

JOINT PUBLIC NOTICE

April 4, 2016

United States Army
Corps of Engineers
New Orleans District
Regulatory Branch
Post Office Box 60267
New Orleans, Louisiana 70160-0267

(504) 862-2284

Sara.B.Fortuna@usace.army.mil

Project Manager
Sara Fortuna
Permit Application Number
MVN-2015-01060-WKK

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

(225) 219-3225

Elizabeth.Hill@la.gov

Project Manager
Elizabeth Hill
WQC Application Number
WQC 160330-01

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).

PIPELINE REPLACEMENT IN ST. MARY PARISH

NAME OF APPLICANT: Shell Pipeline Company, Post Office Box 2648, OSP 41082B, Houston, Texas 77252-2648.

LOCATION OF WORK: Bateman Island, crossing Atchafalaya River and Bayou Shaffer, located in near the community of Morgan City, in St. Mary Parish, Louisiana, as shown on the enclosed drawings.

Location: POB: Latitude: 29°40'52" N / Longitude: -91°13'31" W, POE: Latitude: 29°40'47" N / Longitude: -91°11'21" W, Hydrologic Unit Code for West of Bayou Shaffer: 08080101 – Atchafalaya River Basin, Hydrologic Unit Code for East of Bayou Shaffer: 08090302 – Terrebonne, West-Central Louisiana Coastal Basin

CHARACTER OF WORK: **Atchafalaya River Segment:** Cut and abandon 4,160 feet of an existing 22-inch Shell Pipeline, conduct drilling and excavation operations to install 1,120-foot long pipeline to connect to the new HDD pipeline and to the existing pipeline at Berwick Station, construct a 40-foot wide by 50-foot long bore pit within a 200-foot wide by 200-foot long work space connected to a 40-foot wide by 1,140-foot long excavated work space, place approximately 7,825 cubic yards excavated fill material in three temporary spoil placements, 980 cubic yards of wood chips along pipeline, and a total of approximately 365 cubic yards within a 30-foot wide by 75-foot long and a 30-foot wide by 230-foot long areas in the Atchafalaya River. **Bateman Island Segment:** Cut and abandon 4,160 feet of an existing 22-inch Shell Pipeline, conduct drilling and excavation operations to install 4,860 feet of the HDD pipeline, construct a 40-foot wide by 50-foot long bore pit within a 250-foot wide by 250-foot

long work space and a 40-foot wide by 50-foot long bore pit within a 200-foot wide by 200-foot long work space connected to a 80-foot wide by 2,860-foot long excavated work space, which includes placing 1,275 cubic yards of wood chips in a 10-foot wide by 2,860-foot long temporary spoil placement area along the south side of an 30-foot wide existing right-of-way (ROW), and placing approximately 1,275 cubic yards of wood chips in a 10-foot wide by 2,860 foot long flotation channel within part of the ROW, 2,330 cubic yards of wood chips in a 30-foot wide by 2,860 foot long temporary spoil placement and 2,330 cubic yards of wood chips in a 15-foot wide by 2,860-foot long flotation channel, all on the north side of the ROW, place approximately 1,160 cubic yards of excavated fill material within temporary excavated workspace near bore pit area that is located within the 250-foot wide by 250-foot long work space, and 1,280 cubic yards of excavated fill material near bore pit area that is located within the 200-foot wide by 200-foot long work space. East of this work space, cut and abandon 5,175 feet of an existing 22-inch Shell Pipeline, install a 50-foot wide by 1,289-foot long excavated work space, place approximately 2,135 cubic yards of wood chips along 4,255-foot long HDD pipeline, and construct 40-foot wide by 54-foot long concrete dock, install four 5-pile clusters, and conduct clearing, grading, and chipping operations to place approximately 649 cubic yards of wood chips in a 200-foot wide by 350-foot long work space. **Bayou Shaffer Segment:** Place 240 cubic yards of rip rap within a 30-foot wide by 155-foot long area in Bayou Shaffer, cut and abandon 5,175 feet of an existing 22-inch Shell Pipeline, install 4,255-foot long HDD pipeline, install a 40-foot wide by 50-foot long bore pit within a 200-foot wide by 200-foot long work space connected to a 75-foot wide by 400-foot long work space, place approximately 3,300 cubic yards of excavated material near bore pit area, 3,485 cubic yards of wood chips within a 75-foot wide by 125-foot long temporary spoil placement. Approximately 1.84 acres of jurisdictional wetlands west of Atchafalaya River levee and 0.21 of an acre of open water in the Atchafalaya River would be permanently impacted via project implementation. Approximately 12.29 acres of jurisdictional wetlands east of the Atchafalaya River levee and 0.10 of an acre of open water in Bayou Shaffer in would be permanently impacted via project implementation. Temporary impacts include 0.46 of an acre of non-wetlands and 3.63 acres of temporary spoil placement work areas. Therefore, a total of 14.1 acres of jurisdictional wetlands would be permanently impacted via project implementation. The applicant agrees to compensate for wetland impacts by purchasing credits at a Department of the Army approved mitigation bank.

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 out of the 18.53 acre project footprint, 0.31 of an acre is located in waters known to be utilized by the pallid sturgeon (*Scaphirhynchus albus*) and the West Indian Manatee (*Trichechus manatus*) and 1.84 acres of jurisdictional wetlands utilized by the Louisiana Black Bear (*Ursus americanus luteolus*) and determined the activity is not likely to adversely affect these 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: Standard Manatee Conditions for In-Water Activities, Appendix LBB-01 Conditions for General Activities That Would Occur within Louisiana Black Bear Breeding Habitat, and the Appendix LBB-03 Conditions for Activities That Would Occur within Louisiana Black Bear Critical Habitat.

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 **0.31** of an acre 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.

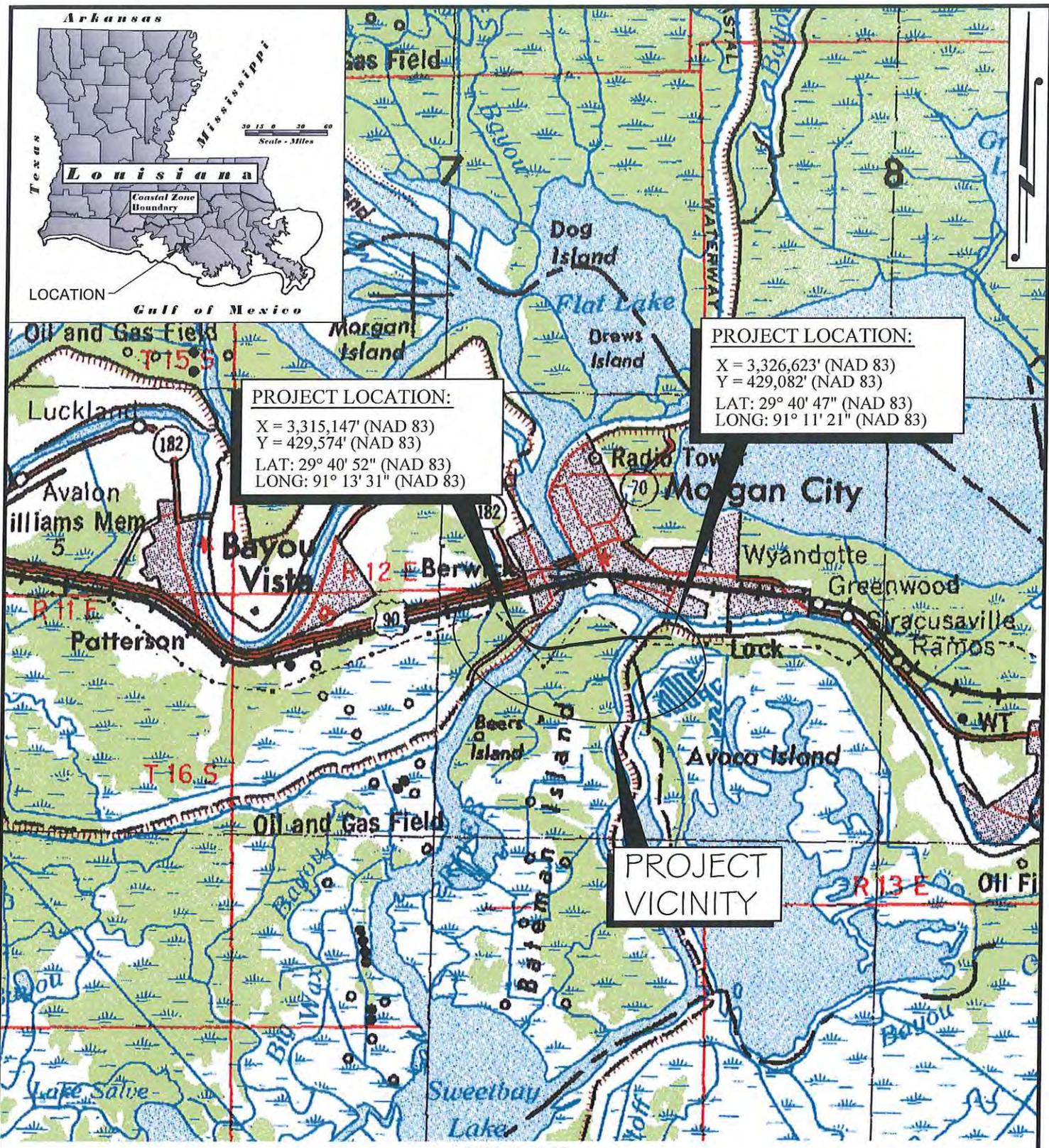
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

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.

Darrell S. Barbara
Chief, Western Evaluation Section

Enclosure



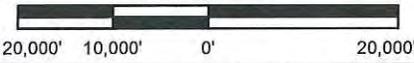
PROJECT LOCATION:
 X = 3,315,147' (NAD 83)
 Y = 429,574' (NAD 83)
 LAT: 29° 40' 52" (NAD 83)
 LONG: 91° 13' 31" (NAD 83)

PROJECT LOCATION:
 X = 3,326,623' (NAD 83)
 Y = 429,082' (NAD 83)
 LAT: 29° 40' 47" (NAD 83)
 LONG: 91° 11' 21" (NAD 83)

PROJECT VICINITY

SCALE: 1" = 20,000'

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.



REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

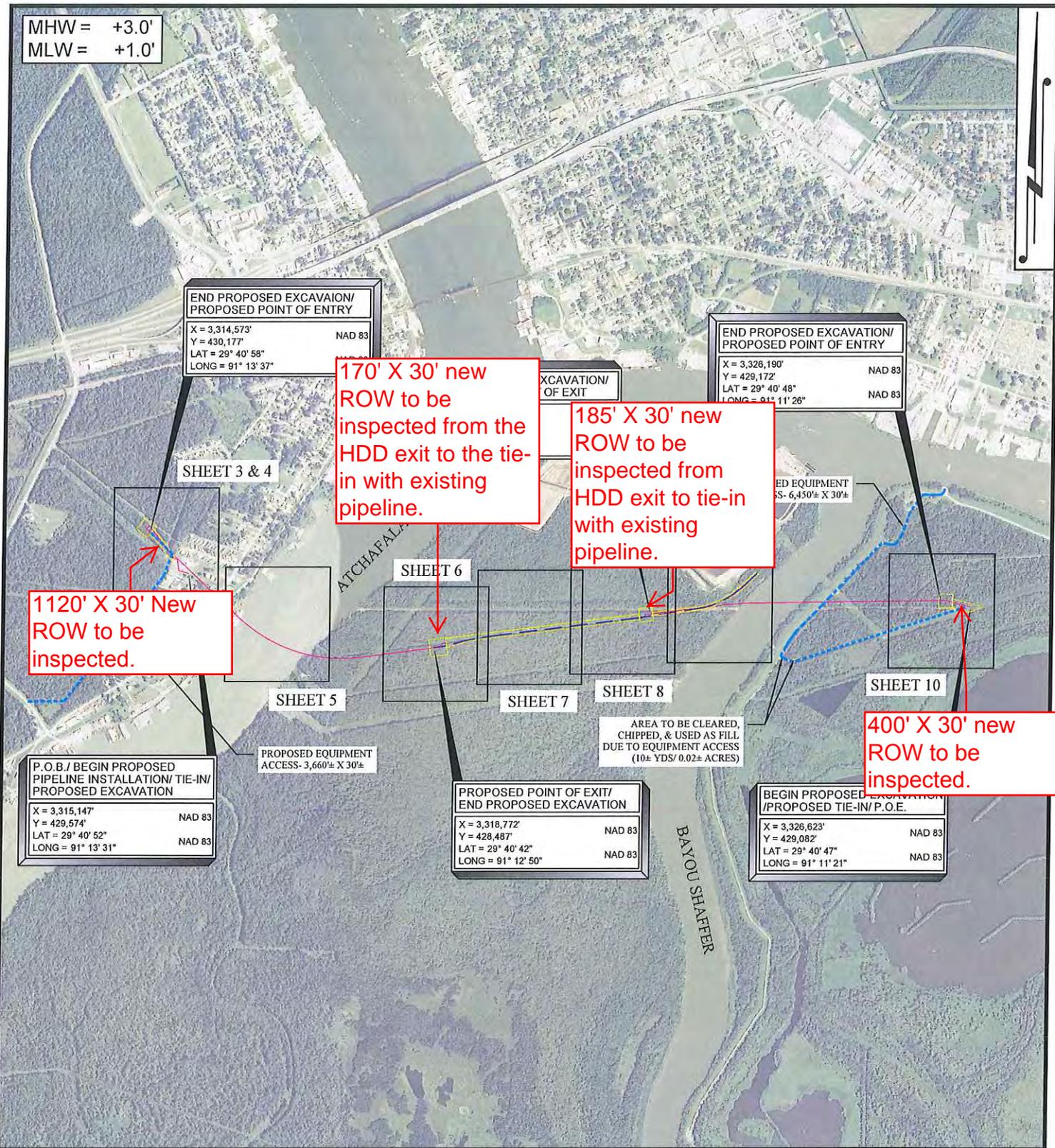
HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

DATE: 04/09/2015	SPLC-GOM-HE-SA93851	REV. 00
BY: TBS-2014.0525		

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MHW = +3.0'
MLW = +1.0'

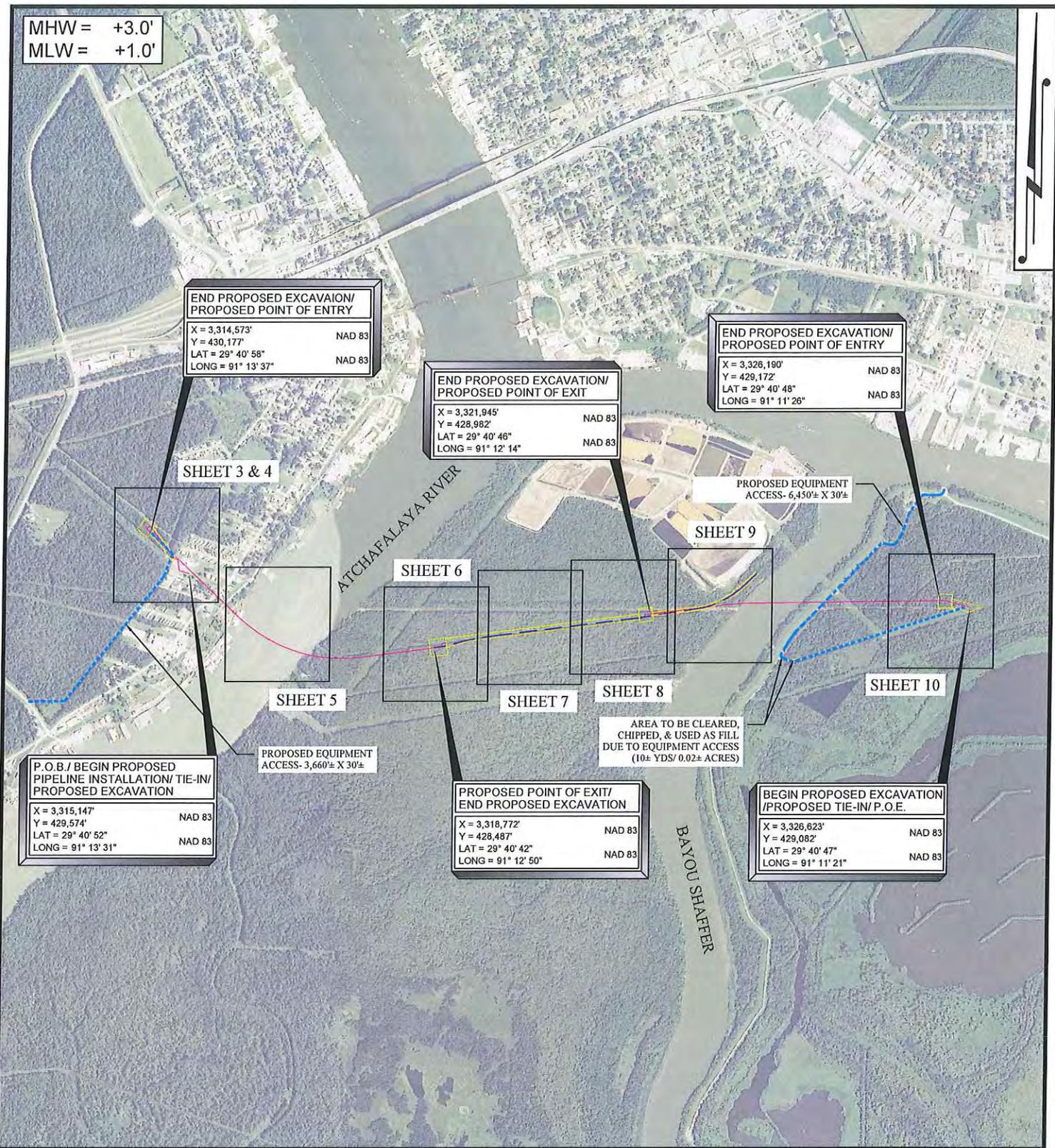


Only the 4 trenched areas of the proposed pipeline will be subject to physical inspection in the future. The areas are:

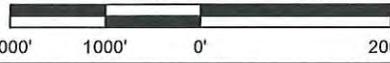
- The 1120' segment from Berwick Station to the Atchafalaya River HDD entry tie-in.
- The 170' tie-in of the Atchafalaya River exit to the existing pipeline on Bateman Island.
- The 185' tie-in of the Bayou Shaffer HDD exit to the existing pipeline on Bateman Island.
- The 400' tie-in of the Bayou Shaffer drill to the existing pipeline on Avoca Island.

The type of equipment and clearing requirements will depend on the nature of the repair.

MHW = +3.0'
MLW = +1.0'



SCALE: 1" = 2000'



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26

SHEET 2 OF 10

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

DATE: 04/09/2015	SPLC-GOM-HE-SA93852	REV. 00
BY: TBS-2014.0525		

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MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:

-  PALUSTRINE FORESTED WETLANDS
-  PALUSTRINE EMERGENT WETLANDS

EXISTING SHELL PIPELINE
TO REMAIN IN PLACE

PROPOSED TEMPORARY SPOIL
PLACEMENT- 115'± X 85'± X 20'±
(4,275± YDS/ 0.22± ACRES)

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(490± YDS/ 0.92± ACRES)

PROPOSED BORE PIT
EXCAVATION- 50'± X 40'±
SEE SHEET 14 FOR DETAIL

PROPOSED 22-INCH PIPELINE
TO BE INSTALLED- 1,120'±

PROPOSED TEMPORARY SPOIL
PLACEMENT- 60'± X 60'± X 10'±
(900± YDS/ 0.08± ACRES)

END PROPOSED EXCAVATION/
PROPOSED POINT OF ENTRY

X = 3,314,573' NAD 83
Y = 430,177' NAD 83
LAT = 29° 40' 58" NAD 83
LONG = 91° 13' 37"

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(490± YDS/ 0.92± ACRES)

PROPOSED EXCAVATION
(1,140'± X 40'±)
SEE SHEET 11 & 17 FOR DETAIL

P.O.B./ BEGIN PROPOSED
PIPELINE INSTALLATION/ TIE-IN/
PROPOSED EXCAVATION/
BEGIN PIPELINE ABANDONMENT

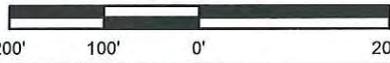
X = 3,315,147' NAD 83
Y = 429,574' NAD 83
LAT = 29° 40' 52" NAD 83
LONG = 91° 13' 31"

PROPOSED TEMPORARY SPOIL
PLACEMENT- 90'± X 75'± X 15'±
(2,650± YDS/ 0.15± ACRES)

NOTE: PROPOSED TIMBER MATS TO BE USED
FOR EQUIPMENT ACCESS. THIS SHEET TO
SHOW LOOP CONNECTION ONLY. SEE SHEET 4
FOR HDD INSTALLATION PLAN VIEW.

EXISTING SHELL PIPELINE TO BE CUT,
CAPPED, & ABANDONED IN PLACE- 4,160'±

SCALE: 1" = 200'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR
THE ACQUISITION OF REGULATORY PERMITS.

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

**PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA**

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INFORMATION CONTAINED ON THIS DRAWING, AND THE USER ASSUMES ALL RISK OF
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DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93853

REV. 00

MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:



PALUSTRINE FORESTED WETLANDS



PALUSTRINE EMERGENT WETLANDS

EXISTING SHELL PIPELINE
TO REMAIN IN PLACE

PROPOSED TEMPORARY SPOIL
PLACEMENT- 115± X 85± X 20±
(4,275± YDS/ 0.22± ACRES)

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(490± YDS/ 0.92± ACRES)

PROPOSED BORE PIT
EXCAVATION- 50± X 40±
SEE SHEET 14 FOR DETAIL

PROPOSED TEMPORARY SPOIL
PLACEMENT- 60± X 60± X 10±
(900± YDS/ 0.08± ACRES)

END PROPOSED EXCAVATION/
PROPOSED POINT OF ENTRY

X = 3,314,573' NAD 83
Y = 430,177' NAD 83
LAT = 29° 40' 58" NAD 83
LONG = 91° 13' 37"

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(490± YDS/ 0.92± ACRES)

EXISTING SHELL FACILITY

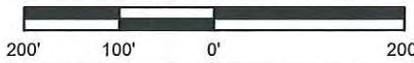
PROPOSED 22-INCH HDD PIPELINE
TO BE INSTALLED- 4,860±

PROPOSED TEMPORARY SPOIL
PLACEMENT- 90± X 75± X 15±
(2,650± YDS/ 0.15± ACRES)

NOTE: PROPOSED TIMBER MATS TO BE USED
FOR EQUIPMENT ACCESS. THIS SHEET TO
SHOW HDD INSTALLATION ONLY. SEE SHEET 3
FOR LOOP CONNECTION PLAN VIEW.

EXISTING SHELL PIPELINE TO BE CUT,
CAPPED, & ABANDONED IN PLACE- 4,160±

SCALE: 1" = 200'



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26

SHEET 4 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

**PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA**

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DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93854

REV.
00

MHW = +3.0'
MLW = +1.0'

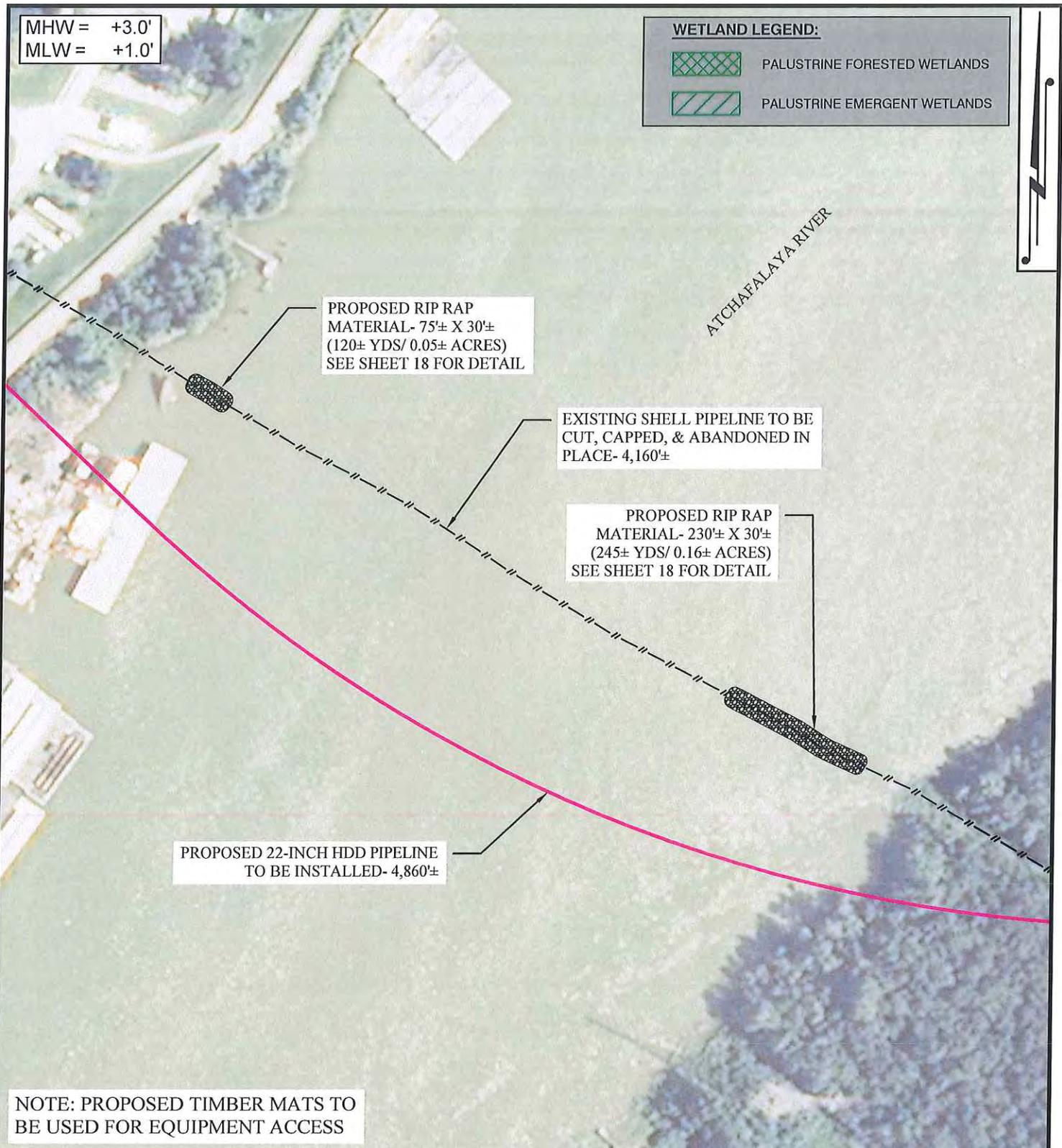
WETLAND LEGEND:



PALUSTRINE FORESTED WETLANDS



PALUSTRINE EMERGENT WETLANDS



NOTE: PROPOSED TIMBER MATS TO BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



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26
SHEET 5 OF 26

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER ST. MARY PARISH, LOUISIANA

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DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93855

REV. 00

MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:

-  PALUSTRINE FORESTED WETLANDS
-  PALUSTRINE EMERGENT WETLANDS

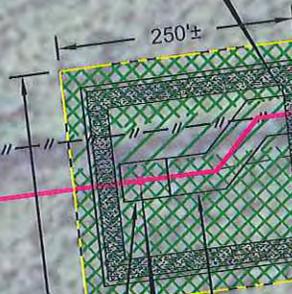
BEGIN PROPOSED EXCAVATION /PROPOSED TIE-IN/ END PIPELINE ABANDONMENT

X = 3,318,934' NAD 83
Y = 428,558' NAD 83
LAT = 29° 40' 42"
LONG = 91° 12' 48"

WORK AREA TO BE CLEARED, CHIPPED, & USED AS FILL (2,920± YDS/ 5.49± ACRES)

PROPOSED EQUIPMENT ACCESS & FLOATATION CHANNELS SEE SHEET 16 FOR DETAIL

EXISTING SHELL PIPELINE TO BE CUT, CAPPED, & ABANDONED IN PLACE- 4,160±



EXISTING SHELL PIPELINE TO REMAIN IN PLACE

WORK AREA TO BE CLEARED, CHIPPED, & USED AS FILL (765± YDS/ 1.43± ACRES)

PROPOSED BORE PIT EXCAVATION- 50'± X 40'± SEE SHEET 14 FOR DETAIL

PROPOSED EXCAVATION- 170'± X 40'± SEE SHEET 17 FOR DETAIL

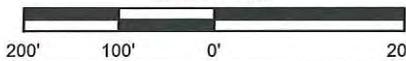
PROPOSED 22-INCH HDD PIPELINE TO BE INSTALLED- 4,860±

PROPOSED POINT OF EXIT/ END PROPOSED EXCAVATION

X = 3,318,772' NAD 83
Y = 428,487' NAD 83
LAT = 29° 40' 42"
LONG = 91° 12' 50"

NOTE: PROPOSED TIMBER MATS TO BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



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26
SHEET 6 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

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DATE: 04/09/2015
BY: TBS-2014.0525
SPLC-GOM-HE-SA93856
REV. 00

MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:



PALUSTRINE FORESTED WETLANDS



PALUSTRINE EMERGENT WETLANDS

PROPOSED BACK STRING/ PROPOSED
FLOATATION CHANNEL EXCAVATION
(2,330± YDS/ 0.98± ACRES)
SEE SHEET 16 FOR DETAIL

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(2,920± YDS/ 5.49± ACRES)

PROPOSED EQUIPMENT ACCESS
& FLOATATION CHANNELS
SEE SHEET 16 FOR DETAIL

30' existing cleared ROW

Workspace
2860' X 80'

80'±

EXISTING SHELL PIPELINE
TO REMAIN IN PLACE

PROPOSED TEMPORARY SPOIL
PLACEMENT- 2,860± X 10±
(1,275± YDS/ 0.66± ACRES)

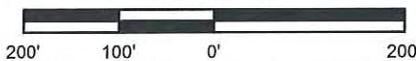
PROPOSED BACK STRING/ PROPOSED
FLOATATION CHANNEL EXCAVATION
(1,275± YDS/ 0.66± ACRES)
SEE SHEET 16 FOR DETAIL

MATCHLINE A

MATCHLINE B

NOTE: PROPOSED TIMBER MATS TO
BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



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THE ACQUISITION OF REGULATORY PERMITS.

26

SHEET 7 OF 29

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

**PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA**

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

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DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93857

REV.
00

MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:



PALUSTRINE FORESTED WETLANDS



PALUSTRINE EMERGENT WETLANDS

PROPOSED 22-INCH HDD PIPELINE
TO BE INSTALLED- 4,255'±

END PROPOSED EXCAVATION/
PROPOSED POINT OF EXIT

X = 3,321,945' NAD 83
Y = 428,982' NAD 83
LAT = 29° 40' 46"
LONG = 91° 12' 14"

PROPOSED EXCAVATION-
185'± X 40'±
SEE SHEET 17 FOR DETAIL

PROPOSED TEMPORARY SPOIL
PLACEMENT- 75'± X 75'± X 15'±
(1,465± YDS/ 0.13± ACRES)

PROPOSED EQUIPMENT ACCESS
& FLOATATION CHANNELS
SEE SHEET 16 FOR DETAIL

80'±

200'±

50'±

200'±

EXISTING SHELL PIPELINE
TO REMAIN IN PLACE

BEGIN PROPOSED EXCAVATION/
PROPOSED TIE-IN/ BEGIN
PIPELINE ABANDONMENT

X = 3,321,784' NAD 83
Y = 428,915' NAD 83
LAT = 29° 40' 46"
LONG = 91° 12' 16"

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(2,920± YDS/ 5.49± ACRES)

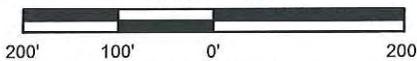
PROPOSED BORE PIT
EXCAVATION- 50'± X 40'±
SEE SHEET 14 FOR DETAIL

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(490± YDS/ 0.92± ACRES)

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(805± YDS/ 1.51± ACRES)

NOTE: PROPOSED TIMBER MATS TO
BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR
THE ACQUISITION OF REGULATORY PERMITS.

26
SHEET 8 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

**PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA**

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LOSS TO PERSONS AND PROPERTY AS A RESULT OF RELIANCE THEREON.

DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93858

REV.
00

MHW = +3.0'
MLW = +1.0'

WETLAND LEGEND:

-  PALUSTRINE FORESTED WETLANDS
-  PALUSTRINE EMERGENT WETLANDS

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(35± YDS/ 0.07± ACRES)

Workspace
58' X 50'

Dock details shown
on Sheets 20 - 25

PROPOSED BACK STRING

WORK AREA TO BE CLEARED,
CHIPPED, & USED AS FILL
(805± YDS/ 1.51± ACRES)

Workspace
1289' X 50'

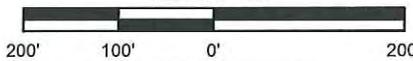
PROPOSED 22-INCH HDD PIPELINE
TO BE INSTALLED- 4,255±

EXISTING SHELL PIPELINE TO BE
CUT, CAPPED, & ABANDONED IN
PLACE- 5,175±

PROPOSED RIP RAP
MATERIAL- 155± X 30±
(240± YDS/ 0.10± ACRES)
SEE SHEET 18 FOR DETAIL

NOTE: PROPOSED TIMBER MATS TO
BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR
THE ACQUISITION OF REGULATORY PERMITS.

26

SHEET 9 OF 19

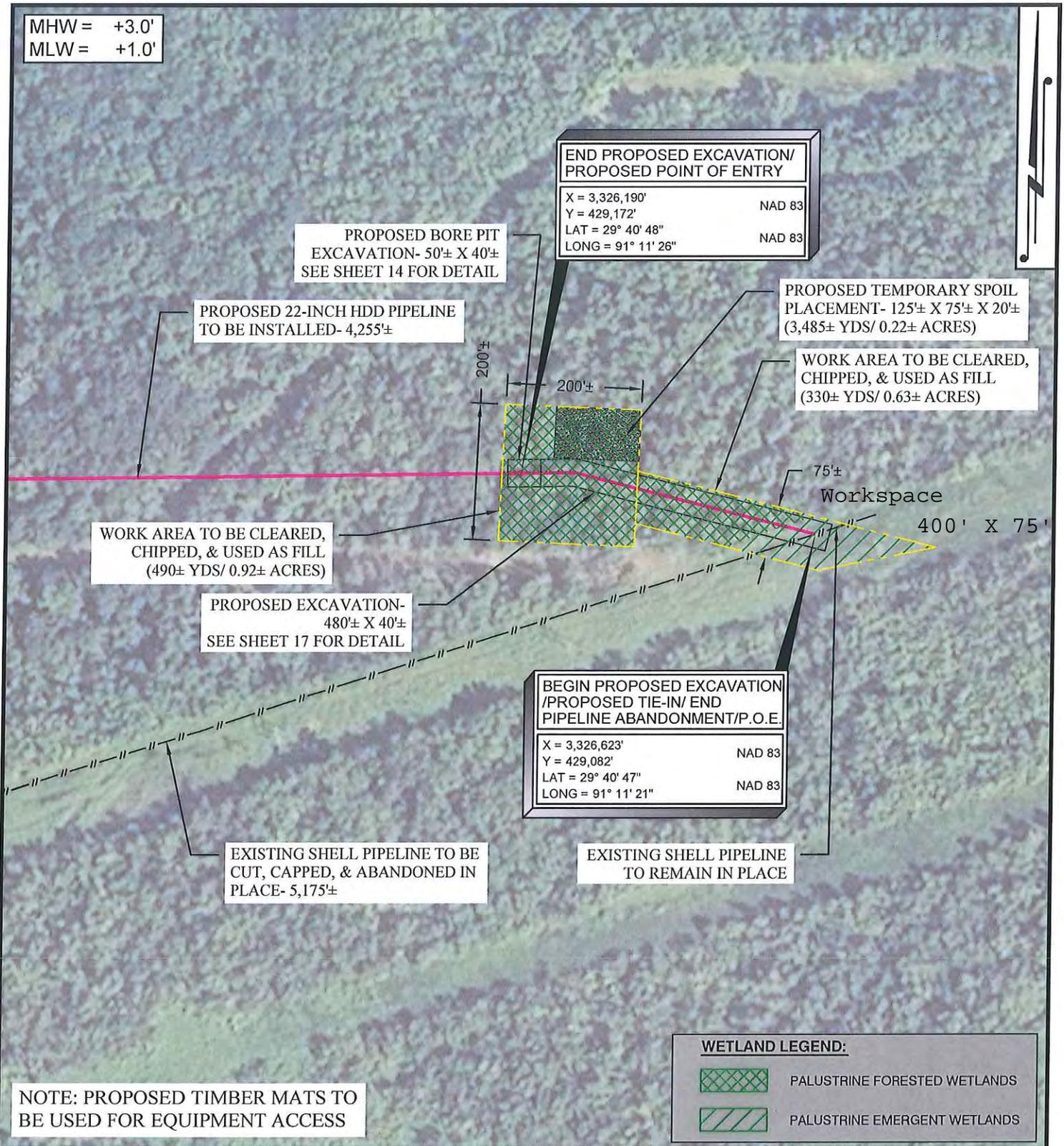
REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

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DATE: 04/09/2015	SPLC-GOM-HE-SA93859	REV. 00
BY: TBS-2014.0525		

MHW = +3.0'
MLW = +1.0'



NOTE: PROPOSED TIMBER MATS TO BE USED FOR EQUIPMENT ACCESS

SCALE: 1" = 200'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

26

SHEET 10 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP
01	04/20	WORK AREA TO BE CLEARED.		SPM	KSB

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

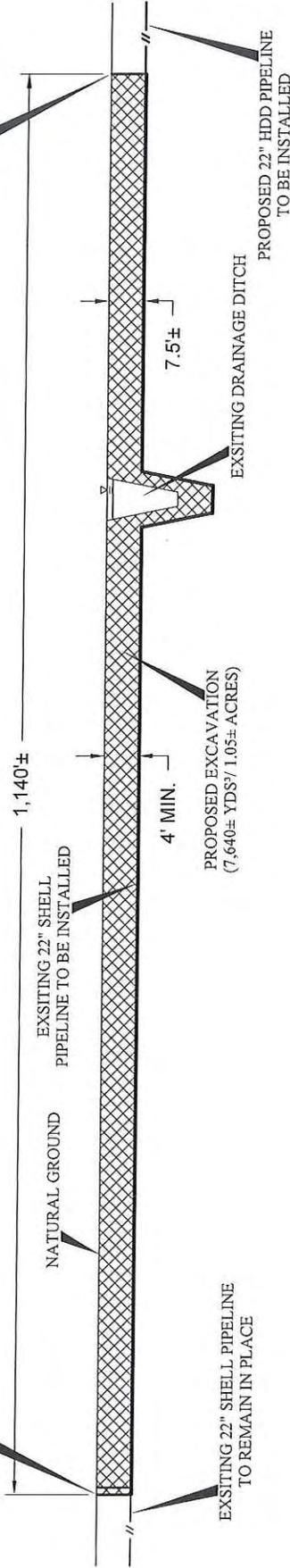
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DATE: 04/09/2015
BY: TBS-2014.0525
SPLC-GOM-HE-SA93860
REV. 01

MHW = +3.0'
MLW = +1.0'

P.O.B./ BEGIN PROPOSED PIPELINE INSTALLATION/ TIE-IN/ PROPOSED EXCAVATION
X = 3,315,147' NAD 83
Y = 429,574' NAD 83
LAT = 29° 40' 52" N
LONG = 91° 13' 31" W

END PROPOSED EXCAVATION/ PROPOSED POINT OF ENTRY
X = 3,314,573' NAD 83
Y = 430,177' NAD 83
LAT = 29° 40' 58" N
LONG = 91° 13' 37" W



PIPELINE EXCAVATION PROFILE

NOT TO SCALE

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

26

SHEET 11 OF 100

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER ST. MARY PARISH, LOUISIANA

DATE: 04/09/2015
DRAWN: TBS-2014.0525

REV. NO. 00
SPLC-GOIM-HE-SA93861

REV. NO.	DATE	DESCRIPTION OF REVISION	ES. NO.	BY	LEG.	APP.

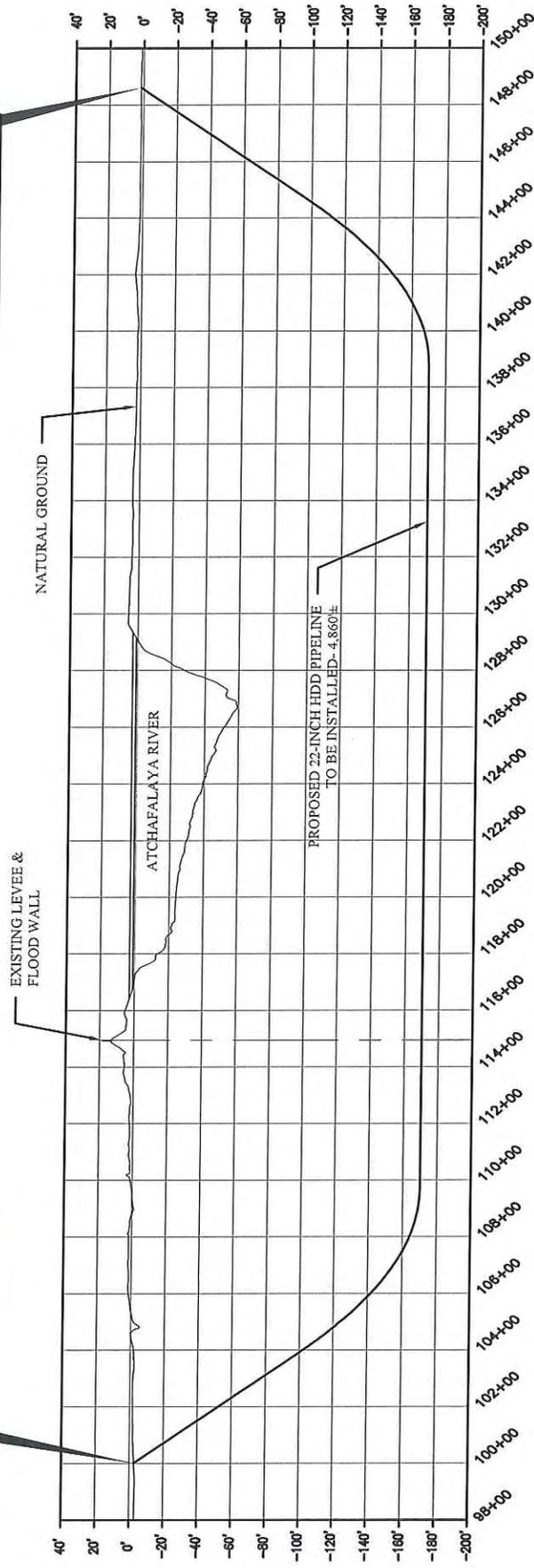
HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

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MHW = +3.0'
MLW = +1.0'

END PROPOSED EXCAVATION/
PROPOSED POINT OF ENTRY
X = 3314.572 NAD 83
Y = 450.177 NAD 83
LAT = 29° 40' 56" LONG = 91° 13' 37"

PROPOSED POINT OF EXIT
END PROPOSED EXCAVATION
X = 3318.772 NAD 83
Y = 426.497 NAD 83
LAT = 29° 42' 42" LONG = 91° 12' 50"



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALAYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

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PERSONS AND PROPERTY AS A RESULT OF RELIANCE THEREON.

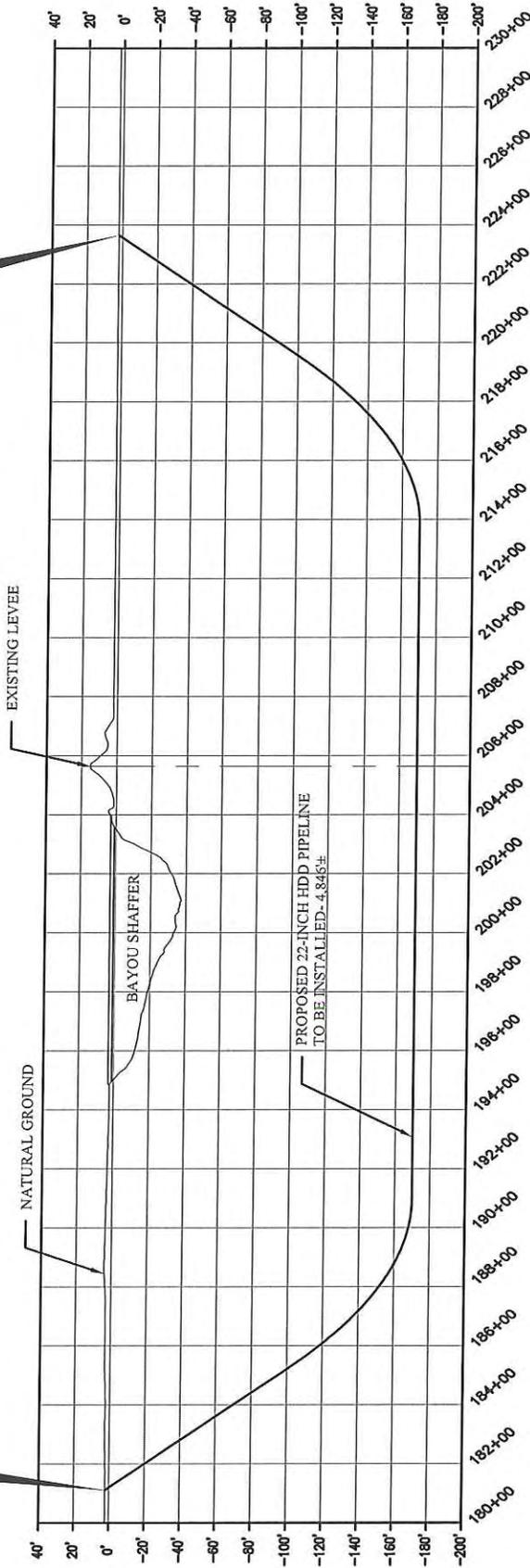
REV.	DATE	DESCRIPTION OF REVISION	ES NO.	BY	CHKD	APP

DATE: 04/09/2015
DRAWN: TBS-2014.0525
SPLC-GOM-HE-SA93862
REV: 00

MHW = +3.0'
MLW = +1.0'

END PROPOSED EXCAVATION/
PROPOSED POINT OF EXIT
X = 3,321,945' NAD 83
Y = 428,982' NAD 83
LAT = 29° 40' 46"
LONG = 91° 12' 14"

END PROPOSED EXCAVATION/
PROPOSED POINT OF ENTRY
X = 3,325,180' NAD 83
Y = 429,177' NAD 83
LAT = 29° 40' 46"
LONG = 91° 11' 25"



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR
THE ACQUISITION OF REGULATORY PERMITS.

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

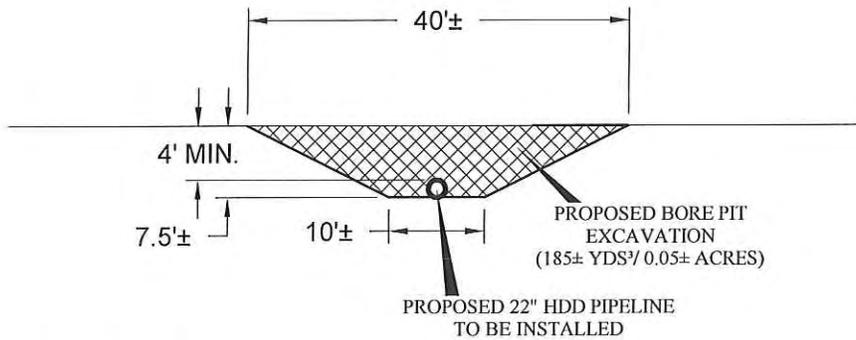
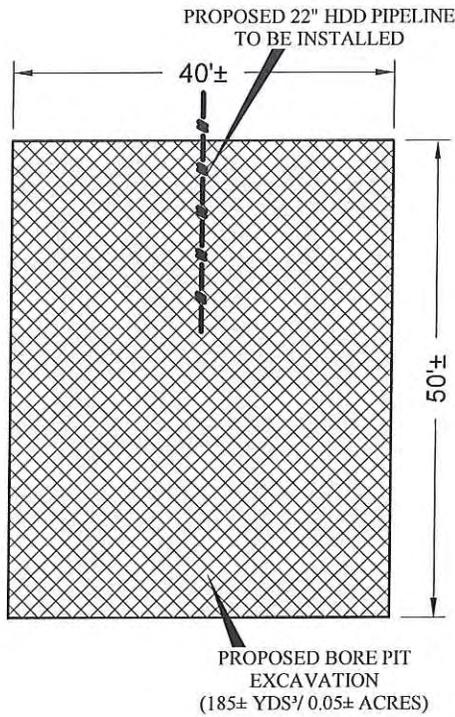
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THE USER ASSUMES ALL RISK OF LOSS TO PERSONS AND PROPERTY AS A RESULT OF RELIANCE THEREON.

REV. NO.	DATE	DESCRIPTION OF REVISION

REV. NO.	DATE	DESCRIPTION OF REVISION

REV. NO.	DATE	DESCRIPTION OF REVISION	ES. NO.	BT	FILED	MEKH	APP

DATE 04/09/2015
DRAWN TBS-2014.0525
SPLC-GOM-HE-SA93863

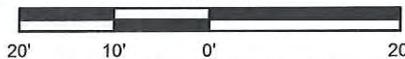


Proposed temporary spoil placement to be stockpiled within workspace and used as backfill.
See plan views for location & dimensions.

EXCAVATION DETAIL- BORE PIT

SCALE: 1" = 20'

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.



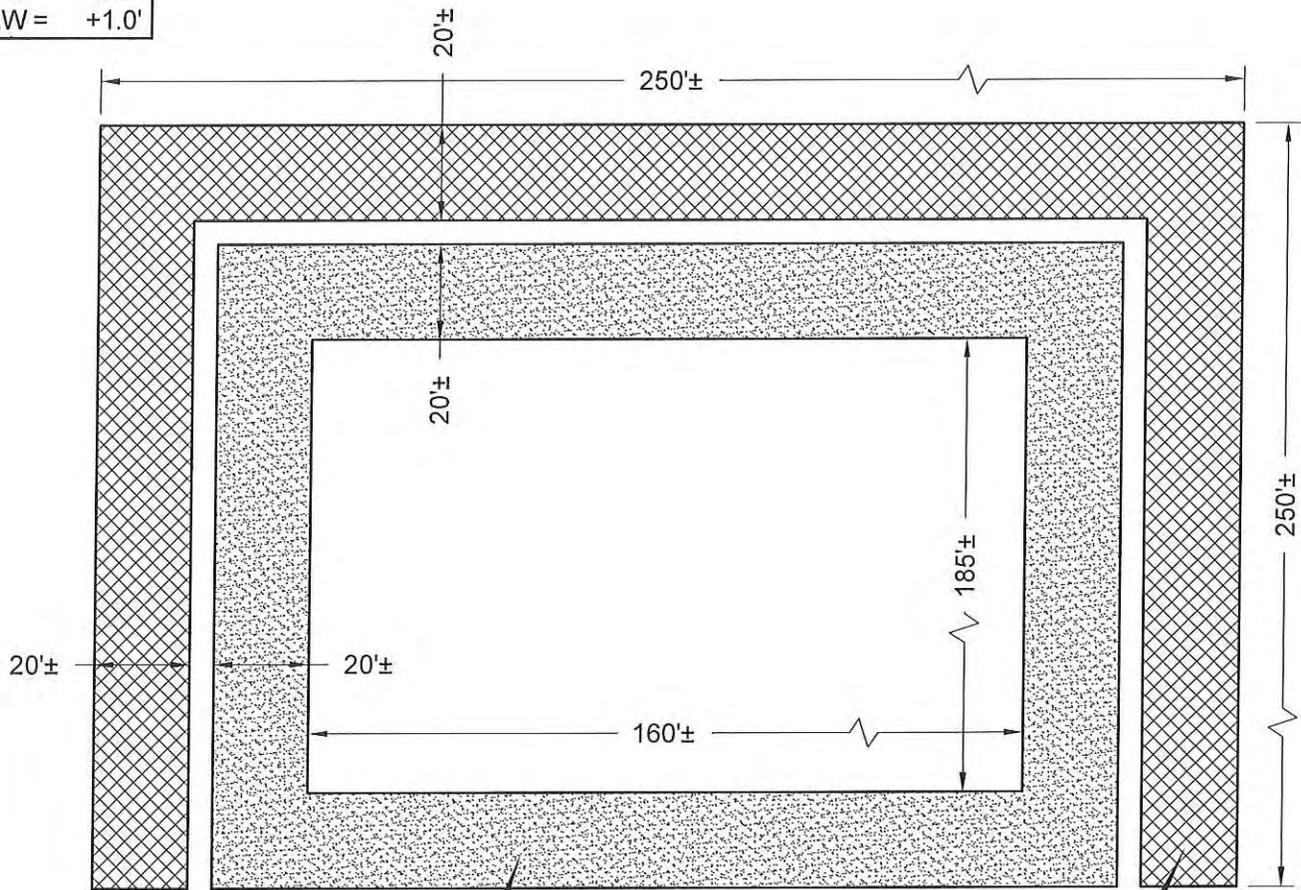
26
SHEET 14 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE	
PL SEG-BERWICK TO HOUMA	
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER ST. MARY PARISH, LOUISIANA	
DATE: 04/09/2015	REV. 00
BY: TBS-2014.0525	SPLC-GOM-HE-SA93864

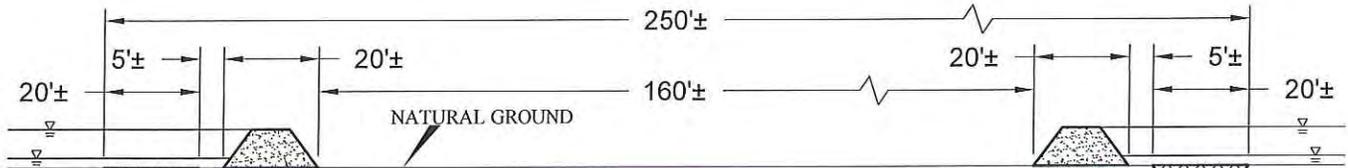
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MHW = +3.0'
MLW = +1.0'



PROPOSED TEMPORARY RING LEVEE
(2,495± YDS²/ 0.35± ACRES)

PROPOSED EXCAVATION FOR RING LEVEE CONSTRUCTION
(1,150± YDS²/ 0.33± ACRES)



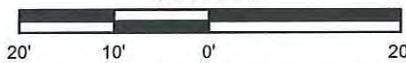
PROPOSED TEMPORARY RING LEVEE
(2,495± YDS²/ 0.35± ACRES)

PROPOSED EXCAVATION FOR RING LEVEE CONSTRUCTION
(1,150± YDS²/ 0.33± ACRES)

Approximately 330± yds³ of native material to be used for ring levee construction will derive from bore pit & tie-in excavation.

EXCAVATION DETAIL- RING LEVEE

SCALE: 1" = 20'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

26

SHEET 15 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER ST. MARY PARISH, LOUISIANA

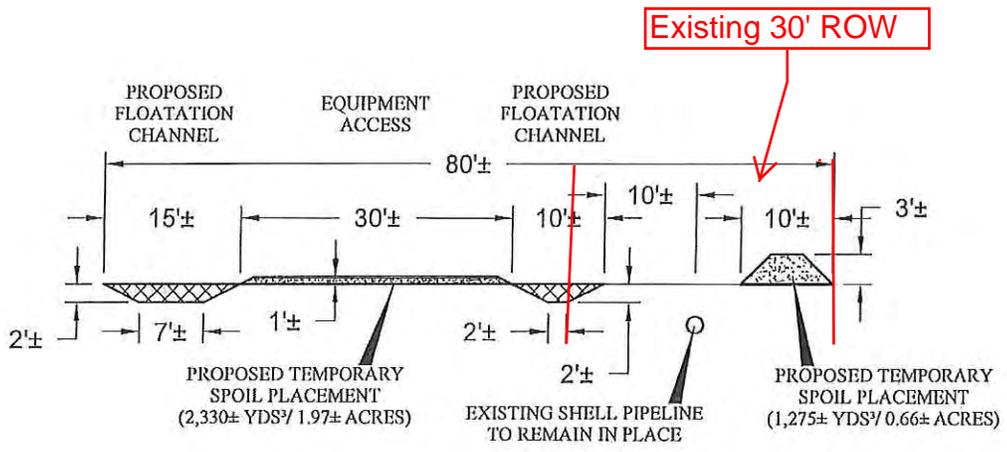
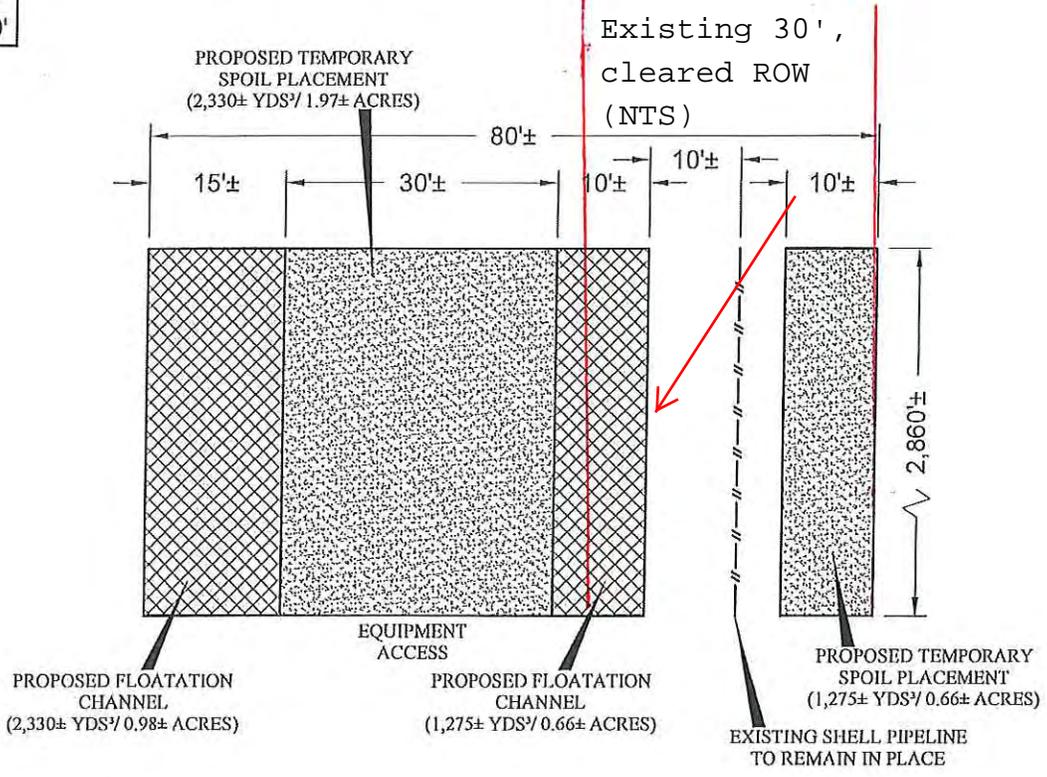
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DATE: 04/09/2015
BY: TBS-2014.0525

SPLC-GOM-HE-SA93865

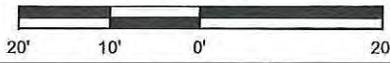
REV. 00

MHW = +3.0'
MLW = +1.0'



EXCAVATION DETAIL- FLOATATION CHANNEL

SCALE: 1" = 20'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

26
SHEET 16 OF 10

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

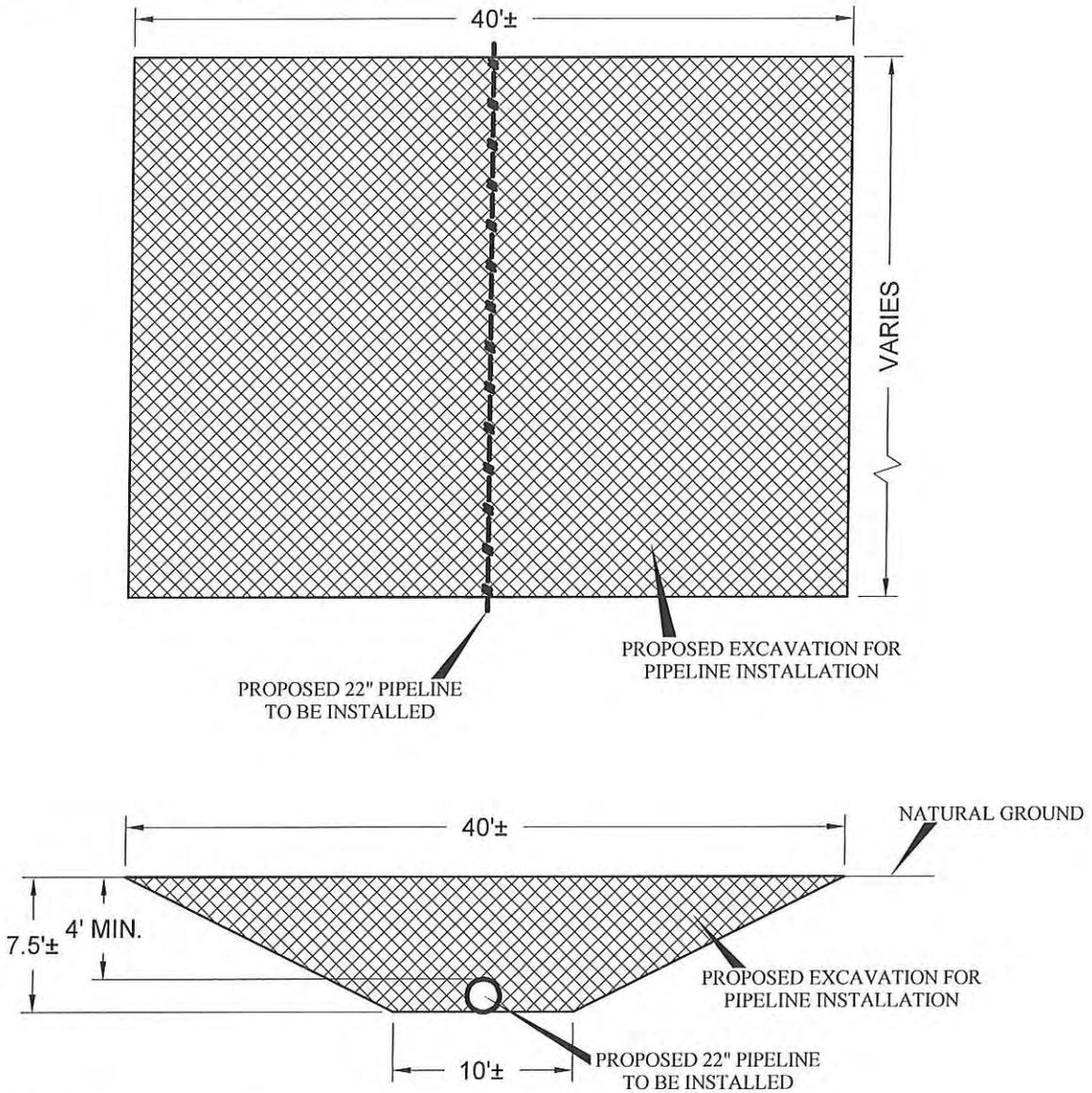
HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

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DATE: 04/09/2015
BY: TBS-2014.0525
SPLC-GOM-HE-SA93866
REV. 00

Pipeline Installation Excavations:

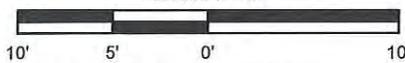
Sheet 3	1,140'Lx40'W	7,640± yds ³	1.05± acres
Sheet 6	170'Lx40'W	1,160± yds ³	0.16± acres
Sheet 8	185'Lx40'W	1,280± yds ³	0.17± acres
Sheet 10	480'Lx40'W	3,300± yds ³	0.44± acres



Proposed temporary spoil placement to be stockpiled within workspace and used as backfill. See plan views for location & dimensions.

EXCAVATION DETAIL- ON LAND

SCALE: 1" = 10'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

26
SHEET 17 OF 19

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA
PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS
ATCHAFALYA RIVER & BAYOU SHAFFER
ST. MARY PARISH, LOUISIANA

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DATE: 04/09/2015	SPLC-GOM-HE-SA93867	REV. 00
BY: TBS-2014.0525		

NOTES

As-built drawings will be submitted within 30 days of completion of this project to the Louisiana Department of Natural Resources, Office of Conservation, Pipeline Division, P. O. Box 94275 Baton Rouge, LA 70804, and to the Louisiana Department of Natural Resources, Coastal Management Division, P. O. Box 44487, Baton Rouge, LA 70804-4487.

In order to ensure the safety of all parties, the permittee shall contact the 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.

All structures, facilities, well and pipelines/flowlines occurring in open water areas or in oilfield canals or slips shall be removed within 120 days of abandonment or the facilities for the herein permitted use unless prior written approval to leave such structures in place is received from the Coastal Management Division. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required.

T. Baker Smith, LLC uses pipeline locating equipment which may include magnetometers and/or gradiometers in an effort to locate underground and underwater pipelines in advance of drilling, construction, or abandonment activity. While reasonable efforts are made to locate all pipelines, the equipment used and the characteristics of pipelines themselves make it practically impossible to guarantee total success. Accordingly, it is incumbent upon the operators and/or contractors conducting operations including dredging and excavation to conduct their operations with extreme caution and recognize that hazards in addition to those detected and marked by T. Baker Smith, LLC may exist within the areas of operation in spite of our most diligent efforts.

Structures must also be marked/lighted in accordance with U. S. Coast Guard regulations.

Applicant is subject to all applicable state laws related to damages which are demonstrated to have been caused by this proposed action.

Applicant shall use any dredged material beneficially to create/restore emergent wetlands or place the material in open water in such a manner not to decrease the water depth greater than six inches.

Applicant shall not discharge any human waste which does not meet or exceed the requirements of the Department of Health and Hospitals.

Applicant shall not discharge any produced waters.

Approximately 12.52± acres of wetlands to be impacted due to tree clearing.

Approximately 0.31± acres of non-wetlands to be impacted due to tree clearing.

Cleared trees will be chipped & spread on site up to 4-inches in depth.

Timber mats to be used as needed to minimize impacts & removed after pipeline project is completed.

Approximately 11,055'± of pipeline to be installed.

Approximately 9,335'± of pipeline to be abandoned in place.

**TOTAL PIPELINE
RELOCATION IMPACTS**

EXCAVATIONS
 NON-VEGETATED WATER BOTTOMS: 80 CU. YDS.
 0.01 ACS.
 NON-WETLANDS: 3,400 CU. YDS.
 0.46 ACS.
 WETLANDS: 15,395 CU. YDS.
 3.52 ACS.

FILL AREAS
 NON-VEGETATED WATER BOTTOMS: 605 CU. YDS.
 0.31 ACS.
 NON-WETLANDS: 2,650 CU. YDS.
 0.15 ACS.
 WETLANDS: 16,225 CU. YDS.
 3.63 ACS.

FILL MATERIALS
 NATIVE MATERIAL: 18,875 CU. YDS.
 RIP RAP MATERIAL: 605 CU. YDS.

EQUIPMENT

Barge (120'x40')- Draft 2.5'
 Barge (120'x30')- Draft 2.5'
 Tug- Draft 5'
 Airboat(s)
 Marsh Buggy Excavator(s)
 Excavator(s)
 Bulldozer(s)
 Chipper(s)
 Other Tracked & Wheeled Vehicles

DOCK IMPACTS SHOWN ON SHEETS 20 - 25.

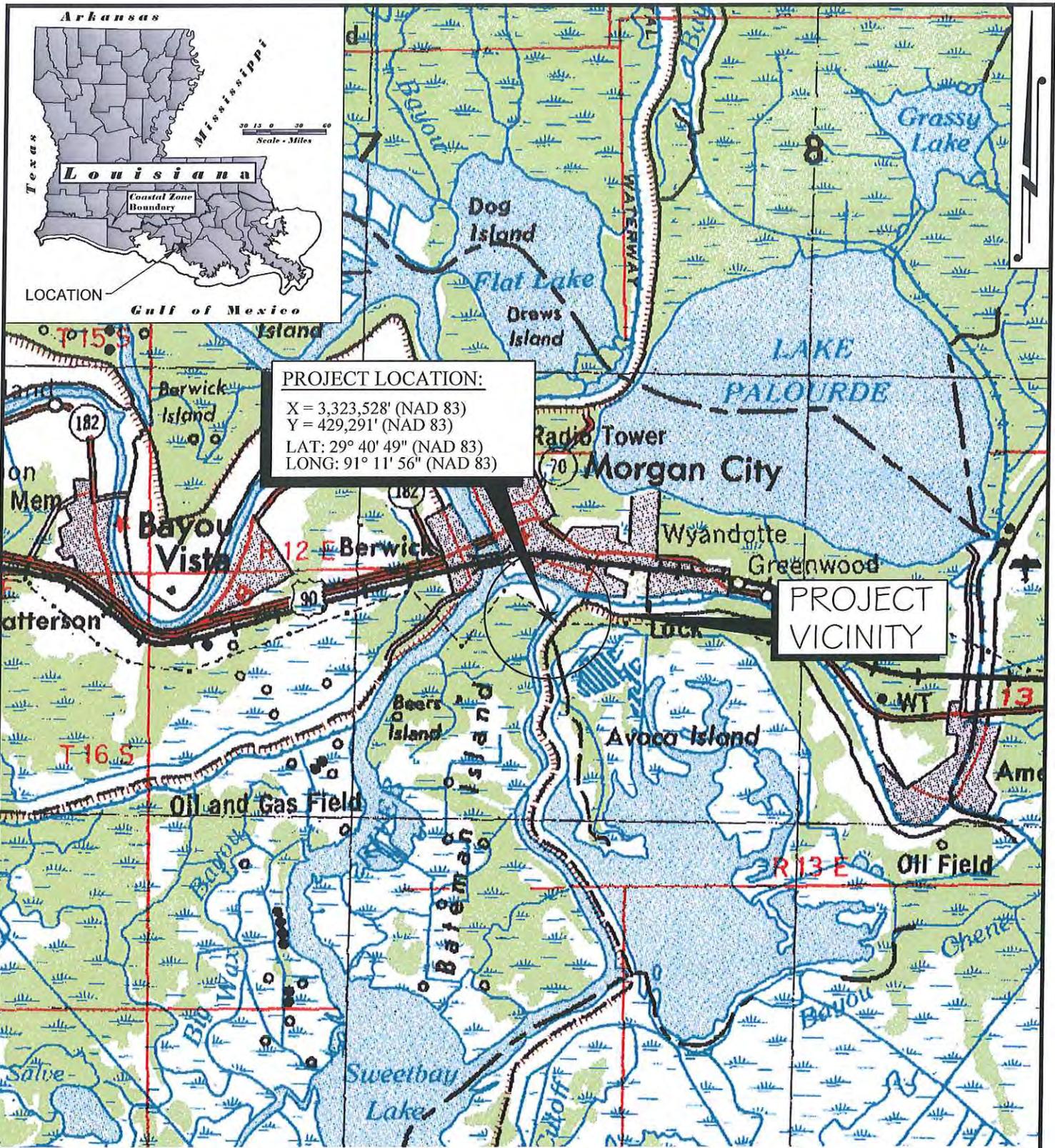
26

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

TOTAL PROJECT IMPACTS ON SHEET 26.

SHEET 19 OF 19

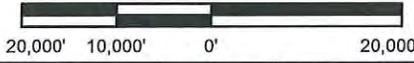
					HOUMA-ERATH CRUDE	
					PL SEG-BERWICK TO HOUMA	
					PROPOSED HORIZONTAL DIRECTIONAL DRILL ACROSS ATCHAFALYA RIVER & BAYOU SHAFFER ST. MARY PARISH, LOUISIANA	
REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP	
01	04/20	WETLANDS IMPACTED DUE TO TREE CLEARING.		SPM	KSB	
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					BY:	TBS-2014.0525
					SPLC-GOM-HE-SA93869	
					REV.	01



PROJECT LOCATION:
 X = 3,323,528' (NAD 83)
 Y = 429,291' (NAD 83)
 LAT: 29° 40' 49" (NAD 83)
 LONG: 91° 11' 56" (NAD 83)

PROJECT VICINITY

SCALE: 1" = 20,000'



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

SHEET 20 OF 26
 SHEET XXXX

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

PROPOSED BAYOU SHAFFER DOCK PROJECT
LOCATED IN SECTION 16, T16S-R12E
ST. MARY PARISH, LOUISIANA

DATE: 03/11/2015	SPLC-GOM-HE-SA-90917	REV. 00
BY: TBS-2014.0525		

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MHW = +3.0'
MLW = +1.0'

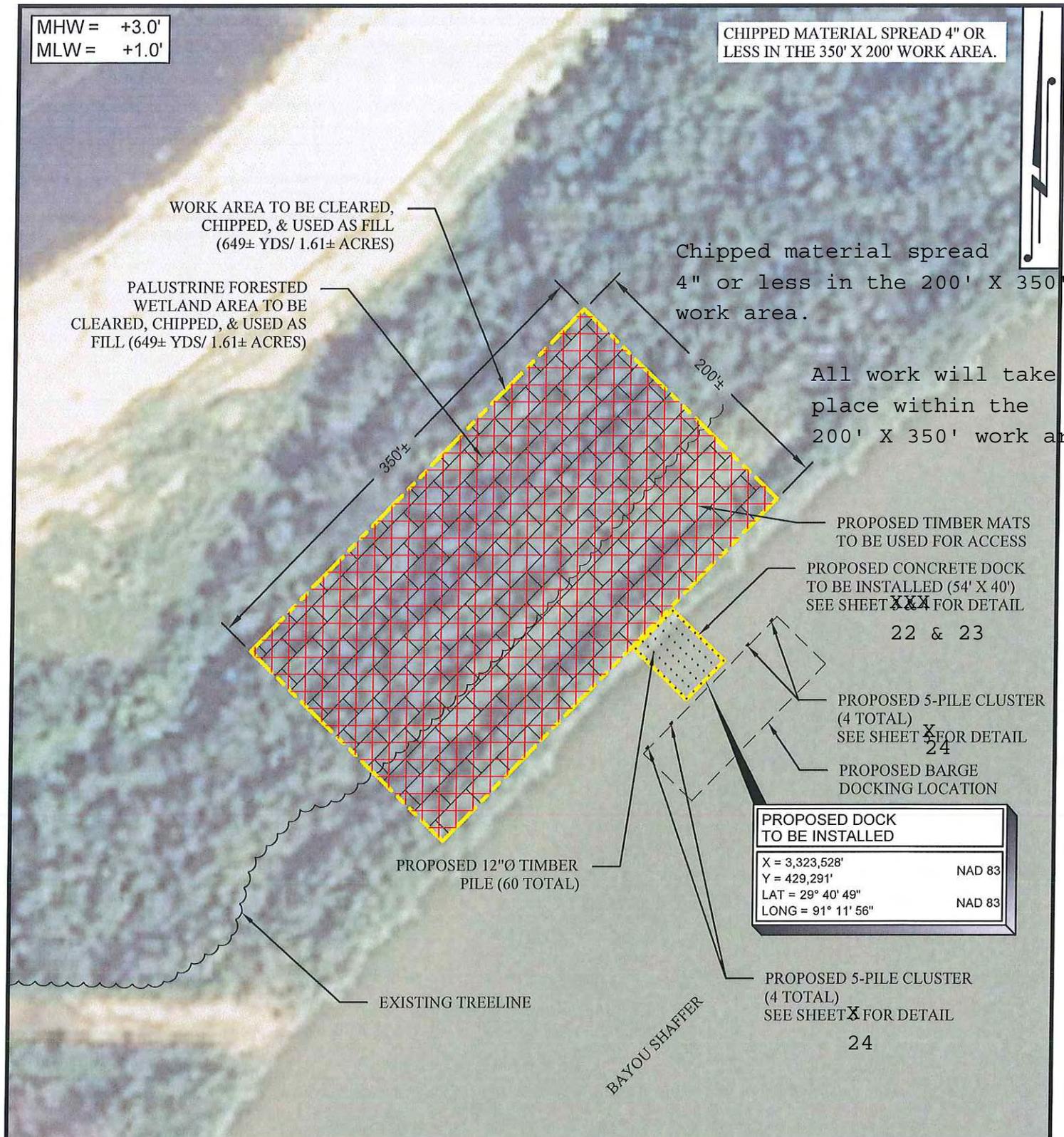
CHIPPED MATERIAL SPREAD 4" OR LESS IN THE 350' X 200' WORK AREA.

WORK AREA TO BE CLEARED, CHIPPED, & USED AS FILL (649± YDS/ 1.61± ACRES)

PALUSTRINE FORESTED WETLAND AREA TO BE CLEARED, CHIPPED, & USED AS FILL (649± YDS/ 1.61± ACRES)

Chipped material spread 4" or less in the 200' X 350' work area.

All work will take place within the 200' X 350' work area.



PROPOSED DOCK TO BE INSTALLED

X = 3,323,528'	NAD 83
Y = 429,291'	
LAT = 29° 40' 49"	NAD 83
LONG = 91° 11' 56"	

SCALE: 1" = 100'

100' 50' 0' 100'

THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

21 OF 26 SHEET 20 OF 26

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP
01	04/21	WETLAND IMPACTS.		SPM	KJB

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

PROPOSED BAYOU SHAFFER DOCK PROJECT

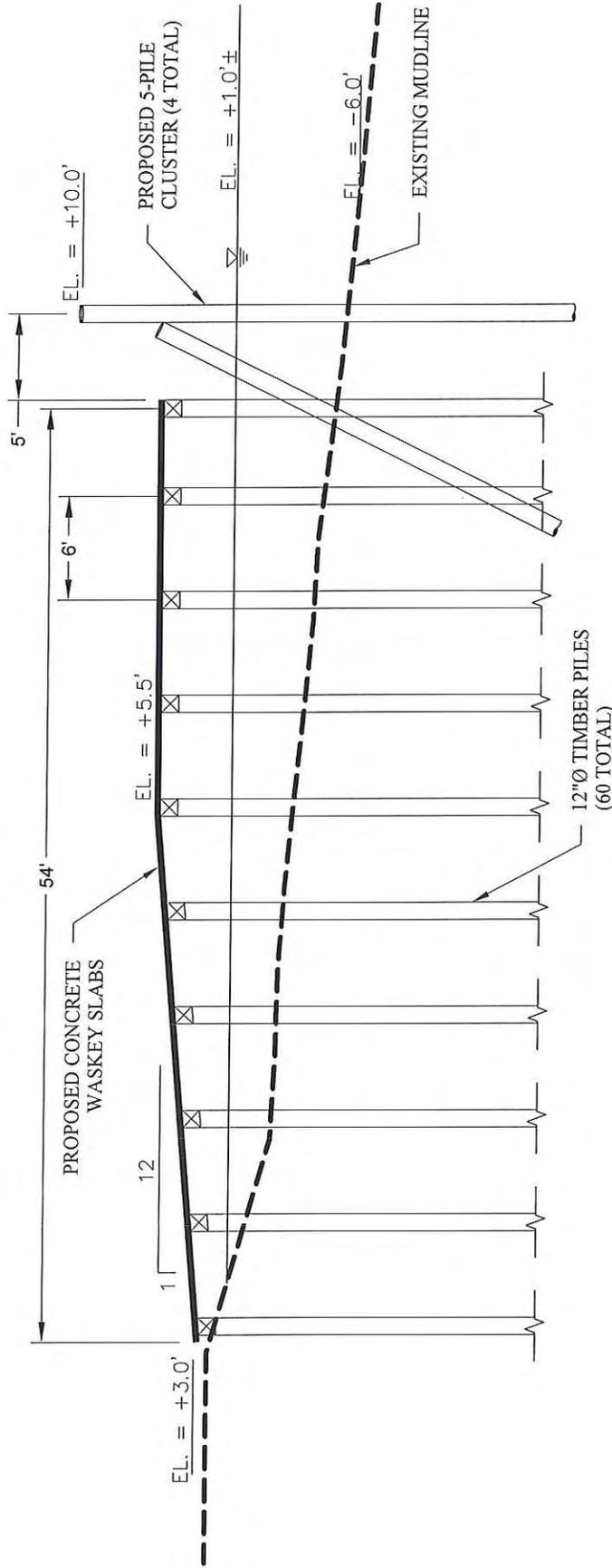
LOCATED IN SECTION 16, T16S-R12E

ST. MARY PARISH, LOUISIANA

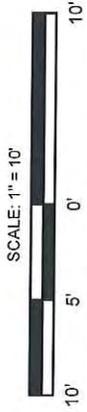
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DATE:	03/11/2015	SPLC-GOM-HE-SA-90918	REV.	01
BY:	TBS-2014.0525			

MHW = +3.0'
MLW = +1.0'



DOCK PROFILE



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22 OF 26

SHEET ~~XXXXX~~

REV. NO.	DATE	DESCRIPTION OF REVISION	ES. NO.	BY	CHKD. BY	APP. BY

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

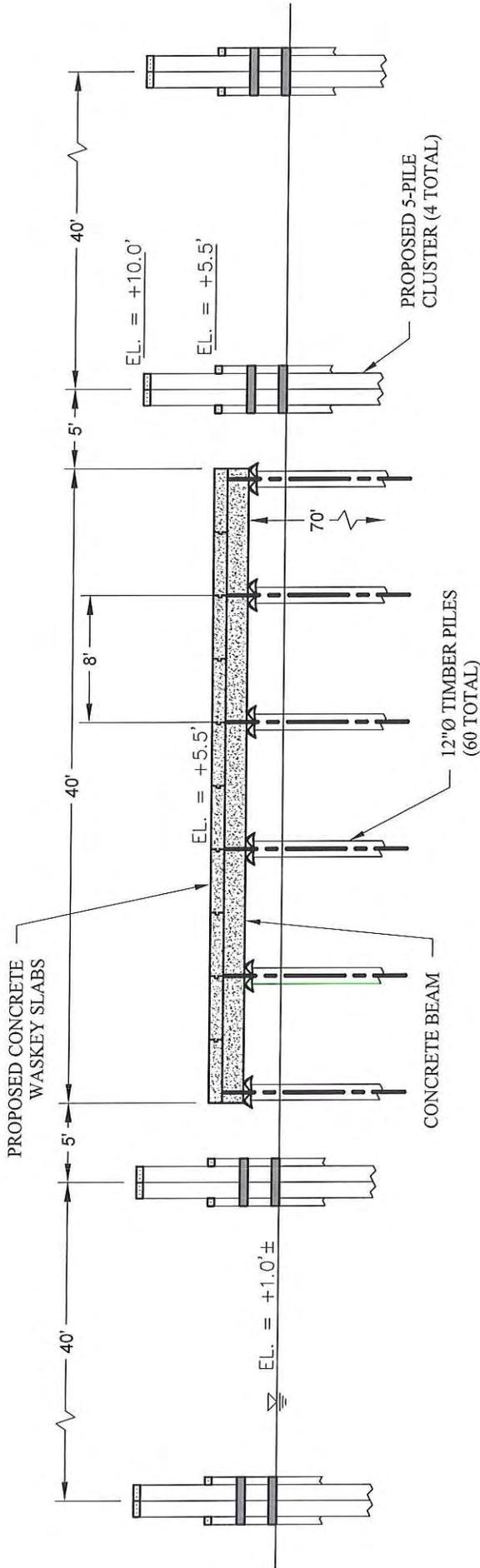
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PROPOSED BAYOU SHAFFER DOCK PROJECT
LOCATED IN SECTION 16, T16S-R12E
ST. MARY PARISH, LOUISIANA

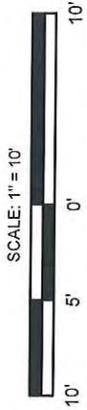
DATE: 03/11/2015
DRAWN: TBS-2014.0525

SPLC-GOM-HE-SA-90919
REV. 00

MHW = +3.0'
MLW = +1.0'



DOCK PROFILE



THESE PLATS ARE TO BE USED EXCLUSIVELY FOR THE ACQUISITION OF REGULATORY PERMITS.

23 OF 26

SHEET ~~XXX~~

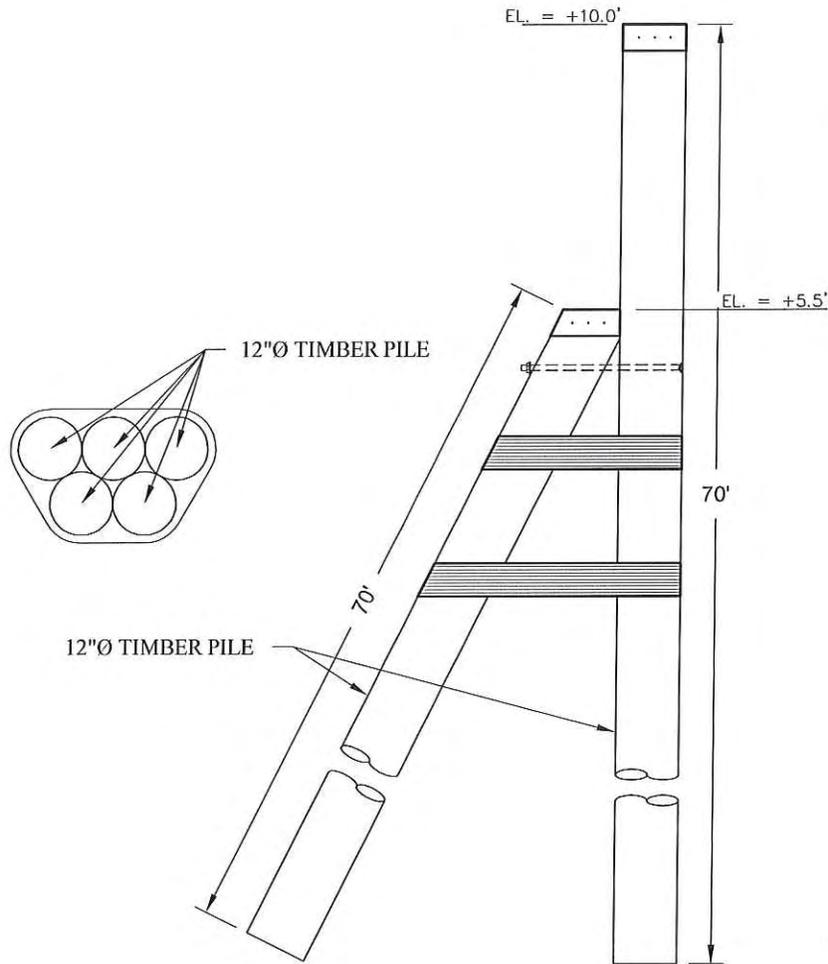
REV. NO.	DATE	DESCRIPTION OF REVISION	ES. NO.	BY	CHKD.	APP.

HOUMA-ERATH CRUDE
PL SEG-BERWICK TO HOUMA

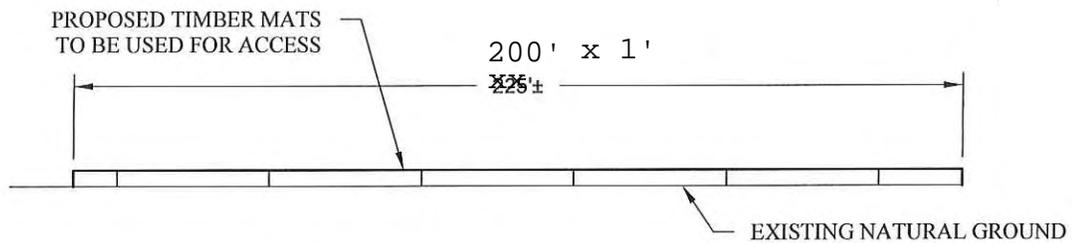
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PROPOSED BAYOU SHAFFER DOCK PROJECT
LOCATED IN SECTION 16, T16S-R12E
ST. MARY PARISH, LOUISIANA

DATE: 03/11/2015
DRAWN: TBS-2014.0525
PROJECT: SPLC-GOM-HE-SA-90920
REV. NO.: 00



5-PILE CLUSTER DETAIL



TIMBER MAT DETAIL

NOT TO SCALE

24 OF 26

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SHEET 5 OF 6

REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE

PL SEG-BERWICK TO HOUMA

**PROPOSED BAYOU SHAFFER DOCK PROJECT
LOCATED IN SECTION 16, T16S-R12E
ST. MARY PARISH, LOUISIANA**

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DATE:	03/11/2015	SPLC-GOM-HE-SA-90921	REV. 00
BY:	TBS-2014.0525		

NOTES

As-built drawings will be submitted within 30 days of completion of this project to the Louisiana Department of Natural Resources, Office of Conservation, Pipeline Division, P. O. Box 94275 Baton Rouge, LA 70804, and to the Louisiana Department of Natural Resources, Coastal Management Division, P. O. Box 44487, Baton Rouge, LA 70804-4487.

In order to ensure the safety of all parties, the permittee shall contact the 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.

All structures, facilities, well and pipelines/flowlines occurring in open water areas or in oilfield canals or slips shall be removed within 120 days of abandonment or the facilities for the herein permitted use unless prior written approval to leave such structures in place is received from the Coastal Management Division. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required.

T. Baker Smith, LLC uses pipeline locating equipment which may include magnetometers and/or gradiometers in an effort to locate underground and underwater pipelines in advance of drilling, construction, or abandonment activity. While reasonable efforts are made to locate all pipelines, the equipment used and the characteristics of pipelines themselves make it practically impossible to guarantee total success. Accordingly, it is incumbent upon the operators and/or contractors conducting operations including dredging and excavation to conduct their operations with extreme caution and recognize that hazards in addition to those detected and marked by T. Baker Smith, LLC may exist within the areas of operation in spite of our most diligent efforts.

Structures must also be marked/lighted in accordance with U. S. Coast Guard regulations.

Applicant is subject to all applicable state laws related to damages which are demonstrated to have been caused by this proposed action.

A total of 60 single timber piles to be used for dock installation.

A total of 4 timber 5-pile clusters to be installed.

Mats, dock, & pilings will be removed after pipeline project is completed.

~~Access route to work area will be included with pipeline construction application.~~

Cleared chipped trees will be chipped and spread on site up to 4" in depth

Wetland Impacts - PFO 1/2R (BLH), 1.61 acres.

Pipeline replacement impacts shown on Sheet 19 of 26.

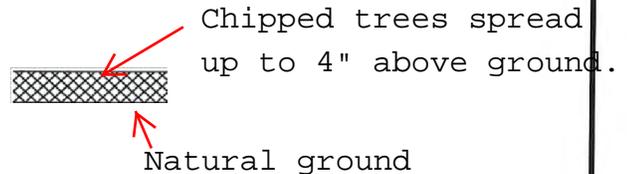
COMBINED DOCK AND PIPELINE IMPACTS SHOWN ON SHEET 26.

TOTAL DOCK IMPACTS

<u>EXCAVATIONS</u>	
NON-WETLANDS:	0 CU. YDS. 0.00 ACS.
WETLANDS:	649 CU. YDS. 1.61 ACS.
<u>FILL AREAS</u>	
NON-WETLANDS:	0 CU. YDS. 0.00 ACS.
WETLANDS:	649 CU. YDS. 1.61 ACS.
<u>FILL MATERIALS</u>	
NATIVE MATERIAL:	649 CU. YDS.

EQUIPMENT

- One(1) Barge (120'x40')- Draft 2.5'
- One(1) Barge (120'x30')- Draft 2.5'
- One(1) 600 H.P. Tug- Draft 5'



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01	04/21	WETLAND IMPACTS.	SPM	KJB	
REV	DATE	DESCRIPTION OF REVISION	ES NO.	BY	APP

HOUMA-ERATH CRUDE	
PL SEG-BERWICK TO HOUMA	
PROPOSED BAYOU SHAFFER DOCK PROJECT	
LOCATED IN SECTION 16, T16S-R12E	
ST. MARY PARISH, LOUISIANA	
DATE: 03/11/2015	SPLC-GOM-HE-SA-90922
BY: TBS-2014.0525	
REV. 01	

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TOTAL PROJECT IMPACTS

	WEST OF LEVEE (Inside)	EAST OF LEVEE (Outside)
EXCAVATIONS		
Non-Vegetated Water Bottoms	80 CYS 0.01 ACS	
Wetlands	4425 CY 0.623 ACS	10,970 CY 2.897 ACS
Non-Wetlands	3400 CY 0.46 ACS	

Fill Excavated Material		
Non-Wetlands	2650 CY 0.15 ACS	
Wetlands	5255 CY 0.3 ACS	10,970 CY 3.33 ACS
Chipped Trees		
Wetlands	906 CY 1.84 ACS	6402 CY 12.29 ACS
Non-Wetlands	74 CY 0.15 ACS	82 CY 0.16 ACS
Rip Rap		
Non-Vegetated Water Bottoms		605 CY 0.31 ACS

Total Excavations **18,875**
3.99 ACS

Total Fill **26,944 CY**
18.53 ACS