Yerba Buena Island/ Treasure Island Multi-Use Pathway Feasibility Study







ACKNOWLEDGMENTS

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INTRODUCTION

- The transformation of Treasure Island and Yerba Buena Island to a large, sustainable multi-modal community is underway!
- Together, the two islands are being redeveloped from their current uses as a small residential community and U.S. Coast Guard military reservation to a masterplanned community with affordable housing, open space, commercial activity and new transportation links.
- This study focuses on the planned and proposed pedestrian and bicycle networks on Yerba Buena Island with connections to Treasure Island, its new Ferry Terminal, and other existing and future destinations.



BACKGROUND

- Yerba Buena Island is a natural island that has traditionally been used primarily by the U.S. military. It is characterized by steep topography and dense vegetation. The island also provides the only access for residents of the two islands to and from San Francisco and Oakland via the Bay Bridge interchanges.
- Treasure Island, constructed on bayfill for the 1939 Golden Gate International Exposition and later used as a military base, encompasses residential, community, institutional, office, retail and industrial uses. A marina is located in Clipper Cove. In recent years Treasure Island has been characterized by vacant buildings and aging infrastructure.



BACKGROUND

- Redevelopment of the two islands has been guided by a long-term regional collaborative planning process that will provide a new, high-density, mixed-use community with a variety of housing types, a retail core, open space and recreation opportunities, on-site infrastructure, and public and community facilities and services.
- The Project will be a model in sustainable development, marrying best-practices in land use and transportation integration to facilitate convenient access by foot, bicycle and transit while reducing the use of single-occupancy vehicles for trips on and off the islands.



ISLAND MOBILITY GOALS

- Limit impacts to Bay Bridge and Island traffic
- Improve transit service
- Pay for improved transit service
- Support affordability for low income families





ISLAND MOBILITY GOALS

Incentivize transit, walking, biking











Discourage use of private cars through toll and paid parking









Meet performance targets of mode share and financial stability

50% Transit, Walking, Biking

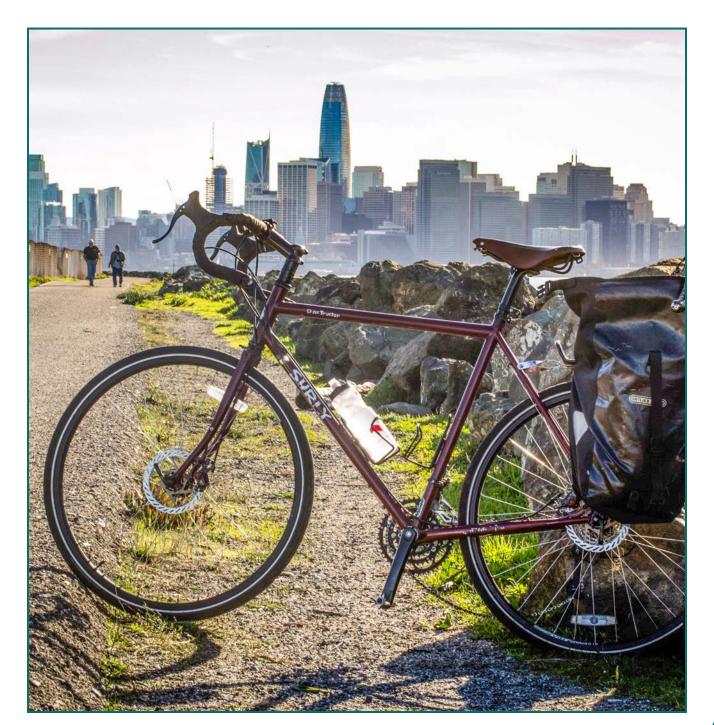


50% Private Vehicles



The vision for transportation and circulation on the islands is that:

- Residents, workers and visitors should have the ability to commute and meet daily needs without having to drive private vehicles.
- The transportation network will prioritize pedestrians and cyclists and encourage sustainable transit-oriented choices as part of everyday life.
- Street design will reflect a commitment to enhancing the public realm, the pedestrian and bicycle network, the transit service, and the demand management system.



To execute this vision, new bicycle, pedestrian and transit networks are planned; a ferry terminal and intermodal transit hub is under construction; and a new vehicular network has been designed to reflect future conditions.

- New and enhanced transportation options will include:
 - Ferries;
 - Buses;
 - On-island shuttles;
 - Car sharing; and
 - A bicycle-sharing program.





- A new intermodal transit facility, located at the southwest corner of Treasure Island, will serve as a gateway onto the island and as a transportation hub.
- Inks between all forms of transportation; ferries and buses will connect seamlessly with on-island services and pedestrian and bicycle routes.



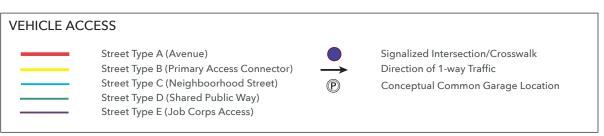
Transportation Objectives and Goals for the islands envision networks of safe and comfortable pedestrian routes and bicycle facilities connecting neighborhoods and major transit facilities with existing and future destinations.



TRANSPORTATION NETWORK GOALS - VEHICULAR

- Private automobile use on the islands will be de-emphasized to prioritize use by pedestrians and bicyclists.
- The primary vehicular routes on Yerba Buena Island will be one-way, in a counterclockwise loop, from Hillcrest Road where two lanes of traffic will provide access to the I-80 interchanges.
- Macalla Road will provide one-way one-lane access from the I-80 interchanges to the Causeway and Treasure Island.





TRANSPORTATION NETWORK GOALS - TRANSIT

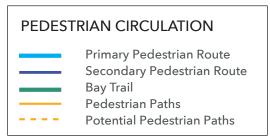
- Public transit use by large numbers of residents, visitors and workers is essential to meet sustainability commitments, provide economic opportunity and achieve a high quality of life.
- An intermodal transit hub on Treasure Island is planned, providing ferry, Muni and AC Transit bus service, and intraisland shuttle buses.
- New ferry service will provide fast and frequent service between the islands and San Francisco.



TRANSPORTATION NETWORK VISION - PEDESTRIAN

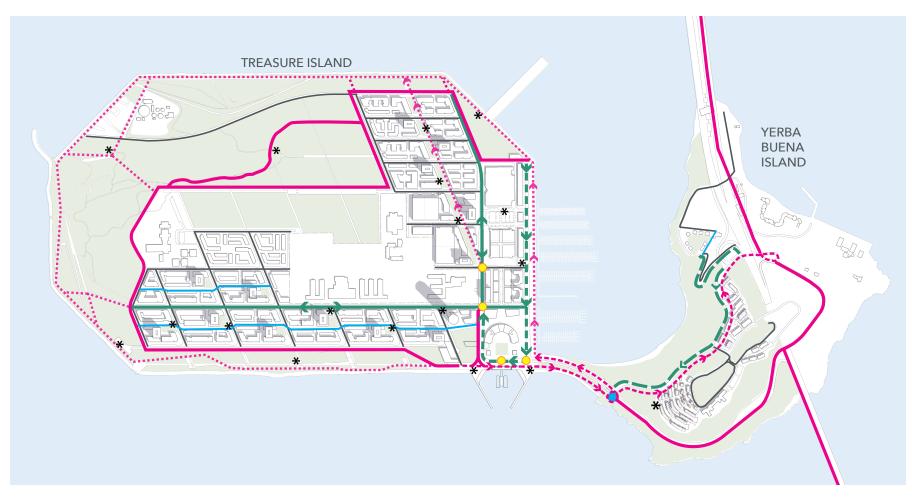
- All destinations on Yerba Buena Island shall be made available to people on foot by a safe and comfortable pedestrian network.
- The pedestrian network will connect the various blocks, neighborhoods, parks and other public spaces on the islands by a diverse network of pedestrian routes.





TRANSPORTATION NETWORK VISION - BICYCLE

A safe and comfortable network of bikeways will encircle Treasure Island, continuing to Yerba Buena Island across the Causeway and across Macalla Road to connect to the Bay Bridge East Span pathway, and around the circumference of YBI along Treasure Island and Hillcrest Roads to connect to the future Bay Bridge West Span pathway to San Francisco.





TRANSPORTATION NETWORK GOALS - BICYCLE

- Bicycle routes should be designed to invite riders of all ages and abilities for trips that range from a daily commute, to a school trip, to convenient shopping and casual recreation.
- A system of separated Class I pathways, Class II bicycle lanes, Class III bike routes, and Class IV bikeways will fully cover both islands and provide access through neighborhoods and open spaces with ranges of options and experiences for cyclists of all types.



YBI/TI MULTI-USE PATHWAY FEASIBILITY STUDY

- This study considers the connectivity and feasibility of the proposed pedestrian and bicycle network for Yerba Buena Island, with connections between the existing Bay Bridge East Span Ped/Bike Pathway, the proposed Bay Bridge West Span Pathway, Pier E2 and the future Ferry Terminal.
- A total of ten discrete pedestrian and bicycle projects comprise the proposed network that has been envisioned to meet the goals and vision of the new communities on Treasure Island and Yerba Buena Island.



YBI/TI MULTI-USE PATHWAY FEASIBILITY STUDY

- A total of 11 individual projects will help to complete the bicycle and pedestrian network on Yerba Buena Island.
- Five of the projects have been funded and/or are currently under construction, but the other six projects require construction funding in order to complete the vision set out for the city's vision for transportation on the islands.



YBI/TI MULTI-USE PATHWAY STUDY

Projects that have been funded and under construction include:

- Treasure IslandCauseway/Ferry Terminal
- Macalla Road
- Southgate RoadRelocation
- Stormwater Garden
- Pier E2 Phase 1



TREASURE ISLAND CAUSEWAY & FERRY TERMINAL





Treasure Island Causeway looking towards Yerba Buena Island. Dedicated pedestrian and bicyclist facilities will be provided to connect the two islands.

- The Treasure Island Causeway will provide multi-modal access between Treasure Island, Yerba Buena Island, and a future Ferry Terminal to be located on Treasure Island.
- The Causeway will contain two vehicular lanes towards Treasure Island and one vehicle lane toward Yerba Buena Island. A transit-only lane will be provided from the future Ferry Terminal towards Yerba Buena Island for approximately half the length of the Causeway.
- Separated bicycle and pedestrian facilities will be constructed on both sides of the Causeway to provide connections to destinations on both islands, the East Bay and, eventually, San Francisco.

Lead: TIDA/TICD

TREASURE ISLAND CAUSEWAY & FERRY TERMINAL

PROPOSED CONDITIONS





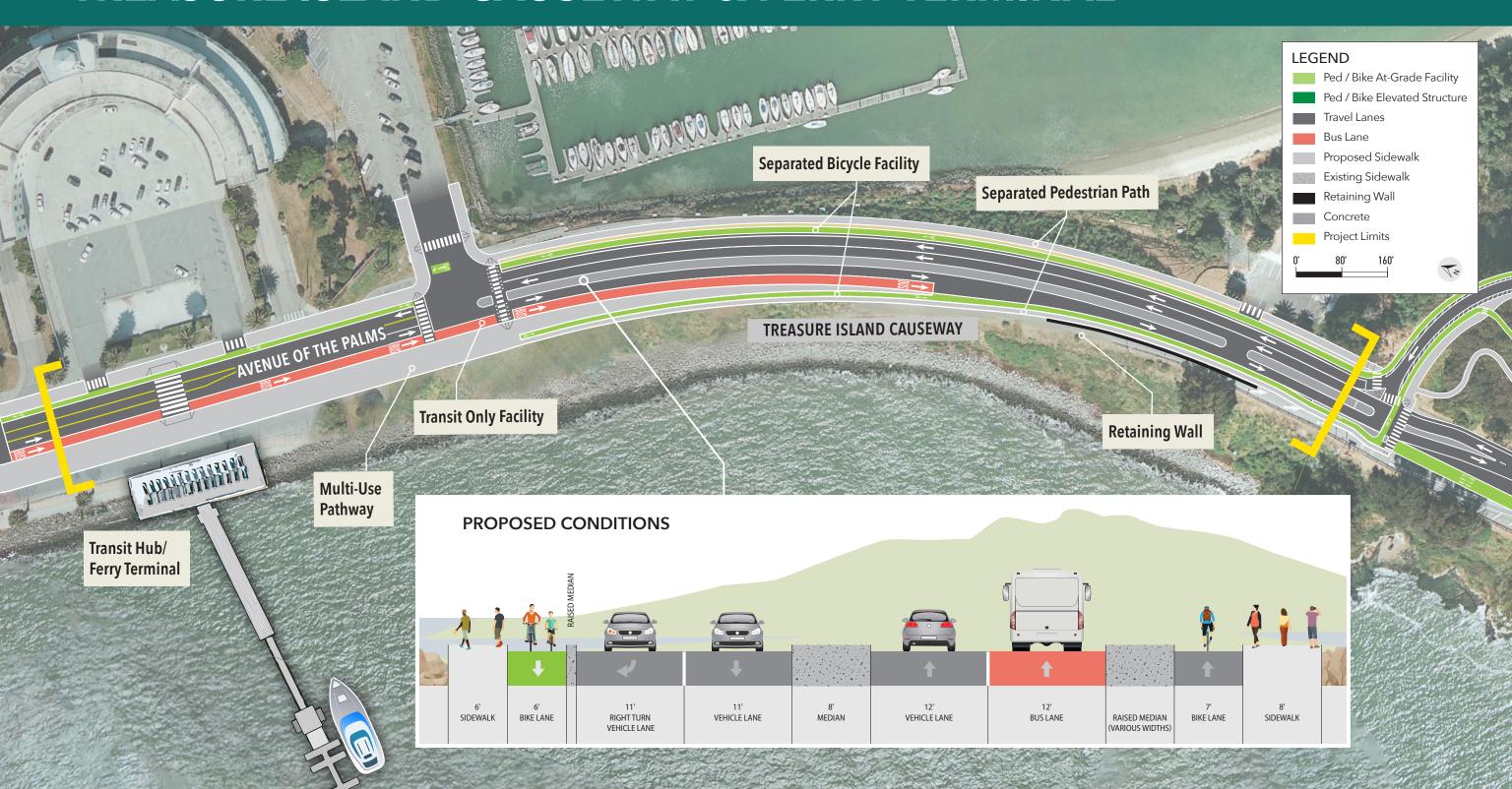
SPECIFICS:

- Six- to seven-foot wide Class IV bikeways on both sides of the Causeway.
- Pedestrian walkways ranging in width from six to eight feet.
- Wide mixed-use pathway along Avenue of the Palms on Treasure Island will provide access to the future Ferry Terminal.
- Ferry service will be frequent and fast; ferries are expected to provide access to the Ferry Building in San Francisco in approximately 20 minutes from Treasure Island.

ESTIMATED COST (Causeway): \$21.5m

ESTIMATED COST (Ferry Terminal, Plaza & Shelter): \$73.6m

TREASURE ISLAND CAUSEWAY & FERRY TERMINAL



MACALLA ROAD



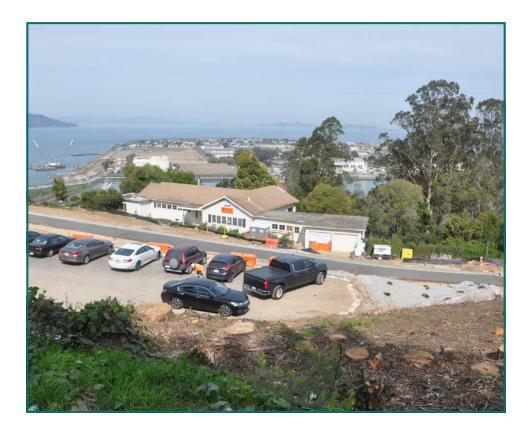


- Macalla Road in its ultimate configuration will provide one-way vehicular circulation from the I-80 interchange towards Treasure Island.
- The roadway will also provide two six-foot bicycle facilities, including a Class IV bikeway adjacent to a sixfoot sidewalk, and a Class II buffered bike lane
- From the intersection with Treasure Island Road where Macalla Road climbs steeply the project will include separated pedestrian and bicyclist facilities that will 'switchback' up and down the hill in order to reduce the impact of the severe roadway grade.

Lead: TIDA/TICD

MACALLA ROAD

EXISTING CONDITIONS



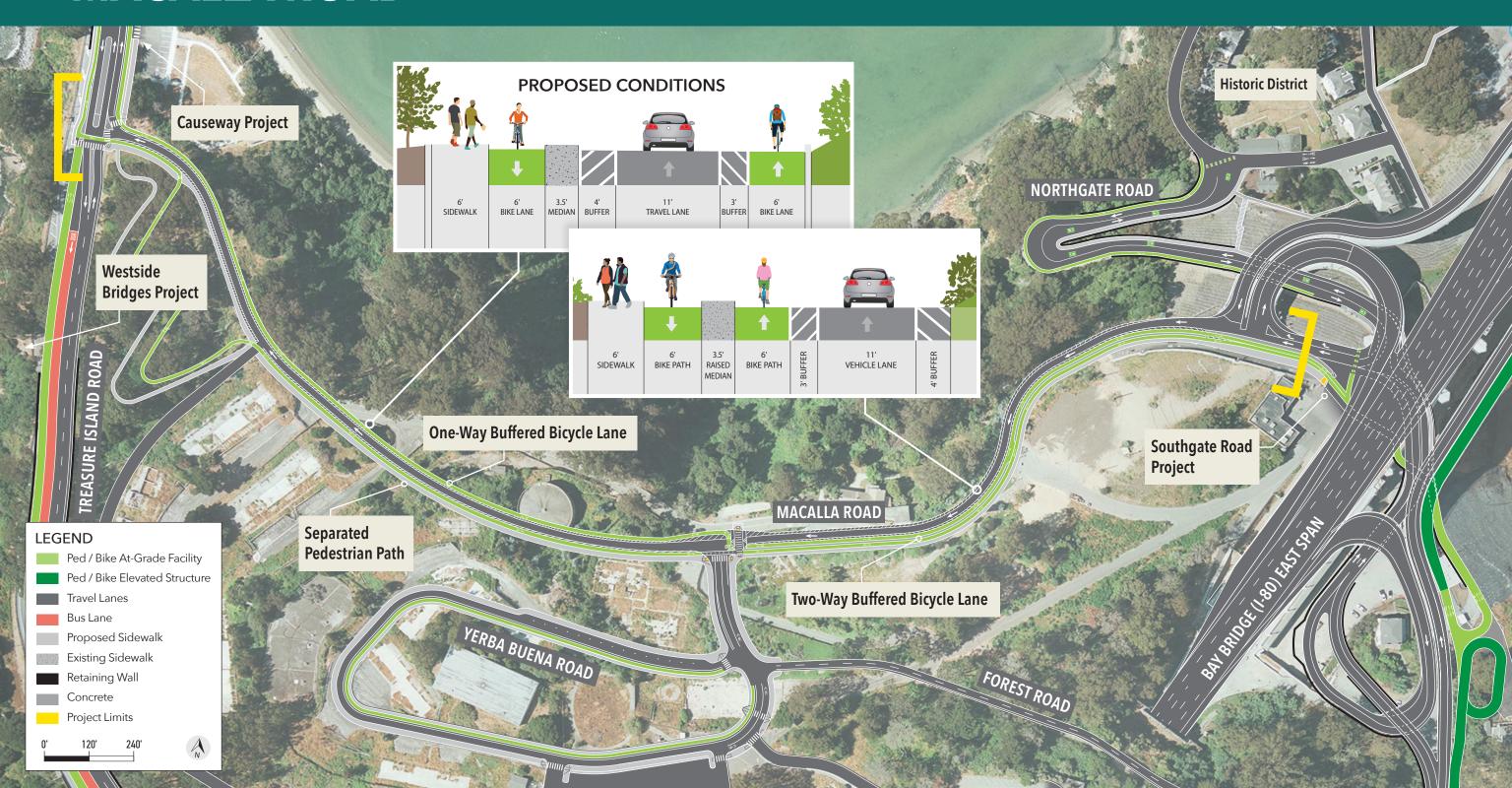
Macalla Road construction near the roadway's intersection with Yerba Buena Road.

SPECIFICS:

- Two separate six-foot wide bicycle facilities (a buffered Class II bike lane and a Class IV bikeway with a 3.5-foot concrete median separation from vehicular traffic).
- Six-foot wide sidewalk.
- One eleven-foot vehicle lane, providing one-way vehicular access from the I-80 interchanges towards the Treasure Island Causeway.

ESTIMATED COST: \$16.5m

MACALLA ROAD



SOUTHGATE ROAD RELOCATION





Hillcrest Road looking towards the eastbound entrance to the Bay Bridge adjacent to the proposed pedestrian/bicyclist loop structure. In the future two one-way lanes of traffic would provide access to the I-80 interchanges from Treasure Island.

- The Southgate Road Relocation Project will relocate Southgate Road, the key local connection providing access to the I-80 on- and off-ramps.
- The project will result in two one-way vehicle lanes running counter-clockwise along Hillcrest Road from Treasure Island Road towards the I-80 interchanges.
- The project will also provide a pedestrian and bicycle connection between the terminus of the Bay Bridge East Span Bike/Pedestrian pathway and the rest of Yerba Buena Island via new facilities on Hillcrest Road and Macalla Road. A new Class I bicycle and pedestrian path will also be constructed underneath I-80 from Vista Point to Macalla Road.

Lead: SFCTA

SOUTHGATE ROAD RELOCATION

EXISTING CONDITIONS



The existing terminus of the Bay Bridge Trail at the SFOBB Viewing Landing, shown above, will be extended for pedestrians and bicyclists to Macalla Road and Northgate Road underneath the eastbound Bay Bridge entrance ramp.

PROPOSED CONDITIONS

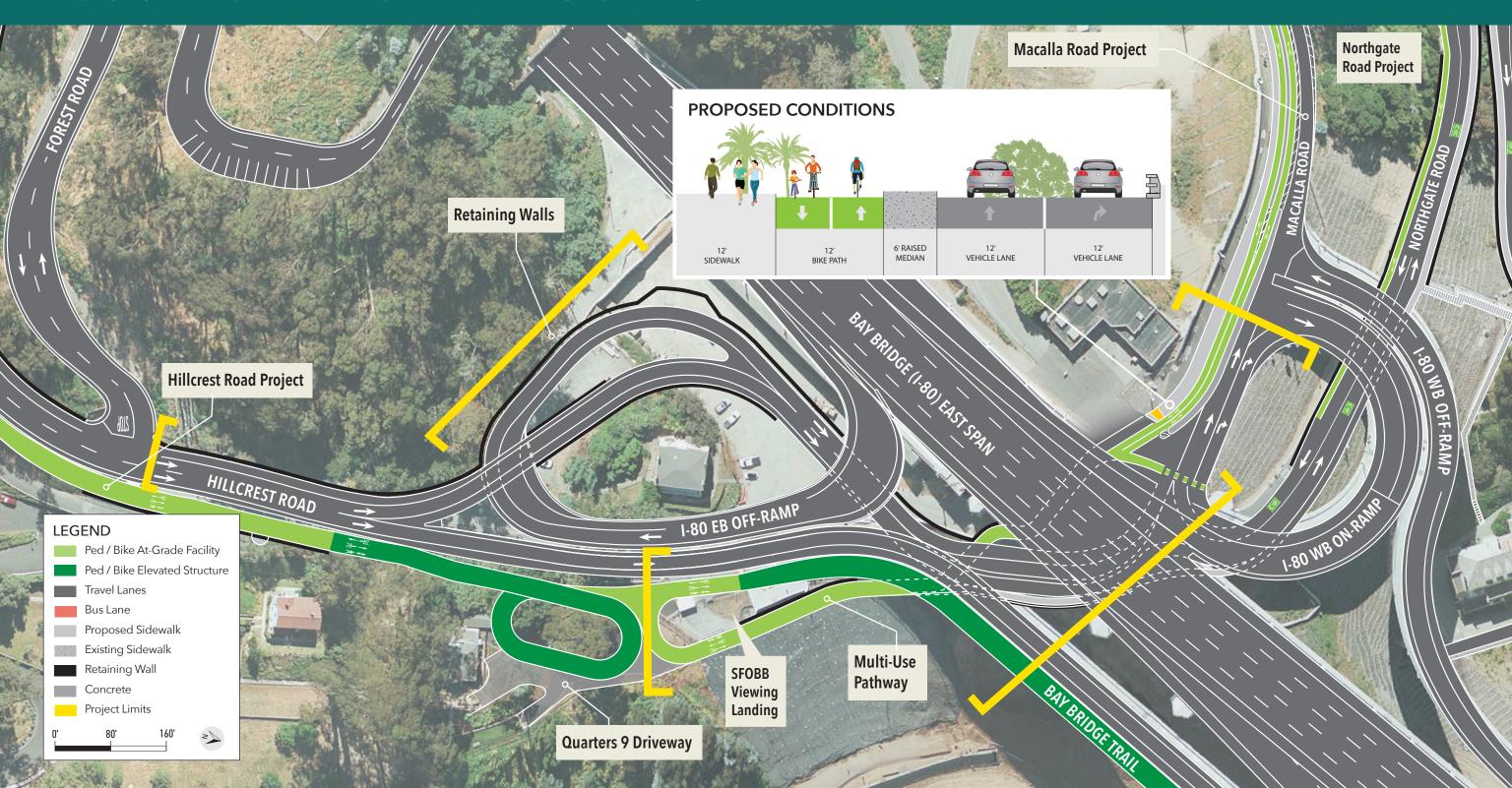


SPECIFICS:

- The project will provide connections between Treasure Island Road, Hillcrest Road and Macalla Road which will help to facilitate pedestrian and bicycle connections between the two Bay Bridge spans.
- A two-way Class I multi-use pedestrian and bicycle pathway will be constructed underneath I-80 from the terminus of the Bay Bridge Trail at the SFOBB Viewing Landing to connect with facilities on Macalla Road and Northgate Road.

ESTIMATED COST: \$63.7m

SOUTHGATE ROAD RELOCATION



STORMWATER GARDEN





- An existing parking lot at the base of the Senior Officers' Quarters Historic District (Historic District) will be replaced with a 'Stormwater Garden' that will act as a storm water retention and treatment feature.
- The Stormwater Garden will include meandering pathways that will provide pedestrian access separated from adjacent Northgate Road. One of the pathways through the Stormwater Garden closest to Northgate Road would be widened from 5 feet to 12 feet to provide pedestrian access from the Historic District neighborhood to a crosswalk leading to the new pathway to Pier E2.

Lead: TIDA/TICD

STORMWATER GARDEN

EXISTING CONDITIONS



The pathways through the future Stormwater Garden will provide pedestrian access to Pier E2 and the U.S. Coast Guard facility.

SPECIFICS:

- A 12-foot pedestrian pathway through the Stormwater Garden on the pathway closest to Northgate Road.
- The pathway would provide a safe ADA-compliant link in YBI's pedestrian network between the Historic District, Pier E2 and the U.S. Coast Guard base.
- Bicycle access between the Historic District and Pier
 E2 would be provided via Northgate Road.

ESTIMATED COST: \$3.8m

STORMWATER GARDEN



YBI/TI MULTI-USE PATHWAY FEASIBILITY STUDY

New projects currently in the planning or engineering phase and that require future funding include:

- Westside Bridges (Ped/Bike Pathway)
- West Span Connector
- Hillcrest Road
- Northgate Road
- Historic District
- Pier E2 Phase 2



WESTSIDE BRIDGES - PED/BICYCLE PATHWAY





Existing pedestrian and bicyclist facilities on Treasure Island Road are incomplete and do not provide protection from fast moving vehicles accessing the Bay Bridge interchanges.

- To meet current seismic safety standards, the Westside Bridges project will replace seven existing bridges with new retaining walls and seismically retrofit one bridge along Treasure Island Road. This segment of Treasure Island Road provides a vital link for all modes between the San Francisco and Oakland-bound I-80 interchanges and Yerba Buena and Treasure Islands.
- The project would also include an adjacent 16-foot wide multi-use pathway for pedestrian and bicycle travel. The pathway would be constructed at-grade at the departure from the Treasure Island Causeway and as a separate elevated bridge structure that would provide connections to the West Span Connector and Hillcrest Road projects, providing access to both spans of the Bay Bridge.

Lead: SFCTA

WESTSIDE BRIDGES - PED/BICYCLE PATHWAY

EXISTING CONDITIONS





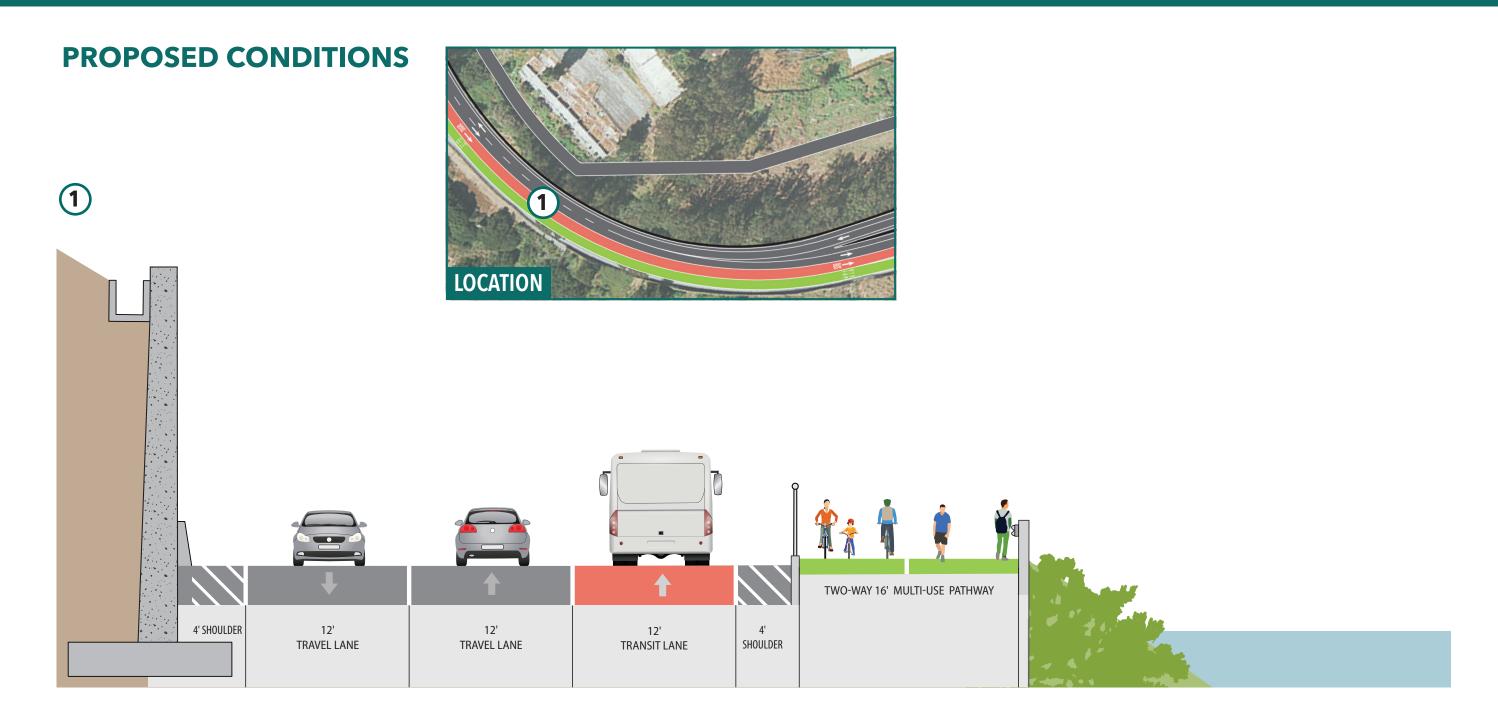
SPECIFICS:

- 16-foot wide pedestrian and bicycle at-grade and grade-separated structure.
- Provides an essential link in the pedestrian and bicycle network between Treasure Island and its new Ferry Terminal with both spans of the Bay Bridge.

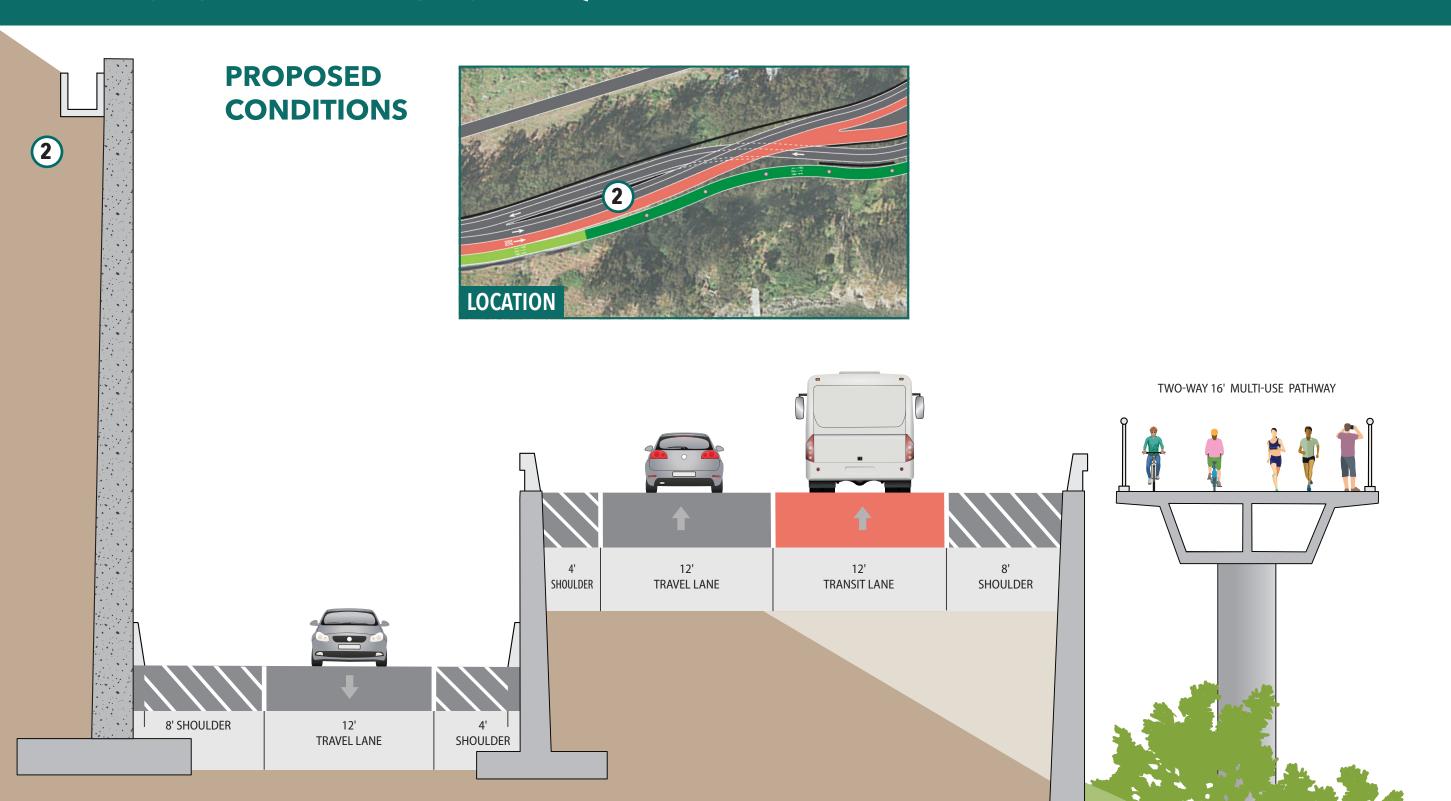
ESTIMATED COST (Roadway Project): \$119.3m (funded)

ESTIMATED COST: \$34.8m (unfunded)

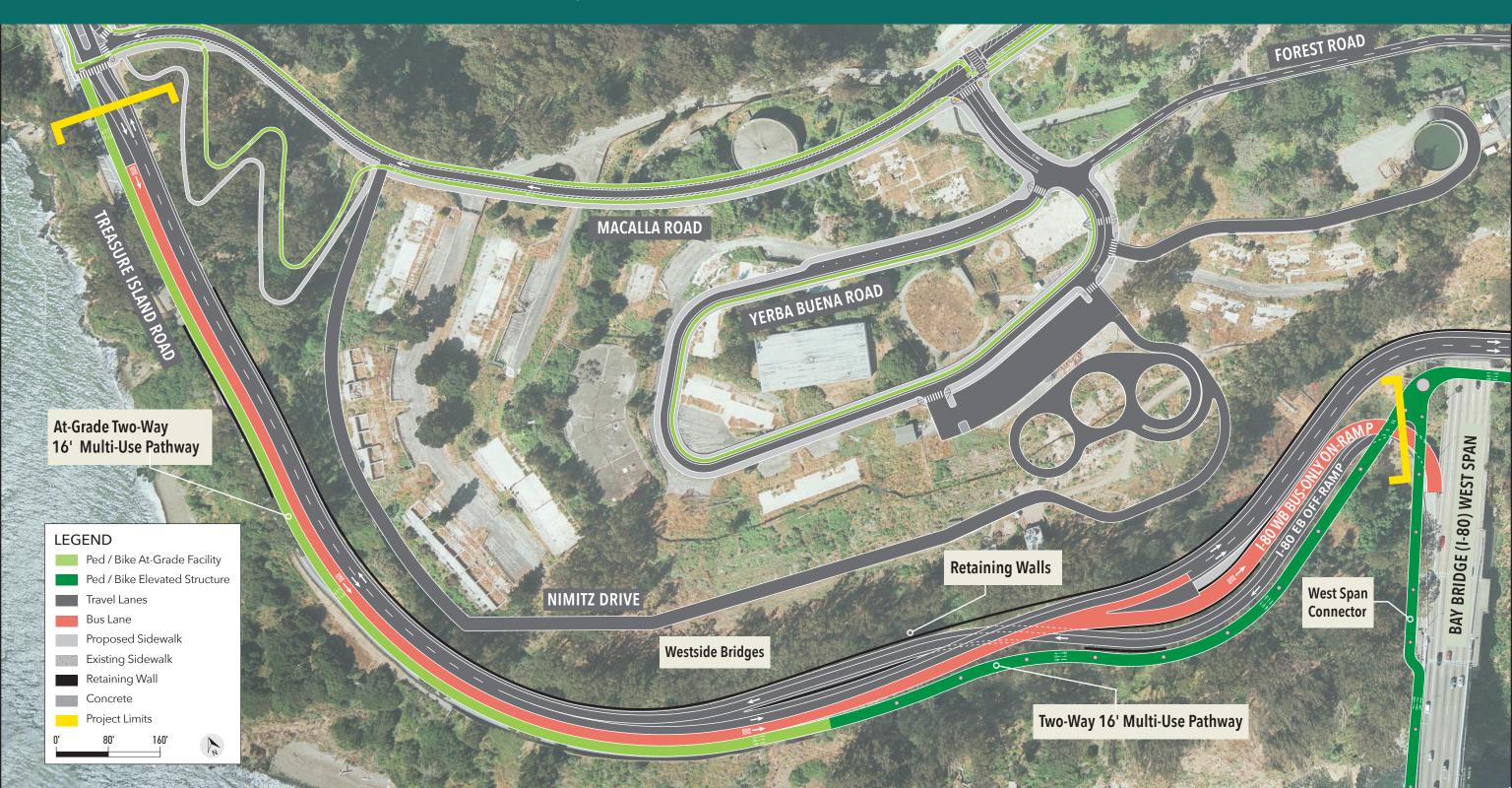
WESTSIDE BRIDGES PED/BIKE PATHWAY



WESTSIDE BRIDGES PED/BIKE PATHWAY

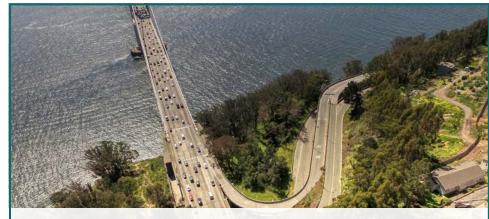


WESTSIDE BRIDGES PED/BIKE PATHWAY



WEST SPAN CONNECTOR





No pedestrian or bicyclist facilities currently exist at or near the Bay Bridge West Span, precluding access to San Francisco and the East Bay from Treasure Island and Yerba Buena Island.

- The West Span Connector would provide a vital link in the connections for people on foot and on bicycle between San Francisco, Yerba Buena Island, Treasure Island and the East Bay.
- The new proposed 15-foot wide structure would connect Yerba Buena Island to the west span of the Bay Bridge to provide direct pedestrian and bicycle access to San Francisco.

Lead: BATA

WEST SPAN CONNECTOR

PROPOSED CONDITIONS



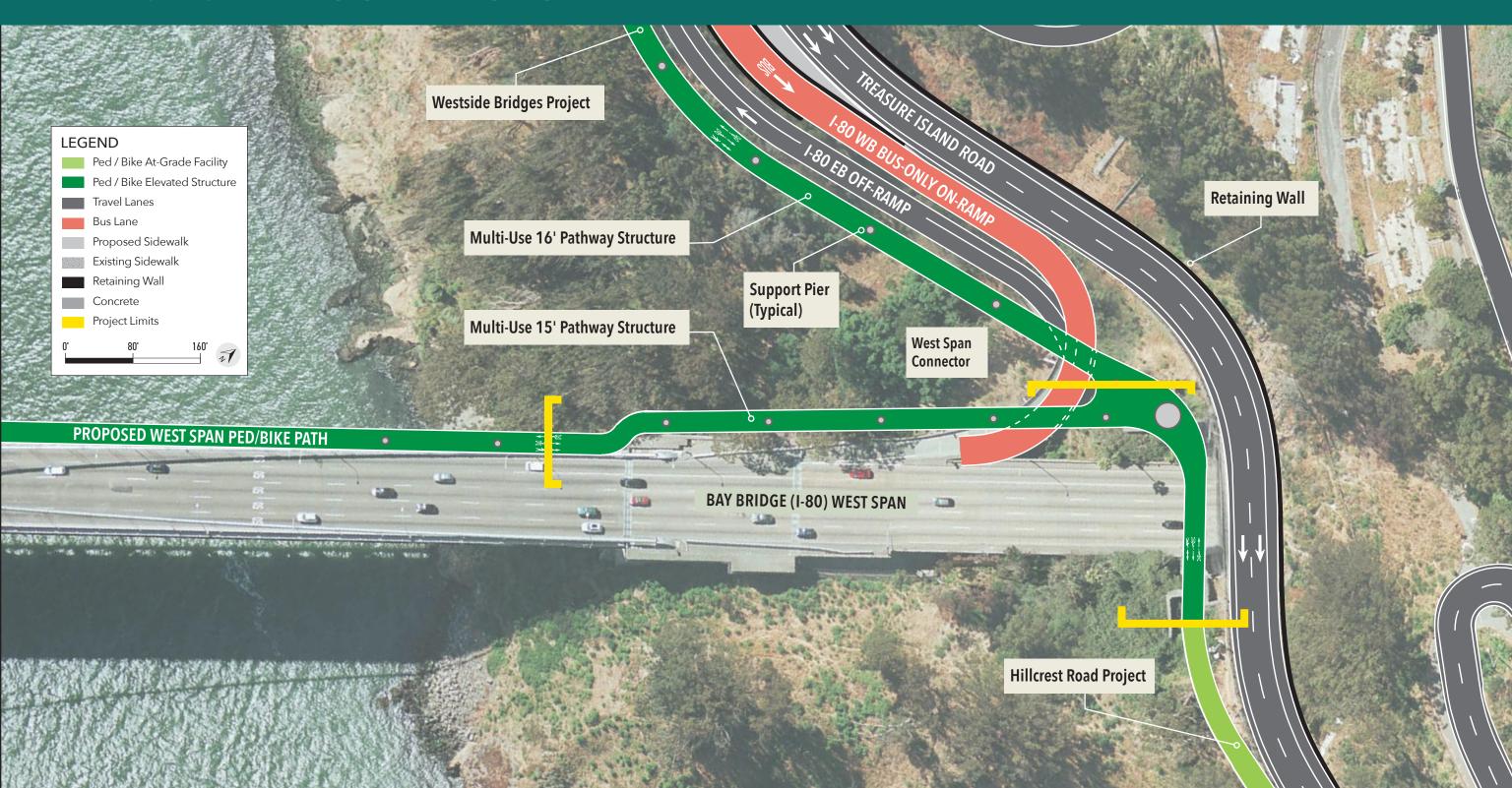
A pathway along the West Span of the Bay Bridge for pedestrians and bicyclists between Yerba Buena Island and San Francisco as envisioned would provide connections to Treasure Island and the East Bay via the West Span Connector project.

SPECIFICS:

- 15-foot wide pedestrian and bicycle grade-separated structure that would connect the proposed Westside Bridges and Hillcrest Road multi-use pathways with the proposed pathway on the West Span of the Bay Bridge.
- The length of the West Span Connector project would be approximately 500 feet parallel to the West Span of the Bay Bridge and 174 feet parallel to Treasure Island Road to the south of the existing portal over the Bay Bridge.

ESTIMATED COST: \$22.7m (unfunded)

WEST SPAN CONNECTOR







- The Hillcrest Road project would provide a key connection for pedestrians and cyclists between the existing East and future West spans of the Bay Bridge, while providing separated two-way pedestrian and bicyclist access around Yerba Buena Island.
- Pespite the island's steep topography, the Hillcrest Road project would invite walking and bicycling by users of all ages and abilities by providing generous width while minimizing the grade of the pathway to meet ADA compliance.

Lead: BATA

POSSIBILITIES: MULTI-USE PATH STRUCTURES



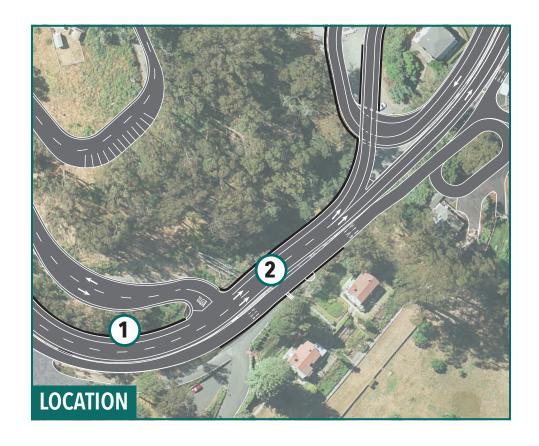


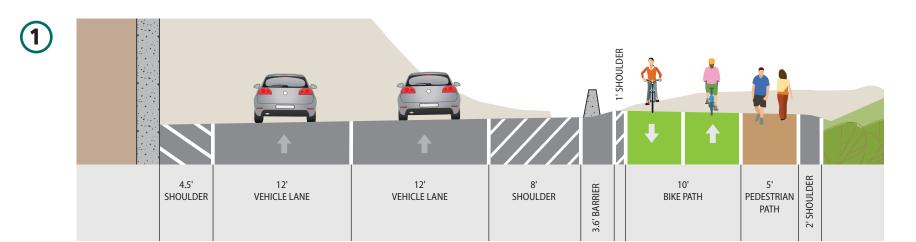
SPECIFICS

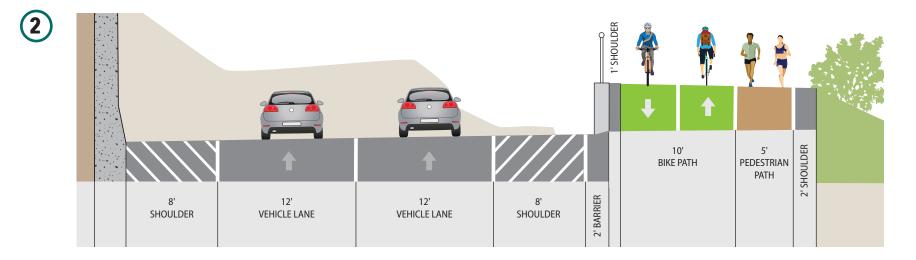
- A 16-foot wide separated multi-use Class I and IV pathway would provide connections to/from the existing SFOBB Viewing Landing, the future West Span Connector project, and the Westside Bridges project for connections to Treasure Island.
- The pathway will also connect to the Southgate Relocation project for connections to Macalla and Northgate Roads.
- A multi-use loop structure would minimize grade changes and enable ADA compliance.
- The pathway would be constructed both at-grade and as an elevated structure.
- Existing access to Quarters 9 would be maintained.

ESTIMATED COST: \$31.9m (unfunded)

PROPOSED CONDITIONS









NORTHGATE ROAD





Northgate Road from Macalla Road at the approach to the 'horseshoe' provides no dedicated pedestrian or bicyclist facilities.

- Northgate Road provides access from the Southgate Road Relocation and Macalla Road projects to the Historic District, Pier E2 and the U.S. Coast Guard facilities.
- The Northgate Road project would widen the existing roadway in order to provide a continuous 5-foot sidewalk on one side of the street and a 5-foot uphill Class II bicycle lane. Bicyclists traveling downhill, towards the Historic District from Macalla Road, would share the travel lane with vehicles.

Lead: BATA

NORTHGATE ROAD

EXISTING CONDITIONS



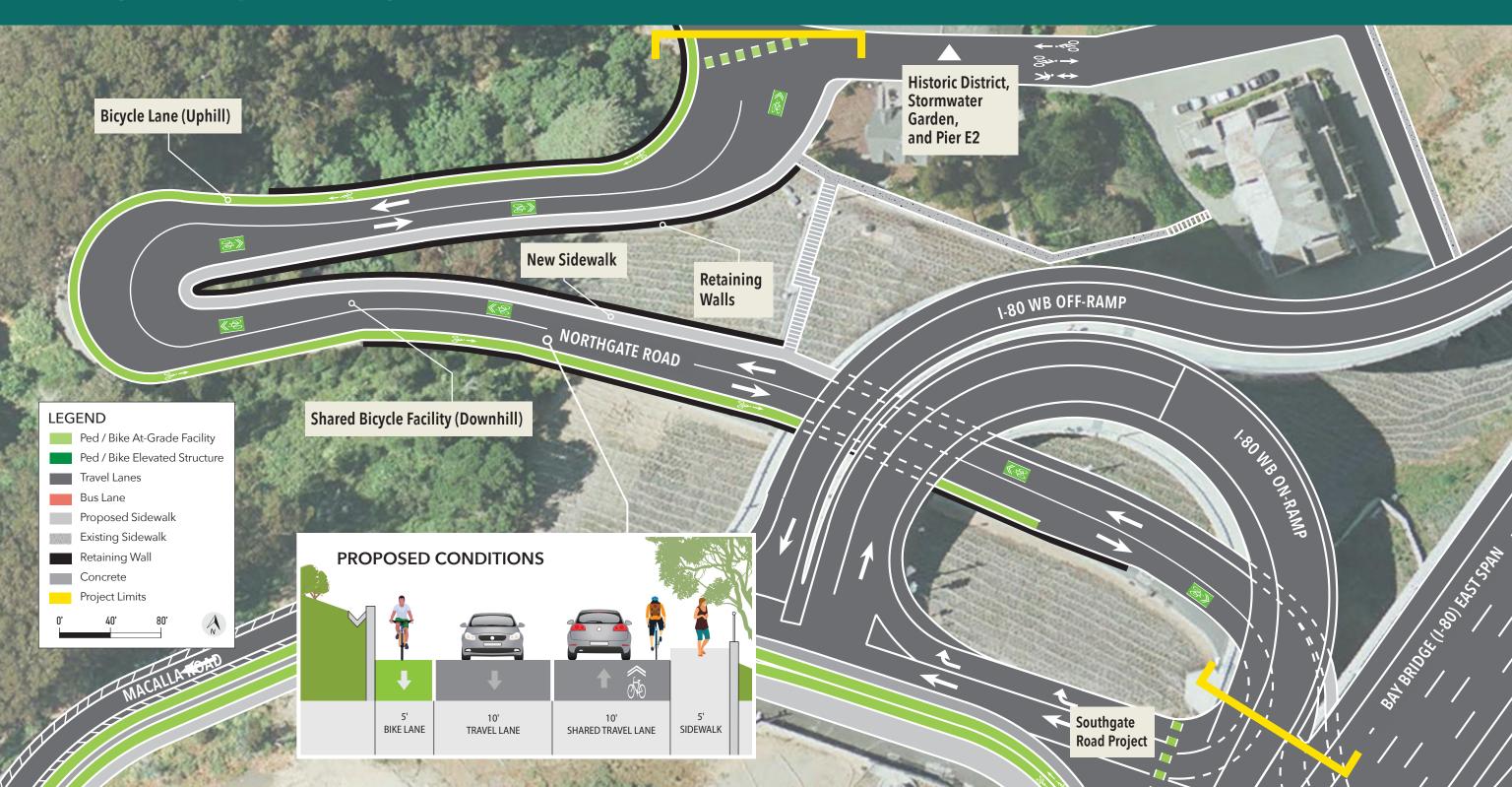
Northgate Road looking up towards Macalla Road and down towards Whiting Way.

SPECIFICS:

- A 5-foot wide sidewalk extension from the current terminus at the existing staircase to Whiting Way would complete the pedestrian network along Northgate Road from Macalla Road to the Historic District.
- A 5-foot wide Class II bicycle lane would provide separated uphill bicyclist access from Whiting Way to near Macalla Road.
- Shared Lane Markings along the 'downhill' portion of Northgate Road from Macalla Road to Whiting Way would indicate a shared vehicle/bicycle lane.

ESTIMATED COST: \$6.8m (unfunded)

NORTHGATE ROAD





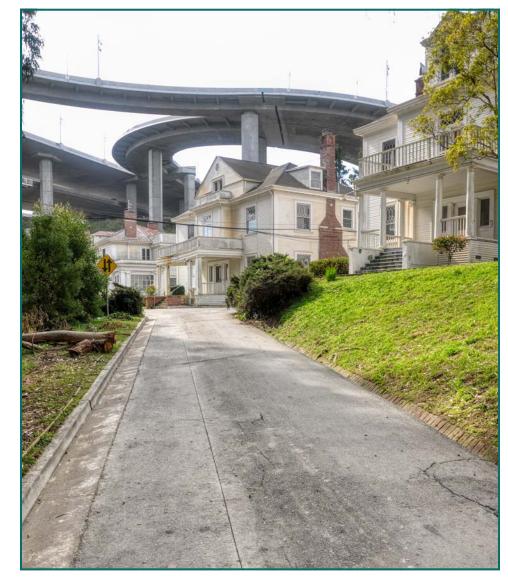


An existing pathway provides pedestrian access through the Historic

District from an existing staircase down from Northgate Road.

- The Senior Officers' Quarters Historic District (Historic District), listed on the National Register of Historic Places, contains several former Navy officers' quarters (also called the 'Great Whites'), associated buildings and landscaped areas.
- Roadway access to the Historic District is provided by Northgate Road and Whiting Way, two constrained streets with limited opportunities for separated pedestrian and bicyclist access.
- The Historic District project would make Whiting Way from Northgate Road a two-way low-speed multimodal street, shared by drivers, pedestrians and cyclists. Pedestrian access would also be provided via the existing sidewalk that runs from the existing staircase behind the Quarters 1 Nimitz Building.

EXISTING CONDITIONS

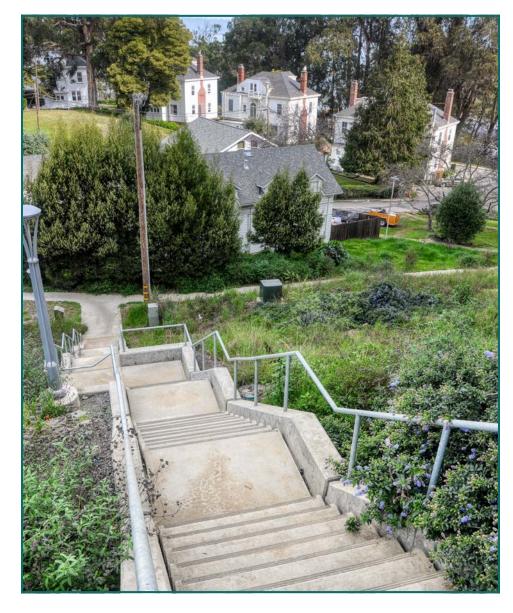


Whiting Way from the Historic District to Northgate Road currently does not provide separated pedestrian access.

The project would also extend the sidewalk along the portion of Whiting Way from the 'Great Whites' to provide pedestrians with another option for walking towards the Stormwater Garden and Pier E2 via Whiting Way to Northgate Road, in addition to the existing staircase. Whiting Way would also be striped for two-way bicyclist access.

Lead: TIDA

EXISTING CONDITIONS



A recently constructed staircase provides pedestrian access from Northgate Road to the Historic District.

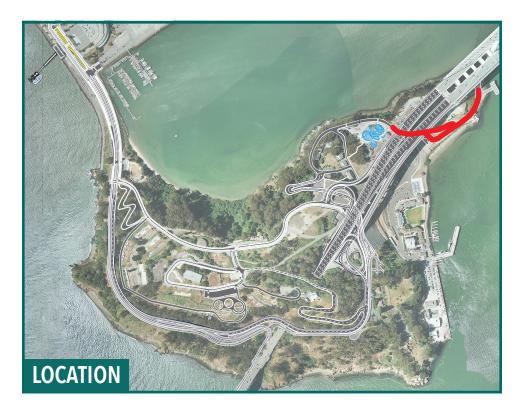
SPECIFICS:

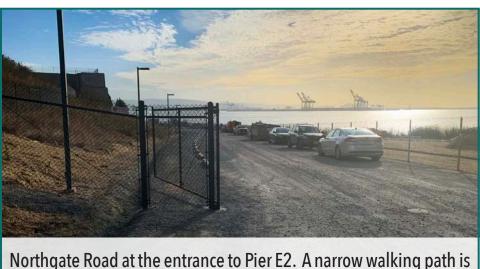
- Two-way shared multi-use access along Whiting Way.
- Sidewalk extension along Whiting Way.
- Reconstruction of an existing staircase down an embankment from Whiting Way to Stormwater Garden.
- Striping of Whiting Way for two-way bicyclist access.

ESTIMATED COST: \$3.3m (unfunded)



PIER E2 - PHASE 2





visible on the other side of the entry gate.

- Pier E2, dedicated as Bimla Rhinehart Vista Point, is a new destination recently constructed by Caltrans on a pier from the previous eastern bridge span of the Bay Bridge.
- Phase 1 of the Pier E2 project is complete. The project provides access to the Bimla Rhinehart Vista Point via a 24foot wide gravel access road from Northgate Road and an adjacent 6- to 8-foot wide concrete sidewalk.
- Phase 2 will include a one-way vehicle and bicycle loop with parking lot for 25 vehicles, accessible parking and drop off areas, bicycle parking and enhanced pedestrian access, including a pathway along the waterfront with appropriate lighting. The pathway to the Pier will consist of a 6-foot wide concrete path and an adjacent 6-foot wide permeable hard surface path.

Lead: Caltrans

PIER E2 - PHASE 2

EXISTING CONDITIONS



Pier E2 is a new public gathering space constructed by Caltrans on a pier that had been used to support the old east span of the Bay Bridge.

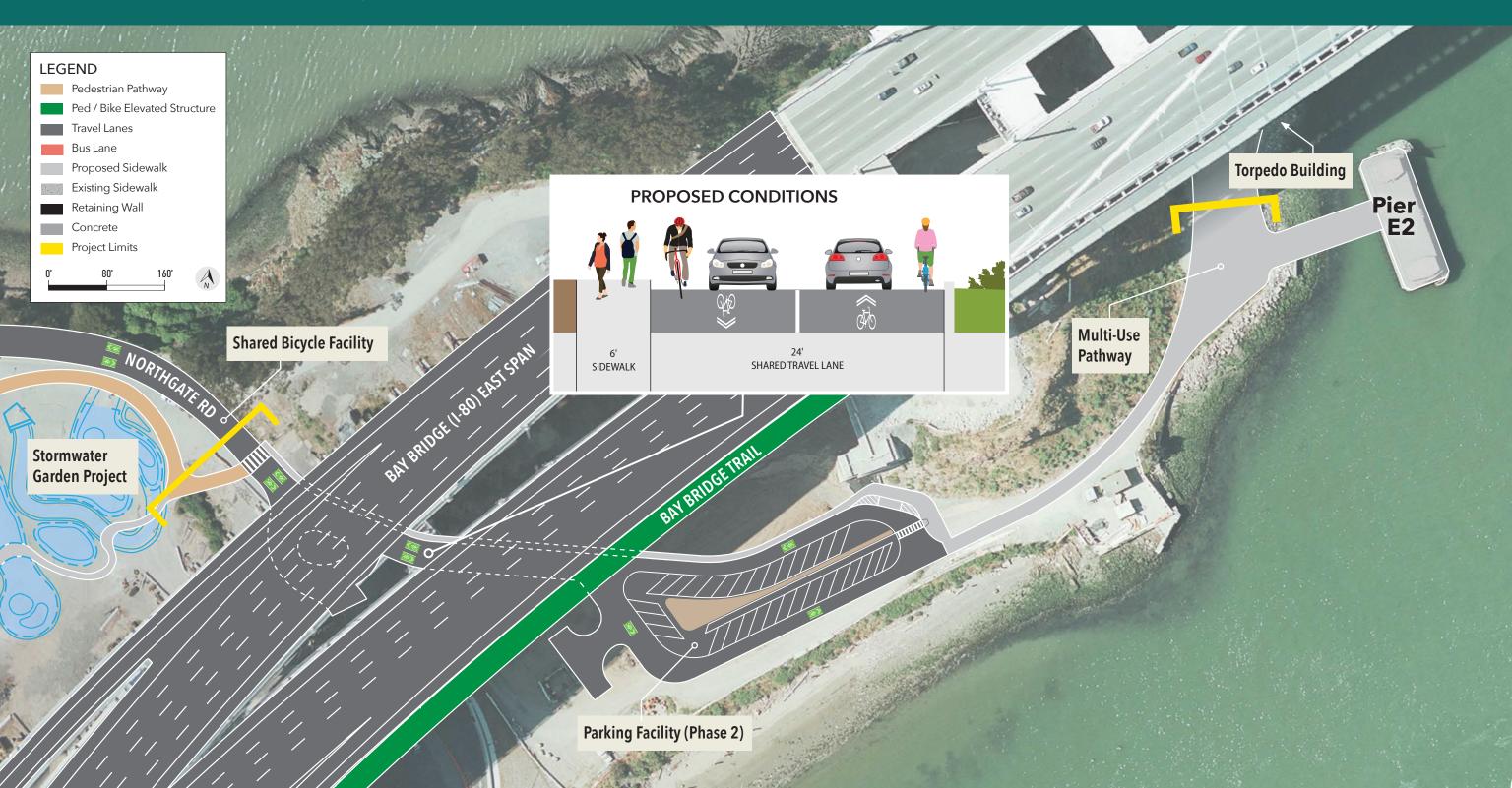
SPECIFICS:

- New destination on northeast tip of Yerba Buena Island providing an observation deck and public gathering space.
- Pedestrian and bicyclist access is provided from the Stormwater Garden area via a roadway extension of Northgate Road with a new sidewalk.
- Future facilities to be constructed by Caltrans in Phase 2 will include enhanced access to the attraction.

ESTIMATED COST (PHASE 1): \$20.0m (constructed)

ESTIMATED COST (PHASE 2): \$5.0m (unfunded)

PIER E2 - PHASE 2



TRANSPORTATION INVESTMENTS

- Approximately \$320 million in funding investment has already been made towards the transportation visions for the future of Treasure Island and Yerba Buena Islands.
- Many of the transportation projects have been funded and are either in the final design stage, under construction or have been completed.

Project	Lead Agency	Estimated Construction \$m	Construction Start Date	Construction End Date
Treasure Island- Causeway	TIDA/TICD	\$21.5	2Q 2019	2Q 2021
Ferry Terminal	TIDA/TICD	\$48.2	2Q 2019	2Q 2021
Ferry Plaza/Shelter	TIDA/TICD	\$25.4	1Q 2022	2Q 2024
Stormwater Garden	TIDA/TICD	\$3.8	4Q 2020	1Q 2021
Macalla Road	TIDA/TICD	\$16.5	3Q 2018	3Q 2020
Westside Bridges (roadway)	SFCTA	\$119.3	2Q 2021	2Q 2024
Southgate Road Realignment	SFCTA	\$63.7	3Q 2020	4Q 2021
Pier E2 - Phase 1	Caltrans	\$20.0	2Q 2018	4Q 2019
Total		\$318.4		

FUTURE TRANSPORTATION INVESTMENTS

Six projects require funding for engineering, environmental and construction. These projects would be required in order to achieve the vision for pedestrian and bicycle access throughout Treasure Island and Yerba Buena Island as well as San Francisco.

Project	Lead Agency	Estimated Construction \$m	
West Bridges (ped/bike pathway)	SFCTA	\$34.8	
West Span Connector	BATA	\$22.7	
Hillcrest Road	BATA	\$31.9	
Northgate Road	TIDA	\$6.8	
Historic District	TIDA	\$3.3	
Pier E2 - Phase 2	Caltrans	\$5.0	
Total		\$104.5	

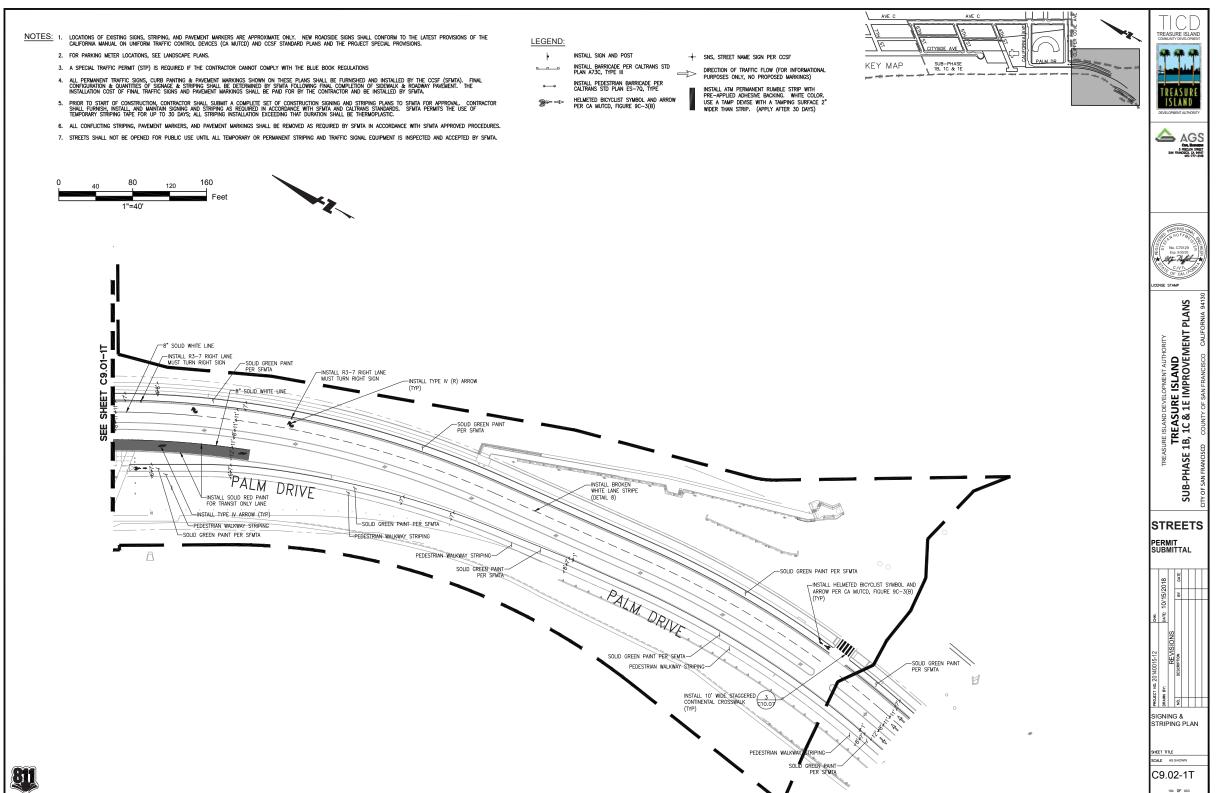






APPENDIX

TREASURE ISLAND CAUSEWAY



MACALLAROAD

NOTES:

- A LOCATIONS OF EXISTING SIGNS, STRIPING AND PAVEMENT MARKERS ARE APPROXIMATE ONLY. NEW ROADSDE SIGNS SHALL COMPORNI 10 THE LATEST PROVISIONS OF THE CALFORNIA MANUAL ON UNFORM TRAFFIC CONTROL DEVICES (CA. MUTCO) 2014 EDITION AND 2015 CALTRANS STANDARD PLANS, THE 2016 CITY STANDARD PLAN AND THE PROJECT SPECIAL PROVISIONS.
- SPECIAL FIOUSIONS.

 2. ALL PERMANENT TRAFFIC SIGNS, CURB PANTING AND PAVENENT MARRINGS SHOWN ON THESE PLANS SHALL BE FURNISHED AND INSTALLED BY THE CITY AND COUNTY OF SAN FRANCISCO (CCSF). FINAL CONFIGURATION AND QUANTITES OF SIGNAGE AND STREPING SHALL BE DETERMINED BY SAN FRANCISCO MUNICIPAL. TRANSPORTATION AGENCY (SPITA). FOLLOWING FINAL COMPIETOR OF SIDEMAL AND ROADWAY PAVENENT. THE INSTALLATION COST OF RIVAL TRAFFIC SIGNS AND PAVEMENT AND STALL BE PAID FOR BY THE CONTRACTOR. A STATEMENT OF COST FOR BIDDING PURPOSES WILL BE AND ALMAELE FROM SHATLA STATEMENT. THE RIST STATEMENT OF COST FOR BIDDING PURPOSES WILL BE AND ALMAELE FROM SHATLA STATEMENT.
- 3. PROR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBBIT A COMPLETE SET OF CONSTRUCTION SIGNING AND STRENNE PLANS TO SHATA FOR APPROVAL. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SIGNING AND STRENNE AS REQUIRED IN ACCORDANCE WITH SHATA, AND CALTRANS AS REQUIRED IN ACCORDANCE WITH SHATA, AND CALTRANS TANDARDS, SHATA PERMITS THE USE OF TEMPORARY STRIPING TARE FOR UP TO 30 DAYS, ALL STRENNE INSTALLATION EXCEEDING HAT DURATION SHALL BE THERMOPLASTIC.
- 4. ALL CONFLICTING STRIPING, PAVEMENT MARKERS, AND PAVEMENT MARKINGS SHALL BE REMOVED AS REQUIRED BY SEMTA IN ACCORDANCE WITH SEMTA APPROVED PROCEDURES.
- STREETS SHALL NOT BE OPENED FOR PUBLIC USE UNTIL ALL TEMPORARY OR PERMANENT SIGNAGE AND STRIPING IS INSPECTED AND ACCEPTED BY SPMTA AND PUBLIC WORKS.

- SNS, STREET NAME SIGN PER CCSF
- HELMETED BICYCLIST SYMBOL AND ARROW PER CA MUTCO.
- SHARE THE ROAD BIKE AND CHEVROM "SHARROW" MARKING







PLANS

TREASURE ISLAND DEVELOPMENT AUTHORITY
YERBA BUENA ISLAND
-PHASE 1YA & 1YB IMPROVEMENT

STREETS PERMIT SUBMITTAL

NO. DRAWN

SIGNING AND STRIPING PI AN

C8.00-1Y 119 **OF** 365

K:\Eng14\140015\DWG\-12 : 10-23-19 PLOTTED BY: DRAWING NAME: PLOT DATE:

NOTES:

- TOP. LIEST.

 1. LOCATIONS OF EXISTING SIGNS, STRIPING AND PAVEMENT MARKERS ARE APPROXIMATE ONLY. NEW ROADSIDE SIGNS SHALL COMPORTM TO THE LATEST PROVISIONS OF THE CALIFORNIA MANUAL. ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCO) 2014 EDITION AND 2015 CALIFARNS STANDARD PLANS, THE 2010 CITY STANDARD PLAN AND THE PROJECT SPECIAL PROVISIONS.
- SPECIAL PROVISIONS.

 2. ALL PERMARENT TRAFFIC SIGNS, CURB PANTING AND PAYEMENT MARKINGS SHOWN ON THESE PLANS SHALL BE PLRINSHED AND INSTALLED BY THE CITY AND COUNTY OF SAN FRANCISCO (COSE). FINAL CONFIGURATION AND CULANTITES OF SIGNAGE AND STIPPING SHALL BE DETERMINED BY SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SMTIA) FOLLOWING FINAL COMPLETION OF SIDEWAK AND ROADWAY PAYEMENT. THE INSTALLATION COST OF FINAL ITRAFFIC SIGNS AND PAYEMENT THE STALLATION COST OF FINAL TRAFFIC SIGNS WILL BE AND TOR BY THE CONTRACTOR. A STATEMENT OF COST FOR BIDDING PURPOSES WILL BE AVAILABLE FROM STATLA AT SMTIA TRAFFIC ENGINEERING PRIOR TO SUBMISSION OF BIDDS.
- 3. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBBIT A COMPLETE SET OF CONSTRUCTION SIGNING AND STRPING FRANS TO SETAL FOR APPROVAL. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SIGNING AND STRPING AS REQUIRED IN ACCORDANCE WITH SHATIA AND CALITANIS AS TRANSPORT OF THE PROPERTY STRPING TAPE FOR UP TO 30 DAYS, ALL STRIPING INSTALLATION EXCEEDING THAT DURATION SHALL BET HERMOPLASTIC.
- 4. ALL CONFLICTING STRIPING, PAVEMENT MARKERS, AND PAVEMENT MARKINGS SHALL BE REMOVED AS REQUIRED BY SPMTA IN ACCORDANCE WITH SFMTA APPROVED PROCEDURES.
- 5. STREETS SHALL NOT BE OPENED FOR PUBLIC USE UNTIL ALL TEMPORARY OR PERMANENT SIGNAGE AND STRIPING IS INSPECTED AND ACCEPTED BY SFMTA AND PUBLIC WORKS.

- SNS, STREET NAME SIGN PER CCSF
- HELMETED BICYCLIST SYMBOL AND ARROW PER CA MUTCD.
- SHARE THE ROAD BIKE AND CHEVROM "SHARROW" MARKING



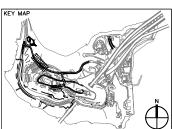




TREASURE ISLAND DEVELOPMENT AUTHORITY
YERBA BUENA ISLAND
SUB-PHASE 1YA & 1YB IMPROVEMENT PLANS

STREETS

			DATE	02/28/19	10/25/19			
	2/23/2018	ı	AВ	10	CT			
SH: BS	DATE: 2/2							
PROJECT NO. 20140015-12	DRAWN BY: CT/FC	REVISIONS	DESCRIPTION	INSTRUCTIONAL BULLETIN #1	INSTRUCTIONAL BULLETIN #2			
PROJE	DRA		'ON	W	V	ℽ	∢	
SIGNING AND STRIPING								





NOTES:

- 1. LOCATIONS OF EXISTING SIGNS, STRIPING AND PAVEMENT MARKERS ARE APPROXIMATE ONLY. NEW ROADSIDE SIGNS SHALL COMFORM TO THE LATEST PROVISIONS OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEMOES (CA MUTCO) 2014 EDITION AND 2015 CALTRANS STANDARD PLANS, THE 2010 CITY STANDARD PLAN AND THE PROJECT SPECIAL PROVISIONS.
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- 3. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBBIT A COMPLETE SET OF CONSTRUCTION SIGNING AND STRPING FRANS TO SETAL FOR APPROVAL. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SIGNING AND STRPING AS REQUIRED IN ACCORDANCE WITH SHATIA AND CALITANIS AS TRANSPORT OF THE PROPERTY STRPING TAPE FOR UP TO 30 DAYS, ALL STRIPING INSTALLATION EXCEEDING THAT DURATION SHALL BET HERMOPLASTIC.
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- SHARE THE ROAD BIKE AND CHEVROM "SHARROW" MARKING





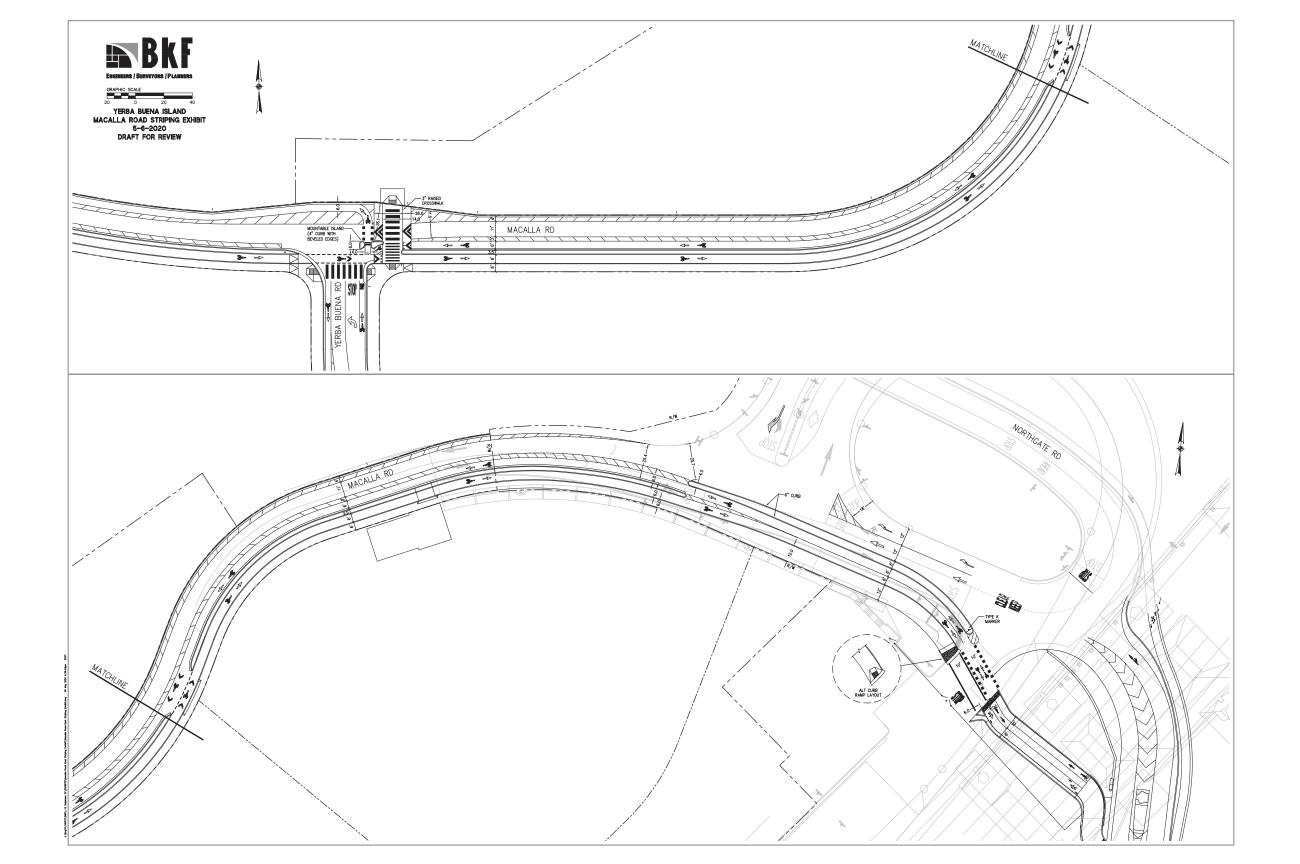


TREASURE ISLAND DEVELOPMENT AUTHORITY
YERBA BUENA ISLAND
SUB-PHASE 1YA & 1YB IMPROVEMENT PLANS

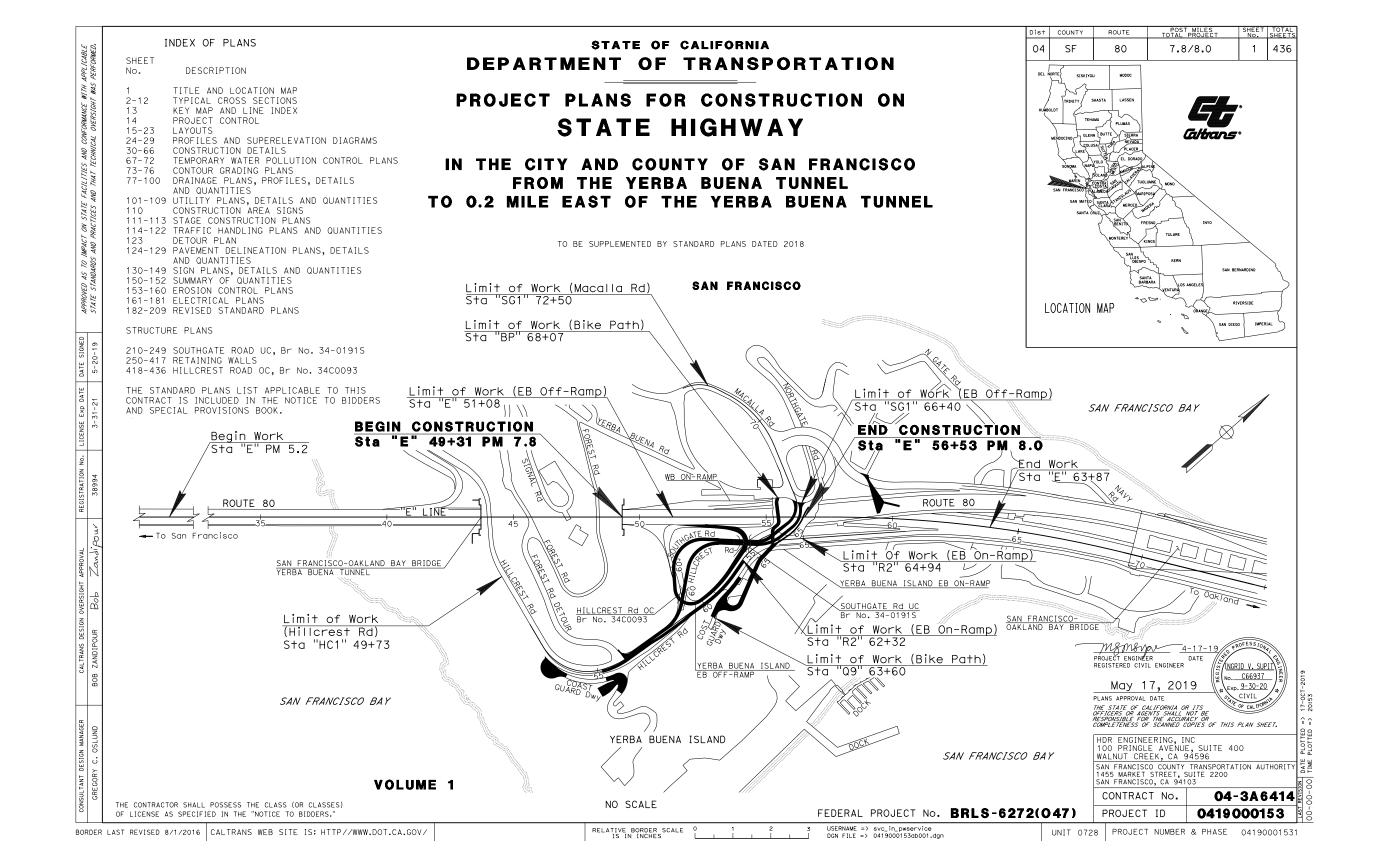
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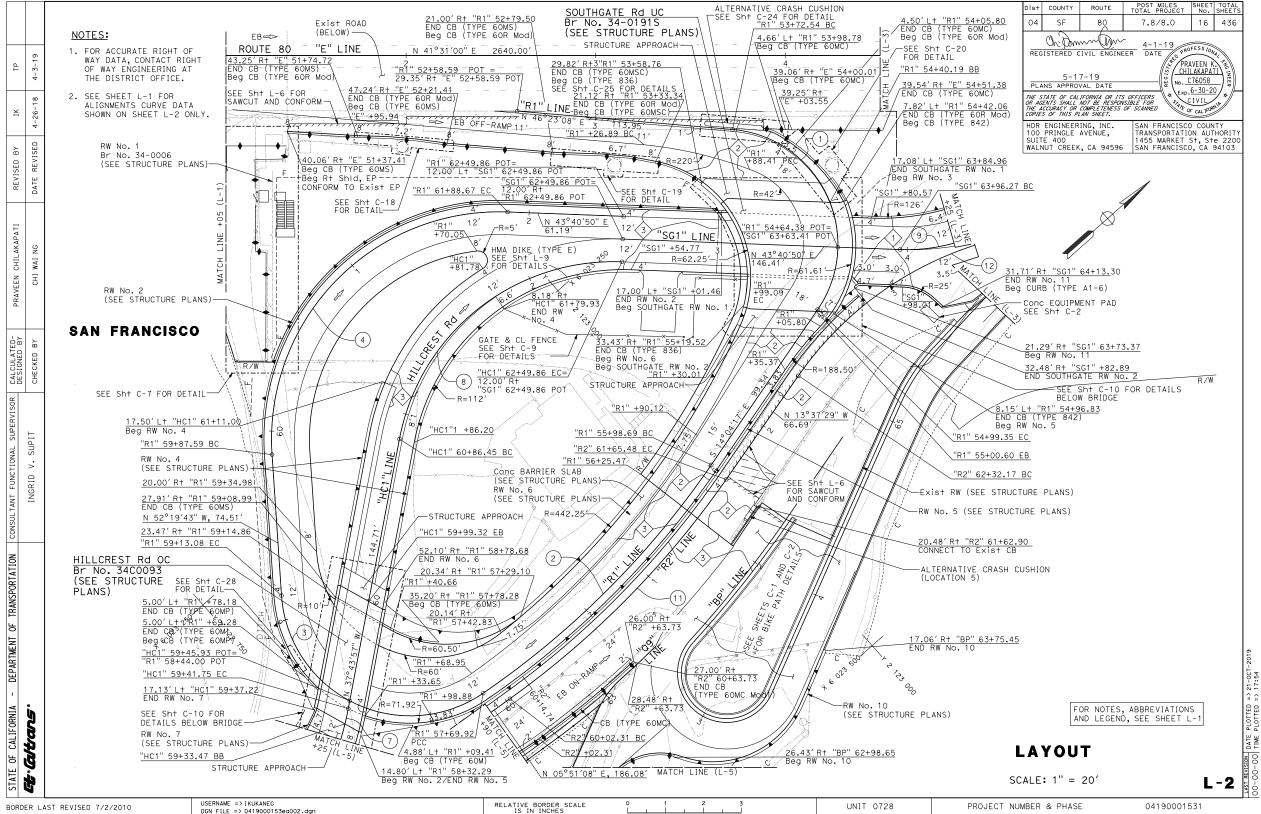
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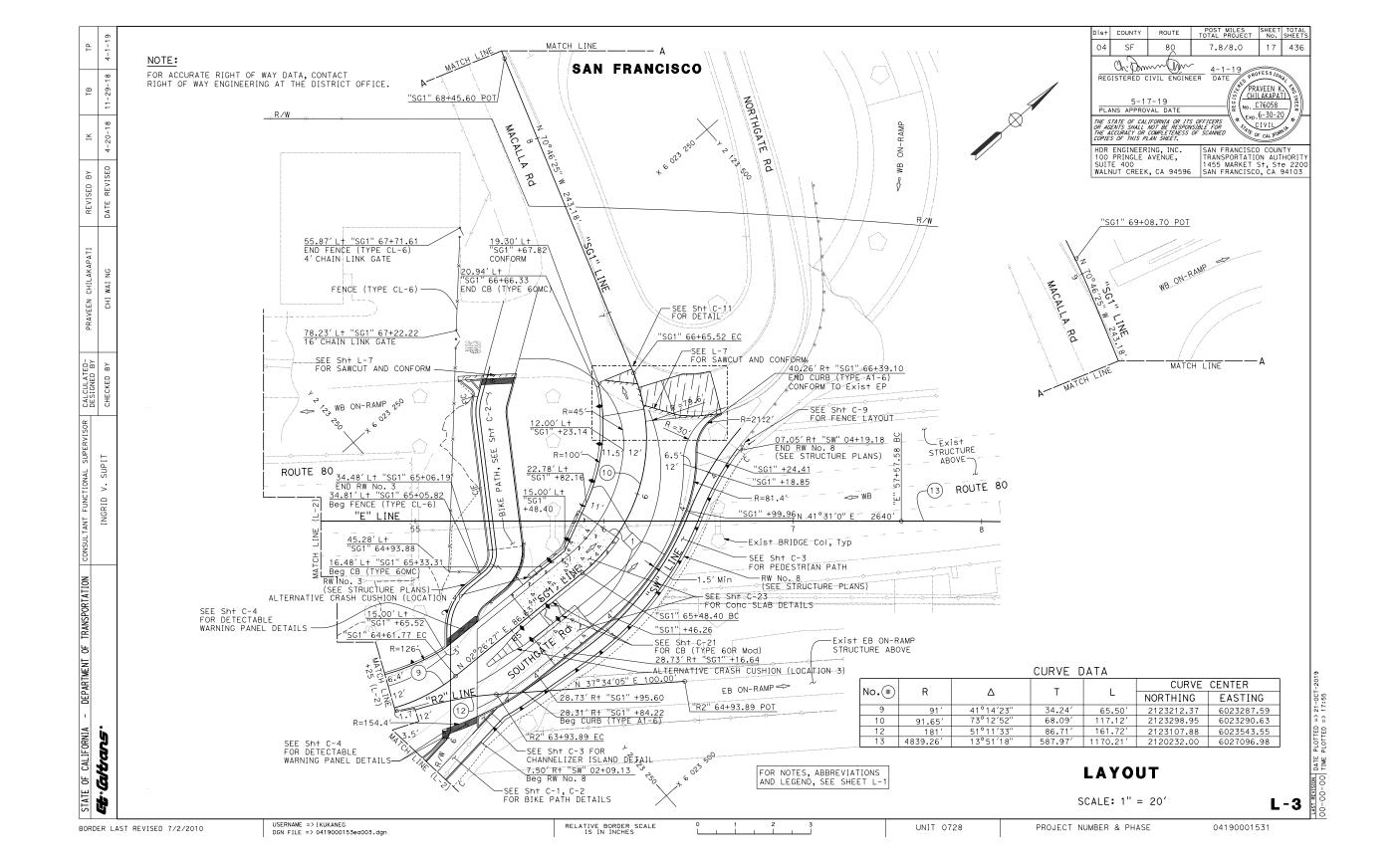
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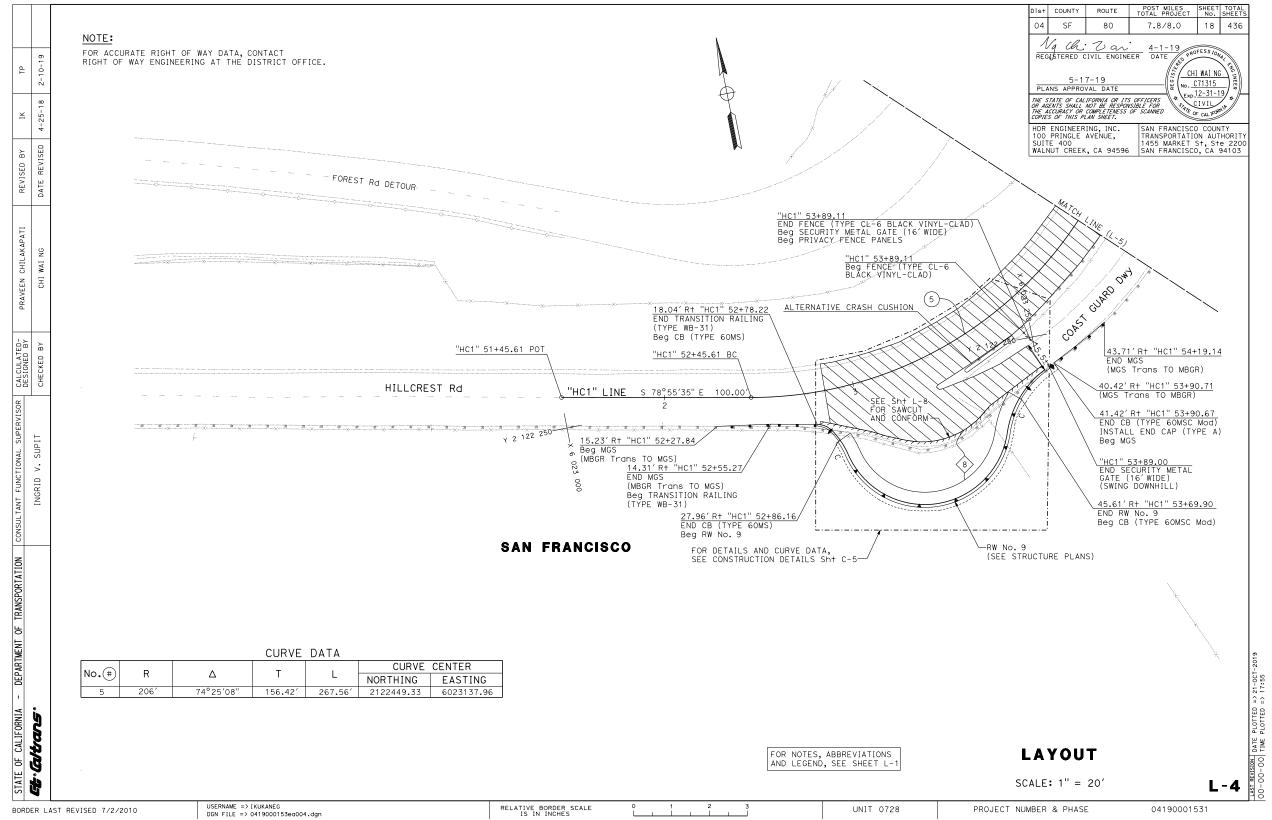


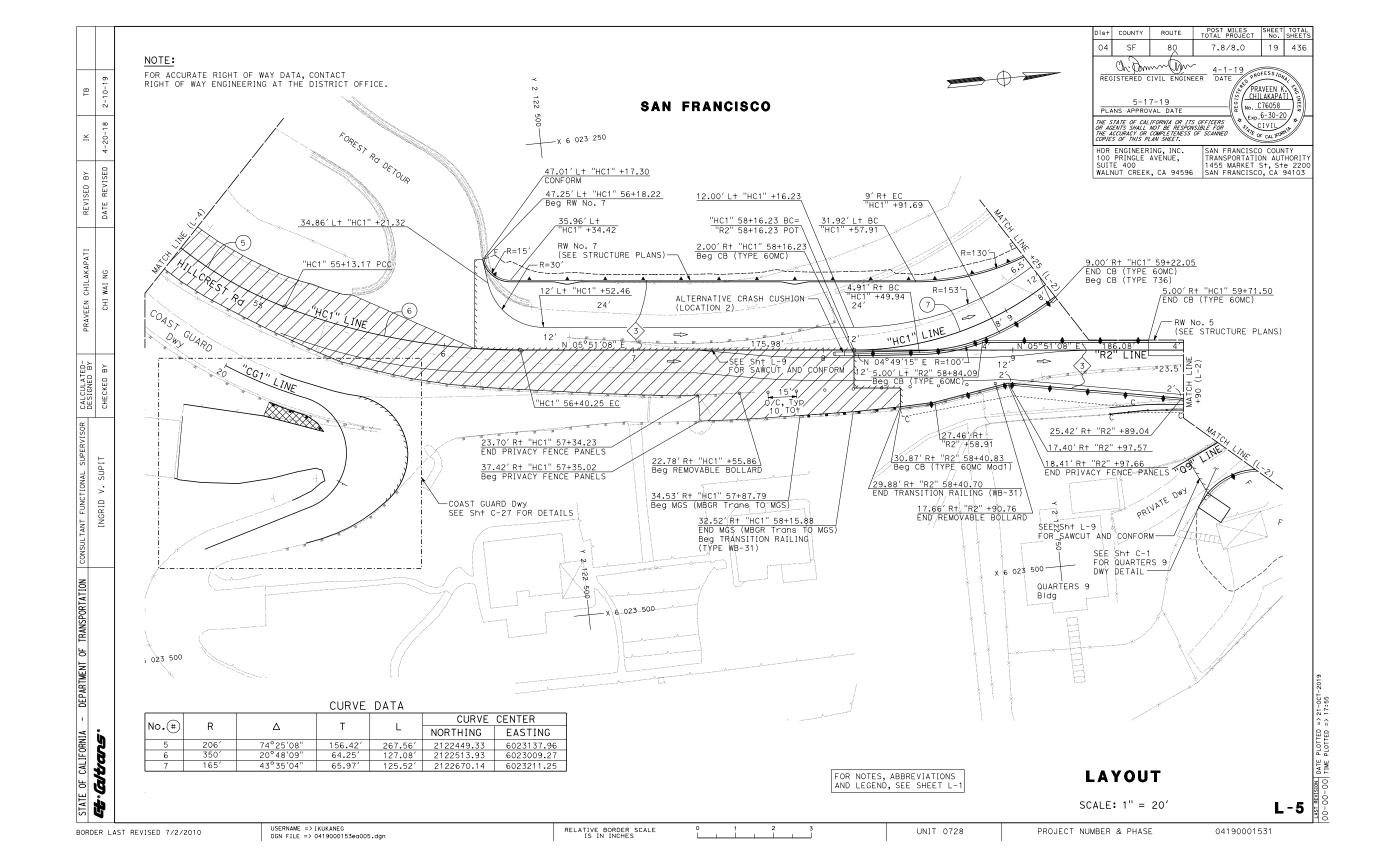
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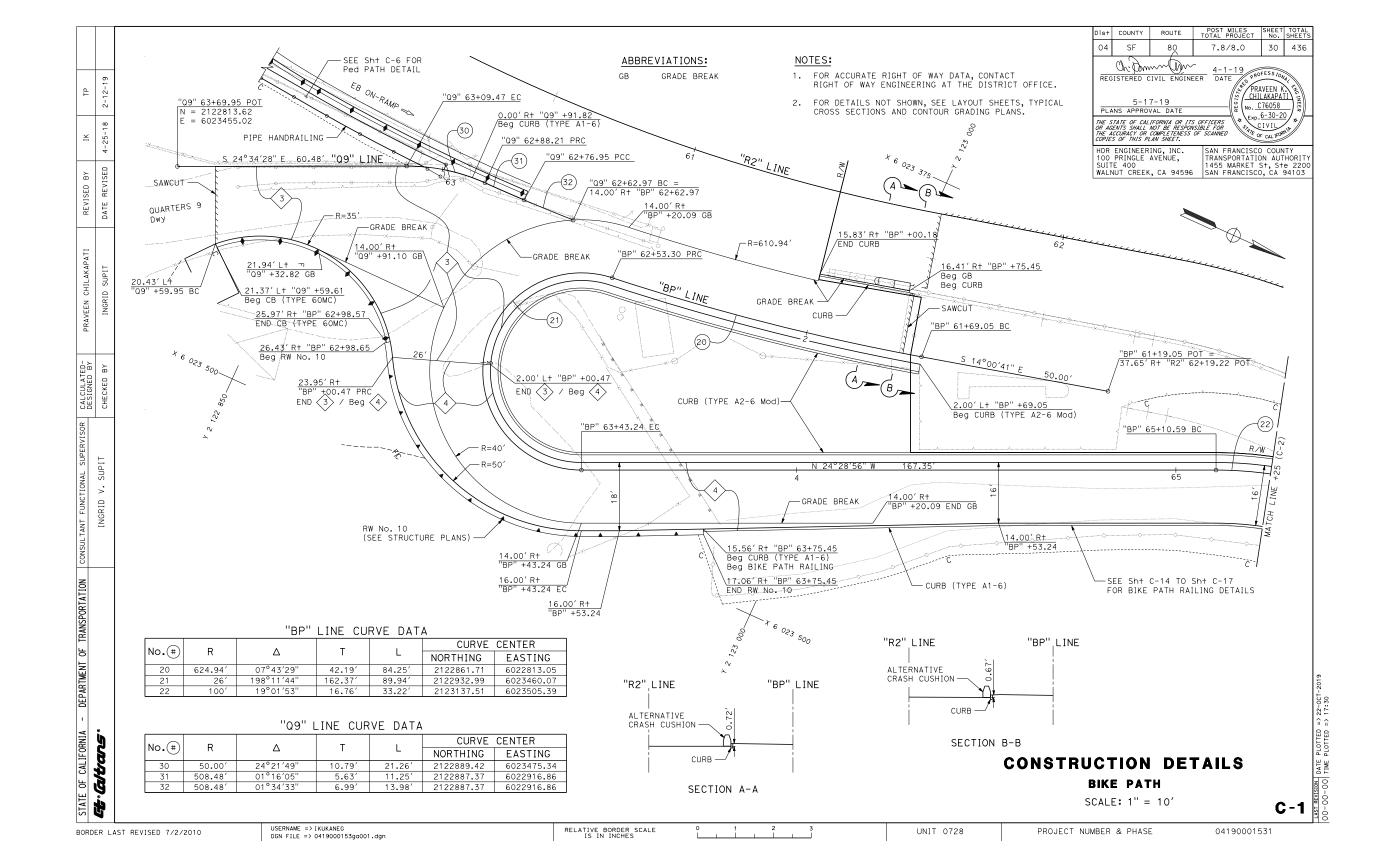


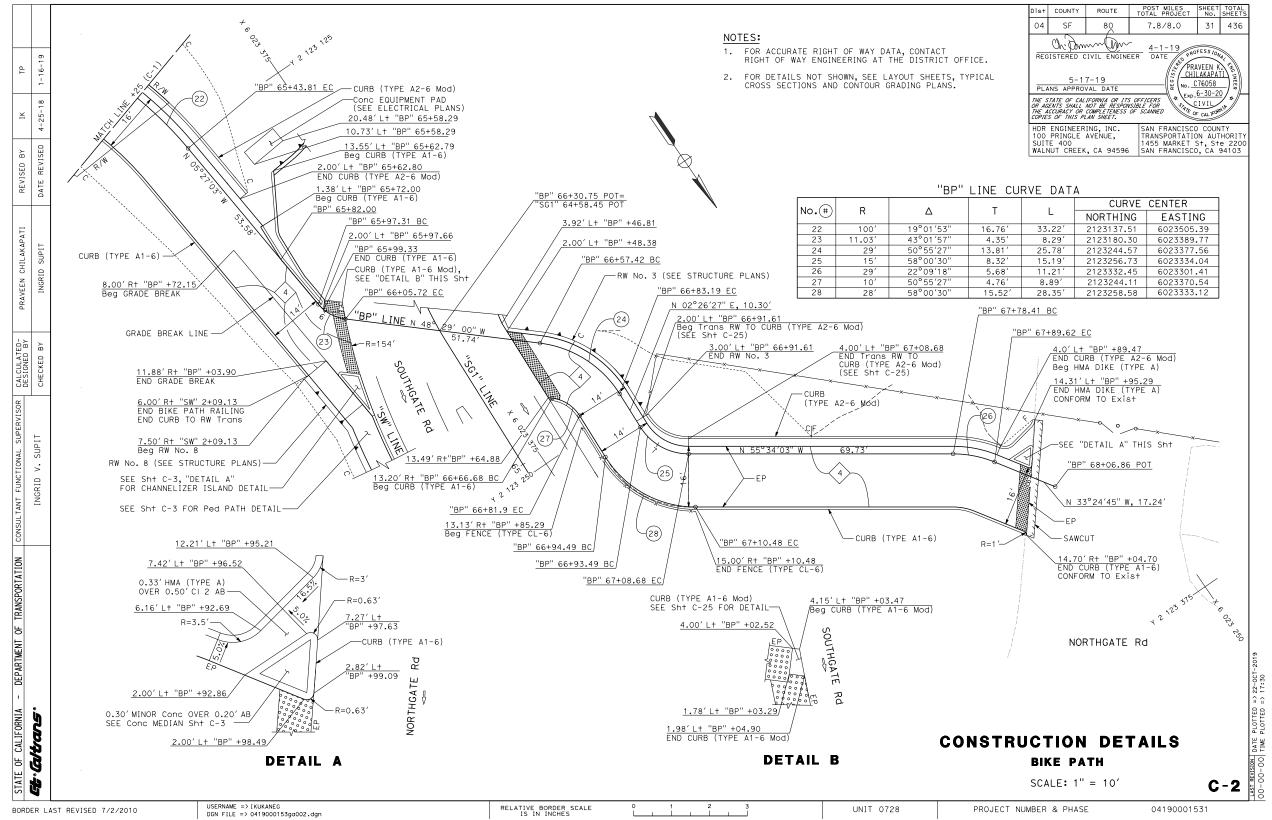


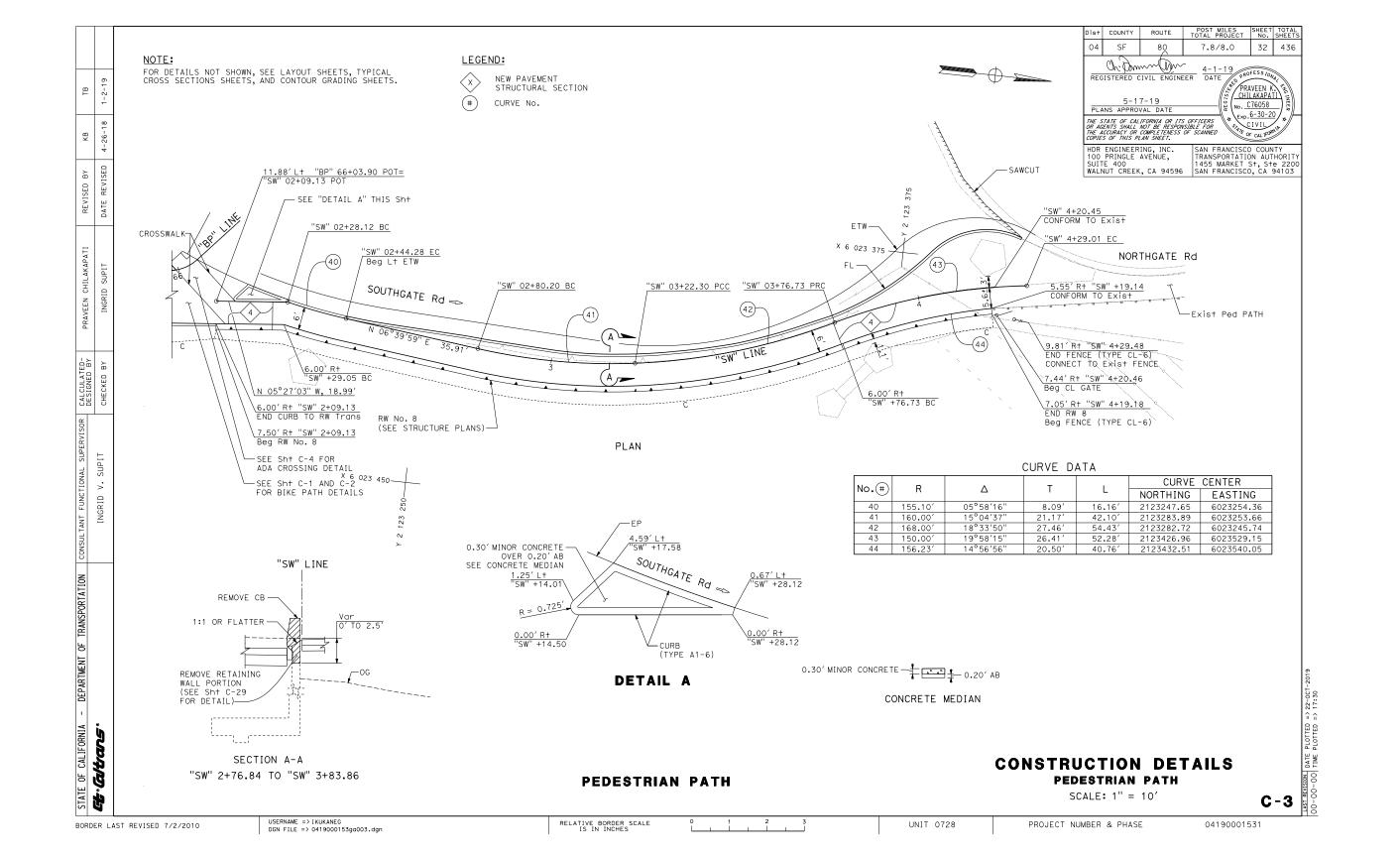


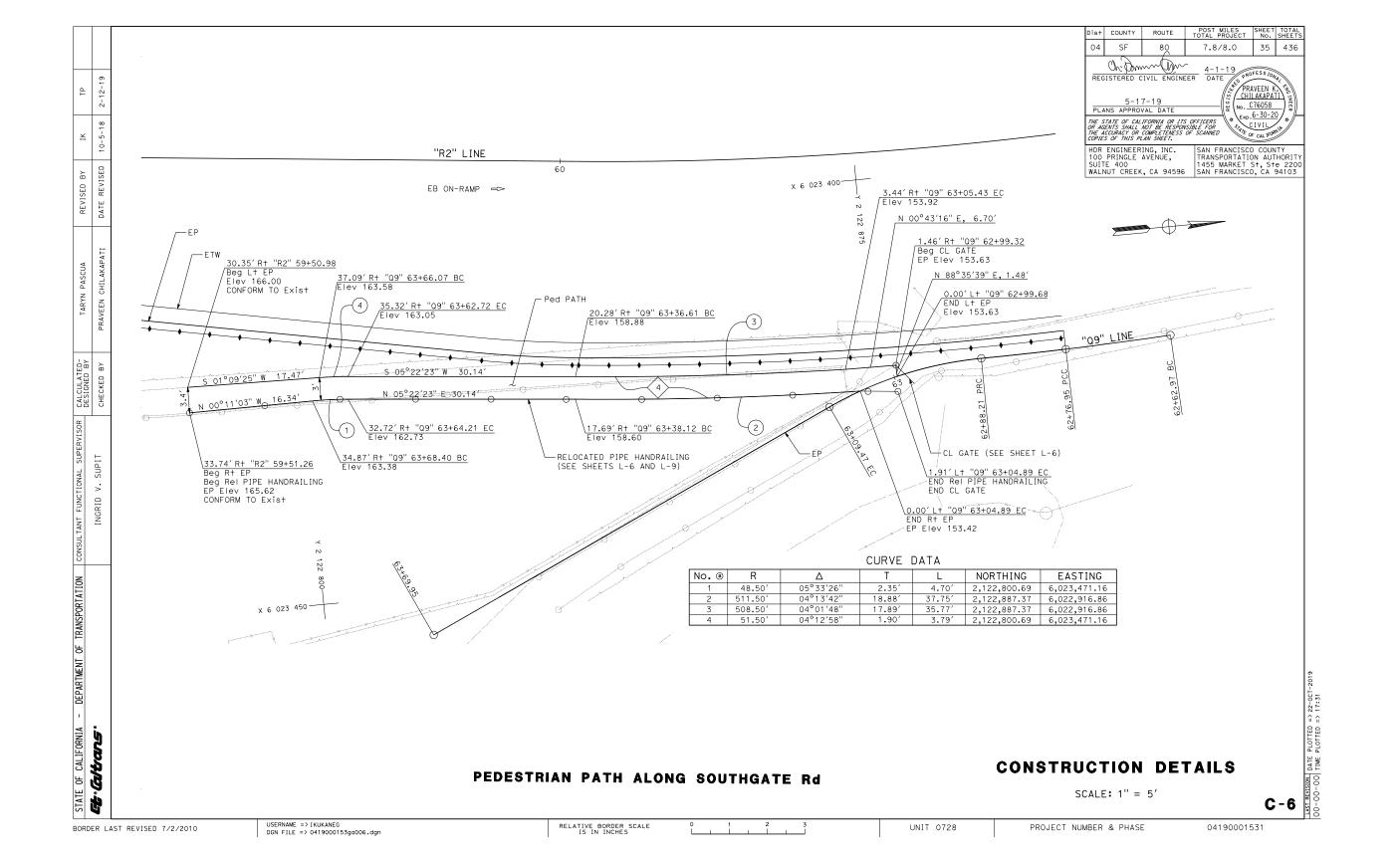




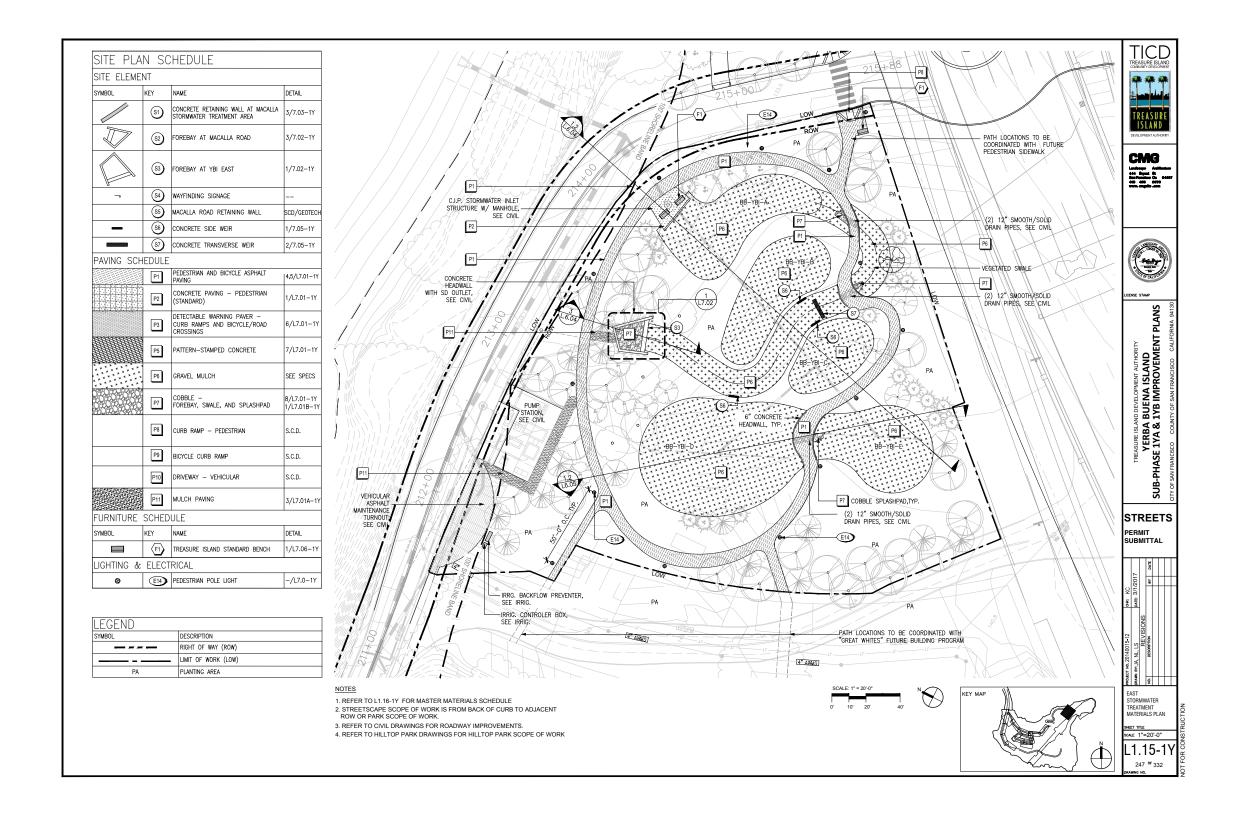


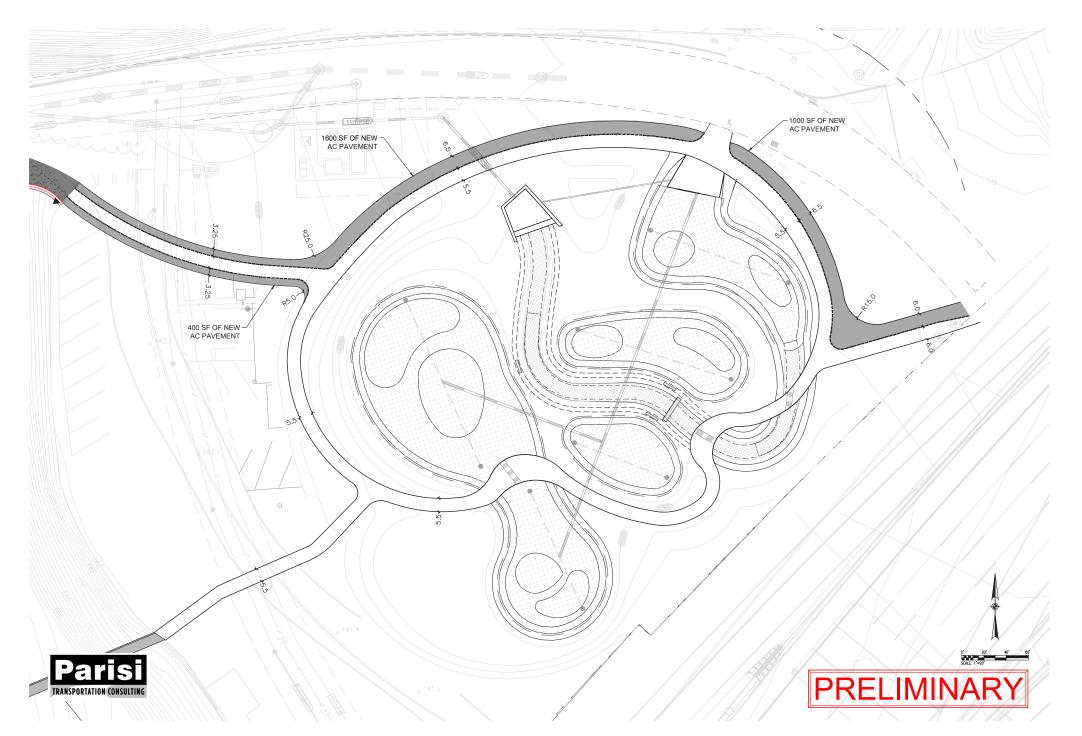






STORMWATER GARDEN





PHASE 1 - STORMWATER GARDEN YERBA BUENA ISLAND

WESTSIDE BRIDGES

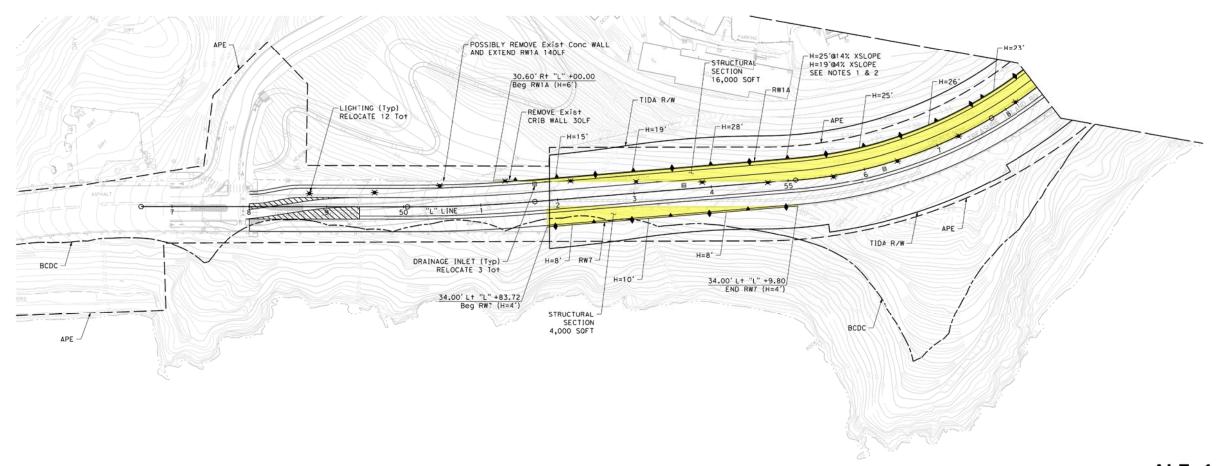
NOTES:

- 1. WALL HEIGHTS ARE APPROXIMATE FROM 2' BELOW PROPOSED ROADWAY FG TO THE TOP OF WALL AND ARE CALLED EVERY 100' ALONG THE "L" LINE. WALL HEIGHTS ON THIS SHEET ARE BASED ON MAINTAINING EXISTING CROSS SLOPE CONDITIONS.
- 2. WITH CROSS SLOPE CORRECTION WALL HEIGHT CAN BE REDUCED 3'-6' DEPENDING ON EXISTING SUPERELEVATION RATES AND RUNOFF. IN THIS PARTICULAR STATION THE CROSS SLOPE IS 14%, THEREFORE, A DECREASED WALL HEIGHT OF 6'CAN BE OBTAINED.



ROADWAY QUANTITIES:

ITEM:	Sht L-1:	Sht L-2:	TOTAL:
RELOCATE LIGHTING	12	1	13
RELOCATE DI'S	3	1	4
STRUCTURAL SECTION	20,000 SQFT	O SQFT	20,000 SQFT



ALT 1 LAYOUT SCALE: 1" = 50'

EVISED BY	DATE REVISED		DESIGNED BY: S. DWYER
		YERBA BUENA ISLAND WEST-SIDE BRIDGE STRUCTURES	DRAWN BY: S. DWYER
		PROJECT	CHECKED BY: D. DICKINSON
		PROJECT DESCRIPTION	APPROVED BY: D. DICKINSON

BY: ISON

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

PLANS SUBMITTAL DATE WMH CORPORATION SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

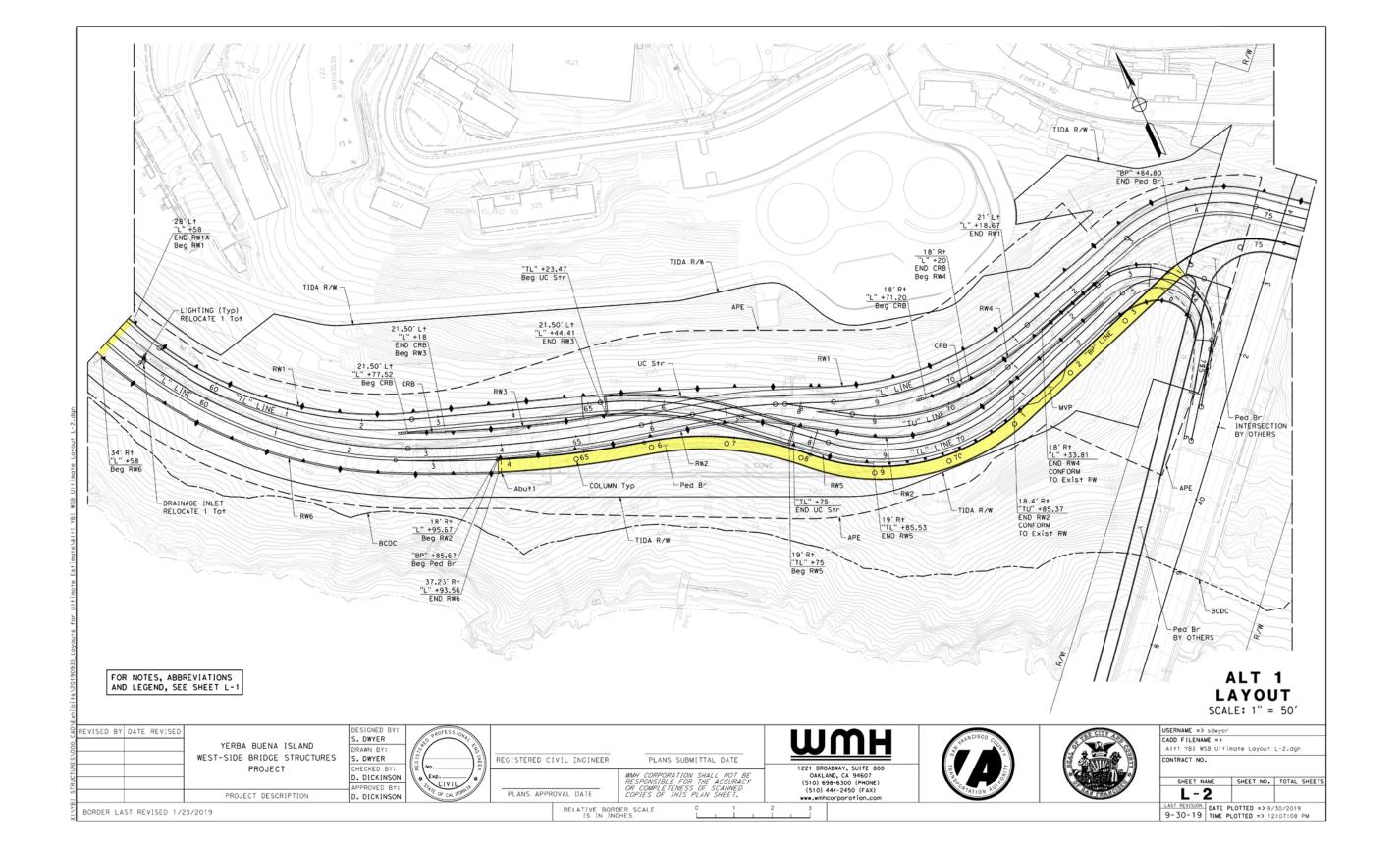


1221 BROADWAY, SUITE 800 OAKLAND, CA 94607 (510) 698-6300 (PHONE) (510) 444-2450 (FAX)

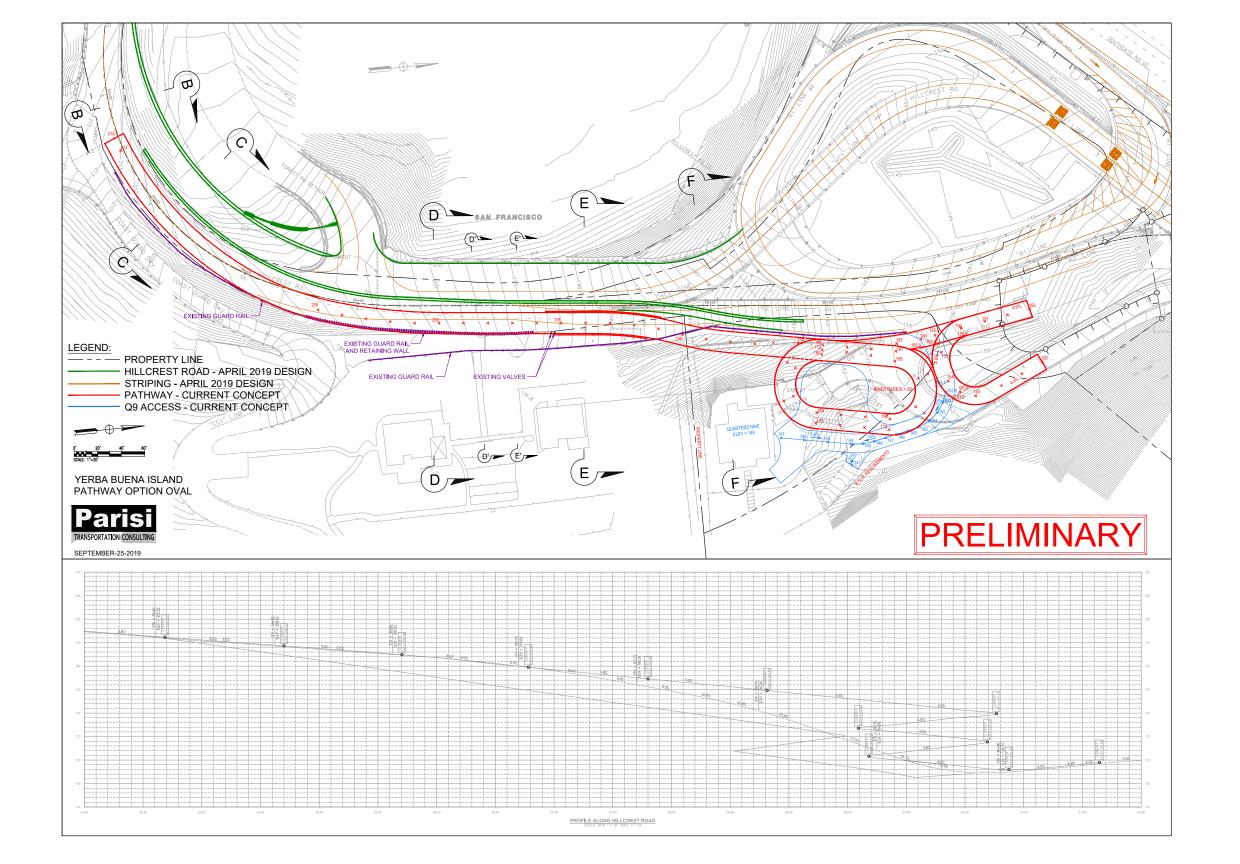


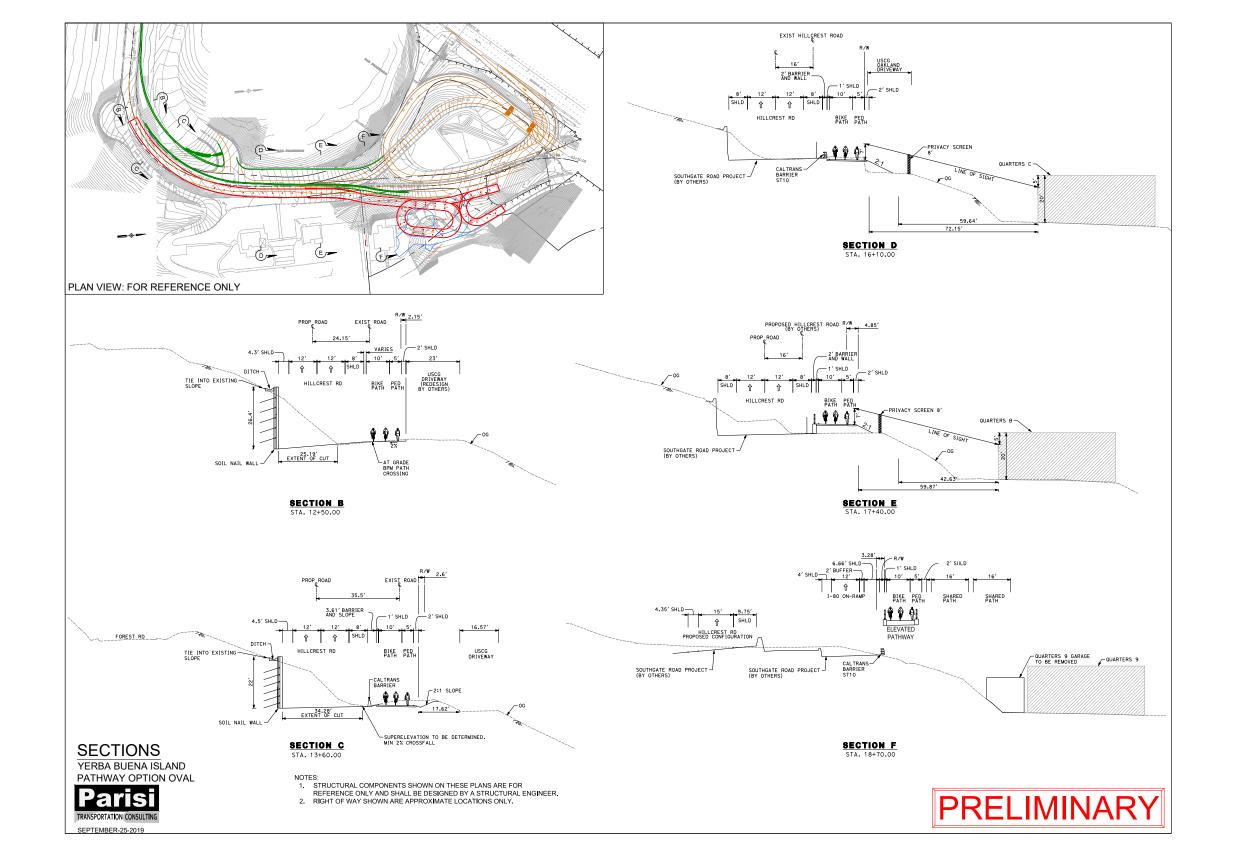
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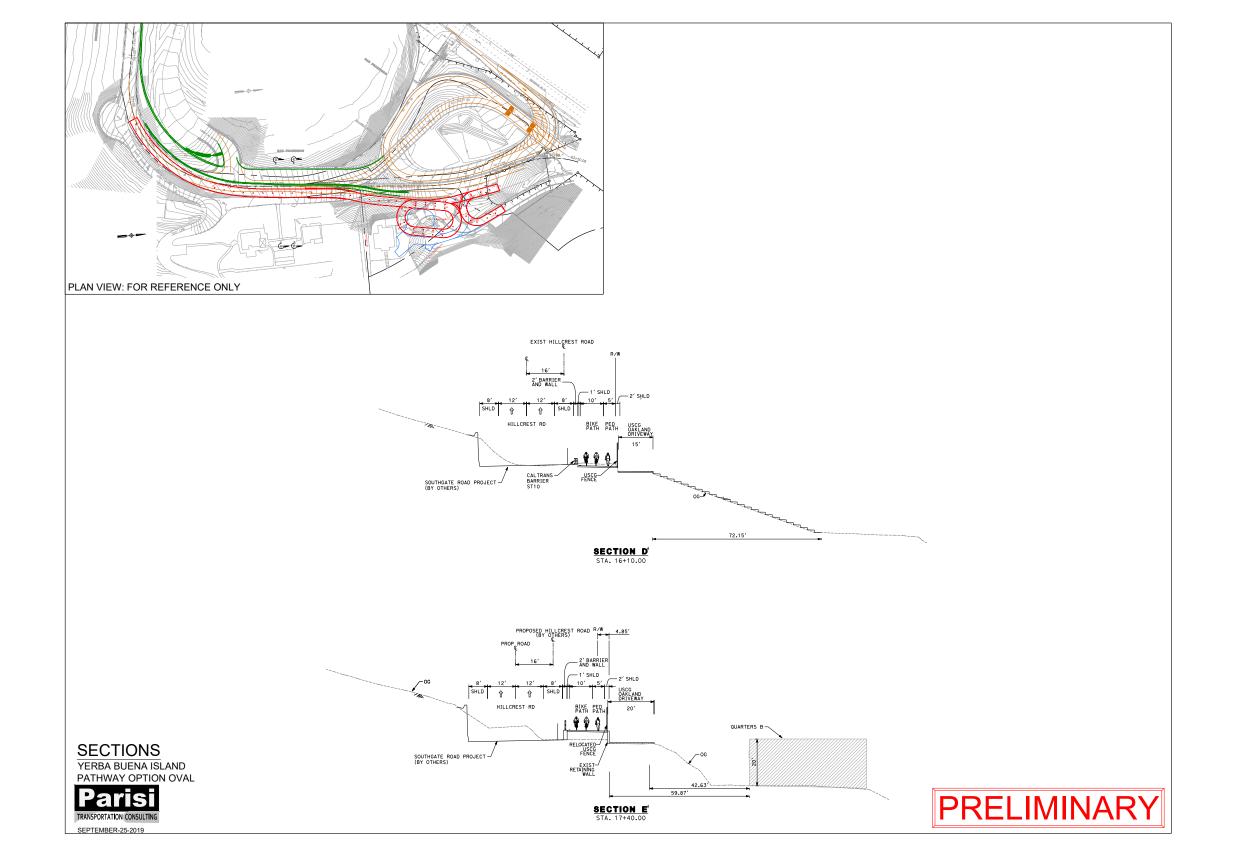
SHEET N	AME	SHEE	NO.	TOTAL	SHEETS
L-1	1				
AST REVISION	DATE	PLOTTED		30/2019	



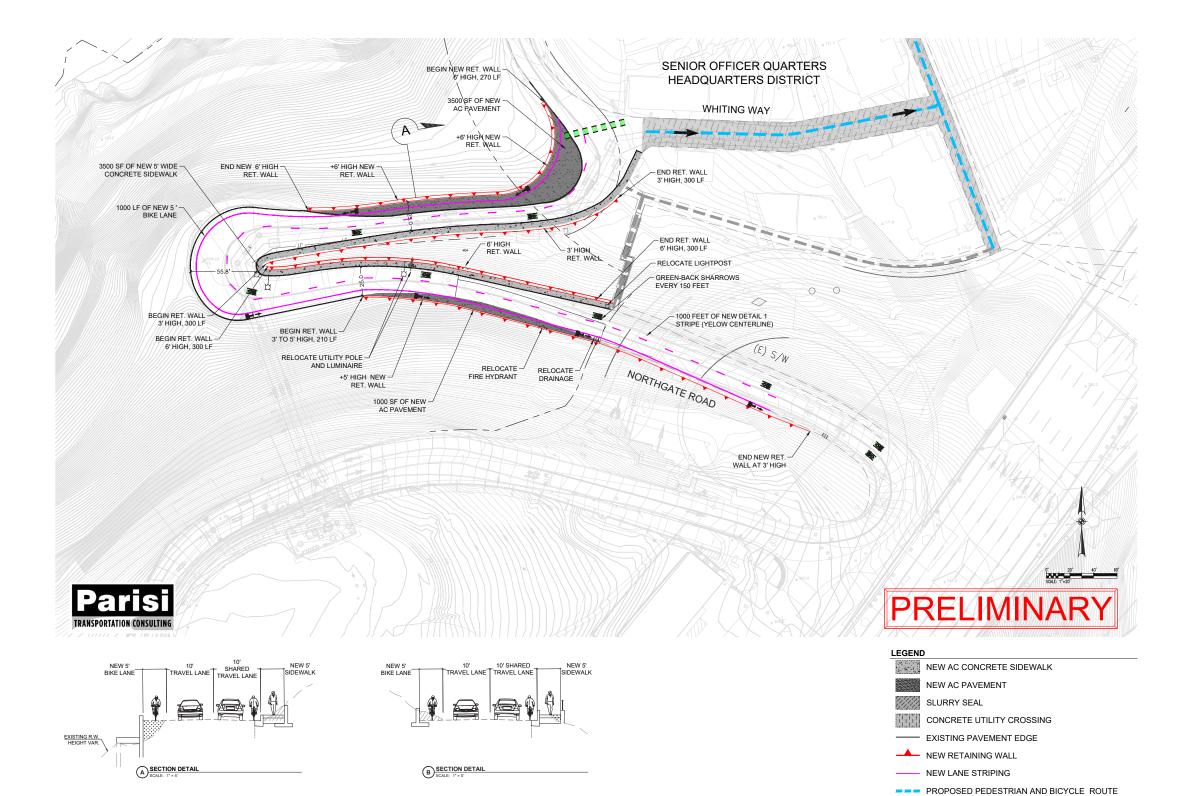
HILLCRESTROAD







NORTHGATE ROAD



NORTHGATE ROAD YERBA BUENA ISLAND

=== EXISTING PEDESTRIAN ROUTE

HISTORIC DISTRICT

