JOINT PUBLIC NOTICE

February 11, 2019

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

(504) 862-1280/FAX (504) 862-1697
brian.w.breaux@usace.army.mil
Project Manager
Brian Breaux
Permit Application Number
MVN 2012-01428-MB

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

(225) 219-3225/FAX (225) 325-8250
Elizabeth.Hill@la.gov
Project Manager
Elizabeth Hill
WQC Application Number
WQC 190131-02

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).

PROPOSED ESTUARY MITIGATION BANK IN JEFFERSON PARISH

NAME OF APPLICANT: Estuary Mitigation, LLC, c/o The Natural Resources Investment Group, LLC, 3801 Woodland Heights Road, Suite 110, Little Rock, Arkansas 72212, ATTN: Brad Humber.

LOCATION OF WORK: Located in the Gulf Intracoastal Waterway and in Section 15, T15S-R23E and Section 37, T15S-R24E, near Crown Point, Louisiana, in Jefferson Parish, as shown on the attached drawings. (Lat. 29.75278, Long. -89.9206).

Hydrologic Unit Code: 08090301 – East-Central Louisiana Coastal (Barataria Basin).

CHARACTER OF WORK: The applicant/mitigation bank sponsor proposes to dredge/excavate approximately 1,000,000 cubic yards of material from the nearby Gulf Intracoastal Waterway and deposit the material as substrate for marsh restoration in open water canals. Spoil banks adjoining the fill area of the canals will be degraded with the materials similarly used. Bulkheads and a dock will be installed at various strategic locations in the marsh restoration area for containment and staging/monitoring. The work proposed is anticipated to restore approximately 120 acres of fresh/intermediate marsh for establishment of the Estuary Mitigation Bank.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **30 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. Copies of this public notice will be forwarded to the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources.

The New Orleans District has determined that the approximately 100-acre dredge area in the Intracoastal Waterway and approximately 65-acre canal fill area are located in West Indian Manatee Consultation Zone (*Trichechus manatus)* and determined that the activity is not likely to adversely affect this species based on the Standard Local Operating Procedure for Endangered Species in Louisiana (SLOPES), dated October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans and U.S. Fish and Wildlife Service, Ecological Services Office. If this permit is issued, the applicant has agreed to the following conditions provided in the SLOPES manual:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at “no wake/idle” speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

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 approximately 165 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.

Michael V. Farabee
Chief, Eastern Evaluation Section
Regulatory Branch

Enclosure

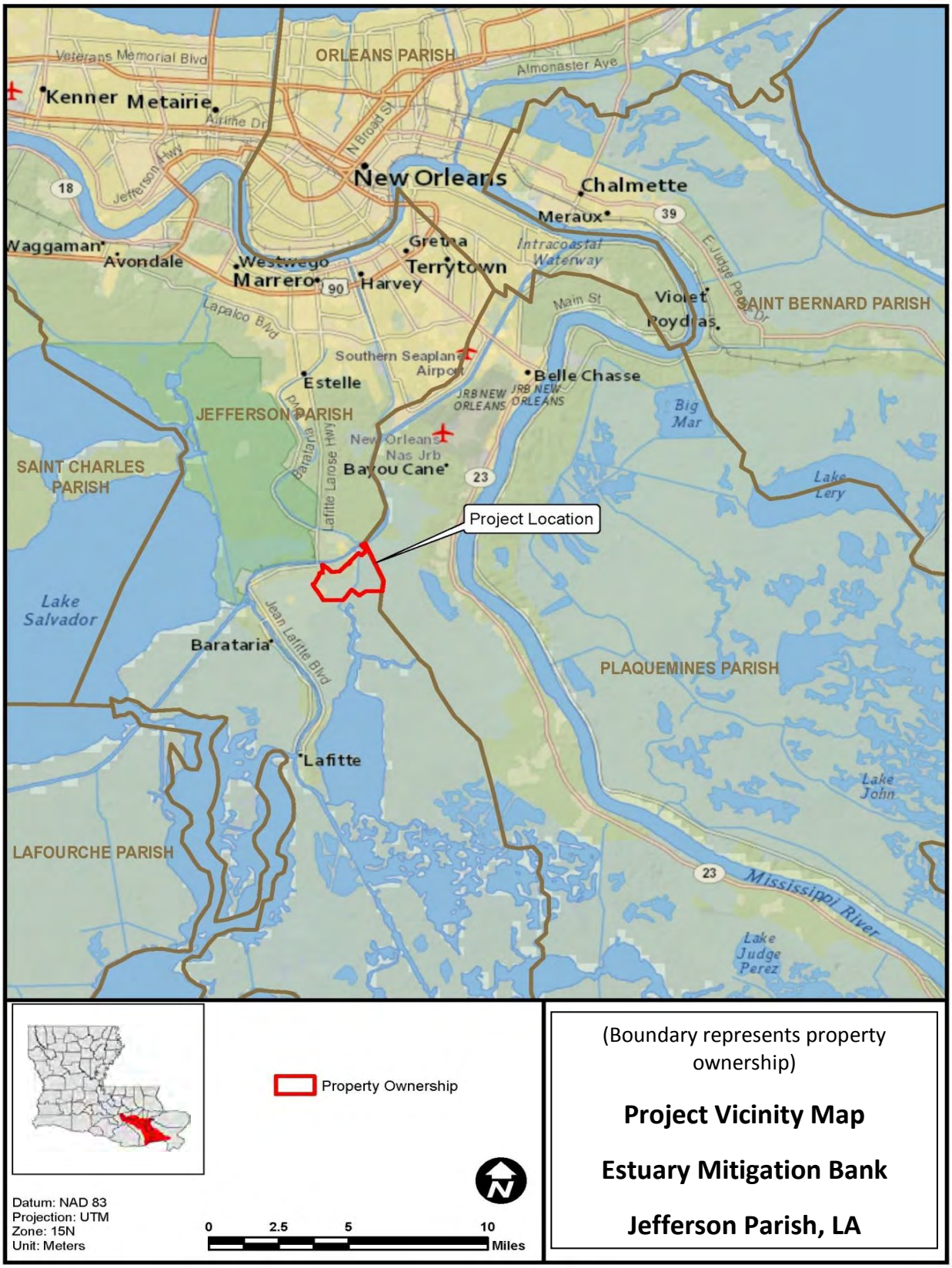


FIGURE 1. Vicinity Map

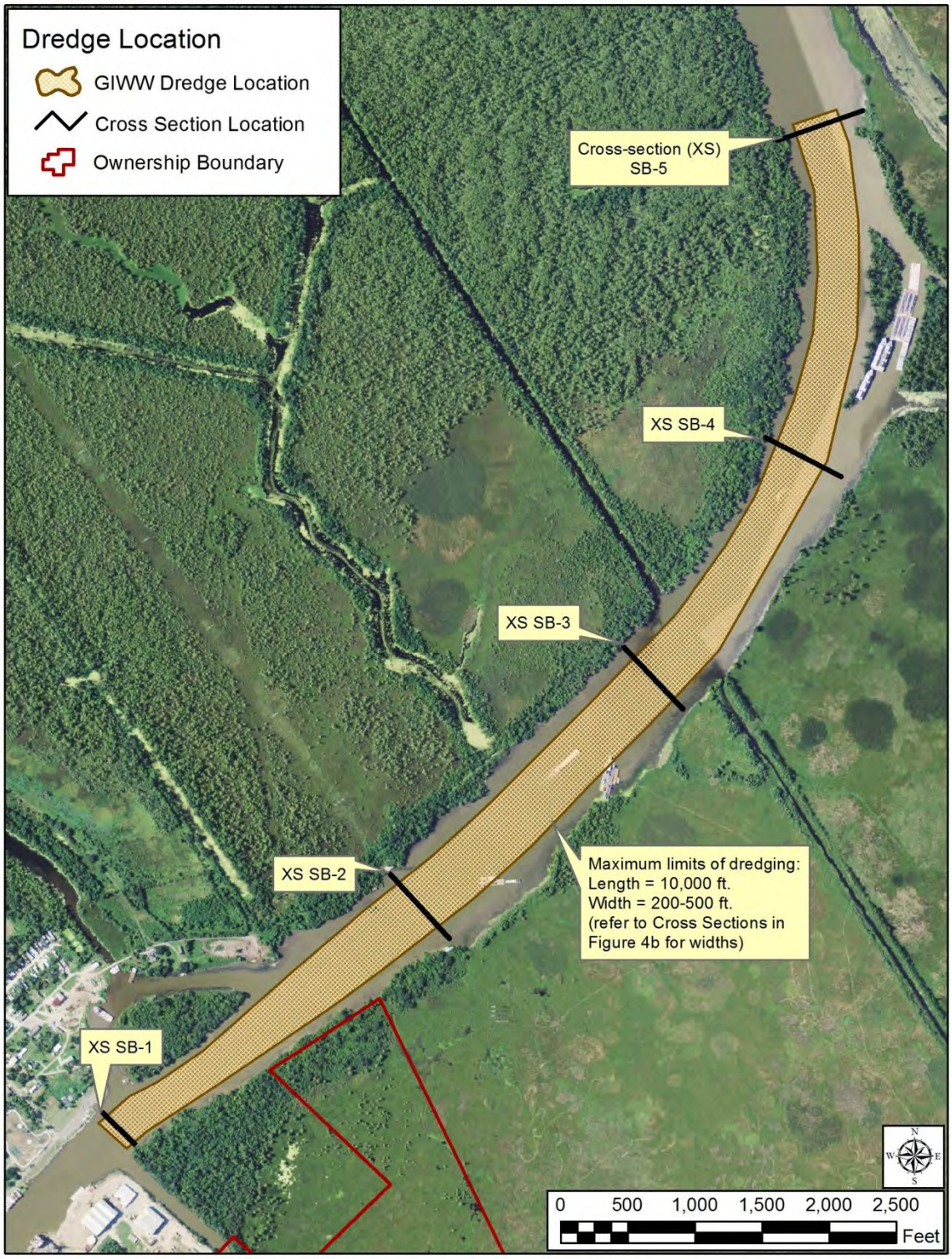


FIGURE 2. Dredge Location in GIWW.

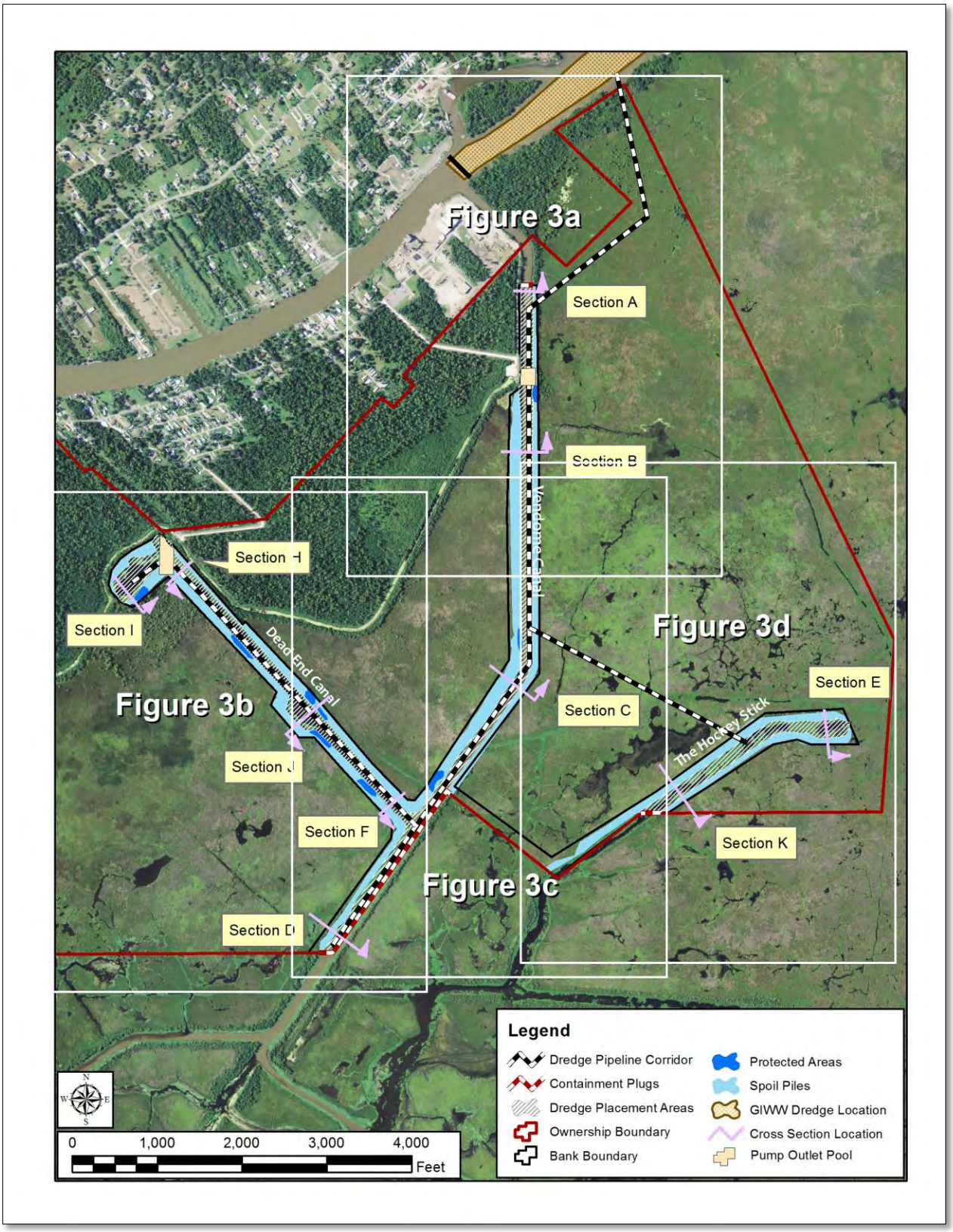


FIGURE 3. Index Map of Dredge Placement

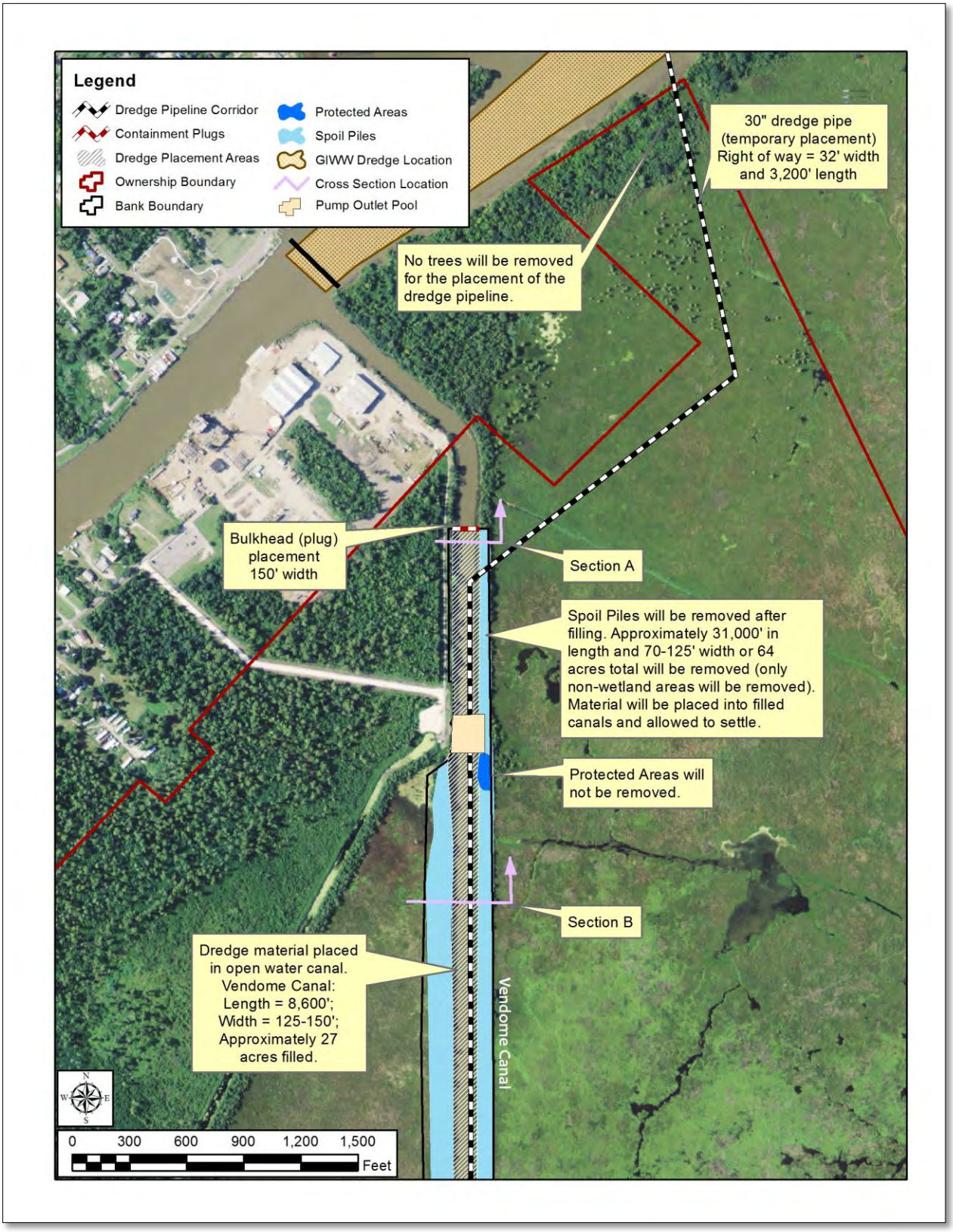


FIGURE 3a. Dredge Placement, Pipe Location, Cross Section Locations, and Spoil Piles.

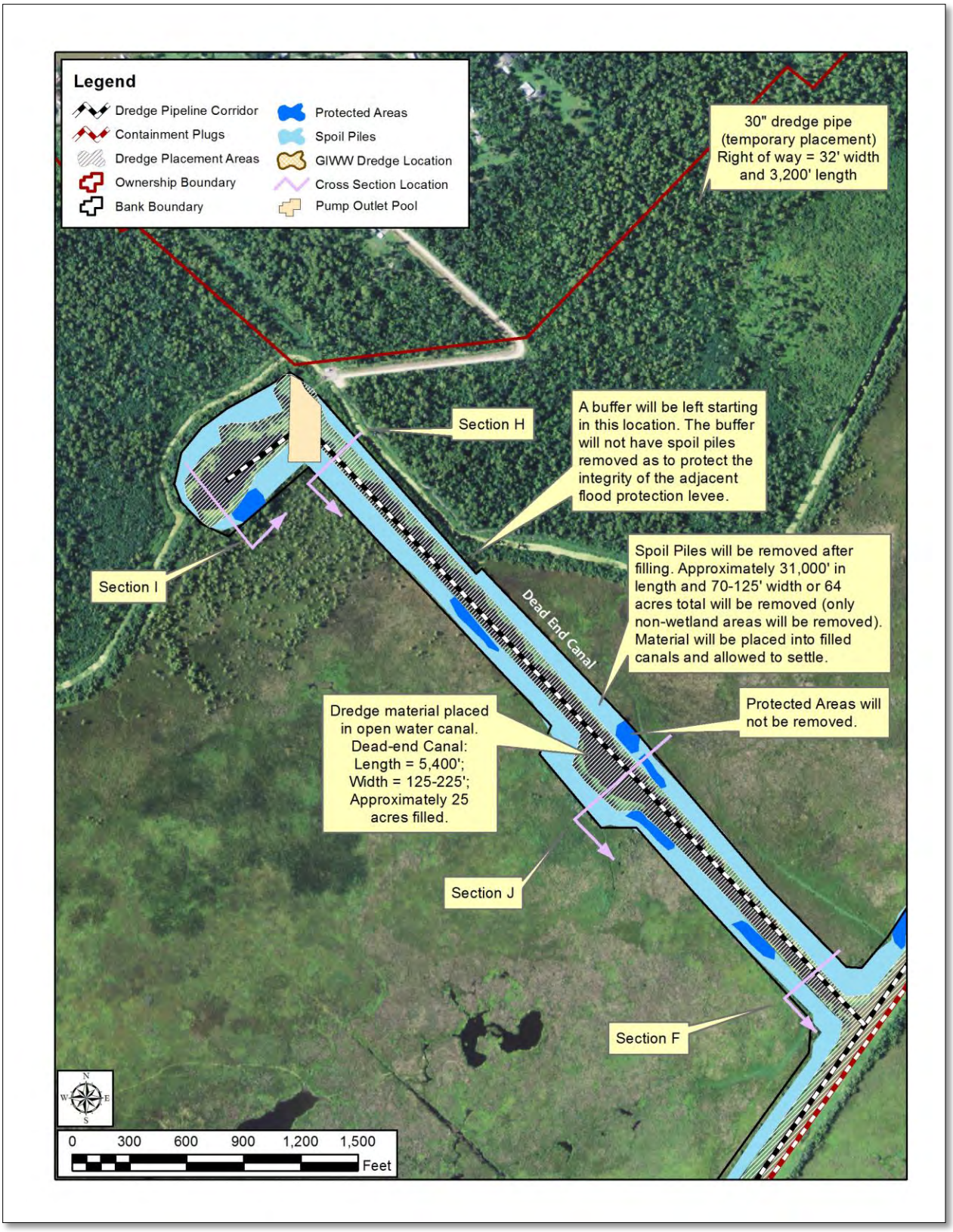


FIGURE 3b. Dredge Placement, Pipe Location, Cross Section Locations, and Spoil Piles.

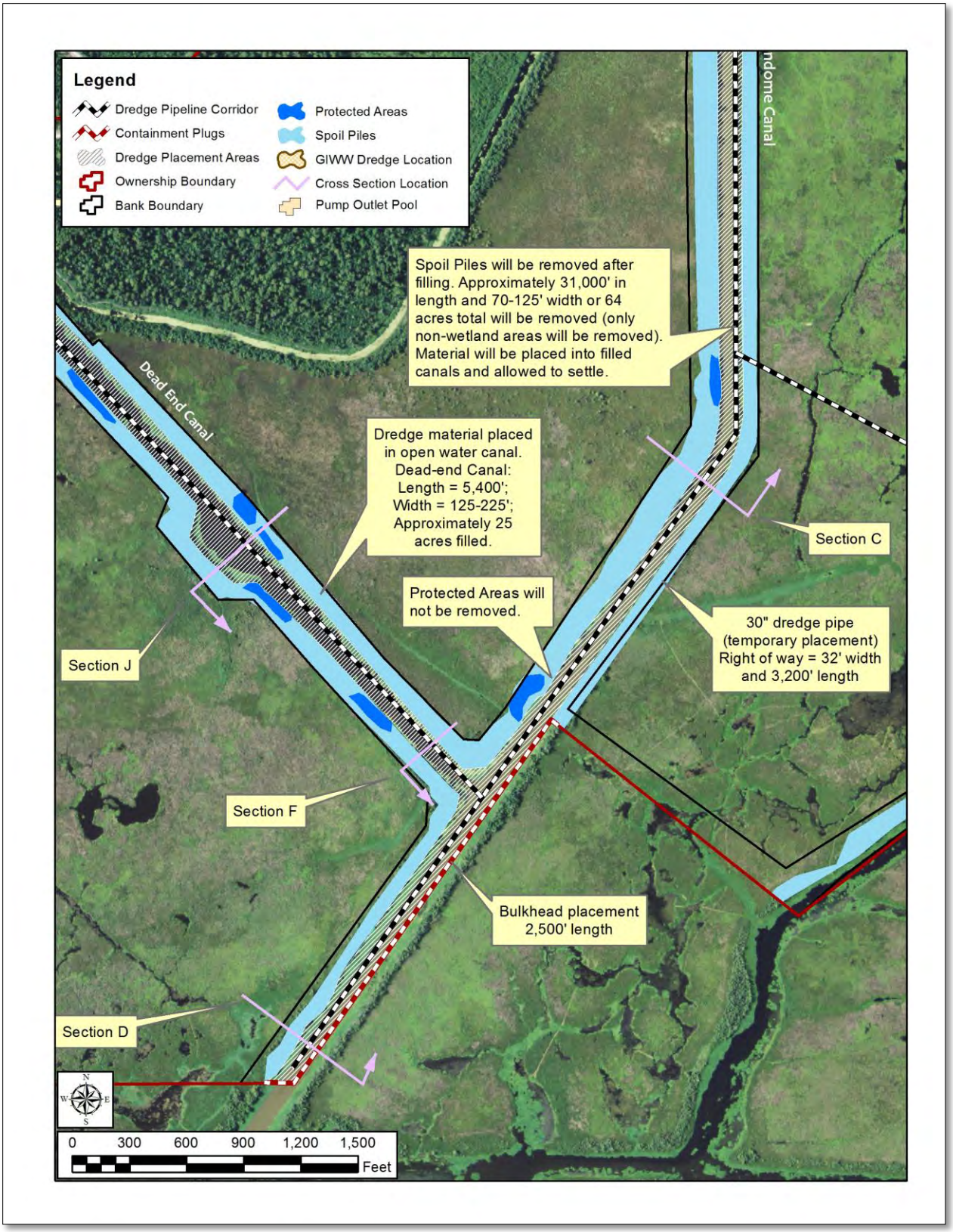


FIGURE 3c. Dredge Placement, Pipe Location, Cross Section Locations, and Spoil Piles.

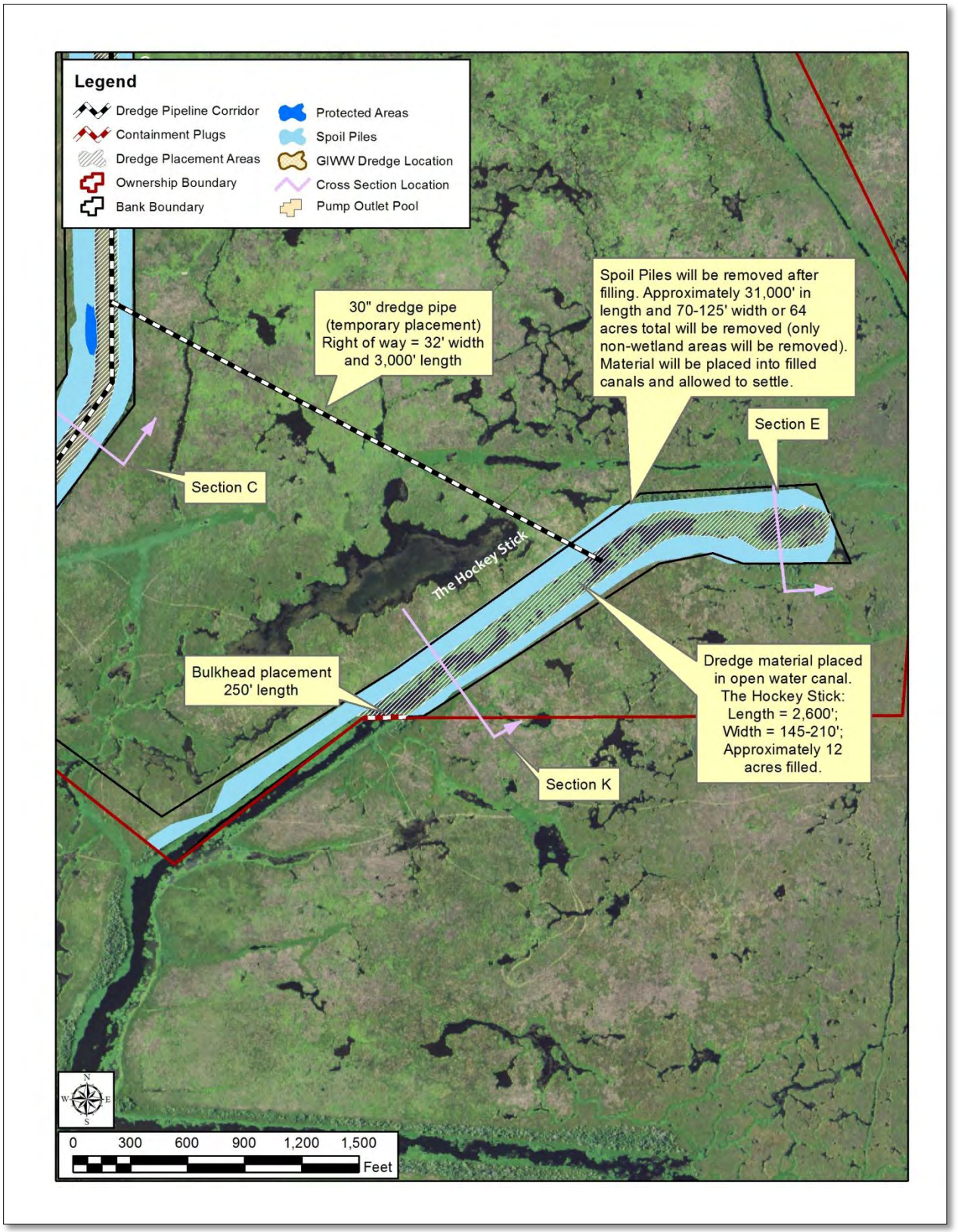
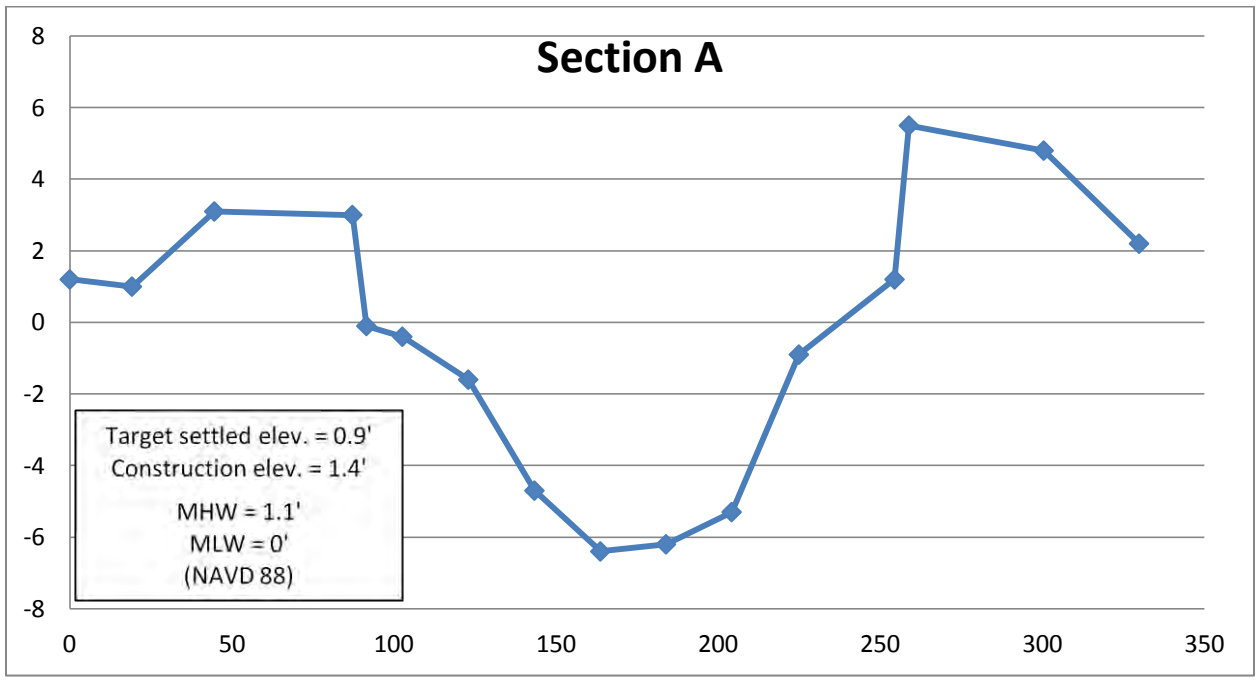
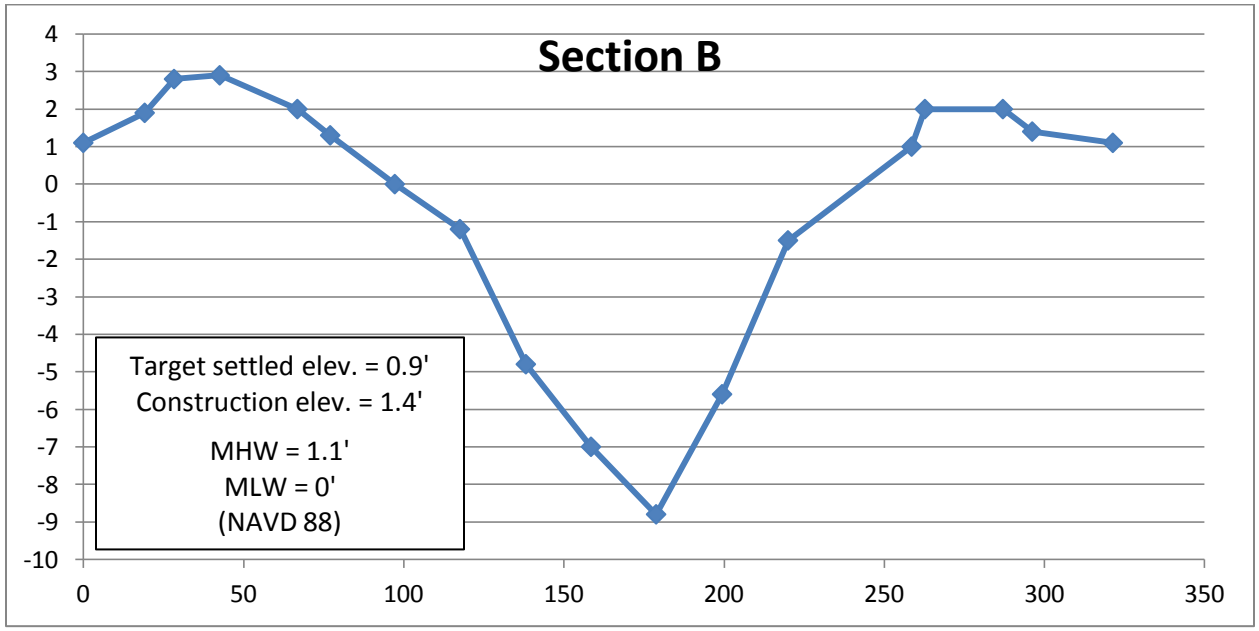


FIGURE 3d. Dredge Placement, Pipe Location, Cross Section Locations, and Spoil Piles.

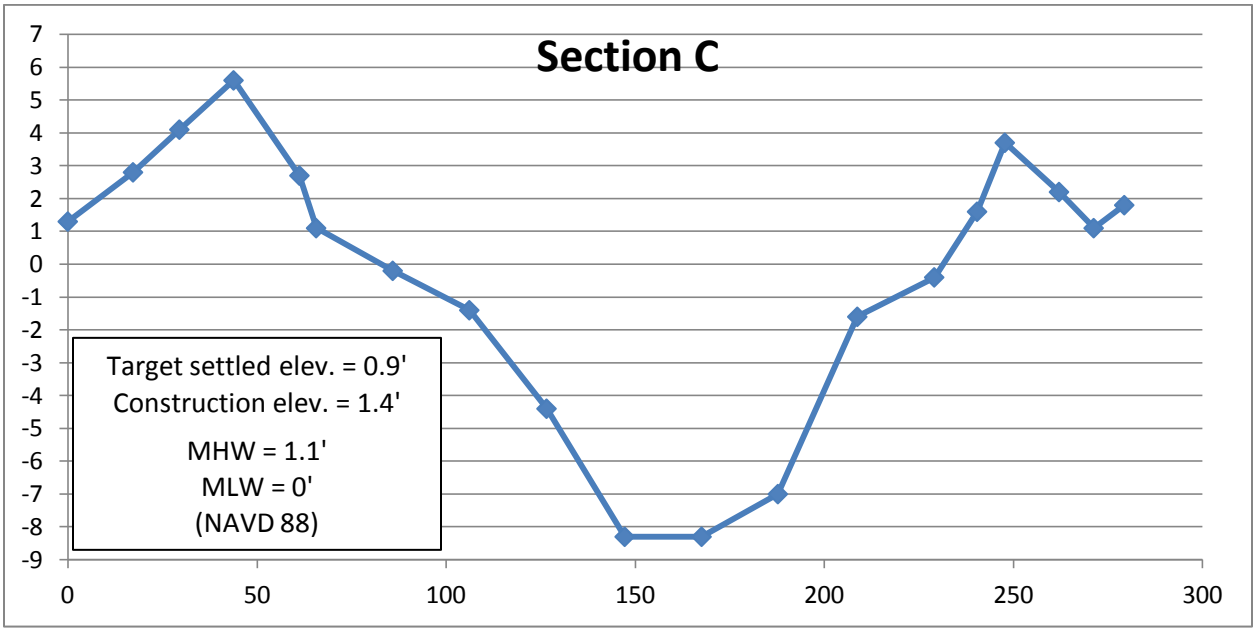
FIGURE 4A.

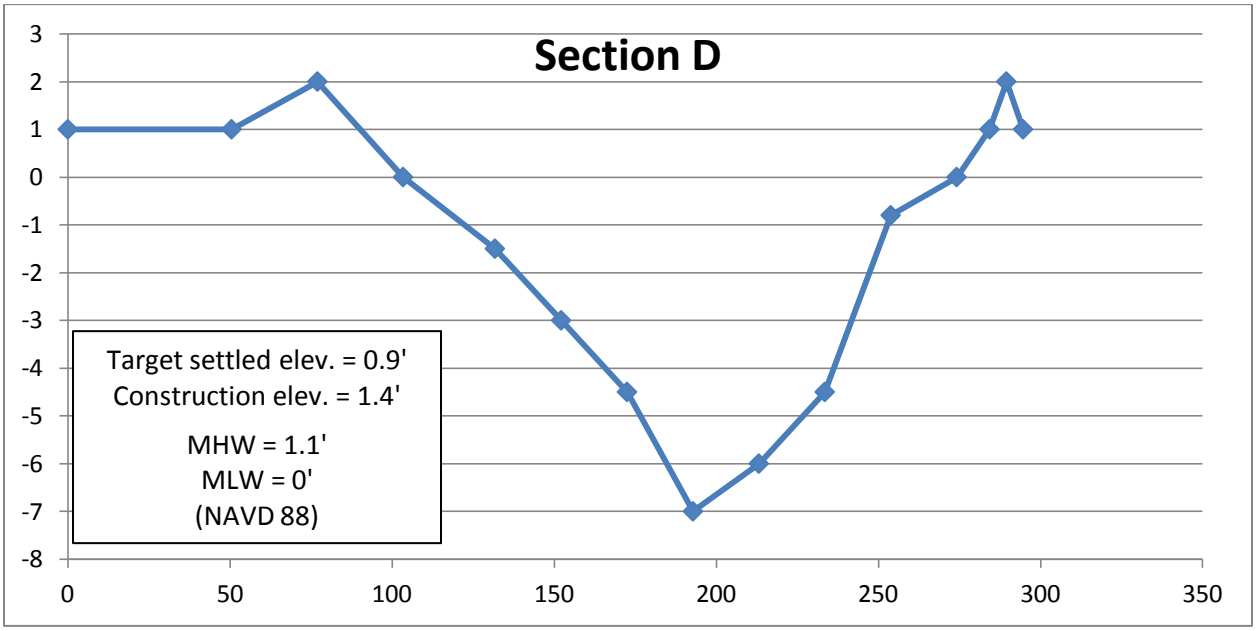
CROSS SECTIONS FOR MATERIAL PLACEMENT



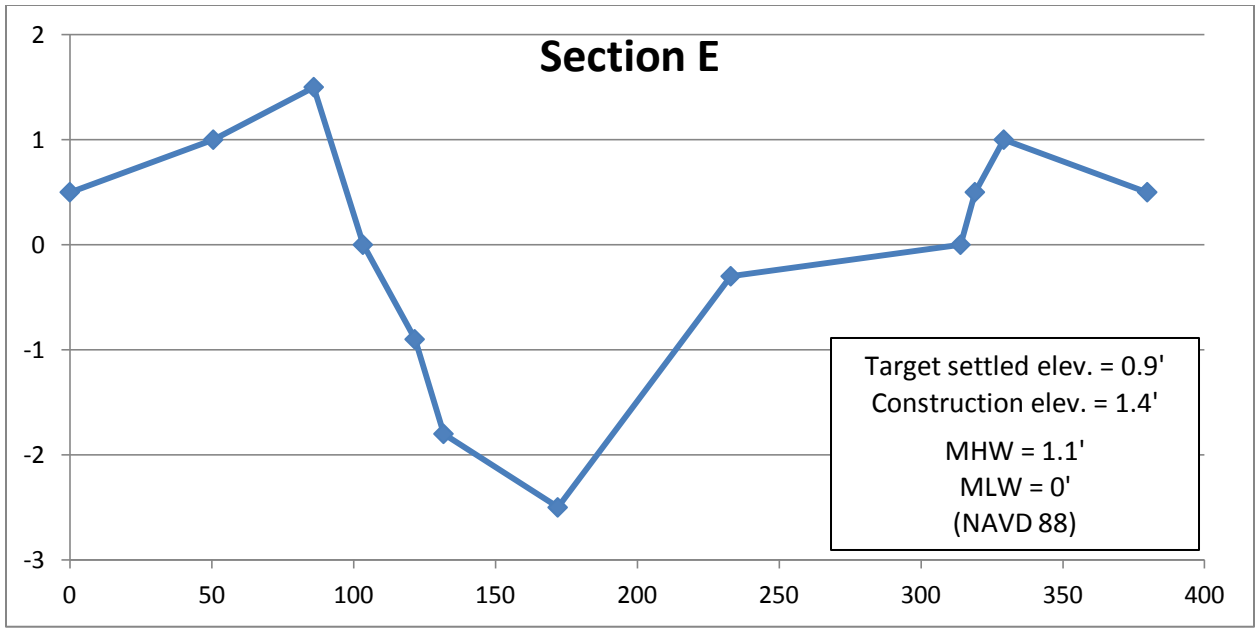


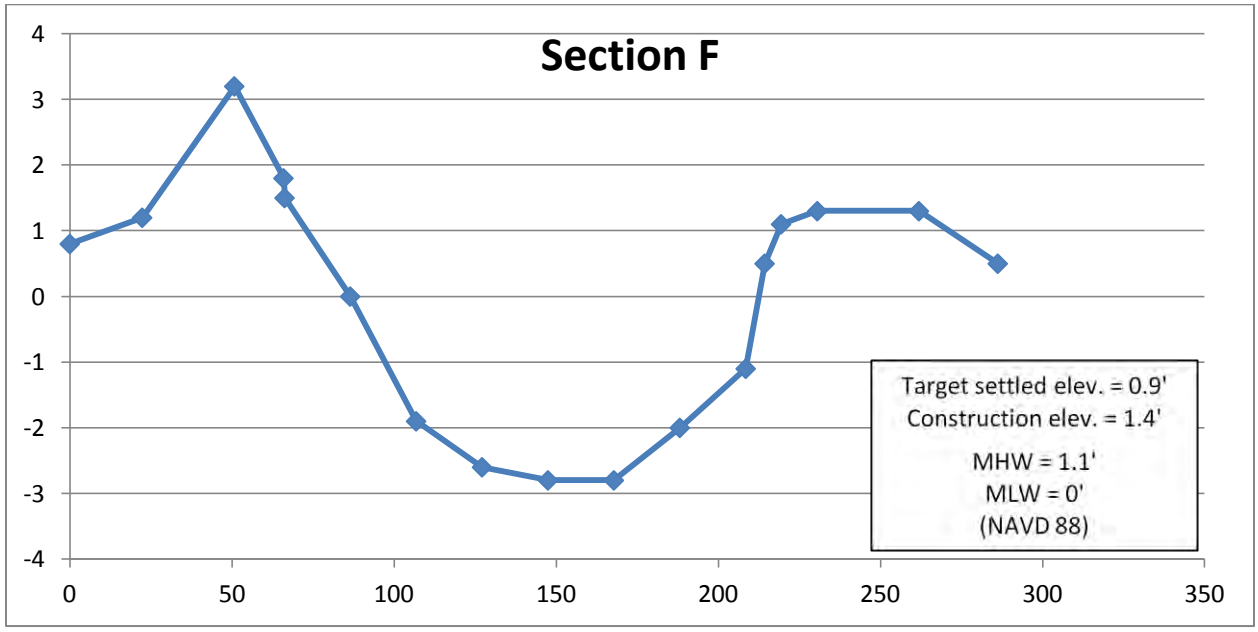
***Water level at time of survey was -1.4' (NAVD88).**



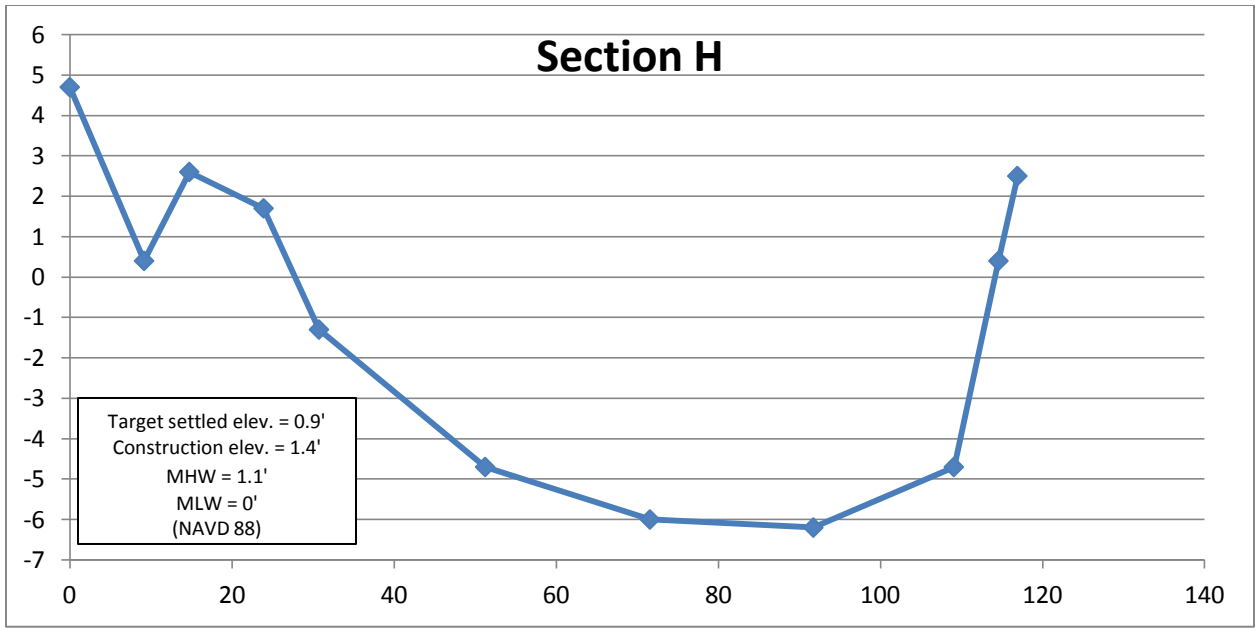


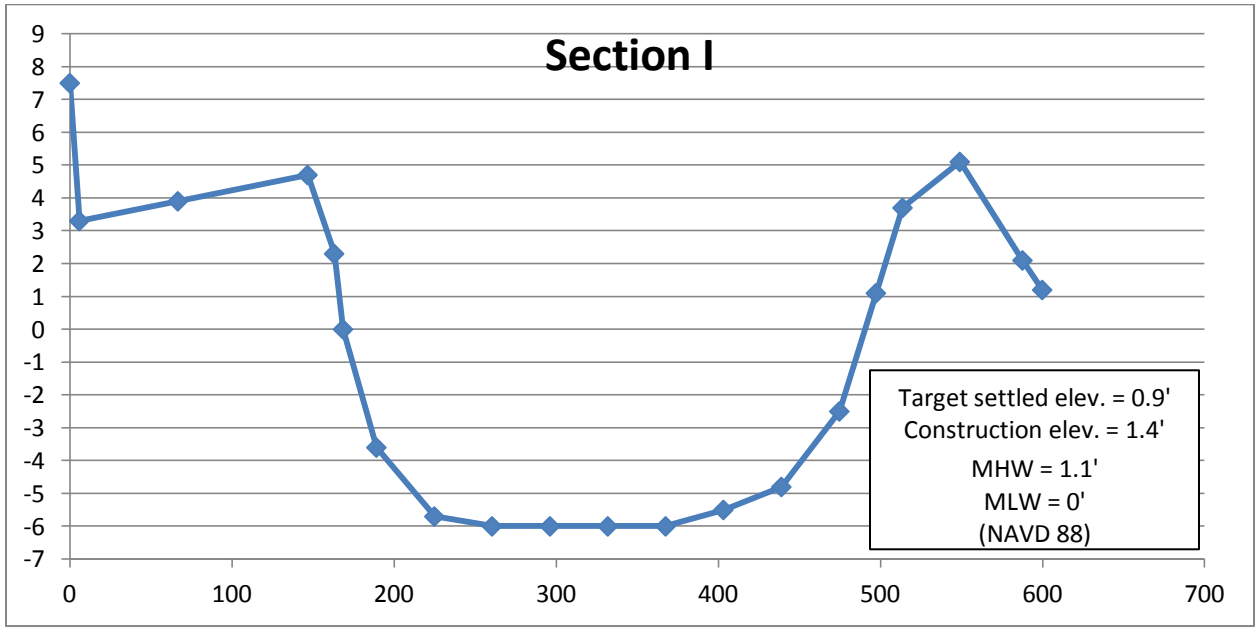
***Water level at time of survey was -1.4' (NAVD88).**



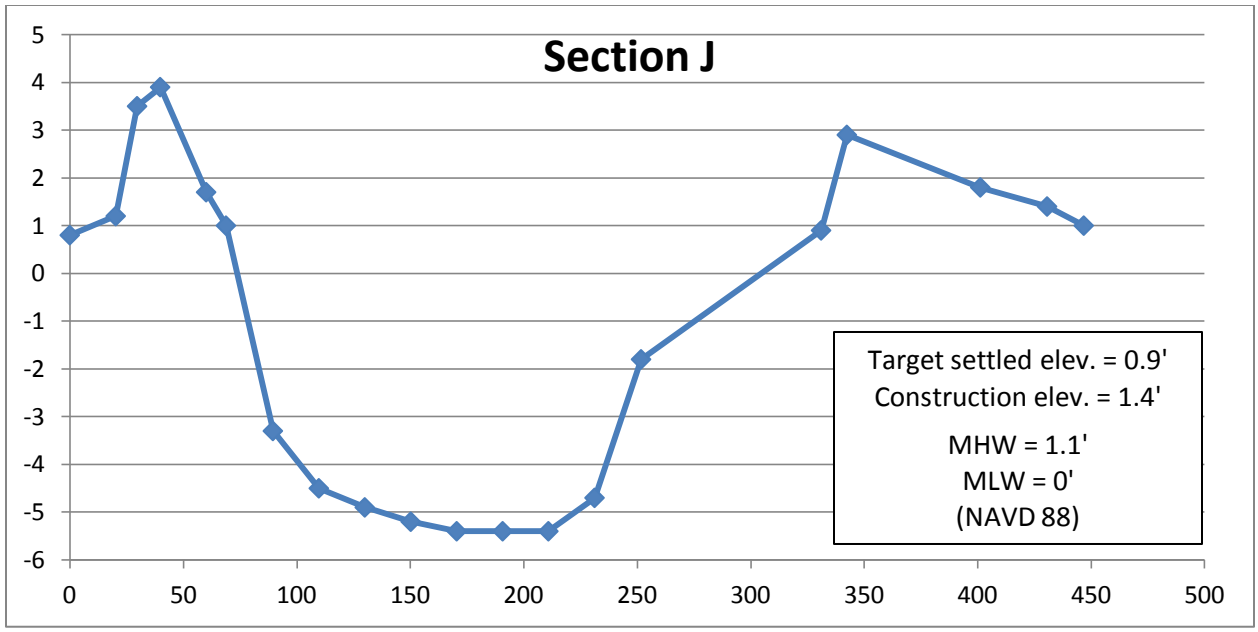


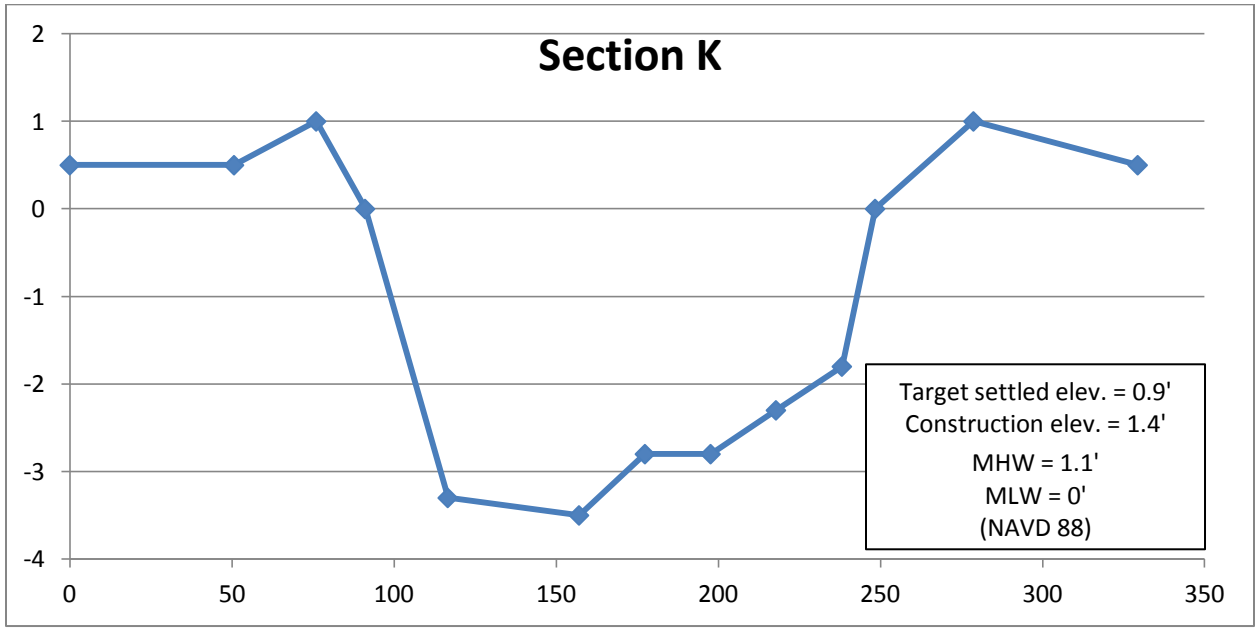
***Water level at time of survey was -1.4' (NAVD88).**





***Water level at time of survey was -1.4' (NAVD88).**





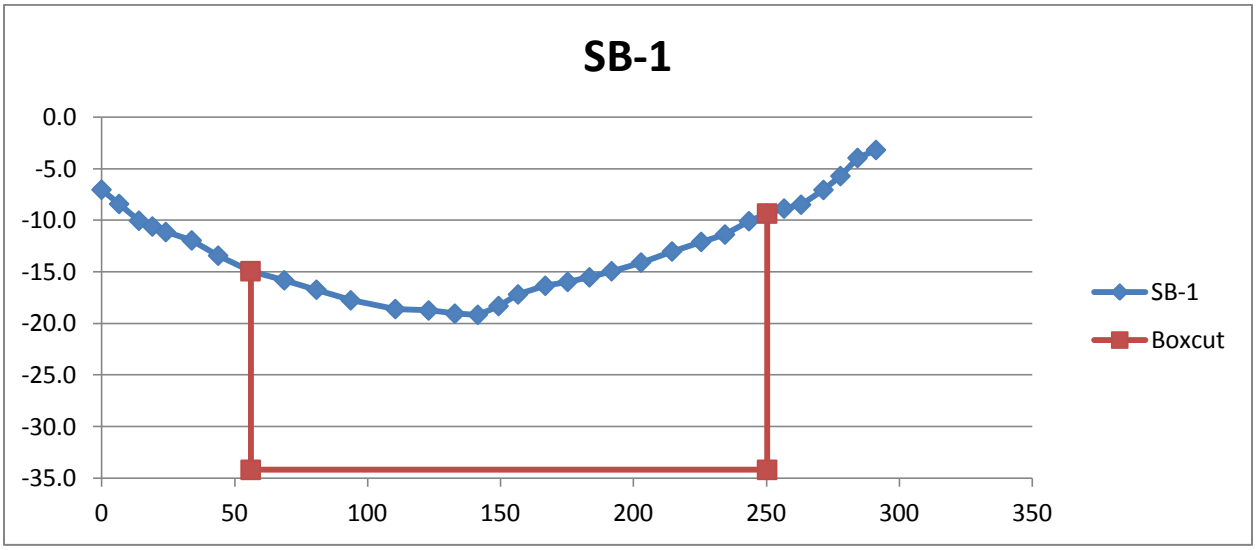
***Water level at time of survey was -1.4' (NAVD88).**

****Any areas of the spoil piles that are below 1.5' NAVD 88 in elevation will be raised with surrounding material from the spoil piles to increase the elevation to 1.5' NAVD 88.**

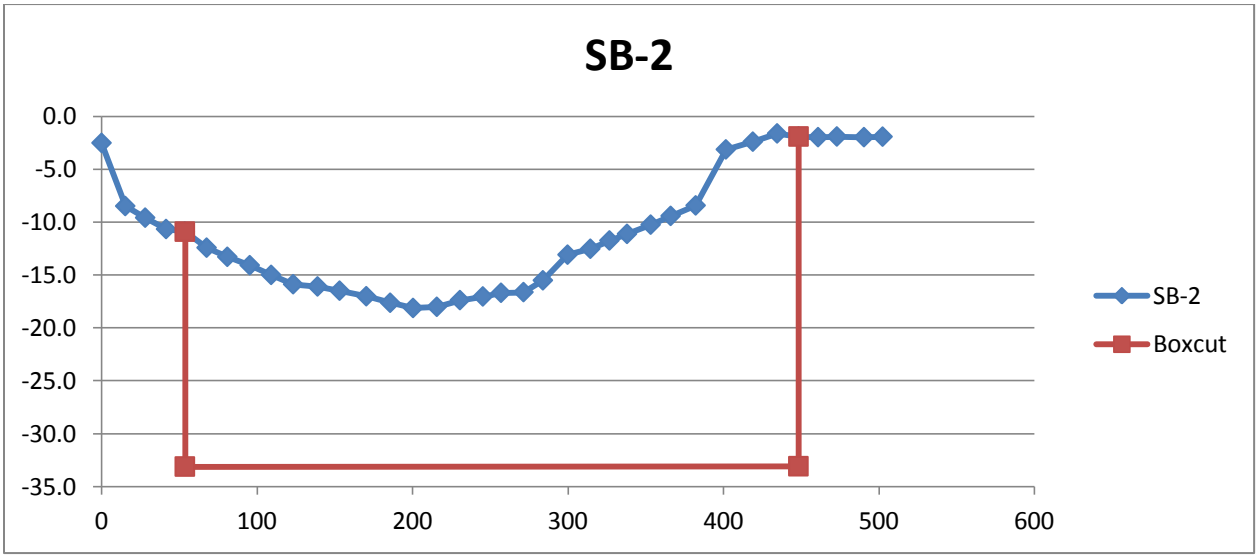
FIGURE 4B.

GIWW DREDGING CROSS SECTIONS

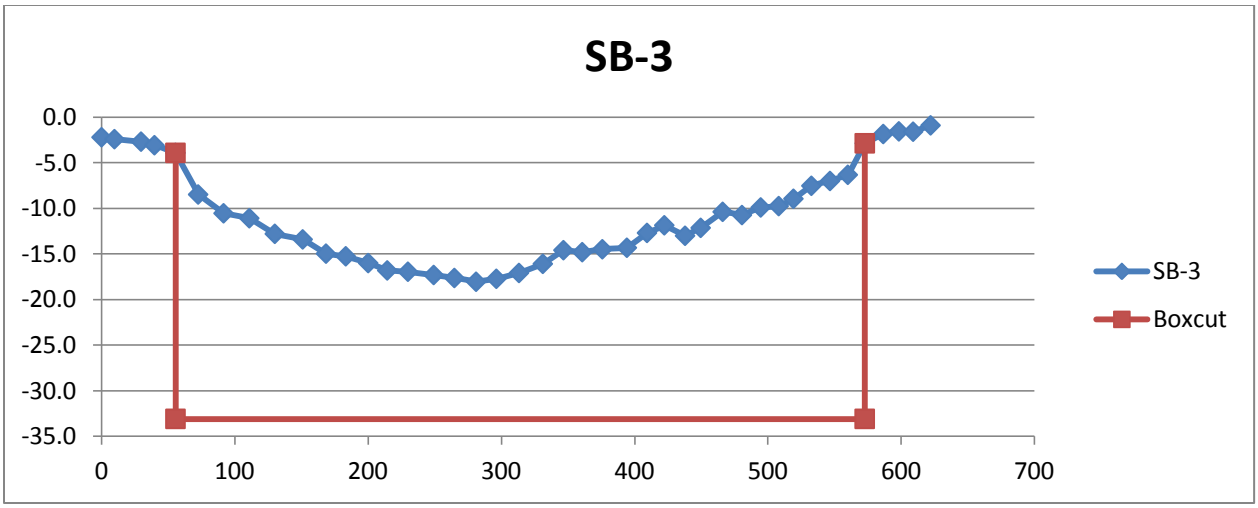
Cross sections are from left descending bank to right descending bank (facing downstream).

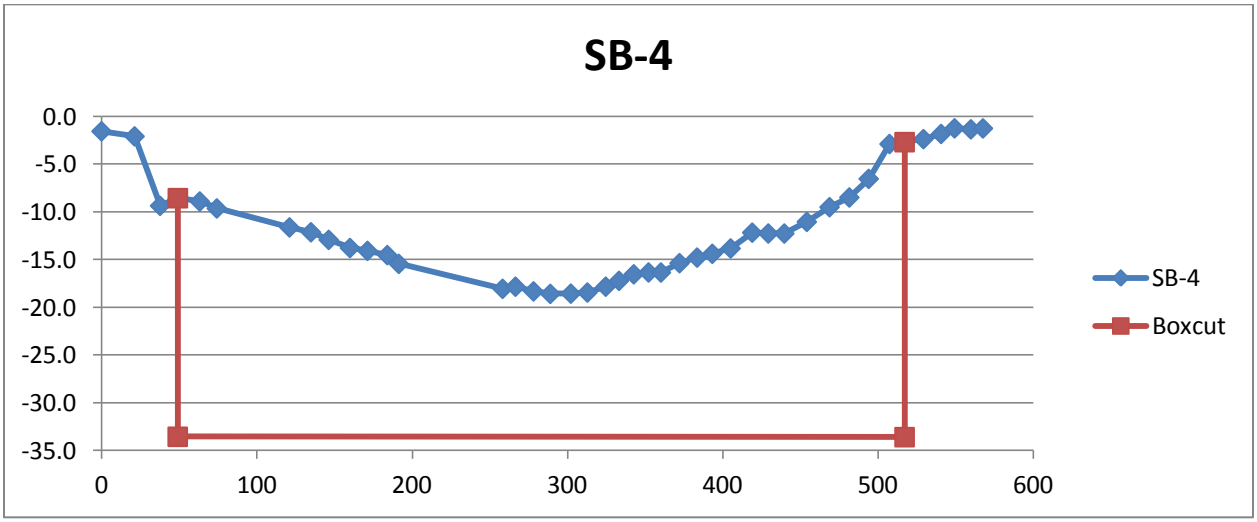


Existing elevations vs. the maximum dredging cut.
*Survey taken from boat mounted depth readings, beginning and end of survey is not actual edge of canal (Actual canal may be wider).



****Water level at time of survey was 0' (NAVD88).**


SB-3
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
0
100
200
300
400
500
600
700
SB-3
Boxcut


SB-4
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
0
100
200
300
400
500
600
SB-4
Boxcut

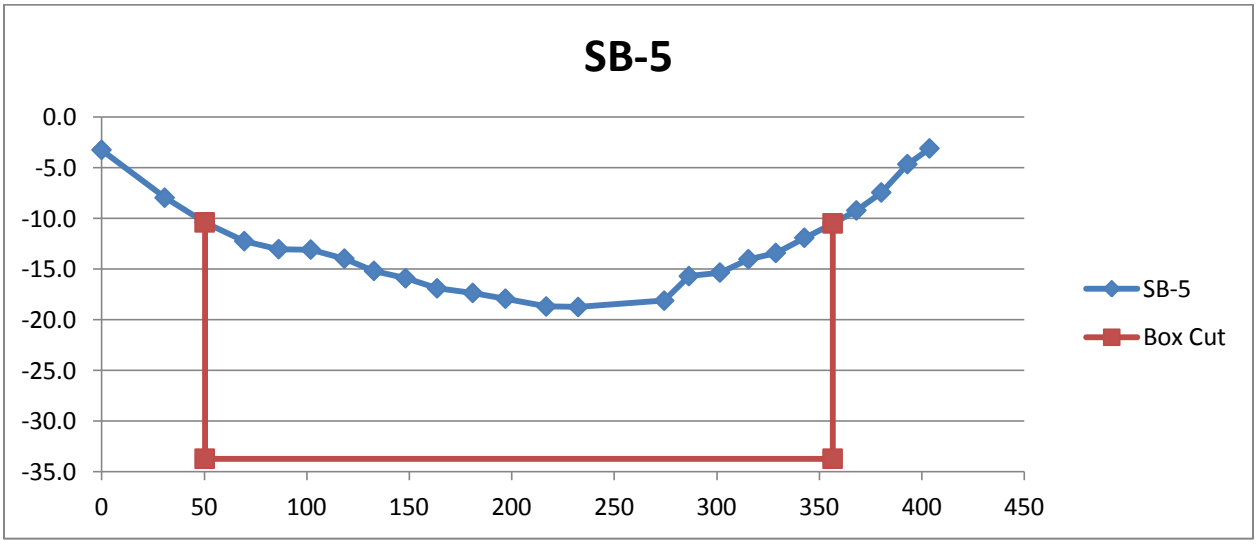
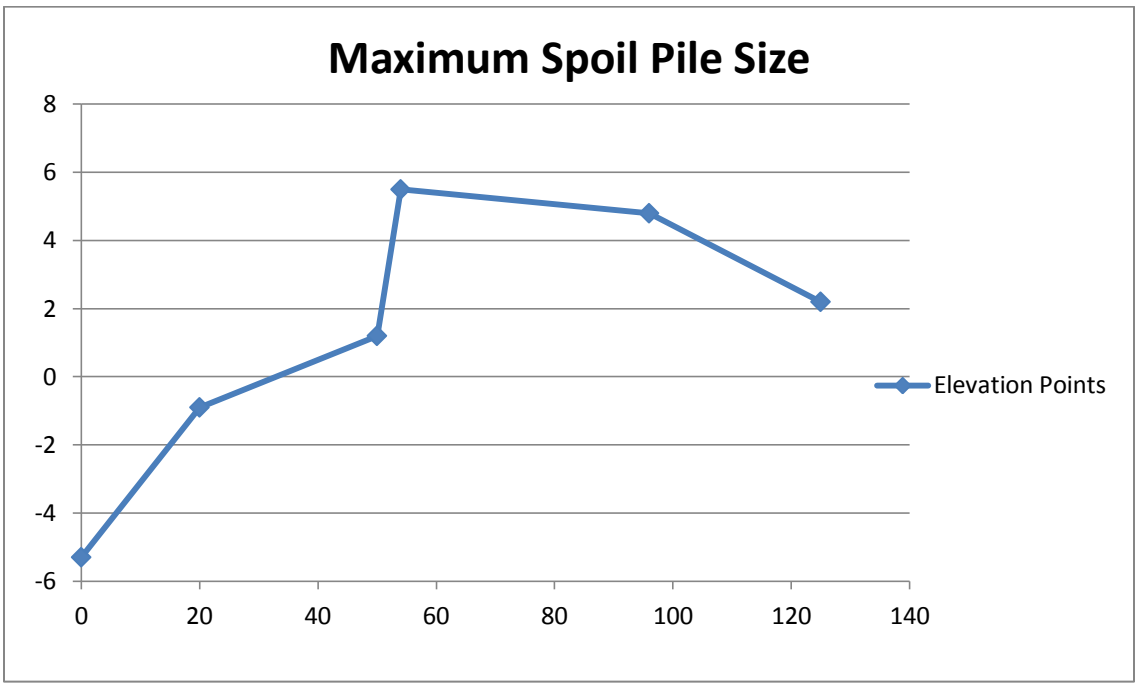
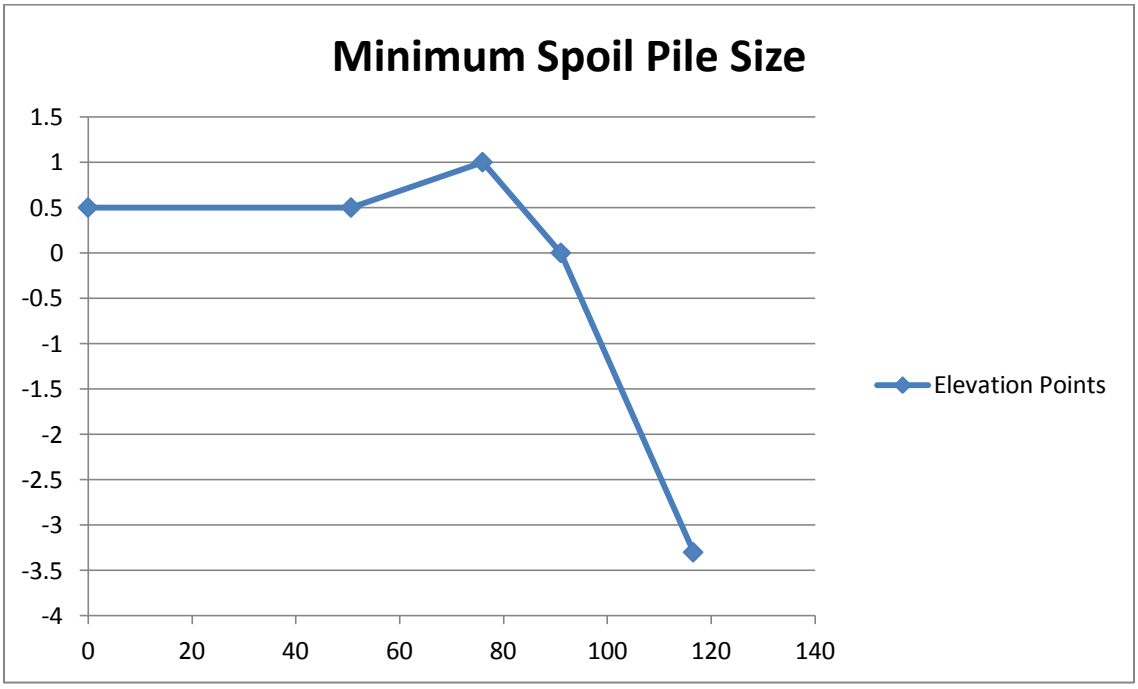

SB-5
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
0
50
100
150
200
250
300
350
400
450
SB-5
Box Cut

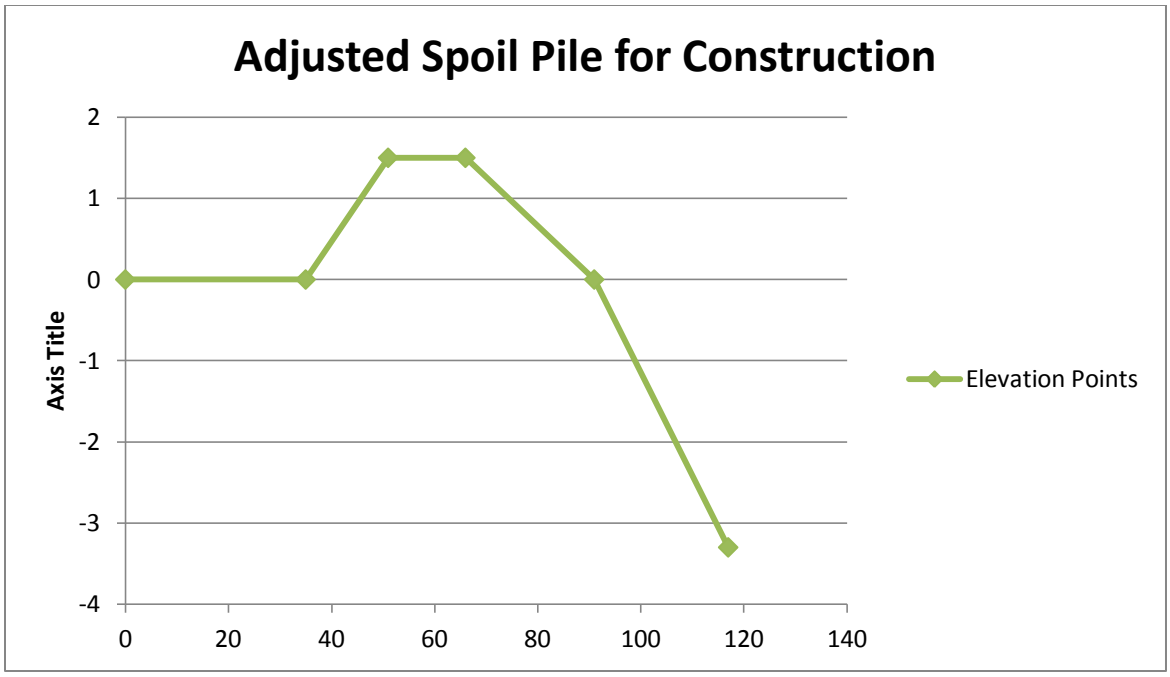
FIGURE 4C.

SPOIL PILE CROSS SECTIONS

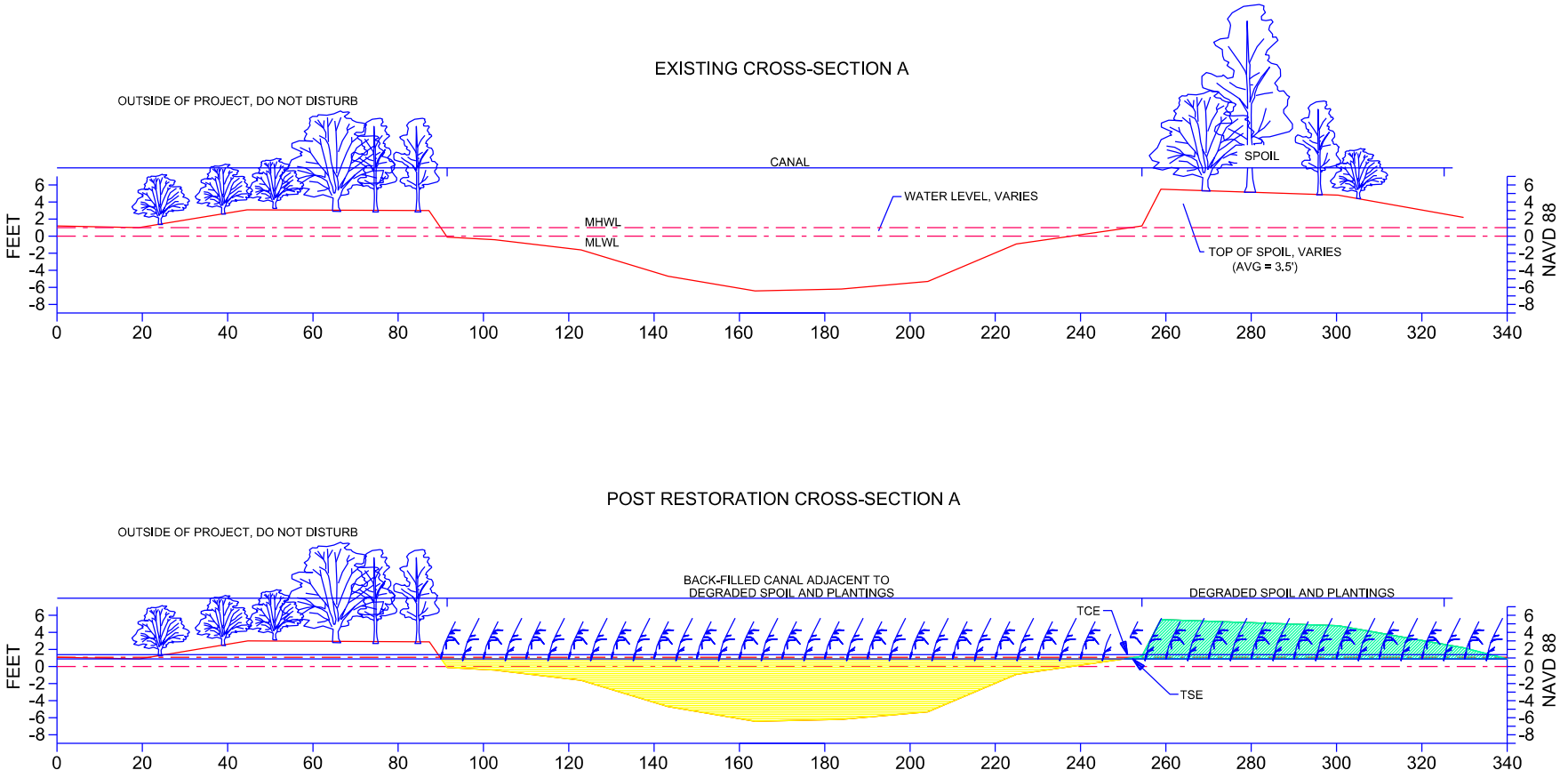


***Water level at time of survey was -1.4' NAVD 88.**





***Spoil Piles will be adjusted to sufficient height for construction if necessary.**



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

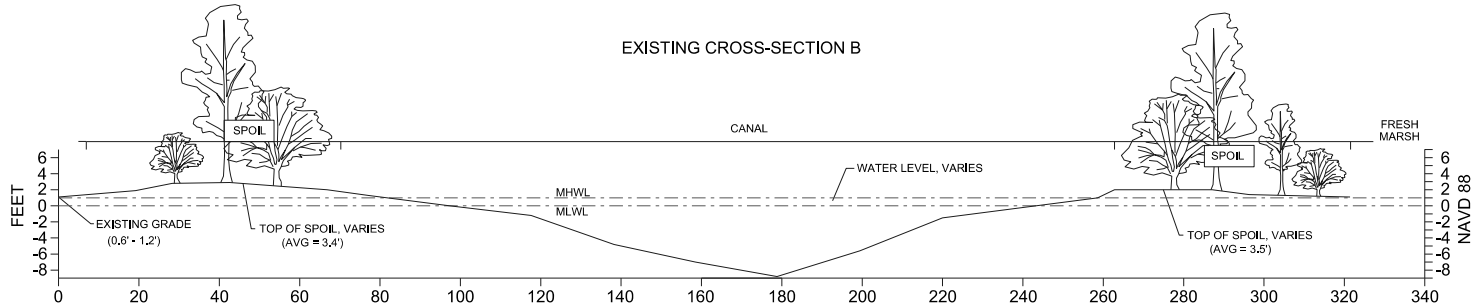
Note: For cross-section direction, please refer to Figure 3.

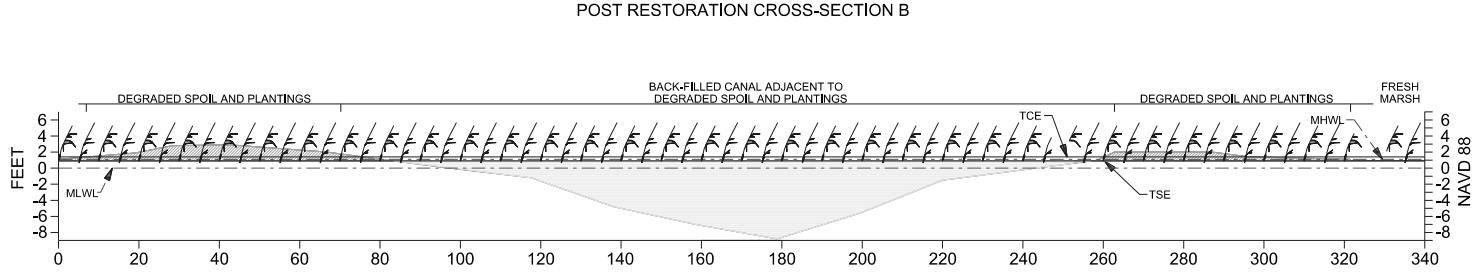
ESTUARY MITIGATION BANK
CROSS SECTION A
VENDOME CANAL

JEFFERSON PARISH, LA

FIGURE 5A

The NRI Group, LLC





PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

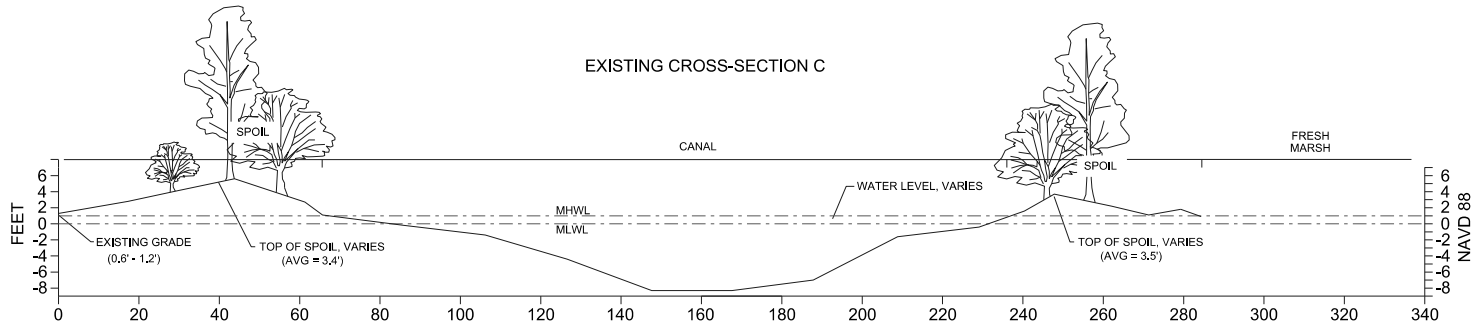
Note: For cross-section direction, please refer to Figure 3.

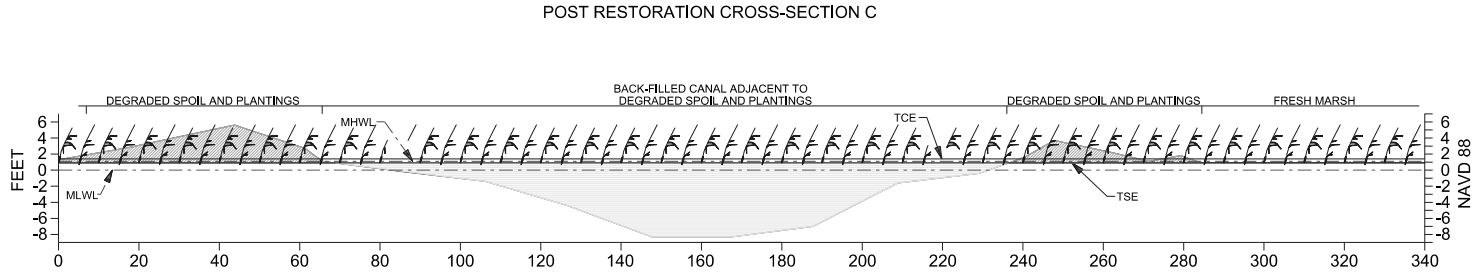
ESTUARY MITIGATION BANK
CROSS SECTION B
VENDOME CANAL

JEFFERSON PARISH, LA

FIGURE 5B

The NRI Group, LLC





PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

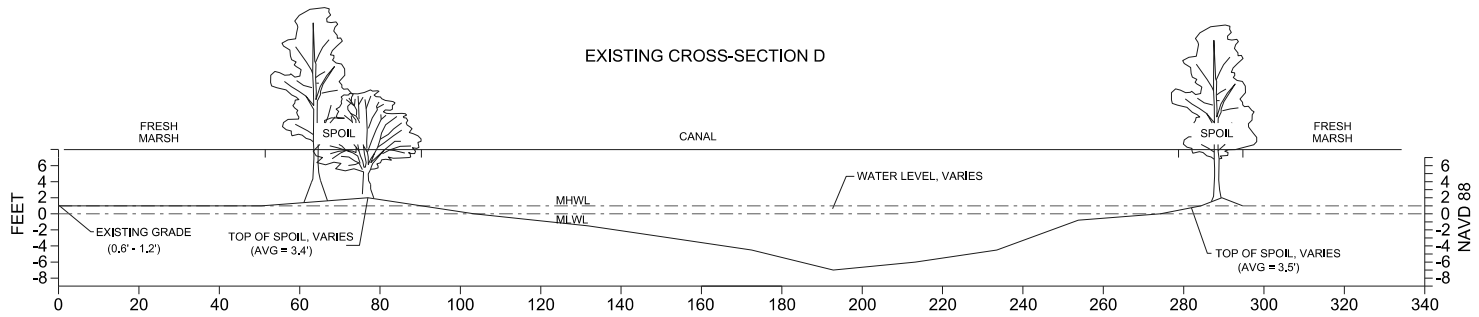
Note: For cross-section direction, please refer to Figure 3.

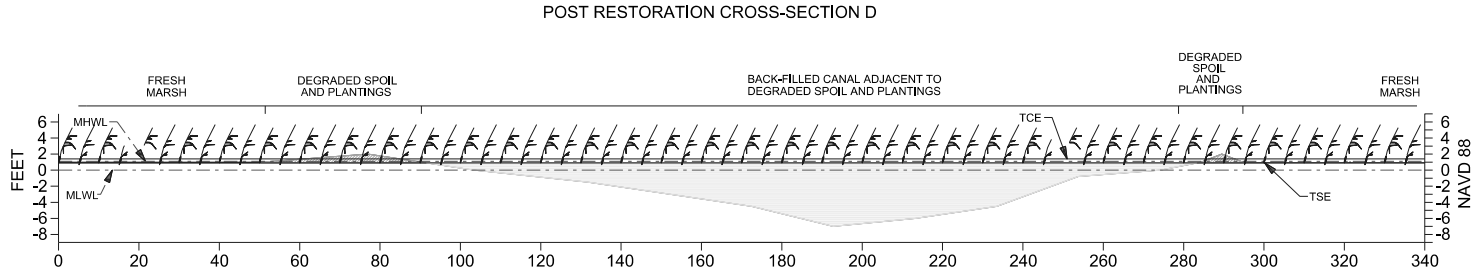
ESTUARY MITIGATION BANK
CROSS SECTION C
VENDOME CANAL

JEFFERSON PARISH, LA

FIGURE 5C

The NRI Group, LLC





PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

Note: For cross-section direction, please refer to Figure 3.

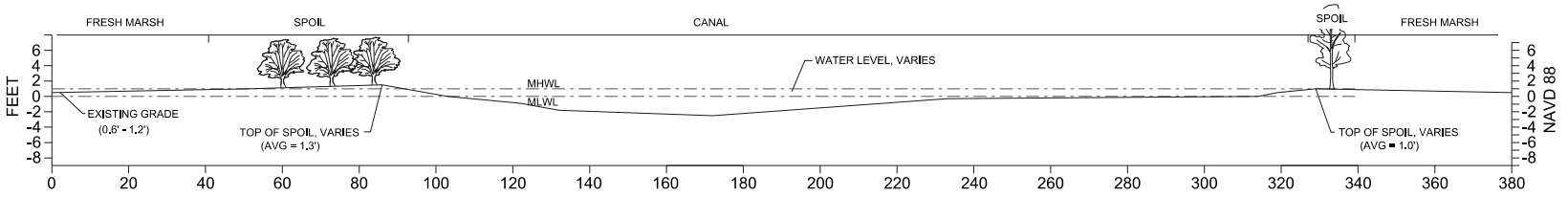
ESTUARY MITIGATION BANK
CROSS SECTION D
VENDOME CANAL

JEFFERSON PARISH, LA

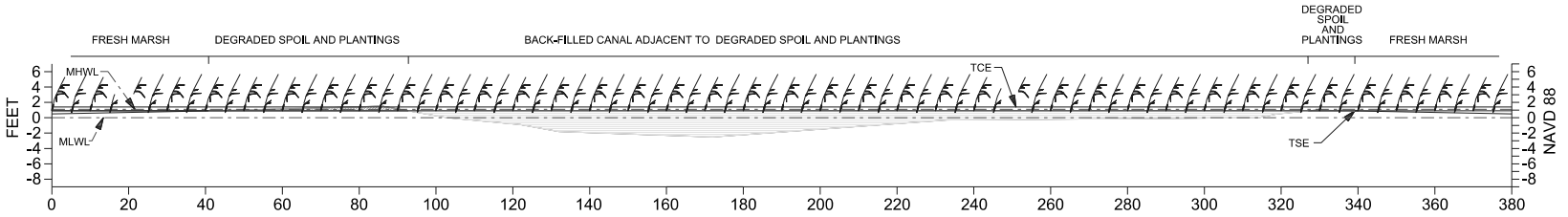
FIGURE 5D

The NRI Group, LLC

EXISTING CROSS-SECTION E



POST RESTORATION CROSS-SECTION E



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

Note: For cross-section direction, please refer to Figure 3.

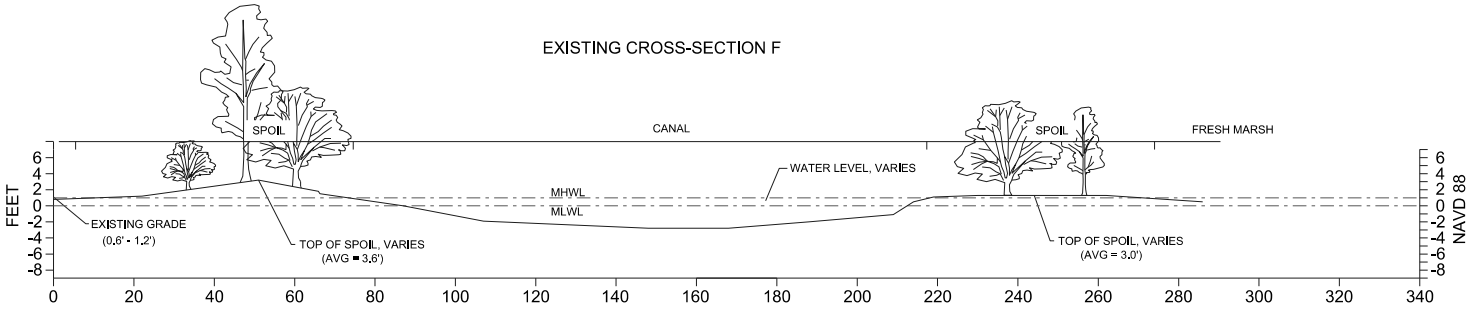
ESTUARY MITIGATION BANK
CROSS SECTION E
HOCKEYSTICK CANAL

JEFFERSON PARISH, LA

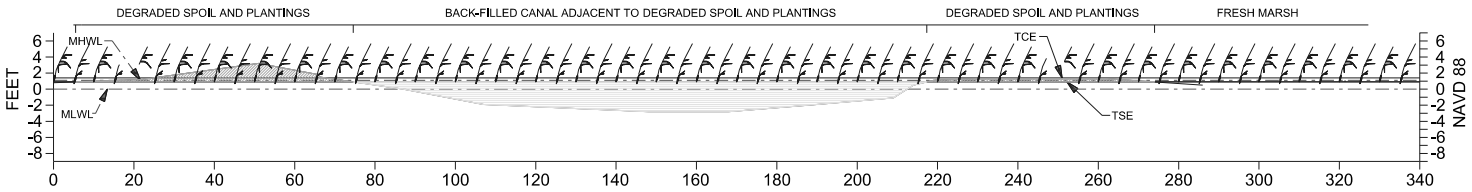
FIGURE 5E

The NRI Group, LLC

EXISTING CROSS-SECTION F



POST RESTORATION CROSS-SECTION F



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

Note: For cross-section direction, please refer to Figure 3.

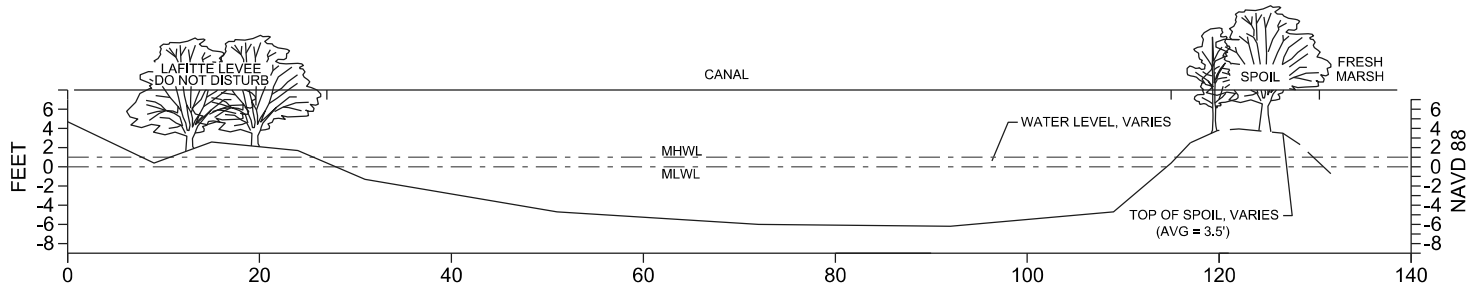
ESTUARY MITIGATION BANK
CROSS SECTION F
DEADEND CANAL

JEFFERSON PARISH, LA

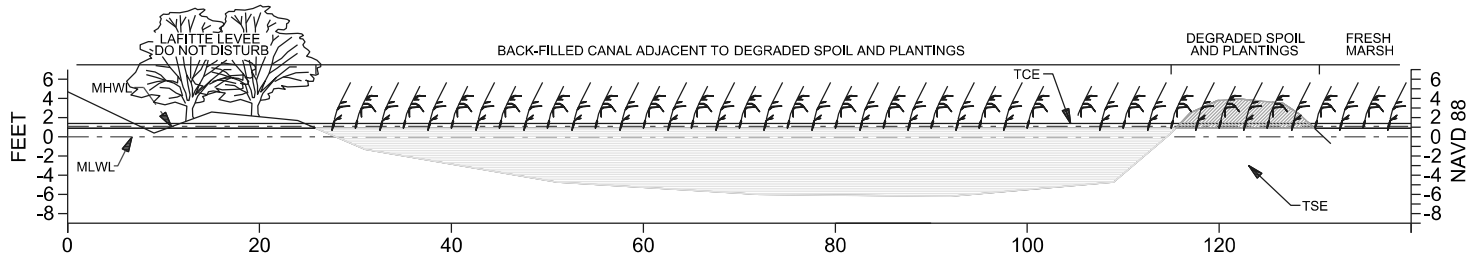
FIGURE 5F

The NRI Group, LLC

EXISTING CROSS-SECTION H



POST RESTORATION CROSS-SECTION H



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

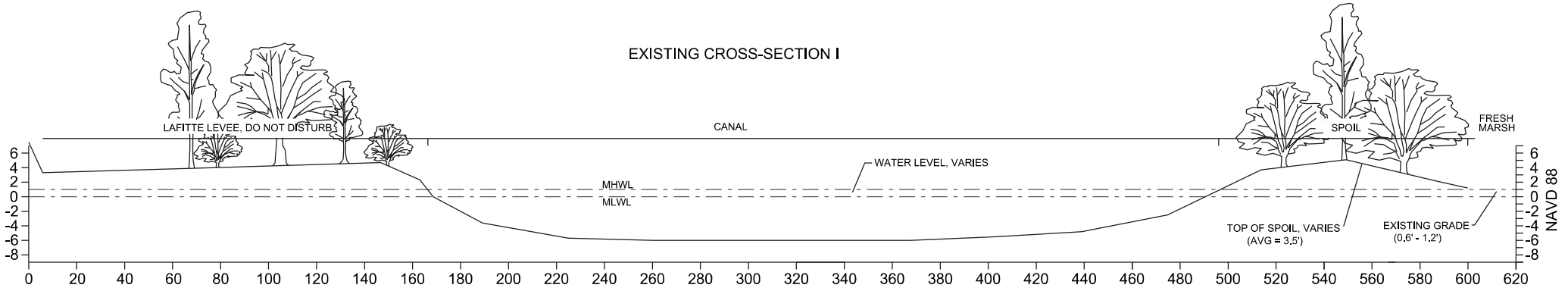
Note: For cross-section direction, please refer to Figure 3.

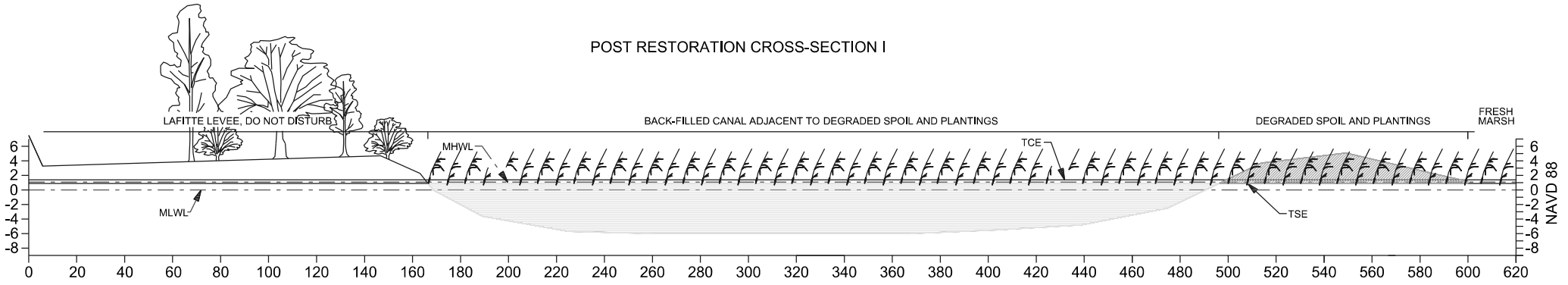
ESTUARY MITIGATION BANK
CROSS SECTION H
DEADEND CANAL

JEFFERSON PARISH, LA

FIGURE 5H

The NRI Group, LLC
The Natural Resources Investment Group, LLC





PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

Note: For cross-section direction, please refer to Figure 3.

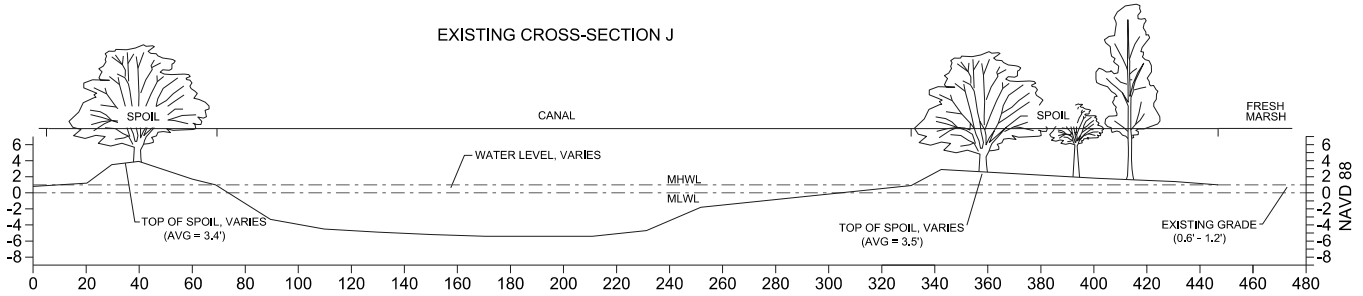
ESTUARY MITIGATION BANK
CROSS SECTION I
DEADEND CANAL

JEFFERSON PARISH, LA

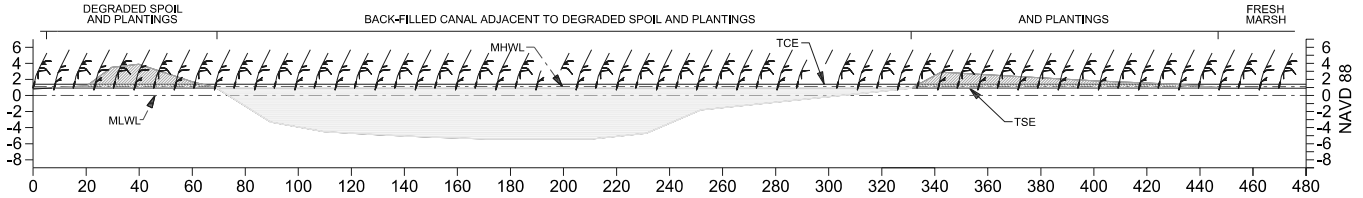
FIGURE 5I

The NRI Group, LLC
The Natural Resources Investment Group, LLC

EXISTING CROSS-SECTION J



POST RESTORATION CROSS-SECTION J



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

Note: For cross-section direction, please refer to Figure 3.

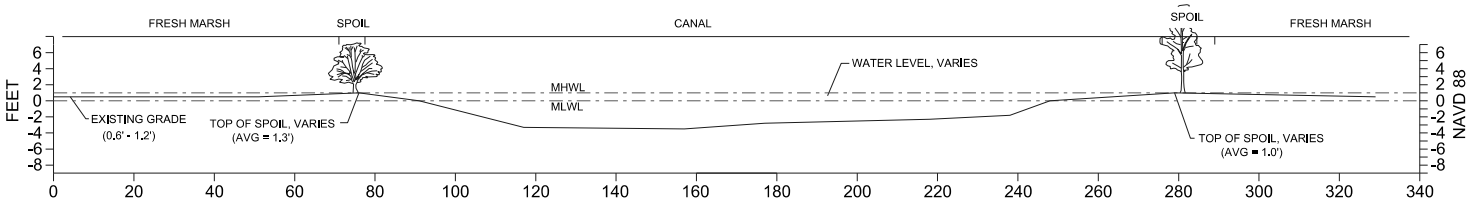
ESTUARY MITIGATION BANK
CROSS SECTION J
DEADEND CANAL

JEFFERSON PARISH, LA

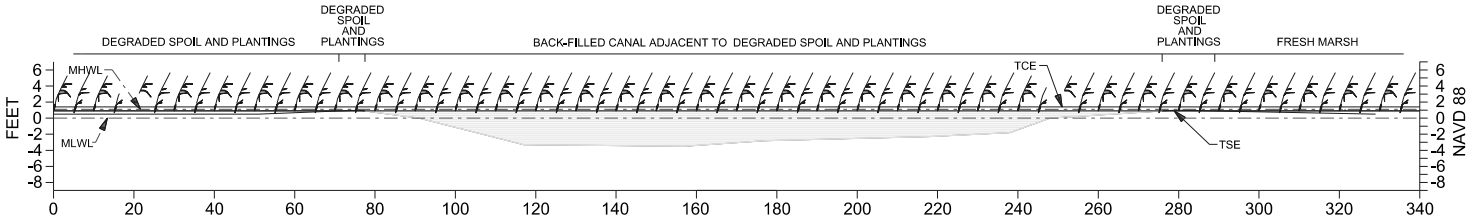
FIGURE 5J

The NRI Group, LLC

EXISTING CROSS-SECTION K



POST RESTORATION CROSS-SECTION K



PROPOSED EXCAVATION

PROPOSED FILL

VEGETATIVE PLANTINGS

MHWL = MEAN HIGH WATER LEVEL IS 1.1 FEET
MLWL = MEAN LOW WATER LEVEL IS 0.0 FEET

TCE = TARGET CONSTRUCTION ELEVATION = 1.4 FEET
TSE = TARGET SETTLED ELEVATION = 0.9 FEET

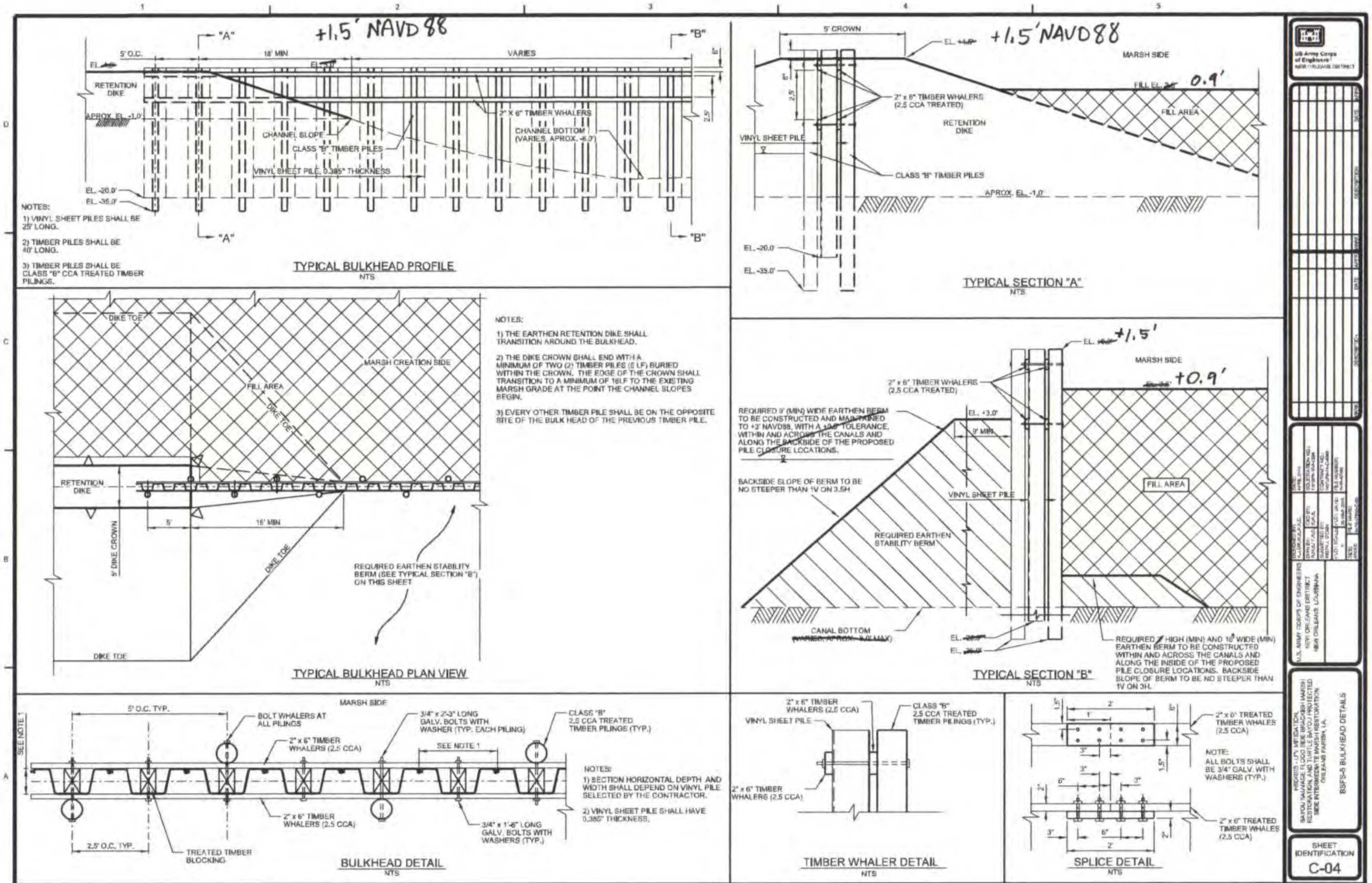
Note: For cross-section direction, please refer to Figure 3.

ESTUARY MITIGATION BANK
CROSS SECTION K
HOCKEYSTICK CANAL

JEFFERSON PARISH, LA

FIGURE 5K

The NRI Group, LLC


+1.5' NAVD 88
"A"
"B"
5' O.C.
18' MIN
VARIES
RETENTION DIKE
APROX. EL. -1.0'
2" X 6" TIMBER WHALERS
CHANNEL SLOPE
CHANNEL BOTTOM (VARIES, APROX. -6.0')
CLASS "B" TIMBER PILES
VINYL SHEET PILE, 0.385" THICKNESS
EL. -20.0'
EL. -35.0'
NOTES:
1) VINYL SHEET PILES SHALL BE 25' LONG.
2) TIMBER PILES SHALL BE 40' LONG.
3) TIMBER PILES SHALL BE CLASS "B" CCA TREATED TIMBER PILINGS.
TYPICAL BULKHEAD PROFILE
NTS
5' CROWN
+1.5' NAVD88
MARSH SIDE
FILL EL. 0.9'
2" x 6" TIMBER WHALERS (2.5 CCA TREATED)
RETENTION DIKE
FILL AREA
VINYL SHEET PILE
CLASS "B" TIMBER PILES
APROX. EL. -1.0'
EL. -20.0'
EL. -33.0'
TYPICAL SECTION "A"
NTS
DIKE TOE
MARSH CREATION SIDE
FILL AREA
RETENTION DIKE
5'
15' MIN
5' DIKE CROWN
REQUIRED EARTHEN STABILITY BERM (SEE TYPICAL SECTION "B") ON THIS SHEET
NOTES:
1) THE EARTHEN RETENTION DIKE SHALL TRANSITION AROUND THE BULKHEAD.
2) THE DIKE CROWN SHALL END WITH A MINIMUM OF TWO (2) TIMBER PILES (5 LF) BURIED WITHIN THE CROWN. THE EDGE OF THE CROWN SHALL TRANSITION TO A MINIMUM OF 16LF TO THE EXISTING MARSH GRADE AT THE POINT THE CHANNEL SLOPES BEGIN.
3) EVERY OTHER TIMBER PILE SHALL BE ON THE OPPOSITE SITE OF THE BULK HEAD OF THE PREVIOUS TIMBER PILE.
TYPICAL BULKHEAD PLAN VIEW
NTS
EL. +1.5'
MARSH SIDE
+0.9'
2" x 6" TIMBER WHALERS (2.5 CCA TREATED)
REQUIRED 9' (MIN) WIDE EARTHEN BERM TO BE CONSTRUCTED AND MAINTAINED TO +3' NAVD88, WITH A ±0.5' TOLERANCE, WITHIN AND ACROSS THE CANALS AND ALONG THE BACKSIDE OF THE PROPOSED PILE CLOSURE LOCATIONS.
EL. +3.0'
9' MIN
BACKSIDE SLOPE OF BERM TO BE NO STEEPER THAN 1V ON 3.5H
VINYL SHEET PILE
FILL AREA
REQUIRED EARTHEN STABILITY BERM
CANAL BOTTOM
REQUIRED 2' HIGH (MIN) AND 10' WIDE (MIN) EARTHEN BERM TO BE CONSTRUCTED WITHIN AND ACROSS THE CANALS AND ALONG THE INSIDE OF THE PROPOSED PILE CLOSURE LOCATIONS. BACKSIDE SLOPE OF BERM TO BE NO STEEPER THAN 1V ON 3H.
TYPICAL SECTION "B"
NTS
MARSH SIDE
5' O.C. TYP.
BOLT WHALERS AT ALL PILINGS
3/4" x 2'-3" LONG GALV. BOLTS WITH WASHER (TYP. EACH PILING)
CLASS "B" 2.5 CCA TREATED TIMBER PILINGS (TYP.)
2" x 6" TIMBER WHALERS (2.5 CCA)
SEE NOTE 1
2" x 6" TIMBER WHALERS (2.5 CCA)
3/4" x 1'-6" LONG GALV. BOLTS WITH WASHERS (TYP.)
2.5' O.C. TYP.
TREATED TIMBER BLOCKING
NOTES:
1) SECTION HORIZONTAL DEPTH AND WIDTH SHALL DEPEND ON VINYL PILE SELECTED BY THE CONTRACTOR.
2) VINYL SHEET PILE SHALL HAVE 0.385" THICKNESS.
BULKHEAD DETAIL
NTS
2" x 6" TIMBER WHALERS (2.5 CCA)
VINYL SHEET PILE
CLASS "B" 2.5 CCA TREATED TIMBER PILINGS (TYP.)
2" x 6" TIMBER WHALERS (2.5 CCA)
TIMBER WHALER DETAIL
NTS
2" x 6" TREATED TIMBER WHALES (2.5 CCA)
NOTE:
ALL BOLTS SHALL BE 3/4" GALV. WITH WASHERS (TYP.)
2" x 6" TREATED TIMBER WHALES (2.5 CCA)
SPLICE DETAIL
NTS
US Army Corps of Engineers
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT NEW ORLEANS, LOUISIANA
BSFS-A BULKHEAD DETAILS
SHEET IDENTIFICATION
C-04

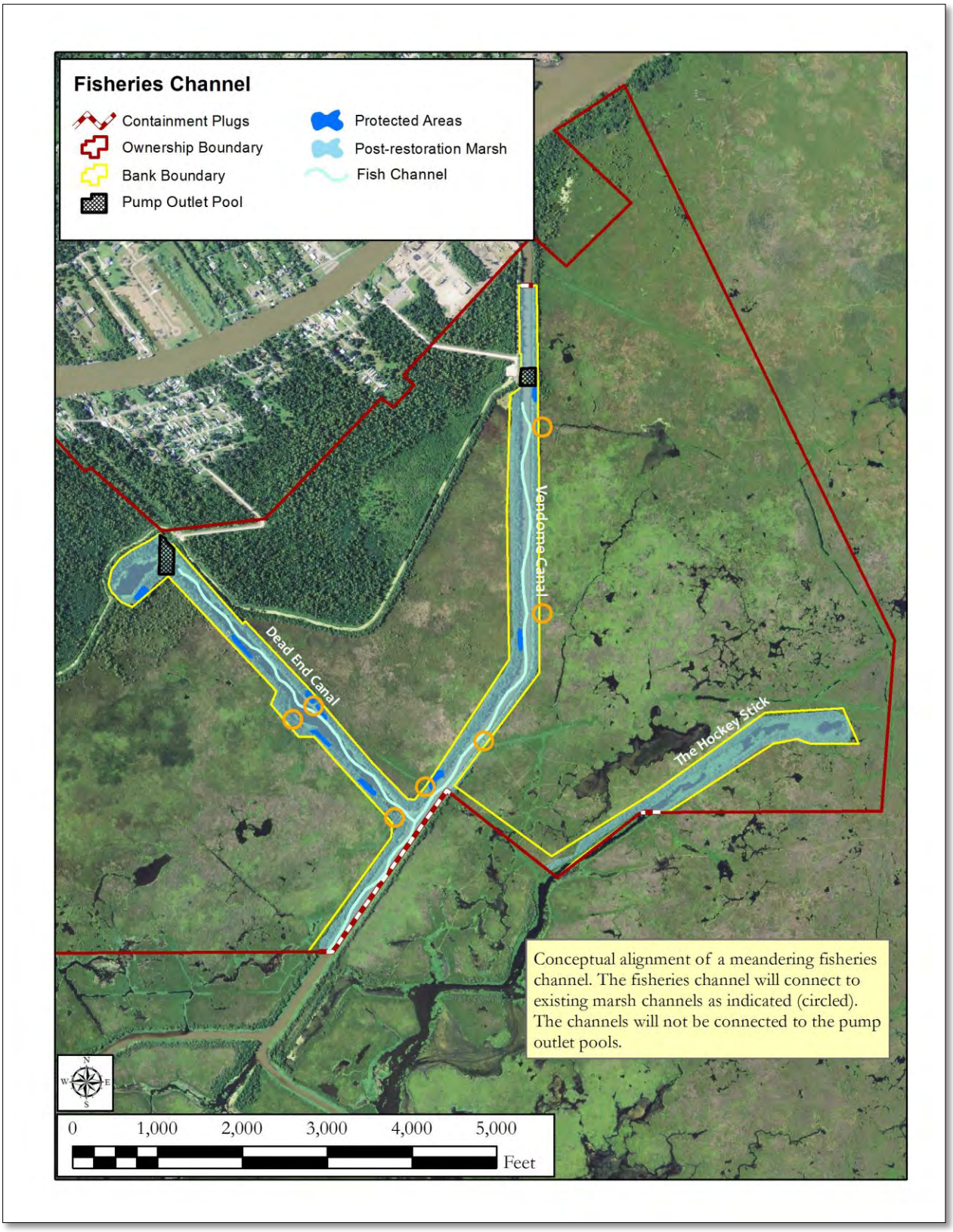


Figure 6. Fisheries Channel Conceptual Alignment

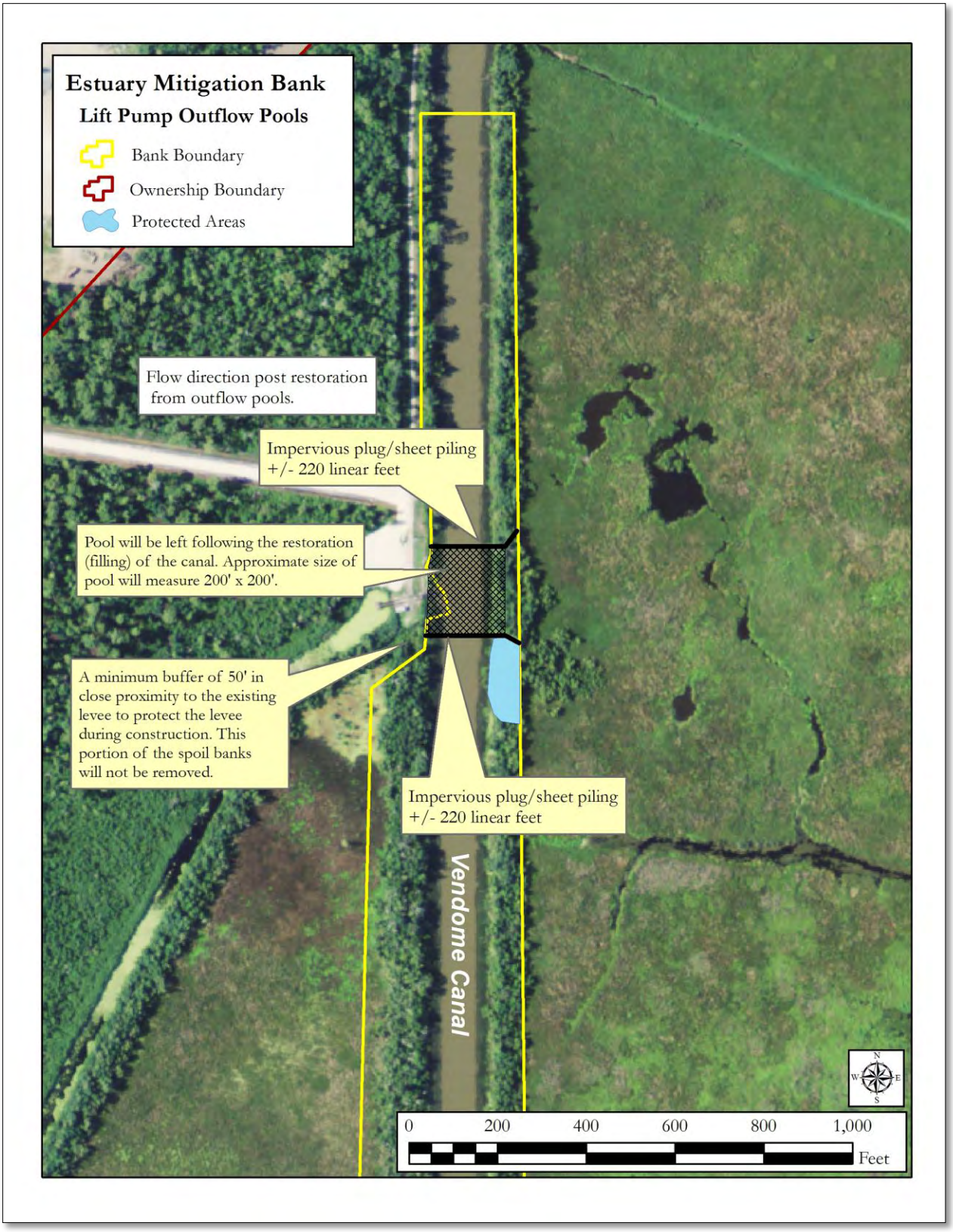


Figure 6a. Close up of outlet pool. Water will exit pool to the east into the existing marsh.

Figure 6b. Close up of outlet pool. Water will exit the pool to the south into the existing marsh.

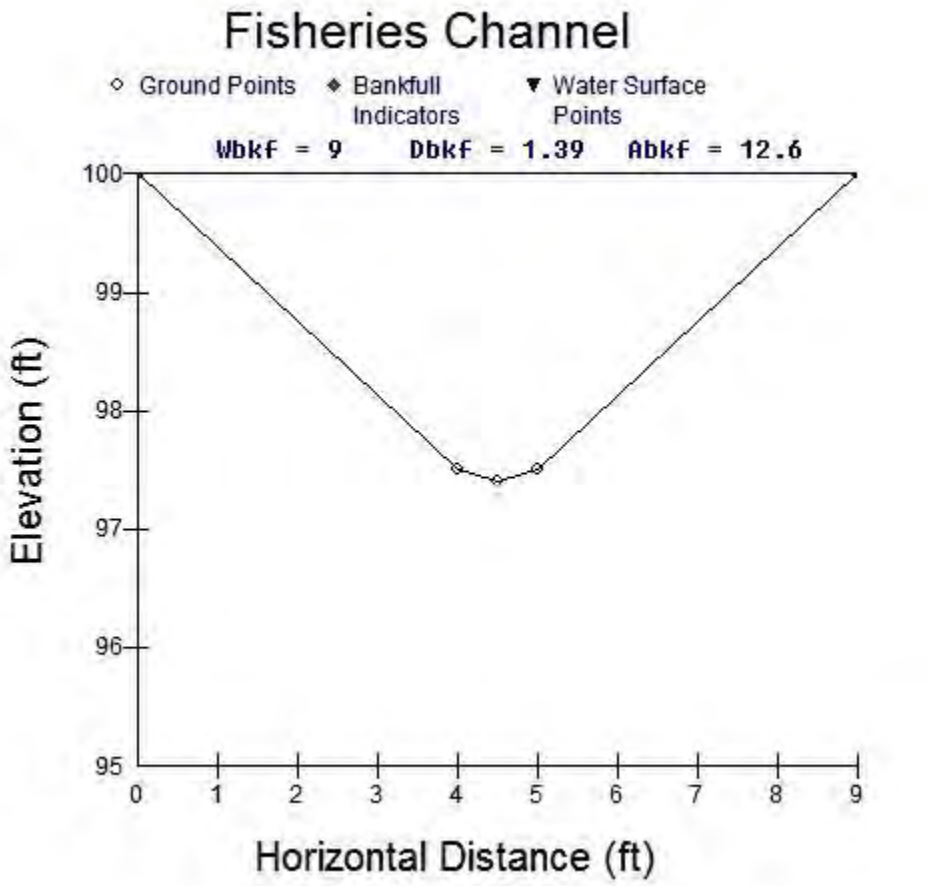
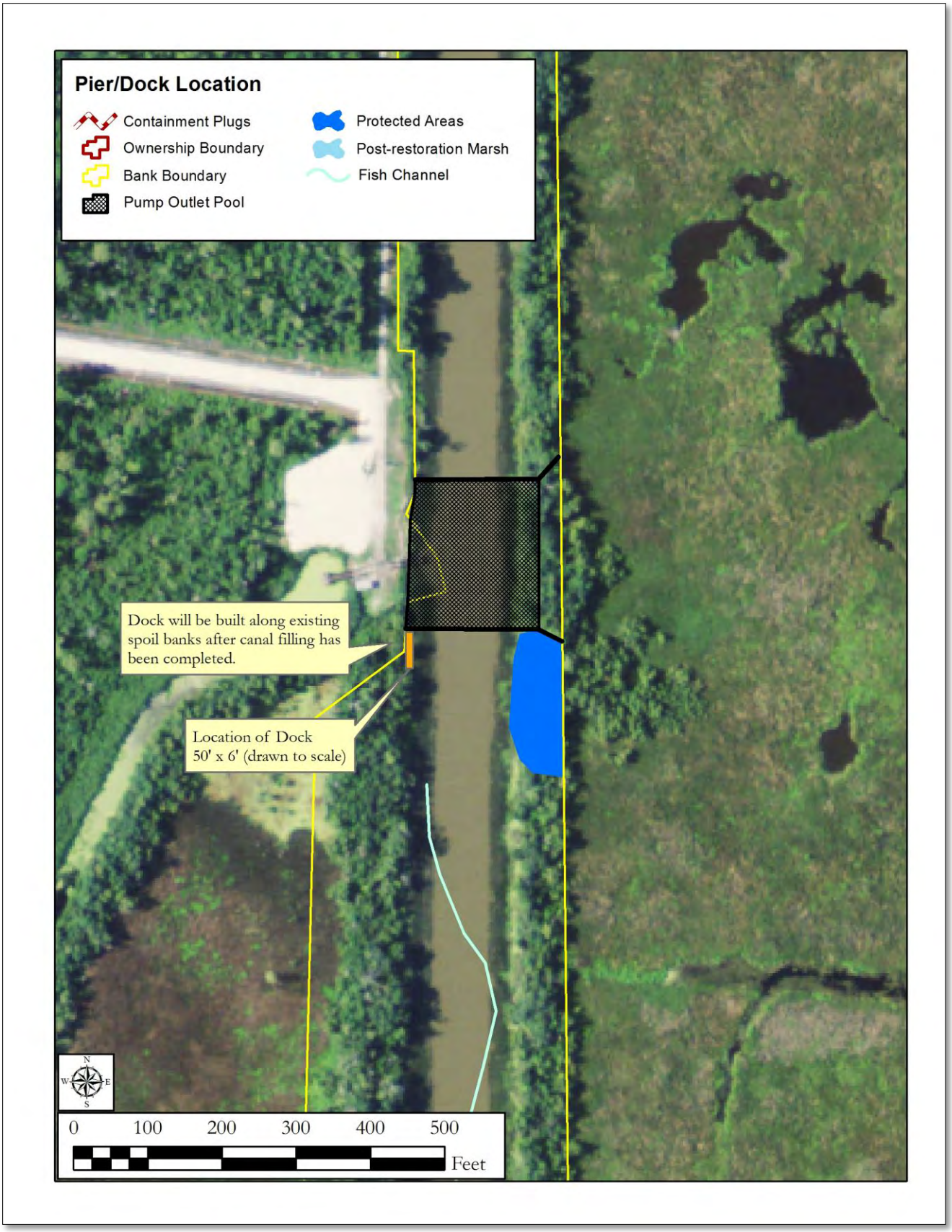
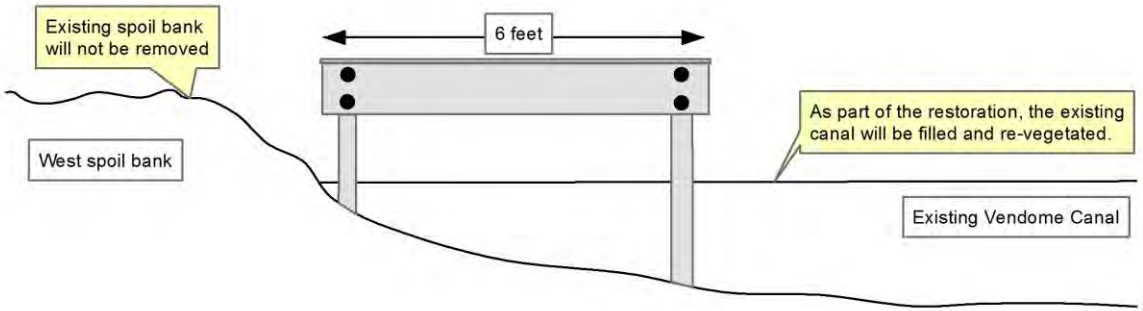


Figure 7. Cross Section of Fisheries Channel. For example purposes only.

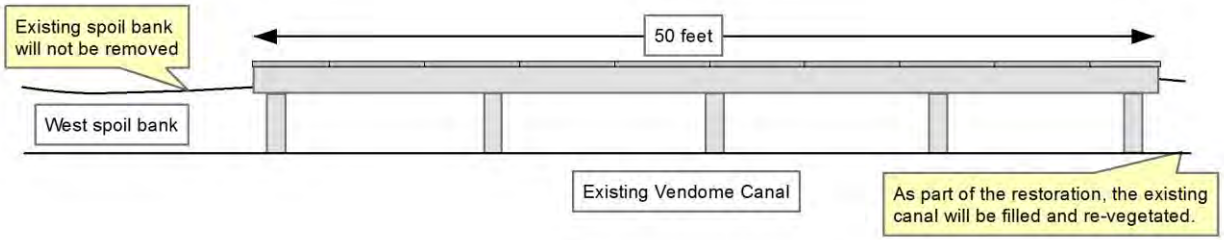

Pier/Dock Location
Containment Plugs
Ownership Boundary
Bank Boundary
Pump Outlet Pool
Protected Areas
Post-restoration Marsh
Fish Channel
Dock will be built along existing spoil banks after canal filling has been completed.
Location of Dock 50' x 6' (drawn to scale)
N
W
E
S
0
100
200
300
400
500
Feet

Dock/Pier Plans

Side View



Front View



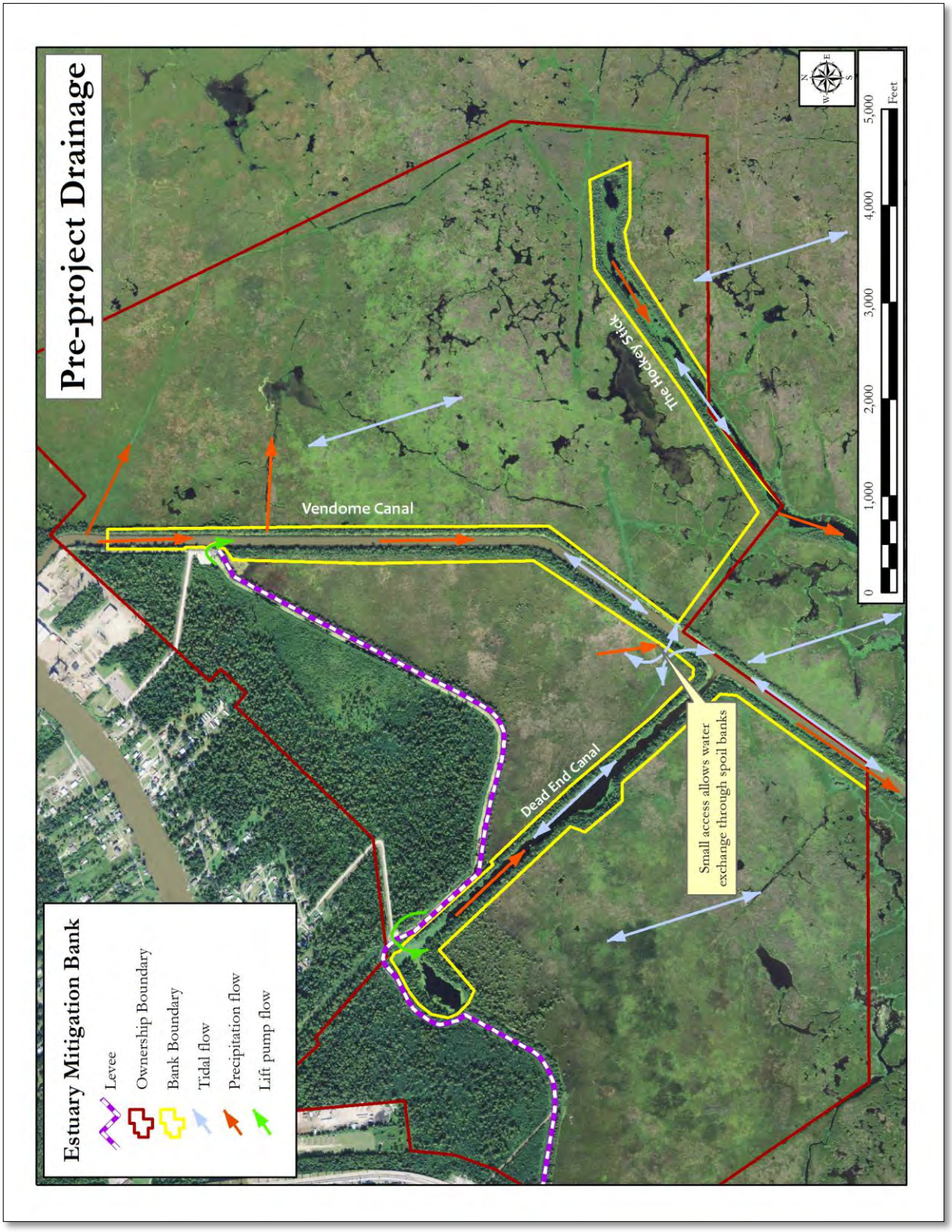


Figure 4. HMIA Pre-project Drainage Patterns.

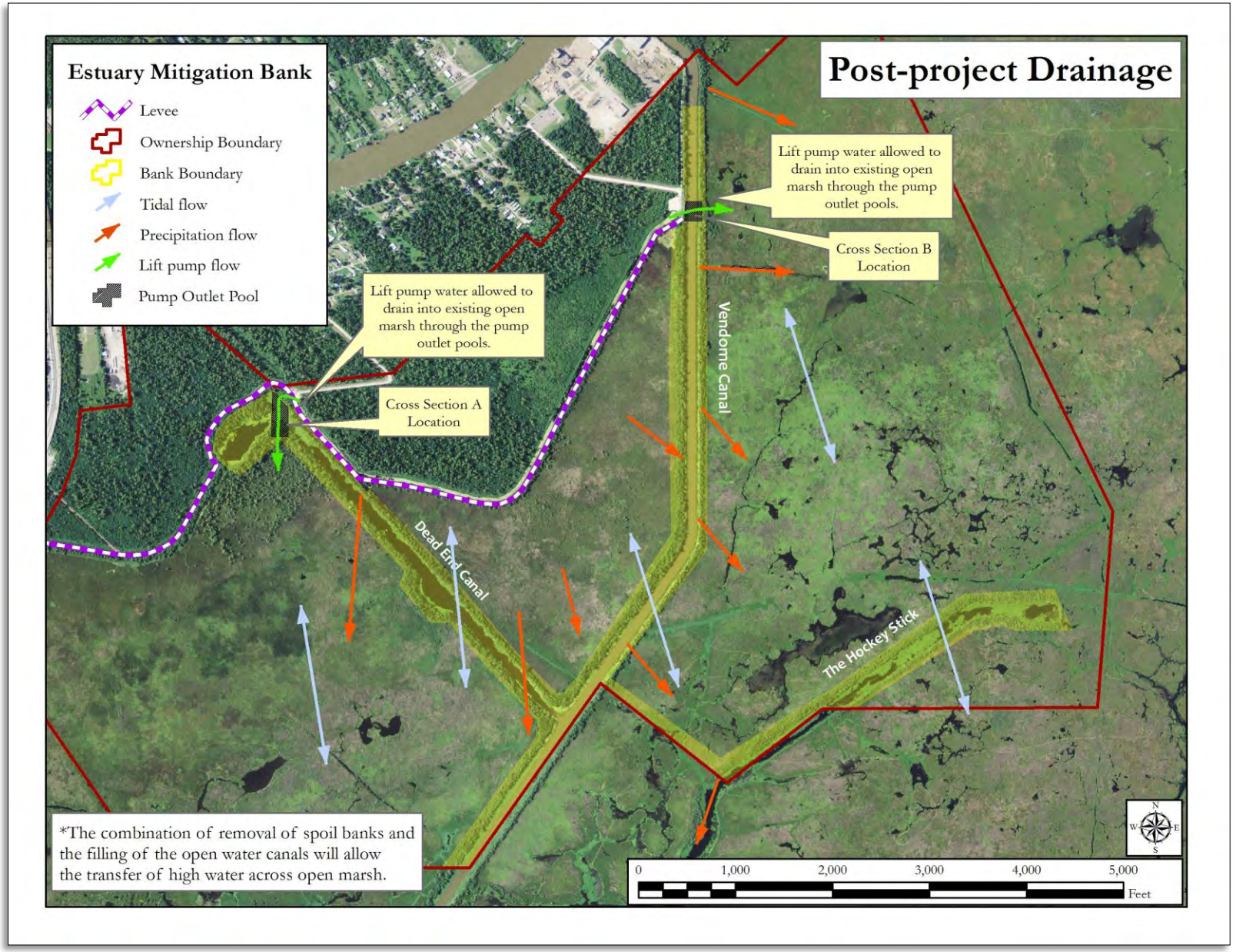


Figure 5. HMIA Post-project Drainage Patterns.

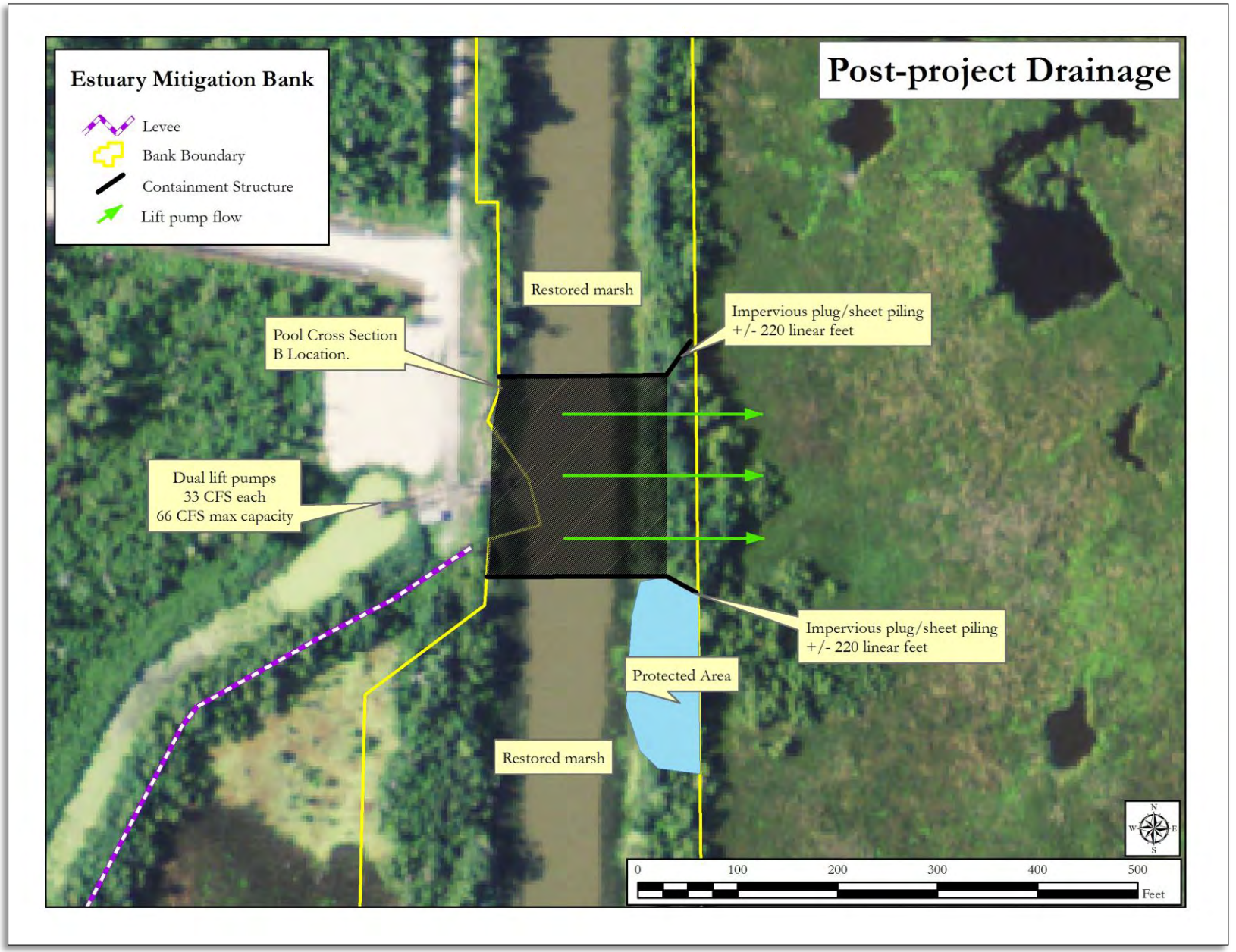


Figure 5a. HMIA Rosethorne pump outlet pool and flow direction.

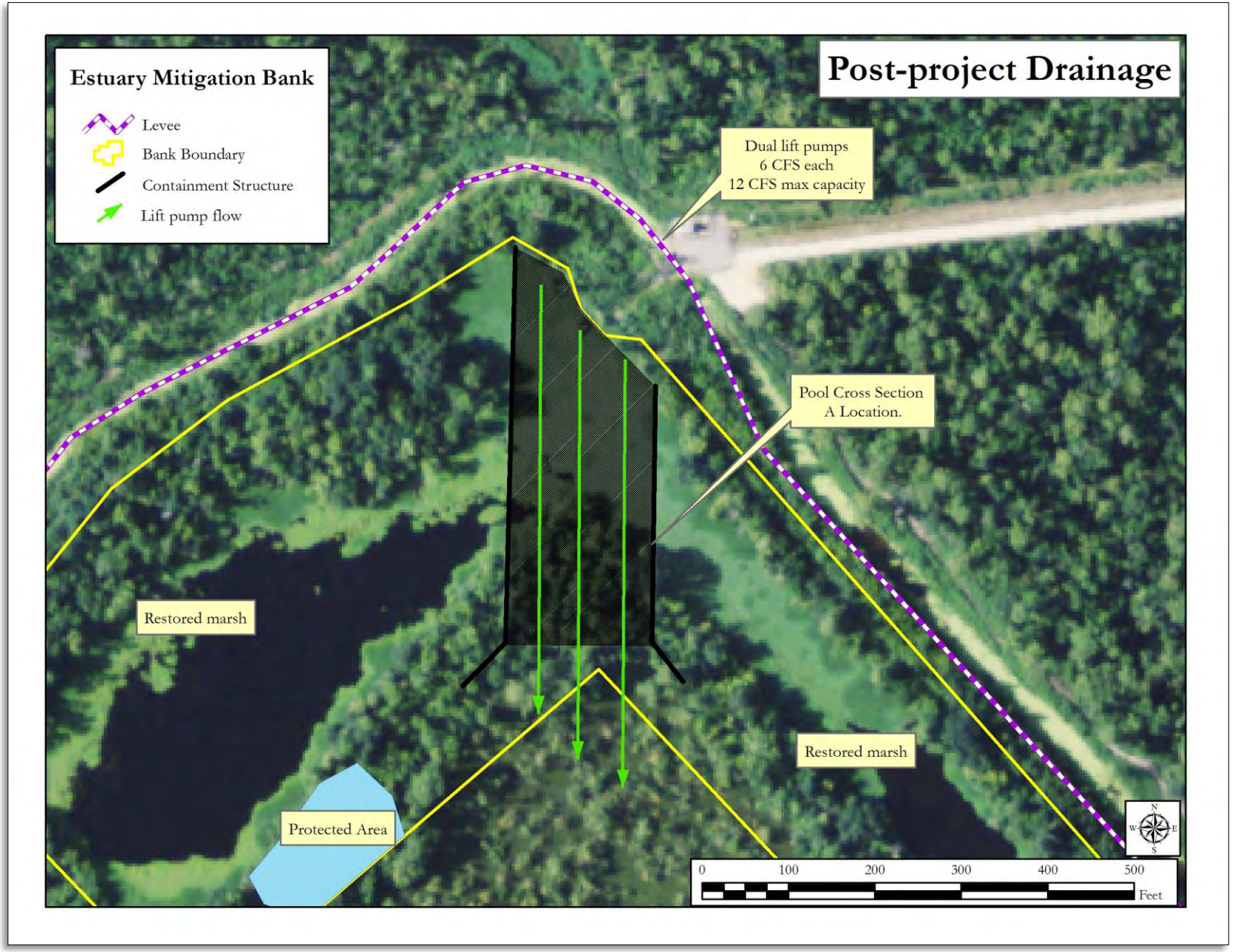
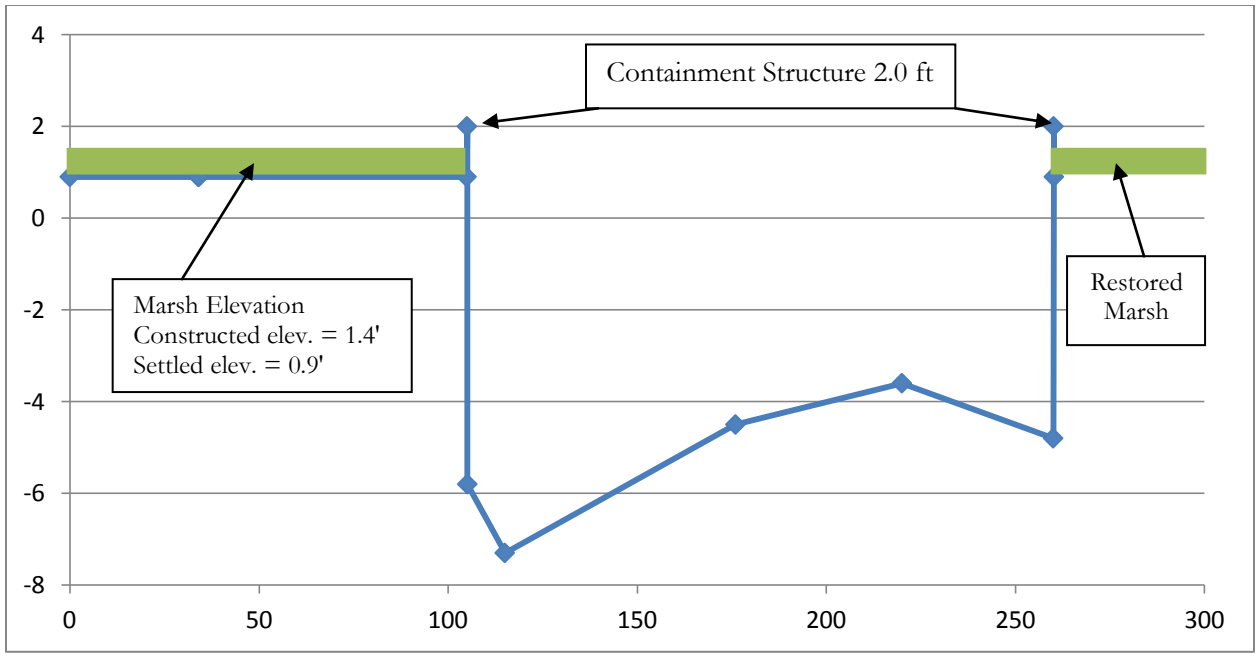
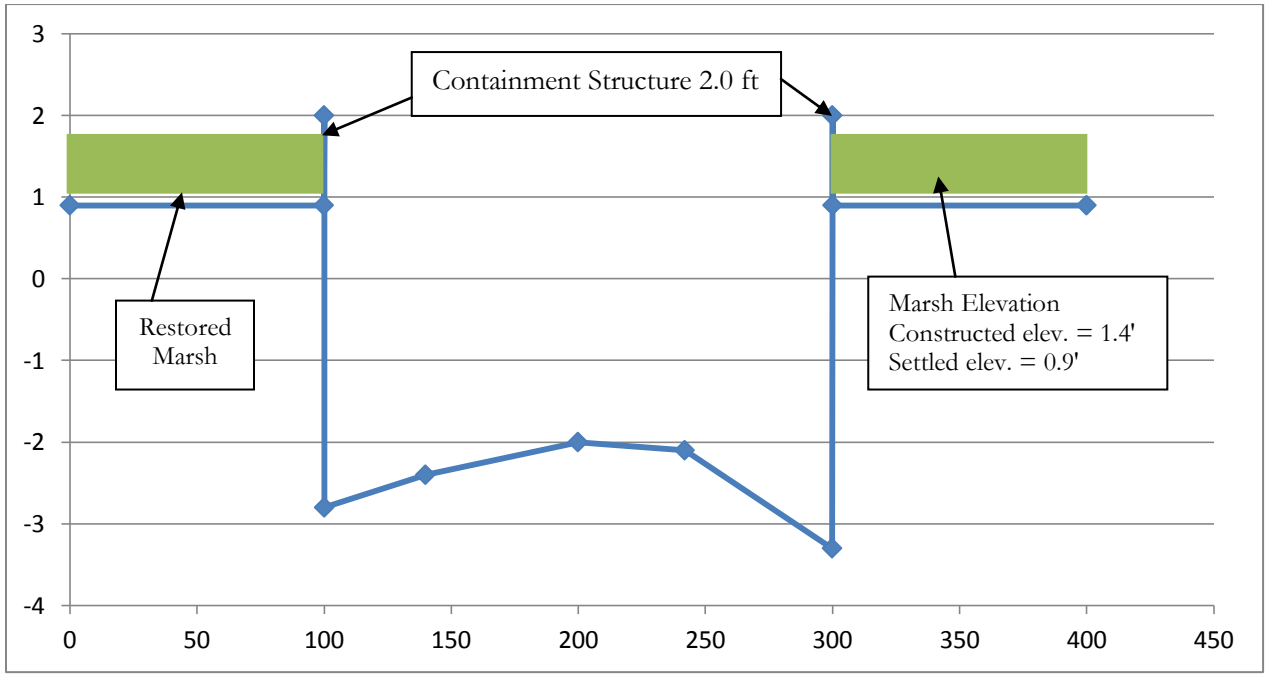


Figure 5b. HMIA August Lane pump outlet pool and flow direction.



*Elevation in NAVD88. Left side is flood protection levee side (facing east to west).

Figure A. August Lane Post-Restoration Outlet Pool Cross Section.



*Elevation in NAVD88. Left side of graph faces north.

Figure B. Vendome Canal Post-Restoration Outlet Pool Cross Section.