



N. Mel Waiters Way 24-Inch Water Main Replacement
Solicitation Number: CO-00228
Job No.: 16-4011

ADDENDUM 1
December 21, 2018

To Bidder of Record:

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

RESPONSES TO QUESTIONS

- 1. Question:** Will SAWS increase the number of days from 210 days to 300 days? This is a complex job with very unstable soils, existing utilities, bores, etc.
Response: The number of days for the project has been revised to 255 days. Refer to revised Bid Proposal Signature Page and revised Contract Agreement included with this addendum.
- 2. Question:** What is the anticipated award date?
Response: The anticipated award date is the March 2019 SAWS Board meeting.
- 3. Question:** Is \$2,533,107.80 the correct cost estimate? This appears to be extremely low.
Response: \$2,553,107.90 is the correct opinion of probable construction cost.
- 4. Question:** On the "Statement of Bidder's Experience", Number 3 requires past experience of 500 LF of tunneling or boring 42" casing or larger. Many of the 24" jobs we have built have no bores or a small quantity. Will SAWS change this requirement from 42" steel casing bore to 30" steel casing bore? Will SAWS change the 500 LF required boring to 224 LF which is the longest single bore on the project? This will be much more applicable to what SAWS has required in the past. Example: On November 13, 2018 SAWS bid a project called "Westlakes Offsite Water Extension" that included 2,017 LF of 42" steel casing bores that had single bores up to 900 LF and SAWS did not require any past experience as a prerequisite to bidding and being awarded the project.
Response: Casing size requirement will not be changed for project A-3 in Statement of Bidder Experience. Project A-3 may represent the experience of the Bidder or Bidder's subcontractor. Minimum boring length has been revised – see revision to Statement of Bidder Experience included with this addendum.
- 5. Question:** Under what conditions will bid item 44 "Intermediate Demobilization & Remobilization" be paid?
Response: "Intermediate Demobilization and Remobilization" will be paid as indicated in the Special Provisions to Technical Specifications in the contract documents.
- 6. Question:** The location of this job has very unstable ground conditions. Will SAWS increase the quantity of Flowable Fill to utilize Flowable Fill as a secondary backfill? By increasing this quantity substantially, SAWS personnel along with COSA personnel can elect where to use it at. The quantity and the cost will already be in the contract.
Response: Flowable fill quantities will not be revised.
- 7. Question:** Will SAWS accept multiple previous jobs to meet Number 3 of "Bidders Qualifications" regarding bores?
Response: A single project shall be provided to meet the requirement for project A-3 in the Statement of Bidder Experience. Refer to revised Statement of Bidder Experience included with this addendum.

- 8. Question:** For the bore pits that are on the street, since these are 40ft long and about 15ft wide, it is almost impossible to compact these trenches back since there are utilities nearby and will collapse. Can the engineer provide additional flowable to backfill these trenches?
Response: Contractor is responsible for determining means and methods (including sizing of bore pit and shoring) to perform proposed construction. Per notes on the plans, Contractor shall support and protect existing utilities adjacent to the bore pits. No additional flowable fill will be added to the quantities.
- 9. Question:** As per special provisions Item 814 DI PIPE, the exterior of the pipe shall be coated with zinc and additional polyethylene encasement is mentioned (is this the poly wrap or this needs to be fused to the pipe)?
Response: The polyethylenene wrap (encasement) for the ductile iron pipe is indicated in the Special Provisions to Technical Specifications in section 814.3 on page SPTS-3.
- 10. Question:** For the temporary waterline, what type of material is required?
Response: All SAWS approved water main materials are allowed for the temporary water main. Refer to revised specification 1040 "Temporary Water Main Installation" included with this addendum.
- 11. Question:** Bore pit at STA 26+70 since the waterline is in the bore pit, can this waterline be removed.
Response: Existing 24-inch water main will be shut down during construction of bore pit at STA 26+70 and can be removed as needed within footprint of bore pit. Reference "Proposed Construction Phasing" notes on sheet 2.
- 12. Question:** STA 18+75 there is an existing 8in CI at exit bore pit, can this line be removed or a temporary waterline be required?
Response: As noted on sheet 9, existing water main can be removed. No temporary waterline is required at this location. Refer to revised sheet 22 indicating main can be removed.
- 13. Question:** Note 1 Phase 1: on sheet 2 of 30 shows a date of 4/30/19 for completion of this first phase. When is the anticipated date to start for this project? Bores will take about a month to complete before any of the main is installed. Please give enough time to complete the bores.
Response: Anticipated NTP for this project is late March 2019. See revisions to sheet 2 included in this addendum.

CHANGES TO THE SPECIFICATIONS

1. Replace Bid Proposal (BP-1 through BP-2) in its entirety with the attached Bid Proposal (BP-1 through BP-2). The following items were updated:
 - a. Changed contract duration and changed unit of measure for Specification Item 1040.
2. Replace Proposal Certification (PC-1) in its entirety with the attached Proposal Certification (PC-1). The following items were updated:
 - a. Changed contract duration.
3. Replace Statement of Bidder Experience (SBE-1 through SBE-3) in its entirety with the attached Statement of Bidder Experience (SBE-1 through SBE-3). This revised version should be used by bidders when submitting a bid for this project. The following items were updated:
 - a. Reduced minimum length requirement for project A-3.
4. Replace Contract Agreement (CA-1 through CA-2) in its entirety with the attached Contract Agreement (CA-1 through CA-2). The following items were updated:
 - a. Changed contract duration.
5. Replace specification 1040 "Temporary Water Main Installation" (1040-1 through 1040-2) in its entirety with the attached specification 1040 "Temporary Water Main Installation" (1040-1 through 1040-2). The following items were updated:
 - a. Added size of temporary water main and changed unit of measure for water main.

CHANGES TO THE PLANS

1. Sheet 2 – replace sheet 2 dated 12/5/18 with attached sheet 2 dated 12/19/18.
2. Sheet 3 – replace sheet 3 dated 12/5/18 with attached sheet 3 dated 12/19/18.
3. Sheet 7 – replace sheet 7 dated 12/5/18 with attached sheet 7 dated 12/19/18.
4. Sheet 8 – replace sheet 8 dated 12/5/18 with attached sheet 8 dated 12/19/18.

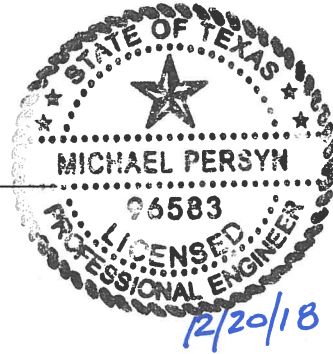
5. Sheet 10 – replace sheet 10 dated 12/5/18 with attached sheet 10 dated 12/19/18.
6. Sheet 11 – replace sheet 11 dated 12/5/18 with attached sheet 11 dated 12/19/18.
7. Sheet 12 – replace sheet 12 dated 12/5/18 with attached sheet 12 dated 12/19/18.
8. Sheet 13 – replace sheet 13 dated 12/5/18 with attached sheet 13 dated 12/19/18.
9. Sheet 22 – replace sheet 22 dated 12/5/18 with attached sheet 22 dated 12/19/18.

END OF ADDENDUM

This Addendum, including these three (3) pages, is twenty-two (22) pages with attachments in its entirety.
Attachments:

Michael Persyn

Michael Persyn, PE
K Friese + Associates (TBPE F-6535)



BID PROPOSAL

PROPOSAL OF _____, a corporation

a partnership consisting of

an individual doing business as

THE SAN ANTONIO WATER SYSTEM:

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

(PLEASE SEE ATTACHED PDF LIST OF BID ITEMS)

TOTAL BID PRICE: \$ _____

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

BIDDER'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL ADDRESS

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

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

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **255** calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

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

N. MEL WAITERS WAY 24-INCH WATER MAIN REPLACEMENT

SAWS Job No. 16-4011

Solicitation No. CO-00228

Item No.	Spec No.	Bid Items Specification No. & Description	Unit	Qty.	Unit Price	Total Price
1	103.1	REMOVE CONCRETE CURB	LF	380	\$	\$
2	103.3	REMOVE SIDEWALKS AND DRIVEWAYS	SF	968	\$	\$
3	203	TACK COAT	GAL	503.6	\$	\$
4	205.2	HOT MIX ASPHALTIC PAVEMENT TYPE B (10" COMPACTED DEPTH)	SY	2628	\$	\$
5	205.4	HOT MIX ASPHALTIC PAVEMENT TYPE D (2" COMPACTED DEPTH)	SY	5036	\$	\$
6	208.1	SALVAGING, HAULING, AND STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (2" DEPTH)	SY	5036	\$	\$
7	413	FLOWABLE FILL	CY	709	\$	\$
8	500.1	CONCRETE CURB	LF	380	\$	\$
9	502.1	CONCRETE SIDEWALKS - CONVENTIONALLY FORMED	SY	84	\$	\$
10	503.1	PORTLAND CEMENT CONCRETE DRIVEWAY	SY	24	\$	\$
11	506.1	CONCRETE RETAINING WALLS - COMBINATION TYPE	CY	8	\$	\$
12	515	TOP SOIL (3")	CY	0.9	\$	\$
13	516.2	ST. AUGUSTINE SODDING	SY	10	\$	\$
14	530.1	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1	\$	\$
15	535	4" WIDE YELLOW LINE	LF	120	\$	\$
16	535	24" WIDE WHITE LINE	LF	70	\$	\$
17	550	TRENCH EXCAVATION SAFETY PROTECTION	LF	4896	\$	\$
18	SP814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	3880	\$	\$
19	818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	175	\$	\$
20	818	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	671	\$	\$
21	818	12" PVC C900 WATERLINE (ALL DEPTHS)	LF	10	\$	\$
22	824	RELAY 2" SHORT SERVICE	EA	1	\$	\$
23	824	RELAY 4" SHORT SERVICE	EA	1	\$	\$
24	828	8" GATE VALVE	EA	15	\$	\$
25	830	24" BUTTERFLY VALVE	EA	4	\$	\$
26	834.1	FIRE HYDRANT	EA	5	\$	\$
27	836	PIPE FITTING (ALL SIZES & TYPES)	TN	10.8	\$	\$
28	840	6" WATER TIE-IN	EA	18	\$	\$
29	840	8" WATER TIE-IN	EA	2	\$	\$
30	840	12" WATER TIE-IN	EA	2	\$	\$
31	840	24" WATER TIE-IN	EA	5	\$	\$
32	841	HYDROSTATIC TESTING	EA	9	\$	\$
33	844	2" BLOW-OFF, TEMPORARY	EA	22	\$	\$
34	844	4" BLOW-OFF, TEMPORARY	EA	5	\$	\$
35	SP846	2" AIR RELEASE ASSEMBLIES	EA	6	\$	\$
36	848	8" PVC SDR 26 WASTEWATER LINE (ALL DEPTHS)	LF	160	\$	\$
37	856	JACKING, BORING, OR TUNNELING 42"	LF	411	\$	\$
38	856	STEEL CASING 42"	LF	411	\$	\$
39	864-S1	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS)	LS	1	\$	\$
40	3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	728	\$	\$
41	856	24" CARRIER PIPE FOR JACKING, BORING, OR TUNNELING	LF	411	\$	\$
42	SS1040	TEMPORARY WATER MAIN (6" DIAMETER)	LS	1	\$	\$
43	SS6706	24" WATERLINE GROUTED IN PLACE	LF	3854	\$	\$
44	SP100	INTERMEDIATE DEMOBILIZATION AND REMOBILIZATION	EA	1	\$	\$
45		MOBILIZATION (MAXIMUM OF 10% OF THE TOTAL OF LINE ITEMS 1-44)	LS	1	\$	\$
46		PREPARING RIGHT-OF-WAY (MAXIMUM OF 5% OF THE TOTAL OF LINE ITEMS 1-44)	LS	1	\$	\$

PROPOSAL CERTIFICATION

Accompanying this proposal is a Bid Bond or Certified or Cashier's Check payable to the Order of the San Antonio Water System for _____ dollars (\$_____), which amount represents five percent (5%) of the total bid price. Said bond or check is to be returned to the bidder unless the proposal is accepted and the bidder fails to execute and file a contract within **10** calendar days after the award of the Contract, in which case the check shall become the property of said San Antonio Water System, and shall be considered as payment for damages due to delay and other inconveniences suffered by said San Antonio Water System due to the failure of the bidder to execute the contract. The San Antonio Water System reserves the right to reject any and all bids.

It is anticipated that the Owner will act on this proposal within **60** calendar days after the bid opening. Upon acceptance and award of the contract to the undersigned by the Owner, the undersigned shall execute standard San Antonio Water System Contract Documents and make Performance and Payment Bonds for the full amount of the contract within **10** calendar days after the award of the Contract to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until final completion and acceptance, and the guarantee period stipulated, and to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

It is anticipated that the Owner will provide written Authorization to Proceed within **30** days after the award of the contract.

The work called for in this Contract shall commence on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the date provided for in the SAWS issued, written Authorization to Proceed. Work shall be completed in full within **255** consecutive calendar days.

The undersigned further acknowledges compliance with "Wage and Labor Standard Provisions" of this contract and the use of the Blue Book rental rates for establishment of equipment rental rates whether owned or leased during the course of this Contract.

In completing the work contained in this proposal the undersigned certifies that bidder's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin and that the bidder will affirmatively cooperate in the implementation of these policies and practices.

Signed: _____
Company Representative

Company Name

Address

Please return bidder's check to: _____
Company Name

Address

STATEMENT OF BIDDER'S EXPERIENCE

**N. Mel Waiters Way 24-Inch Water Main Replacement, SAWS Job No. 16-4011
SAWS Solicitation No. CO-00228**

A. Please complete **all** the fields below.

Bidder must answer all questions completely and all information must be clear, accurate and comprehensive. Bidders submitting a bid for this project are required to verify the contact information prior to completing the Statement of Bidder's Experience.

If all fields are not completed, the Bid is at risk for being rejected due to non-responsiveness. It is not acceptable to indicate "See attached".

Projects A-1 and A-2 shall be separate projects. Project A-3 may be the same project as Project A-1 or A-2 or a separate project.

Project A-1 is to have been completed by the Bidder.

- Project A-1 demonstrates construction of a minimum of 3,000 LF by open cut construction for water mains 16-inches or larger in an urban environment.
- Project A-1 shall have been completed between 2008 and 2018.

Project A-1 Description

Name of Project: _____ Location: _____
Scope of Work: _____
Pipe Sizes: _____ Pipe Lengths: _____
Owner Name: _____ Owner Title: _____
Owner Phone Number: _____ Bid Amount: _____
Final Contract Amount: _____
Project Start Date: _____ Project End Date: _____
Additional Information: _____

Project A-2 is to have been completed by the Bidder.

- Project A-2 demonstrates construction of a minimum of 3,000 LF by open cut construction for water mains 24-inches or larger in an urban environment.
- Project A-2 shall have been completed between 2008 and 2018.

Project A-2 Description

Name of Project: _____ Location: _____
Scope of Work: _____
Pipe Sizes: _____ Pipe Lengths: _____
Owner Name: _____ Owner Title: _____
Owner Phone Number: _____ Bid Amount: _____
Final Contract Amount: _____
Project Start Date: _____ Project End Date: _____
Additional Information: _____

Project A-3 is to have been completed by the Bidder or the Bidder's Subcontractor.

- Project A-3 demonstrates construction of a minimum of 200 LF by tunneling or boring steel casing 42-inches or larger.
- Project A-3 shall have been completed between 2008 and 2018.

Project A-3 Description

Name of Project: _____ Location: _____
Scope of Work: _____
Pipe Sizes: _____ Pipe Lengths: _____
Owner Name: _____ Owner Title: _____
Owner Phone Number: _____ Bid Amount: _____
Final Contract Amount: _____
Project Start Date: _____ Project End Date: _____
Additional Information: _____

CONTRACT

«Contract_No»

Job_No 16-4011

STATE OF TEXAS §
COUNTY OF BEXAR §

KNOW ALL MEN BY THESE PRESENTS:

That this Agreement made and entered into this «Board Date» day of «Board Month», A.D.,«Board Year», by and between **THE SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES**, hereinafter called **THE SAN ANTONIO WATER SYSTEM, COUNTY OF BEXAR, STATE OF TEXAS**, Acting through its Contracting Officer, First Party, hereinafter termed the Owner, and «Company Name», of the City of «City», County of «County», State of «State », Second Party, hereinafter termed the Contractor.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by said First Party, (Owner), the said Second Party, (Contractor), hereby agrees with the First Party to commence and complete the construction of certain improvements in the amount of «Written Contract Amt» Dollars «Formatted Price», for the San Antonio Water System Job No(s). «Bid Opening Date», dated «Bid Opening Date», the same being designated as San Antonio Water System Project N. Mel Waiters Way 24-Inch Water Main Replacement.

The Contractor shall perform all work shown on the Plans and described Specifications and shall meet all requirements of this Agreement, The General and Special Conditions of the Agreement; and such Orders and Agreements for Extra Work as may subsequently be entered by the above named parties to this Agreement.

The Contractor shall not offer, confer, or agree to confer any benefit or gift to any San Antonio Water System employee and Water System employees are prohibited from soliciting, accepting or agreeing to accept any gifts from outside sources; please see Section M. – Gifts or Benefits of the Water System’s Code of Ethical Standards. Section M of the Water System’s Code of Ethical Standards regarding Gifts or Benefits is available on the SAWS Business Center website.

The Contractor hereby agrees to commence work under this Contract on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the Contractor's receipt of SAWS issued, written Authorization to Proceed. Computation of Contract Time will begin on the construction start date as indicated on the written Authorization to Proceed. All work specified in these Contract Documents shall be completed within 255 calendar days from the construction start date indicated on the written Authorization to Proceed.

It is agreed and understood by the Owner and the Contractor that the provisions of Chapter 252, Texas Local Government Code, and/or Chapter 2269, Texas Government Code (as amended) apply to this contract. As applicable, the terms of the aforementioned state law are incorporated herein by reference. Contractor and Owner agree that pursuant to state law, Owner authorizes its duly designated administrative officer (Contracting Officer) to negotiate change orders up to and including the amount of \$100,000.00. It is also agreed and understood that any change orders which increase the cost of the work provided under the contract in excess of 25% of the original contract price are prohibited. The cost of the work provided under the contract may be decreased over 25% of the original contract price with the consent of the Contractor.

The Owner agrees to pay the Contractor in current funds, and to make payments on account, for the performance of the work in accordance with the Contract, at the prices set forth in the Contractor's Proposal, subject to additions and deductions, all as provided in the General Conditions of the Agreement.

SPECIAL SPECIFICATION ITEM NO. 1040
TEMPORARY WATER MAIN INSTALLATION

1040.1 DESCRIPTION: This item shall consist of the installation of 6” diameter temporary water mains in accordance with these specifications and as directed by the Engineer and shown in the plans.

1040.2 MATERIALS: Materials for temporary water mains shall conform to SAWS Material Specifications for pipe, fittings, valves, and service connections as appropriate. All approved SAWS waterline materials are allowed.

Temporary all-weather surface restoration where the pipe is buried shall consist of a minimum of six (6) inches of hot mix asphaltic pavement, Type B.

1040.3 CONSTRUCTION: The contractor is responsible for maintaining access to impacted homes and securing the temporary water main during construction and shall be responsible for any damage and/or injuries resulting from the installation of the temporary water main. The temporary water main shall be buried as required to allow for vehicles and pedestrians in accordance with the Contractor’s approved traffic control plan.

Construction shall follow the requirements for the SAWS Standard Specification Items to which it relates.

The contractor is to fully restrain the entire length of the temporary water main if placed above ground. If the temporary water main is underground, the pipe shall be restrained in accordance with Standard Details DD-839-04 through DD-839-08 or as shown on plan drawings.

The contractor shall notify residents 48 hours prior to installation of the temporary main.

Temporary main must be pressure tested, chlorinated, sampled, and tested prior to being placed into service. Contractor shall disinfect temporary water main using HTH.

The Contractor shall maintain the temporary water main for the duration of construction. Where temporary main is buried, Contractor shall maintain temporary trench surface as needed, to include replacement of temporary asphalt surface where required.

Temporary main shall be removed upon completion and acceptance of the permanent water main.

1040.4 MEASUREMENT: Temporary water mains (6” Diameter) shall be measured by the lump sum.

1040.5 PAYMENT: Payment for Temporary Water Mains will be made at the contract lump sum price bid for this item. Such payment shall also include fittings, valves, tie-ins, blow-offs, service connections, trench protection, restraint and thrust blocks, testing and disinfection, and all appurtenances to provide a complete temporary water main. Such payment shall also include excavation, selected embedment material, backfill,

compaction, temporary all-weather surface during construction and maintenance, hauling, and disposition of surplus excavated material and existing pipe or fittings to be abandoned as needed where main is proposed to be buried. Payment shall also include removal of the temporary water main and backfilling the excavation upon completion of construction and acceptance of the permanent water main. Final surface restoration shall be measured separately under applicable bid items.

- End of Specification -

SAWS GENERAL CONSTRUCTION NOTES

GENERAL SECTION:

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
 - CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
 - CURRENT TXDOT "STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE."
 - CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION."
 - CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION."
 - CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
- THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
- THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 233-3500. AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO EXCAVATION.
- LOCATIONS AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:
 SAN ANTONIO WATER SYSTEM:
 SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES
 COSA DRAINAGE 207-8048
 COSA TRAFFIC SIGNAL OPERATIONS 207-7720
 TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.
- ALL WORK IN TEXAS HIGHWAY DEPARTMENT AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT.
- THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
- THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.
- ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
- HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG. WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
 ANY AN ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
- PRE CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION. THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS. (NSPI)
- POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR. CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY THE CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THE RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.

WATER SECTION:

- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST ONE WEEK OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
 SAWS PRODUCTION CONTROL CENTER 233-2016
- ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS, PAYMENT FOR SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE"
- VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)

CPS ENERGY NOTE:

- CALL THE TEXAS STATE WIDE ONE CALL LOCATOR NUMBER 1-800-344-8377, 48 HOURS BEFORE BEGINNING ANY EXCAVATION.
 DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN PROJECT AREA.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING CPS ENERGY OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES IF ADJACENT TO WORK AREAS.
- CONTRACTOR TO COORDINATE WITH CPS ENERGY AND FIELD VERIFY THE DEPTH OF GAS MAINS BEFORE BEGINNING OF CONSTRUCTION.

NOTES:

- ALL RESTRAINED PROPOSED PIPES, VALVES, AND FITTINGS SHALL BE AT NO ADDITIONAL COST (RL=RESTRAINT LENGTH)
- CONTRACTOR TO MAINTAIN WATER SERVICE CONNECTIONS AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL ALSO MAINTAIN ACCESS TO ALL EXISTING AND PROPOSED WATER VALVES AT ALL TIMES (NSPI).
- NSPI - NOT A SEPARATE PAY ITEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING OPERATION OF ALL EXISTING UTILITIES AFFECTED BY PROPOSED CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER CONDITION, ANY DAMAGE DONE TO EXISTING CURBS, SIDEWALKS, OR DRIVEWAYS.
- SERVICE LINES SHALL BE LAID AT A MINIMUM OF 3-FEET OF COVER THROUGHOUT THE PROJECT.
- ALL STREET REPAIRS ARE REQUIRED TO BE SQUARE CUTS.
- TREE REMOVAL IS NOT PERMITTED ON THIS PROJECT. CONTRACTOR SHALL TAKE EXTREME CARE WHEN WORKING AROUND TREES TO PREVENT DAMAGE. PRIOR TO THE START OF WORK, CALL 207-1111 TO SCHEDULE A PRE-CONSTRUCTION FENCING INSPECTION. PRUNING OF TREES REQUIRED TO CLEAR ROW WILL BE DONE AT CONTRACTOR'S EXPENSE AND IS NSPI. TREE PROTECTION IS NSPI.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO FEET OF VERTICAL SEPARATION DISTANCE BETWEEN ALL PROPOSED WATER LINES (MAINS AND SERVICES) AND EXISTING GAS MAINS UNLESS SHOWN OTHERWISE ON DESIGN PLANS.
- CONTRACTOR SHALL NOTIFY SAWS AT LEAST TWO WEEKS IN ADVANCE OF SHUTTING DOWN THE EXISTING 24" WATER MAIN FOR FINAL APPROVAL.

NOTE FOR THE CITY OF SAN ANTONIO FLATWORK:

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

AT&T NOTES:

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

VIA NOTES:

- THE CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA ASSETS.
- THE CONTRACTOR MUST CONTACT VIA (ERNEST SWEET AT (210)362-2155 OR MARK SPAULDING AT (210)414-9078) FOURTEEN DAYS PRIOR TO ANY WORK IN THE VICINITY OF VIA BUS STOPS.
- THE CONTRACTOR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA.
- THE CONTRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.

TRENCH EXCAVATION SAFETY PROTECTION

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

PROPOSED CONSTRUCTION PHASING:

PRE-PHASE I: PRIOR TO SHUTDOWN OF 24" PIPELINE

- INSTALL SMALL DIAMETER CROSSINGS AT LAMAR, HAYS, BURNET, AND POINSETTIA. CONTRACTOR TO DISINFECT USING HTH, TEST, AND PLACE INTO SERVICE.
- INSTALL 24" MAIN FROM STA 28+50 TO STA 35+50.

PHASE I: 24" MAIN REPLACEMENT DURING SHUTDOWN (GORMAN TO GABRIEL)

- EXISTING 24" MAIN CAN BE SHUT DOWN FOR 8 WEEKS MAXIMUM. CONTRACTOR TO SCHEDULE WORK SUCH THAT MAIN IS OUT OF SERVICE NO LONGER THAN 8 WEEKS AND IS BACK IN SERVICE BY JUNE 14, 2019. COORDINATE WITH SAWS. MULTIPLE CREWS MAY BE REQUIRED.
- BEGIN INSTALLATION OF TRENCHLESS CROSSING AT ARROYO LARGO AS SHOWN IN THE PLANS. INSTALL NEW 24" MAIN FROM APPROX STA 26+10 TO END AT GABRIEL ST.
- PERFORM HYDROSTATIC TEST. COORDINATE WITH SAWS FOR MACHINE CHLORINATION AND PERFORM BACTERIOLOGICAL TESTS. PERFORM TIE-INS (INCLUDING TEMPORARY TIE-IN AT STA 26+10 (APPROX)) AND PLACE NEW 24" MAIN INTO SERVICE.

PHASE II: (BELMONT TO GORMAN)

- BEGIN TRENCHLESS CROSSINGS NEAR GIBBS ST. AND HOUSTON ST. AS SHOWN IN THE PLANS.
- INSTALL SMALL DIAMETER CROSSINGS AT GORMAN (TEMPORARY), GULF, CANTON, AND CROCKETT. CONTRACTOR TO DISINFECT WITH HTH, TEST AND PLACE INTO SERVICE. INSTALL TEMPORARY CAPS/PLUGS ON EXISTING MAINS AS NEEDED TO MAINTAIN SERVICE IN EXISTING 6" / 24" MAINS AS TIE-INS ARE COMPLETED.
- INSTALL 24" MAIN FROM BEGIN TO APPROX 26+10.
- PERFORM HYDROSTATIC TEST. COORDINATE WITH SAWS FOR MACHINE CHLORINATION AND PERFORM BACTERIOLOGICAL TESTS. REMOVE TEMPORARY TIE-IN NEAR STA 26+10 AND MAKE TIE-INS TO EXISTING MAIN AT BELMONT AND NEW 24" MAIN AT APPROX STA 26+10.
- AFTER NEW 24" MAIN IS IN SERVICE COMPLETE TIE-INS AT SIDE STREETS AS SHOWN IN THE PLANS. REMOVE TEMPORARY MAINS.
- COMPLETE FINAL PAVING AND SURFACE RESTORATION.

TEMPORARY WATER MAIN:

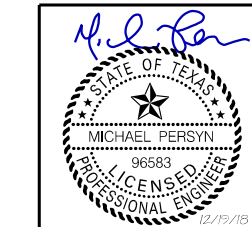
- REFER TO SPECIFICATIONS FOR ALLOWABLE MATERIALS, PRESSURE RATING, AND RELATED REQUIREMENTS.
- IT IS INTENDED THAT WATER MAIN WILL BE PLACED ABOVE GROUND. HOWEVER, WATER MAIN SHALL BE BURIED AT DRIVEWAYS AND ROADWAY CROSSINGS. CONTRACTOR SHALL LOCATE WATER MAINS TO MAINTAIN PEDESTRIAN ACCESS ON SIDEWALKS. WHERE SIDEWALK MUST BE BLOCKED, CONTRACTOR TO PROVIDE SIGNAGE IN ACCORDANCE WITH TMUTCD. SIDEWALK CLOSURES SHALL BE INDICATED IN CONTRACTOR'S TRAFFIC CONTROL PLAN.
- TEMPORARY MAIN SHALL BE REMOVED ONCE NEW 24" MAIN IS PLACED INTO SERVICE. DISTURBED AREAS AND PAVEMENT SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION.

PIPE NOTES:

- THIS PROJECT USES DUCTILE IRON PIPE (DI). DI PIPE SHALL BE PRESSURE CLASS 200. MINIMUM ALLOWABLE RADIUS OF CURVATURE SHALL BE 720 FEET (1.35° OR 6.7" OFFSET PER 20' JOINT). DI PIPE SHALL HAVE ZINC COATING FOR CORROSION PROTECTION. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.
- COORDINATE WITH SAWS INSPECTOR FOR SERVICE CENTER LOCATION TO DELIVER SALVAGED FITTINGS AND FIRE HYDRANTS UPON COMPLETION OF PROJECT.
- FLOWABLE FILL SHALL BE LOW STRENGTH (80 PSI TO 150 PSI AT 28 DAYS).
- AIR VALVES TO BE ABANDONED SHALL BE MADE INOPERABLE BY BENDING OR DEFORMING THE SERVICE LINE ONCE THE AIR VALVE IS REMOVED.



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ADDENDUM NO. 1	TK	MP		12/19/2018
No.	Revision	Drawn	Approved	Date

REVISIONS

**N. MEL WAITERS WAY
 24-INCH WATER MAIN
 REPLACEMENT**

GENERAL NOTES

DEVELOPER: _____

CONT. _____ **BUDGET PROJ.** _____

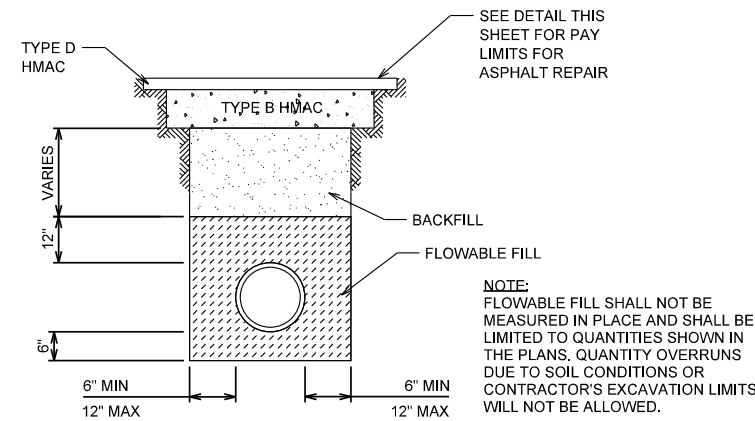
SUBMITTED _____

APPROVED _____

MAP No. _____	SHEET 2
SECT. No. _____	
DR. _____ CK. _____	JOB No. 16-4011
Of 30	

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TOTAL ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
100	MOBILIZATION	LS	1
SP100.1	INTERMEDIATE DEMOBILIZATION AND REMOBILIZATION	EA	1
101	PREPARING RIGHT-OF-WAY	LS	1
103.1	REMOVE CONCRETE CURB	LF	380
103.3	REMOVE SIDEWALKS AND DRIVEWAYS	SF	968
203	TACK COAT	GAL	503.6
205.2	HOT MIX ASPHALTIC PAVEMENT TYPE B (10" COMPACTED DEPTH)	SY	2628
205.4	HOT MIX ASPHALTIC PAVEMENT TYPE D (2" COMPACTED DEPTH)	SY	5036
208.1	SALVAGING, HAULING, AND STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (2" DEPTH)	SY	5036
413	FLOWABLE FILL	CY	709
500.1	CONCRETE CURB	LF	380
502.1	CONCRETE SIDEWALKS - CONVENTIONALLY FORMED	SY	84
503.1	PORTLAND CEMENT CONCRETE DRIVEWAY	SY	24
506.1	CONCRETE RETAINING WALLS - COMBINATION TYPE	CY	8
515	TOP SOIL (3")	CY	0.9
516.2	ST. AUGUSTINE SODDING	SY	10
530.1	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1
535	4" WIDE YELLOW LINE	LF	120
535	24" WIDE WHITE LINE	LF	70
SP814	TRENCH EXCAVATION SAFETY PROTECTION	LF	4896
814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	3880
818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	175
818	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	671
818	12" PVC C900 WATERLINE (ALL DEPTHS)	LF	10
824	RELAY 2" SHORT SERVICE	EA	1
824	RELAY 4" SHORT SERVICE	EA	1
828	8" GATE VALVE	EA	15
830	24" BUTTERFLY VALVE	EA	4
834.1	FIRE HYDRANT	EA	5
836	PIPE FITTING (ALL SIZES & TYPES)	TN	10.8
840	6" WATER TIE-IN	EA	18
840	8" WATER TIE-IN	EA	2
840	12" WATER TIE-IN	EA	2
840	24" WATER TIE-IN	EA	5
841	HYDROSTATIC TESTING	EA	9
844	2" BLOW-OFF, TEMPORARY	EA	22
SP846	4" BLOW-OFF, TEMPORARY	EA	5
846	2" AIR RELEASE ASSEMBLIES	EA	6
848	8" PVC SDR 26 WASTEWATER LINE (ALL DEPTHS)	LF	160
856	JACKING, BORING, OR TUNNELING 42"	LF	411
856	STEEL CASING 42"	LF	411
864-S1	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWERS)	LS	1
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	728
856	24" CARRIER PIPE FOR JACKING, BORING, OR TUNNELING	LF	411
SS1040	TEMPORARY WATER MAIN (6" DIAMETER)	LS	1
SS6706	24" WATERLINE GROUTED IN PLACE	LF	3854

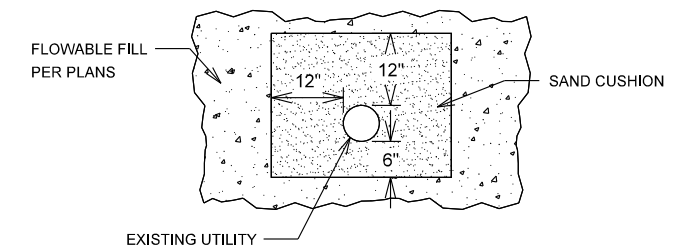


FLOWABLE FILL ENCASEMENT DETAIL

N.T.S.

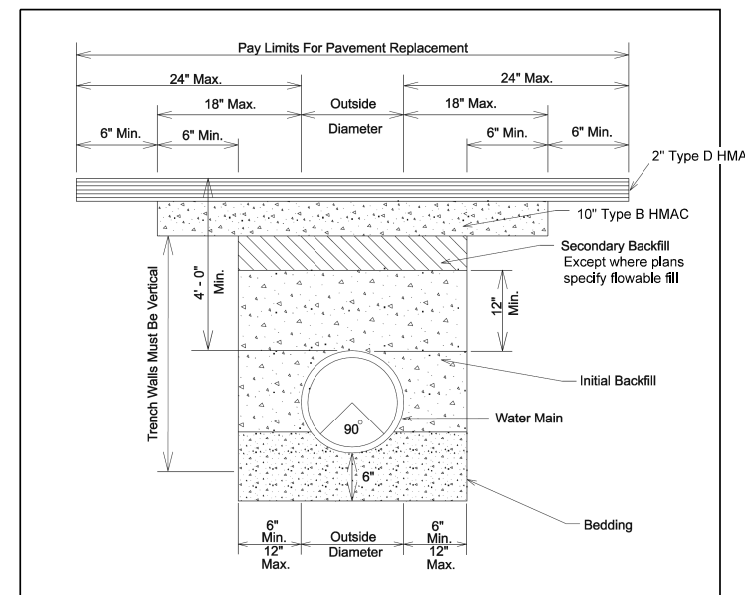
SAWS STANDARD DETAIL INCORPORATED BY REFERENCE:		
804	EXCAVATION, TRENCHING AND BACKFILL	DD-804-01, 02
828	GATE VALVES	DD-828-01
844	BLOW-OFF ASSEMBLIES	DD-844-01
846	2" AIR RELEASE ASSEMBLIES	DD-846-02

COSA STANDARD DETAILS INCORPORATED BY REFERENCE:		
205	HOT MIX ASPHALTIC CONCRETE PAVEMENT	
500	CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER	
502	CONCRETE SIDEWALKS	
503	PORTLAND CEMENT CONCRETE DRIVEWAYS	
530	BARRICADES, SIGNS, AND TRAFFIC HANDLING	



UTILITY CROSSING - SAND CUSHION

N.T.S.

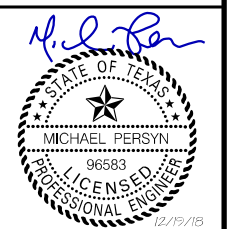


WATER MAIN INSTALLATION DETAIL

N.T.S.

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ADDENDUM NO. 1	TK	MP	12/19/2018	
No.	Revision	Drawn	Approved	Date

REVISIONS

**N. MEL WAITERS WAY
24-INCH WATER MAIN
REPLACEMENT**

**SUMMARY OF QUANTITIES
AND GENERAL DETAILS**

DEVELOPER: _____

CONT. _____ BUDGET PROJ. _____

SUBMITTED _____

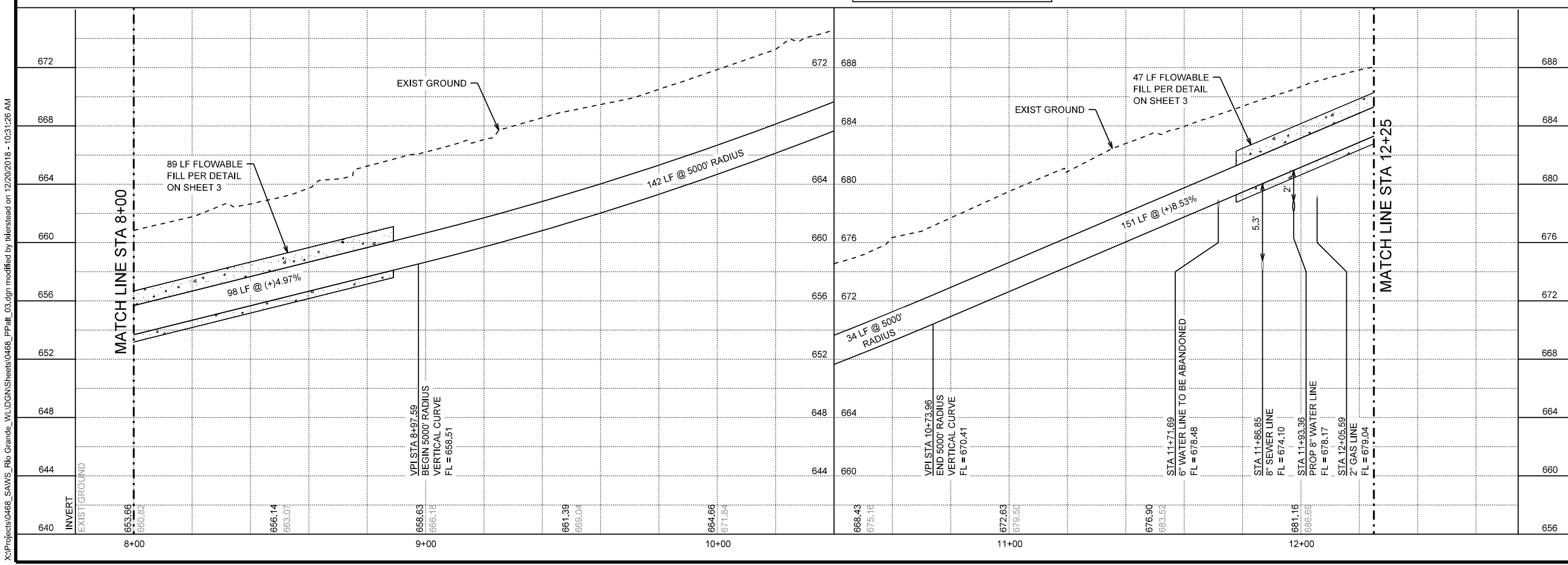
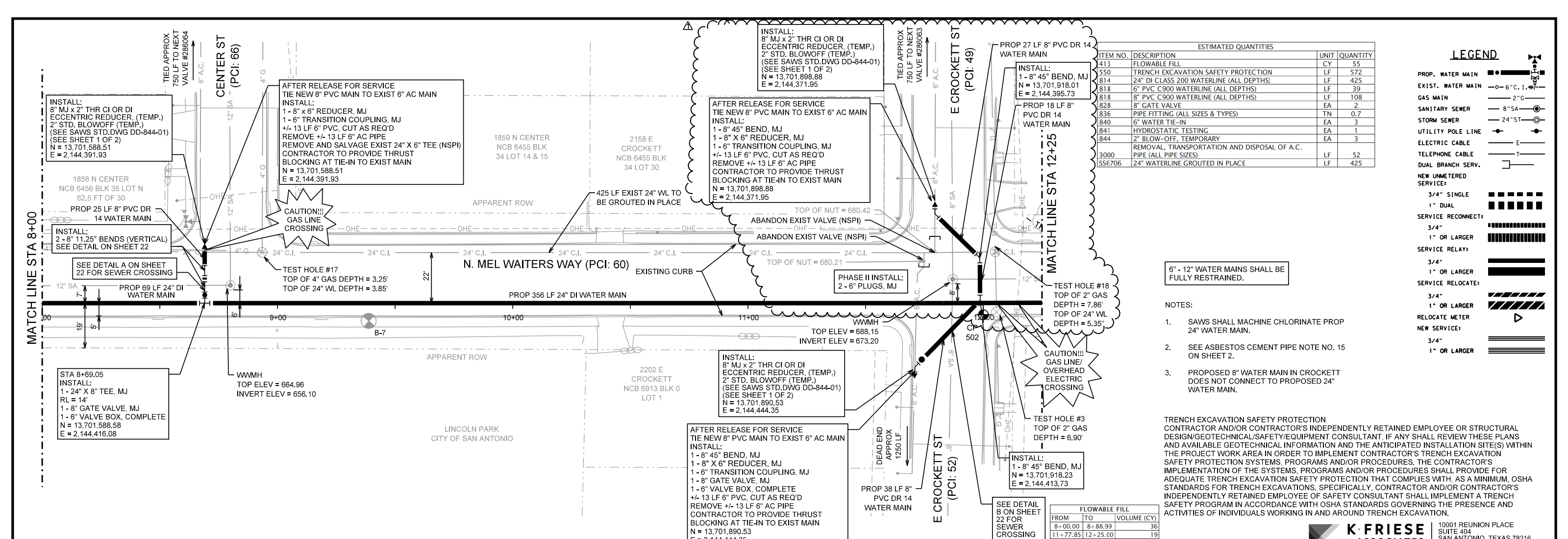
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MAP No. _____ SHEET 3

SECT. No. _____

DR. _____ CK. _____ JOB No. 16-4011 OF 30

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Michael Persyn

STATE OF TEXAS
 MICHAEL PERSYN
 96583
 LICENSED PROFESSIONAL ENGINEER
 12/19/18

No.	Revision	Drawn	Approved	Date
Δ	ADDENDUM NO. 1	TK	MP	12/19/2018

REVISIONS

**N. MEL WAITERS WAY
 24-INCH WATER MAIN
 REPLACEMENT**

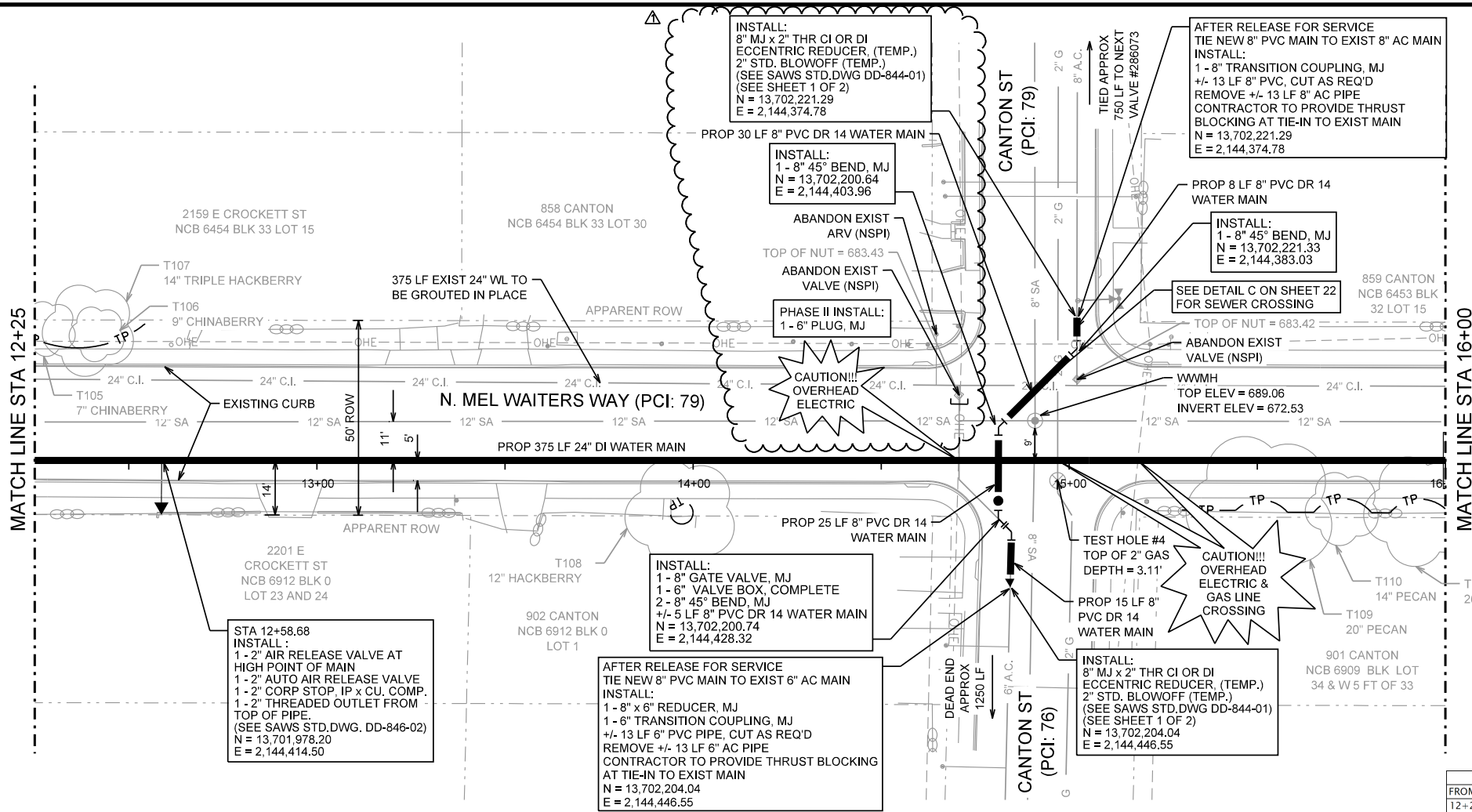
**PLAN & PROFILE
 STA 8+00 TO STA 12+25**

DEVELOPER: [Blank]
CONT.: [Blank] **BUDGET PROJ.**
SUBMITTED: [Blank]
APPROVED: [Blank]

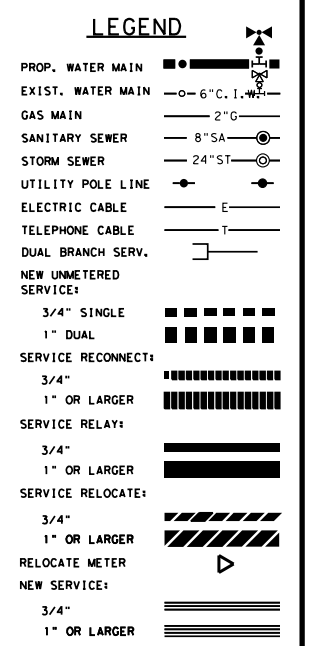
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SECT. No. [Blank]
DR. [Blank] **CK.** [Blank] **JOB No. 16-4011** **OF 30**

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ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413	FLOWABLE FILL	CY	86
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	484
814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	375
818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	13
818	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	96
828	8" GATE VALVE	EA	1
836	PIPE FITTING (ALL SIZES & TYPES)	TN	0.2
840	6" WATER TIE-IN	EA	1
840	8" WATER TIE-IN	EA	1
844	2" BLOW-OFF, TEMPORARY	EA	2
846	2" AIR RELEASE ASSEMBLIES	EA	1
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	26
556706	24" WATERLINE GROUTED IN PLACE	LF	375

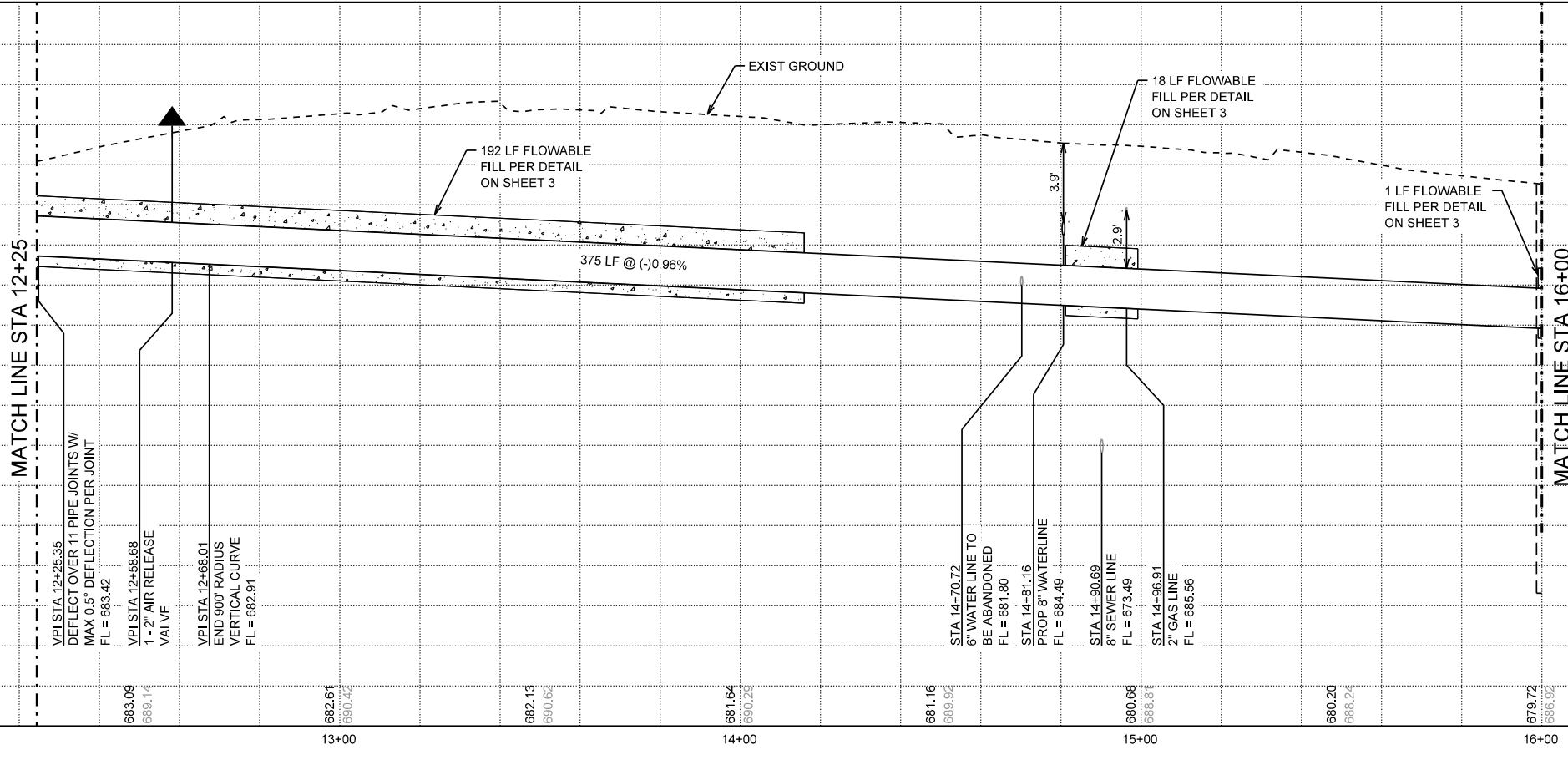


6" - 12" WATER MAINS SHALL BE FULLY RESTRAINED.

- NOTES:
- SAWS SHALL MACHINE CHLORINATE PROP 24" WATER MAIN.
 - SEE ASBESTOS CEMENT PIPE NOTE NO. 15 ON SHEET 2.
 - PROPOSED 8" WATER MAIN IN CANTON DOES NOT CONNECT TO PROPOSED 24" WATER MAIN.

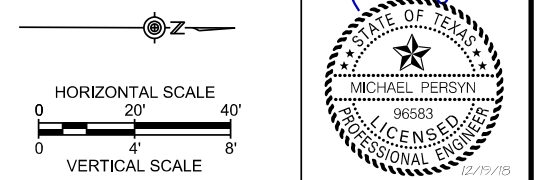
TRENCH EXCAVATION SAFETY PROTECTION CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA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

FLOWABLE FILL		
FROM	TO	VOLUME (CY)
12+25.00	14+15.94	77
14+81.16	14+99.16	8
15+99.08	16+00.00	1



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No.	Revision	Drawn	Approved	Date
Δ	ADDENDUM NO. 1	TK	MP	12/19/2018

REVISIONS

N. MEL WAITERS WAY
24-INCH WATER MAIN
REPLACEMENT

PLAN & PROFILE
STA 12+25 TO STA 16+00

DEVELOPER: _____

CONT. _____ BUDGET PROJ. _____

SUBMITTED _____

APPROVED _____

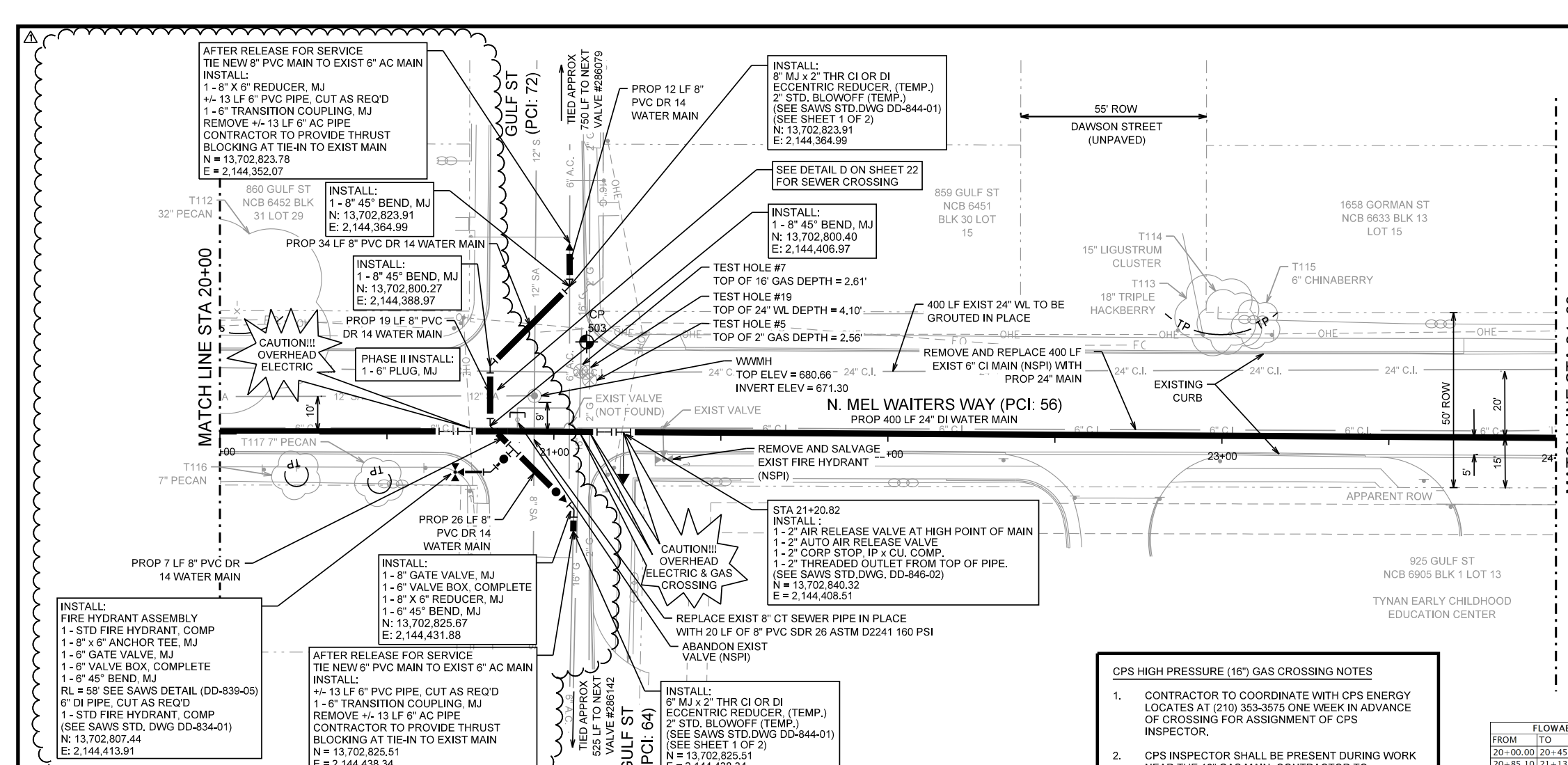
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SECT. No. _____

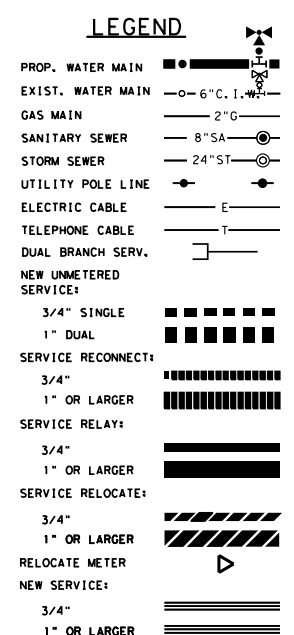
DR. _____ CK. _____

JOB No. 16-4011

SHEET 8 OF 30



ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413	FLOWABLE FILL	CY	41
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	544
814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	400
818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	26
828	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	98
834	8" GATE VALVE	EA	1
836	FIRE HYDRANT	EA	1
840	PIPE FITTING (ALL SIZES & TYPES)	TN	1.2
844	2" BLOW-OFF, TEMPORARY	EA	2
846	2" AIR RELEASE ASSEMBLIES	EA	1
848	8" PVC SDR 26 WASTEWATER LINE (ALL DEPTHS)	LF	20
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	26
SS6706	24" WATERLINE GROUTED IN PLACE	LF	400



- NOTES:
- SAWS SHALL MACHINE CHLORINATE PROP 24" WATER MAIN.
 - SEE ASBESTOS CEMENT PIPE NOTE NO. 15 ON SHEET 2.
 - MAINTAIN SCHOOL BUS ACCESS TO DRIVEWAYS AT 925 GULF. COORDINATE WITH SAN ANTONIO ISD AND SCHOOL AT LEAST 2 WEEK IN ADVANCE.
 - PROPOSED 8" WATER MAIN IN GULF ST DOES NOT CONNECT TO PROPOSED 24" WATER MAIN.

6" - 12" WATER MAINS SHALL BE FULLY RESTRAINED.

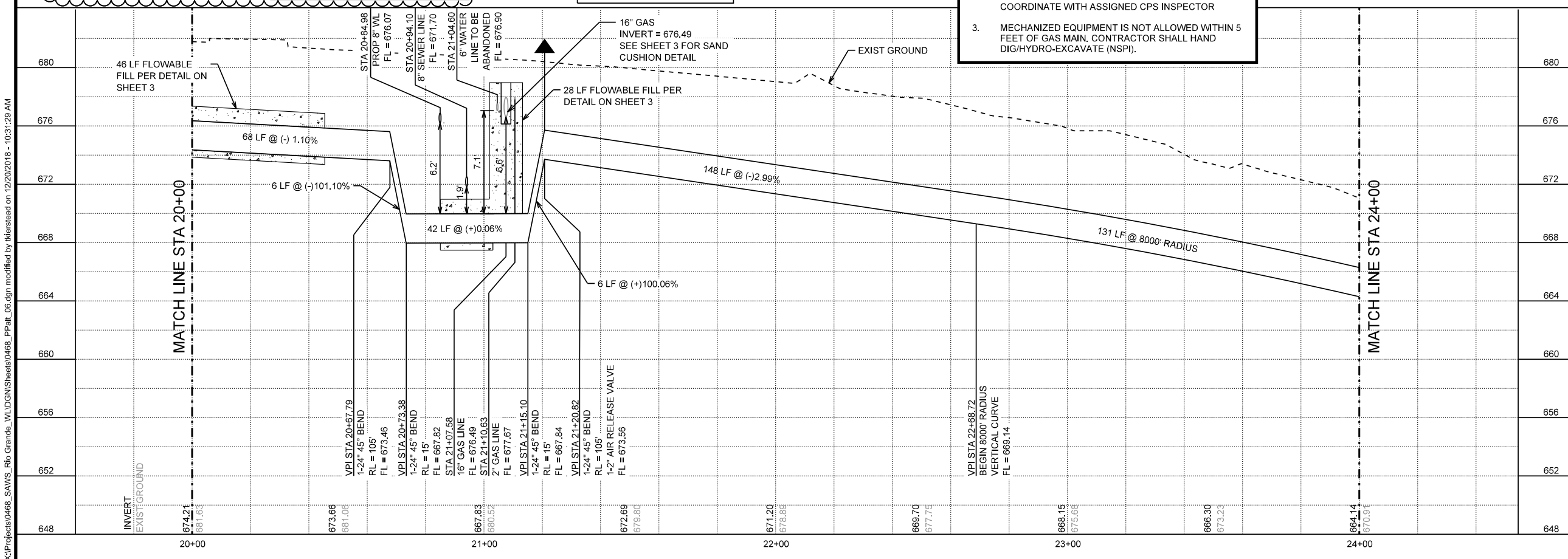
TRENCH EXCAVATION SAFETY PROTECTION
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TYNAN EARLY CHILDHOOD EDUCATION CENTER COORDINATION NOTE:
 CONTRACTOR TO COORDINATE WITH TYNAN EARLY CHILDHOOD EDUCATION CENTER AT LEAST 2 WEEKS PRIOR TO PERFORMING ANY SHUTDOWNS OR MAKING ANY TIE-INS THAT COULD IMPACT THE SCHOOL. ACCESS TO VALVES ON PRIVATE PROPERTY MAY BE NEEDED FOR TIE-INS. SHUTDOWN OF SERVICES TO SCHOOL SHALL ONLY BE PERFORMED WHEN SCHOOL IS NOT IN SESSION AND ONLY AFTER RECEIVING WRITTEN APPROVAL FROM THE SAWS INSPECTOR.

CPS HIGH PRESSURE (16") GAS CROSSING NOTES

- CONTRACTOR TO COORDINATE WITH CPS ENERGY LOCATES AT (210) 353-3575 ONE WEEK IN ADVANCE OF CROSSING FOR ASSIGNMENT OF CPS INSPECTOR.
- CPS INSPECTOR SHALL BE PRESENT DURING WORK NEAR THE 16" GAS MAIN. CONTRACTOR TO COORDINATE WITH ASSIGNED CPS INSPECTOR
- MECHANIZED EQUIPMENT IS NOT ALLOWED WITHIN 5 FEET OF GAS MAIN. CONTRACTOR SHALL HAND DIG/HYDRO-EXCAVATE (NSPI).

FLOWABLE FILL		
FROM	TO	VOLUME (CY)
20+00.00	20+45.48	19
20+85.10	21+13.25	22



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 1001 REUNION PLACE SUITE 404
 SAN ANTONIO, TEXAS 78216
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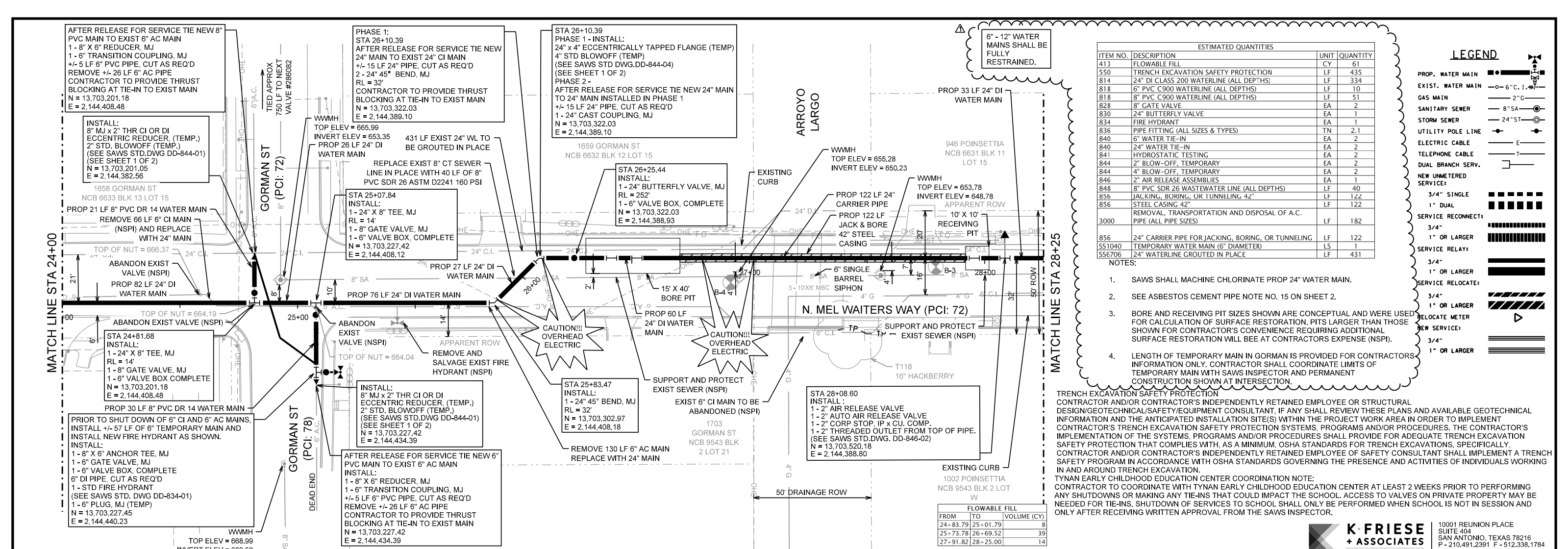
STATE OF TEXAS
 MICHAEL PERSYN
 96583
 LICENSED PROFESSIONAL ENGINEER
 12/19/18

No.	Revision	Drawn	Approved	Date
ADDENDUM NO. 1	TK	MP		12/19/2018

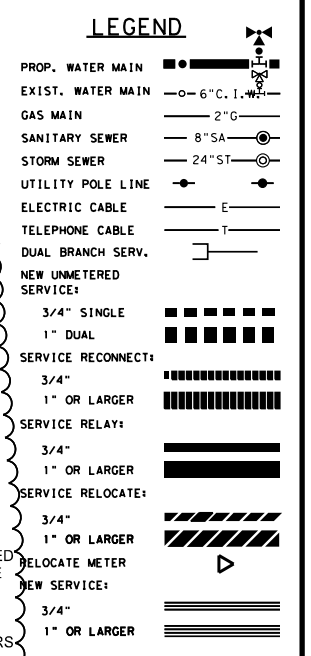
REVISIONS
 N. MEL WAITERS WAY
 24-INCH WATER MAIN
 REPLACEMENT
 PLAN & PROFILE
 STA 20+00 TO STA 24+00

DEVELOPER:	
CONT.	BUDGET PROJ.
SUBMITTED	
APPROVED	
MAP No.	
SECT. No.	10
DR.	CK.
JOB No.	16-4011
SHEET	OF 30

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ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413	FLOWABLE FILL	CY	61
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	435
814	24\"/>		

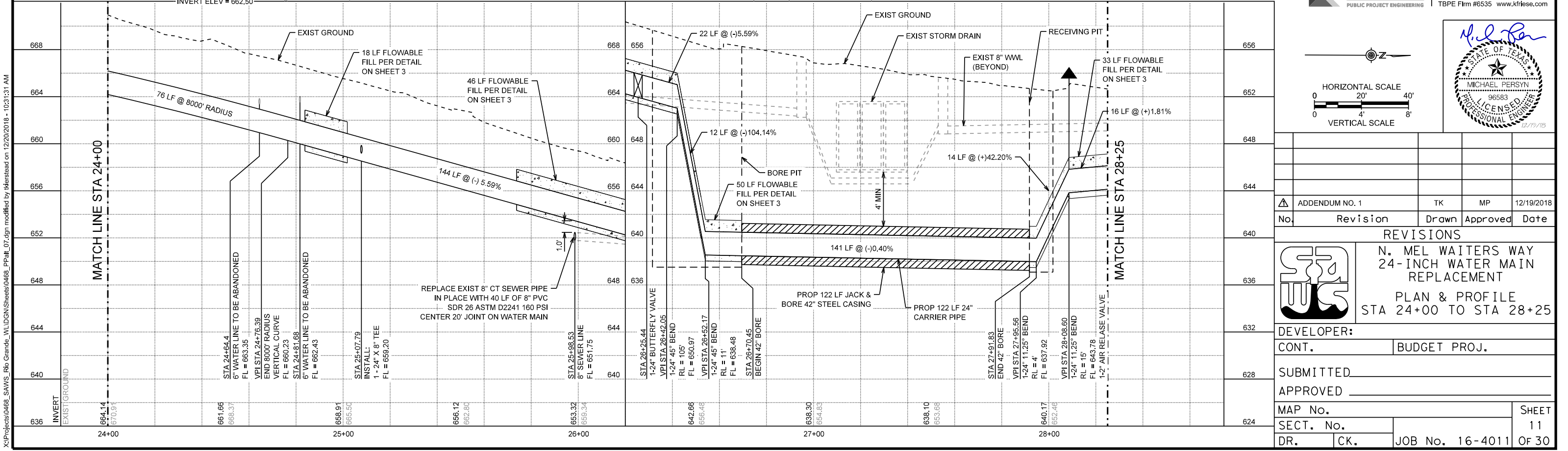


- NOTES:
- SAWS SHALL MACHINE CHLORINATE PROP 24\"/>

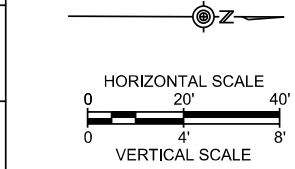
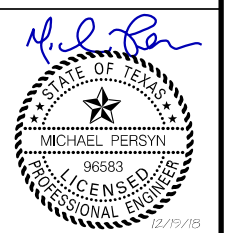
TRENCH EXCAVATION SAFETY PROTECTION CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA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

TYNAN EARLY CHILDHOOD EDUCATION CENTER COORDINATION NOTE:
CONTRACTOR TO COORDINATE WITH TYNAN EARLY CHILDHOOD EDUCATION CENTER AT LEAST 2 WEEKS PRIOR TO PERFORMING ANY SHUTDOWNS OR MAKING ANY TIE-INS THAT COULD IMPACT THE SCHOOL. ACCESS TO VALVES ON PRIVATE PROPERTY MAY BE NEEDED FOR TIE-INS. SHUTDOWN OF SERVICES TO SCHOOL SHALL ONLY BE PERFORMED WHEN SCHOOL IS NOT IN SESSION AND ONLY AFTER RECEIVING WRITTEN APPROVAL FROM THE SAWS INSPECTOR.

FLOWABLE FILL	
FROM	TO
24+83.79	25+01.79
25+73.78	26+69.52
27+91.82	28+25.00



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No.	Revision	Drawn	Approved	Date
Δ	ADDENDUM NO. 1	TK	MP	12/19/2018

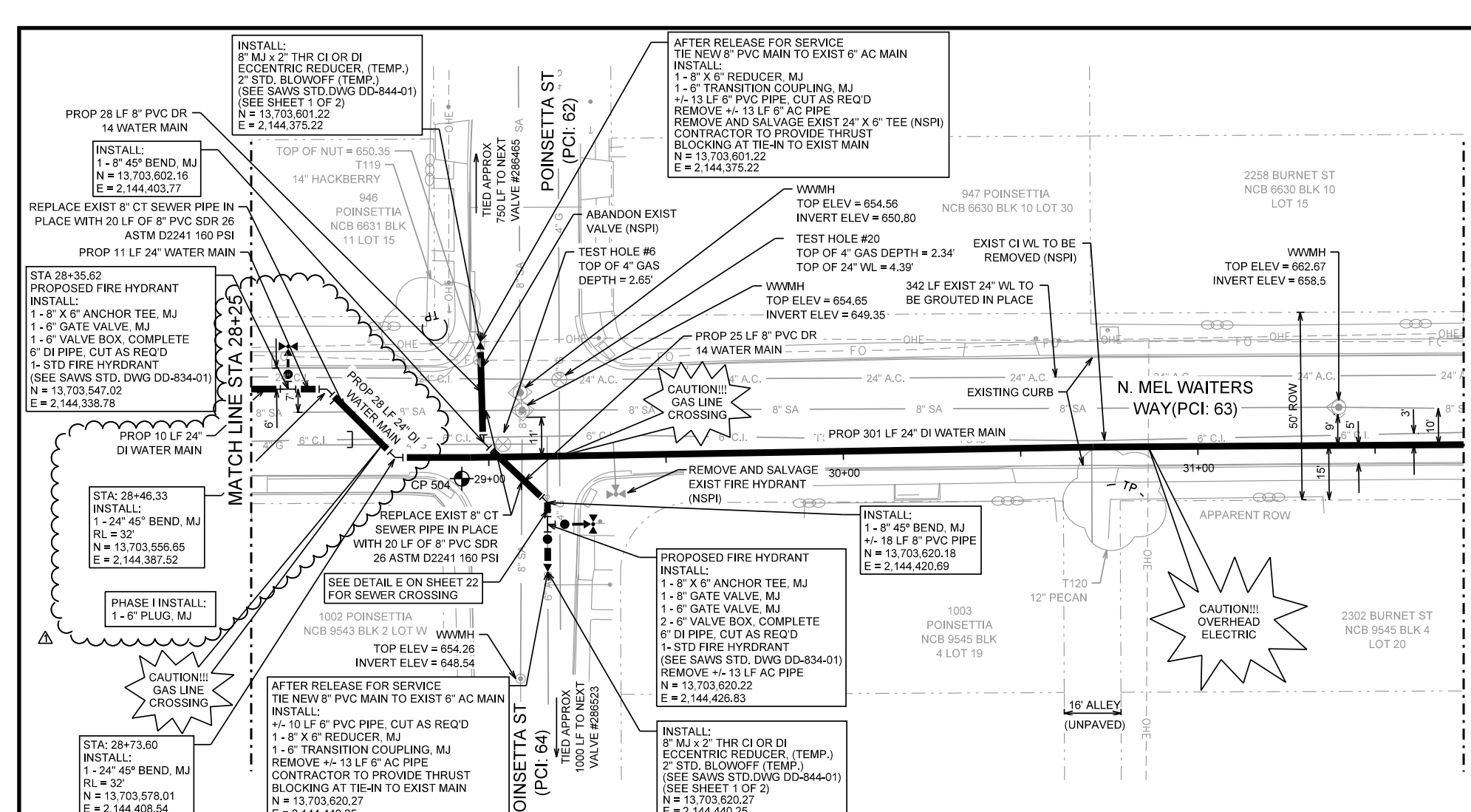
REVISIONS

N. MEL WAITERS WAY 24-INCH WATER MAIN REPLACEMENT

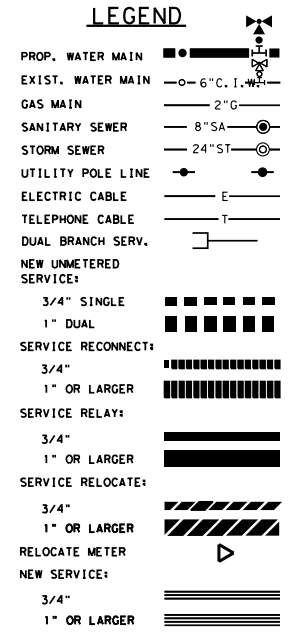
PLAN & PROFILE STA 24+00 TO STA 28+25

DEVELOPER:	
CONT.	BUDGET PROJ.
SUBMITTED	
APPROVED	
MAP No.	
SECT. No.	
DR.	CK.
JOB No.	16-4011
SHEET	11
OF	30

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ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413	FLOWABLE FILL	CY	49
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	504
814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	350
818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	23
818	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	71
828	8" GATE VALVE	EA	1
834	FIRE HYDRANT	EA	1
836	PIPE FITTING (ALL SIZES & TYPES)	TN	0.9
840	6" WATER TIE-IN	EA	2
841	HYDROSTATIC TESTING	EA	1
844	2" BLOW-OFF, TEMPORARY	EA	2
848	8" PVC SDR 26 WASTEWATER LINE (ALL DEPTHS)	LF	60
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	39
556706	24" WATERLINE GROUTED IN PLACE	LF	342



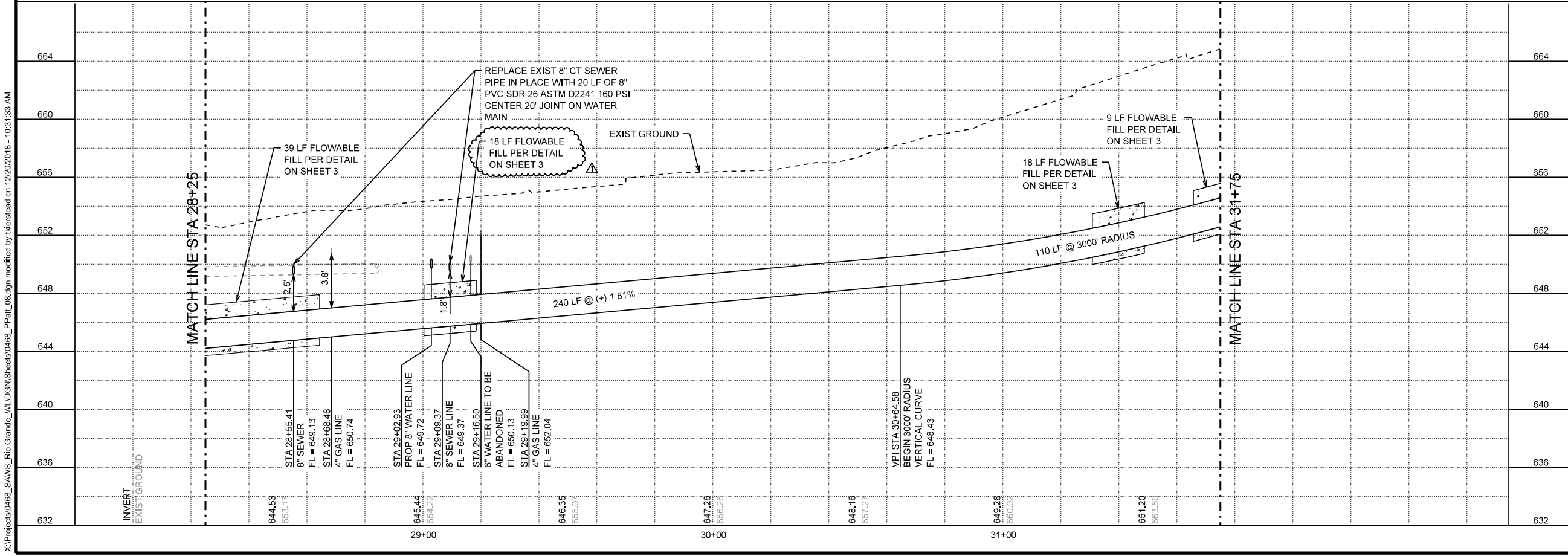
6" - 12" WATER MAINS SHALL BE FULLY RESTRAINED.

- NOTES:
- SAWS SHALL MACHINE CHLORINATE PROP 24" WATER MAIN.
 - SEE ASBESTOS CEMENT PIPE NOTE NO. 15 ON SHEET 2.
 - PROPOSED 8" WATER MAIN IN POINSETTA DOES NOT CONNECT TO PROPOSED 24" WATER MAIN.

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

FLOWABLE FILL		
FROM	TO	VOLUME (CY)
28+25.00	28+64.33	16
29+00.37	29+18.37	8
31+30.80	31+48.80	8
31+65.68	31+75.00	4

NOTE: TABLE INCLUDES FLOWABLE FILL QUANTITIES FOR 24-INCH MAIN ONLY



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1001 REUNION PLACE
SUITE 404
SAN ANTONIO, TEXAS 78216
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TBPE Firm #6535 www.kfriese.com

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 8'

STATE OF TEXAS
MICHAEL PERSYN
96583
LICENSED PROFESSIONAL ENGINEER
12/19/18

No.	Revision	Drawn	Approved	Date
1	ADDENDUM NO. 1	TK	MP	12/19/2018

REVISIONS

**N. MEL WAITERS WAY
24-INCH WATER MAIN
REPLACEMENT**

PLAN & PROFILE
STA 28+25 TO STA 31+75

DEVELOPER: _____
CONT. BUDGET PROJ.
SUBMITTED _____
APPROVED _____

MAP No. _____ SHEET 12
SECT. No. _____
DR. CK. JOB No. 16-4011 OF 30

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AFTER RELEASE FOR SERVICE TIE NEW 8" PVC MAIN TO EXIST 6" AC MAIN
 INSTALL:
 1 - 8" X 6" REDUCER, MJ
 1 - 6" TRANSITION COUPLING, MJ
 +/- 13 LF 6" PVC PIPE, CUT AS REQ'D
 REMOVE +/- 13 LF 6" AC PIPE
 CONTRACTOR TO PROVIDE THRUST BLOCKING AT TIE-IN TO EXIST MAIN
 N = 13,703,924.48
 E = 2,144,374.16

SEE DETAIL F ON SHEET 22 FOR SEWER CROSSING

REPLACE EXIST 8" CT SEWER LINE IN PLACE WITH 20 LF OF 8" PVC SDR 26 ASTM D2241 160 PSI

ABANDON EXIST VALVE (NSPI)

REMOVE AND SALVAGE EXIST FIRE HYDRANT (NSPI)

AFTER RELEASE FOR SERVICE TIE NEW 8" PVC MAIN TO EXIST 12" DI MAIN
 INSTALL:
 1 - 12" X 8" REDUCER, MJ
 1 - 12" CAST COUPLING, MJ
 +/- 5 LF 12" PVC PIPE
 CONTRACTOR TO PROVIDE THRUST BLOCKING AT TIE-IN TO EXIST MAIN
 N = 13,703,928.59
 E = 2,144,420.44

INSTALL:
 1 - 8" X 2" THR CI OR DI ECCENTRIC REDUCER (TEMP.)
 1 - 2" STD. BLOWOFF (TEMP.)
 (SEE SAWS STD. DWG DD-844-01)
 N = 13,703,924.48
 E = 2,144,374.16

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 5 LF 8" PVC PIPE
 N = 13,703,928.20
 E = 2,144,384.68

PROPOSED FIRE HYDRANT INSTALL:
 1 - 8" X 6" ANCHOR TEE, MJ
 1 - 8" GATE VALVE, MJ
 1 - 6" GATE VALVE, MJ
 2 - 6" VALVE BOX, COMPLETE
 6" DI PIPE, CUT AS REQ'D
 1 - STD FIRE HYDRANT
 (SEE SAWS STD. DWG DD-834-01)
 N = 13,703,928.53
 E = 2,144,415.15

INSTALL:
 1 - 8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
 2" STD. BLOWOFF (TEMP)
 (SEE SAWS STD DWG. DD-844-01)
 (SEE SHEET 2 OF 2)
 N = 13,703,928.59
 E = 2,144,420.44

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 5 LF 8" PVC PIPE
 N = 13,703,928.20
 E = 2,144,384.68

PROPOSED FIRE HYDRANT INSTALL:
 1 - 8" X 6" ANCHOR TEE, MJ
 1 - 8" GATE VALVE, MJ
 1 - 6" GATE VALVE, MJ
 2 - 6" VALVE BOX, COMPLETE
 6" DI PIPE, CUT AS REQ'D
 1 - STD FIRE HYDRANT
 (SEE SAWS STD. DWG DD-834-01)
 N = 13,703,928.53
 E = 2,144,415.15

INSTALL:
 1 - 8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
 2" STD. BLOWOFF (TEMP)
 (SEE SAWS STD DWG. DD-844-01)
 (SEE SHEET 2 OF 2)
 N = 13,703,928.59
 E = 2,144,420.44

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 5 LF 8" PVC PIPE
 N = 13,703,928.20
 E = 2,144,384.68

PROPOSED FIRE HYDRANT INSTALL:
 1 - 8" X 6" ANCHOR TEE, MJ
 1 - 8" GATE VALVE, MJ
 1 - 6" GATE VALVE, MJ
 2 - 6" VALVE BOX, COMPLETE
 6" DI PIPE, CUT AS REQ'D
 1 - STD FIRE HYDRANT
 (SEE SAWS STD. DWG DD-834-01)
 N = 13,703,928.53
 E = 2,144,415.15

INSTALL:
 1 - 8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
 2" STD. BLOWOFF (TEMP)
 (SEE SAWS STD DWG. DD-844-01)
 (SEE SHEET 2 OF 2)
 N = 13,703,928.59
 E = 2,144,420.44

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 5 LF 8" PVC PIPE
 N = 13,703,928.20
 E = 2,144,384.68

PROPOSED FIRE HYDRANT INSTALL:
 1 - 8" X 6" ANCHOR TEE, MJ
 1 - 8" GATE VALVE, MJ
 1 - 6" GATE VALVE, MJ
 2 - 6" VALVE BOX, COMPLETE
 6" DI PIPE, CUT AS REQ'D
 1 - STD FIRE HYDRANT
 (SEE SAWS STD. DWG DD-834-01)
 N = 13,703,928.53
 E = 2,144,415.15

INSTALL:
 1 - 8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
 2" STD. BLOWOFF (TEMP)
 (SEE SAWS STD DWG. DD-844-01)
 (SEE SHEET 2 OF 2)
 N = 13,703,928.59
 E = 2,144,420.44

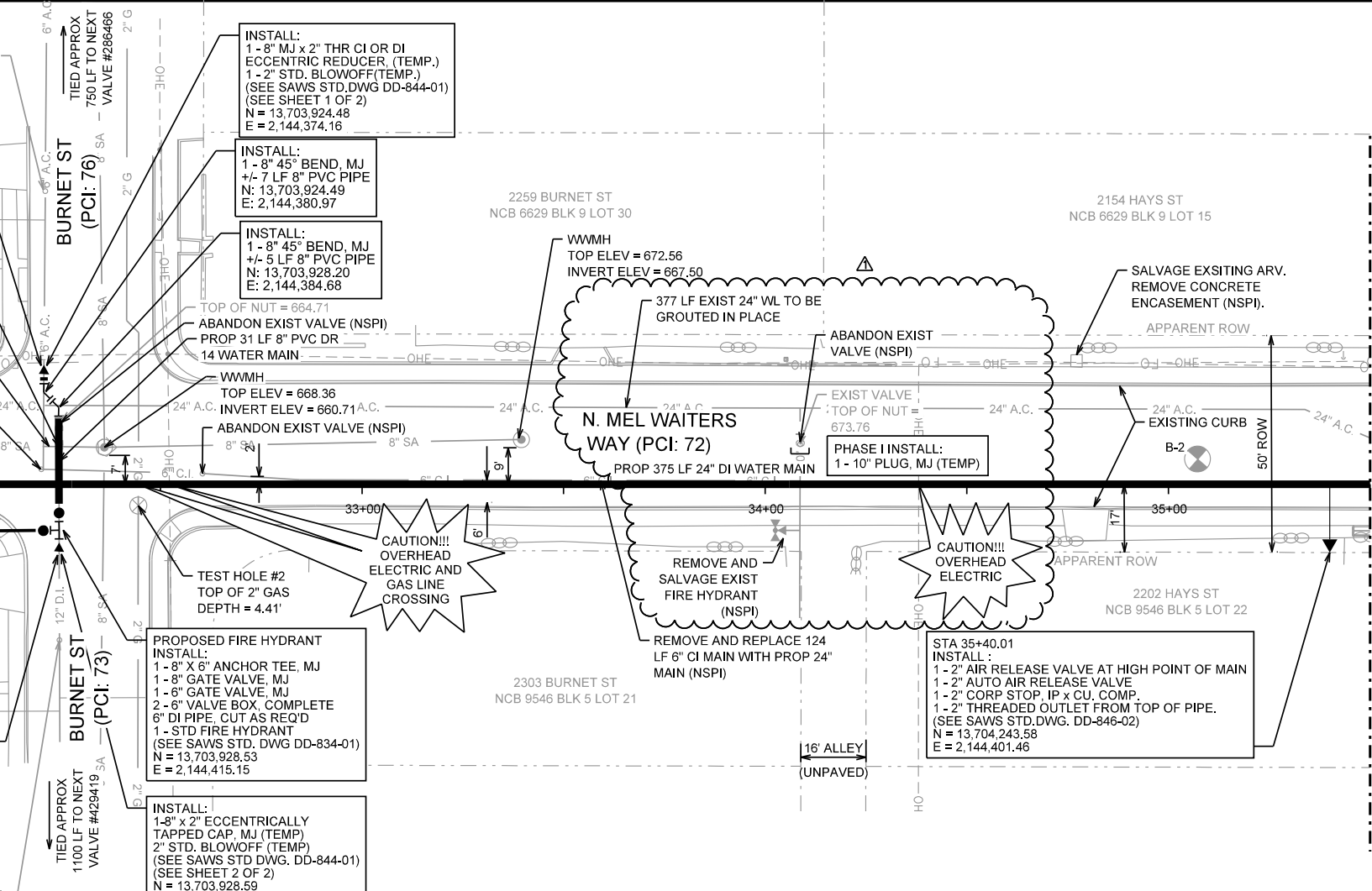
INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97

INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 5 LF 8" PVC PIPE
 N = 13,703,928.20
 E = 2,144,384.68

PROPOSED FIRE HYDRANT INSTALL:
 1 - 8" X 6" ANCHOR TEE, MJ
 1 - 8" GATE VALVE, MJ
 1 - 6" GATE VALVE, MJ
 2 - 6" VALVE BOX, COMPLETE
 6" DI PIPE, CUT AS REQ'D
 1 - STD FIRE HYDRANT
 (SEE SAWS STD. DWG DD-834-01)
 N = 13,703,928.53
 E = 2,144,415.15

INSTALL:
 1 - 8" X 2" ECCENTRICALLY TAPPED CAP, MJ (TEMP)
 2" STD. BLOWOFF (TEMP)
 (SEE SAWS STD DWG. DD-844-01)
 (SEE SHEET 2 OF 2)
 N = 13,703,928.59
 E = 2,144,420.44

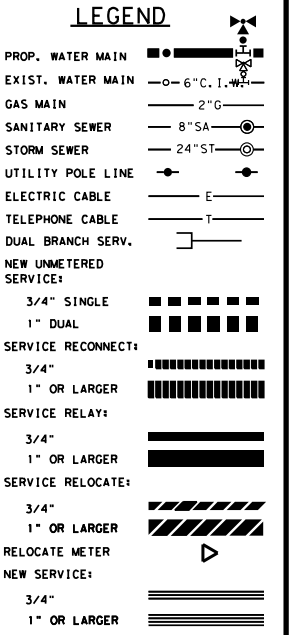
INSTALL:
 1 - 8" 45° BEND, MJ
 +/- 7 LF 8" PVC PIPE
 N = 13,703,924.49
 E = 2,144,380.97



MATCH LINE STA 35+50

FROM	TO	VOLUME (CY)
31+75.00	32+98.08	50
33+30.52	33+48.52	8

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
413	FLOWABLE FILL	CY	58
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	456
814	24" DI CLASS 200 WATERLINE (ALL DEPTHS)	LF	375
818	6" PVC C900 WATERLINE (ALL DEPTHS)	LF	13
818	8" PVC C900 WATERLINE (ALL DEPTHS)	LF	43
818	12" PVC C900 WATERLINE (ALL DEPTHS)	LF	5
828	8" GATE VALVE	EA	1
834	FIRE HYDRANT	EA	1
836	PIPE FITTING (ALL SIZES & TYPES)	TN	0.3
840	6" WATER TIE-IN	EA	1
840	12" WATER TIE-IN	EA	1
841	HYDROSTATIC TESTING	EA	1
844	2" BLOW-OFF, TEMPORARY	EA	2
846	2" AIR RELEASE ASSEMBLIES	EA	1
848	8" PVC SDR 26 WASTE WATER LINE (ALL DEPTHS)	LF	20
3000	REMOVAL, TRANSPORTATION AND DISPOSAL OF A.C. PIPE (ALL PIPE SIZES)	LF	13
556706	24" WATERLINE GROUTED IN PLACE	LF	377

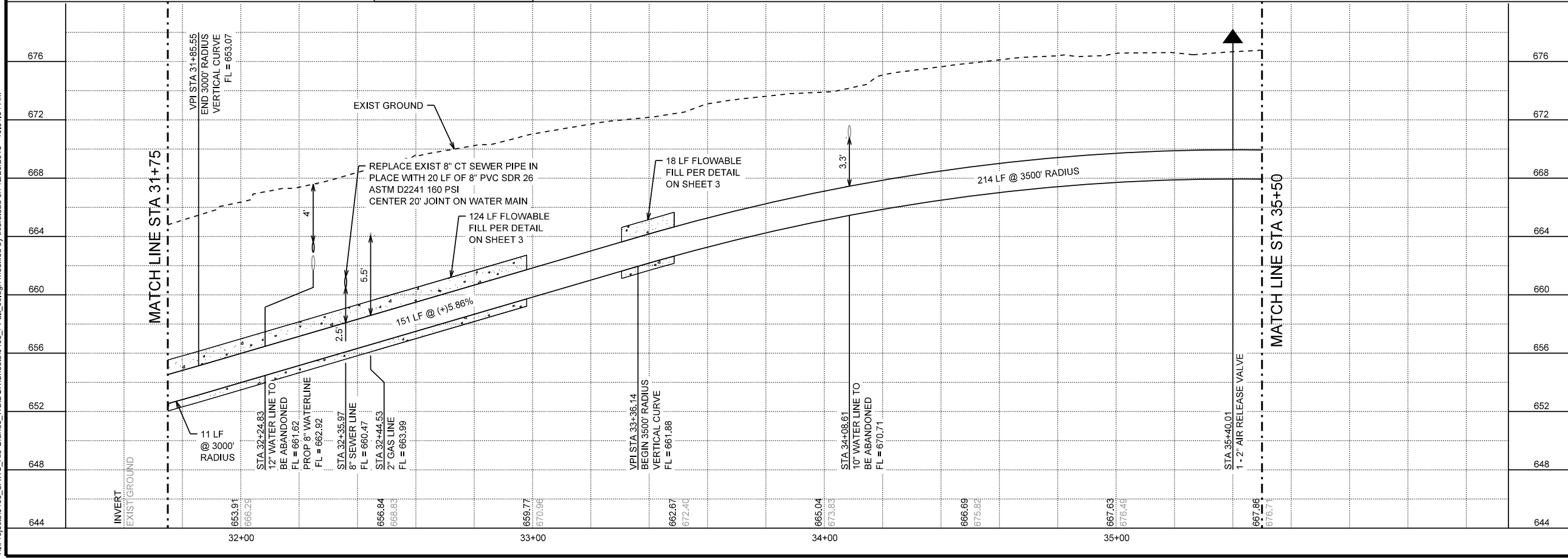
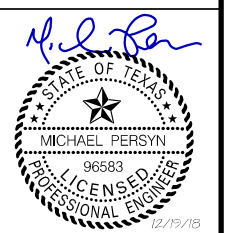
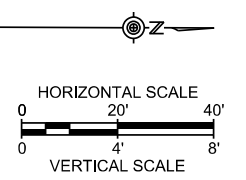


6" - 12" WATER MAINS SHALL BE FULLY RESTRAINED.

- NOTES:
- SAWS SHALL MACHINE CHLORINATE PROP 24" WATER MAIN.
 - SEE ASBESTOS CEMENT PIPE NOTE NO. 15 ON SHEET 2.
 - PROPOSED 8" WATER MAIN IN BURNET DOES NOT CONNECT TO PROPOSED 24" WATER MAIN.

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

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 TBPE Firm #6535 www.kfriese.com



No.	Revision	Drawn	Approved	Date
Δ	ADDENDUM NO. 1	TK	MP	12/19/2018

REVISIONS

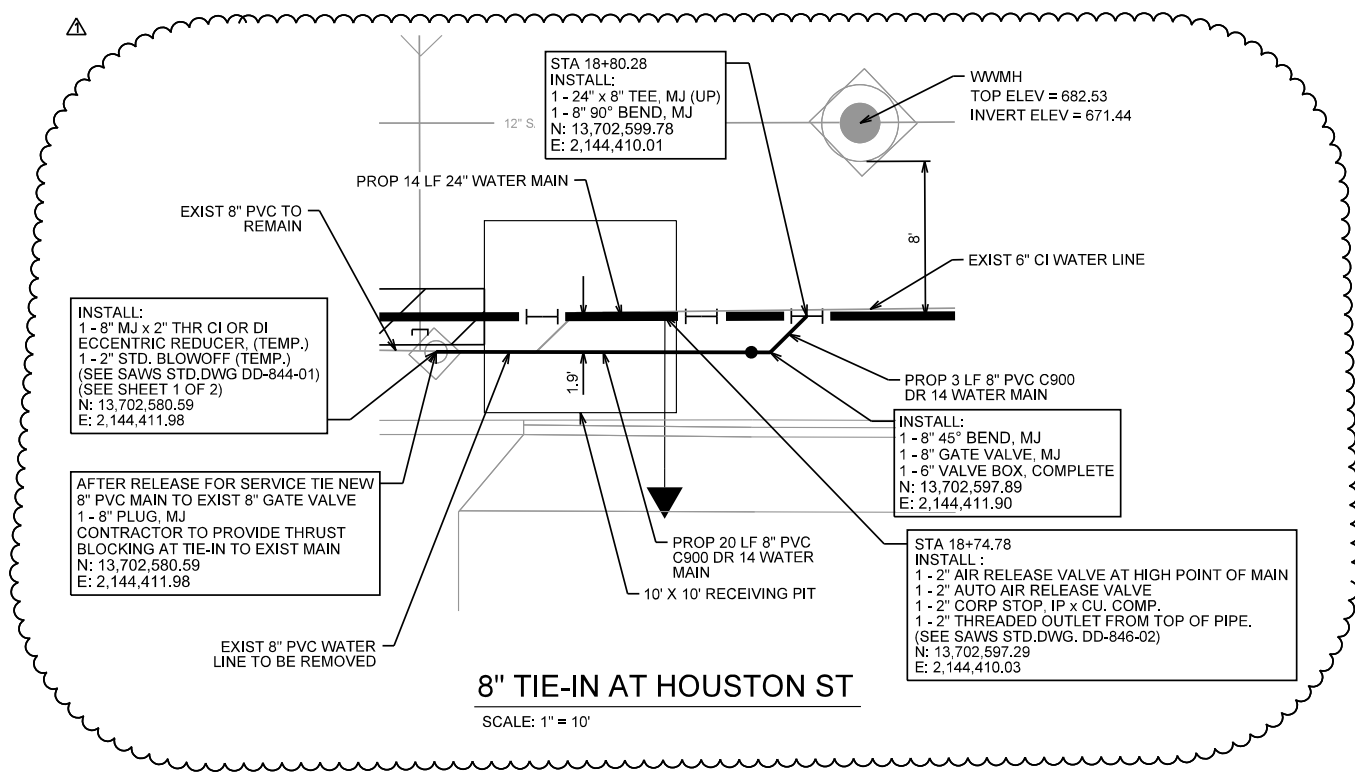
**N. MEL WAITERS WAY
 24-INCH WATER MAIN
 REPLACEMENT**

PLAN & PROFILE
 STA 31+75 TO STA 35+50

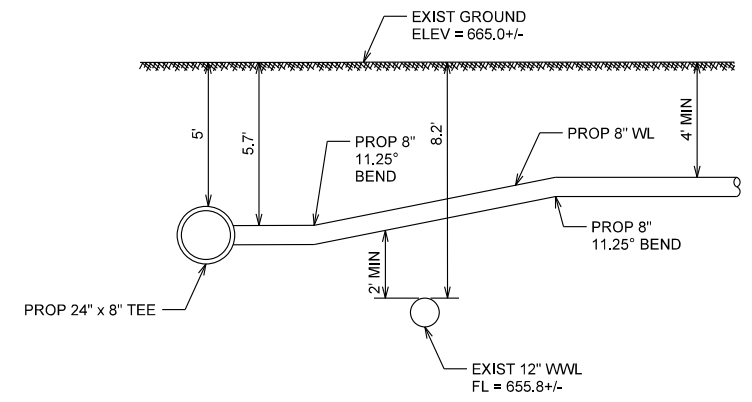
DEVELOPER: _____
 CONT. BUDGET PROJ.
 SUBMITTED _____
 APPROVED _____

MAP No. _____ SHEET 13
 SECT. No. _____
 DR. _____ CK. _____ JOB No. 16-4011 OF 30

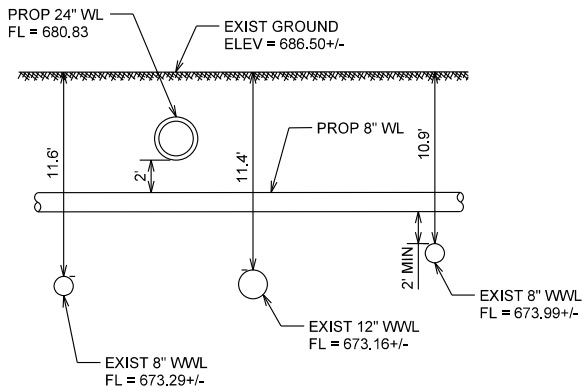
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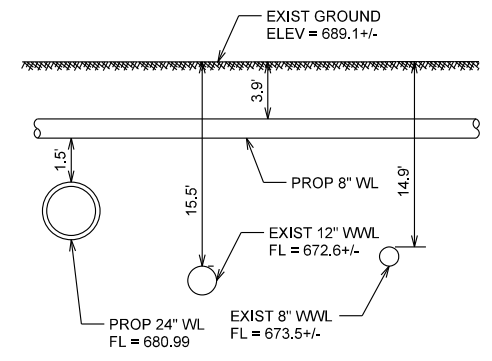
8" TIE-IN AT HOUSTON ST
SCALE: 1" = 10'



SEWER CROSSING DETAIL A (CENTER ST)
N.T.S.

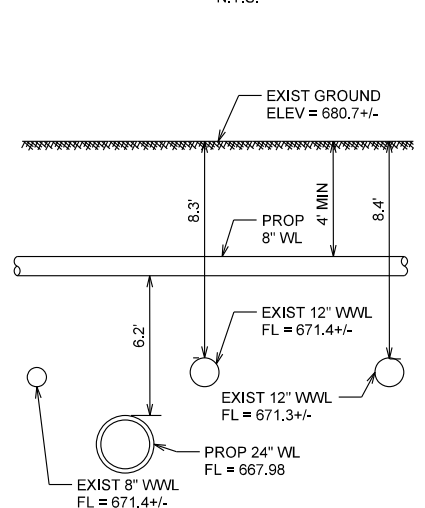


SEWER CROSSING DETAIL B (CROCKETT ST)
N.T.S.

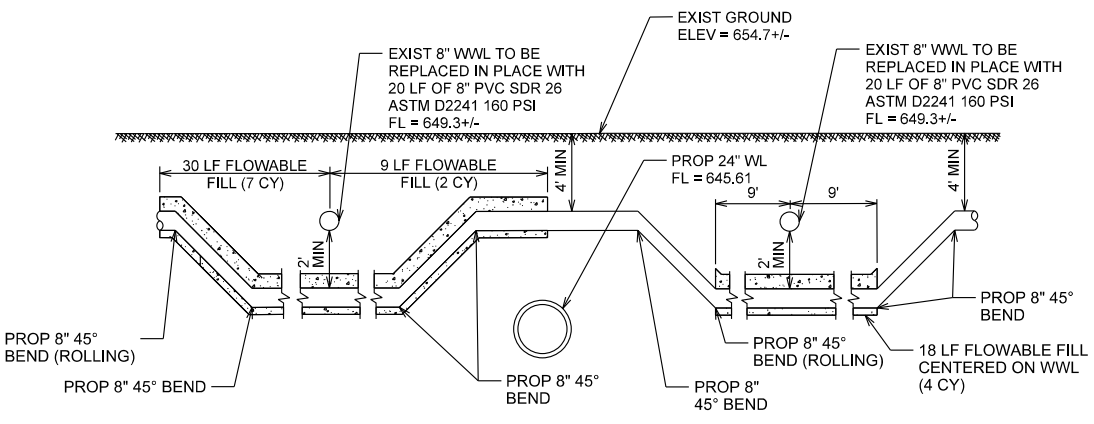


SEWER CROSSING DETAIL C (CANTON ST)
N.T.S.

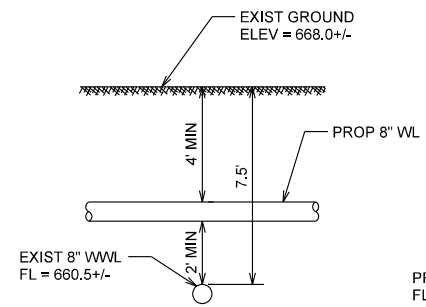
NOTE:
INTENT OF CROSSING DETAILS IS TO SHOW SEPARATION BETWEEN WATER AND SEWER; NOT ALL EXISTING UTILITIES ARE SHOWN.



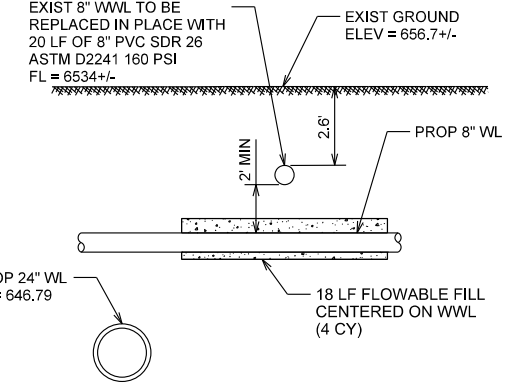
SEWER CROSSING DETAIL D (GULF ST)
N.T.S.



SEWER CROSSING DETAIL E (POINTSETTA ST)
N.T.S.

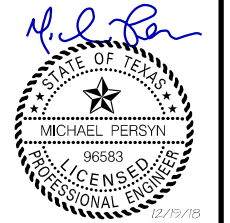


SEWER CROSSING DETAIL F (BURNET ST)
N.T.S.



SEWER CROSSING DETAIL G (LAMAR ST)
N.T.S.

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ADDENDUM NO. 1	TK	MP	12/19/2018
No.	Revision	Drawn	Approved

REVISIONS
N. MEL WAITERS WAY
24-INCH WATER MAIN
REPLACEMENT
WATER CROSSING
DETAILS

DEVELOPER:		BUDGET PROJ.	
SUBMITTED		APPROVED	
MAP No.	SECT. No.		SHEET
DR.	CK.	JOB No. 16-4011	22
			OF 30

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