



Coastal Protection and
Restoration Authority of Louisiana

**State of Louisiana
Office of Coastal Protection and
Restoration**

2011 Annual Inspection Report

for

**LITTLE LAKE SHORELINE
PROTECTION / DEDICATED
DREDGING NEAR ROUND LAKE
(BA-37)**

State Project Number BA-37
Priority Project List 11

July 30, 2011
Lafourche Parish

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I. Introduction

The Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project is a shoreline protection and marsh creation project located in the central Barataria Basin in Lafourche Parish, Louisiana. The project area lies along the southwestern shoreline of Little Lake from Breton Canal to Plumb Point (See Appendix A).

The Little Lake Shoreline Protection / Dedicated Dredging near Round Lake project is co-sponsored by the National Marine Fisheries Service (NMFS) and the Louisiana Office of Coastal Protection and Restoration (OCPR). The project was authorized by Section 303(a) of Title III Public Law 4101-646, the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) enacted on November 29, 1990, as amended. The project was approved on the eleventh (11th) Project Priority List.

The property associated with the Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project is owned by Clovelly Lands, a subsidiary of General Agricultural Services, Ltd.

II. Inspection Purpose and Procedures

The purpose of the annual inspection of the Little Lake Shoreline Protection / Dedicated Dredging near Round Lake Project (BA-37) is to evaluate the constructed project features in order to identify any deficiencies. The inspection results are used to prepare a report detailing the condition of the project features and recommending any corrective actions considered necessary. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, construction, and contingencies and an assessment of the urgency of such repairs (O&M Plan, 2008). The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance, and rehabilitation. In addition to the three (3) year budget, a spreadsheet has been included showing the baseline O&M funding, current approved O&M funding levels, and the twenty (20) year projected expenditures for the remaining project life. The three (3) year and twenty (20) year projections for operation and maintenance are shown in Appendix C. A summary of past operation and maintenance projects completed since construction of the Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project is outlined in Section IV.

The annual inspection of the Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project (BA-37) took place on June 27, 2011. In attendance were Brian Babin, Shane Triche, and Adam Ledet from OCPR; Joy Merino and Phillip Parker with NMFS. The attendees met at the Clovelly Canal Public Boat Launch and traveled to the project site by boat. A water elevation reading of 1.50 ft was taken at BA02-SG-57 at approximately 12:00 pm. The annual inspection began at approximately 9:30 a.m. at the west end of the rock shoreline protection at Segment 1 in Bay L'Ours and ended at the southeast end of the rock

dike at John the Fool Bayou. The field trip included a visual inspection of the 24 rock dike segments of the shoreline protection, all warning signs, and the outer edges of the marsh creation area. The marsh creation area was viewed from the northern boundary along the south shoreline of Round Lake and at the southwest corner of the marsh creation area. The inspection ended at approximately 12:30 pm. Photographs from the inspection are located in Appendix B.

III. Project Description and History

The project consisted of constructing 25,976 linear feet of shoreline protection rock dike in open water along the Little Lake shoreline and using dredged material from Little Lake to create/nourish 920 acres of marsh along the Little Lake shoreline.

The project area is characterized by open water areas and fragmented intermediate marsh with a high rate of marsh loss due to shoreline erosion, subsidence, and pipeline and oilfield access canal construction. The purpose of the project is to reduce erosion along the Little Lake shoreline, create new marsh in the open water areas, and maintain and nourish the existing, deteriorated marsh.

The principle project features include:

- Shoreline Protection – 25,976 feet of rock dike constructed in 24 segments along the shoreline. Two lifts were constructed over the entire length using DOTD Class 250-lb rock with top EL 2.5' NAVD88 (first lift to EL 1.0'), 3.5' crown width, 4:1 front slope and 2:1 back slope. The rock dike was constructed on a geotextile fabric base. Fish dips (20' openings in the dike) are located between the segments with a 2-ft thick, 40-ft wide rock scour pad constructed at each dip flush with existing bottom. A third lift was constructed along segments 10 through 24 using Corps Class R650 rock. For segments 10 through 20 the lift was placed to top EL 3.5' NAVD88, with 2.0' crown width, and 2:1 front and back slopes. Segments 21 and 22 were placed to top EL 4.0' NAVD88, with 2.0' crown width, and 2:1 front and back slopes. Segments 23 and 24 were placed to top EL 4.0' NAVD88, with 3.5' crown width, 4:1 front slope and 2:1 back slope. Galvanized steel settlement plate riser pipes were installed in each rock segment.

Segments 1 – 24: Two lifts DOTD Class 250-lb, EL 2.5' NAVD88, 3.5' crown width, 4:1 front slope and 2:1 back slope

Segments 10 – 20: Third lift Corps Class R650, EL 3.5' NAVD88, 2.0' crown width, 2:1 front and back slopes

Segments 21 and 22: Third lift Corps Class R650, EL 4.0' NAVD88, 2.0' crown width, 2:1 front and back slopes

Segments 23 and 24: Third lift Corps Class R650, EL 4.0' NAVD88, 3.5' crown width, 4:1 front slope and 2:1 back slope

- **Marsh Creation/Nourishment** – Approximately 920 acres was filled with dredge material cut from Little Lake with a target fill height of EL 2.1' NAVD88 (min EL 1.8' and max EL 2.4'). Actual fill elevations varied across the site; however, the average elevation (derived from the individual grid elevations) of the as-built marsh creation area was EL 2.3' NAVD88. For specific as-built elevations of marsh creation area grid points, see Project Completion Report and As-Built Drawings (2007). The in-place fill volume was computed as 3,463,089 cubic yards based on the as-built surveys. The estimated volume of material cut from the borrow area was 3,818,213 cubic yards.

Additionally, 17,000 *spartina alterniflora* (smooth cordgrass) plugs were planted in the marsh creation area.

The Little Lake Shoreline Protection / Dedicated Dredging near Round Lake Project (BA-37) has a twenty-year (20 year) project life which began in March 2007. Attached is the three (3) year projected budget for the project (See Appendix C).

IV. Summary of Past Operation and Maintenance Projects

Below is a summary of completed maintenance projects and operation tasks performed since completion of the Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project (BA-37).

May 2008 – Survey of marsh creation area was performed by Shaw Coastal, Inc. The marsh elevations at the grid points within the marsh creation area as well as top elevations of the 24 rock dike settlement plates were collected. This survey represents the first of the scheduled O&M surveys to be performed but is actually the second post-construction survey. The first post-construction survey was performed by Shaw Coastal, Inc. in May 2007 with remaining construction funds immediately following acceptance of the project. The actual surveying consultant costs associated with the 2008 survey was \$36,007.28.

July 2009 – Survey of marsh creation area was performed by Shaw Coastal, Inc. The marsh elevations at the grid points within the marsh creation area as well as top elevations of the 24 rock dike settlement plates were collected. This survey represents the second of the scheduled O&M surveys to be performed but is actually the third post-construction survey. The actual surveying consultant costs associated with the 2009 survey was \$42,590.40.

July 2010 – Survey of marsh creation area was performed by Morris Hebert, Inc. The marsh elevations and the grid points within the marsh creation area as well as the tops elevations of the rock dike settlement plates were collected. This survey represents the third of the scheduled O&M surveys to be performed but is actually the fourth post-construction survey. The actual surveying consultant costs associated with the 2010 survey is \$23,500.

V. Inspection Results

Rock Segments 1 – 24 (Photos 1 – 21, 25 – 30, Appendix B)

All rock segments were visually inspected by boat. As expected, it appears all rock segments have experienced some amount of rock settlement. Some segments have portions that are below EL 2.5 FT including those that did not receive a third lift during construction (1-5, 8, 9). Check points along the rock segments are to be collected in the 2011 O&M survey to confirm the rock segment settlement observed. There are no recommendations for corrective action at this time; however the segments should continue to be monitored for further settlement.

The elevations of the settlement plates were initially surveyed after construction in 2007, and again in 2008, 2009, and 2010 (see Figure 1). Comparing the final construction survey elevations of the settlement plates (February 2007) to the latest settlement plate survey (July 2010) shows an average settlement of 0.30 feet across the 24 segments, with the most extreme settlement being 0.50 feet. As per the O&M Plan, the settlement plates (along with the marsh creation areas) will continue to be surveyed annually for the first five years following construction, and then again in years 10 and 15. And as noted above, we will also obtain an elevation profile of the top of the entire rock dike along with settlement plate elevations to better determine post-construction settlement and plan for possible maintenance lifts, if needed.

Spoil that was placed behind the rock segments has fully vegetated. Also, it appears that the SAV (submerged aquatic vegetation) behind the rock segments continues to increase from past inspections. This can be seen in the inspection photos located in Appendix B.

Currently, Rock Segments 1 and 2 have no marsh or vegetation along their southern edge, only open water. The fringe marsh that once separated Brusle Lake and Bay L'Ours, located along Rock Segments 1 and 2, has been eroded below the water level by Hurricane Katrina. This land loss occurred during construction of the project and the rock segments were put in place as designed and contracted. There are no recommendations for maintenance at this time; however this site will continue to be monitored to determine if the rock segments have become a hazard, and corrective actions will be conducted as needed.

Marsh Creation Area (Photos 22 – 24, Appendix B)

The fill material in the marsh creation area has fully vegetated. As mentioned above, marsh creation area grid point "O&M" surveys were performed in May 2008, June 2009, and July 2010 as well as "as-built" and 9-month post-placement (May 2007) surveys. Figure 2 is a map showing the elevations associated with the "as-built", 9-month post-placement (May 2007), and May 2008 surveys of the marsh creation area. Additionally, Figure 3 is a map showing elevations from the last two surveys (2009 and 2010). The average grid elevations for the marsh creation area surveys are shown in the table below.

Survey	Average Grid Elevation (FT, NAVD88)
As-Built (May-Aug 2006)	2.2
Post-Construction (May 2007)	1.49
Post-Construction (May 2008)	1.40
Post-Construction (June 2009)	1.14
Post-Construction (July 2010)	1.23

Although there are two additional “O&M” surveys scheduled (of the five annual surveys for the first five years), we recommend only one of the remaining surveys be performed. A survey was performed in May 2007 with remaining construction funds, and this data serves as the first of the five annual surveys after construction completion. The 2011 rock dike profile and marsh survey will serve as the fifth and final annual survey following construction. It is anticipated that the 2011 survey will begin in early September 2011 and will be reported upon in the 2012 Annual Inspection report. There will also be “O&M” surveys of the marsh creation area in Years 10 and 15 as per the O&M Plan.

VI. Conclusions and Recommendations

Based on the visual observations during the annual inspection and the settlement plate data from the post-construction surveys, the rock dike segments have experienced some settlement. Settlement is typical and anticipated for a rock dike structure of this type. The segments that did not receive a third lift are at the lowest elevation and will eventually need an additional lift. In order to obtain an adequate assessment of dike settlement, we have tasked Morris P. Hebert, Inc. of Houma, La. to perform a survey profile and transect of all 24 rock dike segments to gather additional elevation data not collected during the previous four (4) post-construction surveys. The additional data (extending survey to the marsh edge) will help in identifying low areas along the shoreline protection feature and provide information needed for planning upcoming maintenance events. At this time we are not recommending any corrective actions or maintenance of the shoreline protection feature. Further recommendations regarding potential rock lifts will be re-evaluated after review of the elevation data obtained from the 2011 rock dike survey which should be completed by November 2011.

The marsh creation area appears to be completely vegetated and the surveys indicate its elevations are approaching the average marsh elevation for the area. There are no funds allocated for the marsh creation portion of the project other than the surveying of the area grid points. . We recommend that the 2011 survey (2010/2011) be the last of the first five annual surveys as we will have five total data sets for post-construction analysis, in addition to the 10 and 15 year survey as per the O&M Plan. The survey data along with the annual visual inspections will monitor the consolidation and settlement of the fill material and the resulting elevations within the marsh creation area.

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SETTLEMENT PLATES																			
S.P. #	STATION	CONSTRUCTION						POST-CONSTRUCTION				POST-CONSTRUCTION				POST-CONSTRUCTION			
		DATE INSTALLED	ELEV. INST.	FINAL ELEV.	DATE OF FINAL ELEV.	Δ (FT) (INST. TO FINAL)	TIME (DAYS)	2008 ELEV.	DATE OF 2008 ELEV.	Δ (FT) (FINAL TO 2008)	TIME (DAYS)	2009 ELEV.	DATE OF 2009 ELEV.	Δ (FT) (FINAL TO 2009)	TIME (DAYS)	2010 ELEV.	DATE OF 2010 ELEV.	Δ (FT) (FINAL TO 2010)	TIME (DAYS)
1	14+23	11/27/06	6.48	5.87	02/11/07	-0.61	76	5.71	05/02/08	-0.16	446	5.62	08/20/09	-0.25	921	5.60	07/26/10	-0.27	1261
2	23+93	11/14/06	6.32	3.95	02/11/07	-2.37	89	3.60	05/02/08	-0.36	446	3.48	08/20/09	-0.48	921	3.56	07/26/10	-0.39	1261
3	34+22	11/09/06	7.02	5.17	02/11/07	-1.85	94	4.93	05/02/08	-0.23	446	4.94	08/20/09	-0.23	921	4.94	07/26/10	-0.23	1261
4	44+41	11/06/06	6.96	4.57	02/11/07	-2.39	97	4.41	05/02/08	-0.16	446	4.46	08/20/09	-0.12	921	4.32	07/26/10	-0.25	1261
5	54+75	11/06/06	7.71	5.90	02/11/07	-1.81	97	5.66	05/02/08	-0.23	446	5.65	08/20/09	-0.25	921	5.48	07/26/10	-0.42	1261
6	63+17	11/05/06	6.98	4.70	02/11/07	-2.28	98	4.70	05/02/08	0.00	446	4.61	08/20/09	-0.09	921	4.56	07/26/10	-0.14	1261
7	71+47	11/05/06	7.92	4.42	02/11/07	-3.50	98	4.08	05/02/08	-0.34	446	4.03	08/20/09	-0.39	921	4.20	07/26/10	-0.23	1261
8	82+37	10/25/06	6.98	5.51	02/11/07	-1.47	109	5.32	05/02/08	-0.19	446	5.29	08/20/09	-0.22	921	5.33	07/26/10	-0.18	1261
9	92+32	10/26/06	6.70	5.84	02/11/07	-0.86	108	5.82	05/02/08	-0.02	446	5.82	08/20/09	-0.02	921	5.83	07/26/10	-0.01	1261
10	102+21	09/28/06	6.96	5.28	02/11/07	-1.68	136	5.18	05/02/08	-0.10	446	5.08	08/20/09	-0.20	921	5.26	07/26/10	-0.02	1261
11	112+90	09/01/06	6.40	4.19	02/11/07	-2.21	163	3.82	05/02/08	-0.37	446	3.69	08/20/09	-0.50	921	3.86	07/26/10	-0.33	1261
12	123+14	07/09/06	7.74	6.16	02/11/07	-1.58	217	5.74	05/02/08	-0.41	446	5.68	08/20/09	-0.48	921	5.66	07/26/10	-0.50	1261
13	133+25	07/06/06	7.32	3.61	02/11/07	-3.71	220	3.24	05/02/08	-0.37	446	3.09	08/20/09	-0.53	921	3.14	07/26/10	-0.48	1261
14	144+18	06/27/06	6.68	5.56	02/11/07	-1.12	229	5.38	05/02/08	-0.18	446	5.40	08/20/09	-0.16	921	5.29	07/26/10	-0.27	1261
15	154+23	06/16/06	7.02	5.17	02/11/07	-1.85	240	4.93	05/02/08	-0.24	446	4.96	08/20/09	-0.21	921	4.71	07/26/10	-0.45	1261
16	164+05	06/03/06	6.95	6.10	02/11/07	-0.85	253	5.93	05/02/08	-0.17	446	5.86	08/20/09	-0.24	921	5.82	07/26/10	-0.28	1261
17	175+51	05/21/06	7.53	6.36	02/11/07	-1.17	266	6.27	05/02/08	-0.10	446	6.27	08/20/09	-0.09	921	6.15	07/26/10	-0.21	1261
18	190+71	05/18/06	7.68	5.97	02/11/07	-1.71	269	5.74	05/02/08	-0.23	446	5.60	08/20/09	-0.38	921	5.58	07/26/10	-0.39	1261
19	203+43	05/06/06	8.51	6.27	02/11/07	-2.24	281	6.09	05/02/08	-0.18	446	5.94	08/20/09	-0.33	921	5.85	07/26/10	-0.41	1261
20	216+05	04/11/06	7.80	5.65	02/11/07	-2.15	306	5.52	05/02/08	-0.13	446	5.34	08/20/09	-0.30	921	5.28	07/26/10	-0.37	1261
21	229+62	04/05/06	7.31	4.81	02/11/07	-2.51	312	4.65	05/02/08	-0.15	446	4.34	08/20/09	-0.47	921	4.41	07/26/10	-0.40	1261
22	240+24	03/31/06	8.38	4.58	02/11/07	-3.80	317	4.35	05/02/08	-0.24	446	4.26	08/20/09	-0.32	921	4.21	07/26/10	-0.38	1261
23	250+46	03/26/06	7.64	5.16	02/11/07	-2.49	322	4.99	05/02/08	-0.17	446	4.62	08/20/09	-0.54	921	4.79	07/26/10	-0.37	1261
24	262+76	03/21/06	8.26	6.71	02/11/07	-1.55	327	6.69	05/02/08	-0.02	446	6.51	08/20/09	-0.20	921	6.51	07/26/10	-0.20	1261

Δ (FT) – Change in Elevation between noted surveys in feet
 TIME (DAYS) – Time Elapsed between noted surveys in days

Figure 1. Rock Dike Settlement Plate Data

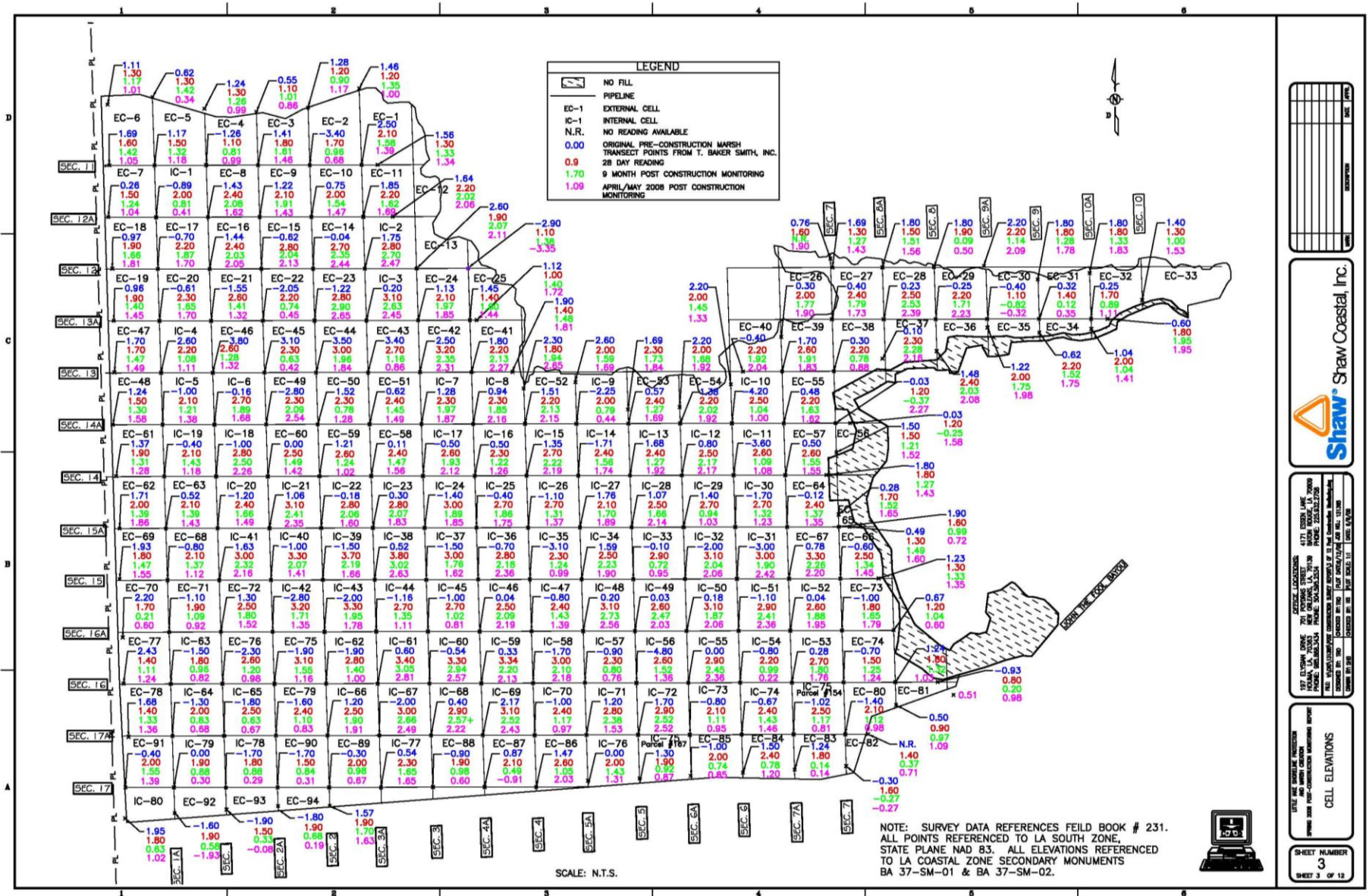


Figure 2. Marsh Creation Area Grid Survey showing Pre-Construction, As-Built (May-Aug 2006), May 2007, and May 2008 Elevations

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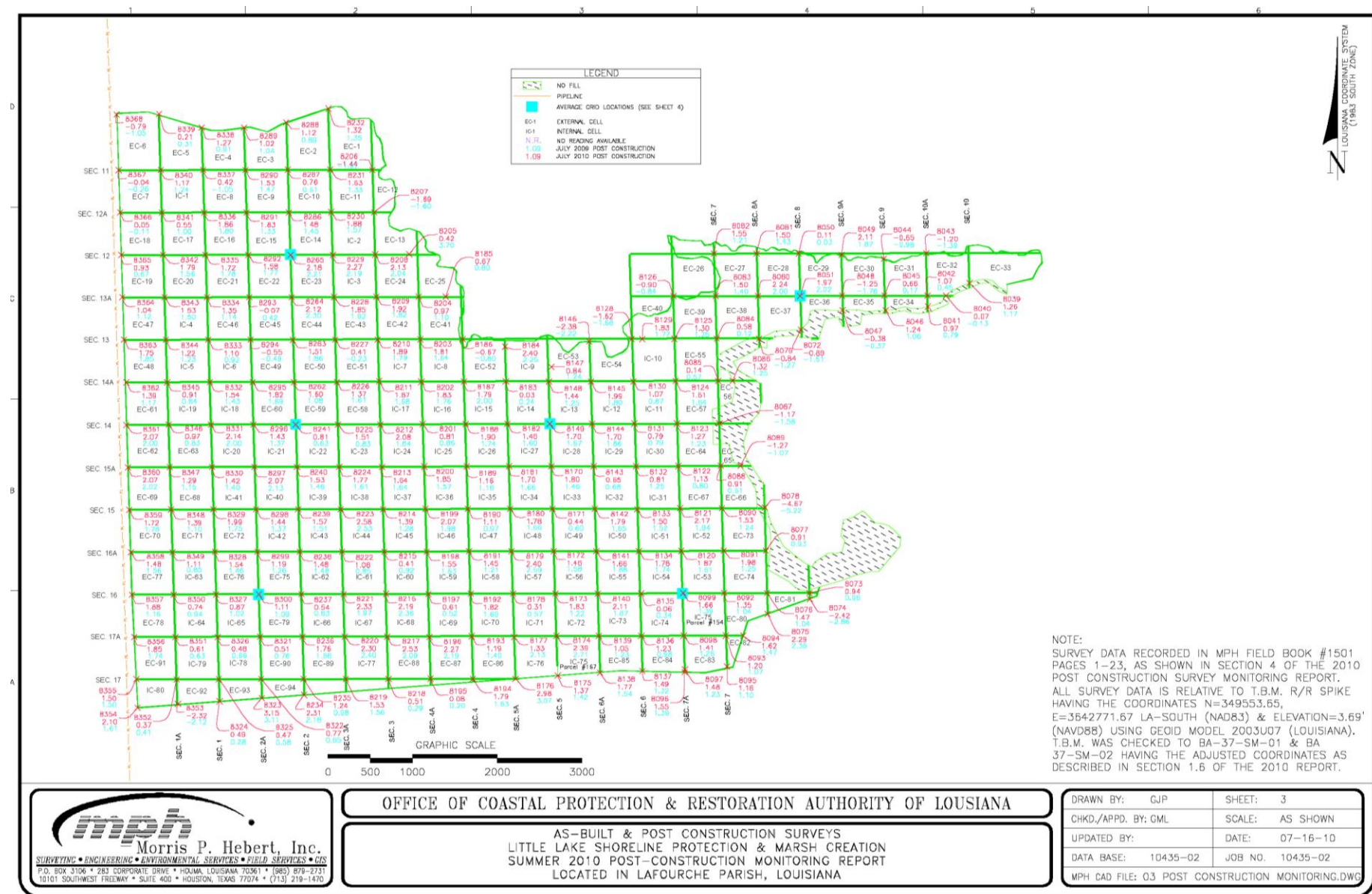


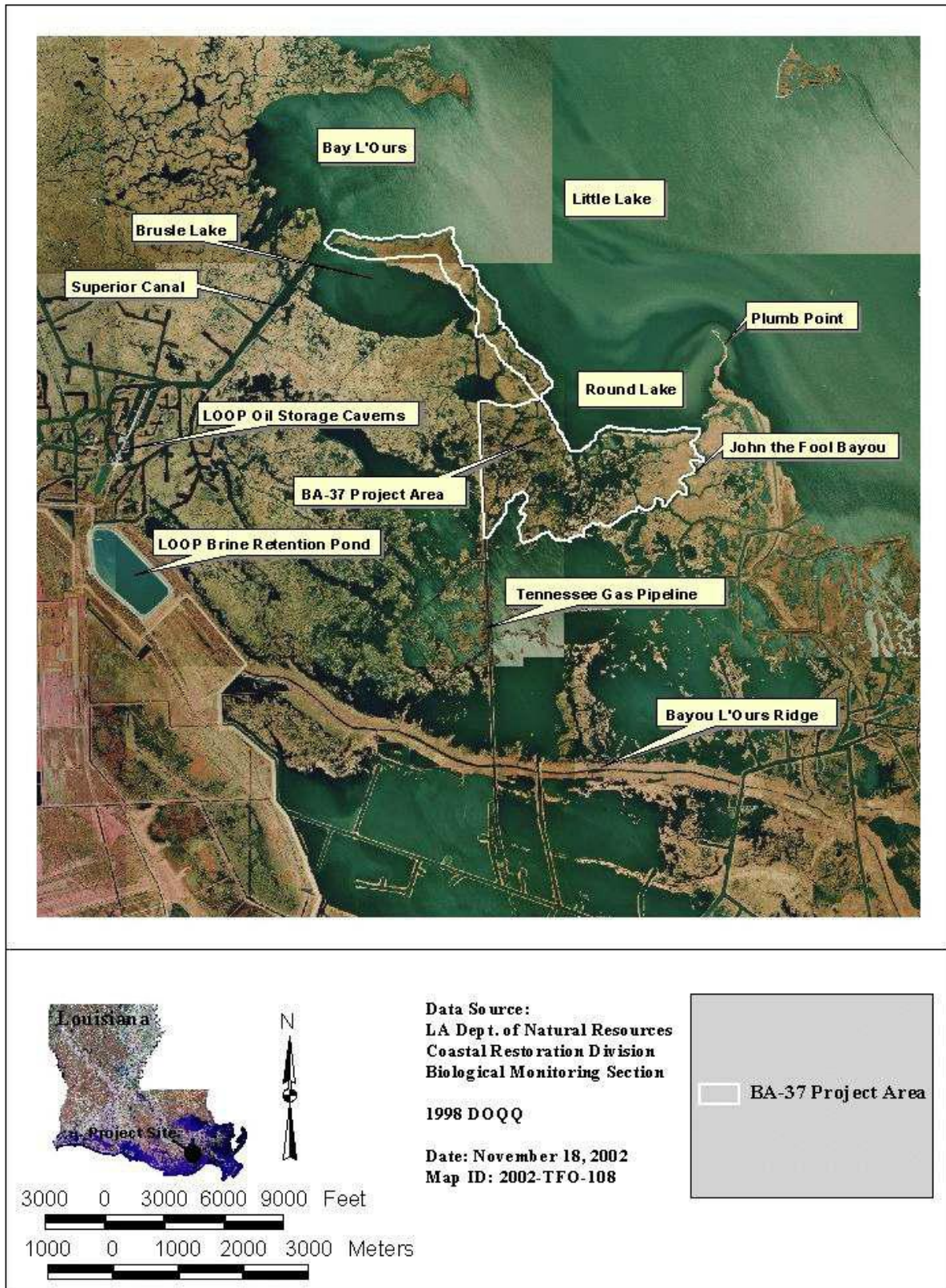
Figure 3. Marsh Creation Area Grid Survey showing June 2009 and July 2010 Elevations

Appendix A

Project Features Map

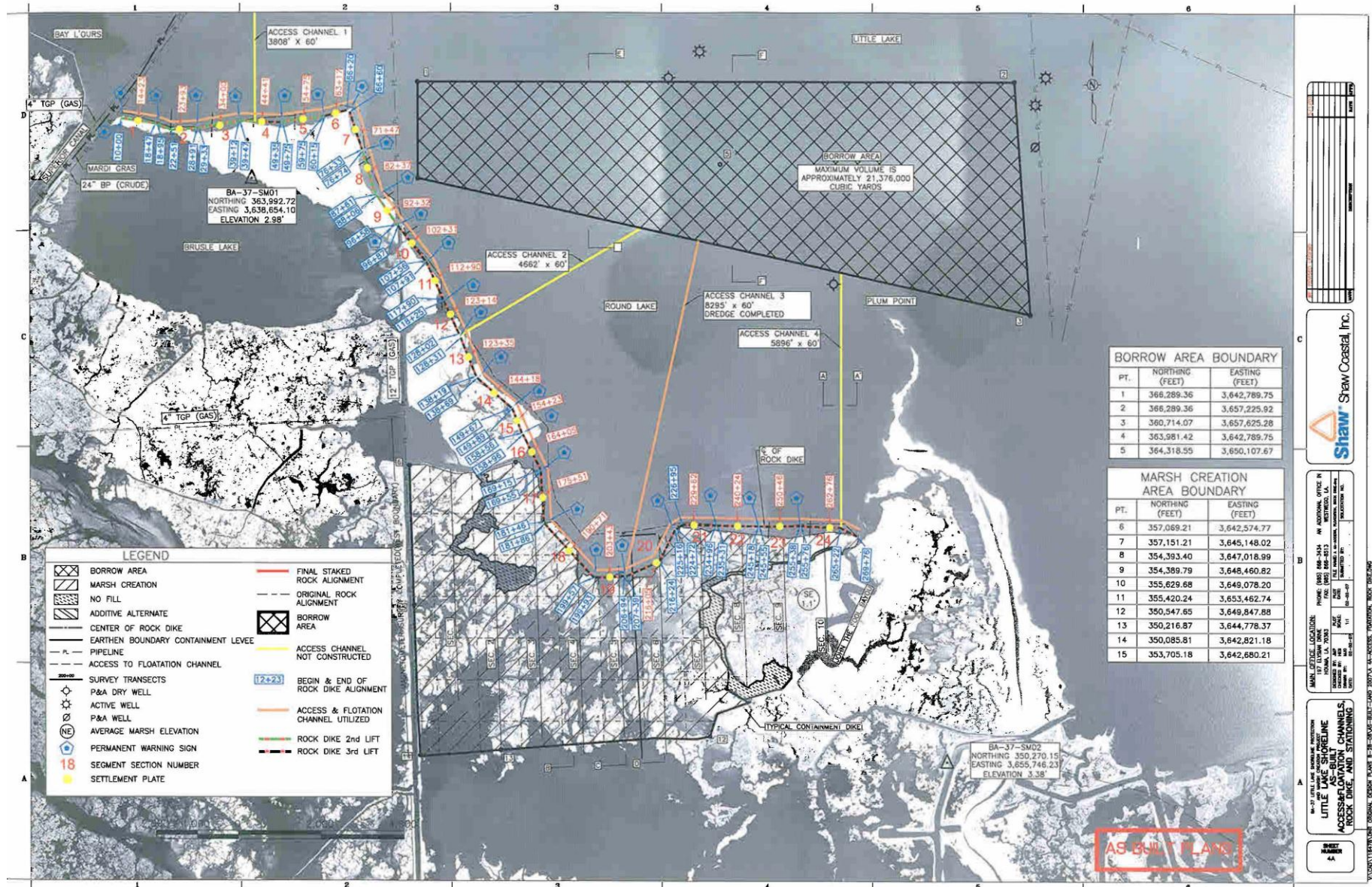


Vicinity Map of Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project
(BA-37)



Location Map of Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project (BA-37)

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As-Built Project Features - Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake Project (BA-37)

Appendix B

Photographs



Picture #1: View of rock segment 1 northwest of Brule Lake, ending at Superior Canal, looking south



Picture #2: View of rock segment 1 northwest of Brusle Lake, ending at Superior Canal, looking southeast



Picture #3: View of rock segment 1 & 2 northwest of Brusle Lake, looking southeast



Picture #4: View of rock segment 2 northwest of Brusle Lake, looking south



Picture #5: View of fish dip between rock segment 2 & 3 northwest of Brusle Lake, looking south



Picture #6: View of rock segment 3 and contained marsh north of Brusle Lake, looking south



Picture #7: View of fish dip between rock segment 3 & 4 north of Brusle Lake, looking southeast



Picture #8: View of rock segment 4 and contained marsh north of Brusle Lake, looking southeast



Picture #9: View of rock segment 5 and contained aquatic vegetation north of Lake Brusle, looking south



Picture #10: View of view of fish dip between rock segment 5 & 6 north of Lake Brusle, looking south



Picture #11: View of rock segment 6 and contained aquatic vegetation northeast of Lake Brusle, looking south



Picture #12: View of fish dip between rock segment 6 & 7 northeast of Brusle Lake, looking south



Picture #13: View of fish dip between rock segment 6 & 7 northeast of Brusle Lake, looking west



Picture #14: View of rock segment 7 and contained aquatic vegetation northeast of Lake Brusle, looking west



Picture #15: View of rock segment 8 and contained marsh northeast of Lake Brusle, looking west



Picture #16: View of rock segment 8 and contained aquatic vegetation northeast of Lake Brusle, looking west



Picture #17: View of fish dip between rock segment 8 & 9 northeast of Lake Brusle, looking southwest



Picture #18: View of rock segment 9 and contained marsh east of Lake Brusle, looking west



Picture #19: View of rock segment 10 & 11 east of Brusle Lake, looking south



Picture #20: View of rock segment 11 east of Brusle Lake, looking southwest



Picture #21: View of fish dip between rock segment 11 & 12 from inside of project boundary east of Lake Brusle, looking east



Picture #22: View of marsh creation area from location in large bay south of project area and east of the pipeline canal, looking north



Picture #23: View of marsh creation area from southwest corner of project area, looking north



Picture #24: View of marsh creation area from southwest corner of project area, looking north



Picture #25: View of rock segment 18 along southwest edge of Round Lake, looking southwest



Picture #26: View of rock segment 20 & 21 along southern edge of Round Lake, looking east



Picture #27: View of rock segment 22 along southern edge of Round Lake, looking southeast



Picture #28: View of rock segment 24 southeast of Brusle Lake, ending at John the Fool Bayou, looking south



Picture #29: View of rock segment 24 southeast of Brusle Lake, ending at John the Fool Bayou, looking southwest



Picture #30: Nearby water gauge part of project BA-02 reads 1.5' NAVD at 12:00 noon during inspection

Appendix C

Three Year Budget Projection

LITTLE LAKE SHORELINE PROTECTION & DEDICATED DREDGING / BA37 / PPL11			
Three-Year Operations & Maintenance Budgets 07/01/2011 - 06/30/2014			
Project Manager	O & M Manager	Federal Sponsor	Prepared By
	<i>Babin</i>	<i>NMFS</i>	<i>Babin</i>
	2011/2012	2012/2013	2013/2014
Maintenance Inspection	\$ 5,487.00	\$ 5,662.00	\$ 5,843.00
Surveys			
Administration (NMFS)	\$ 1,414.00	\$ 1,459.00	\$ 1,506.00
Maintenance/Rehabilitation			
11/12 Description	2011/2012 Marsh Surveys and Dike profile and transects.		
E&D	\$ 73,000.00		
Construction	\$ -		
Construction Oversight	\$ -		
Sub Total - Maint. And Rehab.	\$ 73,000.00		
12/13 Description:			
E&D		\$ -	
Construction		\$ -	
Construction Oversight		\$ -	
Sub Total - Maint. And Rehab.		\$ -	
13/14 Description:			
E&D			\$ -
Construction			\$ -
Construction Oversight			\$ -
		Sub Total - Maint. And Rehab.	\$ -
	2011/2012	2012/2013	2013/2014
Total O&M Budgets	\$ 79,901.00	\$ 7,121.00	\$ 7,349.00
O&M Budget (3-yr Total)			\$ 94,371.00
Unexpended O&M Funds			\$ 158,048.53
Remaining O&M Budget (Projected)			\$ 63,677.53

OPERATIONS & MAINTENANCE BUDGET WORKSHEET

Project: **BA-37 Little Lake Shoreline Protection / Dedicated Dredging Near Round Lake**

FY 11/12 –

Administration (NMFS)	\$	1,414
O&M Inspection & Report	\$	5,487
Surveys – Marsh Creation & Rock Profile/Settlement Plates	\$	73,000
Operation:	\$	0
Maintenance:	\$	0
E&D:	\$	0
Construction:	\$	0
Construction Oversight:	\$	0

Operation and Maintenance Assumptions:

Final Marsh Surveys and Rock Dike Profile and Transects:

Survey Costs: Actual Cost from MPH - \$73,000 (See attached cost proposal)

FY 12/13 –

Administration (NMFS)	\$	1,459
O&M Inspection & Report	\$	5,662
Surveys – Marsh Creation & Rock Settlement Plates	\$	0
Operation:	\$	0
Maintenance:	\$	0
E&D:	\$	0
Construction:	\$	0
Construction Oversight:	\$	0

Operation and Maintenance Assumptions:

FY 12/13 –

Administration (NMFS)	\$	1,506
O&M Inspection & Report	\$	5,843
Surveys – Marsh Creation & Rock Settlement Plates	\$	0
Operation:	\$	0
Maintenance:	\$	0
E&D:	\$	0
Construction:	\$	0
Construction Oversight:	\$	0

Operation and Maintenance Assumptions:

2011-2014 Accounting

Lana Report (Unexpended through May 2011)	\$228,414.44
OCPR Expenditures (February through June 2011)	<u>\$ 70,365.91</u>
Unexpended Funds though June 2011	\$158,048.53

Little Lake Shoreline Protection and Marsh Creation (BA-37)

Federal Sponsor: NMFS

Construction Completed : March 2007

PPL 11

Previous O&M Funding Requests	Baseline Approved Funding	2007	2008	Currently Funded
State O&M	\$4,602,045	\$0	\$2,900,443	\$7,502,488
Corps Admin	\$21,965	\$0	\$0	\$21,965
Federal S&A	\$0	\$0	\$190,908	\$190,908
Total	\$4,624,010	\$0	\$3,091,351	\$7,715,361

Current Approved O&M Budget June 2009	Year 0 FY08	Year - 1 FY09	Year -2 FY10	Year -3 FY11	Year -4 FY12	Year -5 FY13	Year -6 FY14	Year -7 FY15	Year -8 FY16	Year -9 FY17	Year -10 FY18	Year -11 FY19	Year -12 FY20	Year -13 FY21	Year -14 FY22	Year -15 FY23	Year -16 FY24	Year - 17 FY25	Year -18 FY26	Year -19 FY27	Project Life Budget	Currently Funded
State O&M	\$53,341	\$55,047	\$56,810	\$58,629	\$6,867,006	\$5,662	\$5,843	\$6,030	\$6,223	\$70,822	\$6,628	\$6,840	\$7,059	\$172,285	\$82,906	\$7,759	\$8,007	\$8,263	\$8,528	\$8,800	\$7,502,488	\$223,827
Corps Admin	\$4,269	\$938	\$968	\$999	\$1,030	\$1,063	\$1,097	\$1,133	\$1,169	\$1,206	\$1,245	\$1,285	\$1,326	\$1,368	\$1,412	\$1,457	\$0	\$0	\$0	\$0	\$21,965	\$5,232
Federal S&A	\$1,247	\$1,287	\$1,328	\$1,370	\$156,390	\$1,459	\$1,506	\$1,554	\$1,604	\$1,655	\$1,708	\$1,763	\$1,819	\$3,620	\$1,938	\$2,000	\$2,064	\$2,130	\$2,198	\$2,268	\$190,908	\$9,267
Total																					\$7,715,361	\$238,326

Projected O&M Expenditures																	Remaining Project Life	Current 3 year Request				
Maintenance Inspection					\$5,487	\$5,662	\$5,843	\$6,030	\$6,223	\$6,423	\$6,628	\$6,840	\$7,059	\$7,285	\$7,518	\$7,759	\$8,007	\$8,263	\$8,528	\$8,800	\$112,355	\$16,992
Structure Operation																					\$0	\$0
Navigation Aid Maintenance																					\$0	\$0
Routine Breach Repairs/Maint.																					\$0	\$0
Construction Administratoin																					\$0	\$0
NMFS Administration					\$1,414	\$1,459	\$1,506	\$156,390	\$1,604	\$1,655	\$1,708	\$1,763	\$1,819	\$1,938	\$3,620	\$2,000	\$2,064	\$2,130	\$2,198	\$2,268	\$185,536	\$4,379
OCPR Administration								\$193,140							\$4,350						\$197,490	\$0
Maintenance/Rehabilitation																					\$0	\$0
E&D					\$73,000			\$398,460							\$11,760						\$483,220	\$73,000
Construction								\$6,035,800							\$135,990						\$6,171,790	\$0
Construction Oversight								\$179,100							\$12,900						\$192,000	\$0
Total					\$79,901	\$7,121	\$7,349	\$6,968,920	\$7,827	\$8,078	\$8,336	\$8,603	\$8,878	\$9,223	\$176,138	\$9,759	\$10,071	\$10,393	\$10,726	\$11,068	\$7,342,391	\$94,371

O&M Expenditures from COE Report	\$9,912	Current O&M Budget less COE Admin	\$233,094	Current Project Life Budget less COE Admin	\$7,693,396
State O&M Expenditures not submitted for in-kind credit	\$70,365	Remaining Available O&M Budget	\$152,817	Total Projected Project Life Budget	\$7,422,668
Federal Sponsor MIPRs (if applicable)	\$0	Incremental Funding Request Amount FY12-FY14	-\$58,446	Project Life Budget Request Amount	-\$270,728
Total Estimated O&M Expenditures (as of April 2011)	\$80,277				

Notes:

1. The year-by-year figures for the current Approved O&M Budget are based on the BEAST approved at the Fall 2008 Task Force meeting.