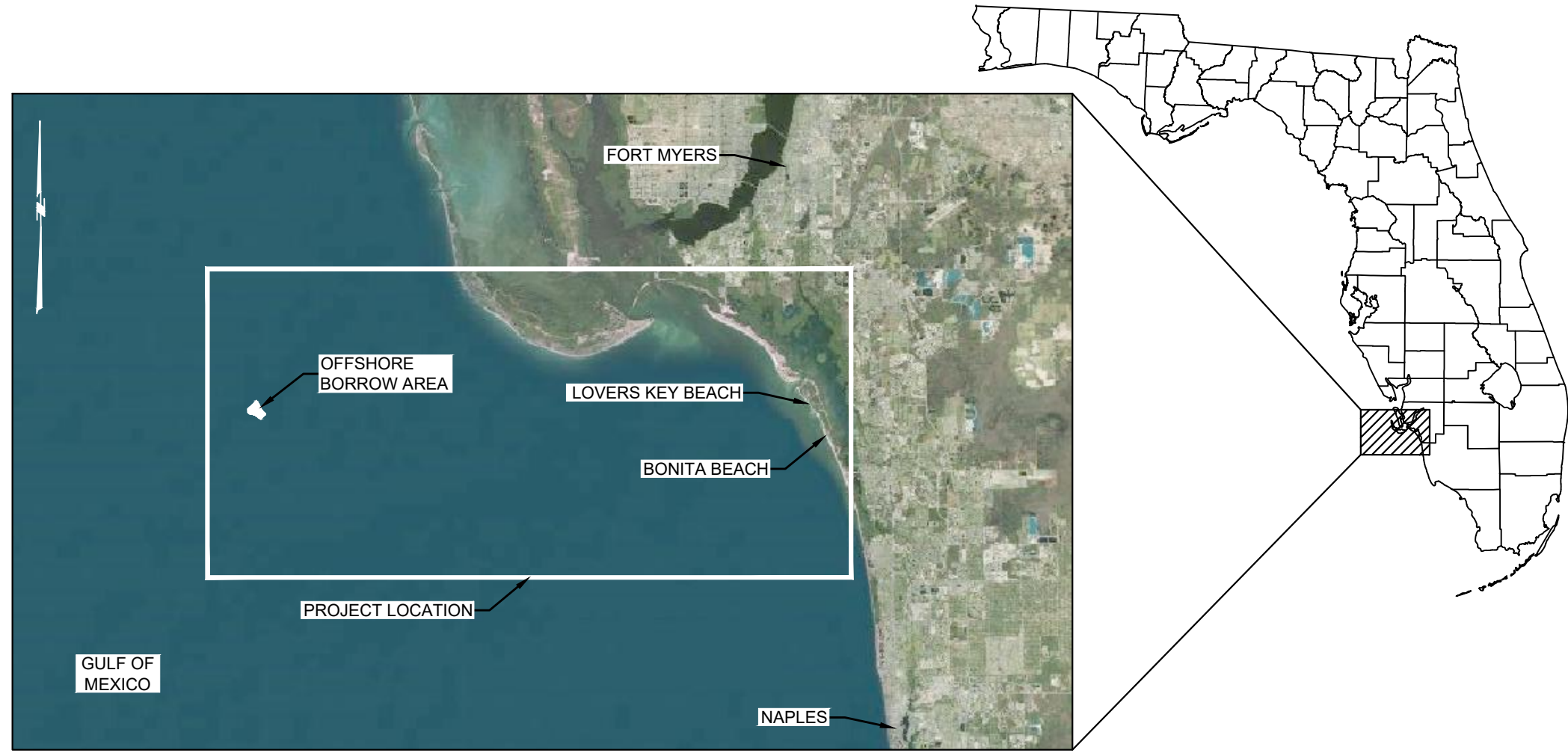


# LOVERS KEY AND BONITA BEACH NOURISHMENT CONTRACT PLANS

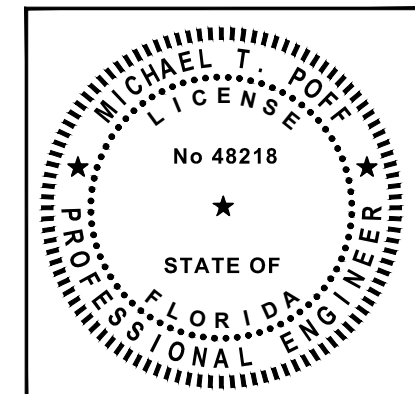
## SHEET INDEX

- 1 COVER SHEET
- 2 PROJECT LOCATION MAP
- 3 LOVERS KEY SURVEY CONTROL AND EQUIPMENT ACCESS OVERVIEW
- 4-5 BONITA BEACH AND SOUTH BONITA BEACH SURVEY CONTROL
- 6 LOVERS KEY BEACH FILL PLAN
- 7-9 LOVERS KEY FILL TEMPLATE PROFILES
- 10-12 BONITA BEACH AND SOUTH BONITA BEACH FILL PLAN
- 13-15 BONITA BEACH AND SOUTH BONITA BEACH FILL TEMPLATE PROFILES
- 16 OFFSHORE BORROW AREA PLAN
- 17-20 OFFSHORE BORROW AREA SECTIONS
- 21 PIPELINE CORRIDORS OVERVIEW
- 22 PIPELINE CORRIDOR - MAIN PLAN VIEW
- 23 PIPELINE CORRIDORS - LOVERS AND BONITA PLAN VIEW
- 24 NORTH EQUIPMENT ACCESS ROUTE
- 25 NEW PASS ACCESS / STAGING AREAS AND SOUTH EQUIPMENT ACCESS ROUTE AND LANDING ZONE



## NOTES

1. MEAN HIGH WATER (MHW) ELEVATION OF +0.3 FEET OBTAINED FROM LABINS POINT 100234, FDEP MEAN HIGH WATER PROCEDURE APPROVAL INQUIRY.
2. LOVERS KEY, BONITA BEACH, SOUTH BONITA BEACH TOPOGRAPHIC AND BATHYMETRIC SURVEY CONDUCTED BY COASTAL ENGINEERING CONSULTANTS, INC. (CEC), MAY 11 - 12, 2023. NEW PASS SURVEYS CONDUCTED BY CEC, OCTOBER 2022. SURVEYS FOR THE OFFSHORE BORROW AREA AND OFFSHORE PIPELINE CORRIDORS CONDUCTED BY OCEAN SURVEYS, INC. (OSI), JULY 2021.
3. OFFSHORE BORROW AREA GEOTECHNICAL INVESTIGATION CONDUCTED BY GFA INTERNATIONAL AND AMDRILL, INC., 2020 AND 2021.
4. STATE PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
5. ELEVATIONS SHOWN HEREON ARE IN FEET AND TENTHS AND REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) GEOID18.
6. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATICS GPS AND REFERENCED TO NAVD88.
7. HYDROGRAPHIC SURVEY ACCURACIES AND PROCEDURES ARE IN ACCORDANCE WITH GENERAL SURVEY STANDARDS, AS DEFINED BY THE U.S. ARMY CORPS OF ENGINEERS, HYDROGRAPHIC SURVEY MANUAL.
8. INFORMATION SHOWN HEREON REFLECTS CONDITIONS AS THEY EXISTED ON THE SURVEY DATE SHOWN AND CAN ONLY BE CONSIDERED INDICATIVE OF CONDITIONS AT THAT TIME.
9. BONITA BEACH EROSION CONTROL LINE (ECL) OBTAINED FROM LEE COUNTY MEAN HIGH WATER (MHW) SURVEY DATED APRIL 1994. LOVERS KEY ECL OBTAINED FROM LEE COUNTY MHW SURVEY DATED MAY 2001.
10. AERIAL PHOTOGRAPHY PROVIDED BY NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.



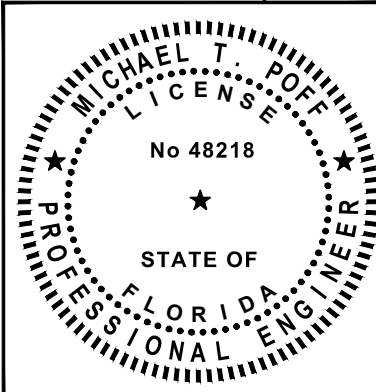
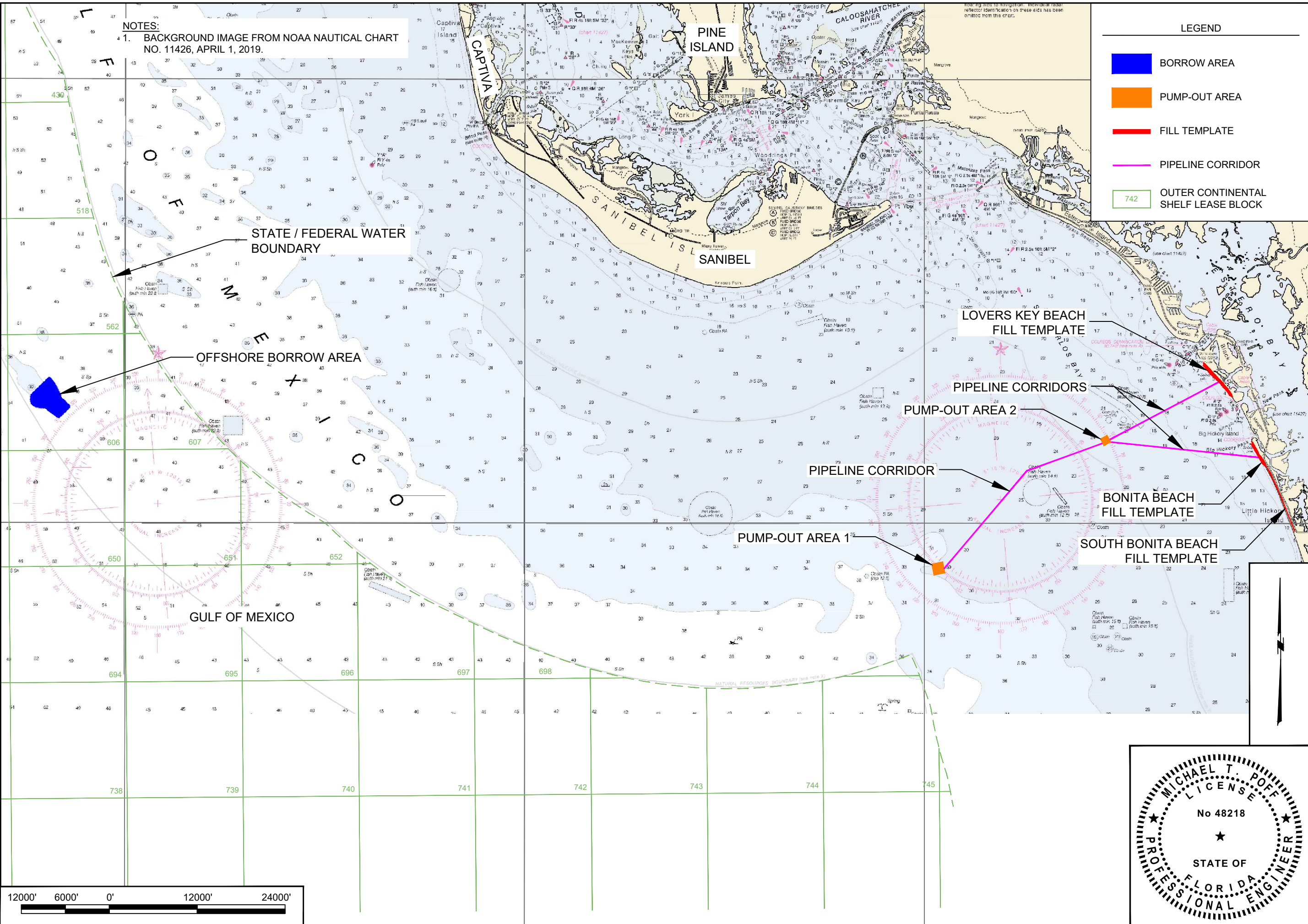
DATE: 2/5/2024		SCALE: AS NOTED	
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CHECKED: MTP/P.G.		REF. NO.:	
SEC.	TWP.	RNG.	NO.
CLIENT: LEE COUNTY		BY:	
TITLE: COVER SHEET		DATE:	
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifi.com			
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135			
SHEET 1 OF 25			
FILE NO.: 22.175			



**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA NAUTICAL CHART NO. 11426, APRIL 1, 2019.

**LEGEND**

- BORROW AREA
- PUMP-OUT AREA
- FILL TEMPLATE
- PIPELINE CORRIDOR
- 742 OUTER CONTINENTAL SHELF LEASE BLOCK



**CLIENT:** LEE COUNTY  
**TITLE:** PROJECT LOCATION MAP

**COASTAL & MARINE ENGINEERING SERVICES**  
 ENVIRONMENTAL & GEOLOGICAL SERVICES  
 SURVEYING & MAPPING  
 ENGINEERING - CA 2464  
 SURVEYING - LB 2464

PHONE: (239) 643-2324  
 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecifi.com

28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135

NO.	DATE	BY	REVISION DESCRIPTION

**DATE:** 2/15/2024 **SCALE:** AS NOTED  
**DRAWN:** JSD/E.B. **CHECKED:** MTP/P.G.  
**SEC:** TWP. **RNG:** ACAD NO.: 22175 CPS 02 Project Loc.DWG  
**REF. NO.:**







**SHEET 2 OF 25**  
**FILE NO.: 22.175**

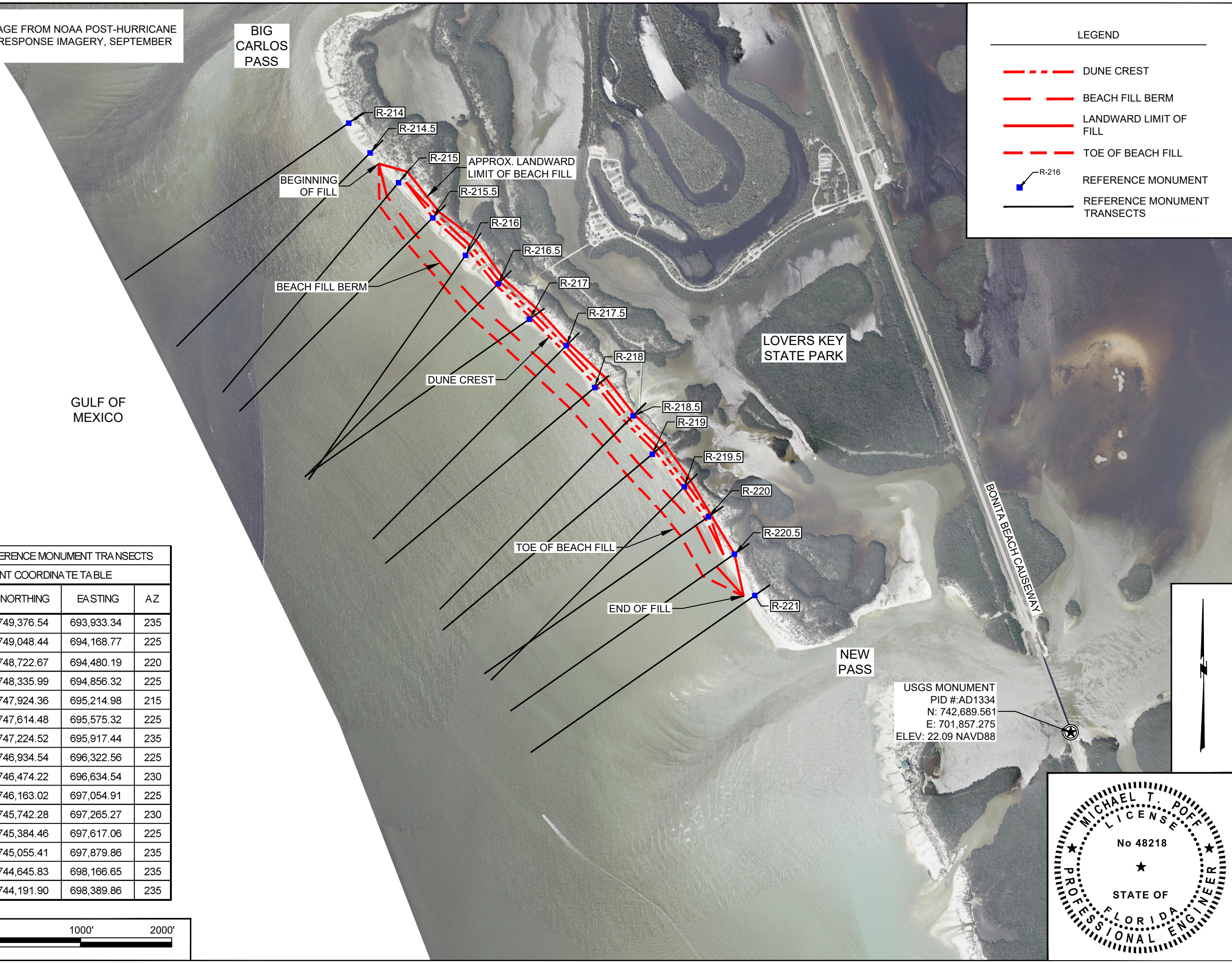


NOTES:  
 1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.

BIG CARLOS PASS

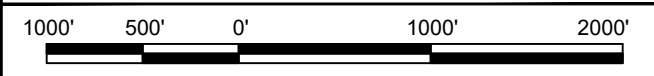
**LEGEND**

-  DUNE CREST
-  BEACH FILL BERM
-  LANDWARD LIMIT OF FILL
-  TOE OF BEACH FILL
-  R-216 REFERENCE MONUMENT
-  REFERENCE MONUMENT TRANSECTS

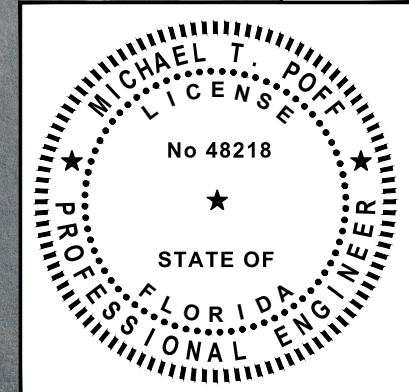


LOVERS KEY REFERENCE MONUMENT TRANSECTS  
 ALIGNMENT COORDINATE TABLE

REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-214	749,376.54	693,933.34	235
R-214.5	749,048.44	694,168.77	225
R-215	748,722.67	694,480.19	220
R-215.5	748,335.99	694,856.32	225
R-216	747,924.36	695,214.98	215
R-216.5	747,614.48	695,575.32	225
R-217	747,224.52	695,917.44	235
R-217.5	746,934.54	696,322.56	225
R-218	746,474.22	696,634.54	230
R-218.5	746,163.02	697,054.91	225
R-219	745,742.28	697,265.27	230
R-219.5	745,384.46	697,617.06	225
R-220	745,055.41	697,879.86	235
R-220.5	744,645.83	698,166.65	235
R-221	744,191.90	698,389.86	235



USGS MONUMENT  
 PID #:AD1334  
 N: 742,689.561  
 E: 701,857.275  
 ELEV: 22.09 NAVD88



DATE: 2/5/2024 SCALE: AS NOTED  
 DRAWN: JSD/F.B.  
 CHECKED: MTP/P.G.  
 SEC: TWP. RING.  
 22175\_CPS\_3-5\_Survey\_CtrIDWG  
 REF. NO. NO. DATE BY REVISION DESCRIPTION

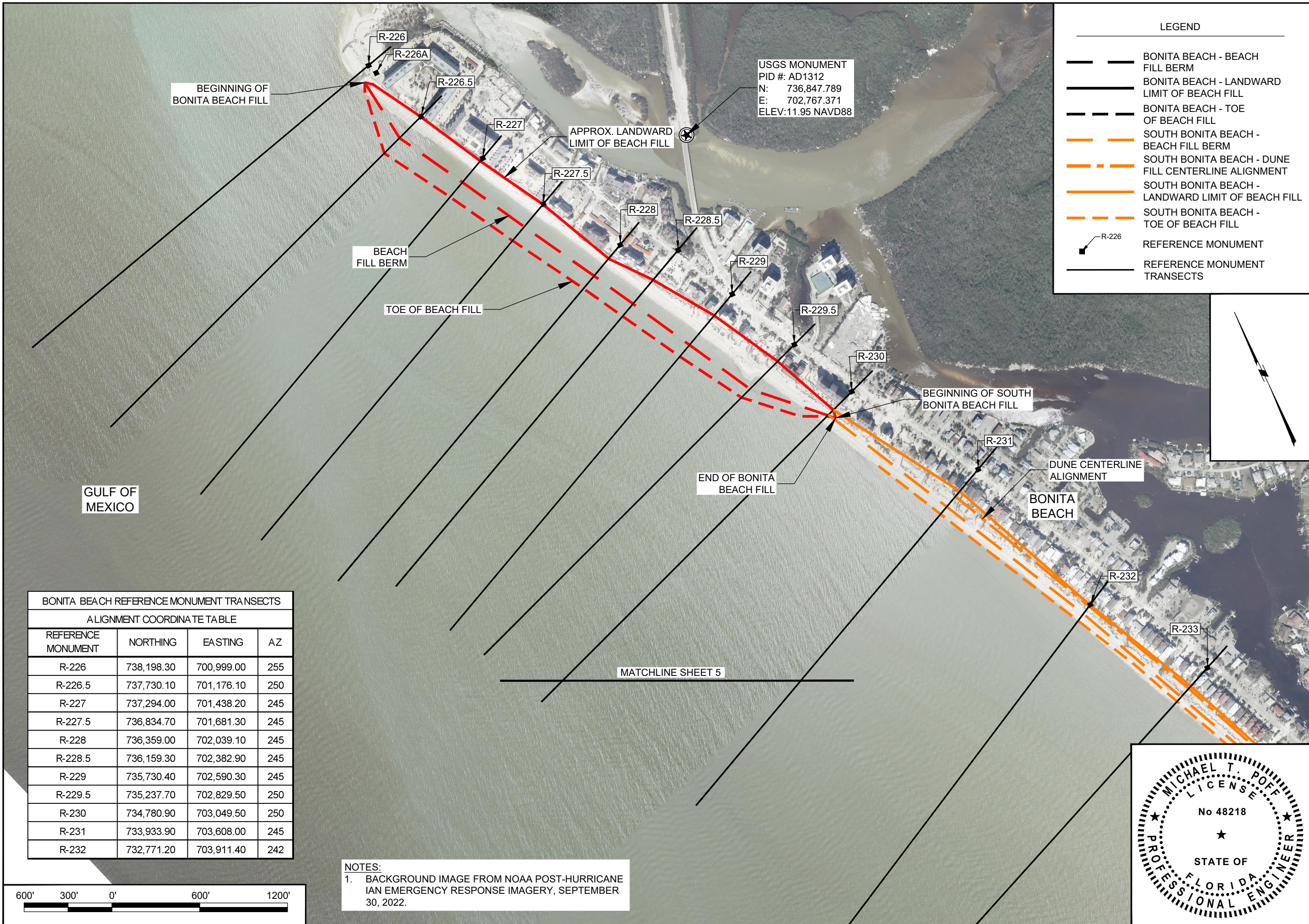
LEE COUNTY  
 LOVERS KEY SURVEY CONTROL

CLIENT: COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464  
 TITLE:  
 PHONE: (239) 643-2324  
 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecifl.com

COASTAL ENGINEERING CONSULTANTS, INC.  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135

SHEET 3 OF 25  
 FILE NO.: 22.175





**LEGEND**

- BONITA BEACH - BEACH FILL BERM
- BONITA BEACH - LANDWARD LIMIT OF BEACH FILL
- BONITA BEACH - TOE OF BEACH FILL
- SOUTH BONITA BEACH - BEACH FILL BERM
- SOUTH BONITA BEACH - DUNE FILL CENTERLINE ALIGNMENT
- SOUTH BONITA BEACH - LANDWARD LIMIT OF BEACH FILL
- SOUTH BONITA BEACH - TOE OF BEACH FILL
- R-226 REFERENCE MONUMENT
- REFERENCE MONUMENT TRANSECTS

DATE:	2/5/2024	SCALE:	AS NOTED
DRAWN:	JSD/F.B.	CHECKED:	MTP/P.G.
SEC:	TWP.	RNG.	
ACAD NO.:	22175_CPS 3-5_Survey_CtrlDWG	REF. NO.	
NO.		DATE	BY

**LEE COUNTY**

**BONITA BEACH AND SOUTH BONITA BEACH SURVEY CONTROL**

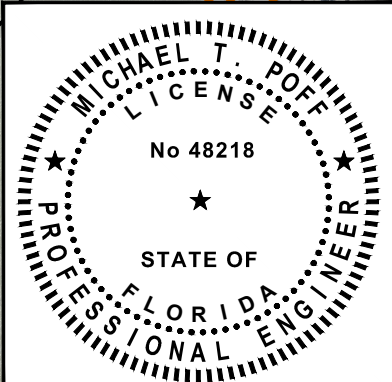
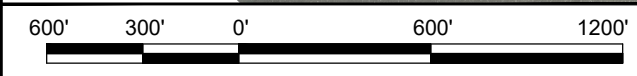
CLIENT: LEE COUNTY  
 TITLE: BONITA BEACH AND SOUTH BONITA BEACH SURVEY CONTROL

COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING - CA 2464 SURVEYING - LB 2464  
 PHONE: (239) 643-2324  
 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecfll.com

**COASTAL ENGINEERING CONSULTANTS, INC.**  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135

BONITA BEACH REFERENCE MONUMENT TRANSECTS			
ALIGNMENT COORDINATE TABLE			
REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-226	738,198.30	700,999.00	255
R-226.5	737,730.10	701,176.10	250
R-227	737,294.00	701,438.20	245
R-227.5	736,834.70	701,681.30	245
R-228	736,359.00	702,039.10	245
R-228.5	736,159.30	702,382.90	245
R-229	735,730.40	702,590.30	245
R-229.5	735,237.70	702,829.50	250
R-230	734,780.90	703,049.50	250
R-231	733,933.90	703,608.00	245
R-232	732,771.20	703,911.40	242







**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.

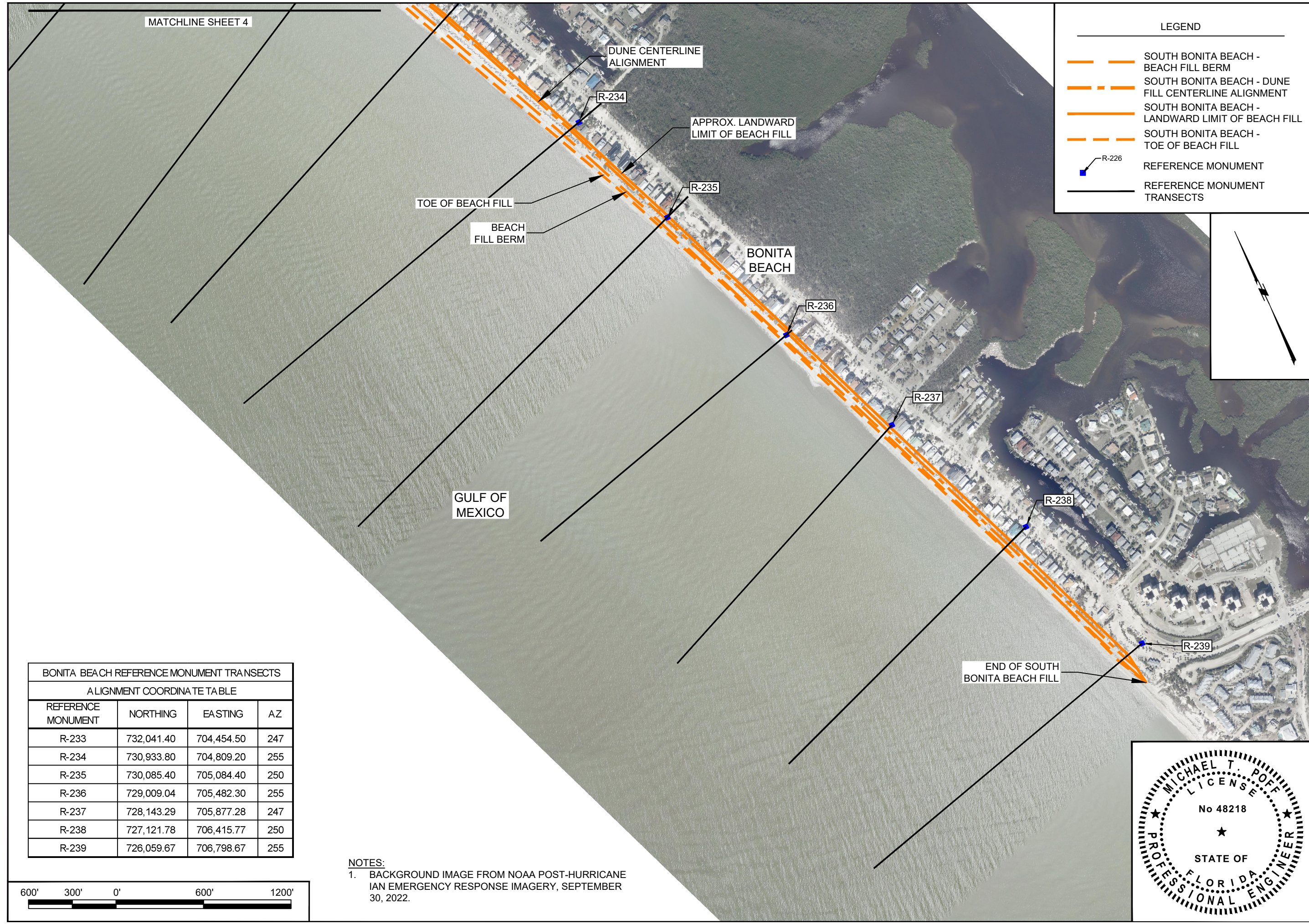




MATCHLINE SHEET 4

**LEGEND**

-  SOUTH BONITA BEACH - BEACH FILL BERM
-  SOUTH BONITA BEACH - DUNE FILL CENTERLINE ALIGNMENT
-  SOUTH BONITA BEACH - LANDWARD LIMIT OF BEACH FILL
-  SOUTH BONITA BEACH - TOE OF BEACH FILL
-  R-226 REFERENCE MONUMENT
-  REFERENCE MONUMENT TRANSECTS

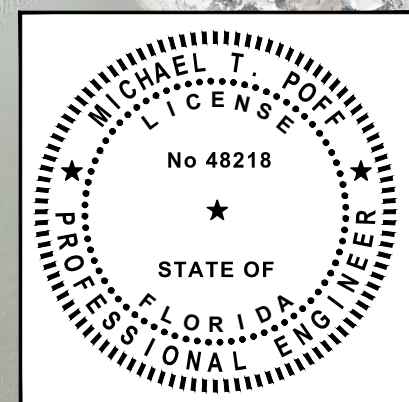
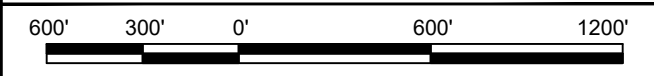


**BONITA BEACH REFERENCE MONUMENT TRANSECTS**

**ALIGNMENT COORDINATE TABLE**

REFERENCE MONUMENT	NORTHING	EASTING	AZ
R-233	732,041.40	704,454.50	247
R-234	730,933.80	704,809.20	255
R-235	730,085.40	705,084.40	250
R-236	729,009.04	705,482.30	255
R-237	728,143.29	705,877.28	247
R-238	727,121.78	706,415.77	250
R-239	726,059.67	706,798.67	255

**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.



**CLIENT:** LEE COUNTY

**TITLE:** SOUTH BONITA BEACH SURVEY CONTROL

**DATE:** 2/5/2024 **SCALE:** AS NOTED

**DRAWN:** JSD **F.B.**

**CHECKED:** MTP **P.G.**

**SEC:** TWP **RNG.**

**ACAD NO.:** 22175 **CPS:** 3-5 **Survey\_Ctrl.DWG**

**REF. NO.**

**NO.** **DATE** **BY** **REVISION DESCRIPTION**

**COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464**

**PHONE:** (239) 643-2324 **FAX:** (239) 643-1143 **www.coastalengineering.com** **E-Mail:** info@cecfll.com

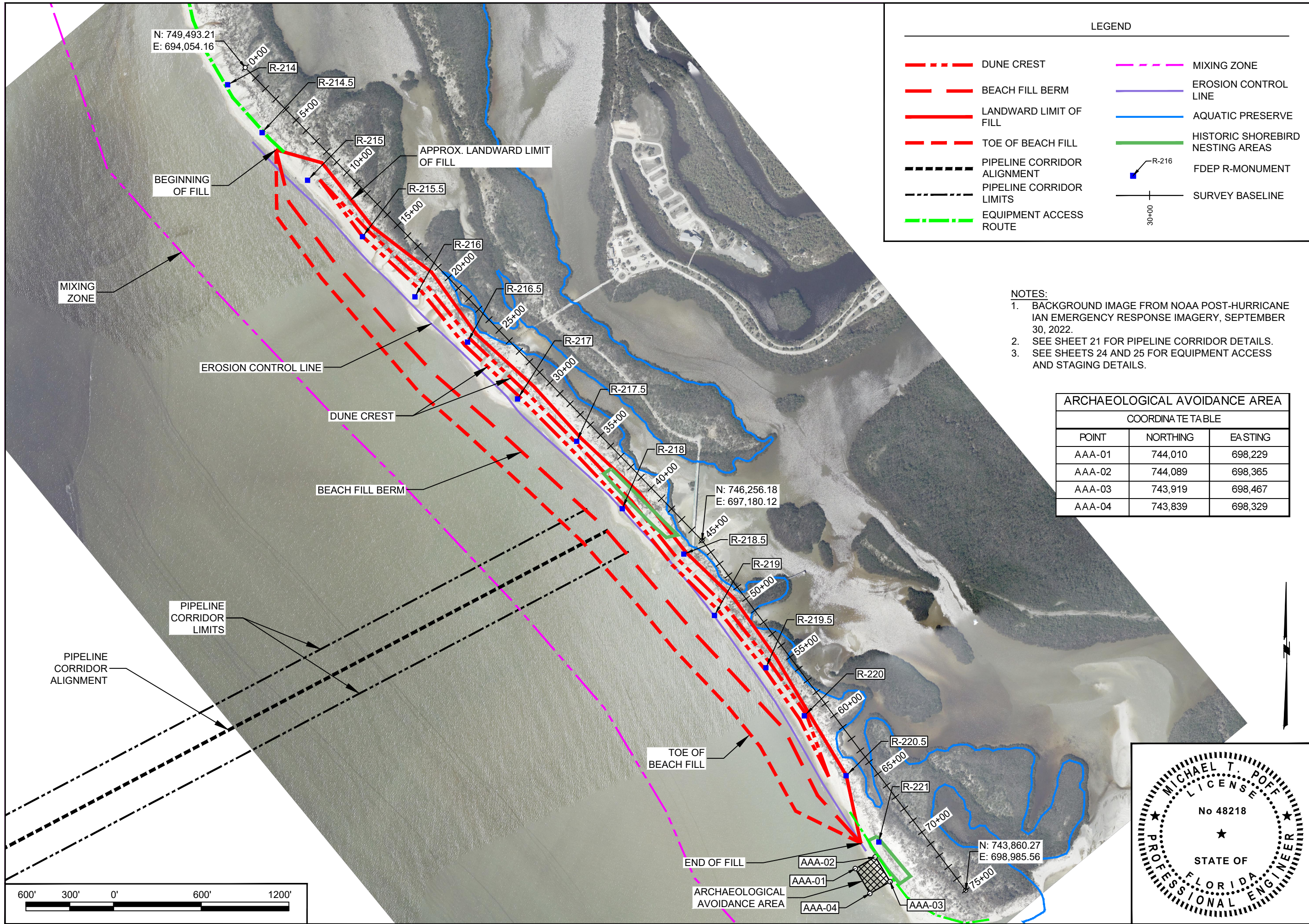
**COASTAL ENGINEERING CONSULTANTS, INC.**

**SERVING FLORIDA SINCE 1977**

**28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135**

**SHEET 5 OF 25**  
**FILE NO.: 22.175**





LEGEND

	DUNE CREST		MIXING ZONE
	BEACH FILL BERM		EROSION CONTROL LINE
	LANDWARD LIMIT OF FILL		AQUATIC PRESERVE
	TOE OF BEACH FILL		HISTORIC SHOREBIRD NESTING AREAS
	PIPELINE CORRIDOR ALIGNMENT		FDEP R-MONUMENT
	PIPELINE CORRIDOR LIMITS		SURVEY BASELINE
	EQUIPMENT ACCESS ROUTE		

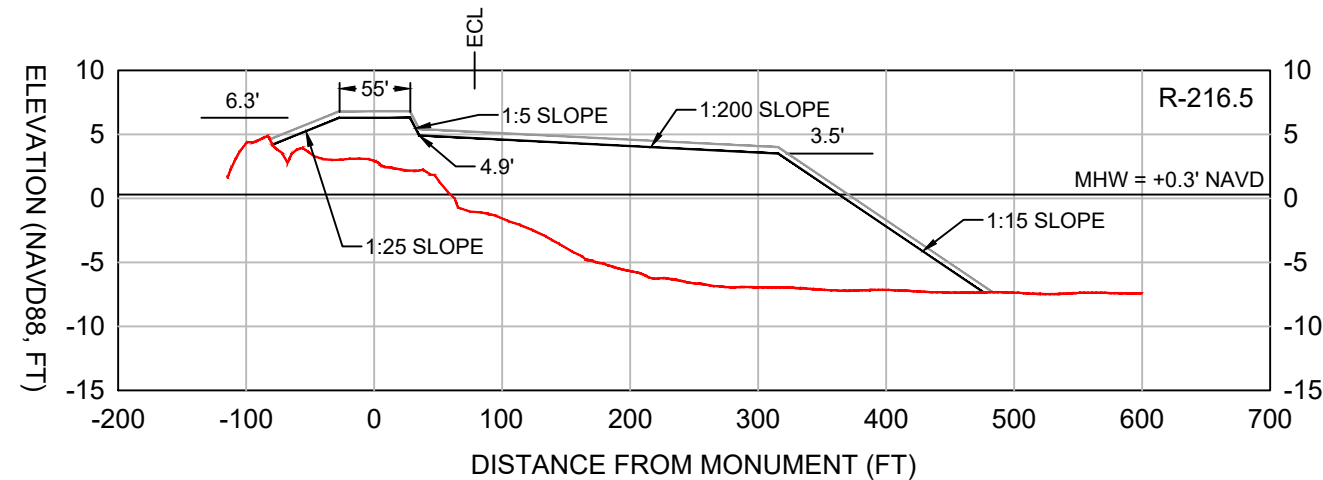
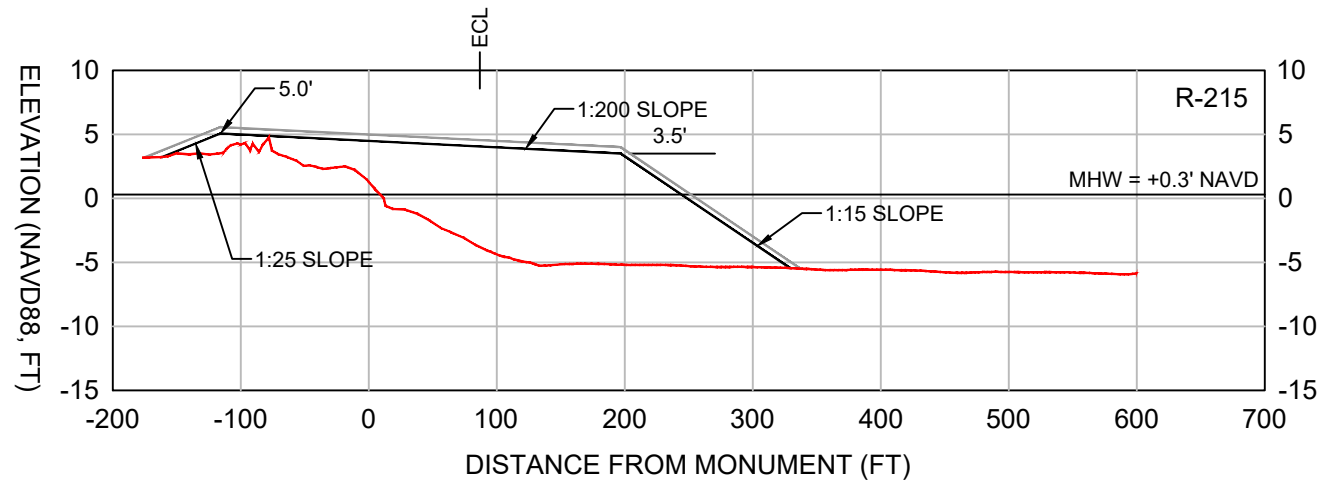
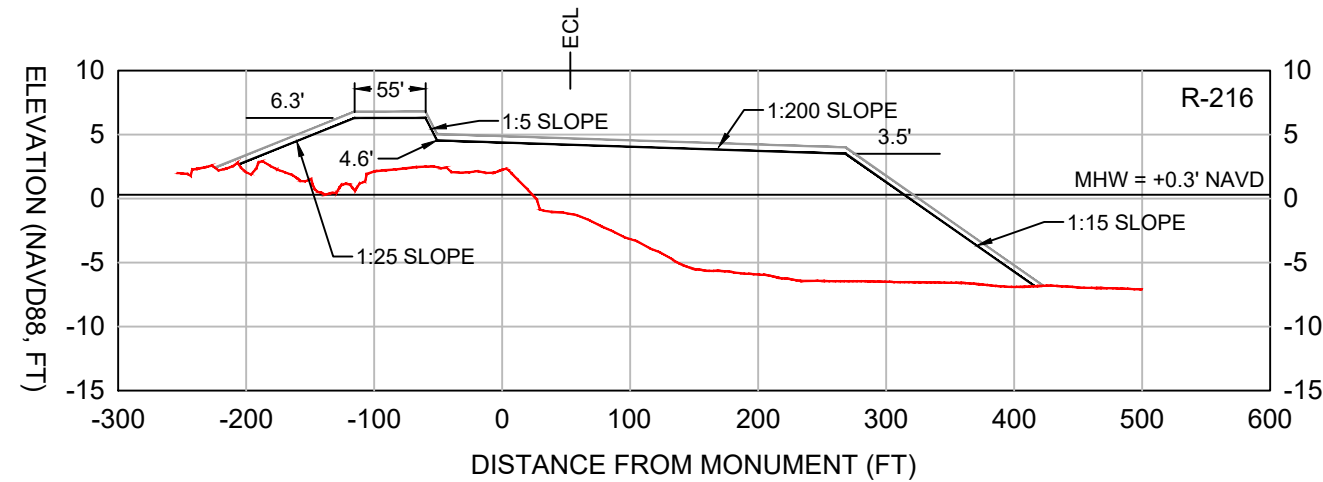
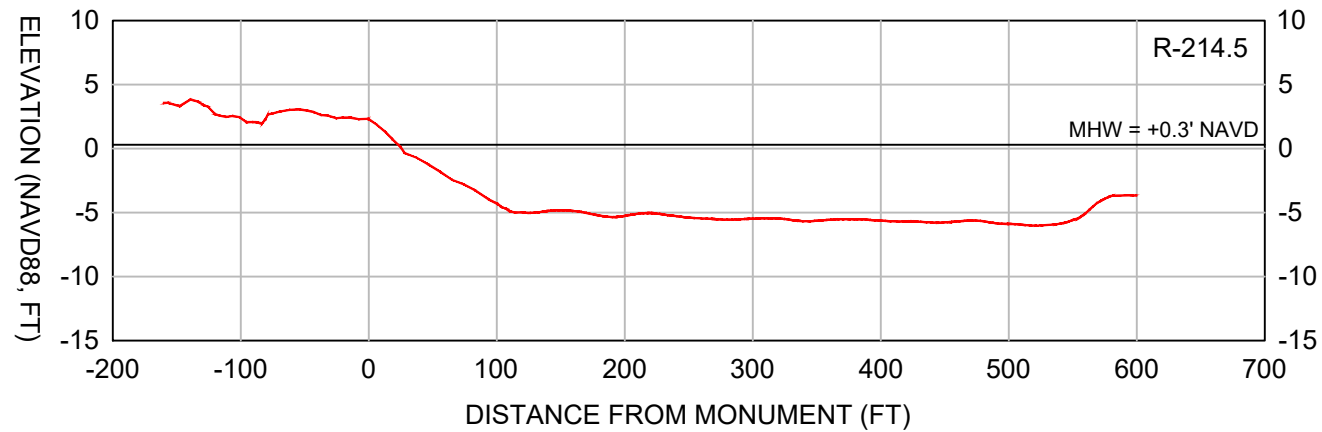
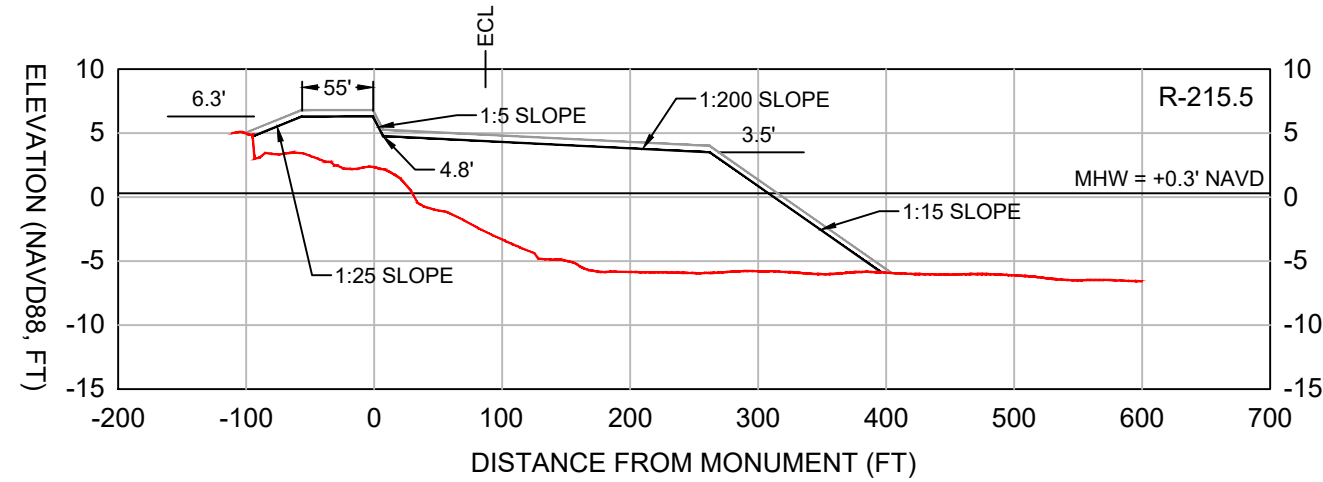
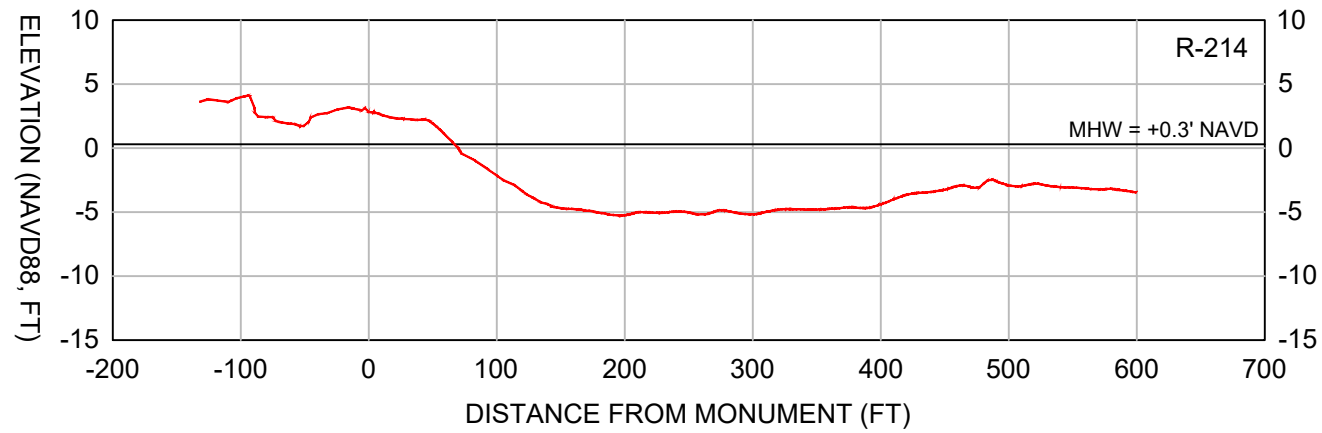
- NOTES:**
- BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.
  - SEE SHEET 21 FOR PIPELINE CORRIDOR DETAILS.
  - SEE SHEETS 24 AND 25 FOR EQUIPMENT ACCESS AND STAGING DETAILS.

ARCHAEOLOGICAL AVOIDANCE AREA  
COORDINATE TABLE

POINT	NORTHING	EASTING
AAA-01	744,010	698,229
AAA-02	744,089	698,365
AAA-03	743,919	698,467
AAA-04	743,839	698,329

DATE: 2/5/2024 DRAWN: JSD/F.B. CHECKED: MTP/P.G. SEC: TWP. ACAD NO.: 22175_CPS_06-09_LK_PV.XS.DWG REF. NO.	SCALE: AS NOTED NO. DATE BY REVISION DESCRIPTION	CLIENT: LEE COUNTY TITLE: LOVER'S KEY BEACH FILL PLAN
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com		
SHEET 6 OF 25 FILE NO.: 22.175		





**LEGEND:**

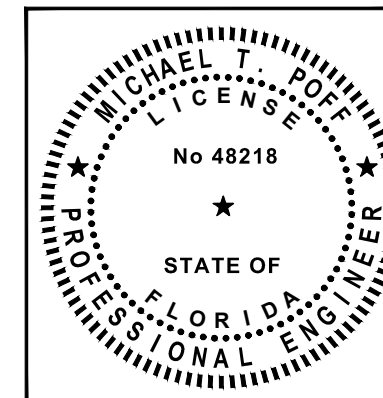
— DESIGN

— CONSTRUCTION TOLERANCE

— EXISTING GRADE (2022)

**SCALE:**  
H: 1" = 150'  
V: 1" = 15'

- NOTES:**
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 12, 2023.
  2. SEE SHEET 3 FOR SURVEY TRANSECT ALIGNMENT.
  3. A +0.5FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.

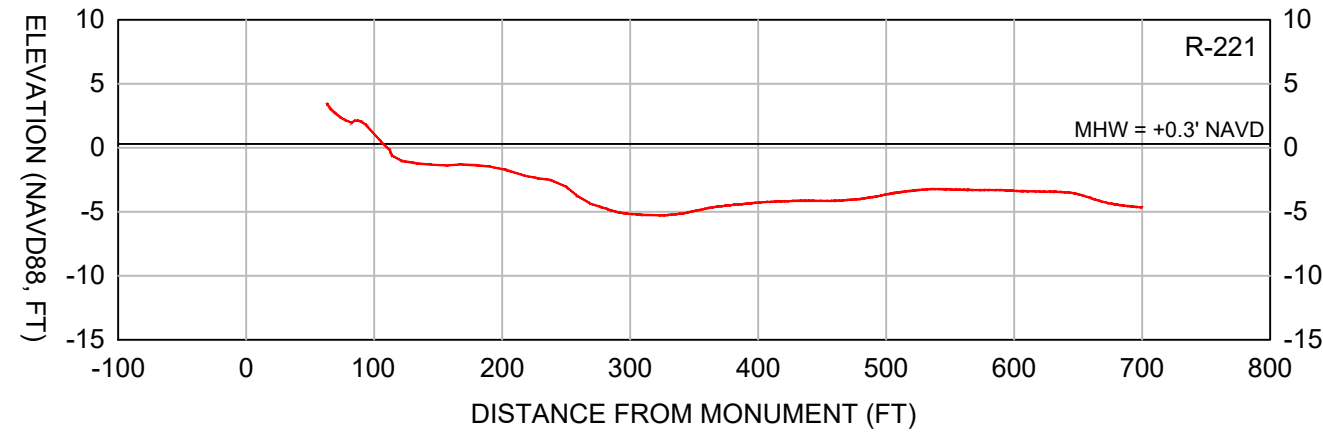
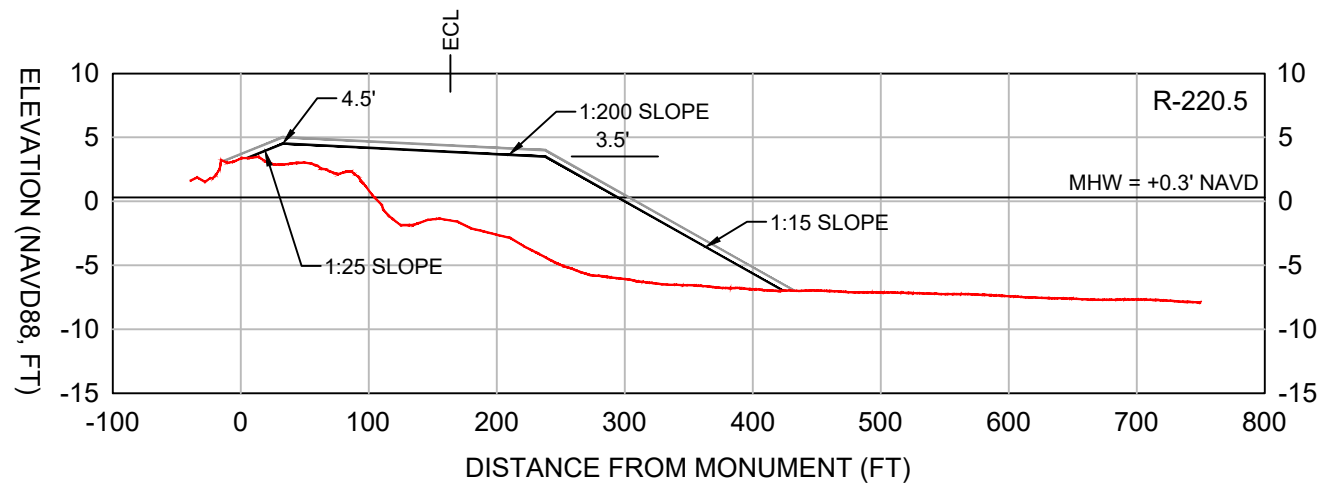
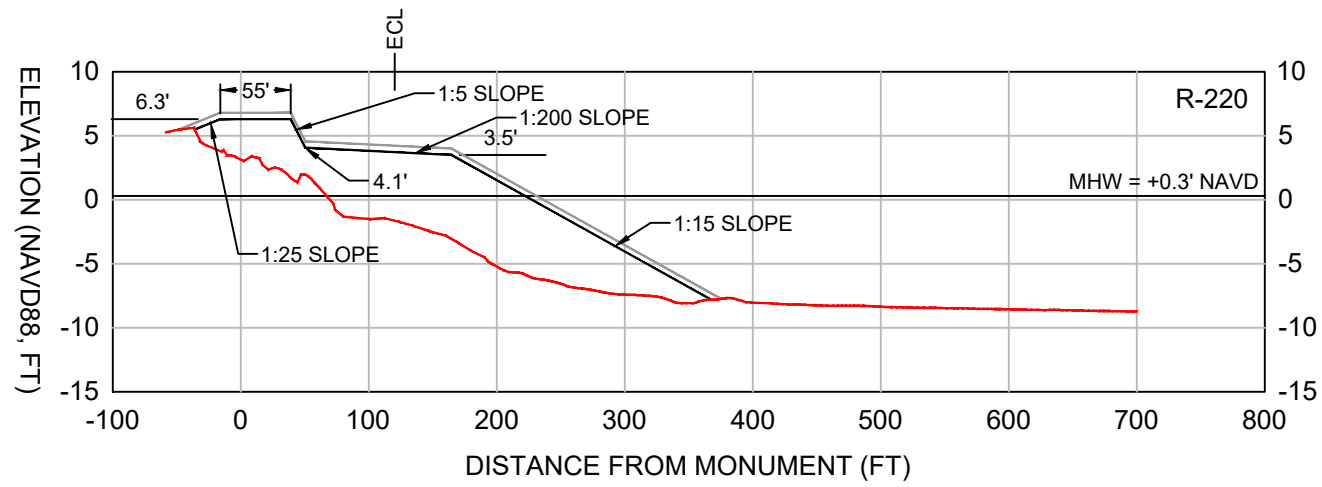


DATE: 2/5/2024		SCALE: AS NOTED
DRAWN: JSD		F.B.
CHECKED: MTP	P.G.	RNG.
SEC.	TWP.	RNG.
ACAD NO.: 22175_CPS_06-09_LK_PV.XS.DWG		REF. NO.
CLIENT: LEE COUNTY		TITLE: LOVER'S KEY FILL TEMPLATE PROFILES
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceciff.com		NO. DATE BY REVISION DESCRIPTION
SHEET 7 OF 25		FILE NO.: 22.175







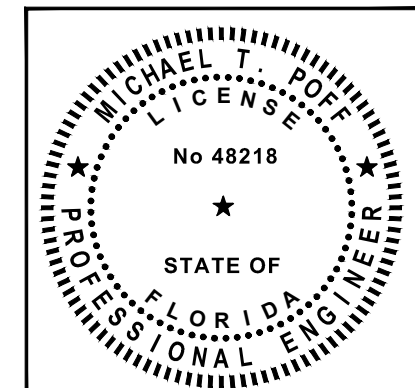


LEGEND:

	DESIGN
	CONSTRUCTION TOLERANCE
	EXISTING GRADE (2022)

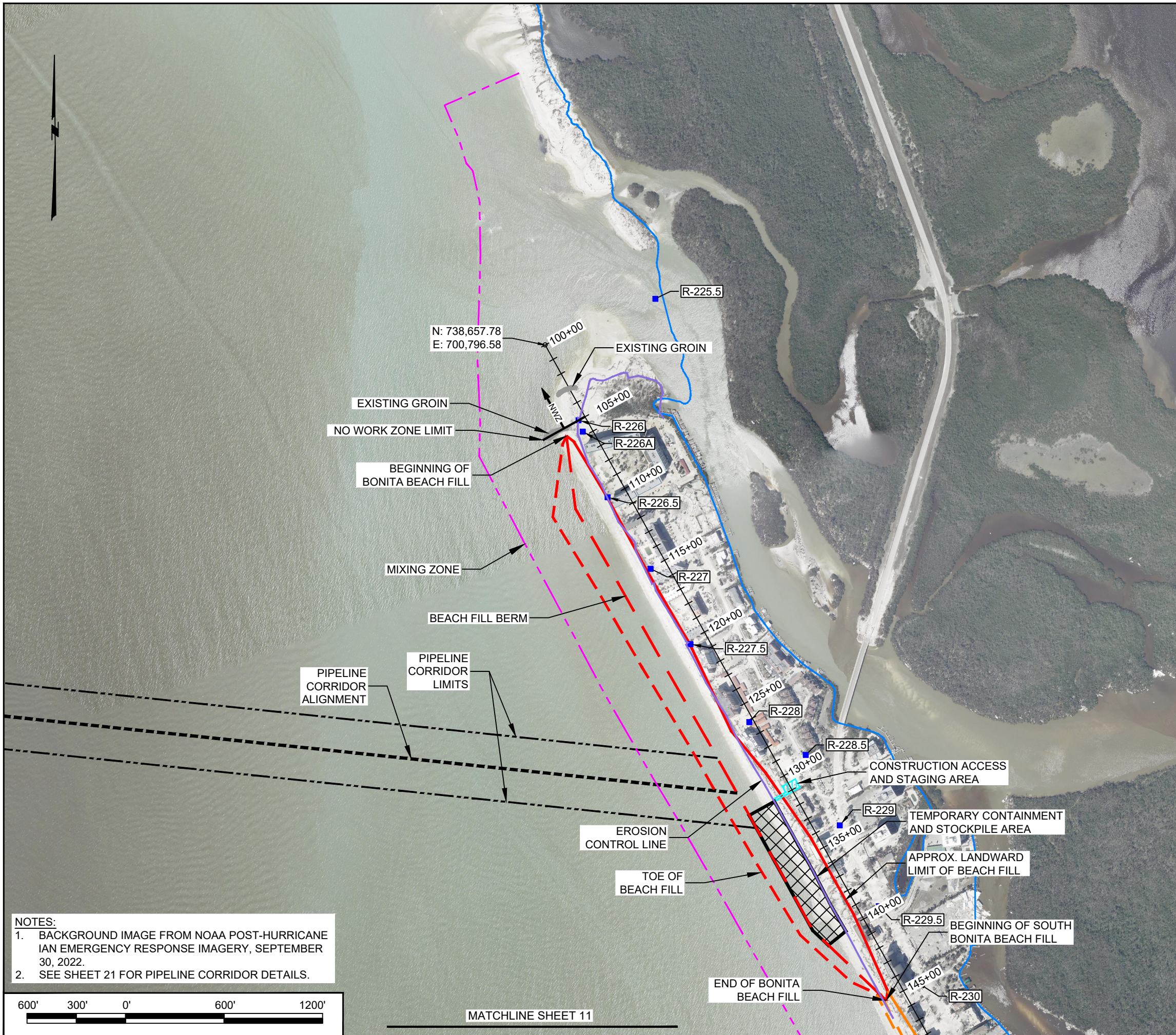
SCALE:  
H: 1" = 150'  
V: 1" = 15'

- NOTES:
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 12, 2023.
  2. SEE SHEET 3 FOR SURVEY TRANSECT ALIGNMENT.
  3. A +0.5FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



DATE: 2/5/2024		SCALE: AS NOTED	
DRAWN: JSD		F.B.	
CHECKED: MTP		P.G.	
SEC:		TWP:	
ACAD NO.: 22175_CPS_06-09_LK_PV.XS.DWG		RNG:	
REF. NO.		NO.	
BY		DATE	
REVISION DESCRIPTION			
CLIENT: LEE COUNTY			
TITLE: LOVER'S KEY FILL TEMPLATE PROFILES			
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com			
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135			
SHEET 9 OF 25			
FILE NO.: 22.175			





LEGEND

	BONITA BEACH - LANDWARD LIMIT OF FILL
	BONITA BEACH - BEACH FILL BERM
	BONITA BEACH - TOE OF BEACH FILL
	SOUTH BONITA BEACH - LANDWARD LIMIT OF FILL
	SOUTH BONITA BEACH - DUNE CENTERLINE ALIGNMENT
	SOUTH BONITA BEACH - BEACH FILL BERM
	SOUTH BONITA BEACH - TOE OF BEACH FILL
	PIPELINE CORRIDOR ALIGNMENT
	PIPELINE CORRIDOR LIMITS
	AQUATIC PRESERVE
	MIXING ZONE
	EROSION CONTROL LINE
	R-MONUMENT COORDINATE
	SURVEY BASELINE
	NO WORK ZONE LIMIT
	CONSTRUCTION ACCESS AND STAGING

N: 738,657.78  
E: 700,796.58

100+00

EXISTING GROIN

NWZ

105+00

R-226

R-226A

110+00

R-226.5

BEGINNING OF BONITA BEACH FILL

115+00

R-227

MIXING ZONE

120+00

R-227.5

BEACH FILL BERM

125+00

R-228

PIPELINE CORRIDOR ALIGNMENT

PIPELINE CORRIDOR LIMITS

130+00

R-228.5

CONSTRUCTION ACCESS AND STAGING AREA

135+00

R-229

TEMPORARY CONTAINMENT AND STOCKPILE AREA

EROSION CONTROL LINE

140+00

R-229.5

APPROX. LANDWARD LIMIT OF BEACH FILL

TOE OF BEACH FILL

145+00

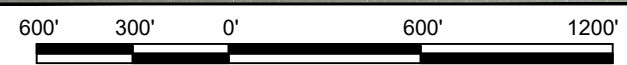
R-230

BEGINNING OF SOUTH BONITA BEACH FILL

END OF BONITA BEACH FILL

**NOTES:**

- BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.
- SEE SHEET 21 FOR PIPELINE CORRIDOR DETAILS.



MATCHLINE SHEET 11

DATE: 2/5/2024 DRAWN: JSD/F.B. CHECKED: MTP/P.G. SEC: TWP. ACAD NO.: 22175_CPS_10-15_BB_PV-XS.DWG REF. NO.	SCALE: AS NOTED	CLIENT: LEE COUNTY TITLE: BONITA BEACH AND SOUTH BONITA BEACH FILL PLAN
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com		
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		
SHEET 10 OF 25 FILE NO.: 22.175		



MATCHLINE SHEET 10

N: 734,284.68  
E: 703,220.63

TOE OF  
BEACH FILL

APPROX.  
LANDWARD LIMIT  
OF BEACH FILL

DUNE CENTERLINE  
ALIGNMENT

BEACH  
FILL BERM

N: 732,033.53  
E: 704,307.98

N: 730,197.41  
E: 705,100.87

NOTES:

- BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.



MATCHLINE SHEET 12

LEGEND

- SOUTH BONITA BEACH - LANDWARD LIMIT OF FILL
- SOUTH BONITA BEACH - DUNE CENTERLINE ALIGNMENT
- SOUTH BONITA BEACH - BEACH FILL BERM
- SOUTH BONITA BEACH - TOE OF BEACH FILL
- AQUATIC PRESERVE
- MIXING ZONE
- R-MONUMENT COORDINATE
- SURVEY BASELINE

DATE:	2/5/2024	SCALE:	AS NOTED
DRAWN:	JSD/F.B.		
CHECKED:	MTP/P.G.		
SEC:	TWP.	RNG.	
ACAD NO.:	22175_CPS_10-15_BB_PV-XS.DWG		
REF. NO.			
		NO.	DATE
		BY	
			REVISION DESCRIPTION

CLIENT: LEE COUNTY

TITLE: SOUTH BONITA BEACH FILL PLAN

COASTAL & MARINE ENGINEERING  
ENVIRONMENTAL & GEOLOGICAL SERVICES  
SURVEYING & MAPPING  
ENGINEERING: CA 2464  
SURVEYING: LB 2464

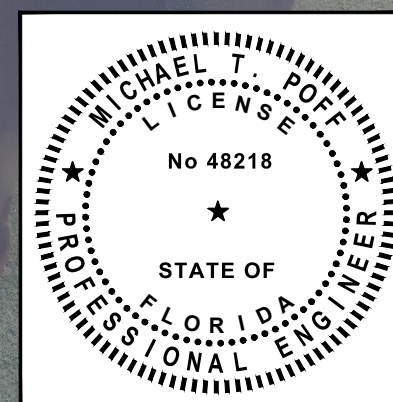
PHONE: (239) 643-2324  
FAX: (239) 643-1143  
www.coastalengineering.com  
E-Mail: info@cecifl.com

COASTAL ENGINEERING CONSULTANTS, INC.

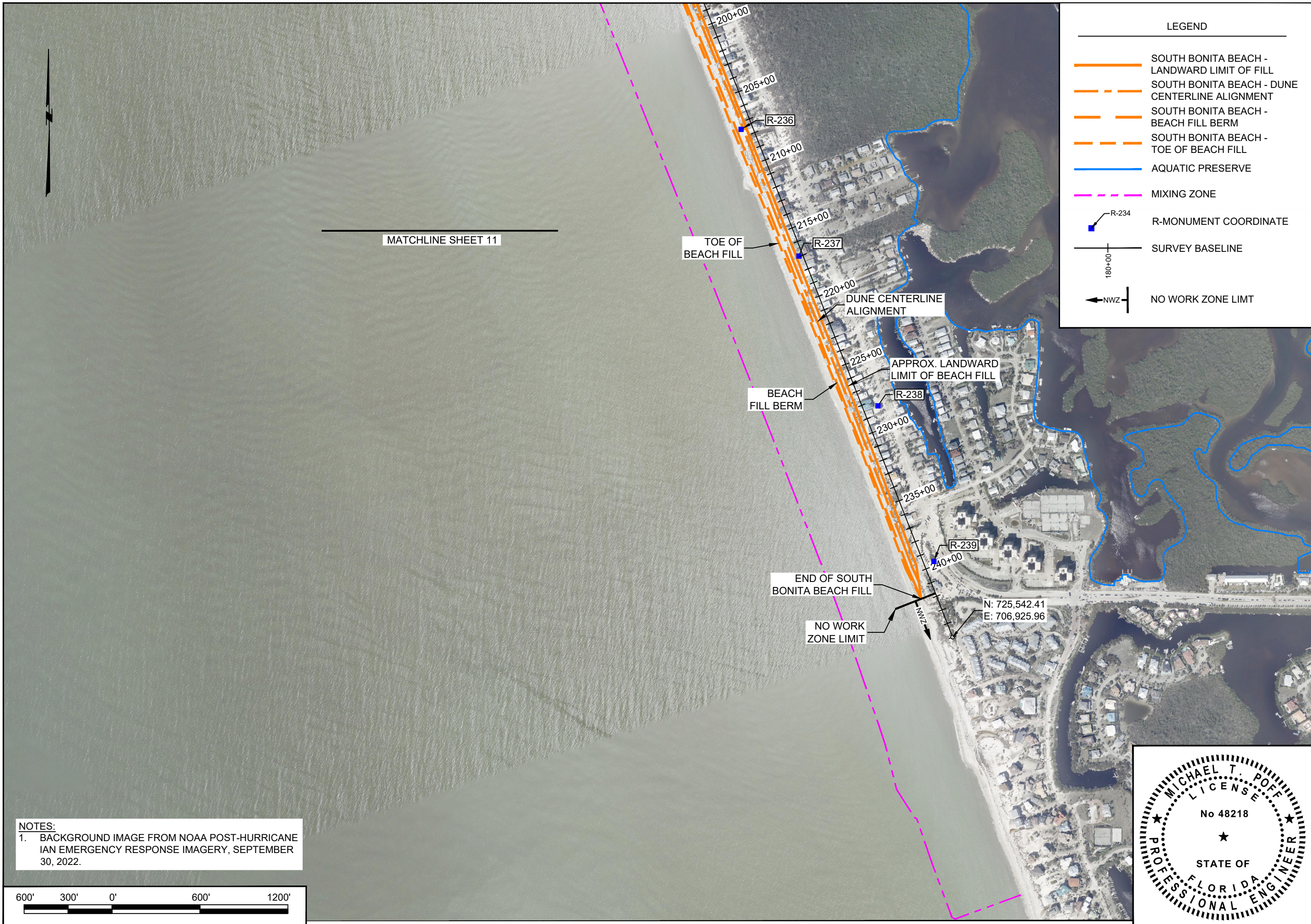
SERVING FLORIDA SINCE 1977

28421 BONITA CROSSINGS BLVD.  
BONITA SPRINGS, FL 34135

SHEET 11 OF 25  
FILE NO.: 22.175







LEGEND

- SOUTH BONITA BEACH - LANDWARD LIMIT OF FILL
- - - - - SOUTH BONITA BEACH - DUNE CENTERLINE ALIGNMENT
- SOUTH BONITA BEACH - BEACH FILL BERM
- - - - - SOUTH BONITA BEACH - TOE OF BEACH FILL
- AQUATIC PRESERVE
- - - - - MIXING ZONE
- R-234 R-MONUMENT COORDINATE
- SURVEY BASELINE
- ← 180+00 NO WORK ZONE LIMIT

DATE:	2/5/2024	SCALE:	AS NOTED
DRAWN:	JSD/F.B.		
CHECKED:	MT/P/G.		
SEC:	TWP.	RNG.	
ACAD NO.:	22175_CPS_10-15_BB_PV-XS.DWG		
REF. NO.			
		NO.	DATE
		BY	REVISION DESCRIPTION

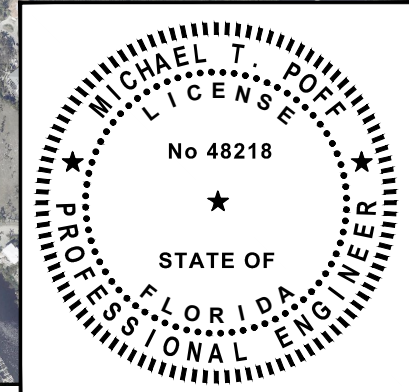
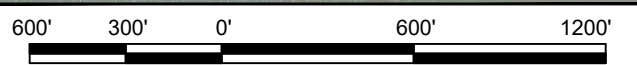
CLIENT: LEE COUNTY  
 TITLE: SOUTH BONITA BEACH FILL PLAN

COASTAL & MARINE ENGINEERING  
 ENVIRONMENTAL & GEOLOGICAL SERVICES  
 SURVEYING & MAPPING  
 ENGINEERING: CA 2464  
 SURVEYING: LB 2464  
 PHONE: (239) 643-2324  
 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecifl.com

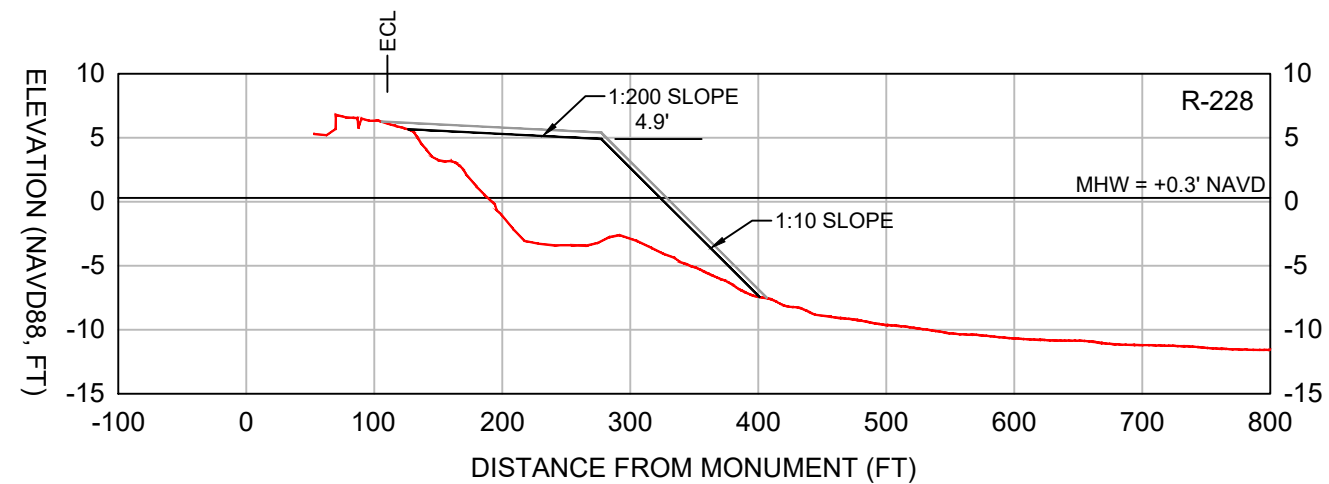
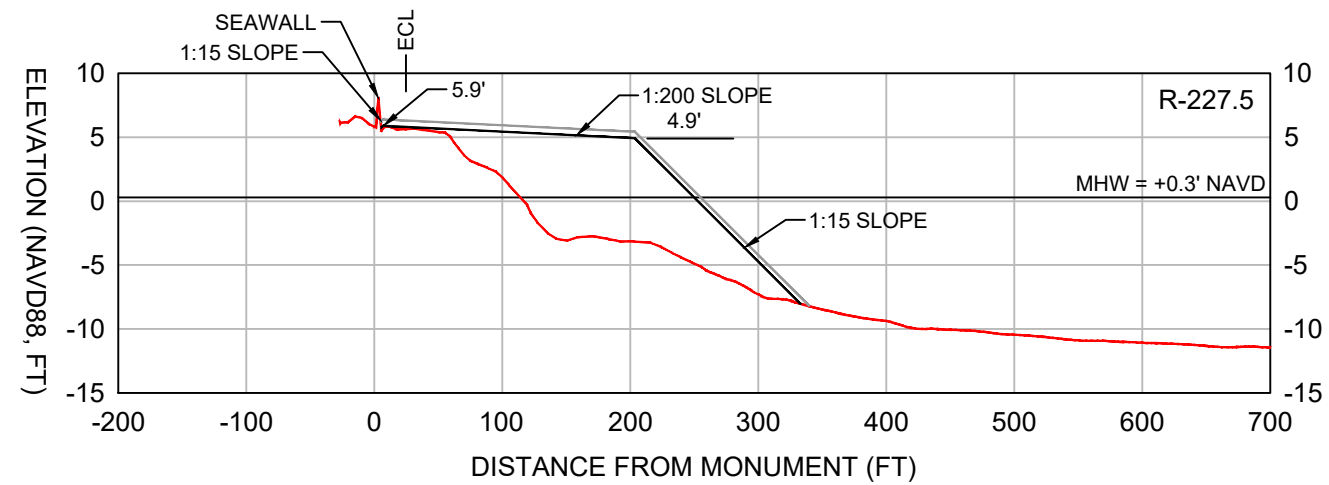
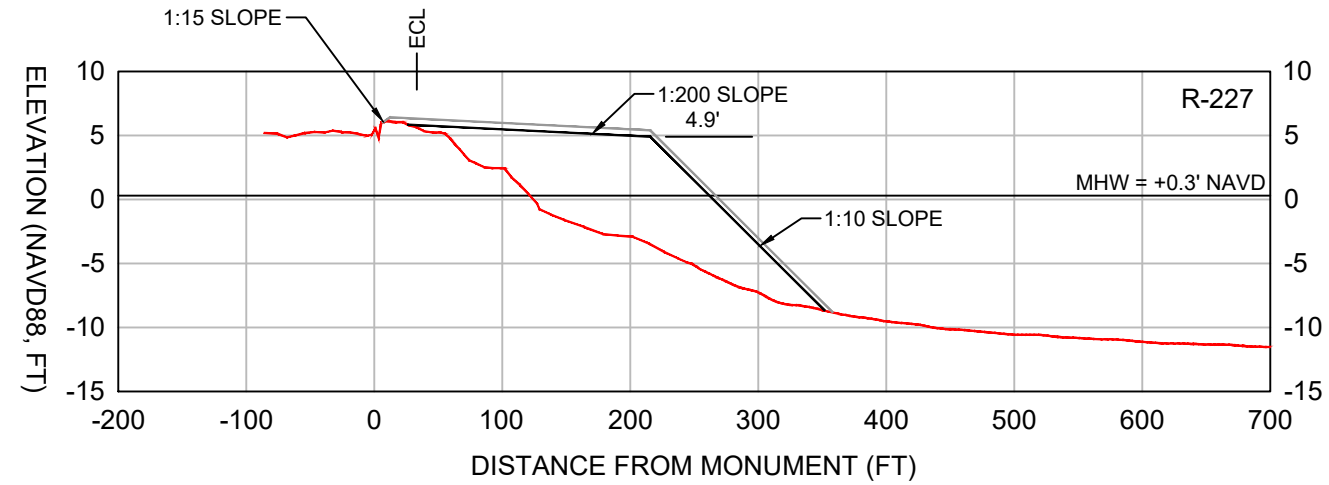
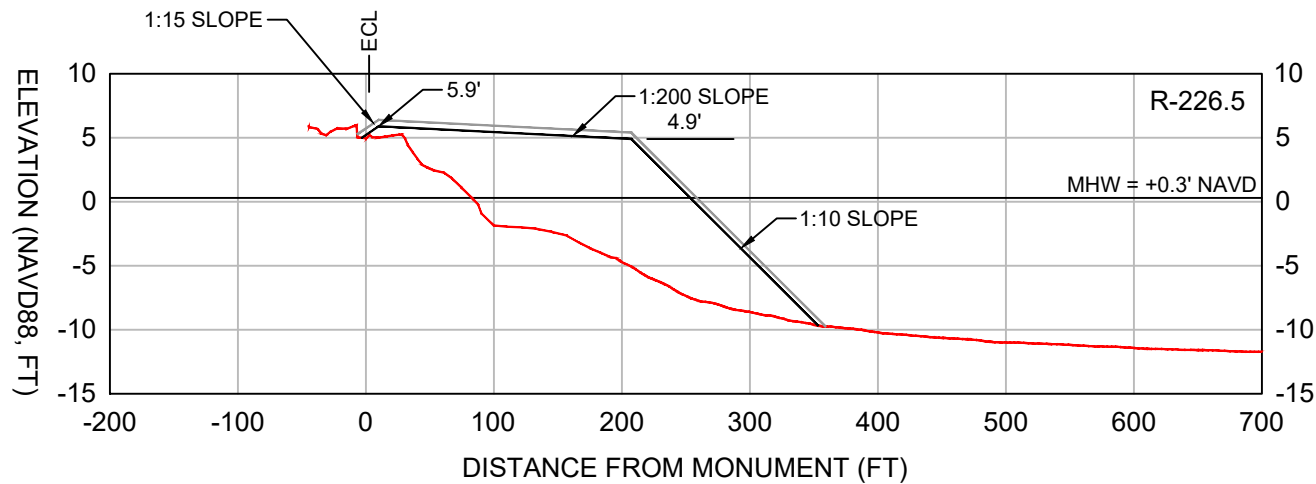
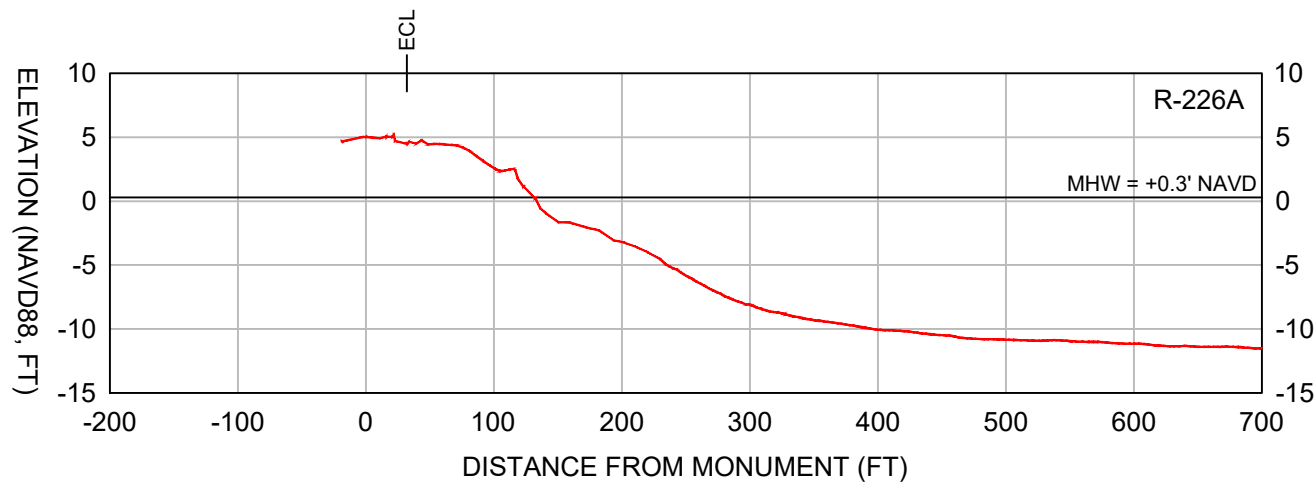
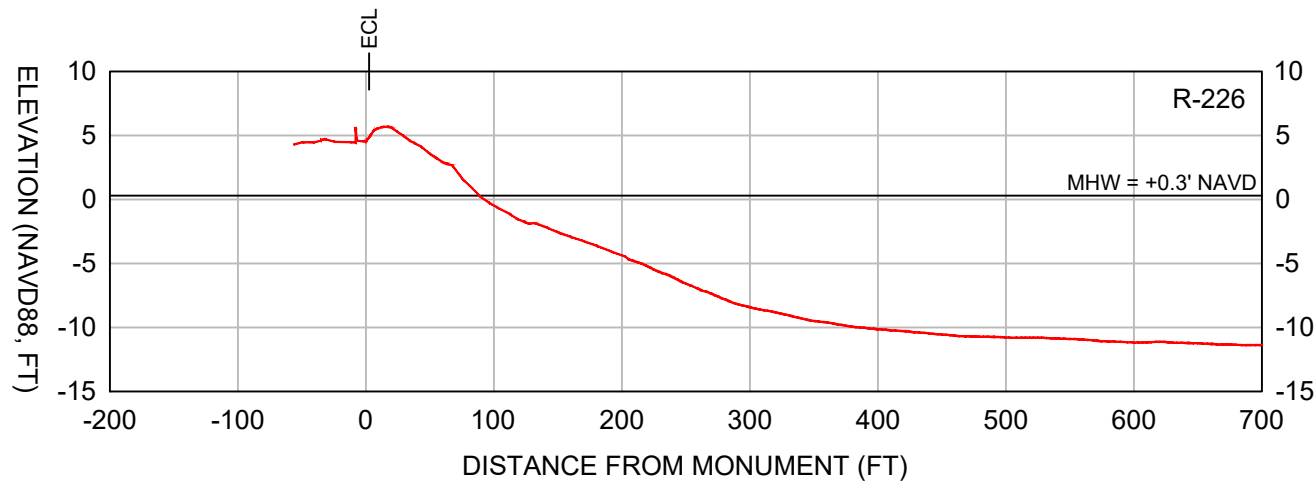
**COASTAL ENGINEERING CONSULTANTS, INC.**  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135

SHEET 12 OF 25  
 FILE NO.: 22.175

**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.







**LEGEND:**

— DESIGN

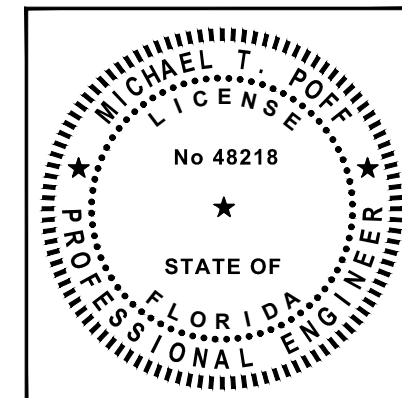
— CONSTRUCTION TOLERANCE

— EXISTING GRADE

**SCALE:**  
H: 1" = 150'  
V: 1" = 15'

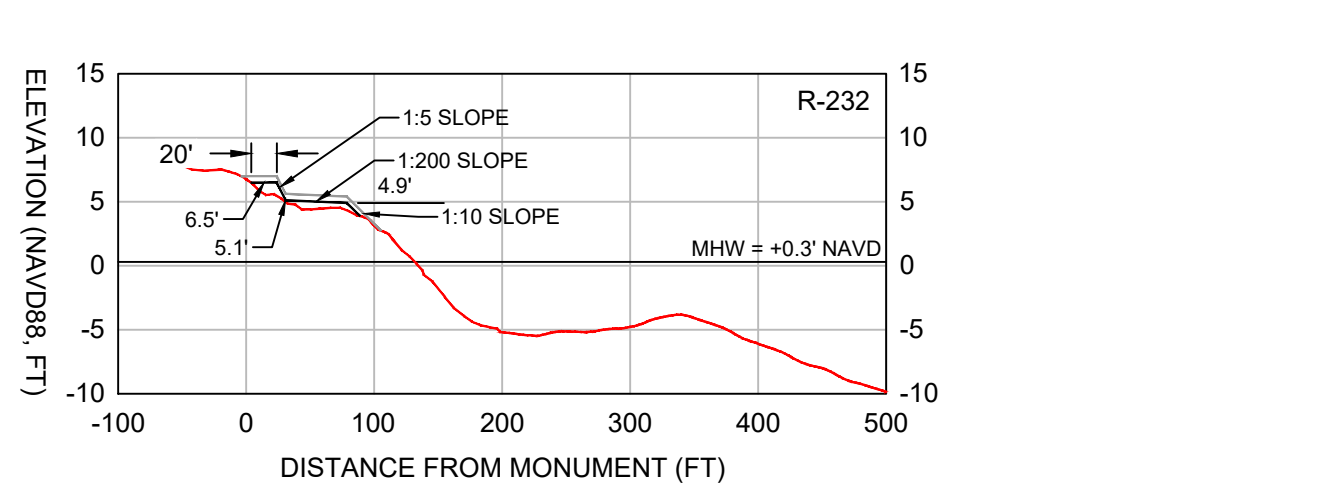
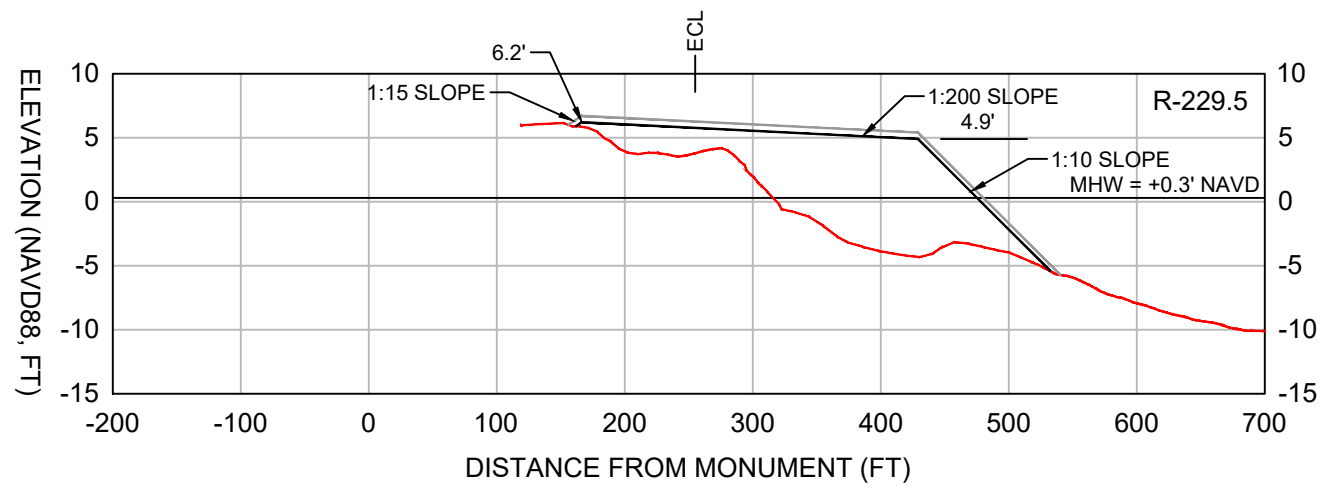
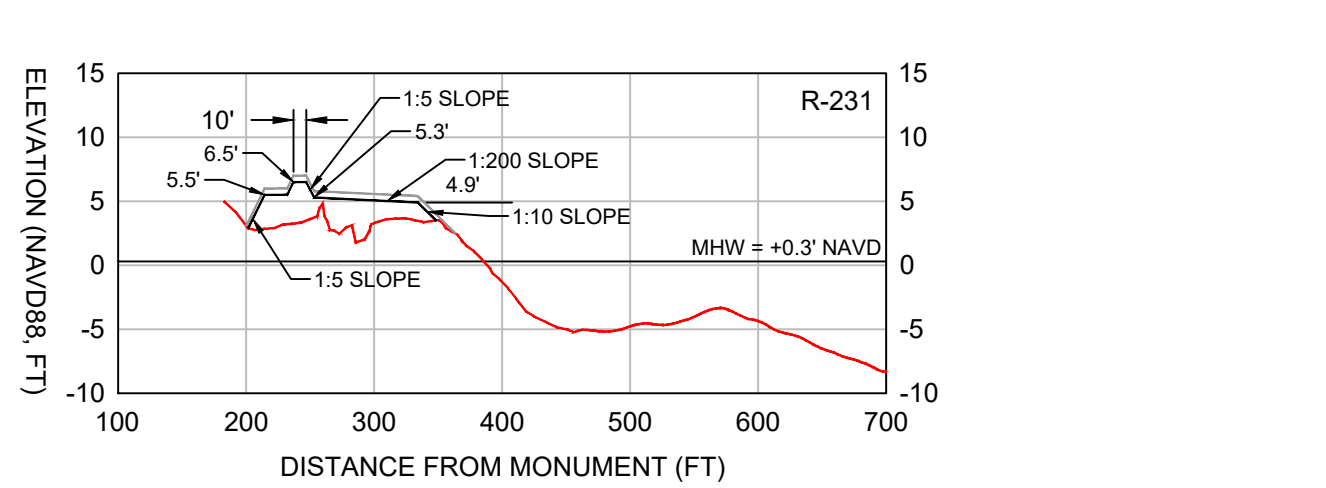
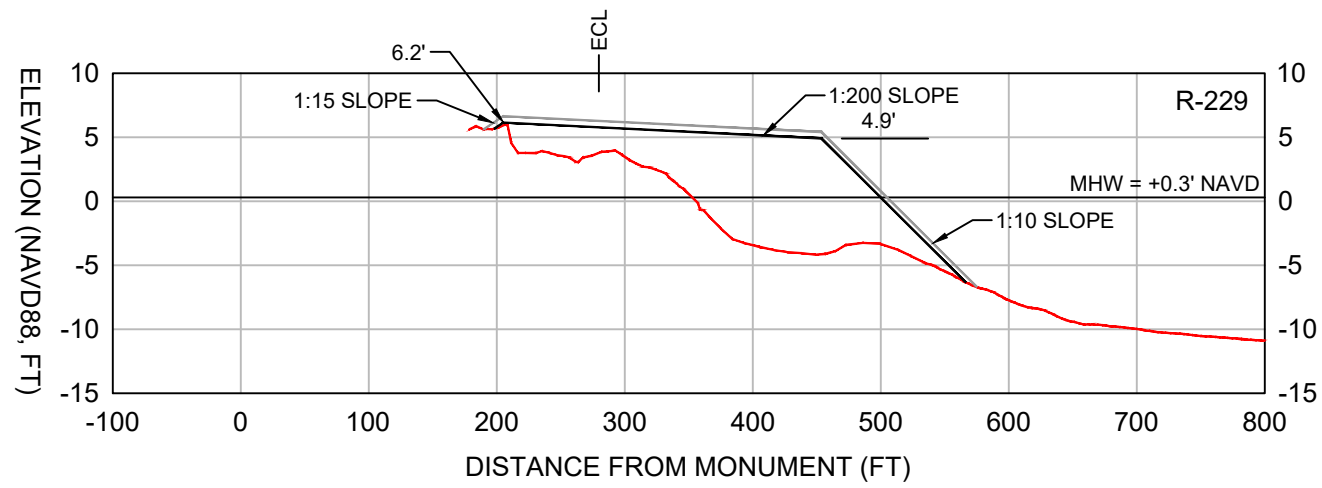
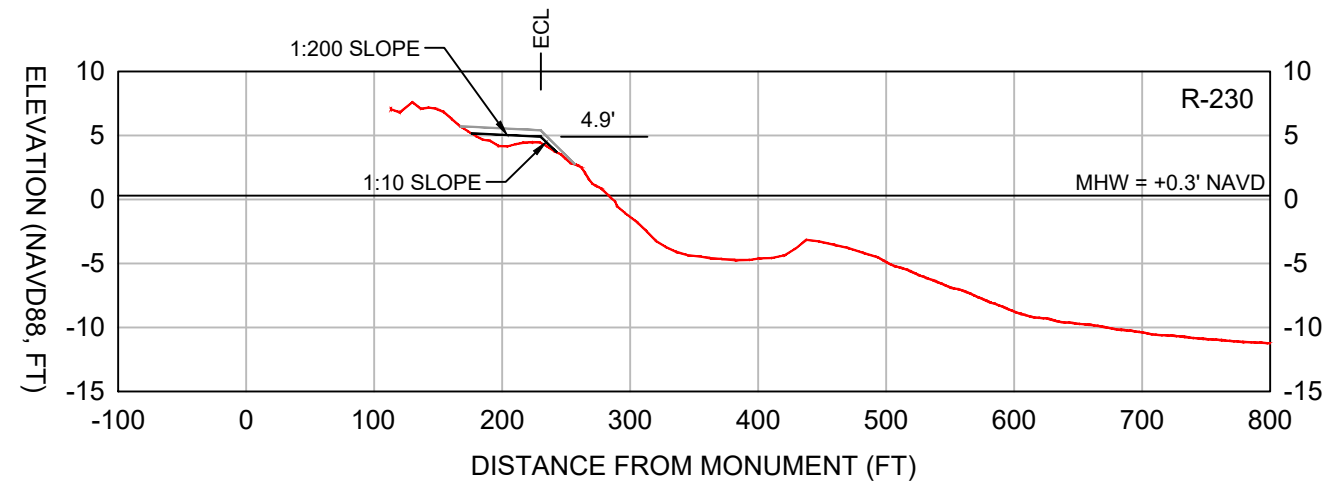
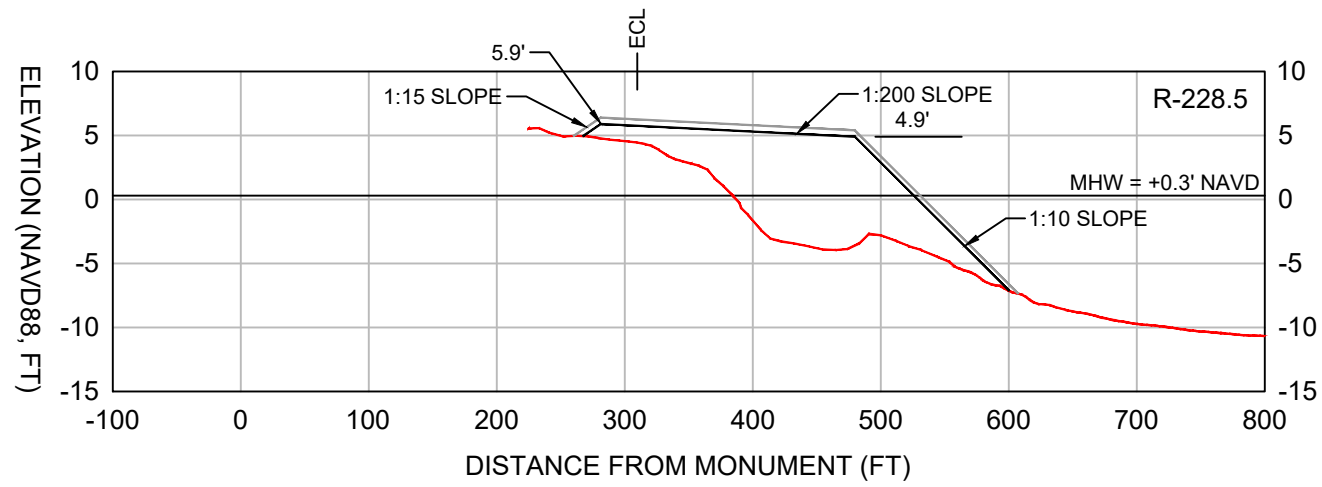
**NOTES:**

1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 11, 2023.
2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



DATE: 2/5/2024		SCALE: AS NOTED	
DRAWN: JSD/F.B.		NO.:	
CHECKED: MTP/P.G.		DATE:	
SEC. TWP. RNG.		BY:	
ACAD NO.: 22175_CPS_10-15_BB_PV-XS.DWG		REVISION DESCRIPTION:	
REF. NO.:		NO.:	
<b>LEE COUNTY</b> <b>BONITA BEACH</b> <b>FILL TEMPLATE PROFILES</b>			
CLIENT: COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING, CA 2464 SURVEYING, LB 2464		TITLE:	
PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com		SERVING FLORIDA SINCE 1977	
28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		SHEET 13 OF 25	
		FILE NO.: 22.175	





LEGEND:

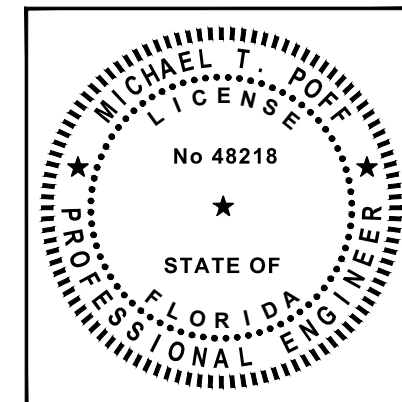
— DESIGN

— CONSTRUCTION TOLERANCE

— EXISTING GRADE

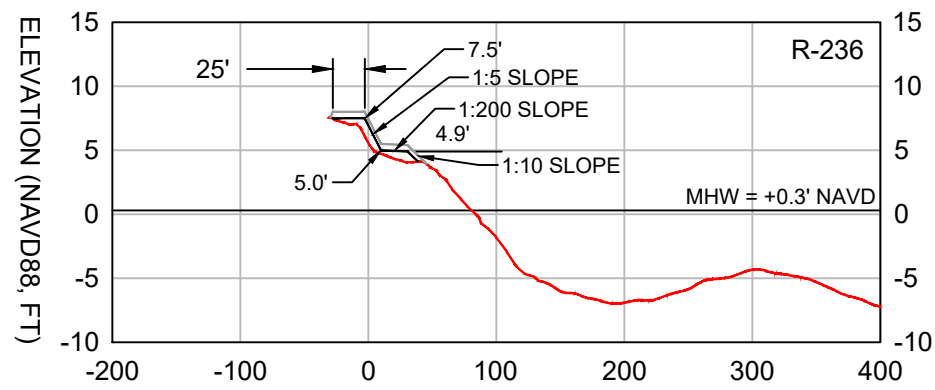
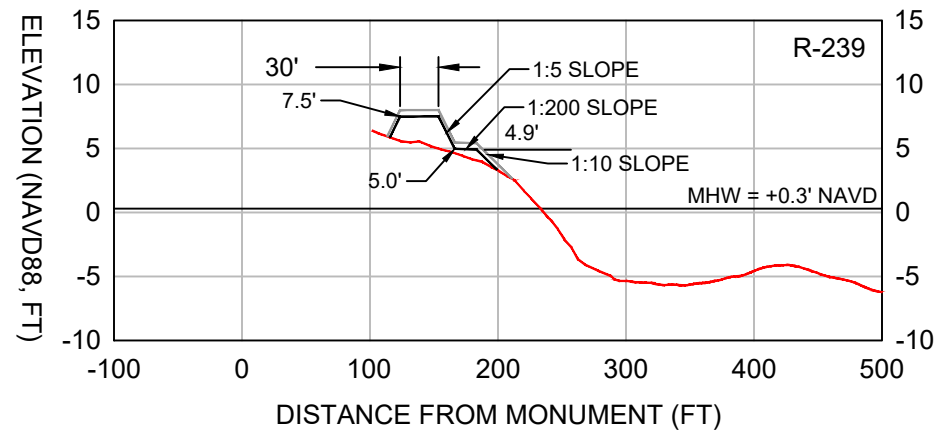
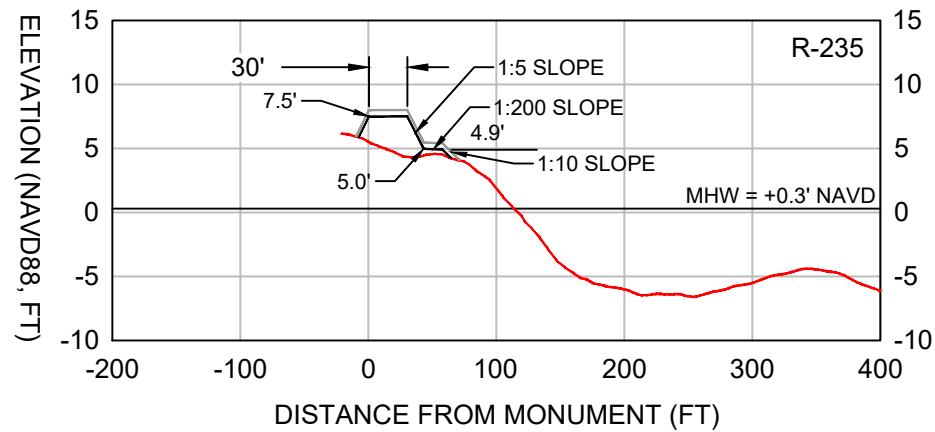
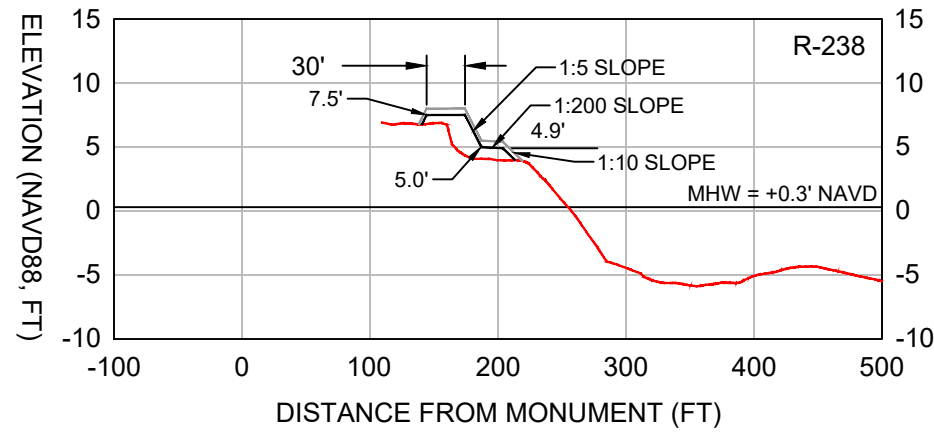
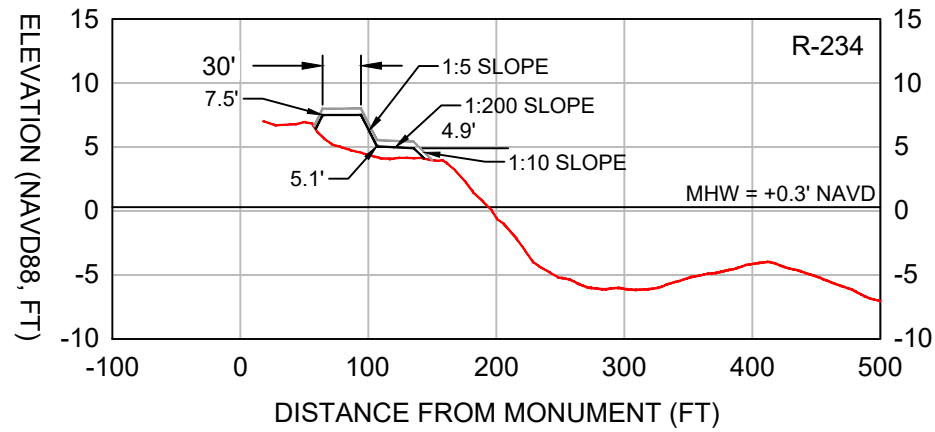
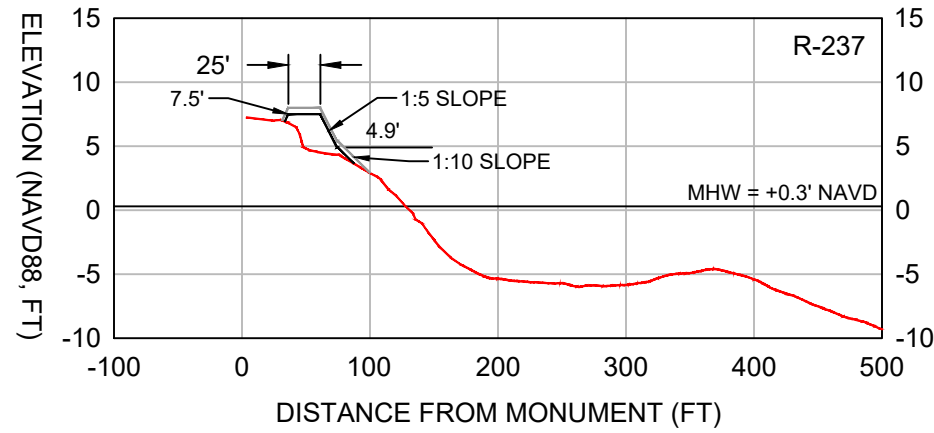
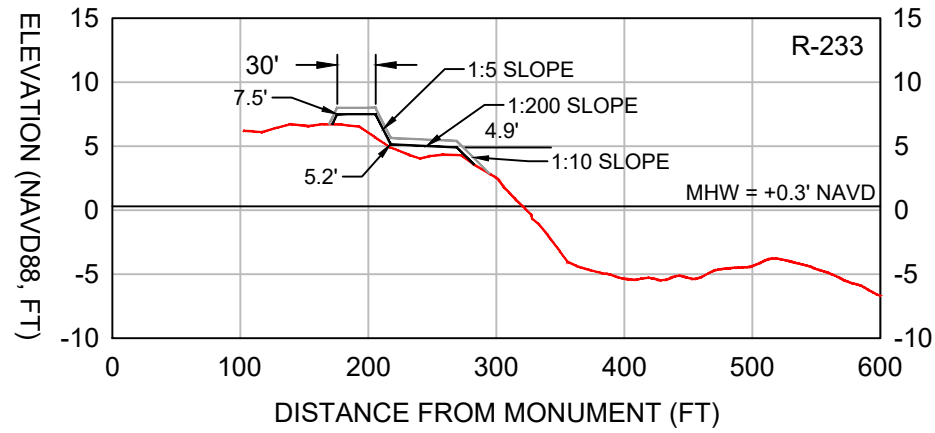
SCALE:  
H: 1" = 150'  
V: 1" = 15'

- NOTES:
1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 11, 2023.
  2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
  3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.



COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464		DATE: 2/5/2024	SCALE: AS NOTED
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		DRAWN: JSD	F.B.
PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com		CHECKED: MTP	P.G.
SHEET 14 OF 25 FILE NO.: 22.175		SEC.	TWP.
CLIENT: LEE COUNTY		RNG.	NO.
TITLE: BONITA BEACH AND SOUTH BONITA BEACH FILL TEMPLATE PROFILES		ACAD NO.: 22175_CPS_10-15_BB_PV-XS.DWG	REVISION DESCRIPTION
		REF. NO.	BY
			DATE





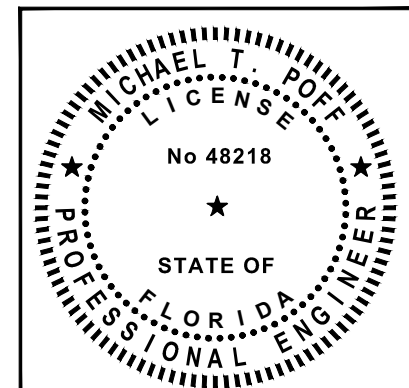
SCALE:  
H: 1" = 150'  
V: 1" = 15'

NOTES:

1. TOPOGRAPHIC AND BATHYMETRIC DATA COLLECTED BY CEC, MAY 11, 2023.
2. SEE SHEET 4 FOR SURVEY TRANSECT ALIGNMENT.
3. A +0.5 FT VERTICAL CONSTRUCTION TOLERANCE IS INCLUDED TO ACCOUNT FOR CONSTRUCTION METHODS AND CONSOLIDATION / SETTLEMENT OF THE FILL.

LEGEND:

	DESIGN
	CONSTRUCTION TOLERANCE
	EXISTING GRADE



DATE: 2/5/2024		SCALE: AS NOTED
DRAWN: JSD	F.B.	
CHECKED: MTP	P.G.	
SEC:	TWP:	RNG:
ACAD NO.: 22175_CPS_10-15_BB_PV-XS.DWG		
REF. NO.	NO.	DATE
CLIENT: LEE COUNTY		REVISION DESCRIPTION
TITLE: SOUTH BONITA BEACH FILL TEMPLATE PROFILES		BY
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464		
PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceciff.com		
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		
SHEET 15 OF 25		
FILE NO.: 22.175		



**NOTES:**

1. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY OSI IN JULY 2021.
2. GEOTECHNICAL INVESTIGATION CONDUCTED BY GFA INTERNATIONAL AND AMDRILL, INC., 2020 AND 2021.
3. ELEVATIONS ARE NAVD88, US SURVEY FEET.

**LEGEND**

- 55 DESIGN CUT TOE AND ELEVATION (FT)
- -29 — BATHYMETRIC CONTOUR (OSI, 2021)
- VC-20\_1-1 GEOTECHNICAL VIBRACORE (GFA, 2020)
- VC-21\_1-4 GEOTECHNICAL VIBRACORE (AMDRILL, 2021)
- AA — LIMITS OF ANCHORING
- BORROW AREA ALIGNMENT COORDINATE
- +— SURVEY BASELINE

DATE:	2/5/2024	SCALE:	AS NOTED
DRAWN:	JSD/F.B.		
CHECKED:	MTP/P.G.		
SEC.	TWP.	RNG.	
ACAD NO.:	22175_CPS_16-20_Borrow Area.DWG		
REF. NO.			
		NO.	DATE
		BY	
			REVISION DESCRIPTION

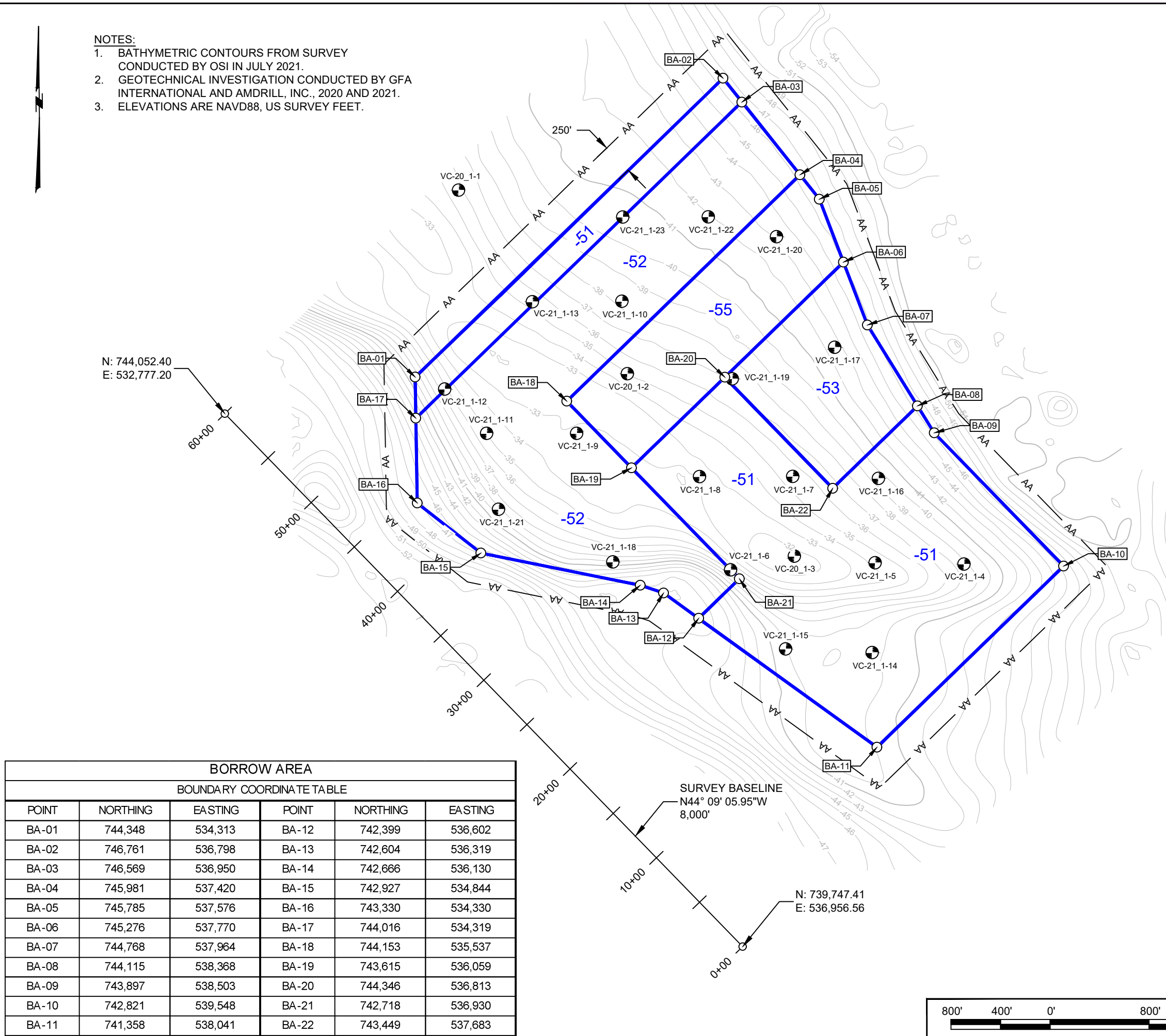
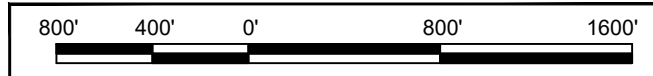
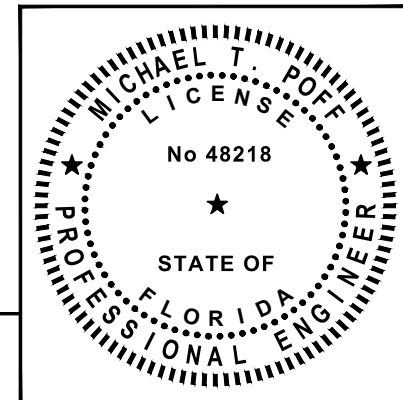
VIBRACORE COORDINATE TABLE		
POINT	NORTHING	EASTING
VC-20_1-1	745,857	534,664
VC-20_1-2	744,374	536,027
VC-20_1-3	742,901	537,375
VC-21_1-4	742,837	538,744
VC-21_1-5	742,847	538,027
VC-21_1-6	742,790	536,860
VC-21_1-7	743,545	537,361
VC-21_1-8	743,544	536,609
VC-21_1-9	743,893	535,617
VC-21_1-10	744,960	535,982
VC-21_1-11	743,893	534,890
VC-21_1-12	744,251	534,552
VC-21_1-13	744,956	535,260
VC-21_1-14	742,123	538,003
VC-21_1-15	742,152	537,304
VC-21_1-16	743,530	538,053
VC-21_1-17	744,588	537,700
VC-21_1-18	742,855	535,909
VC-21_1-19	744,334	536,873
VC-21_1-20	745,482	537,231
VC-21_1-21	743,280	534,986
VC-21_1-22	745,641	536,680
VC-21_1-23	745,641	535,989

BORROW AREA BOUNDARY COORDINATE TABLE					
POINT	NORTHING	EASTING	POINT	NORTHING	EASTING
BA-01	744,348	534,313	BA-12	742,399	536,602
BA-02	746,761	536,798	BA-13	742,604	536,319
BA-03	746,569	536,950	BA-14	742,666	536,130
BA-04	745,981	537,420	BA-15	742,927	534,844
BA-05	745,785	537,576	BA-16	743,330	534,330
BA-06	745,276	537,770	BA-17	744,016	534,319
BA-07	744,768	537,964	BA-18	744,153	535,537
BA-08	744,115	538,368	BA-19	743,615	536,059
BA-09	743,897	538,503	BA-20	744,346	536,813
BA-10	742,821	539,548	BA-21	742,718	536,930
BA-11	741,358	538,041	BA-22	743,449	537,683

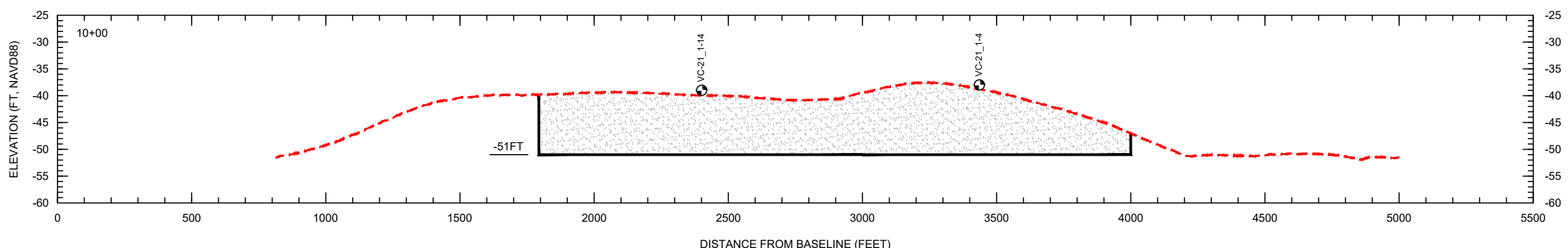
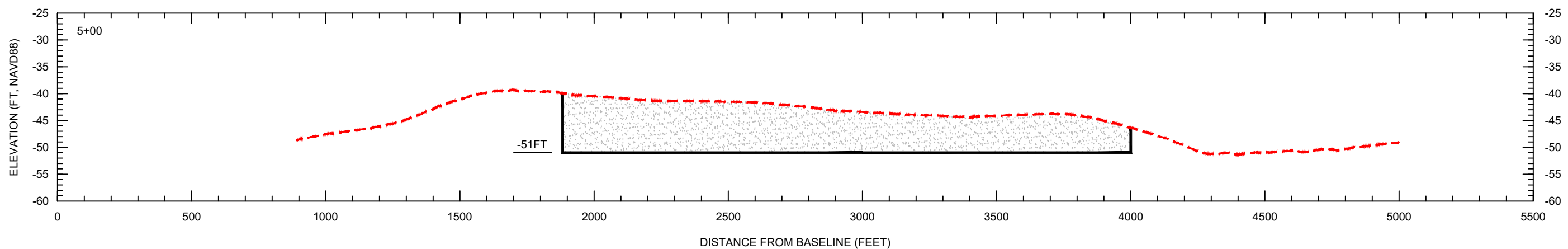
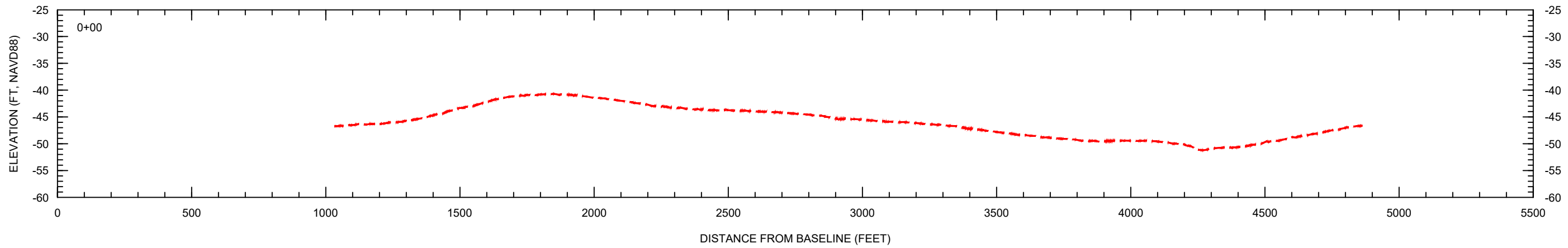
CLIENT: LEE COUNTY  
 TITLE: OFFSHORE BORROW AREA PLAN VIEW

COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464  
 PHONE: (239) 643-2324  
 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecifl.com

COASTAL ENGINEERING CONSULTANTS, INC.  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135  
 SHEET 16 OF 25  
 FILE NO.: 22.175





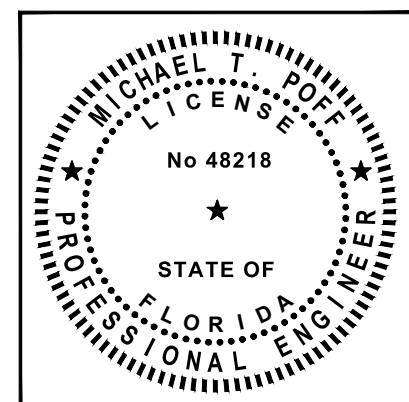


LEGEND:

- EXISTING GRADE
- DESIGN DREDGE CUT
- VIBRACORE

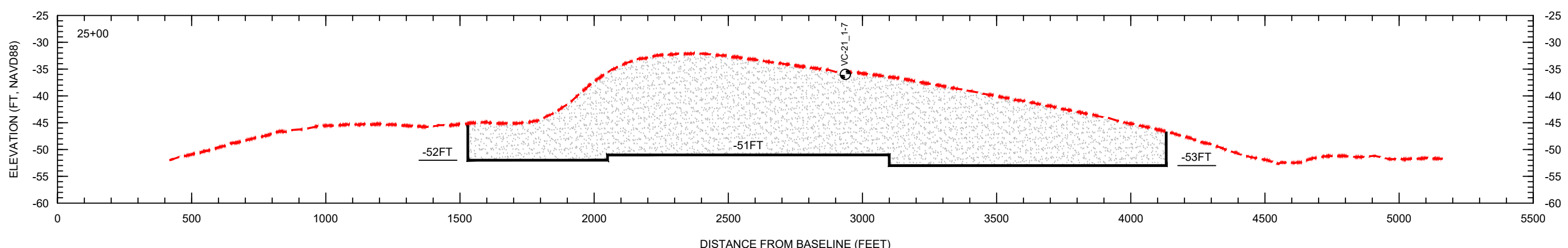
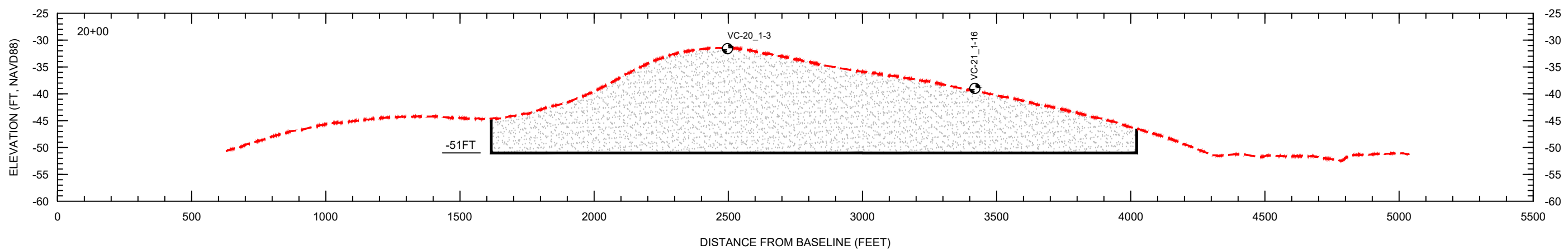
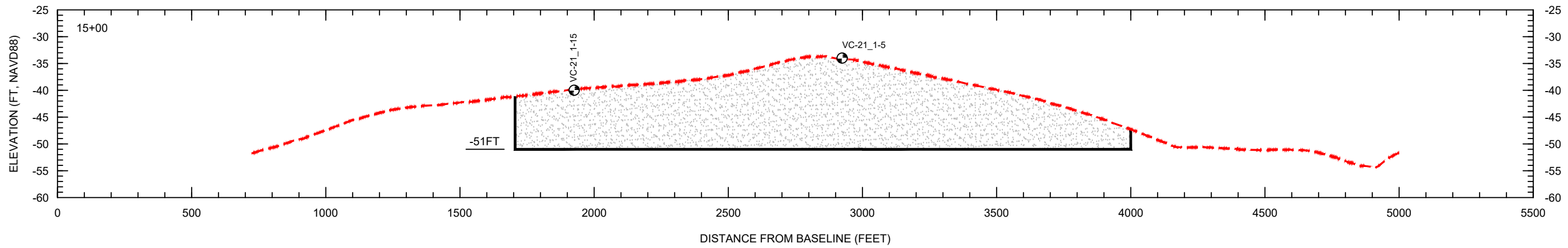
SCALE:  
H: 1" = 400'  
V: 1" = 20'

- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
  2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
  3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.



LEE COUNTY		DATE: 2/5/2024	SCALE: AS NOTED
BORROW AREA SECTIONS		DRAWN: JSD/F.B.	
		CHECKED: MTP/P.G.	
		SEC: TWP.	RNG.
		ACAD NO.: 22175_CPS_16-20_Borrow Area.DWG	
CLIENT:	TITLE:	REF. NO.	REVISION DESCRIPTION
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464			
PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceciff.com			
COASTAL ENGINEERING CONSULTANTS, INC.	SERVING FLORIDA SINCE 1977		
28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135			
SHEET 17 OF 25			
FILE NO.: 22.175			



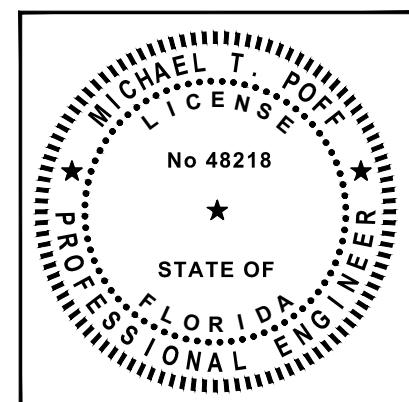


- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
  2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
  3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.

SCALE:  
H: 1" = 400'  
V: 1" = 20'

LEGEND:

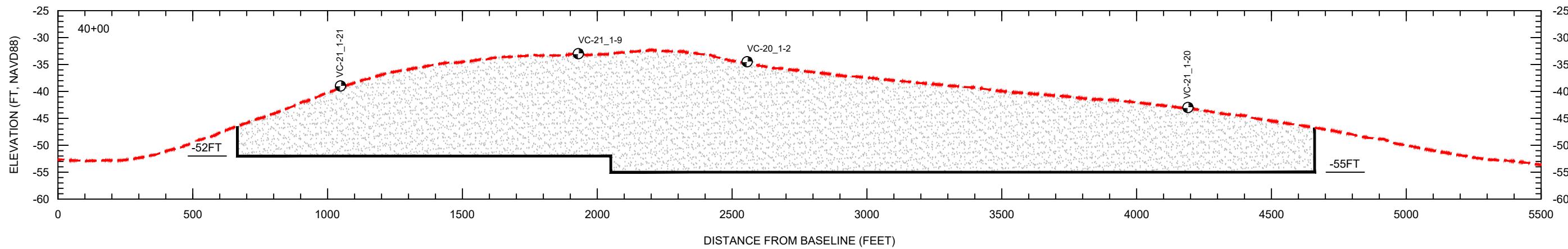
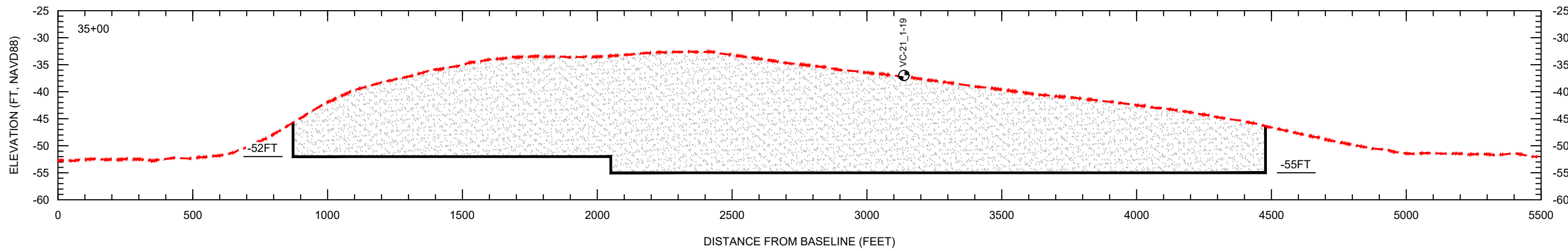
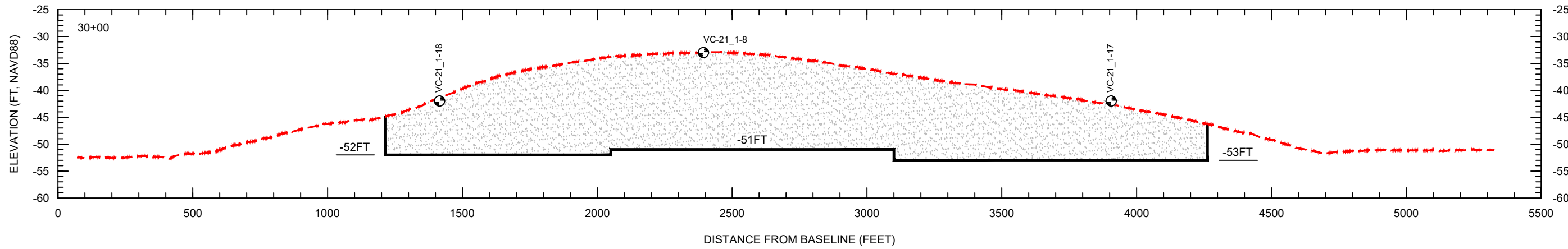
- EXISTING GRADE
- DESIGN DREDGE CUT
- VIBRACORE



LEE COUNTY		CLIENT:
BORROW AREA SECTIONS		TITLE:
DATE: 2/5/2024	SCALE: AS NOTED	COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceciff.com
DRAWN: JSD/F.B.	DATE:	
CHECKED: MTP/P.G.	DATE:	
SEC: TWP.	DATE:	
ACAD NO.: 22175_CPS_16-20_Borrow Area.DWG	DATE:	
REF. NO.	NO.	BY
		REVISION DESCRIPTION

**COASTAL ENGINEERING CONSULTANTS, INC.**  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135



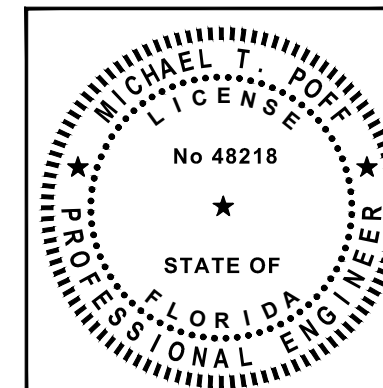


- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
  2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
  3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.

SCALE:  
H: 1" = 400'  
V: 1" = 20'

LEGEND:

- - - EXISTING GRADE
- DESIGN DREDGE CUT
- ⊕ VC-21\_1-20 VIBRACORE



LEE COUNTY		BORROW AREA SECTIONS	
DATE: 2/5/2024	SCALE: AS NOTED	NO.	REVISION DESCRIPTION
DRAWN: JSD	F.B.	BY	
CHECKED: MTP	P.G.	DATE	
SEC. TWP.	RNG.		
ACAD NO.: 22175_CPS_16-20_Borrow Area.DWG			
REF. NO.			

CLIENT: LEE COUNTY  
TITLE: BORROW AREA SECTIONS

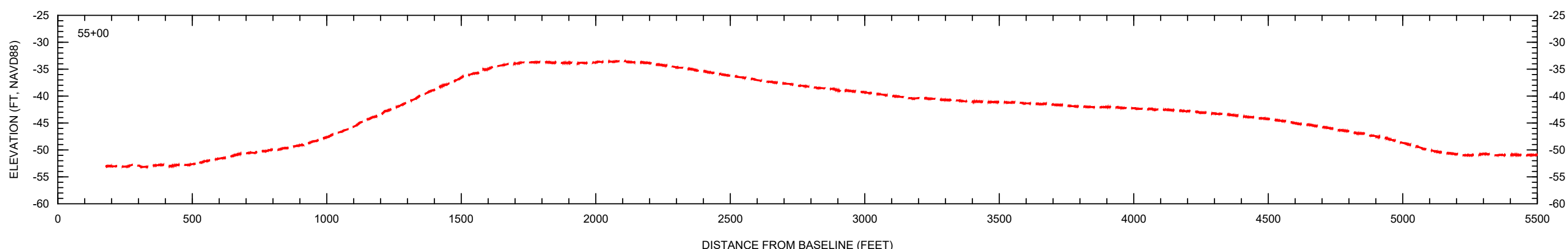
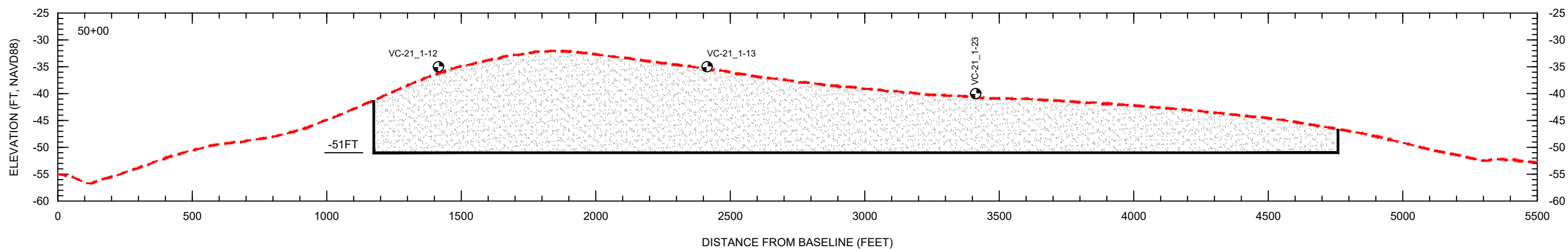
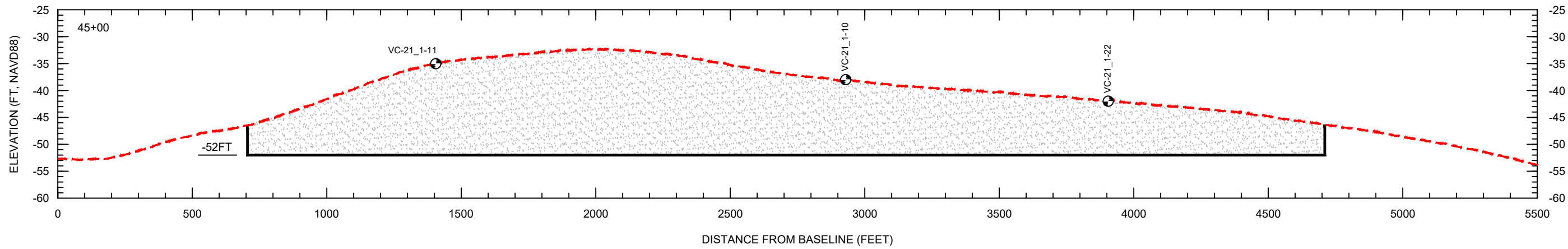
COASTAL & MARINE ENGINEERING  
ENVIRONMENTAL & GEOLOGICAL SERVICES  
SURVEYING & MAPPING  
ENGINEERING: CA 2464  
SURVEYING: LB 2464

PHONE: (239) 643-2324  
FAX: (239) 643-1143  
www.coastalengineering.com  
E-Mail: info@cecfll.com

COASTAL ENGINEERING CONSULTANTS, INC.  
SERVING FLORIDA SINCE 1977  
28421 BONITA CROSSINGS BLVD.  
BONITA SPRINGS, FL 34135

SHEET 19 OF 25  
FILE NO.: 22.175



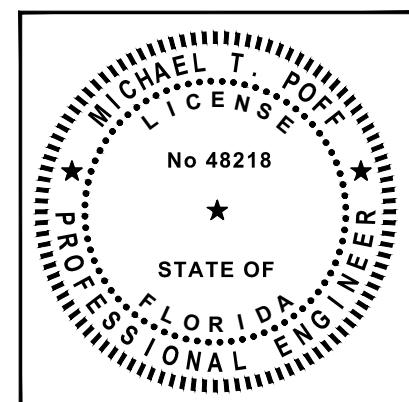


- NOTES:
1. GEOPHYSICAL DATA FROM OSI, 2021.
  2. GEOTECHNICAL DATA FROM GFA INTERNATIONAL AND AMDRILL, INC. 2020 AND 2021.
  3. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.

SCALE:  
H: 1" = 400'  
V: 1" = 20'

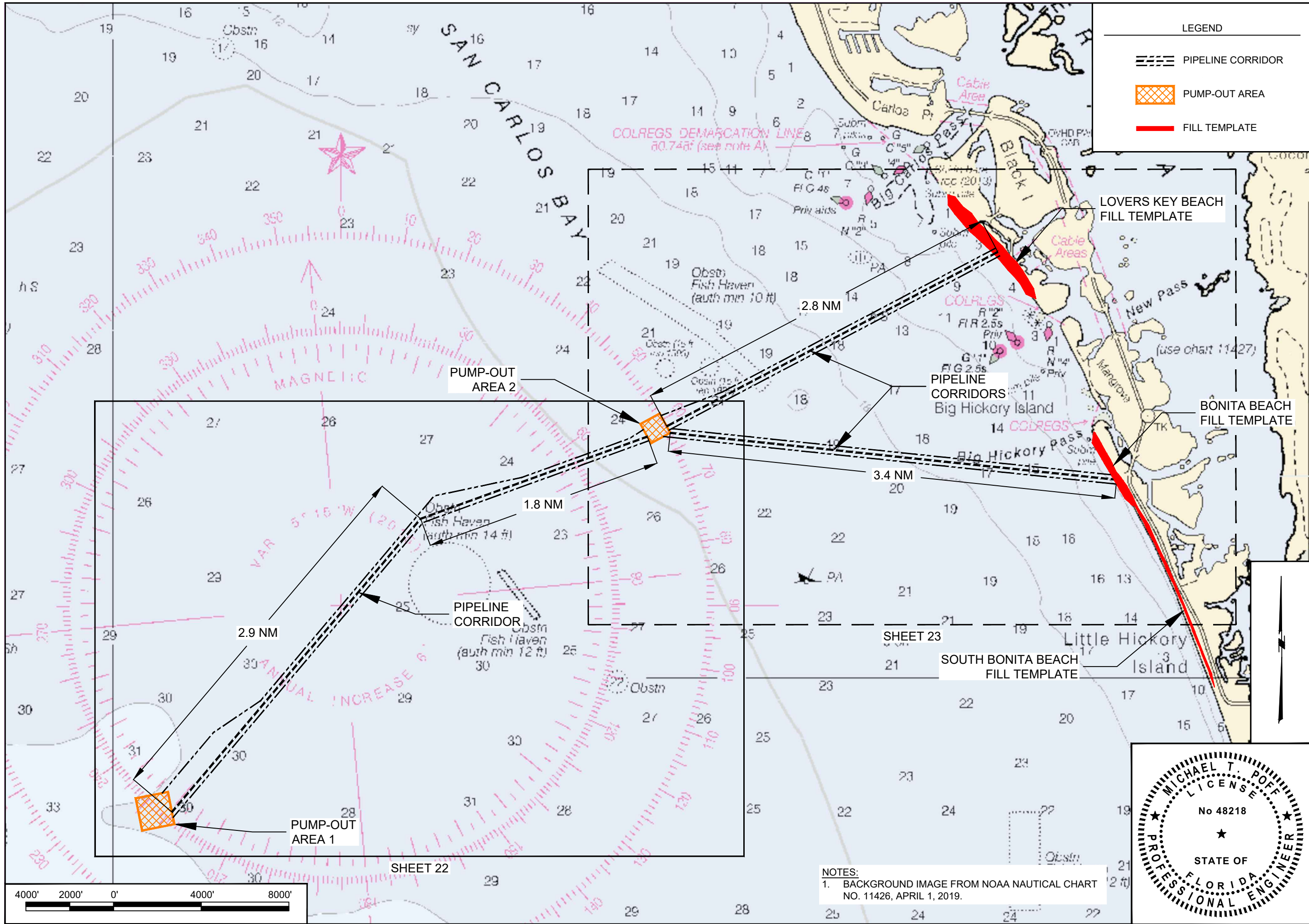
LEGEND:

- - - EXISTING GRADE
- DESIGN DREDGE CUT
- ⊕ VC-21\_1-23 VIBRACORE



DATE: 2/5/2024 DRAWN: JSD/F.B. CHECKED: MTP/P.G. SEC: TWP. ACAD NO.: 22175_CPS_16-20_Borrow Area.DWG REF. NO.	SCALE: AS NOTED JSD/F.B. MTP/P.G. RING. NO. DATE BY REVISION DESCRIPTION	CLIENT: LEE COUNTY TITLE: BORROW AREA SECTIONS
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com		
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		
SHEET 20 OF 25 FILE NO.: 22.175		





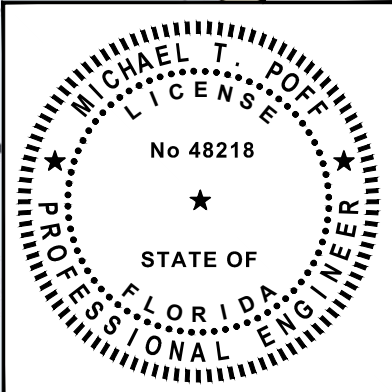
**LEGEND**

- PIPELINE CORRIDOR
- PUMP-OUT AREA
- FILL TEMPLATE

NO.	DATE	BY	REVISION DESCRIPTION

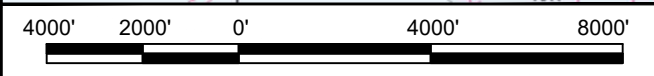
DATE: 2/5/2024 SCALE: AS NOTED  
 DRAWN: JSD/E.B.  
 CHECKED: MTP/P.G.  
 SEC. TWP. RING.  
 ACAD NO.: 22175\_CPS\_21+23\_Corridor.DWG  
 REF. NO.:  
 CLIENT: LEE COUNTY  
 TITLE: PIPELINE CORRIDORS OVERVIEW

COASTAL & MARINE ENGINEERING  
 ENVIRONMENTAL & GEOLOGICAL SERVICES  
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 FAX: (239) 643-1143  
 www.coastalengineering.com  
 E-Mail: info@cecifl.com





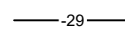
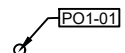
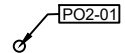
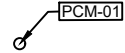
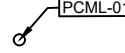
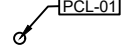
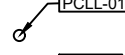
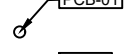

**COASTAL ENGINEERING CONSULTANTS, INC.**  
 SERVING FLORIDA SINCE 1977  
 28421 BONITA CROSSINGS BLVD.  
 BONITA SPRINGS, FL 34135  
 SHEET 21 OF 25  
 FILE NO.: 22.175

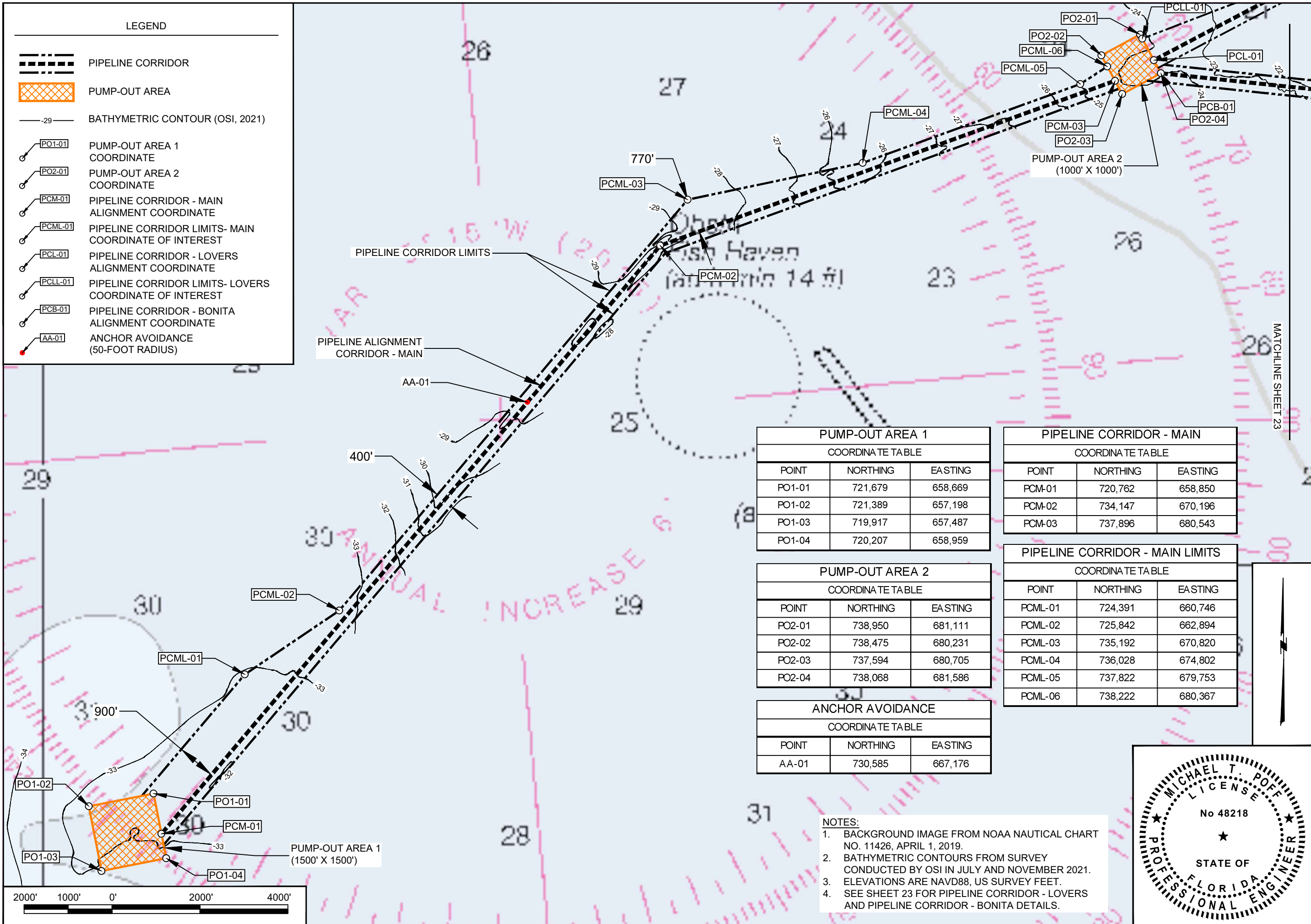
**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA NAUTICAL CHART NO. 11426, APRIL 1, 2019.





LEGEND

-  PIPELINE CORRIDOR
-  PUMP-OUT AREA
-  BATHYMETRIC CONTOUR (OSI, 2021)
-  PUMP-OUT AREA 1 COORDINATE
-  PUMP-OUT AREA 2 COORDINATE
-  PIPELINE CORRIDOR - MAIN ALIGNMENT COORDINATE
-  PIPELINE CORRIDOR LIMITS- MAIN COORDINATE OF INTEREST
-  PIPELINE CORRIDOR - LOVERS ALIGNMENT COORDINATE
-  PIPELINE CORRIDOR LIMITS- LOVERS COORDINATE OF INTEREST
-  PIPELINE CORRIDOR - BONITA ALIGNMENT COORDINATE
-  ANCHOR AVOIDANCE (50-FOOT RADIUS)



PUMP-OUT AREA 1		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PO1-01	721,679	658,669
PO1-02	721,389	657,198
PO1-03	719,917	657,487
PO1-04	720,207	658,959

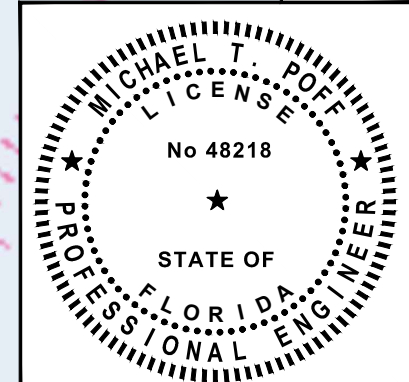
PUMP-OUT AREA 2		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PO2-01	738,950	681,111
PO2-02	738,475	680,231
PO2-03	737,594	680,705
PO2-04	738,068	681,586

ANCHOR AVOIDANCE		
COORDINATE TABLE		
POINT	NORTHING	EASTING
AA-01	730,585	667,176

PIPELINE CORRIDOR - MAIN		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PCM-01	720,762	658,850
PCM-02	734,147	670,196
PCM-03	737,896	680,543

PIPELINE CORRIDOR - MAIN LIMITS		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PCML-01	724,391	660,746
PCML-02	725,842	662,894
PCML-03	735,192	670,820
PCML-04	736,028	674,802
PCML-05	737,822	679,753
PCML-06	738,222	680,367

- NOTES:
1. BACKGROUND IMAGE FROM NOAA NAUTICAL CHART NO. 11426, APRIL 1, 2019.
  2. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY OSI IN JULY AND NOVEMBER 2021.
  3. ELEVATIONS ARE NAVD88, US SURVEY FEET.
  4. SEE SHEET 23 FOR PIPELINE CORRIDOR - LOVERS AND PIPELINE CORRIDOR - BONITA DETAILS.



<p>DATE: 2/5/2024 SCALE: AS NOTED</p> <p>DRAWN: JSD/F.B. CHECKED: MTP/P.G. SEC: TWP. ACAD NO.: 22175_CPS_21+23_Corridor.DWG REF. NO.:</p>	<p>CLIENT: LEE COUNTY</p> <p>TITLE: PIPELINE CORRIDOR - MAIN PLAN VIEW</p>	<p>COASTAL &amp; MARINE ENGINEERING ENVIRONMENTAL &amp; GEOLOGICAL SERVICES SURVEYING &amp; MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464</p> <p>PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com</p>	<p>NO. DATE BY REVISION DESCRIPTION</p>
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COASTAL ENGINEERING CONSULTANTS, INC.

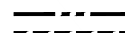


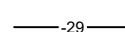
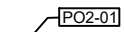

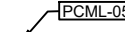
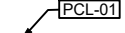
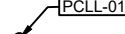
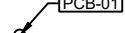

SERVING FLORIDA SINCE 1977

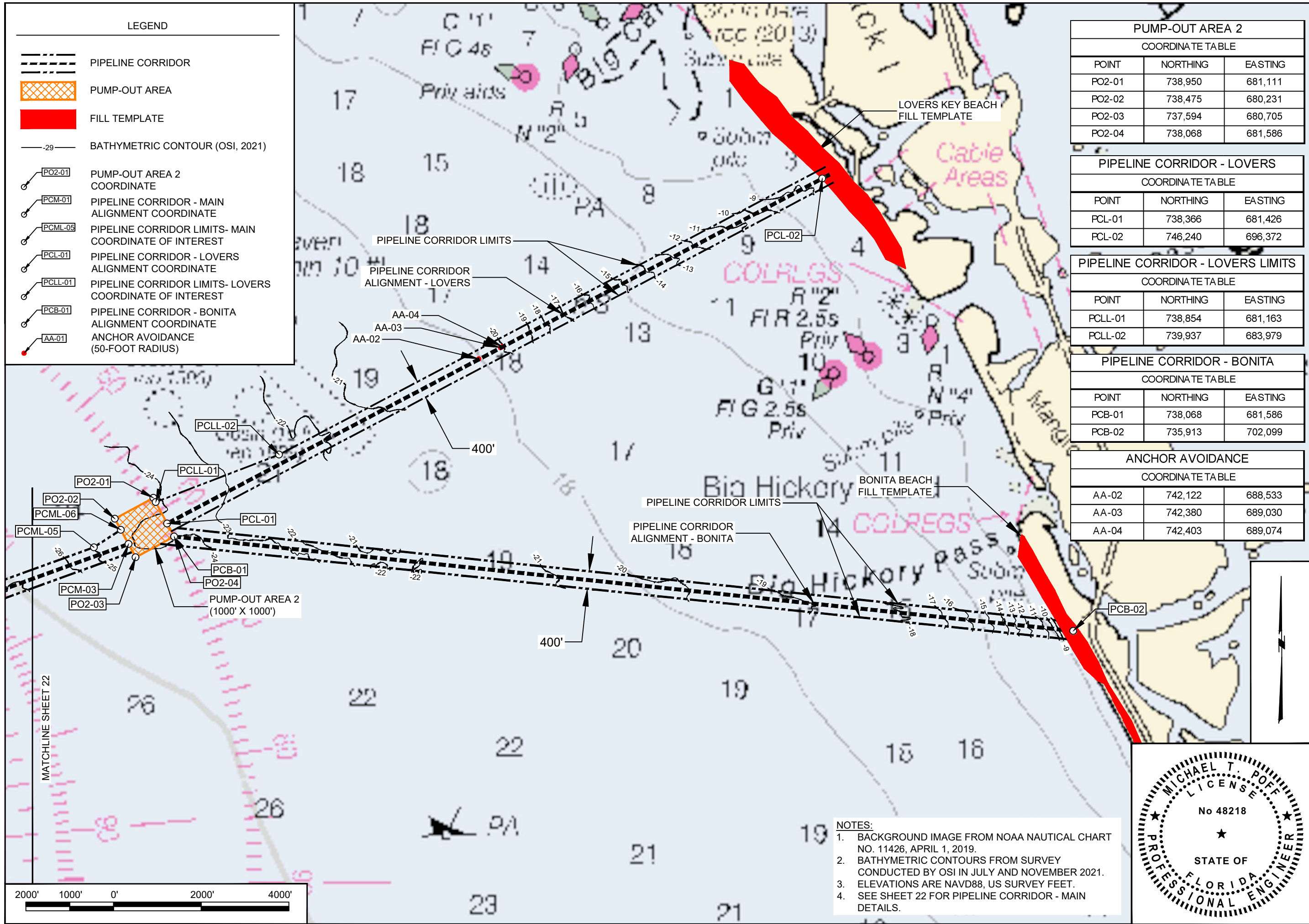
28421 BONITA CROSSINGS BLVD.  
BONITA SPRINGS, FL 34135

SHEET 22 OF 25  
FILE NO.: 22.175



LEGEND

-  PIPELINE CORRIDOR
-  PUMP-OUT AREA
-  FILL TEMPLATE
-  BATHYMETRIC CONTOUR (OSI, 2021)
-  PUMP-OUT AREA 2 COORDINATE
-  PIPELINE CORRIDOR - MAIN ALIGNMENT COORDINATE
-  PIPELINE CORRIDOR LIMITS- MAIN COORDINATE OF INTEREST
-  PIPELINE CORRIDOR - LOVERS ALIGNMENT COORDINATE
-  PIPELINE CORRIDOR LIMITS- LOVERS COORDINATE OF INTEREST
-  PIPELINE CORRIDOR - BONITA ALIGNMENT COORDINATE
-  ANCHOR AVOIDANCE (50-FOOT RADIUS)



PUMP-OUT AREA 2		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PO2-01	738,950	681,111
PO2-02	738,475	680,231
PO2-03	737,594	680,705
PO2-04	738,068	681,586

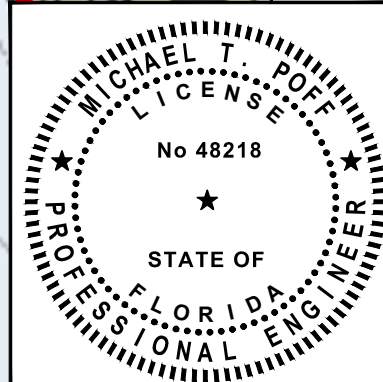
PIPELINE CORRIDOR - LOVERS		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PCL-01	738,366	681,426
PCL-02	746,240	696,372

PIPELINE CORRIDOR - LOVERS LIMITS		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PCLL-01	738,854	681,163
PCLL-02	739,937	683,979

PIPELINE CORRIDOR - BONITA		
COORDINATE TABLE		
POINT	NORTHING	EASTING
PCB-01	738,068	681,586
PCB-02	735,913	702,099

ANCHOR AVOIDANCE		
COORDINATE TABLE		
POINT	NORTHING	EASTING
AA-02	742,122	688,533
AA-03	742,380	689,030
AA-04	742,403	689,074

- NOTES:
1. BACKGROUND IMAGE FROM NOAA NAUTICAL CHART NO. 11426, APRIL 1, 2019.
  2. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY OSI IN JULY AND NOVEMBER 2021.
  3. ELEVATIONS ARE NAVD88, US SURVEY FEET.
  4. SEE SHEET 22 FOR PIPELINE CORRIDOR - MAIN DETAILS.



LEE COUNTY  
PIPELINE CORRIDORS  
LOVERS AND BONITA  
PLAN VIEW

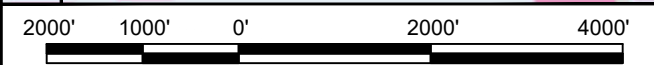
CLIENT: LEE COUNTY  
TITLE: PIPELINE CORRIDORS - LOVERS AND BONITA PLAN VIEW

COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464  
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E-Mail: info@ceefl.com

28421 BONITA CROSSINGS BLVD.  
BONITA SPRINGS, FL 34135

SHEET 23 OF 25  
FILE NO.: 22.175


NO.	DATE	BY	REVISION DESCRIPTION




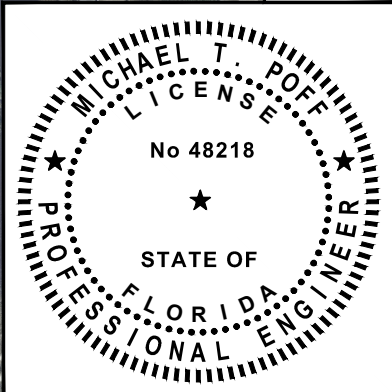
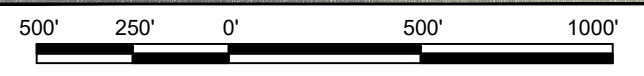
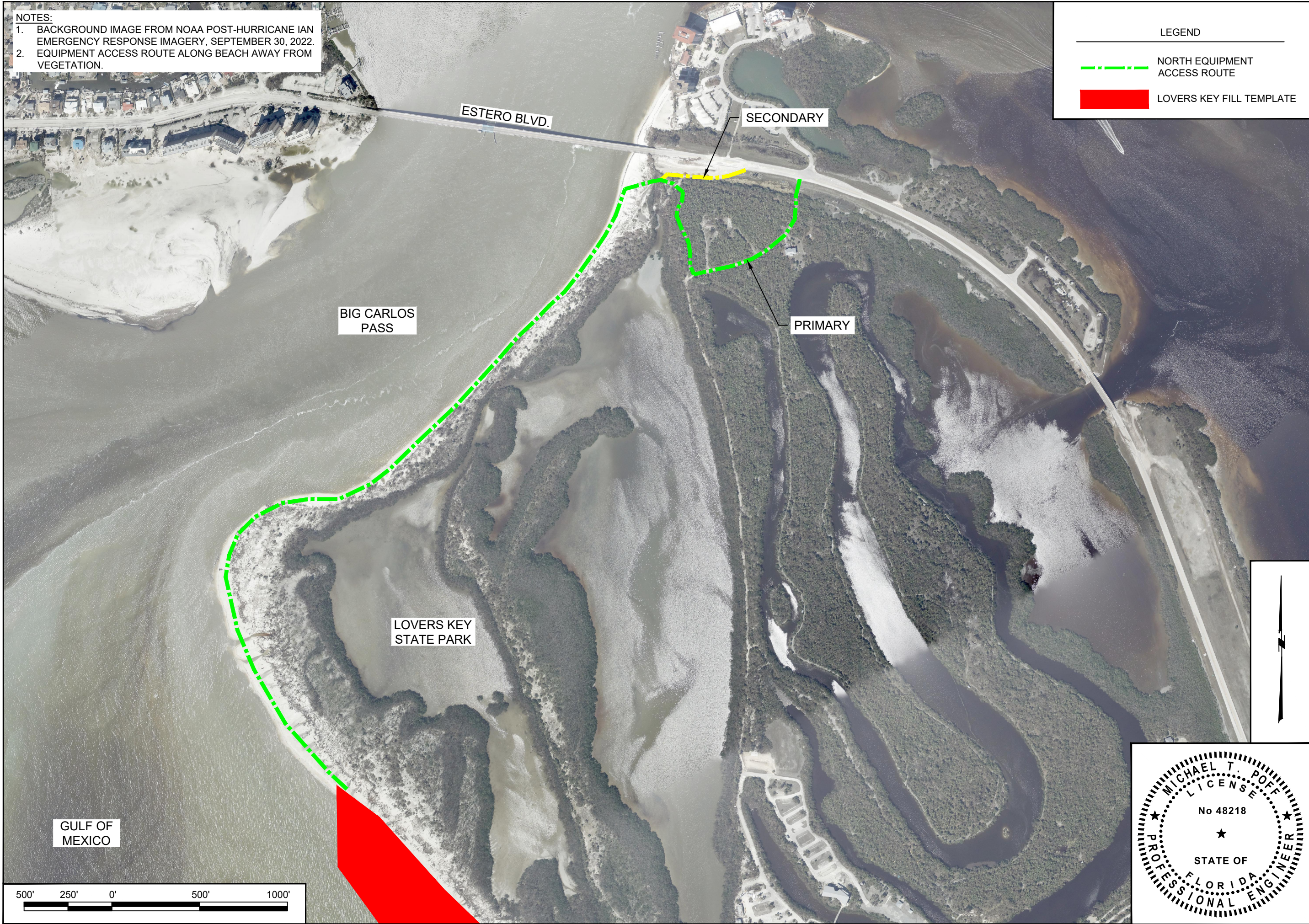


**NOTES:**  
 1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.  
 2. EQUIPMENT ACCESS ROUTE ALONG BEACH AWAY FROM VEGETATION.

**LEGEND**

 NORTH EQUIPMENT ACCESS ROUTE

 LOVERS KEY FILL TEMPLATE


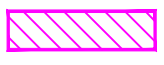
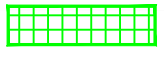



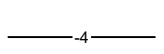


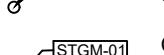


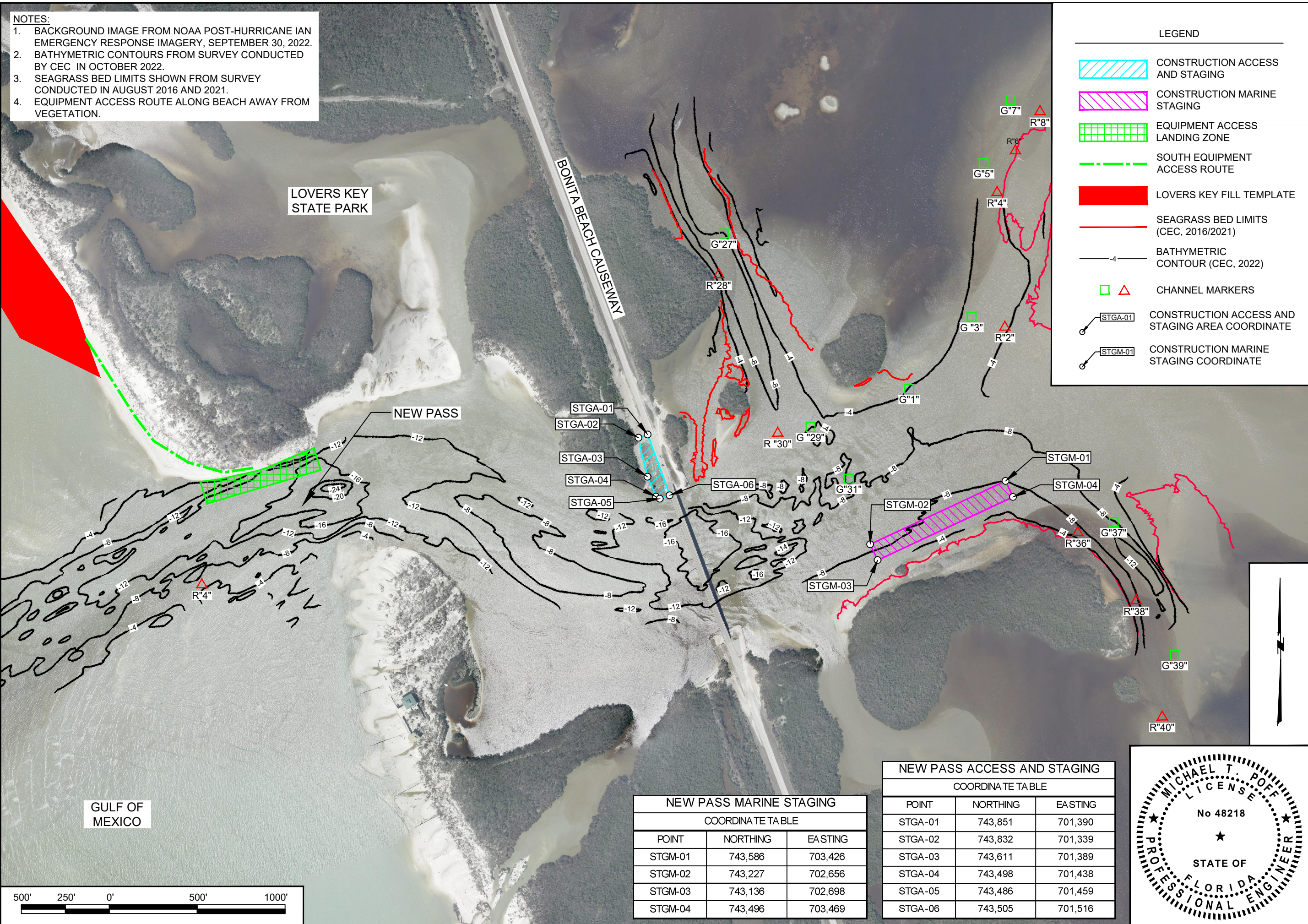
DATE: 2/5/2024		SCALE: AS NOTED	
DRAWN: JSD/F.B.			
CHECKED: MTP/P.G.			
SEC.	TWP.	RNG.	
ACAD NO.: 22175_CPS_24_Staging.DWG			
REF. NO.			
CLIENT: LEE COUNTY		TITLE: NORTH EQUIPMENT ACCESS ROUTE	
COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@cecifl.com			
COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135		SHEET 24 OF 25 FILE NO.: 22.175	



- NOTES:**
1. BACKGROUND IMAGE FROM NOAA POST-HURRICANE IAN EMERGENCY RESPONSE IMAGERY, SEPTEMBER 30, 2022.
  2. BATHYMETRIC CONTOURS FROM SURVEY CONDUCTED BY CEC IN OCTOBER 2022.
  3. SEAGRASS BED LIMITS SHOWN FROM SURVEY CONDUCTED IN AUGUST 2016 AND 2021.
  4. EQUIPMENT ACCESS ROUTE ALONG BEACH AWAY FROM VEGETATION.

**LEGEND**

-  CONSTRUCTION ACCESS AND STAGING
-  CONSTRUCTION MARINE STAGING
-  EQUIPMENT ACCESS LANDING ZONE
-  SOUTH EQUIPMENT ACCESS ROUTE
-  LOVERS KEY FILL TEMPLATE
-  SEAGRASS BED LIMITS (CEC, 2016/2021)
-  BATHYMETRIC CONTOUR (CEC, 2022)
-  CHANNEL MARKERS
-  CONSTRUCTION ACCESS AND STAGING AREA COORDINATE
-  CONSTRUCTION MARINE STAGING COORDINATE



**NEW PASS MARINE STAGING**

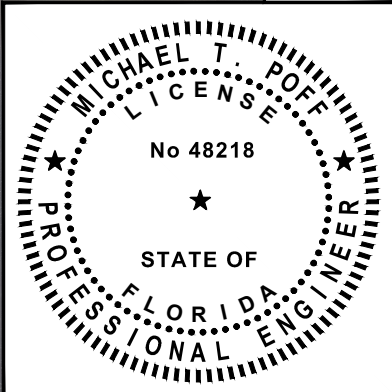
COORDINA TE TA BLE

POINT	NORTHING	EASTING
STGM-01	743,586	703,426
STGM-02	743,227	702,656
STGM-03	743,136	702,698
STGM-04	743,496	703,469

**NEW PASS ACCESS AND STAGING**

COORDINA TE TA BLE

POINT	NORTHING	EASTING
STGA-01	743,851	701,390
STGA-02	743,832	701,339
STGA-03	743,611	701,389
STGA-04	743,498	701,438
STGA-05	743,486	701,459
STGA-06	743,505	701,516



DATE: 2/5/2024 SCALE: AS NOTED  
 DRAWN: JSD/F.B. CHECKED: MTP/P.G.  
 SEC. TWP. RING. ACAD NO.: 22175\_CPS\_24\_Staging.DWG REF. NO.  
 DATE BY NO. DATE BY NO. DATE BY NO.

CLIENT: LEE COUNTY  
 TITLE: NEW PASS CONSTRUCTION ACCESS / STAGING AREAS AND SOUTH EQUIPMENT ACCESS ROUTE / LANDING ZONE

COASTAL & MARINE ENGINEERING ENVIRONMENTAL & GEOLOGICAL SERVICES SURVEYING & MAPPING ENGINEERING: CA 2464 SURVEYING: LB 2464  
 PHONE: (239) 643-2324 FAX: (239) 643-1143 www.coastalengineering.com E-Mail: info@ceciff.com

COASTAL ENGINEERING CONSULTANTS, INC. SERVING FLORIDA SINCE 1977 28421 BONITA CROSSINGS BLVD. BONITA SPRINGS, FL 34135

SHEET 25 OF 25 FILE NO.: 22.175