FINAL PLANS

STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY
(CPRA)

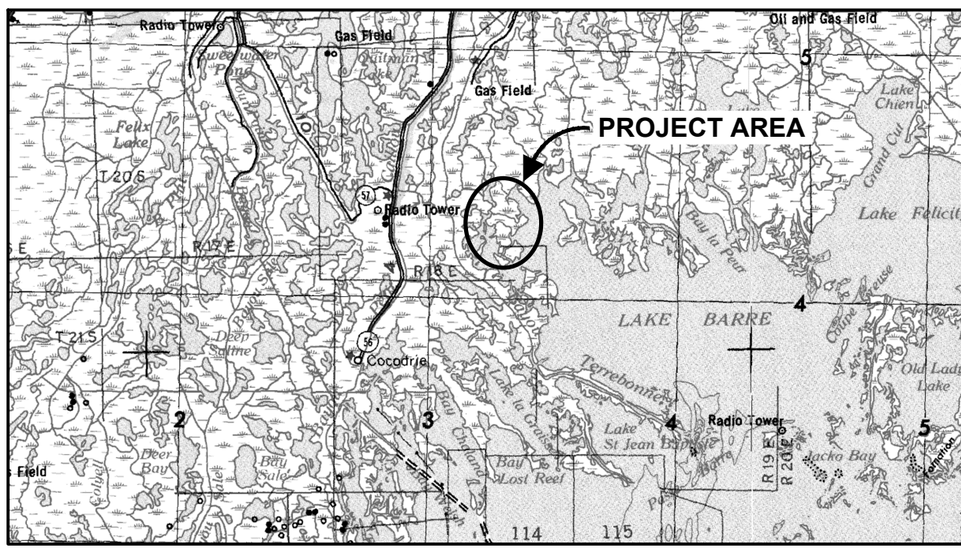
TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT

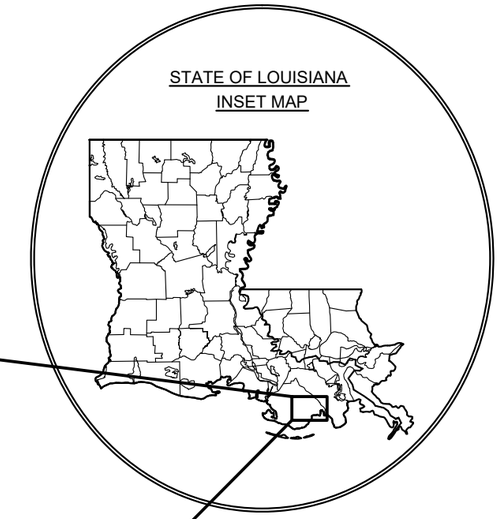
TE-0045

TERREBONNE PARISH, LOUISIANA

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES
3	PLAN VIEW
4	TYPICAL UNIT PROFILES
5	ANCHORING AND TIE-DOWN DETAILS
6	REACH A AND B LAYOUTS
7	REACH E LAYOUT
8	ONSHORE ARMOUR UNIT DETAILS
9	ONSHORE GABION MAT UNIT DETAILS
10	FORESHORE TRIANGULAR UNIT DETAILS
11	WARNING SIGN DETAILS
12-18	REACH A AND B PROFILES
19-25	REACH E PROFILES





STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19

TYPE OF CONSTRUCTION

HEAVY CONSTRUCTION, CLASS III
SHORELINE PROTECTION REMOVAL

HEI
Hartman Engineering, Inc.
Consulting Engineers

REV.	DATE	DESCRIPTION	BY

LOUISIANA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESTORATION DIVISION
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

DRAWN BY: STEVE URQUHART
DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045
FEDERAL PROJECT NUMBER:
APPROVED BY: ROLLAND MURA, P.E.

TITLE SHEET

DATE: DEC. 2019
SHEET 1 OF 25

FINAL PLANS

GENERAL NOTES

1. ALL ELEVATIONS ARE GIVEN IN THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ALL HORIZONTAL COORDINATES ARE GIVEN IN THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
2. BENCHMARK TE-45-SM-01 HAS BEEN ESTABLISHED AT THE SITE BY THE OWNER. SEE SHEET 3 FOR BENCHMARK LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS DURING CONSTRUCTION AS NEEDED.
3. ELEVATIONS SHOWN ON PLANS ARE BASED ON SURVEYS PERFORMED BETWEEN JUNE 23, 2002 AND JULY 6, 2002 BY MORRIS P. HERBERT, INC.
4. CONTRACTOR SHALL VISIT THE SITE OF WORK TO BECOME FAMILIAR WITH THE LOCAL CONDITIONS AND WHAT EFFECTS THE CONDITIONS MAY HAVE ON ACCESS AND CONSTRUCTION.
5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, EXISTING ELEVATIONS AND CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO REMOVAL OF MATERIAL, AND COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ALL DISCREPANCIES.
6. THE CONTRACTOR SHALL MAKE HIS OWN INTERPRETATION OF THE CHARACTER AND CONDITION OF THE MATERIALS WHICH WILL BE ENCOUNTERED BETWEEN THE BORING LOCATIONS. THE CONTRACTOR, AT HIS OWN EXPENSE, MAY MAKE ADDITIONAL SURVEYS AND INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE CONDITIONS WHICH WILL AFFECT PERFORMANCE OF THE WORK.
7. THE LOCATIONS OF THE STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL PROVIDE ALL SURVEY PERSONNEL AND EQUIPMENT NECESSARY TO REMOVE THE STRUCTURES AT THE BEGINNING OF CONSTRUCTION.
8. LOCATION OF UTILITIES INDICATED ON THE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE BASED IN PART ON INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR'S NEGLIGENCE. THE DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
10. FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CALL LOUISIANA ONE CALL AT 1-800-272-3020 TO LOCATE ANY UTILITY OR PIPELINES IN THE AREA WHICH MAY BE UNKNOWN TO THE OWNER. ADDITIONALLY, THE CONTRACTOR SHALL PERFORM A MAGNETOMETER SURVEY WITHIN THE CONSTRUCTION AREA AND WHERE THE STRUCTURES ARE TO BE LOCATED. FURTHERMORE, CONTRACTOR SHALL NOTIFY CHEVRONTEXACO A MINIMUM OF 14 DAYS PRIOR TO ACCESSING THE SITE AT (985) 758-0230 OR (504) 247-3383, ATTENTION SHANNON MONTGOMERY, TO HAVE THE PIPELINE IN THE PROJECT AREA PROPERLY MARKED PRIOR TO MOBILIZATION.
11. ALL PIPELINES WITHIN THE PROJECT AREA SHALL BE CLEARLY MARKED WITH BUOYS BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN BUOYS DURING CONSTRUCTION OR HAVE ADEQUATE NAVIGATIONAL EQUIPMENT ON THE DREDGE TO AVOID DREDGING IN RESTRICTED AREAS. THE CONTRACTOR SHALL NOT ANCHOR OR EXCAVATE WITHIN 100 FEET OF ANY PIPELINE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOBILIZING, COMPLETING THE REQUIRED CONSTRUCTION ACTIVITIES, AND DEMOBILIZING WITHOUT CROSSING OR OTHERWISE IMPACTING UNACQUIRED OYSTER LEASES SHOWN ON SHEET 3.
13. REMOVALS SHALL CONSIST OF SHORELINE PROTECTION UNITS AND ANY ANCHORS. BEDDING MATERIAL SHALL BE LEFT IN PLACE.
14. WARNING SIGNS FOR REACH A, B, & E TO BE REMOVED BY PULLING THE COMPLETE PILE IF POSSIBLE. IF PILE CAN NOT BE COMPLETELY PULLED IT MUST BE BROKEN OFF A MINIMUM OF 3 FEET BELOW THE BAY BOTTOM.
15. ALL ITEMS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

SUMMARY OF ESTIMATED QUANTITIES

ITEM No.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	1
2	SURVEYING AND PROJECT LAYOUT	LUMP SUM	1
3	A-JACKS ARMOUR UNITS REMOVAL	LINEAR FOOT	900
4	GABION MAT UNITS REMOVAL	LINEAR FOOT	900
5	FORESHORE TRIANGULAR (REEF BLOCKS) UNITS REMOVAL	LINEAR FOOT	900
6	REMOVAL OF TIE-DOWN ANCHOR	EACH	189
7	REMOVAL OF TIE-IN UNIT*	LINEAR FOOT	790
8	PERMANENT WARNING SIGNS REMOVAL	EACH	4

AS- BUILT NOTES:

* 1. ONSHORE ARMOR UNITS WAS SELECTED AND USED BY THE CONTRACTOR AS THE TIE-IN UNIT APPROX 85 ANCHORS WERE USED.

2. (FOR INFORMATION ONLY) APPROXIMATE QUANTITIES INSTALLED FOR FOUNDATIONS:

FOUNDATION BASE GEOTEXTILE GEOGRID 220 SQ. YD.
FOUNDATION BASE CRUSHED STONE 645 TON

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BATON ROUGE, LOUISIANA 70802

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

GENERAL NOTES

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

DATE: DEC. 2019

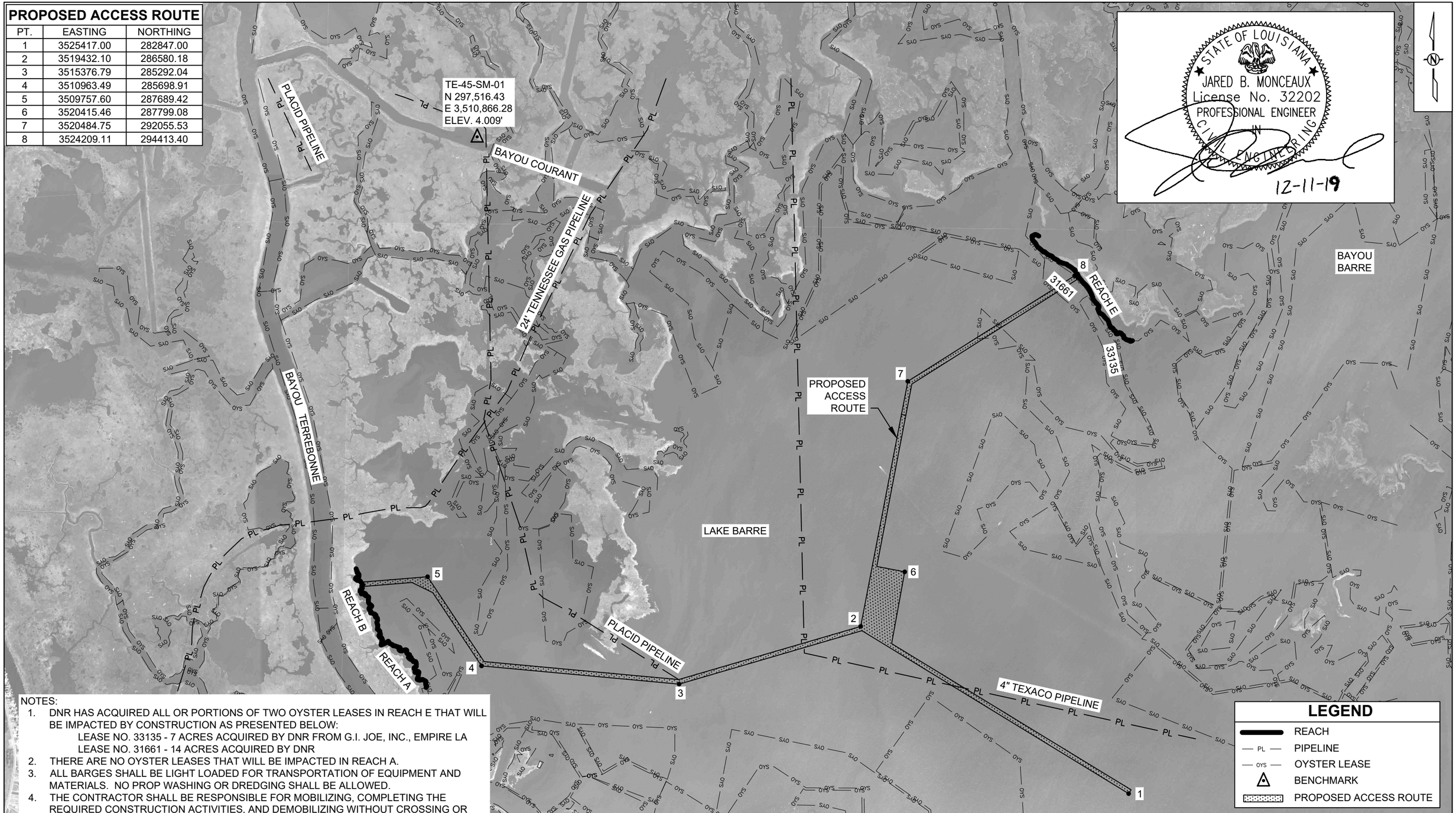
DRAWN BY: STEVE URQUHART | DESIGNED BY: JARED MONCEAUX, P.E. | APPROVED BY: ROLLAND MURA, P.E.

SHEET 2 OF 25

FINAL PLANS

PROPOSED ACCESS ROUTE

PT.	EASTING	NORTHING
1	3525417.00	282847.00
2	3519432.10	286580.18
3	3515376.79	285292.04
4	3510963.49	285698.91
5	3509757.60	287689.42
6	3520415.46	287799.08
7	3520484.75	292055.53
8	3524209.11	294413.40



NOTES:

1. DNR HAS ACQUIRED ALL OR PORTIONS OF TWO OYSTER LEASES IN REACH E THAT WILL BE IMPACTED BY CONSTRUCTION AS PRESENTED BELOW:
   LEASE NO. 33135 - 7 ACRES ACQUIRED BY DNR FROM G.I. JOE, INC., EMPIRE LA
   LEASE NO. 31661 - 14 ACRES ACQUIRED BY DNR
2. THERE ARE NO OYSTER LEASES THAT WILL BE IMPACTED IN REACH A.
3. ALL BARGES SHALL BE LIGHT LOADED FOR TRANSPORTATION OF EQUIPMENT AND MATERIALS. NO PROP WASHING OR DREDGING SHALL BE ALLOWED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOBILIZING, COMPLETING THE REQUIRED CONSTRUCTION ACTIVITIES, AND DEMOBILIZING WITHOUT CROSSING OR OTHERWISE IMPACTING UNACQUIRED OYSTER LEASES SHOWN ON SHEET 3.
5. THE AERIAL PHOTOGRAPHY WAS TAKEN IN THE FALL OF 2005.

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PLAN VIEW

STATE PROJECT NUMBER: TE-0045

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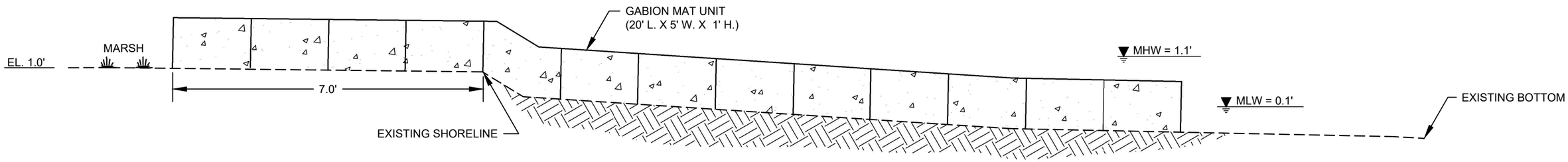
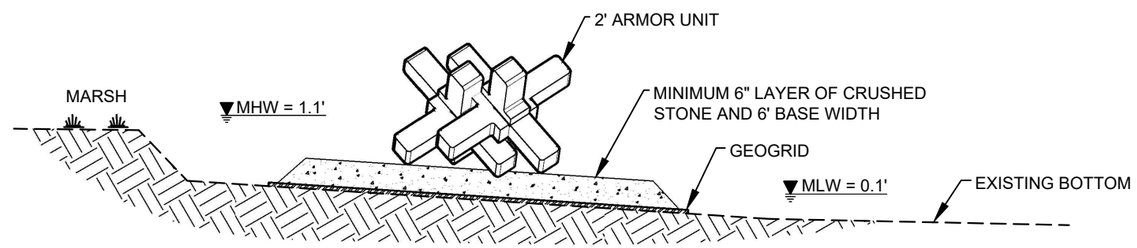
SHEET 3 OF 25

FINAL PLANS



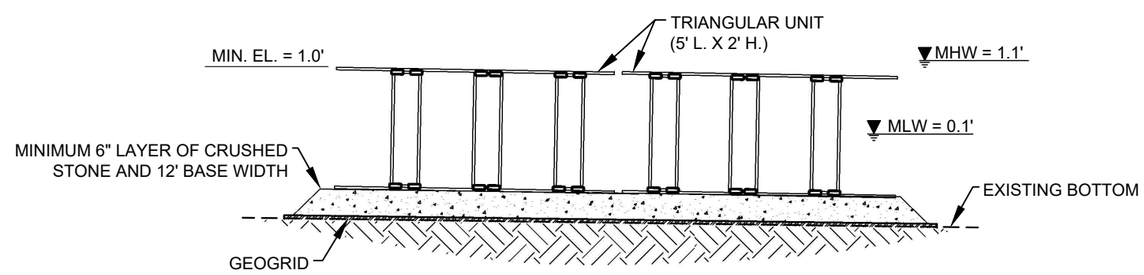
TYPICAL ONSHORE GABION MAT UNIT

NOT TO SCALE



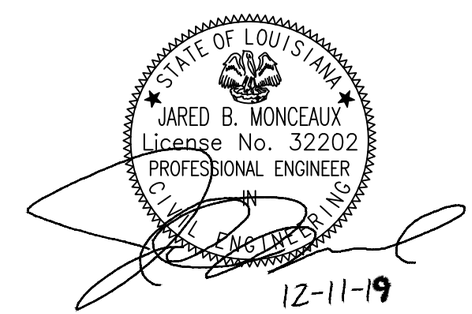
TYPICAL ONSHORE ARMOR UNIT

NOT TO SCALE



TYPICAL FORESHORE TRIANGULAR UNIT

NOT TO SCALE



FOR INFORMATION ONLY

NOTES:
1. SEE SHEET 5 FOR ANCHORING AND TIE-DOWN DETAILS.

AS-BUILT NOTES:
1. THE ONSHORE ARMOR UNIT WAS SELECTED AND USED BY CONTRACTOR AS THE TIE-IN UNIT.

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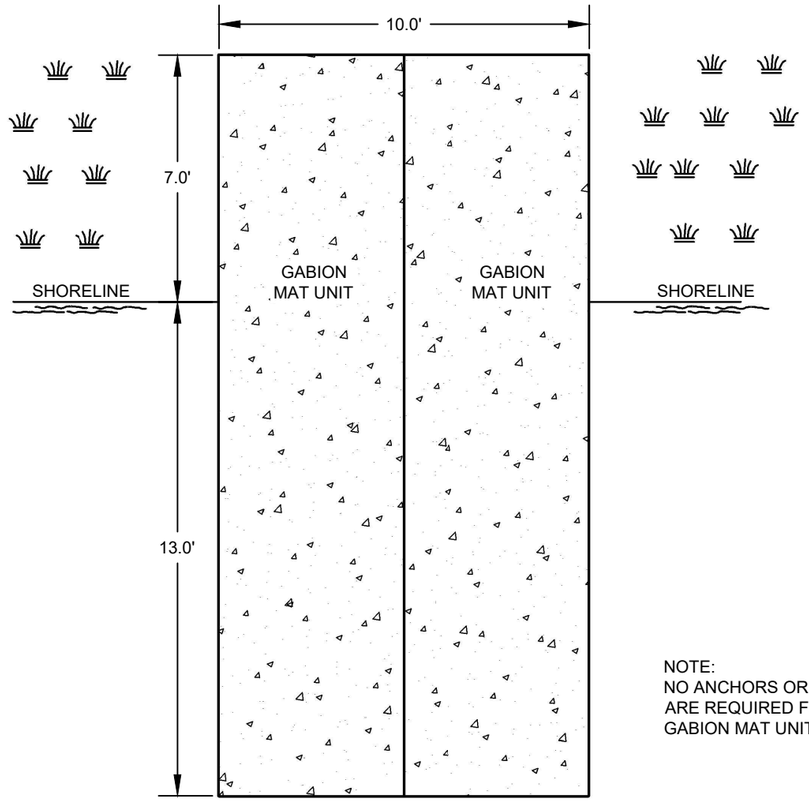
TYPICAL UNIT PROFILES

DATE: DEC. 2019

SHEET 4 OF 25

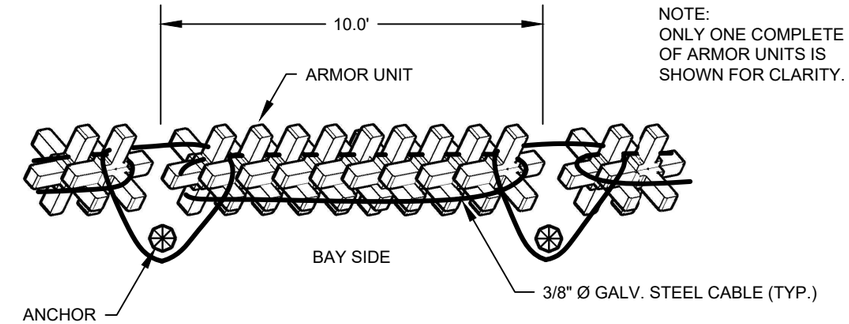
FINAL PLANS



NOTE:
NO ANCHORS OR TIES
ARE REQUIRED FOR
GABION MAT UNITS

GABION UNIT DETAIL

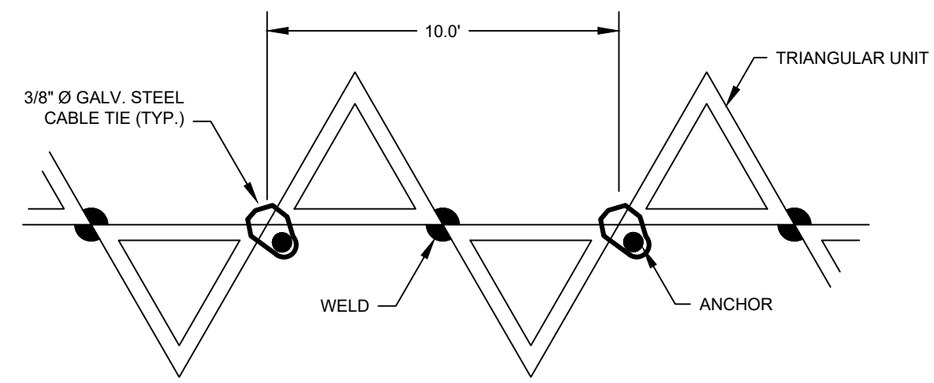
NOT TO SCALE



NOTE:
ONLY ONE COMPLETE ROW
OF ARMOR UNITS IS
SHOWN FOR CLARITY.

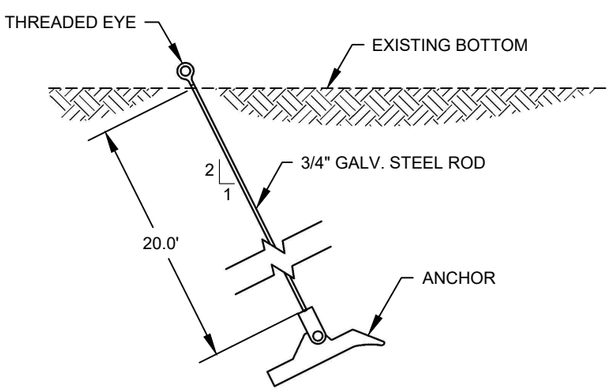
ARMOR UNIT DETAIL

NOT TO SCALE



TRIANGULAR UNIT DETAIL

NOT TO SCALE



TYPICAL ANCHOR DETAIL

NOT TO SCALE

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TERREBONNE BAY SHORELINE
DEMONSTRATION - FEATURES
REMOVAL PROJECT TE-0045

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ANCHORING AND
TIE-DOWN DETAILS

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SHEET 5 OF 25

FINAL PLANS

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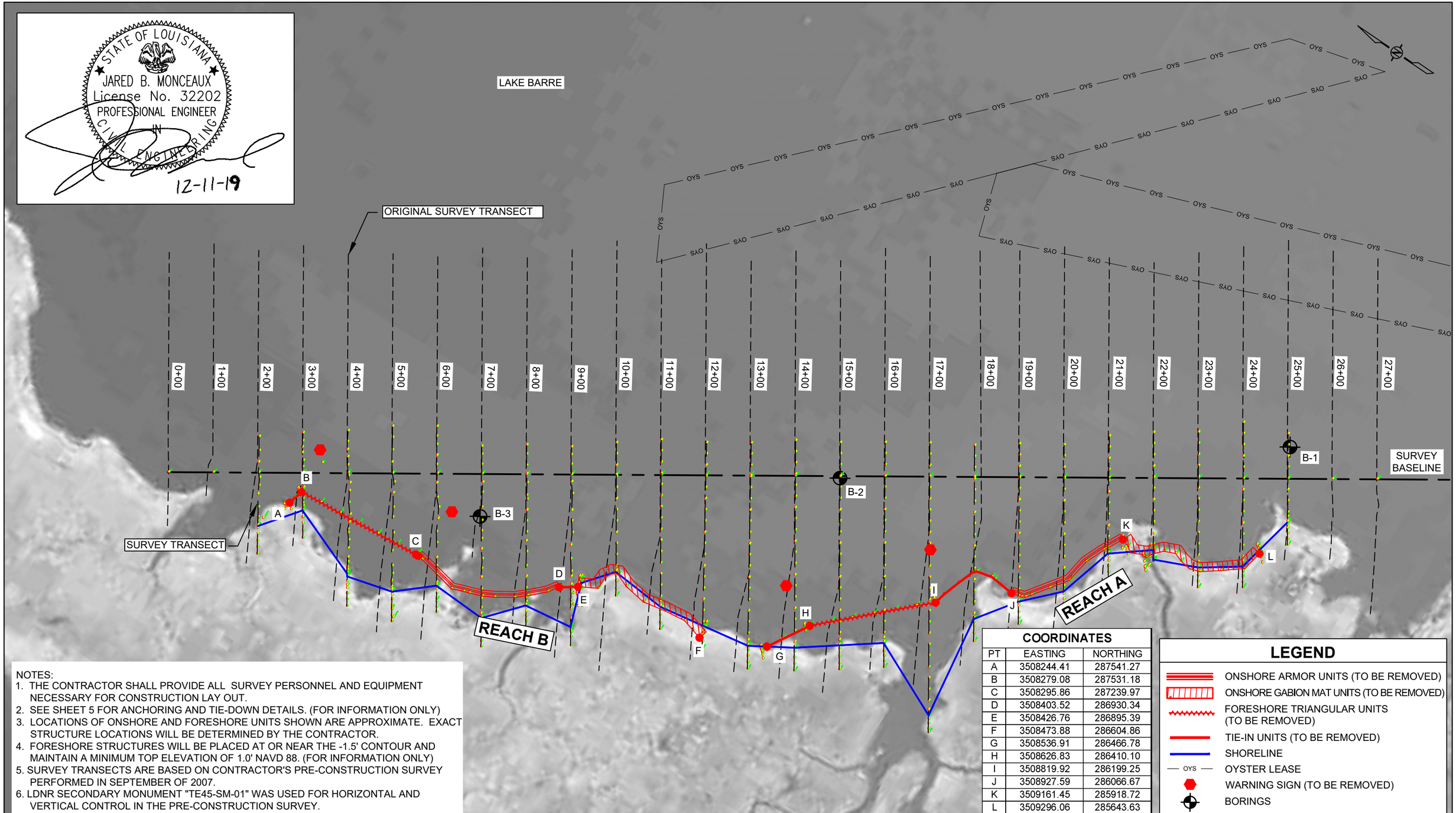

NOTES:
1. THE CONTRACTOR SHALL PROVIDE ALL SURVEY PERSONNEL AND EQUIPMENT NECESSARY FOR CONSTRUCTION LAY OUT.
2. SEE SHEET 5 FOR ANCHORING AND TIE-DOWN DETAILS. (FOR INFORMATION ONLY)
3. LOCATIONS OF ONSHORE AND FORESHORE UNITS SHOWN ARE APPROXIMATE. EXACT STRUCTURE LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR.
4. FORESHORE STRUCTURES WILL BE PLACED AT OR NEAR THE -1.5' CONTOUR AND MAINTAIN A MINIMUM TOP ELEVATION OF 1.0' NAVD 88. (FOR INFORMATION ONLY)
5. SURVEY TRANSECTS ARE BASED ON CONTRACTOR'S PRE-CONSTRUCTION SURVEY PERFORMED IN SEPTEMBER OF 2007.
6. LDNR SECONDARY MONUMENT "TE45-SM-01" WAS USED FOR HORIZONTAL AND VERTICAL CONTROL IN THE PRE-CONSTRUCTION SURVEY.

COORDINATES

PT	EASTING	NORTHING
A	3508244.41	287541.27
B	3508279.08	287531.18
C	3508295.86	287239.97
D	3508403.52	286930.34
E	3508426.76	286895.39
F	3508473.88	286604.86
G	3508536.91	286466.78
H	3508626.83	286410.10
I	3508819.92	286199.25
J	3508927.59	286066.67
K	3509161.45	285918.72
L	3509296.06	285643.63

LEGEND

- ONSHORE ARMOR UNITS (TO BE REMOVED)
- ONSHORE GABION MAT UNITS (TO BE REMOVED)
- FORESHORE TRIANGULAR UNITS (TO BE REMOVED)
- TIE-IN UNITS (TO BE REMOVED)
- SHORELINE
- OYS — OYSTER LEASE
- WARNING SIGN (TO BE REMOVED)
- BORINGS

200' 100' 0' 200' 400'

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Consulting Engineers

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BATON ROUGE, LOUISIANA 70802

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REACH A AND B LAYOUTS

DATE: DEC. 2019
SHEET 6 OF 25

FINAL PLANS

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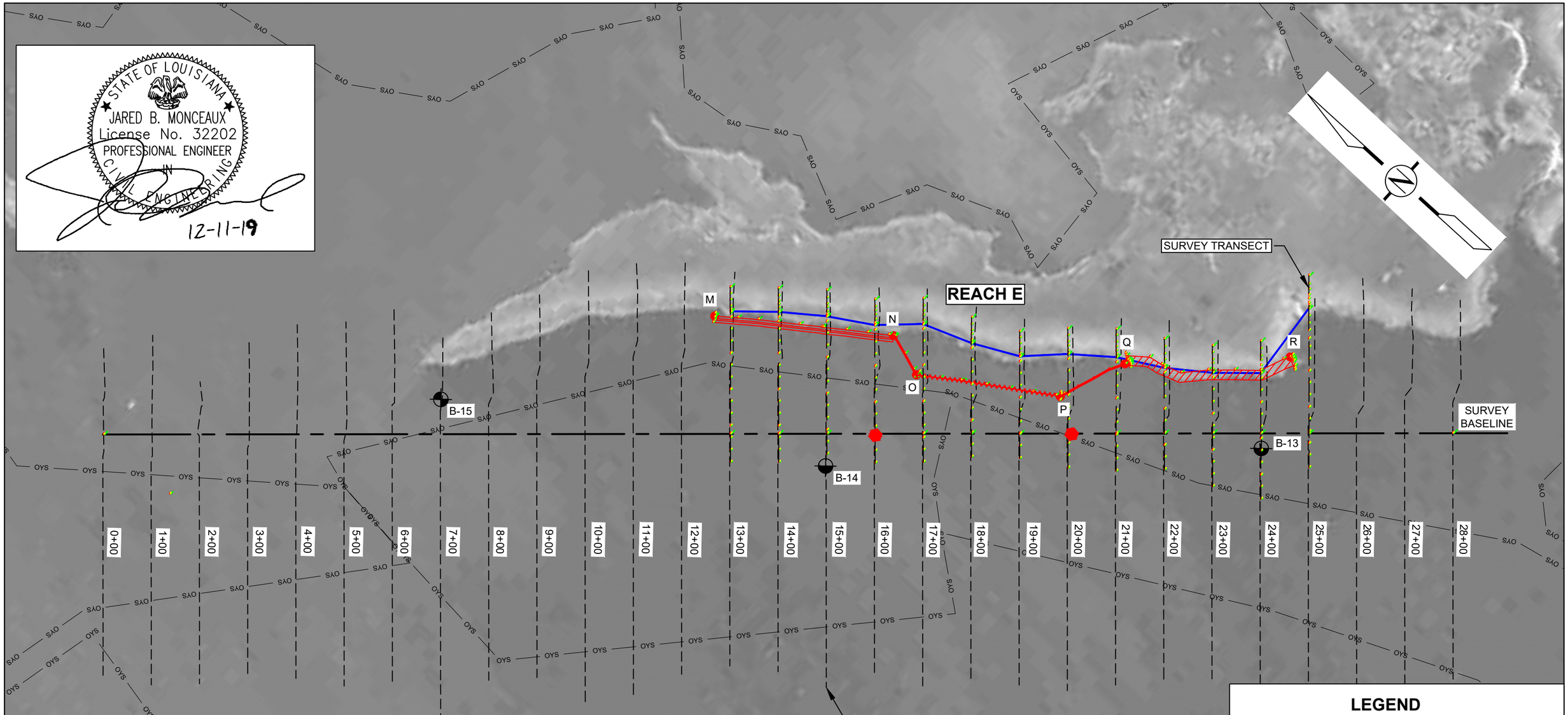

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6. LDNR SECONDARY MONUMENT "TE45-SM-01" WAS USED FOR HORIZONTAL AND VERTICAL CONTROL IN THE PRE-CONSTRUCTION SURVEY.

COORDINATES

PT	EASTING	NORTHING
M	3524328.07	294463.64
N	3524551.18	294164.68
O	3524524.21	294074.49
P	3524694.70	293825.40
Q	3524850.02	293772.90
R	3525079.67	293533.19

LEGEND

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- ONSHORE GABION MAT UNITS (TO BE REMOVED)
- FORESHORE TRIANGULAR UNITS (TO BE REMOVED)
- TIE-IN UNITS (TO BE REMOVED)
- SHORELINE
- OYS — OYSTER LEASE
- WARNING SIGN (TO BE REMOVED)
- BORINGS

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200' 100' 0' 200' 400'

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REACH E LAYOUT

DATE: DEC. 2019
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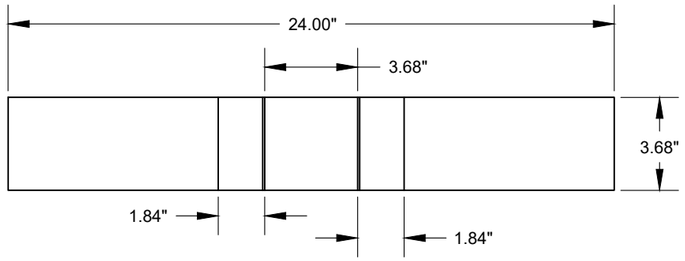
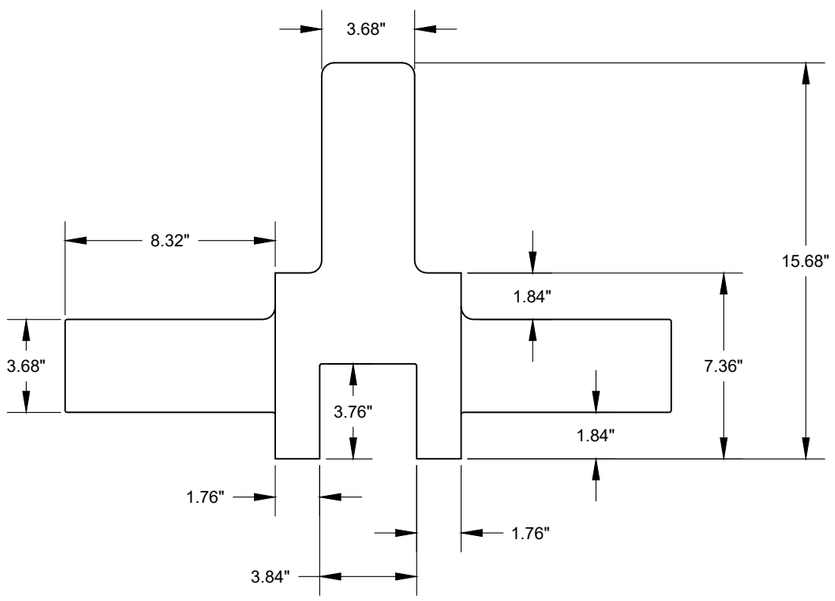
FINAL PLANS



TOP
SCALE: 1" = 6"



FRONT
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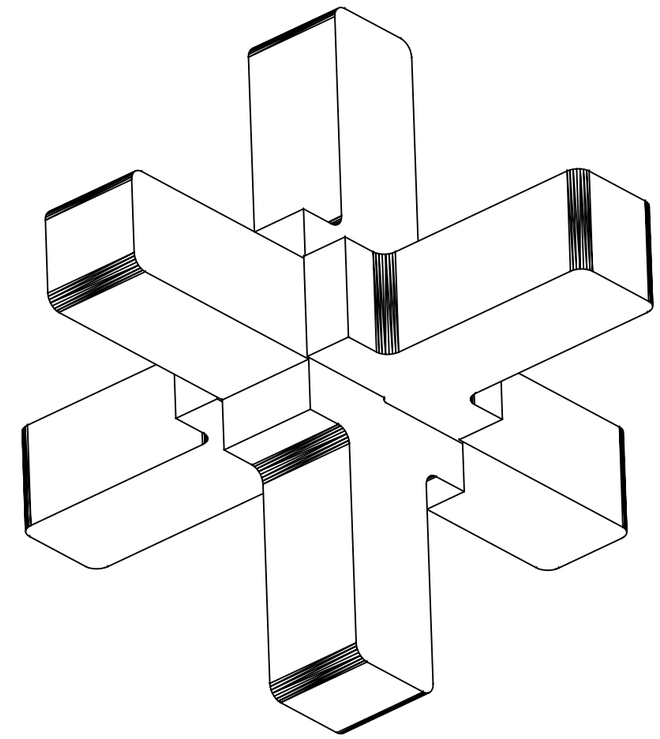

ARMOR UNIT
NOT TO SCALE

NOTES:
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
2. ADHESIVE SHALL BE USED TO JOIN ALL HALVES TO FORM A SINGLE UNIT.
3. IF CONTRACTOR SELECTS ARMOR UNIT AS HIS TIE-IN UNIT, THE TOP OF THE ARMOR UNIT MUST BE AT A MINIMUM ELEVATION OF +1.0' NAVD.
4. SEE SHEET 5 FOR ANCHORING AND TIE-DOWN DETAILS.

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ONSHORE ARMOR UNIT DETAILS

DATE: DEC. 2019

SHEET 8 OF 25

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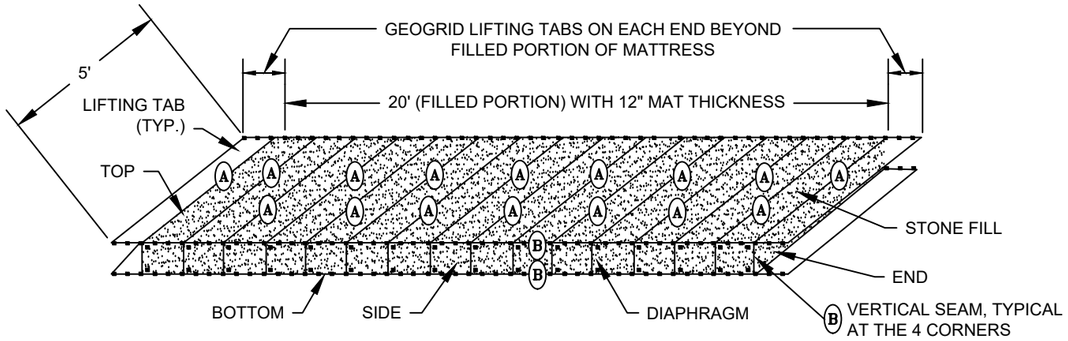


(A) INDICATES BODKIN CONNECTION USING 3/8" DIAMETER HDPE BODKIN ROD

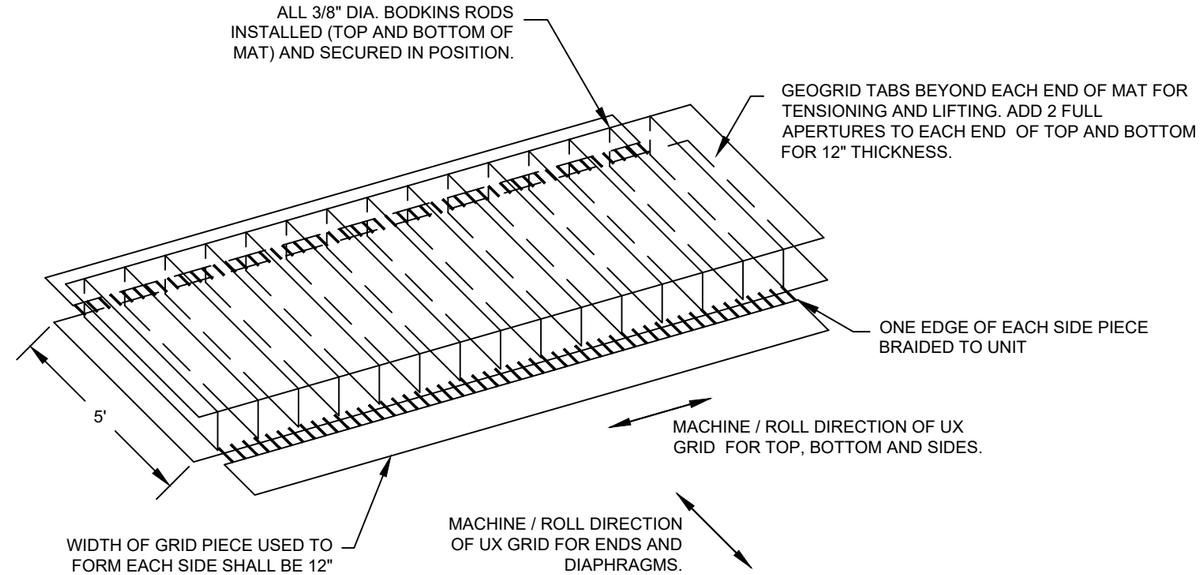
(B) INDICATES BRAIDED SEAM USING 3/16" DIAMETER HIGH UV HDPE BRAID

TYPICAL CONFIGURATION OF FILLED GABION MAT UNITS

SCALE: NOT TO SCALE

CONSTRUCTION NOTES:

1. ENDS, TOP, BOTTOM, SIDES AND ANY EXTRA LENGTH USED FOR LIFTING OR ANCHORING PURPOSES SHALL BE COMPOSED OF TENSAR UXTRITON200 GEOGRID, PLASTIC CABLES TIES MAY BE USED TO SECURE BODKIN CONNECTORS IN POSITION PRIOR TO TENSIONING OR FILLING OF MAT UNITS.
2. INTERNAL DIAPHRAGMS SHALL BE COMPOSED OF TENSAR UXTRITON100 GEOGRID.
3. GABION MAT SHALL BE FILLED WITH ASTM CLASS #1 STONE, OR ENGINEER APPROVED EQUIVALENT.
4. NOMINAL WIDTH: 5 FT. (FILLED)
5. NOMINAL THICKNESS: 12 IN. (FILLED)
6. NOMINAL WEIGHT: 9000 LBS. (20' X 5' X 12")

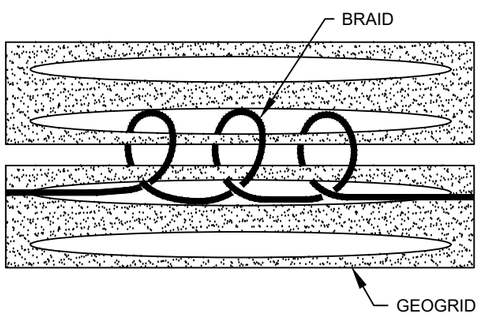


TYPICAL CONFIGURATION OF FABRICATED GABION MAT

SCALE: NOT TO SCALE

FABRICATION NOTES:

1. TYPICAL SPACING OF DIAPHRAGMS IS EVERY THREE APERTURE LENGTHS. A SHORTER SPACING MAY BE USED IN ORDER TO MATCH THE REQUIRED MAT LENGTH. LENGTH OF END PIECES AND INTERNAL DIAPHRAGMS PIECES ARE 2 GRID APERTURES LONG.
2. DUE TO THE ENVIRONMENTALLY SENSITIVE NATURE OF THE PROJECT AND POSSIBLE LIFT RESTRICTIONS OF THE CONTRACTOR'S EQUIPMENT, GABION MATS MAY BE SPLIT INTO TWO EQUAL 10' LONG MATS IN ACCORDANCE WITH THE MANUFACTURER SPECIFICATIONS.

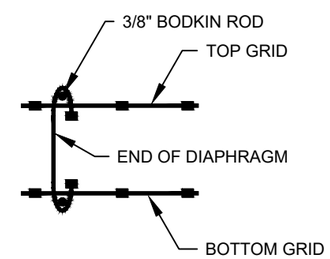


TYPICAL STITCHED SEAM DETAILS

SCALE: NOT TO SCALE

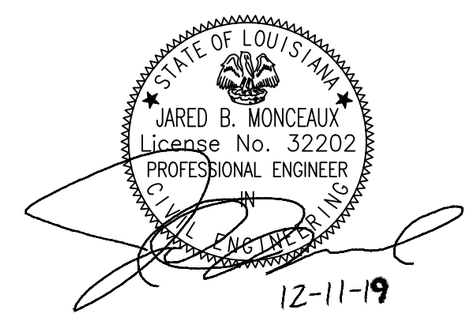
SEAM NOTES:

1. ALL CUT ENDS OF BRAID MATERIAL SHALL BE KNOTTED WITHIN 1/2" TO 2" OF THE END TO PREVENT RAVELING OF BRAID.
2. THE BRAID SHALL BE SECURELY KNOTTED TO THE GEOGRID AT ALL ENDS OF ALL BRAIDED SEAMS. THE BRAID SHALL BE KNOTTED WHEN SPLICING TO THE NEXT PIECE OF BRAID, OR WHEN SECURING IT TO THE GEOGRID. AT ALL ENDS, EACH BRAIDED SEAM SHALL BE CONTINUOUS, WITH SECURELY KNOTTED SPLICES ALLOWED. THE BRAID SHALL BE SECURELY KNOTTED TO THE GEOGRID AT A SPACING NOT TO EXCEED 6 FT ALONG ANY SEAM.
3. THE BRAID SHALL BE STITCHED THROUGH EACH PAIR OF APERTURES ALONG THE SEAM AT LEAST ONCE, AND THE MINIMUM NUMBER OF STITCHES PER FOOT ALONG THE SEAM SHALL BE SIX (6). THE SPACING OF STITCHES ALONG EACH SEAM SHALL BE REASONABLY UNIFORM.
4. ALL KNOTS SHALL BE TIED IN A MANNER TO PREVENT SLIPPING AND CINCHING. THE WRAPS ALONG THE SEAM SHALL BE SUFFICIENTLY TIGHT TO CLOSE THE GAP BETWEEN THE ADJACENT PIECES OF GEOGRID, BUT SHALL NOT BE OVER-TIGHTENED SUCH THAT THE GEOGRID BINDS ALONG THE SEAM.



EXPANDED SECTION AT DIAPHRAGM

SCALE: NOT TO SCALE



FOR INFORMATION ONLY

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Hartman Engineering, Inc.
Consulting Engineers

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LOUISIANA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESTORATION DIVISION
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

DRAWN BY: STEVE URQUHART | DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

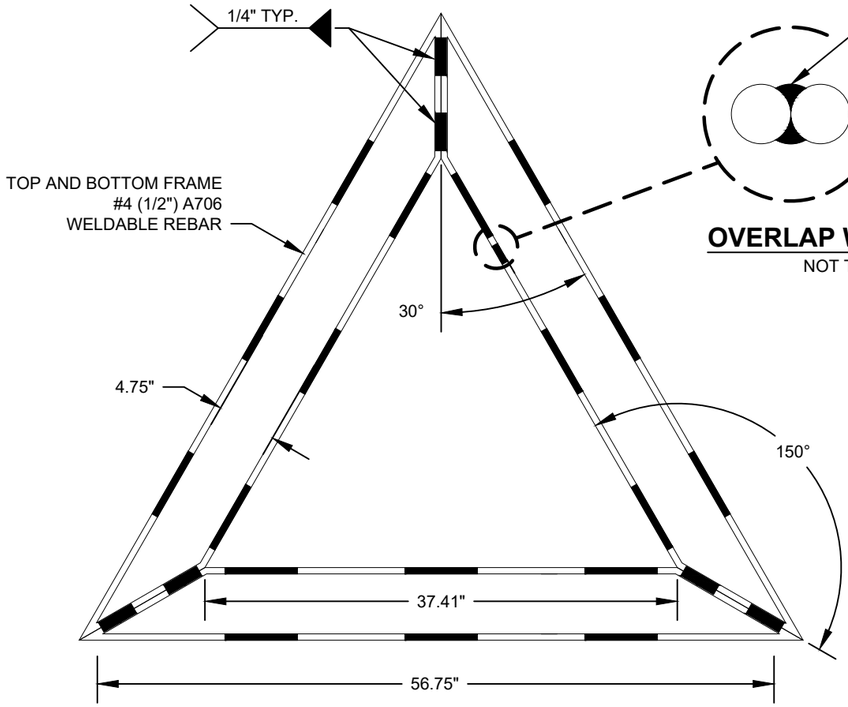
APPROVED BY: ROLLAND MURA, P.E.

ONSHORE GABION MAT DETAILS

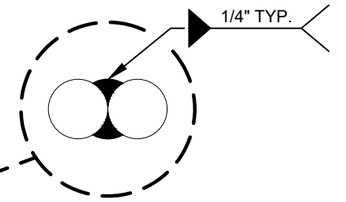
DATE: DEC. 2019

SHEET 9 OF 25

FINAL PLANS



PLAN VIEW
NOT TO SCALE



OVERLAP WELD DETAIL
NOT TO SCALE

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19

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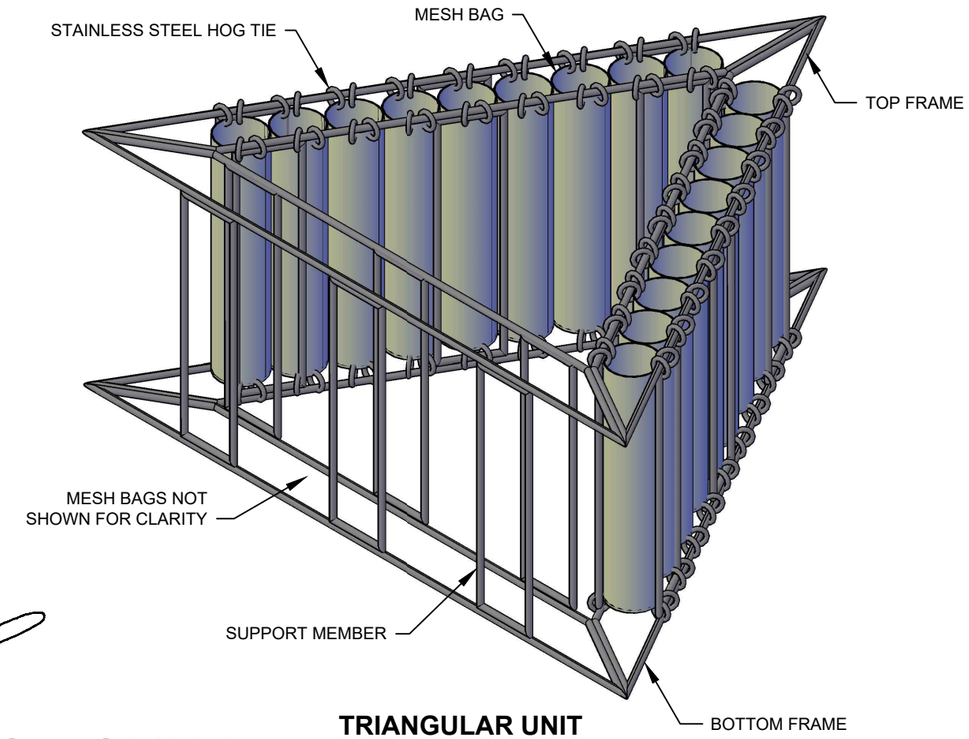

TRIANGULAR UNIT
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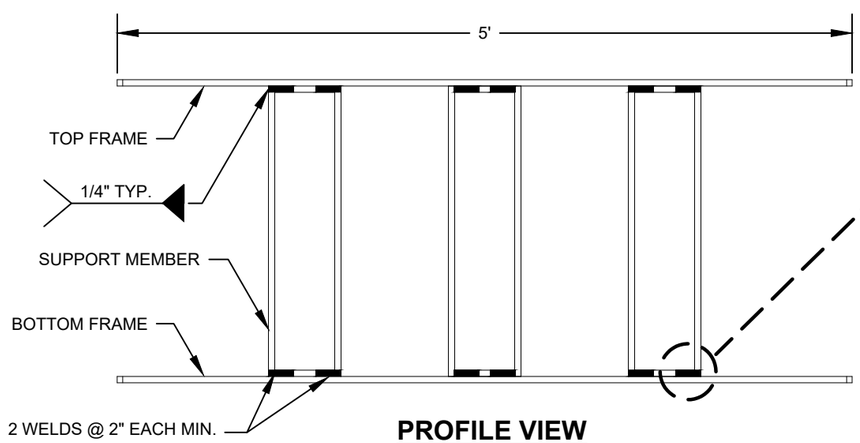
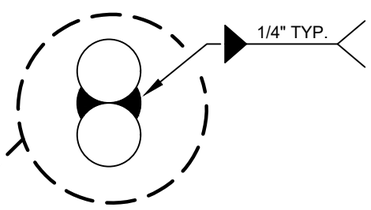


PROFILE VIEW
NOT TO SCALE



WELD DETAIL
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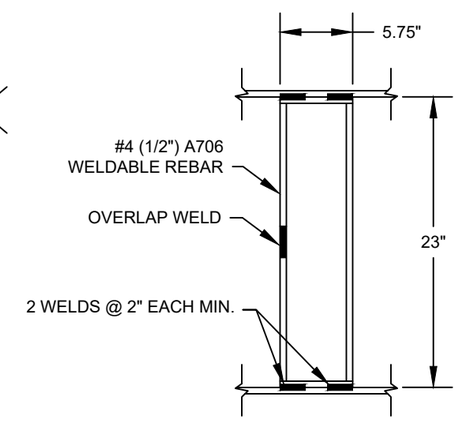
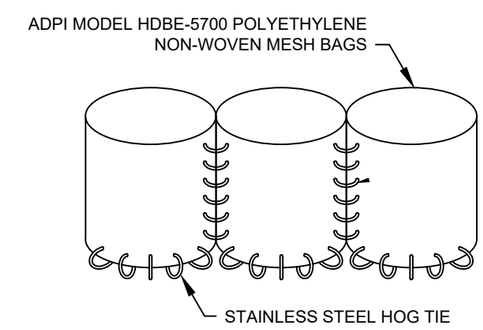


SUPPORT MEMBER DETAIL
NOT TO SCALE



MESH BAG DETAIL
NOT TO SCALE

NOTES:
1. ALL STRUCTURAL STEEL SHALL BE ASTM A-706 WELDABLE NO. 4(1/2 INCH) REBAR.
2. SEE SHEET 5 FOR ANCHORING AND TIE-DOWN DETAILS.

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LOUISIANA DEPARTMENT OF NATURAL RESOURCES
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BATON ROUGE, LOUISIANA 70802

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TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

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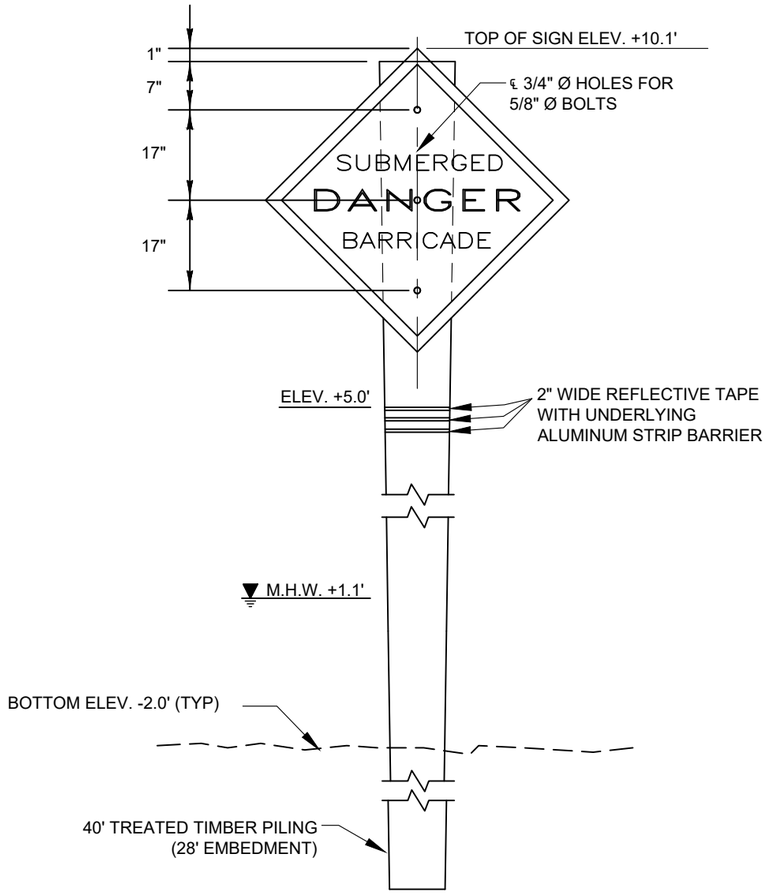
APPROVED BY: ROLLAND MURA, P.E.

FORESHORE TRIANGULAR UNIT DETAILS

DATE: DEC. 2019

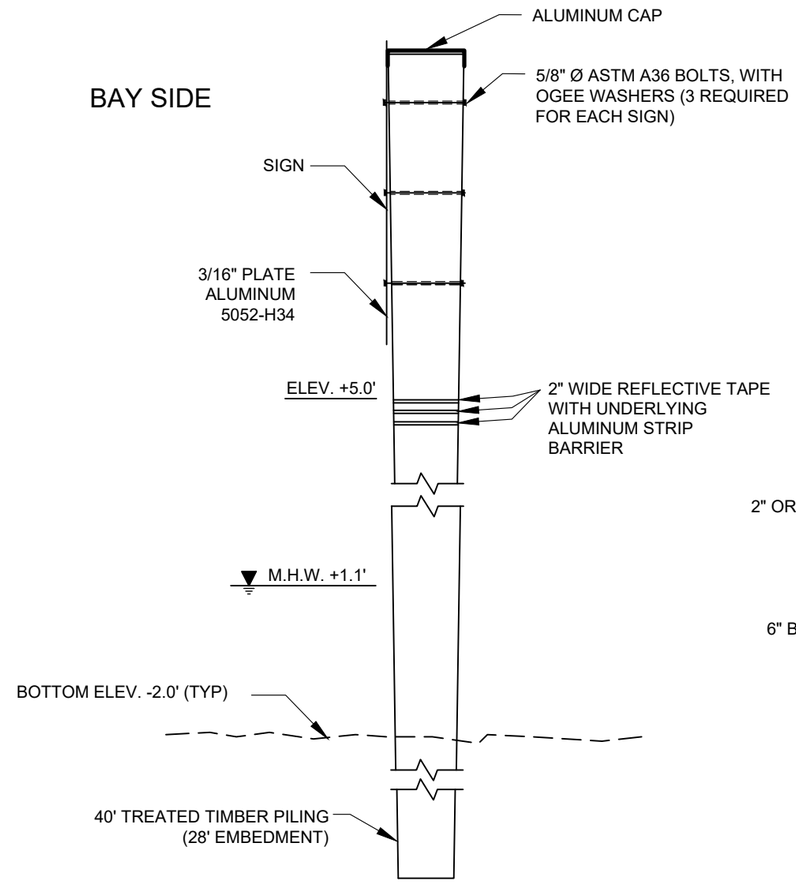
SHEET 10 OF 25

FINAL PLANS



WARNING SIGN ELEVATION

NOT TO SCALE

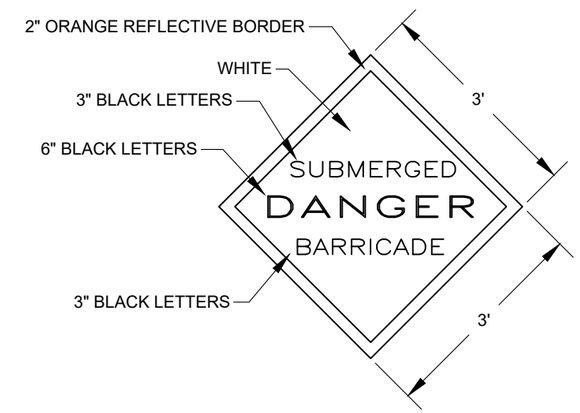


WARNING SIGN ELEVATION

NOT TO SCALE

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19



SIGN DETAIL

NOT TO SCALE

NOTES:

1. REFERENCES HEREIN TO THE "STANDARD SPECIFICATIONS" REFER TO THE "LA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES", LATEST EDITION, INCLUDING AMENDMENTS, BY THE DEPT. OF TRANSPORTATION AND DEVELOPMENT. MEASUREMENT AND PAYMENT WILL BE MADE AS DESCRIBED THEREIN, EXCEPT WHERE STATED OTHERWISE.
2. TWO WARNING SIGNS SHALL BE INSTALLED WITHIN EACH REACH (6 TOTAL) AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE PROJECT ENGINEER. APPROXIMATE LOCATIONS OF THE WARNING SIGNS ARE SHOWN ON SHEETS 6 AND 7. ACTUAL LOCATIONS WILL BE DETERMINED IN THE FIELD.
3. THE 2" BORDER ON THE WARNING SIGN WILL BE A REFLECTIVE MATERIAL OF ORANGE COLOR. THE LETTERING FIELD WILL BE A REFLECTIVE MATERIAL OF WHITE COLOR. THE LETTERING FOR THE WARNING SIGNS WILL BE BLACK. ALL SIGNS MUST MEET U.S. COAST GUARD STANDARDS; IN ACCORDANCE WITH 33 CFR 330.4 (a) (1).
4. NEOPRENE WASHERS SHALL BE PLACED BETWEEN THE SIGN AND THE PILING AT ALL POINTS OF CONTACT.
5. HARDWARE FOR TIMBER CONNECTIONS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH SECTION 811.15 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS PUBLISHED BY THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, LATEST EDITION.
6. TIMBER PILES SHALL CONFORM TO SECTIONS 804 AND 1014 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS PUBLISHED BY THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, LATEST EDITION. PILES SHALL BE TREATED WITH A CREOSOTE SOLUTION CONFORMING TO AWPA P2 TO A MINIMUM RETENTION OF 16 PCF.
7. TIMBER PILINGS SHALL BE 40-FEET IN LENGTH WITH A 12-INCH DIAMETER BUTT AND 7-INCH DIAMETER AT THE TIP.
8. EXPOSED BOLT THREADS SHALL BE EITHER TACK WELDED TO NUTS, STRIPPED, OR DAMAGED BY OTHER APPROVED METHOD TO PREVENT EASY REMOVAL.

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DRAWN BY: STEVE URQUHART | DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

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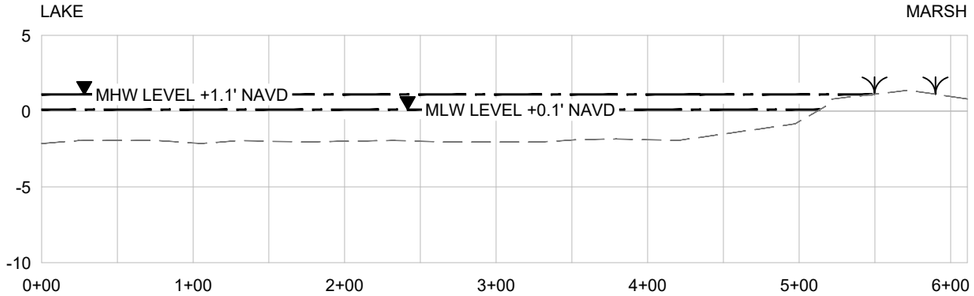
APPROVED BY: ROLLAND MURA, P.E.

WARNING SIGN DETAILS

DATE: DEC. 2019

SHEET 11 OF 25

FINAL PLANS



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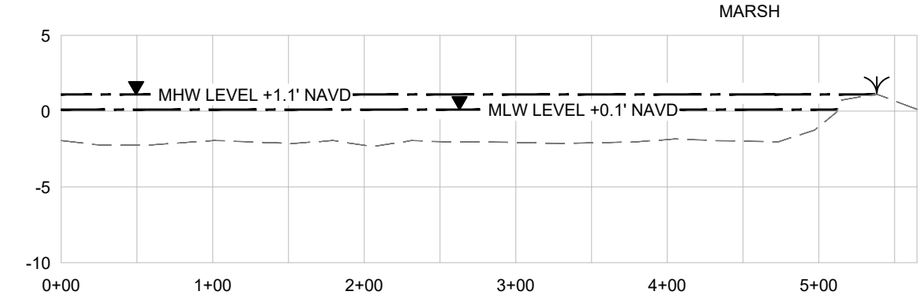

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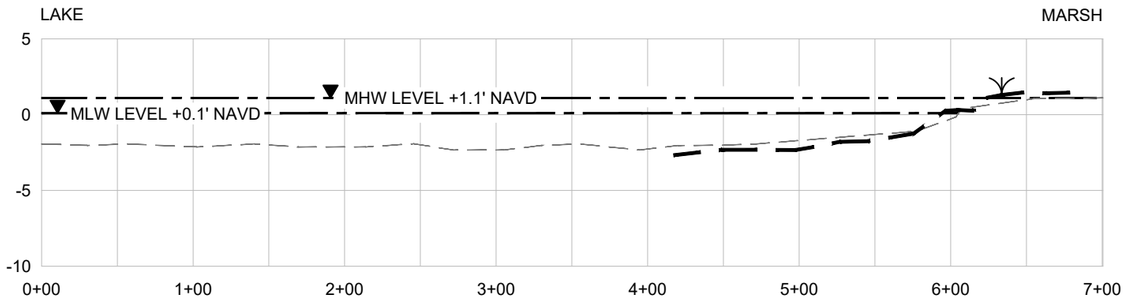

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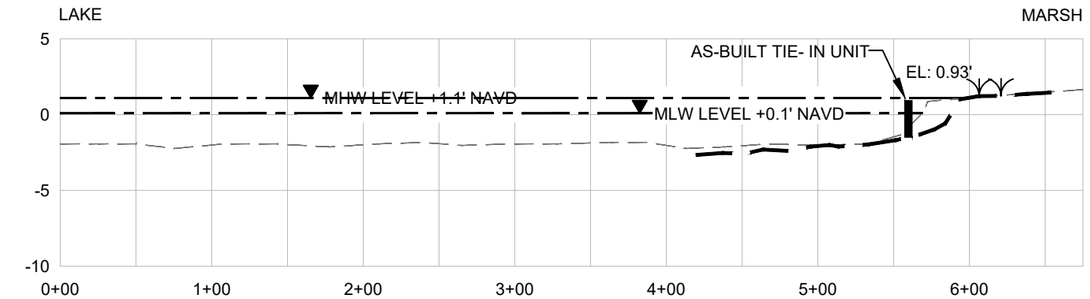

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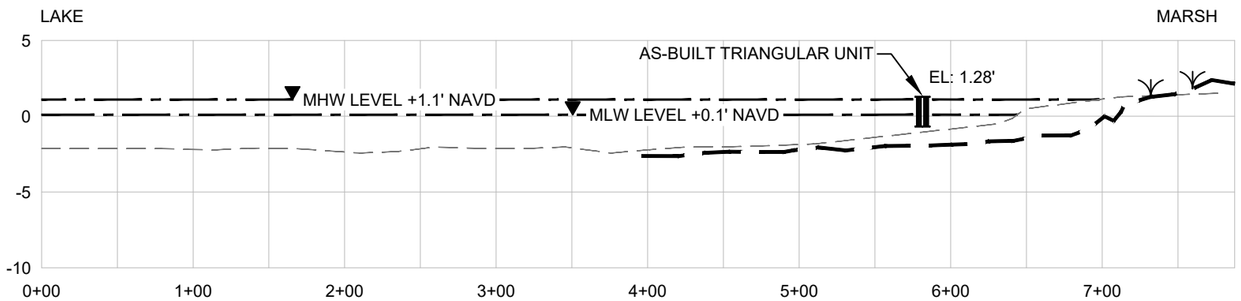

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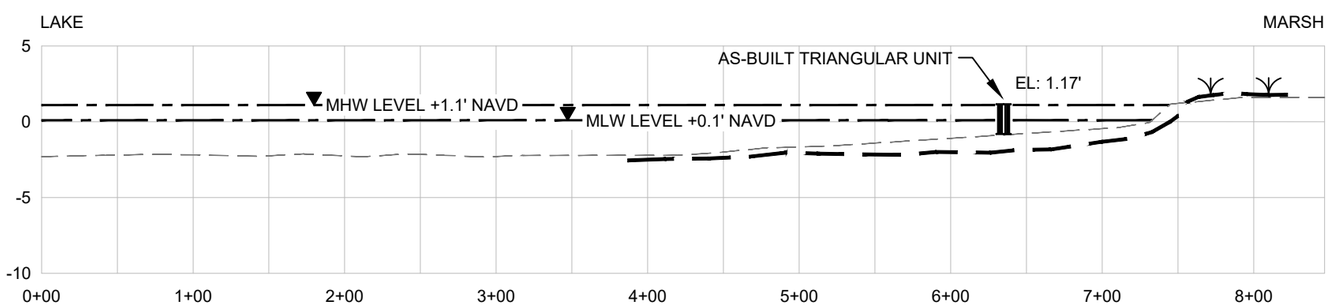

REACH B 5+00

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19

NOTES:

1. THE MEAN HIGH WATER (MHW) AND MEAN LOW WATER (MLW) ELEVATIONS ARE BASED ON THE BAYOU PETIT CAILLOU GAGE #76305 READINGS FROM 1992-2002 HAVING A VERTICAL DATUM OF NGVD 29 WHICH WAS CONVERTED TO NAVD 88 ELEVATIONS.
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LEGEND

PRE- CONSTRUCTION X-SECTIONS (SEPT 2007)

ORIGINAL DESIGN X-SECTIONS (JUNE/JULY 2002)

HORIZONTAL GRAPHIC SCALE

100' 50' 0 100' 200'

10' 5' 0 10' 20'

VERTICAL GRAPHIC SCALE

FOR INFORMATION ONLY

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COASTAL RESTORATION DIVISION
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

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DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

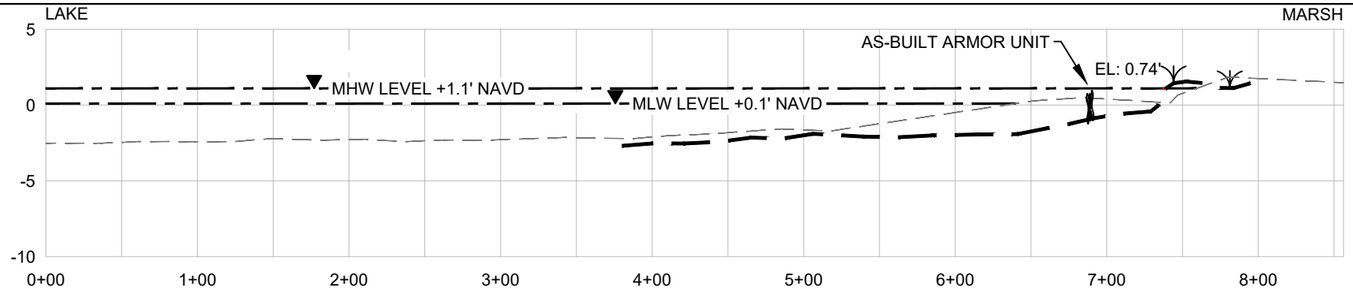
APPROVED BY: ROLLAND MURA, P.E.

REACH A AND B PROFILES

DATE: DEC. 2019

SHEET 12 OF 25

FINAL PLANS



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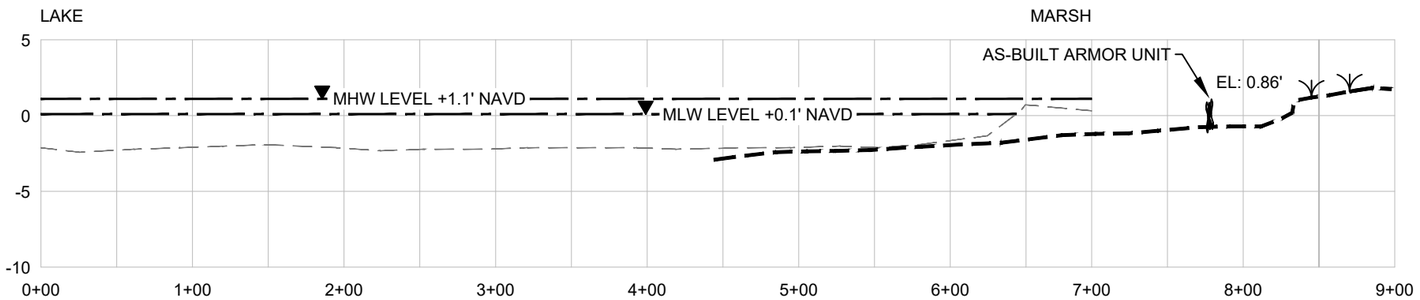

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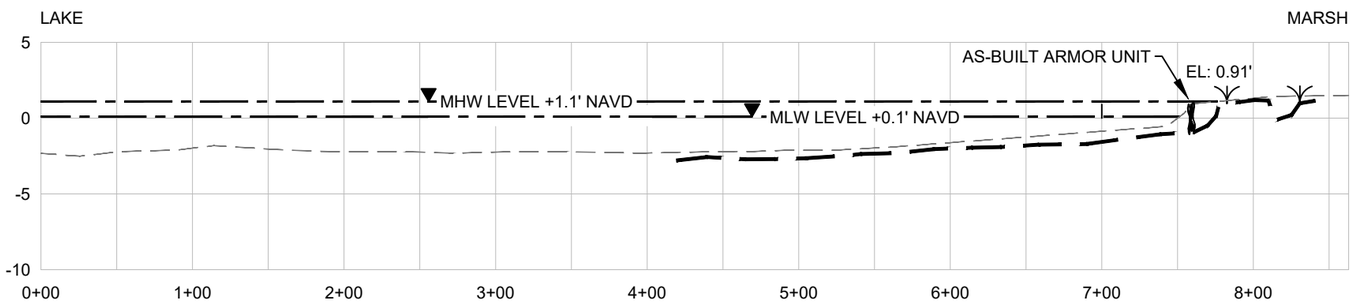

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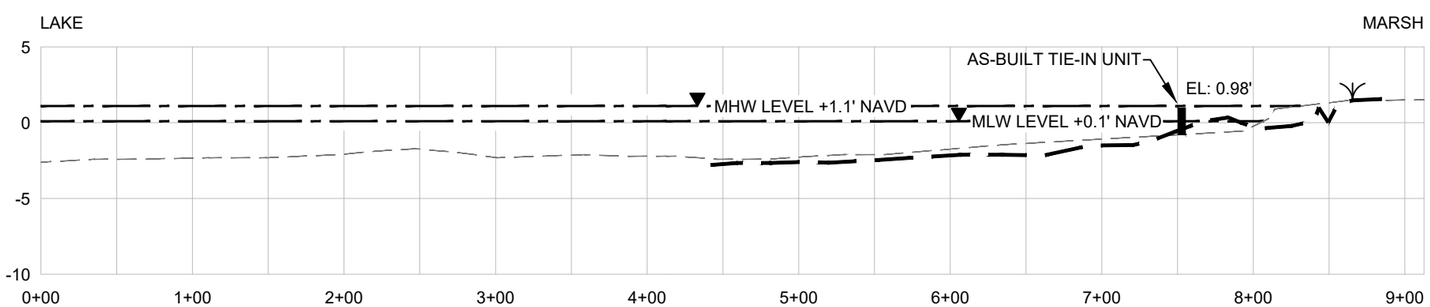

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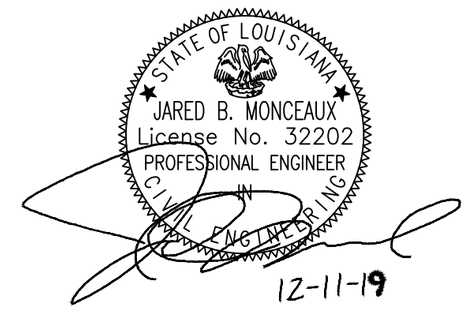

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STATE PROJECT NUMBER: TE-0045

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REACH A AND B PROFILES

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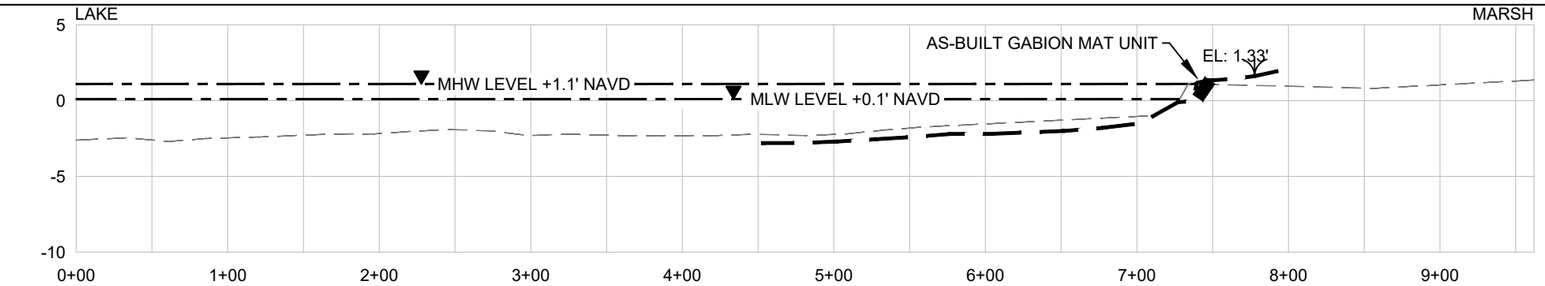
SHEET 13 OF 25

FINAL PLANS



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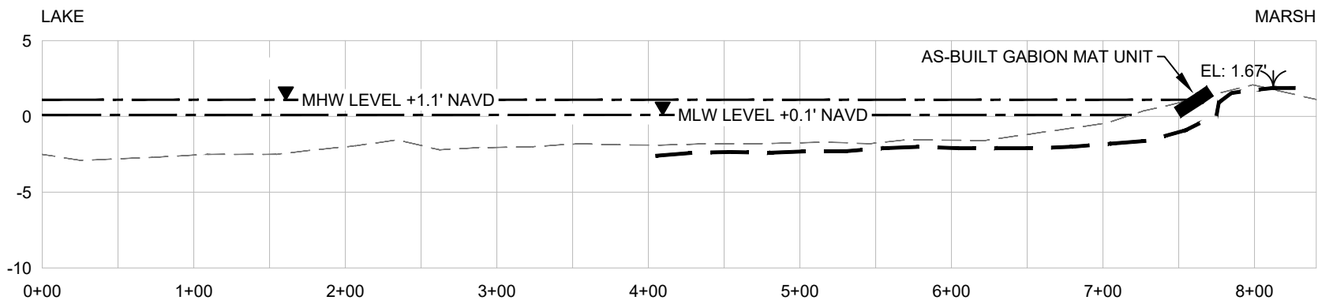

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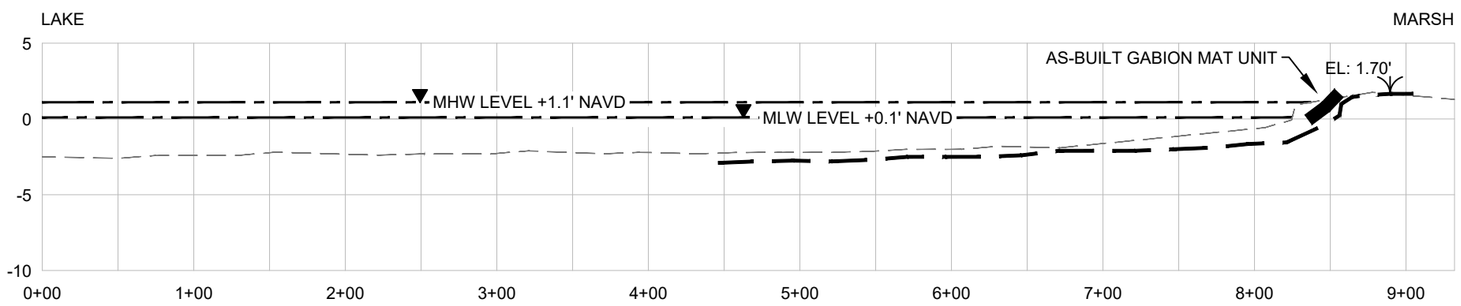

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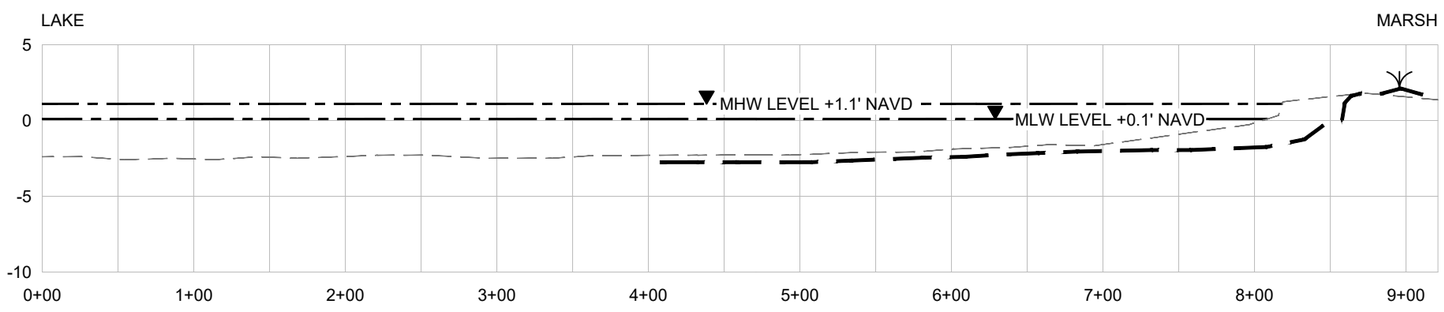

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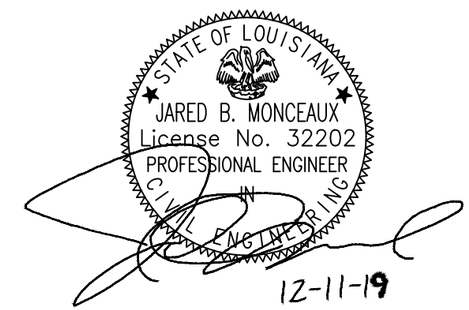

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100' 50' 0 100' 200'

10' 5' 0 10' 20'

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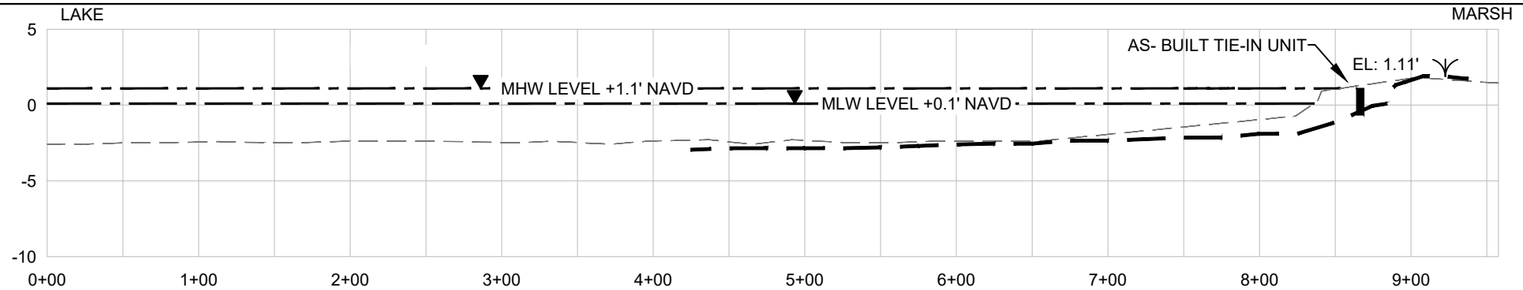
DRAWN BY: STEVE URQUHART | DESIGNED BY: JARED MONCEAUX, P.E. | APPROVED BY: ROLLAND MURA, P.E.

SHEET 14 OF 25

FINAL PLANS



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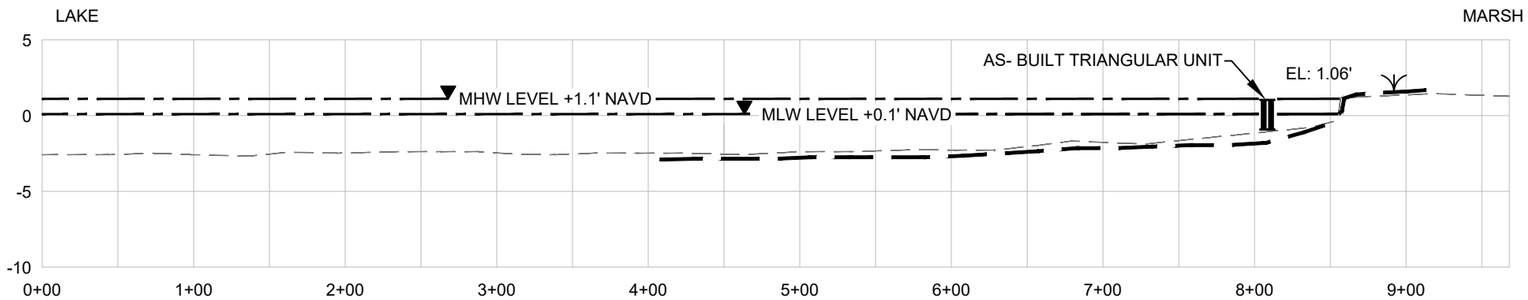

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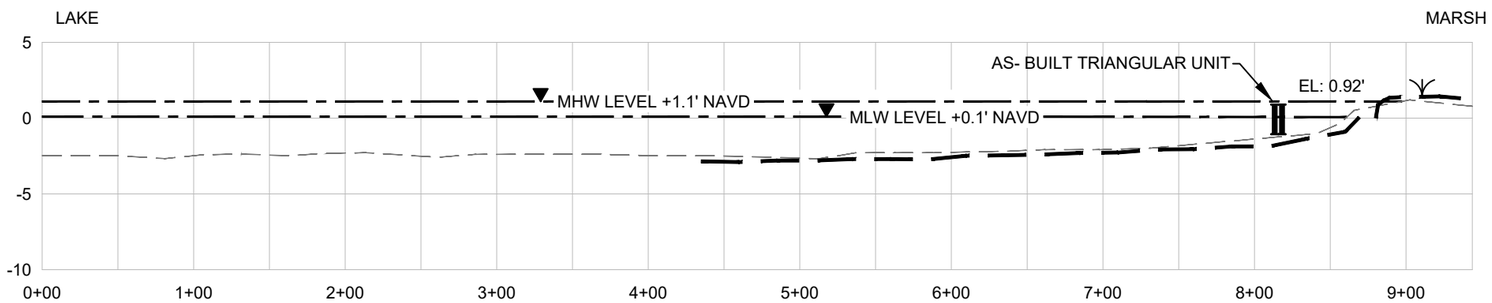

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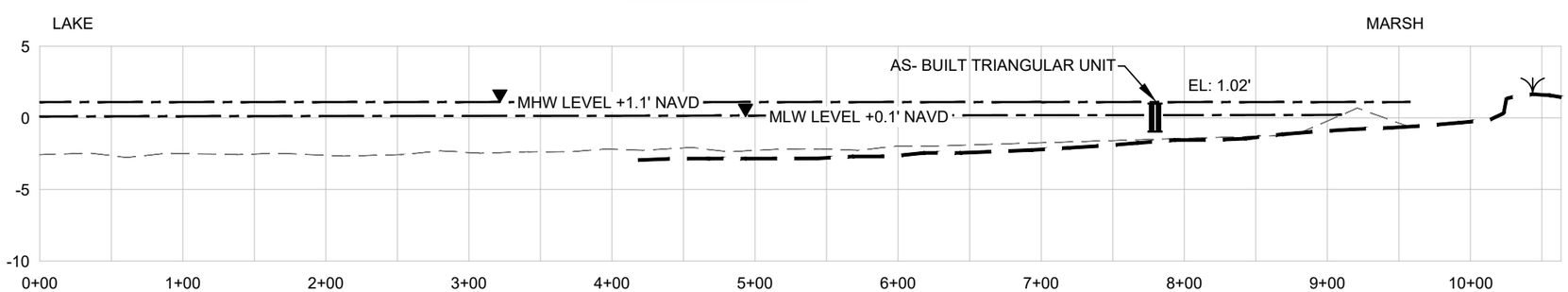

REACH A 17+00

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19

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LEGEND

PRE- CONSTRUCTION X-SECTIONS (SEPT 2007)

ORIGIONAL DESIGN X-SECTIONS (JUNE/JULY 2002)

HORIZONTAL GRAPHIC SCALE

100' 50' 0 100' 200'

10' 5' 0 10' 20'

VERTICAL GRAPHIC SCALE

FOR INFORMATION ONLY

HEI
Hartman Engineering, Inc.
Consulting Engineers

REV.	DATE	DESCRIPTION	BY

LOUISIANA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESTORATION DIVISION
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

DRAWN BY: STEVE URQUHART
DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

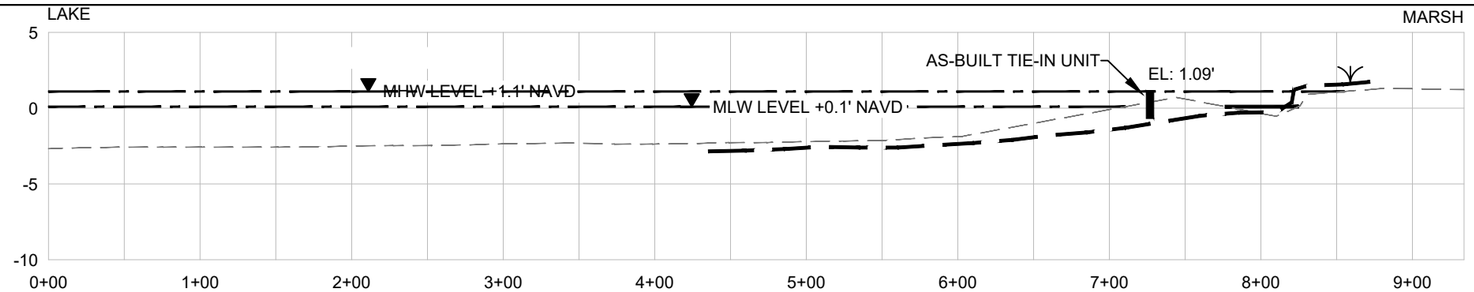
APPROVED BY: ROLLAND MURA, P.E.

REACH A AND B PROFILES

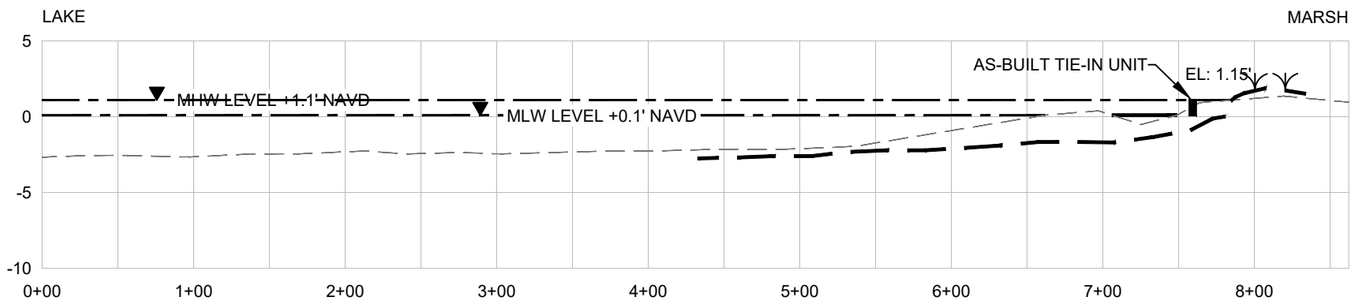
DATE: DEC. 2019

SHEET 15 OF 25

FINAL PLANS



REACH A 18+00



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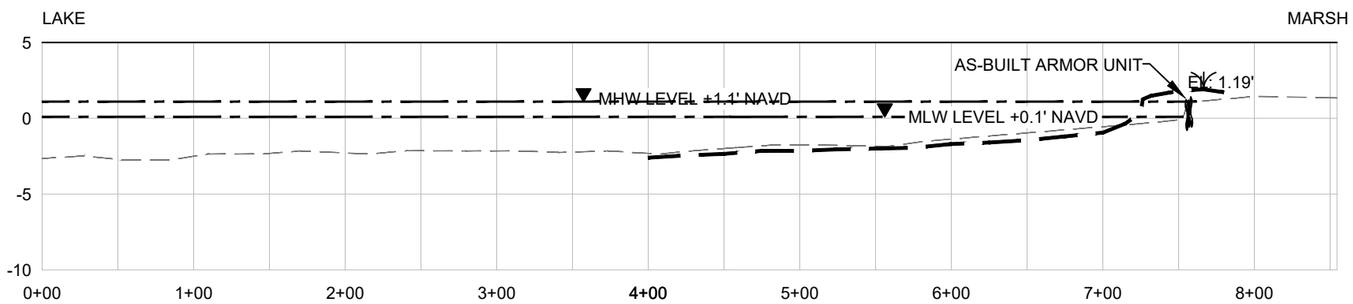

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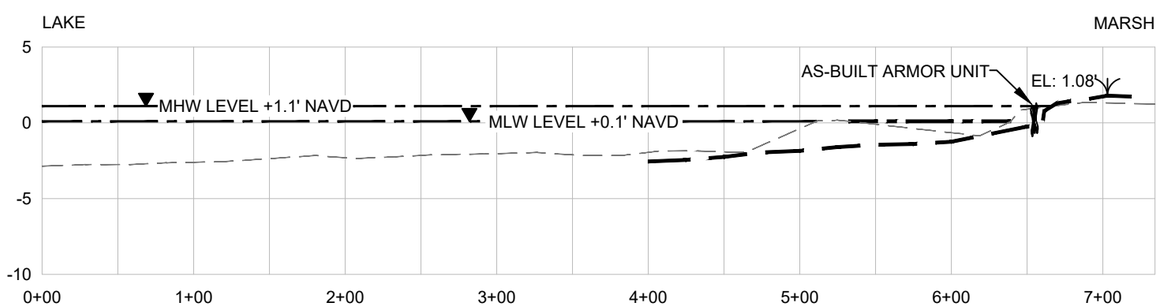

REACH A 21+00

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ORIGIONAL DESIGN X-SECTIONS (JUNE/JULY 2002)

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STATE PROJECT NUMBER: TE-0045

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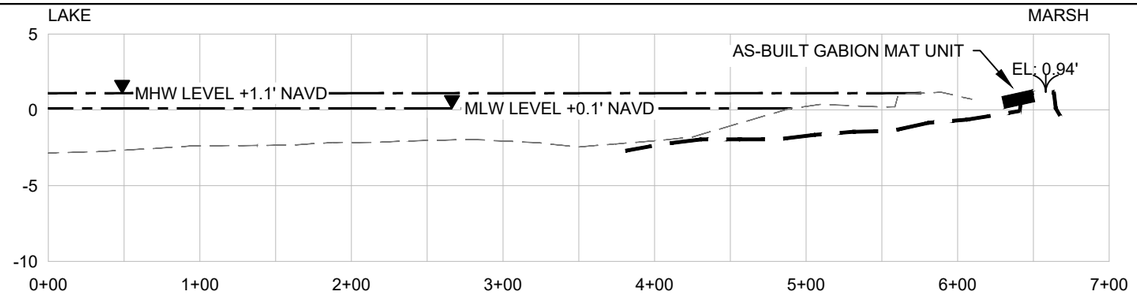
DATE: DEC. 2019

SHEET 16 OF 25

FINAL PLANS



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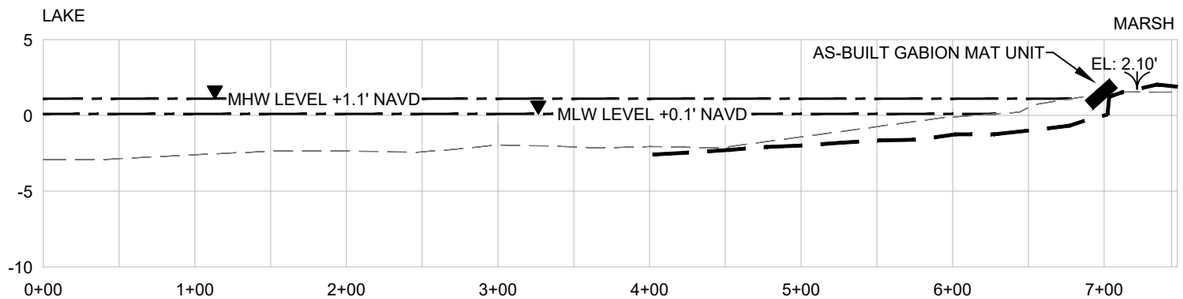

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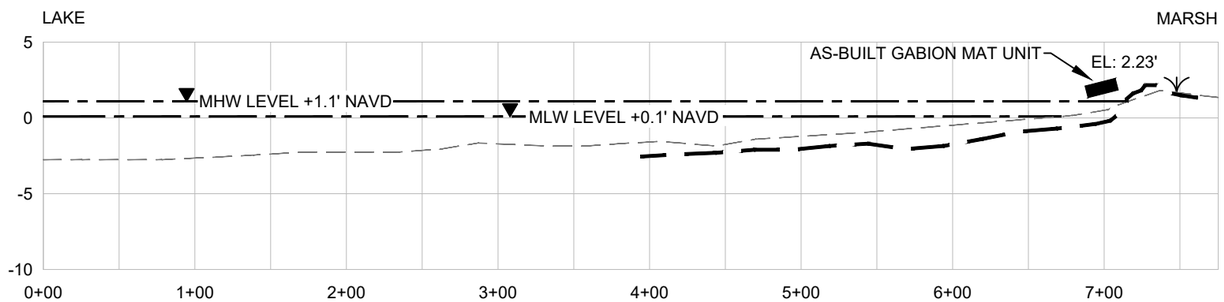

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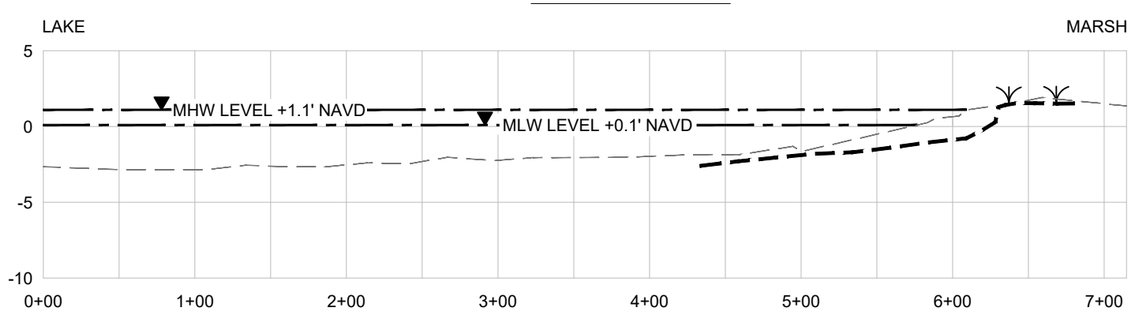

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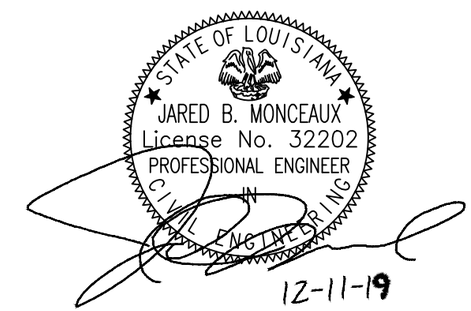

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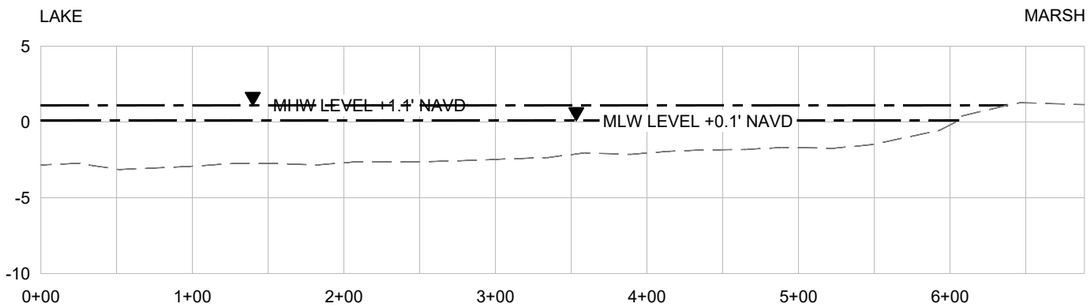
FINAL PLANS



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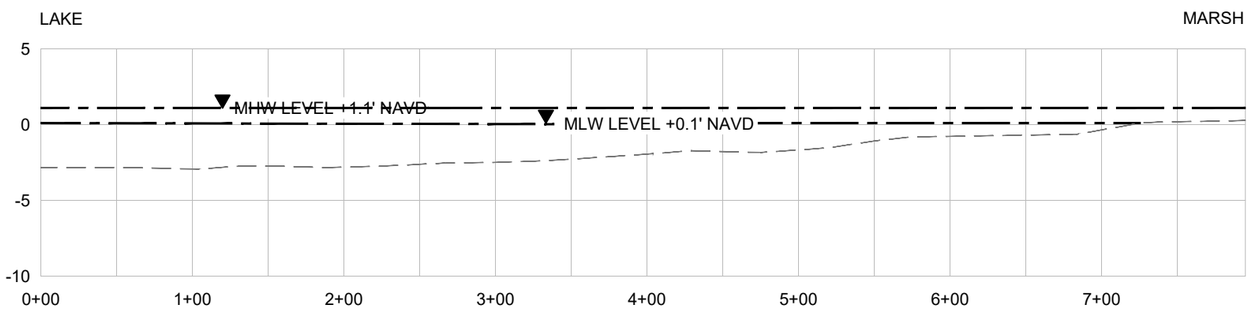

REACH A 27+00

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
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12-11-19

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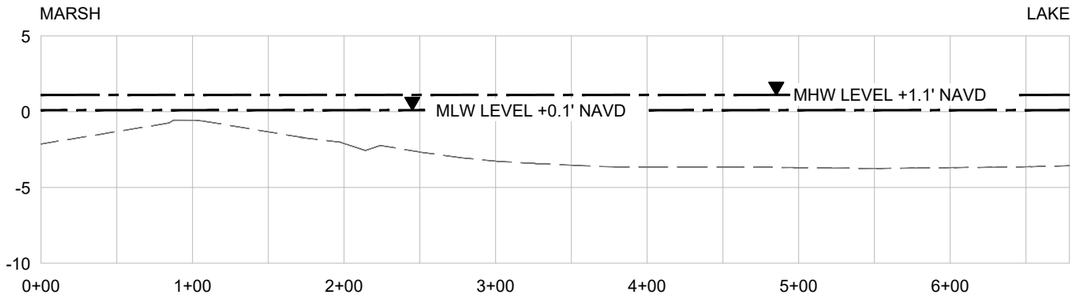
SHEET 18 OF 25

FINAL PLANS



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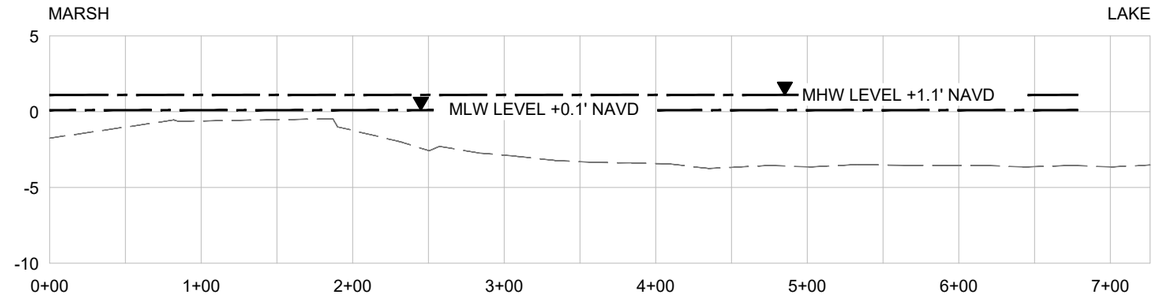

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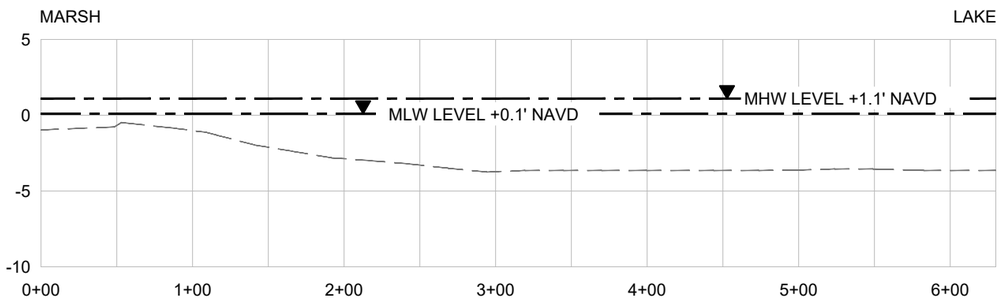

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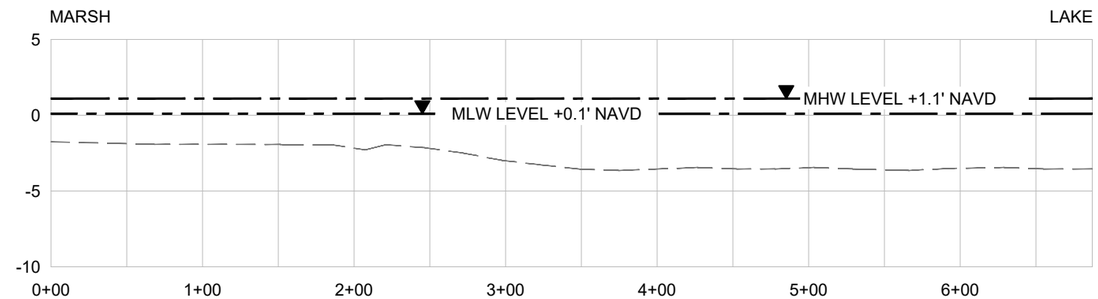

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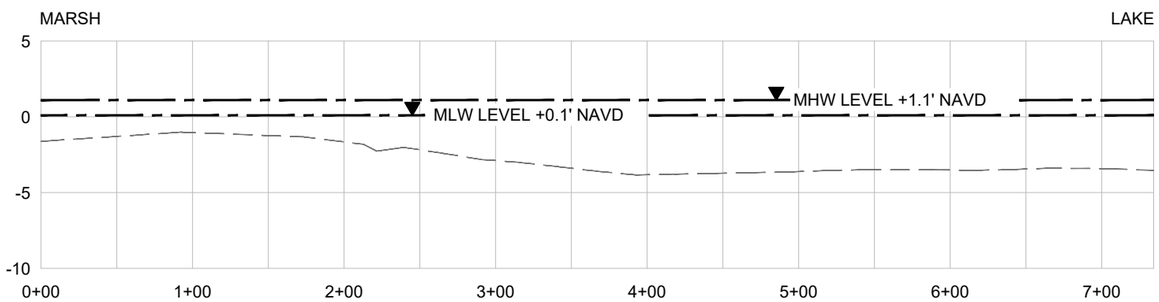

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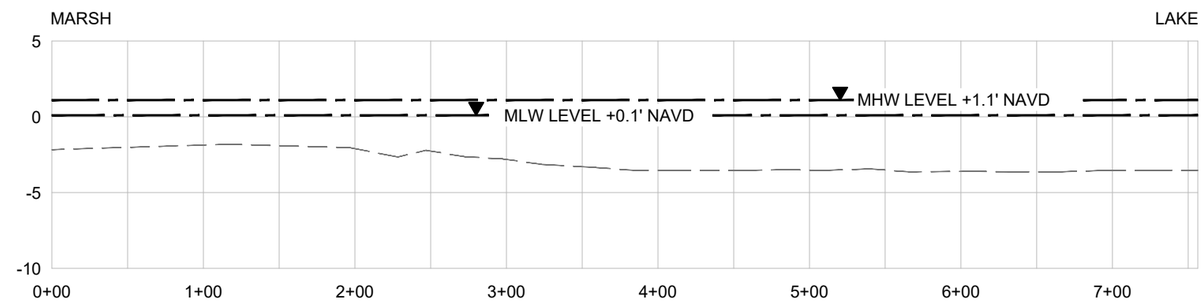

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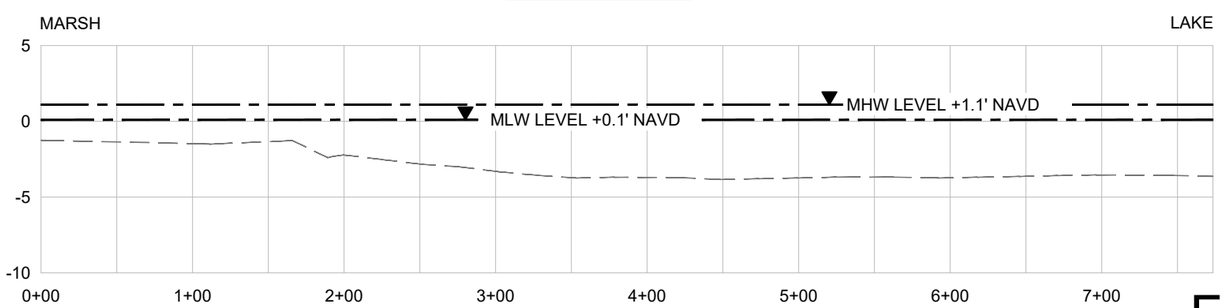

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LEGEND

PRE-CONSTRUCTION X-SECTIONS (SEPT 2007)

ORIGIONAL DESIGN X-SECTIONS (JUNE/JULY 2002)

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

12-11-19

FOR INFORMATION ONLY

HORIZONTAL GRAPHIC SCALE

100' 50' 0 100' 200'

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150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

DRAWN BY: STEVE URQUHART
DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

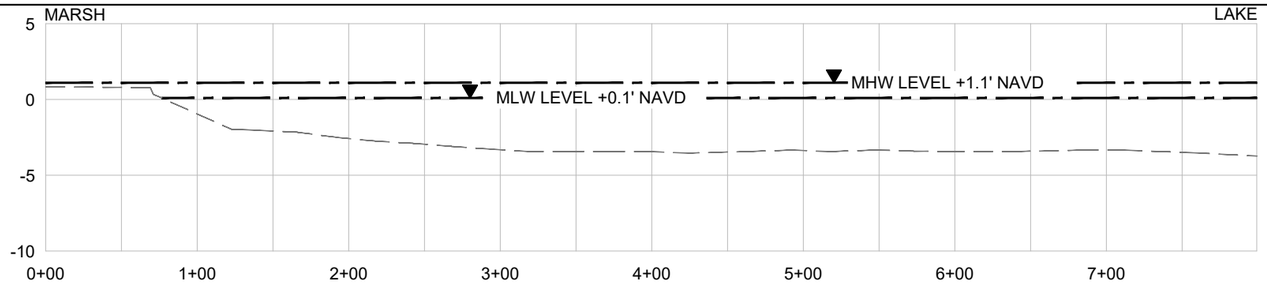
APPROVED BY: ROLLAND MURA, P.E.

REACH E PROFILES

DATE: DEC. 2019

SHEET 19 OF 25

FINAL PLANS



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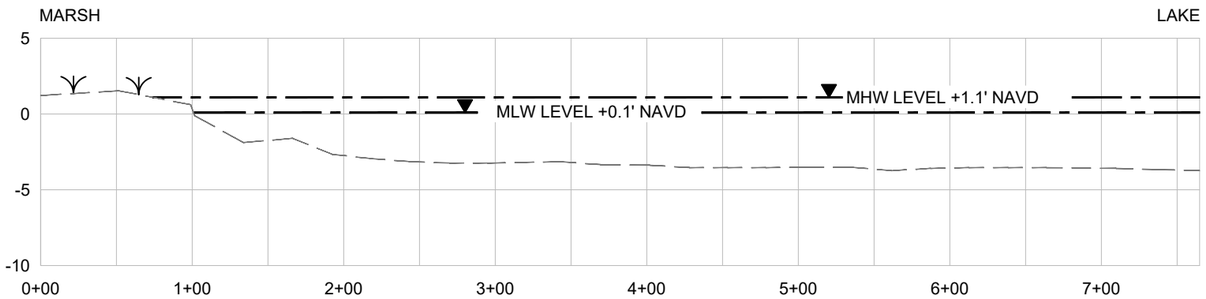

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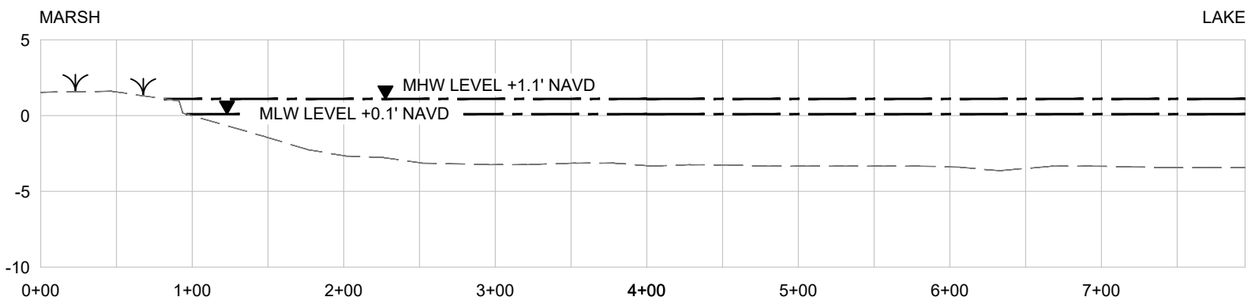

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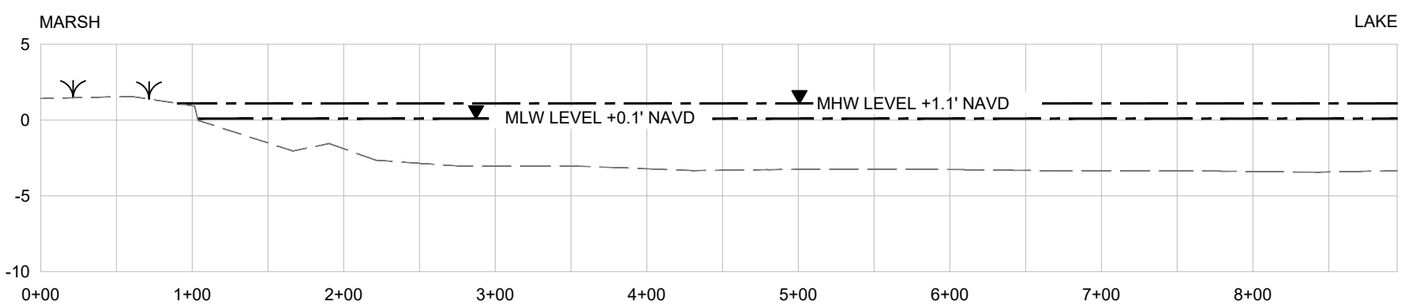

REACH E 10+00

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STATE PROJECT NUMBER: TE-0045

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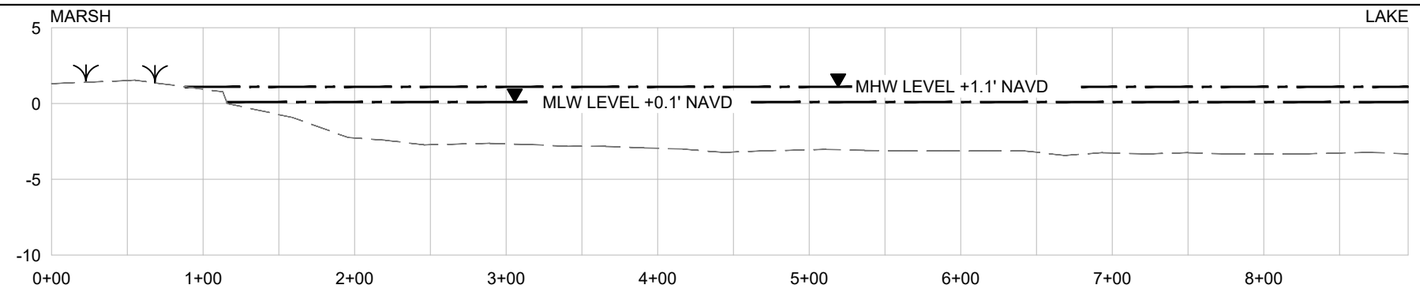
DATE: DEC. 2019

SHEET 20 OF 25

FINAL PLANS



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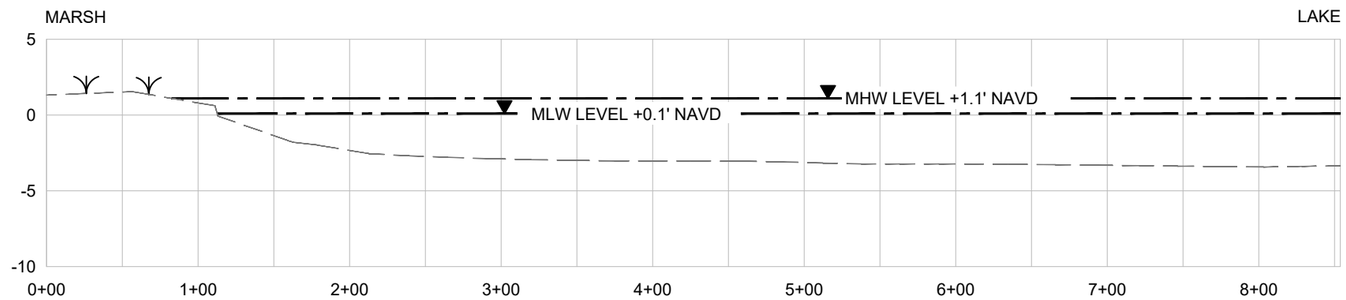

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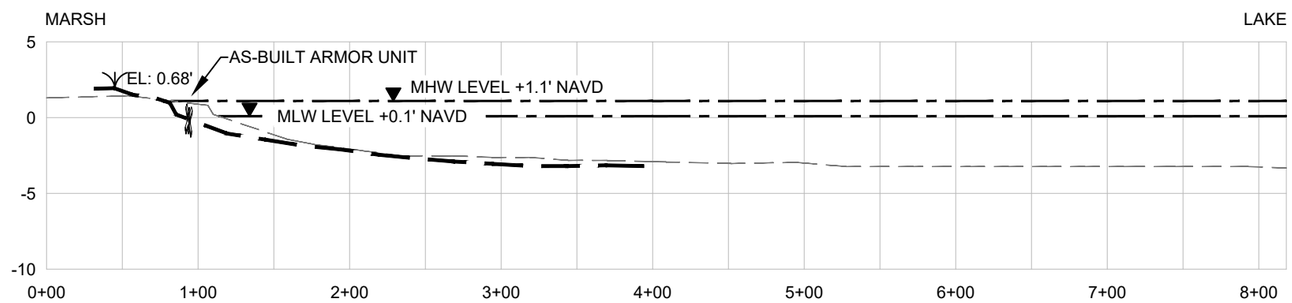

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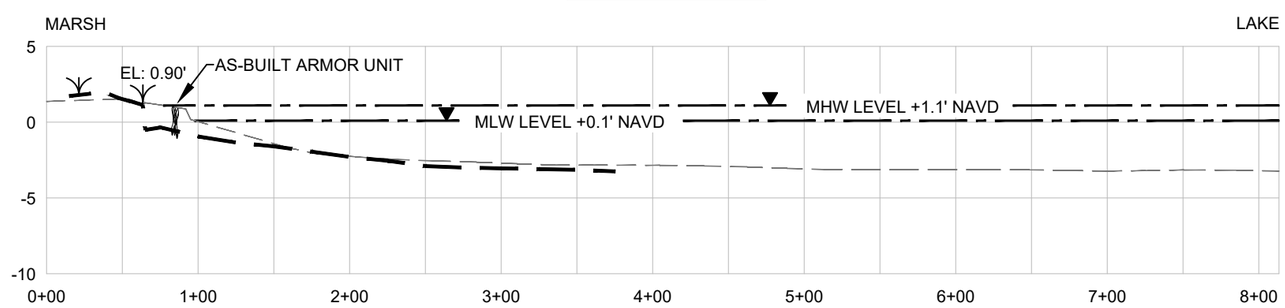

REACH E 14+00

STATE OF LOUISIANA
JARED B. MONCEAUX
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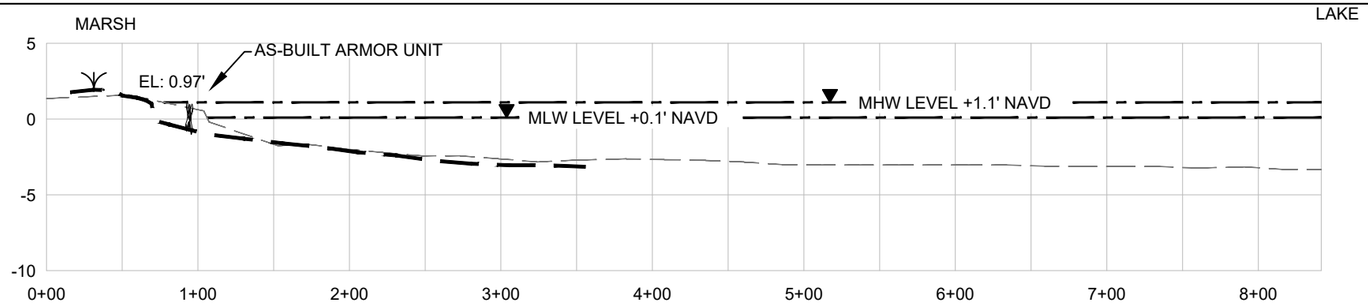
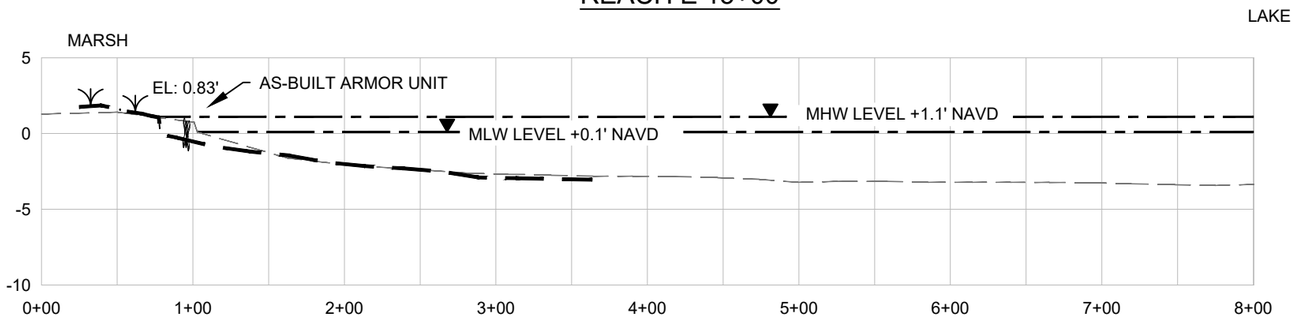
SHEET 21 OF 25

FINAL PLANS



REACH E 15+00



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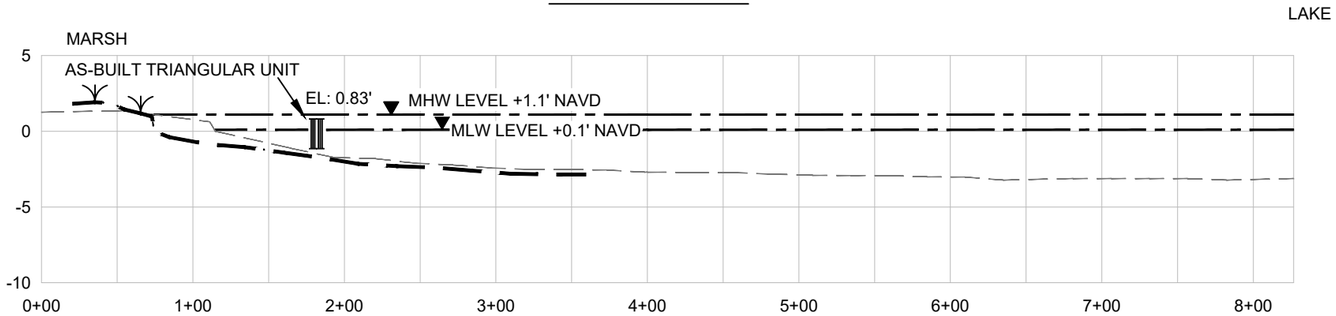

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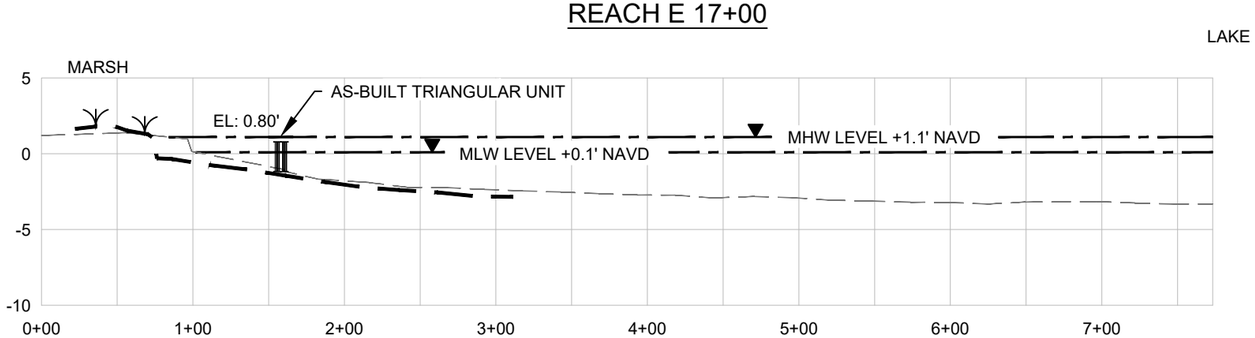
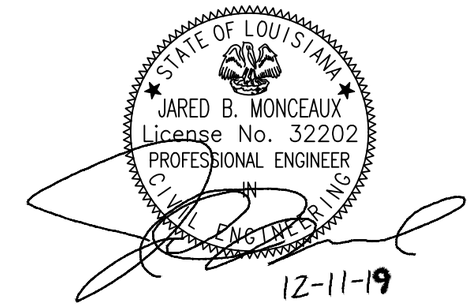


REACH E 18+00



FOR INFORMATION ONLY

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LEGEND

PRE-CONSTRUCTION X-SECTIONS (SEPT 2007)

ORIGIONAL DESIGN X-SECTIONS (JUNE/JULY 2002)

HORIZONTAL GRAPHIC SCALE

100' 50' 0 100' 200'

10' 5' 0 10' 20'

VERTICAL GRAPHIC SCALE

HEI
Hartman Engineering, Inc.
Consulting Engineers

REV.	DATE	DESCRIPTION	BY

LOUISIANA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESTORATION DIVISION
150 TERRACE AVENUE
BATON ROUGE, LOUISIANA 70802

DRAWN BY: STEVE URQUHART
DESIGNED BY: JARED MONCEAUX, P.E.

TERREBONNE BAY SHORELINE DEMONSTRATION - FEATURES REMOVAL PROJECT TE-0045

STATE PROJECT NUMBER: TE-0045

FEDERAL PROJECT NUMBER:

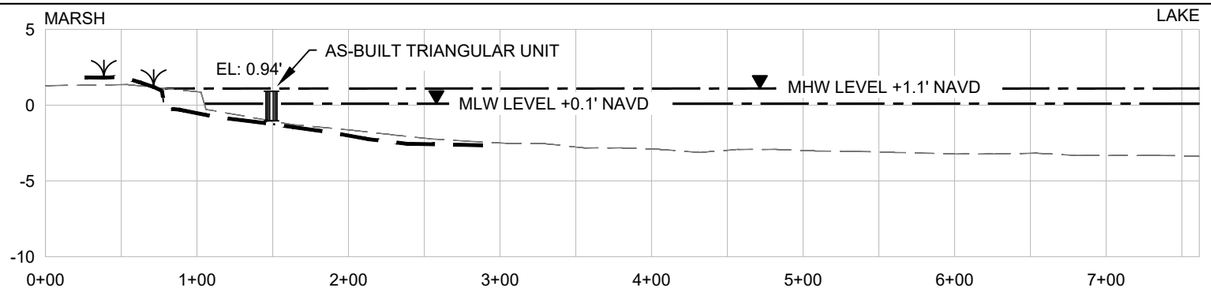
APPROVED BY: ROLLAND MURA, P.E.

REACH E PROFILES

DATE: DEC. 2019

SHEET 22 OF 25

FINAL PLANS



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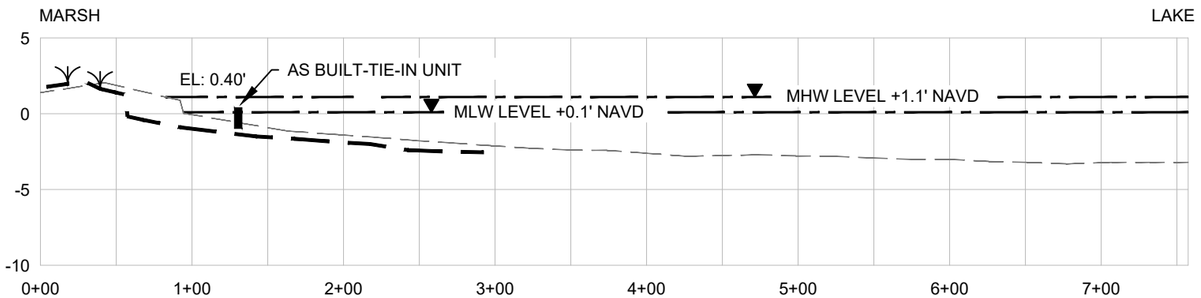

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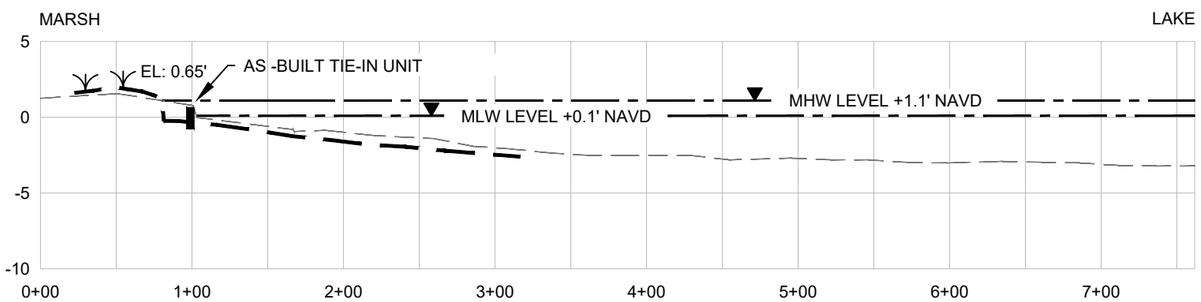

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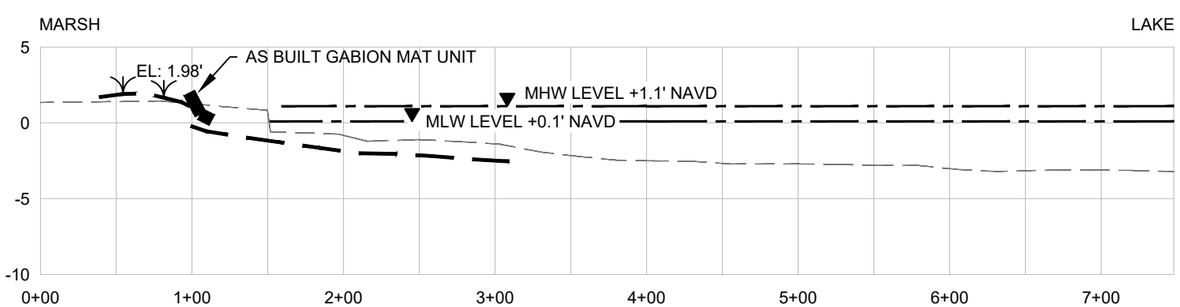

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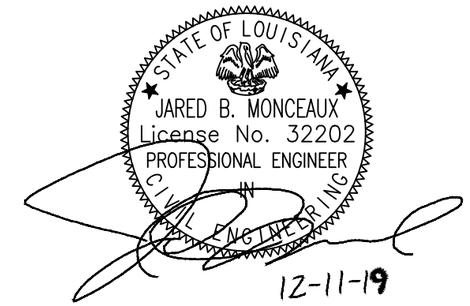

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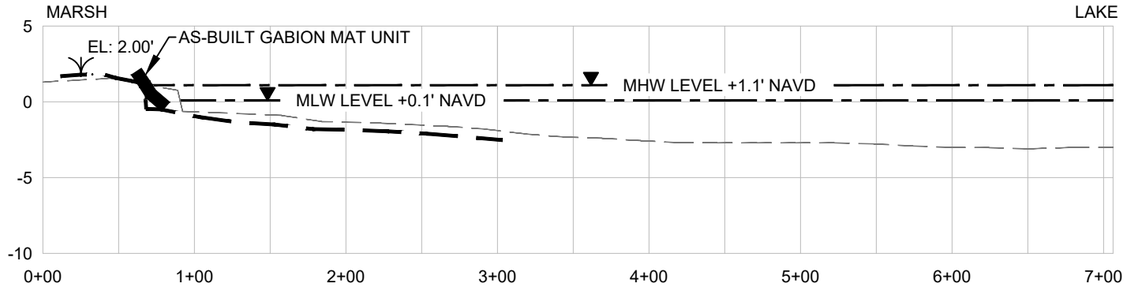
SHEET 23 OF 25

FINAL PLANS



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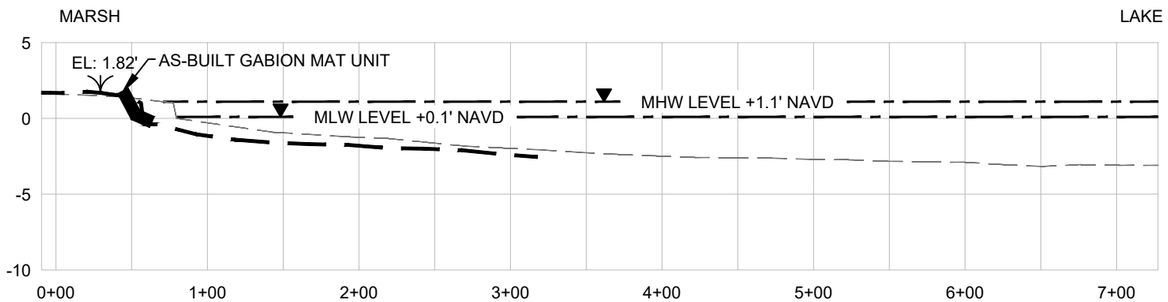

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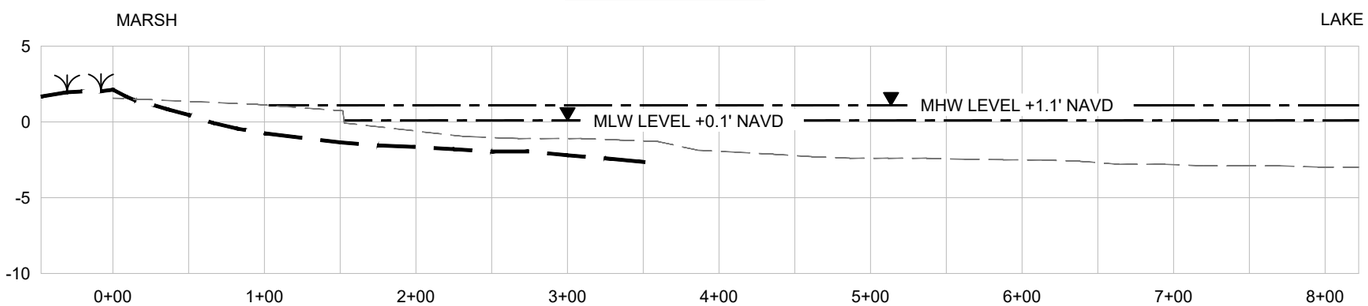

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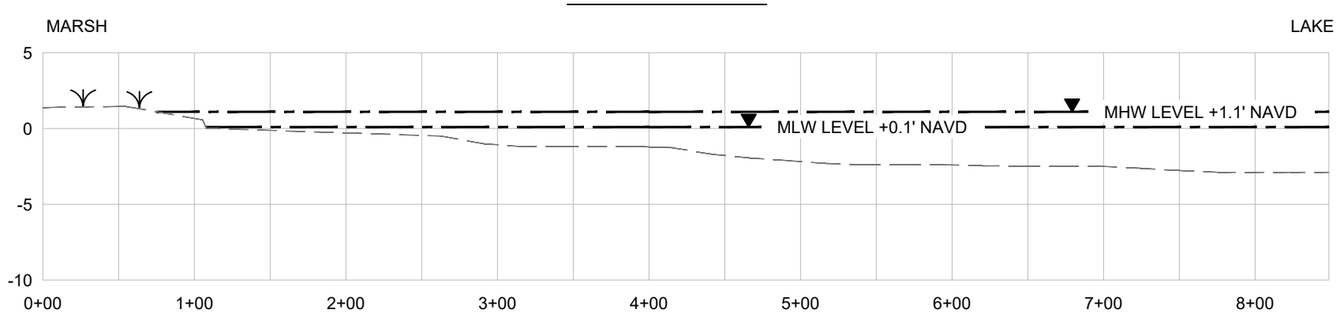

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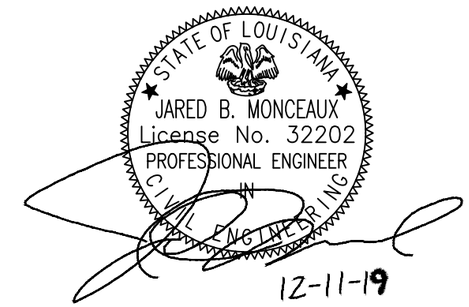

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STATE PROJECT NUMBER: TE-0045

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APPROVED BY: ROLLAND MURA, P.E.

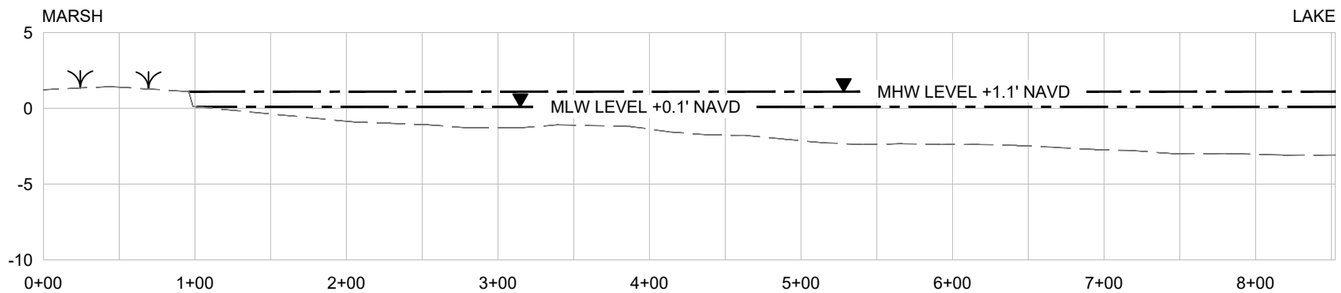
REACH E PROFILES

DATE: DEC. 2019

SHEET 24 OF 25

FINAL PLANS

STATE OF LOUISIANA
JARED B. MONCEAUX
License No. 32202
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
12-11-19



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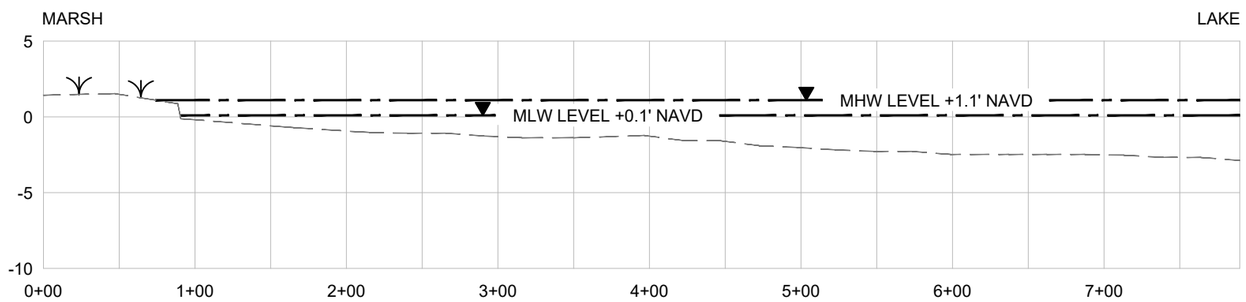

REACH E 28+00

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SHEET 25 OF 25