PERMIT DOCUMENTS FOR PENSACOLA BAY LIVING SHORELINE

PD 17-18.027/PO 191138
VOLKERT PROJECT #1033000.848

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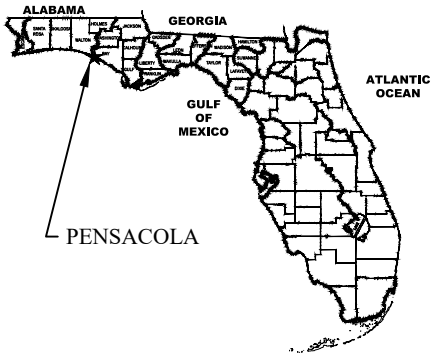

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DISTRICT TWO	DOUG UNDERHILL
DISTRICT THREE	LUMON MAY
DISTRICT FOUR	ROBERT BENDER
DISTRICT FIVE	STEVEN BARRY

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PLANS PREPARED BY:

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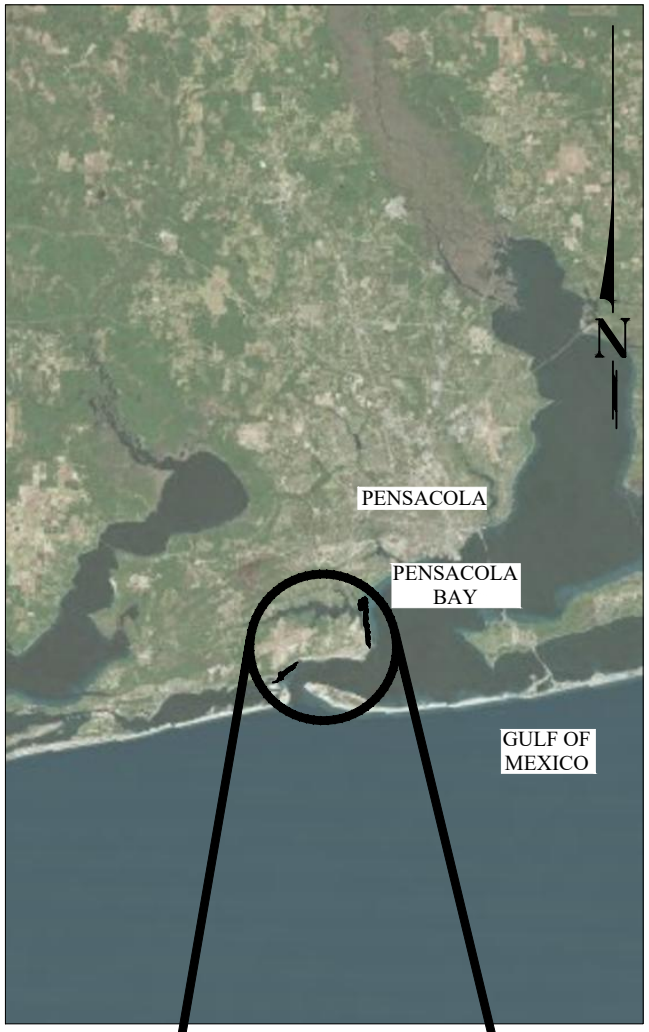

VICINITY MAP

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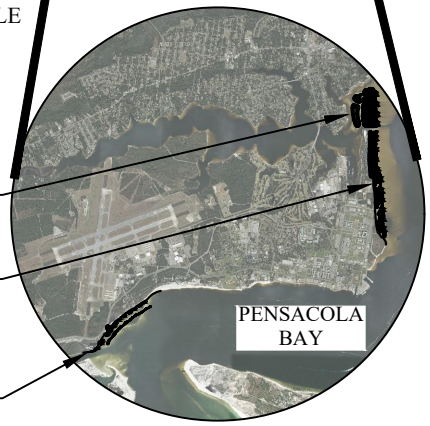


PROJECT MANAGER: MATT POSNER	
SECTION / TOWNSHIP / RANGE: 1 / 3S / 31	DISTRICT: 2
PROJECT ENGINEER: MIKE WARNKE	REG FLA ENG NO: 64091
SIGNATURE:	DATE:

GENERAL NOTES:

1. IF ARCHAEOLOGICAL MATERIAL/PREHISTORIC ARTIFACTS SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME, THE PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE APPLICANT/RECIPIENT, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AND THE DSH/FEMA REGION IV ENVIRONMENTAL OFFICER AND FDEM STATE ENVIRONMENTAL LIAISON OFFICER FOR FURTHER GUIDANCE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.

2. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH F.S. 872.05.

3. STORAGE, STOCKPILING OR ACCESS OF EQUIPMENT ON, IN, OVER OR THROUGH SAV, WETLANDS OR VEGETATED DUNES IS PROHIBITED. NO CONSTRUCTION ACTIVITY INCLUDING DREDGED MATERIAL DISPOSAL WILL BE CONDUCTED IN THE EXISTING WETLAND AREA AT ROCK ISLAND.

4. ALL CONSTRUCTION PERSONNEL SHALL BE ADVISED THAT MIGRATORY BIRDS ARE PROTECTED BY THE FLORIDA ENDANGERED AND THREATENED SPECIES ACT OF 1977 (SECTION 372.072, FLORIDA STATUTES), AND THE U.S. FISH AND WILDLIFE SERVICE PURSUANT TO THE MIGRATORY BIRD TREATY ACT OF 1918 AND THE ENDANGERED AND THREATENED SPECIES ACT OF 1982, AS AMENDED. THE CONTRACTOR SHALL NOT HARM OR HARASS THE BIRDS, THEIR EGGS OR THEIR NESTS AS A RESULT OF THE CONSTRUCTION.

5. IN-WATER WORK, INCLUDING DREDGING, FILLING, AND DEWATERING OPERATIONS MUST COMPLY WITH THE NATIONAL MARINE FISHERIES SERVICE (NMFS) "SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS" AND FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) STANDARD MANATEE CONDITIONS FOR IN-WATER WORK, 2009" ITEMS A, B, D, AND E.

SURVEY NOTES:

1. TYPE OF SURVEY: TOPOGRAPHIC AND HYDROGRAPHIC

2. HORIZONTAL INFORMATION ON THIS PLAT IS REFERENCED TO FLORIDA STATE PLANE COORDINATE SYSTEM NORTH ZONE.

3. THIS SURVEY WAS ACCOMPLISHED UTILIZING AN AUTOMATED SOUNDING SYSTEM. THE DECIMAL POINT IN THE SOUNDING REPRESENTS THE LOCATION WHERE THE SOUNDING WAS ACQUIRED. ALL SOUNDINGS SHOWN WITH A "-" SIGN ARE DEPTHS BELOW ZERO NAVD 88 DATUM. ALL SOUNDINGS THAT APPEAR WITHOUT A "+" SIGN ARE ELEVATIONS ABOVE ZERO NAVD 88 DATUM. SOUNDINGS ARE IN FEET AND TENTHS,

4. ELEVATIONS ARE REFERENCED TO NAVD 88 (USING GEOID 12B) ESTABLISHED BY RTK GPS UTILIZING FLDOT NETWORK AS A CONTINUOUSLY OPERATING REFERENCE STATION.

5. DATE OF FIELD SURVEY: APRIL, MAY, 2020 AND MAY 2021.

6. STANDARDS OF PRACTICE FOR SURVEYING REQUIRE THAT "THE HORIZONTAL POSITION OF PHYSICAL FEATURES MUST BE PLOTTED TO 1/100TH INCH OF FINAL MAP SCALE." DIMENSIONS "SNAPPED" FROM THE ELECTRONIC VERSION OF THIS MAP SHOULD BE CONSIDERED TO BE NO MORE ACCURATE THAN 1/100TH OF THE MAP SCALE NOTED. CRITICAL CLEARANCE DIMENSIONS MUST BE FIELD CHECKED.

7. SOUNDINGS WERE ACQUIRED WITH A TELEDYNE ODOM ECHOTRAC CV100DF SOUNDER AND 208 KHZ TRANSDUCER.

TURBIDITY NOTES:

1. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN IN THE PLANS, AS REQUIRED BY THE PERMIT AND AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTION PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. AS REQUIRED, THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROL TO ENSURE THE SITE MEETS ALL FEDERAL, STATE, AND LOCAL REGULATIONS. BEST MANAGEMENT PRACTICES (BMP) FOR EROSION AND SEDIMENTATION CONTROL AND DEWATERING OPERATIONS SHALL MEET OR EXCEED REGULATIONS AND STATUTORY REQUIREMENTS.

2. TURBIDITY SCREENS SHALL BE SET A MINIMUM OF 3 FEET OFF THE EDGE OF THE SEA GRASSES UNLESS OTHERWISE DOCUMENTED IN THE PLANS AND OTHER CONSTRUCTION DOCUMENTS.

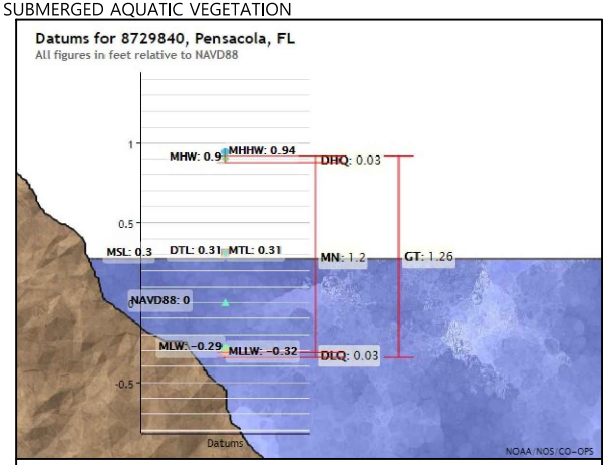
3. THE CONTRACTOR SHALL PROPERLY ISOLATE THE DREDGING ACTIVITIES WITH TURBIDITY SCREENS TO PREVENT DREDGED MATERIAL (SPOIL), SEDIMENTS AND TURBID WATER FROM ENTERING ADJACENT WETLANDS OR WATERS OF THE STATE. ALL DREDGED MATERIAL PLACED AT TEMPORARY AND PERMANENT SPOIL SITES SHALL BE PROTECTED FROM EROSION BY PLACING BARRIERS (E.G. SILT FENCE, SAND BAGS, OR DIKES) AROUND THEIR PERIMETER TO PREVENT THE ESCAPE OF SEDIMENTS ONTO ADJACENT PROPERTY.

4. A TURBIDITY SCREEN SHALL BE INSTALLED AROUND THE DREDGING VESSEL DURING DREDGING OPERATIONS.

5. INSTALL ADDITIONAL TURBIDITY CURTAINS AS NEEDED TO PREVENT MIGRATION OF SEDIMENT TO OTHER PORTIONS OF THE BAY.

6. THE TURBIDITY OF THE SURFACE WATER SHALL NOT EXCEED 29 NTU'S OVER THE BACKGROUND TURBIDITY. IN THE EVENT THAT THE TURBIDITY IS RAISED ABOVE THE ACCEPTABLE LIMIT, ALL DREDGING ACTIVITIES SHALL BE STOPPED, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL BE NOTIFIED, AND THE CONTRACTOR SHALL WORK WITH THE FDEP TO REMEDIATE ANY DAMAGE THAT OCCURRED.

7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BEST MANAGEMENT PRACTICES FOR CONTROLLING RUNOFF AND TURBIDITY FROM DREDGING AND DREDGED MATERIAL DISPOSAL OPERATIONS BY UTILIZING MEASURES SUCH AS TURBIDITY BARRIERS AND CONTROL OF DREDGING OPERATIONS TO ASSURE DREDGED MATERIAL AND TURBIDITY DOES NOT IMPACT SUBMERGED AQUATIC VEGETATION LOCATED IN THE VICINITY OF THE PROJECT OR EXCEED WATER QUALITY STANDARDS AS SPECIFIED BY THE FDEP. TURBIDITY GENERATED BY THE PROJECT MUST NOT RESULT IN AN INCREASE OF MORE THAN 29 NEPHELOMETRIC TURBIDITY UNITS (NTU) ABOVE BACKGROUND LEVELS IN WATERS OUTSIDE OF A 150 METER MIXING ZONE FROM THE ACTIVITY OR AT THE EDGE OF SAV. TURBIDITY MONITORING AND REPORTING WILL BE CONDUCTED IN ACCORDANCE WITH FDEP REQUIREMENTS AS SET FORTH IN THE PROJECT PERMIT. THE CONTRACTOR WILL ADHERE TO THE FDEP PERMIT CONDITIONS FOR THE PROTECTION OF SUBMERGED AQUATIC VEGETATION



DATUM CHART

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 2 OF 50			

MIKE WARNKE
FL PE 28976

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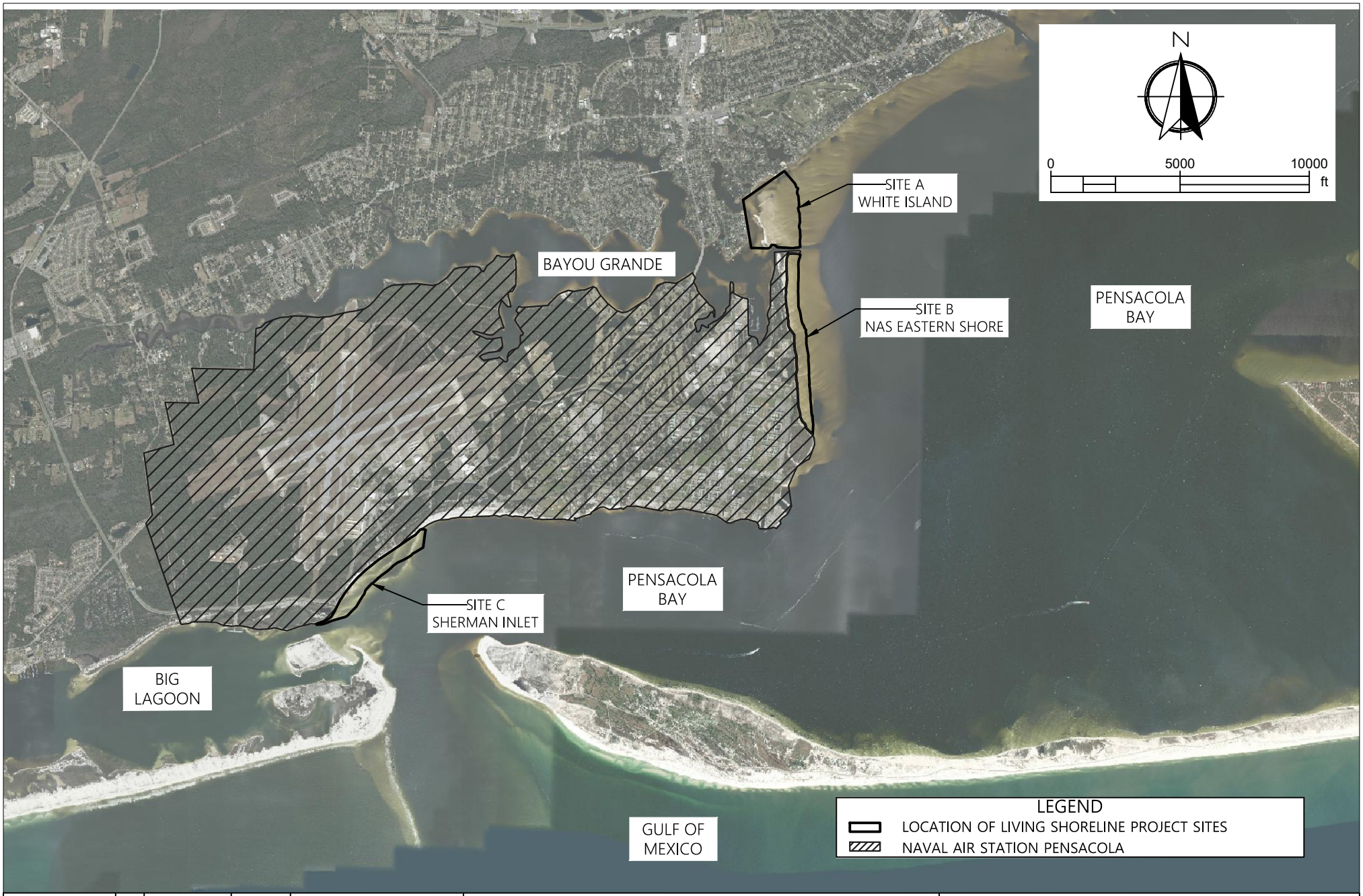
PENSACOLA BAY LIVING SHORELINE
GENERAL NOTES



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SHEET 3 OF 50			

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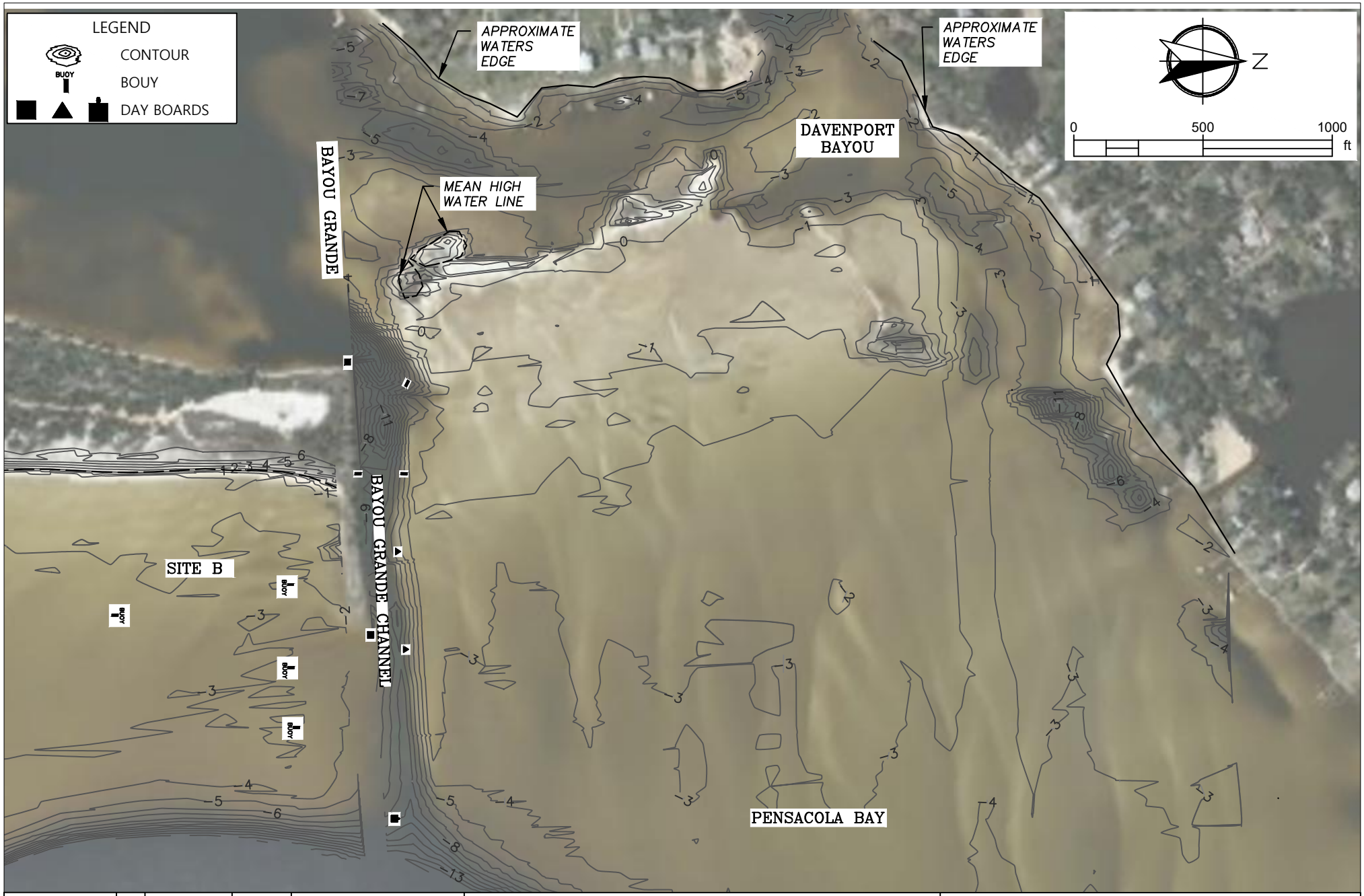
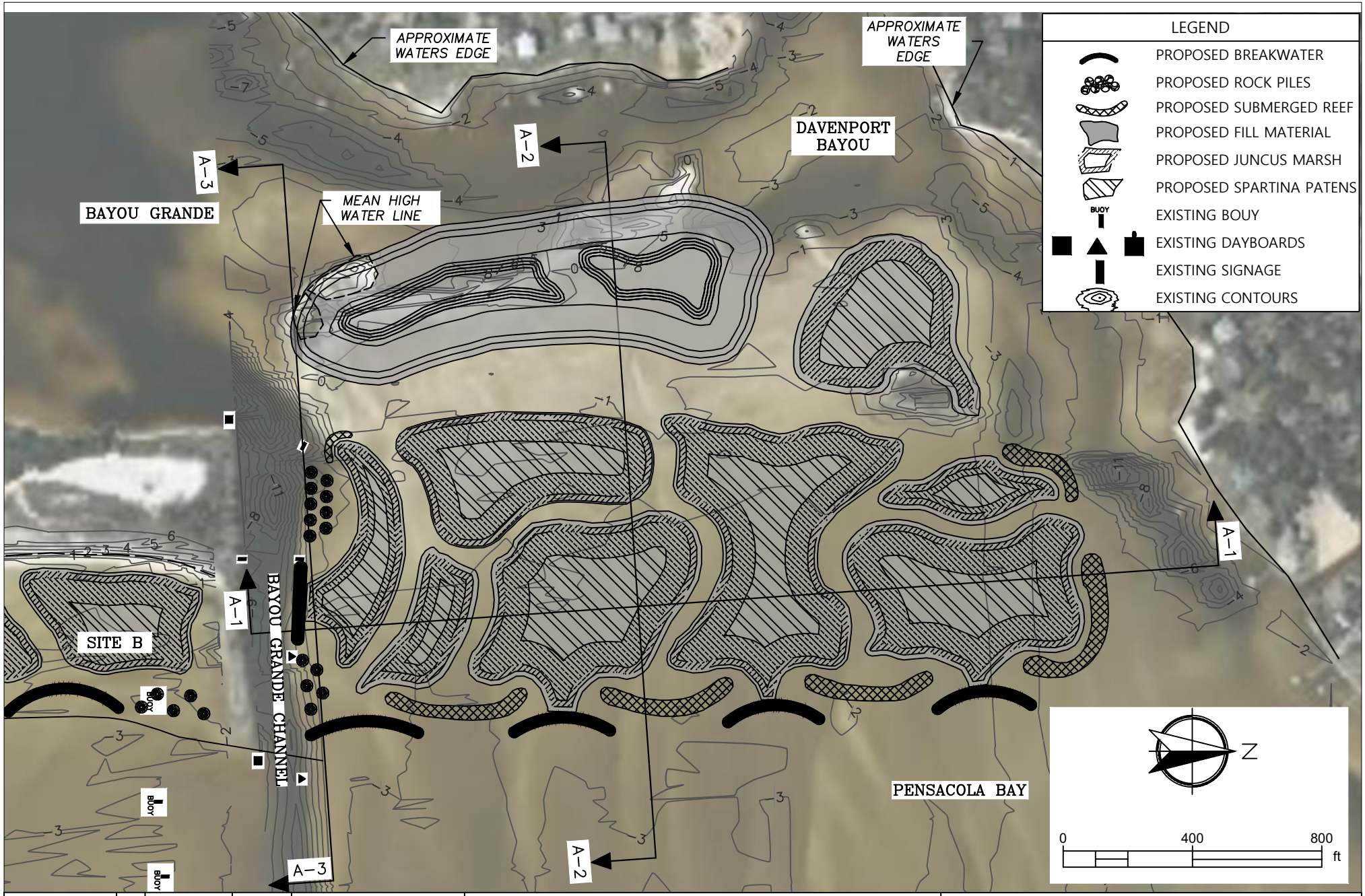
PENSACOLA BAY LIVING SHORELINE VICINITY MAP



PROJECT NUMBER 1033000.848 SHEET 4 OF 50	NO.	REVISIONS	DATE	MIKE WARNKE FL PE 28976	VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935	PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND EXISTING CONDITIONS
					DRAWN BY SC / DESIGNED BY VARIES / QA/QC MANAGER / CHECKED BY MIKE WARNKE		
					SECTION/TOWNSHIP/RANGE / DISTRICT / DATE JUNE 2021		



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SHEET 5 OF 50			

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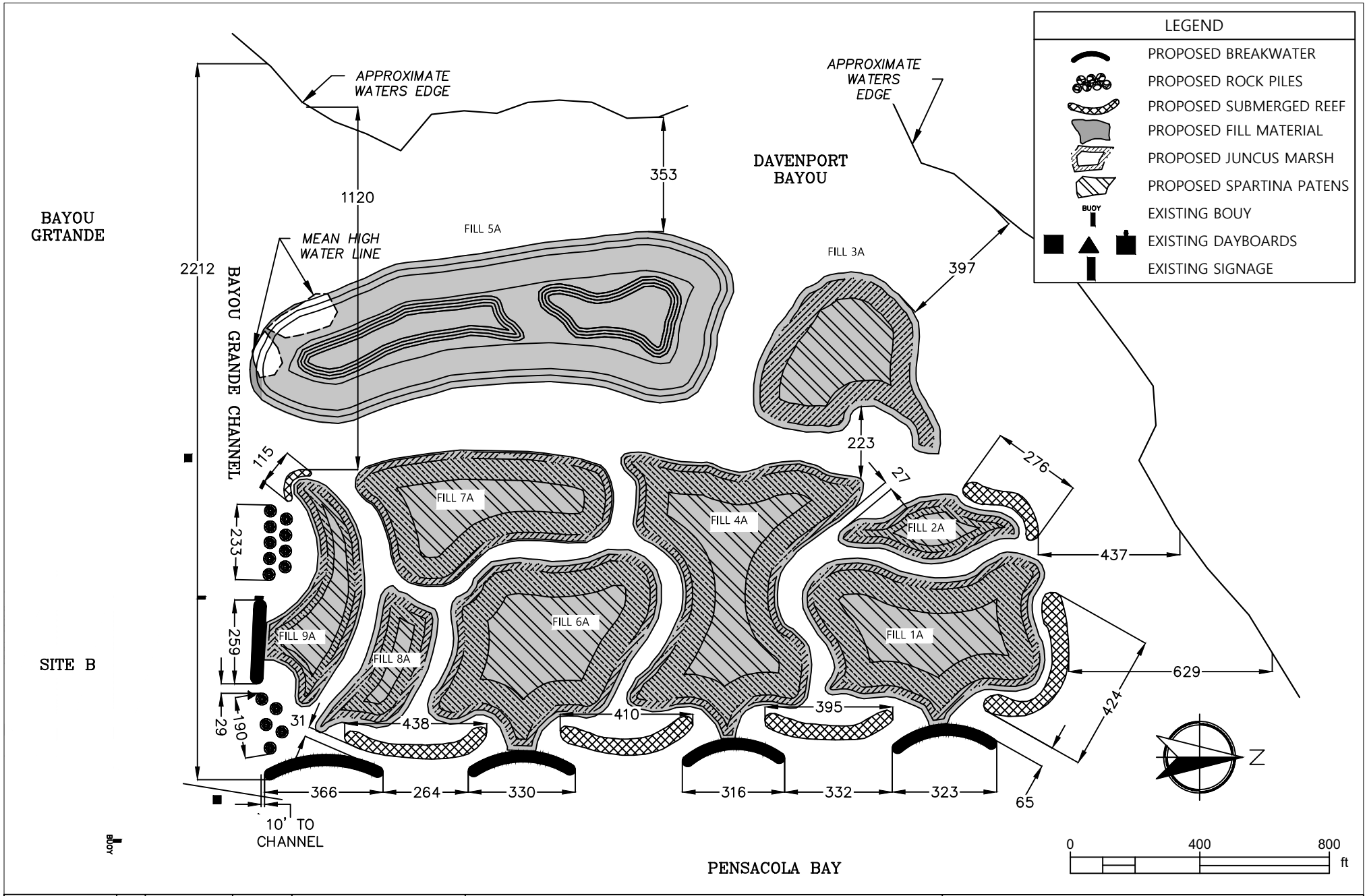
PENSACOLA BAY LIVING SHORELINE
SITE A WHITE ISLAND
SITE PLAN



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PENSACOLA BAY LIVING SHORELINE
SITE A WHITE ISLAND
DETAILED PLAN

PROJECT WETLAND (WI) & OTHER SURFACE WATER (SW) & IMPACT SUMMARY		
WL & SW ID	PERMANENT WL & SW IMPACT SIZE (SQ.FT.)	(ACRES)
FILL 1A	283,218	6.50
FILL 2A	71,966	1.65
FILL 3A	207,278	4.76
FILL 4A	377,579	8.67
FILL 5A	584,298	13.41
FILL 6A	300,912	6.91
FILL 7A	229,252	5.26
FILL 8A	84,571	1.94
FILL 9A	113,477	2.61
TOTAL	2,252,551	51.71

PROPOSED CONSTRUCTION		
	TOTAL AREA (SQ.FT.)	(ACRES)
BREAK WATER	56,436	1.30
ROCK PILES	14,443	0.33
SUBMERGED REEF	103,563	2.38

MARSH PLANTING		
	AREA (SQ.FT.)	(ACRES)
1A MARSH	249,419	5.73
2A MARSH	53,749	1.23
3A MARSH	169,005	3.88
4A MARSH	346,045	7.94
6A MARSH	267,811	6.15
7A MARSH	219,109	5.03
8A MARSH	63,683	1.46
9A MARSH	96,371	2.21
TOTAL	1,465,192	33.64

NOTE: SEE SITE PLAN, DETAIL PLAN AND MARSH DETAILS SHEET

PROJECT NUMBER 1033000.848

SHEET 7 OF 50

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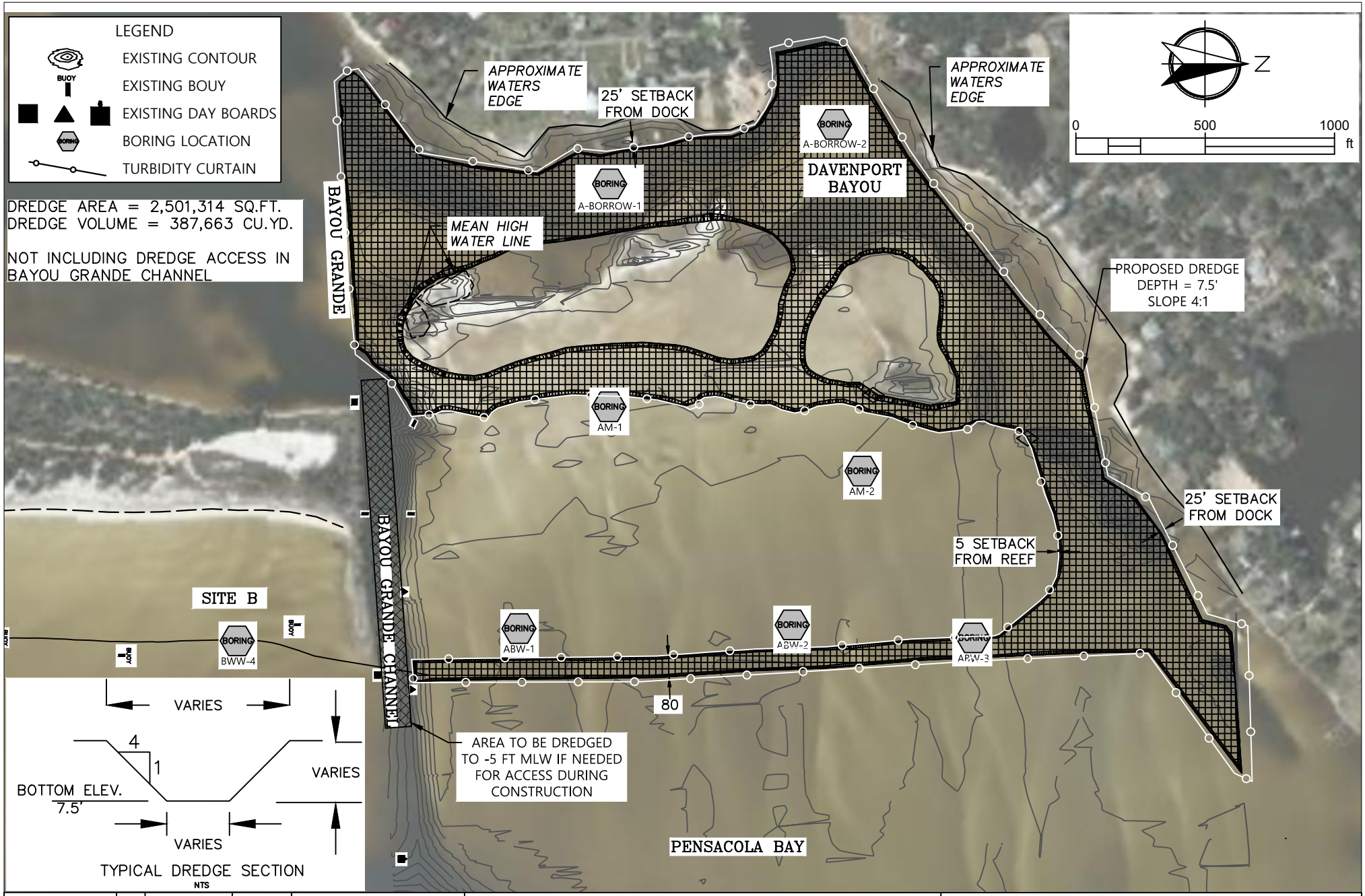
PENSACOLA BAY LIVING SHORELINE
SITE A WHITE ISLAND
IMPACT SUMMARY



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SHEET 8 OF 50			

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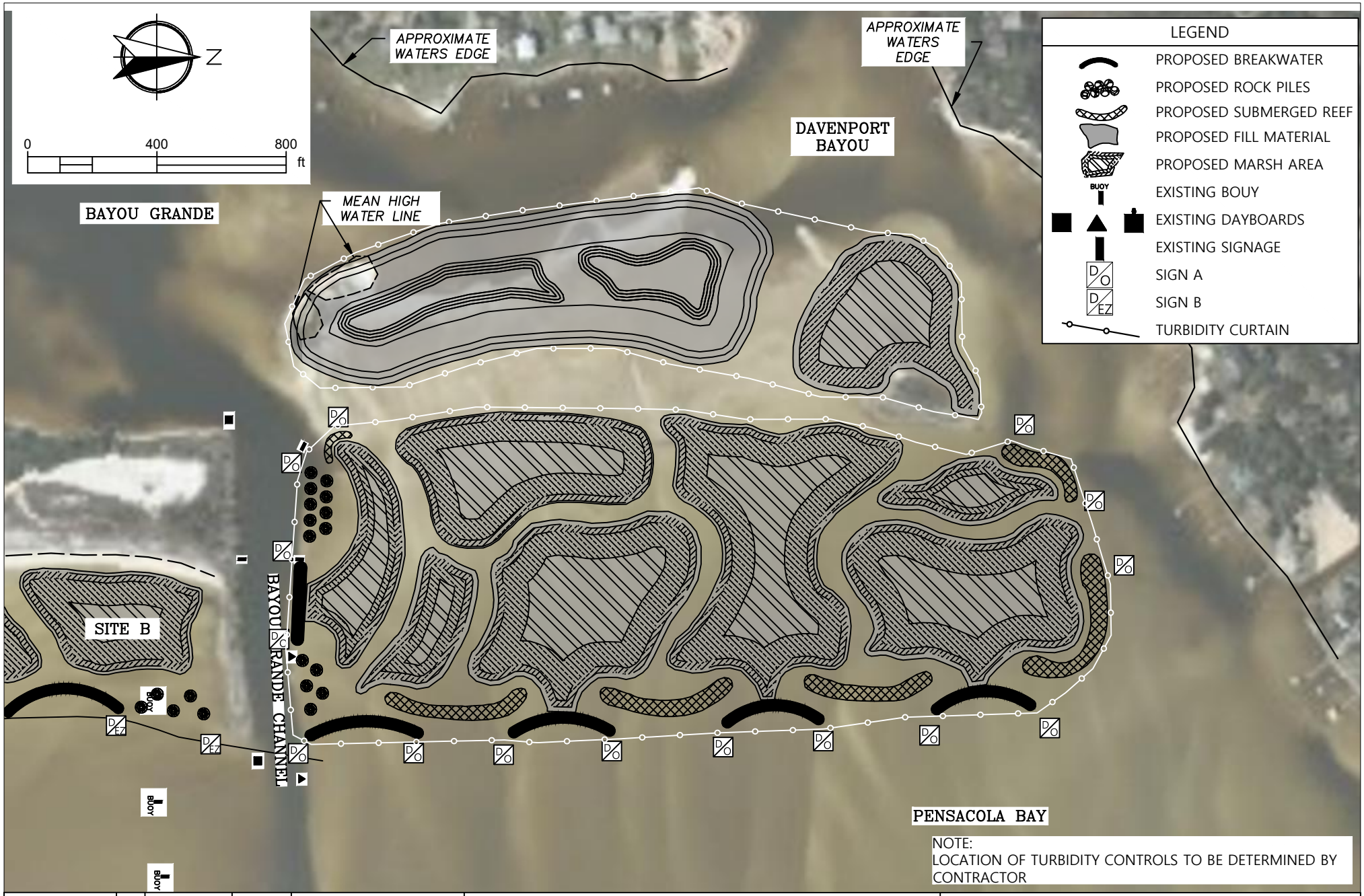
PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND BORING & DREDGING PLAN



NOTE:
LOCATION OF TURBIDITY CONTROLS TO BE DETERMINED BY CONTRACTOR

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SHEET 9 OF 50			

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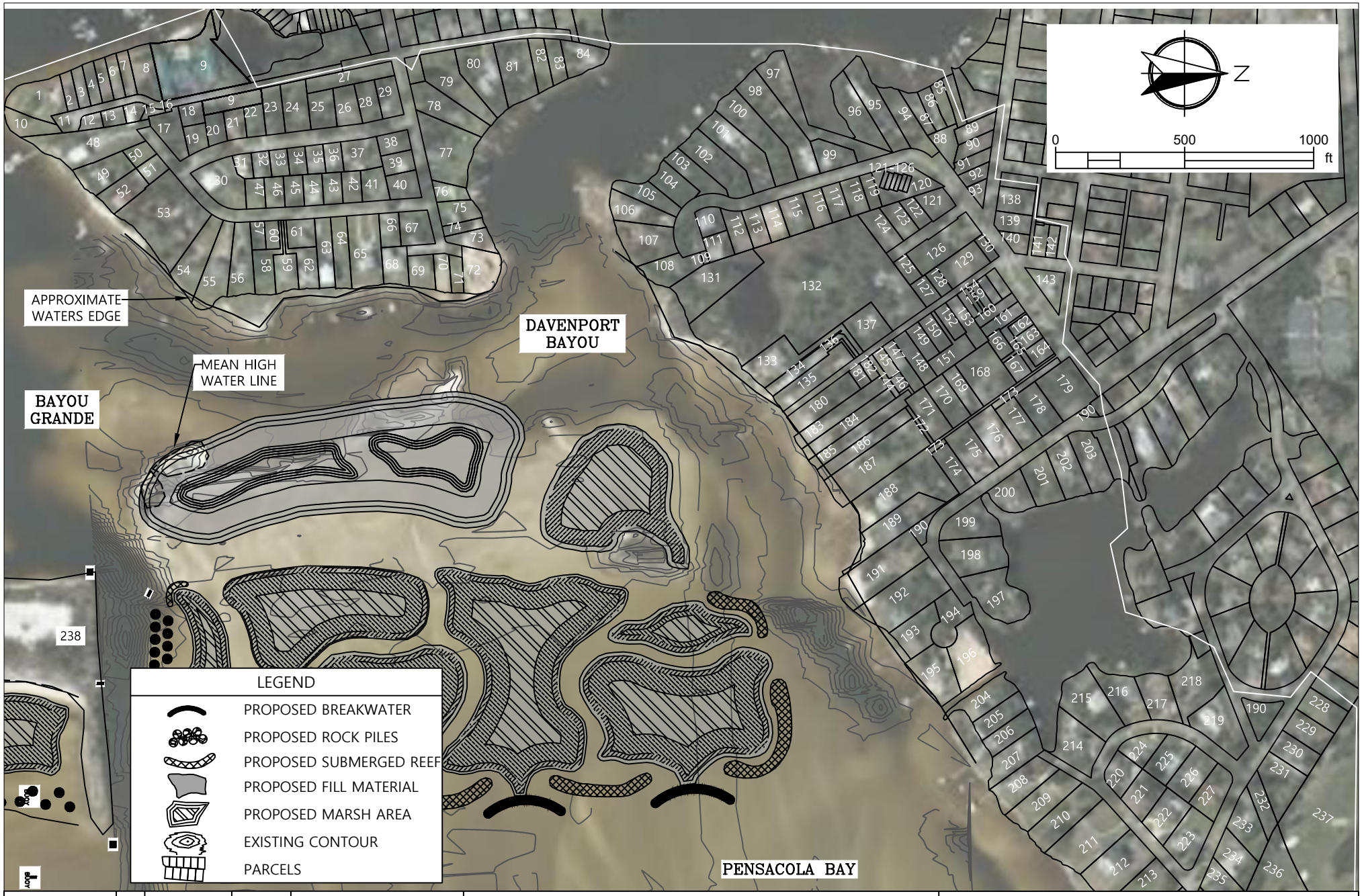
PENSACOLA BAY LIVING SHORELINE
SITE A WHITE ISLAND
AIDS TO NAVIGATION



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SHEET 10 OF 50			

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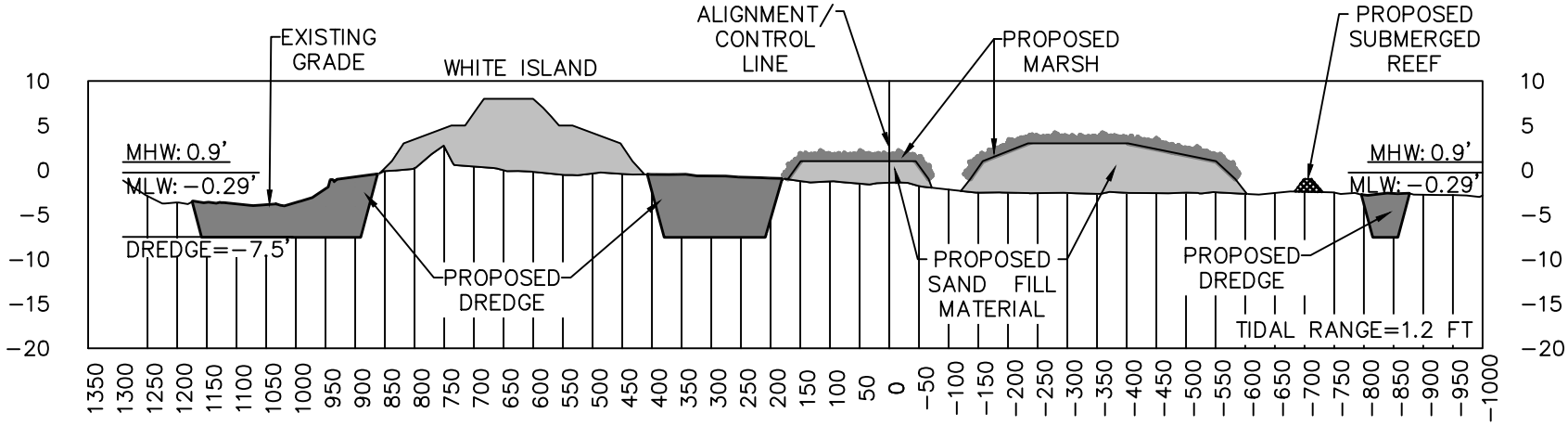
PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND ADJACENT PROPERTY



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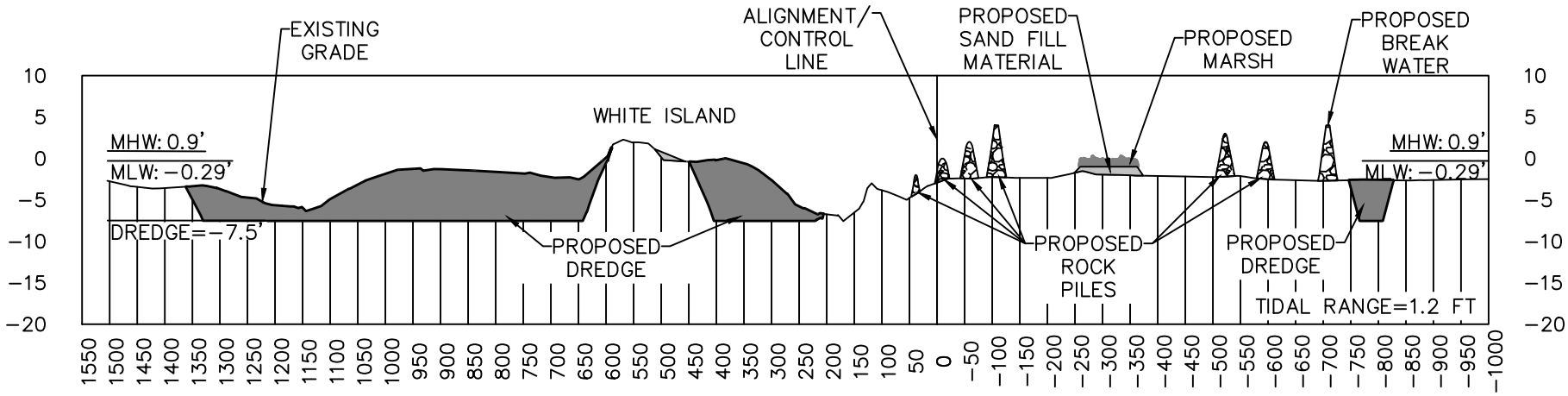

SECTION A3

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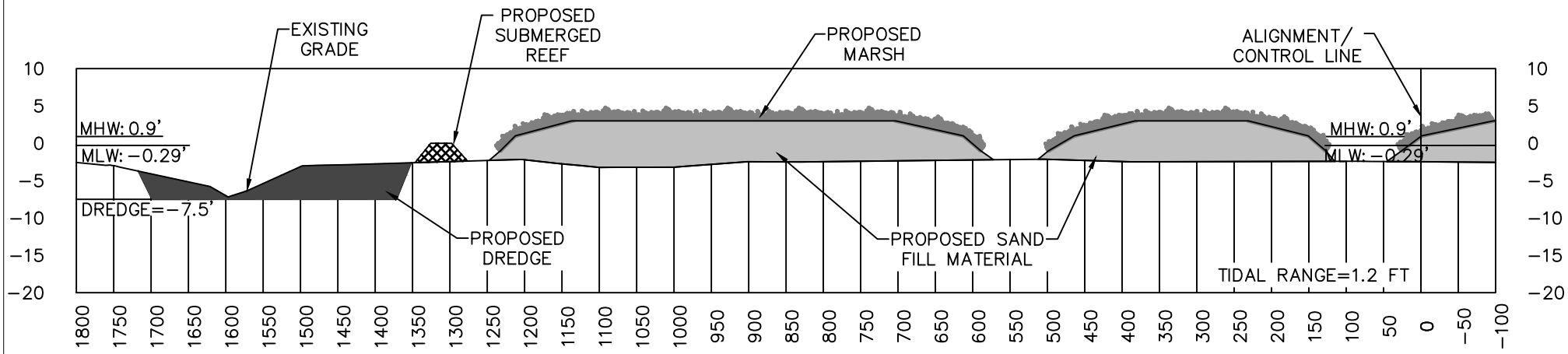
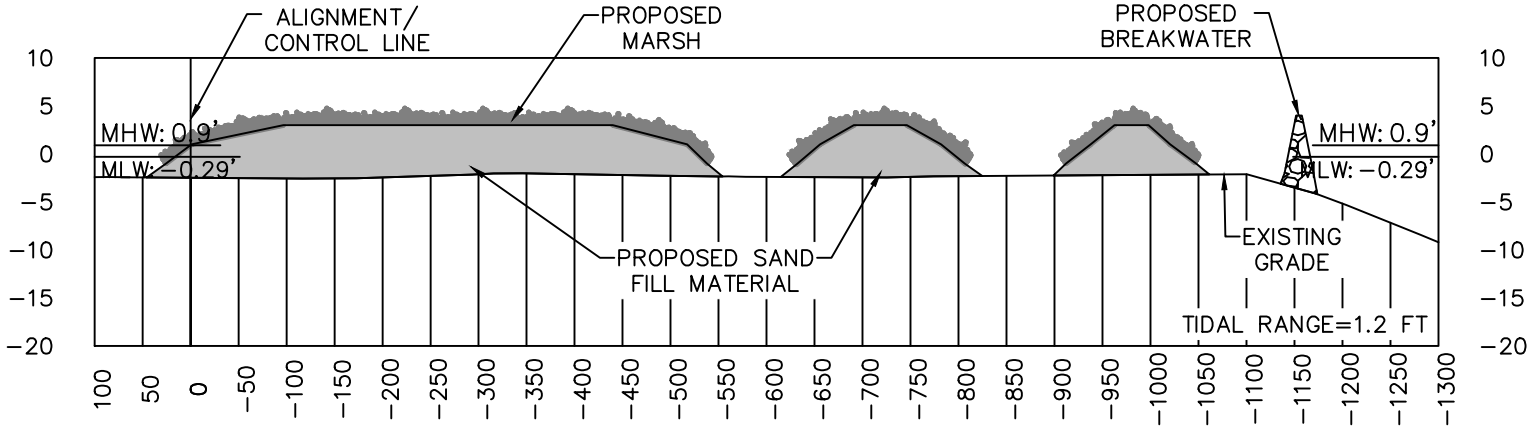
PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND CROSS SECTIONS





SECTION A−1

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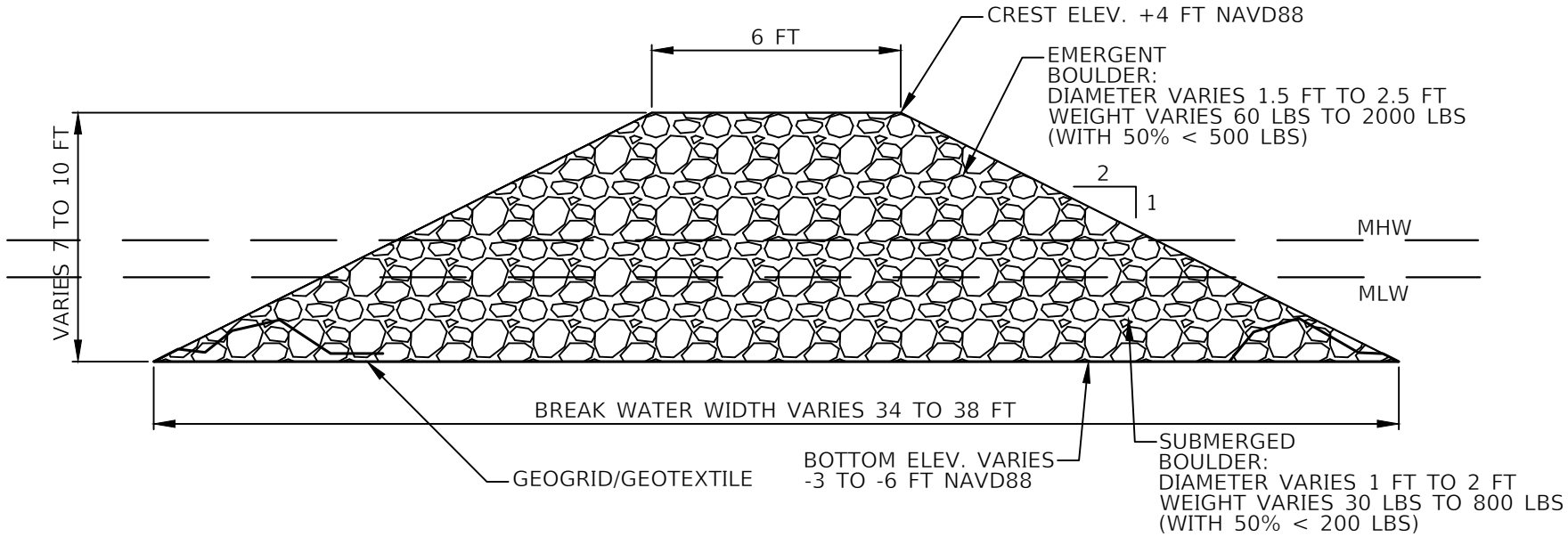
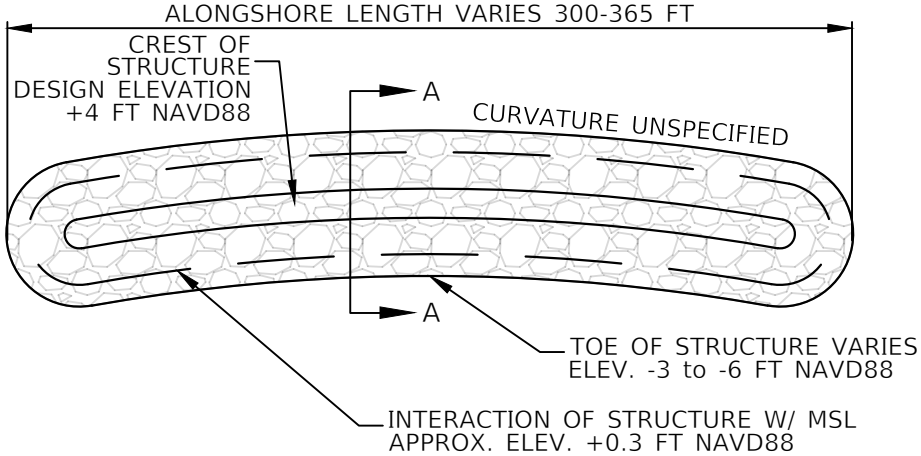
PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND CROSS SECTIONS



Section A-A



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Plan View

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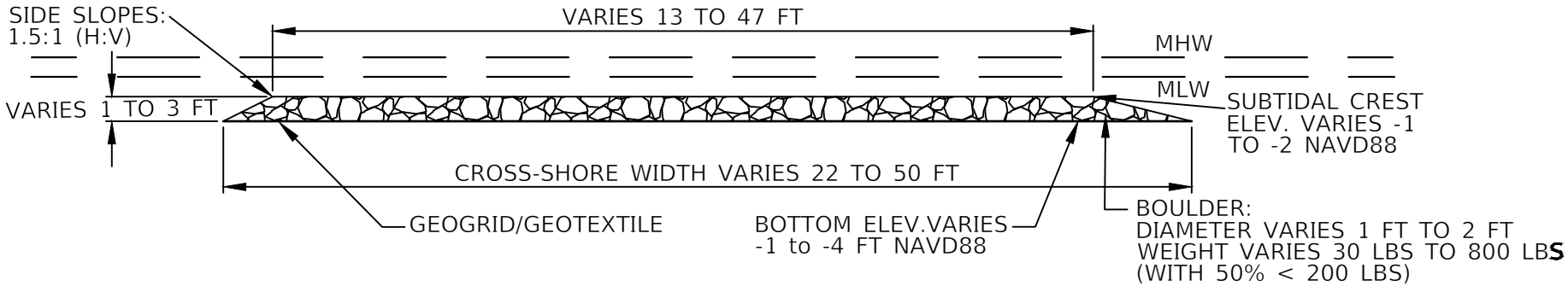
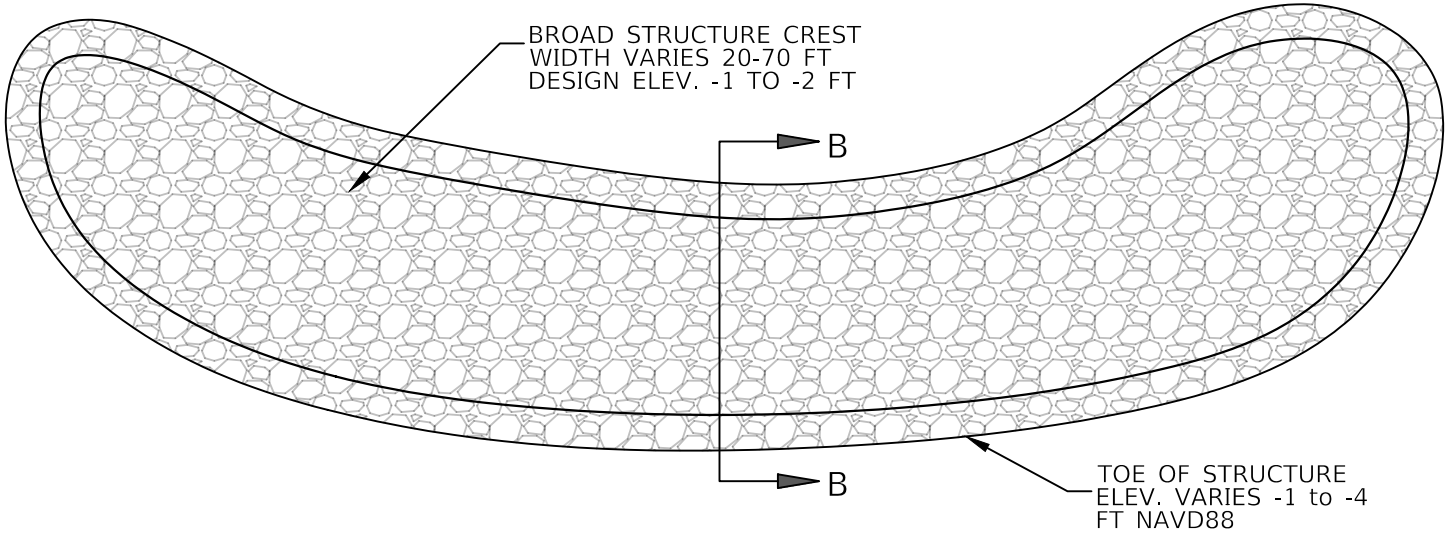
1033000.848				VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935			PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND BREAK WATER DETAILS
SHEET 13 OF 50				DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE	
				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE	DISTRICT	DATE JUNE 2021	



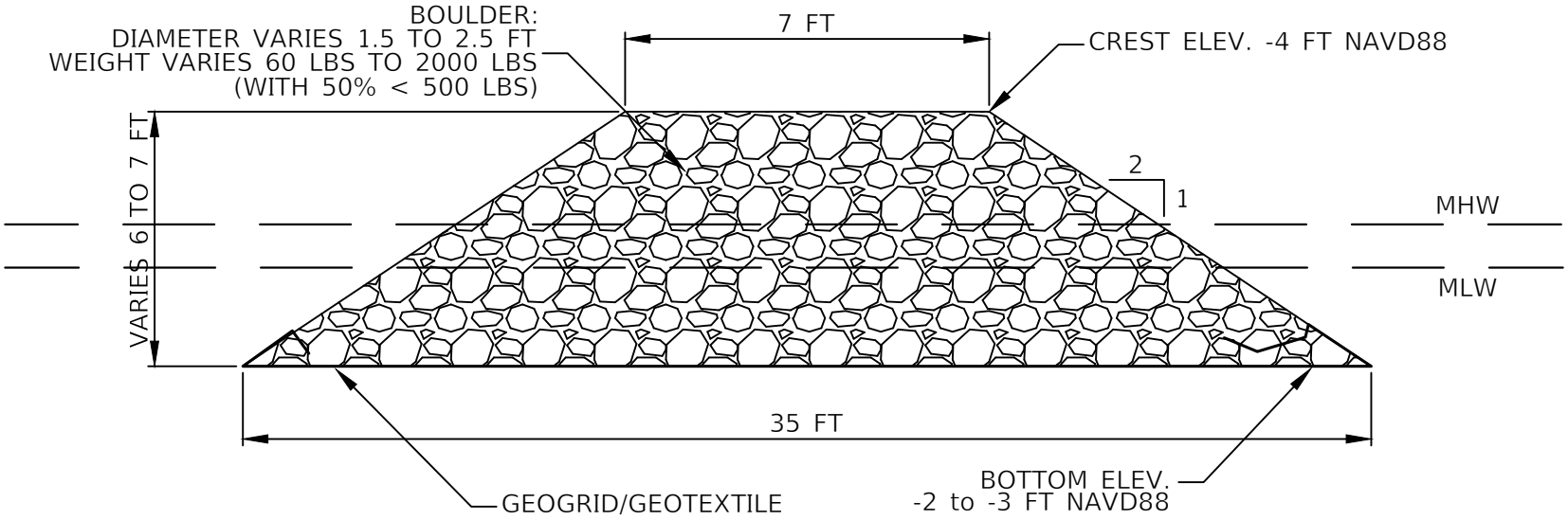
Section B-B



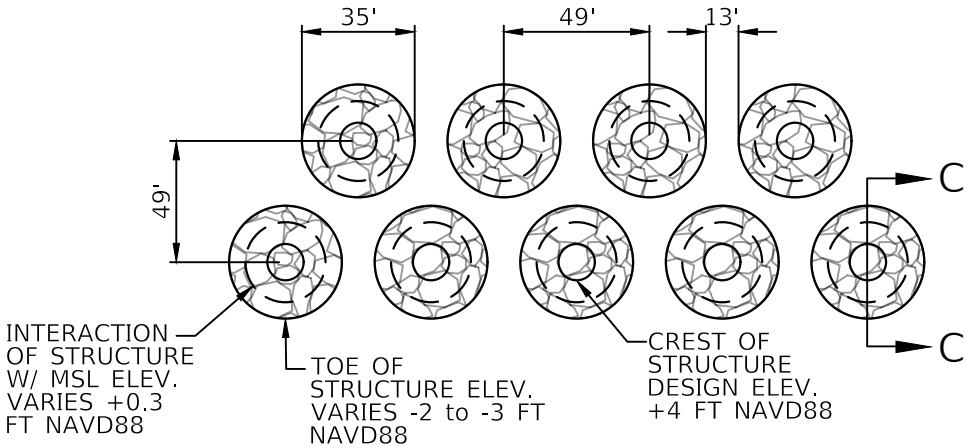
Plan View

NOT TO SCALE

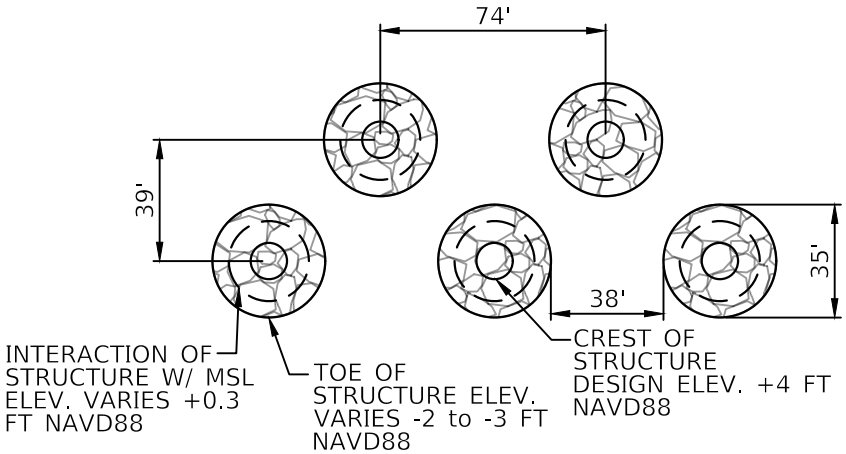
PROJECT NUMBER	NO.	REVISIONS	DATE		VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935			PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND SUBTIDAL REEF DETAILS
1033000.848					DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE	
SHEET 14 OF 50				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021	



Section C-C



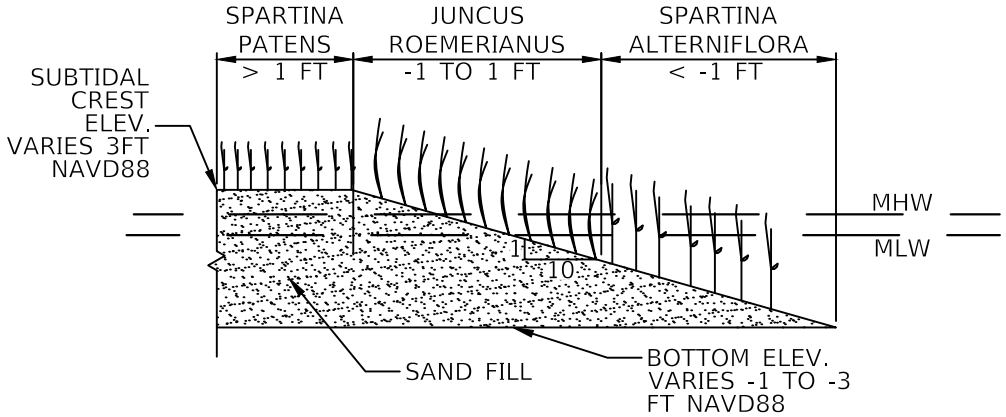
Plan View 1



Plan View 2

NOT TO SCALE

PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848				VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935			PENSACOLA BAY LIVING SHORELINE SITE A WHITE ISLAND ROCK PILES DETAILS
SHEET 15 OF 50				DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE	
				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE	DISTRICT	DATE JUNE 2021	



Marsh Area Section View

MARSH AREA		
ZONE	PLANT	FREQUENCY
Bottom to -1	Spartina Alterniflora (Sporobolus Alterniflora)	18" on center
Elevation -1 to +1	Juncus Roemerianus (Needlegrass Rush)	18" on center
Above elevation +1	Spartina Patens (Saltmeadow Cordgrass)	24" on center

Marsh Details

NOT TO SCALE

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 16 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE A WHITE ISLAND
MARSH DETAILS

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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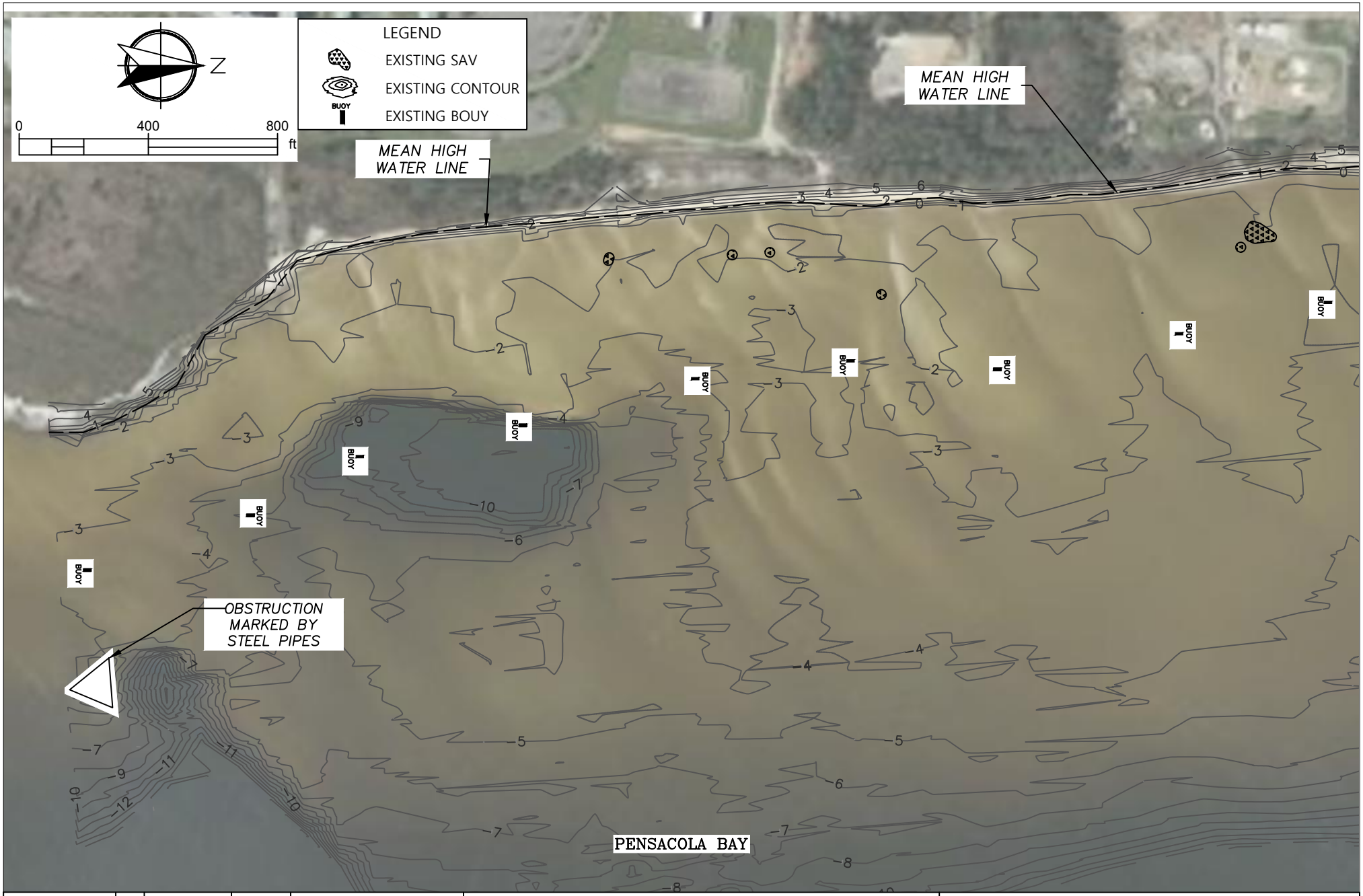
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
EXISTING CONDITIONS



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 18 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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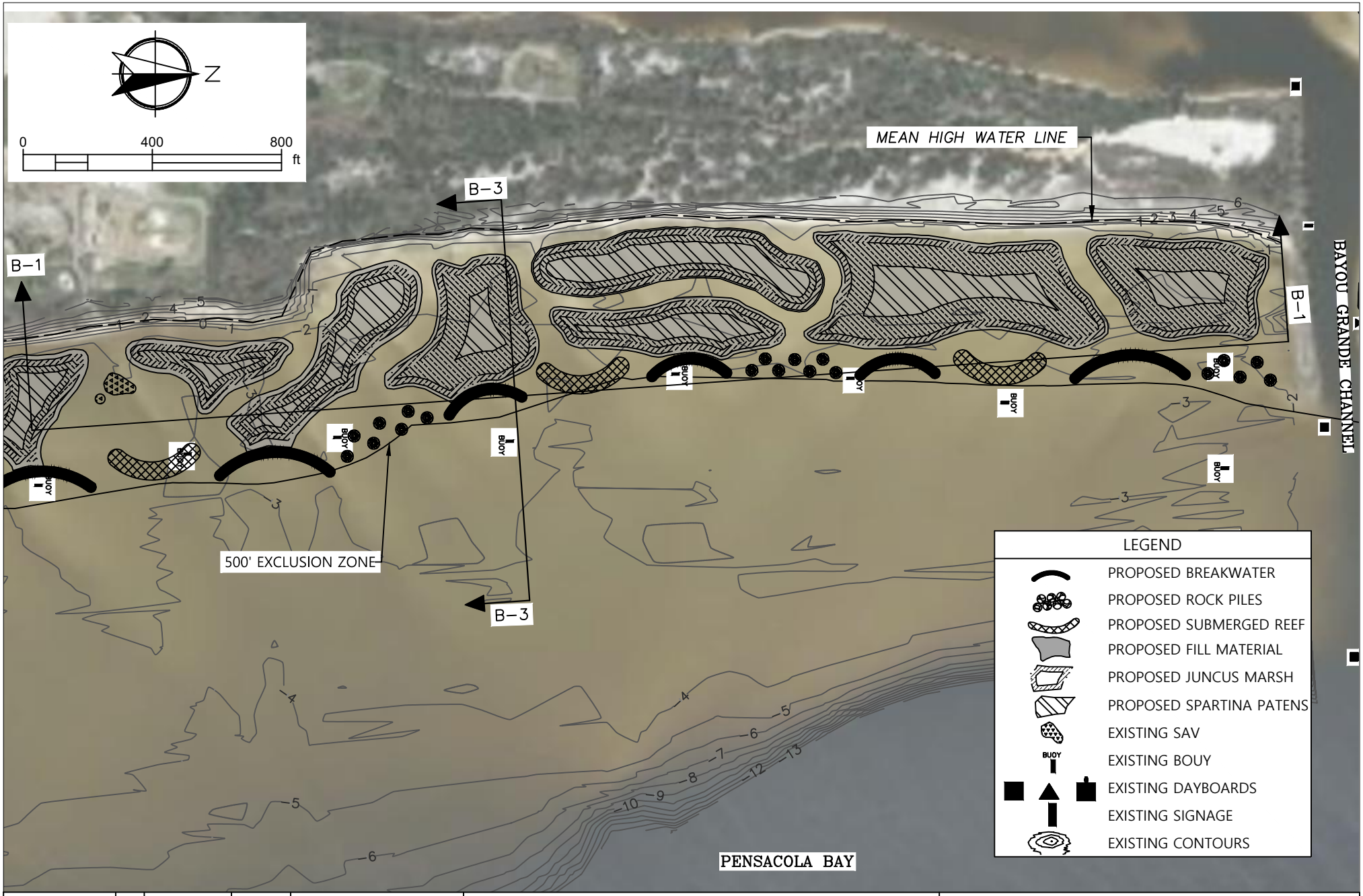
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE EXISTING CONDITIONS



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 19 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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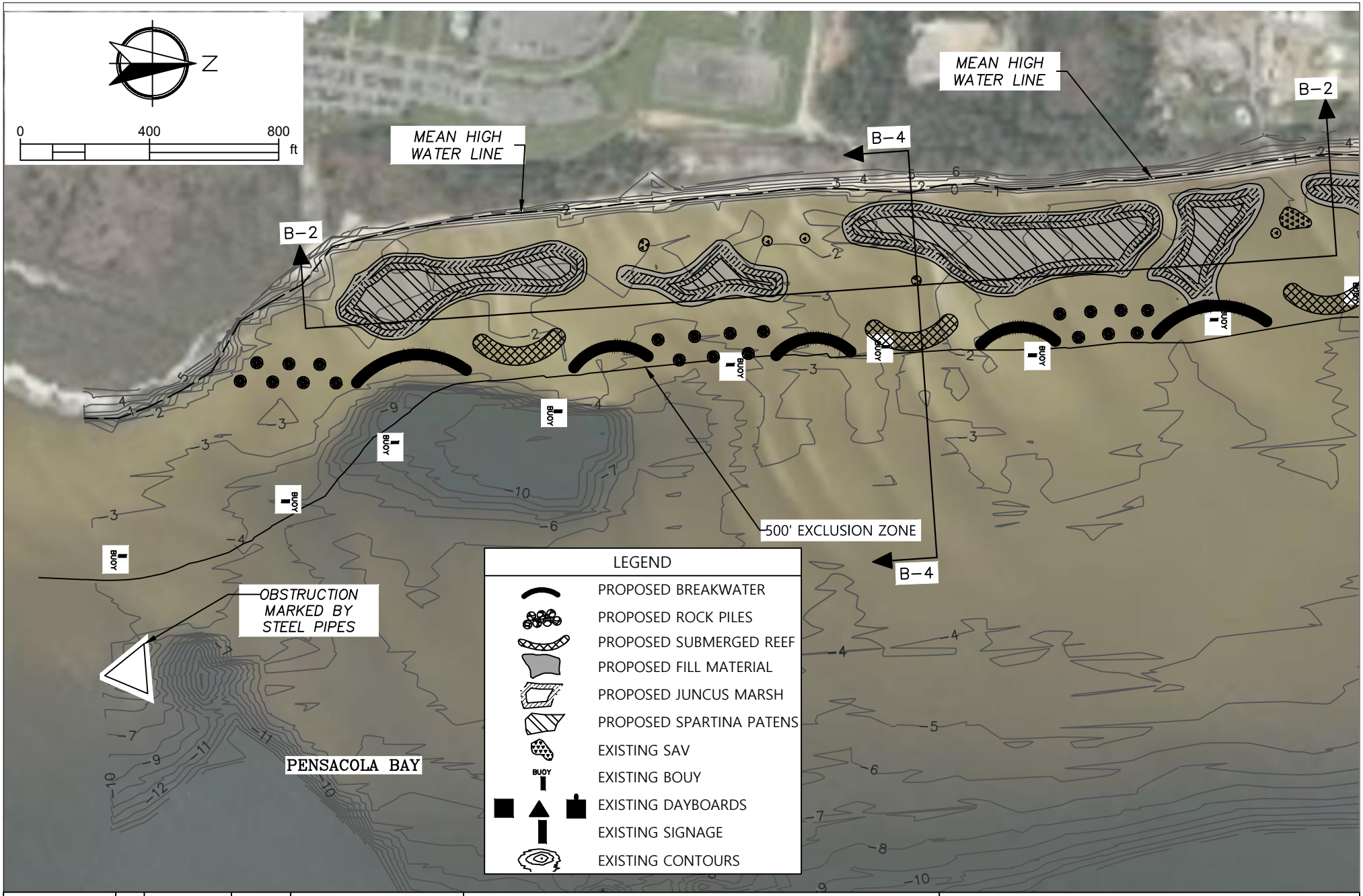
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE SITE PLAN



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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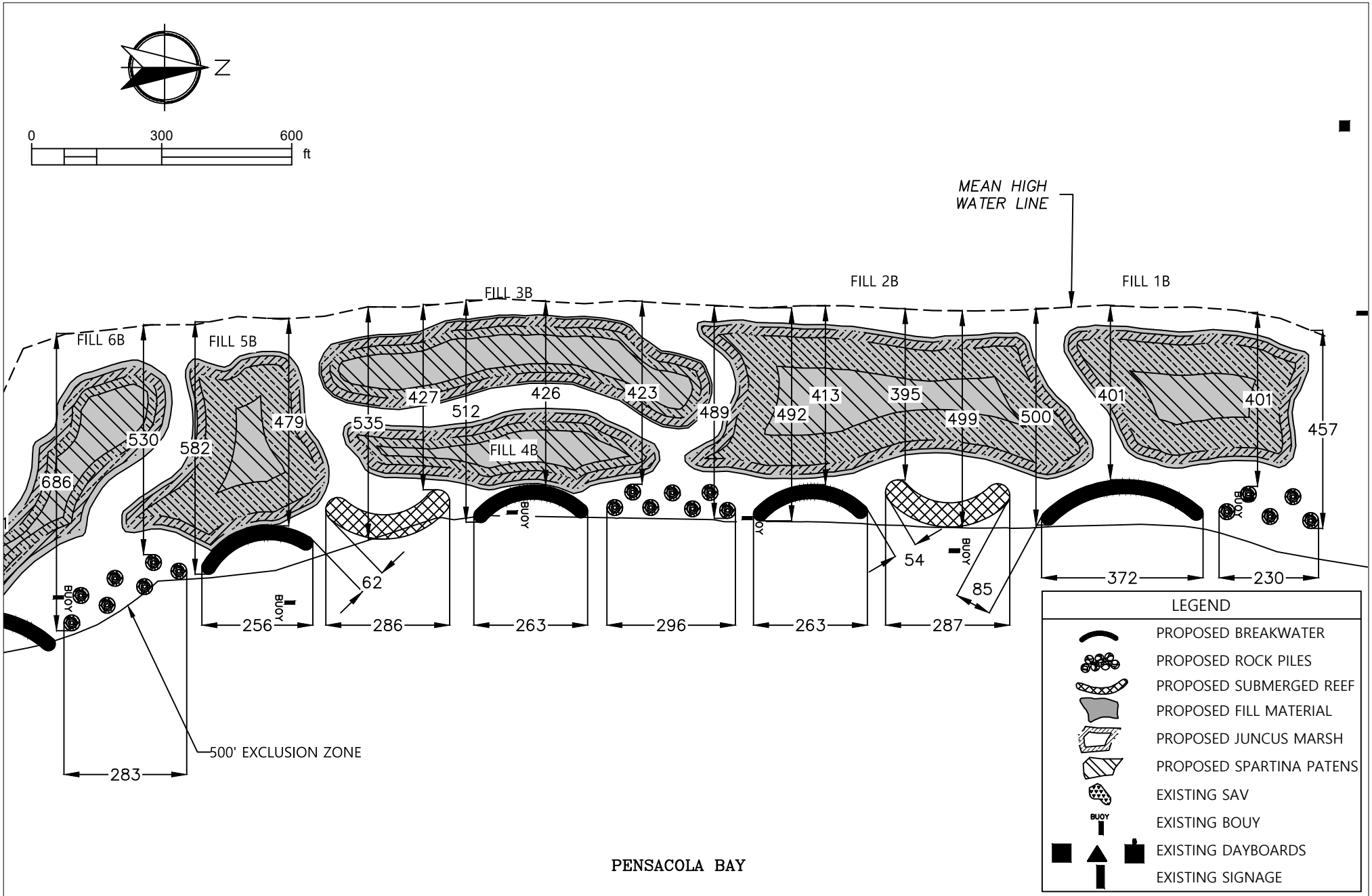
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
SITE PLAN



PENSACOLA BAY

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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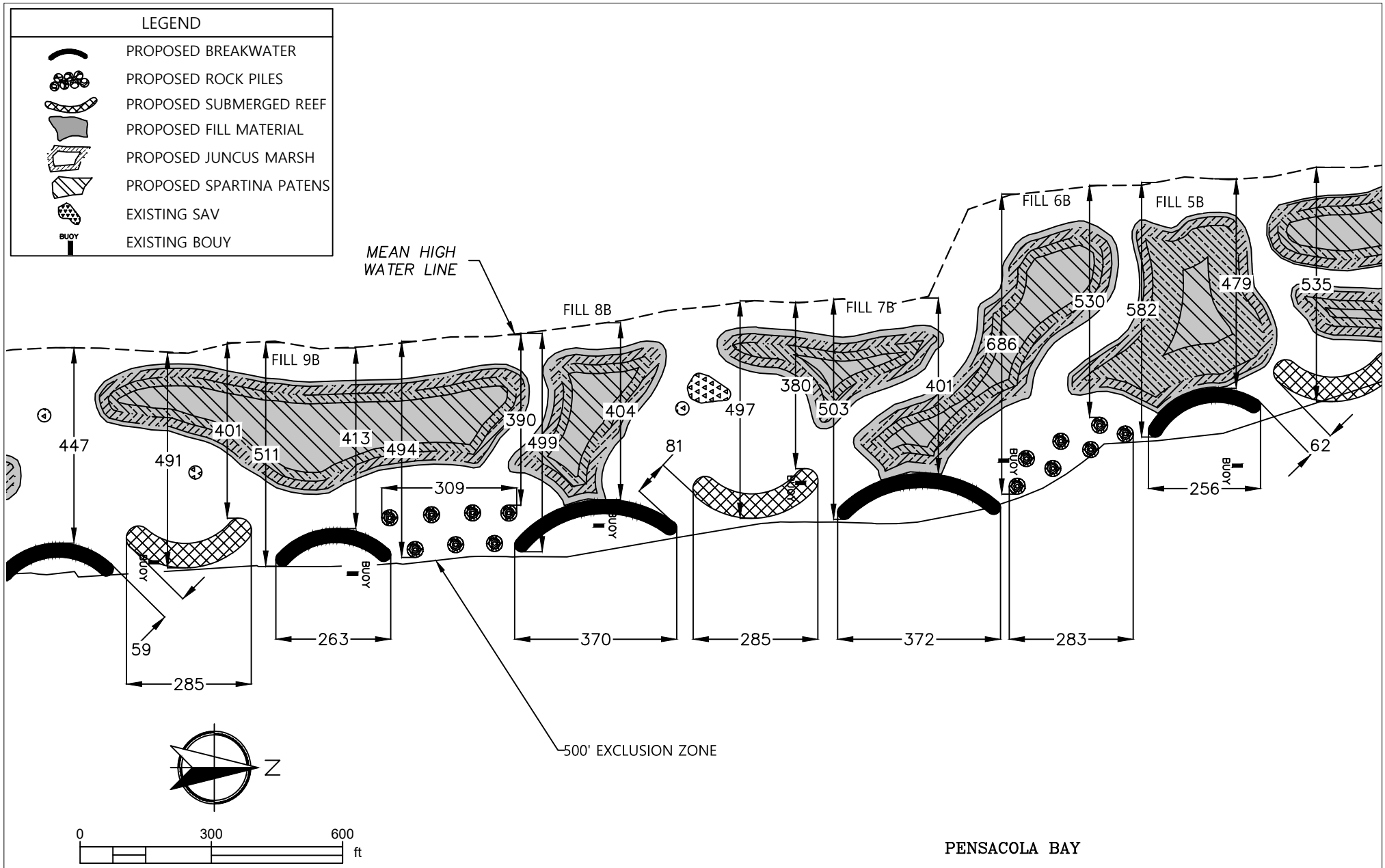
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE DETAILED PLAN



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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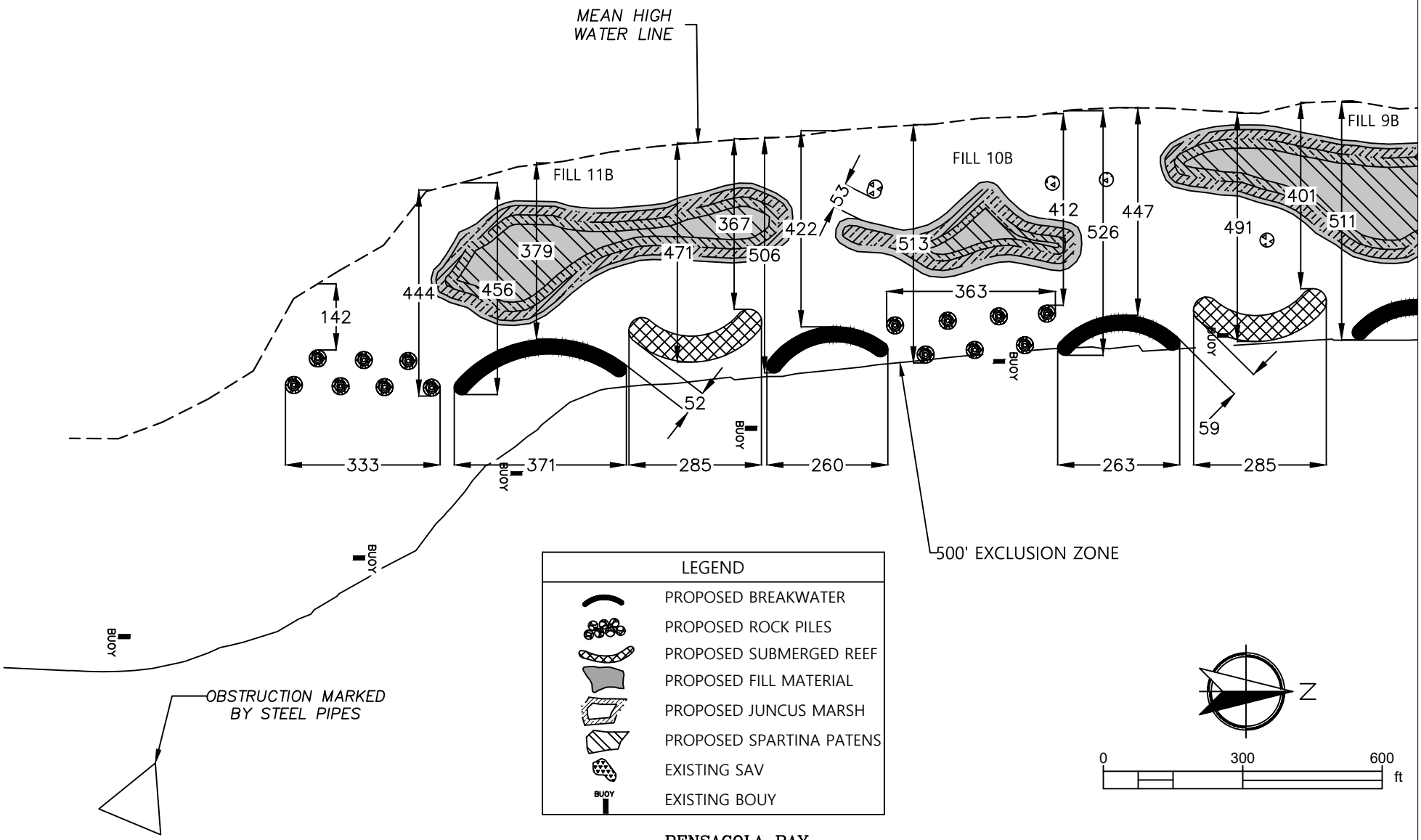
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE DETAILED PLAN



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 23 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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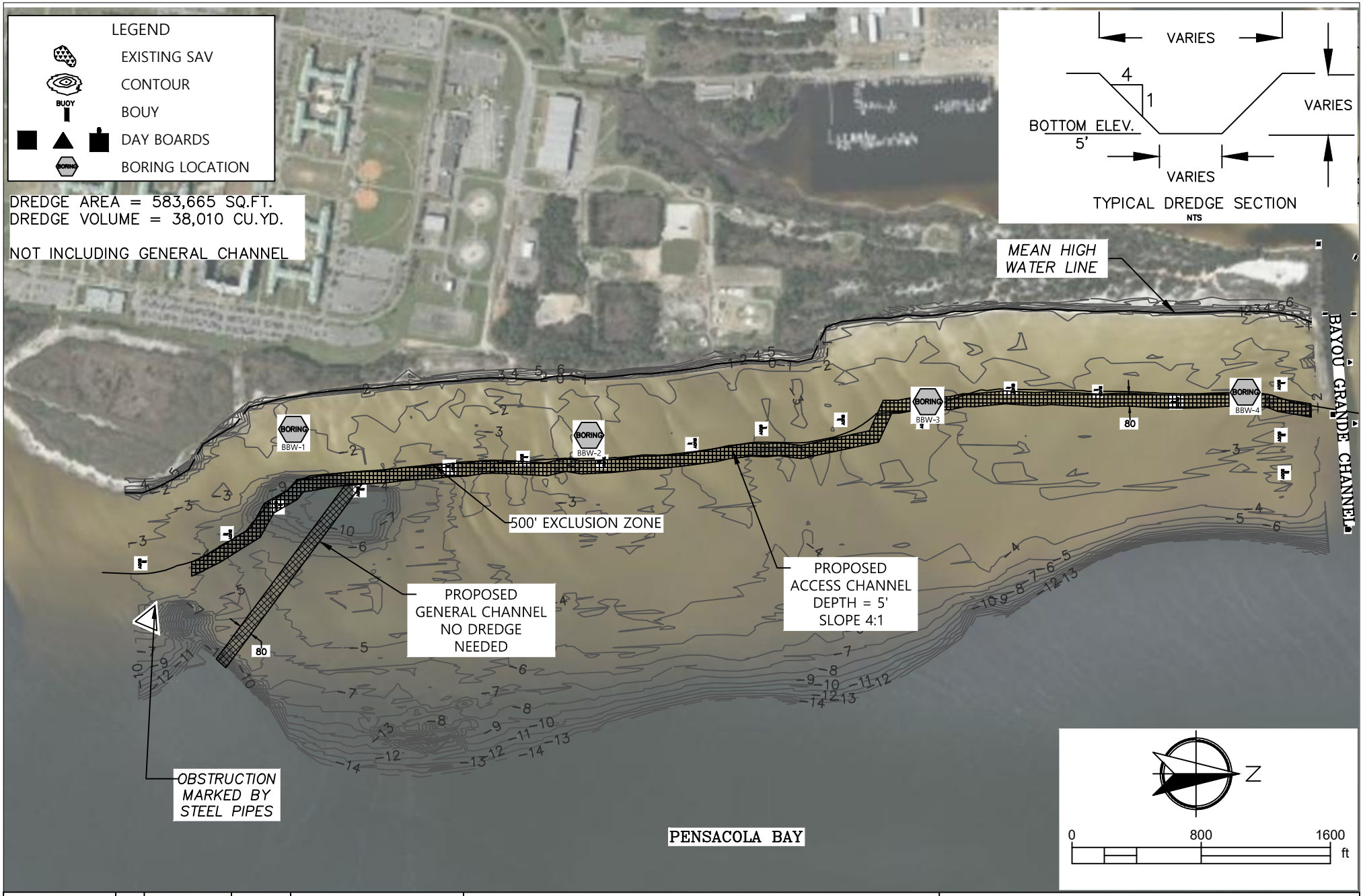
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE DETAILED PLAN

PROJECT WETLAND (WI) & OTHER SURFACE WATER (SW) & IMPACT SUMMARY		
WL & SW ID	PERMANENT WL & SW IMPACT SIZE (SQ.FT.)	(ACRES)
FILL 1B	142,013	3.26
FILL 2B	254,956	5.85
FILL 3B	147,555	3.39
FILL 4B	99,831	2.29
FILL 5B	128,951	2.96
FILL 6B	128,912	2.96
FILL 7B	74,541	1.71
FILL 8B	74,541	1.71
FILL 9B	190,730	4.38
FILL 10B	56,755	1.30
FILL 11B	128,094	2.94
TOTAL	1,426,879	32.76

PROPOSED CONSTRUCTION		
	TOTAL AREA (SQ.FT.)	(ACRES)
BREAK WATER	105,287	2.42
ROCK PILES	41,265	0.95
SUBMERGED REEF	83,945	1.93

MARSH PLANTING		
	PERMANENT WL & SW IMPACT SIZE (SQ.FT.)	(ACRES)
1B MARSH	126,933	2.91
2B AMRSH	230,534	5.29
3B MARSH	137,303	3.15
4B MARSH	84,012	1.93
5B MARSH	113,551	2.61
6B MARSH	101,130	2.32
7B MARSH	46,072	1.06
8B MARSH	57,074	1.31
9B MARSH	168,563	3.87
10B MARSH	38,706	0.89
11B MARSH	110,244	2.53
TOTAL	1,214,122	27.87



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 25 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE BORING & DREDGING PLAN

NOTE:
LOCATION OF TURBIDITY CONTROLS TO BE DETERMINED BY CONTRACTOR

PROJECT NUMBER	NO.	REVISIONS	DATE
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SHEET 26 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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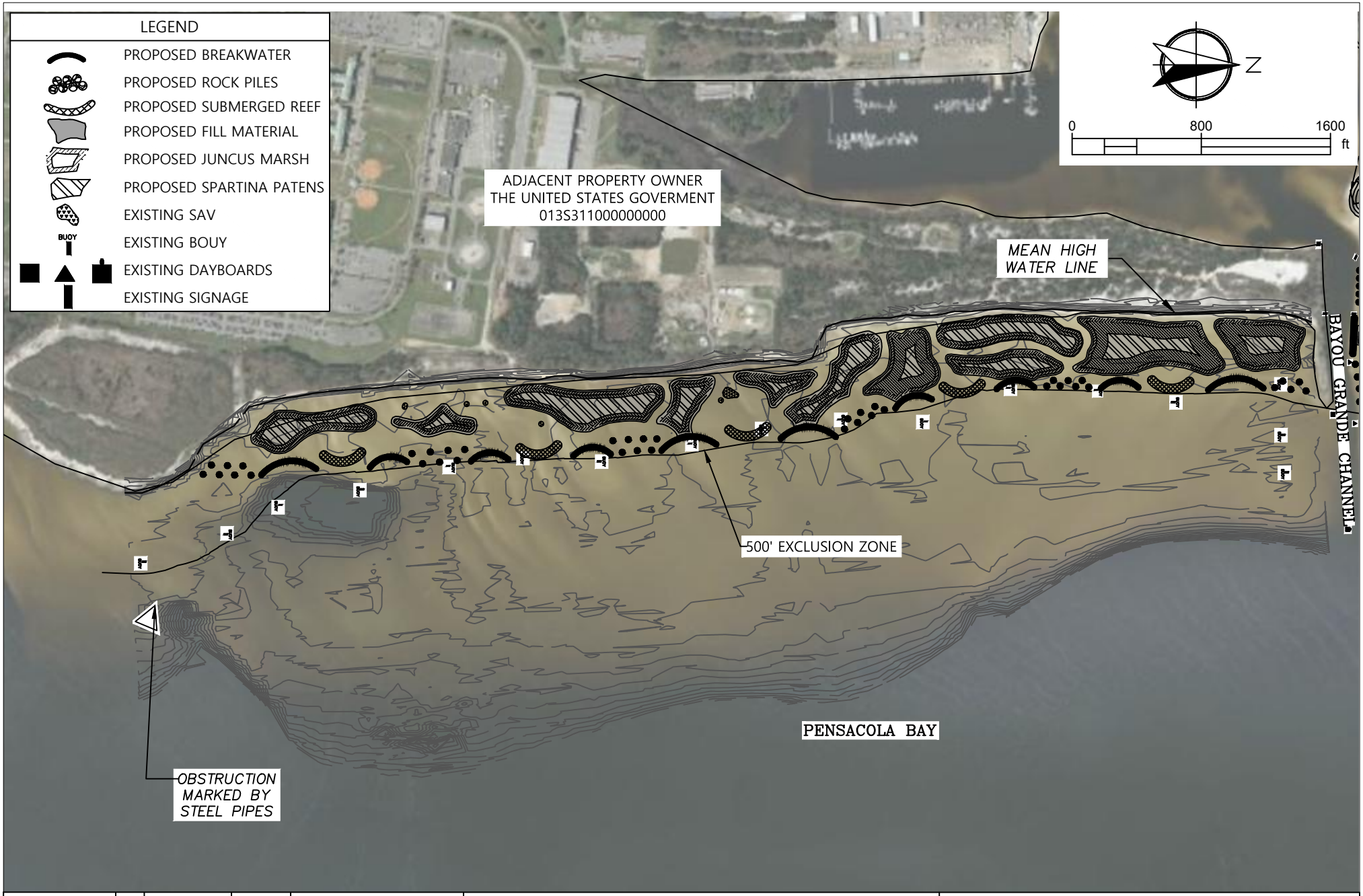
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE AIDS TO NAVIGATION



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 27 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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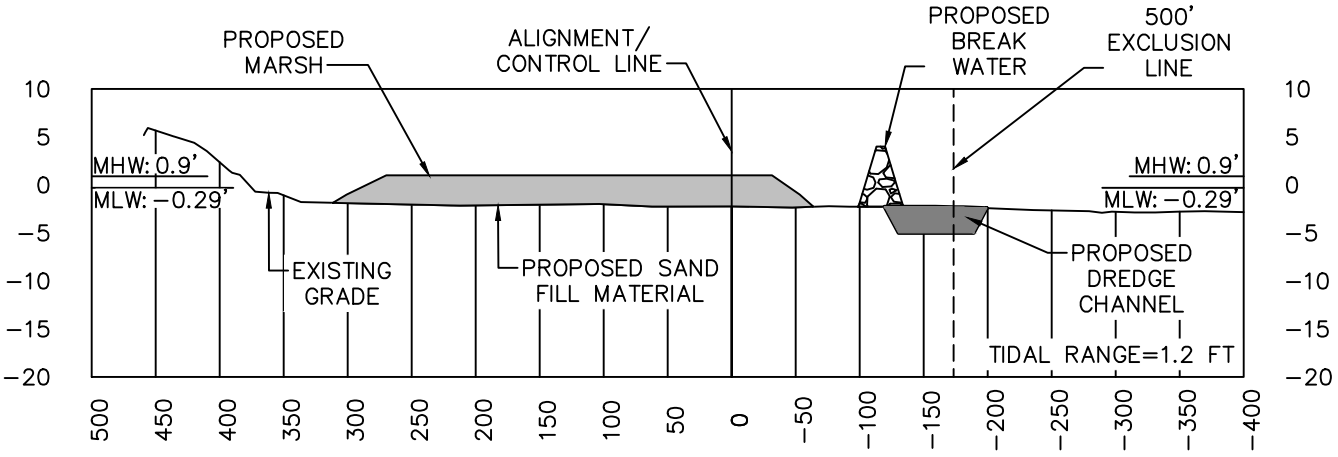
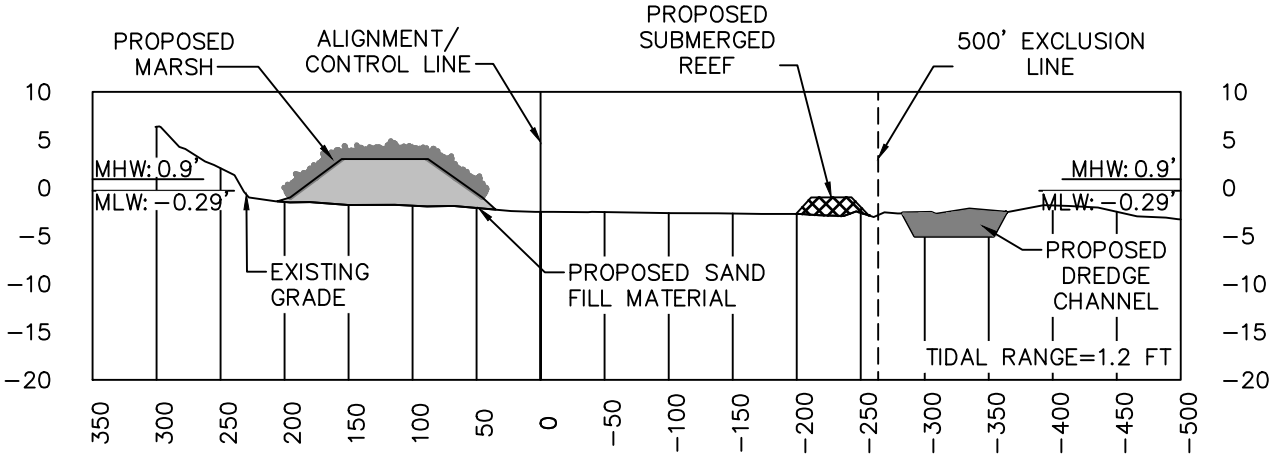
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

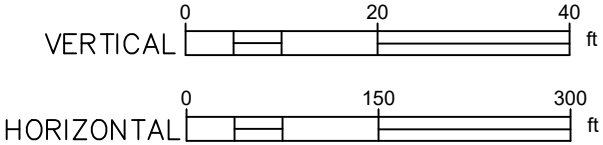
PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
ADJACENT PROPERTY



SECTION B−3



SECTION B−4



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 28 OF 50			

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FL PE 28976

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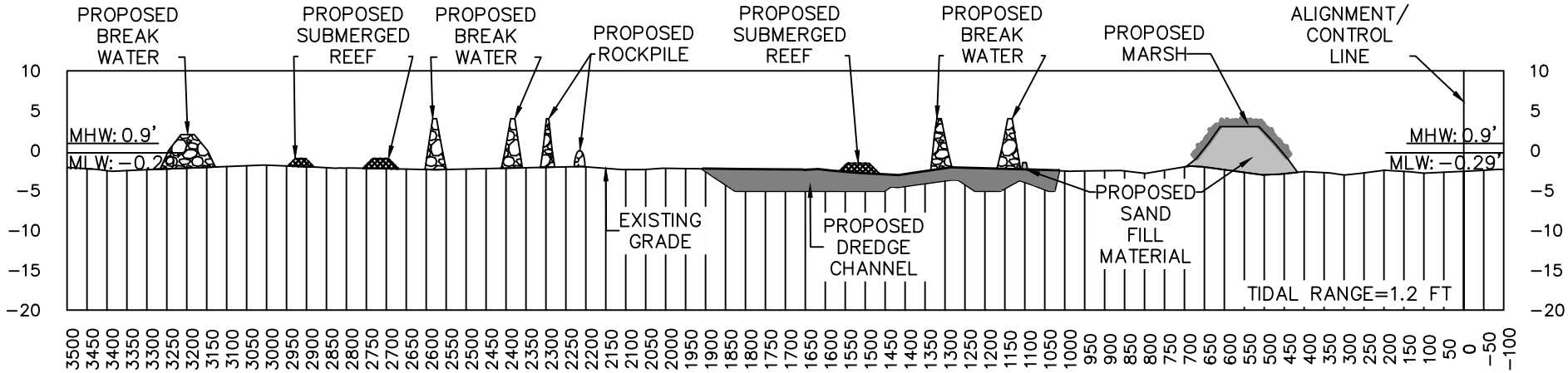
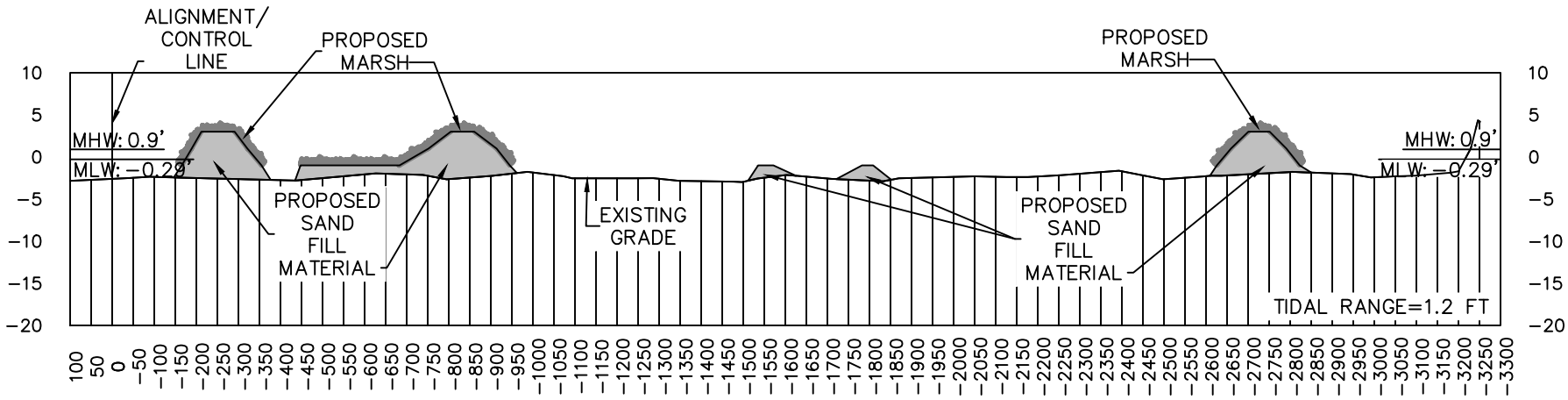
215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

DRAWN BY	DESIGNED BY	QA/QC MANAGER	CHECKED BY
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
CROSS SECTIONS



SECTION B−1



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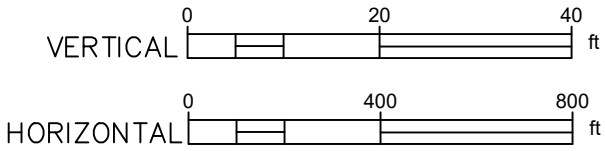

PROJECT NUMBER 1033000.848	NO.	REVISIONS	DATE
SHEET 29 OF 50			

MIKE WARNKE
FL PE 28976

VOLKERT Engineers Surveyors • Planners

215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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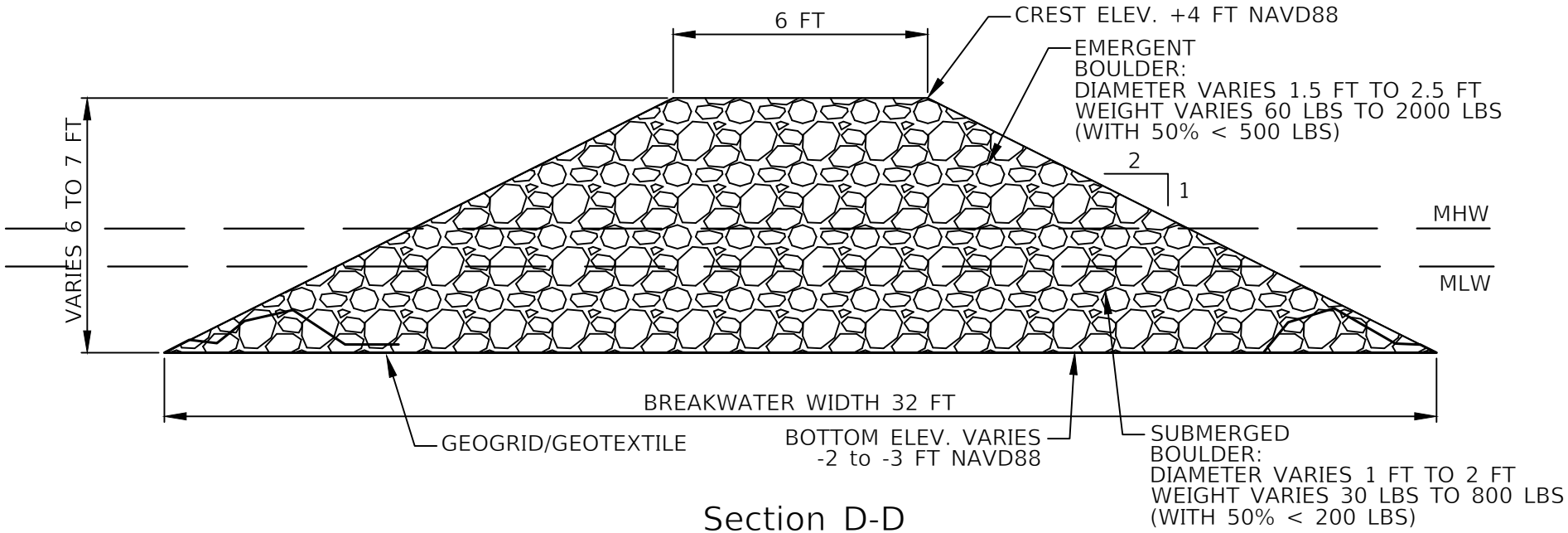
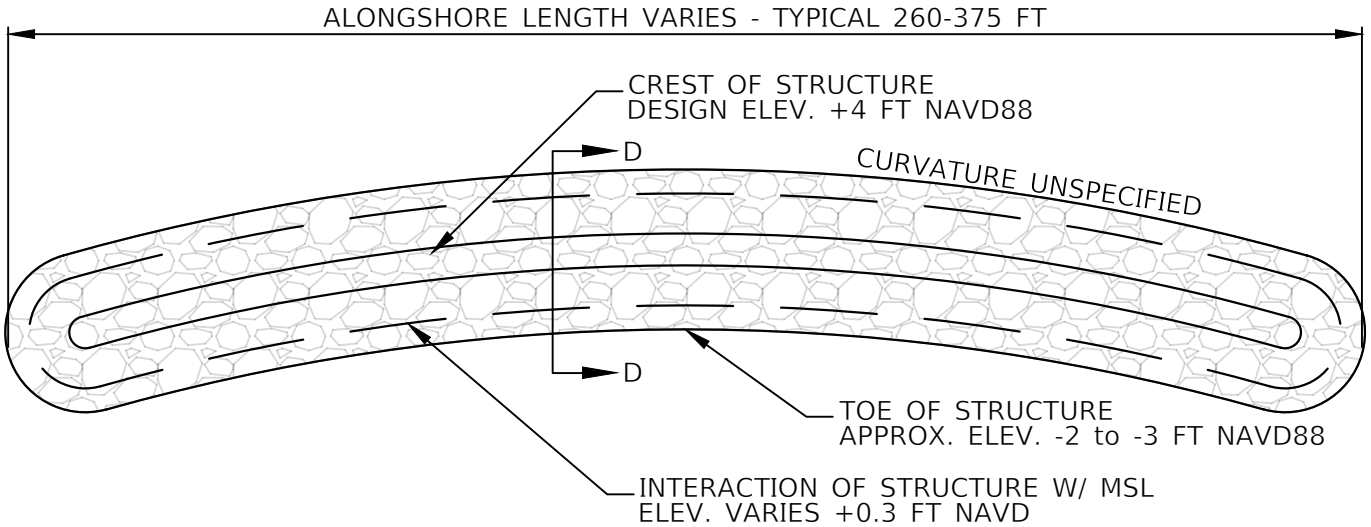
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE CROSS SECTIONS



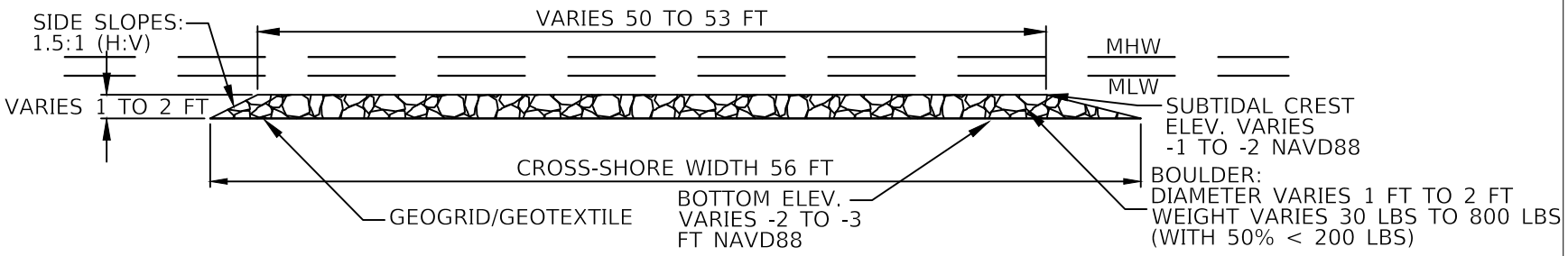
Section D-D



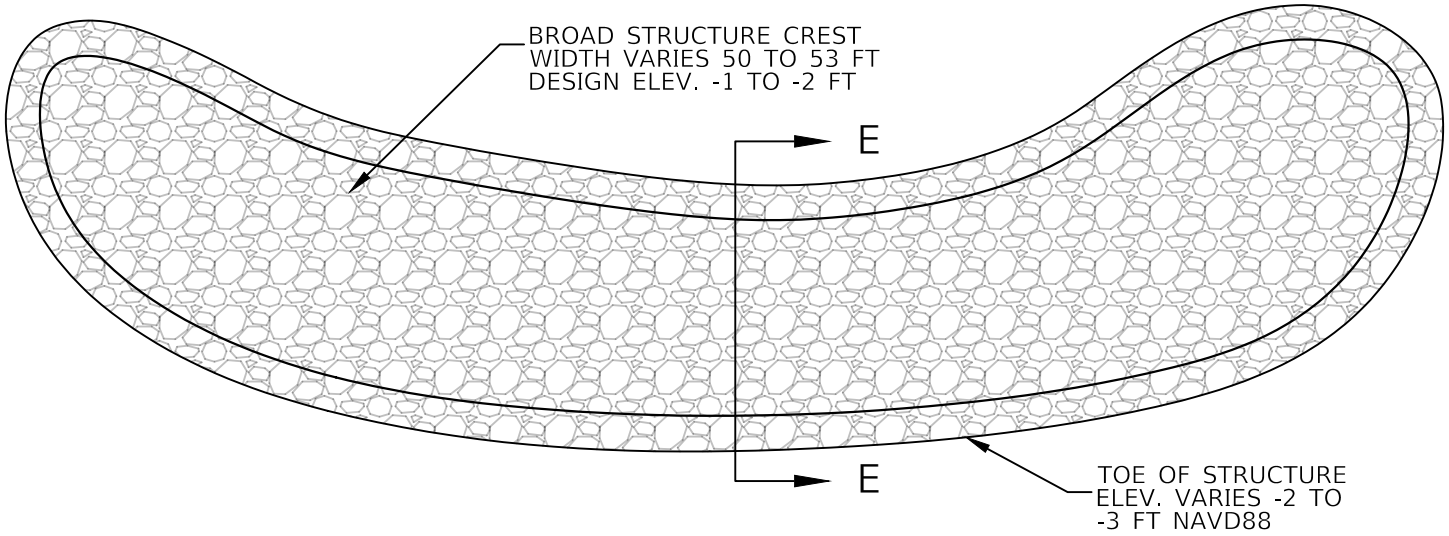
Plan View

NOT TO SCALE

PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848				MIKE WARNKE FL PE 28976	VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935		PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE BREAK WATER DETAILS
SHEET 30 OF 50					DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE
					SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021



Section E-E



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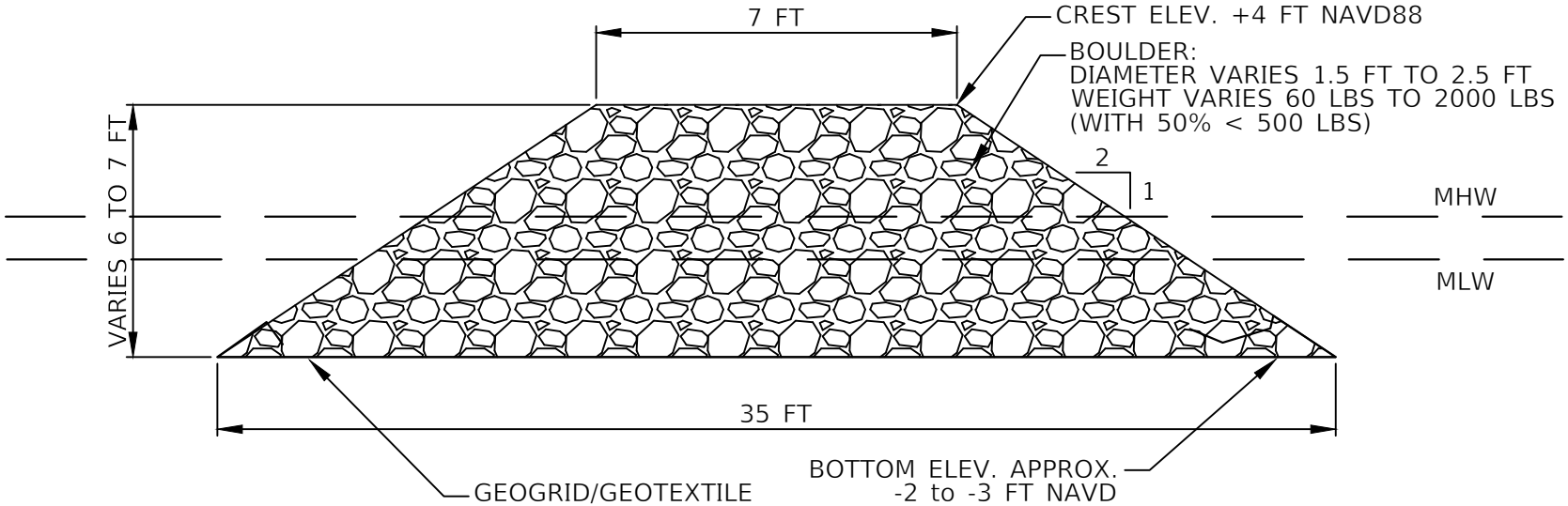
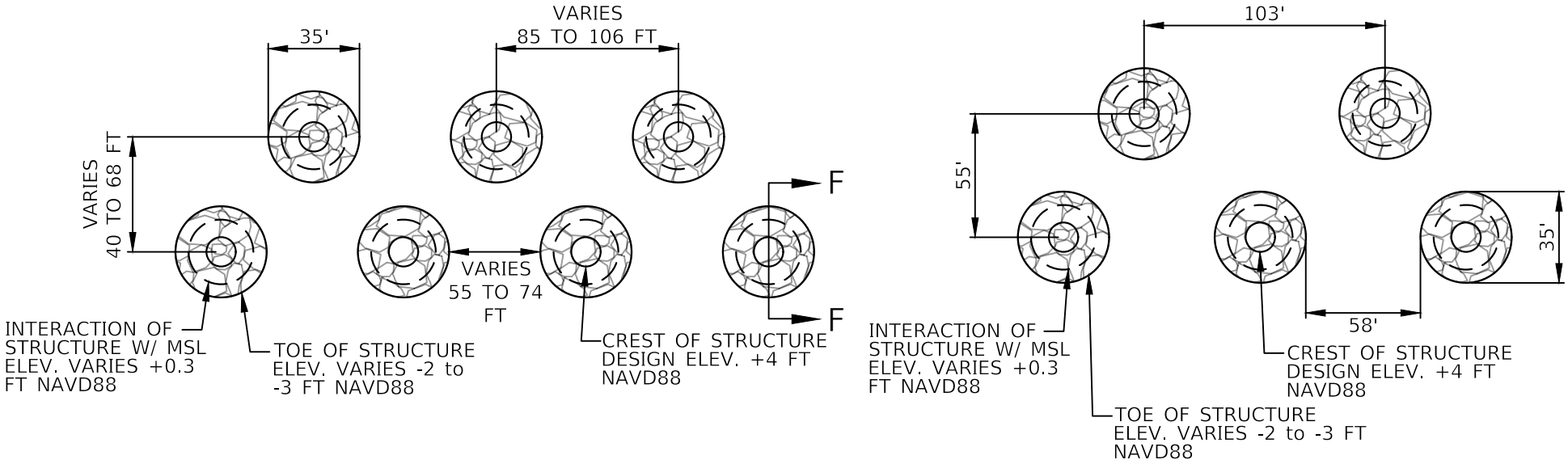
Plan View

PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848				VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935			PENSACOLA BAY LIVING SHORELINE SITE B EASTERN SHORE SUBTIDAL REEF DETAILS
SHEET 31 OF 50				DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE	
				SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021	
				MIKE WARNKE FL PE 28976				



Section F-F



NOT TO SCALE

Plan View

PROJECT NUMBER	NO.	REVISIONS	DATE
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SHEET 32 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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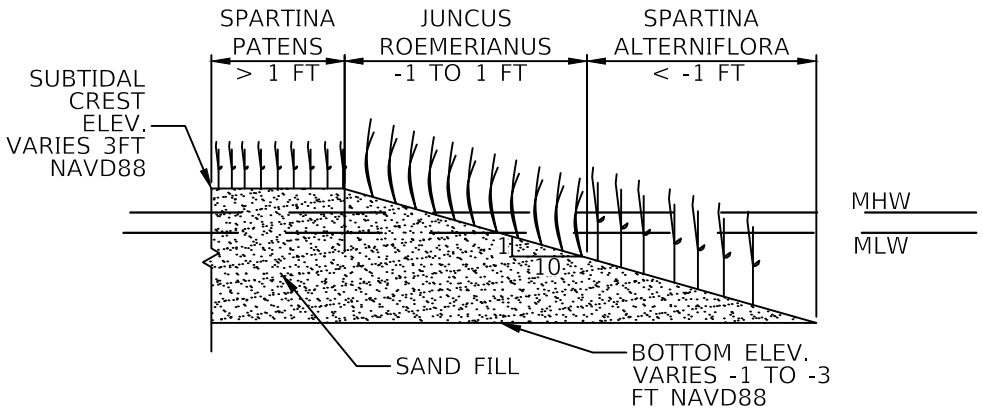
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
ROCK PILES DETAILS



Marsh Area Section View

MARSH AREA		
ZONE	PLANT	FREQUENCY
Bottom to -1	Spartina Alterniflora(Sporobolus Alterniflora)	18" on center
Elevation -1 to +1	Juncus Roemerianus(Needlegrass Rush)	18" on center
Above elevation +1	Spartina Patens(Saltmeadow Cordgrass)	24" on center

Marsh Details

NOT TO SCALE

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
SHEET 33 OF 50			

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FL PE 28976

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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SECTION/TOWNSHIP/RANGE	DISTRICT	DATE
		JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE B EASTERN SHORE
MARSH DETAILS

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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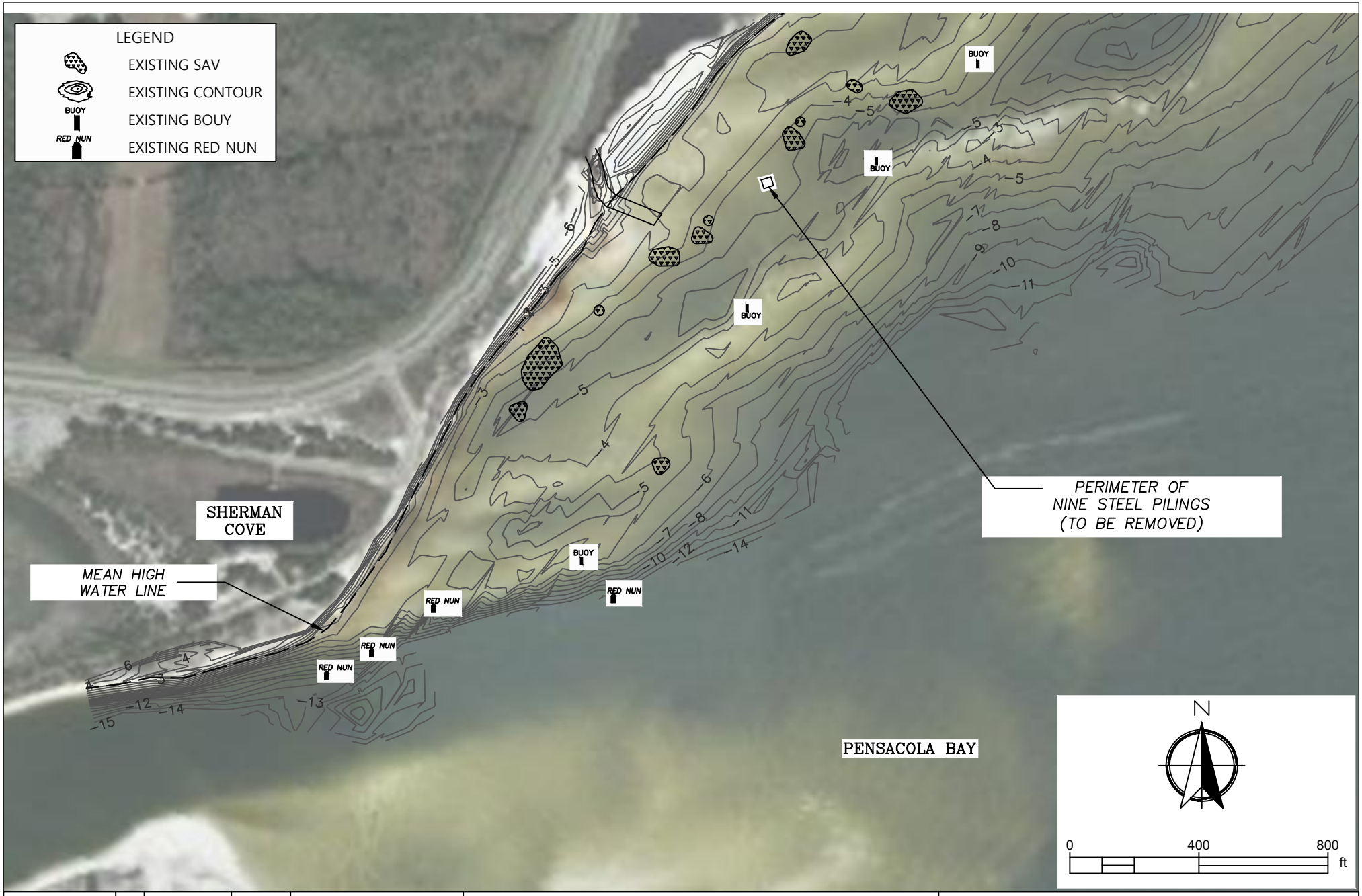
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
EXISTING CONDITIONS



PROJECT NUMBER	NO.	REVISIONS	DATE
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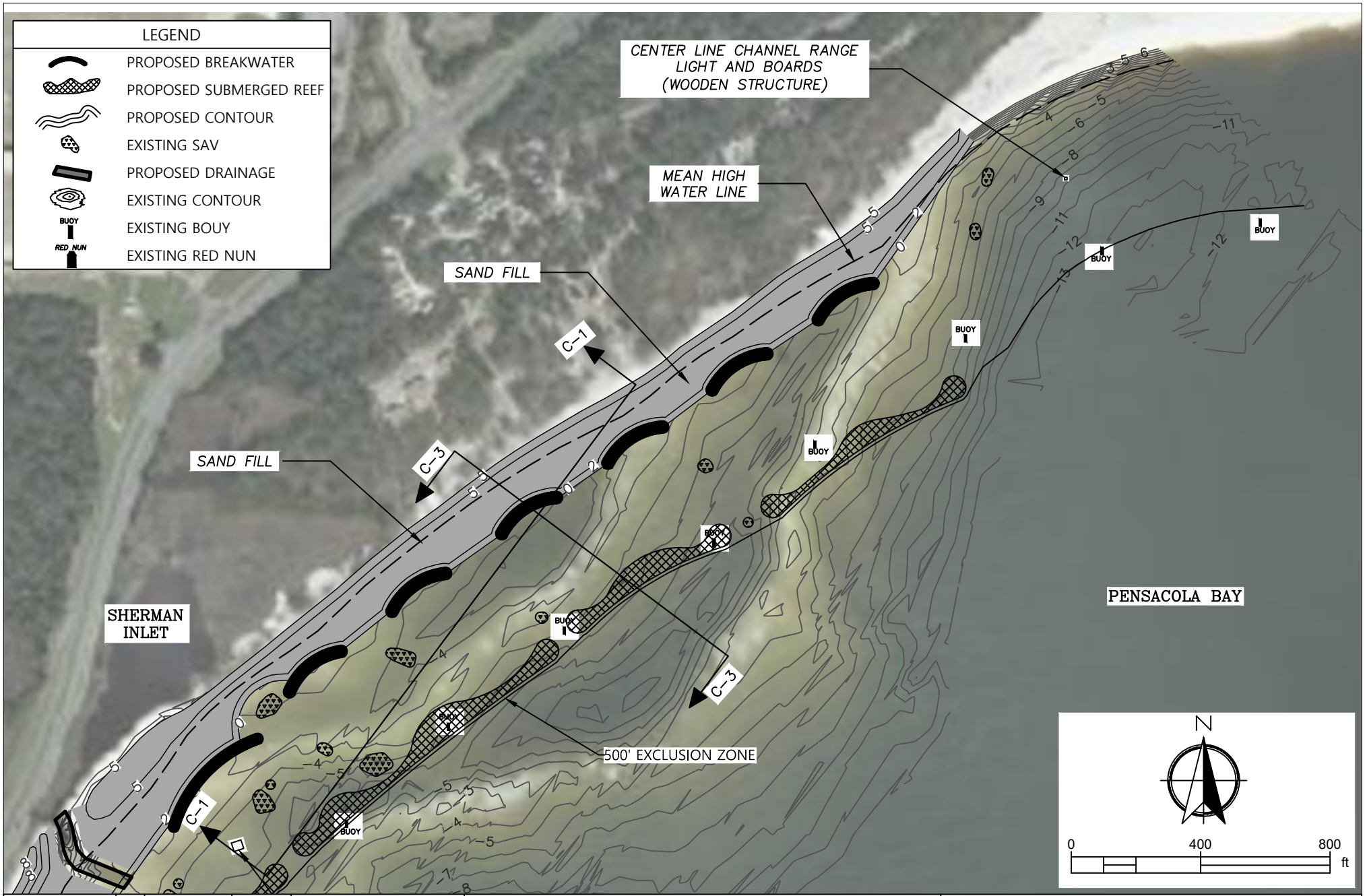
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET EXISTING CONDITIONS



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1033000.848			
SHEET 36 OF 50			

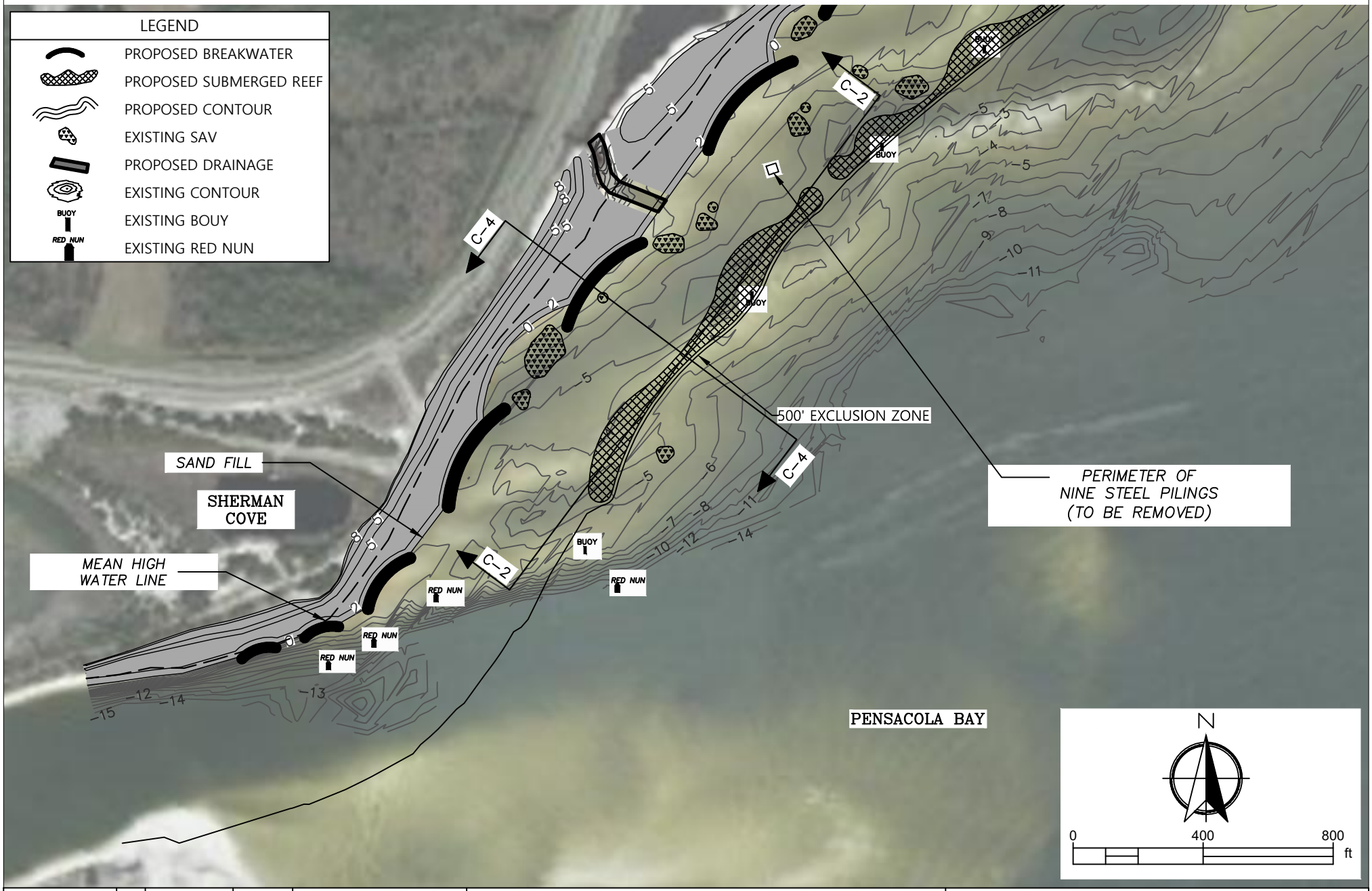
MIKE WARNKE
FL PE 28976

VOLKERT
Engineers Surveyors • Planners

215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

DRAWN BY	DESIGNED BY	QA/QC MANAGER	CHECKED BY
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
SITE PLAN



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MIKE WARNKE
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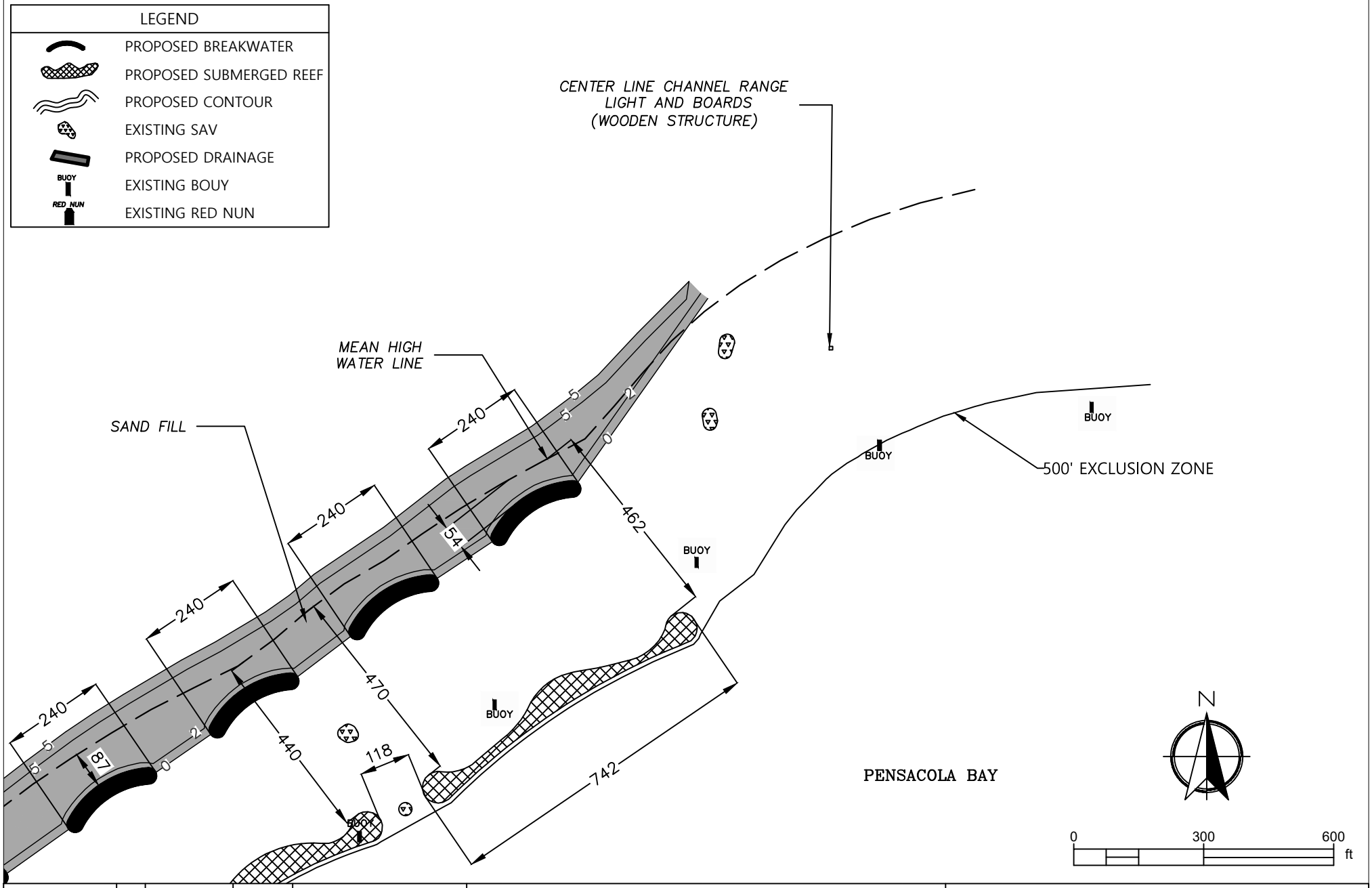
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET SITE PLAN



PROJECT NUMBER	NO.	REVISIONS	DATE
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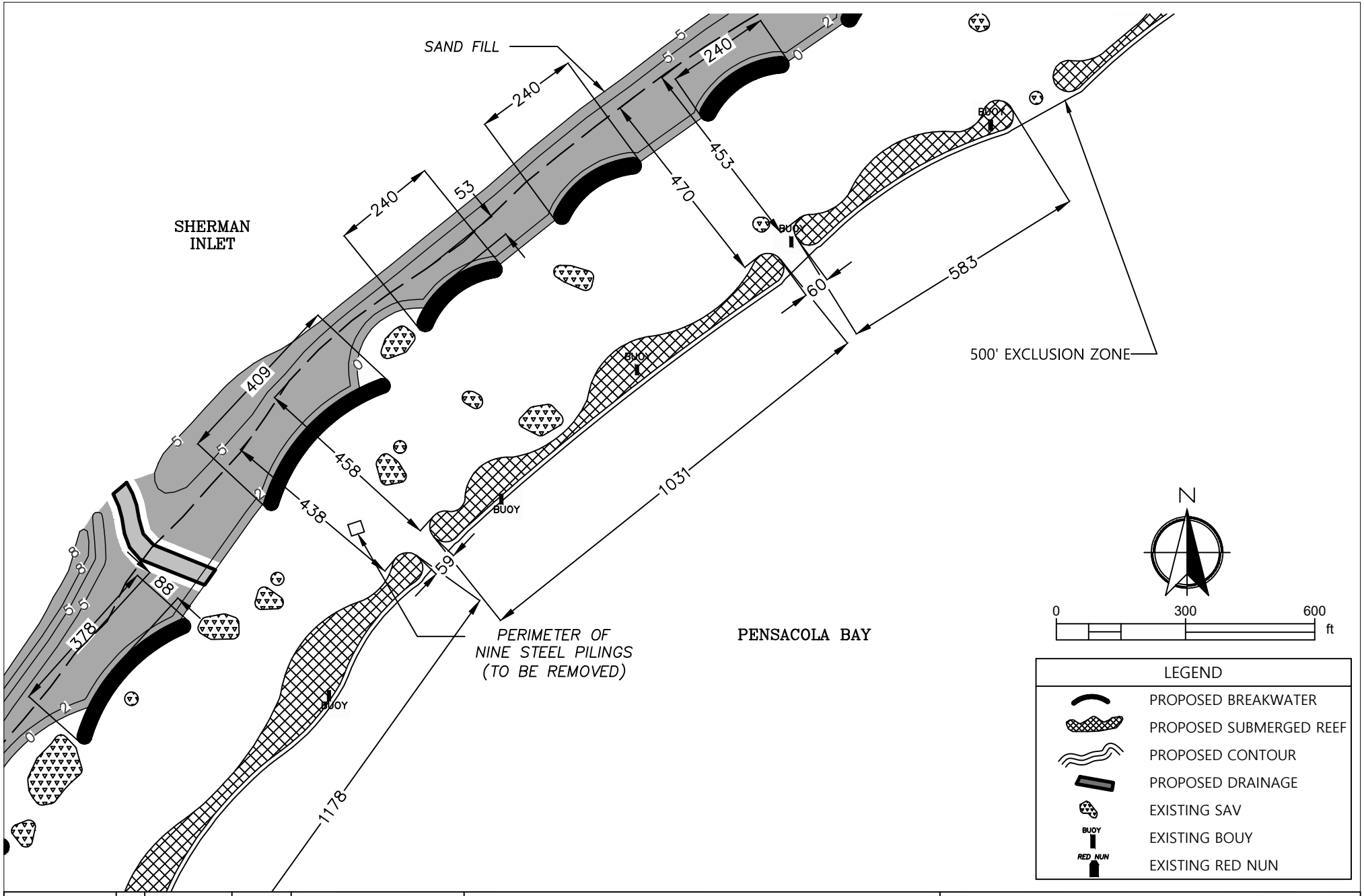
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET DETAILED PLAN



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1033000.848			
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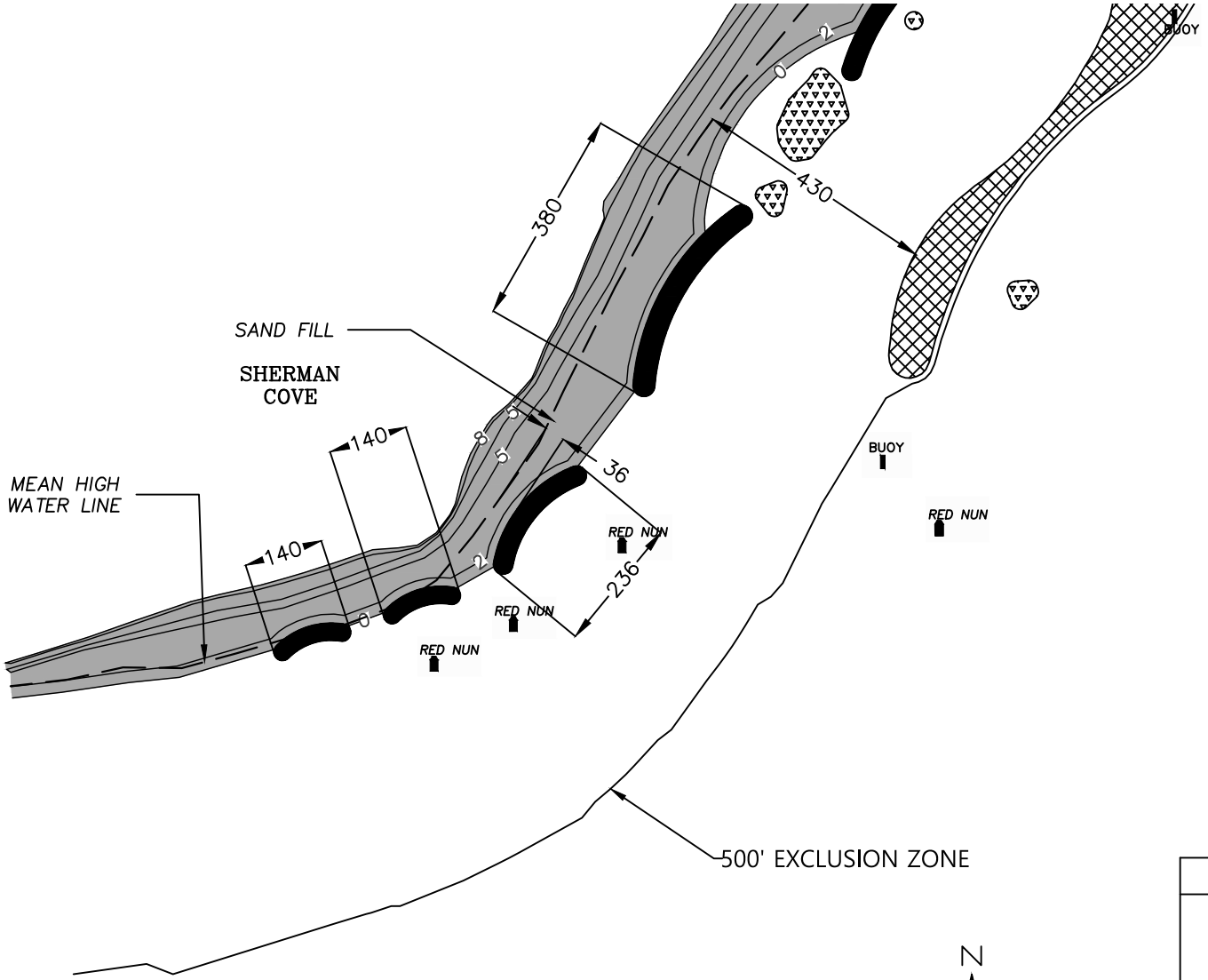
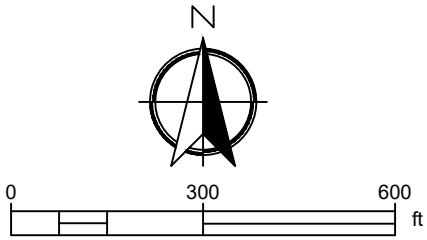
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET DETAILED PLAN





LEGEND	
	PROPOSED BREAKWATER
	PROPOSED SUBMERGED REEF
	PROPOSED CONTOUR
	PROPOSED DRAINAGE
	EXISTING SAV
BUOY	EXISTING BOUY
RED NUN	EXISTING RED NUN

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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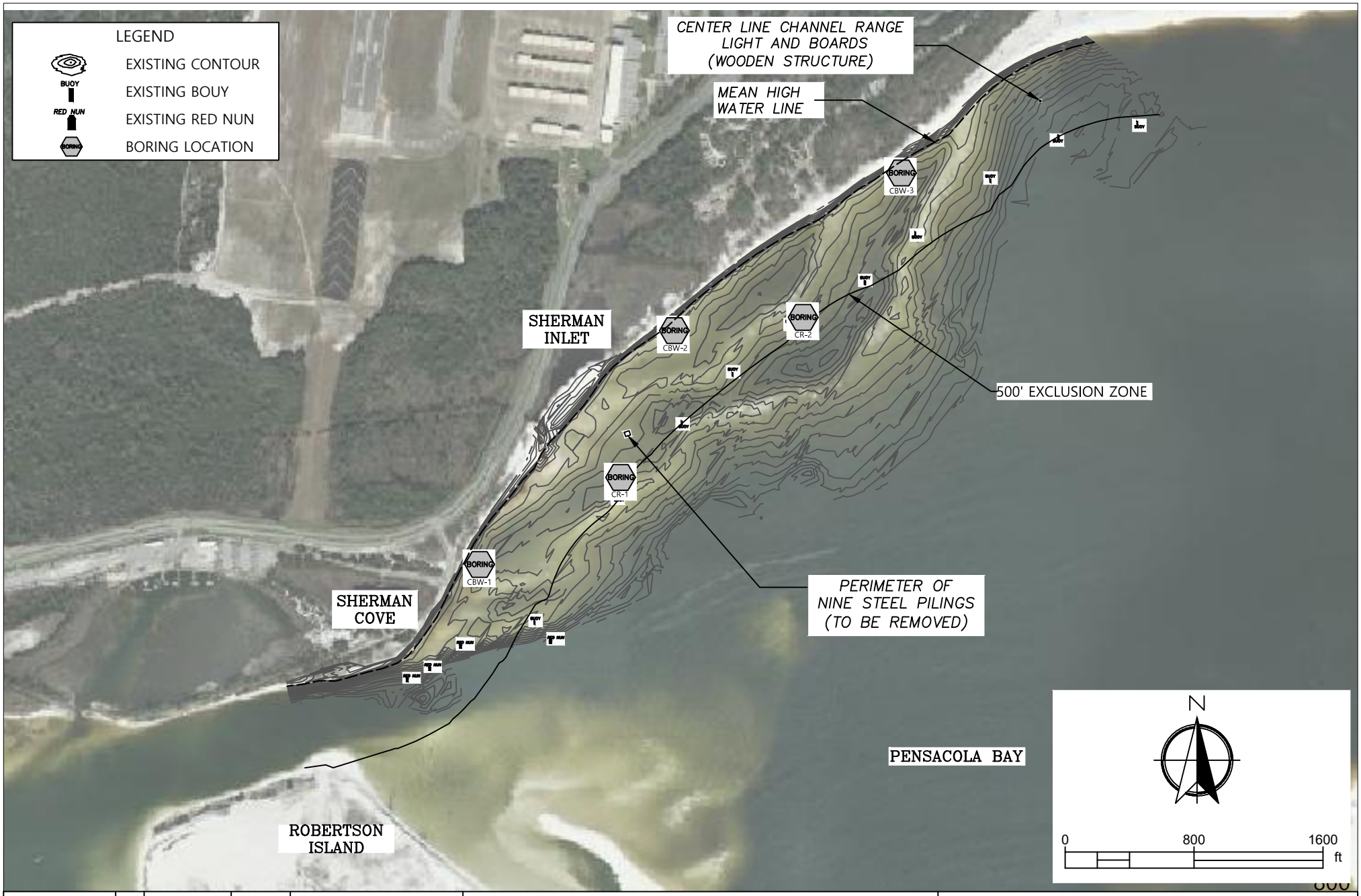
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
DETAILED PLAN

PROJECT WETLAND (WI) & OTHER SURFACE WATER (SW) & IMPACT SUMMARY		
WL & SW ID	PERMANENT WL & SW IMPACT SIZE (SQ.FT.)	(ACRES)
LANDWARD OF MHWL	456,049	10.47
WATERWARD OF MHWL	433,514	9.95
TOTAL	889,564	20.42

PROPOSED CONSTRUCTION		
	TOTAL AREA (SQ.FT.)	(ACRES)
BREAKWATER	113,185	2.60
SUBMERGED REEF	200,299	4.60

PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848				VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935			PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET IMPACT SUMMARY
SHEET 41 OF 50					DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE
				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021



PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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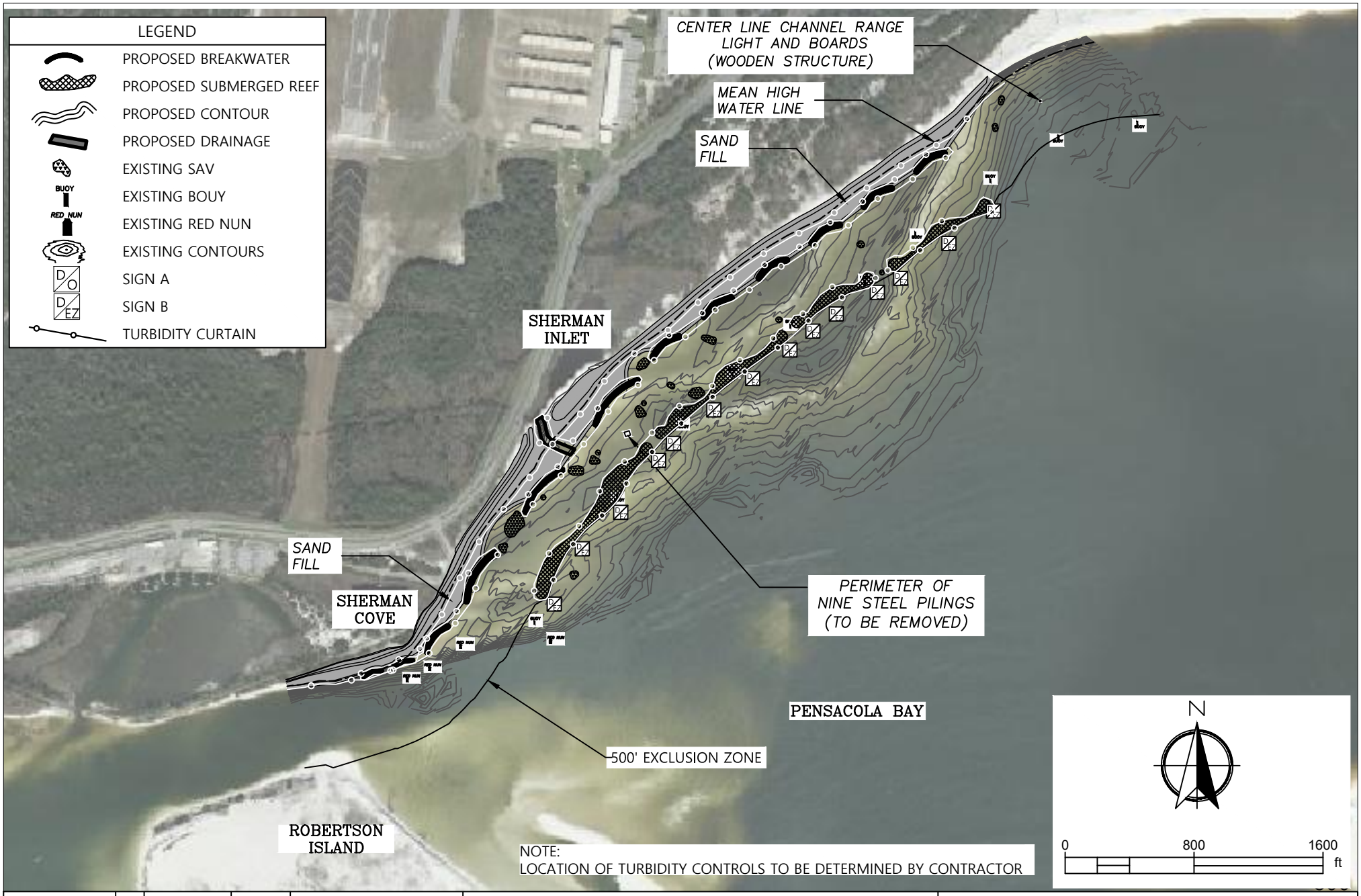
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET BORING & DREDGING PLAN



NOTE:
LOCATION OF TURBIDITY CONTROLS TO BE DETERMINED BY CONTRACTOR

PROJECT NUMBER	NO.	REVISIONS	DATE
1033000.848			
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MIKE WARNKE
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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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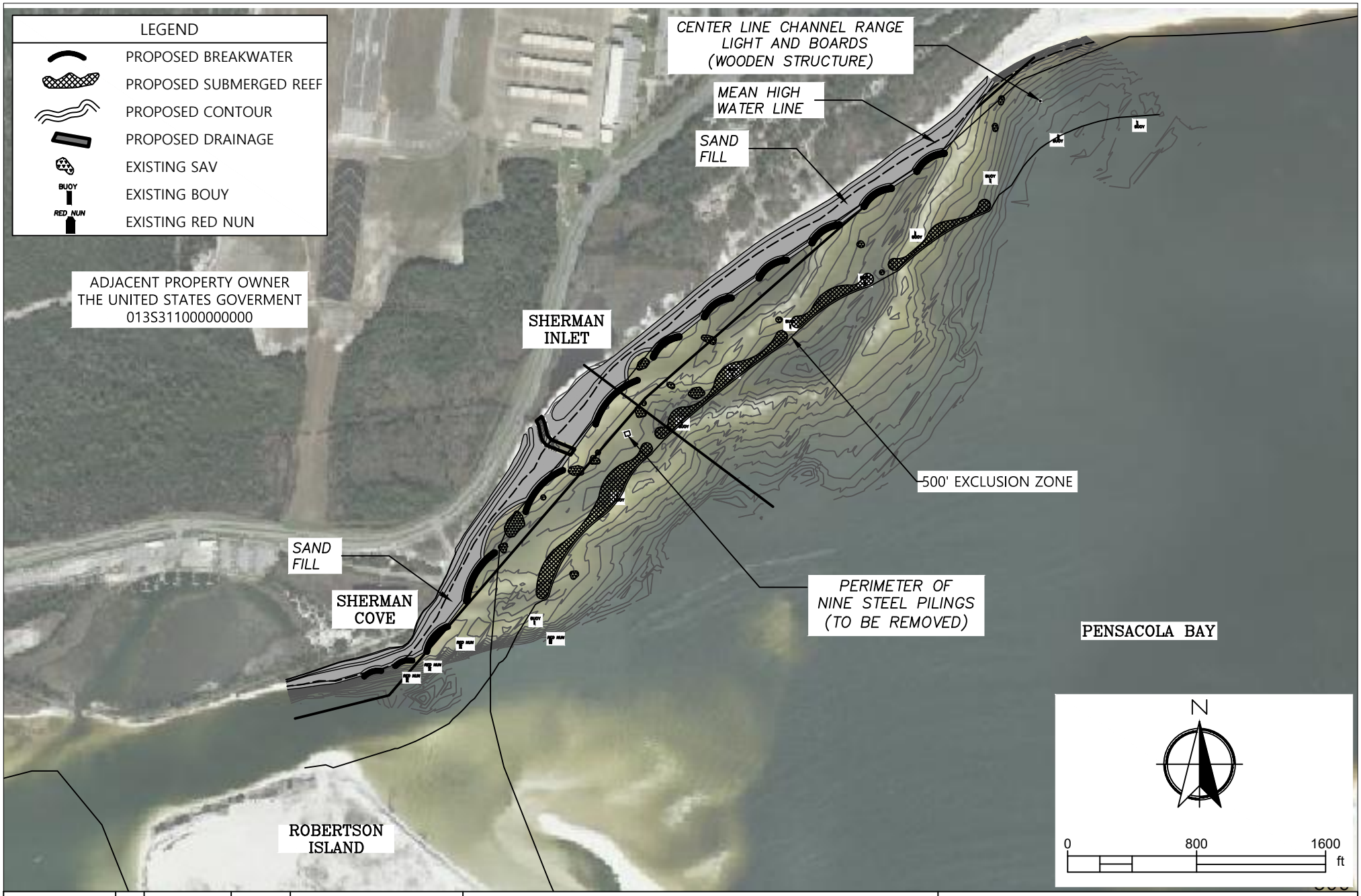
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
AIDS TO NAVIGATION



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SHEET 44 OF 50			

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215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
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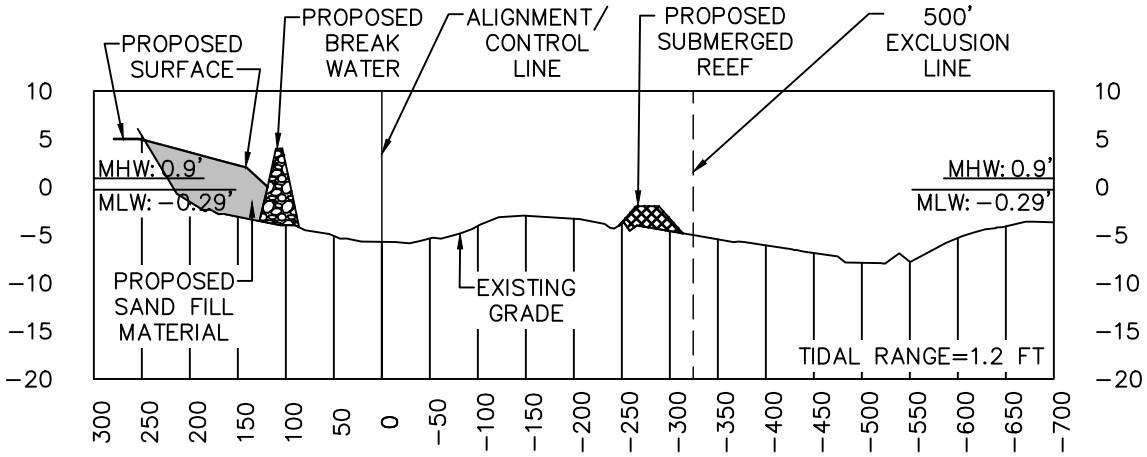
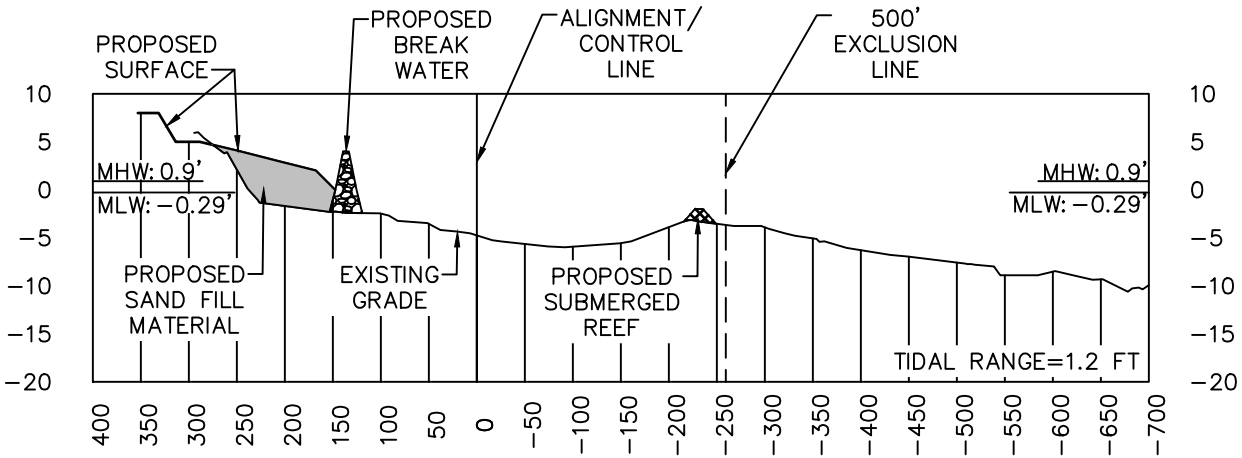
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET ADJACENT PROPERTY



SECTION C−3



SECTION C−4

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GULF BREEZE, FL 32561
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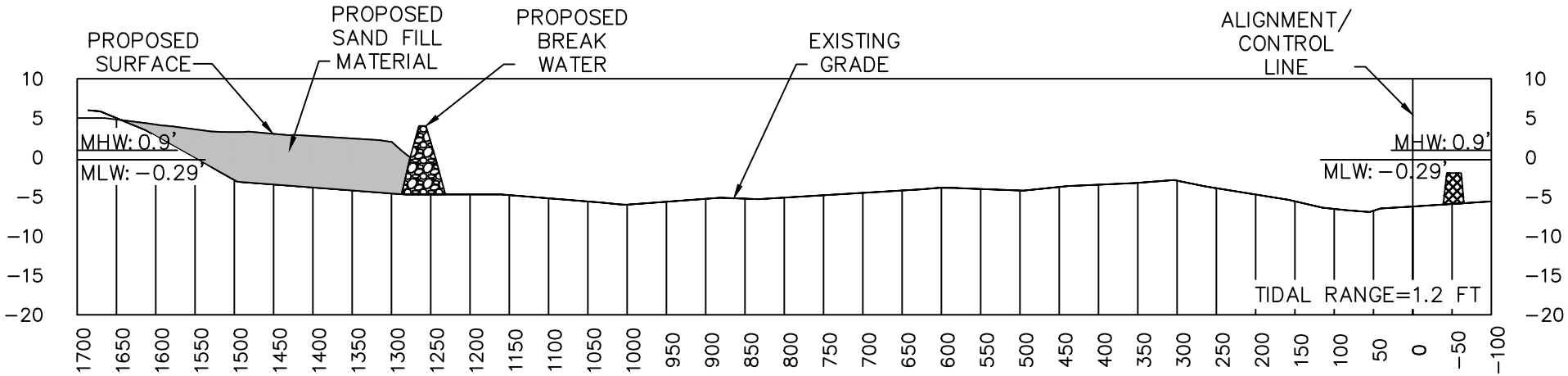
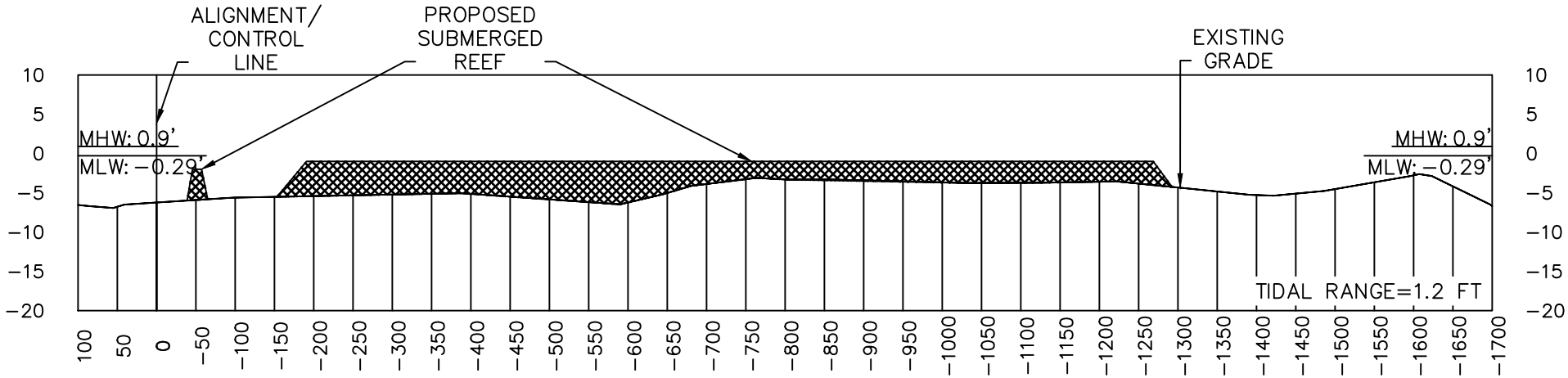
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
CROSS SECTIONS



SECTION C−1



SECTION C−2

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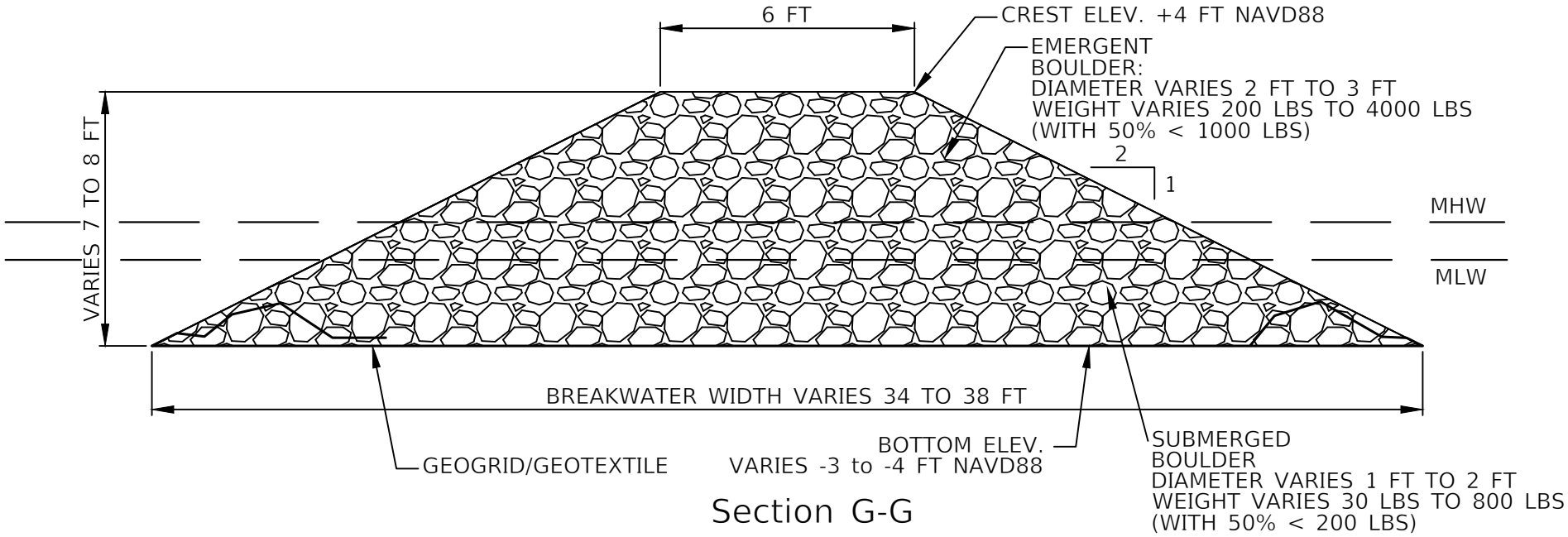
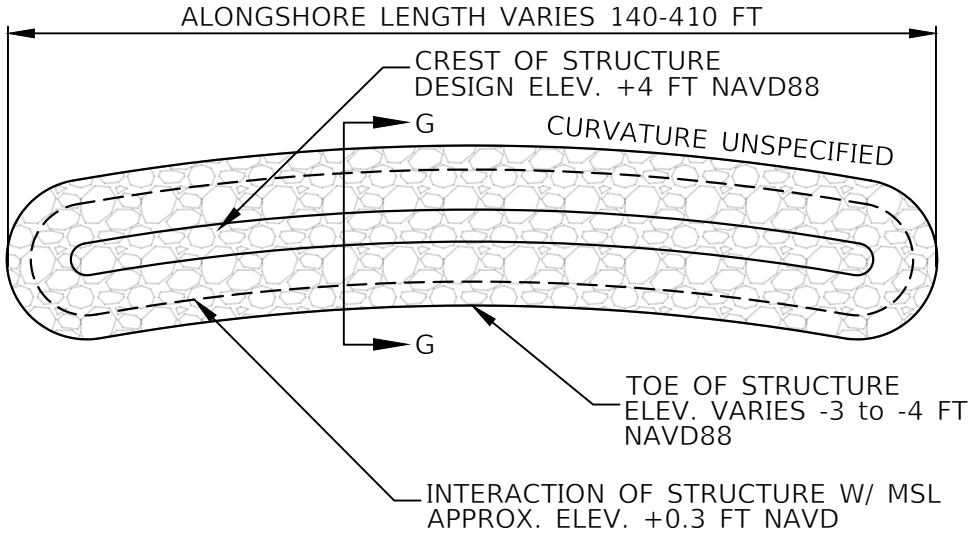
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
SITE C SHERMAN INLET
CROSS SECTIONS



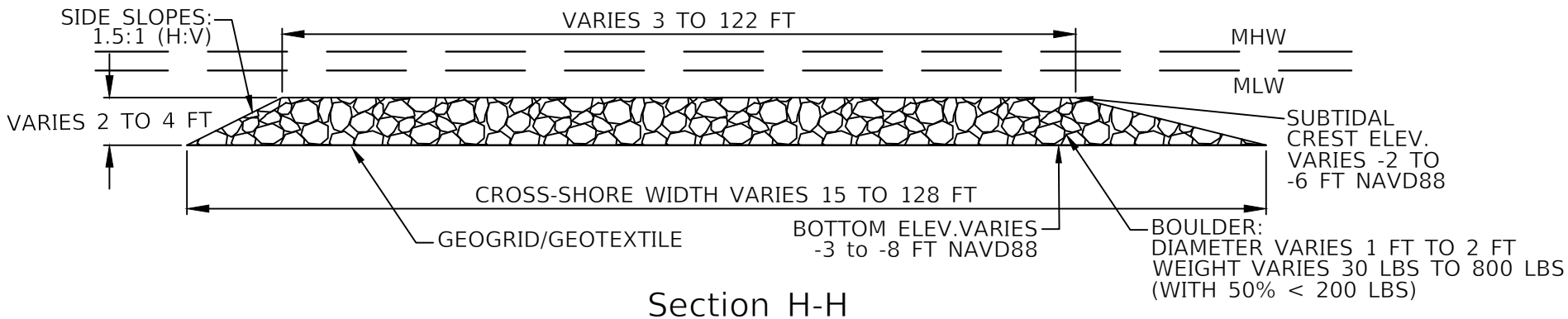
Section G-G



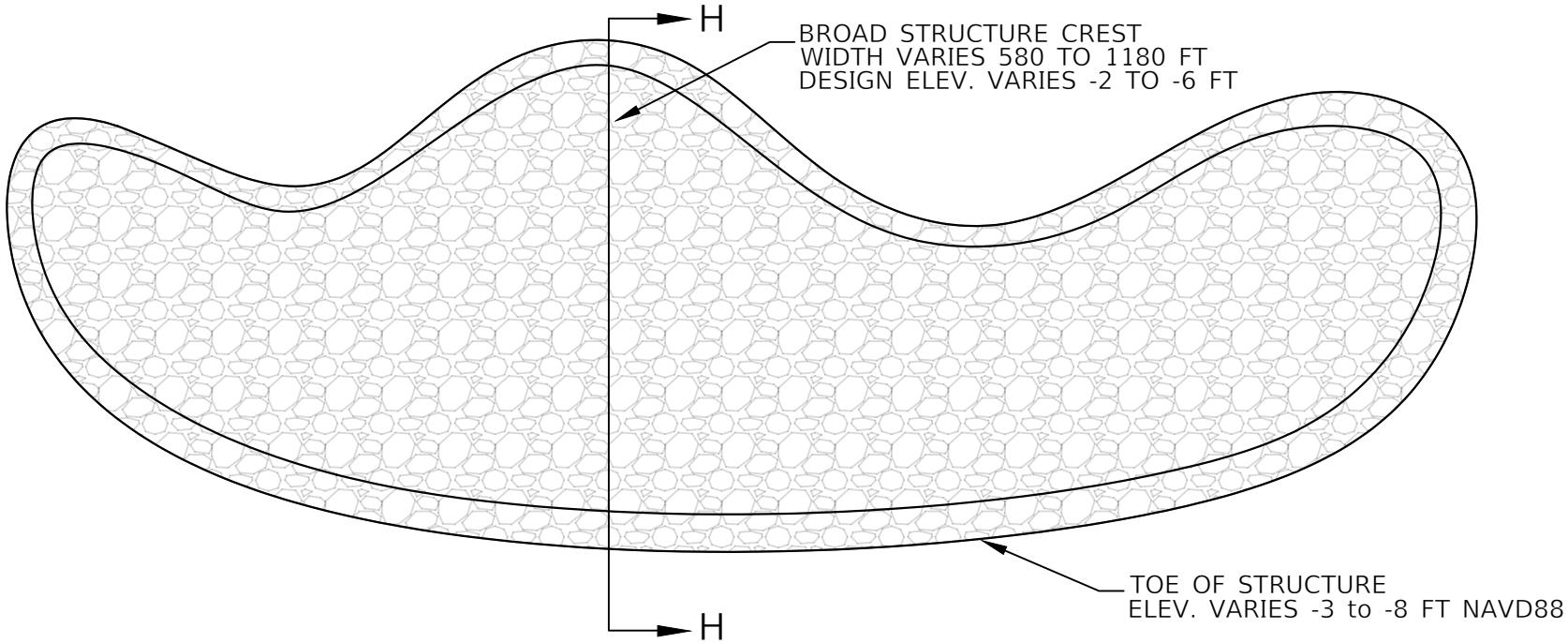
NOT TO SCALE

Plan View

PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848					VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935		PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET BREAK WATER DETAILS
SHEET 47 OF 50					DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE
				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021



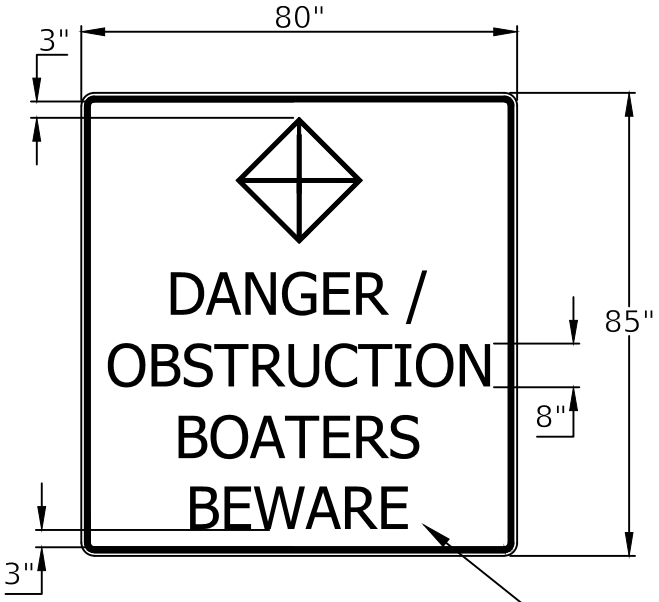
Section H-H



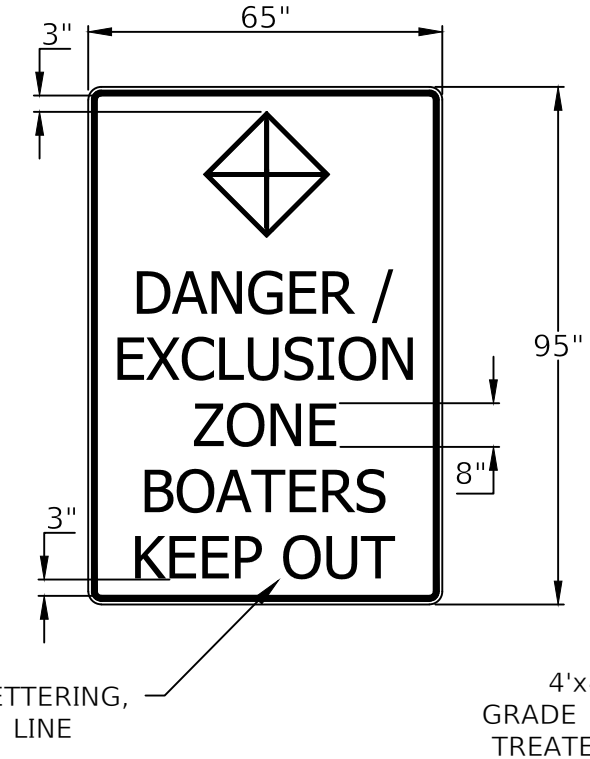
NOT TO SCALE

Plan View

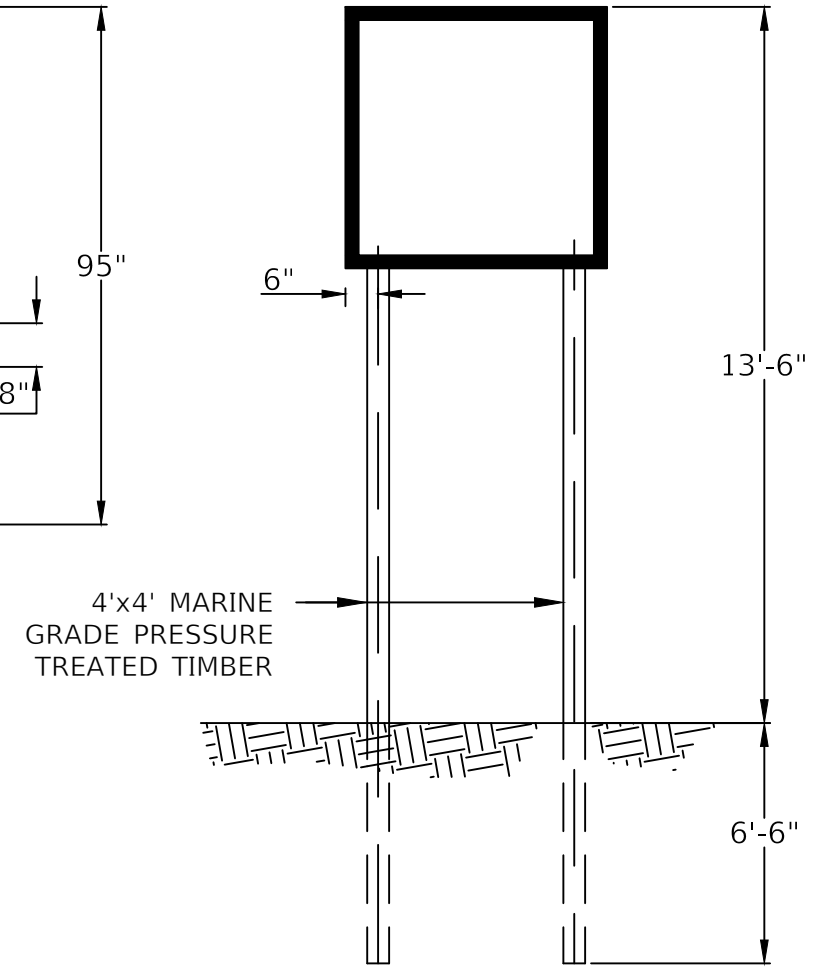
PROJECT NUMBER	NO.	REVISIONS	DATE					
1033000.848					VOLKERT Engineers Surveyors • Planners	215 FAIRPOINT DRIVE SUITE B GULF BREEZE, FL 32561 TELEPHONE: (850) 512-8935		PENSACOLA BAY LIVING SHORELINE SITE C SHERMAN INLET SUBTIDAL REEF DETAILS
SHEET 48 OF 50					DRAWN BY SC	DESIGNED BY VARIES	QA/QC MANAGER	CHECKED BY MIKE WARNKE
				MIKE WARNKE FL PE 28976	SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021



SIGN A



SIGN B



SIGN POST DETAIL

NOTES

1. DOUBLE POST DAY BOARD SIGN WITH WHITE FLASHING LIGHT MOUNTING ABOVE SIGN. WHITE LIGHT CHARACTERISTICS: FL 2.5S (0.3 SEC ON/2.2 SEC OFF) U.S. COAST GUARD APPROVED MARINE LANTERNS - MINIMUM 1 NM VISIBILITY RANGE (1+ CANDELA LED RATING)
2. TEXT AND BORDERS ARE BLACK UNLESS OTHERWISE NOTED
3. BACKGROUNDS ARE REFLECTIVE WHITE UNLESS OTHERWISE NOTED
4. PER U.S. COAST GUARD REQUIREMENTS MIN. SIGN SIZE OS 36" x 36" WITH 8" LETTER.
5. MINIMUM SIGN ELEVATION SHALL BE PER U.S. COAST GUARD REQUIREMENTS
6. FINAL LOCATION WILL BE DETERMINED BY THE US COAST GUARD THROUGH AN APPROVED PRIVATE AIDS TO NAVIGATION APPLICATION

NOT TO SCALE

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MIKE WARNKE
FL PE 28976

VOLKERT Engineers Surveyors • Planners

215 FAIRPOINT DRIVE SUITE B
GULF BREEZE, FL 32561
TELEPHONE: (850) 512-8935

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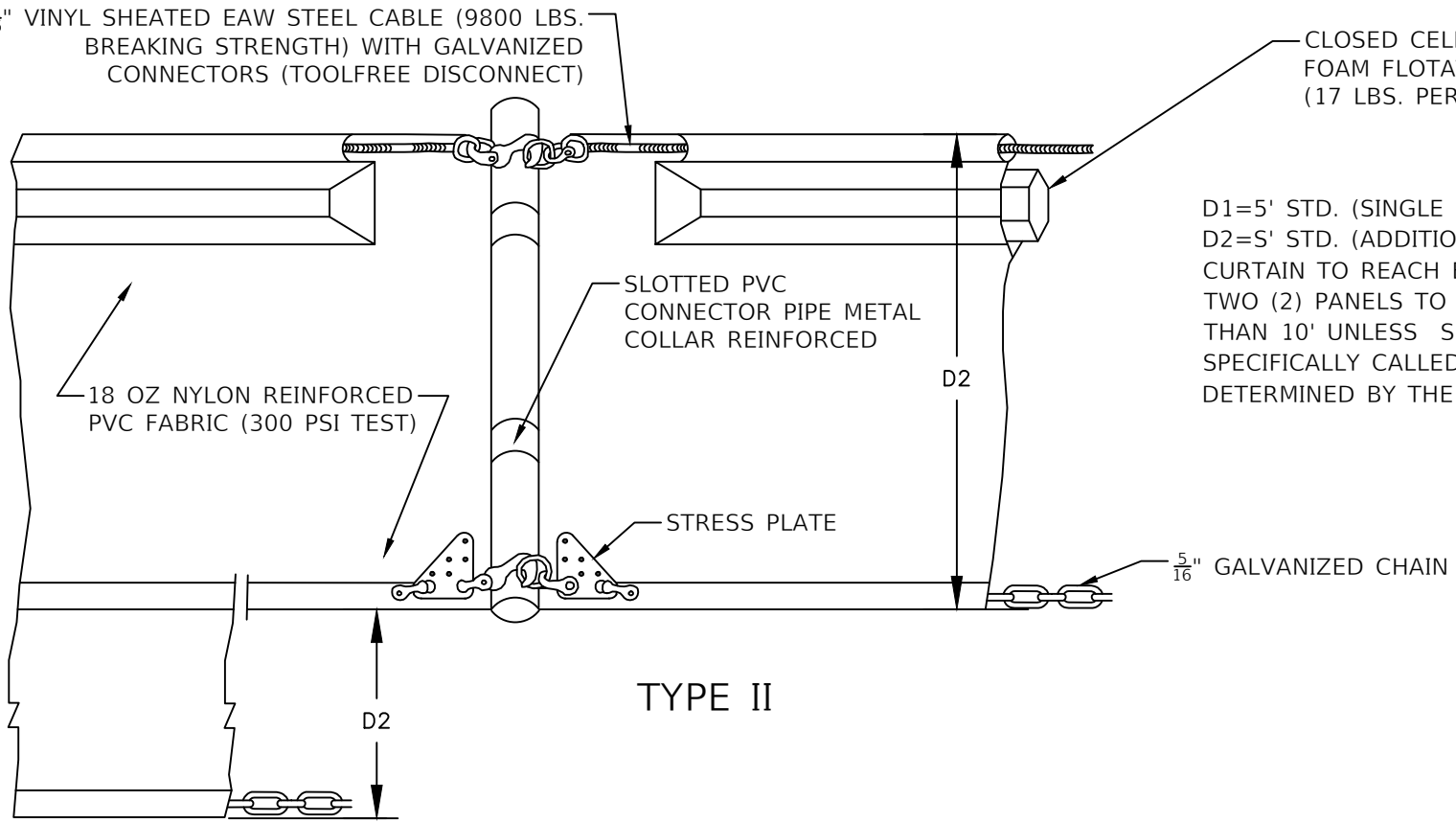
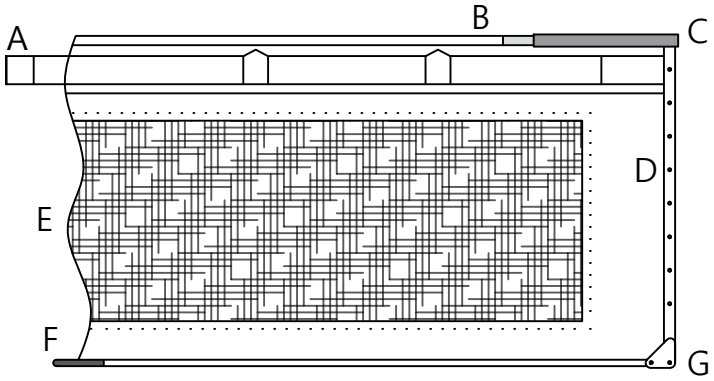
SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE
AIDS TO NAVIGATION DETAILS



TYPE II

D1=5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS).
D2=S' STD. (ADDITIONAL PANEL FOR DEPTHS>5').
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10'.
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10' UNLESS SPECIAL DEPTH CURTAINS ARE SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.



TYPE III

A - 6" OR 8" CLOSED FOAM FLOAT
B - 5/16" TENSION CABLE
C - STEEL CONNECTOR
D - REINFORCED GROMMETS
E - PERMEABLE FABRIC
F - 5/16" BOTTOM BALLAST CHAIN
G - STRESS PLATE W/ SHACKLE CONNECTOR

NOTE:

TURBIDITY CURTAIN TYPE WILL BE DETERMINED ACCORDING TO SITE AND WATER CONDITIONS

NOT TO SCALE

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SC	VARIES		MIKE WARNKE
SECTION/TOWNSHIP/RANGE		DISTRICT	DATE JUNE 2021

PENSACOLA BAY LIVING SHORELINE TURBIDITY CONTROL DETAILS