

July 27, 2015

BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA

IFB Y15-1128 PH, ADDENDUM NO. 1

WASTEWATER GRAVITY AND LATERAL CIPP LINING

BID OPENING DATE: August 4, 2015

This Addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions, and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining.

A. The Bid Opening date is August 4, 2015 at 2:00 P.M.

B. Questions and Answers

Question No. 1: What is the County's budget for the first year and subsequent years of this project?

Response No. 1: *Our estimated budget is one million, eight hundred thousand dollars for one year with the County having the option to extend the contract an additional two years.*

Question No. 2: What are the minimum and maximum order amounts for each work release?

Response No. 2: *The delivery order minimum will be five hundred dollars and the maximum will five hundred thousand dollars.*

Question No. 3: How many work releases are anticipated?

Response No. 3: *OCU anticipates an amount in excess of 100 delivery orders.*

C. PART D Bid Schedule is revised and failure to use the attached REVISED BID SCHEDULE will result in you bid being found non-responsive.

D. SPECIFICATIONS

Part H, Section 01025 Measurement & payment is changed as attached.

E. ATTACHMENTS

- 1. REVISED Bid Schedule**
- 2. 1025 Measurements and Payments Section**

F. ACKNOWLEDGEMENT OF ADDENDA

- 1. The Proposer shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of proposal.
- 2. All other terms, conditions and specifications remain the same.

Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm

BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
	General				
1	EMERGENCY Mobilization, Demobilization, Bonds, and Permits	3	EA		
2	Indemnification	1	LS	\$ 100.00	\$100.00
3	Complex Maintenance of Traffic	2	LS		
4	Traffic Control Officer/Off Duty Police Officer	100	Hr		
	Install/Replace Fence				
5	Chain Link Fence Install/Replacement	40	LF		
6	Wood Fence Install/Replacement	40	LF		
	Bypass Pumping				
7	Bypass Pumping for Sanitary Sewer Mains (13"-24")	50 40	LS		
8	Bypass Pumping for Sanitary Sewer Mains (>24")	50 40	LS		
9	Bypass Pump Station (>1,500 gpm)	10	LS		
10	Extra Tankers	100	EA		
	Cleaning Sanitary Sewers				
11	Cleaning Sanitary Sewer Laterals	500	EA		
12	Cleaning Sanitary Sewer Mains (12" or smaller)	5 13,000	LF		
13	Cleaning Sanitary Sewer Mains (13"-24")	2 3,000	LF		
14	Cleaning Sanitary Sewer Mains (>24")	7 3,500	LF		
15	Mechanical Root or Grease Removal	1,000	LF		
16	Mechanical Tuberculation/Mineral Deposit Removal	1,000	LF		
	CCTV Sanitary Sewers				
17	CCTV Inspection Sanitary Sewer Mains (12" or smaller)	5 13,000	LF		
18	CCTV Inspection Sanitary Sewer Mains (13" to 24")	2 3,000	LF		

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BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
19	CCTV Inspection Sanitary Sewer Mains (>24")	7 3,500	LF		
20	CCTV Lateral Inspection from Main	4 300	EA		
21	CCTV Lateral Inspection from Cleanout	4 200	EA		
Sealing and Grouting					
22	Point Down Chemical Sealing	200	GAL		
23	Internal Pipe Joint Sealing (packer method)	200	EA		
Cured-In-Place Pipe (CIPP) Liner					
24	Sanitary Sewer Main CIPP Liner (12" 8" or smaller)	5,000 10,000	LF		
25	Sanitary Sewer Main CIPP Liner (13"-18" 10"-12")	1,200 3,000	LF		
26	Sanitary Sewer Main CIPP Liner (19"-24" 15")	800 1000	LF		
27	Sanitary Sewer Main CIPP Liner (25"-30" 18"-24")	400 2,000	LF		
28	Sanitary Sewer Main CIPP Liner (31"-36" 30")	300 1,500	LF		
29	Sanitary Sewer Main CIPP Liner (31"-36" 36")	300 1,000	LF		
30	Sanitary Sewer Main CIPP Liner (31"-36" 42")	200 1,000	LF		
31	Reinstatement of Service Laterals after Sewer Main Lining	1,000 2,000	EA		
32	Brim Type - CIPP Lateral Liner (4" , <40 LF)	50	EA		
33	Brim Type - CIPP Lateral Liner (4" , >40 LF)	50 100	EA LF		
34	Brim Type - CIPP Lateral Liner (6" , <40 LF)	5	EA		
35	Brim Type - CIPP Lateral Liner (6" , >40 LF)	50	EA LF		
36	FCLRL – CIPP Lateral Liner (4" , <40 LF)	80	EA		
37	FCLRL – CIPP Lateral Liner (4" , >40 LF)	80 100	EA LF		
38	FCLRL – CIPP Lateral Liner (6" , <40 LF)	10	EA		
39	FCLRL – CIPP Lateral Liner (6" , >40 LF)	10	EA LF		
				BASIC YEAR TOTAL	\$ -

REVISED D-4

BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
	General				
40	EMERGENCY Mobilization, Demobilization, Bonds, and Permits	3	EA		
41	Complex Maintenance of Traffic	2	LS		
42	Traffic Control Officer/Off Duty Police Officer	100	Hr		
	Install/Replace Fence				
43	Chain Link Fence Install/Replacement	40	LF		
44	Wood Fence Install/Replacement	40	LF		
	Bypass Pumping				
45	Bypass Pumping for Sanitary Sewer Mains (13"-24")	50 <u>40</u>	LS		
46	Bypass Pumping for Sanitary Sewer Mains (>24")	50 <u>40</u>	LS		
47	Bypass Pump Station (>1,500 gpm)	10	LS		
48	Extra Tankers	100	EA		
	Cleaning Sanitary Sewers				
49	Cleaning Sanitary Sewer Laterals	500	EA		
50	Cleaning Sanitary Sewer Mains (12" or smaller)	5 <u>13,000</u>	LF		
51	Cleaning Sanitary Sewer Mains (13"-24")	2 <u>3,000</u>	LF		
52	Cleaning Sanitary Sewer Mains (>24")	7 <u>3,500</u>	LF		
53	Mechanical Root or Grease Removal	1,000	LF		
54	Mechanical Tuberculation/Mineral Deposit Removal	1,000	LF		
	CCTV Sanitary Sewers				
55	CCTV Inspection Sanitary Sewer Mains (12" or smaller)	5 <u>13,000</u>	LF		
56	CCTV Inspection Sanitary Sewer Mains (13" to 24")	2 <u>3,000</u>	LF		

BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
57	CCTV Inspection Sanitary Sewer Mains (>24")	7 <u>3,500</u>	LF		
58	CCTV Lateral Inspection from Main	4 <u>300</u>	EA		
59	CCTV Lateral Inspection from Cleanout	4 <u>200</u>	EA		
	Sealing and Grouting				
60	Point Down Chemical Sealing	200	GAL		
61	Internal Pipe Joint Sealing (packer method)	200	EA		
	Cured-In-Place Pipe (CIPP) Liner				
62	Sanitary Sewer Main CIPP Liner (12" 8" or smaller)	5,000 <u>10,000</u>	LF		
63	Sanitary Sewer Main CIPP Liner (13"-18" 10"-12")	1,200 <u>3,000</u>	LF		
64	Sanitary Sewer Main CIPP Liner (19"-24"15")	800 <u>1000</u>	LF		
65	Sanitary Sewer Main CIPP Liner (25"-30"18"-24")	400 <u>2,000</u>	LF		
66	Sanitary Sewer Main CIPP Liner (31"-36" 30")	300 <u>1,500</u>	LF		
67	Sanitary Sewer Main CIPP Liner (31"-36" 36")	300 <u>1,000</u>	LF		
68	Sanitary Sewer Main CIPP Liner (31"-36" 42")	200 <u>1,000</u>	LF		
69	Reinstatement of Service Laterals after Sewer Main Lining	1,000 <u>2,000</u>	EA		
70	Brim Type - CIPP Lateral Liner (4" , <40 LF)	50	EA		
71	Brim Type - CIPP Lateral Liner (4" , >40 LF)	50 <u>100</u>	EA LF		
72	Brim Type - CIPP Lateral Liner (6" , <40 LF)	5	EA		
73	Brim Type - CIPP Lateral Liner (6" , >40 LF)	<u>50</u>	EA LF		
74	FCLRL – CIPP Lateral Liner (4" , <40 LF)	80	EA		
75	FCLRL – CIPP Lateral Liner (4" , >40 LF)	80 <u>100</u>	EA LF		
76	FCLRL – CIPP Lateral Liner (6" , <40 LF)	10	EA		
77	FCLRL – CIPP Lateral Liner (6" , >40 LF)	10	EA LF		
		OPTION YEAR ONE TOTAL		\$	-

REVISED D-6

BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
	General				
78	EMERGENCY Mobilization, Demobilization, Bonds, and Permits	3	EA		
79	Complex Maintenance of Traffic	2	LS		
80	Traffic Control Officer/Off Duty Police Officer	100	Hr		
	Install/Replace Fence				
81	Chain Link Fence Install/Replacement	40	LF		
82	Wood Fence Install/Replacement	40	LF		
	Bypass Pumping				
83	Bypass Pumping for Sanitary Sewer Mains (13"-24")	50 40	LS		
84	Bypass Pumping for Sanitary Sewer Mains (>24")	50 40	LS		
85	Bypass Pump Station (>1,500 gpm)	10	LS		
86	Extra Tankers	100	EA		
	Cleaning Sanitary Sewers				
87	Cleaning Sanitary Sewer Laterals	500	EA		
88	Cleaning Sanitary Sewer Mains (12" or smaller)	5 13,000	LF		
89	Cleaning Sanitary Sewer Mains (13"-24")	2 3,000	LF		
90	Cleaning Sanitary Sewer Mains (>24")	7 3,500	LF		
91	Mechanical Root or Grease Removal	1,000	LF		
92	Mechanical Tuberculation/Mineral Deposit Removal	1,000	LF		
	CCTV Sanitary Sewers				
93	CCTV Inspection Sanitary Sewer Mains (12" or smaller)	5 13,000	LF		
94	CCTV Inspection Sanitary Sewer Mains (13" to 24")	2 3,000	LF		

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BID ITEM	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
95	CCTV Inspection Sanitary Sewer Mains (>24")	7 3,500	LF		
96	CCTV Lateral Inspection from Main	4 300	EA		
97	CCTV Lateral Inspection from Cleanout	4 200	EA		
	Sealing and Grouting				
98	Point Down Chemical Sealing	200	GAL		
99	Internal Pipe Joint Sealing (packer method)	200	EA		
	Cured-In-Place Pipe (CIPP) Liner				
100	Sanitary Sewer Main CIPP Liner (12" 8" or smaller)	5,000 10,000	LF		
101	Sanitary Sewer Main CIPP Liner (13"-18" 10"-12")	1,200 3,000	LF		
102	Sanitary Sewer Main CIPP Liner (19"-24" 15")	800 1000	LF		
103	Sanitary Sewer Main CIPP Liner (25"-30" 18"-24")	400 2,000	LF		
104	Sanitary Sewer Main CIPP Liner (31"-36" 30")	300 1,500	LF		
105	Sanitary Sewer Main CIPP Liner (31"-36" 36")	300 1,000	LF		
106	Sanitary Sewer Main CIPP Liner (31"-36" 42")	200 1,000	LF		
107	Reinstatement of Service Laterals after Sewer Main Lining	1,000 2,000	EA		
108	Brim Type - CIPP Lateral Liner (4" , <40 LF)	50	EA		
109	Brim Type - CIPP Lateral Liner (4" , >40 LF)	50 100	EA LF		
110	Brim Type - CIPP Lateral Liner (6" , <40 LF)	5	EA		
111	Brim Type - CIPP Lateral Liner (6" , >40 LF)	50	EA LF		
112	FCLRL – CIPP Lateral Liner (4" , <40 LF)	80	EA		
113	FCLRL – CIPP Lateral Liner (4" , >40 LF)	80 100	EA LF		
114	FCLRL – CIPP Lateral Liner (6" , <40 LF)	10	EA		
115	FCLRL – CIPP Lateral Liner (6" , >40 LF)	10	EA LF		

OPTION YEAR TWO EST. TOTAL \$ _____

OPTION YEAR ONE EST. TOTAL \$ _____

BASIC YEAR \$ _____

ESTIMATED TOTAL ALL YEARS \$ _____

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. This Section specifies administrative and procedural requirements to define pay items and determine payable amounts, and includes but is not limited to:
 - 1. General Provisions
 - 2. Cash Allowances
 - 3. Work Not Paid for Separately
 - 4. Measurement for Payment
 - 5. Partial Payment for Stored Materials and Equipment

1.02 GENERAL PROVISIONS

- A. This specification includes standard descriptions for all bid items. This Contract's specific bid items are listed in the Bid Schedule.
- B. The total Contract Amount shall cover the Work required by the Contract Documents. All costs in connection with the successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid.
- C. If used, all estimated quantities stipulated in the Bid Schedule or other Contract Documents are approximate and are to be used only (a) for the purpose of comparing the bids submitted for the Work, and (b) as a basis for determining an initial Contract Amount. The actual amounts of Work completed and materials furnished under unit price items may differ from the estimated quantities. The County does not expressly or by implication represent that the actual quantities involved will correspond exactly to the quantities stated in the Bid Schedule; nor shall the Contractor plead misunderstanding or deception because of such estimate or quantities or of the character, location or other conditions pertaining to the Work. Payment to the Contractor will be made only for the actual quantities of work performed or material furnished in accordance with the Drawings and other Contract Documents, and it is understood that the quantities may be increased or decreased as provided in the General Conditions.

- D. If used, the unit prices listed in the Bid Schedule shall include all services, obligations, responsibilities, labor, materials, devices, equipment, royalties and license fees, supervision, temporary facilities, construction equipment, bonds, insurance, taxes, clean up, traffic control, control surveys, field offices, close out, overhead and profit and all connections, appurtenances and any other incidental items of any kind or nature, as are necessary to complete the Work in accordance with the Contract Documents.
- E. Except for mobilization/demobilization and project record documents, payment for Work will be based on the percent of completed work of each item in the Schedule of Values, including stored materials, as determined by the County. Progress of work in each item of the Schedule of Values will be determined separately by the County. However, the County will issue a single payment certificate for progress on the Contract.
- F. The Contractor agrees that it will make no claim for damages, anticipated profits, or otherwise because of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.
- G. Where payment by scale weight is specified under certain items, the Contractor shall provide suitable weighing equipment which shall be kept in accurate adjustment at all times and certified. The weighing of all material shall be performed by the Contractor in the presence and under the supervision of the County.
- H. All schedules included in the Contract Documents are given for convenience and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quantity of materials and equipment included in work to be done under this Contract.
- I. Where pipe fittings are noted on the Drawings, such notation is for the Contractor's convenience and does not relieve the Contractor from laying and jointing different or additional items where required.

1.03 WORK NOT PAID FOR SEPARATELY

- A. Delivery: Payment for equipment delivery, storage or freight shall be included in the pay items including their installation and no other separate payment will be made therefore.
- B. Bonds: Payment for bonds required by the Contract shall be included in the pay items for the Work covered by the required bonds and no separate payment will be made.
- C. Preparation of Site: Payment for preparation of site shall be included in pay items proposed for the various items of Work and no separate payment will be made therefore. Preparation of site includes setting up construction plant, offices, shops, storage areas, sanitary and other facilities required by the specifications or state law or regulations; providing access to the site; obtaining necessary permits and licenses; payments of fees; general protection, temporary heat and utilities including electrical power; providing shop and working drawings, certificates and schedules; providing

required insurance; cleaning up; and all other work regardless of its nature which may not be specifically referred to in a Bid Item but is necessary for the complete construction of the project set forth by the Contract.

D. Permitting & Permit Fees.

E. The County reserves the right to delete any item included in the Schedule of Values and decrease the Contract Price by the scheduled amount for the item deleted.

1.04 MEASUREMENT FOR PAYMENT

A. Methods of Measurement - Generally:

1. Units of measurement shall be defined in general terms as follows:

- a. Linear Feet (LF)
- b. Square Feet (SF)
- c. Square Yards (SY)
- d. Cubic Yards (CY)
- e. Each (EA)
- f. Sacks (SK)
- g. Lump Sum (LS)
- h. Hourly Rate (HR)
- i. Gallon (GAL)

2. Unit Price Contracts/Items:

- a. Linear Feet (LF) shall be measured along the horizontal length of the centerline of the installed material, unless otherwise specified. Pipe shall be measured along the length of the completed pipeline, regardless of the type of joint required, without deduction for the length of valves or fittings. Pipe included within the limits of lump sum items will not be measured.
- b. Square Feet (SF), Square Yards (SY), Cubic Yards (CY), Each (EA) and Sacks (SK) shall be measured as the amount of the unit of measure installed and compacted within the limits specified and shown in the Specifications and Drawings. Slope angles and elevations shall be measured using land-surveying equipment. Contractor shall provide supporting documentation (i.e. drawings, delivery tickets, invoices, survey calculations, etc.) to verify actual installed quantities.

B. Lump Sum Contracts/Items - Generally:

1. Quantities provided in the Schedule of Values are for the purpose of estimating the completion status for progress payments. Payment will be made for each individual item on a percentage of completion basis as estimated by the Contractor and approved by the County.
2. Adjustments to costs provided in the accepted Schedule of Values may be made only by Change Order.
3. The County reserves the right to delete any item included in the Schedule of Values and decrease the Contract Price by the scheduled amount for the item deleted.

1.05 MEASUREMENT AND PAYMENT ITEMS

Only those bid items included in the Bid Schedule are applicable for this Contract. All of the subsections have bid item measurement and payment descriptions. Several bid items in the Project Bid Schedule may be described with the same bid item measurement and payment description in Table A, "Measurement and Payment Items". The bid items in the Project Bid Schedule are related to the Section 01025 measurement and payment items as follows:

1. All of the bid items in the Project Bid Schedule have 8 numerical digits.
2. Table A, "Measurement and Payment Items" for each of the bid items there are five numerical digits followed by ".xxx".
3. The first 5 numerical digits of the bid item in the Project Bid Schedule designate the measurement and payment item found in Table A, "Measurement and Payment Items."

Table A

BID ITEM	Orange County Utilities MEASUREMENT AND PAYMENT ITEMS <small>Pg 1</small>
	General
<p align="center">1 40 78</p>	<p>EMERGENCY Mobilization, Demobilization, Bonds, and Permits</p> <p>a. Measurement: Emergency Mobilization and Demobilization shall be applicable only when an Emergency Order is requested from the County as specified in Section 01001 General Work Requirements. Measurement of various items for Emergency Mobilization and Demobilization shall not be made for payment and all items shall be included in the lump sum price.</p> <p>b. Payment: Payment will be made at the Contract unit price bid for each County authorized Emergency Mobilization and Demobilization successfully executed. Payment of the applicable unit price for the item shall be full compensation for the Work consisting of the preparatory Work and operations in mobilizing for beginning Work on the Contract, including, but not limited to, movement of those personnel, equipment, supplies and incidentals to the project site, preparation of submittals, and for the establishment of temporary offices and buildings, safety equipment and first aid supplies, project signs, field surveys, sanitary and other facilities required by these specifications, and State and local laws and regulations. The costs of General Requirements (Section 01001), bonds, permits, and any required insurance, project signs, and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included. This Work also consist of the general project management of the Work including, but not limited to, field supervision and office management, as well as other incidental cost for management of the Work during the duration of the Contract. This Work also includes maintenance of the field offices for the duration of the Contract.</p> <p>Payment of the applicable unit price for this item shall also include demobilization or the operations normally involved in ending Work on the project including, but not limited to, termination and removal of temporary utility service and field offices; demolition and removal of temporary structures and facilities; restoration of Contractor storage areas; disposal of trash and rubbish, and any other post-construction work necessary for the proper conclusion of the Work.</p>
<p align="center">2 40 78</p>	<p>Preconstruction Audio-Video Documentation</p> <p>a. Measurement: Measurement shall be based on the satisfactory submittal of a comprehensive pre-construction video in accordance with the County requirements and specifications (Section 01101 and Section 01380).</p> <p>b. Payment: Payment of the applicable Contract linear foot price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to create a comprehensive pre-construction video in accordance with the County requirements and specification.</p>
<p align="center">2</p>	<p>Indemnification</p> <p>Payment: In consideration of the Contractor's Indemnity Agreement as set out</p>

	<p>in the Contract Documents, the County specifically agrees to give the Contractor a maximum of \$100.00 and other good and valuable consideration, receipt of which is acknowledged upon signing of the Agreement.</p>
<p>3 41 79</p>	<p>Complex Maintenance of Traffic</p> <p>a. Measurement: Measurement shall be based on satisfactory execution of Complex Maintenance of Traffic (Complex MOT) as defined in Section 01570 and in accordance with County requirements and Florida Department of Transportation (FDOT) standards.</p> <p>b. Payment: Payment of the applicable Contract lump sum price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to maintain public roadway and pedestrian traffic including flag men, uniformed police officers, barricades, warning lights/flashers, and safety ropes. Also included is furnishing, installing and maintaining a Traffic Control Plan, control and safety devices, control of dust, temporary crossing structures over trenches, any necessary detour facilities, and other special requirements for the safe and expeditious movements of traffic.</p>
<p>4 42 80</p>	<p>Traffic Control Officer/Off Duty Police Officer</p> <p>a. Measurement: Measurement shall be based on satisfactory implementation of a Traffic Control Officer in accordance with FDOT's Standard Specifications for Road and Bridge Construction Section 102-7 and/or county requirements.</p> <p>b. Payment: Payment of the applicable Contract hourly rate price as stated in the proposal will be full compensation for furnishing all labor, materials, and equipment necessary to provide and maintain communication with the public and to direct and maintain traffic.</p>
	<p>Install/Replace Fence</p>
<p>5 43 81</p>	<p>Chain Link Fence Install/Replacement</p> <p>a. Measurement: Chain Link Fence Install/Replacement shall be measured in actual linear feet removed and replaced as measured along the centerline of the fence within the construction excavation. All additional fencing damaged shall be replaced by the Contractor at his own expense.</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Chain Link Fence Install/Replacement and shall include all labor, materials, and equipment to remove and properly dispose of existing chain link fence and concrete and install new chain link fence including replacement fence, gate, support posts and concrete for a complete installation.</p>
<p>6 44 82</p>	<p>Wood Fence Install/Replacement</p> <p>a. Measurement: Wood Fence Install/Replacement shall be measured in actual linear feet removed and replaced as measured along the centerline of the fence within the construction excavation. All additional fencing damaged shall be replaced by the Contractor at his own expense.</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Wood Fence Install/Replacement and shall include all labor, materials, and equipment to remove and properly dispose of existing</p>

	wood fence and concrete and install new wood fence including replacement fence, gate, support posts and concrete for a complete installation.
	Bypass Pumping
7,8 45,46 83,84	<p>Bypass Pumping Sanitary Sewer Mains (diameters 13" or larger)</p> <p>a. Measurement: Measurement for this item shall be based on the complete bypass operation and contingency plan in accordance with the County requirements and specifications.</p> <p>b. Payment: Payment of the applicable Contract lump sum price shall be full compensation for furnishing all labor, materials, equipment as necessary for bypass operations and contingency plan as required, including pumps, piping, and hoses; tankers; temporary bypass and service piping; hauling and proper disposal of wastewater; plugging; gasoline/diesel fuel; protection of existing facilities, utilities, and property; signs and barriers; Standard MOT, permits, restoration and all incidental work required to satisfactorily complete this item.</p>
9 47 85	<p>Bypass Pump Station (>1,500 gpm)</p> <p>a. Measurement: Measurement for this item shall be based on the County authorized complete bypass operation and contingency plan in accordance with the County requirements and specifications.</p> <p>b. Payment: Payment of the applicable Contract lump sum price shall be full compensation for furnishing all labor, materials, equipment as necessary for bypass operations and contingency plan as required, including pumps, piping, and hoses; tankers; temporary bypass and service piping; hauling and proper disposal of wastewater; plugging; gasoline/diesel fuel; protection of existing facilities, utilities, and property; ; signs and barriers; Standard MOT, permits, restoration and all incidental work required to satisfactorily complete this item.</p>
10 48 86	<p>Extra Tankers</p> <p>a. Measurement: Measurement for this item shall be based on the complete bypass operation and contingency plan in accordance with the County requirements and specifications. Measurement for Extra Tankers shall be made per actual number of tankers used above the one tanker included in other bid items.</p> <p>b. Payment: Payment of the applicable Contract unit price shall be full compensation for each additional tanker required and for furnishing all labor, materials, equipment as necessary for bypass operations and contingency plan as required, including pumps, piping, and hoses; tankers; temporary bypass and service piping; hauling and proper disposal of wastewater; plugging; gasoline/diesel fuel; protection of existing facilities, utilities, and property; Standard MOT; signs and barriers; and all incidental work required to satisfactorily complete this item.</p>
	Cleaning Sanitary Sewers
11	<p>Cleaning Sanitary Sewer Laterals</p> <p>a. Measurement: Measurement for Cleaning Sanitary Sewer Laterals shall be made per actual number of sanitary sewer laterals satisfactorily cleaned with a cleaning nozzle, regardless of number of passes required, in accordance with</p>

<p>49 87</p>	<p>County requirements and specifications (Section 02761).</p> <p>b. Payment: Payment for Cleaning Sanitary Sewer Laterals shall be made based on the authorized quantity at the unit price indicated in the Bid. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary to satisfactorily clean a sanitary sewer lateral to an acceptable condition for CCTV inspection, regardless of number of passes required, with a cleaning nozzle including water, hoses, and nozzles, protection of property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
<p>12-14 50-52 88-90</p>	<p>Cleaning Sanitary Sewer Mains (various diameters)</p> <p>a. Measurement: Cleaning Sanitary Sewer Mains shall be measured in actual linear feet of sanitary sewer main satisfactorily cleaned with a cleaning nozzle, regardless of number of passes required, as measured along the length of the centerline of sewer, which cleaning was performed, between manholes, measured to the nearest foot from inside wall of the manhole to the inside wall of the other manhole and not including the manhole chamber, in accordance with County requirements and specifications (Section 02761).</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Cleaning Sanitary Sewer Mains and shall include all labor, materials, and equipment necessary to satisfactorily clean a sanitary sewer main to an acceptable condition for CCTV inspection and ready for any and all repairs with a cleaning nozzle, regardless of number of passes required, including water, hoses, and nozzles, protection of property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
<p>15 53 91</p>	<p>Mechanical Root or Grease Removal</p> <p>a. Measurement: Mechanical Root or Grease Removal shall require written County approval before this bid item may be used. Mechanical Root or Grease Removal shall be measured in actual linear feet of sanitary sewer mains satisfactorily cleaned by removing roots from the interior of the main and de-scaling the main. Measurement shall be along the length of the centerline of sewer, which cleaning was performed, between manholes, measured to the nearest foot from inside wall of the manhole to the inside wall of the other manhole and not including the manhole chamber, in accordance with County requirements and specifications (Section 02761).</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Mechanical Root or Grease Removal and shall include all labor, materials, and equipment necessary to satisfactorily remove roots from the interior of the main and de-greasing the main including water, hoses, and nozzles; mechanical methods of root removal and grease removal, all herbicides or chemical treatment, protection of property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
<p>16</p>	<p>Mechanical Tuberculation/Mineral Deposit Removal</p> <p>a. Measurement: Mechanical Tuberculation/Mineral Deposit Removal shall require written County approval before this bid item may be used. Mechanical</p>

54 92	<p>Tuberculation/Mineral Deposit Removal shall be measured in actual linear feet of sanitary sewer mains satisfactorily cleaned by mechanically removing tuberculation/mineral deposit from the interior of the main and de-scaling the main. Measurement shall be along the length of the centerline of sewer, which cleaning was performed, between manholes, measured to the nearest foot from inside wall of the manhole to the inside wall of the other manhole and not including the manhole chamber, in accordance with County requirements and specifications (Section 02761)</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Mechanical Tuberculation/Mineral Deposit Removal and shall include all labor, materials, and equipment necessary to satisfactorily remove tuberculation/mineral deposits from the interior of the main including water, hoses, and nozzles, protection of property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
CCTV Sanitary Sewers	
17-19 55-57 93-95	<p>CCTV Inspection Sanitary Sewer Mains (various diameters)</p> <p>a. Measurement: CCTV Inspection Sanitary Sewer shall be measured in actual linear feet of satisfactory visual inspection completed utilizing closed-circuit television in accordance with the County requirements and specifications (Section 02762). CCTV inspection shall be measured along the length of the centerline of the inspected sanitary sewer. These bid items do not apply to CIPP lining pre/post CCTV inspections.</p> <p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for CCTV Inspection Sanitary Sewer and shall include, but is not necessarily limited to, all labor, materials, and equipment necessary for a complete CCTV visual inspection of the sanitary sewer and subsequent report including qualified personnel, DVD, and all incidentals related to sewer main inspection, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
20 58 96	<p>CCTV Lateral Inspection from Main</p> <p>a. Measurement: Measurement for CCTV Lateral Inspection from Main shall be made per actual number of sanitary sewer laterals satisfactorily visually inspected utilizing closed-circuit television panned and tilted from the main in accordance with the County requirements and specifications (Section 02763). This bid item does not apply to CIPP lining pre/post CCTV inspections.</p> <p>b. Payment: Payment for CCTV Lateral Inspection from Main shall be made based on the authorized quantity at the unit price indicated in the Bid. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary for a complete CCTV visual inspection of the sanitary sewer lateral from the main and subsequent report including qualified personnel, DVD, and all incidentals related to sewer lateral inspection, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
21	<p>CCTV Lateral Inspection from Cleanout</p> <p>a. Measurement: Measurement for CCTV Lateral Inspection from Cleanout shall</p>

59	<p>be made per actual number of sanitary sewer laterals satisfactorily visually inspected utilizing closed-circuit television in accordance with the County requirements and specifications (Section 02763). This bid item does not apply to CIPP lining pre/post CCTV inspections.</p>
97	<p>b. Payment: Payment for CCTV Lateral Inspection from Main shall be made based on the authorized quantity at the unit price indicated in the Bid. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary for a complete CCTV visual inspection of the sanitary sewer lateral from the cleanout and subsequent report including qualified personnel, DVD, and all incidentals related to sewer lateral inspection, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
Sealing and Grouting	
22	<p>Point Down Chemical Sealing</p> <p>a. Measurement: Measurement for Point Down Chemical Sealing shall be made per actual number of point down chemical sealing repairs satisfactorily executed.</p>
60	<p>b. Payment: Payment for Point Down Chemical Sealing shall be made based on the authorized quantity at the unit price indicated in the Bid. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary to satisfactorily perform point down chemical sealing repairs, including property restoration and clean-up, reinstatement of flow after point down chemical sealing, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
98	
23	<p>Internal Pipe Joint Sealing (packer method)</p> <p>a. Measurement: Measurement for Internal Pipe Joint Sealing shall be made per actual number of internal pipe joint sealing satisfactorily executed.</p>
61	<p>b. Payment: Payment for Internal Pipe Joint Sealing shall be made based on the authorized quantity at the unit price indicated in the Bid. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary to seal pipe joints utilizing the packer method, including reinstatement of flow after sealing, leak and pressure testing, property restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
99	
Cured-In-Place Pipe (CIPP) Liner	
24-30	<p>Sanitary Sewer Main CIPP Liner (various diameters)</p> <p>a. Measurement: Sanitary Sewer Main CIPP Liner shall be measured in actual linear feet of furnished and satisfactorily installed cured-in-place pipe liner in the sanitary sewer main from center of manhole to center of manhole, regardless of depth, in accordance with the County requirements and specifications (Section 02771). CIPP liner installation shall be measured along the length of the centerline of the rehabilitated sanitary sewer.</p>
62-68	
100-106	<p>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the Bid Schedule for Sanitary Sewer Main CIPP Liner and shall</p>

	include, but is not necessarily limited to, all labor, materials, and equipment necessary for a complete CIPP liner installation including pre and post CCTV inspection, sanitary sewer cleaning, qualified personnel, providing and processing of liner material, service connection and manhole/wall interface sealing, all costs associated with providing cured CIPP samples for testing, blocking or plugging of incoming lines, grouting, leakage testing, reinstate service laterals, protection of existing utilities, structures, and property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.
31 69 107	<p>Reinstatement of Service Laterals after Sewer Main Lining</p> <p>a. Measurement: Reinstatement of Service Laterals after Sewer Main Lining shall be made per actual number of sanitary service laterals satisfactorily reinstated.</p> <p>b. Payment: Payment will be made based on the authorized quantity of sanitary service laterals reinstated at the unit price indicated in the Bid Schedule and shall include all labor, materials, and equipment necessary to reinstate sanitary service laterals, including removal of debris, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
32,34 70,72 108,110	<p>Brim Type – CIPP Lateral Liner (various sizes, <= 40 LF)</p> <p>a. Measurement: Measurement for Brim Type – CIPP Lateral Liner - shall be made per actual number of satisfactorily installed brim type cured-in-place pipe liners in the existing sanitary sewer laterals measured from the sewer main to the property clean-out, regardless of depth, in accordance with the County requirement, drawings, and specifications (Section 02772).</p> <p>b. Payment: Payment for Brim Type - CIPP Lateral Liner will be made at the contract unit price indicated in the Bid Schedule for each Brim Type CIPP Lateral Liner satisfactorily installed and shall include, but is not necessarily limited to, all labor, materials and equipment necessary to complete lateral liner installation including pre and post CCTV inspection, sewer lateral cleaning, excavation, sheeting, shoring and bracing, dewatering, backfill, and compaction, qualified personnel, providing and processing of liner material, blocking or plugging of lateral, grouting, leakage testing, protection of existing utilities, structures, and property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
32,34 71,73 109,111	<p>Brim Type – CIPP Lateral Liner (various sizes, > 40 LF)</p> <p>a. Measurement: This bid item is an additive line item for brim type CIPP lateral liners in excess of 40 linear feet. Measurement for Brim Type – CIPP Lateral Liner - shall be made per actual linear feet of satisfactorily installed brim type cured-in-place pipe liners in the existing sanitary sewer laterals in excess of 40 linear feet; measured from 40 linear feet from sewer main to the property clean-out, regardless of depth, in accordance with the County requirement, drawings, and specifications (Section 02772).</p> <p>b. Payment: Payment for Brim Type - CIPP Lateral Liner will be made at the contract unit price indicated in the Bid Schedule for linear feet in excess of 40</p>

	<p>linear feet of Brim Type CIPP Lateral Liner satisfactorily installed and shall include, but is not necessarily limited to, all labor, materials and equipment necessary to complete lateral liner installation including pre and post CCTV inspection, sewer lateral cleaning, excavation, sheeting, shoring and bracing, dewatering, backfill, and compaction, qualified personnel, providing and processing of liner material, blocking or plugging of lateral, grouting, leakage testing, protection of existing utilities, structures, and property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
<p>36,38 74,76 112,114</p>	<p>FCLRL - CIPP Lateral Liner (various sizes, <= 40 LF)</p> <p>a. Measurement: Measurement for Full Circumference Lateral Reinforced Liner (FCLRL) - CIPP Lateral Liner shall be made per actual number of satisfactorily installed cured-in-place liners in the existing sanitary sewer laterals measured from the sewer main to the property clean-out, regardless of depth, in accordance with the County requirement, drawings, and specifications (Section 02772).</p> <p>b. Payment: Payment for Full Circumference Lateral Reinforced Liner (FCLRL) - CIPP Lateral Liner shall be made based on the authorized quantity at the unit price indicated in the Bid Schedule for each FCLRL – CIPP lateral liner satisfactorily install. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary to satisfactorily install a CIPP lateral liner system including pre- and post-CCTV inspection, sewer lateral cleaning, excavation, sheeting, shoring and bracing, dewatering, backfill, and compaction, qualified personnel, providing and processing of liner material, blocking or plugging of lateral, grouting, leakage testing, protection of existing utilities, structures, and property, restoration and clean-up, Standard MOT, flow control, plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.</p>
<p>37,39 75,77 113,115</p>	<p>FCLRL - CIPP Lateral Liner (various sizes, > 40 LF)</p> <p>a. Measurement: This bid item is an additive line item for FCLRL - CIPP lateral liners in excess of 40 linear feet. Measurement for Full Circumference Lateral Reinforced Liner (FCLRL) - CIPP Lateral Liner shall be made per actual number of satisfactorily installed cured-in-place liners in the existing sanitary sewer laterals in excess of 40 linear feet; measured from 40 linear feet from sewer main to the property clean-out, regardless of depth, in accordance with the County requirement, drawings, and specifications (Section 02772).</p> <p>b. Payment: Payment for Full Circumference Lateral Reinforced Liner (FCLRL) - CIPP Lateral Liner shall be made at the contract unit price indicated in the Bid Schedule for linear feet in excess of 40 linear feet of FCLRL – CIPP lateral liner satisfactorily installed. Payment of the applicable Contract unit price shall be full compensation for furnishing all labor, materials and equipment necessary to satisfactorily install a CIPP lateral liner system including pre- and post-CCTV inspection, sewer lateral cleaning, excavation, sheeting, shoring and bracing, dewatering, backfill, and compaction, qualified personnel, providing and processing of liner material, blocking or plugging of lateral, grouting, leakage testing, protection of existing utilities, structures, and property, restoration and clean-up, Standard MOT, flow control,</p>

	plugging, one tanker, bypass pumping (12" or smaller), permits and restoration.
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PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION