



**BPC WEST SEWERSHED PACKAGE 5C  
SAWS Solicitation No. CO-00458  
SAWS Job No. 21-4516**

**ADDENDUM NO. 1  
September 28, 2021**

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bidding documents 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 in the space provided in the submitted bid proposal.

<b>RESPONSES TO QUESTIONS</b>
-------------------------------

**1. Question:** CIPP standard specification section 901.4-3.e.6 requires a soil modulus of 500 psi be used in the CIPP thickness designs, but this soil modulus is overly conservative and will produce CIPP thicknesses that are thicker than needed, which will increase the difficulty of installation and overall project cost. On previous projects, this section has been replaced with language saying the Contractor was allowed to submit calculations signed and sealed by a Texas Professional Engineer utilizing other values for soil modulus so long as those values were part of the sealed calculations, the calculation method complied with ASTM F1216, and the soil modulus utilized did not exceed 1,000 psi. Please confirm that the Contractor will again be allowed to use values other than 500 psi for the soil modulus on this project.

*Response:* Refer to Special Provision to Rehabilitation of Sanitary Sewer by Cured-in-Place Pipe (CIPP) Process Item No. 901 in the Contract Documents for revised soil modulus requirements.

**2. Question:** CIPP standard specification section 901.4-3.e.7 specifies that the groundwater to be used in the CIPP thickness designs shall be at the ground surface or the elevation of the 100-year floodplain, whichever is greater. On previous projects, this section has been modified so that the reference to floodwater being used as a design parameter has been deleted. Please confirm that the floodwater will again not need to be considered in the CIPP thickness designs, and that this section shall be modified to simply require the groundwater depth to be at the ground surface. If floodwater loading must be included as a design parameter, please provide the elevation of the floodwater level to be applied at each of the applicable manholes on the CIPP alignments.

*Response:* Section 901.4-3.e.7 of Specification 901 Rehabilitation of Sanitary Sewer by Cured-in-Place Pipe (Hot Water) shall remain in place. This project does not

*include any segments to be rehabilitated via CIPP within the 100-year floodplain that require floodwater loading consideration. The sewer segment to be rehabilitated via CIPP at Site C-58 is close to 100-year floodplain, but not within it.*

3. **Question:** **Is Warren Environmental Epoxy (pre-approved product by SAWS) considered approved for this project's manhole rehabilitation?**

*Response:* *Warren is approved for testing only. The scope of this project does not allow for testing of manhole coatings/linings and only products in the material specifications or specified by the design consultant for specific locations that were part of the design process are allowed for use on this project.*

4. **Question:** **Regarding New Manholes according bid item nos 35 & 36, will these manholes require interior epoxy coating?**

*Response:* *Refer to SAWS 2020 Specification Item No. 852 Sanitary Sewer Manholes Section 852.4 (10). Link to SAWS 2020 Specifications is available in the Table of Contents of the Contract Documents.*

5. **Question:** **The DR13.5 rating is virtually impossible to find in a normal Non-Covid environment. With the shortages of materials in the county today, all pipe is getting harder to get and 13.5 simply isn't available. For the pipe bursting lines, will you accept DR17 instead of DR 13.5?**

*Response:* *Refer to the pipe bursting plan sheets which specify DR17.*

CHANGES TO SPECIFICATIONS
---------------------------

1. **Bid Proposal, BP-1 to BP-3** – Remove in its entirety and replace with the revised version attached to this Addendum. Respondents will utilize the attached Bid Proposal form in their submittals. Failure to use the revised bid proposal may result in the Contractor's bid being found non-responsive and rejected.

2. **Page IB-4, Instructions to Bidders, 9., b. is amended to read as follows:**

(b) Contractor agrees that, unless it is a sole proprietorship or a company with fewer than 10 full-time employees and the value of this Contract is less than \$100,000, it:

- a. does not boycott Israel and will not do so during the term of this Contract;
- b. does not boycott energy companies and will not do so during the term of this Contract;
- c. does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of the Contract against a firearm entity or firearm trade association;

This provision is in compliance with Chapters §2271 and 2274 of the Texas Government Code. SAWS agrees to comply with the United States and Texas Constitutions in consideration of whether to enforce this provision.

## CHANGES TO THE PLANS

1. Remove the following sheets dated 8/26/21 and replace with the attached sheets dated 9/27/21:
  - a. Sheet GEN-03 (3 of 98) Overall Quantities
  - b. Sheet A-04 (14 of 98) Site C-5 Sewer Rehabilitation Plan – PIPE BURST
  - c. Sheet J-04 (52 of 98) Site C-45 Sewer Rehabilitation Plan – PIPE BURST
  - d. Sheet K-05 (57 of 98) Site C-46 Sewer Rehabilitation Plan – PIPE BURST
  - e. Sheet M-03 (64 of 98) Site C-52 Pavement Repair Plan
  - f. Sheet M-04 (65 of 98) Site C-52 Sewer Rehabilitation Plan – PIPE BURST

## CLARIFICATIONS

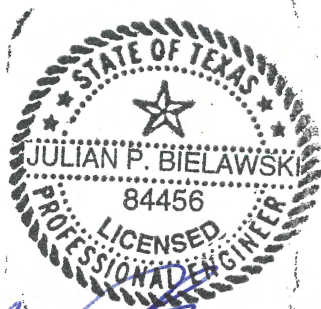
1. Bid Proposal, BP-1 to BP-3 – updated “Bid Proposal Signature Page” is related to new statutes from the latest legislative session. In addition, the List of Bid Items has the following updates:
  - a. Quantity for Line Item Spec No. 205.4 Hot Mix Asphalt Concrete Pavement Type D (2” Compacted) has increased.
  - b. Quantity for Line Item Spec No. 206.1 Asphalt Treated Base (ATB) (10” Compacted Depth) has increased.
  - c. Line Item Spec No. 413.1 Flowable Fill has been added.
2. Plan Sheet GEN-03 – Revised plan sheets includes updates to the Estimated Quantities per the updated List of Bid Items.
3. Sewer Rehabilitation Plan Sheets A-04, J-04, K-05, and M-04 – Revised plan sheets specify Flowable Fill at water crossings per TCEQ 217.53(d)(7)(D) and include an additional note regarding the flowable fill pour. Line Item Spec No. 413.1 Flowable Fill has been added to the Estimated Quantities.
4. Pavement Repair Plan Sheet M-03 – Revised plan sheet includes updated Quantities Table. The quantities for Line Item Spec No. 205.4 Hot Mix Asphalt Concrete Pavement Type D (2” Compacted) and Line Item Spec No. 206.1 Asphalt Treated Base (ATB) (10” Compacted Depth) have been increased.
5. The estimated construction cost has increased from \$2,026,771.00 to \$2,031,783.00 and has been noted on the SAWS website.

## END ADDENDUM 1

This Addendum, including these 4 pages, is 13 pages with attachments in its entirety.

### Attachments:

- Bid Proposal Form (3 pages total)
- Plan Sheets GEN-03, A-04, J-04, K-05, M-03, and M-04 (6 pages total)



*Julian P. Bielawski* 9/27/21

Julian P. Bielawski  
WESTON SOLUTIONS, INC.  
*Texas Registered Engineering Firm F-3123*

BID PROPOSAL

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

THE SAN ANTONIO WATER SYSTEM:

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

**PLEASE SEE ATTACHED LIST OF BID ITEMS.**

\_\_\_\_\_  
BIDDER'S SIGNATURE & TITLE

\_\_\_\_\_  
FIRM'S NAME (TYPE OR PRINT)

\_\_\_\_\_  
FIRM'S ADDRESS

\_\_\_\_\_  
FIRM'S PHONE NO. /FAX NO.

\_\_\_\_\_  
FIRM'S EMAIL ADDRESS

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

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

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **310** 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.

**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

- (1) Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes  No
- (2) Are you, Contractor, held or controlled by a company or other entity, including a governmental entity, that is owned or controlled by citizens of or directly controlled by the government of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes  No
- (3) Are you, Contractor, headquartered in China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes  No



**BPC West Sewershed Package 5C**  
**SAWS Job No. 21-4516**  
**Bid Proposal Line Items**  
**September 2021**

ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
1	103.1	REMOVE CONCRETE CURB (COSA SPEC)	LF	66	\$	\$
2	103.3	REMOVE SIDEWALK AND DRIVEWAYS (COSA SPEC)	SF	315	\$	\$
3	103.4	REMOVE MISCELLANEOUS CONCRETE (COSA SPEC)	SF	504	\$	\$
4	203.1	TACK COAT (COSA SPEC)	GAL	530	\$	\$
5	205.4	HOT MIX ASPHALT CONCRETE TYPE D (2" COMPACTED)(COSA SPEC)	SY	5334	\$	\$
6	206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	679	\$	\$
7	208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	4563	\$	\$
8	413.1	FLOWABLE FILL	CY	8	\$	\$
9	500.1	CONCRETE CURB (COSA SPEC)	LF	66	\$	\$
10	502.1	CONCRETE SIDEWALKS (CONVENTIONALLY FORMED)	SY	29	\$	\$
11	503.1	PORTLAND CEMENT CONCRETE DRIVEWAY (COSA SPEC)	SY	6	\$	\$
12	505	CONCRETE RIPRAP	SY	56	\$	\$
13	516.1	SODDING	SY	172	\$	\$
14	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-5)	LS	1	\$	\$
15	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-9)	LS	1	\$	\$
16	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-14)	LS	1	\$	\$
17	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-22A)	LS	1	\$	\$
18	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-41)	LS	1	\$	\$
19	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-43A)	LS	1	\$	\$
20	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-43B)	LS	1	\$	\$
21	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-45)	LS	1	\$	\$
22	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-46)	LS	1	\$	\$
23	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-51)	LS	1	\$	\$
24	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-52)	LS	1	\$	\$
25	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-54)	LS	1	\$	\$
26	530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-58)	LS	1	\$	\$
27	535.1	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE DOUBLE SOLID YELLOW LINE) (COSA SPEC)	LF	312	\$	\$
28	535.2	HOT APPLIED THERMOPLASTIC PAVEMENT MARKINGS (4-IN WIDE BROKEN WHITE LINE) (COSA SPEC)	LF	312	\$	\$
29	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	689	\$	\$
30	845.1	REMOVE AND REPLACE FENCING (4' HIGH CHAIN LINK)	LF	50	\$	\$
31	SS1	REMOVE AND REPLACE FENCING (6' HIGH WOOD)	LF	176	\$	\$
32	848	8" IPS DR17 HDPE SANITARY SEWER PIPE - ALL DEPTH	LF	20	\$	\$
33	848	8" (ASTM D1784) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	32	\$	\$
34	848	8" (SDR-26) (ASTM D-2241) PVC SANITARY SEWER PIPE - ALL DEPTH	LF	18	\$	\$
35	851	EXISTING MANHOLE ADJUSTMENTS (WITH NEW RING AND WATERTIGHT COVER)	EA	35	\$	\$
36	852.6.1	SANITARY SEWER MANHOLE (0' - 6'), 4' DIA.	EA	6	\$	\$
37	852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0' - 6'), 4' DIA.	EA	2	\$	\$
38	852.6.2	EXTRA DEPTH SANITARY SEWER MANHOLE (> 6'), 4' DIA.	VF	4	\$	\$
39	852.6.2	EXTRA DEPTH SANITARY SEWER DOGHOUSE MANHOLE (> 6'), 4' DIA.	VF	2	\$	\$
40	854	SANITARY SEWER LATERAL	LF	10	\$	\$
41	854.1	CLEANOUT (TWO-WAY) FOR SANITARY SEWER LATERAL	EA	1	\$	\$
42	855	RECONSTRUCTION OF EXISTING MANHOLES	EA	5	\$	\$
43	864	BYPASS PUMPING (LARGE DIAMETER SANITARY SEWER) SITE C-58	LS	1	\$	\$
44	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-5	LS	1	\$	\$
45	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-9	LS	1	\$	\$
46	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-14	LS	1	\$	\$
47	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-21A	LS	1	\$	\$
48	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) C-22A	LS	1	\$	\$



**BPC West Sewershed Package 5C**  
**SAWS Job No. 21-4516**  
**Bid Proposal Line Items**  
**September 2021**

ITEM	PAY ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	SUBTOTAL
49	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) C-22B	LS	1	\$	\$
50	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-25A & C-25B	LS	1	\$	\$
51	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-33	LS	1	\$	\$
52	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-41	LS	1	\$	\$
53	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-43A	LS	1	\$	\$
54	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-43B	LS	1	\$	\$
55	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-45	LS	1	\$	\$
56	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-46	LS	1	\$	\$
57	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-51	LS	1	\$	\$
58	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-52	LS	1	\$	\$
59	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-54	LS	1	\$	\$
60	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-55	LS	1	\$	\$
61	865	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-58	LS	1	\$	\$
62	866	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS) SITE C-60A	LS	1	\$	\$
63	866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8" - 15") WITH CLEANING	LF	6032	\$	\$
64	866	SEWER MAIN TELEVISION INSPECTION (27" AND LARGER) WITH CLEANING AND PRE INSPECTION	LF	21	\$	\$
65	866	SANITARY SEWER MAIN TELEVISION POST INSPECTION (8" - 15")	LF	70	\$	\$
66	900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 8" DIA. PIPE- ALL DEPTH	LF	5441	\$	\$
67	901.1	REHABILITATION OF SANITARY SEWER BY CURED-IN-PLACE PIPE (HOT WATER), 8" DIA. PIPE- ALL DEPTH	LF	521	\$	\$
68	901.1	REHABILITATION OF SANITARY SEWER BY CURED-IN-PLACE PIPE (HOT WATER), 36" DIA. PIPE- ALL DEPTH	LF	21	\$	\$
69	910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	250	\$	\$
70	1103	POINT REPAIRS (UP to 9 LF) - 8" DIA. - ALL DEPTH	EA	6	\$	\$
71	1103	POINT REPAIRS LONGER THAN 9 LF - ALL DEPTH	LF	32	\$	\$
72	1103.2	OBSTRUCTION REMOVAL - 18" OR SMALLER DIA. - REMOTE CONTROL - ALL DEPTH	EA	1	\$	\$
73	1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION - ALL DEPTH	EA	76	\$	\$
74	1109.1	SANITARY SEWER LATERAL RECONNECTIONS - REMOTE CONTROL DEVICE - ALL DEPTH	EA	15	\$	\$
75	6001	PORTABLE CHANGEABLE MESSAGE SIGN (TXDOT SPEC.)	LF	1	\$	\$
76	SS 02221	DEMOLISH EXISTING SHED	EA	1	\$	\$
77	SC3	CPS ENERGY ALLOWANCE	ALW	1	\$ 15,000	\$ 15,000
					Subtotal (Items 1-77)	
78	100	MOBILIZATION (MAX 10% OF ITEMS 1 TO 76)	LS	1	\$	
79	101	PREPARING RIGHT-OF-WAY (MAX 5% OF ITEMS 1 TO 76)	LS	1	\$	
Mobilization and Prep ROW shall be limited to the maximum percentange shown. If the percentage exceeds the allowable maximum stated for the mobilization and/or preparation of ROW, SAWS reserves the right to cap the amount at the percentanges shown and asjust the extension of the bid items accordingly.						
<b>TOTAL BID PRICE (TO INCLUDE LINE ITEMS 1-77 AND 78-79)</b>					<b>\$</b>	









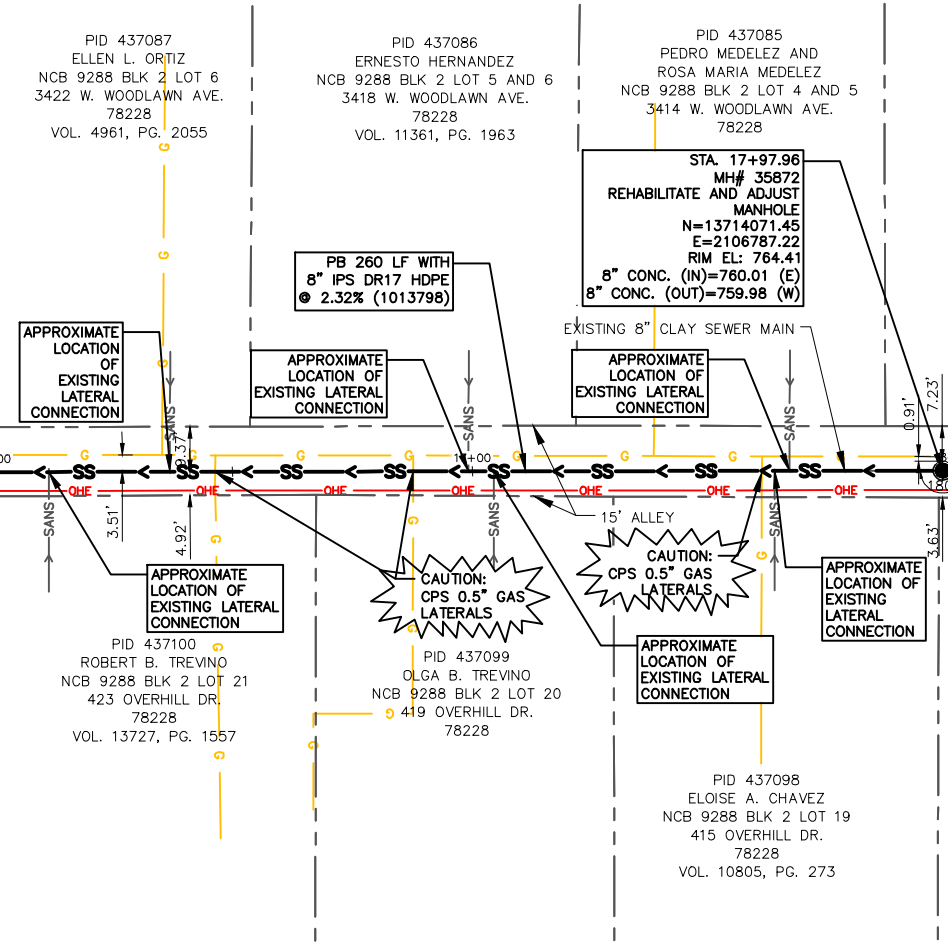




G:\113620-00005\Civil\00-CAD\113620-00005-REHAB.dwg Sep 27, 2021 1:24pm rchlaro

MATCHLINE STA. 16+00 - SEE SHEET K-04

MATCHLINE STA. 18+00



BM COORDINATE DATUM				
BM	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-BM1	13,714,156.76	2,105,968.60	752.98	MAG NAIL W/SHINER STAMPED "MTR ENGINEERING" ON CONCRETE
CP-BM2	13,713,870.25	2,105,943.06	745.58	MAG NAIL W/SHINER STAMPED "MTR ENGINEERING" ON CONCRETE
CP-BM3	13,714,123.21	2,106,302.15	755.75	1/2" IRON ROD WITH PINK PLASTIC CAP STAMPED "MTR ENG CONTROL"
CP-BM4	13,714,045.17	2,107,017.70	771.07	MAG NAIL W/SHINER STAMPED "MTR ENGINEERING" IN ASPHALT
CP-BM5	13,714,172.59	2,107,005.09	773.21	MAG NAIL W/SHINER STAMPED "MTR ENGINEERING" IN CURB

ESTIMATED QUANTITIES TABLE			
ITEM	DESCRIPTION	UNIT	QUANTITY
413.1	FLOWABLE FILL	CY	2
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	120
851	EXISTING MANHOLE ADJUSTMENTS	EA	2
866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8"-15") WITH CLEANING	LF	418
900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST 8" DIA. HDPE DR17 PIPE (ALL DEPTH)	LF	418
910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	11
1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION (ALL DEPTH)	EA	12

- NOTES:**
- THE EXISTING UTILITIES THAT ARE BEING SHOWN IN THE PLANS ARE TAKEN FROM BEST AVAILABLE DATA. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CROSSINGS, ELEVATIONS, AND LOCATIONS. ANY UTILITY DISCREPANCY SHALL BE REPORTED TO THE DESIGN ENGINEER.
  - CONTRACTOR SHALL EXECUTE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES. ALL GAS SERVICE LINE CROSSINGS MUST BE EXPOSED FOR OBSERVATION DURING PIPE BURSTING OPERATIONS.
  - CONTRACTOR SHALL EXECUTE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES. ALL WATER MAIN AND LATERAL CROSSINGS MUST BE EXPOSED FOR OBSERVATION DURING PIPE BURSTING OPERATIONS.
  - CONTRACTOR SHALL COORDINATE WITH SAWS INSPECTOR FOR THE REMOVAL OF THE SMART COVER AT MH 48809.
  - SPECIAL NOTE FOR A.C. EXPOSURE:** ASBESTOS CEMENT (A.C.) PIPE, ALSO KNOWN AS TRANSITE PIPE AND WHICH IS KNOWN TO OBTAIN ASBESTOS CONTAINING MATERIAL (ACM), IS LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCUR. A.C. PIPE EXPOSURE SHALL BE DONE ACCORDING TO SPECIFICATION ITEM NO. 3000, "HANDLING ASBESTOS CEMENT PIPE."
  - EXCAVATION, BACKFILL, HAULING EXCAVATED MATERIAL AND ALL OTHER NECESSARY WORK TO COMPLETE FLOWABLE FILL POUR IS CONSIDERED SUBSIDIARY TO THE FLOWABLE FILL LINE ITEM.

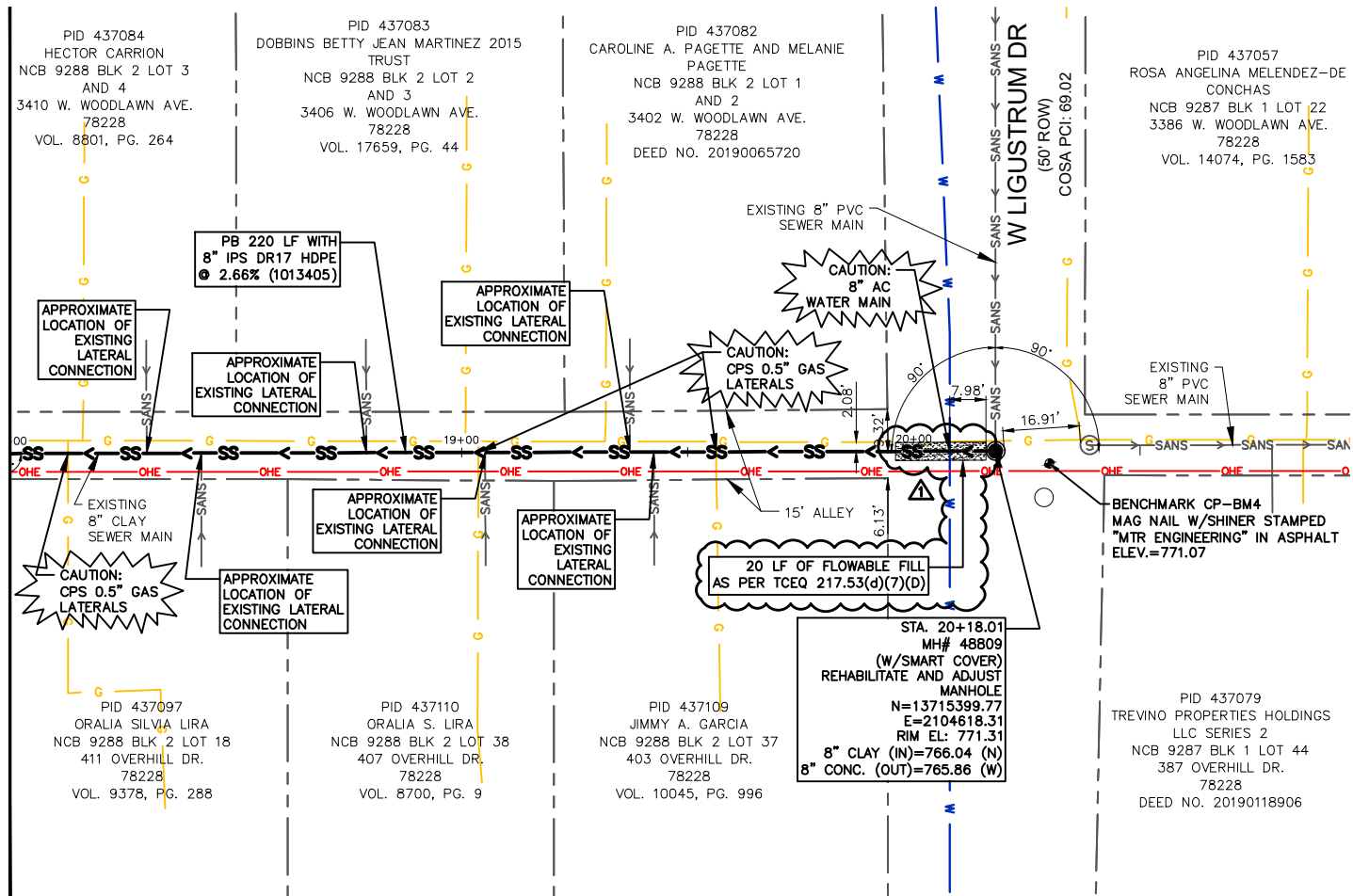
REVISION DESCRIPTION

NO.	DATE	REVISION
1	09/27/2021	BAL

ADDENDUM #1

STATE OF TEXAS  
BRETT A. LARSON  
113028  
PROFESSIONAL ENGINEER  
09/27/2021

MATCHLINE STA. 18+00



**LEGEND**

- EXISTING CONTOUR - MAJOR
- EXISTING CONTOUR - MINOR
- EXISTING UTILITY - SEWER
- EXISTING UTILITY - WATER
- EXISTING UTILITY - GAS
- EXISTING UTILITY - UNDERGROUND ELECTRIC
- EXISTING UTILITY - OVERHEAD ELECTRIC
- EXISTING DRAINAGE DITCH
- EXISTING STORM PIPELINE
- PROPOSED UTILITY - SEWER
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING CHAIN LINK FENCE
- EXISTING WOODEN FENCE
- EXISTING PARCEL BOUNDARY
- EXISTING BUILDING SETBACK
- EXISTING EASEMENT
- EXISTING TREE

100 NE Loop 410, Suite 1090  
San Antonio, Texas 78216  
TBPE #F-14629

BPC WEST SEMERGED PACKAGE 5C  
SITE C-46  
SEWER REHABILITATION PLAN - PIPE BURST

**garza**

**San Antonio Water System**

NOTES INITIALS DATE

DESIGNED BY

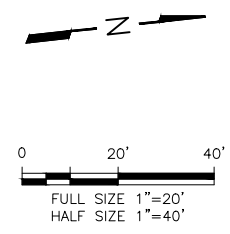
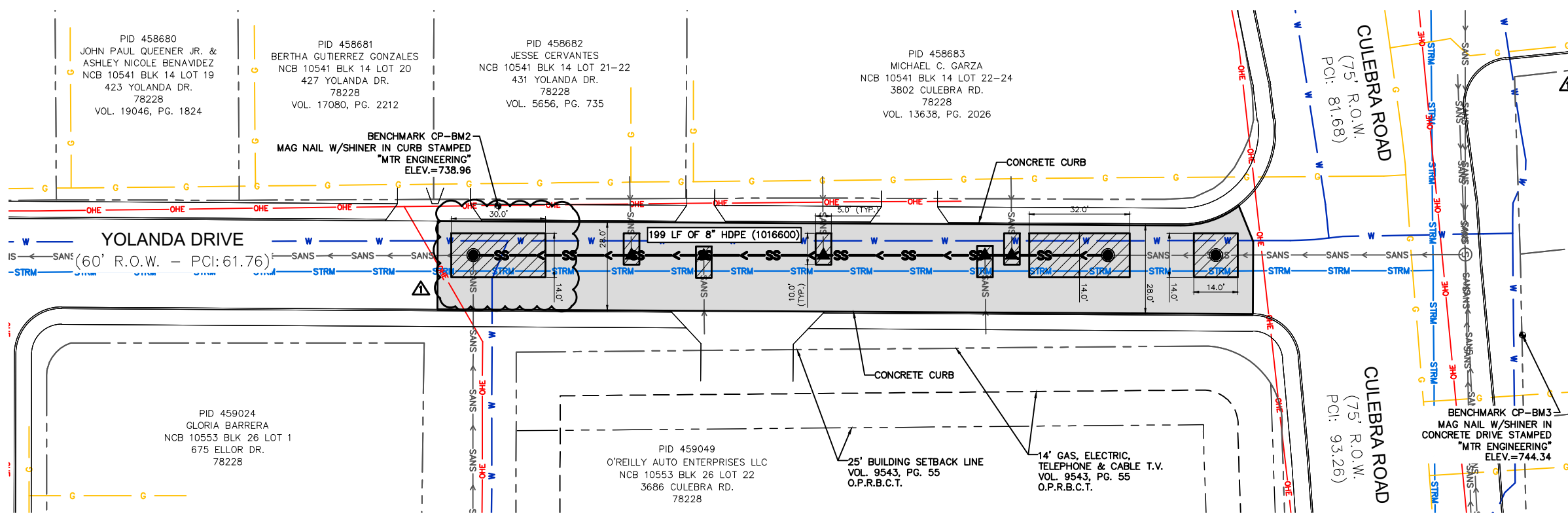
REVIEWED BY

SCALE:

SHEET NO. K-05  
57 OF 98

JOB NO. 20-4504

G:\113620-00005\Civil\00-CAD\113620-00005-PAVE.dwg Sep 27, 2021 - 1:25pm rchero



**LEGEND**

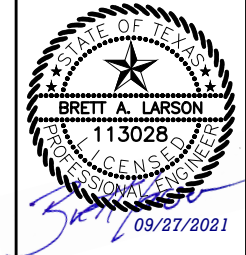
- MILL/ OVERLAY
- ASPHALT PAVEMENT REPAIR
- CONCRETE PAVEMENT REPAIR
- POINT REPAIR

**QUANTITIES TABLE**

ITEM	DESCRIPTION	UNIT	QUANTITY
203.1	TACK COAT (COSA SPEC)	GAL	94
205.4	HOT MIX ASPHALT CONCRETE PAVEMENT TYPE D (2" COMPACTED) (COSA SPEC)	SY	958
206.1	ASPHALT TREATED BASE (ATB) (10" COMPACTED DEPTH) (COSA SPEC)	SY	125
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALT PAVEMENT (2" DEPTH) (COSA SPEC)	SY	813

COSA PCI: 51-85  
DESIGNATED AS PIPE BURST

NO.	REV.	DATE	REVISION DESCRIPTION
1		BAL 09/27/2021	ADDENDUM #1



100 NE Loop 410, Suite 1090  
San Antonio, Texas 78216  
TBPE #F-14629

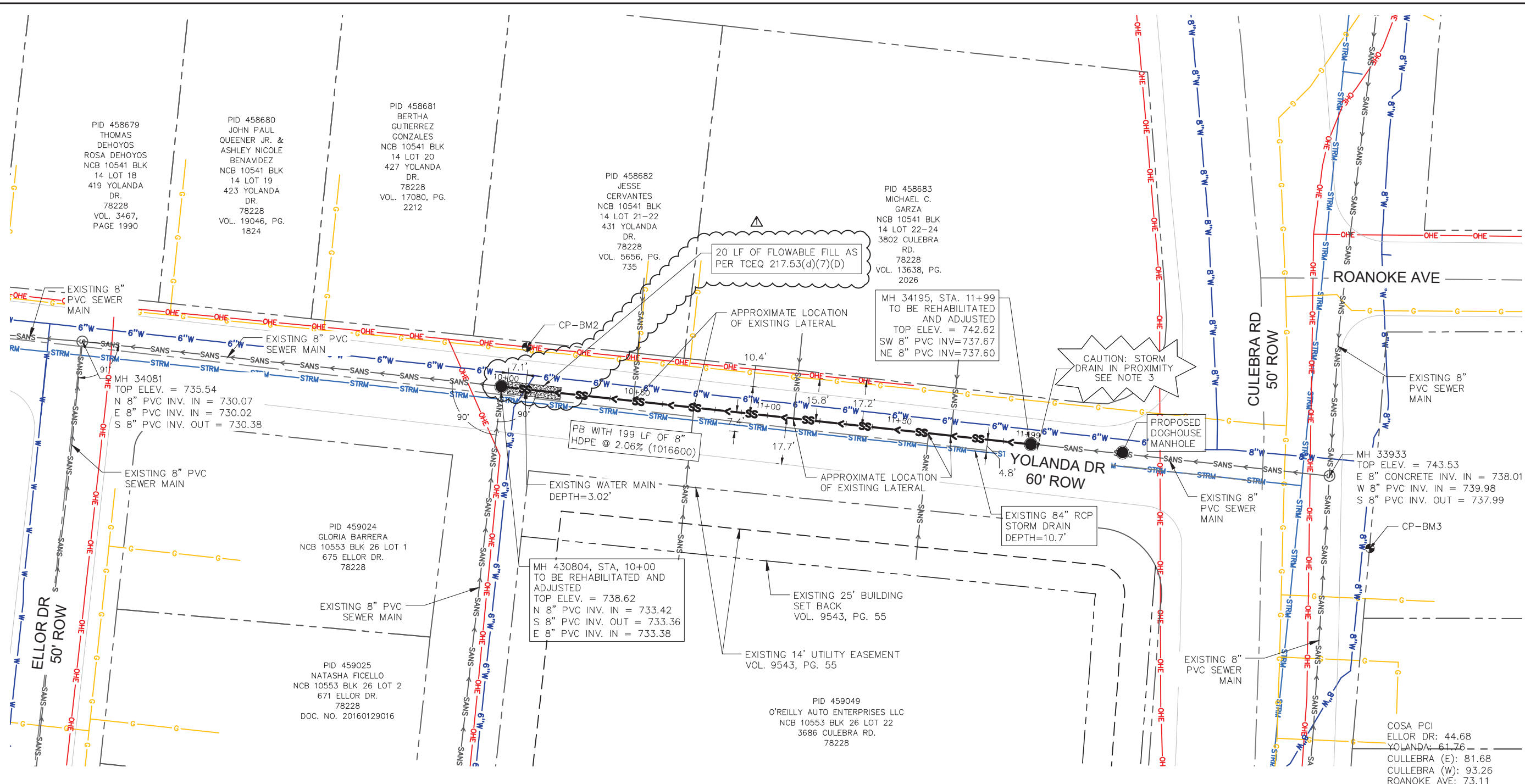
**garza**

BPC WEST SEWERSHED PACKAGE 5C  
SITE C-52  
PAVEMENT REPAIR PLAN



NOTES	INITIALS	DATE
DESIGNED BY		
REVIEWED BY		
SCALE:		
SHEET NO.	M-03	
	64 OF 98	

\\nasrv1\etc\data\Shared\SAWS\BPC West Sewereshed Package 5\07.0 Design Engineering\Cad  
 G:\Shared\SAWS\BPC West Sewereshed Package 5\07.0 Design Engineering\CAD\Production Drawings\101--PKG C\M-01--M-02 M-04 C52.dwg Sep 27, 2021 - 4:50pm STAUDTS



PID 458679  
 THOMAS DEHOYOS  
 ROSA DEHOYOS  
 NCB 10541 BLK 14 LOT 18  
 419 YOLANDA DR.  
 78228  
 VOL. 3467, PAGE 1990

PID 458680  
 JOHN PAUL QUEENER JR. & ASHLEY NICOLE BENAVIDEZ  
 NCB 10541 BLK 14 LOT 19  
 423 YOLANDA DR.  
 78228  
 VOL. 19046, PG. 1824

PID 458681  
 BERTHA GUTIERREZ GONZALES  
 NCB 10541 BLK 14 LOT 20  
 427 YOLANDA DR.  
 78228  
 VOL. 17080, PG. 2212

PID 458682  
 JESSE CERVANTES  
 NCB 10541 BLK 14 LOT 21-22  
 431 YOLANDA DR.  
 78228  
 VOL. 5656, PG. 735

PID 458683  
 MICHAEL C. GARZA  
 NCB 10541 BLK 14 LOT 22-24  
 3802 CULEBRA RD.  
 78228  
 VOL. 13638, PG. 2026

PID 459024  
 GLORIA BARRERA  
 NCB 10553 BLK 26 LOT 1  
 675 ELLOR DR.  
 78228

PID 459025  
 NATASHA FICELLO  
 NCB 10553 BLK 26 LOT 2  
 671 ELLOR DR.  
 78228  
 DOC. NO. 20160129016

PID 459049  
 O'REILLY AUTO ENTERPRISES LLC  
 NCB 10553 BLK 26 LOT 22  
 3686 CULEBRA RD.  
 78228

20 LF OF FLOWABLE FILL AS PER TCEQ 217.53(d)(7)(D)

MH 34195, STA. 11+99  
 TO BE REHABILITATED AND ADJUSTED  
 TOP ELEV. = 742.62  
 SW 8" PVC INV.=737.67  
 NE 8" PVC INV.=737.60

PB WITH 199 LF OF 8" HDPE @ 2.06% (1016600)

MH 430804, STA. 10+00  
 TO BE REHABILITATED AND ADJUSTED  
 TOP ELEV. = 738.62  
 N 8" PVC INV. IN = 733.42  
 S 8" PVC INV. OUT = 733.36  
 E 8" PVC INV. IN = 733.38

CAUTION: STORM DRAIN IN PROXIMITY SEE NOTE 3

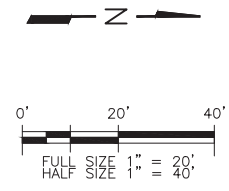
PROPOSED DOGHOUSE MANHOLE

EXISTING 84" RCP STORM DRAIN DEPTH=10.7'

MH 33933  
 TOP ELEV. = 743.53  
 E 8" CONCRETE INV. IN = 738.01  
 W 8" PVC INV. IN = 739.98  
 S 8" PVC INV. OUT = 737.99

**LEGEND**

	EXISTING CONTOUR- MAJOR		PROPOSED UTILITY - SEWER
	EXISTING CONTOUR- MINOR		EXISTING SEWER MANHOLE
	EXISTING UTILITY- SEWER		PROPOSED SEWER MANHOLE
	EXISTING UTILITY- WATER		EXISTING CHAIN LINK FENCE
	EXISTING UTILITY- GAS		EXISTING WOODEN FENCE
	EXISTING UTILITY- UNDERGROUND ELECTRIC		EXISTING PARCEL BOUNDARY
	EXISTING UTILITY- OVERHEAD ELECTRIC		EXISTING BUILDING SETBACK
	EXISTING DRAINAGE DITCH		EXISTING EASEMENT
	EXISTING STORM PIPELINE		EXISTING TREE



- NOTES:**
1. THE EXISTING UTILITIES THAT ARE BEING SHOWN IN THE PLANS ARE TAKEN FROM BEST AVAILABLE DATA. BEFORE COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY CROSSINGS, ELEVATIONS, AND LOCATIONS. ANY UTILITY DISCREPANCY SHALL BE REPORTED TO THE DESIGN ENGINEER.
  2. CONTRACTOR SHALL EXECUTE CAUTION WHEN EXCAVATING AROUND EXISTING UTILITIES.
  3. THE APPROXIMATE SEPARATION DISTANCE BETWEEN THE STORM DRAIN AND THE EXISTING SEWER LINE IS 4.8 FEET.
  4. EXCAVATION, BACKFILL, HAULING EXCAVATED MATERIAL AND ALL OTHER NECESSARY WORK TO COMPLETE FLOWABLE FILL POUR IS CONSIDERED SUBSIDIARY TO THE FLOWABLE FILL LINE ITEM.

(TO BE VERIFIED BY COSA)

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413.1	FLOWABLE FILL	CY	2
530.7	BARRICADES, SIGNS, TRAFFIC HANDLING (SITE C-52)	LS	1
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	25
851	EXISTING MANHOLE ADJUSTMENTS	EA	2
852.6.1	SANITARY SEWER DOGHOUSE MANHOLE (0' - 6'), 4' DIA.	EA	1
865	BYPASS PUMPING SMALL DIAMETER SANITARY SEWERS (SITE C-52)	LS	1
866	SANITARY SEWER MAIN TELEVISION PRE INSPECTION (8" - 15") WITH CLEANING	LF	199
900.1	REHABILITATION OF SANITARY SEWER BY PIPE BURST, 8" DIA. PIPE - ALL DEPTH	LF	199
910.1	MANHOLE REHABILITATION (STANDARD MANHOLES 4' DIA.)	VF	11
1109.1	SANITARY SEWER LATERAL RECONNECTIONS - OPEN CUT EXCAVATION - ALL DEPTH	EA	5

BENCHMARK COORDINATE DATUM

BM	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-BM1	13710979.382	2102843.184	734.69	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" IN CURB
CP-BM2	13711190.419	2102828.811	738.96	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" IN CURB
CP-BM3	13711510.115	2102905.113	744.34	MAG NAIL WITH SHINER STAMPED "MTR ENGINEERING" IN CONCRETE DRIVE

NO.	REV.	DATE	REVISION DESCRIPTION
1	1	9/27/21	ADDENDUM 1



**WESTON**  
 WESTON SOLUTIONS, INC.  
 70 NE LOOP 410, SUITE 600  
 SAN ANTONIO, TEXAS 78216-5842  
 TEXAS REGISTERED ENGINEERING FIRM F-3123  
 BPC WEST SEWERESHED PACKAGE 5C  
 SITE C-52  
 SEWER REHABILITATION PLAN - PIPE BURST

**San Antonio Water System**  
 NOTES INITIALS DATE  
 DESIGNED BY RK 08/21  
 REVIEWED BY JB 08/21  
 SCALE: AS SHOWN  
 SHEET NO. M-04 65 OF 98