



## ST. TAMMANY PARISH

Michael Cooper  
PARISH PRESIDENT

**June 16, 2021**

Please find the following addendum to the below mentioned BID.

**Addendum No.:** 1

**Bid#:** 21-20-2

**Project Name:** LA 1077 / LA 21 CONNECTOR ROAD

**Bid Due Date:** June 24, 2021 @ 2:00 PM

### **GENERAL INFORMATION:**

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1. Do not break these documents into parts or sub-parts. Each contracting entity shall be responsible for all the work related to their trades wherever it may be shown within the contract documents package.
2. The scope of the work for contractors, subcontractors, material suppliers, etc., cannot be determined by examining partial sets of documents. The entire set of drawings and specifications must be reviewed to ascertain the scope of work for each project element.
3. If the contractor bases bid on burning and, for whatever reason, the District Fire Chief shuts the burning down, the Parish will not pay extra to have the debris chipped, hauled off site, and disposed of legally.
4. Access to driveways and public and private rights-of-way shall be maintained at all times. Contractor shall coordinate his work to accommodate this provision.
5. All wetlands areas within the required roadway right-of-way in this contract have been mitigated. At this time, the linear ditch detention area from Station 151+27 to Station 177+85 between southern property line of Shady Lakes Subdivision and the northern right-of-way line has an approved Jurisdictional Determination from the USACE and is awaiting mitigation approval. Contractors shall include in their bid all costs to construct the project as shown in the plans. However, contractors shall also include all costs to construct northern roadway ditch within the actual roadway right-of-way temporarily until the wetlands mitigation is approved by the USACE. **No clearing, grubbing, excavation, or other work in this linear detention area is to occur until wetland mitigation is approved for this area.** Upon receipt of wetlands mitigation approval, contractor will then be required to complete the construction as detailed on the plans.



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6. All materials hauled to and from the site shall have a haul plan approved by the St. Tammany Parish Government.
7. Bids will be opened on the 3rd floor in the Staff Conference Room at the office of **St. Tammany Parish Government, 21454 Koop Drive, Mandeville, LA 70471.**
8. **Contractor is required to obtain a \$250,000 maintenance bond for LA1077, Ochsner Blvd and other St. Tammany Parish roadways that are used as haul routes which could be damaged as result of this project. Any damage to haul roads shall be repaired immediately with traffic maintenance asphalt until project is complete. Temporary and permanent repairs shall be as directed by St. Tammany Parish Engineering. Traffic maintenance asphalt shall meet LADOTD binder specifications. Permanent concrete and asphalt roadway repairs shall meet LADOTD Specifications. This work is at no direct pay.**

### **THE FOLLOWING CHANGES WERE MADE TO THE SPECIFICATIONS:**

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#### 1. **Section 03 Summary of Work**

- A. Revise Paragraph III, Documents, to "Bid Documents dated April 29, 2021 and as revised by Addendum, and entitled:"
- B. Revise Paragraph IV, OTHER REQUIREMENTS (as applicable) to "LADOTD (2016 Edition of Louisiana Standards for Roads and Bridges)."

#### 2. **SPECIAL PROVISIONS**

Add Item S-017 Remove 12" SFM and Backfill with Structural Fill as follows:

#### **ITEM S-017, REMOVE 12" SFM AND BACKFILL WITH STRUCTURAL FILL**

##### A. GENERAL

This item consists of all labor, materials, and equipment necessary to remove existing 12" SFM and backfill with approved structural fill.

##### B. MATERIALS

Structural fill shall consist of sands (SP, SW), clayey sands (SC) or silty sands (SM) with at least 75% passing the No. 4 sieve and containing not more than 15% passing the No 200 sieve. Material shall be compacted to 95% of the maximum dry density as



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determined by ASTM D698 at moisture content between 1% below and 3% above the optimum moisture content.

### C. MEASUREMENT AND PAYMENT

Measurement for this item will be made by actual field measured linear footage of 12” SFM removed. Contractor shall include cost for backfilling with approved structural fill back to grade in the contract unit bid price per LN FT. Payment will fully compensate all labor, materials, equipment, tools and incidentals required to complete the item.

Payment will be made under:

### **ITEM S-17, REMOVE 12” SFM AND BACKFILL WITH STRUCTURAL FILL, per LN FT.**

3. ADD attached pages 1-27, Natural Gas System Specification. Included are Measurement and Payment description.

Backfill material for removal of existing gas line shall be structural fill consisting of sands (SP, SW), clayey sands (SC) or silty sands (SM) with at least 75% passing the No. 4 sieve and containing not more than 15% passing the No 200 sieve. Material shall be compacted to 95% of the maximum dry density as determined by ASTM D698 at moisture content between 1% below and 3% above the optimum moisture content.

4. DELETE the Unit Price Base Bid Form and Alternate No. 1 Bid Form and REPLACE with the Revised Unit Price Bid Form and Alternate No. 1 Bid Form.
5. ADD Special Provision Section SP.35 CONSTRUCTION PHOTOGRAPHS AND VIDEOS. (Specification is provided as an Attachment)
4. ADD Special Provision Section SP.36 SITE CONDITIONS SURVEY. (Specification is provided as an Attachment)

## **THE FOLLOWING CHANGES WERE MADE TO THE UNIT PRICE SHEET**

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### **1. Quantity Change:**

- a. Item#701-04-01120 Storm Drain Pipe Arch (48” EQUIV. RCPA) quantity change from 96 LNFT to 128 LNFT
- b. Item#729-01-00100 Sign (Type A) quantity change from 134.2 SQFT to 141.7 SQFT
- c. Item#729-02-00100 Sign (Type B) quantity change from 41 SQFT to 126.1 SQFT
- d. Item#729-21-00100 U-Channel Post quantity change from 22 Each to 37 Each



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- e. Item#732-01-02080 Plastic Pavement Strip (Solid Line) (24" W) (Thermo 125 Mil) quantity change from 0.196 Mile to 0.228 Mile
- f. Item#732-02-02000 Plastic Pavement Strip (Solid Line) (4" W) (Thermo 90 Mil) quantity change from 9.933 Mile to 10.077 Mile
- g. Item#732-02-02040 Plastic Pavement Strip (Solid Line) (8" W) (Thermo 90 Mil) quantity change from 0.286 Mile to 0.028 Mile
- h. Item#732-03-02070 Plastic pavement Strip (Dotted Line) (24" W) (Thermo 90 Mil) quantity change from 0.041 Mile to 0.060 Mile

### 2. Deleted Item:

- a. Item#701-04-0116 Storm Drain Pipe Arch (60" EQUIV. RCPA) 595 LNFT

### 3. Added Item:

- a. Item#701-04-01180 Storm Drain Pipe Arch (72" EQUIV. RCPA) quantity 595.
- b. Item#732-04-01130 Plastic Pavement Legends and Symbols (DIR ARR RNDBT-FSHK) (Type LTRC) quantity 1 Each
- c. Item#S-012 Remove and Dispose of Existing Natural Gas Main quantity 1700 LNFT
- d. Item#S-013 Jack & Bore Steel 12" Casing with 8-Inch Diameter HDPE (PE 4710, DR 11) Natural Gas Main (Including End Seals & Vents) quantity 70 LNFT
- e. Item#S-014 Directionally Drill New 8-Inch HDPE (PE 4710, DR 11) Natural gas Main Including All Required Fused Fittings quantity 1700 LNFT
- f. Item#S-015 New 8-Inch Diameter Natural Gas Poly Valve with Valve Box and Concrete Pad quantity 1 Each
- g. Item#S-016 Connect New 8-Inch Diameter HDPE Gas Main to Existing HDPE Natural Gas Main with Valve (Including Fittings) quantity 2 Each
- h. Item#S-017 Remove 12" SFM and Backfill with Structural Fill quantity 690 LNFT

## **THE FOLLOWING CHANGES WERE MADE TO THE PLANS**

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- 1. **Title Sheet**, add the following text to **INDEX OF SHEETS**:  
**53-57            NATURAL GAS MAIN RELOCATION**
- 2. **Sheet 2r**:
  - A. **ADD TRAFFIC CONTROL NOTE** as follows:



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**7. Any work that requires closing a lane or flagging operations along LA1077 shall be done at night between the hours of 7:00 PM and 5:00 AM. Closures and flagging operations shall be coordinated with LADOTD District 62 Traffic Engineering and St. Tammany Parish Engineering Department.**

B. DELETE the following note in its entirety:

CONTRACTOR SHALL PERFORM AT LAST 50 PERCENT OF THE TOTAL CONTRACT AMOUNT AS ESTABLISHED IN THE BID WITH THE CONTRACTOR'S OWN ORGANIZATION.

3. DELETE sheet 3 SUMMARY OF QUANTITIES and REPLACE with attached **SUMMARY OF ESTIMATED QUANTITIES (Addendum No. 1)**. (plan attached).
4. DELETE Sheets 4-6 and REPLACE with attached **Sheets 4-6 (Addendum No.1)**.
5. DELETE Sheet 41 and REPLACE with attached **Sheet 41 (Addendum No.1)**.
6. ADD attached **Sheets 53-57 (Addendum No.1)**.

### **QUESTIONS FROM PRE-BID MEETING on 06/09/2021**

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#### **Question 1:**

Is a DOTD Inspector required for work on HWY 1077?

#### **Answer:**

No, a DOTD Inspector is not required but they can request to be present.

#### **Question 2:**

What type of pipe is the existing sewer force main?

#### **Answer:**

Existing SFM is a 12" PVC Pipe.

#### **Question 3:**

What is the newest cost estimate for the project?

#### **Answer:**

With the addition of new pay items, the cost estimate is between 9-11 million.



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### **Question 4:**

Can we get a copy of the sign in sheet?

### **Answer:**

Yes, a copy is provided in Addendum No. 1.

### **Question 5:**

Are there any restrictions on Ochsner BLVD regarding trucking and work times?

### **Answer:**

No work time restrictions along Ochsner Blvd.

**There are restrictions to work along LA1077. Any work that requires closing a lane or flagging operations along LA1077 shall be done at night between the hours of 7:00 PM and 5:00 AM. Closures and flagging operations shall be coordinated with LADOTD District 62 Traffic Engineering and St. Tammany Parish Engineering Department.**

### **ATTACHMENTS:**

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1. **Natural Gas System Specification** (27 pages)
2. **Revised Unit Price Bid Form and Alternate No. 1 Bid Form** (19 pages)
3. **SP.35 CONSTRUCTION PHOTOGRAPHS AND VIDEOS** (5 pages)
4. **SP.36 SITE CONDITIONS SURVEY** (1 page)
5. **SUMMARY OF ESTIMATED QUANTITIES (Addendum No. 1)** (1 plan sheet)
6. **Plan Sheets 4-6 (Addendum No.1)** (1 plan sheet)
7. **Plan Sheet 41 (Addendum No.1)** (1 plan sheet)
8. **Plan Sheets 53-57 (Addendum No.1)** (5 plan sheets)
9. **Mandatory Pre-Bid Sign-In-Sheet** (2 pages)

**End of Addendum No. 1**

## **SPECIAL ITEMS**

### **NATURAL GAS SYSTEM**

#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION**

- A. This section of the specifications details requirements for work and materials to be used in connection with installing, constructing, laying, placing, etc., gas lines, gas valves, valve boxes and other gas system appurtenances detailed on the plans and in the other sections of these specifications. The CONTRACTOR'S attention is directed to the Proposal Form, Specifications and Plans to determine which type of material is to be used on this particular project. The CONTRACTOR shall provide all labor, materials, tools and equipment necessary to install all gas lines, valve boxes and appurtenances as shown on the Plans. The Work shall include excavation, sheeting and bracing, bedding, backfill, etc.
- B. All work performed under this Contract shall comply to the requirements of the United States Department of Transportation, Office of Pipeline Safety, Part 192 of Title 49, Code of Federal Regulations "Transportation of Natural and Other Gas by Pipeline, Minimum Safety Standards."
- C. Any part, portion, or section of this Specification found to be in conflict with any part, portion, or section of Part 192, shall be considered null and void and the applicable part, portion or section of Part 192 shall be substituted therefor.
- D. Contractor shall furnish Owner with copies of the welder certifications and PE Fusion Certification for their records prior to any work being done. Contractor shall be certified in accordance with the Town of Madisonville's Certification Requirement and for working on their system.

#### **PART 2 - PRODUCTS**

##### **2.01 STEEL GAS PIPE (NOT USED)**

- A. All pipe installed in the transmission main shall be plain A.P.I. line pipe conforming to A.P.I. Std. 5L (latest edition with latest supplements) for Seamless or Electric-welded Grade B, Electric-furnace or open-hearth Bessemer.
- B. All pipe installed in the distribution system shall be plain A.P.I. line pipe conforming to A.P.I. Std. 5L (latest edition with latest supplements) for Seamless or Electric-welded Grade B, Electric-furnace or open-hearth Bessemer or Butt-welded Bessemer.
- C. All steel pipe shall be beveled for welding. All steel pipe smaller than 2.375" O.D. shall be furnished in at least twenty (20') foot lengths. All steel pipe 2.375" O.D. and larger shall be furnished in double random lengths.
- D. All steel pipe shall be marked in accordance with the above A.P.I. Specification. Said markings shall include the A.P.I. monogram. The Contractor shall provide the Engineers with mill test certificates indicating results of physical and chemical tests as required by the above A.P.I. Specification.
- E. In the event that pipe for use in this project is manufactured by a mill which is not

authorized to use the A.P.I. monogram, the Contractor shall provide the Engineers with certificates from an independent testing laboratory approved by the Engineers. These certificates shall indicate results of all chemical and physical tests as required by A.P.I. Standard 5L (latest edition with latest supplements). The cost of such testing shall be included in other items. No additional compensation shall be allowed.

- F. Cathodic protection shall be provided for at locations where directed by the Engineer. Criteria for Cathodic protection shall be in accordance with the requirements set forth in the Federal Register, "Transportation of Natural and other Gas by Pipeline: Minimum Federal Safety Standards", Part 192; Department of Transportation, Office of Pipeline Safety.
- G. The minimum wall thickness and weight of the various sizes of steel pipe installed in the transmission line and distribution system will be as follows:

Size Nominal (Inches)	O.D.	Size (Inches)	Wall Thickness Minimum (Inches)	Weight Minimum (Lbs. per Ft.)
3/4		1.050	0.113	1.13
1		1.315	0.133	1.68
1 1/2		1.900	0.145	2.72
2		2.375	0.154	3.65
3		3.500	0.216	7.58
4		4.500	0.237	10.79
6		6.625	0.250	17.02
8		8.625	0.250	22.36

**2.02 HIGH DENSITY POLYETHYLENE GAS MAIN**

- A. Pipe shall be capable of operating at a pressure of 100 psi
- B. Gas lines, including pipe and fittings shall be made of polyethylene compound to ASTM D-1248 for Type III, Grade P34, Category 5 (ASTM Material Designation PE 3408). Pipe and fittings shall be rated for a minimum working pressure of 100 psi at 73.4 degrees Fahrenheit and shall conform to ASTM D-2513-85a "Standard Specifications for Thermoplastic Gas Pressure Piping", ASTM D-3261-85 "Standard Specifications for Butt Heat Fusion Polyethylene Plastic Pipe and Tubing" and ASTM D-2683-85 "Standard Specifications for Socket-Type Polyethylene Fitting for Outside Diameter Controlled Polyethylene Pipe and Tubing." Pipe and fittings shall be installed in accordance with manufacturer's recommendations. All connections shall be visually inspected by the ENGINEER prior to the CONTRACTOR performing any backfilling. All polyethylene pipe shall be visually inspected by the ENGINEER prior to the CONTRACTOR performing any backfilling. All polyethylene pipe shall be marked. Markings shall consist of at least the following: manufacturer, product name or trade name, nominal diameter, material type, SDR value, applicable standards, class rating. Gas main shall have a SDR rating of 11.

**2.03 MEDIUM DENSITY POLYETHYLENE GAS PIPE (NOT USED)**

- A. Gas lines, including pipe and fittings shall be made of polyethylene compound to ASTM D-1248 (ASTM Material Designation PE 2406). Pipe and fittings shall be rated for a minimum working pressure of 100 psi at 73.4 degrees Fahrenheit and shall conform to ASTM D-2513-



85a "Standard Specifications for Thermoplastic Gas Pressure Piping", ASTM D-3261-85 "Standard Specifications for Butt Heat Fusion Polyethylene Plastic Fittings for Polyethylene Plastic Pipe and Tubing" and ASTM D-2683-85 "Standard Specifications for Socket-Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing." Pipe and fittings shall be installed in accordance with manufacturer's recommendations. All connections shall be visually inspected by the ENGINEER prior to the CONTRACTOR performing any backfilling. All polyethylene pipe shall be visually inspected by the ENGINEER prior to the CONTRACTOR performing any backfilling. All polyethylene pipe shall be marked. Markings shall consist of at least the following: manufacturer, product name or trade name, nominal diameter, material type, SDR value, applicable standards, class rating. Gas main shall have an SDR value of 11.

#### **2.04 COATING AND WRAPPING STEEL PIPE (NOT USED)**

- A. Coating Steel Pipe shall be standard X-TRU-COAT, or approved equal, as applied by PLEXCO of Harvey, Louisiana, or any other approved X-TRU-COAT applicator.
- B. The coating shall be applied as follows:
  - 1. Steel Pipe shall be pre-heated.
  - 2. Steel Pipe shall be steel shot cleaned to produce a slightly stippled surface.
  - 3. The Modified Rubber Blend Adhesive shall be applied to the minimum thickness recommended by the manufacturer.
  - 4. The High Density Polyethylene is extruded to the pipe surface in accordance with the recommendation of the manufacturer.
  - 5. Water bath for quenching to shrink and cure the polyethylene coating.
  - 6. Identification - Apply trade name X-TRU-COAT or other coating used.
  - 7. Electrical inspection at 10,000 volts to detect coating flaws.

#### **2.05 STEEL VALVES (NOT USED)**

- A. The following are standard valve specifications and shall apply only in sizes required for completion of the project.
- B. All valves used in the gas transmission line and distribution system, except service cocks, shall be wrench operated, lubricated type plug valves. These valves shall be as manufactured by the Rockwell-Nordstrom Valve Company, or approved equal.
- C. Companion flanges shall be furnished and welded to the pipe at valve locations in the transmission line and distribution system. The cost of this work shall be included in the price bid for valves.
- D. Valves on H.P. transmission lines, 2" and larger will be as specified in the Special Conditions of the Specifications.
- E. Valves on H.P. transmission lines, 3/4", 1" and 1-1/2" size shall be 500 pound., Rockwell-Nordstrom Semi-Steel valves, flanged and wrench operated, Figure No. 525, or approved equal. However, when valves of these sizes are used in service lines, etc., a Mueller H-17656 Valve Tee may be used. Valves on distribution system lines in size 6" to 8" diameter shall be 200 pound Rockwell-Nordstrom Semi-Steel valves, flanged and wrench operated, Figure No. 143, or approved equal.

- F. All 2", 3" and 4" valves on distribution system lines shall be 175 pound, Rockwell-Nordstrom Semi-Steel valves, style 38 Dresser end and wrench operated, Figure 23141 with conducting gasket, or approved equal.
- G. All 3/4" through 2" service cocks shall be Mueller No. H-11175 Lub-O-Seal Gas Meter Stops, or approved equal.
- H. All valves on transmission and distribution mains, not service cocks, shall be equipped with 2" square shank adaptor operating nuts. Adaptors shall be installed on the valves and set screws tightened before valves are installed in the system.
- I. The Contractor shall also furnish one each heavy duty valve handle for each size valve in each installed regulator station, manufactured by valve manufacturer.
- J. All service cocks shall be provided with a Mueller Type H-10090 Sealing Device, or approved equal.
- K. All valves and cocks shall be adjusted and serviced according to the manufacturer's specifications before being installed in the system and shall be installed in an open position with lubricating screw in a half out position.

## **2.06 POLYETHYLENE GAS VALVES**

- A. Gas valves shall be polyethylene valves for gas distribution pipelines (ASTM Material designation PE 3408) as manufactured by Rockwell ball valves and plug valves, or approval equal and shall conform to ASTM D-3261-85 "Standard Specifications for Butt Head Fusion Polyethylene Plastic Fittings for Polyethylene Plastic Pipe and Tubing and ASTM D2683-85 "Standard Specifications for Socket-Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing

## **2.07 VALVE LUBRICATION**

- A. All valves shall be provided with a combination button head fitting and lubricant screw.
- B. The Contractor shall provide four (4) sticks of the proper size lubricant specified for each valve, three of which shall be used to lubricate each valve prior to installation in the system.
- C. Lubricant sticks shall be of the grade recommended for natural gas service by the manufacturer of the valve.
- D. All service cocks shall be fully lubricated at the time of installation with Mueller Type H-853 lubricate or equal. In addition, the Contractor shall provide the Owner with one pound lubricant, in unopened containers, for each one hundred (100) service cocks provided.

## **2.08 VALVE BOXES**

- A. Valve boxes on 4" and smaller valves shall be two sections sliding type adjustable valve boxes, Mueller No. H-10364, size 562-A, or approved equal.
- B. Valve boxes on 6" and larger valves shall be three section adjustable valve boxes, Mueller No. H-10380, size AA with No. 140 Dome Base or approved equal.

- C. In event the valve must be installed at a below normal depth, a suitable valve box extension shall be provided to adjust the top of the box to the roadway or ground level. Cost of furnishing and installing valve box extensions shall be included in other items; no additional compensation will be allowed.
- D. All valve boxes shall be provided with cast iron covers on which the word "GAS" is printed in raised letters.
- E. All valve boxes shall have a 6" by 1'-0" concrete ring around the top of the box as detailed on the Plans. The cost of this concrete ring shall be included in the unit price bid for the valve. No additional compensation shall be allowed.
- F. To eliminate any possible transfer of loads from the valve box to the valve, the Contractor shall furnish and install masonry or other approved supports beneath all valve boxes as detailed on the Plans.

**2.09 CASING PIPE**

- A. All mains and laterals crossing state highways and railroads shall be encased in a steel pipe of larger diameter. This casing pipe shall have a minimum wall thickness of 0.250 inches and shall extend through the roadway at least from ditch to ditch line and across the roadway right-of-way a distance designated on the Plans.
- B. All casing shall be installed with an even bearing throughout its length and with a slope to one end. Due care shall be taken to prevent a waterway from forming adjacent to the casing.
- C. The vents shall be fabricated from 2" or larger pipe and installed as indicated on the standard detail sheet of the Plans.
- D. The Contractor shall also install the insulator spacers and end seals. The cost of these and all other work incidental to the installing of the casing shall be included in the unit price bid.
- E. Typical examples of casing installation are shown in the detail section of the Plans.
- F. Casing pipe shall be steel having a minimum yield strength of 35,000 psi, conforming to A.P.I. Specification 5L. Casings shall have the following minimum wall thicknesses:

<u>Size</u> (Non. Diam., In.)	<u>Thickness</u> (Inches)
Under 12" I.D.	0.250
14 and 16 O.D.	0.281
18 O.D.	0.313
20 O.D.	0.344
24 O.D.	0.375
26 O.D.	0.438
28 and 30 O.D.	0.469
32 O.D.	0.500
34 and 36 O.D.	0.532
38,40, and 42 O.D.	0.563

- G. Both the interior and exterior of the pipe shall have a bituminous coating.
- H. Upon written permission of the approving agency (Railroad company or Highway Department) and the Engineer, the Contractor may be permitted to substitute reinforced concrete culvert pipe or bituminous coated corrugated metal pipe for steel casing pipe specified above, provided that the substituted pipe conforms to the approving agency's specifications.
- I. Joints shall be butt welded. Coatings shall be continuous at the joints.
- J. The carrier pipe shall be supported by utilizing threeway to concentric casing cradle as manufactured by T. D. Williamson, Inc., Pipeline Seal and Insulator Company, APS Casing Spacers or equal.
- K. Casing seals, which seals the annulus between the casing and carrier pipe, shall be made of cement grout or bituminous material.

## **2.10 SERVICE TAPS ON MAINS (NOT USED)**

- A. Service taps into steel distribution lines shall be made with Mueller No. H-17650, No-Block Service tee. Service tees shall be drilled as follows: for 3/4" service pipe - 3/8"; for one inch service pipe - 2"; and 1-1/4" for 2" service pipe.
- B. Service taps for all size services on the transmission main shall be with a 1" Mueller #H-17800 curb valve tee as detailed on the Plans. These service tees shall be drilled with a 1/4" drill only. Each curb valve tee shall be equipped with a curb box, Mueller No. H-10317 or approved equal. Service taps into polyethylene distribution lines shall be made with a 3/4" Phillips Tapping Tee.

## **PART 3 - EXECUTION**

### **3.01 TESTING PIPE COATING**

- A. The Contractor shall include in the price per linear foot bid for the transmission main and for all distribution lines 1/2" and larger, the cost of furnishing all equipment, tools, labor, materials, incidentals, etc., necessary to conduct "Holiday" tests on said pipe after joints have been made and coated and before lowering the pipe into trench. All defects found shall be repaired before lowering the pipe into the trench. No additional compensation shall be allowed for such repairs. All tests shall be made in the presence of a representative of the Engineer.
- B. The holiday detector shall be capable of producing a spark of 2" in length minimum at all times.
- C. The Contractor shall submit to the Engineers for approval the type and name and address of the manufacturer of the holiday detector.

### **3.02 LAYING STEEL PIPE (NOT USED)**

- A. Before being placed in the trench, all pipe shall be carefully examined for defects and the inside of the pipe swabbed clean. The bottom of the trench shall be conditioned such that

the pipe will have a bearing on earth along its entire length. Where joints occur, the trench shall provide ample room for connecting the pipe in an efficient and satisfactory manner.

- B. Each length of pipe as it is laid in the trench, shall be carefully aligned with the pipe already laid. Flanged and bolted joints shall be made up with proper gaskets, without tightening the bolts unevenly, and without causing undue stress in the joints. Threaded joints shall be thoroughly cleaned with a wire brush before applying joint compound and they shall be made up without crossing the threads.
- C. All pipe bends in steel pipe in the system shall be made cold and shall be made without kinking, wrinkling or flattening the pipe. The Contractor shall provide the proper bending shoe or other suitable equipment to perform this operation in a manner satisfactory to the Engineers.
- D. All short bends in the system shall be made with standard weight long radius welding fittings, Tube Turn, or approved equal. Lateral connections shall be made using the proper fittings, Tees, Y's, etc.
- E. Where work is suspended at night or for any other reason, the open ends of the pipe line shall be securely plugged or closed so as to prevent the entrance of water, animals and other foreign matters.

### **3.03 JOINTS IN STEEL GAS PIPING (NOT USED)**

- A. Screw Joints shall be carefully wiped or brushed to remove grease applied at the factory. All dirt and grit shall be removed between threads, and "X-pando" or other approved joint compound shall be applied on the threads to serve as a lubricant when making up. Care must be taken to avoid crossing threads.
- B. Flanged Joints shall be made up with suitable composition gaskets and bolts shall be tightened such that no undue stress is placed upon pipe members or fittings.
- C. Welded Joints for steel pipe shall be butt welded with acetylene or shielded metal arc-welding equipment unless other welding methods are submitted to and approved by the Engineers.

Surfaces to be welded shall be free from loose scale, rust, and other foreign materials. Piping shall be carefully aligned before welding and shall be maintained in alignment during welding. Welds shall be sound throughout, shall be fused thoroughly, and shall be free from gas pockets, surfaces porosity and other defects. Welds shall be free from overlaps, undercuts and excessive convexity, and shall be guaranteed leakproof at testing pressure.

No arc welding shall be permitted on pipe 2" and smaller, nominal diameter.

Welded joints found unsatisfactory shall be remade, or if rewelding cannot be done satisfactorily, new pipe and fittings shall be provided at the Contractor's expense. Before rewelding, the surface shall be cleaned thoroughly, and properly prepared. Peening and caulking of welds will not be permitted.

No welder will be permitted to perform under this contract until after he has been certified as proficient in both shielded metal arc and oxyacetylene welding, according to the provisions of A.P.I. Standard 1104, as amended.

Each welder shall make samples of his work using materials and procedures for this Contract. Each sample shall be properly marked and sent to an approved testing laboratory for evaluation. Until a favorable report is returned from the laboratory, he will not be permitted to weld.

The cost of these tests and the fees charged by the laboratory shall be included in other items. No additional compensation shall be allowed.

Contractor shall be responsible for qualifying all welding procedures to be used on this construction. No additional compensation shall be allowed.

### **3.04 LAYING POLYETHYLENE GAS PIPE**

#### **A. General**

Gas Piping shall be installed in accordance with ASTM D2774-72 "Standard Recommended Protective for Underground Installation of Thermoplastic Pressure Piping." Proper implements, tools and facilities satisfactory to the ENGINEER shall be utilized by the CONTRACTOR for the safe and efficient execution of the Work. All pipe, fittings, valves and accessories shall be carefully lowered into the trench using suitable equipment in such manner as to prevent damage to pipe fittings. Under no circumstances shall the pipe or accessories be dropped or dumped into the trench. A minimum cover of 60" shall be maintained between the top of the trench and top of the pipe.

#### **B. Inspection Of Pipe And Accessories**

The pipe and accessories shall be inspected for defects prior to lowering into trench. Any defective, damaged or unsound material shall be repaired or replaced as directed by the ENGINEER.

#### **C. Pipe Kept Clean**

All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench. Pipe shall be kept clean by means approved by the ENGINEER during and after laying. All openings to the pipe shall be closed by suitable means at all times except as the actual progress of the Work may require. Stub ends and fittings installed for further connection shall be closed with plugs or caps normally used for that purpose.

#### **D. Joints**

All joints shall be made in accordance with manufacturer's recommendations. A "Bull-Horn" type connection where a heatfuse connection is required will not be accepted. The CONTRACTOR will be required to cut out the "Bull-Horn" section and make a new acceptable splice at no additional cost or contract adjustment.

#### **E. Tracers For Non-Metallic Pipe**

Tracer wire for non-metallic pipe shall be provided in accordance with 49CFR, Part 192.321. Plastic pipe that is not encased must have an electrically conducting wire (plastic bonded 10 gauge copper wire) as a means of locating the pipe underground. Tracer wire may not be wrapped around the pipe and contact with the pipe must be minimized but is not prohibited.

Tracer wire installed for pipe locating purposes must be resistant to corrosion damage. All splices in the tracer wire must be connected using a direct burial connection to prevent corrosion or deterioration of the connection so as to not lose connectivity over time. Such connection may be made by using the appropriate size direct burial kit silicon filled and sealed or an approved equal.

Tracer wire shall be installed 6-8 inches above the top of the pipe after partial backfill. Tracer wire must be protected at all time to prevent damage. The use of splices shall be kept to a minimum. A continuity/ connectivity test shall be conducted and witnessed by the Engineer prior to acceptance.

A "Warning/Cautionary Tape" shall be placed over the pipe approximately 12" below the natural ground level. The "Warning/Cautionary Tape" shall be 2" wide, orange in color, and shall be marked "WARNING/CAUTION BURIED GAS LINE BELOW", and shall be of non-corrosive manufacture.

Service pipe shall have the same wire laid six inches (6") above the top of the service pipe and project one (1) foot into or along side each meter.

### **3.05 PLACING VALVES AND FITTINGS AND TEST STATIONS**

- A. Valves fittings and test stations shall be placed in the location indicated on the Plans and as directed by the ENGINEER.
- B. All underground valves shall be set vertically. Boxes shall be set with covers flush with the surface of the adjacent ground, street, etc.
- C. Before being placed in the trenches, all valves, meters, fittings, etc., shall be carefully examined by the Contractor are in good working order and are clean.

### **3.06 JACKING AND BORING PIPE**

#### **A. General**

Where pipe is to be laid beneath railroads, Federal Highways, State Highways, and concrete pavement, jacking and boring will be required. The Contractor will not be permitted to open cut.

The requirements of the approving agency, such as railroad or State Highway Department, shall govern over these Specifications and Plans.

Sub-surface operations resulting in damage to the tracks or pavement, shall be the responsibility of the Contractor and shall be repaired at no cost to the OWNER.

#### **B. Jacking and Boring Casing Pipe**

Installing of steel casing pipe shall conform to the A.R.E.A. Manual for Railway Engineering and Louisiana Standard Specifications for Roads and Bridges, Sections 7 and 8, latest edition.

Where the ends of pipe used as casing for other pipe are below ground, the ends shall be sealed.

The barrel of the carrier pipe shall be supported within the casing. Supports or carrier runners shall be spaced as recommended by the manufacturer, or as directed by the ENGINEER.

C. Prefabricated Steel Liner

1. General

- a. The Contractor shall furnish all labor, materials, equipment and incidentals required to jack pipe sleeves under State highways and to install pipelines therein, at the locations shown on the Drawings and as specified herein.
- b. All work on this project affecting the Louisiana Department of Transportation and Development (LADOTD) property, right-of-way, or facilities shall be carried out to the full satisfaction of the LADOTD authorized representative. The Contractor shall fully inform himself of all requirements of the LADOTD as pertains to the specific project and shall conduct all his work accordingly.
- c. Prior to the start of work, a detailed plan of jacking pits and excavation together with an outline of the methods to be used and a time schedule for jacking operations shall be submitted to the Engineer for review, and no work shall be done until Engineer's review is completed. The Contractor shall also submit the name of the jacking subcontractor for approval.
- d. Three (3) days written notice prior to start of the actual work shall be given to the Engineer and the Louisiana Department of Transportation and Development.
- e. The Contractor shall install, maintain, and leave in place any sheeting, underpinning, cribbing, and other related items (other than that required for the jacking pits) to support any structure or facility on the right-of-way owned by LADOTD. The LADOTD or the Engineer, depending upon existing conditions, may require that additional sheeting for the trench be left in place. If such a requirement is made, the sheeting left in place shall be paid for at the unit price bid in the Schedule of Values.
- f. In no instance shall any wires, equipment, or other appurtenances be placed across or pass across State property without the express written permission of LADOTD's authorized representative.
- g. All equipment used by the Contractor on State property may be inspected by the State and shall not be used if considered unsatisfactory by State representatives. The State highways shall be kept free of obstructions at all times.
- h. No blasting will be permitted under or adjacent to State highways.
- i. The Contractor shall be fully responsible for all damages arising from his failure to comply with the regulations and the requirements of these Specifications.
- j. All work at State highway crossings shall be performed and completed in a manner fully satisfactory to LADOTD.
- k. The Contractor shall furnish shop drawings showing all fabrication and construction details for the jacked crossings.



## 2. Materials

- a. Steel sleeve shall be welded steel pipe, new and unused material conforming to ASTM A139, Grade B, sized as shown on the Drawings. Minimum thickness of the steel sleeve shall be 0.500 inch unless a greater thickness is shown on the Drawings. The steel sleeve shall be painted inside and outside with two coats of bitumastic paint prior to delivery to the job.
- b. Class V concrete pipe in accordance with ASTM C-76 and specially designed for stresses encountered in installation by jacking the pipe in place may be used for the casing sleeve in lieu of the steel sleeve specified above.
- c. The carrier pipe within the sleeve shall have all joints restrained and shall conform to the requirements of these Specifications. The sleeve has been sized for installation of mechanical joint ductile iron carrier pipe and, if other type pipe materials are used which require a larger sleeve, the larger sleeve shall be provided and installed at no additional cost to the Owner.
- d. Insulating spacers shall be painted galvanized steel with micarta skids, Model 512M as manufactured by Plico Co., Cascade Waterworks Manufacturing Co. or approved equal. Raised mortar collars on prestressed concrete cylinder pipe shall be equal to insulating spacers.
- e. Brick for bulkheads shall be sound uniformly burned and shall comply with ASTM C 32, Grade SS. Mechanical seals may be used in lieu of the brick bulkheads.
- f. Mortar for brickwork shall consist of one part cement, 1/4 part lime, and 2 parts sand. Sand shall comply with ASTM C-144; lime shall comply with ASTM C 207 Type S; cement shall comply with ASTM C 150, Type II.

## 3. Jacking Sleeve

- a. The Contractor shall provide all material, equipment, and facilities required for jacking the sleeves beneath the highway. The sleeves shall be jacked in one continuous operation at the locations shown on the Drawings. In no event shall jacking be discontinued for sufficient period to cause the partially jacked sleeve to “freeze” in place. Proper alignment and elevation of the sleeves shall be consistently maintained throughout the jacking operation. The method used to install the sleeve shall conform to the requirements of the LADOTD Project Permit which may be inspected at the office of the Engineer.
- b. Jacking pits shall be shored with sheeting or such other materials as required. Sheeting shall be driven to a sufficient depth below the invert of the steel sleeve to resist any pressure developed by the soil outside the jacking pit. Sheeting shall terminate not less than 3-feet 6-inches above existing grade.
- c. When steel sleeves are used, the sections shall be field welded in accordance with the applicable portions of AWWA C 206 and AWS D7.0 for field welded water pipe joints. Wire brush and paint the welded joints with Inertol Quick-Drying Primer 626 by Kop-Coat Company, or equal.
- d. At the completion of the jacking operations, the Contractor will be required to leave

all wooden sheeting in place. If steel sheeting is used, it may be removed, however, should damage to the roadway, pipeline or any other adjacent structure occur, the Contractor shall leave all remaining sheeting in place and re-drive and leave in place any sheeting which is required to stabilize the site and prevent additional damage from occurring. The top of all sheeting left in place shall be cut off 36-inches below finished grade.

- e. The Contractor shall be responsible for preventing the occurrence of voids outside the sleeves and if they do occur, he may be directed to fill them with grout in a method approved by the Engineer. The Contractor shall constantly exercise care in the removal of the earth from within the sleeve sufficiently close the forward end to prevent voids.
- f. The Contractor shall be fully responsible for furnishing and installing and later removing to the extent required, a thrust block or other provisions required for backing up the jacks employed in driving the sleeve forward. No payment for installation and removal of such backup blocks will be made other than the lump sum prices provided for in the Schedule of Prices. The entire construction of same shall be discussed with the Engineer in advance and shall be fully satisfactory to him before being built. After completion of the jacking operation, the backup structures shall be removed sufficiently to permit construction of the pipeline in the sleeve.

#### 4. Installing Pipe Sleeve

- a. The pipe installed within the sleeve shall be in full conformity with these Specifications and as shown on the Drawings. The pipe shall be installed to the exact lines and grades required within the sleeve and after having been satisfactorily placed and approved by the Engineer, the space between the outside of the pipe and the sleeve shall be completely filled with sand pumped in one continuous uninterrupted operation in a manner to prevent occurrence of any voids between the pipe and the sleeve. The pipe must be braced to the side and top of the sleeve to prevent flotation or motion during the placing of sand.
- b. A masonry bulkhead 8-inches wide shall be placed at the ends of the sleeve. As an alternate, a continuous sleeve type rubber seal of one hundred percent (100%) neoprene with stainless steel straps and clamps as manufactured by Plico Co., mechanical seals, or approved equal may be installed.
- c. The casing and pipe within the casing shall be tested as specified in these Specifications.

### **3.07 INSTALLATION OF CARRIER PIPE BY DIRECT BORE TECHNIQUE (HDPE PIPE)**

#### **A. General**

- 1. The Contractor shall furnish all labor, materials, equipment and incidentals required to install carrier pipe under streets by the technique of inserting the pipe directly into a bored opening, at the locations shown on the Drawings and as specified herein.
- 2. This procedure shall be allowed only where the carrier pipe can be installed so that no pipe joint is within the bored area. In no case shall this procedure be allowed

where installation of the carrier pipe requires the pushing of one piece of pipe with another piece of pipe.

3. Prior to the start of work, a detailed plan of boring and receiving pits, including excavation, together with an outline of the methods to be used and a time schedule for boring operations shall be submitted to the Engineer for review, and no work shall be done until Engineer's review is completed and written approval has been granted. The Contractor shall also submit the name of the boring subcontractor for approval when applicable.
4. Three day's written notice prior to start of the actual work shall be given to the Engineer.
5. The Contractor shall install, maintain, and leave in place any sheeting, underpinning, cribbing, and other related items (other than that required for the boring and receiving pits) to support any structure or facility affected by the boring operations. The Engineer, depending upon existing conditions, may require that additional sheeting for the excavation be left in place. If such a requirement is made, the sheeting left in place shall be paid for at the unit price bid in the Schedule of Prices, unless the extra sheeting is required because of the Contractor's failure to properly protect the Work.
6. All work under this specification affecting the Louisiana Department of Transportation and Development (LADOTD) property, right-of-way, or facilities shall be carried out to the full satisfaction of the LADOTD authorized representative. The Contractor shall fully inform himself of all requirements of the LADOTD as pertains to the specific project and shall conduct all his work accordingly.
7. All equipment used by the Contractor on State property maybe inspected by the State and shall not be used if considered unsatisfactory by State representatives. The State highways shall be kept free of obstructions at all times.
8. The Contractor shall be fully responsible for all damages arising from his failure to comply with the regulations and the requirements of these Specifications.
9. The Contractor shall furnish shop drawings showing all fabrication and construction details for the bored crossings.

B. PRODUCTS

1. The carrier pipe shall conform to the requirements of these Specifications.
2. Grout to be used to fill the annular space between the pipe and the bore wall shall be portland cement, sand and water in proportions that result in a mixture that is pumpable and will flow evenly around the carrier pipe, yet retain enough plastic properties so that it will not tend to drain out of the bore hole and away from the pipe. Grout mixtures shall not contain more than two parts sand to one part portland cement.

C. BORING OPERATION

1. The Contractor shall provide all material, equipment, and facilities required for boring the opening beneath the street or driveway. Proper alignment and elevation of the opening shall be consistently maintained throughout the boring operation. The method used to make the bore shall conform to the requirements of the LADOTD Project Permit, when applicable, which may be inspected at the office of the Engineer.
2. Boring pits shall be shored with sheeting or such other materials as required. Sheeting shall be driven to a sufficient depth below the invert of the carrier pipe to resist any pressure developed by the soil outside the boring pit. Sheeting when used shall terminate not less than 3-feet 6-inches above existing grade.
3. At the completion of the boring operations, the Contractor will be required to leave all wooden sheeting in place. If steel sheeting is used, it may be removed after installation of the carrier pipe in the bore hole but prior to installation of the joining carrier pipe, however, should damage to the roadway, pipeline or any other adjacent structure occur, the Contractor shall leave all remaining sheeting in place and redrive and leave in place any sheeting which is required to stabilize the site and prevent additional damage from occurring. The top of all sheeting left in place shall be cut off 36-inches below finished grade.
4. The Contractor shall be fully responsible for furnishing and installing and later removing to the extent required, a thrust block or other provisions required for backing up jacks which may be employed in installing the carrier pipe. No payment for installation and removal of such backup blocks will be made other than the lump sum prices provided for in the Schedule of Prices. The entire construction of same shall be discussed with the Engineer in advance and shall be fully satisfactory to him before being built. After completion of the boring operation, the backup structures shall be removed sufficiently to permit construction of the pipeline.
5. Where wet type boring techniques are allowed, bentonite or other stabilizing gels shall be used to prevent caving of the unsupported bore hole.
6. The pipe installed within the boring shall be in full conformity with these Specifications and as shown on the Drawings. The pipe shall be installed to the exact lines and grades required and after having been satisfactorily placed and approved by the Engineer, the space between the outside of the pipe and the bore hole shall be completely filled with grout in one continuous uninterrupted operation in a manner to prevent occurrence of any voids between the pipe and the bore face.
7. An earth bulkhead of sufficient width to retain the grout shall be placed at the lower end of the bore. The bulkhead shall extend up to only 75 percent of the pipe outside diameter to allow an observation port for use during the grouting operation.

8. Grout shall be pumped into the annular space between the bore face and the pipe by means of a manifold system of nozzles that simultaneously deposits grout on both sides of the carrier pipe to provide balanced grout forces. The grouting shall be begun at the lower end of the bore, adjacent to the earth bulkhead. Grout shall be pumped against the bulkhead until the grout fills the annular cavity and is pushed out of the observation port at the top of the bulkhead. The nozzles which deposit the grout shall be withdrawn from the bore hole at a slow rate to assure that the grout is discharged into the grout mass and not into the unfilled void area. This procedure is required to prevent voids from being formed as the grout nozzles are withdrawn.
9. Grouting shall be performed prior to connecting the carrier pipe on highest end of the bored installation. During the grouting process, evidence of excessive grout pressures shall be monitored by observing the inside of the carrier pipe to detect abnormal ovalization or deflection in the pipe wall. For purposes of this observation the inside of the carrier pipe shall be illuminated with a light inserted into the carrier pipe beyond the point where the grouting begins. Grout pressures shall be controlled by monitoring the quantity of grout injected into the annular cavity to determine the rate at which the discharge nozzles are to be withdrawn.
10. At the completion of the grouting operation, the carrier pipe shall be checked for excessive deflection by pulling a go-no go mandrel through the direct bored installation. The mandrel shall be sized through the direct bored installation. The mandrel shall be sized for a maximum of 7.5 percent deflection.
11. Grouting of the annular space will not be required if the diameter of the bore hole does not exceed the outside diameter of the pipe by more than one-half inch.
12. All directionally drilled pipe shall be tested as specified herein.

### **3.08 INSTALLING SERVICE ASSEMBLIES (NOT USED)**

- A. Contractor shall furnish all service meters, service regulators, fittings, bushings, meter loops, insulating pipe unions, safety relief valves, and sut trap required and shall install the assemblies as specified herein and in the General Conditions.

1. Dust Traps

Dust traps for 3/4" and one inch services shall be straight through type as manufactured by the Sprague Meter Company, or approved equal.

2. Safety Relief Valves

For service assemblies using a regulator without internal relief valve (usually Nos. 6 and 7), the Contractor shall furnish and install a 2" Fisher Series 289 H safety relief valve, or approved equal, set to relieve at pressure designated by Engineer.

For service assembly No. 1 high pressure the safety relief shall be a 3/4" Fisher

Series 1805 or equal set to relieve at pressure designated by the Engineers.

3. Insulated Unions

The Contractor shall provide insulating unions where noted on the Plans. These unions shall be as manufactured by Universal Controls, Dallas, Texas, or approved equal.

4. Meter Loops

All meter loops will be as manufactured by the Sprague Meter Company, or approved equal, dimensioned as shown on the Plans.

**3.09 SERVICE CONNECTION ASSEMBLIES (NOT USED)**

- A. Service connection assemblies shall include service tee as specified and service cock with sealing device with open end plugged.
- B. For purposes of classifying, the following connection assemblies have been set up:  
  
Service Connection Assembly No. 1 - for 3/4" service  
Service Connection Assembly No. 1 - for 1" service  
Service Connection Assembly No. 1 - for 2" service
- C. Service assembly for H.P. transmission services shall include valve tee, valve box, H.P. cut off valve tee, Type "D" regulator, safety relief valve, guard rail and wing lock stop as outlined in Specifications and detailed on the Plans. This until shall be classed as Service Connection Assembly No. 1 H.P. Contractor shall furnish and install this item complete as detailed with the exception of the Type "D" regulator which shall be furnished by the Owner.

**3.10 TESTING GAS PIPING**

- A. All tests shall be conducted in the presence of the Engineer.
- B. For these tests, the Contractor shall furnish suitable testing plugs or caps for the pipe, all necessary compressors, pipe connections, recording gauges and other equipment, together with all labor required.
- C. All breaks, leaks, or defects in the pipe, valves and fittings shall be repaired and made good by the Contractor at this own expense, following which the lines shall be retested until the test requirements have been fulfilled.
- D. Services shall be tested separately from the gas mains.
  - 1. Transmission Main (Not Applicable)

The transmission main shall be tested with compressed air. Before the 100# air test is made on the one mile sections "Pig" (Type JRN or RCN 50, manufactured by T.D. Williamson, Inc., or equal) shall be passed through the entire section to be tested.

Pipe shall be tested in sections not exceeding one (1) mile in length. A one hundred (100) pound per square inch pressure shall be applied by means of a compressor or

other suitable means and shall be maintained without pressure drop for at least 24 hours. A sensitive recording gauge attached to the pipe at a convenient point shall be used to measure the pressure.

After the entire length of the H.P. transmission line is complete, including service taps, the curb valve tee on each service shall be closed and the transmission line shall be tested in sections not exceeding five (5) miles. A pair of flanges shall be provided every five miles on the main as indicated on the Plans to facilitate testing. The cost of furnishing and installing these flanges shall be included in other items. Each section is then tested with compressed air to 150% of the gas transmission's line maximum design operating pressure. This pressure shall be maintained without decrease for a period of 24 hours. A sensitive recording gauge shall be connected to the pipe to record the pressure. The charts made by this gauge shall be presented to the Engineer in such condition and appearance that they can be reproduced and filed with proper authorities.

2. Distribution System

The distribution system shall be tested by the Contractor with compressed air. The Owner shall be notified a minimum of 72 hours in advance of the pressure testing.

A minimum of 1.5 times the MAOP of the pipe in psi shall be applied by suitable means and shall be maintained for a period of twenty-four (24) hours without pressure drop. A recording gauge shall be used to measure the pressure. The system shall be divided for testing into convenient sections. The total length of pipe in each section shall not exceed 6,000 feet.

The original charts made by the recording gauge during the test shall be of such condition and appearance that they can be reproduced for filing with the proper authorities.

3. Services (NOT USED)

For service pipe, all services shall be tested at one hundred (100) pounds pressure for ten minutes without drop. This test shall be made after installation is complete but before main has been tapped and before trench has been backfilled.

Service lines on the H.P. transmission main shall be individually tested to the same pressure as the H.P. transmission main after the transmission main has been completely tested. This pressure shall be maintained without pressure drop for at least twenty-four (24) hours.

### **3.11 WELDING**

- A. Contractor's attention is directed to Section 16.14, JOINTS IN GAS PIPING, as regards to qualifications of both Welders and Welding Procedure.
- B. Reproduced herein, for Contractor's use, is Article 192.222, "Qualification of Welding Procedures"; Article 192.229, "Limitations on Welder's"; Article 192.231, "Protection from Weather"; Article 192.223, "Meter Joints"; and Article 192.235, "Preparation for Welding", from the latest revision of the Code for Transportation of Natural and Other Gas by Pipeline; Minimum Safety Standards. These Standards are to be complied with.

*"Section 192.225(a) is revised to read as follows:*

*S192.225 QUALIFICATION OF WELDING PROCEDURES*

*(a) Each welding procedure must be qualified under Section IX of the 1974 edition of the ASME Boiler and Pressure Vessel Code or Section 2 of the 1973 edition of the API Standard 1104, whichever is appropriate to the function of the weld, except that a welding procedure qualified under Section IX of the 1968 edition of the ASME Boiler and Pressure Vessel Code before July 1, 1976, or Section 2 of the 1968 edition of API Standard 1104 before March 20, 1975, may continue to be used but may not be requalified under that edition.*

*(b) When a welding procedure is being qualified under Section IX of the ASME Boiler and Pressure Vessel Code, the following steels are considered to fall within the P-Number 1 grouping for the purpose of the essential variables and do not require separate qualification of welding procedures:*

*(1) Carbon Steels that have a carbon content of 0.32 percent (ladle analysis) or less.*

*(2) Carbon Steels that have a carbon equivalent (C+1/4 Mn) of 0.65 percent (ladle analysis) or less.*

*(3) Alloy Steels with weld ability characteristics that have been shown to be similar to the carbon steels listed in subparagraphs (1) and (2) of this paragraph.*

*Alloy steels and carbon steels that are not covered by subparagraph (1), (2), or (3) of this paragraph requires separate qualification of procedures for each individual pipe specification in accordance with sections VIII and IX of the ASME Boiler and Pressure Vessel Code.*

*8 Each welding procedure must be recorded in detail during the qualifying tests. This record must be retained and followed whenever the procedure is used.*

*Section 192.227 (a) (1) is revised to read as follows:*

*S 192.227 QUALIFICATION OF WELDERS*

*(a) Except as provided in paragraph 8 of this section, each welder must be qualified in accordance with one of the following:*

*(1) Section IX of the latest edition of the ASME Boiler and Pressure Vessel Code or, if qualified before July 1, 1976, the 1968 edition, except that a welder may not requalify under the 1968 edition.*

*(2) Section 3 of API Standard 1104.*

*(b) When a welder is being qualified under Section IX of the ASME Boiler and Pressure Vessel Code, the following steels are considered to fall within the P-Number 1 grouping for the purpose of essential variables and do not require separate qualifications:*

*(1) Carbon steels that have a carbon content of 0.32 percent (ladle analysis) or less.*



(2) Carbon steel that have a carbon equivalent ( $C+1/4 Mn$ ) of 0.65 percent (ladle analysis) or less.

(3) Alloy steels with weld ability characteristic that have been shown to be similar to the carbon steels listed in subparagraphs (1) and (2) of this paragraph.

*Alloy steels and carbon steels that are not covered by subparagraph (1), (2), or (3) of this paragraph require separate qualification of welders for each individual pipe specification in accordance with section VIII and IX of the ASME Boiler and Pressure Vessel Code.*

(4) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C to this part. A welder who makes welded service line connection to mains must also perform an acceptable test weld under Section II of Appendix C to this part as a part of his qualifying test. After initial qualification, a welder may not perform welding unless:

(1) Within the preceding 12 calendar months, he has requalified; or

(2) Within the preceding 6 calendar months, he has had:

(I) A production weld cut out, tested and found acceptable in accordance with the qualifying test; or

(ii) For welders who work only on service lines 2 inches or smaller in diameter, two sample welds tested and found acceptable in accordance with the test in Section II of Appendix C to this part.

#### *S 192.229 LIMITATION ON WELDERS*

(a) No welder whose qualifications is based on nondestructive testing may weld compressor station pipe and components.

(b) No welder may weld with a particular welding process unless, within the preceding 6 calendar months, he has engaged in welding with that process.

(c) No welder who is qualified under S 192.227 (a) may weld unless; within the preceding 6 calendar months, he has at least one weld tested and found acceptable under either Section 3 or 6 of API Standards 1104.

#### *S 192.231 PROTECTION FROM WEATHER*

*The welding operation must be protected from weather conditions that would impair the quality of the completed weld.*

#### *S 192.233 MITER JOINTS*

(a) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 30 percent or more of SMYS may not deflect the pipe more than 3%.

(b) A miter joint on steel pipe to be operated at a pressure that produces hoop

*stress of less than 30 percent, but more than 10 percent of SMYS may not deflect the pipe more than 12-1/2% and must be a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint.*

*(c) A miter joint on steel pipe to be operated at a pressure that produces a hoop stress of 10 percent or less of SMYS may not deflect the pipe more than 90%.*

#### *S 192.235 PREPARATION FOR WELDING*

*Before beginning any welding, the welding surfaces must be clean and free of any material that may be detrimental to the weld, and the pipe or component must be aligned to provide the most favorable condition for depositing the root bead. This alignment must be preserved while the root bead is being deposited.*

*Contractors shall have each welder qualified for work on this Contract. No previous qualification will be acceptable."*

### **3.12 CATHODIC PROTECTION FLANGE INSULATION AND MONITOR POINTS**

- A. Contractor shall furnish and install insulating material to electrically isolate sections of pipe line.
- B. Flange insulating material, including full face gaskets and bolt insulation sleeves and washer, and test leads, shall be installed in accordance with the details given on the Plans.
- C. Flange insulation of valves with welding neck flanges shall be installed and tested before the valve is welded into the pipe line, unless otherwise directed by Engineers. Flanges installed prior to insulation must be carefully aligned. Leads shall be attached prior to field coating of coating cutbacks and valves.
- D. Completed insulated flanges, including flanges insulated and tested prior to welding-in, shall be electrically tested in the presence of the Engineer and to his satisfaction and before backfilling. The leads shall be brought into a curb valve box, (Mueller No. H-10317, or approved equal) and left bonded (shorted) in the curb valve box.
- E. The cost of installing these flange insulating sets with test leads and curb valve box shall be included in the unit price bid for Plug Valves with Box. No additional compensation will be allowed.
- F. Contractor's attention is directed to the following. If the insulating gasket furnished does not have the proper sealing surfaces, it is the Contractor's responsibility to include the proper asbestos gasket on each side of the insulating gasket to effect proper sealing of the joint. The cost of extra gaskets, if furnished, are to be included in the cost of other items. No additional compensation is allowed.

### **3.13 ANTI-DRUG PROGRAM FOR PIPELINE PERSONNEL**

- A. Contractors wishing to submit bids must provide certification that they have complied with DOT pipeline safety standards in 49 CFR Part 192, 193, or 195.

### **3.14 TRENCHING**

- A. Trenching for installation of the supply (transmission) mains shall be such that the pipe will have a minimum cover of fifty (50") inches below grade.
- B. The maximum permissible width of cut shall be as follows: for pipe less than six (6") inches in diameter, twelve (12") inch trench; for pipe six (6") inches in diameter and greater, the trench width shall not exceed twice the diameter of the pipe.
- C. Where subsurface obstructions are encountered in the above trenching, the Contractor will be permitted to lay pipe above the obstruction if the minimum cover require can be obtained while providing a cushion between the bottom of the pipe and the top of the obstruction at least twelve (12") inches for transmission lines and six (6") inches for distribution mains.
- D. Where this minimum cover cannot be obtained, the Contractor will be required to lay pipe under the obstruction and he will receive no additional compensation for constructing the line in this manner.
- E. All shade trees, telephone poles, power poles, etc., along the line of work shall be protected, and sufficient barricades, lanterns, etc., shall be provided for the protection of the public.

The Engineers reserve the right to control the length of trench opened in advance of pipe installation if, in their opinion, the laying of pipe is not proceeding fast enough to complete the installation and backfilling within a reasonable length of time.

### **3.15 MAINS AND LATERALS UNDER PAVED STREETS OR ROADWAYS**

- A. Where mains and laterals are to be held beneath roadway paving on roadways, they shall be installed by means of a boring machine, auger or by means satisfactory to the Engineers. In the event subsurface operations result in injury or damage to the pavement, repairs to this pavement shall be made by the Contractor at no additional cost to the Owner. In the event paving cracks on either side of the pipe line, or is otherwise disturbed or broken due to the Contractor's operations, he shall repair or replace same at his own expense without further compensation.
- B. In cases where no other practical method for installation is available, the Contractor, with the permission of the Engineers, may be permitted to cut the pavement if the area is not within a state roadway. He shall in no case make any continuous open cut more than twenty-five (25') feet in length through any concrete or concrete base roadway pavement except with specific consent of the Engineers, a brace or undisturbed pavement no less than two (2') feet in width shall be left across the trench at such intervals as the Engineer may direct. These braces shall remain undisturbed until the Contractor is ready to repave the cut.
- C. All mains and laterals crossing paved state highways shall be encased in a pipe of larger diameter where indicated. This casing shall extend through the highways at least from ditch line to ditch line. Casing for the pipelines shall be vented in an approved manner.

### **3.16 MAINS AND LATERALS UNDER DRIVEWAYS AND SIDEWALKS**

- A. Where mains and laterals are to cross under concrete or brick driveways/sidewalks, the Contractor will be required to install them by means of a boring machine, auger or by other means satisfactory to the Engineers. Where it become necessary to cut and replace the

driveway/sidewalk, it shall be cut by use of a concrete saw and replaced as soon as practicable after the trench has been backfilled and tamped.

### **3.17 SURFACE OBSTRUCTION**

- A. All buildings, walls, fences, poles, bridges, railroads, trees, and other property or improvements encountered shall be carefully protected from all injury, and in the event that any of the foregoing are damaged or removed during the progress of the work they shall be repaired or replaced in a satisfactory manner within a reasonable time. Special care must be exercised in trenching under or near railroads in order to avoid or minimize delays or injuries resulting therefrom.

### **3.18 SUBSURFACE OBSTRUCTIONS**

- A. In excavating, backfilling, and laying pipe, care must be taken not to remove, disturb, or injury other pipes, conduits, or structures, without the approval of the Engineers. If necessary, the Contractor, at his own expense, shall sling, shore up, and maintain such structure in operation and within a reasonable time shall repair any damage done thereto. Repairs to these facilities shall be made to the satisfaction of the OWNER of the damaged facility.
- B. The Contractor shall give sufficient notice to the interested utility of his intention to remove or disturb any other pipe, conduit, etc., and shall abide by their regulations governing such work.
- C. In the event that subsurface structures are broken or damaged in the prosecution of the work, the Contractor shall immediately notify the proper authorities, and at the option of said authority, either repair the damage at once at his own expense, or pay the utility the proper charges for repairing said damage. The Contractor shall be responsible for any damage to persons or property caused by such breaks or due to his own neglect in reporting and/or repairing such damage.
- D. Delays, such as would result in buildings being without service overnight or for needlessly long periods during the day, will not be tolerated, and the Owner reserves the right to make repairs at the Contractor's expense without prior notification. Should it become necessary to move the position of a pipe, conduit or structure, it shall be done by the Contractor in strict accordance with instructions given by the Engineers or the utility involved.
- E. The Owner or Engineers will not be liable for any claim made by the Contractor based on underground obstructions being different than that indicated in the Contract Documents. Where ordered by the Engineers, the Contractor shall uncover subsurface obstructions in advance of construction so that the method of avoiding same may be determined before pipe laying reaches the obstruction.
- F. The Contractor shall be governed by instructions of the Engineers regarding the laying of pipe along State Highways and the latter will determine whether the pipe shall be laid over, under, or along the end of the various drainage structures encountered.

### **3.19 BACKFILLING**

- A. Backfilling shall begin as soon as possible after installation of the pipe. A maximum of one day's trenching may remain open overnight.

- B. In backfilling all trenches, the excavated material shall be thoroughly compacted around and to a depth of six (6") inches above the pipe for the entire length of the trench. The remaining portion of the trench shall be backfilled and thoroughly compacted for the entire length of the trench and left in a lightly overfilled and crowned condition. The method of compacting trenches shall be approved by the Engineers.
- C. Backfilling of all trenches crossings, or in all sidewalks and surfaced areas and shoulders of improved streets shall be filled and power tamped in six (6") inch layers.
- D. All excavated material shall be cleared from adjacent street surfaces, gutters, sidewalks, parkways, railroads, grass plots, etc., and the whole shall be left in a tidy and acceptable condition. All surplus material shall be removed by the Contractor.

### **3.20 PLANKING**

- A. In all locations where street surfacing (concrete, brick, or asphalt) has been cut, the trench shall be backfilled and compacted, as specified in Section 16.28 of the Specifications, to within three (3") inches of the top of the surfacing. The Contractor shall then place planking of 3" thickness over the entire length and width of the cut portion of the surfacing. This planking shall be tied together by spiking 2" X 4" ties to the underside at 3 ft. spacing.
- B. The top of the planking shall be maintained at street elevation until the Contractor is directed by the Engineers to remove the planking and replace the street surfacing.
- C. The cost of this planking shall be included in the price bid for other items. No additional compensation shall be allowed.

### **3.21 REPLACING STREET SURFACING AND SIDEWALKS**

- A. In all paved or improved streets, the surface of the trenches after having been filled and the filling has dried and settled, shall be finished without any needless delay and in the best workmanlike manner with the same kind of roadway or sidewalk improvement that was removed in excavating the trench. The underlying foundation courses, as well as the finished surface, shall conform to the undisturbed portion of the roadway or sidewalk, and shall, in every respect, be equal to the quality, materials, and workmanship. The concrete braces left in place shall then be removed and the concrete or concrete base shall be replaced as a monolith over the entire area of the cut. The replaced portion of roadway or sidewalk shall be least 24 inches wider than the width of the trench.
- B. Concrete used in this work shall be 3,000 pound per square inch (minimum) strength.
- C. The decision of the Engineer shall be final as to the classifying of any form of pavement or surfacing not specified in the Contract or of any forms where the classification is at all doubtful.
- D. In bidding on pavement made up of two or more courses, all the courses shall be considered as integral parts of the pavement. The price bid shall be replacement of the pavement complete, including foundation, intermediate course (if present) and surface.
- E. Sidewalk surfaces replaced shall, as far as possible, match the existing surface including line markings, etc.

- F. As soon as the roadway or sidewalk improvement which was disturbed by the Contractor has been replaced, all refuse or surplus materials deposited or left by the Contractor on the street shall be removed therefrom and the street restored in all respects to as good a condition as before the trenching was commenced. No measurement for payment will be made of any pavement until the entire block is placed in proper condition and the above requirements complied with.
- G. Should any street or sidewalk surfacing, curbs, gutters, bridges, etc., be damaged, cracked, settled, disturbed or injured in any manner by the work, such damage or injury must be replaced and the surfacing, etc., restored to its former condition by the Contractor, and the Contractor shall receive no compensation therefor except as provided for in specific pay items.
- H. Should the Contractor fail or refuse to repair any such damage, the Owner may after twenty-four (24) hours written notice, employ such force and furnish such materials as may be necessary and do the work, deducting the actual cost thereof from any amounts due or to become due the Contractor.
- I. Where the street has not been paved but has a hard surface composed of gravel, crushed rock, shell, etc., the Contractor shall leave the trench overfilled. When directed by the Engineers, the Contractor shall dress the backfill back to the base of the existing gravel then place the new gravel. Replacement gravel, crushed rock or shell surfaces shall be paid for by the yard of such material placed, compacted, bladed and accepted.
- J. The Contractor shall be obligated to maintain and keep in good condition any replacement of base, street surfacing or sidewalks from the time of installation until final acceptance of the work.

### **3.22 CROSSING OF CANALS, TRACKS, ETC. - PERMITS, CHARGES, PAYMENTS**

- A. No additional compensation will be paid for the construction of any gas line because of its crossing under or over a drainage canal (either open or covered), a natural or artificial stream or lagoon, a railroad track or a sewer, culvert, pipe, conduit or any such structure, provided the route of the main as bid on has not been changed so as to produce a crossing not to be anticipated by the bidder. Any additional material required because of the crossing will be paid for at the prices bid for such material.
- B. Special crossings for which drawings have been made and on which a special price has been added, whether a lump sum bid or otherwise, will be paid for according to the special specifications governing said crossing.
- C. Such natural or artificial streams or lagoons, drainage or navigation canals, gutters or culverts, shall not be unreasonably blocked or obstructed or prevented from carrying their customary drainage or traffic and shall be replaced by the Contractor in as good condition as they were originally, without charge.
- D. The Contractor shall be responsible for any damage of any kind resulting from interference with or obstruction of any drainage canal or other waterway.
- E. The Owner will secure the permits for crossing highways, railroads, canals, streams or there waterways or appurtenances, but the Contractor will be held to a strict compliance with the

terms under which such permits may be issued.

- F. Should the highway department, railroad company, government authority or others owning or controlling the right-of-way require special supervision during construction of their premises, the cost of such supervision shall be paid for by the Contractor and no additional compensation shall be allowed.

### **3.23 CLEAN-UP**

- A. Clean up shall commence immediately after the backfilling operation and shall continue and progress with the prosecution of the work. After the work is complete, the Contractor shall begin the final dressing up of the project.

## **PART 4 – MEASUREMENT AND PAYMENT**

### **4.01 REMOVE AND DISPOSE OF EXISTING NATURAL GAS MAIN (ITEM S-012)**

- A. Measurement

Remove and Dispose of existing natural gas pipe shall consist of isolating existing pipe and laterals, capping, purging in accordance with pipeline safety regulations, and removing and disposing of the lines. This item shall also include restoring surface to its pre-construction condition.

- B. Payment

The completed and accepted work shall be paid for per linear foot of gas pipe removed and disposed of. Price shall include, not limited to, all labor, tools, excavation equipment, backfill, water and all other incidentals in accordance with the Plans and Specifications.

### **4.02 JACK & BORE STEEL 12" CASING WITH 8-INCH DIAMETER HDPE (PE 4710, DR 11) NATURAL GAS MAIN (INCLUDING END SEALS AND VENTS) (ITEM S-013)**

- A. Measurement

Steel Casing with natural gas pipe, jacked and bored, will be measured by the linear foot of pipe and casing placed, tested, and accepted without deductions for the space occupied by the valves or fittings. Measurement for any section of the pipe will be the actual centerline measurement from the centerline of cross lines or reducer fittings, or between either, and stub end of line being measured.

- B. Payment

Steel Casing with natural gas pipe, jacked and bored, placed and accepted measured as provided above, will be paid for at the contract unit price per linear foot for casing and gas pipe of the various sizes, types and classifications, which price and payment shall constitute full compensation for, not limited to, furnishing, hauling, installing complete, testing and purging the pipe for excavation, jacking and boring, dewatering, sheeting, backfilling, compaction and removing surplus earth and for the furnishing of all fittings, thrust blocks, equipment, and labor and incidentals necessary to complete the item in accordance with Plans and Specifications. Payment shall include all required fittings, grouting and vents for a complete and in-place installation in accordance with the DOTD standards.

**4.03 DIRECTIONALLY DRILL NEW 8-INCH HDPE (PE 4710, DR 11) NATURAL GAS MAIN INCLUDING ALL REQUIRED FUSED FITTINGS) (ITEM S-014)**

A. Measurement

Natural gas pipe, directionally drilled will be measured by the linear foot of pipe placed, tested, and accepted without deductions for the space occupied by the valves or fittings. Measurement for any section of the pipe will be the actual centerline measurement from the centerline of cross lines or reducer fittings, or between either, and stub end of line being measured.

B. Payment

Natural gas pipe, directionally drilled, placed and accepted measured as provided above, will be paid for at the contract unit price per linear foot for gas pipe of the various sizes, types and classifications, which price and payment shall constitute full compensation for, but not limited to, furnishing, hauling, installing complete, fusing, testing and purging the pipe for excavation, directional drilling, managing drilling fluids, preparation of bed and backfilling, compaction and removing surplus earth and for the furnishing of all fused fittings, transition fittings, thrust blocks, equipment, and labor and incidentals necessary to complete the item in accordance with Plans and Specifications.

**4.04 NEW 8-INCH DIAMETER NATURAL GAS POLY VALVE WITH VALVE BOX AND CONCRETE PAD (ITEM S-015)**

A. Measurement

Natural gas valves with valve boxes, and extension or test boxes together tested, and accepted will be measured per each as accepted by the Engineer. The unit bid shall include any necessary joint adapters for connecting valves into system as shown in the details in the Plans.

B. Payment

The completed and accepted work as measured above shall include valves with valve boxes, and extensions constituting full compensation for, but not limited to, furnishing, hauling, installing complete, testing for excavation and backfilling, and for the furnishing of all equipment, tools, labor and incidentals as necessary to complete the item in accordance with the Drawings and Specifications.

**4.05 CONNECT NEW 8-INCH DIAMETER HDPE GAS MAIN TO EXISTING HDPE NATURAL GAS MAIN WITH VALVE (INCLUDING FITTINGS) (ITEM S-016)**

A. Measurement

Connecting new natural gas pipe to existing natural gas pipe will be measured by an actual count of each main so connected, tested, complete and in-place, and accepted. This unit of work, for connections to existing lines, shall include clamps, connectors, coupling, valves, stiffeners and appurtenances for various line sizes, types, and depths of pipe field verified by the Contractor.

B. Payment

Each connection measured as provided above, will be paid for at the Contract Unit Price per each, which price and payment shall constitute full compensation for, but not limited to, furnishing, testing, and for furnishing all equipment, tools, labor, supervision and incidentals necessary to complete the



item in accordance with the Contract Documents. This item shall include all labor, materials and equipment required to make tie-in connections at various depth differences of existing versus new lines, and for all types of existing lines encountered. This item shall also include all valves associated with the required tie-in, which shall not be paid under Item S-015.

END OF SECTION

**REVISED**  
**LOUISIANA UNIFORM PUBLIC WORK BID FORM**  
**UNIT PRICE FORM: BASE BID**

TO: \_\_\_\_\_  
 St. Tammany Parish Government  
 21454 Koop Drive, Suite 2F  
 Mandeville, LA. 70471  
 \_\_\_\_\_  
*(Owner to provide name and address of owner)*

BID FOR: \_\_\_\_\_  
 LA 1077 TO OCHSNER/LA 21 CONNECTOR  
 \_\_\_\_\_  
 BID No. 21-20-2  
 \_\_\_\_\_  
*(Owner to provide name of project and other identifying information)*

<b>UNIT PRICES:</b> 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.				
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CLEARING AND GRUBBING				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
201-01-00100	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF STRUCTURES AND OBSTRUCTIONS				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
202-01-00100	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF 8" WATERLINE				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
202-02-00030	260	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF CURBS (CONCRETE)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
202-02-06140	596	LN FT		
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				

**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
202-02-32500	57.5	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ EXCAVATION AND EMBANKMENT				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
203-05-00100	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ TEMPORARY HAY OR STRAW BALES				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
204-02-00100	465	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ TEMPORARY SILT FENCING				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
204-06-00100	23024	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CLASS II BASE COURSE (12" THICK)(LA 1077)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
302-02-06121	3361.8	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SUPERPAVE ASPHALT CONCRETE (LA 1077)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
502-01-00100-A	2249.4	TON		

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

**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ MILLING ASPHALT PAVEMENT (2" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
509-01-00100	4496.3	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
601-01-00100-A	55546.9	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(ROUNDAABOUT)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
601-01-00100-B	917.0	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE (15" RCP)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-03-01002	48	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE (18" RCP)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-03-01022	415	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE (24" RCP)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-03-01042	184	LN FT		

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

**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (15" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01000	651	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (18" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01020	465	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (30" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01060	216	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (36" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01080	1060	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (42" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01100	264	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (48" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01120	128	LN FT		

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

**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ STORM DRAIN PIPE ARCH (72" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-04-01180	595	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CORREGUATED METAL PIPE ARCH (EXT)(54" EQUIV.)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
701-13-01140	20	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ MANHOLES (R-CB-11)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-02-00200	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CATCH BASINS (CB-01)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-03-00100	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ ADJUSTING CATCH BASINS				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-04-00200	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIDE DRAIN END TREATMENT (1 BARREL, 18" RCP)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-06-01000	2	EACH		

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

**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIDE DRAIN END TREATMENT(1 BARREL, 24" RCP)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-06-01020	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIDE DRAIN END TREATMENT (1 BARREL, 30" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-06-01060	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIDE DRAIN END TREATMENT (1 BARREL, 36" EQUIV. RCPA)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
702-06-01100	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONCRETE WALK (5" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
706-01-00200	11675.9	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ INCIDENTAL CONCRETE PAVING (6" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
706-03-00300	449.2	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ INCIDENTAL CONCRETE PAVING (COLORED)(6" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
706-03-10000	1387.4	SQ YD		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONCRETE BARRIER CURB (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00200-A	20003.1	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONCRETE BARRIER CURB (ROUNDAABOUT)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00200-B	453.4	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONCRETE MOUNTABLE CURB				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00300	2810.8	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONCRETE MOUNTABLE CURB (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00300-A	96	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ RIPRAP (10 LB, 12" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
711-01-02020	355	SQ YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ RIPRAP (30 LB, 14" THICK)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
711-01-03000	564	SQ YD		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ TEMPORARY SIGNS AND BARRICADES				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
713-01-00100	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ TEMPORARY PAVEMENT MARKINGS (4" WIDTH)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
713-02-00100	20175	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ MOBILIZATION				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
727-01-00100	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIGN (TYPE A)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
729-01-00100	141.7	SQ FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SIGN (TYPE B)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
729-02-00100	126.1	SQ FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ U-CHANNEL POST				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
729-21-00100	37	EACH		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REFLECTORIZED RAISED PAVEMENT MARKERS				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
731-02-00100	600	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF RAISED PAVEMENT MARKERS				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
731-03-00100	0.098	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (SOLID LINE) (12" W) (THERMO 125 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-01-02060	0.067	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (SOLID LINE) (24" W) (THERMO 125 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-01-02080	0.228	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (SOLID LINE) (4" W) (THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-02-02000	10.077	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (SOLID LINE) (8" W) (THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-02-02040	0.028	MILE		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (BRKN LINE) (4" W) (THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-03-02000	4.102	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (DOTTED LINE) (8" W) (THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-03-02040	0.271	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (DOTTED LINE) (12" W)(2' L)(THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-03-02050	0.019	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT STRIP (DOTTED LINE) (24" W)(2' L)(THERMO 90 MIL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-03-02070	0.060	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - STRAIGHT)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01020	3	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - DBL)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01040	3	EACH		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - LT TURN)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01080	3	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - RT TURN)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01100	5	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (DIR ARR RNDDBT-FSHK)(TYPE LTRC)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01130	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (DIR ARR RNDDBT-FSHK)(TYPE LTC)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01131	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (DIR ARR RNDDBT-FSHK)(TYPE TRC)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01132	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (DIR ARR RNDDBT-FSHK)(TYPE LC)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01133	1	EACH		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (DIR ARR RND BT-FSHK)(TYPE TC)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-01134	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLASTIC PVMT LEGENDS AND SYMBOLS (ONLY)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-04-15020	4	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVAL OF EXISTING MARKINGS				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
732-05-00100	0.688	MILE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PAINTED CURBS AND ISLANDS				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
737-05-00001	338.4	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ HYDRO-SEEDING				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
739-01-00100	18.77	ACRE		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONSTRUCTION LAYOUT				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
740-01-00100	1	LUMP SUM		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ WATER MAIN (10" HDPE)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
741-01-01120	260	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ GATE VALVE (12")				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
741-02-00600	4	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ TAPPING SLEEVE AND VALVE ASSEMBLY (8")				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
741-03-00500	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ SAW CUTTING PORTLAND CEMENT CONCRETE PAVEMENT				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
NS-600-00220	1384.8	IN-FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PORTABLE CHANGEABLE MESSAGE SIGN				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
NS-713-00008	4	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ 6" THICK STRUCTURAL FILL (SHARED USE PATH)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-001	2141.9	CU YD		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ 12" THICK STRUCTURAL FILL (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-002-A	20037.7	CU YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ 12" THICK STRUCTURAL FILL (ROUNDBOUT)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-003	322	CU YD		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ OUTFALL DITCH EXCAVATION				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-004	1449	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONSTRUCTION MATERIALS TESTING				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-005	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ ENVIRONMENTAL PROTECTION				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-006	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ EXCAVATION AND REPLACEMENT OF UNSUITABLE MATERIAL				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-007	8175.3	CU YD		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ PLUG AND ABANDON EXISTING WATER WELL				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-008	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ JUNCTION BOX TYPE 1				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-009-A	3	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ JUNCTION BOX TYPE 2				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-009-B	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ JUNCTION BOX TYPE 3				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-009-C	3	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ JUNCTION BOX TYPE 4				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-009-D	1	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ 24"X24" STACK DRAIN INLET				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-009-E	3	EACH		

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<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ AS-BUILT SURVEY AND PLAN				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-010	1	LUMP SUM		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVE AND DISPOSE OF EXISTING NATURAL GAS MAIN				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-012	1700	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ JACK AND BORE STEEL 12" CASING WITH 8-INCH DIAMETER HDPE (PE 4710, DR 11) NATURAL GAS MAIN (INCLUDING END SEALS AND VENTS)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-013	70	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ DIRECTIONALLY DRILL NEW 8-INCH HDPE (PE 4710, DR 11) NATURAL GAS MAIN (INCLUDING ALL REQUIRED FUSED FITTINGS)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-014	1700	LN FT		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ NEW 8-INCH DIAMETER NATURAL GAS POLY VALVE WITH VALVE BOX AND CONCRETE PAD				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-015	1	EACH		

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**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.

<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ CONNECT NEW 8 INCH DIAMETER HDPE GAS MAIN TO EXISTING HDPE NATURAL GAS MAIN WITH VALVE (INCLUDING FITTINGS)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
S-016	2	EACH		
<b>DESCRIPTION:</b> x Base Bid or Alt.# ____ REMOVE 12" SFM AND BACKFILL WITH STRUCTURAL FILL				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION ( <i>Quantity times Unit Price</i> )
S-017	690	LN FT		

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

# REVISED

## LOUISIANA UNIFORM PUBLIC WORK BID FORM UNIT PRICE FORM: ALTERNATE NO. 1

TO: \_\_\_\_\_  
 St. Tammany Parish Government  
 21454 Koop Drive, Suite 2F  
 Mandeville, LA. 70471  
 \_\_\_\_\_  
*(Owner to provide name and address of owner)*

BID FOR: \_\_\_\_\_  
 LA 1077 TO OCHSNER/LA 21 CONNECTOR  
 \_\_\_\_\_  
 BID No. 21-20-2  
 \_\_\_\_\_  
*(Owner to provide name of project and other identifying information)*

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.				
UNIT PRICES OF DEDUCTIVE ITEMS BELOW SHALL MATCH THOSE IN THE BASE BID				
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 SUPERPAVE ASPHALT CONCRETE (CONNECTOR ROAD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
502-01-00100-B	15,605.9	TON		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 COMBINATION CURB AND GUTTER (CONNECTOR ROAD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
707-03-00100	20,099.1	LN FT		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 12" THICK STRUCTURAL FILL (CONNECTOR ROAD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
S-002-B	21,543.8	CU YD		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 5" THICK FULL-DEPTH ASPHALT CONCRETE BASE COURSE (CONNECTOR ROAD)				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION <i>(Quantity times Unit Price)</i>
S-011	56,748.7	SQ YD		

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

**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.

**UNIT PRICES OF DEDUCTIVE ITEMS BELOW SHALL MATCH THOSE IN THE BASE BID**

<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
601-01-00100-A	-55,546.9	SQ YD		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 CONCRETE BARRIER CURB (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00200-A	-20,003.1	LN FT		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 CONCRETE MOUNTABLE CURB (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
707-01-00300-A	-96.0	LN FT		
<b>DESCRIPTION:</b> Base Bid or x Alt.# 1 12" THICK STRUCTURAL FILL (CONNECTOR ROAD)				
<b>REF. NO.</b>	<b>QUANTITY:</b>	<b>UNIT OF MEASURE:</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)</b>
S-002-A	-20,037.7	CU YD		

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

SP.35      CONSTRUCTION PHOTOGRAPHS AND VIDEOS

1.01      REQUIREMENTS INCLUDED

Contractor shall employ a competent photographer to take construction record photographs and video DVDs prior to and periodically during course of the work.

1.02      PHOTOGRAPHY REQUIRED

- A. Video Survey as specified herein (pre-construction).
- B. Provide six (6) photographs each month of each major portion of the work taken at each major stage of construction.
- C. Provide digital files of each photograph identified with contract number, description of view and date.

1.03      COSTS OF PHOTOGRAPHY

Contractor shall pay costs for specified video and photography, and prints. Parties requiring additional photography or prints will pay photographer directly.

2.01      PRINTS

- A. Color:
  - 1. Paper: 20lb Bond Paper.
  - 2. Print Size: 3 ½ in. x 5 in.
  - 3. Each picture will be date stamped.
  - 3. Prints: 1 column and 2 rows of pictures per sheet.
- B. Identify each print by caption below the picture, listing:
  - 1. Project Subject / Item.
  - 2. Location / Station.
  - 3. Direction of view.

2.02      VIDEOS

- A. Specifications for Audio-Video Survey

Prior to the start of construction of the contract, the Contractor shall furnish to the Engineer the Preconstruction video DVDs that will include the construction areas, all haul routes, and other areas as designated by the Project Engineer.

If the project is near any structures, then additional preconstruction video may be required as directed by the Project Engineer. This will include at a minimum: pavements, sidewalks, yards, driveways, walkways and fronts facades of

residences/businesses along the project site. In addition, if properties are near the site, views shall include from behind the curb, the sidewalk and grass areas, driveways and the fronts of the residences. Side and rear views of the exterior of the residence, along with the interior of all structures adjacent to project, shall also be videoed. Interior videos shall run along the corners of each room of the subject structure. Views shall also clearly show any existing damage prior to the commencement of work. The Contractor shall also supply the Engineer with signatures of any resident not allowing the internal/external survey of existing residential structures on an appropriate form.

The Pre Construction DVDs shall be reviewed by the Engineer and either approved or additional coverage will be required to fully show the physical conditions of the work areas. The Contractor shall have the additional coverage videoed and shall not begin work, including moving equipment and/or material on the project site, until the audio-video survey has been approved by the Engineer. After approval, the Contractor shall supply two copies of the audio-video survey to the Engineer. One copy of the DVDs will remain available for viewing by the Contractor and may be reviewed by him for any assistance that the DVDs may provide in resolving disputes which arise with the property owners claiming improper restoration of their properties or Parish owned features and items. The copy of the DVDs will also be used as a guide by the Engineer, prior to issuance of final payments, in determining the adequacy of restoration and the extent of damages attributable to the Contractor's work. The remaining copy of the DVD will be delivered to the Owner.

B. Technical Requirements

The total audio-video recording system and the procedures employed in its use shall be such as to produce a finished product that will fulfill the technical requirements of the project, as well as those more subjective requirements of high-quality audio and video production. The video portion of the recording shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion or any other form of picture imperfection. The audio portion of the recording shall reproduce precise and concise explanatory notes by the camera operator with proper volume, clarity and freedom from distortion.

C. Video Recorder

The recorder shall be DVD format.

D. Camera

The color video camera shall have a horizontal resolution of at least 550 lines at center and 4 megapixels.

### 3.01           TECHNIQUE FOR STILL PHOTOGRAPHS

- A.   Factual presentation.
- B.   Correct exposure and focus.
  - 1.    High resolution and sharpness.
  - 2.    Maximum depth-of-field.
  - 3.    Minimum distortion.

### 3.02           VIEWS REQUIRED FOR STILL PHOTOGRAPHS

- A.   Contractor shall photograph from locations to adequately illustrate conditions of construction and state of progress. Consult with Engineer at each period of photography for instructions concerning views required.
- B.   Prior to construction, six photographs of pertinent features shall be taken at various locations at the site as selected by the Engineer and promptly submitted to the Engineer. Additional progress photographs shall be made monthly throughout the progress of the work and of significant milestones items or areas when work has taken place at that location during the month and submitted with each of the Contractor's applications for progress payment.

### 3.03           TECHNIQUE AND VIEWS REQUIRED FOR VIDEO TAPING

- A.   At the start of production, an identification summary shall be read into the record while, at the same time, a wide-angle view with numeric displays shall be provided for a visual record. This summary will include (1) DVD number, (2) job title, (3) job location, (4) positional location at job start, (5) date and time, (6) weather and (7) any other notable conditions.

- B.   Coverage

The recording shall include coverage of all surface features located within the construction zone-of-influence. This zone shall be defined as (1) the area within 500 feet of the work site and (2) areas directed by the Owner. The coverage shall be continuous (i.e., the camera shall not be turned off once photography has begun) to the greatest extent practically possible. If the camera must be turned off then a verbal message shall be inserted stating that the camera will be turned off and the reason for discontinuing coverage.

- C.   Visibility

No recording shall be done during periods of significant precipitation, mist or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recording. Zooming and panning shall be slow and

deliberate.

D. Experience

The operator in charge must have had previous experience video documenting a minimum of fifty miles of pre-construction work. Any apprentice operators must be continuously supervised by an above-described experienced operator.

3.04 DELIVERY OF PHOTOGRAPHS AND PRINTS

- A. Preconstruction photographs shall be delivered to the Engineer prior to the mobilization of any equipment or materials or the beginning of construction.
- B. Digital photographs shall be of at least 4 megapixels and shall be clear, sharp and encompass depth of field. The photographs shall be submitted as a color printed composite PDF, digital PDF file and original digital camera files on a CD/DVD ROM. Two (2) printed colored PDFs on bond paper and (2) CD/DVD ROMS labeled with the Project Title and date shall be furnished with each set of photographs. In addition, any and all digital photographs taken during construction by the contractor shall be retained and a copy of all digital files shall be delivered on CD/DVD ROM to the Owner's Project Engineer at the completion of the project or as directed by the Owners Project Engineer or Representative.
- C. Deliver progress prints to Engineer to accompany each Application for Payment.

3.05 DELIVERY OF DVDs

A. Recording Schedule

The recording shall be performed prior to the placement of any construction materials or equipment on the proposed construction site, but not more than seven weeks prior to the placement of materials or equipment.

B. DVD Indexing

All DVDs and their storage cases shall be properly identified by DVD index number, project title and general project location. Displayed on the storage case of each DVD shall be a log of that DVD's contents. That log shall describe (1) the various segments contained on that DVD, (2) coverage start, direction and endpoints, with corresponding DVD player counter numbers. A cumulative index correlating the various segments of coverage to their corresponding DVDs shall be typed and supplied to the Owner.

C. After approval of videos, deliver two record copies to Engineer.

D. Unacceptable Documentation



The Owner shall have the authority to reject all or any portion of the DVD documentation not conforming to the specifications. Those rejected portions shall be re-taped at no additional cost to the Owner.

E. Specification Deviations

Any deviation from these specifications must have the written approval of the Owner/Engineer.

F. Payment

There will be no separate payment for construction photographs and videos. Payment for the work covered under this section shall be included within the pay item for mobilization. Video documentation will be made in accordance with the project specifications.

END OF SECTION

SP.36 SITE CONDITIONS SURVEY

- A. Contractor shall conduct a thorough survey of the entire job route. This survey should be adequate as to ascertain pre-construction and post-construction conditions (including elevations) of all public and private property within and adjacent to the construction limits. The Contractor shall provide sufficient video, still photographs, slab elevations and/or written documentation of the project route. Sufficient photographs and video shall be provided by the Contractor and submitted to the Engineer to resolve any damage claims which may arise due to the construction of this project. All videos shall be made in accordance with Section SP.35. Elevations on abutting drives and walks shall be taken at approximately 20-foot intervals and at the point of juncture with any structure to which they are attached.
- B. All photographs, video tapes and survey data shall be submitted to the Engineer for record purposes prior to, but not more than seven weeks before, commencement of any construction activities. All videos, photographs, and written records shall become the property of the Owner upon payment for work.
- C. On horizontal directional drilling (HDD) projects, the Contractor shall provide a video inspection of all existing gravity sewer and storm drain lines that the HDD route crosses prior to and upon completion of construction (cleaning of these lines may be required). The pre-construction video must be presented to the Owner, reviewed and accepted prior to commencing construction. If in the opinion of the Owner, any of these lines have been damaged by HDD construction, the Contractor will be required to perform a 16 ft. long "point repair" of the damaged line at no additional cost to the Owner. Cost for pipe inspection shall be absorbed in the project cost.

END OF SECTION

# BASE BID

ITEM	DESCRIPTION	UNIT	QUANTITY
201-01-00100	CLEARING AND GRUBBING	LUMP SUM	1
202-01-00100	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	1
202-02-00030	REMOVAL OF 8" WATERLINE	LN FT	260
202-02-06140	REMOVAL OF CURBS (CONCRETE)	LN FT	596.0
202-02-32500	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SQ YD	57.5
203-05-00100	EXCAVATION AND EMBANKMENT	LUMP SUM	1
204-02-00100	TEMPORARY HAY OR STRAW BALES	EACH	465
204-06-00100	TEMPORARY SILT FENCING	LN FT	23,024
302-02-06121	CLASS II BASE COURSE (12" THICK)(LA 1077)	SQ YD	3,361.8
502-01-00100-A	SUPERPAVE ASPHALT CONCRETE (LA 1077)	TON	2,249.4
509-01-00100	MILLING ASPHALT PAVEMENT (2" THICK)	SQ YD	4,496.3
601-01-00100-A	PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(CONNECTOR ROAD)	SQ YD	55,546.9
601-01-00100-B	PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(ROUNDAABOUT)	SQ YD	917.0
701-03-01002	STORM DRAIN PIPE (15" RCP)	LN FT	48
701-03-01022	STORM DRAIN PIPE (18" RCP)	LN FT	415
701-03-01042	STORM DRAIN PIPE (24" RCP)	LN FT	184
701-04-01000	STORM DRAIN PIPE ARCH (15" EQUIV. RCPA)	LN FT	651
701-04-01020	STORM DRAIN PIPE ARCH (18" EQUIV. RCPA)	LN FT	465
701-04-01060	STORM DRAIN PIPE ARCH (30" EQUIV. RCPA)	LN FT	216
701-04-01080	STORM DRAIN PIPE ARCH (36" EQUIV. RCPA)	LN FT	1,060
701-04-01100	STORM DRAIN PIPE ARCH (42" EQUIV. RCPA)	LN FT	264
701-04-01120	STORM DRAIN PIPE ARCH (48" EQUIV. RCPA)	LN FT	128
701-04-01180	STORM DRAIN PIPE ARCH (72" EQUIV. RCPA)	LN FT	595
701-13-01140	CORRUGATED METAL PIPE ARCH (EXTENSION)(54" EQUIV.)	LN FT	20
702-02-00200	MANHOLES (R-CB-11)	EACH	1
702-03-00100	CATCH BASINS (CB-01)	EACH	2
702-04-00200	ADJUSTING CATCH BASINS	EACH	2
702-06-01000	SIDE DRAIN END TREATMENT (1 BARREL, 18" RCP)	EACH	2
702-06-01060	SIDE DRAIN END TREATMENT (1 BARREL, 24" RCP)	EACH	2
702-06-01080	SIDE DRAIN END TREATMENT (1 BARREL, 30" EQUIV. RCPA)	EACH	1
702-06-01100	SIDE DRAIN END TREATMENT (1 BARREL, 36" EQUIV. RCPA)	EACH	1
706-01-00200	CONCRETE WALK (5" THICK)	SQ YD	11,675.9
706-03-00300	INCIDENTAL CONCRETE PAVING (6" THICK)	SQ YD	449.2
706-03-10000	INCIDENTAL CONCRETE PAVING (COLORED)(6" THICK)	SQ YD	1,387.4
707-01-00200-A	CONCRETE BARRIER CURB (CONNECTOR ROAD)	LN FT	20,003.1
707-01-00200-B	CONCRETE BARRIER CURB (ROUNDAABOUT)	LN FT	453.4
707-01-00300	CONCRETE MOUNTABLE CURB	LN FT	2,810.8
707-01-00300-A	CONCRETE MOUNTABLE CURB (CONNECTOR ROAD)	LN FT	96.0
711-01-02020	RRPAP (10 LB, 12" THICK)	SQ YD	355
711-01-03000	RRPAP (30 LB, 14" THICK)	SQ YD	564
713-01-00100	TEMPORARY SIGNS AND BARRICADES	LUMP SUM	1
713-02-00100	TEMPORARY PAVEMENT MARKINGS (4" WIDTH)	LN FT	20,175
727-01-00100	MOBILIZATION	LUMP SUM	1
729-01-00100	SIGN (TYPE A)	SQ FT	141.7
729-02-00100	SIGN (TYPE B)	SQ FT	126.1
729-21-00100	U-CHANNEL POST	EACH	37
731-02-00100	REFLECTORIZED RAISED PAVEMENT MARKERS	EACH	600
731-03-00100	REMOVAL OF RAISED PAVEMENT MARKERS	MILE	0.098
732-01-02060	PLASTIC PVMT STRIP (SOLID LINE) (12" W) (THERMO 12S MIL)	MILE	0.067
732-01-02080	PLASTIC PVMT STRIP (SOLID LINE) (24" W) (THERMO 12S MIL)	MILE	0.228
732-02-02000	PLASTIC PVMT STRIP (SOLID LINE) (4" W) (THERMO 90 MIL)	MILE	10.077
732-02-02040	PLASTIC PVMT STRIP (SOLID LINE) (8" W) (THERMO 90 MIL)	MILE	0.028
732-03-02000	PLASTIC PVMT STRIP (BRKN LINE) (4" W) (THERMO 90 MIL)	MILE	4.102
732-03-02040	PLASTIC PVMT STRIP (DOTTED LINE) (8" W) (THERMO 90 MIL)	MILE	0.271
732-03-02050	PLASTIC PVMT STRIP (DOTTED LINE) (12" W)(2" L)(THERMO 90 MIL)	MILE	0.019
732-03-02070	PLASTIC PVMT STRIP (DOTTED LINE) (24" W)(2" L)(THERMO 90 MIL)	MILE	0.060
732-04-01020	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW-STRAIGHT)	EACH	3
732-04-01040	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW-DBL)	EACH	3
732-04-01080	PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - LT TURN)	EACH	3
732-04-01100	PLASTIC PVMT LEGENDS AND SYMBOLS (ARROW - RT TURN)	EACH	5

# BASE BID (CONTINUED)

ITEM	DESCRIPTION	UNIT	QUANTITY
732-04-01130	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (DIR ARR RNDBT-FSHK)(TYPE LTRC)	EACH	1
732-04-01131	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (DIR ARR RNDBT-FSHK)(TYPE LTC)	EACH	2
732-04-01132	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (DIR ARR RNDBT-FSHK)(TYPE TRC)	EACH	1
732-04-01133	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (DIR ARR RNDBT-FSHK)(TYPE LC)	EACH	1
732-04-01134	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (DIR ARR RNDBT-FSHK)(TYPE TC)	EACH	2
732-04-15020	PLASTIC PVMT LEGENDS AND SYMBOLS (ONLY)	EACH	4
732-05-00100	REMOVAL OF EXISTING MARKINGS	MILE	0.688
737-05-00001	PAINTED CURBS AND ISLANDS	LN FT	338.4
739-01-00100	HYDRO-SEEDING	ACRE	18.77
740-01-00100	CONSTRUCTION LAYOUT	LUMP SUM	1
741-01-01120	WATER MAIN (10" HDPE)	LN FT	260
741-02-00600	GATE VALVE (12")	EACH	4
741-03-00500	TAPPING SLEEVE AND VALVE ASSEMBLY (8")	EACH	2
NS-600-00220	SAW CUTTING PORTLAND CEMENT CONCRETE PAVEMENT	IN-FT	1,384.8
NS-713-00008	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	4
S-001	6" THICK STRUCTURAL FILL (SHARED USE PATH)	CU YD	2,141.9
S-002-A	12" THICK STRUCTURAL FILL (CONNECTOR ROAD)	CU YD	20,037.7
S-003	12" THICK STRUCTURAL FILL (ROUNDAABOUT)	CU YD	322.0
S-004	OUTFALL DITCH EXCAVATION	LN FT	1,449
S-005	CONSTRUCTION MATERIALS TESTING	LUMP SUM	1
S-006	ENVIRONMENTAL PROTECTION	LUMP SUM	1
S-007	EXCAVATION AND REPLACEMENT OF UNSUITABLE MATERIAL	CU YD	8,175.3
S-008	PLUG AND ABANDON EXISTING WATER WELL	EACH	1
S-009-A	JUNCTION BOX TYPE 1	EACH	3
S-009-B	JUNCTION BOX TYPE 2	EACH	1
S-009-C	JUNCTION BOX TYPE 3	EACH	3
S-009-D	JUNCTION BOX TYPE 4	EACH	1
S-009-E	24" X 24" STACK DRAIN INLET	EACH	3
S-010	AS-BUILT SURVEY AND PLAN	LUMP SUM	1
S-012	REMOVE AND DISPOSE OF EXISTING NATURAL GAS MAIN	LN FT	1700
S-013	JACK & BORE STEEL 12" CASING WITH 8-INCH DIAMETER HDPE (PE 4710, DR 11) NATURAL GAS MAIN (INCLUDING END SEALS & VENTS)	LN FT	70
S-014	DIRECTIONALLY DRILL NEW 8-INCH HDPE (PE 4710, DR 11) NATURAL GAS MAIN INCLUDING ALL REQUIRED FUSED FITTINGS	LN FT	1700
S-015	NEW 8-INCH DIAMETER NATURAL GAS POLY VALVE WITH VALVE BOX AND CONCRETE PAD	EACH	1
S-016	CONNECT NEW 8-INCH DIAMETER HDPE GAS MAIN TO EXISTING HDPE NATURAL GAS MAIN WITH VALVE (INCLUDING FITTINGS)	EACH	2
S-017	REMOVE 12" SFM AND BACKFILL WITH STRUCTURAL FILL	LN FT	690

## ALTERNATE NO. 1

ITEM	DESCRIPTION	UNIT	QUANTITY
502-01-00100-B	SUPERPAVE ASPHALT CONCRETE (CONNECTOR ROAD)	TON	15,605.9
707-03-00100	COMBINATION CURB & GUTTER (CONNECTOR ROAD)	LN FT	20,099.1
S-002-B	12" THICK STRUCTURAL FILL (CONNECTOR ROAD)	CU YD	21,543.8
S-011	5" THICK FULL-DEPTH ASPHALT CONCRETE BASE COURSE (CONNECTOR ROAD)	SQ YD	56,748.7
601-01-00100-A	PORTLAND CEMENT CONCRETE PAVEMENT (8" THICK)(CONNECTOR ROAD)	SQ YD	-55,546.9
707-01-00200-A	CONCRETE BARRIER CURB (CONNECTOR ROAD)	LN FT	-20,003.1
707-01-00300-A	CONCRETE MOUNTABLE CURB (CONNECTOR ROAD)	LN FT	-96.0
S-002-A	12" THICK STRUCTURAL FILL (CONNECTOR ROAD)	CU YD	-20,037.7

SEE SHEET 3g FOR NOTES PERTAINING TO THE ITEMS ABOVE.

## ADDENDUM NO. 1

### SUMMARY OF ESTIMATED QUANTITIES

LA 1077/LA 21 CONNECTOR ROAD

Revised

NO.	DATE	REVISION DESCRIPTION
06/03/21		ADDENDUM NO.1 - ADDED PAY ITEMS AND REVISED QUANTITIES
06/03/21		REVISION DESCRIPTION

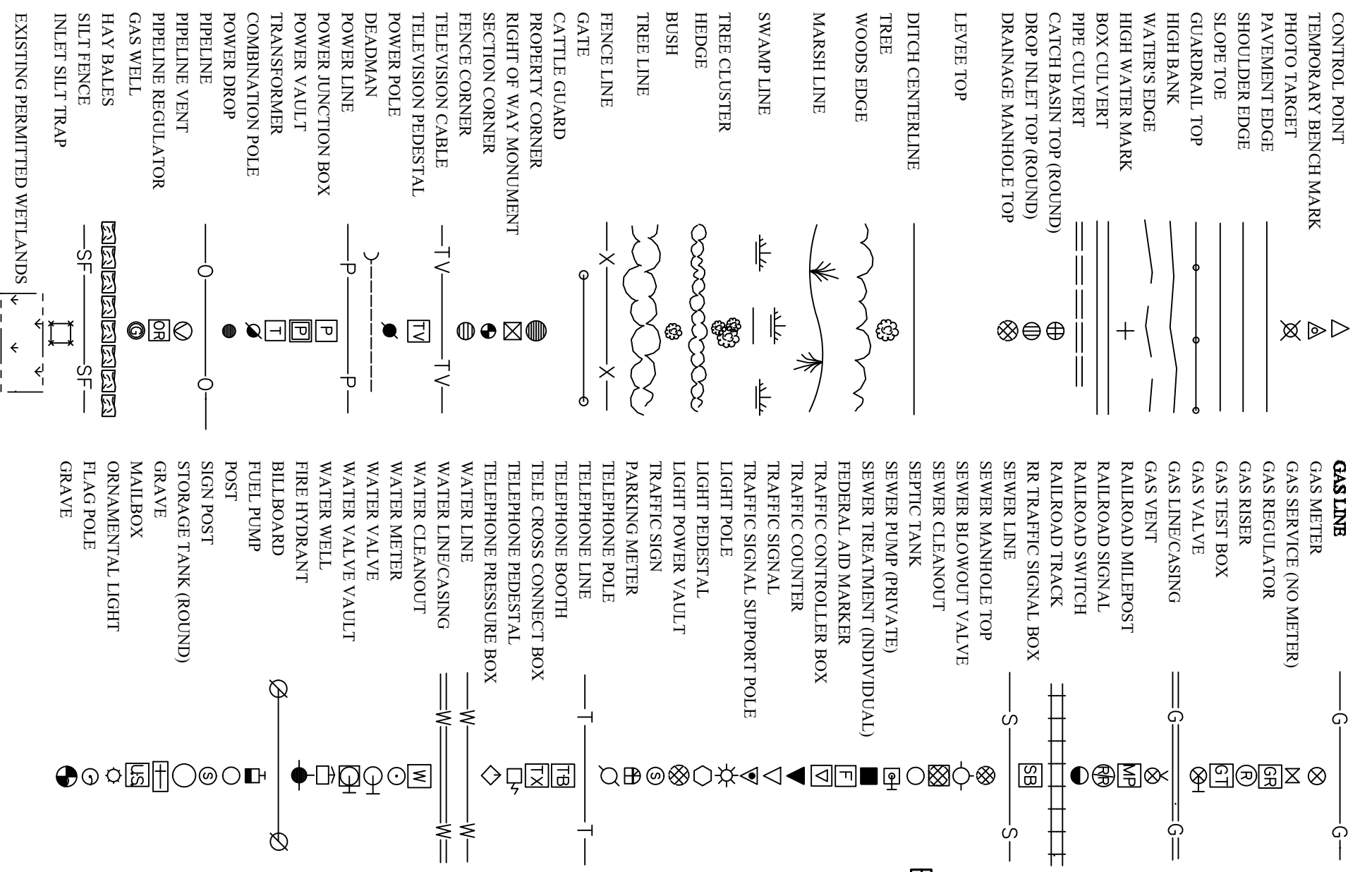
DESIGNED	ATL
CHECKED	FJZ
DATE	04/29/21
SHEET	3

RICHARD C. LAMBERT CONSULTANTS, L.L.C.

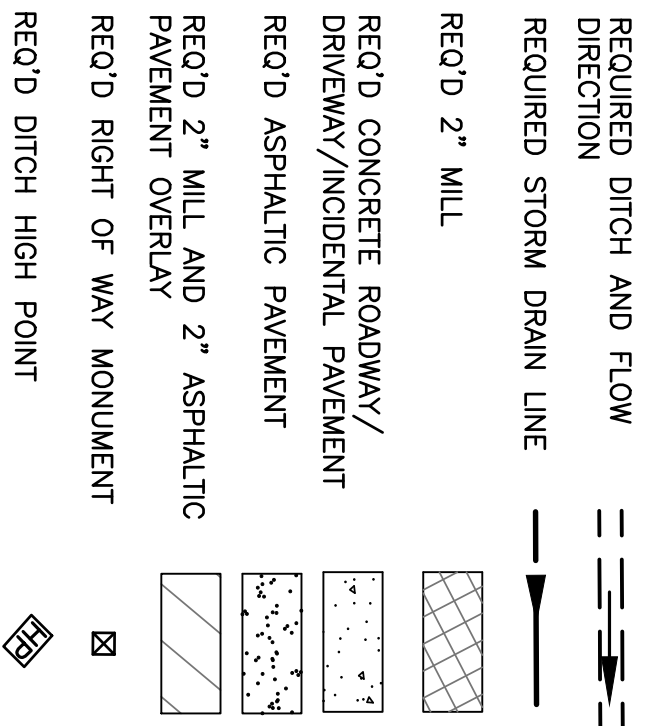
829 Baronne New Orleans, LA 70113  
 900 W. Causeway Appr. Mandeville, LA 70471  
 985-727-4440  
 Fax: 985-727-4447



PLAN LEGEND - EXISTING TOPOGRAPHY



PLAN LEGEND - REQUIRED WORK



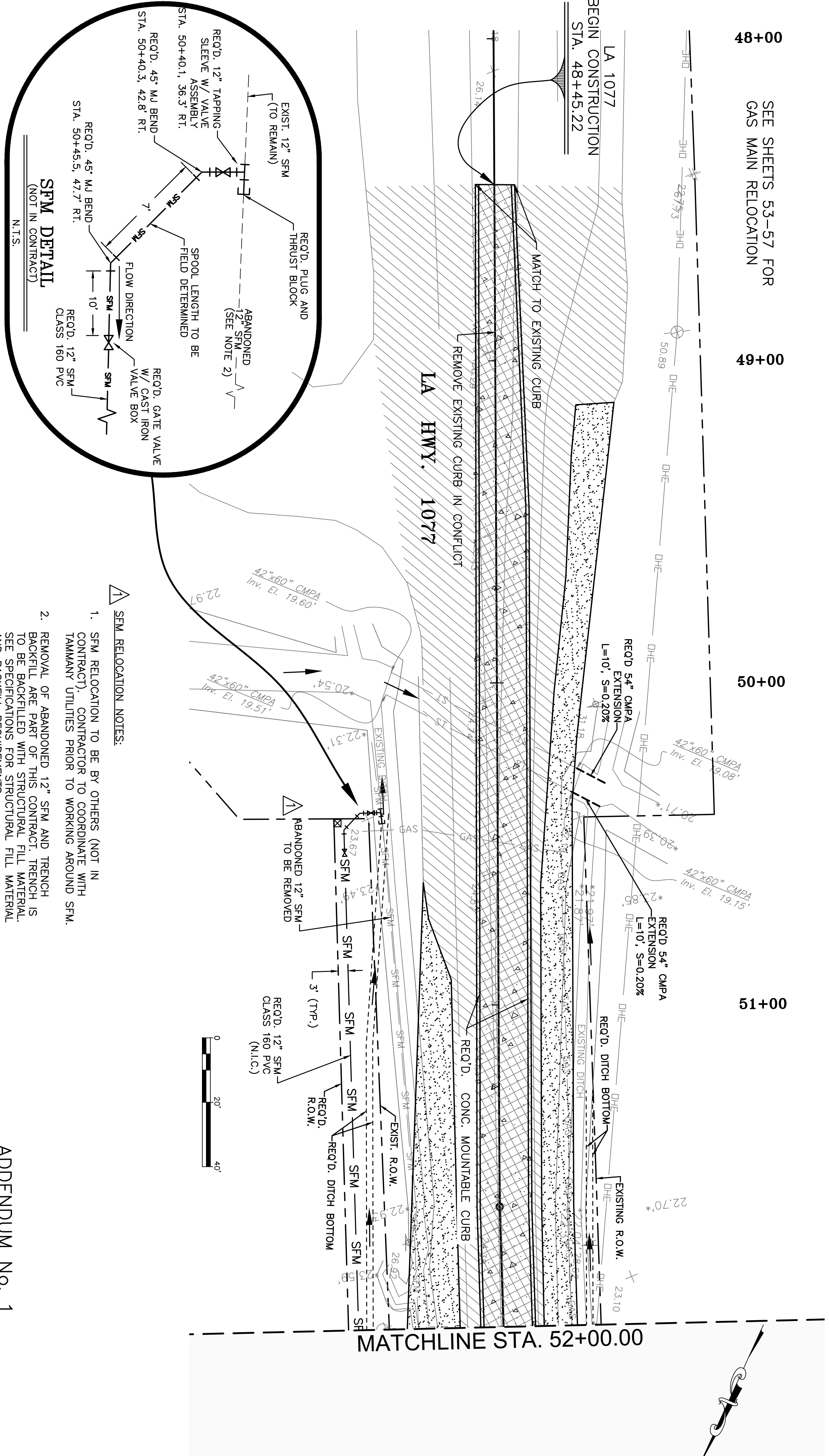
**NOTE**  
THE CONTRACTOR'S ATTENTION IS CALLED TO THE PRESENCE OF OVERHEAD GAS AND UNDERGROUND POWER LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND COORDINATING HIS OPERATIONS WITH ALL UTILITY COMPANIES.

48+00 SEE SHEETS 53-57 FOR GAS MAIN RELOCATION

49+00

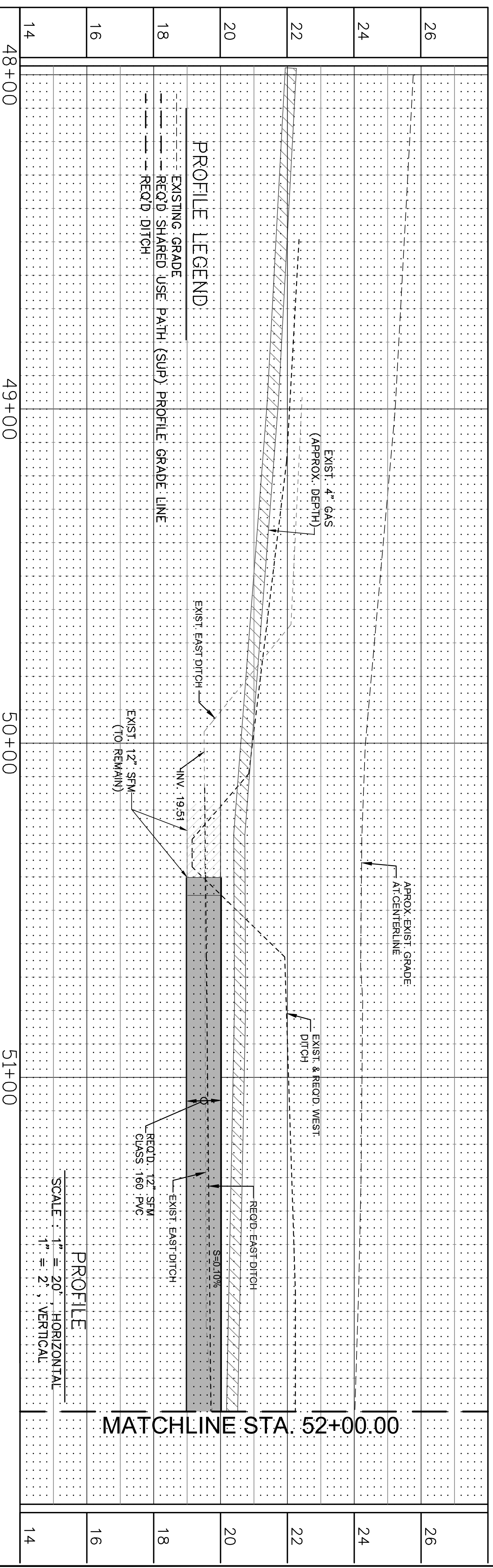
50+00

51+00



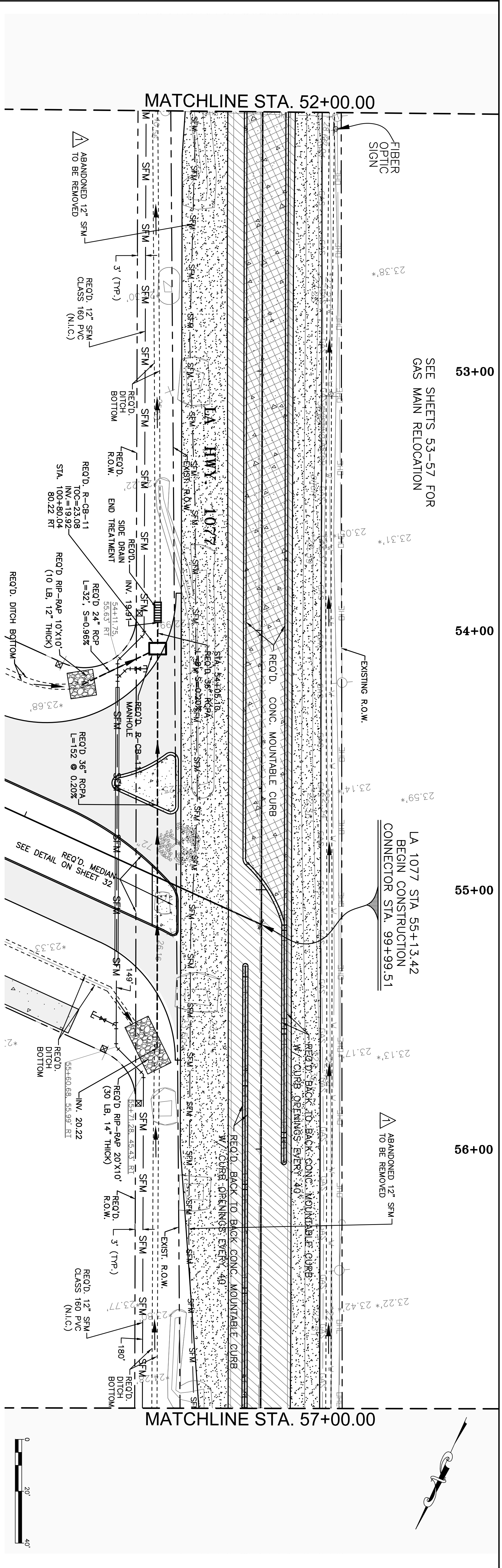
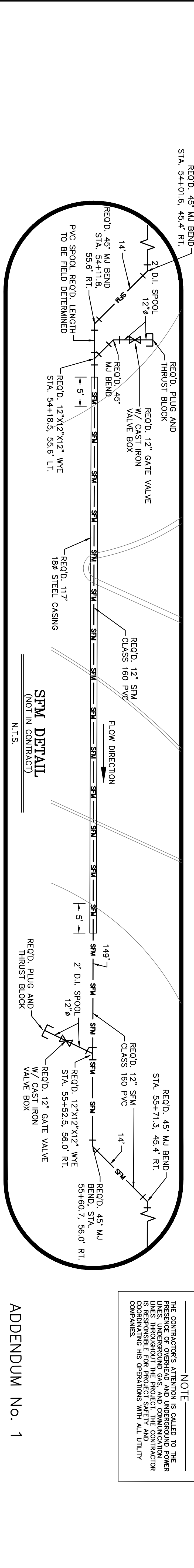
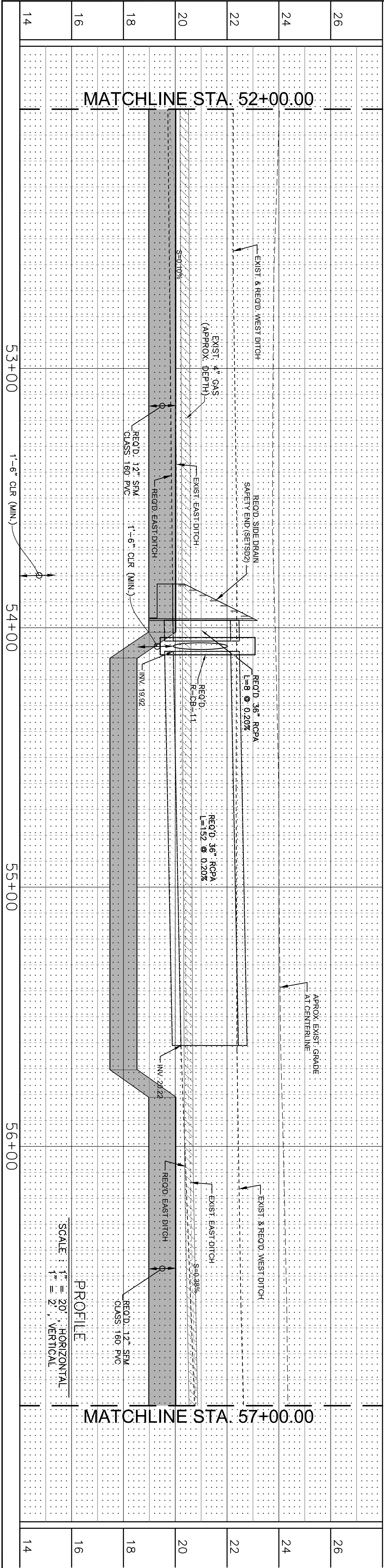
- SFM RELOCATION NOTES:**
- SFM RELOCATION TO BE BY OTHERS (NOT IN CONTRACT). CONTRACTOR TO COORDINATE WITH TAMMANY UTILITIES PRIOR TO WORKING AROUND SFM.
  - REMOVAL OF ABANDONED 12" SFM AND TRENCH IS TO BE BACKFILLED WITH STRUCTURAL FILL MATERIAL. SEE SPECIFICATIONS FOR STRUCTURAL FILL MATERIAL AND BACKFILL REQUIREMENTS.

ADDENDUM NO. 1



PROFILE  
SCALE: 1" = 20' HORIZONTAL  
1" = 2' VERTICAL

<p>DESIGNED: ATL CHECKED: FJZ</p>		<p>DATE: 04/29/21 SHEET: 4</p>	
<p>DETAILED: LBW CHECKED: FJZ</p>		<p>BY:</p>	
<p>PROJECT: PLAN &amp; PROFILE LA 1077 50+00.00 TO 52+00.00</p>		<p>ADDENDUM NO. 1</p>	
<p>CONTRACTOR: RICHARD C. LAMBERT CONSULTANTS, L.L.C.</p>		<p>729 POND LANE, SUITE 200, NEW ORLEANS, LA 70113</p>	
<p>PROJECT NUMBER: RCLC No. 714-08</p>		<p>729 POND LANE, SUITE 200, NEW ORLEANS, LA 70113</p>	

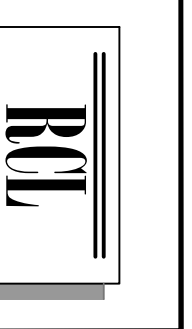


Project Number: RCLC No. 71408  
 Project Name: PLAN & PROFILE LA 1077 52+00.00 TO 57+00.00  
 Date: 04/29/21  
 Sheet Number: 5

NO.	DATE	REVISION DESCRIPTION
1		Addendum No. 1

DESIGNED	ATL
CHECKED	FJZ
DATE	04/29/21
SHEET	5

**RICHARD C. LAMBERT CONSULTANTS, L.L.C.**  
 829 Baronne, New Orleans, LA 70113  
 900 W. Causeway Arr. Mandeville, LA 70471  
 985-727-4440  
 Fax: 985-727-4447

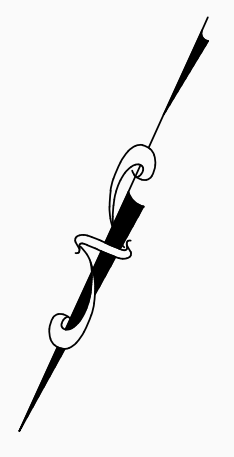


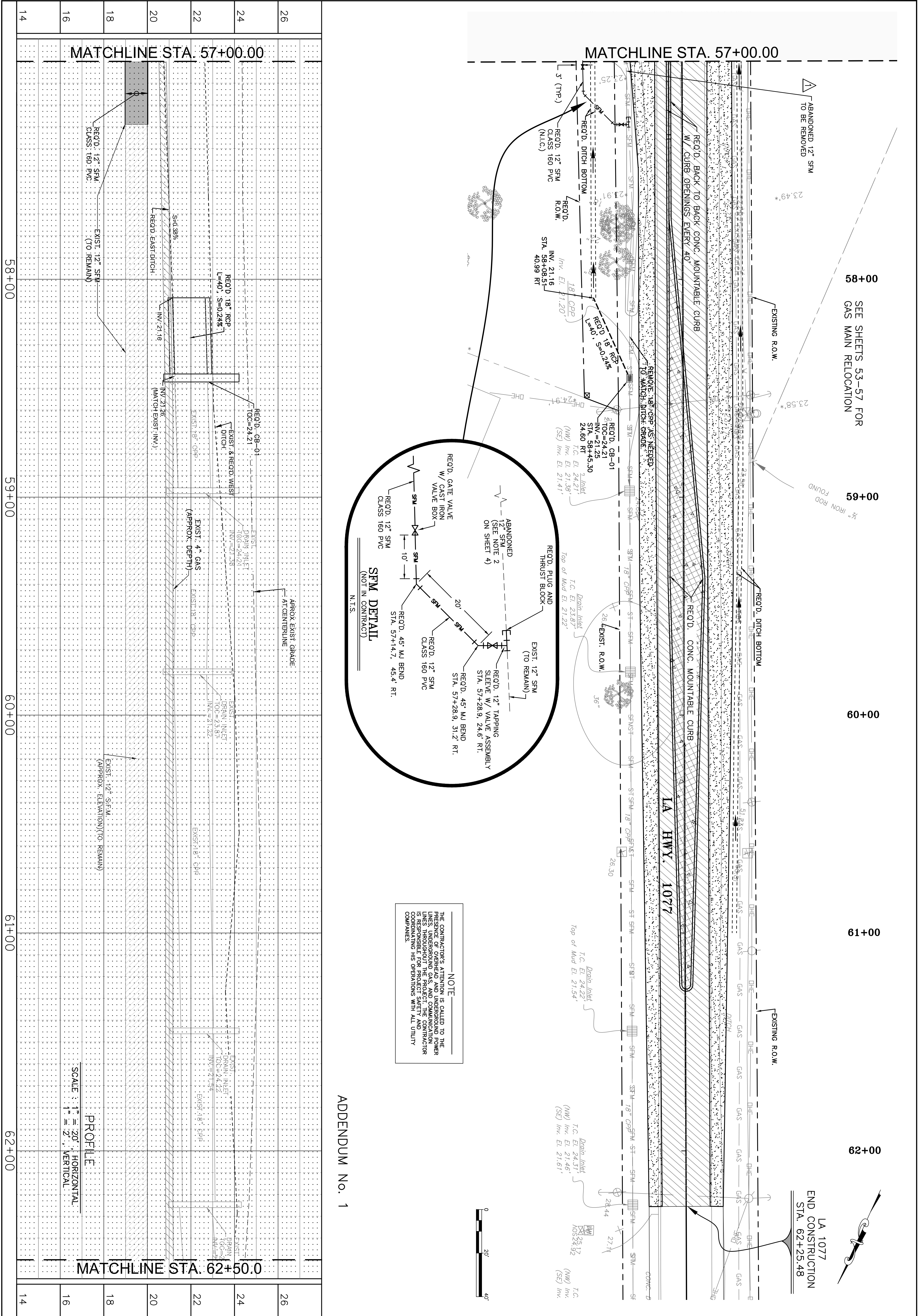
**NOTE**  
 THE CONTRACTOR'S ATTENTION IS CALLED TO THE PRESENCE OF OVERHEAD AND UNDERGROUND POWER LINES, UNDERGROUND GAS, AND COMMUNICATION LINES. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL SUCH UTILITIES PRIOR TO CONSTRUCTION AND COORDINATE HIS OPERATIONS WITH ALL UTILITY COMPANIES.

ADDENDUM No. 1

SEE SHEETS 53-57 FOR GAS MAIN RELOCATION

LA 1077 STA 55+13.42 BEGIN CONSTRUCTION CONNECTOR STA. 99+99.51





ADDENDUM No. 1

NOTE  
 THE CONTRACTOR'S ATTENTION IS CALLED TO THE  
 FACT THAT THE CONTRACTOR SHALL BE RESPONSIBLE FOR  
 THE LOCATION AND DEPTH OF ALL UTILITIES AND  
 OTHER LINES UNDERGROUND GAS AND COMMUNICATION  
 LINES THROUGHOUT THE PROJECT. THE CONTRACTOR  
 IS RESPONSIBLE FOR PROJECT SAFETY AND  
 COMPENSATING HIS OPERATIONS WITH ALL UTILITY  
 COMPANIES.

PROFILE  
 SCALE: 1" = 20' HORIZONTAL  
 1" = 2' VERTICAL

Project Number: RCLC No. 714-08  
 RICHARD C. LAMBERT CONSULTANTS, L.L.C.  
 829 Baronne, New Orleans, LA 70113  
 900 W. Causeway Appr. Mandeville, LA 70471  
 985-727-4440  
 Fax: 985-727-4447

PLAN & PROFILE  
 LA 1077  
 57+00.00 TO 62+00.00  
 LA 1077/LA 21 CONNECTOR ROAD

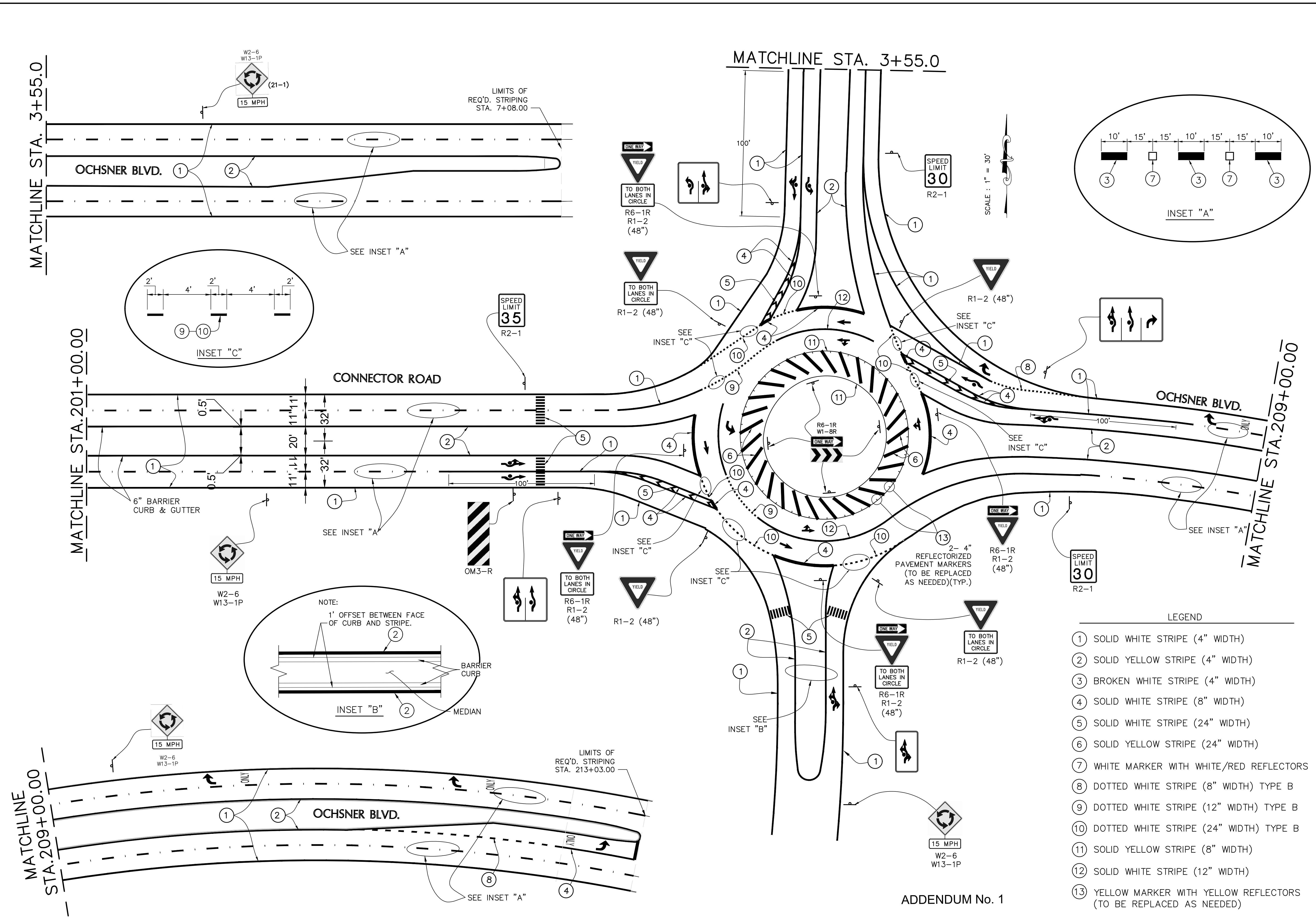
NO.	DATE	REVISION DESCRIPTION
1		Addendum No. 1

DESIGNED	ATL
CHECKED	FJZ
DATE SHEET	04/29/21 6

RICHARD C. LAMBERT CONSULTANTS, L.L.C.  
 829 Baronne, New Orleans, LA 70113  
 900 W. Causeway Appr. Mandeville, LA 70471  
 985-727-4440  
 Fax: 985-727-4447

CONSULTANTS L.L.C.  
 Engineering  
 Construction Management  
**RCL**

I:\CAD\71408\_LA1077-Ochsner Blvd Study\working\_drawings\71408\_33-36\_Striping & Signing.dwg



- LEGEND
- ① SOLID WHITE STRIPE (4" WIDTH)
  - ② SOLID YELLOW STRIPE (4" WIDTH)
  - ③ BROKEN WHITE STRIPE (4" WIDTH)
  - ④ SOLID WHITE STRIPE (8" WIDTH)
  - ⑤ SOLID WHITE STRIPE (24" WIDTH)
  - ⑥ SOLID YELLOW STRIPE (24" WIDTH)
  - ⑦ WHITE MARKER WITH WHITE/RED REFLECTORS
  - ⑧ DOTTED WHITE STRIPE (8" WIDTH) TYPE B
  - ⑨ DOTTED WHITE STRIPE (12" WIDTH) TYPE B
  - ⑩ DOTTED WHITE STRIPE (24" WIDTH) TYPE B
  - ⑪ SOLID YELLOW STRIPE (8" WIDTH)
  - ⑫ SOLID WHITE STRIPE (12" WIDTH)
  - ⑬ YELLOW MARKER WITH YELLOW REFLECTORS (TO BE REPLACED AS NEEDED)

ADDENDUM No. 1



**RICHARD C. LAMBERT**  
CONSULTANTS, L.L.C.  
829 Baronne  
New Orleans, LA 70471  
900 W. Causeway Appr.  
Mandeville, LA 70471  
985-727-4440  
LA 70113  
Fax: 985-727-4447

DESIGNED	CHECKED	ATL	FUZ
DETAILED	CHECKED	LBW	FUZ
DATE	DATE	NO.	BY
04/29/21			
ADDITIONAL NO. 1 - REVISED TRAFFIC SIGNS AND STRIPING		REVISION DESCRIPTION	

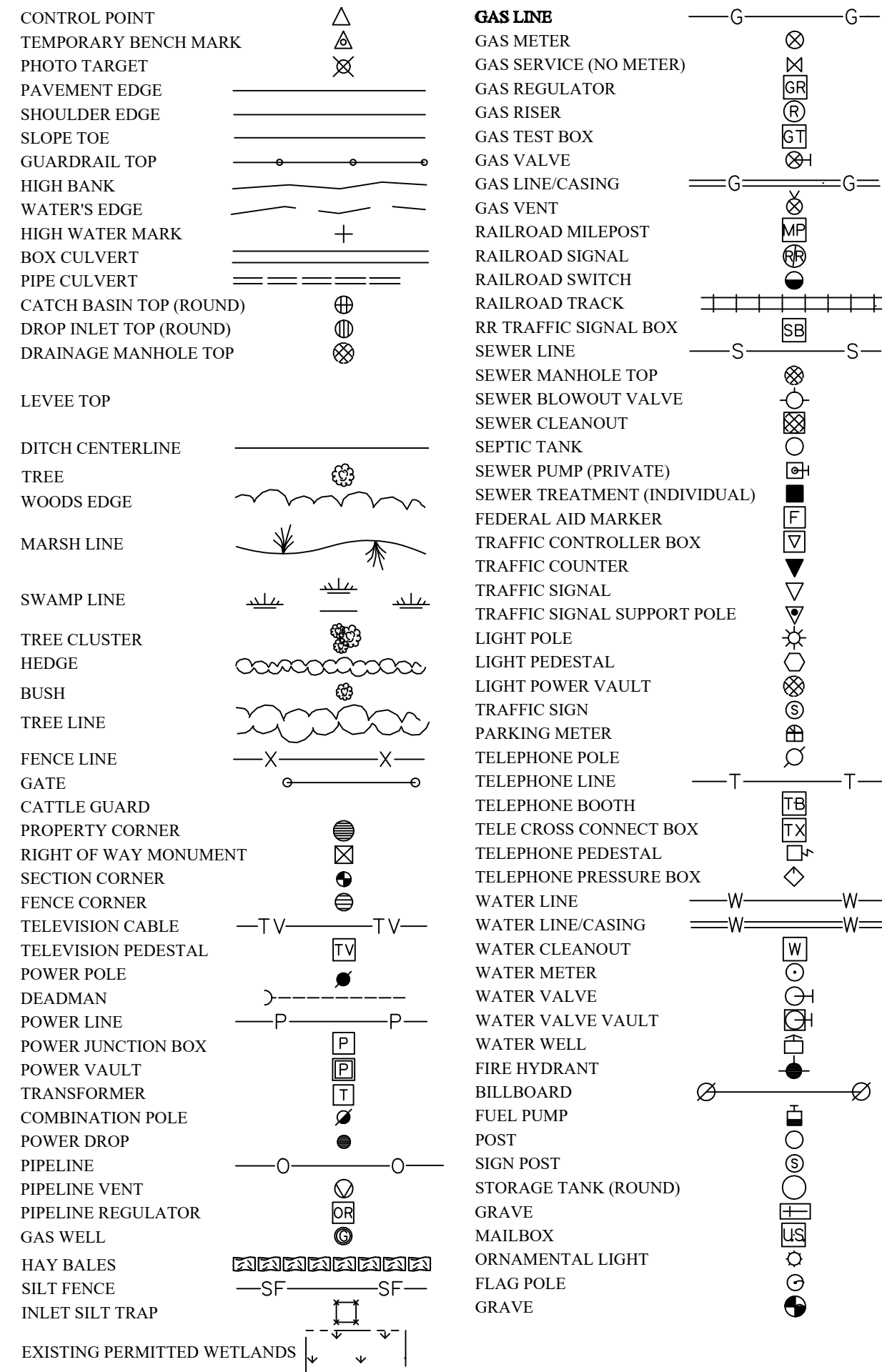
**PAVEMENT MARKING AND SIGNING LAYOUT**  
LA 1077/LA 21 CONNECTOR ROAD

Project Number: RCLC No. 714-08

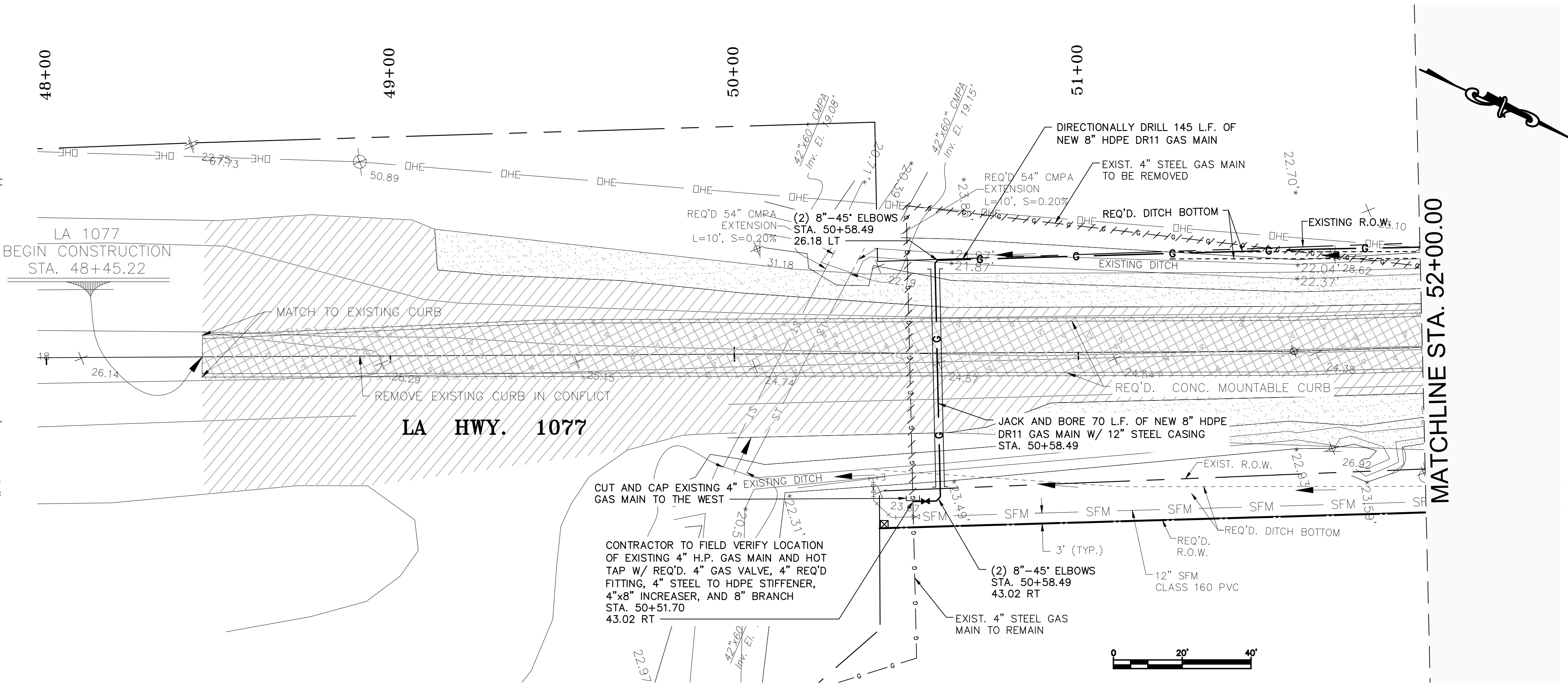


Sheet Number: 41

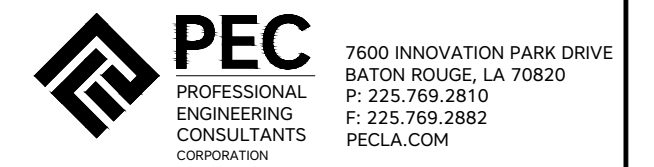
PLAN LEGEND – EXISTING TOPOGRAPHY



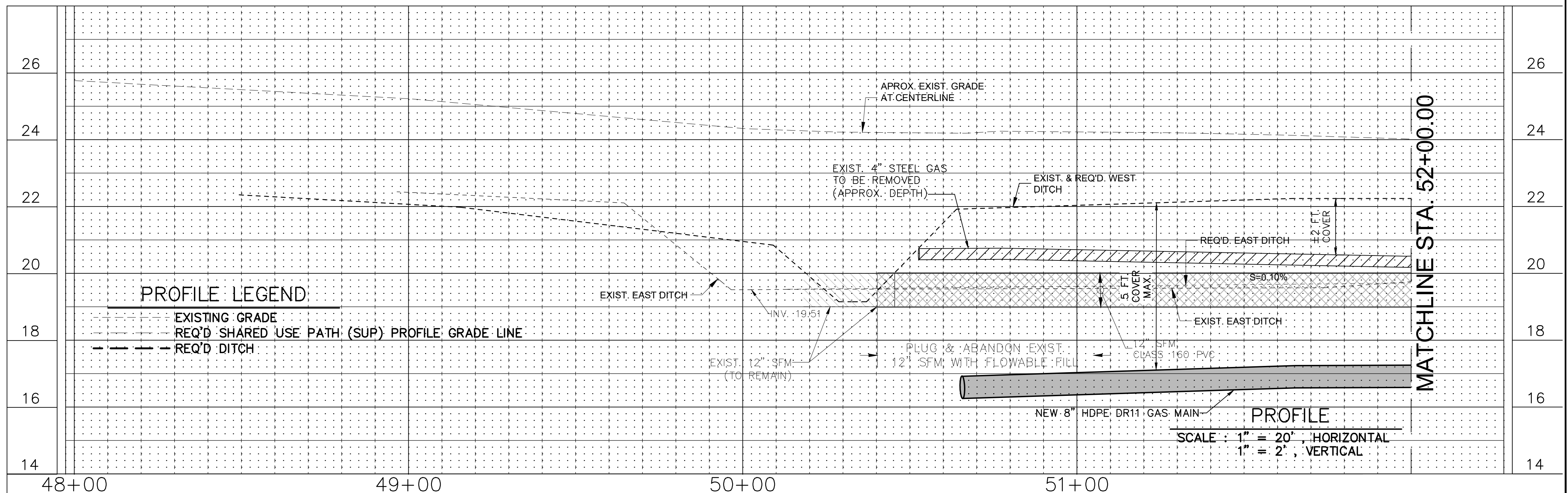
PLAN LEGEND – REQUIRED WORK



**NATURAL GAS MAIN  
RELOCATION  
Addendum No. 1**



**UTILITY WARNING**  
The Contractor is advised that existing overhead and underground utilities such as (but not limited to) electrical lines and poles, telephone cable, gas lines, water lines, and sanitary sewers exist in the rights-of-way where the proposed improvements are to be installed, all in accordance with the provisions of R.S. 38:2223. It shall be the Contractor's responsibility to protect these existing utilities during the construction of the work to be installed under this Contract and any damage to the existing utilities caused by the negligent acts of the Contractor shall be repaired by the Contractor at his expense. The Contractor shall contact Louisiana One (1) Call (1-800-272-3020) a minimum of 48 hours prior to beginning construction in the work area.



**RICHARD C. LAMBERT**  
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900 W. Causeway Appr.  
Mandeville, LA 70471  
829 Barome  
New Orleans, LA 70113  
985-727-4440  
Fax: 985-727-4447

DESIGNED	CHECKED	DATE	BY	NO.	DATE	DESCRIPTION
ATL	FJZ					
LIB	FJZ	03/26/21		53		

**PLAN & PROFILE**  
LA 1077  
50+00.00 TO 52+00.00  
LA 1077/LA 21 CONNECTOR ROAD

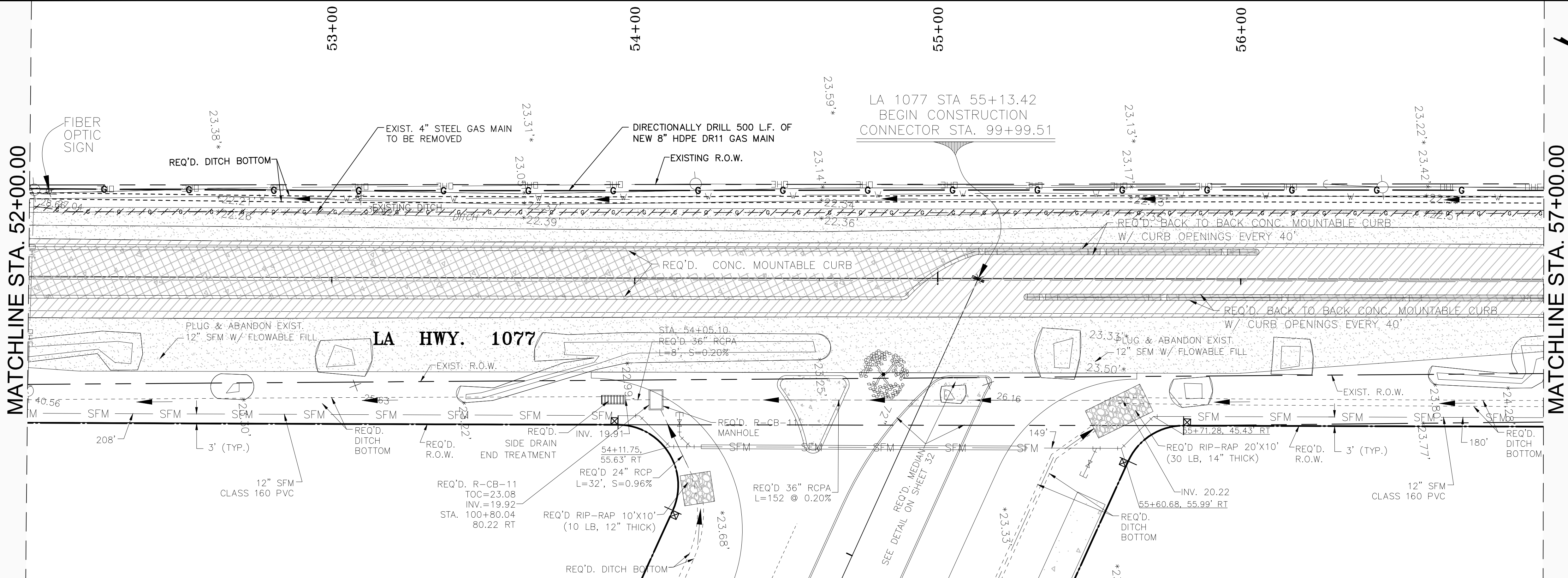
Project Number:  
RCLC No: 714-08



Sheet Number:  
**53**

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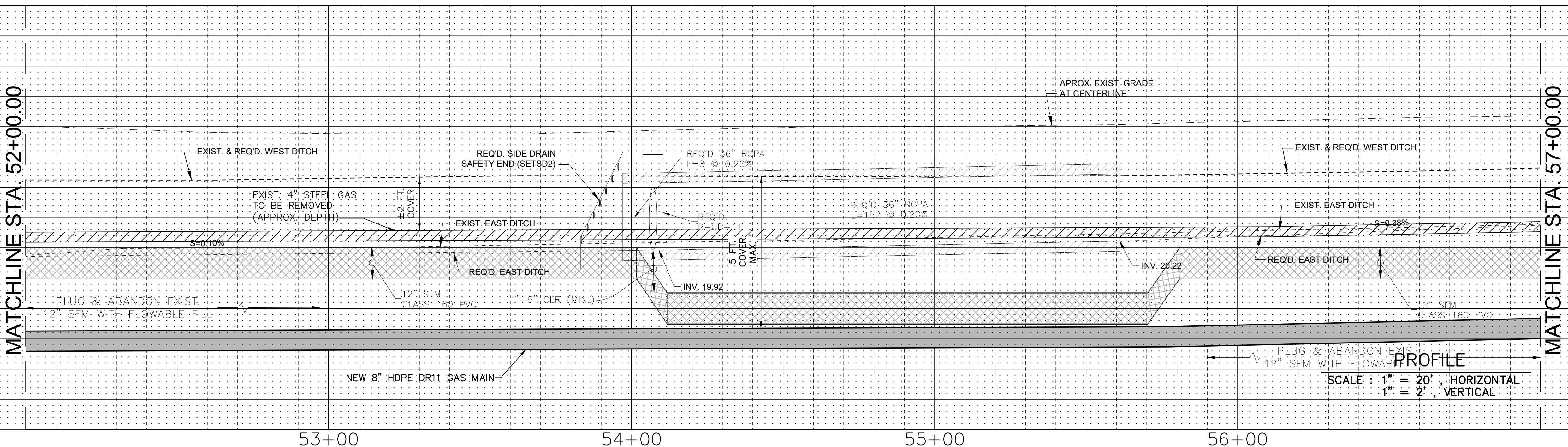
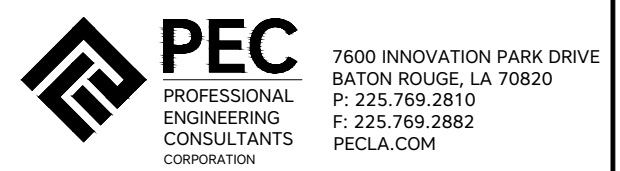




**NATURAL GAS MAIN  
RELOCATION  
Addendum No. 1**

**UTILITY WARNING**

The Contractor is advised that existing overhead and underground utilities such as (but not limited to) electrical lines and poles, telephone cable, gas lines, water lines, and sanitary sewers exist in the rights-of-way where the proposed improvements are to be installed, all in accordance with the provisions of R.S. 38:2223. It shall be the Contractor's responsibility to protect these existing utilities during the construction of the work to be installed under this Contract and any damage to the existing utilities caused by the negligent acts of the Contractor shall be repaired by the Contractor at his expense. The Contractor shall contact Louisiana One (1) Call (1-800-272-3020) a minimum of 48 hours prior to beginning construction in the work area.



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985-727-4447  
Fax: 985-727-4447

DESIGNED	ATL	BY	54
CHECKED	FUZ	DATE	03/26/21
DETAILED	LWB	REVISION	DESCRIPTION
CHECKED	FUZ	NO.	DATE

**PLAN & PROFILE**  
**LA 1077**  
**52+00.00 TO 57+00.00**  
LA 1077/LA 21 CONNECTOR ROAD

Project Number:  
RCLC No: 714-08



Sheet Number:  
**54**

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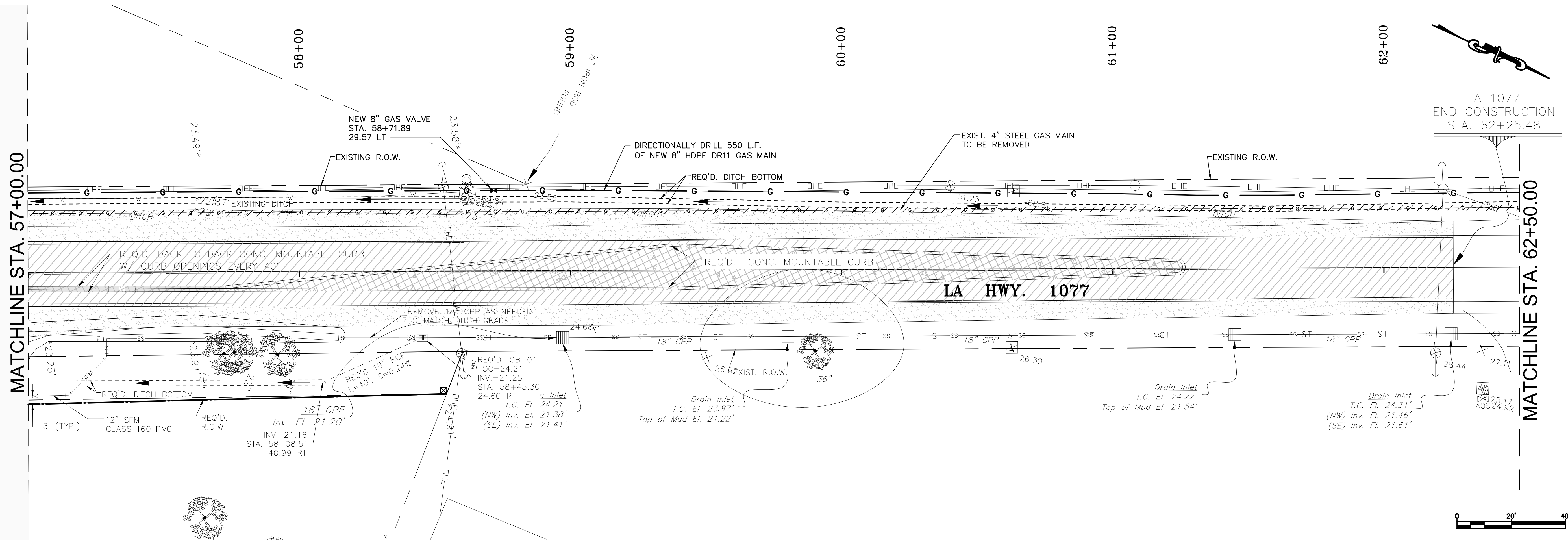
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ATL	FUZ					
LIBW	FUZ	03/26/21				
LIBW	FUZ					
LIBW	FUZ					

**PLAN & PROFILE**  
**LA 1077**  
**57+00.00 TO 62+50.00**  
LA 1077/LA 21 CONNECTOR ROAD

Project Number:  
RCLC No: 714-08

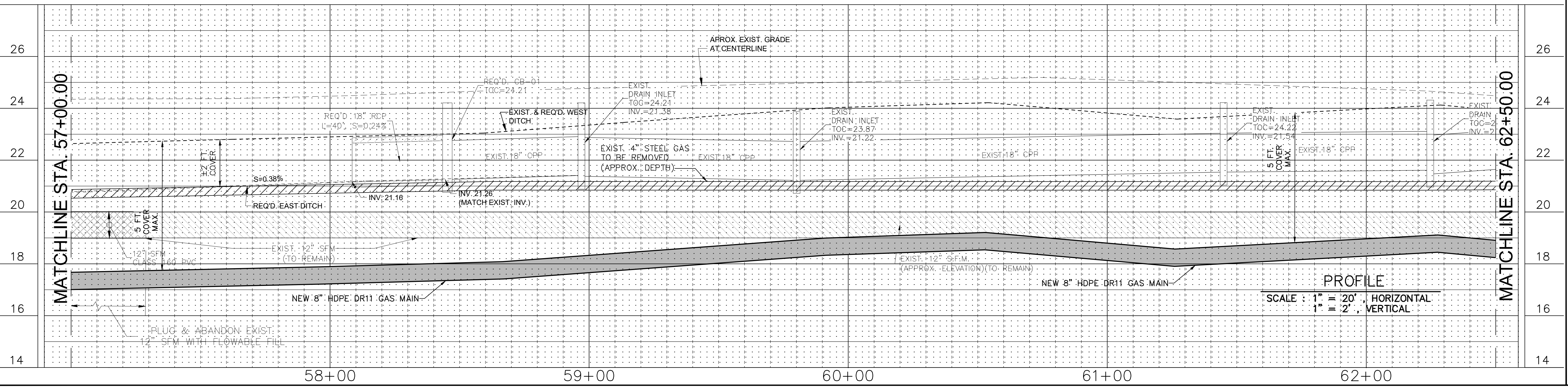
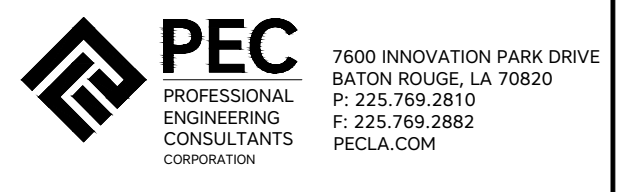


Sheet Number:  
**55**



**NATURAL GAS MAIN  
RELOCATION  
Addendum No. 1**

**UTILITY WARNING**  
The Contractor is advised that existing overhead and underground utilities such as (but not limited to) electrical lines and poles, telephone cable, gas lines, water lines, and sanitary sewers, exist in the rights-of-way where the proposed improvements are to be installed, all in accordance with the provisions of R.S. 38:2223. It shall be the Contractor's responsibility to protect these existing utilities during the construction of the work to be installed under this Contract and any damage to the existing utilities caused by the negligent acts of the Contractor shall be repaired by the Contractor at his expense. The Contractor shall contact Louisiana One (1) Call (1-800-272-3020) a minimum of 48 hours prior to beginning construction in the work area.



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DETAILED	LWB
CHECKED	FUZ
DATE	03/26/21
SHEET	56

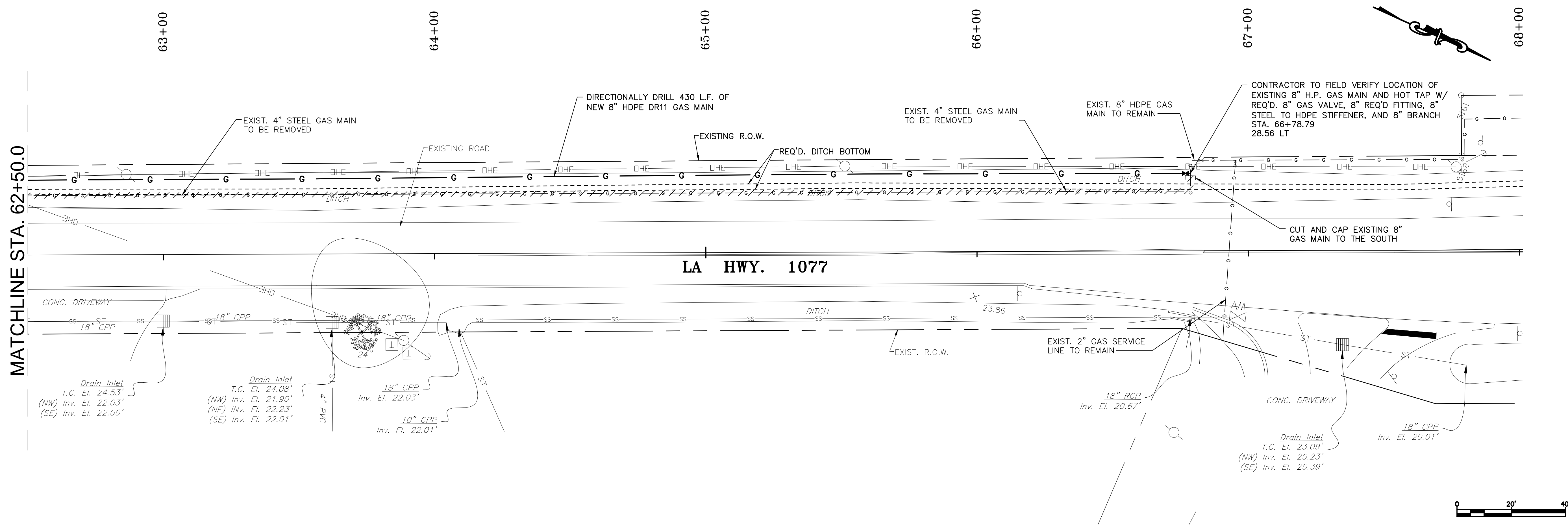
NO.	DATE	REVISION DESCRIPTION

PLAN & PROFILE  
LA 1077  
62+50.00 TO 68+00  
LA 1077/LA 21 CONNECTOR ROAD

Project Number:  
RCLC No: 714-08



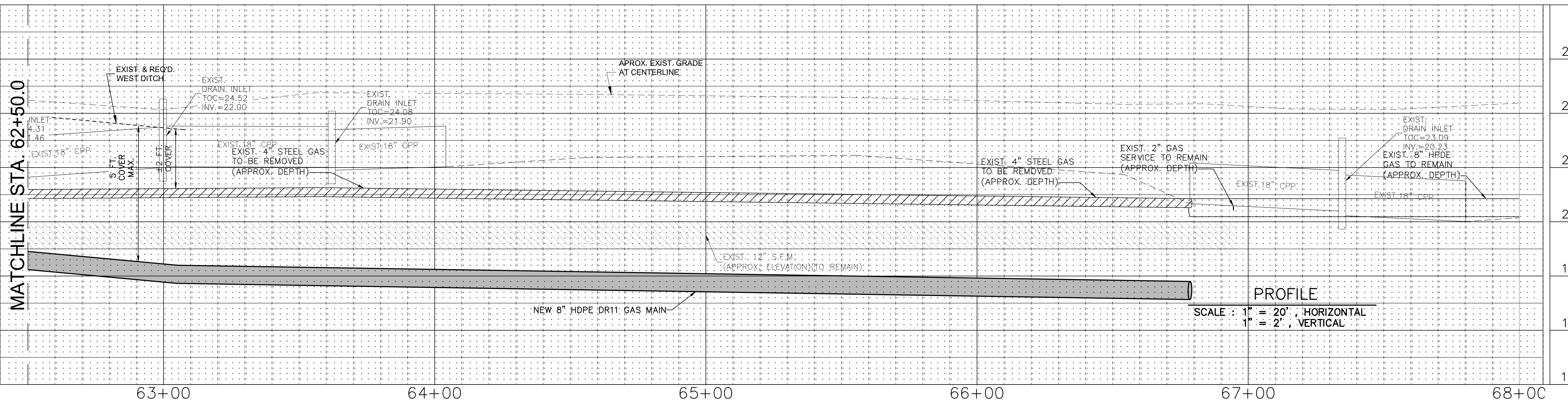
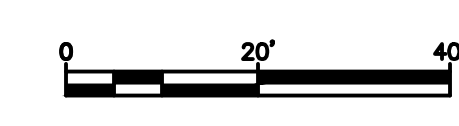
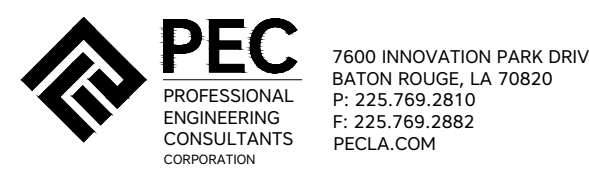
Sheet Number:  
56



**NATURAL GAS MAIN  
RELOCATION  
Addendum No. 1**

**UTILITY WARNING**

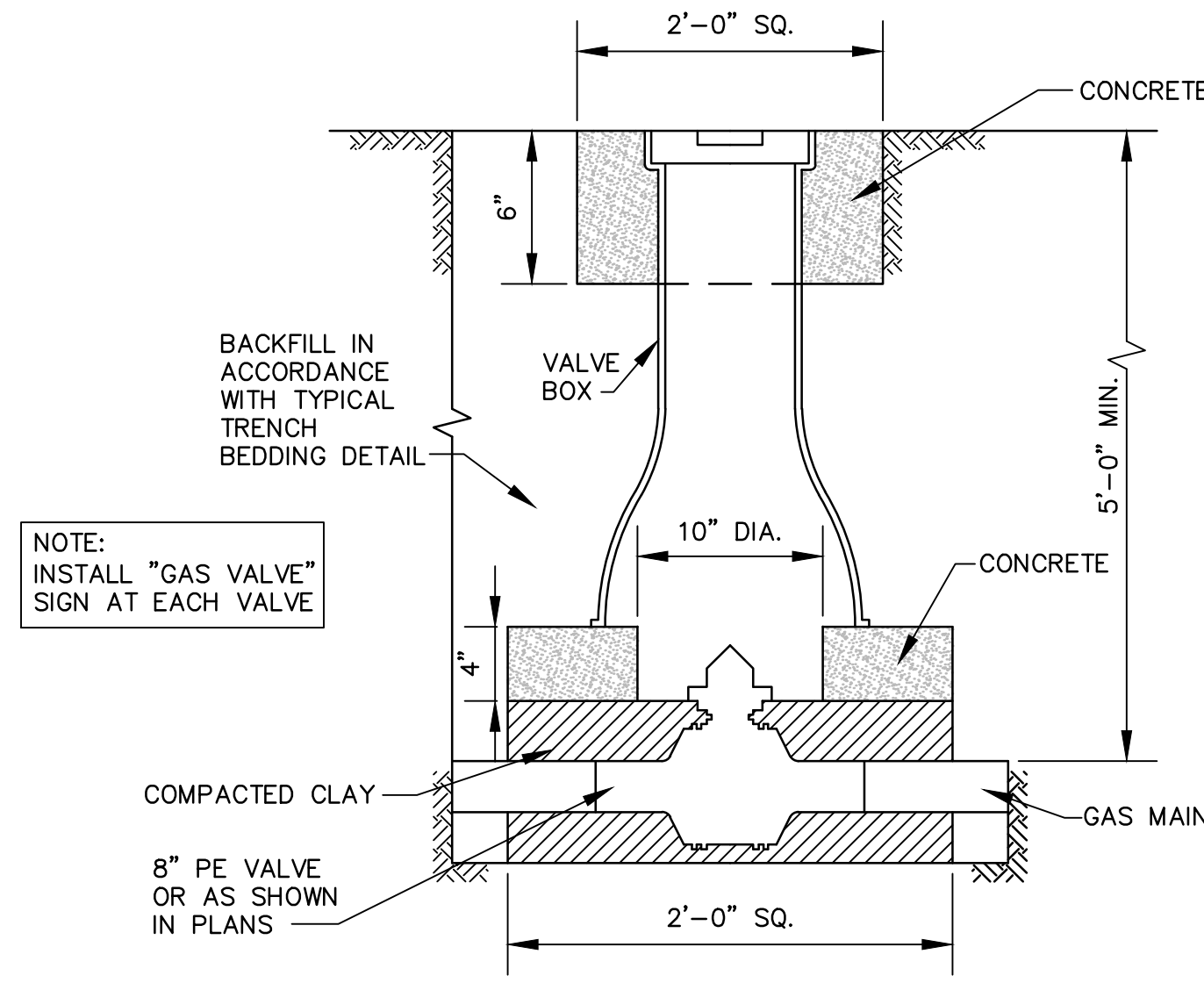
The Contractor is advised that existing overhead and underground utilities such as (but not limited to) electrical lines and poles, telephone cable, gas lines, water lines, and sanitary sewers exist in the rights-of-way where the proposed improvements are to be installed, all in accordance with the provisions of R.S. 38:2223. It shall be the Contractor's responsibility to protect these existing utilities during the construction of the work to be installed under this Contract and any damage to the existing utilities caused by the negligent acts of the Contractor shall be repaired by the Contractor at his expense. The Contractor shall contact Louisiana One (1) Call (1-800-272-3020) a minimum of 48 hours prior to beginning construction in the work area.



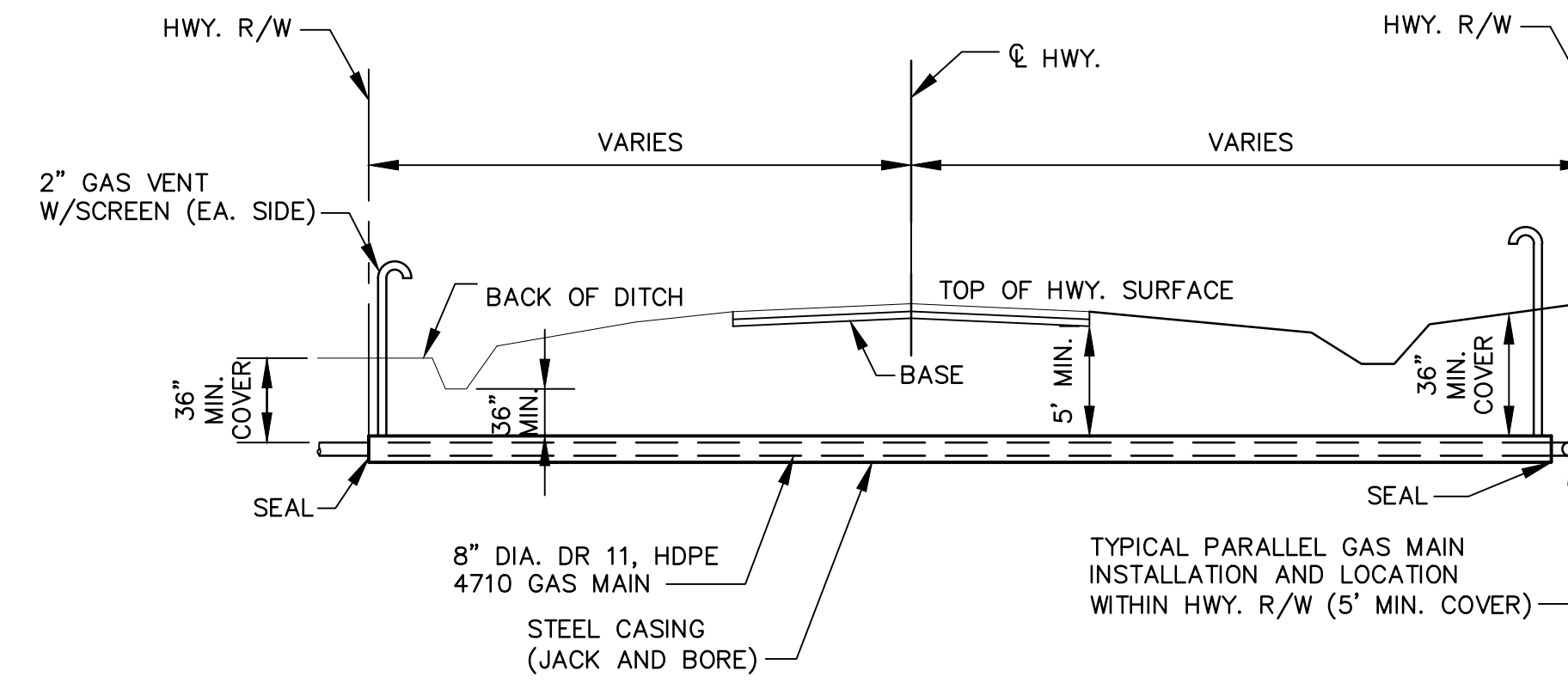
SCALE : 1" = 20', HORIZONTAL  
1" = 2', VERTICAL

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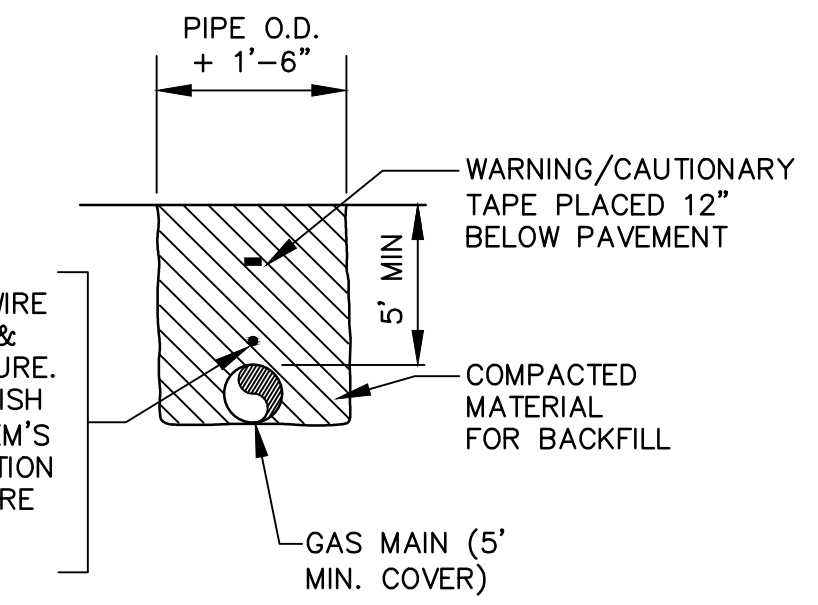
TYPICAL GAS VALVE SETTING  
N.T.S.



HIGHWAY CROSSING  
N.T.S.

- NOTES:  
 1. STEEL CASING PIPE TO BE JACK AND BORE.  
 2. JACK AND BORE LENGTH SHOWN ON PLANS.

10 GA. PLASTIC COATED COPPER TRACER WIRE FOR PIPE LOCATION. GROUND TO VALVES & PLACE ON TOP OF PIPE AND TAPE TO SECURE. CONTRACTOR TO MAINTAIN AND RE-ESTABLISH CONTINUITY FOR THE EXISTING STEEL SYSTEM'S CATHODIC PROTECTION. CATHODIC PROTECTION #4 WIRES SHALL BE INSTALLED ALONG ENTIRE LENGTH OF PIPE (INCLUDING BORES)



TYPICAL TRENCH SECTION  
N.T.S.

- NOTE:  
 1. BACKFILL MATERIAL SHALL CONSIST OF SELECT MATERIAL REMOVED FROM THE TRENCH AS DIRECTED BY THE PROJECT ENGINEER. THE CONTRACTOR SHALL RECEIVE NO DIRECT PAY FOR USE OF EXISTING MATERIAL. BACKFILL MATERIAL SHALL BE CAREFULLY PLACED AND COMPACTED TO 95% PROCTOR DENSITY IN LAYERS NOT TO EXCEED 12" THICK.

### GENERAL NOTES:

1. THE UNIT PRICE BID FOR EACH "MAINLINE TIE-IN" SHALL INCLUDE TAP, HOT TAP, FITTINGS, AND ANY OTHER MATERIAL NOT SPECIFICALLY PROVIDED FOR IN THE PROPOSAL FORM AS WELL AS ALL LABOR, EQUIPMENT, ETC. NECESSARY TO CONNECT THE NEW GAS LINE TO THE EXISTING GAS LINE AT DIFFERENT VERTICAL ELEVATIONS AND WITHOUT ANY INTERRUPTION OF SERVICE TO CUSTOMERS ON THE INTERSECTING MAINLINE.
2. 48-HOURS PRIOR TO ANY WORK BEING PERFORMED ON THE GAS MAIN, THE CONTRACTOR SHALL NOTIFY THE TOWN OF MADISONVILLE'S GAS DEPARTMENT FOR COORDINATION WITH ITS CONSTRUCTION INSPECTION.
3. CONTRACTOR SHALL FURNISH THE TOWN OF MADISONVILLE WITH COPIES OF THE WELDER CERTIFICATIONS AND PE FUSION CERTIFICATION FOR THEIR RECORDS PRIOR TO ANY WORK BEING DONE. CONTRACTORS SHALL BE CERTIFIED IN ACCORDANCE WITH THE TOWN OF MADISONVILLE'S CERTIFICATION REQUIREMENT AND FOR WORKING ON THEIR SYSTEM.
4. WELDERS MUST BE QUALIFIED IN ACCORDANCE WITH SECTION 6 OF API 1104 (IBR SEE 192.7) PER SECTION IX OF THE ASME BOILER AND PRESSURE VESSEL CODE (IBR SEE 192.7). HOWEVER, A WELDER QUALIFIED UNDER AN EARLIER EDITION MAY WELD BUT MAY NOT REQUALIFY UNDER THAT EARLIER EDITION.
5. THE CONTRACTOR IS HEREBY NOTIFIED THAT THE TOWN OF MADISONVILLE REQUIRES COMPLIANCE WITH (BUT NOT LIMITED TO) THE FOLLOWING:
  - 5.1. COMPLIANCE: ANY EMPLOYEE WHO WOULD PERFORM AN OPERATIONS, MAINTENANCE, OR EMERGENCY-RESPONSE FUNCTION, REGULATED BY PART 192, 193, OR 195, ON THE PIPELINE OR LNG FACILITY, IS SUBJECT TO MANDATORY DOT DRUG AND ALCOHOL TESTING UNDER THIS PROGRAM. SUCH INDIVIDUALS ARE SUBJECT TO DOT TESTING BECAUSE THEIR JOB FUNCTIONS ARE BEING DETERMINED BY PHMSA TO BE COVERED, OR SAFETY-SENSITIVE, TRANSPORTATION FUNCTION. IT IS THE WORK THAT AN INDIVIDUAL PERFORMS, NOT THE TITLE OF THEIR JOB, WHICH DETERMINES WHETHER THEIR WORK IS COVERED AND THEREFORE SUBJECT TO DRUG AND ALCOHOL TESTING.
  - 5.2. OPERATOR OR CONTRACTOR: COVERED EMPLOYEES MAY BE EMPLOYED BY THE OPERATOR, BE A CONTRACTOR ENGAGED BY THE OPERATOR, OR BE EMPLOYED BY SUCH A CONTRACTOR; THIS INCLUDES FULL-TIME, PART-TIME, AND TEMPORARY EMPLOYEES AND INCLUDE ANY APPLICANT FOR A COVERED FUNCTION.



**RICHARD C. LAMBERT**  
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 900 W. Causeway Appr.  
 Mandeville, LA 70471  
 829 Barome New Orleans, LA 70113  
 985-727-4440  
 Fax: 985-727-4447

DESIGNED	ATL
CHECKED	FJZ
DETAILED	LBW
CHECKED	FJZ
DATE	03/28/21
SHEET	57

NO.	DATE	REVISION DESCRIPTION	BY

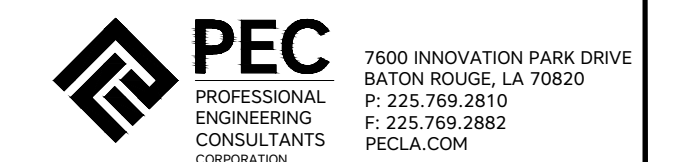
**LA 1077 CONNECTOR MISCELLANEOUS GAS DETAILS**

LA 1077/LA 21 CONNECTOR ROAD

Project Number:  
RCLC No: 714-08

## NATURAL GAS MAIN RELOCATION

### Addendum No. 1



Sheet Number:  
**57**

**Pre-Bid Sign-In Sheet**  
**LA 1077 LA 21 Connector Road**

Tuesday, June 8, 2021 10:30am

	Name	Company	Email	Phone	Time In	Time Out
1	Sean Weick	Cycle Construction	Seanw@cycleconstruction.com	504-467-1444	10:00	10:47
2	Sean Manuel	Command Industries	Michelle@CommandIndustri.com	504-8879795	10:00	10:45
3	LANNY CAZAX	Beverly Const.	LANNY@Beverlyinc.com	985-264-8725	10:10	10:50
4	CHANCE KELLEY	BYRON E TALBOT CONTRACTOR	bsanchez@byrontalbot.com	985-946-9778	10:10	10:45
5	Kevin Bourgeois	Bah Bros.	Kbourgeois@bahbros.com	6014413210	10:11	10:46
6	Chad Chauvin	LA Contracting	Bidding@LA-cont.com	985-870-4429	10:13	10:45
7	Scott Cormier	LENDINE COMPANY	SCOTT.CORMIER@MATEX BUILDING SYSTEMS.COM	936-827-8957	10:15	10:45
8	Nick Flucke	McDonald Construction	Ksnelson@bellsouth.net	(985) 960-0008	10:15	10:46
9	Roy Dalman	Magee Excavation	roy@mageexcavation.net	985-264-1160	10:15	10:45
10	JASON JUNEAU	HARD ROCK CONST LLC.	JJUNEAU@CONSTRUCTION.COM	504-835-1050	10:50	10:49
11	David Marcotte	Creek Construction	dmarda@creekconstruction.org		10:20	10:50
12	Gary Citrasson	-	chie51g@outlook.com	-	10:20	10:48

	Name	Company	Email	Phone	Time In	Time Out
13	Jordan Licciardi	Barriere Const.	jordanl@barriere.com	804-756-6259	10:30	10:45
14	Charlie Gerkin	Korf's Const. Services	cgerkin@korfconstructionservices.com		10:30	10:46
15	Justin Taylor	Barriere Const.	Justint@barriere.com	985-705-4028	10:30	10:45
16	FRANK ZEMMER	RCL Consultants	fzemma@rclconsultants.com	985-727-4449		
17	Eric Kocken	RCLC	EKocken@rclconsultants.com	225-9583995	10:30	
18	DANIEL HILL	STPG	dphill@stpgov.org		10:28	10:50
19	Chris Conners	STPG	wconners@stpgov.org	985-898-2552	10:28	10:50
20						
21						
22						
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26						