Construction Drawings

NATIONAL FISH AND WILDLIFE FOUNDATION (NFWF) EMERGENCY COASTAL RESILIENCY (DUNE ENHANCEMENT) PROJECT

Gulf County Board of County Commissioners
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

Commissioners

District 1 - David Rich
District 2 - Ward McDaniel
District 3 - Jimmy Rogers
District 4 - Sandy Quinn, Jr. (Chair)
District 5 - Phillip McCroan

Mike Hammond,
County Administrator

OWNER CONTACT INFORMATION

Michael Hammond
Gulf County Chief Administrator
1000 Cecil G. Costin, Sr. Boulevard
Port St. Joe, Florida, 32456

ENGINEER CONTACT INFORMATION

Michael Dombrowski, P.E.
MRD Associates, Inc.
543 Harbor Boulevard, Suite 204
Destin, Florida 32541
850.654.1555
850.654.0550 fax
Email: md@mrd-associates.com

PROJECT LOCATION

Gulf County, Florida
Section 12, Township 9S, Range 12W
Sections 7, 18-20, Township 9S, Range 11W

Latitude/Longitude:
29°43'09.95"N/85°23'16.52"W to 29°40'44.78"N/85°21'56.35" (NAD1983)

Northing/Easting
262,680N/1,686,621E to 248,114N/1,693,533E (NAD1983)

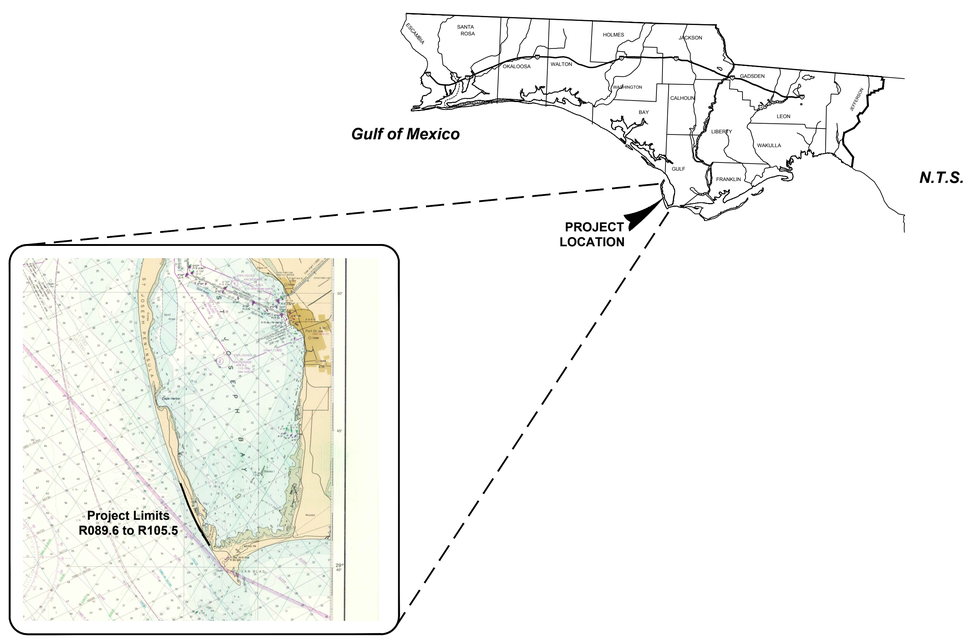
DEP Monuments: R-89.6 to R-105.5

PROJECT DESCRIPTION

The project is located along the gulf front of St. Joseph Peninsula, Gulf County, Florida. The project consists of the construction of and emergency dune project for a segment of beach between R-89.6 and R-105.5 (16,254 feet; 3.1 miles; 4,954 meters). The project consists of the placement of clean white beach compatible sand totaling approximately 78,930 Cubic Yards from an upland sand source. In addition, the project includes the installation of multiple native dune vegetation species totaling approximately 619,126 plants along the project shoreline. Contractor is responsible for verifying all quantities.

GENERAL NOTES

1. The work consists of furnishing all labor, equipment, and materials (except where indicated) and performing all operations in connection with construction of the project.
2. All work shall conform to the plans, specifications, and approved permits. The Contractor shall post at the project site all permit placards, and comply with all terms of the permits as pertaining to the performance of the work.
3. Prior to construction, the Contractor, Owner, and Engineer shall meet to verify construction access locations, design details, and methods of construction.
4. Prior to construction, the Contractor shall be responsible to verify the vertical and horizontal control of all benchmarks listed within.
5. All elevations as shown are referenced to North American Vertical Datum, 1988 (NAVD 1988), unless otherwise stated.
6. Coordinates shown hereon refer to Florida State Plane Coordinate System, North Zone, NAD 1983.
7. All Florida Department of Environmental Protection R-Monuments shown are for informational purposes only.



LOCATION MAP

SCALE: 1 inch = 3 miles

INDEX OF SHEETS

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NOTES:
Image of NOAA chart 11389, St. Joseph and St. Andrew Bay published July, 2005.

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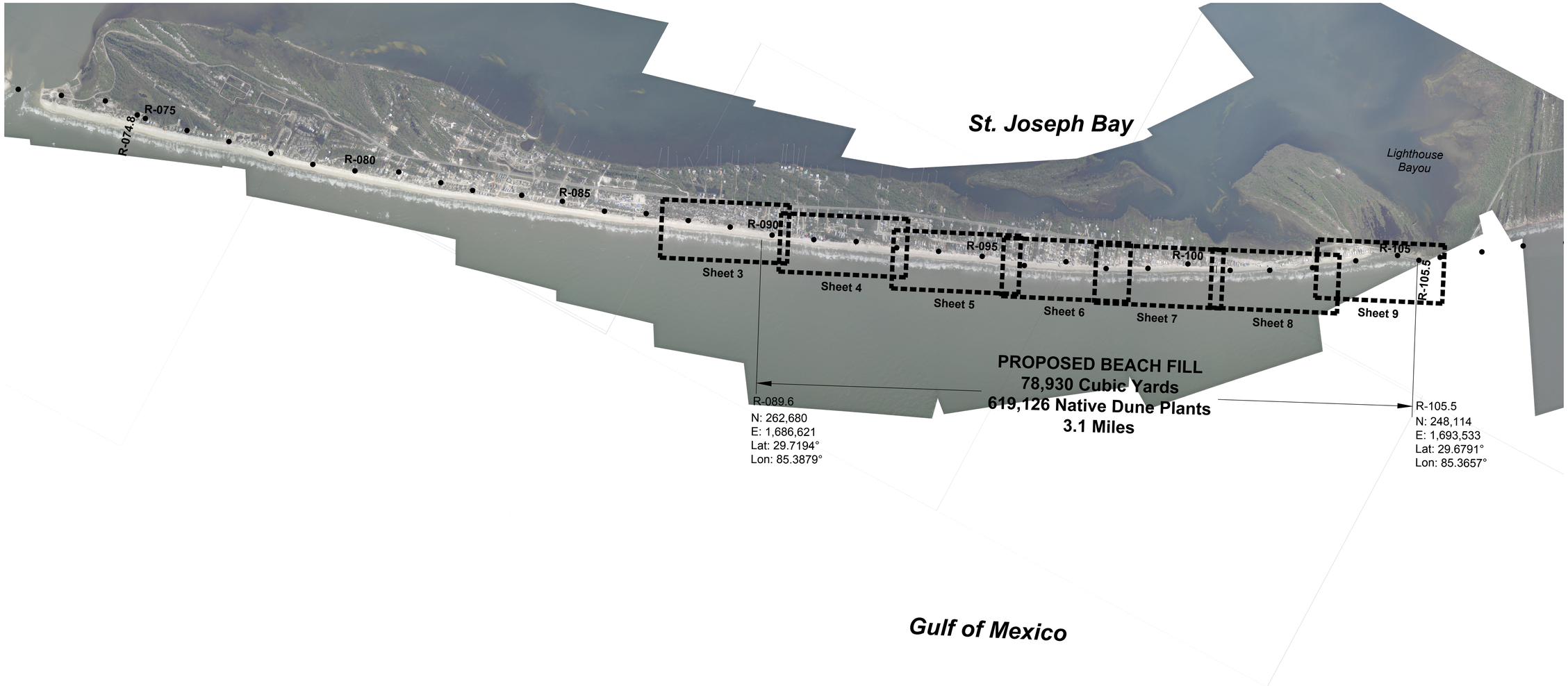
No. 55555
12/18/2020
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Michael R. Dombrowski, P.E.
Florida Licensed No. 55555

COVER SHEET AND LOCATION MAP
NFWF Emergency Coastal Resilience Project

Gulf County Board of County Commissioners
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 1 of 10	



0 1200 2400

(IN FEET)
1 inch = 1200 ft.

LEGEND:

● = DEP Reference Monuments

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NOTES:

- Drawing is referenced to Florida State Plane, North Zone, NAD 1983.
- Drawing is based on Chart 11389, St. Joseph and St. Andrew Bay published July 2005.
- Aerial photography obtained from LABINS.org and flown in 2016. The location of all objects in the photograph are approximate and may not represent currently existing conditions.

ORIGINALS ARE NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND SEALED

STATE OF FLORIDA PROFESSIONAL ENGINEER No. 52255 MICHAEL P. DONHOWE

12/18/2020

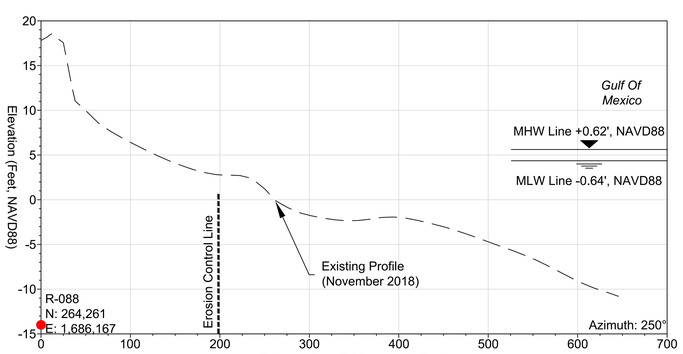
Michael P. Donhowe, P.E.
Florida Licensed No. 52255

INDEX OF SHEETS
NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

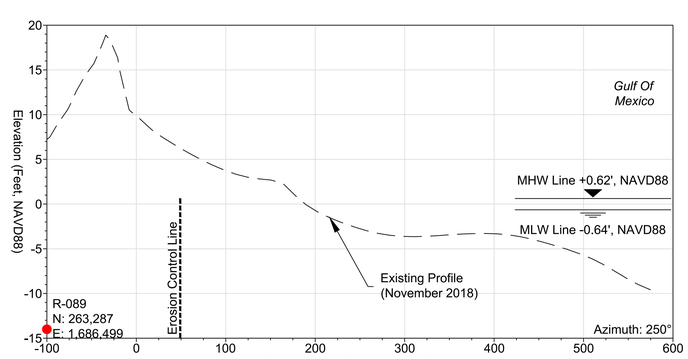
DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: **15-210.22**	
SHEET NUMBER: **2 of 10**	

(IN FEET)
1 inch = 100 ft.



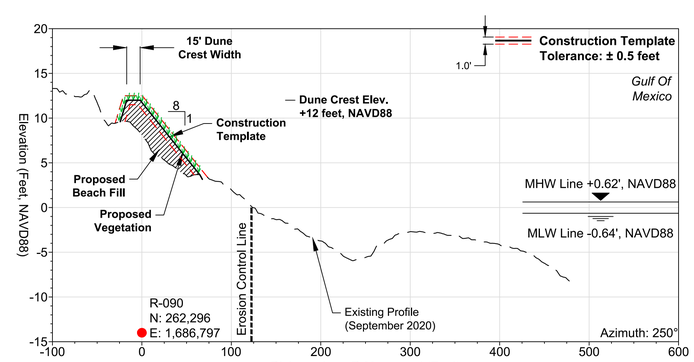
DEP R-088 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'



DEP R-089 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'



DEP R-090 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 8.6 yds³/lf

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NOTES:

- Drawing is referenced to Florida State Plane, North Zone, NAD 1983.
- Existing MHWL from Post-Sally Lidar flown 2020-09 by USACE/NOAA
- Aerial photography obtained from NOAA and flown in 2018-10-11, Post-Michael. The location of all objects in the photograph are approximate and may not represent currently existing conditions.

MISSOURI PROFESSIONAL ENGINEER
Michael S. Drzewiecki, P.E.
Florida P.E. License #
No. 56265
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PROFESSIONAL ENGINEER
Michael S. Drzewiecki, P.E.
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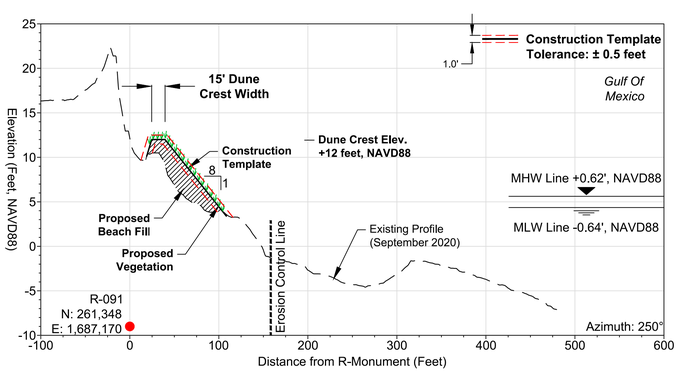
DEP MONUMENTS R-088 TO R-090 AND CROSS-SECTIONS
NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 3 of 10	

(IN FEET)
1 inch = 100 ft.

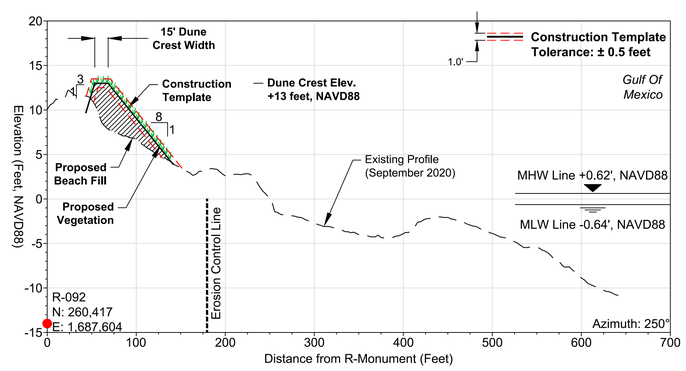


DEP R-091 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'

HORIZONTAL SCALE: 1" = 80'

CONSTRUCTION VOLUME: 7.6 yds³/lf

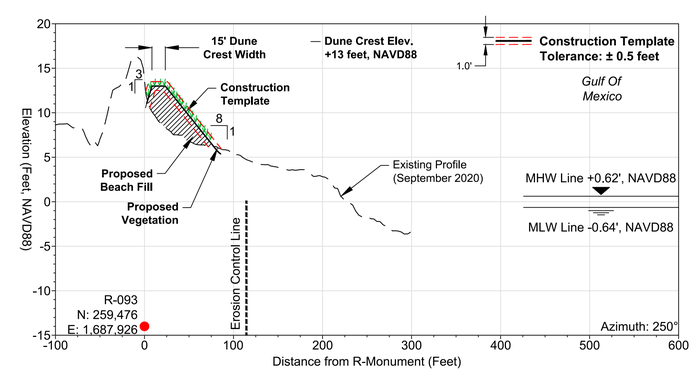


DEP R-092 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'

HORIZONTAL SCALE: 1" = 80'

CONSTRUCTION VOLUME: 8.8 yds³/lf



DEP R-093 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'

HORIZONTAL SCALE: 1" = 80'

CONSTRUCTION VOLUME: 7.8 yds³/lf

NOTES:

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- Existing MHWL from Post-Sandy Lidar from 2020-09 by USACE/NOAA.
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No. 65825 STATE OF FLORIDA PROFESSIONAL ENGINEER

12/15/2020

Michael P. Dombrowski, P.E.
Florida P.E. License No. 65825

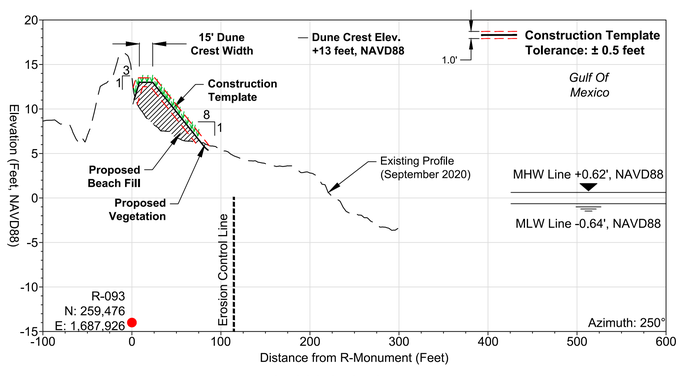
DEP MONUMENTS R-091 TO R-093 AND CROSS-SECTIONS

NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

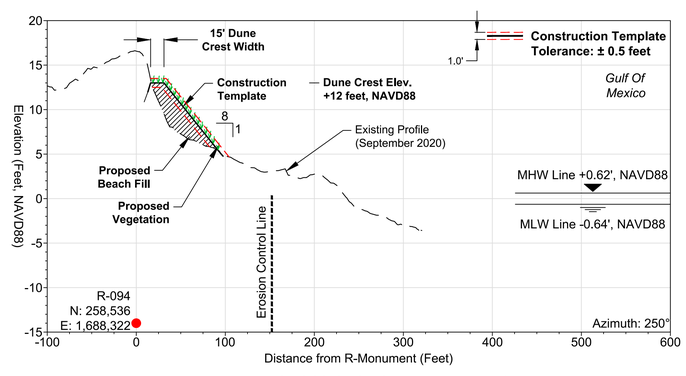
DESIGNED BY: mrd	
December 14, 2018	
REV DATE: December 15, 2020	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 4 of 10	

(IN FEET)
1 inch = 100 ft.



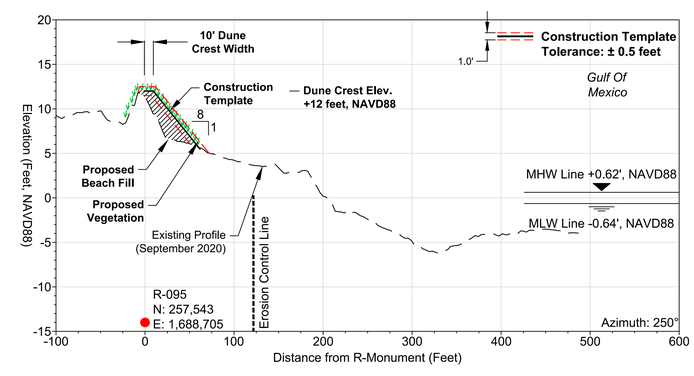
DEP R-093 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 7.8 yds³/lf



DEP R-094 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 6.4 yds³/lf



DEP R-095 CROSS-SECTION (Azimuth:250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 4.4 yds³/lf

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Florida P.E. License No. 65555

DEP MONUMENTS R-093 TO R-095 AND CROSS-SECTIONS
NFWF Emergency Coastal Resilience Project

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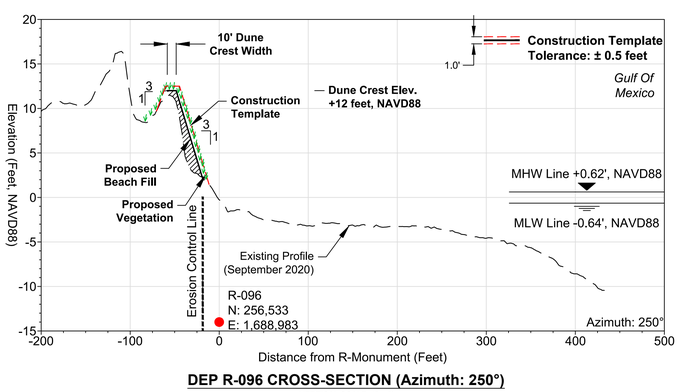
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

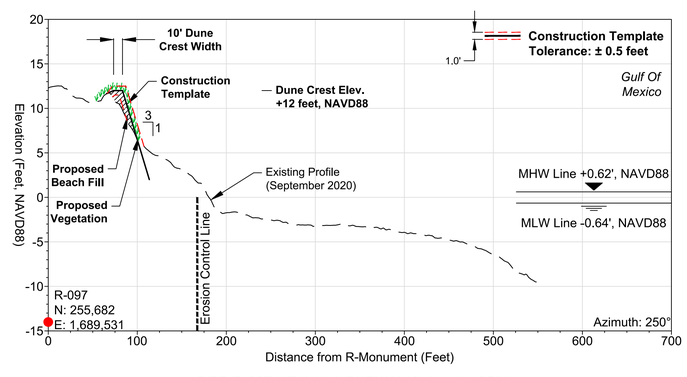
DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 5 of 10	

(IN FEET)
1 inch = 100 ft.



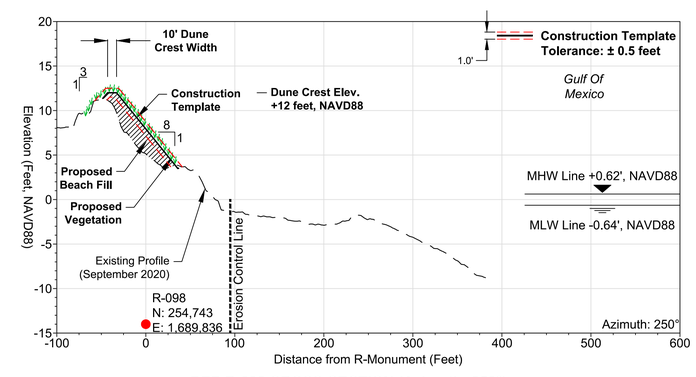
DEP R-096 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 5.0 yds³/lf



DEP R-097 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 3.9 yds³/lf



DEP R-098 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 6.6 yds³/lf

NOTES:
- Drawing is referenced to Florida State Plane, North Zone, NAD 1983.
- Existing MHWL from Pre-Sally LiDAR from 2020-09 by USACE/NOAA.
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STATE OF FLORIDA
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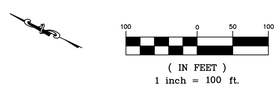
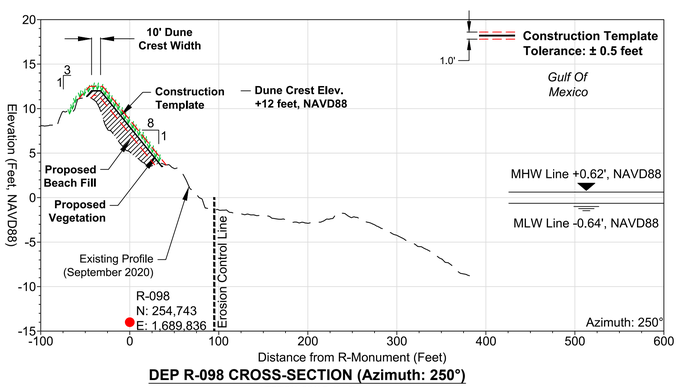
DEP MONUMENTS R-096 TO R-098 AND CROSS-SECTIONS
NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

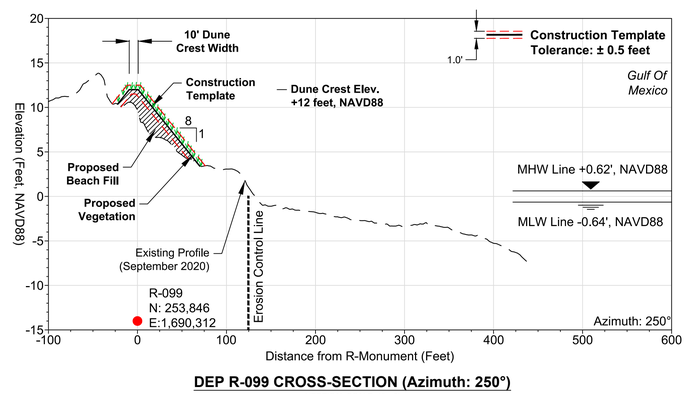
DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 6 of 10	





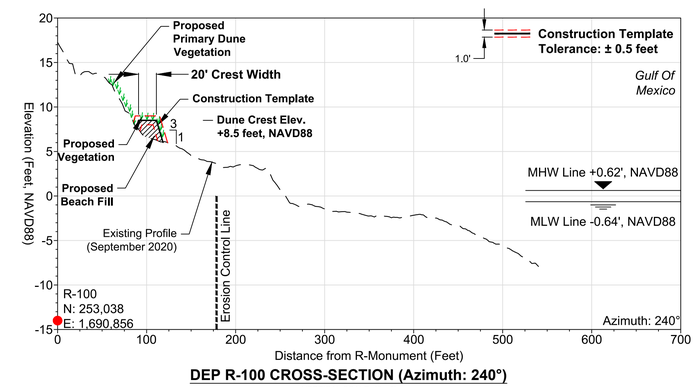
DEP R-098 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 6.6 yds³/lf



DEP R-099 CROSS-SECTION (Azimuth: 250°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 5.8 yds³/lf



DEP R-100 CROSS-SECTION (Azimuth: 240°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 1.7 yds³/lf

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NOTES:
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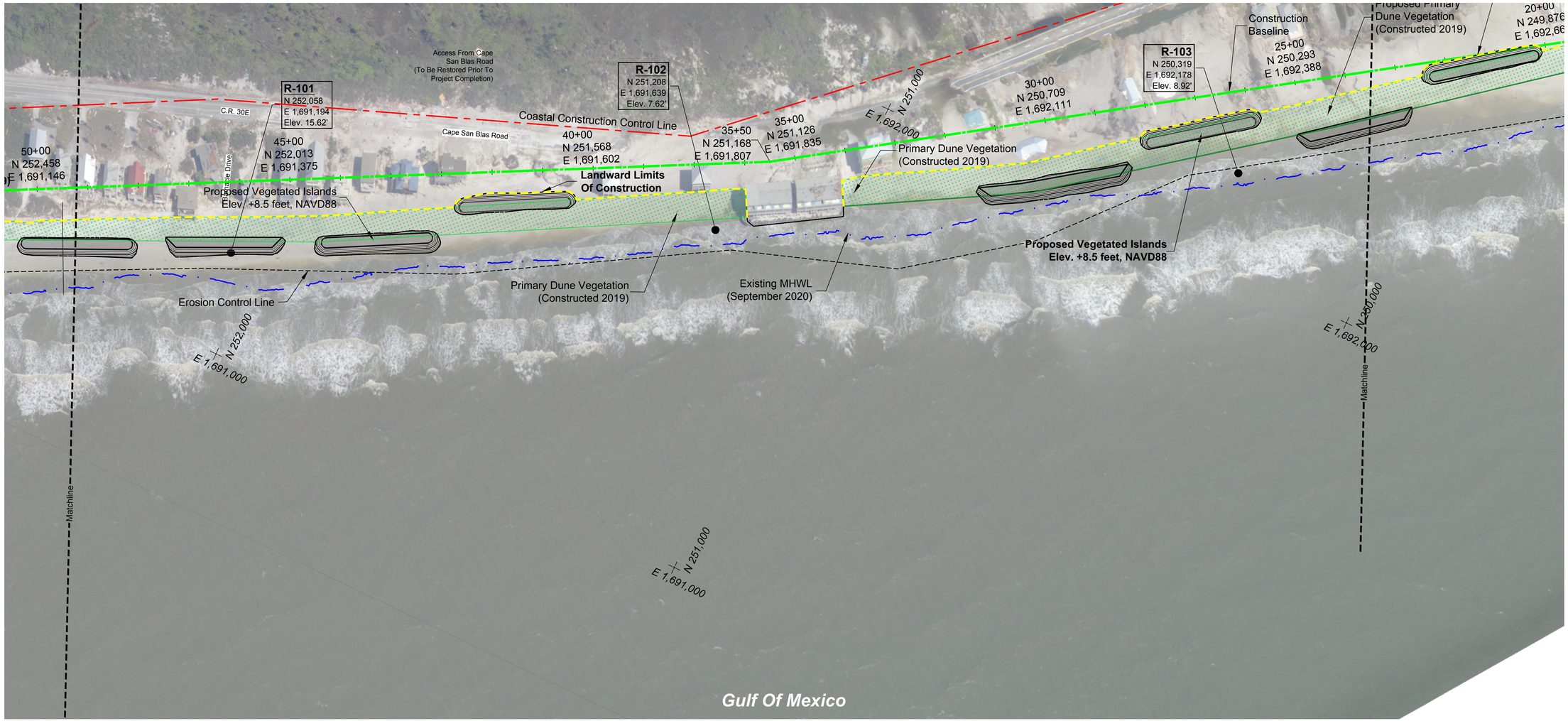
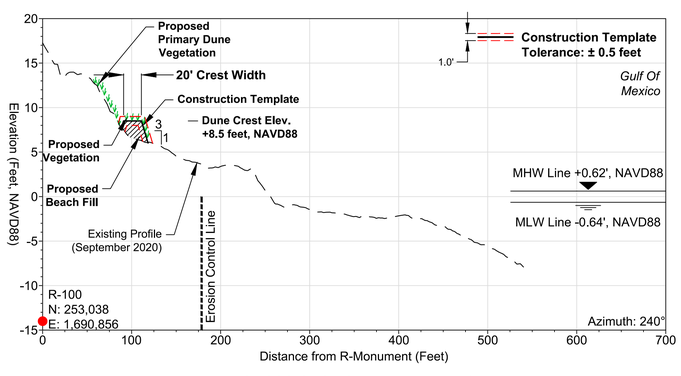
STATE OF FLORIDA PROFESSIONAL ENGINEER No. 65555
12.18.2020
Michael R. Dombrowski, P.E.
Florida Professional License No. 65555

DEP MONUMENTS R-098 TO R-100 AND CROSS-SECTIONS
NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

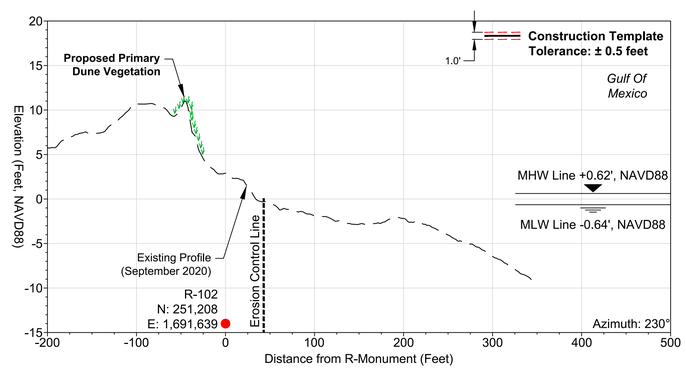
DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 7 of 10	





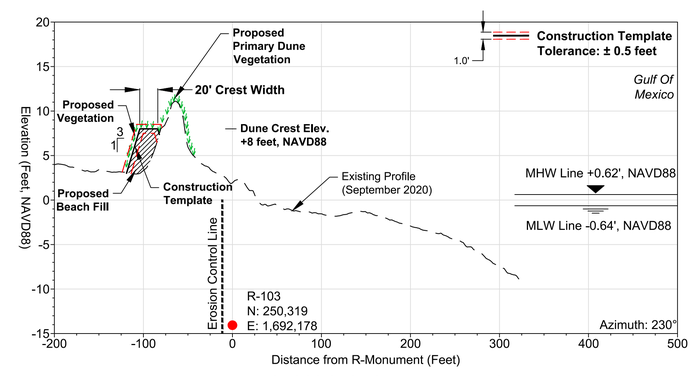
DEP R-101 CROSS-SECTION (Azimuth: 240°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 1.7 yds³/lf



DEP R-102 CROSS-SECTION (Azimuth: 230°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 3.0 yds³/lf



DEP R-103 CROSS-SECTION (Azimuth: 240°)

VERTICAL SCALE: 1" = 8'
HORIZONTAL SCALE: 1" = 80'
CONSTRUCTION VOLUME: 4.1 yds³/lf

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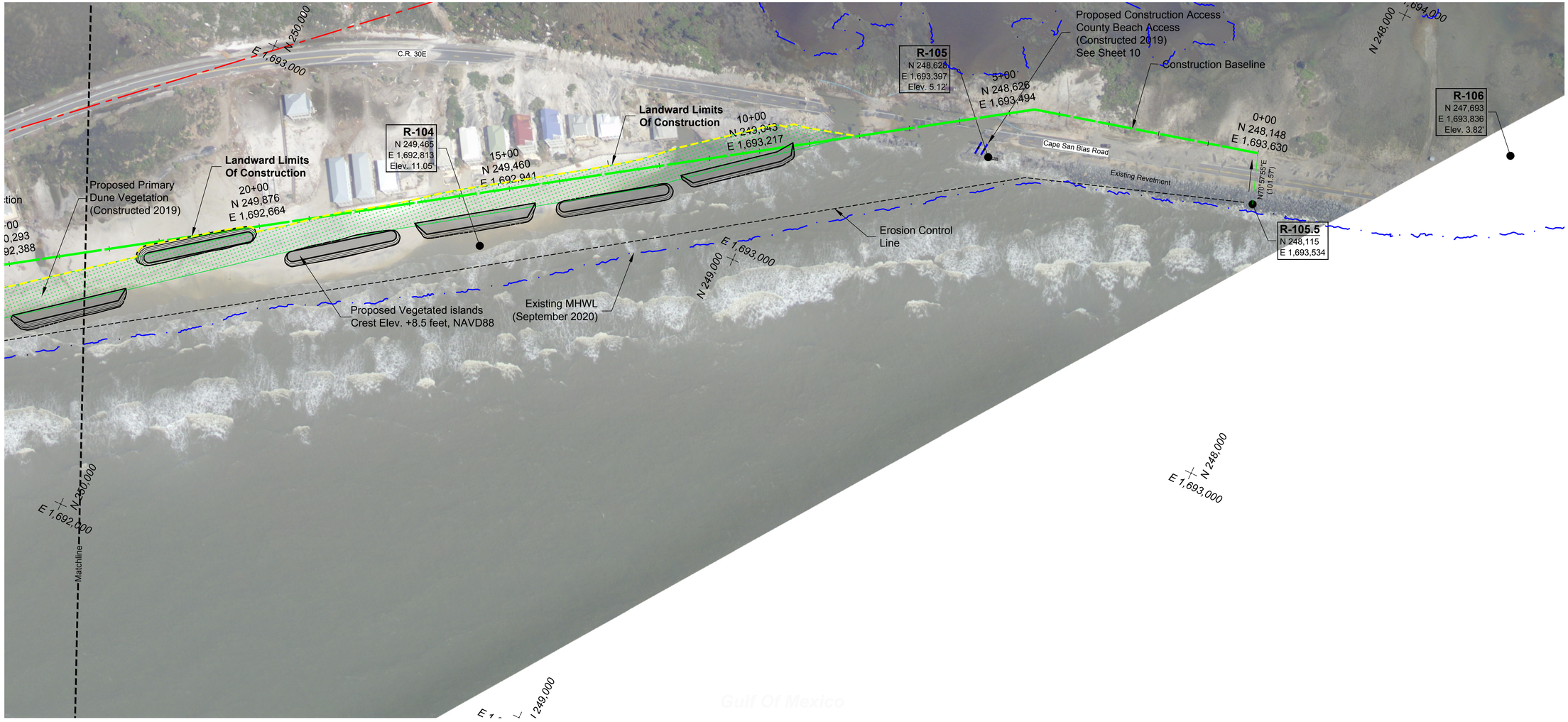
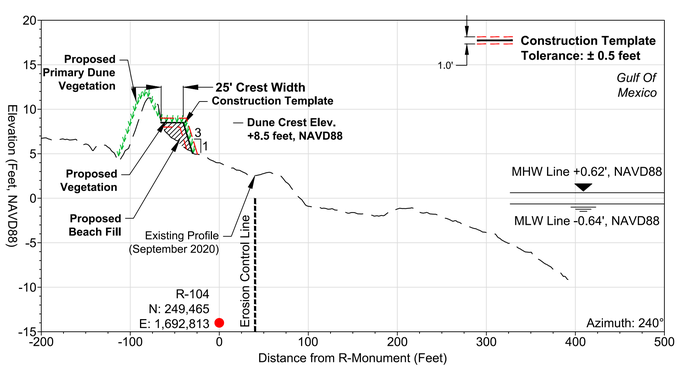
STATE OF FLORIDA
No. 65555
PROFESSIONAL ENGINEER
12/18/2020
Michael R. Dombrowski, P.E.
Florida P.E. License No. 65555

DEP MONUMENTS R-098 TO R-100 AND CROSS-SECTIONS
NFWF Emergency Coastal Resilience Project

Gulf **County Board of County Commissioners**
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: **15-210.22**	
SHEET NUMBER: **8 of 10**	



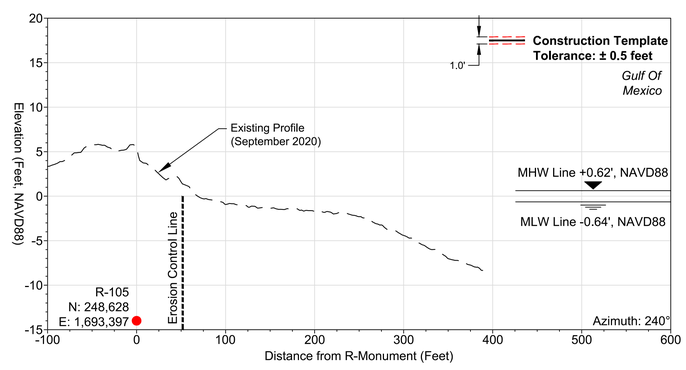


DEP R-104 CROSS-SECTION (Azimuth: 240°)

VERTICAL SCALE: 1" = 8'

HORIZONTAL SCALE: 1" = 80'

CONSTRUCTION VOLUME: 2.0 yds³/lf

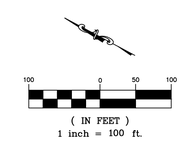


DEP R-105 CROSS-SECTION (Azimuth: 240°)

VERTICAL SCALE: 1" = 8'

HORIZONTAL SCALE: 1" = 80'

CONSTRUCTION VOLUME: 0.0 yds³/lf



NOTES:

- Drawing is referenced to Florida State Plane, North Zone, NAD 1983.
- Existing MHWL from Post-Sandy Lidar from 2020-09 by USACE/NOAA.
- Aerial photography obtained from NOAA and flown in 2018-10-11, Post-Michael. The location of all objects in the photograph are approximate and may not represent currently existing conditions.

543 Harbor Boulevard, Suite 204
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Coastal, Marina & Water Resources Engineering

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STATE OF FLORIDA PROFESSIONAL ENGINEER No. 65256

12/18/2020

Michael R. Rentrevis, P.E.
Florida Licensed No. 65256

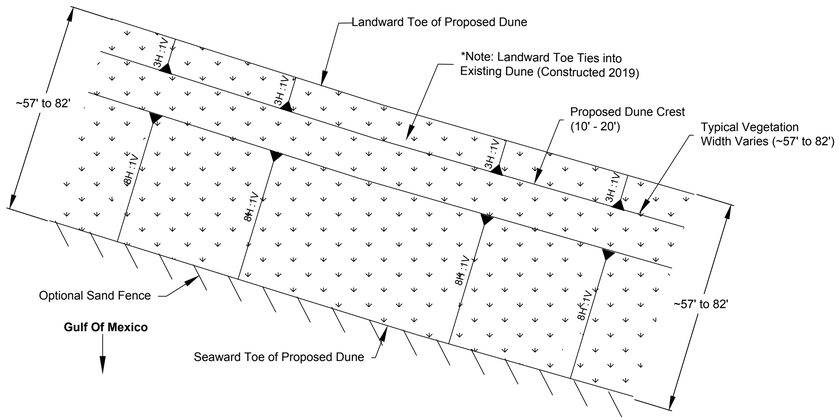
DEP MONUMENTS R-104 TO R-106 AND CROSS-SECTIONS

NFWF Emergency Coastal Resilience Project

***Gulf* County Board of County Commissioners**

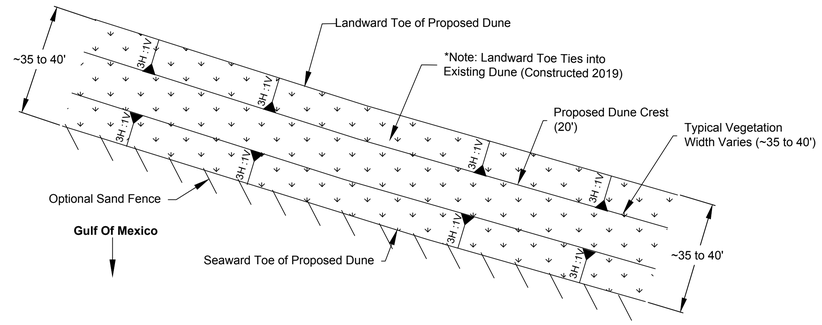
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

DESIGNED BY: mrd	
December 18, 2020	
REV DATE:	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 9 of 10	



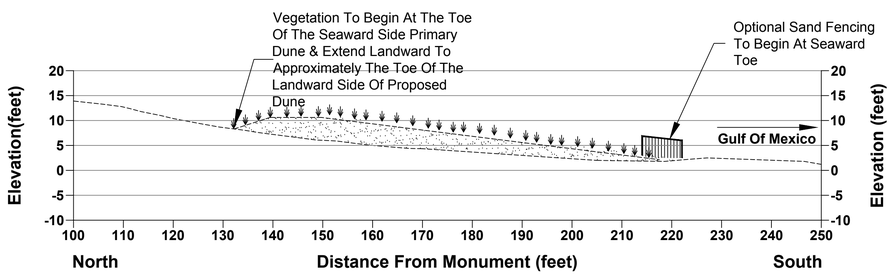
TYPICAL DUNE ENHANCEMENT DETAIL PLAN VIEW

NOT TO SCALE



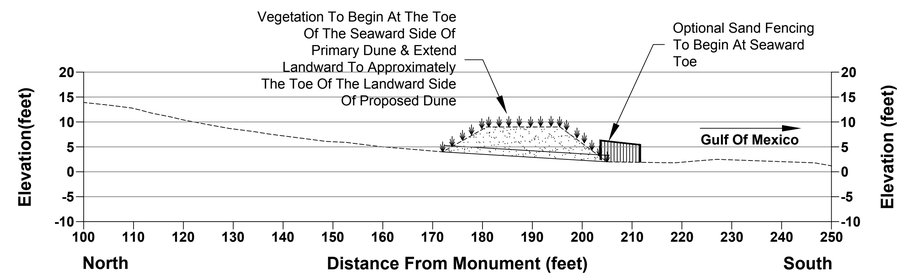
TYPICAL VEGETATED ISLAND DETAIL PLAN VIEW

NOT TO SCALE



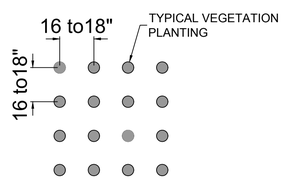
TYPICAL DUNE ENHANCEMENT DETAIL

NOT TO SCALE



TYPICAL VEGETATED ISLAND DETAIL

NOT TO SCALE



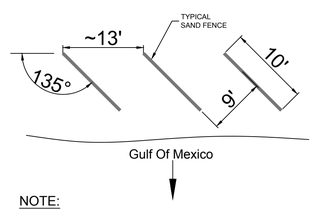
NOTE:

1.) THE CONTRACTOR MAY ATTEMPT TO ACHIEVE A NATURAL LOOK BY NOT PLANTING IN STRAIGHT ROWS AND MAY MODIFY THE SPACING REQUIREMENTS ±6" FOR UP TO 25% OF THE PLANTS.

2.) CONTRACTOR SHALL PROVIDE PLANTS AND PLANTINGS ACCORDING TO TECHNICAL SPECIFICATIONS AND CONTRACT DOCUMENTS.

TYPICAL VEGETATION PLANNING SCHEDULE (16 to 18" O.C.)

NOT TO SCALE

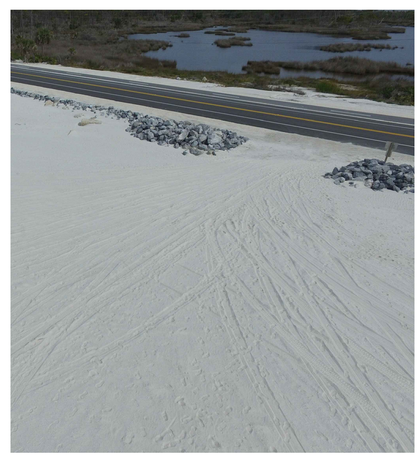


NOTE:

SAND FENCES ARE 4' IN HEIGHT AND SHALL BE INSTALLED AT A MAXIMUM OF 10' LENGTHS SPACED AT A MINIMUM OF 9' ON A DIAGONAL ALIGNMENT (NORTHWEST TO SOUTHEAST) FOR THE SHORE-PARALLEL COVERAGE.

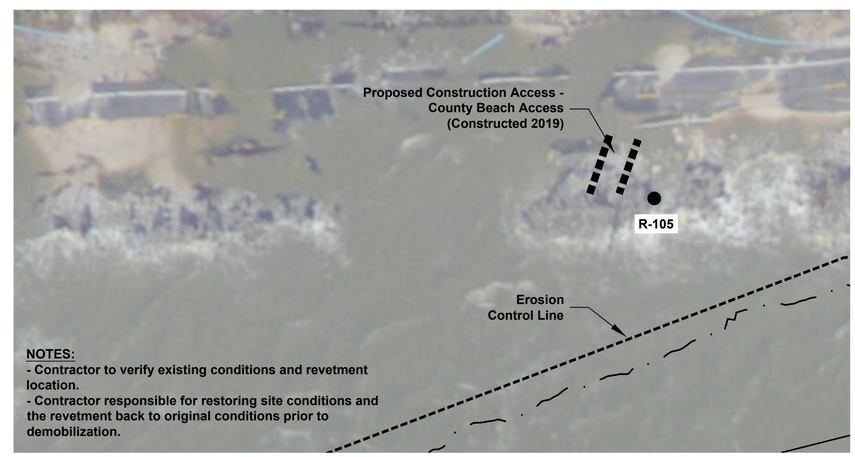
OPTIONAL FDEP SAND FENCING GUIDELINES

NOT TO SCALE



CONSTRUCTED COUNTY ACCESS POST CONSTRUCTION SITE PHOTO

NOT TO SCALE



STUMP HOLE ACCESS DETAIL PLAN VIEW

30 0 15 30

(IN FEET)
1 inch = 30 ft.

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Coastal, Marine & Water Resources Engineering

NOTES:
- Drawing is referenced to Florida State Plane, North Zone, NAD 1983.
- Aerial photo from LABINS.
- Contours from 2016 NGS Lidar Survey

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12/18/2020
No. 65205
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Michael R. Dombrowski, P.E.
Florida License No. 65205

TYPICAL FILL DETAILS
St. Joseph Peninsula Beach Erosion Control Project

Gulf County Board of County Commissioners
1000 Cecil G. Costin, Sr. Boulevard, Port St. Joe, Florida, 32456

DESIGNED BY: mrd	
December 18, 2020	
REV DATE: December 15, 2020	
REV #:	DRAWN: KH
REVIEWED: MRD	
PROJECT NUMBER: 15-210.22	
SHEET NUMBER: 10 of 10	