

# JOINT PUBLIC NOTICE

January 25, 2021

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

(504) 862-2259  
Project Manager  
Scott N. Kennedy  
scott.n.kennedy@usace.army.mil  
Permit Application Number  
MVN 2019-01031 EMM

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

(225) 219-3225  
Project Manager  
Elizabeth Hill  
WQC Application Number  
WQC 210111-02

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

Application has also been made to the Louisiana Department of Environmental Quality, Water Quality Certifications, for a Water Quality Certification (WQC) in accordance with statutory authority contained in LRS 30:2074 A(3) and provisions of Section 401 of the Clean Water Act.

## **CLEAR, GRADE, AND FILL FOR THE CONSTRUCTION OF THE MUNSTER SUBSTATION AND ASSOCIATED POWERLINE INSTALLATIONS IN SAINT BERNARD PARISH**

**NAME OF APPLICANT:** Entergy Louisiana, LLC, c/o Morris P. Hebert, Inc. 22828 Hazard Drive, Zachary, Louisiana 70791.

**LOCATION OF WORK:** Section 39, Township 13 South, Range 13 East, in Chalmette, Louisiana, in Saint Bernard Parish, as shown on the attached drawings.

HUC: 08090203: Eastern Louisiana Coastal  
Latitude: 29.947481 Longitude: -89.930136

**CHARACTER OF WORK:** Clear, grade, and fill for the construction of the Munster substation, access roads, offloading sites, boardmat roads, and right of ways in Zachary, Louisiana. The entire site is wetlands and approximately 11.97 acres of permanent impacts and approximately 1.99 acres of temporary impacts. The impacts are proposed to be mitigated for at an approved off-site 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 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 the public notice solicits input from the State Archeologist and State Historic Preservation Office regarding potential impacts to cultural resources.

The New Orleans District has determined that the proposed work would neither affect any species or critical habitat listed as endangered by the U.S. Department of Commerce.

Utilizing Information and Planning and Consultation for Endangered Species in Louisiana (iPAC), dated January 27, 2020, between the U.S. Army Corps of Engineers, New Orleans and U.S. Fish and Wildlife Service, Ecological Services Office, the Corps has determined that the proposed project activities are not likely to adversely affect the endangered West Indian Manatee (*Trichechus manatus*) with the inclusion of "Standard Manatee conditions for In-Water Activities" and no effect on any other listed species.

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 up to n/a acres of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

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

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

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

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

Michael Farabee  
Chief, Eastern Evaluation Section

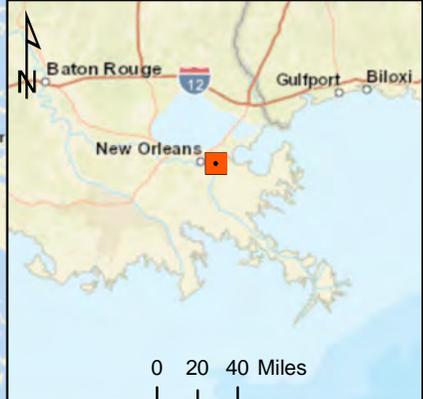
Enclosures

FILE LOCATION: F:\DRIVE\13602 ENTERGY\PERMIT PLATS\MAPS\13602\_MUNSTER\_OVERVIEW.MXD



**ST. BERNARD PARISH, LOUISIANA  
SECTION 39-T13S-R13E**

**PROPOSED MUNSTER SUBSTATION  
ST BERNARD PARISH  
LAT: 29°56'50.53"N  
LON: 89°55'48.49"W**



NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

NOTE: THIS DRAWING WAS PREPARED FOR PERMITTING PURPOSES ONLY, AND IS NOT A PROPERTY BOUNDARY SURVEY AND AS SUCH DOES NOT COMPLY WITH THE STANDARDS SET FORTH FOR PROPERTY BOUNDARY SURVEYS BY THE PROFESSIONAL LAND SURVEY LICENSING INSTITUTE FOR THE STATE(S) ILLUSTRATED.

**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
OVERVIEW MAP**

**SURVEYING • ENGINEERING • ENVIRONMENTAL SERVICES • FIELD SERVICES • GIS**  
116 VENTURE BLVD P.O. BOX 3106 HOUMA, LOUISIANA 70360 (985) 879-2731  
10101 SOUTHWEST FREEWAY • SUITE 620 • HOUSTON, TEXAS 77071 • (713) 219-1470

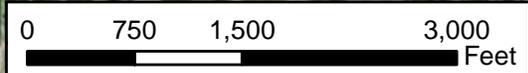
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CHECKED BY:	SCALE: 1 IN = 12 MI
APPROVED BY: CRF	DATE: 8/3/2020
REVISION BY:	JOB NO.: 13602-00
GIS FILE: 13602_MUNSTER_OVERVIEW.MXD	

ST.BERNARD PARISH, LOUISIANA  
SECTION 39-T13S-R13E



**Legend**

- Offload/Passing Boardmat Placement Sites
- Access Route
- Proposed Permanent ROW
- Proposed Boardmat Road
- Proposed Substation
- Proposed Permanent Access Road



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**ENTERGY LOUISIANA, LLC**

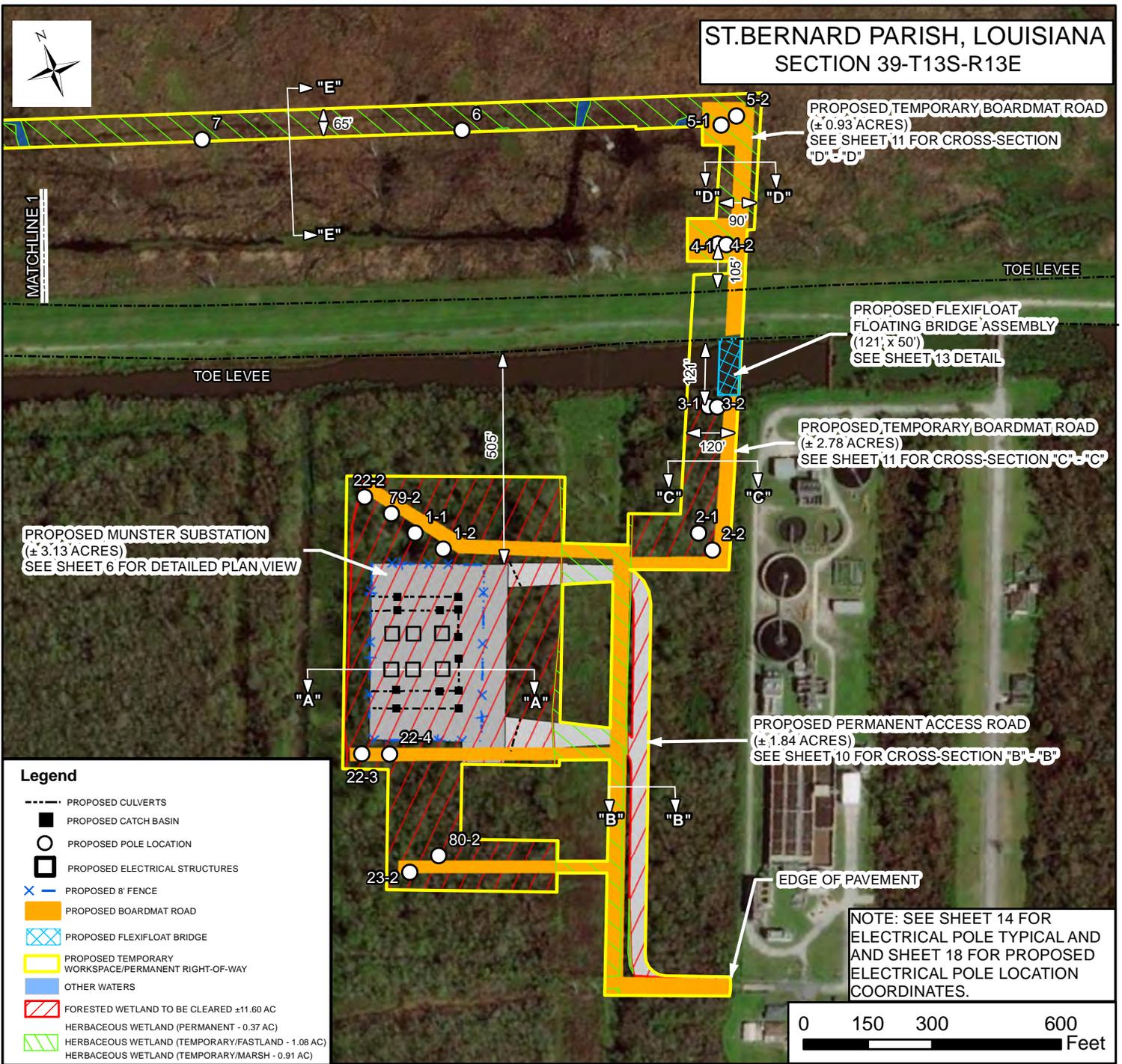
**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST.BERNARD PARISH, LOUISIANA  
ACCESS MAP**



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DRAWN BY: JLC	SHEET: 2
CHECKED BY:	SCALE: AS SHOWN
APPROVED BY: CRF	DATE: 12/17/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CONST.MXD	

FILE LOCATION: F:\L DRIVE BACKUP\DRIVE13602 ENERGY\PERMIT PLATS\MAPS\13602\_MUNSTER\_PLAN1.MXD



**Legend**

- PROPOSED CULVERTS
- PROPOSED CATCH BASIN
- PROPOSED POLE LOCATION
- PROPOSED ELECTRICAL STRUCTURES
- × PROPOSED 8' FENCE
- PROPOSED BOARDMAT ROAD
- ▨ PROPOSED FLEXIFLOAT BRIDGE
- ▨ PROPOSED TEMPORARY WORKSPACE/PERMANENT RIGHT-OF-WAY
- OTHER WATERS
- ▨ FORESTED WETLAND TO BE CLEARED ±11.60 AC
- ▨ HERBACEOUS WETLAND (PERMANENT - 0.37 AC)
- ▨ HERBACEOUS WETLAND (TEMPORARY/FASTLAND - 1.08 AC)
- ▨ HERBACEOUS WETLAND (TEMPORARY/MARSH - 0.91 AC)

NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
PLAN VIEW MAP**

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DRAWN BY: JLC	SHEET: 3
CHECKED BY:	SCALE: AS SHOWN
APPROVED BY: CRF	DATE: 12/16/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_PLAN1.MXD	



ST.BERNARD PARISH, LOUISIANA  
SECTION 39-T13S-R13E



**Legend**

-  PROPOSED POLE LOCATION
-  MATCHLINE
-  PROPOSED TEMPORARY WORKSPACE/PERMANENT RIGHT-OF-WAY
-  OTHER WATERS
-  HERBACEOUS WETLAND (PERMANENT - 0.37 AC)
-  HERBACEOUS WETLAND (TEMPORARY/FASTLAND - 1.08 AC)
-  HERBACEOUS WETLAND (TEMPORARY/MARSH - 0.91 AC)

NOTE: SEE SHEET 14 FOR ELECTRICAL POLE TYPICAL AND SHEET 18 FOR PROPOSED ELECTRICAL POLE LOCATION COORDINATES.



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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST.BERNARD PARISH, LOUISIANA  
PLAN VIEW MAP**

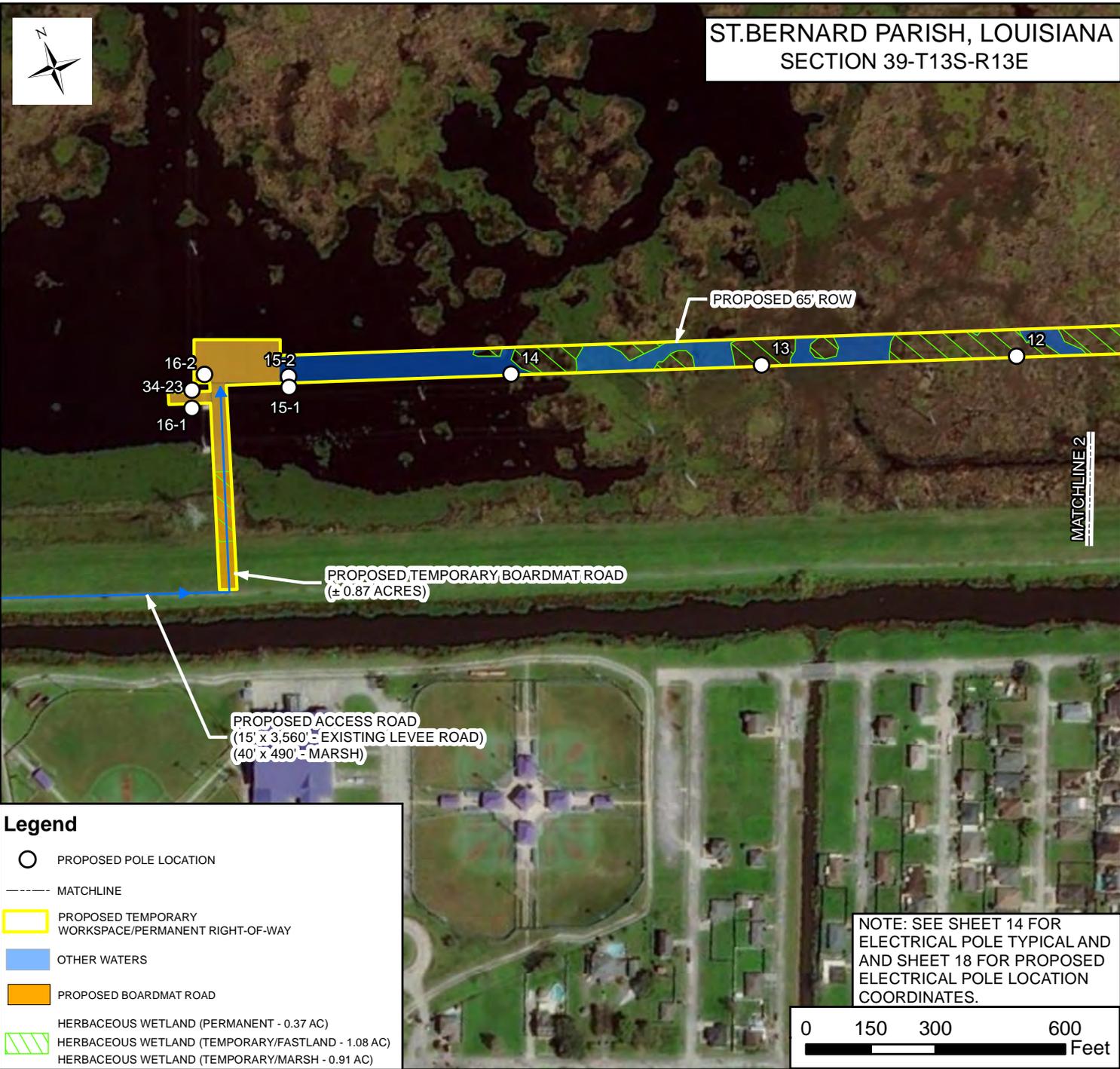


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DRAWN BY: JLC	SHEET: 4
CHECKED BY:	SCALE: AS SHOWN
APPROVED BY: CRF	DATE: 12/15/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_PLAN2.MXD	



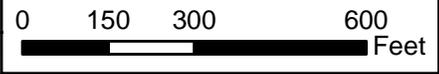
ST.BERNARD PARISH, LOUISIANA  
SECTION 39-T13S-R13E



**Legend**

- PROPOSED POLE LOCATION
- MATCHLINE
- PROPOSED TEMPORARY WORKSPACE/PERMANENT RIGHT-OF-WAY
- OTHER WATERS
- PROPOSED BOARDMAT ROAD
- HERBACEOUS WETLAND (PERMANENT - 0.37 AC)
- HERBACEOUS WETLAND (TEMPORARY/FASTLAND - 1.08 AC)
- HERBACEOUS WETLAND (TEMPORARY/MARSH - 0.91 AC)

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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST.BERNARD PARISH, LOUISIANA  
PLAN VIEW MAP**



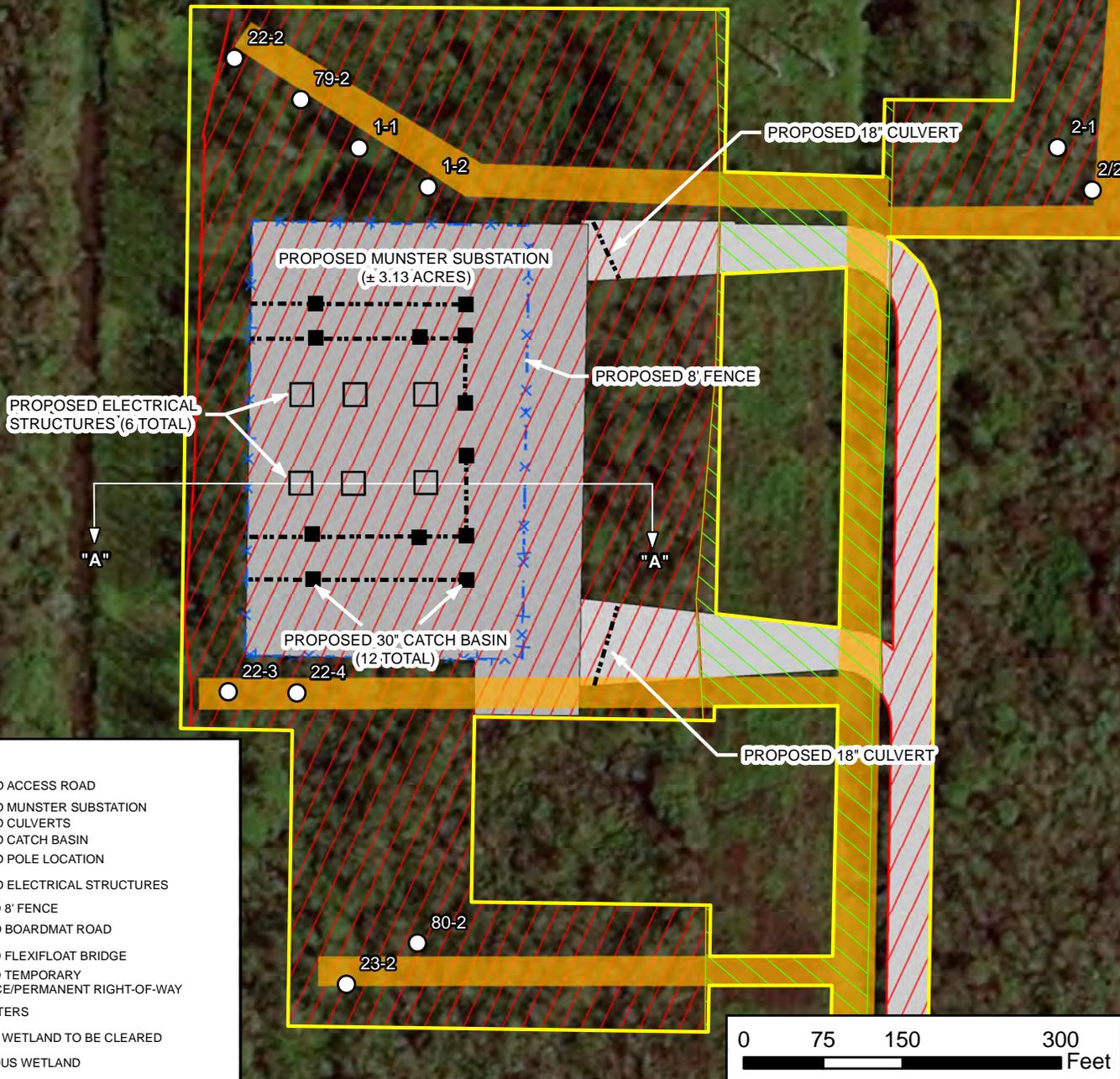
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DRAWN BY: JLC	SHEET: 5
CHECKED BY:	SCALE: AS SHOWN
APPROVED BY: CRF	DATE: 12/16/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_PLAN3.MXD	

FILE LOCATION: F:\L DRIVE BACKUP\LD\DRIVE1\3602 ENERGY\PERMIT PLATS\MAPS\13602\_MUNSTER\_PLAN3.MXD



ST.BERNARD PARISH, LOUISIANA  
SECTION 39-T13S-R13E



**Legend**

- PROPOSED ACCESS ROAD
- PROPOSED MUNSTER SUBSTATION
- PROPOSED CULVERTS
- PROPOSED CATCH BASIN
- PROPOSED POLE LOCATION
- PROPOSED ELECTRICAL STRUCTURES
- PROPOSED 8' FENCE
- PROPOSED BOARDMAT ROAD
- PROPOSED FLEXIFLOAT BRIDGE
- PROPOSED TEMPORARY WORKSPACE/PERMANENT RIGHT-OF-WAY
- OTHER WATERS
- FORESTED WETLAND TO BE CLEARED
- HERBACEOUS WETLAND



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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST.BERNARD PARISH, LOUISIANA  
DETAILED SITE PLAN MAP**

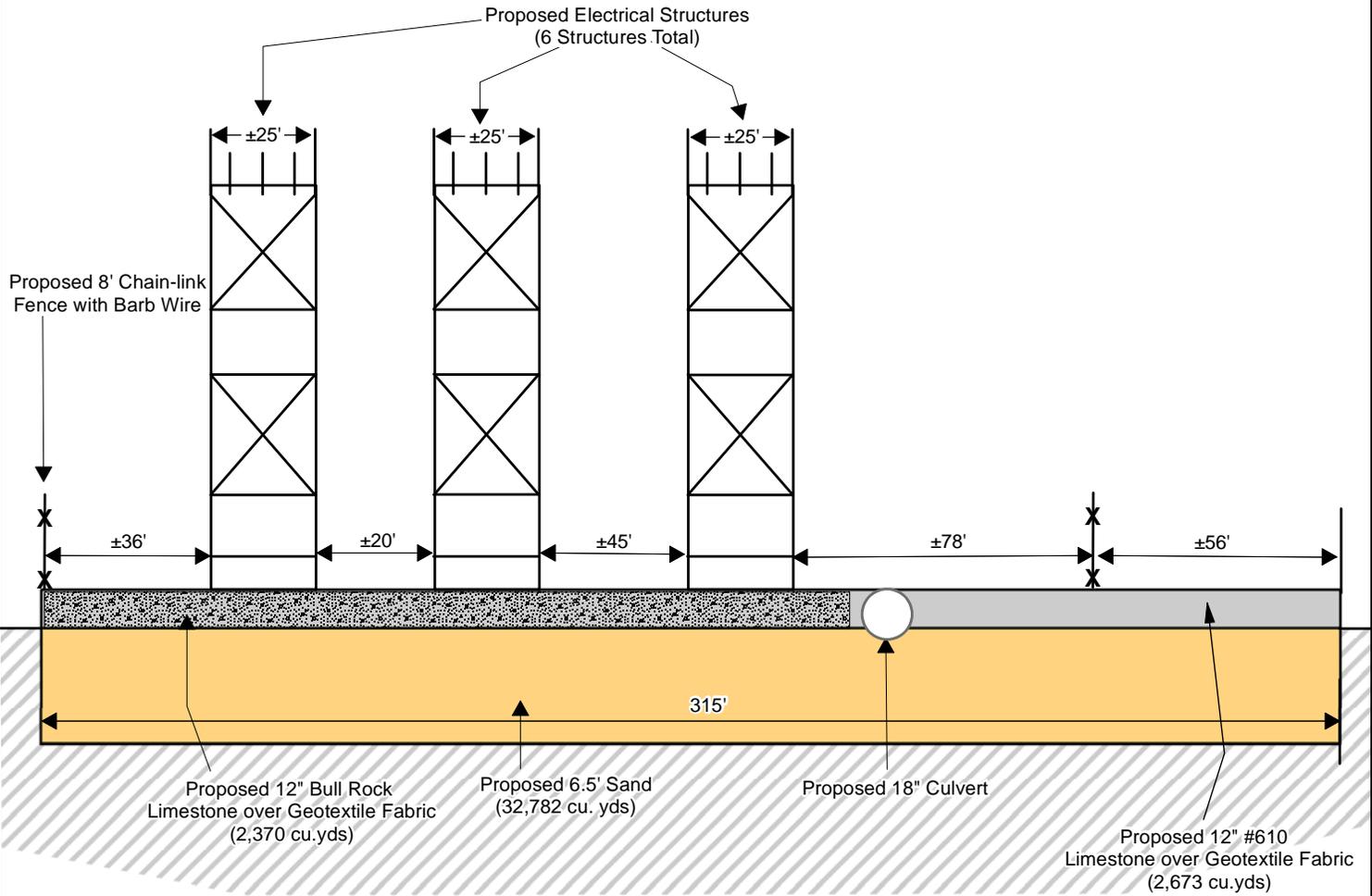


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DRAWN BY: JLC	SHEET:6
CHECKED BY:	SCALE: AS SHOWN
APPROVED BY: CRF	DATE: 12/16/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_DETAILED_PLAN.MXD	

# CROSS-SECTION "A" - "A" (MUNSTER SUBSTATION)

NOT TO SCALE



NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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ENTERGY LOUISIANA, LLC

PROPOSED SUBSTATION EXPANSION  
ST. BERNARD PARISH, LOUISIANA  
CROSS-SECTION



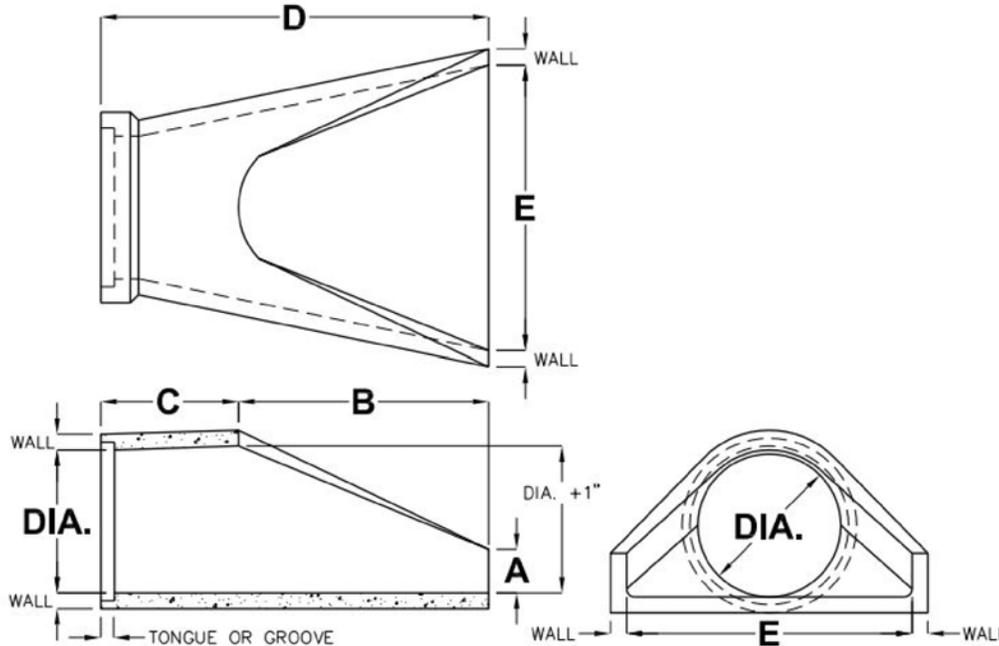
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DRAWN BY: JLC	SHEET: 7
CHECKED BY:	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 8/13/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CS.MXD	

# TYPICAL CULVERT

NOT TO SCALE

## REINFORCED CONCRETE PIPE FLARED END SECTIONS



DIA.	WALL	TONGUE OR GROOVE	WEIGHT	A	B	C	D	E
15"	2-1/4"	1-3/4"	970	6"	27"	46"	73"	30"
18"	2-1/2"	1-3/4"	1340	9"	27"	46"	73"	36"
24"	3"	1-3/4"	1820	9-1/2"	43-1/2"	30"	73-1/2"	48"
30"	4-1/4"	3-7/8"	2400	12"	54"	19-3/4"	73-3/4"	60"
36"	4-3/4"	3-7/8"	5500	15"	63"	34-3/4"	97-3/4"	72"

### MUNSTER SUBSTATION PROPOSED 18" CULVERT

N.T.S.

NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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ENTERGY LOUISIANA, LLC

PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
TYPICAL - CULVERT



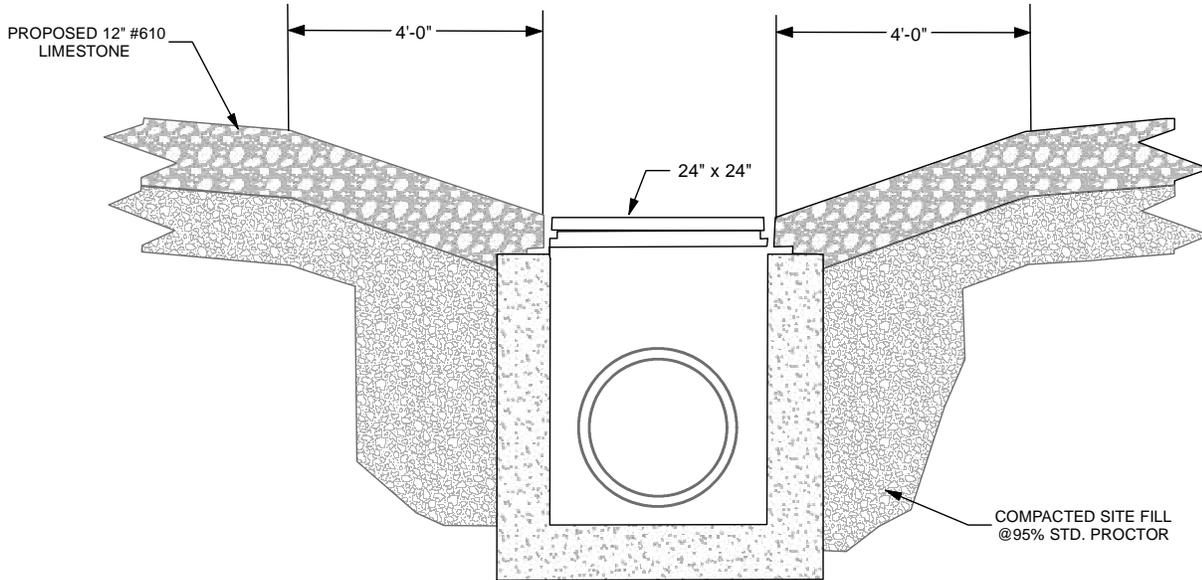
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DRAWN BY: JLC	SHEET: 8
CHECKED BY: CRF	SCALE: NOT TO SCALE
APROVED BY: CRF	DATE: 8/13/2020
REVISION BY:	JOB NO.: 12900-00
GIS FILE: 13602_MUNSTER_TYPICAL_CULVERT.MXD	

# TYPICAL CATCH BASIN

NOT TO SCALE



## TYPICAL 24" CATCH BASIN

NOT TO SCALE

NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
TYPICAL - CATCH BASIN**



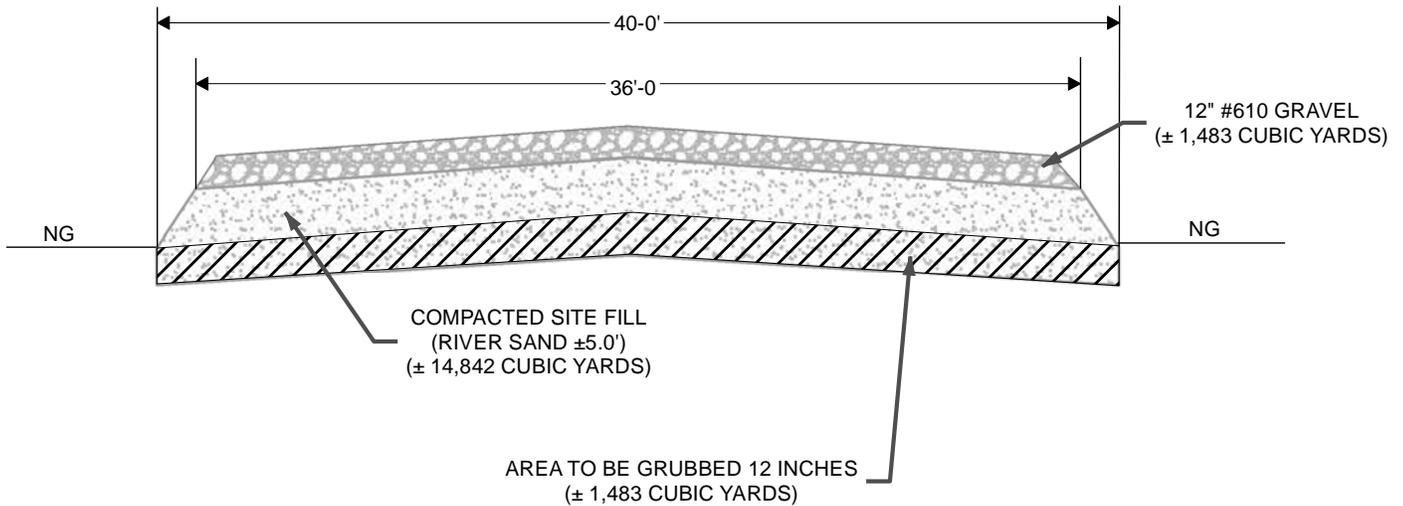
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DRAWN BY: JLC	SHEET: 9
CHECKED BY: CRF	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 8/13/2020
REVISION BY:	JOB NO.: 12900-00
GIS FILE: 13602_MUNSTER_TYPICAL_CATCHBASIN.MXD	

# CROSS-SECTION "B" - "B" (MUNSTER SUBSTATION)

NOT TO SCALE



NOTE: APPROXIMATELY 0.37 ACRES OF HERBACEOUS WETLANDS AND 1.27 ACRES OF FORESTED WETLANDS WILL BE PERMANENTLY IMPACTED BY THE PROPOSED ACCESS ROAD.

NOTE: PROPOSED ACCESS ROAD TO BE GRUBBED TO A DEPTH OF 12" BELOW EXISTING ELEVATION.

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**ENTERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
ACCESS ROAD CROSS-SECTION**

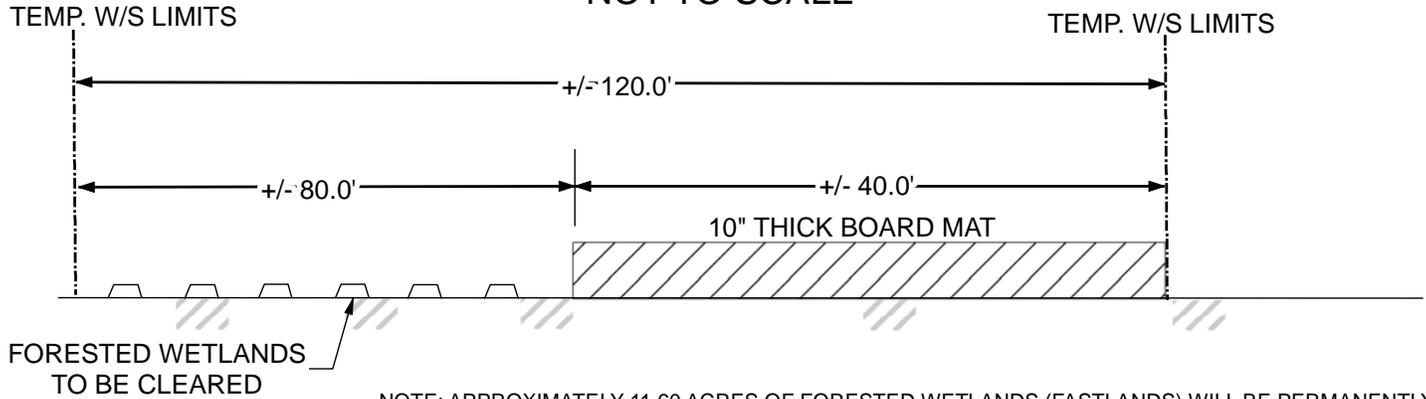


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APPROVED BY:	DATE: 9/14/2020
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GIS FILE: 13602_MUNSTER_CROSS_ROAD.MXD	

# CROSS-SECTION "C" - "C"

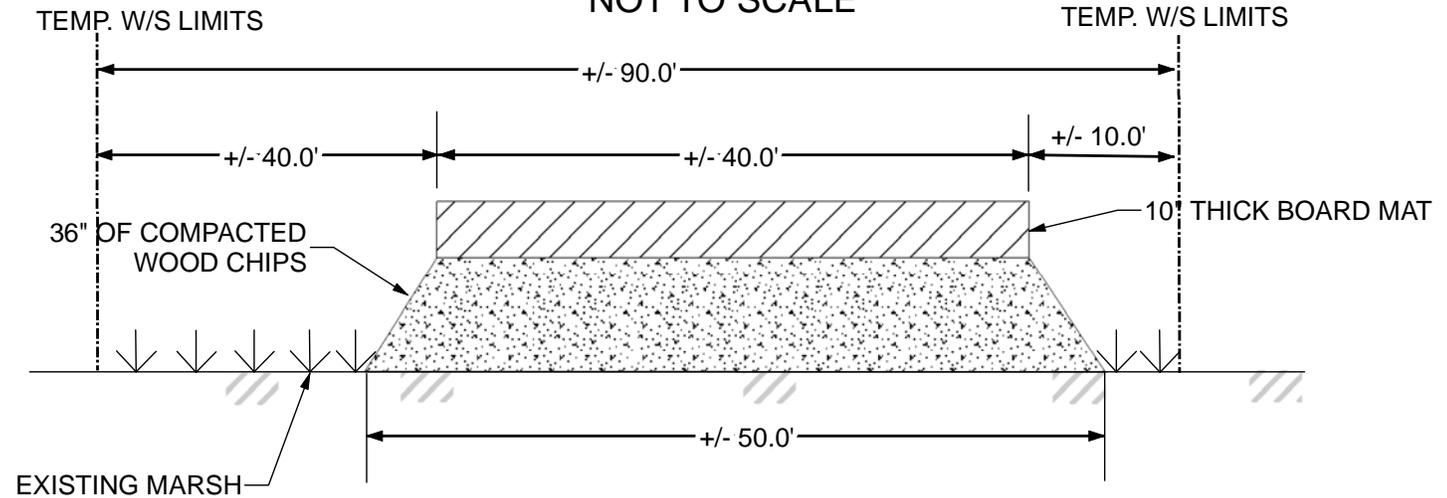
NOT TO SCALE



NOTE: APPROXIMATELY 11.60 ACRES OF FORESTED WETLANDS (FASTLANDS) WILL BE PERMANENTLY IMPACTED BY THE PROPOSED PROJECT. APPROXIMATELY 0.91 ACRES OF HERBACEOUS WETLANDS WILL BE TEMPORARILY IMPACTED BY THE INSTALLMENT OF THE BOARDMAT ROADS. APPROXIMATELY 1.08 ACRES OF HERBACEOUS WETLANDS (FASTLANDS) WILL BE TEMPORARILY IMPACTED BY THE INSTALLMENT OF THE BOARDMAT ROADS. APPROXIMATELY 0.37 ACRES OF HERBACEOUS WETLANDS WILL BE PERMANENTLY IMPACTED BY THE INSTALLMENT OF THE SUBSTATION ACCESS ROAD.

# CROSS-SECTION "D" - "D"

NOT TO SCALE



NOTE: UPON COMPLETION OF THE PROJECT, WOOD CHIPS WILL BE REMOVED TO EXISTING MARSH/WATERBOTTOM ELEVATION.

NOTE: APPROXIMATELY 8,871 CUBIC YARDS OF WOOD CHIPS WILL BE UTILIZED FOR BASE OF PROPOSED TEMPORARY BOARDMAT ROAD WITHIN MARSH/WATERBOTTOMS.

NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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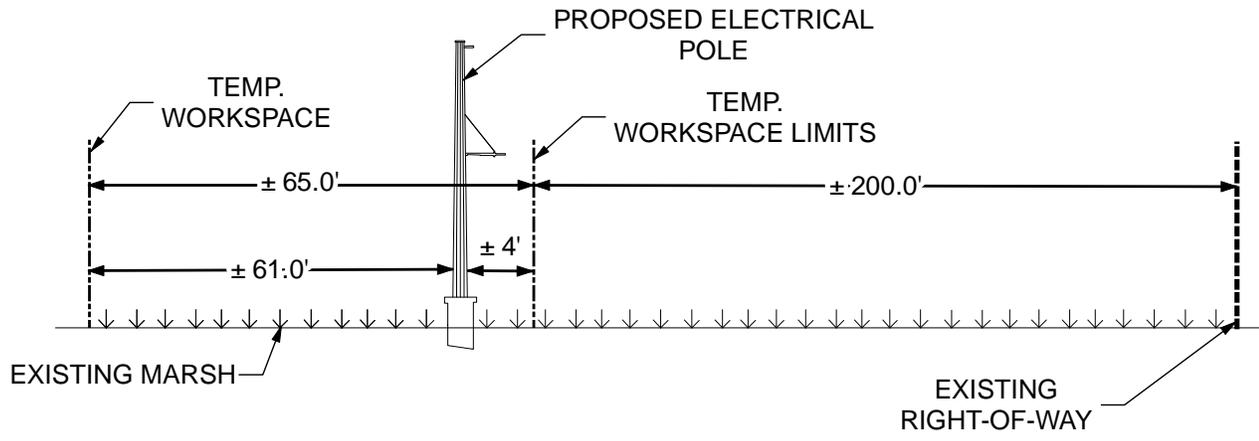
**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
CROSS-SECTION**



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FILE LOCATION: F:\L DRIVE BACKUP\PLDRIVE\13602 ENERGY\PERMIT PLATS\MAPS\13602\_MUNSTER\_CS\_E.MXD



**CROSS-SECTION "E" - "E"**  
NOT TO SCALE

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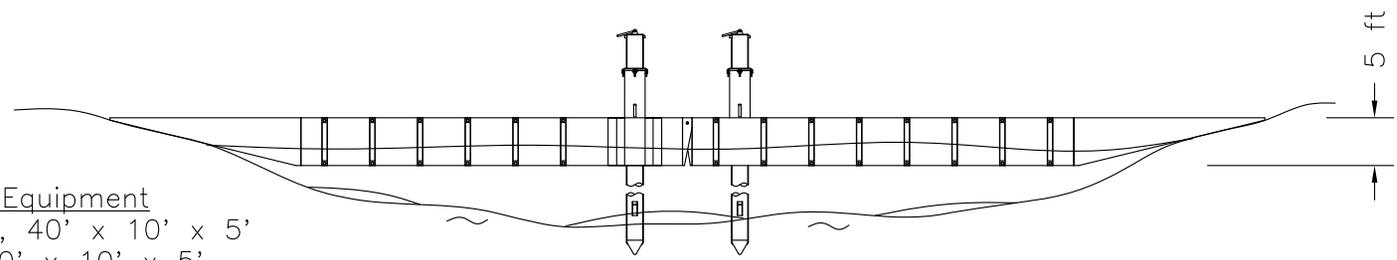
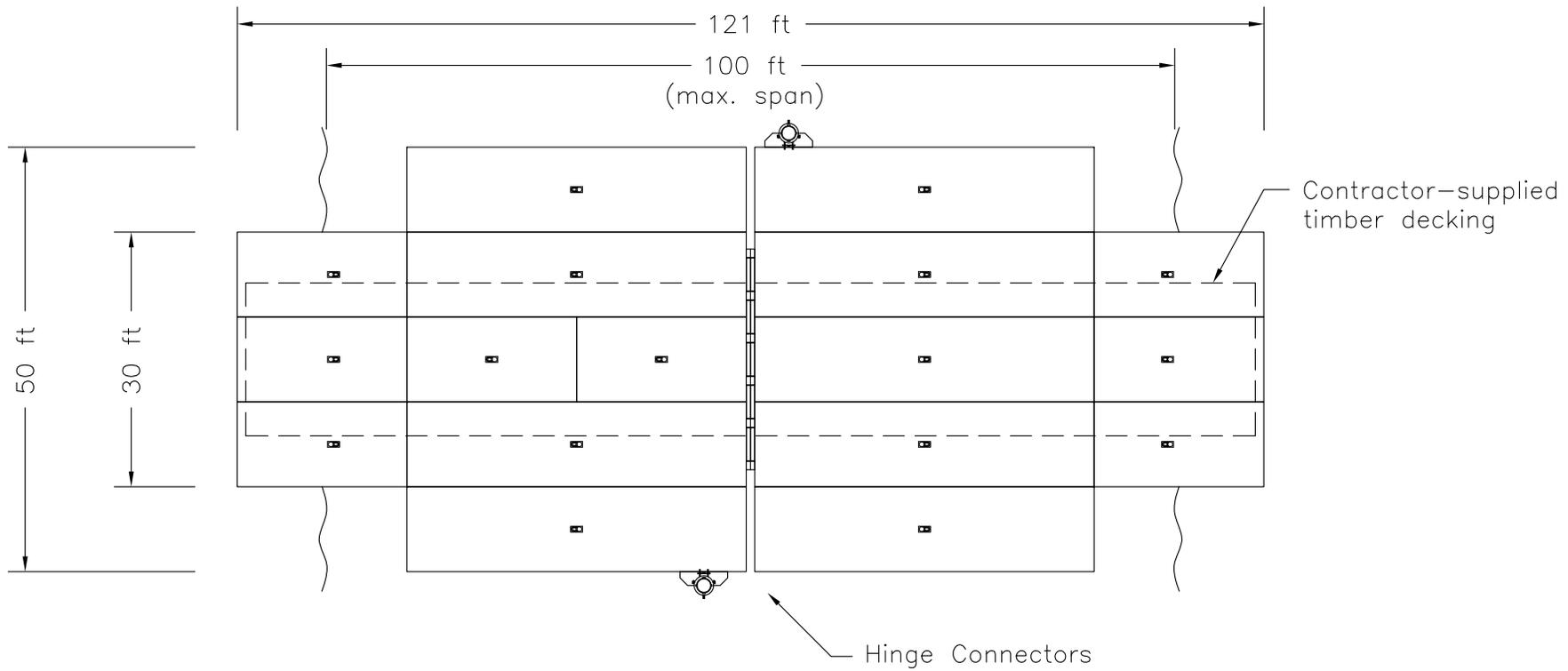
**ENERGY LOUISIANA, LLC**

**PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
CROSS-SECTION**



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**Series S-50 Equipment**

- 9 Quadrafloats, 40' x 10' x 5'
- 2 Duofloats, 20' x 10' x 5'
- 6 Loading Ramps, 20' x 10'
- 2 Spud Wells, 20" round
- 2 Spuds, 20' rd. x 40'
- 6 Hinge Connectors
- 10 Hinge Cover Panels
- 12 Double Male Pin Adapters

**WARNING:** The use of Flexifloat equipment requires competent personnel and the application of engineering principles. The improper use, operation, modification, maintenance or repair of Flexifloat equipment can be dangerous and result in property damage, injury or death. Contact Robishaw Engineering, Inc. (REI) or other qualified professional for assistance prior to use. REI offers its engineering services free of charge to all Flexifloat users. Equipment used on or with Flexifloat barges must have the manufacturer's approval for use in marine applications.

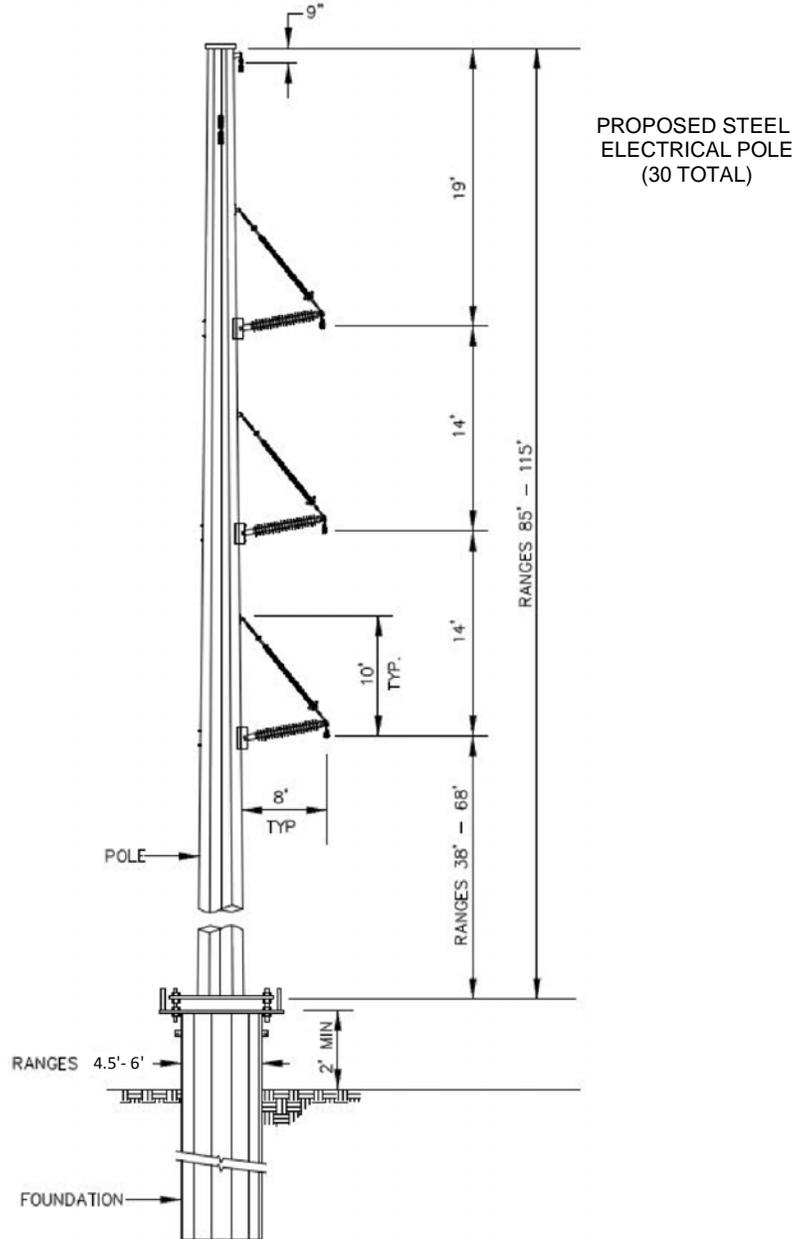
**PROPERTY OF ROBISHAW ENGINEERING, INC.**  
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Flexifloat Floating Bridge Assembly  
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# TYPICAL ELECTRICAL POLE

NOT TO SCALE



NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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ENTERGY LOUISIANA, LLC

PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
T-LINE TYPICAL



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CHECKED BY:	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 7/24/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_ALLIANCE_TYPICAL_POLE.MXD	

# MUNSTER SUBSTATION - CALCULATION SHEET

EXCAVATION/FILL CHART & EQUIPMENT LIST FOR PROPOSED ELECTRICAL SUBSTATION CONSTRUCTION		
<b>EXCAVATIONS:</b>		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	0	0
HERBACEOUS WETLANDS:	0	0
FORESTED WETLANDS:	10,087.00	3.12
NON-WET AREAS	0	0
<b>FILL AREAS:</b>		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	0	0
HERBACEOUS WETLANDS:	0	0
FORESTED WETLANDS:	37,825	3.12
NON-WET AREAS	0	0
<b>FILL MATERIALS:</b>		
CLASSIFICATION	CUBIC YARDS	
CONCRETE:	0	
CRUSHED STONE OR GRAVEL:	5,043	
NATIVE MATERIAL (CLAY, MUD, SOIL):	0	
CONCRETE MATTING:	0	
SAND:	32,782	
<b>ADDITIONAL IMPACTS (ROW CONVERSION):</b>		
CLASSIFICATION	ACREAGE	
HERBACEOUS WETLANDS:	0.001	
FORESTED WETLANDS:	7.39	
ROCKS:	0	

**EQUIPMENT LIST:**

40T-300T CRANES	AIRBOAT
BUCKET AND AERIAL PLATFORMS TRUCKS	TANKER TRUCKS
WIRE PULLING EQUIPMENT	SKIDDERS
VIBRATORY HAMMER AND HYDRAULIC POWER UNIT	PICKUPS
EXCAVATORS, TRACKHOES, AND BACKHOES	50 TON MANTIS WITH MANBASKET
TRAILERS	70 TON MANTIS WITH MANBASKET
MARSH EXCAVATOR	WIRE BOAT
FRONT END LOADER	FORKLIFT

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## ENTERGY LOUISIANA, LLC

### PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT ST. BERNARD PARISH, LOUISIANA CALCULATION SHEET - SUBSTATION



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DRAWN BY: JLC	SHEET: 15
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APPROVED BY: CRF	DATE: 8/3/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CALC_SUB_MXD	

# MUNSTER SUBSTATION - CALCULATION SHEET

EXCAVATION/FILL CHART & EQUIPMENT LIST FOR PROPOSED ACCESS ROAD CONSTRUCTION		
<b>EXCAVATIONS:</b>		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	0	0
HERBACEOUS WETLANDS:	1,193.00	0.37
FORESTED WETLANDS:	4,097.00	1.27
NON-WET AREAS	645.00	0.20
<b>FILL AREAS:</b>		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	0	0
HERBACEOUS WETLANDS:	3,283.00	0.37
FORESTED WETLANDS:	11,269.00	1.27
NON-WET AREAS	1,774.00	0.20
<b>FILL MATERIALS:</b>		
CLASSIFICATION	CUBIC YARDS	
CONCRETE:	0	
CRUSHED STONE OR GRAVEL:	1,484	
NATIVE MATERIAL (CLAY, MUD, SOIL):	0	
CONCRETE MATTING:	0	
SAND:	14,842	
<b>ADDITIONAL IMPACTS (TEMPORARY ACCESS ROAD)</b>		
CLASSIFICATION	ACREAGE	
HERBACEOUS WETLANDS:	0	
FORESTED WETLANDS:	0	
ROCKS:	0	

**EQUIPMENT LIST:**

40T-300T CRANES	AIRBOAT
BUCKET AND AERIAL PLATFORMS TRUCKS	TANKER TRUCKS
WIRE PULLING EQUIPMENT	SKIDDERS
VIBRATORY HAMMER AND HYDRAULIC POWER UNIT	PICKUPS
EXCAVATORS, TRACKHOES, AND BACKHOES	50 TON MANTIS WITH MANBASKET
TRAILERS	70 TON MANTIS WITH MANBASKET
MARSH EXCAVATOR	WIRE BOAT
FRONT END LOADER	FORKLIFT

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## ENTERGY LOUISIANA, LLC

### PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT ST. BERNARD PARISH, LOUISIANA CALCULATION SHEET - ACCESS ROAD



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CHECKED BY:	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 8/3/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CALC_ACCESSRD_.MXD	

# T-LINE STRUCTURES - CALCULATION SHEET

EXCAVATION/FILL CHART & EQUIPMENT LIST FOR PROPOSED ELECTRIC POLE CONSTRUCTION (VIBRATORY CAISON)		
INSTALLATION IMPACTS:		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	28	0.00264
HERBACEOUS WETLANDS:	92	0.00126
FORESTED WETLANDS:	100	0.001377
NON-WET AREAS	0	0
FILL AREAS:		
CLASSIFICATION	CUBIC YARDS	ACREAGE
WATERBOTTOMS:	28	0.00264
HERBACEOUS WETLANDS:	92	0.00126
FORESTED WETLANDS:	100	0.00137
NON-WET AREAS	0	0
FILL MATERIALS:		
CLASSIFICATION	CUBIC YARDS	
CONCRETE:	220	
CRUSHED STONE OR GRAVEL:	0	
NATIVE MATERIAL (CLAY, MUD, SOIL):	0	
CONCRETE MATTING:	0	
SAND:	0	
ADDITIONAL IMPACTS (ROW CONVERSION):		
CLASSIFICATION	ACREAGE	
HERBACEOUS WETLANDS:	0	
FORESTED WETLANDS:	0	
ROCKS:	0	

**EQUIPMENT LIST:**

CRANES	TRACTORS
BUCKET AND AERIAL PLATFORMS TRUCKS	TANKER TRUCKS
WIRE PULLING EQUIPMENT	SKIDDERS
VIBRATORY HAMMER AND HYDRAULIC POWER UNIT	TRAILERS
BULLDOZERS	SLEDS
EXCAVATORS, TRACKHOES, AND BACKHOES	VEGETATION CLEARING EQUIPMENT
DIGGER DERRICKS AND DRILL RIGS	VEGETATION INCINERATOR
GRADERS	HELICOPTERS
FORKLIFTS	MARSH BUGGIES
LOADERS	

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## ENTERGY LOUISIANA, LLC

PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
CALCULATION SHEET - PROPOSED ELECTRICAL POLE



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DRAWN BY: JLC	SHEET: 17
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APPROVED BY: CRF	DATE: 7/30/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CALC_VIBRATORY.MXD	

# PROPOSED ELECTRICAL POLE LOCATION COORDINATES

MUNSTER SUBSTATION				
NAME	LAT	LONG	X	Y
80-2	29°56'47.05"N	89°55'51.45"W	3724959.12	528717.46
23-2	29°56'46.98"N	89°55'52.33"W	3724881.98	528708.74
22-3	29°56'49.93"N	89°55'52.18"W	3724891.04	529007.17
22-4	29°56'49.65"N	89°55'51.52"W	3724949.95	528979.99
1-2	29°56'53.46"N	89°55'47.98"W	3725256.66	529368.48
1-1	29°56'54.06"N	89°55'48.48"W	3725211.5	529428.66
79-2	29°56'54.70"N	89°55'48.83"W	3725179.58	529492.78
22-2	29°56'55.31"N	89°55'49.30"W	3725137.95	529553.58
2-1	29°56'51.36"N	89°55'41.64"W	3725816.54	529162.75
2-2	29°56'50.86"N	89°55'41.49"W	3725830.4	529112.78
3-1	29°56'53.92"N	89°55'40.01"W	3725956.69	529423.24
3-2	29°56'53.83"N	89°55'39.80"W	3725975.72	529414.62
4-1	29°56'57.26"N	89°55'38.00"W	3726129.1	529762.28
4-2	29°56'57.16"N	89°55'37.80"W	3726147.31	529752.88
5-1	29°56'59.72"N	89°55'36.61"W	3726248.52	530013.01
5-2	29°56'59.77"N	89°55'36.15"W	3726289.33	530017.81
6	29°57'2.09"N	89°55'42.93"W	3725689.98	530244.88
7	29°57'4.37"N	89°55'49.30"W	3725126.83	530469.07
8	29°57'6.65"N	89°55'55.66"W	3724564.78	530692.53
9	29°57'8.89"N	89°56'1.86"W	3724016.22	530911.39
10	29°57'11.15"N	89°56'8.15"W	3723460.04	531133.08
11	29°57'13.40"N	89°56'14.45"W	3722903.4	531353.81
12	29°57'15.65"N	89°56'20.71"W	3722350.01	531574.06
13	29°57'17.88"N	89°56'26.91"W	3721801.67	531792.77
14	29°57'20.07"N	89°56'33.02"W	3721261.91	532007.29
15-1	29°57'21.89"N	89°56'38.48"W	3720779.16	532185.98
15-2	29°57'22.12"N	89°56'38.37"W	3720788.44	532209.22
16-1	29°57'22.38"N	89°56'41.04"W	3720553.7	532232.35
16-2	29°57'22.96"N	89°56'40.36"W	3720612.51	532292.06
34-23	29°57'22.76"N	89°56'40.84"W	3720570.85	532270.9

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## ENTERGY LOUISIANA, LLC

PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT  
ST. BERNARD PARISH, LOUISIANA  
PROPOSED ELECTRICAL POLE LOCATION COORDINATES



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DRAWN BY: JLC	SHEET: 14
CHECKED BY:	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 12/2/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_POLE_XY_.MXD	

# MUNSTER SUBSTATION - TEMP/PERM IMPACT TABLE

PROPOSED MUNSTER SUBSTATION		
TEMPORARY/PERMANENT IMPACT TABLE		
HABITAT TYPE	ACREAGE	FASTLAND
HERBACEOUS WETLANDS(TEMP W/S/MARSH):	6.89	N
HERBACEOUS WETLANDS(TEMP W/S/BOARDMAT ROAD):	0.42	N
HERBACEOUS WETLANDS(TEMP/FASTLAND):	1.08	Y
HERBACEOUS WETLANDS(PERM):	0.37	Y
FORESTED WETLANDS(TEMP):	0.00	Y
FORESTED WETLANDS(PERM):	11.67	Y

# MUNSTER SUBSTATION - FILL MATERIAL BY TYPE

PROPOSED MUNSTER SUBSTATION		
FILL MATERIAL BY TYPE		
CLASSIFICATION	CUBIC YARDS	FASTLAND
CONCRETE:	87.96	Y
CONCRETE (FASTLAND):	132.04	N
CRUSHED STONE OR GRAVEL:	6527	Y
RIVER SAND:	47624	Y
WOOD CHIPS(TEMP):	8871	N

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## ENTERGY LOUISIANA, LLC

### PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT ST. BERNARD PARISH, LOUISIANA TEMPORARY & PERMANENT IMPACT TABLES



**SURVEYING • ENGINEERING • ENVIRONMENTAL SERVICES • FIELD SERVICES • GIS**  
116 VENTURE BLVD P.O. BOX 3106 HOUMA, LOUISIANA 70360 (985) 879-2731  
10101 SOUTHWEST FREEWAY • SUITE 620 • HOUSTON, TEXAS 77071 • (713) 219-1470

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CHECKED BY:	SCALE: NOT TO SCALE
APPROVED BY: CRF	DATE: 9/15/2020
REVISION BY:	JOB NO.: 13602
GIS FILE: 13602_MUNSTER_CALC_TEMP_PERM.MXD	

# CZM NOTES

1. THE SITE FILL SHALL BE RIVER SAND, CRUSHED STONE OR GRAVEL, CONCRETE AND WOOD CHIPS.
2. 4,555 LINEAR FT (4.58 ACRES) OF BOARD MAT ROAD WILL BE TEMPORARILY INSTALLED FOR SITE ACCESS. 1,799 LINEAR FT (1.96 ACRES) OF BOARD MAT ROAD WILL BE INSTALLED WITHIN EXISTING HERBACEOUS WETLANDS INCLUDING 485 LINEAR FT (0.86 ACRES) IN MARSH AND 1,314 LINEAR FT (1.10 ACRES) IN MAINTAINED RIGHT OF WAY. 1,867 LINEAR FT (1.11 ACRES) OF BOARD MAT ROAD WILL BE INSTALLED IN FORESTED WETLANDS TO BE CLEARED FOR THE PROJECT. ALL BOARD MAT ROAD WILL BE REMOVED FROM PROJECT SITE UPON PROJECT COMPLETION.
2. THE GRUBBING/CUT EFFORT SHOULD REMOVE ALL ORGANIC MATTER, DEBRIS, STUMPS AND ROOTS. THE GRUBBED MATERIAL WILL BE IMMEDIATELY REMOVED FROM THE SITE AND DISPOSED OF AT A STATE APPROVED FACILITY.
3. APPROXIMATELY 10,087 CUBIC YARDS (3.12 ACRES) OF MATERIAL WILL BE DISPLACED DURING THE EXCAVATION OF THE PROPOSED CONSTRUCTION SURFACE. THE EXCAVATED AREA WILL BE REPLACED WITH APPROXIMATELY 32,782 CUBIC YARDS (3.12 ACRES) OF SAND. APPROXIMATELY 5,043 CUBIC YARDS (3.12 ACRES) OF CRUSHED STONE WILL BE PLACED ON TOP OF THE SAND. ALL EXCAVATED MATERIALS REMOVED FOR THE CREATION OF THE ACCESS ROADS AND SUBSTATION WILL BE IMMEDIATELY REMOVED FROM THE SITE AND DISPOSED OF AT A STATE APPROVED FACILITY. PLEASE SEE SHEET 11.
4. APPROXIMATELY 3.12 ACRES OF FORESTED WETLANDS WILL BE PERMANENTLY FILLED BY THE CONSTRUCTION OF THE SUBSTATION. APPROXIMATELY 7.39 ADDITIONAL ACRES OF FORESTED WETLANDS WILL BE CONVERTED TO HERBACEOUS WETLANDS DUE TO THE CONSTRUCTION OF THE NEW ROW. PLEASE SEE SHEET 11.
5. APPROXIMATELY 5,935 CUBIC YARDS (1.84 ACRES) OF MATERIAL WILL BE DISPLACED DURING THE EXCAVATION OF THE PROPOSED ACCESS ROAD. THE EXCAVATED AREA WILL BE REPLACED WITH APPROXIMATELY 14,842 CUBIC YARDS (1.84 ACRES) OF SAND. APPROXIMATELY 1,483 CUBIC YARDS (1.84 ACRES) OF #610 STONE WILL BE PLACED ON TOP OF THE SAND. APPROXIMATELY 1.27 ACRES OF FORESTED WETLANDS AND 0.37 ACRES OF HERBACEOUS WETLANDS WILL BE IMPACTED BY PROPOSED ACCESS ROAD. PLEASE SEE SHEET 12.
6. THIRTY (30) ELECTRICAL POLES WILL BE INSTALLED ON A VIBRATORY CAISON FOUNDATION. THE 30 ELECTRICAL POLES WILL REQUIRE A TOTAL OF 220 CUBIC YARDS (0.005 ACRES) OF EXCAVATION AND 220 CUBIC YARDS (0.005 ACRES) OF CONCRETE FILL . APPROXIMATELY 0.002 ACRES OF WATERBOTTOMS AND 0.001 ACRES OF HERBACEOUS WETLANDS WILL BE PERMANENTLY FILLED BY ELECTRICAL POLE INSTALLATION. APPROXIMATELY 0.001 ACRES OF FORESTED WETLANDS WILL BE PERMANENTLY FILLED BY ELECTRICAL POLE INSTALLATION. PLEASE SEE SHEET 13.
7. APPROXIMATELY 8,871 CUBIC YARDS/1.83 ACRES OF WOOD CHIPS WILL BE UTILIZED ON THE PROPOSED TWO (2) BOARDMAT ROADS WITHIN THE MARSH. ONCE THE PROJECT IS COMPLETED, WOOD CHIPS WILL BE REMOVED BY BACKHOE. SEE SHEET 8.
8. AS-BUILT DRAWINGS SHALL BE SUBMITTED WITHIN 30 DAYS OF COMPLETION OF THIS PROJECT TO THE LOUISIANA DEPARTMENT OF NATURAL RESOURCES, COASTAL MANAGEMENT DIVISION, P.O. BOX 44487, BATON ROUGE, LA, 70804-4487.
9. STRUCTURES WILL BE MARKED/LIGHTED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS.
10. 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.
11. NO DREDGING OR WHEELWASHING IS REQUIRED WITHIN THE PROJECT AREA.

NOTE: NO FIELD SURVEY WAS MADE FOR THIS PROJECT AND NO ON-THE-GROUND EFFORT HAS BEEN MADE TO LOCATE AND INDICATE ALL CABLES, PIPELINES, ETC. CROSSED BY THE PROPOSED PROJECT. THEREFORE, MORRIS P. HEBERT, INC. IS NOT RESPONSIBLE FOR ANY LOCATED DURING THE COURSE OF THE PROJECT.

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## ENTERGY LOUISIANA, LLC

### PROPOSED MUNSTER SUBSTATION CONSTRUCTION PROJECT ST. BERNARD PARISH, LOUISIANA CZM NOTES



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