SAFER Bay Project

BCDC Design Review Board Meeting

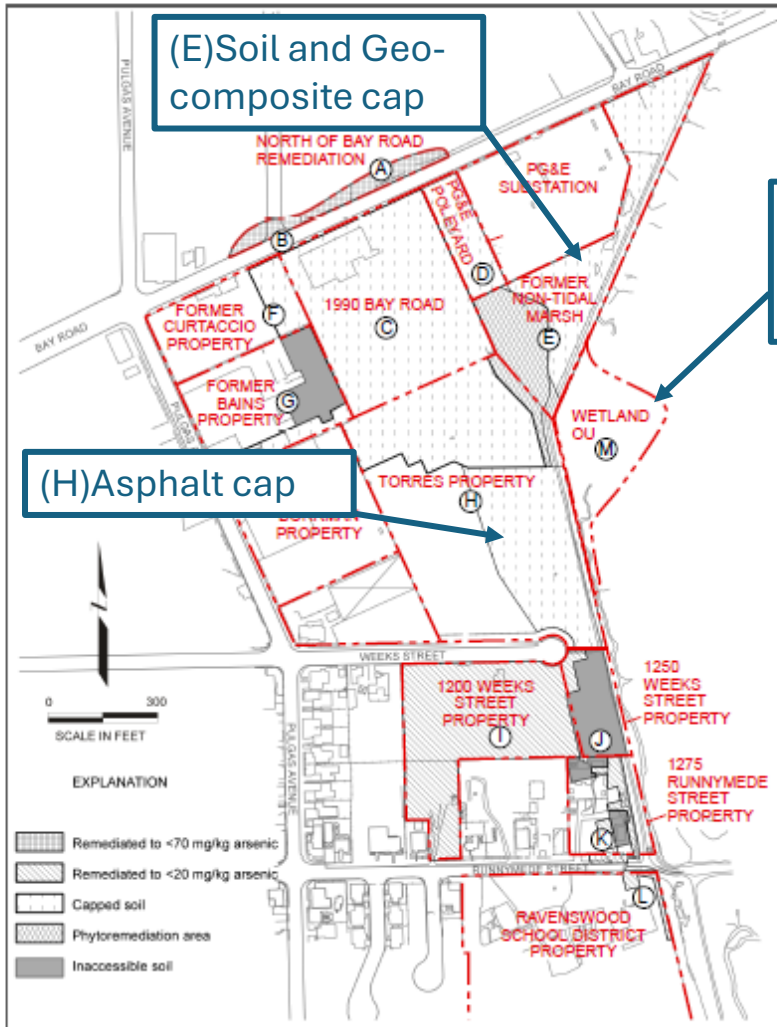
October 6, 2026

Reach Analyses: South of Bay Road Constraints/Impact Minimization Approach

Flood Protection adjacent to Brownfield Property subject to remedial action and Deed Restrictions



Remediation Measures in Conflict



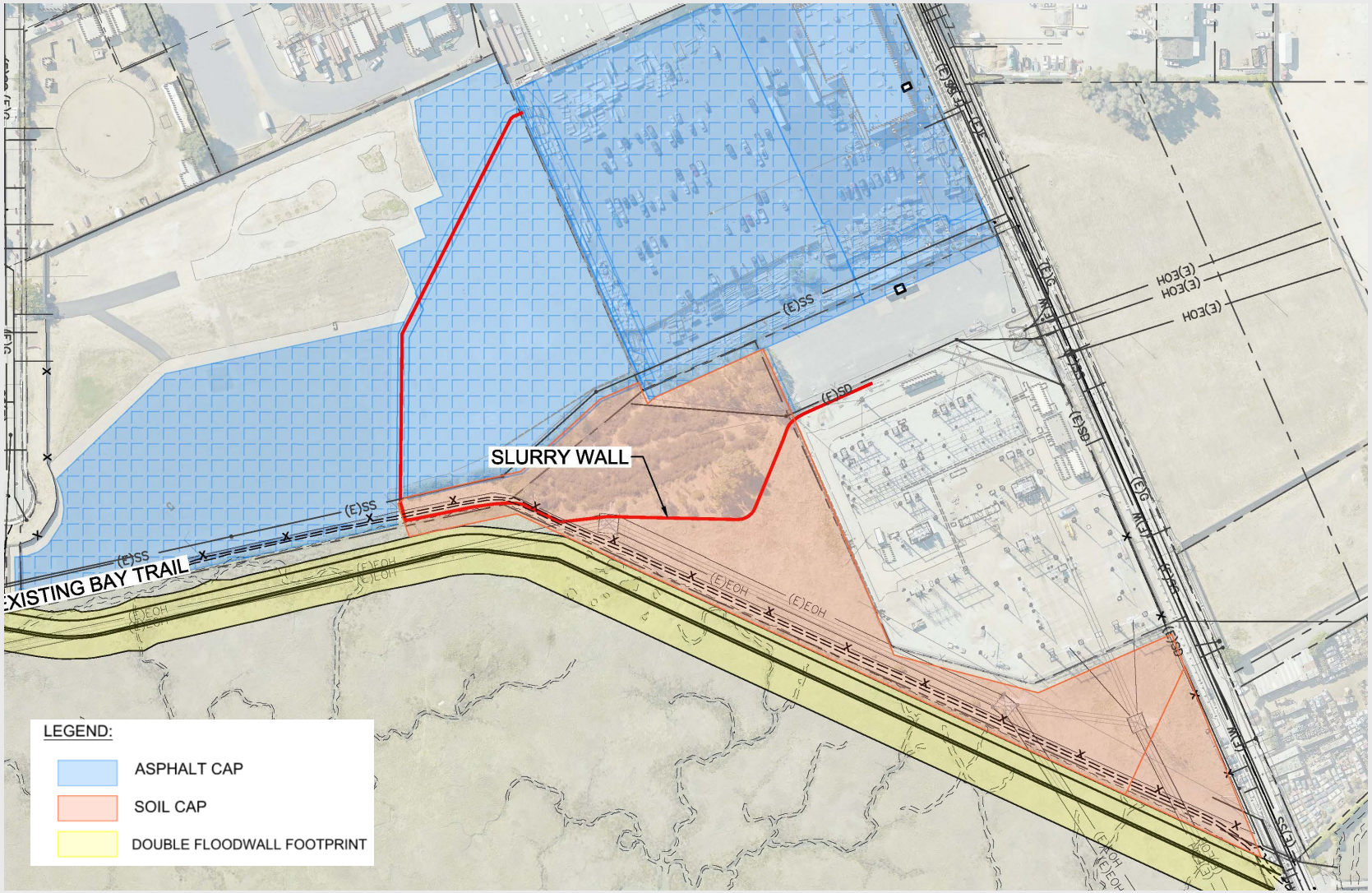
ID	Area	Remediation Status
A	North of Bay Road	• Soil > 70 mg/kg As removed
B	Bay Road Right-of-Way	• Soil with As between 70 and 500 mg/kg is present beneath the road
C	1990 Bay Road	• Soil > 5,000 mg/kg As removed • Soil with As between 500 and 5,000 mg/kg treated in-situ (stabilized) • 3-layer asphalt cap installed
		• Soil > 500 mg/kg As removed • 3-layer asphalt cap installed
		• Soil > 500 mg/kg As removed • 1-foot thick soil/geo-composite cap installed
F	Former Curtaccio Property (1980 Bay Road)	• Soil > 500 mg/kg As removed • 3-layer asphalt cap installed over eastern portion of property
G	Former Bains Property (2470 Pulgas Avenue)	• Soil > 500 mg/kg As removed in accessible areas • 3-layer asphalt cap installed over accessible portions of property • Soil >500 mg/kg As potentially present beneath structures
H	Torres Property (1175 Weeks Street)	• Soil > 5,000 mg/kg As removed • Soil with As between 500 and 5,000 mg/kg treated in-situ (stabilized) • 3-layer asphalt cap installed on northern portion of property • 2-inch thick asphalt cap installed on southern portion of property to cap soil with As between 70 and 500 mg/kg
	Weeks Street Right-of-Way	• Soil with As between 70 and 500 mg/kg is present beneath the road
I	1200 Weeks Street	• Soil > 20 mg/kg As removed
J	1250 Weeks Street	• Accessible soil > 20 mg/kg As removed • Inaccessible soil >20 mg/kg beneath water table is covered by a minimum of 3-feet of clean soil.
K	1275 Runnymede Street Property	• Soil > 20 mg/kg As removed in accessible areas • Soil >20 mg/kg As potentially present beneath structures
	Runnymede Street Right-of-Way	• Soil with As >20 mg/kg is present beneath the road
L	Ravenswood School District Property (1286 Runnymede Street)	• Soil > 20 mg/kg As removed
M	Wetland Operable Unit	• Soil > 20 mg/kg As present below surface • Topographical monitoring conducted to measure potential surface erosion

S.S. Papadopulos & Associates, Inc.

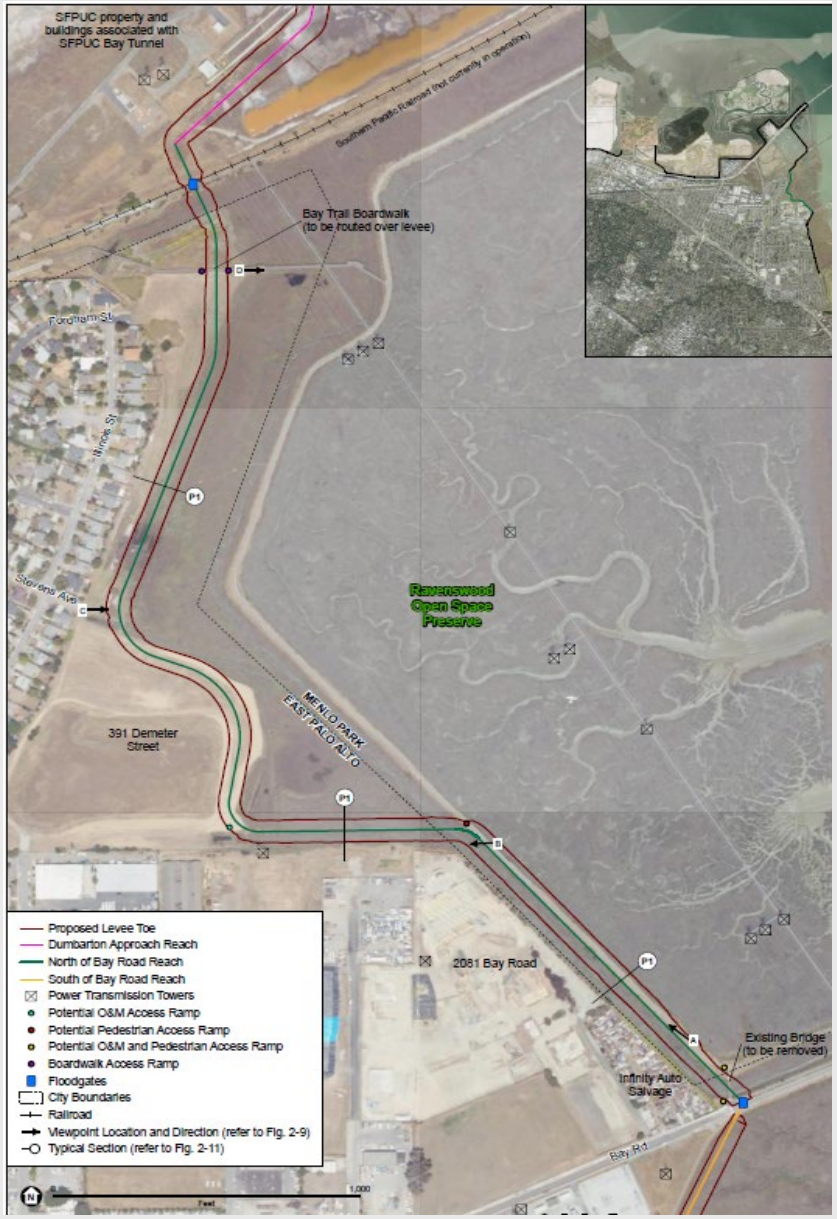
CURRENT STATUS OF REMEDIATION
1990 Bay Road Site
East Palo Alto, California

Figure 7

Proposed Flood Protection Footprint

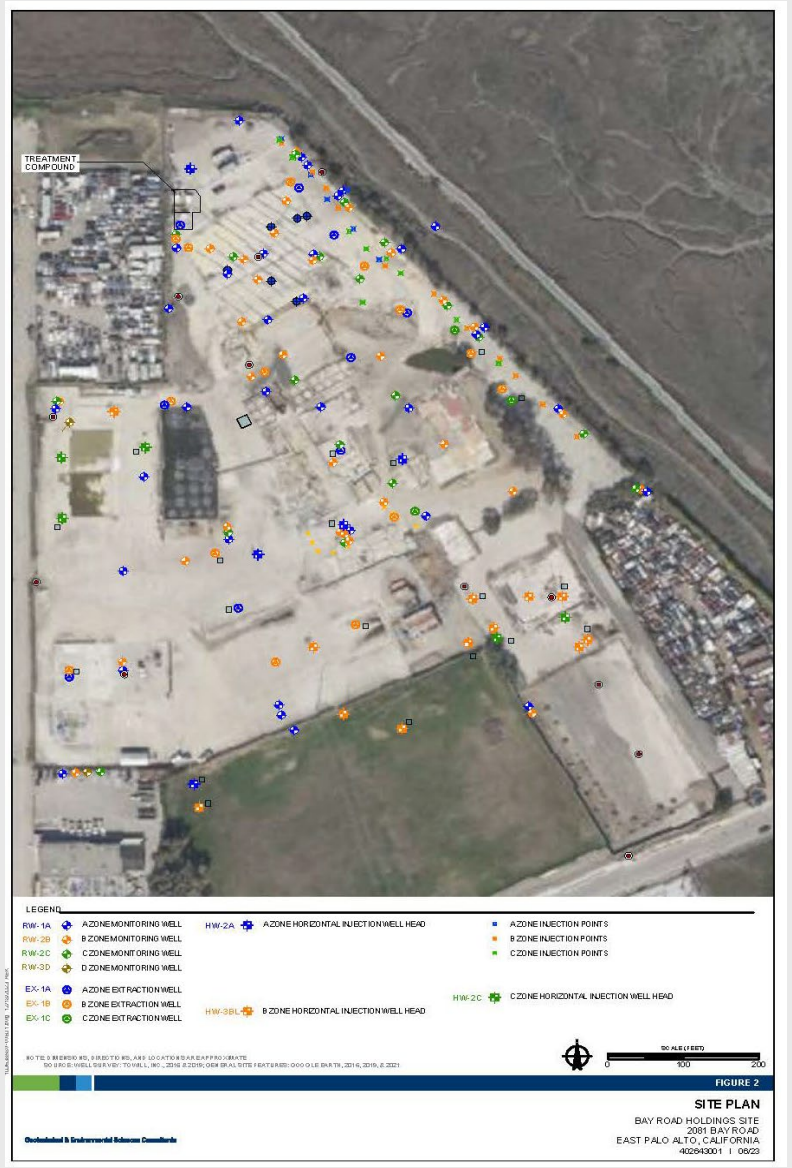


Reach Analyses: North of Bay Road Constraints/Impact Minimization Approach

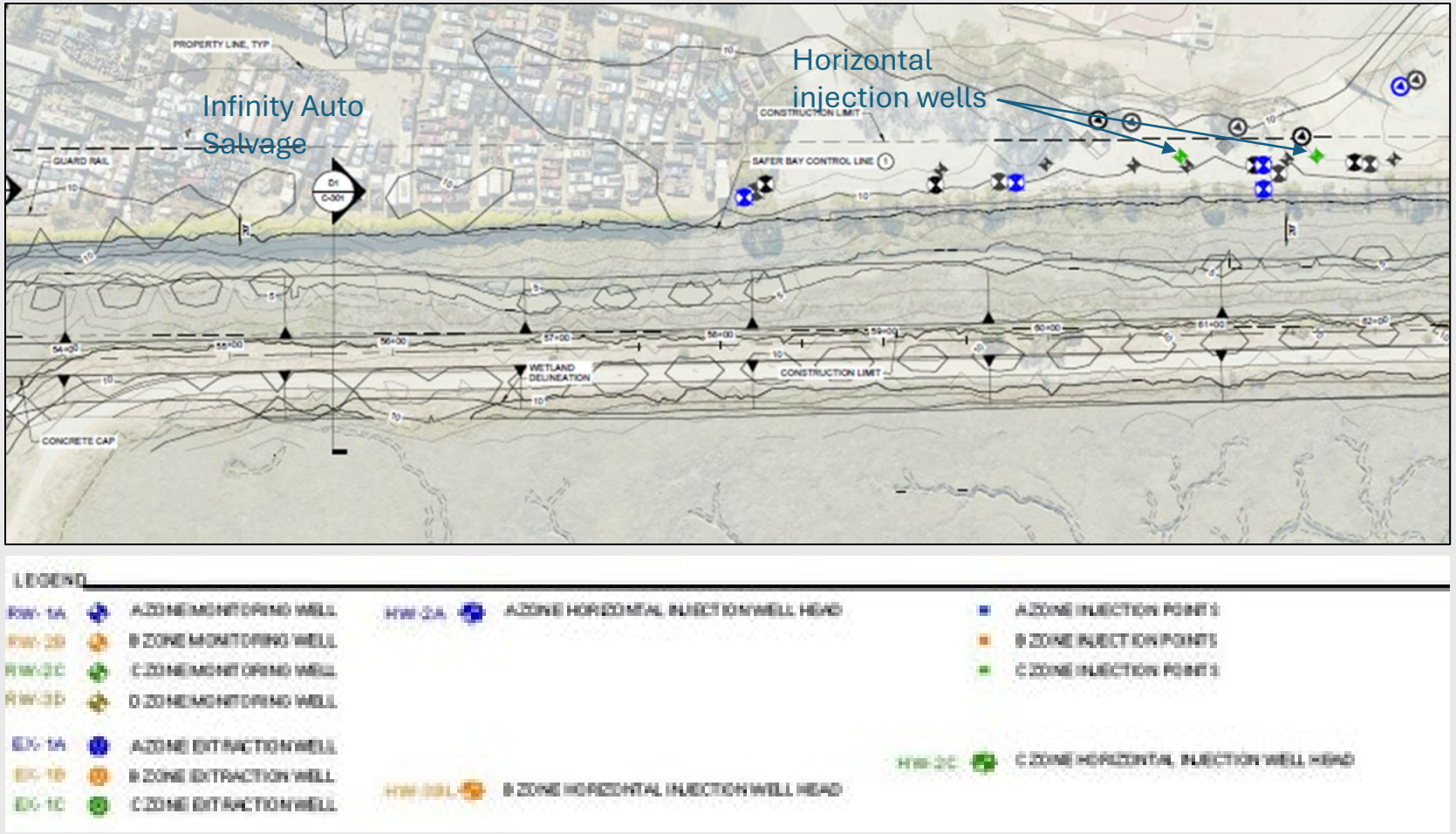


Reach Analyses: North of Bay Road Constraints/Impact Minimization Approach

Flood Protection adjacent to Brownfield Property North of Bay Road subject to remedial action and Deed Restrictions



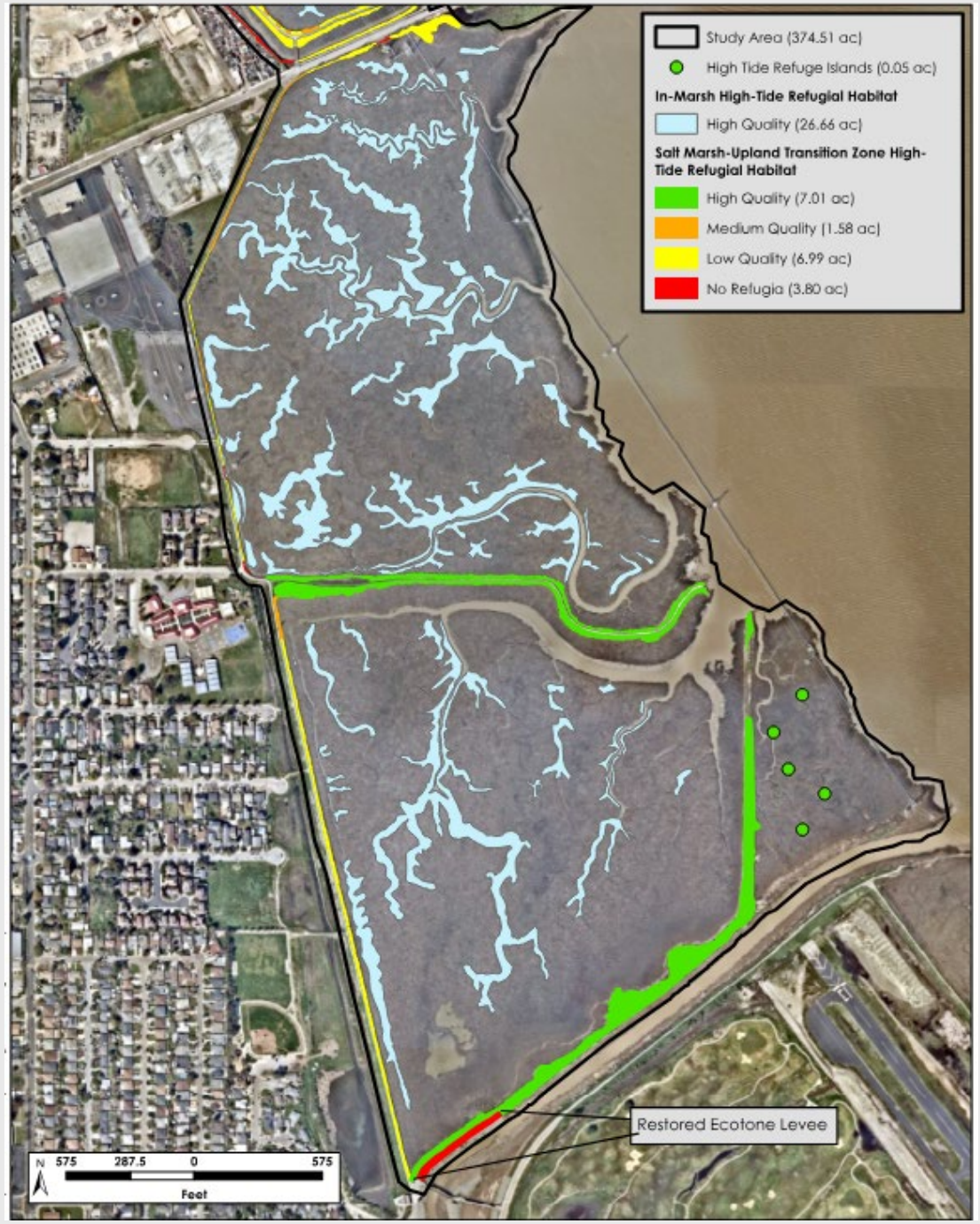
Proposed Alignment North of Bay Road



Refugial Habitat Study

Recommendations:

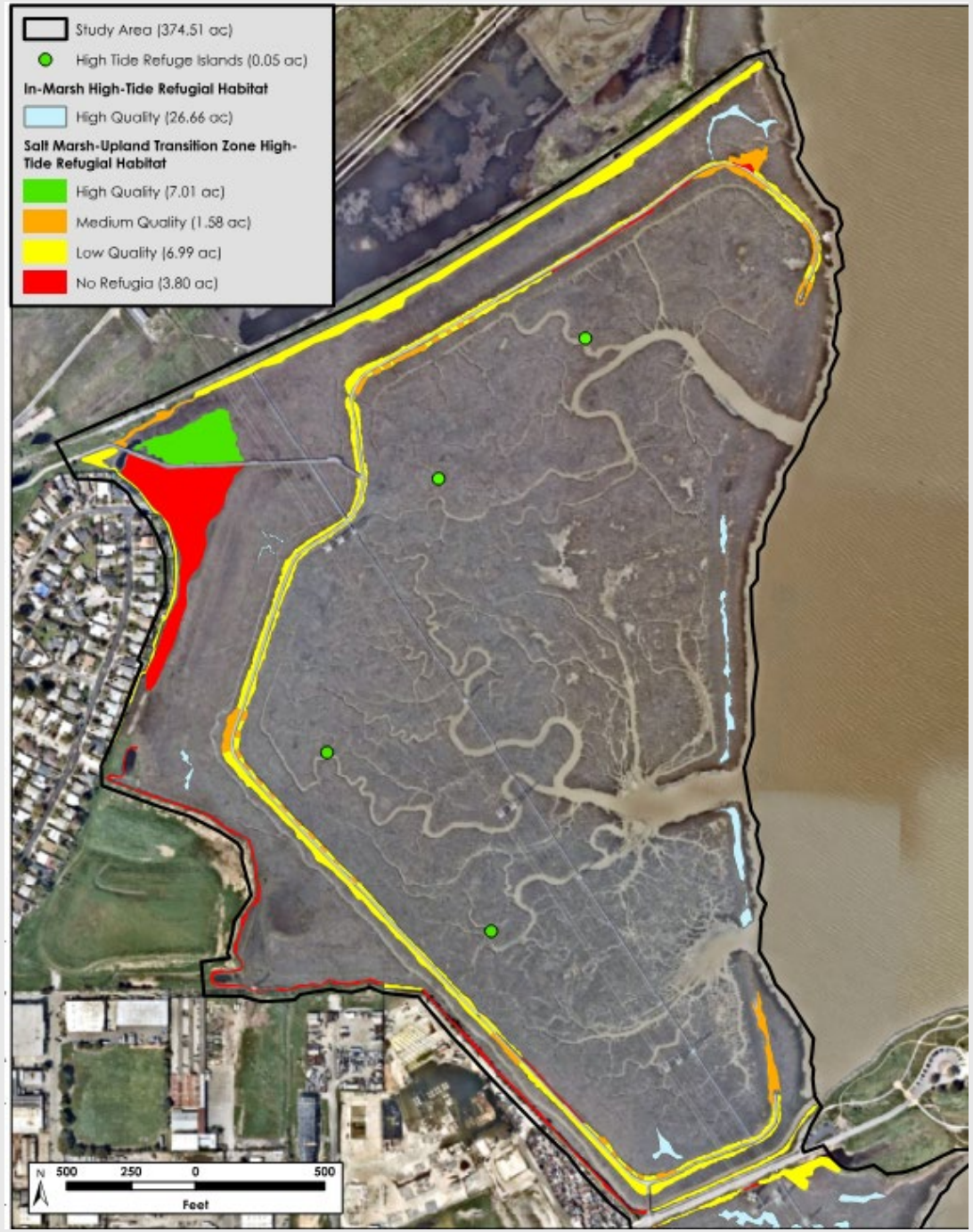
- Do not create horizontal levees or broad slopes adjacent to floodwalls to increase transition zone habitat within Faber, Laumeister, and Ravenswood Marshes
- Minimize impacts to all salt marsh habitat
- Design revegetation of high quality, high tide refugial habitat on the bayward slopes along the entirety of the edge of existing tidal marshes in the study area



Refugial Habitat Study

Recommendations:

- Do not create horizontal levees or broad slopes adjacent to floodwalls to increase transition zone habitat within Faber, Laumeister, and Ravenswood Marshes
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- Design revegetation of high quality, high tide refugial habitat on the bayward slopes along the entirety of the edge of existing tidal marshes in the study area



Refugial Habitat Study

- Feasibility Report considered alternatives up to 15: or gentler
- Refugial habitat study resulted in conclusion that wide transition zone habitat at the expense of marsh habitat is not an ecologically preferable alternative
- Recommended the SAFER project minimize impacts on existing salt marsh habitat to the maximum extent practicable

BCDC DESIGN REVIEW BOARD 2

SAFER East Palo Alto

October 5, 2026

Overview

1 What We Heard & How We Responded

2 SAFER EPA Vision

3 Public Access Design

4 Levee and Tidal Revegetation

What We Heard + How We Responded

1	Is there opportunity to improve elements of the levee related to the human experience after the October grant deadline?	Modifications can be made to nonstructural elements such as site furnishings, materials selection, and similar. Adjustments to the form and layout of the trail and entry locations are integral to the levee engineering and so will not be able to be changed. Many adjustments have been made to improve these less flexible project elements in response to Board comments.
2	The EPA reach would greatly benefit from including more amenities, and increasing variability to frame key views and create moments of differentiation to improve how a person experiences the place.	The EPA team has greatly expanded the breadth of amenities and increased the differentiation between the trail entry points to provide variety and a vastly improved human experience. Trail alignment has also been adjusted to allow for overlook areas and respite areas which provide for an improved human experience, emphasizing keys viewpoints along the trail.
3	Is 3.5 feet the initial or the final wall reveal height and is there any flexibility to reduce that height to improve views?	The 3.5 foot height is the final (post settlement) wall reveal height. The design team has adjusted the project to provide a 3 foot wall reveal in as many areas as feasible without impacting the key project constraints with an increased levee footprint.
4	Is project cost a key driver in the decision to design the EPA reach south of Bay Road as a hybrid levee and sea wall?	Cost is always a consideration with any major public works project, but cost is not a driving factor for the hybrid slope/wall design. That is driven by significant surrounding geographic constraints.
5	Is there flexibility around the design of the maintenance access road to allow more space for the levee alignment and public amenities?	Unfortunately, the maintenance road is required by U.S. Army Corps of Engineers levee certification requirements and is the smallest footprint feasible to meet those requirements.

Guiding principles for designing the human experience along the alignment to be addressed in the following slides.

SAFER EPA + SAFER Menlo Park - Reaches with Common Objectives

Though not physically connected, the SAFER EPA and Menlo Park reaches seek to provide shoreline experiences that elevate public access, respond to the unique character and adjacencies of their respective reaches, promote equitable access to views and gathering spaces, while promoting long term community and habitat resiliency. Each reach has common site amenities, with distinct design features informed by context and stakeholder input.

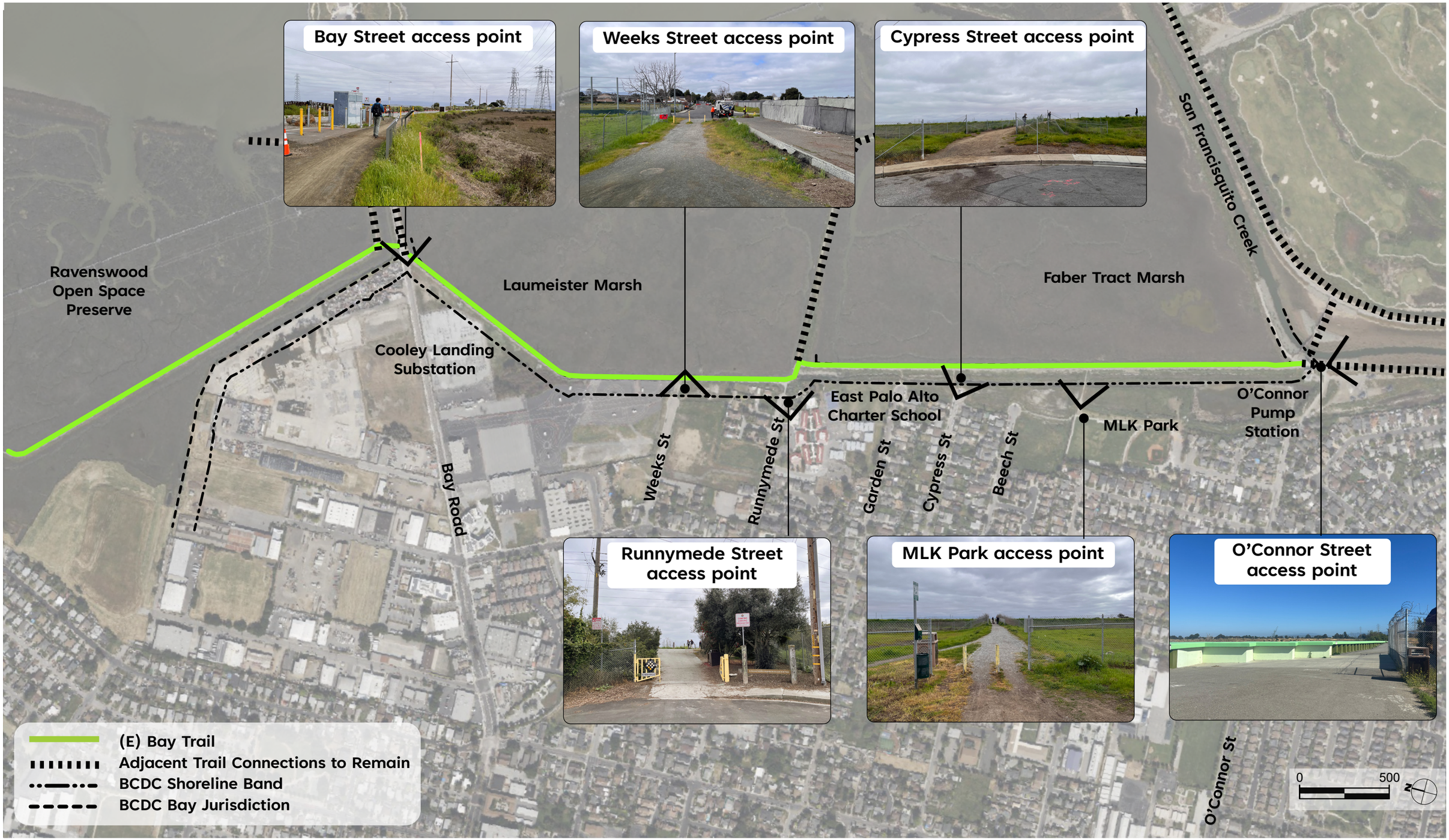
SAFER EPA Vision

A quiet Bay Trail reach with ecological and community importance - where trail users can ***connect with people and shoreline plants and wildlife,*** *move, commute, enjoy views, rest, and observe.*

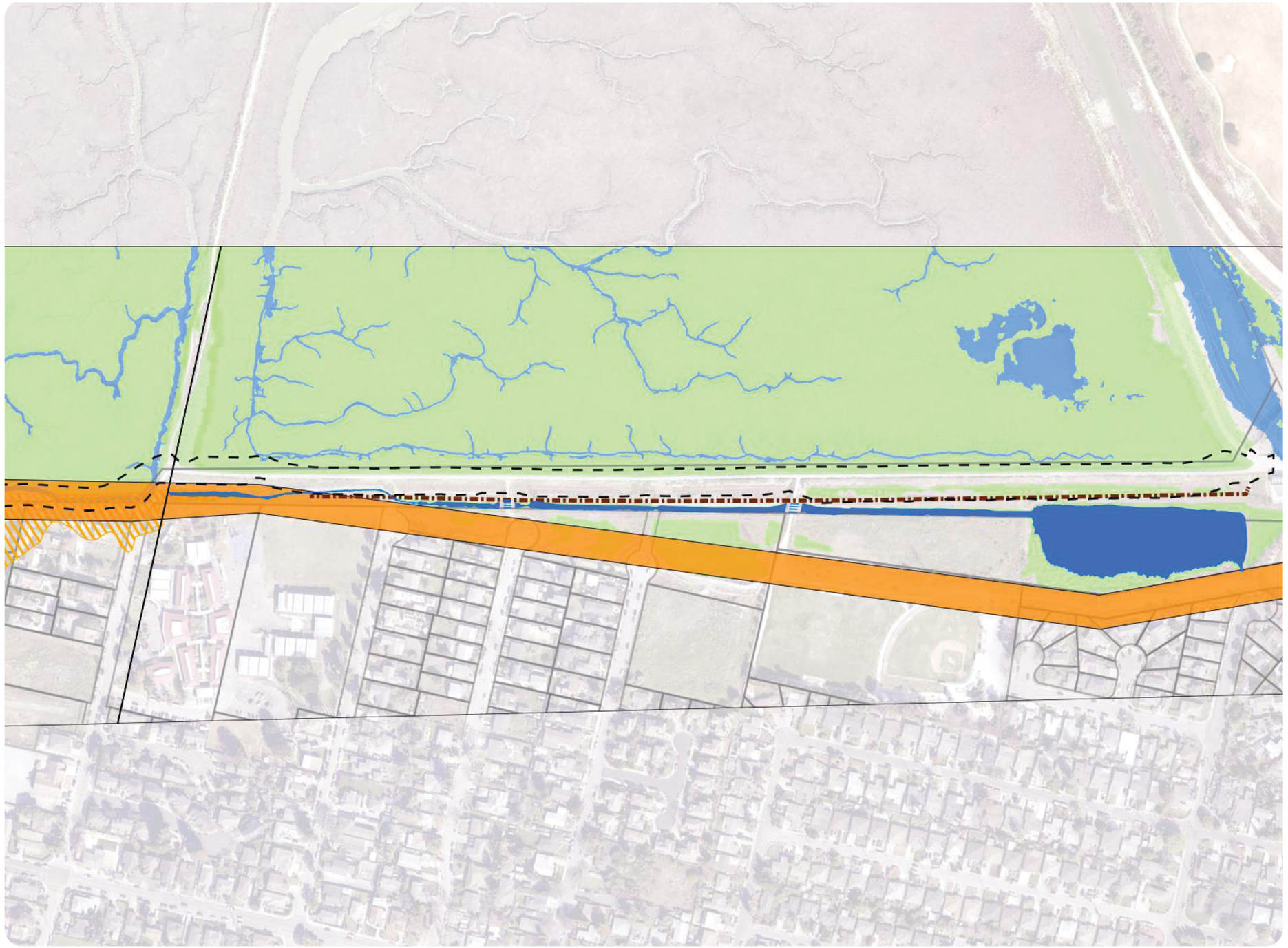




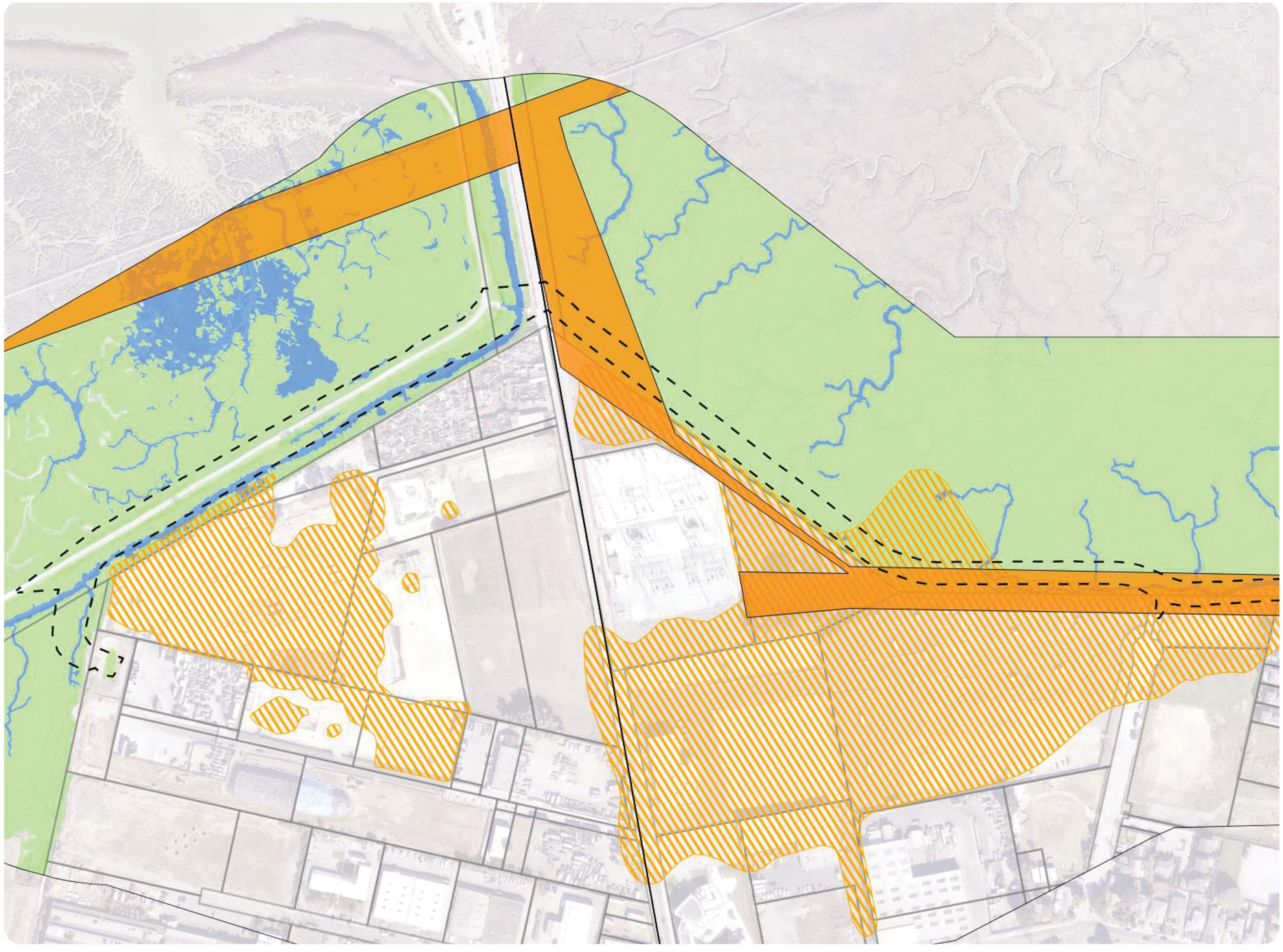
Existing Conditions



Constraints



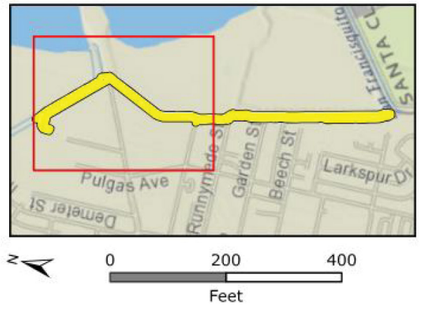
Constraints



Legend

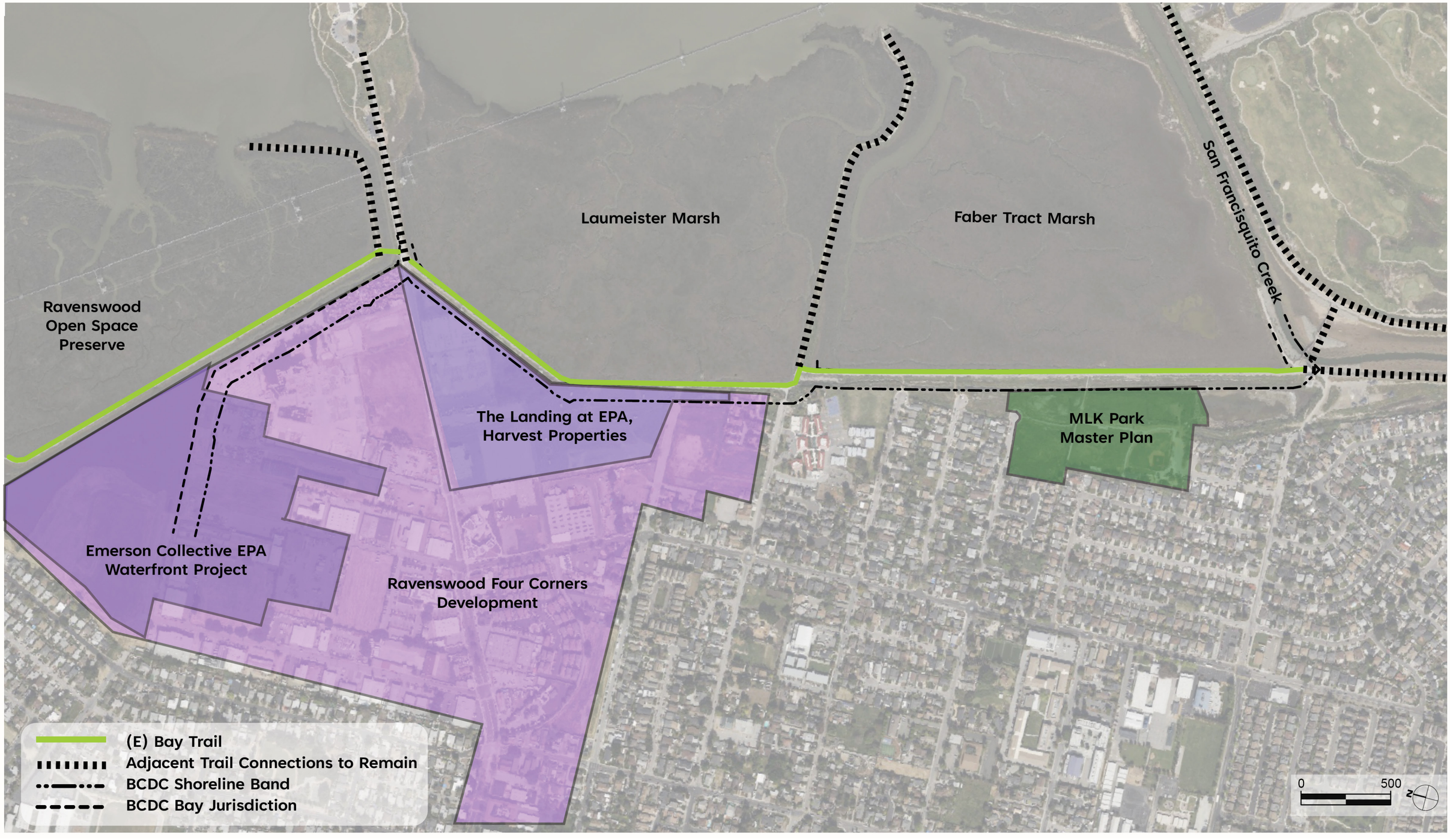
- Approximate Proposed Levee Footprint
- Wastewater Infrastructure
- Overhead Power Lines
- Stormwater Infrastructure
- San Mateo County Parcels
- Approximate Limits of Contaminated Soil
- Terrestrial Sensitive Habitat
- Tidal Channels and Waterways

Key Map

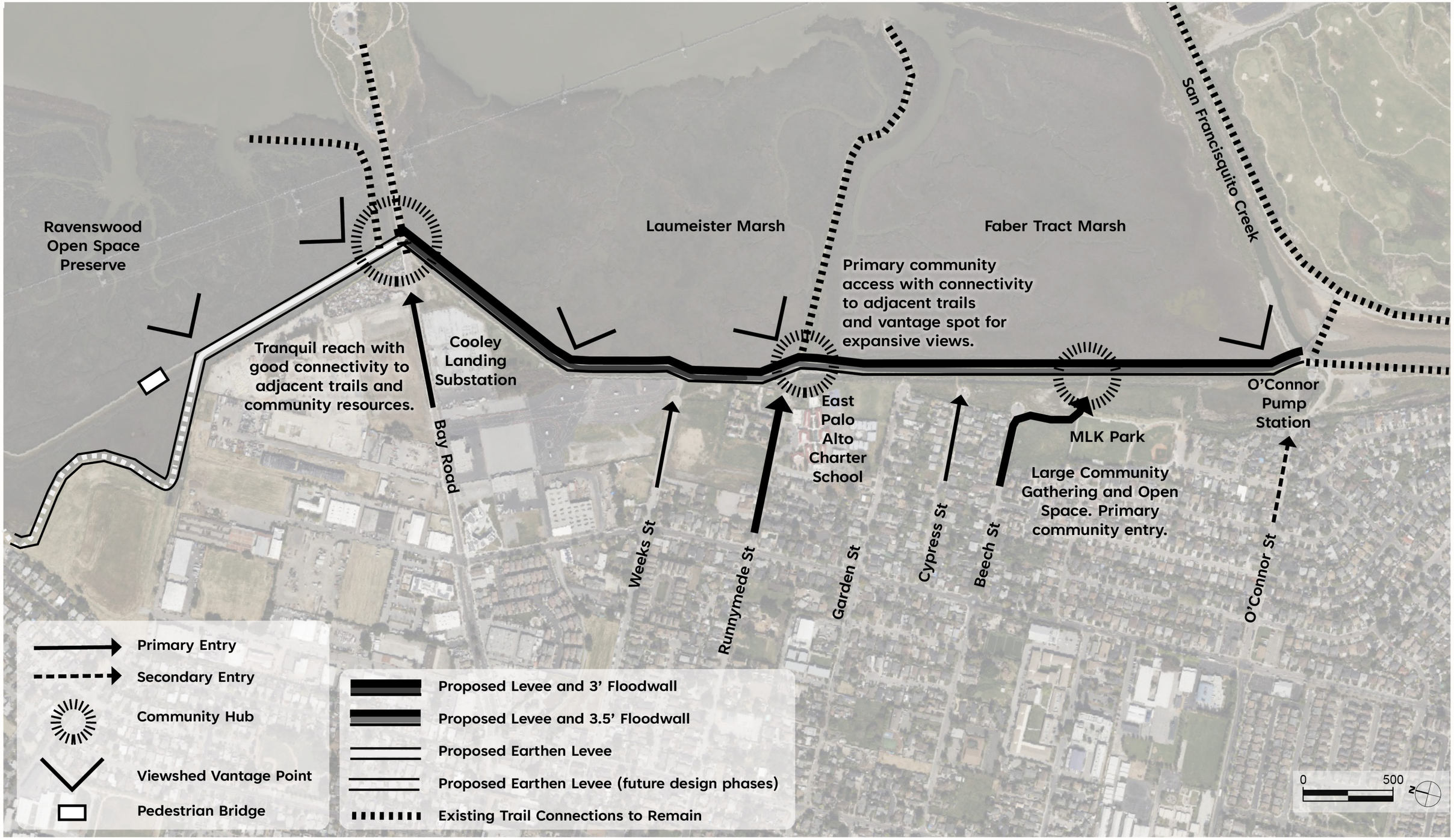


SHERWOOD DESIGN ENGINEERS

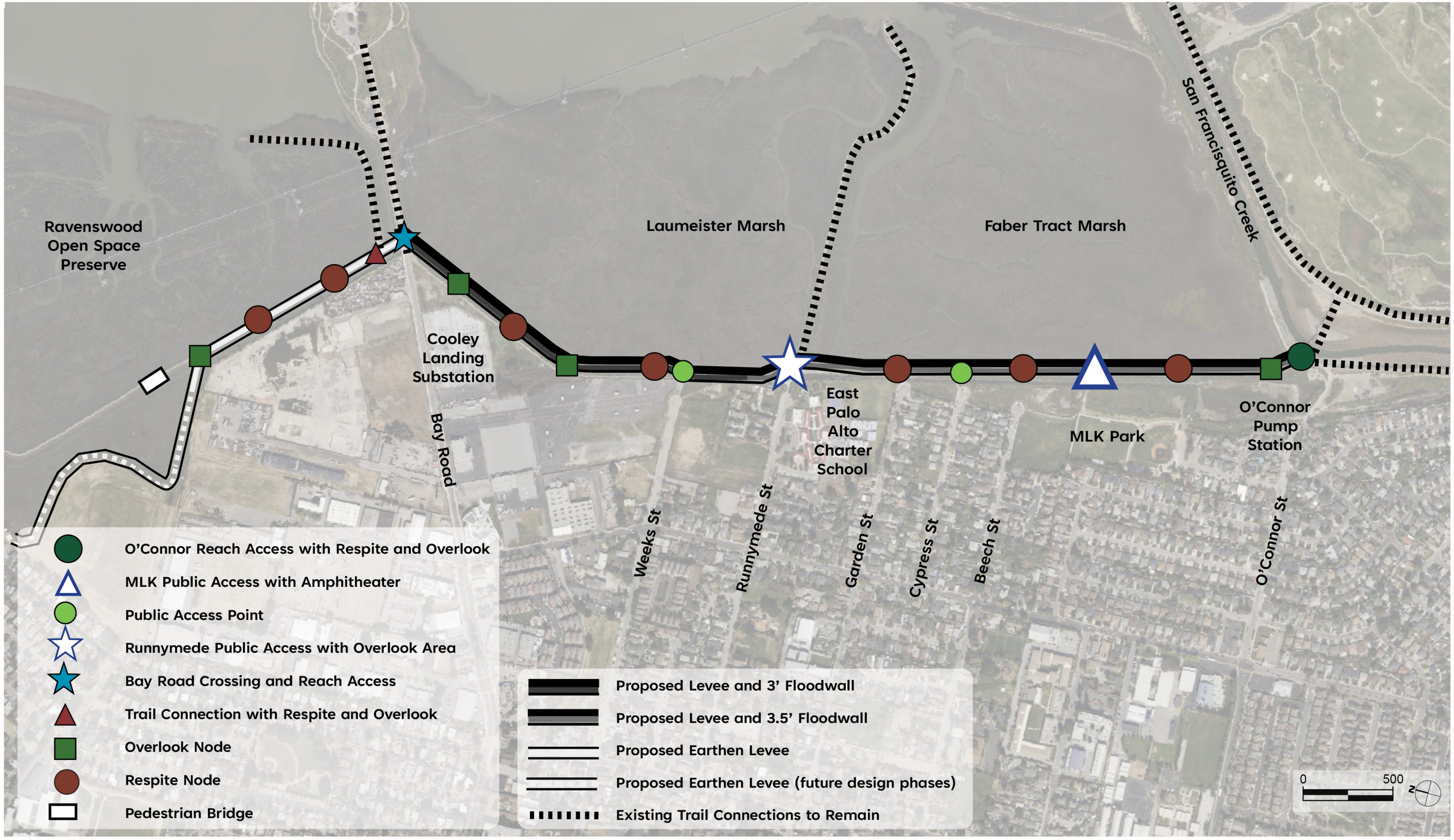
Future Developments



SAFER EPA Design Approach



Proposed Levee & Floodwall Alignment



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Public Access Precedent Imagery

Public Art



Credit: Paz de la Calzadas



Credit: Getty, The Great Wall of Los Angeles by Judy Baca

Signage



Credit: Karl Nielsen

Bike Rack



Credit: Landscape Forms

Waste Receptacles



Credit: Landscape Forms



Credit: Global Industrial

Bike Repair Station



Credit: Dero

Water Fountain



Credit: Elkay

Emergency Call Station



ADA Accessible Ramp



Credit: Viva Railings

Stairs with Handrail



Credit: Mid Island Steel

Amphitheater Seating



Public Access Precedent Imagery

Seating: Benches and Stools





Credit: QCP Corp

Interpretive Panels



Credit: Midpen

Metal Panels



Credit: Metal Art Fever

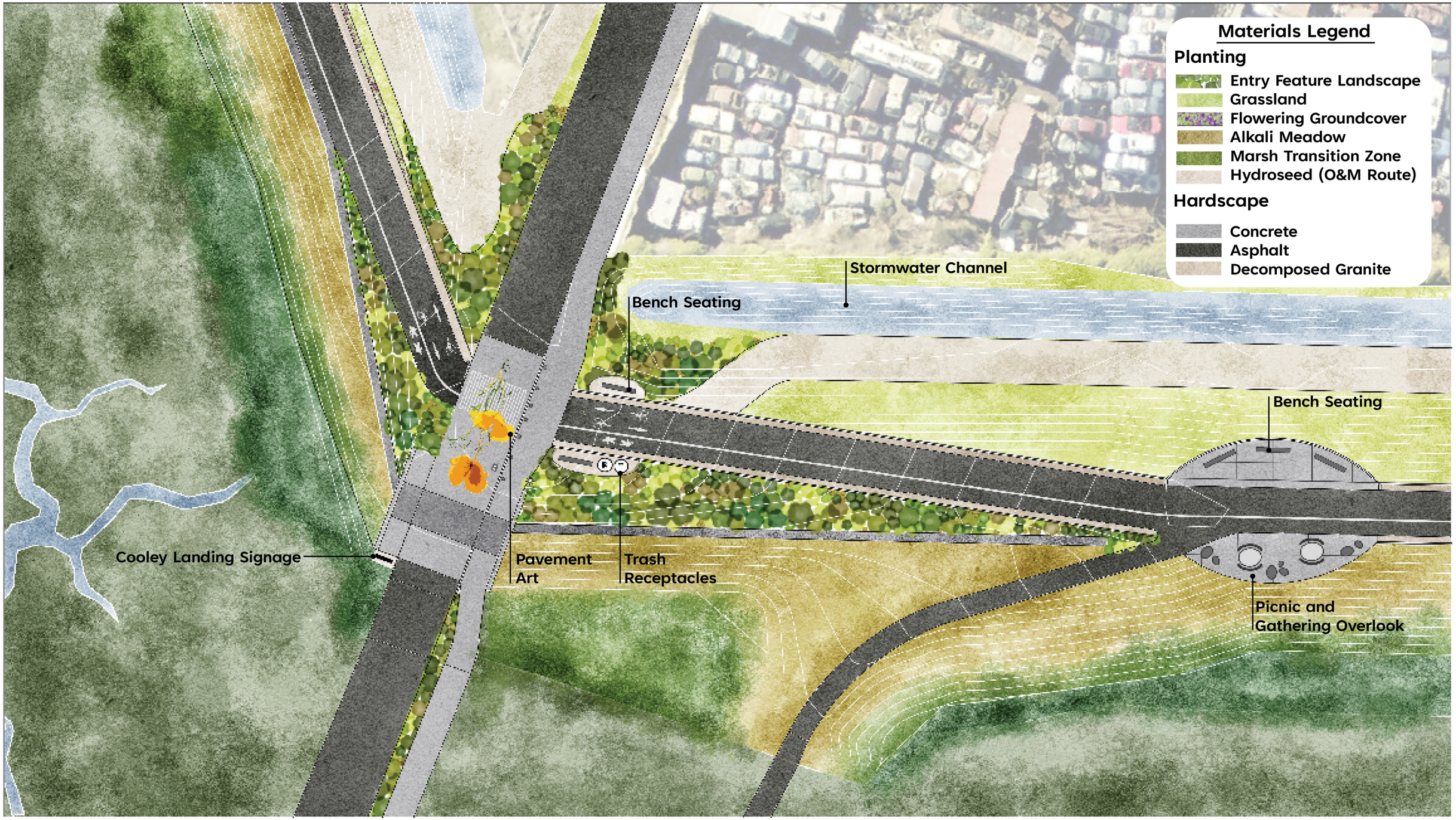


Credit: Metal Art Fever



Credit: Outdoor Privacy Screen

Public Access at Bay Road



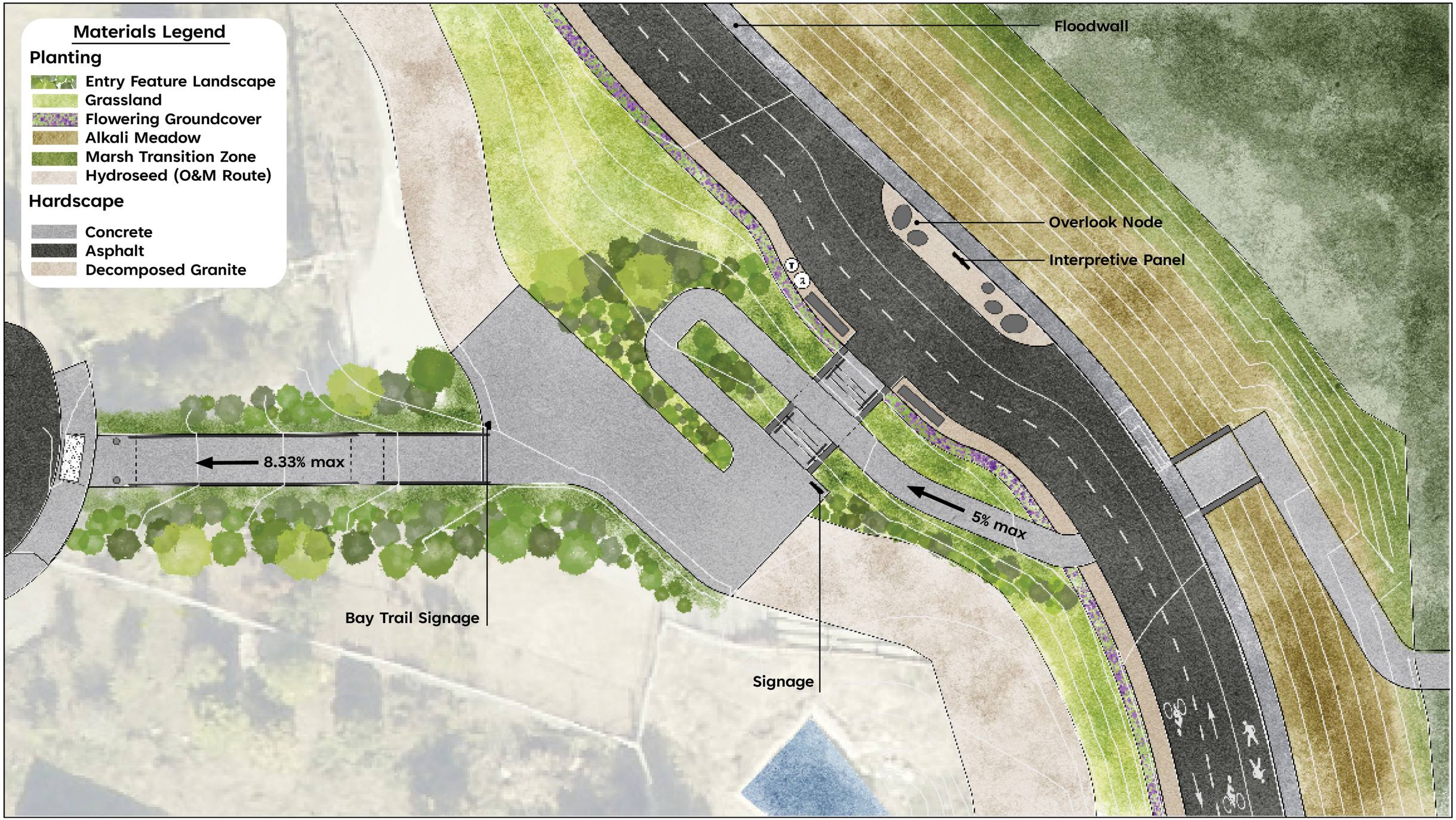
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0 7.5' 15' 30' North

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Public Access at Runnymede Street



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0 3.5' 7' 14' North

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Public Access at Runnymede Street



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Public Access at Cypress Street

Materials Legend

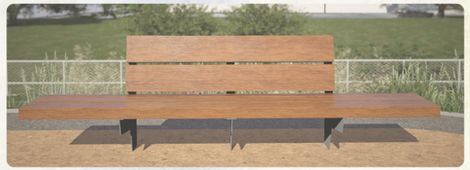
Planting

- Entry Feature Landscape
- Grassland
- Flowering Groundcover
- Alkali Meadow
- Marsh Transition Zone
- Hydroseed (O&M Route)

Hardscape

- Concrete
- Asphalt
- Decomposed Granite







Bay Trail Signage

Signage

Floodwall Cap

0 3.5' 7' 14' North

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Public Access at Martin Luther King Jr. Park



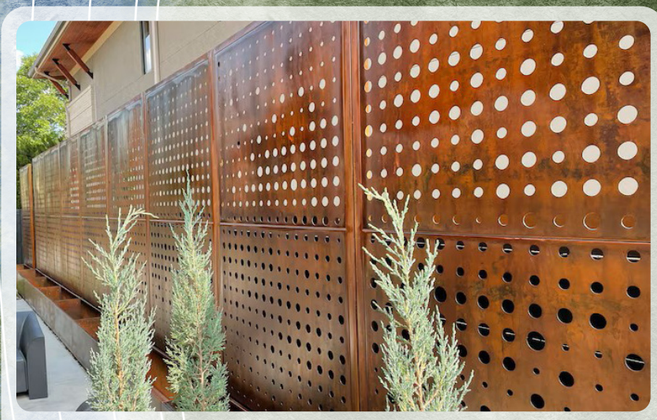
Materials Legend

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Hardscape

- Concrete
- Asphalt
- Decomposed Granite





Bay Trail Signage

Bike Rack and Repair Station

Water Fountain

Signage

Planting Area

Floodwall Cap

Amphitheater

Public Art

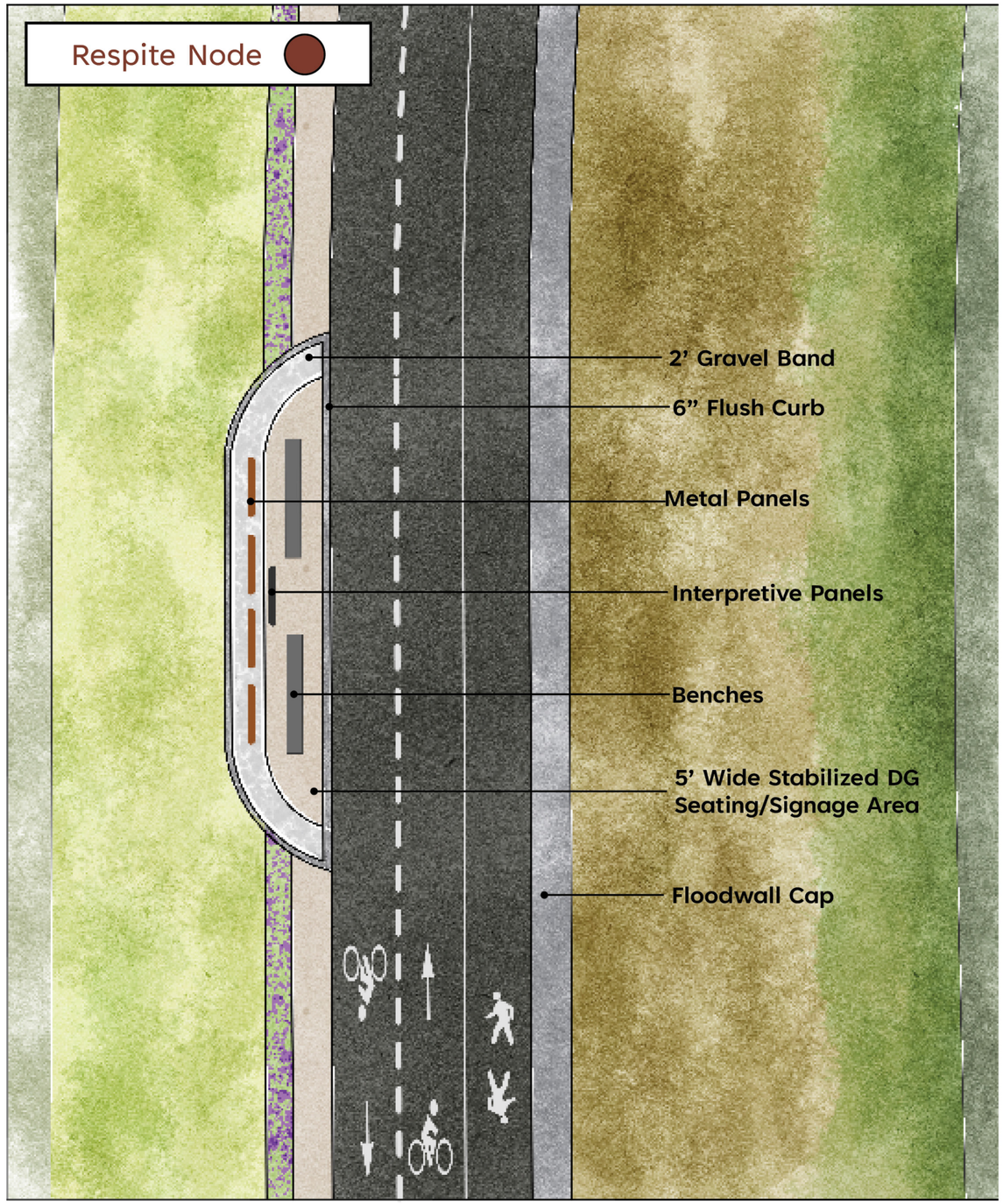
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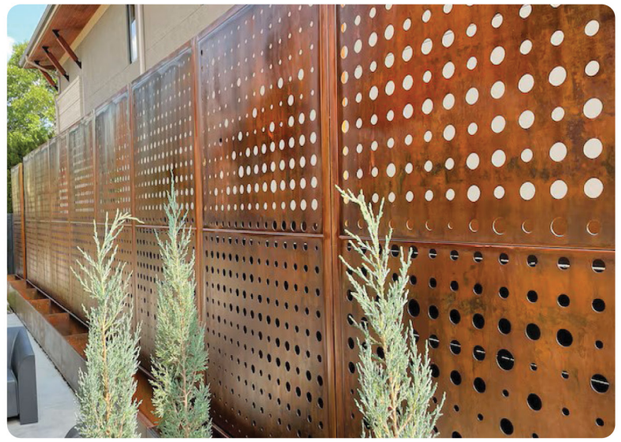
0 3.5' 7' 14' North

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Respite Node

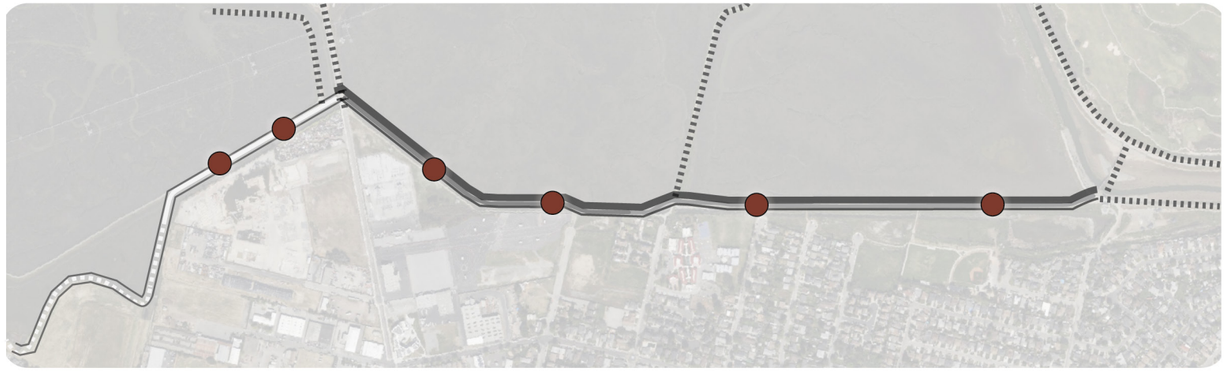








Key Map



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0 2.5’ 5’ 10’ North

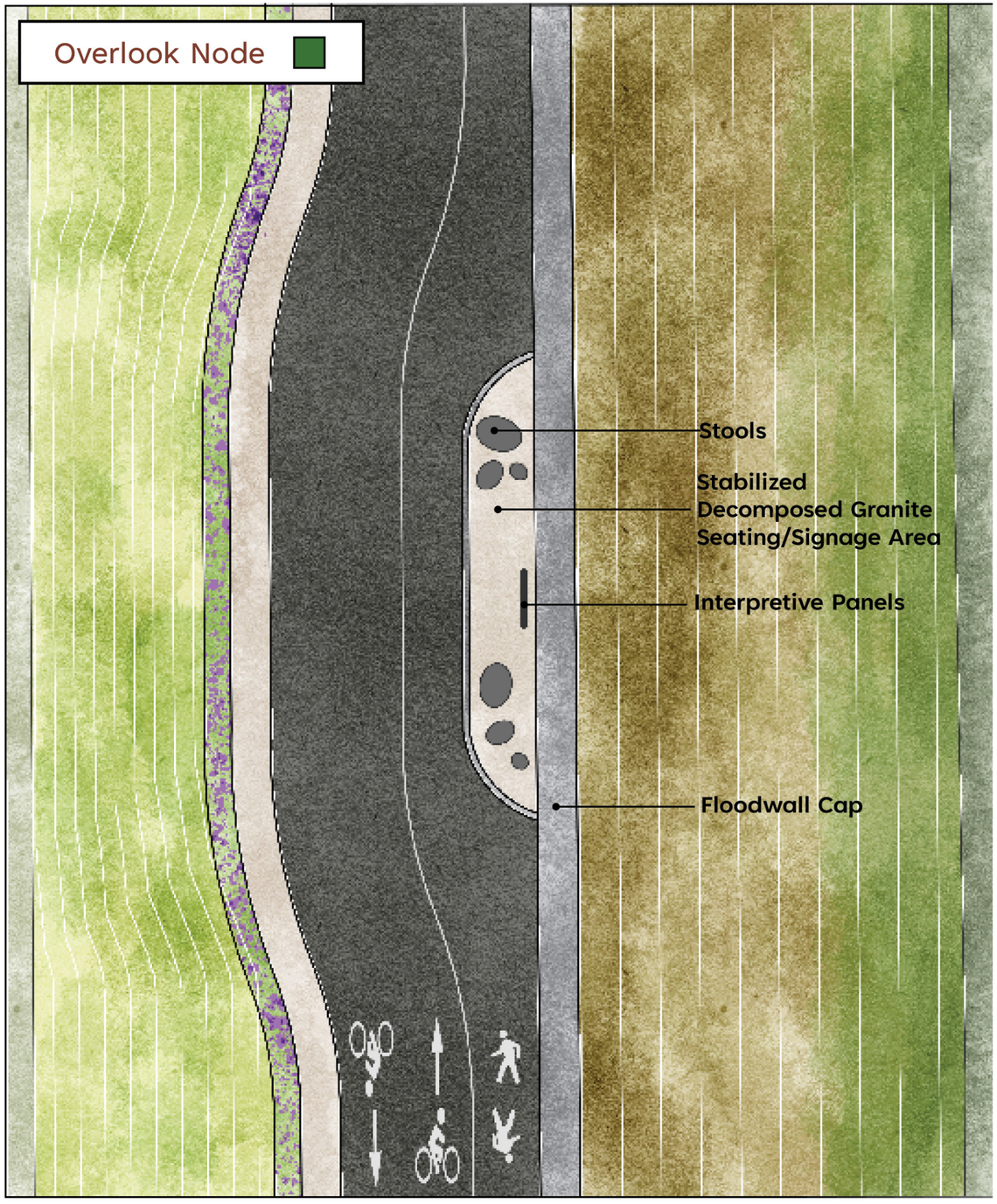
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Respite Node



Overlook Node







Key Map



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0 2.5' 5' 10' North

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Levee Section: Land Side Revegetation

Grassland









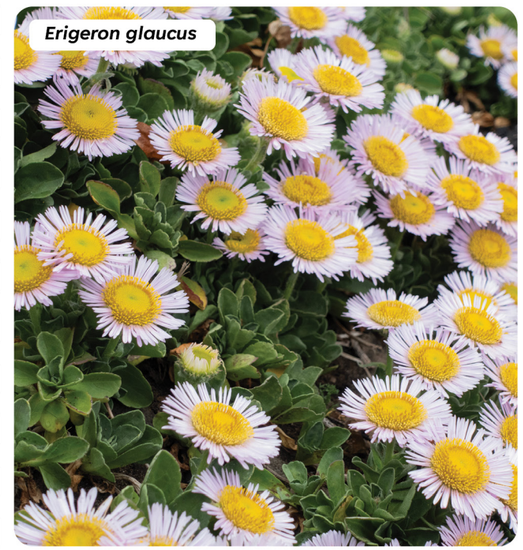


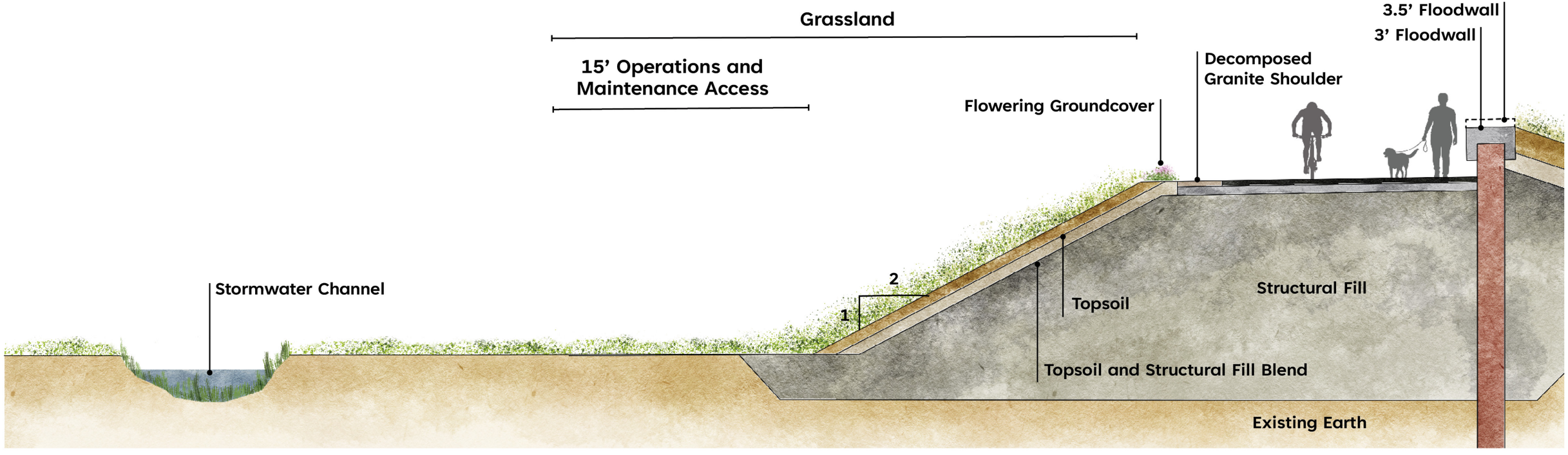






Flowering Groundcover

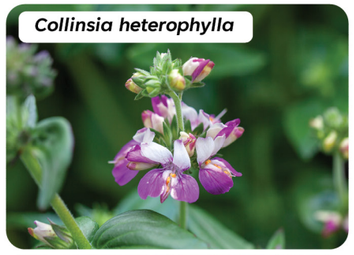




Levee Section: Bay Side Revegetation & Tidal Channel Design

Alkali Meadow

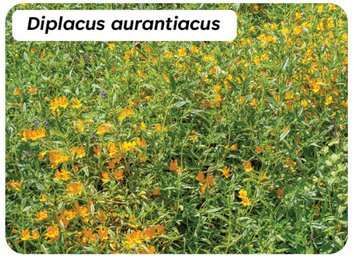












Marsh Transition Zone









Tidal Marsh Plain/Refugia Berms



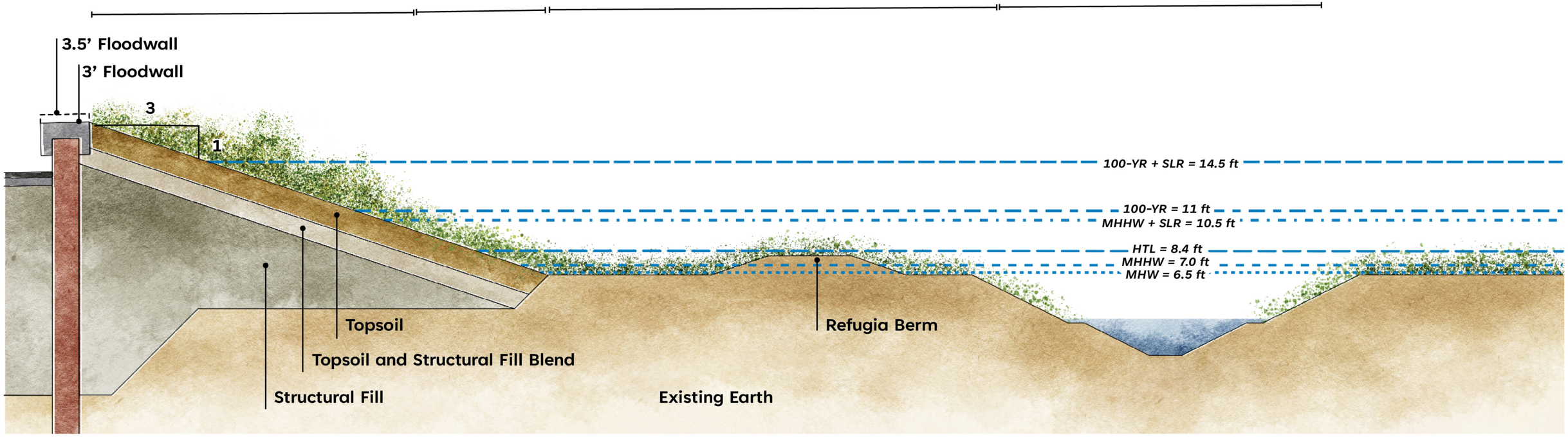


Alkali Meadow, Elevation 10+ ft

Marsh Transition Zone, Elevation 7-10 ft

Tidal Marsh Plain

Tidal Channel Replacement

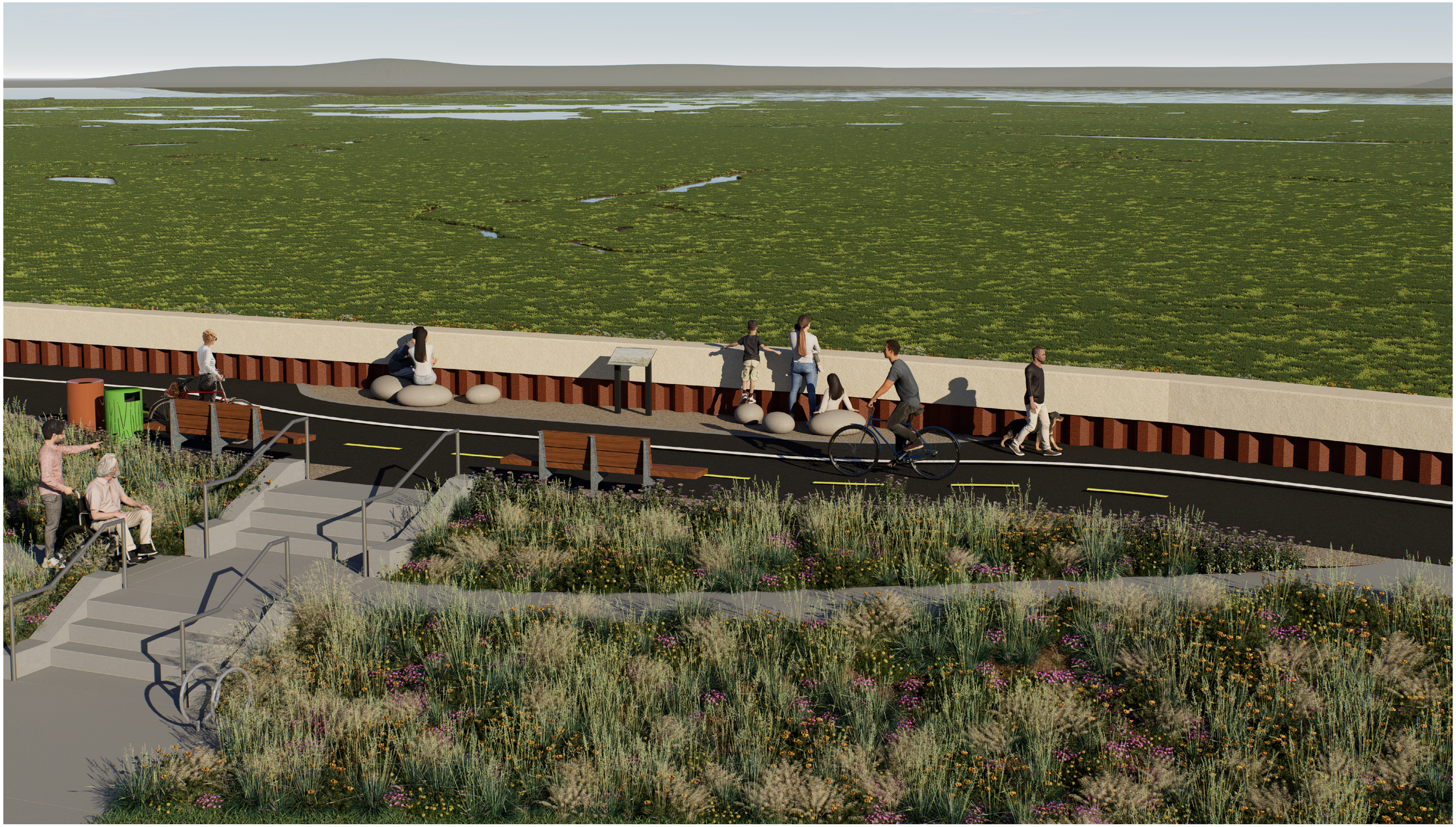


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SAFER East Palo Alto Summary



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Thank you!

SAFER Bay

Menlo Park, CA

BCDC Design Review Board 2
October 5, 2026

What we Heard and How We Responded

WHAT WE HEARD:

1.) Develop clear narrative to describe where the two city[5]s projects share principles and approach and where the projects may diverge in response site conditions.

2.) Bring the 2 projects closer together in terms of amenities offered and explore if some shared elements or treatments could be employed.

3.) Introduce more variability in levee treatment to create a more dynamic experience and frame views.

4.) Describe how people use the trail and the rhythm of experience.

5.) Provide details for amenities for human comfort and preservation of key views.

6.) Balance public access with wildlife protections.

HOW WE RESPONDED

1.) The projects share big picture goals: Balance flood-protection and habitat creation with high-quality public access along the Bay; Take advantage of the amazing baylands landscape with focused seating areas and overlooks that maintain and enhance views.

2.) The projects will share standard seating details in some areas, but we also value the distinct and varied experiences along the two projects.

3.) Both projects have introduced some re-alignment / direction change in the bay trail to create seating areas and overlooks that take advantage of views.

4.) We will describe the project in terms the human experience and rhythm of features, views, and access points.

5.) Benches, seatwalls, sculptural seating elements and shade structures are built for comfort and oriented to take advantage of views. Shade structures provide canopy and vertical screen for wind.

6.) Project has incorporated input from HT Harvey ecologists and CDFW/USFWS and maintained high quality public access.

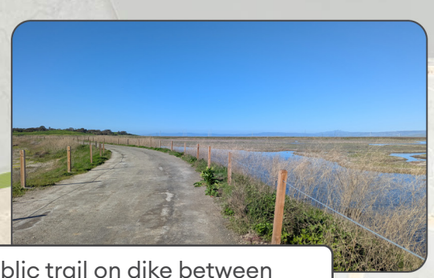
Project Site Today

Existing Conditions

LEGEND

- Bay Trail (MTC Existing)
- Bay Trail (MTC Proposed)
- Public Trails
- Informal Trails
- City Jurisdictions
- Menlo Park SAFER Bay Levee + Bay Trail
- Reach by Others

Within the project area there are expansive views over the Bay, salt ponds, sloughs, and marshes. The Dumbarton Bridge at one end of the project and Bedwell Bayfront Park at the other are landmarks that book-end to this stretch of Bay shoreline.



Public trail on dike between managed ponds - Quieter and more peaceful the greater the distance from Bayfront Expy.



Bay Trail along Ravenswood Slough - Picturesque, elevated, tree-lined.



Access road to PG&E substation - No current public access bayside of PG&E.



Bay Trail along Bayfront Expy - Loud and exposed with planted bu⅟er. Wider path with new paving.



Informal trail along Bayfront Expy - Exposed with minimal separation from bridge tra⅖c.

Ravenswood Trail

Dumbarton Bridge

Don Edwards San Francisco Bay National Wildlife Refuge

PG&E

Redwood City

Bedwell Bayfront Park

Bay Trail

Bayfront Expy

Chilco St.

Meta

Meta

Willow Rd.

University Ave.

Don Edwards San Francisco Bay National Wildlife Refuge

Bay Trail

East Palo Alto

Ravenswood Open Space Preserve

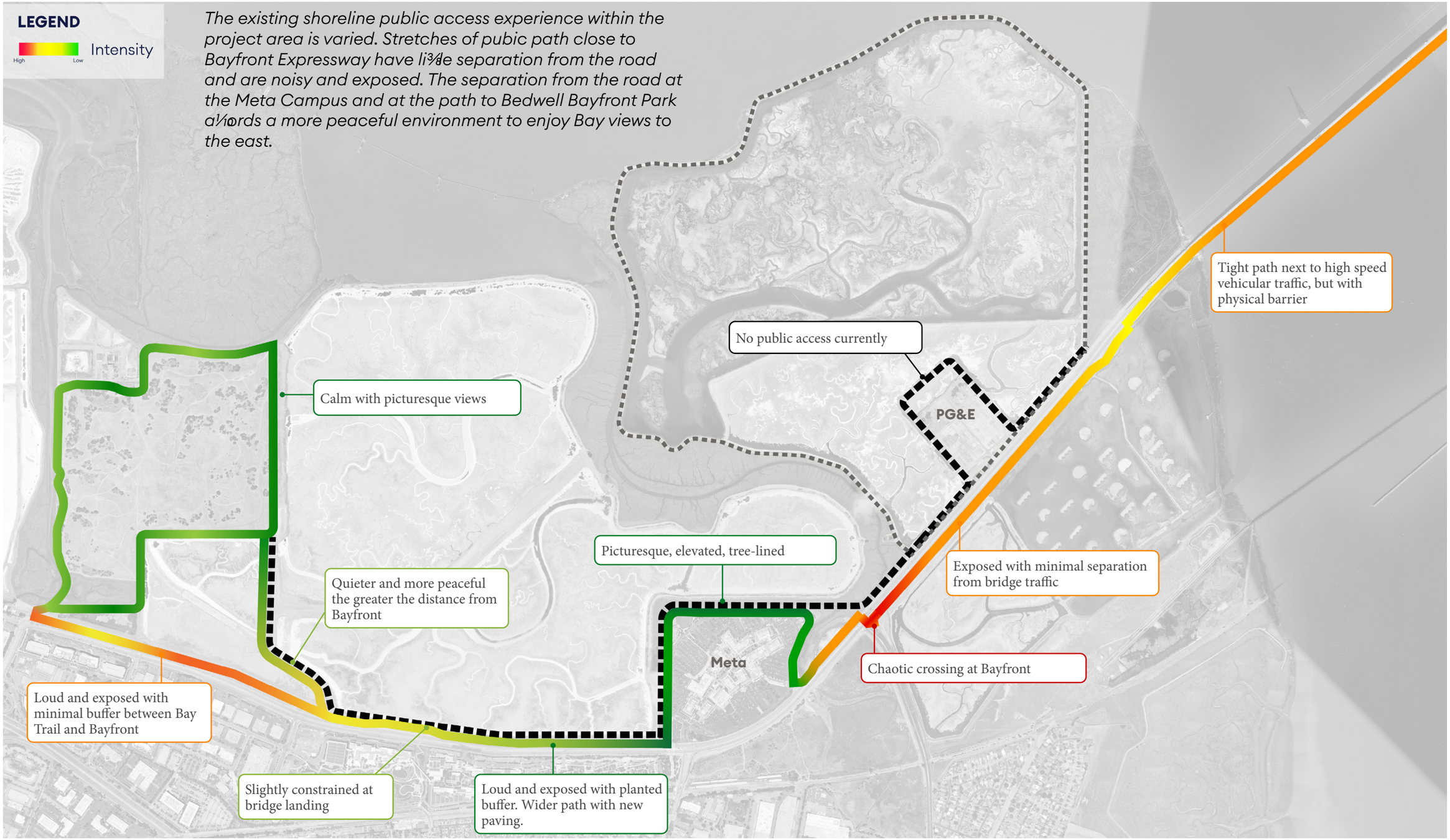
Menlo Park

Scale 1"=1200'

0' 600' 1200' 2400'

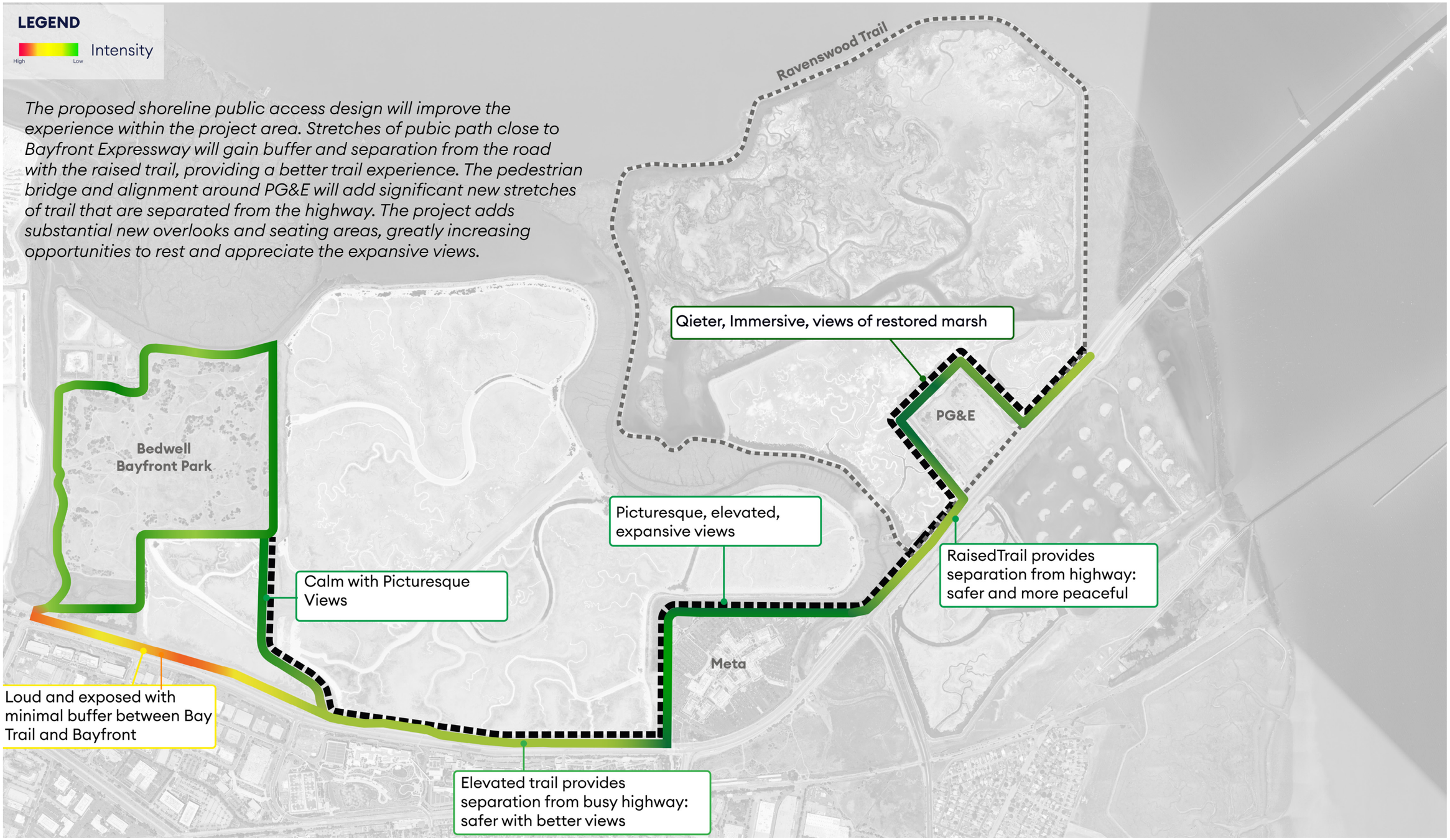
Shoreline Experience

Existing Conditions



Shoreline Experience

Proposed



Scale
1"=2400'

0' 2400' 4800' 9600'

Bay Trail Access + Public Amenities

Proposed

LEGEND

Existing to Remain

- Public Trails
- City Jurisdictions
- Levee and Bay Trail Access Points
- Private Bay Trail Connection
- Public Restroom
- Parking

Proposed

- Overlook with Seating
- Seating area with Benches
- Interpretive Signage
- Wayfinding Signage
- Menlo Park SAFER Bay Levee + Bay Trail
- Reach by Others

The Safer Bay levee project will provide a variety of seating and small gathering spaces on top of the levee that will encourage the public to stop, linger, or gather. Access to the levee and Bay Trail will be accessible and welcoming. Stairs, sloped walks, and ramps will provide straight-forward, ADA-compliant access at intersections and at key connections to adjacent neighborhoods, workplaces, and public parking areas.

Overlooks with seating at vantage points and key intersections

Bay Trail on top of levee for pedestrians and bicycles

Ramps and stairs connect adjacent paths and trails to Bay Trail

Seating areas with benches at regular intervals

Bay Trail Parking to Remain (10 Spaces) See Exhibit "I | Flood wall at Ravenswood Slough"

43 Parking Spaces

36 Parking Spaces

Approx. 25 Parking Spaces

Approx. 32 Parking Spaces

Redwood City

Bedwell Bayfront Park

Bay Trail

Bayfront Expy

Chilco St.

Menlo Park

Meta

Willow Rd.

Seasonal Ravenswood Trail 1,872 LF)

Ravenswood Trail (4,469 LF)

Ravenswood Trail (4,133 LF)

Don Edwards San Francisco Bay National Wildlife Refuge

PG&E

University Ave.

East Palo Alto

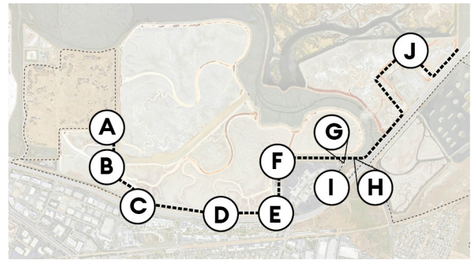
Ravenswood Open Space Preserve

Scale 1"=1200'

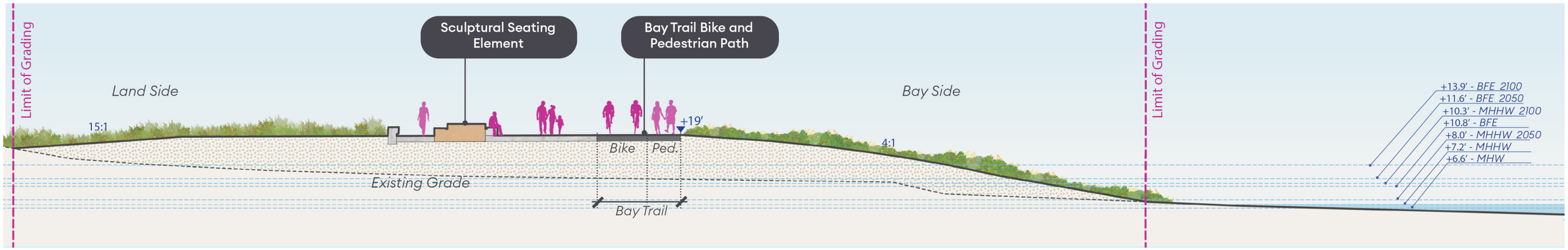
0' 600' 1200' 2400'

A | Overlook at Bedwell Bayfront Park

Proposed



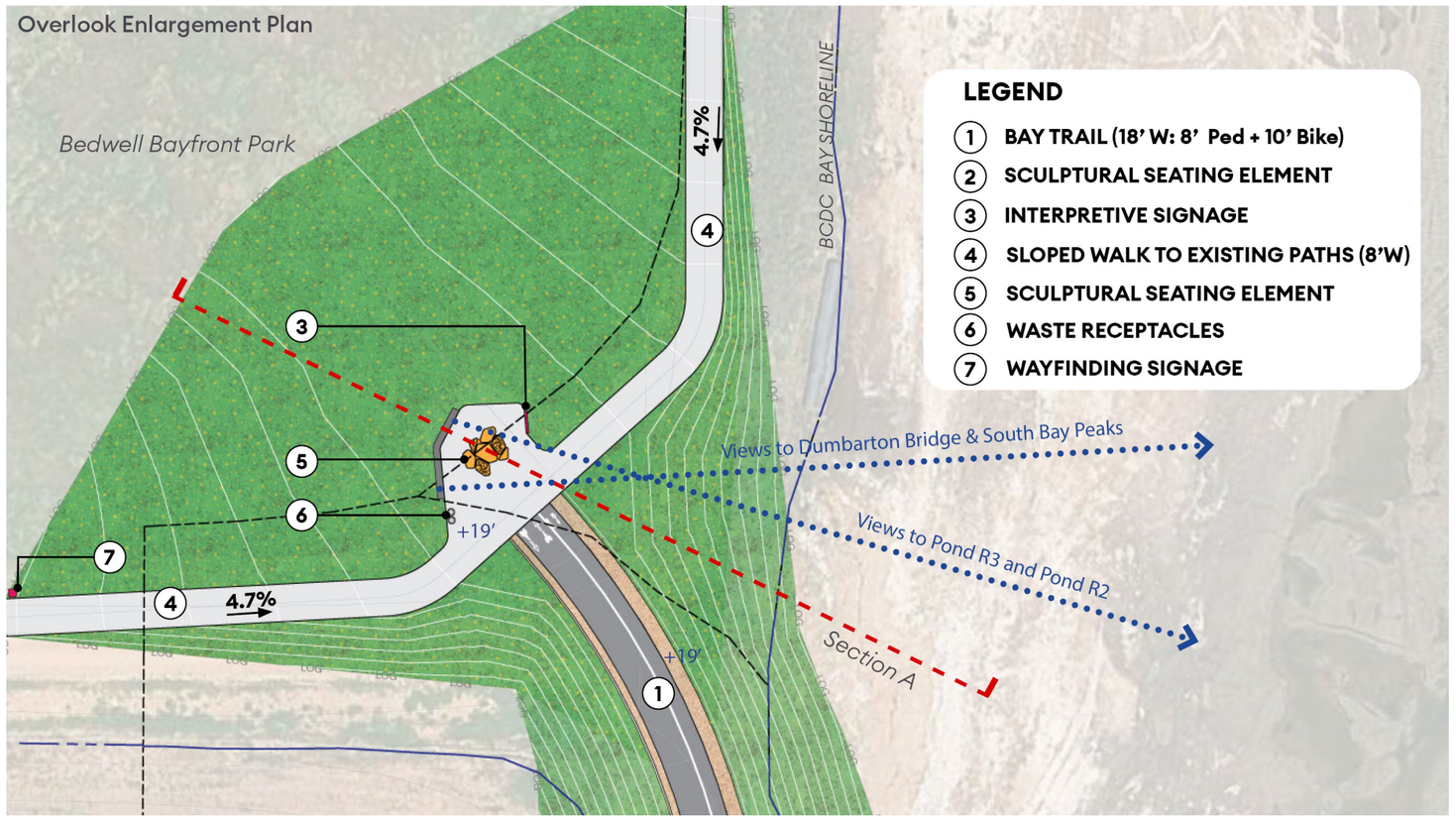
Section A



Sculptural Seating Element: Precast Concrete Seating with Fluvial Pattern



Overlook Enlargement Plan

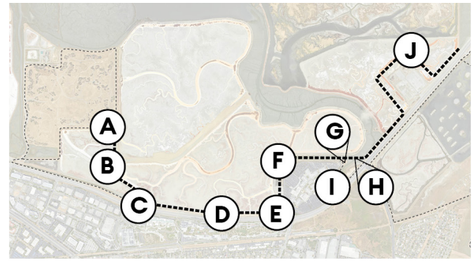


Scale 1"=40'

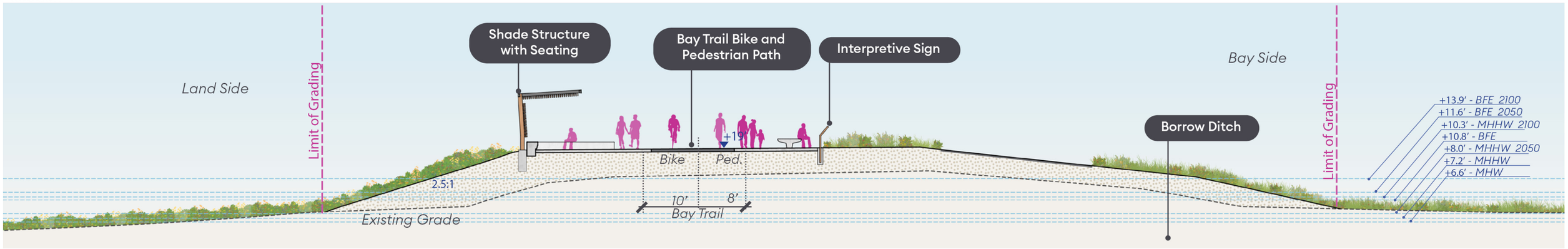
0' 20' 40' 80'

B | Overlook at Ducks Unlimited

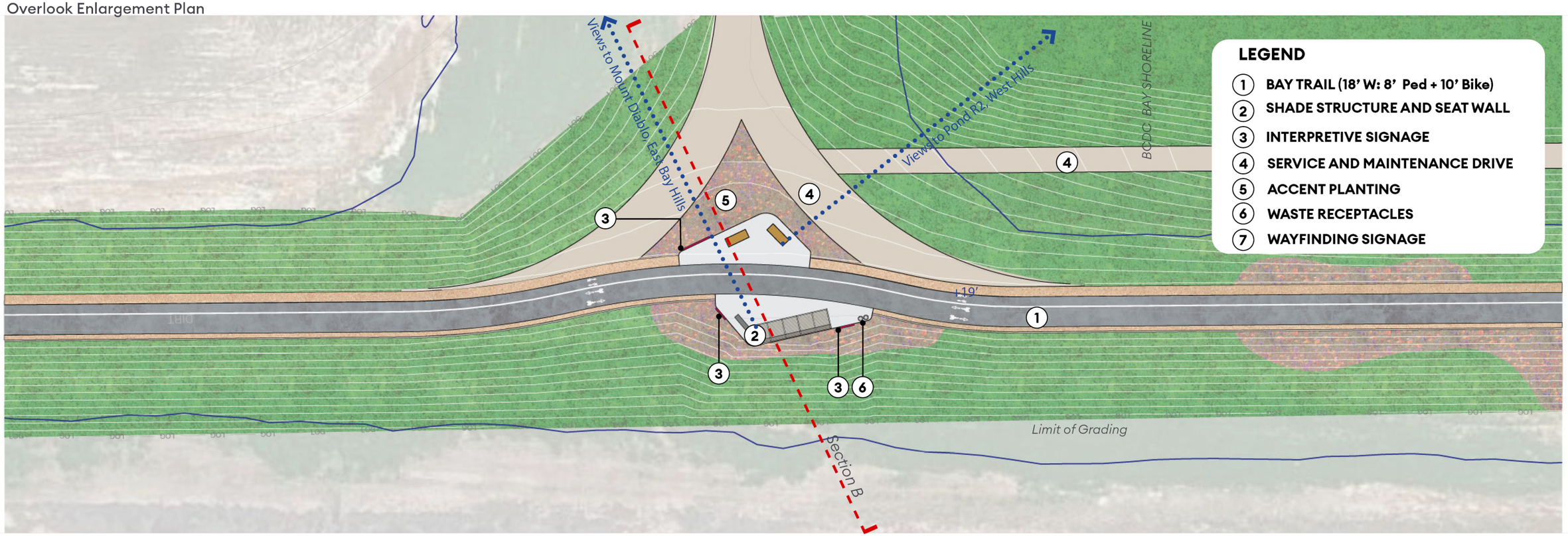
Proposed



Section B



Overlook Enlargement Plan

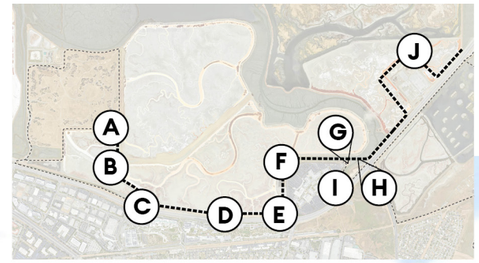


Scale 1"=40'

0' 20' 40' 80'

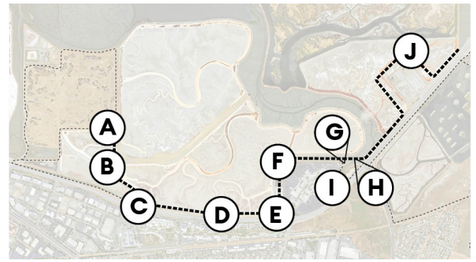
B | Overlook at Ducks Unlimited

Proposed

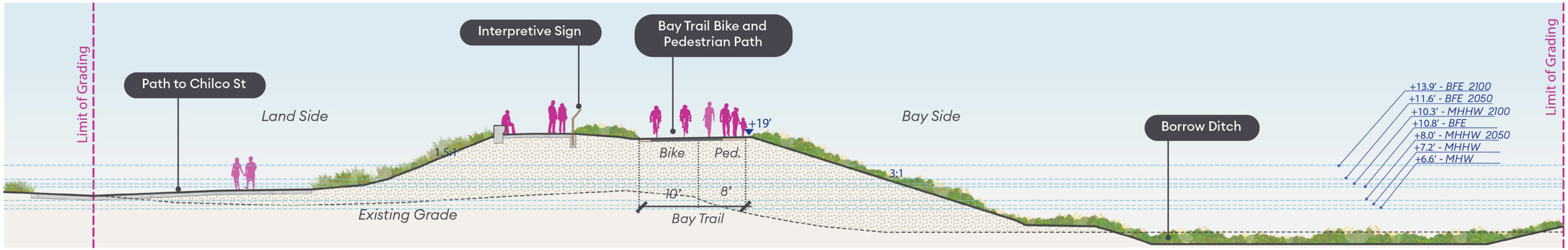


C | Overlook at Chilco Street

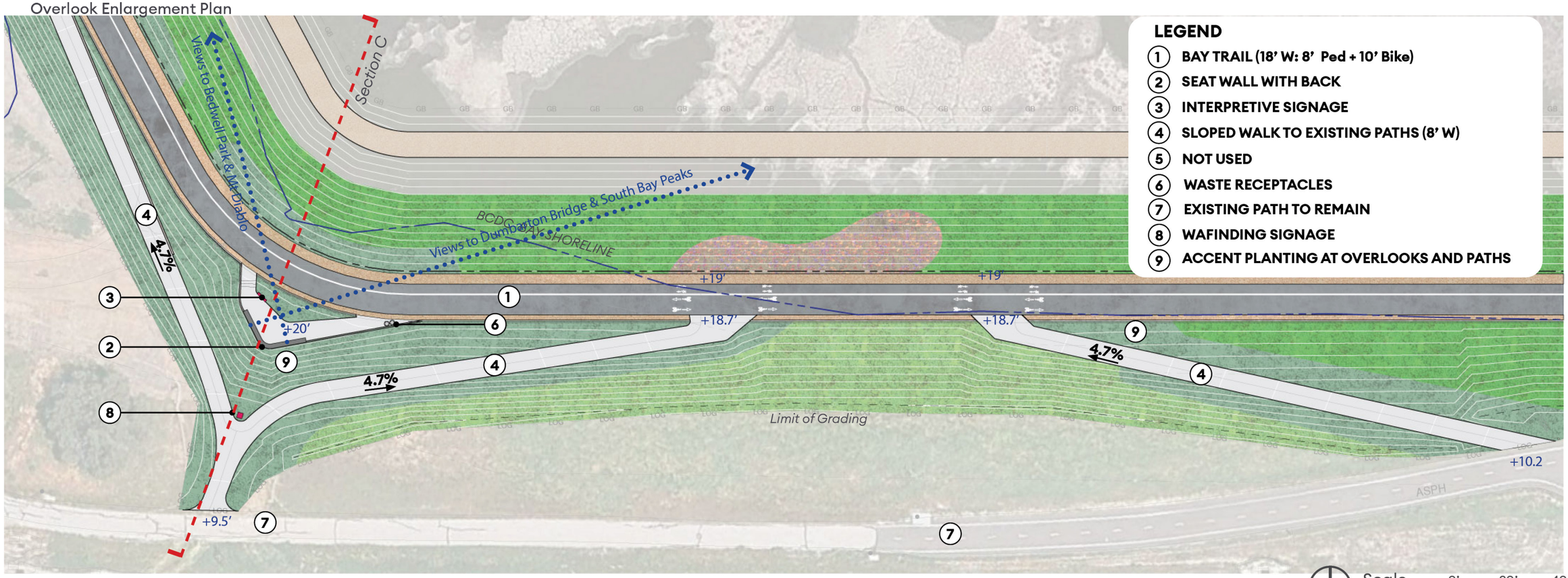
Proposed



Section C



Overlook Enlargement Plan



LEGEND

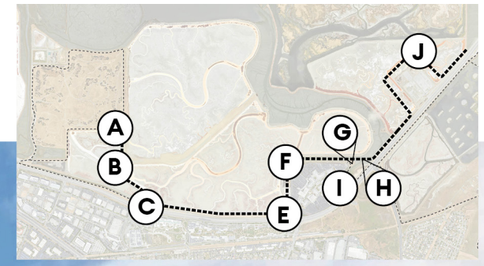
1. BAY TRAIL (18' W: 8' Ped + 10' Bike)
2. SEAT WALL WITH BACK
3. INTERPRETIVE SIGNAGE
4. SLOPED WALK TO EXISTING PATHS (8' W)
5. NOT USED
6. WASTE RECEPTACLES
7. EXISTING PATH TO REMAIN
8. WAFINDING SIGNAGE
9. ACCENT PLANTING AT OVERLOOKS AND PATHS

Scale 1"=40'

0' 20' 40' 80'

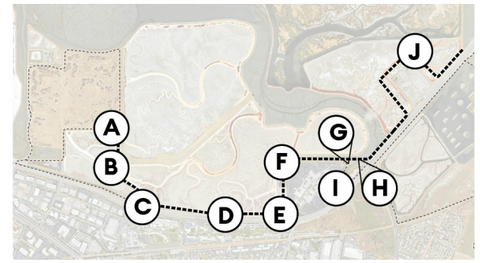
C | Overlook at Chilco Street

View looking northwest

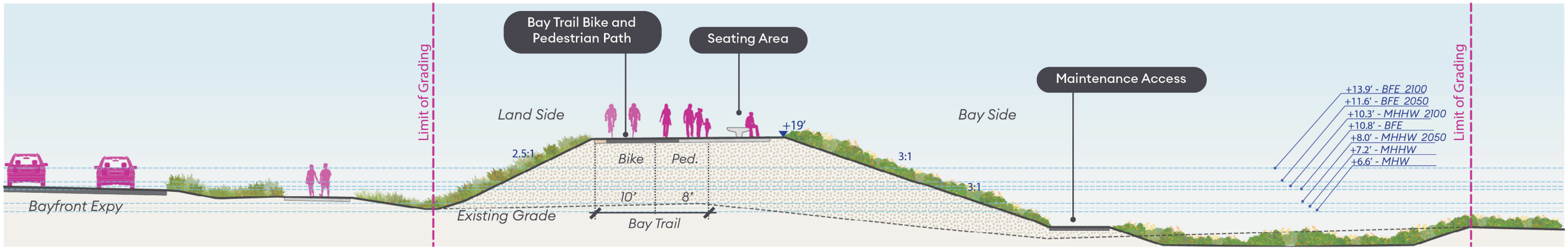


D | Typical Seating Area

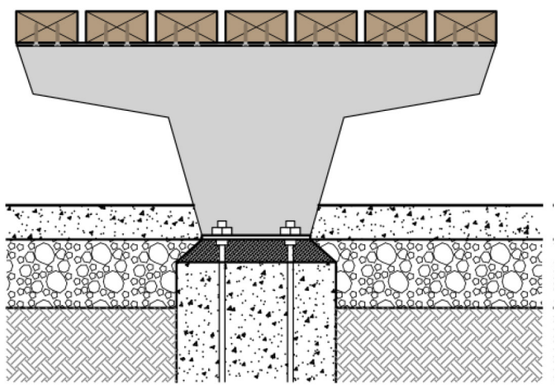
Proposed



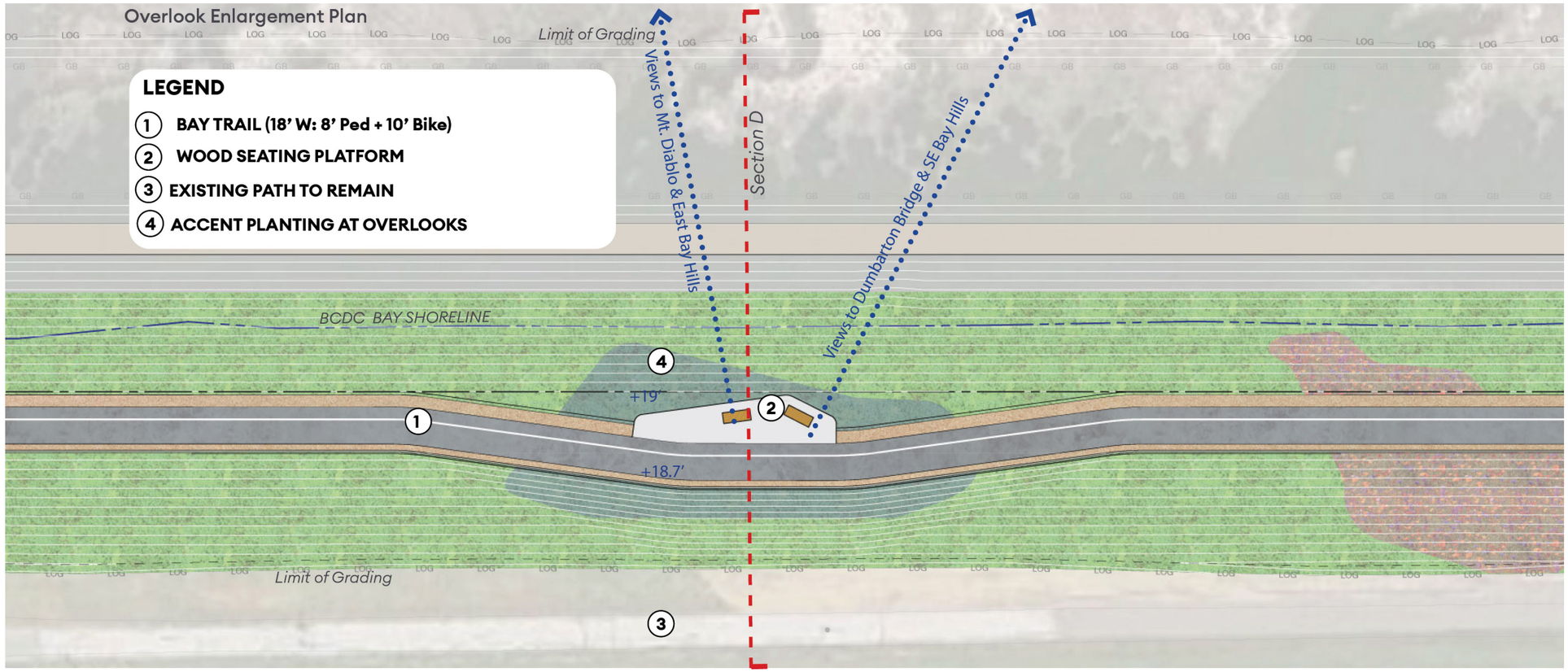
Section D



Wood Seating Platform



Overlook Enlargement Plan

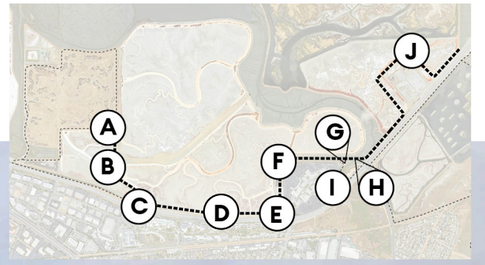


Scale
1"=40'

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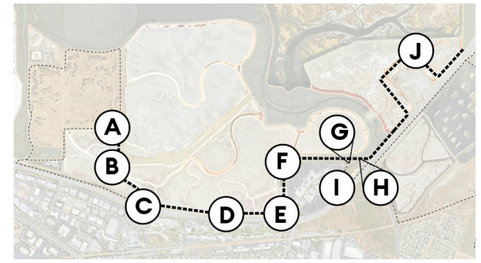
D | Typical Seating Area

View looking northwest

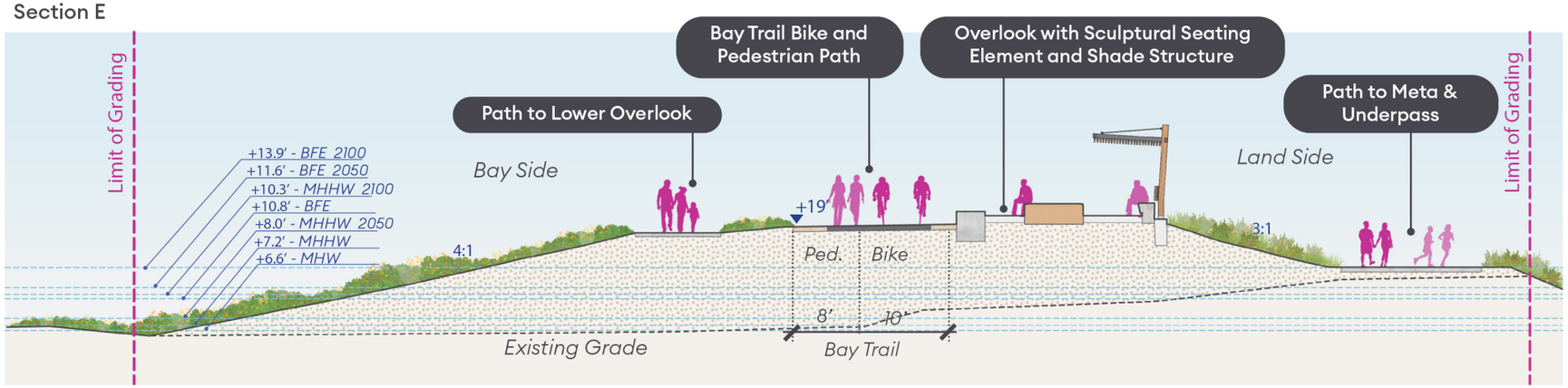


E | Overlook at Willow Road

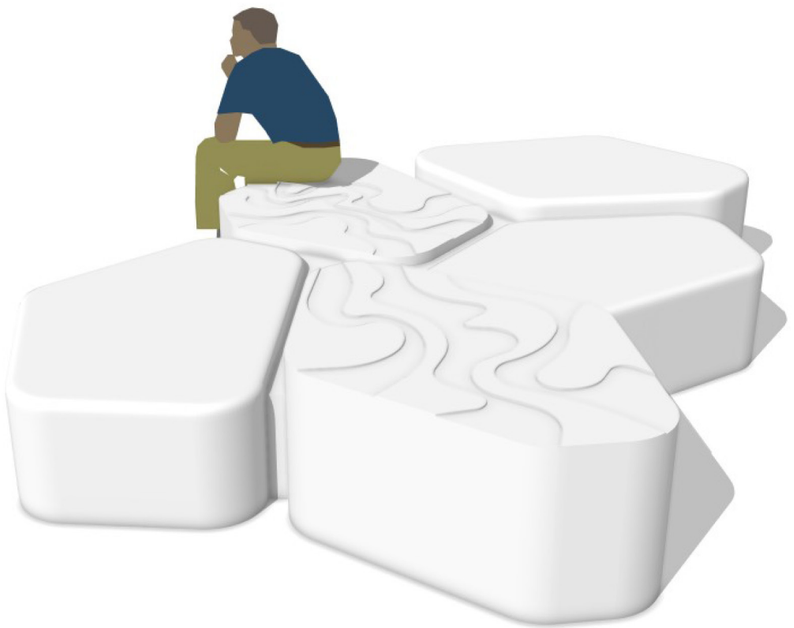
Proposed

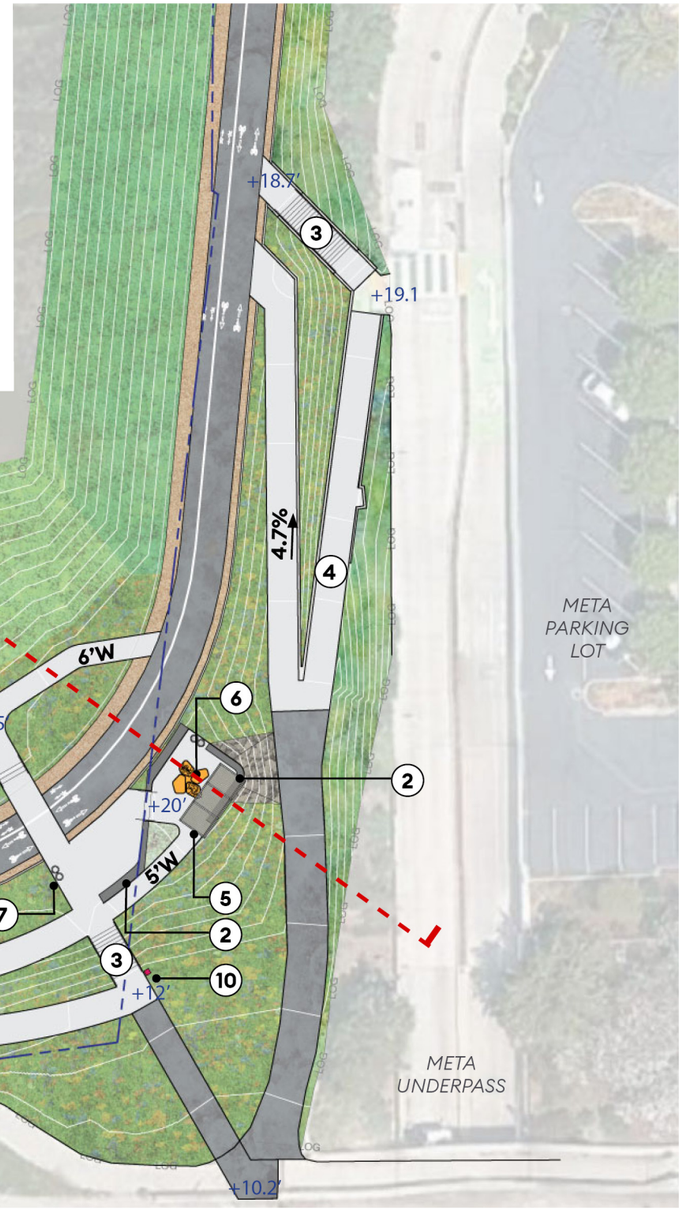


Section E



Sculptural Seating Element: Precast Concrete Seating with Fluvial Pattern



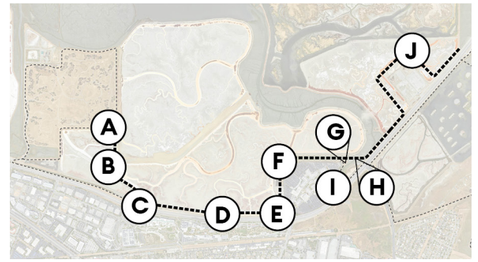


Scale 1"=40'

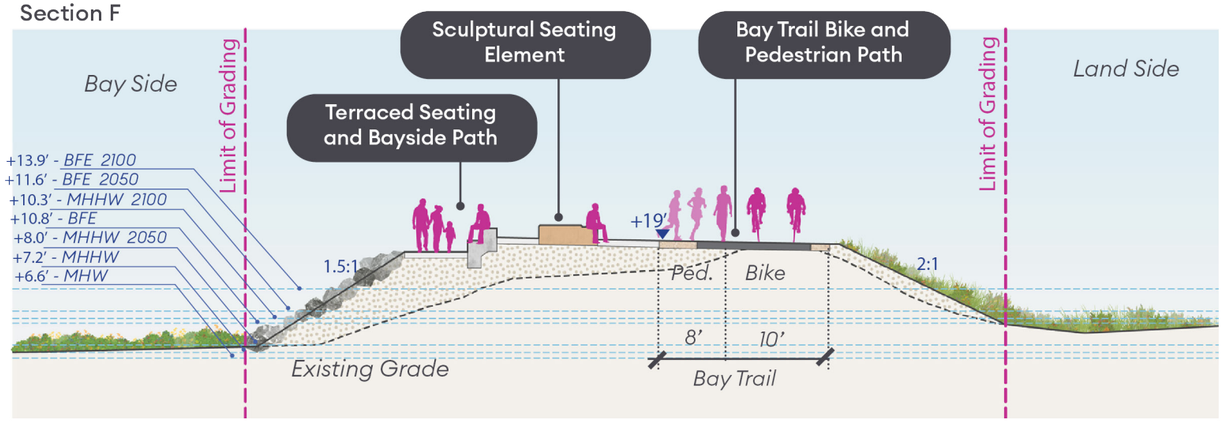
0' 20' 40' 80'

F | Overlook at Meta

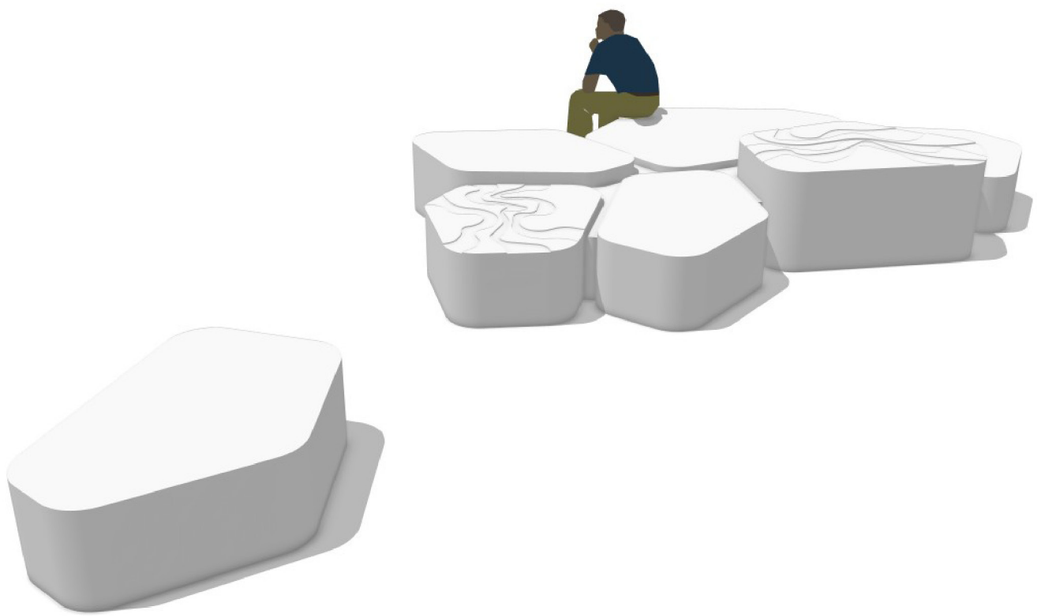
Proposed

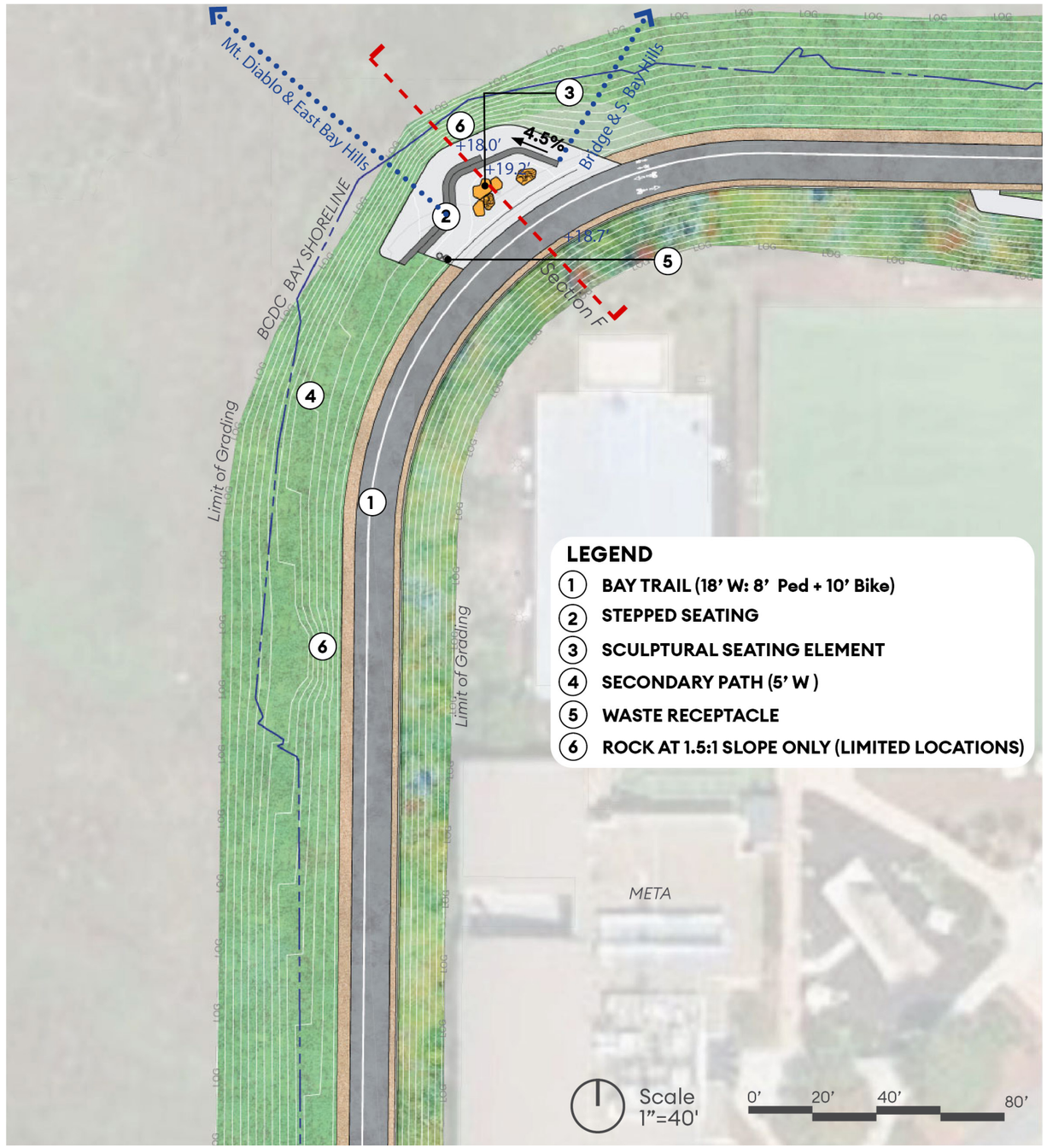


Section F



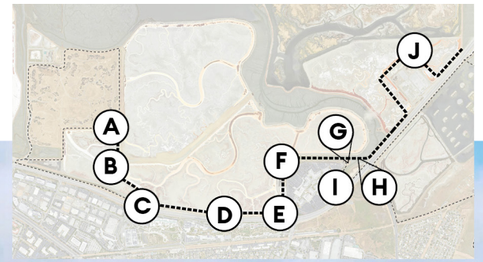
Sculptural Seating Element: Precast Concrete Seating with Fluvial Pattern





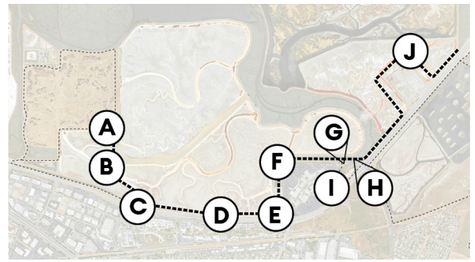
F | Overlook at Meta

View looking west

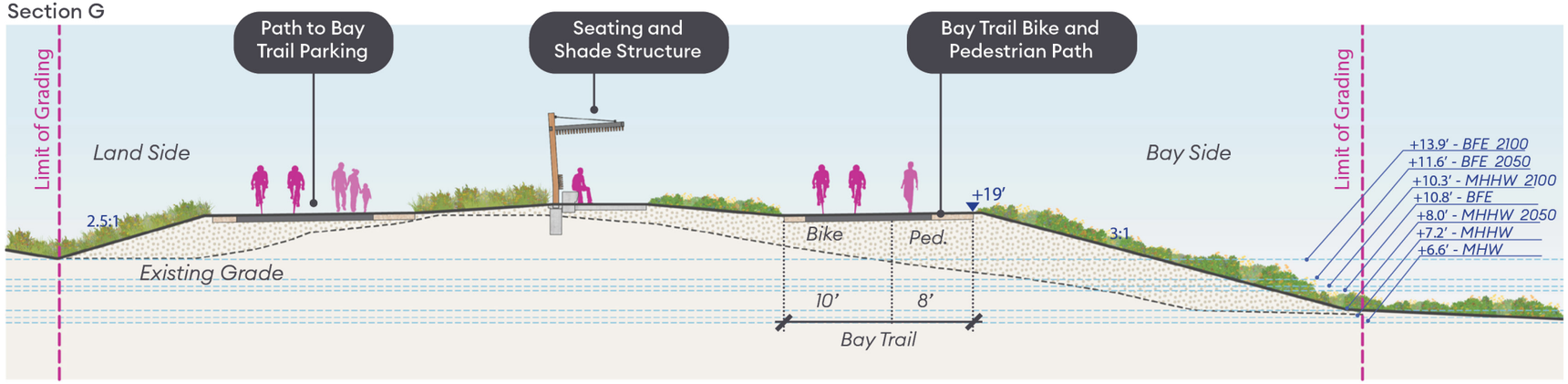


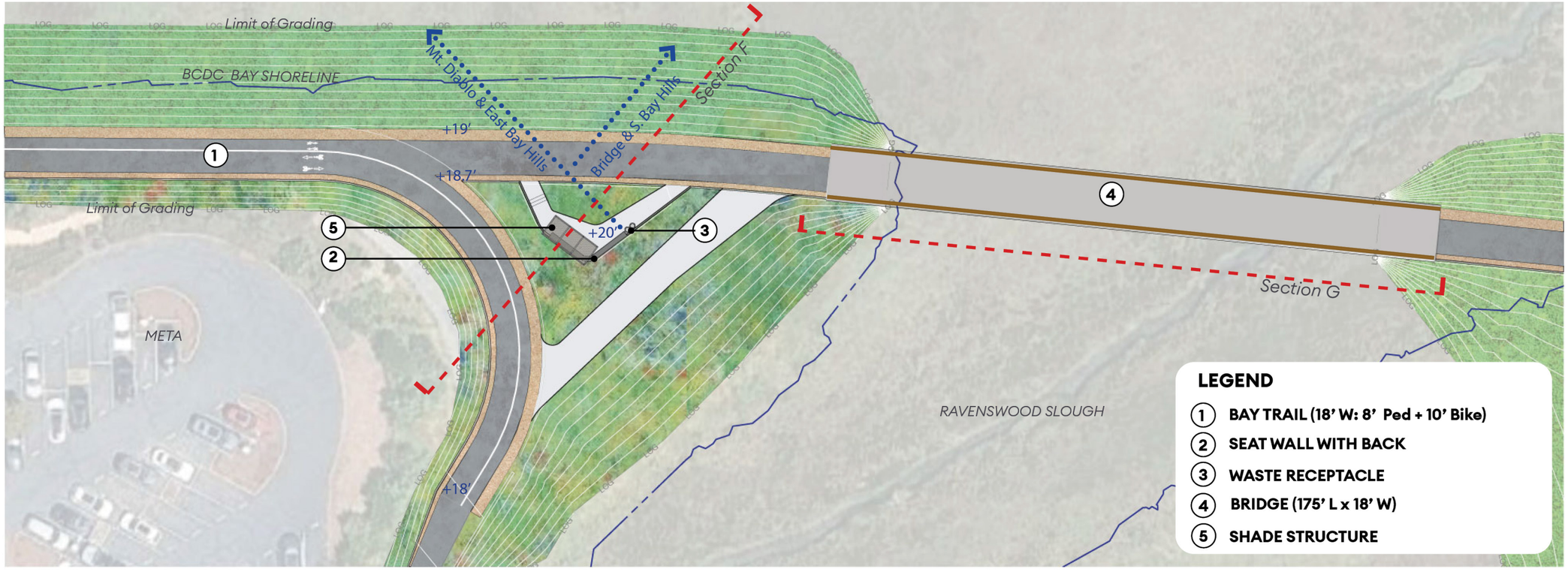
G | Overlook at Near Bay Trail Parking & Pedestrian Bridge

Proposed



Section G





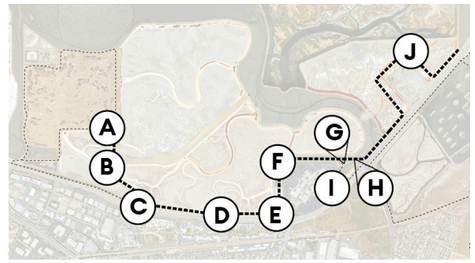
Scale
1"=40'

0' 20' 40' 80'

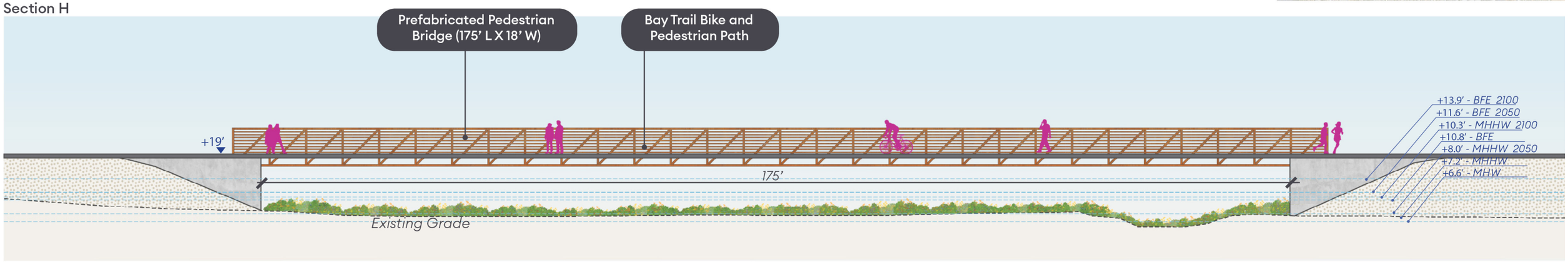
H | Pedestrian Bridge at Ravenswood Slough

Proposed

- Abutments constructed on high ground
- Shading reduced with Bike-Safe, ADA compliant grate
- Anti-perching measures



Section H



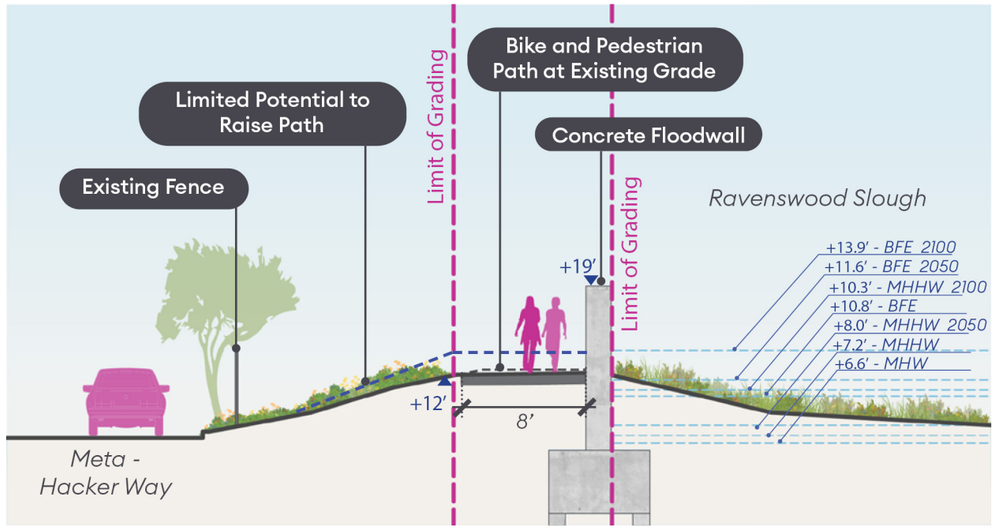


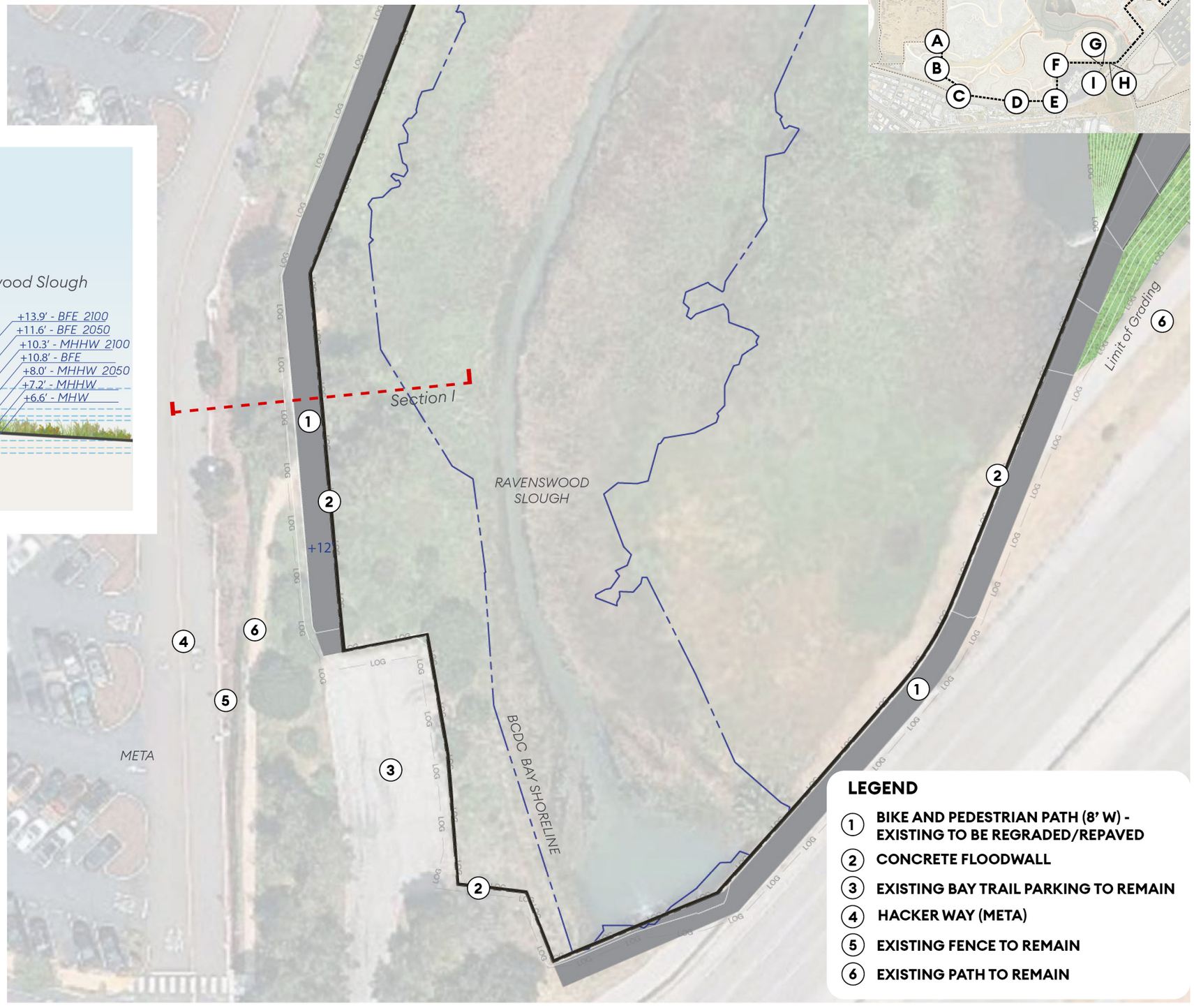


I | Floodwall at Ravenswood Slough

Proposed

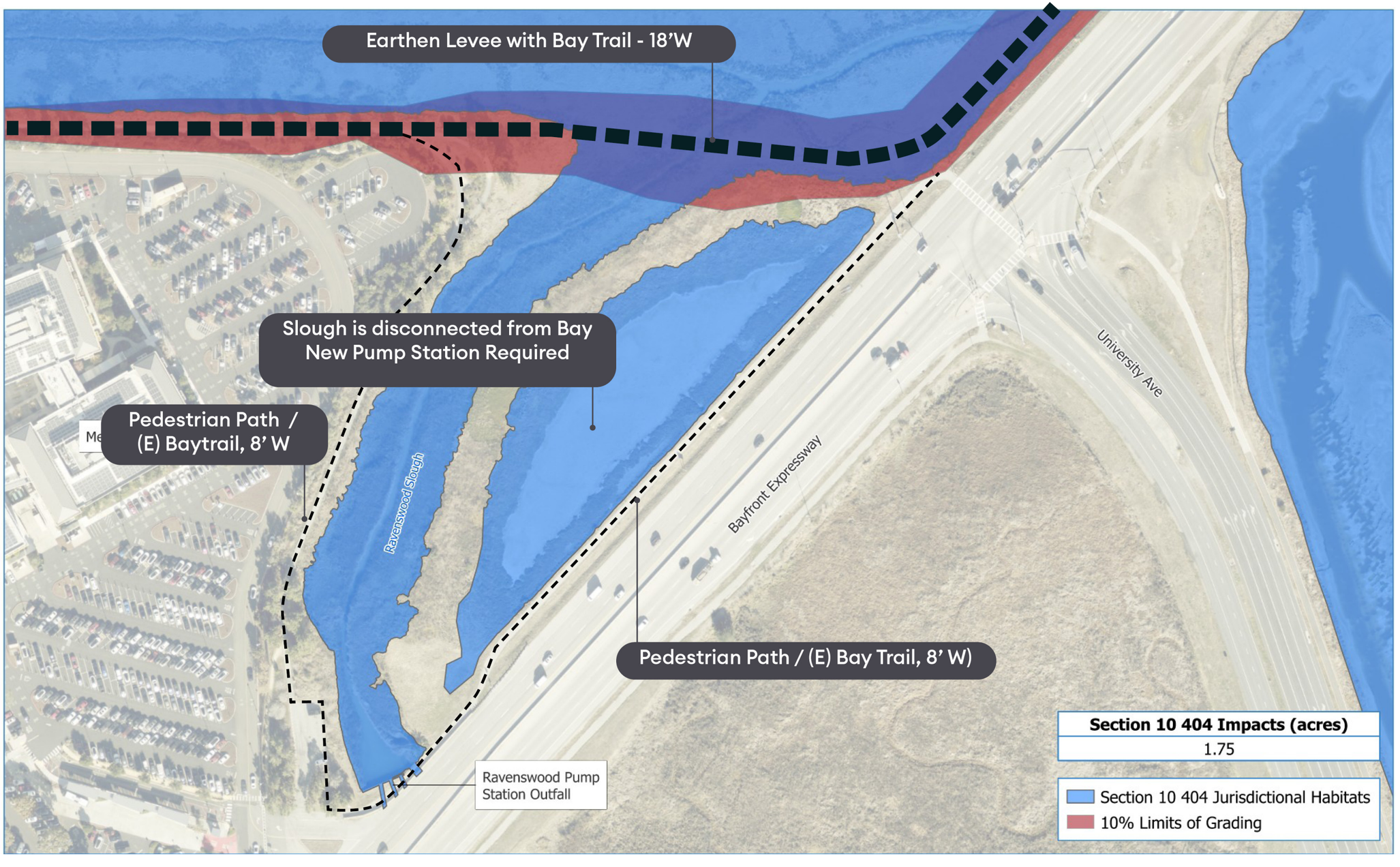
Section I





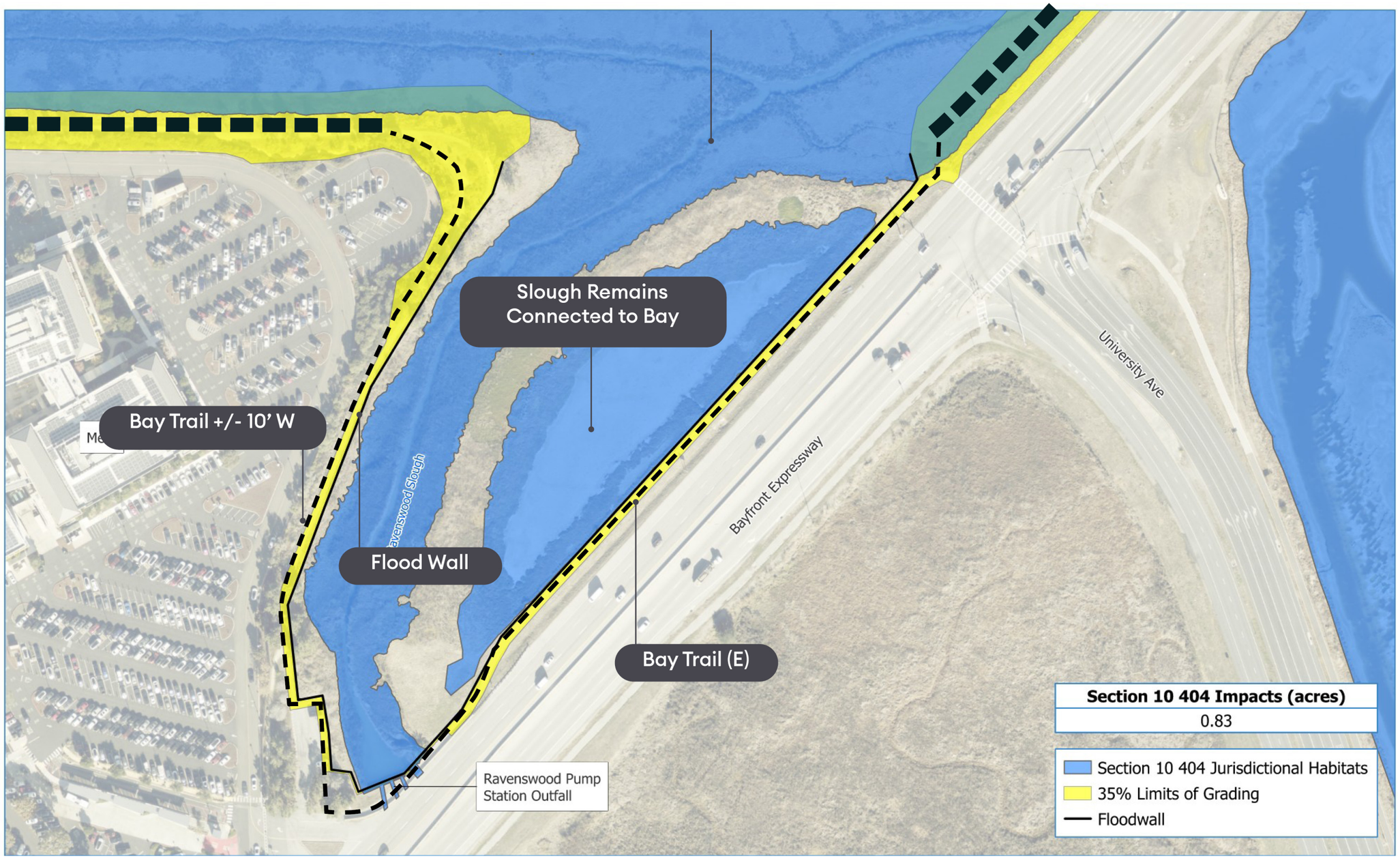
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

10% DESIGN PROPOSAL CUT OFF RAVENSWOOD SLOUGH - **1.75 ACRES** OF JURISDICTIONAL HABITAT IMPACTED



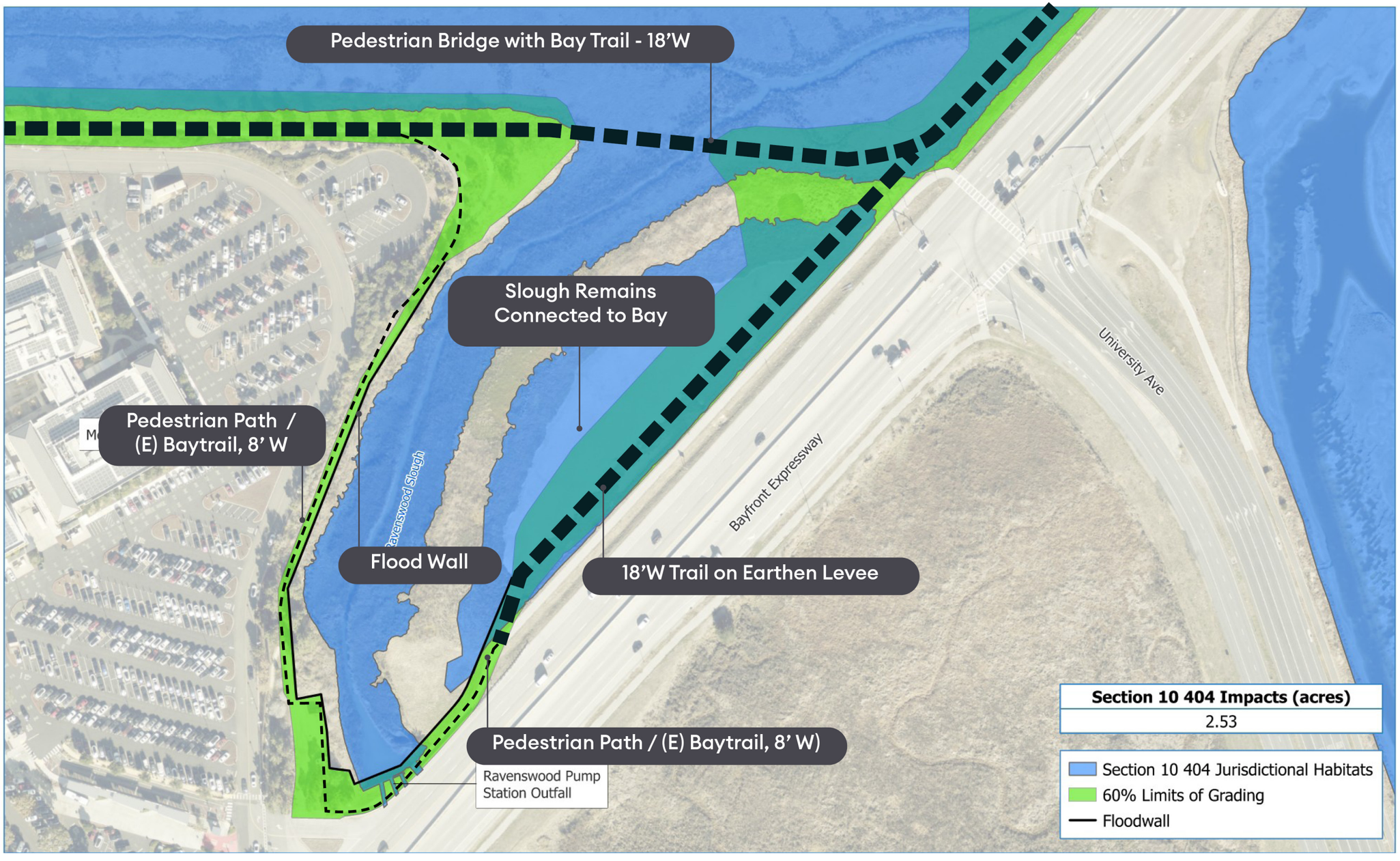
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

35% DESIGN PROPOSAL PRESERVES RAVENSWOOD SLOUGH - **.83 ACRES** OF JURISDICTIONAL HABITAT IMPACTED



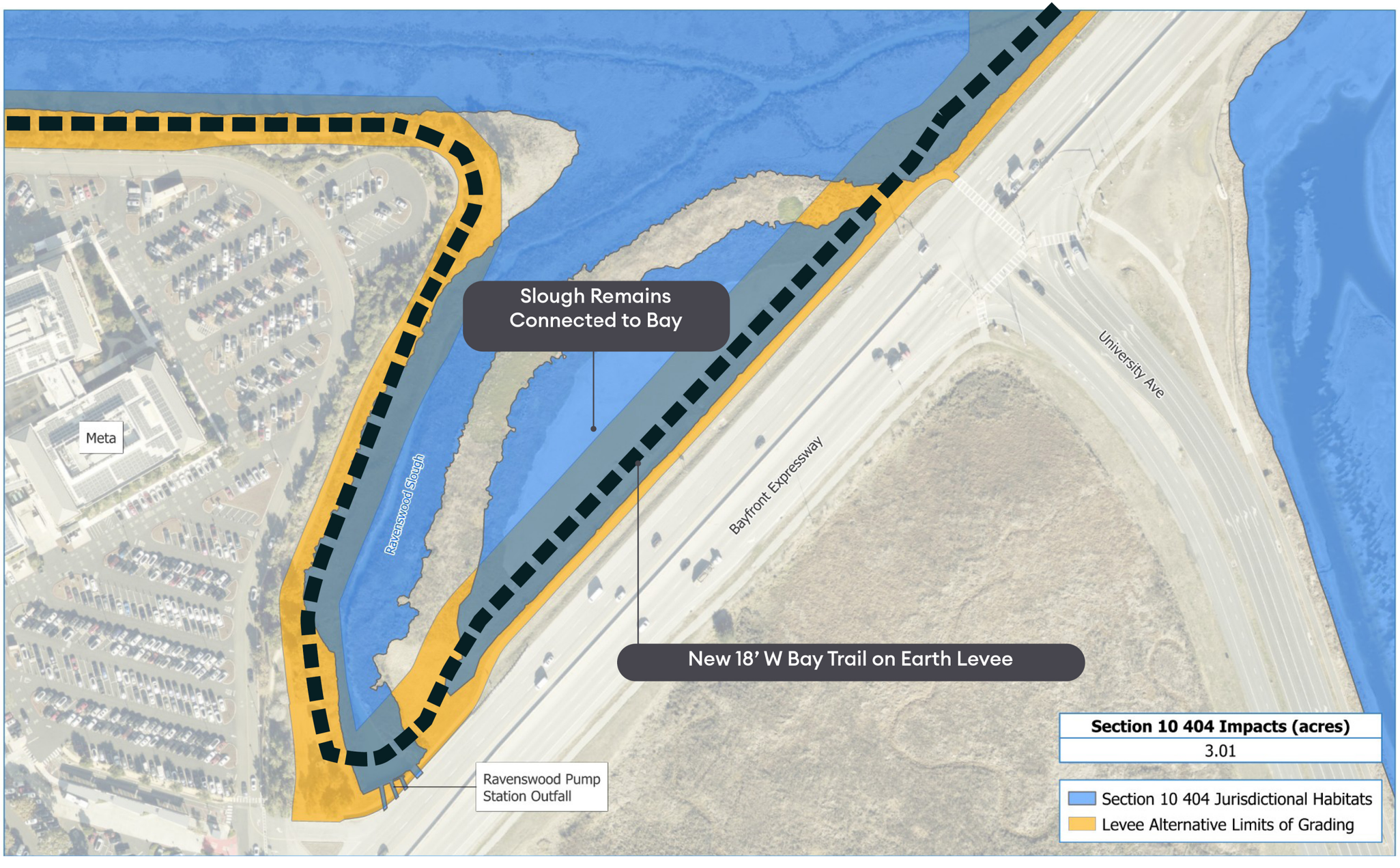
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

60% DESIGN PROPOSAL ADDED PEDESTRIAN BRIDGE - **2.53 ACRES** OF JURISDICTIONAL HABITAT IMPACTED



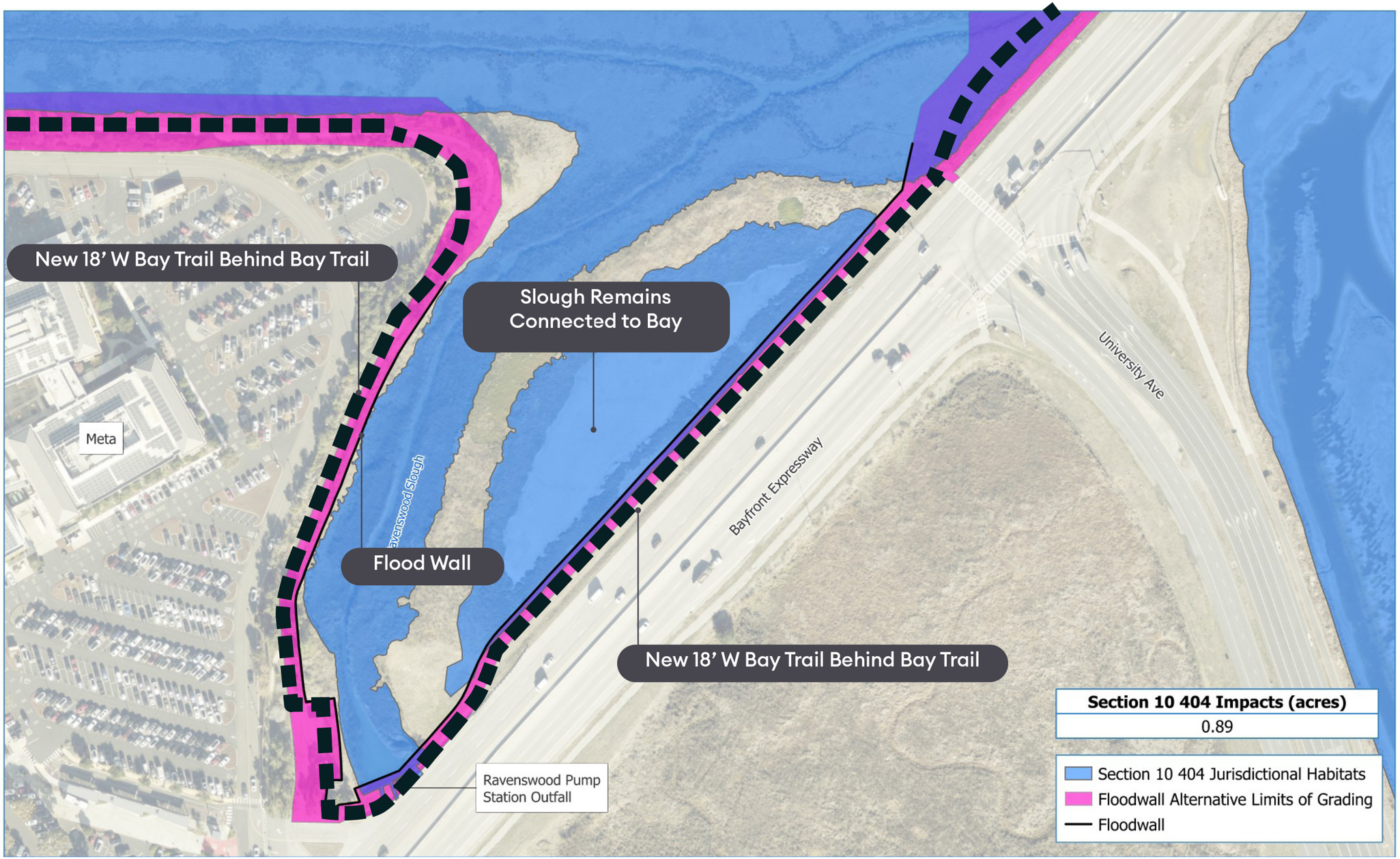
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

DESIGN STUDY WITH EARTHEN LEVEE AROUND SLOUGH - **3.01 ACRES** OF JURISDICTIONAL HABITAT IMPACTED



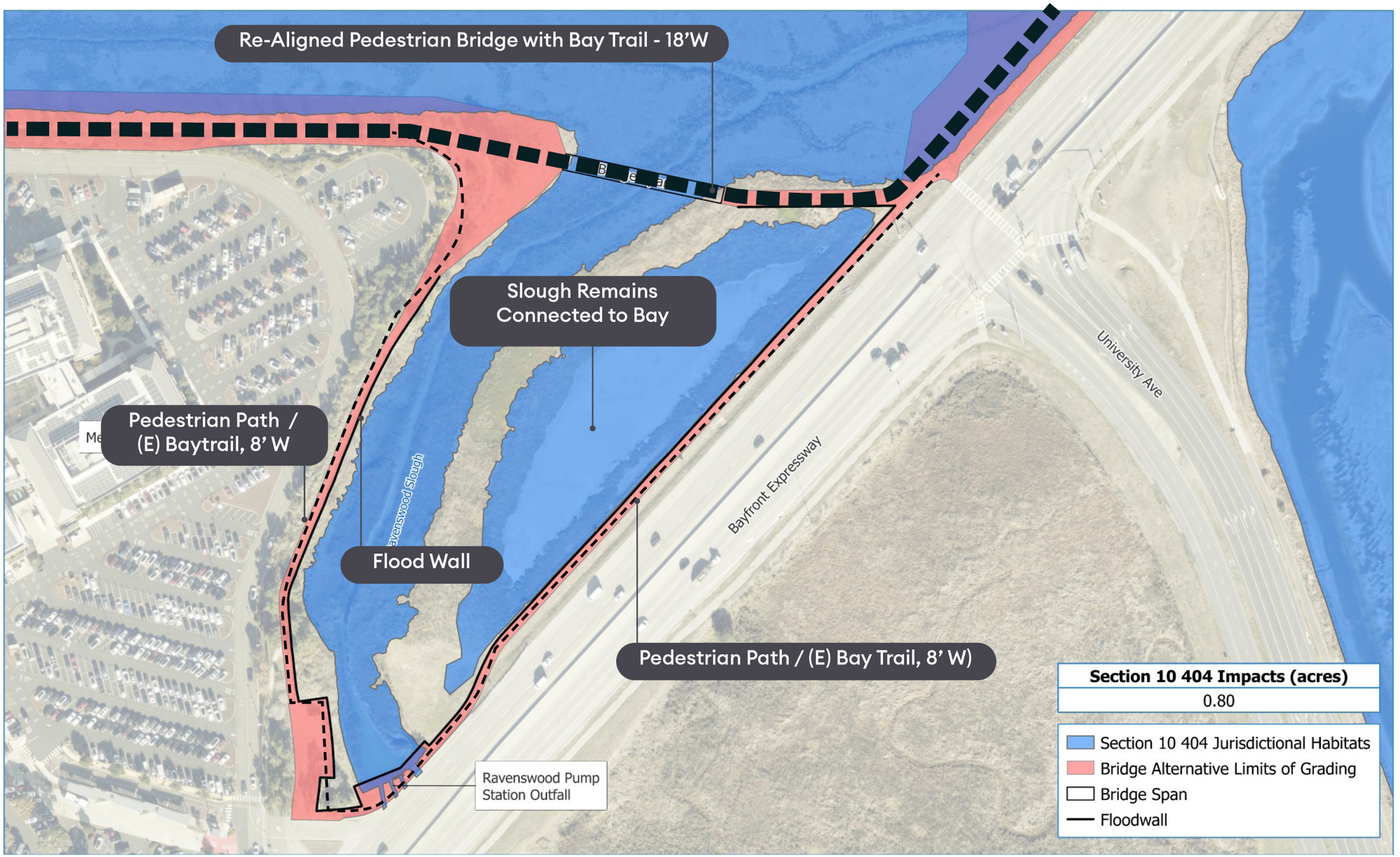
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

DESIGN STUDY WITH FLOOD WALL AND 18[5] WIDE BAY TRAIL - **.89** ACRES OF JURISDICTIONAL HABITAT IMPACTED



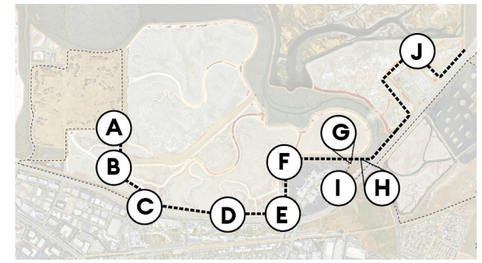
Pedestrian Bridge, Floodwall, & Bay Trail Alignment Options: Habitat Considerations

CURRENT DESIGN PROPOSAL: REALIGN PED BRIDGE - **.80 ACRES** OF JURISDICTIONAL HABITAT IMPACTED

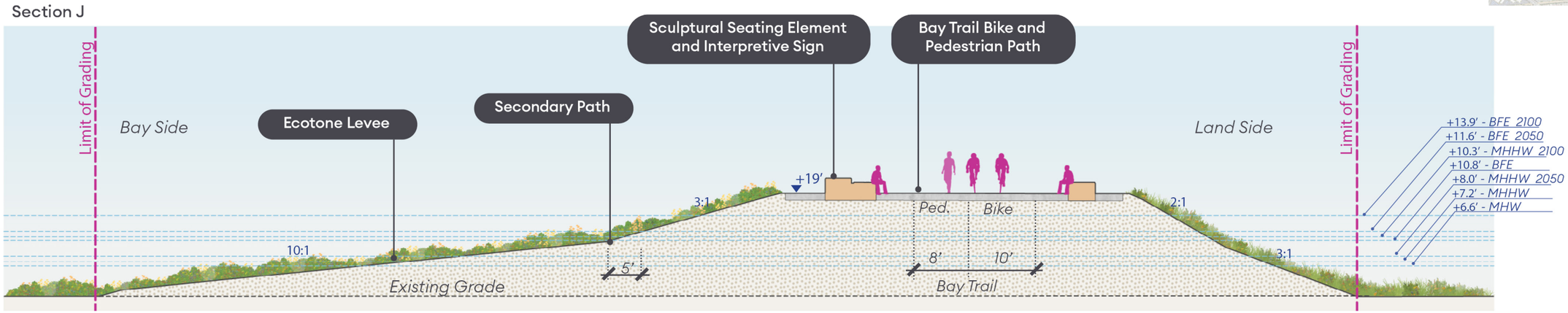


J | Overlook at PG&E + Ecotone Levee

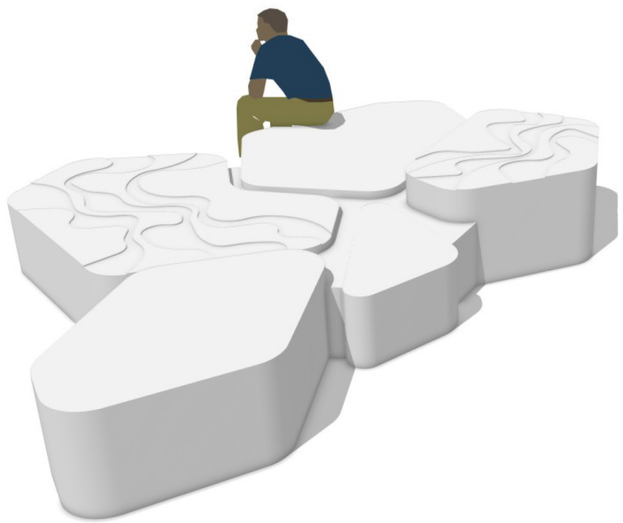
Proposed

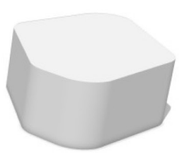


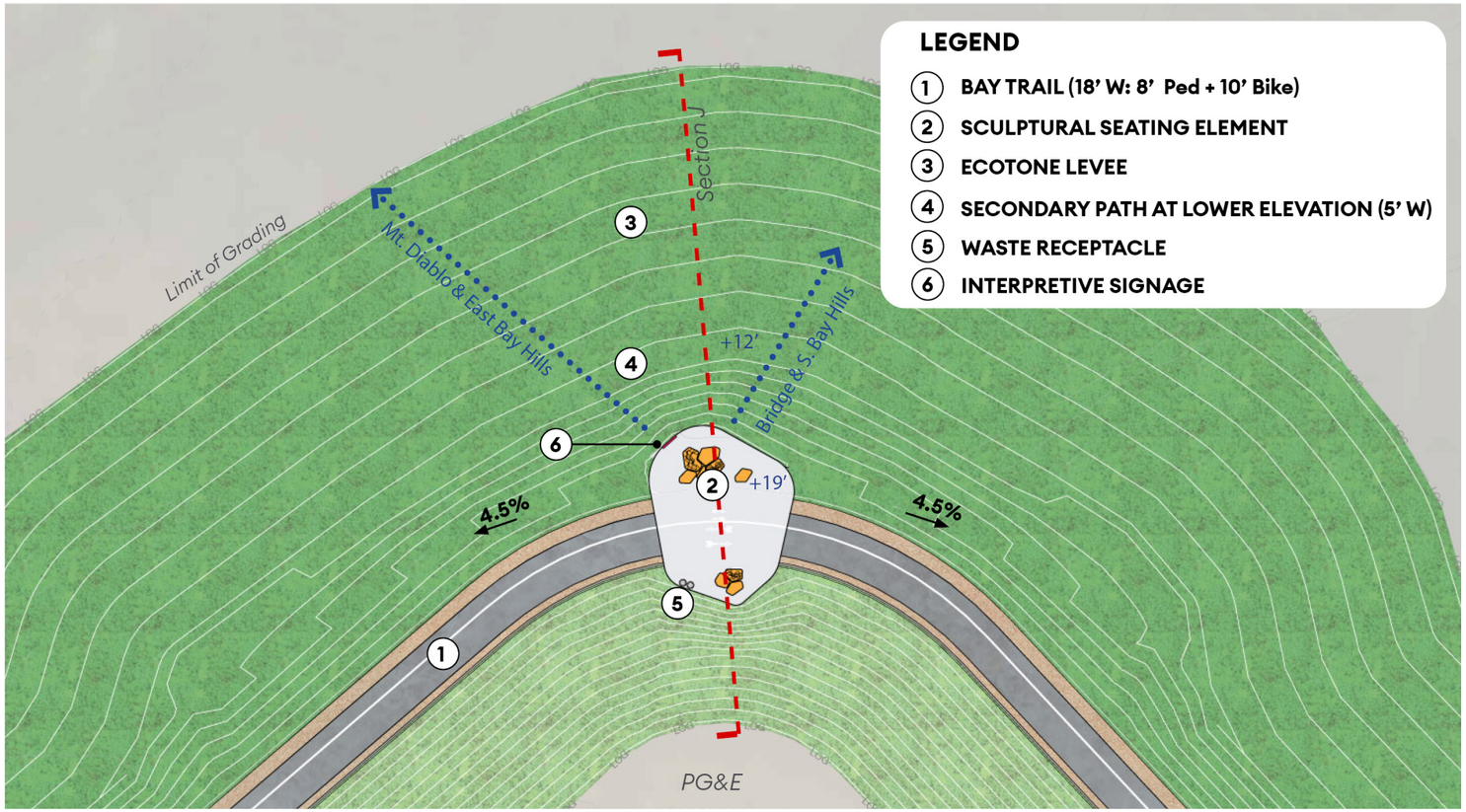
Section J



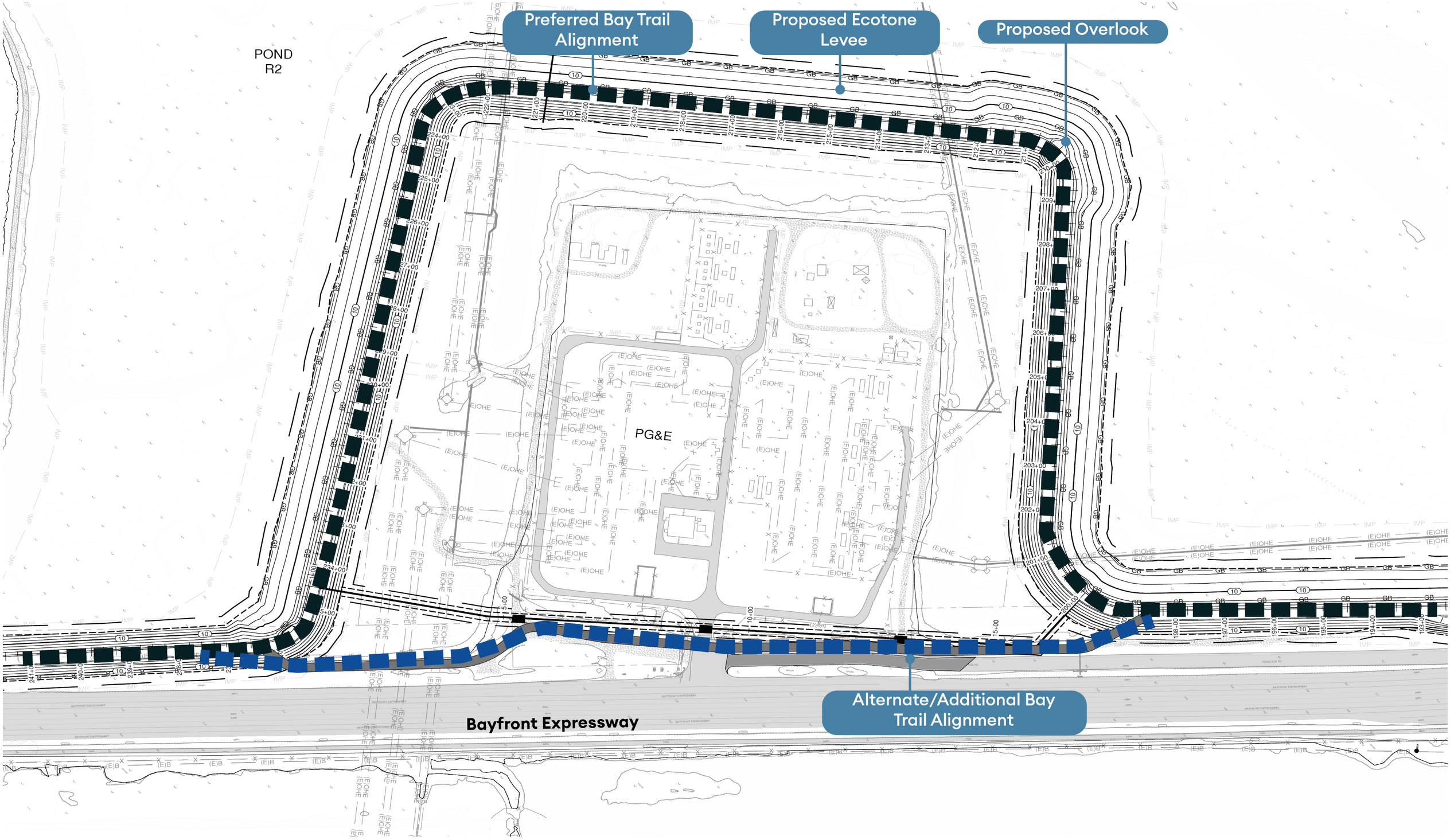
Sculptural Seating Element







Bay Trail Alignment at PG&E



Levee Revegetation and Planting

Proposed

LEGEND

- Accent planting
- Coastal Grassland
- Roadside Grassland
- Coastal Scrub and Grassland
- Grassland and High Marsh
- Salt Marsh Upland Transition Zone Restoration
- Restored Tidal Marsh
- Managed Ponds (Existing)
- Public Trails
- City Jurisdictions
- Menlo Park SAFER Bay Levee + Bay Trail
- Reach by Others

The banks of the levee will be enhanced with native planting, with a focus on Bay edge ecology on the bay side and durable, native planting on the landward side. Distinct zones may have different planting approaches depending on adjacent roadways, marshes, and salt ponds. All plants will be native species. Inland levee embankment may include a base of hydroseeded grasses, with addition of groundcover, perennials, and bunch grass. Bay side levee embankment plans will include bay edge species appropriate to the adjacent ecological conditions.

Ponds R1 + R2 restored to tidal marsh

Ravenswood Trail

Dumbarton Bridge

PG&E

Redwood City

Bedwell Bayfront Park

Don Edwards San Francisco Bay National Wildlife Refuge

Ravenswood Slough

Ravenswood Trail

Pond R5 / S5

Bay Trail

Bayfront Expy

Pond R3

Meta

Meta

Chilco St.

Willow Rd.

University Ave.

Pond SF2

Don Edwards San Francisco Bay National Wildlife Refuge

Bay Trail

East Palo Alto

Ravenswood Open Space Preserve

Menlo Park



Coastal Grassland



Roadside Grassland



Grassland and High Marsh



Restoration Planting/Revegetation

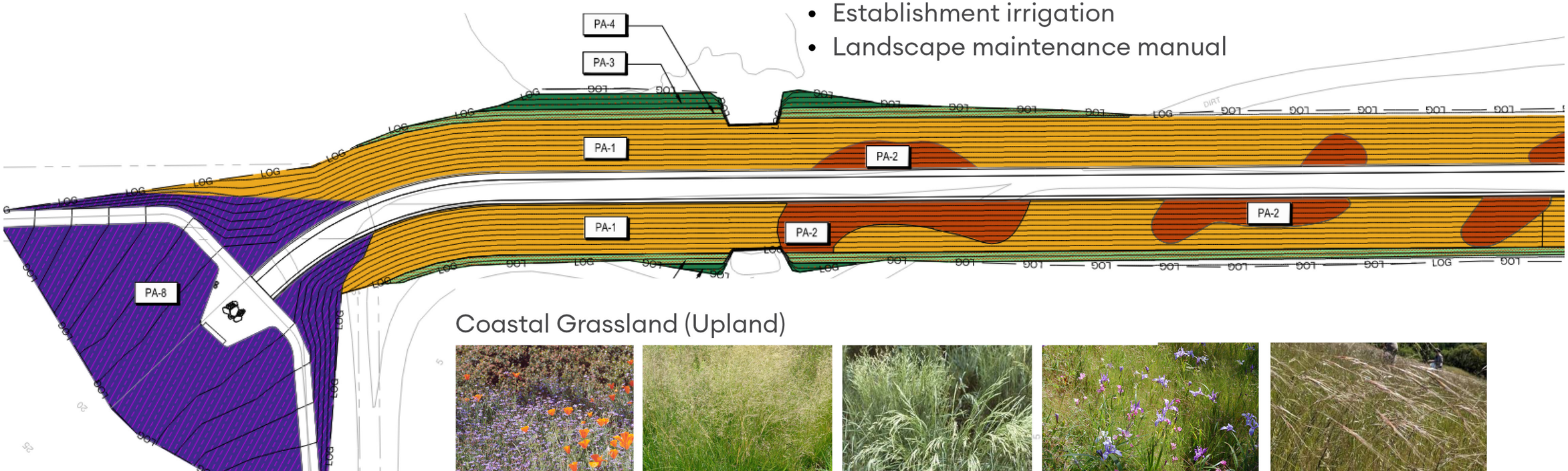
Scale 1”=1200’

0’ 600’ 1200’ 2400’

Levee Planting

Soils, Example Planting, Maintenance

- 18-24” import horticultural soil - keyed into levee soils
- 3:1 slope is typical. At 2:1 Slopes erosion control matting will be used
- Establishment irrigation
- Landscape maintenance manual



Coastal Grassland (Upland)

Accent Areas Around Overlooks And Access - Mix of Seed and Nursery Pots



Upland Coastal Scrub



Scale
1”=1200’

0’ 600’ 1200’ 2400’

THANK YOU