



**US Army Corps
of Engineers**

Vicksburg District
4155 Clay Street
Vicksburg, MS 39183-3435
www.mvk.usace.army.mil

Public Notice

APPLICATION NO.:	MVK-2017-222
EVALUATOR:	Mr. Jared Everitt
PHONE NO.:	(601) 631-7104
E-MAIL:	Jared.H.Everitt@usace.army.mil
DATE:	July 11, 2024
EXPIRATION DATE:	July 31, 2024

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Vicksburg District is considering an application for a Department of the Army permit for the work described herein. Comments should be forwarded to the Vicksburg District, Attention: CEMVK-RD, 4155 Clay Street, Vicksburg, Mississippi 39183-3435 and must reach this office by the cited expiration date.

The Clean Water Act (CWA) Section 401 Water Quality Certification Improvement Rule (Certification Improvement Rule, 40 CFR 121), effective November 27, 2023, requires certification for any license or permit that authorizes an activity that has the potential to result in a discharge. The scope of a CWA Section 401 certification is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements. The applicant is responsible for requesting certification and providing required information to the certifying agency. As of the date of this public notice, the applicant has submitted a certification request to the Louisiana Department of Environmental Quality (certifying authority). In accordance with Certification Improvement Rule, once the applicant submits a certification request, the U.S. Army Corps of Engineers and the certifying authority will jointly establish the reasonable period of time for the certifying authority to act upon the certification request.

Law Requiring a Permit: Section 404 of the Clean Water Act (33 U.S.C. 1344), which applies to discharges of dredged and/or fill material into waters of the United States.

Name of Applicant:
Ms. Kim Smith
Sierra Frac Sand, LLC
1155 East Johnson Street
Tatum, Texas 75691

Name of Agent:
Mr. Lee Womack
Matrix New World Engineering
2798 O’Neal Lane, Building F
Baton Rouge, Louisiana 70816

Location of Work: The proposed project site is located in Sections 14, 15, 22, and 23, T21N-R14W, Latitude 32.800199, Longitude -93.792704, within the Arkansas, White, and Red Rivers Drainage Basin (8-digit USGS HUC 11140202), Bossier Parish, Louisiana.

Description of Work: (See enclosed map and drawings.)

The following descriptions of the proposed project and associated impacts are based upon information provided by the applicant.

The applicant is applying for an after-the-fact Department of the Army permit and permit modification to an existing Department of the Army permit to conduct regulated activities in “Waters of the U.S.” for the purpose of Sand mining and dredging within Bossier Parish, Louisiana.

Sierra’s Cedar Bluff Sand Mining Facility’s current operation was authorized by the USACE Vicksburg District March 30, 2023. In addition to the continued operation of the Cedar Bluff Plant, Sierra is submitting this Section 10/404 After-the-Fact Permit and Modification Request Application to continue authorized operations under the March 30, 2023, permit, address non-compliance issues discovered during a USACE compliance inspection conducted December 4, 2023, and modify the currently authorized Operation.

The following activities have already been conducted and are proposed to be covered as after-the-fact permit features.

1. Twenty-five geotechnical borings were conducted within the Red River between July 7 and July 16, 2023. Sierra has obtained a Letter of No Objection for the subject borings from the Caddo Levee District.
2. Approximately 0.21 acres of Section 10 waters were impacted by the installation of a haul road entrance onto the sandbar.

The following activities are proposed as additional modifications to the existing authorized permit.

1. Installation of four, 18-inch-diameter helical piles to moor the Red River Dredge. The helical piles will be placed in uplands along the top bank of the river.
2. Incorporated 3.69 acres of Red River bank reclamation where it is currently sloughing.
3. Modify the location of the Red River Dredge discharge pond locations.
4. Modify a 0.58-acre area previously permitted at a 3:1 slope to a 6.5:1 slope to facilitate the Red River Dredge Deployment.

The Applicant proposes to purchase the required compensatory mitigation credits from a USACE Vicksburg District approved mitigation bank.

The majority of this site has already been disturbed through the existing operation of the Cedar Bluff facility. This includes the areas for the proposed modifications. The after-the-fact activities already occurred and took place within the Red River. Upon reviewing this notice, you should write to this office to provide your opinion of the impacts this work will have on the natural and human environment and address any mitigation you believe is necessary to offset these impacts. Other comments are welcome, but the above information will further our review of the applicant's plan as proposed. Comments of a general nature are not as helpful as those specific to the impacts of the subject project.

State Water Quality Permit: The State Pollution Control Agency must certify that the described work will comply with the State's water quality standards and effluent limitations before a Corps permit is issued.

Cultural Resources: The Regulatory Archaeologist has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. The permit area was created in modern times and has had no human habitation: therefore, little likelihood exists for the proposed project to impinge upon a historic property. Copies of this public notice have been sent to the State Historic Preservation Officer, Federally Recognized Tribes, and other interested parties for comment on potential effects to historic properties that could result from the proposed activity.

Endangered Species: The Threatened and Endangered Species list gained via the U.S. Fish and Wildlife Service's Information for Planning and Consultation Tool for the project area includes: Northern Long-Eared Bat (Endangered), Tricolored Bat (Proposed Endangered), Red-cockaded Woodpecker (Endangered), and Alligator Snapping Turtle (Proposed Threatened). The Corps has determined that the proposed activity would have No Effect on Northern Long-Eared Bat, Red-cockaded Woodpecker, and Tricolored Bat as the project site does not contain suitable habitat for these species. While suitable habitat for the Alligator Snapping Turtle might be present within the proposed work areas, the proposed activities should not jeopardize the species.

Floodplain: In accordance with 44 CFR Part 60 (Floodplain Management and Use), participating communities are required to review all proposed development to determine if a floodplain development permit is required. Floodplain administrators should review the proposed development described in this public notice and apprise this office of any flood plain development permit requirements. The project is located within the 100-year floodplain.

Evaluation Factors: The decision whether or not to issue a permit will be based upon an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which may be expected to accrue from the proposal must be balanced against its expected adverse effects. All factors which may be relevant to the proposal will be considered; among these

are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use classification, navigation, recreation, water supply, water quality, energy needs, safety, food requirements and, in general, the needs and welfare of the people. Evaluation of the proposed activity will include application of the guidelines published by the Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act.

Public Involvement: The purpose of this notice is to solicit comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties. These comments will be used to evaluate the impacts of this project. All comments will be considered and used to help determine whether to issue the permit, deny the permit, or issue the permit with conditions, and to help us determine the amount and type of mitigation necessary. This information will be used in our Environmental Assessment or Impact Statement. Comments are also used to determine the need for a public hearing.

Opportunity for a Public Hearing: Any person may make a written request for a public hearing to consider this permit application. This request must be submitted by the public notice expiration date and must clearly state why a hearing is necessary. Failure of any agency or individual to comment on this notice will be interpreted to mean that there is no objection to the proposed work. Please bring this announcement to the attention of anyone you know who might be interested in this matter.

Notification of Final Permit Actions: Each month, the final permit actions from the preceding month are published on the Vicksburg District Regulatory web page. To access this information, you may follow the link from the Regulatory web page, <http://www.mvk.usace.army.mil/Missions/Regulatory.aspx>.

For **Andy Sanderson**
Chief, Louisiana Branch
Regulatory Division



Legend

Source: Base map comprised of ESRI StreetMap USA data.

Vicinity Map
Section 10/404 After the Fact Permit
and Modification Request

Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
 Cedar Bluff Tract

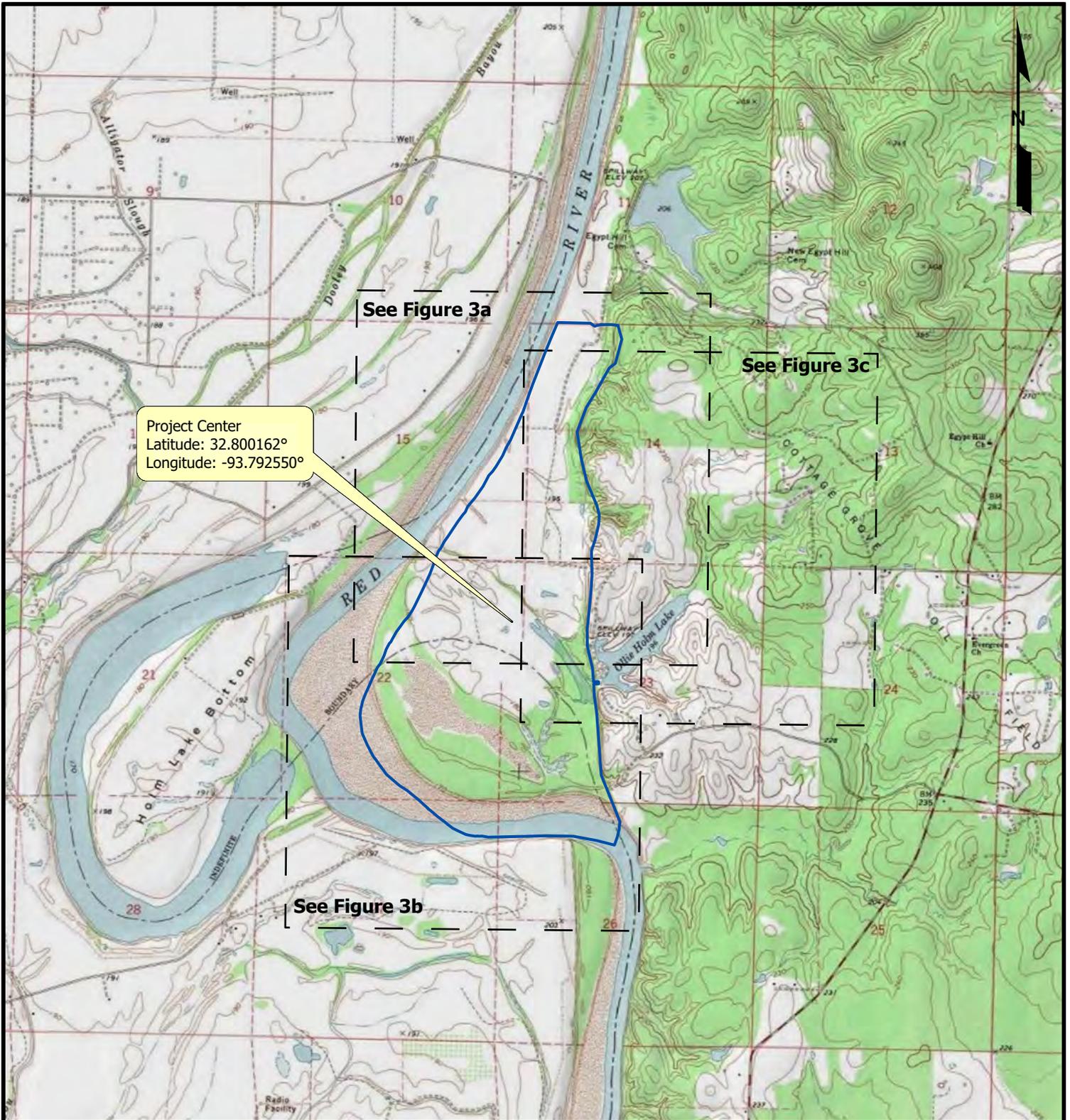


MATRIXNEWORLD
 Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	4/4/2024
Drawing No.	19-489-A181

1
 Figure No.

File: C:\Users\cdg\Public\New World Engineering\Licenses - Projects\2019-489 Sierra Frac Sand Red River Drilling\Output\Drawings\2024\10_489_Sierra_Frac_Sand_Drilling\Sierra_Frac_Sand_Drilling_01102024.dwg



Project Center
 Latitude: 32.800162°
 Longitude: -93.792550°

See Figure 3a

See Figure 3c

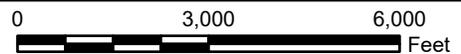
See Figure 3b

Legend

- Tract Boundary (869.93 Acres)
- Site Plan Index

Site Location Map
 Section 10/404 After the Fact Permit
 and Modification Request
 Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
 Cedar Bluff Tract



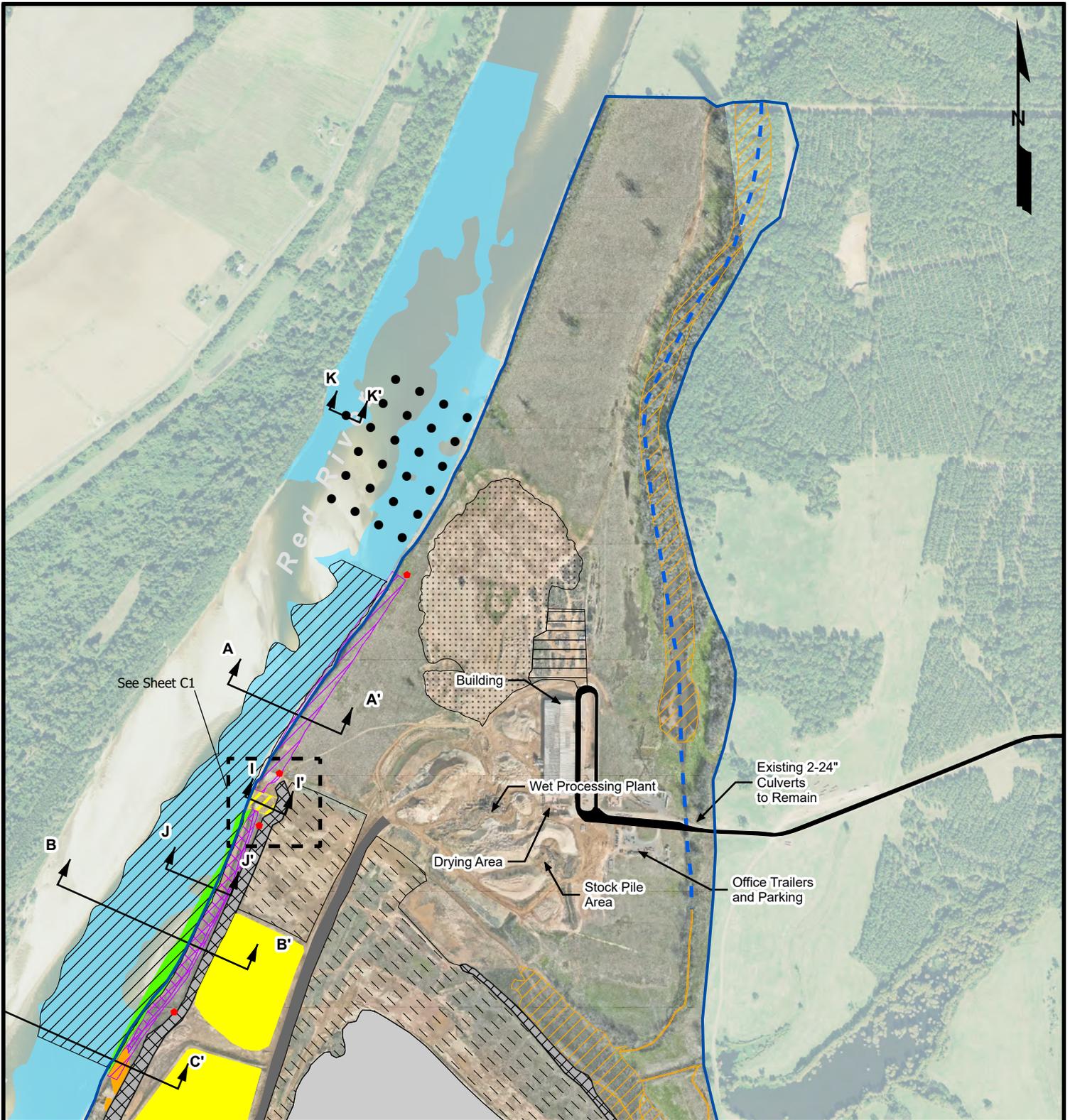
MATRIXNEWORLD
 Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	4/4/2024
Drawing No.	19-489-A182

2

Figure No.

Source: Base map comprised USA_Topo_Maps



Legend

- Tract Boundary (869.93 Acres)
- 18" Diameter Helical Piles
- ATF Red River Geotechnical Borings (25)
- Existing Constructed Berms (24.70 Acres)
- Currently Permitted Dry Excavation to Elevation 160' (48.44 acres)
- Proposed Dredge Excavation (49.34 acres to EL 143.61')
- Currently Permitted Stripped Areas to be Mined (66.31 Acres)
- Previously Impacted/Mitigated Jurisdictional Wetlands (0.93 acre)
- Bank Reclamation Area (3.69 Acres)
- Non-Impacted Jurisdictional Wetlands (157.64 Acres)
- Non-Impacted Section 10 Waters (3.22 Acres)
- After the Fact Impacted Section 10 Waters (0.21 Acres)
- Currently Permitted Mined Area (196.30 Acres)
- Existing Haul Road (12.60 Acres)
- Dredge Discharge Pond (22.913 Acres)
- Existing Dredge Discharge Pond (6.45 Acres)
- Area to be Sloped and Rip-Rapped (6.64 Acres)
- Area to be Reclaimed, Sloped, and Rip-Rapped (3.10 Acres)
- Area to be Sloped for Dredge Deployment (0.58 Acres)
- Existing Access Road (5.14 acres)
- Existing Laydown Area (4.40 acres)
- Existing Sand Stockpile (31.85 acres)
- Red River Mean Low Water
- Existing Red River Revetment
- Non-Impacted Section 404 Non-Wetland Waters (6,172.95 Linear Feet)

Source: Base map comprised of 2021 aerial photograph from USDA/FSA Aerial Photography Field Office and client provided aerial flown 2024.

Site Plan

Section 10/404 After the Fact Permit and Modification Request
Caddo and Bossier Parishes, Louisiana

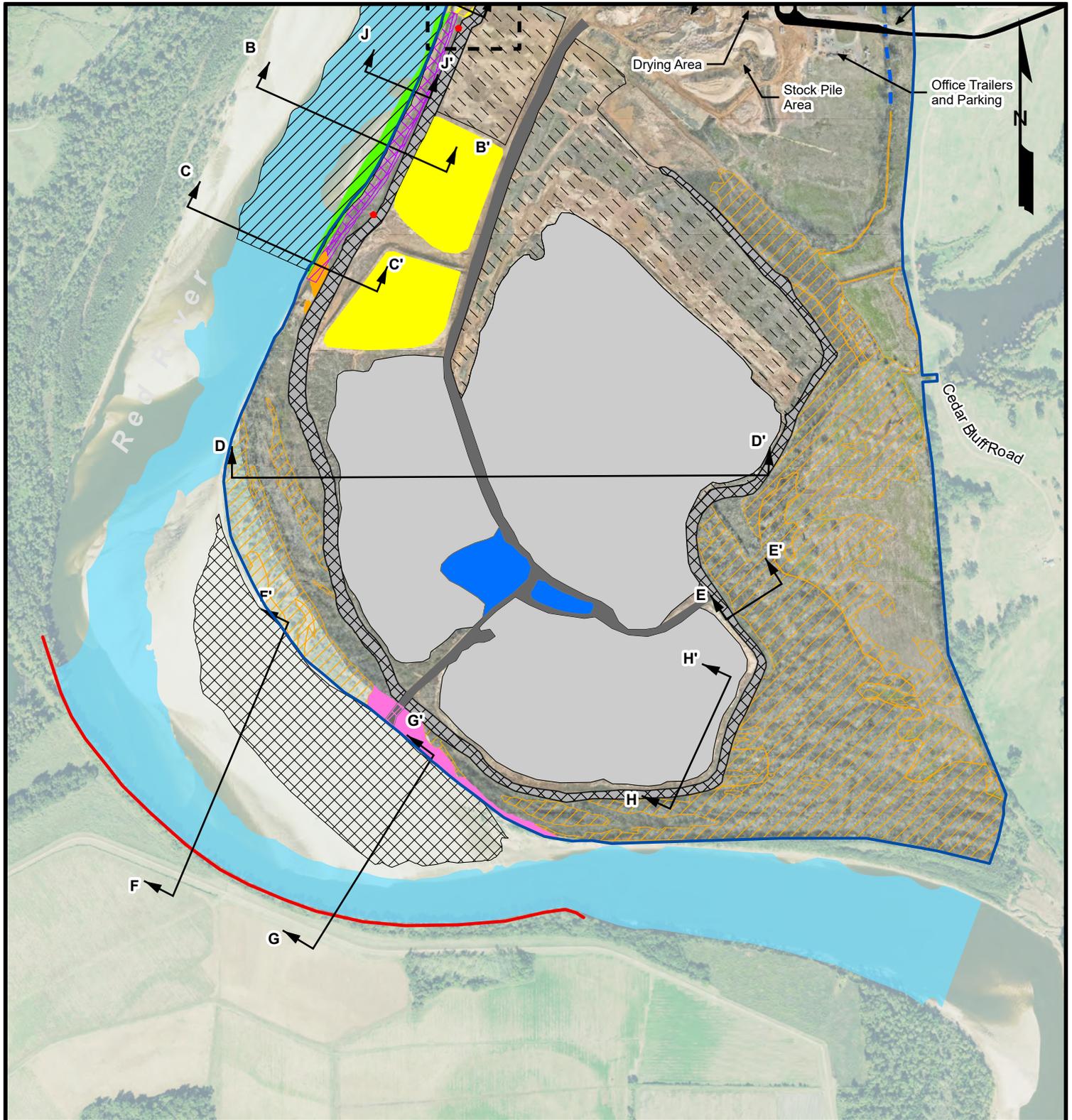
Sierra Frac Sand, LLC
Cedar Bluff Tract



MATRIXNEWORLD
Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	02/20/2024
Drawing No.	19-489-A185

3a
Figure No.



Legend

- ▬ Tract Boundary (869.93 Acres)
- 18" Diameter Helical Piles
- ATF Red River Geotechnical Borings (25)
- Existing Constructed Berms (24.70 Acres)
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Source: Base map comprised of 2021 aerial photograph from USDA/FSA Aerial Photography Field Office and client provided aerial from 2024.

Site Plan

Section 10/404 After the Fact Permit and Modification Request
Caddo and Bossier Parishes, Louisiana

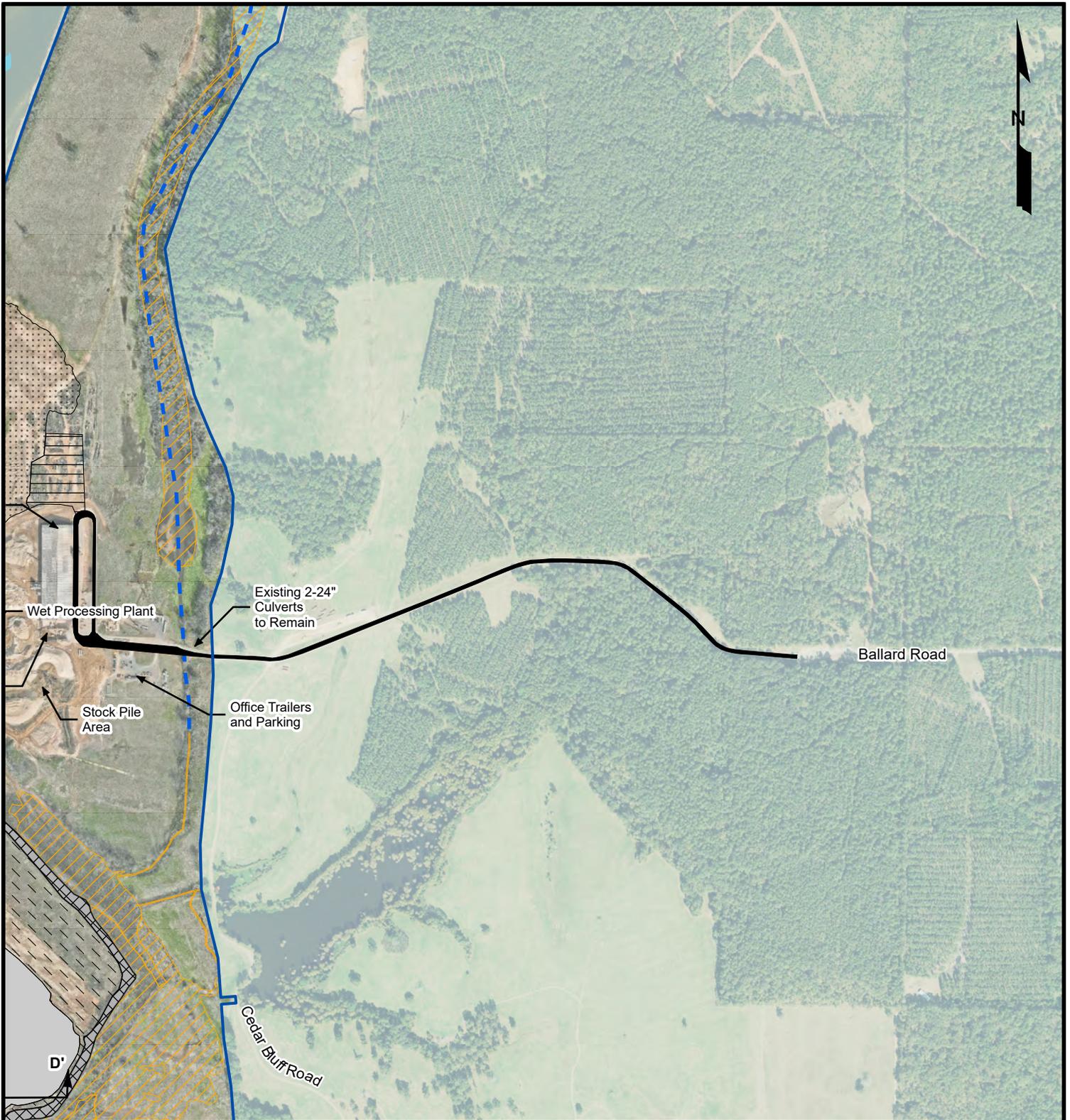
Sierra Frac Sand, LLC
Cedar Bluff Tract



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Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	02/20/2024
Drawing No.	19-489-A185

3b
Figure No.



Legend

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- 18" Diameter Helical Piles
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Source: Base map comprised of 2021 aerial photograph from USDA/FSA Aerial Photography Field Office and client provided aerial from 2024.

Site Plan

Section 10/404 After the Fact Permit and Modification Request
Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

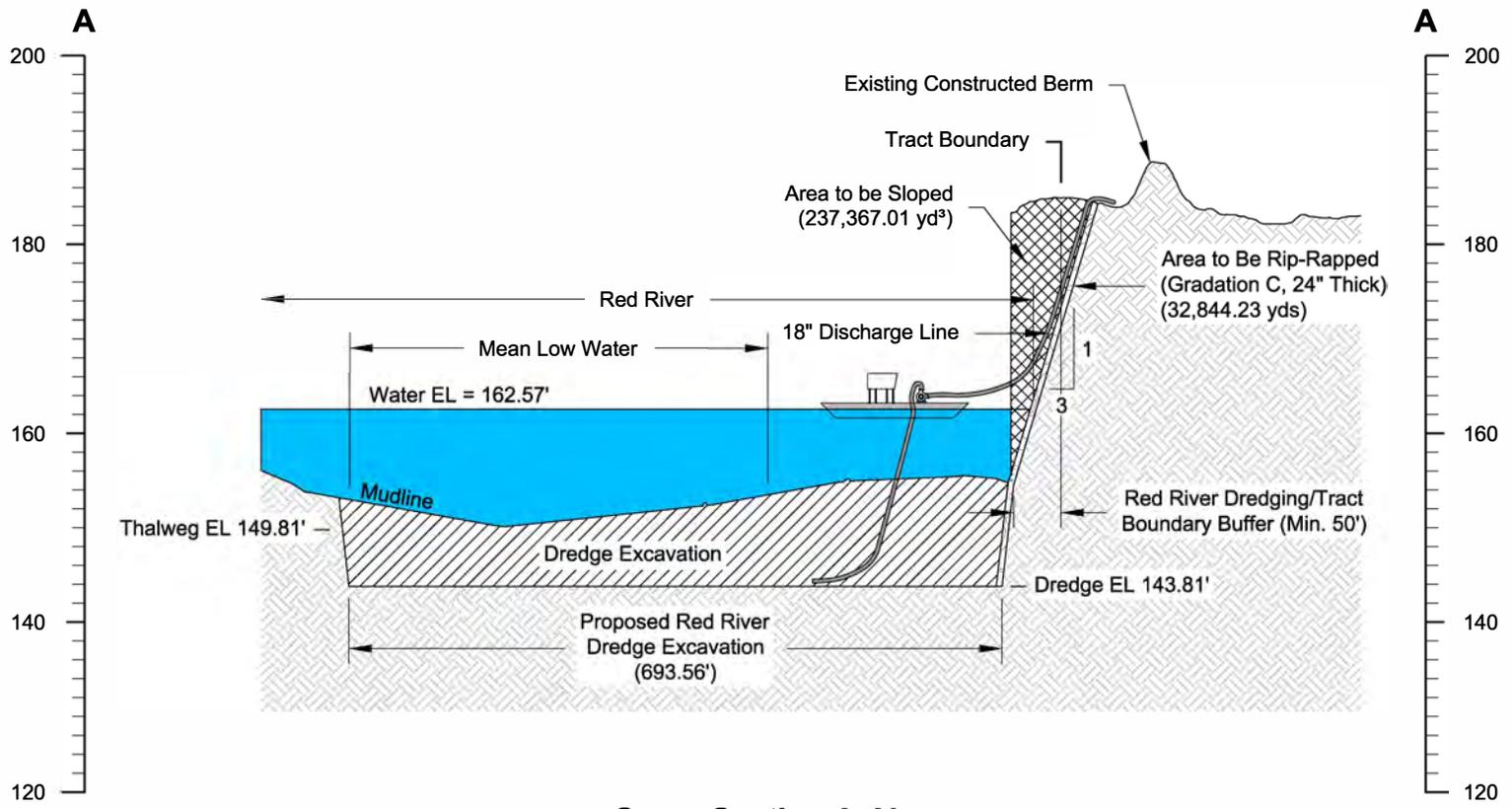
Cedar Bluff Tract



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Engineering Progress

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Approved By	LAW
Date	02/20/2024
Drawing No.	19-489-A185

3c
Figure No.



Cross Section A-A'

Horizontal Scale: 1" = 200'
 Vertical Scale: 1" = 20'

Notes

MLW EL = 153.29' NAVD 88

Red River bottom elevations and sand bar elevations based on topographic survey information collected 09/10/2020, 09/15/2020, 03/29/2021, and 11/19/2021.

Red River water level collected 09/10/2020.

Red River Dredge Excavation = 692,137.89 yd³

Cross Section A-A'
Section 10/404 After the Fact Permit
and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract

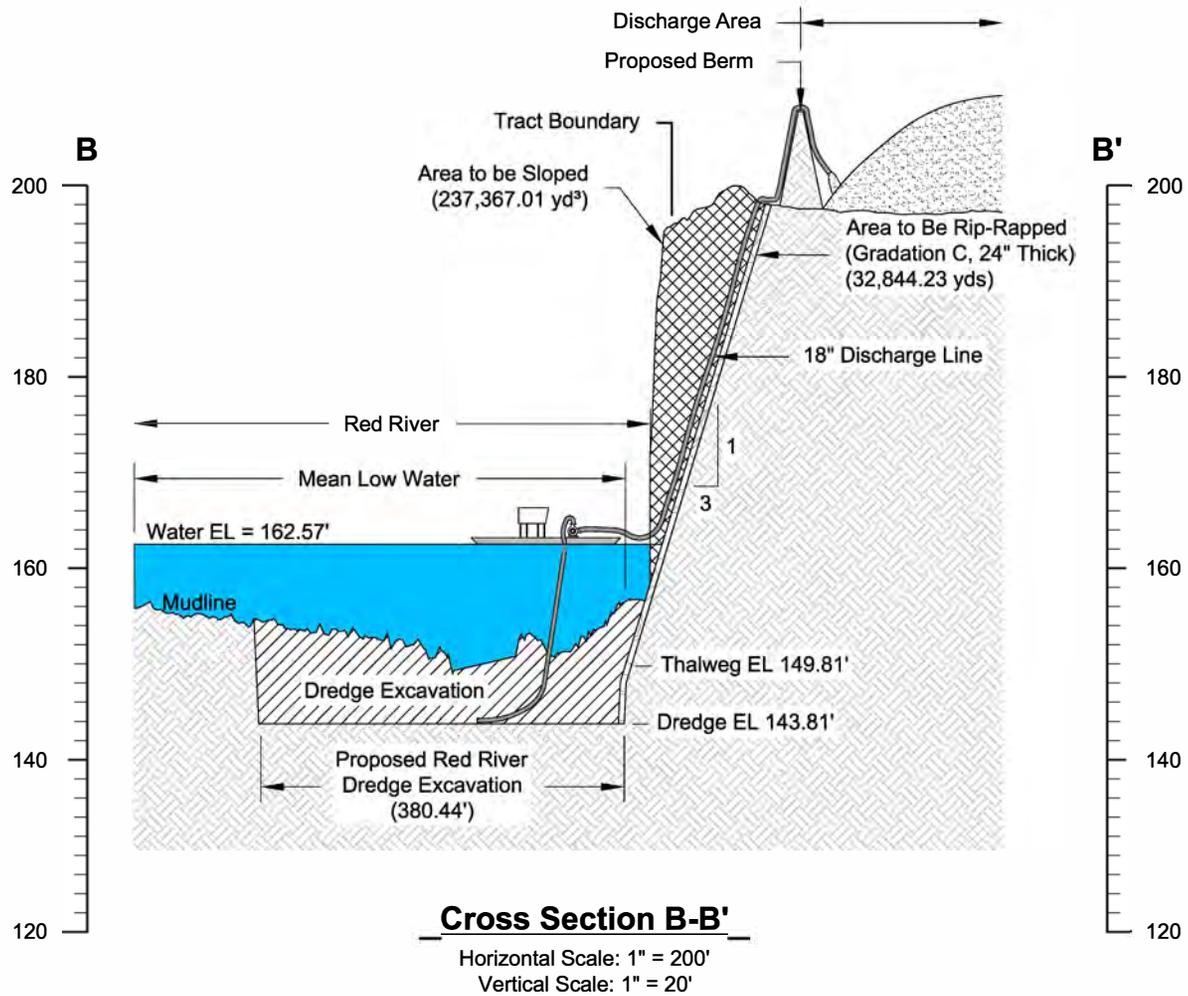


MATRIXNEWORLD
 Engineering Progress.

Drawn By	LMM
Approved By	LAW
Date	12/06/2022
Drawing No	19-489-A135

4

Figure No.



Notes

MLW EL = 153.29' NAVD 88

Red River bottom elevations and sand bar elevations based on topographic survey information collected 09/10/2020, 09/15/2020, 03/29/2021, and 11/19/2021.

Red River water level collected 09/10/2020.

Red River Dredge Excavation = 692,137.89 yd³

Cross Section B-B'
Section 10/404 After the Fact Permit
and Modification Request
Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Cedar Bluff Tract

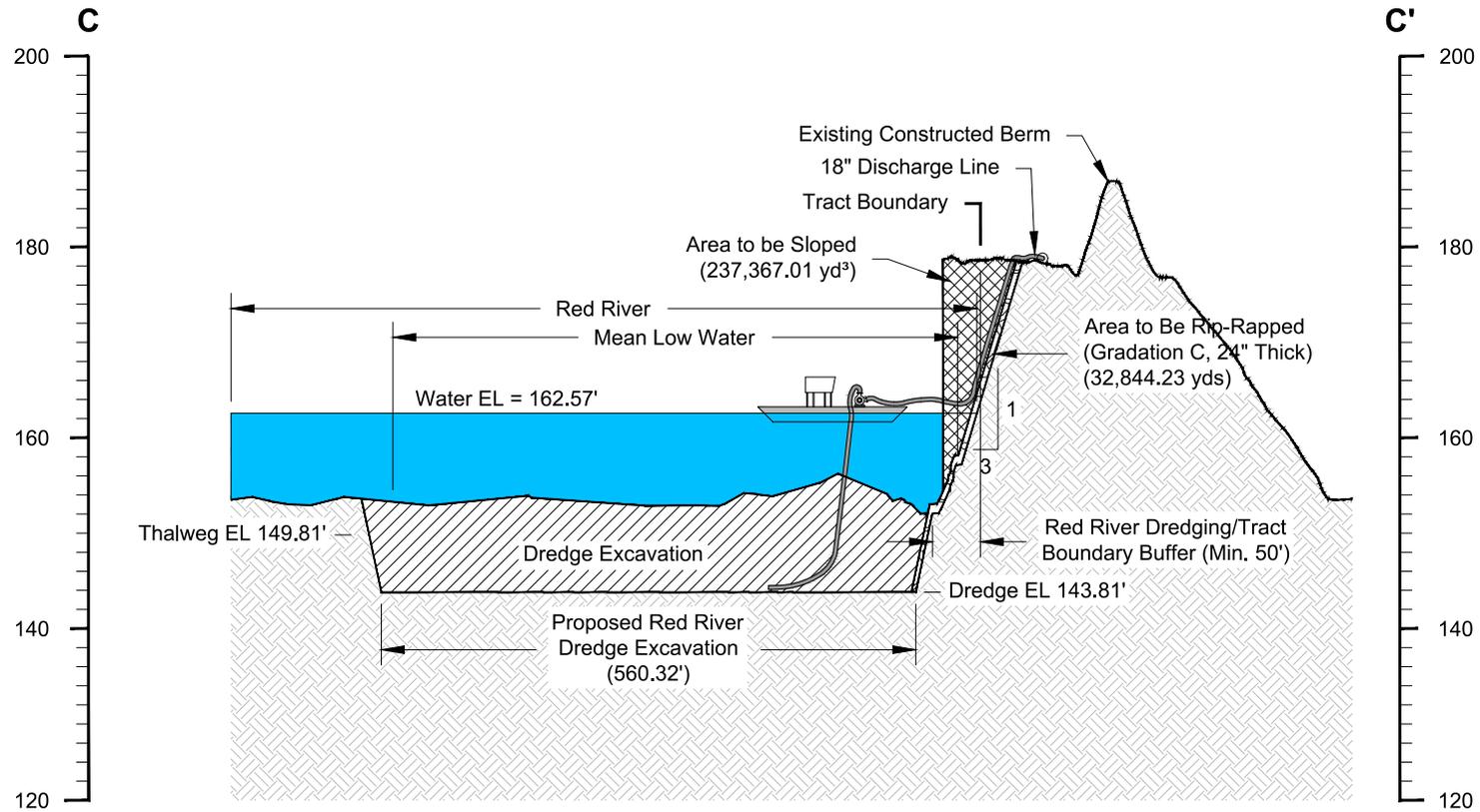


MATRIXNEWORLD
Engineering Progress.

Drawn By	LMM
Approved By	LAW
Date	12/06/2022
Drawing No	19-489-A134

5

Figure No.



Cross Section C-C'

Horizontal Scale: 1" = 200'
 Vertical Scale: 1" = 20'

Notes

MLW EL = 153.29' NAVD 88

Red River bottom elevations and sand bar elevations based on topographic survey information collected 09/10/2020, 09/15/2020, 03/29/2021, and 11/19/2021.

Red River water level collected 09/10/2020.

Red River Dredge Excavation = 692,137.89 yd³

Cross Section C-C'
Section 10/404 After the Fact Permit
and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract

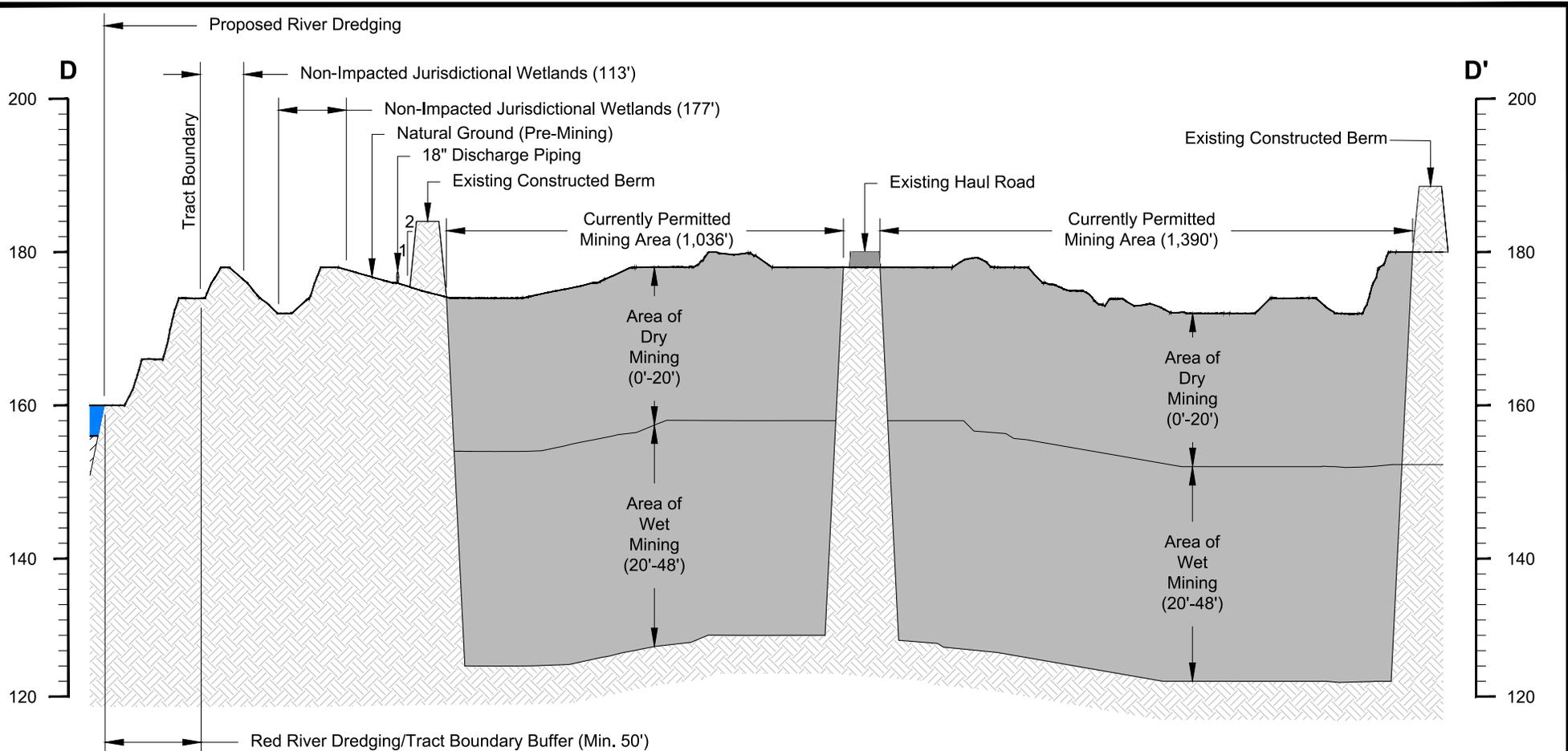


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 Engineering Progress

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Approved By	LAW
Date	12/06/2022
Drawing No	19-489-A136

6

Figure No.



Cross Section D-D'

Horizontal Scale: 1" = 400'
 Vertical Scale: 1" = 20'

Notes

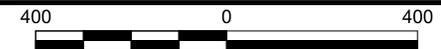
Dry Excavation = 4,872,096.38 yd³

Wet Excavation = 6,820,934.93 yd³

Cross Section D-D'
 Section 10/404 After the Fact Permit
 and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract

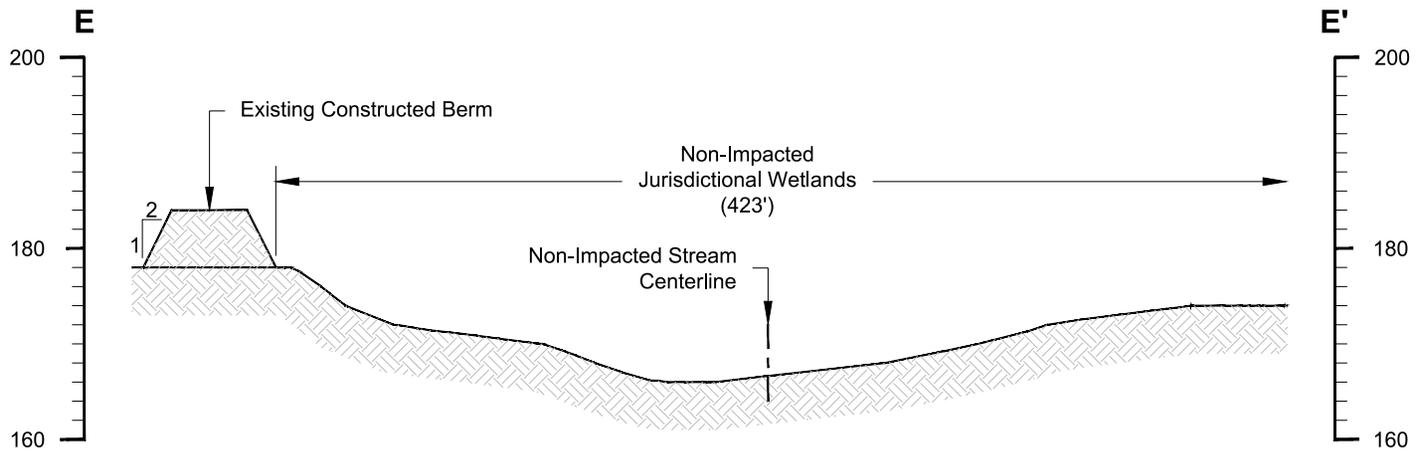


MATRIXNEWORLD
 Engineering Progress

Drawn By	LMM
Approved By	LAW
Date	11/07/2022
Drawing No	19-489-A087

7

Figure No.



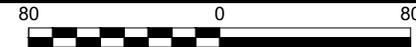
Cross Section E-E'

Horizontal Scale: 1" = 80'
 Vertical Scale: 1" = 20'

Cross Section E-E'
 Section 10/404 After the Fact Permit
 and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract

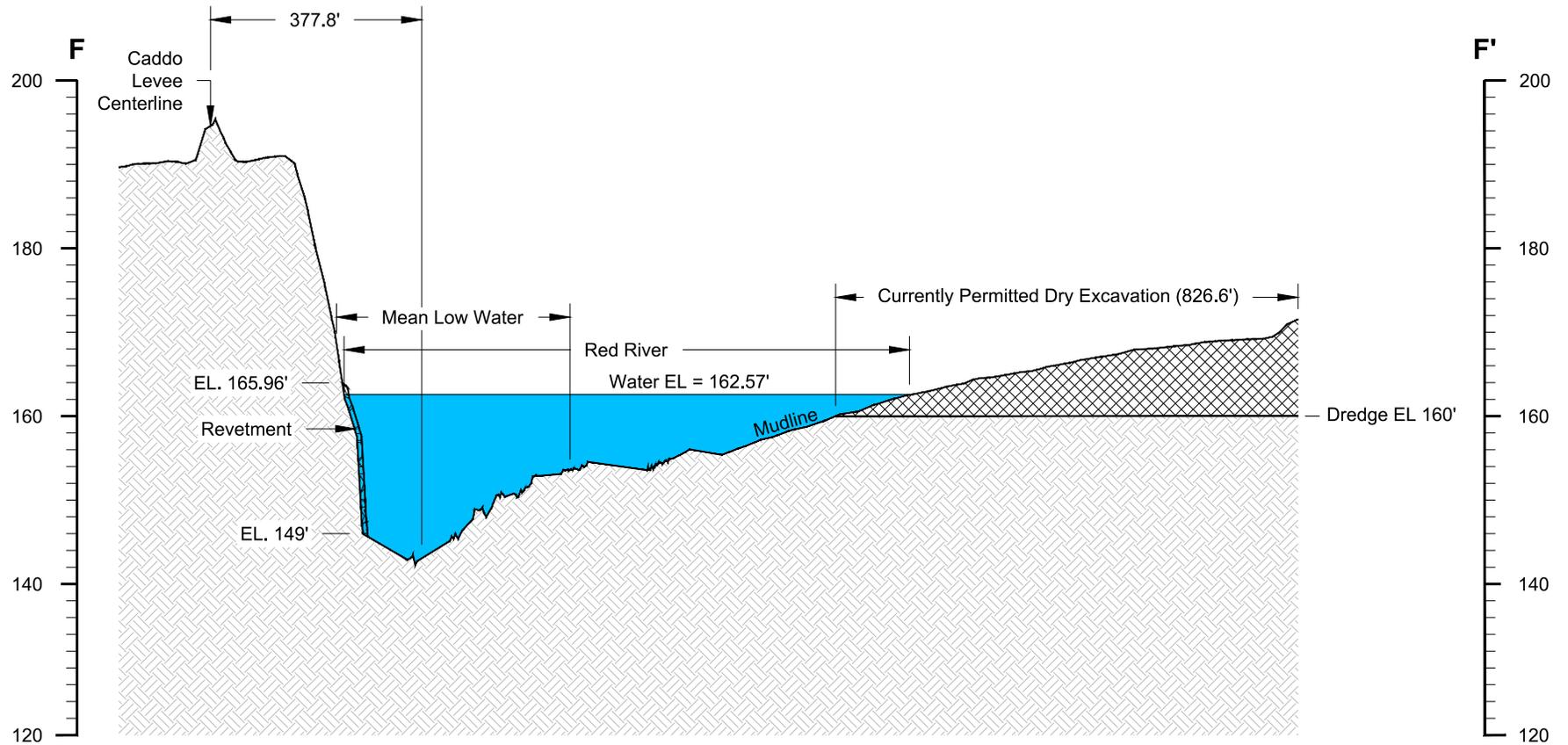


MATRIXNEWORLD
 Engineering Progress

Drawn By	LMM
Approved By	LAW
Date	11/07/2022
Drawing No	19-489-A088

8

Figure No.



Cross Section F-F'

Horizontal Scale: 1" = 300'
 Vertical Scale: 1" = 20'

Notes

MLW EL = 153.29' NAVD 88

Red River bottom elevations and sand bar elevations based on topographic survey information collected 09/10/2020, 09/15/2020, 03/29/2021, and 11/19/2021.

Red River water level collected 09/10/2020.

Permitted Excavation = 434,185.82 yd³

Cross Section F-F'
Section 10/404 After the Fact Permit
and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
 Cedar Bluff Tract

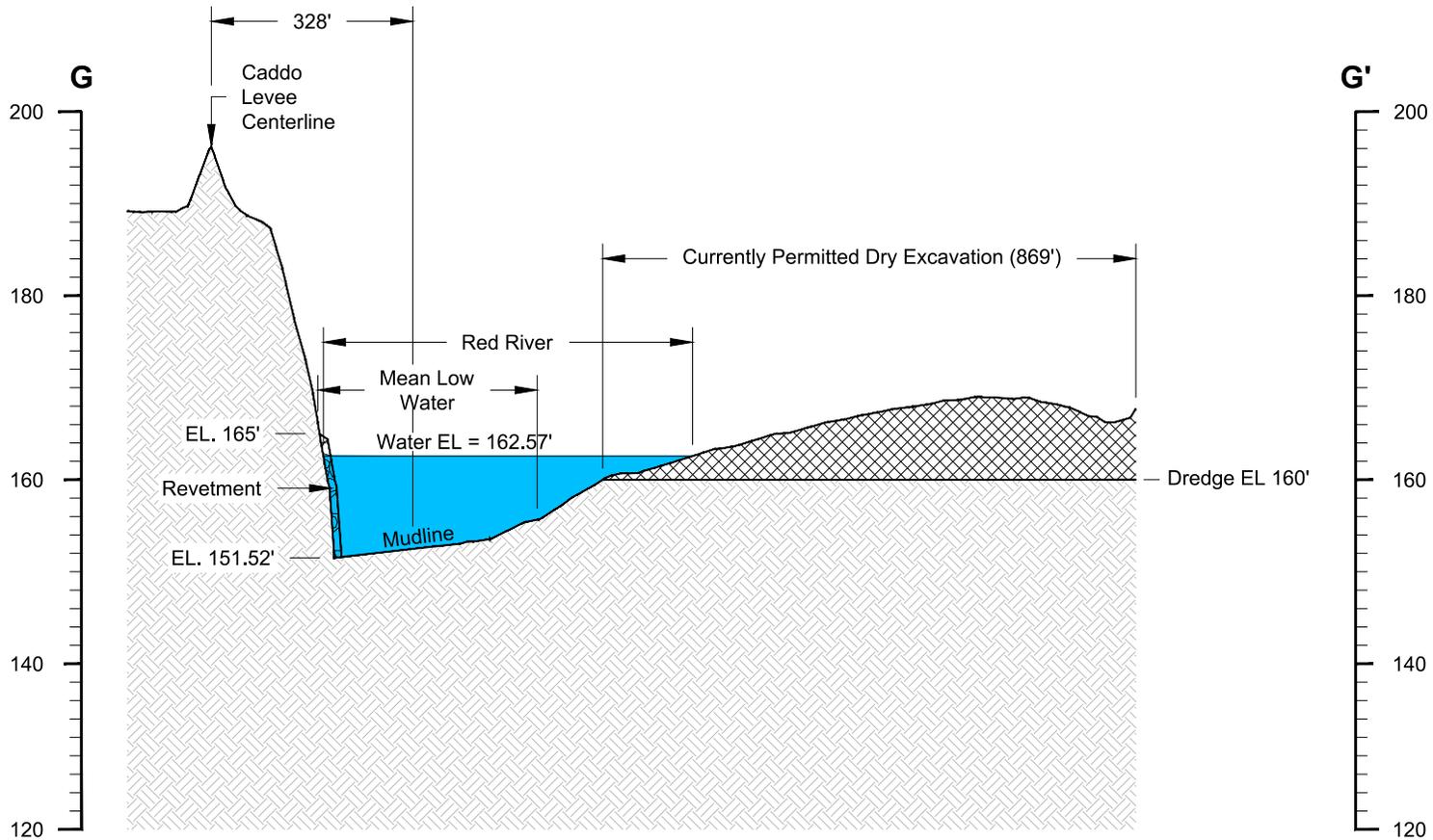


MATRIXNEWORLD
 Engineering Progress

Drawn By	LMM
Approved By	LAW
Date	11/07/2022
Drawing No	19-489-A137

9

Figure No.



Cross Section G-G'

Horizontal Scale: 1" = 300'
 Vertical Scale: 1" = 20'

Notes

MLW EL = 153.29' NAVD 88

Red River bottom elevations and sand bar elevations based on topographic survey information collected 09/10/2020, 09/15/2020, 03/29/2021, and 11/19/2021.

Red River water level collected 09/10/2020.

Permitted Excavation = 434,185.82 yd³

Cross Section G-G'
Section 10/404 After the Fact Permit
and Modification Request
 Caddo and Bossier Parishes, Louisiana

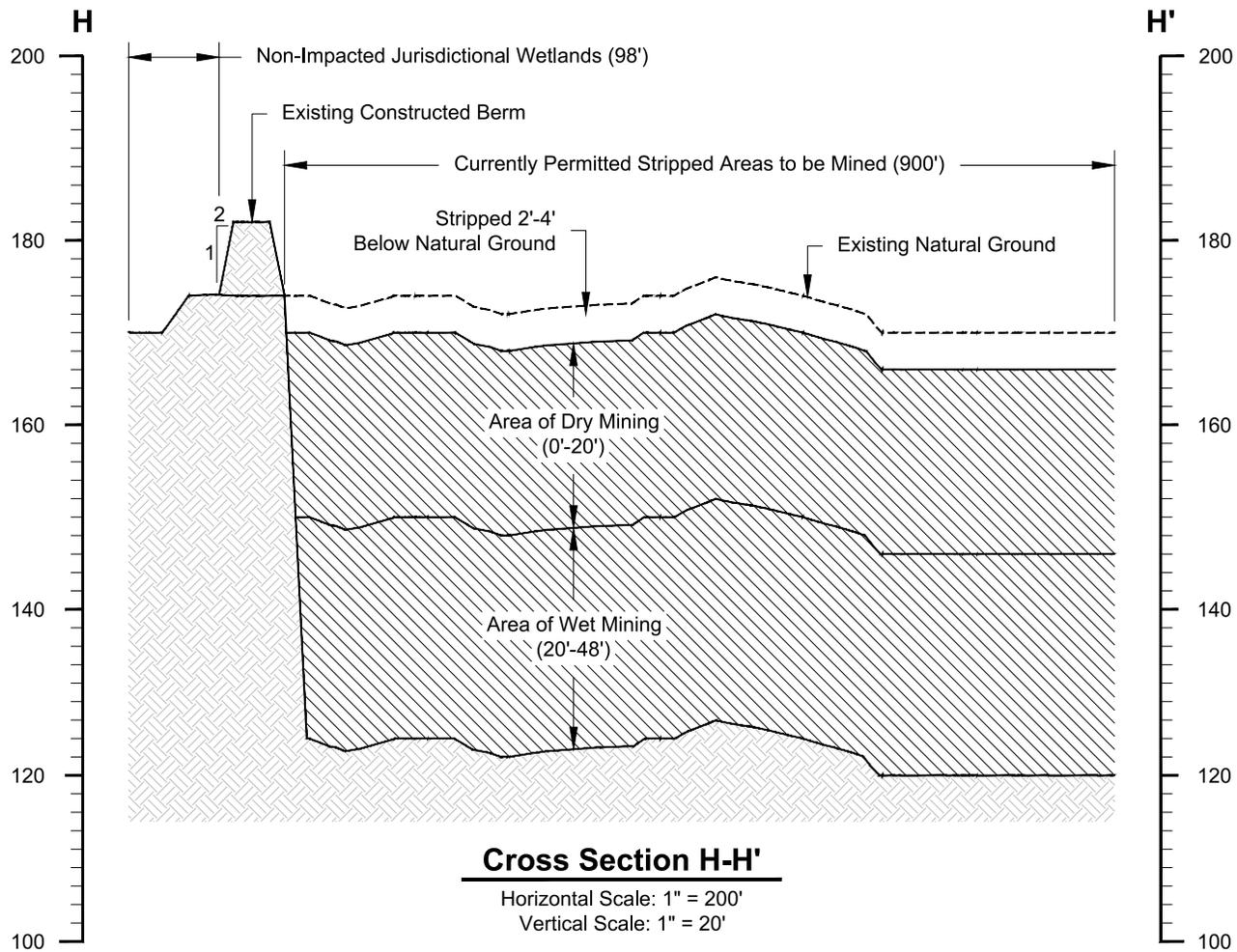
Sierra Frac Sand, LLC
 Cedar Bluff Tract



MATRIXNEWORLD
 Engineering Progress

Drawn By	LMM
Approved By	LAW
Date	11/07/2022
Drawing No	19-489-A138

10
 Figure No.



Legend

 Currently Permitted Stripped Area to be Mined

Notes

Dry Excavation = 4,872,096.38 yd³

Wet Excavation = 6,820,934.93 yd³

Cross Section H-H'
 Section 10/404 After the Fact Permit
 and Modification Request
 Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract



MATRIXNEWORLD
 Engineering Progress

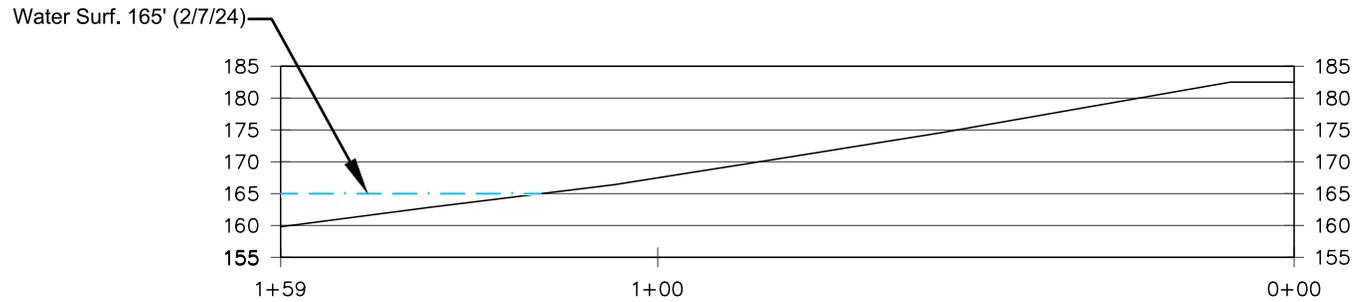
Drawn By	LMM
Approved By	LAW
Date	11/07/2022
Drawing No	19-489-A091

11

Figure No.



Scale: 1" = 500'



Cross Section I - I'

Horizontal Scale: 1" = 30'
Vertical Scale: 1" = 30'

Notes



Area to be Sloped for Dredge Deployment (0.58 acres, 3333.11 cubic yards)

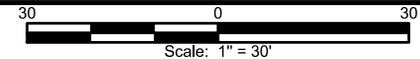
Reference

Topographic survey conducted by Sierra Frac Sand, LLC on 1/10/24 & 2/7/24.

Cross Section I - I'

Section 10/404 After the Fact Permit and Modification Request
Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Cedar Bluff Tract

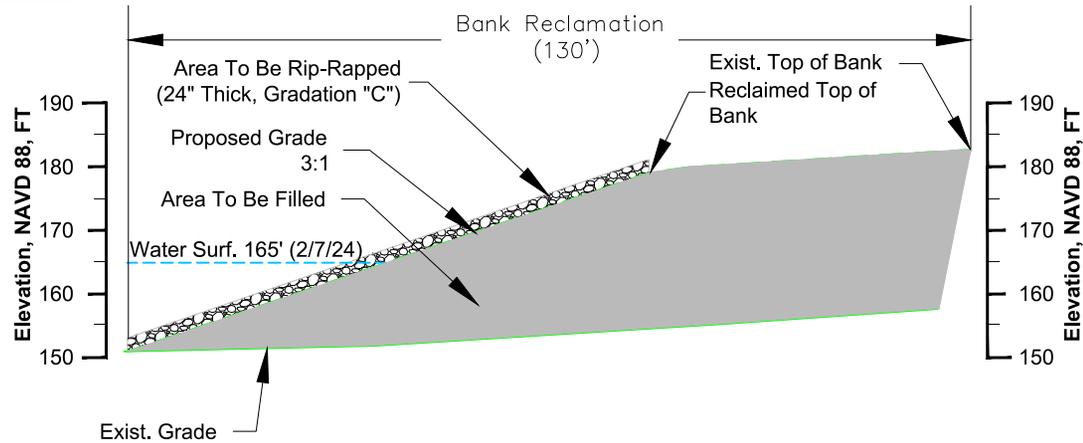


MATRIXNEWORLD
Engineering Progress

Drawn By	BJR
Approved By	LAW
Date	3/5/24
Drawing No	19-489-A185

12

Figure No.



Cross Section A-A'

Horizontal Scale: 1" = 30'
 Vertical Scale: 1" = 30'

Notes

105,115 cubic yards of fill material; 4.42 acres

Area To Be Rip-Rapped (24" Thick, Gradation "C"): 15,918.76 cubic yards

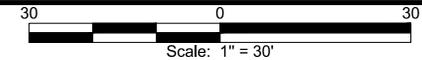
Reference

Topographic survey conducted by Sierra Frac Sand, LLC on 1/10/24 & 2/7/24.

Cross Section J-J'

Section 10/404 After the Fact Permit and Modification Request
 Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
 Cedar Bluff Tract



MATRIXNEWORLD
 Engineering Progress

Drawn By	BJR
Approved By	LAW
Date	2/15/24
Drawing No	19-489-A185

13

Figure No.

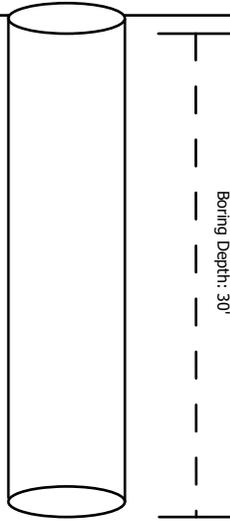
Top of Water: ~162' NGVD

River Bottom: ~155' NGVD

Boring Width: 4"



Boring Depth: 30'



Cross Section K - K'

Section 10/404 After the Fact Permit
and Modification Request

Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

Cedar Bluff Tract

Not to Scale

MATRIXNEWORLD
Engineering Progress

Drawn By CDG

Approved By LAW

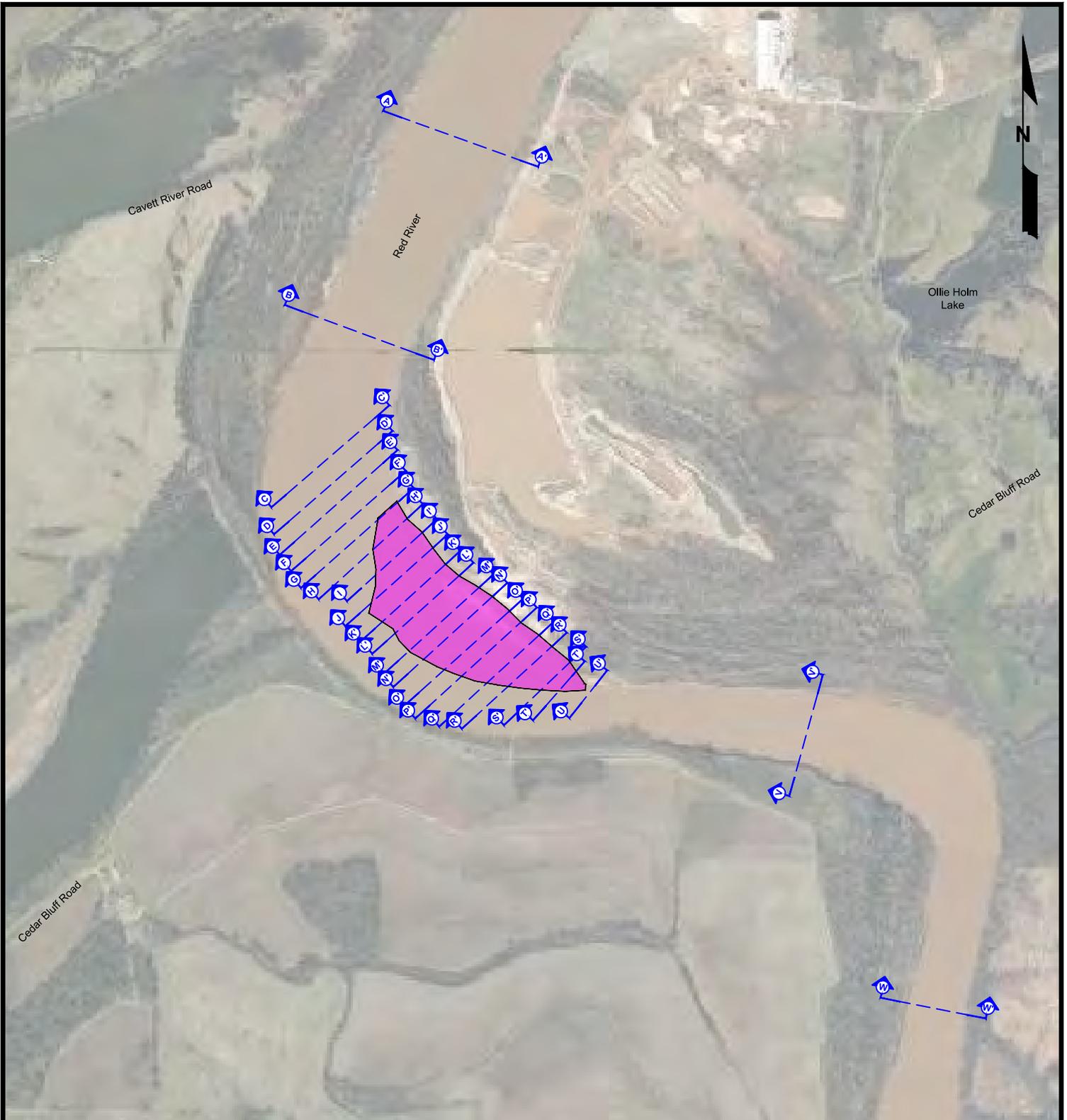
Date 4/4/2024

Drawing No. 19-489-A184

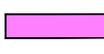
14

Figure No.

Source: Base map comprised USA_Topo_Maps



Legend

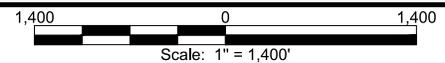
 Dry Excavation
(44.26 acres to Elevation 160')

Source

Base map comprised from Bing Maps aerial imagery from (c) 2022 Microsoft Corporation and its data suppliers, dated 01/27/2019 - 01/29/2019.

**Sandbar Monitoring
Cross Section Locations
Section 10/404 After the Fact Permit
and Modification Request**
Caddo and Bossier Parishes, Louisiana

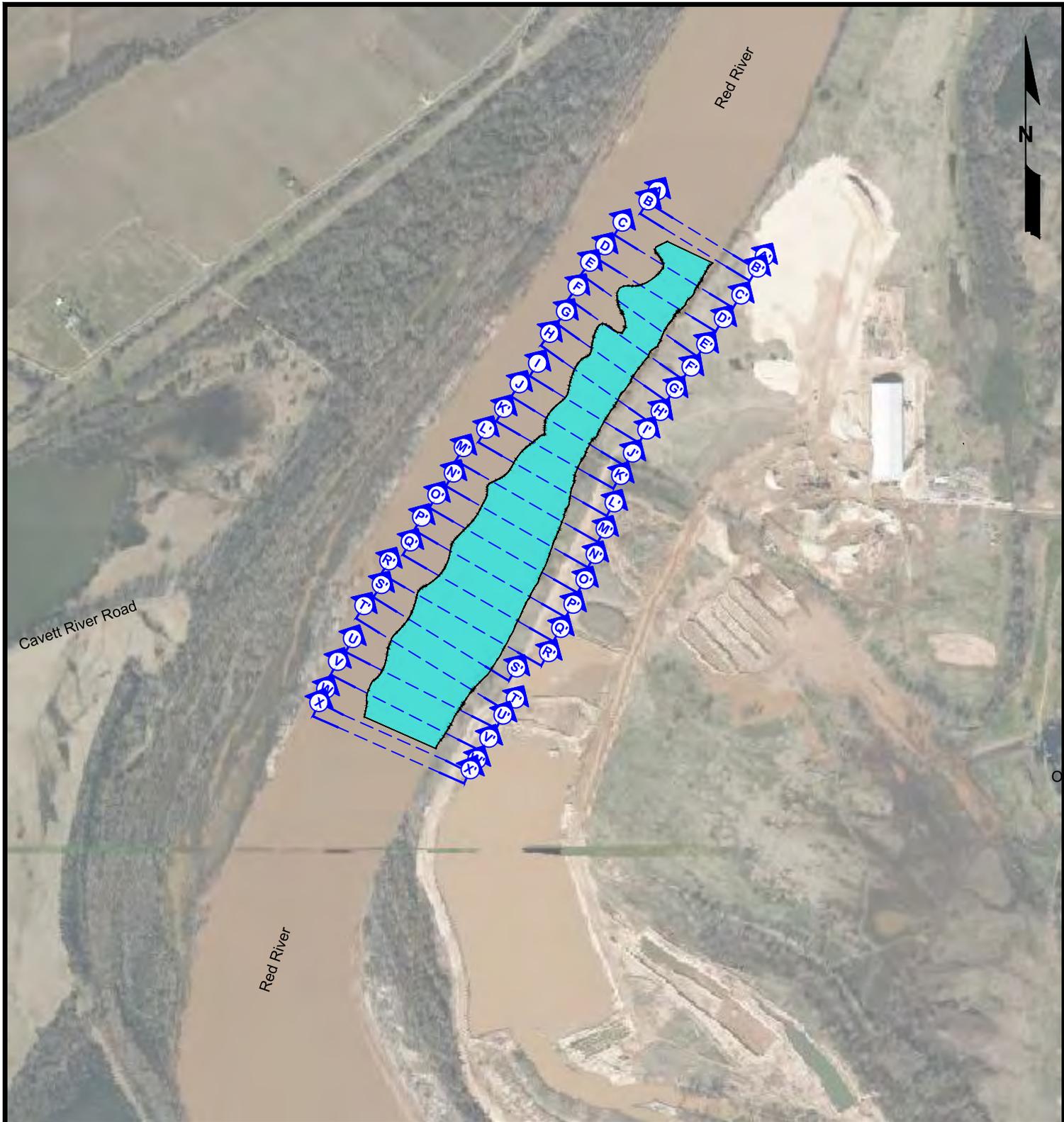
Sierra Frac Sand, LLC
Cedar Bluff Tract



MATRIXNEWORLD
Engineering Progress

Drawn By	BDL
Approved By	LAW
Date	7/31/2023
Drawing No	19-489-A139

15
Figure No.



Legend

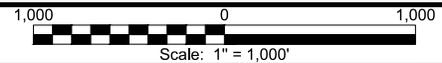
 River Dredging
(49.34 acres to Elevation 143.81')

Source

Base map comprised from Bing Maps aerial imagery from (c) 2022 Microsoft Corporation and its data suppliers, dated 01/27/2019 - 01/29/2019.

**Sandbar Monitoring
Cross Section Locations
Section 10/404 After the Fact Permit
and Modification Request**
Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Cedar Bluff Tract

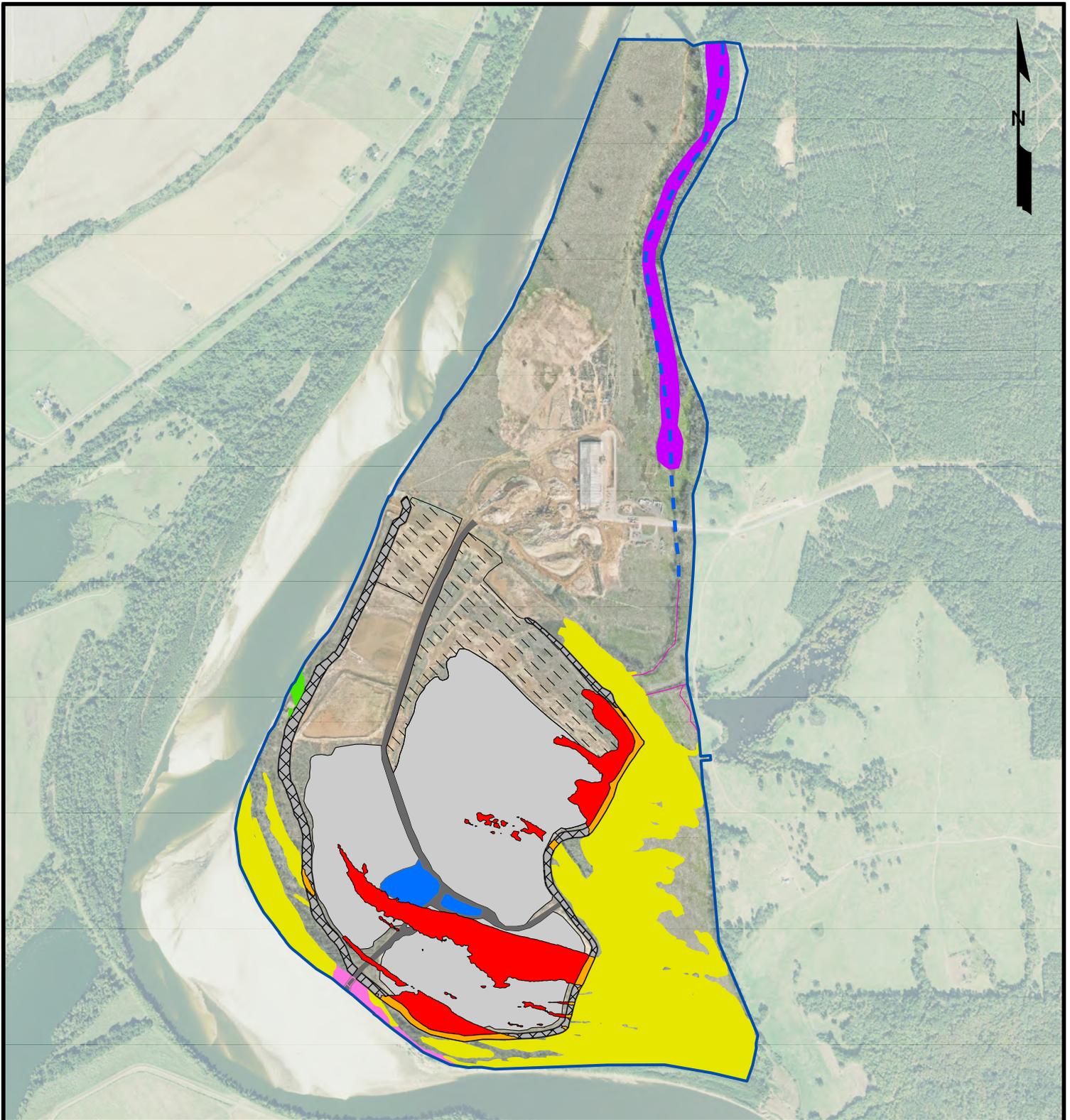


MATRIXNEWORLD
Engineering Progress

Drawn By	BDL
Approved By	LAW
Date	7/31/2023
Drawing No	19-489-A140

16

Figure No.



Legend		MVK-2017-222 (12/05/2019)	MVK-2017-222 (03/28/2024)
Tract Boundary (869.93 Acres)	Currently Permitted Mined Area (196.30 Acres)	Non-Impacted Section 404 Non-Wetland Waters (6,172.95 Linear Feet)	Non-Impacted Section 10/404 Wetlands (136.32 Acres)
Existing Haul Road (12.60 Acres)	Existing Dredge Discharge Pond (6.45 Acres)	Previously Impacted/Mitigated Jurisdictional Wetlands (0.93 acre)	Non-Impacted Section 10 Waters (3.22 Acres)
Currently Permitted Stripped Areas to be Mined (66.31 Acres)	Impacted Section 10/404 Wetlands (Fill; 5.85 acres)	After the Fact Impacted Section 10 Waters (0.21 Acres)	Non-Impacted Section 404 Wetlands (0.45 Acres)
Existing Constructed Berms (24.70 Acres)	Impacted Section 10/404 Wetlands (Excavation; 39.63 Acres)		
	Non-Impacted Section 404 Wetlands (20.87 Acres)		

Source: Base map comprised of 2024 Client Provided Orthomosaic

Previously Permitted Section 10 Areas Section 10/404 After the Fact Permit and Modification Request
Caddo and Bossier Parishes, Louisiana

Sierra Frac Sand, LLC

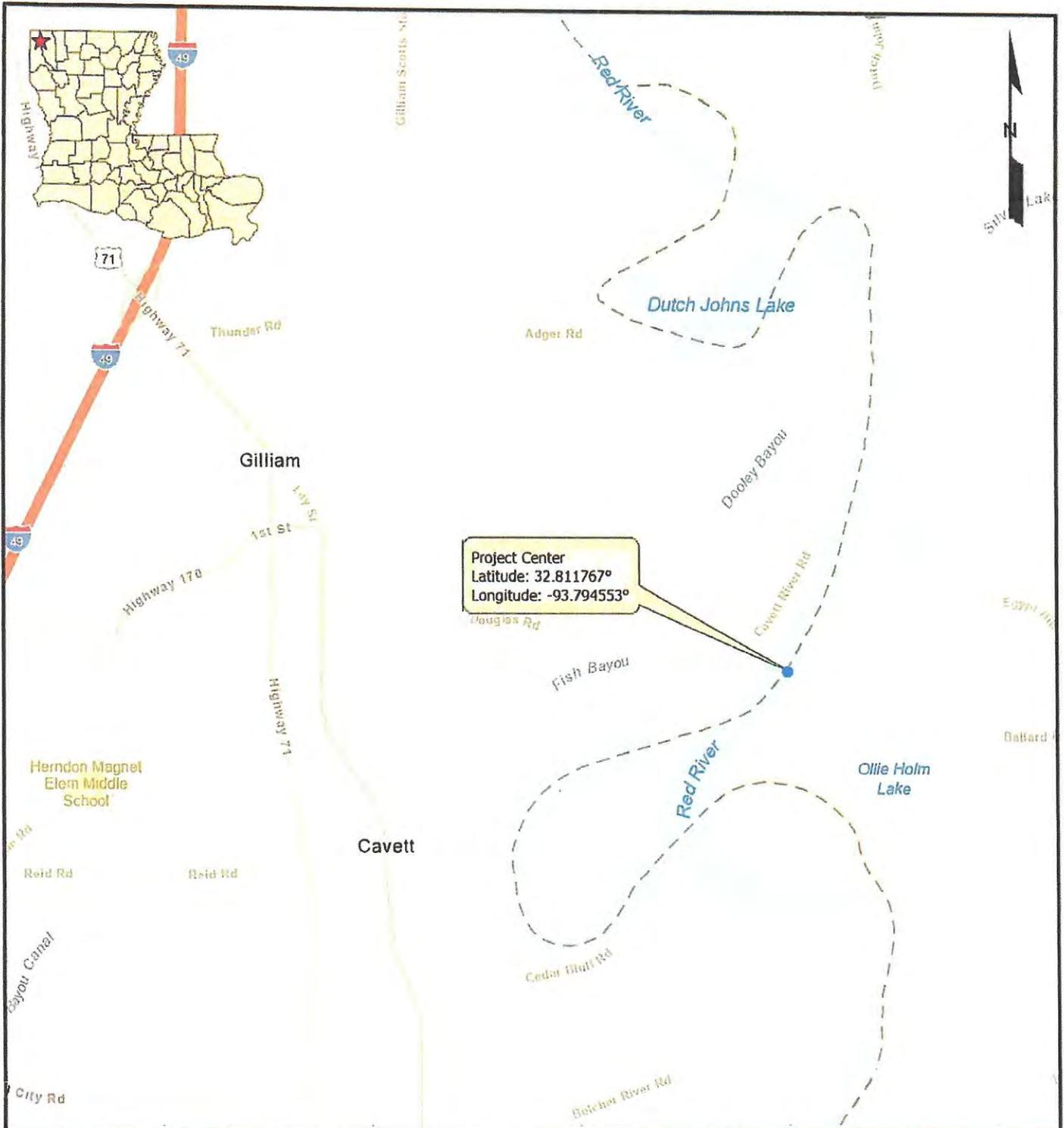
Cedar Bluff Tract



MATRIXNEWORLD
Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	4/23/2024
Drawing No.	19-489-A186

17
Figure No.



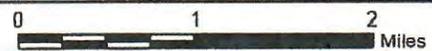
Legend

- Project Center

Vicinity Map

After-the-Fact Permit Request
Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Northern River Borings

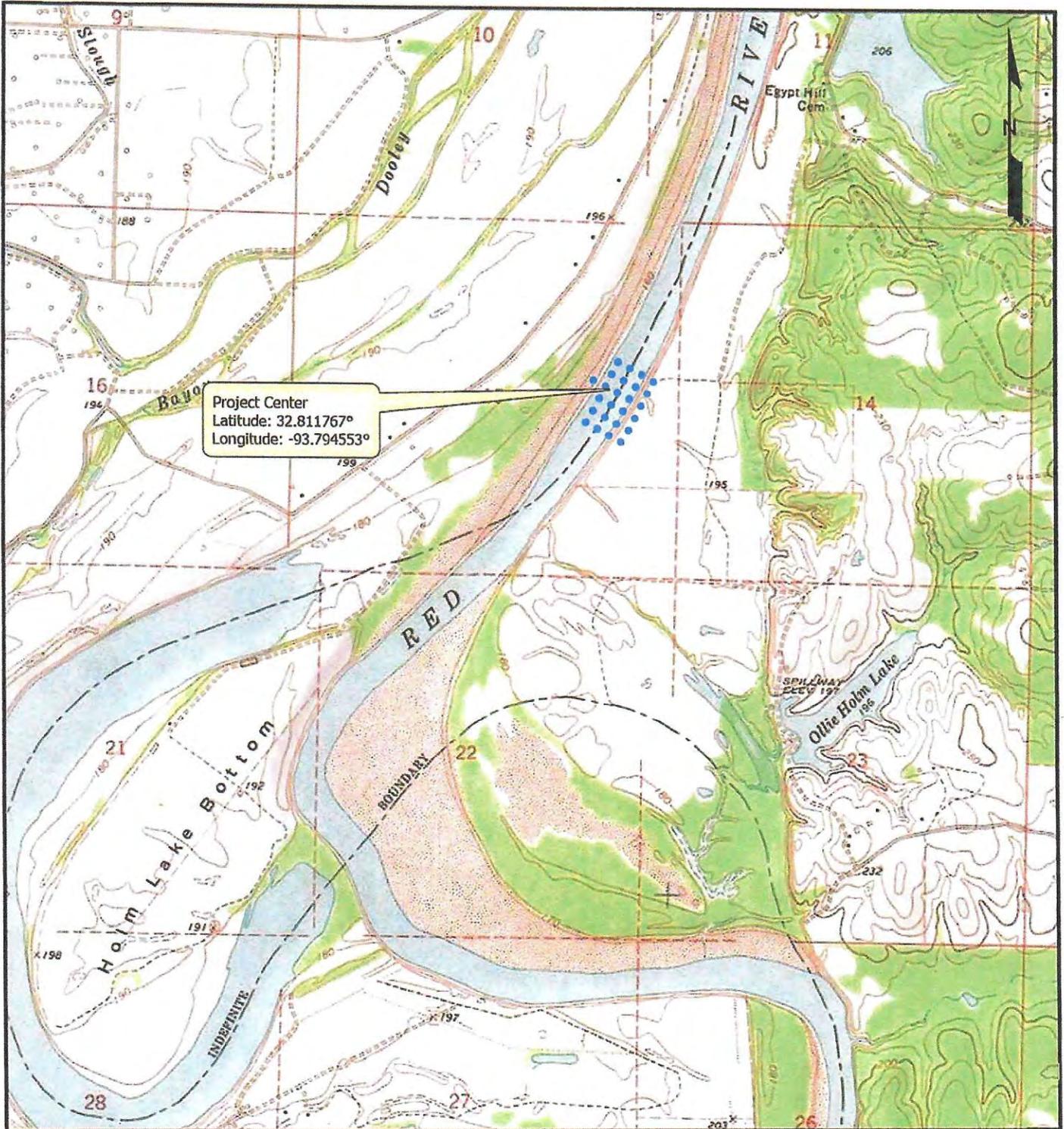


MATRIXNEWORLD
Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	1/16/2024
Drawing No.	19-489-A181

1
Figure No.

Source: Base map comprised of ESRI StreetMap USA data.



Project Center
 Latitude: 32.811767°
 Longitude: -93.794553°

Legend

- Boring Locations

Site Location Map

After-the-Fact Permit Request
 Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
 Northern River Borings

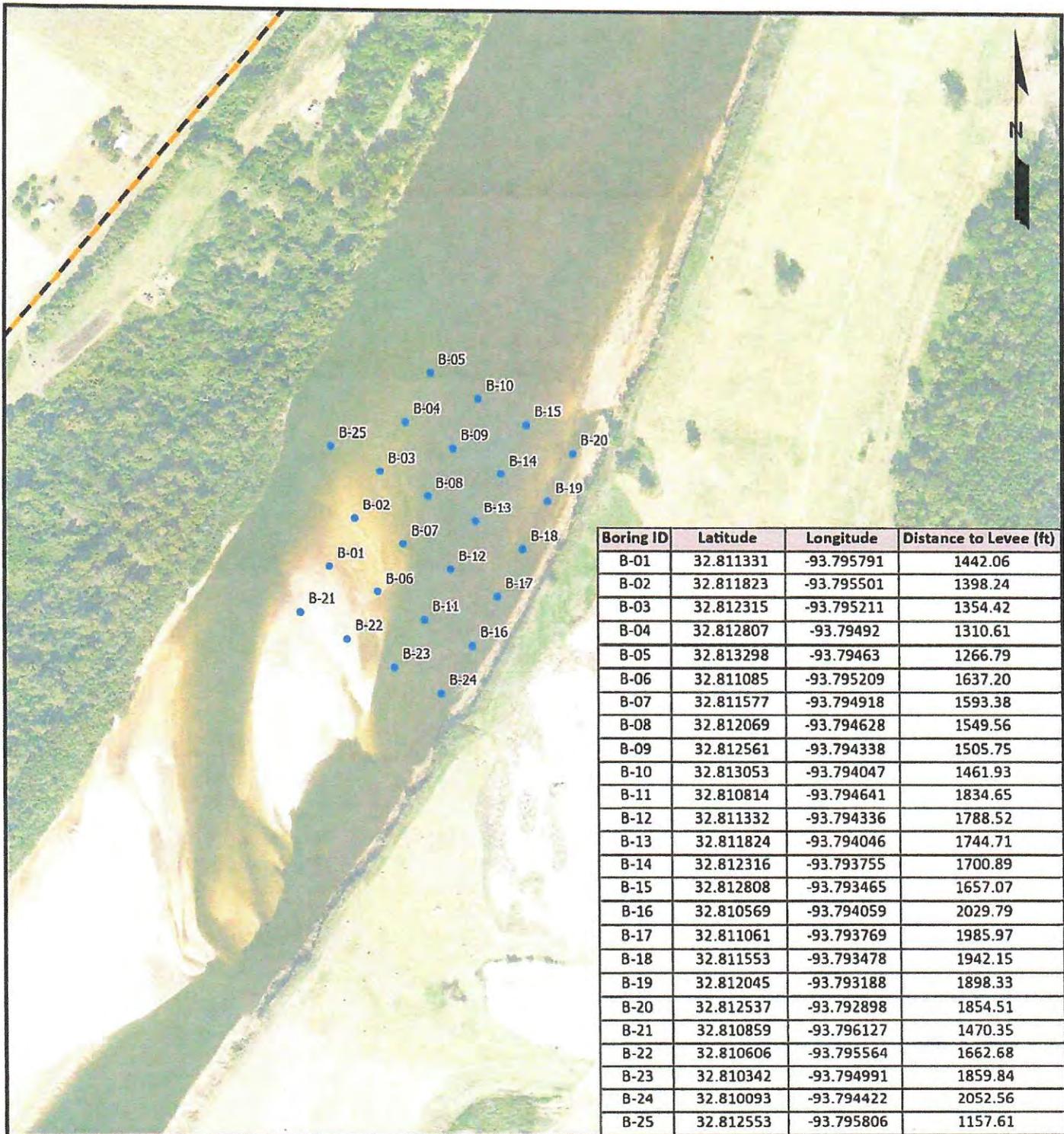


MATRIXNEWORLD
 Engineering Progress

Drawn By	COG
Approved By	LAW
Date	1/16/2024
Drawing No.	19-489-A182

2
 Figure No.

Source: Base map comprised USA_Topo_Maps



Boring ID	Latitude	Longitude	Distance to Levee (ft)
B-01	32.811331	-93.795791	1442.06
B-02	32.811823	-93.795501	1398.24
B-03	32.812315	-93.795211	1354.42
B-04	32.812807	-93.79492	1310.61
B-05	32.813298	-93.79463	1266.79
B-06	32.811085	-93.795209	1637.20
B-07	32.811577	-93.794918	1593.38
B-08	32.812069	-93.794628	1549.56
B-09	32.812561	-93.794338	1505.75
B-10	32.813053	-93.794047	1461.93
B-11	32.810814	-93.794641	1834.65
B-12	32.811332	-93.794336	1788.52
B-13	32.811824	-93.794046	1744.71
B-14	32.812316	-93.793755	1700.89
B-15	32.812808	-93.793465	1657.07
B-16	32.810569	-93.794059	2029.79
B-17	32.811061	-93.793769	1985.97
B-18	32.811553	-93.793478	1942.15
B-19	32.812045	-93.793188	1898.33
B-20	32.812537	-93.792898	1854.51
B-21	32.810859	-93.796127	1470.35
B-22	32.810606	-93.795564	1662.68
B-23	32.810342	-93.794991	1859.84
B-24	32.810093	-93.794422	2052.56
B-25	32.812553	-93.795806	1157.61

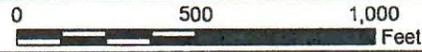
Legend

- Boring Locations
- Red River, Caddo North Levee Centerline

Site Plan

After-the-Fact Permit Request
Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Northern River Borings



MATRIXNEWORLD
Engineering Progress

Drawn By	COG
Approved By	LAW
Date	1/16/2024
Drawing No.	19-489-A183

3
Figure No.

Source: Base map comprised of ESRI StreetMap USA data.

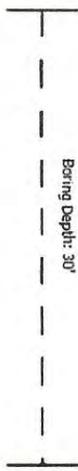
Top of Water: ~162' NGVD

River Bottom: ~155' NGVD

Boring Width: 4"



Boring Depth: 30'



Typical of Boring

After-the-Fact Permit Request
Caddo & Bossier Parishes, Louisiana

Sierra Frac Sand, LLC
Northern River Borings

Not to Scale

MATRIXNEWORLD
Engineering Progress

Drawn By	CDG
Approved By	LAW
Date	1/16/2024
Drawing No.	19-489-A184

4

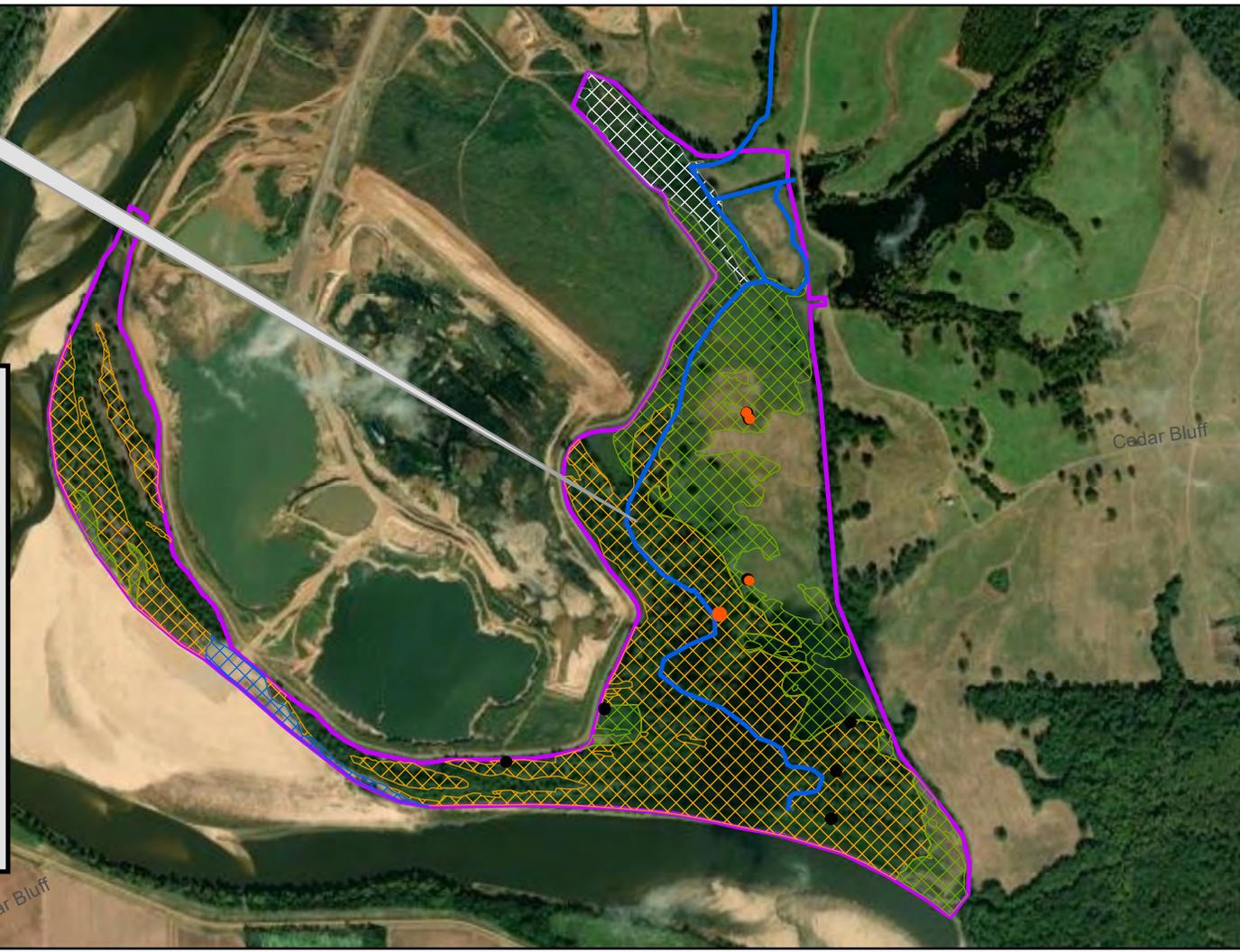
Figure No.

Source: Base map comprised USA_Topo_Maps

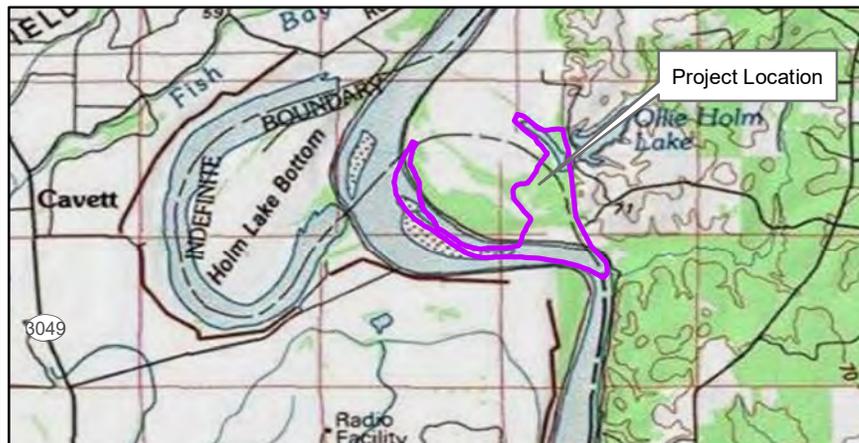
**Approx. Project Coordinates:
32.7930 -93.7918**

Legend

-  Stream/8,178Ft-(Non-RPW) ephemeral
-  Other Waters Sec-10/ 3.43ac
-  Elev 174.0 PSS Wetlands/ 8.46ac
-  Elev 174.0 PEM Wetlands/ 50.05ac
-  Elev 174.0 PFO Wetlands/ 92.08ac
-  Site Expansion Boundary/ 210.88ac



Bossier Parish



Project Location

**January 19, 2024
MVK-2017-222**

Applicant:
Sierra Frac Sand, LLC

Proposed Work:
Sand Mining

Location:
Section 22 & 23, T21N-R14W
Gilliam, Quadrangle
Bossier Parish, LA

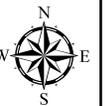
Map Background:
NAIP Aerial (2015)

**Approved
Jurisdictional Determination**

Prepared by:
Robert G. Ulmer, Jr.

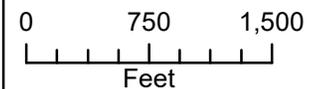


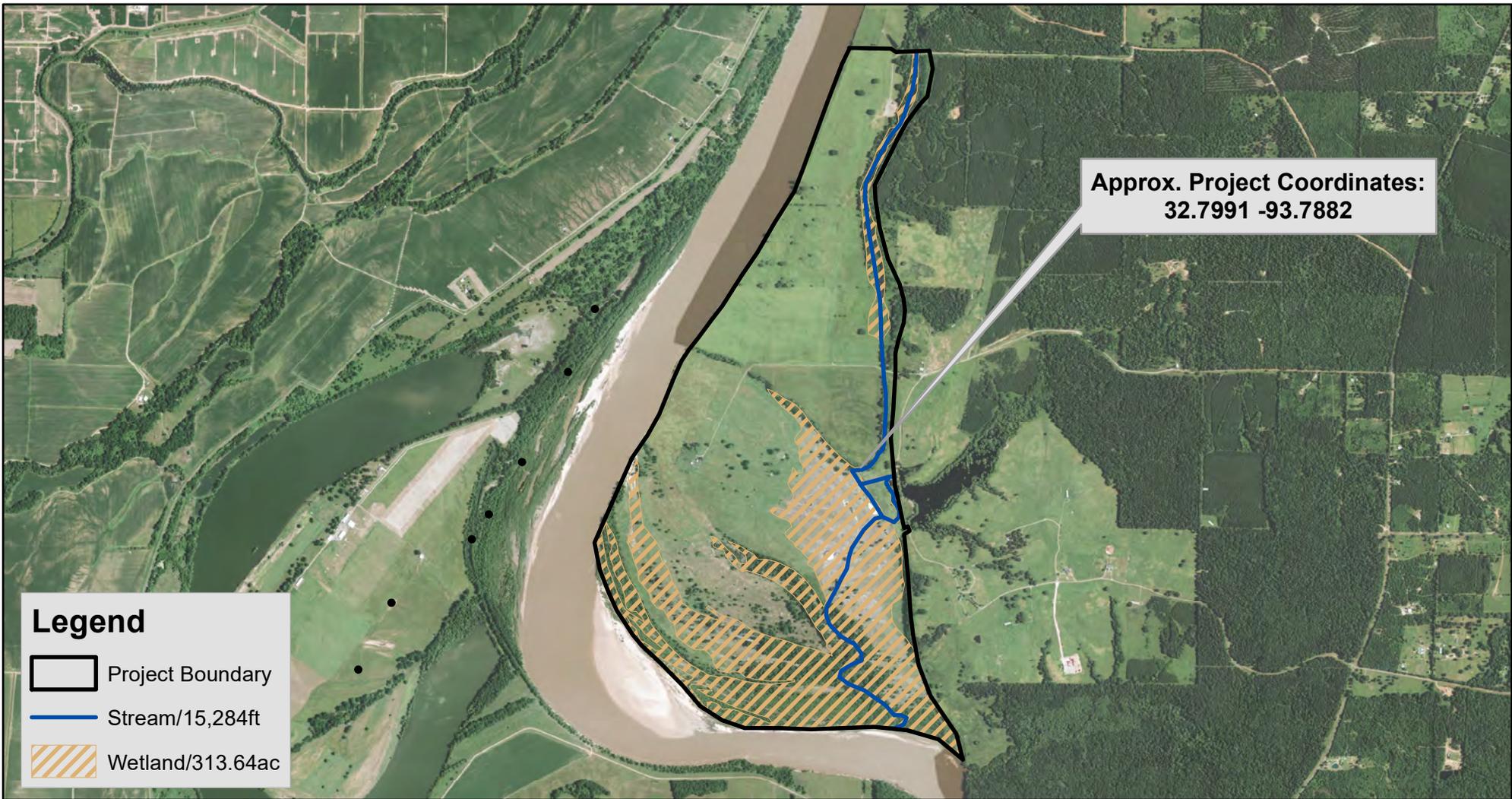
**US Army Corps
of Engineers**



Regulatory Branch

Enforcement Section

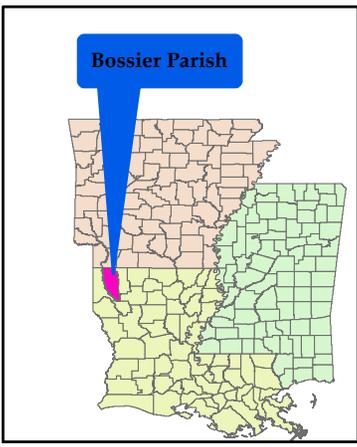




Approx. Project Coordinates:
32.7991 -93.7882

Legend

-  Project Boundary
-  Stream/15,284ft
-  Wetland/313.64ac



December 5, 2019
MVK-2017-222
 Applicant:
 Sierra Frac Sand, LLC

Proposed Work:
 Sand Mining

Location:
 Section 14-15, & 22-23, T21N-R14W
 Gilliam Quad, Quadrangle
 Bossier Parish, LA

Map Background:
 NAIP Aerial (2015)

Preliminary
Jurisdictional Determination

Prepared by:
 Robert G. Ulmer, Jr.

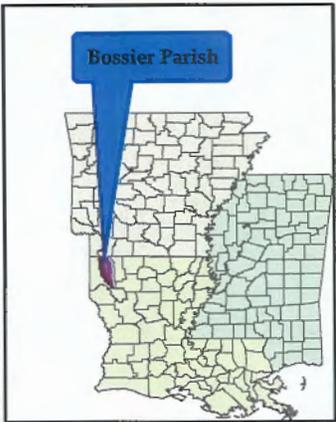
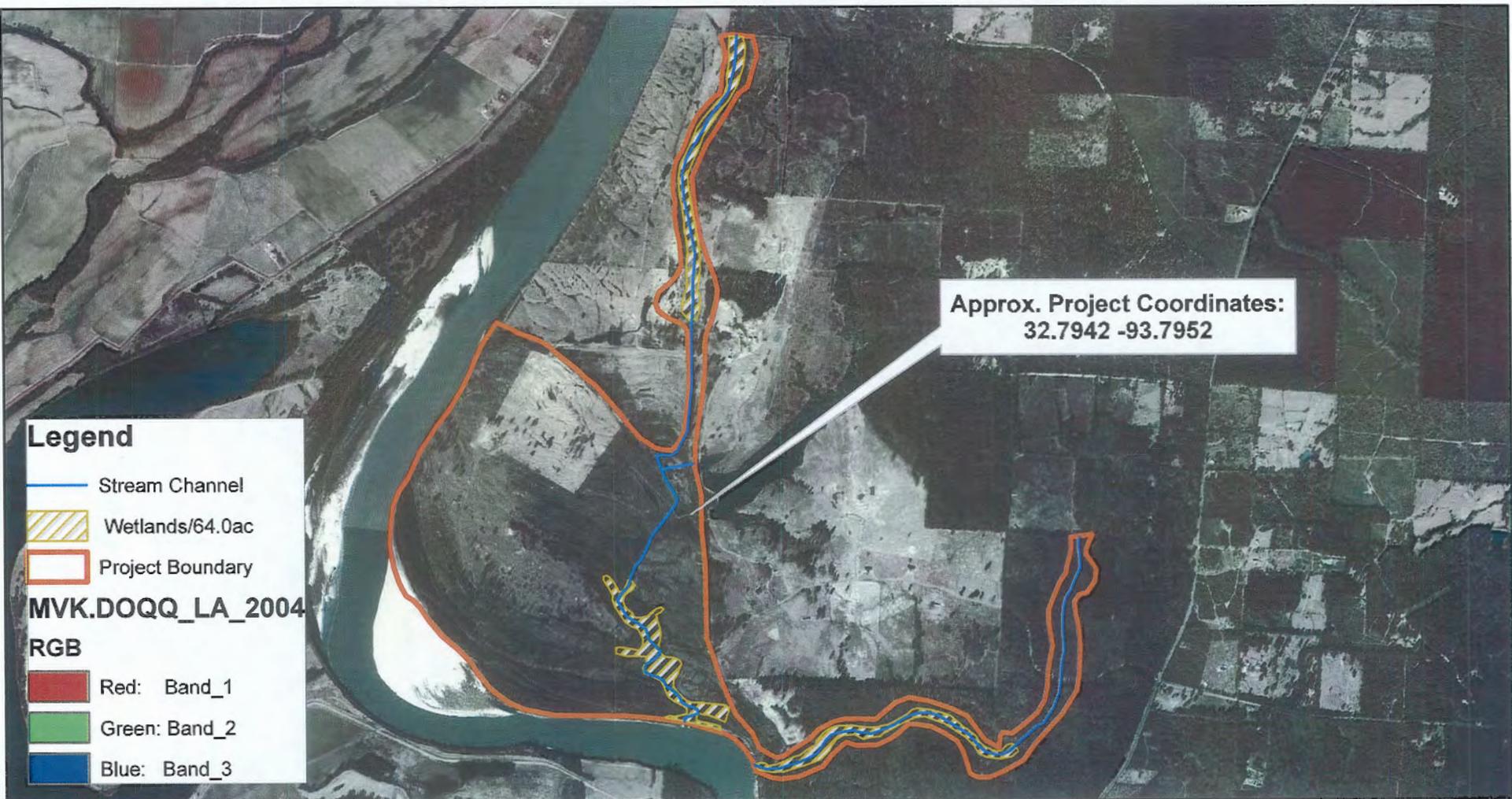



US Army Corps of Engineers®

Regulatory Branch

Enforcement Section

0 1,600 3,200
 Feet



1 August 2012
MVK-2012-484
 Applicant:
 Disiere Properties
 Proposed Work:
 Mitigation Bank Creation
 Location:
 Section 14 ,and 22-26 T21N-R14W
 Gilliam, Quadrangle
 Bossier Parish, LA
 Map Background:
 NAIP Aerial Imagery (2010)
Preliminary
Jurisdictional Determination
 Prepared by:
 Robert G. Ulmer, Jr.

US Army Corps of Engineers

Regulatory Branch
Enforcement Section

0 1,400 2,800
 Feet