

ADDENDUM NO. 1

December 26, 2023

**TO PROSPECTIVE BIDDERS UNDER
Fenter Rd Reconstruction
LVWD Bid No. 24-0105-02**

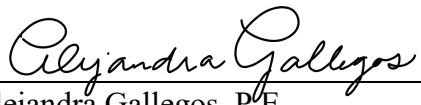
Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached. Bid inserts pages must be returned with the bid proposal submitted to the LVWD.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum.

Receipt of this addendum must be acknowledged in the space provided in the bid form. Failure to acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

Rosa Rivera
Purchasing Agent*


Alejandra Gallegos, P.E.
Project Manager
Huitt-Zollars, Inc.

Date

12/26/2023

Date

*The Purchasing Agent's signature certifies only that this document shall become part of the Contract Documents for the referenced project. Her signature is not a representation that the content of this Document is technically correct.

PART A – QUESTIONS SUBMITTED BY PROSPECTIVE BIDDERS

The purpose of this part of the Addendum is to answer questions submitted by prospective bidders as follows:

1. I am writing to request a copy of the pre-bid meeting attendance sheet, any addenda that have been released to date and the plan holders list if available. I would also like to know the estimated budget for this project.

Answer:

Attachment 1 includes the pre-bid meeting attendance sheet and agenda. The agenda has been updated. Item III, Item V.1.B, Item V.11, and Item V.12 were revised. The milestone descriptions under Item V.1 were also revised.

Addenda No. 1 is the only addenda that has been released to date.

There is no plan holders list available.

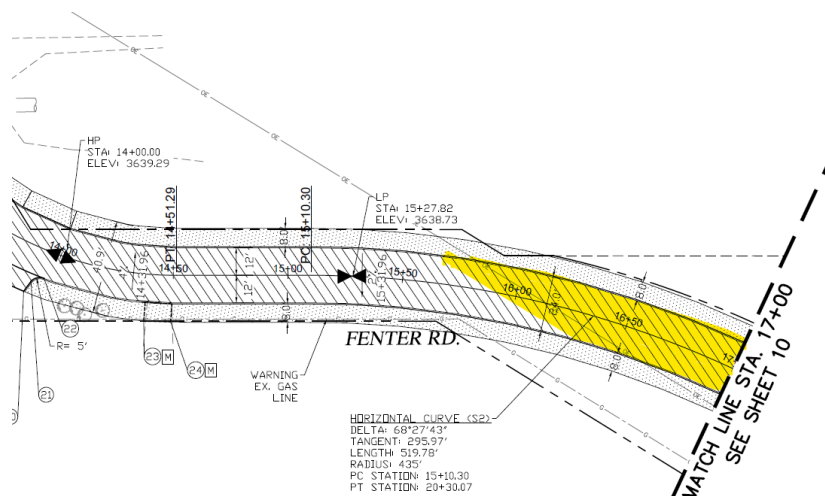
The estimated range for the Base Bid 1 is between \$690,000 and \$720,000.

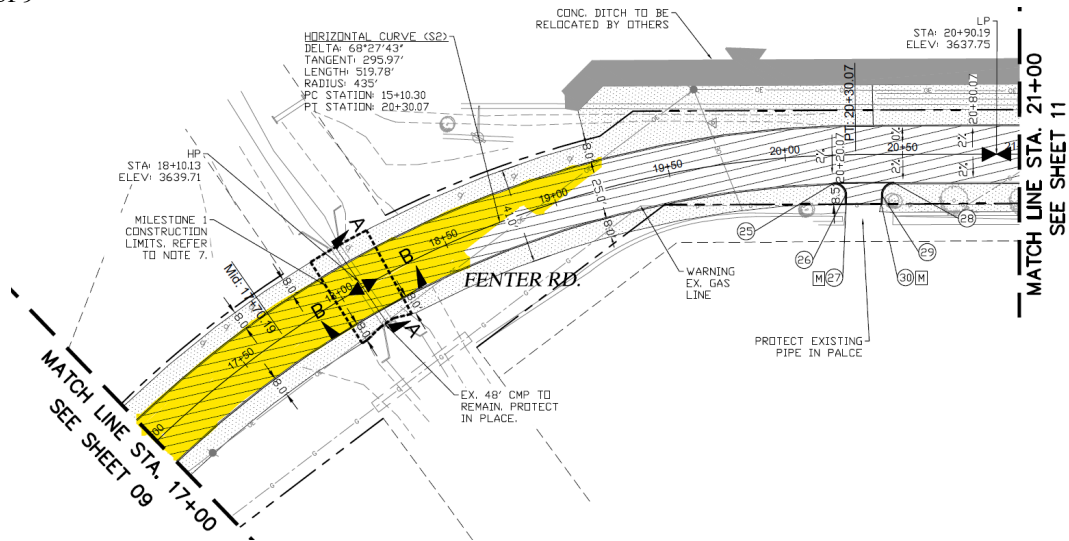
The estimated range for the Base Bid 2 is between \$320,000 and \$340,000.

2. Plans and bid form call for the removal and disposal of existing Asphalt Pavement and Basecourse. After visiting the jobsite, it looks like both of these have been removed. Please confirm the extends of the removal. Depending on how much was removed this will also affect the quantity of select fill. Can the bid documents and quantities be updated to reflect this?

Answer:

The asphalt layer has been removed for the entire length of the project, except for an 800 SY section between approximately STA 16+00 to STA 19+00. The area highlighted in yellow in the following exhibits show an approximation of the area where the existing asphalt pavement was not removed.





The base course layer was only removed for the areas where a water and sewer line trench was excavated. The depth of the base course removed was about 1 inch at those locations. The rest of the soil removed in the trenches was native soil.

- Per question #1 What will the new grade lines be? Will an updated existing conditions survey be provided to the contractor?

Answer:

The proposed grading will not change. It will remain as proposed in the engineering design plans.

An updated existing conditions survey will not be provided.

- On Plan Sheet Number 2 of 29; GRADING SPECIFICATIONS Note 12. States the following “ IN AREA\S WHERE PUMPING OCCURS, THE CONTRACTOR SHALL REMOVE THE SATURATED MATERIAL AND REPLACE WITH CEMENT STABILIZED BACKFILL (2-SACK). THIS SHOULD BE SUBSIDIARY TO ITEM 13 COMPACTED SELECT FILL AND ITEM 14 SUBGRADE PREPARATION. It is unknown if pumping will occur or not. How much 2-Sack should we include on these bid items?

Answer:

As per Note 10, weak or soft areas identified during proof rolling should be removed to a minimum depth of 8 inches. If the soil is suitable (not saturated) at this depth, the removed 8 inch depth of soil should be replaced with suitable, compacted select fill. However, if saturated soil conditions exist at this depth, the removed 8 inch depth of soil should be replaced with cement stabilized backfill. Significant use of cement stabilized backfill is not anticipated.

5. Horizontal and Vertical Control Information is missing from STA 12+00 to 19+50.

Answer:

Horizontal and vertical control information is not necessary between STA 12+00 and 19+50 since the control information provided in Sheet 3 can be used for the missing area.

6. There is a 2 ft. wide Bench shown in the pavement cross section detail (Sheet 24). Will this section have a compacted base and asphalt layer? If so, can you clarify type and thickness of these layers?

Answer:

The 2 ft bench will not have a compacted base nor an asphalt layer. The bench and parkway grading will consist of native soil and will only require ordinary compaction.

7. There is an existing Gas Line shown in Plan sheets 7 ~ 11. In case there is the need to relocate, Is the Town of Clint / LVWD responsible for payment of this item?

Answer:

Relocation of the existing gas line is not expected. The contractor shall protect the gas line in place. In the event that the gas line needs to be relocated, this will have to be coordinated with Texas Gas and Texas Gas will be responsible for this expense. The Contractor will be financially responsible for any damage to existing utility lines.

8. There is three (3) existing Power Poles marked for relocation on Sheets 11 and 12. Is the Town of Clint / LVWD responsible for payment of this item?

Answer:

The Town of Clint will be responsible for the payment of the power poles called out for replacement in Sheets 11 and 12. However, it is the Contractor's responsibility to inform El Paso Electric at least two weeks in advance of construction near their facilities.

9. Does the Engineer have a Project Estimate cost?

Answer:

The estimated range for Base Bid 1 is between \$690,000 and \$720,000.

The estimated range for Base Bid 2 is between \$320,000 and \$340,000.

10. Bid Form calls for only two (2) Water Valves to be adjusted to grade. Will the current contractor installing the water & sewer lines do their own adjustments for Gate Valves, Fire Hydrants & Manholes?

Answer:

*Concrete collars and adjustments to match proposed pavement or parkway grade for water valves, water meters, man holes, and water valves for fire hydrants will be included in this project. The bid tab items, quantities and specifications have been updated. Refer to **Attachment 2** for the latest engineering plans for the water and sewer line project and **Attachments 3 and 4** for the updated bid tabs.*

11. Will all the new residential driveways to receive asphalt ?

Answer:

Asphalt driveways are not proposed for all existing residential driveways. Asphalt driveways are only proposed for existing driveways that have asphalt and will be disturbed as a result of the proposed work. Refer to Sheets 9 through 11 for proposed asphalt driveways. Driveways called out as "Unpaved Driveways" will only require ordinary compaction and are identified for informational purposes only.

12. Will Owner pay for Density testing?

Answer:

Yes, the Owner will pay for density testing. However, the Contractor will be responsible to pay for all failing tests as indicated in Specification 01 40 00 Testing Laboratory Services.

13. On Sheets 5 & 6, Note number 9 states that " Water and sewer lines installed in 2023 by LVWD are not reflected in this sheet or Engineering Plans" . Will As-Builts for these lines be provided to the Contractor?

Answer:

*As-builts are not currently available. However, the latest engineering plans for the water and sewer lines with clouded revisions are included in **Attachment 2**.*

14. Will there be any grading permit fees associated with this project? If yes, who will pay for this, Owner or Contractor?

Answer:

The Contractor shall submit a request for an Ordinance No. 144 Building Permit from the Town of Clint. The fee will be waived.

PART B – BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

Item No.	Page or Drawing No.	Location and Description of Change
1.01	00300 – 3	<p>DELETE BID FORM Section 00300 page 00300-3 and REPLACE in its entirety with attached BID FORM Section 00300 page 00300-3 in Attachment 3.</p> <p>Revisions to Base Bid 1 include revision to quantities for Items 3, 9 and 10; revision to the item number, description, and quantity for Item 4; and addition of Item 22 Adjust Manhole.</p>
1.02	00300 – 5	<p>DELETE BID FORM Section 00300 page 00300-5 and REPLACE in its entirety with attached BID FORM Section 00300 page 00300-5 in Attachment 4.</p> <p>Revisions to Base Bid 2 include revision to quantities for Items 3, 7 and 8; revision to the item number, description, and quantity for Item 4; addition of Item 9 Adjust Water Valve, Item 10 Adjust Water Meter, and Item 22 Adjust Manhole; and revision to description for Item 21.</p>
1.03	00500 – 1	<p>DELETE BID FORM page 00500-1 and REPLACE in its entirety with attached BID FORM page 00500-1 in Attachment 5.</p> <p>Adjustment of manholes was added to project description.</p>
1.04	00500 – 2	<p>DELETE BID FORM page 00500-2 and REPLACE in its entirety with attached BID FORM page 00500-2 in Attachment 6.</p> <p>Milestone 2 time frame was corrected to 163 Calendar Days</p>
1.05	Section 00900 ARPA Required Information, Attachment G	<p>DELETE Section 00900 ARPA Required Information, Attachment G: Ethics and Conflict of Interest Acknowledgement form in its entirety and REPLACE with Section 00900 ARPA Required Information, Attachment G: Ethics and Conflict of Interest Acknowledgement form in Attachment 7 of Addendum No. 1.</p> <p>Form was revised to reference Town of Clint.</p>

PART C – TECHNICAL SPECIFICATIONS

Item No.	Page or Drawing No.	Location and Description of Change
1.06	Table of Contents	<p>DELETE Table of Contents in its entirety and REPLACE with Table of Contents in Attachment 8.</p> <p>Revised name of Sections 03 40 00 and 33 05 13.</p>
1.07	01 00 00 – 1	<p>DELETE page 01 00 00–1 in its entirety and REPLACE with page 01 00 00–1 in Attachment 9.</p> <p>Revised project description to include adjustment of manholes.</p> <p>Descriptions for Milestones 1 and 2 were revised. Milestone 1 was revised to specify flowable backfill instead of 2-sack. The Milestone 2 description was corrected to reference the 163 Calendar Days allowed to substantially complete this milestone.</p>
1.08	01 22 00 – 3	<p>DELETE page 01 22 00–3 in its entirety and REPLACE with page 01 22 00–3 in Attachment 10.</p> <p>Updated Mobilization & Bonds (Bid Item No. 1) to include Item 22 in the 5% total threshold.</p>
1.09	01 22 00 – 4	<p>DELETE page 01 22 00–4 in its entirety and REPLACE with page 01 22 00–4 in Attachment 11.</p> <p>Revised Item 3 Traffic Control description.</p>
1.10	01 22 00 – 6	<p>DELETE page 01 22 00–6 in its entirety and REPLACE with page 01 22 00–6 in Attachment 12.</p> <p>Revised Item 13’s third and last sentences.</p>
1.11	01 22 00 – 7	<p>DELETE page 01 22 00–7 in its entirety and REPLACE with page 01 22 00–7 in Attachment 13.</p> <p>Revised Item 14 second to last sentence.</p>
1.12	01 22 00 – 8	<p>DELETE page 01 22 00–8 in its entirety and REPLACE with page 01 22 00–8 in Attachment 14.</p> <p>Modified item name description for Item 21. Added Item 22 Adjust Manhole.</p>
1.13	01 40 00 – 3	<p>DELETE page 01 40 00–3 in its entirety and REPLACE with page 01 40 00–3 in Attachment 15.</p> <p>Revised testing for asphalt pavement and concrete.</p>

PART C – TECHNICAL SPECIFICATIONS (CONTINUED)

Item No.	Page or Drawing No.	Location and Description of Change
1.14	03 40 00 – 1	DELETE page 03 40 00–1 in its entirety and REPLACE with 03 40 00–1 in Attachment 16 . Revised specification to define flowable backfill and cement stabilized backfill.
1.15	33 05 13 – 1	DELETE page 33 05 13–1 in its entirety and REPLACE with page 33 05 13–1 in Attachment 17 . Revised specification to include adjustment of manholes.

PART D – PLAN SHEETS

Item No.	Page or Drawing No.	Location and Description of Change
1.16	Sheet 2	<p>DELETE Sheet 2 in its entirety and REPLACE with Sheet 3 in Attachment 18.</p> <p>Note 12 was modified to clarify when cement stabilized backfill is required for areas with pumping issues.</p>
1.17	Sheet 5	<p>DELETE Sheet 5 in its entirety and REPLACE with Sheet 5 in Attachment 18.</p> <p>Identified existing gas lines and underground communication lines that were missing from original plans. The legend was also updated to show the correct line type for existing underground communication lines.</p>
1.18	Sheet 6	<p>DELETE Sheet 6 in its entirety and REPLACE with Sheet 6 in Attachment 18.</p> <p>The legend was updated to show the correct line type for existing underground communication lines.</p>
1.19	Sheet 7	<p>DELETE Sheet 7 in its entirety and REPLACE with Sheet 7 in Attachment 18.</p> <p>Identified existing gas lines that were missing from original plans.</p>
1.20	Sheet 10	<p>DELETE Sheet 10 in its entirety and REPLACE with Sheet 10 in Attachment 18.</p> <p>Revised Note 7, Section Note *, and callouts for Section A-A and Section B-B to reference flowable backfill, which will be required for the pavement section above the Salitral Lateral culvert.</p>
1.21	Sheet 18	<p>DELETE Sheet 18 in its entirety and REPLACE with Sheet 18 in Attachment 18.</p> <p>Added existing sign that was missing from original plans. This existing sign will be removed in this project.</p>

ATTACHMENT 1

Fenter Rd Reconstruction

LVWD Bid No. 24-0105-02

PREBID MEETING – 11:00 a.m. (MST), December 12, 2023

AGENDA

I. SIGN IN & INTRODUCTIONS

1. Owners:

Lower Valley Water District
1557 FM 1110 Road
Clint, Texas 79836

Ed Long – Chief Operations and Technical Officer
Daniel Hernandez – Project Engineer

(915) 791-4480 ext. 1104
(915) 791-4480 ext. 1110

Town of Clint, Texas
200 N. San Elizario Rd
Clint, Texas 79836

Ramon Cano – Mayor
Susie Rodriguez – Town Clerk
Hector Parada – Maintenance Supervisor

915-851-3146
915-851-3146
915-852-3146

2. Design Engineers and Construction Managers:

Huitt-Zollars
Alejandra Gallegos, PE – Project Manager
Raul Esparza, Resident Project Representative

II. GENERAL BID PHASE REQUIREMENTS:

1. Bid Requirements

- a. Local Project
- b. Unit Price Contract
- c. Davis/Bacon Wage Rate apply
- d. American Rescue Plan Act (ARPA), North American Development Bank (NADBank), and Town of Clint funds
- e. Minimum Goals:
 - 10% for Small Locally Owned Business
 - 14% for Minority-Owned Business
 - 2% for Women-Owned Business

2. Contract Documents consist of the project manual, which includes drawings.

III. PROJECT DESCRIPTION

The above listed project consists of providing all labor, equipment, materials, tools and incidentals to perform the work described in the Fenter Rd Reconstruction project contract documents.

Base Bid 1:

This work consists of the roadway reconstruction of Fenter Rd from STA 0+90 (beginning of project limits) to STA 11+46 and from STA 20+46 to STA 30+83.67 (end of project limits). Major work items include site demolition, 24 ft roadway improvements, header curb, asphalt driveways, roadway signing, pavement markings, and parkway grading.

Street improvements consist of HMAC pavement, header curb, HMAC driveways, striping, and installing new small roadway signs.

Other improvements consist of regrading, removal of three trees, and minor adjustments of manholes and water meters and valves. Replacement of El Paso Electric power poles is required if the pole base is exposed by 1 ft or more. Three El Paso Electric power poles will have to be replaced due to the regraded parkway. Replacement of power poles will be paid by the Town of Clint. Contractor shall coordinate with El Paso Electric at least two weeks in advance of work activities that will expose the power pole base by 1 ft or more. Contractor shall also coordinate with El Paso Electric if they will perform work activities that will destabilize the power poles.

Base Bid 1 excludes stone for the v-channels between STA 20+30 and STA 30+51.22. Grading for the v-channels will also differ between Base Bid 1 and Base Bid 1 Alternate 1. Grading for the v-channel north of Fenter Rd will not follow the grading presented in the Cross Section Sheets 15 through 17. The Contractor shall refer to the *Fenter Rd Typical Section A-A (Base Bid 1)* detail in Sheet 20 for the Base Bid 1 grading between STA 20+30 and STA 30+40.

Base Bid 1 Alternate 1:

Base Bid 1 Alternate 1 includes stone for the v-channels between STA 20+30 and STA 30+51.22. Grading for the v-channels will follow the grading presented in the Cross Section Sheets 15 through 17 and the *Fenter Rd Typical Section A-A (Base Bid 1 Alternate 1)* detail in Sheet 20 between STA 20+30 and STA 30+51.22.

Base Bid 2:

This work consists of the roadway reconstruction of Fenter Rd from STA 11+46 to STA 20+46. Major work items include site demolition, 24 ft roadway improvements, header curb, asphalt driveways, roadway signing, pavement markings, parkway grading, and adjustments of manholes and water meters and valves.

Within the Base Bid 2 boundaries, Fenter Rd crosses the Salitral Lateral and Mesa Drain, which are El Paso County Water Improvement District No. 1 (EPCWID1) facilities. The Mesa Drain culvert will be about 7.1 ft below the proposed pavement surface, while the Salitral Lateral culvert will be about 2.1 ft below the proposed pavement surface. The Contractor shall not disturb the Salitral Lateral and Mesa Drain and protect the culverts in place. The Contractor shall reconstruct the Fenter Rd section from STA 17+97 to STA 18+23, which is above the

Salitral Lateral, by February 14, 2024 under Milestone 1 to avoid conflicts with EPCWID1's irrigation season as described in the construction documents.

IV. MINIMUM GENERAL REQUIREMENTS

The Bidder, or at least three *Key Personnel employed by the Bidder, must demonstrate **Successful Completion of one project similar in nature and scope to this project within the past five (5) years and one similar project with a value of at least 50% of the value bid for this project.

BIDDER MUST MEET THE FOLLOWING MINIMUM PROJECT SPECIFIC CRITERIA IN ORDER TO QUALIFY FOR AWARD OF THE BID:

- 1. Key personnel shall demonstrate successful completion of at least three (3) projects with similar scope of work and size within the past five (5) years. This requirement may be satisfied by employing the services of a qualified subcontractor and a list of paving projects.**
- 2. Project involves work within EPCWID1 right of way. Bidder shall demonstrate successful completion of at least one (1) project that included work within EPCWID1 right of way.**
- 3. Project involves work within TxDOT right of way. Bidder shall demonstrate successful completion of at least one (1) project within the last five years that included work within TxDOT right of way.**

V. PROJECT CONSTRUCTION CONSIDERATIONS

1. Contract Time
 - A. Milestone 1 - Work shall be completed by February 14, 2024. It is expected that Notice to Proceed will be provided on January 29, 2024.
 - B. Milestone 2 – 163 Calendar Days from Notice to Proceed
 - C. Substantial Completion – 163 Calendar Days (includes time to complete Milestones 1 and 2)
 - D. Final Completion – 193 Calendar Days
 - E. Liquidated Damages –
 - \$2,050/Calendar Day with a total maximum amount of \$26,650 for Milestone 1
 - \$2,050/Calendar Day for Substantial Completion
 - \$1,025/Calendar Day for Final Completion

Work under this project will be divided into the following milestones:

Milestone No. 1: Contractor shall reconstruct the Fenter Rd section from STA 17+97 to STA 18+23 by February 14, 2024 to avoid conflicts with EPCWID1's irrigation season. The Salitral Lateral crosses this segment of Fenter Rd through a culvert. Work to be completed by the Milestone 1 deadline includes demolition of existing pavement structure, excavation, placement of flowable backfill for proposed pavement structure,

header curb and parkway grading. HMAC shall be placed when weather is optimal as described in Section 32 12 17 Specifications; therefore, the base course and HMAC may be placed after the February 14, 2024 deadline. If placement of HMAC will exceed two calendar days from placement of base course, prime coat shall be applied for moisture retention and density tests shall be conducted again to verify proper compaction before HMAC placement.

Milestone No. 2: Contractor shall reconstruct the remaining sections of Fenter Rd from STA 0+90 to STA 17+97 and from STA 18+23 to STA 30+83.67 as described in the Fenter Rd Reconstruction engineering plans and the specifications. Placement of base course and HMAC between STA 17+97 and STA 18+23 shall also be completed within the 163 Calendar Days allowed to substantially complete Milestone 2. Contractor may start Milestone No. 2 work with Milestone No. 1 activities.

2. Contractor Schedule
 - A. No construction will begin until Engineer has received and approved the schedule. Separate schedules for Milestones 1 and 2 can be submitted and approved independently.
 - B. A revised schedule will be submitted every two weeks at the biweekly meetings.
 - C. Regular working hours shall be defined as Monday through Friday from 8:00 a.m. to 4:30 p.m.
 - D. Allowed working hours in the vicinity of TxDOT ROW are from 9 a.m. to 4 p.m., Monday through Friday.
 - E. Work may be allowed on Saturdays between January 29, 2024 and February 14, 2024 with Owner's written consent given after prior written notice to Engineer.

3. Water for Construction - Coordinate with the Lower Valley Water District to determine location of water source. Contractor will be responsible for paying for the water used.

4. Dust and Noise Control – Sections 1.7 and 1.8 of Specifications

5. Traffic Control –
 - Implement TCP provided in engineering plans, which follow TxDOT standards and requirements.
 - Shadow vehicle with TMA shall be used when workers are present at the Fenter Rd and FM 76 intersection, which shall only be allowed for one day, with up to four daily applications.
 - Traffic control using TxDOT Standard TCP (2-3)-23 (2-3a) and Detail B shall only be allowed when working at the Fenter Rd and FM 76 intersection. TxDOT Standard TCP (2-3)-23 (2-3a) and Detail B shall only be allowed for one day, with up to four daily applications. TCP (2-1)-18 (2-1b) and Detail A shall be reinstated after work hours.

- Water filled barriers shall be used in lieu of plastic drums inside lateral buffer zones when excavating over 24" and/or slopes cannot be installed due to field conditions.
- 6. Shop Drawings
Shop drawings must be submitted and approved by the Engineer before any materials are installed.
- 7. TPDES Stormwater Pollution Prevention Plan requirements- Small Construction Site
- 8. Permits –
 - Contractor will need to submit Town of Clint Ordinance No. 144 Building Permit. No fee will be charged.
 - Engineer will obtain TxDOT Permit Form 1058 Permit to Construct Access Driveway Facilities on Highway Right of Way
- 9. Construction Easements from residents in adjacent properties will be obtained by Engineer
- 10. Materials Testing Requirements – LVWD will provide Materials Testing during Construction.
- 11. Water & Sewer Adjustments – Meters, valves and manholes need to be adjusted to proposed grade. Coordinate with LVWD.
- 12. Utility Coordination
 - 48-hour notification is required of all contractors working in the vicinity of high pressure gas lines and to allow stand-by personnel to be present during excavation.
 - Contractor shall inform Texas Gas of required utility adjustments and relocations at least 30 days in advance of planned construction.
 - Contractor shall coordinate with El Paso Electric at least two weeks in advance of planned construction near power poles to be replaced or stabilized.

VI OTHER CONSIDERATIONS

1. Bid Requirements:
 - A. Bids due by 3:00 p.m. (MST), Friday, January 5, 2024
 - B. Questions shall be submitted to LVWD in writing no later than Tuesday, December 19, 2023.
 - C. Include ARPA Required Documents
2. Addendum(s)

VII. QUESTIONS

VIII. ADJOURN

Fenter Rd Reconstruction
LVWD Bid No. 24-0105-02

PREBID MEETING – 11:00 a.m. (MST), December 12, 2023
Sign-in Sheet

Name PABLO MOTA	Address: 200 Wullington Dr. Ap. 205	Phone: 915 246 4103	Email: pmota@scitunks.com
Company SPIESJ			
Name AECTOR PARADA	Address:	Phone: 915-5831446	Email: T W O N U E C L I A T
Company			
Name David Ortega	Address: 13047 Alameda	Phone: 915-996-5292	Email: DOrtega@EPCWID2.org
Company EPCWID2			
Name Quaid Muncy	Address: 6 King Canyon Loop	Phone: 575-894-6161	Email: smithco@smithco.cc
Company Smithco			
Name Donovan Lasyone	Address: 14160 Blair Dr. Herizo City, TX	Phone: 915-525-3398	Email: donovan@bairconstruction.com
Company Bair Const			
Name Gerald Grijalva	Address:	Phone: 915 791-4480-1100	Email: ggrijalva@lvwd.org
Company LVWD			
Name David Hernandez	Address:	Phone: 915-791-4480-1110	Email: dherandez@lvwd.org
Company LVWD			
Name Gerardo Rodriguez	Address:	Phone: 915-342-3620	Email: grodriguez@cmdei.com
Company CMD Endeavor			
Name Brayam Chavarria	Address: 11351 James Watt Blvd 79932 & Pasy TX	Phone:	Email: brayam@cmdei.com
Company CMD Endeavors Inc.			
Name Rosa Riveru	Address: 1515111 Clint	Phone: 915-791-4480	Email: rosar@lvwd.org
Company LVWD			

ATTACHMENT 2



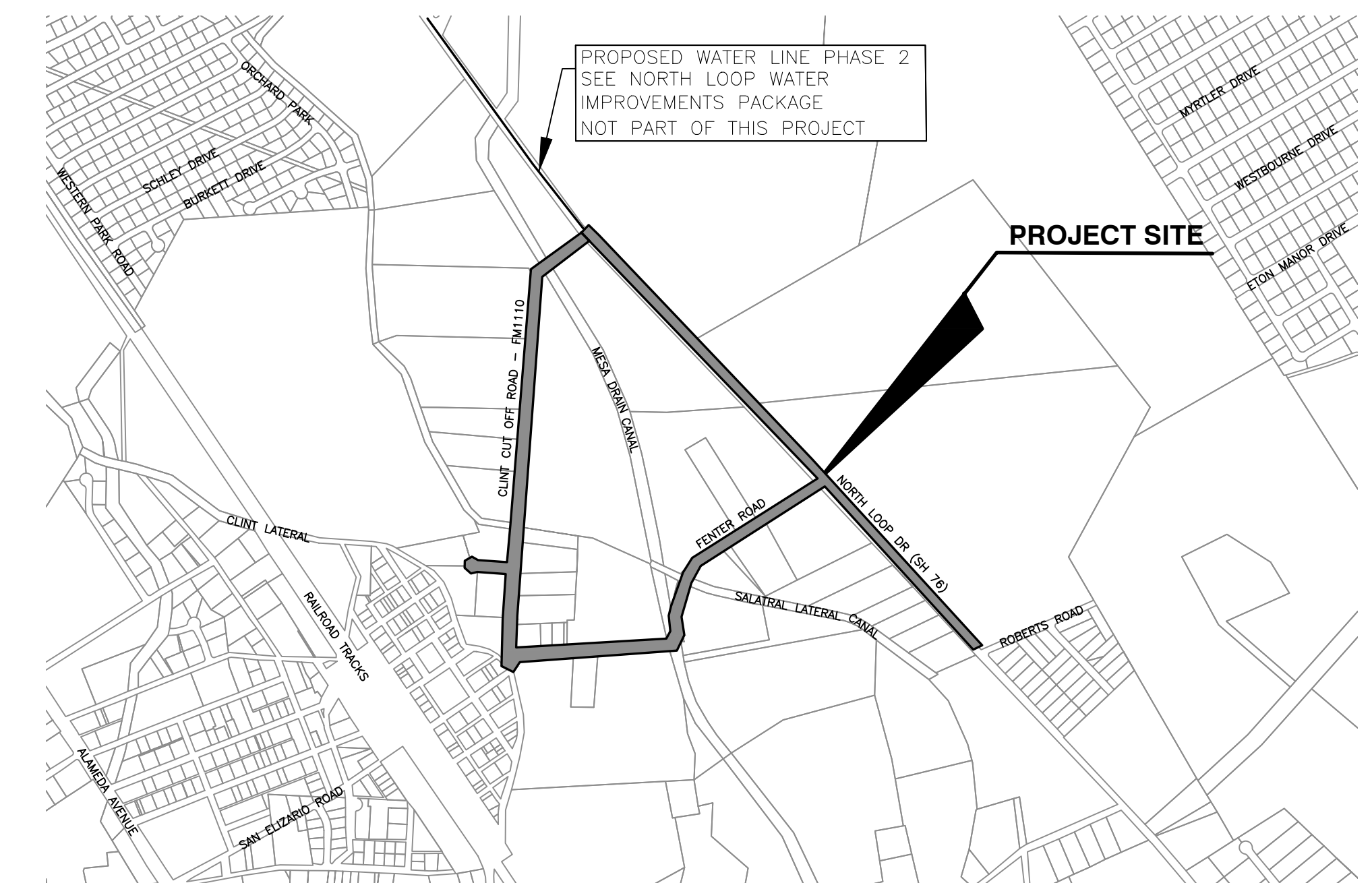
LOWER VALLEY WATER DISTRICT NORTH LOOP PHASE I WATER AND SEWER IMPROVEMENTS

VOLUME 3 OF 3

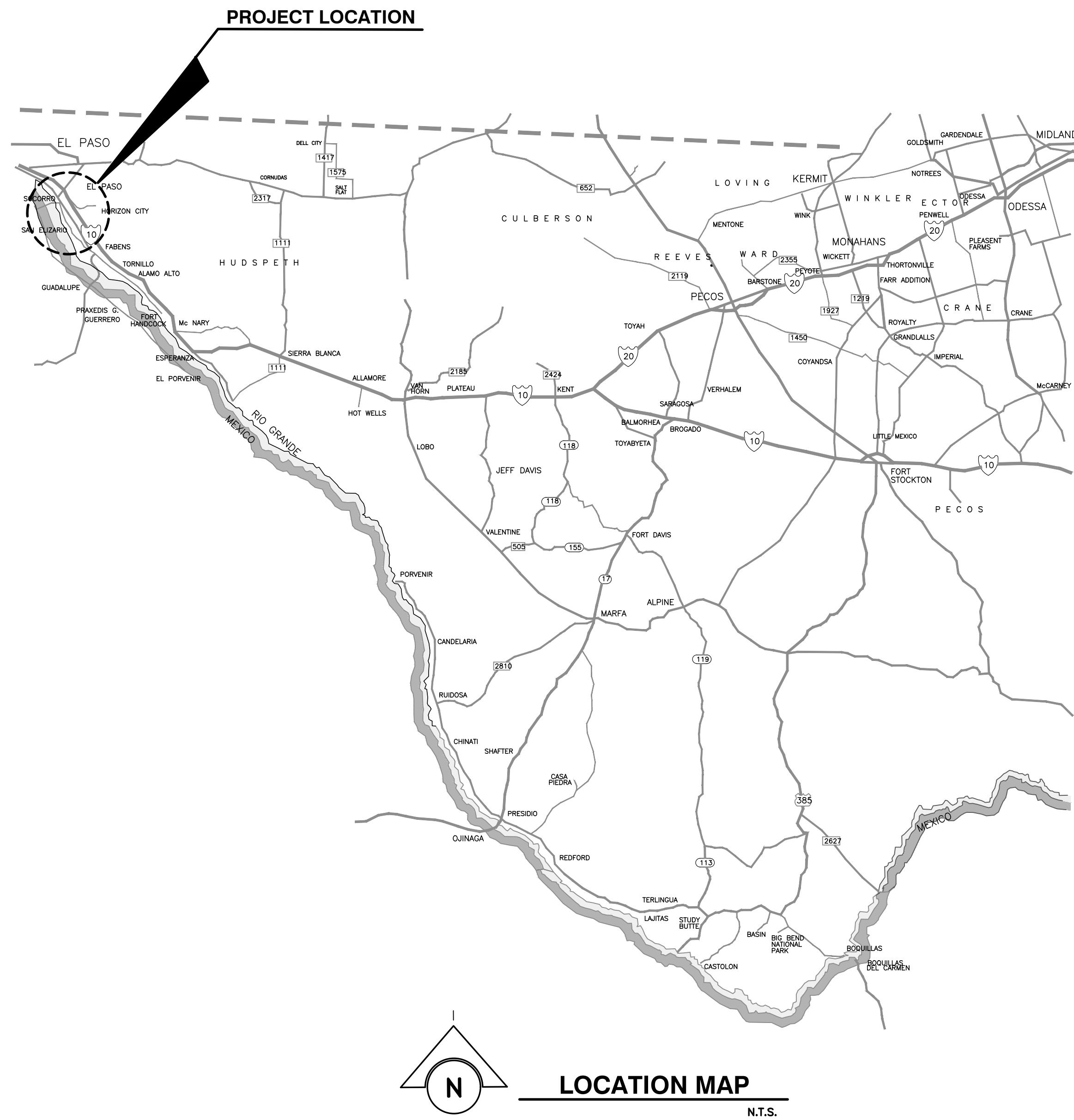
LVWD BID No. 23-0207-01

JANUARY 2023

PRESIDENT
ROSALINDA VIGIL
VICE-PRESIDENT
DAVID CARRASCO
SECRETARY/TREASURER
HENRY TRUJILLO
DIRECTOR
DAVID ESTRADA
DIRECTOR
ROD CHAVEZ
GENERAL MANAGER
GERALD GRIJALVA



VICINITY MAP
SCALE 1"=1,000'



INDEX OF SHEET	
DESCRIPTION	SHEET NO.
COVER SHEET	1
GENERAL LAYOUT & GENERAL NOTES	2
ALIGNMENT "A"—SANITARY SEWER LINE PLAN AND PROFILE	3
ALIGNMENT "B"—SANITARY SEWER LINE PLAN AND PROFILE	4
ALIGNMENT "C"—SANITARY SEWER LINE PLAN AND PROFILE	5 - 8
ALIGNMENT "D"—SANITARY SEWER LINE PLAN AND PROFILE	9 - 10
ALIGNMENT "E"—SANITARY SEWER LINE PLAN AND PROFILE	11 - 12
ALIGNMENT "F"—WATER LINE PLAN AND PROFILE	13 - 16
ALIGNMENT "G"—WATER LINE PLAN AND PROFILE	17 - 18
ALIGNMENT "H"—WATER LINE PLAN AND PROFILE	19
ALIGNMENT "I"—WATER LINE PLAN AND PROFILE	20 - 25
SANITARY SEWER & WATER STANDARD DETAILS	26 - 34
CONCRETE CHANNEL PLAN AND PROFILE	C1 - C2

SHEET NO.
1 OF 34

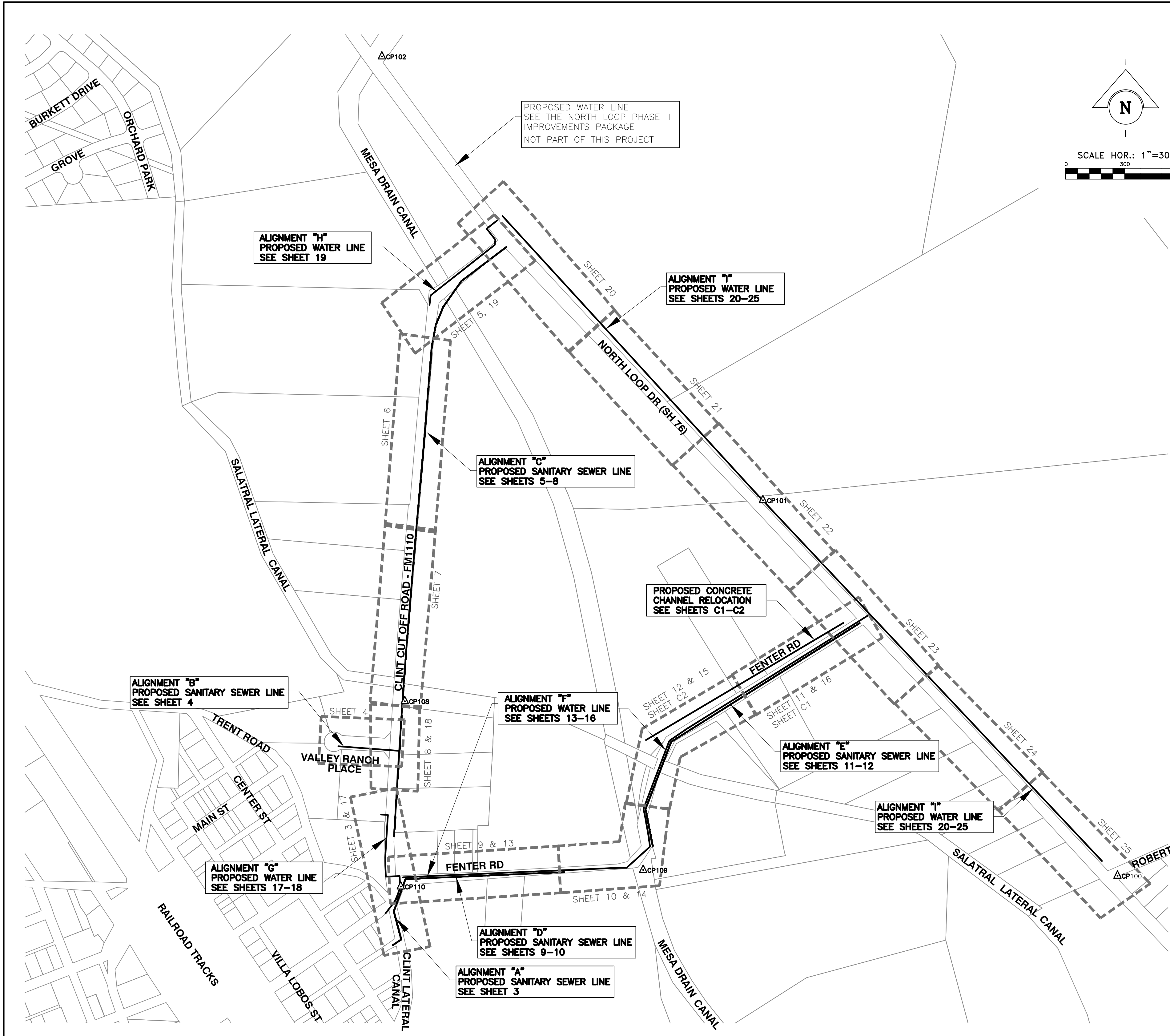
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF
BID OPENING OR CONSTRUCTION UNDER THE AUTHORITY
OF JAVIER ACOSTA, P.E. 109225 ON JANUARY 10, 2023.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
(TBPE# F-3584, TBPLS# 100490-00)
1130 MONTANA AVE
EL PASO, TX 79902
Ph: (915) 533-4600
Fax: (915) 533-4673



J:\WORKING\2021\210118-1\LVWD North Loop Water Line Design\10-3-23 Design Phase 1\Phase 1\Drawings\Water and Sewer\Phase 1\Sheet 01-COVER SHEET.dwg 09/17/2023 11:04AM



GENERAL NOTES:

- LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATION AND DEPTH MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
- WHEN WATER LINES ARE INSTALLED IN THE VICINITY OF SEWER MAINS, SUCH INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH SECTION 290.44 (WATER DISTRIBUTION) AS PUBLISHED IN "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS" BY TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, (DECEMBER, 1995 OR ANY REVISION THERETO).
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL OR BETTER CONDITION ALL DAMAGE CAUSED TO EXISTING IMPROVEMENTS SUCH AS FENCES, LAWNS, CONCRETE SIDEWALKS, CURBS, CONCRETE RAMPS, SPRINKLER SYSTEMS, LANDSCAPE, BUILDINGS, CONCRETE DRIVEWAYS, DRAINAGE STRUCTURES, FIBER OPTICS, AND EXISTING PAVEMENT. THE RESTORATION SHALL BE INCIDENTAL TO THE CONTRACT ITEMS, AND SHALL NOT BE PAID FOR SEPARATELY.
- SURFACE STRUCTURES SUCH AS STREETS SIGNS, DRIVEWAYS, LANDSCAPING, CULVERTS, ETC., ARE SHOWN ON THE PLANS AS VISIBLE AT THE TIME OF THE SURVEY. IT IS THE CONTRACTORS RESPONSIBILITY TO SAFEGUARD AND MAINTAIN ANY AND ALL SURFACE STRUCTURES DURING THE COURSE OF WORK AND TO REPLACE THOSE ITEMS WHICH ARE DAMAGED BY THE CONTRACTOR WITH LIKE OR BETTER QUALITY.
- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, ACCESS TO GAS VALVES MUST BE MAINTAINED AT ALL TIMES. CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA, COORDINATE ALL WORK WITH AFFECTED GAS UTILITY COMPANIES.
- WHENEVER POWER POLES ARE ADJACENT TO THE PROPOSED WATER/SANITARY SEWER LINE. THE CONTRACTOR SHALL PROVIDE PROPER SHORING OR OTHER SUITABLE SUPPORT DURING CONSTRUCTION OF THE WATER/SANITARY SEWER LINE, WHICH METHODS MUST BE APPROVED BY THE UTILITY COMPANY MAINTENANCE DEPARTMENT. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED. BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF, THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTACT:
 LOWER VALLEY WATER DISTRICT 1-915-791-4480
 TEXAS GAS SERVICE 1-800-959-5325
 TXDOT EL PASO DISTRICT 1-915-790-4200
 EL PASO ELECTRIC COMPANY 1-800-592-1634
 AT&T REPAIR 1-888-944-0447
 EL PASO COUNTY COURT HOUSE 1-915-546-2000
 EL PASO WATER 1-915-594-5500
- THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES IF MODIFICATIONS OF DEPTH AND/OR COURSE OF EXISTING UTILITY LINES ARE REQUIRED TO COMPLY WITH THE DESIGN OF THE PROPOSED WATER/SANITARY SEWER LINE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND GRADE OF THE UTILITIES WITH THE UTILITY COMPANIES WELL AHEAD OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
- TRAFFIC AND SPECIAL CONDITIONS:
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TRAFFIC CONTROL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE COUNTY CONSTRUCTION INSPECTOR AND THE TRAFFIC ENGINEERING REPRESENTATIVES WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVES AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
- THE CONTRACTOR SHALL NOTIFY ALL RESIDENTS AND BUSINESS OWNERS THAT THEY MAY BE AFFECTED BY THE CONSTRUCTION TEN DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE DRIVEWAY ACCESS AND PROVIDING FULL DRIVEWAY ACCESS AT ALL TIMES FOR LANDOWNERS.
- ALL TIE-INS SHALL BE CLOSELY COORDINATED WITH LOWER VALLEY WATER DISTRICT AT LEAST 48-HOURS PRIOR TO ACTUAL CONSTRUCTION. CLOSING AND OPENING OF EXISTING VALVES SHALL BE OPERATED BY THE LOWER VALLEY WATER DISTRICT. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE TO CUSTOMERS IF SERVICE WILL BE INTERRUPTED FOR MORE THAN 4 HOURS IN A 24 HOUR PERIOD.
- ANY HORIZONTAL RADIUS OF CURVATURE FOR THE WATERLINE SHALL BE IN ACCORDANCE AND RECOMMENDATIONS WITH PIPE & JOINT DEFLECTION SPECIFIED BY THE MANUFACTURER.
- GRADING, PAVEMENT CUT, HAULING, AND STORM WATER POLLUTION PREVENTION PLAN PERMITS MUST BE OBTAINED FROM APPROPRIATE AGENCIES. CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED PERMITS.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF POWER POLES AND ASSOCIATED EQUIPMENT WHILE EXCAVATING IN THE VICINITY OF THESE FACILITIES.
- ALL GATE VALVES TO OPEN COUNTER - CLOCKWISE
- LOCATIONS OF BOUNDARY LINES ARE APPROXIMATE. TO OBTAIN LOCATION OF BOUNDARY LINES A BOUNDARY SURVEY WILL BE REQUIRED.
- ALL WORK TO BE DONE UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH TCEQ WATER UTILITIES DIVISION - RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS AS PUBLISHED IN THE 10-20-95 TEXAS REGISTER, DECEMBER 1995 OR ANY REVISIONS THERETO.
- UTILITY TRENCH BACKFILL & COMPACTION SHALL BE IN ACCORDANCE WITH THE LOWER VALLEY WATER DISTRICT TRENCHING DETAILS AND SPECIFICATIONS. FURTHERMORE, ALL UTILITY TRENCHING BACKFILL & COMPACTION WITHIN TXDOT R.O.W. (NORTH LOOP DR - FARM RD 76) SHALL BE IN ACCORDANCE WITH TXDOT DETAILS AND SPECIFICATIONS.
- TRENCH EXCAVATION PROTECTION:
 THE CONTRACTOR SHALL INDEPENDENTLY RETAIN/OR EMPLOY A STRUCTURAL DESIGN/ GEOTECHNICAL/SAFETY EQUIPMENT PROFESSIONAL TO DESIGN AND MONITOR ALL REQUIRED TRENCH SAFETY PROVISIONS. THIS INDIVIDUAL SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTOR'S TRENCH SAFETY PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR PLANS SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, THE CONTRACTOR'S TRENCH SAFETY PROFESSIONAL AND/OR CONTRACTORS INDEPENDENTLY RETAINED SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION. ALL EXCAVATING SHALL BE DONE IN ACCORDANCE WITH 29 CFR, SUBPART P - EXCAVATIONS, REQUIREMENTS AS PUBLISHED IN THE CODE OF FEDERAL REGULATIONS JULY 1996 OR ANY REVISIONS THERETO.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ADDITIONAL FITTINGS WHERE NECESSARY IN ORDER TO MAKE ADJUSTMENTS AND/OR COMPLETE PROPER INSTALLATION OF THE WATERLINES.
- SERVICE CONNECTIONS INDICATED ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM LOCATION OF SERVICE CONNECTIONS WITH OWNER AND THE LOWER VALLEY WATER DISTRICT PRIOR TO INSTALLATION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, THE LOWER VALLEY WATER DISTRICT AND OWNER REGARDING FINAL ALIGNMENT OF PROPOSED WATER/SANITARY SEWER LINE, AT NO CHARGE TO THE CONTRACT.
- THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH AN AS-BUILT PLAN INDICATING THE LOCATION, DISTANCE FROM EXISTING ROAD, AND LENGTH OF ALL WATERLINES, SANITARY SEWER, VALVES, SERVICE CONNECTIONS, FITTINGS, MANHOLES AND APPURTENANCES (WITH STATION AND ELEVATIONS). AS-BUILTS SHALL BE SUBMITTED ON A USB FLASH DRIVE AND A 24" X 36" HARDCOPY SET OF PLANS.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE CONCRETE THRUST BLOCKING AND MECHANICAL JOINT RESTRAINERS AT THE FOLLOWING: TAPPING SLEEVES, TEES, BENDS, PLUGS AND ALL FITTINGS.
- ALL VALVES ON P.V.C. WATER MAINS SHALL BE ANCHORED IN CONCRETE. SEE ANCHOR DETAILS.
- ALL P.V.C. PIPE ON THIS PLAN SHALL BE ENCASED WITH INDICATED BEDDING MATERIAL.
- INSTALL NEW WATER LINES WITH 4" OF COVER UNDER PROPOSED FINISH GRADE.
- CONTRACTOR TO REPLACE ALL EXISTING WATER SERVICES (IF APPLICABLE), TO INCLUDE METER BOXES, NEW PIPING, FITTINGS, VALVES & ALL APPURTENANCES. NO SEPARATE PAYMENT.
- RECONNECTION OF EXISTING WATER LINE SYSTEM SHOWN ON THESE PLANS MUST BE MADE SUCH THAT MINIMAL INTERRUPTION OF SERVICE TO CUSTOMER IS MADE.
- ALL EXISTING LINES CURRENTLY IN SERVICE MUST REMAIN IN SERVICE THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING WATER/SANITARY SEWER LINES (INCLUDING SERVICES) FROM DAMAGE AS A RESULT OF CONSTRUCTION ACTIVITIES.
- PIPE MATERIALS AND PIPE TO BE ABANDONED IN PLACE, THAT ARE REMOVED WILL BE DISPOSED OFF AT THE CONTRACTORS RESPONSIBILITY AND EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL TRAFFIC DEVICES.
- USE CAUTION WHEN DIGGING IN THE AREA OF EXISTING GAS LINE. VERIFY DEPTH AND LOCATION OF GAS MAIN BEFORE CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN TO THE LOWER VALLEY WATER DISTRICT ENGINEERING DEPARTMENT AND TXDOT FOR APPROVAL. THE TCP SHALL BE IN ACCORDANCE WITH THE TMUCD AND SHALL BE SUBMITTED AT LEAST 2 WEEKS BEFORE CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PHOTOGRAPHS AND VIDEO OF ALL FENCES, WALLS, AND HOUSES INCLUDING TREES ON BOTH SIDES OF EACH STREET WHERE WATER LINES WILL BE INSTALLED. PHOTOGRAPHS AND VIDEO SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO COMMENCING ANY WORK. NO DIRECT PAYMENT FOR THIS ITEM. SHALL BE SUBSIDIARY PER ALL BID ITEMS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVED TRAFFIC CONTROL BY TXDOT PRIOR TO COMMENCING ANY WORK IN TXDOT R.O.W. NO SEPARATE PAYMENT.
- ALL CONCRETE SHALL BE 3000 PSI AT 28 DAYS AND MEET MATERIAL REQUIREMENTS OF "CAST IN PLACE CONCRETE" OF THE SPECIFICATIONS, UNLESS OTHERWISE INDICATED.
- ALL REINFORCING STEEL SHALL BE GRADE 60 AND MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF "REINFORCING STEEL" OF THE SPECIFICATIONS.
- CURING SHALL BE MADE BY THE IMPERVIOUS MEMBRANE METHOD AND SHALL MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS ON "CONCRETE WORK" OF THE SPECIFICATIONS.
- PROOF ROLLING - ALL SUB-GRADE AND EACH LIFT OF BASE MATERIAL SHALL BE PROOF-ROLLED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE NECESSARY EQUIPMENT AND OPERATORS FOR PROOF-ROLLING. SOFT AND YIELDING AREAS DISCOVERED SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO PRIME COAT AND SURFACE TREATMENT APPLICATIONS.
- FINISH GRADING OF SUBGRADE AND BASE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- UTILITY TRENCH COMPACTION SHALL BE 95% PROCTOR PRIOR TO UTILITY ACCEPTANCE.
- ALL WORK REQUIRED TO SAW-CUT EXISTING CONCRETE SIDEWALKS, EXISTING DRIVEWAYS, ETC. AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
- MOBILIZATION, DEWATERING, SWPPP, AND TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
- EMERGENCY RESPONSE NOTE: THE CONTRACTOR SHALL IMMEDIATELY CALL AND NOTIFY TO THE LOWER VALLEY WATER DISTRICT - EMERGENCY LEAKS - AT 915-588-7831 WHEN A WATER OR SANITARY SEWER IS BROKEN DURING CONSTRUCTION EXCAVATION. THE CONTRACTOR SHALL ALSO IMMEDIATELY NOTIFY THE LOWER VALLEY WATER DISTRICT WATER UTILITIES FIELD INSPECTOR AND PROJECT ENGINEER ASSIGNED TO THE PROJECT.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL RETESTING NECESSARY ON THE FAILED TESTS.
- LABORATORY TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY. THE FOLLOWING TEST SCHEDULE SHALL BE ADHERED TO:
 A. SUBGRADE MOISTURE AND DENSITY TEST AT THE RATE OF ONE PER EACH BLOCK, NOT TO EXCEED 500 FEET SPACING.
 B. FLEXIBLE BASE P.I., L.L. AND GRADATION OF MATERIAL USED, MOISTURE AND DENSITY TEST PER LIFT ON SAME SPACING AS SUBGRADE.
 C. COMPACTED FILL P.I. SHALL BE A MINIMUM OF 25 TESTS, TESTING SHALL BE PROVIDED FOR 12" LIFT, 1 TEST PER 300 LINEAR FEET OF STREET;
 D. CONCRETE - TWO CONCRETE COMPRESSIVE STRENGTH TEST (4 CYLINDERS EACH) FOR EVERY 800 LINEAR FEET OF CONCRETE CAP.
 ALL TESTING IS THE OWNER'S RESPONSIBILITY. COPIES OF ALL TEST RESULTS SHALL BE FURNISHED TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FAILURES & RE-TESTING EXPENSES.
- HOT-MIX ASPHALTIC CONCRETE TESTING DESIGN MIXES AND TESTS FOR DENSITY AND STABILITY ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AT HIS EXPENSE. ALL TESTING SHALL FULFILL THE REQUIREMENTS ON SECTION ASPHALTIC CONCRETE PAVING OF THE TECHNICAL SPECIFICATIONS.

GENERAL LEGEND

MON	SET MONUMENT, AS NOTED	---	PROPERTY LINE
ΔCP	SET CONTROL POINT, AS NOTED	---	EDGE OF PAVEMENT
ΔPK	SET CONTROL POINT, SPINDLE NAIL	---	CHAINLINK FENCE
⊗	FOUND IRON REBAR	---	WL
⊙	FOUND IRON PIPE	---	SAN
⊕	FIRE HYDRANT	---	GAS
○/P	LIGHT POLE	---	OHE
⊕	WATER METER	---	TEL
⊕/V	WATER VALVE	---	TXDOT RIGHT-OF-WAY

CONTROL POINTS & TEMPORARY BENCHMARKS

CP	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
100	10591279.44	466981.20	3637.09	SET 5/8" REBAR WITH FXSA CAP
101	10593185.05	465181.34	3636.63	SET 5/8" REBAR WITH FXSA CAP
102	10594537.39	463247.21	3638.44	SET 5/8" REBAR WITH FXSA CAP
108	10592164.92	463363.75	3638.60	SET 5/8" REBAR WITH FXSA CAP
109	10591308.78	464573.50	3636.53	SET 5/8" REBAR WITH FXSA CAP
110	10591224.51	463342.85	3638.16	SET 5/8" REBAR WITH FXSA CAP

SURVEY POINTS

- HORIZONTAL CONTROL: MAPPING COORDINATES AND BEARINGS ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM, TEXAS CENTRAL ZONE 4203, NAD83. UNIT OF MEASURE: U.S. SURVEY FOOT. COORDINATES SHOWN HEREON ARE GRID USING A COMBINED FACTOR OF 1.0002127334, TO CONVERT TO SURFACE COORDINATES DIVIDED BY 0.999787312 FOR THIS PROJECT.
- VERTICAL CONTROL AND ELEVATIONS ARE BASED ON NAVD 88, US SURVEY FEET.
- LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATION AND DEPTH MUST BE VERIFIED IN THE FIELD.
- UNDERGROUND UTILITIES LOCATIONS ARE BASED ON PHYSICAL FEATURES SUCH AS MANHOLES, VALVES, PEDESTALS, METERS AND SPOTTING IN THE FIELD AND ARE APPROXIMATE ONLY. NO DIGGING WAS PERFORMED TO LOCATE THE ACTUAL LOCATIONS OF BURIED UTILITIES. THE SURVEYOR DOES NOT GUARANTEE THE COMPLETENESS OR ACCURACY OF THE BURIED UTILITY DATA SHOWN HEREON. ACTUAL LOCATIONS SHOULD BE VERIFIED PRIOR TO ANY EXCAVATING.

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
 CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
 1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
 LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
 1-800-344-8377 (1-800-DIG-TESS)



SCALE
 HOR: _____
 VER: _____

DATE JAN 10, 2023
 DRAWN BY M.P., A.V.
 CHKD. BY CM,GR,JA
 APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
 Consulting Civil Engineers & Surveyors

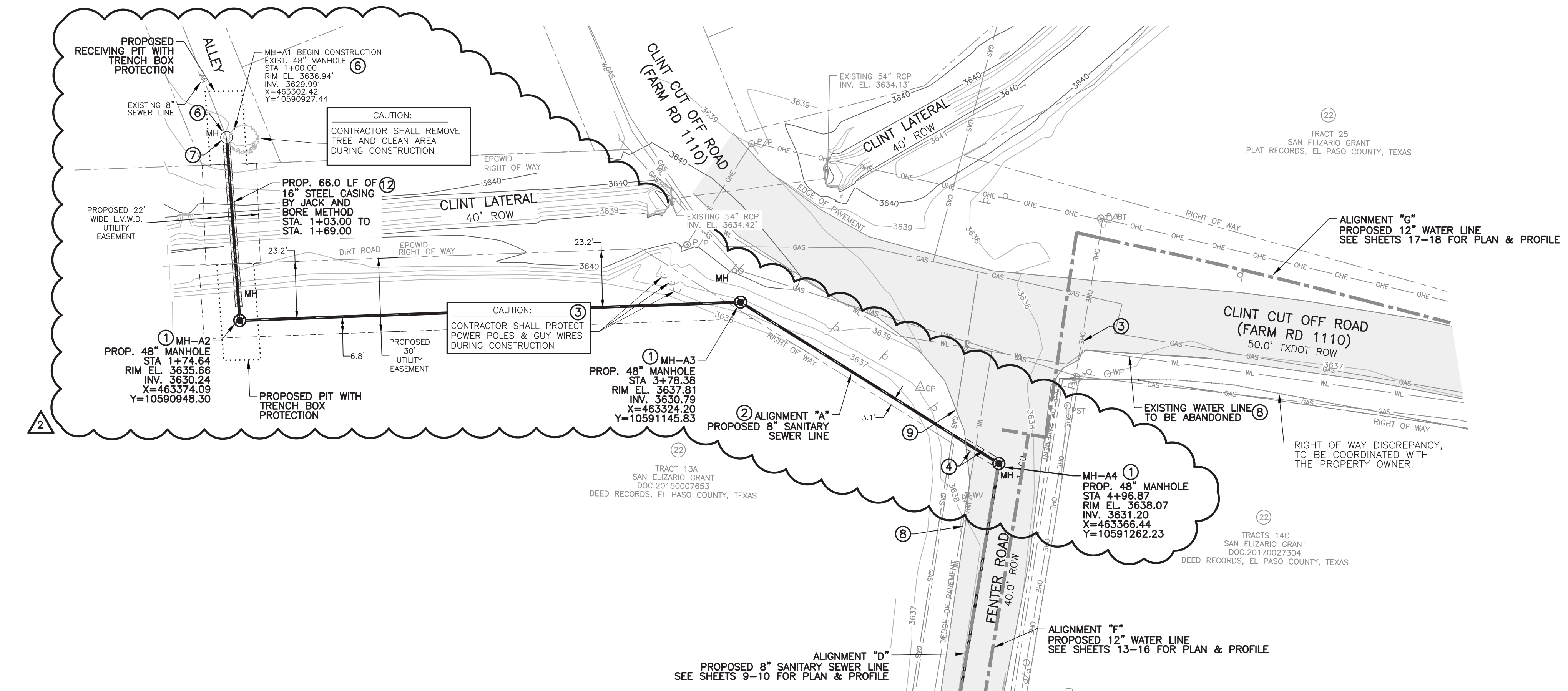
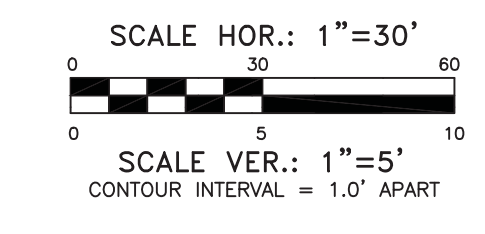
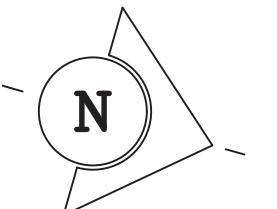
1130 Montana Ave., El Paso, Texas 79902
 Ph: (915) 533-4600 Fax: (915) 533-4673
 TBPLS# 100490-00, TBPE# F-3584

NO.	DATE	REVISIONS	BY
1	1/31/23	ADDENDUM # 2	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
 EL PASO COUNTY, TEXAS
 PROJECT NO. E2119EP

SHEET NO.
 2 OF 34

GENERAL LAYOUT & GENERAL NOTES



LEGEND

△CP	CONTROL POINT AS NOTED	○	EXISTING ANCHOR GUY WIRE
⊙MH	PROPOSED 48" SANITARY SEWER MANHOLE	◇WM	EXISTING WATER METER
—	PROPOSED 8" SANITARY SEWER LINE	◇WV	EXISTING WATER VALVE
▨	PROPOSED ASPHALT PAVEMENT PATCHING	□GM	EXISTING GAS METER
---	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT	—3640	EXISTING INDEX CONTOURS
---	PROPOSED SERVICE LINE	—3639	EXISTING INTERMEDIATE CONTOURS
○	EXISTING 48" SANITARY SEWER MANHOLE	—OHE	EXISTING OVERHEAD ELECTRIC
○P/P	EXISTING POWER POLE	—WL	EXISTING WATER LINE
□JBT	EXISTING TELEPHONE JUNCTION BOX	—SAN	EXISTING SANITARY SEWER LINE
□	EXISTING SIGN	—GAS	EXISTING GAS LINE
○WP	EXISTING WOOD POST	▨	EXISTING ASPHALT PAVEMENT
○PST	EXISTING POST	○JBE	EXISTING ELECTRIC JUNCTION BOX
□	EXISTING MAILBOX		
○	EXISTING TRAFFIC LIGHT		
---	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		

**ALIGNMENT "A"
PROPOSED 8" SANITARY SEWER PLAN VIEW**
SCALE: 1"=30'

KEYED NOTES:

- PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
- INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
- CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
- CONTRACTOR SHALL SAWCUT AND PATCH EXISTING ASPHALT PAVEMENT, SEE SHEET 29.
- EXISTING SANITARY SEWER MANHOLE TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING SANITARY SEWER LINES AND EXISTING SERVICE LINES DURING CONSTRUCTION.
- PROPOSED PIPE CONNECTION TO EXISTING MANHOLE, SEE SHEET 32 DETAIL "330".
- EXISTING WATER LINE TO BE ABANDONED AFTER PROPOSED 12" WATERLINE IS INSTALLED AND IN OPERATION. CONTRACTOR SHALL CONCRETE FILL ALL ENDS OF ABANDONED WATER LINE. CONTRACTOR SHALL RECONNECT EXISTING SERVICES TO NEW WATER MAIN.
- APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
- PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. SEE DETAILS ON SHEET 27.

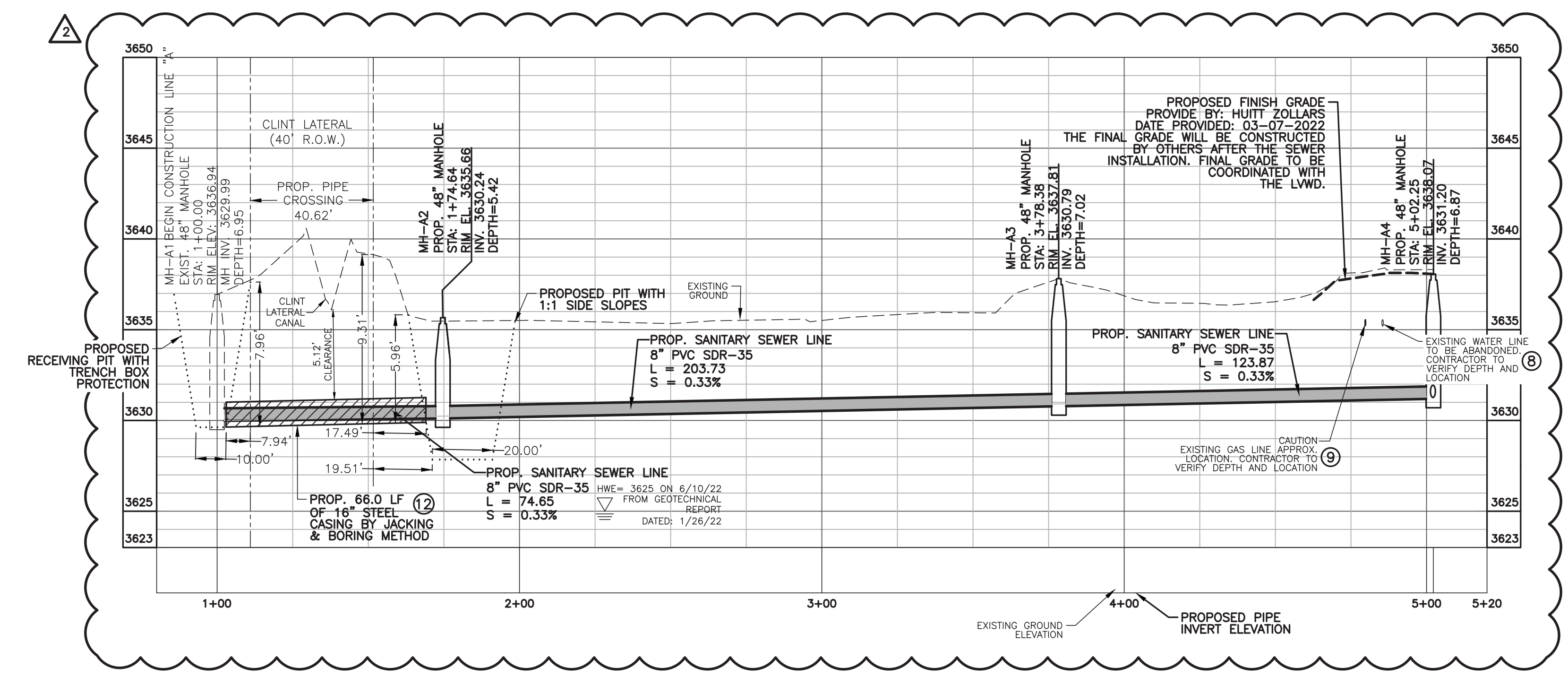
NOTES:

- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
- CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
- CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
- SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
- SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
- ALL PROPOSED PIPE INVERT AND ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT. UNLESS NOTED OTHERWISE ON PLANS.
- ALL PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.
- NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
- CONTRACTOR SHALL COORDINATE WITH EPCWID #1 SIZE AND DEPTH OF BORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPCWID #1 RIGHT-OF-WAY.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	403
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	3
SAW/CUT AND PATCH PAVEMENT	SY	8
PROPOSED 16" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	66
EXTRA DEPTH MANHOLES	VF	2

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.



**ALIGNMENT "A"
PROPOSED 8" SANITARY SEWER LINE PROFILE**
SCALE: HOR. 1"=30'
VER. 1"=5'

REVISION: 11/29/2022 4:10PM A:\2021\21189- LINDA MORIN LOOP WATER LINE DESIGN\10-3-D DESIGN PHASE & PERMITS\DWG\MANHOLE AND SEWER PHASE (SHEET 10-1) SEWER PLAN CLIN (A08) 10-3-D-01.DWG

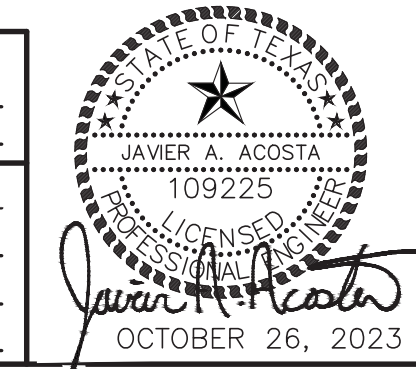
**IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG**
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**Lower Valley
WATER DISTRICT**

SCALE
HOR: 1"=30'
VER: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR./J.A.
APPD. BY J.A.



FXSA
www.fxsa.com

FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

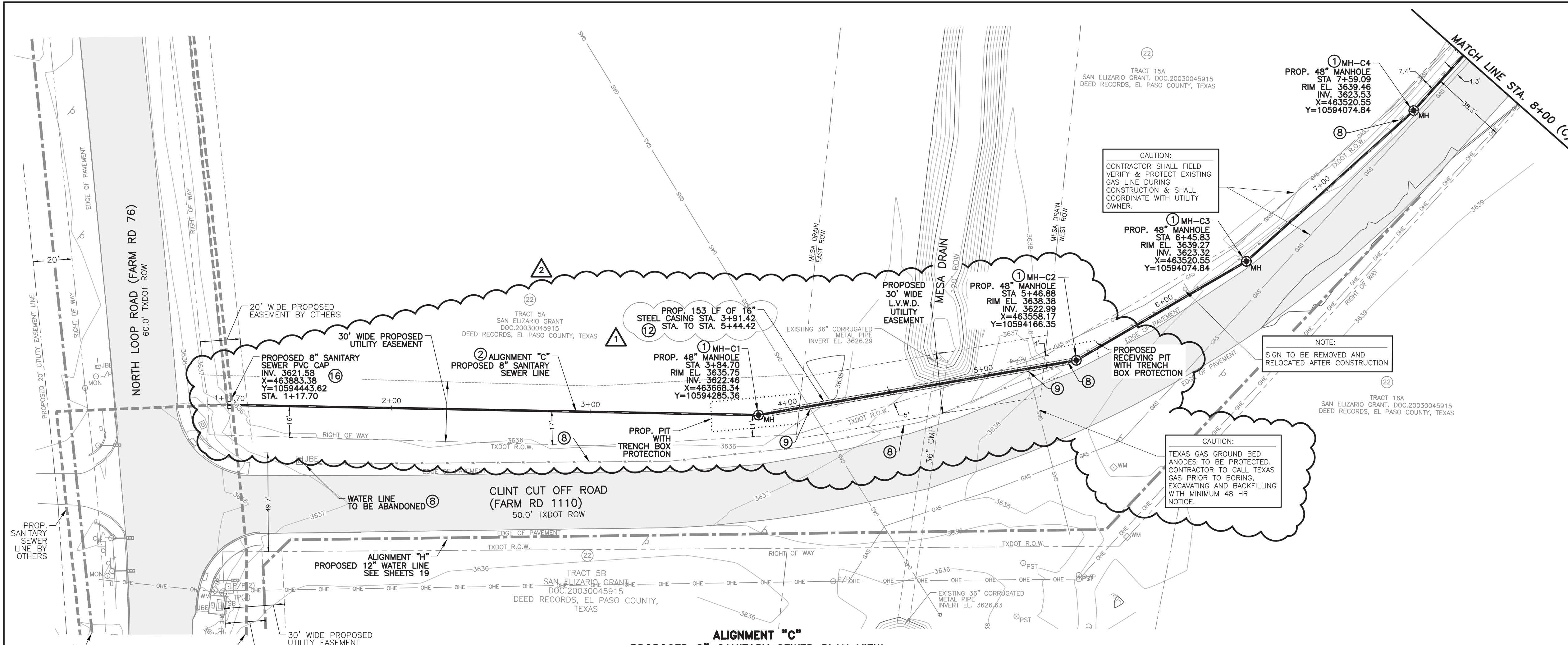
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

**LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS**
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

**ALIGNMENT "A" - 8" SANITARY
SEWER LINE PLAN AND PROFILE**

SHEET NO.
3 OF 34

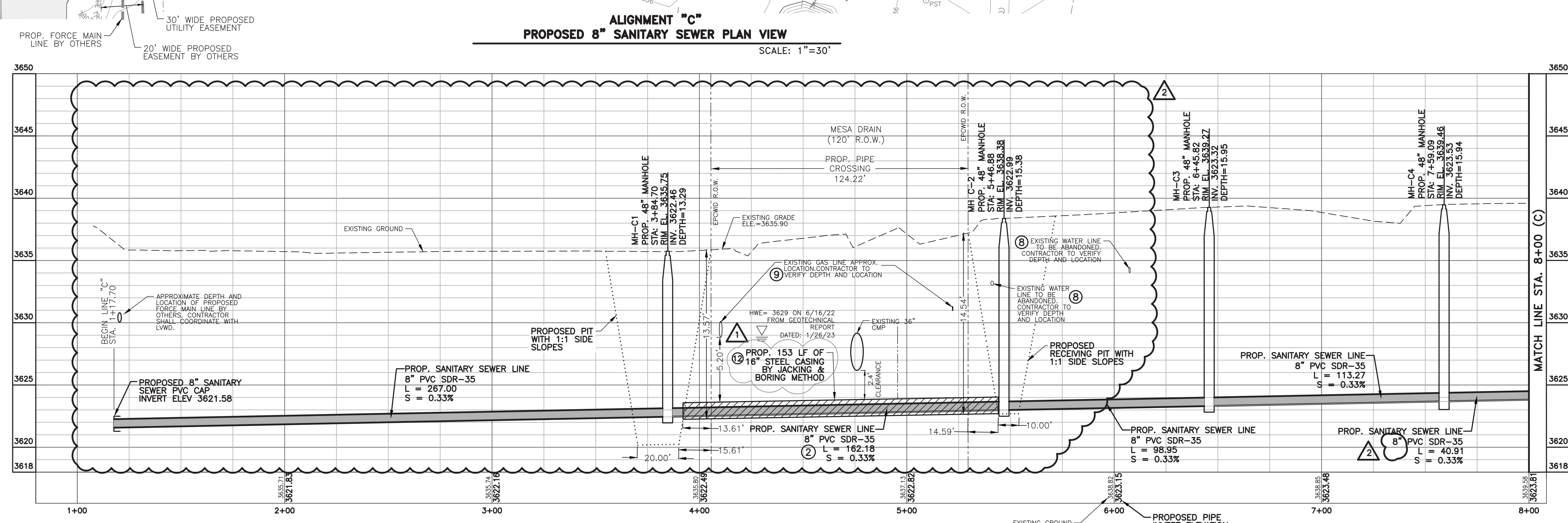


LEGEND

△CP	CONTROL POINT AS NOTED	⊕	EXISTING ANCHOR GUY WIRE
⊙MH	PROPOSED 48" SANITARY SEWER MANHOLE	⊕WM	EXISTING WATER METER
—	PROPOSED 8" SANITARY SEWER LINE	⊕WV	EXISTING WATER VALVE
—	PROPOSED ASPHALT PAVEMENT PATCHING	⊕GM	EXISTING GAS METER
—	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT	—	EXISTING INDEX CONTOURS
—	PROPOSED SERVICE LINE	—	EXISTING INTERMEDIATE CONTOURS
⊙	EXISTING 48" SANITARY SEWER MANHOLE	—	EXISTING OVERHEAD ELECTRIC
⊙P/P	EXISTING POWER POLE	—	EXISTING WATER LINE
⊙T	EXISTING TELEPHONE JUNCTION BOX	—	EXISTING SANITARY SEWER LINE
⊙WP	EXISTING SIGN	—	EXISTING GAS LINE
⊙PST	EXISTING WOOD POST	—	EXISTING ASPHALT PAVEMENT
⊙	EXISTING POST	⊕BE	EXISTING ELECTRIC JUNCTION BOX
⊕	EXISTING MAILBOX	—	EXISTING TRAFFIC LIGHT
⊕	EXISTING TRAFFIC LIGHT	—	WATER TABLE ELEVATION DATE DETERMINED INDICATED
—	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		

- KEYED NOTES:**
- PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
 - INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
 - EXISTING WATER LINE TO BE ABANDONED AFTER PROPOSED 12" WATERLINE IS INSTALLED AND IN OPERATION. CONTRACTOR SHALL CONCRETE FILL ALL ENDS OF ABANDONED WATER LINE. CONTRACTOR SHALL RECONNECT EXISTING SERVICES TO NEW WATER MAIN.
 - APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
 - PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. SEE DETAILS ON SHEET 27.
 - PROPOSED STEEL CASING INSTALLED BY APPROVED OPEN / CUT METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN. SEE DETAILS ON SHEET 27.
 - PROPOSED 8" DIAMETER SANITARY SEWER PVC CAP.

- NOTES:**
- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 - CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 - CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 - THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 - CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 - SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 - SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
 - ALL PROPOSED PIPE INVERT AND ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT. UNLESS NOTED OTHERWISE ON PLANS.
 - ALL PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.
 - NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
 - CONTRACTOR SHALL COORDINATE WITH EPCWD #1 SIZE AND DEPTH OF BORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPCWD #1 RIGHT-OF-WAY.



*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	682
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	4
PROPOSED 16" STEEL CASING INSTALLED BY APPROVED OPEN/CUT METHODS.	LF	153
REMOVE AND RELOCATE EXISTING SIGN	EA	1

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
EXTRA DEPTH MANHOLES	VF	37
PROPOSED 8" SANITARY SEWER PVC CAP	EA	1

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
 CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
 1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
 LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
 1-800-344-8377 (1-800-DIG-TESS)



SCALE
 HOR.: 1"=30'
 VER.: 1"=5'

DATE OCT 26, 2023
 DRAWN BY M.P., A.V.
 CHKD. BY CM,GR,JA
 APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
 Consulting Civil Engineers & Surveyors
 1130 Montana Ave., El Paso, Texas 79902
 Ph:(915)533-4600 Fax:(915)533-4673
 TBPLS# 100490-00, TBPE# F-3584

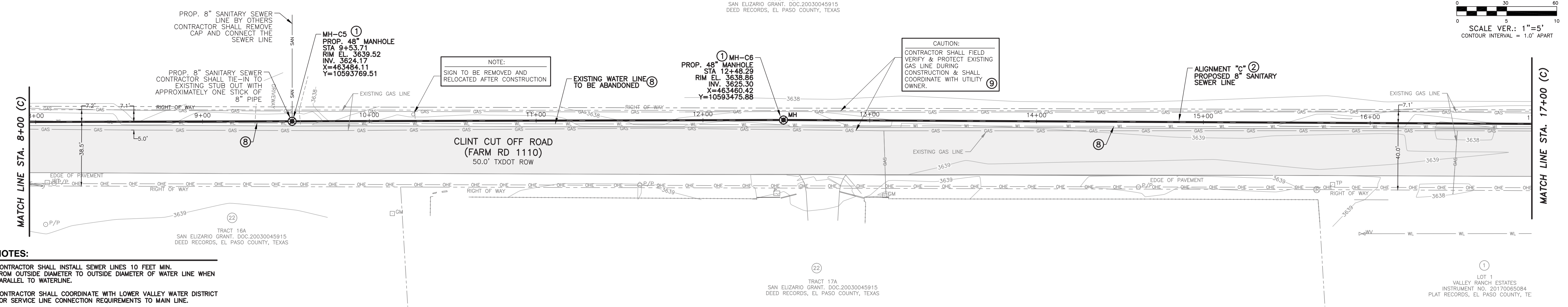
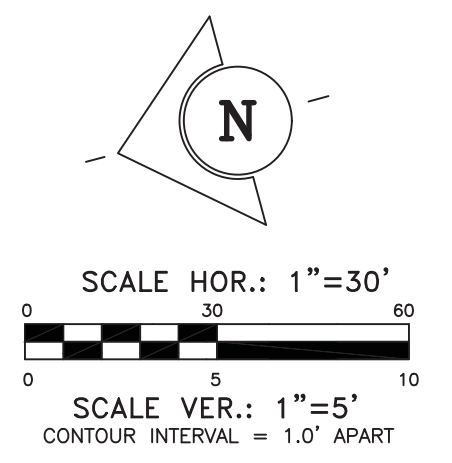
BENCHMARKS:

NO.	DATE	REVISIONS	BY
1	1/31/23	ADDENDUM # 2	J.A.
2	10/26/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
 NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
 EL PASO COUNTY, TEXAS
 PROJECT No. E2119EP

ALIGNMENT "C" - 8" SANITARY SEWER LINE PLAN AND PROFILE

SHEET NO.
5 OF 34



- NOTES:**
- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 - CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 - CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 - THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 - CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 - SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 - SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
 - ALL PROPOSED PIPE INVERT AND ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT. UNLESS NOTED OTHERWISE ON PLANS.
 - ALL PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.

**ALIGNMENT "C"
PROPOSED 8" SANITARY SEWER PLAN VIEW**

SCALE: 1"=30'

*** ESTIMATED SHEET QUANTITIES**

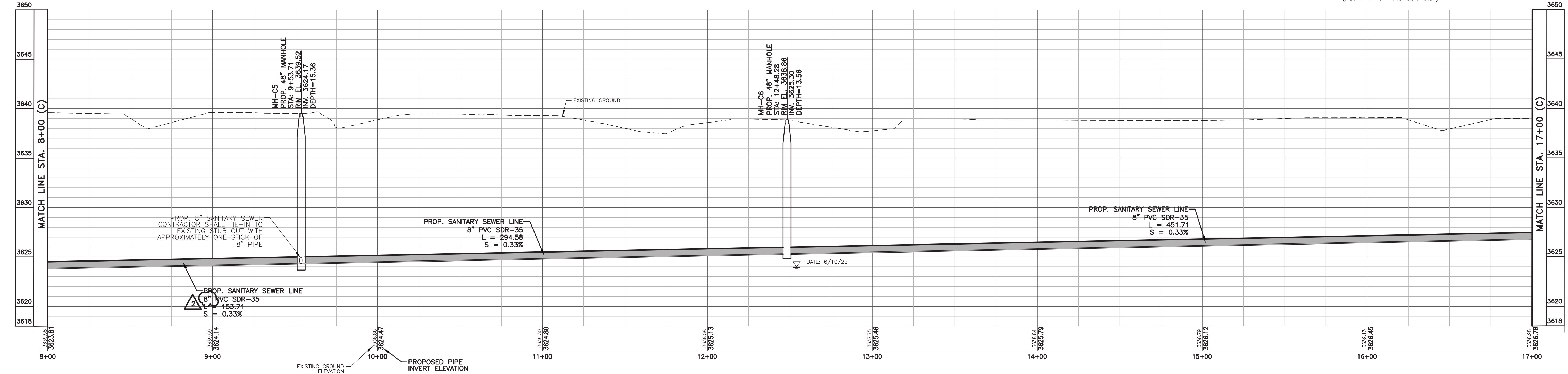
DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	900
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	2
REMOVE AND RELOCATE EXISTING SIGN	EA	1
EXTRA DEPTH MANHOLES	VF	17

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

- KEYED NOTES:**
- PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
 - INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
 - EXISTING WATER LINE TO BE ABANDONED AFTER PROPOSED 12" WATERLINE IS INSTALLED AND IN OPERATION. CONTRACTOR SHALL CONCRETE FILL ALL ENDS OF ABANDONED WATER LINE. CONTRACTOR SHALL RECONNECT EXISTING SERVICES TO NEW WATER MAIN.
 - APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.

LEGEND

	CONTROL POINT AS NOTED		EXISTING ANCHOR GUY WIRE
	PROPOSED 48" SANITARY SEWER MANHOLE		EXISTING WATER METER
	PROPOSED 8" SANITARY SEWER LINE		EXISTING WATER VALVE
	PROPOSED ASPHALT PAVEMENT PATCHING		EXISTING GAS METER
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT		EXISTING INDEX CONTOURS
	PROPOSED SERVICE LINE		EXISTING INTERMEDIATE CONTOURS
	EXISTING 48" SANITARY SEWER MANHOLE		EXISTING OVERHEAD ELECTRIC
	EXISTING POWER POLE		EXISTING WATER LINE
	EXISTING WATER/SEWER JUNCTION BOX		EXISTING SANITARY SEWER LINE
	EXISTING SIGN		EXISTING GAS LINE
	EXISTING WOOD POST		EXISTING ASPHALT PAVEMENT
	EXISTING POST		EXISTING ELECTRIC JUNCTION BOX
	EXISTING MAILBOX		WATER TABLE ELEVATION DATE DETERMINED INDICATED
	EXISTING TRAFFIC LIGHT		
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		



**ALIGNMENT "C"
PROPOSED 8" SANITARY SEWER LINE PROFILE**

SCALE HOR.: 1"=30'
VER.: 1"=5'

REVISED: 11/29/2022 4:10PM 2/2021 (21)189-1400 NORTH LOOP WATER LINE DESIGN (10-3) DESIGN PHASE & PERMITS/ISSUES/WATER AND SEWER PHASE (SHEET 04-1) SEWER PLAN VIEW (A04) 48-8-C-01.DWG

**IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG**
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS 1-800-344-8377 (1-800-DIG-TESS)

**ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS 1-800-344-8377 (1-800-DIG-TESS)

SCALE
HOR.: 1"=30'
VER.: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.Y.
CHKD. BY CM,GR,JA
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

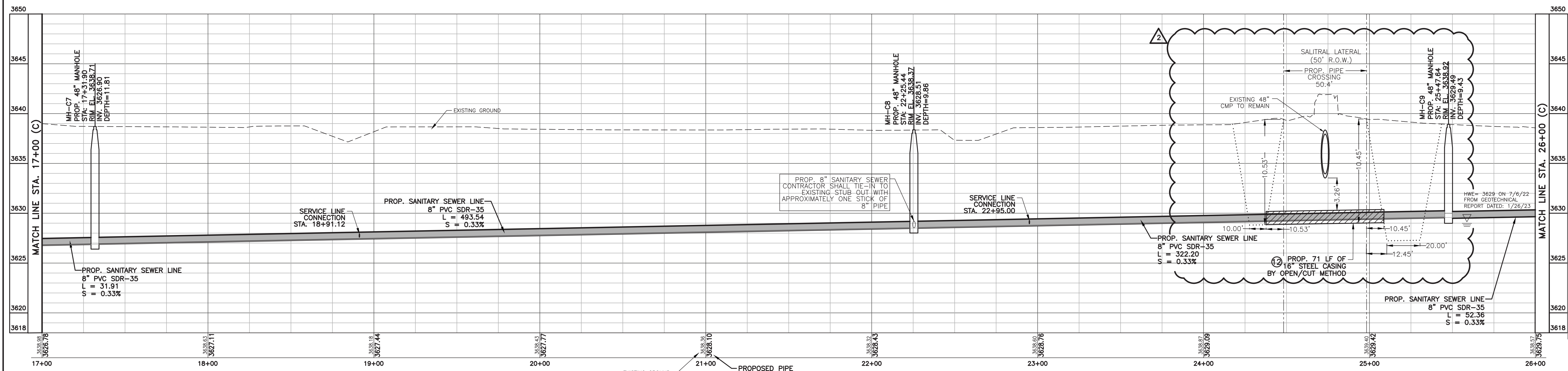
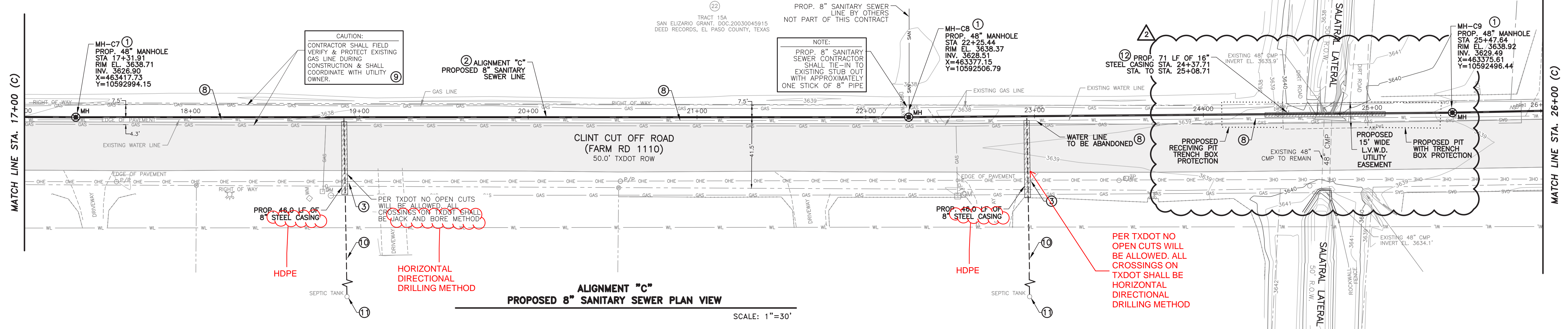
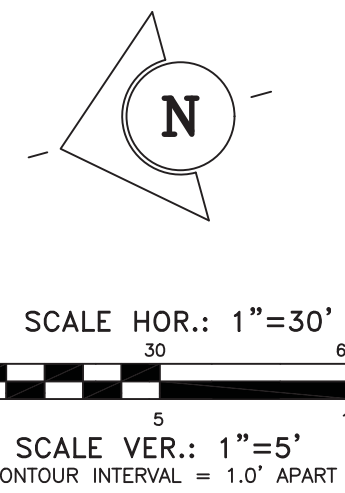
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

**LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP**

**ALIGNMENT "C" - 8" SANITARY
SEWER LINE PLAN AND PROFILE**

SHEET NO.
6 OF 34



ALIGNMENT "C"
PROPOSED 8" SANITARY SEWER LINE PROFILE
SCALE HOR.: 1"=30'
VER.: 1"=5'

- NOTES:**
- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 - CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 - CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W., ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 - THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE 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 MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 - CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 - SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 - SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
 - ALL PROPOSED PIPE INVERT ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT. UNLESS NOTED OTHERWISE ON PLANS.
 - ALL PROPOSED PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.
 - NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
 - CONTRACTOR SHALL COORDINATE WITH EPCWD #1 SIZE AND DEPTH OF BORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPCWD #1 RIGHT-OF-WAY.

- KEYED NOTES:**
- PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
 - INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
 - CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
 - EXISTING WATER LINE TO BE ABANDONED AFTER PROPOSED 12" WATERLINE IS INSTALLED AND IN OPERATION. CONTRACTOR SHALL CONCRETE FILL ALL ENDS OF ABANDONED WATER LINE. CONTRACTOR SHALL RECONNECT EXISTING SERVICES TO NEW WATER MAIN.
 - APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
 - PROPOSED 4" PVC SANITARY SEWER SERVICE LINE @0.84% MIN. SLOPE. CONTRACTOR SHALL CONNECT TO MAIN LINE AND TO EXISTING SEPTIC TANK SERVICE LINE, SEE SHEET 34 FOR DETAIL.
 - EXISTING SEPTIC TANK TO BE DECOMMISSIONED BY CONTRACTOR. LOCATION OF SEPTIC TANK SHOWN IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SEPTIC TANK SERVICE LINE & SHALL COORDINATE WITH OWNER. SEE SHEET 34 FOR DETAIL.
 - PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING & BORING METHOD.

LEGEND

△CP	CONTROL POINT AS NOTED	—	EXISTING ANCHOR GUY WIRE
⊙MH	PROPOSED 48" SANITARY SEWER MANHOLE	⊙WM	EXISTING WATER METER
—	PROPOSED 8" SANITARY SEWER LINE	⊙WV	EXISTING WATER VALVE
—	PROPOSED ASPHALT PAVEMENT PATCHING	⊙GM	EXISTING GAS METER
—	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT	—	EXISTING INDEX CONTOURS
—	PROPOSED SERVICE LINE	—	EXISTING INTERMEDIATE CONTOURS
⊙	EXISTING 48" SANITARY SEWER MANHOLE	—	EXISTING OVERHEAD ELECTRIC
⊙P/P	EXISTING POWER POLE	—	EXISTING WATER LINE
⊙BT	EXISTING TELEPHONE JUNCTION BOX	—	EXISTING SANITARY SEWER LINE
⊙	EXISTING SIGN	—	EXISTING GAS LINE
⊙WP	EXISTING WOOD POST	—	EXISTING ASPHALT PAVEMENT
⊙PST	EXISTING POST	⊙BE	EXISTING ELECTRIC JUNCTION BOX
⊙	EXISTING MAILBOX		
⊙	EXISTING TRAFFIC LIGHT		
—	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	900
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	3
FURNISH AND INSTALL SANITARY SEWER SERVICE LINE WITH CONNECTIONS AND CLEANOUT, COMPLETE IN PLACE	EA	2
PROPOSED 8" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	92
SEPTIC TANK TO BE DECOMMISSIONED	EA	2
PROPOSED 16" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	71
EXTRA DEPTH MANHOLES	VF	14

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

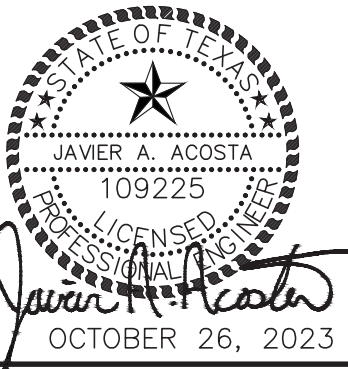
IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)



SCALE
HOR.: 1"=30'
VER.: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR./JA
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

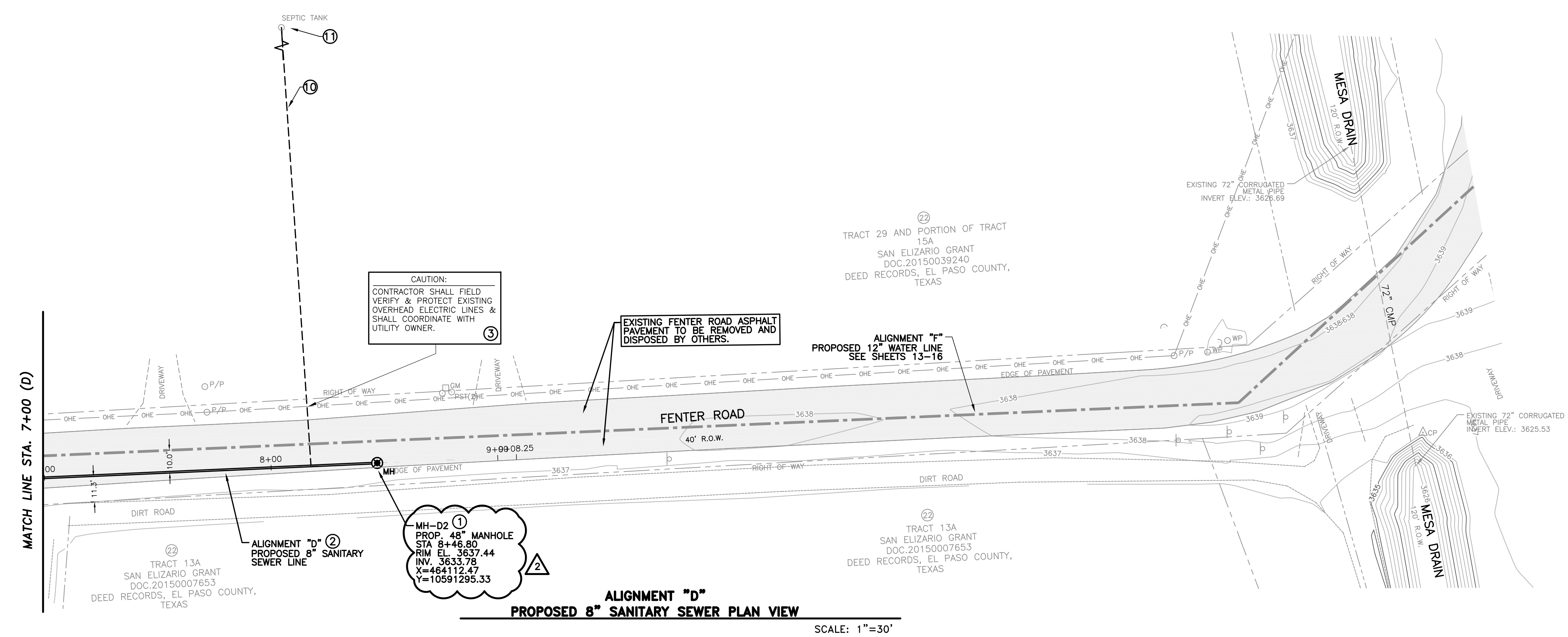
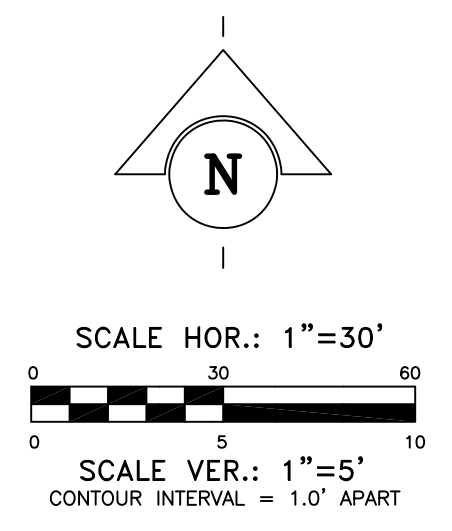
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

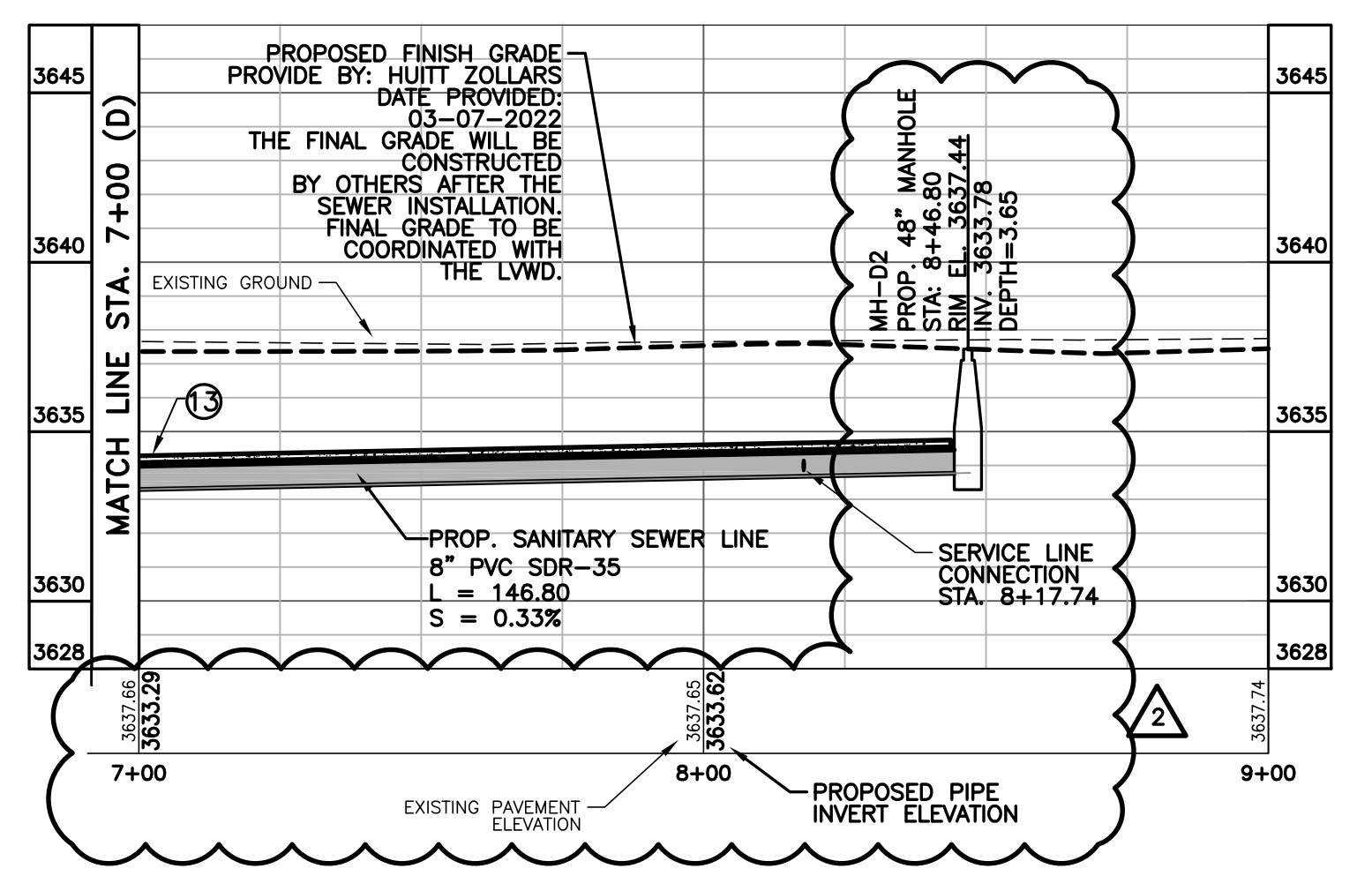
LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

ALIGNMENT "C" - 8" SANITARY SEWER LINE PLAN AND PROFILE

SHEET NO.
7 OF 34



**ALIGNMENT "D"
PROPOSED 8" SANITARY SEWER PLAN VIEW**
SCALE: 1"=30'



**ALIGNMENT "D"
PROPOSED 8" SANITARY SEWER LINE PROFILE**
SCALE: HOR. 1"=30'
VER. 1"=5'

- KEYED NOTES:**
- ① PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
 - ② INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
 - ③ CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
 - ⑩ PROPOSED 4" PVC SANITARY SEWER SERVICE LINE @0.84% MIN. SLOPE. CONTRACTOR SHALL CONNECT TO MAIN LINE AND TO EXISTING SEPTIC TANK SERVICE LINE, SEE SHEET 34 FOR DETAIL.
 - ⑪ EXISTING SEPTIC TANK TO BE DECOMMISSIONED BY CONTRACTOR. LOCATION OF SEPTIC TANK SHOWN IS APPROXIMATE, CONTRACTOR SHALL FIELD VERIFY SEPTIC TANK SERVICE LINE & SHALL COORDINATE WITH OWNER. SEE SHEET 34 FOR DETAIL.
 - ⑬ CONCRETE CAP 3,000 P.S.I. CLASS "A". SEE SHEET 28 DETAIL "115 & 116"

LEGEND

△CP	CONTROL POINT AS NOTED	○	EXISTING ANCHOR GUY WIRE
⊙MH	PROPOSED 48" SANITARY SEWER MANHOLE	◇WM	EXISTING WATER METER
—	PROPOSED 8" SANITARY SEWER LINE	⊖WV	EXISTING WATER VALVE
▨	PROPOSED ASPHALT PAVEMENT PATCHING	□GM	EXISTING GAS METER
---	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT	—3640	EXISTING INDEX CONTOURS
---	PROPOSED SERVICE LINE	—3639	EXISTING INTERMEDIATE CONTOURS
○	EXISTING 48" SANITARY SEWER MANHOLE	—OHE	EXISTING OVERHEAD ELECTRIC
○P/P	EXISTING POWER POLE	—WL	EXISTING WATER LINE
□BT	EXISTING TELEPHONE JUNCTION BOX	—SAN	EXISTING SANITARY SEWER LINE
⊙	EXISTING SIGN	—GAS	EXISTING GAS LINE
○WP	EXISTING WOOD POST	▨	EXISTING ASPHALT PAVEMENT
○PST	EXISTING POST	□JBE	EXISTING ELECTRIC JUNCTION BOX
□	EXISTING MAILBOX		
○	EXISTING TRAFFIC LIGHT		
---	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	147
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	1
CONCRETE CAP 3,000 P.S.I. CLASS "A"	LF	147
SEPTIC TANK TO BE DECOMMISSIONED	EA	1
FURNISH AND INSTALL SANITARY SEWER SERVICE LINE WITH CONNECTIONS AND CLEANOUT, COMPLETE IN PLACE	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

- NOTES:**
1. CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 2. CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 3. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W., ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 5. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE 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 MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 6. CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 7. SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 8. SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
 9. ALL PROPOSED PIPE INVERT AND ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT. UNLESS NOTED OTHERWISE ON PLANS.
 10. ALL PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.

CAUTION:
CONTRACTOR SHALL FIELD VERIFY & PROTECT EXISTING OVERHEAD ELECTRIC LINES & SHALL COORDINATE WITH UTILITY OWNER.

EXISTING FENTER ROAD ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED BY OTHERS.

ALIGNMENT "F"
PROPOSED 12" WATER LINE
SEE SHEETS 13-16

MH-D2 ①
PROP. 48" MANHOLE
STA. 8+46.80
RIM EL. 3637.44
INV. 3633.78
X=464112.47
Y=10591295.33

REVISION: 08/23/2023 11:50AM A:\2021\121987-1\WATER IMPROV. LOOP NORTH WATER LINE IMPROV. (10-3)-0 DESIGN PHASE 2 & PERMITS\DWG\WATER AND SEWER\PHASE 1\3 SHEET 10 OF 12 308787 PLAN DWG (AUG) 10-3-0-01.DWG

**IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG**
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**Lower Valley
WATER DISTRICT**

SCALE
HOR: 1"=30'
VER: 1"=5'

DATE: AUG 04, 2023
DRAWN BY: M.P., A.V.
CHKD. BY: CM,GR,JA
APPD. BY: J.A.

FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors

FXSA
www.fxsa.com

1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

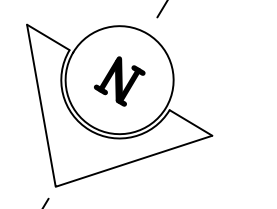
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	8/4/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
 EL PASO COUNTY, TEXAS
 PROJECT No. E2119EP

**ALIGNMENT "D" - 8" SANITARY
SEWER LINE PLAN AND PROFILE**

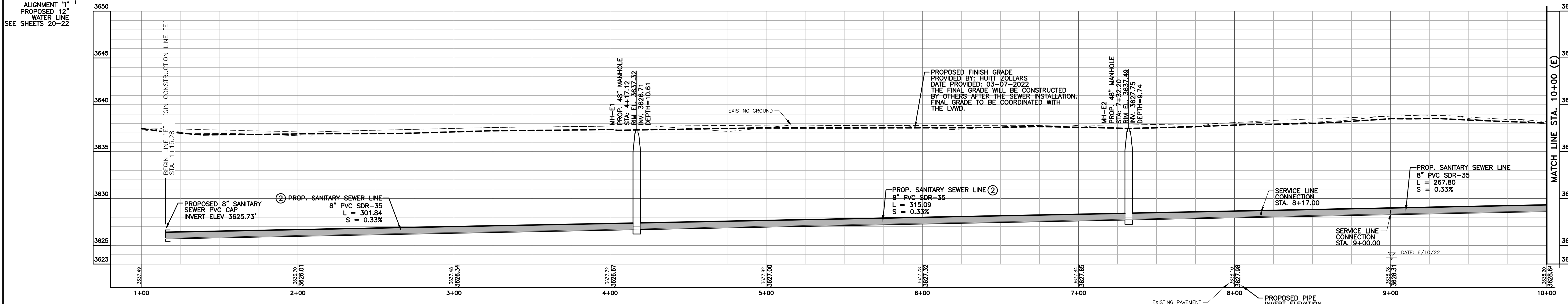
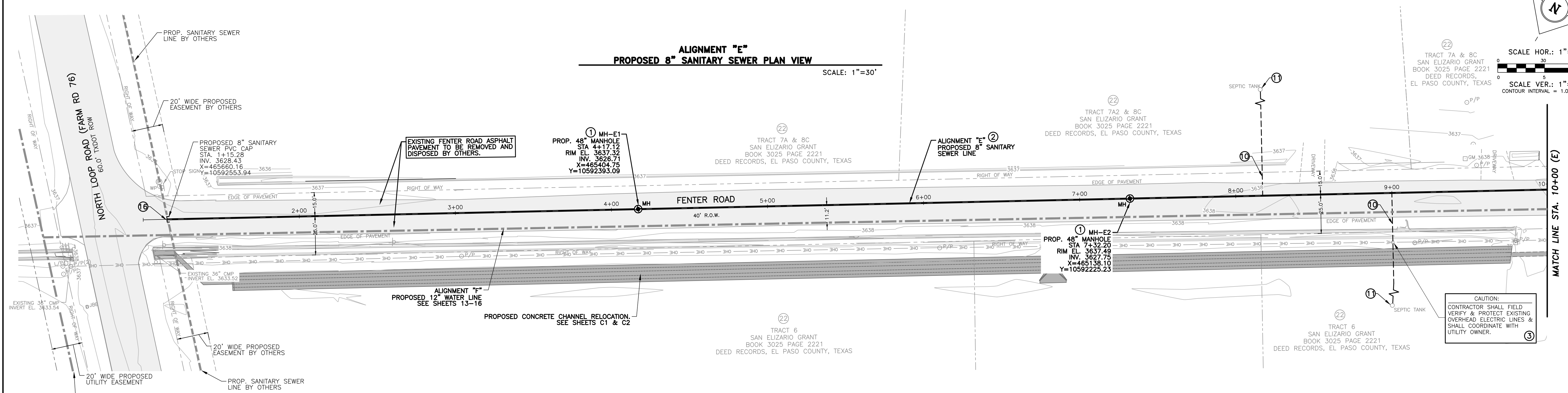
SHEET NO.
10 OF 34



SCALE HOR.: 1"=30'
SCALE VER.: 1"=5'
CONTOUR INTERVAL = 1.0' APART

**ALIGNMENT "E"
PROPOSED 8" SANITARY SEWER PLAN VIEW**

SCALE: 1"=30'



**ALIGNMENT "E"
PROPOSED 8" SANITARY SEWER LINE PROFILE**

SCALE: HOR. 1"=30'
VER. 1"=5'

- NOTES:**
- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 - CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 - CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 - THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 - CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 - SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 - SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
 - ALL PROPOSED PIPE INVERT AND ELEVATIONS ARE TO THE PROPOSED OR EXISTING MANHOLE INVERT, UNLESS NOTED OTHERWISE ON PLANS.
 - ALL PROPOSED MANHOLES RIM ELEVATION SHALL MEET AND MATCH WITH FINISH GRADE ELEVATION.

LEGEND

	CONTROL POINT AS NOTED		EXISTING ANCHOR GUY WIRE
	PROPOSED 8" SANITARY SEWER MANHOLE		EXISTING WATER METER
	PROPOSED 8" SANITARY SEWER LINE		EXISTING WATER VALVE
	PROPOSED ASPHALT PAVEMENT PATCHING		EXISTING GAS METER
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT		EXISTING INDEX CONTOURS
	PROPOSED SERVICE LINE		EXISTING INTERMEDIATE CONTOURS
	EXISTING 48" SANITARY SEWER MANHOLE		EXISTING OVERHEAD ELECTRIC
	EXISTING POWER POLE		EXISTING WATER LINE
	EXISTING TELEPHONE JUNCTION BOX		EXISTING SANITARY SEWER LINE
	EXISTING SIGN		EXISTING GAS LINE
	EXISTING WOOD POST		EXISTING ASPHALT PAVEMENT
	EXISTING POST		EXISTING MAILBOX
	EXISTING MAILBOX		EXISTING ELECTRIC JUNCTION BOX
	EXISTING TRAFFIC LIGHT		WATER TABLE ELEVATION DATE DETERMINED INDICATED
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT BY OTHERS (NOT PART OF THIS CONTRACT)		

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 8" PVC SDR-35 SANITARY SEWER PIPE, COMPLETE IN PLACE	LF	885
48" ARMOROCK SANITARY SEWER MANHOLE WITH RING AND COVER, COMPLETE IN PLACE	EA	2
FURNISH AND INSTALL SANITARY SEWER SERVICE LINE WITH CONNECTIONS AND CLEANOUT, COMPLETE IN PLACE	EA	2
SEPTIC TANK TO BE DECOMMISSIONED	EA	2
EXTRA DEPTH MANHOLES	VF	9
PROPOSED 8" SANITARY SEWER PVC CAP	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

- KEYED NOTES:**
- PROPOSED 48" ARMOROCK POLYMER MANHOLE, SEE SHEET 32.
 - INSTALL PROPOSED 8" DIA. PVC SDR-35 SANITARY SEWER LINE.
 - CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
 - PROPOSED 4" PVC SANITARY SEWER SERVICE LINE @ 0.84% MIN. SLOPE. CONTRACTOR SHALL CONNECT TO MAIN LINE AND TO EXISTING SEPTIC TANK SERVICE LINE. SEE SHEET 34 FOR DETAIL.
 - EXISTING SEPTIC TANK TO BE DECOMMISSIONED BY CONTRACTOR. LOCATION OF SEPTIC TANK SHOWN IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SEPTIC TANK SERVICE LINE & SHALL COORDINATE WITH OWNER. SEE SHEET 34 FOR DETAIL.
 - PROPOSED 8" DIAMETER SANITARY SEWER PVC CAP.

**IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG**
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE JAN 10, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR./J.A.
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

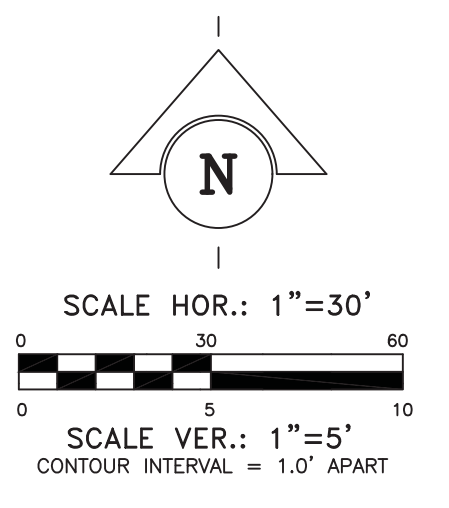
BENCHMARKS:

NO.	DATE	REVISIONS	BY

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

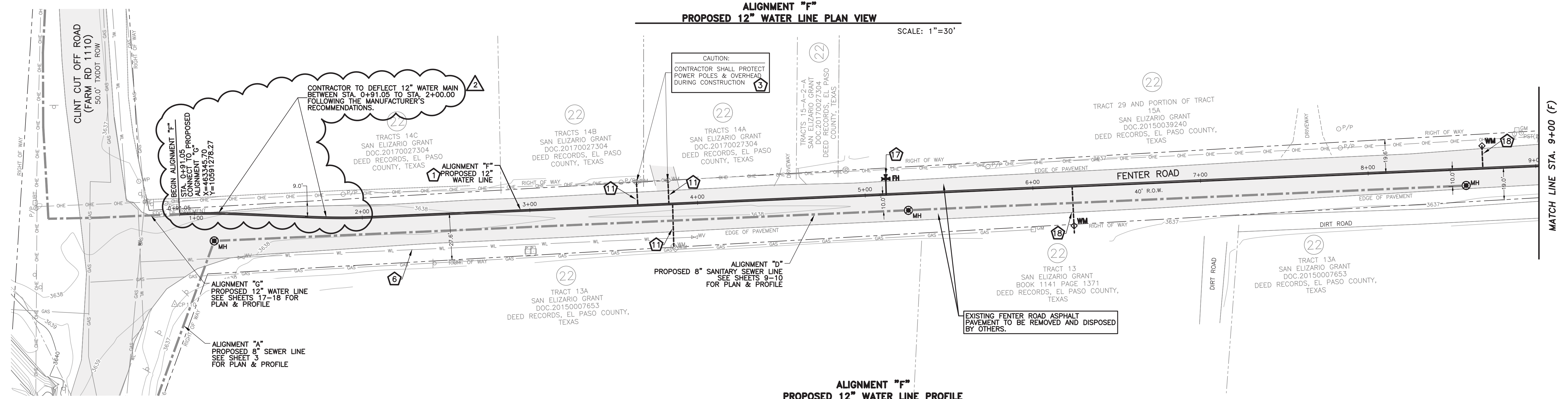
ALIGNMENT "E" - 8" SANITARY SEWER LINE PLAN AND PROFILE

SHEET NO.
11 OF 34



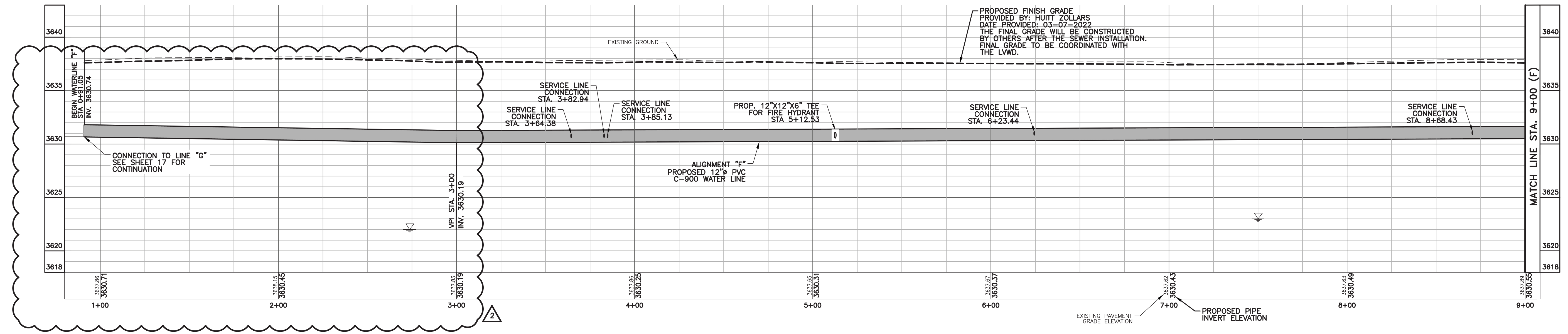
**ALIGNMENT "F"
PROPOSED 12" WATER LINE PLAN VIEW**

SCALE: 1"=30'



**ALIGNMENT "F"
PROPOSED 12" WATER LINE PROFILE**

SCALE: HOR. 1"=30'
VER. 1"=5'



LEGEND

- △ CP CONTROL POINT AS NOTED
- ⊙ MH PROPOSED 48" SANITARY SEWER MANHOLE
- PROPOSED WATER LINE AS NOTED
- PROPOSED ASPHALT PAVEMENT PATCHING
- P/P EXISTING POWER POLE
- JBT EXISTING TELEPHONE JUNCTION BOX
- EXISTING SIGN
- WP EXISTING WOOD POST
- PST EXISTING POST
- EXISTING MAILBOX
- EXISTING TRAFFIC LIGHT
- EXISTING ANCHOR GUY WIRE
- PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT
- EXISTING CHAIN LINK FENCE
- PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.
- PROPOSED AIR RELEASE VALVE
- PROPOSED SERVICE LINE AS NOTED
- ◇ WM EXISTING WATER METER
- ◇ WV EXISTING WATER VALVE
- GM EXISTING GAS METER
- 3640 EXISTING INDEX CONTOURS
- 3639 EXISTING INTERMEDIATE CONTOURS
- OHE EXISTING OVERHEAD ELECTRIC
- WL EXISTING WATER LINE
- SAN EXISTING SANITARY SEWER LINE
- GAS EXISTING GAS LINE
- JBE EXISTING ELECTRIC JUNCTION BOX
- ◇ WV PROPOSED WATER VALVE
- ◇ WM PROPOSED WATER METER
- ◇ FH PROPOSED FIRE HYDRANT
- ▽ WATER TABLE ELEVATION DATE DETERMINED INDICATED

NOTES:

- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
- CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
- CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W., ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED. BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
- SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
- SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.

KEYED NOTES:

- PROPOSED 12" PVC C900, DR18 WATERLINE.
- PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
- CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
- EXISTING WATER LINE TO BE ABANDONED.
- CONNECT PROPOSED 3/4" WATER SERVICE LINE AT EXISTING WATER METER. SEE SHEET 30 DETAIL "228".
- PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
- PROPOSED WATER SERVICE LINE AND WATER METER WITH BOX AND COVER, SEE SHEETS 30 & 31 DETAILS "228, 237, 238, 239 & 240".

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	809
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION AND WATER METER, COMPLETE IN PLACE	EA	3
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	0
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	0
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION, COMPLETE IN PLACE	EA	2

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

REVISED: 11/29/2023 4:20PM 4/2024 4/2024 12/21/2023 10:40 AM NORTH LOOP WATER LINE DESIGN (10-1)-0 DESIGN PHASE 2 - REMOVAL OF EXISTING WATER AND SEWER PHASE 1 (SHEET 13-1) WATER PLAN FENTER C. G. RUDING

**IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG**
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

**ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

SCALE
HOR: 1"=30'
VER: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR., J.A.
APPD. BY J.A.

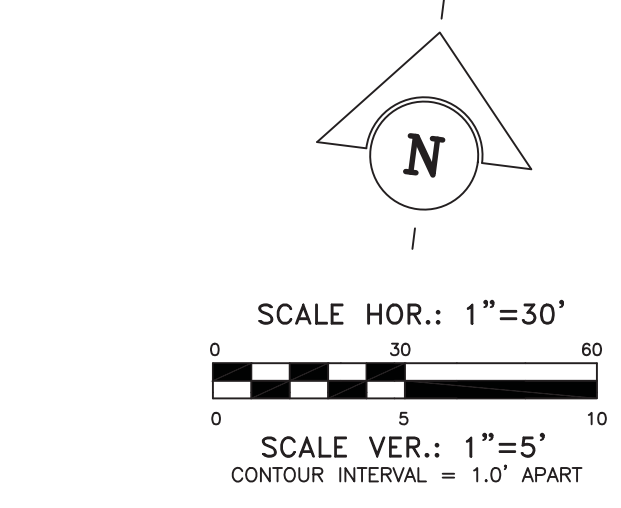
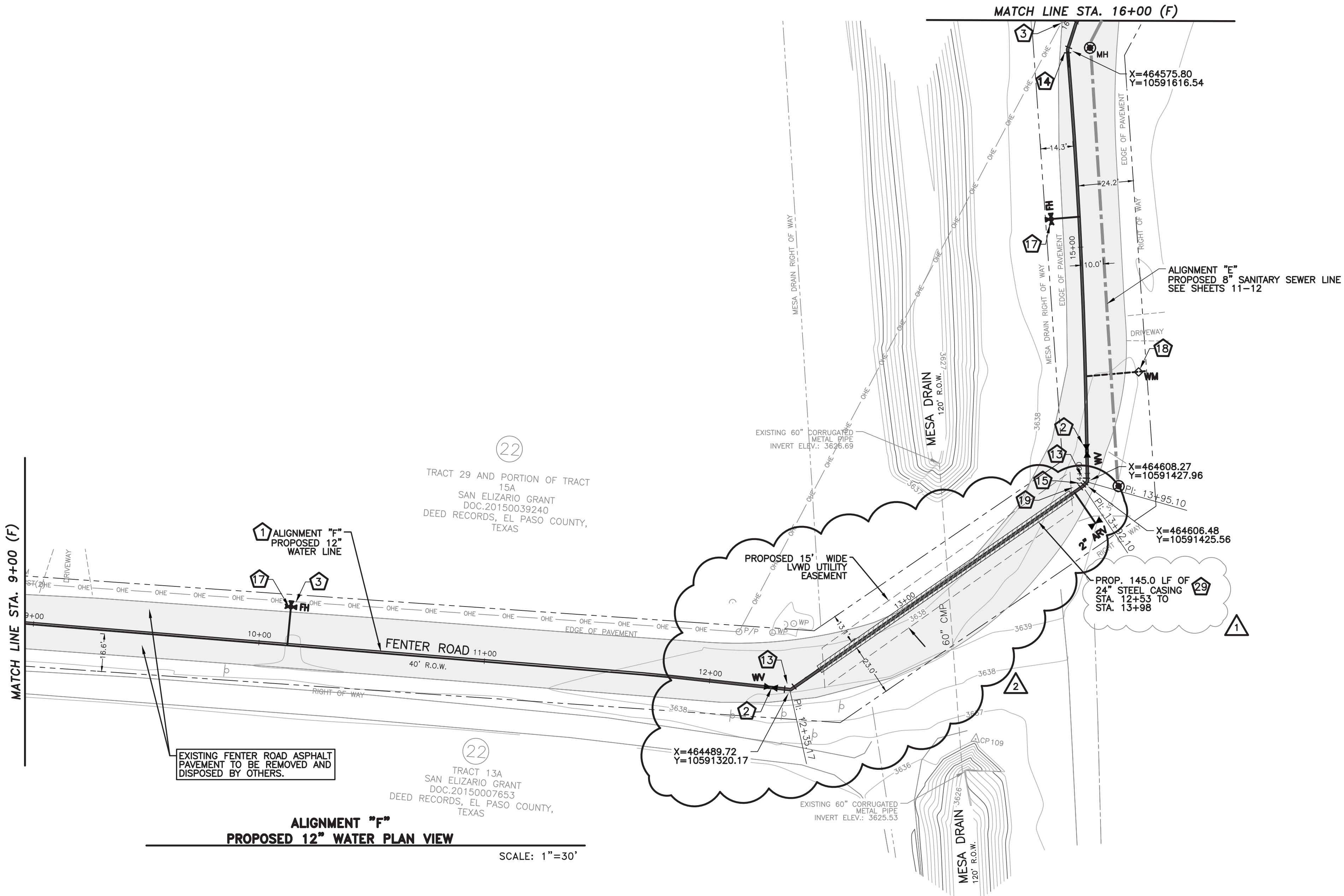
FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

BENCHMARKS:			
NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

**LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP**

**ALIGNMENT "F" - 12" WATER LINE
PLAN AND PROFILE**

**SHEET NO.
13 OF 34**



LEGEND

	CONTROL POINT AS NOTED		EXISTING WATER METER
	PROPOSED 48" SANITARY SEWER MANHOLE		EXISTING WATER VALVE
	PROPOSED WATER LINE AS NOTED		EXISTING GAS METER
	PROPOSED ASPHALT PAVEMENT PATCHING		EXISTING INDEX CONTOURS
	EXISTING POWER POLE		EXISTING INTERMEDIATE CONTOURS
	EXISTING TELEPHONE JUNCTION BOX		EXISTING OVERHEAD ELECTRIC
	EXISTING SIGN		EXISTING WATER LINE
	EXISTING WOOD POST		EXISTING SANITARY SEWER LINE
	EXISTING POST		EXISTING GAS LINE
	EXISTING MAILBOX		EXISTING ASPHALT PAVEMENT
	EXISTING TRAFFIC LIGHT		EXISTING ELECTRIC JUNCTION BOX
	EXISTING ANCHOR GUY WIRE		PROPOSED WATER VALVE
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT		PROPOSED WATER METER
	EXISTING CHAIN LINK FENCE		PROPOSED FIRE HYDRANT
	PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS		WATER TABLE ELEVATION DATE DETERMINED INDICATED
	PROPOSED AIR RELEASE VALVE		
	PROPOSED SERVICE LINE AS NOTED		

KEYED NOTES:

- PROPOSED 12" PVC C900, DR18 WATERLINE.
- PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
- CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
- PROPOSED 12" 45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED 12"-22.5° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED 12"-11.25° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
- PROPOSED WATER SERVICE LINE AND WATER METER WITH BOX AND COVER. SEE SHEETS 30 & 31 DETAILS "228, 237, 238, 239 & 240".
- PROPOSED AIR RELEASE VALVE. SEE SHEET 29 DETAIL "212".
- PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.
- PROPOSED STEEL CASING INSTALLED BY APPROVED OPEN / CUT METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.
- STEEL CASING INSTALLED BY OPEN/CUT METHOD.

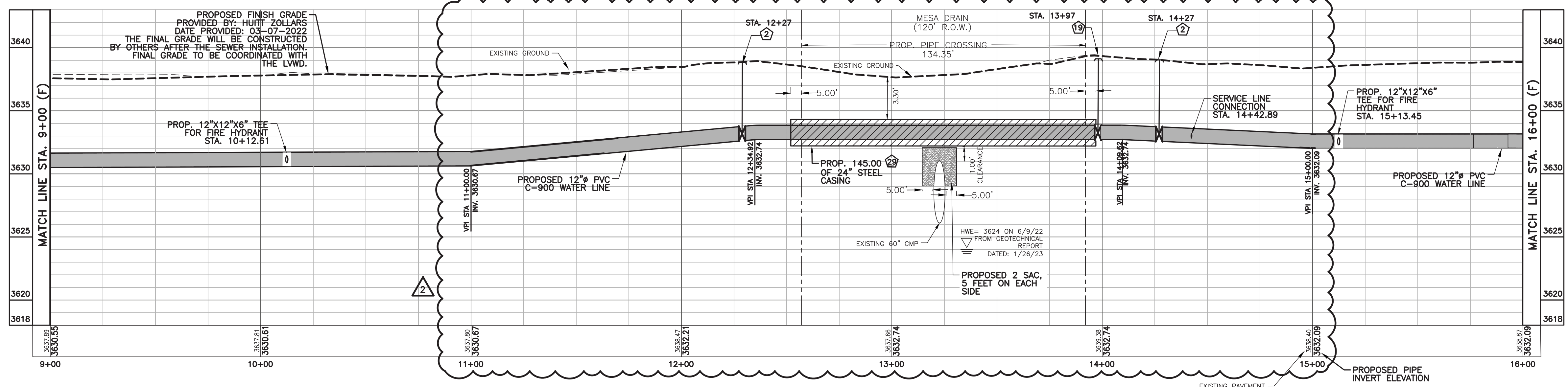
*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	700
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION AND WATER METER, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	2
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	2
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED OPEN / CUT METHODS.	LF	145
FURNISH AND INSTALL 2" SINGLE BODY COMBINATION AIR RELEASE VALVE, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL 12"-45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	0
FURNISH AND INSTALL 12"-22.5° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	0
FURNISH AND INSTALL 12"-11.25° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

NOTES:

- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
- CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
- CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
- SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
- SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
- NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
- CONTRACTOR SHALL COORDINATE WITH EPCWID #1 SIZE AND DEPTH OF BORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPCWID #1 RIGHT-OF-WAY.



ALIGNMENT "F" PROPOSED 12" WATER LINE PROFILE
SCALE: HOR. 1"=30' VER. 1"=5'

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377 (1-800-DIG-TESS)
ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377 (1-800-DIG-TESS)



SCALE
HOR. 1"=30'
VER. 1"=5'
DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM,GR,JA
APPD. BY J.A.



FXSA
www.fxsa.com
FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

BENCHMARKS:

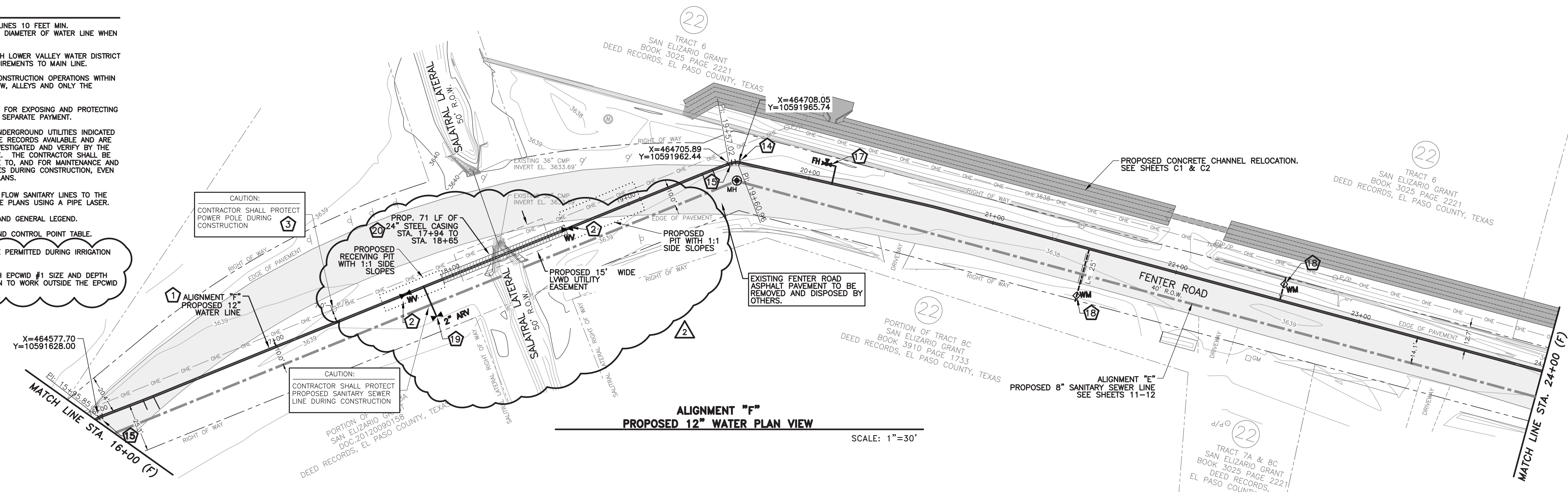
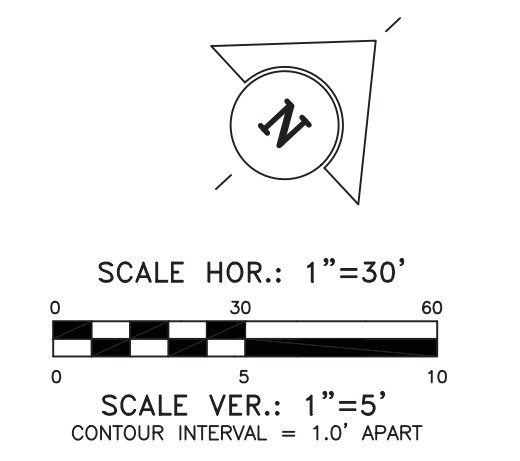
NO.	DATE	REVISIONS	BY
1	1/31/23	ADDENDUM # 2	J.A.
2	10/26/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP
ALIGNMENT "F" - 12" WATER LINE PLAN AND PROFILE

SHEET NO.
14 OF 34

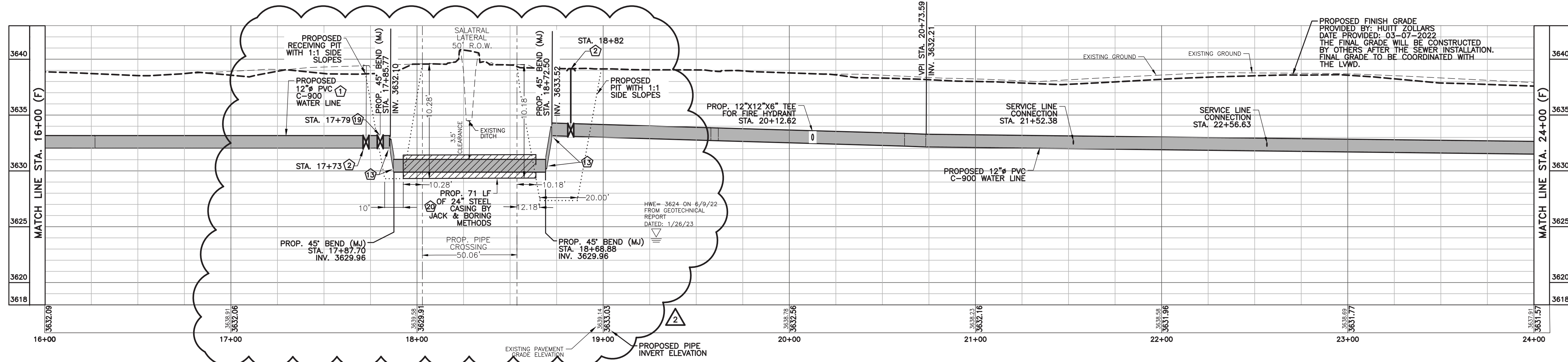
NOTES:

- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
- CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
- CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
- SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
- SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
- NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
- CONTRACTOR SHALL COORDINATE WITH EPWID #1 SIZE AND DEPTH OF SORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPWID #1 RIGHT-OF-WAY.



ALIGNMENT "F" PROPOSED 12" WATER PLAN VIEW

SCALE: 1"=30'



ALIGNMENT "F" PROPOSED 12" WATER LINE PROFILE

SCALE: HOR. 1"=30'
VER. 1"=5'

LEGEND

- | | | | |
|-------|---|--------|---|
| △ C/P | CONTROL POINT AS NOTED | ◇ WM | EXISTING WATER METER |
| ⊙ MH | PROPOSED 48" SANITARY SEWER MANHOLE | ⊘ W | EXISTING WATER VALVE |
| — | PROPOSED WATER LINE AS NOTED | ⊘ G | EXISTING GAS METER |
| — | PROPOSED ASPHALT PAVEMENT PATCHING | — 3640 | EXISTING INDEX CONTOURS |
| ⊙ P/P | EXISTING POWER POLE | — 3639 | EXISTING INTERMEDIATE CONTOURS |
| ⊙ JT | EXISTING TELEPHONE JUNCTION BOX | — OHE | EXISTING OVERHEAD ELECTRIC |
| ⊙ d | EXISTING SIGN | — WL | EXISTING WATER LINE |
| ⊙ WP | EXISTING WOOD POST | — SAN | EXISTING SANITARY SEWER LINE |
| ⊙ PST | EXISTING POST | — GAS | EXISTING GAS LINE |
| ⊙ MB | EXISTING MAILBOX | — | EXISTING ASPHALT PAVEMENT |
| ⊙ TL | EXISTING TRAFFIC LIGHT | ⊙ JBE | EXISTING ELECTRIC JUNCTION BOX |
| — | EXISTING ANCHOR GUY WIRE | ▶ WM | PROPOSED WATER VALVE |
| — | PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT | ◇ WM | PROPOSED WATER METER |
| — | EXISTING CHAIN LINK FENCE | ▶ FH | PROPOSED FIRE HYDRANT |
| — | PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. | ▽ | WATER TABLE ELEVATION DATE DETERMINED INDICATED |
| ▶ ARV | PROPOSED AIR RELEASE VALVE | | |
| — | PROPOSED SERVICE LINE AS NOTED | | |

KEYED NOTES:

- PROPOSED 12" PVC C900, DR18 WATERLINE.
- PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
- CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
- PROPOSED 12"-45" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED 12"-22.5" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED 12"-11.25" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
- PROPOSED WATER SERVICE LINE AND WATER METER WITH BOX AND COVER, SEE SHEETS 30 & 31 DETAILS "228, 237, 238, 239 & 240".
- PROPOSED AIR RELEASE VALVE. SEE SHEET 29 DETAIL "212".
- PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHOD.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	800
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION AND WATER METER, COMPLETE IN PLACE	EA	2
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	2
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	1
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	71
FURNISH AND INSTALL 2" SINGLE BODY COMBINATION AIR VALVE, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL 12"-45" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	4
FURNISH AND INSTALL 12"-22.5" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	1
FURNISH AND INSTALL 12"-11.25" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	2

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377 (1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM, GR, JA
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors

1130 Montana Ave., El Paso, Texas 79902
Ph: (915) 533-4600 Fax: (915) 533-4673
TBPLS# 100490-00, TBPE# F-3584

BENCHMARKS:

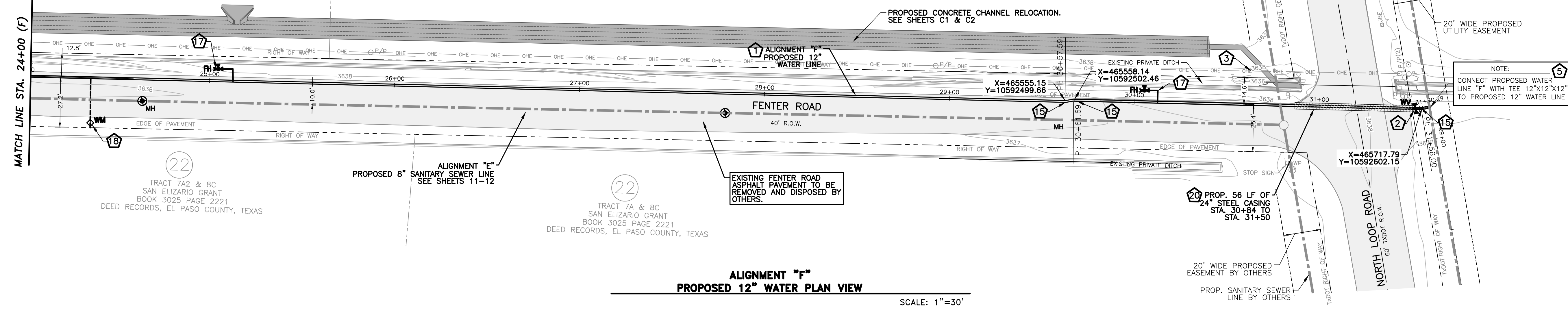
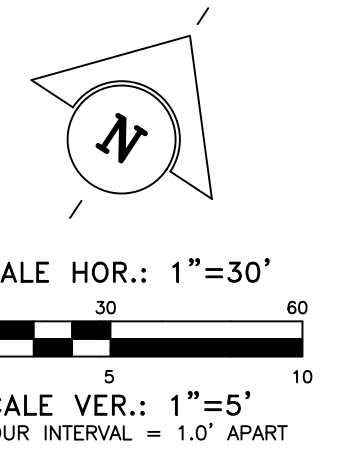
NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

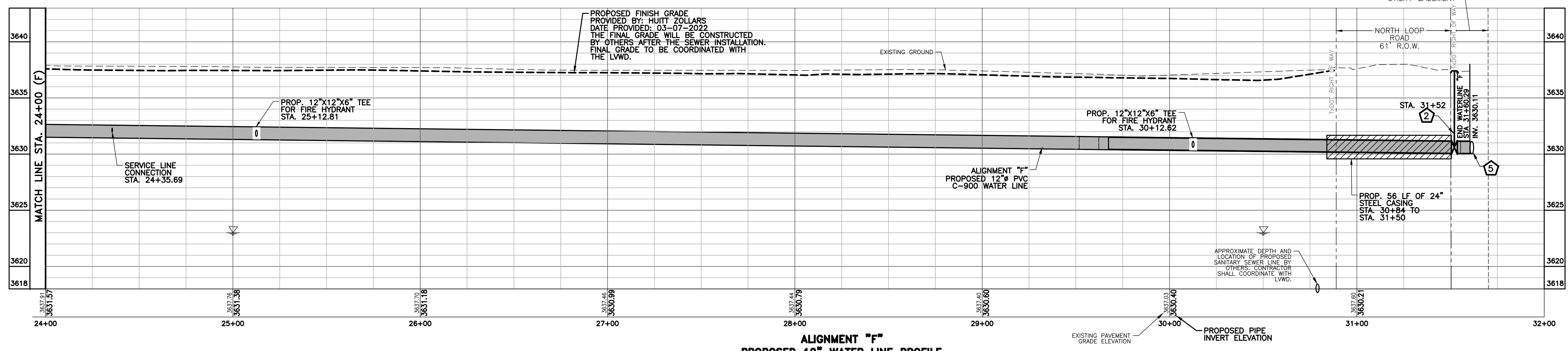
ALIGNMENT "F" - 12" WATER LINE PLAN AND PROFILE

SHEET NO.
15 OF 34

22
TRACT 8
SAN ELIZARIO GRANT
BOOK 3025 PAGE 2221
DEED RECORDS, EL PASO COUNTY, TEXAS



ALIGNMENT "F"
PROPOSED 12" WATER PLAN VIEW
SCALE: 1"=30'



ALIGNMENT "F"
PROPOSED 12" WATER LINE PROFILE
SCALE: HOR. 1"=30'
VER. 1"=5'

LEGEND

	CONTROL POINT AS NOTED		EXISTING WATER METER
	PROPOSED 48" SANITARY SEWER MANHOLE		EXISTING WATER VALVE
	PROPOSED WATER LINE AS NOTED		EXISTING GAS METER
	PROPOSED ASPHALT PAVEMENT PATCHING		EXISTING INDEX CONTOURS
	EXISTING POWER POLE		EXISTING INTERMEDIATE CONTOURS
	EXISTING TELEPHONE JUNCTION BOX		EXISTING OVERHEAD ELECTRIC
	EXISTING SIGN		EXISTING WATER LINE
	EXISTING WOOD POST		EXISTING SANITARY SEWER LINE
	EXISTING POST		EXISTING GAS LINE
	EXISTING MAILBOX		EXISTING ASPHALT PAVEMENT
	EXISTING TRAFFIC LIGHT		EXISTING ELECTRIC JUNCTION BOX
	EXISTING ANCHOR GUY WIRE		PROPOSED WATER VALVE
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT		PROPOSED WATER METER
	EXISTING CHAIN LINK FENCE		PROPOSED FIRE HYDRANT
	PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS		WATER TABLE ELEVATION DATE DETERMINED INDICATED
	PROPOSED AIR RELEASE VALVE		
	PROPOSED SERVICE LINE AS NOTED		

- KEYED NOTES:**
- PROPOSED 12" PVC C900, DR18 WATERLINE.
 - PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
 - CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
 - PROPOSED 12"x12"x12" TEE WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
 - PROPOSED 12"-11.25" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
 - PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
 - PROPOSED WATER SERVICE LINE AND WATER METER WITH BOX AND COVER, SEE SHEETS 30 & 31 DETAILS "228, 237, 238, 239 & 240".
 - PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	760
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	2
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	1
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	56
FURNISH AND INSTALL 12"-11.25" BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	3

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

- NOTES:**
- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
 - CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
 - CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W. ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
 - THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED. BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
 - CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
 - SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
 - SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.

REVISED: 09/27/2023 11:00AM A:\2021\21199\12199-WATER LINE DESIGN\12-1-23 DESIGN PHASE & PERMITS\DWG\WATER AND SEWER\PHASE 1\SHEET 13-19 WATER PLAN FENTER.PC (S. R) DWG

IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE JAN 10, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR./JA
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

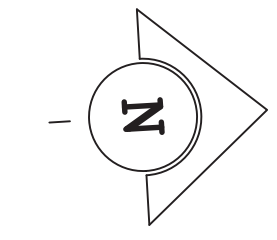
BENCHMARKS:

NO.	DATE	REVISIONS	BY

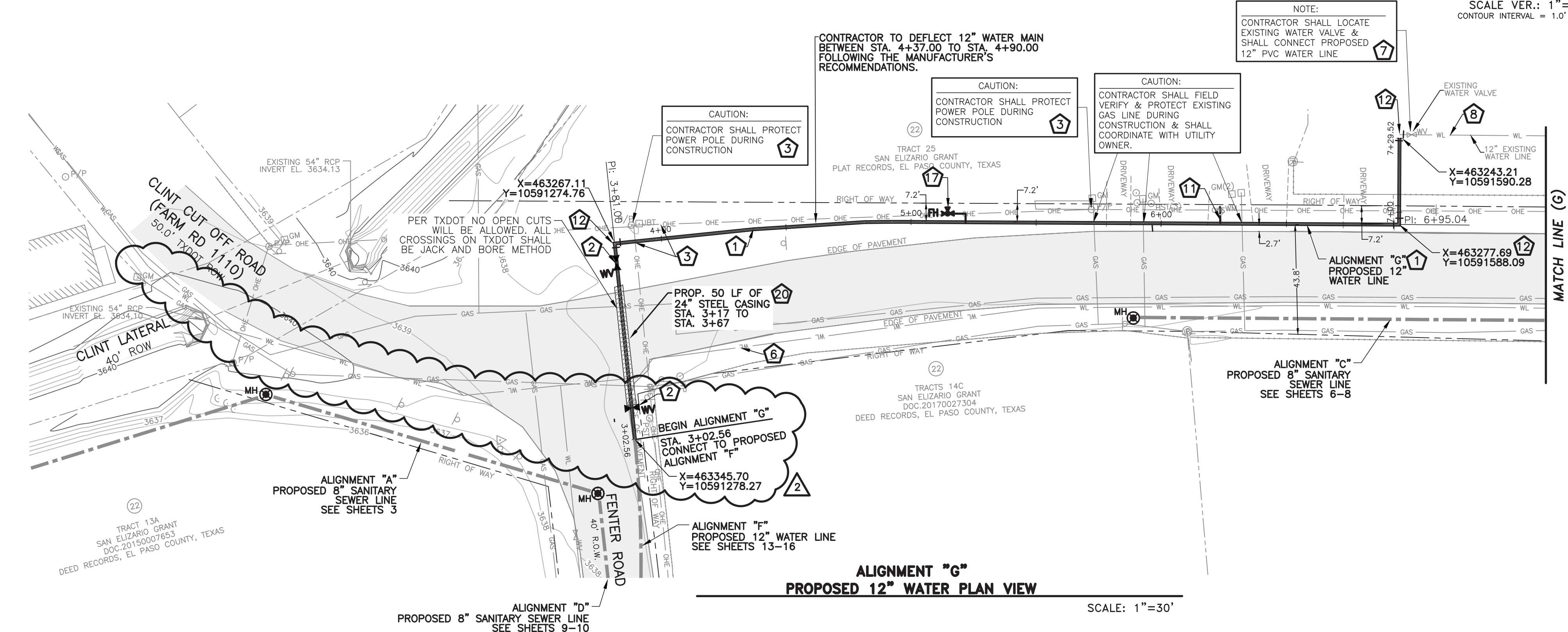
LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

ALIGNMENT "F" - 12" WATER LINE
PLAN AND PROFILE

SHEET NO.
16 OF 34



SCALE HOR.: 1"=30'
 SCALE VER.: 1"=5'
 CONTOUR INTERVAL = 1.0' APART



ALIGNMENT "G"
 PROPOSED 12" WATER PLAN VIEW
 SCALE: 1"=30'

KEYED NOTES:

- 1 PROPOSED 12" PVC C900, DR18 WATERLINE.
- 2 PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
- 3 CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
- 5 PROPOSED 12"x12"x12" TEE WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- 6 EXISTING WATER LINE TO BE ABANDONED AFTER PROPOSED WATERLINE IS INSTALLED AND RUNNING. CONTRACTOR SHALL CONCRETE FILL ALL ENDS OF ABANDONED WATER LINE.
- 7 PROPOSED PIPE CONNECTION TO EXISTING WATER VALVE.
- 8 EXISTING WATER LINE TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING WATER LINE DURING CONSTRUCTION.
- 9 APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
- 11 CONNECT PROPOSED 3/4" WATER SERVICE LINE AT EXISTING WATER METER. SEE SHEET 30 DETAIL "228".
- 12 PROPOSED 12"-90° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- 14 PROPOSED 12"-22.5° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- 15 PROPOSED 12"-11.25° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- 16 PROPOSED 12"x8" REDUCER.
- 17 PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
- 20 PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.
- 23 PROPOSED 12" MECHANICAL JOINT END CAP.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	427
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	1
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	2
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	50
FURNISH AND INSTALL 12"-90° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	3
FURNISH AND INSTALL 12"x12"x12" TEE WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	0
REMOVE AND RELOCATE EXISTING SIGN	EA	0
FURNISH AND INSTALL 12"-22.5° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	0
FURNISH AND INSTALL 12"-11.25° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	0
FURNISH AND INSTALL 12"x8" REDUCER	EA	0

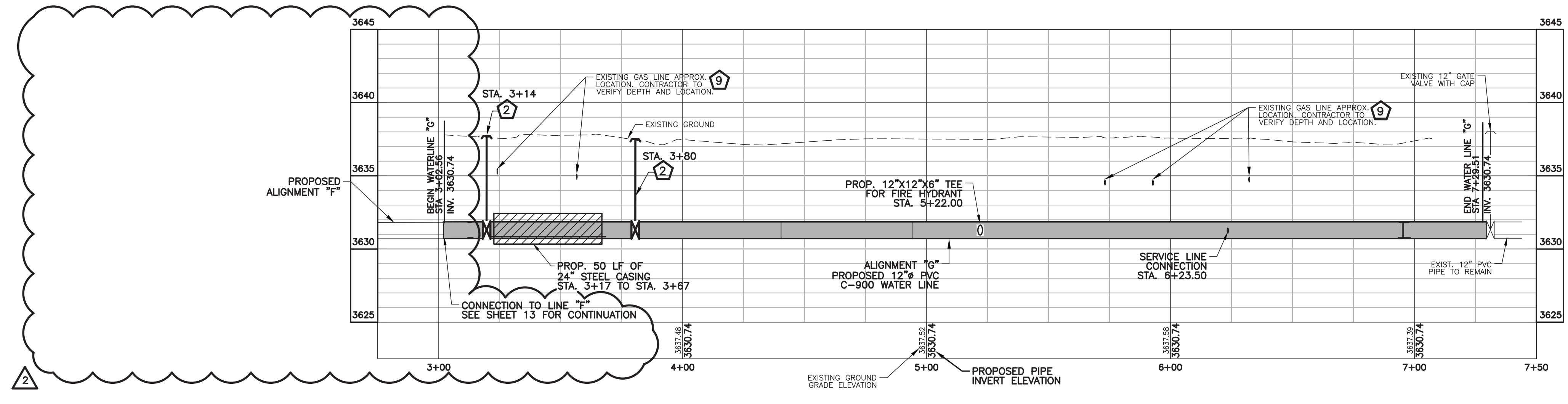
* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

LEGEND

	CONTROL POINT AS NOTED		EXISTING WATER METER
	PROPOSED 48" SANITARY SEWER MANHOLE		EXISTING WATER VALVE
	PROPOSED WATER LINE AS NOTED		EXISTING GAS METER
	PROPOSED ASPHALT PAVEMENT PATCHING		EXISTING INDEX CONTOURS
	EXISTING POWER POLE		EXISTING INTERMEDIATE CONTOURS
	EXISTING TELEPHONE JUNCTION BOX		EXISTING OVERHEAD ELECTRIC
	EXISTING SIGN		EXISTING WATER LINE
	EXISTING WOOD POST		EXISTING SANITARY SEWER LINE
	EXISTING POST		EXISTING GAS LINE
	EXISTING MAILBOX		EXISTING ASPHALT PAVEMENT
	EXISTING TRAFFIC LIGHT		EXISTING ELECTRIC JUNCTION BOX
	EXISTING ANCHOR GUY WIRE		PROPOSED WATER VALVE
	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT		PROPOSED WATER METER
	EXISTING CHAIN LINK FENCE		PROPOSED FIRE HYDRANT
	PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.		WATER TABLE ELEVATION DATE DETERMINED INDICATED
	PROPOSED AIR RELEASE VALVE		
	PROPOSED SERVICE LINE AS NOTED		

NOTES:

- CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
- CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
- CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W, ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
- SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
- SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.



ALIGNMENT "G"
 PROPOSED 12" WATER LINE PROFILE
 SCALE: HOR. 1"=30'
 VER. 1"=5'

REVISION: 11/29/2023 4:20PM 4/2021 12/18/2018 1400 NORTH LOOP WATER LINE DESIGN (10-3) DESIGN PHASE 2 PERMITS/ISSUANCES/WATER AND SEWER PHASE 1 SHEET 15-19 WATER FROM FENTER C. 6, 10, 18

IT'S THE LAW
 AND IT'S FREE - CALL BEFORE YOU DIG
 CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS 1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY
 GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
 LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS 1-800-344-8377 (1-800-DIG-TESS)

Lower Valley WATER DISTRICT

SCALE
 HOR: 1"=30'
 VER: 1"=5'

DATE OCT 26, 2023
 DRAWN BY M.P., A.V.
 CHKD. BY CM,GR,JA
 APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
 Consulting Civil Engineers & Surveyors
 www.fxsa.com
 1130 Montana Ave., El Paso, Texas 79902
 Ph:(915)533-4600 Fax:(915)533-4673
 TBPLS# 100490-00, TBPE# F-3584

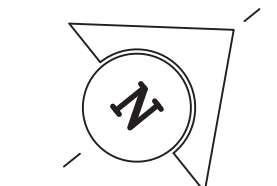
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
 NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
 EL PASO COUNTY, TEXAS
 PROJECT No. E2119EP

ALIGNMENT "G" - 12" WATER LINE PLAN AND PROFILE

SHEET NO.
 17 OF 34



SCALE HOR.: 1"=30'
 SCALE VER.: 1"=5'
 CONTOUR INTERVAL = 1.0' APART

LEGEND

- CONTROL POINT AS NOTED
- PROPOSED 48" SANITARY SEWER MANHOLE
- PROPOSED WATER LINE AS NOTED
- PROPOSED ASPHALT PAVEMENT PATCHING
- EXISTING WATER POLE
- EXISTING TELEPHONE JUNCTION BOX
- EXISTING SIGN
- EXISTING WOOD POST
- EXISTING POST
- EXISTING MAILBOX
- EXISTING TRAFFIC LIGHT
- EXISTING ANCHOR GUY WIRE
- PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT
- EXISTING CHAIN LINK FENCE
- PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS
- PROPOSED AIR RELEASE VALVE
- PROPOSED SERVICE LINE AS NOTED
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING GAS METER
- EXISTING INTERMEDIATE CONTOURS
- EXISTING OVERHEAD ELECTRIC
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING GAS LINE
- EXISTING ASPHALT PAVEMENT
- EXISTING ELECTRIC JUNCTION BOX
- PROPOSED WATER VALVE
- PROPOSED WATER METER
- PROPOSED FIRE HYDRANT
- WATER TABLE ELEVATION DATE DETERMINED INDICATED

NOTES:

1. CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
2. CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
3. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W., ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
5. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFY BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO, AND FOR MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
6. CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
7. SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
8. SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
9. NO OPEN CUTS IN DITCH BANKS ARE PERMITTED DURING IRRIGATION SEASON.
10. CONTRACTOR SHALL COORDINATE WITH EPCWD #1 SIZE AND DEPTH OF BORE PITS DURING CONSTRUCTION TO WORK OUTSIDE THE EPCWD #1 RIGHT-OF-WAY.

KEYED NOTES:

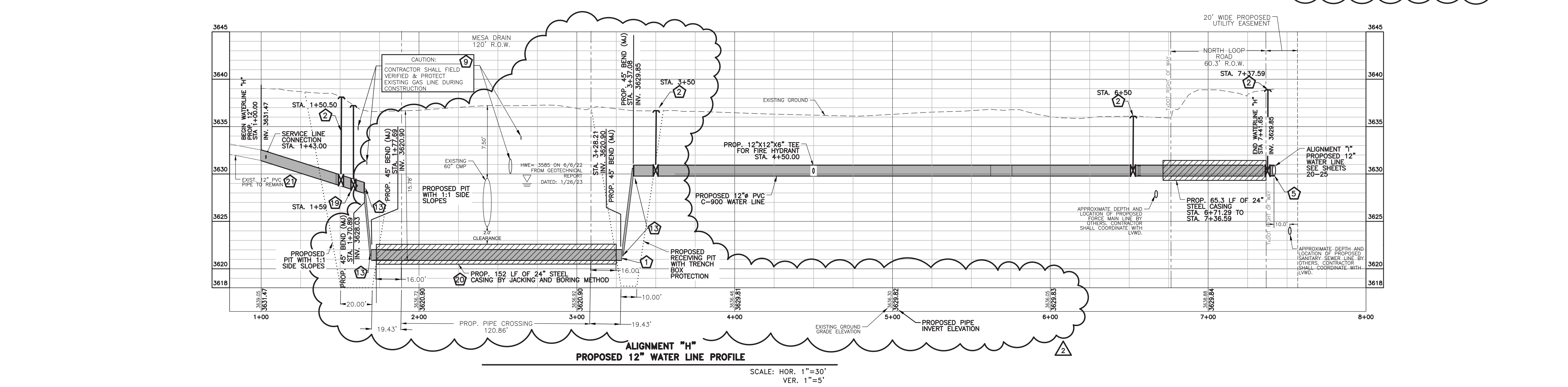
1. PROPOSED 12" PVC C900, DR18 WATERLINE.
2. PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
3. CONTRACTOR SHALL PROTECT OVERHEAD ELECTRICAL LINES, POWER POLES & ANCHOR GUY WIRE DURING CONSTRUCTION.
5. PROPOSED 12"x12"x12" TEE WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
8. EXISTING WATER LINE TO REMAIN. CONTRACTOR SHALL PROTECT EXISTING WATER LINE DURING CONSTRUCTION.
9. APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.

12. PROPOSED 12"-90° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
13. PROPOSED 12"-45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
17. PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
18. PROPOSED WATER SERVICE LINE AND WATER METER WITH BOX AND COVER, SEE SHEETS 30 & 31 DETAILS "228, 237, 238, 239 & 240".
19. PROPOSED AIR RELEASE VALVE. SEE SHEET 29 DETAIL "212".
20. PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.
21. CONTRACTOR SHALL FIELD LOCATE EXISTING 12" WATER LINE & SHALL REMOVE CAP AND CONNECT PROPOSED 12" PVC WATER LINE TO EXISTING 12" WATER LINE.
23. PROPOSED STEEL CASING INSTALLED BY APPROVED OPEN / CUT METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	642
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION AND WATER METER, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	4
FURNISH AND INSTALL FIRE HYDRANT INCLUDING ALL NECESSARY FITTING AND APPURTENANCES	EA	1
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS.	LF	212
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED OPEN / CUT METHODS.	LF	0
FURNISH AND INSTALL 2" SINGLE BODY COMBINATION AIR VALVE, COMPLETE IN PLACE	EA	1
FURNISH AND INSTALL 12"-90° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	1
FURNISH AND INSTALL 12"-45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	7
REMOVE AND RELOCATE EXISTING SIGN	EA	2
FURNISH AND INSTALL WATER SERVICE LINE WITH CONNECTION, COMPLETE IN PLACE	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.



**ALIGNMENT "H"
 PROPOSED 12" WATER LINE PROFILE**
 SCALE: HOR. 1"=30'
 VER. 1"=5'

REVISION: 1/29/2023 4:20PM A:\2021\2118P-LVWD NORTH LOOP WATER LINE DESIGN\10-3-23 DESIGN PHASE 2 & REMOVALS\DWG\MWD AND SEWER_PHASE 1\10-3-23 WATER PLAN PENDER.C, 6, 10.DWG

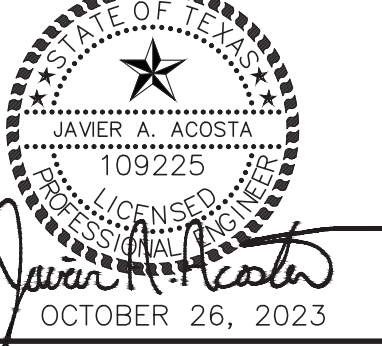
**IT'S THE LAW
 AND IT'S FREE - CALL BEFORE YOU DIG**
 CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
 1-800-344-8377
 (1-800-DIG-TESS)

**ES LA LEY
 GRATIS PARA USTED - LLAME ANTES DE EXCAVAR**
 LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
 1-800-344-8377
 (1-800-DIG-TESS)



SCALE
 HOR: 1"=30'
 VER: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR./JA
APPD. BY J.A.



FXSA
 www.fxsa.com

FRANK X. SPENCER & ASSOCIATES, INC.
 Consulting Civil Engineers & Surveyors
 1130 Montana Ave., El Paso, Texas 79902
 Ph:(915)533-4600 Fax:(915)533-4673
 TBPLS# 100490-00, TBPE# F-3584

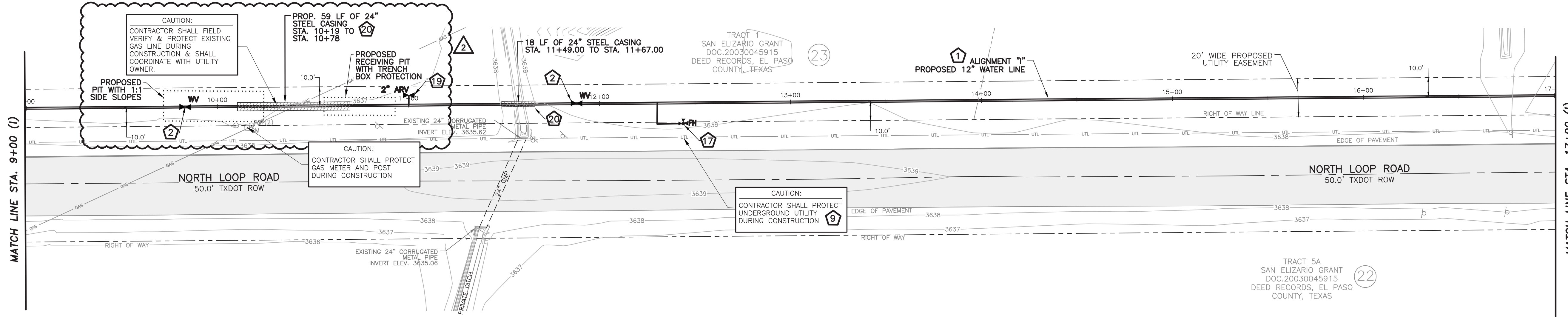
BENCHMARKS:

NO.	DATE	REVISIONS	BY
1	1/31/23	ADDENDUM # 2	J.A.
2	10/26/23	ADDENDUM # 3	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
 EL PASO COUNTY, TEXAS
 PROJECT No. E2119EP

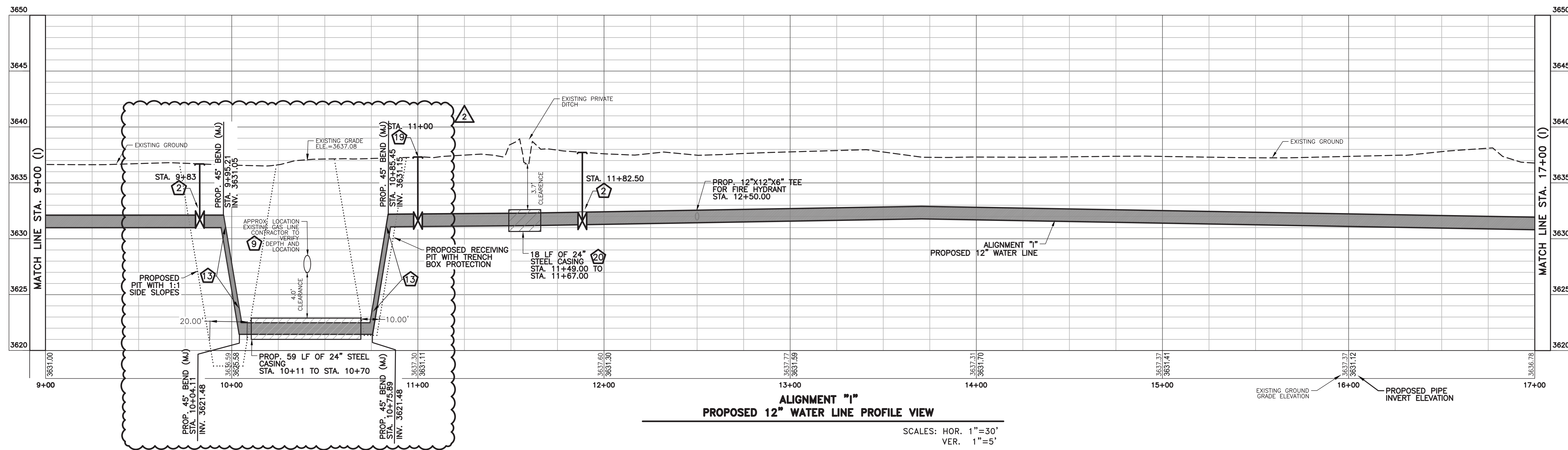
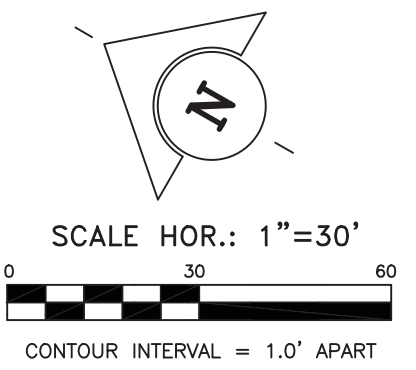
**ALIGNMENT "H" - 12" WATER LINE
 PLAN AND PROFILE**

SHEET NO.
 19 OF 34



ALIGNMENT "I"
PROPOSED 12" WATER LINE PLAN VIEW

SCALES: HOR. 1"=30'



ALIGNMENT "I"
PROPOSED 12" WATER LINE PROFILE VIEW

SCALES: HOR. 1"=30'
VER. 1"=5'

LEGEND

△cp	CONTROL POINT AS NOTED
⊙MH	PROPOSED 48" SANITARY SEWER MANHOLE
—	PROPOSED WATER LINE AS NOTED
—	PROPOSED ASPHALT PAVEMENT PATCHING
○P/P	EXISTING POWER POLE
□JBT	EXISTING TELEPHONE JUNCTION BOX
□	EXISTING SIGN
○WP	EXISTING WOOD POST
○PST	EXISTING POST
□	EXISTING MAILBOX
○	EXISTING TRAFFIC LIGHT
—	EXISTING ANCHOR GUY WIRE
—	PROPOSED WATER/SEWER IMPROVEMENTS CENTERLINE ALIGNMENT
—	EXISTING CHAIN LINK FENCE
—	PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS
⊙WM	EXISTING WATER METER
⊙WV	EXISTING WATER VALVE
⊙GM	EXISTING GAS METER
—	EXISTING INDEX CONTOURS
—	EXISTING INTERMEDIATE CONTOURS
—	EXISTING OVERHEAD ELECTRIC
—	EXISTING WATER LINE
—	EXISTING SANITARY SEWER LINE
—	EXISTING GAS LINE
—	EXISTING ASPHALT PAVEMENT
□JBE	EXISTING ELECTRIC JUNCTION BOX
⊙ARV	PROPOSED AIR RELEASE VALVE
⊙WV	PROPOSED WATER VALVE
⊙WM	PROPOSED WATER METER
⊙FH	PROPOSED FIRE HYDRANT

KEYED NOTES:

- 1 PROPOSED 12" PVC C900, DR18 WATERLINE.
- 2 PROPOSED 12" GATE VALVE WITH BOX AND COVER. SEE SHEET 28, 29 & 30 DETAIL "202, 203, 219 & 220".
- 9 APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
- 13 PROPOSED 12"-45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING. SEE SHEET 30 DETAIL "221".
- 17 PROPOSED FIRE HYDRANT WITH WATER VALVE, BONNET BOX & COVER, AND FITTINGS (COMPLETE). SEE SHEET 30 DETAILS "223, 224 & 225".
- 19 PROPOSED AIR RELEASE VALVE. SEE SHEET 29 DETAIL "212".
- 20 PROPOSED STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS. STEEL CASING SHALL EXTEND 5 FEET BEYOND DRAINAGE/ROADWAY R.O.W. UNLESS SHOWN ON PLAN.

NOTES:

1. CONTRACTOR SHALL INSTALL SEWER LINES 10 FEET MIN. FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER OF WATER LINE WHEN PARALLEL TO WATERLINE.
2. CONTRACTOR SHALL COORDINATE WITH LOWER VALLEY WATER DISTRICT FOR SERVICE LINE CONNECTION REQUIREMENTS TO MAIN LINE.
3. CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS WITHIN THE UTILITY EASEMENTS, STREET R.O.W., ALLEYS AND ONLY THE PROPERTIES RECEIVING SERVICES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND PROTECTING UTILITIES DURING CONSTRUCTION. NO SEPARATE PAYMENT.
5. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE RECORDS AVAILABLE 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 MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES DURING CONSTRUCTION, EVEN IF THEY ARE NOT SHOWN ON THE PLANS.
6. CONTRACTOR SHALL INSTALL GRAVITY FLOW SANITARY LINES TO THE LINES AND GRADES INDICATED ON THE PLANS USING A PIPE LASER.
7. SEE SHEET 2 FOR GENERAL NOTES AND GENERAL LEGEND.
8. SEE SHEET 2 FOR SURVEY NOTES AND CONTROL POINT TABLE.
9. PROVIDE FIVE (5) FEET MINIMUM COVER FOR ALL PROPOSED WATER LINES.

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
FURNISH AND INSTALL 12" PVC C-900, DR18 WATERLINE PIPE, COMPLETE IN PLACE	LF	800
FURNISH AND INSTALL 12" GATE VALVE WITH BOX AND COVER	EA	2
FURNISH AND INSTALL FIRE HYDRANT COMPLETE WITH CONNECTION AND GATE VALVE	EA	1
PROPOSED 24" STEEL CASING INSTALLED BY APPROVED JACKING AND BORING METHODS	LF	77
FURNISH AND INSTALL 12"-45° BEND WITH MECHANICAL JOINTS AND CONCRETE THRUST BLOCKING	EA	4
FURNISH AND INSTALL 2" SINGLE BODY COMBINATION AIR VALVE, COMPLETE IN PLACE	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

REVISED: 11/29/2023 4:20PM 4/2021 (21)REVISED NORTH LOOP WATER LINE DESIGN (10-3) DESIGN PHASE 1 (SHEET 20-25 WATER FROM NORTH LOOP MAIN LINE)

IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377
(1-800-DIG-TESS)

ES LA LEY
GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377
(1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE OCT 26, 2023
DRAWN BY M.P., A.V.
CHKD. BY CM.GR., J.A.
APPD. BY J.A.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

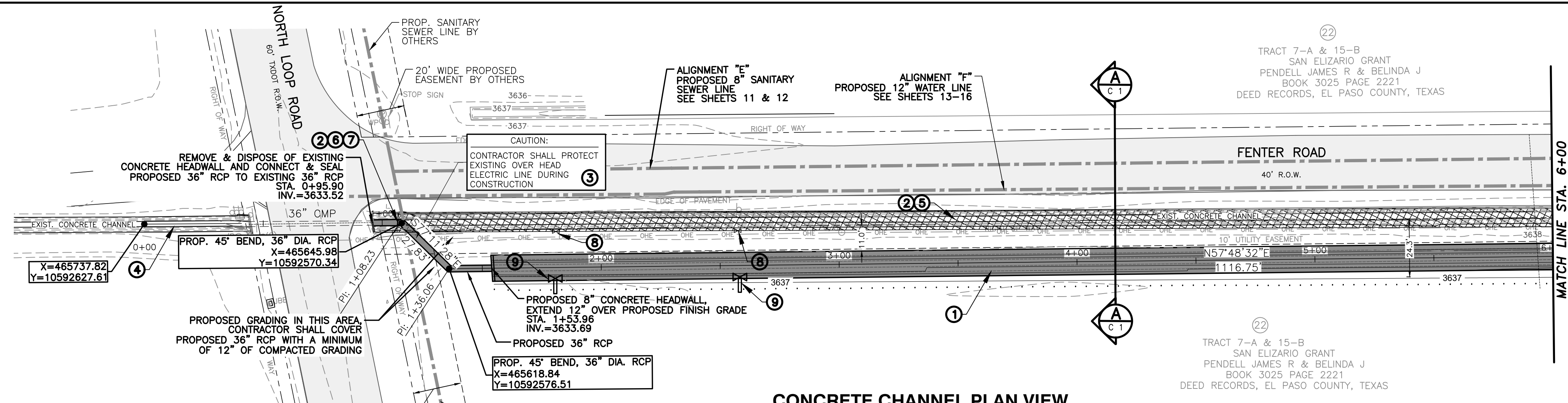
BENCHMARKS:

NO.	DATE	REVISIONS	BY
2	10/26/23	ADDENDUM # 3	J.A.

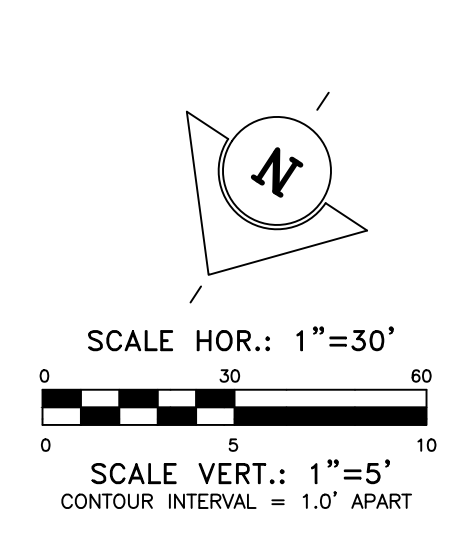
LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I WATER & SEWER IMPROVEMENTS
EL PASO COUNTY, TEXAS
PROJECT No. E2119EP

ALIGNMENT "I" - 12" WATER LINE
PLAN AND PROFILE

SHEET NO.
21 OF 34



CONCRETE CHANNEL PLAN VIEW
SCALE: 1"=30'



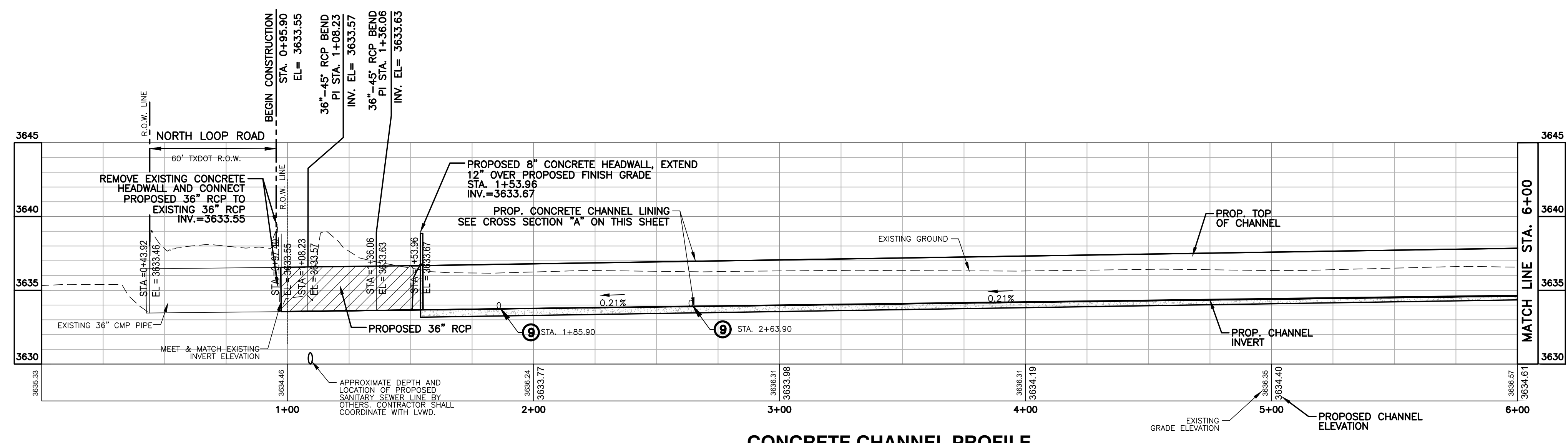
LEGEND

△ CP	CONTROL POINT AS NOTED	◊ WM	EXISTING WATER METER
P/P	EXISTING POWER POLE	▽ WY	EXISTING WATER VALVE
BT	EXISTING TELEPHONE JUNCTION BOX	◻ GM	EXISTING GAS METER
WP	EXISTING WOOD POST	— 36.40 —	EXISTING INDEX CONTOURS
WPST	EXISTING POST	— 36.39 —	EXISTING INTERMEDIATE CONTOURS
MB	EXISTING MAILBOX	— OHE —	EXISTING OVERHEAD ELECTRIC
TL	EXISTING TRAFFIC LIGHT	— WL —	EXISTING WATER LINE
AGW	EXISTING ANCHOR GUY WIRE	— SAN —	EXISTING SANITARY SEWER LINE
CLF	EXISTING CHAIN LINK FENCE	— GAS —	EXISTING GAS LINE
TR	EXISTING TREE	— ASPH —	EXISTING ASPHALT PAVEMENT
CC	EXISTING CONCRETE CHANNEL	◻ EJB	EXISTING ELECTRIC JUNCTION BOX
CONC	EXISTING CONCRETE	— GRAD —	GRADING LIMITS
PCCH	PROPOSED CONCRETE CHANNEL	— BOUND —	BOUNDARY LINE
SLOPE	0.15%	— 36.40 —	PROPOSED CONTOURS

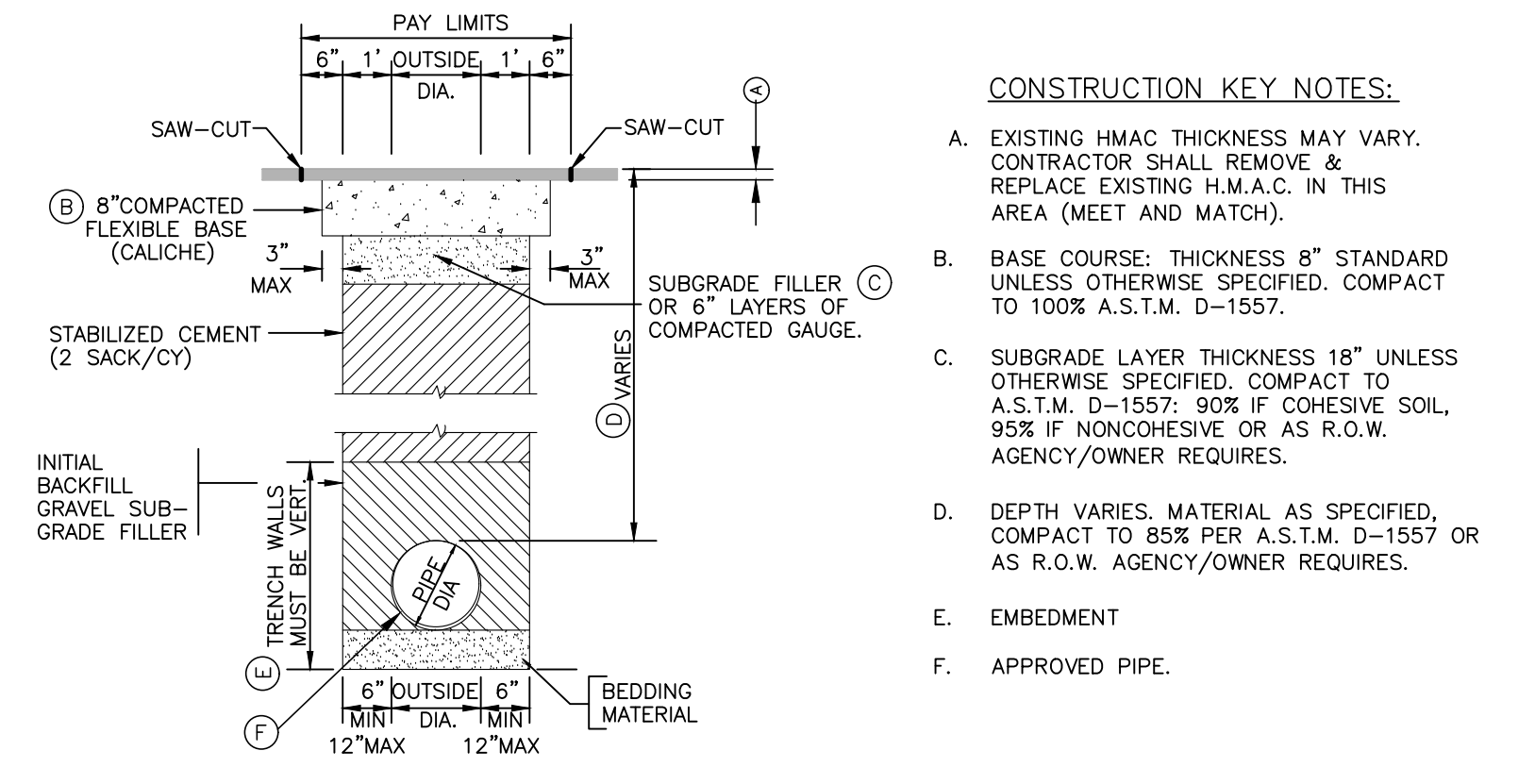
*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
INSTALL REINFORCED CHANNEL CONCRETE LINING, COMPLETE IN PLACE	CY	112
REMOVAL & DISPOSE OF EXISTING CONCRETE CHANNEL	CY	99
8" CONCRETE HEADWALL, EXTEND 12" OVER PROPOSED FINISH GRADE	EA	1
FURNISH & INSTALL 36" RCP WITH BEND, COMPLETE IN PLACE	LF	60
REMOVE AND RELOCATE SLUICE GATE	EA	2
FURNISH & INSTALL 8" HDPE, COMPLETE IN PLACE	LF	12
ENGINEERED CUT NATIVE MATERIAL	CY	125
ENGINEERED FILL NATIVE MATERIAL, 95% COMPACTION	CY	470

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

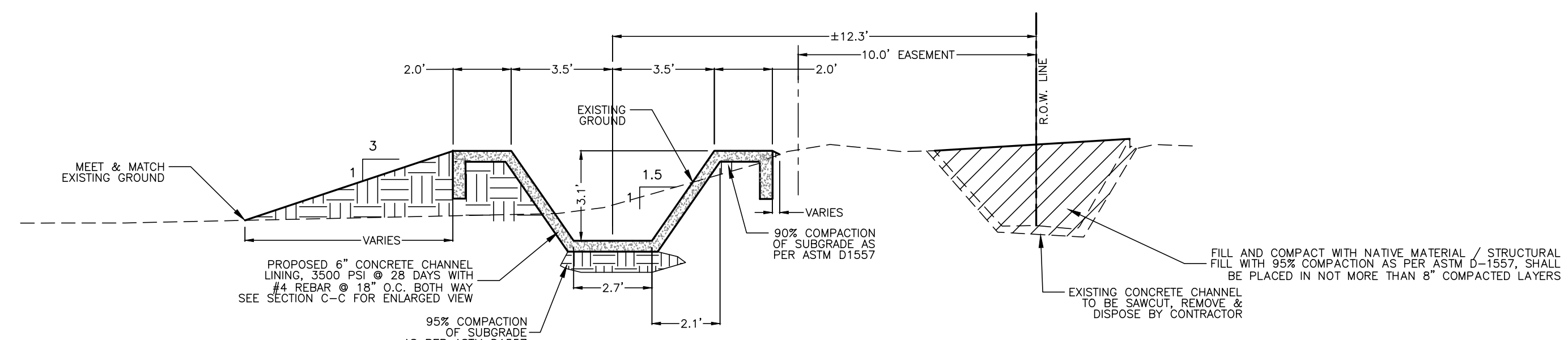


CONCRETE CHANNEL PROFILE
SCALE: HOR. 1"=30' VERT. 1"=5'

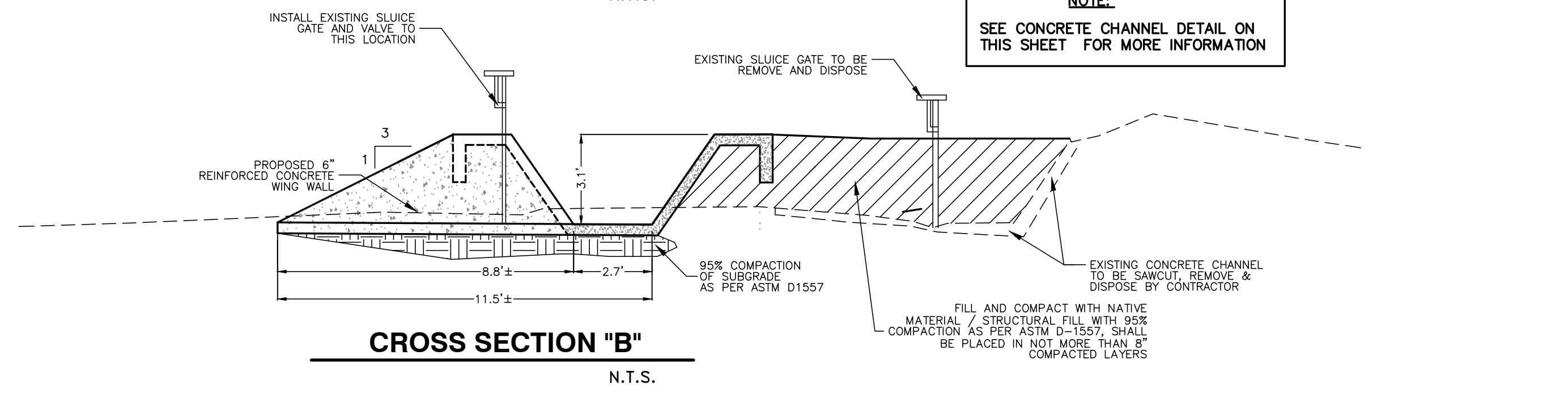


ASPHALT PAVING PATCHING DETAIL

- CONSTRUCTION KEY NOTES:**
- EXISTING HMA/C THICKNESS MAY VARY. CONTRACTOR SHALL REMOVE & REPLACE EXISTING HMA/C IN THIS AREA (MEET AND MATCH).
 - BASE COURSE: THICKNESS 8" STANDARD UNLESS OTHERWISE SPECIFIED. COMPACT TO 100% A.S.T.M. D-1557.
 - SUBGRADE LAYER THICKNESS 18" UNLESS OTHERWISE SPECIFIED. COMPACT TO A.S.T.M. D-1557; 90% IF COHESIVE SOIL, 95% IF NONCOHESIVE OR AS R.O.W. AGENCY/OWNER REQUIRES.
 - DEPTH VARIES. MATERIAL AS SPECIFIED, COMPACT TO 85% PER A.S.T.M. D-1557 OR AS R.O.W. AGENCY/OWNER REQUIRES.
 - EMBEDMENT
 - APPROVED PIPE.

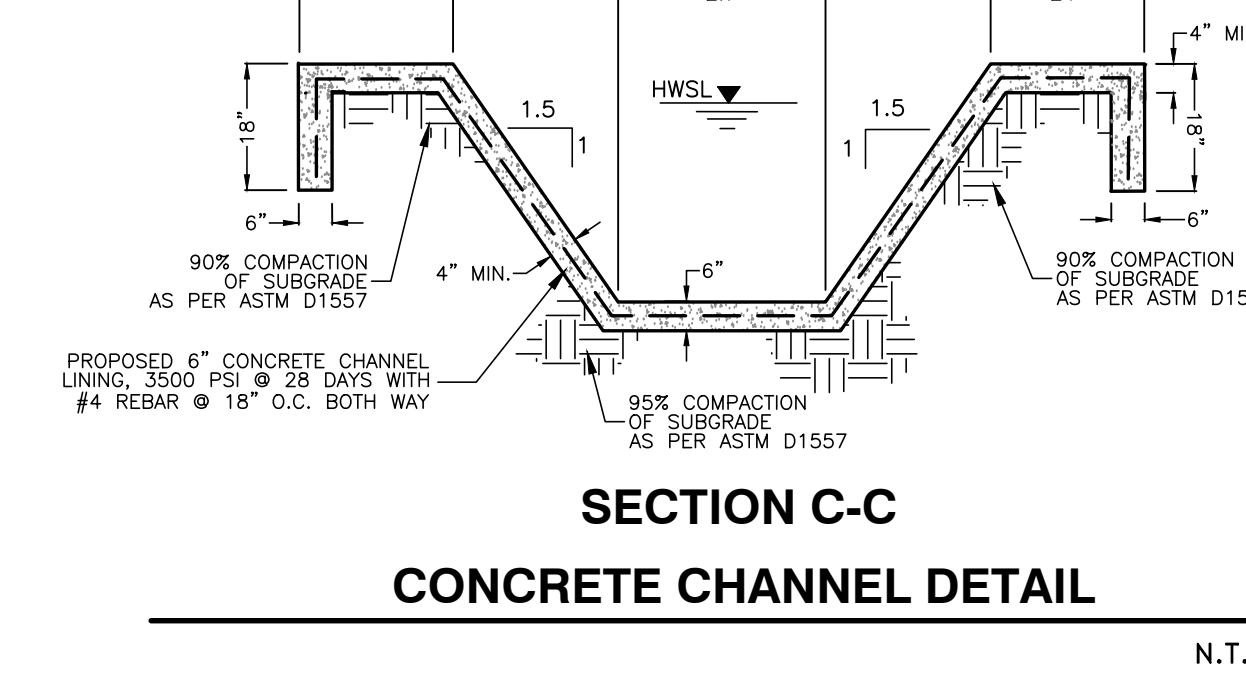


CROSS SECTION "A"
N.T.S.

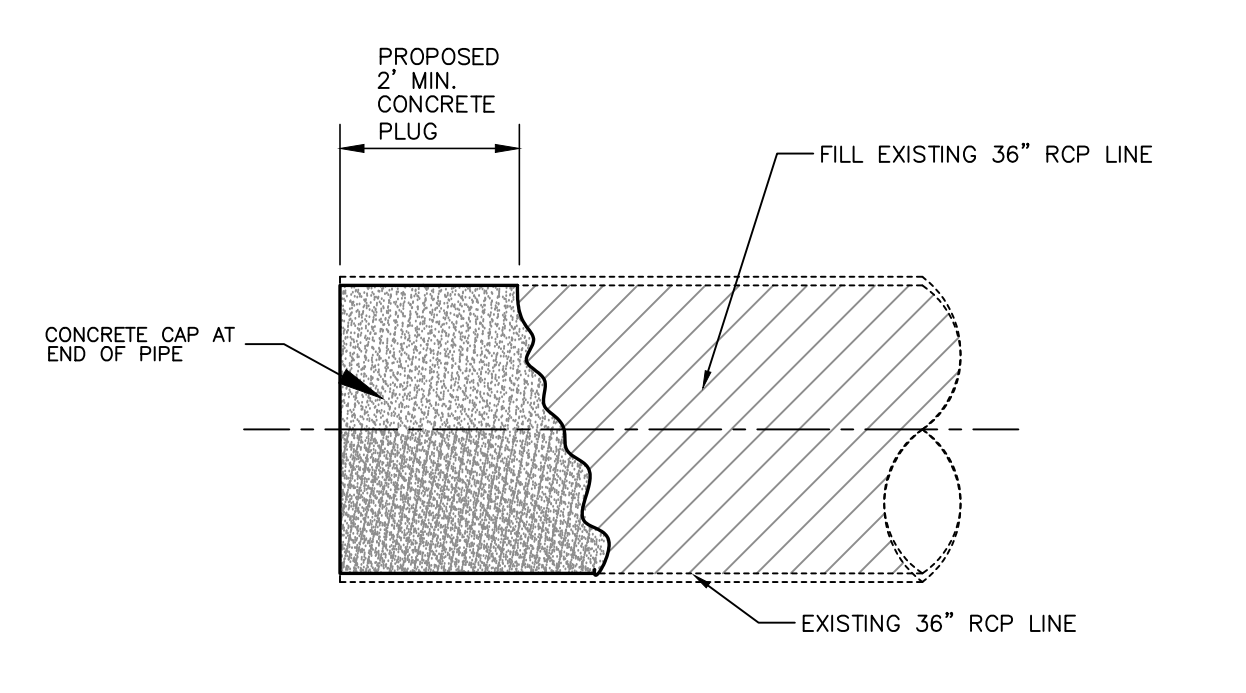


CROSS SECTION "B"
N.T.S.

- KEY NOTES:**
- PROPOSED CONCRETE CHANNEL LINING. SEE CROSS SECTION "A" ON THIS SHEET.
 - SAWCUT, REMOVE & DISPOSE OF EXISTING CONCRETE CHANNEL MEETING FEDERAL, STATE & LOCAL REGULATIONS.
 - EXISTING OVERHEAD ELECTRIC LINE & GUY WIRE TO REMAIN. CONTRACTOR SHALL PROTECT POWER POLE & GUY WIRE DURING CONSTRUCTION.
 - EXISTING CONCRETE CHANNEL TO REMAIN.
 - EXISTING CHANNEL VOID AREA TO BE GRADED AND FILLED PER SPECIFICATIONS
 - MEET AND MATCH EXISTING CHANNEL ELEVATIONS.
 - INSTALL 3/4" DOWELS WITH HOT DIPPED END, SPACE AT EVERY 12" ON CENTER, 8" EMBEDMENT, 14" LONG. CONTRACTOR SHALL WATERSEAL ALL CONCRETE CONNECTIONS/JOINTS.
 - REMOVE AND RELOCATE EXISTING SLUICE GATE AND VALVE TO NEW CHANNEL LOCATION
 - PROPOSED SLUICE GATE NEW LOCATION AND NEW 8" RCP PIPE (6' LONG), CONTRACTOR SHALL REINSTALL AND SEAL ALL EXISTING SLUICE GATE & VALVE CONNECTIONS, AND SHALL INSTALL RCP PIPE @ 0.33% MIN. SLOPE.



SECTION C-C CONCRETE CHANNEL DETAIL
N.T.S.



ABANDONED PIPE
N.T.S.

CONTROL TABLE

CP#	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
109	10591308.78	464573.50	3636.53	SET 5/8" IRDN REBAR
110	10591224.51	463342.85	3638.16	SET 5/8" IRDN REBAR

- SURVEY NOTES:**
- ALL BEARINGS, DISTANCES, AND COORDINATES REFER TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE 4203, US SURVEY FEET.
 - VERTICAL CONTROL AND ELEVATIONS ARE BASED ON NAVD 88, US SURVEY FEET.

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377 (1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE NOV 15, 2022
DRAWN BY A.V.
CHKD. BY CM,GR,JA
APPD. BY J.A.

FOR REVIEW ONLY
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JAVIER ACOSTA, P.E. 109225 ON NOVEMBER 15, 2022. IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.



FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

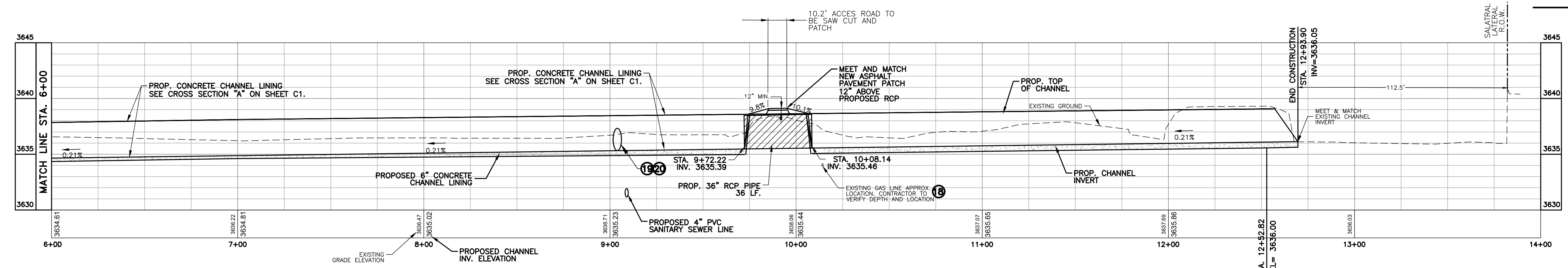
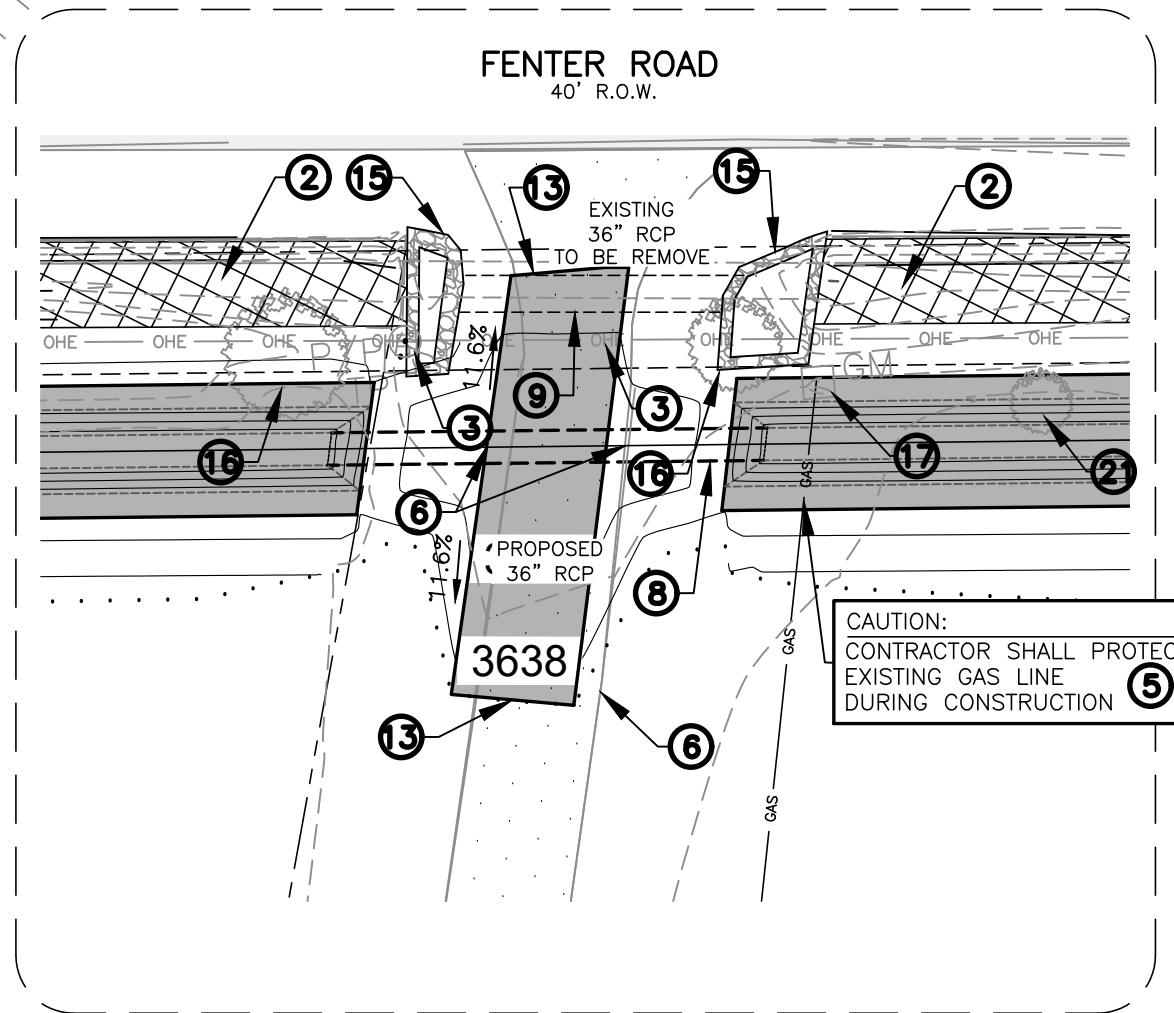
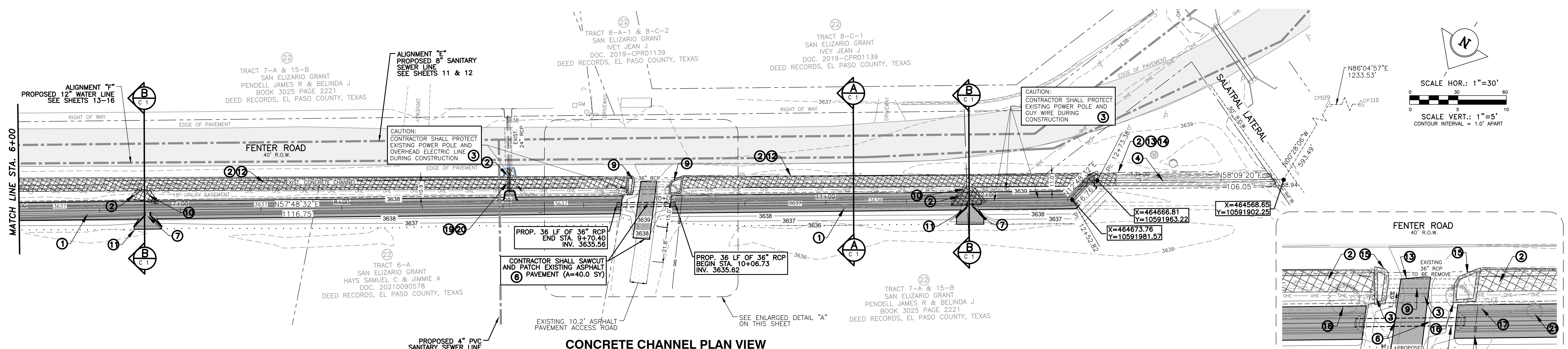
BENCHMARKS:

NO.	DATE	REVISIONS	BY
1	1/31/23	ADDENDUM # 2	J.A.

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I - CONCRETE CHANNEL RELOCATION
EL PASO COUNTY COUNTY, TEXAS
PROJECT No. E2119EP

CONCRETE CHANNEL PLAN AND PROFILE

SHEET NO.
C1 OF 2



SURVEY NOTES:

- ALL BEARINGS, DISTANCES, AND COORDINATES REFER TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE 4203, US SURVEY FEET.
- VERTICAL CONTROL AND ELEVATIONS ARE BASED ON NAVD 88, US SURVEY FEET.

LEGEND

△CP	CONTROL POINT AS NOTED	◊WM	EXISTING WATER METER
○P/P	EXISTING POWER POLE	◊WV	EXISTING WATER VALVE
□JBT	EXISTING TELEPHONE JUNCTION BOX	◊GM	EXISTING GAS METER
Ⓧ	EXISTING SIGN	---	EXISTING INDEX CONTOURS
Ⓧ	EXISTING WOOD POST	---	EXISTING INTERMEDIATE CONTOURS
Ⓧ	EXISTING POST	---	EXISTING OVERHEAD ELECTRIC
Ⓧ	EXISTING MAILBOX	---	EXISTING WATER LINE
Ⓧ	EXISTING TRAFFIC LIGHT	---	EXISTING SANITARY SEWER LINE
Ⓧ	EXISTING ANCHOR GUY WIRE	---	EXISTING GAS LINE
Ⓧ	EXISTING CHAIN LINK FENCE	---	EXISTING ASPHALT PAVEMENT
Ⓧ	EXISTING TREE	ⓍJBE	EXISTING ELECTRIC JUNCTION BOX
Ⓧ	EXISTING CONCRETE CHANNEL TO BE REMOVED AND BACKFILL PER SPECIFICATIONS	---	GRADING LIMITS
Ⓧ	EXISTING CONCRETE	---	BOUNDARY LINE
Ⓧ	PROPOSED CONCRETE CHANNEL	---	PROPOSED CONTOURS

- KEY NOTES:**
- PROPOSED CONCRETE CHANNEL LINING. SEE CROSS SECTION "A" ON SHEET C1.
 - SAWCUT, REMOVE & DISPOSE OF EXISTING CONCRETE CHANNEL, MEETING FEDERAL, STATE & LOCAL REGULATIONS.
 - EXISTING POWER POLE, OVERHEAD ELECTRICAL LINE & GUY WIRE TO REMAIN. CONTRACTOR SHALL PROTECT POWER POLE & GUY WIRE DURING CONSTRUCTION.
 - EXISTING CONCRETE CHANNEL TO REMAIN.
 - EXISTING GAS SERVICE LINE TO REMAIN. CONTRACTOR SHALL PROTECT GAS LINE AT ALL TIME DURING CONSTRUCTION.
 - EXISTING ASPHALT PAVEMENT TO BE SAW CUT AND PATCH. SEE ASPHALT PAVING PATCHING DETAIL ON SHEET C1.
 - PROPOSED SLUICE GATE NEW LOCATION, CONTRACTOR SHALL REINSTALL AND SEAL ALL EXISTING SLUICE GATE & VALVE CONNECTIONS. SEE CROSS SECTION "B" ON SHEET C1.
 - PROPOSED 36" RCP PIPE, OPEN TRENCH (LENGTH=36.00'). CONTRACTOR SHALL SAWCUT AND PATCH EXISTING ASPHALT PAVEMENT. SEE DETAIL ON SHEET C1.
 - EXISTING 36" RCP PIPE TO BE FILLED, CAPPED AND ABANDONED. SEE DETAIL ON SHEET C1.
 - REMOVE AND RELOCATE EXISTING SLUICE GATE AND VALVE TO NEW CHANNEL LOCATION
 - PROPOSED OUTFLOW CONCRETE FLUME WITH WING WALLS.
 - EXISTING CHANNEL VOID AREA TO BE GRADED AND FILLED PER SPECIFICATIONS
 - MEET AND MATCH EXISTING CHANNEL ELEVATIONS.
 - INSTALL 3/4" DOWELS WITH HOT DIPPED ENDS. SPACE AT EVERY 12" ON CENTER. 6" EMBEDMENT, 14" LONG. CONTRACTOR SHALL WATERSEAL ALL CONCRETE CONNECTIONS.
 - EXISTING ROCKWALL TO BE REMOVE AND DISPOSE BY CONTRACTOR.
 - EXISTING TREES TO REMAIN, CONTRACTOR SHALL PROTECT TREES AT ALL THE DURING CONSTRUCTION.
 - EXISTING GAS METER TO REMAIN, CONTRACTOR SHALL PROTECT GAS METER AT ALL TIME DURING CONSTRUCTION.
 - APPROXIMATE DEPTH OF EXISTING UTILITY LINE. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF UTILITY LINE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND.
 - PROPOSED 24" RCP PIPE EXTENSION, (LENGTH=16.00').
 - PROPOSED 3" RCP PIPE EXTENSION, (LENGTH=16.00').
 - EXISTING TREE TO BE REMOVED AND DISPOSED BY CONTRACTOR.

CONTROL TABLE

CP#	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
109	10591308.78	464573.50	3636.53	SET 5/8" IRON REBAR
110	10591224.51	463342.85	3638.16	SET 5/8" IRON REBAR

*** ESTIMATED SHEET QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
INSTALL REINFORCED CHANNEL CONCRETE LINING, COMPLETE IN PLACE	CY	167
FURNISH AND INSTALL 36" RCP, COMPLETE IN PLACE	LF	37
REMOVE AND RELOCATE SLUICE GATE	EA	2
SAW/CUT AND PATCH PAVEMENT	SY	40
REMOVAL & DISPOSE OF EXISTING CONCRETE CHANNEL	CY	131
CAP AND ABANDONED EXISTING 36" RCP	EA	1
REMOVAL & DISPOSE OF EXISTING ROCKWALL	LF	68
ENGINEERED CUT NATIVE MATERIAL	CY	190
ENGINEERED FILL NATIVE MATERIAL, 95% COMPACTION	CY	670
FURNISH AND INSTALL 24" RCP, COMPLETE IN PLACE	LF	22
FURNISH AND INSTALL 3" RCP, COMPLETE IN PLACE	LF	22
REMOVE AND DISPOSE OF EXISTING TREE	EA	1

* ALL QUANTITIES ARE APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACTUAL QUANTITIES REQUIRED TO INSTALL ALL NEW IMPROVEMENTS SHOWN, INCLUDING APPURTENANCES AND REPAIRS TO ANY DAMAGE OF EXISTING IMPROVEMENTS, AT NO ADDITIONAL COST TO OWNER.

IT'S THE LAW AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS
1-800-344-8377 (1-800-DIG-TESS)

ES LA LEY GRATIS PARA USTED - LLAME ANTES DE EXCAVAR
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS
1-800-344-8377 (1-800-DIG-TESS)



SCALE
HOR: 1"=30'
VER: 1"=5'

DATE NOV 15, 2022
DRAWN BY A.V.
CHKD. BY CM,GR,JA
APPD. BY J.A.

FOR REVIEW ONLY
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JAVIER ACOSTA, P.E. 109225 ON NOVEMBER 15, 2022. IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.

FRANK X. SPENCER & ASSOCIATES, INC.
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph:(915)533-4600 Fax:(915)533-4673
TBPLS# 100490-00, TBPE# F-3584

BENCHMARKS:

NO.	DATE	REVISIONS	BY

LOWER VALLEY WATER DISTRICT
NORTH LOOP PHASE I - CONCRETE CHANNEL RELOCATION
EL PASO COUNTY COUNTY, TEXAS
PROJECT No. E2119EP

CONCRETE CHANNEL PLAN AND PROFILE

SHEET NO.
C2 OF 2

ATTACHMENT 3

BASE BID 1 (INCLUDES ALL WORK FROM STA 0+90 TO STA 11+46 AND FROM STA 20+46 TO 30+83.67)					
Item No	Description of Item	Est. Quantity	Unit	Unit Bid Price	Extended Amount (Qty x Unit Price)
1	Mobilization & Bonds (for Items 2-22)	1	LS		
2	Implement Storm Water Pollution Prevention Plan	1	LS		
3	Traffic Control	6.5	MO		
4b	Remove Base Material and Dispose Off-site (up to 6")	6260	SY		
5	Excavation of Subgrade and Dispose Off-site	6260	SY		
6	Tree Removal	3	EA		
7	Grading	21	STA		
8	Remove Sign Post and Assembly & Dispose Off-site	4	EA		
9	Adjust Water Valve	6	EA		
10	Adjust Water Meter	8	EA		
11	Furnish and Install HMAC Type C Pavement	870	TON		
12a	FL BS (CMP IN PLC)(TY A GR 3) (6")	6240	SY		
12b	FL BS (CMP IN PLC)(TY A GR 3) (4")	20	SY		
13	Compacted Select Fill	6260	SY		
14	Subgrade Preparation	6260	SY		
15	Furnish & Install Header Curb	4250	LF		
16	Install 4" Broken Yellow Striping	350	LF		
17	Install 4" Solid White Striping	4150	LF		
18	Install 4" Solid Yellow Striping	1300	LF		
19	Furnish & Install Sign, Post, and Assembly	7	EA		
22	Adjust Manhole	5	EA		

TOTAL BASE BID 1 (ITEMS 1 THROUGH 22) _____

TOTAL BASE BID 1 (in words)

In accordance with Section 151.311 of the Texas Tax Code (V.A.T.C.S.), regarding taxes on materials and services, and requiring a separated contract, the following is the breakdown of cost for materials and cost for labor for this bid:

MATERIALS TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

LABOR TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

RENTAL EQUIPMENT AND OTHER TAXABLE ITEMS: \$ _____

OTHER (I.E. BONDS, INSURANCE, CAPITAL EQUIPMENT, ETC.) \$ _____

***TOTAL CONTRACT (TOTAL MUST EQUAL TOTAL BID PRICE):** \$ _____

ATTACHMENT 4

BASE BID 2 (INCLUDES ALL WORK BETWEEN STA 11+46 AND STA 20+46)					
Item No	Description of Item	Est. Quantity	Unit	Unit Bid Price	Extended Amount (Qty x Unit Price)
1	Mobilization & Bonds (for Items 2-22)	1	LS		
2	Implement Storm Water Pollution Prevention Plan	1	LS		
3	Traffic Control	6.5	MO		
4a	Remove Asphalt Pavement and Base Material, and Dispose Off-site (up to 9")	800	SY		
4b	Remove Base Material and Dispose Off-site (up to 6")	2080	SY		
5	Excavation of Subgrade and Dispose Off-site	2690	SY		
7	Grading	9	STA		
8	Remove Sign Post and Assembly & Dispose Off-site	11	EA		
9	Adjust Water Valve	5	EA		
10	Adjust Water Meter	1	EA		
11	Furnish and Install HMAC Type C Pavement	370	TON		
12a	FL BS (CMP IN PLC)(TY A GR 3) (6")	2640	SY		
12b	FL BS (CMP IN PLC)(TY A GR 3) (4")	50	SY		
13	Compacted Select Fill	2690	SY		
14	Subgrade Preparation	2690	SY		
15	Furnish & Install Header Curb	1800	LF		
17	Install 4" Solid White Striping	1800	LF		
18	Install 4" Solid Yellow Striping	1800	LF		
19	Furnish & Install Sign, Post, and Assembly	11	EA		
20	Furnish & Install Object Marker	2	EA		
21	Flowable Backfill (12")	15	SY		
22	Adjust Manhole	3	EA		

TOTAL BASE BID 2 (ITEMS 1 THROUGH 22) _____

TOTAL BASE BID 2 (in words)

In accordance with Section 151.311 of the Texas Tax Code (V.A.T.C.S.), regarding taxes on materials and services, and requiring a separated contract, the following is the breakdown of cost for materials and cost for labor for this bid:

MATERIALS TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

LABOR TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

RENTAL EQUIPMENT AND OTHER TAXABLE ITEMS: \$ _____

OTHER (I.E. BONDS, INSURANCE, CAPITAL EQUIPMENT, ETC.) \$ _____

***TOTAL CONTRACT (TOTAL MUST EQUAL TOTAL BID PRICE):** \$ _____

ATTACHMENT 5

SECTION 00500

**STANDARD FORM OF AGREEMENT BETWEEN OWNER
AND CONTRACTOR ON THE BASIS OF A STIPULATED PRICE**

THIS AGREEMENT is dated as of the _____ day of _____ in the year 201__ by and between Lower Valley Water District (hereinafter called OWNER) and _____
_____ (hereinafter called CONTRACTOR). OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The work is generally described as follows:

FENTER RD RECONSTRUCTION

The work under this contract shall be for furnishing all labor, materials, transportation and services for the construction and installation of the following work:

The Fenter Rd Reconstruction project includes the reconstruction of approximately 3,000 linear feet of Fenter Rd including removal of asphalt, base and subgrade, and construction of a new pavement structure. The project will also include installation of header curb, reconstruction of driveways, removal and installation of signs, striping, drainage improvements, and adjustment of manholes and water meters and valve boxes.

ARTICLE 2. ENGINEER.

The Project has been designed by Huitt-Zollars, Inc. who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIME.

3.1 The Work will be Substantially completed within **163** Calendar Days from the date when the Contract Time commences to run as provided in Paragraph 2.03 of the General Conditions, and as revised in Supplementary Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions, and as revised in the Supplementary Conditions, within **193** calendar days. Final completion includes CONTRACTOR'S resolution of all punch list items and CONTRACTOR'S submission of required close-out documentation. Any failure of the CONTRACTOR to complete the project within the contract time will be considered a material breach of this contract.

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss and public inconvenience if the Work is not completed and the submittals are not submitted within the times specified in Paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER the sum per day as noted below per milestone for each and every milestone date as defined in Section 01 00 00 of these Specifications and which the Contractor fails to meet. For Milestone 2, liquidated damages shall be computed from the milestone date until the date the milestone task is completed.

ATTACHMENT 6

Liquidated Damages
-----Per Day-----

Milestone	Description	Liquidated Damages per Day
Milestone No. 1	Fenter Rd Reconstruction between STA 17+97 and STA 18+23 as described in Section 01 00 00 of these Specifications and Sheet 10 of the Fenter Rd Reconstruction project engineering plans.	\$2,050 per day with a total maximum amount of \$26,650 for Milestone 1.
Milestone No. 2	Remaining work for the complete reconstruction of Fenter Rd as described in Section 01 00 00 of these Specifications and the Fenter Rd Reconstruction project engineering plans.	<ul style="list-style-type: none"> ▪ \$2,050 per day for substantial completion ▪ \$1,025 per day for final completion

Milestone No. 1 Milestone 1 work shall be completed by February 14, 2024 to avoid conflicts with EPCWID1 irrigation season. It is expected that Notice to Proceed will be provided on January 29, 2024.

Milestone No. 2 163 Calendar Days from the Notice to Proceed date will be provided to substantially complete work in this milestone

ARTICLE 4. CONTRACT PRICE.

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents in current funds, per the attached CONTRACTOR's Bid in accordance with the below listed separate charges:

BASE BID 1

MATERIALS TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

LABOR TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

RENTAL EQUIPMENT AND OTHER TAXABLE ITEMS: \$ _____

OTHER (I.E. BONDS, INSURANCE, CAPITAL EQUIPMENT, ETC.) \$ _____

***TOTAL CONTRACT:** \$ _____

***(TOTAL MUST EQUAL TOTAL BID PRICE)**

BASE BID 1 ALTERNATE 1

MATERIALS TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

LABOR TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX: \$ _____

RENTAL EQUIPMENT AND OTHER TAXABLE ITEMS: \$ _____

OTHER (I.E. BONDS, INSURANCE, CAPITAL EQUIPMENT, ETC.) \$ _____

ATTACHMENT 7

Attachment G: Ethics and Conflict of Interest Acknowledgement

Public servants are expected to conduct themselves impartially and in a manner that inspires public confidence, while ensuring that responsible contractors have fair and equal access to governmental procurement.

The Town of Clint is committed to protection of government integrity, while also facilitating the recruitment and retention of the skilled personnel necessary to support its operations. To achieve this objective, The Town of Clint has established standards of ethical conduct and conflict of interest policies and expects all vendors, contractors, and subrecipients to adhere to the same core principles, as described below.

To achieve these standards, it is essential that those doing business with the Town of Clint also observe the ethical standards prescribed here.

I acknowledge that it is a breach of ethics to attempt to influence any public employee, elected official, or department head to violate the standards of ethical conduct set forth in this code.

I further acknowledge that it is a breach of ethics for any employee of Town of Clint or a vendor doing business with the County to participate directly or indirectly in a procurement when the employee or vendor knows that:

- A. The employee or any member of the employee's immediate family or household has a substantial financial interest in a company responding to a Town of Clint procurement.
- B. A business or organization in which the employee or any member of the employee's immediate family has a financial interest pertaining to the procurement.

I understand that it is a breach of ethics to offer, give, or agree to give any employee of the Town of Clint or for any employee to solicit, demand, accept, or agree to accept from a vendor, a gratuity of consequence or any offer of employment in connection with any decision, approval, disapproval, recommendation, preparation, or any part of a program requirement or purchase request influencing the content of specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or controversy, any particular matter pertaining to any program requirement, contract or subcontract, or to any solicitation or proposal therefore pending before the Town of Clint.

I acknowledge that it is a breach of ethics for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for Town of Clint as an inducement for the award of a contract or order.

I acknowledge all terms of the State of Texas (via the Texas Ethics Commission) for when a Conflict-of-Interest Questionnaire (CIQ) should be filed online and also understand that the City/County has designated Susie Rodriguez, Town of Clint Clerk as the point of contact should any questions or concerns arise related to Ethics or conflicts of interest at any time that must be reported for review.

I certify that I have read and understand the ethical standards set forth by Town of Clint and agree to comply with them in all business dealings with the County.

[Vendor Authorized Representative Signature] _____

PRINT NAME AND TITLE: _____

COMPANY NAME: _____

[Date] : _____

ATTACHMENT 8

FENTER RD RECONSTRUCTION

TABLE OF CONTENTS

	No. of Pages
SECTION 01 00 00 – GENERAL REQUIREMENTS.....	5
SECTION 01 02 00 - TPDES REQUIREMENTS.....	4
SECTION 01 22 00 – MEASUREMENT AND PAYMENT.....	9
SECTION 01 30 00 - SUBMITTALS.....	6
SECTION 01 40 00 – TESTING LABORATORY SERVICES.....	3
SECTION 01 57 00 - TEMPORARY CONTROLS.....	2
SECTION 01 74 00 - CLEANING.....	4
SECTION 01 74 01 - WARRANTIES.....	3
SECTION 01 77 00 - PROJECT CLOSEOUT.....	11
SECTION 01 78 39 - PROJECT RECORD DOCUMENTS.....	4
SECTION 02 41 00 - SELECTIVE DEMOLITION.....	2
SECTION 02 50 00 – TREE REMOVAL.....	1
SECTION 03 01 10 - CONCRETE FORMWORK.....	5
SECTION 03 01 20 - CONCRETE REINFORCING STEEL.....	4
SECTION 03 39 00 - PLACING, FINISHING & CURING CONCRETE.....	9
SECTION 03 40 00 – BACKFILL.....	1
SECTION 10 15 00 – DELINEATOR AND OBJECT MARKER ASSEMBLY.....	2
SECTION 31 00 00 – EARTHWORK.....	4
SECTION 31 10 00 – GRADING.....	1
SECTION 32 11 23 - CRUSHED AGGREGATE BASE COURSE.....	6
SECTION 32 12 17 - PLANT MIX BITUMINOUS PAVEMENTS.....	15
SECTION 32 16 00 - CAST-IN-PLACE CONCRETE.....	9
SECTION 32 71 23 - HOT APPLIED THERMOPLASTIC MARKINGS.....	16
SECTION 33 05 13 - ADJUSTMENTS OF MANHOLES, VALVES, & WATER METERS....	1
SECTION 34 00 00 – STONE COMMON DRY.....	1

TABLE OF CONTENTS

ATTACHMENT 9

FENTER RD RECONSTRUCTION

SECTION 01 00 00 – GENERAL REQUIREMENTS

PART 1 – GENERAL

1.1 GENERAL DESCRIPTION OF THE PROJECT

The work contemplated under this contract consists of furnishing all labor, materials, equipment, and tools necessary for the construction of the project titled as follows:

FENTER RD RECONSTRUCTION

The Fenter Rd Reconstruction project includes the reconstruction of approximately 3,000 linear feet of Fenter Rd including removal of asphalt, base and subgrade, and construction of a new pavement structure. The project will also include installation of header curb, reconstruction of driveways, removal and installation of signs, striping, drainage improvements, and adjustment of manholes and water meters and valve boxes.

Work under this project will be divided into the following milestones:

Milestone No. 1: Contractor shall reconstruct the Fenter Rd section from STA 17+97 to STA 18+23 by February 14, 2024 to avoid conflicts with EPCWID1's irrigation season. The Salitral Lateral crosses this segment of Fenter Rd through a culvert. Work to be completed by the Milestone 1 deadline includes demolition of existing pavement structure, excavation, placement of flowable backfill for proposed pavement structure, header curb and parkway grading. HMAC shall be placed when weather is optimal as described in Section 32 12 17 of these Specifications; therefore, the base course and HMAC may be placed after the February 14, 2024 deadline. If placement of HMAC will exceed two calendar days from placement of base course, prime coat shall be applied for moisture retention and density tests shall be conducted again to verify proper compaction before HMAC placement. Contractor shall exercise caution when working in this area to avoid damage to the Salitral Lateral culvert, which shall be protected in place.

Milestone No. 2: Contractor shall reconstruct the remaining sections of Fenter Rd from STA 0+90 to STA 17+97 and from STA 18+23 to STA 30+83.67 as described in the Fenter Rd Reconstruction engineering plans and these specifications within the 163 Calendar Days allowed to substantially complete this milestone. Placement of base course and HMAC between STA 17+97 and STA 18+23 shall also be completed within the 163 Calendar Days allowed to substantially complete Milestone 2.

1.2 CONTRACT DRAWINGS OR PLANS

The details for the above mentioned work are shown on a set of drawings dated December 4, 2023. These drawings together with these specifications and contract documents form the Contract. Where figures are shown on the drawings, they shall take

ATTACHMENT 10

FENTER RD RECONSTRUCTION

PART 3 - EXECUTION

3.1 GENERAL

A. Two general classes of pay items exist consisting of:

- A.1 Unit price items: Payment for the various unit price items will be made at the particular contract price per unit as shown on the proposal.
- A.2 Lump Sum Items: Lump sum items are to be paid for at a lump sum price per job, not in measured increments. Lump sum items shall include all work and materials involved in the installation, construction or performance of work, including incidental and subsidiary items as may be required to complete that item as shown on the drawings and designated in the specifications.

B. The unit price or lump sum price bid on each item as stated in the Proposal shall include furnishing all labor, superintendence, incidentals, machinery, supplies, equipment and materials necessary to complete the various items of work in accordance with the Design Drawings and Specifications. Cost of work or materials shown on the Design Drawings, called for in the Specifications and on which no separate payment is made shall be included in the bid price on the various pay items for which they are associated.

3.2 MEASUREMENT AND PAYMENT

Base Bid 1 and Base Bid 2 Items

Mobilization & Bonds (Bid Item No. 1)

Shall include all costs for Contractor's mobilization and demobilization, insurance and bond, construction permits and fees, site administration expenses, temporary utilities, coordinating with owners of affected properties, and coordinating with Town's testing lab. Any demolition not covered under the demolition items is also subsidiary to this Item. This item shall also include all costs for contract closeout, site clean-up, and all costs associated with Contractor's demobilization from the site. This item shall also include a video recording of the existing conditions before construction and a video recording of the site after the completion of all work. Payment for mobilization and demobilization shall be on a Lump Sum basis as noted in the Bid Schedule. Mobilization/Demobilization shall not exceed 5% of the total of the below item descriptions, 2 – 22.

Implement Storm Water Pollution Prevention Plan (Bid Item No. 2)

Payment for storm water pollution prevention measures, including construction entrances/exits, silt fences, erosion control logs, dust control, concrete washout areas, protection of existing inlets and irrigation ditches, protection of the Mesa Drain and Salitral Lateral, etc., will be made at a Lump Sum price and shall be total compensation for complete performance of this work through the duration of the project.

ATTACHMENT 11

FENTER RD RECONSTRUCTION

Traffic Control (Bid Item No. 3)

Traffic control shall be paid for on a monthly basis and shall include coordinating traffic control requirements with TxDOT, LVWD, Town of Clint, EPCWID1, and Engineer. Traffic control plans shall conform to the Texas Manual on Uniform Traffic Control Devices for Streets and Highways (latest edition). This Item shall include obtaining approval of the traffic control plans prior to beginning construction in areas affecting traffic. The Contractor shall construct, grade, and maintain in transitable condition during construction and remove when permanent improvements are completed. The Contractor shall also provide and install all traffic control devices, materials, equipment, temporary patch paving, on-going coordination and personnel as required to implement and maintain the traffic control plans for the duration of the project. No measurement of the work or material included in this item shall be made. All materials and work associated with this item shall be included with the price of the item. Payment includes full compensation for the complete performance of the work in accordance with the Project's drawings and the provisions of these specifications. Shadow Vehicles with TMA and high intensity rotating, flashing, oscillating or strobe lights will not be paid for directly, but will be subsidiary to this Item. Water filled barriers are subsidiary to this Item.

Remove Asphalt Pavement and Base Material, and Dispose off-site (Bid Item No. 4)

Measurement shall be the actual square yards removed. The surface area is based on the width shown in the plans. This item includes the removal of asphalt pavement and base course. Removed item shall be properly disposed of and shall not exceed the limits shown on the drawings. Removal of the additional asphalt for tie in to existing pavement shall be subsidiary to this Item. Payment shall be made at the unit price as stated in the bid schedule and will be compensation in full for the necessary materials, repair to base course when necessary, equipment and work including saw-cut, removal, and off-site disposal, in accordance with the Construction Drawings and Specifications.

Excavation of Subgrade and Dispose off-site (Bid Item No. 5)

Measurement shall be by the square yards of subgrade to be removed. The surface area is based on the width shown in the plans. The work performed will be paid for at the unit price bid for the types of work described for a depth specified in plans. No additional payment will be made for thickness or width exceeding that shown on the typical section or provided on the plans. Removed item shall be properly disposed of. Payment shall be made at the unit price as stated in the bid schedule and will be compensation in full for authorized excavation; drying; undercutting subgrade and reworking or replacing the undercut material in rock cuts; hauling; disposal of material not used elsewhere on the project; scarification and compaction; and equipment, labor, materials, tools, and incidentals.

ATTACHMENT 12

FENTER RD RECONSTRUCTION

Furnish and Install HMAC Type C Pavement (Bid Item No. 11)

Measurement shall be by the ton of hot mix asphaltic concrete (HMAC) pavement installed, as determined by measurement along the baseline of the roadway using horizontal stationing and shall not exceed the limits shown on the drawings. Additional asphalt required for the tie in to existing pavement, as per the Pavement Junction detail, shall be subsidiary to this Item. Payment shall be made at the unit price as stated in the bid schedule and will be compensation in full for all necessary materials, equipment and work including tack coat, joint sealant, placement, rolling, repair of base course, clean-up, off-site disposal, equipment, labor, tools and incidentals in accordance with the Construction Drawings and Specifications.

Crushed Aggregate Base Course (Bid Item No. 12)

Measurement and payment are by the square yard for the surface area in the completed and accepted final position. The surface area of the base course is based on the width shown in the plans. The work performed and materials furnished will be paid for at the unit price bid for the types of work described for a depth specified in plans. No additional payment will be made for thickness or width exceeding that shown on the typical section or provided on the plans. This price is full compensation for furnishing materials, temporary stockpiling, assistance provided in stockpile sampling and operations to level stockpiles for measurement, loading, hauling, delivery of materials, spreading, blading, mixing, shaping, placing, compaction, reworking, finishing, correcting locations where thickness is deficient, corrections of soft spots in the subgrade, curing, furnishing and placing prime coat, furnishing scales and labor for weighing and measuring, and equipment, labor, tools and incidentals. Sprinkling and rolling (including proof rolling) will be subsidiary to this Item.

Compacted Select Fill (Bid Item No. 13)

Measurement and payment are by the square yard for the surface area of select fill in the completed and accepted final position. Payment shall be made at the unit price as stated in the bid schedule. The surface area of the select fill is based on the width and depth shown in the plans. The price is full compensation for furnishing embankment; hauling; placing, compacting, finishing, and reworking; surface preparation; repairs; disposal of waste material; cleaning; and equipment, labor, tools, and incidentals. All sprinkling and rolling (including proof rolling) will not be paid directly, but will be considered subsidiary to this Item. Corrections of soft spots (including cement stabilized backfill) in the subgrade will be subsidiary to this Item.

Subgrade preparation (Bid Item No. 14)

Measurement shall be by square yards of area where subgrade preparation is required. Grade the roadway and shape to the typical sections shown in the plans. Scarify existing natural ground or roadbed and compact in accordance with the method shown on the plans. The price is full compensation for furnishing and operating equipment; excavation required to achieve final grades, sprinkling; rolling; hauling; placing, scarification, compacting, finishing, and reworking; surface preparation; repairs; and for labor, materials, tools, and incidentals. All work involved in removing, excavating, and replacing (furnishing approved select fill) or reworking unsuitable or

ATTACHMENT 13

FENTER RD RECONSTRUCTION

unstable material is considered subsidiary to this Item. Corrections of soft spots (including cement stabilized backfill) in the subgrade will be subsidiary to this Item. The work performed under this Item will not include work specified for payment under other Items.

Furnish & Install Header Curb (Bid Item No. 15)

Measurement shall be the actual amount of header concrete curb in linear feet. Payment shall be made at the unit price as stated in the bid schedule and will be compensation in full for excavation or select fill required for placement of header curb, compacting, and preparing subgrade, furnishing and installing the necessary materials, dowels, steel reinforcement, and for all work performed in accordance with the Construction Drawings and Specifications, and shall include all associated items, as detailed, including concrete, forming, curing, re-grading, expansion joints, broom finish, saw cutting, clean up and off-site disposal.

Furnish and Install Reflective Pavement Marking Ty1 for Markings (Bid Item Nos. 16 through 18)

Shall be paid for as linear foot or each as indicated in plans and shall include the full compensation for blast cleaning, mechanical cleaning and/or other cleaning methods; surface preparation; and for application of pavement markings, materials, tools, equipment, labor, traffic control, and incidentals necessary to complete the work. No payment will be made for the elimination of pavement markers or pavement markings when pavement markers or markings are to be removed in conjunction with the elimination of asphalt pavement. This item shall include the proper placement of the Type I pavement markings of the various types, colors, shapes, sizes, widths and thickness specified as per the drawings and specifications. Pavement shall be cleaned of dirt/debris and ready to accept the markings. All costs for this work shall be included in the Contractor's price and shall be complete compensation for complete performance of this work including equipment, materials, labor, tools, incidentals and work in accordance with the Construction Drawings and Specifications.

Furnish & Install Sign, Post, and Assembly (Bid Item No. 19)

Shall be paid for each and shall include the proper and complete installation. Payment shall be made at the unit price as stated in the bid schedule and will be compensation in full for furnishing and installing the necessary materials and incidentals necessary to complete the work, in accordance with the Construction Drawings and Specifications. Sign installation will be compensated in full for furnishing and installing new signs, connections, and hardware, including post and triangular base; street name sign hardware pole caps and cross brackets; foundations (including concrete and rebar); fabrication of sign panels; furnishing bolts, rivets, screws, fasteners, clamps, brackets, and sign support connections; preparing and cleaning signs; galvanizing; and equipment, materials, labor, tools, incidentals required to complete the work in accordance with the Construction Drawings and Specifications. Two back-to-back chevron signs (W1-8R and W1-8L) will be installed per one sign post. This assembly will be measured as one sign post assembly.

ATTACHMENT 14

FENTER RD RECONSTRUCTION

Furnish & Install Object Marker (Bid Item No. 20)

Installation will be measured by each bidirectional object marker assembly installed. The price is full compensation for furnishing and fabricating when required, and installing and mounting the object marker assemblies including posts, adhesive or pads for surface mount assemblies, back plates, reflector units, fastening plates, brackets, bolts, nuts, and washers; and materials, equipment, labor, tools, and incidentals.

Flowable Backfill (Bid Item No. 21)

Measurement and payment are by the square yard for the surface area in the completed and accepted final position. The surface area of the flowable backfill is based on the width shown in the plans. The work performed and materials furnished will be paid for at the unit price bid for the type of work described for a depth specified in plans. No additional payment will be made for thickness or width exceeding that shown on the typical section or provided on the plans. This price is full compensation for furnishing materials, loading, hauling, delivery of materials, shaping, placing, compaction, reworking, finishing, correcting locations where thickness is deficient, and equipment, labor, tools and incidentals. This Item shall be used to pay for the flowable backfill proposed for the pavement structure above the Salitral Lateral. Cement stabilized backfill used for subgrade correction shall be subsidiary to Items 13 and 14.

Adjust Manhole (Bid Item No. 22)

Measurement shall be by each manhole adjusted. The price is full compensation for any coordination with utility company, adjustments, concrete collars, ring adjustments, new rings (if necessary), materials, fittings, including backfill as required, and for excavation, tools, material, equipment, labor, incidentals and for all work performed in accordance with the Construction Drawings and Specifications.

Base Bid 1 Alternate 1 Items

Mobilization & Bonds- Alternate Bid (Bid Item No. A1)

Shall include all costs for Contractor's mobilization and demobilization, insurance and bond, construction permits and fees, site administration expenses, temporary utilities, coordinating with owners of affected properties, and coordinating with Town's testing lab. Any demolition not covered under the demolition items is also subsidiary to this Item. This item shall also include all costs for contract closeout, site clean-up, and all costs associated with Contractor's demobilization from the site. This item shall also include a video recording of the existing conditions before construction and a video recording of the site after the completion of all work. Payment for mobilization and demobilization shall be on a Lump Sum basis as noted in the Bid Schedule. Mobilization/Demobilization shall not exceed 5% of the total of the below Item A2.

Stone Common Dry (4" to 6") (Bid Item No. A2)

This Item will be measured by the cubic yard of material complete in place. Volume will be computed on the basis of the measured area in place and the thickness shown on the plans. This price is full compensation for furnishing, hauling, and placing the stones and for filter fabric, scales, test weights, equipment, labor, tools, and incidentals. Payment for all necessary excavation required for stone placement as specified in the plans, and for shaping of slopes will be included in the unit price of this Item.

ATTACHMENT 15

FENTER RD RECONSTRUCTION

A. Street Construction:

1. Field Densities:

- | | | |
|----|------------------|------------------------|
| a. | Subgrade* | 1 density per 150 l.f. |
| b. | Fill* | 1 density per 200 l.f. |
| c. | Base Course | 1 density per 200 l.f. |
| d. | Asphalt Pavement | 1 density per 150 l.f. |

*Field density tests and corresponding moisture content determination shall be made for each layer of compacted fill. If any areas of doubtful compaction appear, additional tests may be required.

One moisture-density curve should be obtained for each type of material used in accordance with ASTM D-1557, and one sieve analysis and one plasticity index for each type of material used, according to ASTM C-136, and D-4318.

2. Concrete:

- 1 set (four specimens) per each 50 cy
- Slump tests shall be made every time test cylinders are made in accordance with ASTM C 143 and reported by the testing laboratory.

3. Asphalt Pavement:

- 1 gradation, extraction and set of briquettes per 500 feet of roadway (minimum of 1 per traffic lane poured); and in-place density of asphalt every 150 feet of roadway or as recommended by the Materials Testing Engineer representing the Testing Laboratory.

ATTACHMENT 16

FENTER RD RECONSTRUCTION

SECTION 03 40 00 - BACKFILL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Specification Sections, apply to work of this section.

1.2 DESCRIPTION OF WORK

Backfill shall be used in this project for the following:

- A. Flowable Backfill shall be used for the proposed pavement section above the Salitral Lateral.
- B. Cement Stabilized Backfill shall be used in subgrade areas where pumping occurs.

1.3 SUBMITTALS

Material Certificates: Provide copies of materials certificates, signed by material producer and Contractor, certifying that each material item complies with, or exceeds specified requirements.

1.4 MATERIALS & CONSTRUCTION

1.4A Flowable Backfill - Where flowable backfill is shown on the Drawings, it shall consist of a mixture of soil or sand and 2 sacks of Portland cement per cubic yard. Use a sandy material, free from lumps, clods or organic material. Mix backfill in a concrete mixer or transit mixer.

1.4B Cement Stabilized Backfill - Where cement stabilized backfill is shown on the Drawings or required for pavement structure stabilization, it shall consist of a mixture of soil (select fill) or sand and 2 sacks of Portland cement per cubic yard. Use a sandy material, free from lumps, clods or organic material. Mix cement stabilized backfill in-situ.

END OF SECTION

ATTACHMENT 17

FENTER RD RECONSTRUCTION

SECTION 33 05 13 - ADJUSTMENTS OF MANHOLES, VALVES, & WATER METERS

PART 1 – GENERAL

- 1.1 This item shall govern for the furnishing of materials and for adjusting manholes, valves, and water meters where required by the plans. Manholes, valves and water meters shall be adjusted to elevations shown on the Fenter Rd Reconstruction engineering plans or as ordered by the Engineer and in accordance with these specifications and the Lower Valley District standard details. This item also includes the construction of concrete collars, which shall be built as per the Lower Valley District standard details.

PART 2 – MATERIALS AND EQUIPEMENT

- 2.1 Manholes, water meter boxes/manholes, valve boxes/manholes, rings, frames, and covers and brick in good condition that were removed may be reused.

PART 3 – EXECUTION

- 3.1 Construction. Manholes rings or valve boxes, covers and frames shall be removed carefully and the contact areas shall be cleaned of all mortar and grease. Rings, covers, and frames broken in the process of removal and cleaning shall be replaced in kind, by the Contractor, at the Contractor's expense.
- 3.2 The adjustment involves lowering the top of the manhole. A sufficient depth of concrete or brick courses shall be removed to permit reconstruction on a batter not exceeding 1 inch horizontal to 2 inches vertical. In the case of brickwork, the mortar shall be cleaned from the top course of brick remaining in place and from all brick to be re-used and the manhole rebuilt to the original top dimensions. The manhole ring, frame and cover shall then be installed with the top conforming to the proposed new surface of street or parkway.
- 3.3 Salvage and reuse existing valve box.

Remove and replace ductile iron riser pipe with suitable length for depth of cover required to establish the adjusted elevation to accommodate actual finish grade.

Reinstall in-kind adjustable valve box and riser piping plumbed in vertical position.

After valve box has been set, aligned, adjust so that the top lid is level with final grade.

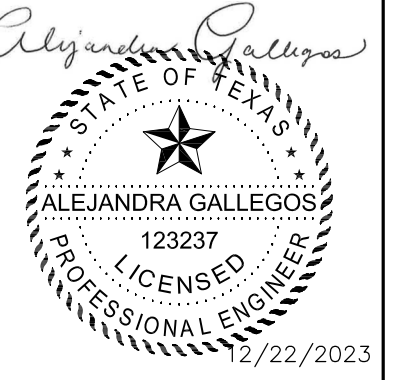
ATTACHMENT 18

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT AND BECOME FAMILIAR WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.
2. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VEHICLE AND PEDESTRIAN ACCESS AT ALL TIMES, INCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, TO AREA RESIDENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, DRIVEWAYS, STREETS, PARKING, AND WALKWAYS. THIS REQUIREMENT WILL BE FULFILLED AT NO EXTRA COST TO THE OWNER.
3. CONTRACTOR MUST WATER CONSTRUCTION AREA A MINIMUM OF TWICE A DAY TO KEEP DUST TO A MINIMUM, ONCE IN THE MORNING AND BEFORE QUITTING TIME OR AS REQUIRED. THIS SHALL ALSO BE DONE DURING WEEKENDS AND HOLIDAYS.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM THE WORK SO AS TO ASSURE PROPER PASSAGE OF STORM RUNOFF DURING THE COURSE OF THE OPERATIONS. ALL LABOR, TOOLS, EQUIPMENT, AND SUPERVISION REQUIRED TO ASSURE SUCH PROPER PASSAGE OF RUNOFF WATER AND ANY REMOVAL OR HANDLING OF WATER IN ORDER TO MAINTAIN DRY CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE USER, ALL UTILITIES, AND ALL OTHER AGENCIES WITH JURISDICTION OVER THE PROJECT.
6. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF NEW CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. THE OWNER WILL FURNISH HORIZONTAL AND VERTICAL CONTROL REFERENCE POINTS ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. ANY DISCREPANCIES FOUND SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER, OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
8. RIGHT OF WAY LINES SHOWN HEREON ARE INTENDED TO BE A GRAPHICAL REPRESENTATION AND SERVE FOR INFORMATIONAL PURPOSES ONLY. NO WARRANTIES ARE MADE BY THE SURVEYOR AS TO ITS ACCURACY.
9. ALL ELEVATIONS ARE BASED ON NAVD 88. SEE REFERENCED BENCHMARK IN PLANS.
10. VIBRATORY ROLLERS WILL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY ENGINEER. COMPACTION ROLLERS WILL NOT BE PERMITTED OVER CLASS IV STORM DRAIN PIPE.
11. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THE PROJECT.
12. MATERIAL TESTING COORDINATION AND COSTS SHALL BE THE RESPONSIBILITY OF THE OWNER. HOWEVER, THE COSTS OF SAMPLING AND TESTING OF MATERIALS FAILING TO CONFORM TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
13. ALL WORK SHALL CONFORM TO THE TOWN OF CLINT, TEXAS SUBDIVISION ORDINANCE, LATEST EDITION, THE TEXAS ACCESSIBILITY STANDARDS AND ADA REQUIREMENTS. ANY CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS AND THE ORDINANCE, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND OWNER TO DETERMINE WHICH CONTROLS.
14. ANY EXISTING TOWN MONUMENT DISTURBED BY THE CONTRACTOR SHALL BE REPLACED TO THE TOWN STANDARDS BY CONTRACTOR AND CERTIFIED BY A REGISTERED SURVEYOR AT NO COST TO THE TOWN. THE CONTRACTOR'S SURVEYOR SHALL FURNISH A CERTIFIED ELEVATION AND LOCATION FOR EACH REPLACED MONUMENT.
15. ALL EXISTING UTILITY LINES CURRENTLY IN SERVICE MUST REMAIN IN SERVICE THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITY LINES (INCLUDING SERVICES) FROM DAMAGE AS A RESULT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE ALL UNDERGROUND UTILITY LINES AT NO EXTRA COST TO THE OWNER WHEN LINES ARE DISTURBED AS A RESULT OF THE WORK.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER INDICATED ON THE DRAWINGS OR NOT, TO VERIFY THE LOCATION, DEPTH, AND CONDITION OF ALL EXISTING UTILITIES AND SUBSTRUCTURES AND PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES AND CONDUCT ALL NECESSARY FIELD INVESTIGATIONS/POTHOLING PRIOR TO ANY EXCAVATION. IF DAMAGE OCCURS, THE CONTRACTOR SHALL IMMEDIATELY CORRECT OR REPLACE EXISTING STRUCTURES OR FACILITIES THAT ARE DAMAGED IN ANY WAY AS A RESULT OF HIS OPERATIONS. THE CONTRACTOR SHALL NOT CUT, REMOVE, CHANGE, OR DISTURB ANY EXISTING LINES OR STRUCTURES, EXCEPT AS PROVIDED BY THE PLANS AND THE SPECIFICATIONS, WITHOUT THE EXPRESS PERMISSION OF THE OWNER OF ANY SUCH LINE.
17. THE CONTRACTOR SHALL PROVIDE THE UTILITY OWNER WITH REASONABLE ADVANCE NOTICE TO PERFORM THE REQUIRED ADJUSTMENTS AND RELOCATIONS. THE CONTRACTOR SHALL INFORM TEXAS GAS OF REQUIRED UTILITY ADJUSTMENTS OR RELOCATIONS AT LEAST THIRTY DAYS IN ADVANCE OF PLANNED CONSTRUCTION.
18. CONTRACTOR SHALL PLACE EROSION CONTROL MEASURES AS SHOWN IN PLANS.
19. CONTRACTOR MAY RE-USE SEDIMENT/EROSION CONTROLS.
20. CONTRACTOR SHALL COORDINATE WITH EL PASO ELECTRIC AT LEAST TWO WEEKS IN ADVANCE OF PLANNED CONSTRUCTION NEAR POWER POLES TO BE ADJUSTED OR REPLACED.
21. PROPOSED SIGNING AND STRIPING SHALL CONFORM TO TXDOT STANDARDS AND TXDOT SPECIFICATION ITEMS 666, 644, AND 658.

GRADING SPECIFICATIONS

1. CLEARING AND GRUBBING: CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION; COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS PROTRUDING THROUGH GROUND SURFACE; FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY FILL MATERIAL, UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED; REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. BURNING IS NOT PERMITTED ON OWNER'S PROPERTY. REMOVE WASTE MATERIALS FROM OWNER'S PROPERTY AND DISPOSE OF IT IN PROPER LOCATION.
2. ALL EXISTING PAVEMENT SHALL BE COMPLETELY REMOVED AND DISPOSED OFF-SITE. DEMOLITION DEBRIS SHALL BE REMOVED AND DISPOSED OFF-SITE AS PER LOCAL REGULATIONS.
4. HMAC MATERIAL SHOULD CONFORM TO TYPE C, IN ACCORDANCE WITH THE SPECIFICATIONS. THE HMAC MIX SHOULD HAVE A MINIMUM 1,500 POUNDS OF MARSHALL STABILITY WHEN COMPACTED AT 75 BLOWS IN ACCORDANCE WITH ASTM D-1559, AND SHOULD HAVE A FLOW BETWEEN 8 AND 16. THE HMAC COURSE SHOULD BE PLACED AT A TARGET DENSITY OF AT LEAST 98 PERCENT.
5. THE CRUSHED STONE BASE COURSE (CSBC) SHOULD BE ITEM 247, TYPE A, GRADE 3 IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES. CSBC MATERIALS SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 6 INCHES IN COMPACTED THICKNESS, AND COMPACTED TO 100 PERCENT OF MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN PLUS OR MINUS 2 PERCENT, IN ACCORDANCE WITH ASTM D-1557.
6. SATISFACTORY FILL MATERIALS: SELECT FILL MATERIAL SHOULD BE GRANULAR, COHESIONLESS, AND FREE OF DELETERIOUS MATERIAL AND PARTICLES OVER 4 INCHES IN GREATEST DIMENSION. SOILS PROPOSED FOR USE AS FILL MATERIALS SHOULD BE CLASSIFIED IN ACCORDANCE WITH ASTM D-2487. THE FOLLOWING SOILS CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) CAN BE CONSIDERED SATISFACTORY FOR USE AS SELECT FILL: GM, GC, GW-GM, GW-GC, GP, GP-GM AND GP-GC, SM, SC, SW-SM, SW-SC, SP-SM, SW-SC AND SC-SM.
7. UNSATISFACTORY FILL MATERIAL: THE FOLLOWING USCS-CLASSIFIED SOILS ARE NOT CONSIDERED SATISFACTORY FOR USE AS SELECT FILL: CH, CL, MH, ML, OH, OL AND PT, OR SOILS THAT EXCEED A LIQUID LIMIT OF 40 AND A PLASTICITY INDEX OF 15.
8. EXCAVATION: IS UNCLASSIFIED AND INCLUDES EXCAVATION TO ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIAL AND OBSTRUCTIONS ENCOUNTERED.
9. SELECT FILL SHOULD BE PLACED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES IN COMPACTED THICKNESS, MOISTURE-CONDITIONED TO ADD THE AMOUNT OF MOISTURE REQUIRED FOR OPTIMUM COMPACTION AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR) PROCEDURES. THE MOISTURE CONTENT SHOULD BE AT PLUS OR MINUS 3 PERCENT OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557. THIS COMPACTION REQUIREMENT ALSO APPLIES TO THE SUBGRADE SOILS THAT WILL RECEIVE SELECT FILL. HOWEVER, IF THE SUBGRADE SOILS CONSIST OF COHESIVE SOILS SUCH AS CL OR CH, OR IF THE PLASTICITY INDEX EXCEEDS 18, THE SUBGRADE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT. COMPACTION OF THE FILL MATERIAL AND SUBGRADE SOILS SHOULD BE CONDUCTED WITH APPROVED TYPES OF PNEUMATIC, POWER OR TAMPING EQUIPMENT. DETERMINATION OF DENSITY IN THE FIELD SHOULD BE CONDUCTED IN ACCORDANCE WITH ASTM D-2922 OR D-1556.
10. ONCE THE ELEVATION OF THE NATIVE SUBGRADE HAS BEEN ESTABLISHED, THE NATIVE SUBGRADE SOILS THAT WILL SUPPORT PREPARED SELECT FILL, BASE COURSE AND THE PAVEMENT STRUCTURE SHOULD BE STRIPPED OF ALL EXISTING PAVEMENT MATERIALS, VEGETATION, ORGANIC MATTER, TOPSOIL, AND/OR FOREIGN MATTER. THE EXPOSED SUBGRADES SHOULD BE THOROUGHLY PROOFROLLED IN ORDER TO LOCATE AND DENSIFY ANY WEAK, COMPRESSIBLE ZONES. A MINIMUM OF 5 PASSES OF A FULLY-LOADED DUMP TRUCK OR CONSTRUCTION EQUIPMENT WITH SIMILAR AXLE LOADS SHOULD BE USED FOR EVALUATION PURPOSES. WEAK OR SOFT AREAS IDENTIFIED DURING PROOFROLLING SHOULD BE SCARIFIED AND RECOMPACTED OR REMOVED AND REPLACED WITH A SUITABLE, COMPACTED SELECT FILL. THESE WEAK OR SOFT SOIL ZONES (I.E., PUMPING AREAS) SHOULD BE RECOMPACTED OR REMOVED TO A MINIMUM DEPTH OF 8-INCHES OR AS REQUIRED TO APPROXIMATELY BRIDGE OVER THESE ZONES.
11. RECOMPACTED NON-COHESIVE SUBGRADE SOILS (I.E., SILTY SANDS OR POORLY GRADED SANDS) SHOULD BE MOISTURE CONDITIONED BY SCARIFYING TO A MINIMUM DEPTH OF 8-INCHES AND SHOULD BE RECOMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT ±3 % OF OPTIMUM MOISTURE AS DETERMINED BY ASTM D 1557. THE MOISTURE CONTENT OF THE SUBGRADE SHOULD BE MAINTAINED UNTIL PERMANENTLY COVERED.
12. IF PUMPING CONTINUES AFTER RECOMPACTING OR REMOVING THE SOIL IN WEAK OR SOFT AREAS AS DESCRIBED IN NOTE 10, THE CONTRACTOR SHALL REPLACE THE SATURATED MATERIAL WITH CEMENT STABILIZED BACKFILL AS PER SPECIFICATION 03 40 00, 1.4B. THIS SHALL BE SUBSIDIARY TO ITEM 13 COMPACTED SELECT FILL AND ITEM 14 SUBGRADE PREPARATION.
13. QUALITY CONTROL: FIELD DENSITY TESTS SHALL BE MADE BY GEOTECHNICAL ENGINEER AS SPECIFIED IN THE SPECIFICATIONS. DENSITY TESTS SHALL BE TAKEN IN THE COMPACTED MATERIAL BELOW THE DISTURBED SURFACE. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED UNTIL THE REQUIRED DENSITY HAS BEEN OBTAINED.
14. REFER TO SPECS FOR MATERIAL TESTING.
15. AFTER A COMPACTED LAYER PASSES THE DENSITY TEST, THE PLACEMENT OF THE NEXT LAYER SHALL BE DONE AS SOON AS POSSIBLE, BUT NOT EXCEED TWO CALENDAR DAYS. IF THERE IS RAIN AFTER A LAYER IS COMPACTED AND ITS DENSITY APPROVED, IT SHALL BE ALLOWED TO DRY BEFORE DENSITY TESTING IS CONDUCTED AGAIN TO VERIFY PROPER COMPACTION.



Huitt-Zollars, Inc.
Firm Registration No. F-761

ADDENDUM NO.	Description	D.D. NO.	Action	Date
1				

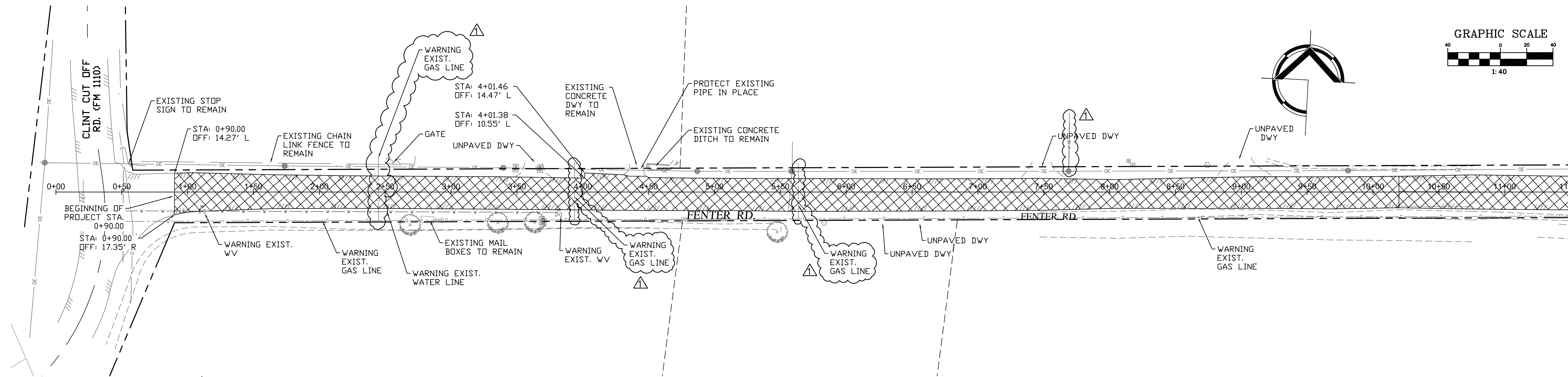
Rev.	Date	Design file no.	Drawing code:
	03-10-2021		
Designed by:	Drawn by:	Checked by:	Reviewed by:
	R. BELTRAN	A. GALLEGOS	R. MEDINA
Lower Valley WATER DISTRICT		TOWN OF CLINT TEXAS	
6102 Coates Park, Suite 101 El Paso, Texas 79912-5802 915.897.4339 www.lvdwater.com		6102 Coates Park, Suite 101 El Paso, Texas 79912-5802 915.897.4339 www.hzclint.com	
HUITT ZOLLARS		HZ	

FENTER RD. RECONSTRUCTION
TOWN OF CLINT, TEXAS

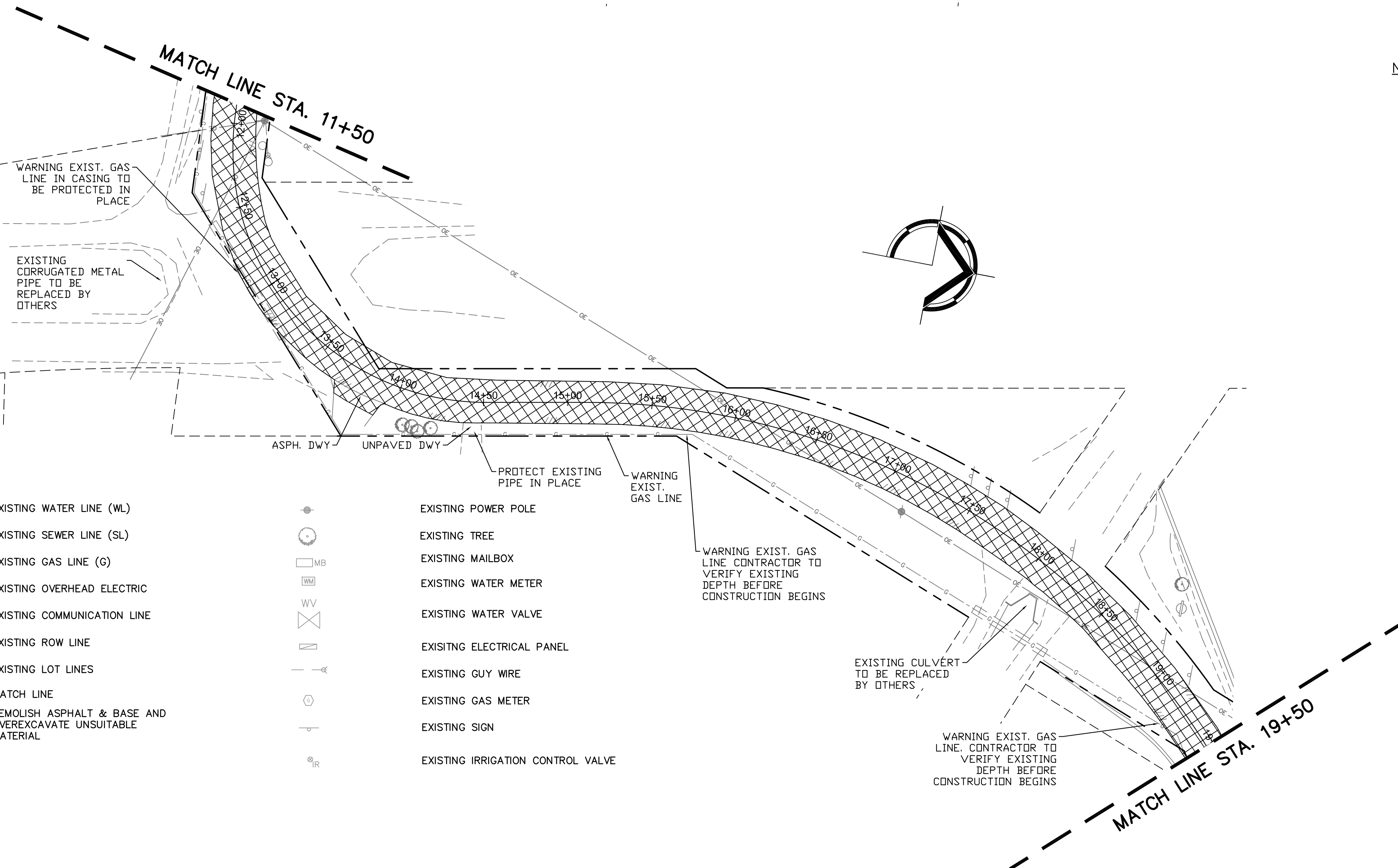
GENERAL NOTES

Sheet reference number:
Sheet 02 of 29

HA:\PROJ\030638\03 - FENTER RD. RECONSTRUCTION TO CADD & BIDDING\1. AUTOCAD SHEETS\02 - EROSION CONTROL - CONSTRUCTION



MATCH LINE STA. 11+50



NOTES:

1. ALL SAWCUTS NECESSARY FOR REMOVAL OF EXISTING MATERIAL WILL BE SUBSIDIARY TO REMOVAL ITEMS.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER INDICATED ON THE DRAWINGS OR NOT, TO VERIFY THE LOCATION, DEPTH, AND CONDITION OF ALL EXISTING UTILITIES AND SUBSTRUCTURES BEFORE CONSTRUCTION BEGINS, AND PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES AND CONDUCT ALL NECESSARY FIELD INVESTIGATIONS/POTHOLING PRIOR TO ANY EXCAVATION.
3. AN ADDITIONAL 2 FOOT LENGTH OF THE ASPHALT LAYER SHALL EXTEND BEYOND THE PAVEMENT RECONSTRUCTION LIMITS AND WILL BE REPLACED AS NOTED IN THE PAVEMENT JUNCTION DETAIL IN THE CIVIL DETAILS SHEET. THIS WORK IS SUBSIDIARY TO THE ASPHALT REMOVAL AND INSTALLATION ITEMS 4 AND 11.
4. THE CONTRACTOR SHALL PROVIDE THE UTILITY OWNER WITH REASONABLE ADVANCE NOTICE TO PERFORM THE REQUIRED ADJUSTMENTS AND RELOCATIONS.
5. THE CONTRACTOR SHALL INFORM TEXAS GAS OF REQUIRED UTILITY ADJUSTMENTS OR RELOCATIONS AT LEAST 30 DAYS IN ADVANCE OF PLANNED CONSTRUCTION.
6. CONTRACTOR TO COORDINATE WITH EL PASO COUNTY WATER IMPROVEMENT DISTRICT NO.1 FOR REMOVAL AND CONSTRUCTION OF CULVERTS AT THE MESA DRAIN AND SALITRAL LATERAL.
7. REFER TO THE SIGNING AND STRIPING SHEETS FOR THE REMOVAL OF SIGNS.
8. CONTRACTOR SHALL COORDINATE WITH EL PASO ELECTRIC AT LEAST TWO WEEKS IN ADVANCE OF PLANNED CONSTRUCTION NEAR POWER POLES TO BE ADJUSTED OR REPLACED.
9. WATER AND SEWER LINES INSTALLED IN 2023 BY LVWD ARE NOT REFLECTED IN THIS SHEET OR ENGINEERING PLANS.

LEGEND:

— W — W —	EXISTING WATER LINE (WL)	●	EXISTING POWER POLE
— S — S —	EXISTING SEWER LINE (SL)	○	EXISTING TREE
— G — G —	EXISTING GAS LINE (G)	□ MB	EXISTING MAILBOX
— OE — OE —	EXISTING OVERHEAD ELECTRIC	WM	EXISTING WATER METER
— UT — UT —	EXISTING COMMUNICATION LINE	WV	EXISTING WATER VALVE
---	EXISTING ROW LINE	□	EXISTING ELECTRICAL PANEL
---	EXISTING LOT LINES	—	EXISTING GUY WIRE
---	MATCH LINE	○	EXISTING GAS METER
---	DEMOLISH ASPHALT & BASE AND OVEREXCAVATE UNSUITABLE MATERIAL	—	EXISTING SIGN
		○ IR	EXISTING IRRIGATION CONTROL VALVE

**WARNING !
BEFORE YOU DIG**

CONTRACTOR SHALL
FIELD LOCATE ALL EXISTING
UNDERGROUND IMPROVEMENTS
IN PROJECT AREA

UTILITY LOCATOR SERVICES

TOWN OF CLINT MAIN OFFICE	1-915-851-3146
LOWER VALLEY WATER DISTRICT	1-915-791-4480
TEXAS GAS SERVICE	1-800-700-2443
EL PASO NATURAL GAS	1-800-334-8047
A T & T	1-800-924-9420
EL PASO ELECTRIC COMPANY	1-800-252-1133
SPECTRUM	1-915-772-1123
TEXAS 811	1-811



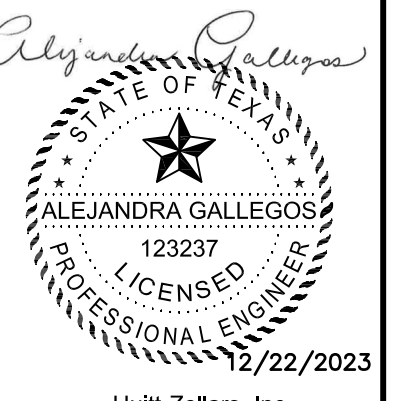
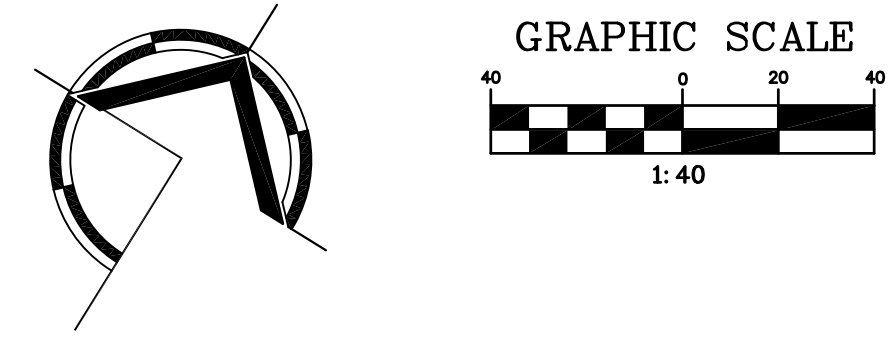
Huitt-Zollars, Inc.
Firm Registration No. F-761

ADDENDUM NO.	Description	P.D. NO.	Action	Date
1				

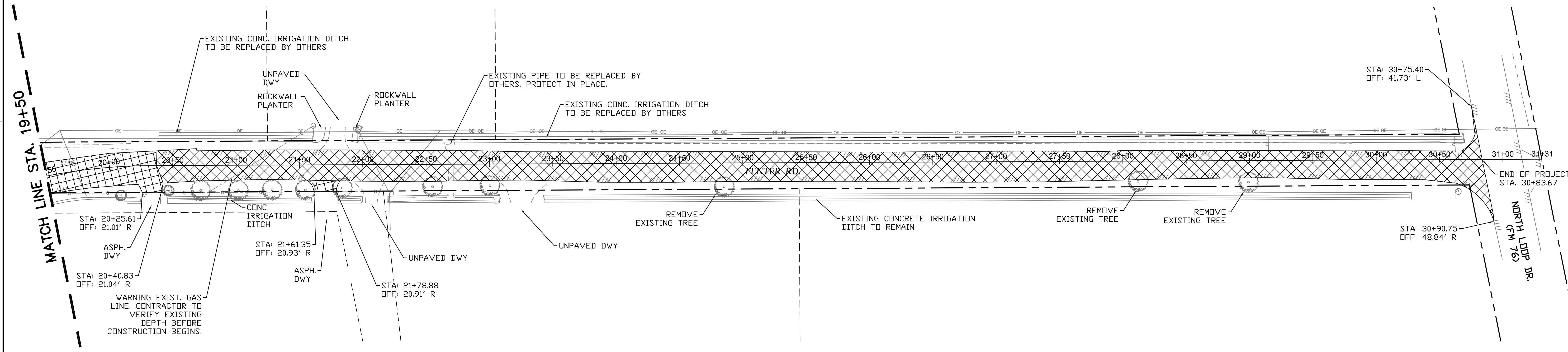
DESIGNED BY: B. BELTRAN	DATE: 03-10-2021	REV.
DRAWN BY: A. GALLEGOS	DESIGN FILE NO.	
REVIEWED BY: R. MEDINA	DRAWING CODE:	
TOWN OF CLINT TEXAS	PROJECT NO.: 123237	DATE: 03-10-2021
LOWER VALLEY WATER DISTRICT	PROJECT NAME: FENTER RD. RECONSTRUCTION	SCALE: 1:1
HUITT ZOLLARS	PROJECT LOCATION: FENTER RD. STA. 0+00 TO STA. 19+50	

FENTER RD. RECONSTRUCTION
TOWN OF CLINT, TEXAS
EXISTING CONDITIONS & DEMOLITION PLAN
STA. 0+00 TO STA. 19+50

HA:PROV/03/2023/03 - FENTER RD. RECONSTRUCTION TO CADD & BUA/10.1 AUTOCAD SHEETS/07 63963303-EXTEND - LONG



Huitt-Zollars, Inc.
Firm Registration No. F-761



ADDENDUM NO.	Description	Work	P.D. NO.	Action	Date
1					

Date: 03-10-2021 Design file no. Drawing code: File name: EL PASO COUNTY - 20210310.dwg Plot scale: 1:1	Designed by: Drawn by: B. BELTRAN Checked by: A. GALLEGOS Reviewed by: R. MEDINA
---	---

LEGEND:

- | | | | |
|-------------|--|-------|-----------------------------------|
| — W — W — | EXISTING WATER LINE (WL) | ● | EXISTING POWER POLE |
| — S — S — | EXISTING SEWER LINE (SL) | ○ | EXISTING TREE |
| — G — G — | EXISTING GAS LINE (G) | □ MB | EXISTING MAILBOX |
| — OE — OE — | EXISTING OVERHEAD ELECTRIC | WM | EXISTING WATER METER |
| — UT — UT — | EXISTING COMMUNICATION LINE | WV | EXISTING WATER VALVE |
| --- | EXISTING ROW LINE | ⊠ | EXISTING ELECTRICAL PANEL |
| --- | EXISTING LOT LINES | — A — | EXISTING GUY WIRE |
| --- | MATCH LINE | ⊙ | EXISTING GAS METER |
| ⊠ | DEMOLISH ASPHALT & BASE AND OVEREXCAVATE UNSUITABLE MATERIAL | — P — | EXISTING SIGN |
| | | ⊙ R | EXISTING IRRIGATION CONTROL VALVE |

NOTES:

- ALL SAWCUTS NECESSARY FOR REMOVAL OF EXISTING MATERIAL WILL BE SUBSIDIARY TO REMOVAL ITEMS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER INDICATED ON THE DRAWINGS OR NOT, TO VERIFY THE LOCATION, DEPTH, AND CONDITION OF ALL EXISTING UTILITIES AND SUBSTRUCTURES BEFORE CONSTRUCTION BEGINS, AND PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES AND CONDUCT ALL NECESSARY FIELD INVESTIGATIONS/POTHOLING PRIOR TO ANY EXCAVATION.
- AN ADDITIONAL 2 FOOT LENGTH OF THE ASPHALT LAYER SHALL EXTEND BEYOND THE PAVEMENT RECONSTRUCTION LIMITS AND WILL BE REPLACED AS NOTED IN THE PAVEMENT JUNCTION DETAIL IN THE CIVIL DETAILS SHEET. THIS WORK IS SUBSIDIARY TO THE ASPHALT REMOVAL AND INSTALLATION ITEMS 4 AND 11.
- THE CONTRACTOR SHALL PROVIDE THE UTILITY OWNER WITH REASONABLE ADVANCE NOTICE TO PERFORM THE REQUIRED ADJUSTMENTS AND RELOCATIONS.
- THE CONTRACTOR SHALL INFORM TEXAS GAS OF REQUIRED UTILITY ADJUSTMENTS OR RELOCATIONS AT LEAST 30 DAYS IN ADVANCE OF PLANNED CONSTRUCTION.
- CONTRACTOR TO COORDINATE WITH EL PASO COUNTY WATER IMPROVEMENT DISTRICT NO.1 FOR REMOVAL AND CONSTRUCTION OF CULVERTS AT THE MESA DRAIN AND SALITRAL LATERAL.
- REFER TO THE SIGNING AND STRIPING SHEETS FOR THE REMOVAL OF SIGNS.
- CONTRACTOR SHALL COORDINATE WITH EL PASO ELECTRIC AT LEAST TWO WEEKS IN ADVANCE OF PLANNED CONSTRUCTION NEAR POWER POLES TO BE ADJUSTED OR REPLACED.
- WATER AND SEWER LINES INSTALLED IN 2023 BY LVWD ARE NOT REFLECTED IN THIS SHEET OR ENGINEERING PLANS.

**WARNING !
BEFORE YOU DIG**

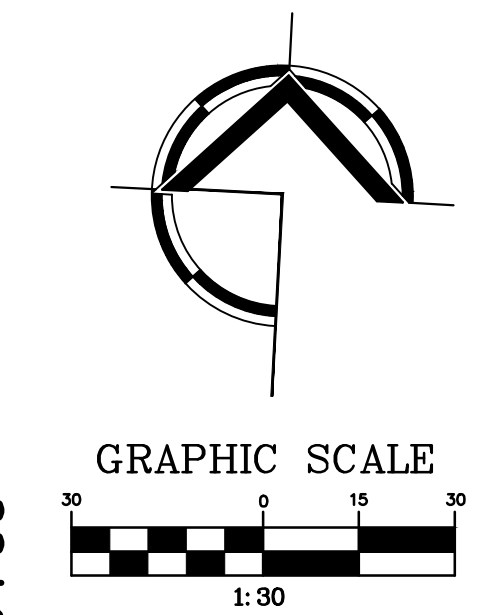
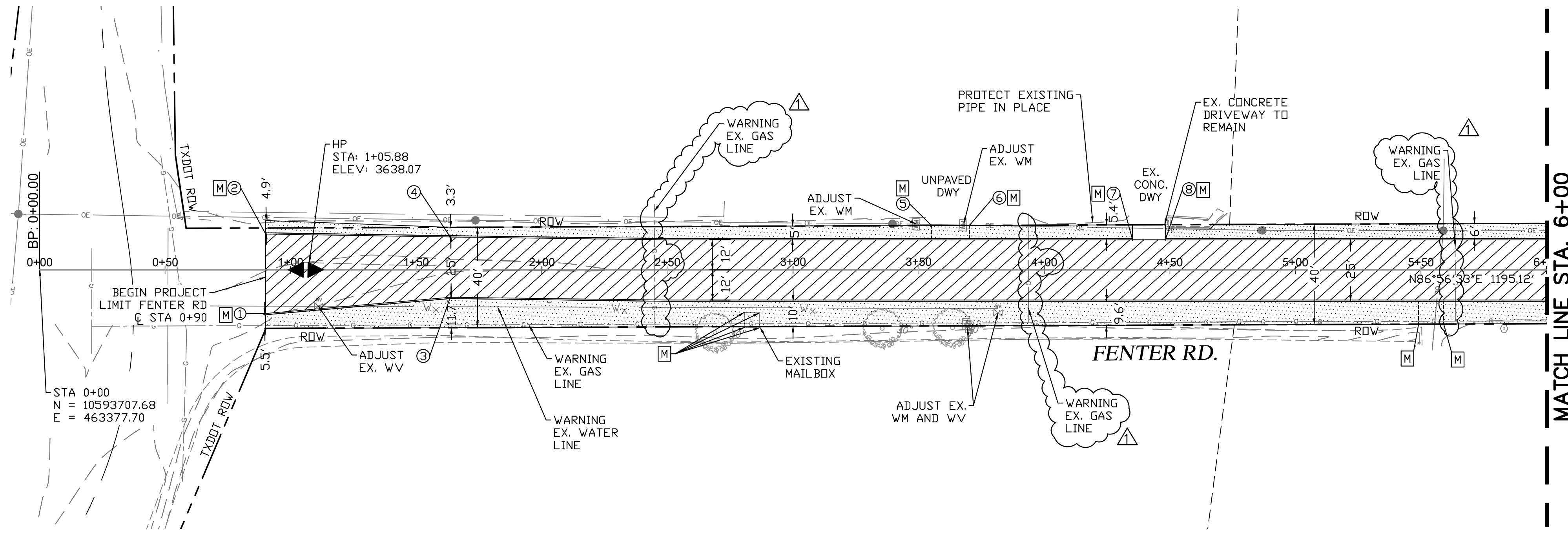
CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UNDERGROUND IMPROVEMENTS IN PROJECT AREA

UTILITY LOCATOR SERVICES

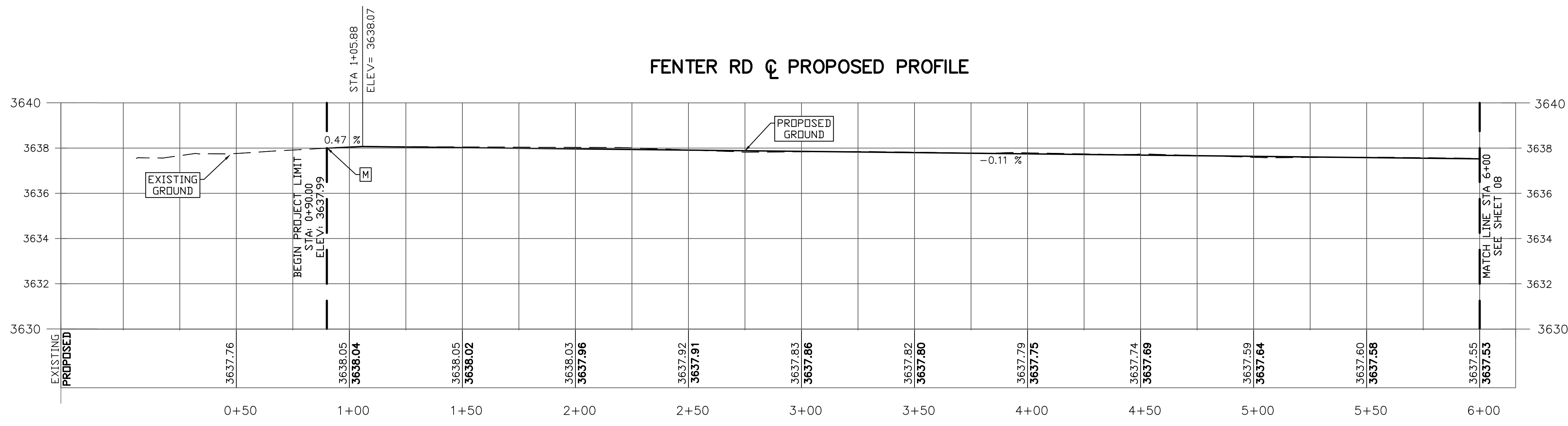
TOWN OF CLINT MAIN OFFICE	1-915-851-3146
LOWER VALLEY WATER DISTRICT	1-915-791-4480
TEXAS GAS SERVICE	1-800-700-2443
EL PASO NATURAL GAS	1-800-334-8047
A T & T	1-800-924-9420
EL PASO ELECTRIC COMPANY	1-800-252-1133
SPECTRUM	1-915-772-1123
TEXAS 811	1-811

FENTER RD. RECONSTRUCTION
 TOWN OF CLINT, TEXAS
 EXISTING CONDITIONS & DEMOLITION PLAN
 STA. 19+50 TO END

Sheet reference number:
 Sheet 06 of 29



- LEGEND:**
- Wx — EXISTING WATER LINE
 - G — EXISTING GAS LINE
 - OE — EXISTING OVERHEAD ELECTRIC
 - UT — EXISTING COMMUNICATION LINE
 - - - - EXISTING ROW LINE
 - - - - EXISTING LOT LINES
 - - - - MATCH LINE
 - [Hatched Box] PROPOSED HEADER CURB
 - [Dotted Box] PROPOSED PAVEMENT
 - [Cross-hatched Box] PROPOSED PARKWAY REGRADE
 - [Diagonal Hatched Box] PROPOSED ASPHALT DRIVEWAY
 - [Dotted Box] PROPOSED UNPAVED DRIVEWAY
 - ▲ HIGH POINT (HP)
 - ▼ LOW POINT (LP)
 - EXISTING POWER POLE
 - EXISTING TREE
 - MB EXISTING MAILBOX
 - ⊗ EXISTING WATER METER (WM)
 - ⊗ EXISTING WATER VALVE (WV)
 - ⊗ EXISTING ELECTRIC PANEL
 - ⊗ EXISTING GAS METER
 - ⊗ EXISTING SIGN
 - ⊗ EXISTING ELECTRIC JUNCTION BOX
 - DWY DRIVEWAY
 - ROW APPROXIMATE RIGHT OF WAY LINE
 - M MATCH EXISTING ELEVATION



POINT TABLE			
POINT #	NORTHING	EASTING	Elevation
1	10593695.16	463468.50	3638.13
2	10593726.73	463466.81	3637.62
3	10593705.52	463541.56	3637.95
4	10593729.50	463540.28	3637.70
5	10593744.27	463731.46	3637.13
6	10593745.13	463746.47	3637.15
7	-	-	M
8	-	-	M

--- EXISTING
 — PROPOSED

HORIZONTAL SCALE : 1" = 30'
 VERTICAL SCALE : 1" = 3'

DESIGN SPEED: 20 MPH

- NOTES:**
- CONTRACTOR SHALL PROVIDE ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
 - REFER TO SHEETS 13 TO 17 FOR CROSS SECTIONS AND DRIVEWAY PROFILES.
 - REFER TO SHEET 24 FOR TYPICAL ROADWAY SECTION.
 - CONTRACTOR TO VERTICALLY ADJUST ALL EXISTING UTILITY MANHOLES AND VALVES TO NEW ROADWAY GRADE.
 - AN ADDITIONAL 2 FOOT OF THE ASPHALT LAYER SHALL EXTEND BEYOND THE PAVEMENT RECONSTRUCTION LIMITS AND WILL BE REPLACED AS NOTED IN THE PAVEMENT JUNCTION DETAIL IN THE CIVIL DETAILS SHEET. THIS WORK IS SUBSIDIARY TO THE ASPHALT REMOVAL AND INSTALLATION ITEMS 4 AND 11.
 - AN EXPANSION JOINT SHALL BE PROVIDED BETWEEN THE EXISTING CONCRETE DRIVEWAY AND THE PROPOSED HEADER CURB. THIS SHALL BE SUBSIDIARY TO ITEM 15.

**WARNING !
BEFORE YOU DIG**

CONTRACTOR SHALL
FIELD LOCATE ALL EXISTING
UNDERGROUND IMPROVEMENTS
IN PROJECT AREA

UTILITY LOCATOR SERVICES

TOWN OF CLINT MAIN OFFICE	1-915-851-3146
LOWER VALLEY WATER DISTRICT	1-915-791-4480
TEXAS GAS SERVICE	1-800-700-2443
EL PASO NATURAL GAS	1-800-334-8047
A T & T	1-800-924-9420
EL PASO ELECTRIC COMPANY	1-800-252-1133
SPECTRUM	1-915-772-1123
TEXAS 811	1-811



Huitt-Zollars, Inc.
 Firm Registration No. F-761

ADDENDUM NO. 1	Description	Date	Action

Designed by:	Drawn by:	Checked by:	Reviewed by:
A. GALLEGOS	L. MEDINA	A. GALLEGOS	R. MEDINA

Date: Rev.:

Design file no.:

Drawing code:

File name: AL_20230912.dwg

Plot name: AL_23_09_12.dwg

Plot scale: 1:1

TOWN OF CLINT TEXAS

LOWER VALLEY WATER DISTRICT

HUITT ZOLLARS

6802 Cross Creek Road, Suite 100
 El Paso, Texas 79912-5802
 915.836.6389
 www.huittzollars.com

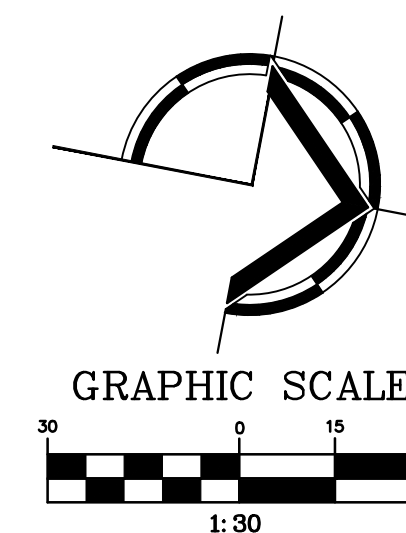
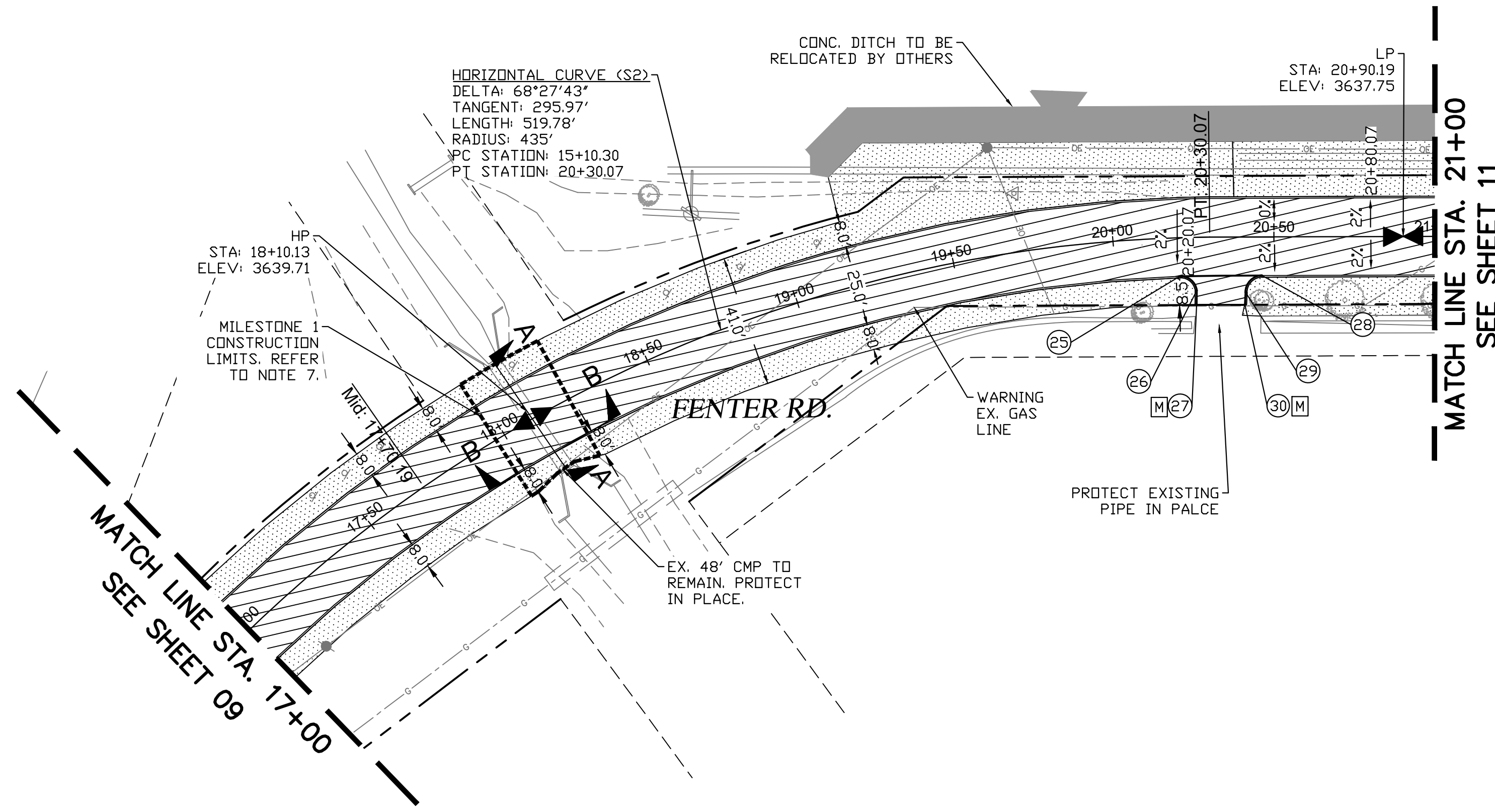
FENTER RD. RECONSTRUCTION
 TOWN OF CLINT, TEXAS

PLAN & PROFILE PLAN
 FROM STA 0+00 TO 6+00

Sheet reference number:
 Sheet 07 of 29

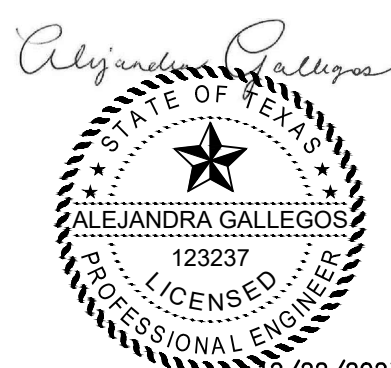
NOTES:

1. CONTRACTOR SHALL PROVIDE ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
2. REFER TO SHEETS 13 TO 17 FOR CROSS SECTIONS AND DRIVEWAY PROFILES.
3. REFER TO SHEET 24 FOR TYPICAL ROADWAY SECTION.
4. CONTRACTOR TO VERTICALLY ADJUST ALL EXISTING UTILITY MANHOLES AND VALVES TO NEW ROADWAY GRADE.
5. AN ADDITIONAL 2 FOOT OF THE ASPHALT LAYER SHALL EXTEND BEYOND THE PAVEMENT RECONSTRUCTION LIMITS AND WILL BE REPLACED AS NOTED IN THE PAVEMENT JUNCTION DETAIL IN THE CIVIL DETAILS SHEET. THIS WORK IS SUBSIDIARY TO THE ASPHALT REMOVAL AND INSTALLATION ITEMS 4 AND 11.
6. AN EXPANSION JOINT SHALL BE PROVIDED BETWEEN THE EXISTING CONCRETE DRIVEWAY AND THE PROPOSED HEADER CURB. THIS SHALL BE SUBSIDIARY TO ITEM 15.
7. CONTRACTOR SHALL BUILD SECTION FROM STA 17+97 TO STA 18+23 BY THE SET DATE FOR MILESTONE 1 IN THE PROJECT FRONT END DOCUMENTS. WORK TO BE COMPLETED BY THIS DATE INCLUDES DEMOLITION, EXCAVATION, PLACEMENT OF FLOWABLE BACKFILL FOR PAVEMENT STRUCTURE AS PER SPECIFICATION SECTION 03 40 00 BACKFILL (1.4A), HEADER CURB AND PARKWAY GRADING. HMAC SHALL BE PLACED WHEN WEATHER IS OPTIMAL AS DESCRIBED IN THE PROJECT SPECIFICATIONS. IF PLACEMENT OF HMAC WILL EXCEED TWO CALENDAR DAYS FROM PLACEMENT OF BASE COURSE, PRIME COAT SHALL BE APPLIED FOR MOISTURE RETENTION AND DENSITY TESTS SHALL BE CONDUCTED AGAIN TO VERIFY PROPER COMPACTION BEFORE ASPHALT PLACEMENT.



LEGEND:

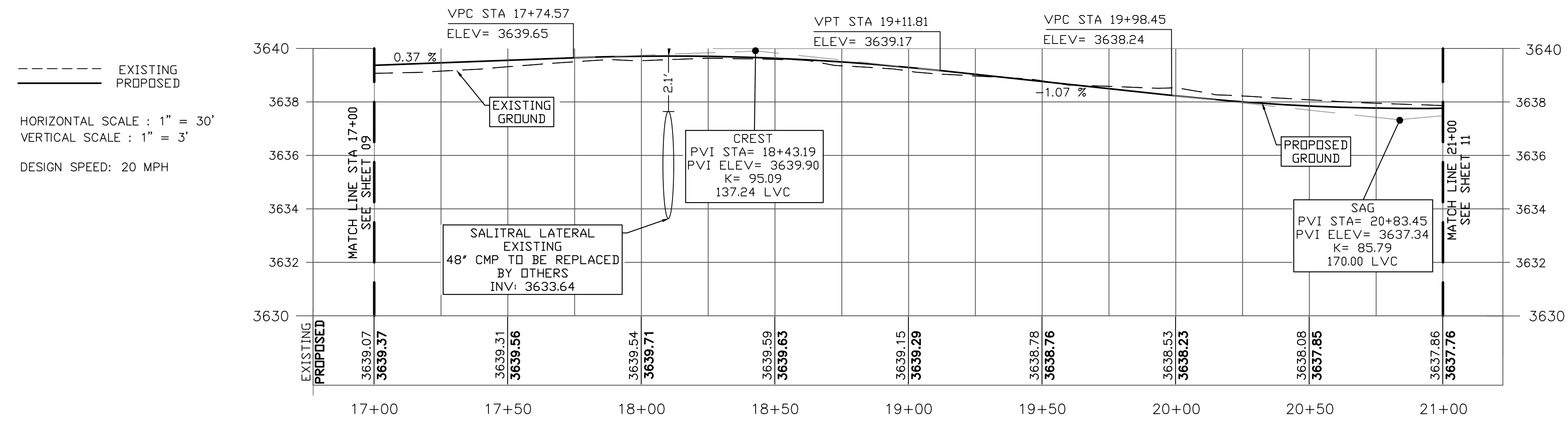
— Wx —	EXISTING WATER LINE
— G —	EXISTING GAS LINE
— OE —	EXISTING OVERHEAD ELECTRIC
— UT —	EXISTING COMMUNICATION LINE
---	EXISTING ROW LINE
- - - -	EXISTING LOT LINES
- - - -	MATCH LINE
[Hatched pattern]	PROPOSED HEADER CURB
[Dotted pattern]	PROPOSED PAVEMENT
[Cross-hatched pattern]	PROPOSED PARKWAY REGRADE
[Diagonal hatched pattern]	PROPOSED ASPHALT DRIVEWAY
[Stippled pattern]	PROPOSED UNPAVED DRIVEWAY
▲	HIGH POINT (HP)
▼	LOW POINT (LP)
●	EXISTING POWER POLE
○	EXISTING TREE
□ MB	EXISTING MAILBOX
■ WM	EXISTING WATER METER (WM)
⊗	EXISTING WATER VALVE (WV)
⊞	EXISTING ELECTRIC PANEL
⊙	EXISTING GAS METER
⊚	EXISTING SIGN
⊠	EXISTING ELECTRIC JUNCTION BOX
DWY	DRIVEWAY
ROW	APPROXIMATE RIGHT OF WAY LINE
M	MATCH EXISTING ELEVATION



Huitt-Zollars, Inc.
Firm Registration No. F-761

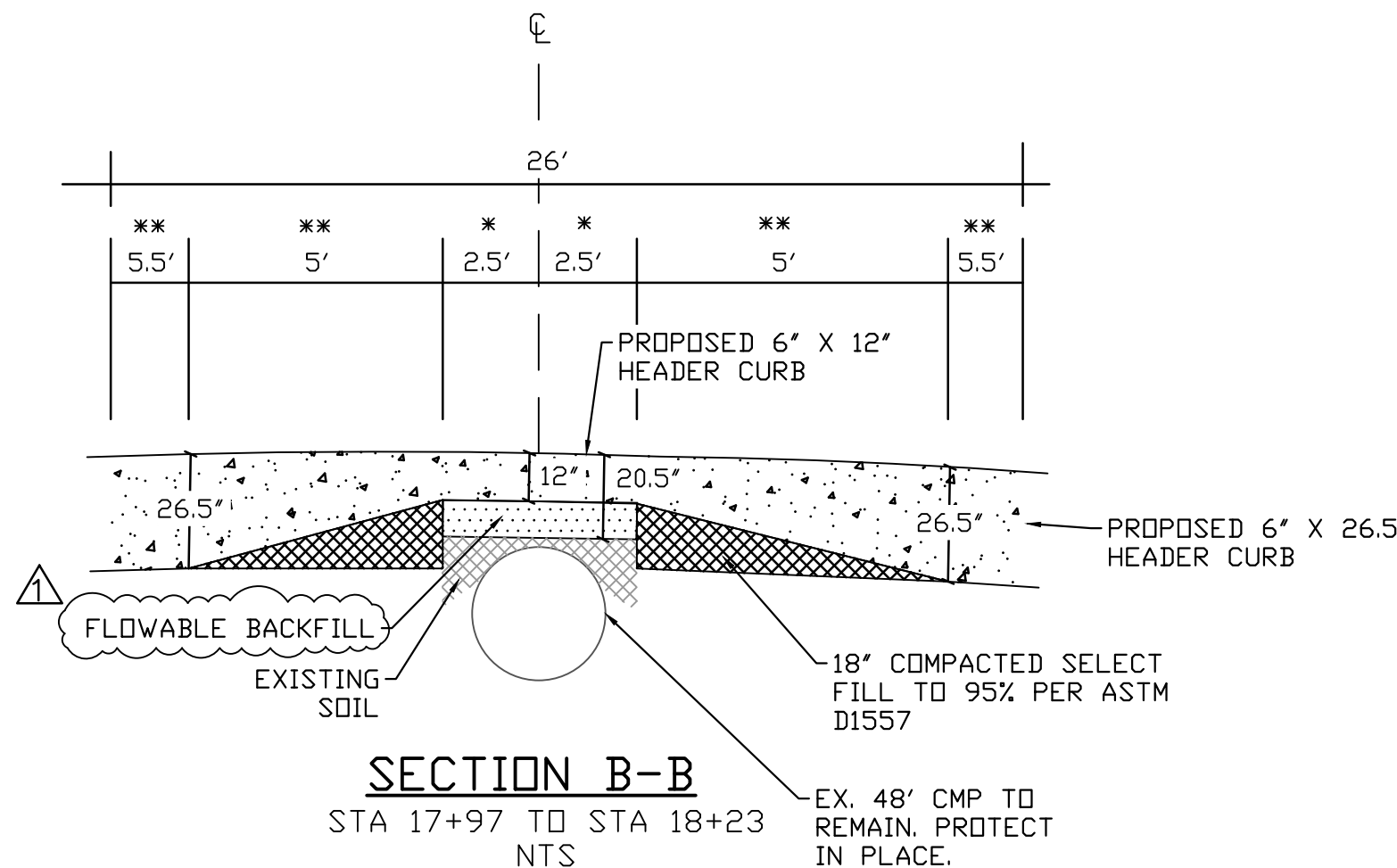
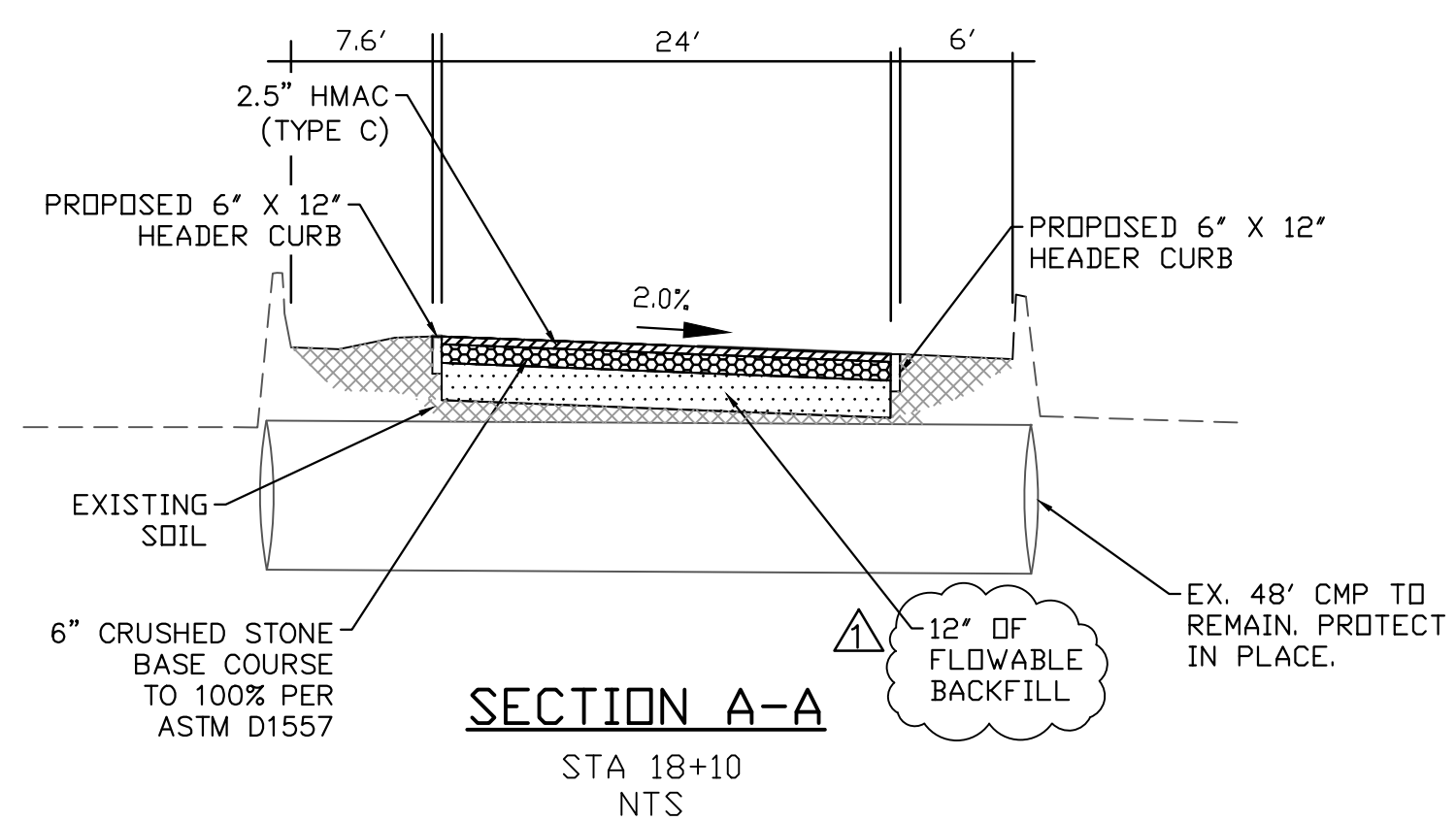
ADDENDUM NO. 1	Date	Work

FENTER RD PROPOSED PROFILE



POINT TABLE

POINT #	NORTHING	EASTING	Elevation
25	10594441.68	464891.52	3637.80
26	10594440.76	464898.39	3637.53
27	10594436.93	464900.70	3637.37
28	10594455.40	464913.07	3637.63
29	10594448.26	464911.51	3637.41
30	10594444.92	464913.39	3637.31



- SECTION NOTES:
- * CONTRACTOR SHALL PLACE 12" OF FLOWABLE BACKFILL BELOW BASE COURSE FOR A TOTAL 5' WIDTH, 2.5' TO EACH SIDE OF THE CULVERT FROM THE CENTERLINE. PAVEMENT STRUCTURE SHALL INCLUDE 2.5" OF HMAC, 6" OF CRUSHED STONE BASE COURSE, AND 12" OF FLOWABLE BACKFILL AS SHOWN IN SECTION A-A IN THIS SHEET. PRIOR TO PLACEMENT OF FLOWABLE BACKFILL, REMOVE LOOSE DEBRIS. DO NOT USE MECHANICAL COMPACTION DEVICES DIRECTLY OVER EXISTING PIPE.
 - ** PAVEMENT STRUCTURE SHALL INCLUDE 2.5" OF HMAC, 6" OF CRUSHED STONE BASE COURSE, 18" OF COMPACTED SELECT FILL, AND 8" OF COMPACTED SUBGRADE AS SHOWN IN THE CIVIL DETAILS SHEET.

WARNING ! BEFORE YOU DIG
CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UNDERGROUND IMPROVEMENTS IN PROJECT AREA

UTILITY LOCATOR SERVICES

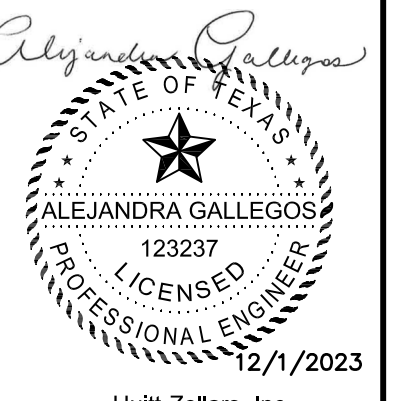
TOWN OF CLINT MAIN OFFICE	1-915-851-3146
LOWER VALLEY WATER DISTRICT	1-915-791-4480
TEXAS GAS SERVICE	1-800-700-2443
EL PASO NATURAL GAS	1-800-334-8047
A T & T	1-800-924-9420
EL PASO ELECTRIC COMPANY	1-800-252-1133
SPECTRUM	1-915-772-1123
TEXAS 811	1-811

DESIGNED BY: TOWN OF CLINT TEXAS
DRAWN BY: A. GALLEGOS
CHECKED BY: R. MEDINA
DATE: 12/22/2023

LOWER VALLEY WATER DISTRICT
HUITT ZOLLARS

FENTER RD. RECONSTRUCTION
TOWN OF CLINT, TEXAS
FENTER RD. WEST SEGMENT
PLAN & PROFILE PLAN
FROM STA 17+00 TO 21+00

Sheet reference number:
Sheet 10 of 29



Huitt-Zollars, Inc.
Firm Registration No. F-761

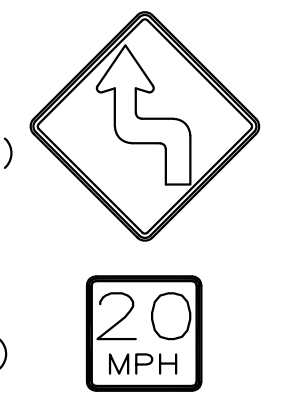
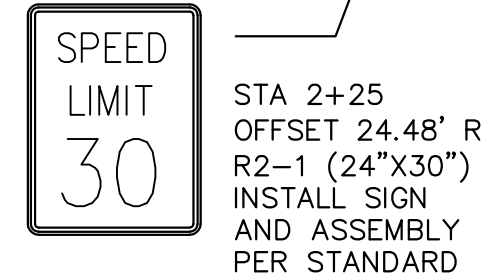
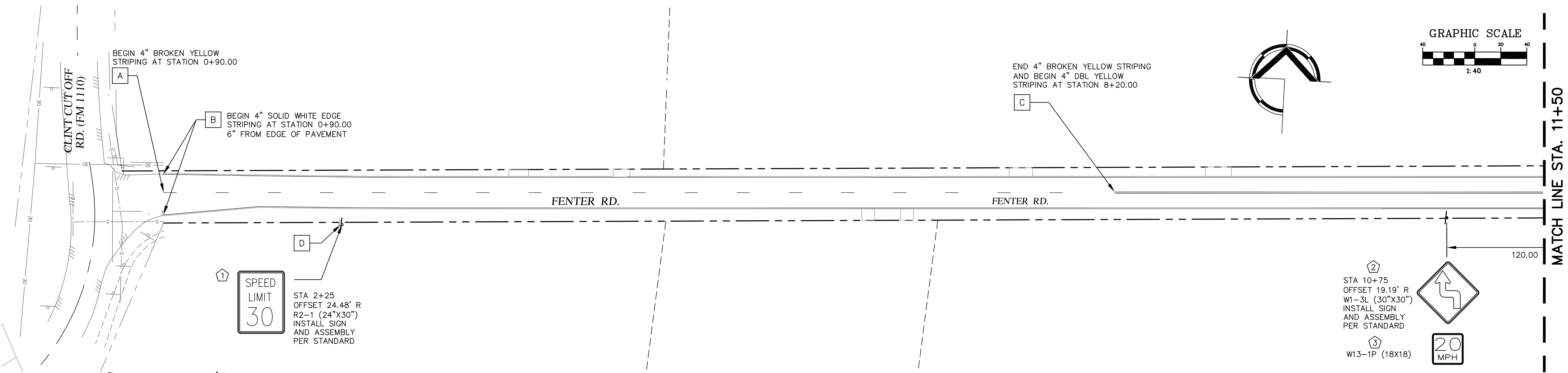
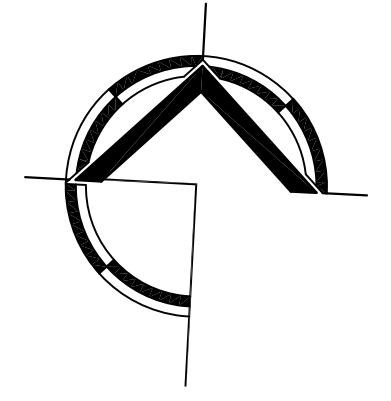
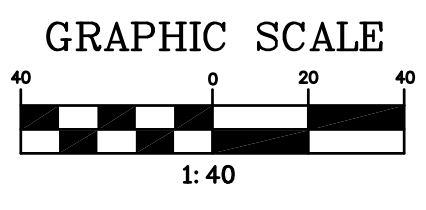
ADDENDUM NO.	Description	P.D. NO.	Date
1			

Date	Rev.	Design file no.	Drawing code	File name	Plot scale
03-10-2021				CLINT 030323-2021.dwg	1:1

Lower Valley WATER DISTRICT
TOWN OF CLINT TEXAS
6502 Coates Park, Suite 101
El Paso, Texas 79912-5822
915.836.4200
www.lvwatertexas.com
HUITT ZOLLARS

FENTER RD. RECONSTRUCTION
 TOWN OF CLINT, TEXAS
 PAVEMENT MARKING & SIGNING PLAN
 STA. 0+00 TO STA. 19+50

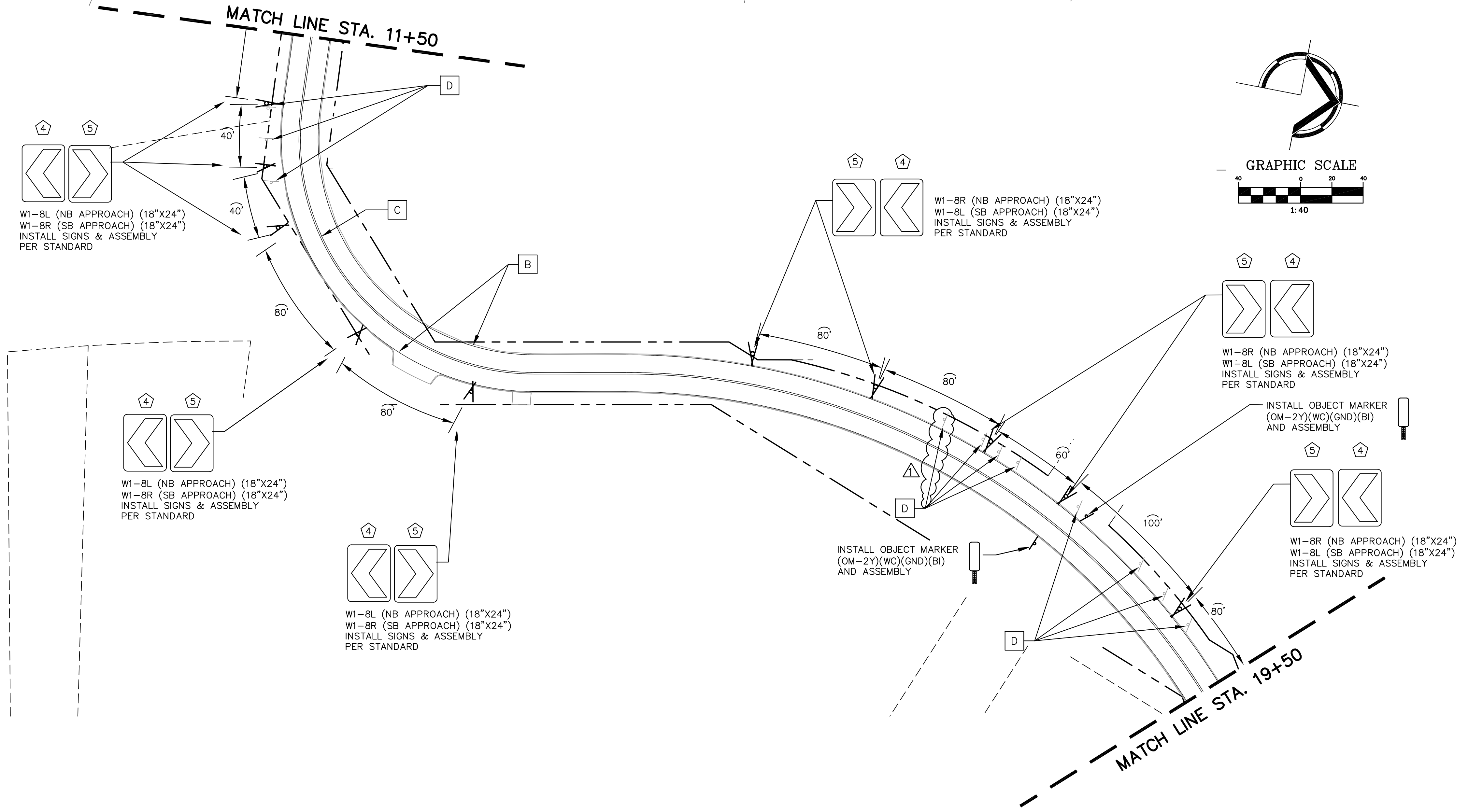
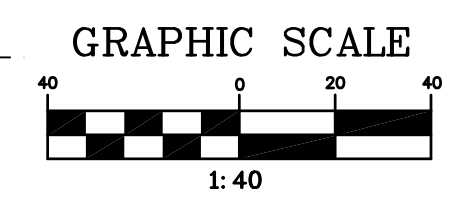
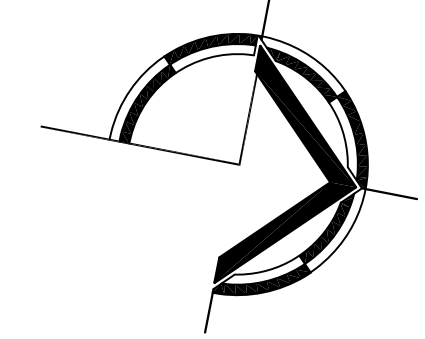
Sheet reference number:
 Sheet 18 of 29



STA 10+75
 OFFSET 19.19' R
 W1-3L (30\"/>

LEGEND:

- Ⓐ REFL PAV MKR TY I (Y) 4" (BRK) (100MIL), 10-1F LINE EXTENSION WITH 30-FT GAPS
- Ⓑ REFL PAV MKR TY I (W) 4" (SLD) (100MIL)
- Ⓒ REFL PAV MKR TY I (Y) 4" (DBL) (SLD) (100MIL)
- Ⓓ REMOVE EXISTING SIGN AND ASSEMBLY
- ⓪ EXISTING SIGN
- Ⓛ PROPOSED SIGN TY 10BWG(1)(SA)(P)



NOTES:

1. ALL EXISTING SIGNAGE TO REMAIN UNLESS OTHERWISE NOTED FOR RELOCATION OR REMOVAL.
2. SIGN LOCATIONS ARE APPROXIMATE AND CAN BE ADJUSTED IN THE FIELD.
3. ALL SIGNS SHALL BE INSTALLED ON BREAKAWAY POSTS (SLIP BASE). REFER TO SIGN POST STANDARDS.
4. REPLACE ALL EXISTING STRIPING THAT IS DISTURBED DURING CONSTRUCTION, UNLESS OTHERWISE INDICATED.
5. PROPOSED PAVEMENT MARKINGS AND SIGNS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND STANDARD HIGHWAY SIGN DESIGNS (SHSD) FOR TEXAS.
6. CHEVRON SIGNS (W1-8) SHALL BE MOUNTED AT A 4' HEIGHT.

WARNING !

BEFORE YOU DIG

CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UNDERGROUND IMPROVEMENTS IN PROJECT AREA

UTILITY LOCATOR SERVICES

TOWN OF CLINT MAIN OFFICE	1-915-851-3146
LOWER VALLEY WATER DISTRICT	1-915-791-4480
TEXAS GAS SERVICE	1-800-700-2443
EL PASO NATURAL GAS	1-800-334-8047
A T & T	1-800-924-9420
EL PASO ELECTRIC COMPANY	1-800-252-1133
SPECTRUM	1-915-772-1123
TEXAS 811	1-811

HA:PROV/03063803 - FENTER RD. RECONSTRUCTION TO CAD & BVA/10.1 AUTOCAD SHEETS/19_03063803-STEP_1.DWG