



BPC Central Small Diameter Package 1
Solicitation Number: CO-00293-FF
Job No.: 18-4532

ADDENDUM 02
August 21, 2019

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

RESPONSES TO QUESTIONS

1. Are pipeline inspection videos available for the bidders to view on this project? If so, please provide the applicable disclaimer form so that we may obtain the videos.

Answer: Please see Clarifications Item No. 1 included with this Addendum.

2. The Special Provisions to Technical Specifications section J requires the host pipe to have an ovality of 10% in the CIPP thickness calculations. Please explain what existing host pipe conditions have been observed to require such a severe ovality to be applied to all the pipe on the project.

Answer: Please see Changes to the Specifications Item No. 3. The special provisions to the SAWS standard specification 901 requiring a 10% ovality is deleted, thus reverting the ovality requirement to the original standard of 2%.

3. The table of Estimated Quantities for Site 7 on drawing sheet 26 shows that 15 LF of 8" PVC (spec no. 848) will be installed at this site, but this work does not appear to be shown on the drawing. Please clarify where this 8" PVC will be installed.

Answer: The 15 LF of 8" PVC is intended for service reconnection near the existing 8" line at Sta 13+12.

4. There is no table of Estimated Quantities included on drawing sheet 54 for Site 17 or drawing sheet 79 for Site 23. Please provide the table of Estimated Quantities for these sites.

Answer: These tables are included in the bid set. On Sheet 54, the table is on the bottom left corner. On Sheet 79, the table is on the upper left corner. Please see Changes to the Plans Items No. 7 and 9.

5. The specification book does not contain any ROE agreements, but the specs indicate that ROE agreements are in process for sites 22, 23, & 24. Does this mean that these are the only sites where SAWS anticipates a ROE agreement will be needed?

Answer: Please see Changes to the Specifications Item No. 2. SAWS anticipates a ROE agreement at Sites 1, 22, 23, and 24.

CHANGES TO THE SPECIFICATIONS

1. Bid Proposal- Remove Bid Proposal and replace with the revised Bid Proposal attached to this Addendum. Updated Bid Proposal Estimated Quantity Table. Please see Clarifications Item No. 2 included with this Addendum. This version of the bid proposal should be used by bidders when submitting a bid for this project.
2. Special Conditions- Remove Special Conditions and replace with the revised Special Conditions attached to this Addendum.
 - The Project Milestones were updated to identify the Project Sites that have ancillary requirements for TXDOT permits or Right of Entry (ROE) agreements.
 - Removed and replaced "The Project Sites within TXDOT ROW must be completed within the first 6 months." with the following "Contractor to notify SAWS 45 days in advance of commencing work; Contractor may not proceed with work within TXDOT ROW until a TXDOT permit has been obtained."
3. Special Provisions to the Technical Specifications- Remove SPTS-7 and replace with the revised page SPTS-7 attached to this Addendum. Deleted ovality special provision in section J regarding Specification 901.4.3.2.3.

CHANGES TO THE PLANS

2. Sheet 4- Remove Sheet 4 and replace with revised Sheet 4 attached to this Addendum.
 - Added COSA TCI Floodplain Notes.
3. Sheet 5- Remove Sheet 5 and replace with revised Sheet 5 attached to this Addendum.
 - Updated Summary of Quantities.
4. Sheet 15- Remove Sheet 15 and replace with revised Sheet 15 attached to this Addendum.
 - Updated Alignment based on Test Hole Information.
 - Updated Estimated Quantities Table- Spec No. 866: Sewer Main Television Inspection- 8" through 15" from 379 LF to 380 LF.
 - Updated Estimated Quantities- Spec No. 901: Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe- 8" through 15" from 379 LF to 380 LF.
5. Sheet 32- Remove Sheet 32 and replace with revised Sheet 32 attached to this Addendum.
 - Edited visibility of curb to curb dimension (29'-8") of Rivas St. as shown between Sta 13+00 and 13+59. No substantial changes to proposed improvements and/or quantities.
6. Sheet 43- Remove Sheet 43 and replace with revised Sheet 43 attached to this Addendum.
 - Added FEMA Floodplain and updated legend.
 - No substantial changes to proposed improvements and/or quantities.
7. Sheet 48- Remove Sheet 48 and replace with revised Sheet 48 attached to this Addendum.
 - Updated Alignment based on Test Hole Information.
 - Updated stations and services with relocated alignment.
8. Sheet 54- Remove Sheet 54 and replace with revised Sheet 54 attached to this Addendum.
 - Updated Estimated Quantities Table- Added Bypass pumping line item to quantity table.
9. Sheet 56- Remove Sheet 56 and replace with revised Sheet 56 attached to this Addendum.
 - Updated Alignment based on Test Hole Information.
 - Updated stations and callouts based on relocated alignments.
 - Updated Estimated Quantities Table- Spec No. 866: Sewer Main Television Inspection- 8" through 15" from 123 LF to 125 LF.
 - Updated Estimated Quantities- Spec No. 901: Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe- 8" through 15" from 123 LF to 125 LF.
10. Sheet 59- Remove Sheet 59 and replace with revised Sheet 59 attached to this Addendum.
 - Updated Alignment based on Test Hole Information.
 - Updated stations, services, and callouts based on relocated alignments.
 - Updated Pavement restoration limits from 181 sy to 320 sy.
 - Updated Estimated Quantities Table- Spec No. 205.4: Hot Mix Asphaltic Concrete Pavement Type D (2" Compacted Depth) (COSA Spec) and 208.1: Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth) from 181 sy to 320 sy.
11. Sheet 79- Remove Sheet 59 and replace with revised Sheet 59 attached to this Addendum.
 - Updated visibility of Estimated Quantities Table.

CLARIFICATIONS

1. Videos are available for download. To access the videos the bidder must complete and submit the attached release form, the password required to view the videos will be provided on receipt of this form. Please submit the form to Stella Monzello, Contract Administrator, via email to: stella.monzello@saws.org or by fax to (210) 233-4290. NOTE: These videos are provided for information purposes only, and are not included in the bid documents. The deterioration is an ongoing process, so the condition at the time of construction may be substantially different from that shown in the videos.
2. The attached Bid Proposal shall be used when submitting bid.
3. Sheet 16, 27, 30, 41, and 74- Add "Suggested" to all bypass titles. It is intended that these suggested bypass plans are included in the bid set to indicate feasibility; responsibility for developing and implementing a final bypass plan, where necessary, remains with the Contractor.
4. Sheet 72- Add TXDOT Traffic Control line item as shown in the table below.

Sheet 72- Site 21:

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
103	REMOVE CONCRETE CURB (COSA SPEC)	LF	30
103	REMOVE SIDEWALK & DRIVEWAY (COSA SPEC)	SF	60
202	PRIME COAT (COSA SPEC)	GAL	259
203	TACK COAT (COSA SPEC)	GAL	104
205	HOT MIX ASPHALTIC PAVEMENT-TYPE D (2")(COSA SPEC)	SY	1036
206	ASPHALT TREATED BASE (10" COMPACTED DEPTH)(COSA SPEC)	SY	200
208.3	SALVAGING, HAULING, & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (2" DEPTH)(COSA SPEC)	SY	1036
500	CONCRETE CURB, GUTTER AND CONCRETE CURB AND GUTTER (COSA SPEC)	LF	30
502	CONCRETE SIDEWALK (COSA SPEC)	SY	4
502	TXDOT BARRICADES, SIGNS, AND TRAFFIC HANDLIING	LS	1
530.1	BARRICADES, SIGNS, AND TRAFFIC HANDLING	LS	1
550	TRENCH EXCAV. SAFETY PROTECTION	LF	300
848	8" PVC SDR-26 (2241) SEWER LINE (6'-14')	LF	300
851	MANHOLE ADJUSTMENT	EA	1
854	SANITARY SEWER LATERALS, (SDR 26-2241, 160 PSI)	LF	150
854	TWO-WAY SANITARY SEWER CLEAN-OUT	EA	6
864	BY-PASS PUMPING	EA	1
866	SEWER MAIN TELEVISION INSPECTION - 8" THROUGH 15"	LF	300
910	REHABILITATE EXISTING 4' DIAMETER MANHOLE	VF	9

END OF ADDENDUM

This Addendum, including these four (4) pages, is thirty-one (31) pages with attachments in its entirety.

- Attachments:
- A- CCTV Video Release Form
 - B- Bid Proposal
 - C- Special Conditions
 - D- SPTS-7
 - E- Plan Sheets 4, 5, 32, 43, 48, 54, 56, 59, and 79.



Ian P. Toohey, P.E.
Garver

ATTACHMENT A
CCTV VIDEO RELEASE FORM

DISCLAIMER

The video clips being provided through the FTP site are for the BPC Central Small Diameter Package 1 project. Since these videos have been compiled over a period of time, many of the images may be outdated and no longer accurate. The video clips are being made available for the sole purpose of providing historical background information that may assist Respondents in preparing their response to this solicitation. As planning for any project evolves, important aspects often change. This project is no exception. SAWS makes no representations about the accuracy of this information and disclaims any responsibility for its use.

The FTP details will be provided upon return of this form.

AGREED TO:

Printed Name

Signature

Typed/Printed Firm Name

Date: _____

ATTACHMENT B
BID PROPOSAL

BID PROPOSAL

PROPOSAL OF _____, a corporation
a partnership consisting of _____
an individual doing business as _____

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitation to Bidders, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the project as specified, in accordance with the Plans and Specifications for the following prices in the bid proposal to wit:

PLEASE SEE ATTACHED LIST OF BID ITEMS.

BIDDER'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL ADDRESS

The Contractor herein acknowledges receipt of the following:
Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **365** calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Bid Proposal which are included on the following pages.

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
1	103	Remove Concrete Curb, (COSA Spec)	LF	510	\$	\$
2	103	Remove Sidewalk & Driveway, (COSA Spec)	SF	1340	\$	\$
3	202	Prime Coat, (COSA Spec)	GAL	1101	\$	\$
4	203	Tack Coat, (COSA Spec)	GAL	471	\$	\$
5	205	Hot Mix Asphaltic Pavement- Type D (2"), (COSA Spec)	SY	4823	\$	\$
6	206	Asphalt Treated Base (10" Compacted Depth), (COSA Spec)	SY	968	\$	\$
7	208	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth), (COSA Spec)	SY	4811	\$	\$
8	500	Concrete Curb and Gutter, (COSA Spec)	LF	500	\$	\$
9	502	Concrete Sidewalk, (COSA Spec)	SY	184	\$	\$
10	503	Portland Cement Concrete Driveway, (COSA Spec)	SY	83	\$	\$
11	530.1	Barricades, Signs, and Traffic Handling, Site 1, (COSA Spec)	LS	1	\$	\$
12	530.1	Barricades, Signs, and Traffic Handling, Site 2, (COSA Spec)	LS	1	\$	\$
13	530.1	Barricades, Signs, and Traffic Handling, Site 4, (COSA Spec)	LS	1	\$	\$
14	530.1	Barricades, Signs, and Traffic Handling, Site 5, (COSA Spec)	LS	1	\$	\$
15	530.1	Barricades, Signs, and Traffic Handling, Site 7, (COSA Spec)	LS	1	\$	\$
16	530.1	Barricades, Signs, and Traffic Handling, Site 8, (COSA Spec)	LS	1	\$	\$
17	530.1	Barricades, Signs, and Traffic Handling, Site 9, (COSA Spec)	LS	1	\$	\$
18	530.1	Barricades, Signs, and Traffic Handling, Site 12, (COSA Spec)	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
19	530.1	Barricades, Signs, and Traffic Handling, Site 14, (COSA Spec)	LS	1	\$	\$
20	530.1	Barricades, Signs, and Traffic Handling, Site 15, (COSA Spec)	LS	1	\$	\$
21	530.1	Barricades, Signs, and Traffic Handling, Site 16, (COSA Spec)	LS	1	\$	\$
22	530.1	Barricades, Signs, and Traffic Handling, Site 18, (COSA Spec)	LS	1	\$	\$
23	530.1	Barricades, Signs, and Traffic Handling, Site 19, (COSA Spec)	LS	1	\$	\$
24	530.1	Barricades, Signs, and Traffic Handling, Site 20, (COSA Spec)	LS	1	\$	\$
25	530.1	Barricades, Signs, and Traffic Handling, Site 21, (COSA Spec)	LS	1	\$	\$
26	530.1	Barricades, Signs, and Traffic Handling, Site 22, (COSA Spec)	LS	1	\$	\$
27	530.1	Barricades, Signs, and Traffic Handling, Site 24, (COSA Spec)	LS	1	\$	\$
28	550	Trench, Excavation, Safety Protection	LF	1269	\$	\$
29	848	18" PVC SDR- 26 Sewer Line (0'-6')	LF	250	\$	\$
30	848	18" PVC SDR- 26 Sewer Line (6'-14')	LF	100	\$	\$
31	848	8" PVC SDR- 26 Sewer Line (6'-14')	LF	417	\$	\$
32	848	8" PVC SDR-26 Sewer Line (0'-6')	LF	517	\$	\$
33	851	Manhole Adjustment	EA	38	\$	\$
34	852	Extra Depth Manholes (>6')	VF	5	\$	\$
35	852	Install Sanitary Sewer Manhole (0'-6')	EA	7	\$	\$
36	854	Two-Way Sanitary Sewer Clean-Out	EA	27	\$	\$
37	854	Sanitary Sewer Laterals (SDR 26-2241, 160 PSI)	LF	555	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
38	855	Reconstruction of Existing Manhole	EA	1	\$	\$
39	858	Concrete Encasement, Cradles, Saddles and Collars	CY	2		
40	862	Abandonment of Sanitary Sewer Main and Manholes	LF	430	\$	\$
41	866	Sewer Main Television Inspection - 15" through 24"	LF	1562	\$	\$
42	866	Sewer Main Television Inspection - 8" through 15"	LF	8300	\$	\$
43	901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 24"	LF	601	\$	\$
44	901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 12"	LF	392	\$	\$
45	901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 10"	LF	1218	\$	\$
46	901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	5341	\$	\$
47	910	Rehabilitate Existing 4-foot Diameter Manhole	VF	337	\$	\$
48	1103	Point Repair (0'-9')	EA	29	\$	\$
49	1103	Point Repair, Additional Length >9'	LF	53	\$	\$
50	1103	Obstruction Removal - Remote Device	EA	12	\$	\$
51	1109	Lateral Connection within Point Repair	EA	17	\$	\$
52	1109	Excavated Lateral Connections	EA	3	\$	\$
53	1109	Service Reconnections - Open Cut	EA	12	\$	\$
54	1109	Service Reconnections - Remote Cutting Connection	EA	163	\$	\$
55	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 1	LS	1	\$	\$
56	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 2	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
57	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 4	LS	1	\$	\$
58	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 5	LS	1	\$	\$
59	864-S1	Bypass Pumping Small Diameter (8" to 15"), Site 7	LS	1	\$	\$
60	864-S2	Bypass Pumping Large Diameter, Site 7	LS	1	\$	\$
61	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 9	LS	1	\$	\$
62	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 10	LS	1	\$	\$
63	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 11	LS	1	\$	\$
64	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 14	LS	1	\$	\$
65	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 16	LS	1	\$	\$
66	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 17	LS	1	\$	\$
67	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 20	LS	1	\$	\$
68	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 21	LS	1	\$	\$
69	864-S1	Bypass Pumping Small Diameter Sanitary Sewer- Site 22	LS	1	\$	\$
70	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 23	LS	1	\$	\$

ITEM NO	SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
71	864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 24	LS	1	\$	\$
72	502	Barricades, Signs, And Traffic Handling, Site 10, (TXDOT Spec)	LS	1	\$	\$
73	502	Barricades, Signs, And Traffic Handling, Site 11, (TXDOT Spec)	LS	1	\$	\$
74	502	Barricades, Signs, And Traffic Handling, Site 21, (TXDOT Spec)	LS	1	\$	\$
75	502	Barricades, Signs, And Traffic Handling, Site 22, (TXDOT Spec)	LS	1	\$	\$
76	502	Barricades, Signs, And Traffic Handling, Site 23, (TXDOT Spec)	LS	1	\$	\$
77	502	Barricades, Signs, And Traffic Handling, Site 24, (TXDOT Spec)	LS	1	\$	\$
78	530	Driveway, (TXDOT Spec)	SY	164	\$	\$
79	531	Sidewalk, (TXDOT Spec)	SY	4.5	\$	\$
SUBTOTAL (ITEMS 1-79)				\$		
80	MOBILIZATION AND DEMOBILIZATION, MAX 10% OF LINE ITEMS 1-79			L.S.	1	\$
81	PREPARING ROW, MAX 5% OF LINE ITEMS 1-79			L.S.	1	\$

Mobilization and Prep of ROW shall be limited to the maximum percentage shown. **If the percentage exceeds the allowable maximum stated for mobilization and or preparation of ROW, SAWS reserves the right to cap the amount at percentages shown and adjust the extensions of the bid items accordingly.**

TOTAL BID PRICE (TO INCLUDE LINE ITEMS 1-79 AND 80-81)	\$
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ATTACHMENT C
SPECIAL CONDITIONS

Special Conditions

PROJECT LOCATIONS COMPLETION

This project consists of multiple separate project sites where work is to be performed or “project site”. For each project site, substantial completion will be evaluated separately. After substantial completion has been achieved for a Project Site, final completion must be completed at that same Project Site within 30 days, including completion of all necessary restoration work and approval of the final punch list by SAWS.

PERFORMANCE TIME

PROJECT MILESTONES:

Project milestones below indicate calendar days required for substantial completion and final completion of each “Project Site”, however, final completion of all “Project Sites” shall be achieved in 365 calendar days. “Project Site” number does not dictate the order in which “Project Sites” must be constructed. Rights of Entry (ROE’s) are in process for Sites 1, 22, 23, and 24; it is recommended that the Contractor schedule these sites later in the project to allow time for finalizing of ROE agreements by SAWS. Project Sites within TXDOT ROW require the Contractor to notify SAWS 45 days in advance of commencing work; Contractor may not proceed with work within TXDOT ROW until a TXDOT permit has been obtained. The Contractor may not work simultaneously on more than two (2) Project Sites. The Contractor should take this into consideration when developing a project schedule.

“Project Site 1” – 14 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: ROE.

“Project Site 2” – 60 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: Obtain active Floodplain Permit from SAWS.

“Project Site 4” – 21 Calendar Days (substation completion)
Final completion 30 calendar days after substation completion

“Project Site 5” – 30 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 6” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 7” – 60 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 8” – 28 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 9” – 30 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: Must be completed within first 90 days.
Ancillary Requirement: Obtain active Floodplain Permit from SAWS.

“Project Site 10” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.

“Project Site 11” – 60 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.

“Project Site 12” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: Obtain active Floodplain Permit from SAWS.

“Project Site 14” – 14 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 15” – 28 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 16” – 30 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 17” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 18” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 19” – 28 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 20” – 45 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion

“Project Site 21” – 60 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.

“Project Site 22” – 14 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.
Ancillary Requirement: ROE.

“Project Site 23” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.
Ancillary Requirement: ROE.

“Project Site 24” – 21 Calendar Days (substantial completion)
Final completion 30 calendar days after substantial completion
Ancillary Requirement: TXDOT ROW Site- Must notify SAWS 45 days in advance of commencing work.
Ancillary Requirement: ROE.

WORK NEAR SCHOOLS

For all work within 150 feet of schools, the Contractor must coordinate with the school personnel to ensure work occurs when school is not in session. Project Sites within 150 feet of schools include: Project Sites 2, 11, and 18.

CITY OF SAN ANTONIO REQUIRMENTS

1. Contractor is to follow all City of San Antonio (COSA) requirements for project signage and visible identification when working within COSA R.O.W.
 2. Contractor is to follow the COSA requirement for impacted collector or arterial streets, which requires the Contractor to provide a seven (7) day notification by electronic message board before work is to occur. Message board is to remain in place until three (3) days after construction begins. Contractor is also to provide a three (3) day notification to be made by door hanger to impacted residents or businesses.
 3. Any Traffic Control Plans included in the contract documents are suggested routes only. Contractor shall submit their Traffic Control Plans to COSA for review and approval at no additional cost to SAWS.
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CONSENT DECREE NOTICE PROVISION

The San Antonio Water System (“SAWS”), the United States of America and the State of Texas have entered into a Consent Decree in Civil Action No. 5:13-cv-00666- DAE, United States

of America and State of Texas v. San Antonio Water System, in the United States District Court for the Western District of Texas, San Antonio Division (the “Consent Decree”). A copy of the Consent Decree is available at

<http://www.saws.org/Infrastructure/EPA/download.cfm>

Work performed pursuant to this contract is work that SAWS is required to perform pursuant to the terms of the Consent Decree. In the event of any conflict between the terms and provisions of this Consent Decree Notice Provision and any other terms and provisions of this Contract or the Contract Documents, the terms and provisions of this Consent Decree Notice Provision shall prevail.

A. Retention of documents.

Contractor shall retain and preserve all non-identical copies of all documents, reports, research, analytical or other data, records or other information of any kind or character (including documents, records, or other information in electronic form including, but not limited to e-mails) in its or its sub-contractors’ or agents’ possession or control, or that come into its or its sub-contractors’ or agents’ possession or control, and that relate in any manner to this contract, or the performance of any work described in this contract (the “Information”). This retention requirement shall apply regardless of any contrary corporate or institutional policy or procedure or legal requirement. Contractor, Contractor’s sub-contractors and agents shall retain and shall not destroy any of the Information until such time as Contractor has received written approval from the General Counsel of SAWS that the Information or any part of the Information may be destroyed. Contractor shall, within 30 days after receipt of a written request by SAWS, deliver the Information to SAWS. Contractor shall instruct and require its agents and sub-contractors performing any part of the work described in this contract to comply with the requirements of this paragraph.

B. Notification of events that may cause delay.

If any event occurs that may delay performance by Contractor, or Contractor’s agents or sub-contractors of any work or obligation of any kind under this contract, Contractor shall provide notice in accordance with the Notice Provisions of this contract to SAWS within two (2) business days of the date Contractor or Contractor’s agents or sub-contractors first knew that the event might cause a delay. Contractor shall provide a written explanation and description of the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or minimize the delay, and a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay. **TIME IS OF THE ESSENCE** in the performance of the requirements of this paragraph and of any work to be performed by the Contractor in this contract.

C. Liability for stipulated penalties.

The Consent Decree provides that the United States of America, the United States Environmental Protection Agency and the State of Texas may assess stipulated penalties against SAWS upon the occurrence of certain events. To the extent that Contractor or Contractor’s agents or sub-contractors cause or contribute to, in whole or in part, the assessment of any stipulated penalty against SAWS, Contractor agrees that it shall pay to SAWS the full amount of any

stipulated penalty assessed against and paid by SAWS that is caused or contributed to in whole or in part by any action, failure to act, or failure to act within the time required by any provision of this contract. Contractor shall also pay to SAWS all costs, attorney fees, expert witness fees and all other fees and expenses incurred by SAWS in connection with the assessment or payment of any such stipulated penalties, or in contesting the assessment or payment of any such stipulated penalties. In addition to any and all other remedies to which SAWS may be entitled at law or in equity, Contractor expressly authorizes SAWS to withhold all amounts assessed and paid as stipulated penalties, and all associated costs, fees, or expenses from any amount unpaid to Contractor under the terms of this contract, or from any retainage provided in the contract.

ATTACHMENT D
SPECIAL PROVISIONS TO THE TECHNICAL
SPECIFICATIONS (SPTS) - 7

1. *Project Name / SAWS Job # / Project Site #;*
2. *Date of television inspection;*
3. *Manhole UNIT IDs (as labeled on plans) and size of sanitary sewer;*
4. *Street/easement location;*
5. *Name of Contractor;*

Each video shall be submitted with the following information:

1. *Project name/SAWS Job #/Project Site #;*
2. *Date of television inspection;*
3. *Manhole UNIT IDs (as labeled on plans) and size of sanitary sewer;*
4. *Street/easement location;*
5. *Name of Contractor;*
6. *Date video submitted;*
7. *Data storage device number;*
8. *SAWS Inspector Name.*

General Clarification: All references to DVD should be replaced with a single data storage device.

866.8 Measurement and Payment- Add the following:

All Pre- and Post-Construction video is included in the unit price bid for Sewer Main Television Inspection.

All other language in this specification 866 remains in full force.

J. Revision to SAWS Standard Specification Item No. 901 Rehabilitation of Sanitary Sewer by Cured-in-Place Pipe (Hot Water or Steam Cured)

901.1 Description: Add the following:

For this project, CIPP curing can only be by hot water, no steam curing is allowed.

All other language in this specification 901 remains in full force.

K. Revision to SAWS Standard Specification Item No. 910 Manhole Rehabilitation (included in Contract Documents)

910.1 Description: Delete this section in its entirety and Replace with the following:

This item shall govern the rehabilitation of manholes as described in the plans. This specification shall govern the materials and methods used for rehabilitation including, but not limited to, cleaning, surface preparation, priming and preparing surface

ATTACHMENT E
PLAN SHEETS

(4, 5, 32, 43, 48, 54, 56, 59, and 79)

GENERAL CIVIL NOTES

- SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER AND OWNER SHALL NOT BE RESPONSIBLE FOR SAFETY, MEANS, OR METHODS OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AGENCIES AND OWNER BEFORE WORK COMMENCES TO VERIFY THE TYPE LOCATION, PROTECTION REQUIREMENTS, DEPTH OF ALL EXISTING UTILITIES, DRAINAGE FACILITIES, AND OTHER OBSTRUCTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REPAIRING AND/OR REPLACING ANY SUCH ITEMS DAMAGED DURING CONSTRUCTION.
- CAUTION: UNDERGROUND UTILITIES SHOWN ARE TAKEN FROM EXISTING RECORDS AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS AND CONFIRM LOCATIONS OF UTILITIES AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ACCURATELY LOCATE AND UNCOVER ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. WHERE CROSSING OF EXISTING UTILITIES OCCUR, PROVIDE 12" MINIMUM CLEARANCE EXCEPT WATER MAINS SHALL BE 24".
- SEWER AND WATER SERVICE SHALL BE MAINTAINED DURING ENTIRE CONSTRUCTION PERIOD OR TEMPORARY FACILITIES PROVIDED.
- CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING ACTIVITIES AND ASSOCIATED PERMITS REQUIRED FOR ALL EXCAVATIONS REQUIRED TO COMPLETE THE PROJECT.
- APPROXIMATE LOCATIONS OF OVERHEAD AND BURIED POWER LINES MAY OR MAY NOT BE SHOWN ON PLANS. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING ALL LOCATIONS IN THE FIELD AND PLAN WORK IN THESE AREAS ACCORDINGLY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE DRAINAGE AND COMPLIANCE WITH ALL GOVERNMENTAL STORM WATER REGULATIONS AND PERMITS (SWPPP) AS REQUIRED.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE TRAFFIC CONTROL AND SIGNAGE FOR THE DURATION OF PROJECT AS REQUIRED BY THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES - PART VI, AND/OR ALL OTHER APPLICABLE GUIDELINES OF TXDOT, COUNTY, CITY OR ANY OTHER AUTHORITIES HAVING JURISDICTION OVER THE PROJECT AREAS.
- ALL EXCAVATION BACKFILL OUTSIDE TRAFFIC WAYS SHALL BE COMPACTED TO MIN 95% STANDARD PROCTOR DENSITY TO PREVENT SETTLEMENT.

PAVING AND GRADING NOTES

- ANY PAVEMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION AT THE CONTRACTORS EXPENSE.
- ANY DISTURBED AREAS NOT SPECIFICALLY DESIGNATED TO BE GRADED SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AND SHALL BE GRADED TO DRAIN AS APPROVED BY THE OWNER/ENGINEER.
- FINAL PAVEMENT SURFACES SHALL NOT BE PLACED UNTIL ALL MAJOR CONSTRUCTION ACTIVITIES HAVE CONCLUDED.
- ANY CHANGES TO FINAL GRADE ELEVATIONS AS SHOWN ON THE PLANS SHALL BE APPROVED BY THE OWNER/ENGINEER.
- ALL ASPHALT AND CONCRETE PAVING REMOVED AND REPLACED SHALL BE NEAT SAW CUT.
- ALL OPEN CUT TRAFFIC WAYS (ROADS, PARKING LOTS, DRIVES, ETC.) AND ALL AREAS LYING WITHIN PRISM OF TRAFFIC WAYS, SHALL HAVE CRUSHED STONE BACKFILL COMPACTED WITH VIBRATORY COMPACTOR MAXIMUM 6" LIFTS AND COMPACTED TO MINIMUM 100%-98% MODIFIED PROCTOR DENSITY TO PREVENT SETTLEMENT FOR ITS ENTIRE TRENCH HEIGHT AND WIDTH. COMPACTED "PUG-MIX" SHALL BE USED AND MAINTAINED IN TOP 12" OF TRENCH HEIGHT AS REQUIRED TO PREVENT AGGREGATE LOSS DUE TO TRAFFIC.

PIPING NOTES

- MINIMUM COVER OVER PIPING SHALL BE 3'-0", BELOW FINISHED GRADE.
- PROVIDE MINIMUM PIPE COVER AS SPECIFIED.
- SIZE OF FITTINGS SHOWN ON PLANS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE AS SPECIFIED FOR ADJACENT STRAIGHT RUN OF PIPE.
- ALL JOINTS SHALL BE WATERTIGHT.
- ALL BURIED PIPING SPECIFIED TO BE PRESSURE TESTED, EXCEPT FLANGED, WELDED, OR SCREWED PIPING, SHALL BE PROVIDED WITH THRUST RESTRAINT. THRUST RESTRAINT FOR ALL PIPING SHALL BE BY CONCRETE THRUST BLOCKS AT ALL DIRECTION CHANGES, UNLESS OTHERWISE NOTED.

PIPING NOTES (CONT.)

- CONTRACTOR SHALL LOCATE AND UNCOVER ALL CONNECTIONS TO EXISTING LINES, AND ANY POSSIBLE CONFLICTS WITH PROPOSED FACILITIES AND VERIFY LOCATION, ELEVATION, PIPE MATERIAL, AND PIPE O.D. PRIOR TO ANY CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING BURIED PIPING AND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGED UNDERGROUND UTILITIES.
- ALL SMALL DIAMETER PIPING SHALL BE INSTALLED AS SHOWN ON DRAWINGS WITH ALL FITTINGS AND VALVES AS REQUIRED TO PROVIDE A FUNCTIONAL PIPELINE AS SPECIFIED.
- ALL PIPELINE SHUTDOWNS SHALL BE COORDINATED WITH THE OPERATORS. A WRITTEN WORK PLAN SHALL BE SUBMITTED AND APPROVED BY THE OWNER/ENGINEER.
- ROCK SHALL BE UNDERCUT A MINIMUM OF 4" AND PIPE BEDDED IN STONE. NO SEPARATE PAY ITEM EXISTS FOR ROCK EXCAVATION. ALL EXCAVATION SHALL BE CONSIDERED TO BE UN-CLASSIFIED EXCAVATION AND SUBSIDIARY TO OTHER BID ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF THE EXISTING PIPE, EXISTING MANHOLES, AND ANY EXCESS MATERIALS RESULTING FROM THE WORK.
- CONTRACTOR SHALL PREVENT STORM WATER AND DEBRIS FROM ENTERING PIPES AND MANHOLES AT ALL TIMES. ALL PIPES AND MANHOLES SHALL BE SECURELY PLUGGED AT THE END OF EACH DAY.

TREE PROTECTION NOTES

- PRIOR TO THE START OF WORK, CALL 207-1111 TO SCHEDULE A PRE-CONSTRUCTION AND FENCING INSPECTION. [SEC. 35-477 (5) (C)]
- 35-477 (H) AMENDMENTS. NOTIFICATION AND APPROVAL OF THE CITY ARBORIST ARE REQUIRED IF CHANGES NEED TO BE MADE TO THE PLANS THAT WILL IMPACT PROTECTED TREES OR THE ROOT PROTECTION ZONE OF PROTECTED TREES. APPROVAL OF THE CHANGES MUST BE RECEIVED FROM THE CITY ARBORIST, IN WRITING, BEFORE COMMENCEMENT OF ANY WORK THAT IS THE SUBJECT OF THE CHANGE OR FIELD ADJUSTMENT. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN A STOP WORK ORDER, A PENALTY OF \$2000.00, OR BOTH. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LICENSED TREE MAINTENANCE PROFESSIONAL THROUGHOUT THE PROJECT PER CITY OF SAN ANTONIO ORDINANCE ARTICLE VIII SEC. 21-171.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LICENSED TREE MAINTENANCE PROJECT FOR TREE RELATED ACTIVITIES PER CITY OF SAN ANTONIO ORDINANCE ARTICLE VIII SEC. 21-171.
- TREE ROOTS SHALL BE CUT WITH A SAW AND PAINTED PRIOR TO EXCAVATION WITH EQUIPMENT.
- 35-477 (J) IT SHALL BE THE RESPONSIBILITY OF THE PLAN HOLDER TO MAINTAIN A COPY OF THE DATA AND DRAWINGS REQUIRED BY THIS SECTION, AND THE CONDITIONS OF THE CITY ARBORIST, READILY AVAILABLE AT THE SITE AT ALL TIMES DURING WHICH THE AUTHORIZED WORK IS IN PROGRESS.
- 35-523 (K) (4) ALL BROKEN BRANCHES & EXPOSED ROOTS OF SIGNIFICANT, HERITAGE OR MITIGATION TREES SHALL BE CUT CLEANLY.
- STAGING, PARKING, STORAGE, EMPLOYEE PARKING, ETC.: A) ALL CONSTRUCTION ACCESS AND STAGING AREAS WILL NEED TO BE SURVEYED AND ASSOCIATED TREE IMPACTS WILL NEED TO BE ACCOUNTED FOR IN THE PRESERVATION PLAN. B) STAGING, PARKING, AND MATERIAL STORAGE AREAS AND PROJECT LIMITS OF CLEARANCE MUST BE DISCUSSED AND APPROVED WITH THE INSPECTOR DURING THE PRE-CONSTRUCTION/FENCING INSPECTION. C) 35-523 (K) (5) ALL OFFSITE STAGING, STORING, PROJECT TRAILERS, EMPLOYEE PARKING, ETC. ARE REQUIRED TO OBTAIN AND COMPLY WITH A TEMPORARY USES CERTIFICATE OF OCCUPANCY.
- 21-170 (B) ALL WOUNDS TO THE TRUNK, LIMBS, AND ROOT SYSTEM OF OAK TREES IN THE CITY THAT EXPOSE SAPWOOD SHALL BE PAINTED 30 MIN. OF THE WOUND WITH ASPHALTIC, EXTERIOR OIL OR LATEX BASED PAINT.
- 35-523 (J) (1) ROOT PROTECTION ZONE: A) A ROOT PROTECTION ZONE MUST BE ESTABLISHED AROUND THE TRUNK OF EACH TREE PRESERVED OR MITIGATION TREE. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY AN AVERAGE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH INCH (DBH). B) THE ROOT PROTECTION ZONE AREA SHALL BE PRESERVED AT NATURAL GRADE, WITH NATURAL GROUND COVER. C) NO CUTTING, FILLING, TRENCHING, ROOT DISTURBANCE, SOIL DISTURBANCE, OR CONSTRUCTION IMPACTS SHALL OCCUR CLOSER TO THE TRUNK THAN ONE-HALF (1/2) THE ROOT PROTECTION ZONE RADIUS EXCEPT IN PARKING AREAS WHERE APPROVED ALTERNATIVE MATERIALS AND METHODS ARE USED, CONSTRUCTION MAY BE AS CLOSE AS FIVE (5) FEET FROM THE ROOT FLARES ON ONE (1) SIDE OF THE TREE. THE IMPERVIOUS COVER MAY ENCR OACH WITHIN THE ROOT PROTECTION ZONE IF SAID ENCR OACHMENT IS APPROVED BY CITY ARBORIST. D) FILLING SHALL BE ALLOWED TO ACCOMPLISH WATER CONSERVATION GOALS ESTABLISHED BY THE CITY OF SAN ANTONIO OR BY A PUBLIC UTILITY.

COSA TCI FLOODPLAIN NOTES

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL REQUIRED STORM WATER PERMITS, FEES, AND APPROVALS. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PERMITS REQUIRED FOR CONSTRUCTION IN DRAINAGE EASEMENTS, RIGHT-OF-WAYS, AND FLOODPLAINS.
- THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET RIGHT-OF-WAY NOT INDICATED ON THE CONSTRUCTION PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING DRAINAGE FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING DRAINAGE SYSTEMS, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AT HIS EXPENSE. THE CONTRACTOR SHALL NOTIFY STORM WATER ENGINEERING AT 210-206-8433 AS SOON AS CONFLICTS WITH UTILITIES ARE ENCOUNTERED OR ANY DRAINAGE SYSTEM IS DAMAGED DURING CONSTRUCTION.
- CONSTRUCTION SPOILS WILL NOT BE ALLOWED TO BE DEPOSITED ANYWHERE WITHIN A DRAINAGE EASEMENT, RIGHT-OF-WAY, OR FLOODPLAIN WITHIN THE LIMITS OF THE PROJECT AND SHALL BE DISPOSED OFFSITE IN COMPLIANCE WITH CURRENT APPLICABLE REGULATIONS.
- NO STRUCTURE, FENCES, WALLS, LANDSCAPING, OR OTHER OBSTRUCTIONS THAT IMPEDE DRAINAGE SHALL BE PLACED WITHIN THE LIMITS OF THE DRAINAGE EASEMENTS SHOWN ON THE CONSTRUCTION DOCUMENTS.
- UPON COMPLETION OF TRENCHING, THE AREA WILL BE BACKFILLED AND COMPACTED TO ITS ORIGINAL CONDITION. TRENCHES/BORE PITS TO BE OPEN AND UNATTENDED LONGER THAN 24 HOURS SHALL BE PROTECTED TO WITHSTAND ALL HYDRODYNAMIC AND HYDROSTATIC FORCES AND PREVENT DOWNSTREAM IMPACTS. TRENCHES/BORE PITS TO BE OPEN LONGER THAN 30 DAYS AFTER STARTING EXCAVATION SHALL BE BACKFILLED WITH A SEMI-PERMANENT REPAIR BACKFILL.
- IMPROVED SECTIONS OF EARTHEN CHANNELS AND/OR WATERWAYS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT THE CHANNEL FOR MAINTENANCE.

GENERAL CONVENTIONS LEGEND (CONT.)

SYMBOL	DESCRIPTION
	SYMBOL INDICATES A GRAPHICAL BAR SCALE
	CLOUDED REGION INDICATES A REVISED AREA
	SYMBOL INDICATES A ROOM / AREA DESIGNATION WITH ROOM NUMBER AND SQUARE FOOTAGE
	SYMBOL INDICATES A STRUCTURAL GRIDLINE OR DATUM
	SYMBOL INDICATES A DATUM IN A SECTION OR ELEVATION

GENERAL CONVENTIONS LEGEND

SYMBOL	DESCRIPTION
	PROJECT NORTH
	TITLE TITLE DENOTES A PLAN VIEW LAYOUT (THIS EXAMPLE IS PLAN VIEW No. 1 ON SHEET A101) SCALE: 1/8" = 1'-0"
	TITLE TITLE DENOTES AN ELEVATION, SECTION, OR DETAIL VIEW LAYOUT (THIS EXAMPLE IS DETAIL 1 ON SHEET A201 WHICH HAS A BACK REFERENCE ON SHEET A101) SCALE: 1/8" = 1'-0"
	CALLOUT DENOTES A CUT SECTION TYPICAL REFERENCE (THIS EXAMPLE OCCURS ON SHEET A101 REFERENCING SECTION No. 1 ON SHEET A301)
	CALLOUT DENOTES AN ELEVATION REFERENCE (THIS EXAMPLE OCCURS ON SHEET A101 REFERENCING ELEVATION No. 1 ON SHEET A201)
	CALLOUT DENOTES AN ENLARGED AREA TYPICAL REFERENCE (THIS EXAMPLE OCCURS ON SHEET A101 REFERENCING DETAIL No. 1 ON SHEET A401)
	CALLOUT DENOTES A STANDARD DETAIL REFERENCE
	CALLOUT DENOTES A KEYED NOTE REFERENCE
	SYMBOL INDICATES NORTH DIRECTION

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13750 San Pedro Avenue
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San Antonio, TX 78232
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ADDENDUM NO. 2	OR	IPT	8/19/19
No.	Revision	Drawn	Approved
REVISIONS			
SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1			
GENERAL CIVIL NOTES AND LEGENDS			
DEVELOPER: SAN-ANTONIO-WATER-SYSTEM			
CONT. BUDGET PROJ. 00-00-00			
SUBMITTED _____			
APPROVED _____			
MAP No.	000-000	SHEET	
SECT. No.		04	
DR. JFM	CK. JGM	JOB No. 18-4532	OF 97

ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
103	Remove Concrete Curb, (COSA Spec)	LF	510
103	Remove Sidewalk & Driveway, (COSA Spec)	SF	1340
202	Prime Coat, (COSA Spec)	GAL	1101
203	Tack Coat, (COSA Spec)	GAL	471
205	Hot Mix Asphaltic Pavement-Type D (2"), (COSA Spec)	SY	4823
206	Asphalt Treated Base (10" Compacted Depth), (COSA Spec)	SY	968
208	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth), (COSA Spec)	SY	4811
500	Concrete Curb and Gutter, (COSA Spec)	LF	500
502	Concrete Sidewalk, (COSA Spec)	SY	184
503	Portland Cement Concrete Driveway, (COSA Spec)	SY	83
530.1	Barricades, Signs, and Traffic Handling, Site 1, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 2, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 4, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 5, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 7, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 8, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 9, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 12, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 14, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 15, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 16, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 18, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 19, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 20, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 21, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 22, (COSA Spec)	LS	1
530.1	Barricades, Signs, and Traffic Handling, Site 24, (COSA Spec)	LS	1
550	Trench, Excavation, Safety Protection	LF	1269
848	18" PVC SDR- 26 Sewer Line (0'-6')	LF	250
848	18" PVC SDR- 26 Sewer Line (6'-14')	LF	100
848	8" PVC SDR- 26 Sewer Line (6'-14')	LF	417
848	8" PVC SDR-26 Sewer Line (0'-6')	LF	517
851	Manhole Adjustment	EA	38
852	Extra Depth Manholes (>6')	VF	5
852	Install Sanitary Sewer Manhole (0'-6')	EA	7
854	Two-Way Sanitary Sewer Clean-Out	EA	27
854	Sanitary Sewer Laterals (SDR 26-2241, 160 PSI)	LF	555

ESTIMATED QUANTITIES (CONT.)


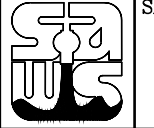
SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
855	Reconstruction of Existing Manhole	EA	1
858	Concrete Encasement, Cradles, Saddles and Collars	CY	2
862	Abandonment of Sanitary Sewer Main and Manholes	LF	430
866	Sewer Main Television Inspection - 15" through 24"	LF	1562
866	Sewer Main Television Inspection - 8" through 15"	LF	8300
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 24"	LF	601
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 12"	LF	392
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 10"	LF	1218
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	5341
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	337
1103	Point Repair (0'-9')	EA	29
1103	Point Repair, Additional Length >9'	LF	53
1103	Obstruction Removal - Remote Device	EA	12
1109	Lateral Connection within Point Repair	EA	17
1109	Excavated Lateral Connections	EA	3
1109	Service Reconnections - Open Cut	EA	12
1109	Service Reconnections - Remote Cutting Connection	EA	163
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 1	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 2	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 4	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 5	LS	1
864-S1	Bypass Pumping Small Diameter (8" to 15"), Site 7	LS	1
864-S2	Bypass Pumping Large Diameter, Site 7	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 9	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 10	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 11	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 14	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 16	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 17	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 20	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 21	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer- Site 22	LS	1
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 23	LS	1

ESTIMATED QUANTITIES (CONT.)

SPEC NO	DESCRIPTION	UNIT	ESTIMATED QUANTITY
864-S1	Bypass Pumping Small Diameter Sanitary Sewer, Site 24	LS	1
502	Barricades, Signs, And Traffic Handling, Site 10, (TXDOT Spec)	LS	1
502	Barricades, Signs, And Traffic Handling, Site 11, (TXDOT Spec)	LS	1
502	Barricades, Signs, And Traffic Handling, Site 21, (TXDOT Spec)	LS	1
502	Barricades, Signs, And Traffic Handling, Site 22, (TXDOT Spec)	LS	1
502	Barricades, Signs, And Traffic Handling, Site 23, (TXDOT Spec)	LS	1
502	Barricades, Signs, And Traffic Handling, Site 24, (TXDOT Spec)	LS	1
530	Driveway, (TXDOT Spec)	SY	164
531	Sidewalk, (TXDOT Spec)	SY	4.5

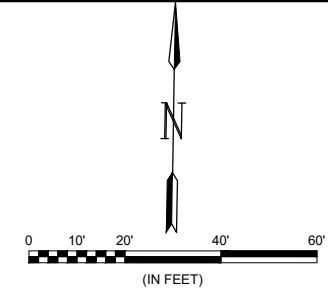
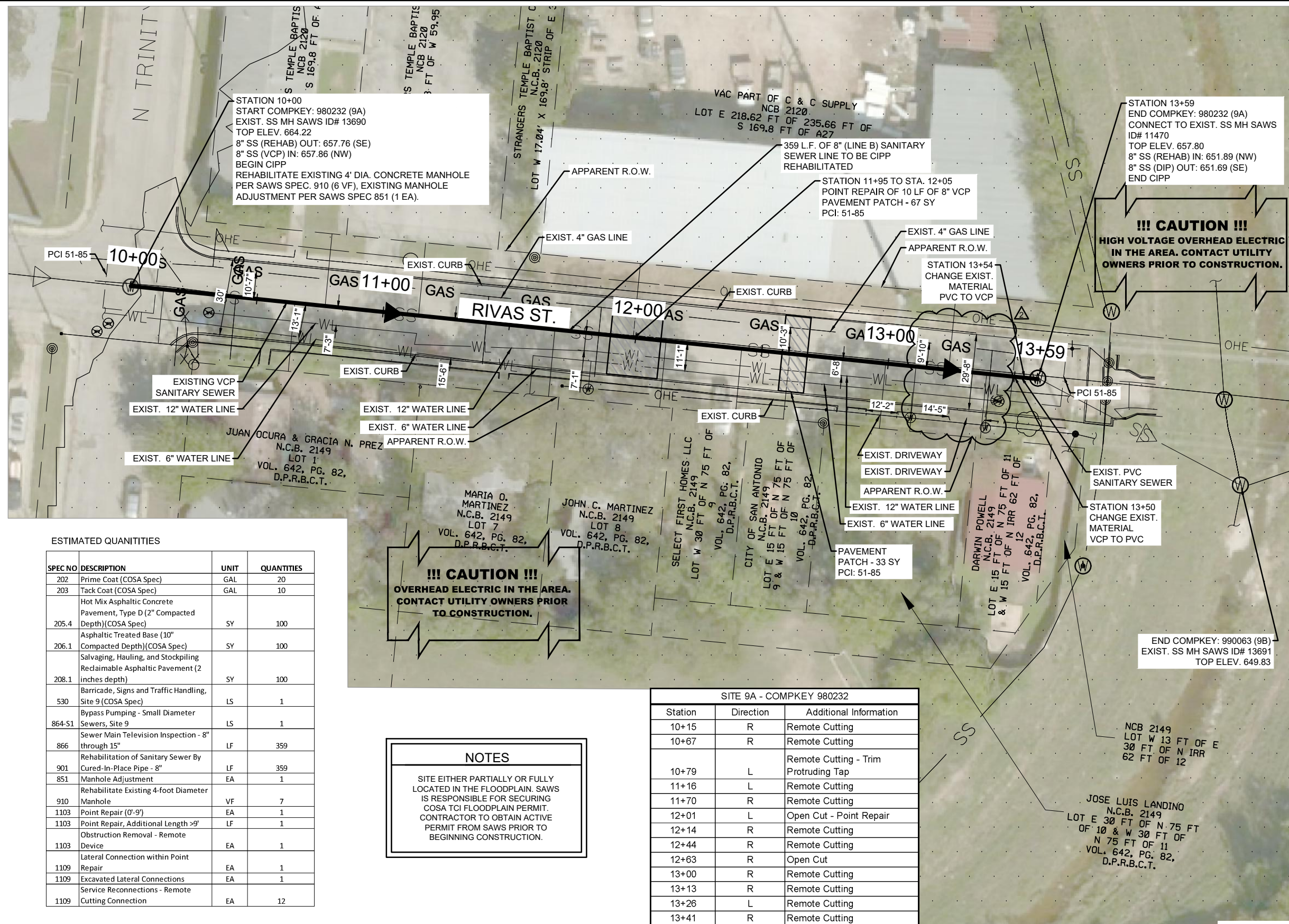


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 Registration No. F-5713 13750 San Pedro Avenue Suite 350 San Antonio, TX 78232 (210) 447-6250				
				ADDENDUM NO. 2
No.	Revision	Drawn	Approved	Date
REVISIONS				
 SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1 SUMMARY OF QUANTITIES				
DEVELOPER: SAN-ANTONIO-WATER-SYSTEM				
CONT. BUDGET PROJ. 00-00-00				
SUBMITTED _____				
APPROVED _____				
MAP No. 000-000				SHEET
SECT. No.				05
DR. JFM	CK. JGM	JOB No. 18-4532		OF 97



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 Last plotted by: Conduille, O. C., Plot Style: AECmono.ctb, Plot Date: 8/20/2019 12:05 PM, Plotter used: DWG To PDF.pc3



NOTES

ALL SERVICES TO BE FIELD VERIFIED AND TABLE IS PROVIDED FOR INFORMATION PURPOSES ONLY UNTIL OBSERVATIONS AND LOCATES HAVE BEEN FINALIZED

LEGEND

SANITARY SEWER	SS	SS
GAS MAIN	GAS	
BURIED TEL	UGT	
WATER LINE	WL	
OH ELEC/OH TEL	OHE/OT	
FIBER OPTIC	FO	
FENCE	X-X-X	
PROPERTY LINES	- - -	
TEL. JUNCTION BOX	T	
WATER METER	WM	
WATER VALVE COVER	WV	
POWER POLE	W	
SANITARY SEWER MH	W	
WATER VALVE	W	
GAS VALVE	W	
TEL. MANHOLE	T	
GUY WIRE	~	
STREET SIGN	⊙	
EXIST. FLOW ARROW	▷	
FLOW ARROW WITHIN PROJECT LIMITS	▷	
PAVEMENT REPLACEMENT	▨	
POINT REPAIRS LIMITS	▩	
FEMA FLOODPLAIN	...	

ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
202	Prime Coat (COSA Spec)	GAL	20
203	Tack Coat (COSA Spec)	GAL	10
205.4	Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted Depth)(COSA Spec)	SY	100
206.1	Asphaltic Treated Base (10" Compacted Depth)(COSA Spec)	SY	100
208.1	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth)	SY	100
530	Barricade, Signs and Traffic Handling, Site 9 (COSA Spec)	LS	1
864-S1	Bypass Pumping - Small Diameter Sewers, Site 9	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	359
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	359
851	Manhole Adjustment	EA	1
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	7
1103	Point Repair (0'-9')	EA	1
1103	Point Repair, Additional Length >9'	LF	1
1103	Obstruction Removal - Remote Device	EA	1
1109	Lateral Connection within Point Repair	EA	1
1109	Excavated Lateral Connections	EA	1
1109	Service Reconnections - Remote Cutting Connection	EA	12

!!! CAUTION !!!
OVERHEAD ELECTRIC IN THE AREA.
CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION.

NOTES

SITE EITHER PARTIALLY OR FULLY LOCATED IN THE FLOODPLAIN. SAWS IS RESPONSIBLE FOR SECURING COSA TCI FLOODPLAIN PERMIT. CONTRACTOR TO OBTAIN ACTIVE PERMIT FROM SAWS PRIOR TO BEGINNING CONSTRUCTION.

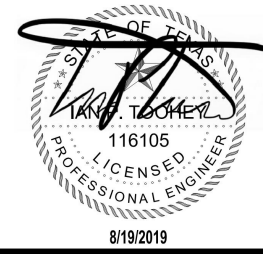
SITE 9A - COMPKEY 980232

Station	Direction	Additional Information
10+15	R	Remote Cutting
10+67	R	Remote Cutting
10+79	L	Remote Cutting - Trim Protruding Tap
11+16	R	Remote Cutting
11+70	R	Remote Cutting
12+01	L	Open Cut - Point Repair
12+14	R	Remote Cutting
12+44	R	Remote Cutting
12+63	R	Open Cut
13+00	R	Remote Cutting
13+13	R	Remote Cutting
13+26	L	Remote Cutting
13+41	R	Remote Cutting

EXIST. 8" Ø SANITARY SEWER POINT REPAIR & CIPP REHABILITATION- SEGMENT (COMPKEY 980232) - 359 LINEAR FOOTAGE

1
34

SCALE: 1" = 40'



GARVER Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
 San Antonio, TX 78232
 (210) 447-6250

ADDENDUM NO. 2	JFM	IP	8/19/19
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No.	Revision	Drawn	Approved	Date

REVISIONS

SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
SITE 9A - CompKey 980232
STA. 10+00 - STA. 13+59
CIPP REHAB & PT. REPAIR

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
 APPROVED _____

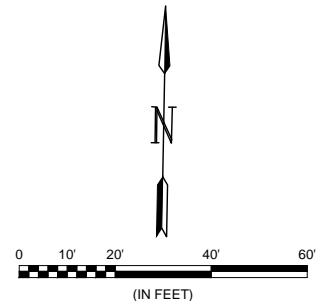
MAP No. 000-000	SHEET 32
SECT. No. _____	OF 97
DR. JFM CK. JGM	JOB No. 18-4532

TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
202	Prime Coat (COSA Spec)	GAL	10
203	Tack Coat (COSA Spec)	GAL	5
205.4	Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted Depth)(COSA Spec)	SY	51
206.1	Asphaltic Treated Base (10" Compacted Depth)(COSA Spec)	SY	42
208.1	Salvaging, Hauling, and Stockpiling Redaimable Asphaltic Pavement (2 inches depth)	SY	51
530	Barriade, Signs and Traffic Handling, Site 12 (COSA Spec)	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	240
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	240
851	Manhole Adjustment	EA	1
852	Install Sanitary Sewer Manhole (0'-6")	EA	1
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	8
1103	Point Repair (0'-9")	EA	1
1109	Service Reconnections - Remote Cutting Connection	EA	11

SITE 12 - COMPKEY 1052727		
Station	Direction	Additional Information
10+11	L	Remote Cutting
10+14	L	Remote Cutting
10+28	R	Remote Cutting
10+36	L	Remote Cutting
10+47	R	Remote Cutting
10+90	L	Remote Cutting
11+00	R	Remote Cutting
11+29	R	Remote Cutting
11+50	L	Remote Cutting
11+94	R	Remote Cutting
12+14	L	Remote Cutting

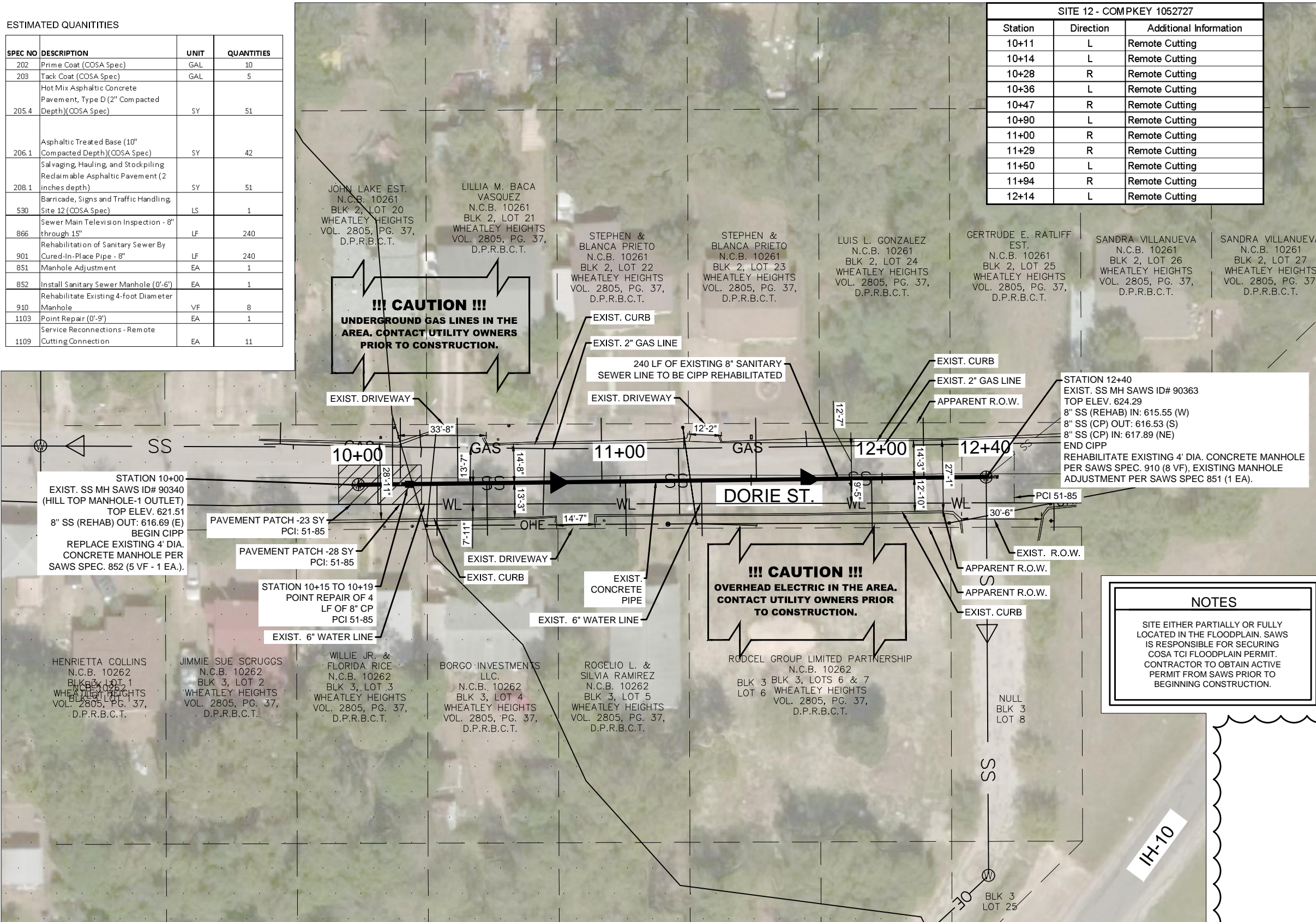


NOTES

ALL SERVICES TO BE FIELD VERIFIED AND TABLE IS PROVIDED FOR INFORMATION PURPOSES ONLY

LEGEND

SANITARY SEWER	— SS — SS —
GAS MAIN	— GAS —
BURIED TEL	— UGT —
WATER LINE	— WL —
OH ELEC/OH TEL	— OHE/OT —
FIBER OPTIC	— FO —
FENCE	— X — X — X —
PROPERTY LINES	— — — —
TEL JUNCTION BOX	(T)
WATER METER	(WM)
WATER VALVE COVER	(WV)
POWER POLE	(P)
SANITARY SEWER MH	(W)
WATER VALVE	(V)
GAS VALVE	(G)
TEL MANHOLE	(T)
GUY WIRE	(GW)
STREET SIGN	(S)
EXIST. FLOW ARROW	(FA)
FLOW ARROW WITHIN PROJECT LIMITS	(FA)
PAVEMENT REPLACEMENT	(PR)
FEMA FLOODPLAIN	(FF)



NOTES

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 Last plotted by: Matia, Juan F. Plot Date: 8/19/2019 9:55 PM, Plotter used: DWG To PDF.pc3

TRENCH EXCAVATION SAFETY PROTECTION:
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PROP. 8" Ø SANITARY SEWER POINT REPAIR & CIPP REHABILITATION- SEGMENT (COMPKEY 1052727) - 240 LINEAR FOOTAGE

1
48

SCALE: 1" = 40'



GARVER
 Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
 San Antonio, TX 78232
 (210) 447-6250

ADDENDUM NO. 2	JFM	IP	8/20/19
No.	Revision	Drawn	Approved

REVISIONS

SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
SITE 12 - CompKey 1052727
STA. 10+00 - 12+40
CIPP REHAB & POINT REPAIR

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

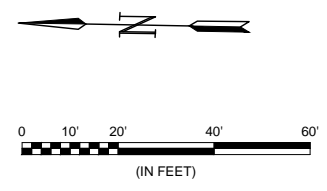
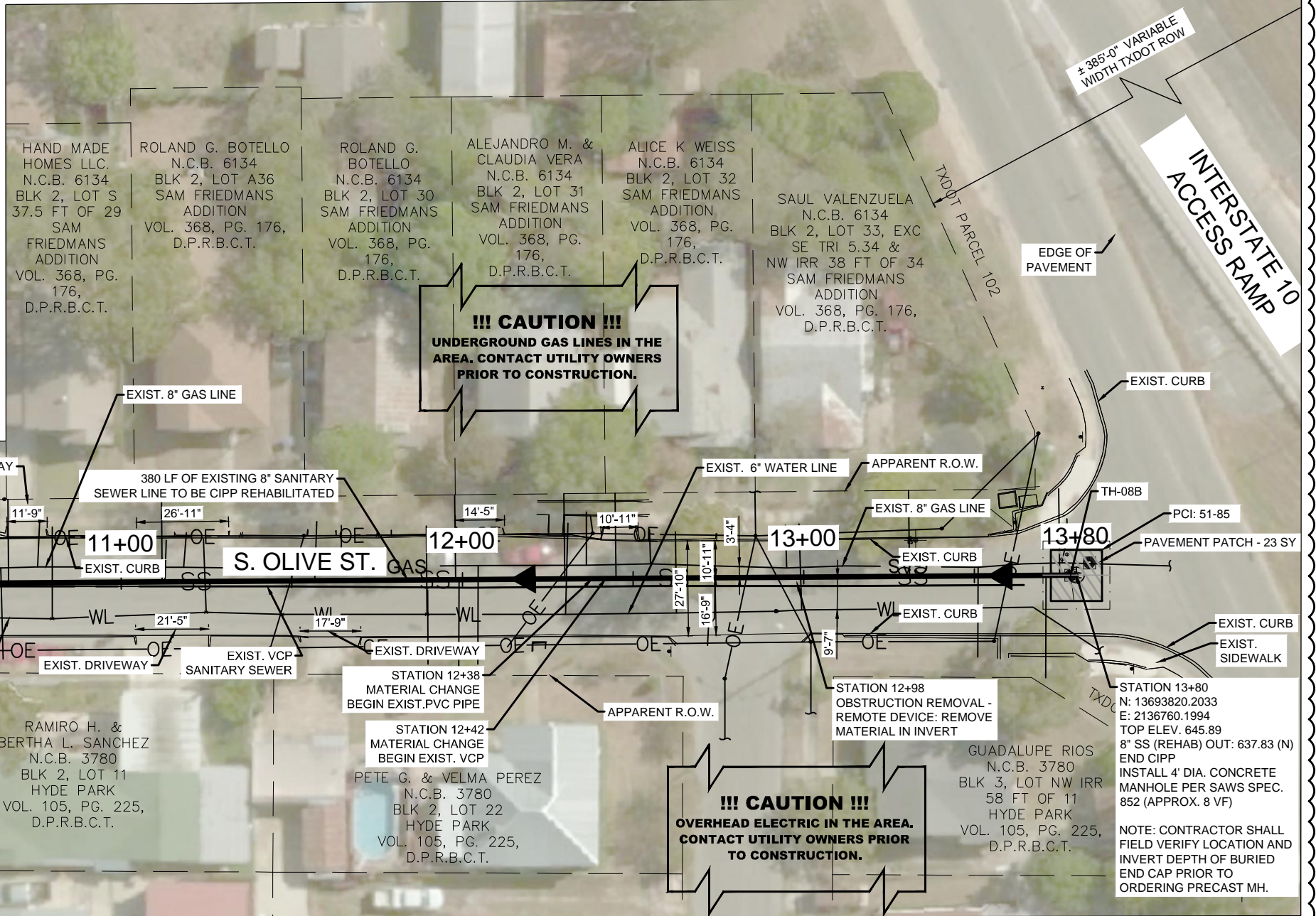
SUBMITTED _____
 APPROVED _____

MAP No. 000-000 SHEET 43
 SECT. No. _____
 DR. JFM CK. JGM JOB No. 18-4532 OF 97

8/19/2019

ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
202	Prime Coat (COSA Spec)	GAL	4
203	Tack Coat (COSA Spec)	GAL	2
205.4	Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted Depth)(COSA Spec)	SY	23
206.1	Asphaltic Treated Base (10" Compacted Depth)(COSA Spec)	SY	20
208.1	Salvaging Hauling and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth)	SY	23
530	Barriade, Signs and Traffic Handling, Site 15 (COSA Spec)	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	380
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	380
851	Manhole Adjustment	EA	1
852	Install Sanitary Sewer Manhole (0'-6")	EA	1
852	Extra Depth Manholes (>6')	VF	2
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	6
1103	Obstruction Removal - Remote Device	EA	1
1109	Service Reconnections - Remote Cutting Connection	EA	11



NOTES

ALL SERVICES TO BE FIELD VERIFIED AND TABLE IS PROVIDED FOR INFORMATION PURPOSES ONLY

LEGEND

SANITARY SEWER	— SS — SS —
GAS MAIN	— GAS —
BURIED TEL	— UGT —
WATER LINE	— WL —
OH ELEC/OH TEL	— OHE/OT —
FIBER OPTIC	— FO —
FENCE	— X — X —
PROPERTY LINES	— — —
TEL. JUNCTION BOX	(T)
WATER METER	(WM)
WATER VALVE COVER	(WV)
POWER POLE	(P)
SANITARY SEWER MH	(W)
WATER VALVE	(V)
GAS VALVE	(GV)
TEL. MANHOLE	(T)
GUY WIRE	(G)
STREET SIGN	(S)
EXIST. FLOW ARROW	(▶)
FLOW ARROW WITHIN PROJECT LIMITS	(▶)
PAVEMENT REPLACEMENT	(Hatched Box)
TEST BORE HOLE	(B)

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 Last plotted by: Matia, Juan F. Plot Date: 8/19/2019 7:02 PM, Plotter used: DWG To PDF.pc3

SITE 15 - COMPKEY 986463

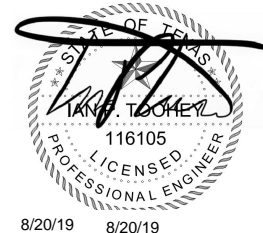
Station	Direction	Additional Information
10+24	L	Remote Cutting
10+61	L	*Remote Cutting
10+65	L	*Remote Cutting
11+11	L	Remote Cutting
11+97	L	Remote Cutting
12+38	L	Remote Cutting
12+44	L	Remote Cutting
12+85	L	Remote Cutting
13+31	L	Remote Cutting
13+70	R	Remote Cutting
13+72	L	Remote Cutting

*Open Active Service Lateral

EXIST. 8" Ø SANITARY SEWER CIPP REHABILITATION- SEGMENT (COMPKEY 986463) - 380 LINEAR FOOTAGE

SCALE: 1" = 40'

TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



GARVER

Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
 San Antonio, TX 78232
 (210) 447-6250

ADDENDUM NO. 2	JFM	IP	8/19/19
No.	Revision	Drawn	Approved

REVISIONS

SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
 SITE 15 - CompKey 986463
 STA. 10+00 - 13+79
 CIPP REHAB & POINT REPAIR

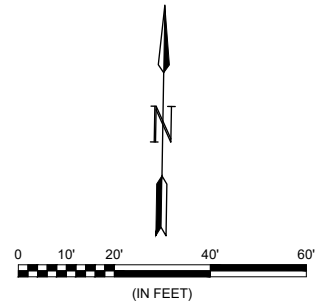
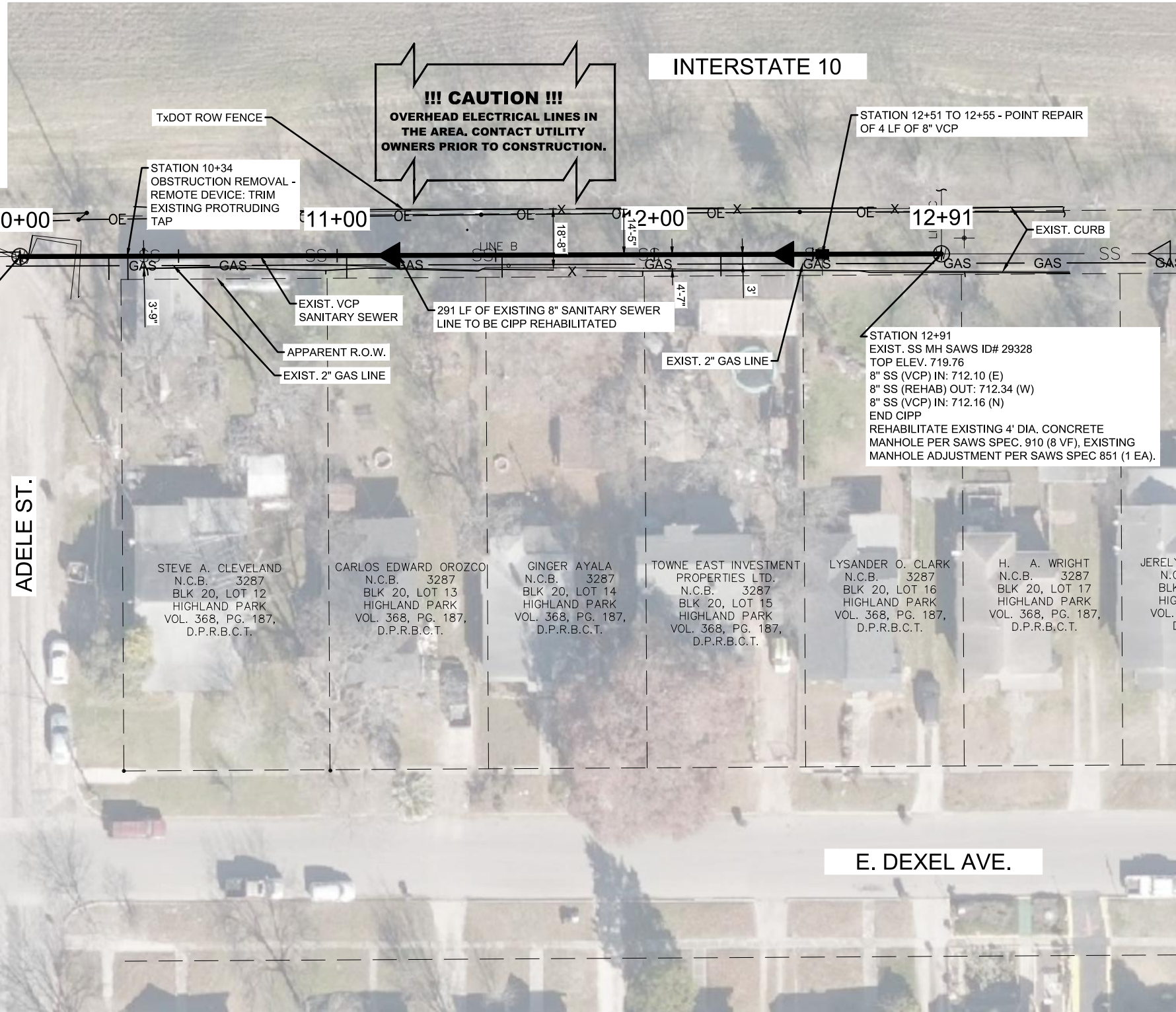
DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
 APPROVED _____

MAP No. 000-000 SHEET 48
 SECT. No. _____ OF 97
 DR. JFM CK. JGM JOB No. 18-4532

8/20/19 8/20/19

SITE 17 - COMPKEY 996167		
Station	Direction	Additional Information
10+26	R	Remote Cutting
10+32	R	Remote Cutting - Trim Protruding Tap
11+02	R	Open Cut
11+50	R	Remote Cutting
12+02	R	Remote Cutting
12+53	R	Open Cut - Point Repair



NOTES

ALL SERVICES TO BE FIELD VERIFIED AND TABLE IS PROVIDED FOR INFORMATION PURPOSES ONLY

LEGEND

SANITARY SEWER	— SS — SS—
GAS MAIN	— GAS —
BURIED TEL	— UGT —
WATER LINE	— WL —
OH ELEC/OH TEL	— OHE/OT —
FIBER OPTIC	— FO —
FENCE	— X — X —
PROPERTY LINES	— — — —
TEL. JUNCTION BOX	⊕
WATER METER	⊕
WATER VALVE COVER	⊕
POWER POLE	⊕
SANITARY SEWER MH	⊕
WATER VALVE	⊕
GAS VALVE	⊕
TEL. MANHOLE	⊕
GUY WIRE	⊕
STREET SIGN	⊕
EXIST. FLOW ARROW	▶
FLOW ARROW WITHIN PROJECT LIMITS	▶

STATION 10+00
EXIST. SS MH SAWS ID# 29327
TOP ELEV. 726.86
8" SS (VCP) OUT: 711.59 (W)
8" SS (REHAB) IN: 711.61 (E)
BEGIN CIPP
REHABILITATE EXISTING 4' DIA. CONCRETE MANHOLE PER SAWS SPEC. 910 (15 VF), EXISTING MANHOLE ADJUSTMENT PER SAWS SPEC 851 (1 EA).

STATION 12+91
EXIST. SS MH SAWS ID# 29328
TOP ELEV. 719.76
8" SS (VCP) IN: 712.10 (E)
8" SS (REHAB) OUT: 712.34 (W)
8" SS (VCP) IN: 712.16 (N)
END CIPP
REHABILITATE EXISTING 4' DIA. CONCRETE MANHOLE PER SAWS SPEC. 910 (8 VF), EXISTING MANHOLE ADJUSTMENT PER SAWS SPEC 851 (1 EA).

JOSE L. ZAPATA
N.C.B. 3287
BLK 19, LOT 22
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

STEVE A. CLEVELAND
N.C.B. 3287
BLK 20, LOT 12
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

CARLOS EDWARD OROZCO
N.C.B. 3287
BLK 20, LOT 13
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

GINGER AYALA
N.C.B. 3287
BLK 20, LOT 14
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

TOWNE EAST INVESTMENT
PROPERTIES LTD.
N.C.B. 3287
BLK 20, LOT 15
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

LYSANDER O. CLARK
N.C.B. 3287
BLK 20, LOT 16
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

H. A. WRIGHT
N.C.B. 3287
BLK 20, LOT 17
HIGHLAND PARK
VOL. 368, PG. 187,
D.P.R.B.C.T.

JERELY
N.C.B.
BLK
HIG
VOL.

ESTIMATED QUANTITIES

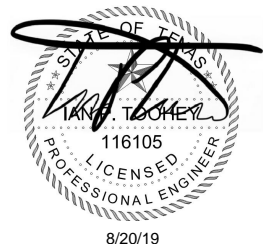
SPEC NO	DESCRIPTION	UNIT	QUANTITIES
866	Sewer Main Television Inspection - 8" through 15"	LF	291
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	291
851	Manhole Adjustment	EA	2
864-51	Bypass Pumping Small Diameter Sanitary Sewer, Site 17	LS	1
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	23
1103	Point Repair (0'-9")	EA	1
1103	Obstruction Removal - Remote Device	EA	1
1109	Lateral Connection within Point Repair	EA	1
1109	Excavated Lateral Connections	EA	1

TRENCH EXCAVATION SAFETY PROTECTION:
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EXIST. 8" Ø SANITARY SEWER POINT REPAIR & CIPP REHABILITATION SEGMENT (COMPKEY 1065052) - 291 LINEAR FOOTAGE

59

SCALE: 1" = 40'



GARVER
Registration No. F-5713
13750 San Pedro Avenue
Suite 350
San Antonio, TX 78232
(210) 447-6250

No.	Revision	Drawn	Approved	Date
ADDENDUM NO. 2	OR	IP		8/19/19

REVISIONS

SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
SITE 17 - CompKey 1065052
STA. 10+00 - 12+91
CIPP REHAB. & POINT REPAIR

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
APPROVED _____

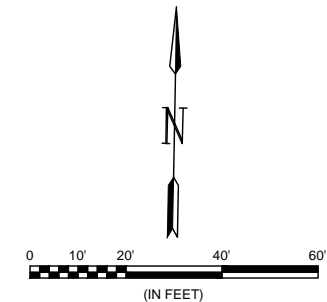
MAP No. 000-000 SHEET 54
SECT. No. _____ OF 97
DR. JFM CK. JGM JOB No. 18-4532

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ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
202	Prime Coat (COSA Spec)	GAL	8
203	Tack Coat (COSA Spec)	GAL	4
205.4	Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted Depth)(COSA Spec)	SY	44
206.1	Asphaltic Treated Base (10" Compacted Depth)(COSA Spec)	SY	44
208.1	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth)	SY	52
530	Barricade, Signs and Traffic Handling, Site 18 (COSA Spec)	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	125
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	125
851	Manhole Adjustment	EA	1
852	Install Sanitary Sewer Manhole (0'-6")	EA	1
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	6
1109	Service Reconnections - Remote Cutting Connection	EA	4

SITE 18 - COMPKEY 996167		
Station	Direction	Additional Information
10+61	L	Remote Cutting
10+63	R	Remote Cutting
11+09	L	Remote Cutting
11+12	R	Remote Cutting
11+25	L	Connect To New Manhole

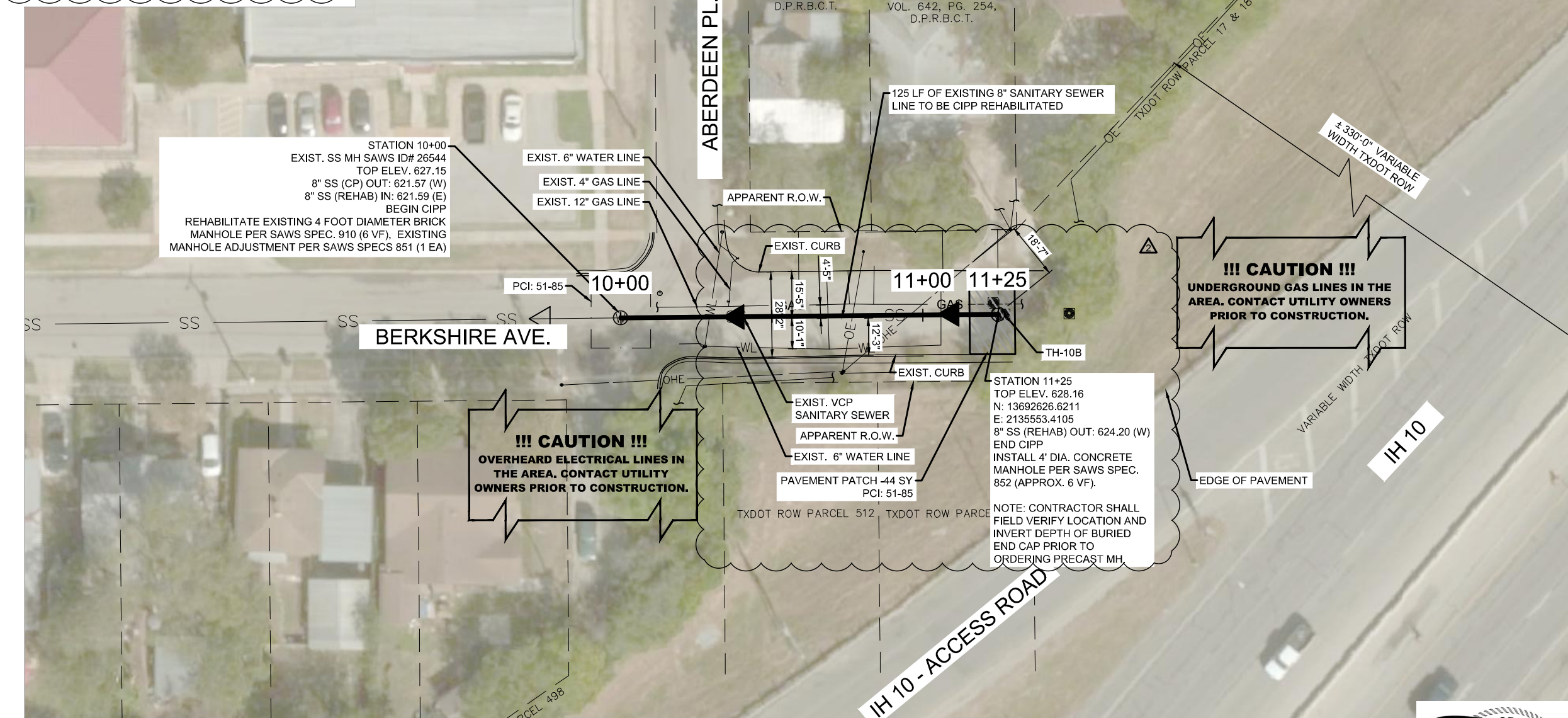


NOTES

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LEGEND

SANITARY SEWER	— SS — SS —
GAS MAIN	— GAS —
BURIED TEL	— UGT —
WATER LINE	— WL —
OH ELEC/OH TEL	— OHE/OT —
FIBER OPTIC	— FO —
FENCE	— X — X — X —
PROPERTY LINES	— — —
TEL. JUNCTION BOX	⊕
WATER METER	⊙
WATER VALVE COVER	⊙
POWER POLE	⊙
SANITARY SEWER MH	⊙
WATER VALVE	⊙
GAS VALVE	⊙
TEL. MANHOLE	⊕
GUY WIRE	⌋
STREET SIGN	⊙
EXIST. FLOW ARROW	▶
FLOW ARROW WITHIN PROJECT LIMITS	▶
PAVEMENT REPLACEMENT	▨



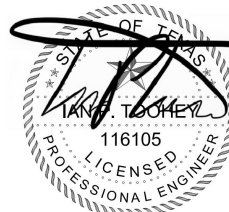
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 Last plotted by: Marra, Juan F. Plot Style: AECmon.ctb Plot Scale: 1:1 Plot Date: 8/19/2019 7:46 PM Plotter used: DWG To PDF.pc3

TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

1
61

PROP. 8" Ø SANITARY SEWER MH REPAIR & CIPP REHABILITATION- SEGMENT (COMPKEY 996167) - 125 LINEAR FOOTAGE

SCALE: 1" = 40'



8/19/2019

GARVER
 Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
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 (210) 447-6250

ADDENDUM NO. 2	JFM	IP	8/19/19
No.	Revision	Drawn	Approved

REVISIONS
 SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
 SITE 18 - Compkey 996167
 STA. 10+00 - STA. 11+23
 MH REPAIR & CIPP REPAIR

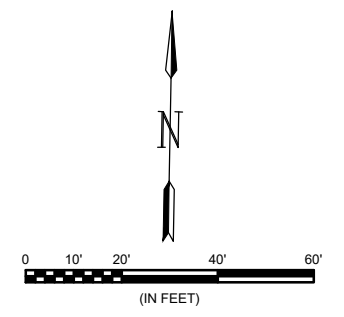
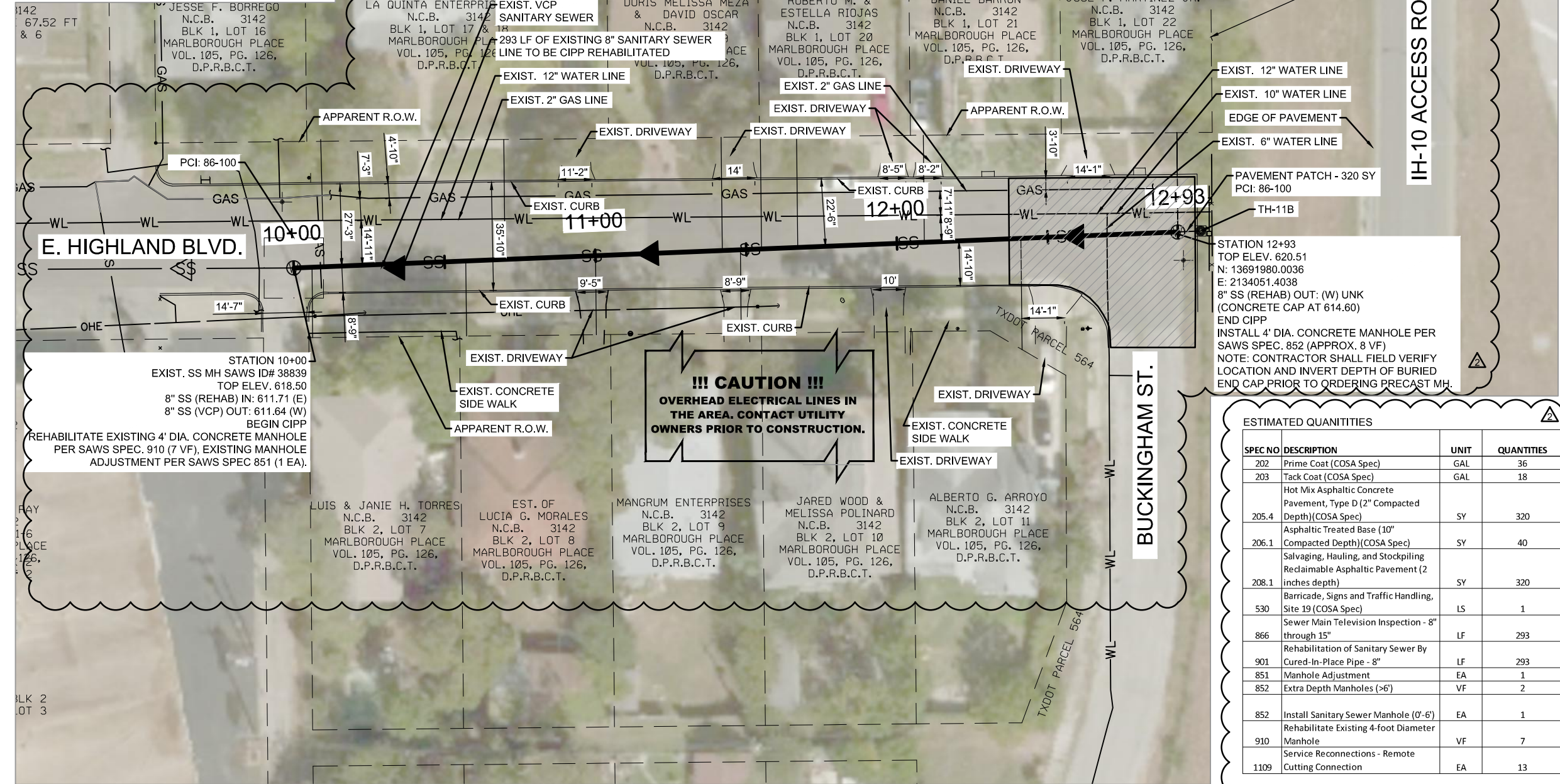
DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

SUBMITTED	
APPROVED	
MAP No. 000-000	SHEET 56
SECT. No.	OF 97
DR. JFM	CK. JGM
JOB No. 18-4532	

SITE 19 - COMPKEY 995440		
Station	Direction	Additional Information
10+08	R	Remote Cutting
10+12	L	Remote Cutting
10+59	R	Remote Cutting
10+72	L	Remote Cutting
11+02	R	Remote Cutting
11+44	L	Remote Cutting
11+50	R	Remote Cutting
11+57	L	Remote Cutting
11+69	L	Remote Cutting
12+11	L	Remote Cutting
12+43	R	Remote Cutting
12+80	R	Remote Cutting
12+93	L	Connect to New Manhole

!!! CAUTION !!!
UNDERGROUND GAS LINES IN THE AREA. CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION.

!!! CAUTION !!!
OVERHEAD ELECTRICAL LINES IN THE AREA. CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION.



NOTES

ALL SERVICES TO BE FIELD VERIFIED AND TABLE IS PROVIDED FOR INFORMATION PURPOSES ONLY

LEGEND

SANITARY SEWER	— SS — SS —
GAS MAIN	— GAS —
BURIED TEL	— UGT —
WATER LINE	— WL —
OH ELEC/OH TEL	— OHE/OT —
FIBER OPTIC	— FO —
FENCE	X X X
PROPERTY LINES	---
TEL. JUNCTION BOX	(T)
WATER METER	(WM)
WATER VALVE COVER	(WV)
POWER POLE	(P)
SANITARY SEWER MH	(W)
WATER VALVE	(V)
GAS VALVE	(GV)
TEL. MANHOLE	(T)
GUY WIRE	(G)
STREET SIGN	(S)
EXIST. FLOW ARROW	(▶)
FLOW ARROW WITHIN PROJECT LIMITS	(▶)
PAVEMENT REPLACEMENT	(Hatched Box)

ESTIMATED QUANTITIES

SPEC NO	DESCRIPTION	UNIT	QUANTITIES
202	Prime Coat (COSA Spec)	GAL	36
203	Tack Coat (COSA Spec)	GAL	18
205.4	Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted Depth)(COSA Spec)	SY	320
206.1	Asphaltic Treated Base (10" Compacted Depth)(COSA Spec)	SY	40
208.1	Salvaging, Hauling, and Stockpiling Reclaimable Asphaltic Pavement (2 inches depth)	SY	320
530	Barricade, Signs and Traffic Handling, Site 19 (COSA Spec)	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	293
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	293
851	Manhole Adjustment	EA	1
852	Extra Depth Manholes (>6')	VF	2
852	Install Sanitary Sewer Manhole (0'-6')	EA	1
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	7
1109	Service Reconections - Remote Cutting Connection	EA	13

GARVER Registration No. F-5713
 13750 San Pedro Avenue
 Suite 350
 San Antonio, TX 78232
 (210) 447-6250

No.	Revision	Drawn	Approved	Date
ADDENDUM NO. 2		JFM	IP	8/19/19

REVISIONS

SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1
 SITE 19 - COMPKEY 995440
 STA. 10+00 - 12+91
 CIPP REHAB. & POINT REPAIR

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
 CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
 APPROVED _____
 MAP No. 000-000 SHEET 59
 SECT. No. _____
 DR. JFM CK. JGM JOB No. 18-4532 OF 97



TRENCH EXCAVATION SAFETY PROTECTION:
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

PROP. 8" Ø SANITARY SEWER MH REPAIR & CIPP REHABILITATION- SEGMENT (COMPKEY 995440) - 293 LINEAR FOOTAGE

1 64 SCALE: 1" = 40'

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ESTIMATED QUANTITIES

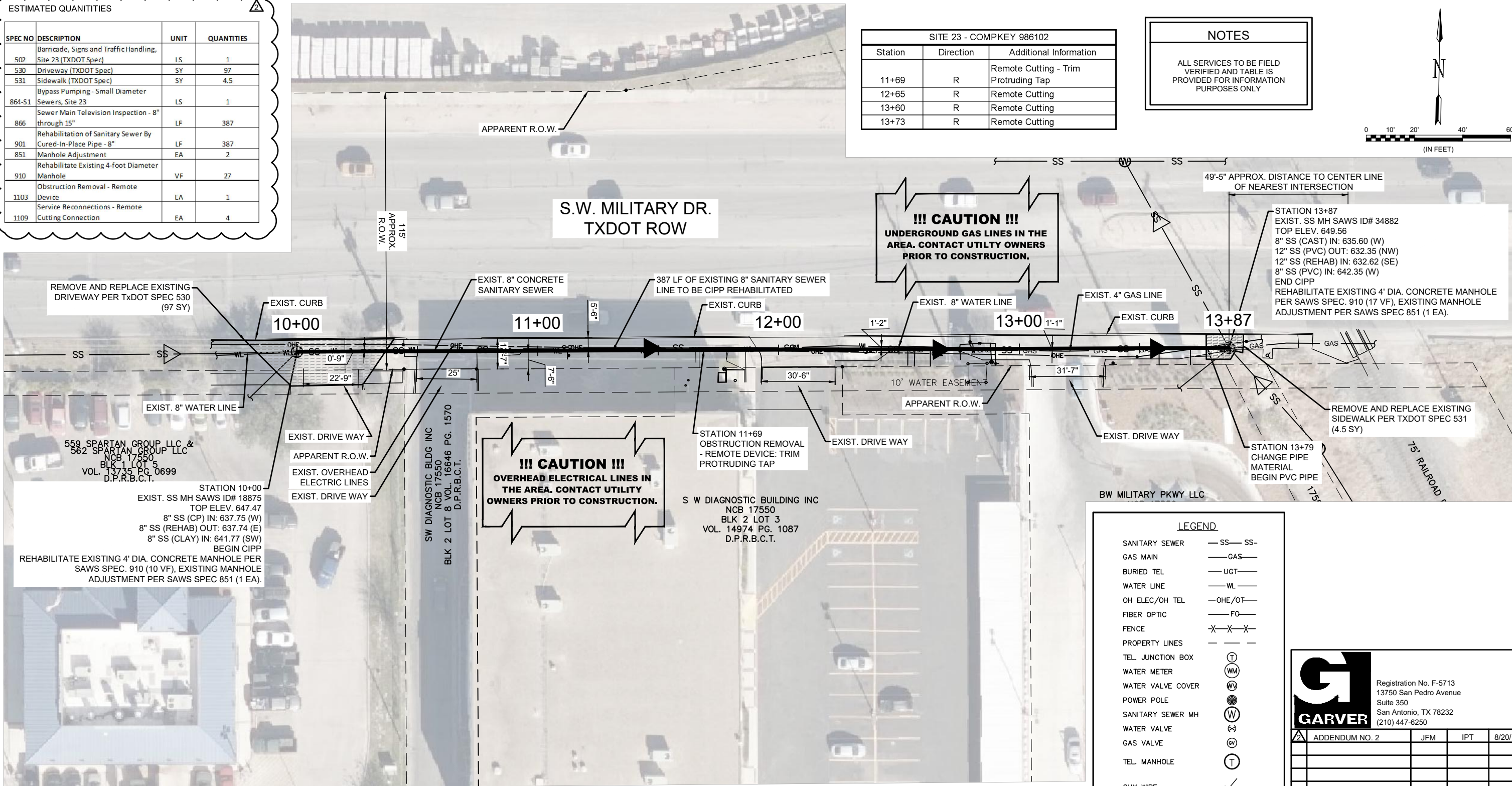
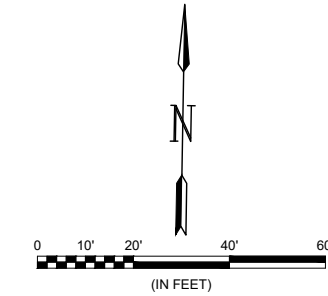
SPEC NO	DESCRIPTION	UNIT	QUANTITIES
502	Barricade, Signs and Traffic Handling, Site 23 (TXDOT Spec)	LS	1
530	Driveway (TXDOT Spec)	SY	97
531	Sidewalk (TXDOT Spec)	SY	4.5
864-51	Bypass Pumping - Small Diameter Sewers, Site 23	LS	1
866	Sewer Main Television Inspection - 8" through 15"	LF	387
901	Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe - 8"	LF	387
851	Manhole Adjustment	EA	2
910	Rehabilitate Existing 4-foot Diameter Manhole	VF	27
1103	Obstruction Removal - Remote Device	EA	1
1109	Service Reconnections - Remote Cutting Connection	EA	4

SITE 23 - COMPKEY 986102

Station	Direction	Additional Information
11+69	R	Remote Cutting - Trim Protruding Tap
12+65	R	Remote Cutting
13+60	R	Remote Cutting
13+73	R	Remote Cutting

NOTES

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LEGEND

- SANITARY SEWER — SS — SS —
- GAS MAIN — GAS —
- BURIED TEL — UGT —
- WATER LINE — WL —
- OH ELEC/OH TEL — OHE/OT —
- FIBER OPTIC — FO —
- FENCE — X — X — X —
- PROPERTY LINES — — — —
- TEL. JUNCTION BOX (T)
- WATER METER (WM)
- WATER VALVE COVER (V)
- POWER POLE (P)
- SANITARY SEWER MH (W)
- WATER VALVE (V)
- GAS VALVE (G)
- TEL. MANHOLE (T)
- GUY WIRE (G)
- STREET SIGN (S)
- EXIST. FLOW ARROW (triangle)
- FLOW ARROW WITHIN PROJECT LIMITS (arrow)
- TXDOT EXISTING DRIVEWAY (hatched)

GARVER

Registration No. F-5713
13750 San Pedro Avenue
Suite 350
San Antonio, TX 78232
(210) 447-6250

ADDENDUM NO. 2	JFM	IP	8/20/19
No.	Revision	Drawn	Approved

REVISIONS

SAWS 2018 BPC CENTRAL BASIN
SMALL DIAMETER PACKAGE 1
SITE 23 - COMPKEY 986102
STA. 10+00 - STA. 13+87
CIPP REHABILITATION

DEVELOPER: SAN-ANTONIO-WATER-SYSTEM
CONT. BUDGET PROJ. 00-00-00

SUBMITTED _____
APPROVED _____

MAP No. 000-000 SHEET 79
SECT. No. _____
DR. JFM CK. JGM JOB No. 18-4532 OF 97

PROP. 8" Ø SANITARY SEWER CIPP REHABILITATION (COMPKEY 986102) - 387 LINEAR FOOTAGE

SCALE: 1" = 40'



83

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TRENCH EXCAVATION SAFETY PROTECTION:
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