

JOINT PUBLIC NOTICE

September 18, 2017

United States Army
Corps of Engineers
New Orleans District
Regulatory Branch, OD-SE
7400 Leake Avenue
New Orleans, Louisiana 70118

(504) 862-1564
Stephanie.L.Castain@usace.army.mil
Project Manager
Stephanie Castain
Permit Application Number
MVN-2014-2106-EPP

State of Louisiana
Department of Environmental Quality
ATTN: Water Quality Certifications
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

(225) 219-3225

Project Manager
Elizabeth Hill
WQC Application Number
WQC 170914-03

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [X] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [X] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

Application has also been made to the Louisiana Department of Environmental Quality, Water Quality Certifications, for a Water Quality Certification (WQC) in accordance with statutory authority contained in LRS30:2047 A(3), and provisions of Section 401 of the Clean Water Act (P.L.95-17).

RESTORATION OF NORTH BRETON ISLAND IN PLAQUEMINES PARISH

NAME OF APPLICANT: U.S. Fish and Wildlife Service, 341 Greeno Road North, Fairhope, Alabama 36532.

LOCATION OF WORK: Project site is located within the Breton Sound/Gulf of Mexico, Louisiana, in Plaquemines Parish, as shown on the attached drawings.

Latitude: 29.484208/Longitude: -89.174708, Hydrologic Unit Code: 08090203 Eastern Louisiana Coastal.

CHARACTER OF WORK: Restoration of the existing North Breton Island which serves as an important rookery site for several migratory bird species. An addition of approximately 143 acres of beach, 66 acres of dune, and 227 acres of back barrier marsh habitat shall be developed. Project implementation requires approximately 10,375,454 cubic yards/ 496 acres of native material to be excavated from the Gulf of Mexico borrow area and deposited around the existing island. The proposed project will result in a net increase in area of these habitat types; therefore, compensatory mitigation has not been proposed.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **20 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. Similar letters concerning the Water Quality Certification must reference the applicant's name and the WQC Application number and be mailed to the Louisiana Department of Environmental Quality at the address above. Individuals or parties may request an extension of time in which to comment on the proposed work by writing or e-mailing the Corps of Engineers Project Manager listed above. Any request must be specific and substantively supportive of the requested extension, and received by this office prior to the end of the initial comment period. The Section Chief will review the request and the requestor will be promptly notified of the decision to grant or deny the request. If granted, the time extension will be continuous to the initial comment period and, inclusive of the initial comment period, will not exceed a total of 30 calendar days.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

Corps of Engineers Permit Criteria

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Issuance of this public notice solicits input from the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

The New Orleans District has determined that the proposed project is located in waters known to be utilized by the West Indian Manatee (*Trichechus manatus*) and determined that the proposed activity is not likely to adversely affect the species based on the Standard Local Operating Procedure for Endangered Species of Louisiana (SLOPES), dated October 22, 2014, between the U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service, Ecological Services Office.

The U.S. Fish and Wildlife Services has provided a Migratory Bird Abatement Plan for the North Breton Island Restoration Project in the case that breeding behavior and/or nesting are observed prior to and once the project has commenced.

Our initial finding is that the proposed work would not affect any species, nor affect any habitat designated as critical to the survival and recovery of such species, listed as endangered by the U.S. Department of Commerce.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of 1,243.00 acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, Water Quality Certifications, before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

For
Michael V. Farabee
Chief, Eastern Evaluation Section

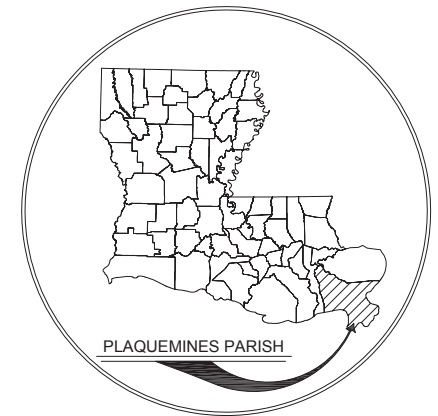
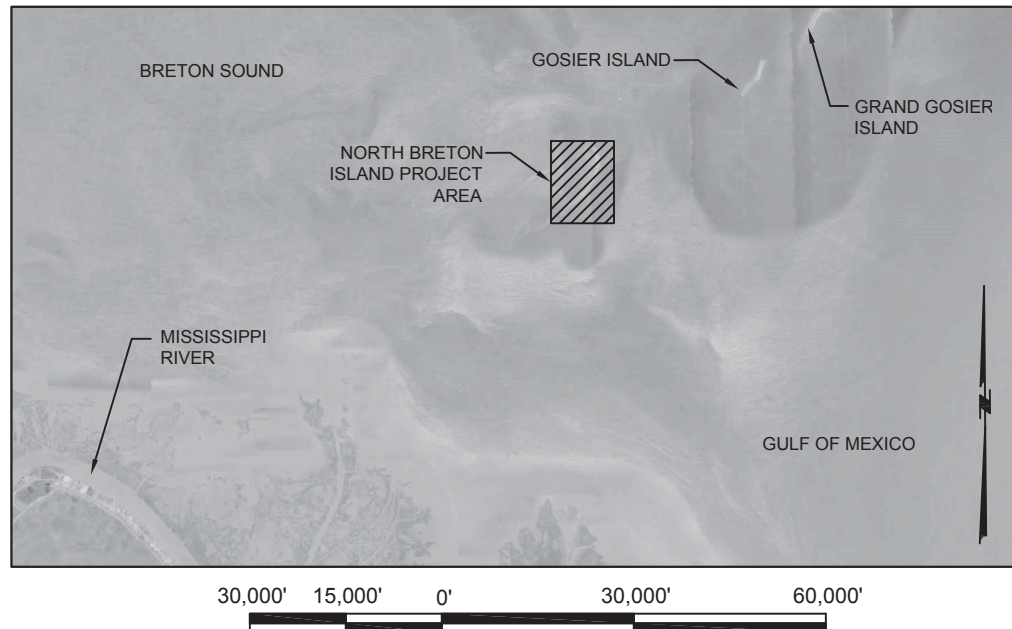
Enclosure

UNITED STATES FISH AND WILDLIFE SERVICE
NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE

NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT
PLAQUEMINES PARISH, LOUISIANA
PRELIMINARY


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NOTES:

1. FOR PERMITTING PURPOSES ONLY. NOT TO BE USED FOR CONSTRUCTION.
2. RETAIN ENTIRE SET AS ONE, INDIVIDUAL SHEETS SHOULD NOT BE REMOVED.

BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	TITLE SHEET
						DATE: JULY 2017
						SHEET 1 OF 16

GENERAL NOTES:


1. ALL AERIAL IMAGERY FROM AERIAL IMAGE FROM GOOGLE EARTH®, 2014 AND DIGITAL GLOBE IMAGE, OCTOBER 1, 2016 AND MAY NOT BE INDICATIVE OF CURRENT CONDITIONS.
2. PROBABLE PIPELINE INFORMATION AND LOCATIONS OBTAINED FROM THE OFFICE OF COASTAL MANAGEMENT OF THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, 2008 & 2010 PIPELINE DATABASE.
3. ANY EXCAVATED MATERIAL WILL BE, TO THE BEST OF KNOWLEDGE, FREE OF CONTAMINANTS AND/OR WILL BE DISPOSED OF IN AN APPROVED LANDFILL.
4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE, CONSTRUCTION PLANS, AND CONTRACT DOCUMENTS AND SHALL CONDUCT WORK IN STRICT ACCORDANCE WITH ALL PERMITS AND APPROVALS OBTAINED FOR THIS PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ERRORS OR DISCREPANCIES IN THE PLANS PRIOR TO BIDDING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING PIPELINE AND UTILITY OPERATORS AT TIME OF CONSTRUCTION. ALL PIPELINES AND UNDERGROUND UTILITIES SHALL BE FIELD LOCATED AND MARKED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOUISIANA ONE CALL SYSTEM (1-800-272-3020) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION (DIGGING, DREDGING, JETTING, ETC.) OR DEMOLITION ACTIVITY. THE CONTRACTOR SHALL ALSO NOTIFY PIPELINE AND UTILITY OPERATORS 72 HOURS PRIOR TO ANY EXCAVATION.
7. THE WATER BOTTOM SHALL NOT BE DISTURBED DURING ACCESS TO THE PROPOSED WORK LOCATION, OR BY THE AUTHORIZED ACTIVITIES WHETHER IT BE BY DREDGING, WHEEL WASHING, PROPWASHING, JETTING, MUCKING, PLOWING, BULL DOZING OR ANY MEANS OF MOVING BOTTOM MATERIAL, EXCEPT AS DEPICTED ON THE PERMIT SHEETS. POWERED VESSELS SHALL BE OPERATED SO AS NOT TO DISTURB THE WATER BOTTOM BY PROPELLER OR JET ACTION.
8. ALL MANMADE DEBRIS UNEARTHED DURING DREDGING OR FOUND WITHIN THE FILL TEMPLATE SHALL BE REMOVED TO AN APPROVED OFFSITE DISPOSAL AREA.
9. THE CONTRACTOR MUST INSTALL AND MAINTAIN ANY SAFETY LIGHTS, SIGNS, AND SIGNALS PRESCRIBED BY THE U.S. COAST GUARD, THROUGH REGULATIONS OR OTHERWISE ON THE AUTHORIZED FACILITIES.
10. ANY DAMAGE TO EXISTING U.S. COAST GUARD NAVIGATION AIDS OR PRIVATE NAVIGATION AIDS SHALL BE REPAIRED BY THE CONTRACTOR TO U.S. COAST GUARD STANDARDS AT THE EXPENSE OF THE CONTRACTOR.
11. PIPELINES IN OPEN WATER AND/OR NAVIGABLE WATERS SHALL BE MARKED WITH BUOYS BY THE CONTRACTOR IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN BUOYS DURING CONSTRUCTION OR HAVE ADEQUATE NAVIGATIONAL EQUIPMENT ON THE DREDGE TO AVOID DREDGING IN RESTRICTED AREAS.
12. THE PROPOSED PROJECT AND ANY FUTURE MAINTENANCE WORK INVOLVING THE USE OF FLOATING CONSTRUCTION EQUIPMENT (BARGE MOUNTED CRANES, BARGE MOUNTED PILE DRIVING EQUIPMENT, FLOATING DREDGE EQUIPMENT, DREDGE DISCHARGE PIPELINES, ETC.) IN FEDERAL WATERS, SHALL NOTIFY THE U.S. COAST GUARD SO THAT A NOTICE TO MARINERS, IF REQUIRED, MAY BE PREPARED. NOTIFICATION, WITH A COPY OF THE PERMIT APPROVAL AND DRAWINGS, SHALL BE MAILED TO THE U.S. COAST GUARD, SECTOR NEW ORLEANS COMMAND CENTER, 201 HAMMOND HIGHWAY, METAIRIE, LOUISIANA 70005, 30 DAYS BEFORE COMMENCEMENT OF WORK.
13. THE OFFSHORE WORK AREAS SHALL CONSIST OF THE BORROW AREAS AND CONVEYANCE CORRIDORS. THE INSHORE WORK AREA IS DEFINED BY A 150' OFFSET FROM THE OUTER LIMITS OF THE ACCESS CHANNELS, TEMPORARY SIDECAST DISPOSAL AREAS, SECONDARY BORROW CHANNEL, AND THE GULF TOE OF THE BEACH FILL TEMPLATE. THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS/HER PLANT, EQUIPMENT, AND OPERATIONS OF PERSONNEL WITHIN THE LIMITS OF THE WORK AREA, AREAS PERMITTED BY LAW, ORDINANCES, PERMITS, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT UNREASONABLY ENCUMBER THE PREMISES WITH PLANT OR EQUIPMENT.
14. THE CONTRACTOR SHALL FOLLOW CONVEYANCE CORRIDORS, ACCESS CHANNELS, AND / OR FILL TEMPLATES, AND SHALL NOT, AT ANY TIME, TRAVEL ON EXISTING MARSH OR VEGETATED WETLANDS UNLESS SPECIFIED IN THE PERMIT OR THROUGH WRITTEN DIRECTION FROM ENGINEER.
15. THE CONTRACTOR SHALL WORK COOPERATIVELY WITH THE OWNER TO ADDRESS THE NOTIFICATION AND COORDINATION REQUIREMENTS WITH THE LANDOWNERS, UTILITY OPERATORS, AND PIPELINE COMPANIES.
16. AS-BUILT DRAWINGS AND/OR PLATS SHALL HAVE WRITTEN ON THEM THE DATE OF COMPLETION OF SAID ACTIVITIES AND SHALL BE SUBMITTED TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, OFFICE OF COASTAL MANAGEMENT, P.O. BOX 44487, BATON ROUGE, LA 70804-4487 WITHIN 30 DAYS FOLLOWING PROJECT COMPLETION.
17. THIS DRAWING SET IS FOR PERMITTING PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.

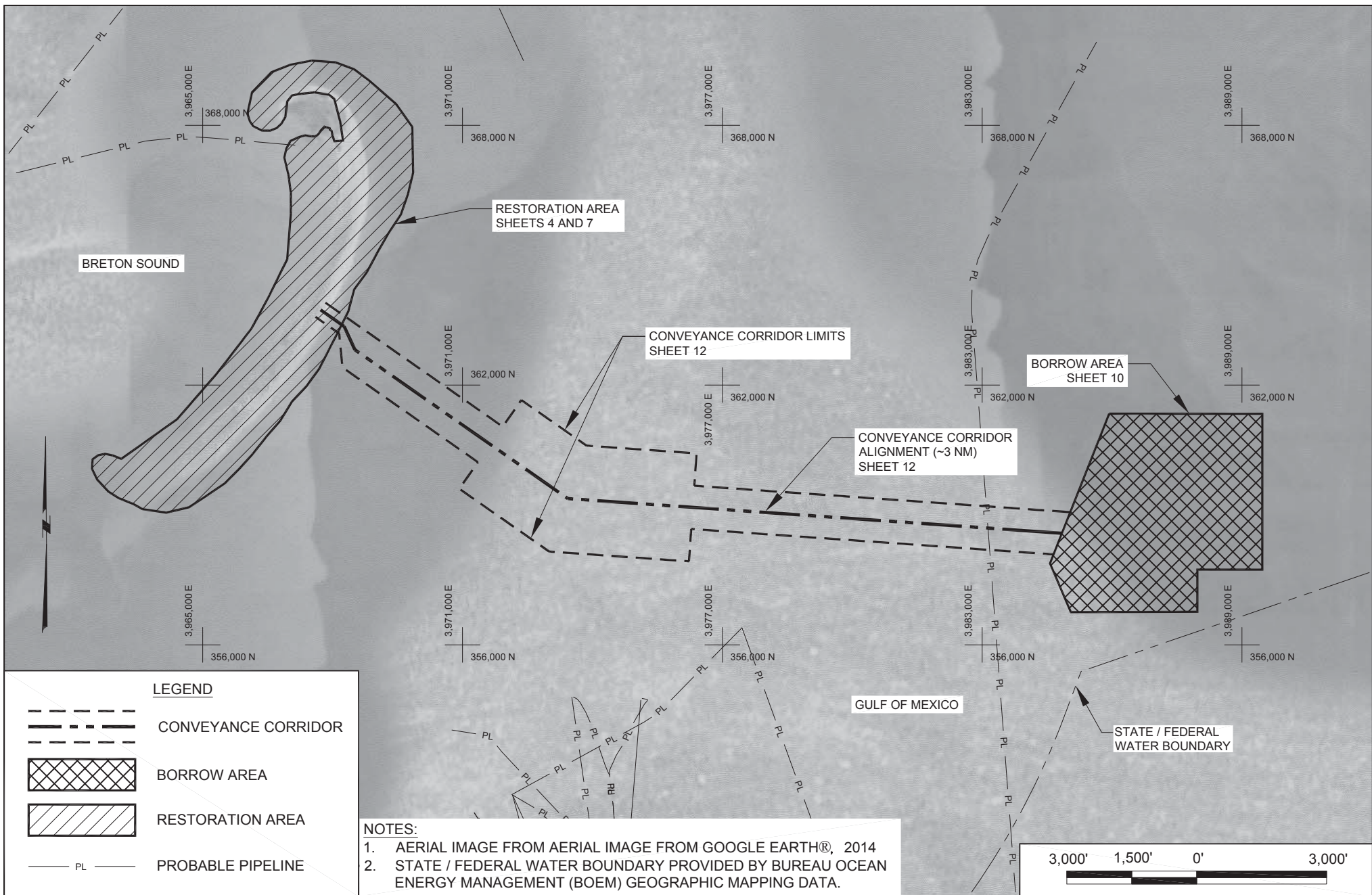
SURVEY NOTES:


1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), GEOID 12A, U.S. SURVEY FEET. ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983, NAD 83 (2011) EPOCH 2010.00, LOUISIANA STATE PLANE SOUTH ZONE U.S. SURVEY FEET EXCEPT WHERE NOTED. ALL BEACH AND DUNE RESTORATION AREA ELEVATIONS ARE BASED ON SURVEY CONTROL MONUMENTS LOCATED ON BRETON ISLAND, LOUISIANA.

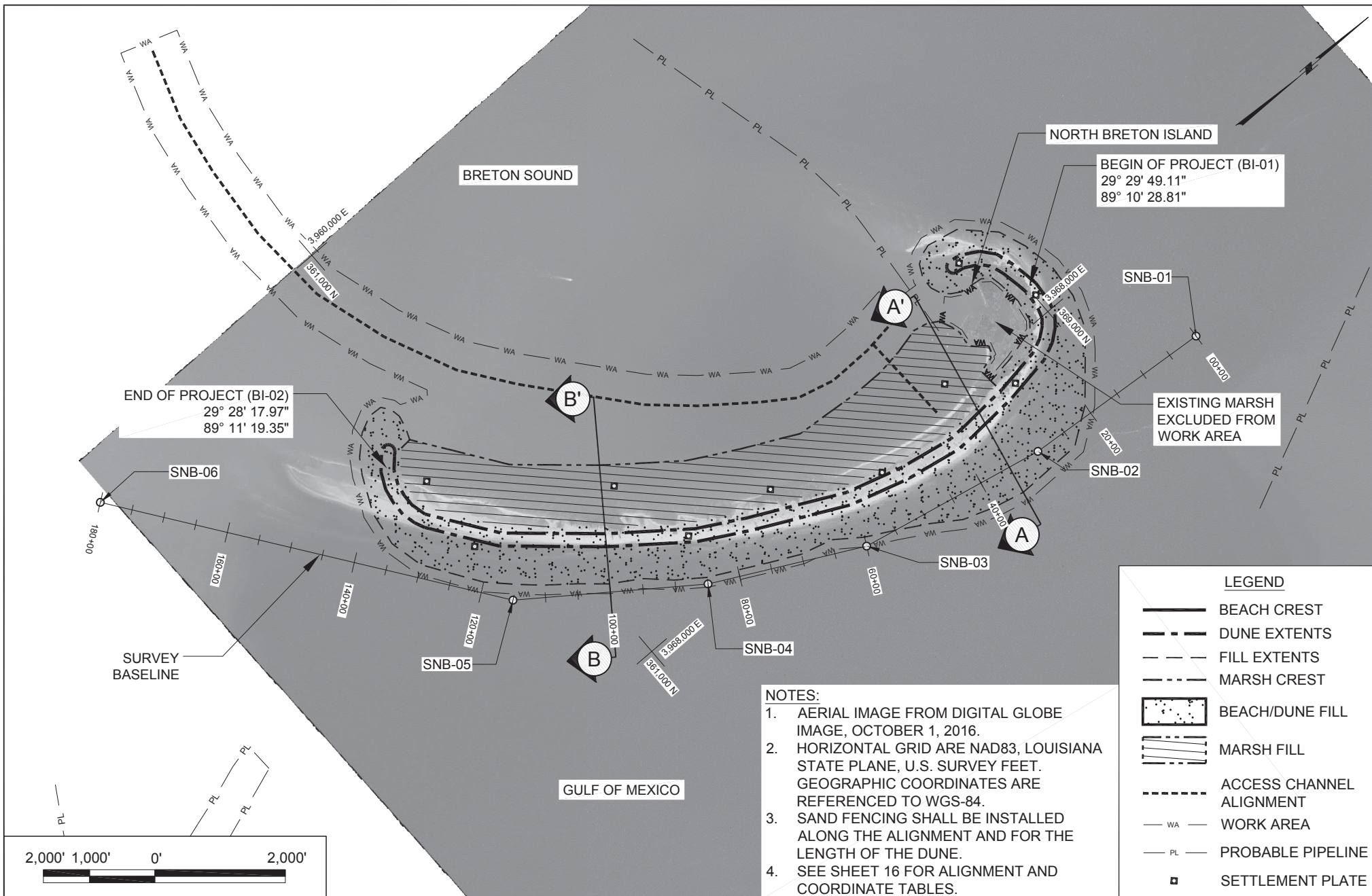
MONUMENTS	ELEVATION	NORTHING	EASTING
BRET	+2.33 FT	367,953.66	3,967,491.09
BRT2	+4.74 FT	367,876.16	3,967,598.70
IR 1	+2.82 FT	367,406.33	3,968,133.25
IR 2	+3.25 FT	367,322.30	3,968,332.11
COE MONUMENT	+5.45 FT	367,949.46	3,967,578.06

2. BORROW AREA BATHYMETRIC SURVEYS PERFORMED BY EMC SURVEYS, INC. IN MAY 2016.
3. HEADLAND RESTORATION AREA SURVEY PERFORMED BY EMC SURVEYS, INC. IN SEPTEMBER 2015.
4. INFORMATION SHOWN HEREON REFLECTS CONDITIONS AS THEY EXISTED ON SURVEY DATE SHOWN AND CAN ONLY BE CONSIDERED INDICATIVE OF CONDITIONS AT THAT TIME.
5. MEAN HIGH WATER (MHW) IS BASED ON INFORMATION OBTAINED FROM USGS OPEN FILE REPORT 2016-1039, ANALYSIS OF SHORELINE AND GEOMORPHIC CHANGE FOR BRETON ISLAND, FROM 1869 TO 2014. MEAN LOW WATER (MLW) WAS CALCULATED USING DATA OBTAINED FROM NOAA STATION 8747437, BAY WAVELAND YACHT CLUB, MISSISSIPPI.

BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	GENERAL AND SURVEY NOTES
						DATE: JULY 2017
			DRAWN BY: STEVE DARTEZ	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 2 OF 16

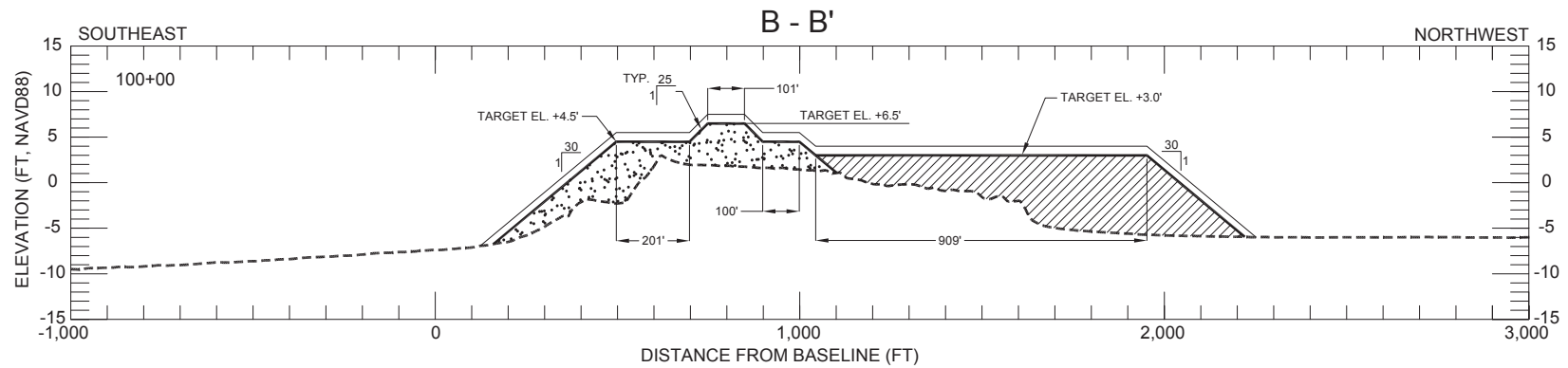
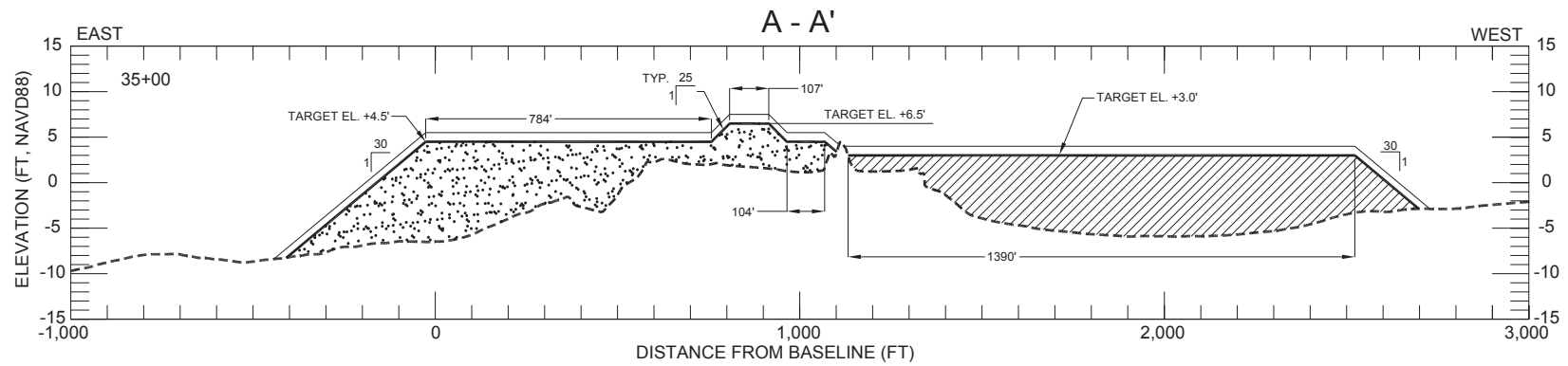


BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	PROJECT OVERVIEW
						DATE: JULY 2017
						SHEET 3 OF 16



BY	DESCRIPTION	DATE			UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE		NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT		RESTORATION AREA PLAN VIEW - SAND MARSH
									DATE: JULY 2017
			DRAWN BY: BRETT BORNE, E.I.		DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048		APPROVED BY:		SHEET 4 OF 16

SCALE:
H: 1" = 500'
V: 1" = 20'



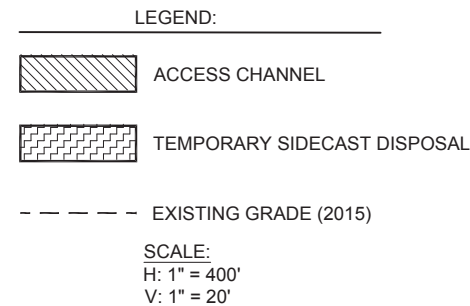
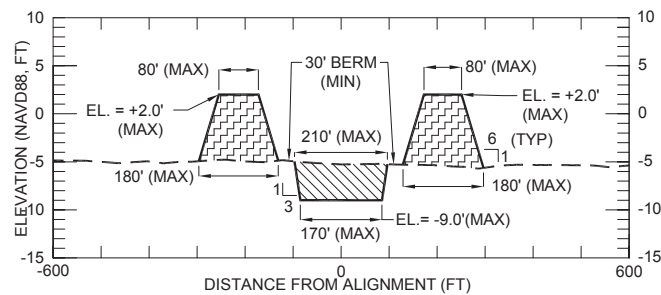
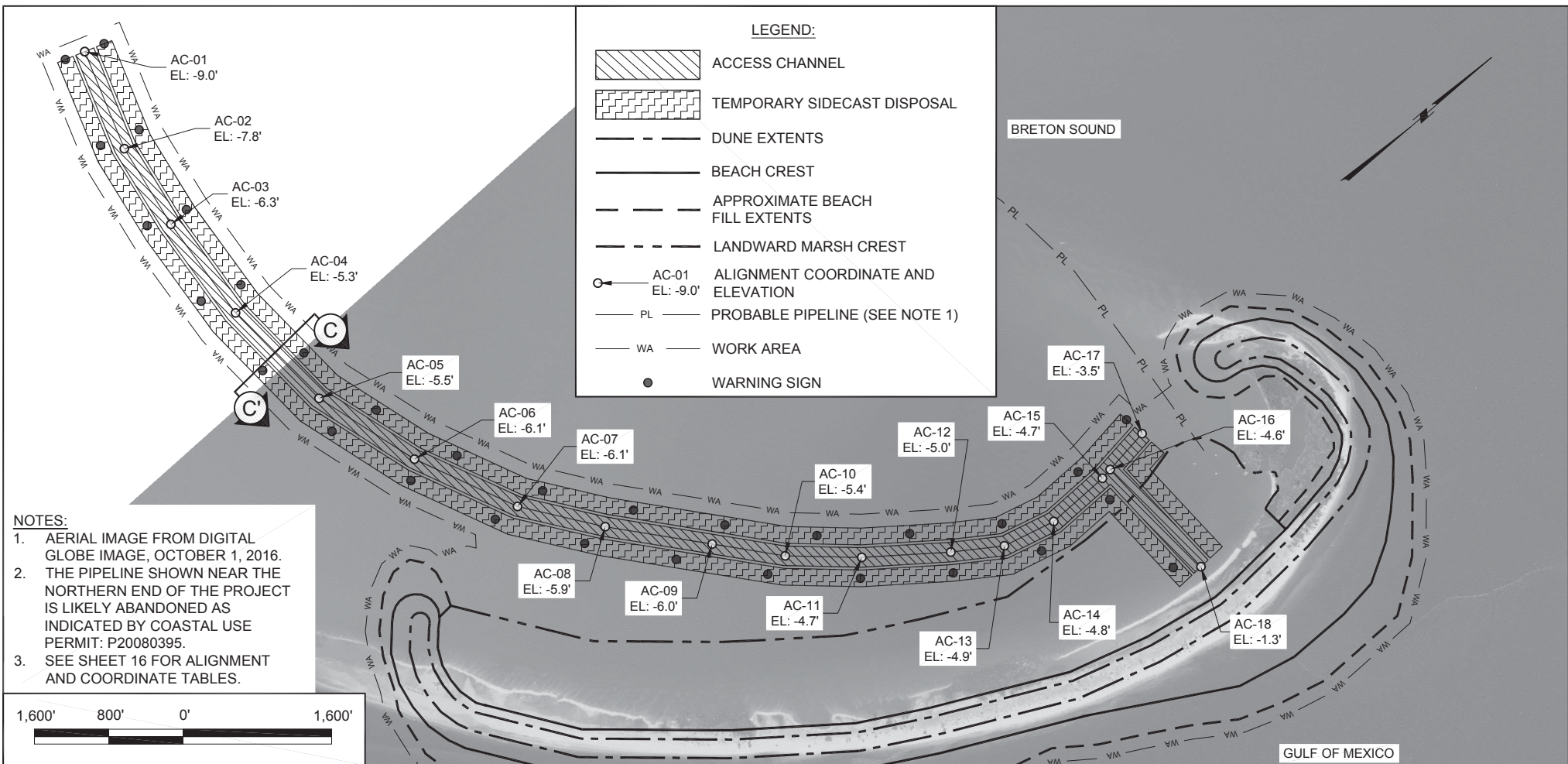
NOTES:

1. SECTIONS ARE VIEWED AS LOOKING SOUTH.
2. EXISTING GRADE SURVEY PERFORMED BY EMC SURVEYS, INC. IN 2015.
3. DIMENSIONS ARE PROVIDED FOR DESIGN PURPOSES AND DO NOT MEASURE ALONG THE SURVEY BASELINE.
4. A +1.0 FT ELEVATION CONSTRUCTION TOLERANCE SHALL BE ACCOMMODATED FOR CONSTRUCTION PURPOSES.

LEGEND

-----	EXISTING GRADE (2015)		BEACH & DUNE FILL
-----	CONSTRUCTION TOLERANCE		MARSH FILL

BY	DESCRIPTION	DATE	 OBG COASTAL ENGINEERING CONSULTANTS, INC.	UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	RESTORATION AREA TYPICAL SECTIONS - SAND MARSH
						DATE: JULY 2017
			DRAWN BY: BRETT BORNE, E.I.	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 5 OF 16

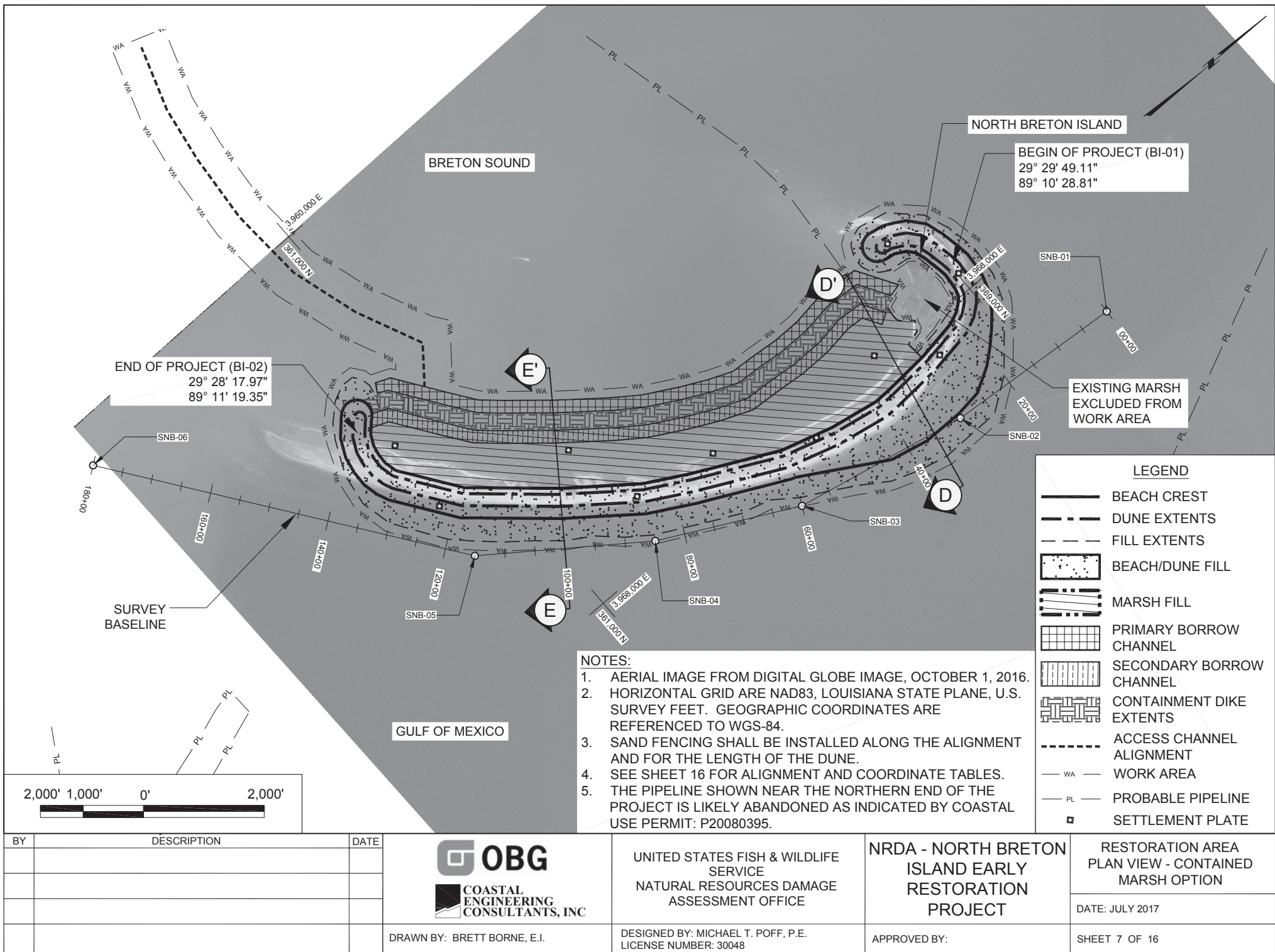


BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	RESTORATION AREA ACCESS CHANNEL - SAND MARSH
						DATE: JULY 2017
						SHEET 6 OF 16

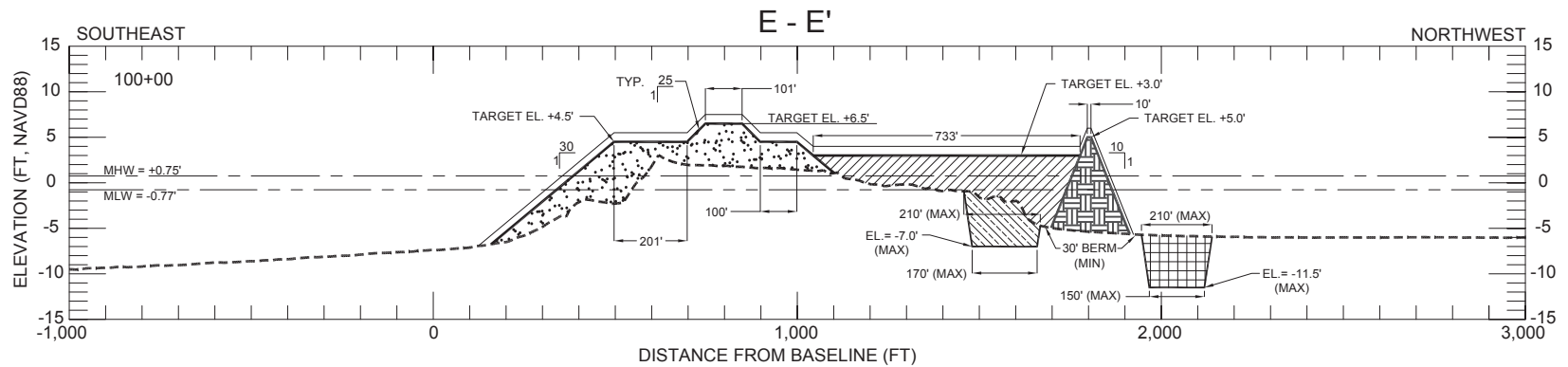
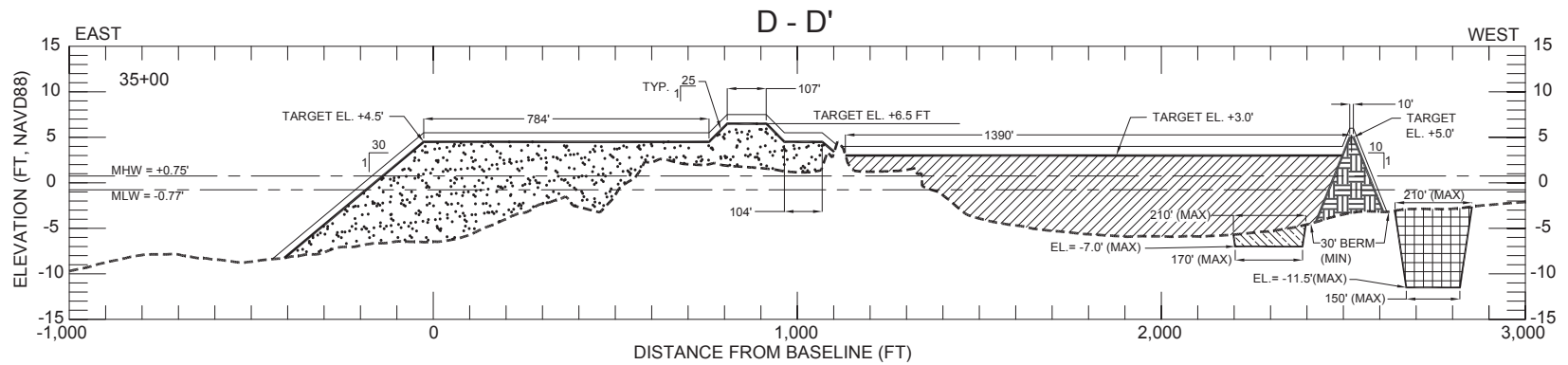
DRAWN BY: BRETT BORNE, E.I.

DESIGNED BY: MICHAEL T. POFF, P.E.
LICENSE NUMBER: 30048

APPROVED BY:



SCALE:
H: 1" = 500'
V: 1" = 20'



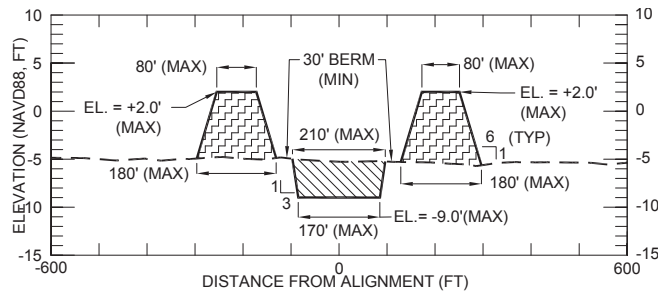
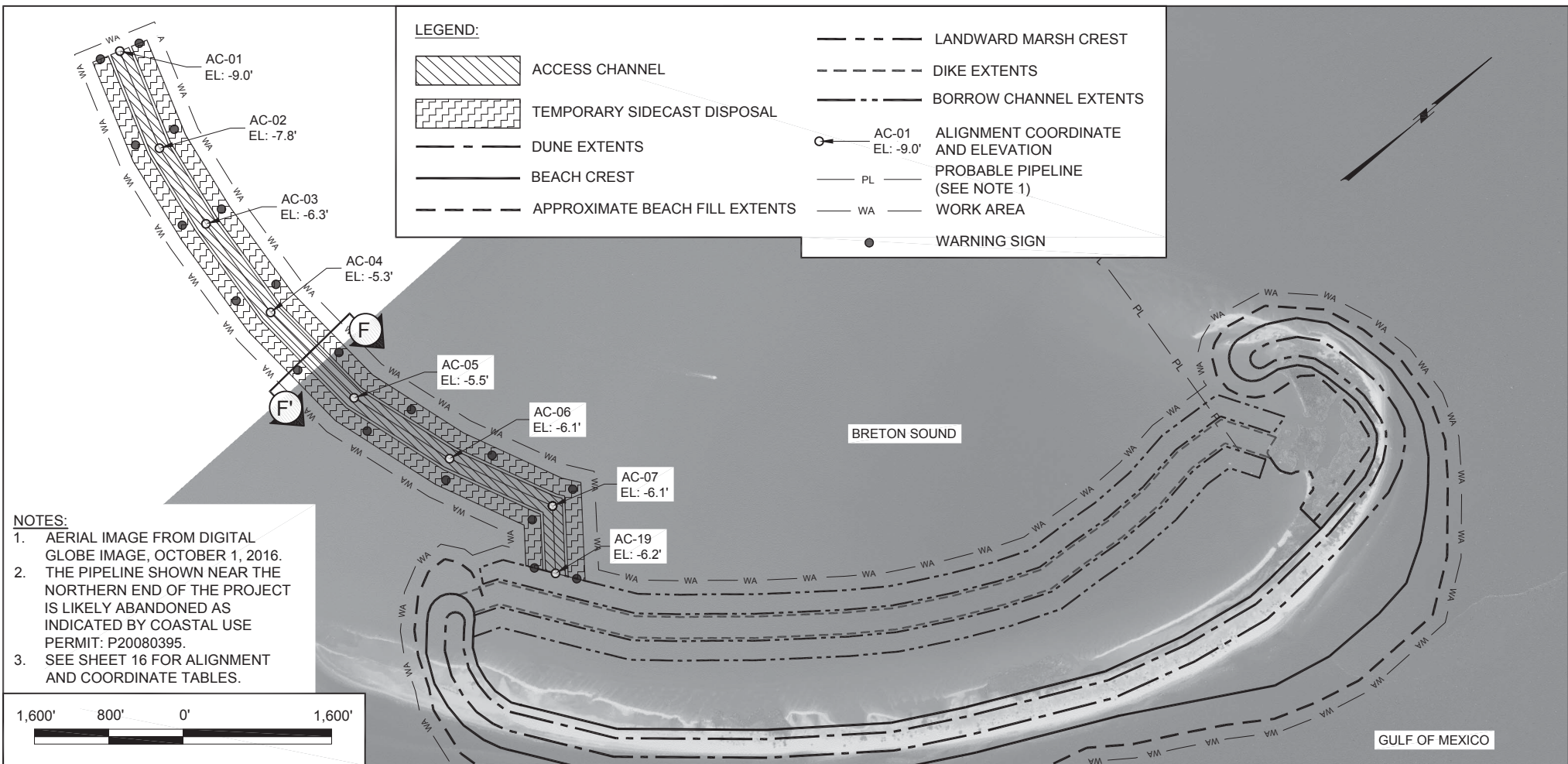
NOTES:

1. SECTIONS ARE VIEWED AS LOOKING SOUTH.
2. EXISTING GRADE SURVEY PERFORMED BY EMC SURVEYS, INC. IN 2015.
3. DIMENSIONS ARE PROVIDED FOR DESIGN PURPOSES AND DO NOT MEASURE ALONG THE SURVEY BASELINE.
4. A +1.0 FT ELEVATION CONSTRUCTION TOLERANCE SHALL BE ACCOMMODATED FOR CONSTRUCTION PURPOSES.

LEGEND

-----	EXISTING GRADE (2015)		BEACH & DUNE FILL		PRIMARY BORROW CHANNEL
	CONTAINMENT DIKE FILL		MARSH FILL		SECONDARY BORROW CHANNEL
—	CONSTRUCTION TOLERANCE				

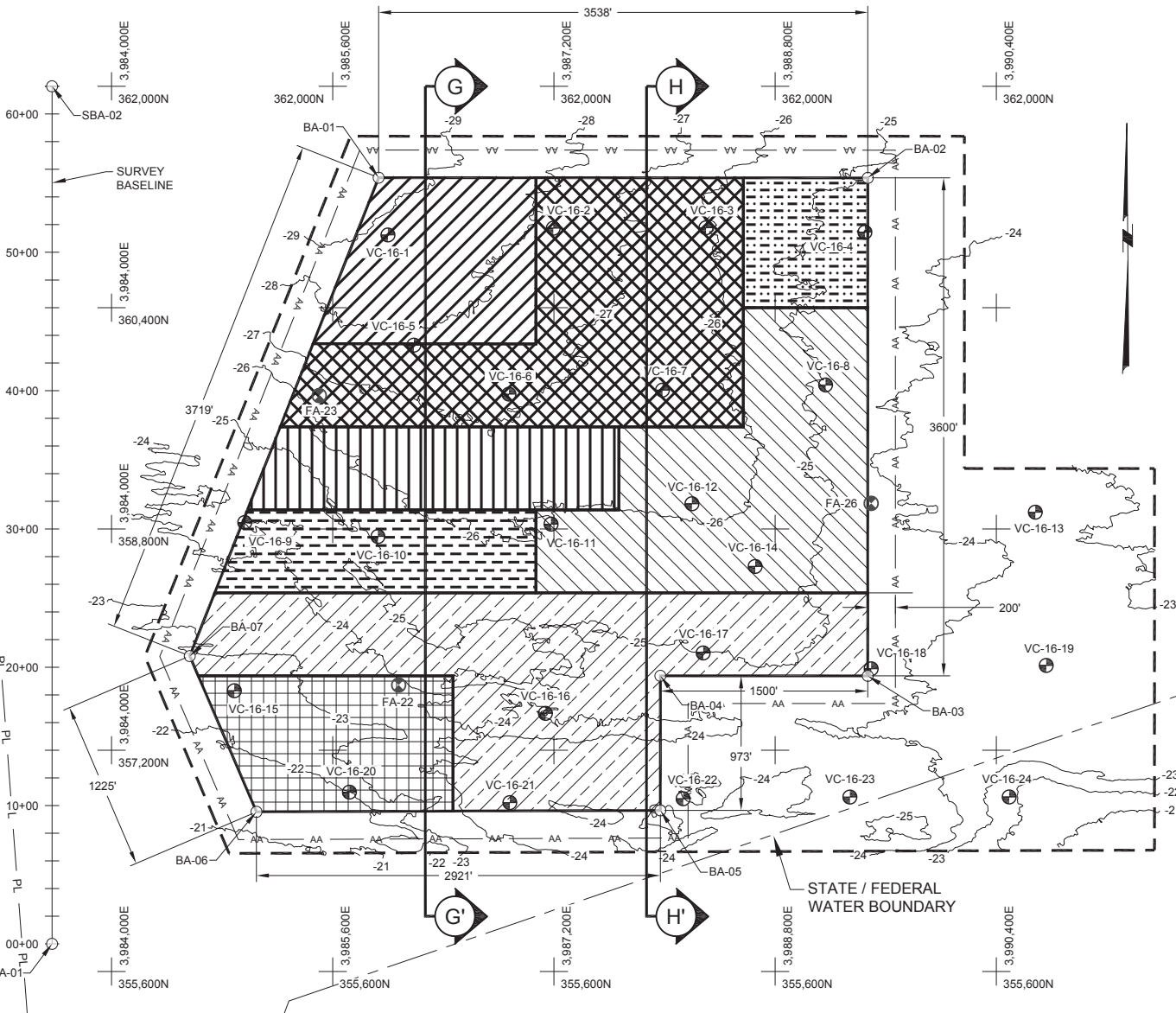
BY	DESCRIPTION	DATE	 OBG COASTAL ENGINEERING CONSULTANTS, INC.	UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	RESTORATION AREA TYPICAL SECTIONS - CONTAINED MARSH OPTION
						DATE: APRIL 2017
			DRAWN BY: BRETT BORNE, E.I.	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 8 OF 16



BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	RESTORATION AREA ACCESS CHANNEL - CONTAINED MARSH OPTION
						DATE: JULY 2017
						SHEET 9 OF 16

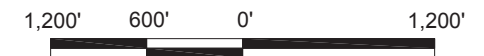
NOTES:

1. ALL COORDINATES ARE IN NAD 83, STATE PLANE - LOUISIANA SOUTH, U.S. SURVEY FEET.
2. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.
3. BATHYMETRIC SURVEY PERFORMED BY EMC SURVEYS, INC. IN MAY 2016.
4. GEOTECHNICAL INVESTIGATIONS PERFORMED BY THOMPSON ENGINEERING IN 2017 AND USGS IN 2014.
5. SEE SHEET 16 FOR ALIGNMENT AND COORDINATE TABLES.



LEGEND

- DESIGN CUT TOE
- DESIGN CUT: -49FT
MAX DISTURBANCE: -52FT
- DESIGN CUT: -47FT
MAX DISTURBANCE: -50FT
- DESIGN CUT: -46FT
MAX DISTURBANCE: -49FT
- DESIGN CUT: -45FT
MAX DISTURBANCE: -48FT
- DESIGN CUT: -42FT
MAX DISTURBANCE: -45FT
- DESIGN CUT: -36FT
MAX DISTURBANCE: -39FT
- DESIGN CUT: -34FT
MAX DISTURBANCE: -37FT
- DESIGN CUT: -32FT
MAX DISTURBANCE: -35FT
- BATHYMETRIC CONTOUR
(EMC, 2016)
- VC-16-1
GEOTECHNICAL VIBRACORE
(THOMPSON, 2017)
- FA-22
GEOTECHNICAL VIBRACORE
(USGS, 2014)
- 2016 SURVEY LIMITS
- SBA-01
BORROW AREA BASELINE
COORDINATE
- BA-01
BORROW AREA COORDINATE
- PL
PROBABLE PIPELINE
(EMC, 2016)
- AA
ALLOWABLE ANCHOR
AREA



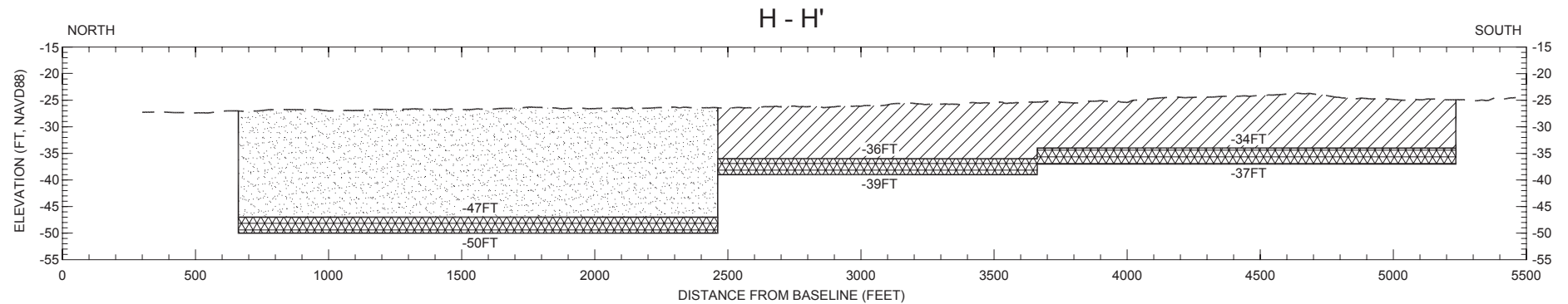
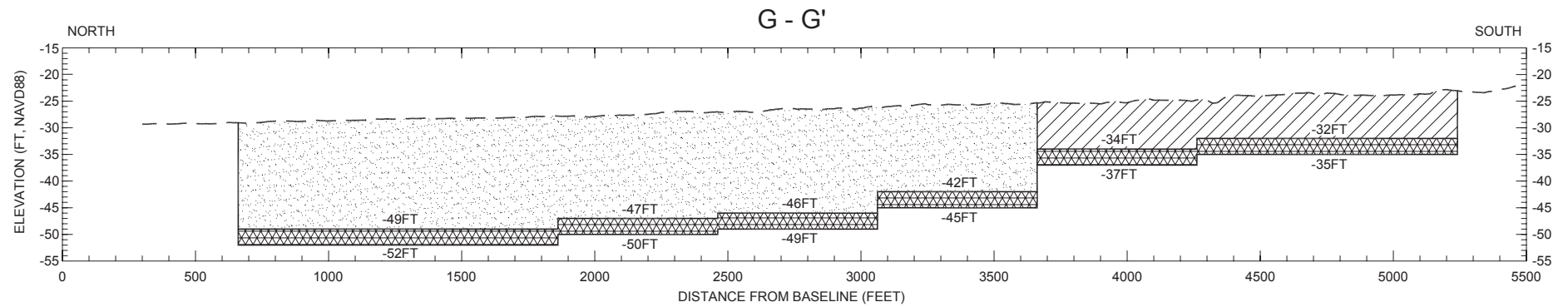
BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	BORROW AREA PLAN VIEW
						DATE: JULY 2017
						SHEET 10 OF 16

DRAWN BY: STEVE DARTEZ



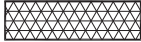
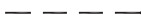
DESIGNED BY: MICHAEL T. POFF, P.E.
LICENSE NUMBER: 30048

APPROVED BY:

SCALE:
H: 1" = 600'
V: 1" = 30'




LEGEND:

-  BEACH/DUNE DESIGN DREDGE CUT
-  MARSH DESIGN DREDGE CUT
-  LIMIT OF DISTURBANCE
-  EXISTING GRADE (2016)

NOTES:

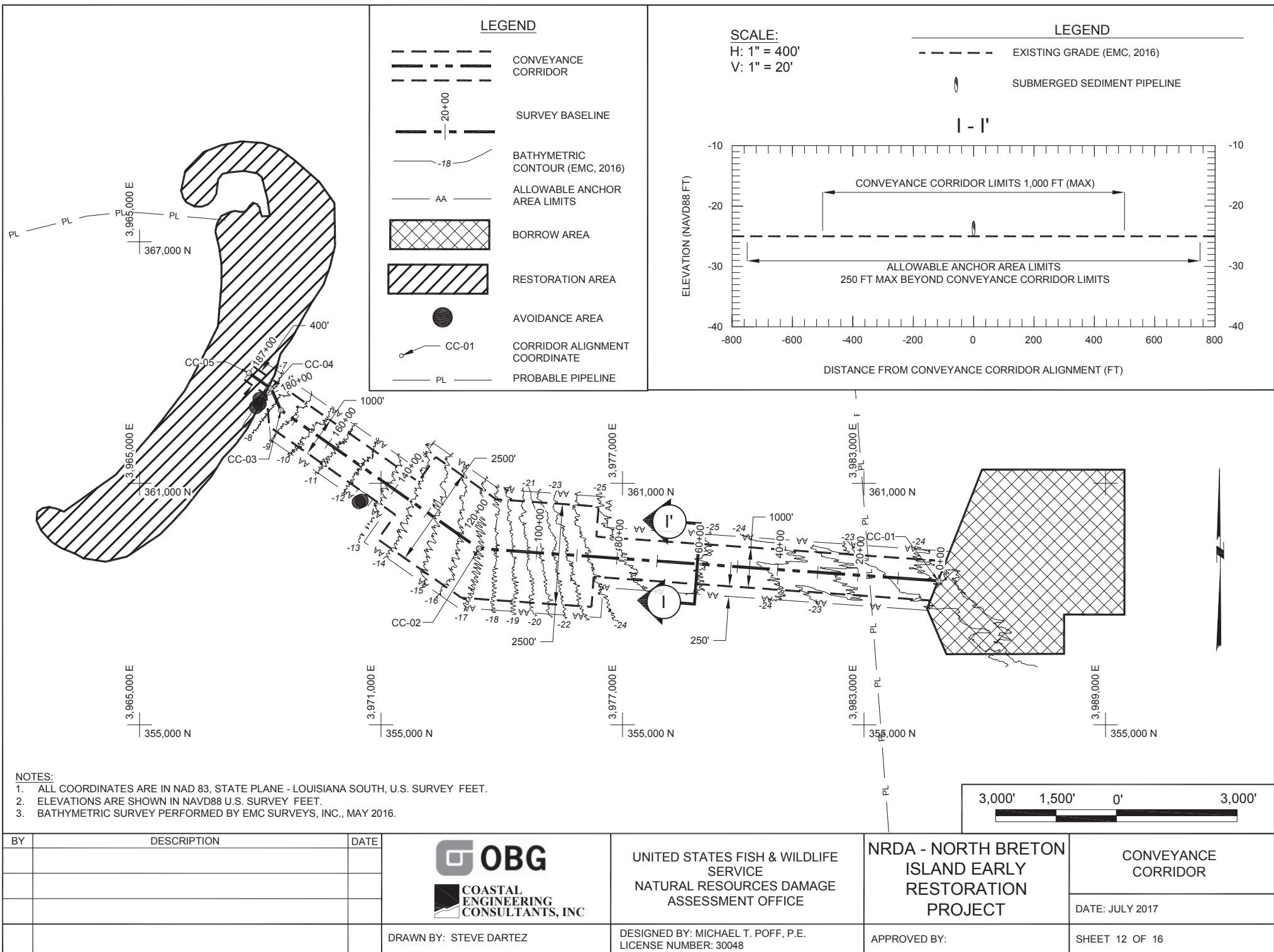
1. ELEVATIONS ARE SHOWN IN NAVD88 U.S. SURVEY FEET.
2. BATHYMETRIC SURVEY PERFORMED BY EMC SURVEYS, INC. IN MAY 2016.
3. MEAN HIGH WATER = +0.75' NAVD 88, MEAN LOW WATER = -0.77' NAVD 88.

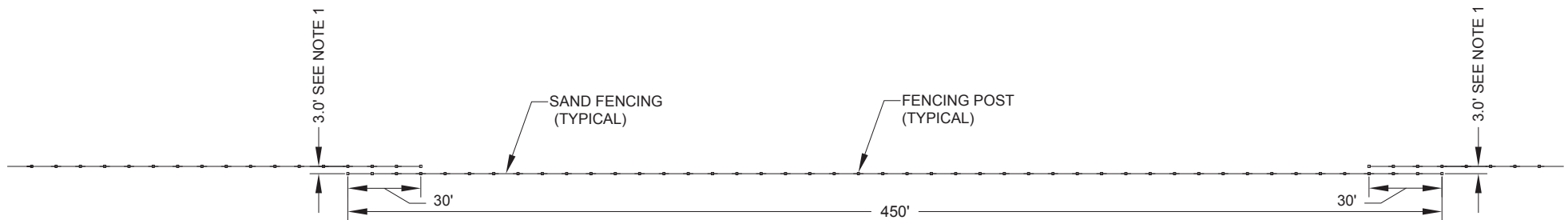
BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	BORROW AREA TYPICAL SECTIONS
						DATE: JULY 2017
						SHEET 11 OF 16

DRAWN BY: STEVE DARTEZ

DESIGNED BY: MICHAEL T. POFF, P.E.
LICENSE NUMBER: 30048

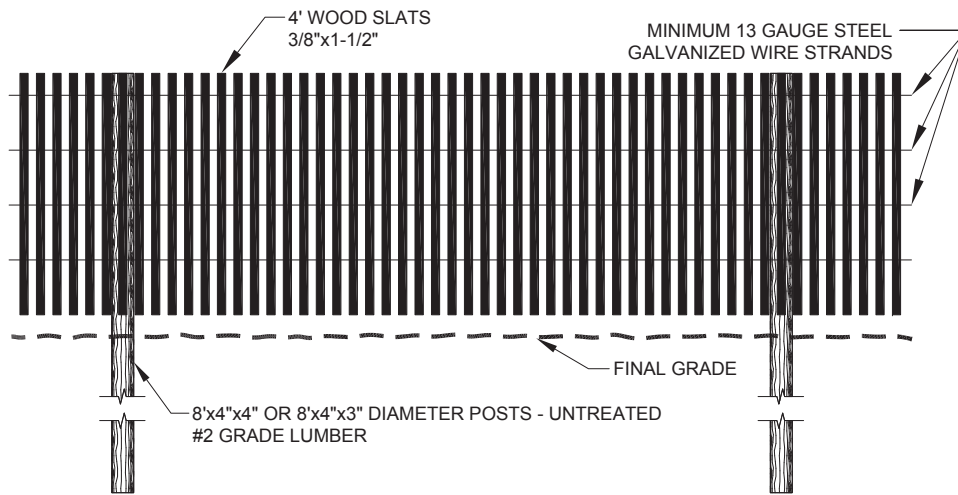
APPROVED BY:



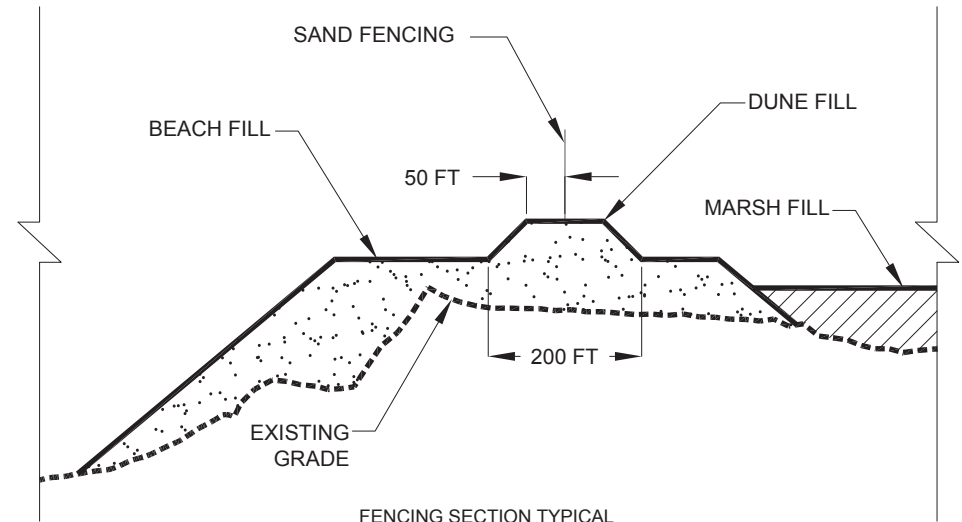


NOTES:
 1. THE DISTANCE BETWEEN FENCES SHALL BE INCREASED FROM 3.0' TO 8.0' AT EVERY FIFTH GAP TO ALLOW ALL-TERRAIN VEHICLE ACCESS.


FENCING GAPPING DIMENSIONS
 NOT TO SCALE

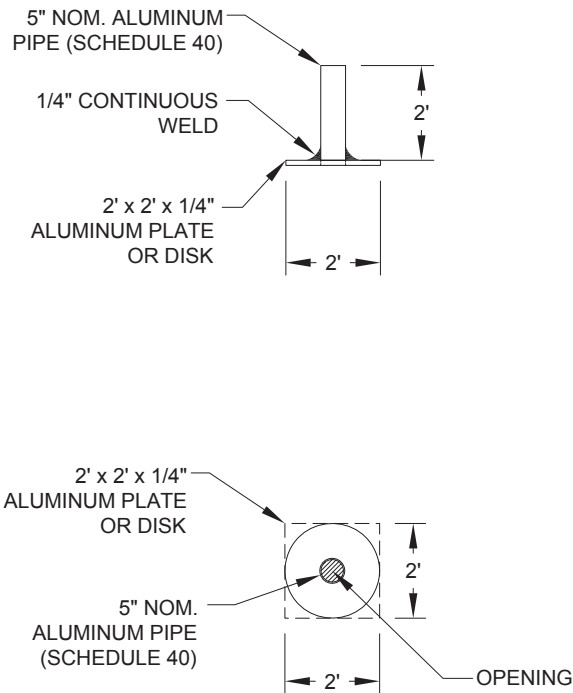


FENCING DETAIL
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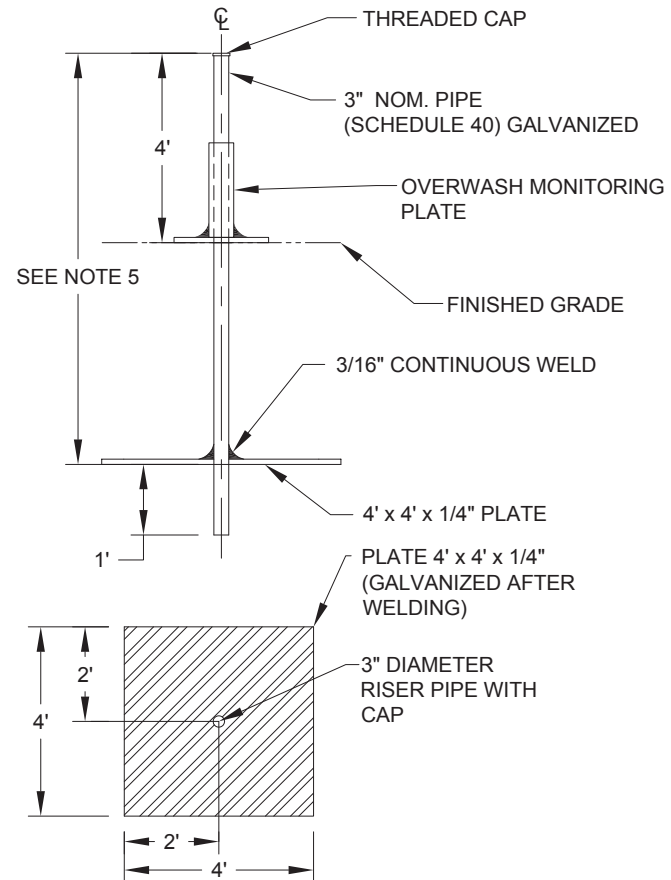


FENCING SECTION TYPICAL
 NOT TO SCALE

BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	SAND FENCING DETAILS
						DATE: JULY 2017
			DRAWN BY: STEVE DARTEZ	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 13 OF 16




OVERWASH MONITORING PLATE
(NOT TO SCALE)

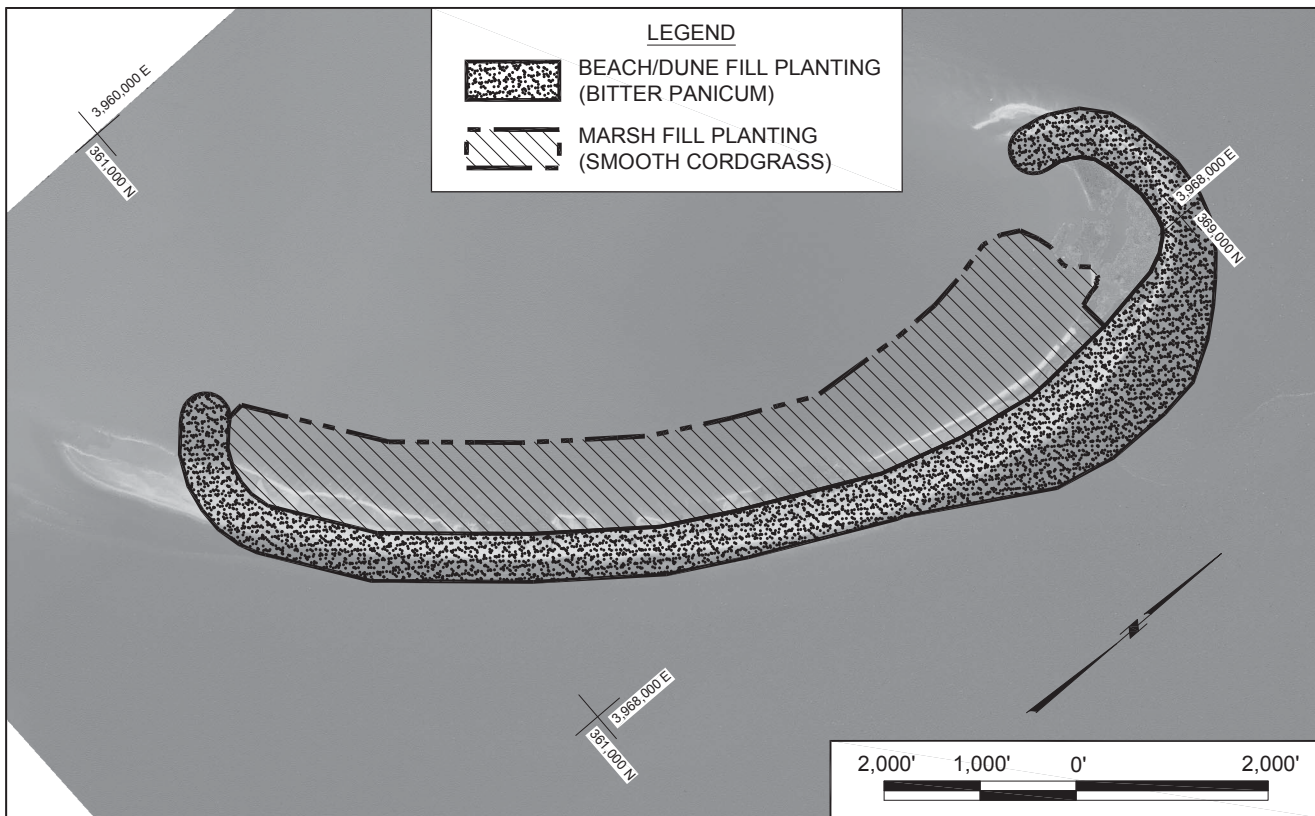


SETTLEMENT PLATE
(NOT TO SCALE)

SETTLEMENT AND OVERWASH MONITORING SYSTEM NOTES:

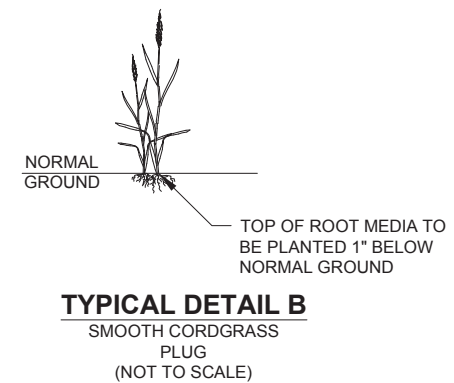
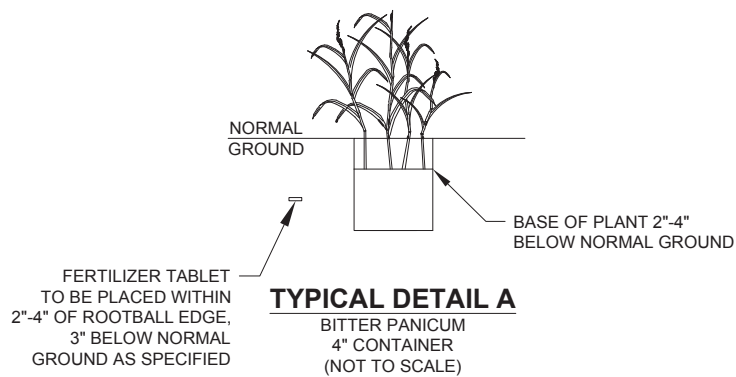
1. SETTLEMENT PLATES SHALL BE CONSTRUCTED USING ASTM A36 STEEL AND HOT-DIPPED GALVANIZED AFTER FABRICATION.
2. ALL SETTLEMENT PLATES SHALL BE SURVEYED WITHIN A DAY OF INSTALLATION AND WEEKLY THROUGHOUT THE DURATION OF THE PROJECT.
3. ALL SETTLEMENT PLATES MUST BE INSTALLED AND MAINTAINED WITHIN 10.5 DEGREES OF VERTICAL.
4. ALL SETTLEMENT PLATES SHALL BE MARKED WITH SURVEY FLAGGING.
5. LENGTH OF THE SETTLEMENT PLATE RISER PIPE SHALL BE SUCH THAT THE ELEVATION OF THE TOP CAP BE NO LESS THAN 4 FEET ABOVE MAXIMUM FINAL DESIGN GRADE FOR ITS LOCATION.
6. OVERWASH MONITORING PLATES SHALL BE FABRICATED USING 6061-TS GRADE ALUMINUM PER SPECIFICATION TS-16.


BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	MONITORING SYSTEM AND WARNING SIGN DETAILS
						DATE: JULY 2017
			DRAWN BY: STEVE DARTEZ	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 14 OF 16



NOTES:

1. BITTER PANICUM PLANTS SHALL BE PLANTED ON SEVEN (7) FOOT CENTERS WITH ROWS TEN (10) FEET APART.
2. SMOOTH CORDGRASS PLANTS SHALL BE PLANTED ON THREE (3) FOOT CENTERS WITH ROWS THREE (3) FEET APART.
3. SPECIES OF PLANTS ARE SUBJECT TO CHANGE DUE TO SITE CONDITIONS AND / OR CONSTRUCTION VARIABLES.
4. AERIAL IMAGE FROM DIGITAL GLOBE IMAGE, OCTOBER 1, 2016.



BY	DESCRIPTION	DATE		UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	VEGETATIVE PLANTING DETAILS
						DATE: JULY 2017
			DRAWN BY: STEVE DARTEZ	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:	SHEET 15 OF 16

NORTH BRETON ISLAND RESTORATION AREA EXTENTS				
PI NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
BI-01	369,034.51	3,967,524.73	29° 29' 49.11"	89° 10' 28.81"
BI-02	359,745.92	3,963,231.64	29° 28' 17.97"	89° 11' 19.35"

ISLAND SURVEY BASELINE ALIGNMENT				
PI NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
SNB-01	370,479.40	3,969,764.06	29° 30' 02.99"	89° 10' 03.16"
SNB-02	367,488.77	3,969,527.14	29° 29' 33.44"	89° 10' 06.48"
SNB-03	364,550.83	3,968,920.13	29° 29' 04.47"	89° 10' 13.98"
SNB-04	362,327.17	3,967,777.62	29° 28' 42.67"	89° 10' 27.38"
SNB-05	359,897.01	3,966,018.54	29° 28' 18.95"	89° 10' 47.79"
SNB-06	356,073.87	3,960,761.77	29° 27' 42.08"	89° 11' 48.06"


ACCESS CHANNEL ALIGNMENT				
PI NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
AC-01	361,190.49	3,956,028.54	29° 28' 33.59"	89° 12' 40.52"
AC-02	360,833.71	3,957,099.44	29° 28' 29.86"	89° 12' 28.49"
AC-03	360,684.19	3,958,043.72	29° 28' 28.21"	89° 12' 17.84"
AC-04	360,591.38	3,959,220.19	29° 28' 27.07"	89° 12' 04.55"
AC-05	360,674.61	3,960,503.52	29° 28' 27.66"	89° 11' 50.01"
AC-06	361,028.28	3,961,669.49	29° 28' 30.95"	89° 11' 36.75"
AC-07	361,538.47	3,962,778.28	29° 28' 35.80"	89° 11' 24.10"
AC-08	362,112.86	3,963,558.79	29° 28' 41.34"	89° 11' 15.15"
AC-09	362,865.39	3,964,450.08	29° 28' 48.62"	89° 11' 04.91"
AC-10	363,379.60	3,965,058.97	29° 28' 53.60"	89° 10' 57.91"
AC-11	363,994.51	3,965,608.34	29° 28' 59.58"	89° 10' 51.56"
AC-12	364,759.09	3,966,188.89	29° 29' 07.04"	89° 10' 44.83"
AC-13	365,240.98	3,966,513.78	29° 29' 11.75"	89° 10' 41.06"
AC-14	365,815.78	3,966,660.81	29° 29' 17.41"	89° 10' 39.27"
AC-15	366,515.43	3,966,648.98	29° 29' 24.34"	89° 10' 39.25"
AC-16	366,639.67	3,966,632.08	29° 29' 25.57"	89° 10' 39.42"
AC-17	367,152.27	3,966,562.36	29° 29' 30.66"	89° 10' 40.10"
AC-18	366,700.87	3,968,062.10	29° 29' 25.91"	89° 10' 23.23"
AC-19	361,090.90	3,963,349.45	29° 28' 31.26"	89° 11' 17.73"

BORROW AREA COORDINATES (BOTTOM OF CUT)				
POINT NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
BA-01	361,339.69	3,985,932.20	29° 28' 29.47"	89° 07' 02.23"
BA-02	361,338.04	3,989,470.00	29° 28' 28.77"	89° 06' 22.21"
BA-03	357,738.05	3,989,470.00	29° 27' 53.14"	89° 06' 23.00"
BA-04	357,738.05	3,987,970.00	29° 27' 53.43"	89° 06' 39.97"
BA-05	356,765.23	3,987,970.00	29° 27' 43.80"	89° 06' 40.18"
BA-06	356,754.78	3,985,048.69	29° 27' 44.26"	89° 07' 13.23"
BA-07	357,881.09	3,984,566.11	29° 27' 55.50"	89° 07' 18.44"

BORROW AREA SURVEY BASELINE ALIGNMENT				
PI NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
SBA-01	355,800.00	3,983,570.00	29° 27' 35.09"	89° 07' 30.16"
SBA-02	362,000.00	3,983,570.00	29° 28' 36.46"	89° 07' 28.81"

SETTLEMENT AND OVERWASH MONITORING SYSTEM COORDINATES				
NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
MS-01	368,451.32	3,966,550.15	29° 29' 43.52"	89° 10' 39.96"
MS-02	369,027.31	3,967,688.04	29° 29' 49.01"	89° 10' 26.96"
MS-03	367,908.64	3,968,511.12	29° 29' 37.78"	89° 10' 17.89"
MS-04	367,077.98	3,967,813.62	29° 29' 29.69"	89° 10' 25.96"
MS-05	365,466.32	3,968,218.38	29° 29' 13.66"	89° 10' 21.72"
MS-06	363,998.58	3,967,299.52	29° 28' 59.31"	89° 10' 32.43"
MS-07	362,580.51	3,967,024.23	29° 28' 45.32"	89° 10' 35.85"
MS-08	362,214.69	3,965,700.37	29° 28' 41.95"	89° 10' 50.90"
MS-09	359,987.92	3,965,012.40	29° 28' 20.03"	89° 10' 59.16"
MS-10	360,081.89	3,963,773.51	29° 28' 21.19"	89° 11' 13.15"

CONVEYANCE CORRIDOR AND SURVEY BASELINE ALIGNMENT				
PI NUMBER	NORTHING	EASTING	LATITUDE	LONGITUDE
CC-01	358,577.56	3,984,845.54	29° 28' 02.34"	89° 07' 15.13"
CC-02	359,379.37	3,973,431.55	29° 28' 12.44"	89° 09' 24.05"
CC-03	362,816.75	3,968,513.79	29° 28' 47.38"	89° 10' 18.95"
CC-04	363,356.07	3,968,265.68	29° 28' 52.77"	89° 10' 21.64"
CC-05	363,737.82	3,967,719.52	29° 28' 56.65"	89° 10' 27.74"

BY	DESCRIPTION	DATE	 OBG COASTAL ENGINEERING CONSULTANTS, INC	UNITED STATES FISH & WILDLIFE SERVICE NATURAL RESOURCES DAMAGE ASSESSMENT OFFICE	NRDA - NORTH BRETON ISLAND EARLY RESTORATION PROJECT	COORDINATE AND ALIGNMENT TABLES
						DATE: JULY 2017
				DRAWN BY: STEVE DARTEZ	DESIGNED BY: MICHAEL T. POFF, P.E. LICENSE NUMBER: 30048	APPROVED BY:
						SHEET 16 OF 16