Bayshore Bikeway Preferred Alignment

for Segments Two and Three of the Bayshore Bikeway

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1. Existing Conditions

1.1 Introduction

The purpose of this report is to provide a description and analysis of existing conditions in the project area in order to determine the preferred alignment for Segments 2 and 3 of the Bayshore Bikeway.

The Bayshore Bikeway is a planned 24-mile bikeway currently comprised of on-street bike routes and lanes, and off-street paths within the cities of San Diego, Chula Vista, National City, Imperial Beach and Coronado. Segments 2 and 3 are approximately 2.5 miles long and are located within the City of San Diego, in the Downtown and Barrio Logan communities.

Segment 2 of the facility runs from the Bayshore Promenade, near the intersection of Park Boulevard and Harbor Drive, adjacent to the Downtown area, to 28th Street in Barrio Logan. This segment currently exists as a Class II on-street bike lane. Segment 3 runs from 28th Street to the Naval Base entrance at 32nd Street, which is also a Class II bike lane. Of the 5 miles of Class II bike lanes (2.5 miles on both sides of the roadway), much of the bikeway is poorly marked and the pavement surface is substandard.

The Barrio Logan segment is one of the few remaining major segments of the Bayshore Bikeway. The other remaining sections are Glorietta Boulevard and Chula Vista bayfront segments.

This phase of the project will provide preliminary design and a preferred alignment of the bikeway. A subsequent phase will provide environmental analysis and construction plans.

1.2 Goals and Objectives

- Provide continuation of Bayshore Bikeway with similar design of Class 1 bike path
- Provide the types of accommodations suitable for all potential users (the existing bike lanes only meet the needs of experienced bike riders)
- Meet the operational constraints of moving freight through corridor
- Fit within available space (prefer no property purchase)
- Minimize impact on existing parking along corridor
- Design for a reasonable construction cost

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Figure 1: Bayshore Bikeway Alignment

1.3 Land Use

Land Use Overview

The project corridor is bordered primarily by industrial land along most of the 2.5 mile corridor. At the north end, just south of Park Boulevard, the area transitions abruptly from industrial to tourist/visitor-oriented Downtown Convention Center and to commercial and residential. Land uses along the project corridor are shown in Figure 2: Project Area Land Uses and Figure 3: Project Area Land Uses Continued.

Key Destinations

Numerous key destinations along the corridor should attract biking activity. From south to north, destinations include:

U.S. Naval Station: The 32nd Street Naval Station is a major employer along the waterfront. The Naval Station employs approximately 26,000 people.

Barrio Logan: Barrio Logan is one of the oldest and most culturally-rich urban neighborhoods in San Diego. It continues to be a thriving area with stable neighborhoods and successful business districts.

Woodbury University: Woodbury University's San Diego campus is an architecture school located on Main Street in Barrio Logan, about one block from the Bayshore Bikeway.

Maritime shipyards: The National Steel and Shipbuilding Company (NASSCO), a division of General Dynamics, is a major employer in the area with more than 3,000 workers each day. BAE Systems Ship Repair is another ship builder, located directly north of NASSCO.

Petco Park: Petco Park, located in Downtown San Diego, is home to the San Diego Padres. This stadium is relatively new and is particularly popular during baseball season. In addition to the ballpark itself, the businesses and new residential and office development in nearby East Village are very popular.

Convention Center: The San Diego Convention Center is a major attraction in the Downtown area, and the home of popular conventions, such as Comic Con International and the ESRI conference. The Convention Center attracts approximately 760,000 visitors annually (FY13 Annual Report, San Diego Convention Center Corporation). The facility currently is planned for expansion to accommodate its popularity.

Gaslamp Quarter: The Gaslamp Quarter in Downtown San Diego is the major tourist activity hub in the city. This area has a wide variety of restaurants, shopping, residences and entertainment.

Seaport Village: Seaport Village is a major Downtown tourist-oriented destination, just north of the Convention Center, offering many restaurants, shopping and parks.

Figure 2: Project Area Land Uses

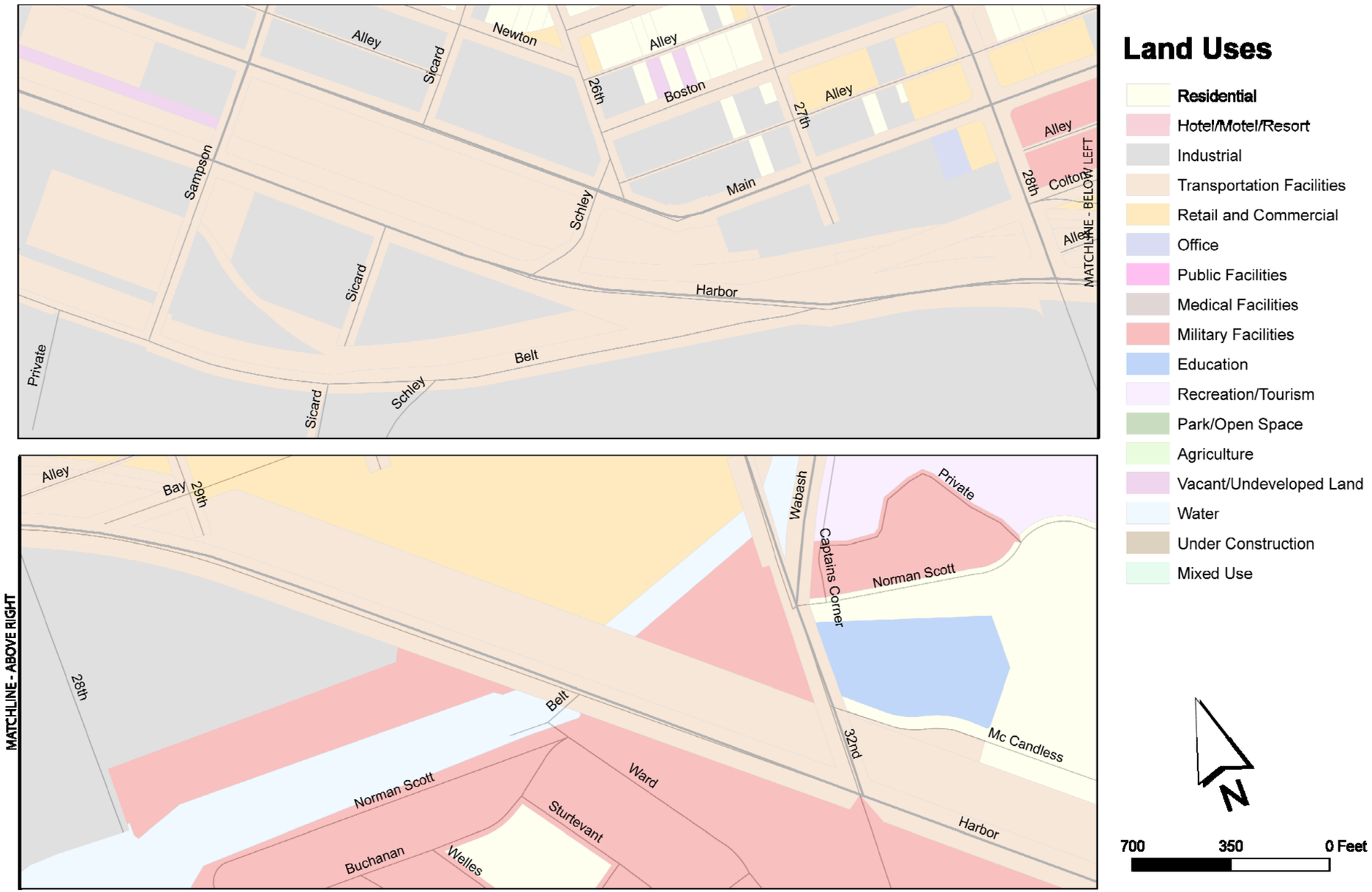


Figure 3: Project Area Land Uses Continued

1.4 Transportation

This section discusses the current transportation system on the project corridor. Roadway users discussed include personal automotive vehicles, commercial trucks (standard and oversized), people riding bikes, people walking, and people with physical challenges. This section also discusses the area's parking demand.

Roadways

Roadway volumes range from a high of approximately 20,000 at the south end near 32nd Street, to a low of 12,000 vehicles per day at the north end. The higher volumes are predominately associated with workers entering and leaving the major employers (Naval Station, NASSCO, and BAE) and the proximity to the entrance and exit to I-5 at 28th Street and to I-15 at 32nd Street.

Harbor Drive Traffic Counts				
Primary Street	**1 st Cross Street**	**2nd Cross Street**	**Existing 2010**	**Forecast 2035**
Harbor Dr.	8th St	Cesar Chavez Pkwy	13900	11800
Harbor Dr.	Cesar Chavez Pkwy	Coronado Bridge	13900	21900
Harbor Dr.	Coronado Bridge	Sampson St.	9600	22500
Harbor Dr.	Sampson St.	28th St	16300	19800
Harbor Dr.	28th St	32nd St	17200	21000
Harbor Dr.	32nd St	8th St (National City)	17200	20900

Source: SANDAG

Existing Biking Facilities

This segment of Harbor Drive currently has on-street bike lanes, although many sections are poorly marked and maintained. The intent of this project is to design a safer and more appealing facility for a broader potential user group on this corridor. The existing bike lanes will remain, while the Bayshore Bikeway will serve as a shared-use (for people biking and walking) facility next to the roadway.

Existing Walking Facilities

Many segments of the project location are lacking in facilities for either walking across or along the road. While there are a few crosswalks to help people walk across Harbor Drive, most could benefit from improvement. In some areas, there are literally thousands of walking trips for workers to access MTS Trolleys or buses, or their personal vehicles, yet on-foot accommodations for those crossings are limited. The blocks and separation of signalized crossings are quite long, and many workers resort to walking along the existing sidewalk on the west side of the street, and then jaywalking mid-block to get to their designated parking lot.

Figure 4: Walking bridge crossing Harbor Drive near Petco Park and the Convention Center

The City of San Diego has improved ADA access at some locations, such as Schley Street and Cesar Chavez, but ADA access

improvements are needed at many intersections. Generally speaking, ADA access improvements greatly benefit all users, especially those with strollers, luggage and other wheeled devices.

On the north end of the project area, a bridge provides a safe connection for people crossing Harbor Drive and the railroad tracks near the ballpark. Ramps are provided for this structure (from the Hilton parking lot), and elevators are provided in the parking ramp on the west side and a separate structure on the east side near Petco Park.

Notably, the 32nd Street intersection has a walking bridge over the north and west approaches. Users must climb stairs at all entrances to gain access over the roadways. It should be noted that no ADA access for people with physical-challenges is provided across this intersection. No elevators are available to reach the overcrossing, and no crosswalks, signals or ramps are provided for people at the roadway level.

As noted earlier, the ability to walk along the roadway is also limited, particularly along the east side, since the most all the work centers are located on the west side of the roadway. Looking at the entire length of this segment from Park Ave to the north and 32nd Street to the south, sidewalks exist along 85% (2.1 miles of the 2.5 miles) of the west side, and only about 15% (2100 feet) of the east side (sidewalks exist only on the two bridges and on the transit platform at Cesar Chavez Street). The existing bike lane provides the only access route to the dozens of parking lots and thousands of parking spaces located along the opposite (east) side of Harbor Drive. Thus, people are forced to use the west sidewalk and jay-walk across Harbor Drive to access their vehicles, or walk in the existing bike lane on the east side.

Lighting along this corridor is scaled for vehicles rather than people walking or riding bikes. Most lighting along the corridor is out-dated high-pressure sodium bulbs which casts an orange glow and provides minimal illumination. Irregular spacing of the street lights also creates areas that can be less safe and promote illegal activity. The possibility for fog and other climatic conditions can render streetlights useless when they are situated high up on a light standard, rather than lower down at the human scale.

Transit

Existing transit facilities in the vicinity of the project location include local buses and the Orange and Blue Trolley lines. The Orange Trolley line runs west to east at the north end of the project, and the Blue Trolley line runs north to south directly next to the project location. The light-rail tracks currently pose safety concerns for people biking in the area, discussed later on in this document.

Six Trolley stops and 19 bus stops are located within one-quarter mile of the project. In spite of the good access to transit, the ‘first/last mile’ trip between transit and the workplace is made more difficult with the lack of pedestrian infrastructure.

Convenient and safer access to these transit options for the workers in the industries along the west side of Harbor Drive is critical to providing a broader range of transportation choices for this population.

Parking

Parking was observed via several independent efforts, and was grouped into two categories, on-street and off-street. According to one study, the current available parking supply in the project area includes approximately 265 on-street public parking spaces and 2,600 off-street parking spaces which are reserved for shipyard employees, Trolley riders, or paid customers (Harbor Drive Segment Study, 2011), and summarized in the Plan and Policy Review section of

this document. Another parking assessment, completed for the Shipyard District Parking Structure Feasibility Study, 2011, indicates that there are 370 on-street public parking spaces and 3,994 off-street parking spaces which are reserved for shipyard employees of four private companies. Summaries of both of these documents can be found in Section 3.1 Local Plan and Policy Review. Lot conditions range from irregular dirt lots with no markings to paved surfaces with stall markings. Those parcels that are irregular or unmarked lend themselves to inefficient parking styles that are not consistent or uniform, leaving spacing up to individuals. Vehicular access and storm water runoff from these parking lots and medians create challenges for interfacing with the proposed Bayshore Bikeway.

On-street parking consists of parallel, diagonal and perpendicular spaces along Harbor Drive. Some of these perpendicular parking spaces conflict with through-traffic right-of-way, particularly west of 28th Street. All on-street parking spaces are paved, but are of inconsistent textures.

During this subject study, tallies of each lot were taken to estimate the average usage by patrons on a daily basis. For this study, historical photos from Google Earth were observed and cars in each lot were counted. A total number of spots were also estimated to provide a percent occupancy for each lot. For the lots without clearly defined parking spaces, the final total is a rough estimate based on average car sizing.

The parking lots observed for this project present both opportunities and constraints. Most of the lots are situated either on City property, transit right-of-way or privately-owned parcels. Limited space creates a constraint on access and circulation. This has multiple effects on how patrons perceive available spaces. Less accessible spaces, especially those further away from workplace entrances, can potentially create a psychological constraint, thus creating the greater perception that parking is limited. People who park farther away have to walk through inhospitable conditions (note the lack of sidewalks in the earlier discussion) in order for NASSCO employees to access Lot #6T adjacent to 32nd Street, they have to walk down the sidewalk and cross the creek on the south side of Harbor Drive and then jay-walk across Harbor Drive. Alternatively, they would have to cross at the 28th St crosswalk or the Gate 4 crosswalk and walk along the bikeway to the lot, since there isn't a sidewalk along the east side of Harbor Drive.

Observations in the field support the idea that the bikeway, which would essentially be a shared use path, could provide a much needed means of safer access for shipyard employees to access their vehicles in the remote lots. Currently, sidewalks in the area are intermittent, and are virtually non-existent on the east side of Harbor Drive. Thus, workers leaving the gates are forced to walk along the existing sidewalks on the west side, and then jaywalk across Harbor Drive to get to their vehicles. With the shared use path, workers can cross the intersections at signalized intersections and marked crosswalks, and walk along the pathway to access their vehicles. See Figure 5 for the missing sidewalk gaps.

Figure 5: Sidewalk Gaps

1.5 Plan and Policy Review

This chapter presents existing plans and policies relevant to the design of the Bayshore Bikeway These documents have been developed by organizations at the local, regional, state, and federal level.

Local Plans

San Diego Downtown Community Plan, 2006

The San Diego Downtown Community Plan was established as the policy framework that would shape further development in the downtown area. This area is described as the 'center of regional economic, residential, and cultural activity, as well as the center of influence on the Pacific Rim.' The Community Plan seeks to ensure that intense development is complemented with livability through strategies such as the development of new parks, and Neighborhood Centers, and emphasis on the public realm.

Figure 6: Downtown Community Plan Street Typologies displays the street typologies proposed in the Plan. The Plan proposes a network of bikeways that connect to the Bayshore Bikeway and surrounding neighborhoods. On-street bike lanes and off-street bike paths are proposed, though most streets will integrate bike riders into vehicle travel lanes. In addition to bike facilities, the Plan proposes Green Streets, which are corridors that will link parks and other Downtown amenities and destinations. Green Streets will include enhanced landscaping and expanded sidewalks to increase the mobility of people walking. The Bayshore Bikeway links to a network of Green Streets. A system of gateways is included in this Plan, which will be enhanced with landscaping, public art, or other defining features that will create an experience for roadway users entering Downtown. The Plan includes major and minor

gateways. A major gateway is located on the Bayshore Bikeway on the border of Centre City and Barrio Logan.

A goal for bike movement in the plan is to develop a cohesive and attractive walking and biking system within Downtown that provides links within the area and to surrounding neighborhoods. A supportive policy relevant to this project is to create a system of bike facilities and encourage regional links such as the Bayshore Bikeway.

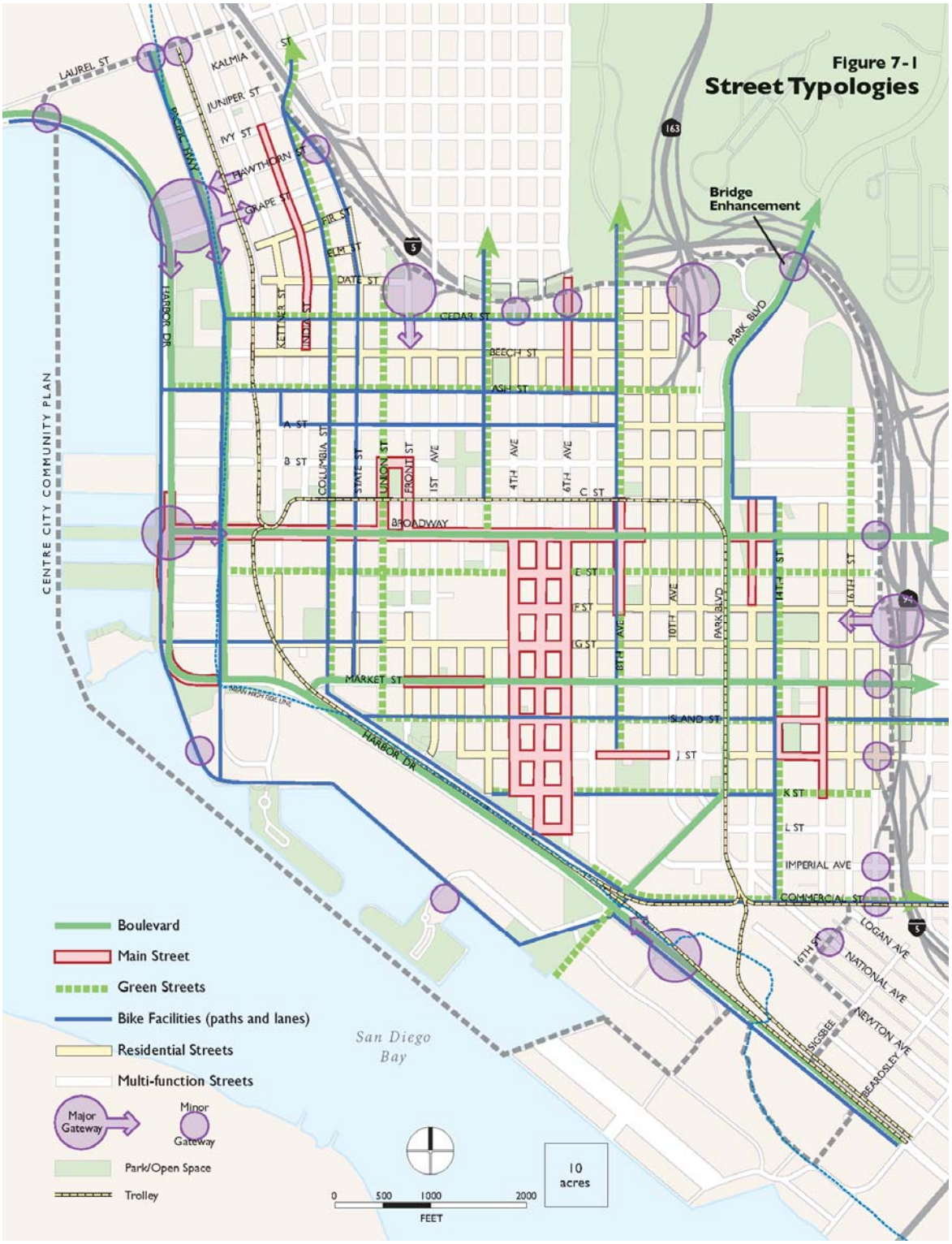


Figure 6: Downtown Community Plan Street Typologies

Barrio Logan Community Plan, 2014 (Draft)

The 2014 Barrio Logan Community Plan and Local Coastal Program serve as a revision of the Barrio Logan/Harbor 101 Community Plan (1978) and include a revision to the Barrio Logan Local Coastal Program Land Use Plan (1979). The Plan guides redevelopment and growth while respecting and utilizing the community's rich cultural heritage. The Plan has 10 elements: Land Use, Mobility, Urban Design, Economic Prosperity, Public Facilities/Services/Safety, Recreation, Conservation, Noise, Historic Preservation, and Arts and Culture. The Plan continues to undergo political intervention and has not been officially adopted by the City as of mid-2015.

The Mobility Element discusses multiple modes of transportation, including walking and biking. Goals of the Mobility Element that are relevant to the design and implementation of the Bayshore Bikeway include a goal to create a safe bike network that connects community destinations and links to surrounding communities and the regional bike network. In order to promote multimodal transportation, the Plan acknowledges the benefits that Complete Streets designs would bring to the community, and includes a Traffic Calming Toolbox in the document. The Plan includes planned bikeways, shown in Figure 7. Key proposed bike corridors include National Avenue, Harbor Drive, 28th Street, Cesar Chavez Parkway, and the Bayshore Bikeway. Parking is an issue addressed in this Element, as many of the goals and policies for transportation depend on how parking is managed in the community. Recommendations include focusing commercial area parking on short-term visitors, and residential area parking as primarily for residents. Parking structures are noted as another aid to parking issues in the community. Parking strategies are relevant to the design of Segments 2 and 3 due to the potential loss of on-streets parking to accommodate the bike path.

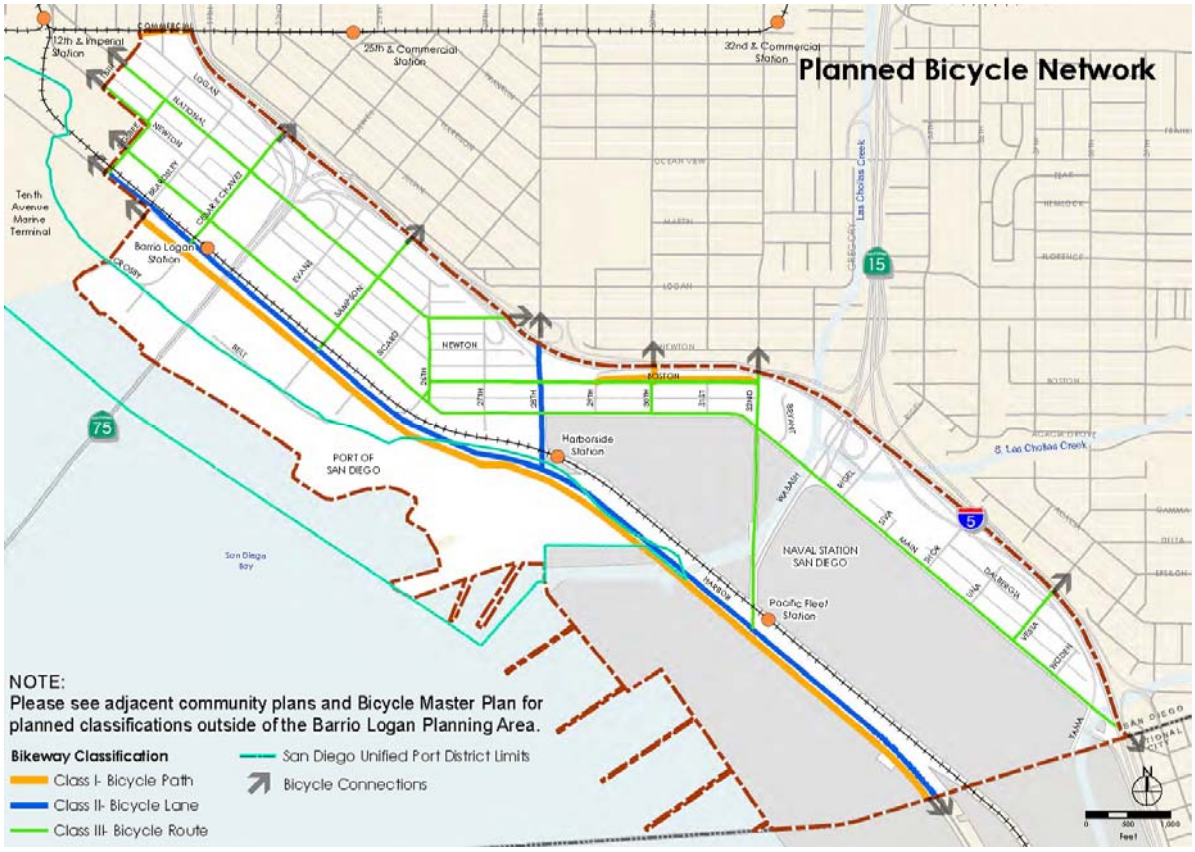


Figure 7: Barrio Logan Community Plan Planned Bikeways

Relevant policies in the Mobility Element include:

- Policy 3.1.1: Support and promote complete sidewalk and intersection improvements along Harbor Drive including the intersections at: Sampson Street, Cesar Chavez Parkway, Schley Street, 28th Street and 32nd Street.
- Policy 3.5.1: Provide and support a continuous network of safe, convenient and attractive bicycle facilities connecting Barrio Logan to the citywide bicycle network and implementing the San Diego Bicycle Master Plan and the Bayshore Bikeway.
- Policy 3.5.2: Provide secure, accessible and adequate bicycle parking, particularly at Barrio Trolley station located at Cesar Chavez Parkway, the 28th Street and 32nd Street Trolley stations, within shopping areas including the Mercado Commercial District and at concentrations of employment throughout the community.
- Policy 3.5.3: Work with Caltrans to retrofit the pedestrian overcrossing stairways over I-5 at Beardsley Street and 20th Street to add bike rails to facilitate wheeling a bicycle up the stairs.
- Policy 3.6.1: Establish parking policies that reduce parking congestion.
- Policy 3.6.2: Permit construction of public parking garages that include shared parking arrangements that efficiently use space, are appropriately designed, and reduce the overall number of off-street spaces required for development.
- Policy 3.6.3: Encourage shared parking arrangements upon completion of a parking structure that accommodates the parking needs of the maritime and port-related industries.
- Policy 3.6.5: Implement on-street parking management strategies in the Community Village, Historic Core and Transition Zone in order to more efficiently use street parking space and increase turnover and parking availability.
- Policy 3.6.6: Implement a parking in-lieu fee for new development that would contribute to implementation of parking demand reduction strategies as well as potentially fund parking structures within the community.

The Parks and Recreation Element includes the goal of having comprehensive pedestrian and bikeway connections between parks and open space lands within the Barrio Logan Community, as well as to surrounding communities. Policies in this Element that are relevant to the Bayshore Bikeway design include:

- Policy 7.1.7: Improve waterfront access, linkages and recreational opportunities via a system of public plazas, bike paths and parks that increase connectivity and improve public access to existing parks and facilities.
- Policy 7.3.4: Provide barrier-free access to all parks and the San Diego Bay via pedestrian, bicycle, public transit, automobile and alternative modes of travel.

The Conservation Element addresses climate change and promoting sustainability in the community. A relevant goal of this Element is an energy efficient transportation system, which includes bike facilities such as the Bayshore Bikeway.

City of San Diego Bicycle Master Plan, 2013

The 2013 San Diego Bicycle Master Plan is an update to the City's 2002 plan. The Plan presents new guiding principles for bike transportation, recreation, and quality of life in San Diego. The bike network, projects, policies, and programs included in this document provided the City with a strong framework for improving biking through 2030 and beyond. The Bicycle

Master Plan is also closely aligned with the City's General Plan and its goals for mobility, sustainability, health, economic, and social issues. The goals of the document include:

- A city where bicycling is a viable travel choice, particularly for trips of less than five miles
- A safe and comprehensive local and regional bikeway network
- Environmental quality, public health, recreation, and mobility benefits through increased bicycling

This updated plan was created with the intention of developing a feasible plan for an interconnected on-street and off-street bike network that serves all of San Diego's neighborhoods as well as provides connections to transit centers, shopping, parks and other amenities. Developing a bike master plan was also used to help maximize funding sources for implementation, define high priority projects, provide needed facilities and services, and improve safety. This plan proposes a total of 595.3 miles of bikeways.

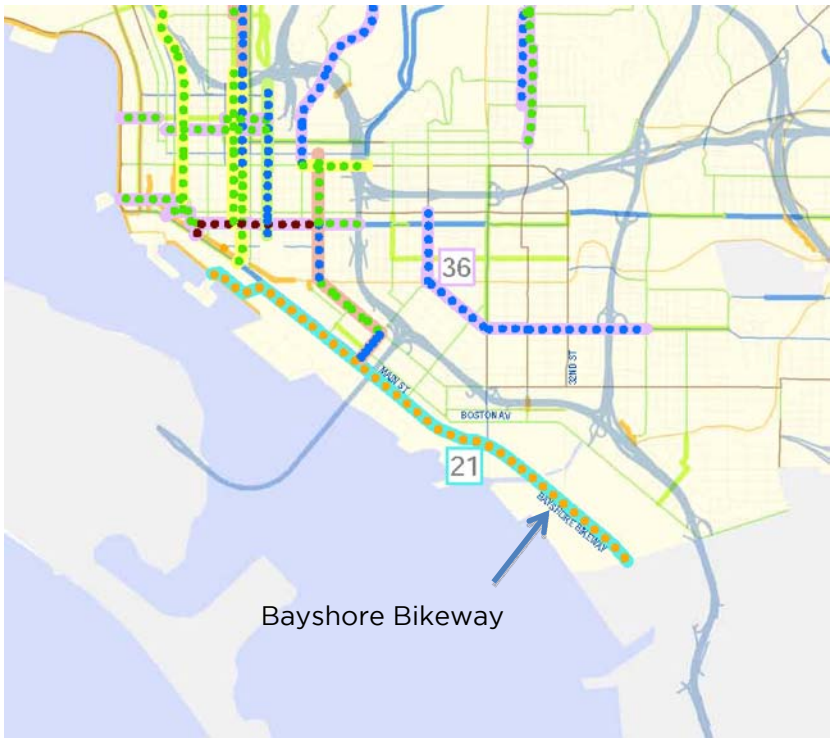


Figure 8: San Diego BMP High Priority Projects

The Bayshore Bikeway is noted as an existing on-going bikeway project, with 2.5 miles completed at the time the Plan was created. A recommended 3.24-mile Class I section of the bikeway from the Embarcadero Path to National City limits is a high-priority project in the Plan. Figure 6 displays a portion of the high priority projects in the BMP, number 21 being part of the Bayshore Bikeway.

Port of San Diego Master Plan, 2012

This document provides the official planning policies, consistent with a general statewide purpose, for the physical development of the tide and submerged lands conveyed and granted in trust to the San Diego Unified Port District. The Plan divides the Port lands up by area, taking bicycle and pedestrian infrastructure into consideration in each. Segments 2 and 3 of the Bayshore Bikeway fall within the Tenth Avenue Marine Terminal (Planning District Four). The Plan supports the concept of the Bayshore Bikeway, stating that the design must accommodate the parking needs of the National Steel and Shipbuilding Company.

Shipyard District Parking Structure Feasibility Study, 2011

This 2011 study was completed to assess the feasibility of a parking structure that would provide the necessary additional parking for the shipyard industries' planned growth. Impacts on the neighboring Barrio Logan community were taken into consideration, looking at how existing parking demands affected the area, as well as the possible construction of a parking structure. The existing Bayshore Bikeway and Barrio Logan Community Plan provided much

of the relevant background information for this Feasibility Study. NASSCO currently requires the greatest amount of spaces for its employees. The current parking conditions do not currently meet the needs of employees, and more spaces will be needed to accommodate future growth. All other businesses in the area have enough parking to accommodate current employees and projected growth. Table 1: Shipyard District Parking Study Off-Street Parking Inventory, from the study, shows the total number of off-street parking spaces occupied by employees, and shows the on-street parking numbers.

Table 1: Shipyard District Parking Study Off-Street Parking Inventory

Shipyard Tenant	Total Parking Spaces
NASSCO	2,052
BAE Systems	1,189
CMSD	633
CP Kelco	120
Total	3,994

Table 2: Shipyard Parking District Study On-Street Parking Inventory

Location	Total Parking Spaces
Harbor Drive (North of 32nd Street to Sampson Street)	258
Main Street (Sampson Street to Schley Street)	90
Sampson Street (Harbor Drive to Belt Street)	22
Total	370

The study found that on-street parking maintains a higher peak-occupancy than off-street parking: 90 percent and 80 percent respectively.

According to the study, 181 parking spaces along Harbor Drive were expected to be affected by the completion of the Bayshore Bikeway. It should be noted that this estimate was based on assumptions by the study's authors and authorizing agency. The results of the parking demand analysis show that there would be a net increase of 2,124 parking spaces needed to support the planned growth of NASSCO.

The study identifies two potential sites for development of the required parking. The first site includes the property between the Trolley tracks and Main Street from 27th to 28th Streets, providing 2,124 spaces. The second site includes a structure that would require 2,949 spaces; as it would need to include the 825 spaces of surface lot that currently exist at that location.

Comparison Criteria	Alternative 1 Structure 1 at 27th St / Main St	Alternative 2 Structure 2 at Sampson St / Main St
Description	3-bay, 478' x 192' Ground plus six elevated levels One-half level below grade	3-bay, 1241' x 172' Ground plus four elevated levels One level below grade
General		
Total No. of Parking Spaces	2,006	3,131
Height Above Street Grade (Feet)	67	33
Parking Square Footage	697,500	1,045,000
Efficiency: Square Foot per Space	348	334
Total Square Footage	697,500	1,045,000
Construction Cost (Includes soft costs)		
Year 2011 Total Estimated Project Costs	$50,700,000	$79,800,000
Year 2011 Cost per Square Foot	$72.69	$76.36
Year 2011 Cost per Space	$25,300	$25,500
Miscellaneous Considerations		
General	Exceeds allowable height - requires variance; concept is 140 spaces short of demand (will need to study alternatives in next phase of design)	Primary parking levels are within height restrictions; May need height variance for stair/elevators
Proximity to NASSCO	600 feet - 1,200 feet walking distance	>1,800 feet walking distance
Demolition	Requires demolition and relocation of existing businesses	Requires temporary loss of parking in surface lot and temporary relocation of those parkers during construction

Table 3: Parking Structure Alternatives Comparison

Preliminary Traffic & Environmental Studies for Bike Trail along the Chollas Creek Corridor, 2013

The Chollas Creek Corridor is a project aimed at connecting the "Chollas Trail" to the Bayshore Bikeway. The goal is to implement the connection primarily along the Chollas Creek, which connects to Segment 3 and 4 of the Bayshore Bikeway. The completion of this project would result in improved connectivity from Southcrest to the Bayshore Bikeway. Additional objectives of this study include community development and beautification and creek restoration.

Harbor Drive Segment Study, 2011

The Port of San Diego commissioned the Harbor Drive Segment Study to examine potential Harbor Drive enhancements, including the feasibility of the Bayshore Bikeway along Harbor Drive from 32nd Street to Park Boulevard. The study examines the impact developing this segment would have on on-street parking and off-street parking lots adjacent to the project location, bikeway design issues, traffic flow and safety and urban design features. The objectives for studying parking in the project location included:

- Determine what it might take to bring all of the parking into conformance with current development standards
- Limit the exit points from parking adjacent to Harbor Drive to decrease conflicts between bike path users and vehicles entering and exiting parking spaces
- Provide storm-water runoff solutions that would improve water quality
- Provide a logical, rational layout for parking that would contribute to a positive visual character of the project location

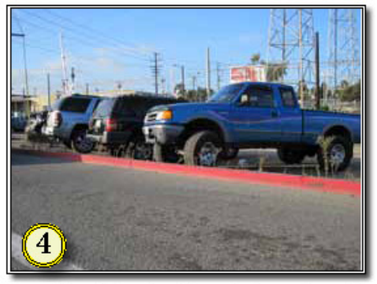
The study identified parking conditions at particular locations, displayed in Figure 9. A notable issue along this corridor is the overhanging parking into the public right-of-way.

According to the study, a total of 2,854 parking spaces exist within the study area, 1,615 belonging to the National Steel and Shipbuilding Company (NASSCO). Three levels of analyses determined existing and proposed parking conditions. The proposed parking changes in this study include a loss of 256 spaces, 75 from the NASSCO lots and 181 from the City of San Diego on-street parking areas. As before, it should be noted that the base assumption of this study was to place the bikeway along the edge of the existing right-of-way and assumed that parking could be taken.

Both sides of Harbor Drive along the north segments do not allow for on-street parking

The trolley station has a drop-off zone and bus pull-out lane that is no longer used

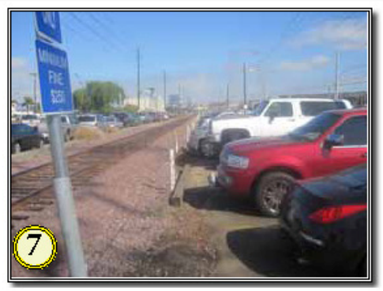
Parallel parking exists along both sides of Harbor Drive along much of the roadway southeast of Sampson



Some of the off-street parking actually overhangs the public rights-of-way

Off-street parking is used heavily by BAE and NASSCO employees

Back in parking exists just north of 28th Street



On street parking is within the public rights of way and is used heavily by NASSCO staff

A variety of poles, structures and various obstacles do affect the overall parking capacity of the area

Parking spaces are squezzed onto NASSCO owned land or leased land from SDG&E or the railroad

The southern most segment of the corridor has limited on-street parking

Figure 9: Harbor Segment Study Identified Parking Conditions (Image from KTU+A)

City of San Diego General Plan, 2008

The City of San Diego General Plan, adopted in 2008, provides guidance for the development of the growing city and enhancing the quality of life for all current and future residents. The General Plan includes the following ten elements: Land Use and Community Planning, Mobility, Economic Prosperity, Public Facilities, Services and Safety, Urban Design, Recreation, Historic Preservation, Conservation, Noise and Housing.

The Mobility Element includes goals and actions related to a balanced transportation system, including many provisions for bicycle travel. The goal to improve the pedestrian environment includes specifications for bicycle travel as well.

Section F of the Mobility Element covers the topic of biking. The General Plan does not recommend any new facilities, but does use the City's Bicycle Master Plan as a reference for its preferred bike network.

Goals laid out for biking in San Diego include:

- A city where bicycling is a viable travel choice, particularly for trips of less than five miles.
- A safe and comprehensive local and regional bikeway network.
- Environmental quality, public health, recreation, and mobility benefits through increased bicycling.

Policies for biking include:

- ME-F.1: Implement the Bicycle Master Plan, which identifies existing and future needs, and provides specific recommendations for facilities and programs over the next 20 years.
- ME-F.2: Identify and implement a network of bikeways that are feasible, fundable and serve bicyclists' needs, especially for travel to employment centers, village centers, schools, commercial districts, transit stations, and institutions.
- ME-F.3: Maintain and improve the quality, operation, and integrity of the bikeway network and roadways regularly used by bicyclists.
- ME-F.4: Provide safe, convenient and adequate short- and long-term bicycle parking facilities and other bicycle amenities for employment, retail, multifamily housing, schools and colleges, as well as transit facility uses.
- ME-F.5: Increase the number of bicycle-transit trips by coordinating with transit agencies to provide safe routes to transit stops and stations, to provide secure bicycle parking facilities, and to accommodate bicycles on transit vehicles.
- MR-F.6: Develop and implement public education programs promoting bicycling and bicycle safety.

The City's goals for improving the pedestrian environment, providing parking management strategies and promoting its "City of Villages" strategy also include provisions for bike travel, as these all work together to create a healthier and sustainable city.

Coronado Bridge Pedestrian and Bicycle Tube

In May 2014, the San Diego County Board of Supervisors approved a $75,000 study to look at access for people to walk and bike across the Coronado Bay Bridge. The project would provide people walking and biking with direct access to Coronado, which could supplement the only access point to the island via the ferry across the Bay.

32nd Street at Harbor Drive and Vesta Street Bridge TIGER Application

The 32nd Street at Harbor Drive and Vesta Street Bridge is one component of a large set of Port Access Working Waterfront Improvements. The system of Port Access Improvements will greatly improve the Port of San Diego's ability to co-exist with recreational, residential, and other industrial operations on San Diego's mixed-use waterfront. The project will also buffer commercial traffic from an economically disadvantaged community, Barrio Logan, and also improve the traffic operations at Naval Base San Diego. The project has not been funded.

Regional Plans

Bayshore Bikeway Plan, 2006

The 2006 Bayshore Bikeway Plan serves as an update to a 1976 feasibility study that recommended 11 miles of bike paths and 14 miles of bike lanes and routes around the bay. The Plan focuses on ways to connect gaps in the existing route with new off-street bike path segments, along with the goal of identifying an off-street bike path alignment for the entire Bikeway loop around San Diego Bay. At the time of the 2006 Plan, the Bayshore Bikeway consisted of 12 miles of off-street bike paths and 12 miles of on-street lanes or routes.

Figure 11 displays the plans for Segments 2 and 3 (this project).

Segment 2, from 8th Street and Harbor Drive to the entrance of the National Steel and Shipbuilding Company at 28th Street, consists of on-street bike lanes and routes. Key recommendations for this segment include:

- Cantilever new Class I path on the east side of the Harbor Drive bridge over BNSF tracks. Conduct a study of the bridge structure required to ensure that it can handle the additional load
- New Class I along east side of Harbor Drive, adjacent to MTS Trolley right-of-way.
- Easement or right-of-way acquisition through NASSCO parking areas is required, some parking may be lost
- Repave, restripe, and improve maintenance/sweeping along Harbor Drive bike lane and shoulder areas
- Consider widening existing Class II bike lanes on Harbor Drive and increase enforcement of parking encroachments

Segment 3 begins at 28th Street at the NASSCO entrance and extends south to the Naval Station entrance at 32nd Street, currently consisting of on-street bike lanes. Key recommendations for Segment 3 include:

- New Class I bike path along the east side of Harbor Drive through areas currently used by NASSCO for parking
- Easement or right-of-way acquisition through NASSCO parking areas will be required, some parking may be lost
- New bike path bridge crossing Chollas Creek
- Bike path cross to west side of Harbor Drive at 32nd Street
- Repave, restripe and improve maintenance/sweeping along Harbor Drive bike lane and shoulder area
- Considering widening existing Class II bike lanes on Harbor Drive, and increase enforcement of parking encroachments

Figure 10: Bayshore Bikeway Study Segments

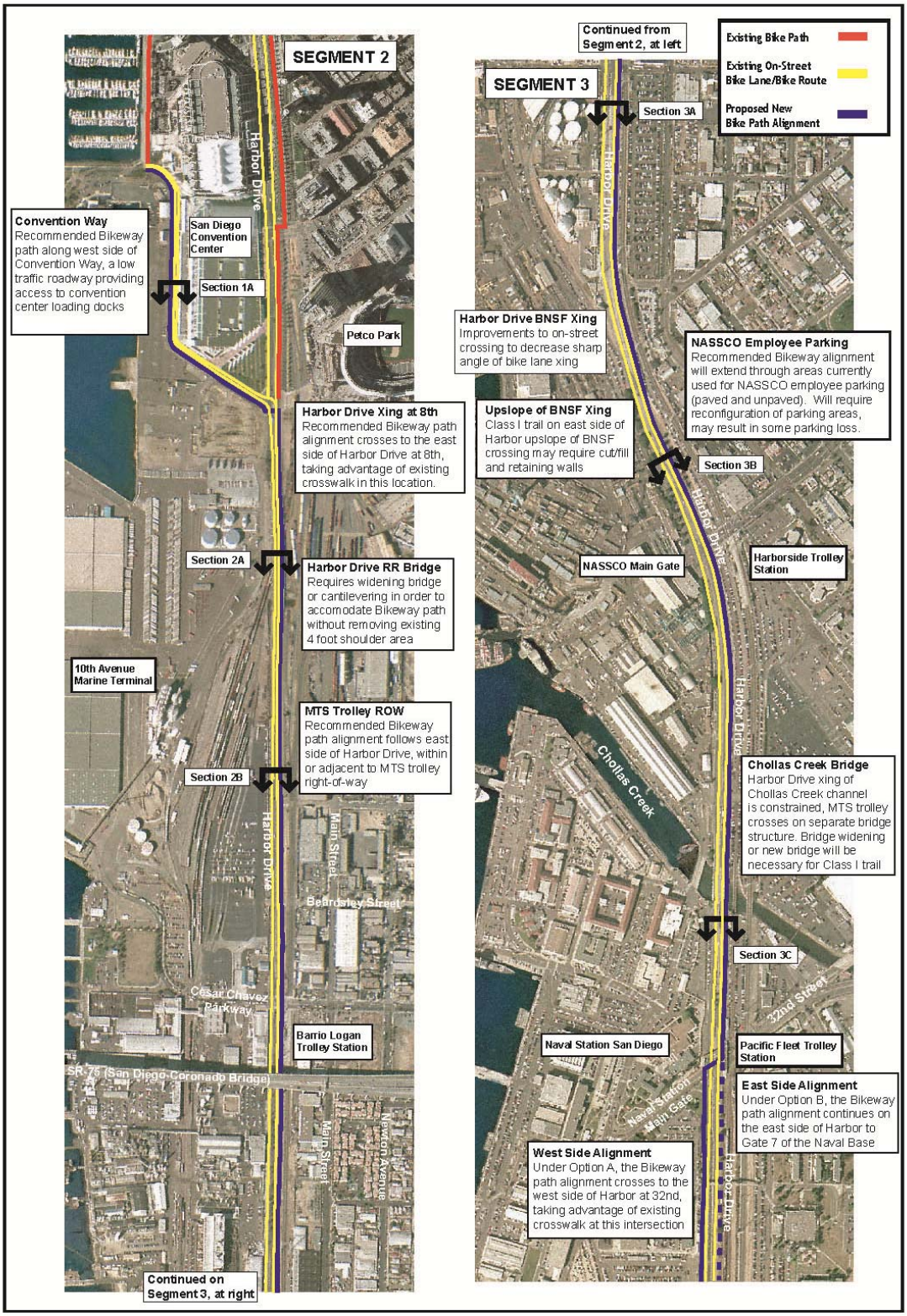


Figure 11: Segments 2 and 3 of the Bayshore Bikeway

Bay Route Bikeway Planning Study, 1976

The "Bay Route" Bikeway Planning Study is the preliminary document created to assess the layout of a bikeway around the San Diego Bay. It was completed in March 1976 by the California Department of Transportation (Caltrans) at the request of the City of National City. The stated objective of the study was "to determine an acceptable route for bicyclists to traverse the southern regions of San Diego Bay." The recommended route totaled 25.5 miles of Bikeway facilities. The "Bay Route" Bikeway Planning Route Study included such characteristics as: providing a continuous route around the bay, providing safe cycling facilities, reducing parking and traffic congestion, reducing noise and traffic congestion, and enriching the experience of cycling for the general public.

The plan originally defined 4 sections (A-D) with their own alternatives. These sections set up the initial pathway alignment, with some being planned to utilize abandoned railroad right-of-way.

San Diego Regional Bike Plan, 2011

The San Diego Regional Bike Plan proposes a vision for a diverse regional system of interconnected bike corridors, support facilities, and programs to make riding a bike more practical and desirable to a broader range of people in our region. This vision is intended to guide the development of the regional bike network through the year 2050, building off the original plan established in the 2030 Regional Transportation Plan. The Plan was developed to support the implementation of the Regional Comprehensive Plan (RCP) and the 2050 Regional Transportation Plan (RTP) and is part of the Sustainable Communities Strategy (SCS) mandated by Senate Bill 375.

Goals for the Regional Bike Plan include:

- Significantly increase levels of biking throughout the San Diego Region
- Improve bike safety
- Encourage the development of Complete Streets
- Support reductions in greenhouse gas emissions
- Increase community support for biking

A total of 515.5 miles of bikeways are proposed in the plan. At the time of the Plan's creation, the Bayshore Bikeway was already an adopted facility.

Figure 12: Regional Bicycle Plan Corridors

San Diego Regional Transportation Plan, 2011

The San Diego Regional Transportation Plan (RTP) is set to direct growth for the San Diego area by the year 2050. The RTP serves as preliminary guidelines to where transportation alternatives need to be implemented based on local land use plans and forecasted population increases. The Plan emphasizes transportation choices and improving the mobility of all modes. The goal for improved mobility reads: "The transportation system should provide the general public and those who move goods with convenient travel options. The system should also operate in a way that maximizes productivity. It should reduce the time it takes to travel and the costs associated with travel." Policy objectives that accompany this goal include:

- Provide convenient travel choices including transit, intercity and high speed trains, driving, ridesharing, walking, and biking.
- Increase the use of transit, ridesharing, walking, and biking in major corridors and communities.

The Plan also has a goal to promote a healthy environment through transportation system improvements. Policy objectives for this goal include:

- Develop transportation improvements that respect and enhance the environment
- Reduce greenhouse gas emissions from vehicles and continue to improve air quality in the region
- Make transportation investments that result in healthy and sustainable communities.

Active transportation and healthy communities are prominent topics of the Plan. The RTP includes the 2050 Regional Bike Plan as an Appendix, as well as a Regional Safe Routes to School Strategy. The Plan also lays out strategies for transportation demand management and incentivizing modes other than the automobile.

The Sustainable Communities Strategy (SCS) is a major component of the 2050 Regional Transportation Plan, which seeks to create healthier and more sustainable communities that are more walkable, bikeable, and transit-oriented. Though this strategy has its own chapter, it is referenced throughout the entire Plan. Senate Bill (SB) 375, 2009, calls for each metropolitan planning organization to prepare a Sustainable Communities Strategy as part of their RTP in order to meet greenhouse gas emission targets by integrating land use and transportation.

State Plans

California Coastal Trail

The California Coastal Trail includes some 1,200 miles of trails along the California coastline. The Bayshore Bikeway is included in the South San Diego maps of the Trail. Improving the quality of the segments along Harbor Drive would add to a greater connection to the State of California as a whole.

1.6 Preliminary Environmental Constraints

An environmental consultant provided a preliminary environmental review to inform the planning and design of the Barrio Logan portion of the Bayshore Bikeway. The scope of this effort was to utilize existing, readily available resources to review the conceptual proposed project for potential constraints associated with hazardous materials (particularly toxic soils), cultural resource, natural resource, and socioeconomics. As a 'preliminary environmental constraints scan', the goal of the document was not to fully evaluate potential impacts of the project in these areas. Rather, the purpose was to identify issues that could affect project design (such as significant resources that should be avoided) or that could factor into the approval processing for the project (such as resources which may require more in-depth analysis or approvals from other agencies).

To provide a comprehensive review of potential environmental issues, the resource areas typically covered by analysis pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) are individually addressed. A summary of the document's highlights is included below, while the entire document is included under Appendix D.

Environmental Review

The section provides a "scan" of potential issues for the resource areas typically covered by analysis conducted pursuant to CEQA and NEPA. In performing this scan, several general assumptions about the project were considered to help frame the extent of potential impacts and issues. These assumptions include:

- The bikeway improvement would be located mostly within the existing Harbor Drive right-of-way.
- The bikeway improvement would mainly involve low profile streetscape, bike, and pedestrian improvements. No large structures, buildings, or bridges would be included in the project except of the possible cantilevering of the bikeway on the existing bridges.
- The bikeway improvements would not require substantial excavation or grading.

The review involved the evaluation of the following elements:

- Aesthetics
- Agriculture and Forestry
- Air Quality
- Biological Resources
- Cultural Resources
    - Historical Resources
    - Archaeological and Paleontological Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services and Utilities
- Recreation

- Socioeconomics and Environmental Justice
- Transportation, Traffic, and Parking

Additional Study and Considerations

This section provides a summary of the resource areas where potential issues were identified and associated recommendations for additional study and/or design considerations:

- Biological Resources – If the project design includes an expansion (cantilever) to the Chollas Creek Bridge, a biologist should be consulted to review for potential biological issues and possible permits needed from regulatory agencies. Prior to construction, the project should be reviewed by a biologist to advise on measures necessary to address nesting migratory birds.
- Cultural Resources – An assessment of the project is recommended by a qualified archeologist and architectural historian to conduct a records search and review of existing cultural resources and advise on any potential impacts associated with the project.
- Hazardous Materials – Once the extent of construction activity is determined, a hazardous materials site assessment is recommended to evaluate the risk to the project to encounter contamination and to recommend any measures to address the possible exposure to contamination during construction and the disposal of contaminated material.
- Water Quality – A water pollution control plan or storm water management plan will be required to comply with State requirements.
- Parking and Environmental Justice – Parking impacts should be evaluated and minimized to the extent possible. Should parking be substantially reduced, additional analysis for related environmental impacts may be appropriate. Additionally, public engagement should continue through the project and ensure that minority and low-income populations are specifically included in the engagement.
- Construction Parking and Access – Construction plans should account for the high amount of multi-modal activity that occurs in the project area to provide continuity in access and to address safety issues.

As noted earlier, the foregoing is a summary of the Preliminary Environmental Constraints Scan; the entire document is included under Appendix D.

2. Stakeholder Outreach

2.1 Introduction

In addition to the public engagement processes of many of the plans described previously, the stakeholder outreach efforts for this feasibility and recommended alignments phase of Segments 2 and 3 were targeted toward in the corridor, including the maritime industries and the residents and businesses of the Barrio Logan community, and also included regional transportation, health, and business stakeholders. This stage of the outreach effort was considered integral to understanding the existing conditions.

The first tier of project guidance was provided by SANDAG, which assumed the responsibility for implementing many of the bikeway and transit projects in the San Diego region.

The second tier of guidance was provided by the Technical Advisory Group, which met monthly and consisted of:

- Port of San Diego
- City of San Diego
- SANDAG

The third tier was provided by the Bayshore Bikeway Working Group, which has guided the implementation of the 25 miles bikeway around the bay since 1990. Their role in the bikeway was to ensure a consistency of design and to ensure forward momentum towards accomplishing the goal of a completed bikeway. The working group consists of elected officials and regional stakeholders from the following jurisdictions and organizations:

- County of San Diego
- San Diego County Bicycle Coalition
- Unified Port District of San Diego
- City of Coronado
- City of Imperial Beach
- City of Chula Vista
- City of National City

2.2 Stakeholders

The fourth, broadest and perhaps most critical group were the stakeholders who will be in some way impacted by the project. The members of the stakeholder group were largely identified by members of the Technical Advisory Groups or other parties who had expressed interest in the project. The project core team, consisting of SANDAG's Project Advisor and the consultant Project Manager, personally met with several members of the stakeholder group in order to understand the needs of these specific members.

The project team met with Port District staff at the Tenth Avenue Marine Terminal (TAMT). The Port had expressed a concern about the bikeway design hindering or constraining the movement of oversize and overweight trucks that haul very large freight items taken from freighters at the

Figure 13 - Oversize vehicle leaves 10th Ave Marine Terminal

marine terminal either to another marine industry alongside Harbor Drive or onto the interstate highway system. In an extreme case, wind turbine parts such as towers or blades that can be as long as 170 feet and can require a truck as long as 200 feet long. The project team met onsite with engineers at TAMT to grasp the extent of movements, and then met one evening to witness the transport operation of an oversize and overweight generator through the intersection of Cesar Chavez and Harbor Drive.

As of result of this coordination, the project team modified the design of the bikeway in order to not constrain these movements. A photo of a typical oversize movement is shown, as well as a depiction of the swept area of these movements.

The project team also met individually with the following organizations:

- Port Tenants Association
- General Dynamics / NASSCO
- Councilmember David Alverez and staff
- Barrio Station
- Barrio Logan Planning Group
- Environmental Health Commission

2.3 Stakeholder Workshops

In addition to the individual meetings with stakeholders, a broader Stakeholder Meeting was held on December 1, 2014 at Woodbury University in the Barrio Logan neighborhood. All members of the Stakeholders Group were invited. Displays were provided on the corridor, with a map depicting Constraints and Opportunities along the 2.5-mile section. A presentation was provided, and the discussion centered on what the team had learned during previous outreach efforts and how that input would be affecting the bikeway design.

Feedback from the December 1 meeting was incorporated into refining the plan documents, which were presented as 'Alternatives Analysis' to Stakeholders on February 2, 2015

Finally, the refined Alternatives were presented in a Public Meeting on May 5, 2015. No substantive comments were received during that meeting. The group concurred with the Alternatives review and that the preferred alignment addressed all concerns expressed during early project phases.

2.4 Barrio Logan Community Concerns

More than any other issue, the problems with parking were the one topic that was voiced in virtually every conversation. Largely, the shipyards rely on offsite parking to accommodate their employees' parking needs, including on-street parking. Many cars are parked along Harbor Drive, and more than a dozen parking lots are set aside by the shipyards to accommodate this parking need. Even with on-street and off-street parking opportunities, the Barrio Logan neighborhood groups voiced concerns that shipyard and Navy employees often park in the neighborhoods and take up parking spaces needed by the residents.

Various parking studies have been done over the past decade. One example is the Shipyard District Parking Structure Feasibility Study, 2011, which indicates that future job growth in the industrial sector will cause a deficit in available parking within the corridor. Access to parking and community design are sensitive issues for both the maritime industry and the residents.

3. Needs Analysis

3.1 Types of Bike Riders

The propensity to ride a bike varies from person to person, and the needs and preferences of people riding bikes vary depending on skill level, trip type, and trip location. Understanding this diversity is necessary to evaluate bikeway proposals and their potential to attract new riders.

Generally, biking propensity levels can be classified into three categories, displayed in Figure 14.

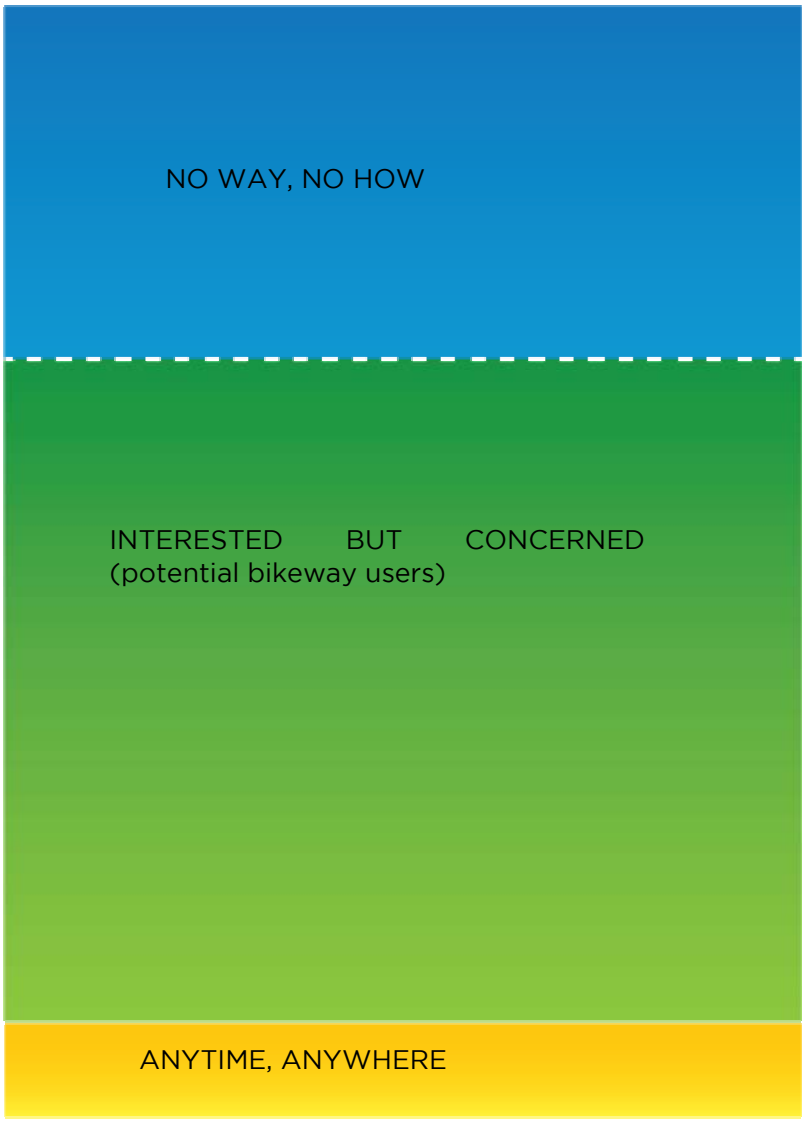


Figure 14 - Types of Cyclists

- NO WAY, NO HOW represents people that do not consider riding a bike part of their transportation or recreation options and are estimated to be **35 percent** of the population.
- INTERESTED BUT CONCERNED people will ride if bike paths or lanes are provided on roadways with low traffic volumes and speeds. They are typically not confident riding with people driving cars. Interested but Concerned bike riders are estimated to be **60 percent** of the population and the primary target group that will bike more if encouraged to do so.
- ANYTIME, ANYWHERE bike riders are that portion of the population who have the skill and confidence to ride on most roadways, especially where traffic volumes and speeds are not high, or where dedicated space such as a wide shoulder or single stripe bike lane exist. In many cases, they are confident in positioning themselves to share the roadway with motorists and are estimated to be **5 percent** of the population.

The needs of bike riders also vary between trip purposes. For example, people who bike for sport recreational purposes may prefer long and un-signalized roadways, while people who ride with their children to school may prefer direct roadways with lower vehicular volumes and speeds. The design of this bikeway will consider these differences and develops a facility to serve all user types. This section describes the different types of bike riders and the respective needs for these categories

- Commuters - adults who regularly bike between their residences and work.
- Enthusiasts - skilled adults.
- Casual / Family / Elderly riders - adults who use bikes for running errands, recreation, tourism, exercise, or as a family activity.
- School Children - children who bike to school.

Casual bike riders generally prefer roadways with low traffic volumes and low speeds. They also prefer paths that are physically separated from roadways. Experienced bike riders typically ride to destinations or to achieve a goal, therefore they generally choose the most direct route, which may include roadways with or without bike lanes. The current facility only provides for experienced riders, and will not likely appeal to casual bike riders. The intended design of this 'shared-use' facility will provide an environment more conducive to casual biking, as well as people walking, wheelchair users, and others.

3.2 Collision Analysis

From 2008 to 2012, there were a total of 24 collisions along the project corridor that involved people walking or riding a bike. Eight of these collisions involved people on bikes, one of which resulted in an injury. Three of the bike collisions involved a motor vehicle, two of which were the bike riders' fault and one was deemed "No Fault." In three of the bike-involved collisions, the collision was caused by the bike rider hitting the Trolley tracks.

Unsafe movements by people riding bikes may be an indication of inadequate facilities. The design of a facility that is safer and easier for bike riders of all abilities may reduce the number of bike-involved collisions.

Most of the bike-involved collisions occurred near 28th Street. Three occurred within the intersection, and three occurred west of the intersection. This indicates a need for enhanced safety in this area.

3.3 Personal Safety Concerns

Around 40 crimes of different kinds have taken place within the project area over the past six months. These include theft, assault, drug/alcohol violations, DUIs, vehicle break-ins, weapons and vandalism. Current conditions allow for increased illegal activity and were expressed as a concern by some stakeholders. Increasing the number of people present in the area would ensure more eyes on possible illegal activities, therefore discouraging them.

3.4 Lighting Conditions

The lighting conditions of a facility contribute to the personal safety of the environment during evening hours. The roadway currently has vehicle-scaled lighting, rather than lighting that is lower to the ground and scaled for other users such as people walking and riding bikes. According to the AASHTO Guide for the Development of Bicycle Facilities, a shared-use facility should be illuminated at an 'average maintained horizontal illumination levels of 5 to 22 lux.' These levels are currently achieved at only a few spot locations. A complete analysis will be performed during the next phase of the project engineering.

4. Opportunities and Constraints

Based on extensive stakeholder conversations, field review, aerial survey and engineering drawings, the team has prepared an analysis of opportunities of the corridor and the specific constraints that would need to be addressed in order to place a bikeway along Harbor Drive. Design challenges that need to be addressed in the design of this facility include:

- Parking Issues
- Freight Movements
- Narrow Bridges
- Complex and Busy Intersections
- Right-of-Way Obstructions

Consistent with earlier documents that investigated potential alignments for the Bayshore Bikeway, the analysis of existing conditions did confirm that the preferred alignment for the facility is the east/north side of Harbor Drive.

Parking Issues: Depicted in earlier descriptions, parking in the vicinity is the most important issue in the eyes of many stakeholders. NASSCO employees place the largest demand on off-site parking, the conditions and the distances from the various gates place challenges on employees to access their vehicles in a safe and expedient manner. While the primary purpose of the Bayshore Bikeway is not to provide safer access to employee parking along Harbor Drive, it will serve that function.

Figure 15 - Vehicles west of 28th St encroaching on existing bike lane

The goal of the Bayshore Bikeway Segments 2 and 3 project is to result in no, or minimal, net parking loss. Where the bikeway may displace parking spaces, the project team will strive to replace that parking with equivalent parking at other locations.

Freight Movements: As noted previously, in earlier meetings with Port of San Diego staff at the Tenth Avenue Marine Terminal, the Port Tenants Association and NASSCO, another important issue is to ensure that the bikeway allows continued movement of over-size and over-weight goods from the Port to points along Harbor Drive and to the I-5 entrance north on 28th Street.

Nearly all of the oversize movements run along the southbound lanes of Harbor Drive, which reinforces the decision to run the bikeway along the northbound lanes.

The most critical area lies at the intersection of Harbor and Cesar Chavez Parkway, where oversize vehicles typically swing into the northbound lanes and then back over the median in order to make the turn from the Tenth Avenue Marine Terminal to Harbor Drive. This activity typically occurs late at night to minimize traffic disruptions. The project team is confident that the design of the bikeway will not restrict these movements, most likely by using a mountable curb design in this vicinity.

Narrow Bridges: The two bridges in the corridor are over Chollas Creek to the south, and over the BNSF Railroad near the Tenth Avenue Marine Terminal and Park Blvd.

The bridge over Chollas Creek is 67 feet from inside-to-inside of railing. Opportunities to add a 2-way bikeway within the existing structure include:

- Narrowing the through lanes to an urban standard width (11 feet)
- Relocating or removing the median
- Widening the northbound sidewalk to a bikeway width (10 feet)
- Adding a concrete barrier with a railing (48" high) between the traffic lanes and the bikeway, and adding a higher outside railing to a bikeway height of 48 inches.

Figure 16 - Chollas Creek Bridge - potential bikeway alignment

Alternatively, an independent pre-fabricated structure could be placed alongside the existing highway bridge. The bridge over the BNSF Railroad is slightly wider at 72 feet. A similar approach could be used on this structure, but narrowing the lanes to 11 feet and the bikeway to 12 feet. Alternatively, the existing sidewalk could be widened to the outside of the bridge, with the additional width cantilevered to the east.

Complex and busy Intersections: There are three complex intersections in the corridor: Cesar Chavez, 28th Street, and 32nd Street.

At Cesar Chavez Parkway, massive vehicles are moved through this intersection, and the bikeway design will need to respect those movements. Otherwise, the bikeway accommodations will include crossing improvements as necessary to ensure safe crossings.

At 28th Street, improvements are necessary to channel the bikeway across the north/east approach, and ADA improvements are necessary at the other quadrants.

The 32nd Street intersection is by far the most complex and presents the greatest need for facilities to guide people biking and walking through the intersection. In addition, the Chollas Creek Bikeway will

Figure 17 - Segment 4 north terminus at 32nd Street

run down the south edge of 32nd Street and connect to the Bayshore Bikeway at the bridge base as shown to the right. People walking are directed OVER the intersection via pedestrian bridges with stairs. No markings, curb ramps, or signals are currently provided to direct people walking at street level, and the intersection does not meet ADA requirements for accessibility. The re-design of this intersection will be a challenge, and will require careful consideration of people driving cars and truck, people riding bikes, and people walking to balance the safety of all users and the rail crossing controls.

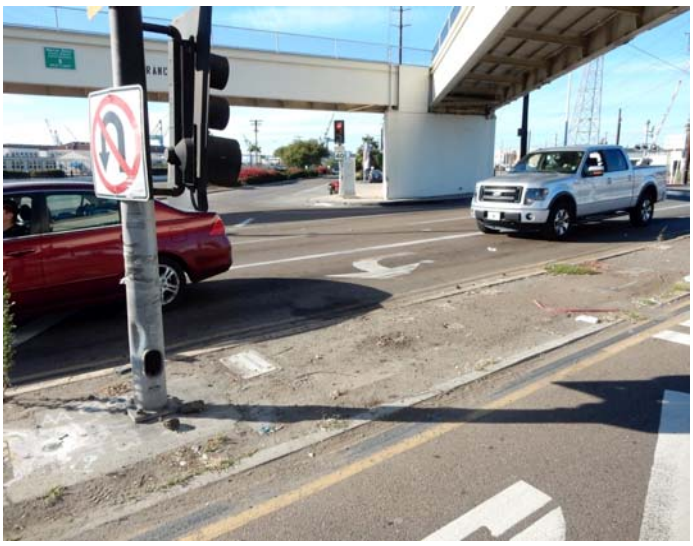


Figure 18 - Bikeway needs to cross 32nd St in this location

For example, the bikeway will need to cross the median where shown in Figure 19, with an at-grade cut-through with bike and walk signals.

Right-of-Way Obstructions: The route has many notable barriers along the Drive, such as an MTS power station at the northwest corner of Harbor and Cesar Chavez Parkway. The power station is located in the parkway area between the road and the MTS Trolley tracks. It will be necessary to narrow the pathway in this vicinity and push the roadway toward the median to route around the power station.

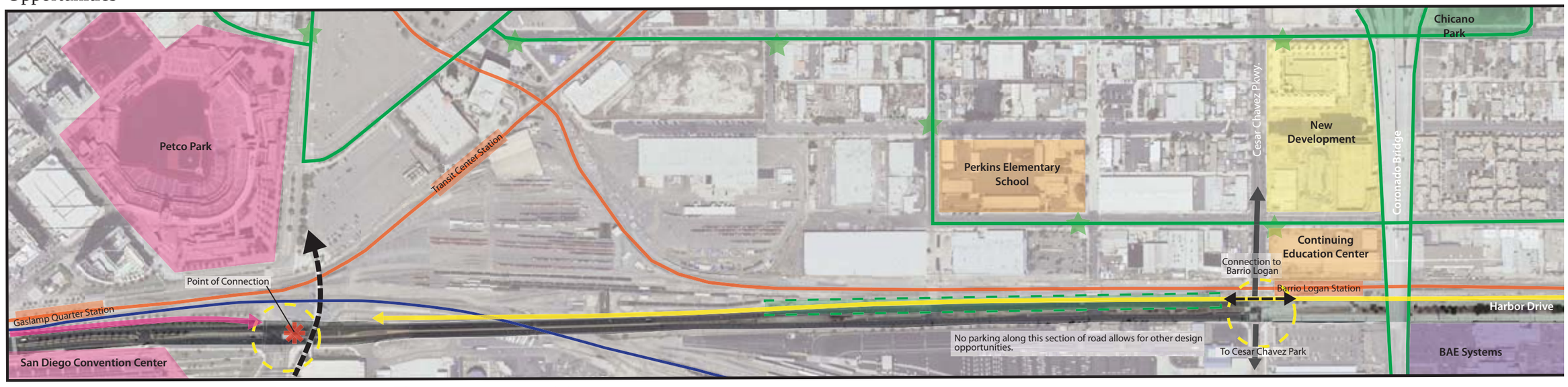
Other barriers include the pedestrian bridge at 32nd Street, antenna tower bases at two locations, the Coronado Bridge pier, as well as many others. A presentation of obstacles along the corridor is listed in Figure 20.

Figure 19 - Bikeway needs to be routed around MTS power station

Bayshore Bikeway through Barrio Logan

Constraints

Opportunities



SANDAG TransNet byBIKE

Figure 20: Opportunities and Constraints

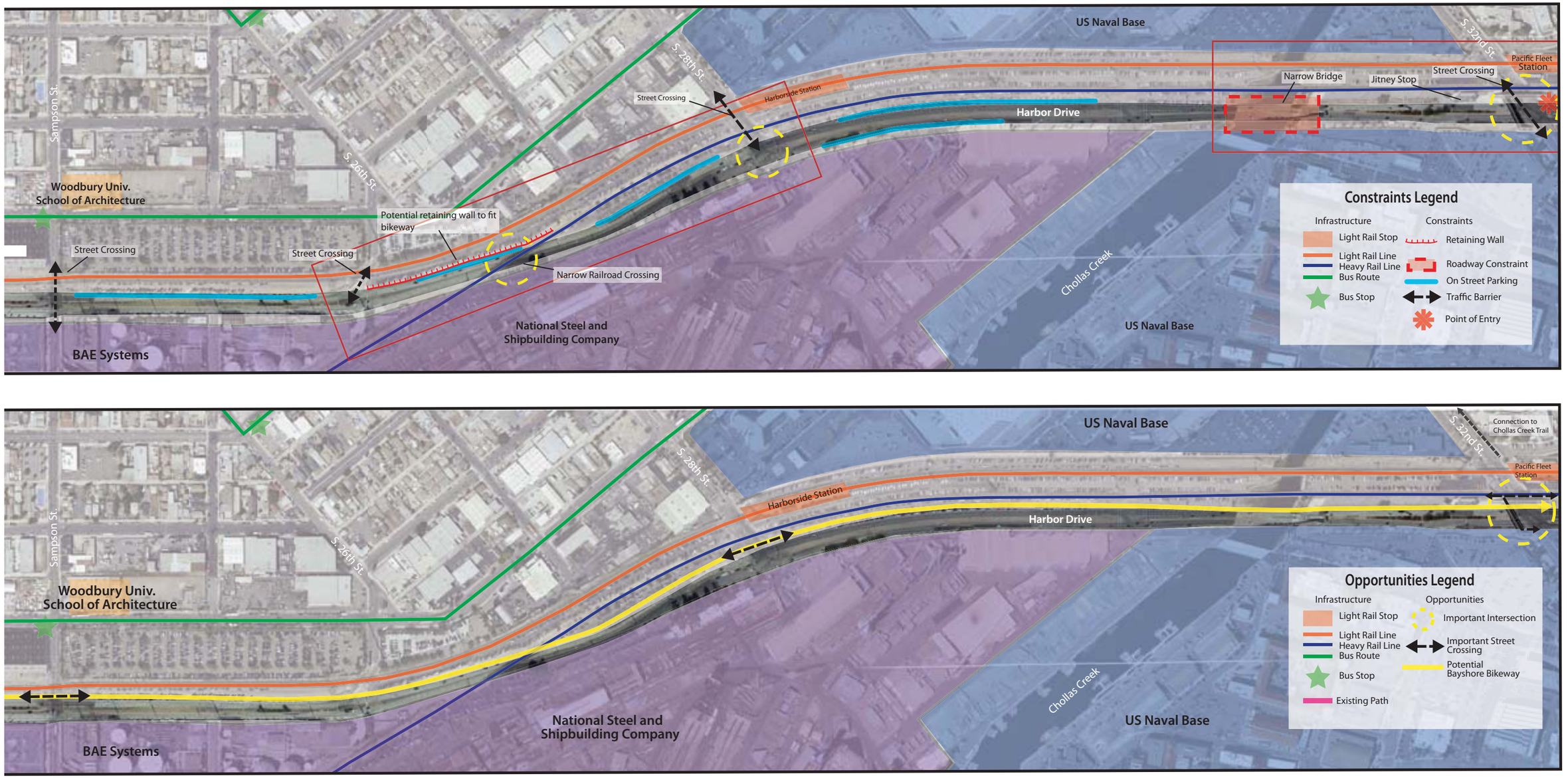


Figure 20: Opportunities and Constraints

5. Alternatives Analysis

5.1 Design Objectives

In order to satisfy the previously identified needs, and to work within the existing constraints and challenges, the team looked at various options to fit the bikeway within the identified constraints. The following objectives were outlined in Chapter 1, Section 1.2.

Provide continuation of Bayshore Bikeway with similar design of Class 1 bike path

The Bayshore Bikeway, as described in Chapter 1, will eventually traverse about 24 miles around San Diego Bay. The original and continuing intent of the bikeway is to provide a safe and comfortable bike facility for people of all ages and abilities, and this is largely accomplished with a Class 1 Bikeway. Also as noted previously, while Harbor Drive does have bike lanes in place, the present conditions are primarily suitable for experienced bike riders, and do not meet the needs of the intended Bayshore Bikeway target rider. The Barrio Logan segment is one of the last remaining segments. It is important to meet the standards set by the previously-completed segments.

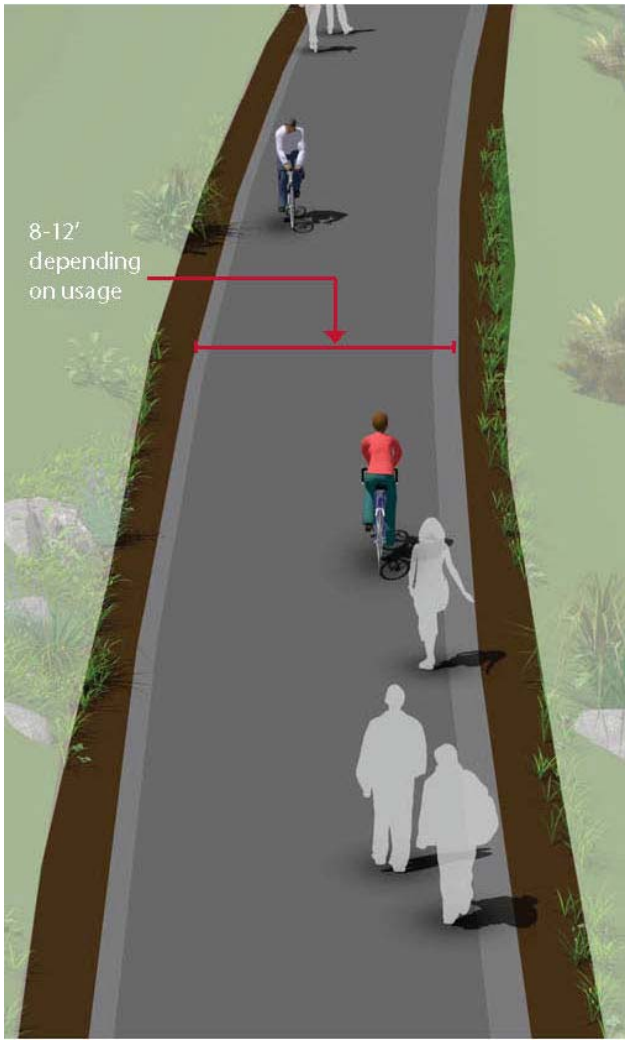


Figure 21: Typical Shared-Use Path

Provide the types of accommodations suitable for people of all ages and abilities

As noted above, the existing bike lanes only meet the needs of experienced bike riders. The broader public's needs are best met with Class 1 facilities - a Bike Path that is physically separated from the traffic lanes and shared with pedestrians.

This type of facility offers protection from traffic and sufficient width. Further, it will be particularly important to provide clear traffic controls to ensure safe crossing of the eight intersections that the bikeway will cross.

Meet the operational constraints of moving freight through corridor

The existing conditions description in Chapter 1 explains that the Port of San Diego was concerned that the proposed bikeway did not impede freight movements along the corridor.

Fit within available space (prefer no property purchase)

The space available for the bikeway is very constrained and is intended to be placed within the outer edge of the roadway, between the edge of Harbor Drive and the

railroad right of way (MTS Trolley).

Minimize impact on existing parking along corridor

As noted, throughout the course of stakeholder outreach, the importance of preserving parking was stated many times.

Design for a reasonable construction cost

While it is important to build a safe and quality facility that addresses the needs of the intended users, costs need to be constrained as funding is limited.

5.2 Alternatives Considered

The first tier review was a broader look at viable locations within the Harbor Drive rights-of-way.

- Bikeway along the west side
- Bikeway within the median
- Bikeway along the east side

Reviewing the current standards for bikeway design approved by Caltrans and looking at potential safety issues were the driving factors behind choosing alternatives. Availability of right of way space, and impacts on parking, also influenced the decision process. These options were discussed with SANDAG and were arrived at by careful consideration.

Harbor Drive West Side

The west side of Harbor Drive was ruled out from further analysis because of the following constraints:

- Freight traffic in and out of the Tenth Avenue Marine Terminal is regulated. The designated truck route is shown routed down Harbor Drive south of Cesar Chavez Drive to 28th Street*. Therefore, all loaded freight movements are located southbound on Harbor Drive, and enter I-5 at 28th, 32nd or Civic Center Drive in National City. I-5 connects to I-8 via SR 15, SR 94, and SR 54
    - Freight traffic is restricted from various areas of the City, such as Cesar Chavez Parkway, as well as Harbor Drive north of Cesar Chavez Parkway. Note that the context of Harbor changes at Park Blvd, from heavy industrial south of Park Blvd to a tourist-oriented environment north, with hotels, Petco Park, the Convention Center, the Gaslamp Quarter, etc.
- The presence of loaded freight movements on the west side of Harbor makes a bikeway along this side of the roadway a less-appealing option aesthetically, from a bike rider perspective, but particularly from the perspective of a casual rider
- There are significantly more right-of-way constraints on the west side, particularly within the proximity of ship-building facilities

Harbor Drive Median

Certain stakeholders had offered the suggestion that the Harbor Drive median should be considered for the bikeway. The team investigated the potential and ruled it out because of these fatal flaws:

- There are many locations where the median is non-existent and other places where it is too narrow for a bikeway
- In those areas where the bikeway wouldn't fit in the median, it would be necessary to route the bikeway across Harbor Drive
- Turning movements for bike riders would occur where people driving aren't expecting people on bikes
- A median bikeway is inconsistent with remainder of the Bayshore Bikeway
- Median bikeways are known to have operational flaws. They are prohibited on State highways, for the reasons outlined in the following language from Caltrans Highway Design Manual. While Harbor Drive is no longer under state jurisdiction, the same reasoning would apply:

  "Bike paths shall not be placed in the medians of State highways or roadways, especially freeways or expressways. Bike paths in the median of highways are not recommended because they require movements contrary to normal rules of the road. Specific problems with such facilities include:

  - **Right-turns from the center of roadways for bicyclists are unnatural and unexpected by motorists.**
  - **Devoting separate phases to bicyclist movements to and from a median path at signalized intersections increases intersection delay.**
  - **Left-turning motorists must cross one direction of motor vehicle traffic and two directions of bicycle traffic, which increases conflicts.**
  - **Where intersections are infrequent, bicyclists will enter or exit bike paths at midblock.**
  - **Where medians are landscaped, visibility between bicyclists on the path and motorists at intersections may be diminished."**

Harbor Drive East Side

Of the three options, the east side is the preferred alternative. This area has the most available space, which lies between the roadway and the Trolley tracks. Intermittent obstacles present challenges for this alignment, but overall it should be easier to implement than the other alternatives.. This proposed alignment will be discussed further in Chapter 6.

6. Recommendations

The process of evaluating alternative alignments essentially resulted in one alignment, and two options for crossing both of the bridges. This 'package' was presented to the Stakeholders and the Public with no suggestions or recommended changes. Therefore, the Recommended Alignment is the route presented on May 5, 2015 at a community workshop and on June 4, 2015 to the Bayshore Bikeway Working Group. This alignment will move forward into the preliminary engineering phase for detailed analysis.

The East side alignment, as discussed in the previous section, is the preferred recommendation based on a various factors. The east side of Harbor Drive has the most available ROW space as well as unconstrained conditions. Parking along the corridor proved to be the biggest constraint, but was mostly free-form in many places. The initial recommendation was to formalize many of the parking situations, thus providing more efficient space usage. Where possible, on-street parking was kept, and in some cases improved. An ample center median exists along much of the corridor, and most of it is unimproved. This provides the opportunity to narrow the median where necessary to fit the bikeway within the road right of way.

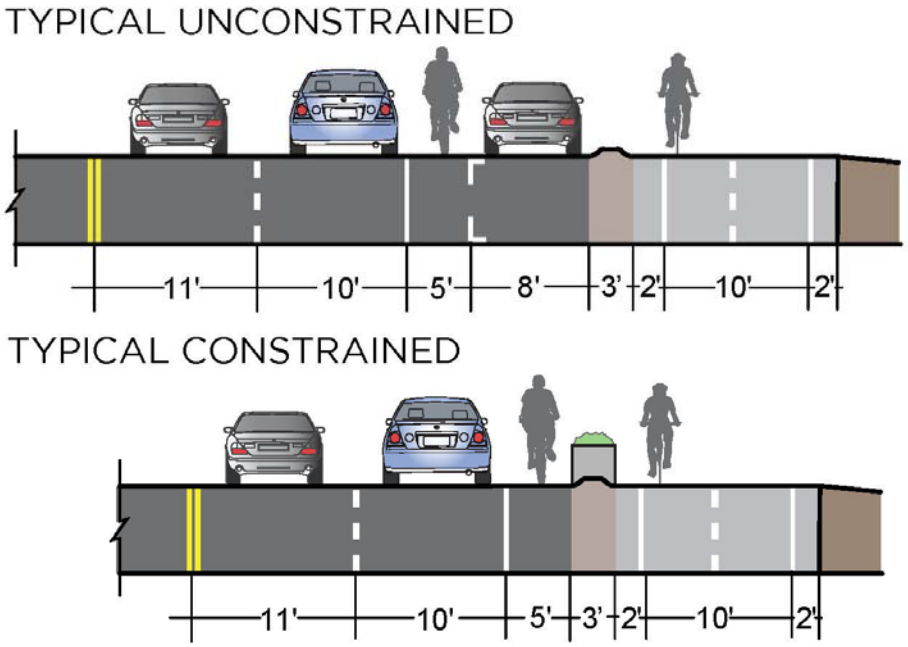


Figure 22: Typical unconstrained and constrained sections along Harbor Drive

Starting from the north end of the project at Harbor Drive and Park Boulevard, the path needs a high visibility type bikeway crossing west across Harbor Drive and establish a Class 1 facility to connect to the Promenade.

From there, the path meets a constriction point at the bridge over the BNSF Railroad. The design team worked with two alternatives for dealing with the tight conditions over the bridge. The path leading up the bridge would be built up with a retaining wall to negotiate a cross slope and meet the bridge at grade.

The Tenth Avenue Marine Terminal Bridge is approximately 70 feet from railing to railing. The team's analysis showed that the bikeway could be incorporated within the existing structure width, with the following components:

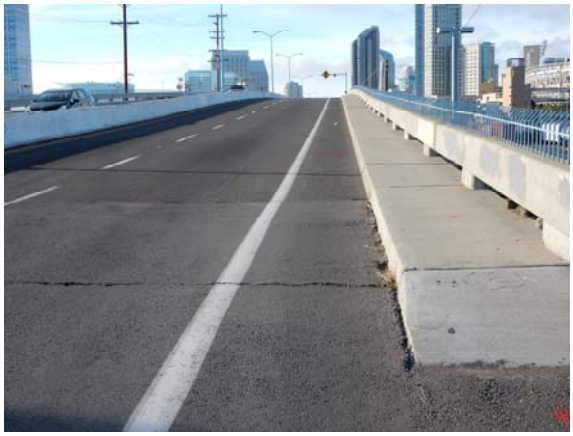


Figure 23: View north on Harbor Drive Bridge near Tenth Avenue Marine Terminal

- Southbound lanes (2) are reduced to 11' (from 12')
- Existing barrier median (6') is removed and replaced with double yellow centerline OR narrowed median (2')
- Existing light standards to be relocated to median or to the sides of bridge
- Northbound lanes are reduced to 11' (from 12')
- Northbound bike lane is removed
- Add concrete barrier (with railing extension to 48") to separate bike path
- Place 12' wide bike path on remaining structure width (widen existing sidewalk to 12' by adding 6" depth concrete x 7' wide)
- Provide 'slip lane' at bridge ends to allow on-road cyclists to enter and exit bridge bike path
- A 48" railing would be placed at the outside of the bikeway

In Figure 24 (as well as in Appendix B, sheet 1A), the alignment of the proposed path is within the existing right of way of the bridge. Because of the limited space, the path would narrow from its standard 14' width to the narrower 12' width. The travel lanes would also be reduced as a result of narrowing, and the on street bike lane in the northbound direction would be removed. Instead, a slip lane will be placed at the beginning and end of the bridge to allow for cyclists who do not want to "take the lane" to temporarily merge with the path, then slip back on to the roadway once across.

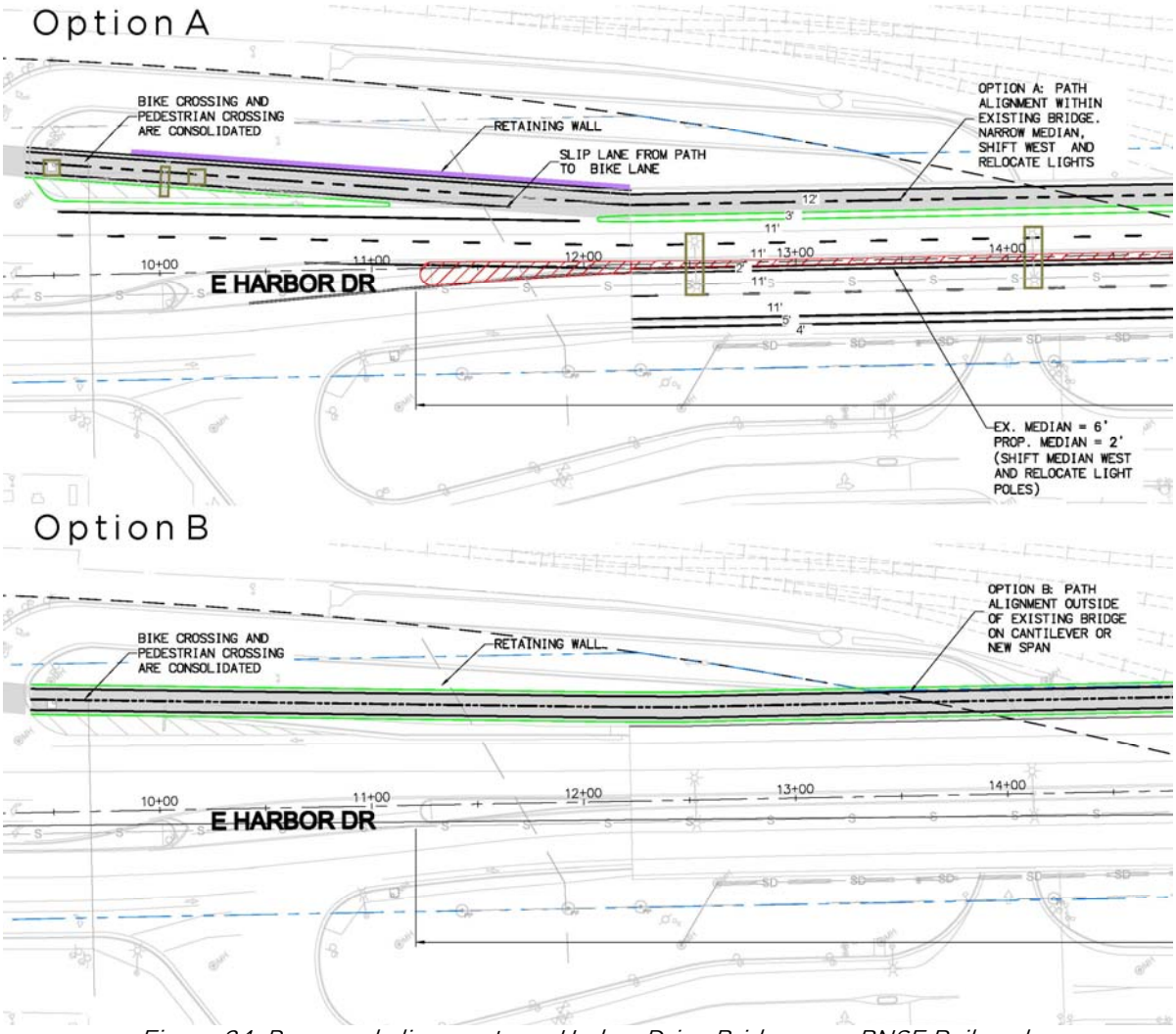


Figure 24: Proposed alignments on Harbor Drive Bridge over BNSF Railroad.

Figure 24 also shows the other possible alternative for negotiating the bridge over the BNSF Railroad. Option B would include a cantilevered bridge attached to the existing bridge. This option has the benefit of keeping the 14' width of the proposed path as well as reducing the changes to the travel lanes and on street facilities. The biggest deterrent would be the cost of building a separate structure attached to the bridge, rather than building on the bridge.

Moving south, the next major obstacle, as observed and expressed by the stakeholders, would be the freight turning movements at Cesar Chavez Parkway. Oversize trucks regularly exit the Tenth Avenue Marine Terminal and must cross into the northbound lanes to negotiate the intersection. The raised median on Harbor Drive had been removed and paved flush on the south leg of the intersection in order to allow a smooth transition for oversize vehicle movements. A mountable barrier curb nose in the turning path of these trucks is recommended for the proposed path in this area. While the barrier curb would typically be 6" high between the vehicular lanes and the bikeway, the mountable curb would be approximately 2" high, with a corrugated 'nose' in order to facilitate these vehicles, but also

Figure 25: Turning movements of large freight vehicles on Cesar Chavez Parkway

to provide a clear delineation to normal cars and trucks that this an area that they should not encroach into.

The existing raised median, which varies significantly in width, runs much of the 2.5 miles of Harbor Drive. Earlier discussions with stakeholders had indicated that narrowing the median in order to add the bikeway along the eastern right of way was an acceptable option. In many areas, this option allowed the designers to achieve a consistent bikeway width to satisfy the requirements of casual bike riders. Encroaching into the median would only be done as a last resort, primarily because shifting the bikeway to the west to avoid obstacles, causes an encroachment into Harbor Drive, which pushes the roadway into the median. The power substation as seen in Figure 26 creates an obstacle the proposed path placement.

Figure 26: The addition of this power substation creates an obstacle within the ROW.

Between Schley Street and 28th Street, the proposed alignment for the path will run along a steep slope. Because this area is constricted, existing parallel parking will have to be relocated to a proposed lot across the street. This lot will have pull-through parking for ease of use and will include one more spot than current on-street parking provides. The proposed path will then continue past current semi-off street parking. The current condition has cars backing in to perpendicular spots, which can interfere with the current bike lane. Parking would be changed to parallel on-street parking, with the loss of spot made up on the west side by adding 4 parallel spots and 29 back-in angled parking spots. This will safely route path users between the on-street parked cars and the adjacent parking lot.

The next busy intersection is 28th Street, with significant truck turning movements, and since it serves as the main entrance to NASSCO, it handles a concentration of pedestrians. It too will need a median refuge area with a cut-through, as well as dedicated bike signals. Similar to the conditions at Cesar Chavez Parkway and 32nd, this intersection is further complicated by existing signal pre-emption for the rail-crossing.

At Chollas Creek Bridge, the proposed path would align differently based upon two possible options. The Chollas Creek Bridge is the narrower of the two bridges, with an inside-railing-to-inside-railing width of 67 feet. The team's analysis showed that the bikeway could be incorporated within the existing structure width (see Figure 28). Placing the pathway on the bridge would create room in the adjacent parking lots to maintain and/or improve parking spaces. There will also be 9 proposed spaces on the west side of Harbor Drive just north of Chollas Creek Bridge. Further recommended improvements would be as follows:

Figure 27: Chollas Creek Bridge

- Southbound lanes (2) are reduced to 11' (from 12')
- Existing barrier median is removed and replaced with double yellow centerline
- Northbound lanes are reduced to 11' (from 12')
- Northbound bike lane is removed
- Add concrete barrier (with railing extension to 48") to separate bike path
- Add 12' wide bike path (widen existing sidewalk to 12' by adding 6" concrete x 7' wide)
    - A 'slip lane' should be provided at bridge ends to allow on-road bike riders to enter and exit bridge bike path
- A 48" railing would be placed at the outside of the bikeway

An option evaluated for both bridges was to remove the existing east railing and add a 7' cantilevered section on each bridge, for a total 12' wide bikeway. This option would include the following:

- Structural analysis to determine whether the bridges could support this addition would be done in Phase 2
- Roadway configuration stays the same as existing
- Addition of a concrete barrier with a 48" railing would separate the bikeway from vehicular traffic
- Addition of a 48" railing would be placed at the outside of the cantilevered section

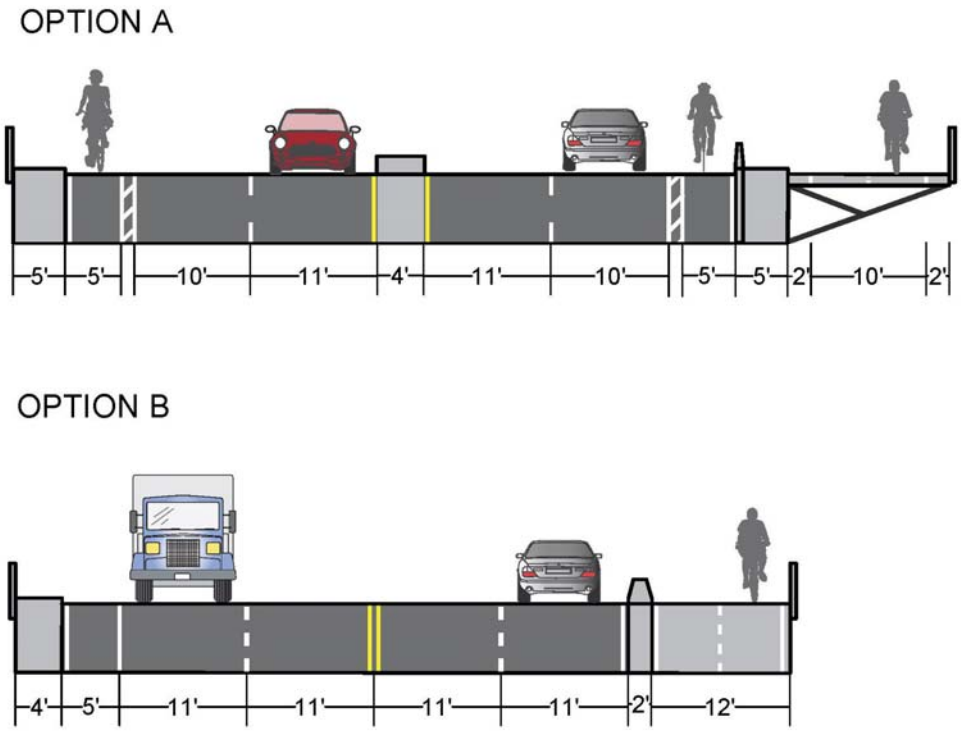


Figure 28: Chollas Creek Sections

Finally, 32nd Street is the corridor's busiest intersection, with significant turning movements and no existing pedestrian signals, ramps, or signage. Most or all pedestrian traffic currently uses an existing pedestrian bridge over the intersection. Because the future bike travel will be at street-level, adding ramps at the southeast and northeast corners, as well as a median cut-through on the 32nd Street east leg is critical to safer crossing for people walking and riding bikes. Because bike travel will be 2-way, a dedicated, protected bike phase will be necessary for safe movements.

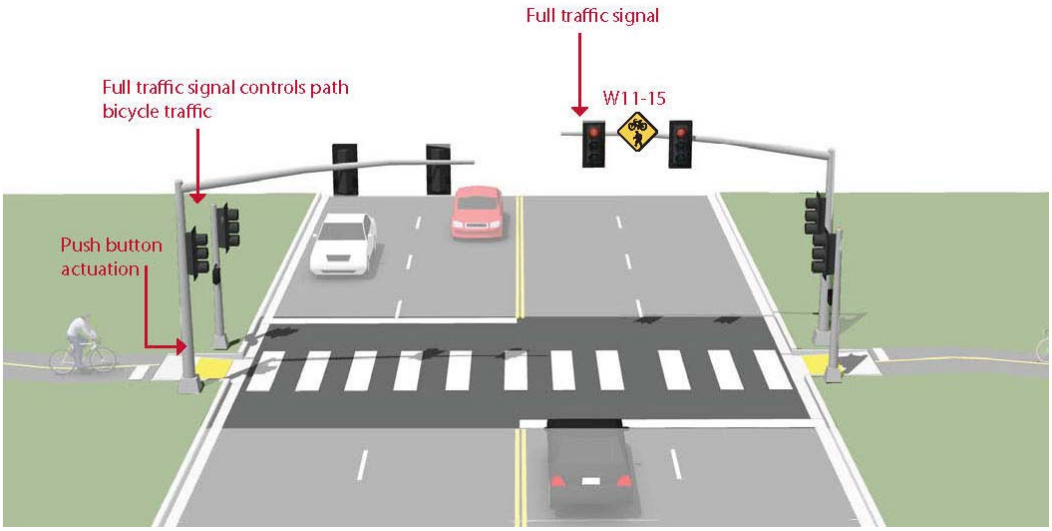


Figure 29: Typical Bike/Walk Signal Crossing

This intersection is further complicated by existing signal pre-emption for the rail-crossing. While the Pacific Fleet Trolley Station provides service for the Naval Station entrance here, pedestrians currently cross the intersection via the pedestrian bridges.

While not as busy as 32nd Street, 28th Street is a busy intersection with significant truck turning movements, and since it serves as the main entrance to NASSCO, it handles a concentration of people walking. It too will need a median refuge area with a cut-through, as well as dedicated bike signals. Similar to 32nd Street, this intersection is further complicated by existing signal pre-emption for the rail-crossing.

6.1 Conclusion

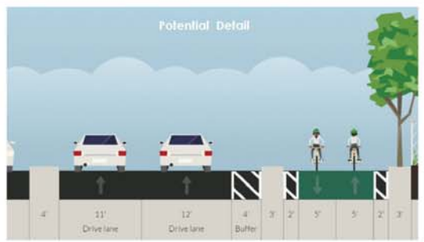
The proposed alignment would improve bike ridership by separating people biking and walking from unsafe and undesirable conditions along Harbor Drive. Connecting the existing segments of the Bayshore Bikeway will provide San Diego and the surrounding cities with a world-class facility that will promote healthy lives and a greater sense of community. The Barrio Logan neighborhood also will benefit from having a soft barrier between the heavy industrial land uses along harbor Drive through the development of this portion of the Bayshore Bikeway. This region will also benefit from increased access with more transportation alternatives for residents of all ages and comfort levels.

Appendices

APPENDIX A: Presentation Graphics

Harbor Drive Cross Sections

1. West of Sigsbee



2. Between Sampson & Schley

3. West of 32nd Street

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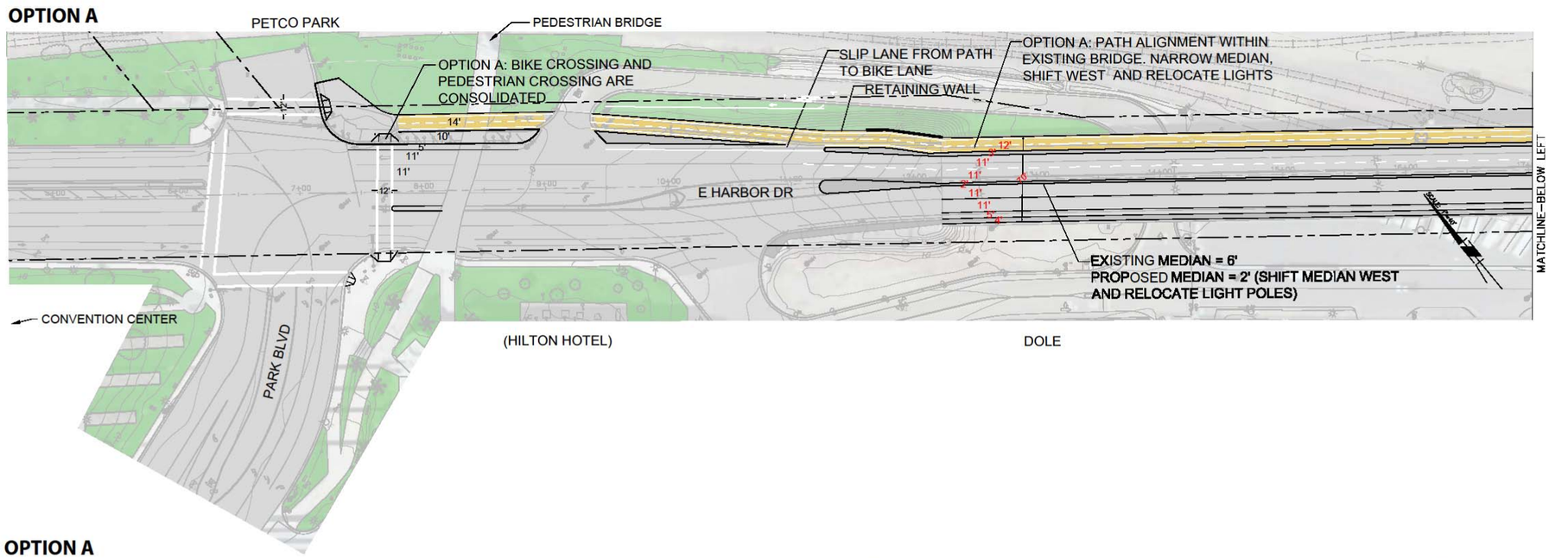
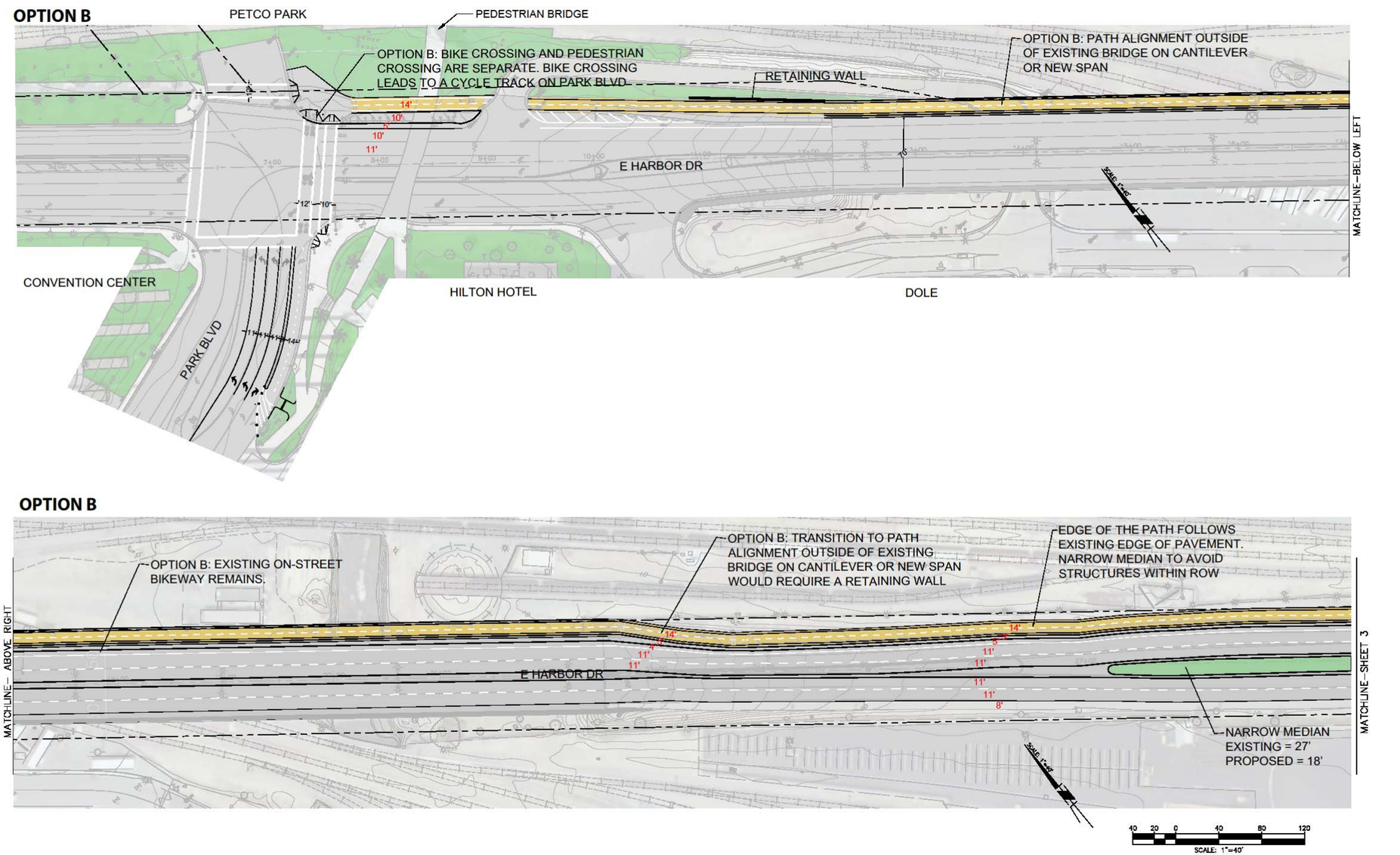
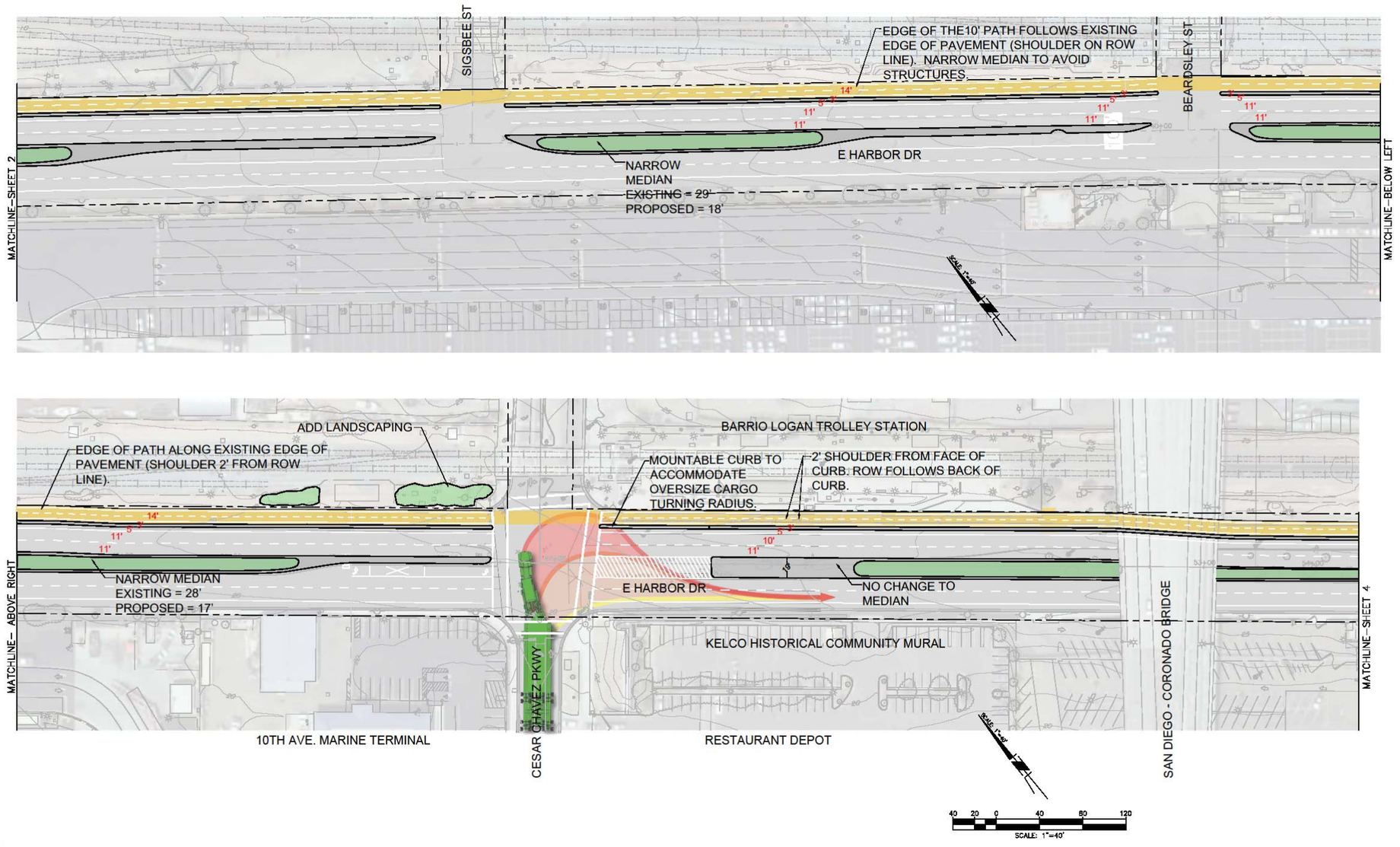
PARK BOULEVARD ACROSS E. HARBOR DRIVE BRIDGE



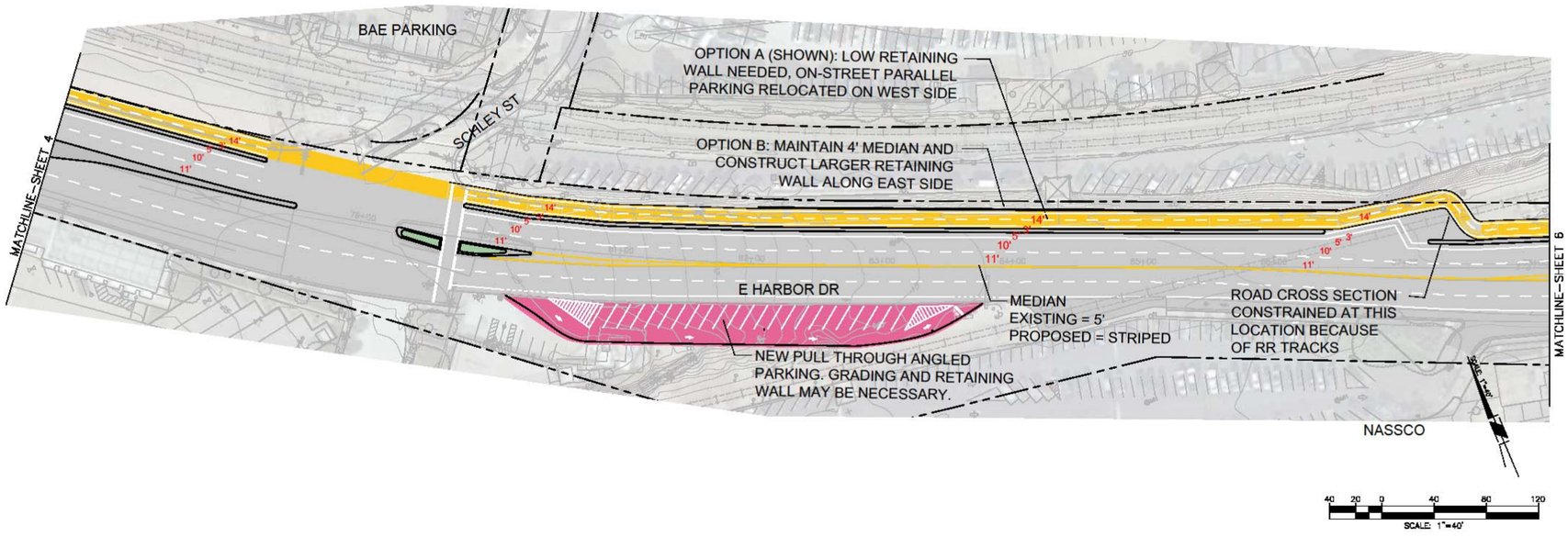
PARK BOULEVARD ACROSS E. HARBOR DRIVE BRIDGE



SIGSBEE STREET TO BEARDSLEY STREET



SCHLEY STREET TO RAILROAD CROSSING



RAILROAD CROSSING TO S. 28TH STREET

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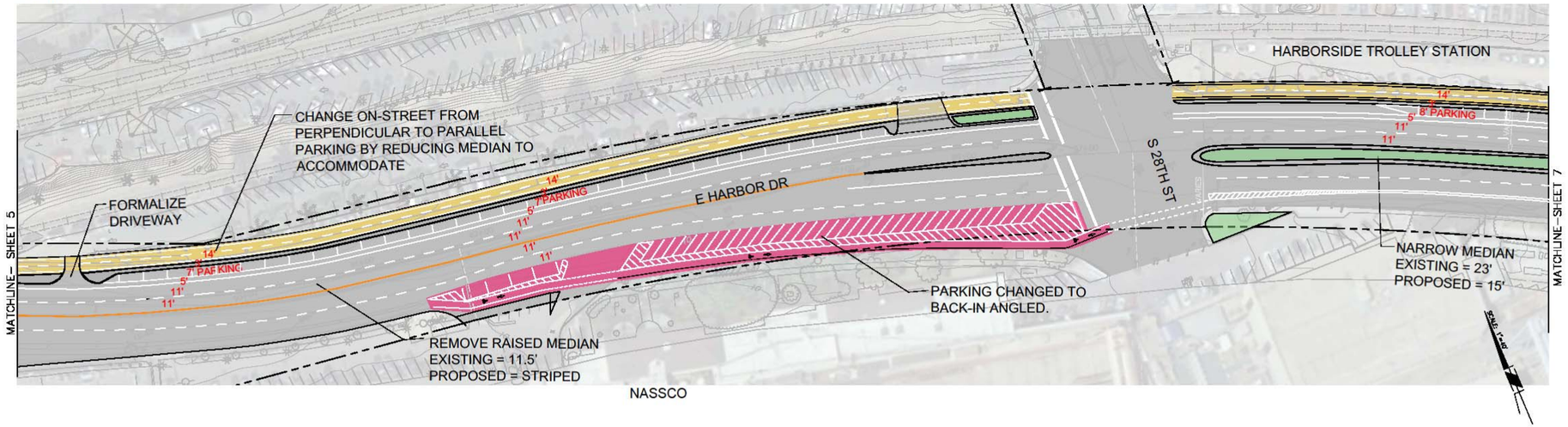

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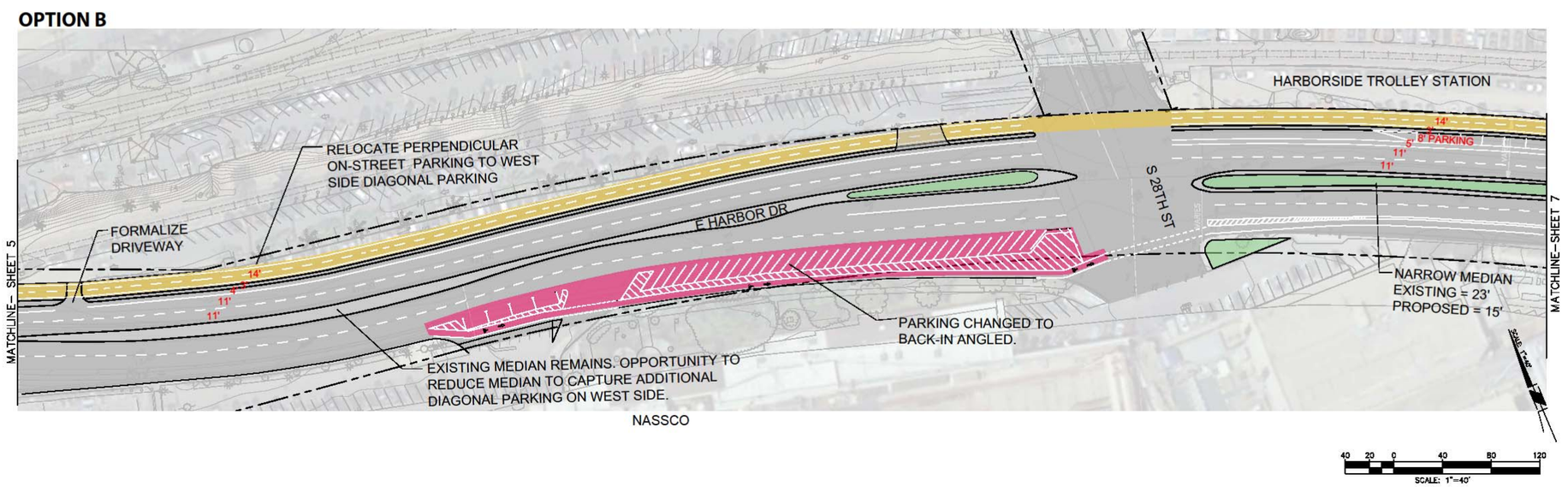
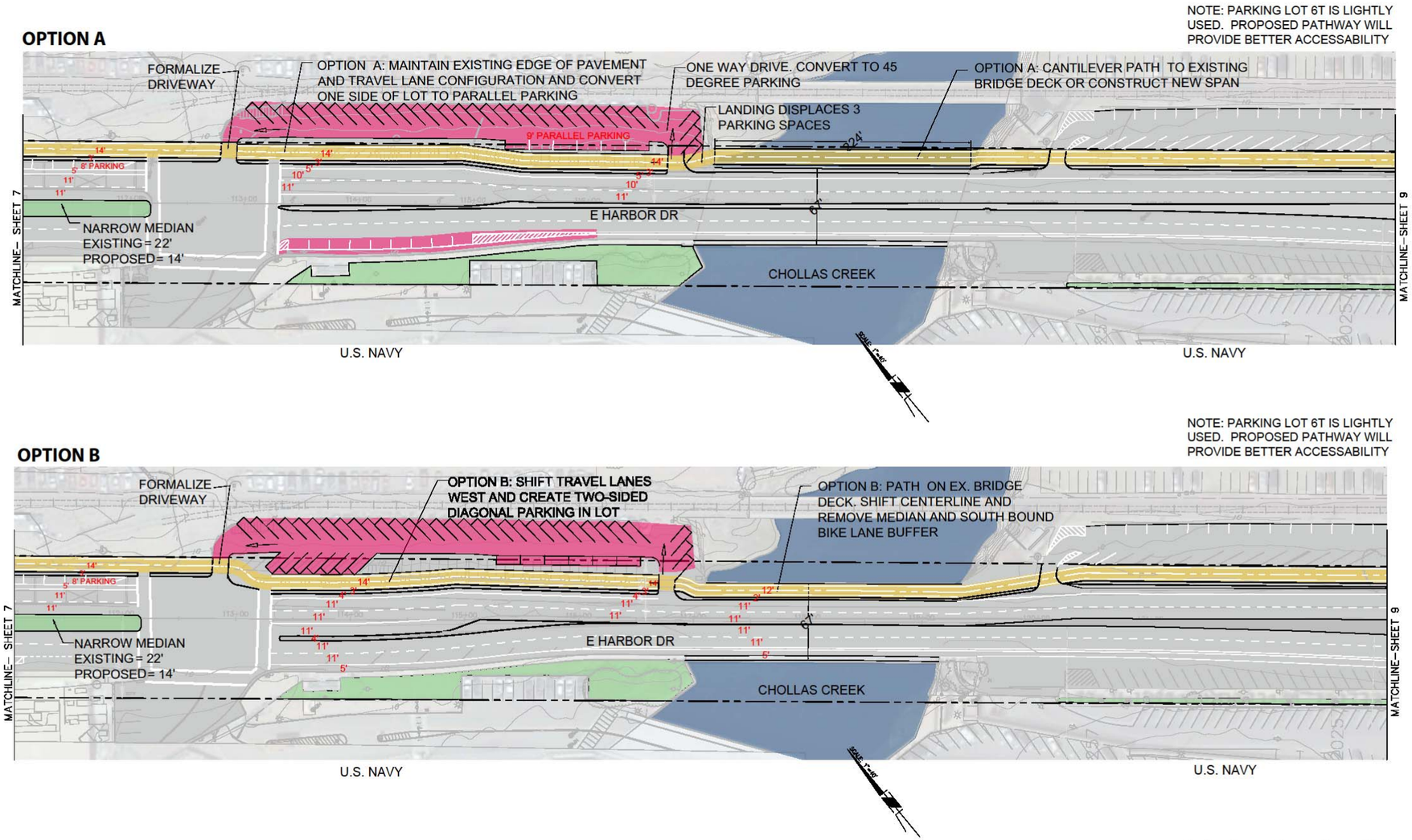


CHOLLAS CREEK BRIDGE



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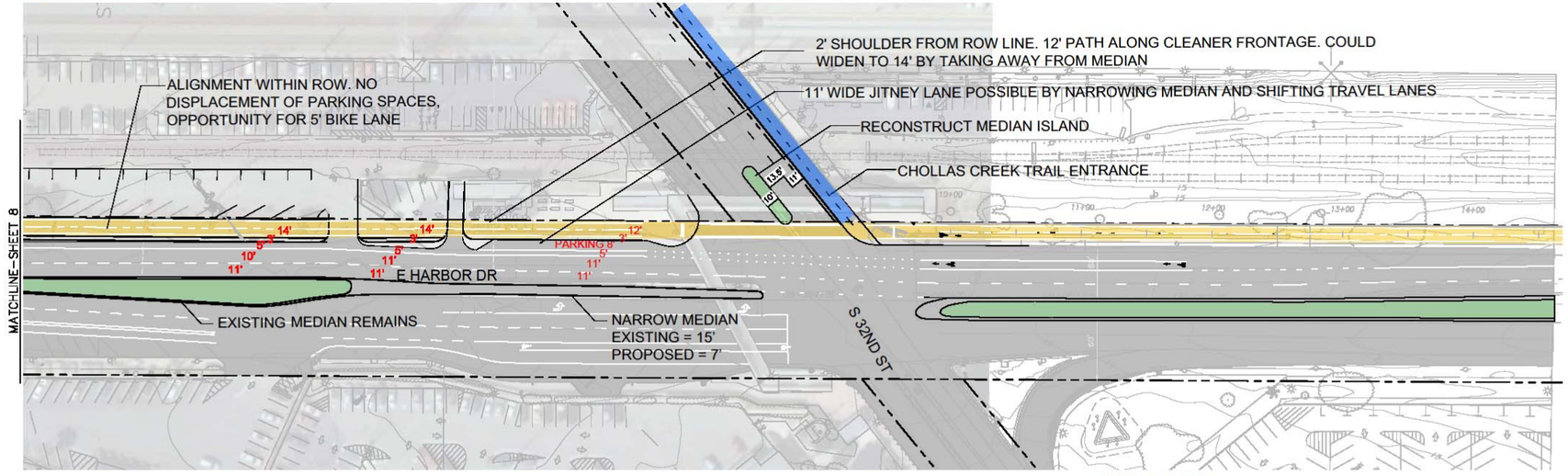

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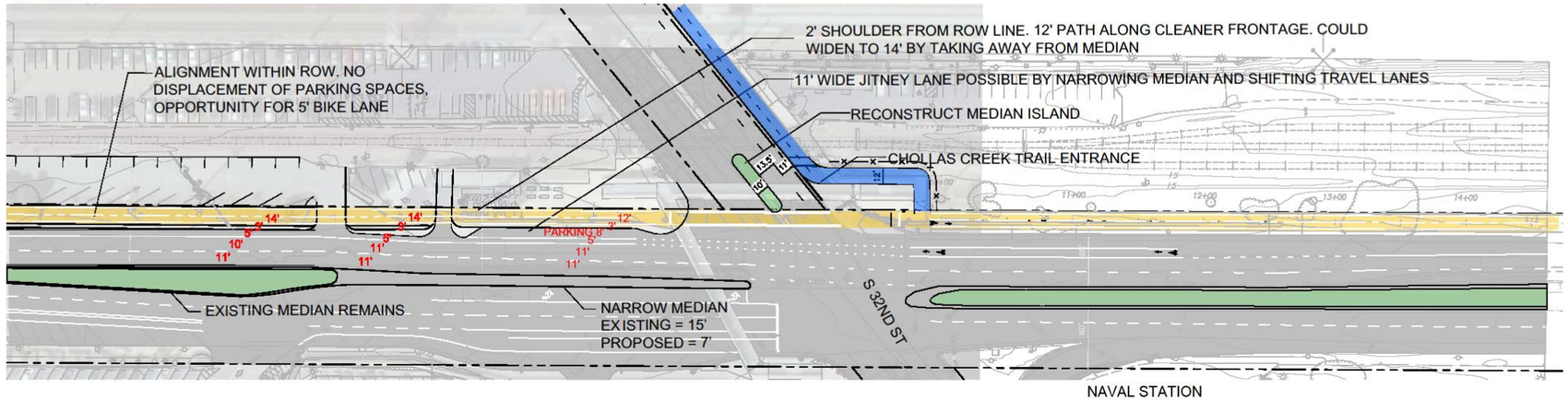

Bayshore Bikeway through Barrio Logan
Parking Map

APPENDIX B: Recommended Alignment

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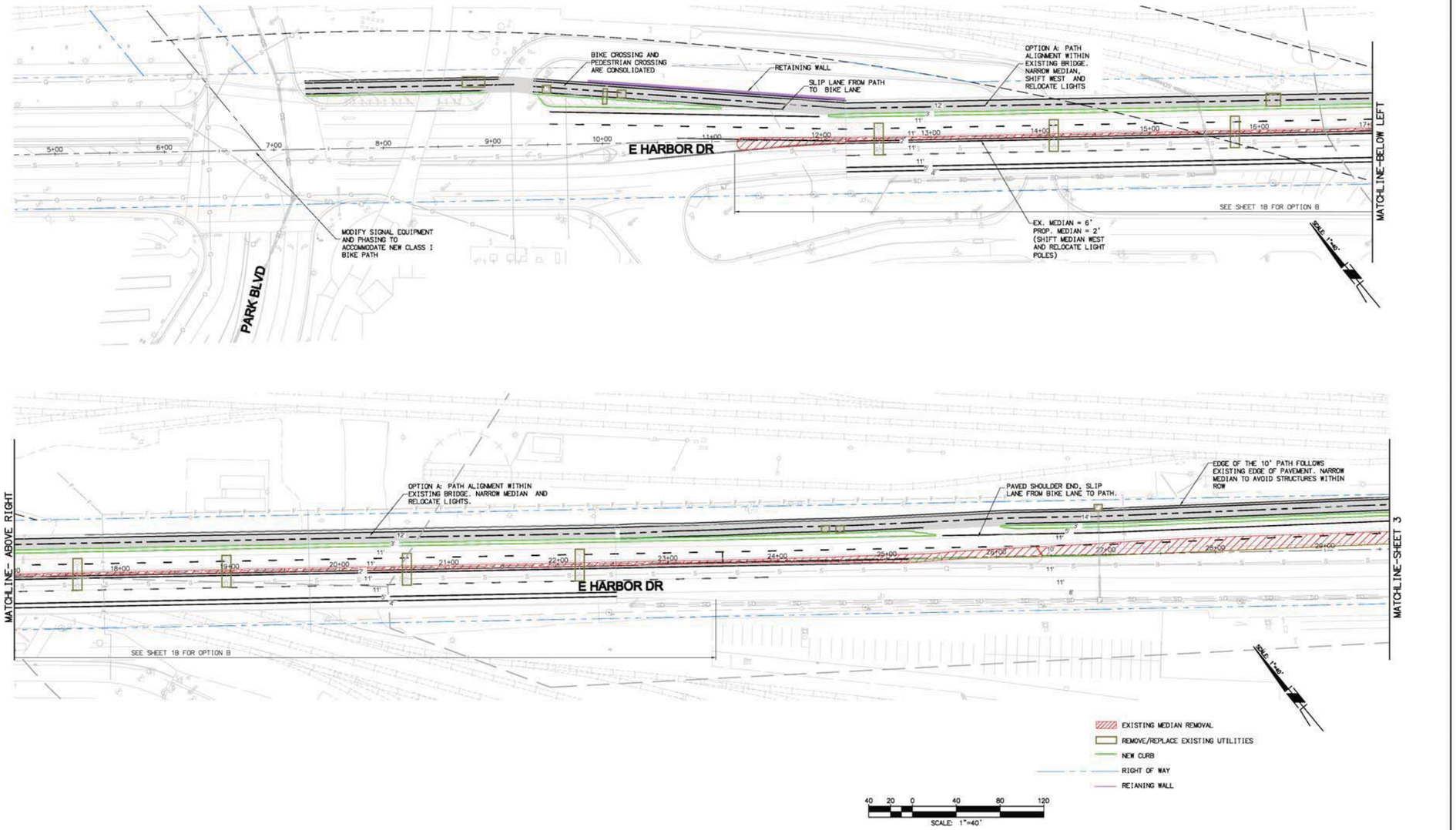

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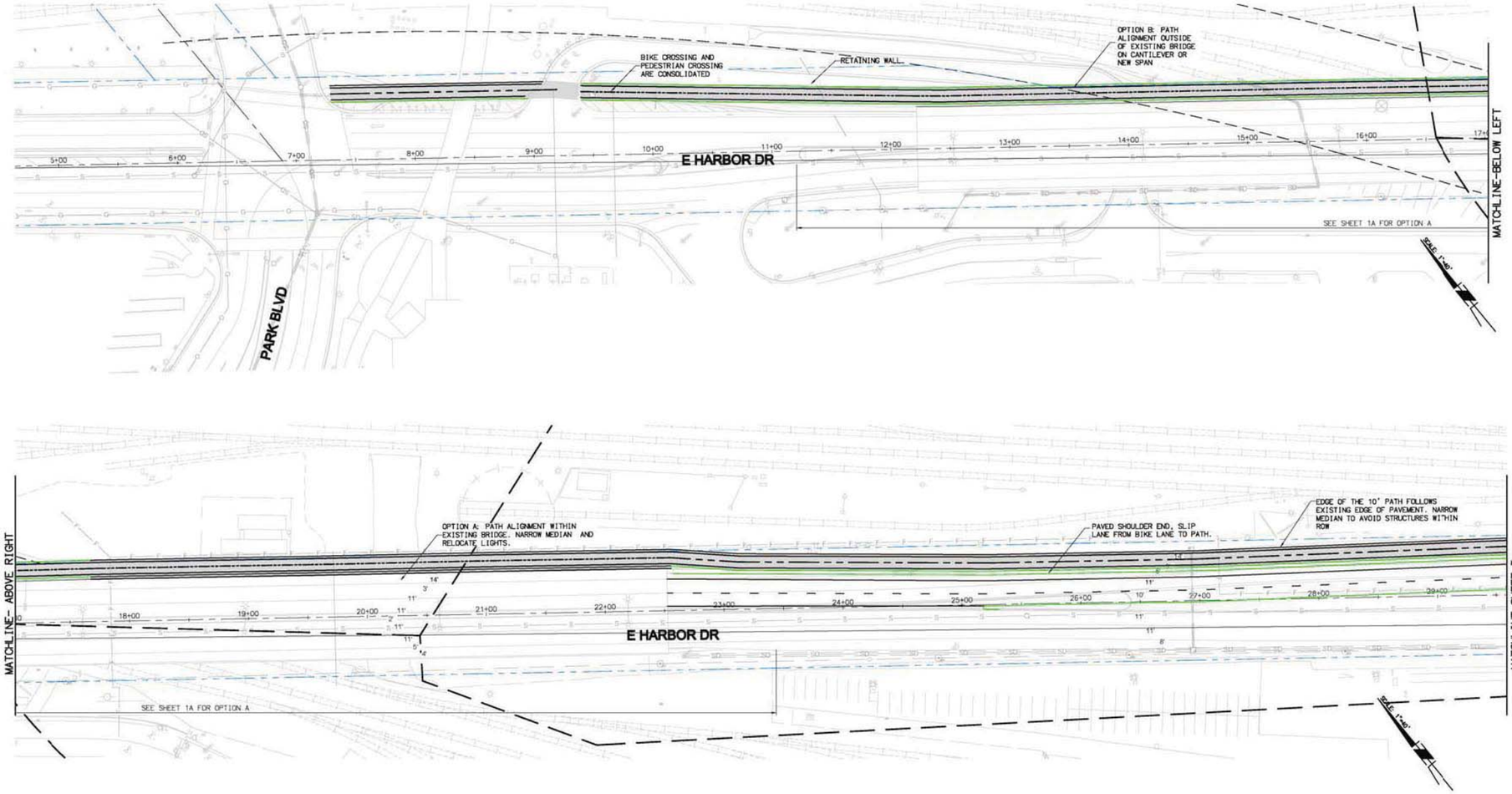

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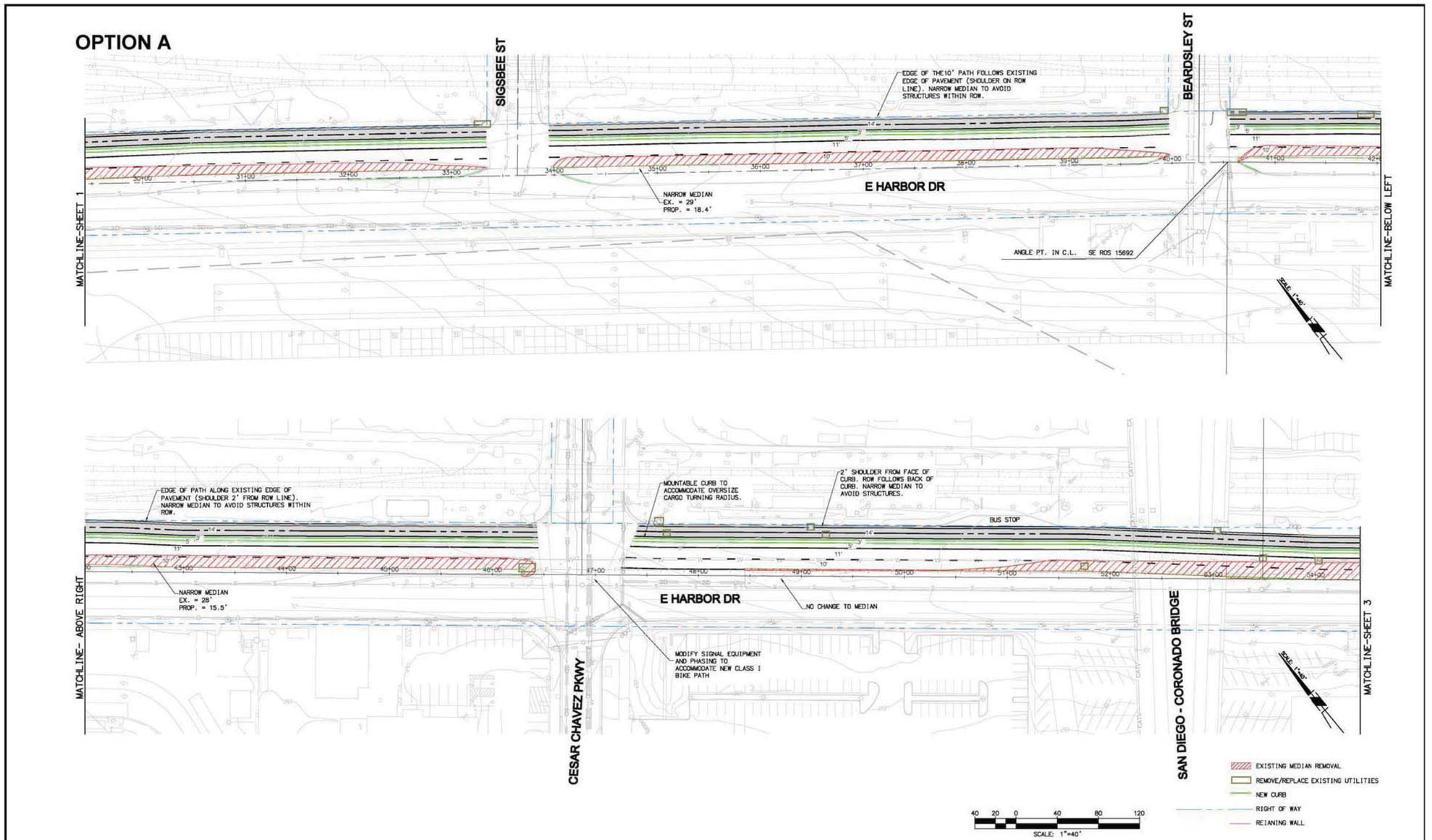

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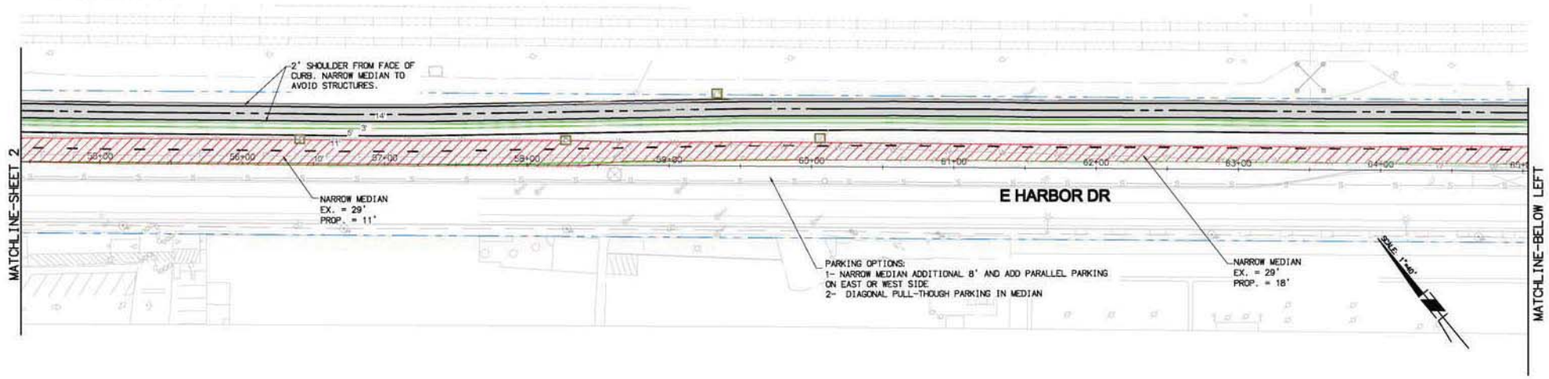

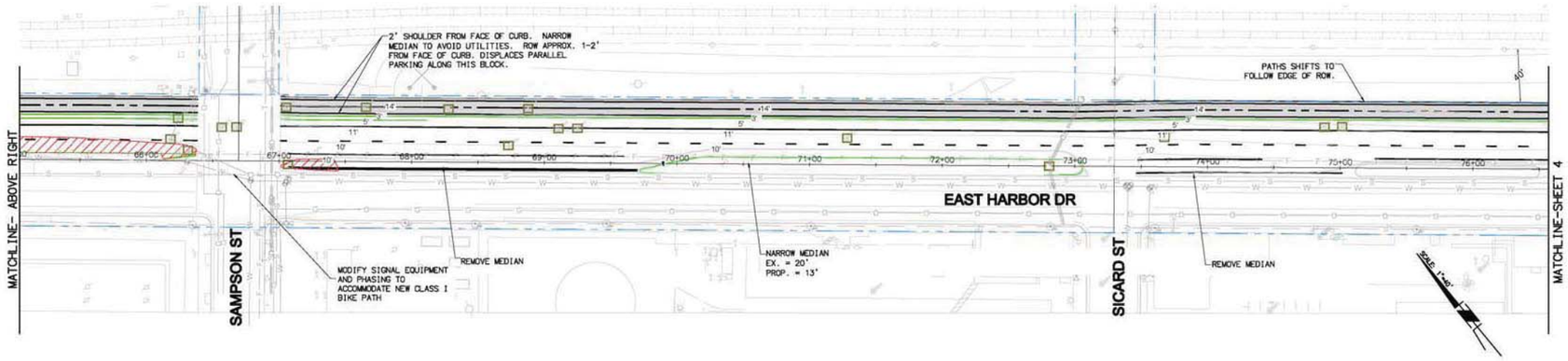

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- REMOVE/REPLACE EXISTING UTILITIES
- NEW CURB
- RIGHT OF WAY
- RETAINING WALL

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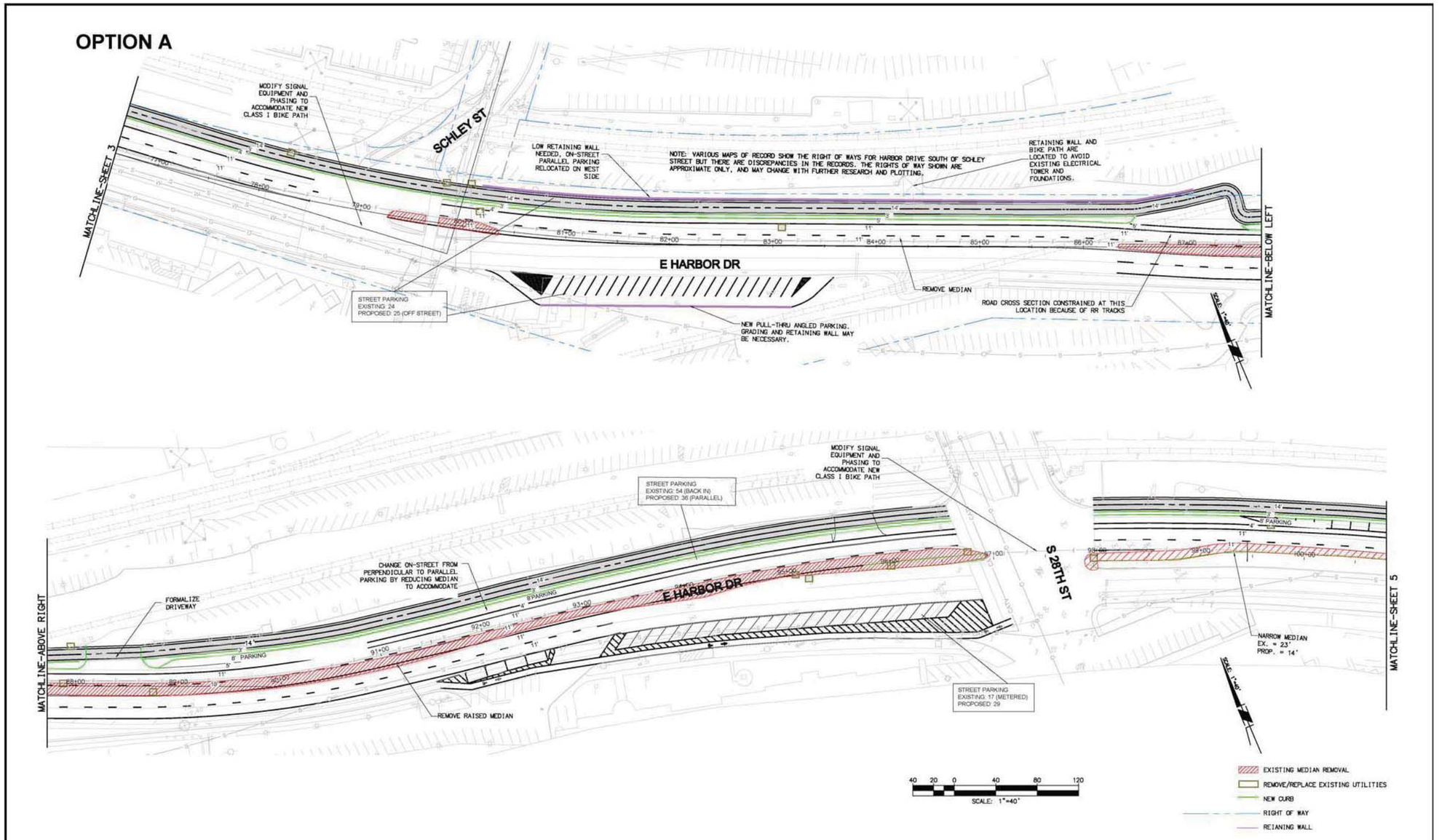

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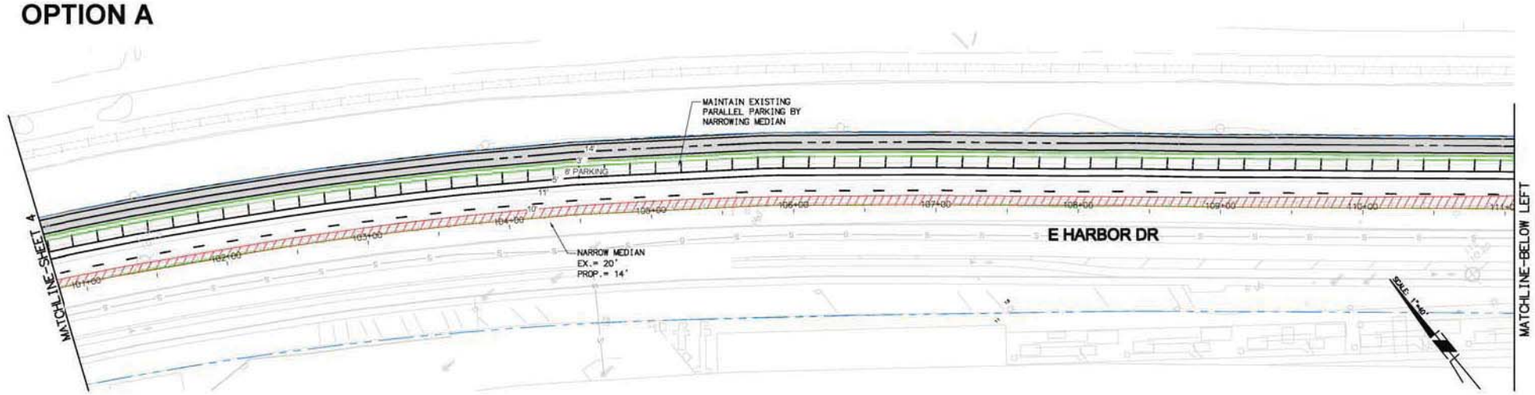

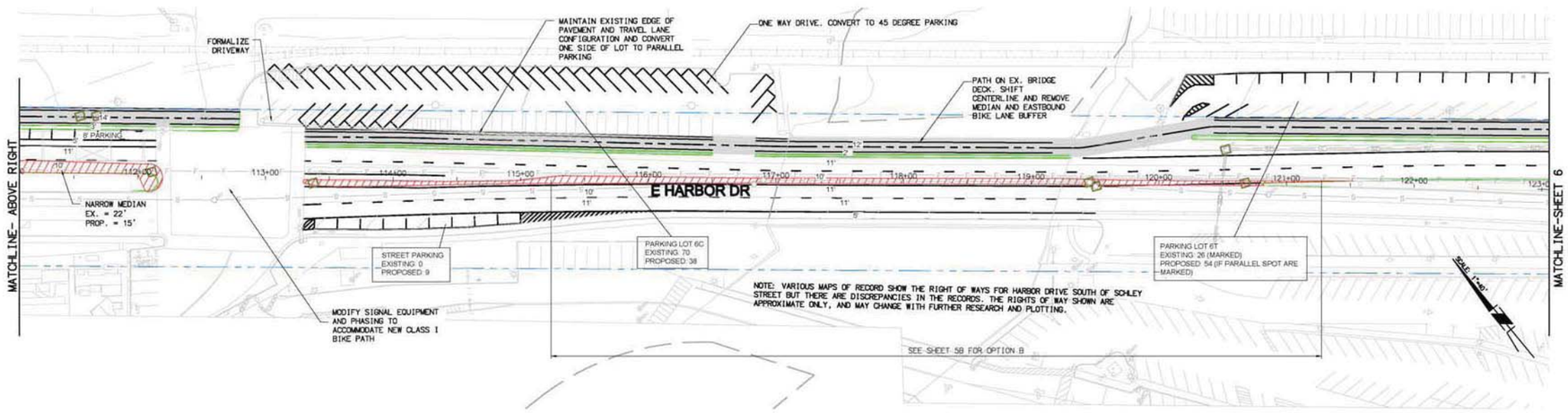

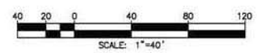

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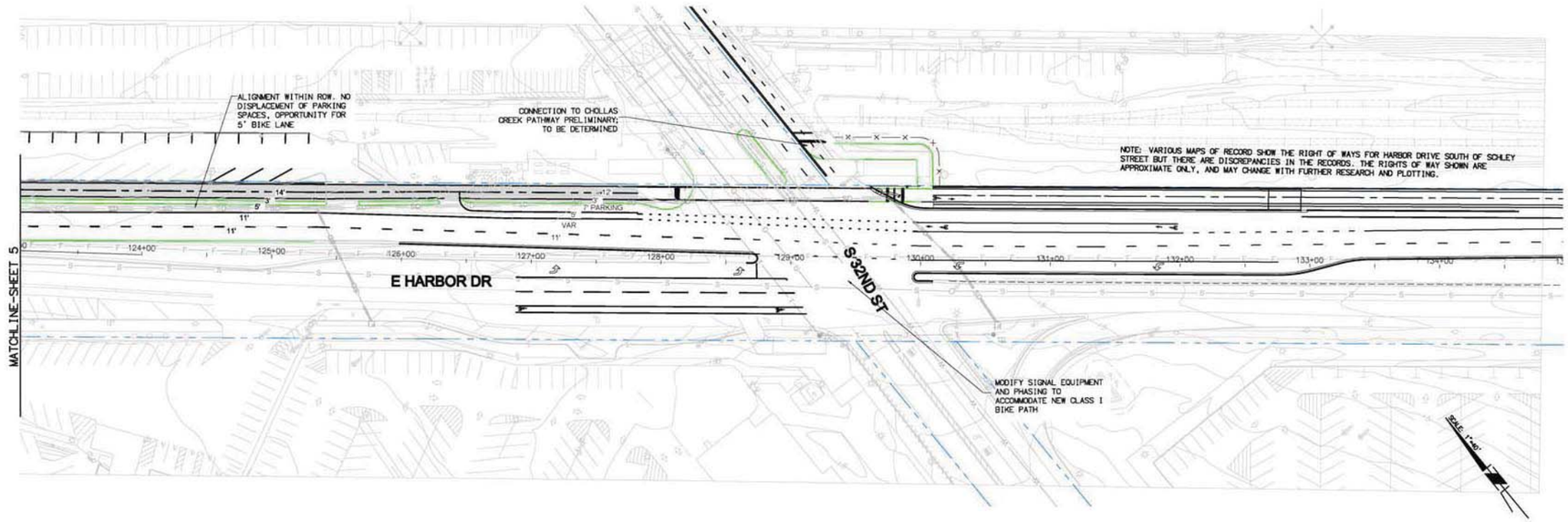

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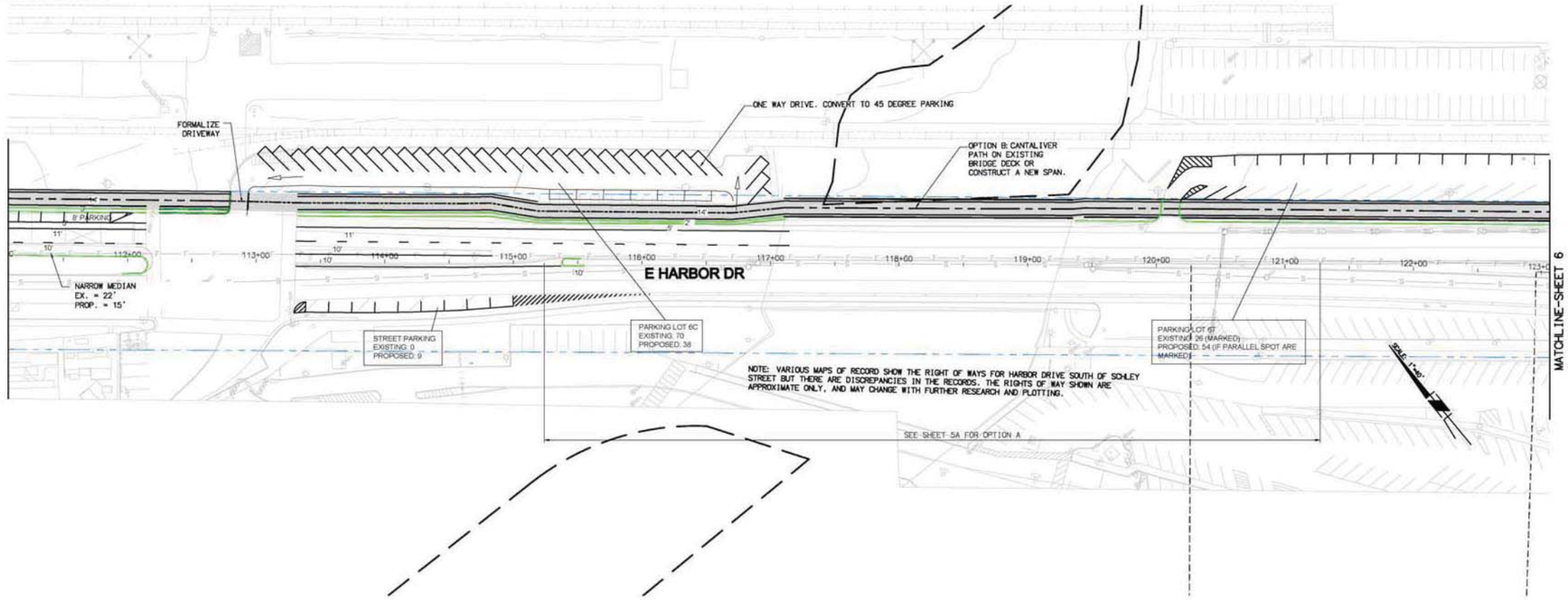

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APPENDIX C: Environmental Report

Memorandum

Date:	January 13, 2015
To:	Craig Williams, AICP Senior Associate Alta Planning + Design 625 Broadway, Suite 1001 San Diego, CA 92101
Cc:	n/a
From:	Devon Muto Principal, ICF International
Subject:	**Bayshore Bikeway Barrio Logan (Segments 2 and 3) Preliminary Environmental Constraints Scan**

1.0 Introduction

This memorandum provides a preliminary environmental review to inform the planning and design of the proposed Barrio Logan portion of the San Diego Bayshore Bikeway alignment between 32nd Street and Park Boulevard, along Harbor Drive (Bayshore Bikeway Segments 2 and 3). The general project and alignment are discussed in detail in the Existing Conditions report being prepared by Alta Planning and Design and is therefore not repeated here.

The scope of this effort was to utilize existing, readily available resources to review the conceptual proposed project for potential constraints associated with hazardous materials (particularly toxic soils), cultural resource, natural resource, and socioeconomics. As a preliminary environmental constraints scan, the goal of this document is not to fully evaluate potential impacts of the project in these areas. Rather, the purpose is to identify issues that could affect project design (such as significant resources that should be avoided) or that could factor into the approval processing for the project (such as resources which may require more in-depth analysis or approvals from other agencies).

To provide a comprehensive review of potential environmental issues, the resource areas typically covered by analysis pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) are each individually addressed in Section 2.0, Environmental Review. Following that, Section 3.0 provides general recommendations for design considerations and further analysis and evaluation.

2.0 Environmental Review

This section provides a "scan" of potential issues for the resource areas typically covered by analysis conducted pursuant to CEQA and NEPA. In performing this scan, several general assumptions about the project were considered to help frame the extent of potential impacts and issues. These assumptions include:

- The bikeway improvement would be located mostly within the existing Harbor Drive right-of-way.
- The bikeway improvement would mainly involve low profile streetscape, bike, and pedestrian improvements. No large structures, buildings, or bridges would be included in the project except of the possible cantilevering of the bikeway on the existing bridges.
- The bikeway improvements would not require substantial excavation or grading.

2.1 Aesthetics

Aesthetic effects are evaluated to determine if a project would obstruct or detract from an important view or negatively impact the visual character of an area. The project area is highly urbanized and the topography is low-lying. Although San Diego Bay is a dominating feature of Barrio Logan, the industrial development along the bay obscures most views along Harbor Drive. No scenic vistas or other scenic viewpoints were identified for the project area.

The proposed bikeway would consist of at grade, low profile improvements and would not introduce substantial visual elements to the area that would detract from the community character of the region. Further, by its nature as a low-lying path, it would not block existing community views. The bikeway would not erect any buildings or structures that would change the community character or scenic resources. As a typical urban improvement, the bikeway would maintain the integrity of the landscape and built environment. Therefore, the initial review suggests there are no environmental concerns associated with aesthetics.

2.2 Agriculture and Forestry

Environmental concerns surrounding agriculture and forestry would be the potential of the proposed project to impact agricultural operations or lands suitable for high quality agriculture. Agricultural resources are designated under the California Department of Conservation, Division of Land Resource Protection as a part of the Farmland Mapping and Monitoring Program (FMMP). The Department of Conservation's San Diego County Important Farmland map identifies Barrio Logan as "Urban and Built-Up Land" in its entirety. Agricultural resources are also identified under the local jurisdiction's zoning designations. According to the Barrio Logan Community Plan and the Downtown Community Plan, there are no agriculture and forestry land spaces within the jurisdictional boundary of the community. The area surrounding the bikeway is highly urbanized and the proposed project would not convert or cause the loss of either agricultural or forest land. Therefore, there are no environmental issues associated with agriculture and forestry.

2.3 Air Quality

Air quality considerations focus on the potential for a proposed project to: conflict with applicable air quality plans and standards, result in the increase of criteria pollutants, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors. The discussion below gives a brief overview of air quality conditions in the area and the likelihood of the proposed project to create air quality impacts in the area.

The proposed bikeway is located within the San Diego Air Basin (SDAB). The air basin is currently designated as nonattainment for the eight-hour federal and state ozone standards. Because ozone is not emitted directly but forms in the atmosphere, it is more a broader regional concern than it is a direct effect of individual projects. The SDAB is also nonattainment for both the PM-10 and the PM-2.5 standards (EPA Greenbook, 2014; Barrio Logan Draft EIR, 2013).

The proposed bikeway would not result in population growth and/or employment growth that exceed estimates used to develop applicable air quality plans, which in turn, would generate emissions not accounted for in the regional emissions budgets. There would be no conflicts with applicable air quality plans and standards.

Construction activities associated with the proposed bikeway would generate short-term emissions. Emissions would originate from heavy-equipment use, worker vehicle trips, material deliveries, and site grading. Construction related emissions would be minimal and would vary depending on level of activity, the specific construction operations and wind and precipitation conditions. Based on experience with similar construction projects, the short-term emissions from the project are unlikely to exceed any significance thresholds.

Once operational, the proposed bikeway is not anticipated to increase long-term operations emissions. Land use patterns would not be affected and additional vehicle trips would not be created. Rather, the intent of bicycle infrastructure, such as the proposed project, is to reduce vehicle trips. The proposed bikeway could result in some minor rerouting of traffic – the ingress and egress of parking along the eastern side of Harbor Drive may be altered. However, these alterations are not anticipated to result in a substantial increase in distances traveled by vehicles.

No objectionable odors affecting a substantial amount of people are anticipated.

Implementation of the proposed project could increase exposure of individuals to pollutants as bikeway users pass through the project area. In addition to the entire air basin being in non-attainment, the Barrio Logan community is home to transportation operations and industries that emit air pollutants that increase health risks. Further, Harbor Drive accommodates numerous commercial vehicles, many of which are diesel fueled, which result in emissions known for a higher health risk. However, there are existing bike lanes already along Harbor Drive and some future bikeway users will be individuals that would already be passing through the area in vehicles and are now choosing to bike. It is also intended that providing the improved bikeway will attract more cyclists to the project area. Nonetheless, it is difficult to predict what this increase in ridership would be and if this increase would actually result in greater exposure to air quality pollutants as these cyclists may already be riding in areas with poor air quality. Further, even if there were a large increase in new riders, they would only be travelling through

the project area for a short period of time; and in order for air pollution to be an issue for an individual, long-term exposure is required. Therefore, this is not an issue that requires further analysis.

2.4 Biological Resources

Concerns relating to biological resources revolve around any potential impacts to sensitive vegetation, wildlife, aquatic resources and associated habitats.

The San Diego Bay and Las Chollas Creek are within the immediate surroundings of the proposed project and are identified as having the potential for the occurrence of sensitive plant communities, wildlife or plant species (Barrio Logan Draft EIR, 2013). However, the proposed project design is a bikeway within an existing road right-of-way (Harbor Drive). Not only are there no biological resources within the Harbor Drive right-of-way, but due to the developed and urban nature of the area, no biological resources were identified adjacent to the right-or-way with the exception of Chollas Creek and some non-native ornamental vegetation which could support nesting birds. Additionally, the project area is not included in the City of San Diego's Multi-Habitat Planning Area (MHPA).

Removal of large trees or construction in proximity to large trees suitable for nesting may affect nesting birds protected by the Migratory Bird Treaty Act (MBTA). Where feasible, such construction or tree removal should be conducted outside of avian breeding season (February 1 to August 31) to ensure that impacts are avoided. If these activities are required during the breeding season, pre-construction surveys for covered avian species are recommended to verify that no active nests are present, and impacts would be avoided.

Two design options are being considered for the Harbor Drive Bridge over Chollas Creek. One involves altering the median and accommodating the bikeway on the current bridge deck. This option would likely contain all construction activities to the existing road and would not require additional permits or result in potential biological impacts. The second option is the addition of a cantilevered bikeway on the eastern side of the bridge. This option would likely result in work over and within the creek, which is considered aquatic habitat and jurisdictional Waters of the United States. This work would trigger Federal and State requirements including approvals from the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Services (USFWS), and the U.S. Army Corps of Engineers (USACE).

2.5 Cultural Resources

Cultural resources encompasses the potential for the proposed project to adversely affect paleontological, archaeological and historical resources. Paleontological resources are considered geologic formations (fossils) that underlie the project that have a high potential to yield information of scientific importance.

Archaeological and historical resources are considered resources if they are:

1. Currently listed, or eligible for listing, by the State Historical Resources Commission, in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:
    - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    - Is associated with the lives of persons important in our past;
    - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    - Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Paleontological and archaeological resources are generally subterranean and are encountered during earth-disturbing activities such as grading or excavation. The paleontological and archaeological resource review below focuses on potential disturbance or destruction of significant paleontological and archaeological resources within the project area. The Barrio Logan Community Plan PEIR and the City of San Diego Downtown Community Plan EIR was referred to for identification of sensitive paleontological and archaeological areas with the project location.

The historical resource impact review below focuses on the historic and/or architectural significance of structures that are at least 50 years old. The potential of the proposed project to directly affect resources was considered during the review. The Barrio Logan Historical Resources Survey and the Downtown Community Plan were referred to in order to evaluate the potential for the project to affect historical resources.

2.5.1 Historical Resources

A community-wide reconnaissance historical resource survey was prepared as a part of the Barrio Logan Community Plan Update, Historic Preservation Element in 2014. The Kelco Historical Community Mural located at 1935 Harbor Drive on the west side of the road was identified as an individual property eligible for local listing or designation (Barrio Logan Community Plan, 2014). Additionally, a "streamline moderne" architectural style structure located at 2295 Harbor Drive, is also identified as a historical site.

Railroad facilities which are located throughout the area and especially along Harbor Drive are identified as resources important to the historical development of Barrio Logan that could potentially be encountered during bikeway construction activities. Railroad facilities include: tracks, spurs and signs first installed in the late 19th century and used today by freight trains and the San Diego trolley (Barrio Logan Community Plan, 2014).

The proposed bikeway is currently planned to be located almost entirely within the existing Harbor Drive right-of-way and therefore direct impacts to historic resources is generally unlikely. Additionally, no segments of Harbor Drive itself or the bridges or other structures it crosses have been identified as potentially historically significant, with the exception of the railroad facilities. The bikeway crosses a railway spur approximately 1000 feet northwest of South 28th Street. Direct impacts to this spur should be evaluated.

Because a developed bikeway typically involves low profile improvements with few vertical structures, interference, such as blocking a view, of an adjacent historic structure is unlikely but should be considered. Additionally, while unlikely, the proposed project has the potential to alter the context of nearby historic resources, such as the railroad facilities.

Due to the proximity of identified significant or potentially significant historic resources, it is recommended that nearby historic features be further evaluated and considered as part of the design and approval of the proposed bikeway.

2.5.2 Archaeological and Paleontological Resources

The Barrio Logan Community Plan Update identified areas for the potential for encountering archaeological and paleontological resources during development projects in Barrio Logan. The likelihood of encountering archaeological resources is greatest on sites that have been minimally excavated in the past, including undeveloped parcels, vacant lots and lots containing surface parking (Barrio Logan Community Plan DEIR, 2013). The potential to discover prehistoric sites or deposits within Barrio Logan is high in the areas near Las Chollas Creek (Barrio Logan Community Plan, 2014). Two previously recorded sites, SDI-12090 and SDI-12092, represent a prehistoric village situated at the mouth of Chollas Creek.

The proposed bikeway runs along vacant lots, surface parking lots, and minimally disturbed dirt associated with both historical and current industrial and commercial developments along the Harbor Drive corridor. However, the majority of the project is anticipated to occur within the previously disturbed right-of-way of Harbor Drive and excavation associated with project construction is also it is also anticipated to me be minimal. The proposed bikeway crosses the mouth of Chollas Creek but would likely not require soil disturbance in this area. Nevertheless, review at a later design stage is

recommended to determine if any excavation activities could potentially impact known archaeological resources. If excavation activities are proposed where significant archaeological resources may have the potential to occur, preparation of a cultural resources survey and records search is recommended to determine if an impact could occur and if so, the appropriate mitigation measure(s) to reduce impacts to less than significant.

While it is unlikely, due to the nature of the project and associated improvements, impacts to paleontological resources could occur if excavation is proposed in native soils at depths greater than 10 feet. If, at a later design stage, excavation depths would exceed 10 feet and be located in geologic formations known to contain prehistoric resources or fossils, it is recommended that a qualified paleontologist be consulted to determine if a survey would be necessary for determining significance.

2.6 Geology and Soils

The following geology and soils review focuses on the potential for the proposed project to have potential adverse geological effects on people, soil erosion, unstable geologic units or soil, or waste water systems. The discussion below gives a brief overview of geologic and soil conditions in the area and the likelihood of the proposed project to affect geology and soil in the area.

Potentially active faults are mapped transecting or projecting toward the northern portions of the Barrio Logan Community Plan Update area. Therefore, due to the presence of mapped and active faults in the project area, surface rupture hazard due to faulting is considered possible. Like all of southern California, severe ground shaking is most likely to occur during an earthquake on one of the regional active faults in the area. The Downtown Graben, located along the northern portion, and the San Diego Fault, located 4,000 feet northwest of the Barrio Logan Community Plan Update area, are the nearest active faults and are considered to have the most significant effect (Barrio Logan Community Plan, 2014). The California Building Code includes design criteria for seismic loading and other geologic hazards. Implementation of these design criteria would ensure that users of the bikeway and the bikeway itself are not adversely impacted by seismic hazards.

Construction of the proposed bikeway would involve grading and repaving of the existing bikeway, which would temporarily expose soil to wind or water erosion. Implementation of standard construction best management practices (BMPs) and adherence to the State's construction stormwater regulations would ensure that there are no significant adverse impacts from erosion and loss of topsoil.

The project area contains alluvial deposits which are subject to liquefaction. There is potential for liquefaction to occur within young alluvium and non-compacted fill during strong ground motion near minor drainages of Las Chollas Creek. Additionally, lateral spreading, a phenomenon associated with liquefaction, and subsidence or other geologic or soil conditions that could create unstable surface conditions may occur in the project area. Barrio Logan's surficial soils are largely composed of expansive clays, which swell when wet and shrink when dry, producing ground surface desiccation cracks. The bikeway would be susceptible to damage if underlying soil characteristics such as liquefaction, shrink-swell potential and low strength are not accounted for in the project design. However, adherence to standard building code requirement and standard engineering practices would address these potential issues.

According to the Barrio Logan Community Plan Update, there is no evidence of landslides of mudslides in the proposed bikeway area. The proposed bikeway contains level topography, which has a low potential for landslides or mudslides.

No restrooms would be constructed as part of the proposed project, and there would be no consequent increase in wastewater due to project implementation. There would be no impact on soils related to the use of septic tanks.

2.7 Greenhouse Gas Emissions

The following greenhouse gas (GHG) emissions review focuses on the potential for the proposed project to generate direct or indirect GHG emissions or conflicts with applicable plans, policies, or regulation. The discussion also gives a brief overview of GHG emissions in the area and the likelihood of the proposed project to affect these emissions.

GHG emissions are typically characterized as being emitted during construction or operation. Sources of construction emissions associated with the proposed bikeway include heavy-duty equipment and on-road vehicles, such as haul trucks and employee commuter cars. Emissions associated with these are considered short-term, and the emission source would cease once construction activities are complete.

As discussed under the Air Quality section, implementation of the proposed bikeway would not substantially affect vehicle operations or land use patterns. Additionally, it would not substantially alter energy demand or water use in the project area. Accordingly, the proposed bikeway would not increase long-term operational emissions associated with use of the bikeway, relative to existing conditions.

Minor maintenance of the roadway surfaces, along with some of the raised median hardscape surfaces, would be required on an as-needed basis. GHG emissions generated by required asphalt maintenance would be minimal and would likely produce a less than significant amount of carbon dioxide equivalent (CO_2e) that would be well below all adopted GHG thresholds.

The City of San Diego has established an interim screening criterion and guidelines for the evaluation of GHG emissions for projects subject to CEQA. The interim guidance defines a significant amount of GHG as 2,500 metric tons (MT) per year (City of San Diego, 2013).

The proposed bikeway would not introduce any new energy, water, or transportation requirements on city infrastructure. Accordingly, the project would not create a new source of emissions or obstruct the City's ability to implement the GHG reduction efforts outlined in the interim guidance.

ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32 goals. The Scoping Plan outlines a series of technologically feasible and cost effective measures to reduce statewide GHG emissions. Some reductions will need to come in the form of changes pertaining to vehicle emissions and mileage standards. Some will come from changes pertaining to sources of electricity and increased energy efficiency at existing facilities. The remainder will need to come from plans, policies, or regulations that will require new facilities to have lower carbon intensities than they have under business-as-usual (BAU) conditions.

The project would improve the connectivity of the existing bikeway, which could encourage alternative modes of transportation and contribute to long-term GHG reductions. Implementation of the proposed bikeway would contribute to achieving the goals of AB 32.

2.8 Hazards and Hazardous Materials

The following hazards and hazardous materials analysis focuses on the potential for the proposed project to increase the risk of adverse public health or environmental effects relating to the presence of known hazardous materials. Research was conducted on GeoTracker to identify the hazardous materials present within the vicinity of the bikeway. This data was also cross-referenced with the hazardous materials information in the Barrio Logan Community Plan EIR. GeoTracker is a database developed under State mandates AB 592 and SB 1189. It is used by the State Board, regional boards and local agencies to compile information relating to compliance from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. The discussion below gives a brief overview of hazardous materials in the area and the likelihood of the proposed project to be effected by hazardous materials in the area.

Barrio Logan has historically experienced heavy development related to its location on the bay and its growth as the industrial hub of downtown San Diego. Since the late 1800s, when the community of Barrio Logan began to develop, the land west of Harbor Drive has been heavily concentrated with industrial, commercial and transportation-related development. The area surrounding Harbor Drive has historically been occupied by industrial developments such as shipbuilding, fish canning, oil, lumber, and general warehouses; commercial business-especially that which was associated with the U.S. Navy; and transportation-related development such as a north-south train line that runs parallel to Harbor Drive.

Currently, the proposed bikeway segment's adjacent land uses include a large Naval base, shipbuilding and repair facilities and other related industrial and maritime activities. The southern half of the propose bikeway segment is bordered mainly by parking lots and rail lines.

Industrial, commercial and transportation-related development are characteristically the types of development which may result in the presence of hazardous materials, especially considering that potentially toxic activities occurred prior to enforcement of environmental regulations. This lends to a major susceptibility of hazardous materials in the area. Potential hazardous materials existing subsurface could be encountered during excavation and demolishing or removal of existing surface cover.

According to GeoTracker, within 50 feet of each side of the Harbor Drive along the bikeway segment, there are approximately:

- 3 Permitted Underground Storage Tank Facilities;
- 3 Leaking Underground Tank (LUST) Cleanup Sites;
- 4 'Other' Cleanup Sites;
- 1 Land Disposal Site; and

- 3 Department of Toxic Substance Control Cleanup Sites.

There are also sites that have experienced past cleanup efforts:

- 4 LUST Cleanup sites; and
- 2 Other Cleanup Sites.

Additionally, numerous clusters of sample/monitoring points are present within the 50 foot range of the subject segment of Harbor Drive. The sample/monitoring points allow for nearby identified sites to be monitored for seepage, leaking or migration of nearby hazardous materials.

Aside from known hazardous materials, unknown toxins could potentially exist in the demolition materials (asphalt and concrete) and pose a threat to public health. As such, the proposed project could create hazards to public or the environment through unforeseen upset or accident of hazardous materials along the proposed bikeway.

As a result of the potential to encounter contamination and hazardous materials during the construction of the project, a hazardous materials site assessment is recommended for the project to determine the likelihood for exposure to contamination and recommendations to address potential exposure, and for management of contaminated materials involved with the construction. Additionally, the review should determine if any site on the CalEPA Cortese List occurs within the project area. If it does, they the project would not be eligible for a Categorical Exemption under CEQA.

2.9 Hydrology and Water Quality

The following hydrology and water quality analysis discusses the potential for the proposed project to adversely impact water quality or waste discharge requirements, groundwater supplies, existing drainage patterns, stormwater capacity and flood hazards.

The California Regional Water Quality Control Board, San Diego Region (Regional Board) is in the process of addressing water quality impairments in Chollas Creek and the mouth of Chollas Creek, which the bikeway will cross. This creek is adversely impacted by urban stormwater runoff that enters the creek throughout its course that originates in La Mesa and Lemon Grove, continuing through the San Diego communities of City Heights, Encanto, Valencia Park, Lincoln Park, Southcrest and Barrio Logan before emptying into the San Diego Bay. As a result, Chollas Creek was placed on the Clean Water Act, Section 303(d) list for toxicity, cadmium, copper, lead, zinc and the household pesticide diazinon. These factors have been tested to contribute to sediment toxicity and benthic community degradation. The San Diego Bay is also on the 303(d) list for various locations. Due to the proximity of the proposed bikeway to these waterbodies, controlling pollutants from the project site will be important.

A Storm Water Pollution Prevention Plan or Water Pollution Control Plan would be required which would identify standard BMPs to minimize water quality impacts from potential storm water runoff during construction. Construction of the proposed bikeway would involve site preparation to remove existing pavement, grading for the improved bikeway and installing base material and paving. Implementation of standard BMPs would ensure compliance with San Diego Basin Plan water quality standards. Through compliance with regulatory standards and uniformly applicable development standards, impacts related to water quality or waste discharge requirements would be addressed.

The proposed bikeway could increase some impermeable surface cover. The proposed bikeway area is already developed or disturbed, but the eastern edge of the Harbor Drive includes an area of dirt where the right-of-way has not been fully developed. These areas of dirt appear highly compacted and no erosion control features were apparent. As such, paving the area could benefit water quality, while not substantially increasing runoff. However, controlling any increased runoff will be important. Drainage is already a concern along Harbor Drive. The current surface drainage system within the proposed bikeway is under capacity and can become clogged, resulting in flooding of roadways and sidewalks. Nearly all of the median within Harbor Drive lacks curbs, gutters or storm drains and, as a result, stormwater runoff forms large pools within the median that evaporate slowly due to limited percolation. Several low lying areas near the intersection of Harbor Drive and Belt Street become inundated easily after rain (Harbor Drive Segment, Bayshore Bikeway, 2011).

According to the Bayshore Bikeway report prepared for the Port, stormwater runoff is generally not controlled to current standards throughout the Harbor Drive corridor, including the parking areas adjacent to Harbor Drive. For example, many of the parking areas used by NASSCO employees immediately adjacent to the roadway are inundated following typical rain events. Even so, employees continue to park in these submerged areas, and must contend with the standing water until it evaporates, which can be lengthy.

Because it is unlikely that the proposed bikeway project will generate substantially more runoff or alter drainage patters, it is not anticipated to exacerbate these conditions and the project may provide some opportunities for improvement. This issue should be considered as part of the project design and reviewed in concern with storm water and water quality management to ensure that it is addressed.

Therefore, it is anticipated that implementation of the proposed bikeway would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

2.10 Land Use and Planning

The land use and planning review focuses on whether or not the proposed project would conflict with local existing plans and policies. A more in-depth review of review of relevant plans and policies is provided in the Plan and Policy Review Chapter of the Alta Existing Conditions Report.

The proposed bikeway would improve the existing Bayshore Bikeway within the Barrio Logan Community Plan area. This use is consistent with the Barrio Logan Community Plan goals and policies. Land use and planning goals and policies in Barrio Logan Community Plan call for increased multi-modal transportation and support of nearby recreational facilities. Specifically, Policy 3.5.1 supports the bikeway:

> Provide and support a continuous network of safe, convenient and attractive bicycle facilities connecting Barrio Logan to the citywide bicycle network and implementing the San Diego Bicycle Master Plan and the Bayshore Bikeway (Barrio Logan Community Plan, 2014).

The Barrio Logan Community Plan Update also incorporates sustainable building concepts and practices that serve to reduce or avoid potential environmental effects associated with water and energy consumption, consumption of nonrenewable or slowly renewing resources, and urban runoff. One particular element, Smart Location and Linkage, encourages the reduction of vehicle trips and miles

traveled and support walking and bicycling as a transportation choice. The Land Use Policy 2.5.8 supports the integration of transit within employment areas and encourages the creation of safe and direct bicycle and pedestrian connections to provided multi-modal access. The Recreation and Conservation Elements contain policies aimed at improving public access to local and regional passive and active recreation opportunities through the creation of bicycle and pedestrian pathways linkages to such areas as Las Chollas Creek, Chicano Park, San Diego Bay and the downtown park system.

The proposed project would upgrade an established bike path along Harbor Drive, which accommodates an alternative mode of transportation and provides recreational opportunities. The proposed bikeway would be consistent with goals and policies to enhance parks, recreation and alternative modes of transportation in Barrio Logan and San Diego. Further, the proposed project would not divide an established community as the project would be upgrading an already existent bike path. Therefore, initial review of potential land use and planning impacts suggest there are no concerns associated with this resource area.

2.11 Mineral Resources

The proposed bikeway project area contains no significant mineral deposits and has low likelihood of significant deposits (Barrio Logan Community Plan, 2014). Further, all of the proposed bikeway has been previously graded and is currently developed with urban uses. The proposed bikeway would not result in the loss of availability of known valuable mineral resources or of a locally important mineral recovery site as identified in the City's General Plan or existing Community Plan. Therefore, the project would have no effect on mineral resources.

2.12 Noise

Noise, which in this context is unwanted sound, is considered significant if a proposed project were to cause a significant increase or exposure that was not existent prior to project implementation. A majority of the area surrounding the proposed project currently experiences high levels of noise from industrial activities, vehicular traffic and rail operation.

Sensitive receptors are also an element when analyzing project-generated noise. Sensitive receptors are considered areas where occupants are more susceptible to adverse effects of exposure to noise, such as: hospitals, schools, daycare facilities and elderly housing. Initial review shows that the immediate area surrounding Harbor Drive does not include any sensitive receptors.

Once operational, the proposed project could expose cyclists who use the bikeway to noise currently surrounding the bikeway, such as vehicular traffic along Harbor Drive, the rail line and industrial activities. This exposure would be temporary while in passing, as it would only occur in the areas along Harbor Drive where noise sources are highest, such as the rail line and traffic intersections. This would not be considered a significant change as the bikeway presently exists under current noise levels.

The project would not likely generate a large amount of construction activity, requiring noise-generating equipment, and would not increase noise above current levels during construction and operation. It is assumed that noise-generating construction activities for the project would be limited to the hours of 7 A.M. to 7 P.M., which is consistent with the City of San Diego's Noise Ordinance. As such, significant noise

impacts are not expected to occur because construction activities would comply with the City's Noise Ordinance. Furthermore, the noise generated by the construction would be temporary and intermittent at various points of the segment during the construction phase.

2.13 Population and Housing

The project proposes an upgrade to an existing bike path along Harbor Drive. The immediate area surrounding Harbor Drive is largely industrial and transportation related. The proposed project does not include the construction of housing and would not displace existing housing as it is remaining within the current bike path. Therefore, the proposed project does not raise any environmental concerns when considering population and housing.

2.14 Public Services and Utilities

Implementation of the proposed bikeway would not increase the demand for public services, utilities, and facilities within the bikeway area. The proposed bikeway is within the existing right-of-way and no additional construction of new facilities would be required as a result of the proposed bikeway. The proposed bikeway would not increase the capacity or operations of the existing right-of-way; rather multi-modal transportation would be encouraged. In addition, the proposed bikeway would not increase population or create habitable structures. Thus, no additional public services or utilities would be required for the project.

As with any work in an existing right-of-way, there is the potential for utility conflicts which may require relocation of existing utilities occur within the project footprint. Any possible utility relocation should be identified as part of the project an included in the final evaluation of its potential environmental impacts.

2.14 Recreation

According to the Bayshore Bikeway study, the nature of this proposed bikeway is that it is a linear experience, without many locations for public viewing of natural areas or other public spaces where individuals are likely to want to stop. Implementation of the proposed bikeway is not expected to substantially increase use of existing recreational facilities. The proposed bikeway is considered a recreational facility itself, but does not substantially interact with other recreational facilities. Therefore, it would not require the construction or expansion of recreational facilities that might have an adverse impact on the environment. Further, there is currently a deficit of population-based parks in the Barrio Logan Community Plan area. The proposed bikeway would increase recreation opportunities by enhancing the bike route within the local area.

2.14 Socioeconomics and Environmental Justice

Socioeconomic and environmental justice issues are relevant to projects that involve funding and or approval from a federal agency. NEPA requires that environmental documents prepare by a federal agency address social and economic effects. Executive Order 12898 requires that federal agencies "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies,

and activities on minority populations and low-income populations," including tribal populations. Further guidance emphasizes the importance of using the NEPA review processes to promote environmental justice.

The Barrio Logan area is a low-income community when compared with the rest of the City, and a community with a substantial population below the poverty level. The 2009 unadjusted annual median household income is low when compared to the citywide average, and approximately 33 percent of households earn less than $30,000 annually. The population in the proposed bikeway area has a higher rate of minorities, lower education levels, and more non-skilled and semi-skilled workers compared to citywide averages (Barrio Logan Community Plan, 2014). Additionally, the Barrio Logan area is home to many industrial uses, many of which likely support non-skilled and semi-skilled lower wage workers.

Construction of the proposed bikeway is short-term, temporary and would rely on employees from the existing labor pool. There would be no increased demand on the local housing supply and housing affordability would not be impacted. Therefore, there would be no displacement of existing residents for the construction and implementation of the proposed bikeway. Further, the proposed bikeway would provide linkages between employment areas, housing and villages via an improved bicycle network; thus benefiting the local population.

However, the proposed bikeway could remove parking spaces that are heavily used by employees and contractors of primary Port tenants such as NASSCO and BAE Systems, as discussed further below under Transportation, Traffic and Parking. The removal of parking could occur on a temporary (during construction) or permanent basis. In addition, during construction there is possibility of other access inconveniences.

None of the other potential environmental effects identified in this review are considered adverse effects on the nearby populations. Rather, they are considered to be effects to bikeway users or to the environment itself. No other social or economic effects to surrounding residents or workers were identified except for the positive effect of the improved bicycle infrastructure.

A key component of environmental justice guidance is ensuring that minority populations and low-income populations have the opportunity to be informed and comment on the potential impacts to their community and environment. A substantial amount of comprehensive public engagement has already been undertaken for the project as described in the Alta Existing Conditions Report. Due to the identification of minority populations and low-income populations in the surrounding area and especially because of the potential for access and parking issues, it is recommended that public engagement continue on a comprehensive basis to ensure that residents and workers in the project area have the opportunity to be informed and to provide input on the project and its potential effects. Additionally, as part of project design, considerations for temporary and permanent parking and access impacts should be included to ensure that any environmental justice issues are addressed.

2.15 Transportation, Traffic, and Parking

The Barrio Logan Bikeway Segment may cause the removal of adjacent on-street and off-street parking spaces along Harbor Drive. While parking is no longer included in CEQA guidelines as topic of environmental impact, the recent court decision of *Taxpayers for Accountable School Bond Spending v.*

San Diego Unified School District indicated that impacts from the removal of parking still requires attention, as it potentially encompasses issues relating to circulation, congestion, air quality, safety and land use. Additionally, NEPA requires that social issues be addressed and, subsequently, compliance with NEPA (and environmental justice requirements discussed above) requires consideration of possible parking impacts.

Parking issues and potential reconfigurations would mainly occur along a 1.4 mile stretch between Sampson Street and south of 32nd Street. According to the Harbor Drive Segment Study (2011), a total of approximately 2,865 spaces exist within this segment of the proposed bikeway. The initial concepts for the project considered in that study would have resulted in a 9% loss of parking spaces: 75 NASSCO parking spaces, and 181 on-street parking spaces within the Harbor Drive right-of-way, for a total of 256 spaces. However, as discussed in the Alta Existing Conditions Report, a number of opportunities have been identified for improving parking and access and the project may be designed to achieve a minimal reduction in parking. While current parking conditions are disorganized and inefficient, it will be important to consider any overall changes in parking capacity as current observations indicated that the parking demands already exceed the existing capacity.

The project is not expected to remove lanes or otherwise substantially reduce capacities to the existing roadways or intersections. Therefore, no other long-term impacts to circulation or access are anticipated. Safety will be considered as part of project design and is therefore not identified as a concern. There is potential for temporary impacts to circulation, access and safety associated with the construction of the project. Especially because of the high volume of vehicles, trucks, pedestrians and recreational bicyclists that are expected to continue to be active in the project area during construction. Construction plans should account for this and provide appropriate measures to address any issues.

3.0 Recommendations

3.1 Additional Study and Considerations

This section provides a summary of the resource areas where potential issues were identified and associated recommendations for additional study and/or design considerations:

- Biological Resources – If the project design includes an expansion (cantilever) to the Chollas Creek Bridge, a biologist should be consulted to review for potential biological issues and possible permits needed from regulatory agencies. Prior to construction, the project should be reviewed by a biologist to advise on measures necessary to address nesting migratory birds.
- Cultural Resources – An assessment of the project is recommended by a qualified archeologist and architectural historian to conduct a records search and review of existing cultural resources and advise on any potential impacts associated with the project.
- Hazardous Materials – Once the extent of construction activity is determined, a hazardous materials site assessment is recommended to evaluate the risk to the project to encounter contamination and to recommend any measures to address the possible exposure to contamination during construction and the disposal of contaminated material.

- Water Quality – A water pollution control plan or storm water management plan will be required to comply with State requirements.
- Parking and Environmental Justice – Parking impacts should be evaluated and minimized to the extent possible. Should parking be substantially reduced, additional analysis for related environmental impacts may be appropriate. Additionally, public engagement should continue through the project and ensure that minority and low-income populations are specifically included in the engagement.
- Construction Parking and Access – Construction plans should account for the high amount of multi-modal activity that occurs in the project area to provide continuity in access and to address safety issues.

3.2 CEQA Compliance

Discretionary actions of local, regional, or state agencies that have the potential to adversely impact the environment are subject to CEQA. Therefore, the decision to implement this project by SANDAG must be consistent with CEQA. However, CEQA contains several exemptions that may be relevant to this project.

A statutory exemption is available under Public Resources Code 21080.20.5 (and Section 15282(j) of the CEQA Guidelines) for restriping projects in urbanized areas that meet the requirements of a bicycle transportation plan pursuant to Section 891.2 of the Streets and Highways Code. As a requirement of this exemption, an assessment of any traffic and safety impact of the project would need to be prepared to mitigate for any potential vehicular traffic impact, as well as any bicycle and pedestrian safety impacts. Additionally, a public meeting is required to be held in any areas affected by the project, with notification in a newspaper of general circulation. Because this exemption only mentions restriping and the project is anticipated to include other improvements, the exemption does not appear sufficient to cover the project.

A strategy could be to combine Statutory and Categorical Exemptions for segments of the North Corridor. The project could qualify for a Categorical Exemption under Section 15304(h) Minor Alterations to Land: Creation of Bike Lanes within Existing ROW. A Categorical Exemption under Section 15301(c) Existing Facilities: Existing Streets, Sidewalks, etc. may also be applicable. Prior to determining if a Categorical Exemption may be appropriate, the project must be screened to ensure no environmental effects, direct or cumulative, would occur (this is commonly accomplished through the completion of a preliminary Initial Study). In particular, CEQA Guidelines Section 15300.2 precludes the application of exemptions for projects on certain contaminated sites or with potential impact to historic resources. Therefore, the additional studies recommended above should be undertaken in concert with determining the correct CEQA compliance approach.

If the project cannot be found to be completely exempt from CEQA, an Initial Study should be prepared pursuant to CEQA, which would likely lead to a Negative Declaration or Mitigated Negative Declaration.

3.3 NEPA Compliance

NEPA compliance is required when a project involves federal approval and/or funding. Should the project require NEPA compliance, it is anticipated a Categorical Exclusion would apply. However, similar to CEQA, NEPA precludes the application of exemptions for projects with certain issues. If the project cannot be found to be completely exempt from NEPA, an Environmental Assessment would be required.

4.0 References

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