



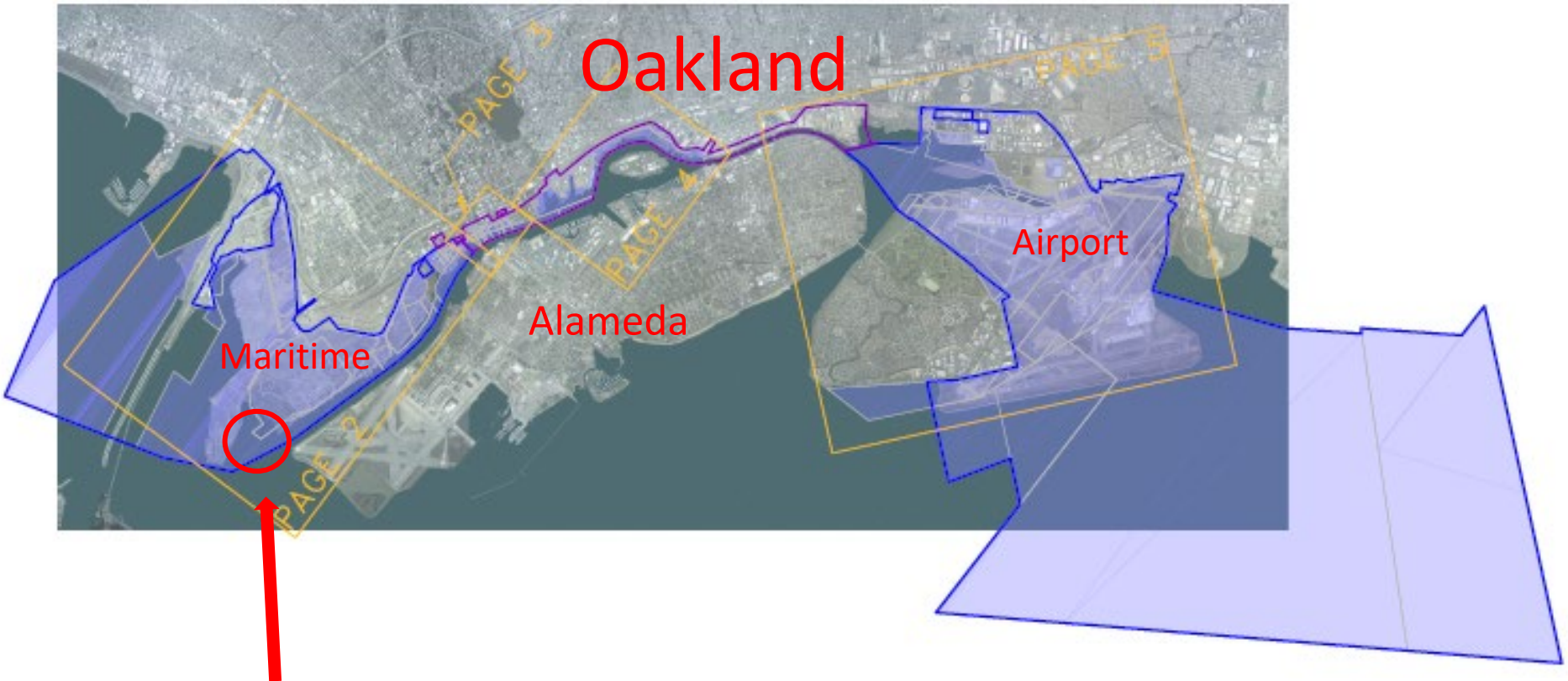
Middle Harbor Enhancement Area



Ancillary Feature Design
via Design Charrette

September 22, 2020

Port Of Oakland Current Geographical Jurisdiction

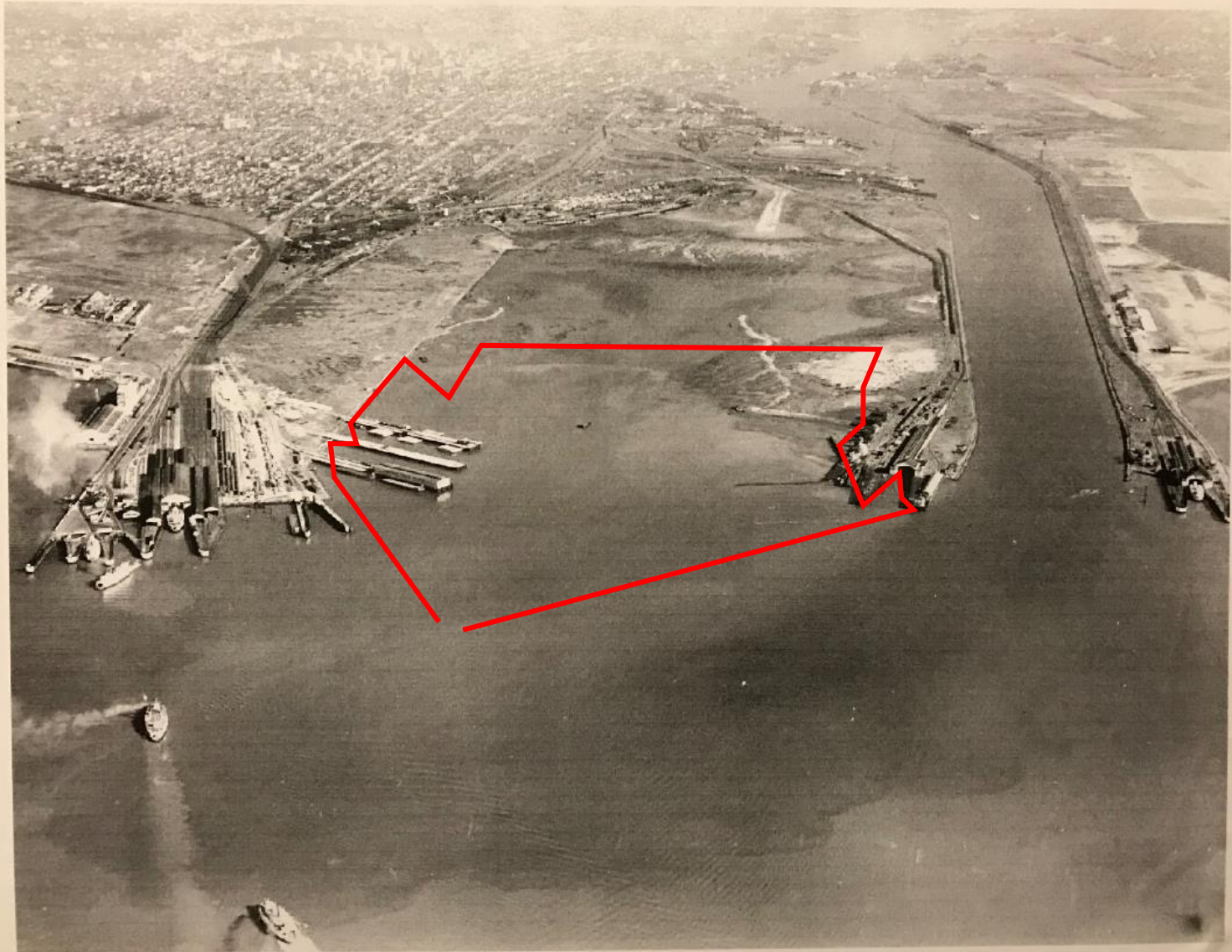


Middle Harbor
Enhancement Area

Oakland 1859 - Not Much to Harbor



1930's Historical Habitat – Mudflats



Middle Harbor Basin in the early 1930s, before the tideland shallows were filled and deepened for the Navy.

Middle Harbor in 1942 – Naval Base

January 1942

The Naval Supply Depot was commissioned just 8 days after the Japanese attacked Pearl Harbor on December 7, 1941. Within weeks construction on the base accelerated. Less than a month later the USS Albatross (SS-218) was assigned to the depot, bringing the USS Albatross and other ships to the harbor to load and unload with war supplies for the Pacific.





Naval Base Closure

6

Navy - Fleet and
Industrial Supply Center
Oakland (FISCO) –Closed
September 1998.



Vision 2000 - Oakland Harbor Navigation Improvement (-50 Foot) Project



MHEA Goals

Subtidal Habitat (Eelgrass)

Birds (Avian Foraging Habitat)

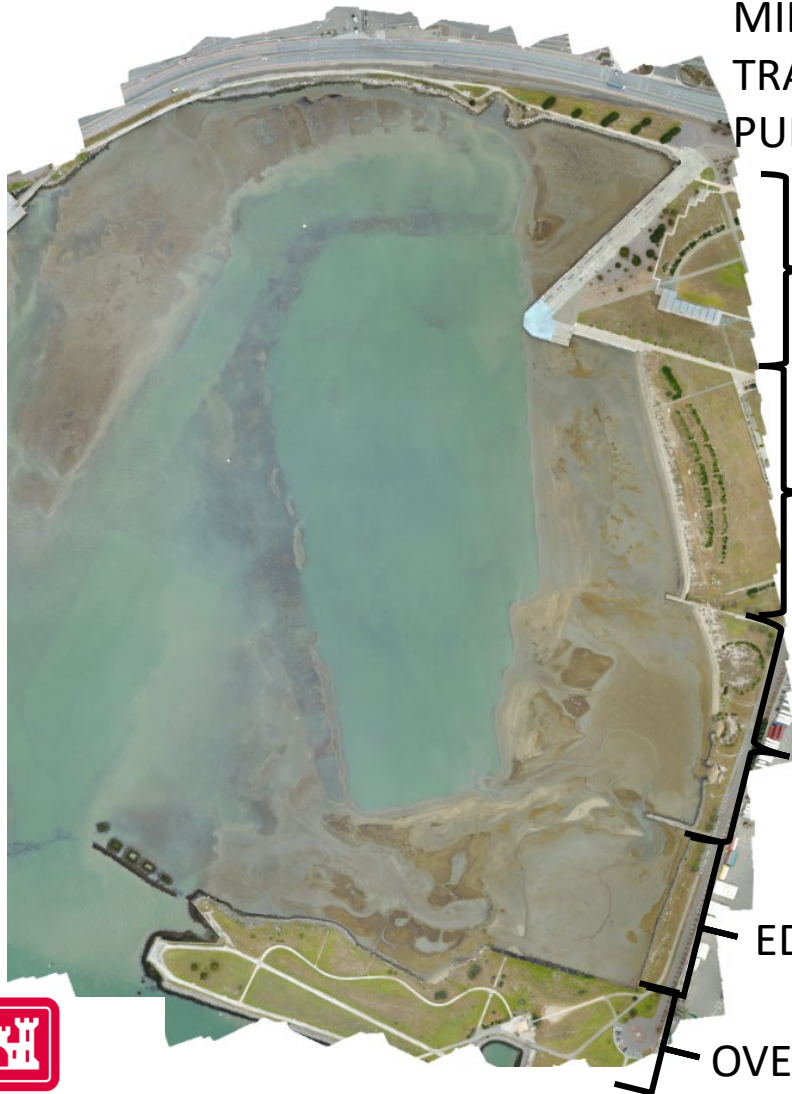
Fish (Increase Diversity & Populations)

Beach

Educational Marsh

Design Philosophy of MHEA/MHSP Interface

MIDDLE HARBOR SHORELINE PARK DESIGNED TO
TRANSITION FROM INTENSE TO LESS INTENSE
PUBLIC USE



PLAZA AND AMPHITHEATER

PRIMARY RECREATIONAL BEACH

COVES AND HEADLANDS
PASSIVE SHORELINE RECREATION

EDUCATIONAL AND INTERPRETIVE MARSH

OVERLOOKS/TRAILS/RECREATION MEADOWS
NO SHORE ACCESS



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Levi Stadium – Seats 68,500 people



2002 – 2012 Consolidation Period



Image USDA Farm Service Agency

Google Earth
September 2010

Modelling for Eelgrass

The map displays a coastal area with a green overlay representing the Eelgrass Habitat Suitability Index (ER). The green color scale ranges from 0.3 (lightest green) to 1.0 (darkest green). The map also shows depth contours (ORSE) with values ranging from -10 to -25. The map is overlaid on a grayscale aerial photograph of the coastal area.

Eelgrass Habitat Suitability Index

ER	ORSE
1	0.5
0.9	0.4
0.8	0.3

BETTER

WORSE

The Problem

Agency Request
for Project
Completion

Ancillary Features
Not Meeting
Performance Criteria

Project Budget
Running Out (902
Limit)

USACE Contracting
Mechanism is Slow



Design Charrette Plan



Envision and Design



Prepare

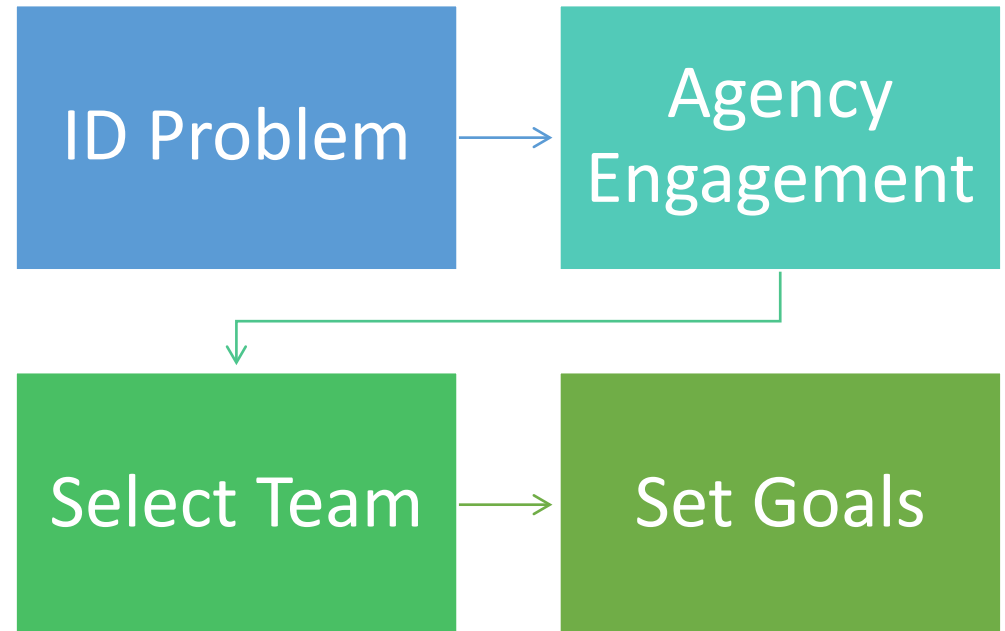


Implement



Move Forward

Envision and Prepare





Prepare

Contract Team

Information Sharing

Identify Challenges

Site Visit

Ancillary Features – Not Quite There



Marsh

3M Target (FEIR/S and RWQCB)

Provide a new 3-5 acre marsh to provide bird foraging opportunities and educational/interpretive benefits. An interspersed mixture of vegetated marsh, salt pannes, and mud flats over 3-5 acres would satisfy the performance criteria for this element.



MHEA 3-5 Acre Educational Marsh



Avian Islands

3M Target (TAC and FEIR/S)

Table 1-1. Provide improved bird habitat, with reduced predators and human disturbance through construction of four avian islands, each being a maximum size 5,000 sq. ft. and by providing a protected area along the shoreline of the UP Mole. (Rebuild islands if total square footage decreases below 5,000 sq. ft.)



Avian Islands



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Beach Area Criteria (3M Plan)

3M Target (FEIR/S and RWQCB Permit)

“Provide new public access beach area that will also provide storm refuge to birds.”

Measure of Success

No technical requirements for beach length or size.

MHEA designed to be self-sustaining
(Section 1.3.1)



Public Access Beach – Current Condition

Provide new public access beach area that will also provide storm refuge to birds.



Implement

1 Day Charrette

Follow Up
Meeting

Create Design
Alternatives

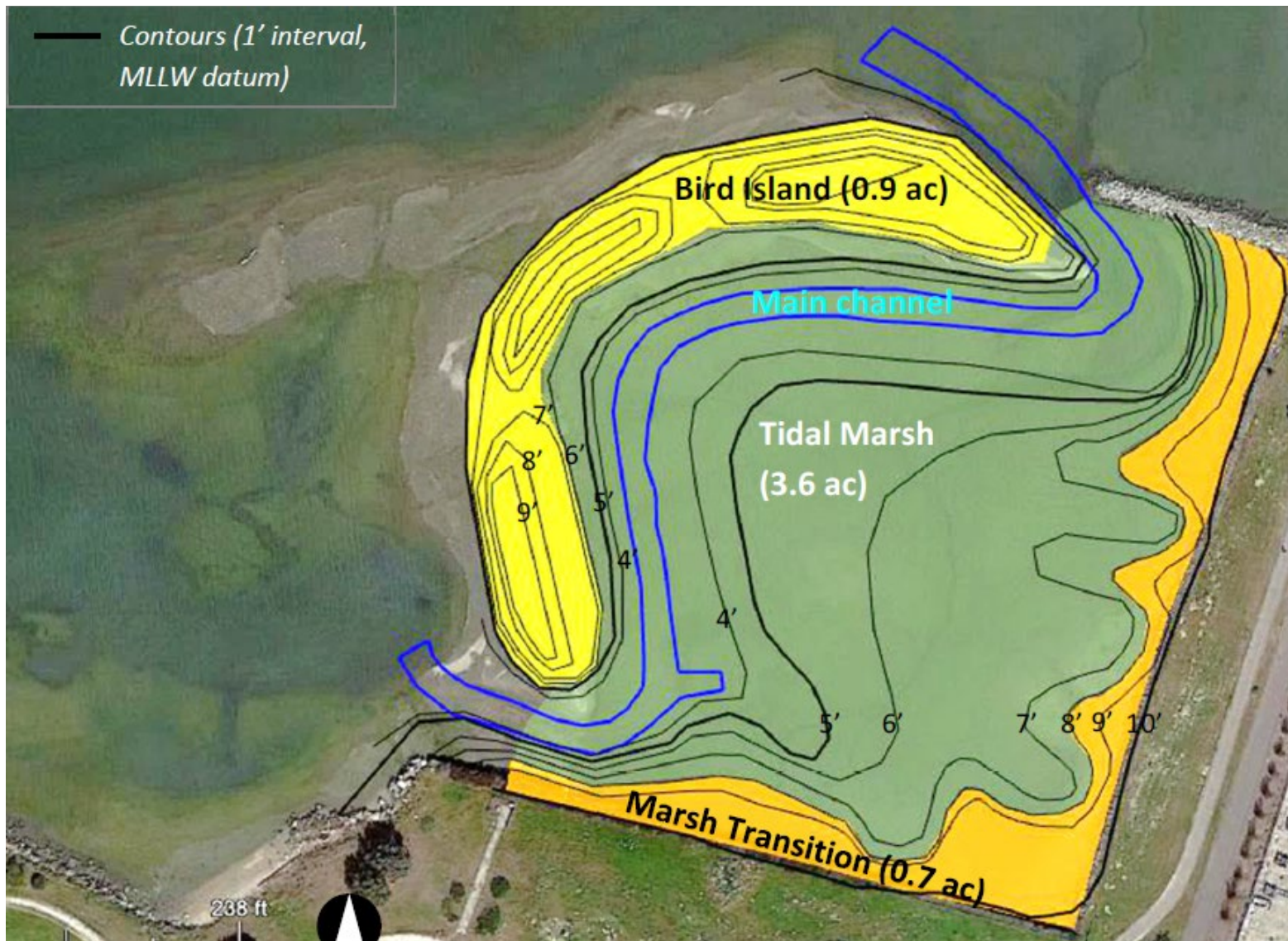


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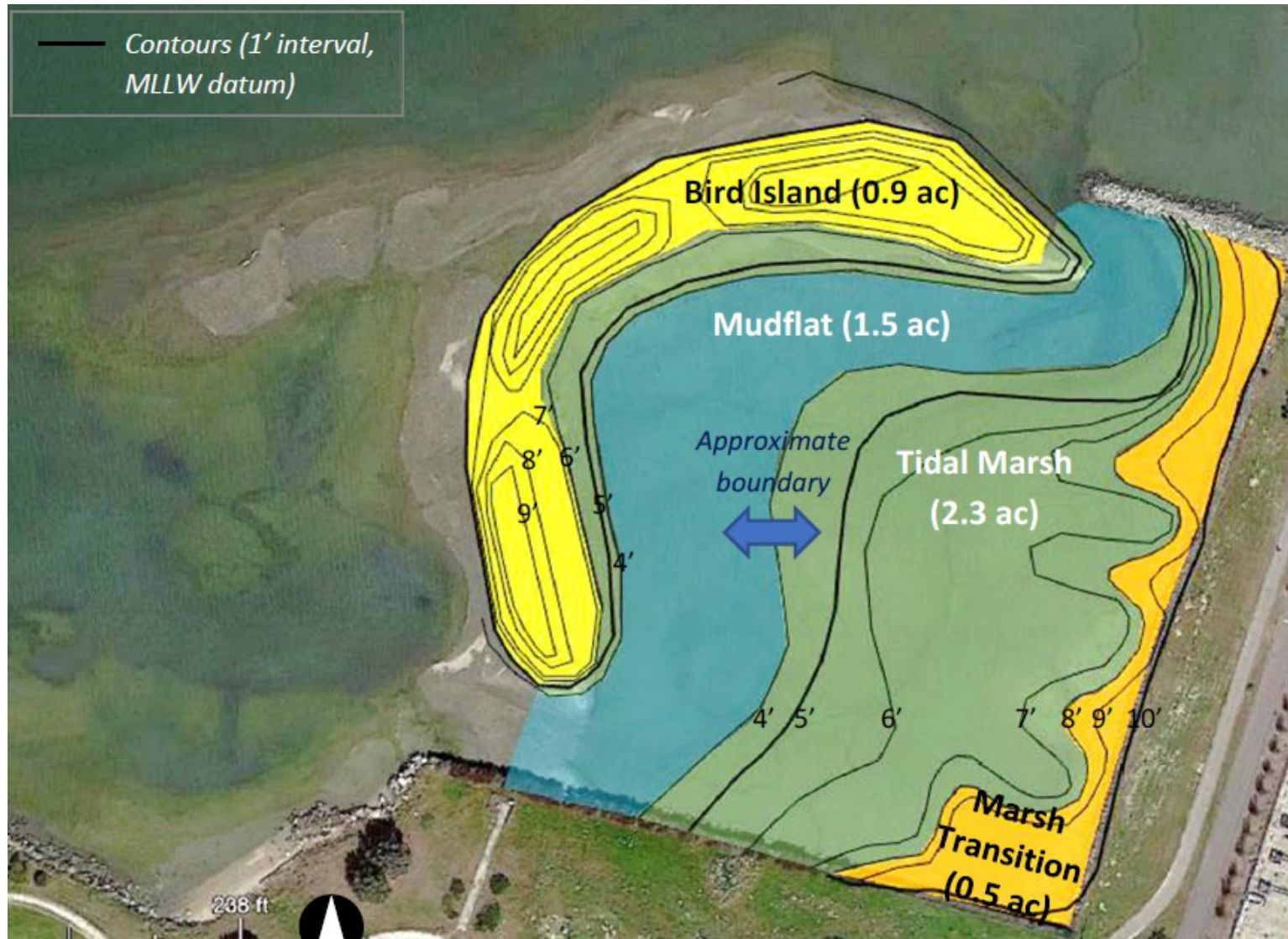


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Alternative 1 – Tidal Marsh



Alternative 2 – Interspersed Estuarine Habitats

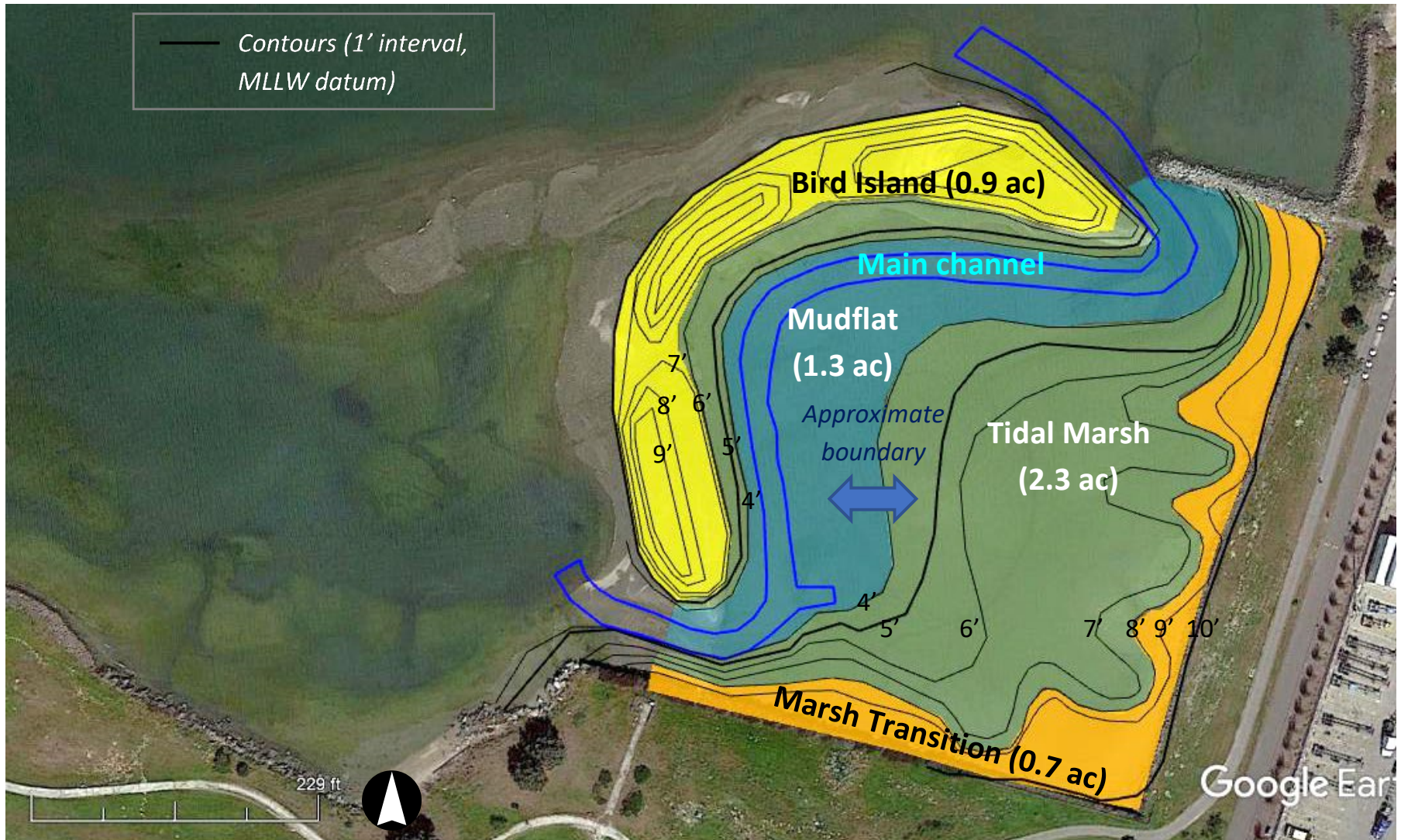


Alternative 3 – Current Mudflat



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Alternative 4 – Interspersed Habitats



Educational Marsh Decision

- Alternative 3 meets marsh criteria but doesn't meet avian roosting habitat criteria.
- Alternative 4 – more transition habitat; meets criteria, incorporates mudflat. Meets Avian Roosting Habitat requirement.



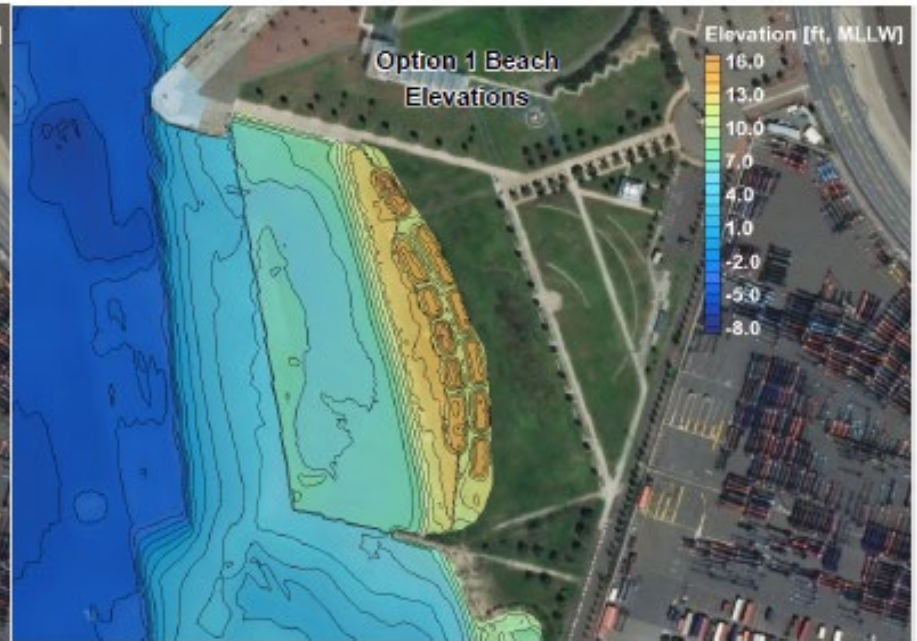
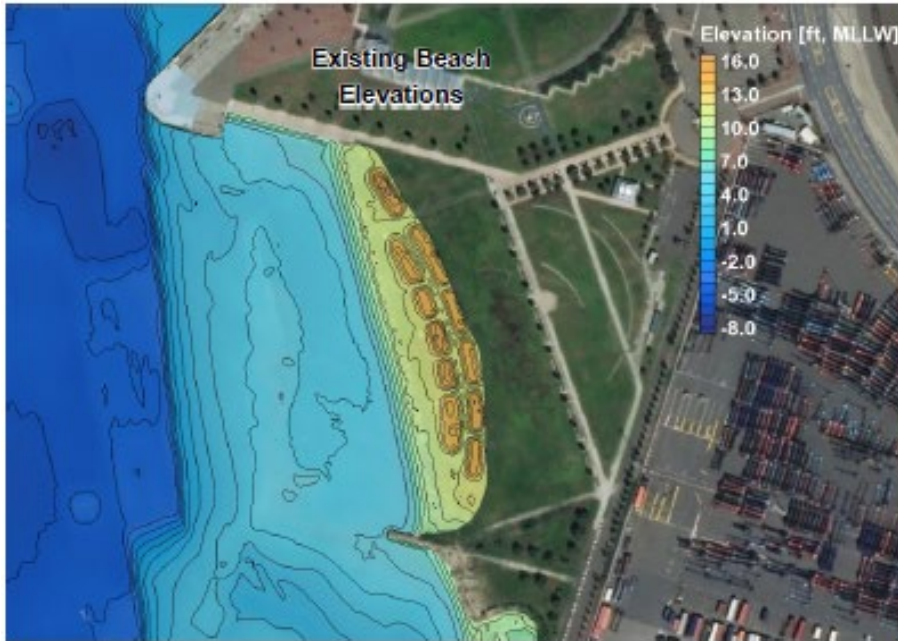
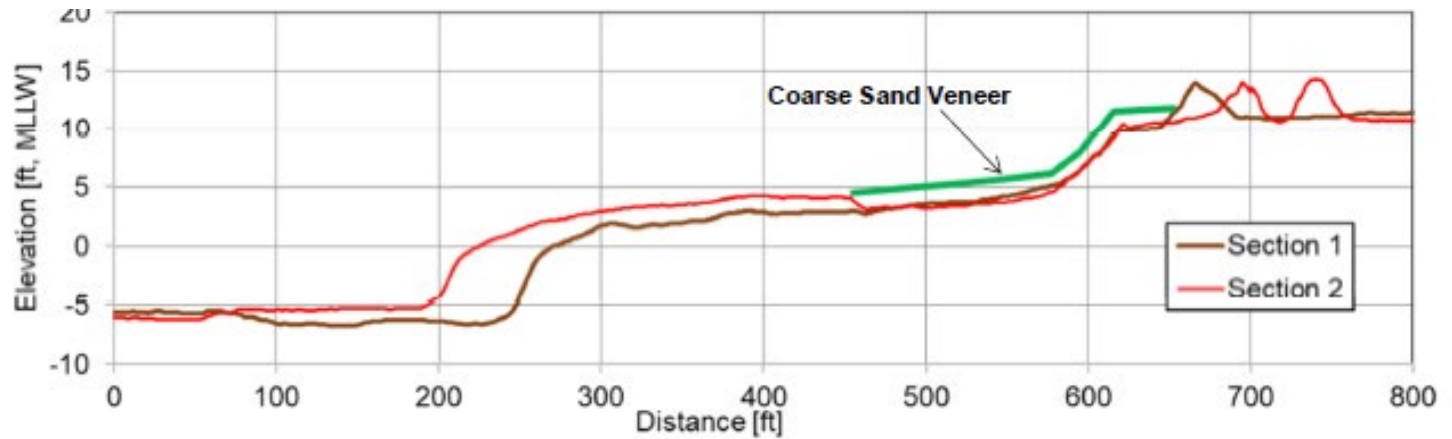
Beach Area – Alternative 1

Current Condition

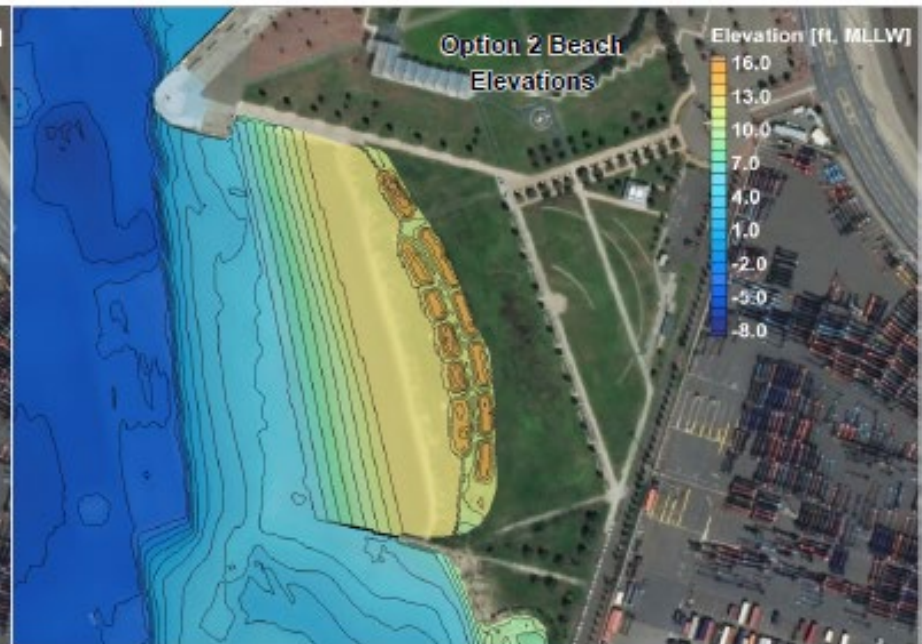
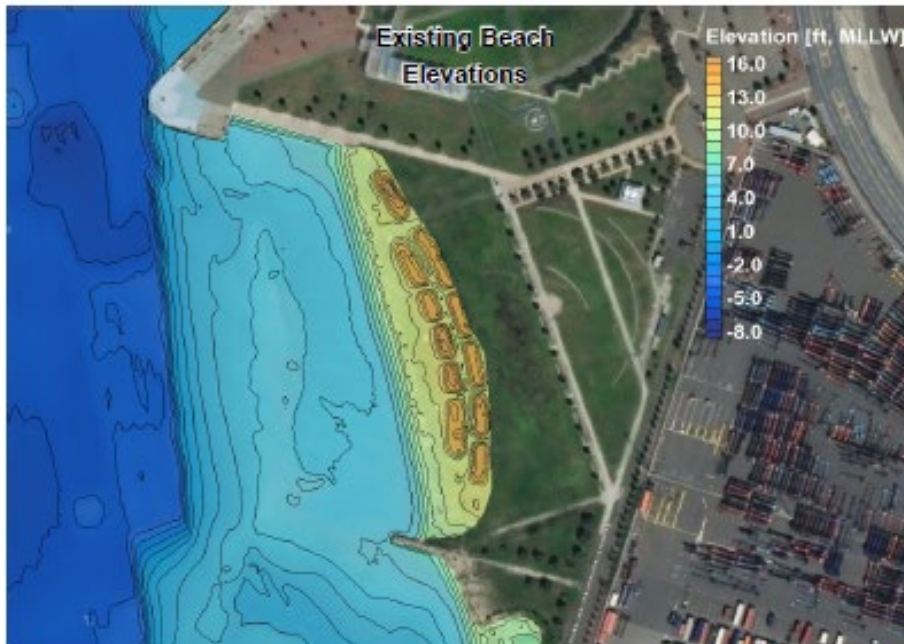
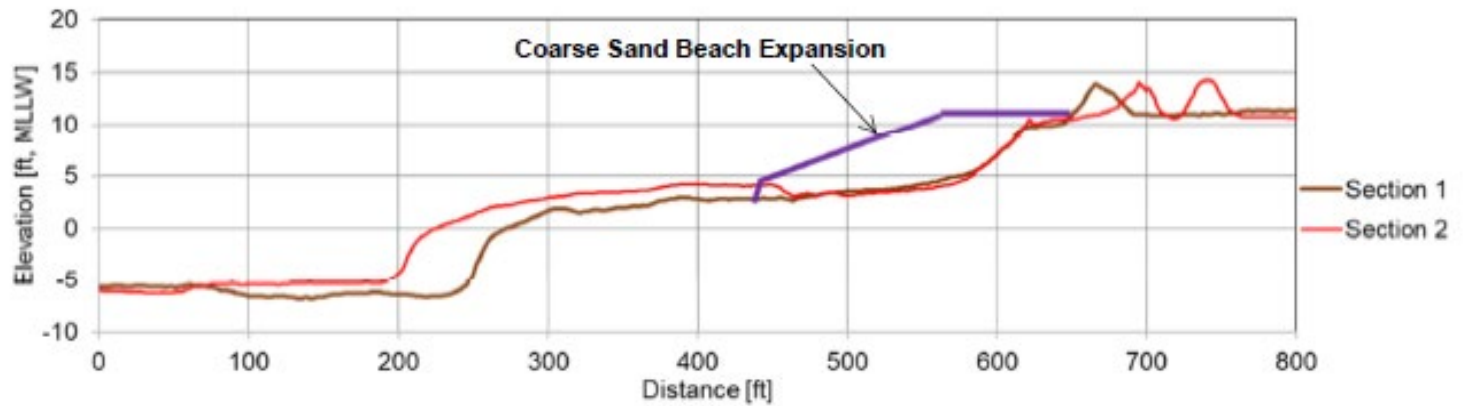


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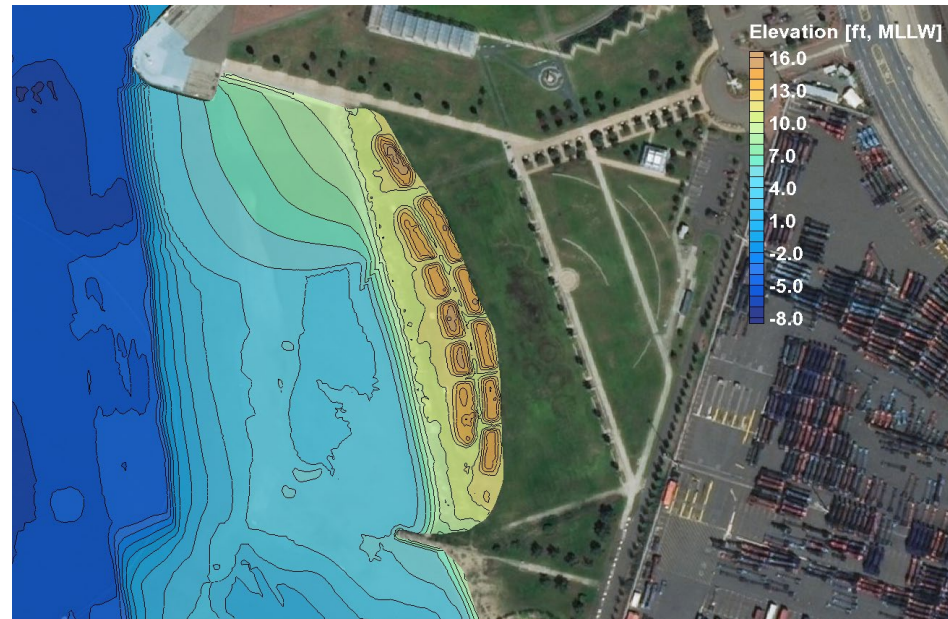
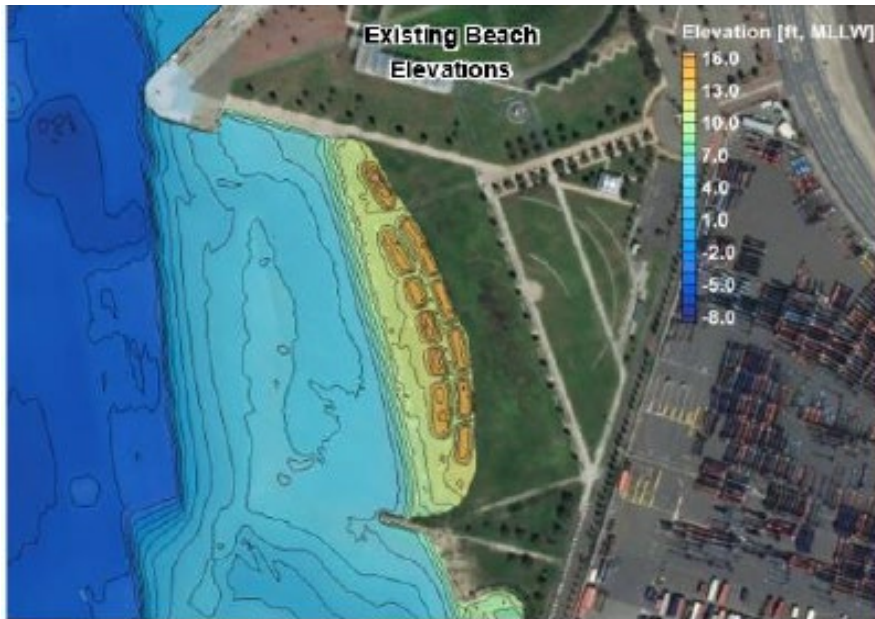
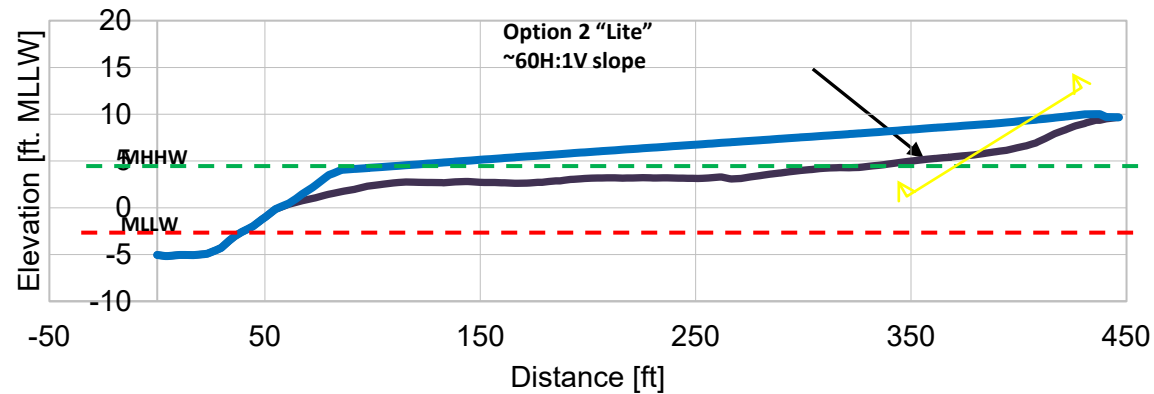
Beach Area – Alternative 2



Beach Area – Alternative 3



Beach Area – Alternative 4



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Beach Decision

- No criteria given for beach (all qualify)
- Ability to “touch the water” (original intent)
- Alternative 4 – allows for public access to water



Design Charrette Background

- 4/19/19 – BCDC requests design charrette during a TAC meeting
- Spring/Summer 2019 – Port staff engaged BCDC and procured funding for TAC, sent information to team
- November 2019 - Charrette team performed site visit with Port/USACE/BCDC followed by 1-day TAC
- 12/13/19 Post Charrette follow up meeting
- April 2020 – Draft designs submitted to Port/USACE and BCDC
- May 2020 – shared designs with BCDC. Gathered agency input.
- May 2020 – shared designs with technical advisory committee (TAC). TAC voted unanimously on designs.





The Takeaway

- Early agency coordination is important
- Efficient way to make progress (13 months total)
- Good value (< \$75,000)
- Document EVERYTHING



Thank you to the
charrette team –

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Dilip Trivedi,
Eric Jolliffe (USACE),
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