JOHN BEL EDWARDS
GOVERNOR

THOMAS F. HARRIS
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

May 12 2021

Jeffrey Weller
U.S. Fish and Wildlife Service
Louisiana Ecological Services
200 Dulles Drive
Lafayette, LA 70506
Via e-mail: Jeff_Weller@fws.gov

RE: **C20210017,** Coastal Zone Consistency
U.S. Fish and Wildlife Service
Direct Federal Action
Mid-Breton Land Bridge Marsh Creation and Terracing CWPPRA Project BS-32
Plaquemines Parish**, Louisiana**

Dear Mr. Weller:

The above referenced project has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307(c)(1)(A) of the Coastal Zone Management Act of 1972, as amended. The project, as proposed in the application, is consistent with the LCRP.

If you have any questions concerning this matter, please contact Jeff Harris of the Consistency Section at (225) 342-7949 or jeff.harris@la.gov.

Sincerely yours,

/S/ Charles Reulet
Administrator
Interagency Affairs/Field Services Division

CR/MH/jdh

cc: Robert Dubois, USFWS
David Taylor, CPRA
John Helmers, Plaquemines Parish
Dave Butler, LDWF

JOHN BEL EDWARDS
GOVERNOR

THOMAS F. HARRIS
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

June 15, 2022

Sydney Dobson
Coastal Protection and Restoration Authority
150 Terrace Avenue
Baton Rouge, Louisiana 70802
Via e-mail: sydney.dobson@la.gov

RE: **C20210017 Mod 01,** Coastal Zone Consistency
Coastal Protection and Restoration Authority/USFWS
Corps of Engineers, New Orleans District
Federal License or Permit
Mid-Breton Land Bridge Marsh Creation and Terracing Project (BS-32) - Mod 01 for additional dredge pipeline route and booster pump, and removal of existing obstructions
Plaquemines Parish, Louisiana

Dear Mr. Dobson:

The above referenced project modification has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. The project modification, as proposed in the application, is consistent with the LCRP.

If you have any questions concerning this determination, please contact Jim Bondy of the Consistency Section at (225) 342-3870 or 1-800-267-4019.

Sincerely yours,

/S/ Charles Reulet
Administrator
Interagency Affairs/Field Services Division

CR/MH/jab

cc: April Newman, CPRA
Michael Farabee, NOD-COE
Dave Butler, LDWF
Sam Welty, OCM FI
Robert Spears, Plaquemines Parish

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVE
NEW ORLEANS, LA 70118-3651

17 March 2022

Regulatory Division
Eastern Evaluation Branch

SUBJECT: MVN-2018-01516-MM

Coastal Protection and Restoration Authority
Attention: Sydney Dobson
Post Office Box 44027
Baton Rouge, Louisiana 70804
via email: Sydney.Dobson@LA.GOV

Dear Mr. Dobson:

The proposed work, to dredge Lake Lery and place fill in open water and broken marsh areas for the BS-0032 Mid Breton Land Bridge Marsh Creation and Terracing Project, in the Breton Sound Basin, in and south of Lake Lery and west of Delacroix in Plaquemines Parish, Louisiana, as shown on the enclosed drawings, is authorized under **Category II** of the **Programmatic General Permit** provided that all conditions of the permit are met.

In addition, you must comply with the enclosed, "Manatee Special Conditions".

This authorization has a blanket water quality certification from the Louisiana Department of Environmental Quality; therefore, no additional authorization from DEQ is required.

However, prior to commencing work on your project, you must obtain approvals from state and local agencies as required by law and by terms of this permit. These approvals include, but are not limited to, a permit, consistency determination or determination of "no direct or significant impact (NDSI) on coastal waters" from the Louisiana Department of Natural Resources, Office of Coastal Management.

This approval to perform work is valid for 5 years from the date of this letter. Permittee is aware that this office may reevaluate its decision on this permit at any time the circumstances warrant.

Should you have any further questions concerning this matter, please contact Melissa Marino at (504) 862-2637 or melissa.l.marino@usace.army.mil.

Sincerely,

for Martin S. Mayer
Chief, Regulatory Division

Enclosures

1. Activities authorized under this general permit shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single and complete project shall be treated together as constituting one single and complete project. All planned phases of multi-phased projects shall be treated together as constituting one single and complete project. This general permit shall not be used for any activity that is part of an overall project for which an individual permit is required.

2. No activity is authorized under this general permit which may adversely affect significant cultural resources listed or eligible for listing in the National Register of Historic Places until the requirements for Section 106 of the National Historic Preservation Act are met. Upon discovery of the presence of previously unknown historic and/or prehistoric cultural resources, all work must cease and the permittee must notify the State Historic Preservation Office and the Corps of Engineers. The authorization is suspended until it is determined whether or not the activity will have an adverse effect on cultural resources. The authorization may be reactivated or modified through specific conditions if necessary, if it is determined that the activity will have no adverse effect on cultural resources. The PGP authorization will be revoked if it is determined that cultural resources would be adversely affected, and an individual permit may be necessary.

3. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein. The permittee will, at his or her expense, install and maintain any safety lights, signals, and signs prescribed by the United States Coast Guard, through regulations or otherwise, on authorized facilities or on equipment used in performing work under the authorization.

4. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the activity's primary purpose is to block or impound water.

5. If the **authorized** activity involves the installation of aerial transmission lines, submerged cable, or submerged pipelines across navigable waters of the United States the following is applicable:

The National Ocean Service (NOS) has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notification to NOS will be sent to the following address: National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Spring, Maryland 20910-3282.

6. For pipelines under an anchorage or a designated fairway in the Gulf of Mexico, the following is applicable: The NOS has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Within 30 days of completion of the pipeline, 'as built' drawings certified by a professional engineer registered in Louisiana or by a registered surveyor shall be furnished to this office, the Commander (dpw), Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Room 1230, New Orleans, Louisiana 70130, and to the Director, National Ocean Service, Office of Coast Survey, N/CS261, 1315 East West Highway, Silver Spring, Maryland 20910-3282. The plans must include the location, configuration and actual burial depth of the completed pipeline project.

7. If the **authorized** project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.,) in the· waterway, you are advised to notify the Eighth Coast Guard District so that a Notice to Mariners, if required, may be prepared. Notification with a copy of your permit approval and drawings should be mailed to the Commander (dpw), Eighth Coast Guard District, Hale Boggs Federal Building, 500 Poydras Street, Room 1230, New Orleans, Louisiana 70130, about 1 month before you plan to start work. Telephone inquiries can be directed to the Eighth Coast Guard District, Waterways Management at (504) 671-2107.

8. All activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters if the United States, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (PL 92-500: 86 Stat 816), or pursuant to applicable state and local laws.

9. Substantive changes to the Louisiana Coastal Resources Program may require immediate suspension and revocation of this permit in accordance with 33 CFR 325.7.

10. Irrespective of whether a project meets the other conditions of this permit, the Corps of Engineers retains discretionary authority to require an individual Department of the Army permit when circumstances of the proposal warrant this requirement.

11. Any individual authorization granted under this permit may be modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest.

12. The Corps of Engineers may suspend, modify, or revoke this general permit if it is found in the public interest to do so.

13. Activities proposed for authorization under the PGP must comply with all other necessary federal, state, and/or local permits, licenses, or approvals. Failure to do so would result in a violation of the terms and conditions of PGP.

14. The permittee shall permit the District Commander or his authorized representative(s) or designee(s) to make periodic inspections of the project site(s) and disposal site(s) if different from the project site(s) at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

15. This general permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations nor does it obviate the requirements to obtain state or local assent required by law for the activity authorized herein.

16. In issuing authorizations under this permit, the federal government will rely upon information and data supplied by the applicant. If, subsequent to the issuance of an authorization, such information and data prove to be false, incomplete, or inaccurate, the authorization may be modified, suspended, or revoked, in whole or in part.

17. For activities resulting in sewage generation at the project site, such sewage shall be processed through a municipal sewage treatment system or, in areas where tie-in to a municipal system is not practical, the on-site sewerage system must be approved by the local parish sanitarian before construction.

18. Any modification, suspension, or revocation of the PGP, or any individual authorization granted under this permit, will not be the basis for any claim for damages against the United States.

19. Additional conditions deemed necessary to protect the public interest may be added to the general permit by the District Commander at any time. If additional conditions are added, the public will be advised by public notice. Individual authorizations under the PGP may include special conditions deemed necessary to ensure minimal impact and compliance with the PGP.

20. The PGP is subject to periodic formal review by MVN and OCM in coordination with the Environmental Protection Agency, US Fish and Wildlife Service, the National Marine Fisheries Service, and the Louisiana Department of Wildlife and Fisheries. Comments from reviewing agencies will be considered in determination as to whether modifications to the general permit are needed. Should the District Commander make a determination not to incorporate a change proposed by a reviewing agency, after normal negotiations between the respective agencies, the District Commander will explain in writing to the reviewing agency the basis and rationale for his decision.

21. CEMVN retains discretion to review the PGP, its terms, conditions, and processing procedures, and decide whether to modify, reissue, or revoke the permit. If the PGP is not modified or reissued within 5 years of its effective date, it automatically expires and becomes null and void.

22. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

23. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party as described in Special Condition 25 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

24. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

25. If you sell the property associated with this permit, you must provide this office with a copy of the permit and a letter noting your agreement to transfer the permit to the new owner and the new owner's agreement to accept the permit and abide by all conditions of the permit. This letter must be signed by both parties.

26. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. Your project involves dredging and/or placement of fill; therefore, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your proposed activities with local floodplain ordinances, regulations or permits.

27. In issuing authorizations under this permit, the federal government does not assume any liability for: damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit, and; design or construction deficiencies associated with the permitted work.

Manatee Special Conditions

The following construction guidelines have been placed within the project plans and specifications.

The following precautions will be implemented from May to October, when manatees have the greatest potential for entering the project area:

1) All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence.

2) 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).

3) 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.

4) 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.

5) 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”.

6) 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.

STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY

MID BRETON LANDBRIDGE
MARSH CREATION & TERRACING PROJECT
BS-0032
PLAQUEMINES PARISH

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15,000' 7,500' 0' 15,000' 30,000'

FOR PERMITTING ONLY

DOCUMENTS ARE NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, OR SALES.

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	TITLE SHEET
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 1 OF 13

NOTES:

1. THE VESSEL(S) USED TO TRANSPORT EQUIPMENT TO THE BORROW AREA SHALL NOT EXCEED A DRAFT OF 6.0'.
2. EQUIPMENT ACCESS TO MARSH CREATION AREAS AND TERRACE AREAS SHALL BE RESTRICTED TO OPEN WATER.

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	PROJECT LAYOUT
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 2 OF 13

BORROW AREA BOUNDARY TOP OF CUT COORDINATES		
POINT	LATITUDE	LONGITUDE
BA-1	29° 47' 49.92"	89° 49' 09.00"
BA-2	29° 48' 02.61"	89° 48' 56.73"
BA-3	29° 47' 55.30"	89° 48' 38.06"
BA-4	29° 47' 50.54"	89° 48' 31.95"
BA-5	29° 47' 37.46"	89° 48' 41.73"
BA-6	29° 47' 31.12"	89° 48' 54.63"
BA-7	29° 47' 30.61"	89° 48' 59.21"

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	MARSH CREATION BORROW AREA LAYOUT
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 3 OF 13

MARSH CREATION AREA BOUNDARY COORDINATES		
POINT	LAT.	LONG.
MCA-1	29° 45' 49.73"	89° 47' 44.07"
MCA-2	29° 45' 48.09"	89° 47' 40.97
MCA-3	29° 45' 46.66"	89° 47' 40.03"
MCA-4	29° 45' 46.00"	89° 47' 38.71"
MCA-5	29° 45' 46.03"	89° 47' 37.10"
MCA-6	29° 45' 44.98"	89° 47' 35.16"
MCA-7	29° 45' 38.96"	89° 47' 32.34"
MCA-8	29° 45' 33.80"	89° 47' 34.68"
MCA-9	29° 45' 29.34"	89° 47' 35.26"
MCA-10	29° 45' 28.04"	89° 47' 37.06"
MCA-11	29° 45' 48.98"	89° 47' 45.52"
MCA-12	29° 45' 48.29"	89° 47' 48.41"
MCA-13	29° 45' 48.16"	89° 47' 57.51"
MCA-14	29° 45' 00.24"	89° 48' 10.17"
MCA-15	29° 45' 00.97"	89° 48' 03.46"
MCA-16	29° 45' 02.64"	89° 47' 57.97"
MCA-17	29° 45' 01.17"	89° 47' 52.89"
MCA-18	29° 45' 25.64"	89° 47' 41.23"
MCA-19	29° 44' 58.04"	89° 47' 54.85"
MCA-20	29° 47' 55.51"	89° 47' 55.51"
MCA-21	29° 44' 42.40"	89° 47' 52.43"
MCA-22	29° 44' 23.42"	89° 48' 02.92"
MCA-23	29° 44' 24.38"	89° 48' 01.04"
MCA-24	29° 44' 22.93"	89° 48' 12.28"
MCA-25	29° 44' 54.05"	89° 48' 22.67"
MCA-26	29° 44' 56.02"	89° 48' 20.68"
MCA-27	29° 44' 56.50"	89° 48' 03.42"
MCA-28	29° 44' 58.36"	89° 48' 00.70"
MCA-29	29° 44' 28.23"	89° 48' 24.58"
MCA-30	29° 44' 27.68"	89° 48' 18.95"

MARSH CREATION AREA BOUNDARY COORDINATES		
POINT	LAT.	LONG.
MCA-31	29° 44' 26.34"	89° 48' 17.97"
MCA-32	29° 44' 25.22"	89° 48' 20.08"
MCA-33	29° 44' 23.03"	89° 48' 19.43"
MCA-34	29° 44' 22.53"	89° 48' 16.13"
MCA-35	29° 44' 04.16"	89° 48' 10.40"
MCA-36	29° 43' 57.52"	89° 48' 10.26"
MCA-37	29° 43' 57.54"	89° 48' 11.41"
MCA-38	29° 44' 07.69"	89° 48' 21.09"
MCA-39	29° 44' 13.81"	89° 48' 30.90"
MCA-40	29° 44' 05.18"	89° 48' 55.83"
MCA-41	29° 43' 51.37"	89° 48' 37.40"
MCA-42	29° 43' 43.07"	89° 48' 42.03"
MCA-43	29° 43' 37.33"	89° 48' 41.88"
MCA-44	29° 43' 34.28"	89° 48' 40.94"
MCA-45	29° 43' 30.80"	89° 48' 49.75"
MCA-46	29° 43' 28.84"	89° 48' 49.81"
MCA-47	29° 43' 27.84"	89° 48' 56.56"
MCA-48	29° 43' 23.26"	89° 49' 07.10"
MCA-49	29° 43' 25.31"	89° 49' 08.56"
MCA-50	29° 43' 28.12"	89° 49' 05.54"
MCA-51	29° 43' 30.69"	89° 49' 06.65"
MCA-52	29° 43' 41.86"	89° 48' 51.21"
MCA-53	29° 43' 47.01"	89° 48' 52.80"
MCA-54	29° 43' 52.56"	89° 48' 59.62"

APPLICATION BY:
COASTAL PROTECTION & RESTORATION AUTHORITY
150 TERRACE AVENUE
BATON ROUGE, LA. 70802

COASTAL PROTECTION AND RESTORATION AUTHORITY
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

MID BRETON LANDBRIDGE
MARSH CREATION & TERRACING PROJECT

MARSH CREATION AREA LAYOUT

STATE PROJECT NUMBER: BS-0032

DATE: MARCH 2021

DRAWN BY: SHANE FAUST

DESIGNED BY: CHRIS SCALCO, E.I.

APPROVED BY: SHANNON HAYNES, P.E.

SHEET 4 OF 13

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	EARTHEN TERRACE AREA LAYOUT
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 5 OF 13

EARTHEN TERRACE END POINT COORDINATES			
TERRACE	COORDINATE	LATITUDE	LONGITUDE
T1	1	29° 45' 30.47"	89° 49' 17.55"
	2	29° 45' 30.40"	89° 49' 11.88"
T2	1	29° 45' 30.31"	89° 49' 04.17"
	2	29° 45' 30.25"	89° 48' 58.50"
T3	1	29° 45' 27.81"	89° 49' 01.16"
	2	29° 45' 27.74"	89° 48' 55.48"
T4	1	29° 45' 25.30"	89° 48' 58.14"
	2	29° 45' 25.23"	89° 48' 52.47"
T5	1	29° 45' 20.65"	89° 48' 48.27"
	2	29° 45' 20.59"	89° 48' 42.60"
T6	1	29° 45' 18.15"	89° 48' 45.26"
	2	29° 45' 18.08"	89° 48' 39.59"
T7	1	29° 45' 15.71"	89° 48' 48.36"
	2	29° 45' 15.64"	89° 48' 42.69"
T8	1	29° 45' 13.20"	89° 48' 45.35"
	2	29° 45' 13.14"	89° 48' 39.67"
T9	1	29° 45' 10.69"	89° 48' 42.35"
	2	29° 45' 10.63"	89° 48' 36.67"
T10	1	29° 45' 08.25"	89° 48' 45.43"
	2	29° 45' 08.19"	89° 48' 39.76"
T11	1	29° 45' 05.74"	89° 48' 42.42"
	2	29° 45' 05.68"	89° 48' 36.75"
T12	1	29° 44' 56.97"	89° 48' 39.74"
	2	29° 44' 56.91"	89° 48' 34.07"
T13	1	29° 44' 54.46"	89° 48' 36.73"
	2	29° 44' 54.40"	89° 48' 31.06"
T14	1	29° 44' 52.02"	89° 48' 39.81"
	2	29° 44' 51.96"	89° 48' 34.14"
T15	1	29° 44' 41.78"	89° 48' 38.58"
	2	29° 44' 41.71"	89° 48' 32.91"
T16	1	29° 44' 39.38"	89° 48' 41.66"
	2	29° 44' 39.32"	89° 48' 35.99"

EARTHEN TERRACE END POINT COORDINATES			
TERRACE	COORDINATE	LATITUDE	LONGITUDE
T17	1	29° 44' 31.39"	89° 48' 35.21"
	2	29° 44' 34.85"	89° 48' 31.15"
T18	1	29° 44' 27.25"	89° 48' 36.03"
	2	29° 44' 30.70"	89° 48' 31.97"
T19	1	29° 44' 23.10"	89° 48' 36.85"
	2	29° 44' 26.55"	89° 48' 32.79"
T20	1	29° 44' 23.70"	89° 48' 32.08"
	2	29° 44' 27.16"	89° 48' 28.02"
T21	1	29° 44' 19.56"	89° 48' 32.90"
	2	29° 44' 23.01"	89° 48' 28.83"
T22	1	29° 44' 18.96"	89° 48' 37.67"
	2	29° 44' 22.41"	89° 48' 33.60"
T23	1	29° 44' 14.81"	89° 48' 38.49"
	2	29° 44' 18.26"	89° 48' 34.42"
T24	1	29° 44' 10.06"	89° 48' 44.07"
	2	29° 44' 13.51"	89° 48' 40.01"
T25	1	29° 44' 14.20"	89° 48' 43.26"
	2	29° 44' 17.66"	89° 48' 39.19"
T26	1	29° 44' 13.08"	89° 48' 48.63"
	2	29° 44' 16.54"	89° 48' 44.57"
T27	1	29° 44' 09.45"	89° 48' 48.84"
	2	29° 44' 12.91"	89° 48' 44.78"
T28	1	29° 45' 02.67"	89° 48' 14.66"
	2	29° 45' 06.13"	89° 48' 10.60"
T29	1	29° 45' 06.82"	89° 48' 13.85"
	2	29° 45' 10.27"	89° 48' 09.78"
T30	1	29° 45' 05.70"	89° 48' 19.23"
	2	29° 45' 09.15"	89° 48' 15.16"
T31	1	29° 45' 17.25"	89° 48' 10.92"
	2	29° 45' 20.71"	89° 48' 06.85"
T32	1	29° 45' 16.65"	89° 48' 15.69"
	2	29° 45' 20.10"	89° 48' 11.63"

EARTHEN TERRACE END POINT COORDINATES			
TERRACE	COORDINATE	LATITUDE	LONGITUDE
T33	1	29° 45' 21.40"	89° 48' 10.10"
	2	29° 45' 24.85"	89° 48' 06.04"
T34	1	29° 45' 20.80"	89° 48' 14.87"
	2	29° 45' 24.25"	89° 48' 10.81"
T35	1	29° 45' 25.54"	89° 48' 09.28"
	2	29° 45' 29.00"	89° 48' 05.22"
T36	1	29° 45' 24.94"	89° 48' 14.05"
	2	29° 45' 28.40"	89° 48' 09.99"
T37	1	29° 45' 29.69"	89° 48' 08.47"
	2	29° 45' 29.09"	89° 48' 13.24"
T38	1	29° 45' 29.07"	89° 48' 13.22"
	2	29° 45' 32.54"	89° 48' 09.17"
T39	1	29° 45' 33.83"	89° 48' 07.65"
	2	29° 45' 37.29"	89° 48' 03.58"
T40	1	29° 45' 33.23"	89° 48' 12.42"
	2	29° 45' 36.69"	89° 48' 08.35"
T42	1	29° 45' 37.38"	89° 48' 11.60"
	2	29° 45' 40.83"	89° 48' 07.54"
T43	1	29° 45' 42.13"	89° 48' 06.01"
	2	29° 45' 45.58"	89° 48' 01.95"
T44	1	29° 45' 41.52"	89° 48' 10.78"
	2	29° 45' 44.98"	89° 48' 06.72"

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	EARTHEN TERRACE AREA COORDINATES
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 6 OF 13

MCBA 3 MARSH CREATION BORROW AREA TYPICAL SECTION

DPC1 3 DREDGE PIPELINE CORRIDOR TYPICAL SECTION

DPC2 4 DREDGE PIPELINE CORRIDOR TYPICAL SECTION

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	MARSH CREATION BORROW AREA & DREDGE PIPELINE TYPICAL SECTIONS
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 7 OF 13

MCA1 / 4 MARSH CREATION AREA 1 TYPICAL SECTION

MCA2 / 4 MARSH CREATION AREA 2 TYPICAL SECTION

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	MARSH CREATION AREA 1 & 2 TYPICAL SECTIONS
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 8 OF 13

MCA3 / 4 MARSH CREATION AREA 3 TYPICAL SECTION

MCA4 / 4 MARSH CREATION AREA 4 TYPICAL SECTION

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	MARSH CREATION AREA 3 & 4 TYPICAL SECTIONS
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 9 OF 13

MCA5 / 4 MARSH CREATION AREA 5 TYPICAL SECTION

HORIZONTAL GRAPHIC SCALE

100' 50' 0 100' 200'

10' 5' 0 10' 20'

VERTICAL GRAPHIC SCALE

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	MARSH CREATION AREA 5 TYPICAL SECTION
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 10 OF 13

ET1 / 5 EARTHEN TERRACE TYPICAL SECTION

ET2 / 5 EARTHEN TERRACE TYPICAL SECTION

HORIZONTAL GRAPHIC SCALE

60' 30' 0 600' 120'

6' 3' 0 6' 12'

VERTICAL GRAPHIC SCALE

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	EARTHEN TERRACE TYPICAL SECTION
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 11 OF 13

EARTHEN TERRACE DETAIL
PLAN VIEW

HORIZONTAL GRAPHIC SCALE
60' 30' 0 600' 120'
6' 3' 0 6' 12'
VERTICAL GRAPHIC SCALE

APPLICATION BY: COASTAL PROTECTION & RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LA. 70802	**COASTAL PROTECTION AND RESTORATION AUTHORITY** 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	MID BRETON LANDBRIDGE MARSH CREATION & TERRACING PROJECT	EARTHEN TERRACE DETAILS
		STATE PROJECT NUMBER: BS-0032	DATE: MARCH 2021
DRAWN BY: SHANE FAUST	DESIGNED BY: CHRIS SCALCO, E.I.	APPROVED BY: SHANNON HAYNES, P.E.	SHEET 12 OF 13

Estimated Fill Quantities		
Feature	Volume (CY)	Area (Acres)
Marsh Creation Area 1	96058	26
Marsh Creation Area 2	887589	170
Marsh Creation Area 3	821365	147
Marsh Creation Area 4	339381	62
Marsh Creation Area 5	411954	109
Earthen Containment Dike 1	17717	5
Earthen Containment Dike 2	88344	13
Earthen Containment Dike 3	82837	11
Earthen Containment Dike 4	61724	8
Earthen Containment Dike 5	62603	13
Earthen Terraces	68444	20
Estimated Borrow Quantities		
Feature	Volume (CY)	Area (Acres)
Marsh Creation Borrow	3335702	145
Earthen Containment Dike 1 Borrow	26575	6
Earthen Containment Dike 2 Borrow	132515	14
Earthen Containment Dike 3 Borrow	124256	12
Earthen Containment Dike 4 Borrow	92585	9
Earthen Containment Dike 5 Borrow	93904	14
Earthen Terraces Borrow	205333	23