

Moody Point on Great Bay

Workshop #3

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Property Owner:

Moody Point Community
Association

Team Coordinator:

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Project Goals

- Address shoreline erosion
- Improve kayak storage and water access, if feasible
- Promote aggradation of healthy salt marsh



Project Scope & Focal Areas

- Central Upland
- Water Access
- Central Shore
- West Shore



Site Challenges: Upland

- Limited opportunities for stormwater retention
- Sloping grade to the shoreline
- Runnels/channeling over the coastal bank
- Undefined walking paths
- Compacted soils
- Expansive watercraft storage / Limited tiered storage



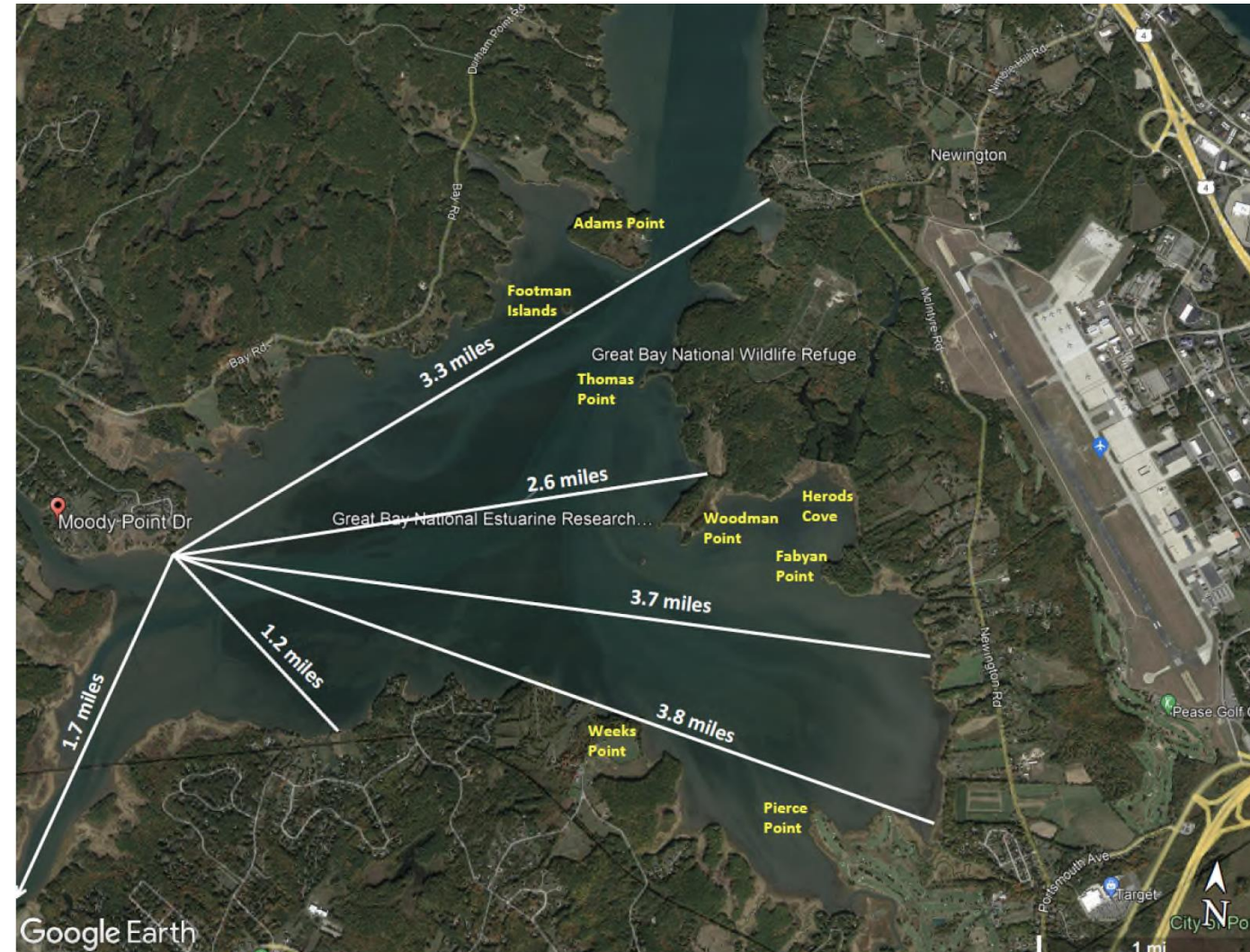
Site Challenges: Water Access

- Stairs at beginning of dock
- Challenging gangway slope at low tide
- Narrow gangway width impedes hauling of watercraft



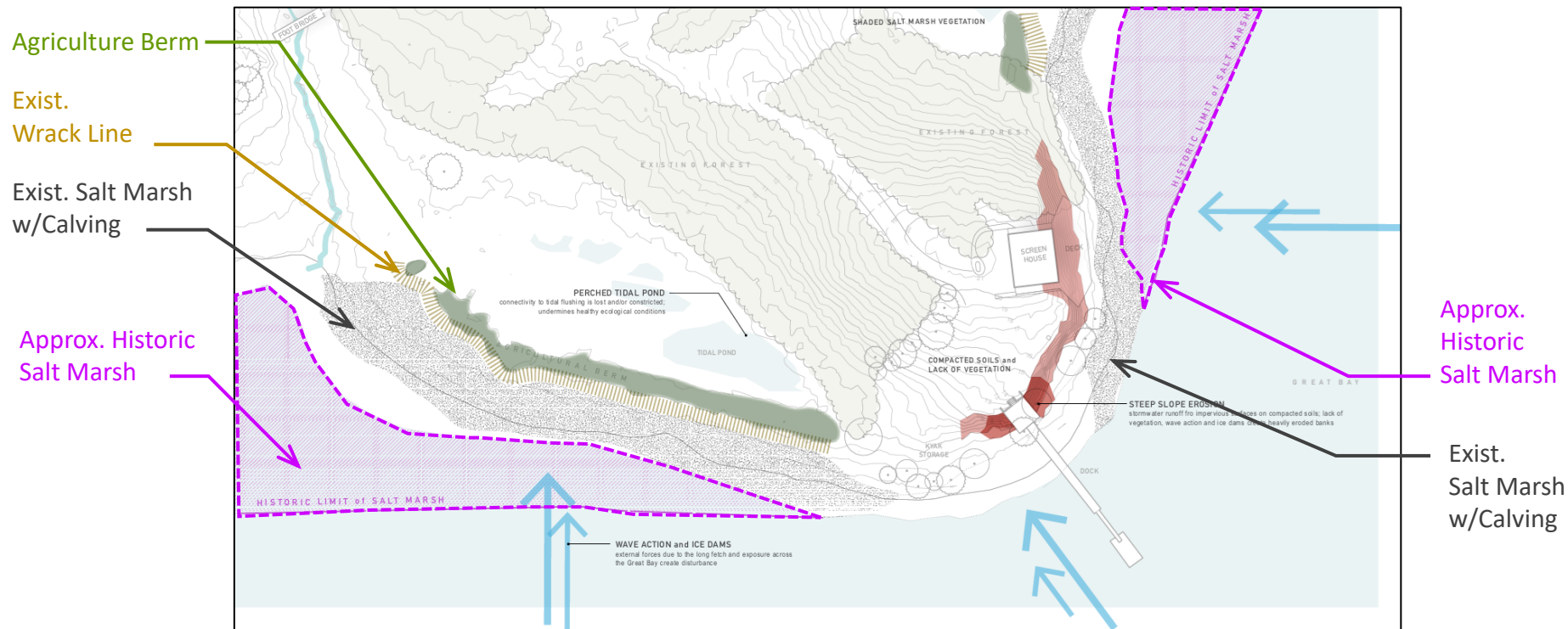
Site Challenges: Shoreline Erosion

- Exposure to wave action
- Compromised tree roots
- Exposed bedrock
- Tidal range and sea level rise



Site Challenges: Salt Marsh Regression

- Undercutting/collapse, ice rafting and wave action = main causes of salt marsh loss;
- Historic agriculture berm on the west shore accumulates wrack, limits salt marsh migration, & restricts flushing



Sea Level Rise, Marsh Migration, and the Consequences of No Action



2014 Baseline Marsh



2050 Predicted Marsh Migration



MHHW Baseline Extents



MHHW +1-foot SLR Extents



MHHW + 2-foot SLR Extents

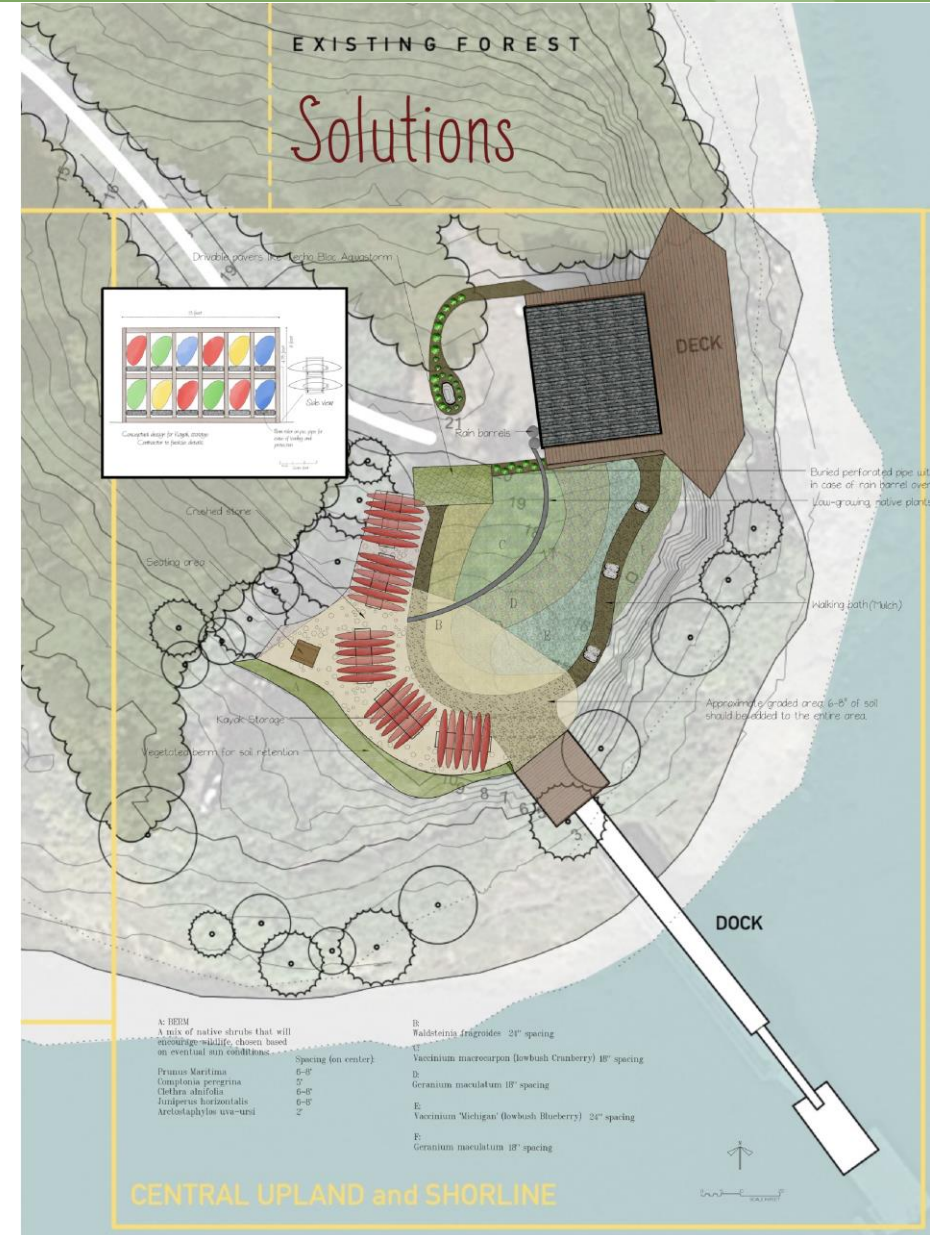
Central Upland - Concept Mitigation Measures

Challenges



-Runoff

-Kayak access/ease of use/storage



Central Upland - Concept Mitigation Measures



Central Upland - Concept Mitigation Measures





Before

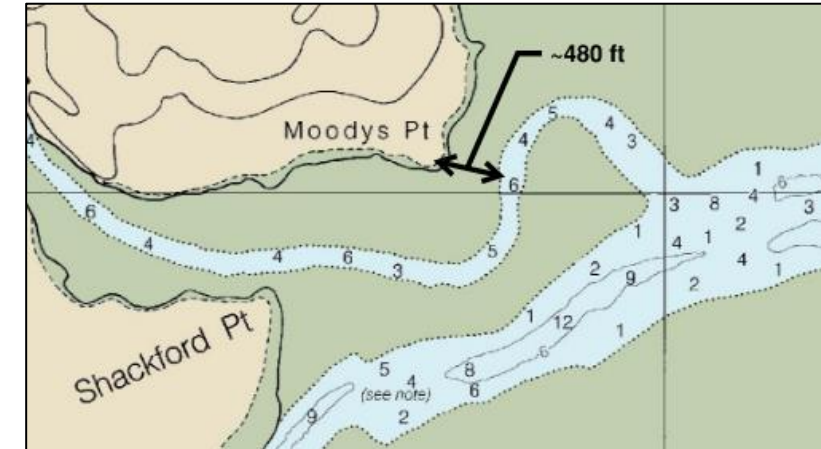
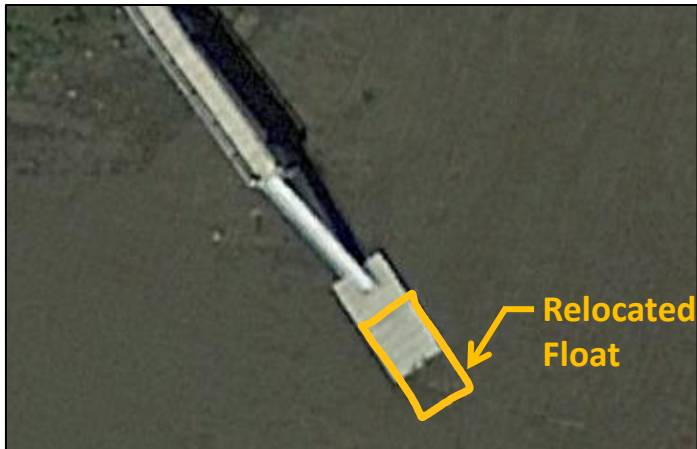
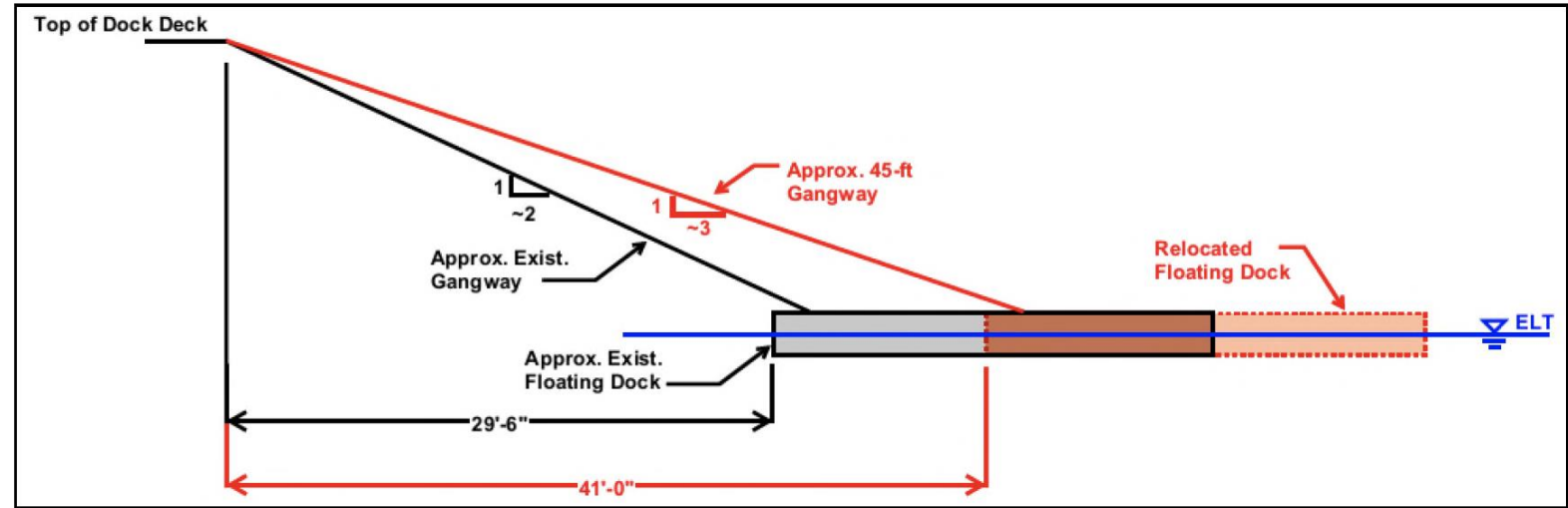


After

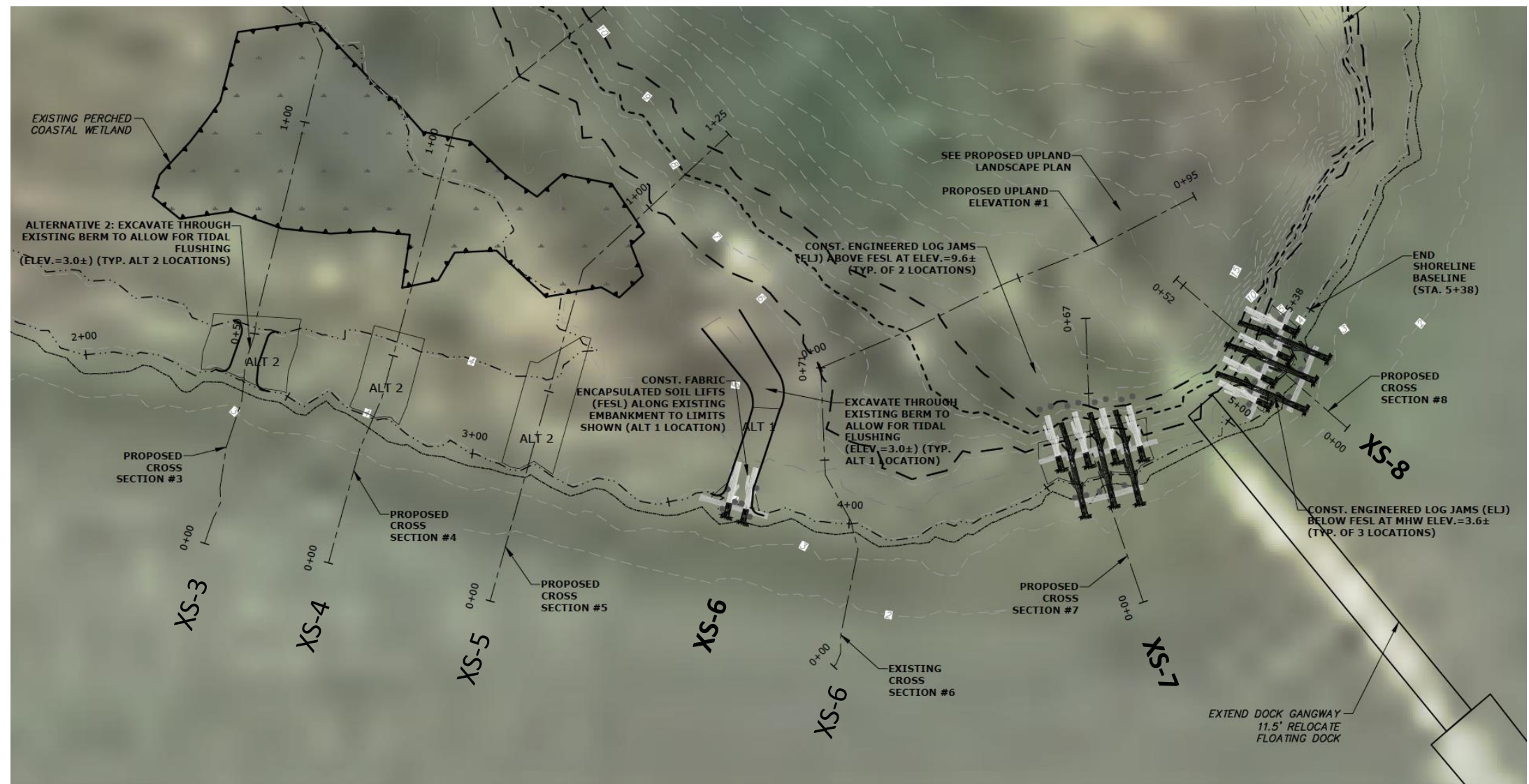


Water Access - Gangway

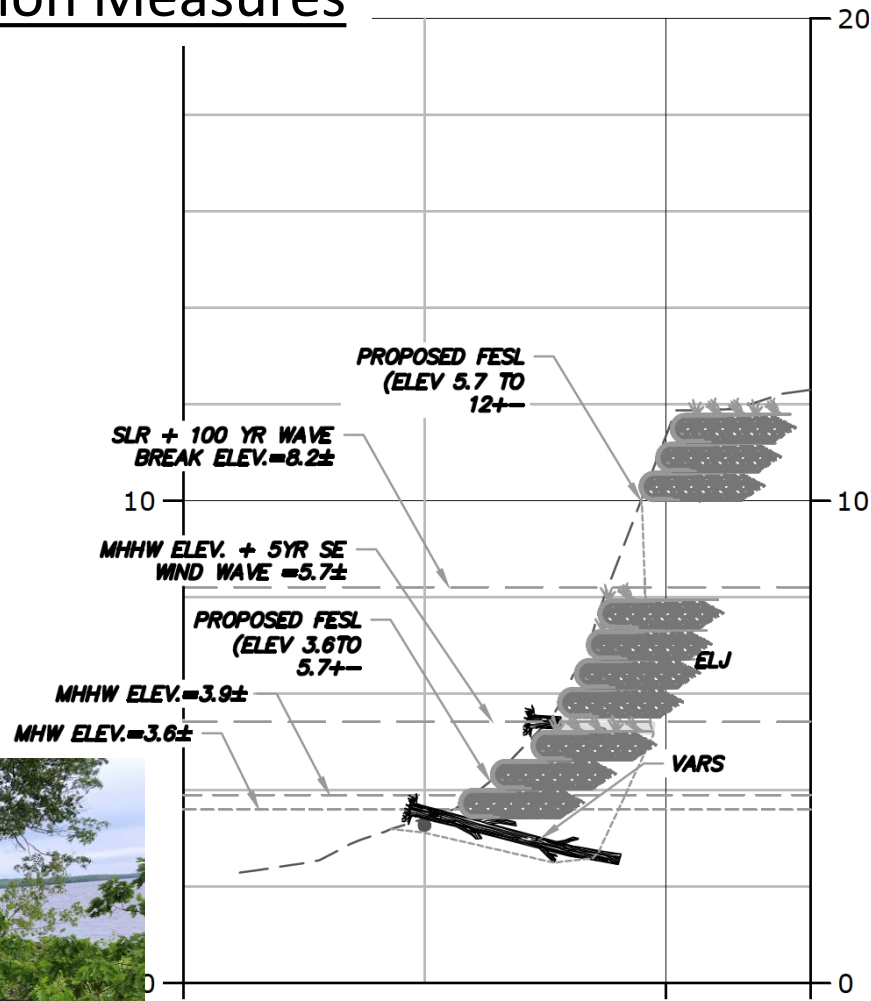
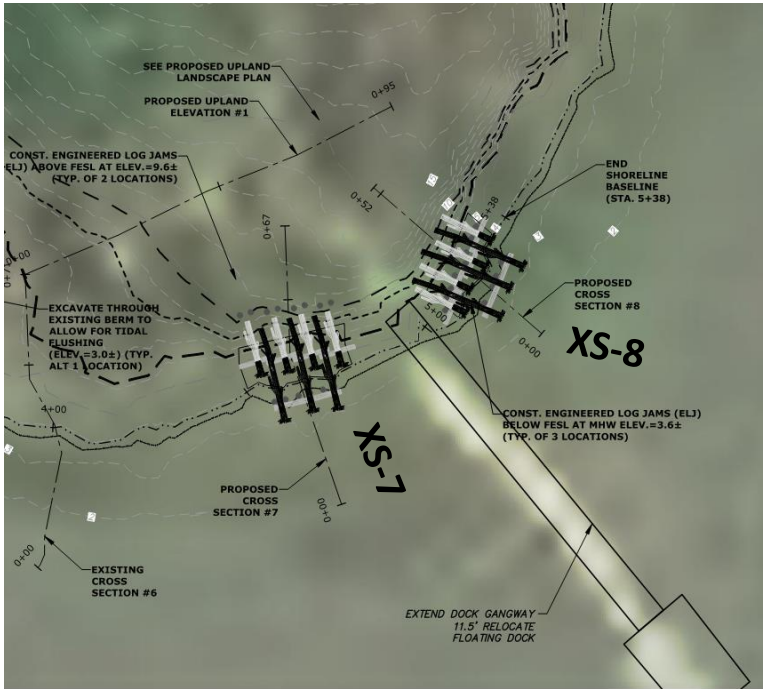
- Replace gangway with a wider and longer gangway (~45' long)
- Relocate float more waterward to receive the longer gangway



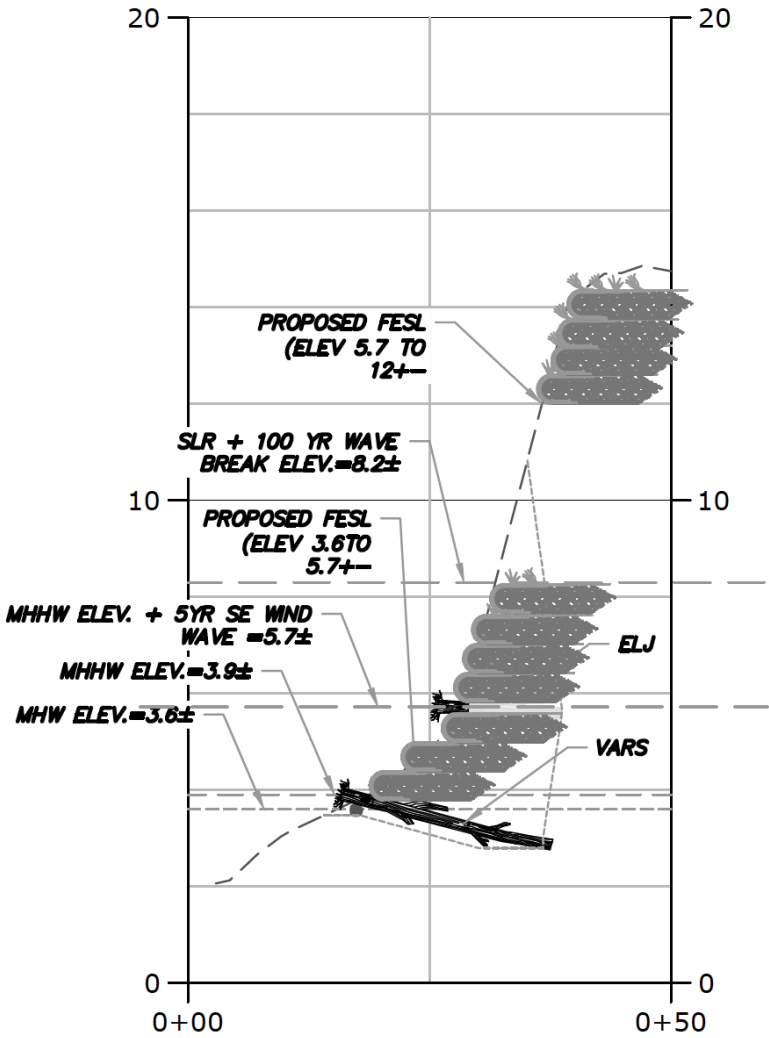
Central and West Shore – Concept Mitigation Measures



Central Shore – Concept Mitigation Measures



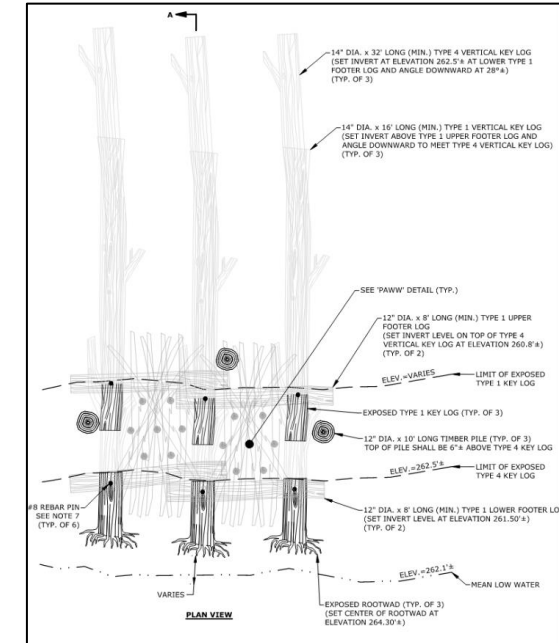
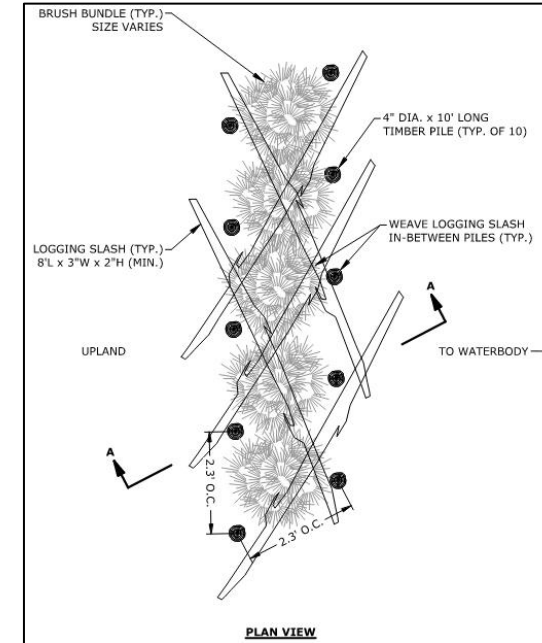
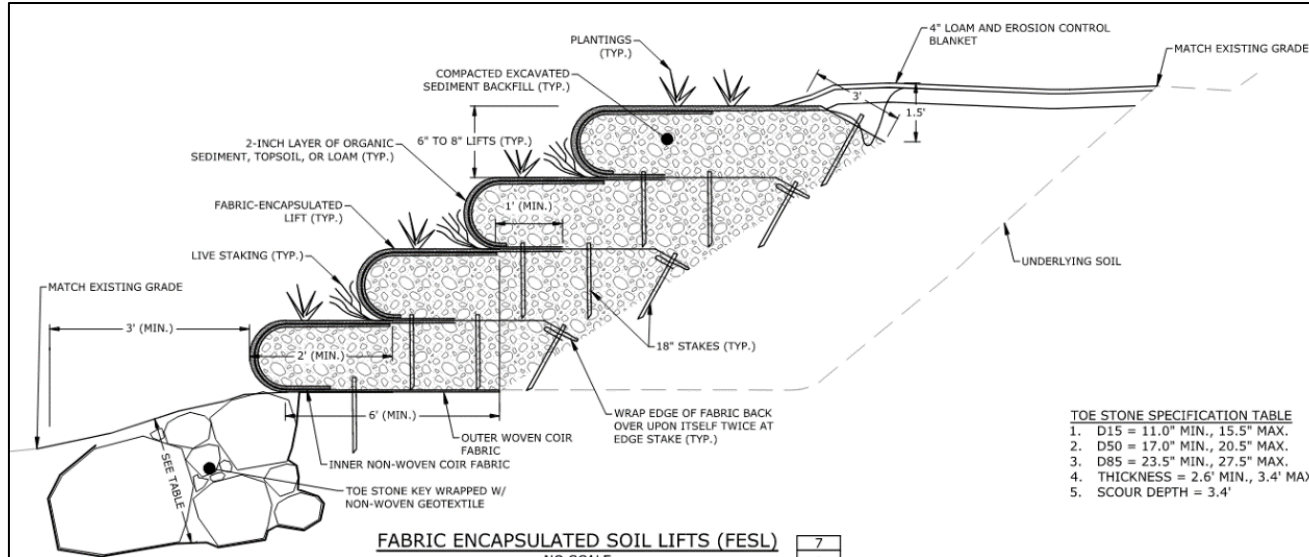
XSEC7 - STA: 0+00 TO 0+65



XSEC8 - STA: 0+00 TO 0+50



Central Shore – Concept Mitigation Measures



FES with Toe Rock
Upper Bank Failure Treatment

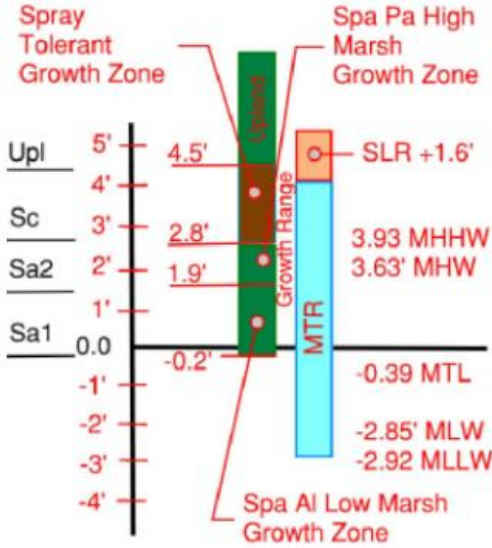
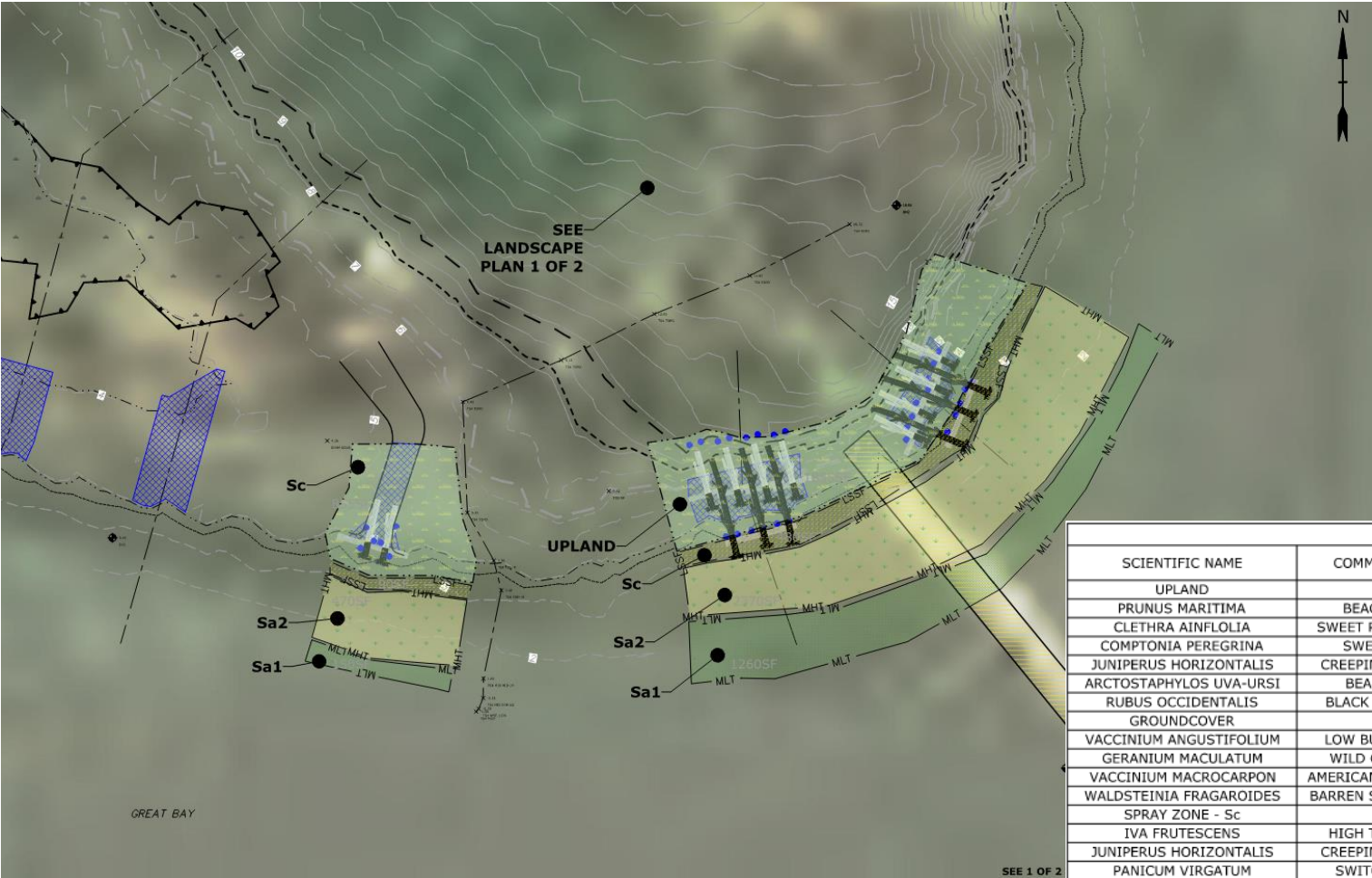


Brush Aggradation Bundle
Avulsion/Calving Areas



Toe Wood and Breakwater
Ice and Wave Energy Dissipation

Central and West Shore - Concept Planting Schedule



LIVING SHORELINE PLANTING SCHEDULE					
SCIENTIFIC NAME	COMMON NAME	PLANT SIZE	PLANTING DISTANCE (O.C.)	QUANTITY	NOTES
UPLAND			SF	TBD	PLANTING ZONE UPLAND SLOPE
PRUNUS MARITIMA	BEACH PLUM	1 gal	6-8 feet		INSTALL ON BERM
CLETHRA AINFLOLIA	SWEET PEPPERBUSH	18" TO 24"-1 Gal	6-8 feet		INSTALL ON BERM
COMPTONIA PEREGRINA	SWEET FERN	1 Gal	5 feet		INSTALL ON BERM
JUNIPERUS HORIZONTALIS	CREeping JUNIPER	1 Gal	6-8 feet		INSTALL ON BERM
ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	1 Gal	2 feet		INSTALL ON BERM
RUBUS OCCIDENTALIS	BLACK RASBERRY	18" TO 24"	4'		INSTALL AROUND PERIMETER
GROUNDCOVER				TBD	PLANTING ZONE UPLAND
VACCINIUM ANGUSTIFOLIUM	LOW BUSH BERRY	3" TO 5"	1' TO 2'		INSTALL THROUGHOUT SITE (SCATTERED)
GERANIUM MACULATUM	WILD GERANIUM	1 Gal	24 Inches		UPLAND GROUNDCOVER
VACCINIUM MACROCARPON	AMERICAN CRANBERRY	1 Gal	18 Inches		UPLAND GROUNDCOVER
WALDSTEINIA FRAGAROIDES	BARREN STRAWBERRY	1 Gal	24 Inches		UPLAND GROUNDCOVER
SPRAY ZONE - Sc			SF		PLANTING ZONE Sc - SPRAY ZONE
IVA FRUTESCENS	HIGH TIDE BUSH	TRANSPLANT*	2 Feet		
JUNIPERUS HORIZONTALIS	CREeping JUNIPER	1 Gal	6-8 Feet		
PANICUM VIRGATUM	SWITCHGRASS	1 Gal	2 Feet		
HIGH MARSH - Sa2			SF	TBD	PLANTING ZONE Sa2 - HIGH MARSH
SPARTINA PATENS	SALTMEADOW CORDGRASS	MAT	2 Feet		
DISTICHLIS SPICATA	SALTGRASS	1 Gal	8 Feet		
JUNCUS GERARDII	BLACK NEEDLE RUSH	1 Gal	8 Feet		
LOW MARSH - Sa1			SF	TBD	PLANTING ZONE Sa1 - LOW MARSH
SPARTINA ALTERNATA	SMOOTH CORDGRASS	MAT	2 Feet		

Considerations & Next Steps

- Phasing: Construction access and sequencing
- North Shore/Screenhouse Deck Foundation
- Permitting



Thank you!

