# *PROJECT COMPLETION REPORT*

# BARATARIA BAY WATERWAY WEST SHORELINE PROTECTION PROJECT
# STATE PROJECT NO. BA-23

*Prepared for*

**STATE OF LOUISIANA**
**DEPARTMENT OF NATURAL RESOURCES**
**OFFICE OF COASTAL RESTORATION AND MANAGEMENT**

*Prepared by*

**Shread-Kuyrkendall & Associates, Inc.**
**13000 Justice Avenue, Suite 16**
**Baton Rouge, Louisiana 70816**

*MARCH 30, 2006*

**PROJECT COMPLETION REPORT**

**PROJECT NAME:** **Barataria Bay Waterway West Shoreline Protection Project**
**STATE PROJECT NO.:** **BA-23**

**Report Date:** **March 30, 2006** **By:** **James E. Powell, Jr., P.E.**
**Shread-Kuyrkendall & Associates, Inc.**

1. *Project Managers/Contracting Officer:*

| | | |
|---|---|---|
| DNR Project Manager | George Boddie | (228) 596-1256 |
| DNR Construction Project Manager | Barry Richard | (504) 481-4979 |
| Shread-Kuyrkendall, Inspector | C.B. Neal | (225) 806-4738 |
| Shread-Kuyrkendall, Inspection Coordinator | James E. Powell, Jr. | (225) 296-1335 |

2. *Location and description of projects as approved for construction by Task Force.*

The Barataria Bay Waterway West Shoreline Protection Project (BA-23) is located along the west shoreline of the Barataria Bay Waterway (BWW) in Jefferson Parish, Louisiana. This project is designed to protect the marsh shoreline along the west shoreline of BWW from erosion due to the wake from commercial traffic in the waterway. This project consists of upgrading approximately 6,400 linear feet of an existing rock dike. The project consists of applying a lift of rock to areas where the existing rock dike has subsided. The final elevation of the rock dike will be approximately +3.5 feet NAVD.

3. *Final, as-built features, boundaries and resulting acreage (use attachments if necessary).*

All areas along the west rock dike that required repair were completed along the Barataria Bay Waterway West Shoreline in accordance with the plans. Approximately 751 tons were remaining and used in areas on the East Side of the project as approved by DNR. According to the as-built information provided by the Contractor, all rock segments were between Elevation +3.7 feet NAVD and +4.0 feet NAVD.

4. *Key project cost elements.*

| **Barataria Bay Waterway West (BA-23)** | **CWPPRA Project Construction Cost** | **Five Year Maintenance Cost** |
|---|---|---|
| Construction | $1,764,703.41 | $0.00 |
| E & D | $299,296.69 | Approx. $25,000.00 |
| Landrights | $80,225.14 | $0.00 |
| Monitoring | $55,608.15 | $0.00 |
| O & M | $0.00 | $235,434.00 |
| Total | $2,199,833.39 | $260,434.00 |

5. *Items of Work.*

The following is the list of bid items and bid unit prices for the entire project (BA-23 & BA-26):

| **Item** | **Unit** | **Quantity** | **Unit Price** | **Total Price** |
|---|---|---|---|---|
| Mobilization and Demobilization | LUMP SUM | LUMP | $50,000.00 | $50,000.00 |
| Flotation Channel - East Structure | LUMP SUM | LUMP | $15,000.00 | $15,000.00 |
| Flotation Channel - West Structure | LUMP SUM | LUMP | $15,000.00 | $15,000.00 |
| Rip Rap - East Structure | TONS | 15,532 | $38.00 | $590,216.00 |
| Rip Rap - West Structure | TONS | 5,894 | $38.00 | $223,972.00 |

6. *Construction and construction oversight.*

| **Item** | **Barataria Bay Waterway West (BA-23)** |
|---|---|
| Prime Construction Contractor | Luhr Bros., Inc. |
| Original Construction Contract | $263,972.00 |
| Change Orders | $0.00 |
| Overrun/Underrun | -$28,538.00 |
| Total Construction Contract Cost | $235,434.00 |
| Inspection Cost | $4,255.23 |

7. *Major equipment used.*

(3) Tug Boats
(1) Long-Arm Excavator
(1) Track Hoe/Excavator
(2) Spud Barges
(14) Rock Barges
(1) Crew Boat
(1) Converted Tug Boat for sleeping quarters

8. *Discuss construction sequences and activities, problems encountered, solutions to problems, etc.*

- The contractor began the project by setting the gauges to establish the river stages.
- Then the contractor staked out the required rock segments based on the coordinates provided by DNR using GPS.
- The East Side (BA-26) of the project was completed first in accordance with the plans and specifications.
- The West Side (BA-23) of the project was completed next in accordance with the plans and specifications.
- There was approximately 751 tons of rip-rap remaining after all rock segments on the West Side were completed. At the approval of DNR, this excess was used to fill in gaps between rock segments on the East Side of the project. Also an additional 1885 tons of rip-rap were added to the East Side at the approval of DNR.
- At the completion of the project, the contractor provided as-built elevations which ranged from +3.7 feet NGVD to +4.1 feet NGVD.
- There were no problems experienced during the construction which was completed well within the allotted contract time.

9. *Construction change orders and field changes.*

- Modification #1 – Move 751 tons of rip-rap from West Side (BA-23) to East Side (BA-26) and add 1885 additional tons of rip-rap to the East Side (BA-26).

10. *Pipeline and other utility crossings.*

The following pipeline/utility companies have pipeline/utilities located within the vicinity of the project:

| | |
|---|---|
| Central Crude Oil Company | Enbridge Pipeline Company |
| British Petroleum Pipeline Co. | Town of Grand Isle |

The contractor notified LA One Call of the proposed work and these companies were contacted specifically to ensure the proper location of their respective pipelines.

*11. Safety and Accidents.*

Excellent safety record with no accidents reported.

*12. Additional comments pertaining to construction, completed project, etc.*

None.

*13. Significant construction dates.*

| **ACTION** | **DATE** |
|---|---|
| Bid I.D. (Const., Veg., etc.) | Maintenance |
| Bid Opening | 10/6/2005 |
| Construction Contract Award | 10/21/2005 |
| Preconstruction Conference | 12/6/2005 |
| Notice to Proceed | 11/30/2005 |
| Mobilization | 1/1/2006 |
| Construction Start | 1/4/2006 |
| Construction Completion | 1/23/2006 |
| Final Acceptance | 1/24/2006 |