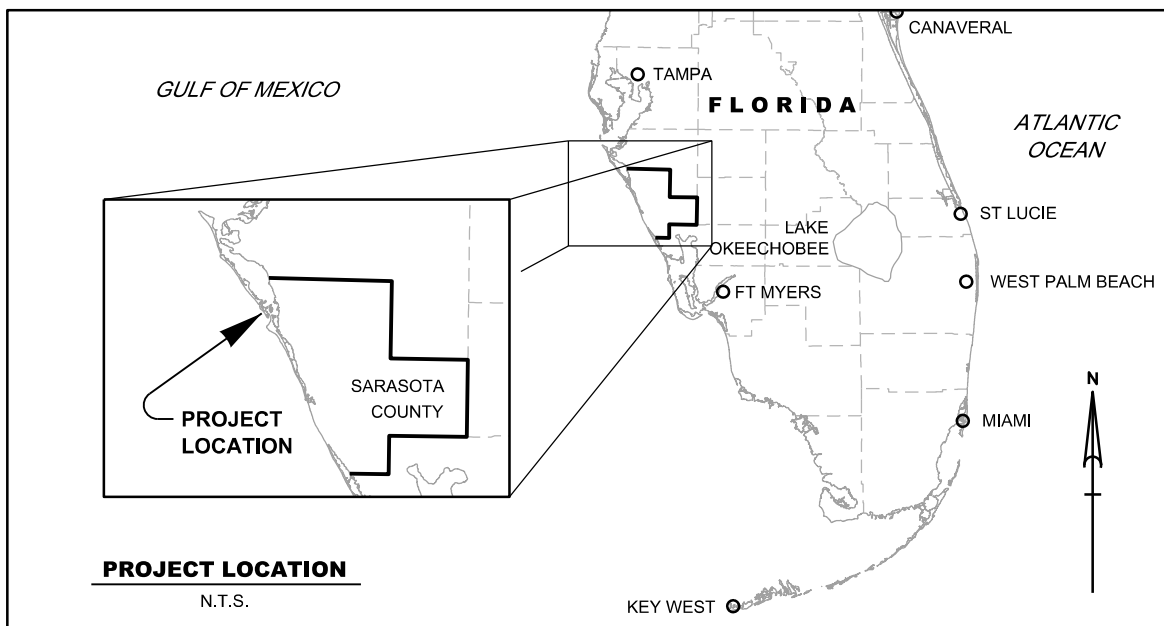


ATTACHMENT NO. 24

PERMIT SKETCHES



INDEX TO DRAWINGS

PLATE	TITLE
01	PROJECT OVERVIEW
02	PROJECT VICINITY
03	PROJECT TIDAL DATUM RELATIONSHIPS
04 - 07	BEACH FILL - PLANE VIEW
08 - 14	BEACH FILL - PROFILE VIEW
15	BORROW AREA - OVERALL PLAN
16 - 19	BORROW AREA - PLAN
20 - 22	BORROW AREA CROSS SECTIONS
23 - 27	SEAGRASS - BORROW AREA PLANS
28	GROIN PLAN OVERALL
29	GROIN No. 1 PLAN VIEW
30	GROIN No. 1 CROSS SECTIONS
31	GROIN No. 1 PROFILE
32	GROIN No. 2 PLAN VIEW
33	GROIN No. 2 CROSS SECTIONS
34	GROIN No. 2 PROFILE

GENERAL NOTES:

1. REFER TO THIS PLATE FOR PROJECT LOCATION, PLATE INDEX, ABBREVIATIONS AND LEGEND
2. THE PLANE COORDINATES SHOWN ARE BASED ON THE FLORIDA STATE PLANE WEST COORDINATE SYSTEM (0902) AND REFERENCED TO THE 1990 ADJUSTMENT OF THE NAD OF 1983 (NAD83(90)), UNLESS REFERENCED OTHERWISE IN THE SURVEY NOTES.
3. ELEVATIONS SHOWN ON ALL PLATES ARE IN FEET AND ARE BASED ON NAVD88. ELEVATIONS ARE BELOW THE DATUM UNLESS PRECEDED BY A (+) SIGN.
4. THE REQUIRED BERM HEIGHT FOR THE PROJECT WILL BE +4.0' REFERENCING NAVD88, LANDWARD EDGE OF BERM IS EL. +4.0, VEGETATION LINE, SEAWALL OR DEVELOPMENT.
5. TIDAL RELATIONSHIPS SHOWN ON PLANS ARE BASED ON NOAA'S VDUTUM MODEL VERSION 3.4. REFER TO PLATE 03 FOR OBSERVED TIDAL RELATIONSHIPS WITHIN THE AREA.
6. REFER TO PLATE 04 FOR BEACH SURVEY NOTES AND FOR BORROW AREA SURVEY NOTES REFER TO PLATE 15.

ABBREVIATIONS

B/N = BETWEEN
 CBL = CONSTRUCTION BASELINE
 EL. = ELEVATION
 ECL. = EROSION CONTROL LINE
 FDEP. = FLORIDA DEPARTMENT OF ENV. PROTECTION
 FDOT. = FLORIDA DEPARTMENT OF TRANSPORTATION
 FT. = FOOT/FEET
 MHW. = MEAN HIGH WATER
 MLW. = MEAN LOW WATER
 OFW. = OUTSTANDING FLORIDA WATERBODY
 NAD. = NORTH AMERICAN DATUM
 NAVD88. = NORTH ATLANTIC VERTICAL DATUM OF 1988.
 NTS. = NOT TO SCALE
 TYP. = TYPICAL

LEGEND

	BEACH FILL AREA (PLAN VIEW)
	BEACH FILL AREA (PROFILE VIEW)
	EXISTING GROUND (PROFILE VIEW)
	DNR RANGE MONUMENT
	SLOPE INDICATOR SYMBOL W/ FILL
	CONSTRUCTION BASELINE W. STATIONING
	EROSION CONTROL LINE
	FDEP AZIMUTH BEARING
	MEAN HIGH WATER LINE
	BORING
	BORROW AREA
	SARASOTA BAY OFW
	CULTURAL RESOURCE TARGET W/ 300' BUFFER



US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

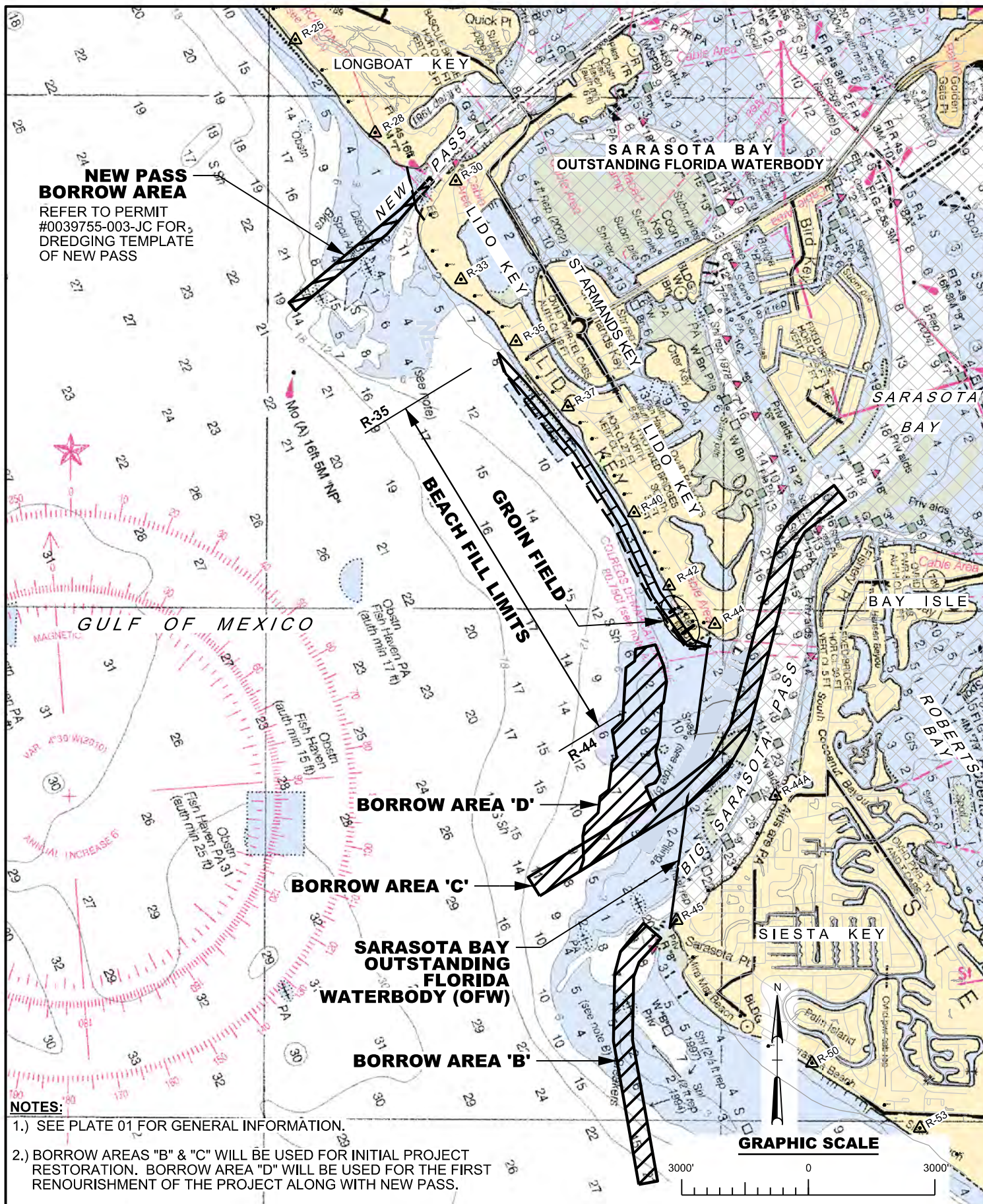
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

LIDO KEY BEACH EROSION CONTROL PROJECT

PROJECT OVERVIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			01 OF 34



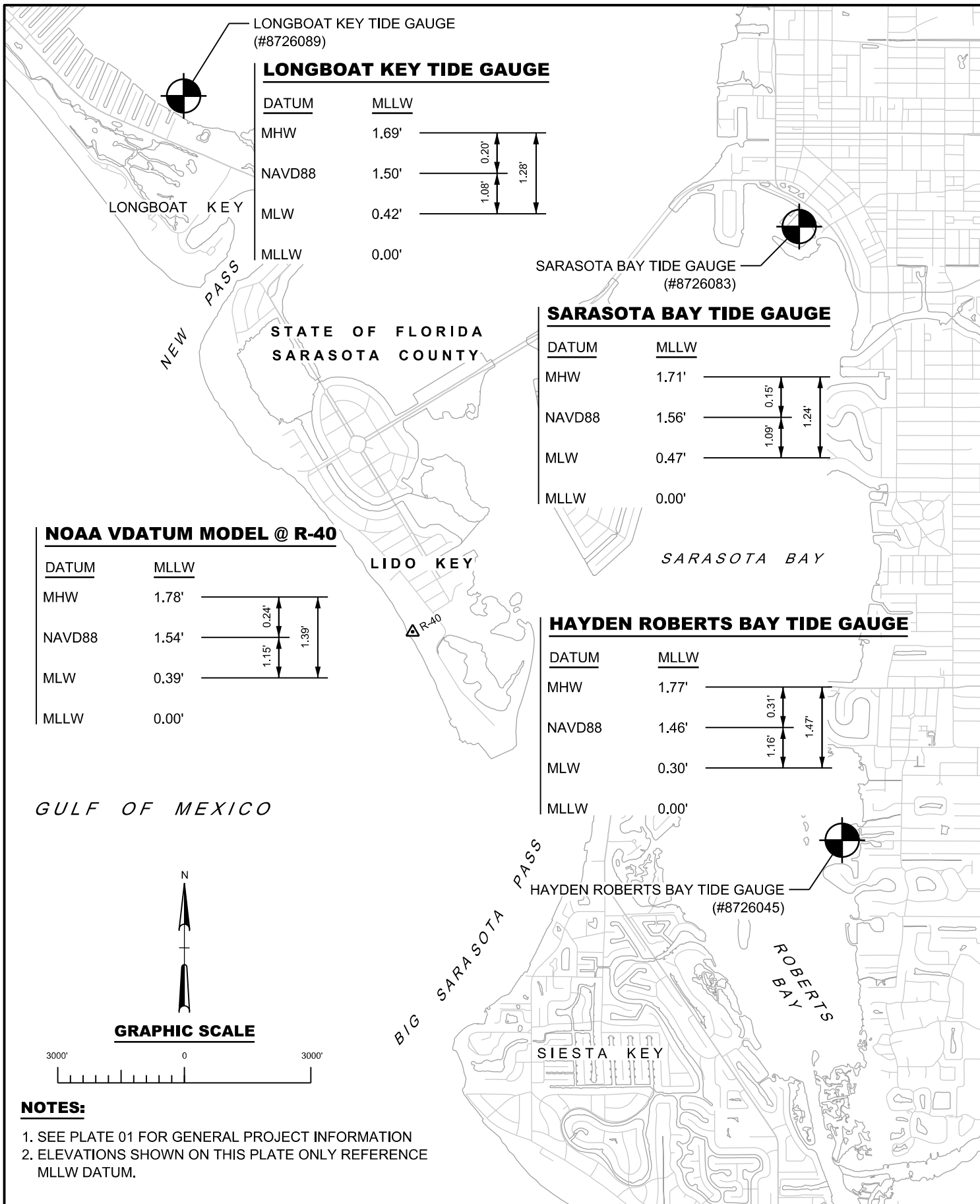
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
PROJECT VICINITY

DATE	DESIGNED	APPROVED	DATE
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 02 OF 34



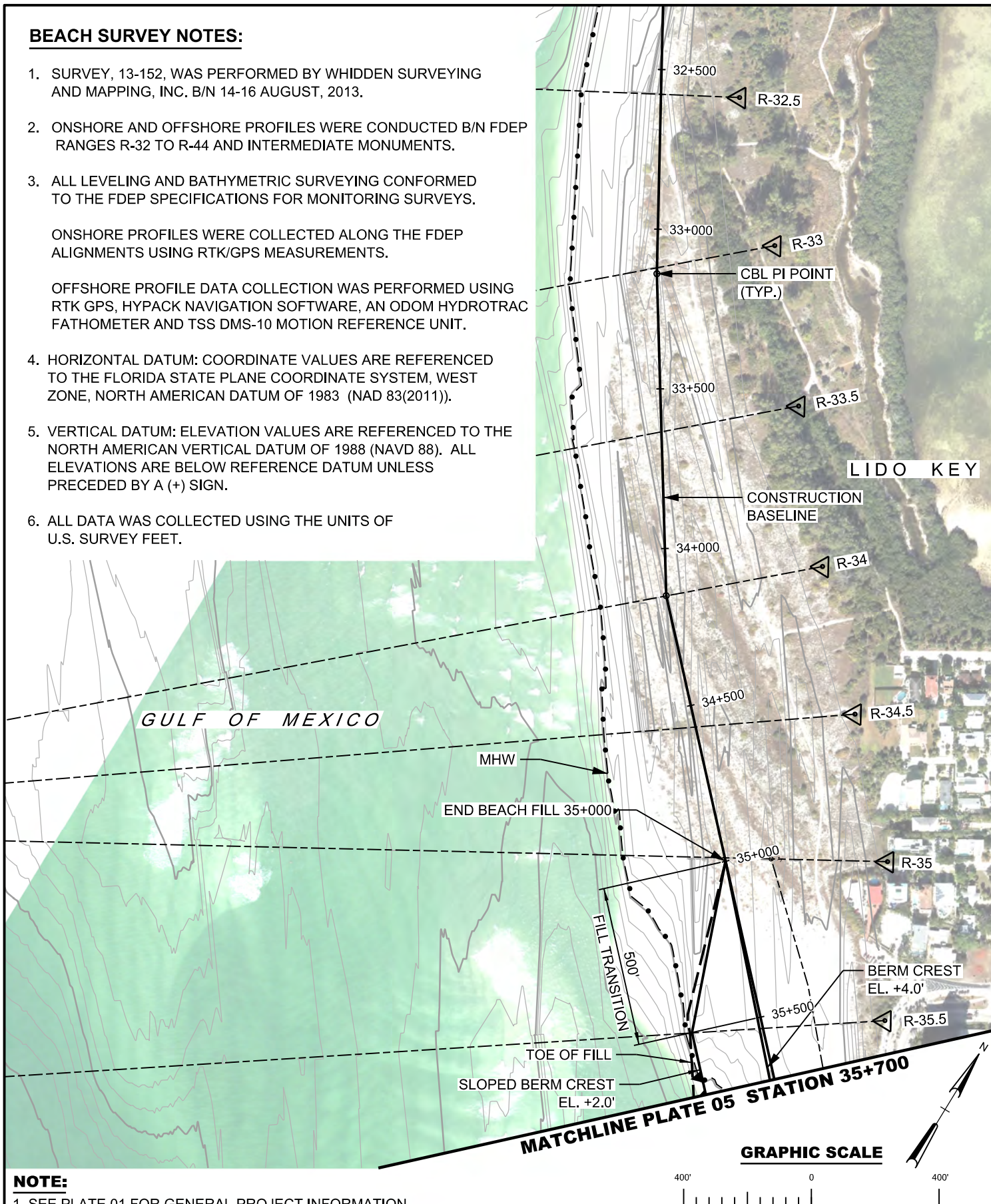
BEACH SURVEY NOTES:

1. SURVEY, 13-152, WAS PERFORMED BY WHIDDEN SURVEYING AND MAPPING, INC. B/N 14-16 AUGUST, 2013.
2. ONSHORE AND OFFSHORE PROFILES WERE CONDUCTED B/N FDEP RANGES R-32 TO R-44 AND INTERMEDIATE MONUMENTS.
3. ALL LEVELING AND BATHYMETRIC SURVEYING CONFORMED TO THE FDEP SPECIFICATIONS FOR MONITORING SURVEYS.

ONSHORE PROFILES WERE COLLECTED ALONG THE FDEP ALIGNMENTS USING RTK/GPS MEASUREMENTS.

OFFSHORE PROFILE DATA COLLECTION WAS PERFORMED USING RTK GPS, HYPACK NAVIGATION SOFTWARE, AN ODOM HYDROTRAC FATHOMETER AND TSS DMS-10 MOTION REFERENCE UNIT.

4. HORIZONTAL DATUM: COORDINATE VALUES ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83(2011)).
5. VERTICAL DATUM: ELEVATION VALUES ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ALL ELEVATIONS ARE BELOW REFERENCE DATUM UNLESS PRECEDED BY A (+) SIGN.
6. ALL DATA WAS COLLECTED USING THE UNITS OF U.S. SURVEY FEET.



NOTE:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION



US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

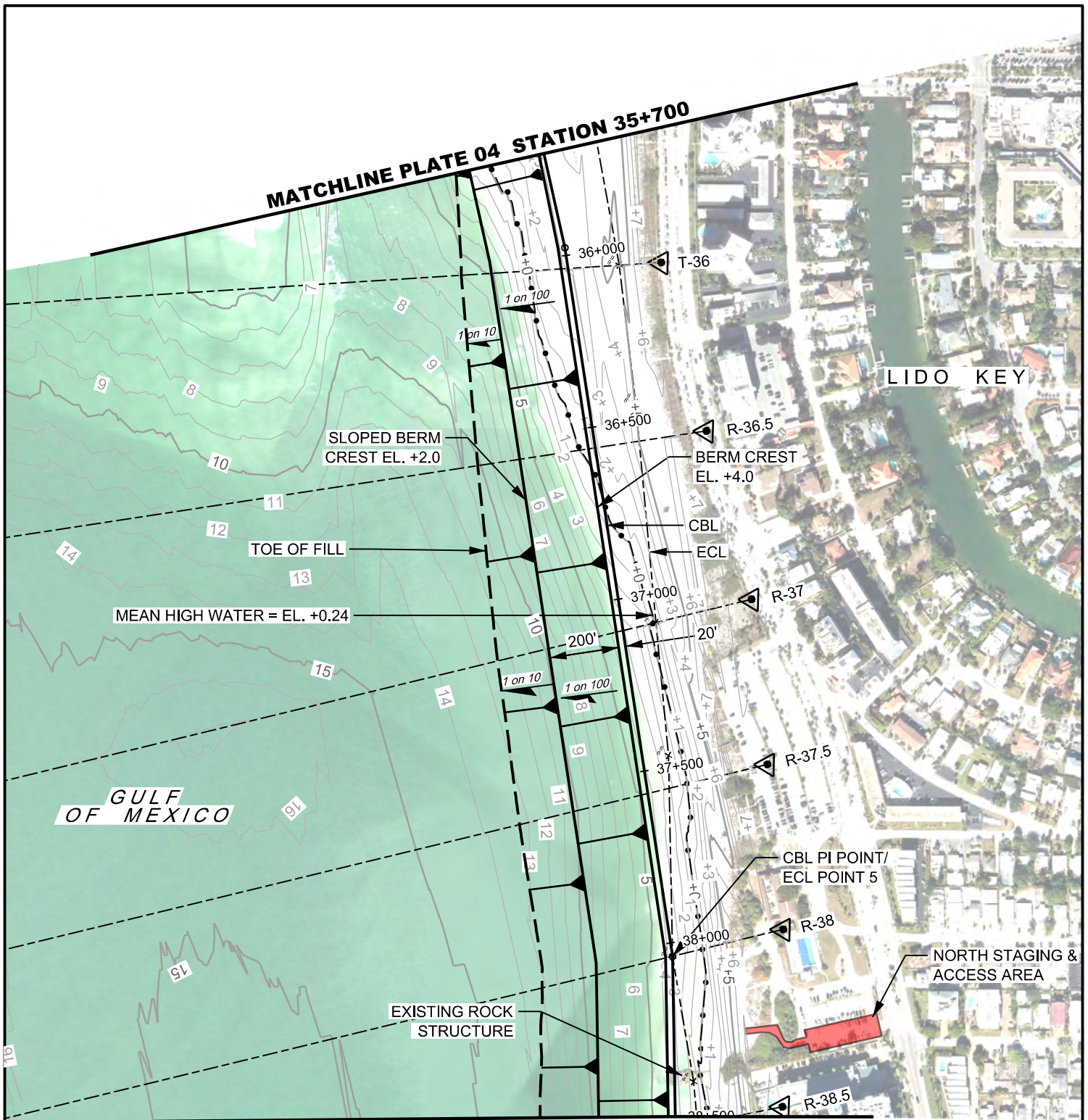
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

LIDO KEY BEACH EROSION CONTROL PROJECT

BEACH FILL - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
			J.W.L.
			PLATE:
			04 OF 34

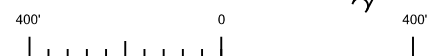


MATCHLINE PLATE 06 STATION 38+500

NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 04 FOR BEACH SURVEY NOTES.
3. BERM CREST WIDTH IS 20' FROM CBL THEN SLOPED PUSH BERM BEGINS AND EXTENDS 200' ON A 1 ON 100 SLOPE.

GRAPHIC SCALE



US Army Corps
of Engineers®
Jacksonville District

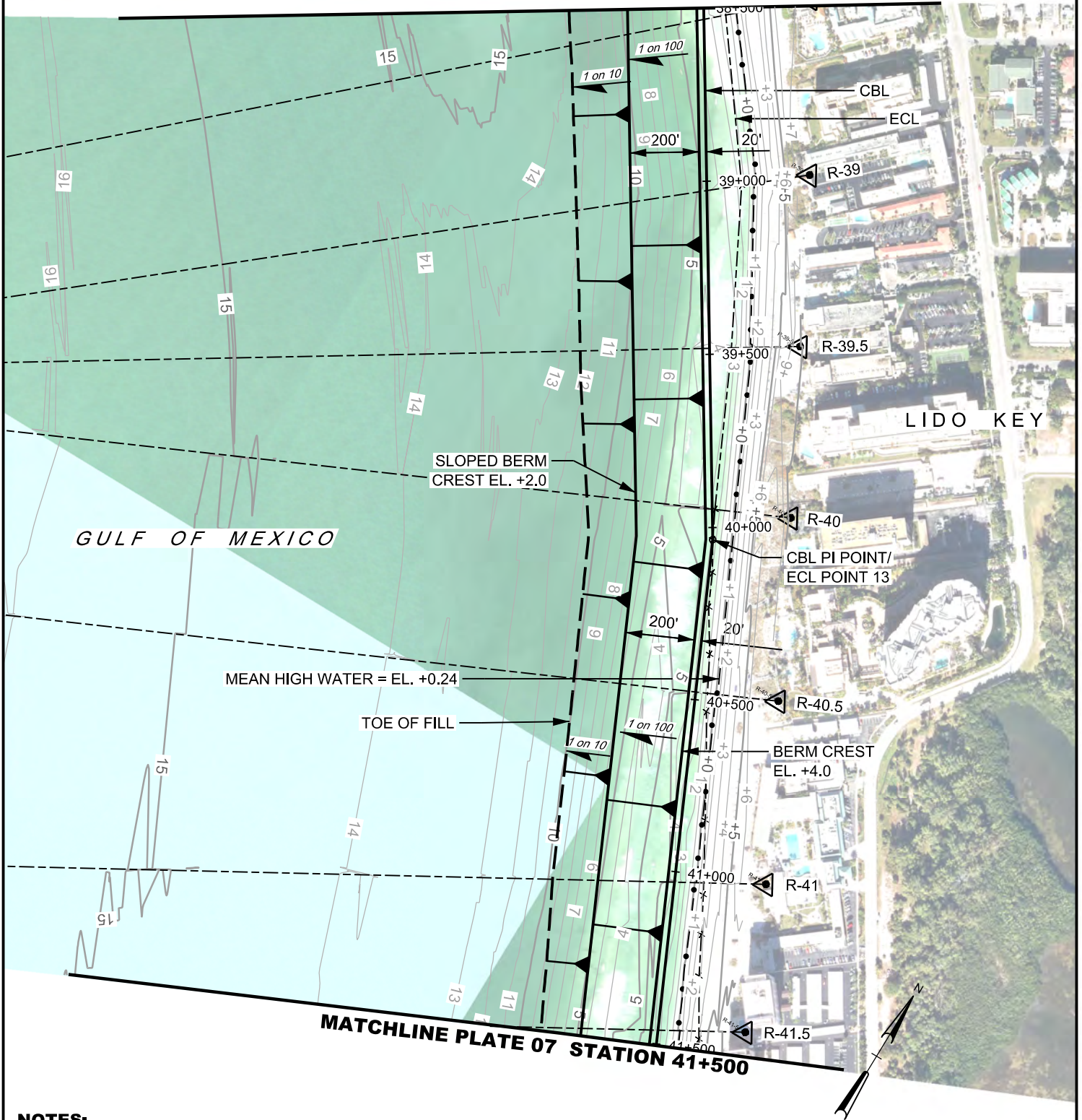
**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			05 OF 34

MATCHLINE PLATE 05 STATION 38+500



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 04 FOR BEACH SURVEY NOTES.
3. BERM CREST WIDTH IS 20' FROM CBL THEN SLOPED PUSH BERM BEGINS AND EXTENDS 200' ON A 1 ON 100 SLOPE.



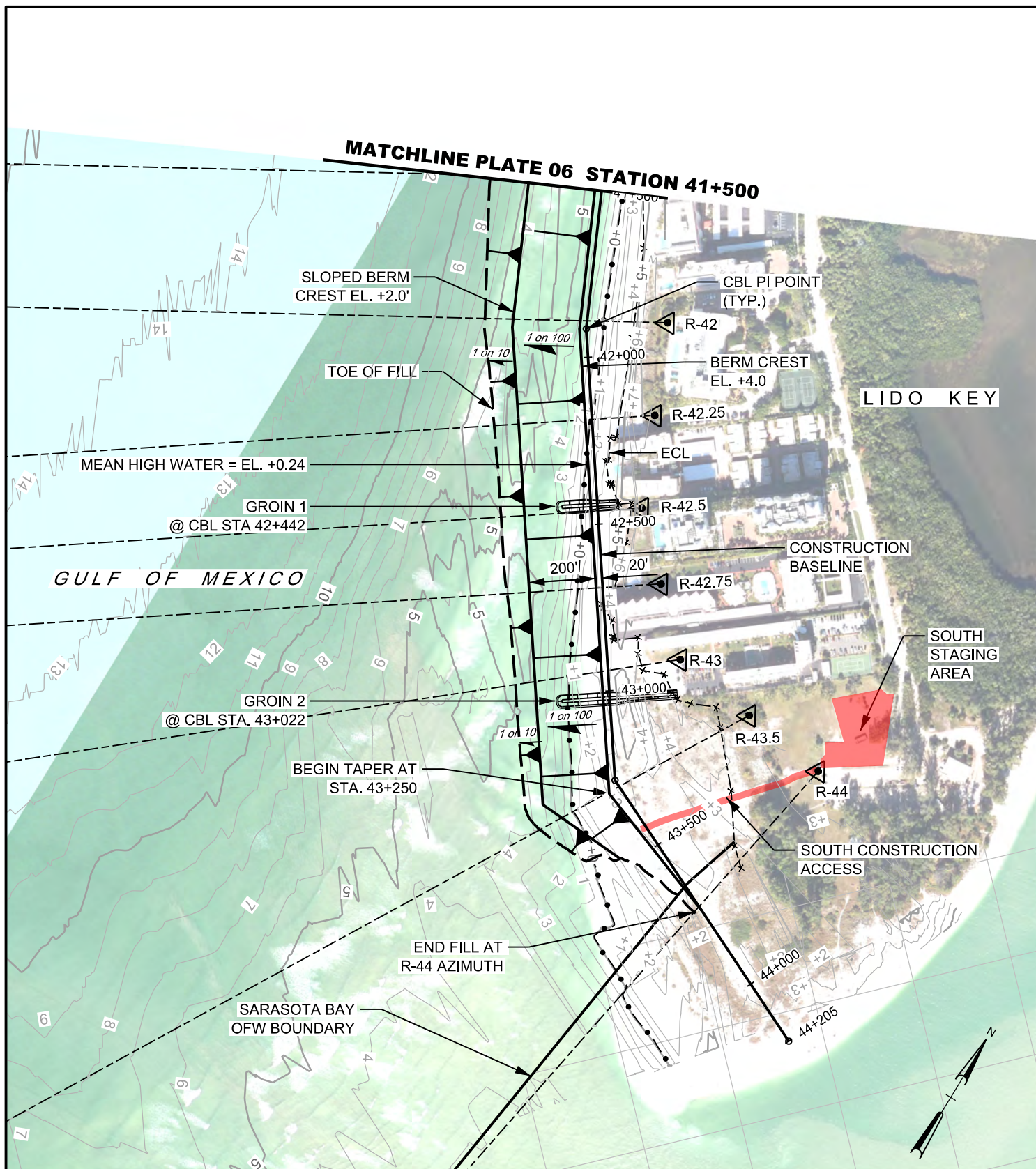
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PLAN VIEW

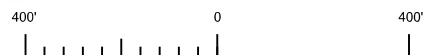
DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 06 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 04 FOR BEACH SURVEY NOTES.
3. BERM CREST WIDTH IS 20' FROM CBL THEN SLOPED PUSH BERM BEGINS AND EXTENDS 200' ON A 1 ON 100 SLOPE.

GRAPHIC SCALE



**US Army Corps
of Engineers®**
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

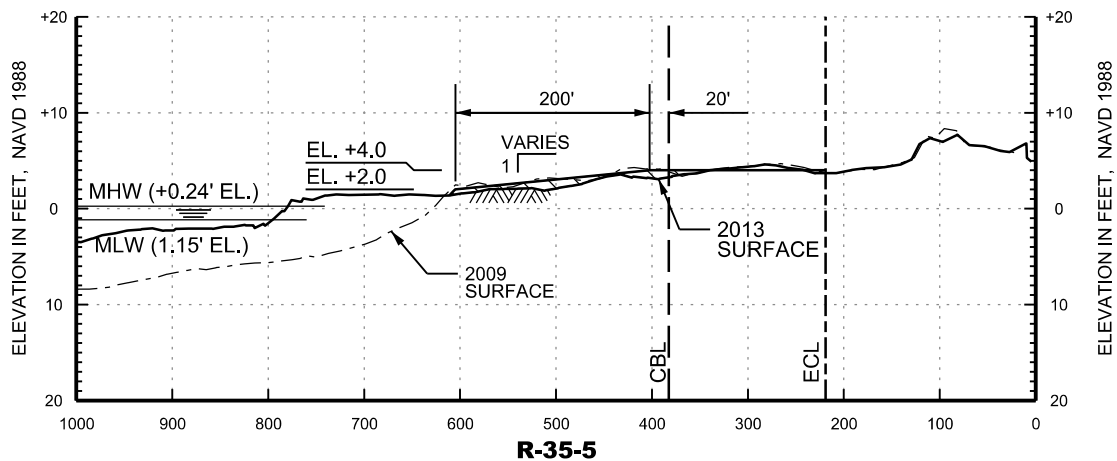
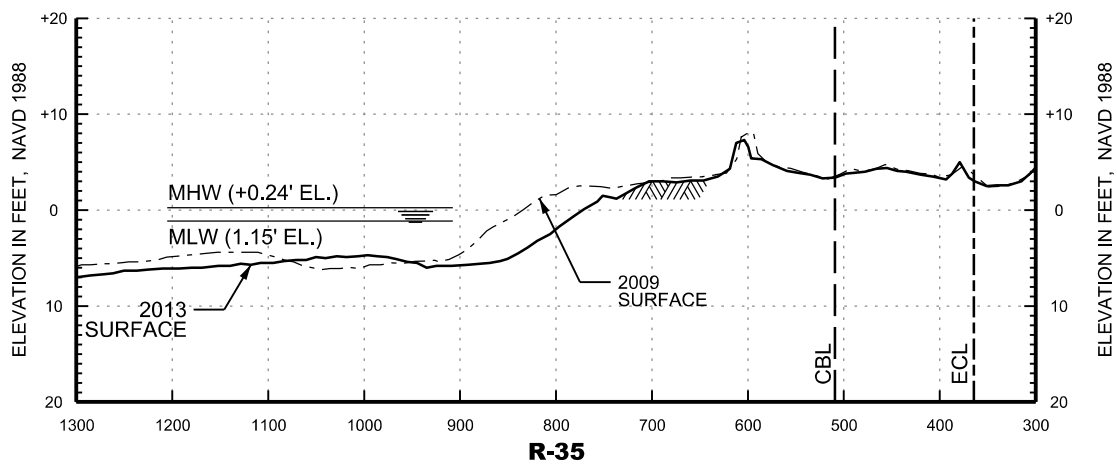
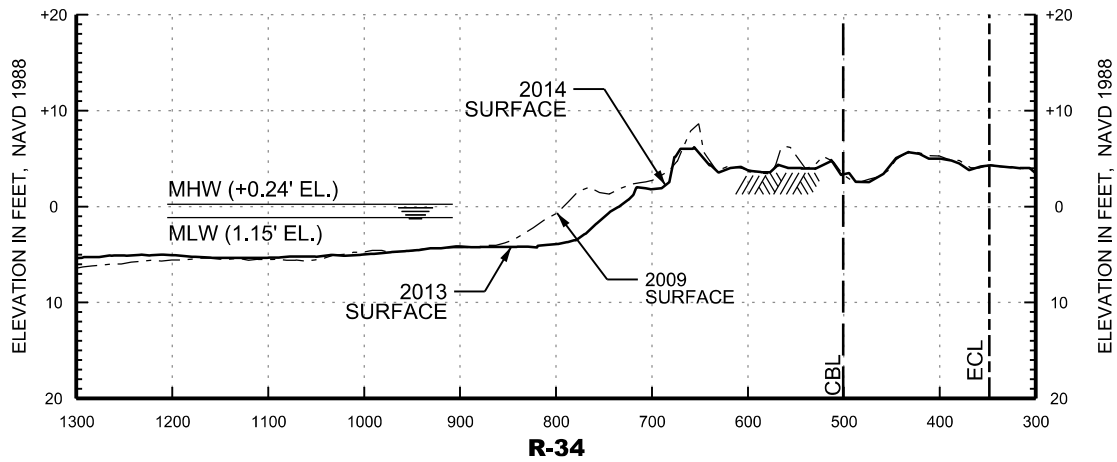
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

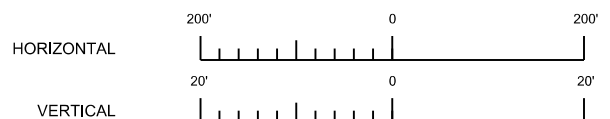
LIDO KEY BEACH EROSION CONTROL PROJECT

BEACH FILL - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/15	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			07 OF 34



GRAPHIC SCALES



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.



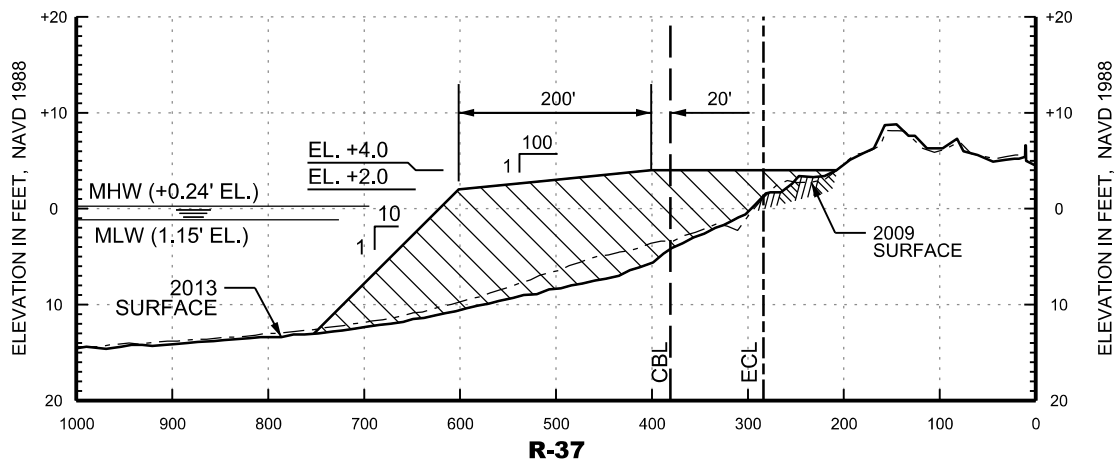
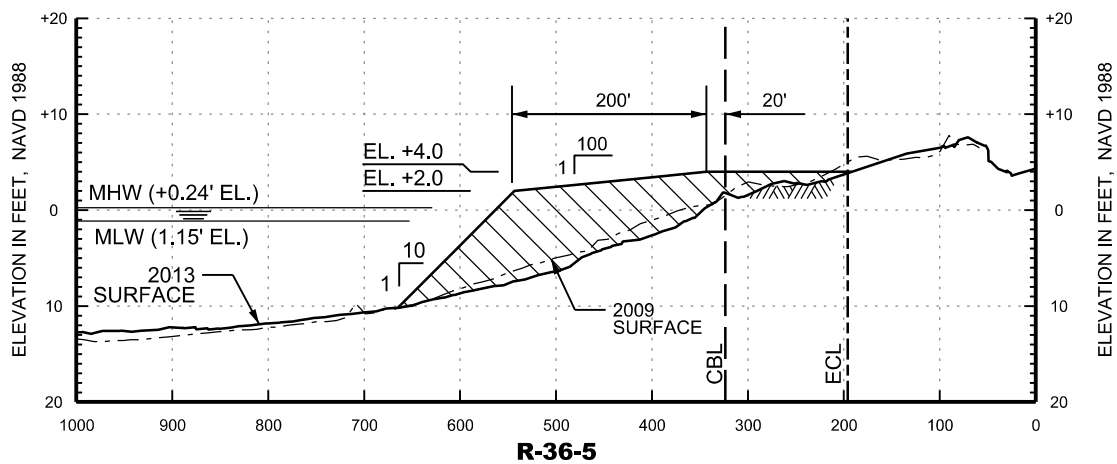
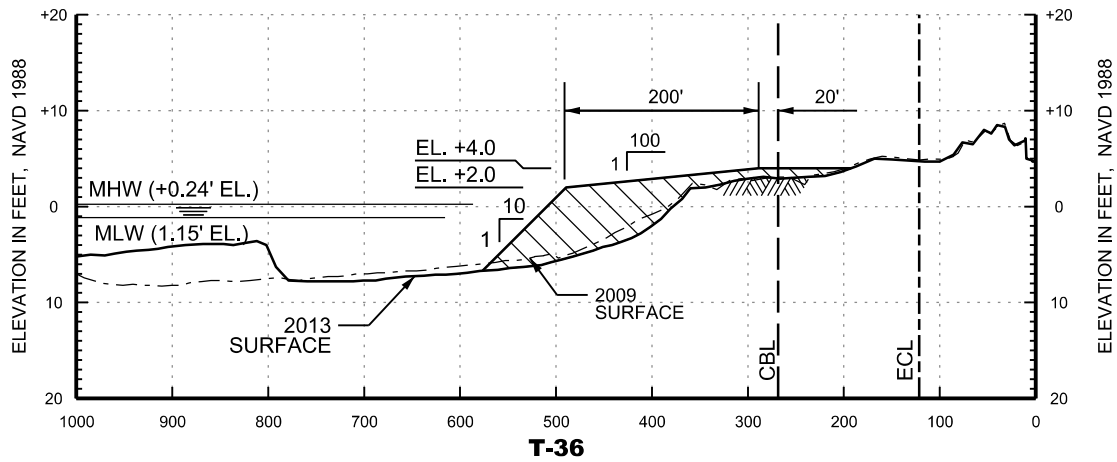
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 08 OF 34



NOTES:

- SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
- THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.

GRAPHIC SCALES



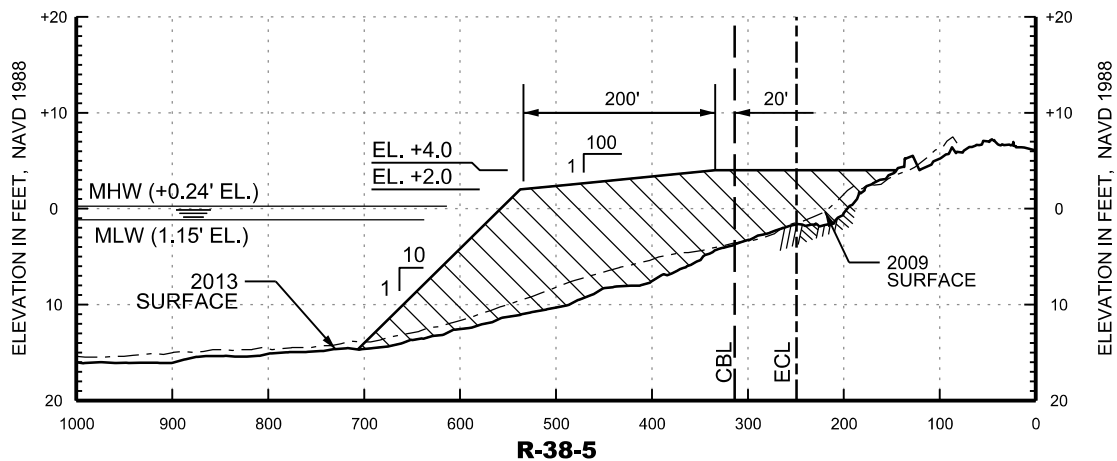
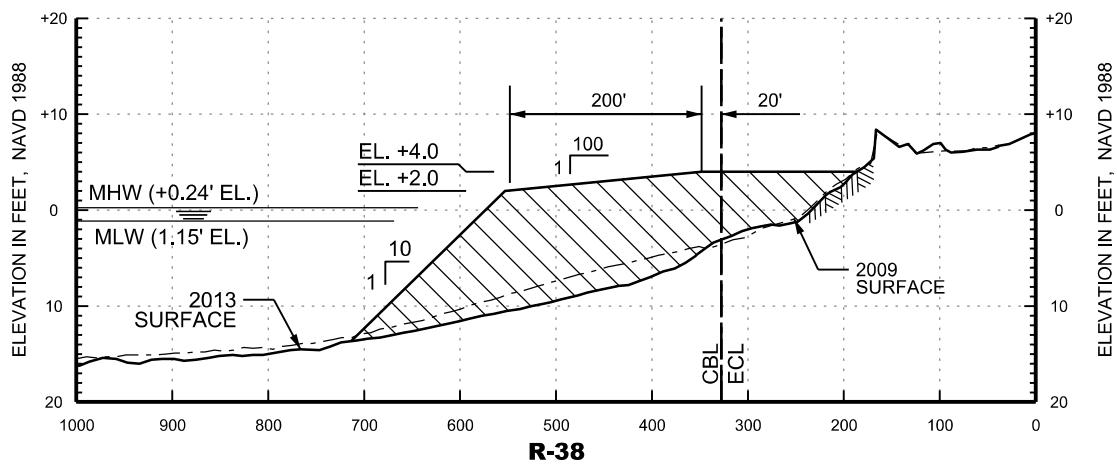
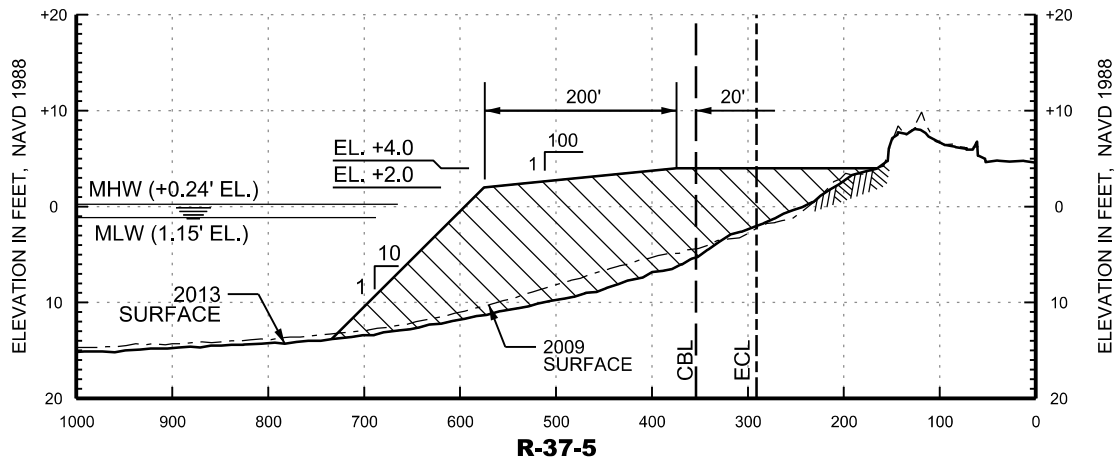
US Army Corps
of Engineers
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

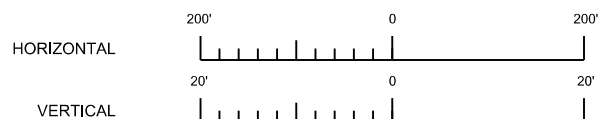
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 09 OF 34



GRAPHIC SCALES



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.



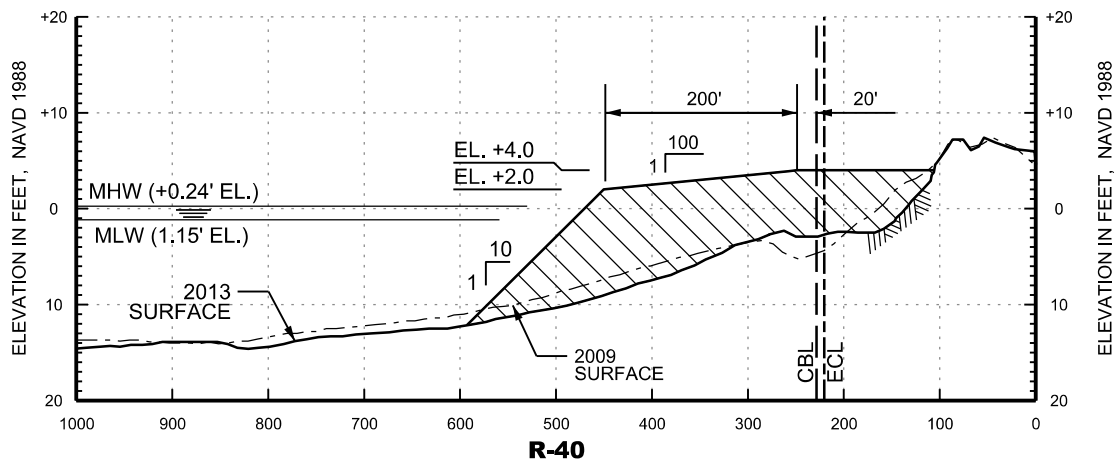
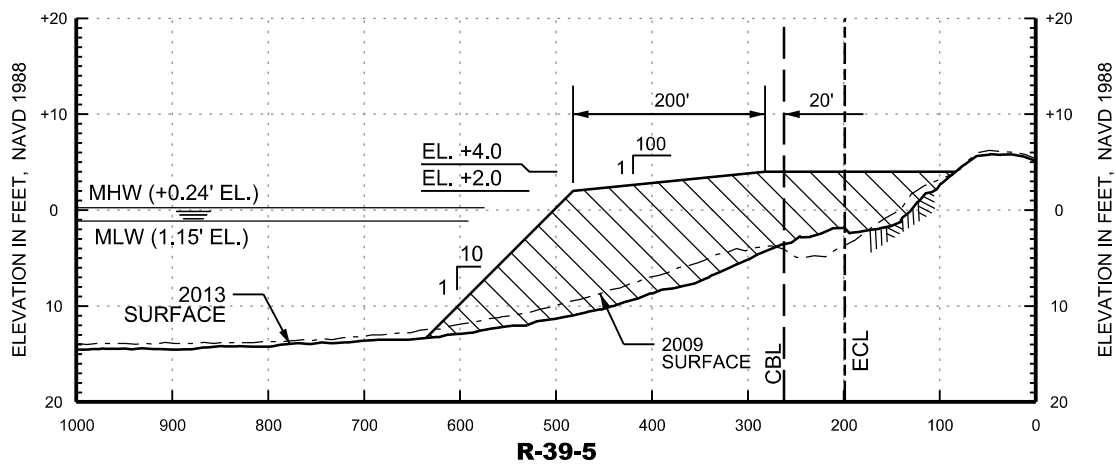
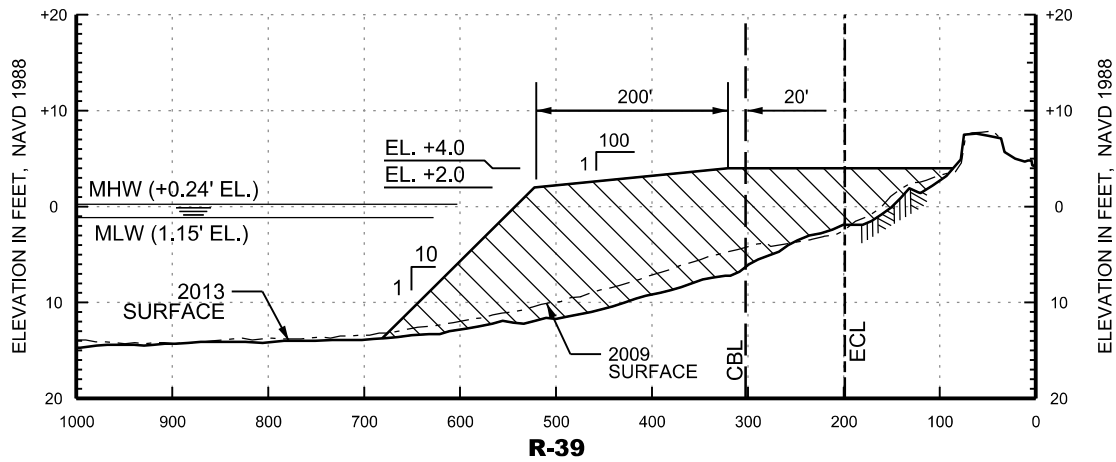
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 10 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.

GRAPHIC SCALES



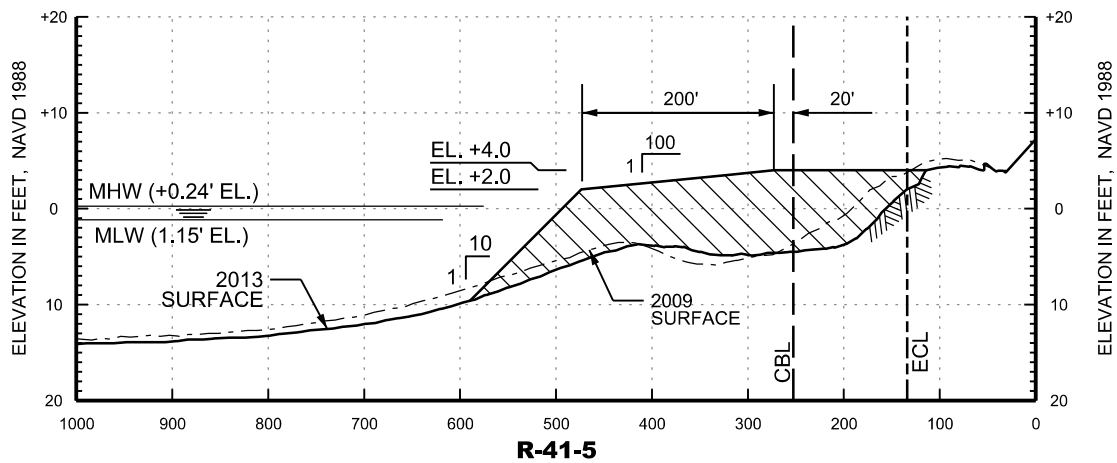
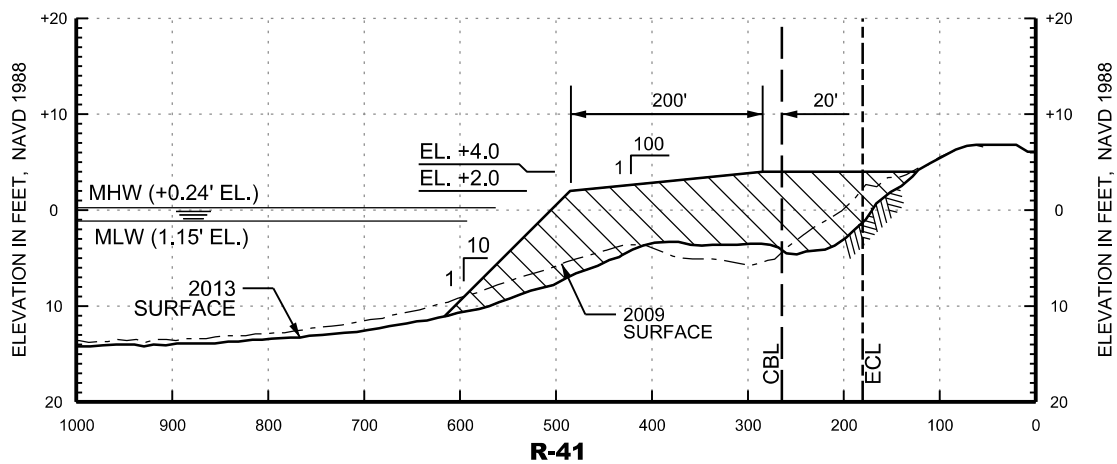
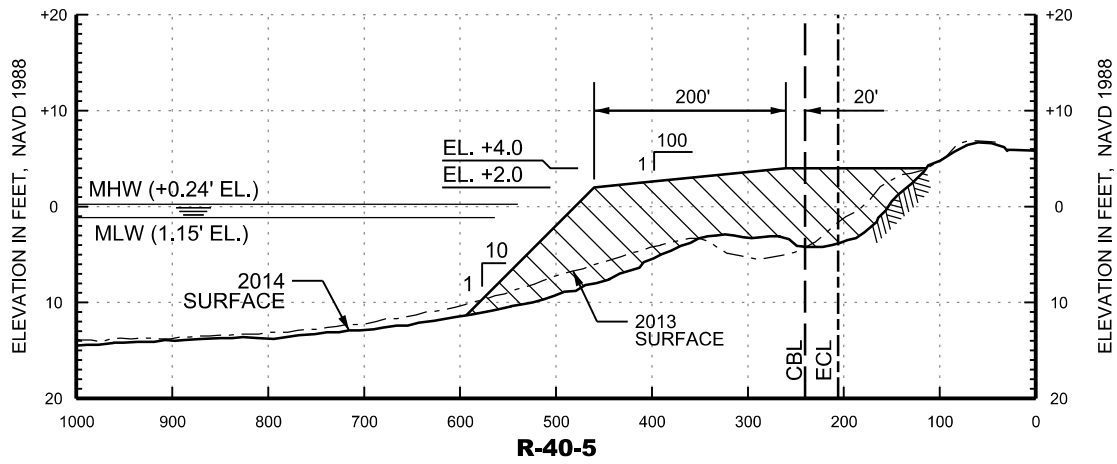
US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

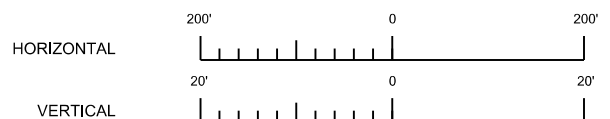
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA LIDO KEY BEACH EROSION CONTROL PROJECT BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 11 OF 34



GRAPHIC SCALES



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.



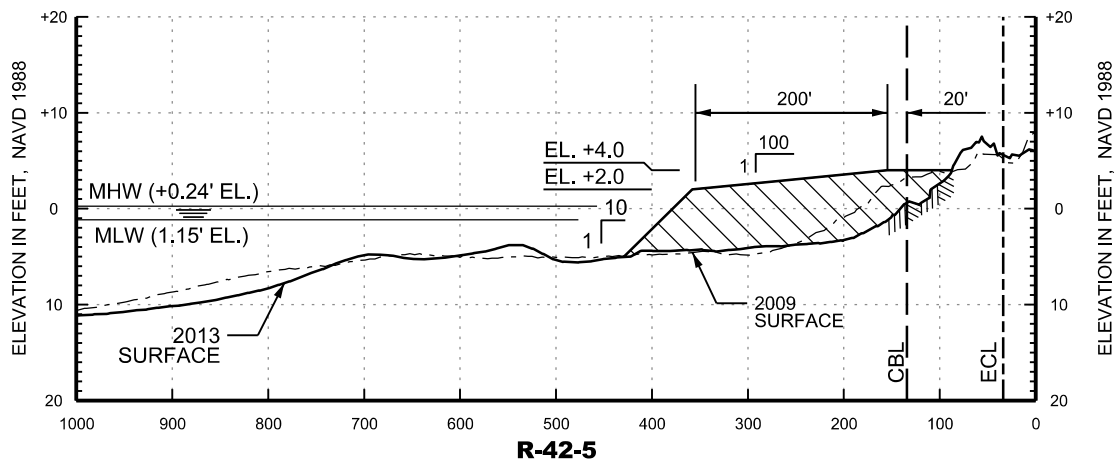
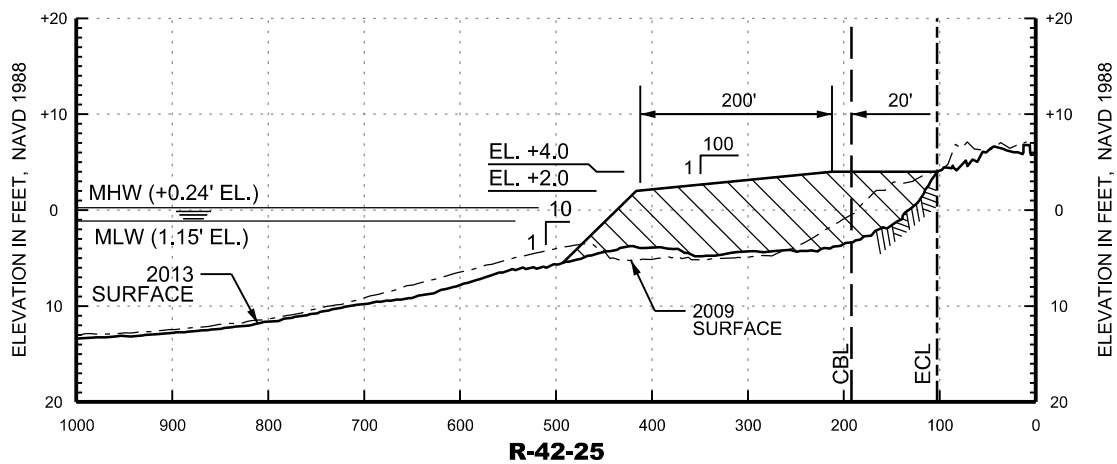
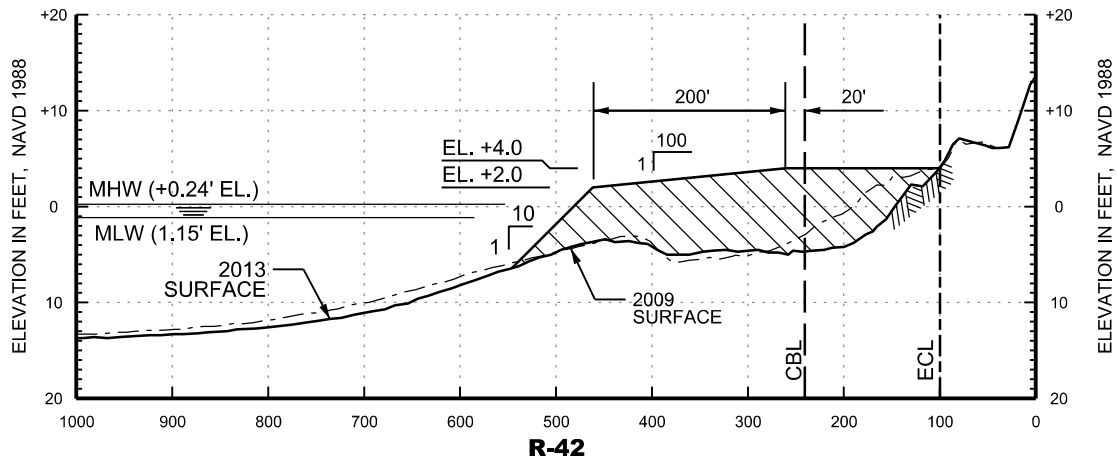
US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

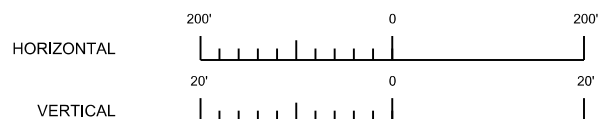
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA **LIDO KEY BEACH EROSION CONTROL PROJECT** BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 12 OF 34



GRAPHIC SCALES



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.



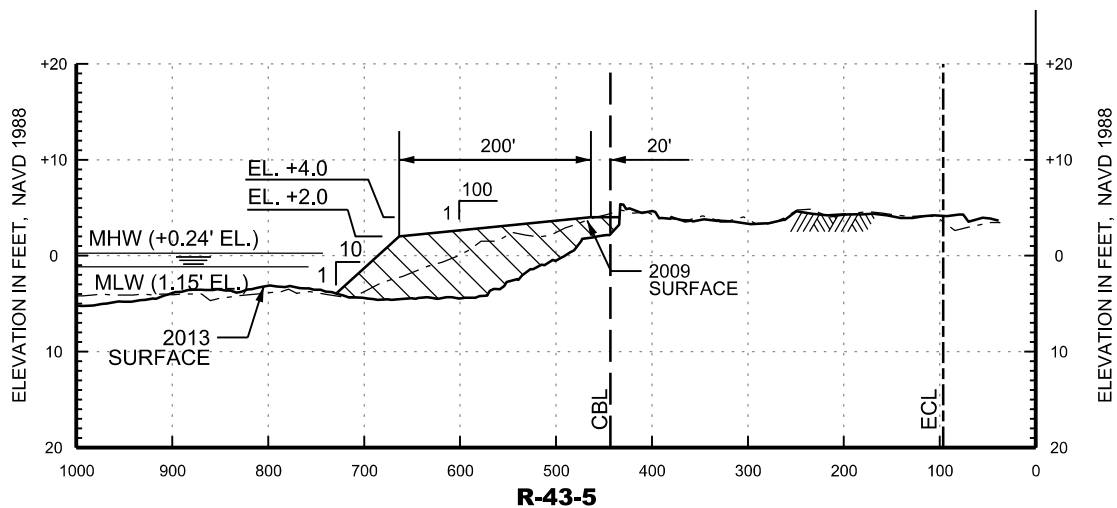
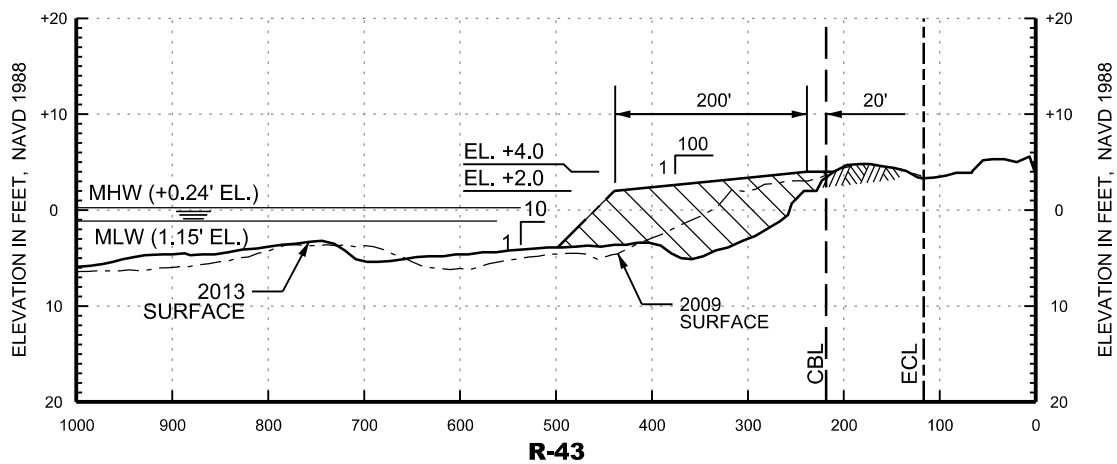
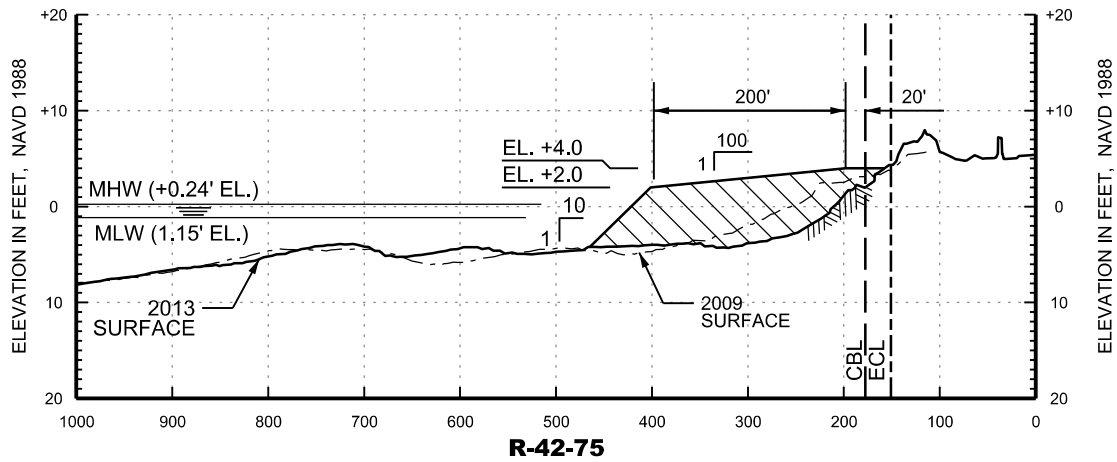
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 13 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN FEET AND FOLLOW FDEP RANGE MONUMENT AZIMUTH.

GRAPHIC SCALES



US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

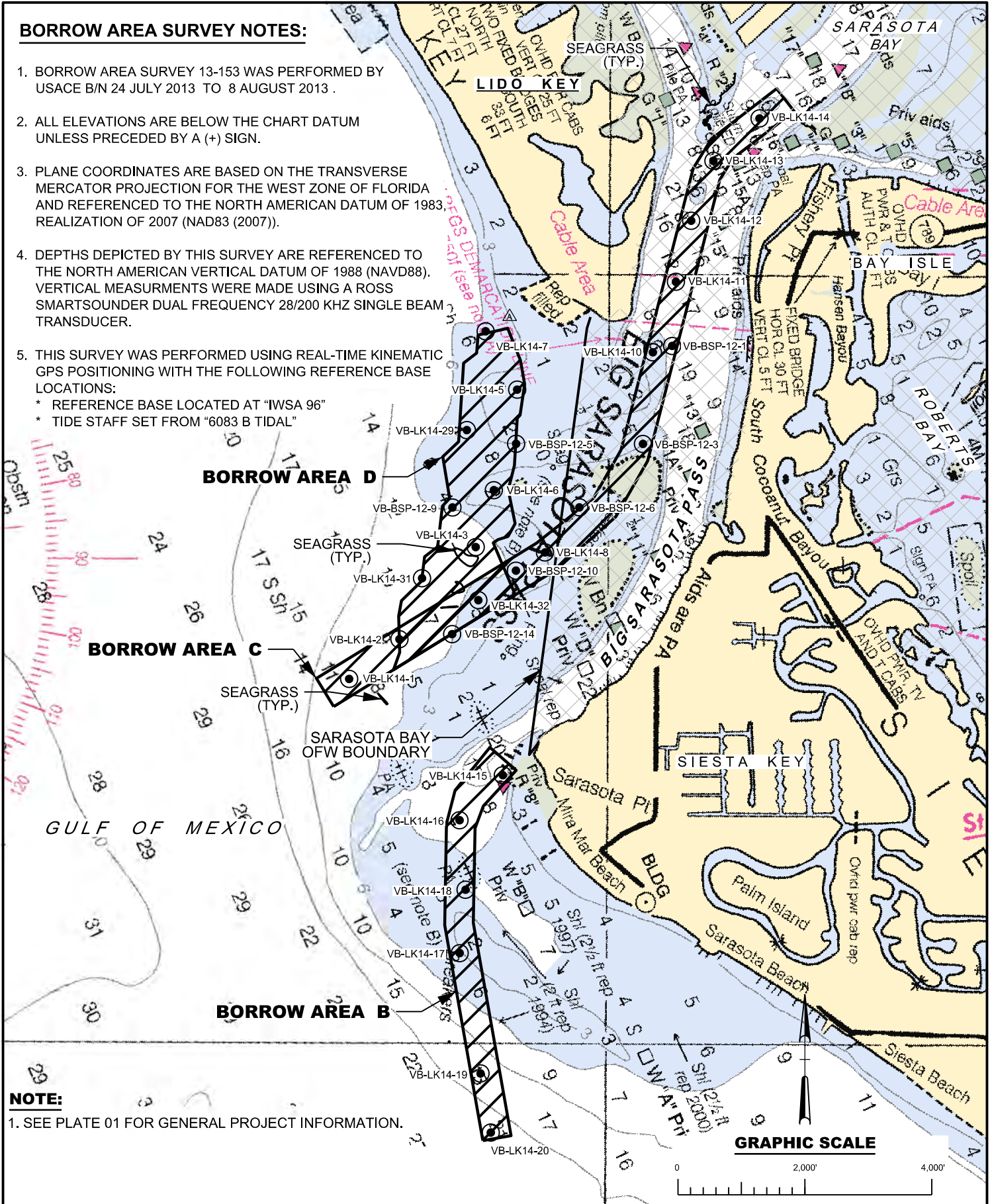
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA **LIDO KEY BEACH EROSION CONTROL PROJECT** BEACH FILL - PROFILE VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 14 OF 34

BORROW AREA SURVEY NOTES:

1. BORROW AREA SURVEY 13-153 WAS PERFORMED BY USACE B/N 24 JULY 2013 TO 8 AUGUST 2013.
2. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
3. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, REALIZATION OF 2007 (NAD83 (2007)).
4. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMARTSOUNDER DUAL FREQUENCY 28/200 KHZ SINGLE BEAM TRANSDUCER.
5. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATIONS:
 - * REFERENCE BASE LOCATED AT "IWSA 96"
 - * TIDE STAFF SET FROM "6083 B TIDAL"



NOTE:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.



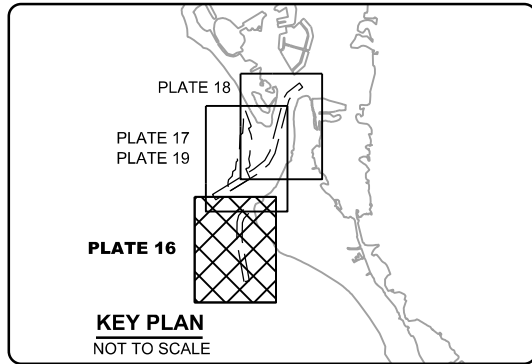
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

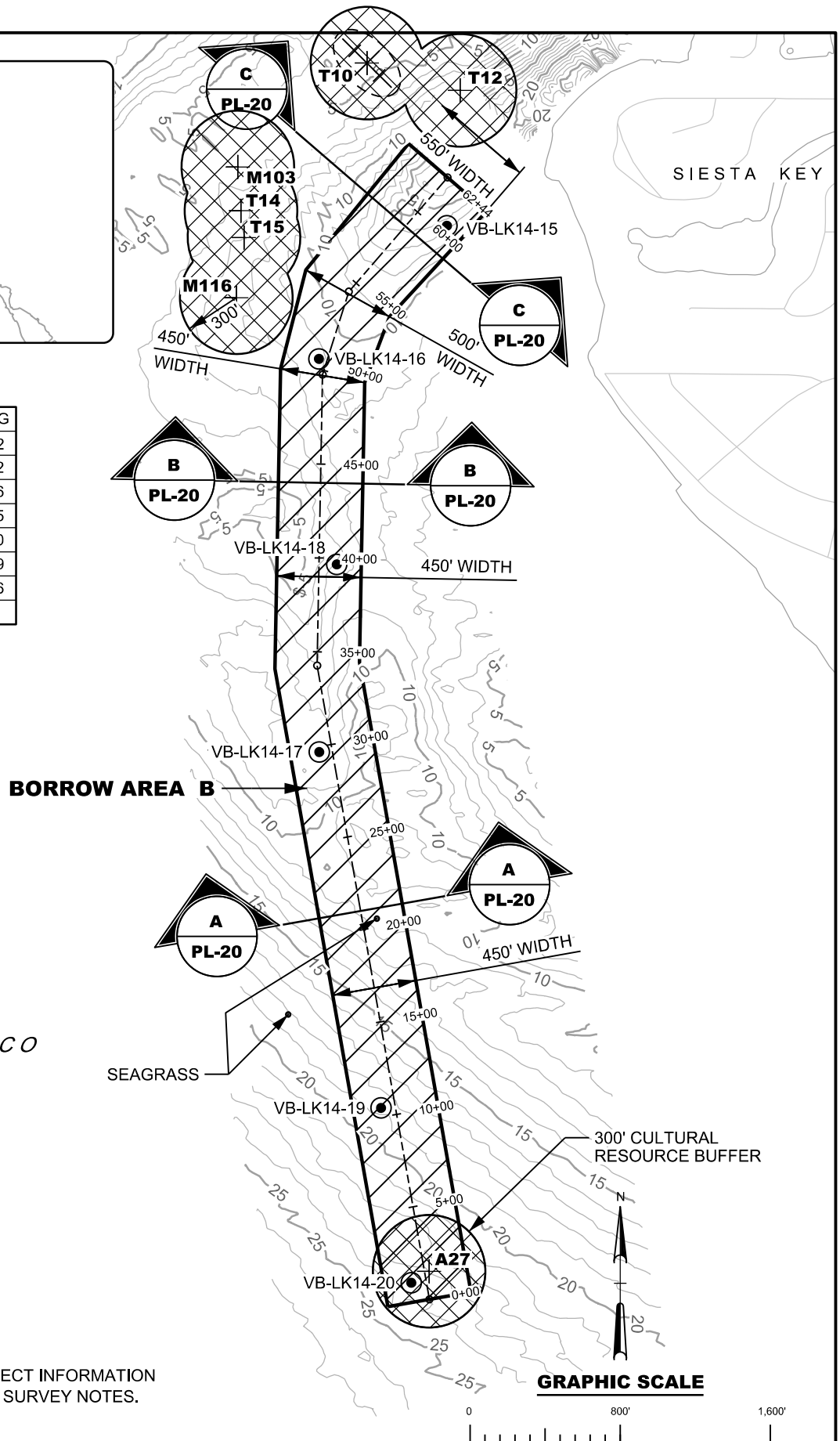
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BORROW AREAS - OVERALL PLAN

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 15 OF 34



MAG HIT ID	EASTING	NORTHING
A27	470,391	1,065,182
M103	469,372	1,071,062
M116	469,364	1,070,366
T10	470,060	1,071,615
T12	470,556	1,071,470
T14	469,389	1,070,829
T15	469,405	1,070,686



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 15 FOR BORROW AREA SURVEY NOTES.



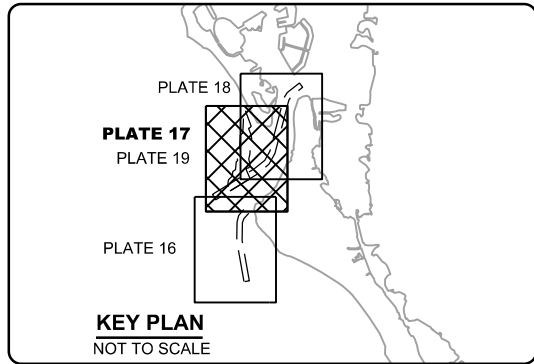
US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA **LIDO KEY BEACH EROSION CONTROL PROJECT** **BORROW AREA B - PLAN VIEW**

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			16 OF 34



MAG HIT ID	EASTING	NORTHING
T9	469,612	1,072,699

NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 15 FOR BORROW AREA SURVEY NOTES.

SARASOTA BAY
OFW BOUNDARY

LIDO KEY

MATCHLINE PLATE 18 STA. 70+00

GULF OF MEXICO

BORROW AREA D

SEAGRASS

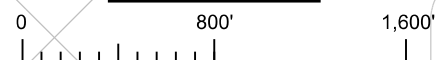
300' CULTURAL
RESOURCE BUFFER

**BORROW
AREA C**

SEAGRASS

T10 300'
CULTURAL
BUFFER

GRAPHIC SCALE



US Army Corps
of Engineers®
Jacksonville District

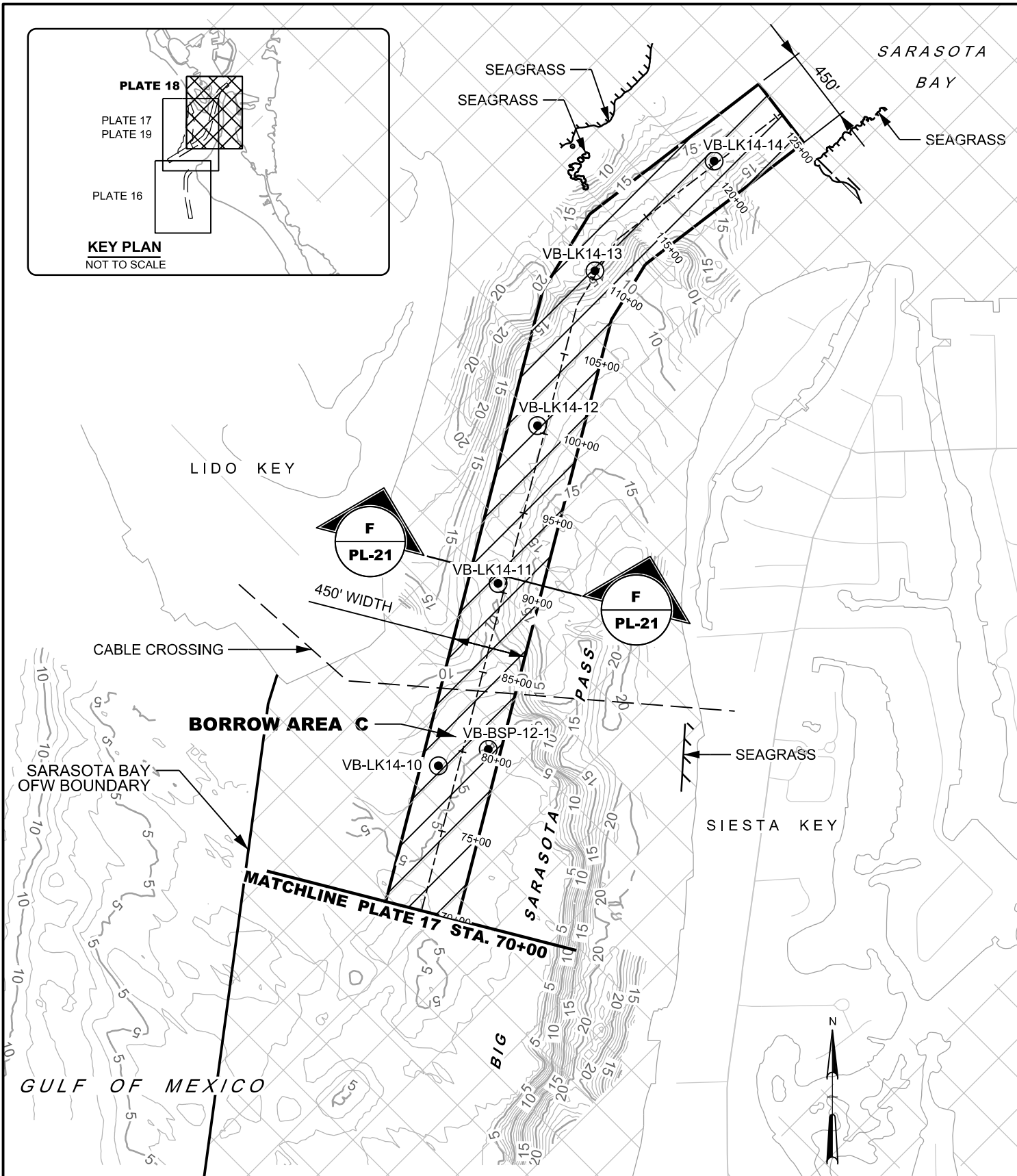
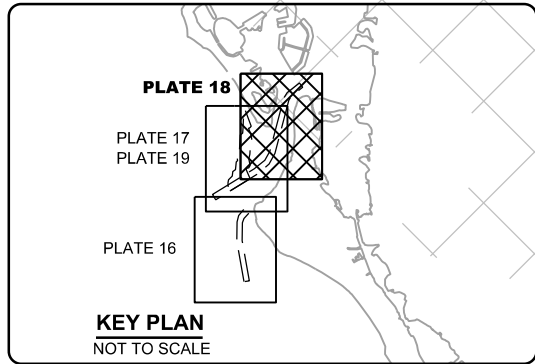
**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

LIDO KEY BEACH EROSION CONTROL PROJECT
BORROW AREA C - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			17 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 15 FOR BORROW AREA SURVEY NOTES.



US Army Corps
of Engineers®
Jacksonville District

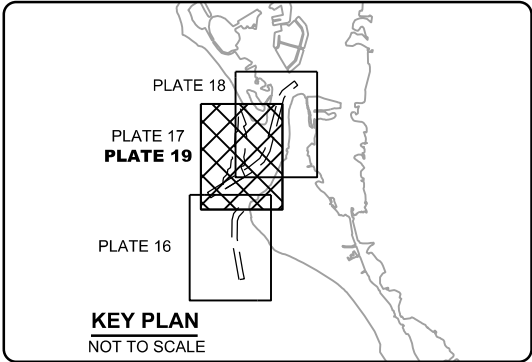
**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

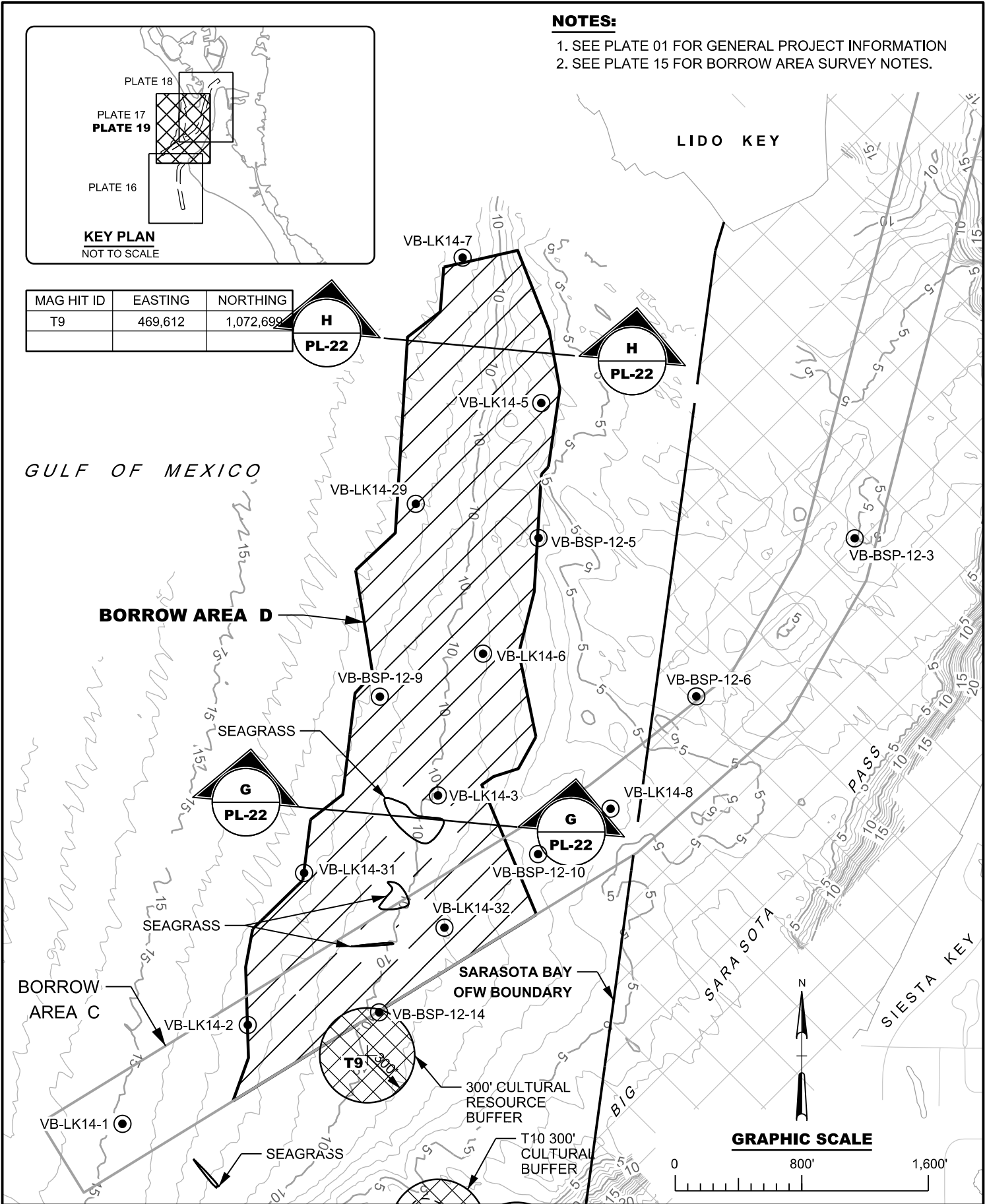
HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BORROW AREA C - PLAN VIEW

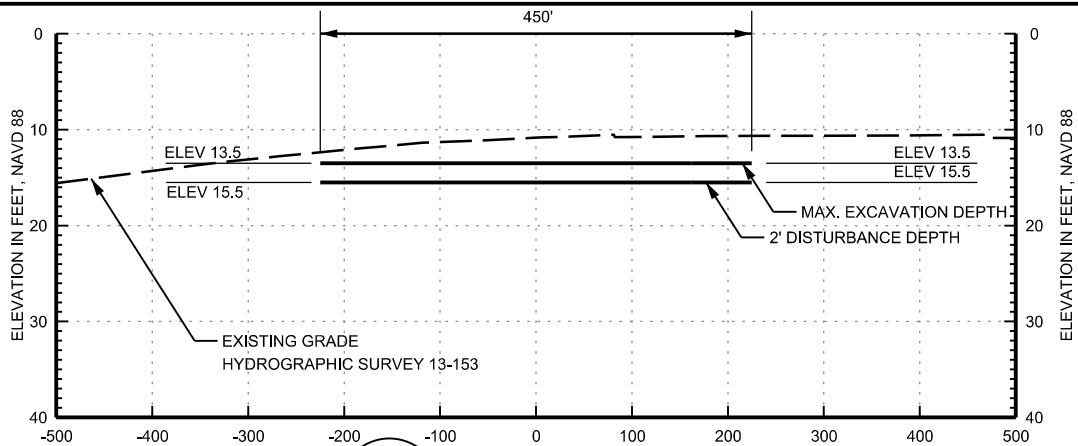
DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
7/15/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			18 OF 34

- NOTES:**
1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
 2. SEE PLATE 15 FOR BORROW AREA SURVEY NOTES.

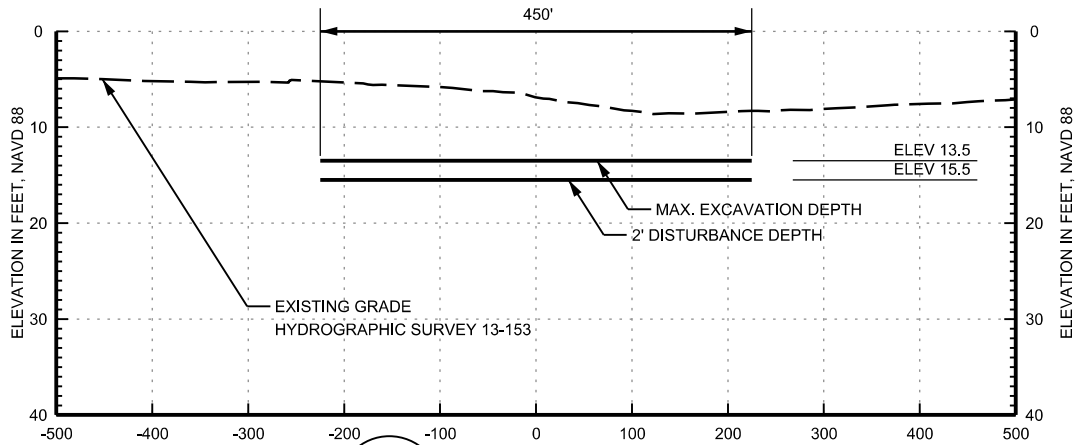


MAG HIT ID	EASTING	NORTHING
T9	469,612	1,072,699

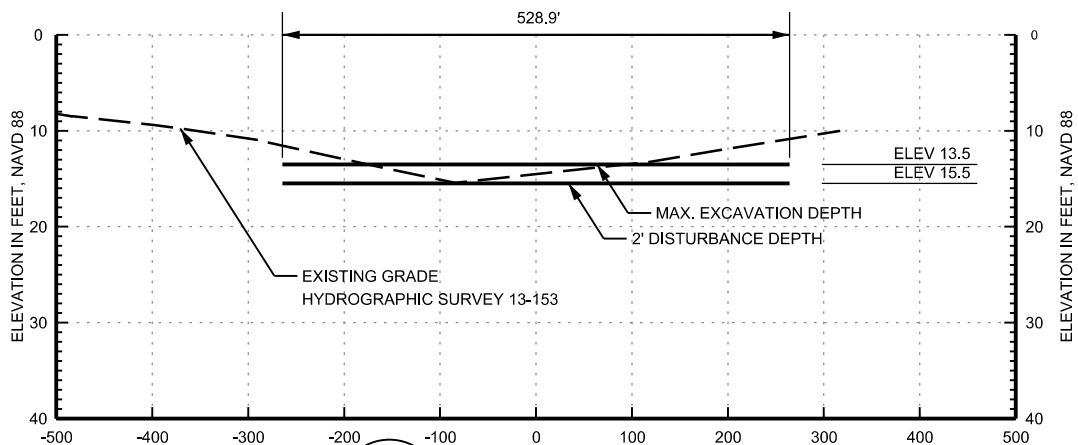




A
PL-16



B
PL-16



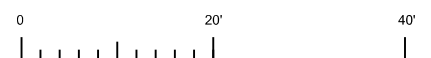
C
PL-16

GRAPHIC SCALES

HORIZONTAL



VERTICAL



NOTE:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.



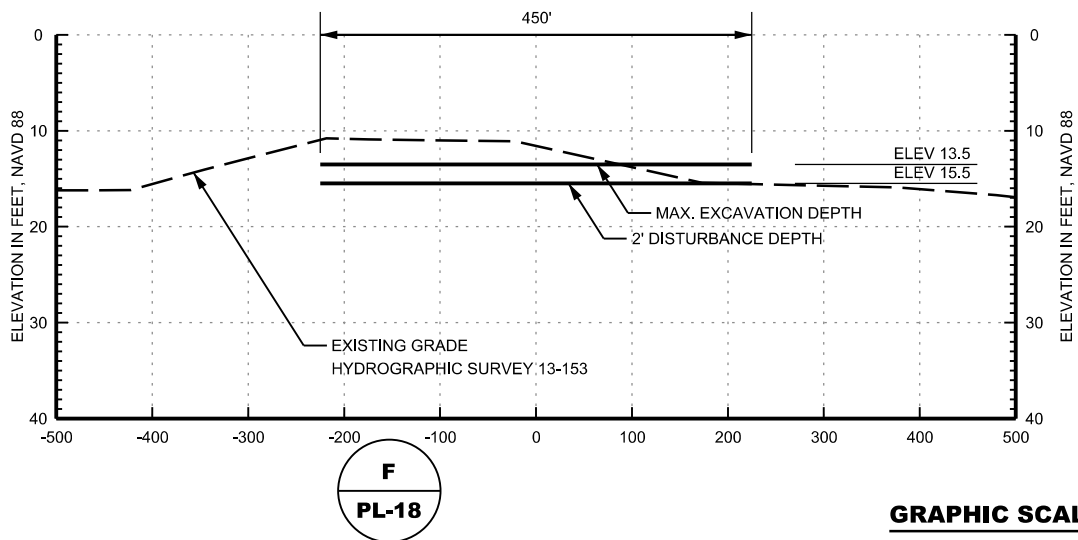
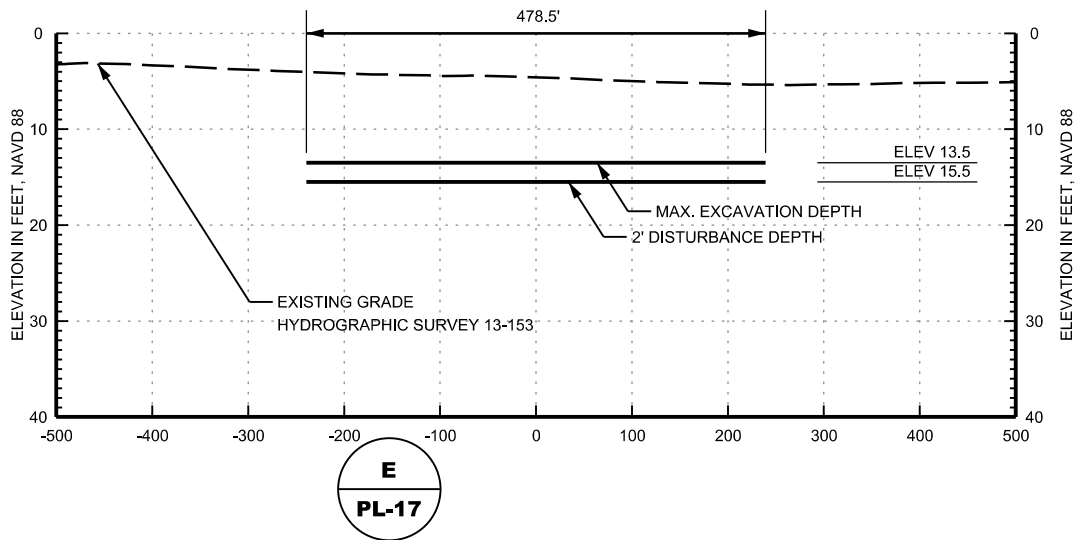
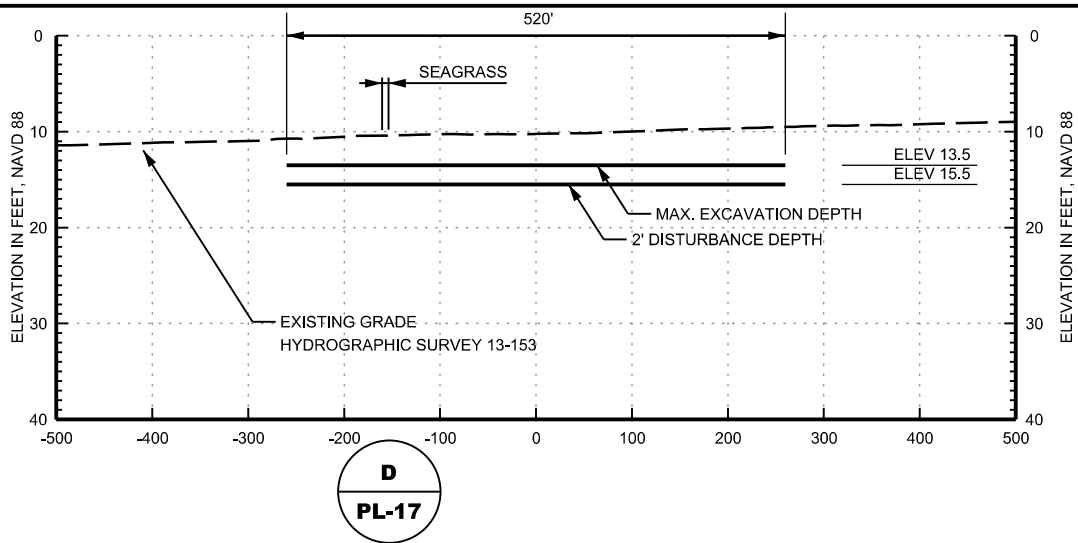
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

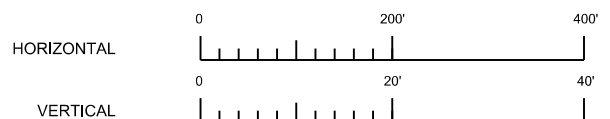
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BORROW AREA B - CROSS SECTIONS

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			20 OF 34



GRAPHIC SCALES



NOTE:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.



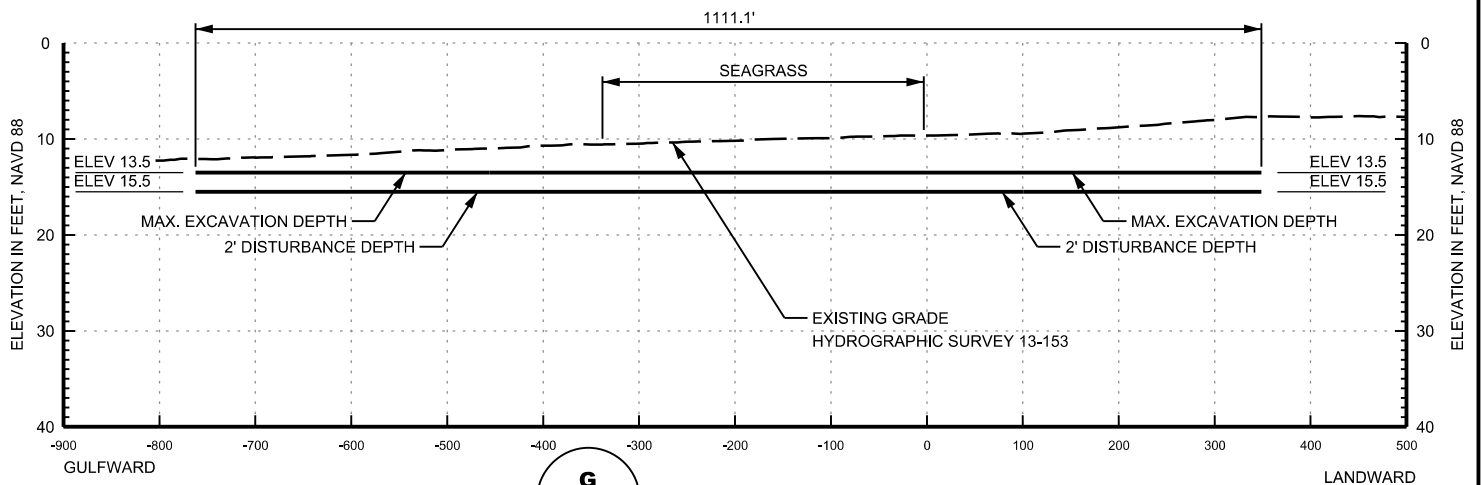
US Army Corps
of Engineers®
Jacksonville District

NOT FOR CONSTRUCTION PERMIT DRAWINGS

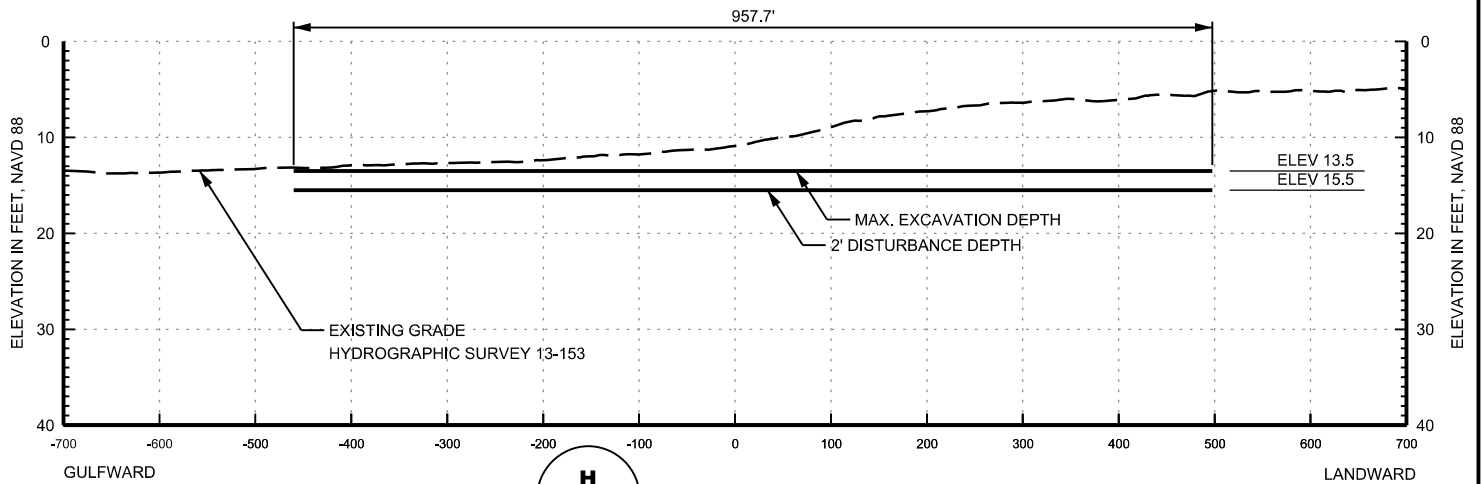
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA **LIDO KEY BEACH EROSION CONTROL PROJECT** BORROW AREA C - CROSS SECTIONS

DATE	DESIGNED	APPROVED	DATE
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			21 OF 34



G
PL-19



H
PL-19

NOTE:

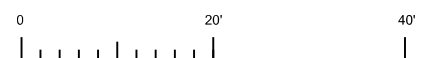
1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.

GRAPHIC SCALES

HORIZONTAL



VERTICAL



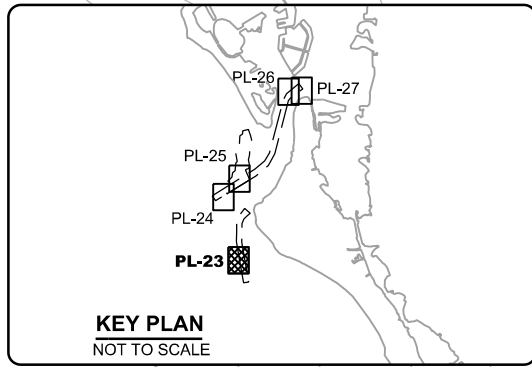
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
BORROW AREA D - CROSS SECTIONS

DATE	DESIGNED	APPROVED	DATE
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			22 OF 34



**SEAGRASS
PATCH #13**
($< 0.5 \text{ m}^2$)

BORROW AREA B

**SEAGRASS
PATCH #14**
($< 0.5 \text{ m}^2$)

GULF OF MEXICO

NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.
2. SEAGRASS SHOWN IS BASED ON SEPTEMBER 2014 SURVEY.

GRAPHIC SCALE



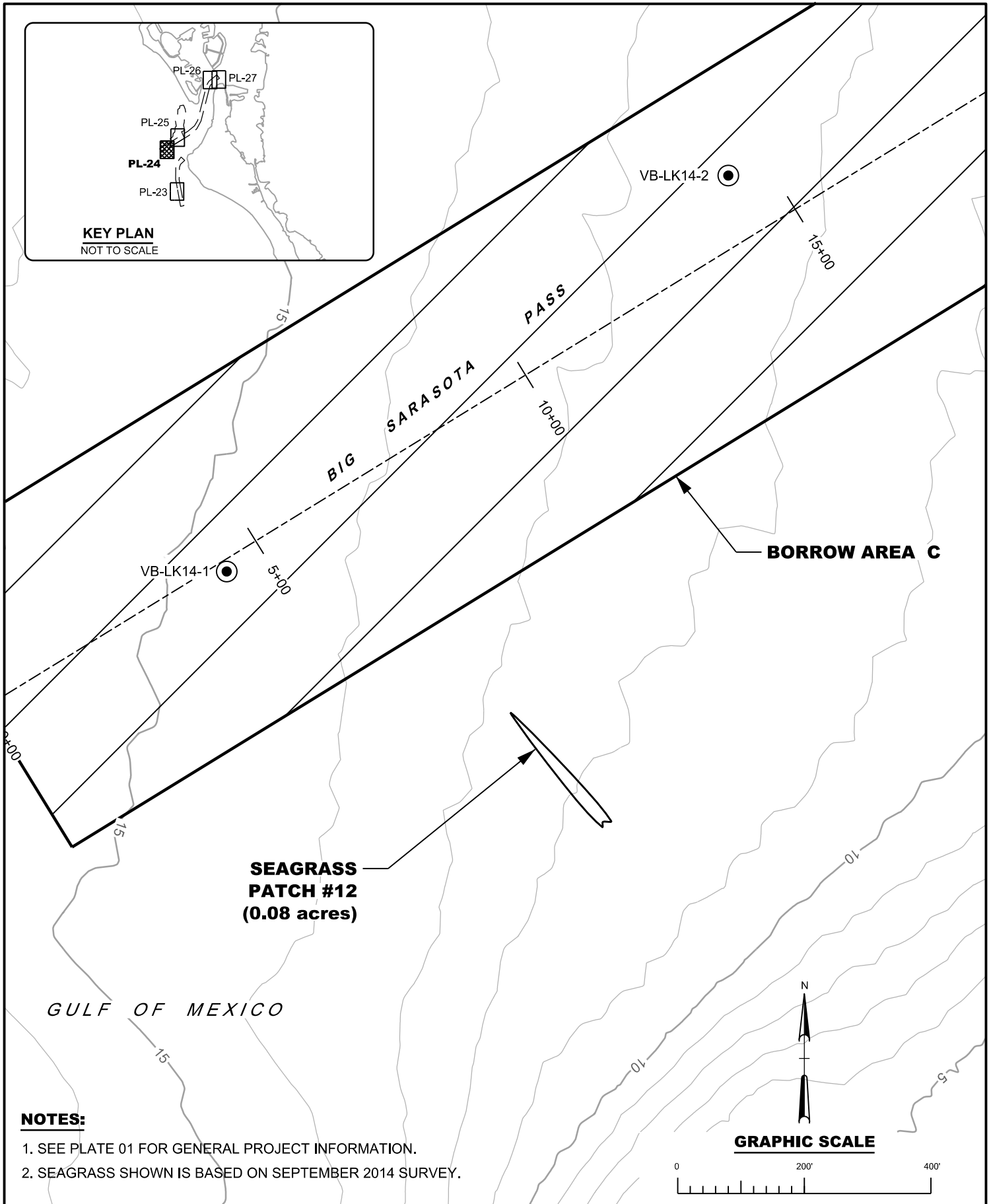
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

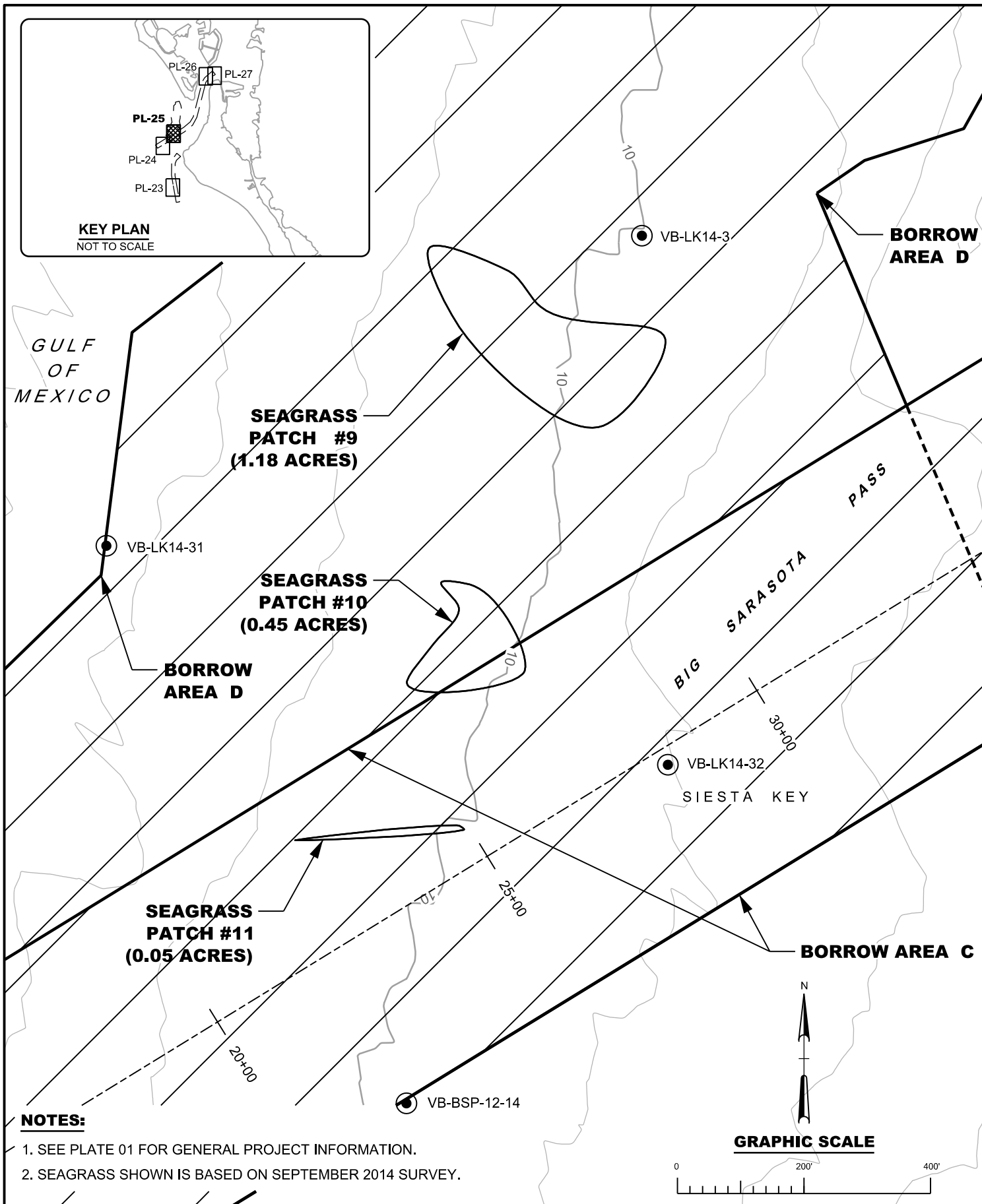
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
SEAGRASS - BORROW AREA B - PLAN VIEW

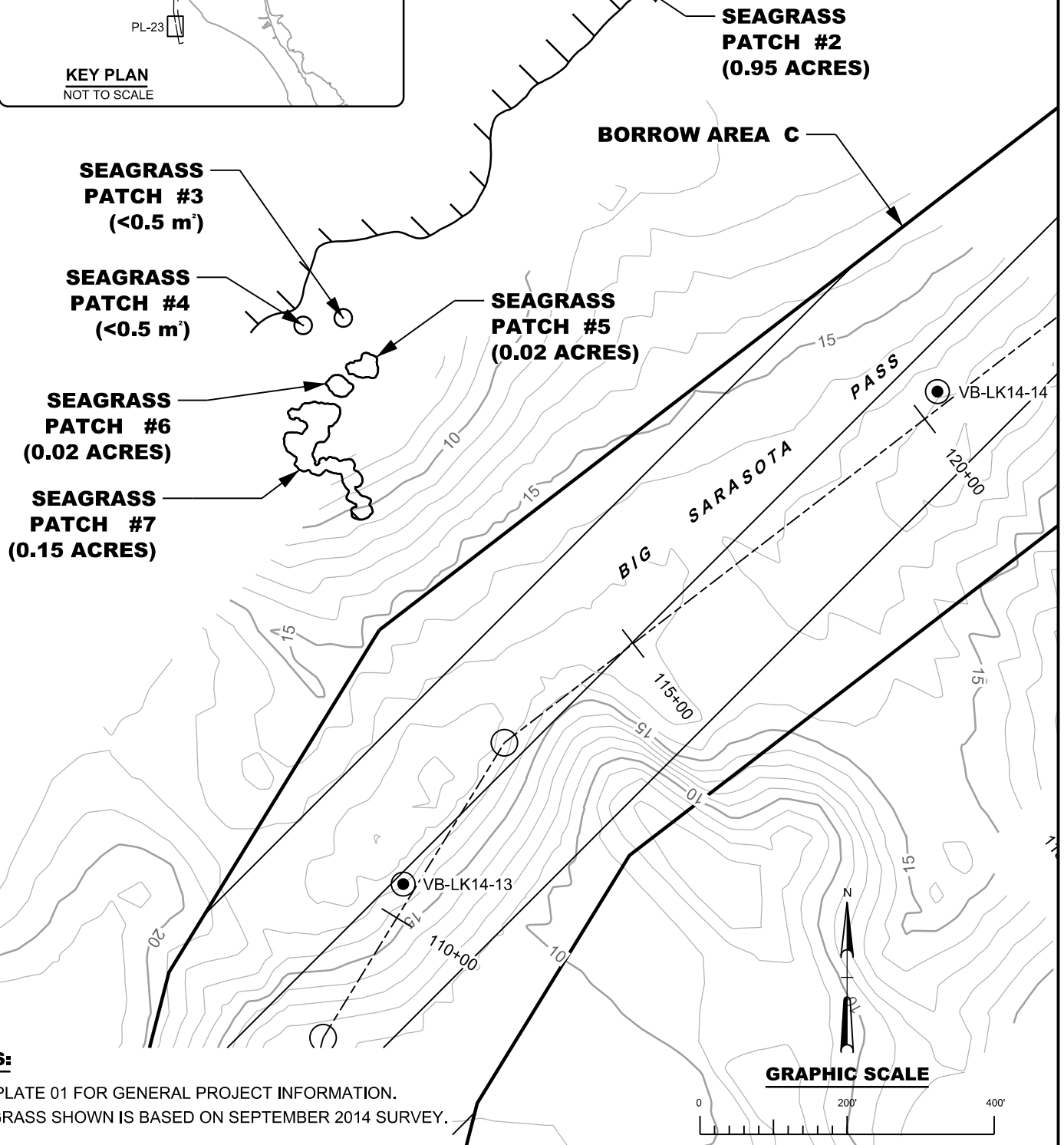
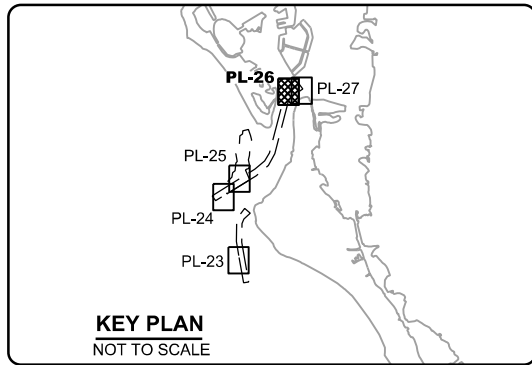
DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			23 OF 34



 US Army Corps of Engineers® Jacksonville District	NOT FOR CONSTRUCTION PERMIT DRAWINGS		HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA		DATE 2/26/15	DESIGNED J.W.L.	APPROVED L.R.P.	DATE MAR. 2014
	DEPARTMENT OF THE ARMY		LIDO KEY BEACH EROSION CONTROL PROJECT		9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
	JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA		SEAGRASS - BORROW AREA C - PLAN VIEW		6/10/16	J.W.L.	J.E.B.	PLATE:
								24 OF 34



 US Army Corps of Engineers® Jacksonville District	NOT FOR CONSTRUCTION PERMIT DRAWINGS	HURRICANE STORM DAMAGE REDUCTION PROJECT SARASOTA COUNTY, FLORIDA			DATE	DESIGNED	APPROVED	DATE:
	DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA	LIDO KEY BEACH EROSION CONTROL PROJECT SEAGRASS - BORROW AREAS C & D - PLAN VIEW			2/26/15	J.W.L.	L.R.P.	MAR. 2014
					9/03/15	J.W.L.	J.E.B.	DWN BY:
					6/10/16	J.W.L.	J.E.B.	J.W.L.
							PLATE:	
							25 OF 34	



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.
2. SEAGRASS SHOWN IS BASED ON SEPTEMBER 2014 SURVEY.



US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

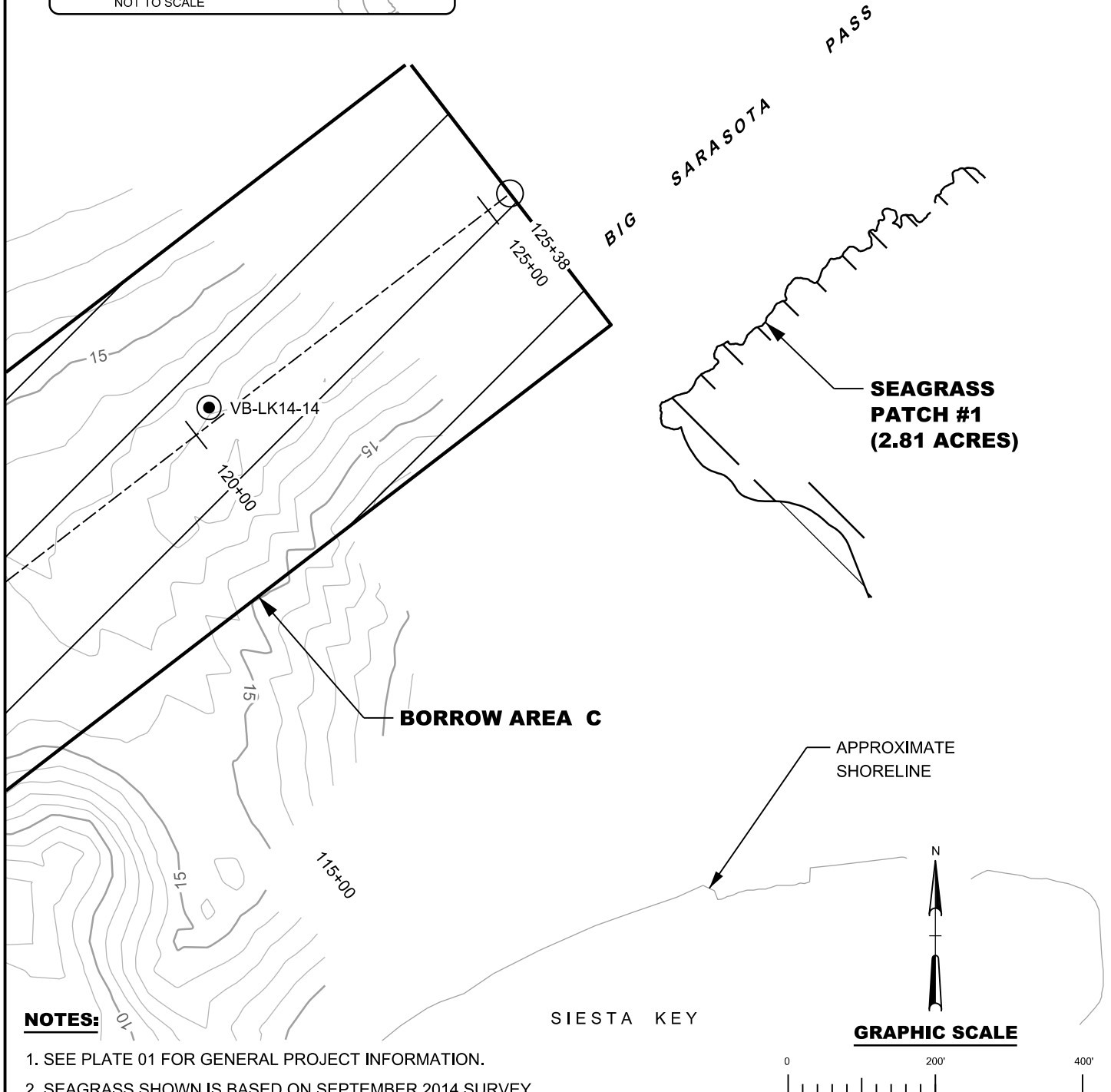
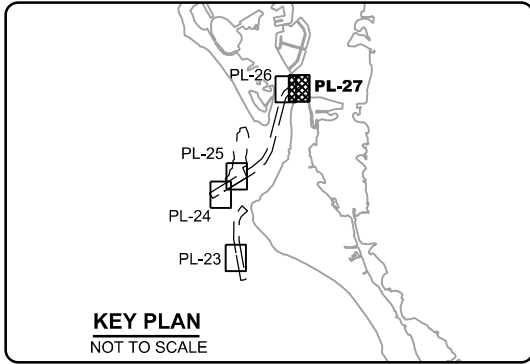
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

LIDO KEY BEACH EROSION CONTROL PROJECT

SEAGRASS - BORROW AREA C - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			26 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.
2. SEAGRASS SHOWN IS BASED ON SEPTEMBER 2014 SURVEY.



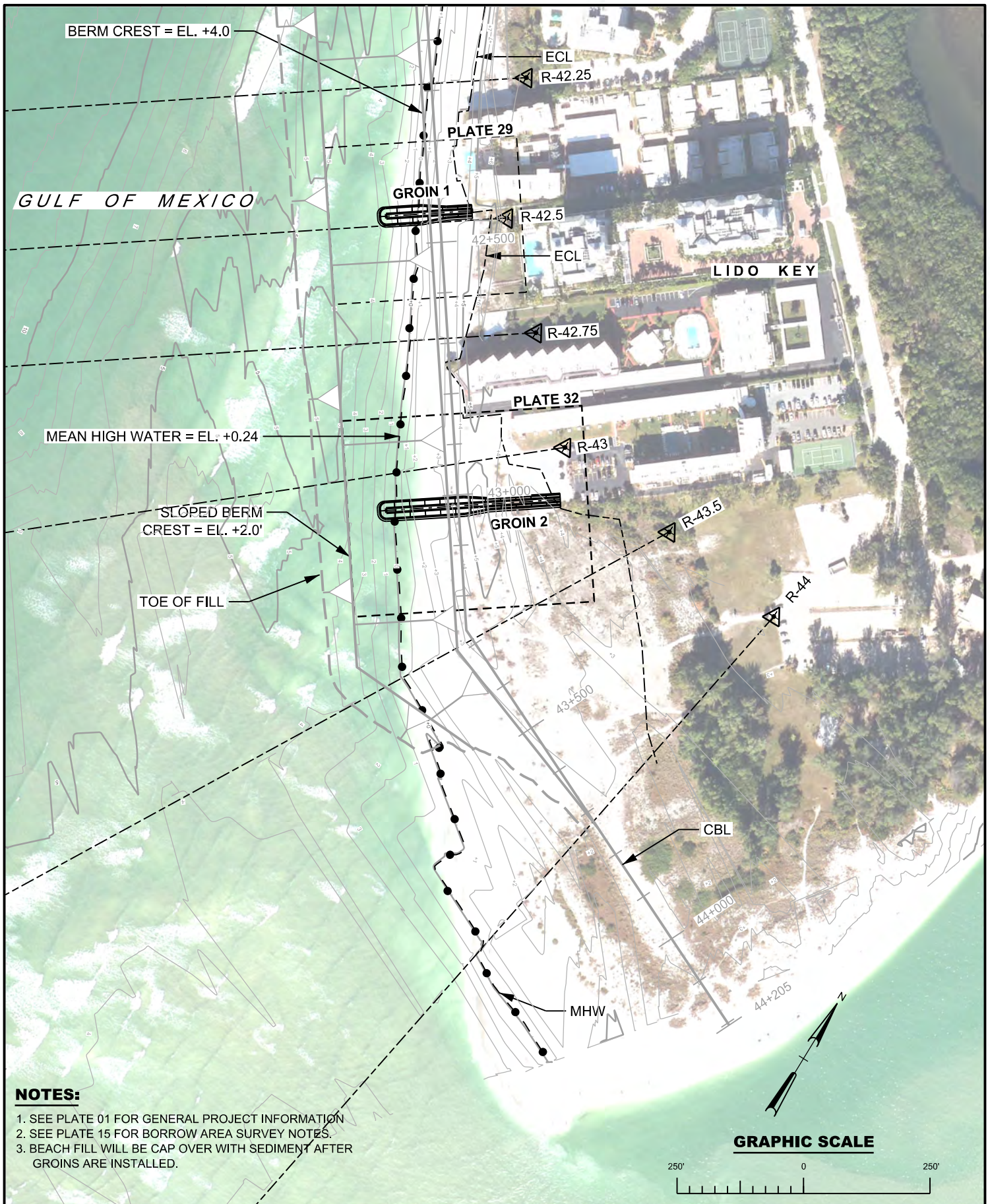
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
SEAGRASS - BORROW AREA C - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY:
6/10/16	J.W.L.	J.E.B.	J.W.L.
			PLATE:
			27 OF 34



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. SEE PLATE 15 FOR BORROW AREA SURVEY NOTES.
3. BEACH FILL WILL BE CAP OVER WITH SEDIMENT AFTER GROINS ARE INSTALLED.



US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
GROIN OVERALL

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 28 OF 34

GULF OF MEXICO



RGE. 106.0



RGE. 36.0

RGE. -14.0



RGE. -64.0

70 FEET
SEAWARD

50 FEET
TRANSITION

50 FEET
LANDWARD

STA. 42+442

12" THICK MARINE MATTRESS
ON GEOTEXTILE

FLAT BERM CREST
EL. +4.0

9 FOOT CREST WIDTH - EL. +4.0' NAVD

CBL

ARMOR STONE

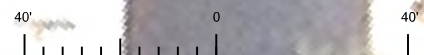
ECL

LIDO KEY

NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION.
2. SEE PLATE 04 FOR BEACH SURVEY NOTES.
3. CENTERLINE OF GROIN IS CBL STATION 42+442.
4. BEACH FILL NOT SHOWN FOR CLARITY.

GRAPHIC SCALE



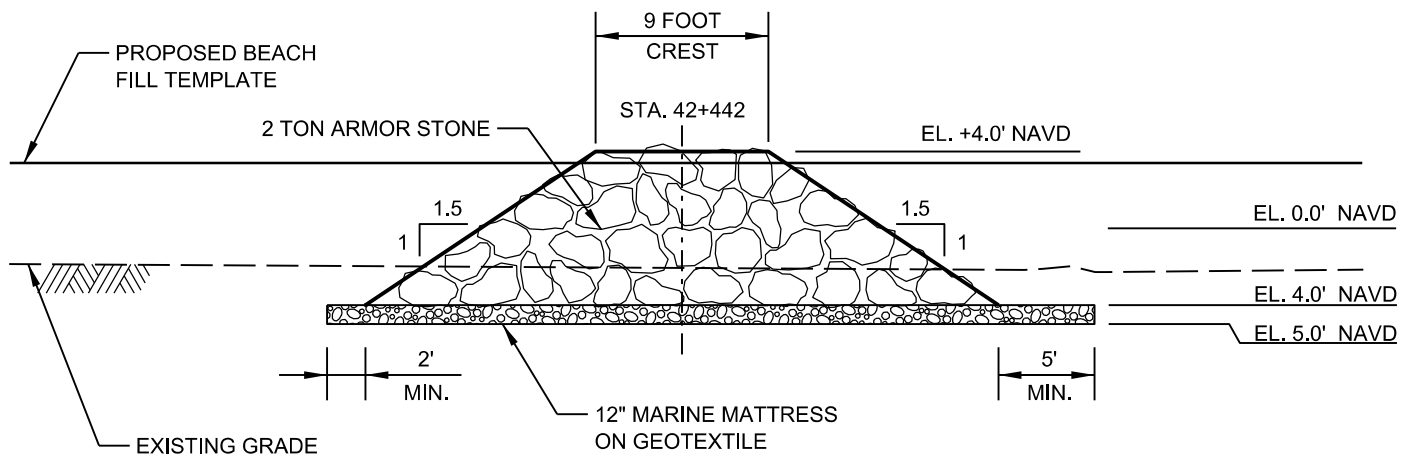
US Army Corps
of Engineers®
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

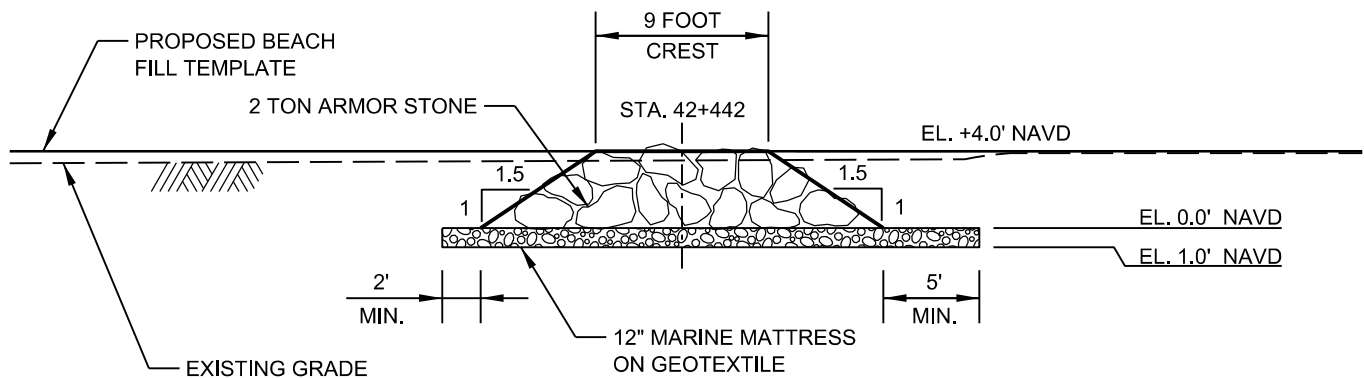
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
GROIN NO. 1 - PLAN VIEW

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 29 OF 34



I
PL-29 **GROIN NO. 1 - SEAWARD SECTION**
LOOKING LANDWARD

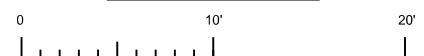


J
PL-29 **GROIN NO. 1 - LANDWARD SECTION**
LOOKING LANDWARD

NOTES:

1. ARMOR STONE: W=1.5 TO 2.5 TONS WITH 50% GREATER THAN 2.0 TONS, 165 PCF MINIMUM.
2. EXCAVATE AND/OR FILL AS NECESSARY TO PLACE MARINE MATTRESS AND ARMOR STONE TO ACHIEVE THE SPECIFIED CREST ELEVATION.

GRAPHIC SCALE



US Army Corps
of Engineers
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA
LIDO KEY BEACH EROSION CONTROL PROJECT
GROIN NO. 1 CROSS SECTIONS

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 30 OF 34



**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

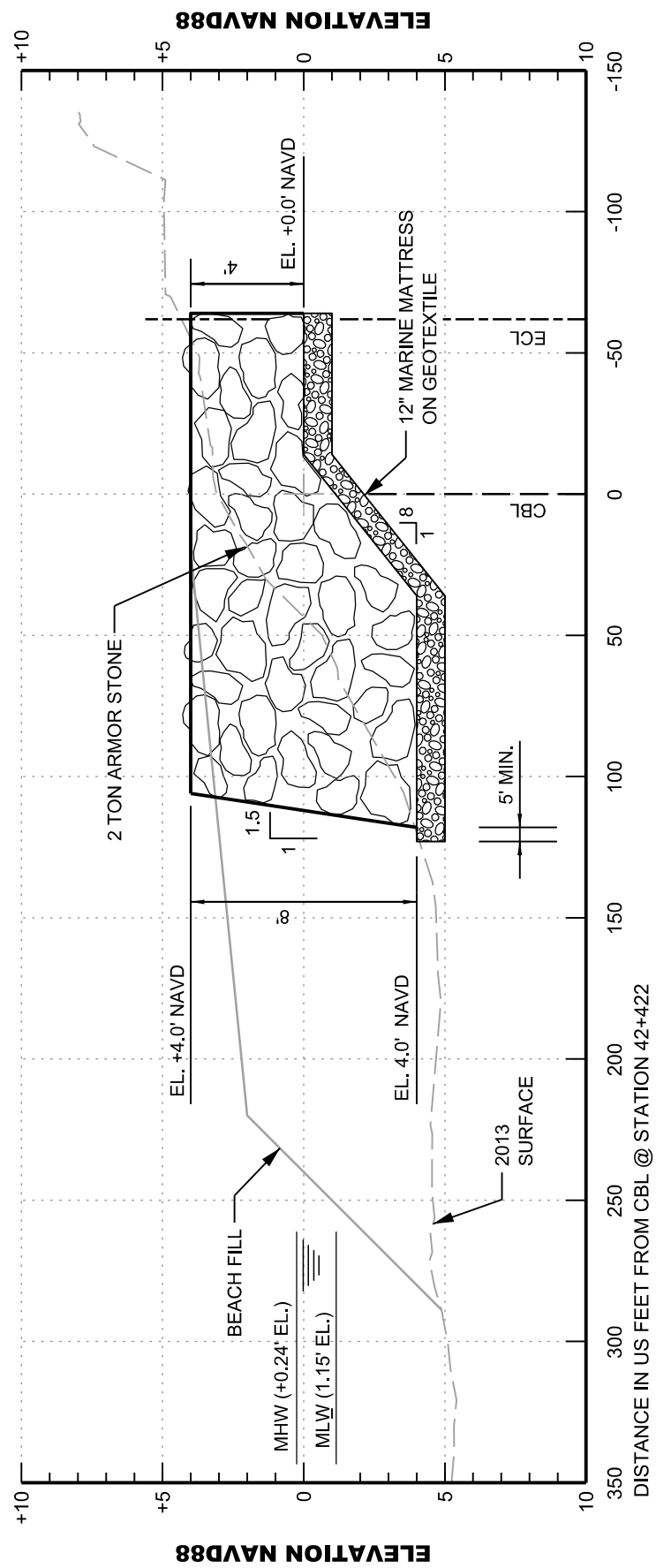
LIDO KEY BEACH EROSION CONTROL PROJECT

GROIN NO. 1 PROFILE

DATE	DESIGNED	APPROVED	DATE
8/27/15	J.W.L.	J.E.B.	MAR. 2014
			DWN BY: J.W.L.
			PLATE: 31 OF 34

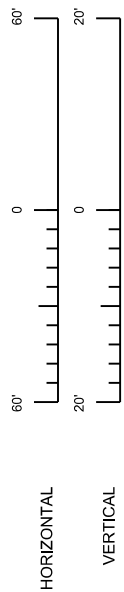
GROIN NOTES:

1. ARMOR STONE: W=1.5 TO 2.5 TONS WITH 50% GREATER THAN 2.0 TONS, 165 PCF MINIMUM.
2. EXCAVATE AND/OR FILL AS NECESSARY TO PLACE MARINE MATTRESS AND ARMOR STONE TO ACHIEVE THE SPECIFIED CREST ELEVATION.
3. BACKFILL WITH BEACH QUALITY SEDIMENT ONTOP OF PLACED GROIN.



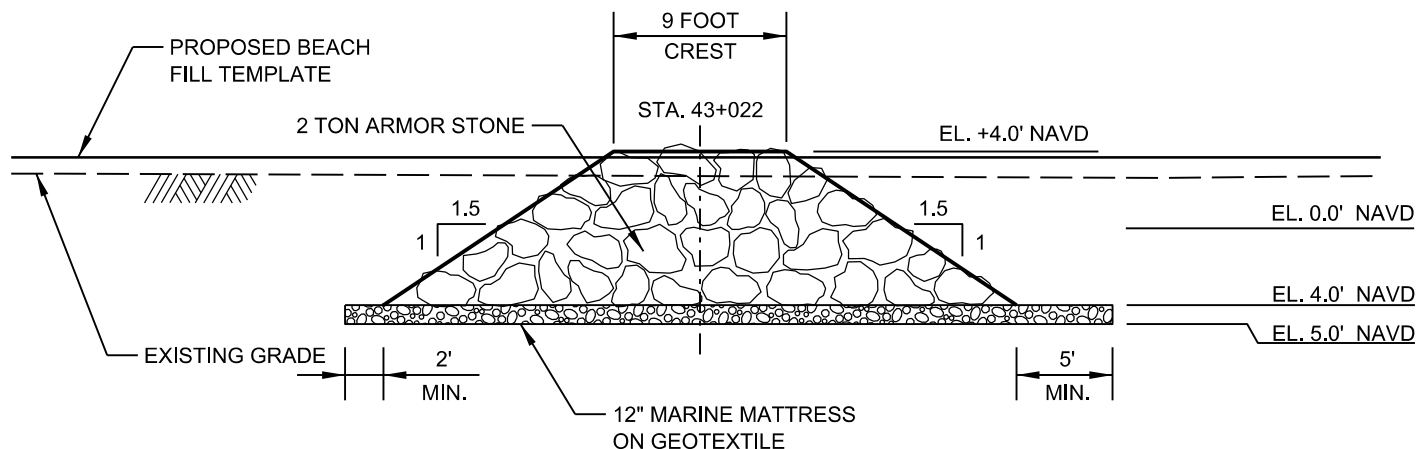
K **GROIN NO. 1 PROFILE**
PL-29 LOOKING NORTHWARD

GRAPHIC SCALES

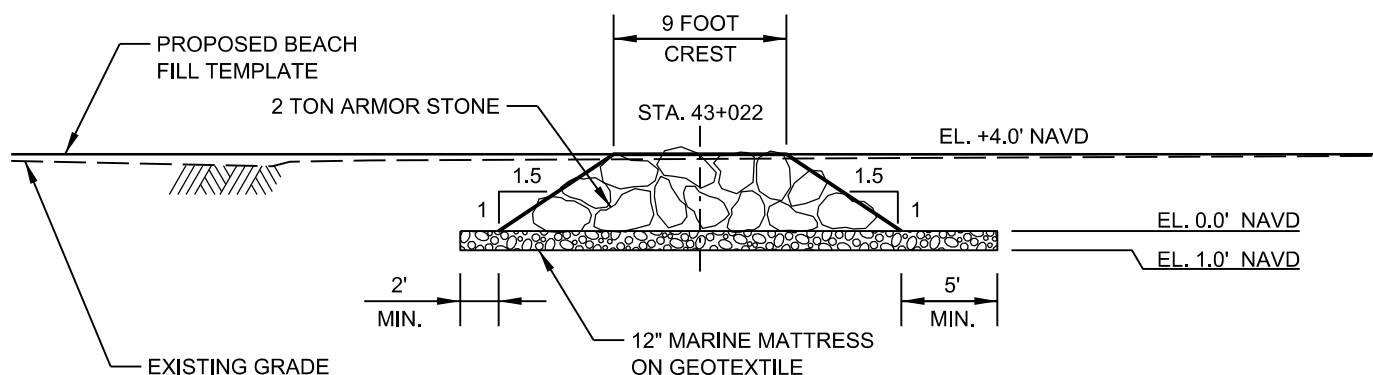


NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN US FEET AND FOLLOWS ALONG STATION 42+422 RANGES.



L
PL-32 **GROIN NO. 2 - SEAWARD SECTION**
LOOKING LANDWARD

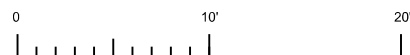


M
PL-32 **GROIN NO. 2 - LANDWARD SECTION**
LOOKING LANDWARD

NOTES:

1. ARMOR STONE: W=1.5 TO 2.5 TONS WITH 50% GREATER THAN 2.0 TONS, 165 PCF MINIMUM.
2. EXCAVATE AND/OR FILL AS NECESSARY TO PLACE MARINE MATTRESS AND ARMOR STONE TO ACHIEVE THE SPECIFIED CREST ELEVATION.

GRAPHIC SCALE



US Army Corps
of Engineers
Jacksonville District

**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

LIDO KEY BEACH EROSION CONTROL PROJECT

GROIN NO. 2 CROSS SECTIONS

DATE	DESIGNED	APPROVED	DATE:
2/26/15	J.W.L.	L.R.P.	MAR. 2014
9/03/15	J.W.L.	J.E.B.	DWN BY: J.W.L.
			PLATE: 33 OF 34



**NOT FOR CONSTRUCTION
PERMIT DRAWINGS**

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

HURRICANE STORM DAMAGE REDUCTION PROJECT
SARASOTA COUNTY, FLORIDA

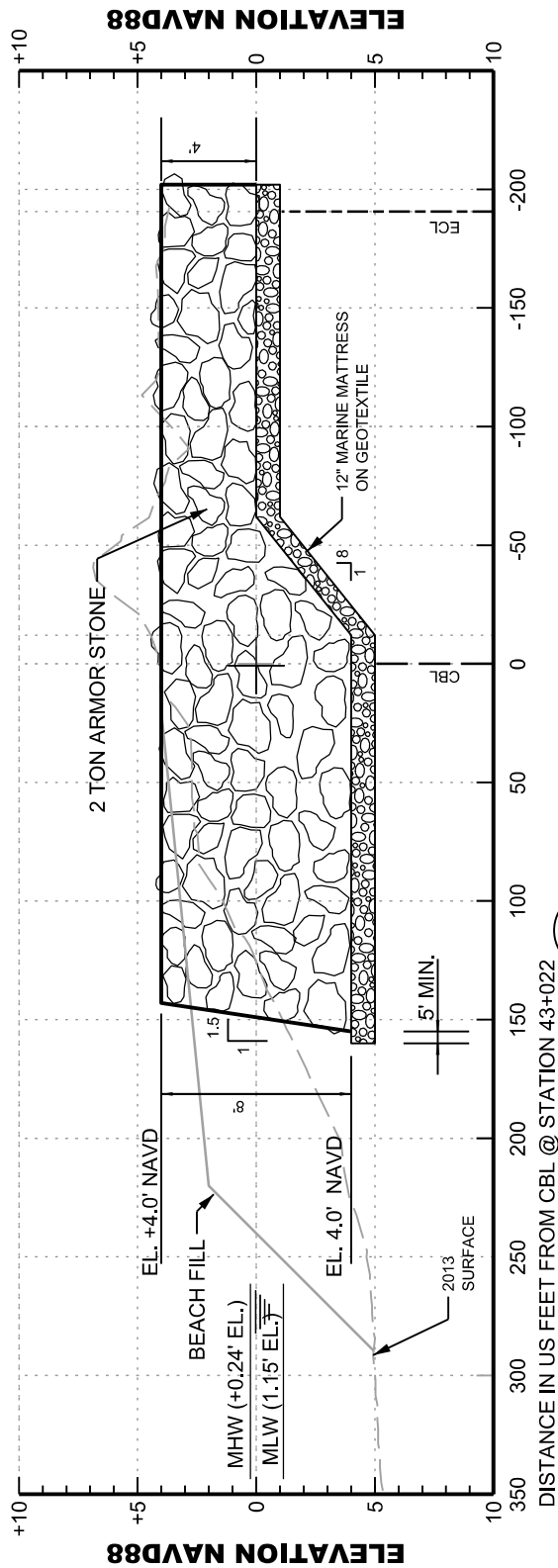
LIDO KEY BEACH EROSION CONTROL PROJECT

GROIN NO. 2 PROFILE

DATE	DESIGNED	APPROVED	DATE:
9/03/15	J.W.L.	J.E.B.	MAR. 2014
			DWN BY: J.W.L.
			PLATE: 34 OF 34

GROIN NOTES:

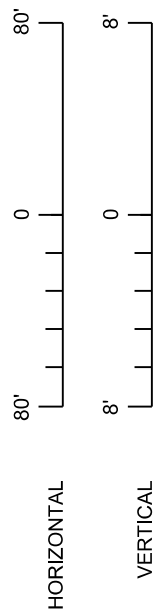
1. ARMOR STONE: W=1.5 TO 2.5 TONS WITH 50% GREATER THAN 2.0 TONS, 165 PCF MINIMUM.
2. EXCAVATE AND/OR FILL AS NECESSARY TO PLACE MARINE MATTRESS AND ARMOR STONE TO ACHIEVE THE SPECIFIED CREST ELEVATION.
3. BACKFILL WITH BEACH QUALITY SEDIMENT ON TOP OF PLACED GROIN.



GROIN NO. 2 PROFILE



GRAPHIC SCALES



NOTES:

1. SEE PLATE 01 FOR GENERAL PROJECT INFORMATION
2. THE HORIZONTAL DISTANCES ARE IN US FEET AND FOLLOWS ALONG CBL STATION 43+022 RANGES.