

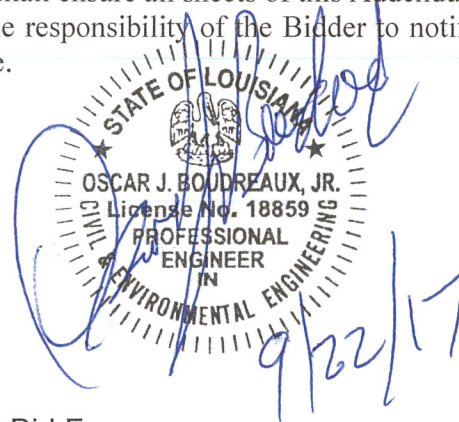
ADDENDUM NO. 4

Addis Place Subdivision Sanitary Sewer Rehabilitation Town of Addis, Louisiana

DATE ISSUED: September 22, 2017
BID DATE: September 29, 2017

EES PROJECT NO. 1332

This Addendum shall be considered as included and/or amended in the original Contract Documents and shall take precedence over any part of the original documents or previous addendum in conflict therewith. This Addendum contains 40 pages. All bidders shall ensure all sheets of this Addendum are enclosed. If sheets are missing from this Addendum, it is the responsibility of the Bidder to notify the Engineer seventy-two (72) hours prior to the bid date and time.



I. SPECIFICATIONS

A. Section 00300 – Louisiana Uniform Public Work Bid Form

Replace Section 00300 with the attached 00300A, consisting of 3 pages.

B. Section 01025(S&SR) – Measurement and Payment (Sewer/Sewer Rehabilitation)

Replace Section 01025(S&SR) with the attached 01025(S&SR)A, consisting of 35 pages.

II. DRAWINGS

A. Sheet 1

Replace Sheet 1 with the attached Sheet 1A.

B. Sheet 2

Replace Sheet 2 with the attached Sheet 2A.

C. Sheet 3

Replace Sheet 3 with the attached Sheet 3A.

D. Sheet 4

Replace Sheet 4 with the attached Sheet 4A.

END OF ADDENDUM NO. 4

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Town of Addis
P.O. Box 237, 7818 Hwy. 1 South
Addis, LA 70710
Attn: Jade Simpson

BID FOR: Addis Place Subdivision
Sanitary Sewer Rehabilitation
EES Project No. 1332

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: **Environmental Engineering Services, Inc.** and dated: **August 2016.**

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA**:

(Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging):

Addendum No. _____	Addendum Date: _____	Addendum No. _____	Addendum Date: _____
Addendum No. _____	Addendum Date: _____	Addendum No. _____	Addendum Date: _____
Addendum No. _____	Addendum Date: _____	Addendum No. _____	Addendum Date: _____

TOTAL BASE BID: For all work required by the Bidding Documents, the lump sum of:

Dollars (\$ _____)
(price in words) (price in numbers)

ALTERNATES: None.

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

TELEPHONE NUMBER AND E-MAIL ADDRESS: _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: _____

DATE: _____

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

** If someone other than a corporate officer signs for the Bidder/Contractor, a copy of a corporate resolution or other signature authorization shall be required for submission of bid. Failure to include a copy of the appropriate signature authorization, if required, may result in the rejection of the bid unless bidder has complied with La. R.S. 38:2212(A)(1)(c) or RS 38:2212(O) .

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

LOUISIANA UNIFORM PUBLIC WORK BID FORM

UNIT PRICE FORM

TO: Town of Addis
P.O. Box 237, 7818 Hwy. 1 South
Addis, LA 70710
Attn: Jade Simpson

BID FOR: Addis Place Subdivision
Sanitary Sewer Rehabilitation
EES Project No. 1332

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

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Remove and Replace Asphalt Roadway and Base	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
23	20	Square Yards	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Remove and Replace Concrete Walks and Driveways	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
24	60	Square Yards	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Service Cleanout Assembly	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
37	20	Each	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Reconstruction of Manhole Chimney Riser	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
61	2	Each	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Sewer Pipe Lining (CIPP 8")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
67	5200	Linear Feet	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	X Base Bid or <input type="checkbox"/> Alt.#	Remove Protruding Service Connections	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
68	4	Each	UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.#		Replace Existing 8"x6" Sewer Service Assembly	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
70	35	Each		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# Sewer Line Cleaning and Televising			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
73	5500	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# 8" Root Removal			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
75	100	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# Excavation, Backfill, and Compaction (0-6")		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE
80 (A)	950	Linear Feet	
			UNIT PRICE EXTENSION (Quantity times Unit Price)

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.#		Excavation, Backfill, and Compaction (6-8")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
80 (B)	700	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.#		Remove and Replace Gravity Pipe (8")	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
81 (A)	1250	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.#		8" Non-shear Coupling	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
82 (A)	70	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# 6" Non-shear Coupling			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
82 (B)	35	Linear Feet		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.#		Replace Existing Service Connections	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
83 (A)	6	Each		

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

TECHNICAL SECTION
DIVISION 01 - GENERAL REQUIREMENTS
SECTION 01025(S/SR) - MEASUREMENT AND PAYMENT
(SEWER/SEWER REHABILITATION)

PART 1 - GENERAL

1.01 SCOPE OF WORK

A. The scope of this Section for work described as Sewer and Sewer Rehabilitation (S/SR) defines the items included in each Bid Item. Payment will be made based on the specified items included in the description in the Section for each Bid Item.

B. All Contract Prices included in the Schedule of Prices will be full compensation for all labor, materials, tools, equipment, procedures and incidentals necessary to complete the Work as shown on the Drawings and/or as described in the specifications for the Work to be performed under this Contract. Payment for all items listed in the Schedule of Prices will constitute full compensation for all Work specified to be performed under this Project.

1.02 FORCE MAINS (Item No.1)

A. Measurement – Measurement of work for payment of this item shall be the actual linear foot of respective size, type, classification, and material of pipe, without deductions for the space occupied by valves, fittings or specials. Measurement for any section of pipe will be actual centerline measurement between centerline of cross lines or reducer fittings, or between either, and stub end of line being measured.

Where new pipe is connected into existing lines, the new pipe will be measured to the centerline of the pipe into which it is connected. Where new fittings and/or valves are to be placed in existing lines, the fittings and/or valves will be paid for by the appropriate item but no measurement or payment will be made (as pipe) for the section of existing main cut and replaced for said installation.

This Item is to provide payment for distribution pipe of ductile iron, asbestos-cement, or plastic, exclusive of fittings, and for steel or concrete distribution pipe or all types of service pipe including fittings, unless otherwise indicated.

No measurement and payment will be made for abandoning piping.

B. Payment - Payment of the amount for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to furnish and install the force main as specified and as shown on the Drawings. The actual linear footage of restrained joint force main installed, measured as provided above, will be paid for at the respective unit prices bid for force main of the various sizes and classifications. No additional payment will be made for

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excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction (except sand backfill paid for under other items), testing, and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, granular backfill above the bedding material to a point 12" above the pipe, fittings, laying, joining, cleaning, and testing the pipe and all incidental work required in the installation of restrained joint force main.

C. Payment Schedule – Upon completion of the following the payment shall be:

1. Pipe Storage: Pipe stored in accordance with the specifications (security, insurance, etc.) will be paid for at the invoiced costs, minus retainage. A copy of the invoice must accompany the Request for Payment.
2. Pipe Installation: When pipe is installed, backfilled and compacted in accordance with the specifications, a total of 90% of the bid price shall be paid, minus retainage.
3. Pipe Testing: When the pipe has been tested and accepted an additional 5% of the bid price shall be paid, minus retainage.
4. Clean-up Site: When the pipe construction has been cleaned leveled, and accepted, an additional 5% of the bid price shall be paid, minus retainage.

1.03 CASING PIPE (JACK & BORE METHOD) (Item No.2)

A. Measurement - Measurement of work for payment of this Item shall be on a basis of actual casing pipe installed and accepted on a linear foot basis. Carrier pipe installed inside casing will be measured and paid for under other items. The limits are as specified and as shown on the Drawings.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the construction of a bore and jack crossing with steel casing and carrier pipe as specified and shown on the Drawings. No additional payment will be made for tunneling, furnishing, and installing the casing pipe, carrier pipe, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, laying, joining (including fittings), cleaning, and testing all pipes (including the carrier pipe installed inside the casing), within the limits specified and as shown on the Drawings. Partial payment will be based on the preliminary Schedule of

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Values as required for Section 01370.

1.04 CASING PIPE - LAID IN OPEN CUT (Item No.3)

The Contractor will install pipe casings, laid in open cut, including the carrier pipe. The Contractor will be paid on the basis of linear footage for furnishing and installing the casing.

A. Measurement - Casing pipe installed and accepted including the carrier pipe, will be measured on a linear foot basis established in the unit price bids. The limits are as specified and shown on the Drawings.

B. Payment - The casing pipe, installed and accepted, will be paid for at the contract lump sum price for casing pipe in the various diameters required, which price and payment shall constitute full compensation for furnishing, hauling and installing complete; for all excavation and backfilling; and for furnishing all equipment, tools, labor and incidentals and the performance of all work necessary to complete the item in accordance with plans and specifications.

1.05 PLUG VALVES (Item No.4)

A. Measurement - Measurement of work for payment of this Item shall be the actual count (each) of valves installed as specified and as shown on the Drawings.

B. Payment - Payment for the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to complete the furnishing and installing valves complete with boxes as specified and as shown on the Drawings. The actual count (each) of valves installed, measured as provided above will be paid for at the respective unit prices for valves in the various types and sizes. No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations. Payment shall include full compensation for furnishing bedding, setting, joining, cleaning, sealing and testing of the valve and all incidental work required in the installation of valves.

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1.06 AIR RELEASE VALVE AND MANHOLE (Item No.5)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual count (each) of air release valves installed as specified and as shown on the Drawings.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to furnish and install air release valves, complete as specified and as shown on the Drawings. The actual count (each) of air release valves installed, measured as provided above, will be paid for at the respective unit price bid for air release valves. No additional payment will be made for excavation, sheeting, and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing, and removal of excess earth. No direct payment may be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing, setting, joining, cleaning, sealing, and testing of the air release valves and all incidental work required in the installation of air release valves.

1.07 CONSTRUCT AERIAL STREAM CROSSING (Item No.6)

A. **Measurement** - Measurement of work for payment of this Item shall be on a lump sum basis established in the bid. The limits are as specified and as shown on the Drawings.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to construct the aerial stream crossing as specified and shown on the Drawings. No additional payment will be made for brackets, pilings, supports, pipe, bends, fittings, air release valves, cleaning and testing all pipe, furnishing bedding, laying, joining, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, and any other miscellaneous work to construct the aerial stream crossing. Payment shall include full compensation for all work performed within the limits shown on the Drawings.

1.08 SUBAQUEOUS CROSSING (Item No.7)

A. **Measurement** - Measurement of Work for payment of this Item shall be on a lump sum basis established in the Bid, the limits of which are as specified in the specifications and as shown on the Drawings.

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B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to construct the subaqueous crossing as specified and as shown on the Drawings. No additional payment will be made for pipe, concrete, fittings, air release valves, cleaning and testing of all the pipe, furnishing bedding, laying, joining, excavation, water handling, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfilling and any other miscellaneous work necessary to construct the sub aqueous crossing. Payment shall include full compensation for all work performed within the limits shown on the Drawings.

1.09 CONNECTIONS TO EXISTING MAIN (TIE-INS) (Item No.8)

A. Measurement - Measurement of Work for this Item shall be for the actual tie-in as specified and shown on the Drawings.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to relieve any pressure and/or pump water from the existing pipe, remove any restrained joint plug installed by others on the existing pipe and complete the construction of each tie-in, complete as specified and as shown on the Drawings and to deliver any plugs removed to the Owner. The actual count (each) installed, measured as provided above, will be paid for at the unit price bid.

1.10 PLUGS (Item No.9)

A. Measurement - Measurement of work for payment of this Item shall be for furnishing and installing each restrained joint plug, in the various sizes required, as specified and as shown on the Drawings.

B. Payment - Payment of the amount bid, for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to furnish and install the restrained joint plugs as specified and shown on the Drawings. No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, plug, installation, joining, cleaning, and testing and all incidental work required in the installation of the restrained joint plug.

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1.11 PIPE ENCASEMENT (Item No.10)

A. **Measurement** - Measurement of work for payment of this Item shall be on a lump sum basis established in the bid. The limits are as specified and as shown on the Drawings.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals to construct pipe encasement as specified and as shown on Drawings. No additional payment shall be made for mucking, excavation, backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for everything necessary to make pipe encasement complete, but shall not include the sewer pipe to be encased.

1.12 CARRIER PIPE (JACK & BORE METHOD) (Item No.11)

A. **Measurement** - Measurement of Work for payment of this Item shall be on a basis of actual carrier pipe installed and accepted on a linear foot basis by the jack and bore method. Limits of jack and bore shall be measured in the field from undisturbed trench opening to undisturbed trench opening on the opposite side of the road, railroad, streets, etc. However, measurement shall not exceed bid quantities unless approved by Engineer as a result of unknown obstacles encountered in field excavation. This Item covers the additional costs for jacking and boring method. Carrier pipe will be measured and paid under other items.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the construction of a bore and jack crossing with carrier pipe as specified and shown on the Drawings. No additional payment will be made for tunneling, furnishing, and installing the carrier pipe, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, laying, joining (including fittings), cleaning, and testing all pipe within the limits as specified and as shown on the Drawings.

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1.13 DUCTILE IRON FITTINGS (Item No.12)

A. **Measurement** - Iron fittings for pipe size three inch (3") and larger will be measured by an actual count in units of U.S. short tons of fittings and payment for both mechanical joint and push-on joint fittings, whether cast iron or ductile iron, shall be made on the basis of ANSI/AWWA C110 published body weight for standard short radius ductile iron (not gray iron) mechanical joint fittings for iron pipes, exclusive of weight for mortar linings, gasket, gland, bolts, and packaging. This same basis of measurement shall be used for gray or ductile iron fittings used on ductile iron pipe, asbestos cement pipe, PVC pressure class pipe (C.I.-O.D.), or G.F.R. pipe. No measurement will be made for fittings on pipe smaller than three inches (3") or for steel or concrete fittings or PVC or G.F.R. pressure rated plastic fittings, where allowed, and their payment will be included in the pipe. Where special sleeve fittings for tapping tees or crosses or special pattern fittings are required, they will be measured as standard fittings as herein provided for connections to new or existing mains and any extra cost shall be included in the measurement and payment for the respective special type valve or appurtenance.

B. **Payment** - The total quantity of iron fittings, placed and accepted, measured as provided above, will be paid for at the contract unit price per ton for iron fittings, payment shall include full compensation for furnishing, hauling, installing complete, testing and disinfecting, excavation, preparation of bed and backfilling, concrete thrust blocks or other restraint, and for the furnishing of all equipment, tools, labor and incidentals necessary to complete the item in accordance with the drawings and specifications.

1.14 GRAVITY SEWER PIPE (Item No.13)

A. **Measurement** - Measurement of work for payment of this Item shall be by the actual linear footage installed, in the various sizes and depth categories required, as specified and as shown on the Drawings. Measurement for the linear footage of gravity sewer pipe installed will be measured horizontally from manhole connection to manhole connection. The depth will be calculated by adding the depth of the upstream and downstream manholes and dividing by 2. The entire footage between the average depth of the upstream and downstream manholes will be measured the same.

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B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to furnish and install gravity sewer pipe as specified and as shown on the Drawings. The actual linear footage of gravity sewer pipe installed, measurement as provided above will be paid for at the respective prices for sewer pipe of the various sizes and classifications and depths. No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction (except sand backfill paid under other items), testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations. Payment shall include full compensation for furnishing bedding, granular backfill above the bedding material to a point 12" above the pipe, laying, joining, cleaning, and testing the pipe and all incidental work required in the installation of gravity sewer pipe.

C. Payment Schedule – Upon completion of the following the payment shall be:

1. **Pipe Storage**: Pipe stored in accordance with the specifications (security, insurance, etc.) will be paid for at the invoiced cost, minus retainage. A copy of the invoice must accompany the Request for Payment.
2. **Pipe Installation**: When the pipe is installed, backfilled and compacted in accordance with the specifications, a total of 90% of the bid price will be paid, minus retainage.
3. **Pipe Testing**: When the pipe has been tested and accepted, the remaining 5% shall be paid, minus retainage.
4. **Clean-up Site**: When pipe construction has been leveled, and accepted, an additional 5% of the bid price shall be paid, minus retainage.

1.15 SANITARY SEWER MANHOLES (Item No.14)

A. Measurement - Measurement of work for payment of this Item shall be the actual count (each) of the manholes installed, in the various depth categories as specified and as shown on the Drawings. The depth of the manhole shall be measured from the top of the manhole casting to the invert of the deepest sewer connection.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing labor, materials, equipment and incidentals required to complete the construction of a manhole and the connection of the sewer pipe, complete as specified and as shown on the Drawings. The actual count (each) of manholes installed, measured as provided above will be paid for at the respective unit prices bid for manholes in the various depth categories.

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No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations. Payment shall include full compensation for furnishing, bedding, setting, joining, cleaning, sealing, and testing of the manhole, and all incidental work required in the construction of a manhole.

1.16 CONNECTIONS TO EXISTING MANHOLES (Item No.15)

A. Measurement - Connections to existing manholes will be measured by an actual count (each) of connections installed and accepted.

B. Payment - Connections to existing manholes, installed and accepted, measured as provided above, will be paid for at the contract unit price per each, which price and payment shall constitute full compensation for furnishing, hauling, and installing all materials complete; for all excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, removing surplus earth; and for the furnishing of all equipment, tools, labor and incidentals necessary to complete the item as shown on the Drawings.

1.17 CONNECTIONS TO EXISTING WET WELLS (Item No.16)

A. Measurement - Connections to existing wet wells will be measured by an actual count (each) of connections installed and accepted.

B. Payment - Connections to existing wet wells, installed and accepted, measured as provided above, will be paid for at the contract unit price per each, which price and payment shall constitute full compensation for furnishing, hauling and installing all materials complete; for all excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, removing surplus earth; and for the furnishing of all equipment, tools, labor and incidentals necessary to complete the item as shown on the Drawings.

1.18 SEWER FLOW CONTROL AND BY-PASS PUMPING (Item No.17)

A. Measurement and Payment

- 1.** Payment of the lump sum established in the proposal will be full compensation for all labor, materials, and equipment required to do all work.

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2. Payment of the lump sum established in the proposal will represent full compensation for all sewer flow control and bypass pumping, and shall be made only after each tie-in is complete as indicated on the Drawings and as shown on the Schedule of Values.

1.19 EXTRA SHEETING AND BRACING LUMBER LEFT IN PLACE (Item No.18) (EXTRA WORK IF ORDERED BY ENGINEER)

A. Measurement - Measurement of work for payment of this Item shall be determined in thousand feet of board measure (MFBM) based on the thickness of lumber actually used as authorized by the Engineer in writing.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to complete the construction of extra sheeting and bracing when ordered left in place by the Engineer in writing. No additional payment will be made for driving and cutting off the lumber and all incidental work connected with the sheeting and bracing. No direct payment shall be made for lumber removed or left in place for the convenience or error by the Contractor.

1.20 EXCAVATION BELOW NORMAL GRADE AND REFILL (Item No.19) (EXTRA WORK IF ORDERED BY ENGINEER)

A. Measurement

1. Measurement of excavation below normal grade and refill for trench excavation will extend only downward from the elevation 6" below the pipe bottom for pipe diameter 24" less and 9" below the bottom of the pipe for pipe diameters over 24" to a depth determined by the Engineer and for a width as defined on the Drawings, or as approved by the Engineer.

2. If the trench bottom is below grade through error by the Contractor, or if improper drainage softens the sub-grade and additional excavation in the trenches is required before laying the pipe, such removal and replacement of material will not be measured for payment.

3. No material, which may run or flow into the excavation from outside the payment limits, shall be measured for payment.

4. Measurement by truck count will not be permitted.

5. Refill material placed or removed outside the above limits will not be measured for payment.

B. Payment - Payment for excavation below normal grade and refill will be made for the quantity as determined above at the price per cubic yard established in the bid, which price and payment shall be full compensation for sheeting and bracing (except extra sheeting and bracing

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left in place and paid for under other items), dewatering, excavation, and disposal of all materials below normal grade, furnishing and placing refill and all work incidental thereto for which separate payment is not provided under other items in the Bid.

1.21 REMOVE AND REPLACE CONCRETE SURFACE (Item No.20)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards removed, as determined by the product of the pavement slab width and length as determined by field measurements and as approved by the Engineer. Measurement will be made on the actual square yards of material removed and restored at the existing thickness.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the removal of concrete paving including integral curb, complete as specified and as shown on the Drawings. Payment shall include full compensation for removal and disposal of concrete pavement and integral curb.

1.22 SAW CUT CONCRETE SURFACES (Item No.21)

A. **Measurement** - Concrete surfaces (streets, driveways, sidewalks, etc.) to be sawed will be measured by the actual lineal foot sawed as required by the specifications and drawings at specified depths, or as directed by the Engineer.

B. **Payment** - Concrete surfaces (streets, driveways, sidewalks, etc.) sawed, approved and accepted, measured as provided above, will be paid for at the contract unit price per linear foot for this item, which price and payment shall constitute full compensation for furnishing all equipment, tools, labor and incidentals necessary to complete the item in accordance with specifications and Drawings.

1.23 REMOVE AND REPLACE CONCRETE CURB AND GUTTER (Item No.22)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual linear footage removed and restored as specified and as shown on the Drawings. Measurement for the linear footage of the combination curb and gutter shall be measured along the back of curb line.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to remove and restore the

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combination concrete curb and gutter, complete as specified and as shown on the Drawings. No additional payment will be made for sub-grade preparation, excavation, disposal, backfill, forms, expansion joint material, dowels, or any other miscellaneous materials used in the removal and restoration of combination concrete curb and gutter.

1.24 REMOVE AND REPLACE ASPHALT PAVEMENT AND BASE (Item No.23)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards restored as determined by the product of the actual width and length as determined by field measurements and as approved by the Engineer.

B. **Payment** - Payment of the amount for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to restore asphalt streets, complete as specified and as shown on the Drawings. Payment shall include full compensation for furnishing and placing all materials, including base course, required to complete the pavement, including the rolling, compaction and grading, cleaning the surface upon which the asphalt is placed, providing headers, prime coats and tack coats, and all incidental work required in the restoring of asphalt streets.

1.25 REMOVE AND REPLACE CONCRETE WALKS AND DRIVEWAYS (Item No.24)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards removed as determined by the product of the actual width and length as determined by field measurements and as approved by the Engineer.

B. **Payment** – Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to remove and replace P.C. concrete walks and driveways, complete as specified and as shown on the Drawings. Payment shall include full compensation for furnishing and placing all materials required, sub grade preparation, excavation, backfill, forms, reinforcement, expansion joint materials, dowels, or any other miscellaneous materials used in the restoration of P.C. driveways, and walks.

1.26 TEMPORARY GRANULAR SURFACE (Item No.25)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual net section in cubic yards measured in place. The net section shall be based on the depth, width of

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pipe trench, and length as shown on the Drawings and as approved by the Engineer.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to temporarily restore the surface with granular surface material, completed as specified and as shown on the Drawings. Payment shall include full compensation for the furnishing of all material, loading, hauling, unloading, spreading, shaping, maintaining the finished surface until acceptance, and all incidental work required in the temporary restoration of surface with granular surface material.

1.27 REMOVE AND REPLACE SURFACE WITH WASHED GRAVEL (Item No.26)

A. Measurement - Measurement of work for payment of this Item shall be the actual net section in cubic yards measured in place.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to restore surface with washed gravel complete as specified and as shown on the Drawings. Payment shall include full compensation for the furnishing of all material, loading, hauling, unloading, spreading, shaping, maintaining the finished surface until acceptance, and all incidental work required in the restoration of surface with washed gravel.

1.28 TRAFFIC CONTROL AND CONSTRUCTION SIGNAGE (Item No.27)

A. Measurement and Payment - Payment of the lump sum established in the bid shall be full compensation for all labor, materials, and equipment to do all work required to provide temporary construction signage as shown on the Drawings, including all incidental work and materials related thereto. Payment of the lump sum price bid for this work shall constitute full compensation for this item of Work.

1.29 AUDIO/VIDEO SURVEY (Item No.28)

A. Measurement and Payment

1. Payment of the lump sum established in the bid will be full compensation for all labor, materials, and equipment required to do all work specified in Section 01380, with the exception of construction photographs.

2. Payment of the lump sum established in the proposal shall occur only after the audio/video tapes have been completed and are satisfactory to the Owner and/or his approved agent.

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1.30 MISCELLANEOUS WORK AND CLEAN-UP (Item No.29)

A. **Measurement** - Measurement of work for payment of this Item shall be on a lump sum basis established in the Bid.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the miscellaneous work, and cleanup as shown on the Drawing, and any other miscellaneous work not specifically included for payment under any other items but obviously necessary to complete the Contract Documents.

1.31 SAND BACKFILL (Item No.30)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual net section in cubic yards measured in place. The net section shall be based on the width, depth, and actual length of the trench as shown on the Drawings and as approved by the Engineer. Sand backfill above the bedding material to a point 12" above the top of the pipe shall be included in the cost of laying the pipe and shall not be measured for payment under this item.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, material, equipment, and incidentals, required to place the sand backfill in the trench and compact complete as specified and as shown on the Drawings. Payment shall include full compensation for the furnishing of all material, loading, hauling, unloading, and disposal of all unsuitable materials being replaced and all incidental work required for the placement of the sand backfill.

1.32 MOBILIZATION (Item No.31)

A. **Measurement** - Measurement of work for payment of this Item shall be on a lump sum basis as established in the bid, and broken down in accordance with Section 01370.

If not listed in unit price bid, measurement and payment for this Item will be included in the unit price of gravity or force main installed, tested, and accepted.

B. **Payment** - Payment shall be based on preparatory work and operations to include, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all construction offices, and other facilities necessary for work on the project and the cost of bonds.

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Partial payments for mobilization will be made in accordance with the following schedule up to a maximum of 3% of the original total contract amount, including this Item, and payment of any remaining amount will be made upon completion of all work under the Contract. No price adjustment will be made for this due to changes and or extensions of time and any increased mobilization cost incurred by the Contractor due to any additional work occasioned by such changes.

Payments will be as follows:

1. 1st Payment Request: Invoiced cost for Bond, and any other work as required and substantiated in accordance with Section 01370.
2. Remaining Payment Request: Invoiced and verified as per the Schedule of Price.
3. Final Payment: Remaining amount of lump sum due for this Item.

If the Owner cancels the Contract, the Contractor will be paid for the actual cost for mobilization at the time of cancellation, which cost shall not exceed the total amount bid under this Item.

Nothing herein shall be construed to limit or preclude partial payment otherwise provided by the Contract.

1.33 PUMP STATION COMPLETE (Item No.32)

A. Measurement and Payment

1. Measurement and Payment of the lump sum established in the Bid for the pump station shall be full compensation for furnishing all labor, electrical and instrumentation work, materials, equipment, and incidentals required to complete the construction of the pumping station, complete as specified and as shown on the Drawings. Payment shall include full compensation for all excavation, sheeting, bracing, utility relocation as shown on the Drawings, backfill, drainage and dewatering, loaming and sodding, sub-base and pavement within limits disturbed by construction.
2. Measurement and Payment shall also include installation of new piping, including force mains, and gravity sewers required to connect the new stations to existing pipelines as shown on the Drawings and all work necessary to maintain the existing pumping and collection systems in operation as specified (including bypass pumping as necessary).
3. Measurement and Payment under the pump station item shall also include removal and storage of existing equipment from the existing stations and demolition, sand backfill, and abandonment of the stations as required by these specifications and all other appurtenances and related work which are not specified or shown but which are required to complete the work of the pump station items as shown on the Drawings and as specified herein.

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4. Measurement and Payment shall include the cost of Service Entrance and Pump Control Panel or a Programmable Controller (PC) and all applicable sales and use taxes and cost of submittal requirements, coordination of information to assure compatible operation between the pump control equipment and other equipment supplied under the contract, and installation for the equipment provided under other bid items.

1.34 REHABILITATE PUMP STATIONS (Item No.33)

A. Measurement and Payment

1. Measurement and Payment for each lump sum established in the Bid for each pump station the rehabilitation shall be full compensation for furnishing all labor, electrical and instrumentation work, materials, equipment, and incidentals required to complete the rehabilitation of each pump station, complete as specified and as shown on the Drawings. Payment shall also include full compensation for all piping, pumps, and all auxiliary equipment specified to be installed in the rehabilitated stations.

2. Measurements and payment shall also include installation of quick connect coupling manholes, all new buried piping, including force mains, and gravity sewers required to connect the stations to existing pipelines as shown on the Drawings and all work necessary to maintain the existing pumping and collection system in operation as specified (including bypass pumping as necessary) during station rehabilitation.

3. Measurement and Payment under each pump station rehabilitation item shall also include removal and storage of existing piping, valving, and equipment from each existing station as required by these specifications and all other appurtenances and related work which are not specified or shown but which are required to complete the work on each pump station item as shown on the Drawings and as specified herein.

4. Measurement and Payment shall include the cost of either Service Entrance and Pump Control Panel or Programmable Controller (PC) and any required sub feed electrical panels, applicable sales and use taxes and cost of submittal requirements, coordination of information to assure compatible operation between the pump control equipment and other equipment supplied under the contract, and installation for the equipment provided under other bid items.

1.35 RELOCATION SANITARY SEWER SERVICE CONNECTIONS (EXTRA WORK IF ORDERED BY ENGINEER) (Item No.34)

A. Measurement

1. Measurement for relocating sanitary sewer service connections ordered by the Engineer in writing shall be by the linear foot of service pipe and fitting which have been relocated due to conflict with sewerage force main installed under the Contract.

2. Measurement shall not be made for relaying sanitary sewer service connections which are not in conflict with the force main, those sewer service connections which have been removed for the convenience or through the negligence of the Contractor, or those which have not been ordered by the Engineer to be relocated as confirmed by the Engineer's written instructions.

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B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to perform relocation of sanitary sewer service connections. The actual linear footage of relocated sanitary sewer service connection, measured as provided above, will be paid for at the respective unit bid prices for relocation of sanitary sewer service connections. No additional payment will be made for excavation, sheeting and bracing, backfill and compaction, testing, and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary dewatering operations.

Payment shall include full compensation for removal of existing sewer service connections pipe and fittings, furnishing bedding, pipe, fittings, including a cleanout at the tie-in closes to the property being served by the service connection, wyes with cleanout plugs at the higher offset bend and the tie-in point to the existing stack connection or sewer main, and other 45 degree bends to complete the relocation, laying, joining, cleaning, and testing the pipe and all incidental work required to complete the relocation of sanitary sewer service connections under the conflicting sewerage force main.

1.36 SPECIAL FITTINGS (Item No.35)

A. Measurement - Measurement of work for payment of this Item shall be the actual count (each) of the special fitting listed in the bid item and as shown on the Drawings.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to furnish and install special fittings complete as specified and as shown on the Drawings. The actual count (each) of special fittings installed, measured as provided above will be paid for at the respective unit prices for various types and sizes. No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations. Payment shall include full compensation for furnishing bedding, setting, joining, cleaning, sealing and testing of the special fitting and all incidental work required in the installation of these fittings.

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1.37 SANITARY SEWER WYE (Item No.36)

Sanitary sewer wye will be paid according to size and type of material. Wyes may either be single or double wyes.

A. **Method of Measurement** – Wyes will be measured by a count of each according to size and type of material. Wyes will be single or double and shall be installed at the depth stated in the plans.

B. **Bases for Payment** – The total quantity of wyes, measured as provided above, will be paid at the contract unit price per each, which price and payment shall constitute full compensation for furnishing, hauling, installing complete, testing, and preparation of bed and backfilling, and for the furnishing of all equipment, tools, labor, and incidental necessary to complete the item in accordance with the drawings and specifications.

1.38 SERVICE CLEANOUT ASSEMBLY (Item No.37)

Sanitary sewer service cleanout assembly will be paid per each. The assembly shall include a 6” PVC wye, 6” PVC bend, 6” PVC DR35 pipe, and a 6” PVC plug at ground level. Assembly can include single or double wyes prior to 45° bend and plug.

A. **Method of Measurement** – Service cleanout assembly will be measured by a count of each cleanout and whether the assembly is a single or double wye arrangement.

B. **Bases for Payment** – The total actual number of service cleanout assemblies measured as provided above will be paid at the contract unit price bid, including all fittings, caps, castings, and concrete as shown on the Drawings, which price and payment shall constitute full compensation for furnishing, hauling, installing complete, testing, and preparation of bed and backfilling, and for the furnishing of all equipment, tools, labor, and incidentals necessary to complete the item in accordance with drawings and specifications.

1.39 TRANSITION FITTING (Item No.38)

Transition fitting shall be measured and paid for according to size and types of pipe. This Item covers to special fitting, usually a Harvey adapter, to transition from PVC to HDPE pipe.

A. **Method of Measurement** – Transition fittings will be measured by a count of each according to size and types of pipe, complete with all restrained joint glands, gaskets, etc.

B. **Bases for Payment** – The total quantity of transition fittings, measured as stated above, will be paid at the Contract Price per each stated in the Bid, which price and payment shall

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constitute full compensation for furnishing, hauling, installing complete, testing, and preparation of bed and backfilling, and for the furnishing of all equipment, tools, labor, and incidentals necessary to complete the item in accordance with drawings and specifications.

1.40 STANDPIPE OR RISER PIPE OR STACKS (Item No.39)

Standpipes, which can be referred to as riser pipes or stacks, will be measured and paid by the vertical foot according to size and type.

A. Method of Measurement – Standpipe or rise pipe will be measured vertically by the linear foot from the invert of the main sewer to the invert of the highest service line without deduction for fittings. Additional payment will be made for fittings.

B. Bases for Payment – The actual total length of standpipes, measured as provided above will be paid at the contract unit price, according to size and type, including concrete encasement, at the contract unit price per vertical linear foot in the Bid, which price and payment shall constitute full compensation for furnishing, hauling, installing complete, testing, and preparation of bed and backfilling, and for the furnishing of all equipment, tools, labor, and incidentals necessary to complete the item in accordance with drawings and specifications.

1.41 DROP INLETS (Item No.40)

Drop inlets at manholes will be paid for per each according to size and invert differential in two-foot increments. This Item is to cover the additional cost of drop inlet piping and fittings and concrete or masonry encasement and does not include the cost of the basic manhole.

A. Method of Measurement – Drop inlets will be measured by a count of each according to size and depth classification. The depth will be measured between the invert of the incoming sewer and the invert of the manhole.

B. Bases for Payment – The actual total number of drop inlets, measured as provided above, will be paid at the contract unit price bid, according to size and depth, including concrete or masonry encasement, pipe and fittings.

1.42 GRINDER PUMP STATION, COMPLETE (Item No.41)

A. Measurement and Payment

1. Measurement and Payment for each lump sum established in the Bid for the grinder pump station shall be full compensation for furnishing all labor, electrical and instrumentation work, materials, equipment, and incidentals required to complete the

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rehabilitation of each pump station, complete as specified and as shown on the Drawings. Payment shall also include full compensation for all excavation, sheeting, bracing, utility relocation as shown on the Drawings, backfill, drainage and dewatering, loaming and sodding, sub base and pavement within limits disturbed by construction.

2. Measurements and payment shall also include installation of new pumps, wet well, piping, including force mains, and gravity sewers required to connect the new stations to existing pipelines as shown on the Drawings and all work necessary to maintain the existing pumping and collection systems in operation as specified (including bypass pumping as necessary).

3. Measurement and Payment for new installations in this item of work shall include all piping either gravity or force main within three (3) feet of pump station.

4. Measurement and Payment shall include the cost of Service Entrance and Pump Control Panel or Programmable Controller (PC) and all applicable sales and use taxes and cost of submittal requirements, coordination of information to assure compatible operation between the pump control equipment and other equipment supplied under the contract, and installation for the equipment provided under this or other bid items.

1.43 CAP EXISTING SEWER MAIN (Item No.42)

A. Measurement – Measurement of work for payment of this Item shall be on a unit price basis for each sewer gravity or force main separated from items shown on the Drawing at the location illustrated regardless of depth of cover of the pipe. Capping of pipe shall mean a watertight seal in either direction.

B. Payment – Payment of the amount bid, for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to furnish and install the plugs and/or caps as specified and shown on the Drawings. No additional payment will be made for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, plug, and/or caps, installation, joining, cleaning, and testing and all incidental work required in the installation of this item.

1.44 SEWER POINT REPAIR (Item No.43)

A. Measurement - Measurement for sewer point repairs or sewer pipe repair and replacement will be made on a linear foot basis, measured to the nearest whole foot. Measurement will be made for the depths listed under this item on the Bid Form. Measurement will be along the

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horizontal centerline of the existing pipe. Trench width shall be as specified in the Drawings. Excavation, backfill, and compaction will be measured under other items.

It is recognized that the Contractor must purchase pipe material at the minimum manufactured length based on the pipe material used. For this reason, the unit bid price for Bid Item 1 shall be based on a minimum length of six feet (6') at each point of repair and shall be recorded accordingly by the Owner's field representative.

1. For situations where it is determined by the inspector that repairs require vertical stack replacement in lieu of trunk line replacement, Contractor will be paid for excavation under this Bid Item for actual length of excavation at the elevation of the repair (distance below ground) to a maximum length of eight feet (8'), and a minimum length of six feet (6').

2. Where Contractor uses a device, which allows a vertical excavation in lieu of the sloped excavation shown on the drawings, payment for excavation under this Bid Item shall be based on actual length of pipe replaced plus one (1) foot additional on each end of the replacement pipe. The minimum quantity to be paid under this condition shall be considered to be eight feet (8') in length.

3. Payment of the amount bid for the removal of existing pipe and its replacement by PVC pipe will be made for the respective quantity as measured above and which shall be full compensation for plugging, bypass pumping, connections to existing pipe and service lines, laying, jointing, and cleaning new pipe, and smoke testing of the repair, in accordance with the Specifications and the Drawings; and all else incidental thereto for which separate payment is not provided under other items in the Bid Form.

4. Payment will be made for new pipe only when it is installed in the ground. No payment shall be made for pipe stored on the site but not yet installed.

B. Payment - Payment of the amount bid for sewer point repairs or sewer pipe repair and replacement will be made for the quantity as measured above which shall be full compensation for clearing and grubbing, traffic control, dewatering, sheeting and bracing, restoring the trench surface to grade, and top soiling, as specified and as shown on the Drawings.

1.45 ADDITIONAL SELECT MATERIAL FOR BACKFILL (Item No.44)

A. Measurement

1. Measurement for additional select material will be made upon the basis of cubic yards of select material and outside the limits as specified and as shown on the Drawing details, and as authorized by the Owner in writing.

2. Select material used to fill voids resulting from unauthorized excavation, or where required for dewatering, will not be measured for payment even though their use was ordered by the Owner.

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3. Select fill material does not include transporting, placing and compacting usable excavated soils from excavations made in the Contract. The Contractor shall use all such usable excavated soils available from excavations made in this Contract prior to supplying select material from other sources.

B. Payment

1. Payment for additional select material for backfill will be made for the respective quantity as measured above which shall be full compensation for additional select material furnished from sources other than excavation made in this Contract, transported, placed and compacted as ordered by the Owner and not specifically included under other Bid Items; and for all else incidental thereto for other items in the Bid Form.

2. No payment will be made for approved usable excavated soil obtained from excavations made in the Contract.

1.46 SPECIAL STABILIZATION MATERIAL (Item No.45)

A. **Measurement** - Measurement for special stabilization material will be made upon the basis of actual cubic yards mixed in place of special stabilization material as determined by field measurements and as approved by the Owner.

B. **Payment** - Payment of the unit price amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the base course of all improved sites as required by the Contractor.

1.47 REMOVAL OF ASPHALT PAVEMENT AND CONCRETE BASE (Item No.46)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards removed as determined by product of the actual width and length as determined by field measurements and as approved by the Owner.

B. **Payment** - Payment of the amount for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the removal of asphalt pavement and base, complete as specified and as shown on the drawings. Payment shall include full compensation for removal and disposal of asphalt pavement and base course.

1.48 RESTORE ASPHALT PAVEMENT AND CONCRETE BASE (Item No.47)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards restored as determined by the product of the actual width and length as determined by field measurements and as approved by the Owner.

B. **Payment** - Payment of the amount for this Item shall be full compensation for furnishing all

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labor, materials, equipment, and incidentals required to restore asphalt pavement and base, complete as specified and as shown on the drawings. Payment shall include full compensation for furnishing and placing all materials, including base course, required to complete the pavement, including the rolling, compaction and grading of limestone, cleaning the surface upon which the asphalt is placed, providing headers, prime coats and tack coats, and all incidental work required in the restoring of asphalt pavement.

1.49 REMOVAL OF CONCRETE PAVEMENT (Item No.48)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards removed, as determined by the product of the pavement slab width and length as determined by field measurements and as approved by the Owner.

B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the removal of concrete paving including integral curb, complete as specified and as shown on the drawings. Payment shall include full compensation for removal and disposal of concrete pavement and integral curb.

1.50 RESTORE CONCRETE PAVEMENT (Item No.49)

A. **Measurement** - Measurement of work for payment of this Item shall be the actual number of square yards restored as determined by the product of the pavement slab width and length as determined by field measurement and as approved by the Owner.

B. **Payment** - Payment of the unit price amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals, including the rolling, compaction and grading of limestone, furnishing additional granular material, shaping, and compacting the base course, to restore the concrete paving as shown on the Drawings.

1.51 CARRIER PIPE (DIRECTIONAL DRILL METHOD) (Item No. 50)

A. **Measurement** – Measurement of Work for payment of this item shall be on a basis of actual carrier pipe installed and accepted on a horizontal linear foot basis by the directional drill method. Limits of directional drill shall be measured in the field from undisturbed trench opening horizontal to undisturbed trench opening on the opposite side of the road, railroad, streets, etc. However, measurement shall not exceed bid quantities unless approved by Engineer as a result of

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unknown obstacles encountered in field excavation. This item covers the additional costs for the directional drill method. Carrier pipe will be measured and paid under other items.

B. Payment – Payment of the amount bid for this item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the construction of a bore and jack crossing with carrier pipe as measured above and as specified and shown on the Drawings. No additional payment will be made for tunneling, furnishing, and installing the carrier pipe, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, laying, joining (including fittings), cleaning, and testing all pipe within the limits specified and as shown on the Drawings.

1.52 REMOVAL OF CONCRETE WALKS AND DRIVEWAYS (Item No.51)

A. Measurement - Measurement of work for payment of this Item shall be the actual number of square yards removed as determined by the product of the actual width and length as determined by field measurements and as approved by the Owner.

B. Payment - Payment of the amount for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the removal of concrete walks and driveways, completed as specified in other Sections and as directed by the Owner. Payment shall include full compensation for removal and disposal of concrete walks and driveways.

1.53 RESTORE CONCRETE WALKS AND DRIVEWAYS (Item No.52)

A. Measurement - Measurement of work for payment of this Item shall be the actual number of square yards restored as determined by the product of the actual width and length as determined by field measurements and as approved by the Owner.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to restore P.C. concrete walks and driveways, complete as shown in the Drawings and in accordance with Section 02575 at the locations directed by the Owner. Payment shall include full compensation for furnishing and placing all materials required, sub grade preparation, including the rolling, compaction and grading of special stabilization material, forms, reinforcement, expansion joint

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materials, dowels, or any other miscellaneous materials used in the restoration of P.C. driveways and walks.

1.54 PLUGGING CROSS CONNECTION PIPE (Item No.53)

A. Measurement - Measurement of work for payment of this Item shall be the actual count of each plug used. There shall be no more than two plugs used on a single cross connection.

B. Payment - Payment of the amount bid for plugging cross connection pipe will be for the quantity as measured above which shall be full compensation for traffic control, flow control, installation of plug material in accordance with the specifications and all else incidental thereto for which separate payment is not provided under other items in the Bid Form.

1.55 AGGREGATE ROADWAY (Item No. 54)

A. Measurement – Measurement of work for payment of this Item shall be the actual net section in cubic yards measured in place.

B. Payment – Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to install Aggregate Roadway as specified and as shown on the Drawings. Payment shall include full compensation for the furnishing of all material, loading, hauling, unloading, spreading, shaping, maintaining the finished surface until acceptance, and all incidental work required in the installation of Aggregate Roadway.

1.56 FURNISH AND INSTALL REPLACEMENT SANITARY SEWER MANHOLES (Item No.55)

A. Measurement - Measurement of work for payment of this Item shall be the linear foot of the manhole measured vertically, in the various depth categories as specified and as shown on the drawings. The depth of the manhole shall be measured from the top of the manhole casting to the invert of the deepest sewer connection.

B. Payment - Payment of the amount bid for this Item shall be full compensation for demolishing and completely removing the existing manhole and furnishing labor, materials, equipment and incidentals required to complete the construction of a new manhole, complete as specified and as shown on the drawings. The actual count (each) of manholes installed, measured as provided above will be paid for at the respective unit prices bid for manholes in the various depth categories. No additional payment will be made for by-pass pumping, if

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required, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations. Payment shall include full compensation for furnishing, bedding, setting, joining, cleaning, sealing, and testing of the manhole, and all incidental work required in the construction of a manhole.

1.57 TRENCH SHORING AND SUPPORT BRACING (Item No.56)

Timber Sheeting and Bracing – Driven and Left in Place - Item 56.a.1

A. Measurement - Measurement of work for payment of this Item shall be determined in thousand feet of board measure (MFBM) based on the thickness of lumber actually used as authorized by the Engineer in writing.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to complete the construction of sheeting and bracing when ordered left in place by the Engineer in writing. No additional payment will be made for driving the lumber and all incidental work connected with the sheeting and bracing.

Cut-Off and Removal of Timber Sheeting and Bracing - Item 56.a.2

A. Measurement - Measurement of Work for payment of this Item shall be determined in thousand feet of board measure (MFBM) based on the thickness of lumber actually cut off and removed as authorized by the Engineer in writing.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to complete the cut off and removal when ordered by the Engineer in writing. No direct payment shall be made for lumber cut off or removed for the convenience or error by the Contractor.

1.58 MANHOLE REPAIR (Item No.57)

A. Measurement - Measurement of work for payment of this Item shall be the actual count (each) of manhole repair work shall include the incidentals required to repair or replace manhole cover, repair ring and/or seal manhole with epoxy sealant, as specified.

B. Payment - Payment in the bid amount for this Item shall include full compensation for furnishing all labor, material, equipment, and incidentals required to repair or replace manhole

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cover, grout inverts, repair ring and/or seal manhole with epoxy sealant, as specified.

1.59 SMOKE TESTING FOR LEAK IDENTIFICATION (Item No.58)

A. Measurement - Measurement for smoke testing to identify leak locations will be made on a linear foot basis from upstream manhole to downstream manhole. The total length of line tested per smoke test set-up shall not exceed 600 linear feet.

B. Payment

1. Payment of the amount bid for smoke testing for leak identification will be made when requested by Owner for the quantity as measured above which shall be full compensation for smoke bombs, blower usage, sand bagging, smoke test logs, public notification and photos in accordance with the Specifications; and all else incidental thereto for which separate payment is not provided under other items in the Bid Form.

2. No payment will be made for smoke testing pipe segments that expose leaks at locations, which have been repaired by the Contractor.

1.60 MANHOLE INSPECTION (Item No. 59)

A. Measurement - Measurement of work for payment of this Item shall be the actual number of manholes inspected in the field and a written report provided as to the condition of each manhole. Included in this work shall be the cleaning and removal of loose debris.

B. Payment - Payment of the amount for this Item and as measured above shall be full compensation for furnishing all labor, materials, equipment, incidentals, and skill labor required to complete the cleaning and visual inspection of each manhole as directed by the Engineer. Included shall be a full written report by a skilled technician.

1.61 MANHOLE REHABILITATION (Item No. 60)

A. Measurement - The Work will be measured for payment from the bottom of the pipe invert to the bottom of the manhole ring.

B. Payment - Payment shall be based on the Contract Unit Price per vertical foot coated as indicated in the Rehabilitation Section Schedule, Drawings, and/or Bid Schedule. The Contract Unit Price shall be payment in full for performing the work and for furnishing all labor, supervision, materials, equipment and all testing necessary to complete the Work.

1.62 RECONSTRUCTION OF MANHOLE CHIMNEY/RISER (Item No. 61)

A. Measurement – Measurement of work for payment of this Item shall be per vertical foot of Chimney/Riser removed and replaced. Work shall include the incidentals required to

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reconstruct the Manhole Chimney/Riser.

B. Payment – Payment of the amount bid for this Item shall be full compensation for all labor, materials, equipment and incidentals required to complete the reconstruction of Manhole Chimney/Riser. Manhole Frame and Cover to be covered by other item.

1.63 SAND-CLAY-GRAVEL (Item No.62)

A. Measurement - Measurement of work for payment of this Item shall be the actual net section in cubic yards measured in place fully compacted.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, material, equipment, and incidentals required to place the sand-clay-gravel backfill in the excavation where recommended by the Engineer due to soil and ground water conditions, and will be paid under Bid Item 21 as the difference in cost above the cost already included in other Bid Items requiring compacted select material for backfill or base material. Payment shall include full compensation for the furnishing of all material, loading, hauling, unloading, and disposal of all unsuitable materials being replaced and all incidental work required for the placement of sand-clay-gravel backfill.

1.64 WELLPOINTING (Including first 30 LF) (Item No.63)

A. Measurement - Measurement of work for payment of this Item shall be by an actual count (each) of well pointing setups; as required by the Owner's field representative. Each well pointing setup shall be measurement at a maximum of 30 LF.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, material, equipment, and incidentals required for pre-drainage of the soil prior to final excavation.

1.65 ADDITIONAL WELLPOINTING (Item No.64)

A. Measurement - Measurement for additional well pointing shall be made on a linear foot basis, contractor will be paid for additional linear footage over the maximum 30 LF as required by the Owner's field representative.

B. Payment - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, material, equipment, and incidentals required for pre-drainage of the soil prior to final excavation.

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1.66 BY-PASS PUMPING SET-UP (Item No.65)

A. Measurement - Measurement for by-pass pumping set-up will be the actual count of each set-up of the respective sizes as set forth in the Bid Form and shall include the first eight (8) hours of operation.

B. Payment - Payment of the amount bid for by-pass pumping set-ups will be for the quantity as measured above which will be full compensation for sewer flow control, and shall be made only after the work for which the set-up is necessary is complete.

1.67 BY-PASS PUMPING HOURLY OPERATION (Item No.66)

A. Measurement - Measurement for the operation of the various size by-pass pumping set-ups shall be by the hour (after the first eight hours) as set forth in the Bid Form.

B. Payment - Payment of the amount bid for hourly operation of the by-pass pumping set-ups will represent full compensation for all labor, equipment, materials and incidentals required to complete the operation.

1.68 SEWER PIPE LINING (Item No.67)

A. Measurement

1. Measurement for installed sewer liner pipe shall be on a per linear foot basis for the various nominal existing host pipe diameters measured between the center lines of the adjoining manholes to the nearest whole foot.

2. Measurement for sewer liner pipe for restored service line connections shall be for each service line, which has been fully restored.

B. Payment

1. Payment of the bid amount for installed sewer liner pipe will be made for the respective quantity as measured above which shall be full compensation for sewer flow control, public notification, traffic control any required excavation, sewer pipe cleaning, installation of the liner, sealing of the liner to the host pipe at manholes, pre-construction and post construction TV/Video inspection, testing, root removal and clean-up in accordance with the specifications and all else incidental thereto for which separate payment is not provided under other items in the bid form.

2. Payment of the bid amount for sewer liner pipe restored service line connections shall be for the actual quantity as measured above which shall be full compensation for the actual count of fully restored service connections cut through the liner and all else incidental thereto for which payment is not provided under other items of the Bid Form.

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1.69 REMOVAL OF PROTRUDING SERVICE CONNECTIONS (Item No.68)

- A. **Measurement** - Measurement of work shall be the actual (each) removal of individual protruding service connections.
- B. **Payment** - Payment shall be based on the removal of each protruding service through the use of an internal cutting device. Payment shall be full compensation for furnishing labor, equipment and materials.

1.70 RAISE TOP OF EXISTING MANHOLE (Item No.69)

- A. **Measurement** – Measurement of work for payment of this Item shall be made by linear vertical foot from existing manhole cover to new manhole cover.
- B. **Bases for Payment** – Payment in the bid amount for this Item shall be full compensation for furnishing all labor, material, equipment, and incidentals required to raise top of existing manholes, as specified.

1.71 REPLACE EXISTING 8" SEWER SERVICE ASSEMBLY (Item No.70)

Sanitary sewer service assembly will be paid per each. The assembly shall include an 8" x 6" PVC WYE bend, a 6" PVC 45° bend, a maximum of three (3) feet 6" PVC pipe, and a maximum of six (6) feet of 8-inch PVC DR35 gravity sewer pipe on either side of the WYE fitting, including bedding material. If the assembly includes a double WYE assembly, it will be measured as 1.5 the unit of a single. Connections on existing pipes to new pipes to be with non-shear couplings. Excavation, backfill, compaction, and non-shear couplings are measured and paid under other items.

- A. **Measurement** – Sewer Service Assembly will be measured by the count of each service and whether the assembly is a single or a double (1.5 times a single).
- B. **Bases of Payment** – The total actual number of service assemblies measures as provided above will be paid at the contract unit bid price, including all fittings, caps, castings, and concrete as shown on the Drawings, which price and payment shall constitute full compensation for furnishing, hauling, installing complete, testing, and preparation of bed and backfilling, and for the furnishing or all equipment, tools, labor, and incidentals necessary to complete the item in accordance with drawings and specifications.

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1.72 SEAL DRAIN (Item No.29)

- A. **Measurement** – Measurement of work for payment of this Item shall be made by actual count of each drain sealed.
- B. **Payment** – Payment of the bid amount for this Item shall be full compensation for furnishing all labor, pipes, material, equipment, and incidentals required to seal drain.

1.73 TRAFFIC CONTROL AND SIGNAGE (Item No.72)

Traffic Control Director - Item 72a

- A. **Measurement** - Measurement for traffic control director shall be by the hour for one person dedicated solely to traffic control.
- B. **Payment** - Payment of the bid amount for the item shall be full compensation for furnishing the personnel and incidentals required to provide for a traffic control director.

Traffic Control Barricade Setup and Removal - Item 72b

- A. **Measurement** - Measurement for traffic control barricades shall be measured by the lump sum.
- B. **Payment** - Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials and incidentals required to complete all traffic control barricade setups and removals.

1.74 SEWER LINE CLEANING AND TELEVISIONING (Item 73)

- A. **Measurement** - Measurement for sewer line cleaning and televising shall be made on a linear foot basis. Measurement will be made along the length of sewer line as determined in the field to the nearest whole foot.
- B. **Payment** – Payment of the amount bid for this Item shall be made for the respective quantity as measured above. Payment shall be full compensation of furnishing all labor, materials, equipment, documentation and analysis of the televising results, debris disposal and incidentals required to complete the Work.

1.75 REMOVAL AND REPLACEMENT OF FENCE (Item No.74)

- A. **Measurement** - Measurements for removal and replacement of fence shall be made on a linear foot basis.
- B. **Payment** - Payment of the amount bid for this Item shall be full compensation for all labor,

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materials, equipment and incidentals required to complete the Work for any and all types of fencing.

1.76 ROOT REMOVAL IN PIPING (Item No.75)

A. Measurement - The Work will be measured by the length of each line section and size of pipe specified in the drawings or stated in these specifications. Where no length is provided, the length shall be measured by the total length of joints with roots to be removed. If a gap of more than twenty feet exists between joints, which require root removal, the length shall be discontinued between those two joints. Only continuous joints shall be measured on this item.

B. Payment - All work performed and measured as provided above will be paid for a “Root Removal in Sewers (Size)” at the unit price bid, which said bid shall be full compensation for root removal as specified and for furnishing all labor, tools, equipment, and incidentals necessary to complete the Work.

1.77 MANHOLE LINING (Item No.76)

A. Measurement - The Work will be measured for payment from the bottom of the pipe invert to the bottom of the manhole ring.

B. Payment - Payment shall be based on the Contract Unit Price per vertical foot coated as indicated in the Rehabilitation Section Schedule, Drawings, and/or Bid Schedule. The Contract Unit Price shall be payment in full for performing the work and for furnishing all labor, supervision, materials, equipment and all testing necessary to complete the Work.

1.78 MANHOLE COVER (Item No.77)

A. Measurement – Measurement of work for payment of this Item shall be actual count of each manhole covers installed. Work shall include the incidentals required to replace the manhole covers as specified.

B. Payment – Payment in the Bid Amount for this Item shall include full compensation for furnishing all labor, material equipment, and incidentals required to replace the manhole covers as specified.

1.79 MANHOLE FRAME AND WATER TIGHT COVER (Item No.78)

A. Measurement – Measurement of work for payment of this Item shall be actual count of each manhole frame and water tight cover installed. Work shall include the incidentals

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required to replace the manhole covers as specified.

B. Payment – Payment in the Bid Amount for this Item shall include full compensation for furnishing all labor, material equipment, and incidentals required to replace the manhole frame and water tight cover as specified.

1.80 CARRIER PIPE (PIPE BURSTING METHOD) (Item No.79)

A. Measurement – Measurement of Work for payment of this item shall be on a basis of actual carrier pipe installed and accepted on a horizontal linear foot basis by the pipe bursting method. Limits of pipe burst shall be measured in the field from undisturbed trench opening horizontal to undisturbed trench opening on the opposite side of the road, railroad, streets, etc. However, measurement shall not exceed bid quantities unless approved by Engineer as a result of unknown obstacles encountered in field excavation. This item covers the additional costs for the pipe bursting method. Carrier pipe will be measured and paid under other items.

B. Payment – Payment of the amount bid for this item shall be full compensation for furnishing all labor, materials, equipment, and incidentals required to complete the construction of a pipe burst crossing with carrier pipe as measured above and as specified and shown on the Drawings. No additional payment will be made for tunneling, furnishing, and installing the carrier pipe, excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction, testing and removal of excess earth. No direct payment will be made for dewatering, including all pumping, well pointing, and other necessary operations. Payment shall include full compensation for furnishing bedding, laying, joining (including fittings), cleaning, and testing all pipe within the limits specified and as shown on the Drawings.

1.81 EXCAVATION, BACKFILL, AND COMPACTION (Item No. 80)

This work will be used in addition to the point repair, service replace work, or removal and replacement of gravity sewer.

A. Measurement – Measurement of work for payment for the excavations, bedding, backfill, and compaction for each sewer point repair or service replacement shall be made on a linear foot basis, measured to the nearest whole foot for the depth listed under the item of the Bid Form. Measurement shall be based on the actual length of the main line pipe replaced, plus one foot additional on either end.

B. Payment – Payment of the amount for this item at the depth specified shall be full compensation for furnishing all labor, materials, equipment, and indications required to furnish and

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install point repairs, service replacements, or removal and replacement of gravity sewer, as shown on The Drawings. No direct payment shall be made for dewatering, including pumping, well pointing, or other necessary operations. Payment shall include full compensation for furnishing bedding, granular backfill above the bedding material to a point 12" above the pipe, laying, joining, cleaning, and testing pipe and fittings and all incidental work required.

1.82 REMOVE AND REPLACE GRAVITY SEWER PIPE (Item No.81)

This includes the removal of existing pipe of various lengths designated by the Engineer and shall include at no direct payment any by-pass pumping during performance of work. Excavation, backfill, and compaction will be measured and paid for under this item. Anything under 20 feet in length will be paid for under other items.

A. Measurement – Measurement of work for the payment of this item shall be by the actual linear footage installed in various sizes and depth categories required, as specified and as shown on the drawings. Measurement shall be as directed by the Engineer either on the drawings or in the field. The depth shall be by calculating the upstream and downstream manholes and dividing by 2. The extra footage between manholes will be measures with the same depth.

B. Payment – Payment of the amount bid for this Item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to furnish and install gravity sewer pipe as specified and as shown on the Drawings. The actual linear footage of gravity sewer pipe installed, measurement as provided above will be paid for that at the respective prices for sewer pipe of the various sizes and classifications and depths. No additional payment will be made under this item for excavation, sheeting and bracing (except extra sheeting and bracing left in place and paid for under other items), backfill and compaction (except sand backfill paid under other items), testing and removal of excess earth. No direct payment shall be made for dewatering, including all pumping, well pointing and other necessary operations.

1.83 NON-SHEAR COUPLINGS (Item No. 82)

A. Measurement – Measurement of work for payment of this item shall be the actual count (each) of non-shear couplings installed as specified and as shown on the drawings.

B. Payment – Payment for the amount bid for this item shall be full compensation for furnishing all labor, materials, equipment and incidentals required to complete the furnishing and installing couplings as specified and as shown on drawings. The actual count (each) of couplings installed, measured as provided above, will be paid for at the respective unit price for couplings in various

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sizes.

1.84 REPLACE EXISTING SERVICE CONNECTIONS (Item No. 83)

A. Measurement – Measurement for this work shall include the service WYE and service pipe to reconnect existing service pipe when removing and replacing gravity sewer pipe. Excavation, backfill, and compaction will be measured and paid for under other items.

B. Payment – Payment in the amount bid for this time shall be full compensation for furnishing all labor, material equipment, and incidentals required to complete the furnishing of materials and installation of service connections as specified or as directed by Engineer.

PART 2 – PRODUCT - NOT USED

PART 3 – EXECUTION - NOT USED

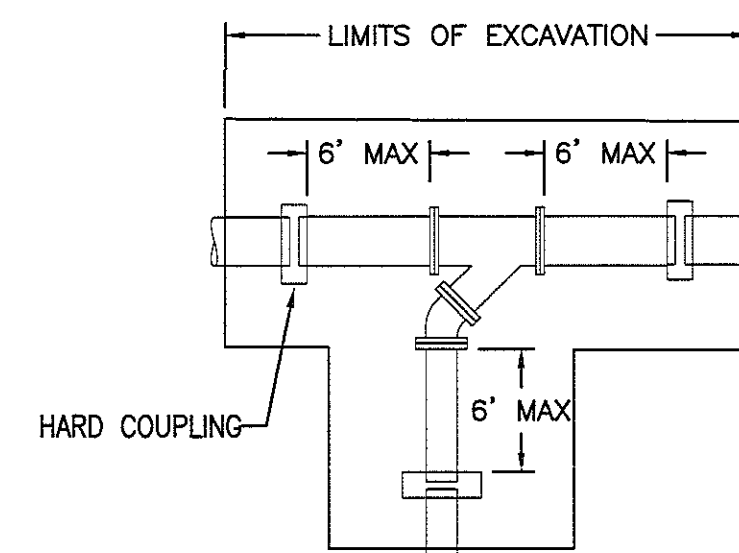
END OF SECTION

- REPAIR WORK MAY INCLUDE SOME LOCATIONS NOT SHOWN ON THE DRAWINGS, AND SOME LISTED LOCATIONS MAY BE DELETED. ADDITIONAL LOCATIONS WILL BE AT THE DIRECTION OF THE ENGINEER AND CHANGES IN ITEM QUANTITIES, PAYMENT AND PROJECT TIME WILL BE PERFORMED BY CHANGE ORDER. WORK PERFORMED BY THE CONTRACTOR WILL BE OF A SIMILAR NATURE TO THE REPAIR WORK REQUIRED AT THESE LOCATIONS.
- ENGINEER RESERVES THE RIGHT TO PRIORITIZE THE SEQUENCE OF REPAIR WORK AND ADD OR DELETE REPAIR WORK AS NECESSARY FROM THE PROJECT IN ACCORDANCE WITH BUDGETARY LIMITATIONS.
- ONLY WORK AUTHORIZED IN WRITING BY THE ENGINEER AND AGREED UPON BY THE OWNER SHALL BE MEASURED AND PAID FOR. CONTRACTOR SHALL PROCEED WITH ONLY WORK AUTHORIZED BY OWNER AND ENGINEER. ALL WORK AUTHORIZED SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AT THE CONTRACT UNIT PRICE.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED. COST FOR THIS WORK TO SHALL BE INCLUDED IN OTHER ITEMS. NO DIRECT PAYMENT WILL BE MADE FOR SITE RESTORATION.
- SEWER FLOW CONTROL DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO DIRECT PAYMENTS WILL BE MADE FOR FLOW CONTROL. COST SHOULD BE INCLUDED IN OTHER ITEMS.
- UTILITIES SHOWN ARE APPROXIMATE AND BASED ON BEST AVAILABLE INFORMATION SUPPLIED BY UTILITY OWNER. CONTRACTOR SHALL BE RESPONSIBLE DETERMINING THE EXACT LOCATION, DEPTH, AND SIZE OF ALL UNDERGROUND UTILITIES AND STRUCTURES, WHETHER SHOWN ON DRAWINGS OR NOT, AND SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS. CONTRACTOR SHALL PERFORM SUCH DETERMINATION A MINIMUM OF 500 FEET IN ADVANCE OF PIPE LAYING TO ALLOW FOR ALIGNMENT AND GRADE CORRECTIONS. NO ADDITIONAL PAYMENT WILL BE MADE TO RELAY OR REWORK PIPE BASED ON FAILURE TO COMPLY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR UNEARTHING AND VERIFYING TYPE AND OUTSIDE DIAMETER OF EXISTING UTILITIES(SEWER, WATER, ETC.) AND SHALL FURNISH REQUIRED FITTINGS AND/OR ADAPTERS PRIOR TO CONNECTION TO EXISTING LINES OR MANHOLES.
- PROVISIONS SHALL BE MADE DURING CONSTRUCTION AND AFTER FINAL COMPLETION TO PROVIDE EROSION CONTROL. ALL ERODED AREAS SHALL BE RE-GRADED, REFILLED AND RE-SEEDED UNTIL A STAND OF GRASS HAS DEVELOPED.
- ALL AREAS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE CLEANED, FERTILIZED, SEEDED AND MULCHED AS PER THE EXISTING CONDITIONS. NO DIRECT PAYMENT WILL BE MADE. COST OF WORK WILL BE INCLUDED IN OTHER ITEMS.
- ELECTRICAL OVERHEAD AND UNDERGROUND LINES ARE LOCATED ON OR NEAR CONSTRUCTION AREA. CONTRACTOR SHALL TAKE PROPER SAFETY PRECAUTIONS DURING CONSTRUCTION WHEN WORKING AROUND HIGH VOLTAGE LINES. NOT ALL OVERHEAD OR UNDERGROUND LINES MAY BE SHOWN IN THE DRAWINGS. WHEN SHOWN, EXACT LOCATIONS MAY VARY.
- CONTRACTOR SHALL REMOVE AND REPLACE CULVERTS, MAILBOX, ETC. WHICH INTERFERES WITH THE INSTALLATION OF GRAVITY SEWER PIPE OR FORCE MAIN. COST FOR REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN OTHER ITEMS OF WORK. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK.
- SEWER LINES SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. SEWER LINES CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER.
- CONTRACTOR SHALL TAKE EVERY PRECAUTION THAT IS NECESSARY SO AS NOT TO DISRUPT ANY EXISTING UNDERGROUND UTILITY OR PIPELINES.
- CONTRACTOR SHALL RE-GRADE ALL AREAS AFFECTED BY CONSTRUCTION ACTIVITIES TO PROVIDE POSITIVE DRAINAGE. ALL WORK SHALL BE IN A MANNER ACCEPTABLE TO THE OWNER.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE TO THOSE AFFECTED BY CONSTRUCTION ACTIVITIES THAT MAY DISRUPT WATER, SEWER, OR OTHER UTILITY SERVICES. UTILITY SERVICES SHALL BE PROMPTLY REPAIRED AND SHALL NOT REMAIN OUT OF SERVICE OVERNIGHT.
- CONTRACTOR SHALL AT ALL TIMES CONDUCT HIS OPERATION AS TO ENSURE MINIMAL INCONVENIENCE TO THE GENERAL PUBLIC, ADJACENT PROPERTY OWNERS, AND BUSINESSES. CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL PROPERTIES AND TRAFFIC FLOW IN ROADWAYS AT ALL TIMES.
- CONTRACTOR TO PROVIDE CONTINUOUS PUMPING CAPACITY DURING AVERAGE AND PEAK FLOW CONDITIONS. TEMPORARY PUMPING SHALL BE MONITORED BY THE CONTRACTOR DURING WORK TO ENSURE CONTINUOUS SERVICE. NO DIRECT PAYMENT SHALL BE MADE FOR BY-PASS PUMPING. THE COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS.
- NO DIRECT PAYMENT WILL BE MADE FOR REMOVING EXISTING SEWER PIPE. COST TO BE INCLUDED IN OTHER ITEMS.
- NO DIRECT PAYMENT WILL BE MADE FOR CONNECTING TO EXISTING MANHOLES. COST TO BE INCLUDED IN OTHER ITEMS.
- WHEN SERVICE CONNECTIONS FALL IN LENGTH OF POINT REPAIR CONTRACTOR TO CONNECT SERVICE CONNECTION TO NEW REPAIRED LINE, PAYMENT UNDER ITEM NO.70.
- ALL CONCRETE AND ASPHALT SURFACE REMOVAL SHALL BE SAW CUT TO LEAVE A SMOOTH STRAIGHT SURFACE TO TIE INTO.
- VIDEO OF GRAVITY SEWER LINE USED TO EVALUATE PROJECT WAS FILMED IN OCTOBER 2012. CONTRACTOR TO PRE VIDEO GRAVITY SEWER LINE BEFORE LINING TO DETERMINE IF ANY ADDITIONAL FAILURES HAVE OCCURRED IN SEWER PIPE. THE ITEM IS PAID AS A SEPARATE PAY ITEM.,
- PROPOSED SEWER LINES TO BE CLEANED AND RECEIVE TELEVISION INSPECTION TO BE EVALUATED AND REPAIRED AND OR LINED AS BUDGET ALLOWS. SEE SPECIFICATIONS SECTION 02955 – SUMMARY OF SEWER REHABILITATION SERVICES FOR DETAILS.
- SOME LOCATIONS OF WORK IS LOCATED IN THE RIGHT OF WAY IN BACK OF HOUSES. CONTRACTOR TO NOTIFY HOME OWNERS OF WORK TO BE DONE AT LEAST 24 HRS BEFORE WORK IS TO BEGIN.
- CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AS CALLED IN SPECIFICATION SECTION 01570.

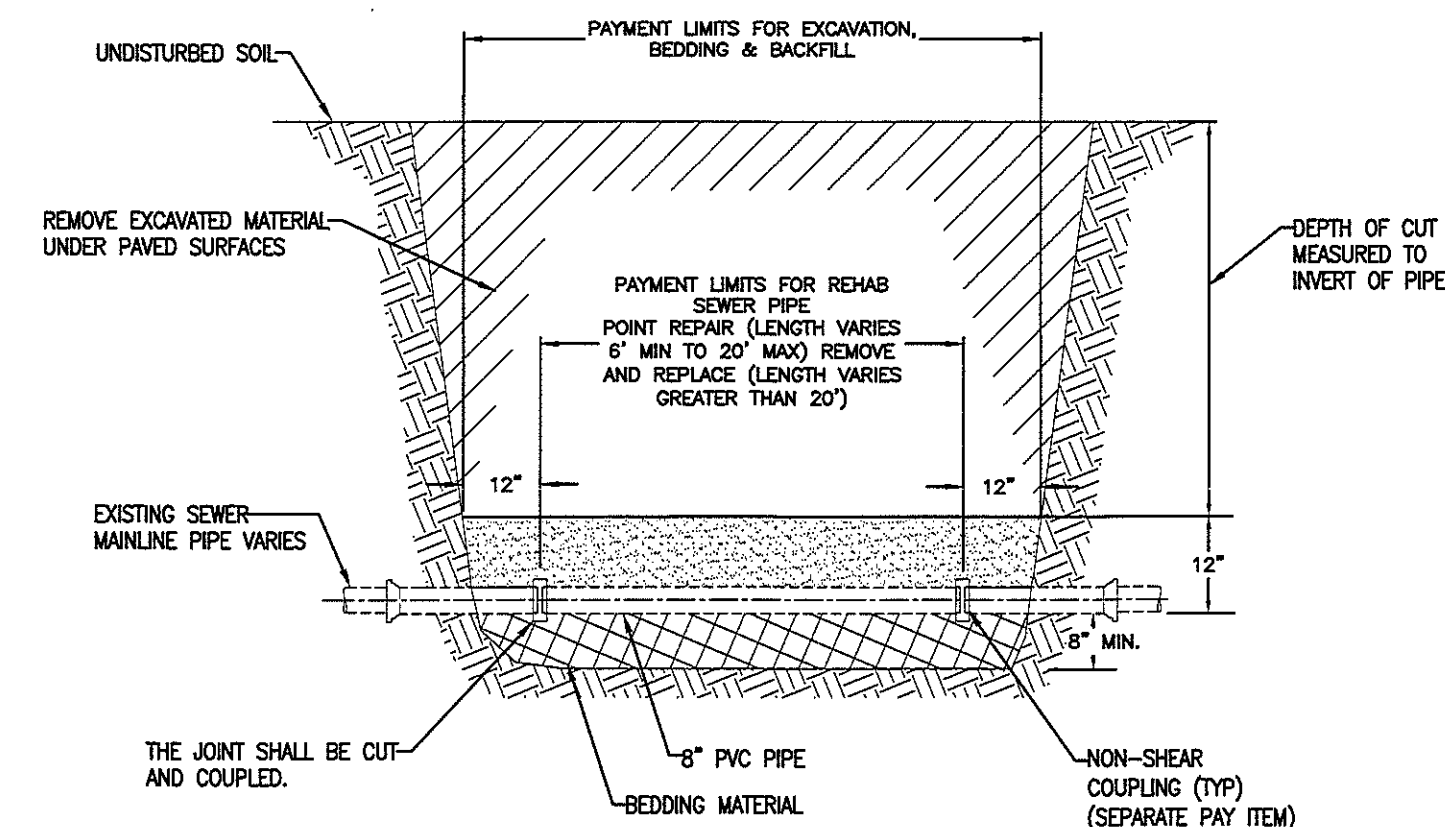
1. ALL GRAVITY SEWER PIPE TO HAVE CIPP SHALL BE CLEANED AND TV TO DETERMINE SERVICE CONNECTIONS. CLEANING AND TV WILL BE PAID UNDER A SEPARATE ITEM FROM CIPP.
2. THERE WILL BE NO DIRECT PAYMENT FOR CUTTING OUT SERVICE COUPONS AFTER CIPP HAS BEEN COMPLETED.



1. CONTRACTOR SHALL NEGOTIATE WITH HOMEOWNERS FOR ACCESS TO GRAVITY SEWER PIPES ON PRIVATE PROPERTY.
2. AMPLE NOTIFICATION SHALL BE PROVIDED BY CONTRACTOR TO HOMEOWNER CONCERNING THE REMOVAL OF OBSTACLES SUCH AS FENCES, SHEDS, ETC. LOCATED ATOP SERVIDUTE CAUSING ACCESS OR CONSTRUCTION PROBLEM FOR THIS WORK.
3. IF CONTRACTOR HAS PROVIDED HOMEOWNER WITH BOTH WRITTEN AND VERBAL NOTIFICATIONS CONCERNING REMOVAL OF OBSTACLES OR INFRASTRUCTURE IN THE SERVIDUTE, HE CAN REMOVE SUCH OBSTACLES AND STORE THEM ON THE SIDE OF THE SERVIDUTE FOR THE HOMEOWNER.
4. AFTER ALL POINT REPAIRS AND SERVICES HAVE BEEN INSTALLED, CONTRACTOR SHALL DRESS AND CLEAN SITE.
5. ALL POINT REPAIRS AND SERVICE REPAIRS ON THE END OF KAREN STREET, BRADLEY COURT, JEFF COURT, AND SANDRA DRIVE SHALL BE COMPLETED BEFORE ANY OTHER WORK.



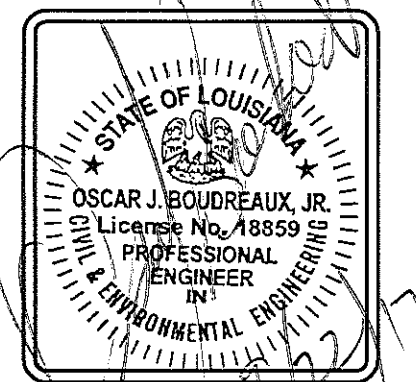
SERVICE ASSEMBLY
SCALE: NTS



STANDARD TYPICAL SEWER PIPE
REPLACEMENT AT MID SEGMENT

SCALE: NTS

ADDENDUM NO. 4



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DATE	8/2017

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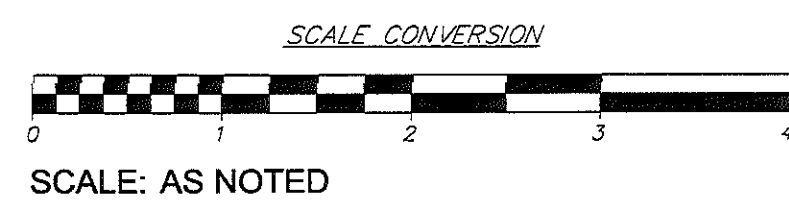
TOWN OF ADDIS
ADDIS PLACE SUBDIVISION
SANITARY SEWER REHABILITATION
ADDIS, LOUISIANA

PROJECT:
1332

SHEET:
1A

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FILENAME: S:\Yr 2013\1332\30\DWG\1332-ADDIS PL REHAB.dwg TAB NAME: 1



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CONSULTING ENGINEERS
610 BELLE TERRE BLVD.
LAPLACE, LA 70068
PHONE (985) 653-0185
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INDEX MAP AND GENERAL NOTES



PIPE LINING GRADING
(A) - MAJOR WATER INFILTRATION - REQUIRES 8" CIPP

PLAN
SCALE: 1"=40'

NOTE:
ARROW INDICATES DIERCTION OF MEASUREMENT.

ADDENDUM NO. 4



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DATE	8/2017

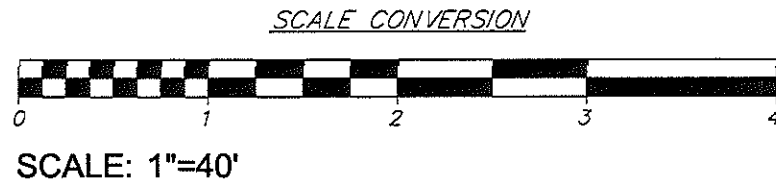
NO.	DATE	DESCRIPTION
4	9/6/17	ADDENDUM NO. 4

OWNER:	TOWN OF ADDIS
PROJECT:	ADDIS PLACE SUBDIVISION SANITARY SEWER REHABILITATION ADDIS, LOUISIANA

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SEWER REHABILITATION MAP

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PIPE LINING GRADING

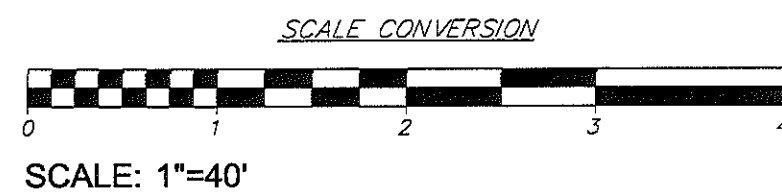
- (A) - MAJOR WATER INFILTRATION - REQUIRES 8" CIPP
- (B) - MODERATE WATER INFILTRATION - REQUIRES 8" CIPP
- (C) - REPLACE GRAVITY SEWER PIPE

PLAN
SCALE: 1"=40'

NOTE:
ARROW INDICATES DIERCTION OF
MEASUREMENT.

ADDENDUM NO. 4

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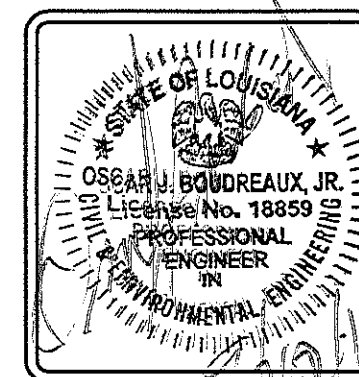


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SEWER REHABILITATION MAP

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PROJECT:	1332
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SHEET:	3A
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PIPE LINING GRADING

(A) - MAJOR WATER INFILTRATION - REQUIRES 8" CIPP

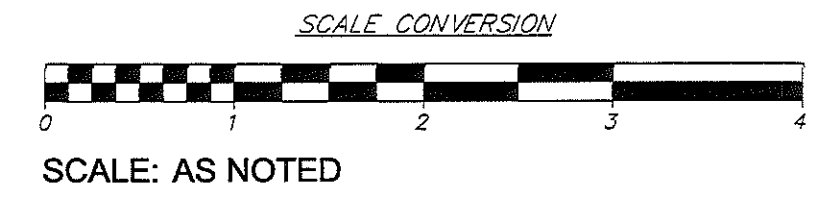
(B) - MODERATE WATER INFILTRATION - REQUIRES 8" CIPP

PLAN
SCALE: 1"=40'

NOTE:
ARROW INDICATES DIERCTION OF
MEASUREMENT.

ADDENDUM NO. 4

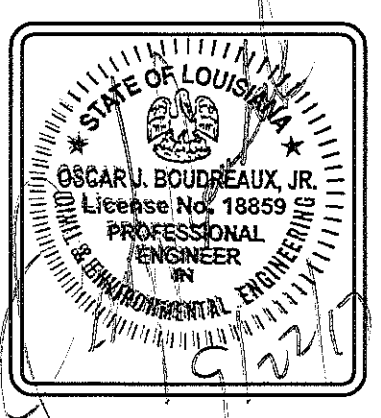
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SEWER REHABILITATION MAP

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