

TERREBONNE PARISH CONSOLIDATED GOVERNMENT

PROJECT MANUAL

FOR

**PARISH PROJECT No. 23-SEW-77/IDA-0091
FEMA Project No. 720545**

**SOUTH WASTEWATER TREATMENT PLANT
HURRICANE IDA LEVEE REHABILITATION
CELL NO. 1**

GORDON DOVE - PARISH PRESIDENT

TERREBONNE PARISH COUNCIL MEMBERS



BRIAN PLEDGER
CARL "CARLEE" HARDING
GERALD MICHEL
JOHN AMEDEE
JESSICA DOMANGUE
DARRIN GUIDRY
DANIEL "DANNY" BABIN
DIRK GUIDRY
STEVE TROSCLAIR

(1)
(2)
(3)
(4)
(5)
(6)
(7)

OCTOBER 2023

Prepared By:



WORK CLASSIFICATION

**HEAVY CONSTRUCTION
AND/OR
HIGHWAY, STREET AND
BRIDGE CONSTRUCTION**

ISSUE FOR BID

GENERAL TABLE OF CONTENTS

| | Page No. |
|--|----------|
| SECTION A - INVITATION TO BIDDERS | A-4 |
| SECTION B - INSTRUCTION TO BIDDERS | B-1 |
| 1.0 Defined Terms | B-1 |
| 2.0 Copies of Bidding Documents | B-2 |
| 3.0 Examination of Contract Documents and Site..... | B-3 |
| 4.0 Interpretations and Addenda..... | B-4 |
| 5.0 Bid Security | B-5 |
| 6.0 Contract Time | B-5 |
| 7.0 Liquidated Damages | B-6 |
| 8.0 Substitute Material and Equipment of "Or-Equal" Items | B-6 |
| 9.0 Proposal Document Forms..... | B-7 |
| 10.0 Preparation and Submission of Bids..... | B-7 |
| 11.0 Modification and Withdrawal of Bids | B-8 |
| 12.0 Opening of Bids | B-9 |
| 13.0 Bids to Remain Open | B-9 |
| 14.0 Award of Contract..... | B-9 |
| | |
| SECTION C – PROPOSAL FORMS | C-1 |
| Louisiana Uniform Public Works Bid Form..... | C-1 |
| Unit Price Form..... | C-2 |
| | |
| SECTION D -Low Bidder Additional Information and Documentation | D-1 |
| 15.0 Due Within 10 Days From Opening Of Bid | D-1 |
| 16.0 Due Within 10 Days Of Receipt Of Notice Of Award | D-3 |
| E-Verification Form (Sample)..... | D-5 |
| Criminal Attestation Affidavit (Sample) | D-6 |
| | |
| SECTION E- RESERVED | |
| | |
| SECTION F - STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR | F-1 |
| Article 1 Work | F-1 |
| Article 2 Engineer | F-1 |
| Article 3 Contract Time | F-1 |
| Article 4 Contract Price..... | F-2 |
| Article 5 Payment Procedure | F-2 |
| Article 6 Contractor's Representations..... | F-3 |
| Article 7 Miscellaneous | F-3 |
| Article 8 Contract Documents..... | F-4 |

| | |
|---|------|
| SECTION G - CONTRACTOR'S AFFIDAVIT | G-1 |
| SECTION H - PERFORMANCE BOND | H-1 |
| SECTION I - GENERAL CONDITIONS | I-1 |
| Article 1 Definitions..... | I-1 |
| Article 2 Preliminary Matters | I-5 |
| Article 3 Contract Documents; Intent, Amending, Re-use | I-6 |
| Article 4 Availability of Lands; Physical Conditions Ref. Points | I-9 |
| Article 5 Bonds and Insurance | I-13 |
| Article 6 Contractor's Responsibilities..... | I-22 |
| Article 7 Other Work | I-33 |
| Article 8 Owner's Responsibilities..... | I-35 |
| Article 9 Engineer's Status During Construction | I-36 |
| Article 10 Changes in the Work..... | I-38 |
| Article 11 Change in Contract Price | I-41 |
| Article 12 Change of Contract Time..... | I-47 |
| Article 13 Warranty and Guarantee; Test & Inspections; Correction, Removal or Acceptance of Defective Work | I-49 |
| Article 14 Payments to Contractor and Completion | I-53 |
| Article 15 Suspension of Work & Termination | I-59 |
| Article 16 Dispute Resolution..... | I-61 |
| Article 17 Miscellaneous | I-62 |
| Exhibit "B" Quality Control Daily Reports | I-64 |
| SECTION J – SPECIAL PROVISIONS | J-1 |
| SECTION K – FEMA Contract Compliance Provision | K-1 |
| SECTION L – TECHNICAL SPECIFICATIONS | L-1 |

SECTION A
INVITATION TO BIDDERS

SECTION A

INVITATION TO BIDDERS

Sealed bids will be received on **November 14, 2023, at 2:00 pm**, by the Terrebonne Parish Consolidated Government (TPCG) Purchasing Division, at the City of Houma Service Complex, 301 Plant Road, in Houma, Louisiana until 2:00 P.M as shown on the Purchasing Division Conference Room Clock, and TPCG shall at that time and place publically open the bids and read them aloud.

Bid documents are posted on <http://www.centrauctionhouse.com/rfp.php?cid=65>. To view these, download, and receive bid notices by e-mail, you must register with Central Auction House (CAH). Vendors/Contractors have the option to submit their bids electronically or by paper copy. For information about the electronic submittal process, contact Ted Fleming with Central Auction House at 1-866-570-9620.

Each bid shall be either hand delivered by the bidder or his agent, or such bid shall be sent by United States Postal Service registered or certified mail with a return receipt requested or shall be submitted electronically with Central Auction House (CAH). Bids shall not be accepted or taken, including receiving any hand delivered bids, on days which are recognized as holidays by the United States Postal Service.

**The mailing address for bids is: City of Houma Service Complex
 301 Plant Road
 Houma, Louisiana 70363**

No bid received after the scheduled time for opening will be considered. Failure of the U.S. Mail to deliver the bids timely shall not be considered due cause for the scheduled time of the bid opening to be extended.

**Project Name: SOUTH WASTEWATER TREATMENT PLANT
 HURRICANE IDA LEVEE REHABILITATION
 CELL NO. 1**

Parish Project No: 23-SEW-77

Project Description: This project consists of the following:

- **Levee rehabilitation of approximately 4,300 linear feet of existing levee to an elevation of +8.0' NAVD88 along the eastern side of the treatment plant's Cell No.1.**
- **Concrete mats for erosion control will also be installed along the interior levee side slopes, with the intent to reduce future erosion on the levee.**

Bids must be submitted on the Louisiana Uniform Public Works Bid Form furnished with the Bidding Documents. A single set of Bidding Documents shall be issued at the cost of reproduction to contractors who are licensed by the Licensing Board of Contractors.

This Project shall require a Louisiana Contractors license number for **Heavy Construction and/or Highway, Street and Bridge Construction.**

Bidding Documents for this Project are on file in the office of GIS Engineering, LLC located at 197 Elysian Dr., Houma, LA 70363. Please contact Ann Schouest at (985) 219-1000 or bidquestions@gisy.com for any clarification or information with regard to the specifications.

A Non-mandatory Pre-Bid Conference will be held on **November 2, 2023, at 2:00 pm** at the office of GIS Engineering, LLC, located at 197 Elysian Drive, Houma Louisiana 70363.

The Terrebonne Parish Consolidated Government reserves the right to reject any and all bids in accordance with Louisiana State Bid Law.

GORDON DOVE, PARISH PRESIDENT
TERREBONNE PARISH CONSOLIDATED GOVERNMENT

PUBLISH:

October 20, 2023
October 27, 2023
November 3, 2023

SECTION B
INSTRUCTIONS TO BIDDERS

SECTION B

INSTRUCTIONS TO BIDDERS

1.0 DEFINED TERMS

1.1 Terms used in these Instructions to Bidders which are defined in the Standard General Conditions of the Construction Contract have the meanings assigned to them in the Standard General Conditions and the Supplementary Conditions.

1.2 Other terms used in the Bidding Documents and not defined elsewhere have the following meanings which are applicable to both the singular and plural thereof:

Addenda - Written or graphic instruments issued prior to the date for opening of Bids which may interpret or modify the Bidding Documents by additions, deletions, clarifications, or corrections.

Alternate – An item on the bid form that may either increase or decrease the quantity of work or change the type of work within the scope of the project, material, or equipment specified in the bidding documents or both. The owner may or may not incorporate an alternate into the contract at the time of contract award.

Base Bid – The amount of money stated in the bid as the sum for which the bidder offers to perform the work described in the bidding documents prior to the adjustments for alternate bids but including any unit prices.

Louisiana Uniform Public Works Bid Form (Bid Form) - The written offer of the Bidder on the bid forms furnished within the Bidding Documents for the Work proposed.

Bid – A complete signed proposal to perform work or a designated portion for a stipulated sum in accordance with the bidding documents.

Bidder - An entity or person who submits a bid for a contract with the owner. A bidder is not a contractor on a specific project until a contract is executed between the bidder and the owner.

Successful Bidder - The lowest responsible and responsive Bidder to whom OWNER (on the basis of OWNER'S evaluation as hereinafter provided) makes an award.

Bid Security – A bid bond or deposit submitted with a bid to guarantee to the owner that the bidder, if awarded the contract, will execute the contract within a specified period of time and will furnish any bonds or other requirements of the bidding documents.

Bidding Documents – means the bid notice or invitation to bidders, plans and specifications, instructions to bidders, bid form, addenda, special provisions, and all other written instruments prepared by or on behalf of a public entity for use by prospective bidders on a public contract.

Legal Alien - Is a person who is or was lawfully present or permanently residing legally in the United States and allowed to work at the time of employment and remains so throughout the duration of that employment.

Owner – The public entity issuing the bid.

Public entity – Means and includes the state of Louisiana, or any agency, board, commission, department, or public corporation of the state, created by the constitution or statute or pursuant thereto, or any political subdivision of the state, including but not limited to any political subdivision as defined in Article VI Section 44 of the Constitution of Louisiana, and any public housing authority, public school board, or any public officer whether or not an officer of a public corporation or political subdivision.

Public Work – means the erection, construction, alteration, improvement, or repair of any public facility or immovable property owned, used, or leased by a public entity.

Qualifications Submittals - The information required on AIA Document A305, and as required the Preliminary Progress Schedule, the Bid Breakdown and Subcontractor Qualifications Statement List.

Status Verification System - Means the electronic verification of work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324(a), and operated by the United States Department of Homeland Security, known as the “E-Verify” program.

Unit Price – The amount stated on the bid form representing the price per unit of materials and/or services.

2.0 COPIES OF BIDDING DOCUMENTS

2.1 A single complete set of the Bidding Documents may be obtained as set forth in the Invitation to Bidders.

2.2 Complete sets of Bidding Documents should be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3 OWNER and ENGINEER, in making copies of Bidding 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.

3.0 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

3.1 Before submitting a Bid it is recommended that each Bidder (a) examine the Bidding Documents thoroughly, (b) visit the site to become familiar with local conditions that may in any manner affect cost, progress, performance or furnishing of the Work, (c) familiarize himself with and consider federal, state and local Laws and Regulations that may in any manner affect cost, progress, performance or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Bidding Documents, and (e) notify ENGINEER of all conflicts, errors or discrepancies in the Bidding documents.

3.2 Review the Supplementary Conditions for identification of:

3.2.1 those reports of explorations and tests of subsurface conditions at the site which have been utilized by ENGINEER in preparation of the Bidding Documents. Bidder may rely upon the accuracy of the technical data contained in such reports but not non-technical data, interpretations or opinions contained therein or for the completeness thereof for the purposes of Bidding or construction.

3.2.2 those drawings of physical conditions in or relating to existing surface and subsurface conditions (except Underground Facilities) which are at or contiguous to the site which have been utilized by ENGINEER in preparation of the Bidding Documents. Bidder may rely upon the accuracy of the technical data contained in such drawings but not upon the completeness thereof for the purposes of Bidding or construction.

3.2.3 Copies of subsurface soil investigation reports and drawings will be made available by OWNER to any Bidder on request if such report exists. Those reports and drawings are not part of the Bidding Documents, but the technical data contained therein upon which Bidder is entitled to rely as provided in Paragraphs 3.2.1 and 3.2.2 are incorporated therein by reference. Such technical data has been identified and established in the General Conditions, Article 4.

3.3 Information or data reflected in the Bidding Documents with respect to Underground Facilities at or contiguous to the site is based upon information or data furnished to OWNER and ENGINEER by owners of such Underground Facilities or others, and OWNER does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

3.4 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, Underground Facilities and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in the General Conditions.

3.5 Before submitting a Bid each Bidder may, at Bidder's own expense and with OWNER's prior approval, make or obtain any additional examinations, investigations, explorations, tests and studies and may obtain any additional information and data which pertain to the physical conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may in any manner affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

3.6 On request in advance, OWNER may provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.

3.7 The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, access, or storage of materials and equipment are to be provided by Successful Bidder who has been awarded the Contract. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by OWNER unless otherwise provided in the Contract Documents.

3.8 Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with, Federal, State and local laws, ordinances, rules and regulations affecting the execution of the Work and the furnishing of the necessary materials. This requirement includes, but is not limited to, applicable regulations concerning minimum wages, non-discrimination in employment, protection of public and employee safety and health, environmental protection, fire protection and permits, and fees and licensing.

3.9 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with recommendations of this Article; that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding and Contract Documents; and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

4.0 INTERPRETATIONS AND ADDENDA

4.1 All questions about the meaning or intent of the Bidding Documents are to be directed to ENGINEER as set forth herein. Interpretations, clarifications, or modifications considered necessary by ENGINEER in response to such questions will be issued by Addenda as set forth below.

4.2 Bidders shall promptly notify ENGINEER in writing of any ambiguity, inconsistency, or error which they may discover upon examination of the Bidding Documents or of the site and local conditions. Bidders requiring clarification or interpretation of any of the Bidding Documents shall make a written request of the ENGINEER at the address in the Bidding Documents or Contract Documents.

4.3 All requests pertaining to questions about the meaning or intent of the Bidding Documents received less than ten days prior to the date for opening of Bids may not be answered unless, in the opinion of the ENGINEER, the ambiguity in the Bidding Documents is so significant that it may necessitate postponement of the Bid date and issuance of an addendum to respond to the Bidder's request.

4.4 Any interpretation, clarification, correction, or modification to the Bidding Documents shall be only by a written addendum. Interpretations, clarifications, corrections or modifications made by any other manner shall not be binding and shall not be relied upon by Bidders. Addenda shall be transmitted in accordance with Louisiana Bid Law.

4.5 Addenda may be issued to modify the Bidding Documents as deemed advisable by OWNER or ENGINEER.

4.6 Prior to submittal of bids, each Bidder shall ascertain that he has received all addenda issued. The Bidder shall acknowledge receipt of each Addendum by completing the acknowledgment space provided on the Bid Form. Failure by a Bidder to acknowledge each individual addendum shall render that Bidder's Bid proposal non-responsive.

5.0 BID SECURITY

5.1 The bid must be accompanied by bid security which shall be in the amount of five (5%) percent of the proposed total contract amount. Said security can be in the form of a certified check, cashier's check, or bid bond.

5.2 The Bid Security of the Successful Bidder will be retained until such Bidder has furnished other additional information and required documentation in accordance with the bidding documents, executed the Standard Form Agreement, furnished the required payment and performance bonds, and provided the required insurance documentation whereupon the Bid Security will be returned. If the Successful Bidder fails to furnish other required documentation or to execute and deliver the Standard Form of Agreement and furnish the required bonds, OWNER may annul the Notice of Award and the Bid Security of that Bidder will be forfeited to OWNER. Should the OWNER be required to engage the services of an attorney in connection with the enforcement of Bids, Bidder agrees to pay OWNER's reasonable costs, including attorney fees, and all court, arbitration, or hearing costs incurred with or without suit. The Bid Security of any Bidder whom OWNER believes to have a reasonable possibility of receiving the award may be retained by OWNER until the forty-fifth (45th) day after the Bid opening or seven (7) days after the effective date of the Standard Form of Agreement.

6.0 CONTRACT TIME:

The numbers of days within which, or the dates by which, the Work is to be substantially completed and also completed and ready for Final Payment (the Contract Times) are set forth in the Standard Form of Agreement. If for any reason, a Bidder believes that the Contract Time specified is insufficient or excessive to complete the work, said Bidder shall so inform the ENGINEER at the Pre-Bid Conference or at any time prior to the deadline for the receipt of requests for clarification/interpretation. Replies may be issued by addenda in accordance with these Instructions to Bidders.

By submission of bid, Bidder acknowledges and represents that Bidder has carefully correlated the provisions in Article 3 of the Standard Form of Agreement with the other terms and conditions of the Bidding Documents and unequivocally accepts the contract time for the work and any other designated parts of the work as specified.

7.0 LIQUIDATED DAMAGES: By submission of bid, Bidder unequivocally accepts the liquidated damages provisions set out herein and specified in Article 3 of the Standard Form of Agreement in the event of failure, neglect or refusal to complete the work, or any designated part of the work, within the corresponding contract times.

By submission of Bid, Bidder agrees that for each calendar day beyond the Contract Time set forth in the Agreement, and any extension thereof, that the Work remains incomplete, the Owner may retain from the total amount of the Contract Price, as Liquidated Damages the following sums: One Thousand Dollars (\$1,500.00) a day.

8.0 SUBSTITUTE MATERIAL AND EQUIPMENT OR "OR-EQUAL" ITEMS

8.1 Whenever materials or equipment are specified or described in the Bidding Documents or specifications by using the name of a certain brand, make, supplier, manufacturer, or definite specification; the naming or specification of the item is only intended to denote the quality standard of the product and they do not restrict bidders to the specific brand, make, manufacturer, or specification named; that they are used only to set forth and convey to prospective bidders the general style, type, character, and quality of product desired; and that equivalent products will be acceptable. It shall be the responsibility of the professionally employed architect or engineer to determine what is considered an equivalent product on any and all projects in which he has been legally employed

to perform his professional services.

8.2 With respect to equal brand products other than those specified:

(1) The name of a certain brand, make, manufacturer, or definite specifications is to denote the quality standard of the article desired, but does not restrict bidders to the specific brand, make, manufacturer, or specification named. It is to set forth and convey to prospective bidders the general style, type, character, and quality of article desired.

(2) When in specifications or contract documents a particular brand, make of material, device, or equipment is shown or specified, such brand, make of material, device, or equipment shall be regarded merely as a standard.

8.3 When in specifications or contract documents an architect, prime design professional or engineer specifies a particular brand, make of material, device, or equipment, or equal thereto, he shall adequately identify said product by including, minimally, the model or catalog number of the product.

8.4 If a potential supplier wishes to submit for prior approval a particular product other than a product specified in the contract documents, he shall do so no later than seven working days prior to the opening of bids. Within three days, exclusive of holidays and weekends, after such submission, the prime design professional shall furnish to both the public entity and the potential supplier written approval or denial of the product submitted.

9.0 PROPOSAL DOCUMENT FORMS

9.1 Bid Forms for the Project are included with the Bidding Documents; additional copies may be obtained from ENGINEER.

9.2 Bids shall be submitted on the Bid Forms provided with the Bidding Documents. All blank spaces on the bid form required for Bid prices shall be properly filled in ink, or typed, in both words and figures as indicated.

10.0 PREPARATION AND SUBMISSION OF BIDS

10.1 Bids shall be submitted by the time and at the place indicated in the Invitation to Bidders and, unless submitted electronically, shall be enclosed in an opaque sealed envelope. The envelope shall be marked with the Project title and name, address and state license number of the Bidder as set forth in the Invitation to Bidders.

10.2 Each bid shall be either hand delivered by the bidder or his agent, or such bid shall be sent by registered or certified mail with a return receipt requested, or shall be submitted electronically with Central Auction House (CAH) (<http://www.centrauctionhouse.com/rfp.php?cid=65>). Bids shall not be accepted or taken including receiving any hand delivered bids, on days which are recognized as holidays by the United States Postal Service.

10.3 **The following items are to be included within each Bid:**

10.3.1 Completed Uniform Public Works Bid Form.

10.3.2 Signature Authorization. Written evidence of the authority of the person signing the bid for public works shall be submitted at the time of bidding, in accordance with LA R.S.

38:2212(B)(5) as follows:

(a) The signature on the 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) The signature on the bid is that of an authorized representative as documented by the legal entity certifying the authority of the person.

(c) The legal entity has filed in the appropriate records of the secretary of state of this 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.

Failure to include the appropriate signature authorization shall result in rejection of the bid as non-responsive.

10.3.3 Bid Bond with Power of Attorney, or Certified Check or Cashier's Check, all in the amount of five (5%) percent of the amount of the bid.

10.3.4 The Unit Price Form where unit prices are utilized. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

10.4 Only for the purpose of interpretation of the base bid total and alternate bids, when applicable, written words shall govern if a conflict exists between words and numerals. If the public works requires unit price bids and there is a discrepancy between the base bid total and the sum of extended unit prices, the unit price shall govern.

10.5 A bidder may alter or correct an entry on the bid form by crossing out the entry, entering the new figure above or below the deleted entry, and initialing on the line of change. The crossing out of an entry and the initials shall be legibly handwritten with ink or typed. Any ambiguity arising from entries altered or corrected on the Bid Form will cause the rejection of said Bid Proposal as non-responsive.

10.6 **TAXES:** It is understood that all applicable taxes are included in the Bid price. Successful bidder as an authorized agent of OWNER will be authorized by OWNER to receive an exemption from Louisiana State Sales taxes related to the work to be performed. As such, the bid price should reflect this exemption.

11.0 MODIFICATION AND WITHDRAWAL OF BIDS

11.1 Bids may be modified or withdrawn by an appropriate written document duly signed and authorized (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the deadline for submitting Bids. Withdrawal of a Bid will not prejudice the rights of a Bidder to submit a new Bid prior to the Bid Date and Time. After expiration of the period for receiving Bids, no Bid may be withdrawn, modified, or explained except as provided for herein.

11.2 In accordance with Louisiana law, more particularly, R.S. 38:2214, as may be amended, bids containing patently obvious, unintentional, and substantial mechanical and clerical, or mathematical errors, or errors of unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the bid, may be withdrawn by the bidder if clear and convincing

sworn, written evidence of such errors is furnished to the OWNER within 48 hours of the bid opening excluding Saturdays, Sundays and legal holidays. Such errors must be clearly shown by objective evidence drawn from inspection of the original work papers, documents or materials used in the preparation of the bid sought to be withdrawn. If the OWNER determines that the error is a patently obvious mechanical, clerical or mathematical error, or unintentional omission of a substantial quantity of work, labor, material or services as opposed to a judgment error, and that the bid was submitted in good faith, it shall accept the withdrawal and return the bid security to the bidder. A bidder who attempts to withdraw a bid under these provisions of this section shall not be allowed to re-submit a bid on the contract. Any modifications or amendments to the above stated applicable State law shall supersede this procedure.

12.0 OPENING OF BIDS

12.1 All Bids received prior to the announced closing time for the receipt of Bids stipulated in the Invitation to Bidder will be opened publicly. Bids will be read aloud and a tabulation of the amounts of the Base Bids and alternates (if any) will be made available to Bidders after the opening of Bids.

12.2 Any Bid received after the announced closing time will be returned unopened. Any uncertainty as to whether a Bid was submitted in time will be resolved against the Bidder.

13.0 BIDS TO REMAIN OPEN

13.1 The OWNER shall act not later than forty-five calendar days after the date of opening Bids to award such public works contract to the lowest responsible and responsive bidder or to reject all bids.

13.2 The OWNER and the lowest responsible and responsive bidder, by mutually written consent, may agree to extend the deadline for award by one or more extensions of thirty calendar days.

14.0 AWARD OF CONTRACT

14.1 To the extent permitted by applicable local, state and federal laws and regulations, OWNER reserves the right to reject any and all Bids for just cause. The Terrebonne Parish Consolidated Government reserves the right to reject any and all bids in accordance with Louisiana State Bid Law.

14.2 In order to be responsive, the apparent low bidder must submit the additional information and documentation required by the OWNER and ENGINEER within the time delays established by law.

14.3 The apparent low Bidder must establish to the complete satisfaction of the OWNER, a minimum, that he has: (a) adequate financial resources to meet bid Contractual obligations and will maintain same for the Contract Time; (b) adequate equipment to perform the Work properly and within the Contract Time; (c) the necessary experience and technical qualifications in the type of Work provided for in the Contract; (d) conformed to the Qualification Submittals as requested.

14.4 OWNER may conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed Subcontractors, and other persons and organizations to do the Work in accordance with the Contract Documents to OWNER'S satisfaction within the prescribed time. OWNER reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER'S satisfaction.

14.5 If the Contract is to be awarded for the Work, it will be awarded to the lowest responsive and responsible Bidder as determined by the evaluation of the corresponding Bid. The successful Bidder who is awarded the Contract will be required to perform the Work as an Independent Prime Contractor. No assignment of a Contract will be allowed without written permission from OWNER.

SECTION C
PROPOSAL FORMS

SECTION C
LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Terrebonne Parish Consolidated Government
City of Houma Service Complex
301 Plant Road
Houma, LA 70363
(Owner to provide name and address of owner)

BID FOR: South Wastewater Treatment Plant
Hurricane Ida Levee Rehabilitation
Cell No.1
Parish Project No. 23-SEW-77
(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: GIS Engineering, LLC and dated: October 2023.

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 USED _____ Dollars (\$ NOT USED _____)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:
_____ NOT USED _____ Dollars (\$ NOT USED _____)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:
_____ NOT USED _____ Dollars (\$ NOT USED _____)

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 FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* 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.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by 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) attached to and made a part of this bid.

SECTION C
LOUISIANA UNIFORM PUBLIC WORK BID FORM
UNIT PRICE FORM

TO: Terrebonne Parish Consolidated Government
City of Houma Service Complex
301 Plant Road
Houma, LA 70363

BID FOR: South Wastewater Treatment Plant
Hurricane Ida Levee Rehabilitation
Cell No.1
Parish Project No. 23-SEW-77

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 & Demobilization | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 01010-1 | 1 | LUMP SUM | | |

| | | | | |
|--------------|--|------------------|------------|---|
| DESCRIPTION: | <input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ___ Clearing & Grubbing | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 02231-1 | 1 | LUMP SUM | | |

| | | | | |
|--------------|---|------------------|------------|---|
| DESCRIPTION: | <input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ___ Hauled In Fill Material for Levee Embankment (including hauling, placing, compacting, and testing) | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 02300-1 | 11,000 | CUBIC YARDS | | |

| | | | | |
|--------------|---|------------------|------------|---|
| DESCRIPTION: | <input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ___ Seeding (including labor, material and placment) | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 02922-1 | 5.00 | ACRES | | |

| | | | | |
|--------------|--|------------------|------------|---|
| DESCRIPTION: | <input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ___ Erosion Control Concrete Mats (including labor, material and placment plus geotextile fabric under concrete mats) | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 026551-1 | 89,000 | SQUARE FOOT | | |

| | | | | |
|--------------|--|------------------|------------|---|
| DESCRIPTION: | <input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ___ 610 Limestone Access Road Maintenance | | | |
| REF. NO. | QUANTITY: | UNIT OF MEASURE: | UNIT PRICE | UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>) |
| 02713-1 | 1,000 | TONS | | |

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

SECTION D
LOW BIDDER ADDITIONAL INFORMATION
AND DOCUMENTATION

SECTION D

ADDITIONAL INFORMATION AND DOCUMENTATION REQUIRED OF APPARENT LOW BIDDER ONLY

15.0 DUE WITHIN 10 DAYS FROM OPENING OF BID

In order to be responsive and no later than ten (10) days after the date bids are opened, the apparent low bidder must submit the following additional information and documentation as required by the OWNER or ENGINEER as indicated below:

If the apparent low bidder does not submit the proper information or documentation as required by the bidding documents within the ten-day period, such bidder shall be declared non-responsive, and the public entity may award the bid to the next lowest bidder, and afford the next lowest bidder not less than ten days from the date the apparent low bidder is declared non-responsive, to submit the proper information and documentation as required by the bidding documents, and may continue such process until the public entity either determines the low bidder or rejects all bids.

15.1 REQUIRED: a Criminal Attestation Affidavit in accordance with LARS 38:2227– sample attached

15.2 REQUIRED: an E-Verification Form in accordance with LARS 38:2212.10 – sample attached

15.3 [NOT] REQUIRED: Non-collusion affidavit. The apparent low Bidder must submit a sworn statement, in the form required by Terrebonne Parish Consolidated Government, certifying that the Bidder has not, directly or indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this project. The sworn statement shall be in the form of an affidavit, executed and sworn to by the bidder before persons authorized by laws of the state to administer oaths.

15.4 [NOT] REQUIRED: If Bid Bond is submitted electronically, the hard copy of the bid bond must be submitted by the apparent low bidder.

15.5 It is the intention of OWNER to award Contracts to Bidders competent to perform and to complete the Work in a satisfactory manner. OWNER and ENGINEER reserve the right to request additional information and documentation not set out below or set out below but not currently required. The apparent low Bidder must be prepared to submit the following within ten days of the date bids are opened:

15.5.1 [NOT] REQUIRED: Preliminary Progress Schedule, as follows:

15.5.1.1 The "Preliminary Progress Schedule" pertaining to Proposal Documents for the Work designated under this Contract shall consist of three copies of a "Summary Bar Chart" and a "Narrative." Activities in the Summary Bar Charts, unless otherwise indicated, should show the order in which Bidder proposes to perform the Work pursuant to the specified Contract dates and sequencing conditions, and should indicate starting and completion dates

of Work pertaining to each Division of the technical specifications. Bar chart activities should further identify significant fabrication, installation, testing, submittals and approvals, deliveries, OWNER's responsibilities and those of affected utilities and similarly involved third parties. Weekly or monthly rates of production for fabrication and installation should be shown for each activity on the Summary Bar Chart.

15.5.2 [NOT] REQUIRED: Bid Breakdown, as follows:

15.5.2.1 The "Bid Breakdown" should show the quantities, as required, unit prices, as required, a description of each unit, as required, and total costs for each item for the entire Work as contemplated in the Contract. The Bidder agrees that these separate Bid Breakdown Prices, where they are applicable and determined to be reasonable by OWNER and at OWNER'S discretion, a) may be utilized as Contract prices for the purposes of measurement and payment, b) may be utilized to add or deduct separate Bid Breakdown Items from the Contract, and c) may be used in Change Orders which add or deduct like Work.

15.5.3 [NOT] REQUIRED: Subcontractor "Qualifications Statement List," as follows:

15.5.3.1 The "Qualifications Statement List" for all proposed Subcontractors, proposed Suppliers, and other persons or organizations, including those who are to furnish the principal items of material and equipment, with a value in excess of \$100,000 or 10% of the maximum Base Bid Total Amount, whichever is lower. This list should include the name and address of the Subcontractor, Supplier, or other person or organization and a description of the services, materials or equipment to be supplied. Such list should be accompanied by an experience statement with pertinent information as to similar projects and other evidence of qualification for each Subcontractor, Supplier, or other person or organization if requested by OWNER. The list of principal items of equipment should include the name of the locations at which similar size and type of equipment, as that specified, is in service.

15.5.3.2 If OWNER or ENGINEER after due investigation has reasonable objection to the responsibility of any proposed Subcontractor, Supplier, or other person, organization, or equipment, OWNER may, before giving Notice of Award, request a Bidder to perform the associated parts of the Work or to submit an acceptable substitute, without an increase in Bid price. If a Bidder declines to make such substitution, the Contract may not be awarded to such Bidder.

15.5.3.3 The Contract, if awarded, will be on the basis that the total amount of the subcontracted Work shall not exceed 50% of the Bid price. Procedures for approval of Subcontractors, Suppliers, and other persons or organizations, after execution of the Agreement, are described in Article 6.8.1 of the General Conditions.

15.5.4 [NOT] REQUIRED: information required on AIA Document A305.

If, upon receipt and evaluation of these submittals, Bidder does not pass the evaluation to OWNER's satisfaction, OWNER reserves the right to reject the Bid pursuant to Article 14 of the Instructions to Bidders.

15.6 [NOT] REQUIRED: Where the apparent low bidder desires to submit a substitute material or equipment from those specified in the Bidding Documents:

15.5.1 A written proposal of an equivalent material or equipment from a potential supplier that is submitted to the ENGINEER should certify (and include drawings, specifications and other relevant information showing) that the proposed item (a) has the same essential characteristics of the item named or specified, (b) will equally perform the functions and achieve the results called for by the original design concept, (c) is suited to the same use as that item named or specified in the bid documents, (d) is at least of equal materials of construction, quality and necessary design features as that item named or specified in the Bidding Documents, (e) conforms substantially to the desired detailed requirements for the item named or specified, including, but not limited to, durability, strength, appearance and aesthetics (where aesthetics are significant), safety, service, life, reliability, economy of operation and ease of maintenance, and (f) offers a proven record of performance and service for at least three years before the date of Bid opening.

15.5.2 The proposal from a potential supplier should include (a) a list of installations that have been in service for at least three years before the date of Bid opening (including the name, address and telephone number of a person familiar with and at the installation), and (b) sufficient Shop Drawing data and other data as may be necessary to allow the ENGINEER to determine whether the naming or specification of that item may be used to denote the essential characteristics of the item desired.

15.5.3 The ENGINEER may consent to these proposals if, in the ENGINEER's judgment, the proposed item also may be used to denote the quality standard of the item desired, and to convey and establish the general style, type, character and quality of material or equipment desired. Lack of adequate information may be sufficient cause for rejecting a proposal.

15.5.4 The ENGINEER will furnish notice to the OWNER and the potential supplier of the ENGINEER's approval or denial to adding the brand, make, supplier, manufacturer or specification.

16.0 DUE WITHIN 10 DAYS OF RECEIPT OF NOTICE OF AWARD

Within ten (10) days of receipt of Notice of Award by the successful bidder, the following information and documentation will be required:

16.1 REQUIRED: PERFORMANCE AND PAYMENT BONDS - Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth OWNER's requirements as to performance and payment Bonds. When a Successful Bidder delivers the executed Agreement to OWNER, it shall be accompanied by the required performance and payment Bonds.

16.2 REQUIRED: A Notice of Award to a Successful Bidder will be accompanied by multiple unsigned counterparts of the corresponding Agreement with all other written Contract Documents attached. Within ten (10) days thereafter, that Successful Bidder shall sign and deliver to the OWNER the required number of counterparts of the Agreement and attached Contract Documents and the required Bonds.

16.3 REQUIRED: Following notice of award to the successful bidder, CONTRACTOR must comply with the provisions of the Louisiana First Hiring Act for the following types of contracts for public works:

any public work funded by monies received by OWNER from the Federal Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2011, hereinafter referred to as "RESTORE", or as a result of any settlement related to the explosion on, and sinking of the mobile offshore drilling unit Deepwater Horizon or the Comprehensive Master Plan for Coastal Protection. The term "contract" shall include awards and notices of award; contracts of a fixed-price, cost, cost plus a fixed-fee, or incentive type contracts; contracts providing for the issuance of job or task orders; leases; letter contracts; and purchase orders; (LARS 39:2201(2))

Pursuant to LARS 39:2204, compliance requires the CONTRACTOR, within ten days of the contract having been awarded, to submit to the Louisiana Workforce Commission the following information:

- (1) The number and types of jobs anticipated for the project.
- (2) The skill level of the jobs anticipated for the project.
- (3) The wage or salary range for each job anticipated for the project.
- (4) Methods, if any, that the contractor will use to recruit unemployed persons or persons employed in low wage jobs to fill job openings for the project.

The Louisiana Workforce Commission shall provide the CONTRACTOR with a list of people eligible for employment. An eligible person shall be a resident of a parish within the coastal zone as defined by the Louisiana State and Local Coastal Resources Management Act.

Sample
Required of Apparent Low Bidder Only
AFFIDAVIT
VERIFICATION OF CITIZENSHIP

BEFORE ME, the undersigned Notary Public, duly qualified in and for the Parish and State aforesaid, personally came and appeared:

(name)

who after being first duly sworn, deposed and said that:

1. I am the _____ of _____.
(title) (company)

2. I swear that _____ is registered and participates in a status verification system
(company)
to verify that all new employees in the state of Louisiana are legal citizens of the United States or are legal aliens.

3. I verify that if _____ is awarded the contract, it shall continue, during the
(company)
term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.

4. I acknowledge that _____ shall require all subcontractors to
(company)
Submit to _____ a sworn affidavit verifying compliance with Paragraphs (2) and (3) of
(company)
the Affidavit.

Name:
Title:
Company:

Sworn to and subscribed before me at Houma, Louisiana,
on this _____ day of _____ 20_____.

NOTARY PUBLIC

Sample
Required of Apparent Low Bidder Only
ATTESTATION
AFFIDAVIT AS TO LA. R.S. 38:2227

STATE OF LOUISIANA

PARISH OF _____

BEFORE ME, the undersigned authority, on this day personally came and appeared:

(print name of affiant signing affidavit)

who did depose and state:

PART I. TO BE COMPLETED BY SOLE PROPRIETOR

(Business Entities must complete Parts II and III.)

1. that he is a sole proprietor doing business under the name _____;
2. that his address is _____;
3. that on _____, he did submit a bid for a public contract with Terrebonne Parish Consolidated Government, for the construction of Parish Project No. 23-SEW-77, bearing the name: _____;
4. that since July 2, 2010, he has not been convicted of, or has not entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed in La. R.S. 38:2227(B)(1), as may be revised, which consists of the following non-exclusive list: *Public bribery, Corrupt influencing, Extortion, and/or Money laundering*; and
5. that since July 2, 2010, or for a period of five years prior to the date of his bid for said project, whichever is shorter, he has not been convicted of, or has not entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed in La. R.S. 38:2227(B)(2), as may be revised, as a result of an offense committed 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, said crimes consisting of the following non-exclusive list: *Theft, Identity theft, Theft of a business record, False accounting Issuing worthless checks, bank fraud, Forgery, Contractors; misapplication of payments, and/or Malfeasance in office.*

PART II. TO BE COMPLETED BY AUTHORIZED AGENT OF BUSINESS ENTITY

(Sole Proprietors must complete Parts I. and III.)

1. that he is _____, a duly authorized representative of _____ (hereinafter the "bidding entity"), who's address is _____;
2. that on _____, the said bidding entity did submit a bid for a public contract with Terrebonne Parish Consolidated Government, for the construction of Parish Project No. 23-SEW-77, bearing the name: _____;

3. that since July 2, 2010, no individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed in La. R.S. 38:2227(B)(1), as may be revised, which consists of the following non-exclusive list: *Public bribery, Corrupt influencing, Extortion, and/or Money laundering*; and
4. that since July 2, 2010, or for a period of five years prior to the date of said bidding entity's bid for said project, whichever is shorter, no individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed in La. R.S. 38:2227(B)(2), as may be revised, as a result of an offense committed 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, said crimes consisting of the following non-exclusive list: *Theft, Identity theft, Theft of a business record, False accounting, Issuing worthless checks, bank fraud, Forgery, Contractors; misapplication of payments, and/or Malfeasance in office.*

PART III. ATTESTATION

Affiant Signature: _____

Affiant Name Printed: _____

Title of Affiant: _____

Bidding Entity or Company: _____

Sworn to and subscribed before me, in the Parish of _____, Louisiana this _____ day of _____, 20_____.

 NOTARY PUBLIC

SECTION E
RESERVE

SECTION F
STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR

SECTION F

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT is dated as of the _____ day of _____ in the year 20__ by and between TERREBONNE PARISH CONSOLIDATED GOVERNMENT (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

OWNER AND CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK

CONTRACTOR shall complete all work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Project Name: SOUTH WASTEWATER TREATMENT PLANT
HURRICANE IDA LEVEE REHABILITATION
CELL NO. 1

Parish Project No. 23-SEW-77
IDA-0091

FEMA Project No. 720545

The work consists of providing all equipment, labor and material necessary for the construction of the proposed levee rehabilitation and headwork expansion project, in accordance to the design specifications and plans. The work includes the following, but not limited to:

- Levee rehabilitation of approximately 4,300 linear feet of existing levee to an elevation of +8.0' NAVD88 along the eastern side of the treatment plant's Cell No.1.
- Concrete mats (with geotextile fabric) for erosion control will also be installed along the interior levee side slopes, with the intent to reduce future erosion on the levee.

Article 2. ENGINEER

The Project has been designed by GIS Engineering, LLC., who is hereinafter called ENGINEER and who will assume all duties and responsibilities and will have rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. CONTRACT TIME

3.1 The work will be substantially completed within One Hundred and Twenty (120) days after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.14 of the General Conditions within 45 days after the date of Substantial Completion.

3.2 LIQUIDATED DAMAGES. OWNER and CONTRACTOR recognize that time is of the essence in this Agreement and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in paragraph 3.1, above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof or notice of default, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER for each day that expires after the time specified in paragraph 3.1 for substantial completion until the work is substantially complete in an amount of **One Thousand Five Hundred dollars (\$1,500)** per day, and Contractor shall pay Owner for each day that expires after the time specified in paragraph 3.1 for final completion until the entire Work is finally complete and ready for final payment an amount of **One Thousand Five Hundred dollars (\$1,500)** per day. Contractor agrees to allow Owner to deduct liquidated damages from progress payments and retention.

Article 4. CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for performance of the Work in accordance with the Contract Documents and Specifications in current funds as follows: **SEE ATTACHED BID FORM.**

Article 5. PAYMENT PROCEDURE

Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided for in the General Conditions.

5.1 Progress Payments. OWNER shall make progress payments on the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the 25th day of each month during construction as provided below. All progress payments will be on the basis of the work measured by the schedule of values provided for in paragraph 14.1 of the General Conditions.

5.1.1 Prior to Substantial Completion of any work order, progress payments will be in an amount equal to 90% of the Work completed, and 90% of materials and equipment not incorporated in the Work but delivered and suitably stored, less in each case the aggregate of payments previously made. On contracts of \$500,000 or more the payments will be in an amount equal to 95% of the work completed and 95% of materials and equipment not incorporated in the work, but delivered and suitably stored.

5.1.2 Upon Substantial Completion of any work order, OWNER shall pay an amount sufficient to increase total payments to CONTRACTOR to 90% of the Contract Price on contracts under \$500,000 and 95% of the Contract Price on contracts \$500,000 or more, less such amount as ENGINEER shall determine in accordance with paragraph 14.7 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.14 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.14.

5.3 OWNER may deduct from each progress payment and final payment any liquidated damages then due or that would become due based on OWNER's estimate of late completion of the Work, provided that CONTRACTOR fails to submit and implement a written schedule recovery plan describing the cause of schedule slippage or delayed progress and the actions proposed and taken to recover schedule.

Article 6. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, Locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

6.2 CONTRACTOR has studied carefully all reports or investigations and tests of subsurface and latent physical conditions at the site or otherwise, affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications and which have been identified in the Special Conditions.

6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 7.2 as he deems necessary for the performance of the work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports and similar data are or will be required by CONTRACTOR for such purposes.

6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data within the terms and conditions of the Contract Documents.

6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors and discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 7. MISCELLANEOUS

7.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.

7.2 No assignment by a party hereto for any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, money that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge to assignor from any duty or responsibility under the Contract Documents.

7.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

7.4 If any provision of the Contract Documents is invalid, illegal or unenforceable, all other provisions of the Contract Documents shall nevertheless remain in full force and effect. If any provision of the Contract Documents is inapplicable to any person or circumstance, that provision shall nevertheless remain applicable to all other persons and circumstances.

Article 8. CONTRACT DOCUMENTS

This Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post-bid documentation submitted), the bonds, the General Conditions, the Technical Provisions, the Drawings as the same are more specifically identified in this Agreement, together with all Modifications issued after the execution of this Agreement, and all documents contained in the booklet entitled "Project Manual" shall be part of the Contract Documents.

IN WITNESS WHEREOF, the parties hereto have signed this agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This agreement will be effective on the _____ day of _____, 20__.

TERREBONNE PARISH
CONSOLIDATED GOVERNMENT

CONTRACTOR:

Parish President

BY:

(Corporate Seal)

WITNESS:

WITNESS:

WITNESS:

WITNESS:

Address for giving notices:
Post Office Box 2768
Houma, Louisiana 70361

ADDRESS for giving notices:

License Number: _____
Agent for service of Process:

SECTION G
CONTRACTOR'S AFFIDAVIT

SECTION G

CONTRACTOR'S AFFIDAVIT

STATE OF LOUISIANA
PARISH OF _____

BEFORE ME, the undersigned authority, on this day personally came and appeared:

1) That he is _____, and duly authorized representative of _____, whose address is _____.

2) That on _____, the said firm did enter into a public contract with Terrebonne Parish Consolidated Government, for the construction of the **South Wastewater Treatment Plant Hurricane Ida Levee Rehabilitation Cell No.1, Parish Project No. 23-SEW-77.**

3) That the firm has not employed any person, corporation, firm association or other organization, either directly or indirectly, to secure the said public contract under which he has or will receive payment, other than persons regularly employed by the firm and whose services in connection with the construction of said project or in securing the above said public contract were in regular course of their duties for the firm.

4) That no part of the contract price received by affiant was paid nor 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 firm and whose services in connection with the construction of the public project were in regular course of their duties of the firm, so help him God.

CONTRACTOR

* * * * *

Sworn to and subscribed before me, this _____ day of _____, 20__.

NOTARY PUBLIC

SECTION H
PERFORMANCE BOND

SECTION H

PERFORMANCE BOND

STATE OF LOUISIANA
PARISH OF TERREBONNE

KNOW ALL MEN BY THESE PRESENTS: That _____ as Principal, hereinafter called the CONTRACTOR, and _____ as Surety, hereinafter called Surety, are held and firmly bound unto

THE TERREBONNE PARISH CONSOLIDATED GOVERNMENT
GOVERNMENT TOWER BUILDING – 8026 MAIN STREET
HOUMA, LOUISIANA 70361

as Obligee, hereinafter called the OWNER, in the amount of

for the payment whereof CONTRACTOR and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

CONTRACTOR has by written agreement dated the ____ of _____, 20__ entered into a contract with OWNER for, the construction of

**South Wastewater Treatment Plant Hurricane Ida Levee Rehabilitation Cell No.1,
Parish Project 23-SEW-77**

in accordance with Drawings and Specifications prepared by GIS Engineering, LLC which Contract is by reference made a part thereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the conditions of this obligation are such that, if CONTRACTOR shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the OWNER.

Whenever CONTRACTOR shall be, and declared by OWNER to be in default under the Contract, the OWNER having performed OWNER's obligations thereunder, the Surety may promptly

- 1) Complete the Contract in accordance with its terms and conditions or,
- 2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions and upon determination by Surety of the lowest responsible bidder, arrange for a Contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of Completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract", as used in this paragraph shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner and Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right or action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

SIGNED AND SEALED THIS _____ DAY OF _____, 20__.

(Principal) (Seal)

(Witness)

(Title) (Seal)

(Surety) (Seal)

(Witness)

(Title) (Seal)

PAYMENT BOND

STATE OF LOUISIANA
PARISH OF TERREBONNE

KNOW ALL MEN BY THESE PRESENTS: That as Principal, hereinafter called the CONTRACTOR, and as Surety, hereinafter called Surety, are held and firmly bound unto

THE TERREBONNE PARISH CONSOLIDATED GOVERNMENT
GOVERNMENT TOWER BUILDING - 8026 MAIN STREET
HOUMA, LOUISIANA 70361

as Obligee, hereinafter called the OWNER, in the amount of

for the payment whereof CONTRACTOR and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

CONTRACTOR has by written agreement dated the ____ of _____, 20__ entered into a Contract with OWNER for, the construction of the

**South Wastewater Treatment Plant Rehabilitation at Cell 1 & Headworks Upgrade,
Parish Project No. 23-SEW-77,**

in accordance with Drawings and Specifications prepared by the engineering firm of GIS Engineering, LLC, ENGINEER, which Contract is by reference made a part thereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the conditions of this obligation are such that, if CONTRACTOR shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Contractor or with a Subcontract or of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any cost or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Contractor, shall have given written notice to any two of the following: the Contractor, the Owner or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postal prepaid in an envelope addressed to the Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

b) After the expiration of one (1) year following the date on which Contractor ceased Work on said Contract or after the expiration of one (1) year following the Date of Substantial Completion of the Project, whichever is later, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

c) Other than in a state court of competent jurisdiction in and for the parish or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

SIGNED AND SEALED THIS _____ DAY OF _____, 20__.

(Principal) (Seal)

(Witness)

(Title) (Seal)

(Surety) (Seal)

(Witness)

SECTION I
GENERAL CONDITIONS

SECTION I

GENERAL CONDITIONS

ARTICLE 1 - Definitions

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

Acceptance, Final Acceptance - The formal action by ENGINEER accepting the Work, or a specified part of the work thereof, as being complete in all respects, or the action by ENGINEER to place the equipment/facilities in operation for continuous utilization for their intended purposes.

Agreement - Refers to the written document signed by the OWNER and CONTRACTOR that is the legal instrument binding the parties to the work. The terms "Agreement" and "Contract" are synonymous.

Application for Payment - The form furnished by CONTRACTOR and approved by ENGINEER for requesting progress payments and an affidavit of CONTRACTOR and its Subcontractors that progress payments theretofore received from OWNER on account of the work have been applied by CONTRACTOR and its Subcontractors to discharge in full all of CONTRACTOR'S and its Subcontractors' obligations stated in the prior Application for Payment, and that the accuracy of the progress reported in the Application for Payment to have been completed by CONTRACTOR or its Subcontractors has been verified by CONTRACTOR. The application for Payment should include all supporting documentation as required by the Contract Documents.

Bid - Refer to definition of Proposal Document in Instructions to Bidders.

Bonds - Bid, performance and payment bonds and other instruments of security.

Change Order - A written order to CONTRACTOR in accordance with the Louisiana Bid Law and approved by OWNER authorizing an alteration, deviation, addition, deletion, and/or revision in the Work, or an adjustment in the Contract Price and/or the Contract Time.

Contract Documents - Those documents itemized or designated in Article 8 of the Agreement as may be further itemized in the Supplementary Conditions

Contract Price - The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time - The number of days (computed as provided in paragraph 17.2) or the date stated in the Agreement for the completion of the Work.

CONTRACTOR - A person, firm or corporation with whom OWNER has entered into the Agreement for the Work designated under the Contract Documents. The term "CONTRACTOR" shall also mean CONTRACTOR or its authorized representative.

Correction Period - The time during which CONTRACTOR must repair defective work or remove defective work from the site and replace it with non-defective work, all at no cost to the OWNER, pursuant to Paragraph 13.12 of the General Conditions.

Day - A calendar day of twenty-four hours measured from midnight to the next midnight.

Defective - An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, test, referenced standard or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER'S recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

Drawings - The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents. The terms "Drawing" and "Plan" are synonymous, and wherever used in the Contract Documents it should be interpreted according to the definition of "Drawings".

Effective date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

ENGINEER - The individual, firm or corporation named as ENGINEER in the Supplementary Conditions, who will have the rights and authority assigned to the ENGINEER in the Contract Documents. The term "ENGINEER" means the ENGINEER or its authorized representative. The terms "ENGINEER", "DESIGN ENGINEER", "ARCHITECT" and "ENGINEER/ARCHITECT" are synonymous, and wherever used in the Contract Documents they should be interpreted according to the definition of "ENGINEER".

Field Order - A written order issued by ENGINEER to CONTRACTOR on or after the effective date of the agreement requiring a minor change in work not requiring an adjustment in the Contract Price or Contract Time.

General Requirements - Division H of the Specifications.

Laws and Regulations; Laws or Regulations - Laws, rules, regulations, ordinances, codes and/or orders.

Notice of a Proposed Change - A written document issued on or after the effective date of the agreement initiated by a) OWNER requesting that CONTRACTOR figure the potential effect on Contract Price or time of the proposed change described in the Notice, if the proposed change is to be ordered, or b) CONTRACTOR to notify OWNER that in the CONTRACTOR'S opinion a change has been requested in a Field Order, or pursuant to ENGINEER'S approval of a shop drawings, or a written interpretation or clarification (pursuant to paragraph 9.4). A Notice of a Proposed Change shall not constitute an order to change the work, as no change shall be considered ordered until an appropriate change order, or Work Directive Change is executed by OWNER.

Notice of Award - The written notice by OWNER to the apparent successful Bidder stating that upon compliance by the apparent successful Bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

Notice to Proceed - A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligation under the Contract Documents.

OWNER - Terrebonne Parish Consolidated Government (TPCG) which includes all Parish Departments, its elected and appointed officials, Agencies, Councils, Boards and Commissions, Districts, their officers, agents, servants and employees, including volunteers.

Operation, Initiation of - A point in time when OWNER initiates use of the entire work under the project for the purposes that it was planned, designed and built, setting forth commencement of the correction period.

Partial Utilization - Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Project - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

Resident Project Representative - The authorized representative of ENGINEER who is assigned to the site or any part thereof.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted to CONTRACTOR to illustrate material or equipment for some portion of the Work.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual, partnership, corporation, joint venture, or other combination thereof who has a contract with Contractor to perform any part of the work at the site. The term "Subcontractor" shall also mean any individual, partnership, corporation, joint venture, or other combination thereof who has a contract with another Subcontractor to perform any part of the work at the site.

Substantial Completion - The finishing of the Work, or a specified part of the Work, in accordance with the Contract Documents, to the extent that Owner can use or occupy all or the specified part of the Work for the use for which it is intended without any concurrent Work at the site except as required to complete Punch List items with cumulative value under one percent (1%) of the Contract Price. Prerequisites for Substantial Completion include: (a) all systems have been successfully tested and demonstrated by the CONTRACTOR for their intended use, and (b) the Owner receiving all occupancy certifications and approvals from those State and local Public Entities with jurisdiction.

Supplementary Conditions - Section within Division I which amends or supplements the General Conditions and is a part of the Contract Documents and is located in the Book of Contract Documents.

Supplier - A manufacturer, fabricator, supplier, distributor, material man or vendor.

Testing, Pre-operational - All field inspections, installation checks, water tests, performance tests, and necessary corrections required of CONTRACTOR to demonstrate that individual components of the work have been properly erected and found to operate in accordance with the Contract Documents, so that they can be utilized continuously for their intended purposes.

Testing, Start-up - A pre-defined trial period required for achieving Substantial Completion during which CONTRACTOR is to operate the work, or a part specified thereof, under actual and simulated operating conditions and performing as defined in the Contract Documents, for the purposes of a) making such minor adjustments and changes as may be found necessary to comply with the requirements of the Contract Documents, and b) to comply with the final test requirements outlined in the Contract Documents.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work - Work to be paid for on the basis of unit prices.

Work - Any and all obligations, duties, responsibilities, labor, materials, equipment, temporary facilities, and incidentals, and the furnishing thereof necessary to complete the construction assigned to, or undertaken by CONTRACTOR, pursuant to the Contract Documents. Also, the completed construction or parts thereof required to be provided under the Contract Documents, including all materials, equipment, and supplies incorporated or to be incorporated in the construction.

Work Directive Change - A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.20. A Work Directive Change may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following successful negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time as provided in paragraph 10.2.

ARTICLE 2 - Preliminary Matters

2.1 DELIVERY OF BONDS: When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

2.2 COPIES OF DOCUMENTS: OWNER shall furnish to CONTRACTOR up to five copies (unless otherwise provided in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

2.3 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED: A Notice to Proceed may be given at any time within thirty days after the effective date of the agreement. However, upon mutual written consent by both parties, the notice to proceed may be extended. The Contract Time will commence at the time specified in such notice to proceed or, if no notice is given, thirty days following the Effective Date of the Agreement.

2.4 STARTING THE PROJECT: CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run, except with the written consent of OWNER.

2.5 BEFORE STARTING CONSTRUCTION: Before undertaking each part of the Work, CONTRACTOR shall (a) study and compare the Contract Documents with each other and against manufacturers, representations, (b) verify dimensions and field measurements, (c) coordinate requirements of dependent Work (location, dimensions, access, fit, completeness, class, codes, etc.), and (d) notify ENGINEER in writing of any conflict, error, omission or deviation from manufacturers' recommendations discovered. CONTRACTOR shall be responsible for any delay and all costs resulting from performing any Work before obtaining a written clarification or interpretation from ENGINEER, if CONTRACTOR had actual knowledge, or should have reasonably known that any such Work (a) involves a conflict, error or omission, or (b) is subject to specific method of installation, performance or test procedure or result which is contrary to the recommendation of the corresponding manufacturer. **Contractor shall also be responsible for locating all property lines and right-of-way lines prior to beginning construction.**

2.6 SCHEDULE SUBMITTALS: Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit four copies of the following schedules to ENGINEER for review:

2.6.1 An estimated progress schedule indicating the starting and completion dates of the various stages of the Work in accordance with the Contract Documents.

2.6.2 A preliminary schedule of Shop Drawing submissions.

2.6.3 A preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission. The Schedule of Values will be organized along the Divisions, and sub-divisions, of Section K, the Technical Specifications.

2.7 INSURANCE CERTIFICATES: Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy of ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.4, 5.5, and 5.6. Certificates of Insurance must be accompanied by a letter from the Contractor's Insurance Agent certifying that the insurance being provided meets the limits and requirements of the specifications. An explanation of any abbreviations used on the certificates must also be provided.

2.8 PRE-CONSTRUCTION CONFERENCE: Within twenty days after the effective date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to discuss the schedules referred to in paragraph 2.6, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

2.9 FINALIZING SCHEDULES: At least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the

progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility therefore. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3 - Contract Documents; Intent, Amending, Re-use

3.1 INTENT: The Contract Documents comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2 FUNCTIONALLY COMPLETE PROJECT: It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or be implication, shall mean the latest standard specifications, manual, code or Laws or Regulations in effect at the time of opening of Bids (or, on the effective date of the Agreement if there were no Bids), even though reference may be specifically made to an earlier standard. However, no provision of any referenced standard specifications, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of subparagraph 9.13.3 or 9.13.4. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided for in paragraph 9.4. In the event of any conflict between any of these standard specifications, manuals, or codes and any Divisions of the Book of Technical Specifications, the latter requirements shall be binding on Contractor. In the event that two or more standard specifications, manuals, or codes conflict with one another, the requirement ultimately enforced shall be binding on CONTRACTOR. In this event it will be considered that the higher cost requirement has been considered in the CONTRACTOR'S Bid Proposal and the CONTRACTOR further agrees and acknowledges that compliance with this condition shall not warrant an increase in Contract Price nor Contract Time.

3.3 CONFLICT IN CONTRACT DOCUMENTS: If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof. Until interpretation, clarification or instruction is obtained from ENGINEER, any work done by CONTRACTOR (or Subcontractors) after the discovery of such a conflict, error, or discrepancy, which is directly or indirectly affected by same, will be at his own risk and he shall bear all cost arising therefrom.

3.4 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS: The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.4.1 A Change Order (pursuant to paragraph 10.4), or

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order.

3.5 WORK DIRECTIVE CHANGE: In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by a Work Directive Change required by one or more of the following actions:

3.5.1 A Field Order (pursuant to paragraph 9.5 and 10.7)

3.5.2 ENGINEER'S approval of a Shop Drawing or sample (pursuant to paragraphs 6.24), or

3.5.3 ENGINEER'S written interpretation or clarifications (pursuant to paragraph 9.4)

3.6 RE-USE OF DOCUMENTS: Neither 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 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 ENGINEER; and they shall not re-use any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

3.7 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS:

3.7.1 All figures and dimensions on the drawings and specifications shall be carefully checked by CONTRACTOR, who shall note all conflicts, errors, or discrepancies. CONTRACTOR will be held responsible for any conflict, error, or discrepancy not discovered before the work is executed, unless contractor could not have reasonably known about the conflict, error, or discrepancy. CONTRACTOR shall promptly notify ENGINEER in writing of any discrepancies, errors, or omissions discovered in review of the Contract Documents. ENGINEER will promptly investigate the matter and respond to CONTRACTOR.

3.7.2 In all cases, figured dimensions shall govern over scaled dimensions, but work not dimensioned shall be as directed, and work not particularly shown, identified, sized, or located shall be the same as similar parts that are shown or specified. Further, detail drawings shall govern over general drawings, larger scale details take precedence over smaller scale drawings, change order drawings govern over contract drawings, and contract drawings over shop drawings. Specifications shall govern as to products, execution and workmanship, and drawings shall govern as to locations, dimensions, or quantities to be furnished. Further, in all cases where specifications, notes or details in two drawings conflict, the more restrictive requirement as to quantities, product, execution, workmanship, or performance shall be binding on CONTRACTOR, unless otherwise directed by OWNER.

3.7.3 After the Agreement date, CONTRACTOR shall be furnished with a maximum number of five (5) sets of Plans, Specifications and Addenda in addition to those CONTRACTORS purchased during the bid period. Additional Specifications or Drawings requested by CONTRACTOR will be provided in complete sets and at the expense of CONTRACTOR.

ARTICLE 4 - Availability of Lands; Physical Conditions Reference Points

4.1 AVAILABILITY OF LANDS:

4.1.1 OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be done, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER'S furnishing these lands, right-of-way, or easements entitles CONTRACTOR to an extension of the Contract Time, but without an increase in cost due to the extension, CONTRACTOR may make a claim therefore as provided in Article 12.

4.1.2 Any land and access thereto not furnished by OWNER that CONTRACTOR deems necessary for the Contract work, for temporary construction facilities, access and egress, or for storage of materials shall be provided by CONTRACTOR at no cost to OWNER. CONTRACTOR shall confine its apparatus and storage to such additional areas as may be provided at its expense. CONTRACTOR shall obtain permits and written approvals from the appropriate jurisdictional agency and property owner(s) for use of premises not furnished by OWNER as described above, and of all off-site areas which include off-site borrow pits, waste and disposal areas, such permits and approvals must specify treatment of said areas during and at the completion of construction. Copies of all permits and approvals shall be filed with the ENGINEER before utilization of the areas.

4.2 PHYSICAL CONDITIONS-INVESTIGATIONS AND REPORTS:

4.2.1 Explorations and Reports: Reference is made to the Instructions to Bidders, paragraph 4.2, for identification of those reports of investigations and tests of subsurface conditions at the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon nontechnical data, interpretations or opinions contained therein or for the completeness thereof for the CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.

4.2.2 Existing Structures: Reference is made to the drawings for identification of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.

4.2.3 Report of Differing Conditions: If CONTRACTOR believes that:

4.2.3.1 any technical data on which CONTRACTOR is entitled to rely as provided in paragraph 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2 any physical conditions uncovered or revealed at the site differs materially from that indicated, reflected or referred to in the Contract Documents, or not in conformity with soil reports and surveys.

CONTRACTOR shall promptly, and before such conditions are disturbed, notify ENGINEER in writing of any subsurface or latent physical conditions at the site or in an existing structure differing materially from those indicated or referred to in the contract documents. ENGINEER will promptly review those conditions and advise CONTRACTOR in writing if further investigation or tests are necessary. Promptly thereafter, ENGINEER shall obtain the necessary additional investigations and tests and furnish copies to CONTRACTOR. If ENGINEER finds that the results of such investigations or tests indicate that there are subsurface or latent physical conditions which differ materially from those intended in the Contract Documents, and which could not reasonably have been anticipated by CONTRACTOR, a Change Order shall be issued incorporating the necessary revisions, provided OWNER has not exercised its right to terminate under Paragraph 15.4.

4.2.4 Possible Price and Time Adjustments: In each such case, an increase or decrease in Contract Price will be allowable to the extent that it is attributable to any such inaccuracy or difference. Further, in each such case, a) an extension of the Contract Time and the associated increase in Contract Price, will be allowed only to the extent that the interval of time required to proceed with the part of the Work plus the increase in the time required to perform the part of the Work affected, whether or not changed by the Change Order or the Work Directive Change, exceed the time allowance set forth in the Contract, plus the float time available in the Official Schedule, provided that CONTRACTOR takes all reasonable steps to mitigate the schedule impact of the delays; b) A shortening of the Contract Time and the associated decrease in Contract Price, will be enforced only to the extent that the critical path of the Official Schedule is affected and the decrease in Contract Time will not result in a disproportionate reduction in float time in other portions of the Official Schedule. If OWNER and CONTRACTOR are unable to agree as to the amount or lengthening/reduction thereof, a claim may be made therefore as provided in Articles 11 and 12.

4.3 PHYSICAL CONDITIONS - UNDERGROUND FACILITIES:

4.3.1 Shown, Indicated or Located: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in these General Conditions:

4.3.1.1 OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2 CONTRACTOR shall have full responsibility a) for reviewing and checking all such information and data, b) for locating all water services, gas services, water mains, gas mains, cross drains, culverts, sewers, sewer laterals, electric conduits, etc., shown or indicated in the contract documents as to depth and alignment in advance of laying, c) for coordination of the work with the owner of such existing underground facilities during construction, d) for the safety and protection thereof, and for repairing any damage done thereto resulting from the work. The cost of and the time required to perform the responsibilities outlined in this paragraph will be considered as having been included in the Contract Price and in CONTRACTOR'S schedule for the performance of the Work within the prescribed time.

4.3.1.3 CONTRACTOR shall excavate and uncover all Underground Facilities to be crossed or paralleled by the proposed Work a sufficient time in advance of construction to permit change in line and grade of the existing Underground Facility or the proposed work if the location of the existing Underground Facility should interfere with the proposed Work.

4.3.1.4 Where it is necessary to install pipelines proposed under the Work close to or between other existing pipelines for short distances, CONTRACTOR shall shore, block, and protect the other lines to the satisfaction of the Utility Agency or Municipality having ownership or jurisdiction over said pipelines.

4.3.1.5 Whenever existing Underground Facilities are encountered which obstruct the line or grade of a proposed part of the work, CONTRACTOR shall promptly notify OWNER and ENGINEER in writing about the inaccuracy or difference. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the situation, and the Contract Documents will be amended or supplemented to the extent necessary. In each such a case, a Change Order (or Work Directive Change) will be issued in accordance with the Federal Contract Provisions, as amended, and/or Article 10 to reflect and document the consequences of the inaccuracy or difference, and an increase or decrease in the Contract Price will be allowed only to the extent that it is solely attributable to any such inaccuracy or difference.

4.3.1.6 In each such case, an extension in Contract Time, but without any increase in costs due to the extension, will be allowed only to the extent that the interval of time required to proceed with the part of the Work plus the increase in the time required to perform the part of the Work affected, whether or not changed by the Change Order or Work Directive Change, exceed the time allowance set forth in paragraph 4.3.1.7 plus the float time available in the Official Schedule, provided that CONTRACTOR takes all reasonable steps to mitigate the schedule impact of delays.

4.3.1.7 CONTRACTOR shall schedule excavation and uncovering work to begin in sufficient time in advance of construction to allow ENGINEER'S Review as described in paragraph 4.3.1.5, and OWNER'S issuance of a Work Directive Change or a Change Order as described in paragraph 4.3.1.5 and 4.3.1.6 in connection with a Report of obstructing existing Underground Facilities Shown or Indicated. Further, a reasonable interval of time, but not less than thirty days, will be allowed to ENGINEER and OWNER for those functions required to resolve the inaccuracy or difference.

4.3.1.8 Access to various municipal structures shall not be obstructed by CONTRACTOR to prohibit use of hydrants, valves, manholes, fire alarms, etc. CONTRACTOR is to make no connections to existing water mains or operate valves on existing mains or otherwise interfere with the operation of the existing water distribution system, without first given twenty-four (24) hours notice to the owners of such municipal structures and securing their approval of the proposed action.

4.3.2 Not Shown, Indicated or Located: If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents or which was not located by a notified utility owner and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any work affected thereby (except in an emergency as permitted by paragraph 6.20), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.18.

4.3.2.1 Possible Document Change: If ENGINEER concludes that because of the newly discovered conditions a change in the Contract Documents is required, a Work Directive Change or a Change Order will be issued in accordance with Article 10 to reflect and document the consequences of the inaccuracy or difference, and provided that Owner has not exercised his right to terminate under paragraph 15.4.

4.3.2.2 Possible Price and Time Adjustments: In each such case, an increase or decrease in Contract Price will be allowed to the extent that it is attributable to any such inaccuracy or difference. Further, in each such case, a) an extension of the Contract Time and the associated increase in Contract Price, will be allowed only to the extent that the interval of time required to proceed with the part of the Work plus the increase in the time required to perform the part of the Work affected, whether or not changed by the Change Order or the Work Directive Change, exceed the time allowance set forth in paragraph 4.3.2.3, plus the float time available in the Official Schedule, provided that CONTRACTOR takes all reasonable steps to mitigate the schedule impact of the delays. b) A shortening of the Contract Time and the associated decrease in Contract Price, will be enforced only to the extent that the critical path of the Official Schedule is affected and the decrease in Contract Time will not result in a disproportionate reduction in float in other portions of the Official Schedule. If OWNER and CONTRACTOR are unable to agree as to the amount or lengthening/reduction thereof, a claim may be made therefore as provided in Articles 11 and 12.

4.3.2.3 CONTRACTOR shall schedule excavation and uncovering work to begin in sufficient time in advance of construction to allow ENGINEER'S Review as described in paragraph 4.3.2, and OWNER'S issuance of a Work Directive Change or a Change Order as described in paragraph 4.3.2.2 in connection with a Report of an existing Underground Facility Not Shown or Indicated. Further, a reasonable interval of time, but not less than thirty days, will be allowed to ENGINEER and OWNER for those functions required to resolve the inaccuracy or difference.

4.4 REFERENCE POINTS: CONTRACTOR shall provide engineering surveys to establish reference points for construction which in CONTRACTOR'S judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for accurate replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5 - Bonds and Insurance

5.0 TERREBONNE PARISH CONSOLIDATED GOVERNMENT, DEFINED

For the purposes of this Article, the terms "Terrebonne Parish Consolidated Government," "TPCG," and "OWNER" shall include, but may not be limited to, all of the following entities and persons: the Terrebonne Parish Consolidated Government (a political subdivision of the State of Louisiana); the Terrebonne Parish Council (the governing body of Terrebonne Parish); their elected and appointed officials, all parish departments, districts, agencies, councils, boards, and commissions, officers, agents, servants, employees and volunteers; and the elected and appointed officials, departments, officers, agents, servants, employees and volunteers of those departments, districts, agencies, councils, boards, and commissions.

5.1 PERFORMANCE AND OTHER BONDS

5.1.1 Unless otherwise provided for in the Louisiana Public Bid Law, CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR'S obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date of final payment, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds when required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such Sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority.

Any bond prescribed by the contract documents shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the federal Register, or by a Louisiana domiciled insurance company currently possessing a rating of no less than A- in the latest printing of the A.M. Best's Key Rating Guide, to write individual bonds up to the percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide.

In addition, any surety bond written for a public works project shall be written by a surety or insurance company that is currently licensed and approved to do business in the state of Louisiana.

For any public works project, no surety or insurance company shall write a bond which is in excess of the amount indicated as approved by the U.S. Department of the Treasury Financial Management Service list or by a Louisiana domiciled insurance company with an A- rating by A.M. Best up to a limit of ten percent of policyholders' surplus as shown by A.M. Best; companies authorized by this Paragraph who are not on the treasury list shall not write a bond when the penalty exceeds fifteen percent of its capital and surplus, such capital and surplus in the amount by which the company's assets exceed its liabilities as reflected by the most recent financial statements filed by the company with the Department of Insurance.

5.1.2 If the Surety on any Bond or any insurance company providing any insurance overages furnished by CONTRACTOR is declared bankrupt, becomes insolvent, or its right to do business is terminated in any state where any part of the Project is located, or it ceases to meet the requirements of this Article, CONTRACTOR shall within five (5) days thereafter, substitute another Bond and Surety and/or insurance company, both of which shall be acceptable to OWNER. The OWNER reserves the right to mandate the cessation of all work on the Project until the receipt of evidence of acceptable replacement Bonds and/or insurance.

5.1.3 If, at any time during the Contract Period, the CONTRACTOR fails to provide satisfactory evidence of all Bond and insurance requirements or fails to take all corrective action required by the OWNER, the OWNER reserves the right to mandate the cessation of all work on the Project until receipt of acceptable evidence of Bonds and insurance and/or corrective action undertaken.

5.2 INDEMNIFICATION AGREEMENT

To the fullest extent permitted by law, the CONTRACTOR shall protect, defend, indemnify, save and hold harmless the OWNER from and against any and all claims, demands, expense, losses, suits, costs, actions, fines, penalties, and liability, whether actual or alleged, arising out of or resulting from injury, sickness, disease or death to any person or the damage, loss, expense or destruction of any property, including loss of use resulting therefrom, which may occur, be caused by, or in any way result from any actual or alleged act, omission, negligence, misconduct, or strict liability of CONTRACTOR, its agents, its sub-contractors, partners, servants, officers, employees, volunteers, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, related to the performance or non-performance of the contract herein entered into, including any and all costs, fines, penalties, expense and/or attorney fees, including but not limited to expert witness fees, incurred by the OWNER as a result of any such claims, demands, losses and/or causes of action including any costs associated with the enforcement of this indemnity provision except those arising out of the sole negligence of OWNER. This indemnification does not apply to any strict liability of the Terrebonne Parish Consolidated Government. The CONTRACTOR shall investigate, adjust, settle, contest to resolution, resist claims, handle, respond to, provide defense for and defend any such claims, demands, proceedings, judgments, or suits at its sole expense related thereto, even if such claim, proceeding, judgment, demand or suit is groundless, false or fraudulent.

5.3 POLICIES AND CERTIFICATES

All policies and certificates of insurance of the Contractor/Subcontractor shall contain the following clauses:

5.3.1 The Contractor/ Subcontractor's insurer will have no right of recovery or subrogation against the OWNER, Terrebonne Parish Consolidated Government (TPCG), it being the intention of the parties that the insurance policies so affected shall protect both parties and shall be primary coverage for any and all losses covered by the below described insurance. Contractor's insurers shall waive all rights against Terrebonne Parish Consolidated Government.

5.3.2 The OWNER, Terrebonne Parish Consolidated Government, shall be named as an additional insured as respects to 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 Contractor. The Commercial General Liability Policy shall include ISO Forms CG 20 10 or its equivalent.

5.3.3 The insurance companies issuing the policy or policies shall have no recourse against the OWNER, TPCG, for payment of any premiums or for assessments under any form of policy.

5.3.4 Any and all deductibles and/or self insured retentions in the below described insurance policies shall be assumed and be for the account of, and shall be borne solely by the Contractor/Subcontractor and at his sole expense without any right of reimbursement from the OWNER, and shall not exceed \$10,000 per policy.

5.4 INSURANCE

The Contractor/Subcontractor, prior to commencing work, shall provide at his own expense, proof to the OWNER of the following insurance coverages required by the contract. Insurance is to be placed with insurance companies authorized to do business and approved in the State of Louisiana with an A.M.

Best's rating of no less than A-:VI. This requirement will be waived for workers' compensation coverage only for those contractors whose workers' compensation coverage is placed with companies who participate in the State of Louisiana Workers' Compensation Assigned Risk Pool or the Louisiana Workers' Compensation Corporation. Policies are to be on an Occurrence basis, Claims Made policies are not acceptable. Contractor shall provide an "All-Risk" Builder's Risk Insurance Policy covering all perils typically found and which shall include coverage for wind damage and flood.

5.4.1 All notices will name the Contractor/Subcontractor and identify the contract number. Insurance coverage specified in the GENERAL CONDITIONS (*AIA Document A 201, 1987 Edition*) is to be provided by the Contractor with the following minimum limits:

5.4.1.1 Workers' Compensation-Statutory in compliance with the Compensation Law of the State of Louisiana. Employer's liability to be \$1,000,000. Alternate Employer Endorsement in favor of OWNER; Waiver of Subrogation in favor of OWNER; and Thirty (30) days prior written notice of cancellation, non-renewal, and adverse material change to OWNER. Terrebonne Parish Consolidated Government and the Contractor mutually agree that it is their intention to recognize Terrebonne Parish Consolidated Government as the statutory employer of the contractor's employees (whether direct employees or statutory employees of the contractor) when any of the contractor's employees are doing work and/or providing service under this agreement.

5.4.1.2 USL&H Coverage – If the project or any work involves wharves, piers, docks, decking, floodwalls, levees, battures, other structures or construction near, over, contiguous to or alongside any body of water the policy shall also include USL&H coverage with minimum limits of \$1,000,000; and Maritime Employers' Liability insurance with minimum limits of \$1,000,000. The policy shall provide:

- a. Waiver of Subrogation to include any contract in favor of Terrebonne Parish Consolidated Government; and
- b. Thirty (30) days prior written notice of cancellation, non-renewal or adverse material changes to Terrebonne Parish Consolidated Government by specific endorsement to the applicable policy.

5.4.1.3 Commercial General Liability Insurance with a combined single limit of \$1,000,000 per occurrence and \$2,000,000 general aggregate for bodily injury and property damage. This insurance shall include products/completed operations, contractual liability, personal injury, and without written prior approval of the OWNER, the Commercial General Liability coverages shall not exclude any standardized coverage included in the basic form or limit any coverages for this project in any way that would prohibit or limit the reporting of any claim, suit and the subsequent defense and indemnity that would normally be provided by the policy. The Certificate of Insurance shall indicate which of the seven (7) coverage requirements below are not included in the policy, if any:

1. Premises - Operations;
2. Broad Form Contractual Liability;
3. Products and Completed Operations;
4. Use of Contractors and Subcontractors;
5. Personal Injury;
6. Broad Form Property Damage;
7. Explosion, Collapse, and Underground (XCU) Coverage

Note: On the certification of insurance, under the description of operations, the following wording is required: THE AGGREGATE LOSS LIMIT APPLIES TO EACH PROJECT, or a copy of ISO form CG2503 (Ed. 11-85) shall be submitted.

Waiver of Subrogation to cover both oral and written contracts in favor of the OWNER and Thirty (30) days notice of cancellation, non-renewal or material change. If unable to provide and grant 30 days notice of cancellation, this should be brought to the attention of the Risk Management Department for approval.

COMBINED SINGLE LIMIT (CSL)-AMOUNT OF INSURANCE REQUIRED

| Type of Construction | Projects Up To \$1,000,000 | Projects Over \$1,000,000 |
|--|---|--|
| NEW BUILDING: | | |
| Each Occurrence/Minimum Limit of | \$ 500,000 | \$1,000,000 |
| Aggregate (Applicable to this Contract ONLY) | \$500,000 | \$1,000,000 |
| RENOVATION: | | |
| Each Occurrence/Minimum Limit of | \$ 500,000*** (Depends on Bldg. Value) | \$1,000,000*** (Depends on Bldg. Value) |
| Aggregate (Applicable to this Contract ONLY) | \$500,000*** (Depends on Bldg. Value) | \$1,000,000*** (Depends on Bldg. Value) |

***While the minimum combined single limit of \$500,000 is required for all renovations, the value of a building shall be multiplied by 10% and insurance requirements will be increased at \$1,000,000 intervals and rounded to the nearest \$1,000,000. Example: Renovation on \$33,000,000 building would require \$3,000,000 minimum combined single limit of coverage.

The Contractor shall continue to maintain in its name Commercial General Liability and, if necessary, Commercial Umbrella Liability insurance that shall be written on ISO Occurrence Form CG 00 01 or an approved alternative, with a limit of not less than \$1,000,000 each occurrence/\$2,000,000 general aggregate and shall, at minimum, cover liability arising from products/completed operations and liability assumed under an insured contract, for at least three (3) years following substantial completion of Work.

5.4.1.4 Business Automobile Liability Insurance with a combined single limit of \$500,000 per occurrence for bodily injury and property damage. This insurance shall include for bodily injury and property damage the following coverages:

1. Any automobiles;
2. Owned automobiles;
3. Hired automobiles;
4. Non-owned automobiles.

5.4.1.5 An Umbrella Policy may be used to meet minimum requirements.

5.4.1.6 All property losses shall be made payable to and adjusted with OWNER, TPCG.

5.4.1.7 All policies of insurance shall be approved by contracting OWNER, TPCG prior to the inception of any work.

5.4.1.8 Other insurance required is as follows:

5.4.1.8.1 Owner's and Contractor's Protective Liability Insurance shall be furnished by the Contractor and shall name OWNER, Terrebonne Parish Consolidated Government and the Architect or ENGINEER as Named Insured.

| | Project Up To <u>\$1,000,000</u> | Project Over <u>\$1,000,000</u> |
|-----------------------|-------------------------------------|------------------------------------|
| CSL - Each Occurrence | \$ 500,000 | \$1,000,000 |
| General Aggregate | \$1,000,000 | \$2,000,000 |

Designated Project or Premises Form CG 25 11 or equivalent shall be a part of the Policy. This coverage shall be primary and non-contributory from any other insurance available to TPCG, unless that insurance is provided by a different Contractor than the one on the declarations for the same operation and project location.

5.4.1.8.2 Except for those insurance policies which require a "per project" aggregate, all certificates of insurance for policies that contain an aggregate limit must be accompanied by a statement that the aggregate limit is not impaired, or, if the aggregate limit is impaired, to what extent. OWNER may require that any impaired aggregate(s) be replenished in its favor prior to commencement of work and/or during the progress of the work.

5.4.1.9 If, at any time any of the said policies shall be or become unsatisfactory to OWNER, as to form or substance, or if a company issuing any such policy shall be or become unsatisfactory to OWNER, the Contractor/Subcontractor shall promptly obtain a new policy, submit the same to OWNER for approval and submit a certificate thereof as herein above provided. Upon failure of the Contractor/Subcontractor to furnish, deliver and maintain such insurance as above provided, this contract, at the election of OWNER, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor/Subcontractor to take out and/or to maintain any required insurance shall not relieve the Contractor/Subcontractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with obligations of the Contractor/Subcontractor concerning indemnification.

5.4.2 Thirty (30) days prior notice of cancellation shall be given to OWNER by registered mail, return receipt requested, on all of the required coverage provided to OWNER in the event of cancellation, non-renewal and/or any changes by insurers with regard to limits, terms or conditions (material changes). All notices will name the Contractor/Subcontractor and identify the contract number.

5.5 INFORMATION TO BIDDERS

RISKS AND INDEMNIFICATIONS ASSUMED BY THE CONTRACTOR. Neither the acceptance the completed work nor payment therefore shall release the Contractor/Subcontractor from his obligations from the insurance requirements or indemnification agreement.

5.5.1 Additional insurance may be required on an individual basis for extra hazardous contracts and specific service agreements. If such additional insurance is required for a specific contract, that requirement will be described in the "Special Conditions" section of the contract specifications.

5.5.1.1 The contractor will acquire builders risk coverage for the full value of the project, or in the case of a renovation, for the full value of the renovation which provides all risk coverage for direct physical loss or damage to buildings/contents or structures during the course of construction. This coverage shall not have a deductible higher than a \$5,000 per occurrence. The deductible is the responsibility of the contractor, and should be taken into consideration when determining contract price.

5.5.2 If any of the insurance requirements are not complied with at their renewal dates, payments to the Contractor/Subcontractor will be withheld until those requirements have been met, or at the option of OWNER, OWNER may pay the Renewal Premium and withhold such payments from any monies due the Contractor/Subcontractor. However, under no circumstances shall OWNER be responsible for the payment or provision of fees to any Broker, Wholesaler, Agent or Producer involved in the placement or renewal of the policy(ies) in question.

5.5.2.1 The contractor shall purchase and maintain boiler and machinery insurance or additional property insurance as may be required by Laws and Regulations which will include the interest of OWNER, Contractor, Subcontractor, Architect and Architect's Consultants (or ENGINEER and Engineer's Consultants) in the work all of whom shall be listed as insured or additional insured parties.

5.5.3 All policies and certificates of insurance SHALL BE APPROVED BY OWNER PRIOR TO THE INITIATION OF ANY WORK. If OWNER has any objection to the coverage afforded by or any other provisions of the insurance required to be purchased and maintained by the Contractor in accordance with the insurance requirements for the work on the basis of non-conformance with the Contract Documents, OWNER shall notify the Contractor in writing within fifteen (15) days after receipt of the certificates. The Contractor shall provide a written response to OWNER with objections within ten (10) days from the date of the letter request.

5.5.4 Other coverage may be required by OWNER based on specific needs. If such other coverage is required for this contract, that coverage will be described in the "Special Conditions" of the contract specifications.

5.5.6 Contractors Pollution coverage with minimum limits of \$1,000,000.00 naming TPCG as an Additional Insured due to the nature of work being performed.

5.5.7 SUBCONTRACTORS - Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein for the Contractor.

5.5.8 CERTIFICATE OF INSURANCE AND INDEMNIFICATION AGREEMENT - Contractor shall furnish OWNER with certificates of insurance effecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. THESE CERTIFICATES ARE TO BE RECEIVED AND APPROVED BY OWNER BEFORE WORK COMMENCES, AND THEREAFTER UPON RENEWAL OR REPLACEMENT OF EACH REQUIRED COVERAGE. OWNER reserves the right to require complete, certified copies of all required insurance policies at any time and upon request.

5.5.9 INSURANCE REQUIREMENTS FOR CONTRACTORS - Contractors shall procure and maintain 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, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the bid.

5.6 MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

5.6.1 COVERAGE:

5.6.1.1 Insurance Services Office Commercial General Liability coverage ("occurrence form CG 00 01"). "Claims Made" form is unacceptable. The "occurrence form" shall not have "sunset clause".

5.6.1.2 Insurance Services Office form number CA0001 covering Automobile Liability. The policy shall provide coverage for any auto or owned, hired, and non-owned coverage. If an automobile is to be utilized in the execution of this contract, and the vendor/contractor does not own a vehicle, then proof of hired and non-owned coverage is sufficient.

5.6.1.3 Workers' Compensation insurance as required by the Labor Code of the State of Louisiana, including Employers Liability insurance.

5.6.2 MINIMUM LIMITS OF INSURANCE: Contractor shall maintain limits no less than:

5.6.2.1 Commercial General Liability: Minimum \$500,000 combined single limit per occurrence for bodily injury, personal injury and property damage (or higher limits depending on size of contract).

5.6.2.2 Automobile Liability: \$500,000 combined single limit per accident, for bodily injury and property damage.

5.6.2.3 Workers' Compensation and Employers Liability: Workers' Compensation limits as required by the Labor Code of the State of Louisiana (Statutory Benefits). Employers Liability limit is to be \$1,000,000.

5.6.3 DEDUCTIBLES AND SELF-INSURED RETENTIONS - Any deductibles or self-insured retentions must be declared to and approved by OWNER, TERREBONNE PARISH CONSOLIDATED GOVERNMENT. At the option of the OWNER, Terrebonne Parish Consolidated Government, either: The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects OWNER; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

5.6.4 OTHER INSURANCE PROVISIONS: The policies are to contain, or be endorsed to contain, the following provisions:

5.6.4.1 General Liability and Automobile Liability Coverages

a) OWNER is to be added as "additional insured" 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. The coverage shall contain no special limitations on the scope of protection afforded to OWNER. It is understood that the business auto policy under "Who is an insured" automatically provides liability coverage in favor of OWNER.

b) Any failure to comply with reporting provisions of the policy shall not affect coverage provided to OWNER.

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

5.6.4.2 Workers' compensation and Employer's Liability Coverage - The insurer shall agree to waive all rights of subrogation against OWNER for losses arising from work performed by the Contractor for OWNER.

5.6.4.3 All Coverages - Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, non-renewed, voided, canceled thirty (30) days prior written notice by certified mail, return receipt requested to OWNER.

5.6.5 ACCEPTABILITY OF INSURERS - Insurance is to be placed with insurers with A.M. BEST'S RATING OF NO LESS THAN A-:VI. This requirement will be waived for workers' compensation coverage only for those contractors whose workers' compensation coverage is placed with companies who participate in the State of Louisiana Workers' Compensation Corporation Assigned Risk Pool or Louisiana Workers' Compensation Corporation.

5.7 PARTIAL UTILIZATION - PROPERTY INSURANCE

If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10; provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or allowed to lapse on account of any such partial use of occupancy.

5.8 PRIMARY COVERAGE

OWNER and CONTRACTOR intend that any policies provided in response to paragraphs 5.4.1.3, 5.5.1.1, and 5.5.2.1 shall protect all of the parties insured and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurer shall have no rights of recovery against any of the parties named as insured or additional insured, and if the insurers require separate waiver forms to be signed by ENGINEER, engineer's consultant or subcontractor, CONTRACTOR will obtain the same.

ARTICLE 6 - Contractor's Responsibilities

6.1 SUPERVISION: CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2 CONTRACTOR'S SUPERINTENDENT:

6.2.1 CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR'S representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR. If OWNER, at any time objects to the superintendent, CONTRACTOR shall provide a replacement superintendent at no increase in Contract Price or Contract Time.

6.2.2 The Superintendent shall, as a minimum, be required to be present at a monthly meeting of the Owner in order to address any applicable questions which may arise during construction of the project and to submit request for consideration and approval of any and all applications for payment. It shall be the Contractor's responsibility to ascertain and verify the time, date and location of said meeting. In the event the Superintendent fails to attend the said meeting, Owner may at his option refrain from approving any outstanding applications for payment until the requirements of this provision are fully complied with.

6.3 WORK HOURS: CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site.

6.3.1 Except in connection with the safety or protection of persons or the work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work under the project site shall be performed during normal working hours, and CONTRACTOR will not permit overtime Work or the performance of Work on Saturday, Sunday, legal holidays observed by the OWNER, or December 25th through January 1st of each year, without OWNER'S written consent given after prior written notice to ENGINEER.

6.3.2 Normal working hours shall be defined as CONTRACTOR'S normal eight-hour working period occurring between the hours set forth at the pre-construction conference, or if none are set forth, beginning at 7:00 a.m. and ending at 5:00 p.m., exclusive of Saturdays, Sundays, or legal holidays. Work during other than normal working hours may be scheduled as a regular procedure by CONTRACTOR if he first obtains written permission from OWNER. OWNER shall be entitled to recover costs for overtime inspection related to work done during other than normal working hours.

6.3.3 If CONTRACTOR, after reviewing the Contract Documents, and for his convenience and at no increase in Contract Price, feels that scheduled work during other than normal work hours will be required to complete the work within the Contract Time, CONTRACTOR shall submit a proposed

schedule for said work with the construction schedule as described in Paragraph 2.6 of the General Conditions. This schedule will be reviewed for acceptance by OWNER and discussed at the pre-construction conference as described in Paragraph 2.8 of the General Conditions. If the schedule is accepted by OWNER, OWNER will not seek to recover costs for overtime inspection. OWNER'S approval of CONTRACTOR'S schedule will not be considered a basis for a change in the Contract Price. Changes in Contract Price will be resolved in accordance with Article 11 of the General Conditions.

6.3.4 If at any time subsequent to the submission of the construction schedule, an event within the control of CONTRACTOR occurs which, in the opinion of CONTRACTOR, requires him to request approval to schedule Work during other than normal working hours, for his convenience and at no increase in Contract Price, he shall submit at least three (3) working days in advance of overtime period proposed a revised schedule to ENGINEER. If OWNER accepts the schedule, CONTRACTOR will be notified in writing.

6.3.5 If the work performed during other than normal working hours is not scheduled in accordance with the procedures described above, or if CONTRACTOR'S schedule is not accepted by OWNER, OWNER will invoice CONTRACTOR for the costs of overtime inspection which will include but may not be limited to costs for engineering, resident project representatives, administrative expenses and other related costs. In the event CONTRACTOR fails to pay such costs within 30 days after receipt of an invoice from OWNER, the unpaid amount will be deducted from CONTRACTOR'S pay estimates and charged to the Contract.

6.3.6 CONTRACTOR shall light the parts of the work performed during other than normal working hours as required to comply with the Municipality or Agency with jurisdiction.

6.4 MATERIALS, EQUIPMENT AND LABOR: CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.5 MATERIALS AND EQUIPMENT:

6.5.1 All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of engineer's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of subparagraphs 9.13.3 or 9.13.4.

6.5.1.1 Manufacturer's warranty for all material, products and equipment to be furnished by the CONTRACTOR and to be incorporated into the completed work shall be furnished to the OWNER through the CONTRACTOR.

6.5.1.2 The manufacturer of all materials, products and equipment shall furnish complete information as to any special conditions, or restriction to be applied in the use of these items. Should the manner or method of installation, specified performance or test results as set forth in these specifications be contrary to the manufacturer's recommendations for use of the product, the manufacturer shall at once notify the CONTRACTOR who shall forward same to the ENGINEER for appropriate action. Lack of such notification shall be certification by the CONTRACTOR that specification requirements will be met by the material, products and equipment under project conditions.

6.5.1.3 Data submitted on all equipment shall include complete maintenance instructions and parts lists in sufficient detail to facilitate ordering replacements.

6.5.2 Any equipment proposed for installation by the CONTRACTOR shall meet the intent and provisions of the specifications. All equipment shall be equal in performance to that specified. Performance shall mean equal in quality of construction and materials, efficiency, ease of maintenance, reliability and ability to meet the design parameters on which the specifications are based. Service over the life of the equipment is another factor on which the specification is based and the CONTRACTOR shall provide a written assurance that local service and a manufacturers' representative are currently available to provide service.

6.5.3 It shall be the responsibility of the CONTRACTOR to make certain that any equipment included in his bid meets the above- listed requirements. The CONTRACTOR shall submit to the ENGINEER a list of similar installations by the manufacturer of all major items of equipment to enable ENGINEER to determine their compliance with these drawings and specifications in regard to performance, design, arrangement and capacity. ENGINEER's out-of- pocket expenses to investigate and inspect similar installations of major items of equipment shall be paid by the CONTRACTOR.

6.6 ADJUSTING PROGRESS SCHEDULE: CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.6.1) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.7 SUBSTITUTES OR "OR-EQUAL" ITEMS:

6.7.1 CONTRACTOR is to furnish only material and equipment named or specified in the Contract Documents except where the Contract specifically allows for substitutions after the Contract award. Provisions to submit proposals for substitute and "Or Equal" materials and equipment before Bid opening are included in the Instructions to Bidders.

6.7.2 If an item of material or equipment named or specified in the Contract Documents is unavailable after Contract award, CONTRACTOR shall provide prompt written notice to the ENGINEER, and with such notice propose a substitute item with sufficient data to allow ENGINEER's review to determine if the proposed substitute has the essential characteristics of the item named or specified and desired. Any such request for substitution shall be made in sufficient time (including time for ENGINEER's review of the request, OWNER's issuance of a Change Order or Work Directive Change, shop drawing submittal and review, fabrication and delivery of the item, etc.) in advance of the scheduled time for installation of the item to avoid delay to the work. Any cost savings resulting from such substitution shall be credited to the OWNER in a Change Order. Any increased costs resulting from the substitution shall be borne by the CONTRACTOR and the unavailability of the item shall not entitle the CONTRACTOR to an

extension of Contract time, unless CONTRACTOR can establish that due to no fault of CONTRACTOR, CONTRACTOR's subcontractors or Suppliers, it was not possible to determine availability of the item before the Contract was awarded.

6.7.3 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in paragraph 6.7.1 as applied by ENGINEER.

6.7.4 ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER'S prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing.

6.8 CONCERNING SUBCONTRACTORS, SUPPLIERS AND OTHERS:

6.8.1 CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection as to their responsibility. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2 A Subcontractor or other person or organization identified in CONTRACTOR'S Bid and not objected to in writing by OWNER prior to the execution of the Agreement will be deemed acceptable to OWNER. All other Subcontractors shall be deemed to have been accepted if OWNER does not deliver a written objection thereto within 45 days after CONTRACTOR'S written identification of such Subcontractors. However, if, in accordance with the Louisiana Public Bid Law, OWNER has reasonable objection as to the responsibility of any Subcontractor whether identified in the Bid or subsequently, CONTRACTOR shall submit an acceptable substitute without entitlement to any change in the Contract Price. After acceptance by OWNER of any particular Subcontractor, CONTRACTOR shall make no substitution without written approval of OWNER. No acceptance by OWNER of any such Subcontractor, supplier, or other person or organization shall constitute a waiver of any right of OWNER to reject defective work.

6.9 RESPONSIBILITY OF CONTRACTOR FOR SUBCONTRACTORS AND SUPPLIERS:

6.9.1 CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR'S own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

6.9.2 The CONTRACTOR shall coordinate the Work of Subcontractors to avoid conflicts and to assure clearances. Shop drawings of various trades shall be compared by CONTRACTOR before submittal to the ENGINEER for approval, to ascertain that the installation proposed does not conflict with the structured support or space requirement. The CONTRACTOR shall have full responsibility for satisfactory coordination and completion of all subcontract items.

6.9.3 The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade. The Divisions of the Specifications are complementary, and anything mentioned or shown in a Division of the Specifications or in a Specific Trade Drawing shall be of like effect as if shown in all Divisions of the Specifications and in all Drawings.

6.9.4 All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER and contains waiver provisions as required by paragraph 5.8. CONTRACTOR shall pay each Subcontractor a just share of any insurance moneys received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.4.1.3 and 5.5.2.1.

6.10 PATENT FEES AND ROYALTIES: CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and any one directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees and court and arbitration costs) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights.

6.11 PERMITS: Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses including appropriate NPDES/LPDES permits. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement, CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

6.12 LAWS AND REGULATIONS:

6.12.1 CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work including appropriate NPDES/LDPES regulations. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR'S compliance with any Laws or Regulations.

6.12.2 If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR'S primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

6.13 TAXES: CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.14 USE OF PREMISES: CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or by law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR'S performance of the Work.

6.15 CLEANING PREMISES: During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.16 LOADING STRUCTURES: CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.17 RECORD DOCUMENTS: CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during the construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

6.18 SAFETY AND PROTECTION: CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.18.1 All employees on the Work and other persons and organizations who may be affected thereby;

6.18.2 All the Work and materials and equipment to be incorporated whether in storage on or off the site.

6.18.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.18.2 or 6.18.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). 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 ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.19 SAFETY REPRESENTATIVE: CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR'S superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

6.20 EMERGENCIES: In emergencies affecting the safety or protection of persons, the Work, or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

6.21 SHOP DRAWINGS: After checking and verifying all field measurements, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9), five copies of all Shop Drawings, unless otherwise indicated in the Supplemental Conditions, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with

respect to the review of the submission. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specific performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

6.22 SAMPLES: CONTRACTOR shall also submit to ENGINEER for review and acceptance with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR'S responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

6.23 SHOP DRAWINGS AND SAMPLES SUBMISSION REQUIREMENTS:

6.23.1 Before submission of each Shop Drawing or sample, CONTRACTOR shall have determined and verified all quantities, dimensions, specific performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.23.2 At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to ENGINEER for review and acceptance of each such variation.

6.24 ENGINEER'S REVIEW OF SHOP DRAWINGS AND SAMPLES:

6.24.1 ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER'S review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, sequences, techniques or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make any corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.24.2 After his first review and comments on the Shop Drawings and samples the ENGINEER will either give his approval in accordance with the provisions of paragraphs 6.24.1, or request changes and corrections as noted. The CONTRACTOR shall then make changes and corrections noted and return them to the ENGINEER. If the Shop Drawings and samples are then acceptable, the ENGINEER will return them to the CONTRACTOR, as approved. However, if further revisions are required, ENGINEER'S cost and expenses of further review shall be paid by the CONTRACTOR.

6.24.3 ENGINEER's review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER'S attention to such variation at the time of submission as required by paragraph 6.23.2 and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for

errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.23.1 and 6.23.2.

6.24.4 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER'S review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

6.25 CONTINUING THE WORK: CONTRACTOR shall carry on the work and adhere to the progress schedule during all disputes or disagreements with OWNER. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

6.26 INDEMNIFICATION:

6.26.1 To the fullest extent permitted by law, the CONTRACTOR shall protect, defend, indemnify, save and hold harmless the OWNER, Terrebonne Parish Consolidated Government, including all Parish Departments, its elected and appointed officials, Agencies, Councils, Boards and Commissions, Districts, their officers, agents, servants and employees, including volunteers, from and against any and all claims, demands, expense, losses, suits, costs, actions, fines, penalties, actions, and liability, whether actual or alleged, arising out of or resulting from injury, sickness, disease or death to any person or the damage, loss, expense or destruction of any property, including loss of use resulting therefrom, which may occur, be caused by, or in any way resulting from any actual or alleged act, omission, negligence, misconduct, or strict liability of CONTRACTOR, its agents, its sub-contractors, partners, servants, officers employees, volunteers, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, related to the performance or non-performance of the contract herein entered into, including any and all costs, fines, penalties, expense and/or attorney fees, including but not limited to expert witness fees, incurred by the Terrebonne Parish Consolidated Government, all Parish Departments, its elected and appointed officials, Agencies, Councils, Districts, Boards and Commissions, their officers, agents, servants and employees, including volunteers, as a result of any such claims, demands and/or causes of action except those arising out of the.... solenegligence of Terrebonne Parish Consolidated Government, all Parish Departments, its elected and appointed officials, Districts, Agencies, Councils Boards and Commissions, their officers, agents servants and employees, including volunteers. The CONTRACTOR shall investigate, adjust, settle, contest to resolution, resist claims, handle, respond to, provide defense for and defend any such claims, demands, proceedings, judgments, or suits at its sole expense related thereto, even if such claim, proceeding, judgment, demand or suite is groundless, false or fraudulent.

6.26.2 In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph 6.26 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

6.26.3 The obligations of CONTRACTOR under this paragraph 6.26 shall not extend to the liability of ENGINEER, his agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or Specifications.

6.27 PROJECT MEETINGS: CONTRACTOR, along with appropriate Subcontractors, shall attend project meetings requested by OWNER for the purpose of discussing and resolving matters concerning the various elements of the work.

6.28 CONTRACTOR shall perform all work under this Agreement as an independent contractor and shall not be considered as an agent, employee, or servant of OWNER, nor shall CONTRACTOR'S subcontractors, employee's agents or servants, be considered to be agents, employees, or servants of OWNER.

6.29 QUALITY CONTROL:

6.29.1 CONTRACTOR shall establish a quality control system, narrative in style, to perform sufficient supervision, inspection and testing of all items of work including that of his Subcontractors to insure conformance to applicable Specifications and Drawings with respect to the material, workmanship, construction, finish, functional performance and identification. CONTRACTOR'S quality control system will specifically include the surveillance of the tests required in the technical provisions of the Specifications. A person shall be placed in charge of the CONTRACTOR'S quality control system and that person shall be other than the CONTRACTOR'S superintendent.

6.29.2 CONTRACTOR'S quality control will specifically include the checking, approval and coordination of all Shop Drawings, the ascertaining of the compliance of all items with specification requirements and the tests required in the technical provisions of the specifications, a procedure for preparing non-conformance reports, and completing a Daily Quality Control Report.

6.29.3 CONTRACTOR has the sole responsibility for compliance of the construction with the requirements of the Drawings and Specifications and the quality control system shall be such that this compliance is assured.

6.29.4 The quality control person shall, in the presence of the OWNER'S or ENGINEER'S Project Representative, check all contractor established elevations, the location of all underground pipelines and electrical conduits before covering begins, all reinforcing steel before pouring concrete, and any other item which cannot be located and inspected when work is complete. Data obtained shall be recorded by the quality control person on the record documents.

6.29.5 Within ten days after the date of the Agreement, CONTRACTOR shall furnish ENGINEER a quality control plan which shall include the name and experience record of the person in charge, procedures, instructions and reports to be used.

6.29.6 The form of Quality Control Daily Report is shown in Exhibit "B". This form shall be completed by the CONTRACTOR and each sub-contractor. This daily report shall include complete information as to personnel and equipment being utilized on the project along with a summary of work activities, (i.e., footage of various pipe laid, piles driven, equipment installed etc.) for each days work. These daily reports shall be included with CONTRACTOR'S monthly application for payment. The application for payment will be considered incomplete and will not be processed without inclusion of the Quality Control Daily Reports.

ARTICLE 7 - Other Work

7.1 RELATED WORK AT SITE: OWNER may perform other work related to the Project at the site by OWNER'S own forces, have other work performed by utility owners or let other direct contracts which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work.

7.2 ACCESS TO THE SITE: CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER'S employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected.

7.3 ACCEPTANCE OF THE WORK OF OTHERS: If any part of CONTRACTOR'S Work depends for proper execution or results upon the work of any such other CONTRACTOR or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that render it unsuitable for such proper execution and results. CONTRACTOR'S failure so to report shall constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR'S Work except for latent or non-apparent defects and deficiencies in the other work.

7.4 COORDINATION:

7.4.1 Whenever Work to be performed by CONTRACTOR is dependent upon the work of other parties, CONTRACTOR shall coordinate that Work with the dependent work to the same extent that CONTRACTOR is required to coordinate dependent Subcontractor Work. Installation of Work by CONTRACTOR, directly or through a Subcontractor, in any given area, shall constitute acceptance by CONTRACTOR (including the Subcontractor) of all previously placed dependent work.

7.4.2 If OWNER contracts with other parties for other work, ENGINEER will have the authority and responsibility for coordinating activities of CONTRACTOR and those parties, unless another person or organization with specific authority and responsibility for coordination of the CONTRACTOR and those other parties is expressly designated in the Supplementary Conditions or at the pre-construction conference.

7.4.3 If OWNER contracts with other parties for other work, CONTRACTOR shall be responsible for cooperating with ENGINEER fully in the coordination of CONTRACTOR's Submittals with dependent Submittals of those other parties whose work in any way relates or depends upon the Work, or visa versa. When submitted to ENGINEER any such coordinated Submittal of CONTRACTOR shall identify by specific notation, within or attached to that Submittal, each and every item of interface with the other work.

7.5 MUTUAL DUTIES AND RESPONSIBILITIES:

7.5.1 If CONTRACTOR causes damage to the work or property of others, or if a claim arising out of CONTRACTOR's execution of Work is made by another party against CONTRACTOR, OWNER, or ENGINEER, CONTRACTOR shall promptly attempt to settle with that party by agreement or otherwise resolve the claim. CONTRACTOR shall defend, indemnify and hold harmless OWNER, ENGINEER and others as provided in paragraph 5.2, from and against all claims arising out of or resulting from damage by CONTRACTOR to the work or property of others or from CONTRACTOR's execution of the Work.

7.5.2 If another party causes damage to Work or property of CONTRACTOR, or if the performance of other work results in any claim by CONTRACTOR, CONTRACTOR shall promptly attempt to settle with that party by agreement or otherwise resolve the claim. CONTRACTOR shall not begin any action against OWNER or ENGINEER, their consultants, agents or any of their directors, officers, shareholders, agents or employees, or others indemnified as provided in paragraph 5.2, or permit any action against them to be maintained in CONTRACTOR's name or for CONTRACTOR's benefit before any court or tribunal, which action seeks to impose any liability or recover any damages from OWNER or ENGINEER for such claim.

7.5.3 Except as excluded in paragraph 7.5.4, if any party performing other work causes suspension of Work resulting in unreasonable delay under the circumstances, and if, upon a request from CONTRACTOR, OWNER concludes that any such delay requires a change in Contract Price or Contract Time, OWNER shall, pursuant to Articles 10 through 12, authorize such a change in Contract Price or Contract Time, or both.

7.5.4 If a party performing other work is granted an extension in a contract time only (based on unreasonable delay under circumstances not caused in whole or in part by acts or omissions of that party, OWNER, ENGINEER or OWNER's representative on that other work), and if, upon a request from CONTRACTOR, OWNER concludes that the extension granted to the other work requires a change in a coterminous Contract Time in the Contract Documents, OWNER shall authorize the necessary change in Contract Time only.

7.6 CONTRACTOR'S RESPONSIBILITY FOR OWNER COSTS: If CONTRACTOR becomes involved in settling or otherwise resolving claims with other persons performing other work arising out of events covered under paragraphs 7.5.1 or 7.5.2, or because of any other similar controversy, including damage to the Work or other work or a dispute about responsibility for clean-up or any other issue, neither OWNER, ENGINEER, nor any of their consultants, agents nor any of their directors, officers, stockholders nor employees will be involved in any way in such actions (except if subpoenaed). If OWNER incurs costs contrary to the provisions of this Article, CONTRACTOR shall reimburse those costs to the OWNER.

ARTICLE 8 - Owner's Responsibilities

8.1 Written communications from OWNER to CONTRACTOR will generally be issued through ENGINEER. If the need arises to issue written communication directly, a copy will be issued concurrently to ENGINEER. Written communications from CONTRACTOR to OWNER shall be issued to ENGINEER (and include two (2) copies for OWNER); from Subcontractor or Suppliers shall be issued through CONTRACTOR.

8.2 In case of termination of the employment of ENGINEER, OWNER shall appoint another ENGINEER whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to the provisions of Article 16.

8.3 OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.4 and 14.13.

8.4 OWNER'S duties in respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER'S identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized by ENGINEER in preparing the Drawings and Specifications.

8.5 OWNER is obligated to execute Change Orders, either unilateral or negotiated, in OWNER's sole discretion, covering necessary changes in the work.

8.6 OWNER'S responsibility in respect to certain inspections, tests and approvals is set forth in paragraph 13.4.

8.7 In connection with OWNER'S right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER'S right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9 - Engineer's Status during Construction

9.1 OWNER'S REPRESENTATIVE: The OWNER will provide an OWNER'S representative during the construction period. The duties and responsibilities and the limitations of authority of OWNER'S representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER.

9.2 VISITS TO SITE: In addition to the OWNER's representative, ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. Neither the OWNER's representative nor the ENGINEER will be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. ENGINEER'S efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

9.3 PROJECT REPRESENTATION: OWNER may furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work.

9.4 CLARIFICATIONS AND INTERPRETATIONS: ENGINEER will issue with reasonable promptness such written clarification of interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If

CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or Contract Time, CONTRACTOR may make a claim therefore as provided in Article 11 or Article 12 of the General Conditions.

9.5 AUTHORIZED VARIATIONS IN WORK:

9.5.1 ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall perform the Work involved promptly. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Article 11 or 12.

9.5.2 ENGINEER shall prepare change orders at OWNER'S request, and when required by the contract documents, ENGINEER shall set the price and/or time adjustments he deems reasonable.

9.6 REJECTING DEFECTIVE WORK: ENGINEER, based on its observations, reports of resident engineer(s) and/or reports of Resident Project Representative(s) will have authority to disapprove or reject Work at any time during the construction of the Work, which does not conform to the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the work as provided in Paragraph 13.9, whether or not the Work is fabricated, installed, or completed. When CONTRACTOR has been notified by ENGINEER of disapproval or rejection of non-conforming Work, CONTRACTOR shall take immediate action to correct same.

9.7 SHOP DRAWINGS: In connection with ENGINEER'S responsibility for Shop Drawings and samples, see paragraphs 6.21 through 6.25, inclusive.

9.8 CHANGE ORDERS: In connection with ENGINEER'S responsibilities for Change Orders, see Articles 10, 11 and 12.

9.9 PAYMENTS: In connection with ENGINEER'S responsibilities in respect of Applications for Payment, etc., see Article 14.

9.10 DETERMINATIONS FOR UNIT PRICES: ENGINEER will determine the actual quantities and classifications of unit price work performed by CONTRACTOR. Engineer will review with CONTRACTOR ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application of Payment or otherwise). ENGINEER's written decision will be final and binding on CONTRACTOR, unless within ten days after the date of any such decision, CONTRACTOR delivers to the ENGINEER and OWNER written notice of intention to appeal the ENGINEER's decision.

9.11 DECISIONS ON DISPUTES: ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other

matter shall be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty days of after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

9.12 When functioning as interpreter and judge under paragraphs 9.10 and 9.11, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to paragraph 9.10 and 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.16) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute or other matter.

9.13 LIMITATIONS ON ENGINEER'S RESPONSIBILITIES:

9.13.1 Neither ENGINEER'S authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

9.13.2 Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used to describe requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.13.3 or 9.13.4.

9.13.3 ENGINEER will not be responsible for CONTRACTOR'S means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR'S failure to perform or furnish the Work in accordance with the Contract Documents.

9.13.4 ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 10 - Changes in the Work

Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Change Order, Field Order, or a Work Directive Change. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.1 CHANGE ORDERS: Change orders may be issued by OWNER in one of the following manners:

10.1.1 Bilateral change order: Type of order issued to CONTRACTOR when OWNER and CONTRACTOR have agreed on the price and time adjustment made necessary by the particular change order.

10.1.2 Unilateral change order: Type of order issued to CONTRACTOR when OWNER and CONTRACTOR cannot agree on the price and/or time adjustment necessitated by the particular change order, within the scope of the project. The OWNER will issue the unilateral change order setting forth such price and/or time adjustments that ENGINEER shall deem reasonable. Any dispute in connection with the issuance of a unilateral change order shall be subject to the provisions of paragraph 9.11 and Article 16.

10.2 CHANGE ORDER CLAIM: If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change or Change Order, a claim may be made therefore as provided in Article 11 or Article 12.

10.3 CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.4 and 3.5, except in the case of an emergency as provided in paragraph 6.20 and except in the case of uncovering Work as provided in paragraph 13.9.

10.4 OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

10.4.1 Changes in the Work which are ordered by OWNER pursuant to Article 10, are required because of acceptance of defective Work under paragraph 13.13 or correcting defective Work under paragraph 13.14 or are agreed to by the parties;

10.4.2 Changes in the Contract Price or Contract Time which are agreed to by the parties; and

10.4.3 Changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 9.11; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.25.

10.5 If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR'S responsibility, and the amount of each applicable Bond will be adjusted accordingly.

10.6 WRITTEN PROPOSALS: At any time ENGINEER may request a quotation from CONTRACTOR for a proposed change in the Work. Within 15 calendar days after receipt of a Notice of a Proposed Change, unless otherwise indicated in the Notice, CONTRACTOR shall submit a written and detailed proposal for an increase or decrease in the Contract Price or Contract Time corresponding to the proposed change. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized

estimates shall be in accordance with the requirements of Articles 11 and 12 and in sufficient detail to reasonably permit an analysis by ENGINEER of all material, labor, equipment, subcontract, and overhead costs and fees and shall cover all aspects of the work involved in the change, whether such was deleted, added, changed, or impacted. Any amount claimed for subcontracts shall be similarly supported. Itemized schedule adjustments shall be in sufficient detail to permit an analysis of impact. Notwithstanding the request for quotation, CONTRACTOR shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed quotation will not constitute a basis for an increase in contract time.

10.7 FIELD ORDER: ENGINEER may authorize minor changes in the Work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order or in the approval of a shop drawing or sample, and shall be binding on CONTRACTOR. CONTRACTOR shall proceed with the performance of the changes in the Work so authorized by ENGINEER unless CONTRACTOR believes that such Field Order or approved shop drawing or sample entitles him to a change in the Contract Price or Time, or both, in which case CONTRACTOR shall give ENGINEER a written Notice of a Proposed Change thereof along with supporting documentation within 3 days of receipt of the Field Order or the approved shop drawing or sample and prior to commencing work. CONTRACTOR shall document the basis for the change in Contract Price or Time in accordance with paragraph 10.6 and the requirements of Article 11 and Article 12. Request for a Change Order to adjust Contract Price or Time arising out of a Field Order or an approved shop drawing will not be considered without the attachment thereto of a copy of the referenced Field Order or approved shop drawing. No claim by CONTRACTOR will be allowed if The Notice of a Proposed Change is submitted after Work on the Field Order or the approved shop drawing or sample has commenced, or after Final Payment under this Agreement.

10.8 CONTRACTOR'S ACCEPTANCE OF A CHANGE ORDER: The increase or decrease in Contract Price or Contract Time, or both stated in a Change Order signed by CONTRACTOR shall unequivocally comprise the total price and/or time adjustment due or owed for the Work or changes defined in the Change Order. By executing a Change Order, CONTRACTOR acknowledges and agrees that the stipulated increases or decreases in Contract Price and/or time represent full compensation for all increases or decreases in the cost of or the time required to perform the entire Work under the contract arising directly or indirectly from the change, including the costs and delays associated with the interruption of schedules, extended overheads, delay, loss of momentum, acceleration to overcome delays and loss of momentum, and cumulative impacts or ripple effect on all other non-affected work under this contract. Such signing of a Change Order constitutes full and mutual accord and satisfaction for the adjustment in Contract Price or time as a result of increases or decreases in costs and time of performance caused directly and indirectly from the change, subject to the current scope of the Work as set forth in the Contract Documents. Acceptance of this waiver constitutes an agreement between OWNER and CONTRACTOR that the Change Order represents an equitable adjustment to the Contract, and that CONTRACTOR will waive all rights to file a claim on the Change Order after it is properly executed by OWNER and CONTRACTOR

10.9 If upon the review of any proposal or claim submitted by CONTRACTOR, ENGINEER or OWNER determines that an adjustment or that no adjustment in Contract Price or Contract Time is justified under the Contract documents, that determination shall be final and binding on CONTRACTOR unless CONTRACTOR files a subsequent written notice of claim in the form of a Notice of Proposed Change in accordance with Articles 11 and 12, referencing the disputed determination, and CONTRACTOR furnishes any additional supporting data requested by ENGINEER or OWNER.

ARTICLE 11 - Change of Contract Price

11.1 The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2 The Contract Price may only be changed by a Change Order. CONTRACTOR shall notify ENGINEER by means of a Written Notice of a Proposed Change within fifteen days, or earlier if so required elsewhere in the Contract Documents, of the occurrence of an event which CONTRACTOR believes entitles him to a change in the Contract Price. Supporting data shall be delivered within fifteen days of such notice or within thirty days of such occurrence, whichever is later, unless OWNER allows an additional period of time to ascertain accurate cost data. CONTRACTOR must prove that additional costs were necessarily incurred which meet the criteria set forth in Paragraph 10.4, despite CONTRACTOR'S reasonable, prudent, and diligent efforts to prevent such costs. Failure of CONTRACTOR to comply with the time requirements for written Notice of a Proposed Change or for submittal of supporting data shall be considered to be a waiver by CONTRACTOR of any claim for an addition to the Contract Price.

11.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1 LUMP SUM PRICES INCLUDED IN THE CONTRACT: Where the Work involved is covered by lump sum prices included in the Proposal Documents, Schedule of Contract Items and Unit Price; the Contract Price shall be adjusted by the lump sum prices.

11.3.2 UNIT PRICES INCLUDED IN THE CONTRACT: Where the Work involved is covered by unit prices included in the Proposal Documents, Schedule of Contract Items and Unit Price, and the actual quantities required differ from that shown on the Proposal Documents, or those indicated in the Contract Documents, the Contract Price shall be adjusted by application of unit prices to the actual quantities of the items involved.

11.3.3 NEGOTIATED UNIT PRICES: If the Work involved is not covered by unit prices contained in the Contract Documents, unit prices may be negotiated on the basis of costs estimated in accordance with this Article 11.

11.3.4 NEGOTIATED LUMP SUM: If the Contract Price is adjusted on the basis of an agreed to Lump Sum, and the costs are estimated in accordance with this Article 11.

11.3.5 COST OF THE WORK: If OWNER and CONTRACTOR cannot agree that any of the methods described in 11.3.1, 11.3.2, 11.3.3 or 11.3.4 above are appropriate for the proposed work, OWNER may direct CONTRACTOR to proceed on the basis of actual costs in accordance with Article 11.

11.3.6 UNILATERAL CHANGE ORDER: If OWNER and CONTRACTOR cannot agree on the price and/or time adjustment necessitated by the particular proposed change order, the OWNER may issue a unilateral change order setting forth such price and/or time adjustments that ENGINEER shall deem reasonable.

11.4 COST OF THE WORK: The term Cost of the Work means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1 The Cost of the Work involved includes payroll costs for CONTRACTOR's craft labor, including foremen, assigned to the site and engaged in furnishing and incorporating materials or equipment in the Work involved. Labor work hours shall not exceed current "Means open Shop Building Construction Cost data" applicable to the work involved. Payroll costs shall include wages and may include those labor burdens expressly certified in advance by a duly authorized financial representative of CONTRACTOR and so approved by OWNER, Examples of labor burdens include social security, unemployment taxes, worker's compensation, health and retirement benefits, vacation and holiday pay. When determining actual payroll costs under paragraph 11.3.5: (a) contemporaneously, daily time sheets certified by CONTRACTOR and verified by ENGINEER along with certified payroll records shall be valid records; (b) after-the-fact daily time sheets shall be valid only if they expressly correlate to the Work involved, and if recorded at that time and used for payroll.

11.4.2 The Cost of the Work involved includes payments by CONTRACTOR to Suppliers for material and equipment used in the Work involved, including transportation, storage and necessary Suppliers' field services. All trade discounts, rebates and refunds and all returns from sale of surplus items shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained. If required by OWNER, CONTRACTOR shall obtain bids for designated materials or equipment and nominate at least two (2) Suppliers for selection by OWNER. When determining actual Supplier costs, invoices segregating items associated with the Work involved shall be the record upon which to base actual costs.

11.4.3 The Cost of the work involved includes payments made by the CONTRACTOR to Subcontractor for the Work involved performed by the Subcontractor. The methods for calculating Subcontractors' costs shall be the same as for CONTRACTOR costs, except that the term Subcontractor shall replace the term "CONTRACTOR", context permitting. If OWNER requires, CONTRACTOR shall obtain detailed competitive sub-bids and nominate at least two (2) Subcontractors for the performance of any work involved for selection by OWNER.

11.4.3.1 All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4 Construction Equipment Costs: The Cost of the work involved includes costs for individual construction equipment with replacement value in excess of \$1,000,000. Transportation, loading and unloading, installation, dismantling and removal costs shall be allowed only if prior consent is obtained from ENGINEER, and if equipment is, or was, transported to the site solely for the Work involved. Shipping costs will be allowed if the equipment requires the use of a carrier, and provided the travel distance does not exceed that for equipment in Terrebonne Parish. When multiple attachments are used, only the highest cost attachment shall be recoverable. Equipment costs shall cease when the equipment is no longer needed for the Work involved. Payroll costs for labor operating the equipment are as specified in paragraph 11.4.1. Equipment costs shall be computed using the same accounting and estimating rules and prices, whether related to added or deleted Work.

11.4.4.1 When determining actual construction equipment costs under paragraph 11.3.5: (a) contemporaneously, daily logs of the equipment, operators and actual usage, verified by ENGINEER, shall be the valid records; (b) after-the-fact, such daily records shall be valid only if developed when the Work involved was performed and used for accounting purposes.

11.4.4.2 Rented or owned equipment at the site, idled solely by actions of OWNER or ENGINEER, shall be paid at the rates for rented equipment, or based on fifty percent (50%) of the rates for owned equipment, respectively, provided that the idle period exceeds that normally experienced for such equipment and occurs during normal working hours.

11.4.4.3 Rented or Leased Construction Equipment: Construction equipment rented or leased from third parties shall be priced using either the specific rates negotiated between OWNER and CONTRACTOR (based on the actual rental or lease agreements), or in the event that no agreement is reached, using those rates listed in the Rental Rate "Blue Book" published by Dataquest, Inc. for the region covering the New Orleans metropolitan area and applicable to the equipment (model number and year), but in no event shall the rate exceed those issued by local equipment rental companies within Terrebonne Parish. The equipment rate for second or third shift Work shall not exceed fifty percent (50%) of the base rate. Operating costs shall not exceed the hourly operation rate in the Blue Book. Hourly rates for equipment previously in use on the work for at least a month shall be based on the monthly rate divided by 176 hours. Equipment previously in use for only one week or not previously in use at the site shall not be invoiced to OWNER at rates higher than the following schedule of equipment use and payment category: applicable to equipment listed in the Rental Rate "Blue Book"

| | |
|-------------------------------|--------------|
| Less than 8 hours | Hourly Rate |
| 1 day but less than 7 days | Daily Rate |
| 1 week but less than 30 days | Weekly Rate |
| 30 days or more (when in use) | Monthly Rate |

11.4.4.4 Owned Construction Equipment: Construction equipment Owned by CONTRACTOR, or rented or leased from lessors associated with or owned by CONTRACTOR, shall be priced using either the specific rates negotiated between OWNER and CONTRACTOR (based on rates consistent with CONTRACTOR's normal accounting practices), or in the event that no agreement is reached, using the rates listed in the "Contractor's Equipment Cost Guide" published by Dataquest, Inc. for the region covering the New Orleans metropolitan area, but in no event shall the equipment ownership costs exceed rental rates of local equipment rental companies within Terrebonne Parish and operating costs shall not exceed the hourly operation rate in the Blue Book. For multiple shifts, rates shall not exceed the shift Work adjustments recommended in the "Contractor's Equipment Cost Guide".

11.4.5 Supplemental costs including the following:

11.4.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the Work.

11.4.5.2 Costs of field supplies and purchase costs (less market value if not consumed) of tools individually valued at less than \$1,000 that are not owned by the workers, if CONTRACTOR provides an itemized list of the field supplies and tools required for the performance of the Work involved; however, no such costs shall be allowed over 4% of the labor costs under paragraph 11.4.1, excluding burdens, unless CONTRACTOR furnishes detailed data sufficient to allow verification that a higher percentage is appropriate for the work involved.

11.4.5.3 Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.4 Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

11.4.5.5 Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's Fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.6 The costs of utilities, fuel and sanitary facilities at the site.

11.4.5.7 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.8 Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5 The term Cost of the Work shall not include any of the following:

11.5.1 Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the Work, all of which are to be considered administrative costs covered by the Contractor's Fee.

11.5.2 Expenses of CONTRACTOR'S principal and branch offices other than CONTRACTOR'S office at the site.

11.5.3 Any part of CONTRACTOR'S capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4 Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.4.5.8 above).

11.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

11.5.7 Attorney's Fees and/or Court Costs.

11.5.8 Costs or fees of consultants retained or utilized by CONTRACTOR, or his agents, for the purpose of making or filing a claim against OWNER, pursuing litigation or defending any claim and/or dispute.

11.5.9 CONTRACTOR shall not be allowed to include as part of the Cost of the Work involved any construction equipment or supplemental costs that cannot be shown to increase on account of, or are not directly attributable to, the performance of the Work involved. Payroll costs for the full time resident superintendent included within the requirements of paragraph 6.2.1 are but one example of such costs.

11.6 CONTRACTOR'S FEE: The CONTRACTOR'S fee allowed to CONTRACTOR for overhead and profit shall be determined by negotiations. The objective of negotiations shall be the exercise of sound business judgment including a fair and reasonable profit based on assumptions of risk, exposure to weather, size of the change, percent of subcontracted work, equipment requirements, and time of performance. In no case, however, shall the fee for overhead and profit exceed the following percentages of the various portions of the Cost of the Work:

11.6.1 For costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR'S fee shall not exceed 15%;

11.6.2 For costs incurred under paragraph 11.4.3, and for work performed by a CONTRACTOR'S Subcontractor, the CONTRACTOR'S fee shall not exceed 10% and the Subcontractor's fee shall not exceed 15%; for costs incurred under paragraph 11.4.3, and Work performed by a Subcontractor's Subcontractor, the CONTRACTOR'S and the Subcontractor's fee shall not exceed 5% and 5%, and the Subcontractor's Subcontractor's fee shall not exceed 15%.

11.6.3 No fee shall be payable on the basis of costs itemized under paragraphs 11.4.4 and 11.5.

11.6.4 The amount of credit to be allowed by CONTRACTOR to OWNER for any such a change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR'S fee in accordance with the following:

11.6.5 When both additions and credits are involved in one change, and the additions exceed the credits, the adjustment in CONTRACTOR'S fee shall be computed on the amount by which the additions exceed the credits, except that no adjustments shall be allowed on the costs developed in accordance with paragraph 11.3.1;

11.6.6 When both additions and credits are involved in one change, and the credits exceed the additions, CONTRACTOR will be allowed to retain fee on the amount by which the credits exceed the additions, except that no adjustment shall be allowed on the costs developed in accordance with paragraph 11.3.1 or 11.3.2.

11.7 Whenever the cost of any Work is to be determined pursuant to paragraph 11.4 or 11.5, CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.8 RESERVED

11.9 UNIT PRICE WORK:

11.9.1 Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially 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 Agreement. 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. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with Paragraph 9.10.

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

11.9.3 Unit Prices contained in the initial Contract shall not be changed under any circumstances. (Reference Louisiana Public Bid Law).

11.9.4 If CONTRACTOR believes a variation from estimated quantities of Unit Price Work is such as to require an increase in the Contract Time, CONTRACTOR shall within seven days of knowledge of the variation in quantities, submit a written Notice of a Proposed Change to ENGINEER, and proceed to substantiate his claim within fifteen days of the delivery of the notice with the analysis and documentation required in this Section of the General Requirements.

ARTICLE 12: Change of Contract Time

12.1 The Contract Time may only be changed by a Change Order. Any claim or request for an extension in the Contract Time shall be based on a written Notice of a Proposed Change delivered to ENGINEER within seven days, or earlier if so required in the Contract Documents, of the occurrence of the event giving rise to the request or claim. Supporting data as to the extent of the request or claim shall be delivered within fifteen days of such Notice, or within twenty-two days of the event giving rise to the occurrence, whichever is later, unless ENGINEER allows an additional period of time to ascertain more accurate data. CONTRACTOR must prove that extensions to the Contract Time have materialized which meet the combined criteria set forth in paragraph 12.2 below and Official Progress Schedules of the General Requirements, despite CONTRACTOR'S reasonable, prudent, and diligent efforts to prevent or overcome such delays. Failure of CONTRACTOR to comply with the time requirements for written Notice or for submittal of supporting data shall be considered to be a waiver by CONTRACTOR of any claim for an extension in the Contract Time.

12.2 The Contract Time will be extended in an amount equal to the time lost due to delays beyond the control and without the fault of CONTRACTOR, and which CONTRACTOR could not have guarded against, if a claim is made therefore as provided in Paragraph 12.1 and is substantiated to the satisfaction of OWNER. Such delays may include, but not limited to, unusually severe weather, sink holes, archaeological finds, acts of God, acts of the public enemy, acts of OWNER in either its sovereign or contractual capacity, furnishing of lands, right-of-way or easements by OWNER, acts of another CONTRACTOR in the performance of a Contract with OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of Subcontractors of Suppliers at any tier arising from causes other than normal weather beyond the control and without the fault or negligence of both CONTRACTOR and such Subcontractors and Suppliers; and further provided that

12.2.1 The Contract Time is extended only to the extent that the delay is unreasonable under the Contract, which is the extent the delays set forth in paragraph 12.2 above exceed the Total Float Time available in the Official Schedule and extend completion of the Work, or specified part of the work, beyond the corresponding Contract Time.

12.3 If upon evaluation of CONTRACTOR's analysis, OWNER justifies an extension in Contract Time under paragraph 12.1 through 12.3 for delay not caused in whole or in part by acts or omissions within the control of OWNER or ENGINEER, the OWNER shall authorize the necessary change in Contract Time only.

12.4 COMPENSABLE DELAY:

12.4.1 Unless otherwise excluded in the Contract Documents, an extension in Contract Time may be combined with an increase in Contract Price to the extent the delay was not concurrent with CONTRACTOR delay, was caused in whole or in part by acts or omissions within the control of OWNER or ENGINEER and is due to one of the following: Underground Facilities that are not shown (i.e., previously unknown); an emergency; objection, for OWNER's convince, to a Subcontractor, historic resources, uncovering of work not found to be defective under paragraph 13.9; delay under paragraph 7.5.3 or any other suspension of Work; changes in the Work; differing site conditions; and variation in quantities.

12.4.2 Changes in Contract Price for extensions in Contract Time may include increase in the Cost of the Work, as provided in Article 11, related to the extension in Contract Time, but shall exclude costs that are unaffected or do not relate to the extension in Contract Time, such as: (a) operating costs of construction equipment assigned to the Work on a continuous basis but primarily used in the furnishing and incorporating of materials/equipment into the Work, (b) operating costs and owned/rental costs of construction equipment used solely in the furnishing and incorporating of materials/equipment into the Work (crane used for specific lifts, concrete pump used for specific pours, etc.), and fully paid site facilities, tools, etc.

12.4.3 If a delay meeting the conditions of paragraph 12.4.1 delays Substantial completion of the Work beyond the Contract Time for Substantial Completion, OWNER shall negotiate with CONTRACTOR the reimbursement of an amount to cover administrative costs (under paragraphs 11.5.1 through 11.5.4) that will be or were unabsorbed prior to the expiration date of that contract Time. Reimbursement shall be based on the lesser of (a) five percent (5%) times that portion of the Contract Price remaining un-billed, less retainage, prior to the expiration of that Contract Time, or (b) the product of that un-billed portion of the Contract Price times the (company wide) ratio of CONTRACTOR's administrative costs to billings, or (c) that amount derived by an application of the Eichleay formula.

12.4.4 CONTRACTOR shall not recover from OWNER (a) acceleration costs incurred to overcome delays which warrant extensions in Contract Time but exclude changes in Contract Price, (b) escalation costs for any part of the Work not delayed beyond the Late Dates in the Official Schedule, or (c) delay costs not expressly allowed in this Article.

ARTICLE 13 - Warranty and Guarantee; Tests and Inspections: Correction, Removal or Acceptance of Defective Work

13.1 WARRANTY AND GUARANTEE: CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of observed defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.

13.1.1 The obligations of CONTRACTOR under this Paragraph 13.1 shall be in addition to and not in limitation of any obligation imposed upon him by special guarantees required by the Contract Documents or otherwise prescribed by law.

13.1.2 In special circumstances where a particular item of equipment or part of the Work reaches Substantial Completion upon successful performance of Pre-operational Testing, and notwithstanding anything in the Contract Documents to the contrary, CONTRACTOR shall maintain the particular item of equipment or part of the Work in good order and in proper working condition during the period between Substantial Completion and Initiation of Operation, and for such maintenance CONTRACTOR shall receive no adjustment to the Contract Price.

13.1.3 The warranty or guarantee provided by CONTRACTOR under Paragraph 13.1 of the General Conditions shall remain in full effect throughout the period from the date of Initiation of Operation of the entire work to the end of the Correction Period (as that term is defined in these General Conditions.

13.2 ACCESS TO WORK: ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspection and testing. CONTRACTOR shall provide proper and safe conditions for such access.

13.3 NOTICE OF TESTS AND INSPECTIONS: CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

13.4 TESTS AND INSPECTIONS: If any laws or regulations of any public body having jurisdiction requires any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER'S or ENGINEER's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval to CONTRACTOR'S purchase thereof for incorporation in the work.

13.4.1 All construction testing and certifications required under the Specifications shall be performed by Certified Technicians from an Independent Testing Laboratory. The CONTRACTOR shall propose a private testing laboratory in writing to the ENGINEER, together with a copy of the instruction provisions of his proposed sub-agreement, so that the ENGINEER may determine the proper instructions are included in compliance with the specification. Upon approval by the ENGINEER, the CONTRACTOR shall cooperate with the testing laboratory by furnishing material for testing, space for storage and transportation of the samples as necessary. Compensation for testing and certification shall be included within price bid for associated items of work. No separated measurement or additional compensation shall be allowed.

13.4.2 The Testing Laboratory shall submit to the ENGINEER three (3) typed copies and to the CONTRACTOR one (1) typed copy, of all applicable test data, certifications and reports as required. All required test data and material certifications for each respective item of work must be submitted to the ENGINEER prior to application for payment. Any applications not accompanied by required test data and/or certifications shall be recommended for payment at an amount not to exceed 50% of contract until cost of required test data and certifications are submitted and subsequently approved.

13.4.3 Upon completion of the project and prior to substantial completion, the testing laboratory shall address a letter to the OWNER in which the laboratory shall certify that all testing and certification requirements of the specification have been satisfactorily met.

13.4.4 The CONTRACTOR is cautioned to provide termination provisions in its sub-agreement with the testing laboratory. In the event that the testing services prove not up to recognized standards, the ENGINEER reserves the right to withdraw his approval and require another laboratory be furnished by the CONTRACTOR at no increase in Contract Price.

13.5 All inspections, tests or approvals other than those required by laws or regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).

13.6 If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR'S expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR'S intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.7 Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR'S obligations to perform the Work in accordance with the Contract Documents.

13.8 UNCOVERING WORK: If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER'S observation and replaced at CONTRACTOR'S expense.

13.9 PAYMENT FOR UNCOVERING WORK: If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER'S request, shall uncover, expose or otherwise make available for observation, inspection or testing as 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, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction, (including but not limited to fees and charges of Engineers, Architects, Attorneys and other professionals), and OWNER shall be entitled to an appropriate decrease in the Contract Price, if the parties are unable to agree as to the amount thereof, may make a claim therefore as provided in Article 11. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price of an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12.

13.10 OWNER MAY STOP THE WORK: If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party. In the event the OWNER stops the work pursuant to this paragraph 13.10, CONTRACTOR shall not be entitled to delay damages, including without limitation, demands for extended job site overhead, home office overhead, cumulative impacts, loss of productivity and efficiency, learning curve impacts, equipment down time and/or interest penalties, occasioned directly or indirectly by the stop work order.

13.11 CORRECTION OR REMOVAL OF DEFECTIVE WORK: If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with non-defective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals, and court costs) made necessary thereby. CONTRACTOR shall not be entitled to time extension of the Contract Time for correction or removal of defective work.

13.12 ONE YEAR CORRECTION PERIOD: If within the period from the date of Substantial Completion of a particular item of equipment or a designated part of the work to one year after the date of Initiation of Operation for the Project, the particular item of equipment or designated part of the work is found to be defective, CONTRACTOR shall promptly, without an adjustment in Contract Price and in accordance with ENGINEER'S written instructions, either correct such defective Work, or if it has been rejected by ENGINEER, remove it from the site and replace it with non-defective work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR.

13.12.1 Subject to the conditions set forth in paragraphs 13.1.2 and 13.1.3 and the adjustments described in Subparagraphs 13.12.2, below, the Correction Period shall be one year.

13.12.2 Unless another date is indicated in the Contract Documents the date the Work is Substantially Complete shall be the date for Initiation of Operation to occur. However, OWNER may at its sole option advance or delay the date for Initiation of Operation, and CONTRACTOR'S obligations to extend warranties and guarantees in accordance with paragraph 13.1.2 and 13.1.3 or to maintain the Work in accordance with paragraph 13.1.2 until then shall remain absolute. Applicable Change Orders shall be executed by the parties to adjust the Contract Price, as appropriate.

13.12.3 CONTRACTOR'S responsibilities under the paragraph 13.12, including sub-paragraphs, are in addition to, not in lieu of, all other obligations imposed by these contract documents, or imposed by applicable State laws.

13.13 ACCEPTANCE OF DEFECTIVE WORK: If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER'S recommendations of final payment, also ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER'S evaluation of and determination to

accept such defective Work (such costs to be approved by ENGINEER as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to ENGINEER'S recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.14 OWNER MAY CORRECT DEFECTIVE WORK: If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR'S services related thereto, take possession of CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER'S representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies shall be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 11. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR'S defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER'S rights and remedies hereunder.

ARTICLE 14 - Payments to Contractor and Completion

14.1 SCHEDULE OF VALUES: The schedule of values established as provided in paragraph 2.9 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.2 APPLICATION FOR PROGRESS PAYMENT: At least fifty-five days before each progress payment falls due (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents and also as ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and

suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by such data, satisfactory to OWNER, as will establish OWNER'S title to the material and equipment and protect OWNER'S interest therein, including applicable insurance. Only major items of material and equipment to be incorporated in the project will be eligible for payment. These items must be easily accountable by the ENGINEER. Payment for these materials will be invoice prices for the material, submitted with the request for payment, which price shall not exceed the appropriate portion of the contract items in which such materials are to be incorporated. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

14.2.1 Notwithstanding any other provisions of these contract documents to the contrary, OWNER is under no duty or obligation whatsoever to any Subcontractor, laborer or other party to ensure that payments due and owing by CONTRACTOR to any of them are or will be made. Such parties shall rely only on CONTRACTOR'S surety bonds for remedy of nonpayment by CONTRACTOR.

14.3 CONTRACTOR'S WARRANTY OF TITLE: CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.4 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT: ENGINEER will, within ten days after receipt of each application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER'S reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and re-submit the Application. Forty-five (45) days after presentation of the Application for Payment with ENGINEER'S recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by OWNER to CONTRACTOR.

14.5 ENGINEER'S recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER'S on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER'S review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of ENGINEER'S knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10, and to any other qualifications stated in the recommendation); and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

14.6 ENGINEER'S recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR'S being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.

14.7 ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER'S opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify and such payment previously recommended, to such extent as may be necessary in ENGINEER'S opinion to protect OWNER from loss because:

14.7.1 the Work is defective, or completed Work has been damaged requiring correction or replacement,

14.7.2 the Contract Price has been reduced by Change Order,

14.7.3 OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.14, or

14.7.4 of ENGINEER'S actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.9 inclusive.

14.7.5 OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER, or OWNER has claims against CONTRACTOR including but not limited to liquidated damages for anticipated or actual late completion, on account of CONTRACTOR'S performance or furnishing of the Work, or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR prompt written notice (with a copy to ENGINEER) stating the reasons for such action.

14.8 SUBSTANTIAL COMPLETION: When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reason therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion, which shall fix the date of substantial completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which he may make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within twenty-eight days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating his reasons e. If after consideration of OWNER'S objections, ENGINEER considers the WORK substantially complete, ENGINEER will within said twenty-eight days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be complete or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER prior to ENGINEER'S issuing the definitive certificate of Substantial Completion ENGINEER'S aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9 EXCLUSION OF CONTRACTOR FROM SITE: OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.10 PARTIAL UTILIZATION: Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER without significant interference with CONTRACTOR'S performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1 OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2 OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work OWNER, shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

14.10.3 No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.7 in respect of property insurance.

14.11 LIEN PERIOD: Within twenty-one (21) days of the receipt of the definitive Certificate of Substantial Completion from ENGINEER, OWNER shall adopt and record a Resolution of Acceptance with the Recorder of Mortgages of the Parish in which the Agreement has been recorded. The recording of this Resolution of Acceptance shall commence a lien period of not less than forty-five (45)

consecutive calendar days, during which period the retainage stated in the Supplementary Conditions will be withheld by OWNER. After the said lien period, CONTRACTOR shall be responsible for obtaining from the Recorder of Mortgages a Certificate that the Agreement at the end of said forty-five day period, is clear of all liens, privileges, judgments or encumbrances of any nature whatsoever, which certificate he shall submit with his application for final payment to ENGINEER.

14.12 FINAL INSPECTION: Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of the particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

14.13 FINAL APPLICATION FOR PAYMENT: After CONTRACTOR has completed all such corrections to the satisfaction of the ENGINEER, and delivered four (4) sets of all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 6.17) and other documents, all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.17), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER'S property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

14.13.1 Notwithstanding any provision of the Contract Documents to the contrary, OWNER shall not be deemed to have accepted the work or to have waived claims against CONTRACTOR as provided in Paragraph 14.16 until (i) Initiation of Operation and (ii) payment of all remaining amount of the Contract Price.

14.13.2 As a condition to payment of all remaining portions of the Contract Price of the Unit Price Agreement, CONTRACTOR shall perform all Startup Testing and shall notify ENGINEER that the work is ready for final inspection. Such Startup Testing and notice to ENGINEER may be accomplished only after CONTRACTOR delivers written notice of the expected date of Initiation of Operation.

14.13.3 The requirements and provisions of Paragraphs 14.11, 14.12, and 14.13 of the General Conditions shall apply to payment of the remaining Contract Price pursuant to the *Unit Price Agreement, as well to final payment under the Unit Price Agreement.*

14.14 FINAL PAYMENT AND ACCEPTANCE: If, on the basis of ENGINEER'S observation of the Work during construction and final inspection, and ENGINEER'S review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR'S other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the Final Application for Payment, indicate in writing ENGINEER'S recommendation of payment and present the Application

to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.17. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and re-submit the Application. Thirty days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER'S recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

14.15 If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR'S final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

14.16 CONTRACTOR'S CONTINUING OBLIGATION: CONTRACTOR'S obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.14, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR'S obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.17).

14.17 WAIVER OF CLAIMS: The making and acceptance of any final payment will constitute:

14.17.1 A waiver of all claims by OWNER against CONTRACTOR, except claims previously made in writing and still unsettled, or claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.12 or from failure to comply with the Contract Documents or the terms of any special guarantees specified herein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR'S continuing obligations under the Contract Documents; and

14.17.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15 - Suspension of Work and Termination

15.1 OWNER MAY SUSPEND WORK: OWNER may, at any time and without cause, suspend the Work or any portion thereof by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work shall be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefore as provided in Articles 11 and 12. If OWNER stops work under Paragraph 13.10 or suspends

CONTRACTOR'S services under paragraph 13.14, or suspends the work or any portion thereof because of CONTRACTOR'S failure to prosecute the Work without endangering persons and property, CONTRACTOR shall be entitled to no extension of Contract Time or increase in Contract Price.

15.2 OWNER MAY TERMINATE: OWNER may terminate CONTRACTOR's services for cause upon the occurrence of any one or more of the following events:

15.2.1 If CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2 If a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3 If CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4 If a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR'S creditors;

15.2.5 If CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.6 If CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.9 as revised from time to time);

15.2.7 If CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.8 If CONTRACTOR disregards the authority of ENGINEER; or

15.2.9 If CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

In such case, CONTRACTOR shall not be entitled to receive any further payment beyond an amount equal to the value of the Work actually completed and the value of materials and equipment not incorporated in the Work but delivered and suitably stored, less the aggregate of payments previously made. If the direct and indirect costs of completing the Work exceed the unpaid balance of the Contract Price, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER shall be incorporated in a Change Order, but in finishing the Work, OWNER shall not be required to obtain the lowest figure for the work performed. CONTRACTOR'S obligations to pay the difference between such costs and such unpaid balance shall survive termination of the Agreement.

15.3 Where CONTRACTOR'S services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4 TERMINATION FOR CONVENIENCE: Upon seven days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement.

15.4.1 In any termination for convenience, CONTRACTOR shall be paid for (a) Work completed, in accordance with the Contract Documents, before receipt of the notice of termination, and (b) reasonable termination settlement costs for commitments that have become firm before the termination. CONTRACTOR shall not be paid any anticipated and unrealized supplemental costs, administrative expenses and profit for uncompleted Work. If no agreement can be reached as to reasonable termination costs, OWNER and CONTRACTOR shall follow the provisions in federal regulation FAR 52.249-2, found in 48 CFR Part 52.

15.4.2 Upon termination for convenience, OWNER shall have full power and authority to take possession of the Work, assume any sub-agreements with Subcontractors and Suppliers that OWNER selects, and prosecute the Work to completion by contract or as OWNER may deem expedient.

15.4.3 If after notice of termination of the services of CONTRACTOR for cause, it is determined that CONTRACTOR was not in default, the termination shall be deemed to have been for the convenience of OWNER. In such event, CONTRACTOR may recover from OWNER payment for Work completed and reasonable termination costs as provided in paragraph 15.4.1.

15.5 CONTRACTOR MAY STOP WORK OR TERMINATE: If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or ENGINEER fails to act on any Application for Payment within sixty days after it is submitted, or OWNER fails for sixty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of his obligations under paragraph 6.29 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 16 - DISPUTE RESOLUTION

16.1 Subject to the conditions set forth in subparagraphs 16.2, 16.2.1 and 16.2.2 hereof, all claims, disputes and other matters and questions arising out of or relating to the Contract Documents or the breach thereof, except claims waived by the making and accepting of final payment as provided in Section 14.17, shall be decided by arbitration between the parties. This agreement to arbitrate shall be specifically enforceable under the Louisiana Arbitration Act and the award rendered by the arbitrators shall be final and a judgment may be entered thereon in the State District Court for the Parish of Terrebonne, State of Louisiana.

16.2 Any arbitration provided for hereunder will be conducted in accordance with the Construction Arbitration Rules of the American Arbitration Association (AAA), subject to the following:

16.2.1 OWNER shall not be compelled to arbitrate any dispute without its express consent given in writing after demand is made for arbitration.

16.2.2 Arbitration shall be conducted in Terrebonne Parish, Louisiana and the laws of the State of Louisiana shall be controlling as to matters of law.

16.3 Subject to any recognized privilege, discovery shall be available to each party to the arbitration as it would be available in the District Court for the Parish of Terrebonne under the provisions of the LA Code of Civil Procedure in effect at the time of demand for arbitration. Notices, time periods and other procedural matters shall be governed by the rules that apply in Louisiana District Courts which shall be enforced by the AAA in the same manner as in the Louisiana District Court.

16.4 A pre-hearing conference shall be held not sooner than sixty (60) days after the filing of the answer, at which time a pre-hearing summary shall be filed by each party, setting forth all claims and counterclaims with specificity, all witnesses expected to be called at the hearing, all documents proposed to be introduced, and all items of claimed damages including dollar amounts therefore.

16.5 All discovery and amendments to the pre-hearing summary shall be concluded thirty (30) days prior to the arbitration date. Failure on the part of the CONTRACTOR to provide the foregoing discovery and disclosure shall render any claim supported by witnesses or documents not so disclosed null, void and waived.

16.6 In the event of any arbitration demanded and agreed to by the OWNER, each party shall select an arbitrator and the two so selected shall select a third from a panel proposed by the AAA. In the event that the two cannot agree upon a neutral arbitrator from the AAA list within thirty (30) days, then the third arbitrator shall be designated by the AAA.

16.7 In the event OWNER so elects, CONTRACTOR shall be required to participate in a consolidated arbitration to include the ENGINEER.

16.8 The arbitrators shall render a written decision, with conclusions of law and findings of fact, breaking down the items of any award on the claim or counterclaim in sufficient detail to enable OWNER to seek any grant reimbursement as may be available.

16.9 Notwithstanding anything else in the Contract Documents to the contrary, the CONTRACTOR shall carry on the work and maintain its progress during litigation or any arbitration proceedings, and OWNER shall continue to perform and pay as otherwise required by the Contract Documents.

16.10 In the event OWNER elects not to arbitrate one or more disputes, the dispute or disputes which the OWNER elects not to arbitrate shall be decided under the laws of the State of Louisiana in the 32nd Judicial District Court in and for the Parish of Terrebonne, State of Louisiana.

16.11 In the event OWNER is required to defend itself against any claim for delay, the OWNER shall be entitled to recover costs, including without limitation, administrative costs, attorneys' fees and court costs, from the party causing the delay.

ARTICLE 17 - Miscellaneous

17.1 GIVING NOTICE: Whenever any provisions of the Contract Documents requires the giving of written notice, it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.2 COMPUTATION OF TIME:

17.2.1 When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.2.2 A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

17.3 UTILIZATION OF LOCAL LABOR (STATE RESIDENTS): Contractor shall make every effort to use local labor to the fullest extent possible.

17.4 GENERAL: Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

17.5 DUTIES AND OBLIGATIONS: The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.26, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and shall not be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of this Agreement. Also, the obligation of CONTRACTOR to maintain the Work until Initiation of Operation shall survive final payment and termination and completion of this Agreement.

REPORT NO. _____
DATE:

EXHIBIT "B"

TERREBONNE PARISH CONSOLIDATED GOVERNMENT
P.O. BOX 2768
HOUMA, LA 70361

DAILY SAFETY AND CONSTRUCTION QUALITY CONTROL REPORT
(See Paragraph 6.29 of Section "I" for Instructions)

NAME:

PARISH PROJECT 23-SEW-77

CONTRACTOR/SUBCONTRACTOR AND AREA OF RESPONSIBILITY

CONTRACTOR

SUBCONTRACTOR

1. WEATHER

TIDE: _____ feet SKIES: (Clear) (Partly Cloudy) (Cloudy)

RAIN: _____ inches TEMPERATURE:

2. DAILY TOTALS OF WORK PERFORMED

| ITEM NO. | DESCRIPTION | PREVIOUS | TODAY | TOTAL | NO. | HRS. |
|-----------------|--------------------|-----------------|--------------|--------------|------------|-------------|
|-----------------|--------------------|-----------------|--------------|--------------|------------|-------------|

REPORT NO. _____
DATE:

PAGE 2 OF 3

EXHIBIT "B"

TERREBONNE PARISH CONSOLIDATED GOVERNMENT

DAILY SAFETY AND CONSTRUCTION QUALITY CONTROL REPORT

3. MAJOR EQUIPMENT USED

4. MANPOWER

DESCRIPTION

HOURS

MAN/JOB

DESCRIPTION/HRS

5. WORK PERFORMED TODAY INCLUDING STATION TO STATION LIMITS

6. RESULTS OF QUALITY CONTROL INSPECTIONS

REPORT NO. _____
DATE:

PAGE 3 OF 3

EXHIBIT "B"

TERREBONNE PARISH CONSOLIDATED GOVERNMENT

DAILY SAFETY AND CONSTRUCTION QUALITY CONTROL REPORT

7. INSTRUCTIONS RECEIVED

8. REMARKS (Cover any conflicts in plans or specification)

9. DAILY SAFETY INSPECTIONS

CONTRACTOR'S CERTIFICATION: I CERTIFY THAT THIS REPORT IS COMPLETE AND CORRECT AND ALL MATERIAL, EQUIPMENT AND WORK DURING THIS REPORTING PERIOD WERE IN STRICT COMPLIANCE WITH THE PLANS AND SPECIFICATIONS EXCEPT AS OTHERWISE NOTED

CONTRACTOR'S AUTHORIZED REPRESENTATIVE

SECTION J
SPECIAL PROVISIONS

SECTION J

SPECIAL PROVISIONS

1.01 The ENGINEER for this project is:

GIS Engineering, LLC
Coastal Design & Infrastructure
197 Elysian Drive
Houma, LA 70363

The Project Engineer is KEVAN D. KEISER, P.E.

1.02 The OWNER is the “TERREBONNE PARISH CONSOLIDATED GOVERNMENT”

1.03 The contract time as stipulated in the Proposal Form is One Hundred and Twenty (120) calendar days for substantial completion, with a forty-five (45) day clear lien period required prior to final payment.

1.04 The budget for this project is \$1,100,000. Should all bids exceed the available budget, the project will only be awarded in the event that the Terrebonne Parish Consolidated Government approves additional funds.

1.05 Liquidated damages, as set forth in Sections B – Instructions to Bidders, Section F - Contract and Section I - General Conditions is One Thousand Five Hundred dollars (\$1,500.00) per day.

1.06 Time Constraints - By submitting a proposal, the CONTRACTOR is certifying that he understands the required time constraints on the construction period of this contract and that he will incorporate the level of effort required to complete all specified Work within the required time frame. The contract time can be adjusted as provided in Section I – General Conditions, Article 12. In computing extensions due to abnormal weather conditions, the following chart will be used to determine normal anticipated days lost due to rain:

| | |
|-------------------|--------------------|
| January - 5 days | July - 7 days |
| February - 5 days | August - 7 days |
| March - 4 days | September – 5 days |
| April - 4 days | October 3 - days |
| May - 4 days | November - 3 days |
| June - 5 days | December - 4 days |

Days in excess of the above on a cumulative basis shall be considered “abnormal” per Section I, General Conditions, Article 12. This is a calendar day contract. Normal working hours shall be defined as CONTRACTOR’s daylight hours working period occurring between the hours set forth as beginning 7:00a.m.and ending at 6:00p.m. Work during times other than specified above shall only be upon written permission from the OWNER.

1.07 CONTRACTOR shall be cognizant of the Load Limits that have been established on the local streets adjacent and leading to the project site. All material hauling operations shall be performed in an appropriate manner such that the street load limits are not ever exceeded.

1.08 Intent -Provisions of these Special Provisions shall supersede and take precedence over conflicting counterpart provisions located elsewhere in the contract documents.

No provisions under this section shall be construed as relieving the CONTRACTOR from his contractual obligations in the performance and satisfactory completion of all Work as specified and contracted for in said contract documents, except as may be duly authorized in writing by the OWNER.

CONTRACTOR is responsible for all testing associated with the contract documents. OWNER may, at his own expense, perform additional testing for acceptance purposes.

1.09 Scope of Work - The Work to be performed under the various bid items for this contract shall include all plant, processing, tools, supplies, labor, materials, equipment, superintendence, and incidentals which may be required for the construction unless otherwise specified for a particular bid item.

Forms, Plans, and Specifications - The Work shall conform to the plans titled,

“SOUTH WASTEWATER TREATMENT PLANT

HURRICANE IDA LEVEE REHABILITATION CELL NO. 1

PARISH PROJECT NO. 23-SEW-77” all of which form a part of the contract documents.

1.10 Maintenance of Drainage - The CONTRACTOR shall maintain adequate drainage during construction. The CONTRACTOR shall provide for the removal of water from the land-based Work area and areas adjacent and shall maintain the Work area reasonably dry at all times. No measurement of payment will be made for maintenance of drainage. Payment will be distributed throughout the existing bid items. The CONTRACTOR shall include any and all costs for maintenance of drainage in the contract prices for items of work to which the work is incidental thereto.

1.11 Communication - The CONTRACTOR shall have someone available to take calls at all times. He shall provide the OWNER and ENGINEER with a local night telephone number to call so that he may be advised of any emergency, trouble, or other matter needing his attention. The emergency telephone number should be displayed on barricades and/or on equipment on the job site.

1.12 Sanitation Facility - Employee sanitation facilities shall be provided and maintained by the CONTRACTOR.

1.13 The CONTRACTOR shall be responsible for protecting from damage during entry of large equipment, any fencing, gates, etc. Damaged or removed fencing, gates, etc. shall be replaced in kind at no direct pay. Damage to any culverts along access roads shall be replaced in kind at no direct pay.

- 1.14 The CONTRACTOR shall be responsible for eliminating mud and debris from vehicles that could be spilled onto public roads. The CONTRACTOR is responsible for thorough wash down of vehicles where necessary to eliminate mud, tracking, spillage and/or other surface pollution from equipment and operations from entering public streets. The CONTRACTOR shall slope washdown area to promote positive drainage of all truck washdown waste water using existing drainage at the site. Turbid run-off water shall be kept out of canals. Sediment shall be kept out of canals. Sediment shall be kept out of drainage system. Sediment removed shall be disposed of at the proper location indicated by the ENGINEER.
- 1.15 Tax Exemption – This project is exempt from State Sales Tax. The successful bidder will be provided with the appropriate documentation.
- 1.16 All known utilities within the limits of the Work, such as pipes, communication lines, power lines, etc., that would interfere with construction Work will be protected in place. Any unidentified pipes or structures which may be found within the limits of the Work during the course of construction shall not be disturbed nor shall construction or excavation be performed at these locations unless and until approved by the ENGINEER.
- 1.17 CONTRACTOR shall contact each pipeline company representative at least 72 hours prior to commencing any work activities near or over pipeline crossings. See below Utility Contact Information:
- One Call Office Toll Free: 800-584-4274
Office: 225-275-3700
- 1.18 Insurance will not be measured for payment. Insurance shall be included in the cost of all the other bid items.
- 1.19 Construction Schedule – Upon contract award, the successful bidder shall be required to submit a construction schedule. Construction schedule shall be updated monthly and submitted with the application for payment.
- 1.20 The CONTRACTOR should completely inform himself relative to the tidal conditions and water levels near the site. CONTRACTOR should be aware that these tidal conditions and water levels may vary during construction, and shall make proper provisions to accommodate construction schedule accordingly.
- 1.21 All required records, reports, submittals, etc. shall be provided as per specifications and shall be approved prior to payment of each item.
- 1.22 The CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders, RFI's and other written interpretations and clarifications in good order and annotated to show all changes made during the construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

- 1.23 A set of red line As-Built Drawings shall be maintained up to date by the CONTRACTOR. The As Built set of drawings shall indicate all changes and clarifications that occur during the project and shall be delivered to the ENGINEER upon completion of the work. All revisions shall be shown in red and be easily distinguishable from the original design. The As-Built drawings shall be stamped by a professional surveyor licensed in the state of Louisiana.
- 1.24 An ASCII point file showing all control points of the embankment including embankment centerline, crown, embankment toes, and berm toes, shall accompany all survey submittals (final As-Built and any interim submittals for payment). The point files shall be taken at 200-foot intervals and at all changes of direction and shall include the following information: point number, northing (NAD 83 US. FT.), easting (NAD 83 US. FT.), elevation (NAVD 88 FT.), and the description, which shall include abbreviations indicating whether it is the embankment toe, edge of crown, crown centerline, berm break point, berm toe, or natural ground, edge of ditch, bottom of ditch and any other distinguishing descriptions.
- 1.25 For all Roadway and Bridge design not specified in the supplemental specifications or on the plan sheets, reference “Louisiana Standard Specifications for Roads and Bridges”, latest Edition (LA DOTD Blue Book). A printed copy of the project specifications and plans shall be kept on site by the CONTRACTOR at all times.
- 1.26 Substantial Completion – Substantial completion for the proposed project will be granted upon completion and successful operation of the following items:
- Installation of concrete mats for erosion control will also be installed along the interior levee side slopes, with the intent to reduce future erosion on the levee.
 - Installation of levee embankment to the dimensions, lines, and grade as shown on the Post-28 day survey previously reviewed and approved by the ENGINEER.
- 1.27 Modifications to Embankment Section – The elevations, slopes, and overbuild by station may be adjusted by the ENGINEER during construction. CONTRACTOR payment for embankment shall be sole reimbursement for placing material either as shown on plans, or as modified by ENGINEER during construction.
- 1.28 CONTRACTOR shall remove any existing limestone located on the levee surface prior to installation of the new levee fill. CONTRACTOR shall replace limestone to its original location once new levee fill installation is completed.
- 1.29 CONTRACTOR shall install markers (stakes, flagging, etc.) to indicate stationing every 100 feet for the entire length of the alignment. Markers shall be maintained throughout the duration of the project.
- 1.30 CONTRACTOR shall provide pad locks for the project at all gate locations.
- 1.31 CONTRACTOR shall be licensed in the State of Louisiana under the following, either or both, classifications:
- TYPE II – HIGHWAY, STREET AND BRIDGE CONSTRUCTION
 - TYPE III – HEAVY CONSTRUCTION

- 1.32 Within 30 days of the date of Notice to Proceed, submit to the ENGINEER and the OWNER, for approval, a Hurricane Preparedness Plan. The Plan shall describe in detail the necessary measures which the CONTRACTOR will perform, at no additional costs to the OWNER, in case of a hurricane warning. Revise Plan as required by the ENGINEER and OWNER.
- 1.33 In the event of inclement weather, the CONTRACTOR shall protect the Work and materials from damage or injury from the weather. If, in the opinion of the ENGINEER, any portion of the Work or materials has been damaged by reason of failure on the part of the CONTRACTOR to so protect the Work, such Work and materials shall be removed and replaced with new materials and Work to the satisfaction of the ENGINEER.
- 1.34 A Work Plan including description and schedule of activities to be performed, as well as equipment to be utilized for the proposed levee construction, as required in the Contract Documents and Drawings, shall be submitted to the ENGINEER for review and approval upon execution of the Construction Contract, but no later than three (3) days prior to the Pre-Construction Meeting.
- 1.35 CONTRACTOR shall take careful consideration on the equipment to be used for levee fill material transportation as existing site conditions may not be suitable for certain types of equipment.
- 1.36 Levee construction to the lines and grades as shown on the Contract Drawings may require fill material to be placed in water. CONTRACTOR to take necessary precaution as to avoid excessive fill material to be lost during placement.

SECTION K
FEMA CONTRACT COMPLIANCE PROVISIONS

Section K FEMA Contract Compliance Provisions

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

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.

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, such termination shall be automatically converted to a termination for convenience under and payment made as provided under this Section.

Equal Employment Opportunity

The regulation at 41 C.F.R. § 60-1.4(b) requires, except as otherwise provided or exempted in 41 C.F.R. Part 60, the insertion of the following contract clause: "During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during

Section K FEMA Contract Compliance Provisions

employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government

Section K FEMA Contract Compliance Provisions

contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a state or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and *the* Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain

Section K FEMA Contract Compliance Provisions

from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.”

Contract Work Hours and Safety Standards Act

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
3. Withholding for unpaid wages and liquidated damages. The Terrebonne Parish Consolidated Government shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.”

Section K FEMA Contract Compliance Provisions

5. The contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid.
6. Records to be maintained under this provision shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Homeland Security, the Federal Emergency Management Agency, and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.”

Clean Air Act and Federal Water Pollution Control Act

“Clean Air Act

The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 *et seq.*

The contractor agrees to report each violation to the Terrebonne Parish Consolidated Government and understands and agrees that the Terrebonne Parish Consolidated Government will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency (FEMA), and the appropriate [Environmental Protection Agency Regional Office](#).

The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal assistance provided by FEMA. “Federal Water Pollution Control Act”

The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 *et seq.*

The contractor agrees to report each violation to the Terrebonne Parish Consolidated Government and understands and agrees that the Terrebonne Parish Consolidated Government will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency (FEMA), and the appropriate [Environmental Protection Agency Regional Office](#).

The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with federal assistance provided by FEMA.”

Section K FEMA Contract Compliance Provisions

Suspension and Debarment

This contract is a covered transaction for purposes of 2 C.F.R. Part 180 and 2 C.F.R. Part 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

The contractor must comply with 2 C.F.R. Part 180, subpart C and 2C.F.R. Part 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by Terrebonne Parish Consolidated Government. If it is later determined that the contractor did not comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, in addition to remedies available to Terrebonne Parish Consolidated Government, the federal government may pursue available remedies, including but not limited to suspension and/or debarment.

The bidder or proposer agrees to comply with the requirements of 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.”

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

If applicable, contractors must sign and submit the following certification to the NFE with each bid or offer exceeding \$100,000:

“APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

Section K FEMA Contract Compliance Provisions

If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure."

At the end of the certification language, FEMA recommends including the following signature line.

"The Contractor, _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

Procurement of Recovered Materials

Section K FEMA Contract Compliance Provisions

“In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

Competitively within a timeframe providing for compliance with the contract performance schedule;

Meeting contract performance requirements; or At a reasonable price.

Information about this requirement, along with the list of EPA-designated items, is available at EPA’s Comprehensive Procurement Guidelines webpage:
<https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.”

Prohibition on Contracting for Covered Telecommunications Equipment or Services

“Prohibition on Contracting for Covered Telecommunications Equipment or Services

(a) *Definitions.* As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause—

(b) *Prohibitions.*

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:

(i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

Section K FEMA Contract Compliance Provisions

- (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) *Exceptions.*

- (1) This clause does not prohibit contractors from providing—
 - (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
 - (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
- (2) By necessary implication and regulation, the prohibitions also do not apply to:
 - (i) Covered telecommunications equipment or services that:
 - i. Are *not used* as a substantial or essential component of any system; *and*
 - ii. Are *not used* as critical technology of any system.
 - (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) *Reporting requirement.*

- (1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.

Section K FEMA Contract Compliance Provisions

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

- (i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts.* The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

Domestic Preferences for Procurements

As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

Manufactured products mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.”

Access to Records

“The Contractor agrees to provide Terrebonne Parish Consolidated Government, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

Section K FEMA Contract Compliance Provisions

The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, the Terrebonne Parish Consolidated Government and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

Changes

To be allowable under a FEMA grant or cooperative agreement award, the cost of any contract change, modification, amendment, addendum, change order, or constructive change must be necessary, allocable, within the scope of the grant or cooperative agreement, reasonable for the scope of work, and otherwise allowable.

DHS Seal, Logo, and Flags

The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontracts.

Compliance with Federal Law, Regulations, and Executive Orders and Acknowledgement of Federal Funding

This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The contractor will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

No Obligation by Federal Government

The federal government is not a party to this contract and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

Program Fraud and False or Fraudulent Statements or Related Acts

The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

Section K

FEMA Contract Compliance Provisions

Affirmative Socioeconomic Steps

If subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

SECTION L
TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

| | |
|------------------|---------------------------------------|
| SECTION 01 10 10 | MOBILIZATION AND DEMOBILIZATION |
| SECTION 0 13 56 | STORM WATER POLLUTION PREVENTION PLAN |
| SECTION 0 22 31 | CLEARING AND GRUBBING |
| SECTION 0 23 00 | EMBANKMENT |
| SECTION 0 29 22 | SEEDING |
| SECTION 01 01 02 | SURVEYING |
| SECTION 02 65 1 | CONCRETE MATS |
| SECTION 02 71 3 | NO. 610 LIMESTONE |

SECTION 01 10 10
MOBILIZATION AND DEMOBILIZATION

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
MOBILIZATION AND DEMOBILIZATION
SECTION NO. 01 10 10**

TABLE OF CONTENTS

1.0 GENERAL 1
 1.1 DESCRIPTION..... 1
 1.2 MEASUREMENT 1
 1.3 PAYMENT 1

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
MOBILIZATION AND DEMOBILIZATION
SECTION NO. 01010**

1.0 GENERAL

1.1 DESCRIPTION

This Work consists of preparatory work and operations, including those necessary for movement of personnel, equipment supplies and incidentals to the project site; the establishment of offices, buildings and other facilities necessary for Work on the project; the cost of bonds and any required insurance; and other pre-construction expenses necessary for start of the Work, excluding the cost of construction materials.

This Work shall also consist of post construction Work and operations, including those necessary to undo/remove any of the above mentioned items.

1.2 MEASUREMENT

1.2.1 Arbitrary Mobilization by CONTRACTOR

The OWNER will pay for mobilization and demobilization only once. Should the CONTRACTOR elect to demobilize prior to completing the project, such demobilization and subsequent remobilization shall be at no cost to the OWNER.

1.2.2 Ratio of Mobilization and Demobilization Effort

Sixty percent (60%) of the lump sum price will be paid to the CONTRACTOR upon completion of his mobilization at the work site and the remaining forty percent (40%) will be paid to the CONTRACTOR upon completion of demobilization.

1.2.3 Justification of Mobilization Costs

In the event that the ENGINEER considers the amount in this item, sixty percent (60%) and forty percent (40%) which represents mobilization and demobilization respectively, does not bear a reasonable relation to the cost of the work in this contract, the ENGINEER 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 ENGINEER will result in payment of actual mobilization costs, as determined by the ENGINEER 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 ENGINEER is not subject to appeal.

1.3 PAYMENT

All costs connected with mobilization and demobilization of all the CONTRACTOR's plant, equipment, personnel, and those of his subcontractors and such others costs as may be denoted in the Contract Documents shall be paid at the contract lump sum price for Bid Item No. 01010-1 "Mobilization and Demobilization."

END OF SECTION

SECTION 0 13 56

STORM WATER POLLUTION PREVENTION PLAN

**STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356**



TABLE OF CONTENTS

1.0 GENERAL..... 1
 1.1 SCOPE..... 1
 1.2 REFERENCES..... 1
 1.3 MEASUREMENT AND PAYMENT..... 1
 1.4 DEFINITIONS 1
 1.5 GENERAL 2
 1.6 RECORD RETENTION REQUIREMENTS 2
 1.7 MAINTENANCE AND SURVEILLANCE FEES 3
 1.8 EROSION AND SEDIMENT CONTROLS..... 3
2.0 PRODUCTS..... 4
3.0 EXECUTION..... 4
 3.1 MAINTENANCE..... 4
 3.2 INSPECTIONS 5

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356

1.0 GENERAL

1.1 SCOPE

The Work specified in this section consists of the CONTRACTOR preparing a Storm Water Pollution Prevention Plan (SWPPP) to meet the requirements of General Permit No. LAR200000 Authorization to Discharge under the Louisiana Pollutant Discharge Elimination System (LPDES) for land disturbing activities for small constructions greater than 1 acre, but less than 5 acres. The General Permit has been included as a reference at the end of this technical specification. The purpose of the SWPPP is to implement measures to control soil erosion and the resulting sediment to the extent necessary to prevent sediment from leaving the Project rights-of-ways and prevent pollution of any water body caused by the runoff from the areas of construction activities under this Project. The requirements of these Specifications are supplemental to and shall become part of the overall environmental protection. The CONTRACTOR and all his Subcontractors shall comply with the provisions of the SWPPP.

1.2 REFERENCES

STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES
PERMIT NO. LAR200000 (2018) Authorization to Discharge under the Louisiana Pollutant Discharge Elimination System

1.3 MEASUREMENT AND PAYMENT

1.3.1 SWPPP

No separate measurement or payment will be made for work required by this section.

1.3.2 Other SWPPP Measures

The CONTRACTOR can include in his SWPPP, the proposed installation of other measures to minimize sediment transport from areas disturbed by the proposed construction activities, but those measures shall not be measured and paid under this contract. Other measures can include hay bales and sediment traps.

1.4 DEFINITIONS

Construction Owner - The construction owner is the party that has operational control over plans and specifications including the ability to make changes to those items. The Terrebonne Parish Consolidated Government is the Construction Owner and OWNER.

Construction Operator - The construction operator is the party having day-to-day operational control over those activities at a Project site which are necessary to ensure compliance with the SWPPP or other permit conditions. The CONTRACTOR is the Construction Operator and Permittee.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356

Notice of Intent (NOI) – A document that is completed and submitted to the Louisiana Department of Environmental Quality (LDEQ) as application for coverage to discharge under Permit No. LAR200000.

Please note that a NOI is not required for coverage under the Louisiana Storm Water General Permit for small construction activities.

Notice of Termination (NOT) – A document that is completed and submitted to the LDEQ to terminate permission to discharge under Permit No. LAR200000. The NOT should be filed when the Permittee is no longer the Construction Operator of the Project, or when termination of storm water discharge has been accomplished. **Please note that a NOT is not required for coverage under the Louisiana Storm Water General Permit for small construction activities.**

1.5 GENERAL

The CONTRACTOR shall implement the Storm Water Pollution Prevention Plan (SWPPP) that he prepares in a manner that will meet the requirements of the Louisiana Pollution Discharge Elimination System (LPDES) permit, Storm Water General Permit to Construction Activities, Permit No. LAR200000, effective March 2018.

The CONTRACTOR is advised that deviations from the SWPPP could result in the requirement for the OWNER to reanalyze the project from an environmental stand point. Deviations from the SWPPP erosion control requirements as specified herein may have an environmental impact will require an extended review, processing and approval time by the ENGINEER.

1.6 RECORD RETENTION REQUIREMENTS

Records of the SWPPP, and any reports required by Permit No. LAR200000 shall be retained by the Permittee for at least three years from the date that the site is finally stabilized.

1.6.1 SWPPP Accessibility

A copy of the SWPPP required by Permit No. LAR200000 shall be retained at the construction site (or other local location accessible to the State and Federal regulatory agencies and the public) from the date of construction initiation to the date of stabilization. The Permittee with day-to-day operational control over SWPPP implementation shall have a copy of the plan available at a central location on-site for the use of all operators and those identified as having responsibilities under the SWPPP whenever they are on the construction site. A notice shall be posted near the main entrance to the construction site with the following information: (1) the name and telephone number of a local contact person; (2) a brief description of the project; and 3) the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356



1.6.2 Activity Records

The dates of the following activities shall be recorded:

- (1) Major grading activities occurred
- (2) Construction activities temporarily or permanently ceased
- (3) Stabilization measures were initiated

1.6.3 LDEQ Correspondence

Any written correspondence concerning the SWPPP, or discharges from any facility covered under Permit No. LAR200000 shall be identified by permit number, if one has been assigned. The following is the LDEQ mailing address:

Louisiana Department of Environmental Quality
Office of Environmental Services
P.O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Permits Division

1.7 MAINTENANCE AND SURVEILLANCE FEES

In accordance with the General Conditions: CONTRACTOR's Responsibilities, the CONTRACTOR shall, without additional expense to the OWNER, be responsible for paying any state required annual maintenance and surveillance fees for work associated with coverage under Permit No. LAR200000.

1.8 EROSION AND SEDIMENT CONTROLS

The controls and measures required for controlling sediment during construction are described below.

1.8.1 Stabilization Controls

The stabilization practices to be implemented shall include seeding as specified in Section 02922 of these Technical Specifications. On the Daily Safety and Construction Quality Control Report, the CONTRACTOR shall record the dates when the major grading activities occur, (e.g., clearing and grubbing, embankment, placement and compaction, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Stabilization practices shall be initiated as soon as practicable, but no more than 14 days, in any portion of the site where construction activities have temporarily or permanently ceased.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356



1.8.2 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity [temporarily or] permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.

1.8.3 No Activity for Less Than 21 Days

Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased. Stabilization practices shall be initiated on that portion of the site by the fourteenth day in the case where construction activities will not resume within 21 days after construction activities have ceased

1.8.4 Structural Controls

Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff.

2.0 PRODUCTS

NOT USED

3.0 EXECUTION

3.1 MAINTENANCE

The CONTRACTOR shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The CONTRACTOR shall install, construct, repair, and maintain temporary erosion control within 7 calendar days of being instructed to do so by the ENGINEER. Temporary erosion control features shall be inspected at least once every 14 calendar days and within 24 hours after a rainfall event of 0.5 inches or greater. The features are to be maintained as described below or replaced at no direct pay. The following procedures shall be followed to maintain the protective measures.

**STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
STORM WATER POLLUTION PREVENTION PLAN
SECTION NO. 01356**

3.2 INSPECTIONS

3.2.1 General

The CONTRACTOR shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every fourteen (14) calendar days, before anticipated storm events(or series of storm events such as intermittent showers over one or more days) expected to cause a significant amount of runoff, and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection shall be conducted at least once every two weeks.

3.2.2 Inspection Details

Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

3.2.3 Inspection Reports

For each inspection conducted, the CONTRACTOR shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, maintenance performed, and actions taken. The report shall be furnished to the ENGINEER within 24 hours of the inspection as a part of the CONTRACTOR's Daily Safety and Construction Quality Control Report. A copy of the Report shall be maintained on the job site.

END OF SECTION

SECTION 0 22 31
CLEARING AND GRUBBING

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
CLEARING AND GRUBBING
SECTION NO. 02231**



TABLE OF CONTENTS

1.0 GENERAL1
 1.1 SCOPE1
 1.2 MEASUREMENT AND PAYMENT1
2.0 PRODUCTS1
3.0 EXECUTION1
 3.1 GENERAL REQUIREMENTS1
 3.2 CLEARING1
 3.3 GRUBBING.....2
 3.4 GRUBBING.....3
 3.5 DISPOSAL OF DEBRIS3

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
CLEARING AND GRUBBING
SECTION NO. 02231**

1.0 GENERAL

1.1 SCOPE

The Work covered by this Section consists of furnishing all labor, equipment, and materials, and performing all operations necessary for the clearing, grubbing, and stripping of the areas specified herein, for the removal and disposal of all cleared, grubbed and stripped materials, and for the filling of all holes caused by such operations, as specified herein.

1.2 MEASUREMENT AND PAYMENT

Clearing, grubbing and stripping shall not be measured by quantity; it shall be paid based on overall percent complete. Price and payment shall constitute full compensation for furnishing all labor, material and equipment and performing all operations necessary for clearing, grubbing and stripping of the areas specified herein, for removing and disposing of all cleared, grubbed and stripped materials, for filling holes resulting from such operations.

Payment for clearing, grubbing and stripping shall be made at the applicable contract unit price for the Bid Item as shown below:

| <u>Bid Item No.</u> | <u>Item Description</u> | <u>Unit of Measure</u> |
|---------------------|-------------------------|------------------------|
| 02231-1 | Clearing and Grubbing | Lump Sum |

2.0 PRODUCTS

NOT USED

3.0 EXECUTION

3.1 GENERAL REQUIREMENTS

All clearing, grubbing, and stripping Work for the proposed levee shall be completed at least 500-feet in advance of fill placement but no further than 1,000 feet in advance of fill placement. In locations where work on drainage structures is performed prior to embankment construction, all clearing, grubbing, and stripping shall be completed in advance. If re-growth of vegetation or trees occurs after clearing, grubbing, and stripping, and before placement of fill, the CONTRACTOR will be required to clear, grub, and strip the area again prior to embankment and berm construction, and no payment will be made for this additional clearing, grubbing, and stripping.

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
CLEARING AND GRUBBING
SECTION NO. 02231



3.2 CLEARING

3.2.1 General

Clearing, unless otherwise specified, shall consist of the complete removal above the ground surface of all trees, stumps, down timber snags, brush, vegetation, and loose stone. Clearing shall be performed within the entire width of the proposed levee footprint, and along the proposed headwork structure expansion area as required for installation, or as directed by the ENGINEER.

3.2.2 Merchantable Timber

Merchantable timber remaining within the areas to be cleared on or after the date of award of this contract may be disposed of as the CONTRACTOR sees fit, as long as such merchantable timber is either removed from the right-of-ways indicated on the Drawings or is satisfactorily disposed of in accordance with the provisions of paragraph 3.5.

3.3 GRUBBING

3.3.1 General

Grubbing shall consist of the removal of all stumps, roots, buried logs, and other unsuitable matter.

3.3.2 Embankments and Structures

Grubbing shall be performed within the limits of the proposed levee embankment construction. All roots and other projections over 1 ½-inches in diameter shall be removed to a depth of 3' below the natural surface of the ground. The areas to be grubbed are those specific areas within the limits specified hereinabove from which trees, stumps, down timber, snags, brush, vegetation, and loose stone removed.

3.3.3 Channels and Ditches

All stumps and exposed roots and other obstructions shall be removed from within the limits of all channels and ditches to be constructed.

3.3.4 Borrow Areas

Grubbing of borrow areas will be required to the extent necessary to provide materials free from unsuitable matter. Only those portions of borrow areas from which borrow material will actually be obtained under this contract shall be grubbed to the extent necessary to provide materials free from unsuitable matter.

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
CLEARING AND GRUBBING
SECTION NO. 02231

3.3.5 Filling of Holes

All holes caused by grubbing operations and removal of pipes and drains excluding holes in borrow areas, channels and ditches shall be backfilled with an inorganic clay fill material in 12-inch layers to the elevation of the adjacent ground surface, and each layer compacted to a density at least equal to that of the adjoining undisturbed material.

3.4 GRUBBING

3.4.1 General

Stripping shall consist of the removal of all loose topsoil, organic matter, and other deleterious materials or to the extent necessary.

3.4.2 Embankments and Structures

Stripping shall be performed within the limits of the proposed levee embankment construction, and along the proposed headwork structure expansion area as required for installation, or as directed by the ENGINEER.

3.4.3 Filling of Holes

All holes caused by stripping operations shall be backfilled with an inorganic clay fill material in 12-inch layers to the elevation of the adjacent ground surface, and each layer compacted to a density at least equal to that of the adjoining undisturbed material.

3.5 DISPOSAL OF DEBRIS

3.5.1 General

All debris resulting from clearing, grubbing, and stripping operations shall, at the CONTRACTOR'S option, be disposed of by removal from the site following applicable laws. CONTRACTOR shall comply with all applicable federal, state, and local laws for the selected disposal method. The CONTRACTOR shall make a reasonable effort to channel merchantable material into the commercial market to make beneficial use of materials resulting from clearing and grubbing operations. Windrowing of cut and felled trees will not be acceptable. If chipping is chosen as method of disposal, all chipped material shall be removed from the site of work in accordance of 3.4.2.

3.5.2 Removal from Site of Work

The CONTRACTOR may elect to remove all or part of the debris from the site of the Work. Such disposal shall comply with all applicable federal, state, and local laws. The CONTRACTOR shall, at his/her option, either retain for his/her own use or dispose of by sale or otherwise, such materials of value. The OWNER is not responsible for the protection and safekeeping of any materials retained by the CONTRACTOR. Such materials shall be removed from the site of the Work before the date of completion of the Work. If debris from clearing operations is placed on adjacent property, the

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
CLEARING AND GRUBBING
SECTION NO. 02231**

CONTRACTOR shall obtain, without cost to the OWNER, additional right-of-way for such purposes. Such material shall be so placed as not to interfere with roads, drainage or other improvements and in such a manner as to eliminate the possibility of its entering into channels, ditches, or streams. The CONTRACTOR shall submit written evidence to the ENGINEER that he/she has obtained from the property owner permission for disposal of material on the landowner's property. The written evidence shall consist of an authenticated copy of the conveyance under which the CONTRACTOR acquired the property rights and access thereto, prepared and executed in accordance with the laws of the State of Louisiana. However, delay resulting from acquisition of additional rights-of-way for alternate disposal areas will not qualify as excusable delays if suitable OWNER furnished disposal areas are available.

END OF SECTION

SECTION 0 23 00

EMBANKMENT

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300**



TABLE OF CONTENTS

1.0 GENERAL 1

 1.1 DESCRIPTION..... 1

 1.2 REFERENCES 1

 1.3 MEASUREMENT 2

 1.4 PAYMENT 3

 1.5 QUALITY CONTROL..... 3

 1.6 EQUIPMENT 5

 1.7 SUBMITTALS 5

2.0 PRODUCTS 6

 2.1 GENERAL..... 6

 2.2 EMBANKMENT MATERIAL 6

3.0 EXECUTION 7

 3.1 GEOTECHNICAL TESTING 7

 3.2 SURFACE PREPARATION..... 9

 3.3 PLACEMENT..... 9

 3.4 SLIDES 10

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

1.0 GENERAL

1.1 DESCRIPTION

This Work consists of furnishing all labor, equipment, materials and performing all operations in connection with the construction of the proposed levee embankment. The embankment material shall be placed in loose lifts thickness not exceeding 8 inches, processed and adequately compacted as defined herein to achieve the required minimum shear strength in order to meet the grades, elevations, and slopes as shown on the plans and as herein after specified.

Embankment shall be constructed using fill materials furnished from the CONTRACTOR supplied offsite borrow pit. The offsite borrow pit material shall be transported to the site by the CONTRACTOR.

The CONTRACTOR shall be responsible for all required geotechnical testing, excavation and hauling from the contractor supplied off-site borrow source to the project site.

Any necessary degrading or excavation required for the construction of the new headwork structures shall be performed in accordance with Sections 203 and 802 of the LADOTD Standard Specifications for Roads and Bridges 2016 Edition.

1.2 REFERENCES

The following publications, but referred to before and thereafter by the basic designation only, form a part of this Specification to the extent indicated by the references thereto:

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARD

| | |
|------------|---|
| ASTM D698 | Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12400 ft-lbf/ft ³ (600 kN-m/m ³)) |
| ASTM D1140 | Standard Test Methods for Determining the Amount of Material Finer than 75- μ m (No. 200) Sieve in Soils by Washing |
| ASTM D1556 | Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method |
| ASTM D2216 | Laboratory Determination of Water, (Moisture) Content of Soil and Rock by Mass |
| ASTM D2487 | Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System) |
| ASTM D2974 | Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils |

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

| | |
|------------|---|
| ASTM D3740 | Evaluation of Agencies Engaged in the Testing and/or Inspection of Soil and Rock as used in Engineering Design and Construction |
| ASTM D4318 | Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils |
| ASTM D4643 | Standard Test Method for Determination of Water (Moisture) Content of Soil by Microwave Oven Heating |
| ASTM D6938 | Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) |

UNITED STATES ARMY CORPS OF ENGINEERS (USACE)

EM 1110-2-1913 Design and Construction of Embankments

1.3 MEASUREMENT

1.3.1 Embankment - Hauled in Fill Material

Fill material quantities for the construction of the proposed levee shall be measured by either of the two methods below.

- (a) Net Section Excavated from Borrow Pit: levee fill material shall be measured based on the net section excavated from the CONTRACTOR supplied borrow pit. The quantity of excavated material removed from the borrow pit and to be paid for will be measured by the Cubic Yard (CY) by computing the volume along the centerline between the before-excitation cross sections and the after excavation cross sections using the average end area method. Cross-sections shall be taken by the CONTRACTOR at a maximum of 25' within the borrow area. These surveys shall be stamped by a Registered Land Surveyor in the State of Louisiana. Material removed or wasted from the pit and not used for levee construction will not be measured for payment. This material shall be surveyed and subtracted from the quantity calculations.

Embankment that may be placed beyond the limits presented on the plans shall not be accepted and shall be removed at the expense of the CONTRACTOR. Payment for embankment required beyond that shown on the Contract Drawings and approved by the ENGINEER prior to placement shall be on the basis of the Unit Price Bid per cubic yard as defined herein.

1.3.2 Acceptance of Embankment

Completed segments of the embankment (500' min.) will be inspected for completeness, elevation, width, etc. and allowed to settle for 28 days. Initial surveys (pre 28-day) will not require certification by a licensed professional land surveyor in the State of Louisiana, but shall be performed under the supervision of the ENGINEER. As-built surveys for final acceptance shall be taken after the 28 day period by the CONTRACTOR under the direction of a licensed professional land surveyor in the State of Louisiana,

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300**

and submitted to the ENGINEER for approval. If any portion of the embankment is below the proposed elevation of +8.0' or the typical section has not been achieved after 28 days, the ENGINEER shall require the CONTRACTOR to place additional material prior to acceptance by the ENGINEER. If any portion of the embankment is above +8.3' or 0.3' above the typical section, that portion of the embankment will not be measured for payment. CONTRACTOR may leave the embankment overage in place and does not have to remove the overage. However, this material will be surveyed and subtracted from the quantity calculations. For further surveying requirements reference Section No. 01 01 02 of these Technical Specifications.

1.4 PAYMENT

Payment for items included in this section shall be made at the applicable contract unit price for the Bid Items listed below.

| <u>Bid Item No.</u> | <u>Item Description</u> | <u>Unit of Measure</u> |
|---------------------|--|------------------------|
| 02300-1 | Hauled-In Fill Material for Levee Embankment | Cubic Yard |

Price and payment shall constitute full compensation for transporting/hauling, furnishing all plant, labor, equipment, and materials; placing, spreading, compacting, and maintenance as shown on the drawings and specified herein.

1.5 QUALITY CONTROL

1.5.1 General

The CONTRACTOR shall establish and maintain quality control for embankment construction operations to assure compliance with contract requirements, and maintain records of his/her quality control for all construction operations including but not limited to the following:

- (a) Equipment. Type, size, and suitability for construction of the prescribed Work.
- (b) Materials: Suitability, layout, maintaining existing drainage, moisture control.
- (c) Construction: Layout, maintaining existing drainage, moisture control, thickness of layers, spreading and compacting.
- (d) Grade and Cross Section: Crown width, crown slope, side slopes, and grades. Check fills to determine if placement conforms to prescribed grade and cross section.
- (e) Grade Tolerances: Check fills to determine if placement conforms to prescribed grade and cross section.

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

- (f) Compliance Surveys: After review of embankment work and authorization by ENGINEER and prior to the OWNER's final survey, CONTRACTOR shall furnish plotted cross sections at intervals and locations corresponding to the original survey. Upon completion of suitable reaches of embankment, the CONTRACTOR shall perform, plot and submit compliance cross section surveys at a maximum of 200-foot intervals and all P.I.'s curve P.C.'s, P.T.'s, levee transitions and breakpoints. All sections shall be taken at locations corresponding to the original survey. They shall be plotted by the CONTRACTOR on a minimum scale of 1-inch equals 10 feet horizontally and 1 inch equals 5 feet vertically with the theoretical design cross section and allowable grade tolerances superimposed thereon. Additionally, the CONTRACTOR shall perform, plot, and submit a levee centerline profile with shots taken at a maximum of 200-foot intervals.
- (g) Embankment and Berm Fill: Fill materials to be utilized for levee construction shall be primarily clays (CH) and silty clays (CL) as defined by the Unified Soil Classification System. Large roots and organic matter shall not be placed within the embankment section. Refer to section 3.1 of this specification for soil classification requirements.
- (h) Placement and Compaction of Embankment Fill: For the embankment, compaction will be required to achieve shear strengths assumed for the analysis. The soil should be placed in lifts not exceeding thicknesses of 8 inches scarifying the surface of successive lifts. Embankment fill should be spread and disked to dry back in situ moisture contents to acceptable levels as specified in section 3.1. When proper moisture is achieved, each lift should be compacted to achieve and minimum of 90% compaction, based on the maximum dry density of the standard proctor test results for the material.
- (i) Professional Certification: All surveys shall be performed in the presence of the ENGINEER (or the Engineer's Project Representative). Compliance Surveys shall be performed under the direction of and certified by a Professional Land Surveyor currently licensed in the state of Louisiana.

1.5.2 Truck Measurement

If truck measurement is selected as the measurement method for the proposed embankment construction, the CONTRACTOR shall comply with the following requirements, in conjunction with requirements stated in section 1.3.1 (b) of this specification:

- (a) All dump trucks must obey all LaDOTD rules and regulations.
- (b) All dump trucks must be measured and documented in the presence of the Engineer or Engineers' Representative. Measurements include, but are not limited to, the following:
 - i. Length (inside dimension)
 - ii. Width (inside dimension)
 - iii. Height (inside dimension)
 - iv. Gross Cy ($L*W*H/27$)
 - v. Deductions (If Applicable)
 - vi. Net Cubic Yards (CY)

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

- (c) All dump trucks must be placard with the Contractor's name, size of load (CY), and ID number of dump truck.
- (d) All dump trucks hauling must have the following information:
 - i. Haul tickets must be legible.
 - ii. Tickets shall have the correct CYs, driver's name, truck ID number, ticket number and time of delivery to project site.
- (e) All loads being delivered to the project site shall be accompanied with its corresponding load ticket. No load tickets will be accepted once the dump truck leaves the project site. The Engineers' Representative shall have all load tickets at the end of each work day.
- (f) Any under loaded dump truck not meeting the measurement in cubic yards (CY) as shown on its corresponding load ticket will be deducted or voided.
- (g) All load tickets must be signed by the Engineer or Engineers' Representative.

1.6 EQUIPMENT

Scarifiers, disks, dozers, spreaders, and other equipment shall be types suitable for construction of levee embankment. CONTRACTOR shall include within the Work Plan, as per Special Provision 1.35, specific equipment to be used for the proposed embankment construction. CONTRACTOR to be aware that due to existing site conditions, dump trucks may not be suitable for embankment construction for this project.

1.7 SUBMITTALS

1.7.1 Submittal Package Requirements

The following information shall be submitted by the CONTRACTOR for approval in a single, complete package. Approval of a submittal does not relieve the testing requirements of paragraph 1.5 & 3.1 of this Technical Specification.

- (1) Plotted cross sections.
- (2) Excavation and dewatering plan.

1.7.2 Submittal Package Requirements in Detail

1.7.2.1 Plotted Cross Sections

Plotted cross sections of the borrow area shall be developed in sufficient quantity (maximum of 25-ft. intervals) to give a true representation of the topography of the borrow area. The proposed excavation lines shall be superimposed on these cross sections, so that an accurate computation of the available material can be made.

1.7.2.2 Excavation Plan

The CONTRACTOR shall provide the ENGINEER a plan for clearing, stripping, and excavating materials from the borrow area. In its plan, the CONTRACTOR shall work areas, stockpile areas, etc. The

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

CONTRACTOR shall indicate in writing and show on its layout plans details of the following:

- (1) A stockpile plan for cleared and stripped material and debris to include disposal areas.
- (2) The locations for disposal of wasted material discovered in the borrow area. Location of any haul roads constructed to help the CONTRACTOR in its hauling operations.
- (3) A plan for stockpiling embankment material before it is transported to the project site to include locations, stockpile heights, slopes, and limits.
- (4) The method and route for transporting the excavated material from the CONTRACTOR furnished borrow area to the project site.
- (5) The proposed methods for dewatering or draining and keeping dry during excavation the borrow area excavated under this contract, including any protection dikes constructed to alleviate drainage problems.
- (6) A complete list of excavation and transportation equipment planned for use in its operations.
- (7) The CONTRACTOR'S proposed sequence of excavating the borrow area showing starting and ending work locations.

2.0 PRODUCTS

2.1 GENERAL

- 2.1.1 All embankment material shall be free from masses of organic matter, sticks, branches, roots, and other debris including hazardous and regulated solid wastes.
- 2.1.2 Isolated pieces of wood will not be considered objectionable in the embankment if their length does not exceed 12", their cross sectional area is less than 4 square inches, and they are distributed throughout the fill.
- 2.1.3 No more than 1% by volume of objectionable material shall be contained in the fill material placed in each cubic yard of the levee section.

2.2 EMBANKMENT MATERIAL

The soil used for fill embankment material for the proposed levee construction shall be material furnished by the CONTRACTOR. This material shall be selected as cohesive soil classified in accordance with ASTM D2487 as a CL or CH material with Atterberg Liquid limits no greater than 75. Fill material to be used for levee construction shall have a sand content no greater than 35% by dry weight, a plasticity index (PI) of 10 or greater, and an organic content of 9% or less.

No material shall be used for embankment placement prior to acceptance by the ENGINEER. Material quantity that has been sampled for testing shall be segregated and preserved (stockpile or windrows, etc.) and not placed for embankment pending soils analysis results and approved by the ENGINEER.

**STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300**

2.2.1 UNSUITABLE MATERIAL

Materials which are classified as unsuitable for embankment and berm or fill material are defined as masses of organic matter, sticks, branches, roots, and other debris. As earth from borrow area may contain excessive amounts of wood, isolated pieces of wood will not be considered objectionable in the embankment provided their length does not exceed 1 foot, their cross-sectional area is less than 4 square inches, and they are distributed throughout the fill. Not more than 1 percent (by volume) of objectionable material shall be contained in the earth material placed in each cubic yard of the levee or berm section. Pockets and/or zones of wood shall not be placed in the embankment.

3.0 EXECUTION

3.1 GEOTECHNICAL TESTING

The CONTRACTOR shall perform and pay for all required testing requirements specified herein. All testing shall be performed at and by an independent and accredited geotechnical laboratory. The CONTRACTOR, as a minimum, shall perform the specified number of each of the tests to demonstrate to the satisfaction of the ENGINEER that the fill material to be utilized for embankment construction is in compliance as specified below.

3.1.1 Soil Classification Tests:

Determination of soil classification shall be in accordance with the Unified Soil Classification System defined by ASTM D2487 as CL or CH with Atterberg Limits no greater than 75. The CONTRACTOR shall perform a minimum of one test for every 2,000 cubic yards of material and when visual inspection as directed by the ENGINEER indicates a change in materials. CONTRACTOR shall perform soil classification tests at off-site CONTRACTOR supplied pit.

3.1.2 Moisture Content Tests:

Determination of moisture content shall be performed in accordance with ASTM D2216, ASTM D6938 or ASTM D4643. CONTRACTOR shall perform moisture content tests every 1,000 linear feet of levee embankment per lift or at the direction of the ENGINEER's representative after material is placed on levee before compaction is performed. The CONTRACTOR shall perform the necessary work in moisture control to bring the material within acceptable levels as defined in the range limits below in order to achieve +5% / -3% of optimum moisture. Clay material shall have a moisture content ranging between the following limits:

| <u>Type of Material</u> | <u>Moisture Content (In percent dry weight)</u> | |
|-------------------------|---|----------------|
| | <u>Maximum</u> | <u>Minimum</u> |
| ML | 26 | 15 |
| CL | 30 | 18 |
| CH | 45 | 20 |

Soil classified as ML shall be suitably blended with CH or CL to formulate a material that classifies as a CL before it is loaded for transport.

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

3.1.3 Moisture Density Relationships.

The moisture-density relationships for each different classification of cohesive material utilized shall be determined in accordance with ASTM D698. Prior to placing any fill material containing cohesive material, a minimum of 5 point compaction test shall be performed on representative samples of the material to be used as fill and moisture density relationships curves shall be done at the same frequency as soil classification tests. Additional tests will be required each time a new material is encountered or as directed by the ENGINEER. The moisture-density curves will be compiled to form a family of curves which will be utilized to estimate optimum properties (maximum dry density and optimum moisture content) to be used with field density testing.

3.1.4 In-Place Density Testing.

In-place density tests for compacted fill material shall be made in accordance with ASTM D1556, or ASTM D6938, and shall be made at a minimum frequency of one density test per lift per 200 linear feet per lift placed and compacted, or at the direction of the ENGINEER's representative. A lift on any one side of the existing embankment will be considered one lift. The location of the test shall be representative of the area being tested or as directed by the ENGINEER. For each in-place density test, the CONTRACTOR shall determine the percent of ASTM D698 maximum dry density and the percent (plus 5 or minus 3) optimum water content using the control compaction curves for the same type of material. One standard proctor test shall be performed every 1,000 linear feet of embankment or at the direction of the ENGINEER's representative. Standard proctor tests shall be performed in accordance with ASTM D698. The appropriate control compaction curve shall be selected by using the visual soil classification test.

The results of the soil classification test, in-place density test, and moisture content test shall be reported to the ENGINEER's representative by the end of the working day following the in-place density test. Embankment material not meeting the required specifications for in-place density shall be retested after additional compaction has been completed. When nuclear method is used for in-place density testing, the first test and every tenth test thereafter for each material type shall include a sand cone correlation test in accordance with the location of the nuclear test, shall include a nominal 6 inch diameter sand cone, and shall include a minimum wet soil weight of 6 pounds extracted from the hole. Nuclear density equipment shall not be used during rain. The density correlations shall be submitted with test results. Each transmittal including density test data shall include a summary of all density correlations for the job neatly prepared on a summary sheet including at a minimum:

- (1) Meter serial number and operators initials.
- (2) Standard count for each test.
- (3) Material type.
- (4) Probe depth.
- (5) Moisture content by each test method and the deviation.
- (6) Wet density by each test method and the deviation.

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

The ENGINEER may request additional tests if there is a reason to doubt the adequacy of the compaction, or special compaction procedures are being used, or materials change, or if the ENGINEER determines that the CONTRACTOR's testing is inadequate or the CONTRACTOR is concentrating on backfill and fill operations in a relatively concentrated area.

3.1.5 Organic Content Tests

Determination of Organic Content shall be performed in accordance with ASTM D2974, Method C. Organic Content should be less than 9%. The CONTRACTOR shall perform organic content tests at the CONTRACTOR supplied borrow pit every 2,000 cubic yards.

3.1.6 Sand Content Tests

Determination of Sand Content shall be performed in accordance with ASTM D1140 at the CONTRACTOR Supplied Pit every 2,000 cubic yards. Sand Content should be less than 35% by dry weight.

3.2 SURFACE PREPARATION

After clearing and grubbing and any required excavation of the proposed embankment foundation, test pits and other similar cavities and depressions shall be broken down, where so directed, to flatten out the slopes. The entire earth surface on or against which embankment fill is to be placed shall be thoroughly broken to a depth of 6 inches. If for any cause, this broken surface becomes compacted in such a manner that, in the opinion of the ENGINEER, a plane of seepage or weakness might be induced, it shall again be adequately scarified before depositing material thereon. All scarifying and breaking of ground surface shall be done parallel to the centerline of the levee. All of the foregoing Work shall be completed at least 200 feet but not greater than 500 feet in advance of the embankment and berm construction.

Special attention should be given to any weak areas or depressions discovered during the excavation operation. When possible, these areas, including holes from stump/root removal, should be thoroughly cleaned out and backfilled with an inorganic clay fill material placed and compacted under controlled conditions. However, if compaction is not possible, a "bridge lift" to provide dry conditions for placement and compaction of overlying materials may be required in these areas. This bridge lift may be compacted by several passes of a bulldozer and without regard to compaction control.

No fill material for the construction of the proposed embankment shall be placed upon frozen ground.

3.3 PLACEMENT

3.3.1 Compacted Embankment

Material shall be placed in loose lift thicknesses not exceeding 8 inches and compacted to at least 90% of its maximum dry density. To facilitate compaction, fill should be placed at a moisture content within the limits of plus 5 to minus 3 percentage points of optimum moisture content (refer to section 3.1.2 above). After a layer of material has been dumped and spread, it shall be harrowed to break up and blend the fill materials and to obtain uniform moisture distribution. Harrowing shall be performed with a heavy disk plow, or other approved harrow, to the full depth of the layer. If one pass of the harrow does not accomplish

STP HURRICANE IDA LEVEE REHABILITATION CELL NO. 1
TECHNICAL SPECIFICATIONS
EMBANKMENT
SECTION NO. 02300

the breaking up and blending of the materials, additional passes of the harrow shall be required, but in no case will more than three passes of the harrow on any one layer be required for this purpose. When the moisture content and the condition of the layer are satisfactory, the lift shall be compacted to a minimum of 90 percent of the maximum dry density as determined by the CONTRACTOR in accordance with ASTM D698. In areas which are not accessible by roller, the fill shall be placed in layers not more than 4 inches in uncompacted depth and compacted with an approved hand operated compactor to a density equal to that obtained in other areas which are accessible to rollers. Dumping, spreading, sprinkling, and compacting may be performed at the same time at different points along a section when there is sufficient area to permit these operations to proceed simultaneously. Compaction equipment shall be operated such that the strip being traversed by the roller shall overlap the rolled adjacent strip by not less than 3 feet.

3.3.2 Uncompacted Embankment

This material will be placed by uncompacted methods in areas of standing water, in locations where existing grades are below mean water levels, where excavations to remove stumps, roots, buried logs, old foundations, or other objectionable material has proceeded below the water table, or where otherwise called out in the plans. The purpose of the bridge lift is to raise the working grade such that levee material compaction is achievable and/or to provide dry conditions for the placement of geosynthetic reinforcement. These materials will be placed by mechanical methods using offsite borrow. Onsite dredging or hydraulic placement of this material is not acceptable for the bridge lift. Uncompacted levee fill should be placed in lifts of no more than 2-ft thickness. Depending upon the depth of the standing water and moisture content of the uncompacted fill, consideration should be given to placing an initial fill lift for the entire length of the levee alignment before proceeding with subsequent lifts as a measure for mitigation of mud waves. This method also initiates consolidation of foundation soils as well as decreases the potential for lateral spread and slope failure of uncompacted fill material during levee construction.

3.4 SLIDES

Should a slide occur in any part of the embankment during its construction, or after its completion, but prior to its acceptance, the CONTRACTOR shall, upon written order of the ENGINEER, either cut out and remove the slide from the embankment and then rebuild that portion of the embankment, or construct a stability berm of such dimension, and placed in such manner, as the ENGINEER shall prescribe. In case the slide is caused through fault of the CONTRACTOR, the foregoing operations shall be performed at no additional cost to the OWNER. In case the slide is not the fault of the CONTRACTOR, the repair shall be made by an equitable adjustment. The method of slide correction will be determined by the ENGINEER.

END OF SECTION

SECTION 0 29 22

SEEDING

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922



TABLE OF CONTENTS

1.0 GENERAL1

 1.1 SCOPE1

 1.2 MEASUREMENT1

 1.3 PAYMENT1

 1.4 SUBMITTALS1

 1.5 QUALITY CONTROL2

 1.6 AREAS TO BE TREATED2

2.0 PRODUCTS2

 2.1 SEED2

 2.2 WATER3

 2.3 SOIL FOR REPAIRS3

3.0 EXECUTION3

 3.1 GROUND PREPARATION3

 3.2 SEEDING APPLICATION4

 3.3 WATERING5

 3.4 SEED ESTABLISHMENT PERIOD5

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922

1.0 GENERAL

1.1 SCOPE

The Work provided for herein consists of furnishing all labor, equipment, and materials, and performing all operations necessary for finished dressing and seeding areas as specified herein. Seeding of the new embankment shall be performed upon completion and acceptance by the ENGINEER of embankment construction in minimum lengths of 200'. This Work consists of preparing seed beds and furnishing and sowing grass seed on the areas as directed by the ENGINEER.

Acceptance of the entire seeded area will be based on the ENGINEER's visual inspection and determination of the required coverage.

1.2 MEASUREMENT

Measurement for seeding satisfactorily performed will be made by the acre of seed installed. Acreage will be determined from surface areas computed from the theoretical gross cross section of embankment seeded. Measurement will be to the nearest foot and units computed to the nearest one-hundredth of an acre. No measurement will be made for placement of material required for any necessary repairs as described in Paragraph 3.1.3 below.

1.3 PAYMENT

All cost associated with seeding, including materials, equipment and labor, shall be included in the contract unit price per acre for Bid Item No. 02922-1 "Seeding." All seeding operations shall be performed under the supervision of the ENGINEER. Prices and payments shall constitute full compensation for furnishing all labor, materials and equipment and performing the work, including any necessary repairs, in accordance with these Specifications.

Should there be defective areas where seed has not germinated by the end of the contract period, the CONTRACTOR shall re-seed the defective areas at no direct pay. Any additional seeding required for re-seeding efforts will not be measured for payment.

1.4 SUBMITTALS

- 1.4.1 The CONTRACTOR will be required to submit a Seeding Plan, which lists the equipment and procedures to be used during seeding application.
- 1.4.2 The CONTRACTOR shall furnish duplicate signed copies of statements certifying that each container of seed delivered is laved in accordance with the Federal Seed Act. This certification shall be obtained from the supplier and shall be furnished on or with all copies of seed invoices.
- 1.4.3 The CONTRACTOR is required to submit a sample seeding ticket for approval prior to ordering seed.
- 1.4.4 All tags from seed bags shall be turned into the ENGINEER prior to payment for seeding.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922

1.4.5 Duplicate signed copies of invoices from suppliers shall be furnished. Invoices shall show quantities and percentage of nitrogen, phosphorus, and potash. Upon completion of the Project, a final check of the total quantity of fertilizer used will be made against the total area treated, and if minimum rates of application have not been met, an additional quantity of material sufficient to make up the minimum application rate shall be distributed as directed.

1.4.6 Results of water analysis, if applicable.

1.5 QUALITY CONTROL

1.5.1 The CONTRACTOR shall establish and maintain quality control for finished dressing and seeding operations and shall maintain records of his quality control for all construction operations including, but not limited to, the items listed below. Copies of the records of inspections and tests, as well as records of corrective action taken, shall be furnished by the CONTRACTOR daily.

1.5.1.1 Preparation of Ground Surface

Location and quality of finished dressing, including necessary clearing, filling, or dressing out of washes, smoothness and uniformity of surfaces, and time of year. Ground surface shall be scarified to allow proper application of seeding.

1.5.1.2 Seeding

Quality of type of seed, area covered, rate of application, quantity of seed used, and method of distribution.

1.5.1.3 Maintenance and Repair

Location and type of maintenance problems and remedial treatment performed.

1.5.1.4 Watering

Quality of water, area watered, quantity applied, and method of application.

1.6 AREAS TO BE TREATED

Seeding shall be performed on all newly constructed embankments as depicted on the Plans, or as directed by the ENGINEER.

2.0 PRODUCTS

2.1 SEED

2.1.1 Seed Selection

Prior to placement of any seed, the CONTRACTOR shall perform soil testing along the alignment to determine nutrient and mineral concentrations in soil. Prior to performing soil test CONTRACTOR shall

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922



submit soil testing to ENGINEER along with the name of the test lab. Additional supplements may be added at no cost to the OWNER.

2.1.2 Seed Mixtures

Seed labeled in accordance with U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act shall be furnished by the CONTRACTOR. Seed shall be furnished in sealed, standard containers unless written exception is granted. Seed that is wet or moldy or that has been otherwise damaged in transit or storage will not be acceptable. Seeding shall conform to the specifications as indicated in Table 1 below.

Table 1

| Planting Period and Grasses to be Used | Minimum Purity (%) | Minimum Germination (%) | Minimum Appl. Rate (Lbs/Acre) |
|---|---------------------------|--------------------------------|--------------------------------------|
| <i>March - September</i> | | | |
| Hulled Bermuda Grass | 83 | 87 | 30 |
| <i>September - February</i> | | | |
| Unhulled Bermuda Grass | 80 | 87 | 20 |
| Kentucky 31 Fescue | 80 | 87 | 25 |

2.2 WATER

Water may be obtained from any source; however, brackish, chemically contaminated, or oily water shall not be used. Water shall be free from oil, acid, alkali, salt, and other substances harmful to growth of grass. Water with a salinity content less than 0.45 parts per 1000 will be acceptable. Contractor is responsible for providing independent testing at no additional expense to owner.

2.3 SOIL FOR REPAIRS

For fill of areas to be repaired, soil shall be of a quality at least equal to that which exists in areas adjacent to the area to be repaired. Soil used shall be relatively free from roots, stones, and other materials that hinder grading, planting, and maintenance operations and shall be free from objectionable weed seeds and toxic substances.

3.0 EXECUTION

3.1 GROUND PREPARATION

3.1.1 General

Equipment, in good condition, shall be provided for the proper preparation of the ground and for handling and placing all materials. Equipment shall be approved by the ENGINEER before work is started.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922

Seed beds shall be prepared by disking, harrowing or other methods approved by the ENGINEER. Soil on slopes of 3H:1V and flatter shall be tilled to a minimum of 4 inches depth. On slopes steeper than 3H:1V, the soil shall be tilled to a minimum of 2 inches depth by scarifying with heavy rakes or other methods as approved by the ENGINEER. Areas compacted by construction operation shall be completely pulverized by tillage. Soil used for repair of surface erosion or grade deficiencies shall conform to the Specifications as directed by the ENGINEER. Any pH adjuster, fertilizer or soil conditioner may be applied during this procedure. The prepared surface shall be a maximum 1 inch below the adjoining grade of any surfaced area. New surfaces shall be blended to existing areas. The prepared surface shall be completed with a light raking to remove debris.

Grass, debris and stones over a maximum of 3 inches in any dimension shall be removed from the surface, as directed by the ENGINEER. The prepared surface shall be protected from compaction or damage by vehicular or pedestrian traffic and surface erosion.

3.1.2 Clearing

Prior to grading and tilling, vegetation and debris that may interfere with fertilizing and seeding operations shall be mowed, grubbed, and raked; and shall be disposed of satisfactorily, as specified in Section No. 02231 of these Technical Specifications.

3.1.3 Grading

Previously established grades and slopes shall be maintained in a true and even condition on the areas to be seeded. Necessary repairs to previously graded areas shall be repaired with material as described in Paragraph 2.3 above. The material shall be placed and compacted in accordance with Section No. 02300. Where grades have not been established, the areas shall be graded as shown on the Contract Drawings, or as directed by the ENGINEER, and all surfaces shall be left in a true and even condition.

3.1.4 Tillage

After the areas required to be seeded have been brought to the specified grades, the soil shall be tilled as specified on Paragraph 3.1.1 above, by plowing, disking, harrowing, or other approved method until the condition of the soil is acceptable. The work shall be performed only during periods when, in the opinion of the ENGINEER, beneficial results are likely to be obtained. When drought, excessive moisture, or other unsatisfactory conditions prevail, the work shall be stopped when directed. Undulations or irregularities in the surface to be seeded shall be dressed before the next specified operation.

3.2 SEEDING APPLICATION

Hulled Bermuda seed shall be planted at the rate of 30 pounds per acre. Kentucky 31 Fescue shall be planted at a rate of 25 lbs/acre, mixed with Unhulled Bermuda planted at a rate of 20 lbs/acre. Seeding shall be applied mechanically in dry conditions. A satisfactory method of sowing shall be employed; using a mechanical power-draw seeder, mechanical hand-seeder, broadcast seeder, or other approved method. The CONTRACTOR will be allowed to apply seed by use of a hydro-seeder.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SEEDING
SECTION NO. 02922

When delays in operations extend the work beyond the most favorable planting season for the species designated, or when conditions are such by reason of drought, high winds, excessive moisture, or other factors that satisfactory results are not obtained, work shall be halted as directed by the ENGINEER and resume only when conditions are favorable or when approved alternative or corrective measures and procedures have been effected. If inspection during or after seeding operations indicates that areas have been left unplanted or other areas have been skipped, additional seed shall be applied at no additional cost to the OWNER. The CONTRACTOR shall be fully responsible for any damage to the seeded areas caused by his operations. Areas that become damaged as a result of poor workmanship or failure to meet the requirements of the specifications may be ordered repaired and reseeded to specification requirements, without additional cost to the OWNER.

3.3 WATERING

The fertilizer and seeded areas shall be watered with potable water as specified until the final acceptance of the Contract. Unless the ENGINEER concurs that acceptable levels from precipitation have occurred to support grass establishment, irrigation will be applied one to two days after seeding or other turf establishment method used. Irrigation shall be applied at least 2 times per week unless otherwise directed by the ENGINEER based on natural rainfall. The application of water shall sufficiently moisten at least the top 2 inches of soil with each irrigation event. The application of water in excess, so that surface runoff occurs, is prohibited.

3.4 SEED ESTABLISHMENT PERIOD

The seed establishment period shall begin on the first day of seeding work under the contract and shall continue through the remaining life of the contract and end 3 months after the last day of seeding operation. The CONTRACTOR shall provide a written calendar time period for the seed establishment period. When there is more than one seed establishment period, the boundaries of each seeded area covered by each period shall be described. The seed establishment period may be modified for inclement weather, shut down periods, or for separate completion dates of areas as approved by the ENGINEER.

END OF SECTION

SECTION 01 01 02

SURVEYING

**STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
SURVEYING
SECTION NO. 01 01 02**

TABLE OF CONTENTS

1.0 GENERAL 1

 1.1 DESCRIPTION..... 1

 1.2 REFERENCES 1

 1.3 DEFINITIONS..... 1

 1.4 MEASUREMENT AND PAYMENT 1

2.0 PRODUCTS 1

3.0 EXECUTION 1

 3.1 PRE-CONSTRUCTION SURVEY 1

 3.2 PROGRESS SURVEYS 2

 3.3 AS-BUILT SURVEYS 2

 3.4 DRAWINGS 3

 3.5 POINT FILES 3

**STP LEVEE REHAB AT CELL 1 & HEADWORKS UPGRADE
TECHNICAL SPECIFICATIONS
SURVEYING
SECTION NO. 01 01 02**

1.0 GENERAL

1.1 DESCRIPTION

The scope consists of the surveying as required in this Specification or as shown on the Plans. There is an existing bench mark in the area which is to be used for this project. This benchmark will be used for all horizontal and vertical control. All surveying work listed in this section shall be performed under the direct supervision of a professional land surveyor (PLS) licensed in the state of Louisiana unless otherwise stated with sufficient advance notice given to ENGINEER to allow presence during survey activities. All Drawings shall be stamped by the surveyor and shall reference the North American Datum of 1983, Louisiana South Zone, U.S. Survey Feet, and the North American Vertical Datum of 1988, U.S. Survey Feet.

1.2 REFERENCES

NOT USED

1.3 DEFINITIONS

NOT USED

1.4 MEASUREMENT AND PAYMENT

No direct measurement or payment will be made for this item. All costs associated with pre-construction, construction, and as-built surveys, and as may be denoted in the contract documents, shall be paid under each respective bid item requiring surveying as specified herein. All surveying required in this section shall be performed by a professional surveyor licensed in the state of Louisiana.

2.0 PRODUCTS

NOT USED

3.0 EXECUTION

3.1 PRE-CONSTRUCTION SURVEY

Any temporary benchmarks to be utilized shall be surveyed after the Pre-Construction Meeting and prior to commencement of construction activities. This survey shall be used to verify the alignment of the various project features and make modifications or adjustments as deemed necessary by the ENGINEER. The Pre-Construction Survey shall be submitted to the ENGINEER for review and approval. Items to be included in this survey include, but are not limited to, the levee embankment as defined below, and the headwork structure area.

STP LEVEE REHAB AT CELL 1 & HEADWORKS UPGRADE
TECHNICAL SPECIFICATIONS
SURVEYING
SECTION NO. 01 01 02

3.1.1 Temporary Benchmarks (TBMs)

TBMs shall be installed by the CONTRACTOR at locations necessary for construction of the project. Horizontal and vertical coordinates shall be determined for all TBMs installed. 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 ENGINEER. If multiple TBMs are destroyed, the ENGINEER may require the TBMs to be reinstalled by a PLS. All TBMS shall be resurveyed every 30 days by a PLS and that survey data submitted to the ENGINEER and acceptance prior to be utilized.

3.1.2 Embankment Section

The levee alignment transects, spaced 100' apart, shall be surveyed prior to construction. Survey points shall be taken at a minimum at the levee toe, crown, centerline, breakpoints, utilities, and drainage features. Centerline profile surveys are to be included as well and shall be taken every 50'. Elevations shall be obtained at a maximum of 5' intervals; however, gridlines should be displayed for every 1' of elevation. The CONTRACTOR shall create cross sections and plan views of the existing topography within the surveyed embankment area. All drawings shall be submitted to the ENGINEER digitally in AutoCAD® format and 11"x17" hard copy. The drawings and data must be approved by the ENGINEER prior to the commencement of work.

3.2 PROGRESS SURVEYS

3.2.1 Embankment

The embankment area will not be required to be surveyed in order to receive partial payment. However, surveys from CONTRACTOR supplied borrow pit may be required for partial payment. Reference Paragraph 1.3.1 of Section No. 02300 for requirements.

3.3 AS-BUILT SURVEYS

Final construction surveys will be utilized in the production of the as-built drawings. Final survey shall include all features of the project including, but not limited to, the levee embankment, headwork structure, and the inflow pipe to be located at Cell 1. As-Built Drawings shall include a plan view of the project area with callouts on all components installed to the lines and grades and in accordance with the Contract Documents.

3.3.1 Embankment

The levee alignment transects, spaced 100' apart, shall be surveyed after the construction and acceptance of the levee embankment. Survey points shall be taken at a minimum at the levee toe, crown, centerline, and breakpoints. Centerline profile survey for the final levee shall be included as well and shall be taken at 50' intervals. Elevations shall be obtained at a maximum of 5' intervals; however, gridlines should be displayed for every 1' of elevation. The CONTRACTOR shall create cross sections and plan views of the existing topography within the surveyed embankment area.

**STP LEVEE REHAB AT CELL 1 & HEADWORKS UPGRADE
TECHNICAL SPECIFICATIONS
SURVEYING
SECTION NO. 01 01 02**

3.4 DRAWINGS

As-built drawing and drawings associated with pre-construction and construction surveys will be submitted to the ENGINEER digitally in AutoCAD® format and 11" x 17" hard copy. As-built drawings shall incorporate all field changes, change orders, and show the actual quantity of material placed. All revisions shall be shown in red and be easily distinguishable from the original design. The drawings shall be stamped by a professional surveyor licensed in the state of Louisiana.

3.5 POINT FILES

Point files of all pre-construction, construction, and as-built surveys shall be submitted in electronic format (ASCII) to the ENGINEER. The point files shall contain the following information:

1. Point number
2. Northing (NAD 83 US. FT.)
3. Easting (NAD 83 US. FT.)
4. Elevation (NAVD 88 FT.)
5. Description

END OF SECTION

SECTION 02 56 1
CONCRETE MATS

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
EROSION CONTROL CONCRETE MATS
SECTION No. 02 65 1

TABLE OF CONTENTS

1.0 GENERAL..... 1

 1.1 DESCRIPTION..... 1

 1.2 MEASUREMENT..... 1

 1.3 PAYMENT..... 1

 1.4 SUBMITTALS..... 1

2.0 MATERIALS..... 2

 2.1 CONCRETE MATS..... 2

 2.2 ALTERNATIVE MATERIALS 3

3.0 EXECUTION..... 3

 3.1 CONSTRUCTION 3

**STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
EROSION CONTROL CONCRETE MATS
SECTION No. 02 65 1**

SECTION 02651

EROSION CONTROL CONCRETE MATS

1.0 GENERAL

1.1 DESCRIPTION

CONTRACTOR shall furnish all labor, materials, tools, equipment, and incidentals necessary to install Erosion Control Concrete Mats (Shoreflex®, Flexamat® Plus, or approved equal) for erosion control along the northern and southern levee side slopes at the location and dimensions shown on the drawings and as specified herein.

CONTRACTOR shall furnish proper equipment, as recommended by the manufacturer and later approved by the ENGINEER, to place proposed concrete mats that will not damage the mat material or disturb the top soil subgrade and seed bed.

1.2 MEASUREMENT

Erosion Control Concrete Mats (Shoreflex®, Flexamat® Plus, or approved equal) shall be measured by the square foot as shown on the plans, complete in place.

1.3 PAYMENT

Payment for Erosion Control Concrete Mats (Shoreflex®, Flexamat® Plus, or approved equal) shall be made at the contract unit price per square foot for Bid item “Erosion Control Concrete Mats.” This price is full compensation for loading and transporting, placing, concrete block mats; excavation and disposal; furnishing topsoil and bedding; and equipment, labor, materials, tools, and incidentals.

1.4 SUBMITTALS

CONTRACTOR shall submit for the ENGINEER’S review and approval the manufacturer’s performance research results and calculations in support of the Erosion Control Concrete Mats (Shoreflex®, Flexamat® Plus, or approved equal), as well as shop drawings indicating the means and methods necessary to place the mats in accordance with this specification and the plans. Size and location of mats and placement with details explaining how the mats are tied together shall also be included within the submittal, along with any manufacturer’s recommendations that are specifically related to this project, including the backing material (geogrid) specifications to be used.

A full-Scale laboratory testing performed by an independent 3rd party testing facility will also be required, along with associated engineered calculations certifying that the hydraulic capacity of the proposed Erosion Control Concrete Mat meets the following criteria:

Table 1: Limiting shear stress testing, ASTM D 6460

| Test | Tested Value | Bed Slope | Limiting Value |
|-------------|---------------------|------------------|-------------------------|
| ASTM 6460 | Shear Stress | 10% & 20% | 18 lb./ft. ² |
| ASTM 6460 | Velocity | 10% & 20% | 30 ft./sec |

**STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
EROSION CONTROL CONCRETE MATS
SECTION No. 02 65 1**

2.0 MATERIALS

2.1 CONCRETE MATS

Concrete mats shall be manufactured from individual concrete blocks tied together with a high strength geogrid. Each block shall be tapered, beveled and interlocked, including connections that would prevent lateral displacement of the blocks within the mats when they are lifted for placement.

Mats shall be covered or otherwise protected during long periods of storage, against degradation of the backing material. Mats will be rolled for shipment and are packaged with handling straps. These handling straps shall only be used for lifting below 2 ft. as a means to place heavy duty lifting straps under rolls. Upon delivery, rolls may be left exposed for up to 30 days. If exposure will exceed 30 days, cover or tarp the rolls to minimize UV exposure.

All mats shall be inspected upon delivery. CONTRACTOR shall make sure that all units are sound and free of defects that would interfere with the proper placing of the unit or impair the strength or performance of the product.

2.1.1 Blocks

Tied-concrete blocks shall be manufactured with concrete conforming to the cement requirements as per ASTM standards. Concrete blocks shall also meet a minimum compressive strength of 4,000 psi at 28 days. The concrete blocks will be spaced no further than 2 in. apart and will have a minimum weight of 3 lb. per block.

Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection by the ENGINEER. Replace, repair or patch the damaged areas per the manufacturer’s recommendations.

2.1.2 Backing Materials

Backing material for the proposed erosion control concrete mats shall consist of geogrid revetment mat of a high tenacity that is securely cast into and embedded within the base of the concrete blocks and obtains connection strength greater than that of the geogrid. The geogrid shall be low elongating, and made of continuous filament propylene fibers, multifilament polyester yarns, or other as recommended by the manufacturer and later approved by the ENGINEER. The geogrid shall meet the following minimum criteria:

Table 2: Polyester geogrid system for interlocking concrete blocks.

| Description | Minimum requirement | Testing Method |
|--|----------------------------|-----------------------|
| UV Stabilization | 25 | years |
| Ultimate Tensile Strength (MD and CMD) | 30 kN/m (2,055 lb./ft.) | ASTM D 6637 |
| Elongation break | 6% | ASTM D 6637 |
| Tensile Strength @ 2% | 12kN/m (822 lb./ft.) | ASTM D 6637 |

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
EROSION CONTROL CONCRETE MATS
SECTION No. 02 65 1

| | | |
|---------------------------------|--------------------------|-------------|
| Tensile Strength @ 5% | 24 kN/m (1,646 lb./ft.) | ASTM D 6637 |
| Tensile Modulus @ 2% | 600 kN/m (41,000 lb/ft.) | ASTM D 6637 |
| Tensile Modulus @ 5% | 480 kN/m (32,900 lb/ft.) | ASTM D 6637 |
| Grid aperture size (MD and CMD) | .6 inch | Length |

2.2 ALTERNATIVE MATERIALS

Approved or equal alternative materials may be considered provided the CONTRACTOR submits for the ENGINEER's review the required information as stated below. Such materials must be pre-approved in writing by the ENGINEER prior to bid date. Alternative material must be submitted to the ENGINEER a minimum of fifteen (15) days prior to bid date. Submittal packages for alternate materials must include, as a minimum, the following:

1. Full scale laboratory testing performed by an independent 3rd party testing facility with associated engineered calculations certifying the hydraulic capacity of the proposed Erosion Control Concrete Mat meets the performance requirements listed in this specification.
2. A list of 15 comparable projects in terms of project size, application and material dimensions in the United States, where the results of the specific alternative material's use can be verified and reviewed for system integrity and sustained after a minimum of 5 years of service life.

Flexamat® Plus and Shoreflex® mats have been evaluated and are considered, as specified herein, approved material for the proposed erosion control concrete mats.

3.0 EXECUTION

3.1 CONSTRUCTION

Prior to installing Erosion Control Concrete Mats, CONTRACTOR shall prepare the subgrade as depicted on the plans and specified herein. All subgrade surfaces to be smooth and free of all rocks, stones, sticks, roots, and other protrusions or debris of any kind that would result in an individual block being raised more than ¾ in. above the adjoining blocks. Subgrade material shall sustain the project specified seeding growth. The prepared subgrade surface shall provide a smooth, firm, and unyielding foundation for the mats. The subgrade shall be graded into a parabolic or trapezoidal shape in order to concentrate flow to middle of mat or mats. Required seeds shall be distributed on the prepared topsoil subgrade before installation of the concrete mats in accordance with the specifications.

Concrete Mats shall be installed to the lines and grades as shown on the plans and according to the manufacturer's guidelines. The manufacturer or authorized representative may provide technical assistance during the slope preparation and installation of the concrete block mats as needed.

When needed, provide fastening or anchoring as depicted on the plans or as recommended by the manufacturer or ENGINEER for the specific site conditions.

END OF SECTION

SECTION 02 71 3
No.610 LIMESTONE

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
No.610 LIMESTONE
SECTION No. 02 71 3

TABLE OF CONTENTS

1.0 GENERAL1

 1.1 DESCRIPTION1

 1.2 MATERIALS1

 1.3 CONSTRUCTION REQUIREMENTS1

 1.4 METHODS OF MEASUREMENT2

 1.5 BASIS OF PAYMENT2

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
No.610 LIMESTONE
SECTION No. 02 71 3

1.0 GENERAL

1.1 DESCRIPTION

This work consists of furnishing and placing No. 610 Limestone at the crown of the proposed levee embankment in accordance with these specifications and in conformity to lines, grades, and thickness as directed by the ENGINEER.

1.2 MATERIALS

Limestone shall consist of stone that will not disintegrate upon exposure to the elements or be easily broken from handling and shall be reasonably free from each and other foreign materials. When tested in accordance with AASHTO Designation: T 85, the solid weight of stone shall be at least 150 pounds per cubic foot (based on the bulk specific gravity) and the absorption shall not exceed two percent. Samples of stone shall be taken under supervision of the ENGINEER and submitted for testing and approval prior to delivery to the project when so requested.

The gradation limits define a gradation band and any stone gradation falling within the band is acceptable. Neither the width nor the thickness of any piece of stone shall be less than one-third its length. Methods of stockpiling and removal of limestone shall be submitted to the ENGINEER for approval.

| No. 610 Limestone Gradation Limits | | |
|---|------------------|------------|
| Sieve Size | % Passing | |
| | Min. | Max |
| 1-1/2" (37.5mm) | 100 | 100 |
| 1" (25mm) | 85 | 100 |
| 1/2" (12.5mm) | 40 | 75 |
| No.4 (4.75mm) | 15 | 40 |
| No.100 (150 μm) | 0 | 10 |

1.3 CONSTRUCTION REQUIREMENTS

Areas on which limestone is to be placed shall be graded to require sections. Limestone shall be placed and uniformly distributed over the areas. The CONTRACTOR shall furnish necessary facilities and personnel for checking limestone depth and distribution.

STP HURRICANE IDA LEVEE REHABILITATION CELL No.1
TECHNICAL SPECIFICATIONS
No.610 LIMESTONE
SECTION No. 02 71 3

1.3.1 Placing Limestone

Limestone shall be placed to its full course thickness in 6-inch lifts and compacts to 95% of the maximum dry density at optimum moisture content in accordance with ASTM D698.

1.3.2 Protection of Structures

When placing limestone adjacent to structures, care shall be exercised to avoid damage to the structure. The ENGINEER will inspect the placement of the limestone to insure that the finished sections are in conformance with the plans or as directed.

1.4 METHODS OF MEASUREMENT

Limestone shall be measured by the ton (2,000 pounds). Quantities will be computed to the nearest tenth of a ton. If limestone is delivered by truck, measurement will be based on certified weight tickets furnished to the ENGINEER by the CONTRACTOR. If limestone is delivered by barge, measurement will be made by calculation from barge displacement in a manner acceptable to the ENGINEER, based on water 62.4 pounds per cubic foot.

1.5 BASIS OF PAYMENT

Limestone will be paid for respectively at the contract unit price for No. 610 Limestone for “Access Road Maintenance” Price and Payment shall include all costs of furnishing, hauling, handling and placing to the lines and grades as shown on the plans.

END OF SECTION