

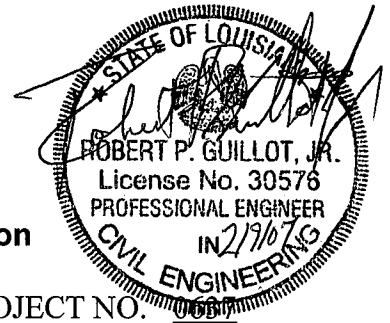
## ADDENDA NO. 2

City of Morgan City, Louisiana

### 2006-2007 Sanitary Sewer Collection Rehabilitation

DATE ISSUED: February 9, 2007  
BID DATE: February 16, 2007

EES PROJECT NO. 0007



This Addenda shall be considered as included and/or amended in the original Contract Documents and shall take precedence over any part of the original documents or previous addendum in conflict therewith. This Addenda contains **14 pages**. All bidders shall ensure all sheets of this Addenda are enclosed. If sheets are missing from this Addenda, it is the responsibility of the Bidder to notify the Engineer seventy-two (72) hours prior to the bid date and time.

## I. SPECIFICATIONS

### Administrative Section

**Remove** section 00300(up) (*yellow sheets*) from the Bid Forms under the administrative section of the specifications and **replace** it with the attached 6-page Section 00300(up) (*green sheets*).

### Technical Section

#### A. Section 02957 – Smoke Testing

**Add** the attached 3-page Section 02957 - Smoke Testing under Division 2 - Site Conditions

#### B. Section 02966 – Sewer Liner Pipe

**Add** the following Paragraph E under 3.07–Inspection and Testing of *Part 3 – Execution* in the technical section of the specifications, entitled, Section 02966 – Sewer Liner Pipe:

“E. Alternate Gravity Pipe Leakage Test – In lieu of the gravity pipe leakage test described in paragraph A, Contractor may choose to use the following testing procedure:

1. During the cool down process, after installation and curing of the liner, the Contractor shall perform a test on the sewer line to determine if it is watertight.
2. The Contractor shall furnish all necessary equipment to conduct the test.
3. The sewer shall be tested using either exfiltration-test methods in accordance with ASTM F1216-Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated tube or air-test methods as specified herein:
  - a. Plug all tees and ends of sewer services with flexible joint plugs, or securely fasten caps, to withstand the internal test pressures. Such plugs or caps shall be readily removable, and their removal shall provide an end suitable for making a flexibly jointed lateral connection or extension.

- b. Before testing, check the pipe liner to see that it is clean. If not, clean it by passing a full-gauge squeegee through the pipe. It shall be the Contractor's responsibility to have the pipe clean and determine the ground water level.
- c. Immediately following this check or cleaning, test the pipe liner installation with low-pressure air. Slowly supply air to the plugged pipe installation until the internal air pressure reaches 4.0psi greater than the average back pressure of any ground water that may submerge the pipe. Allow at least 2 minutes for pressure stabilization.
- d. The pipe liner shall be considered acceptable when tested at an average pressure of 3.0psi greater than the average back pressure of the ground water that may submerge the pipe if (1) the test of air loss from any section tested in its entirety between manholes does not exceed 2.0cfm or (2) the section under test does not lose air at a rate greater than 0.0030cfm per square foot of internal pipe surface.
- e. The pipe liner shall be considered acceptable if the time required in seconds for the pressure to decrease from 3.5 to 2.5psi greater than the average pressure of any ground water that may submerge the pipe is equal to or greater than that shown in the Allowable Time Table below:

<b>ALLOWABLE TIME TABLE</b>	
Pipe Size (in inches)	Minimum Time / 100 ft. (seconds)
8	72
10	90
12	108
15	126
18	144
21	180
24	216
27	252
30	288

- f. If the pipe liner installation fails to meet these requirements, the Contractor shall determine at his own expense the source or sources of leakage and repair or replace all defective materials or workmanship. The completed pipe liner installation shall meet the requirements of this test before being considered acceptable.
- g. Safety Provisions – Securely brace the plugs used to close the sewer pipe for the air test in order to prevent the unintentional release of a plug which can become a high-velocity projectile. Locate gauges, air piping manifolds, and valves at the top of the ground. No one shall be permitted to enter a manhole where a plugged pipe is under pressure: 4 pounds (gauge) air pressure develops a force against the plug in a 12-inch diameter pipe of approximately 450 pounds. Provide a safety release device set to release at 10psi between the air supply and the sewer under test.
- h. Repairs – Regardless of the outcome of any test, repair any noticeable leak.
- i. Retest any repaired or replaced sewer sections.”

**C. Section 02967 – Cured-in-Place – Pipe (CIPP)**

**Remove** the following sentence from Paragraph 3.04.A.–Installation of CIPP of *Part 3 – Execution* in the technical section of the specifications under Section 02967 entitled, Cured-in-Place – Pipe (CIPP):

“Alternately, the tube can be pulled into place and expanded by a water inversion process with an inflation bladder”

And **replace** it with the following sentence:

“Alternately, the tube can be pulled into place and expanded by a water or air inversion process with an inflation bladder.”

**D. Appendix A – Summary of Sewer Rehabilitation Services**

**Add** the attached table entitled, Manhole Depths on Sewer Lines Videoed, to Appendix A under the Appendices section of the specifications.

## **II. DRAWINGS**

**A. Sheet 3**

**Add** the following note to Sheet 3 of the drawings:

“5. In lieu of pipe bursting, the Contractor may remove and replace the gravity sewer pipe. Cost for repair will be paid for as pipe bursting.”

**B. Sheet 7**

**Remove** sheet 7 of the drawings and **replace** it with the attached Sheet 7.

**EJCDC SUGGESTED BID FORM**

(A) PROJECT IDENTIFICATION: **2006-2007 Sanitary Sewer Collection Rehabilitation**  
City of Morgan City, Louisiana

(B) CONTRACT IDENTIFICATION AND NUMBER: EES Project No. **0637**

(C) THIS BID SUBMITTED TO: **City of Morgan City, Louisiana**

NAME OF BIDDER: \_\_\_\_\_

BID SUBMITTAL DATE: \_\_\_\_\_

STATE CONTRACTOR'S LICENSE NO.: \_\_\_\_\_

(D) The undersigned BIDDER proposes and agrees, if this BID is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this BID and in accordance with the other terms and conditions of the Contract Documents.

(E) BIDDER accepts all of the terms and conditions of the Advertisement for Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for forty-five (45) days after the day of Bid opening. BIDDER will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within fifteen (15) days after the date of the OWNER's Notice of Award.

(F) In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(G) 1) BIDDER has examined and carefully studied the Bidding Documents and the following Addenda receipt of all which is hereby acknowledged: (List Addenda by Addendum Number and Date)

Date	Number
_____	_____
_____	_____
_____	_____

2) BIDDER has visited the site and become familiar with and is satisfied to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work;

3) BIDDER is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

4) BIDDER has studied carefully all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions. BIDDER accepts the determination set forth in paragraph SC-4.02 of the Supplementary Conditions of the extent of the technical data contained in such reports and drawings upon which BIDDER is entitled to rely as provided in paragraph 4.02 of the General Conditions. BIDDER acknowledges that such reports and drawings are not Contract Documents and may not be complete for BIDDER's purposes.

BIDDER acknowledges the OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the site. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by BIDDER and safety precautions and programs incident thereto. BIDDER does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the times, price and other terms and conditions of the Contract Documents.

5) BIDDER is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

6) BIDDER has correlated the information known to BIDDER, information and observations, obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

7) BIDDER has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that BIDDER has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

(H) 1) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.

2) BIDDER will complete the Work for the prices indicated in the Schedule of Prices, which follows:

ITEM NO.	EST. UNIT QTY.	BRIEF DESCRIPTION OF ITEMS (Price Written in Words)	UNIT PRICE	TOTAL (Written in Numbers)
14	23 EA	<b>Sanitary Sewer Manhole</b> (0'-6" depth) _____ Dollars _____ Cents <i>per each</i>	\$ _____	\$ _____
22	5 SY	<b>Remove &amp; Replace Surface with Washed Gravel</b> _____ Dollars _____ Cents <i>per square yard</i>	\$ _____	\$ _____
38	300 LF	<b>Sewer Point Repair &amp; Replacement, Excavating, Backfill, and Compaction</b> (0'-6" depth) _____ Dollars _____ Cents <i>per linear foot</i>	\$ _____	\$ _____
41	70 SY	<b>Removal of Asphalt Pavement and Concrete Base</b> _____ Dollars _____ Cents <i>per square yard</i>	\$ _____	\$ _____
42	70 SY	<b>Removal of Asphalt Pavement and Concrete Base</b> _____ Dollars _____ Cents <i>per square yard</i>	\$ _____	\$ _____
43	315 SY	<b>Removal of Concrete Pavement</b> _____ Dollars _____ Cents <i>per square yard</i>	\$ _____	\$ _____
44	315 SY	<b>Restore Concrete Pavement</b> _____ Dollars _____ Cents <i>per square yard</i>	\$ _____	\$ _____
53	2,950 LF	<b>Smoke Testing for Leak Identification</b> _____ Dollars _____ Cents <i>per linear foot</i>	\$ _____	\$ _____
Continued on next page				

62	11,750 LF	<b>Sewer Pipe Lining (Installed)</b>		
		_____ Dollars	\$ _____	\$ _____
		_____ Cents <i>per linear foot</i>		
68	10,000 LF	<b>Additional Sewer Line Cleaning and Televising</b>		
		_____ Dollars	\$ _____	\$ _____
		_____ Cents <i>per linear foot</i>		Continued on next page
70	500 LF	<b>Root Removal in Sewers (8 inch)</b>		
		_____ Dollars	\$ _____	\$ _____
		_____ Cents <i>per linear foot</i>		
71	300 VF	<b>Manhole Wall Rehabilitation</b>		
		_____ Dollars	\$ _____	\$ _____
		_____ Cents <i>Per vertical foot</i>		
73	216 LF	<b>Pipe Bursting</b>		
		_____ Dollars	\$ _____	\$ _____
		_____ Cents <i>per linear foot</i>		
<b>TOTAL BID IN WRITING</b> (Summation of all items)				
_____				
_____				
_____ Dollars			\$ _____	
_____ Cents				
(Price in Words)				<b>TOTAL BID</b> (Price in Numbers)

3) BIDDER agrees that the Work will be substantially complete within 180 calendar days after the date when the Contract Time commences to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions within 225 calendar days after the date when the Contract Time commences to run.

(I) BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified in the Agreement.

(J) The following documents are attached to and made a condition of this Bid:

- 1) Required Bid Security in the form of a Surety Bond, Cashier's Check, or Certified Check.
- 2) A tabulation of Subcontractors, Suppliers and other persons and organization required to be identified in this Bid.
- 3) Required BIDDER's Qualification Statement with supporting data.
- 4) Power of Attorney (For Surety Bond ONLY).

5) If the BIDDER is a Corporation or a joint venture of corporations, attach to Bid a certified copy of corporate resolution of the Board of Directors of the Corporation(s) authorizing an officer of the Corporation(s) to submit bids and execute the Agreement contained within this document on behalf of the Corporation(s).

6) Non-Collusive and Non-Solicitation Affidavit.

(K) Communications concerning this Bid shall be addressed to:

The address of BIDDER indicated below:

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(L) The terms used in this Bid, which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents, have the meanings assigned to them in the General Conditions.

(M) SUBMITTED on \_\_\_\_\_, 2007

State Contractor's License No. \_\_\_\_\_

If BIDDER is:

**An Individual**

By \_\_\_\_\_ (SEAL)  
(Individuals Name)

doing business as \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone No. \_\_\_\_\_

**A Partnership**

By \_\_\_\_\_ (SEAL)  
(Firm Name)

\_\_\_\_\_ (General Partner)

Business Address: \_\_\_\_\_

Phone No. \_\_\_\_\_

**A Corporation**

By \_\_\_\_\_ (Corporation Name)

\_\_\_\_\_ (State of Incorporation)

By \_\_\_\_\_ (Print Name and Title of Person Authorized to Sign)

\_\_\_\_\_ (Signature of Person Authorized to Sign)

(Corporate Seal)

Attest \_\_\_\_\_ (Secretary)

Business Address: \_\_\_\_\_

Phone No. \_\_\_\_\_

**A Joint Venture**

By \_\_\_\_\_ (SEAL)  
(Name)

\_\_\_\_\_ (Address)

By \_\_\_\_\_ (SEAL)  
(Name)

\_\_\_\_\_ (Address)

Phone Number and Address for receipt of official communications

\_\_\_\_\_  
\_\_\_\_\_

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above).

**TECHNICAL SECTION**  
**DIVISION 2-SITE CONDITIONS**  
**SECTION 02957-SMOKE TESTING**

***PART 1 - GENERAL***

**1.01 DESCRIPTION**

- A. Sanitary sewer line sections, at locations designated by the Owner or his authorized representative, shall be smoke tested to locate significant defects which are causing or could cause infiltration/inflow, soil erosion and degradation to the existing sanitary sewer system or other underground utilities and surface structures.
- B. The Owner will field determine which pipe segments are to be smoke tested.

**1.02 SUBMITTALS**

- A. All products and/or materials to be used in this project shall be submitted to the Engineer in accordance with Section 01340 of Division 1- General Requirements.
- B. Manufactures shall submit with his shop drawings any recommended installation procedures which when approval by the Engineer shall become the basis for inspecting, accepting, and/or rejecting actual installation, procedures used on this Project.
- C. The manufactures shall submit in writing a certification that the product meets these Specifications. Certification shall be in the format similar to the certification form shown at the end of Section 01340.
- D. Mill certificates shall be furnished upon request of the Engineer.

***PART 2 - PRODUCTS***

**2.01 PRODUCTS**

- A. Nontoxic, odorless, non-hazardous and non-staining smoke generators (bombs) shall be used to produce smoke used for testing.
- B. Smoke shall be blown by a gasoline powered "squirrel cage" or other approved blower located on top of a central manhole. Blower pressure should be adequate to force smoke throughout the isolated line section and to the ground surface through cracks, channels, improper jointing, etc. Minimum blower free fan delivery is 1,500cfm.
- C. Sand bags and/or plugs shall be placed at each end of the test section to prevent smoke from escaping through the manholes and adjacent sewer pipes.
- D. Color photographs shall be taken of all test sections where smoke is observed coming out. The camera shall be equipped with a date and time generator, which can

**TECHNICAL SECTION**  
**DIVISION 2-SITE CONDITIONS**  
**SECTION 02957-SMOKE TESTING**

record this data directly onto the photo. The photographs will provide permanent documentation of the infiltration/inflow sources and will be used to locate the leak for further evaluation.

E. All data pertinent to the smoke testing shall be recorded on an adequate smoke testing log form as supplied by the Contractor and approved by the Owner. This form shall be turned over to and remain in the possession of the Owner after a section of line has been tested.

***PART 3 - EXECUTION***

**3.01 METHODS**

- A. Only pipe segments on either side of the blower shall be tested on a single set-up.
- B. Smoke shall be introduced into a manhole and then blown into the connecting sewer lines.
- C. All visible leaks including those from collection lines, service laterals and manholes shall be recorded on the smoke testing log form. The information listed below shall be included on the log form:
1. Upstream and downstream manhole number
  2. Manhole depths
  3. Direction of flows
  4. Location of sandbags and plugs
  5. Sketch showing leak location and distance and offset from the upstream manhole
  6. Street address nearest the detected leak
  7. Leak type that clearly describes the leak (i.e. yard drain, roof connection, x-connection with storm drain, drainage channel, soil fissure, etc.)
  8. Smoke quantification (i.e. light, medium, heavy)
  9. Surface cover (i.e. concrete pavement, drive, grass, etc.)
  10. Properly identified instant color photograph of inflow source shall be attached to reporting form.
- D. Public notification and coordination with the City's Police and Fire Departments shall be accomplished according to the following:
1. On the day of the test of any pipe segment and prior to beginning the testing, the Contractor shall go door-to-door to announce that a test is to be performed shortly and distribute a handbill describing the smoke testing.
  2. Contractor shall notify the appropriate authorities prior to the beginning of any smoke testing and shall be responsible for maintaining close coordination with the local Fire and Police Departments regarding the smoke tests.

**TECHNICAL SECTION**  
**DIVISION 2-SITE CONDITIONS**  
**SECTION 02957-SMOKE TESTING**

E. Smoke tests shall not be performed when the smoke coming out of the ground may be blown away so quickly as to escape visual detection.

F. The Contractor shall be totally responsible and held liable for the adequacy of the testing program, public notification and coordination with the City Police and Fire Departments.

**3.02 INSPECTION**

The Owner or his duly authorized representative shall witness all smoke testing, and smoke testing log forms shall be submitted to the Owner on the work day following the performance of the test.

**END OF SECTION**

## Manhole Depths on Sewer Lines Videoed

### Tape / DVD 1106

<u>MH#</u>	<u>DEPTH (ft)</u>
9001	6.33
9002	5.08
9003	5.58
9004	8.25
9011	6.0
9012	6.33
9013	7.25
9014	8.0
9015	9.25
9016	10.67
2022	11.25

### Tape / DVD 1107

<u>MH#</u>	<u>DEPTH (ft)</u>
2019	5.0
2018	5.33
2016	6.92
2017	8.83
2004	5.75
2003	8.25
3024	4.50
3030	4.75
3033	6.25
3034	6.25

### Tape / DVD 1108

<u>MH#</u>	<u>DEPTH (ft)</u>
3040	7.42
3041A	8.33
3049	5.67
3042A	7.58
3041B	7.0
3041A	7.58
4001	3.75
4001A	3.75
4002	4.0
4003	4.25
3049	5.67
4006	4.17
4005	4.50
13065	5.42
13064	5.42
13063	4.83

### Tape / DVD 1109

<u>MH#</u>	<u>DEPTH (ft)</u>
13062	4.25
13061	4.83

