

**BID DOCUMENTS
FOR
NRDA CAILLOU LAKE HEADLANDS
(TE-100)
TERREBONNE PARISH, LOUISIANA**



**STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY**

MAY 2015

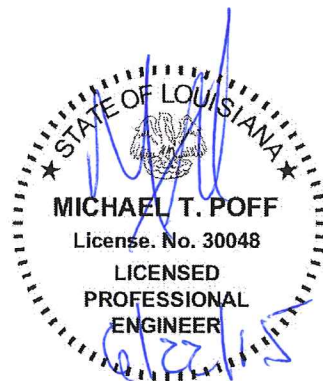


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ADVERTISEMENT FOR BIDS

Sealed bids will be received for the State of Louisiana by the Division of Administration, Office of Facility Planning and Control, Claiborne Office Building, 1201 North Third Street, Conference Room 1-145, Post Office Box 94095, Baton Rouge, Louisiana 70804-9095 until 2:00 P.M., **Wednesday, August 26, 2015**.

ANY PERSON REQUIRING SPECIAL ACCOMMODATIONS SHALL NOTIFY FACILITY PLANNING AND CONTROL OF THE TYPE(S) OF ACCOMMODATION REQUIRED NOT LESS THAN SEVEN (7) DAYS BEFORE THE BID OPENING.

FOR: **NRDA Caillou Lake Headlands
Terrebonne Parish, Louisiana**

PROJECT NUMBER: **TE-100**

Complete Bid Documents for this project are available in electronic form. They may be obtained without charge and without deposit from <http://coastal.la.gov/resources/doing-business-with-cpra/bids/>. Printed copies can also be obtained from CPRA.

Questions about this procedure shall be directed to Renee McKee:

Coastal Protection and Restoration Authority (CPRA)

450 Laurel Street

Suite 1501

Baton Rouge, LA 70801

Telephone: 225-342-0811

Fax: 225-342-4674

E-mail: cpra.bidding@la.gov

All bids shall be accompanied by bid security in an amount of five percent (5.0%) of the sum of the base bid and all alternates. The form of this security shall be as stated in the Instructions to Bidders included in the Bid Documents for this project.

The successful Bidder shall be required to furnish a Performance and Payment Bond written as described in the Instructions to Bidders included in the Bid Documents for this project.

**A MANDATORY PRE-BID CONFERENCE WILL BE HELD
at 1:00 PM on Wednesday, August 12, 2015 at Galvez Building, Oliver Pollock Room,
602 North 5th Street, Baton Rouge, LA 70802.**

BIDS SHALL BE ACCEPTED ONLY FROM CONTRACTORS THAT ATTEND THE ENTIRE PRE-BID CONFERENCE.

A JOB SITE VISIT IS RECOMMENDED

The job site is located in Terrebonne Parish on Whiskey Island with the Isles Dernieres Reach of the Terrebonne Basin barrier island chain. The job site can be accessed by boat from one of several boat launches in Cocodrie (approximately 18 miles northeast of Whiskey Island). It is the responsibility of all potential bidders to visit the job site to assess the location, logistics, and site conditions prior to bidding. The bidders shall be responsible for providing their own boat and any rental and boat launching fees. The bidders will not have access to the interior marsh where potential damage to existing marsh may occur. The bidders may access Project features where water access is available. A permit from the Louisiana Department of Wildlife and Fisheries (LDWF) must be obtained by the bidders for land access onto the island. To obtain a permit to access Whiskey Island, the bidders shall contact LDWF New Iberia office via email that includes the reason for access, requested dates, and type of vessel to be used. The email request must be sent a minimum of one week in advance of the site visit. The proper contact is Lance Campbell, ljcampbell@wlf.la.gov, 337-373-0032. Airboats, ATV's and UTV's are prohibited. LDWF will issue the bidders a letter permit with a list of conditions that must be adhered to.

Contact Travis Byland at 985-449-5073 if directions are needed to the Mandatory Pre-Bid Conference.

Bids shall be accepted from Contractors who are licensed under LA. R.S. 37:2150-2192 for the classification of **Heavy Construction**. Bidder is required to comply with provisions and requirements of LA R.S. 38:2212(B)(5). No bid may be withdrawn for a period of forty-five (45) days after receipt of bids, except under the provisions of LA. R.S. 38:2214.

The Owner reserves the right to reject any and all bids for just cause. In accordance with La. R.S. 38:2212(B)(1), the provisions and requirements of this Section; and those stated in the bidding documents shall not be waived by any entity.

When this project is financed either partially or entirely with State Bonds or financed in whole or in part by federal or other funds which are not readily available at the time bids are received, the award of this Contract is contingent upon the granting of lines of credit, or the sale of bonds by the Bond Commission or the availability of federal or other funds. The State shall incur no obligation to the Contractor until the Contract Between Owner and Contractor is fully executed.

Coastal Protection and Restoration Authority is a participant in the Small Entrepreneurship (SE) Program (the Hudson Initiative) and the Veteran-Owned and Service-Connected Disabled Veteran-Owned (LaVet) Small Entrepreneurship Program. Bidders are encouraged to consider participation. Information is available from Coastal Protection and Restoration Authority or on its website at <http://coastal.la.gov/>.

STATE OF LOUISIANA
DIVISION OF ADMINISTRATION
FACILITY PLANNING AND CONTROL
MARK A. MOSES, DIRECTOR

INSTRUCTIONS TO BIDDERS

COMPLETION TIME:

The Bidder shall agree to fully complete the Contract within **six hundred fifty (650)** consecutive calendar days for the Base Bid subject to such extensions as may be granted under Section GP-44 of the General Provisions and acknowledges that this construction time will start on or before the date specified in the written "Notice to Proceed" from the Owner.

LIQUIDATED DAMAGES:

The Bidder shall agree to pay as Liquidated Damages the amount of **Three Thousand Two Hundred Dollars (\$3,200.00)** for each consecutive calendar day for which the work is not complete, beginning with the first day beyond the Contract completion date stated on the "Notice to Proceed" or as amended by change order.

ARTICLE 1

DEFINITIONS

1.1 The Bid Documents include the following:

- Advertisement for Bids
- Instructions to Bidders
- Bid Form
- Bid Bond
- General Provisions
- Special Provisions
- Technical Specifications
- Construction Drawings
- Contract Between Owner and Contractor
and Performance and Payment Bond
- Affidavit
- User Agency Documents (if applicable)
- Change Order Form
- Recommendation of Acceptance
- Other Documents (if applicable)
- Addenda issued during the bid period and
acknowledged in the Bid Form

1.2 All definitions set forth in the General Provisions and the Special Provisions are applicable to the Bid Documents, unless otherwise specifically stated or written.

1.3 Addenda are written and/or graphic instruments issued by the Engineer prior to the opening of bids which modify or interpret the Bid Documents by additions, deletions, clarifications, corrections and prior approvals.

1.4 A bid is a complete and properly signed proposal to do the work or designated portion thereof for the sums stipulated therein supported by data called for by the Bid Documents.

1.5 Base bid is the sum stated in the bid for which the Bidder offers to perform the work described as the base, to which work may be added, or deleted for sums stated in alternate bids.

1.6 An alternate bid (or alternate) is an amount stated in the bid to be added to the amount of the base bid if the corresponding change in project scope or materials or methods of construction described in the Bid Documents is accepted.

1.7 A Bidder is one who submits a bid for a prime Contract with the Owner for the work described in the Bid Documents.

1.8 A Sub-bidder is one who submits a bid to a Bidder for materials and/or labor for a portion of the work.

1.9 Where the word "Engineer" is used in any of the documents, it shall refer to the Prime Designer of the project, regardless of discipline.

ARTICLE 2

PRE-BID CONFERENCE

2.1 A Pre-Bid Conference shall be held at the time and location described in the Advertisement for Bids. The purpose of the Pre-Bid Conference is to familiarize Bidders with the requirements of the Project and the intent of the Bid Documents, and to receive comments and information from interested Bidders. If the Pre-Bid Conference and/or Job Site Visit is stated in the Advertisement for Bids to be a Mandatory Pre-Bid Conference and/or Mandatory Job Site Visit, bids shall be accepted only from those bidders who attend the Pre-Bid Conference and/or Job Site Visit. Contractors who are not in attendance for the entire Pre-Bid Conference and/or Job Site Visit will be considered to have not attended.

2.2 Any revision of the Bid Documents made as a result of the Pre-Bid Conference shall not be valid unless included in an addendum.

ARTICLE 3

BIDDER'S REPRESENTATION

3.1 Each Bidder by making his bid represents that:

3.1.1 He has read and understands the Bid Documents and his bid is made in accordance therewith.

3.1.2 He has visited the site and has familiarized himself with the local conditions under which the work is to be performed.

3.1.3 His bid is based solely upon the materials, systems, and equipment described in the Bid Documents as advertised and as modified by addenda.

3.1.4 His bid is not based on any verbal instructions contrary to the Bid Documents and addenda.

3.1.5 He is familiar with the Code of Governmental Ethics requirement that prohibits public servants and/or their immediate family members from bidding on or entering into contracts; he is aware that the Designer and its

principal owners are considered Public Servants under the Code of Governmental Ethics for the limited purposes and scope of the Design Contract with the State on this Project (see Ethics Board Advisory Opinion, No. 2009-378 and 2010-128); and neither he nor any principal of the Bidder with a controlling interest therein has an immediate family relationship with the Designer or any principal within the Designer's firm. (see La. R.S. 42:1113). Any Bidder submitting a bid in violation of this clause shall be disqualified and any Contract entered into in violation of this clause shall be null and void.

3.2 The Bidder must be fully qualified under any State or local licensing law for Contractors in effect at the time and at the location of the work before submitting his bid. In the State of Louisiana, Revised Statutes 37:2150, et seq. will be considered, if applicable.

The Contractor shall be responsible for determining that all of his Sub-bidders or prospective Subcontractors are duly licensed in accordance with law.

ARTICLE 4

BID DOCUMENTS

4.1 Copies

4.1.1 Bid Documents may be obtained from the Coastal Protection and Restoration Authority as stated in the Advertisement for Bids.

4.1.1.2 In addition to the availability of printed Bid Documents, the Coastal Protection and Restoration Authority will provide the Bid Documents in electronic format. They may be obtained without charge and without deposit as stated in the Advertisement for Bids.

4.1.1.2.2 Where electronic distribution is provided, all other plan holders are responsible for their own reproduction costs.

4.1.2 Complete sets of Bid Documents shall be used in preparing bids; neither the Owner nor the Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

4.1.3 The Owner or Engineer in making copies of the Bid Documents available on the above terms, do so only for the purpose of obtaining bids on the work and do not confer a license or grant for any other use.

4.2 Interpretation or Correction of Bid Documents

4.2.1 Bidders shall promptly notify the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids of any ambiguity, inconsistency or error which they may discover upon examination of the Bid Documents or of the site and local conditions.

4.2.2 Bidders requiring clarification or interpretation of the Bid Documents shall make a written request to the Coastal Protection and Restoration Authority contact person listed in the Advertisement for Bids, to reach him at least seven days prior to the date for receipt of bids.

4.2.3 Any interpretation, correction, or change of the Bid Documents will be made by addendum. Interpretations, corrections, or changes of the Bid Documents made in any other manner will not be binding and Bidders shall not rely upon such interpretations, corrections, and changes.

4.3 Substitutions

4.3.1 The materials, products, and equipment described in the Bid Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitutions shall be allowed after bids are received.

4.3.2 No substitution will be considered unless written request for approval has been submitted by the Proposer and has been received by the Engineer at least seven (7) working days prior to the opening of bids. (RS38:2295C) Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including model numbers, drawings, cuts, performance and test data and any other information necessary for an evaluation.

A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. It shall be the responsibility of the proposer to include in his proposal all changes required of the Bid Documents if the proposed product is used. Prior approval is given contingent upon supplier being responsible for any costs which may be necessary to modify the space or facilities needed to accommodate the materials and equipment approved.

4.3.3 If the Engineer approves any proposed substitution, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner.

4.4 Addenda

4.4.1 Addenda will be mailed or delivered to all who are known by the Coastal Protection and Restoration Authority to have received a complete set of Bid Documents.

4.4.2 Copies of addenda will be made available for inspection wherever Bid Documents are on file for that purpose.

4.4.3 Except as described herein, addenda shall not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening of bids, excluding Saturdays, Sundays, and any other legal holidays. If the necessity arises of issuing an addendum modifying the Bid Documents within the seventy-two (72) hour period prior to the advertised time for the opening of bids, then the opening of bids shall be extended at least seven but no more than twenty-one (21) working days, without the requirement of re-advertising. The revised time and date for the opening of bids shall be stated in the addendum.

4.4.4 Each Bidder shall ascertain from the Coastal Protection and Restoration Authority prior to submitting his bid that he has received all addenda issued, and he shall acknowledge their receipt on the Bid Form.

4.4.5 The Owner shall have the right to extend the bid date by up to (30) thirty days without the requirement of re-advertising. Any such extension shall be made by addendum issued by the Coastal Protection and Restoration Authority.

ARTICLE 5

BID PROCEDURE

5.1 Form and Style of Bids

5.1.1 Bids shall be submitted on the Louisiana Uniform Public Work Bid Form provided by the Engineer.

5.1.2 All blanks on the Bid Form shall be filled in manually in ink or typewritten.

5.1.3 Bid sums shall be expressed in both words and figures, and in case of discrepancy between the two, the written words shall govern.

5.1.4 Any interlineation, alteration, or erasure must be initialed by the signer of the bid or his authorized representative.

5.1.5 Bidders are cautioned to complete all alternates should such be required in the Bid Form. Failure to submit alternate prices will render the bid non responsive and shall cause its rejection.

5.1.6 Bidders are cautioned to complete all unit prices should such be required in the Bid Form. Unit prices represent a price proposal to do a specified quantity and quality of work.

5.1.7 Bidders are strongly cautioned to ensure that all blanks on the bid form are completely and accurately filled in.

5.1.8 Bidder shall make no additional stipulations on the Bid Form nor qualify his bid in any other manner.

5.1.9 The bid shall include the legal name of Bidder. Written evidence of the authority of the person signing the bid shall be submitted at the time of bidding.

The authority of the signature of the person submitting the bid shall be deemed sufficient and acceptable under any of the following conditions:

(a) Signature on bid is that of any corporate officer listed on the most current annual report on file with the Secretary of State, or the signature on the bid is that of any member of a partnership, limited liability company, limited liability partnership, or other legal entity listed in the most current business records on file with the Secretary of State.

(b) Signature on bid is that of authorized representative as documented by the legal entity certifying the authority of the person.

(c) Legal entity has filed in the appropriate records of the Secretary of State, an affidavit, resolution or other acknowledged or authentic document indicating the names of all parties authorized to submit bids for public contracts. Such document on file with the Secretary of State shall remain in effect and shall be binding upon the principal until specifically rescinded and canceled from the records of the office. A bid submitted by an agency shall have a current Power of Attorney attached certifying agent's authority to bind Bidder. The name and license number on the envelope shall be the same as the entity identified on the Bid Form.

5.1.10 On any bid in excess of fifty thousand dollars (\$50,000.00), the Contractor shall certify that he is licensed under R.S. 37: 2150-2173 and show his license number on the bid above his signature or his duly authorized representative.

5.2 Bid Security

5.2.1 No bid shall be considered or accepted unless the bid is accompanied by bid security in an amount of five percent (5.0%) of the base bid and all alternates.

The bid security shall be in the form of a certified check or cashier's check drawn on a bank insured by the Federal Deposit Insurance Corporation, or a Bid Bond written by a surety company licensed to do business in Louisiana and signed by the surety's agent or Attorney-in-Fact. The Bid Bond shall be written on the Coastal Protection and Restoration Authority Bid Bond Form, and the surety for the bond must meet the qualifications stated thereon. The Bid Bond shall include the legal name of the bidder be in favor of

the State of Louisiana, Coastal Protection and Restoration Authority, and shall be accompanied by appropriate power of attorney. The Bid Bond must be signed by both the bidder/principal and the surety in the space provided on the Coastal Protection and Restoration Authority Bid Bond Form. Failure by the bidder/principal or the surety to sign the bid bond shall result in the rejection of the bid.

Bid security furnished by the Contractor shall guarantee that the Contractor will, if awarded the work according to the terms of his proposal, enter into the Contract and furnish Performance and Payment Bonds as required by these Bid Documents, within ten (10) days after written notice that the instrument is ready for his signature.

Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as penalty.

5.2.2 The Owner will have the right to retain the bid security of Bidders until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected.

5.3 Submission of Bids

5.3.1 The Bid shall be sealed in an opaque envelope. The bid envelope shall be identified on the outside with the name of the project, and the name, address, and license number of the Bidder. The envelope shall contain **only one bid form** and will be received until the time specified and at the place specified in the Advertisement for Bids. It shall be the specific responsibility of the Bidder to deliver his sealed bid to Facility Planning and Control Department at the appointed place and prior to the announced time for the opening of bids. Late delivery of a bid for any reason, including late delivery by United States Mail, or express delivery, shall disqualify the bid.

If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Bid Enclosed" on the face thereof. Such bids shall be sent by Registered or Certified Mail, Return Receipt Requested, addressed to:

Facility Planning and Control,
P. O. Box 94095
Baton Rouge, Louisiana, 70804-9095.

Bids sent by express delivery shall be delivered to:

Facility Planning and Control
Suite 7-160
Claiborne Office Building
1201 North Third Street
Baton Rouge, Louisiana 70802

5.3.2 Bids shall be deposited at the designated location prior to the time on the date for receipt of bids indicated in the Advertisement for Bids, or any extension thereof made by addendum. Bids received after the time and date for receipt of bids will be returned unopened.

5.3.3 Bidder shall assume full responsibility for timely delivery at location designated for receipt of bids.

5.3.4 Oral, telephonic, or telegraphic bids are invalid and shall not receive consideration. Owner shall not consider notations written on outside of bid envelope which have the effect of amending the bid. Written modifications enclosed in the bid envelope, and signed or initialed by the Contractor or his representative, shall be accepted.

5.4 Modification or Withdrawal of Bid

5.4.1 A bid may not be modified, withdrawn or canceled by the Bidder during the time stipulated in the Advertisement for Bids, for the period following the time and bid date designated for the receipt of bids, and Bidder so agrees in submitting his bid, except in accordance with R.S. 38:2214 which states, in part, "Bids containing patently obvious mechanical, clerical or mathematical errors may be withdrawn by the Contractor if clear and convincing sworn, written evidence of such errors is furnished to the public entity within forty eight hours of the Bid Opening excluding Saturdays, Sundays and legal holidays".

5.4.2 Prior to the time and date designated for receipt of bids, bids submitted early may be modified or withdrawn only by notice to the party receiving bids at the place and prior to the time designated for receipt of bids.

5.4.3 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders.

5.4.4 Bid Security shall be in an amount sufficient for the bid as modified or resubmitted.

ARTICLE 6

CONSIDERATION OF BIDS

6.1 Opening of Bids

6.1.1 The properly identified Bids received on time will be opened publicly and will be read aloud, and a tabulation abstract of the amounts of the base bids and alternates, if any, will be made available to Bidders.

6.2 Rejection of Bids

6.2.1 The Owner shall have the right to reject any or all bids and in particular to reject a bid not accompanied by any required bid security or data required by the Bid Documents or a bid in any way incomplete or irregular.

6.3 Acceptance of Bid

6.3.2 It is the intent of the Owner, if he accepts any alternates, to accept them in the order in which they are listed in the Bid Form. Determination of the Low Bidder shall be on the basis of the sum of the base bid and the alternates accepted. However, the Owner shall reserve the right to accept alternates in any order which does not affect determination of the Low Bidder.

ARTICLE 7

POST-BID INFORMATION

7.1 Submissions

7.1.1 The Contractor shall submit all required deliverables in conformance with Section SP-5 of the Special Provisions.

It is the preference of the Owner that, to the greatest extent possible or practical, the Contractor utilize Louisiana Subcontractors, manufacturers,

suppliers and labor.

7.1.2 The Contractor will be required to establish to the satisfaction of the Engineer the reliability and responsibility of the proposed Subcontractors to furnish and perform the work described in the sections of the Specifications pertaining to such proposed Subcontractor's respective trades. The General Contractor shall be responsible for actions or inactions of Subcontractors and/or material suppliers.

The General Contractor is totally responsible for any lost time or extra expense incurred due to a Subcontractor's/or Material Supplier's failure to perform. Failure to perform includes, but is not limited to, a Subcontractor's financial failure, abandonment of the project, failure to make prompt delivery, or failure to do work up to standard. Under no circumstances shall the Owner mitigate the General Contractor's losses or reimburse the General Contractor for losses caused by these events.

7.1.3 Subcontractors and other persons and organizations selected by the Bidder must be used on the work for which they were proposed and shall not be changed except with the written approval of the Owner and the Engineer.

In accordance with La. R.S. 38:2227, LA. R.S. 38:2212.10 and LA. R.S. 23:1726(B) the low bidder on this project must submit the completed Attestations Affidavit (Past Criminal Convictions of Bidders, Verification of Employees and Certification Regarding Unpaid Workers Compensation Insurance) form found within this bid package. The Attestations Affidavit form shall be submitted to the Coastal Protection and Restoration Authority contact person listed in the Advertisement For Bids within 10 days after the opening of bids.

ARTICLE 8

PERFORMANCE AND PAYMENT BOND

8.1 Bond Required

8.1.1 The Contractor shall furnish and pay for a Performance and Payment Bond written by a company licensed to do business in Louisiana, which shall be signed by the surety's agent or

Attorney-in-Fact, in an amount equal to 100% of the Contract Amount. Surety must be listed currently on the U. S. Department of Treasury Financial Management Service List (Treasury List) as approved for an amount equal to or greater than the Contract Amount, or must be an insurance company domiciled in Louisiana or owned by Louisiana residents. If surety is qualified other than by listing on the Treasury list, the Contract Amount may not exceed fifteen percent of policyholders' surplus as shown by surety's most recent financial statements filed with the Louisiana Department of Insurance and may not exceed the amount of \$500,000. However, a Louisiana domiciled insurance company with at least an A-rating in the latest printing of the A. M. Best's Key Rating Guide shall not be subject to the \$500,000 limitation, provided that the Contract Amount does not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide nor fifteen percent of policyholders' surplus as shown by surety's most recent financial statements filed with the Louisiana Department of Insurance. The Bond shall be signed by the surety's agent or Attorney-in-Fact. The Bond shall be in favor of the Coastal Protection and Restoration Authority.

8.2 Time of Delivery and Form of Bond

8.2.1 The Bidder shall deliver the required bond to the Owner simultaneous with the execution of the Contract.

8.2.2 Bond shall be in the form furnished by the Coastal Protection and Restoration Authority, entitled CONTRACT BETWEEN OWNER AND CONTRACTOR AND PERFORMANCE AND PAYMENT BOND, a copy of which is included in the Bid Documents.

8.2.3 The Bidder shall require the Attorney-in-Fact who executes the required bond on behalf of the surety to affix thereto a certified and current copy of his Power of Attorney.

ARTICLE 9

FORM OF CONTRACT BETWEEN OWNER AND CONTRACTOR

9.1 Form to be Used

9.1.1 Form of the Contract to be used shall be furnished by the Coastal Protection and Restoration Authority, an example of which is bound in the Bid Documents.

9.2 Award

9.2.1 Before award of the Contract, the successful Bidder shall furnish to the Owner a copy of a Disclosure of Ownership Affidavit stamped by the Secretary of State, a certified copy of the minutes of the corporation or partnership meeting which authorized the party executing the bid to sign on behalf of the Contractor.

9.2.2 In accordance with Louisiana Law, when the Contract is awarded, the successful Bidder shall, at the time of the signing of the Contract, execute the Non-Collusion Affidavit included in the Contract Documents

9.2.3 When this project is financed either partially or entirely with State Bonds, the award of this Contract is contingent upon the sale of bonds by the State Bond Commission. The State shall incur no obligation to the Contractor until the Contract between Owner and Contractor is duly executed.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Facility Planning and Control
P.O. Box 94095
Claiborne Building
Baton Rouge, LA 70804
(Owner to provide name and address of owner)

BID FOR: NRDA
Caillou Lake
Headlands
(TE-100)
(Owner to provide name of project and other identifying information)

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: the Coastal Protection and Restoration Authority and dated: May 2015
(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) _____.

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

Not Applicable Dollars (\$ Not Applicable)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

Not Applicable Dollars (\$ Not Applicable)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

Not Applicable Dollars (\$ Not Applicable)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.

(INTENTIONALLY LEFT BLANK)

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: Facility Planning and Control
P.O. Box 94095
Claiborne Building
Baton Rouge, LA 70804

(Owner to provide name and address of owner)

BID FOR: NRDA
Caillou Lake
Headlands
(TE-100)

(Owner to provide name of project and other identifying information)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Mobilization and Demobilization			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
1A	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ WH3A Mobilization and Demobilization			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
1B	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Surveys			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
2	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Beach and Dune Fill			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
3	9,444,700	Cubic Yards		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Marsh Fill – WH3A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
4A	1,310,800	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Marsh Fill – SS88			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
4B	1,001,100	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Beach Separation Dike – WH3A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
5A	19,600	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Beach Separation Dike – SS88			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
5B	13,500	Linear Feet		

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: Facility Planning and Control
P.O. Box 94095
Claiborne Building
Baton Rouge, LA 70804
(Owner to provide name and address of owner)

BID FOR: NRDA
Caillou Lake
Headlands
(TE-100)
(Owner to provide name of project and other identifying information)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Marsh Containment Dike – WH3A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
6A	9,530	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Marsh Containment Dike – SS88			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
6B	1,600	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Geotextile Foundation Mat – WH3A			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
7A	1,700	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Geotextile Foundation Mat – SS88			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
7B	800	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Access Channels			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
8	1	Lump Sum		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Sand Fencing			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
9	22,200	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Settlement and Overwash Monitoring Stations			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
10	10	Each		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Marsh Fill Grade Stakes			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
11	1	Lump Sum		

Wording for “DESCRIPTION” is to be provided by the Owner.

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: Facility Planning and Control
P.O. Box 94095
Claiborne Building
Baton Rouge, LA 70804
(Owner to provide name and address of owner)

BID FOR: NRDA
Caillou Lake
Headlands
(TE-100)
(Owner to provide name of project and other identifying information)

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Warning Signs			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
12	20	Each		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
13	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
14	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
15	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
16	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
17	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
18	0	Not Applicable		

DESCRIPTION:	<input type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ____ Not Applicable			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
19	0	Not Applicable		

Wording for "DESCRIPTION" is to be provided by the Owner.

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

BID BOND
FOR
COASTAL PROTECTION AND RESTORATION AUTHORITY PROJECTS

Date: _____

KNOW ALL MEN BY THESE PRESENTS:

That _____ of _____, as Principal, and _____, as Surety, are held and firmly bound unto the State of Louisiana, Coastal Protection and Restoration Authority (Obligee), in the full and just sum of five (5%) percent of the total amount of this proposal, including all alternates, lawful money of the United States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial Management Service list of approved bonding companies as approved for an amount equal to or greater than the amount for which it obligates itself in this instrument or that it is a Louisiana domiciled insurance company with at least an A - rating in the latest printing of the A. M. Best's Key Rating Guide. If surety qualifies by virtue of its Best's listing, the Bond amount may not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide.

Surety further represents that it is licensed to do business in the State of Louisiana and that this Bond is signed by surety's agent or Attorney-in-Fact. This Bid Bond is accompanied by appropriate Power of Attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its proposal to the Obligee on a Contract for:

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing and give a good and sufficient Bond to secure the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this obligation shall be void; otherwise this obligation shall become due and payable.

PRINCIPAL (BIDDER)

SURETY

BY: _____
AUTHORIZED OFFICER-OWNER-PARTNER

BY: _____
AGENT OR ATTORNEY-IN-FACT (SEAL)

Name of Project

Project No.

STATE OF _____

PARISH OF _____

ATTESTATIONS AFFIDAVIT

Before me, the undersigned notary public, duly commissioned and qualified in and for the parish and state aforesaid, personally came and appeared Affiant, who after being duly sworn, attested as follows:

LA. R.S. 38:2227 PAST CRIMINAL CONVICTIONS OF BIDDERS

A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:

- (a) Public bribery (R.S. 14:118)
- (b) Corrupt influencing (R.S. 14:120)

- (c) Extortion (R.S. 14:66)
- (d) Money laundering (R.S. 14:23)

B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:

- (a) Theft (R.S. 14:67)
- (b) Identity Theft (R.S. 14:67.16)
- (c) Theft of a business record
(R.S.14:67.20)
- (d) False accounting (R.S. 14:70)
- (e) Issuing worthless checks
(R.S. 14:71)

- (f) Bank fraud (R.S. 14:71.1)
- (g) Forgery (R.S. 14:72)
- (h) Contractors' misapplication of
payments (R.S. 14:202)
- (i) Malfeasance in office (R.S. 14:134)

LA. R.S. 38:2212.10 Verification of Employees

A. At the time of bidding, Appearer is registered and participates in a status verification system to verify that all new employees in the state of Louisiana are legal citizens of the United States or are legal aliens.

B. If awarded the Contract, Appearer shall continue, during the term of the Contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

C. If awarded the Contract, Appearer shall require all Subcontractors to submit to it a sworn affidavit verifying compliance with Paragraphs (A) and (B) of this Subsection.

Name of Project

Project No.

LA. R.S. 23:1726(B) Certification Regarding Unpaid Workers Compensation Insurance

A. R.S. 23:1726 prohibits any entity against whom an assessment under Part X of Chapter 11 of Title 23 of the Louisiana Revised Statutes of 1950 (Alternative Collection Procedures & Assessments) is in effect, and whose right to appeal that assessment is exhausted, from submitting a bid or proposal for or obtaining any contract pursuant to Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950 and Chapters 16 and 17 of Title 39 of the Louisiana Revised Statutes of 1950.

B. By signing this bid /proposal, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

NAME OF BIDDER

NAME OF AUTHORIZED SIGNATORY OF BIDDER

DATE

TITLE OF AUTHORIZED SIGNATORY OF BIDDER

**SIGNATURE OF AUTHORIZED
SIGNATORY OF BIDDER/AFFIANT**

Sworn to and subscribed before me by Affiant on the ____ day of _____, 20__ .

Notary Public

FOR INFORMATION ONLY

This document will be prepared by the Coastal Protection and Restoration Authority in the form appropriate for the project.

CONTRACT BETWEEN OWNER AND CONTRACTOR AND PERFORMANCE AND PAYMENT BOND

This Contract entered into this _____ day of _____, 2015, by (CONTRACTOR NAME) hereinafter called the "Contractor", whose business address is _____, and the State of Louisiana Coastal Protection and Restoration Authority, herein represented by its Executive Director executing this Contract, and hereinafter called the "Owner".

Witnesseth that the Contractor and the Owner, in consideration of premises and the mutual covenants; consideration and Contract herein contained, agree as follows:

Statement of Work: The Contractor shall furnish all labor and materials and perform all of the work required to build, construct and complete in a thorough and workmanlike manner:

Project No. _____

State ID No. _____

Site Code _____

in strict accordance with Contract Documents prepared by Owner.

It is recognized by the parties herein that said Contract Documents, including by way of example and not of limitation, the Plans, Specifications (including General Provisions, Special Provisions, and Technical Specifications), Any Addenda thereto, Instructions To Bidders, this Contract, Advertisement For Bids, Affidavit, Bid Form, Bonds (Bid, Performance, and Payment), any Submitted Post-Bid Documentation, Notice of Award, Notice to Proceed, Change Orders, and Claims, if any, impose duties and obligations upon the parties herein, and said parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Contract Documents are incorporated herein by reference with the same force and effect as though said Contract Documents were herein set out in full.

Time for Completion: The work shall be commenced on a date to be specified in a written order of the Owner and shall be completed within 650 consecutive calendar days from and after the said date.

Liquidated Damages: Contractor shall be assessed Liquidated Damages in the amount of \$ 3,200 per day for each consecutive calendar day which work is not complete beginning with the first day beyond the completion time.

Compensation to be paid to the Contractor: The Owner will pay and the Contractor will accept in full consideration for the performance of the Contract the sum of _____ **Dollars (\$)**

which sum represents the Contract Price.

Performance and Payment Bond: To these presents personally came and intervened _____, herein acting for _____, a corporation organized and existing under the laws of the State of Louisiana, and duly authorized to transact business in the State of Louisiana, as surety, who declared that having taken cognizance of this Contract and of the Construction Documents mentioned herein, he hereby in his capacity as its Attorney-in-Fact obligates his said company, as Surety for the said Contractor, unto the said Owner, up to the sum of Dollars (\$). By issuance of this Bond, the surety acknowledges they are in compliance with R.S. 38:2219.

The condition of this performance and payment bond shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Owner, from all cost and damages which he may suffer by said Contractor's non-performance or should said Contractor not pay all persons who have and fulfill obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said Surety agrees and is bound to so perform the Contract and make said payment(s).

Provided, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Owner of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Owner or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions or other forbearance being hereby waived.

The Contractor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Act of 1972, and Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

Contractor agrees not to discriminate in its employment practices, and will render services under this Contract without regard to race, color, sex, religion, national origin, genetic information, age or disabilities. Any act of discrimination committed by Contractor or failure to comply with these statutory obligations when applicable shall be grounds for termination of this Contract.

In Witness whereof, the parties hereto on the day and year first above written have executed this Contract in eight (8) counterparts, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:

**STATE OF LOUISIANA
COASTAL PROTECTION AND
RESTORATION AUTHORITY**

BY: _____

Kyle Graham, Executive Director

BY: _____

SURETY: _____

BY: _____

ATTORNEY IN FACT

ADDRESS

TELEPHONE NUMBER

STATE OF LOUISIANA
PARISH OF _____

PROJECT NO. TE-100

NAME: NRDA Caillou Lake Headlands

LOCATION: Terrebonne Parish

A F F I D A V I T

Before me, the undersigned authority, duly commissioned and qualified within and for the State and Parish aforesaid, personally came and appeared _____ representing who, being by me first duly sworn deposed and said that he has read this affidavit and does hereby agree under oath to comply with all provisions herein as follows:

PART I.

Section 2224 of Part II of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

(1) That affiant employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for affiant; and

(2) That no part of the Contract price received by affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the Contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for affiant.

PART II.

Section 2190 of Part I of Chapter 10 of Title 38 of the Louisiana Revised Statutes, as amended.

That affiant, if an architect or engineer, or representative thereof, does not own a substantial financial interest, either directly or indirectly, in any corporation, firm, partnership, or other organization which supplies materials for the construction of a public work when the architect or engineer has performed architectural or engineering services, either directly or indirectly, in connection with the public work for which the materials are being supplied.

For the purposes of this Section, a "substantial financial interest" shall exclude any interest in stock being traded on the American Stock Exchange or the New York Stock Exchange.

That affiant, if subject to the provisions of this section, does hereby agree to be subject to the penalties involved for the violation of this section.

AFFIANT

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____, 2015.

NOTARY

PART I GENERAL PROVISIONS

GP-1 DEFINITION OF TERMS

Whenever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to the singular or plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs and the titles of other documents or forms.

Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

- a. Acceptance: A written approval from the Engineer which certifies that specific items of Work in the Contract have been completed and/or obligations have been fulfilled by the Contractor.
- b. Addenda: Those written or graphic documents which are issued prior to opening of Bids in accordance with the Bidding Requirements and clarify or change the bidding requirements or the proposed Contract Documents.
- c. Application of Payment: That form which is used by the Contractor to request partial and final payment and is deemed acceptable to the Owner. It shall be accompanied by any supporting documentation required by the Contract Documents.
- d. A.S.T.M.: American Society for Testing and Materials.
- e. Bid: An offer or proposal submitted on the prescribed form setting forth the prices for the Work.
- f. Bidder: The person, association of persons, firm, or corporation submitting a proposal for the Work.
- g. Bidding Requirements: The Advertisement for Bids, Instructions to Bidders, Form of Bid Security, if any, and Bid Form with any supplements.
- h. Change Order: A written order which is submitted to the Contractor, signed by the Owner, and authorizes an addition, deletion, or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after the effective date of the Contract.
- i. Claim: A written demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both or other relief with respect to the terms of the Contract.
- j. Contract: The written agreement between the Owner and the Contractor which defines the Work to be completed and shall be understood to also include all Contract Documents.

- k. Contract Documents: The Contract, all addenda which pertains to the Contract Documents, Bid Documents and specified Attachments accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award, Contractor's Bid when attached as an exhibit to the Agreement, the Bonds (Bid and Performance/Payment), General Provisions, Special Provisions, Technical Specifications, Plans, and all Field or Change Orders issued after the execution of the Agreement. Shop Drawings and other submittals by the Contractor are not Contract Documents.
- l. Contract Price: The moneys payable by the Owner to the Contractor for the Work in accordance with the Contract Documents as stated in the Contract.
- m. Contract Time: The number of calendar days specified in the Contract for completion of the Work, together with any extensions authorized through change orders.
- n. Contractor: The person, association of persons, firm, or corporation entering into the duly awarded Contract.
- o. Contracting Agency: The State of Louisiana, Coastal Protection and Restoration Authority (CPRA).
- p. Day: When any period of time is referred to in the Contract Documents using days, it will be computed to exclude the first day and include the last day of such period. If the last day of any such period falls on a Saturday, Sunday, or a legal holiday, that day will be omitted from the computation. A calendar day is measured as twenty-four (24) hour period starting at midnight and ending the following midnight.
- q. Design Report: A written report by the Engineer which provides the design methodology for the Work.
- r. Effective Date of the Contract: The date indicated in the Contract on which it becomes effective.
- s. Engineer: The State of Louisiana, Coastal Protection and Restoration Authority, or its designee.
- t. Equipment: All machinery, implements, and power-tools, in conjunction with the necessary supplies for the operation, upkeep, maintenance, and all other tools and apparatuses necessary for the proper construction and acceptable completion of the Work.
- u. Extension of Contract: Any extension of time for completion of Work beyond the Contract Time which is granted by the Owner, recommended by the Engineer and approved by the Coastal Protection and Restoration Authority in the form of a Change Order.
- v. Federal Sponsor: The federal agency which has been tasked, if applicable, to manage the implementation of the project.
- w. Field Order: A written order issued by the Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or Contract Time.

- x. Laboratory: The firm, company, or corporation which is used to test materials and is approved for use by the Engineer.
- y. Laws and Regulations; Laws or Regulations: Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- z. Materials: Any substance used in the Work to build structures, but does not include material used in false Work or other temporary structures not incorporated in the Work.
- aa. Milestone: A principal event specified in the Contract Documents relating to an intermediated completion date or time prior to the Contract Times.
- bb. Notice of Award: A written notice to the successful Bidder stating that the Bid has been accepted by the Owner and that the successful Bidder is required to execute the Contract and furnish the Payment and Performance Bond and Non-Collusion Affidavit.
- cc. Notice to Proceed: The written notice to the Contractor by the Owner which provides the starting date for the Contract Time.
- dd. Owner: The Owner is the State of Louisiana (State) which acts through the Contracting Agency.
- ee. Performance and Payment Bond: The approved form of security furnished by the Contractor and Surety for the faithful performance of the Work, and the payment for all labor, materials, and/or obligations incurred by the Contractor in the prosecution thereof.
- ff. Plans: That part of the Contract Documents prepared or approved by the Engineer which graphically shows the scope, intent, and character of the Work to be completed by the Contractor.
- gg. Project Site: The location where the Work is to be performed as stated in the Contract Documents.
- hh. Resident Project Representative: An authorized representative of the Engineer who is responsible to inspect the Work and materials furnished by the Contractor.
- ii. Right-of-way: That entire area reserved for constructing, maintaining, and protecting the proposed improvement, structures, and appurtenances of the Work.
- jj. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portions of the Work will be judged.
- kk. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for the Contractor and submitted by the Contractor to illustrate some portion of the Work to be performed.
- ll. Specifications: That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work to be performed and certain administrative details applicable thereto.

- mm. State: The State of Louisiana.
- nn. Structures: Bridges, plugs, weirs, bulkheads, berms, dams, levees, and other miscellaneous construction encountered during the Work and not otherwise classified herein.
- oo. Subcontractor: Any person, association of persons, firm, or corporation who contracts with the Contractor to perform any part of the project covered by the Contract.
- pp. Submittals: Certificates, samples, shop drawings, and all other project data which are submitted to the Engineer in order to verify that the correct products will be installed on the project.
- qq. Successful Bidder: The lowest responsible Bidder whom the Owner makes an award.
- rr. Special Provisions: That part of the Contract Documents which amends or supplements these General Provisions.
- ss. Surety: The corporate body, licensed to do business in Louisiana, bound with and for the Contractor's primary liability, and engages to be responsible for payment of all obligations pertaining to acceptable performance of the Work contracted.
- tt. Temporary Structures: Any non-permanent structure required while engaged in the prosecution of the Contract.
- uu. Work: All work specified herein or indicated on the Plans.
- vv. Work Plan: A written plan by the Contractor that details how the Work will be provided including layout drawings, projected schedule (Initial Progress Schedule), and a list of labor hours, materials, and equipment.

GP-2 BID REQUIREMENTS

The Contract and Bonds which govern the Work shall be performed in accordance with the Plans, Specifications, and the Louisiana Standard Specifications for Roads and Bridges, 2006 edition. The Bidder understands that all quantities for performing the Work have been estimated by the Engineer, and that the Bid shall be the sum of the quantities multiplied by their respective unit rates. The Contract shall be awarded by the Owner through a comparison of all bids. It is the responsibility of each Bidder before submitting a Bid to:

- 2.1 Examine the Bidding Documents including the Plans and Specifications and any Addenda or related data identified in the Bidding Documents;
- 2.2 Visit the Project Site to become familiar with the local conditions if they are believed to affect cost, progress, or the completion of the Work;
- 2.3 Become familiar and satisfied with all federal, state, and local Laws and Regulations that may affect cost, progress, or the completion of the Work;

- 2.4 Study and correlate all information known to the Bidder including observations obtained from Bidder's visits, if any, to the Project Site, with the Bidding Documents;
- 2.5 Submit a written notice to the Engineer within three (3) days regarding any conflicts, errors, ambiguities, or discrepancies discovered in the Bidding Documents and confirm that the written resolution thereof by the Engineer is acceptable to the Bidder; and
- 2.6 Determine that the Bidding Documents are generally sufficient to convey an understanding of all terms and conditions for completing the required Work.

The submission of a Bid will constitute an incontrovertible representation that the Bidder has complied with every requirement of these Specifications. The Bidder shall comply with all other requirements specified in the Advertisement For Bids and the Instruction To Bidders.

GP-3 AVAILABILITY OF PLANS AND SPECIFICATIONS

One (1) set of Plans and Specifications shall be furnished to each Bidder. Three (3) sets of the Plans and Specifications shall be furnished to the Contractor upon award of the Contract. Additional sets may be furnished to the Contractor upon request from the Engineering Division of the Coastal Protection and Restoration Authority, 450 Laurel Street, 11th Floor, Baton Rouge, Louisiana 70801.

GP-4 LAWS, REGULATIONS, STANDARDS, SPECIFICATIONS, AND CODES

Bidders are required to become familiar and remain in compliance with all Federal, State, and local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority which may affect those employed for the execution of the Work or which may affect the conduct of the Work. The Contractor shall indemnify the Owner and its representatives against any claim or liability arising from all violations of any laws, bylaws, ordinances, codes, regulations, orders, or decrees, whether by the Contractor or by the Contractor's employees. The filing of a bid will be presumptive evidence that the Bidder has complied with this requirement. The Owner will not be responsible for any inaccurate interpretations or conclusions drawn by the Contractor from information and documentation provided by the Owner.

References to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws and Regulations, whether such reference be specific or by implication, may not be in effect at the time of opening the Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents. No provision of any such standard, specification, manual, or code, or any instruction of a supplier shall be effective to change the duties or responsibilities of the Owner or Engineer, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Bid Documents. No such provision shall be effective to assign to the Owner or Engineer, or any of their consultants, agents, or employees any duty or authority to supervise or direct the performance of the Contractor's obligations or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

The obligations imposed by these specifications are in addition to and are not to be construed in any way as a limitation of any rights available to the Engineer or Owner which are otherwise imposed by any laws or regulations or other provisions within the Contract Documents.

The Contractor shall abide by laws set forth in the Davis-Bacon Act of 1931 which states that all laborers and mechanics employed by recipients, the recipient's contractors, or Subcontractors on this project shall be paid wages at rates no less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40 United States Code. Additionally, with respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Number 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and The Copeland Act of Title 40 (40 U.S.C. § 3145). Prevailing Wage Determination Schedules, as determined by the United States Department of Labor, are provided in the Appendix. Prevailing Wage Determination Schedules are subject to modification by the United States Department of Labor. The Contractor is responsible for utilizing the most current Prevailing Wage Determination Schedule. These documents can be downloaded from the following link: <http://www.wdol.gov/dba.aspx#3>. Modifications to Prevailing Wage Determination Schedules shall be effective if received (or posted) no less than 10 days prior to bid opening.

GP-5 PRE-BID CONFERENCE AND SITE VISIT

A Pre-Bid Conference will be held at the location and on the date provided in the Advertisement For Bids. If the Pre-Bid Conference is stated in the Advertisement For Bids to be a MANDATORY Pre-Bid Conference, bids shall be accepted only from those bidders who attend the Pre-Bid Conference in its entirety. Failure to attend a mandatory Pre-Bid Conference in its entirety will result in a null or void Bid.

A site visit may also be held at the Project Site as specified in the Advertisement For Bids or at the Pre-Bid conference. If held, bidders will be required to furnish their own transportation to the Project Site. Representatives of the Owner and Engineer will attend the Pre-Bid conference and site visit, if held, to discuss the Work.

All questions shall be in writing and faxed or emailed to the Coastal Protection and Restoration contact person listed in the Advertisement For Bids after the Pre-Bid Conference and by the due date announced at the Pre-Bid conference. In order to ensure adequate response time, all questions and/or requests for clarification or interpretation of the Bid Documents should be received by the Coastal Protection and Restoration Authority at least seven (7) days prior to the date for receipt of bids. Oral statements will not be binding or legally effective. The Coastal Protection and Restoration Authority will issue addenda in response to all questions arising at the Pre-Bid Conference and site visit to all prospective Bidders on record. All prospective Bidders on record may contact the Coastal Protection and Restoration Authority contact person for any additional information.

GP-6 NOTICE OF AWARD

The Owner, or its designated bidding agent (Division of Administration, Office of Facility Planning and Control), shall provide written notice to the Successful Bidder stating that the Owner will sign and deliver the Contract upon compliance with the conditions enumerated therein and within the time specified.

GP-7 NOTICE TO PROCEED AND CONTRACT TIME

The Contractor shall start the Work and begin the Contract Time on the dates provided in the Notice to Proceed. The Work shall be conducted using sufficient labor, materials, and equipment as necessary to ensure completion within the Contract Time. The Contract Time for completion of the Base Bid for the Work is provided in the Instructions To Bidders, unless an extension is granted to the Contract Time as specified in GP-44. If the Bid contains an Alternate Bid(s), and the Alternate Bid(s) is awarded and included in the Contract, the Contract Time associated with the Alternate Bid(s) will be as provided in the Special Provisions.

GP-8 WORK PLAN

The Contractor shall develop a written Work Plan which accounts for all of the construction activities required by the Contract Documents. The Work Plan shall include a list of the individual construction tasks to be completed and the estimated dates for beginning and completing the tasks. It shall also include all other items which are applicable to completing the Work such as, but not limited to, the following:

- a. Typical report form for the Bi-Weekly Progress Meeting;
- b. Typical form for Daily Progress Report;
- c. Hurricane and Severe Storm Plan;
- d. Site-specific Health and Safety Plan;
- e. The delivery method and source(s) of all construction materials (company or producer name, mailing and physical address, phone number, and name of contact person).
- f. The personnel, material, Subcontractors, fabricators, suppliers, types of equipment, and equipment staging areas the Contractor proposes to use for construction;
- g. Shop drawings, test results, and sample submittals;
- h. Survey layout and stakeout;
- i. All supplemental items specified in the Special Provisions.

The Work Plan shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall review the Work Plan and have the Contractor make any necessary revisions prior to acceptance of the plan. **No payment for mobilization will be made until the Work Plan has been accepted by the Engineer.**

GP-9 PROGRESS SCHEDULE

The Contractor shall develop a written Progress Schedule which provides for an orderly progression of the Work, submittals, tests, and deliveries in order to complete the Work within the specified Milestones and Contract Time. All of the items listed in the Work Plan shall be integrated into the Progress Schedule. The format of the schedule shall be composed using Microsoft Project®, or any other software deemed acceptable by the Engineer. It shall be updated weekly by the Contractor, at a minimum. The Progress Schedule shall also include, but not be limited to the following:

- a. All of the elements in the Work Plan, including updates;
- b. A work order issued from Louisiana One Call ordering all their subscribers in the project area to mark their utilities;
- c. A telephone log verifying that all property owners and utilities have been contacted. This log should list the time, date, and names of the personnel representing the property owners, utilities, and Contractor;

The following table defines the monthly anticipated adverse weather days that are expected to occur during the Contract Time and will constitute the baseline monthly weather time for evaluations. The schedule is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the regional geographic area.

Monthly Anticipated Adverse Weather Calendar Days											
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
5	5	4	4	4	5	7	7	5	3	3	4

The Progress schedule must reflect these anticipated adverse weather delays on all weather dependent activities. Adverse weather days must prevent Work for fifty percent (50%) or more of the work day and delay Work critical to the timely completion of the project. The number of actual adverse weather days shall be calculated chronologically from the first to the last day of each month.

The Progress Schedule shall be submitted to the Engineer prior to the Pre-Construction Conference by the date provided in the Special Provisions. The Engineer shall perform a review and have the Contractor make any necessary revisions prior to acceptance of the schedule. Acceptance will not impose responsibility on the Owner or Engineer for the sequencing, scheduling, or progression of the Work. The Contractor is fully responsible for progression of the Work in order to maintain the compliance with the Progress Schedule.

GP-10 DAILY PROGRESS REPORTS

The Contractor shall record the following daily information on Daily Progress Reports:

- a. Date and signature of the author of the report;
- b. Dollar amount of all bid items that are fabricated, installed, backfilled, pumped, constructed, damaged, replaced, etc. The amount of material shall be expressed in the units stated in the bid;

- c. Field notes of all surveys;
- d. Notes on all inspections;
- e. Details of Health and Safety meetings;
- f. A brief description of any Change Orders, Field Orders, Claims, Clarifications, or Amendments;
- g. Condition of all navigation aides (I.E., warning signs, lighted marker buoys) and any repairs performed on them;
- h. Weather conditions (adverse weather day, wind speed and direction, temperature, wave height, precipitation, etc.);
- i. The amount of time lost to severe weather or personnel injury, etc.;
- j. Notes regarding compliance with the Progress Schedule;
- k. Visitor log (Instructions for format will be furnished by the Field Engineer).

The daily progress reports shall be submitted to the Engineer at the Bi-Weekly Progress Meetings specified in GP-13 in both hard copy and digital format (Adobe Acrobat® Format, or approved equal). The typical form for Daily Progress Reports shall be developed by the Contractor and incorporated into the Work Plan.

GP-11 HURRICANE AND SEVERE STORM PLAN

The Contractor shall develop and maintain a written Hurricane and Severe Storm Plan. The Plan shall include, but not be limited to, the following:

- a. What type of actions will be taken before storm strikes at the Project Site. The plan should specify what weather conditions or wave heights will require shutdown of the Work and removal of equipment, personnel, etc.
- b. Notes from continuous monitoring of NOAA marine weather broadcasts and other local commercial weather forecasts.
- c. Equipment list with details on their ability to handle adverse weather and wave conditions.
- d. List of safe harbors or ports and the distance and travel time required to transfer equipment from the Project Site.
- e. Hard copies of any written approvals or operations schedules associated with the use of the safe harbors or ports.
- f. Method of securing equipment at the safe harbors or ports.

- g. List of tug boats and work boats and their respective length, horsepower, etc. which will adequately transfer the equipment to safe harbor or port under adverse weather conditions.
- h. Methods which will be used to secure equipment left onsite during adverse weather conditions.
- i. Evacuation or immediate reaction plans to be taken by personnel for sudden storm occurrences.
- j. Operations procedures which will be used to secure critical dredging equipment such as spuds, swing wires, anchor wires, or tugs during adverse weather conditions.
- k. Communications protocol with local law enforcement and fire and rescue agencies.

The Contractor shall incorporate the Hurricane and Severe Storm Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-12 HEALTH AND SAFETY PLAN AND INSPECTIONS

The Contractor shall develop and maintain a written Health and Safety Plan which allows the Work to be performed in compliance with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the safety of personnel or property. This includes maintaining compliance with the Code of Federal Regulations, Title 29, Occupational Safety and Health Administration (OSHA) and all applicable Health and Safety Provisions of the State of Louisiana.

The Contractor shall institute a daily inspection program to assure that the requirements of the Health and Safety Plan are being fulfilled. Inspections shall include the nature of deficiencies observed, corrective action taken or to be taken, location of inspection, date, and signature of the person responsible for its contents. The results of the inspections shall be recorded on Daily Progress Reports and kept at the Project Site during the Work.

The Contractor shall incorporate the Health and Safety Plan into the Work Plan. The Owner and Engineer are not responsible for the adequacy of this plan.

GP-13 PROGRESS MEETINGS AND REPORTS

The Engineer shall schedule meetings to review the progress of the Work, coordinate future efforts, discuss compliance with the Progress Schedule, and resolve miscellaneous problems. The Engineer or Resident Project Representative, Contractor, and all Subcontractors actively working at the Project Site shall attend each meeting. Representatives of suppliers, manufacturers, and other Subcontractors may also attend at the discretion of the Contractor. The Contractor shall record the details of each meeting in a Progress Report. The format of this report shall be developed by the Contractor, approved by the Engineer, and included in the Work Plan. The progress meetings and reports shall be scheduled according to the Special Provisions.

GP-14 PRE-CONSTRUCTION CONFERENCE

A Pre-Construction Conference shall be held by the Contractor, Owner, Engineer, local stakeholders, and other appropriate personnel prior to starting construction on the date specified in the Special Provisions. This conference shall serve to establish a mutual understanding of the Work to be performed, the elements of the Progress Schedule and Work Plan, expectations for bi-weekly progress meetings, the Plans and Specifications, processing Applications for Payment, and any other items of concern. If any Subcontractors are not present, another pre-construction conference will be required.

GP-15 CONTRACT INTENT

The Bid Documents are complementary; what is called for by one is as binding as if called for by all. Clarifications and interpretations or notifications of minor variations and deviations of the Contract Documents will be issued by Engineer as provided in these Specifications. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Bid Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided at no additional cost to the Owner.

GP-16 ENGINEER AND AUTHORITY OF ENGINEER

The Engineer will be the designated representative of the Owner, the initial interpreter of the Contract Documents and the judge over acceptability of all the Work. Claims, disputes, and other matters relating to the acceptability of the Work, performance by the Contractor or the interpretation of the requirements of the Contract Documents must be submitted to the Engineer in writing. Upon written request from the Contractor, the Engineer shall issue written clarifications or interpretations which are consistent with the overall intent of the Contract Documents. Such written clarifications and interpretations will be binding on the Owner and the Contractor. Either the Owner or the Contractor may make a Claim if a written clarification or interpretation justifies an adjustment in the Contract Price or Contract Times.

The Engineer has the authority to suspend the Work in whole or in part due to failure of the Contractor to correct conditions unsafe for workmen or the general public, carry out provisions of the Contract, perform conformance Work, or to carry out orders. The Engineer shall submit a written order to the Contractor for Work which must be suspended or resumed. Nothing in this provision shall be construed as establishing responsibility on the part of the Engineer for safety which is the responsibility of the Contractor.

The Engineer or Resident Project Representative shall keep a daily record of weather and flood conditions and may suspend the Work as deemed necessary due to periods of unsuitable weather, conditions considered unsuitable for execution of the Work, or for any other condition or reason deemed to be in the public interest.

GP-17 CONFORMITY WITH PLANS AND SPECIFICATIONS

All Work and materials involved with the Work shall conform with the lines, grades, cross sections, dimensions, and other requirements shown on the Plans or indicated in these Specifications unless otherwise approved by the Engineer.

GP-18 CLARIFICATIONS AND AMENDMENTS TO CONTRACT DOCUMENTS

The Contract Documents may be clarified or amended by the Engineer to account for additions, deletions, and revisions to the Work after the Effective Date of the Contract. The clarifications and amendments shall be addressed by either a Change Order or a written clarification by the Engineer. The Contractor shall not proceed with the Work until the Change Order or clarification has been issued by the Engineer. The Contractor shall not be liable to the Owner or Engineer for failure to report any such discrepancy unless the Contractor had reasonable knowledge.

The Contractor may request a clarification or amendment for the following:

- a. Any conflict, error, ambiguity, or discrepancy within the Contract Documents; or
- b. Any conflict, error, ambiguity, or discrepancy between the Bid Documents and the provision of any Law or Regulation applicable to the performance of the Bid; or
- c. Any standard, specification, manual, or code (whether or not specifically incorporated by reference in the Bid Documents); or
- d. Instructions by a supplier.

The official form for a written clarification is provided in Appendix B- Attachment B1. This form shall be filled out appropriately by the Contractor and submitted to the Engineer. The Engineer shall clarify the issue in writing on either the clarification form, Field Order or a Change Order and submit it to the Contractor.

GP-19 SUBCONTRACTS

The Contractor shall provide the names of all Subcontractors to the Engineer in writing before awarding any Subcontracts. The Contractor shall be responsible for the coordination of the trades and Subcontractors engaged in the Work. The Contractor is fully responsible to the Owner for the acts and omissions of all the Subcontractors. The Owner and Engineer will not settle any differences between the Contractor and Subcontractors or between Subcontractors. The Contractor shall have appropriate provisions in all Subcontracts to bind Subcontractors to the Contractor by the terms of the General Provisions and other Contract Documents, as applicable to the Work of Subcontractors. The provisions should provide the Contractor the same power regarding termination of Subcontracts that the Owner may exercise over the Contractor under any provisions of the Contract Documents.

GP-20 WORKERS, METHODS, AND EQUIPMENT

The Contractor shall provide competent, qualified, and trained personnel to perform the Work. The Contractor shall not employ any person found objectionable by the Engineer. Any person employed by the Contractor or any Subcontractor who, in the opinion of the Engineer, does not perform the Work in a proper, skillful, and orderly manner shall be immediately removed upon receiving a written order by the Engineer. The Engineer may also suspend the Work until the Contractor removes the employee or provides a suitable replacement. Such an employee shall not be re-employed in any portion of the Work without written approval from the Engineer.

The on-site superintendent for the Contractor shall be competent, English-speaking, and qualified to receive orders, supervise, and coordinate all Work for the Contractor and any Subcontractors. The qualifications of the superintendent must be established and approved by the Engineer prior to commencement of the Work. The superintendent shall be furnished by the Contractor regardless of how much Work may be sublet. In the performance of the Work under this Contract, the Contractor shall conduct operations to avoid interference with any other Contractors.

All equipment, products, and material incorporated into the Work shall be as specified, or if not specified, shall be new, of good quality, and protected, assembled, used, connected, applied, cleaned, and conditioned in accordance with the manufacturer's instructions, except as otherwise may be provided in the Bid Documents. All equipment shall be of sufficient size and mechanical condition to meet the requirements of the Work and produce a satisfactory quality of Work. Equipment shall not damage adjacent property throughout the performance of the Work. The Plant and Equipment Schedule should be completed by the Contractor.

The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures used to complete the Work in conformance with the Contract Documents.

The Contractor shall obtain permission from the Engineer if a method or type of equipment other than specified in the Contract is desired. The request shall be in writing and shall include a full description of the methods, equipment proposed, and reasons for the modification. A proposed item of material or equipment may be considered by the Engineer to be functionally equal to an item specified in the Contract if:

- a. It is at least equal in quality, durability, appearance, strength, and design characteristics;
- b. There is no increase in any cost including capital, installation, or operating to the Owner;
- c. The proposed item will conform substantially, even with deviations, to the detailed requirements of the item named in the Bid Documents.

If, after trial use of the substituted methods or equipment, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue use of the substituted methods or equipment and shall complete the Work with the specified methods and equipment. The Contractor shall remove the deficient Work and replace it with Work of specified quality or take other corrective action as directed. No change will be made in basis of payment for construction items involved or in Contract Time as a result of authorizing a change in methods or equipment.

GP-21 ACCIDENT PREVENTION, INVESTIGATIONS, AND REPORTING

The Contractor shall be responsible to develop and maintain all safeguards and safety precautions necessary to prevent damage, injury, or loss throughout the performance of the Work. All accidents at the Project Site shall be investigated by the immediate supervisor of employee(s) involved and reported to the Engineer or Resident Project Representative within one (1) working day. A complete and accurate written report of the accident including estimated lost time days shall be submitted to the Engineer within four (4) calendar days. A

follow-up report shall be submitted to the Engineer if the estimated lost time days differ from the actual lost time days.

GP-22 PRESERVATION AND RESTORATION OF PROPERTY, MONUMENTS, ETC.

The Contractor shall comply with all applicable laws, ordinances, rules, and regulations of any government agency having jurisdiction over the preservation and protection of public and private property. The Contractor shall install and maintain suitable safeguards and safety precautions during the Work as necessary to prevent damage, injury, or loss to property. This responsibility shall remain with the Contractor until the Work has been completed and accepted. Any damage, injury, or loss to property which is caused by the Contractor or Subcontractors shall be repaired or replaced at the expense of the Contractor.

The Contractor shall protect all land monuments, State and United States bench marks, geodetic and geological survey monuments, and property markers from disturbance or damage until an authorized agent has witnessed or otherwise referenced their location. The Contractor shall also provide protection for all public and private property including trees, utilities, pipes, conduits, structures, etc. These items shall not be removed unless directed by the Engineer.

The Contractor shall be responsible to completely repair all damages to public or private property due to any act, omission, neglect, or misconduct in the execution of the Work unless it is due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, public enemies, or governmental authorities. The damage must be repaired at the expense of the Contractor before final acceptance of the Work can be granted by the Engineer. If the Contractor fails to repair the damage within forty-eight (48) hours, the Owner may independently proceed with the repairs at the expense of the Contractor by deducting the cost from the Contract. If the Contractor cannot provide for the cost of repairs, the Surety of the Contractor shall be held until all damages, suits, or claims have been settled.

GP-23 PROTECTION OF THE WORK, MATERIALS, AND EQUIPMENT

It shall be the responsibility of the Contractor to protect the Work, materials, and equipment from damages or delays due to inflows, tidal rise, and storm water runoff which may occur at the Project Site. The Owner shall not be held liable or responsible for these types of delays or damages.

GP-24 LAND RIGHTS

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from public and private landowners in order to perform the Work. A land rights memorandum which lists all known responsible contacts and required stipulations is provided in Appendix D. The Contractor is responsible to notify all of the contacts and abide by stipulations listed in that memorandum.

GP-25 UTILITIES

The Owner has been granted all of the temporary easements, servitudes, and right-of-way agreements from known public and private utilities in order to perform the Work. The utilities include, but are not limited to telephone, telegraph, power poles or lines, water or fire

hydrants, water or gas mains and pipelines, sewers, conduits, and other accessories or appurtenances of a similar nature which are fixed or controlled by a city, public utility company or corporation.

The Contractor shall conduct the Work in such a manner as to cooperate and minimize inconveniences with utilities. Prior to commencement of the Work, the Contractor is responsible to notify all of the utilities and abide by stipulations required by the utility company(s). The Contractor shall also call Louisiana One Call at 1-800-272-3020 a minimum of 5 working days prior to construction to locate existing utilities at the Project Site.

Any damage to utilities that is caused by the Contractor within the Project Site shall be repaired at the expense of the Contractor. The Owner will not be responsible for any delay or damage incurred by the Contractor due to working around or joining the Work to utilities left in place or for making adjustments.

Any unidentified pipes or structures which may be discovered within the limits of the Project Site shall not be disturbed and shall be reported to the Engineer as soon as possible. Construction or excavation shall not be performed around unidentified utilities without prior approval from the Engineer.

GP-26 PERMITS

Federal and State permits that are required to perform the Work, such as the Department of the Army Permit, Coastal Use Permit, LDEQ Clean Water Permit, LDWF Fill Material License, and LADOTD highway crossing permit have been secured by the Owner. Permit conditions affecting the construction processes have been included in these Specifications. Copies of these permits will be provided to the Contractor at the pre-construction conference. These permits will not relieve the responsibility of the Contractor from obtaining any additional permits which may be needed to complete the Work. Copies of any special permits that are obtained by the Contractor must be submitted to the Owner. The Contractor shall conform to the requirements therein and display copies of the permits in a public setting at the Project Site at all times.

GP-27 PROJECT SITE CLEAN-UP

The Contractor shall keep the Project Site free from accumulations of waste material or trash at all times. All trash and waste materials shall be removed by the Contractor and disposed off-site in an approved waste disposal facility. In addition, all equipment, tools, and non-conforming Work shall also be removed prior to the Work being accepted. No materials shall be placed outside of the Project Site.

GP-28 OWNER INSPECTION

The Owner, Resident Project Representative, and Federal Sponsor shall have the right to perform reasonable inspections and testing of the Work at the Project Site. Access shall be granted to the entire Project Site including all materials intended for use in the Work. The Contractor shall allow reasonable time for these inspections and tests to be performed. The inspections shall not relieve the Contractor from any obligation in accordance with the requirements of the Contract.

The Owner shall notify the Contractor prior to all tests, inspections, and approvals of the Work which are to be conducted at the Project Site. The Owner shall also provide the Contractor with the written results of all inspections and tests. Inspections, tests, or Payments made by the Owner shall not constitute acceptance of non-conforming Work of prejudice the Owner's rights under the Contract.

GP-29 DUTIES OF THE RESIDENT PROJECT REPRESENTATIVE

A Resident Project Representative shall be assigned by the Engineer to the Project Site to observe the Contractor and monitor the progress and manner in which the Work is being performed. The Resident Project Representative will also report to the Engineer and Contractor whenever materials or Work fail to comply with the Contract. The Resident Project Representative is authorized to reject any materials or suspend Work which does not comply with the Contract until the issue is resolved by the Engineer.

However, the Resident Project Representative is not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract, or to approve or accept any portion of the Work, or to issue instructions contrary to the Plans and Specifications. The Resident Project Representative shall not manage or perform duties for the Contractor.

GP-30 CONSTRUCTION STAKES, LINES, AND GRADES

The Engineer shall direct the Contractor to all control points necessary for setting stakes and establishing lines and grades as shown on the Plans. The Contractor shall be responsible for laying out all of the Work. All layouts shall be witnessed and verified by the Engineer or Resident Project Representative prior to beginning the Work. The Contractor shall be responsible for proper execution of the Work according to the layouts after receiving verification from the Engineer.

The Contractor shall be responsible for furnishing and maintaining stakes such that the Work can be verified for acceptance. The Engineer may suspend the Work at any time if it cannot be adequately verified due to the number, quality, or condition of the stakes.

GP-31 CONTRACTOR'S RESPONSIBILITY FOR WORK

The Contractor shall execute all items covered by the Contract, and shall furnish, unless otherwise definitely provided in the Contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to complete the Work. The Contractor shall pay constant attention to the progress of the Work and shall cooperate with the Engineer in every way possible. The Contractor shall maintain a complete copy of the Contract at all times, including the Plans, Specifications, and any authorized modifications.

GP-32 ENVIRONMENTAL PROTECTION

The Contractor shall comply with and abide by all federal, state, and local laws and regulations controlling pollution of the environment, including air, water, and noise. The Contractor shall take precautions to prevent pollution of waters and wetlands with fuels, oils, bituminous materials, chemicals, sewage, or other harmful materials and contaminants, and to prevent pollution of the atmosphere from particulate and gaseous matter, in accordance with all terms and conditions of federal, state, and local air and water pollution control laws and

programs and their rules and regulations, including the federal Clean Air Act and the federal Clean Water Act.

The Contractor shall adhere to the provisions which require compliance with all standards, orders, or requirements contained under Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, which prohibit the use under non-exempt Federal contracts, grants, or loans, of facilities included on the Environmental Protection Agency (EPA) list of Violating Facilities.

Construction operations in rivers, streams, lakes, tidal or coastal waters, reservoirs, canals, wetlands, and any other impoundments shall be restricted to areas where it is necessary to accomplish the Work and performed in accordance with any applicable federal, state, and local laws, regulations, permit requirements, and guidelines, and the Contractor shall conduct the Work in a manner that will not cause damaging concentrations of silt or pollution to water.

Contractor shall maintain and operate equipment to minimize noise, dust, and vibration near noise, dust and vibration-sensitive areas such as churches, hospitals, schools, and residential areas, and assure that any activities conducted near such areas are not unduly disruptive. Contractor shall maintain all equipment with properly functioning mufflers.

The Contractor shall be responsible for determining and utilizing any erosion and pollution control features or methods that may be necessary to comply with all federal, state, and local laws and regulations.

GP-33 SANITARY PROVISION

The Contractor shall provide and maintain sanitary accommodations for use by all employees and Subcontractors. Facilities shall comply with the requirements of the Louisiana State Board of Health and Hospitals and other authorities having jurisdiction. Committing public nuisance on the Project Site is prohibited.

GP-34 PAYMENT OF TAXES

The Contractor shall be responsible for all taxes and duties that maybe levied under existing State, Federal, and local laws during the completion of the Work. The Owner will presume that the amount of such taxes is included in the unit prices bid by the Contractor and will not provide additional reimbursement.

GP-35 RADIO AND TELEPHONES

The Contractor shall furnish and maintain radio and telephone equipment throughout the Contract Time which will allow communication between the Contractor and the Engineer or Resident Project Representative.

GP-36 NAVIGATION

All marine vessels shall comply with the following Federal Laws and Regulations:

- a. The International Navigational Rules Act of 1977 (Public Law 95-75, 91 Stat. 308, or 33 U.S.C. 1601-1608); and
- b. The Inland Navigation Rules Act of 1980 (Public Law 96-591, 94 Stat. 3415, 33 U.S.C. 2001-2038).

These rules can be found on the Internet at:
<http://www.navcen.uscg.gov/?pageName=navRulesContent>.

All marine vessels shall display the lights and day shapes required by Part C- Lights and Shapes of the Inland Navigation Rules. The location, type, color, and size of the lights and day shape shall be in accordance with Annex I - Positioning and Technical Details of Lights and Shapes. Any vessel engaged in dredging is considered a "Vessel restricted in her ability to maneuver" and shall display all the lights and shapes required in Rule 27, "Vessel Not Under Command".

GP-37 OBSTRUCTION TO NAVIGATION

The Contractor shall minimize all obstructions to navigation in compliance with pertinent U.S. Coast Guard regulations while conducting the Work. The Contractor shall promptly move any floating equipment or marine vessels which obstruct safe passage of other marine vessels. Upon completion of the Work, the Contractor shall remove all marine vessels and other floating equipment such as temporary ranges, buoys, piles, and other marks or objects that are not permanent features of the Work.

GP-38 MARINE VESSELS AND MARINE ACTIVITIES

All marine vessels regulated by the USCG shall have the required USCG documentation that is current before being placed in service. A copy of any USCG Form 835 issued to the vessel in the preceding year shall be made available to the Owner and Engineer and a copy shall be on board the vessel. All officers and crew shall possess valid USCG licenses as required by USCG regulations. These certificates, classifications, and licenses shall be posted in a public area on board each vessel.

All dredges and quarter boats not subject to USCG inspection and certification or not having a current ABS classification shall be inspected in the working mode annually by a marine surveyor accredited by the National Association of Marine Surveyors (NAMS) or the Society of Accredited Marine Surveyors (SAMS) and having at least 5 years' experience in commercial marine plant and equipment. The inspection certificate shall be posted in a public area on board each dredge and/or quarter boat.

All other plant and support vessels shall be inspected before being placed in service and at least annually by a qualified person. The inspection certificate shall be posted in a public area on board each plant and/or vessel.

GP-39 RECORD KEEPING

The Contractor shall maintain orderly records of the Progress Schedule, Daily Progress Reports, Progress Meetings, correspondence, submittals, reproductions of original Contract Documents, Change Orders, Field Orders, certificates, additional drawings issued subsequent to the executed Contract, clarifications and interpretations of the Contract Documents by the Engineer, and other related documents at the Project Site until all of the Work is accepted by the Engineer.

GP-40 CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in three (3) copies. Each certificate shall be certified by an authorized agent of the supplying company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date of shipment. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the testing date. The Contractor shall also certify that all materials and test reports conform to the requirements of the Contract. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material if the material is tested and determined to be in nonconformance.

GP-41 SUBMITTALS

The Contractor shall review all Submittals for compliance with the requirements of the Contract prior to delivery to the Engineer. Each Submittal shall contain a signed statement by the Contractor that it complies with the Contract requirements with any exceptions explicitly listed. The Contractor shall comply with these requirements for Submittals from Subcontractors, manufacturers, and suppliers.

All Submittals shall include sufficient data to demonstrate that the requirements of the Contract are met or exceeded. All submittals shall be legible and marked with the project title and clearly identify the item submitted. Each submittal package shall include an itemized list of the items submitted.

All Submittals will be reviewed within fourteen (14) days after being received by the Engineer. The Contractor shall allow the Engineer sufficient time for review, corrections, and resubmission of all Submittals prior to beginning the associated Work. The Contract Time shall not be extended based on incorrect or incomplete Submittals.

GP-42 CLAIMS FOR EXTRA COST

The Contractor is expected to complete the Work according to the Contract Price specified in the Bid Documents. If the Contractor deems additional compensation is due for Work, materials, delays or other additional costs/or expenses not covered in the Contract or not ordered as extra Work, the Contractor shall give the Engineer written notice thereof within fourteen (14) calendar days after the receipt of such instructions and, in any event, before commencing the procedure. The Contractor shall justify the claim for extra cost by providing supporting data and calculations. The Engineer shall determine whether the Contractor is entitled to be compensated for such extra cost and shall make any required adjustments of the Contract in accordance with GP-43. If no written claim is made within this fourteen (14)

calendar-day period, the Contractor will be deemed to have waived any claim for extra cost for such Work.

Claim for damages or delays of the Work shall not be made by the Contractor for a relocation of the construction operation or portions thereof to other locations within the geographical scope of the project, when in the opinion of the Engineer, such relocation is necessary for the most effective prosecution of the Work and may be accomplished without undue hardship.

GP-43 ALTERATION OF THE CONTRACT AND COMPENSATION

Using Change Orders, Field Orders, or Written Amendments, the Owner may order extra Work or make changes by altering the details of construction, add to or deduct from the Work. The requirements and stipulations of these documents shall be binding on the Owner and Contractor throughout the remainder of the Contract. Any claim for an extension of Contract Time caused thereby shall be adjusted at the time of ordering such change.

The value of any such extra Work or change shall be determined in one or more of the following ways and in the following priority:

- a. By application of the unit prices in the Contract to the quantities of the items involved or subsequently agreed upon; or
- b. By mutual acceptance between the Owner and Contractor of a lump sum.

If none of the above methods is agreed upon, the Contractor, provided he is so ordered by the Owner in writing, shall proceed with the Work on a "force account" basis. In such a case, the Contractor shall keep and preserve in such form as the Engineer may direct, a correct itemized account of the direct cost of labor, materials, equipment, together with vouchers bearing written certification by the Contractor. In any case, the Engineer shall certify to the amount, including an allowance of fifteen percent (15%) for jobsite and home office overhead indirect expenses and profit due to the Contractor. Where such change involves a subcontractor, an allowance of fifteen percent (15%) for overhead and profit shall be due the subcontractor and an allowance of ten percent (10%) shall be due the Contractor. Pending final determination of value, payments on account of changes shall be made on the Engineer's estimate and as approved in an executed Change Order.

If the Contractor is prevented from completing the Work according to the Contract Price due to the Owner, the Contractor may be entitled to any reasonable and necessary addition of cost as determined by the Engineer. Neither the Owner nor the Contractor shall be entitled to any damages arising from events or occurrences which are beyond their control, including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, acts of war, and other like matters. The provisions of this section exclude recovery for damages caused by the Contractor and compensation for additional professional services by either party.

GP-44 EXTENSION OF CONTRACT TIME

The Contractor is expected to complete the Work within the Contract Time specified in the Bid Documents. A legitimate increase of the Contract time may be requested by the Contractor throughout the course of the Work. This Claim must be submitted to the Engineer in writing within fourteen (14) days of the event which caused the time delay to the Contractor. If an extension of Contract Time involves an increase in Contract Price, both

claims shall be submitted together. The Contractor shall justify the increase of the Contract Time in the Claim using supporting data and calculations. The Engineer may deny the claim if there is insufficient information to make a determination. If the Claim is approved, the Engineer shall issue a Change Order within thirty (30) days of the Claim. The Contract Time shall be increased on a basis that is commensurate with the amount of additional or remaining Work. For example, the Contract Time can be increased where the number of actual adverse weather days exceeds the number of days estimated in the Contract.

GP-45 OWNER'S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE

45.1 Termination For Cause

The Owner shall submit a written notice to the Contractor and Surety which justifies placement of the Contractor in default if:

- a. The Work is not begun within the time specified in the Notice to Proceed; or
- b. The Work is performed with insufficient workmen, equipment, or materials to assure prompt completion; or
- c. The Contractor performs unsuitable, neglected or rejected Work, refuses to remove materials; or
- d. The Work is discontinued; or
- e. The Work is not completed within the Contract Time or time extension; or
- f. Work is not resumed within a reasonable time after receiving a notice to continue; or
- g. The Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
- h. The Contractor allows any final judgment to stand unsatisfied for a period of ten (10) days; or
- i. The Contractor makes an assignment for the benefit of creditors; or
- j. The Work is not performed in an acceptable manner.

If the Contractor or Surety does not remedy all conditions cited in the written notice within ten (10) days after receiving such a notice, the Contractor will be in default and the Owner shall remove the Contractor from the Work. If the Contractor is placed into default, the Owner may obtain the necessary labor, materials, and equipment or enter into a new Contract in order to complete the Work. All costs incurred by the Owner for completing the Work under the new Contract will be deducted from the payment due the Contractor. If the expense exceeds the sum payable under the Contract, the Contractor and Surety shall be liable to pay the Owner the difference.

45.2 Termination For Convenience

Owner may, at any time, terminate this Contract or any portion thereof, for Owner's convenience, upon providing written notice to the Contractor. In such case, Contractor shall be paid for all Work completed through the date notice was provided (less payments already received) and reasonable demobilization and restocking charges incurred and reasonable overhead and profit based upon industry standards on the Work performed. In no event shall the Contractor be entitled to payment of overhead and profit on Work not performed. In the event it is determined that the Contractor was wrongfully terminated for cause, pursuant to Section GP-45.1 above, such termination shall be automatically converted to a termination for convenience under and payment made as provided under this Section.

GP-46 TEMPORARY SUSPENSION OF WORK

The Engineer shall have the authority to temporarily suspend the Work in whole or in part. A Field Order shall be issued to the Contractor for any of the Work that is suspended for periods exceeding one (1) calendar day. The Field Order shall include the specific reasons and details for the suspension. The Contract Time shall not be extended if the Work is suspended due to failure by the Contractor to comply with a Field Order or with the Plans and Specifications. If the Work is suspended in the interest of the Owner, the Contractor shall make due allowances for the lost time.

GP-47 NON-CONFORMING AND UNAUTHORIZED WORK

Work not conforming to the Plans, Specifications, Field Orders, or Change Orders shall not be accepted for payment. Unacceptable or unauthorized Work shall be removed and replaced in an acceptable manner at the expense of the Contractor in order to obtain final acceptance of the Work.

If the Contractor should neglect to prosecute the Work properly or fail to perform any provision of this Contract, the Owner after seven (7) calendar days written notice to the Contractor, may correct such deficiencies itself or by use of other contractors without prejudice to any other remedy it may have, and may deduct the cost thereof from the payment then or thereafter due to the Contractor.

GP-48 CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

The Contractor may terminate the Contract or Work and recover payment from the Owner for labor and materials if the Work is stopped through no act or fault of the Contractor for more than three (3) months. For example, such an occurrence could be caused by a court order or other public authority. In any case, the Contractor shall submit a written notice to the Engineer at the beginning of the occurrence, and a written Claim to the Owner at the end of the occurrence.

GP-49 BREACH OF CONTRACT

The Owner shall submit a written Claim to the Contractor regarding any breach of the Contract. The Contractor must provide a written response to the Owner regarding the breach of Contract within ten (10) days after the Claim. This response must provide either an admission to the Claim or a detailed denial based on relevant data and calculations. The

failure of the Contractor to provide a proper response within ten (10) days shall result in justification of the Claim by default.

GP-50 NO WAIVER OF LEGAL RIGHTS

The Owner shall not be prevented from recovering costs from the Contractor, Surety, or both due to failure of the Contractor to fulfill all of the obligations under the Contract. If a waiver is provided to the Contractor for a breach of Contract by the Owner, it shall not apply to any other breach of Contract. Final acceptance of the Work shall not prevent the Owner from correcting any measurement, estimate, or certificate. The Contractor shall be liable to the Owner without prejudice to the terms of the Contract or any warranty for latent defects, fraud, or gross negligence.

GP-51 LIABILITY FOR DAMAGES AND INJURIES

To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner, Engineer, and their officers, employees, representatives, and/or agents from all suits, actions, claims, costs, losses, demands, and judgments (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) brought because of injuries or damage sustained by a person or property due to the operations of Contractor; due to negligence in safeguarding the Work, or use of unacceptable materials in constructing the Work; or any negligent act, omission, or misconduct of the Contractor; or claims or amounts recovered under the Workmen's Compensation Act or other law, ordinance, order, or decree; any money due the Contractor as considered necessary by the Owner for such purpose may be retained for use of the State or in case no money is due, the performance and payment bond may be held until such suits, actions, claims for injuries or damages have been settled and suitable evidence to that effect furnished to the Owner; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that adequate Workman's Compensation, Public Liability, and Property Damage Insurance are in effect.

The indemnification obligations of the Contractor shall not extend to the liability of the Owner, Engineer, and their affiliates arising out of the preparation or approval of the Plans, Specifications, maps, opinions, reports, surveys, or Change Orders, or for providing directions or instructions which are the primary cause of the injury or damage.

Should the Owner or Contractor suffer from any injury or damage due to an error, omission, or act of the other party or their legally liable affiliates, a written Claim shall be submitted to the other party within ten (10) days. The Claim shall provide all details regarding the injury or damage, the results of any investigations, and the action to be taken to prevent any reoccurrence.

GP-52 LIABILITY FOR LOSSES BY ACTS OF THE GOVERNMENT

The Owner shall not be liable for any loss or damage suffered by the Contractor arising out of a cessation of Work under this Contract due to any act or order of any local, state, or federal government agency. If this cessation occurs, the Contractor may request an extension of the Contract Time according to the provisions in GP-44.

GP-53 SUBSTANTIAL COMPLETION

Upon notice from the Contractor that it believes the project has reached substantial completion, and before final acceptance, the Engineer will make an inspection of the Work. "Substantial Completion" is defined as the date on which the Work is complete in accordance with the Contract Documents in order that the Owner can occupy and use the project for its intended use. The date of Substantial Completion shall be specified in the Notice of Acceptance.

If the Owner or its representative determines the Project is substantially complete, the Owner shall issue a Notice of Acceptance identifying the date the Project reached Substantial Completion and attach a punch list, if applicable, identifying the remaining items that must be completed before final payment. The Contractor shall then file the executed Notice of Acceptance with the Clerk of Court in the Parish where the Work is performed and shall forward one complete copy of the recorded acceptance to the Owner and Engineer.

If the inspection discloses any Work as being unsatisfactory or incomplete and such Work generates a formal punch list, the Engineer will give the Contractor instructions for correction of same, and the Contractor shall immediately comply with such instructions. Upon satisfactory completion of the corrections, when a "Punch List" is generated, the Engineer shall prepare a "Recommendation of Acceptance" incorporating the punch list and submit to the Owner. Upon approval of the Recommendation of Acceptance, the Owner may issue a Notice of Acceptance of the Contract which shall establish the date of Substantial Completion.

Any punch list generated by the Engineer shall be accompanied by a cost estimate to correct the particular items of Work the Engineer has developed. The cost estimate shall be developed based on mobilization, labor, material, and equipment costs of correcting each punch list item and shall be retained from monies owed to the Contractor, above and beyond the standard retainage. The Engineer shall retain his working papers used to determine the punch list items cost estimates should the matter be disputed later. The Owner shall not withhold from payment more than the value of the punch list. Punch list items completed shall be paid upon the expiration of the forty-five (45) day lien period. After that payment, none of the remaining funds shall be due the Contractor until all punch list items are completed and are accepted by the Engineer.

If the dollar value of the punch list exceeds the amount of funds, less retainage amount, in the remaining balance of the Contract, the Project shall not be accepted as Substantially Complete. If the funds remaining are less than required to complete the punch list Work, the Contractor shall pay the difference. The provisions listed above shall not be subject to waiver.

Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work/project as provided in the Notice of Acceptance, unless otherwise agreed to in writing by the Owner and Contractor. In the instance where the Owner has accepted the Work/project as substantially complete and issued a Notice of Acceptance, and the Contractor must remain on the premises to complete the "Punch List" or for whatever reason, the Contractor shall maintain Commercial General Liability insurance, Auto Liability insurance and Worker's Compensation insurance as set forth herein until the expiration of the forty-five (45) day lien period or upon the completion of the Work/Project, whichever is later. Builder's Risk insurance, if applicable, may be cancelled only with the written permission of

the Owner or the Owner's representative at Substantial Completion.

If the punch list is not completed within forty-five (45) days, through no fault of Owner or Engineer, the Owner may, but is not required, to place the Contractor in default. Thereafter, the Owner shall notify the Surety. If the Surety has not completed the punch list within forty-five days of receipt of notification, the Owner may, but is not required to, complete the remaining punch list items. Any costs incurred shall be paid for first out of any remaining Contract funds. If the costs incurred exceed the remaining Contract funds, the Contractor and its Surety shall be liable for such costs.

Upon completion of the punch list, Contractor shall request Final Inspection.

GP-54 FINAL INSPECTION AND ACCEPTANCE

Whenever the Work provided for, or contemplated by the Contract, have been satisfactorily completed, all punch list items completed and the final cleaning up is performed, the Engineer shall be notified in writing that said Work is completed and ready for final inspection. The Engineer shall, unless otherwise provided, make the final inspection within a reasonable length of time after the receipt of such notification.

If all construction provided for in the Contract is found completed to the Engineer's satisfaction that inspection shall constitute the final inspection and the Engineer will make recommendation to the Owner for final acceptance and notify the Contractor in writing of this recommendation of acceptance.

GP-55 AS-BUILT DRAWINGS

The Contractor shall submit all originals and copies of the As-Built Drawings to the Engineer for review and acceptance in accordance with the Special Provisions. The As-Built Drawings shall provide complete data for quantities, dimensions, specified performance and design criteria, and similar items which clearly represent the services, materials, and equipment the Contractor has provided. All revision sheets shall be clearly stamped with the words "As-Built".

GP-56 COMPLETION OF CONTRACT

Notwithstanding any other provision of this Contract and all applicable and necessary time delays under Louisiana law, completion of the Contract requires all of the Work to be complete, inspected by the Engineer, accepted by the Owner as recommended by the Engineer, and after final payment is made. After the Contract is complete, the Contractor will then be released from further obligation except as set forth in the Contract Bond and Contractor's Guarantee.

GP-57 CONTRACTOR'S GUARANTEE

The Contractor is obligated to provide a written guarantee to the Owner that all of the Work conforms to the Contract Documents. The Work shall be guaranteed to survive for a minimum period of 1 year after final acceptance, unless otherwise specified in the Technical Specifications.

- a. The guarantee shall include:
 - 57.a.1 A written warranty by the manufacturer for each piece of installed project equipment or apparatus furnished under the Contract.
 - 57.a.2 Any necessary repair or replacement of the warranted equipment during the guarantee period at no cost to the Owner.
 - 57.a.3 Satisfactory operation of installed equipment including, but not limited to, any mechanical and electrical systems furnished and constructed under the Contract during the guarantee period. The Contractor shall repair all equipment which fails due to defective materials or faulty workmanship during the guarantee period. The Contractor shall also be liable for all other ancillary expenses incurred by the Owner due to the failure.
- b. The guarantee shall exclude defects or damage caused by:
 - 57.b.1 Abuse or improper modification, maintenance, or operation by anyone other than the Contractor; or
 - 57.b.2 Wear and tear under normal usage.
- c. This obligation by the Contractor shall be absolute. The following actions will not constitute acceptance of non-conformance Work or release the Contractor from obligation to furnish the Work in accordance with the Contract Documents:
 - 57.c.1 Observations by the Owner or Engineer; or
 - 57.c.2 Recommendations by the Engineer or payment by the Owner; or
 - 57.c.3 Use of the Work by the Owner; or
 - 57.c.4 Issuance of a notice of acceptance by the Owner pursuant to the provisions of GP-53, or failure to do so; or
 - 57.c.5 Any inspection, test, or approval by others; or
 - 57.c.6 Any correction to non-conforming Work by the Owner.

GP-58 DISPUTE RESOLUTION

The parties shall use their best efforts to resolve all disputes in an amicable fashion. Prior to filing suit by either party with respect to any claims, or disputes arising between the parties, the disputes shall be submitted first to non-binding mediation. The mediation shall be conducted in accordance with the Construction Industry Mediation Rules of the American Arbitration Association. If the parties cannot agree to a private mediator, then the mediator shall be selected by the American Arbitration Association, upon the filing of a demand for mediation.

If the dispute is not resolved by mediation within 60 days from the request for mediation, then either party may institute legal proceedings. Any litigation involving the Owner and

arising under or related to the Contract or the bidding or award thereof shall be instituted exclusively in the 19th Judicial District Court in and for the Parish of East Baton Rouge, State of Louisiana.

GP-59 PAYMENT

The Owner hereby agrees to pay to the Contractor as full compensation for all Work performed under the Contract, and/or supplemental agreements thereto, the monetary value of the actual quantities in the completed Work according to the schedule of unit prices and/or lump sum prices set forth in attached bid proposal and/or duly authorized supplements thereto, and made a part of the Contract.

Partial payments under the Contract shall be made at the request of the Contractor not more than once each month, based upon partial estimates agreed to by the Contractor and Engineer and shall be furnished to the Engineer and approved by the Engineer prior to transmittal to the Owner for approval and payment.

The partial estimates will be approximately stated, and all partial estimates and payments shall be subject to corrections in the estimate rendered following the discovery of any error in any previous estimates.

The payment of the partial estimate shall be taken as verification that the Work has been performed and that its quality is satisfactory, however it will in no way serve as a release to the Contractor for the responsibility of any portions thereof. The Work and any particulars relating thereto shall be subject to revision and adjustment by the Engineer and/or the Owner at any time prior to final payment, regardless of any previous action taken.

There shall be reserved from the payments provided for the Contract ten percent (10%) for contracts less than \$500,000 or five percent (5%) for contracts of \$500,000 or more, of the estimates submitted, said sum to constitute a trust fund for the protection of and payment to any person or persons, mechanic, Subcontractor or materialmen who shall perform any labor upon such contract, or the doing of said Work, and all persons who shall supply such person or persons or subcontractors with provisions and supplies for the carrying on of such Work, and shall be withheld for a minimum of forty-five (45) calendar days after final acceptance of the completed Contract.

After the expiration of the forty-five (45) calendar day period, the reserve in excess of a sum sufficient to discharge the claims of materialmen and laborers who have filed their claims, together with a sum sufficient to defray the cost of such action and to pay attorneys' fees, shall be paid to the Contractor.

The Contractor shall be responsible for obtaining and furnishing a clear lien and privilege certificate to the Owner at the expiration of the retainage period, and prior to payment of any reserve withheld.

GP-60 PAYMENTS WITHHELD

In addition to the percentage provided for in Section GP-59 of these General Provisions and in accordance with any other provision of this Contract, the Owner may withhold such amounts from any payment as may be necessary to protect himself from loss on account of:

- a. Defective Work not remedied;
- b. Claims filed or reasonable evidence indicating probable filing of claims;
- c. Failure of the Contractor to make payments properly to Subcontractors or for material or labor;
- d. Reasonable evidence that the Work will not be completed within the Contract time and that the unpaid balance would not be adequate to cover damages for the anticipated delay;
- e. A reasonable doubt that the Contract can be completed within the time period remaining under the Contract;
- f. Damage to another contractor;
- g. Failure to submit required reports; or
- h. Modifications of the Contract which necessitate the execution of change orders prior to payment of funds.

Furthermore, nothing contained in this Section shall be deemed to limit the right of the Owner to withhold liquidated damages, as stated in the Instructions to Bidders and as permitted under Section SP-14 of the Special Provisions, from any amounts which may be due and owing the Contractor for Work performed under the Contract.

GP-61 LIENS

Neither the final payment nor any part of the retained percentage shall come due until the Contractor shall deliver to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required by the Owner, an affidavit that so far as he has knowledge or information, the releases and receipts include all labor and material for which a lien could be filed; but if any Subcontractor refuses to furnish a release or receipt in full, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against any lien, construction cost, or attorney's fees.

GP-62 EQUAL EMPLOYMENT OPPORTUNITY

The State of Louisiana is an equal opportunity employer, and looks to its Contractor, Subcontractors, vendors, and suppliers to take affirmative action to effect this commitment in its operations.

By submitting the bid proposal and executing the Contract, the Contractor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veterans Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, and the Age Act of 1975, and the Contractor agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

The Contractor agrees not to discriminate in its employment practices, and will render services the Contract, without regard to their race, age, color, religion, sex, national origin,

veteran status, political affiliation, or disabilities. Any act of discrimination committed by the Contractor, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of the Contract.

GP-63 ANTI-KICKBACK CLAUSE

The Contractor agrees to adhere to the mandate dictated by the Copeland “Anti-Kickback” Act which provides that each contractor or Subcontractor shall be prohibited from inducing, by any means, any person employed in the completion of the Work, to give up any part of the compensation to which he is otherwise entitled.

GP-64 SUSPENSION/DEBARMENT

Contractor certifies, by signing and submitting any bid, that their company, any Subcontractors, or principals are not suspended or debarred by the General Services Administration (GSA) in accordance with the requirements in OMB Circular A-133. A list of parties who have been suspended or debarred can be viewed via the internet at www.epls.gov.

Contractor agrees to secure from any contractor(s) and Subcontractor(s) for the captioned project, certification that such contractor(s) and Subcontractor(s) are not suspended, debarred or declared ineligible from entering into contracts with any department or agency of the Federal Government or of the State of Louisiana, or in receipt of a notice of proposed debarment or suspension.

Contractor shall provide immediate notice to Owner in the event of it or its contractor(s) or any Subcontractor(s) being suspended, debarred or declared ineligible by any department or agency of the Federal Government or of the State of Louisiana, or upon receipt of a notice of a proposed debarment or suspension, either prior to or after execution of this Contract.

Upon receipt of notice of suspension, debarment, or declaration that Contractor or its contractor(s) or any Subcontractor(s) is/are ineligible to enter into contracts with any department or agency of the Federal Government or of the State of Louisiana, either prior to or after execution of this Contract, Owner reserves the right to review cause for said debarment, suspension, or declaration of ineligibility, and to terminate this Contract pursuant to the terms of GP-45 OWNER’S RIGHT TO TERMINATE CONTRACT FOR CAUSE OR CONVENIENCE, or take such other action it deems appropriate under this Contract.

GP-65 LOUISIANA FIRST HIRING ACT

Contractor shall comply with the Louisiana First Hiring Act (La. R.S. 39:2201-2204), which requires that within ten (10) days of executing the Contract, Contractor shall submit the following information to the Louisiana Workforce Commission:

- a. The number and types of jobs anticipated for the Work.
- b. The skill level of the jobs anticipated for the Work.
- c. The wage or salary range for each job anticipated for the Work.
- d. Methods, if any, that the Contractor will use to recruit unemployed persons or person employed in low wage jobs to fill job openings for the Work.

End of PART I GENERAL PROVISIONS

PART II SPECIAL PROVISIONS

SP-1 LOCATION OF WORK

The Headland Work Area extends from Latitude 29° 03' 19.6"N, Longitude 90° 51' 58.7"W to Latitude 29° 03' 22.4"N, Longitude 90° 48' 12.6"W. The beach and dune fill sediment will be mined from a borrow area located within the Bureau of Ocean Energy Management (BOEM) Outer Continental Shelf Oil and Gas Lease, Ship Shoal Block 88, approximately 8.2 nautical miles (NM) southwesterly from the Work Area. The Ship Shoal Block 88 Borrow Area is centered at Latitude 28° 54' 52.3"N, Longitude 90° 54' 50.7"W. The marsh fill sediment shall be mined from either the Whiskey 3A Borrow Area, located approximately 4.2 NM southeasterly from the Work Area, or from the Ship Shoal Block 88 Borrow Area. The Whiskey 3A Borrow Area is centered at Latitude 29° 01' 01.0"N, Longitude 90° 44' 31.5"W.

SP-2 ADDITIONAL DEFINITION OF TERMS

The following terms are in addition to those defined in GP-1 and as such carry the same conditions.

- 2.1 Plant: Any equipment or machinery associated with the dredge.
- 2.2 Work Area: The location where the Work is to be performed. This term is synonymous with Project Site.
- 2.3 Major Storm: One defined as a storm given a name by NOAA in the vicinity of the Work Area requiring demobilization of personnel and equipment for safety.
- 2.4 Owner's Shorebird Monitoring Contractor: Owner's Contractor responsible for shorebird monitoring surveys and observations as a condition of the Permit.

SP-3 WORK TO BE DONE

The Contractor shall provide all labor, materials, and equipment necessary to perform the Work. The Work shall include, but not be limited to, mobilization and demobilization at or to the Work Area, surveying, debris removal, installation of sediment pipelines, installation of signage, access channel excavation, construction of separation and containment dikes, dredging and placement of beach/dune and marsh fill sediment, installation of sand fencing, and installation of settlement plates. The Work shall be performed in accordance with these Specifications and in conformity to lines, grades, and elevations shown on the Plans or as directed by the Engineer. Quantity calculations, layouts, shop drawings, and construction sequencing of all Work items shall be provided in the Work Plan. The major tasks associated with the Work are described as follows:

3.1 Surveying

Prior to construction, the borrow areas and associated conveyance corridors, access channels, separation/containment dikes, and fill areas shall be surveyed by the Contractor for bathymetry and/or topography. Survey transects are defined in TS-6. Settlement plates shall be surveyed during installation and throughout construction. Prior to construction, the Contractor shall perform a magnetometer survey of the borrow areas, conveyance corridors,

access channels, fill areas, separation/containment dikes, and borrow channels to verify pipeline or obstruction locations and ensure no unknown pipelines exist within the Work Area. The magnetometer survey shall be submitted to the Engineer prior to dredging, access and borrow channel excavations, and sediment pipeline installation. During construction, fill area surveys for quality control and borrow area surveys for progress payments and quality control shall be performed as directed in TS-6, as requested by the Engineer, or more frequently as deemed necessary by the Contractor. After construction is complete, the Contractor shall perform an As-Built Survey, which shall be reviewed by the Engineer for acceptance of the Work.

3.2 Conveyance Corridors

Sediment pipelines used by the Contractor to facilitate the placement of fill sediment shall be placed within the permitted conveyance corridors and within the construction limits shown on the Plans. There shall be no excavation of the conveyance corridors for installation of the sediment pipelines. There shall be no excavation and re-handling of sediment through means of depositing sediment on the seafloor and re-suspending the sediment for transport to the fill template shall be allowed outside of the limits of the borrow areas. The Contractor shall submit a detailed Petroleum Pipeline Crossing Plan including any and all correspondence or agreements with the petroleum pipeline owners or operators.

3.3 Beach and Dune Fill

Beach and dune fill sediment shall be dredged from the Ship Shoal Block 88 Borrow Area, transported to, and placed in the beach and dune fill template. The Contractor shall specify the size and type of dredge(s), booster pumps, and support Plant to be used to perform the Work in the Dredge Data Sheet (Appendix A – Attachment A2) and Work Plan.

3.4 Marsh Fill

Two borrow areas have been identified for construction of the marsh fill, the Whiskey 3A Borrow Area and Ship Shoal Block 88 Borrow Area. Marsh fill sediment shall be dredged from either the Whiskey 3A Borrow Area or the Ship Shoal Block 88 Borrow Area, transported to, and placed in the marsh fill template. The Contractor shall specify the size and type of dredge(s), booster pumps, and support Plant to be used to perform the Work in the Dredge Data Sheet (Appendix A – Attachment A2) and Work Plan.

Bid Item No. 4A “Marsh Fill – WH3A” refers to marsh fill dredged from the Whiskey 3A Borrow Area. Bid Item No. 4B “Marsh Fill – SS88” refers to marsh fill dredged from the Ship Shoal Block 88 Borrow Area.

3.5 Access Channels

The Contractor may elect to excavate either or both of the access channels to facilitate equipment access to the fill templates and primary/secondary containment dike borrow channels. Access channels are not mandatory and are at the discretion of the Contractor.

3.6 Beach/Dune Separation Dike

The beach separation dike shall be constructed from in-situ sediment within the beach separation dike borrow channel prior to beach and dune fill sediment placement from Station

50+00 to 190+00. For construction of the marsh fill using sediment from the Whiskey 3A Borrow Area, prior to placement of sediment, the beach separation dike shall be constructed from Stations 190+00 to 250+00. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, construction of the beach separation dike from Stations 190+00 to 250+00 is optional.

Bid Item No. 5A “Beach Separation Dike – WH3A” refers to construction of the beach separation dike for marsh fill construction utilizing the Whiskey 3A Borrow Area. Bid Item No. 5B “Beach Separation Dike – SS88” refers to construction of the beach separation dike for marsh fill construction utilizing the Ship Shoal Block 88 Borrow Area.

3.7 Marsh Containment Dike

The marsh containment dike shall be constructed from in-situ sediment within the primary containment dike borrow channel prior to marsh fill sediment placement. The Contractor may utilize the secondary containment dike borrow channel for dike construction if insufficient dike material exist within the primary containment dike borrow channel lines and grades shown in the Plans. The Contractor may also elect to dredge the secondary containment dike borrow channel for maintenance of the marsh containment dike during construction. For construction of the marsh fill using sediment from the Whiskey 3A Borrow Area, the entire marsh containment dike shall be constructed. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, the marsh containment dike shall be constructed from coordinate point CD-01 to CD-09 identified in the Contract Plans, and construction of the remaining segments of the marsh containment dike is optional.

Bid Item No. 6A “Marsh Containment Dike – WH3A” refers to construction of the marsh containment dike for marsh fill construction utilizing the Whiskey 3A Borrow Area. Bid Item No. 6B “Marsh Containment Dike – SS88” refers to construction of the marsh containment dike for marsh fill construction utilizing the Ship Shoal Block 88 Borrow Area.

Bid Item No. 7A “Geotextile Foundation Mat – WH3A” refers to installation of the geotextile foundation mat for marsh fill construction utilizing the Whiskey 3A Borrow Area. Bid Item No. 7B “Geotextile Foundation Mat – SS88” refers to installation of the geotextile foundation mat for marsh fill construction utilizing the Ship Shoal Block 88 Borrow Area.

3.8 Settlement and Overwash Monitoring System

Settlement plates shall be installed by the Contractor in the fill template as shown on the Plans and in accordance with TS-16 prior to beach/dune and marsh construction. Overwash monitoring plates shall be placed on the settlement plates in accordance with TS-16 prior to demobilization.

3.9 Marsh Fill Grade Stakes

Marsh fill grade stakes shall be installed by the Contractor in the marsh fill template in accordance with TS-17 prior to marsh construction.

3.10 Sand Fencing

Sand fencing shall be installed by the Contractor upon completion and acceptance of each dune segment as shown on the Plans and in accordance with TS-15.

3.11 Use of Equipment

The equipment used by the Contractor for the Work shall be operated within the boundaries of the Project Site and away from existing vegetated wetlands or any other sensitive areas except where specified in the Plans. The Contractor shall be responsible for returning all disturbed areas outside of the Work Area to pre-existing conditions at no expense to the Owner.

SP-4 SITE EXAMINATION

In addition to that specified by GP-2, bidders are required to examine the Work Area and make determinations of the character of the borrow sediment to be dredged; conditions of the conveyance corridors; conditions of the containment/separation dike areas and character of the borrow channel sediment; and conditions of the designated fill areas. Material such as logs, stumps, snags, scrap, debris and other obstructions may be encountered within the borrow areas, conveyance corridors, borrow channels, and fill areas. No separate payment to the Contractor shall be made for removal and disposal of these obstructions. No consideration shall be given to any claims for additional payments based on the failure of the Contractor to inspect the Work Area. The Contractor shall make his own investigation of available navigation channels, or other means of conveyance for transportation, load limits for bridges, barges and roads, and other road or waterside conditions affecting the transportation of all equipment and personnel to the Work Area.

SP-5 BID ITEMS, CONTRACT DATES, AND DELIVERABLES

Milestone	Location or Recipient	Date Due
Bid Advertisement	Publications	As advertised
Mandatory Pre-Bid Conference and Site Visit	Provided in Notice to Bidders	Provided in Notice to Bidders
Bid Documents Clarification of Interpretation	Deliver to CPRA	7 calendar days prior to the date of receipt of Bids
Effective Date of Contract	Contractor and Owner	Stated in Notice of Award
Start of Contract Time	Contractor and Owner	As stated in Notice to Proceed
Pre-Construction Conference	Contractor and Engineer	Within 30 calendar days following the issuance of the Notice to Proceed
Progress Meetings and Reports	At Work Area	Bi-weekly or as determined at the Pre-Construction Conference (See GP-13, GP-39)
End of Contract Time	At Work Area	650 calendar days after Notice to Proceed

SP-6 DELIVERABLES

6.1 Prior to Construction

6.1.1 The Contractor shall submit the following documents to the Engineer prior to the Pre-Construction Conference specified in GP-14:

- a. Work Plan as specified in GP-8 and SP-9;
- b. Progress Schedule as specified in GP-9;
- c. Copy of typical Daily Progress Report as specified in GP-10;
- d. Hurricane and Severe Storm Plan as specified in GP-11; and
- e. Health and Safety Plan as specified in GP-12.

6.1.2 The Contractor shall provide the following information to the Engineer at the Pre-Construction Conference specified in GP-14:

- a. Updates to all plans and schedules based on comments from the Engineer;
- b. Potential construction corridors (if needed, other than from what is provided) which may be approved on an as needed basis.

6.2 During Construction

The Contractor shall deliver copies of the following documents upon request by the Engineer, or as specified in these provisions:

- a. The results of all surveys and calculations as specified in TS-6;
- b. Progress Schedule as specified in GP-9;
- c. Daily Progress Reports as specified in GP-10;
- d. Bi-weekly updates to the borrow area cut sequences within the borrow areas proposed in the Work Plan;
- e. Dredge position logs as specified in TS-8.4.1.3;
- f. Copies of all inspection reports;
- g. All Change Orders, Field Orders, Claims, Clarifications, and Amendments; and
- h. Results of any materials testing.

6.3 Administrative Records

6.3.1 Notice of Intent to Dredge

At least thirty (30) calendar days prior to commencement of Work on this Contract, the Contractor shall notify the USCG, Sector New Orleans Marine Information Center of his intended operations to dredge and/or install sediment pipeline and request that it be published in the Local Notice to Mariners. This notification must be given in sufficient time so that it appears in the Notice to Mariners at least fourteen (14) calendar days prior to the commencement of this dredging operation. A copy of the Department of the Army Permit and drawings (Appendix E) shall be provided to the USCG. A copy of the notification shall be provided to the Owner and Engineer.

6.3.2 Relocation of Navigational Aids

Temporary removal of any navigation aids located within the Work Area shall be coordinated by Contractor with the USCG prior to removal. The Contractor shall not otherwise remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any aid to navigation. The Contractor shall notify the Eighth U.S. Coast Guard District, New Orleans, Louisiana, in writing, with a copy to the Owner and Engineer, fourteen (14) calendar days in advance of the time he plans to dredge or Work adjacent to any aids which require relocation to facilitate the Work. The Contractor shall contact the USCG for information concerning the position to which the aids will be relocated.

6.3.3 Notification of Discovery of Historical or Cultural Sites

If during construction activities the Contractor observes items that may have prehistoric, historical, archeological, or cultural value, or observes or discovers prehistoric and/or historic aboriginal cultural materials, the Contractor shall immediately cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources. The Contractor shall report such observations immediately to the Owner and Engineer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special dispositions of the finds should be made. The Contractor shall report any observed unauthorized removal or destruction of such resources by any person to the Owner and Engineer so the appropriate State of Louisiana authorities can be notified. The Contractor shall not resume Work at the site in question until State authorities have rendered judgment concerning the artifacts of interest.

6.4 Post-Construction

The Contractor shall notify the Engineer in writing, a minimum of seven (7) calendar days prior to the anticipated completion of the Work in order to schedule the final inspection and gain Acceptance by the Engineer. The following documents shall also be submitted to the Engineer:

- a. Copies of all delivery slips, which shall include the source of construction materials, date of delivery, exact quantity, and size of materials delivered with each shipment to the

Work Area;

- b. As-Built Survey deliverables as specified in TS-6.6.

SP-7 ADDRESSES FOR DOCUMENT DELIVERY

Prior to Bid opening date, the Contractor shall send all questions and request for clarification or interpretation of the Bid Documentation in writing to the attention of Renee McKee of the Coastal Protection and Restoration Authority. The address and contact information is as follows:

Coastal Protection and Restoration Authority (CPRA)

450 Laurel Street, Suite 1501

Baton Rouge, LA 70801

Attn: Renee McKee

Phone: 225-342-0811, Fax: 225-342-4674

Email: cpra.bidding@la.gov

After award, the successful Contractor shall contact the Engineers concerning Bid Documentation or questions. The addresses and contact information for the Engineers are listed as follows:

CPRA Project Engineer:

Jacques Boudreaux

Coastal Protection and
Restoration Authority

450 Laurel Street, Suite 1150

Baton Rouge, LA 70801

Phone: 225-342-0242

Fax: 225-242-3733

Email: Jacques.Boudreaux@la.gov

CPRA Field Engineer:

Travis Byland

Coastal Protection and
Restoration Authority

1440 Tiger Drive, Suite B

Thibodaux, LA 70301

Phone: 985-449-5073

Fax: 985-447-0997

Email: Travis.Byland@la.gov

The Owner and Engineer shall deliver all written Claims, Notices, Submittals, Plans, and other documents to the Contractor at the address indicated on the Bid.

SP-8 BASIS FOR AWARD

Award of this Bid shall be to the lowest responsive, responsible bidder meeting the requirements of the Specifications set forth herein. The Basis for Award shall be the lowest total Bid cost. Except as described below, all unit prices and unit price extensions must be entered on the Bid Form and shall be inclusive of all plant, labor, equipment, supplies, and shall also include all other items of overhead, profit, and any other costs incident to perform and complete all Work specified herein.

Two borrow areas have been identified for construction of the marsh fill, the Whiskey 3A Borrow Area and Ship Shoal Block 88 Borrow Area. **Bidders must submit their bid based on utilizing either one or the other, but not both.** The quantities on the Unit Price Form are presented for both borrow area options. **The bidders must enter the unit prices and unit price extensions for just one borrow area option as follows.**

For construction of the marsh fill from the Whiskey 3A Borrow Area, the bidders must enter unit prices and unit price extensions for the following Bid Items:

- No. 1A "Mobilization and Demobilization"
- No. 1B "WH3A Mobilization and Demobilization"
- No. 2 "Surveys"
- No. 3 "Beach and Dune Fill"
- No. 4A "Marsh Fill – WH3A"
- No. 5A "Beach Separation Dike – WH3A"
- No. 6A "Marsh Containment Dike – WH3A"
- No. 7A "Geotextile Foundation Mat – WH3A"
- No. 8 "Access Channels"
- No. 9 "Sand Fencing"
- No. 10 "Settlement and Overwash Monitoring Stations"
- No. 11 "Marsh Fill Grade Stakes"
- No. 12 "Warning Signs"

For all other bid items, the bidders shall enter \$0.00 for unit prices and unit price extensions.

For construction of the marsh fill from the Ship Shoal Block 88 Borrow Area, the bidders must enter unit prices and unit price extensions for the following Bid Items:

- No. 1A "Mobilization and Demobilization"
- No. 2 "Surveys"
- No. 3 "Beach and Dune Fill"
- No. 4B "Marsh Fill – SS88"
- No. 5B "Beach Separation Dike – SS88"
- No. 6B "Marsh Containment Dike – SS88"
- No. 7B "Geotextile Foundation Mat – SS88"
- No. 8 "Access Channels"
- No. 9 "Sand Fencing"
- No. 10 "Settlement and Overwash Monitoring Stations"
- No. 12 "Warning Signs"

For all other bid items, the bidders shall enter \$0.00 for unit prices and unit price extensions.

SP-9 WORK PLAN AND PROGRESS SCHEDULE SUPPLEMENTAL

The Contractor shall submit a Work Plan, estimated Progress Schedule, and proposed construction sequence in writing to the Owner and Engineer, at least fourteen (14) calendar days prior to the Pre-Construction Conference for review and approval. The Owner and Engineer shall have fourteen (14) calendar days following the Pre-Construction Conference to determine the Work Plan and Progress Schedule acceptability.

In addition to those items required by GP-8 and GP-9, and those items required by the Specifications, the following items shall be included in the Work Plan and Progress Schedule:

- a. Dredge Data Sheet as specified in SP-20;

- b. Layout and Progress Schedule for sediment pipeline(s) installation along the conveyance corridor(s);
- c. Fill area debris removal and offsite disposal location(s);
- d. Marine Pollution Control and Contingency Plan;
- e. Proposed borrow area cut sequences; and
- f. Layout and Progress Schedule for discharge and dewatering of the beach/dune and marsh fill areas.

SP-10 DAILY PROGRESS REPORTS

Daily Progress Reports shall be completed daily following issuance of the Notice to Proceed until project completion. Reports are due by 12:00 pm the day following the report date. A copy of the typical Daily Progress Report shall be submitted to the Engineer at least fourteen (14) calendar days prior to the Pre-Construction Conference. Payments may be withheld in accordance with GP-60 for delinquency in submittal of Reports as determined by the Owner and Engineer.

SP-11 PERMITS

By submitting a Bid, the Contractor acknowledges the Permits referenced in GP-26, accepting full responsibility for compliance with these Permits and all stipulations attached, for all Work. The Contractor shall provide the Owner and Engineer with copies of any and all Permits obtained by the Contractor for the execution of Work. The Contractor shall immediately notify the Engineer in writing of any observed non-compliance with the Permits. The Contractor shall, after such notice, immediately inform the Engineer of proposed corrective action and take such action as may be approved. If the Contractor fails or refuses to comply promptly, the Engineer may notify appropriate permit agencies and issue an order stopping all or part of the Work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor. Any costs incurred by the Owner as a result of such actions may be deducted from the Contract amount due the Contractor.

SP-12 COMMENCEMENT, EXECUTION, AND COMPLETION

The time of completion for this Project, also known as the Contract Time, shall be within 650 calendar days after the Notice to Proceed has been issued. The Contractor will be required to commence Work at the Work Area under the Contract within thirty (30) calendar days after receipt of the Notice to Proceed from the Engineer. Work shall be conducted in such a manner and with sufficient Materials, Plant, equipment, and labor as is considered necessary to ensure its completion within the time limit specified. The Contractor agrees to keep on the Project at all times sufficient Materials, Plant, equipment, and qualified and experienced personnel to meet the requirements of the Work. The Plant and equipment listed on the Dredge Data Sheet and Equipment Schedule provided in the Bid are the minimum which the Contractor agrees to place on the job unless otherwise determined by the Engineer and their listing thereon is not to be construed as an Agreement on the part of the Engineer that they are adequate for the performance of the Work. No reduction in the capacity of the Plant and

equipment employed on the Work shall be made except by written permission of the Engineer. The measure of the capacity of the Plant and equipment shall be its actual performance on the Work to which these Specifications apply.

The Owner shall not be responsible for any delay in the completion of the Project where the delay is beyond the control or without fault or negligence on behalf of the Owner or Engineer. The Owner or Engineer shall not be held accountable for extra compensation or an extension of time due to default by the Contractor, Subcontractors, or suppliers in the furnishing of labor or materials for the Project, or having to replace defective materials.

No extension of Contract Time or increases in Contract Price shall be granted for any delay caused either by:

- a. Inadequate crewing, default or bankruptcy of lower tier contract, slow submittals, etc. or;
- b. For any delay which is caused by the Contractor having to replace defective material or equipment or;
- c. Delays attributable to the lack of performance by Subcontractors regardless of the reasons.

SP-13 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with GP-9 and GP-44. In order for the Owner to award a time extension under this clause, the following conditions must be satisfied:

- a. The weather experienced at the Work Area during the Contract Time must be found to be unusually severe; that is, more severe than the adverse weather anticipated for the Project location during any given month as listed in GP-9.
- b. The unusually severe weather must actually cause a delay to the completion of the Project. The delay must be beyond the control and without the fault or negligence of the Contractor.

Throughout the Contract, the Contractor will record on the Daily Progress Report the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for fifty percent (50%) or more of the Contractor's scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), and be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of anticipated days, the Engineer may grant an extension of Contract Time, giving full consideration for equivalent fair weather work days, in accordance with GP-44.

SP-14 FAILURE TO COMPLETE ON TIME

For each day the Work remains incomplete and un-accepted in its entirety beyond the Contract Time, as specified in SP-12, or Extension of Contract Time as specified in GP-44, the sum of **Three Thousand Two Hundred Dollars (\$3,200)** per calendar day will be deducted from any money due to the Contractor as liquidated damages. The Contractor and

Surety shall be liable for any liquidated damages that are in excess of the amount due the Contractor.

SP-15 PROTECTION OF WORK

The Work Area may be subject to water inundation during construction. It will be the responsibility of the Contractor to protect his/her Work and equipment from damages due to inflows, rises in the Gulf of Mexico or other surrounding bodies of water, and ground water. The Owner shall not be held liable or responsible for delays or damages to the Contractor's Work or equipment resulting from inflows of surface or ground water or other conditions.

SP-16 SAFETY AND PROTECTION

In addition to the requirements set forth in GP-12, the Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees and other persons who may be affected thereby; all the Work and all Materials both on and off the Work Area; and other property in the Work Area including but not limited to trees, structures, and utilities. Costs incurred by the Contractor for compliance with this section should be included in Bid Item No. 1A "Mobilization and Demobilization".

The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction over the safety of persons or property and to protect them from damage, injury, or loss; and will erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and utilities when the execution of the Work may affect them. All damage, injury, or loss to any property referred to in this item caused directly or indirectly, in whole or in part, by Contractor, and Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and the Engineer has issued a notice to the Owner and the Contractor that the Work is acceptable.

SP-17 TRANSPORTATION

The Contractor shall provide a safe and reasonable means of transportation to and from the marine access dock, staging area, and Work Area for the Owner, Engineer, Resident Project Representatives, Owner's Bird Monitoring Contractors, and Federal sponsor throughout the Work. The schedule and pickup location shall be arranged by the Engineer and the Contractor prior to mobilization. The Contractor shall provide a boat and operator for the exclusive use of the Engineer and/or Resident Project Representatives to tour the Work Area during the Work. The boat shall have the following features:

- a. An enclosed cabin space;
- b. Capable of maintaining twenty-five (25) knots (29 mph);
- c. Minimum of six (6) passenger capacity;

- d. Coast Guard certified;
- e. Operable marine radio;
- f. All safety equipment required by the USCG for the size and type of that boat;
- g. Draft of two (2) feet or less.

The Contractor shall supply the fuel and maintain the boat.

The Contractor shall provide an all-terrain vehicle for the exclusive use of the Engineer and/or Resident Project Representatives to tour the Work Area during the Work.

Additionally, if deemed necessary by the Engineer to observe any shallow water segments of the Work Area, The Contractor shall provide an airboat for the exclusive use of the Engineer and/or Resident Project Representative to tour the Work Area during the Work.

The Contractor shall have at the Work Area sufficient modes of transportation for all parties attending the Progress Meetings referenced in GP-13.

All mechanical malfunctions of the boat and all-terrain vehicle shall be repaired within twenty-four (24) hours of the malfunction. In the event that the Contractor refuses, neglects, or delays compliance with the requirements of this provision, the Owner may obtain and use other necessary boat(s) and/or all-terrain vehicle(s) at the expense of the Contractor to be deducted from the Contractor's monthly pay application. The costs associated with providing the boat(s) and all-terrain vehicle(s) shall be included in the lump sum price for Bid Item No. 1A, "Mobilization and Demobilization".

SP-18 OFFICE FOR OWNER REPRESENTATIVES

The Contractor shall provide an office for the Engineer and Resident Project Representatives at the Work Area. The office shall be for the sole use of the Engineer and Resident Project Representatives, suitably sized, and provided with lighting; heat, air conditioning; and reliable internet and telephone services. The office furnishings shall include a work table, drafting table, stool, and two chairs. The cost for providing and furnishing the office shall be included in the contract lump sum price for Bid Item No. 1A, "Mobilization and Demobilization". The office may be combined with the boarding facilities stipulated in SP-19 subject to approval by the Engineer.

In the event that the Contractor refuses, neglects, or delays compliance with the requirements of this provision, the Owner may obtain and use the office at the expense of the Contractor to be deducted from the Contractor's monthly pay application.

SP-19 BOARDING FACILITIES

The Contractor shall provide boarding facilities for full-time Resident Project Representatives at the Work Area from beginning of construction to end of fill activities, removal of all sediment pipelines, or completion of restoration activities, whichever is the latter. Quarters and meals shall be included. Quarters shall be for the sole use of the Engineer and Resident

Project Representatives, of a suitable size and provided with sleeping arrangements, access to bathroom facilities, electrical outlets, lighting, heat, and air conditioning.

The Contractor shall provide meals for the Owner, Engineer, and up to three (3) additional Project Representatives attending the Progress Meetings referenced in GP-13.

The cost for providing and furnishing boarding facilities for the Resident Project Representative and meals for the Owner, Engineer, and Owner Representatives shall be included in the Contract lump sum price for Bid Item No. 1A "Mobilization and Demobilization".

In the event that the Contractor refuses, neglects, or delays compliance with the requirements of this provision, the Owner may obtain and provide room and board for the Resident Project Representative and meals for the Owner, Engineer, and Owner Representatives at the Bi-weekly Progress Meetings at the expense of the Contractor to be deducted from the Contractor's monthly pay application at the rates defined in the most current version of State of Louisiana, Louisiana Travel Guide, Policy and Procedures Memorandum 49 (PPM49). The document may be found at: www.doa.louisiana.gov/osp/travel.

SP-20 DREDGE DATA SHEET

The Contractor shall complete the Dredge Data Sheet in Appendix A - Attachment A2 for each dredge that is proposed to be used to perform the Work and include it in the Bid. Submittal of a Dredge Data Sheet shall constitute a certification that the described equipment is available to, and under control of, the Contractor. The Dredge Data Sheet is for informational purposes only. The data is pertinent to the evaluation of the proposed dredges and their capability to perform the Work. The bidder may only omit data or information that is considered to be proprietary.

SP-21 DELIVERY OF NOTICES, ETC.

All written notices, demands, submittals and other papers or documents to be delivered to the Contractor, under this Contract, shall be delivered at the address indicated on the Bid, or at other locations as designated by written notice delivered to the Engineer.

All written notices, demands, submittals, and other papers, or documents to be delivered to the Owner or to the Engineer under this Contract shall be delivered to the Coastal Protection and Restoration Authority, Thibodaux Regional Office at the following address: 1440 Tiger Drive, Suite B, Thibodaux, LA 70301, or at another location as the Owner may designate by written notice delivered to the Contractor.

SP-22 COPIES OF PLANS, SPECIFICATIONS, AND PERMITS

The Work shall conform to the Contract Plans all of which form a part of these Specifications. **The Contractor and their Subcontractors shall have available at all times at the Work Area where Work is being performed a complete set of Plans, Specifications, and any Permits (Appendix E) issued for the Project either obtained by the Owner or the Contractor.**

Neither the Contractor nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with the Owner shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of the Engineer; and they shall not reuse any of them on extensions of the Project or any other project without written consent of the Owner and Engineer and the specific written verification or adaptation by the Engineer.

SP-23 LANDOWNER, OIL AND GAS FACILITY OPERATORS, AND PIPELINE COMPANY REQUIREMENTS

The Owner has obtained temporary easement, servitude, and right-of-way agreements required for construction of the Project. The agreements executed with landowners for the Work at the site contain special requirements pertaining to access routes and insurance. Landowners, oil & gas facility operators, and pipeline company contact information is included in Appendix D. The Contractor shall abide by stipulations set forth by the respective landowners (Grantors). The Contractor shall work cooperatively with the Owner to address the notification and coordination requirements with the landowners and pipeline companies.

The Contractor shall notify all utility operators and pipeline companies at least seventy-two (72) hours in advance of any Work at the Headland Restoration Area and at least four (4) weeks in advance of any Work at the borrow areas or within the conveyance corridors. All pipelines located within 150 feet of the beach and dune fill area, borrow areas, and conveyance corridors shall be probed and their locations marked prior to any excavation and installation of the sediment pipeline, for the duration of construction activities. No excavation shall be permitted within 50 feet of any pipeline in the vicinity of the beach separation and marsh containment dikes or any fill area. The Contractor shall notify all pipeline companies or current pipeline right-of-way permit holders near the borrow areas, borrow channels, and access channels at least four (4) weeks in advance of any dredging or excavation so that the pipeline companies or right-of-way permit holders may take precautions to mark its pipeline segments if they choose to do so. No dredging or bottom disturbing activities (including anchoring or spudding) may take place within 1,000 feet of any existing pipeline near the Ship Shoal Block 88 Borrow Area or within 500 feet of any existing pipeline near the Whiskey 3A Borrow Area. Refer to GP-25 for utility coordination compliance.

SP-24 PROTECTION OF COMMERCIAL FISHERIES

The Contractor shall note that there are no identified publicly- and privately-issued oyster leases within 1,000 feet of the Work Area. A letter from the Coastal Protection and Restoration Authority – Real Estate and Land Division can be found in Appendix D.

SP-25 DIFFERING SITE CONDITIONS

The Contractor shall promptly, and before the conditions are disturbed, give written notice to the Engineer of (1) subsurface or latent physical conditions at the Work Area which differ materially from those indicated in this Contract, or (2) unknown physical conditions at the Work Area, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

The Engineer shall investigate the Work Area conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the Work under this Contract, whether or not changed as a result of the conditions, an equitable adjustment of Contract price or Contract time or both may be made under this clause and the Contract modified in writing accordingly. Under no circumstances, however, shall an adjustment in Contract price be made for delay caused by materially differing or unknown site conditions.

No request by the Contractor for an equitable adjustment to the Contract under this clause shall be allowed, unless the Contractor has given the written notice required in GP-42. No request by the Contractor for an equitable adjustment to the Contract for differing site conditions shall be allowed if made after final payment under this Contract.

Should differing subsurface or physical condition be encountered, the Contractor will move to an alternate Work area within the limits of the Project to continue dredging activities. This discovery does not allow the Contractor to suspend dredging activity or may not justify an extension of Contract Time. The Contractor is required to pursue the Work in a continuous manner and is advised of the Contract Time within this document.

SP-26 HISTORICAL PERIOD SHIPWRECK SITES

If any shipwreck, artifact, or other objects of antiquity that have scientific or historical value, or are of interest to the public, are discovered, located, and/or recovered, the Contractor acknowledges that: (1) the site(s), articles, or other materials are the property of the State of Louisiana, with title vested in the State Historical Preservation Office; and that, (2) the Contractor shall immediately notify the Engineer in accordance with SP-6.3.3.

SP-27 PHYSICAL DATA

27.1 Data and Information

Information and data furnished or referred to in the Contract Documents are furnished for the Contractor's information. However, it is expressly understood that the Owner or Engineer will not be responsible for any interpretation or conclusion drawn there from by the Contractor. Likewise, the Owner or Engineer will not be responsible for any information provided to the Contractor by any information agency or other party.

27.2 Physical Conditions

The depiction of physical conditions as indicated on the Plans and in these Specifications are the results of site investigations by topographic and bathymetric surveys, magnetometer surveys, and vibracore sampling.

When the indicated physical conditions are the result of site investigations by vibracore sampling, the sampling and probe locations are shown on the Plans. While the Owner's vibracore samples may be representative of subsurface conditions at their respective core locations and vertical reaches, variations in the characteristics of the subsurface materials are likely. Should any questions or discrepancies arise, the conditions should be independently confirmed by the Contractor. Vibracore samples were collected in the borrow areas and the

results of the analyses are supplied in Appendix G.

Beaches are a dynamic environment; actual beach conditions at the time of construction will likely be different from that shown in the Plans; the lateral and seaward extent of sand fill will be limited to that shown on the Plans consistent with these Specifications; however, quantities may vary.

27.3 Local Climatological Data

The following publications, which include information on waves, winds, and tides, are available from the named agencies.

- a. Gulf of Mexico Hindcast Wave Information, Wave Information Studies of U.S. Coastlines. This website provides 20-year wave hindcast summaries at various stations located along the U.S. Gulf of Mexico shoreline. The report includes wave height, period, and direction tables for the 20-year period 1980-1999, summary wave and wind roses, summary tables of mean wave heights by month and year, largest wave heights by month and year, a statistical summary of wave data, and a table of extreme wave events.
Internet URL: <http://frf.usace.army.mil/wis2010/hindcasts.shtml>.
- b. Hubertz, J.M., 1992: User's Guide to the Wave Information Studies (WIS) Wave Model, Version 2.0. WIS Report 27(AD A254 313), Consultant, U.S. Army Waterways Experiment Station, Vicksburg, MS.
- c. Grand Isle, Louisiana Tides, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. This website provides daily tidal predictions, meteorological observations, and sea level trends. Internet URL: <http://tidesandcurrents.noaa.gov/geo.shtml?location=8761724>.
- d. Tolman. 2009. User manual and system documentation of WAVEWATCH III™ version 3.14. NOAA / NWS / NCEP / MMAB Technical Note 276.

SP-28 OBSTRUCTION OF CHANNEL

Marine traffic in the Work Area consists of both commercial and recreational vessels of all types and sizes, which can be accommodated by existing depths. The Owner shall not undertake to keep the Caillou Boca channel free from vessels or other obstructions. The Contractor shall be required to conduct the Work in such manner as to maintain navigation in the channel. Upon completion of the Work, the Contractor shall promptly remove his/her Plant, including ranges, buoys, piles, and other marks placed by him under the Contract in navigable waters or on shore.

SP-29 FEDERAL AGENCY INSPECTION

The Contractor, at the request of BOEM and/or the Bureau of Safety and Environmental Enforcement (BSEE), shall allow access to the site of any operation subject to safety regulations, any authorized Federal inspector and shall provide BOEM or BSEE any documents and records that are pertinent to occupational or public health, safety, or environmental protection as may be requested.

SP-30 DRAWINGS

Any and all drawing submitted by the Contractor shall be formatted to be printed on 11" X 17" paper except where explicitly defined herein. All text and objects shall be drawn to an appropriate engineering scale and legible to the naked eye when printed. The drawings shall be signed and sealed by a professional surveyor or professional engineer licensed in the State of Louisiana where applicable.

SP-31 QUALITY CONTROL

31.1 General Description

The Contractor shall establish and maintain quality control for operations under this section to assure compliance with the Contract Documents and maintain records of the quality control for Materials, equipment and construction operations including, but not limited to, the items included herein. The Contractor has the sole responsibility for quality control and shall provide and maintain such an effective program. The Contractor shall have qualified personnel to provide and maintain control for continual dredging operations. A Daily Progress Report form has been included in this section which the Contractor shall use for keeping quality control records. These reports shall be submitted to the Owner and Engineer on a daily basis.

31.2 Quality Control Plan

The Contractor shall furnish in the Work Plan a quality control plan outlining the procedures, instructions, and reports that will be used. This document shall include, at a minimum, the following:

- a. Structure of the quality control organization;
- b. Number and qualifications of the responsible personnel;
- c. Methods and documentation to assure quality control;
- d. Safety inspection procedures; and
- e. Copy of daily quality control report forms and inspection documents that will be submitted should the Contractor desire to utilize different forms than the ones provided herein.

No Work shall commence until the Contractor's quality control program is approved by the Engineer. If, during the Work process the quality control system is deemed by the Engineer to be inadequate, the Engineer may require corrective actions to rectify said deficiencies. The Contractor's quality control program shall be part of control supervision as field overhead costs and shall not be allowed to be submitted for separate payment.

SP-32 BI-WEEKLY PROGRESS MEETINGS

In addition to the requirements in the General and Special Provisions, the Contractor shall provide an update to the Work Plan, Progress Schedule, progress surveys, and calculations in writing to the Engineer and Resident Project Representatives forty-eight (48) hours in

advance of the Progress Meetings.

SP-33 SUBCONTRACTORS

The use of Subcontractors for any Work is not allowed without written authorization from the Owner and Engineer and in accordance with GP-19.

SP-34 WORK BY OTHERS

The Owner may perform other Work related to the Work Area by itself, or it may let other direct contracts which shall contain General Conditions similar to these.

The Contractor will afford the other contractors who are parties to such direct contracts (or the Owner, if it is performing the additional Work itself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of the Work, and shall properly connect and coordinate his work with theirs. Should the Contract entail relocation of facilities not a part of this Contract, the Contractor will coordinate and cooperate with the applicable entity responsible for this portion of the Work.

SP-35 INSURANCE AND BONDS

The Contractor shall purchase and maintain, without interruption for the duration of the Contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees, or Subcontractors. The duration of the contract shall be from the inception of the contract until the date of final payment.

35.1 Minimum Scope and Limits of Insurance

35.1.1 Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Worker's Compensation law of the State of Louisiana. Employers Liability is included with a minimum limit of \$500,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime law coverage shall be included and the Employers Liability limit increased to a minimum of \$1,000,000. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only.

35.1.2 Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and Completed Operations Liability, shall have a minimum limit per occurrence based on the project value. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. Claims-made form is unacceptable.

The aggregate loss limit must apply to each project. ISO form CG 25 03 (current form approved for use in Louisiana), or equivalent, shall also be submitted. The State project number, including part number, and project name shall be included on this endorsement.

COMBINED SINGLE LIMIT (CSL) PER OCCURRENCE

The required minimum combined single limit amount of insurance shall be as provided below:

<u>Initial Contract Amount</u>	<u>Minimum Insurance</u>
Up to \$1,000,000	\$1,000,000
From \$1,000,001 to \$2,000,000	\$2,000,000
Over \$2,000,000	\$5,000,000

35.1.3 Automobile and Watercraft Liability

Automobile Liability Insurance and Watercraft Liability Insurance shall have a minimum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired, and non-owned automobiles and/or watercraft. If any non-licensed motor vehicles and/or watercraft are engaged in operations within the terms of the contract on the site of the Work to be performed thereunder, such insurance shall cover the use of any such vehicles.

NOTE: If the Contractor does not own an automobile and/or watercraft, and such vehicles are utilized in the execution of the Contract, then hired and non-owned coverage is acceptable. If an automobile and/or watercraft is not utilized in the execution of the Contract, then automobile and/or watercraft coverage is not required.

35.1.4 Excess Umbrella

Excess Umbrella Insurance may be used to meet the minimum requirements for General Liability, Automobile Liability, and Watercraft Liability only.

35.1.5 Pollution Liability (*required when asbestos or other hazardous material abatement is included in the Contract*)

Pollution Liability insurance, including gradual release as well as sudden and accidental shall have a minimum limit of not less than \$1,000,000 per claim. A claims-made form will be acceptable. A policy period inception date of no later than the first day of anticipated Work under this Contract and an expiration date of no earlier than thirty (30) calendar days after anticipated completion of all Work under the Contract shall be provided. There shall be an extended reporting period of at least 24 months, with full reinstatement of limits, from the expiration date of the policy. The policy shall not be cancelled for any reason, except non-payment of premium.

35.1.6 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and accepted by the Owner. The Contractor shall be responsible for all deductibles and self-insured retentions.

35.2 Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

35.2.1 Worker's Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees, and volunteers for losses arising from Work performed by the Contractor for the Owner.

35.2.2 General Liability Coverage

The Owner, its officers, agents, employees and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. ISO Form CG 20 10 (current form approved for use in Louisiana), or equivalent, is to be used.

The Contractor's insurance shall be primary as respects the Owner, its officers, agents, employees and volunteers. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, officials, employees or volunteers. Any insurance or self-insurance maintained by the Owner shall be excess and non-contributory of the Contractor's insurance.

The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the policy limits.

35.2.3 All Coverages

Coverage shall not be canceled, suspended, or voided by either party (the Contractor or the insurer) or reduced in coverage or in limits except after 30 calendar days written notice has been given to the Owner. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy.

Neither the acceptance of the completed Work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.

The insurance companies issuing the policies shall have no recourse against the Owner for payment of premiums or for assessments under any form of the policies.

Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the Owner, its officers, agents, employees and volunteers.

35.2.4 Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of **A-:VI or higher**. This rating requirement may be waived for Worker's compensation coverage only.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance as required in the Contract.

35.2.5 Verification of Coverage

Contractor shall furnish the Owner with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Owner before Work commences and upon any Contract renewal thereafter.

The Certificate Holder must be listed as follows:

State of Louisiana
Coastal Protection and Restoration Authority
450 Laurel Street
Baton Rouge, LA, 70801
Attn: Project # TE-100

In addition to the Certificates, Contractor shall submit the declarations page and the cancellation provision endorsement for each insurance policy. The Owner reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, this Contract, at the election of the Owner, may be suspended, discontinued, or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the Contract.

If the Contractor does not meet the insurance requirements at policy renewal, at the option of the Owner, payment to the Contractor may be withheld until the requirements have been met, OR the Owner may pay the renewal premium and withhold such payment from any monies due the Contractor, OR the Contract may be suspended or terminated for cause.

35.2.6 Subcontractors

Contractor shall include all subcontractors as insureds under its policies OR shall be responsible for verifying and maintaining the certificates provided by each Subcontractor. Subcontractors shall be subject to all of the requirements stated

herein. The Owner reserves the right to request copies of Subcontractor's certificates at any time.

If Contractor does not verify Subcontractors' insurance as described above, Owner has the right to withhold payments to the Contractor until the requirements have been met.

35.2.7 Worker's Compensation Indemnity

In the event Contractor is not required to provide or elects not to provide Worker's compensation coverage, the parties hereby agree the Contractor, its Owners, agents and employees will have no cause of action against, and will not assert a claim against, the State of Louisiana, its departments, agencies, agents and employees as an employer, whether pursuant to the Louisiana Worker's Compensation Act or otherwise, under any circumstance. The parties also hereby agree that the State of Louisiana, its departments, agencies, agents and employees shall in no circumstance be, or considered as, the employer or statutory employer of Contractor, its Owners, agents and employees. The parties further agree that Contractor is a wholly independent contractor and is exclusively responsible for its employees, Owners, and agents. Contractor hereby agrees to protect, defend, indemnify, and hold the State of Louisiana, its departments, agencies, agents, and employees harmless from any such assertion or claim that may arise from the performance of this Contract.

35.2.8 Indemnification/Hold Harmless Agreement

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its officers, agents, servants, employees and volunteers, from and against any and all claims, damages, expenses and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants and employees, or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any claims, demands, suits or causes of action, except those claims, demands, suits or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards, Commissions, its officers, agents, servants, employees and volunteers.

Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands, suits or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the claims, demands, suits, or causes of action are groundless, false or fraudulent.

35.3 Performance and Payment Bond

Recordation of Contract and Bond [38:2241A(2)]

The Contractor shall record within thirty (30) calendar days the Contract between Owner and Contractor, and Performance and Payment Bond with the Clerk of Court in the Parish in which the Work is to be performed. The Contractor shall obtain a Certificate of Recordation from the Clerk of Court and forward this Certificate immediately to the Coastal Protection

and Restoration Authority contact person listed in the Advertisement for Bids. No requests for payment will be processed until receipt of the Certificate of Recordation.

SP-36 WITHHOLDING OF PAYMENTS SPECIFIC TO DELIVERABLES

Payments to the Contractor may be withheld at the discretion of the Owner and Engineer in accordance with GP-60 for the failure of the Contractor to submit deliverables as required by the Contract Documents. Such deliverables include, but are not limited to, Daily Progress Reports; updated Progress Schedules; updates to borrow area cut sequence; daily electronic dredge logs; Progress Surveys of the borrow area; and sea turtle observation and trawling reports.

SP-37 DEFECTIVE WORK

37.1 Defective Work

Defective Work is defined as Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to the Engineer's recommendation of final payment.

37.2 Uncovering the Work

If any Work has been covered which the Owner, Engineer, or Resident Project Representative has not specifically requested to observe prior to its being covered, or if the Owner or Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Owner's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Owner or Engineer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor will bear all costs of such uncovering, exposure, observation, inspection, and testing, and of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction, if he/she makes a Claim therefore.

37.3 Work Stoppage

If the Work is defective, if the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, or if the Contractor fails to make prompt payments to a subcontractor for labor, materials or equipment: the Owner may order the Contractor to stop the Work in accordance with GP-46, or any portion thereof, until the cause for such order has been eliminated: however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other party.

37.4 Correction or Removal of Defective Work

If required by the Owner or Engineer prior to approval of final payment, the Contractor will, promptly, without cost to the Owner and as specified by the Owner or Engineer, either correct

any defective Work whether or not fabricated, installed or completed or, if the Work has been rejected by the Engineer, remove it from the site and replace it with non-defective Work. If the Contractor does not correct such defective Work or remove and replace such rejected Work within fourteen (14) calendar days, all as specified in a written notice from the Owner or Engineer, the Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement shall be paid by the Contractor. The Contractor will also bear the expense of making good all Work of others destroyed or damaged by his correction, removal, or replacement of his defective Work.

37.5 Acceptance of Defective Work

If, instead of requiring correction or removal and replacement of defective Work, the Owner or Engineer prefers to accept it, the Owner or Engineer may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the appropriate revisions to the Contract Documents including an appropriate reduction in the Contract Price.

SP-38 UNIT PRICE WORK

Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price.

Each unit price will be deemed to include an amount considered by the Contractor to be adequate to cover the Contractor's overhead and profit for each separately identified item.

The unit price of an item of Unit Price Work shall be subject to revaluation and adjustment in accordance with GP-43 under the following conditions:

- a. If the total cost of a particular item of Unit Price Work amounts to five percent (5%) or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by the Contractor differs by more than 15% from the estimated quantity of such item indicated in the Contract; and
- b. If there is no corresponding adjustment with respect to any other item of Work; and
- c. If the Contractor believes that it has incurred additional expense as a result thereof; or if the Owner believes that the quantity variation entitles it to an adjustment in the unit price, either the Owner or the Contractor may make a claim for an adjustment in the Contract Price if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

SP-39 EMPLOYEE WHISTLEBLOWER PROTECTION

This Contract and employees working on this Contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employees whistleblower protections

established at 41 U.S.C. 4712 by Section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and Federal Acquisition Regulation (F.A.R.) 3.908.

The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712 as described in Section 3.908 of the F.A.R.

The Contractor shall insert the substance of this clause, including this paragraph, in all subcontracts over the simplified acquisition threshold.

SP-40 DAVIS-BACON ACT

The fourth paragraph of GP-4 is not applicable to this Project.

End of PART II SPECIAL PROVISIONS

PART III TECHNICAL SPECIFICATIONS

TS-1 SCOPE OF WORK

1.1 General Description

The Work to be performed under these Plans and Specifications consists of furnishing all Plant, labor, materials, and equipment for performing all Work required for mobilizing; demobilizing; conducting surveys; dredging of access channels; constructing beach separation and marsh containment dikes; dredging; placing beach/dune fill sediment; placing marsh fill sediment; and installing settlement plates, warning signs, navigation aids, and marsh creation grade stakes in accordance with these Specifications and in conformity to lines, grades, and elevations shown on the Plans or as directed by the Engineer. Major tasks associated with this Work include, but may not necessarily be limited to, the following:

- a. Mobilization and demobilization.
- b. Installation of sediment pipelines.
- c. Migratory bird abatement.
- d. Dredging of access channels for construction equipment access.
- e. Preparation of the fill areas, including the placement of any separation and containment dikes and discharge weirs as required for dewatering.
- f. Dredging and placement of beach/dune and marsh fill sediment.

1.2 Existing Features

The Contractor shall be responsible for investigating, locating and protecting all existing facilities, structures, services, flow lines, and pipelines on, above, or under the surface of the area where equipment transport, sediment pipeline installation, dredging, and filling operations are to be performed. The Owner will not be held responsible for damage to the Contractor's equipment, employees, Subcontractors, adjacent property owners, or anyone else connected with the Project due to encountering objects above and/or below the water surface.

Existing features, where indicated on the Plans, are shown only to the extent such information was made available to or discovered by the Engineer during preparation of the Plans. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness is expressly disclaimed. If the Contractor fails to discover an existing feature including but not limited to structure, service, flow line, or pipeline and damages the same, he/she shall be responsible for the cost of the repair.

TS-2 SUBMITTALS

2.1 Pre-Construction Conference Submittals

A mandatory Pre-Construction Conference shall be held with the Contractor, any Subcontractors, Owner, Engineer, Local Stakeholders, and other appropriate personnel prior to the commencement of Work or mobilization. This conference shall be held at a mutually

agreeable time and place to discuss pertinent details of the Progress Schedule, etc. At the Pre-Construction Conference, the Contractor shall provide the following to the Owner and Engineer:

- a. Communication Plan specifying Contractor chain of command, Owner, Engineer, and Resident Project Representative(s) points of contact, corresponding contact information, and procedures for routine and emergency notifications.
- b. Change Order and Field Order submittal format.

2.2 Administrative Records

2.2.1 Notice of Misplaced Material

The Contractor shall notify the USCG, Owner, and Engineer of any misplaced material as stated in the specification TS-19.

2.2.2 Summary of Project Submittals and Notifications

The following table is a summary of submittals required of the Contractor as part of this section and other sections of these Specifications. All submittals shall be reviewed by the Engineer for acceptance within fourteen (14) calendar days in accordance with GP-41.

SCHEDULE OF SUBMITTALS AND NOTIFICATIONS TABLE

Specification	Deliverable	Submittal
GP-8	Work Plan	14 calendar days prior to Pre-Construction Conference
GP-9	Progress Schedule	14 calendar days prior to Pre-Construction Conference
GP-11	Hurricane and Severe Storm Plan	With Work Plan
GP-12	Health and Safety Plan	With Work Plan
GP-13	Progress Meetings and Reports	Bi-weekly or as determined at the Pre-Construction Conference
GP-19	Names of all Subcontractors	Prior to awarding subcontracts
GP-25	Contact Louisiana One Call	Within 7 calendar days prior to construction
GP-43	Claim for Increase in Contract Price	Within 14 calendar days of the event necessitating increase
GP-44	Claim for Extension of Contract Time	Within 14 calendar days of the event necessitating increase
GP-53	Notice of Completion of Work	Following completion of Work
GP-55	As-Built Survey Drawings	Prior to Final Acceptance

Specification	Deliverable	Submittal
SP-3.2	Petroleum Pipeline Crossing Plan	With Work Plan
SP-6.3.1	Notice of Intent to Dredge	14 calendar days prior to Commencement of Work
SP-6.3.3	Notification of Discovery of Historical or Cultural Sites	Immediately for Each Occurrence
SP-9	Construction Sequence	With Work Plan
SP-10	Daily Progress Report	By 12:00pm the following day
SP-23	Notify Pipeline and Utility Operators	As defined in Appendix D of the Specifications
SP-31.2	Quality Control Plan	With Work Plan
SP-32	Updates to the Work Plan, Progress Schedule, progress surveys, and calculations	48 hours in advance of the Progress Meetings
TS-2.1	Communication Plan	At Pre-Construction Conference
TS-2.1	Change Order and Field Order Format	At Pre Construction Conference
TS-2.2.1	Notice of Misplaced Material	Immediately for Each Occurrence
TS-4.3	Construction Access and Access Restoration Plan	With Work Plan
TS-6.4	Pre-Construction Surveys	Submitted and Approved prior to beginning Work
TS-6.5.7	Submerged Sediment Pipeline Monitoring Reports	Within 5 calendar days of survey completion
TS-6.9	Survey Deliverables	Within 14 calendar days of survey completion
TS-8.4.1.1	Dredge Location Method	With Work Plan
TS-8.4.1.2	Tide Measurements and Methods	With Work Plan
TS-8.6	Turbidity Control Plan	With Work Plan
TS-8.7	Borrow Area Cut Sequence	With Work Plan and Progress Meetings
TS-13.1	Change in Beach Separation Dike Alignment Request	With Work Plan
TS-13.2	Change in Marsh Containment Dike Alignment Request	With Work Plan
TS-13.6	Optional Interior Containment Dike Alignments	With Work Plan
TS-20.3	Description of Daily Nesting Bird Patrols	With Daily Progress Report
TS-20.6	Oil and Fuel Storage Locations	With Work Plan

TS-3 ORDER OF WORK

3.1 Recommended Construction Parameters

The following parameters shall be considered by the Contractor when developing the Progress Schedule for submittal in accordance with SP-9.

- a. The Contractor shall deploy USCG approved lighted aids to navigation prior to commencement of any dredging operations.
- b. The Contractor shall perform and submit the pre-construction surveys and obtain approval by the Engineer prior to any installation of the sediment pipelines or booster pumps; mobilization of any equipment to the conveyance corridors or fill areas; excavation of the access channels; or excavation for construction of separation or containment dikes.
- c. The Contractor shall place and survey settlement plates no sooner than two (2) weeks prior to placement of beach/dune or marsh fill sediment in the vicinity of the settlement plate location.
- d. The Contractor shall construct the beach separation dike, and its construction shall be accepted by the Engineer prior to the placement of any beach/dune sediments. The Contractor shall construct the marsh fill containment dike, and its construction shall be accepted by the Engineer prior to the placement of any marsh fill sediments.
- e. The Contractor shall have the constructed dune fill segment accepted by the Engineer prior to the installation of sand fencing along the constructed dune fill segment. Sand fencing must be installed within seven (7) calendar days of acceptance of a dune fill segment.
- f. The Contractor shall place and survey the overwash monitoring plates prior to demobilization.

The Progress Schedule submitted in accordance with SP-9 shall reflect consideration of these recommendations. The Owner and Engineer will review for acceptance the Contractor's proposed sequence for all other construction items outside of these requirements within the confines of the Contract Time set forth in SP-11.

3.2 Environmental Window

Scheduling requirements regarding endangered/migratory species are set forth in TS-20.2 and TS-20.3.

TS-4 WORK AREA

4.1 Limits of Construction

The construction limits and dredge limits available to the Contractor for accomplishing the Work are documented herein and/or are shown on the Contract Plans. The Contractor may not store Plant or equipment, including sediment pipeline, in excess of what is needed for this Contract within the Work Area. The Work Area encompasses fill areas, containment dikes,

and access channels shown on the Plans. The Work Area relating to the borrow areas and conveyance corridors are defined as the Allowable Anchor Area Limits.

4.2 Security

The Contractor is permitted to exclude the public from the Work Area as necessary to perform the Work and to operate in accordance with the General and Special Provisions. The Contractor shall exclude the public from access to the discharge end of his/her sediment pipeline. Enforcement shall be the Contractor's responsibility at no additional cost to the Owner. The enforcement shall be coordinated with local enforcement agencies and will be subject to approval of the Owner.

4.3 Construction Access

The Contractor shall confine his/her Plant, equipment and operations of personnel to areas permitted by law, ordinances, Permits, and the requirements of the Contract Documents, and shall not unreasonably encumber the premises with Plant or equipment. The Contractor shall not disturb the water bottom during access to the Work Area, or by the authorized activities whether by dredging, wheel washing, prop washing, jetting, mucking, bull dozing, or any other means of moving bottom material, except as depicted in the Plans. Powered vessels shall be operated so as not to disturb the water bottom by propeller or jet action. Access channels and temporary sidecast disposal areas shall be restored to pre-construction conditions as part of demobilization in accordance with TS-14. Additionally, the Contractor shall adhere to any and all equipment access restrictions set forth in these Specifications. It shall be the Contractor's responsibility to coordinate and secure appropriate staging areas and facilities outside of the Work Area if required.

4.4 Protection of Existing Structures

The Contractor shall implement best management practices (BMPs) to protect existing structures within and adjacent to the Work Area at all times. Existing structures include but are not limited to survey control stations and oil and gas infrastructure rock protection dikes.

The Contractor shall exercise due caution when working near structures so as not to damage the structures. The Contractor will be responsible for the cost to repair any damage to existing structures caused by the Work. Final payment shall be withheld until the repairs are made and approved by the Owner.

4.5 Protection of Adjacent Wetland Habitats

There are significant wetland habitats in the vicinity and adjacent to the Work Area. The Contractor shall implement BMPs to protect these habitats adjacent to the Work Area at all times.

The Contractor shall exercise due caution when working near these habitats so as not to cause damage. The Contractor will be responsible for the cost to repair and restore existing adjacent habitats outside of the Work Area damaged by the Work in accordance with TS-10.3 and TS-20.5. Final payment shall be withheld until the repairs and/or replanting are made and approved by the Owner.

4.6 Debris Removal

The Contractor shall, prior to placement of fill, remove all snags, trees, stumps, driftwood, sharp objects, man-made objects, and similar debris lying within the limits of the fill templates and dispose of the debris off-site in areas provided by the Contractor and approved by the Owner and Engineer unless otherwise directed by these Specifications or the Owner and Engineer. On-site relocation of natural debris must be reviewed and approved by the Owner and Engineer prior to placing sediment. All debris removal and offsite disposal or on-site relocation shall be included in Bid Item No. 1A/1B, "Mobilization and Demobilization".

TS-5 MOBILIZATION AND DEMOBILIZATION

5.1 General Description

The Contractor shall provide all labor and equipment necessary to move personnel, equipment, construction materials, and incidentals to and from the Work Area. This shall include but is not limited to establishing offices, buildings, and other facilities necessary for the Work. As part of these Bid Items, the Contractor shall obtain bonds, required insurance, and include any other pre-construction expenses necessary to perform the Work. This section shall exclude the cost of construction materials listed in the Schedule of Bid Items. The Contractor's Daily Progress Report may be used for verification of Work and the Owner and Engineer, at their discretion, may require additional verification by other means.

5.2 Arbitrary Demobilization by Contractor

The Owner will pay for mobilization and demobilization only once. Should the Contractor demobilize prior to completing the Project, such demobilization and subsequent remobilization shall be at no cost to the Owner. If the Contractor elects to demobilize prior to completing the Work, except for the protection of personnel, Plant or equipment prior to a storm, and the Work Area is impacted by a Major Storm, the Contractor shall be required to re-survey the same survey transects as prescribed in TS-6.4 for the pre-construction survey of the borrow areas, fill areas, containment dikes, and flotation channels at no expense to the Owner.

If arbitrary demobilization should occur during construction, upon return to Project Area from an arbitrary demobilization, the Contractor shall be required to resurvey the fill templates in accordance with TS-6.4.4 for a distance of 1,000 linear feet in the direction(s) of the previously accepted sections. If a segment is discontinuous, this requirement shall apply to both ends of the discontinuous fill that had previously been accepted. It shall be the responsibility of the Contractor, at no cost to the Owner, to refill any previously accepted fill sections back to the minimum acceptance elevations and slopes within the 1,000 foot area surveyed as defined in TS-11.7.4 for beach and dune fill and TS-12.5.4 for marsh fill.

5.3 Ratio of Mobilization and Demobilization

5.3.1 Ship Shoal Block 88

a. Ship Shoal Block 88 Borrow Area

The following ratios are specific to Bid Item No. 1A "Mobilization and Demobilization". Thirty percent (30%) of the lump sum price will be paid to the

Contractor upon commencement of sediment placement from the Ship Shoal Block 88 Borrow Area. Twenty percent (20%) of the lump sum price will be paid to the Contractor upon completion of demobilization from the Work Area.

b. Ship Shoal Block 88 Conveyance Corridor

The following ratios are specific to Bid Item No. 1A “Mobilization and Demobilization”. Thirty percent (30%) of the lump sum price will be paid to the Contractor upon completion of mobilization and installation of the sediment pipeline within the Ship Shoal Block 88 Conveyance Corridor and the fill template. Twenty percent (20%) of the lump sum price will be paid to the Contractor upon completion of demobilization from the Ship Shoal Block 88 Conveyance Corridor.

5.3.2 Marsh Fill – Whiskey 3A Borrow Area

For marsh fill construction using the Whiskey 3A Borrow Area, a bid item for mobilization and demobilization is provided specific to the Whiskey 3A Borrow Area and the Whiskey 3A Conveyance Corridor.

a. Whiskey 3A Borrow Area

The following ratios are specific to Bid Item No. 1B “WH3A – Mobilization and Demobilization”. Thirty percent (30%) of the lump sum price will be paid to the Contractor upon commencement of marsh fill sediment placement from the Whiskey 3A Borrow Area. Twenty percent (20%) of the lump sum price will be paid to the Contractor upon completion of marsh fill sediment placement.

b. Whiskey 3A Conveyance Corridor

The following ratios are specific to Bid Item No. 1B “WH3A – Mobilization and Demobilization”. Thirty percent (30%) of the lump sum price will be paid to the Contractor upon completion of mobilization and installation of the sediment pipeline within the Whiskey 3A Conveyance Corridor and the fill template. Twenty percent (20%) of the lump sum price will be paid to the Contractor upon completion of demobilization from the Whiskey 3A conveyance corridor.

5.4 Measurement and Payment

Payment for mobilization and demobilization shall be paid for at the contract lump sum price for Bid Item No. 1A/1B “Mobilization and Demobilization”. Payment shall constitute full compensation for moving personnel, equipment, and supplies to and from the job, obtaining bonds, insurance, required Permits not supplied by the Owner, application fees, and any other associated expenses.

5.5 Justification of Mobilization Costs

In the event that the Owner considers the amount representing mobilization and demobilization, respectively does not bear a reasonable relation to the cost of the Work in this Contract, the Owner may require the Contractor to produce cost data to justify this portion of the Bid. Failure to justify such price to the satisfaction of the Owner will result in payment of actual mobilization costs, as determined by the Owner at the completion of mobilization, and

actual demobilization costs at the completion of demobilization, and payment of the remainder of this item in the final payment under this Contract. The determination of the Owner is not subject to appeal.

TS-6 SURVEYING

6.1 Scope

The Contractor shall furnish all of the materials, labor, and equipment necessary to perform preconstruction, progress, and As-Built Surveys at the locations shown in the Plans and as outlined in these Specifications. **Pre-construction surveys** are those required to be conducted prior to the commencement of Work. Any required intermediate surveys are referred to as **Progress surveys**. **Progress surveys** used to determine payment acceptance and quantities may be referred to as **payment surveys**. Submitted **Progress surveys** shall also be included on **survey drawings**. **As-Built surveys** are those required to be conducted after Project features have been completely constructed and/or excavated.

Benchmarks “TBBSR-SM-01” and “TE14-SM-01” are located in or along the Work Area and were installed as part of Louisiana Department of Natural Resource’s Secondary GPS Network. These benchmarks shall be used for horizontal and vertical control. Data sheets for these benchmarks are included in Appendix F.

Survey data shall reference the North American Datum of 1983 (NAD 83), Louisiana South Zone, U.S. Survey Foot for horizontal control, and the North American Vertical Datum of 1988 (NAVD88 – Geoid12A), U.S. Survey Foot for vertical control.

The survey baselines shown on the Plans were established for the engineering and design survey and shall be used to reference the surveys specified herein. Survey transects to be surveyed as defined in these Specifications.

All surveying Work listed in this section shall be performed under the direct supervision of a professional surveyor or professional engineer licensed in the State of Louisiana. All survey drawings shall be signed and sealed by a Louisiana licensed professional surveyor or professional engineer under which supervision the surveys were conducted.

Any survey conducted within the boundary of the existing mangrove habitat areas shall be conducted by the surveyor on foot. No boats, airboats, or tracked vehicles shall be permitted within the existing mangrove habitats.

6.2 Temporary Bench Marks (TBM)

Temporary Benchmarks shall be installed at locations necessary to stakeout the Project baselines as well as other Project features. Horizontal and vertical coordinates shall be determined for all TBMs installed. All TBMs shall reference Benchmarks “TBBSR-SM-01” and “TE14-SM-01” (Appendix F). The Contractor shall maintain the TBMs for the duration of construction at the Contractor’s expense. In the event that a single TBM is disturbed and/or destroyed, the TBM may be reinstalled by a qualified Contractor employee approved by the Owner. If multiple TBMs are destroyed, the Owner may require the TBMs to be reinstalled by a professional surveyor licensed in the State of Louisiana.

6.3 Accuracy and Methodology

6.3.1 Topographic Surveys

All surveys shall be conducted using the five (5) cm vertical accuracy standard. All onshore points shall be within ± 1 foot horizontally of the established profile line. The Contractor shall use Digital Leveling Instruments, Real Time Kinematic (RTK) and Global Positioning System (GPS) receivers, and software necessary to achieve the required survey accuracy. A six (6) inch diameter metal plate shall be attached to the bottom of the survey rod to prevent the rod from sinking into the sediment past the established grade.

6.3.2 Bathymetric Surveys of the Headland Restoration Area

Bathymetric surveys associated with the Restoration Area may be collected utilizing a single-beam fathometer and shall be performed in accordance with the most recent edition of the U.S. Army Corps of Engineers (USACE) Hydrographic Surveying Manual EM 1110-2-1003 unless otherwise specified. Fathometer and positional data shall be collected along the survey lines with data points collected every one (1) second. All offshore points shall be within ± 30 feet horizontally of the established profile line. Calibration of the fathometer shall be performed for verification of accuracy at the beginning and end of each survey day through the use of a bar check plate or survey level rod based on the water depth of the survey area. Latency checks shall be conducted periodically throughout each day. The latency corrections shall be calculated and adjustments shall be made to the data. Field notes of the bar checks and latency calibrations shall be made available to the Engineer with the data submittal. If bathymetric data are not collected using RTK equipment, the data shall be corrected for tidal variations. If topographic and bathymetric methods are combined to complete a survey transect, topographic and bathymetric surveys must overlap by a minimum of fifty (50) feet. The time span between the topographic and bathymetric surveys should not exceed five (5) calendar days. The Contractor shall propose in the Work Plan the methods to be utilized to reference NAVD88 for the bathymetric surveys for review and approval by the Owner and Engineer prior to conducting surveys.

6.3.3 Bathymetric and Side Scan Sonar Surveys of Borrow Areas and Conveyance Corridors

Surveys, error analysis, and reporting associated with the borrow areas and conveyance corridors shall be performed in accordance with the most recent edition of the USACE Hydrographic Surveying Manual EM 1110-2-1003 unless specified otherwise. Bathymetric surveys shall be acquired using interferometric swath or multibeam bathymetric methods. All interferometric swath or multibeam and side scan sonar surveys shall have one hundred percent coverage. All bathymetric data will be roll, pitch, heave, and tide corrected using BMPs. Sound velocity corrections will be applied based on measurements made during and throughout the duration of the survey using a profiling sound velocity meter to obtain water column sound velocities with casts that log the entire water column to the seafloor.

Surveys will be conducted using kinematic GPS referenced to a GPS base station occupying an established (NAVD 88 vertical control) monument within nine (9)

miles of the survey area or a National Geodetic Survey real-time network; or referenced to a water-level gauge deployed within the vicinity of the Work Area, unless alternative methods are approved by the Engineer and BOEM. Pre- and post-dredging surveys will be referenced to the same water-level gauge, tide gauge, real-time network and/or benchmark, etc. Surveys not tide corrected in real-time or by water-level gauge collecting tide correction at an appropriate time interval during the survey will not be accepted. An uncertainty or error analysis will be conducted on the bathymetric dataset based on calculated differences of measured elevations at all transect crossings. Other BMPs typically employed to identify potential error or quantify uncertainty, such as daily bar-checks, must be conducted and documented. A methods and uncertainty analysis report, field notes, and metadata must be submitted to the Engineer with the processed bathymetric data products.

6.4 Pre-Construction Surveys

The baseline and transects shown on the Plans shall be surveyed and staked by the Contractor after the Pre-Construction Conference and prior to construction. This survey shall be used by the Engineer to verify the alignment of the various Project features, determine fill volumes, quantities, and make modifications or adjustments as deemed necessary by the Engineer.

6.4.1 Borrow Areas

The borrow area survey specifications apply to all borrow areas for the Project from which beach, dune, and marsh fill sediment will be dredged. Surveys shall be conducted in accordance with TS-6.3.3. All survey lines shall extend a minimum of six hundred (600) feet past the borrow area limits. The pre-construction surveys shall be conducted a maximum of sixty (60) calendar days prior to beginning of dredging. Surveys shall be submitted to and approved by the Engineer fourteen (14) calendar days prior to beginning any borrow area excavation to ensure that borrow area elevations have not significantly changed.

6.4.2 Conveyance Corridors

The conveyance corridor survey specifications apply to all conveyance corridors utilized for the Project. Surveys shall be conducted in accordance with TS-6.3.3. The pre-construction surveys must be submitted to and approved by the Engineer fourteen (14) calendar days prior to beginning any installation of submerged sediment pipeline within the conveyance corridor.

6.4.3 Access Channels and Temporary Sidecast Disposal Areas

Cross channel transects shall be surveyed *perpendicular* to the access channel alignments, shall include any temporary sidecast disposal areas where present, and shall be surveyed every 100 feet along the access channel alignments. Points to be surveyed include top and bottom of cut for both sides of the access channel and the channel bottom mid-point. Transects shall extend 100 feet beyond the temporary sidecast disposal area limits. Additionally, a survey transect shall be conducted along the access channel alignment. Surveys shall be submitted to and approved by the Engineer fourteen (14) calendar days prior to beginning any access channel excavation.

6.4.4 Fill Areas

A survey of the natural ground elevations of the beach, dune, and marsh fill areas shall be made. It shall consist of transects spaced 250 feet apart and oriented perpendicular to the survey baseline as shown on the Plans. Additional transects shall be surveyed along the fill template gulfward beach crest line, both dune crest lines, and beach separation dike alignment. Transects shall extend 3,000 feet north of the survey baseline from survey baseline station 10+00 to 45+00 and 187+50 to 280+00. Transects shall extend north of the survey baseline to 250 feet north of the Work Area limits from survey baseline station 47+50 to 185+00. All transects shall extend 3,000 feet beyond the survey baseline to the south. Elevations shall be recorded at points every 50 feet minimum along each transect line in the marsh fill and 25 feet minimum along each transect line in the beach/dune fill. Elevations shall be recorded at all grade breaks in the beach separation dike and at abrupt changes and where beach/dune fill areas meet marsh fill areas. This point shall be denoted on all transects. The pre-construction surveys must be submitted to and approved by the Engineer fourteen (14) calendar days prior to the placement of beach/dune and marsh fill sediment.

6.4.5 Marsh Containment Dikes and Borrow Channels

Cross dike transects shall be surveyed *perpendicular* to the marsh containment dike alignments and shall include the primary and secondary containment dike borrow channels where present. Cross dike transects shall be surveyed every 100 feet along the marsh containment dike. Transects shall extend 250 feet beyond the marsh containment dike toes; 250 feet beyond the primary and secondary containment dike borrow channel limits where present, regardless of whether a particular borrow channel is utilized; or 250 feet beyond the Work Area Limits where adjacent to existing marsh/mangrove habitats as shown on the Plans. A centerline transect shall also be conducted marsh containment dike and borrow channels. Surveys shall be submitted to and approved by the Engineer fourteen (14) calendar days prior to beginning any borrow channel excavation.

6.4.6 Settlement Plates

The Contractor shall survey and record the elevation of the top of pipe and existing grade at each settlement plate location. The elevations shall be recorded and reported to the nearest tenth of a foot (0.1 ft) NAVD88 as well as its Northing and Easting coordinates in Louisiana State Plane South, NAD 83, U.S. survey ft. The top of pipe elevation, horizontal position, existing grade, and distance from settlement plate base to the top of pipe shall be recorded upon installation. The top of pipe elevation and existing grade at the settlement plate shall be recorded weekly throughout the duration of construction. If the settlement plate pipe is extended through an attached extension to the threaded top end, then elevations shall be recorded as described above prior to installation of the extension and immediately after installation of the extension. An Excel spreadsheet of the elevation and position data shall be provided to the Owner and Engineer.

6.4.7 Magnetometer Surveys

The Contractor shall perform a magnetometer survey of the borrow areas, conveyance corridors, beach and marsh fill areas, access channels, containment dikes, and containment dike primary/secondary borrow channels to identify any pipeline, utilities, and/or obstruction locations and ensure no unknown infrastructure exist within the Work Area. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, the magnetometer survey requirement is waived for the Whiskey 3A Borrow Area and Whiskey 3A Conveyance Corridor.

Magnetometer track lines in the borrow areas shall be surveyed at 200 foot intervals, perpendicular and parallel to the survey baseline, and shall coincide with the alignment of the borrow area surveys described in TS-6.5.6 and shall extend six hundred (600) feet beyond the borrow area limits.

The Contractor shall perform a magnetometer survey along the conveyance corridors. The Contractor shall perform, at a minimum, three (3) magnetometer survey transects within the conveyance corridors and parallel to the conveyance corridor alignments. Transects shall be spaced sufficiently to adequately detect pipelines, utilities, or obstructions within the conveyance corridors.

The Contractor shall submit the proposed survey transect alignment for the beach/dune and marsh fill areas, access channels, and containment dike primary/secondary borrow channels along with a listing and description of the equipment to be used for all magnetometer surveys required of the Specifications in the Work Plan for approval by the Engineer prior to conducting surveys.

Magnetometer surveys of the borrow areas and conveyance corridors shall be provided to the Owner and Engineer fourteen (14) calendar days prior to dredging and/or sediment pipeline installation. Magnetometer surveys of the fill areas, access channels, and containment dike primary/secondary borrow channels shall be provided to and accepted by the Engineer prior to dredging or excavations. This does not relieve the Contractor of responsibilities set forth in GP-25 or SP-23.

6.4.8 Pipeline Locations

All pipelines located within 150 feet of the containment dike alignments, primary/secondary containment dike borrow channel alignments, access channels, beach/dune and marsh fill areas, borrow areas, and conveyance corridors shall be probed by the Contractor for depth and their locations marked prior to excavation, dredging, and installation of the sediment pipeline, for the duration of construction activities. A buffer distance of 50 feet from any pipeline, utility, or obstruction within the Work Area shall also be staked prior to excavation by the Contractor. No hydraulic dredging as well as no bottom disturbing activities (including anchoring and spudding) may take place within 1,000 feet of any existing pipeline near the Ship Shoal Block 88 Borrow Area or within 500 feet of any existing pipeline near the Whiskey 3A Borrow Area. The Northern and Easting locations of *each* probing attempt whether or not a pipeline is detected shall be recorded in a table. For each probe positive finding a description of the findings that include the length of the probing apparatus, water elevation, depth of cover, and water bottom elevations shall be recorded in a table and provided with the survey deliverables.

6.4.9 Marsh Grade Stake Surveys

Following the installation of any marsh grade stakes in marsh fill template, the Contractor shall provide the Owner and Engineer with an electronic file containing the following information:

- a. Grade Stake Number;
- b. Northing and Easting (Louisiana State Plane South, NAD 83, US FT);
- c. Elevation of the top of the stake to the nearest tenth of a foot (0.1 ft) NAVD88;
- d. Distance from the top of the stake to the top of the gauge sign to the nearest tenth of a foot (0.1 ft) NAVD88; and
- e. Distance from the top of the stake to the existing ground (tape-down distance).

6.5 Progress Surveys

The baseline and transects used for the Pre-construction survey shall be used for the Progress surveys. These surveys shall be used for payment of the beach, dune, and marsh fill volumes; payment of the separation/containment dikes; payment of access channels; and to make modifications or adjustments as deemed necessary by the Owner and Engineer. Drawings of the plan views and cross sections and calculations of quantities of materials shall be developed from this survey by the Contractor and submitted to the Engineer for review and payment. The borrow area excavation volumes shall be calculated using a method that is approved by the Engineer, such as Hypack TIN method (triangulated irregular network). The quantities of sediment excavated from each borrow area used shall be calculated in cubic yards. The beach, dune, and marsh fill quantities shall be calculated using a method that is approved by the Engineer. The quantities of beach, dune, and marsh fill sediment shall be calculated in cubic yards. The marsh containment dike, beach separation dike, and access channel quantities shall be calculated per linear foot.

6.5.1 Access Channels and Temporary Sidecast Disposal Areas

The same transects surveyed for Pre-construction as specified in TS-6.4.3 shall be surveyed again following construction of the access channels and temporary sidecast disposal areas. The elevation and coordinates shall be recorded and used to create plan views and cross sections of the access channels and temporary sidecast disposal areas to ensure that the access channels and temporary sidecast disposal areas are being constructed to the dimensions shown on the Plans.

6.5.2 Marsh Containment Dikes and Borrow Channels

During construction, Progress surveys shall be conducted along the marsh containment dike and borrow channels along the exact same transects as those of the Pre-construction surveys. These surveys shall be submitted for review by the Engineer after construction of the containment dike for each lift defined in TS-13.3 in 2,000-foot increments. After the marsh containment dikes have been constructed, the Contractor shall survey the marsh containment dikes along the exact same transects

as those of the Pre-construction surveys. The elevation and coordinates shall be recorded and used to create plan views and cross sections of the containment dikes and borrow channels to ensure that the dikes and channels are being constructed to the dimensions shown on the Plans. During marsh fill construction activities, the containment dikes shall be surveyed weekly along the exact same transects as those of the Pre-construction surveys.

6.5.3 Beach Separation Dike

During construction, Progress surveys shall be conducted along the beach separation dike along the exact same transects as those of the beach/dune Pre-construction surveys extending 250 feet north and south of the beach separation dike alignment. The elevation and coordinates shall be recorded and used to create plan views and cross sections of the separation dike and borrow channels to ensure that the dike and borrow channel are being constructed to the dimensions shown on the Plans.

6.5.4 Beach/Dune and Marsh Fill Areas

The exact same transects surveyed for Pre-construction shall be surveyed again when the Contractor requests payment for beach/dune fill and marsh fill. The Contractor shall perform additional survey transects in fill areas as deemed necessary by the Owner and Engineer.

The Contractor shall provide Progress survey maps and cross sections of the fill areas to the Owner and Engineer at the Progress Meetings, at a minimum once per month. Payments may be withheld in accordance with SP-36 for delinquency of submittals as determined by the Owner and Engineer.

In marsh fill areas deemed inaccessible by the Engineer through the use of conventional survey methods, grade stakes will be used to verify marsh fill placement and acceptance as per TS-12.5.4. The top of fill elevation coordinates and identification number shall be recorded at each grade stake and used to create plan views and cross sections. These plan views and cross sections shall be used for the calculation of the marsh fill volume.

The area contained in each transect shall then be calculated upon acceptance of the post-construction elevations by the Engineer. Conditions for acceptance are outlined in TS-11.7 and TS-12.5. The volume for each fill section shall be calculated by multiplying the average transect cross sectional area by the length of the fill segment (average end area method) or other method approved by the Engineer. Volume calculations shall be submitted to the Engineer for verification.

6.5.5 Settlement Plates

The Contractor shall survey and record the elevation of the top of pipe and existing grade at each settlement plate location shall be recorded and reported to the nearest tenth of a foot (0.1 ft) NAVD88 as well as its Northing and Easting coordinates in Louisiana State Plane South, NAD 83, U.S. survey ft. The top of pipe elevation, horizontal position, existing grade, and distance from settlement plate base to the top of pipe shall be recorded upon installation. The top of pipe elevation and existing grade at the settlement plate shall be recorded weekly throughout the duration of

construction. If the settlement plate pipe is extended through an attached extension to the threaded top end, then elevations shall be recorded as described above prior to installation of the extension and immediately after installation of the extension. An Excel spreadsheet of the elevation and position data shall be provided to the Owner and Engineer.

6.5.6 Borrow Areas

The borrow area survey specifications apply to all borrow areas for the Project from which beach, dune, and marsh fill sediment will be dredged. Progress surveys of the borrow areas may be conducted using single-beam fathometer, interferometric swath, or multibeam bathymetry methods. For single-beam surveys, transects shall be spaced two hundred (200) feet apart, ***perpendicular and parallel*** to the borrow area survey baseline, and extend at a minimum five hundred (500) feet beyond the cumulative extents of excavation. Interferometric swath or multibeam bathymetry methods shall require one hundred (100) percent coverage. All surveys shall be conducted in accordance with TS-6.3.

The Contractor shall provide Progress survey maps and cross sections of the borrow areas to the Owner and Engineer at the Progress Meetings, at a minimum once per month. Payments may be withheld in accordance with SP-36 for delinquency of submittals as determined by the Owner and Engineer.

6.5.7 Submerged Sediment Pipeline Monitoring Within The Conveyance Corridors

Any submerged sediment pipelines installed within the conveyance corridors shall be routinely monitored with side scan sonar, multibeam bathymetry, or swath bathymetry for movement, breakage, or leaks resulting in sediment discharge on the water bottom in accordance with TS-6.3.3. The surveys shall be repeatable and compared to prior surveys for any alignment, stability, and integrity issues.

An initial survey shall be conducted following installation of the submerged sediment pipeline within the conveyance corridors. The initial surveys must be submitted to and approved by the Engineer prior to utilization of the submerged sediment pipeline for sediment transport.

Monitoring surveys shall be conducted monthly to ensure pipeline integrity and position within the authorized conveyance corridor by comparison to prior surveys. Additional inspection surveys will be conducted immediately upon detection of any loss of pressure indicative of leaks, the passage of a major storm, and/or evidence of pipeline disturbance by other activities such as fishing vessels, etc. Inspection survey reports with quality control analysis must be submitted to Engineer for concurrence within five (5) calendar days of completion of each survey.

If, prior to Project completion and final demobilization, the dredge plant and supporting equipment (e.g. booster pumps) are temporarily or arbitrarily demobilized from the Work Area for more than fourteen (14) calendar days, a monitoring survey of the sediment pipeline shall be conducted within twenty-one (21) calendar days of the temporary or arbitrary demobilization and monthly thereafter.

The Owner reserves the right to require additional surveys in the wake of a severe storm event.

6.6 As-Built Surveys

The borrow areas, conveyance corridors, access channels, temporary sidecast disposal areas, separation/containment dikes, beach, dune, and marsh fill areas, and settlement plates shall be surveyed in their entirety by the Contractor after construction is complete. The Contractor shall notify the Engineer at least three (3) calendar days prior to when the As-Built surveys will be conducted. Final payment will not be received until the As-Built Survey and Work have been accepted by the Engineer.

6.6.1 Borrow Areas

The borrow area survey specifications apply to all borrow areas for the Project from which beach, dune, and marsh fill sediment will be dredged. An As-Built survey of the entire borrow area(s) shall be conducted upon completion of dredging activities. The exact same transects surveyed and methodologies used for pre-construction and in accordance with TS-6.3.3 shall be employed again by the Contractor. The As-Built quantities of sediment excavated from each borrow area used shall be calculated in cubic yards.

6.6.2 Conveyance Corridors

The conveyance corridors shall be surveyed in accordance with TS-6.3.3 by the Contractor following removal of the submerged sediment pipeline and completion of construction activities.

6.6.3 Access Channels and Temporary Sidecast Disposal Areas

The same transects surveyed for pre-construction as specified in TS-6.4.3 shall be surveyed again for the As-Built survey of the access channels and temporary sidecast disposal areas. These surveys will be checked by the Owner and Engineer for restoration of temporary sidecast disposal areas to within ± 0.5 ft NAVD88 of pre-construction conditions prior to demobilization.

6.6.4 Beach Separation and Marsh Containment Dikes

The As-Built survey shall incorporate the cross sections and plan views from the accepted progress surveys for all beach separation and marsh containment dikes and borrow channels. The As-Built quantities of the beach separation and marsh containment dikes shall be calculated per linear foot.

6.6.5 Fill Areas

The As-Built survey shall incorporate the accepted progress surveys for all of the beach/dune and marsh fill areas. The Contractor shall develop drawings which include the cross sections, plan views, elevations, quantities, and volumes from the progress surveys. The dates, elevations, and volumes for each progress survey shall be superimposed onto the corresponding fill cells on the plan views. The As-Built quantities of beach, dune, and marsh fill sediment shall be calculated in cubic yards.

6.6.6 Settlement and Overwash Monitoring System

The As-Built survey of the settlement plates shall include the installation of the overwash monitoring plates. The Contractor shall survey and record the elevation of the top of pipe and existing grade at each settlement plate location shall be recorded and reported to the nearest tenth of a foot (0.1 ft) NAVD88 as well as its Northing and Easting coordinates in Louisiana State Plane South, NAD 83, U.S. survey ft, prior to installation of the overwash monitoring plate. Following the installation of the overwash monitoring plate the Contractor shall survey and record the top of plate and top of the riser pipe elevations to the nearest tenth of a foot (0.1 ft) NAVD88 as well as its Northing and Easting coordinates in Louisiana State Plane South, NAD 83, U.S. survey ft. An Excel spreadsheet of the elevation and position data collected during the entire length of Work shall be submitted to the Owner and Engineer.

6.6.7 Sand Fencing

Horizontal locations of approved sections of installed sand fencing shall be recorded at fencing end points and at locations every 1,000 feet in between and shown on the As-Built survey.

6.7 Survey Drawings

Survey drawings required by these Specifications shall be submitted to the Engineer in digital AutoCAD format and 11" X 17" hard copy. A total of three (3) hard copies of the survey drawings for pre-construction, progress, and post-construction shall be submitted to the Engineer for review immediately after they are completed in order to receive acceptance and payment. Drawings shall be based on the original drawings using the original scales and datums. The drawings shall be signed and sealed by a professional surveyor or professional engineer licensed in the State of Louisiana and submitted to the Owner and Engineer for approval prior to final acceptance. Failure to properly reference the survey baselines, original scales, or datums may be considered cause to reject the surveys in accordance with GP-47.

6.8 Digital File Naming Convention

The electronic files for the AutoCAD survey drawings and Survey point files required of the survey deliverables shall conform to the following file naming convention:

- Pre-construction AutoCAD Files =
TE-100_(SURVEY AREA)_PREC_(MMDDYYYY).dwg
- Pre-construction Survey Point Files =
TE-100_(SURVEY AREA)_PREC_(MMDDYYYY).xyz
- Progress Survey AutoCAD Files =
TE-100_(SURVEY AREA)_PROG_(MMDDYYYY).dwg
- Progress Survey Point Files =
TE-100_(SURVEY AREA)_PROG_(MMDDYYYY).xyz
- Post-construction (Payment) AutoCAD Files =
TE-100_(SURVEY AREA)_PSTC_(MMDDYYYY).dwg
- Post-construction (Payment) Survey Point Files =
TE-100_(SURVEY AREA)_PSTC_(MMDDYYYY).xyz
- As-Built AutoCAD Files =
TE-100_(SURVEY AREA)_PSTC_(MMDDYYYY).dwg

- As-Built Survey Point Files =
TE-100_(SURVEY AREA)_PSTC_(MMDDYYYY).xyz

Wherein the (SURVEY AREA) is defined as:

- Ship Shoal Block Borrow Area = S88
- Whiskey 3A Borrow Area = W3A
- Ship Shoal Block 88 Conveyance Corridor = SSC
- Whiskey 3A Conveyance Corridor = W3C
- Access Channels = ACA
- Beach/Dune Fill Area = BFA
- Marsh Fill Area - MFA
- Marsh Containment Dikes and Borrow Channels = CDA
- Beach Separation Dike and Borrow Channel = SDA

Wherein (MMDDYYYY) represents the month, day, and year of the last day of data collection for the particular survey.

6.9 Survey Deliverables

Survey deliverables with the exception of the submerged sediment pipeline monitoring surveys (TS-6.5.7) shall be submitted to the Engineer for review within 14 calendar days of survey completion in order to receive acceptance and payment. All submittals shall be reviewed by the Engineer for acceptance within fourteen (14) calendar days in accordance with GP-41.

The survey deliverables shall contain the following information:

- a. Point Files containing point number, Northing and Easting (Louisiana State Plane South NAD 83 US FT), Elevation (reported to the nearest one tenth foot (0.1 ft) NAVD88), and point description in electronic format. Points files shall be organized by transect.
- b. Survey drawings as described in TS-6.7.
- c. 3D quality files in electronic format.
- d. RINEX files in electronic format.
- e. Survey field notebook in electronic PDF format.
- f. Survey Metadata Files

6.10 Ratio of Pre- and Post-Construction Surveying Effort

Twenty percent (20%) of the lump sum price will be paid to the Contractor upon completion of pre-construction surveys. Sixty percent (60%) of the lump sum price will be paid to the Contractor for Progress Surveys. Progress Survey payments shall be determined as a percentage of the volume placed within the beach/dune and marsh fill templates during the period of the progress survey, divided by the total combined volume of Bid Item No. 3 "Beach and Dune Fill" and Bid Item No. 4A/4B "Marsh Fill," times sixty percent (60%) of the lump sum price for Bid Item No. 2 "Surveys". The remaining twenty percent (20%) will

be paid to the Contractor upon approval of post-construction survey drawings and electronic submittals.

6.11 Justification of Surveying Costs

In the event that the Owner considers the amount in this item as defined in TS-6.10 does not bear a reasonable relation to the cost of the Work in this Contract, the Owner may require the Contractor to produce cost data to justify this portion of the Bid. Failure to justify such price to the satisfaction of the Owner will result in payment of actual surveying costs, as determined by the Owner at the completion of each survey, and payment of the remainder of this item in the final payment under this Contract. The determination of the Owner is not subject to appeal.

6.12 Measurement and Payment

All costs associated with pre- and post-construction surveys as may be denoted in the Contract Documents shall be paid for at the Contract lump sum price for Bid Item No. 2 "Surveys".

TS-7 CHARACTER OF BORROW SEDIMENT

7.1 General Description

The borrow area sediment for the Project are documented by interpretation of geophysical data including sidescan sonar and seismic subbottom surveys, vibracore samples, and classifications by laboratory tests on samples from the cores. Applicable boring logs are presented in Appendix G. While the borings are representative of subsurface conditions at their respective locations and vertical reaches, local variations in the characteristics of the subsurface materials within the borrow areas are to be expected. Accordingly, prospective bidders shall form his/her own conclusions from the examination of the recovered materials prior to submission of their Bid. Refer to TS-8.7 and the Plans for borrow area restrictions. The Contractor shall immediately notify the Owner and Engineer of any differing site conditions in accordance with SP-25.

7.2 Character of Borrow Area Sediment

7.2.1 Ship Shoal Block 88 Borrow Area

Assessment of the Ship Shoal Block 88 Borrow Area indicates good quality sand containing an average grain size of 0.19 mm classified as fine sand in the Wentworth scale and fine sand in ASTM soil size ranges, and comprised of over 96% sand. The Contractor is required to examine the geophysical and geotechnical data included in Appendix G. A segment of the borrow area defined by coordinate points S88-24 through S88-27 and S88-29 and from cut elevation -25 ft to -27 ft NAVD88 has been designated for marsh fill construction only. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, this segment may be excavated for marsh fill construction only. Also the Contractor is advised that during the surveys, numerous minor magnetic and acoustic anomalies were recorded. Borrow area boundaries were refined to avoid major anomalies but such debris should be expected.

7.2.2 Whiskey 3A Borrow Area

Assessment of the Whiskey 3A Borrow Area indicates marsh compatible sediment comprised of 60% sand with the combination of finer mixed marsh stratigraphic unit overlaying lower clay sediment. The Contractor is required to examine the geophysical and geotechnical data included in Appendix G. Also the Contractor is advised that during the surveys, numerous minor magnetic and acoustic anomalies were recorded. Borrow area boundaries were refined to avoid major anomalies but such debris should be expected.

7.3 Unsuitable Materials

7.3.1 Beach/Dune Fill

Unsuitable materials for beach and dune fill include wood fragments, peat, clay balls, logs, stumps, snags, scrap, other natural debris, and man-made debris.

7.3.2 Marsh Fill

Unsuitable materials for marsh fill include logs, snags, scrap, and man-made debris.

7.3.3 Beach Separation and Marsh Containment Dikes

Unsuitable materials for containment dikes include logs, stumps, snags, scrap, other natural debris, and man-made debris.

7.4 Quality Control for Beach Placement of Sand

As part of their quality control, the Contractor's onsite personnel shall be trained and experienced in beach nourishment and construction inspection and be knowledgeable of the project design and sediment characteristics. The beach and dune fill sediment quality and the Quality Control measures to be implemented by the Contractor shall be discussed as a matter of importance at the pre-construction meeting. The Contractor shall be required to acknowledge the goals and intent of the project with respect to the beach and dune fill sediment quality in writing prior to commencement of dredging and filling. The Contractor's Daily Progress Reports shall characterize the nature of the sediment encountered at the borrow areas and placed along the beach and dune fill with specific reference to sand content and the occurrence of unsuitable materials defined in TS-7.3. The Contractor shall work cooperatively with the Engineer and Resident Project Representatives to avoid the placement of unsuitable materials within the beach and dune fill.

TS-8 DREDGING

8.1 General Description

All dredging for dredge sites including the borrow areas, containment dikes, and access channels shall be performed within the permitted dredge limits as depicted on the Plans and in the Permits. All dredging shall be performed in a uniform and continuous manner to avoid creating multiple holes, valleys, or ridges within the section of the area to be dredged. There shall be no excavation outside of the permitted borrow areas. A 200 foot wide allowable anchoring area beyond the borrow area and conveyance corridor limits is provided as shown

on the Plans. There shall be no bottom disturbing activity, including anchoring or spudding, outside of the approved 200 foot wide allowable anchor area.

All dredges and other auxiliary service vessels shall be equipped with bridge-to-bridge radiotelephones capable of operating from the main control stations and capable of transmitting and receiving on the frequencies within the 156 to 162 Megahertz band using the class of emissions designated by the Federal Communications Commission for the exchange of navigational information and to provide for maximum safety of operations.

For dredge vessels wherein the Code of Federal Regulations (CFR) does not require a USCG licensed U.S. Merchant Marine Officer for operations, qualified person(s) shall be required to stand watch and monitor the required marine radio channels for vessel-to-vessel communications for passing as well as the operational safety of the dredge, Plant, and support vessels during mobilization, construction, and demobilization.

8.2 Method

The method of transporting sediment from the borrow areas to the beach, dune, and marsh fill areas shall be accomplished via cutterhead dredge, booster pumps and submerged sediment pipeline. A DREDGE DATA SHEET is included in Appendix A - Attachment A2 and must be completed and submitted with the Bid. The dredge equipment and attendant plant shall be in satisfactory operating condition, capable of efficiently performing the Work as set forth in the Plans and Specifications, and shall be subject to inspection by the Owner or Engineer prior to beginning the Work, and at all times during construction. All vessels shall meet the requirements specified in GP-38.

The Contractor is allowed to conduct dredging and disposal operations twenty-four (24) hours per day, including Saturdays, Sundays, and Holidays, at Contractor's discretion, provided that Contractor complies with all applicable labor laws.

8.3 Placement of Dredged Sediment

The Contractor shall not deposit dredged sediment into areas other than those shown on the Plans or stated in Permits without approval of the Owner. Any sediment that is deposited other than as indicated on the Plans or as approved by the Engineer may be required, by the Engineer, to be removed and deposited in approved areas at the Contractor's expense per TS-19. Excess runoff of dredged sediment into areas other than those shown on the Plans or stated in Permits shall be prevented by maintaining a sufficient distance from the discharge pipe to the containment dikes or through controlling discharge flow rates. It is the Contractor's responsibility to maintain the containment dikes throughout construction in accordance with these Specifications and the Permits.

Materials such as logs, stumps, snags, scrap and other debris may be encountered within the dredge limits and shall be removed and disposed of by the Contractor. The Contractor shall change the location and depth of dredging within the borrow area dredge limits for beach, dune, and marsh fill when necessary to avoid unsuitable materials defined in TS-7.3. The Contractor shall immediately change the location of the dredging in order to avoid placement of the unsuitable materials in the fill areas. The Contractor shall also notify the Resident Project Representative(s) immediately of these changes. The location of unsuitable materials encountered within the borrow area dredge site shall be noted on the Contractor's Daily Progress Report. The identified locations of unsuitable materials shall be avoided in future

passes of the dredge. The location and limits of unsuitable materials placement within the fill area shall also be noted to allow removal or remediation by the Contractor as defined in TS-11.2 and TS-12.2.

The Owner or Engineer reserves the right to relocate the Contractor within the borrow areas to avoid placement of unsuitable materials. Relocations to avoid unsuitable materials identified and reported on the Daily Progress Report shall be at no additional cost to the Owner and shall not be a basis of claim for additional costs or time.

The Contractor may be required by the Engineer to operate the dredge at a specified lower production rate and/or to temporarily suspend dredging operations to allow the material to settle and dewater thereby ensuring project elevation and layout is obtained. All costs associated with this discharge control should be contained within the Bid Items No. 5A/5B "Beach Separation Dike" and No. 6A/6B "Marsh Containment Dike". If the Contractor is required by the Engineer to stop dredging, an equitable adjustment of Contract Price or Contract Time or both may be considered in accordance with GP-43 and GP-44.

8.4 Dredge Quality Management Program (DQM)

The Contractor is required to implement a DQM that is consistent with these Specifications and Permits as well as the requirements of the Non-Competitive Negotiated Agreement (NNA) between the Owner and BOEM provided in Appendix E. The Contractor's DQM shall be submitted with their Work Plan for review and approval by the Owner and BOEM prior to mobilization. This includes sediment excavation, transport, and sediment pump-out.

8.4.1 Dredge Location Control

8.4.1.1 *Horizontal Location*

The Contractor is required to have electronic positioning equipment that will locate the dredge when operating in the borrow area. The Contractor shall keep this equipment functioning on the dredge at all times during construction. The Contractor is required to calibrate the equipment as required by the manufacturer. Proof of calibration shall be submitted to the Owner and Engineer. Continuous locations of the dredge shall be made at all times during dredging operations. The location is to be by computed coordinates in the Louisiana State Plane South Coordinate System, NAD 83 with a probable range error not to exceed ten (10) feet. Positions shall be recorded at least every two (2) minutes along the track of the dredge. The Contractor's method of location of the dredge shall be submitted to the Owner and Engineer for review and approval with the Contractor's Work Plan.

8.4.1.2 *Dredging Elevations*

The Contractor is also required to have a dredging depth indicator capable of gauging the depth being dredged at all times for each piece and type of dredging plant being utilized. The instrument shall be of electronic recorder type. The indicators shall be in plain view of Operators and Resident Project Representative(s) and be adjusted to the reference datum, NAVD88. The Contractor shall use surveying equipment and methodology specified in TS-

6.3 to achieve this vertical datum. Proposed tide correction methods and measurements must be included in the DQM.

8.4.1.3 *Reporting*

The Contractor shall compile from the silent inspector a daily electronic dredge log providing at a minimum the date (mm/dd/yy), time (hh:mm:ss), cutterhead location (NAD83 X-Y, ft), cutterhead elevation (NAVD88, ft) and the tide (NAVD88, ft). Data shall be collected at intervals not to exceed two (2) minutes.

The Contractor shall provide the daily electronic dredge logs by 12:00pm the following day to the Owner and Engineer. In accordance with SP-11 the Contractor shall notify the Owner and Engineer immediately of any violation of the permitted borrow area limits, both horizontal and vertical.

8.4.2 Deduction for Non-Conforming Work

No excavation shall occur below the permitted dredging depth or outside the permitted dredging limits defined in the Contract and Permits. This provision does not apply to the slopes of the dredge cut; that is, the Contractor will not be held responsible for sediment running from outside the dredging limits when excavating at an edge of a dredge site. Sediment that is obtained from un-permitted areas will not be paid for under this Contract. Excavation in any area not depicted on the Plans is a violation of Permits for this Work. If pre- and post-construction surveys of the borrow areas and construction observations determine that excavation has been performed outside or below the permitted limits resulting in placement of non-specification beach, dune, or marsh fill, the quantity of sediment dredged from these areas will be computed and subtracted from the pay quantity. Locations outside and below the permitted limits of the borrow areas may contain sediment deposits that are undesirable for beach, dune, or marsh fill. Further, the Contractor shall remediate the beach, dune, or marsh fill areas to remove non-specification sediment excavated from un-permitted areas as required by the permitting agencies and at no additional cost to the Owner as defined in TS-11.2 and TS-12.2. The Contractor will be required to compensate the Owner for any costs, fines or other expenses related to permit violations resulting from Contractor negligence in complying with Permits – including associated with dredging outside or below the permitted cut limits. Compensation will be in the form of a deduction in payments due to the Contractor from the Owner, or may be recovered from the Contractor's bond.

8.4.3 Notice to Mariners

Should the Contractor, during dredging operations, encounter any objects within the borrow areas or conveyance corridors which could be a hazard to navigation, he will notify the Engineer and the USCG Marine Safety Office immediately as to the location of said object for the USCG to put out a Notice to Mariners. The Contractor shall furnish a description of the object, the latitude and longitude of the reported object, and any pertinent information necessary to alert mariners in the area.

8.5 Sediment Pipelines

The Contractor shall maintain a tight sediment pipeline at all times. The joints shall be so constructed as to preclude spillage and leakage. The development of a leak shall be promptly repaired. The Contractor will transport the Engineer or his Resident Project Representative(s) to the leak repair site for visual inspection. Failure to repair leaks or change the method of operation which causes excessive sediment loss, as determined by the Engineer, during transport to discharge site will result in suspension of dredging operations and require prompt repair or change of operation to prevent leakage as a prerequisite to the resumption of dredging. Sediment loss as a result of leaks in the sediment pipeline may be determined by the Engineer as misplaced materials and subject to removal in accordance with TS-19.

Conveyance corridors have been identified in the Plans. Deviations from or relocation of these corridors are subject to review and approval by the State and Federal regulatory agencies. Should the Contractor request a deviation or relocation of these corridors, it shall be the responsibility of the Contractor to apply for and obtain the required Permit modifications from the Louisiana Department of Natural Resources, Office of Coastal Management and the US Army Corps of Engineers, NNA modification from BOEM, in addition to approvals from the applicable property owners, oyster lease holders, and/or utility operators. The Contractor shall provide the approved permit modifications and approvals to the Owner and Engineer prior to installing the sediment pipeline and/or booster pumps.

No anchoring shall be allowed outside of the approved Work Area or allowable anchor areas unless approved by the Owner. No use of spud-type anchors or driving of piles shall be allowed within fifty (50) feet of pipelines within the fill template or access channel Work Areas. If pilings are used for anchorage, the pilings shall be will marked and removed in their entirety upon completion of the Contractor's operations. If the piles cannot be removed completely, they must be removed to ten (10) feet below the existing mud line. **There shall be no driving of piles allowed within the borrow areas, conveyance corridors, or allowable anchorage areas.**

Any damages to private or public property resulting from the Contractor's operations shall be repaired by the Contractor at his/her own expense. Costs incurred by the Contractor for compliance with this section should be included in the mobilization and demobilization cost in the Bid Price for each applicable section.

8.6 Dewatering and Turbidity Control

The Contractor shall conduct his/her work in a manner that will not cause damaging siltation or pollution of any water bodies. All applicable Federal and State regulations of agencies and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the Contract. Dredging and filling operations shall be done in a manner that will minimize turbidity of the water at each dredge site and at the discharge sites from the beach, dune, and marsh fills.

The Contractor shall keep construction activities under continued surveillance, management, and control to minimize interference with, disturbance to, and damage of water, fish and wildlife resources. If excess turbidity occurs, the Contractor shall report such to the Engineer and change the operating procedure to reduce the degree of turbidity.

If necessary, the Contractor shall use turbidity control measures for dewatering. The Contractor shall submit a Turbidity Control Plan with the Work Plan including descriptions and drawings of all turbidity control measures used and locations of all proposed discharge locations for approval by the Engineer. All turbidity control structures must be removed prior to demobilization.

8.7 Borrow Area Cut Sequence

8.7.1 General

The Contractor must submit a proposed cut sequence for each borrow area with the initial Work Plan for approval by the Owner and Engineer prior to mobilization as specified in SP-9. Excavation of sediment from the borrow area shall be in accordance with these Specifications and in conformity to the lines, grades, and elevations shown on the Plans or as directed by the Owner and Engineer.

The Contractor is allowed to over-dredge the design cut elevation of the Ship Shoal Block 88 Borrow Area shown on the Plans for beach and dune fill by no more than two (2) feet at his/her own risk, provided that beach and dune compatible sand is encountered. The Contractor is allowed to over-dredge the design cut elevation of the Whiskey 3A Borrow Area shown on the Plans for marsh fill by no more than two (2) feet at his/her own risk, provided that marsh compatible sediment is encountered. If sediment is dredged below these allowable overdredge depths, the Contractor may be subject to deductions set forth in TS-8.4.2.

The Owner desires to have the borrow areas excavated to remove the significant majority of the compatible sediment within the design dredge depths. The Owner recognizes that the excavator must extend below the design dredge depth to achieve the design dredge depth upon completion of excavation. The maximum limit of removal of sediment from the borrow areas is the bottom of the over-dredge tolerance per the Permits and BOEM NNA. Removal of sediment below this limit is a violation of the Permits and BOEM NNA.

In recognition of unfavorable sea conditions, a one (1) foot limit of disturbance is provided during sea states in excess of four (4) feet as an allowance for the excavator to go below the bottom of the over-dredge tolerance. This allowance may be utilized by the Contractor to place compatible sediment. If unsuitable sediment is encountered, the Contractor shall take the required actions detailed in TS-8.3.

This allowance should not be construed as permission for the excavator to extend below the bottom of the over-dredge tolerance continually.

The Contractor shall notate in the Daily Progress Report sea conditions and usage of the one-foot limit of disturbance along with the suitability of the sediment placed during usage of the one-foot limit of disturbance.

The Contractor shall also supply to the Engineer weekly updates to the proposed borrow area cut sequence supplied in the Work Plan as specified in SP-6.2. These updates shall show previous excavations within the borrow areas since beginning construction in addition to any planned excavations for the next seven (7) calendar days.

8.7.2 Ship Shoal Block 88 Borrow Area

Sand is a precious resource and sand resources within coastal Louisiana are limited. The Contractor shall utilize BMPs to conserve the sand resources permitted for this Project when developing and implementing their borrow area cut sequence. The following parameters shall be considered by the Contractor when developing their cut sequence.

- a. Excavation shall begin in a corner of the borrow area;
- b. Borrow area cuts shall parallel each other;
- c. Borrow area cuts shall be oriented along the azimuths of the eastern borrow area boundary or the southern borrow area boundary, or both;
- d. Borrow area cuts may consist of pairs of corresponding cuts. For example, Cut 1a shall be oriented towards the southwest following the azimuth of the southern boundary while Cut 1b shall be oriented towards the northwest following the azimuth of the eastern boundary. This option is provided to allow dredging along different headings as wind, wave, and current patterns necessitate.
- e. Each borrow area cut must be completed prior to proceeding to the next cut. If pairs of cuts are sequenced, then corresponding cuts such as Cut 1a and Cut 1b, shall be completed concurrently. This shall be repeated until the design grade is achieved, or the Work is completed during the final cut.
- f. For a cut, for a pair of cuts, or for an increment to be considered complete, 90% of the available sediment must be removed to proceed to the subsequent cut, pair of cuts, or increment, as determined by the Owner and Engineer based on the Contractor's progress surveys. If the progress surveys demonstrate that through the Contractor's dredge methods more than 10% of the sediment remains within a borrow area cut, at the Owner's and Engineer's discretion, the Contractor may be required to excavate the sediment to meet the 90% removed threshold. This requirement may not serve as the basis for a change in Contract Time or Contract Price. The Contractor will not be responsible for side-slope adjustment within the borrow area cuts along the perimeter of the borrow area.
- g. The segment of the borrow area defined by coordinate points S88-24 through S88-27 and S88-29 and from cut elevation -25 ft to -27 ft NAVD88 has been designated for marsh fill construction only and may not be excavated for beach fill placement.
- h. All dredging shall be performed in a uniform and continuous manner to avoid creating multiple holes, valleys, or ridges; and
- i. The permitted volume of sand exceeds the volume required to complete the beach and dune fill template. The remaining volume of sand within the borrow area will be utilized by the Owner to complete a future restoration project.

The cut sequence shall reflect consideration of these parameters. The Owner and Engineer will review for acceptance the Contractor's proposed cut sequence. Deviations from the above parameters may be proposed in the Contractor's Work Plan subject to review and approval by the Owner and Engineer.

8.7.3 Whiskey 3A Borrow Area

The Contractor shall utilize BMPs to conserve the mixed sediment resources permitted for this Project when developing and implementing their borrow area cut sequence. The following parameters shall be considered by the Contractor when developing their cut sequence.

- a. Excavation shall begin in either the northeast corner or the southwest corner of the borrow area;
- b. Borrow area cuts shall parallel each other;
- c. Borrow area cuts shall be oriented along the azimuths of the borrow area boundaries consistent with the beginning corner;
- d. Borrow area cuts may consist of pairs of corresponding cuts. For example, if excavation begins in the northeast corner, Cut 1a shall be oriented towards the south following the azimuth of the eastern boundary while Cut 1b shall be oriented towards the west following the azimuth of the northern boundary. This option is provided to allow dredging along different headings as wind, wave, and current patterns necessitate.
- e. Each borrow area cut must be completed prior to proceeding to the next cut. If pairs of cuts are sequenced, then corresponding cuts such as Cut 1a and Cut 1b, shall be completed concurrently. This shall be repeated until the design grade is achieved, or the Work is completed during the final cut.
- f. For a cut, for a pair of cuts, or for an increment to be considered complete, 90% of the available sediment must be removed to proceed to the subsequent cut, pair of cuts, or increment, as determined by the Owner and Engineer based on the Contractor's progress surveys. If the progress surveys demonstrate that through the Contractor's dredge methods more than 10% of the sediment remains within a borrow area cut, at the Owner's and Engineer's discretion, the Contractor may be required to excavate the sediment to meet the 90% removed threshold. This requirement may not serve as the basis for a change in Contract Time or Contract Price. The Contractor will not be responsible for side-slope adjustment within the borrow area cuts along the perimeter of the borrow area.
- g. All dredging shall be performed in a uniform and continuous manner to avoid creating multiple holes, valleys, or ridges; and
- h. The permitted volume of sediment exceeds the volume required to complete the beach and dune fill template. The remaining volume of sand within the borrow area will be utilized by the Owner to complete a future restoration project.

The cut sequence shall reflect consideration of these parameters. The Owner and Engineer will review for acceptance the Contractor's proposed cut sequence. Deviations from the above parameters may be proposed in the Contractor's Work Plan subject to review and approval by the Owner and Engineer.

8.8 Encounter of Ordnance

If any ordnance is encountered while conducting dredging activities, the Contractor shall report the discovery immediately to the Resident Project Representative, Owner, and Engineer; and within twenty-four (24) hours to the Regional Supervisor, Office of Environment, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region at (504) 736-2759 and dredgeinfo@boem.gov.

TS-9 DREDGING AND SEDIMENT PIPELINE LIGHTED AIDS AND MARKING

9.1 General

Signal lights, signage, and markings shall be utilized to designate the pertinent Work Areas including, but not limited to, the conveyance corridors and sediment pipelines and shall be displayed and operated in accordance with the regulations of the USCG as set forth in Commandant USCG Instruction M16672.2, Navigation Rules: International-Inland (COMDTINST M16672.2), or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR 89 (Inland), as applicable.

9.2 Existing Navigational Aids

Existing Navigation Aids (NAVAID) located within or near the Work Area may be removed, if necessary, by the USCG (and/or as directed by the USCG) in advance of dredging operations. The need will be assessed by and any movement shall be coordinated with the USCG. Construction activities shall not remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any NAVAID. Any damage to existing USCG or private navigation aids caused by the Contractor shall be repaired by the Contractor to USCG standards at no expense to the Owner.

9.3 Dredging Aids

The Contractor shall obtain approval for all dredging aids, including but not limited to temporary navigation aids, warning signs, buoys and lights the Contractor requires in conducting the Work specified in this Contract. All dredging aids, signs, buoys, and or lights must meet USCG regulations. The Contractor shall obtain a temporary Permit from the USCG for all buoys or dredging aid markers to be placed in the water prior to installation. The Permit application shall state the position, color, date to be installed and removed for all dredging aid markers and be submitted to the USCG. Dredging aid markers and lights shall not be colored or placed in a manner that they will obstruct or be confused with navigation aids. Copies of application and Permit shall be submitted to the Owner and Engineer seven (7) calendar days prior to commencement of dredging operations.

9.3.1 Installation

Lighted dredging aids to navigation shall be installed prior to any dredging equipment entering the borrow areas. Lighted dredging aids to navigation shall be

installed at intervals required by USCG regulations referenced in TS-9.1 as the sediment pipeline(s) from the borrow areas to the fill areas through the conveyance corridors are installed. The aids to navigation shall be lighted for twenty-four (24) hour operation. The Contractor shall notify the USCG in accordance with SP-6.3.1. The notification shall contain maps and descriptions of lighted aids for inclusion in the Notice to Mariners. No requirements of this Specification shall supersede the USCG regulations referenced in TS-9.1.

9.3.2 Operation and Maintenance

The Contractor shall operate and maintain all the lighted aids. If buoys are used they shall be sufficiently weighted to prevent movement by normal wave and current action and vessel wakes. The buoy arrangement shall be checked daily for missing or incorrectly positioned buoys. Dredging aids shall be checked daily for any that may be missing, damaged, incorrectly positioned, or have inoperable lighting. Dredging aids that are found to be missing, damaged, or inoperable shall be replaced within twenty-four (24) hours. Should dredging aids leave positioned locations, the Contractor shall relocate immediately.

9.3.3 Lighted Aids and Marker Inventory Record

The Contractor shall develop a method of inventory for all lighted aids, anchors, buoys, buoy cables, pilings, signage, etc. used in the construction of the Project. This record shall be used by the Contractor to recover all lighted aids, markers, buoys, anchoring equipment, and associated installation equipment at the completion of the project. The Contractor shall make this log available for review by the Engineer and Resident Project Representatives upon request. Upon completion of the Work, the Contractor shall furnish the log to the Engineer.

9.3.4 Removal

The Contractor shall remove all lighted dredging aids to navigation, piles, chains, anchors, etc. from the Work Area upon completion of this Project.

9.3.5 Measurement and Payment

Lighted dredging aids to navigation are required to maintain safe working conditions for construction in navigable waters. The Contractor shall provide, install, maintain, and remove lighted aids as specified at no direct pay.

9.4 Sediment Pipeline

All sediment pipeline markers must meet USCG regulations referenced in TS-9.1. The Contractor shall obtain a temporary Permit from the USCG for all buoys or markers to be placed in the water prior to installation. The Permit application shall state the position, color, date to be installed and removed for all sediment pipeline markers and be submitted to the USCG. Copies of application and Permit shall be submitted to the Owner and Engineer seven (7) calendar days prior to commencement of dredging operations.

9.4.1 Submerged Sediment Pipeline Markers

All submerged sediment pipelines installed within or crossing a navigable channel shall be marked in accordance with the USCG regulations and requirements referenced in TS-9.1.

9.4.2 Floating Sediment Pipeline Markers

Should any portion of the sediment pipeline not rest on the bottom, it will be considered a floating sediment pipeline and shall be required to be made visible on the water's surface and clearly marked. In no case shall the sediment pipeline be allowed to fluctuate between the surface and the bottom, or lie partly submerged. Lights shall be installed on the floating sediment pipeline in accordance with the USCG regulations and requirements referenced in TS-9.1.

9.4.3 Installation

The sediment pipeline markers shall be lighted for twenty-four (24) hour operation. The Contractor shall notify the USCG in accordance with subparagraph "Notice of Intent to Dredge" as specified in SP-6.3.1. The notification shall contain maps and descriptions of lighted sediment pipeline markers for inclusion in the Notice to Mariners.

9.4.4 Operation and Maintenance

The Contractor shall operate and maintain all the sediment pipeline markers. Sediment pipeline markers shall be checked daily for any that may be missing, damaged, incorrectly positioned, or have inoperable lighting. Missing, damaged, or inoperable markers shall be replaced within twenty-four (24) hours. Should markers leave positioned locations, the Contractor shall relocate immediately.

9.4.5 Removal

The Contractor shall remove all sediment pipeline markers, piles, chains, anchors, concrete mats, etc. from the Work Area upon completion of this Project.

9.4.6 Measurement and Payment

The Contractor shall provide, install, maintain, and remove sediment pipeline markers as specified herein at no direct pay.

TS-10 CONVEYANCE CORRIDORS

The conveyance corridors are defined as the Work Area for sediment pipeline installation from the Ship Shoal Block 88 and Whiskey 3A Borrow Areas to the fill templates.

10.1 Conveyance Corridor Construction Limits

All construction equipment must be located within the conveyance corridor construction limits shown on the Plans. The construction limits of the proposed conveyance corridors shall be no greater than 500 feet in width. All Work must take place within the construction

limits. An approved anchoring area beyond the conveyance corridor construction limits is provided as shown on the Plans. Distance beyond the conveyance corridor limits to the allowable anchor area limits varies by location and in the vicinity of avoidance areas. There shall be no bottom disturbing activity, including anchoring or spudding, outside of the approved anchor limit.

Excess Plant and Materials shall not be stored within the conveyance corridor limits. All conveyance corridors shall be returned to pre-construction conditions at the Contractor's expense prior to demobilization to the satisfaction of the Owner and individual controlling agencies where applicable.

10.2 Equipment and Construction Access

The Conveyance Corridor shown on the Plans may be used during construction to temporarily transport construction equipment, materials, and labor to the fill areas and shall meet the landowner requirements specified in the land rights agreements in Appendix D. The Contractor's equipment access route and sediment pipeline location within the conveyance corridors shall be submitted in the Work Plan for approval prior to mobilization.

The Contractor is prohibited from travel across marsh vegetation outside the designated construction limits. Additional information regarding repair of areas damaged from the land-based equipment can be found in TS-10.3.

10.3 Restoration of Damages

The Contractor will be responsible for the restoration of any damages caused by unpermitted, unapproved, and/or careless operation during construction. Restoration may include the placement of dredged sediment and/or vegetation to pre-construction elevations and/or conditions within the areas of damage at the expense of the Contractor and will be performed at the discretion and direction of the Owner and Engineer.

10.4 Sediment Pipeline Installation

The sediment pipeline shall be placed within the limits of the conveyance corridors. **No excavation or trenching is permitted in the installation of the sediment pipeline along the conveyance corridors.** The sediment pipeline shall be marked in accordance with TS-9.4 at all times.

10.5 Measurement and Payment

All costs incurred by the Contractor for the placement, maintenance, and removal of the sediment pipeline within the conveyance corridor shall be included in Bid Item No. 1A/1B, "Mobilization and Demobilization".

TS-11 BEACH AND DUNE FILL

11.1 General Description

Beach and dune fill operations shall consist of excavating, transporting, and satisfactorily placing beach compatible sand in accordance with these Specifications and in conformity to the lines, grades, and elevations shown on the Plans or as directed by the Owner and

Engineer. Prior to beach and dune fill placement, the Contractor shall construct the beach fill separation dike as specified in TS-13.2.

Specific to the Work Area, the Contractor is prohibited from travel across marsh vegetation outside the designated construction limits. Additional information regarding repair of areas damaged from the land-based or amphibious equipment can be found in TS-10.3.

11.2 Beach Compatible Sand

The dredge discharge shall be monitored for beach compatible sand by the Contractor and Resident Project Representative. If unsuitable materials as defined in TS-7.3 are encountered, the Contractor shall take actions specified in TS-8.3. If the Contractor fails to promptly take the actions specified in TS-8.3, the Contractor shall be required to remediate the beach and dune fill area to remove unsuitable materials placed within the fill area by the Contractor at no additional cost to the Owner.

11.3 Sediment Handling

The Contractor shall, prior to placement of fill, remove all snags, trees, stumps, driftwood, sharp objects, and similar debris lying within the limits of the beach and dune fill template. All Materials removed shall be disposed of in areas provided by and at the expense of the Contractor and approved by the Owner and Engineer. Grading and other construction equipment shall not be permitted outside of the beach and dune fill areas shown on the Plans, except for designated ingress and egress to and from the Work Area as provided by the construction access locations.

The beach and dune fill sediment shall be placed and allowed to dewater/decant in the templates to the lines, grades and cross sections indicated on the Plans unless otherwise provided for herein or directed by the Owner and Engineer. Tapers with minimum lengths indicated on the Plans shall be constructed at the ends of the fills wherein construction grades shall be transitioned to meet existing grades. The Contractor shall not stockpile sediment pipeline or any other equipment or debris outside of the Contractor's Work Area as shown on the Plans and as required by TS-19. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at his/her own expense as specified in TS-19.

Sand is a precious resource and sand resources within coastal Louisiana are limited. The Contractor shall utilize BMPs to conserve the sand resources permitted for this project, including but not limited to the following. A sufficient number of dozers and graders shall be utilized. Temporary longitudinal dikes and spreader and pocket pipe shall be used to prevent gullying and erosion of the beach and dune fill and to retain the fill on the beach and within the limits of the fill cross section. As the Work progresses, dikes or mounds shall be constructed along the beach as necessary to direct the pipeline discharge longitudinally along the beach to avoid transverse gullying directly from the discharge point to the gulf, and to build the new fill to design grade. Longitudinal dikes shall initially be 750 feet long in advance of filling operations. They may need to be lengthened to meet water quality standards. Shorter lengths may be subsequently used if approved by the Engineer. More than one series of longitudinal dikes may be required to build to the required lines and grades and to keep sediment within the toe-of-fill.

While it is acknowledged that in-situ sediment shall be excavated within the limits of the borrow channels to provide sediment for separation/containment dike construction only, this in-situ sediment shall not be used to construct the beach and dune fill. The Contractor shall avoid creating trenches, and shall limit disturbance of in-situ sediment to the greatest extent possible, when constructing longitudinal dikes.

The Contractor will not be held responsible for erosion caused by waves after the beach fill has been satisfactorily placed, surveyed, and accepted. No un-drained pockets shall be left in the fill during or upon completion of the Work. The Contractor shall not permit wastewater to flow landward of the dune fill section and pond between the landward beach fill toe and the beach separation and marsh containment dikes. Subject to approval by the Engineer, the Contractor may dewater the fill template between the landward beach fill toe and the marsh containment dike into the marsh fill.

The Owner and Engineer reserve the right to vary the width and grade of the beach and/or dune template from the lines and grades shown on the Plans in order to establish a uniform beach and/or dune for the entire length of the Project. The cross sections shown on the Plans were used for the purpose of calculating Bid quantities of beach and dune fill. Pay quantities will be based on the borrow area Pre-Construction and Progress surveys in accordance with TS-6. Existing beach and dune elevations are subject to changes and may vary from the elevations shown on the Plans.

The Contractor is to place the fill on the beach and dune in such a manner as to establish a uniform beach and dune between adjacent survey transects. Segments of beach and dune located between survey transects may not be under-filled. Under-filling the beach and dune design template will not be accepted anywhere within the acceptance section or between the intervening survey transects even if the allowable vertical tolerances have otherwise been met at the survey transects. The constructed beach contour lines between survey transects will be approximately parallel and straight line, indicating that the Contractor attempted to construct a uniform (non-cusped) beach between the survey transects. If the Owner or Engineer observe or believe they have observed any attempt to under-fill the beach and dune between survey transects, a survey may be conducted by the Owner or Engineer to quantify the amount of under-filling. In the event under-filling has been found to occur, the cost of additional surveys shall be deducted from payment to the Contractor. The Contractor will place additional fill until the beach and dune are uniform in appearance and dimensions between survey transects meets the requirements defined in TS-11.7.

11.4 Beach and Dune Fill Elevation Tolerance

Placement of hydraulic fill sediment in the beach and dune fill templates shall be to the elevations and areas shown on the Plans. The **target beach fill elevation = +4.2 ft NAVD88** with a tolerance of +0.5 ft. The **target dune fill elevation = +6.4 ft NAVD88** with a tolerance of +0.5 ft. There is a +1.0 ft tolerance along the beach slope from beach crest to toe of beach fill. The Owner or Engineer may require the Contractor to remove sediment placed above this tolerance at no expense to the Owner. The Contractor may use stakes to monitor these elevations. No materials are specified for these optional stakes; however they must be entirely removed prior to acceptance of beach and dune fill.

11.5 Final Grading

Upon completion of construction operations, the beach from the seaward toe of the dune to the Mean High Water Line shall be graded and dressed throughout the beach fill to remove ruts, humps, and depressions in the beach surface resulting from construction operations. All optional monitoring stakes shall be removed entirely prior to acceptance. Any excavation required to remove the stakes shall be backfilled.

11.6 One-Time Beach and Dune Slope Adjustment

Should the Contractor encounter difficulty attaining the beach and dune slope delineated on the Contract Plans, the Contractor may request a change in construction slope. This request must be provided to the Owner and Engineer in writing. The reason for the request in construction slope must be clearly stated and an alternate slope must be clearly stated. Based on this request and at the Engineer's discretion, the construction slope may be altered. The placed volume amounts for each acceptance section shall remain unaltered by this change in slope. A request for slope change may be made only once during the construction of this Project and the Contractor will be required to maintain the revised construction slope throughout the remainder of the Project. A set of revised construction drawings delineating the change in construction slope and new slope break stationing will be provided to the Contractor within five (5) calendar days of the Owner's acceptance of the change in the construction slope.

11.7 Measurement, Payment and Acceptance

11.7.1 General

Payment shall be made for materials and Work specified for furnishing all Plant, labor, Materials and equipment for borrow area excavation, signs, petroleum pipeline crossings, transportation and placement of beach and dune fill; debris removal and disposal as specified in TS-11.3; beach and dune profile construction and final grading; turbidity monitoring; environmental protection measures; and, all other appropriate costs in connection therewith or incidental thereto this Work, shall be included in the applicable Contract unit price per cubic yard for Bid Item No. 3, "Beach/Dune Fill". Any sediment dredged from unauthorized areas will be subtracted from the net amount used for payment, as specified in TS-8.4.2.

11.7.2 Payment for Beach and Dune Fill

The price per cubic yard for beach and dune fill segments will be paid to the Contractor upon acceptance of surveys and volume calculations for the borrow area and acceptance of the applicable beach and dune fill sections completed from the material excavation request for payment. Payments will be based on the result of the comparison of Pre-Construction and Progress surveys in the Ship Shoal Block 88 Borrow Area. The Engineer will verify the pay quantities provided by the Contractor based on Pre-Construction and Progress borrow area surveys conducted by the Contractor and accepted by the Engineer. The surveys will be conducted in accordance with TS-6. The Engineer, at its discretion, may verify the borrow area Progress survey results of the Contractor. The Engineer's survey will be used for payment purposes if, in the Engineer's opinion, a significant difference is found between the Contractor's borrow area Progress survey and the Engineer's survey.

The Engineer is authorized to require the Contractor to refill any deficient section of beach and/or dune to at least meet the template within the vertical tolerances.

11.7.3 Computations of Payment Volumes

The volume of material eligible for payment shall be the volumetric difference between the Pre-Construction and Progress surveys of the borrow area less material removed below the borrow area one-foot limit of disturbance, material overfill above the construction tolerances in the fill area, and misplaced material volumes as defined in TS-19.

Utilizing the survey datasets, surfaces shall be created wherein the surfaces shall extend at a minimum of 100 feet beyond the area of dredging. The total excavation volume shall be calculated by a comparison of the surfaces created within the borrow area template with allowable overdredge.

The Contractor shall provide their methodology, mathematical calculations, and results of volumes along with their request for payment to the Engineer. Payment recommendations will be based on computations made by the Engineer of volumes dredged from the borrow area.

It is recognized that infilling of the borrow area may occur during construction. The Contractor is not required to resurvey areas of the borrow area that have been previously surveyed for pay, except for the final As-Built survey, which will not be used as a basis for payment unless requested by the Contractor. The Contractor shall bear all risks associated with infilling of the borrow area prior to surveying of that section of the borrow area for payment.

In the event of a major storm, the borrow area shall be resurveyed as defined in TS-6.3.3 upon remobilization to determine storm effects. This new survey shall serve as the new basis for volume calculations for payment. The Contractor may request payment for this survey in accordance with GP-42.

11.7.4 Acceptance of Beach and Dune Fill

Segments of beach fill with elevations below the **minimum elevation of +4.2 ft NAVD88** and segments of dune fill with elevations below the **minimum elevation of +6.4 ft NAVD88** will not be accepted. Additional beach or dune fill must be placed into these areas and re-surveyed before acceptance will be considered. Once payment surveys are accepted by the Engineer they will be considered post-construction surveys for inclusion in the final survey drawings. No payment will be made for sediment above the beach fill platform **maximum tolerance elevation of +4.7 ft NAVD88**. No payment will be made for sediment above the dune fill **maximum tolerance elevation of +6.9 ft NAVD88**. No payment will be made for sediment above the prescribed tolerances. At the Owner's discretion, any sediment placed above the prescribed tolerances shall be calculated on a cubic yard basis and deducted from any money due or to become due to the Contractor. Beach and dune fill acceptance sections shall be 750 feet in continuous length.

11.7.5 Payment Requests for Beach and Dune Fill

The Contractor may request payment for beach and dune fill placement on a monthly basis, per every 300,000 CY excavated from the borrow area, or completed borrow area cut. Additionally, payments shall be based on completed and approved consecutive and adjacent fill sections.

For each pay request, the Contractor shall provide the following:

- a. Defined extent of excavation by borrow area cut and stationing,
- b. Borrow area survey deliverables in accordance with TS-6.9,
- c. Borrow area excavation volumetric computations, and
- d. Fill area survey deliverables in accordance with TS-6.9 for the applicable beach and dune fill sections completed from the material excavation request for payment.

TS-12 MARSH FILL

12.1 General Description

Marsh fill operations shall consist of removing and satisfactorily placing sediment in accordance with these Specifications and in conformity to the lines, grades, and elevations shown on the Plans or as directed by the Owner and Engineer.

Specific to the Work Area, the Contractor is prohibited from travel across vegetated areas outside the designated construction limits. Additional information regarding repair of areas damaged from the land-based equipment can be found in TS-10.3.

The marsh fill shall be constructed using sediment from either the Whiskey 3A Borrow Area or Ship Shoal Block 88 Borrow Area, but not both. Certain conditions for marsh containment dike and beach separation dike construction apply to each borrow area option. Refer to TS-13 for these specifications and conditions. If the Contractor excavates the sand layer of the Ship Shoal Block 88 Borrow Area within the segment defined by coordinate points S88-24 through S88-27 and S88-29 (from the top of cut to cut elevation -25 ft NAVD88) and places this sediment within the beach and dune fill, and then elects to excavate the sediment within this same segment from cut elevation -25 ft to -27 ft NAVD88 and place it within the marsh fill, the Contractor shall propose a method of containment fill in their Work Plan for review and approval by the Owner and Engineer.

Placement of marsh fill within the template may not commence until the Contractor has provided the required deliverables for marsh containment dike and beach separation dike construction, and the Owner and Engineer have had sufficient time to review and approve the deliverables. If corrective actions are necessary, marsh fill operations may not commence until the corrective measures have been completed, the containment dikes resurveyed, and new deliverables provided for review and approval by the Owner and Engineer.

12.2 Marsh Compatible Sediment

The dredge discharge shall be monitored for marsh compatible sediment by the Contractor and the Resident Project Representative. If unsuitable materials as defined in TS-7.3 are encountered, the Contractor shall take actions specified in TS-8.3. If the Contractor fails to promptly take the actions specified in TS-8.3, the Contractor shall be required to remediate the marsh fill area to remove unsuitable materials placed within the fill area by the Contractor at no additional cost to the Owner.

12.3 Sediment Handling

The Contractor shall, prior to placement of fill, remove all snags, trees, stumps, driftwood, sharp objects, and similar debris lying within the limits of the marsh fill segment. All materials removed shall be disposed of in areas provided by and at the expense of the Contractor and approved by the Owner and Engineer. Grading and other construction equipment shall not be permitted outside the Contractor's Work Area as shown on the Plans except for designated ingress and egress to and from the Work Area as provided by the construction access locations.

The marsh fill sediment shall be placed in the template and allowed to dewater/decant to the lines, grades, and cross sections indicated on the Plans unless otherwise provided for herein or directed by the Owner or Engineer. The Contractor shall not stockpile pipe or any other equipment or debris outside of the Contractor's Work Area as shown on the Plans and as required by TS-19. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at his/her own expense as specified in TS-19.

For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, if the Contractor elects not to construct the remaining segments of the containment dike as provided for in TS-13.3, the Contractor shall utilize BMPs to direct the discharge of sediment and water away from existing vegetated wetlands. No siltation of the wetlands is allowed. If it is determined by the Engineer that siltation of the wetlands has occurred, the Contractor will be required to restore these areas in accordance with TS-20.5.

The Owner and Engineer reserve the right to vary the width and grade of the marsh fill template from the lines and grades shown on the Plans. The cross sections shown on the Plans were used for the purpose of calculating Bid quantities of marsh fill. Pay quantities will be based on the borrow area Pre-construction and Progress surveys in accordance with TS-6. The marsh is subject to changes and the elevations in the marsh at the time the Work is done may vary from the elevations shown on the Plans.

12.4 Marsh Fill Elevation Tolerance

Placement of hydraulic fill sediment in the marsh fill area shall be to the elevations and areas shown on the Plans. The **target marsh fill elevation = +2.4 ft NAVD88** with a tolerance of +0.5 ft to **+2.9 ft NAVD88**.

12.5 Measurement, Payment and Acceptance

12.5.1 General

Payment shall be made for materials and Work specified for furnishing all Plant, labor, Materials and equipment for borrow area excavation, signs, petroleum pipeline crossings, transportation and placement of marsh fill; debris removal and disposal as specified in TS-12.3; marsh profile construction and final grading; turbidity monitoring; environmental protection measures; and, all other appropriate costs in connection therewith or incidental thereto this Work, shall be included in the applicable Contract unit price per cubic yard for Bid Item No. 4A/4B, "Marsh Fill". Any sediment dredged from unauthorized areas will be subtracted from the net amount used for payment, as specified in TS-8.4.2.

12.5.2 Payment for Marsh Fill

The price per cubic yard for marsh fill segments will be paid to the Contractor upon acceptance of surveys and volume calculations for the selected marsh fill construction borrow area and acceptance of the applicable marsh fill sections completed from the material excavation request for payment. Payments will be based on the result of the comparison of Pre-Construction and Progress surveys in the selected borrow area for marsh construction. The Engineer will verify the pay quantities provided by the Contractor based on Pre-Construction and Progress borrow area surveys conducted by the Contractor and accepted by the Engineer. The surveys will be conducted in accordance with TS-6. The Engineer, at its discretion, may verify the Progress survey results of the Contractor. The Engineer's survey will be used for payment purposes if, in the Engineer's opinion, a significant difference is found between the Contractor's borrow area Progress survey and the Engineer's survey. The Engineer is authorized to require the Contractor to refill any deficient section of marsh to at least meet the template within the vertical tolerances.

12.5.3 Computations of Payment Volumes

The volume of material eligible for payment shall be the volumetric difference between the Pre-Construction and Progress survey of the selected borrow area for marsh construction less material removed below the borrow area one-foot limit of disturbance, material overfill above the construction tolerances in the fill area, and misplaced material volumes as defined in TS-19.

Utilizing the survey datasets, surfaces shall be created wherein the surface extends at a minimum of 100 feet beyond the area of dredging. The total excavation volume shall be calculated by a comparison of the surfaces created within the borrow area template with allowable overdredge.

The Contractor shall provide their methodology, mathematical calculations, and results of volumes along with their request for payment to the Engineer. Payment recommendations will be based on computations made by the Engineer of volumes dredged from the borrow area.

It is recognized that infilling of the borrow area may occur during construction. The Contractor is not required to resurvey areas of the borrow area that have been

previously surveyed for pay, except for the final As-Built survey, which will not be used as a basis for payment unless requested by the Contractor. The Contractor shall bear all risks associated with infilling of the borrow area prior to surveying of that section of the borrow area for payment.

In the event of a major storm, the borrow area shall be resurveyed as defined in TS-6.3.3 upon remobilization to determine storm effects. This new survey shall serve as the new basis for volume calculations for payment. The Contractor may request payment for this survey in accordance with GP-42.

12.5.4 Acceptance of Marsh Fill

Segments of marsh fill with elevations below the **minimum elevation of +2.4 ft NAVD88** will not be accepted. Additional marsh fill must be pumped into these areas after the twenty-eight (28) day waiting period and re-surveyed before acceptance will be considered. If the marsh fill does not meet the minimum elevation requirements the area will have to be re-pumped and undergo an additional twenty-eight (28) day waiting period without any additional placement of fill sediment before payment surveys will be administered again. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area,, the required twenty-eight (28) day waiting period is waived. Once payment surveys are accepted they will be considered post-construction surveys for inclusion in the final survey drawings. Although the Contractor will be allowed to overfill marsh fill areas exceeding the **maximum tolerance elevation of +2.9 ft NAVD88**, no payment will be made for sediment above the prescribed tolerances. At the Owner's discretion, any sediment placed above the prescribed tolerances shall be calculated on a cubic yard basis and deducted from any money due or to become due to the Contractor. Marsh fill acceptance sections shall be 750 feet in continuous length.

12.5.5 Payment Requests for Marsh Fill

The Contractor may request payment for marsh fill placement on a monthly basis, per every 300,000 CY excavated from the borrow area for marsh construction, or completed borrow area cut. Additionally, payments shall be based on completed and approved consecutive and adjacent fill sections.

For each pay request, the Contractor shall provide the following:

- a. Defined extent of excavation by borrow area cut and stationing,
- b. Borrow area survey deliverables in accordance with TS-6.9,
- c. Borrow area excavation volumetric computations, and
- d. Fill area survey deliverables in accordance with TS-6.9 for the applicable marsh fill segments completed from the material excavation request for payment.

TS-13 CONTAINMENT DIKES

13.1 General Description

For construction of the marsh fill using sediment from the Whiskey 3A Borrow Area, the entire marsh containment dike shall be constructed. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, the marsh containment dike shall be constructed from coordinate point CD-01 to CD-09 identified in the Contract Plans, and construction of the remaining segments of the marsh containment dike is optional.

The beach separation dike shall be constructed from Station 50+00 to 190+00. For construction of the marsh fill using sediment from the Whiskey 3A Borrow Area, the beach separation dike shall be constructed from Stations 190+00 to 250+00. For construction of the marsh fill using sediment from the Ship Shoal Block 88 Borrow Area, construction of the beach separation dike from Stations 190+00 to 250+00 is optional.

The Contractor shall submit a Marsh Fill Containment Dike Maintenance Plan as part of the Contractor's Work Plan prior to construction.

The Contractor is allowed to conduct dredging and disposal operations twenty-four (24) hours per day, including Saturdays, Sundays, and Holidays, at Contractor's discretion, provided that Contractor complies with all applicable labor laws.

13.2 Beach Separation Dike

The beach separation dike shall be constructed such that the sandy discharge sediment from the beach and dune fill shall not be allowed to flow back into the existing wetland areas surrounding the Work Area. Dewatering of the beach and dune fill placement to the north will only be allowed into the marsh fill template. All other dewatering of the beach and dune fill placement shall be directed south towards the Gulf of Mexico. A description of dewatering and turbidity control measures shall be submitted with the Contractor's Work Plan in accordance with TS-8.6 for review and approval by the Owner and Engineer. The alignment, lines, grade, and elevation of the beach separation dike are depicted on the Plans. The beach separation dike shall be erected within the lines, grades, and elevations specified in the Plans with a **maximum elevation of +6.0 ft NAVD88**. Dike material shall be taken from in-situ material within the beach separation dike borrow channel.

The alignment of the beach separation dike is based on the field conditions present at the time of the survey. The Contractor may request a change of alignment or an addition of linear footage if field conditions have changed significantly from those represented on the Plans. All requests must be submitted in writing in the Contractor's Work Plan for review and approval by the Owner and Engineer. A permit modification may be required if the length, width, or elevation of the proposed dike is greater than shown in the Plans. No additional construction time will be granted to obtain Permit modifications.

The Contractor will be required to control and/or reduce the outflow production rate in the beach and dune fill area to prevent damage to the beach separation dike which would result in a loss of dredged material in the marsh fill area or existing wetland areas. The Contractor shall submit a method for controlling the production rate in the beach and dune fill area in the Contractor's Work Plan. The Contractor shall maintain the integrity of the beach separation dike at all times during construction in accordance with these Specifications and the Permits.

After the final acceptance of the beach and dune fill, and prior to demobilization, the Contractor shall degrade the beach separation dike to beach fill target elevation of **+4.2 ft NAVD88**.

13.3 Marsh Containment Dike

The marsh containment dike shall be constructed such that the discharge from the marsh fill shall not be allowed to flow back into the access channels or other wetland areas surrounding the Work Area. Effluent control shall be maintained by the use of spillboxes/dewatering structures placed at the Contractor's discretion. The alignments, lines, grades, and elevations of the containment dikes are depicted on the Plans. The marsh containment dikes shall be erected within the lines, grades, and elevations specified in the Plans with an **elevation of +4.4 ft NAVD88**. A plus one-foot vertical tolerance is allowed to +5.4 ft NAVD88. Dike material shall be taken from the primary and secondary containment dike borrow channels in-situ material.

The containment dikes shall be constructed in a minimum of two lifts with the first lift constructed to a **maximum elevation of +2.0 ft NAVD88**. There is a mandatory waiting period of thirty (30) calendar days between completed lifts along segments of the marsh containment dike to allow for consolidation and dewatering of the placed sediment. The Contractor is referred to Appendix H for the back-barrier geotechnical investigations and engineering analyses supporting the containment dike design. Progress surveys shall be conducted and submitted in accordance with TS-6.4.5.

The boundaries of the marsh containment dikes are based on the field conditions present at the time of the survey. The Contractor may request a change of alignment or an addition of linear footage from those represented on the Plans. All requests must be submitted in writing in the Contractor's Work Plan for review and approval by the Owner and Engineer. A permit modification may be required if the length, width, or elevation of the proposed dikes is greater than shown in the Plans. No additional construction time will be granted to obtain Permit modifications for reasons other than a significant change in field conditions.

The marsh containment dikes shall be accessed through the access channels or existing open water to the extent possible. Any access route that requires travel across existing marsh must first be approved by the Owner and Engineer and be allowed by the Permits. Travel across existing marsh will be allowed only within the designated Work Area.

A description of dewatering and turbidity control measures shall be submitted with the Contractor's Work Plan in accordance with TS-8.6 for review and approval by the Owner and Engineer prior to containment dike construction.

The Contractor will be required to control and or reduce the outflow production rate in the marsh fill area to prevent damage to the marsh containment dikes which would result in a loss of dredged material in the marsh fill area. The Contractor shall submit a method for controlling the production rate in the marsh fill area in the Contractor's Work Plan. The Contractor shall maintain the integrity of the marsh containment dikes at all times during construction in accordance with these Specifications and the Permits. After the final acceptance of the marsh fill, and prior to demobilization, the Contractor shall gap or degrade the containment dike at locations designated by the Engineer.

13.4 Geotextile Foundation Mat

13.4.1 General Description

The geotextile foundation mat shall be placed, at a minimum, beneath the primary marsh containment dike footprint between marsh containment dike alignment points CD-04 and CD-11 for marsh fill construction using Whiskey 3A Borrow Area, or between CD-04 and CD-09 for marsh fill construction using Ship Shoal Block 88 Borrow Area. The Contractor may elect to utilize geotextile foundation mat in other segments of the marsh containment dike alignment. All costs associated with utilization of geotextile foundation mat beyond the defined required segments shall be included in the Bid Item No. 6A/6B "Marsh Containment Dike".

13.4.2 Materials

The geotextile foundation mat shall be comprised of high-tenacity polypropylene yarns, which are woven into a network such that the yarns retain their relative position. The geotextile foundation mat shall have an ultimate tensile capacity of 1,200 pounds/linear foot or more. The geotextile foundation mat shall be Mirafi's HP 270 or equivalent approved by the Owner or Engineer prior to construction. Sheets of geotextile foundation mat should be linked together in panels wide enough to install under the containment dike footprint. To form panels, sheets should overlap by a minimum of three (3) feet to ensure continuous load transfer from one sheet to the next. Assembling panels prior to mobilization to the Work Area for ease and efficiency of installation is acceptable provide the integrity of the panels is not compromised. Any panels deemed to be compromised by the Engineer shall be replaced by the Contractor at no cost to the Owner.

13.4.3 Installation

The surface to receive the geotextile foundation mat shall be smooth, free from obstructions, depressions, debris, and sharp objects. The Contractor shall lay the mat so as to minimize the number of seams, and lay the mat loosely, but without creases, and provide at least three (3) feet overlap at joints of the panels. Anchorage of the geotextile foundation mat to the bottom and adhering panels of mat to one another shall be performed in accordance with the manufacturer's specifications.

Subaqueous installation of the geotextile foundation mat will require weight to sink the mat into place within the marsh containment dike footprint where required. This can be done using any heavy object that will not be deleterious to the purposes of the Project. The mat may also be pinned in place using stakes, pieces of rebar, or any suitable mechanical anchor. The Contractor shall provide to the Owner and Engineer the intended methodology for anchoring and fastening the geotextile foundation mat as part of the Contractor's Work Plan.

The Contractor shall not operate machinery directly on the geotextile foundation mat. When placing material over joints, the Contractor shall place the material in the direction from the overlying mat panel to the underlying mat panel. The Contractor shall prevent tears or displacement of the geotextile foundation mat and protect it from damage; and replace torn areas and holes by placing an overlay of geotextile foundation mat at least three (3) feet or greater than the tear or hole.

13.5 Containment Dike Primary and Secondary Borrow Channels

The Contractor shall use the containment dike primary borrow channel first in the construction of the marsh containment dikes. The containment dike secondary borrow channel shall be used if insufficient material is present for dike construction in the containment dike primary borrow channel and for maintenance of the marsh containment dike during marsh fill activities. **Containment dike construction may require double handling of material.** Accordingly, the double handling of the material shall be included in the Bid. Double handling shall be at no additional cost to the Owner and shall not be a basis of claim for additional costs or time.

The limits of excavation for the borrow channel for construction of the beach separation dike shall conform to the lines and grades and no deeper than the **minimum elevation of -1.5 ft NAVD88** or wider than the maximum width shown on the Plans. The limits of dredging for the containment dike primary and secondary borrow channels for construction of the marsh containment dike shall conform to the lines and grades and no deeper than the **minimum elevation of -8.0 ft NAVD88** or wider than the maximum width as shown on the Plans. Distance from top of cut of the borrow channels to toes of the containment dikes shall be such that a minimum thirty (30) feet berm is maintained. The Contractor should utilize information gathered from the Progress Surveys to determine the optimal alignment of the borrow channels such that the 30-foot berm may be maintained throughout construction of the containment dikes. Any deviations from the containment dike or borrow channel design templates must be approved by the Owner and Engineer prior to construction.

No excavation shall be allowed within 50 feet of pipelines or oil and gas infrastructure. Written approval from the pipeline/utility owner defining any allowances and/or restrictions placed on the Contractor by the pipeline/utility owner must be submitted to the Owner and Engineer seventy-two (72) hours prior to any excavation within the 50 foot pipeline buffer. Marsh containment dike material taken from the primary containment dike borrow channel must be re-filled during hydraulic dredge and fill operations. Materials excavated from the borrow channels and utilized to construct and maintain the containment dikes shall conform to the elevations, grades, and lines specified in the Plans. Excavated material deposited within the marsh fill template shall conform to elevation tolerances specified in TS-12.4. All associated costs with placing hydraulic fill to re-fill the primary containment dike borrow channel used for dike construction shall be at no direct pay.

13.6 Optional Interior Containment Dikes (ICD)

The Contractor may use optional Interior Containment Dikes (ICD) to achieve marsh fill elevations. The ICDs shall be constructed within the marsh fill area. Locations of ICDs are left to the discretion of the Contractor to facilitate the placement of marsh fill sediment. Proposed locations of any and all ICD(s) must be specified in the Work Plan and subject to the approval of the Engineer. No excavation shall be allowed within 50 feet of pipelines or oil and gas infrastructure. Written approval from the pipeline/utility owner defining any allowances and/or restrictions placed on the Contractor by the pipeline/utility owner must be submitted to the Owner and Engineer seventy-two (72) hours prior to any excavation within the 50 foot pipeline buffer.

ICDs constructed within the marsh fill area shall be erected within the lines and grades specified in the Plans with a **maximum elevation of +4.4 ft NAVD88**.

ICDs shall be degraded to the completed marsh grade elevations upon demobilization by the Contractor, if required by the Owner or Engineer, at no additional cost to the Owner. ICD material shall be taken from in-situ material within the marsh fill area and re-filled during hydraulic dredge and fill operations. All associated costs with placing hydraulic fill to infill in-situ ICD borrow channels shall be at no direct pay.

13.7 Environmental Protection Measures

The Engineer, prior to construction, shall identify the location of at least one escape route through the marsh containment dike or ICD to allow any protected species to exit the area(s) to be enclosed. The proposed escape route(s) shall lead directly to open water outside the enclosed area and shall have a minimum width of 100 feet. The proposed escape route(s) shall remain open until a thorough survey of the area, conducted immediately prior to complete enclosure, determines no protected species are present within the confines of the structure.

It shall be the responsibility of the Contractor to monitor the impounded marsh fill area for protected species during marsh containment dike and ICD construction. If protected species are regularly sighted over a three (3) day period within the enclosure area during the marsh containment dike or ICD construction, the Contractor shall immediately notify the Resident Project Representative, Engineer, and Owner. The Contractor may not attempt to scare, herd, disturb, or harass the protected species to encourage them to leave the area.

Prior to completing the marsh containment dike or ICD by means of closing the escape route, the Contractor shall notify the Engineer and Owner to ensure that the area to be enclosed is observed for protected species. Escape routes may not be closed until the final clearance determining the absence of protected species within the area to be enclosed is provided in writing by the Engineer.

If protected species become entrapped in an enclosed area, the Contractor shall immediately notify the Resident Project Representative, Engineer, and Owner. If the Resident Project Representative notes that entrapped animals are visually disturbed, stressed, or their health is compromised then the Owner or Engineer may require any pumping activity to cease and the breaching of the marsh containment dike or ICD such that the animals can either leave on their own or be moved under the direction of National Marine Fisheries Service. All cost associated with a requirement to discontinue pumping and breaching of the marsh containment dike or ICD shall be the sole responsibility of the Contractor.

13.8 Gapping of Marsh Containment Dikes

If directed by the Owner or Engineer to gap the marsh containment dikes, the Contractor may use the material to back-fill or increase the existing grade of the containment dike secondary borrow channel. Elevations in the containment dike secondary borrow channel resulting from backfilling operations shall also be no higher than +0.5 ft of the pre-construction elevation unless approved by the Owner and Engineer prior to dike gapping activities. Back-filling may require double handling of material. Accordingly, the double handling of the material shall be included in the Bid. Double handling shall be at no additional cost to the Owner and shall not be a basis of claim for additional costs or time. All costs associated with the gapping of the marsh containment dikes should be included in Bid Item No. 6A/6B "Marsh Containment Dike".

13.9 Measurement, Payment, and Acceptance

13.9.1 Payment for Beach Separation Dike, Marsh Containment Dikes, and Geotextile Foundation Mat

Payment for beach separation and marsh containment dikes will be made at the Contract unit price per linear foot for Bid Item No. 5A/5B “Beach Separation Dike” and Bid Item No. 6A/6B “Marsh Containment Dikes”, respectively. Payment for the required segments of the geotextile foundation mat will be made at the Contract unit price per linear foot for Bid Item No. 7A/7B “Geotextile Foundation Mat”. All required maintenance of the beach separation and marsh containment dikes and geotextile foundation mat shall be performed by the Contractor at no direct pay. Price and payment shall constitute full compensation for furnishing all labor, Materials, and equipment for construction and maintenance of all required beach separation and marsh containment dikes and geotextile foundation mat and performing all Work as specified herein.

13.9.2 Ratio of Beach Separation Dike Construction Effort

Seventy-five percent (75%) of the Contract unit price per linear foot will be paid to the Contractor upon acceptance of initially constructed segments of beach separation dike, prior to placement of beach and dune fill and marsh fill to be contained by said segments. The remaining twenty-five percent (25%) of the Contract unit price per linear foot for all constructed and properly maintained beach separation dike segments will be paid to the Contractor upon completion of demobilization from the Work Area.

13.9.3 Ratio of Marsh Containment Dike Construction Effort

Seventy-five percent (75%) of the Contract unit price per linear foot will be paid to the Contractor upon acceptance of constructed segments of marsh containment dikes, prior to placement of beach and dune fill and marsh fill to be contained by said segments. The remaining twenty-five percent (25%) of the Contract unit price per linear foot for all constructed and properly maintained marsh containment dike segments will be paid to the Contractor upon completion of demobilization from the Work Area.

13.9.4 Ratio of Geotextile Foundation Mat Construction Effort

Seventy-five percent (75%) of the Contract unit price per linear foot will be paid to the Contractor upon installation and acceptance of the required segments of geotextile foundation mat. The remaining twenty-five percent (25%) of the Contract unit price per linear foot for all constructed and properly maintained geotextile foundation mat will be paid to the Contractor upon completion of demobilization from the Work Area.

TS-14 ACCESS CHANNELS

14.1 General Description

Access channels shall be constructed to provide access for equipment. Any excavation for the construction of access channels shall consist of removing and satisfactorily placing all material required to construct the access channels. Construction of the access channels is not mandatory. No excavation shall be allowed within 50 feet of pipelines or oil and gas infrastructure. Written approval from the pipeline/utility owner defining any allowances and/or restrictions placed on the Contractor by the pipeline/utility owner must be submitted to the Owner and Engineer seventy-two (72) hours prior to any excavation within the 50 foot pipeline buffer. The access channels shall be constructed within the lines, grades, and elevations specified in the Specifications and as shown on the Plans if utilized.

14.2 Method

No method of dredging will be specified. The Contractor may use any environmentally acceptable method that will complete the Work in accordance with these Specification and/or shown on the Plans and comply with the Permits. The Contractor shall submit to the Engineer the method and equipment intended to be used to complete dredging of the access channels as part of the Contractor's Work Plan.

The Contractor is allowed to conduct dredging and disposal operations 24 hours per day, including Saturdays, Sundays, and Holidays, at Contractor's discretion, provided that Contractor complies with all applicable labor laws.

14.3 Material Handling

Dredged material shall be deposited in the approved temporary sidecast disposal areas as shown on the Plans and Permits or used for constructing and maintaining the access channels. The excavated material may be used as fill material within the marsh fill template or to construct and maintain marsh containment dikes if approved by the Engineer. **Some of these options may require double handling of material.** Accordingly, the double handling of the material shall be included in the Bid. Double handling shall be at no additional cost to the Owner and shall not be a basis of claim for additional costs or time.

Material placed in the temporary sidecast disposal areas must conform to the elevations, grades, and lines specified in the Plans and shall be marked using warning signs as specified in TS-18. Material remaining in the temporary sidecast disposal areas shall be reworked to **±0.5 feet** of the pre-construction elevations prior to demobilization. Excess material from these areas shall be used to backfill the access channels upon demobilization by the Contractor. Elevations in the access channels resulting from backfilling operations shall also be no higher than **+0.5 feet** of the pre-construction elevation.

Dredged material from access channels used to construct and maintain marsh containment dikes shall conform to the elevations, grades, and lines specified in the Plans. Excavated material deposited within the marsh template shall conform to elevation tolerances specified in TS-12.

Material shall not be deposited anywhere other than as indicated on the Plans or as authorized by the Owner and Engineer. Any unauthorized dredge material placement shall be required to be removed and deposited in approved areas at the Contractor's expense as specified in TS-19. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at his/her own expense as specified in TS-19.

14.4 Access Channel Tolerances

The limits of dredge work for access channels shall conform to the lines and grades shown on the Plans. Tolerances outside these requirements must be approved by the Owner and Engineer. The access channels shall be maintained in a useable configuration dredged as deep and wide as needed for equipment access but no deeper than the **maximum depth of -9.0 ft NAVD88**. Bottom of cut widths shall be no wider than the maximum width as shown on the Plans for the duration of the Project. If an access channel is dredged below the maximum depths or wider than the maximum widths specified, the Contractor may be required to backfill the channel at no direct pay and/or subject to deductions.

14.5 Navigation

The Contractor shall mark the access channels in accordance with TS-18 and as shown on the Plans.

14.6 Measurement, Payment, and Acceptance

Access channels shall be constructed to the lines and grades shown on the Plans and as specified herein. Price and payment shall constitute full compensation for all Materials, labor, supplies, and equipment required for dredging the channels and maintaining the dredged channels to the required depth for the duration of construction.

Seventy-five percent (75%) of the Contract lump sum price of Bid Item No. 8 "Access Channels" will be paid to the Contractor upon acceptance of the initial completion of the access channels utilized. The remaining twenty-five percent (25%) of the Contract lump sum price for all constructed and properly maintained access channels utilized will be paid to the Contractor upon completion of demobilization from the Work Area.

TS-15 SAND FENCING

15.1 General Description

Sand fencing shall be installed on accepted segments of dune fill in accordance with the Plans to aid in the stabilization of sand and in the retention of windblown sand within the Work Area. Sand fencing must be installed within seven (7) calendar days following acceptance of a dune fill segment. Section lengths and configurations may vary. Gaps, as shown on the Plans will separate the beginning and end of each fence section to facilitate movement through the fencing. Sand fencing shall be fastened to wooden fence posts at the top, middle, and bottom. The wire shall be corrosion resistant and affixed with no less than three (3) tie clips around the posts. At the end of fence sections, two (2) wraps of wiring shall be used at each fence wire and at the top and bottom. The Owner and Engineer reserve the right to alter the location and alignment of the sand fencing prior to the installation of the sand fencing on each accepted segment of dune fill. Additional rows of fencing, or parts thereof, may be installed at various locations should site conditions warrant it. Tie clips or wire must be

approved by the Owner or Engineer prior to construction. Three (3) wraps of the wire shall be used at all tie locations on the fence.

15.2 Materials

15.2.1 Posts

Fence posts shall be four (4) inch x four (4) inch or four (4) inch x three (3) inch untreated #2 grade lumber posts eight (8) feet long driven four (4) feet into the ground and placed a maximum of ten (10) feet on center. The posts shall be vertically plumb and the alignment shall be in straight lines. Any alternative equivalent post proposed by the Contractor shall be submitted in writing and approved by the Owner and Engineer prior to purchase and installation.

15.2.2 Fencing

Sand fencing shall be standard, weather resistant snow fencing. Sand fence shall be furnished in rolls of 50 feet or 100 feet. The sand fence is to be composed of the following elements:

- a. *Slats*: Slats shall be made of No. 1 aspen or spruce measuring 3/8 inch thick, 1-1/2 inch wide by 4 feet long. The maximum distance between slats shall not exceed 2-1/4 inches. The slat shall be weather proofed by an acceptable pressure treatment method.
- b. *Fence Wire*: Wire for securing slats shall be good commercial quality steel that has been hot-dipped galvanized with a minimum gauge rating of 13. The wire shall be twisted around the slats sufficiently to penetrate the slat to hold it in place. Wire strands shall not be closer than four (4) inches from slat ends.
- c. *Tie Wire*: The wire that is used to tie the fence to the post shall be galvanized and shall be at least one gauge larger than the individual wires used for the fencing.
- d. *Splice Overlaps*: Where sections of sand fence are joined, a minimum of six (6) inches of each section shall overlap. The overlaps shall be secured using three (3) wraps of wiring at four (4) places: top, bottom, middle top and middle bottom as specified.

15.3 Installation

15.3.1 Alignment

Sand fence location and alignment shall be in conformance with the Plans unless otherwise required or approved by the Owner or Engineer in order to accommodate site conditions that exist at the time of installation. The sand fence shall be installed facing the Gulf of Mexico on the southern side of the post. Such location and alignment changes should not reduce the Contract quantity of fencing materials.

15.3.2 Equipment

Equipment used for the installation of fence posts, the transportation of fence Materials and movement of personnel shall be appropriate for the Work, listed on the PLANT AND EQUIPMENT SCHEDULE form included in the GENERAL PROVISIONS, and approved by the Owner and Engineer. To be appropriate, Contractor's equipment shall be of the type that shall not cause non-repairable damage to surface area of the beach and dune when properly used. All equipment proposed for use on the beach and dune shall be acceptable to the Owner and Engineer prior to mobilization. Equipment operators shall be fully instructed with regards to avoiding damage to the beach and dune surfaces and vegetation. At the discretion of Owner and Engineer, the Contractor may be required to restore beach surface elevations changed by ± 0.5 feet or more by the Contractor during mobilization, construction, or demobilization.

15.3.3 Vegetated Areas

Fence installations shall be on the dune platform only. Fence installation may be in both vegetated and non-vegetated areas. In vegetated areas, ingress and egress of equipment and personnel and the movement and placement of fence Materials shall be restricted and must be closely supervised by the Contractor. In non-vegetated areas, these factors shall be less restrictive but must be controlled; access to and from any non-vegetated area shall not be through vegetated areas. Unwarranted damage to the beach and dune environment shall be justification for the immediate removal of those responsible from the Work Area in accordance with GP-20.

15.3.4 Storage

Fencing materials stored within the Work Area shall be placed in an easily accessible location that has been approved by the Owner or Engineer. Stored Materials shall be placed and maintained in a neat, orderly, and safe manner.

15.4 Measurement and Payment

Sand fencing shall be measured for payment by the linear foot completely installed in accordance with the Plans and Specifications and such approved changes as made thereto. Sand fencing location shall also be surveyed and recorded as specified in TS-6. Splice overlaps mentioned shall not be measured for payment. Sand fencing shall be paid for at the Contract price per linear foot for Bid Item No. 9 "Sand Fencing". No payment shall be made for sand fencing that is rejected or damaged due to fault or negligence by the Contractor.

TS-16 SETTLEMENT AND OVERWASH MONITORING SYSTEM

16.1 General Description

This Work consists of furnishing and assembling the Materials needed to construct and install settlement plates and overwash monitoring plates in accordance with these Specifications and the Plans or as directed by the Owner and Engineer. The system shall be placed at locations shown on the Plans.

16.2 Materials and Construction

The settlement plates shall be fabricated with a four (4) foot x four (4) foot x one-fourth (1/4) inch plate with a three (3) inch diameter riser pipe connected to the center of the plate with a 3/16 inch continuous fillet weld. The pipe length shall be the length specified on the Plans, and the top shall be closed with a threaded cap. All Materials shall be made of ASTM A36 steel and after fabrication the settlement plate shall be hot dipped zinc galvanized. Alternate construction methods proposed by the Contractor shall be included in the Work Plan for approval by the Owner and Engineer prior to construction.

The overwash monitoring plates shall be fabricated with a two (2) foot x two (2) foot x one-fourth (1/4) inch plate or a circular plate with a radius of two (2) feet and a thickness of one-fourth (1/4) inch. A circle portion of the plate with a diameter equal to the inner diameter of the five (5) inch aluminum pipe riser and centered about the centroid of the plate shall be removed. There shall be a five (5) inch diameter x two (2) feet length x schedule 40 wall thickness riser pipe connected to the center of the plate with a one-fourth (1/4) inch continuous fillet weld. All overwash monitoring plate materials shall be made of commercial grade 6061 aluminum. Alternative construction methods proposed by the Contractor shall be included in the Work Plan for approval by the Owner and Engineer prior to construction.

16.3 Zinc Coating

A zinc coating shall be applied to all settlement plates in a manner and thickness quality conforming to ASTM A 123. In any case where the zinc coating becomes damaged, the damaged area shall be re-galvanized with a suitable low-melting zinc base alloy as recommended by the American Hot-Dip Galvanizers Association.

16.4 Installation

The settlement plates shall be installed within the fill templates on natural ground at locations shown on the Plans or as directed by the Owner and Engineer no sooner than two (2) weeks prior to fill placement in the vicinity of the settlement plate location. Settlement plates must be placed such that the vertical pipe conforms to a vertical plumb standard of no more than 10.5° from true vertical. Settlement plates shall also be marked with bright colored flagging or reflector tape.

Leveling of the plate bed shall be accomplished by removing the minimum amount of earth or debris necessary to produce an even foundation and in such manner that the density of the plate bed will remain at the same density as the undisturbed adjacent ground. Leveling of the plate bed by the addition of fill will not be permitted. The Contractor shall exercise care when placing any construction Materials in the vicinity of the settlement plates.

The overwash monitoring plates are to be installed just prior to demobilization and in conjunction with the last settlement plate survey. The overwash monitoring plates are to be installed over the threaded cap and the end of the settlement plate pipe and gently placed onto the constructed grade surface.

16.5 Maintenance

Settlement plates shall be maintained by the Contractor in order to accurately measure the elevation under the fill. Any damaged settlement plates shall be repaired or replaced by the

Contractor at no expense to the Owner. Damaged settlement plates are defined as plates which would not accurately represent elevation of the Project feature in question as determined by the Owner and Engineer.

16.6 Measurement, Payment and Acceptance

Acceptance of settlement plates will be made after associated segments of marsh fill are accepted. Settlement plates shall be surveyed as specified in TS-6. Settlement plates will be measured per each, complete and installed. Payment for the settlement plates and overwash monitoring plates will be made at the Contract unit price for Bid Item No. 10 "Settlement and Overwash Monitoring System".

TS-17 MARSH FILL GRADE STAKES

17.1 General Description

This Work consists of furnishing, assembling, and installing the required Materials for marsh fill grade stakes in accordance with these Specifications. For marsh fill construction using the Whiskey 3A Borrow Area, marsh fill grade stakes shall be used by the Contractor to monitor elevations of the marsh fill within the fill area. The Contractor shall submit the marsh fill grade stake layout in the Work Plan. Any alternative methods of grade stake construction shall be submitted in writing and approved by the Owner and Engineer prior to purchase or installation. For marsh fill construction using the Ship Shoal Block 88 Borrow Area, requirement for installation of marsh fill grade stakes is waived.

17.2 Materials

Grade stakes shall be composed of a gauge sign attached to a two (2) inch x four (4) inch x twelve (12) foot (minimum length) untreated pine or fir timber post. The gauge sign shall be composed of reflective sheeting applied to a fiberglass reinforced plastic (FRP) of 0.120 inch minimum thickness and a minimum of four (4) inches wide by thirty-six (36) inches in height. The sheeting shall be engineer grade that is white in color and reflective as manufactured by Avery Dennison (T1500), or approved equal. The substrate shall be gray in color, dielectric, non-conductive, acrylic modified, UV stabilized for outdoor weather ability, and possess a tensile strength which exceeds 0.005" aluminum. The gauge sign shall be fastened to each stake using three two (2) inch galvanized #8 wood screws and washers.

The elevations shall be represented on the sheeting using background colors, borderlines, and elevation numbers. Background colors shall span between the marsh fill elevation tolerance ranges and border lines shall be placed at each of the marsh fill elevation tolerances defined in TS-12.4. Additional ranges may be included below the minimum marsh elevation if the Contractor deems necessary. Elevation numbers shall be two and one-half (2.5) inches high and placed immediately above each border line. The background colors, border lines, and elevation numbers shall be applied to the sheeting using Avery 7TS ink, or approved equal. Alternate construction methods proposed by the Contractor shall be included in the Work Plan for approval by the Owner and Engineer prior to construction.

17.3 Installation

Grade stakes shall be installed at intervals not to exceed 100 feet along survey lines in the marsh fill area. The grade stake post shall be embedded at least six (6) feet into the existing soil and stable through the fill process and not subject to settlement. A minimum of three (3)

feet of the grade stake shall be above the mean high water (+1.70 ft NAVD88). Grade stakes must be placed such that the vertical mount conforms to a vertical plumb standard of no more than 15° from true vertical. Grade stakes shall be installed no sooner than two (2) weeks prior to fill placement in the vicinity of the grade stake location. The stakes shall be surveyed in accordance with TS-6.

17.4 Grade Stake Log

The Contractor shall prepare and maintain a log to inventory the grade stakes used on the project. The log shall include information concerning the location, installation, and recovery of all grade stakes. The Contractor shall make this log available for review by the Engineer and Resident Project Representatives upon request. Upon completion of the Work, the Contractor shall furnish the log to the Engineer.

17.5 Inspection

If more than one month's time elapses between the surveys of the marsh fill grade stakes and initiation of marsh fill placement within a marsh fill segment, a minimum of 10% of the stakes shall be inspected and/or re-surveyed by the Contractor and witnessed by the Resident Project Representative to determine if the stakes have been disturbed. Inspections shall be conducted with a hand-held level and the tape-down distance shall be measured. If the tape-down distance is not within one (1) inch of the original reported distance, the top of the stakes shall be surveyed to determine if the stakes have settled or if dredge material has flowed in to the area. If any stakes are not plumb, are damaged, or have settled, the Engineer may require that all the stakes within the marsh fill segment to be pumped be re-surveyed and witnessed by the Resident Project Representative. The Contractor has the option of relocating any damaged stakes by no more than five (5) feet along the survey profile line.

17.6 Removal

Upon full acceptance by the Engineer of construction in an area, the Contractor shall conduct a search to find each and every grade stake placed by the Contractor in the area. Sections of the area upon which the search for, and removal of grade stakes shall be documented in the Daily Progress Report form. Any grade stakes left in the fill area will be the sole responsibility and liability of the Contractor. Any injuries to people or damage to property which may occur because grades stakes were left in the fill area by the Contractor will be the responsibility and the liability of the Contractor. If the Contractor fails to remove grade stakes in a timely manner, the Owner may have the stakes removed and deduct the cost associated with such removal from the Contractor's final payment.

17.7 Measurement, Payment and Acceptance

The grade stakes shall be inspected and monitored in accordance with TS-17.5. Marsh fill grade stakes shall be accepted upon submittal and approval of the electronic file as described in TS-6 and after acceptance of corresponding marsh fill segments in accordance with TS-12.5.4. The Engineer reserves the right to halt dredging operations if grade stakes are not properly maintained by the Contractor. Marsh fill grade stakes shall be installed and maintained at no direct pay. The Contractor shall account for all costs associated with providing grade stake Materials, installation, and maintenance in Bid Item No. 11 "Marsh Fill Grade Stakes".

TS-18 WARNING SIGNS

18.1 General Description

This Work consists of furnishing and assembling the Materials needed to construct and install warning signs near all temporary sidecast disposal areas in accordance with the USCG permitting requirements and standards. The Contractor shall provide the Engineer a shop drawing and USCG approval of the signs for review and approval by the Engineer prior to their fabrication and installation. The warning signs, pilings, and assemblies shall also be removed prior to demobilization in accordance with these Specifications and the Plans or as directed by the Owner or Engineer. Warning signs shall be required anywhere sidecast material is placed in the temporary sidecast disposal areas along the access channels. The Contractor may use temporary buoys in lieu of pilings for warning sign installation. Buoys must be approved by the Owner and Engineer and meet all USCG Standards.

18.2 Materials

18.2.1 Signs

Each of the warning signs shall be fabricated from 125 gauge 61TS Aluminum or approved equal, covered with white, engineer grade, reflecting sheeting; black screened lettering and design; and orange, engineer grade reflective border. Signs shall meet all USCG Standards.

18.2.2 Piling

All timber piling shall conform to Louisiana Standard Specifications for Roads and Bridges, 2006 edition, Specification Sections 812 and 1014. Timber piling shall be a minimum of 12 inches in diameter (nominal end) and of such length that the pile have a minimum of forty percent (40%) of the pile's total length as bottom penetration and a marker top elevation of 12 ft above mean high water (+1.70 ft NAVD88).

18.2.3 Hardware and Connections

All nuts, bolts, and washers shall be hot dip galvanized. Nylon washers shall be provided at both ends of all bolts. Connection angles shall be two (2) inch x two and one-quarter (2- $\frac{1}{4}$) inch and hot dip galvanized and shall extend within six (6) inches of sign edges on the top and bottom. Timber blocking shall be pressure treated pine or fir with a minimum length of 18 inches.

18.3 Installation

The warning signs shall be installed at locations shown on the Plans or as directed by the Owner or Engineer. The top of the pile shall be 12 feet above mean high water (+1.70 ft NAVD88).

18.4 Removal

All pilings or pipes shall be removed to depth at least ten (10) feet below existing ground. All material removed shall become property of the Contractor and shall be removed and

disposed of in a manner approved by the Owner and Engineer from the Work Area prior to demobilization. Materials being disposed shall be in accordance with Title 33, part VII, subpart 1 (Solid Waste) of the Louisiana Environmental Regulatory Code, latest revision:

URL: <http://www.deq.state.la.us/portal/tabid/1674/Default.aspx>

The Contractor is responsible for any and all costs associated with the disposal of removed materials.

18.5 Measurement, Payment and Acceptance

Warning signs will be paid per each installed, maintained, and removed. Payment will be made at the contract unit price for Bid Item No. 12 "Warning Signs".

TS-19 MISPLACED MATERIAL

Should the Contractor, during the progress of the Work misplace any dredge material, Plant, equipment, or other Materials outside of what is authorized and permitted without the approval of the Owner or Engineer, the Contractor shall give immediate notice, with description and location of such misplaced Materials to the Owner and Engineer. Following coordination with the Engineer, the Contractor shall immediately recover and remove the Misplaced Material. This may require redeposit of misplaced dredge Materials as directed by the Owner or Engineer. Misplaced Materials shall be removed at the Contractor's expense. Additionally, the Contractor will be responsible for restoring unauthorized disposal areas to pre-construction conditions at his/her own expense.

Should the Contractor, during the progress of the Work, lose, dump, throw overboard, sink, or misplace any Material, Plant, or equipment, which in the opinion of the Owner and Engineer may be dangerous to or an obstruction to navigation, the Contractor shall additionally give immediate notice, with description and location of such obstructions, to the USCG and when required, mark or buoy such obstructions until the same are removed.

In the event of refusal, neglect, or delay in compliance with the above requirements, such obstructions may be removed by the Owner, and the cost of such removal may be deducted from any money due or to become due to the Contractor or may be recovered under his/her bond.

TS-20 ENVIRONMENTAL PROTECTION

20.1 General Description

For the purpose of this Specification, environmental protection is defined as the retention of the environment in its natural state to the greatest possible extent during Project construction and to enhance the natural appearance in its final condition. Environmental protection requires consideration of air, water, and land, and involves solid waste-management as well as other pollutants. In order to prevent any environmental pollution arising from the construction activities in the performance of this Contract, the Contractor and his/her Subcontractors shall comply with all applicable Federal, State and local laws and regulations concerning environmental pollution control and abatement. The Owner shall be given immediate notification of any incidents of environmental pollution arising from the construction activities in performance of this Contract.

20.2 Endangered Species

The Contractor shall comply with the following provisions if applicable based on the Permit requirements and time of actual construction activities.

20.2.1 Manatees

In order to ensure that manatees are not adversely affected by the construction activities, the Contractor shall comply with the Protection Conditions for Construction as required by the Federal, State and local regulations including, but not limited to, those specified in the Permits.

20.2.2 Shorebirds

In order to ensure that shorebirds are not adversely affected by the construction activities, the Contractor shall comply with the Protection Conditions for Construction as required by the Federal, State and local regulations including, but not limited to, those specified in the Permits.

20.2.3 Bald Eagles

In order to ensure that Bald Eagles are not adversely affected by the construction activities, the Contractor shall comply with the Protection Conditions for Construction as required by the Federal, State and local regulations including, but not limited to, those specified in the Permits.

20.2.4 Pallid Sturgeon

In order to ensure that Pallid Sturgeon are not adversely affected by the construction activities, the Contractor shall comply with the Protection Conditions for Construction as required by the Federal, State and local regulations including, but not limited to, those specified in the Permits.

20.3 Migratory Bird Abatement Plan

20.3.1 General

Certain bird species are protected by the U.S. Fish and Wildlife Service (Service). The Migratory Bird Treaty Act prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the U.S. Department of the Interior. While the Act has no provision for allowing unauthorized take, the Service realizes that some birds may be harassed, harmed, or killed due to project construction even if all reasonable measures to protect birds are implemented. The Service's Office of Law Enforcement (LE) carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries that have taken effective steps to minimize their impacts on migratory birds, and by encouraging others to enact such programs. As such, LE focuses their resources on investigating and prosecuting individuals and companies that take migratory birds without regard for their actions or without consideration of

Service conservation and/or impact minimization measures to avoid take.

20.3.2 Implementation

It is advised that passive and/or active abatement techniques be deployed before the onset of the nesting season regardless of whether monitoring reveals active bird use.

Pursuant to the terms and condition of the Biological Opinion for the Project by the Service (Appendix E), the Contractor shall carefully mark and stake the boundaries of the Work Area prior to construction. The markers shall be constructed with materials to be highly visible and semi-permanent. The Contractor shall submit within the Work Plan the materials proposed for the construction of the markers for approval by the Owner and Engineer. The Contractor shall maintain the markers maintain in good order for the duration of construction. All markers shall be removed from the Project Site and properly disposed of at proper facility provided by the Contractor prior to demobilization. Materials and labor for the installation, maintenance, and removal of the markers shall be included in Bid Item No. 1A, "Mobilization and Demobilization".

To minimize impacts to migratory birds, the Contractor shall employ personnel familiar with protected birds to allow for easy identification of birds encountered during the execution of Work under this Contract. The nesting period for various bird species is noted on the attached list in TS-20.3.3.

In the event that initiation of nesting birds (i.e., courtship and/or copulation) is discovered, then the Service shall be contacted and abatement measures should be altered to include more active methods. Passive measures such as the placement of filter cloth or orange fencing material on the beach may deter birds from nesting. If unsuccessful, other measures such as dogs or continual human presence shall be used. More aggressive methods of hazing (i.e., cannons, flares) could also be used if necessary. Timing, persistence, organization, and diversity of abatement measures are crucial in deterring birds from establishing active nests. All abatement measures should be conducted by wildlife biologists who are familiar with shorebird ecology and are familiar with the proposed abatement methods.

All abatement techniques/methods should be coordinated with the Owner and Service prior to use. To increase the effectiveness of the nesting prevention program, a combination of abatement measures should be employed. Additionally, the types of abatement measures, as well as their spatial and temporal deployment, should be changed frequently to reduce the chances that shorebirds become habituated to the abatement methods. If abatement measures that are deployed prove to be unsuccessful, other measures such as dogs or continual human presence should be used. More aggressive methods of hazing (i.e., cannons, flares) could also be used if necessary. The use of habitat altering techniques such as furrowing will need to be cleared with the Service in those areas identified as critical habitat for federally listed species and in areas know to support listed species.

In the event that the Contractor discovers the initiation of shorebird nesting (i.e., courtship and/or copulation) within 1,500 feet of the Work Area then the Owner and Engineer should be contacted immediately and more aggressive abatement measures should be deployed within the Work Area.

The Contractor shall patrol the beaches, associated sand flats and overwash areas to identify any nesting birds. This effort includes not only existing beaches, dunes, and sand flats, but dunes, dune slopes and other areas of island fill created during the execution of the Work. The Contractor shall especially patrol unvegetated or sparsely vegetated sand flats, overwash areas which are prime nesting habitat. Such patrols shall be conducted continuously prior to and throughout the period of construction, or until all Work (including grading and shaping, sand fence installation, and access activities) is completed. Monitoring the effectiveness of the abatement methods and adaptive management are extremely important to ensuring that the nesting prevention program is successful. Once construction is underway, the Daily Progress Reports shall contain information on bird monitoring activities that include locations of surveys, personnel, equipment, results, and any indications of shorebird activity levels and species. Additionally, once abatement procedures have been initiated, the Daily Progress Reports shall contain information on locations, level of effort, techniques employed, and effectiveness.

During the patrols and upon locating a dead or injured piping plover that may have been harmed or destroyed as a direct or indirect result of construction activities, the Contractor shall immediately notify the Owner and Engineer. The Contractor shall also notify the Service's Lafayette, Louisiana Field Office by phone at (337) 291-3108 and the LDWF Natural Heritage Program by phone at (225) 765-2821.

Any evidence of nests or eggs of any protected bird species, the Contractor shall immediately cease work in the immediate vicinity (650 ft) of the nest and shall immediately notify the Owner and Engineer.

20.3.3 Breeding Periods for Louisiana Coastal Birds

Species	Breeding Period
Brown Pelican	November 1 to September 1
Black Skimmer	May 1 to September 15
American Oystercatcher	April 1 to September 15
Wilson's Plover	April 1 to August 1
Snowy Plover	April 1 to August 1
Killdeer	March 15 to September 1
Willet	April 15 to August 1
Black-necked Stilt	April 15 to August 15
Laughing Gull	April 1 to August 1
Gull-billed Tern	May 1 – August 1
Caspian Tern	May 1 to September 15
Royal Tern	April 1 to September 1
Sandwich Tern	April 1 to September 15
Forster's Tern	March 15 to August 1
Least Tern	April 15 to September 15
Clapper Rail	April 15 to September 1
Seaside Sparrow	March 15 to July 31
Common Nighthawk	May 15 to September 1

20.4 Water Quality

The Contractor shall adhere to all water quality regulations set forth by the Permits and these Specifications. The Contractor shall also employ measures set forth in TS-8.6 and TS-20.6 to protect water quality in the vicinity of the Project.

20.5 Vegetation and Landscaping

20.5.1 Prevention of Landscape Defacement

The Contractor shall not deface, injure, or destroy trees, shrubs or marsh vegetation, nor remove or cut them without the approval of the Owner or Engineer. Exceptions can be made within the fill template if approved by the Owner and Engineer. Ropes, cables, or guys shall not be fastened to or attached to any existing nearby trees. Where the possibility exists that trees may be defaced, bruised, injured, or otherwise damaged by the Contractor's equipment or operations, the Contractor shall adequately protect such trees. Monuments and markers shall be protected before construction operations commence and throughout the duration of construction.

20.5.2 Restoration of Landscape Damage

Any trees, shrubs, beach or marsh vegetation, or other landscape features scarred or damaged by the Contractor's equipment or operations shall be restored to a condition satisfactory to the Owner and Engineer. Restoration of scarred and damaged trees, shrubs, or vegetation shall be performed in an approved manner by experienced workmen. Trees, shrubs, or vegetation damaged beyond restoration shall be removed and disposed of by Contractor in a manner approved by Owner and Engineer. Trees, shrubs, or vegetation that are to be removed because of damage shall be replaced at the Contractor's expense by nursery-grown trees, shrubs, or vegetation of the same species or a species approved by the Owner and Engineer. The size and quality of nursery-grown trees, shrubs, or vegetation shall also be approved by the Owner and Engineer. Final payment shall be withheld until the restoration activities are made and approved by the Owner.

20.6 Pollution Control

20.6.1 Location of Storage Facilities

The Contractor's storage, which is required in the performance of the Work, shall be located upon existing cleared portions of the Work Area or areas to be cleared, and shall require written approval of the Owner and Engineer. The Contractor shall not store oil or fuel on the beach, dune, or marsh, or equipment that is not required for the daily construction activities. The Contractor shall specify where oil and fuels will be stored in his/her Work Plan. A metal pan with sides a minimum of four (4) inches high shall be placed under the equipment on the beach or adjacent area during refueling. The pan shall have a capacity equal to the capacity of the fuel cans used and catch any spills or leaks during the refueling activity. Fuel caught in the pan shall be contained and either transported off-site or used in the equipment. Under no condition shall oil or fuels be discharged on the beach, dune, marsh, adjacent lands, or any waterbodies. If the Contractor's fuel cells exceed the thresholds set forth in the applicable Code of Federal Regulations, Title 40 the Contractor shall provide a

spill plan and containment equipment accordingly.

20.6.2 Post-Construction Cleanup or Obliteration

The Contractor shall obliterate all signs of construction Work Area, waste Materials, or any other vestiges of construction as directed by Owner and Engineer. Any damages caused by the Contractor outside of the constructed features shall be restored to pre-construction conditions.

20.6.3 Spillage

Special measures shall be taken to prevent bilge pumpage or effluent, chemicals, fuels, oils, greases, bituminous materials, waste washing, herbicides and insecticides, and concrete drainage from entering State and Federal waters.

20.6.4 Disposal

Disposal of any Materials, wastes, effluent, trash, garbage, oil, grease, chemicals, etc., in areas adjacent to streams or other waters of the State shall not be permitted. If any waste Material is dumped in unauthorized areas, the Contractor shall remove the Material and restore the area to its pre-construction condition before being disturbed. If necessary, contaminated ground shall be excavated, disposed of as directed by the Owner and replaced with suitable fill material, compacted and finished with topsoil and planted as required to re-establish vegetation.

20.7 Existing Petroleum Pipelines, Structures, and Wells

The Contractor shall be responsible for locating and avoiding all petroleum pipelines and facilities in accordance with GP-25, SP-23, and TS-6.4.8. In the event that an oil spill or gas release occurs as a result of construction activities, the Contractor shall call the Louisiana Emergency Hazardous Materials Hotline at (877) 925-6595 and the National Response Center at (800) 424-8802. The Contractor shall also respond in accordance with section 2463 of the Louisiana Oil Spill Prevention and Response Act of 1991 and the Oil Pollution Act of 1990. These documents can be downloaded at: <http://www.losco.state.la.us/regulations.htm>.

End of PART III TECHNICAL SPECIFICATIONS

APPENDIX A: BID PROPOSAL ATTACHMENTS

NRDA CAILLOU LAKE HEADLAND (TE-100)

BID PROPOSAL ATTACHMENT A1 – PLANT AND EQUIPMENT SCHEDULE

EQUIPMENT CATEGORY:_____

Type	Capacity	Manufacturer	Age & Condition	Location

EQUIPMENT CATEGORY:_____

Type	Capacity	Manufacturer	Age & Condition	Location

EQUIPMENT CATEGORY:_____

Type	Capacity	Manufacturer	Age & Condition	Location

NOTE: The Plant and Equipment Schedule is Mandatory. The Plant and Equipment Schedule is for information purposes only and will not be used as a basis for award. The information submitted is pertinent to the evaluation of the proposed dredges and their capability to perform the Work as required and as agreed to by the Bidder through the submittal of a Proposal. The Bidder may only omit information that he/she considers proprietary. Provide separate table for each category of equipment including mechanical dredging, excavating, material handling, pile driving, barges, loading, grading, earthworks, trucking, etc. Specify production rate of equipment. Use separate line for each major item. Use additional pages if necessary. Hydraulic cutterhead and hopper dredge equipment shall be listed on the Dredge Data Sheets in Attachment B.

(THIS PAGE SHOULD BE COMPLETED AND RETURNED WITH CONTRACTOR BID)

NRDA CAILLOU LAKE HEADLAND (TE-100)

BID PROPOSAL ATTACHMENT A2 – DREDGE DATA SHEETS

NOTE: All Bids to be accompanied by *Dredge Data Sheets*. The Contractor shall complete the FOLLOWING data sheets for the equipment proposed to perform the Work under this Contract. Separate *Dredge Data Sheets* for each dredge are required if the Contractor Plans to utilize multiple dredges. The dredge data sheet submittal shall constitute a certification that the described equipment is available to, and under control of, the Contractor.

The Dredge Data Sheet is **MANDATORY**. The Dredge Data Sheet is for informational purposes only and will not be used as a basis for award. The information submitted is pertinent to the evaluation of the proposed dredges and their capability to perform the Work as required and as agreed to by the Bidder through the submittal of a Proposal. The Bidder may only omit data or information that he/she considers proprietary.

NRDA CAILLOU LAKE HEADLAND (TE-100)

DREDGE DATA SHEET

(Sheet 1 of 2)

DREDGE INFORMATION:

Owned: _____ Leased: _____ Leased From: _____

Dredge name: _____

Minimum width of channel in which dredge can successfully operate and make a 180 degree turn: _____

Maximum draft of dredge: _____

Loaded freeboard: _____

Minimum depth in which the dredge can successfully operate: _____

Depth range to which dredge will dig:

Maximum: _____, Minimum: _____

Maximum effective dredge swing, in degrees (where applicable): _____

Length of dredge spuds (where applicable): _____

Length and beam of dredge hull: _____

Length of dredge ladder or dragarm: _____

Length of suction and boat lines: _____

Inside diameter of pump discharge: _____

Inside diameter of pump suction inlet: _____

Suction lift (Elevation of main dredge pump relative to the water surface level): _____

Diameter of pump impeller eye: _____

Outside diameter of pump impeller: _____

Brake horsepower and corresponding engine RPMs (during dredging operations) applied to pump impeller at rated drive of the prime mover, during dredging operations: _____

Cutterhead type and diameter (where applicable): _____

Brake horsepower applied to cutterhead (where applicable) during dredging operations: _____

Pump engine(s) horsepower and corresponding RPM: _____

Completion date of each dredge pump engine(s) re-build: _____

Type(s) of production rate monitoring equipment on-board the dredge (measuring cy/hr of Material dredged): _____

(THIS PAGE SHOULD BE COMPLETED AND RETURNED WITH CONTRACTOR BID)

NRDA CAILLOU LAKE HEADLAND (TE-100)

DREDGE DATA SHEET

(Sheet 2 of 2)

THE DREDGE MAY BE INSPECTED AT (List location of Equipment):

DREDGE OWNER INFORMATION:

Firm name: _____

Point of contact: _____

Title: _____

Business address: _____

Street: _____

City: _____

Parish/County: _____

State: _____ Zip+4: _____

Telephone no. (_____)_____ Facsimile no. (_____)_____

(THIS PAGE SHOULD BE COMPLETED AND RETURNED WITH CONTRACTOR BID)

NRDA CAILLOU LAKE HEADLAND (TE-100)

BID PROPOSAL ATTACHMENT A3 – STATEMENT OF EXPERIENCE

The Bidder is required to state below what work of similar magnitude is a judge of his/her experience, skill and business standing and of his/her ability to conduct the work as completely and as rapidly as required under the terms of the contract. Under Reference, please provide name, address, contact person, phone number, and email address.

PROJECT AND LOCATION	REFERENCE

NOTE: The Statement of Experience is Mandatory. The Statement of Experience is for information purposes only and will not be used as a basis for award. The information submitted is pertinent to the evaluation of the proposed dredges and their capability to perform the Work as required and as agreed to by the Bidder through the submittal of a Proposal.

(THIS PAGE SHOULD BE COMPLETED AND RETURNED WITH CONTRACTOR BID)

**APPENDIX B: INTERPRETATION OR CLARIFICATION BY ENGINEER, CHANGE ORDER,
SUMMARY OF CHANGE ORDER, AND RECOMMENDATION OF ACCEPTANCE**

ATTACHMENT B1

NRDA CAILLOU LAKE HEADLAND (TE-100)

Interpretation or Clarification by Engineer
Number (____)

DATE:

SUBJECT:

SUMMARY OF MATTER BY CONTRACTOR

INTERPRETATION OR CLARIFICATION OF MATTER BY ENGINEER

ATTACHMENT B2

CHANGE ORDER NO. ____

OWNER: State of Louisiana, Coastal Protection & Restoration Authority
CONTRACTOR _____
PROJECT: NRDA CAILLOU LAKE HEADLAND (TE-100)
FILE NO: _____
SOLICITATION NO: _____
ENGINEER: _____

The following changes are hereby proposed to be made to the Contract Documents:

•

Description: See attached summary.

Attachments (list documents supporting change):

•

Change in Contract Price		Change in Contract Time	
Original Contract Price		Original Contract Time (calendar days)	
Net Increase /(Decrease) from previous Change Orders		Net Increase /Decrease from previous Change Orders (calendar days)	
Contract Price prior to this Change Order		Contract Time prior to this Change Order (calendar days)	
Net Increase/(Decrease) of this Change Order		Net Increase (Decrease) of this Change Order (calendar days)	
Contract Price with this Change Order		Contract Time with this Change Order (calendar days)	

RECOMMENDED:

By: _____

Engineer

Date: _____

RECOMMENDED:

By: _____

CPRA Construction Manager

Date: _____

ACCEPTED:

By: _____

Contractor

Date: _____

ATTACHMENT B3

NRDA CAILLOU LAKE HEADLAND (TE-100)

FILE NO: _____, PURCHASE ORDER NO: _____

SUMMARY OF CHANGE ORDER NO: _____

ITEM NO.	DESCRIPTION	UNIT	ORIGINAL QUANTITY	ADJUSTED QUANTITY	UNIT PRICE	AMOUNT OVERRUN	AMOUNT UNDERRUN
Net Increase of this Change Order							

Justification:

-

No additional contract time is requested to accomplish the work for the change order.

ATTACHMENT B4

❖ NOT FOR RECORDATION PURPOSES ❖

RECOMMENDATION OF ACCEPTANCE

TO: Coastal Protection and Restoration Authority
450 Laurel Street, Suite 1501
Baton Rouge, LA 70801

FROM: _____

Design Firm Name and Address

DATE: _____

PROJECT NAME & NUMBER: _____

SITE CODE: _____

STATE ID: _____

CFMS: _____

CONTRACTOR: _____

ORIGINAL CONTRACT AMOUNT: \$ _____

FINAL CONTRACT AMOUNT: \$ _____

DATE OF ACCEPTANCE: _____

CONTRACT DATE OF COMPLETION: _____

NUMBER OF DAYS (OVERRUN) (UNDERRUN) (As of Acceptance Date) _____

LIQUIDATED DAMAGES PER DAY STIPULATED IN CONTRACT \$ _____

VALUE OF PUNCH LIST \$ _____
(Attach punch list)

Signed: _____
DESIGNER

FOR USE OF PROJECT MANAGER:

Signed: _____
PROJECT MANAGER

❖ NOT FOR RECORDATION PURPOSES ❖

APPENDIX C: DAILY PROGRESS REPORT TEMPLATE

NRDA CAILLOU LAKE HEADLAND (TE-100)

DAILY PROGRESS REPORT

DATE: _____
TIME: _____
REPORT NO. _____

Contractor: _____

Weather: (clear) (partially cloudy) (cloudy) (rain)

Wind: _____ mph Wind Direction: _____

Seas: _____ ft Wave Direction: _____

Location of Dredge: STA _____ (+/-15 ft.)

Dredge Coordinates X: _____ Y: _____

Pre-Dredge Depth of Water: _____ ft. Width of Cut: _____ ft.

After Dredge Depth of Water: _____ ft.

Location(s) of Booster Pumps: X = _____ Y = _____

Length of Floating Pipe: _____ ft. Location of Sub-Line Landing: = STA _____

Length of Submerged Pipe: _____ ft. Location of Discharge: = STA _____

Length of Shore Pipe: _____ ft. Fill to Grade: = STA _____

	<u>Today</u>	<u>To Date</u>
WORK Hours	_____	_____
Downtime (Explain Below)	_____	_____
Length Advance on Fill	_____	_____
Length of Advance in Borrow	_____	_____
Volume Pumped (Borrow)	_____	_____
Volume Placed (Fill)	_____	_____

Downtime (Hours) where applicable:

Clean Pump: _____	Spuds: _____	Dump: _____
Clean Suction: _____	Floating Pipe: _____	Booster: _____
Clean Cutter: _____	Shore Pipe: _____	Turbidity: _____
Shift Anchors: _____	Repairs: _____	Other: _____
Engine Room: _____	Weather: _____	
Navigation: _____		

Remarks: _____

Dressing Operations:

Complete to Station = _____
In Progress from = _____ to = _____

NRDA CAILLOU LAKE HEADLAND (TE-100)
Daily Progress Report
Page 2

Beach and Dune Fill Sediment Quality Observations:

Verbal Instructions Received (list any instruction from OWNER or ENGINEER and action taken):

General Remarks (e.g. manatee observations, shorebird nesting observations, safety inspection results):

Contractor's Certification

I hereby certify that the above report is complete and correct and that all Material and equipment used and WORK performed during this report period were in strict compliance with the CONTRACT Plans and Specifications, exceptions noted above.

Contractor's Approved
Authorized Representative

Date

APPENDIX D: LANDOWNERS AGREEMENTS AND PIPELINE INFORMATION

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)

**APPENDIX E: OWNER OBTAINED CONSTRUCTION PERMITS AND FEDERAL
REGULATIONS**

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)

APPENDIX F: SURVEY MONUMENT DATA SHEETS

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)

**APPENDIX G: SHIP SHOAL BLOCK 88 AND WHISKEY 3A BORROW AREA
GEOPHYSICAL / GEOTECHNICAL SURVEYS AND SEDIMENT ANALYSES REPORTS**

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)

**APPENDIX H: WHISKEY ISLAND GEOTECHNICAL SURVEY AND ENGINEERING
ANALYSES REPORTS**

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)

APPENDIX I: U.S. COAST GUARD NOTICE OF INTENT TO DREDGE INFORMATION

(PROVIDED ELECTRONICALLY AT <ftp://ftp.coastal.la.gov/TE-100/Appendices/>)