GENERAL NOTES:

1. THE CONTRACTOR SHALL NOT, AT ANY TIME, TREAD ON EXISTING MARSH OR VEGETATED WETLANDS EXTERNAL TO THE PROJECT SITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NAVIGATING WITHIN THE LIMITS OF THE PROJECT SITE. THE ENGINEER OR RESIDENT PROJECT REPRESENTATIVE SHALL MONITOR THE CONTRACTORS LOCATION DURING CONSTRUCTION.

3. THE HYDRAULIC DREDGE SHALL ACCESS THE BORROW AREA THROUGH NAVIGABLE WATERWAYS AND SHALL NOT DISTURB EXISTING WATER BOTTOMS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL MAINTAIN ADEQUATE NAVIGATIONAL EQUIPMENT ON THE HYDRAULIC DREDGE TO AVOID DREDGING IN RESTRICTED AREAS.

4. PIPELINES AND UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE AND MARK ALL PIPELINES AND UTILITIES LOCATED WITHIN 150 FT. OF THE WORK PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THESE MAKERS DURING CONSTRUCTION.

5. PLANS AND SPECIFICATIONS ARE COMPREHENSIVE. WHAT IS REQUIRED BY ONE IS BINDING AS IF REQUIRED BY ALL. CLARIFICATIONS AND INTERPRETATIONS OF, OR NOTIFICATIONS OF MINOR VARIATIONS AND DEVIATIONS IN THE CONTRACT DOCUMENTS, WILL BE ISSUED BY THE ENGINEER.

6. ANY DAMAGE TO EXISTING U.S. COAST GUARD NAVIGATION AIDS OR PRIVATE NAVIGATION AIDS SHALL BE REPAID BY THE CONTRACTOR TO U.S. COAST GUARD STANDARDS AT THE EXPENSE OF THE CONTRACTOR.

7. THE MARSH CREATION AREAS, BORROW AREAS, EARTHEN CONTAINMENT DIKES, WATER CONTROL STRUCTURES AND EARTHEN TERRACES MAY BE REVISED BY THE ENGINEER THROUGHOUT THE PERFORMANCE OF THE WORK TO REFLECT CHANGES IN FIELD CONDITIONS.

8. THE CONTRACTOR SHALL PERFORM A MAGNETOMETER SURVEY OF THE DREDGE PIPELINE ALIGNMENT, BORROW AREAS, ACCESS CHANNELS AND CONTAINMENT DIKE BORROW AREAS PRIOR TO EXCAVATION AND DREDGING. THE PRECONSTRUCTION SURVEY SHALL SHOW THE TRACK LINES OF THIS MAGNETOMETER SURVEY AND INCLUDE THE COORDINATES, AMPLITUDE, SIGNATURE TYPE AND SIGNATURE WIDTH OF ALL MAGNETOMETER HITS.

9. THE CONTRACTOR IS RESPONSIBLE FOR CONTAINING ALL DREDGED MATERIAL WITHIN THE BOUNDARIES OF THE MARSH CREATION AREAS, EARTHEN TERRACES, AND WATER CONTROL STRUCTURES. ALL DISPLACED DREDGE MATERIAL SHALL BE RETURNED AT NO COST TO THE OWNER.

10. ALL BACKGROUND IMAGERY WAS TAKEN IN 2012.

NOTIFICATIONS:

1. THE CONTRACTOR SHALL NOTIFY LOUISIANA ONE CALL AT 1-800-372-3020 TO LOCATE PIPELINES AND UTILITIES AT LEAST FIVE (5) WORKING DAYS PRIOR TO PERFORMING THE WORK. THE CONTRACTOR SHALL ALSO NOTIFY THE FOLLOWING PIPELINE AND UTILITY OPERATORS AT LEAST FIVE (5) WORKING DAYS PRIOR TO PERFORMING THE WORK:

   TEXAS GAS TRANSMISSION, LLC
   CONTACT: ROD WILLIAMS
   PHONE: (337) 656-2211 - Ext. 311

   JAMES A. WHITSON, JR., PIPELINE
   CONTACT: JIM WHITSON
   PHONE: (713) 975-9893

   SHELL PIPELINE COMPANY, LLP
   CONTACT: KEVIN ARCEAUX
   PHONE: (985) 873-3429

   SOUTH LOUISIANA ELECTRIC COOPERATIVE ASSOCIATION (SLECA)
   CONTACT: RICKY PITTER
   PHONE: (504) 588-6696

2. LAND RIGHTS AGREEMENTS ARE SPECIFIED IN THE CONTRACTORS NOTIFICATION TO THE CONTRACTOR SHALL NOTIFY THE FOLLOWING LANDOWNERS AT LEAST FIVE (5) WORKING DAYS PRIOR TO PERFORMING THE WORK:

   LANDS L.L.C., ET AL
   CONTACT: JOHN ROUCHOLE
   PHONE: (504) 589-2900

   LOUISIANA STATE LAND OFFICE
   CONTACT: SPENCER ROBINSON
   PHONE: (225) 342-4575

   LOUISIANA LAND AND EXPLORATION COMPANY
   CONTACT: PHILLIP PREDOX
   PHONE: (985) 853-3010

DESIGN NOTES:


   SECONDARY SURVEY MONUMENT
   ELEVATION 313.874.12
   NORTHING 3,589,307.21
   EASTING 3,353,843.34

2. THE EXISTING ELEVATIONS SHOWN ON THE PLANS ARE BASED ON BATHYMETRIC AND TOPOGRAPHIC SURVEYS PERFORMED IN MAY, 2011 BY PYBURN AND ODOM, INC.

3. DATA FROM USGS GAUGE #0736165887 AND NOAA STATION #8761724 WAS USED TO CALCULATE THE MEAN HIGH WATER (+1.44') AND MEAN LOW WATER (+0.27').


ENVIRONMENTAL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH THE SPECIAL PROVISION FOR THREATENED AND ENDANGERED SPECIES.

SUMMARY OF ESTIMATED QUANTITIES

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>BASE BID</td>
<td>LUMP SUM</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>DREDGE PIPELINE MOBILIZATION, INSTALLATION, AND DEMOBILIZATION (TS-101)</td>
<td>LUMP SUM</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>HYDRAULIC DREDGE MOBILIZATION AND DEMOBILIZATION (TS-100)</td>
<td>LUMP SUM</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>SURVEYS (TS-210)</td>
<td>EACH</td>
<td>121</td>
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<tr>
<td>25</td>
<td>GRADE STAKES (TS-220)</td>
<td>EACH</td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>SETTLEMENT PLATES (TS-250)</td>
<td>EACH</td>
<td>7</td>
</tr>
<tr>
<td>27</td>
<td>INSTRUMENTED SETTLEMENT PLATES (TS-251)</td>
<td>LUMP SUM</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>EARTHEN CONTAINMENT DIKES (TS-300)</td>
<td>LINEAR FOOT</td>
<td>66,067</td>
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<tr>
<td>29</td>
<td>BANK STABILIZATION DIKE (TS-301)</td>
<td>LINEAR FOOT</td>
<td>4,509</td>
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<tr>
<td>30</td>
<td>EARTHEN TERRACES (TS-310)</td>
<td>LINEAR FOOT</td>
<td>30,000</td>
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<tr>
<td>31</td>
<td>CHANNELS (TS-330)</td>
<td>LUMP SUM</td>
<td>9,698</td>
</tr>
<tr>
<td>32</td>
<td>HYDRAULIC DREDGING AND MARSH CREATION (TS-400)</td>
<td>CUBIC YARD</td>
<td>3,119,021</td>
</tr>
<tr>
<td>33</td>
<td>HH LB CLASS ROCK (TS-720)</td>
<td>CUBIC YARD</td>
<td>1,850</td>
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<tr>
<td>34</td>
<td>PERMANENT WARNING SIGNS (TS-800)</td>
<td>EACH</td>
<td>10</td>
</tr>
<tr>
<td>35</td>
<td>ALUMINUM PANELS (TS-910)</td>
<td>SQUARE FOOT</td>
<td>698</td>
</tr>
<tr>
<td>36</td>
<td>TREATED TIMBER PLIERS (TS-850)</td>
<td>LINEAR FOOT</td>
<td>9,090</td>
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<tr>
<td>37</td>
<td>TREATED TIMBER (TS-950)</td>
<td>MFBM</td>
<td>3.1</td>
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<tr>
<td>38</td>
<td>STRUCTURAL DEMOLITION (TS-900)</td>
<td>EACH</td>
<td>4</td>
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<tr>
<td>39</td>
<td>STRUCTURAL MODIFICATION (TS-951)</td>
<td>LUMP SUM</td>
<td>1</td>
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<tr>
<td>40</td>
<td>STEEL SHEET PILE WALL (TS-670)</td>
<td>SQUARE FOOT</td>
<td>16,740</td>
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<tr>
<td>41</td>
<td>STRUCTURAL STEEL (OR. 36) (TS-971)</td>
<td>20.6 Tons</td>
<td></td>
</tr>
</tbody>
</table>

The quantities shown are for bid purposes only and were calculated according to conditions surveyed in 2021. The owner reserves the right to adjust quantities 25% higher or lower without adjustment of the unit price.

The quantities are based on the dredge cut volume of the borrow area. Payment quantities will be based on process surveys of the borrow area.

COASTAL PROTECTION AND RESTORATION AUTHORITY
444 LAUREL STREET
BATON ROUGE, LOUISIANA 70802

STATE PROJECT NUMBER: TS-72
FEDERAL PROJECT NUMBER: TS-72
DATE: AUGUST 2014

GENERAL NOTES:

DRAWN BY: SHAUN FRAZIER
DESIGNED BY: SHANNON PAYNE, P.E.
APPROVED BY: RAY EDDISON, P.E.
SHOWN 1 OF 44
EXISTING REVETTED EMBANKMENT

PROFILE VIEW

NOTES:
1. TEMPORARY PIPELINE MARKERS TO BE INSTALLED ON BOTH SIDES OF BAYOU DECAYE AT THE PIPELINE CROSSING. SEE DETAIL ON SHEET 26.

Bayou Decaye Dredge Pipeline Crossing

Typical Section

Bayou Decaye Dredge Pipeline and Equipment Access Crossing

Legend

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Temporary Spoil</th>
<th>Existing Ground</th>
<th>Existing Rip-Rap</th>
<th>Articulated Concrete Mats</th>
<th>Pontoon Support</th>
</tr>
</thead>
</table>

NOTES:
1. THE DREDGE PIPELINE SHALL REMAIN ELEVATED ABOVE THE EXISTING REVETTED EMBANKMENT.
2. A SUFFICIENT QUANTITY OF ARTICULATED CONCRETE MATS SHALL BE PLACED ACROSS THE ENTIRE CROSSING WIDTH TO ENABLE ACCESS FOR EQUIPMENT.

Coastal Protection and Restoration Authority

Lost Lake Marsh Creation and Hydrologic Restoration

Typical Dredge Pipeline Alignment Sections

Date: August 2016
TYPICAL SECTION

PLAN VIEW

COORDINATE POINT (TYP.)

15.0' (MIN.)

250.0'

60.0' (MAX.)

10.0'

EARTHEN TERRACE CROWN

EARTHEN TERRACE BORROW AREA

EARTHEN TERRACE

MIN = +1.45'
MIN = +0.27'

ELEVATION (FEET NAVD88)

EL = +10.0' (MAX.)

EL = -10.0' (MIN.)

EARThEN TERRACE

EXISTING WATER BOTTOM

NOTE:
1. THE CONTRACTOR SHALL USE IN-SITU MATERIAL AS SHOWN ON THE PLANS TO CONSTRUCT THE EARTHEN TERRACES.
2. THE VERTICAL TOLERANCE FOR THE EARTHEN TERRACE CREST ELEVATION SHALL BE +6.0 INCHES FROM MAXIMUM.
NO ATTEMPT HAS BEEN MADE BY SIGMA CONSULTING GROUP, INC. TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDE, EASEMENTS, RIGHTS-OF-WAY, OR OTHER BURDENS ON THE PROPERTY.

EXISTING TOPOGRAPHIC SURVEY PERFORMED BY FYBURN & ODOM MCA
DATED MAY 2011

DATUM: ALL ELEVATIONS ARE IN NAVD 88 IN U.S SURVEY FEET. ALL HORIZONTAL COORDINATES ARE IN NAD 83 (LOUISIANA STATE PLANE, SOUTH ZONE) IN U.S. SURVEY FEET. SEE GENERAL NOTES ON SHEET 2 FOR SURVEY CONTROL DATA.

ALL REQUIRED CHANNEL EXCAVATION IS TO BE PLACED ON SITE. REFER TO THE ELEVATION VIEW ON THE FOLLOWING SHEET FOR ADDITIONAL INFORMATION.

LEGEND:
- ........................ EXISTING CONTOURS
........................ PROPOSED CONTOURS
- ........................ EXISTING TOP OF BANK
........................ PROPOSED WEIR
 crashes................. PROPOSED RIPRAP 2' THICK (MIN.)
........................ EXISTING WEIR TO BE REMOVED

C.L. PROPOSED STRUCTURE

CHANNEL BOTTOM

PROPOSED WEIR:
N: 310,468
E: 3,350,727

REMOVE ENTIRE STRUCTURE AND EARTHEN BULKHEAD. SEE TECHNICAL SPECIFICATIONS TS-900.

LIMITS OF RIPRAP

CHANNEL BOTTOM

SIGNATURES

SIGMA CONSULTING GROUP, INC.

COASTAL PROTECTION AND RESTORATION AUTHORITY

LOST LAKE MARSH CREATION AND HYDROLOGIC RESTORATION

SITE WC-1
PLATE VIEW
1. DATUM: ALL ELEVATIONS ARE NAVD 88 IN US FEET
   MHW = +1.44 FT.
   MLW = +0.27 FT.

2. FOR STRUCTURAL DETAILS AND NOTES OF TIMBER PLACING, SHEET PILE WALL AND STEEL BAYS, SEE SHEET 23.

3. CHANNEL EXCAVATION SHALL CONFORM TO TECHNICAL SPECIFICATION TS-330.

4. RIPRAP SHALL BE 55 LB. CLASS AND CONFORM TO TECHNICAL SPECIFICATION TS-725.

5. ONE (1) PERMANENT WARNING SIGN SHALL BE INSTALLED ON EACH SIDE OF THE STRUCTURE. FOR WARNING SIGN DETAILS AND NOTES, SEE SHEET 26.

PILE LAYOUT PLAN
SCALE: 1" = 20'

LEGEND:
- VERTICAL PILE
- BATTERED PILE
- CHANNEL EXCAVATION
- IN-SITU FILL

CREST ELEV. +3.0
EXCAVATE & PLACE ON-SITE
6' WIDE BAY OPENING (TYP.)
EXISTING GROUND
PROPOSED GROUND (2' RIPRAP PLACED ON TOP NOT SHOWN FOR CLARITY)
CHANNEL BOTTOM
CHANNEL BOTTOM
-27.0
-32.5
SHEET PILING
60' TIMBER PLACING
TIP ELEV. -57.0 (TYP.) (VERTICAL)
TIP ELEV. -50.0 (TYP.) (BATTERED)

LEONARD E. ROY, PE, PS
ENGINEERING CONSULTANT
10300 Airline Highway
Baton Rouge, Louisiana 70809

COASTAL PROTECTION AND RESTORATION AUTHORITY
413 LAUREL STREET
BATON ROUGE, LOUISIANA 70808

LOST LAKE MARSH CREATION AND HYDROLOGIC RESTORATION
STATE PROJECT NUMBER: TE-72
FEDERAL PROJECT NUMBER: TE-72
DRAWN BY: AMEERE
DESIGNED BY: SEPEDA
APPROVED BY: E. OR
DATE: AUGUST 2018
SHEET 11 OF 41
1. DATUM: ALL ELEVATIONS ARE NAVD 88 IN US FEET
   MHW = +1.44 FT.
   MLW = -0.27 FT.
2. FOR STRUCTURAL DETAILS AND NOTES OF TIMBER PILING,
   SHEET PILE WALL AND STEEL BAYS, SEE SHEET 23.
3. CHANNEL EXCAVATION SHALL CONFORM TO TECHNICAL
   SPECIFICATION TS-330.
4. RIPRIP SHALL BE 90 LB. CLASS AND CONFORM TO TECHNICAL
   SPECIFICATION TS-720.
5. ONE (1) PERMANENT WARNING SIGN SHALL BE INSTALLED ON
   EACH SIDE OF THE STRUCTURE. FOR WARNING SIGN DETAILS
   AND NOTES, SEE SHEET 26.

---

PILE LAYOUT PLAN
SCALE: 1" = 20'

LEGEND:
- VERTICAL PILE
- BATTED PILE
- CHANNEL EXCAVATION
- IN-SITU FILL

---

REBUILD PIER SECTION
N.T.S.

---

SCALE: 1" = 20'

---

SIGMA ENGINEERING GROUP, INC.

---

COASTAL PROTECTION AND
RESTORATION AUTHORITY

---

LOST LAKE MARSH CREATION
AND HYDROLOGIC RESTORATION

---

SITE WC-4
STRUCTURE DETAIL

---

DRAWN BY: AMEDEE
DESIGNED BY: SONGA
APPROVED BY: LEGR

---

STATE PROJECT NUMBER: TL-72
FEDERAL PROJECT NUMBER: TL-72
DATE: AUGUST 2016

---

Sheet 16 of 41
NO ATTEMPT HAS BEEN MADE BY SIGMA CONSULTING GROUP, INC. TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHTS-OF-WAY, OR OTHER BURDENS ON THE PROPERTY.

EXISTING TOPOGRAPHIC SURVEY PERFORMED BY PYBURN & CODM MCA
DATED MAY 2011

DATUM: ALL ELEVATIONS ARE IN NAVD-88 IN US SURVEY FEET. ALL HORIZONTAL COORDINATES ARE IN NAD 83 (LOUISIANA STATE PLANE, SOUTH ZONE) IN US SURVEY FEET. SEE GENERAL NOTES ON SHEET 2 FOR SURVEY CONTROL DATA.

ALL REQUIRED CHANNEL EXCAVATION IS TO BE PLACED ON SITE. REFER TO THE ELEVATION VIEW ON THE FOLLOWING SHEET FOR ADDITIONAL INFORMATION.
1. DATUM: ALL ELEVATIONS ARE NAVD 88 IN FEET
   MHW = +1.44 FT.
   MLW = +0.27 FT.

2. FOR STRUCTURAL DETAILS AND NOTES OF TIMBER PILING,
   SHEET PILE WALL AND STEEL BAYS, SEE SHEET 23.

3. CHANNEL EXCAVATION SHALL CONFORM TO TECHNICAL
   SPECIFICATION TS-330.

4. RIPRAP SHALL BE 55 LB. CLASS AND CONFORM TO TECHNICAL
   SPECIFICATION TS-720.

5. ONE (1) PERMANENT WARNING SIGN SHALL BE INSTALLED ON
   EACH SIDE OF THE STRUCTURE. FOR WARNING SIGN DETAILS
   AND NOTES, SEE SHEET 26.

---

LEGEND:
- VERTICAL PILE
- BATTERED PILE
- CHANNEL EXCAVATION
- IN-SITU FILL

PILE LAYOUT PLAN
SCALE: 1" = 20'

FISH RAMP DETAIL
SECTION "A-A"
SCALE: 1" = 10'

EXIST. GROUND
ELEV.: -6.0

MIN. 2 RPRAP

5' WIDE BAY
OPENING ELEV.: -2.5

BOTTOM OF BAY
OPENING ELEV.: -2.5

FISH RAMP

CREST ELEV.: +3.0

5' WIDE BAY
OPENING (TYP.)

EXISTING GROUND

PROPOSED GROUND
(2' RIPRAP PLACED ON TOP
NOT SHOWN FOR CLARITY)

CHANNEL BOTTOM

EXCAVATE & PLACE
ON-SITE

ELEVATION
SCALE: 1" = 20'

60' TIMBER PILING
TIP ELEV.: -57.0 (TYP.) (VERTICAL)
TIP ELEV.: -50.0 (TYP.) (BATTERED)

COASTAL PROTECTION AND
RESTORATION AUTHORITY
400 LAUREL STREET
BAYOU BISQUE, LOUISIANA 70348

LOST LAKE MARSH CREATION
AND HYDROLOGIC RESTORATION
STATE PROJECT NUMBER: TL-2
FEDERAL PROJECT NUMBER: TL-2
DATE: AUGUST 2016

SITE WC-5
STRUCTURE DETAIL

REG. No. 26669
PROFESSIONAL ENGINEER

SIGMA
ENGINEERING CONSULTANTS, INC.
10306 Airline Highway
Baton Rouge, Louisiana 70814

DRAWN BY: AMIDEE
DESIGNED BY: SEPEDA
APPROVED BY: LEAK

SHEET 10 OF 41
NO ATTEMPT HAS BEEN MADE BY SIGMA CONSULTING GROUP, INC. TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHTS-OF-WAY, OR OTHER BURDENS ON THE PROPERTY.

EXISTING TOPOGRAPHIC SURVEY PERFORMED BY PYBURN & DDOM MCA DATED MAY 2011

DATUM: ALL ELEVATIONS ARE IN NAVD 88 IN US SURVEY FEET. ALL HORIZONTAL COORDINATES ARE IN NAD 83 (LOUISIANA STATE PLANE, SOUTH ZONE) IN US SURVEY FEET. SEE GENERAL NOTES ON SHEET 2 FOR SURVEY CONTROL DATA.

ALL REQUIRED CHANNEL EXCAVATION IS TO BE PLACED ON SITE, REFER TO THE ELEVATION VIEW ON THE FOLLOWING SHEET FOR ADDITIONAL INFORMATION.

LEGEND:
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING TOP OF BANK
- PROPOSED WEIR
- PROPOSED RIPRAP 2' THICK (MIN.)
- EXISTING WEIR TO BE REMOVED

SCALE: 1" = 20'
1. DATUM: ALL ELEVATIONS ARE NAVD 88 IN US FEET
   MHW = +1.44 FT.
   MLW = +0.27 FT.
2. FOR STRUCTURAL DETAILS AND NOTES OF TIMBER PILING,
   SHEET PILE WALL AND STEEL BAYS, SEE SHEET 23.
3. CHANNEL EXCAVATION SHALL CONFORM TO TECHNICAL
   SPECIFICATION TS-330.
4. RIPRAP SHALL BE 65 LB. CLASS AND CONFORM TO TECHNICAL
   SPECIFICATION TS-720.
5. ONE (1) PERMANENT WARNING SIGN SHALL BE INSTALLED ON
   EACH SIDE OF THE STRUCTURE. FOR WARNING SIGN DETAILS
   AND NOTES, SEE SHEET 26.

PILE LAYOUT PLAN
SCALE: 1" = 20'

LEGEND:
- VERTICAL PILE
- BATTERED PILE
- CHANNEL EXCAVATION
- IN-SITU FILL

CREST ELEV. +3.0

EXCAVATE & PLACE ON-SITE

6' WIDE BAY OPENING (TYP.)

EXCAVATE & PLACE ON-SITE

EXISTING GROUND

PROPOSED GROUND
(2 RIPRAP PLACED ON TOP NOT SHOWN
FOR CLARITY)

60' TIMBER PILING
TP ELEV. -57.0 (TYP.) (VERTICAL)
TP ELEV. -55.0 (TYP.) (BATTERED)

EXCAVATE

PROPOSED GROUND

EXCAVATE

CHANNEL BOTTOM

CHANNEL BOTTOM

ELEVATION
SCALE: 1" = 20'

SECTION A-A
SCALE: 1" = 20'

43.5'

45.9'

27.0'

-Signature-
NO ATTEMPT HAS BEEN MADE BY SIGMA CONSULTING GROUP, INC. TO VERIFY TITLE, ACTUAL LEGAL OWNERSHIPS, SERVITUDES, EASEMENTS, RIGHTS-OF-WAY, OR OTHER BURDENS ON THE PROPERTY.

EXISTING TOPOGRAPHIC SURVEY PERFORMED BY SIGMA CONSULTING GROUP, INC. ON AUGUST 21, 2012

DATUM: ALL ELEVATIONS ARE IN NAVD 88 IN US SURVEY FEET. ALL HORIZONTAL COORDINATES ARE IN NAD 83 (LOUISIANA STATE PLANE, SOUTH ZONE) IN US SURVEY FEET. SEE GENERAL NOTES ON SHEET 2 FOR SURVEY CONTROL DATA.

SOIL BORING B-20 MAY BE REFERENCED FOR THIS LOCATION.

ALL REQUIRED CHANNEL EXCAVATION IS TO BE PLACED ON SITE IN AREAS DESIGNATED. REFER TO THE ELEVATION VIEW ON THE FOLLOWING SHEET FOR ADDITIONAL INFORMATION.

---

**LEGEND:**

- **EXISTING CONTOURS**
- **PROPOSED CONTOURS**
- **EXISTING TOP OF BANK**
- **PROPOSED WEIR**
- **PROPOSED RIPRAP 2" THICK (MIN.)**
- **CHANNEL EXCAVATION**
- **FILL AREA ELEV. <2.0 MAX.**

**FILL AREA ELEV. >2.0 MAX.**

**WATER'S EDGE**

**LIMITS OF RIPRAP**

**CHANNEL BOTTOM**

---

**NON-VEGETATED WATER BOTTOM**

- 0.39 AC. 1,180.0 C.Y. EXCAVATION
- 0.28 AC. 596.0 C.Y. IN-SITU FILL
- 0.08 AC. 244.4 C.Y. ROCK RIPRAP

---

**SCALE:** 1" = 30'

---

**COASTAL PROTECTION AND RESTORATION AUTHORITY**

**LOST LAKE MARSH CREATION AND HYDROLOGIC RESTORATION**

**SITE-1 PLAN VIEW**

**SATE PROJECT NUMBER: TE/72**

**FEDERAL PROJECT NUMBER: TE/72**

**DATE: AUGUST 2016**

**SIGNATURES:**

**GREGORY P. SEFFEDO, REG. No. 26669**

**PROFESSIONAL ENGINEER**

**IN**

**STATE OF LOUISIANA**

---

**SIGMA CONSULTING GROUP, INC.**

**1005 Airline Highway**

**Baton Rouge, Louisiana 70801**

**DRAWN BY: ANGELO**

**DESIGNED BY: SEFFEDO**

**APPROVED BY: LEOE**

**SHEET 21 OF 81**
STRUCTURE NOTES:

1. TIMBER PILES SHALL CONFORM TO TECHNICAL SPECIFICATION TS-650. PILES SHALL BE TREATED WITH A CREOSOTE SOLUTION CONFORMING TO ARPA 72 TO A MINIMUM RETENTION OF 20 PCF AND CAPPED.

2. TIMBER PILING SHALL BE 62 IN LENGTH WITH A NORMAL 13" DIAMETER BUTT AND 7" MINIMUM DIAMETER AT THE TIP.

3. THE TOP OF THE PILES SHALL BE COATED WITH CREOSOTE OIL PRIOR TO PLACING CAP. THE PILE CAP SHALL BE ATTACHED USING ALUMINUM OR STAINLESS STEEL NAILS.

4. THE WALTERS SHALL BE TREATED STRUCTURAL TIMBER AND CONFORM TO TECHNICAL SPECIFICATION TS-655.

5. THE STEEL SHEET PILING SHALL CONFORM TO TECHNICAL SPECIFICATION TS-670.

6. WHEN FIELD DRILLING HOLES IN STEEL PLATES FOR THE WOOD SCREWS, CARE SHOULD BE TAKEN NOT TO PENETRATE THE TIMBER MEMBER MORE THAN 1/2".

TOP VIEW
(END BAY FRAME)
SCALE: 1/2" = 1'-0"

SECTION A-A
SCALE: 1/2" = 1'-0"

SECTION B-B
SCALE: 1/2" = 1'-0"

COASTAL PROTECTION AND RESTORATION AUTHORITY
3400 LAUREL STREET
BATON ROUGE, LOUISIANA 70801

LOST LAKE MARSH CREATION AND HYDROLOGIC RESTORATION

TYPICAL DETAILS

STATE PROJECT NUMBER: 10-72
FEDERAL PROJECT NUMBER: 78-72
DATE: AUGUST 2018

DRAINED BY: YARBROUGH
DESIGNED BY: SEGEDA
APPROVED BY: BADELL

SHEET 23 OF 41
STEEL NOTES:
1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO TECHNICAL SPECIFICATION TS-971.
2. ALL STRUCTURAL STEEL SHALL BE STRUCTURAL CARBON STEEL (GRADE 36). ALL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
3. ALUMINUM PLANKS SHALL CONFORM TO TECHNICAL SPECIFICATION TS-910.
4. CLEVIS PINS SHALL BE STAINLESS STEEL MATERIAL, AND ARE AT NO DIRECT PAY. PADLOCKS ARE TO BE PROVIDED BY GRHA.

SECTION A-A
SCALE: 1/8" = 1'-0"

SECTION B-B
SCALE: 1/8" = 1'-0"

ALUMINUM PLANKS
(NOT ONE TYPE I & TYPE II REQUIRED PER EACH BAY)

BAY FRAME
FRONT ELEVATION
SCALE: 1/8" = 1'-0"

CLEVIS LOCKING PIN
(NOT 2 PINS REQUIRED PER BAY)
NOTES:
1. DATA TO PROVIDE THE COORDINATES FOR ALL SURVEY TRANSECTS AND ALIGNMENTS TO THE CONTRACTOR.
2. THE DREDGE PIPELINE ALIGNMENT SHALL BE SURVEYED ACCORDING TO THE SPECIFICATIONS.
3. ALL INFRASTRUCTURE (PIPELINES, POWER LINES, ETC.) SHALL BE SURVEYED AND MARKED ACCORDING TO THE SPECIFICATIONS.

LEGEND
- BORROW AREA/ACCESS CHANNEL
- SPoil PLACEMENT AREAS
- SURVEY TRANSECT
- DREDGE PIPELINE ALIGNMENT

COSTAL PROTECTION AND RESTORATION AUTHORITY
102 LAFAYETTE STREET
BATON ROUGE, LOUISIANA 70801

LOST LAKE MARSH CREATION AND HYDROLOGIC RESTORATION
STATE PROJECT NUMBER: TE-72
FEDERAL PROJECT NUMBER: TE-72
DRAWN BY: SHANE FAUST
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APPROVED BY: ROSS JOYERSON, P.E.
DATE: AUGUST 2006
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