

Multiple Sewershed Package 7B Solicitation Number: CO-00308 Job No.: 17-4534

### ADDENDUM 2 October 25, 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.

### **CHANGES TO THE SPECIFICATIONS**

1. The estimated cost for this project has changed to \$1,892,000, which is also now reflected on SAWS website at the following:

https://apps.saws.org/Business\_Center/Contractsol/Drill.cfm?id=3663&View=Yes

- 2. Remove the "Bid Proposal Form", Pages BP1 and BP-2, and replace with the revised Pages BP-1 and BP-2 attached to this addendum. This version should be used by Bidders when submitting a bid for this project. The following changes have been made:
  - Quantity for Item 200 Flexible Base, compacted in Place (6") Install and Removal has been revised.
  - Item 860 Vertical Stacks has been added.
  - Item 1109 Service Reconnection, All Depths (W/Remote Control Cut Device) has been added.
  - Item 1109 Service Reconnection, All Depths (W/ Open Cut Excavation) has been added.
- 3. Remove and replace the Special Provisions in entirety with the revised version attached to this Addendum. Section 901.4 Materials has been revised for soil modulus requirements, and Sections 1109.3 and 1109.4 have been revised to correct section references to Standard Specification 1109.
- 4. Add the following to Special Conditions, Section 2 Project Requirements, Page SC-2:

"If artifacts are found during excavation, excavation should be stopped immediately until Joint Base San Antonio (JBSA) Cultural Resources are notified and they advise how to proceed."

- 5. Add the following to Special Conditions, Section 2.2 Permits, Page SC-2:
  - "Contractor shall comply with the City of San Antonio Tree Ordinance and with all requirements within attached COSA Tree Protection and Management Memo. No separate payment will be made for compliance with these requirements".
- 6. Insert COSA Tree Protection and Management Memo attached to this addendum into Appendix A Permits.

#### **MODIFICATIONS TO PLANS**

- 1. Plan sheet 02 (Sheet G02 General Notes and Index of Drawings) Replace sheet dated 10/4/19 with attached sheet dated 10/23/19.
- 2. Plan sheet 03 (Sheet G03 Symbols, Abbreviations, and Summary of Quantities) Replace sheet dated 10/4/19 with attached sheet dated 10/23/19.
- 3. Plan sheet 06 (Sheet CO2 Fort Sam Houston AW47 Site Access Plan) Replace sheet dated 10/4/19 with attached sheet dated 10/23/19.

### **RESPONSES TO QUESTIONS**

#### 1. Question 1

Regarding access to MH #48376, the caliche road was washed out and muddy due to a watermain leak. Can the pay item for matting (SP 4000) be extended for use on the caliche road and pad around the MH, should the condition of the road still be unsuitable for heavy truck use at the time of construction?

Response: Contractor to regrade and repair existing gravel road and place new compacted base material (6" depth) as needed within temporary easement limits for access. Quantities for Item 200 – Flexible Base Compacted in Place (6") have been revised. See attached revised Bid Proposal and plan sheet 6 as part of this Addendum.

#### 2. Question 2

SAWS has allowed the wall thickness design to be based on a Soil Modulus of 1000 psi in lieu of 500 psi. We are requesting that the same appropriate allowance be made for this project. Please see the example below of a previous SAWS response. (No 500 psi required but designs shall be stamped by 3<sup>rd</sup> party P.E.)

Response: Minimum soil modulus requirements have been revised. As part of this addendum, see attached revision to Special Provision Item 901.4, page SPTS-10.

#### 3. Question 3

1. Will all workers be subjected to thorough background checks?

Response: Yes all workers will be subject to thorough background checks in order to obtain a base security pass.

### 4. Question 4

Will the worker background check include inquiries of criminal history, outstanding warrants and status of U.S. citizenship?

Response: Yes, worker background checks will include criminal history, outstanding warrants and US citizenship status.

#### 5. Question 5

 Are any laterals expected to be encountered on this project that will need to be reinstated after lining? If there will be laterals, can they be reinstated internally, or will they be required to be reconnected by opencut methods? There is no bid item for reinstating laterals, but section 1109 is included in the Special Provisions to Technical Specifications, and it outlines the method for reconnecting laterals by open-cut and indicates that there would be no payment for reconnecting laterals to the CIPP by this method. Also, please clarify which portion of the standard specification this special provision is replacing since SP-1109.3 says to replace the "Reconnection by Remove Method", but there does not appear to be any section with that title in the standard specification for 1109.3, and SP-1109.4 says to add the payment clarification to item 2, but there does not appear to be an item 2 under standard specification 1109.4.

Response: Based on available information, there are no known laterals that will need to be reinstated after lining. CCTV data is not complete for some sections of existing sewer main to be lined, therefore it is possible there are unanticipated laterals that will need to be reinstated. Contractor shall submit an RFI for any laterals encountered during cleaning and televising of existing sewer main. The existing condition of any unknown laterals will determine the method of reconnection. Special Provision SP-1109.3 and SP-1109.4 have been revised to correct references to Standard Specification 1109.3 and 1109.4. The following bid items have been added to the bid proposal in case service laterals are encountered:

- Item 860 Vertical Stacks
- Item 1109 Service Reconnection, All Depths (W/Remote Control Cut Device)
- Item 1109 Service Reconnection, All Depths (W/ Open Cut Excavation).

### **END OF ADDENDUM**

This Addendum, including these three (3) pages, is twenty five (25) pages in its entirety.

### Attachments:

Bid Proposal Form (Page BP-2)
Special Provisions to Technical Specifications
COSA Tree Protection and Management Memo
Plan sheet 02 (Sheet G02 General Notes and Index of Drawings)
Plan sheet 03 (Sheet G03 Symbols, Abbreviations, and Summary of Quantities)
Plan sheet 06 (Sheet C02 Fort Sam Houston AW47 Site Access Plan)

Jeffrey E. Reck, P.E. Arcadis US, Inc. TBPE Firm No. F-533

10-24-19

### **BID PROPOSAL**

PROPOSAL OF	, a corporation
a partnership consisting of	
an individual doing businessas	
	e undersigned proposes to furnish all labor and materials as ect as specified, in accordance with the Plans and Specifications
PLEASE SEE ATTACHED LIST OF BID ITEM	1S.
	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 Addendum Nos	following:
OWNED DECEDIFICATIVE DIGUIT TO ACCEPT TO	E OVERALL MOOT RECRONORY E DIR OR PROPOSAL

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

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within <u>270</u> 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	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	100.1	Intermediate Mobilization/Demobilization		1	\$	\$
2	107.1	Embankment	CY	707	\$	\$
3	200	Flexible Base, compacted in place (6") - Install and Removal	SY	5962	\$	\$
4	502	Concrete Sidewalks	SY	79	\$	\$
5	515.1	Topsoil (4 inches)	CY	562	\$	\$
6	516.4	Tiffway 418 Bermuda Sod (Golf Course Quality, Sand Based)	SY	2496	\$	\$
7	SS 518.2	Tree Protection- Level IIB (per CoSA Tree Ordinance Requirements)		53	\$	\$
8	520.1	Hydromulching	SY	17354	\$	\$
9	530.1	Barricades, signs and traffic handling		1	\$	\$
10	540.6	Construction Exits (Install/ Remove)	SY	889	\$	\$
11	540.9	Temporary Sediment Control Fence (Install/Remove)	LF	641	\$	\$
12	550	Trench Excavation Safety Protection	LF	275	\$	\$
13	551	Temporary Special Shoring	SF	4975	\$	\$
14	554.1	Erosion Control Matting	SY	247	\$	\$
15	855	Reconstruction of Existing Manhole	EA	2	\$	\$
16	858	Concrete Encasement, Craddles, Saddles and Collars	CY	5	\$	\$
17	860	Vertical Stacks	VF	10	\$	\$
18	864-S2	Bypass Pumping (Large Diameter Sanitary Sewers)	LS	1	\$	\$
19	866	Sewer Main Television Inspection (18"-24")	LF	3577	\$	\$
20	901	Install cured in place pipe (CIPP) Sanitary Sewer Pipe (Hot water cured) 24-inch diameter	LF	3577	\$	\$
21	SS 910.1	Sanitary Sewer Manhole Rehabilitation (Standard Manholes 4 ft diameter)	VF	78	\$	\$
22	1103.1	Point repairs for 24" Diameter & larger, (all depths) including up to 20 LF of piping	EA	9	\$	\$
23	1103.2	Extra Length Point repairs for 24" Diameter & larger, all depths	LF	30	\$	\$
24	1103.3	Obstruction removal by remote device	EA	8	\$	\$
25	1109	Service Reconnection, All Depths (W/ Remote Control Cut Device)	EA	1	\$	\$
26	1109	Service Reconnection, All Depths (W/ Open Cut Excavation)	EA	1	\$	\$
27 SP 4000		Composite Construction Matting	SY	2496	\$	\$
		SUBTOT	AL (IT	EMS 1 - 27)	\$	
28	100	Mobilization and Demobilization; Max of 10% of Line Items 1 - 27	LS	1	\$	
29	101	Preparing Right of Way; Max 5% of Line Items 1 - 27	LS	1	\$	

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

TOTAL BID PRICE (ITEMS 1 - 27 AND 28 - 29) \$

Addendum 2

### A. Revision to SAWS Standard Specification Item 100 Mobilization

**100.1 DESCRIPTION: ADD** the following paragraph at the end of the section:

The Intermediate Demobilization and Remobilization item shall govern the demobilization and remobilization of personnel, equipment, and supplies as indicated and directed by Owner. Intermediate demobilization and remobilization shall include all of the associated expenses and fees incurred by the Contractor for an Owner approved/directed intermediate demobilization to include stabilization of the project area to safe conditions during the demobilization time and a remobilization for project completion upon re-authorization from Owner. The demobilization and remobilization shall be approved as a written directive from the Owner only if delay outside the Contractor's control and that are otherwise not described would impede any road closures, detours, etc. if such road closure is required for the completion of any work for the Fort Sam Golf Course site, Contractor shall perform the proposed work at this site without hindering any events beyond what is approved on the permits

### **100.2 MEASUREMENT: ADD** the following paragraph at the end of the section:

Measurement of the Intermediate Demobilization and Remobilization item shall be by "Lump Sum," but requires written approval from SAWS. If there is no event(s) requiring the intermediate demobilization and remobilization there shall be no measurement and payment for this item.

### **100.3 PAYMENTS: ADD** the following paragraph at the end of the section:

Payment of the Intermediate Demobilization and Remobilization item shall only be paid if prior authorization in writing was given by SAWS. Payment of this item is limited to delays outside the Contractor's control and that are not otherwise described and provided in the General Conditions. Contractor shall be paid 50% for this item upon demobilization and 50% of this item upon remobilization. There shall be no payment of this item if the Owner does not approve any intermediate demobilization and remobilization for the project.

All other language in this specification 100 remains in full force.

## B. Revision to SAWS Standard Specification Item 101 Preparing Right-Of-Way 101.2 CONSTRUCTION METHODS: ADD the following:

Contractor shall stake each edge of the 20-foot temporary construction easement at a minimum interval of every 50-foot and at all deflection points using survey

lathes or equivalent prior to starting any work at the site. Contractor shall coordinate with Fort Sam Houston Golf Course to schedule dates for staking work to take place.

All other language in this specification 101 remains in full force.

### C. Revision to CoSA Specification Item 516 Sodding

**516.1 DESCRIPTION: DELETE** this section in its entirety and **REPLACE** with the following:

This item shall govern for the furnishing and planting of Bermuda, Tifway 419 Bermuda Sod (Golf Course Quality, Sand Based), St. Augustine, Buffalo 609 or other acceptable grass sod on the areas designated on the plans or as directed by the Engineer. All planting shall be completed as soon as practical to avoid erosion of topsoil and graded areas in advance of acceptable of the work. Sodding restoration for the site on the golf course, requires coordination and approval of the Fort Sam Houston Golf Course.

**516.7 BID ITEM: ADD** the following item at the end of the section:

Item 516.4 Tiffway 419 Bermuda Sod (Golf Course Quality, Sand Based) – per square yard

All other language in this specification 516 remains in full force.

## D. Revision to CoSA Specification Item 540 Temporary Erosion, Sedimentation and Water Pollution Prevention and Control

### **540.1 DESCRIPTION: ADD** the following:

For additional Stormwater Pollution Prevention Requirements, reference the attached SW3P Notice to Permit Holder regarding updates to the Construction Stormwater Ordinance (Ord. 94002) effective January 1, 2017 attached to the end of the Special Provisions to Technical Specifications.

## **540.4.A CONSTRUCTION: DELETE** this section in its entirety and **REPLACE** with the following:

- A. Contractor Responsibilities
- 1. SW3P. Contractor shall provide Storm Water Pollution Prevention Plan (SW3P) designed in accordance with the specific or general storm water requirements. SW3P shall be sealed by a professional engineer licensed in

the state of Texas. Prevent water pollution from storm water associated with construction activity from entering any surface water or private property on or adjacent to the project site. The Contractor shall effectively prevent and control erosion and sedimentation on the site at the earliest practicable time as outlined in the approved schedule. Control measures, where applicable, will be implemented prior to the commencement of each construction operation or immediately after the area has been disturbed.

All other language in this specification 540 remains in full force.

## E. Revision to Standard Specification Item 550 Trench Excavation Safety Protection

### **550.2 CONSTRUCTION: ADD** the following to the end of the section:

Contractor shall submit a Trench Excavation System Plan, designed and sealed by a professional engineer licensed in the State of Texas (Contractor's Engineer), for review by the Engineer and SAWS as product data. The Trench Excavation System Plan shall comply with the Occupational Safety and Health Administration (OSHA) Part 1926 – Safety and Health Regulations for Construction, Subpart P – Excavations section 652 – Requirements for protective systems. If applicable, this item shall be provided as a submittal to the Engineer and SAWS prior to mobilizing to the project site(s).

### **550.3 MEASUREMENT: ADD** the following to the end of the section:

If applicable, the Trench Excavation Safety Protection measurement shall include the Trench Excavation System Plan, designed and sealed by a professional engineer licensed in the State of Texas (Contractor's Engineer). Contractor shall provide as a product data submittal to the Engineer and SAWS.

### **550.4 PAYMENT: ADD** the following to the end of the section:

If applicable, the Trench Excavation System Plan, designed and sealed by a professional engineer licensed in the State of Texas (Contractor's Engineer), shall be subsidiary to the Trench Excavation Safety Protection pay item. There shall be no additional payment for the successful completion of this work.

All other language in this specification 550 remains in full force.

### F. Revision to Standard Specification Item No. 850 Sanitary Sewer Structures

**850.7 PAYMENT: DELETE** this paragraph in its entirety and **REPLACE** with the following:

The work as described in this specification, shall be paid for at the unit price bid per each for "Sanitary Sewer Structures", and where noted as "Cast-In-Place Concrete Base Sanitary Sewer Structure with Precast Concrete Manhole Sections", which price shall be full compensation for furnishing and placing all materials, manipulations, bases (whether cast-in place or precast) with pipe cradles, rings and covers, cones, throat rings, I/I barrier, testing precast sections, concrete, flowable fill, manhole ring encasement, mortar, diversion of flows within structure installation, labor, tools, equipment and incidentals necessary to complete the work.

Please note there shall be no separate measurement and payment for manhole coatings.

Concrete cradles for pipes entering and leaving a structure shall not be measured separately for payment and shall be considered subsidiary to the structure installation.

All other language in this specification 850 remains in full force.

### G. Revision to Standard Specification Item No. 854 Sanitary Sewer Laterals

**854.6 PAYMENT: DELETE** the first paragraph which reads:

Sanitary sewer laterals shall be paid for at the contract bid price per linear foot complete in place for the type, and size constructed. Price shall be full compensation for furnishing all materials, including pipe, pipe fittings (to include wyes, tees, bends), pumping, bedding, trenching or boring, trench protection, backfilling, tamping, cutting pavement and surface structures of whatever type encountered and replacement with whatever type specified and other incidentals required to complete the work.

**ADD** the following as the first paragraph:

Sanitary sewer laterals shall be paid for at the contract bid price per linear foot complete in place for the type, and size constructed. Price shall be full compensation for furnishing all materials, including pipe, cleanout covers/lids (typical type, unless otherwise noted in contract documents or by SAWS Inspector), pipe fittings (to include wyes, tees, bends), pumping, bedding, trenching or boring, trench protection, backfilling, tamping, cutting pavement and surface structures of whatever

type encountered and replacement with whatever type specified and other incidentals required to complete the work.

All other language in this specification 854 remains in full force.

## H. Revision to Standard Specification Item No. 855 Reconstruction of Existing Manholes

### **855.4.3 MATERIALS: ADD** the following:

- 3. Manhole Ring and Cover:
  - f. Specific manhole covers located inside the floodplain shall be vented as indicated on the plans. Vent configuration shall follow the detail provided in the plans. Contractor shall submit the vent material submittal with the manhole submittal for review and approval by Engineer and SAWS. This work shall be considered incidental to manhole reconstruction and shall not be a separate pay item.

All other language in this specification 855 remains in full force.

I. Revision to Standard Specification Item No. 864-S2 Bypass Pumping Large Diameter Sanitary Sewers

**864.7 MEASUREMENT AND PAYMENT: DELETE** this section in its entirety and **REPLACE** with the following:

- 1. Measurement for the work specified herein will be by lump sum as stated in the contract documents and plans. Payment of the "LUMP SUM" bid item for Bypass Pumping shall be in accordance with the following: Any effort required shall be included in the per lump sum bid price. Said effort shall include, as noted on the plans, the bypassing of large diameter mains. There will be no separate pay item for the bypassing of small diameter mains discharging into the proposed sewer pipeline rehab section(s).
- 2. When initial set-up and operation of the bypass pumping system begins at the site (including the passing of required testing), 20% of the "LUMP SUM" cost
  - will be paid as applicable to stationary bypass pumping to include flow diversion if used.
- 3. 60% of the "LUMP SUM" cost will be paid over equal monthly payments (estimated from the BPP or other documentation approved by the Inspector) during the bypass pumping operation/course per site, as applicable to

- stationary bypass pumping to include flow diversion if used.
- 4. 20% of the remaining "LUMP SUM" cost will be paid upon an acceptable removal and/or disassembly of all components of the BPP per site, including site cleanup as applicable to stationary bypass pumping to include flow diversion if used.
- 5. For multi-bypass pumping setups required per site, payment will be proportional to the overall amount of the established bid line item.
- 6. Any damages, repairs, etc., to private or public property will not be considered for any additional payment.
- 7. Measurement of the work for pipe plugs and transmitter shall be incidental to the work and will not have a separate pay item.
- 8. Measurement of the work for burying bypass piping, installing flowable fill, temporary pavement, removing buried bypass piping and flowable fill, disposing of said items, permanent flowable fill, pavement restoration (including road markings, i.e. striping) shall be incidental to the work under this bid price and will not have a separate pay item, unless otherwise stated in contract documents.
- 9. Measurement of the work for paving restoration, CoSA trails, or as noted on the plans shall be paid under the specified line items. The noted restoration items with separate payment are following the bypass plans included in the contract documents. There shall be no additional payment for any items to account for the Contractor's own designed bypass pumping system. Also, there shall be no payment of these items if the Contractor's own designed bypass pumping system doesn't require the noted restoration items.

All other language in this specification 864-S2 remains in full force.

## J. Revision to Standard Specification Item No. 866 Sewer Main Television Inspection

**866.1 DESCRIPTION: DELETE** this section in its entirety and **REPLACE** with the following:

The Contractor shall furnish all labor, materials, equipment, and incidentals to provide the closed-circuit televising. All inspections shall be in accordance with NASSCO PACP requirements and a NASSCO PACP database shall be submitted. All digital video files shall be color, closed-circuit TV in MPEG-1 format. The video shall include an inclinometer, visible on the video being viewed, noting the slope of the main being televised. The contractor shall provide all inspection data of mains and manholes written to a single storage device.

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

**866.2 GENERAL**: **DELETE** this section in its entirety and **REPLACE** with the following:

Before construction of the sanitary sewer main, the main shall be televised to locate laterals, observe existing conditions and immediately upon cleaning or clearing existing main. The Contractor shall furnish all labor, equipment, appliances, and materials necessary for cleaning the sewer system including the removal of all

debris, solids, sand, grease, grit, etc. from the sewer and manholes to facilitate television inspection. Televising shall be observed by the Inspector or Engineer and contractor as the camera is run through the system and shall be in accordance with

NASSCO PACP guidelines. No additional compensation shall be provided for cleaning, clearing, or re-televising.

After construction of the sanitary sewer main and prior to placement of the final course of asphalt or other final surface, the newly constructed sanitary sewer shall be televised immediately upon cleaning. Televising shall be observed by the Inspector or Engineer, and contractor as the camera is run through the system. Any abnormalities such as, but not limited to, misaligned joints, cracked/defected pipe, rolled gaskets, shall be repaired by the Contractor solely at his expense. Sections requiring repair shall be re-televised to verify condition of repair. No additional compensation shall be provided for all needed repairs, re-cleaning, or re-televising efforts.

### **8663 EXECUTION**: **DELETE** the following section:

The television unit shall also have the capability of displaying in color, on DVD, pipe inspection observations such as pipe defects, sags, points of root intrusion, offset joints, service connection locations, and any other relevant physical attributes. Each DVD shall be permanently labeled with the following:

- 1. Project name / SAWS Job # / Work Order #;
- 2. Date of television inspection;
- 3. Station to station location and size of sanitary sewer;
- *4. Street/easement location;*
- 5. Name of Contractor:
- 6. Date DVD submitted;
- 7. *DVD number*:
- 8. *SAWS Inspector Name*.

The section above shall be **REPLACED** with the following:

The television unit shall also have the capability of displaying in color, on videos,

pipe inspection observations such as pipe defects, sags, points of root intrusion, offset joints, service connection locations, and any other relevant physical attributes. Each video shall be permanently labeled at the beginning of the video with the following:

- 1. Project name / SAWS Job # / Work Order #;
- 2. Date of television inspection;
- 3. Manhole UNITIDs (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.

## **8668 MEASUREMENT AND PAYMENT: DELETE** this section in its entirety and **REPLACE** with the following:

Measurement and payment will be made for the work to be done on the basis of the unit bid price per linear foot of pipe diameters 8" through 15," 18" through 24," and 30" and larger, unless otherwise noted by item and shall be considered full compensation for all labor, materials, equipment, tools, logging, cleaning, bypass pumping and incidentals necessary to complete the work, as illustrated below, except as noted in the following paragraph.

- 1. <u>866</u>: Sewer Main Television Inspection
- 2. Category:

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866.1 8" through 15"
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866.2 18" through 24"

866.3 30" and larger

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

## K. Revision to Standard Specification Item No. 901 Rehabilitation of Sanitary Sewer By Cured-In-Place Pipe (Hot Water or Steam Cured)

**901.1 DESCRIPTION: DELETE** this section in its entirety and **REPLACE** with the following:

This specification includes requirements to rehabilitate existing sanitary sewers by

the installation of a resin-impregnated flexible tube, which is formed to the original conduit. The liner is inserted via an existing manhole or other access. The lining shall be installed using the following insertion method:

1. Water inversion – where the lining is inverted under the pressure of water and cured by circulating hot water.

**901.3.4 SUBMITTALS: ADD** the following sentence to the end of item 4 in this section:

4. Design calculations shall be identified by Manhole Numbers and segment identifiers in the plans.

**901.3.6 SUBMITTALS: ADD** the following sentence to the end of item 6 in this section:

6. Map shall provide sufficient detail to indicate the proposed liner insertion location/manhole and which pipe segments will be installed through said insertion location. Map shall also show any locations for field wet-out ("over the hole") insertion locations. Indicate source of water and pipeline route for each segment. Indicate location for any site-built towers or such temporary structures required to obtain sufficient pressure head for liner installation.

### **901.3 SUBMITTALS: ADD** the following item to the end of this section:

- 17. Contractor shall submit installer qualifications for review and approval by Engineer for compliance with specification requirements (Five (5) recent references and/or projects of the CIPP installer indicating pipe diameter, construction type using hot water, length, year completed, and project cost). The information shall indicate Key Personnel assigned on those past projects, and at least the superintendent or project manager shall be Key Personnel on this project and on site or readily accessible during CIPP installation per site.
- 18. Contractor shall submit resumes for Key Personnel staff assigned to project for review and approval by Engineer for compliance with specification requirements.

**901.4 MATERIALS: ADD** the following sentence to the end of item 6 in paragraph 3.e. in this section:

6). A soil modulus of 1000 psi may be used if documented site specific soil data (signed and sealed by a professional Engineer registered in the State of Texas) is provided with liner thickness design calculations required in 901.3 Submittals, Section 4.

**901.5.1 CONSTRUCTION: DELETE** this section in its entirety and **REPLACE** with the following:

- a. Installation of the CIPP products shall be performed by a work force that is experienced and certified in installation of the products. The installer shall be certified by the CIPP product manufacturer to have been trained and approved in the installation of their CIPP products and have a minimum of fiver (5) years total experience with the product.
- b. CIPP installer's project manager shall have a minimum of three (3) years of CIPP installation experience and must be on-site during the installation of the CIPP products. Experience shall be documented to the Owner's satisfaction in the form of a resume of work experience detailing scope of work (linear footage and pipe diameters), location of work, and reference contact information (owner, contact name, title, and phone number).
- c. Installer's superintendent shall have a minimum of fiver (5) years of CIPP installation experience and must be on-site during the installation of the CIPP products. Experience shall be documented to the Owner's satisfaction in the form of a resume of work experience detailing scope of work (linear footage and pipe diameters), location of work, and reference contact information (owner, contact name, title, and phone number).

**901.5.2 CONSTRUCTION: DELETE** this section in its entirety and **REPLACE** with the following:

a. Installer shall only use hot water curing equipment that has been certified and approved for use by the CIPP product manufacturer.

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

L. Revision to Standard Specification Item No. 1103 Point Repairs and Obstruction Removals

1103.3 CONSTRUCTION: DELETE the section "2. Obstruction Removal" and

### **REPLACE** with the following:

- 2. <u>Obstruction Removal -</u> Remove obstructions using one of the following methods:
- a. Obstruction Removal by remote device:
  - (1) Protruding taps: Service laterals that protrude more than one inch into the sewer main
  - (2) Other obstructions: Fixed debris, stabilized sand, hardened mineral deposits, roots, rust scale, tuberculation, etc.
- b. Obstruction Removal by excavation: Obstructions encountered during liner insertion that need to be removed by digging and exposing the damaged section of the main to be rehabbed.

## 1103.4 MEASUREMENT AND PAYMENT: DELETE the section "1. Unit Prices – Point Repairs" and REPLACE with the following:

- 1. Unit Prices- Point Repairs:
- a. Measurement for sewer line point repair is on a unit price basis for each repair performed. Minimum length of pipe to be replaced for each repair, determined by depth of sewer line measured from natural ground to flow line at point of repair.
- b. 9 feet minimum length.
- c. Measurement for sewer line extra length point repair is on a linear foot basis in excess of 20 feet.
- d. Payment for service lateral point repair is on a linear foot basis for all sizes of service laterals and for all depths (same unit price per linear foot, regardless of size and depth). No separate payment will be made for point repair done within the limits of a service lateral reconnection as defined in this Section. Minimum length of service lateral point repair is 3 feet.
- e. Measurement for hand excavation: When authorized by the Inspector in locations where excavation by machine is not suitable, no direct payment shall be made for hand excavation.
- f. Measurement for abandonment of point repair by excavation: No direct payment shall be made for abandonment of point repair.

- g. Measurement for abandonment of point repair by video inspection: No direct payment shall be made for abandonment of point repair by video inspection.
- h. The cost of the following items of work are included in the unit prices for point repairs, and all associated work:
  - 1) Excavation, embedment and backfill;
  - 2) Hauling away and lawful disposal of excess excavated materials and debris;
  - *Pipe, pipe fittings, adapters and concrete collars;*
  - *Smoke testing and any required retesting;*
  - 5) Post-cleaning video inspection;
  - *All other necessary work to complete.*
- i. Payment for site restoration (HMAC, sodding, etc) for each point repair shall be considered subsidiary to the site paying restoration shown on the plans, unless it is specifically called out for payment on the plans or contract documents. There will be no separate pay item for this restoration.

## **1103.4 MEASUREMENT AND PAYMENT: DELETE** the section "2<u>. Unit Prices – Obstruction Removal</u>" and **REPLACE** with the following:

### 2. Unit Prices- Obstruction Removal:

- a. Obstruction removal by excavation will be paid per each obstruction removal performed. Obstruction removal can be submitted for payment when the obstruction has been cleared from the sewer line to be lined. Liner work must proceed at least six (6) feet before payment for removal of another obstruction will be considered (i.e., all obstruction within a distance of six (6) feet is considered to be a part of the same obstruction.)
- b. Obstruction removal by remote device will be paid on a unit price basis, except that additional obstruction removal within six (6) feet of the obstruction shall not be measured separately for payment.
- c. The cost of the following work items are included in the unit prices for obstruction removal:
  - (1) Cleaning of sanitary sewers due to broken pipe, roots, dirt, loose deposits, etc.;

- (2) Post television inspection;
- (3) Excavation, embedment and backfill;
- (4) Hauling away and lawful disposal of excess excavated material and debris;
- (5) For obstruction removal by open cut excavation, restoration of site improvements, including sodding, except for paved areas which shall be measured separately per this section.
- (6) All other necessary effort to complete work.

Payment will not be made for obstruction removal if the existing sewer line, service line or tap is damaged and a point repair is required. Payment for paving restoration for each obstruction removal by shall be considered subsidiary to the line item, unless otherwise noted and quantified on the design plans or contract documents.

Removal of hard deposits, concrete, debris, pipes or any other material in a manhole, or that is accessible from the manhole wall, will be cleared under work items for rehabilitation of sanitary sewer manholes.

- d. Hanging gaskets shall not be measured separately for payment and shall be considered subsidiary to the pay item to which it relates.
- e. Obstruction removal locations shown on plans are based upon available CCTV videos dated 2014 through 2016. Contractor shall plan for the potential need for fine root removal being necessary at locations not indicated on plans. Additional fine root removals not shown on plans will not be paid for separately but shall be subsidiary to bid item 866.2 Sewer Main Television Inspections (18"-24") or bid item 866.3 Sewer Main Television Inspection (30" and larger).

All other language in this specification 1103 remains in full force.

## M. Revision to Standard Specification Item No. 1109 Sanitary Sewer Lateral Stub Outs or Reconnections

**1109.3 CONSTRUCTION: DELETE** the "Reconnection by Excavation Method" section in its entirety and **REPLACE** with the following:

- 3. Reconnection by Excavation Method:
  - a. Remove a portion of existing sanitary sewer main or carrier pipe to expose the CIPP liner. Provide sufficient working space for installing Inserta Tee (or Engineer approved equal) in accordance with manufacturer instructions.
  - b. Carefully cut the CIPP liner pipe to make a neat hole for installation

- of rubber boot for Inserta Tee (or Engineer approved equal). Install Inserta Tee in accordance with manufacturer instructions.
- c. Remove and replace cracked, offset, or leaking service lines for up to 5 feet, measured horizontally, from the center of the new main or liner.
- d. Employ method and equipment that restore the service connection capacity to not less than 90 percent of original capacity.
- e. Make up the connection between new main or liner and lateral using PVC sewer pipe, with approved fittings and couplings.
- f. Encase the entire lateral connection in flowable fill (200 psi minimum) or Engineer approved equal.
- g. Where noted on the design plans, full lateral replacement and cleanout shall be performed and paid under the applicable line items.
- h. Test each lateral connection before backfilling.

### 1109.4 MEASUREMENT AND PAYMENT: ADD the following to item 1:

k. No separate payment shall be made for Inserta Tees (or Engineer approved equal) when reconnection by excavation is required.

All other language in this specification 1109 remains in full force.

### N. Revision to Standard Specification Item No. 1114 (Pre-Construction Video)

**1114.3 EXECUTION: DELETE** this section in its entirety and **REPLACE** with the following:

Prior to beginning the project, the contractor shall submit two copies of the completed DVD for the entire project prior to submission of request for mobilization for review and approval. Failure to submit DVD will result in denial of any request for payment under the Mobilization line item or Preparation of Right-of-Way. Contractor shall ensure to document pre-construction conditions of all sites (i.e. Golf Courses, Private Properties, CoSA Parks Trails, etc.) to confirm any discrepancies in what the Contractor restores to match pre-construction, existing conditions and what the property owner or stakeholders deems as the required restoration.

All other language in this specification 1114 remains in full force.

- END -

# Development Services Department Land Development - Environmental

TO: Mr. Reck

**FROM:** Charles Johnson

**SUBJECT:** Tree Protection and Management

**PROJECT:** Case #CIP173309 SAWS 17-4534 MSP Package 7B

**DATE:** Date

### Dear Mr. Reck and Team

Thank you very much for the opportunity to review and comment on the CIP173309 SAWS 17-4534 MSP Package 7B project. I appreciate the attentiveness given to the tree preservation issues related to this project. The City of San Antonio does not have direct author on non-city owned property unless granted via other mechanisms. However, we greatly appreciate the opportunity to provide input and advice on this project to help ensure the project meets the Uniform Development Code's tree requirements. Based on the currently available information, the project may proceed as a coordination project.

#### Notes & General Comments:

- 1) Prior to the start of work, call 207-1111 and reference Case #CIP173309 SAWS 17-4534 MSP Package 7B to schedule a pre- construction and fencing inspection. [Sec. 35-477 (5) (c)]
- 2) 35-477 (h) Amendments. Notification and review by the city arborist should be obtained if changes need to be made to the plans that will impact protected trees or the root protection zone of protected trees.
- 3) Contractor should provide a licensed Tree Maintenance Professional throughout the project for tree related activities per City of San Antonio Ordinance Article VIII Sec. 21-171.
- 4) Tree roots shall be cut with a saw and painted prior to excavation with equipment.
- 5) **35-477 (j)** The plan holder should maintain a copy of the data and drawings, and the conditions of the City Arborist, readily available at the site at all times during which the authorized work is in progress.
- 6) 35-523 (k) (4) All broken branches & exposed roots of Significant, Heritage or mitigation trees should be cut cleanly
- 7) 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, storage, project trailers, employee parking, etc. are required to obtain and comply with a Temporary Uses Certificate of Occupancy.
- 8) **21-170 (b)** All wounds to the trunk, limbs, and root system of oak trees in the city that expose sapwood shall be painted within 30 min. of the wound with asphaltic, exterior oil or latex based paint.
- 9) **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 groundcover.
- c) No cutting, filling, trenching, root disturbance, soil disturbance, or construction impacts shall occur closer to the trunk than one-half (½) 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 encroach within the root protection zone if said encroachment is approved by the city arborist.
- d) Filling shall be allowed to accomplish water conservation goals established by the City of San Antonio or by a public utility.

Please do not hesitate to contact me if you have questions regarding this communication of I may be of further assistance.

Thanks much, Charles

Charles G Johnson

Development Services Department – Land Development

Office: 210-207-0170

Email: Charles.johnson2@sanantonio.gov



**Development Services Department** Land Development – Environmental

Partnering with our community to build and maintain a safer San Antonio
Please take a moment and tell us how we are doing by taking our survey

- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE.
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR CONSTRUCTION
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM
- THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE. HTTP://WWW.SAWS.ORG/BUSINESS\_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN
- THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500, AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 72 HOURS PRIOR TO EXCAVATION
- LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- THE CONTRACTOR SHALL VERIEV THE EXACT LOCATION OF LINDERGROUND LITH ITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

SAN ANTONIO WATER SYSTEM SANS AUTUNION WATER STEEM:
SANS AUTUNION SANS ORG/SERVICE/LOCATES
(COSA DRAINAGE 210-206-8433)
COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720

TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES CURBS STREETS DRIVEWAYS SIDEWALKS LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S
- ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COLINTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
- THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT
- ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN 2. THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER
- HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS, REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE 4.

- PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION. THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS
- POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A LITHITY POLE IS LESS THAN 5 FEET. SAID LITHITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK, IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL
- CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF

### SAWS GENERAL CONSTRUCTION NOTES WATER SECTION:

PRIOR TO TIE-INS ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS: THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK

SAWS PRODUCTION CONTROL CENTER 210-233-2016

- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIP OCCURS, PAYMENT FOR SUCH WORK IS TO BE MADE UNDER ITEM NO. 3000, "HANDLING ASBESTOS CEMENT PIPE".
- VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG (NSPI)

### CONSTRUCTION SCHEDULE/PHASING:

PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PREPARE A DETAILED PROJECT CONSTRUCTION SCHEDULE THAT DEMONSTRATES COMPLIANCE WITH THE PROPOSED CONTRACT TIME.

### SAWS GENERAL CONSTRUCTION NOTES SEWER SECTION:

- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN
  - A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT 210-704-SAWS (210-704-7297). PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
  - B. ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
  - C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS
  - CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
  - E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS
  - MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE. INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION)

SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.

- THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED, IN ACCORDANCE WITH SAWS SPECIAL SPECIFICATION ITEM NO. 864-S1, "BYPASS PUMPING SMALL DIAMETER SANITARY SEWERS" AND ITEM NO. 864-S2, "BYPASS PUMPING LARGE DIAMETER SANITARY SEWERS". PAYMENT FOR SUCH WORK WILL BE MADE JNDER THE BID ITEM "SANITARY SEWER (BYPASS PUMPING)" (LUMP SUM) AS PER SAWS SPECIAL SPECIFICATION.
- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIF-INS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
- 4 FLEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF VIA NOTES: MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS (NSPI)
- SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY JUAN C. RAMIREZ AT 210- 233-3558 AND SAWS EOC AT 210-704-SAWS (210-233-7297) A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGED TO THE CONTRACTOR THROUGH CHANGE ORDER.

### TXDOT, CITY OF SAN ANTONIO, **BEXAR COUNTY RIGHT-OF-WAY NOTES:**

- THE CONTRACTOR SHALL COMPLY WITH ALL TXDOT, CITY OF SAN ANTONIO AND/OR BEXAR COUNTY PERMIT REQUIREMENTS.
- RIGHT-OF-WAY SHALL BE CLEARED DAILY. STOCKPILING OF MATERIAL/SPOILS WITHIN THE RIGHT-OF-WAY IS PROHIBITED UNLESS APPROVED BY PUBLIC WORKS OF ENTITIES INVOLVED. NO WASTE MATERIAL SHALL BE PLACED WITHIN A FLOOD PLAIN OR DRAINAGE WAY IN A MANNER THAT BLOCKS OR ALTERS THE FLOW OF THE EXISTING STORMFLOW.
- NO TRENCHES SHALL BE LEFT OPEN DURING PERIODS OF NON-CONSTRUCTION OR OVERNIGHT WITHOUT THE PRIOR APPROVAL OF THE TXDOT/CITY/COUNTY ENGINEERS DEPARTMENT. IF TRENCHES ARE LEFT OPEN, SUCH TRENCHES SHALL BE SECURED WITH CONCRETE TRAFFIC BARRIERS OR OTHER ALTERNATIVE PROTECTIVE MEASURES ACCEPTABLE TO THE TXDOT/CITY/COUNTY ENGINEER.
- ALL DRIVEWAYS WITHIN THE CITY/COUNTY RIGHT-OF-WAY, WHICH ARE DAMAGED BY CONSTRUCTION, SHALL BE REPLACED WITH CONCRETE OR ASPHALT WITHIN THE LIMITS OF THE RIGHT-OF-WAY ALL LANDOWNERS OR TENANTS IMPACTED BY THE DRIVEWAY CONSTRUCTION SHALL BE NOTIFIED 48 HOURS PRIOR TO SUCH CONSTRUCTION. TEMPORARY ACCESS TO HOMES OR PROPERTY SHALL BE MAINTAINED DURING RECONSTRUCTION OF
- NATURAL AREAS WITHIN THE RIGHT-OF-WAY WHICH ARE DISTURBED BY CONSTRUCTION SHALL BE REVEGETATED. THESE AREAS MAY BE HYDROMULCHED IN ACCORDANCE WITH CITY OF SAN ANTONIO SPECIFICATIONS. VEGETATIVE WATERING SHALL BE PROVIDED BY
- CONTRACTOR SHALL REPLACE ALL EXISTING TRAFFIC CONTROL SIGNAGE DAMAGED BY CONSTRUCTION AT NO SEPARATE PAY. INSTALLED SIGNS SHALL BE CONSTRUCTED AND INSTALLED IN CONFORMANCE WITH CURRENT THE CITY OF SAN ANTONIO. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER

CURBS, SHRUBS, BUSHES OR DRIVEWAYS, (NO SEPARATE PAY ITEM)

RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION

THE EXISTENCE AND LOCATION OF UNDERGROUND LITH ITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY, ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND SHALL BE

CONDITION. ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREETS PAVING,

THE CONTRACTOR SHALL PROVIDE SAWS WITH AN EMERGENCY TELEPHONE NUMBER FOR EVENINGS, WEEKENDS, AND HOLIDAYS BY THE FIRST WORKING DAY OF THE PROJECT. THIS TELEPHONE NUMBER MUST BE COMMERCIAL ANSWERING SERVICE. THE ANSWERING SERVICE MUST BE ABLE TO CONTACT THE CONTRACTOR AND THE CONTRACTOR RESPOND BACK TO THE COUNTY STAFF WITHIN TWO HOURS OF THE INITIAL CONTACT

#### CPS ENERGY NOTE:

- CALL THE TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION DUE TO FEDERAL REGULATIONS TITLE 49, PART 192-181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN PROJECT AREA.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING CPS ENERGY OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.
- CONTRACTOR TO COORDINATE WITH CPS ENERGY AND FIELD VERIFY THE DEPTH OF GAS MAINS BEFORE BEGINNING OF CONSTRUCTION
- 4 POWER POLES ARE TO BE BRACED BY THE CONTRACTOR IF NECESSARY (NSPI)

#### ACCESSIBILITY REQUIREMENTS:

- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
- WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES. THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY
- PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES. THE CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON OR IN WRITING OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED SO THAT ALTERNATE PLANS MAY BE MADE BY THE RESIDENTS
- THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO ALL INTERSECTING STREETS UNLESS OTHERWISE SHOWN ON THESE PLANS. WHEN CONTINUOUS ACCESS IS SCHEDULED TO BE BLOCKED. THE CONTRACTOR SHALL CONTACT THE DISPATCHERS FOR THE FIRE DEPARTMENT AT 210-207-2257 TO APPRAISE THEM OF THE PENDING STREET CLOSURE AT LEAST 48 HOURS IN ADVANCE. IF THE CLOSURE FALLS ALONG A BUS ROUTE, THE CONTRACTOR SHALL ALSO CONTACT THE PROJECT MANAGER
- THE CONTRACTOR SHALL PROVIDE ACCESS FOR ALL DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE FOR ALL DELIVERABLES & COLLECTIONS, (FEDEX, PROPANE/GAS, GARBAGE, RECYCLING, AND ORGANICS COLLECTION...ETC.)

### TREE PROTECTION AND PRESERVATION NOTES

TREE PROTECTION AND PRESERVATION NOTES ARE INCLUDED IN THESE PLANS.

### AT&T NOTES:

- THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE
- THE CONTRACTOR SHOULD CALL FOR LOCATES THROUGH THE "ONE CALL" UTILITY LOCATE SERVICE (1-800-545-6005) 48 HOURS PRIOR TO CONSTRUCTION/EXCAVATION WORK CONTRACTORS HAVE THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE PANY PLANT DURING CONSTRUCTION

### NOTE FOR THE CITY OF SAN ANTONIO FLATWORKS

ALL LIMITS FOR CURB, SIDEWALK, AND TREE PREP BEYOND WHAT IS CONSIDERED INCIDENTAL TO NORMAL UTILITY CONSTRUCTION WILL BE ADDRESSED BY THE SAWS INSPECTOR. SAWS INSPECTOR WILL ALSO DETERMINE IF ADDITIONAL COMPENSATION IS WARRANTED IF LIMITS EXCEED INCIDENTALS.

- THE CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA ASSETS
- THE CONTRACTOR MUST CONTACT VIA ((210)362-2155 OR (210)362-2096) FOURTEEN DAYS RIOR TO ANY WORK IN THE VICINITY OF VIA BUS STOPS.
- THE CONTRACTOR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY
- THE CONTRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA

### STORM WATER POLLUTION PREVENTION PLAN:

- THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND PROVIDE A COPY OF THE SW3P PLAN TO SAWS AND THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION
- THE CONTRACTOR SHALL PROVIDE CONTROL MEASURES TO PREVENT OR MINIMIZE THE IMPACT TO THE EXISTING MUNICIPAL SEPARATE STORM WATER SYSTEM. THE SW3P IS TO BE ADJUSTED AND UPDATED AS THE PROJECT PROGRESSES TO MEET COMPLIANCE WITH PERM
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND APPROPRIATE DISPOSAL OF ANY PROJECT CONTROL MEASURES NOT INCORPORATED AS A PERMANENT CONTROL WHEN FINAL STABILIZATION HAS BEEN OBTAINED ON THE PROJECT. REMOVAL OF TEMPORARY CONTROL MEASURES. INCLUDING DISPOSAL OF SILT FENCING, ROCK, GRAVEL, OR OTHER MATERIALS SHALL BE INCLUDED IN THE APPROPRIATE LINE ITEM.
- CONTRACTOR SHALL CLEAN JOB SITE EVERY FRIDAY, ANY DEBRIS TRACKED ON EXISTING PAVEMENT SHALL BE CLEANED WITH A VACUUM STREET SWEEPER WITHIN 24 HOURS. IF CONTRACTOR DOESN'T COMPLY, OWNER MAY DISPATCH A DIFFERENT CONTRACTOR/SAW. PERSONNEL AND/OR WITHHOLD AND/OR DEDUCT PAYMENT FROM PRIME CONTRACTOR FOR ADDITIONAL EXPENSE INCURRED BY THE OWNER.

#### 34 DET-09 - TREE PROTECTION DETAILS (3 OF 4 35. DET-10 - TREE PROTECTION DETAILS (4 OF 4

COSA FLOODPLAIN DEVELOPMENT NOTES:

29. DET-05 - TEMPORARY SWPPP CONTROL MEASURES (1 OF 2)
31. DET-06 - TEMPORARY SWPPP CONTROL MEASURES (2 OF 2)
32. DET-07 - TREE PROTECTION DETAILS (1 OF 4)

29. DET-04 - EROSION AND SEDIMENTATION CONTROLS

22. BP-01 - BYPASS PUMPING PLAN SHEET 1 OF 4

23. BP-02 - BYPASS PUMPING PLAN SHEET 2 OF 4

24. BP-03 - BYPASS PUMPING PLAN SHEET 3 OF 4 25. BP-04 - BYPASS PUMPING PLAN SHEET 4 OF 4

26. DET-01 - SAWS STANDARD MANHOLE DETAILS 27 DET-02 - SAWS STANDARD MANHOLE DETAILS

33. DET-08 - TREE PROTECTION DETAILS (2 OF 4

28. DET-03 - MANHOLE DETAILS

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G-04 - FORT SAM HOUSTON (AW47) SURVEY CONTROL C-01 - PROJECT LOCATION MAP

C-02 - FORT SAM HOUSTON (AW47) SITE ACCESS PLAN

G-03 - SYMBOLS, ABBREVIATIONS AND SUMMARY OF QUANTITIES

C-03 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 10+00 TO 14+00 C-04 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 14+00 TO 18+00

C-05 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 18+00 TO 22+00

C-06 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 22+00 TO 26+00 C-07 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 26+00 TO 30+00

12. C-08 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 30+00 TO 34+10

13. C-09 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 34+10 TO 38+00 14. C-10 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 38+00 TO 42+01
15. C-11 - FORT SAM HOUSTON (AW47) PLAN AND PROFILE STA 42+00 TO END

16 TP-01 - FORT SAM HOUSTON (AW47) TREE PROTECTION PLAN (1 OF 4)

19. TP-04 - FORT SAM HOUSTON (AW47) TREE PROTECTION PLAN (4 OF 4

TP-02 - FORT SAM HOUSTON (AW47) TREE PROTECTION PLAN (2 OF 4 TP-03 - FORT SAM HOUSTON (AW47) TREE PROTECTION PLAN (3 OF 4

20 TP-05 - TEMPORARY CONSTRUCTION FASEMENT TREE PROTECTION PLAN (1 OF 2)

. TP-06 - TEMPORARY CONSTRUCTION EASEMENT TREE PROTECTION PLAN (2 OF 2)

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 HE 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

IMPROVED SECTIONS OF EARTHEN CHANNELS AND/OR WATERWAYS WILL BE VEGETATED BY SEEDING OR SODDING FIGHTY-FIVE PERCENT OF THE CHANNEL SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF ANTONIO WILL ACCEPT THE CHANNEL FOR

### TRENCH EXCAVATION SAFETY PROTECTION:

- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/FQLIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS, 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.
- 2. 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.
- 3. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OF 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.

#### FORT SAM HOUSTON GOLF COURSE GENERAL NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FOR ACCESS TO AND FROM PROJECT SITE IN FORT SAM HOUSTON.
- 2. CONTRACTOR SHALL COMPLY WITH "AUTHORITY AND RULES OF CONDUCT" WHILE WORKING
- 3. CONTRACTOR SHALL REFER TO EXECUTED RIGHT OF ENTRY AGREEMENT(S) FOR THE PROJECT SITE AND ABIDE BY THE SPECIFICATIONS AND REQUIREMENTS STATED THERE
- 4. CONTRACTOR SHALL PROVIDE, AS A MINIMUM, 2 WEEKS ADVANCE NOTICE PRIOR TO MOBILIZING TO PROJECT SITE AND COORDINATE WITH SAWS INSPECTOR AND GOLF COURSE POINT OF CONTACT MR. DOUGLAS CARLTON (GOLF COURSE MANAGER) AT 210-221-5863 OR 505-907-6711 (EMAIL: DOUGLAS.W.CARLTON.NAF@MAIL.MIL) AND AIR FORCE CEC LIAISON MR. STEPHEN WHATLEY AT 210-295-4922.
- 5. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES AS INDICATED IN CONTRACT DOCUMENTS AND LIMIT DISRUPTION OF SERVICES AND DAY TO DAY OPERATIONS OF GOLF COURSE AND
- 6. CONTRACTOR SHALL CALL THE FT SAM BASE CIVIL ENGINEER 24-HR SERVICE CALL NUMBER REGARDING ANY FOUND UNEXPLODED ORDINANCES AT 210-671-5555.





WATER SYSTEM



MULTIPLE SEWERSHED PACKAGE 7B JOB NO. 17-4534

NO.	DATE	REVISION	В
1	10/25/19	PER ADDENDUM NO. 2	JF
0000	NOUT.	ABOARIO II O INO	

OCTOBER 2019 ROJECT NO .: 02196052B.0000 DESIGNED BY: J. RECK

RAWN BY K. COBABE HECKED BY M. KRISHNAMOORTHSUJATH

SHEET TITLE

**GENERAL NOTES AND** INDEX OF DRAWINGS

AS SHOWN

G-02 02 OF

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