



W-1 LEON CREEK: HWY 151 TO HWY 90 - UPPER SEGMENT
Solicitation Number: CO-00351
Job No.: 19-4528

ADDENDUM 2
September 24, 2020

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the price 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 price proposal.

RESPONSES TO QUESTIONS

Q1: The typical pipe trench detail 3/D-1 indicates a 14' minimum and 14' max pay width for trench repair. Based on the size of pipe being installed on this project the minimum and max are not possible (7' for pipe, 1' minimum either side, 2' asphalt type B either side and 2' more for asphalt type D or C – $2+2+1+7+1+2+2 = 17$; would be 18 feet if 18" either side of the pipe). Please clarify if contractor's are required to carry additional width of paving above 15' as incidental cost to the pipe installation.

Response: *The asphalt pay limits will be revised to 17'-0" MIN/18'-0" Max on Sheet D-1, detail 3.*

Q2: In addition to the above, a large portion of the access road off Pinn Road is calling for 10" repair that appear to meet the above limit with 2" surface repair for the entire road. Based on the alignment a large portion of this road is going to be removed. Would SAWS consider adjusting this item to just include full replacement of that access road as part of the project?

Response: *All additional asphalt repair beyond pay limits shall be the responsibility of the Contractor and shall be repaired at the Contractor's expense (No additional payment).*

Q3: Line E is called out as 8" PVC in profile view on sheet C-21. Please clarify.

Response: *Line E will be revised in the profile view to indicate 42.80 LF and 24" FRP (SN 72).*

Q4: On Sheet C-12 the existing recycled water line is labeled as 30" RW in plan view and 36" in profile. Please clarify.

Response: *The line work for the RW line in plan view will be revised to indicated 36" RW.*

Q5: There is no information in SS804A that indicates the required frequency of testing for the potentially contaminated soils under pay item 69. At what intervals is this required to be tested?

Response: *Contractor to refer to SS804A, Section 3.02, Sampling Contaminated Soils, C.1, which indicates one sample shall be collected at a maximum of every 1000 cubic yards of excavated materials or as required by the landfill.*

- Q6:** Pay items 70 and 71 are in the bid schedule to be paid per ton however the payment section of SS804A indicates that these materials will be paid by the CY. Please clarify.
- Response:** *Part 4 – Payment, section 4.01 Measurement for Payment, Subsection B, C, and D will be revised to per ton.*
- Q7:** SS804A also includes additional language regarding Special Waste and Contaminated Water. There are no items for either of these instances in the pay items. If these conditions are encountered will the contractor be compensated for the handling and disposal of them via change order?
- Response:** *Special Waste (i.e. Class 1 & 2 soils) covered under Line Items 71 and 72. A Line Item will be added to the Price Proposal for Contaminated Water with a measurement in payment of gallons.*
- Q8:** Can the areas that the contaminated soils are anticipated to be identified so that contractors can reflect the impact in those locations in our schedules or approach to the project?
- Response:** *The potential areas of contaminated soils can be anticipated to be identified from approximately STA 1+00 to approximately STA 27+00.*
- Q9:** The area north of Commerce Street will require heavy dewatering. Can this water be placed in the existing 42” SS if sedimentation is removed prior to it being placed in the line?
- Response:** *No, the water from dewatering cannot be placed in the existing 42” SS.*
- Q10:** The total LF of inspection in pay item 65 does not match the total LF of SS pipe installed in pay items 31, 32, 45, 52-56. Please clarify.
- Response:** *The quantity for pay item 65 has been revised to match the total LF of SS pipe installed.*
- Q11:** I have a question in regards to the prerequisites required for the W-1 Leon Creek bid that is due on Oct 5th. Will SAWS allow other types of underground construction besides sanitary sewer as a prerequisite?
- Response:** *The Respondent’s experience needs to be most relevant to the scope of work described in the RFCSP. Other similar, but non-sanitary sewer installation experience can be included, but may receive a reduction in points.*

CHANGES TO THE SPECIFICATIONS

1. Price Proposal

- Remove and Replace the Price Proposal with the Price Proposal included in this Addendum. The revised documents should be used by Respondents submitting a proposal for this project.
 - Increased quantity of Line Item 3 – Hotmix Asphalt Pavement Type B – 10 inches Pavement Thickness to 2,152 SY
 - Reduced quantity of Line Item 5 – Hotmix Asphalt Pavement Type D – 2 inches Pavement Thickness to 5,847 SY
 - Reduced quantity of Line Item 6 – Salvaging, Hauling & Stockpiling Reclaimable Asphalt Pavement (2 inches depth) to 5,847 SY
 - Reduced quantity of Line 65 – Sewer Main TV Inspection (All Sizes) to 8,019 LF
 - Added Line Item 73 – Contaminated Water Disposal/Recycling Inclusive of Equipment Rental (Frac Tank and Pumps) Removing, Managing, Characterizing, Manifesting, and Transporting to Disposal /Recycling Center

2. Wage Decisions

Due to an update in the General Wage Decision for Building Construction Type, remove the Building Wage decision document from the solicitation in its entirety and replace with the revised version attached (rev. 09/11/2020, General Decision Number: TX20200231). This version should be utilized by the awarded contractor for the project.

3. Supplemental Specifications, SS 804A Contaminated Soil and Water Control

- Remove and Replace in its entirety Pages SS804A – 11 and SS804A – 12
 - Section 4.01 Measurement For Payment, B. Contaminated Waste Classification, Transportation and Disposal (Class I) – removing measurement for payment from a cubic yard basis and replacing measure for payment to a per ton basis
 - Section 4.01 Measurement For Payment, C. Contaminated Waste Classification, Transportation and Disposal (Class II) – removing measurement for payment from a cubic yard basis and replacing measure for payment to a per ton basis
 - Section 4.01 Measurement For Payment, D. Contaminated Waste Classification, Transportation and Disposal (Special Waste) – removing measurement for payment from a cubic yard basis and replacing measure for payment to a per ton basis
 - Section 4.01 Measurement For Payment, E. Water Storage – removing measurement for payment from a per tank basis and replacing measure for payment to a per gallon basis
 - Section 4.01 Measurement For Payment, F Contaminated Water Disposal (Recycling/Disposal Center) removing measure for payment from a per ton basis and replacing measure for payment to a per gallon basis

CHANGES TO THE PLANS

1. Remove the following plan sheets in their entirety and replace them with the attached, revised plan sheets. (Revisions made from the original sheets are depicted by revision clouds around the changed portions.)

- Sheet G-4: QUANTITIES AND SAWS GENERAL CONSTRUCTION NOTES SHEET – Replace sheet in its entirety.
 - Increased quantity of Line Item 3 – Hotmix Asphalt Pavement Type B – 10 inches Pavement Thickness
 - Reduced quantity of Line Item 5 – Hotmix Asphalt Pavement Type D – 2 inches Pavement Thickness
 - Reduced quantity of Line Item 6 – Salvaging, Hauling & Stockpiling Reclaimable Asphalt Pavement (2 inches depth)
 - Reduced quantity of Line 65 – Sewer Main TV Inspection (All Sizes)
 - Added Line Item 73 – Contaminated Water Disposal/Recycling Inclusive of Equipment Rental (Frac Tank and Pumps) Removing, Managing, Characterizing, Manifesting, and Transporting to Disposal /Recycling Center
- Sheet C-1: Line “A” Plan and Profile Sheet STA 9+94.15 to 14+00 – Replace sheet in its entirety.
 - Revised Quantity for Line Item 205.2 Hotmix Asphalt Pavement Type B -10 Inches Pavement Thickness
 - Revised Quantity for Line Item 205.4 Hotmix Asphalt Pavement Type D – 2 Inches Pavement Thickness
 - Revised Quantity for Line Item 208.1 Salvaging, Hauling, & Stockpiling Reclaimable Asphalt Pavement (2 Inches Depth)
 - Revised note to indicate, “Contractor shall Restore and/or Replace 653 SY (Type B)”
- Sheet C-2: Line “A” Plan and Profile Sheet STA 14+00 to 18+00 – Replace sheet in its entirety.
 - Revised Quantity for Line Item 205.2 Hotmix Asphalt Pavement Type B -10 Inches Pavement Thickness and Note
- Sheet C-3: Line “A” Plan and Profile Sheet STA 18+00 to 22+00 – Replace sheet in its entirety.
 - Revised Quantity for Line Item 205.2 Hotmix Asphalt Pavement Type B -10 Inches Pavement Thickness and Note
- Sheet C-12: Line “A” Plan and Profile Sheet STA 54+00 to 58+00 – Replace sheet in its entirety.
 - Revised in plan view the pipe size of the CSC Recycled Water Main to 36”RCW
- Sheet C-21: Line “E” Plan and Profile Sheet STA 1+00 to 1+42.80 – Replace sheet in its entirety.
 - Relabeled Profile to indicate 42.80 LF, 24” FRP (SN 72) @ 3.39%
- Sheet D-1: Typical Trench Details
 - , Revised Minimum and Maximum Asphalt Pay Limits

- o Added note to Detail 3 for Pinn Road Access Road

CLARIFICATIONS

1. Estimated Cost:

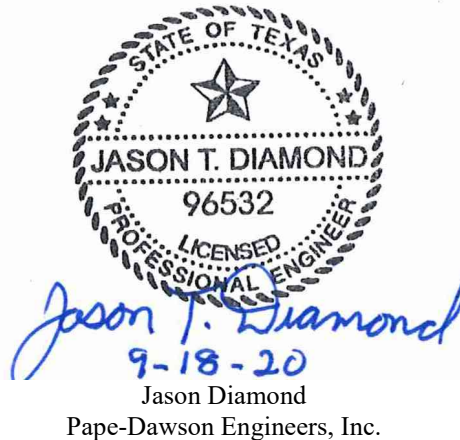
The estimated cost originally noted on the SAWS website has been revised to \$17,401,076.87 due to this Addendum.

END OF ADDENDUM 2

This Addendum is 24 pages in its entirety, including attachments.

Attachments:

- Contract Documents – Price Proposal (4 pages)
- General Wage Decision Number: TX20200231 (rev. 09/11/2020) (7 pages)
- Supplemental Specifications - SS 804A Contaminated Soil and Water Control: Pages SS804A – 11 and SS804A -12 (2 pages)
- Plans – Sheet G-4: Quantities and SAWS General Construction Notes Sheet
- Plans – Sheet C-1: Line “A” Plan and Profile STA 9+94.15 to 14+00
- Plans – Sheet C-2: Line “A” Plan and Profile STA 14+00 to 18+00
- Plans – Sheet C-3: Line “A” Plan and Profile STA 18+00 to 22+00
- Plans – Sheet C-12: Line “A” Plan and Profile STA 54+00 to 58+00
- Plans – Sheet C-21: Line “B” and “E” Plan and Profile STA 1+00 to 50.00; STA 1+00 to 1+42.80
- Plans - Sheet D-1: Typical Trench Details



PRICE PROPOSAL

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

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitation for Competitive Sealed Proposals, 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 PRICE PROPOSAL ITEMS.

RESPONDENT'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 PROPOSAL.

PROPOSAL

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **563** calendar days after the start date, as set forth in the Authorization to Proceed. **The Respondent 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 Proposal which are included on the following pages.

Statement on President's Executive Orders

Has your firm previously performed work subject to the President's Executive Orders Numbers 11246 and 11375 or any preceding similar executive orders (Numbers 10925 and 11114)?

Yes _____ No _____

Price Proposal
SAWS Job No. 19-4528
W-1 Leon Creek: Hwy 151 to Hwy 90 - Upper Segment
Solicitation No. CO-00351

Line No	Item No.	Description	Unit	Quantity	Unit Price	Total Price
1	202.1	PRIME COAT	GAL	588	\$	\$
2	203.1	TACK COAT	GAL	708	\$	\$
3	205.2	HOTMIX ASPHALT PAVEMENT TYPE B - 10 INCHES PAVEMENT THICKNESS	SY	2,152	\$	\$
4	205.3	HOTMIX ASPHALT PAVEMENT TYPE D - 3 INCHES PAVEMENT THICKNESS	SY	1,200	\$	\$
5	205.4	HOTMIX ASPHALT PAVEMENT TYPE D - 2 INCHES PAVEMENT THICKNESS	SY	5,847	\$	\$
6	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2 INCHES DEPTH)	SY	5,847	\$	\$
7	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (3 INCHES DEPTH)	SY	1,200	\$	\$
8	500.1	CONCRETE CURB	LF	64	\$	\$
9	502.1	CONCRETE SIDEWALKS	SY	12	\$	\$
10	503.1	PORTLAND CEMENT CONCRETE DRIVEWAYS	SY	57	\$	\$
11	505.1	CONCRETE RIPRAP (6" THICK)	SY	61	\$	\$
12	103.4	REMOVE MISC. CONCRETE	SF	420	\$	\$
13	SP-13	BYPASS PUMPING PAD 10'x10' WITH 4"-6" (D50) RIPRAP (COMPLETE)	LS	1	\$	\$
14	SP-13	EXISTING PAD RESTORATION	LS	1	\$	\$
15	511.1	REPLACING WITH FLEXIBLE BASE & PAVEMENT (12" COMPACTED DEPTH)	SY	16	\$	\$
16	522.1	SIDEWALK PIPE RAILING	LF	44	\$	\$
17	536.1	4" WIDE YELLOW LINE	LF	480	\$	\$
18	536.2	4" WIDE WHITE LINE	LF	480	\$	\$
19	814	24" DI WATERLINE (OPEN CUT)	LF	85	\$	\$
20	836	PIPE FITTINGS (ALL TYPES & SIZES)	TN	1.55	\$	\$
21	840	24" WATER TIE-INS	EA	2	\$	\$
22	841.0	HYDROSTATIC TESTING	EA	1	\$	\$
23	844.4	4" BLOW-OFF, TEMPORARY	EA	1	\$	\$
24	110/820	36" CSC RECYCLED WATER MAIN, RESTRAINED	LF	61	\$	\$
25	110	30" MANWAY	EA	1	\$	\$
26	846	2" AIR RELEASE VALVE	EA	1	\$	\$
27	3100	TEMPORARY WATER MAIN (12" HDPE)	LS	1	\$	\$
28	507	TEMPORARY CONSTRUCTION FENCE (4 FEET HIGH)	LF	111	\$	\$
29	530	BARRICADES, SIGNS & TRAFFIC HANDLING	LS	1	\$	\$
30	SPTS 540	TEMPORARY EROSION, SEDIMENTATION AND WATER POLLUTION PREVENTION AND CONTROL	LS	1	\$	\$
31	550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	6,979	\$	\$
32	848A	8" PVC SDR 26 (OPEN CUT 0'-10')	LF	106	\$	\$
33	848A	12" PVC SDR 26 (OPEN CUT 10'-20')	LF	67	\$	\$
34	848B	TESTING AND ACCEPTANCE OF PVC SDR 26 PIPE (ALL DEPTHS)	LS	1	\$	\$
35	852A	EXTRA DEPTH MANHOLE	VF	13	\$	\$
36	852A	4 FEET SANITARY SEWER MANHOLE	EA	1	\$	\$
37	852A	REMOVE & REPLACE 4' SANITARY SEWER MANHOLE	EA	2	\$	\$
38	852B	TESTING AND ACCEPTANCE OF SANITARY SEWER MANHOLES (ALL TYPES)	LS	1	\$	\$
39	853	EXTRA DEPTH TEE BASE MANHOLE	VF	194	\$	\$
40	853A	TEE BASE FIBERGLASS MANHOLE	EA	3	\$	\$
41	853A	TEE BASE FIBERGLASS MANHOLE, MITER	EA	9	\$	\$

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Line No	Item No.	Description	Unit	Quantity	Unit Price	Total Price
42	853A	TEE BASE FIBERGLASS MANHOLE, MITER W/ SUMP	EA	1	\$	\$
43	853A	TEE BASE FIBERGLASS DROP MANHOLE	EA	2	\$	\$
44	853A	TEE BASE FIBERGLASS DROP MANHOLE, MITER	EA	1	\$	\$
45	853B	TESTING AND ACCEPTANCE OF FRP MANHOLES (ALL TYPES)	LS	1	\$	\$
46	SS 2426	CARRIER PIPE IN TUNNELS - 84" FRP (ASTM D-3262)(SN 72)	LF	1,196	\$	\$
47	SS2610/SS2314	102" STEEL CASING PIPE (0.5" THICKNESS) / 108" STEEL LINER PLATE	LF	550	\$	\$
48	SS2441/SS2314	PIPE-JACKED TUNNEL/TUNNELING WITH LINER PLATE	LF	550	\$	\$
49	SS2610	102" STEEL CASING PIPE (0.5" THICKNESS)	LF	89	\$	\$
50	SS2441	PIPE-JACKED TUNNEL	LF	89	\$	\$
51	SS2314	108" STEEL LINER PLATE	LF	557	\$	\$
52	SS2314	TUNNELING WITH LINER PLATE	LF	557	\$	\$
53	857A	24" FRP (ASTM D-3262)(SN 72)(OPEN CUT 5'-10')	LF	43	\$	\$
54	857A	66" FRP (ASTM D-3262)(SN 72)(OPEN CUT 15'-20')	LF	67	\$	\$
55	857A	84" FRP (ASTM D-3262)(SN 72)(OPEN CUT 10'-15')	LF	1,075	\$	\$
56	857A	84" FRP (ASTM D-3262)(SN 72)(OPEN CUT 15'-20')	LF	4,940	\$	\$
57	857A	84" FRP (ASTM D-3262)(SN 72)(OPEN CUT 20'-25')	LF	525	\$	\$
58	857B	TESTING AND ACCEPTANCE OF FRP GRAVITY SEWER (ALL SIZES AND DEPTHS)	LS	1	\$	\$
59	858	CONCRETE ENCASEMENT (MIN STRENGTH, 2,000 PSI)	CY	4,126	\$	\$
60	413	FLOWABLE FILL	CY	351	\$	\$
61	862	ABANDON EXISTING SEWER MAIN (>15-INCH DIAMETER)	LF	7,706	\$	\$
62	862	ABANDON EXISTING SEWER MAIN (<15-INCH DIAMETER)	LF	70	\$	\$
63	864-S1	BYPASS PUMPING SMALL DIAMETER (<24")	LS	1	\$	\$
64	SP 864-S2	BYPASS PUMPING LARGE DIAMETER (>24")	LS	1	\$	\$
65	866	SEWER MAIN TV INSPECTION (ALL SIZES)	LF	8,019	\$	\$
66	866	SEWER MAIN TV INSPECTION (PRE-ABANDONMENT)	LF	7,776	\$	\$
67	910	MANHOLE REHABILITATION	SF	692	\$	\$
68	TP7-TP10	DRILL SEEDING (WITH NATIVE SEED MIXTURE)	SY	630,506	\$	\$
69	D-5	CONCRETE MANHOLE TOP SLAB	EA	9	\$	\$
SUBTOTAL (ITEMS 1-69)					\$	\$
70	SS 804A	ENVIRONMENTAL SERVICES, INCLUSIVE OF AIR MONITORING, WASTE CHARACTERIZATION, SAMPLING (LABOR, LAB, OTHER DIRECT COSTS), REPORTING, AND ENVIRONMENTAL OVERSIGHT	LS	1	\$	\$
71	SS 804A	CLASS 1 SOIL WASTE DISPOSAL INCLUSIVE OF REMOVING, MANAGING, CHARACTERIZING, MANIFESTING, TRANSPORTING AND DISPOSING AT A PERMITTED LANDFILL	TON	156	\$	\$
72	SS 804A	CLASS 2 SOIL WASTE DISPOSAL INCLUSIVE OF REMOVING, MANAGING, CHARACTERIZING, MANIFESTING, TRANSPORTING AND DISPOSING AT A PERMITTED LANDFILL	TON	1,440	\$	\$
73	SS 804A	CONTAMINATED WATER DISPOSAL/RECYCLING INCLUSIVE OF EQUIPMENT RENTAL (FRAC TANK AND PUMPS) REMOVING, MANAGING, CHARACTERIZING, MANIFESTING, AND TRANSPORTING TO DISPOSAL/RECYCLING CENTER	GAL	10,000	\$	\$
74	SPTS 100A	INTERMEDIATE DEMOBILIZATION/REMOBILIZATION (OPEN-CUT CONSTRUCTION)	EA	2	\$	\$
75	SPTS 100B	INTERMEDIATE DEMOBILIZATION/REMOBILIZATION (TUNNEL CONSTRUCTION)	EA	2	\$	\$
76	864-S1.3	BYPASS PUMPING DURING DEMOBILIZATION (SMALL DIAMETER) INTERMEDIATE DEMOBILIZATION BYPASS PUMPING EQUIPMENT RENTAL	DAY	30	\$	\$
77	864-S1.4	INTERMEDIATE DEMOBILIZATION BYPASS PUMPING FUEL	DAY	30	\$	\$

Price Proposal
SAWS Job No. 19-4528
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Solicitation No. CO-00351

Line No	Item No.	Description	Unit	Quantity	Unit Price	Total Price
78	864-S1.5	INTERMEDIATE DEMOBILIZATION BYPASS PUMPING MONITORING	DAY	30	\$	\$
79	864-SP-S2.3	BYPASS PUMPING DURING DEMOBILIZATION (LARGE DIAMETER) INTERMEDIATE DEMOBILIZATION BYPASS PUMPING EQUIPMENT RENTAL	DAY	30	\$	\$
80	864-SP-S2.4	INTERMEDIATE DEMOBILIZATION BYPASS PUMPING FUEL	DAY	30	\$	\$
81	864-SP-S2.5	INTERMEDIATE DEMOBILIZATION BYPASS PUMPING MONITORING	DAY	30	\$	\$
82	100	MOBILIZATION (MAXIMUM 8% OF ITEMS 1-69)	LS	1	\$	\$
83	101	PREPARATION OF RIGHT-OF-WAY (MAXIMUM 4% OF ITEMS 1-69)	LS	1	\$	\$
TOTAL PRICE PROPOSAL						
(TO INCLUDE LINE ITEMS 1-69 AND 70-83)						\$

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 THE PERCENTAGES SHOWN AND ADJUST THE EXTENSIONS OF THE BID ITEMS ACCORDINGLY.

"General Decision Number: TX20200231 09/11/2020

Superseded General Decision Number: TX20190231

State: Texas

Construction Type: Building

County: Bexar County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	02/14/2020
2	08/28/2020
3	09/11/2020

ASBE0087-014 01/01/2018

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR (Duct, Pipe and Mechanical System Insulation).....	\$ 22.72	10.02

BOIL0074-003 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 28.00	22.35

ELEC0060-003 06/01/2019

Rates Fringes

ELECTRICIAN (Communication
Technician Only).....\$ 22.55 9%+5.45

ELEC0060-004 06/01/2019

Rates Fringes

ELECTRICIAN (Excludes Low
Voltage Wiring).....\$ 28.60 18%+5.45

ELEV0081-001 01/01/2020

Rates Fringes

ELEVATOR MECHANIC.....\$ 41.90 34.765

FOOTNOTES:

A. 6% under 5 years based on regular hourly rate for all hours worked. 8% over 5 years based on regular hourly rate for all hours worked.

B. Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Friday after Thanksgiving Day; Christmas Day; and Veterans Day.

ENGI0450-002 04/01/2014

Rates Fringes

POWER EQUIPMENT OPERATOR
Cranes.....\$ 34.85 9.85

* IRON0066-013 06/01/2020

Rates Fringes

IRONWORKER, STRUCTURAL.....\$ 23.45 6.83

* IRON0084-011 06/01/2020

Rates Fringes

IRONWORKER, ORNAMENTAL.....\$ 25.26 7.13

PLUM0142-009 08/07/2019

Rates Fringes

HVAC MECHANIC (HVAC
Electrical Temperature
Control Installation Only).....\$ 30.25 13.36

HVAC MECHANIC (HVAC Unit
Installation Only).....\$ 30.25 13.36

PIPEFITTER (Including HVAC
Pipe Installation).....\$ 31.05 13.76
Including HVAC Pipe Installation

PLUMBER (Excludes HVAC Pipe
Installation).....\$ 31.05 13.76
Excludes HVAC Pipe Installation

SFTX0669-002 04/01/2020

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 30.64	21.68

SHEE0067-004 07/01/2020

	Rates	Fringes
Sheet metal worker Excludes HVAC Duct Installation.....	\$ 27.31	15.51
HVAC Duct Installation Only.	\$ 27.31	15.51

SUTX2014-006 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 22.15	0.00
CARPENTER (Acoustical Ceiling Installation Only).....	\$ 17.83	0.00
CARPENTER (Form Work Only).....	\$ 13.63	0.00
CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, Form Work, and Metal Stud Installation.....	\$ 16.86	4.17
CAULKER.....	\$ 15.00	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 22.27	5.30
DRYWALL FINISHER/TAPER.....	\$ 13.81	0.00
DRYWALL HANGER AND METAL STUD INSTALLER.....	\$ 15.18	0.00
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 20.39	3.04
IRONWORKER, REINFORCING.....	\$ 12.27	0.00
LABORER: Common or General.....	\$ 10.75	0.00
LABORER: Mason Tender - Brick...	\$ 11.88	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 12.00	0.00
LABORER: Pipelayer.....	\$ 11.00	0.00
LABORER: Roof Tearoff.....	\$ 11.28	0.00
LABORER: Landscape and Irrigation.....	\$ 8.00	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 15.98	0.00
OPERATOR: Bobcat/Skid		

Steer/Skid Loader.....	\$ 14.00	0.00
OPERATOR: Bulldozer.....	\$ 14.00	0.00
OPERATOR: Drill.....	\$ 14.50	0.00
OPERATOR: Forklift.....	\$ 12.50	0.00
OPERATOR: Grader/Blade.....	\$ 23.00	5.07
OPERATOR: Loader.....	\$ 12.79	0.00
OPERATOR: Mechanic.....	\$ 18.75	5.12
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.03	0.00
OPERATOR: Roller.....	\$ 12.00	0.00
PAINTER (Brush, Roller and Spray), Excludes Drywall Finishing/Taping.....	\$ 13.07	0.00
ROOFER.....	\$ 12.00	0.00
TILE FINISHER.....	\$ 11.32	0.00
TILE SETTER.....	\$ 14.94	0.00
TRUCK DRIVER: Dump Truck.....	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within

the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010

08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

unfavorable weather conditions.

- C. When the work is interrupted by rain, operations will not be resumed until the Contractor's Consultant, in coordination with SAWS, indicates conditions are acceptable to continue work. The Contractor shall notify SAWS and SAWS's representative when work has resumed.
- D. Backfill compaction shall meet the requirements of SAWS Standard Specifications for Construction – Item 804 "Excavation, Trenching and Backfill".

3.11 LANDFILL AND UNDESIRABLE DEBRIS

- A. If refuse other than inert landfill debris is uncovered during the performance of the cutting actions, activities will be immediately stopped and the Engineer notified.
- B. If tires or transite (asbestos containing) pipe is encountered they shall be segregated from other materials. They will be profiled as Special Waste with the receiving disposal facility prior to transportation and disposal.

PART 4 –PAYMENT

4.01 MEASUREMENT FOR PAYMENT

- A. Environmental Services
 - 1. Measurement for payment shall be on a per lump sum basis. Environmental services provided by an environmental consultant(s) for air monitoring, waste characterization, reporting, and environmental oversight for construction within landfill locations.
Contractor shall prepare a Health and Safety Plan that complies with all Federal and State safety requirements to ensure that jobsite conditions meet State, Federal, company and industry standards and provide a safe working environment for personnel to complete the work. Bid price shall be full compensation for environmental services as specified in this specification and the Work Plan. Bid item shall include all costs for required equipment, supplies, and labor to perform the Work.
- B. Contaminated Waste Classification, Transportation, and Disposal (Class I)
 - 1. Measurement for payment shall be on a per ton basis for a Class I waste as specified in the Project Work Plan. Bid item includes all equipment, labor, fuel, incidentals, temporary storage, and materials necessary to remove, manage, handle, characterize, sort, manifest, transport, and dispose of the waste material. This item includes landfill disposal fees.
- C. Contaminated Waste Classification, Transportation, and Disposal (Class II)
 - 1. Measurement for payment shall be on a per ton basis for a Class II waste as specified in the Project Work Plan. Bid item includes all equipment, labor, fuel, incidentals, temporary storage, and materials necessary to remove, manage, handle, characterize, sort, manifest, transport, and dispose of the waste material. This item includes landfill disposal fees.

- D. Contaminated Waste Classification, Transportation, and Disposal (Special Waste)
 - 1. Measurement for payment shall be on a per ton basis for a Special Waste as specified in the Project Work Plan. Bid item includes all equipment, labor, fuel, incidentals, temporary storage, and materials necessary to remove, manage, handle, characterize, sort, manifest, transport, and dispose of the waste material. This item includes landfill disposal fees.

- E. Water Storage
 - 1. Measurement for payment shall be on a per gallon basis for tanks delivered to the site. This item includes portable storage tanks required to store groundwater and potentially contaminated runoff water and all equipment, labor, fuel, pumping, incidentals, materials necessary to remove, manage, handle, and characterize the potentially contaminated water.

- F. Contaminated Water Disposal (Recycling/Disposal Center)
 - 1. Measurement for payment shall be on a per gallon basis. This item includes all equipment, labor, fuel, incidentals, transport, characterization, manifests, and disposal fees.

END OF SECTION

QUANTITIES TABLE

Table with columns: NO, ITEM, UNIT, QUANTITY. Lists construction items like PRIME COAT, TACK COAT, HOTMIX ASPHALT PAVEMENT, CONCRETE CURB, etc.

SAWS GENERAL CONSTRUCTION NOTES

GENERAL SECTION

- 1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM(SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM"...

14. CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION.

WATER SECTION

- 15. 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.

SEWER SECTION

- 16. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS.
17. 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)

EXCAVATION EQUIPMENT

OUR EXPLORATORY BORING LOGS ARE NOT INTENDED FOR USE IN DETERMINING CONSTRUCTION MEANS AND METHODS AND MAY THEREFORE BE MISLEADING IF USED FOR THAT PURPOSE.

PAPE-DAWSON Job No. 8918-00. Includes engineer's seal for Jason T. Diamond, State of Texas, License No. 16552, dated 9-18-20.

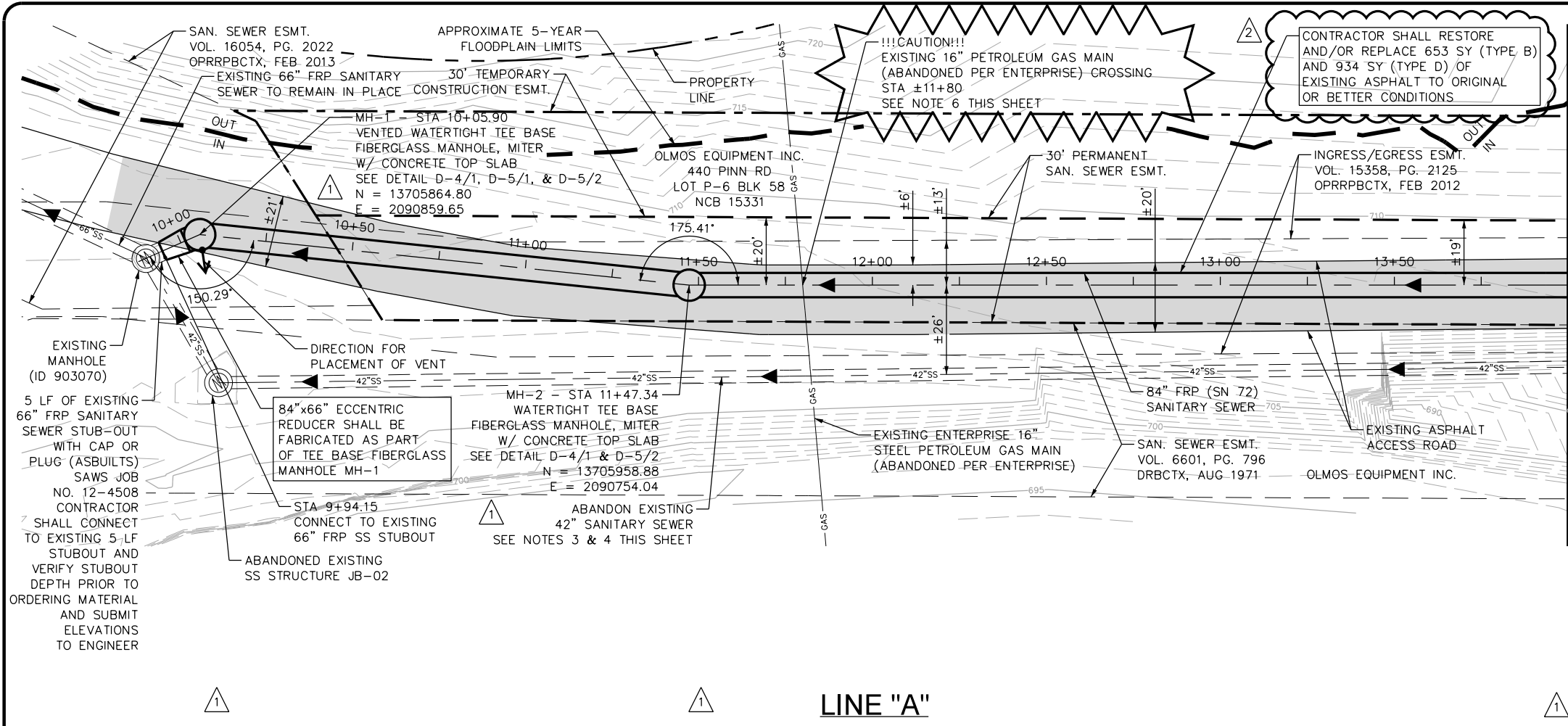
PAPE-DAWSON ENGINEERS logo and address: 2000 HWY LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.8000

SAN ANTONIO WATER SYSTEM logo with a water tap icon.

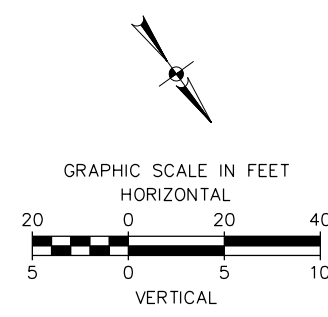
SAWS JOB NO. 19-4528 W-1 LEON CREEK: HWY 151 TO HWY 90 UPPER SEGMENT QUANTITIES AND SAWS GENERAL CONSTRUCTION NOTES SHEET

PLOTTED ON: 9/22/2020

DESIGN FILENAME: P:\89\18\00\Design\Civil\Sewer\Phase 1\SS891800-01-C01.dgn



MATCHLINE STA. 14+00



QUANTITY TABLE			
ITEM	DESCRIPTION	UNIT	QUANTITY
857A	84" FRP (ASTM D-3262)(SN 72) (OPEN CUT 15'-20')	LF	395
853A	TEE BASE FIBERGLASS MANHOLE, MITER	EA	2
853	EXTRA DEPTH TEE BASE MANHOLE	VF	18
202.1	PRIME COAT	GAL	95
203.1	TACK COAT	GAL	95
205.2	HOTMIX ASPHALT PAVEMENT TYPE B - 10 INCHES PAVEMENT THICKNESS	SY	653
205.4	HOTMIX ASPHALT PAVEMENT TYPE D - 2 INCHES PAVEMENT THICKNESS	SY	934
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2 INCHES DEPTH)	SY	934
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	405
866	SEWER MAIN TV INSPECTION	LF	405
D-5	CONCRETE MANHOLE TOP SLAB	EA	2

LINE "A"

PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION	PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION	PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION	PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION	PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION	PROPOSED INVERT ELEVATION	EXISTING GROUND ELEVATION				
692.32	707.1	692.33	707.1	692.42	707.6	692.46	708.0	692.49	708.4	692.53	708.6	692.56	708.8	692.60	709.1
10+00		10+50		11+00		12+00		12+50		13+00		13+50		14+00	

MATCHLINE STA. 14+00

- NOTES:**
- CONTRACTOR SHALL REFER TO THE TREE PRESERVATION PLAN SHEETS TP-1 TO TP-10 FOR TREE REMOVAL AND PRESERVATION.
 - CONTRACTOR MAY ENCOUNTER THE PRESENCE OF GROUND WATER DURING CONSTRUCTION. CONTRACTOR SHALL REFER TO THE SUPPLEMENTARY SPECIFICATIONS FOR CONTROL OF GROUND WATER.
 - CONTRACTOR SHALL REFER TO SHEETS G-21 TO G-23 FOR ABANDONMENT PLAN, NOTES AND QUANTITIES.
 - CONTRACTOR SHALL PROTECT EXISTING 42" SANITARY SEWER DURING CONSTRUCTION OF PROPOSED SANITARY SEWER MAIN.
 - ENTIRE AREA SHOWN ON THIS PLAN SHEET IS IN THE 100-YEAR FLOODPLAIN.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND DEPTH OF THE EXISTING GAS LINE. CONTRACTOR SHALL REPORT, TO THE ENGINEERS, ANY DEVIATION FROM PLAN LOCATION OR ELEVATION.

PAPE-DAWSON
Job No.
8918-00

DATE: AUG 2020
DESIGNED BY: MP
DRAWN BY: BS
CHECKED BY: JO
SCALE: 1" = 40' HORZ
1" = 10' VERT

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 HWY LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TYPE FIRM REGISTRATION # 0036880

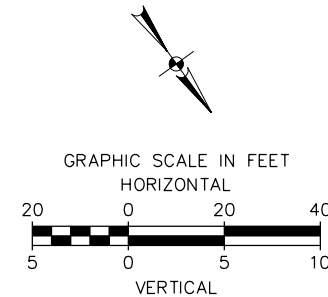
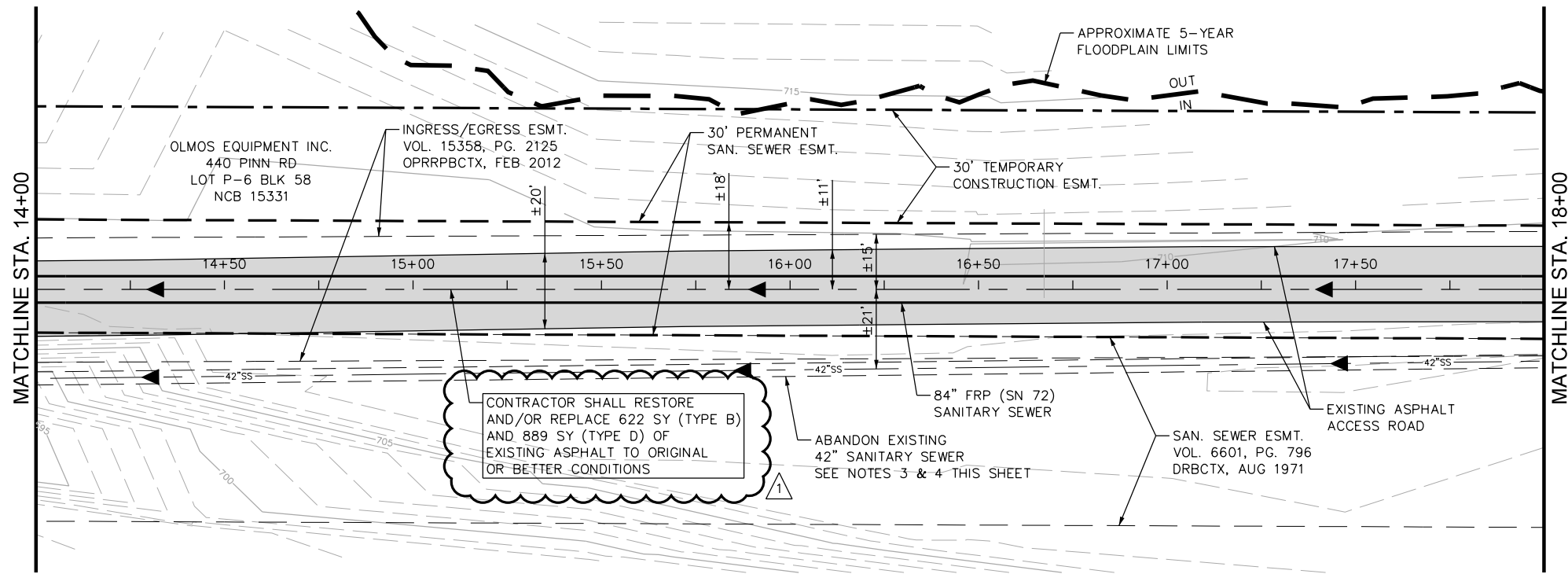
SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 19-4528
W-1 LEON CREEK: HWY 151 TO HWY 90
UPPER SEGMENT
LINE "A" PLAN AND PROFILE
STA 9+94.15 TO STA 14+00

Sheet **C-1**
24 of 67

PLOTTED ON: 9/22/2020

DESIGN FILENAME: P:\89\18\00\Design\Civil\Sewer\Phase 1\SS891800-01-C02.dgn



DATE: AUG 2020	
DESIGNED BY: MP	APP.:
DRAWN BY: BS	REVISIONS:
CHECKED BY: JO	ADDITION #2
SCALE: 1" = 40' HORZ 1" = 10' VERT	

PAPE-DAWSON
Job No.
8918-00



PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 HWY LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.8000
TYPE FIRM REGISTRATION #03070000

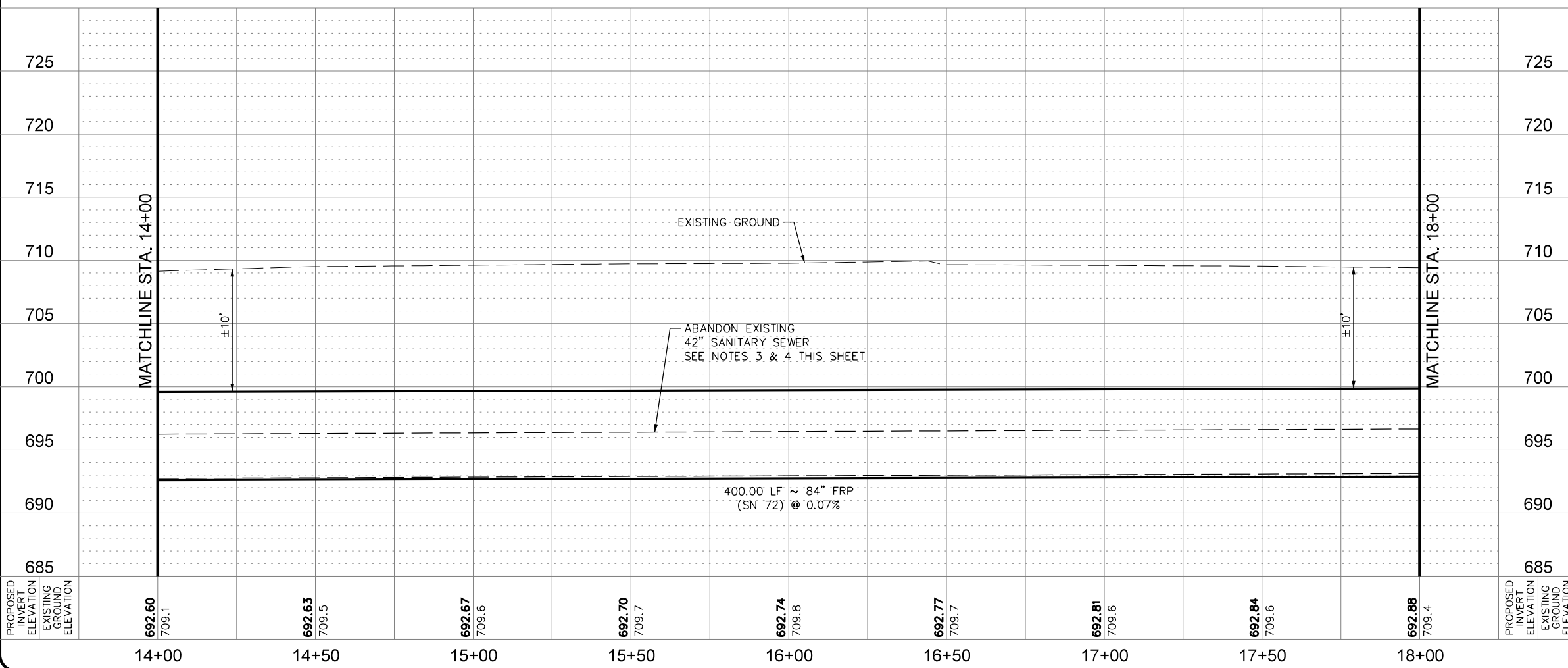
SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 19-4528
W-1 LEON CREEK: HWY 151 TO HWY 90
UPPER SEGMENT
LINE "A" PLAN AND PROFILE
STA 14+00 TO STA 18+00

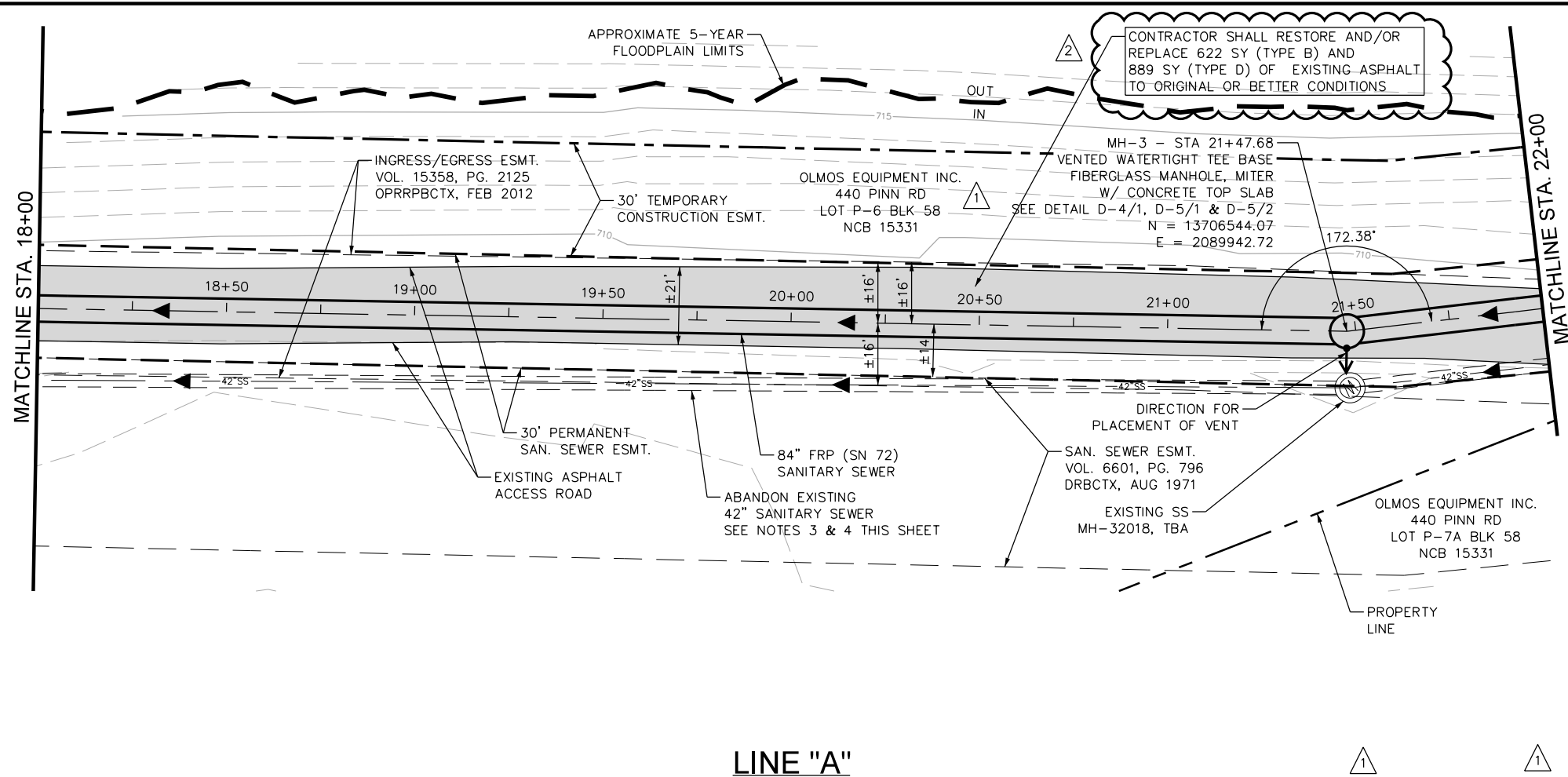
Sheet C-2
25 of 67

QUANTITY TABLE			
ITEM	DESCRIPTION	UNIT	QUANTITY
857A	84" FRP (ASTM D-3262)(SN 72) (OPEN CUT 15'-20')	LF	400
202.1	PRIME COAT	GAL	89
203.1	TACK COAT	GAL	89
205.2	HOTMIX ASPHALT PAVEMENT TYPE B - 10 INCHES PAVEMENT THICKNESS	SY	622
205.4	HOTMIX ASPHALT PAVEMENT TYPE D - 2 INCHES PAVEMENT THICKNESS	SY	889
208.1	SALVAGING, HAULING & STOCKPIILING RECLAIMABLE ASPHALT PAVEMENT (2 INCHES DEPTH)	SY	889
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	400
866	SEWER MAIN TV INSPECTION	LF	400

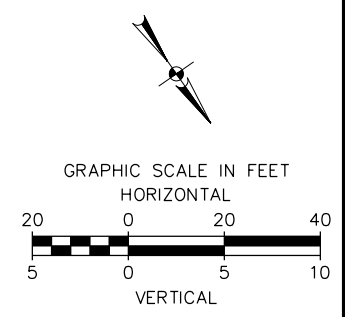
LINE "A"



- NOTES:**
- CONTRACTOR SHALL REFER TO THE TREE PRESERVATION PLAN SHEETS TP-1 TO TP-10 FOR TREE REMOVAL AND PRESERVATION.
 - CONTRACTOR MAY ENCOUNTER THE PRESENCE OF GROUND WATER DURING CONSTRUCTION. CONTRACTOR SHALL REFER TO THE SUPPLEMENTARY SPECIFICATIONS FOR CONTROL OF GROUND WATER.
 - CONTRACTOR SHALL REFER TO SHEETS G-21 TO G-23 FOR ABANDONMENT PLAN, NOTES AND QUANTITIES.
 - CONTRACTOR SHALL PROTECT EXISTING 42" SANITARY SEWER DURING CONSTRUCTION OF PROPOSED SANITARY SEWER MAIN.
 - ENTIRE AREA SHOWN ON THIS PLAN SHEET IS IN THE 100-YEAR FLOODPLAIN.



QUANTITY TABLE			
ITEM	DESCRIPTION	UNIT	QUANTITY
857A	84" FRP (ASTM D-3262)(SN 72) (OPEN CUT 15'-20')	LF	400
853A	TEE BASE FIBERGLASS MANHOLE, MITER	EA	1
853	EXTRA DEPTH TEE BASE MANHOLE	VF	11
202.1	PRIME COAT	GAL	89
203.1	TACK COAT	GAL	89
205.2	HOTMIX ASPHALT PAVEMENT TYPE B - 10 INCHES PAVEMENT THICKNESS	SY	622
205.4	HOTMIX ASPHALT PAVEMENT TYPE D - 2 INCHES PAVEMENT THICKNESS	SY	889
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2 INCHES DEPTH)	SY	889
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	400
866	SEWER MAIN TV INSPECTION	LF	400
D-5	CONCRETE MANHOLE TOP SLAB	EA	1

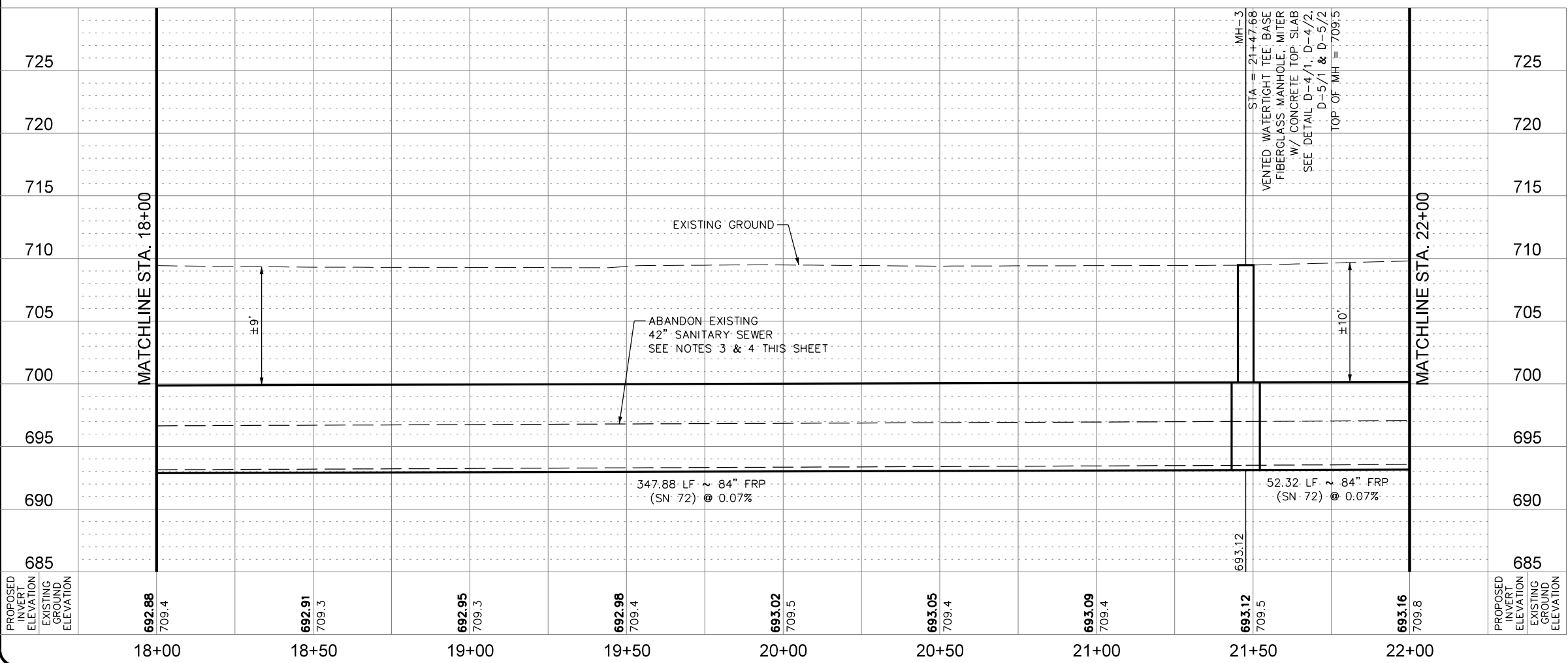


PAPE-DAWSON
Job No.
8918-00

STATE OF TEXAS
JASON T. DIAMOND
96532
Professional Engineer
9-18-20

DATE: AUG 2020
DESIGNED BY: MP
DRAWN BY: BS
CHECKED BY: JO
SCALE: 1" = 40' HORZ
1" = 10' VERT

LINE "A"



- NOTES:**
- CONTRACTOR SHALL REFER TO THE TREE PRESERVATION PLAN SHEETS TP-1 TO TP-10 FOR TREE REMOVAL AND PRESERVATION.
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 - ENTIRE AREA SHOWN ON THIS PLAN SHEET IS IN THE 100-YEAR FLOODPLAIN.

PAPE-DAWSON ENGINEERS

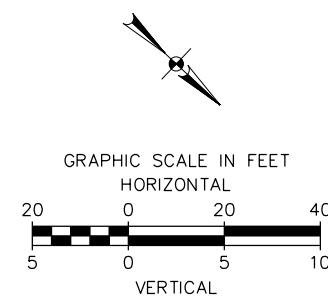
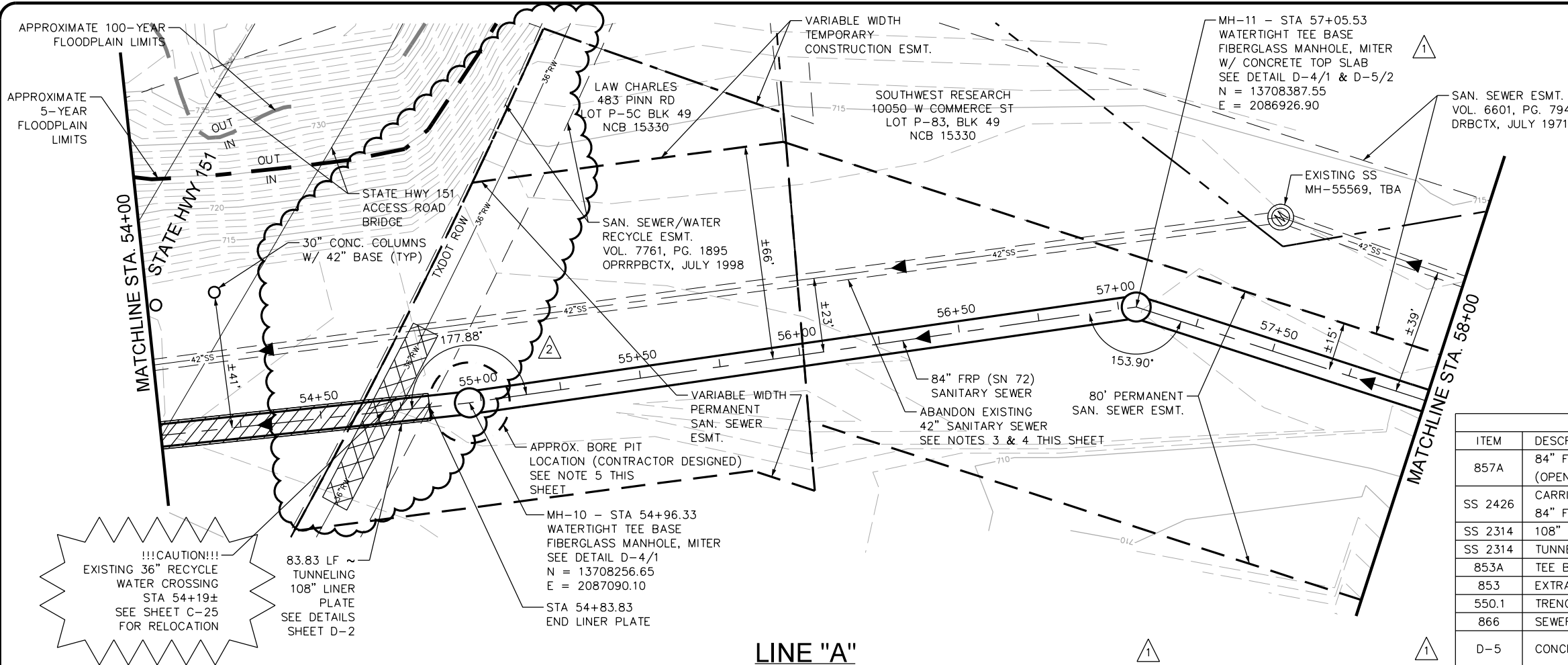
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 HWY LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TYPE FIRM REGISTRATION #470 | TYPE FIRM REGISTRATION #100880

SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 19-4528
W-1 LEON CREEK: HWY 151 TO HWY 90
UPPER SEGMENT
LINE "A" PLAN AND PROFILE
STA 18+00 TO STA 22+00

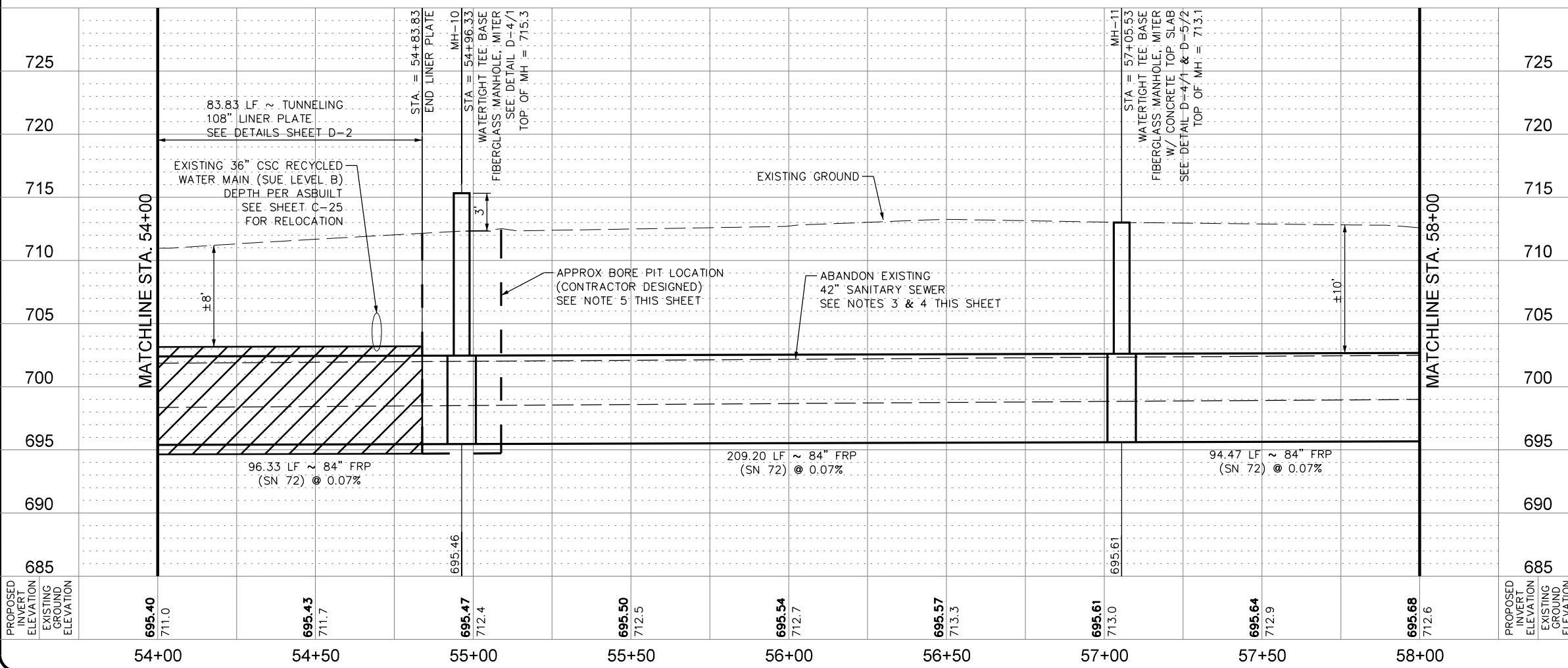
PLOTTED ON: 9/22/2020

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QUANTITY TABLE			
ITEM	DESCRIPTION	UNIT	QUANTITY
857A	84" FRP (ASTM D-3262)(SN 72) (OPEN CUT 15'-20')	LF	316
SS 2426	CARRIER PIPE IN TUNNELS	LF	84
SS 2314	84" FRP (ASTM D-3262)(SN 72)	LF	84
SS 2314	TUNNELING WITH LINER PLATE	LF	84
853A	TEE BASE FIBERGLASS MANHOLE, MITER	EA	2
853	EXTRA DEPTH TEE BASE MANHOLE	VF	26
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	316
866	SEWER MAIN TV INSPECTION	LF	400
D-5	CONCRETE MANHOLE TOP SLAB	EA	1

LINE "A"



- NOTES:**
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 - CONTRACTOR SHALL REFER TO SHEETS G-21 TO G-23 FOR ABANDONMENT PLAN, NOTES AND QUANTITIES.
 - CONTRACTOR SHALL PROTECT EXISTING 42" SANITARY SEWER DURING CONSTRUCTION OF PROPOSED SANITARY SEWER MAIN.
 - CONTRACTOR NEEDS TO ADEQUATELY SHORE TUNNEL SHAFT TO PREVENT DISTURBING BACKFILL OF EXISTING 42-INCH SANITARY SEWER MAIN.
 - ENTIRE AREA SHOWN ON THIS PLAN SHEET IS IN THE 100-YEAR FLOODPLAIN.
 - ACCESS TO SOUTHWEST RESEARCH INSTITUTE IS LIMITED TO THE ACQUIRED SAWS EASEMENTS SHOWN ON PLANS, NO OTHER ACCESS WILL BE ALLOWED.

PAPE-DAWSON
Job No.
8918-00

Jason T. Diamond
9-18-20

NO.	DATE	REVISIONS
2	9/18/20	DATE: AUG 2020
1	9/14/20	DESIGNED BY: MP DRAWN BY: BS CHECKED BY: JO

SCALE: 1" = 40' HORZ
1" = 10' VERT

PAPE-DAWSON ENGINEERS

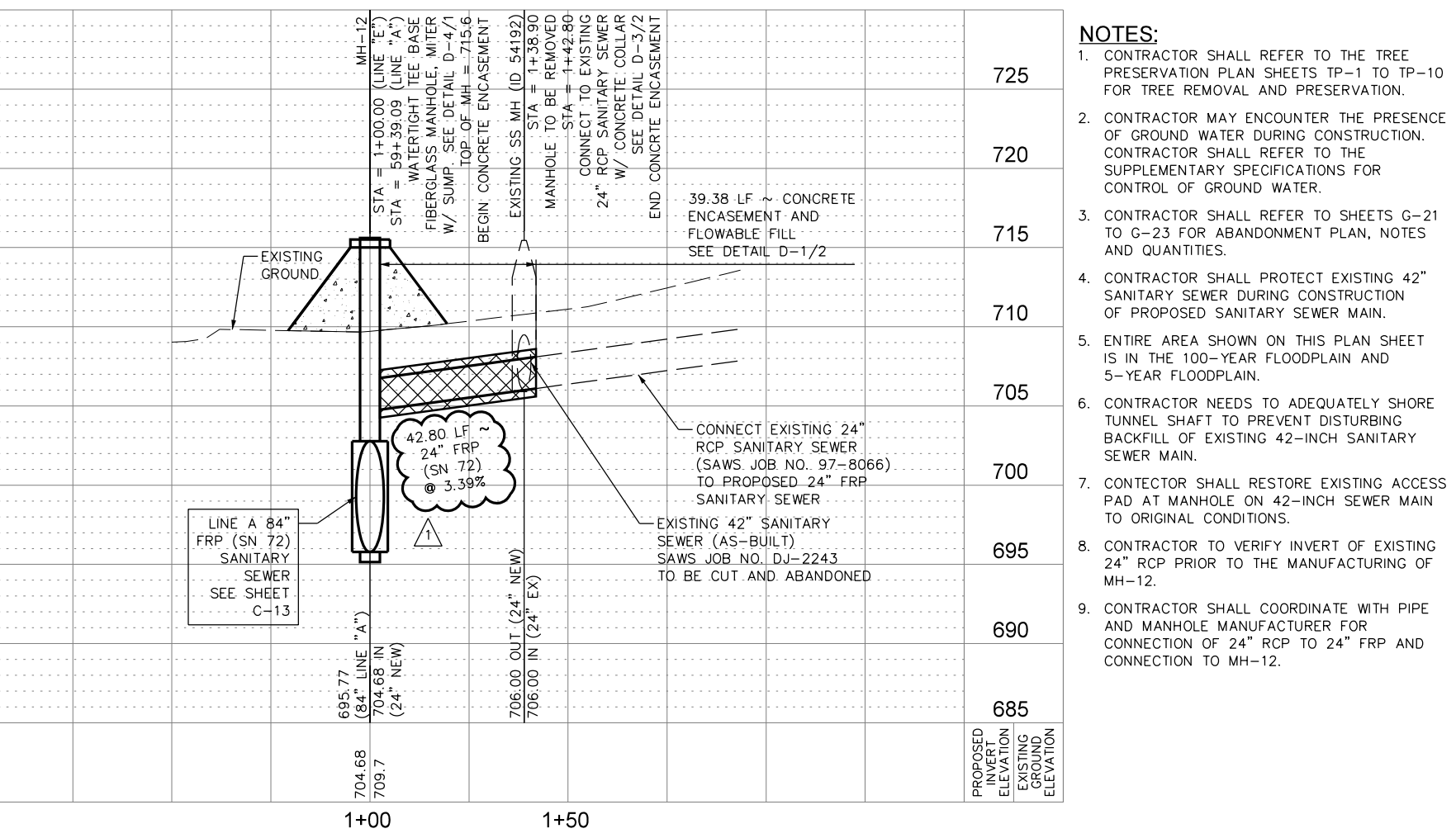
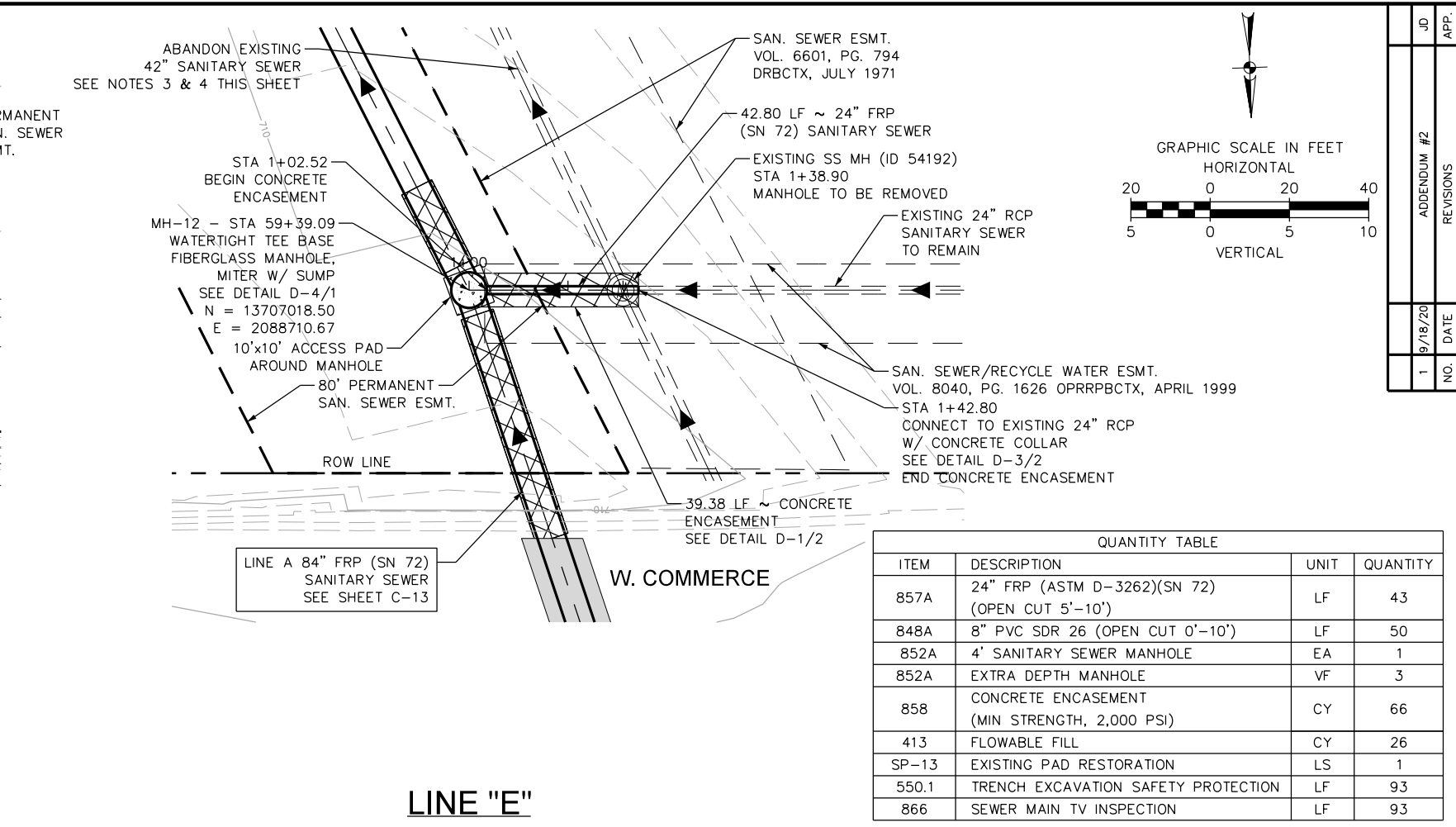
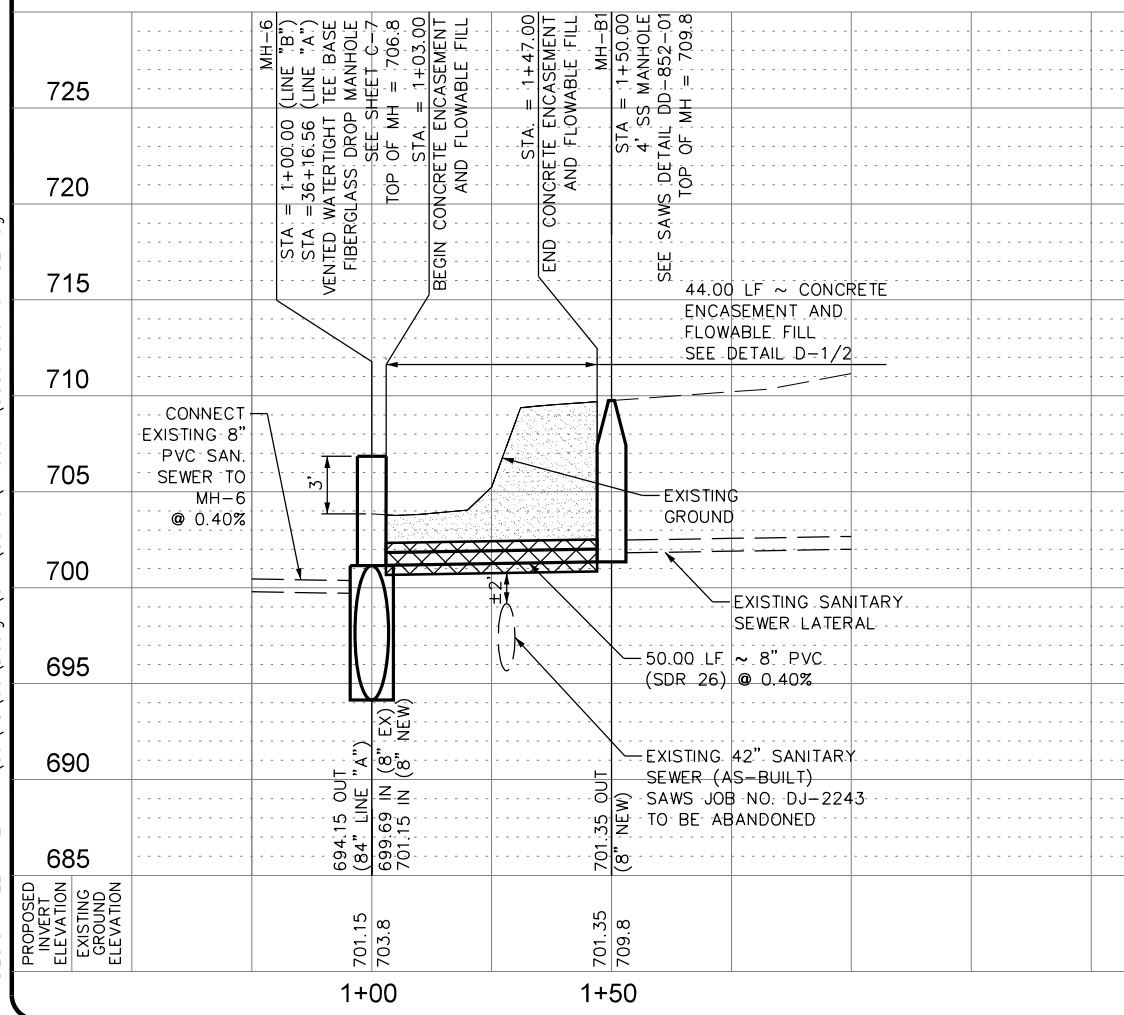
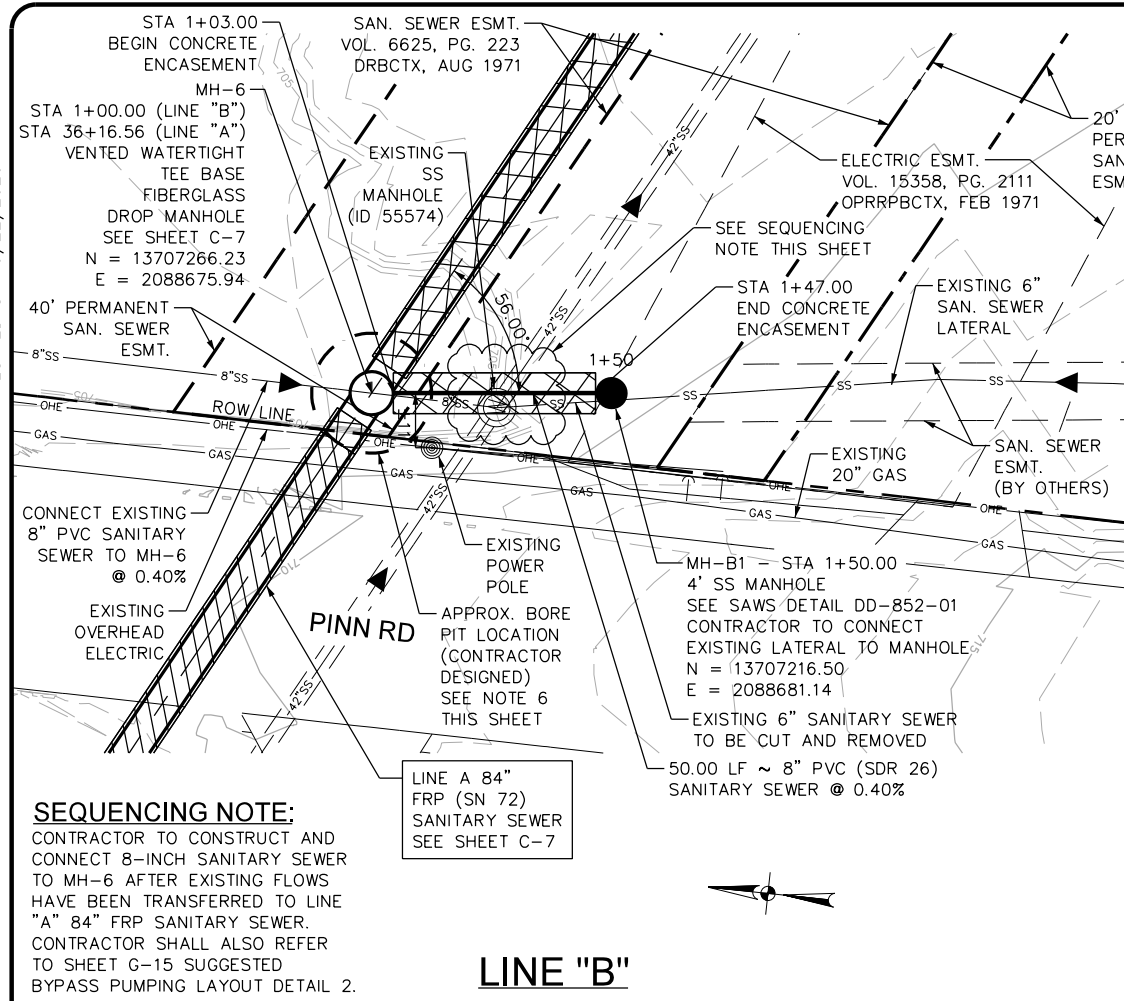
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 HWY LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TXPE FIRM REGISTRATION #470 | TXPLS FIRM REGISTRATION #100880

SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 19-4528
W-1 LEON CREEK: HWY 151 TO HWY 90
UPPER SEGMENT
LINE "A" PLAN AND PROFILE
STA 54+00 TO STA 58+00

PLOTTED ON: 9/22/2020

DESIGN FILENAME: P:\89\18\00\Design\Civil\Sewer\Phase 1\SS891800-01-C21.dgn



QUANTITY TABLE

ITEM	DESCRIPTION	UNIT	QUANTITY
857A	24" FRP (ASTM D-3262)(SN 72) (OPEN CUT 5'-10')	LF	43
848A	8" PVC SDR 26 (OPEN CUT 0'-10')	LF	50
852A	4' SANITARY SEWER MANHOLE	EA	1
852A	EXTRA DEPTH MANHOLE	VF	3
858	CONCRETE ENCASUREMENT (MIN STRENGTH, 2,000 PSI)	CY	66
413	FLOWABLE FILL	CY	26
SP-13	EXISTING PAD RESTORATION	LS	1
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	93
866	SEWER MAIN TV INSPECTION	LF	93

- NOTES:**
- CONTRACTOR SHALL REFER TO THE TREE PRESERVATION PLAN SHEETS TP-1 TO TP-10 FOR TREE REMOVAL AND PRESERVATION.
 - CONTRACTOR MAY ENCOUNTER THE PRESENCE OF GROUND WATER DURING CONSTRUCTION. CONTRACTOR SHALL REFER TO THE SUPPLEMENTARY SPECIFICATIONS FOR CONTROL OF GROUND WATER.
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 - CONTRACTOR SHALL PROTECT EXISTING 42" SANITARY SEWER DURING CONSTRUCTION OF PROPOSED SANITARY SEWER MAIN.
 - ENTIRE AREA SHOWN ON THIS PLAN SHEET IS IN THE 100-YEAR FLOODPLAIN AND 5-YEAR FLOODPLAIN.
 - CONTRACTOR NEEDS TO ADEQUATELY SHORE TUNNEL SHAFT TO PREVENT DISTURBING BACKFILL OF EXISTING 42-INCH SANITARY SEWER MAIN.
 - CONTRACTOR SHALL RESTORE EXISTING ACCESS PAD AT MANHOLE ON 42-INCH SEWER MAIN TO ORIGINAL CONDITIONS.
 - CONTRACTOR TO VERIFY INVERT OF EXISTING 24" RCP PRIOR TO THE MANUFACTURING OF MH-12.
 - CONTRACTOR SHALL COORDINATE WITH PIPE AND MANHOLE MANUFACTURER FOR CONNECTION OF 24" RCP TO 24" FRP AND CONNECTION TO MH-12.

PAPE-DAWSON
 Job No.
8918-00

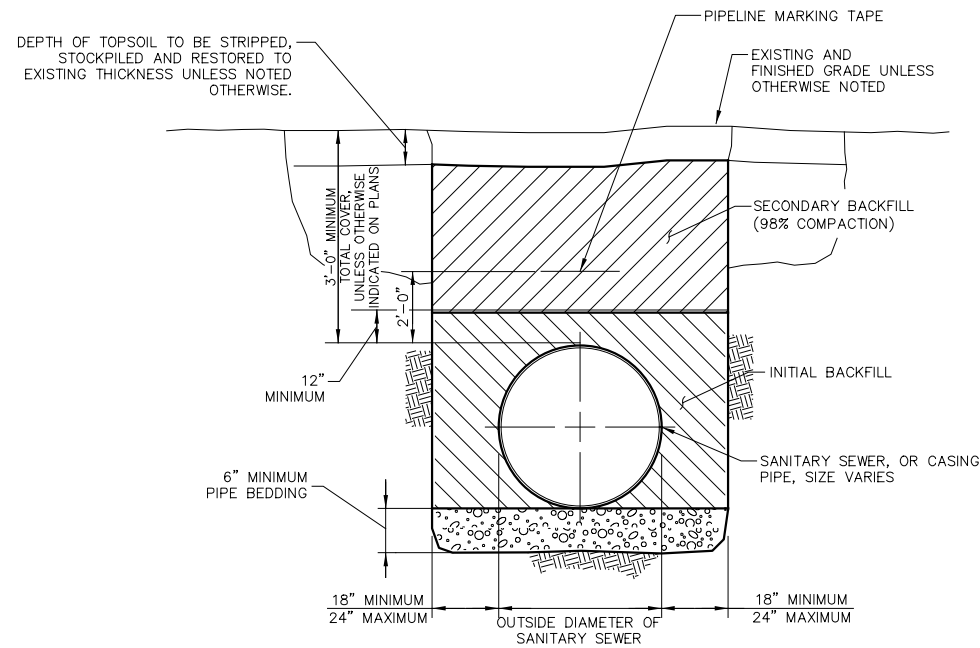
STATE OF TEXAS
 PROFESSIONAL ENGINEER
 JASON T. DIAMOND
 LICENSE NO. 96532
 9-18-20

DATE: AUG 2020
 DESIGNED BY: MP
 DRAWN BY: BS
 CHECKED BY: JO

SCALE:
 1" = 40' HORZ
 1" = 10' VERT

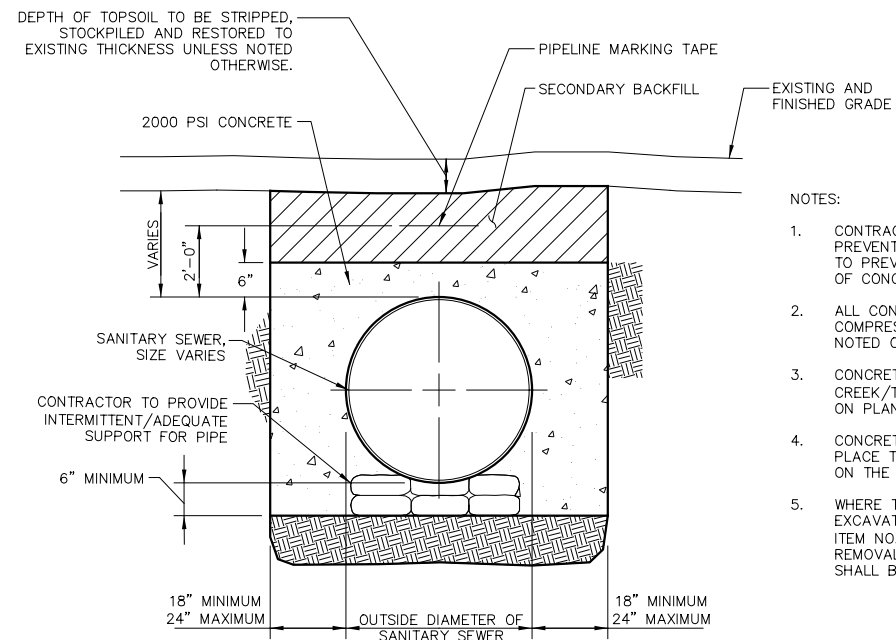
SAW JOB NO. 19-4528
 W-1 LEON CREEK: HWY 151 TO HWY 90
 UPPER SEGMENT
 LINE "B" AND "E" PLAN AND PROFILE SHEET
 STA 1+00 TO STA 1+50.00; STA 1+00 TO STA 1+42.80

Sheet **C-21**
 44 of 67



CROSS SECTION

1 TYPICAL PIPE TRENCH (UNPAVED SURFACE)
N.T.S. (GREATER THAN 27" DIAMETER SEWER PIPE)

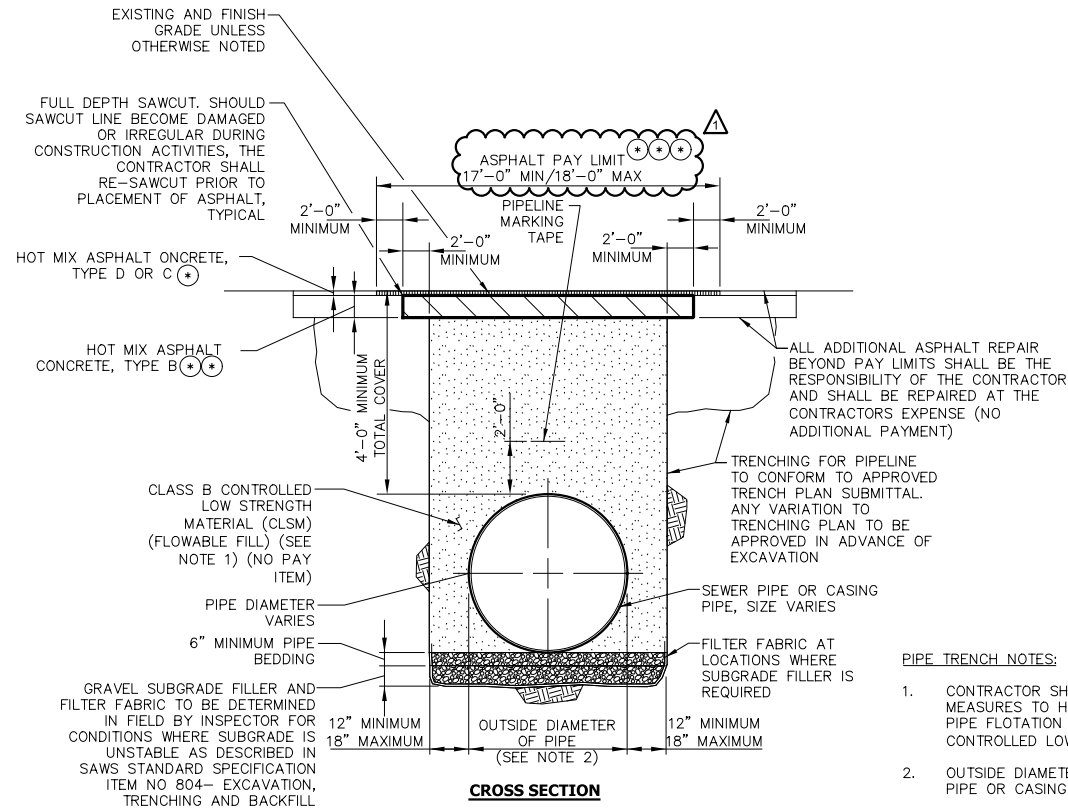


CROSS SECTION

2 CONCRETE ENCASEMENT
N.T.S. (FOR FIBERGLASS PIPE)

NOTES:

1. CONTRACTOR SHALL TAKE REQUIRED PREVENTATIVE MEASURES TO HOLD PIPE IN PLACE TO PREVENT PIPE FLOTATION DURING PLACEMENT OF CONCRETE ENCASEMENT.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI UNLESS NOTED OTHERWISE.
3. CONCRETE ENCASEMENT APPLIES TO DESIGNATED CREEK/TRIBUTARY CROSSINGS FOR LIMITS SHOWN ON PLAN AND PROFILE SHEETS.
4. CONCRETE ENCASEMENT SHALL BE MEASURED IN PLACE TO THE HORIZONTAL LENGTH AS INDICATED ON THE PLANS.
5. WHERE THE TRENCH BOTTOM HAS BEEN OVER EXCAVATED BEYOND THE LIMITS AS DEFINED IN ITEM NO. 848, "SANITARY SEWERS", DUE TO REMOVAL OF UNUSABLE MATERIAL, THE PIPE SHALL BE CONCRETE ENCASED.



CROSS SECTION

3 TYPICAL PIPE TRENCH (ASPHALT SURFACE)
FOR 84" FRP PIPE
N.T.S.

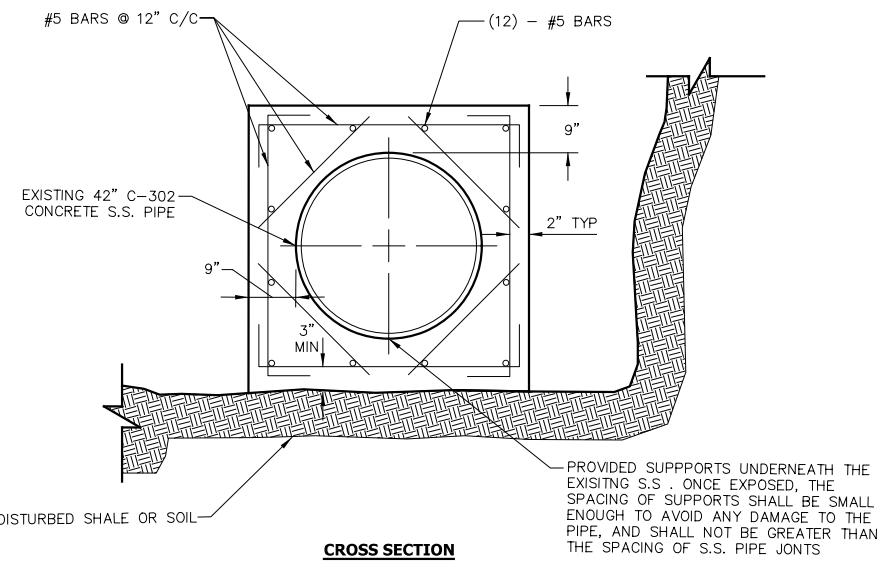
PIPE TRENCH NOTES:

1. CONTRACTOR SHALL TAKE REQUIRED PREVENTIVE MEASURES TO HOLD PIPE IN PLACE TO PREVENT PIPE FLOTATION DURING PLACEMENT OF CONTROLLED LOW STRENGTH MATERIAL (CLSM).
2. OUTSIDE DIAMETER OF PIPE SHALL BE SEWER PIPE OR CASING PIPE AS SHOWN ON PLANS.

⊙ 2" HMAC TY D FOR LOCAL STREETS
3" HMAC TY C FOR ARTERIAL/COLLECTOR STREETS

⊙⊙ TY B (10" MIN) FOR LOCAL STREETS
TY B (12" MIN) FOR ARTERIAL/COLLECTOR STREETS

⊙⊙⊙ PINN ROAD ACCESS ROAD
STA. 10+00 TO STA. 36+26
TY B (10" MIN)
TY D (2" MIN) WITH 20' MAX ASPHALT PAY LIMITS



CROSS SECTION

4 CONCRETE ENCASEMENT WITH REINFORCEMENT
N.T.S.

MAI Job No. M061
Revisions #2 9/18/2020 No.
Date: 9/17/2020 Designed by: ETM Drawn by: CAD Checked by: ETM Scale:

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
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MAESTAS
8122 DATAROUND DR., STE. 800 SAN ANTONIO, TX 78229
(210) 386-1888 TBE No. 15331 TBE No. 10194506

SAN ANTONIO WATER SYSTEM

SAWS JOB NO. 19-4528
W-1 LEON CREEK: HWY 151 to HWY 90
UPPER SEGMENT
TYPICAL TRENCH DETAILS