

NEW HOUSING PROPOSAL 505 E. BAYSHORE TOWNHOMES



REGIS | HOMES

BCDC Hearing
Presentation

May 16, 2024

Advances RWC Priorities: Housing, Transportation, and Children

COMPANY OVERVIEW

REGIS | HOMES

LOCAL EXPERTISE

Bay Area Based
for 25 years

SMART GROWTH PIONEER

Redevelopment of Infill Sites
Close to Transportation, Jobs,
Services and Recreation



COLLABORATION
Community Outreach,
Neighborhood Context,
Public-Private Partnerships,
Financial Investors

REVITALIZATION
Catalyzing projects that
create positive change for
the entire community

DESIGN EXCELLENCE

Award-Winning Designers,
High-Quality Design,
Custom Site Solutions

CONSTRUCTION EXPERTISE

In-house General Contractor,
Home Warranty, and
Customer Care



PASSION
Creating "Home",
Our communities are
our legacy

SUSTAINABILITY
Walkability, LEED, CALGreen,
Green Point Rated
Build It Green, Energy Star

Site Location – Complete the Mixed-Use Waterfront Neighborhood



Underutilized Site – *No Trees or Curb Appeal*



Vision: Build New Housing and Revitalize the Bayfront











DAHLIN

Community Benefits

- 8 Affordable Homes (15%) at Moderate Income Level
- Voluntary Contribution (**\$230k**) for Closing Costs, HOA Dues, etc.
- Public Access Easement (18,100 SF) worth **\$3M+**
- Onsite Sea Level Rise Prep and Improvements worth **\$3M+**
- Offsite Bike and Frontage Improvements worth **\$1M+**
- **\$500k+** Parks Fee
- **\$300k+** Infrastructure Fees
- Upsized Water Main worth **\$300k+**
- Financial Support (**\$48k**) for RWC Education Foundation



Other Key Benefits

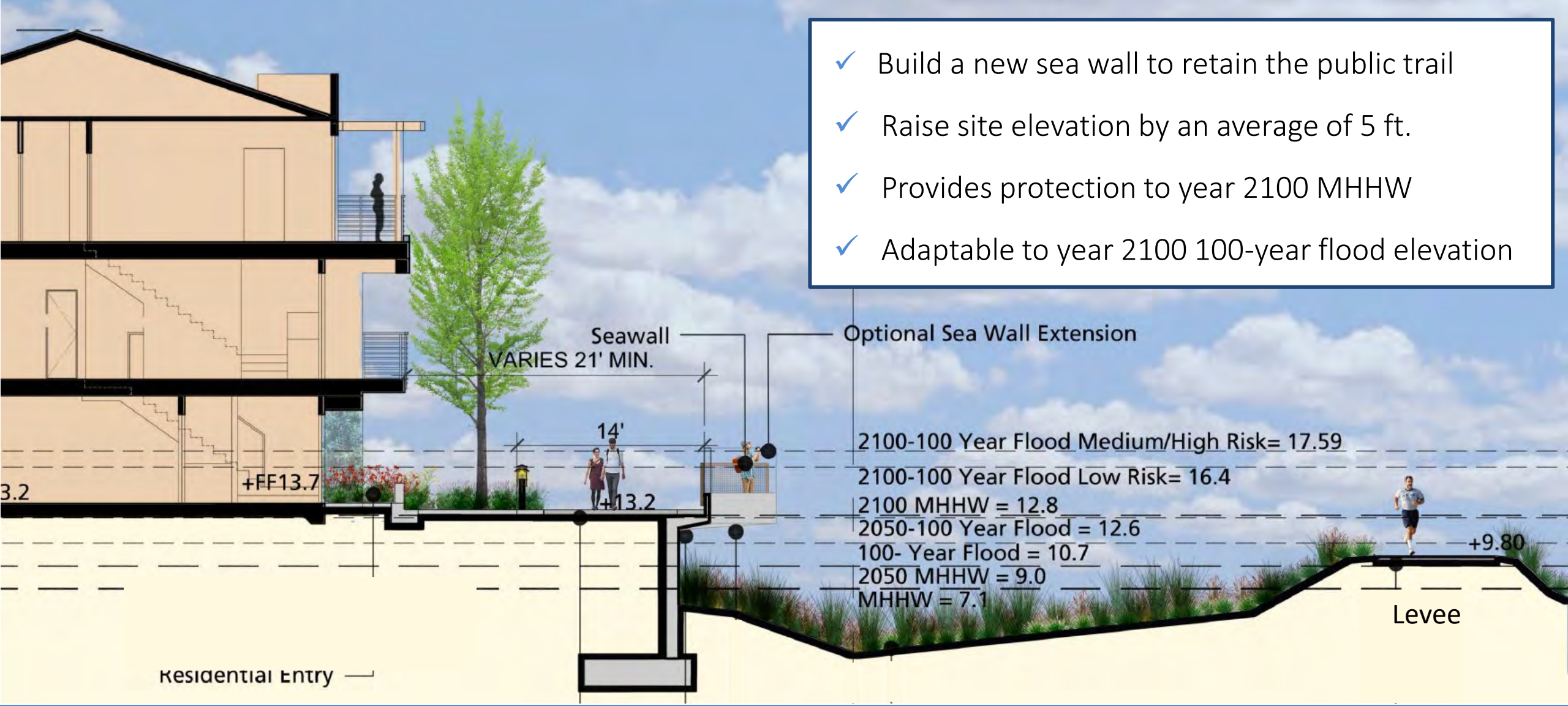
- For-Sale Housing for First-Time Homebuyers
- Ownership (For-Sale) Affordable (BMR) Homes
- Additional Path for Bay Trail System
- Enhanced Safety at Bayshore/Whipple
- Public Access to Neighboring 557 E Bayshore Site
- Adapt Site and Bay Trail for Sea Level Rise
- Beautify Gateway to Bair Island Neighborhood





- ✓ Biological study by Huffman-Broadway
- ✓ Army Corp Jurisdictional Determination
- ✓ Site Plan Shifted Back to Stay out of Ditch
- ✓ Worked with BCDC to approve wall

- ✓ Build a new sea wall to retain the public trail
- ✓ Raise site elevation by an average of 5 ft.
- ✓ Provides protection to year 2100 MHHW
- ✓ Adaptable to year 2100 100-year flood elevation



New Bay Trail Segment



* Approximate; Source: Metropolitan Transportation Commission (MTC) Website

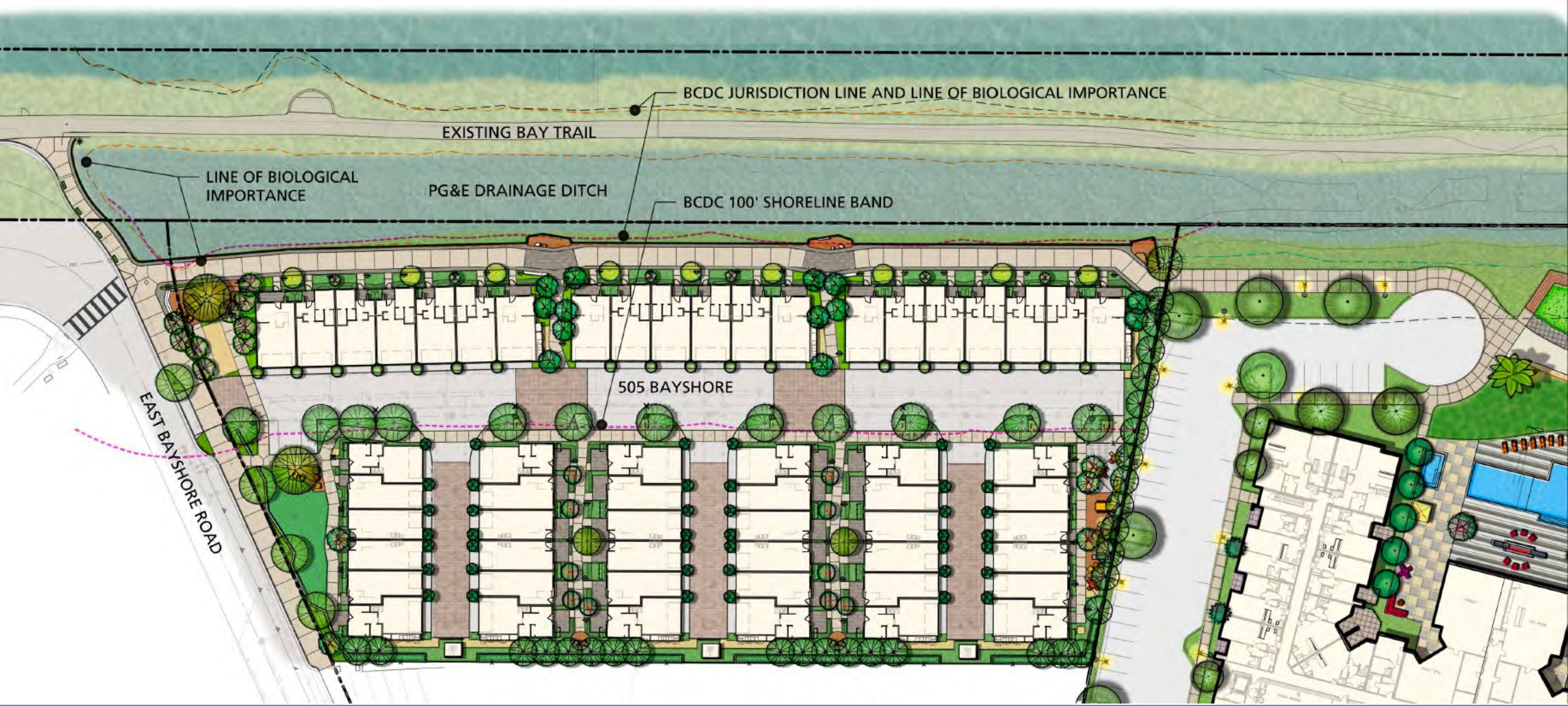
Existing Bay Trail Trailhead – *Unsafe!*



- New Sidewalk Connection to the Bay Trail
- Landscape Planters for Pedestrian Protection
- Trailhead Plaza w/ Seating and Drinking Fountain
- Micro-mobility Station for RWC Program
- Complete the “Crosswalk to Nowhere”



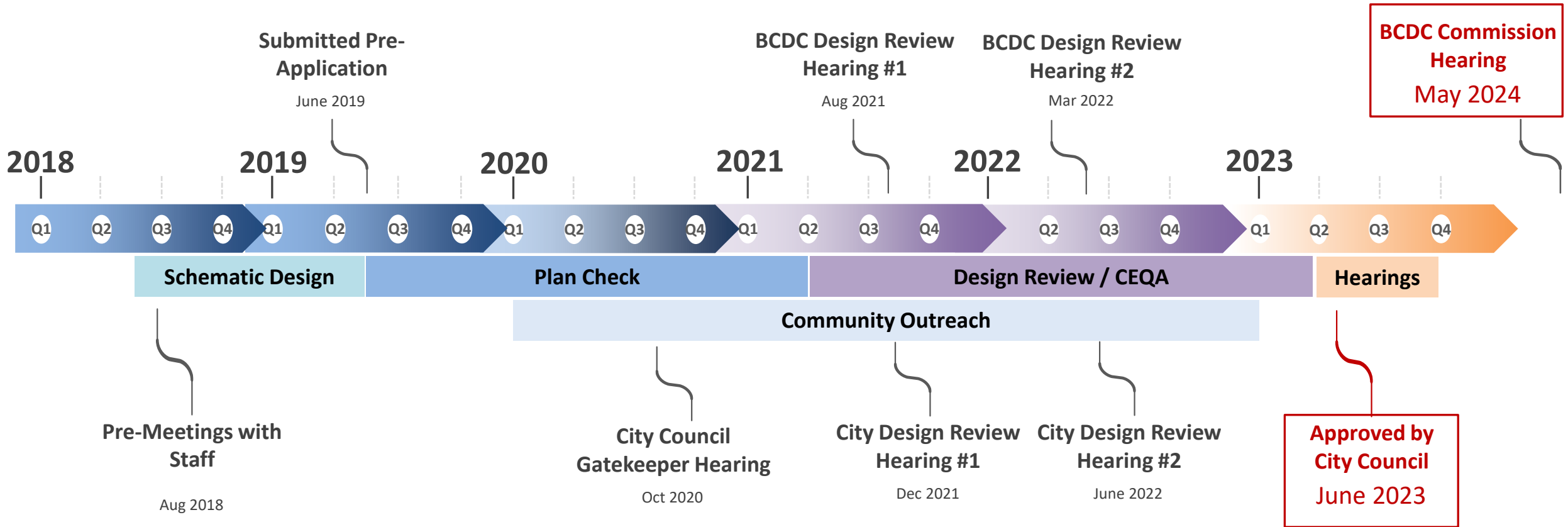
Connection to the Adjacent Project (557 E Bayshore)



- All-Electric Construction – No Gas!
- Solar PV Panels Installed on Every Home
- Heat-Pump Water Heating
- EV Charging Outlets in Each Home
- Plumbed for Recycled Water (Purple Pipe)
- Raise Site for Sea Level Rise Resiliency
- 100+ New Trees



Project Timeline



Organizations Met With:

- Bair Island Neighborhood Assoc.
- Bay Area Council
- Silicon Valley Leadership Group
- Housing Leadership Council (HLC)
- Housing Action Coalition
- Redwood City Chamber of Commerce
- San Mateo Assoc. of Realtors (SAMCAR)
- San Mateo Econ. Dev. Assoc. (SAMCEDA)
- SyRES Properties (557 E Bayshore Rd)
- Citizens Committee to Complete the Refuge
- Sierra Club
- San Carlos Airport
- Silicon Valley Bike Coalition
- Greenbelt Alliance
- Acterra
- Redwood City Downtown Streets Team
- GoBair Aquatic Center
- Redwood City Education Foundation

We are proud to be endorsed by:



CHAMBER
REDWOOD CITY
SAN MATEO COUNTY



HOUSING
LEADERSHIP
COUNCIL



GREENBELT ALLIANCE



REDWOODCITY
EDUCATION FOUNDATION



SAMCEDA
San Mateo County Economic Development Association



SAN MATEO COUNTY
ASSOCIATION of
REALTORS®



Bay Area
HOUSING
ADVOCACY
COALITION



BAYAREA
COUNCIL



PENINSULA
for
EVERYONE



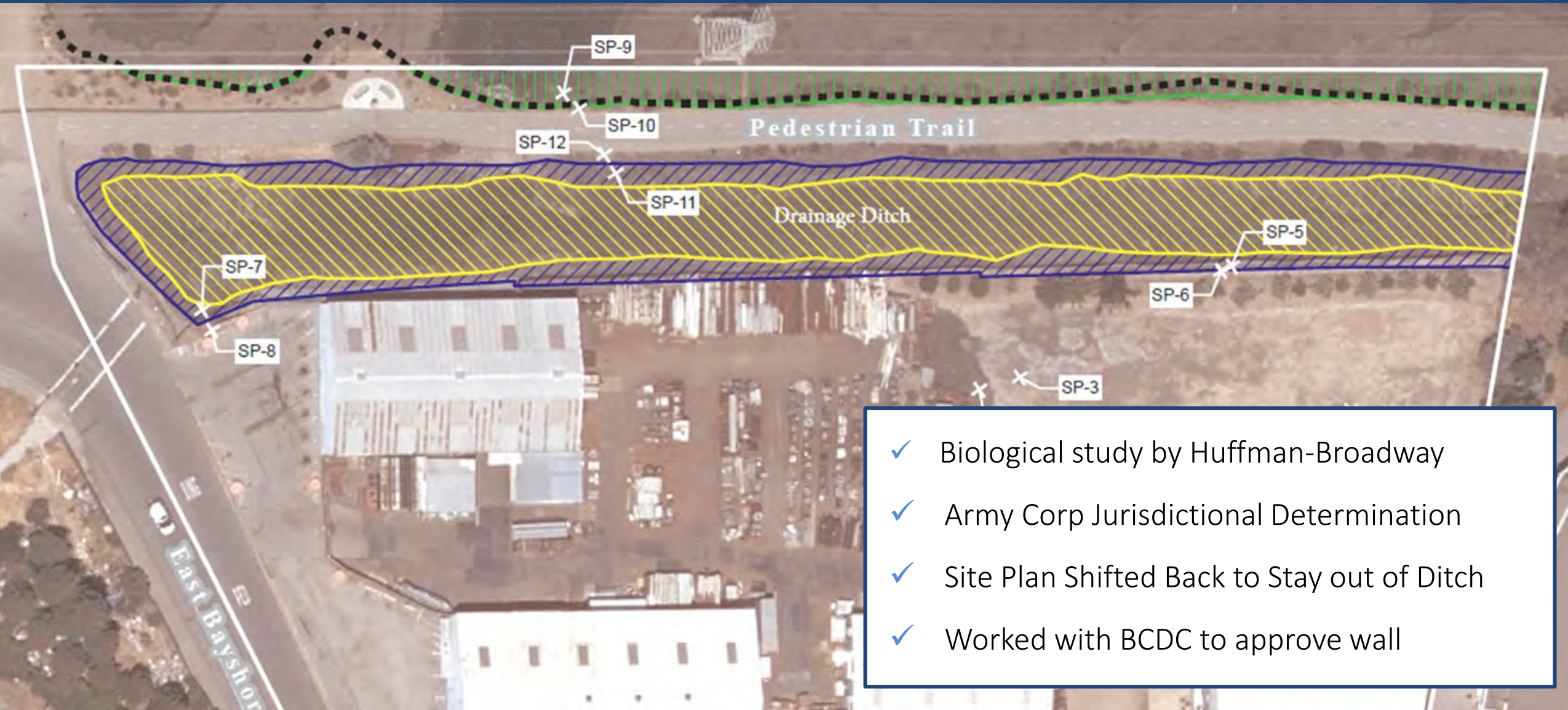
Thank you for your consideration!



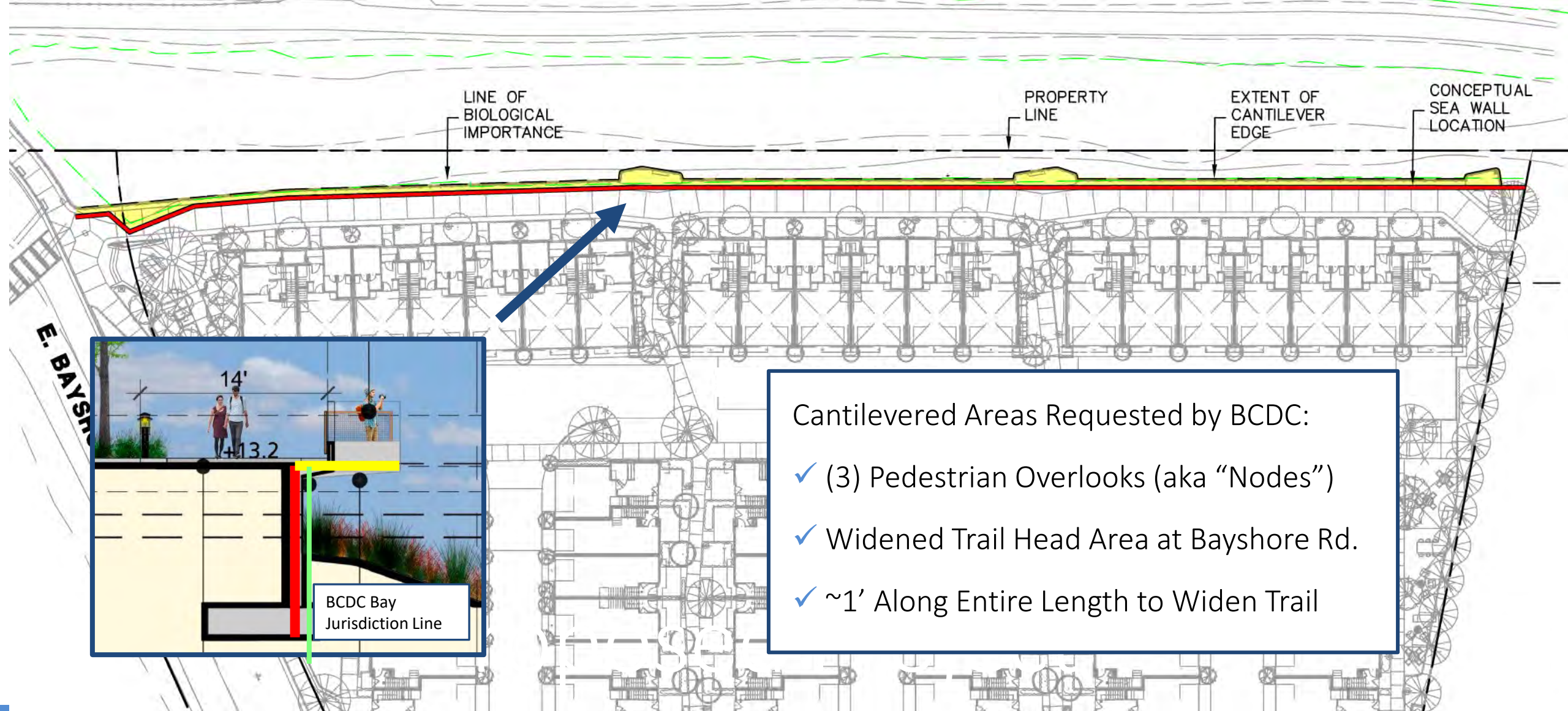
Questions?







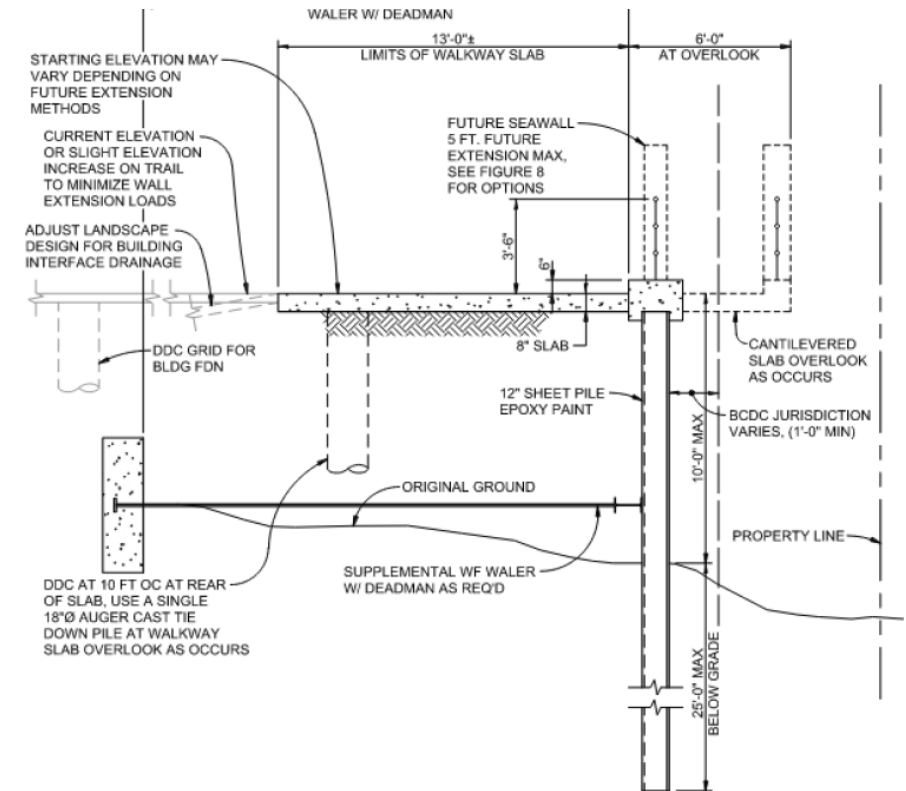
Sea Wall Cantilevers (Overhangs)



Cantilevered Areas Requested by BCDC:

- ✓ (3) Pedestrian Overlooks (aka “Nodes”)
- ✓ Widened Trail Head Area at Bayshore Rd.
- ✓ ~1’ Along Entire Length to Widen Trail

- Sheet Pile Wall w/ Marine-Grade Epoxy Coating
- Cantilevered Slab for Overhang and Nodes
- Max Depth of 25' Below Grade
- Completes Environmental “Cap” to Prevent Horizontal Migration of Contaminants
- Designed for Future Sea Level Rise Adaptation



SHEET PILE WALL

1/4" = 1'-0"



Redwood City Inundation Map



SOURCE: BCDC, ESRI, USGS
Note that hazard mapping amounts and extents are approximate.

D202200346 Redwood City SLR Vulnerability Study
Figure 4
BCDC Flood Hazard Mapping

One Shoreline SLR and Protection Map

OneShoreline Bayside Map of Future Conditions

Overview

The San Mateo County Flood and Sea Level Rise Resiliency District (or OneShoreline) created this map to accompany its Planning Guidance Policy - a voluntary, standardized and evolving resource for the cities and areas of the County that are directly impacted by San Francisco Bay to account for climate-driven flooding, stormwater, groundwater rise and sea level rise in a General Plan, Specific Plan, Zoning Ordinance and approvals of projects. For further details, see oneshoreline.org/planning-guidance. This map is for illustrative and planning purposes only and more detailed analysis is needed for site-specific design.

Map Navigation

- Search a specific address or location.
- Explore the available layers and turn them on and off.
- Click on a layer for additional details.

The map displays an aerial view of a coastal area with a yellowish-green overlay representing future conditions. A prominent green line indicates the projected sea level rise (SLR) boundary. A blue arrow points to Highway 101, and a blue box highlights the address 505 E Bayshore. The map includes a search bar at the top right, a scale bar at the bottom left, and a copyright notice at the bottom.

Find address or place

200 ft

Maxar, Microsoft | Eri Community Maps Contributors, Redwood City, County of San Mateo, California, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

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Focus Area #	Adjacent Water Body	Public Landmarks	Potential Cause of Flooding	Type of Flood Protection	Land Ownership	Approx. Minimum Shoreline Elevation (ft NAVD)	Flood Routes	Approx. BFE (ft NAVD)	Freeboard relative to BFE and SLR			
									SLR: +0'	+1.1'	+3.5'	+6.9'
2b	Steinberger Slough (south branch)	Whipple Ave to Sea Anchor Dr (bayward of Hwy 101)	Coastal	Embankment	City (Bike path)	9.5	Primary: shoreline overtopping Steinberger Slough Secondary: Adjacent flooding from 2c, 2d	11	-1.5	-2.5	-5	-8.4
2c	Smith Slough, Redwood Creek	Sea Harbor	Coastal	Concrete flood wall	Private	15.0	Primary: adjacent flooding from 2c Secondary: Shoreline overtopping from Smith Slough	11	-4	-3	-0.5	-2.0
2d	Redwood Creek	Bair Island Marina	Coastal	Embankment	Private	9.0	Primary: shoreline overtopping from Redwood Creek	10	-1	-2	-4.5	-7.9
2e	Redwood Creek (west bank)	Sea Anchor Dr to Hwy 1 crossing over Redwood Cr	Combined Coastal and Creek	Embankment, concrete flood wall	Private	9.5	Primary: shoreline overtopping from Redwood Creek	10	-0.5	-1.5	-4	-7.4
2f	Redwood Creek (west bank)	Hwy 1 to Bradford Street	Combined Coastal and Creek	Embankment and earthen berms	Private	10	Primary: shoreline overtopping from Redwood Creek Secondary: Flooding from Cordilleras Creek	10	0	-1	-3.5	-6.9
Reach 3: Downtown to Seaport Boulevard												
3a	Redwood Creek (east bank)	Hwy 1 to Bradford Street	Combined Coastal and Creek	Embankment and earthen berms	Private	10.5	Primary: shoreline overtopping from Redwood Creek	10	0.5	-0.5	-3	-6.4
3b	Redwood Creek (east bank)	Inner Harbor: Hwy 101 to Maple Street	Combined Coastal and Creek	Embankment and earthen berms	Private	7.0	Primary: shoreline overtopping at terminus of Maple Street	10	-3	-4	-6.5	-9.9
3c	Redwood Creek (east bank)	Inner Harbor: Maple Street to Seaport Blvd	Combined Coastal and Creek	Earthen berm and metal bulkhead	Private	7.0	Primary: adjacent flooding from 3b Secondary: shoreline overtopping from Redwood Creek. Overtopping of Seaport Blvd from 4	10	-3	-4	-6.5	-9.9
3d	Redwood Creek (east bank)	Seaport	Coastal	Concrete floodwall	Private	14.0	Primary: shoreline overtopping from Redwood Creek Secondary: shoreline overtopping from Redwood Creek. Overtopping of Seaport Blvd from 4	11	3	2	-0.5	-3.9

Because of land ownership, cost, conflicts with existing structures and infrastructure, it will likely be difficult to achieve the long-term target for all of the City in the next decade. For some portions of the shoreline, shorter-term measures that protect for a lower level of coastal flood hazard may be warranted.

Much of the low-lying and shorefront areas of the City are privately owned. These areas will require coordination by and with the City and County to address flooding. Publicly owned parcels or shoreline reaches which have existing levees and easements are likely to facilitate City implementation.

In the long-term, a comprehensive strategy for the City's shoreline will require outreach and partnerships with private landowners.

Many of the areas in Redwood City that are predicted to flood during extreme events are interconnected by low-lying flow pathways landward of the shoreline. Hence, even though one area may have its immediate shoreline elevated above extreme flood water levels, inland portions of the area and/or access to inland portions may be susceptible from flooding via other, lower elevation sections of the shoreline.

3.2.1 Adaptation Measure Selection

There are four general categories of adaptation to increase the resilience to flood-induced sea-level rise hazards, as defined by the California Coastal Commission (2018): protect, accommodate, retreat, and hybrid.

- **Protect:** these strategies employ an engineered structure, such as a levee or a floodwall, to defend development in its current location without changes to the development itself.
- **Accommodate:** these strategies employ methods that modify existing developments or design new developments to tolerate intermittent flooding, such as elevating structures and flood-proofing utilities to reduce consequences of inundation.
- **Retreat:** these strategies involve relocation or removal of existing development out of hazard areas and limit the construction of new development in vulnerable areas.

Known Issues

Three general areas of this reach fall into the current FEMA floodplain: 1) the development between Whipple Avenue and Sea Anchor Drive, 2) the development along Uccelli Drive in the north part of this reach, and 3) inland of Highway 101 and extending west from the left bank of Redwood Creek. This last region may be exposed to combined fluvial and bay flooding.

Shoreline elevations in this reach are variable, ranging from elevations around 10 ft NAVD along the Bay Trail just outboard of the highway, to elevations of up to 15 ft for the walls surrounding the residential Blu Harbor development. However, floodwaters that overtopped the shoreline at lower elevations can still bring overland flooding to those parts of the reach with higher shoreline defenses.

For this reach, a stormwater master plan (Wood Rodgers, 2017) found that only the K-Mart pump station has capacity to handle the 100-year event, although this pump station's pipe network only has capacity for the 30-year event. None of the other pump stations have capacity for the 30-year event. There is some capacity to handle the 10-year event. To meet FEMA accreditation standards, this interior drainage system would need to keep stormwater ponding to less than one foot deep.

Some census tracts in this reach east of El Camino Real rank between the 80th-85th percentile nationally on the Demographic Index, which is assessed on the basis of the two socioeconomic factors named in Executive Order 12898 on Environmental Justice. Higher rankings can indicate more vulnerable populations and those less able to prepare for and respond to hazards.

This reach may also experience flooding during extreme events from Cordilleras Creek. City staff indicated that the creek is known to flood in the vicinity of Industrial Road.

Proposed Strategies

Adaptation strategies for Reach 2 are shown in **Figure 11**.

Primary Strategy: Raise Shoreline Elevations and Bay Trail

Given the variety of existing flood protection and the dense development through much of this reach, the recommended adaptation measures are a mixture of floodwalls and levees at different heights. Raising the shoreline to 16-17 ft NAVD throughout the reach would help prevent flooding of Reach 2 during a present-day 100-year flood event, as well as have capacity for a 100-year event with approximately 3.5 feet of sea-level rise. It would also be a sufficient height to be accredited by FEMA under present-day conditions, so long as other accrediting requirements are also met.

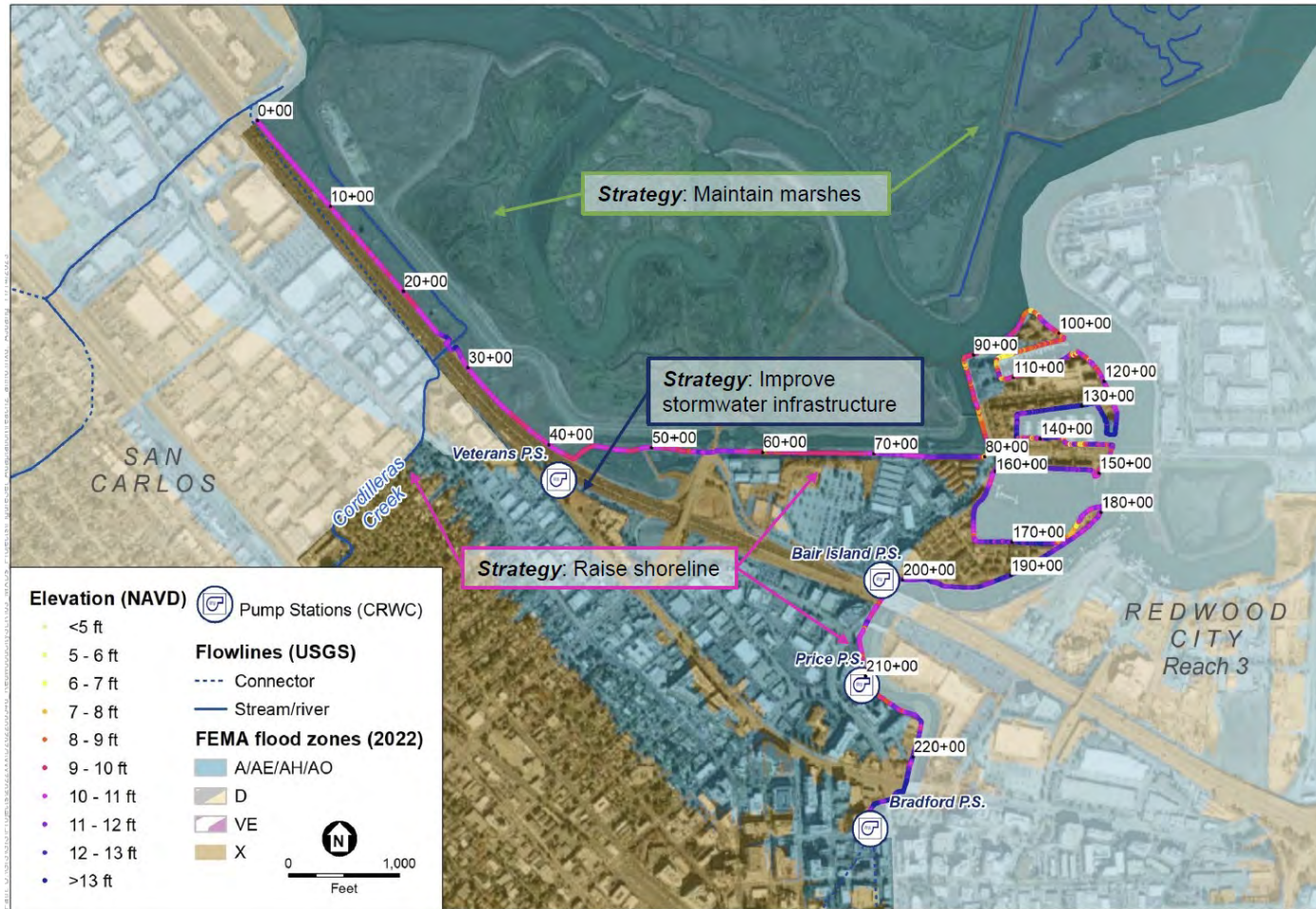
The estimated construction cost for raising the shoreline along Reach 2 is \$53,600,000. With contingency, environmental compliance and permitting, project management, and construction administration, the full Reach 2 improvement cost estimate is \$98,600,000.

Additional Strategies and Considerations

Improve stormwater infrastructure: The Drainage Master Plan recommends improving pump stations first, then pipe systems, and all three of the watersheds in this reach are at the top of the priority rankings based on an analysis of deficient pipe length, associated flooding, and condition assessments. Retrofitting this reach to 30-year capacity (pipes) and 100-year capacity (pumps) would cost an estimated \$22.3 million, not including 50% redundancy on pump station improvements (Wood Rodgers, 2017). As of the end of 2023, the City has completed full design for the Bradford Pump Station. Construction is pending on FEMA's approval of the design. In 2024, the City is anticipating the award of a FEMA grant for design, permitting, and construction services to improve the Price Pump Station, which is located on the landward side of Reach 2.

Maintain marshes: As discussed in the vulnerability assessment, prior wave modeling (BakerAECOM, 2014) shows the marsh between Reach 2 and the open Bay provides wave height reductions of about 1-2 feet. Maintaining these marshes through monitoring and restoration may help them continue to provide substantial benefits even as sea level continues to rise.

Monitor changes in the groundwater table: As part of the long-term adaptation process, the City should participate in regional coordination efforts focusing on groundwater management, and in the short-term should consider the effect of rising groundwater levels when considering capital improvements related to stormwater infrastructure. The City should document localized flooding in low-areas of the City on an annual basis, as these areas are expected to worsen over

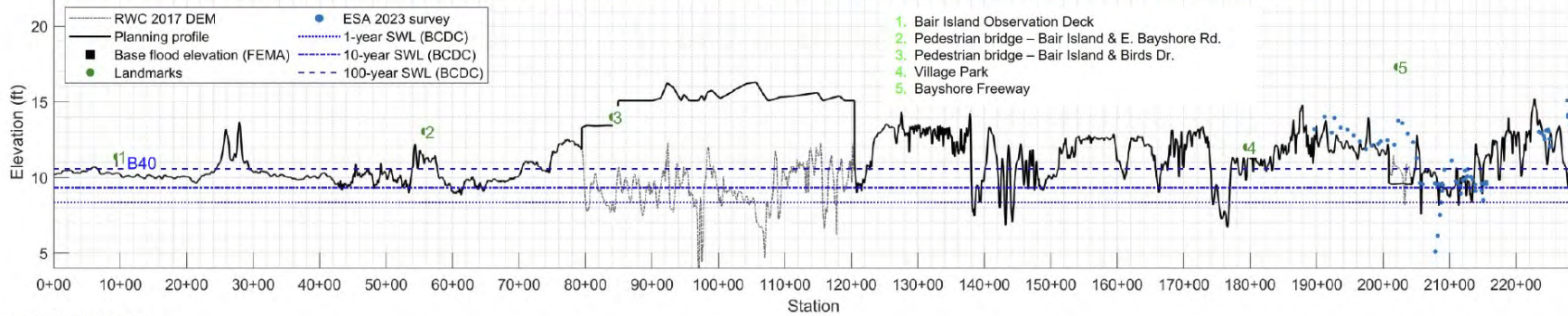


SOURCE: USGS, FEMA, CRWC

D202200346 Redwood City Sea-Level Rise Vulnerability Study and Adaptation Plan

Figure 11
Adaptation Strategies for Reach 2





SOURCE: ESRI, FEMA, CRWC

D202200346 Redwood City SLR Vulnerability Study

Figure E-2
Shoreline Profile for Reach 2



King Tide in the Ditch



King Tide in the Ditch



Foster City Levee Project – Upland Sheet Pile Installation



Comparable Bay Front Paths on Bair Island



One Marina - ~4' Walk



Blu Harbor - ~6' Walk

Public Parking for Bay Trail Access, etc.









EXISTING CONDITIONS - VIEW OF PROJECT SITE FROM TRAIL