

# TREVOR FIELDS PUBLIC SANITARY SEWER

## CITY OF SAN ANTONIO

### PUBLIC SANITARY SEWER IMPROVEMENTS

#### GENERAL SEWER NOTES (REVISED JULY 2017)

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:

- Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Waste water 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 Specifications for Construction of Highways, Streets and Drainage".
- Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
- Current City of San Antonio "Standard Specifications for Public Works Construction".
- Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction I Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.

3. The Contractor shall obtain the SAWS Standard Details from the SAWS website.  
[http://www.saws.org/business\\_center/specs](http://www.saws.org/business_center/specs). Unless otherwise noted within the design plans.

4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.

5. Location 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.

6. 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:

SAWS Utility Locates: <http://www.saws.org/Service/Locates>  
COSA Drainage (210) 207-0724 or (210) 207-6026  
COSA Traffic Signal Operations (210) 206-8480  
COSA Traffic Signal Damages (210) 207-3951  
Texas State Wide One Call Locator 1-800-545-6005 or 811

7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.

8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.

9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.

10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to [constworkreg@saws.org](mailto:constworkreg@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 [constworkreg@saws.org](mailto:constworkreg@saws.org). Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.

12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests performed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS until this requirement being met and verified by providing all necessary documented test results.

13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

#### Sewer Notes:

1. The Contractor is responsible for ensuring that no Sanitary Sewer Overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:

- Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at (210) 233-2014. Provide the address of the spill and an estimated volume or flow.
- Attempt to eliminate the source of the SSO.
- Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
- Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soil/materials.
- Clean the affected sewer mains and remove any debris.
- Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24 hours.

Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all cost incurred by SAWS, including any fines from EPA, TCEQ and/or any other Federal, State or Local Agencies.

No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by TCEQ and SAWS.

2. If bypass pumping is required, the Contractor shall perform such work in accordance with SAWS Standard Specification for Water and Sanitary Sewer Construction, Item No. 864, "Bypass Pumping".

3. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the SAWS Construction Inspection Division at (210) 233-2973 at least one week 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 sequence the work accordingly.

4. Sewer pipe where water line crosses shall be 160 psi and meet the requirements of ASTM D2241, TAC 217.53 and TCEQ 290.44(E9)(4)(B). Contractor shall center a 20' joint of 160 psi pressure rated PVC at the proposed water crossing.

5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY; It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements. (NSPI).

6. Spills, Overflows, or Discharges of Wastewater: All Spills, overflows, or discharges of wastewater, recycled water, petroleum products, or chemicals must be reported immediately to the SAWS Inspector assigned to the Counter Permit or General Construction Permit (GCP). This requirement applies to every spill, overflow, or discharge regardless of size.

7. Manhole and all pipe testing (including the TV inspection) must be performed and passed prior to Final Field Acceptance by SAWS Construction Inspection Division, as per SAWS Specifications For Water and Sanitary Sewer Construction.

8. All PVC pipe over 14 feet of cover shall be extra strength with minimum pipe stiffness of 115 psi.



## LOCATION MAP

## NOT-TO-SCALE

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**BID SET  
NOT FOR  
CONSTRUCTION**

**CLAYTON J. LINNEY**  
TEXAS LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 111543  
COLLIERS ENGINEERING & DESIGN, INC.  
TBP# Firm#: F-14909 TBP#S Firm#: 10194550

**TREVOR FIELDS, UNIT 1  
STREET, DRAINAGE,  
WATER, SANITARY SEWER &  
UTILITY IMPROVEMENTS  
FOR  
BEAZER HOMES**

**CITY OF SAN ANTONIO  
BEXAR COUNTY  
TEXAS**



Engineering  
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**SAN ANTONIO (KFW)**  
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San Antonio, TX 78231  
Phone: 210.979.8444  
COLLIERS ENGINEERING & DESIGN, INC.  
TBP# Firm#: F-14909 TBP#S Firm#: 10194550

SCALE: AS SHOWN DATE: DEC - 2023 DRAWN BY: JA CHECKED BY: CL  
PROJECT NUMBER: 1065-13-03 DRAWING NAME: CV0510651303

SHEET TITLE:  
**SANITARY SEWER  
COVER SHEET**

SHEET NUMBER:  
**1.0**

DEVELOPER'S NAME: BEAZER HOMES  
DEVELOPER'S ADDRESS: 11467 HUEBNER ROAD, SUITE 225  
CITY: SAN ANTONIO STATE: TX ZIP: 78230  
PHONE#: FAX#: TOTAL ACREAGE: AC.  
SAWS BLOCK MAP#: 118630, 118632, 120630, 120632 TOTAL EDU'S:  
TOTAL LINEAR FOOTAGE OF PIPE: 487.52 L.F. ~ SDR 26 PVC PLAT NO.:  
NUMBER OF LOTS: SAWS JOB#:

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

**TRENCH EXCAVATION SAFETY PROTECTION**  
CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTORS' TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTORS' IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR 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.

**COMPACTION NOTE:**

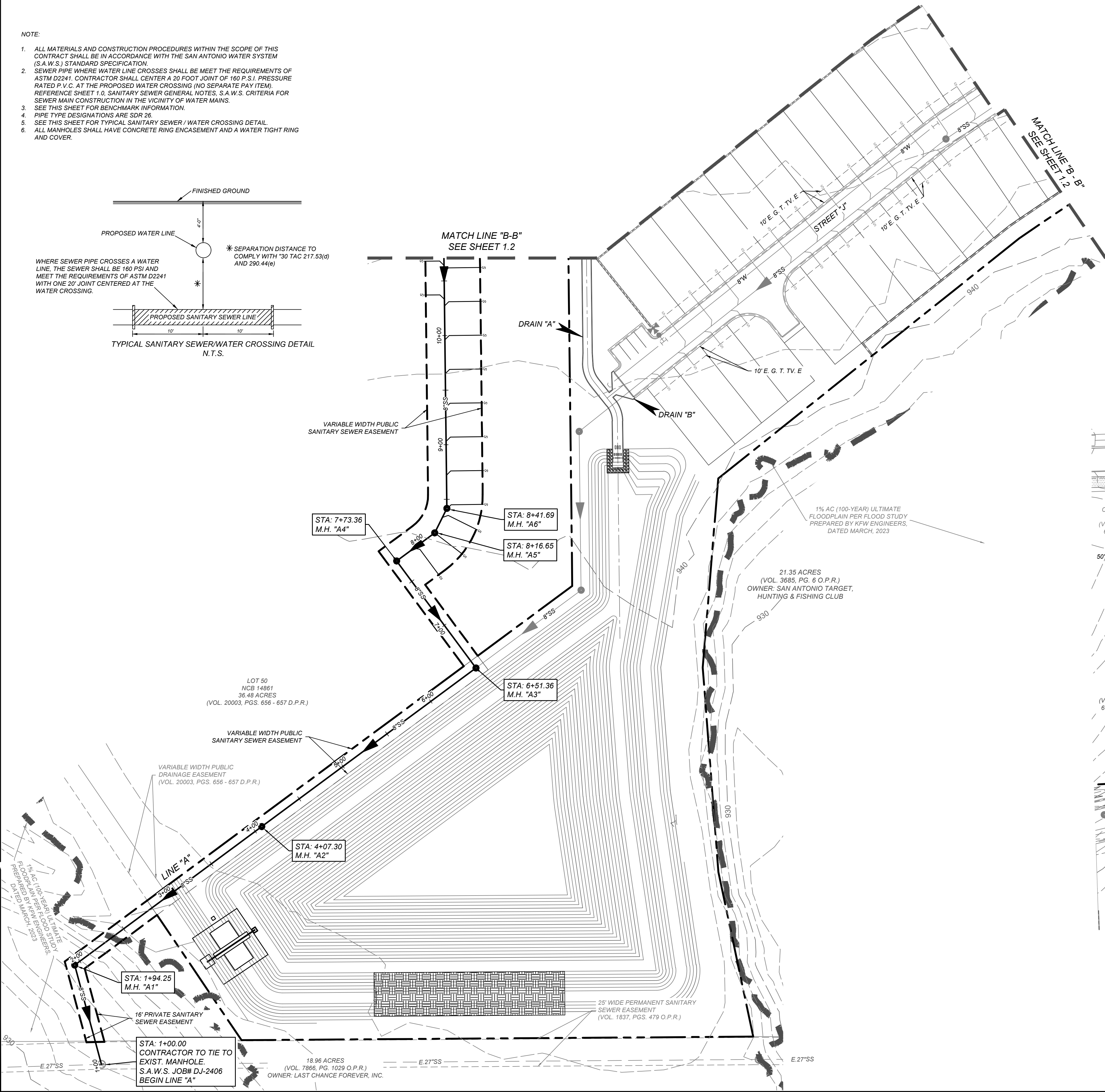
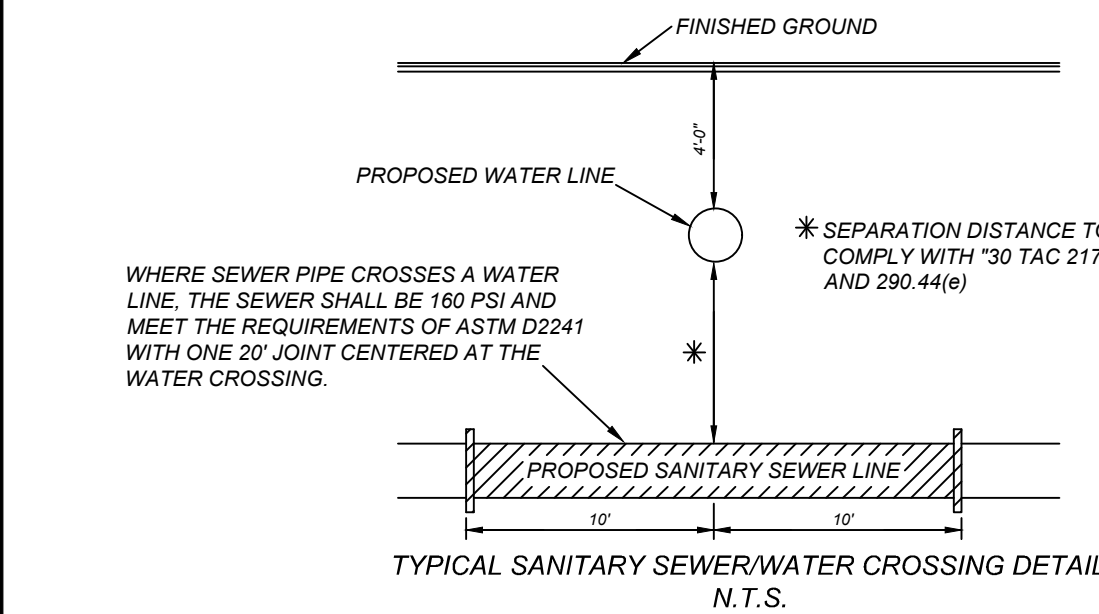
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**CAUTION!!** THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTORS' SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

**MANHOLE NOTE:**  
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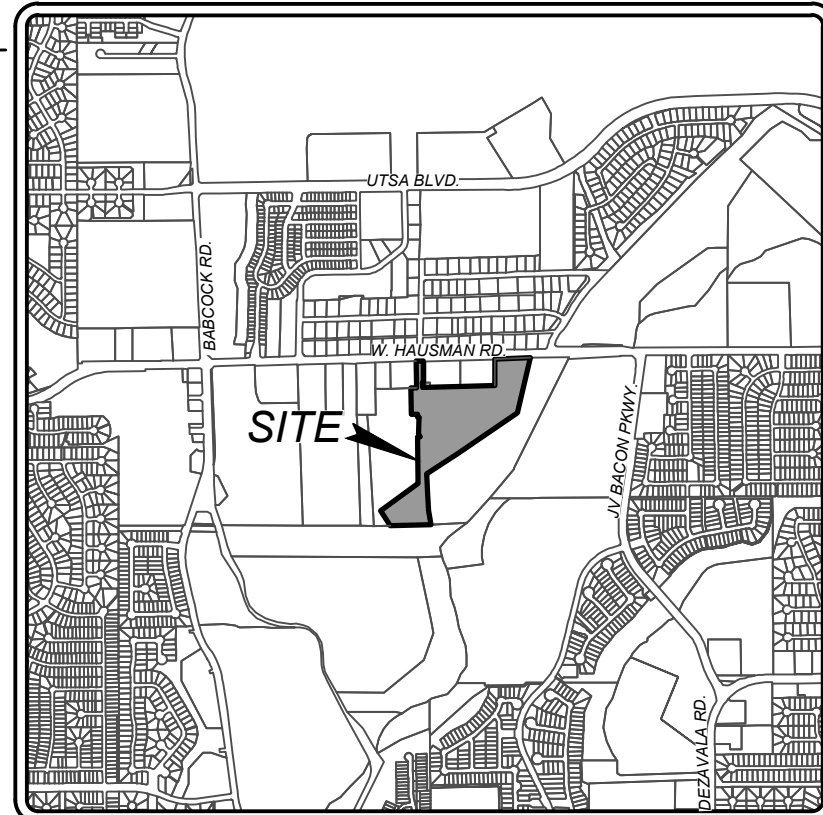
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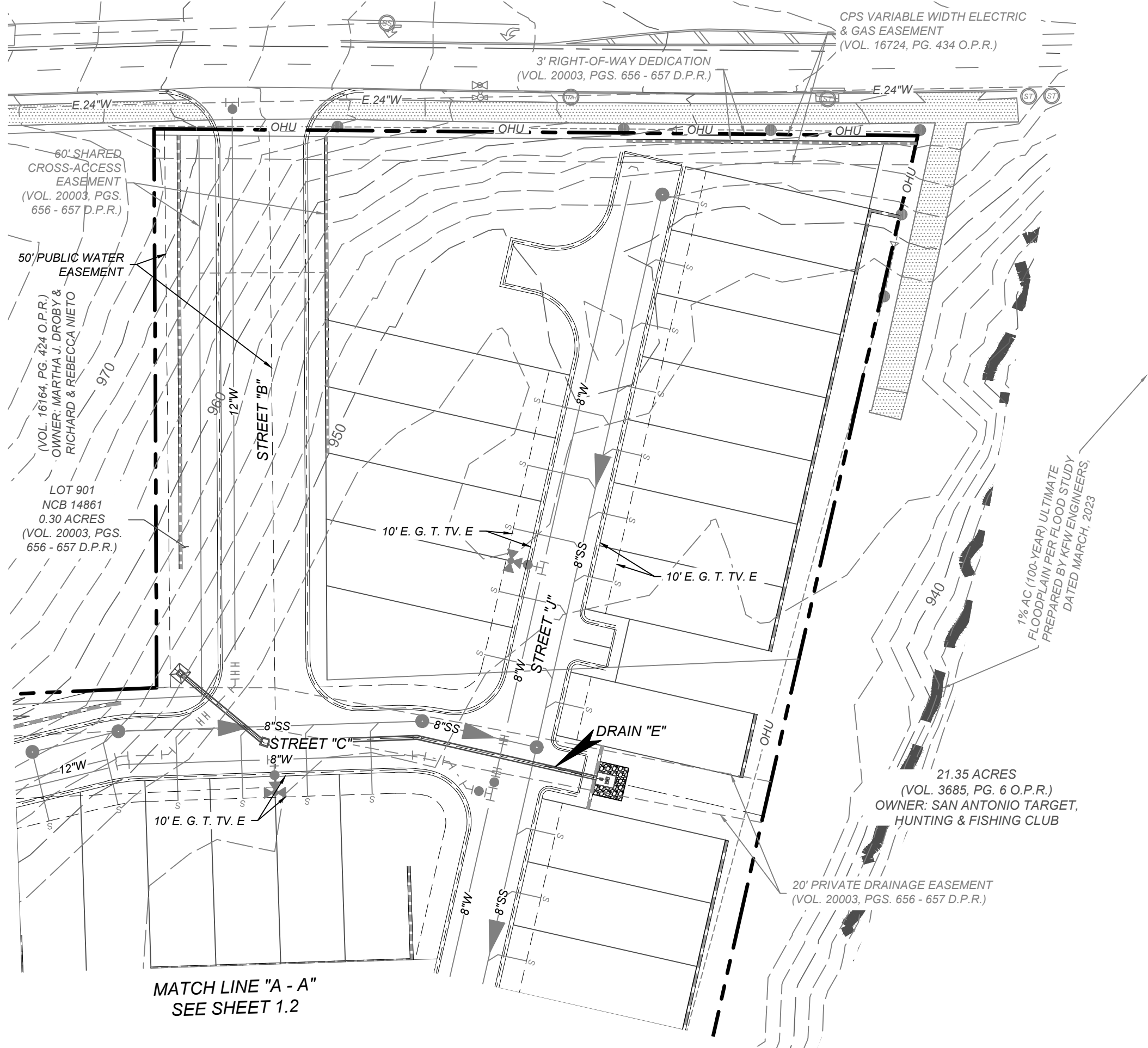
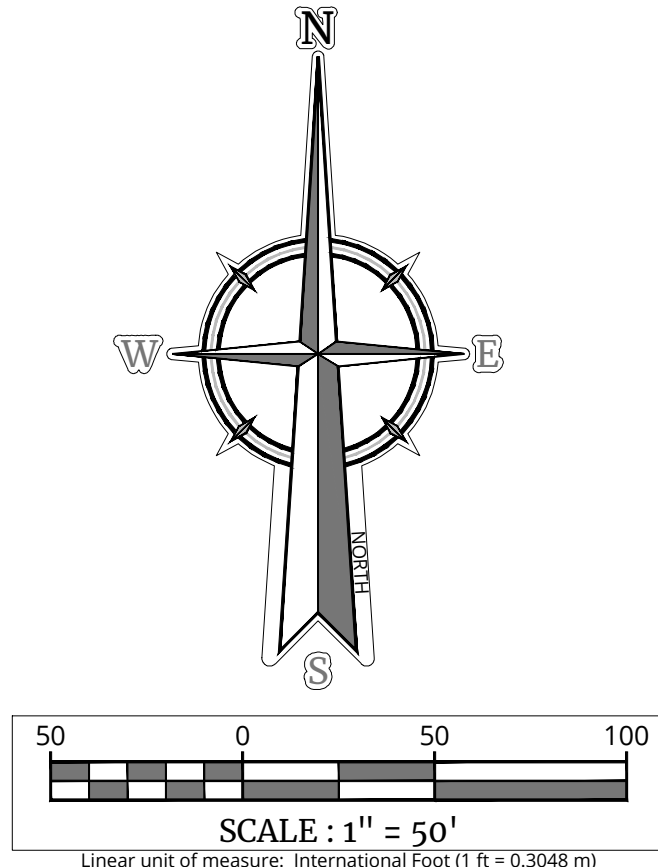


**LEGEND**

- PROPOSED WATER MAIN = W  
PROPOSED WATER SERVICE & METER BOX = W-M  
PROPOSED WATER 3/4" IRRIGATION SERVICE & METER BOX = W-IR  
PROPOSED FIRE HYDRANT = F  
PROPOSED WATER VALVE = V  
PROPOSED SANITARY SEWER MAIN = SS  
PROPOSED SANITARY SEWER MANHOLE = S  
PROPOSED SANITARY SEWER LATERAL = S-L  
PROPOSED ELECTRIC, GAS, TELEPHONE, & CABLE TV EASEMENT = E, G, T, V, E  
EXISTING WATER MAIN = E-W  
EXISTING FIRE HYDRANT = F  
EXISTING WATER VALVE = V  
EXISTING SANITARY SEWER MAIN = E-SS  
EXISTING SANITARY SEWER MANHOLE = E-S  
EXISTING OVERHEAD ELECTRIC W/POWER POLE = -OHE-  
EXISTING GUY WIRE/OVERHEAD ELECTRIC = -OHE-



LOCATION MAP  
NOT-TO-SCALE



DEVELOPER'S NAME: BEAZER HOMES  
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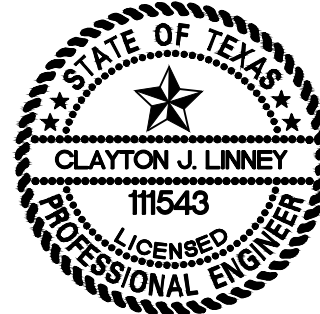
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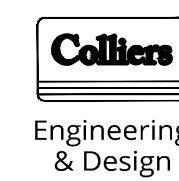
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**STREET, DRAINAGE,**  
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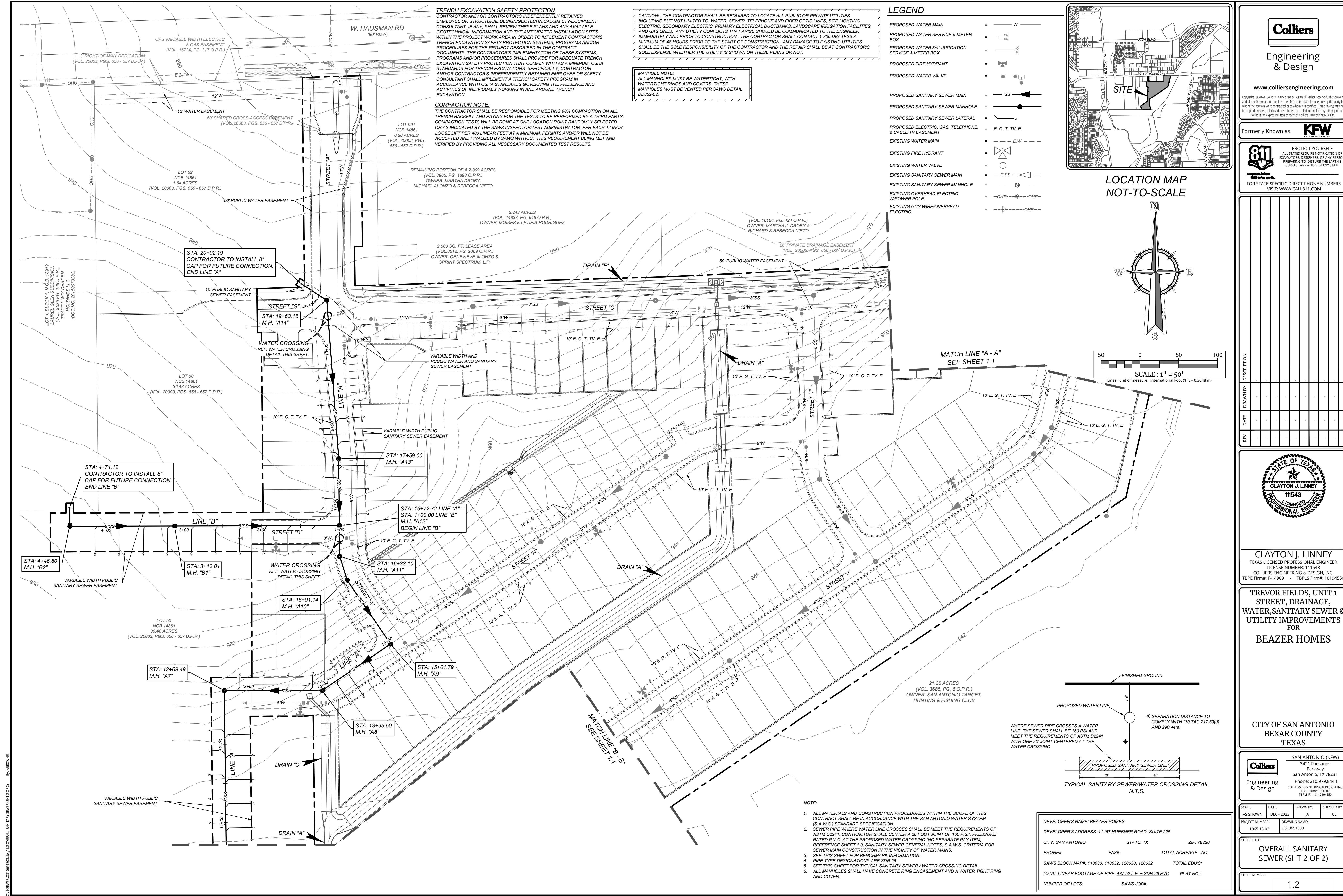
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PROJECT NUMBER: 1065-13-03 DRAWING NAME: 0510651-903

SHEET TITLE:  
**OVERALL SANITARY SEWER (SHT 1 OF 2)**

SHEET NUMBER:  
**1.1**

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**TEXAS**

**Engineering & Design**

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CHECKED BY: CL

PROJECT NUMBER: 1065-13-03

DRAWING NAME: 05106513-03

SHEET TITLE:

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SHEET NUMBER:

**1.2**



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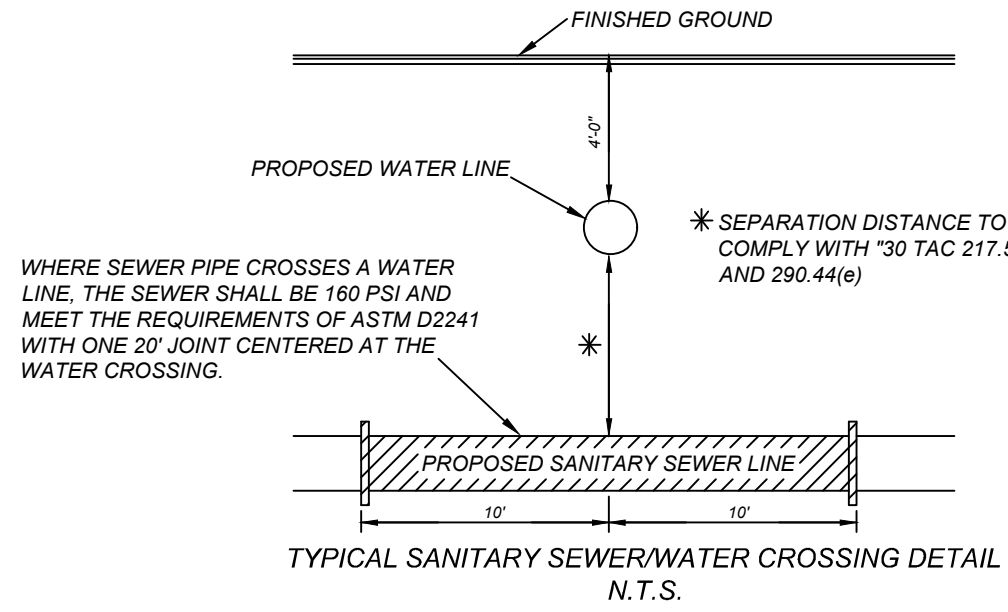
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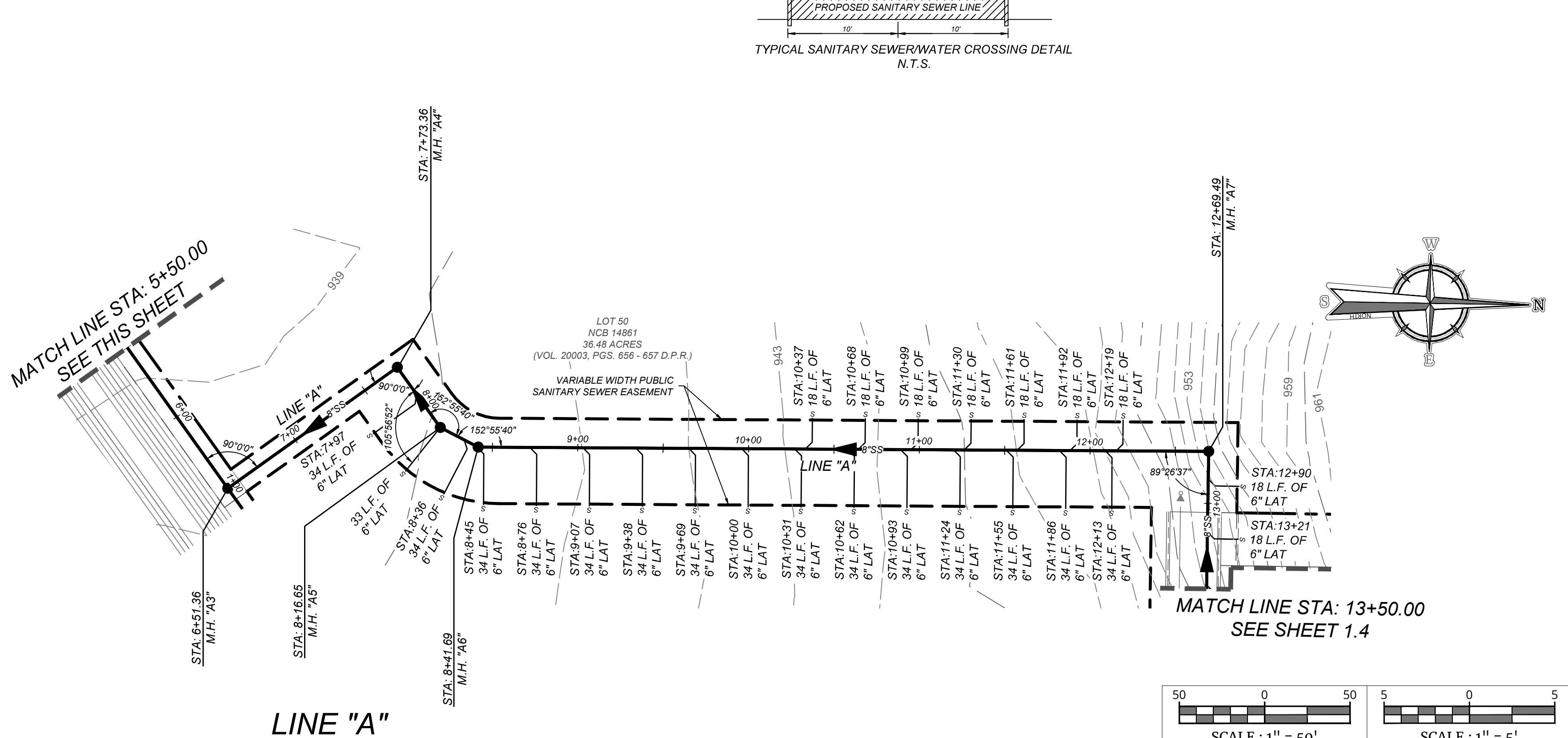
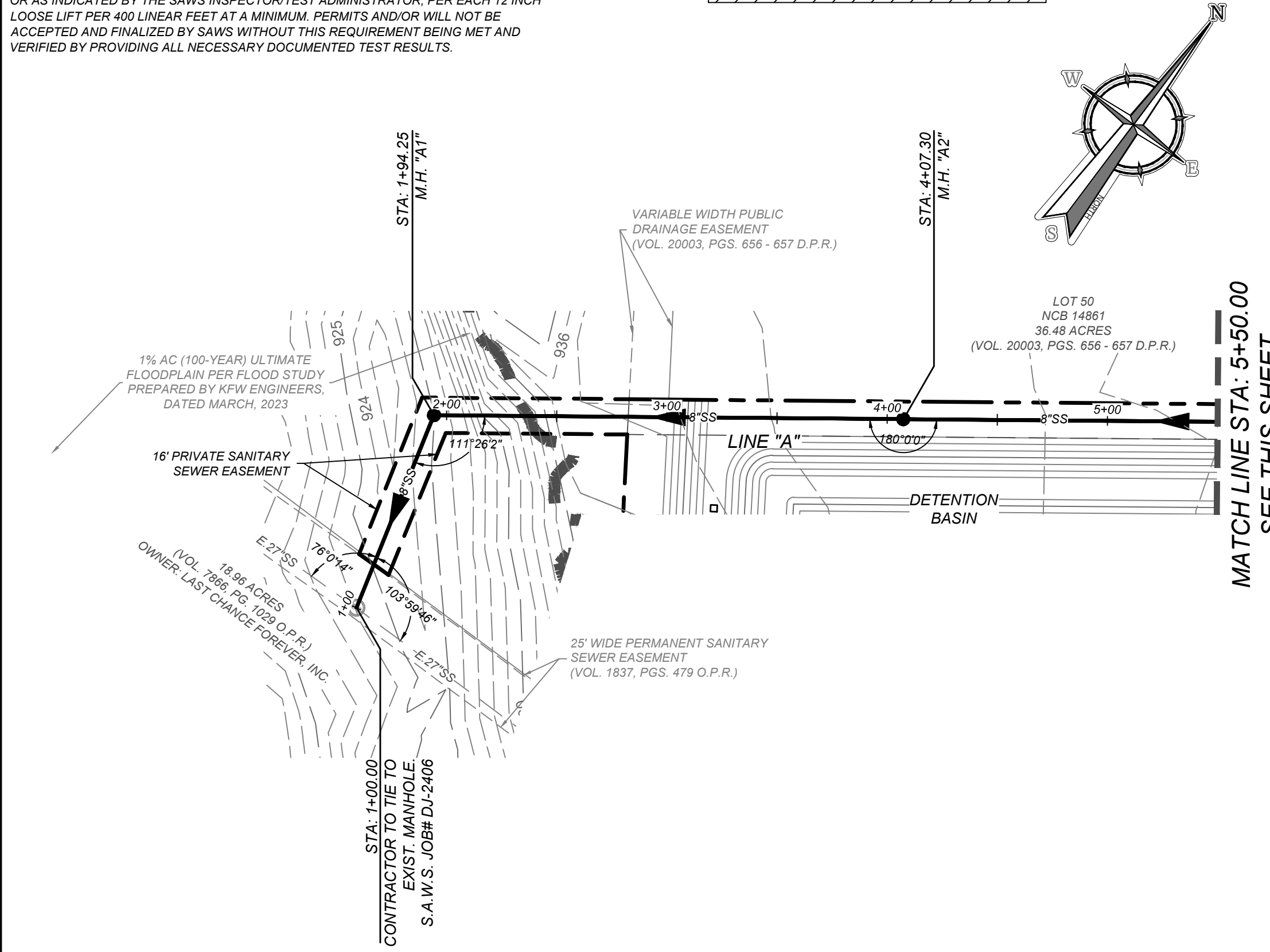
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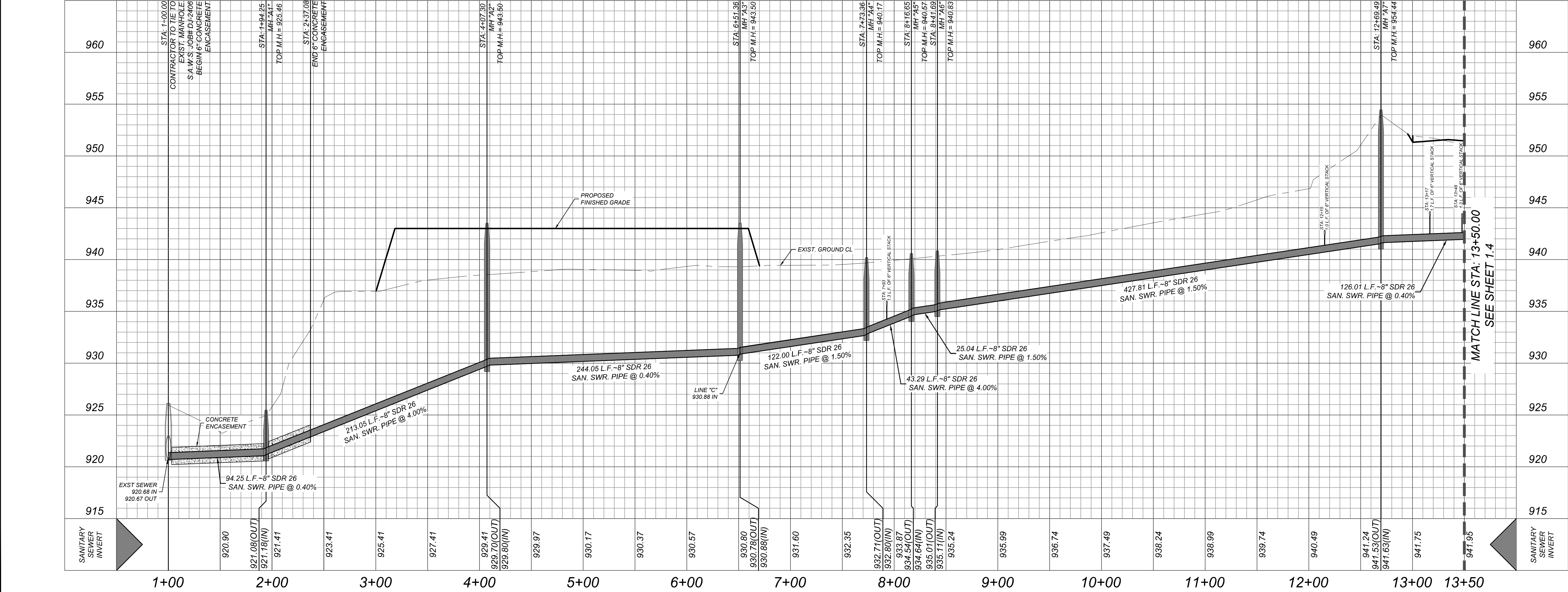
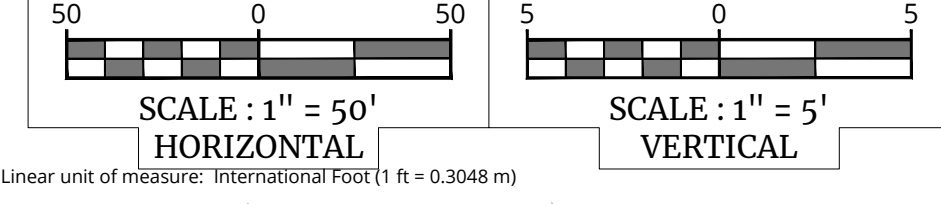
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NUMBER OF LOTS: SAWS JOB#:



LINE "A"  
STA: 1+00.00 - STA: 13+50.00



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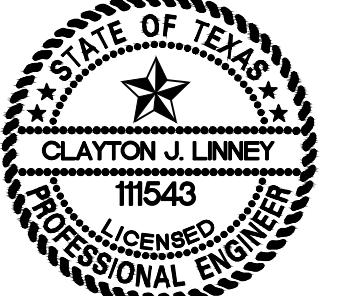
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PROJECT NUMBER: 1065-13-03 DRAWING NAME: 55106513-03

SHEET TITLE:  
LINE "A" PLAN & PROFILE  
(SHT 1 OF 2)

SHEET NUMBER:  
1.3



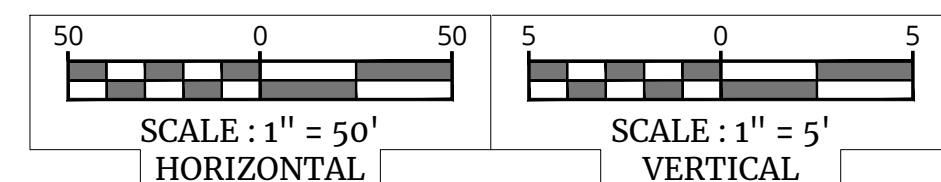
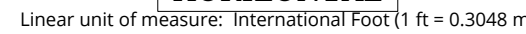
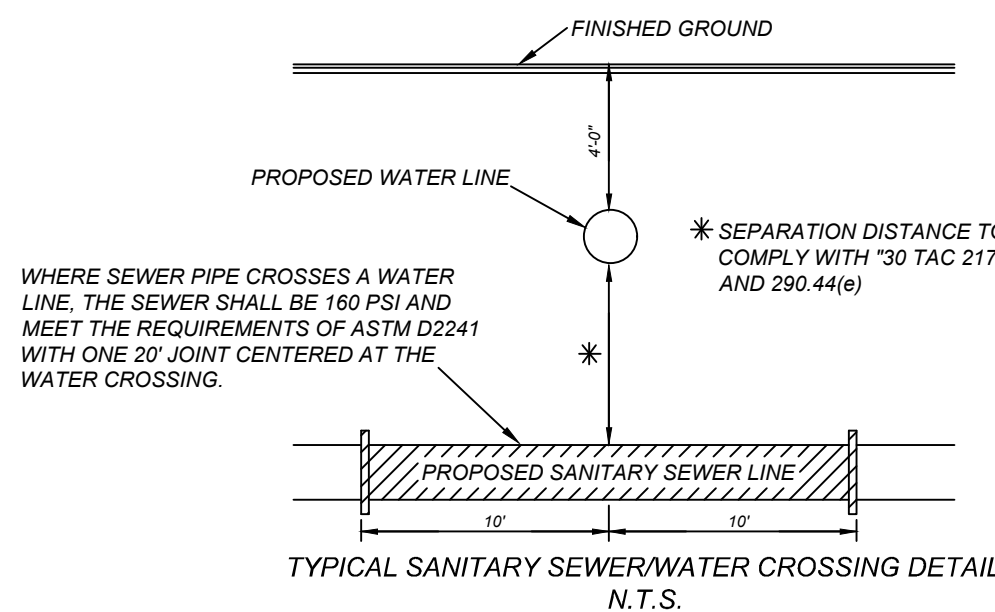
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/TECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY SUBMITTALS AND APPROVE THEM FOR CONSTRUCTION OF THE TRENCH EXCAVATION AND THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH EXCAVATION SAFETY PROTECTION SYSTEM, PROGRAMS AND/OR PROCEDURES, INCLUDING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

**COMPACTION NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12 INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. PERMITS AND/OR WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

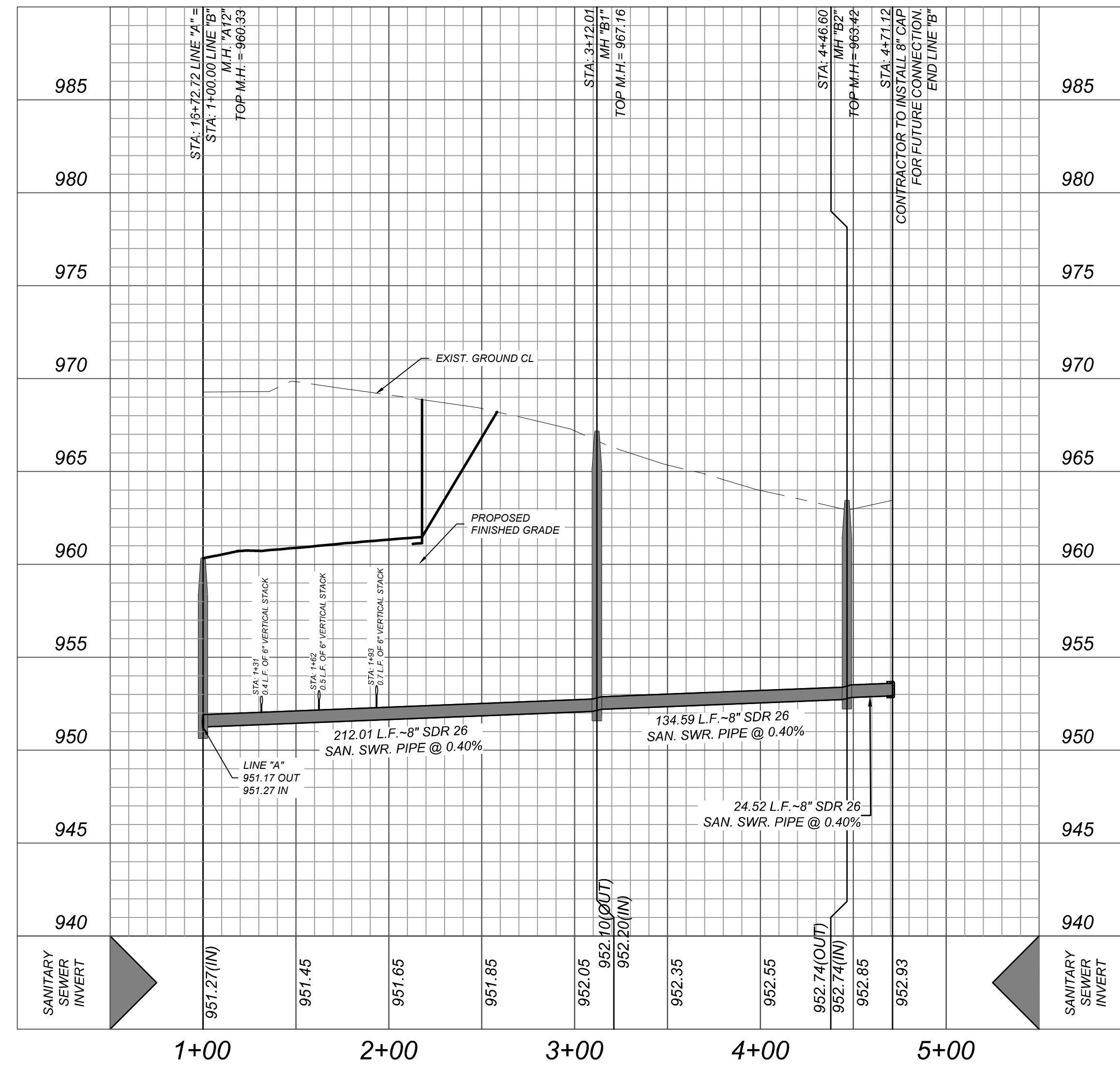
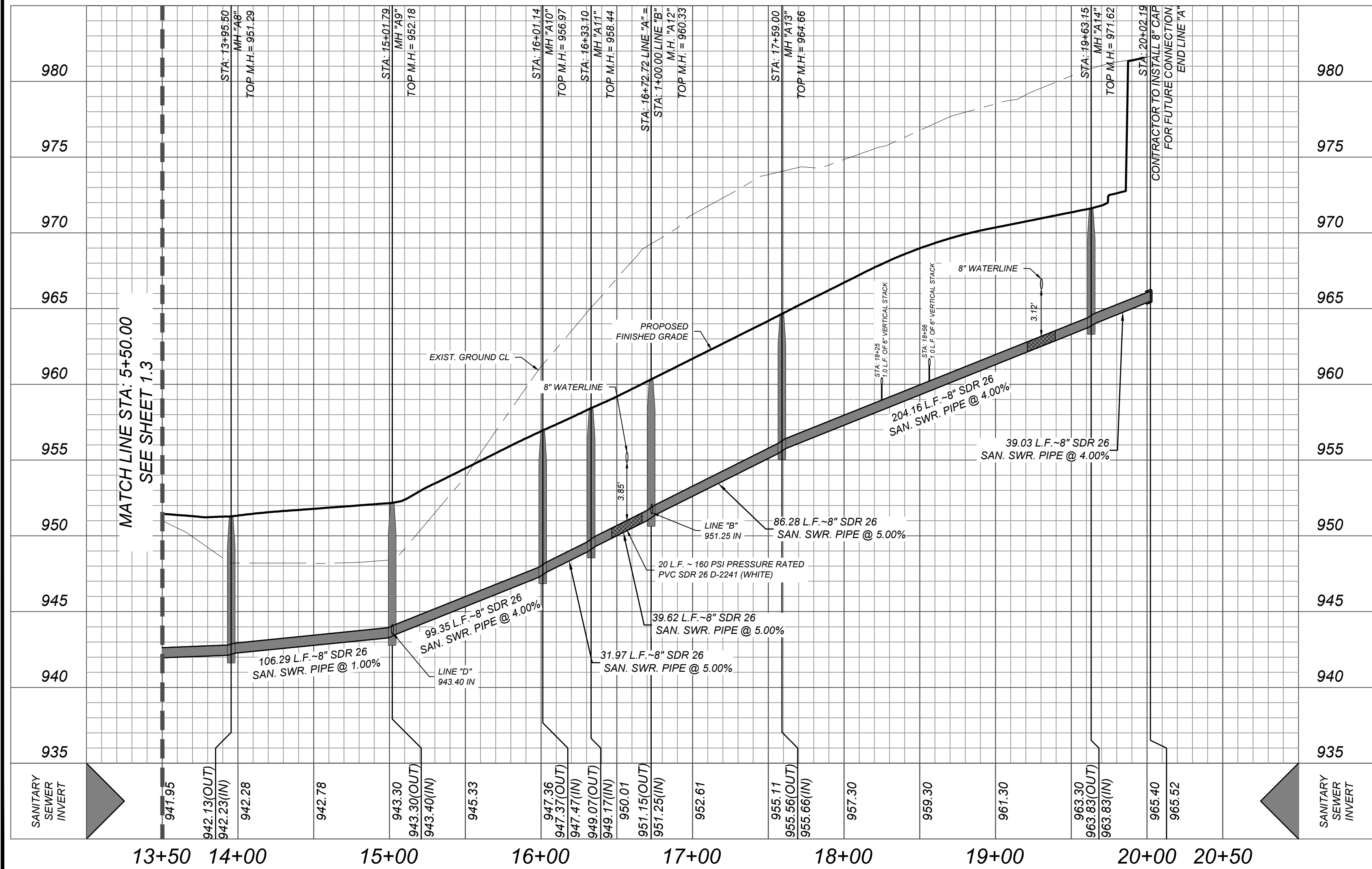
**CAUTION!:** THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING AND ELECTRICAL SECONDARY AND PRIMARY ELECTRICAL DISTRIBUTION, LANDFILL IRRIGATION FACILITIES AND GAS LINES. ANY UTILITIES CONTACTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-GID-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

MANHOLE NOTE:  
ALL MANHOLES MUST BE WATERTIGHT, WITH  
WATERTIGHT RINGS AND COVERS. THESE  
MANHOLES MUST BE VENTED PER SAWS DET  
DD852-02

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM (S.A.W.S.) STANDARD SPECIFICATION.
2. ALL CONSTRUCTION WORKER SHALL POSSESS SHALL BE MEET THE REQUIREMENTS OF ASTM D2242. CONTRACTOR SHALL CENTER A 20 FOOT JUNG OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM).
3. REFERENCE SHEET \_\_\_\_\_ SANITARY SEWER GENERAL NOTES, S.A.W.S. CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS.
4. SEE THIS SHEET FOR BENCHMARK INFORMATION.
5. PIPE TYPE DESIGNATIONS ARE SDR 26.
6. SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
7. ALL MANHOLES SHALL HAVE CONCRETE RING ENCASMENT AND A WATER TIGHT RING AND COVER.



LINE "A"  
STA: 13+50.00 - END



DEVELOPER'S NAME: BEAZER HOMES		
DEVELOPER'S ADDRESS: 11467 HUEBNER ROAD, SUITE 225		
CITY: SAN ANTONIO	STATE: TX	ZIP: 78230
PHONE#:	FAX#:	TOTAL ACREAGE: AC.
SAWS BLOCK MAP# : 118630, 118632, 120630, 120632		TOTAL EDU#:
TOTAL LINEAR FOOTAGE OF PIPE: <u>497.52 L.F.</u> - SDR 26 PVC		PLAT NO.:
NUMBER OF LOTS:	SAWS JOB#:	

[illegible]

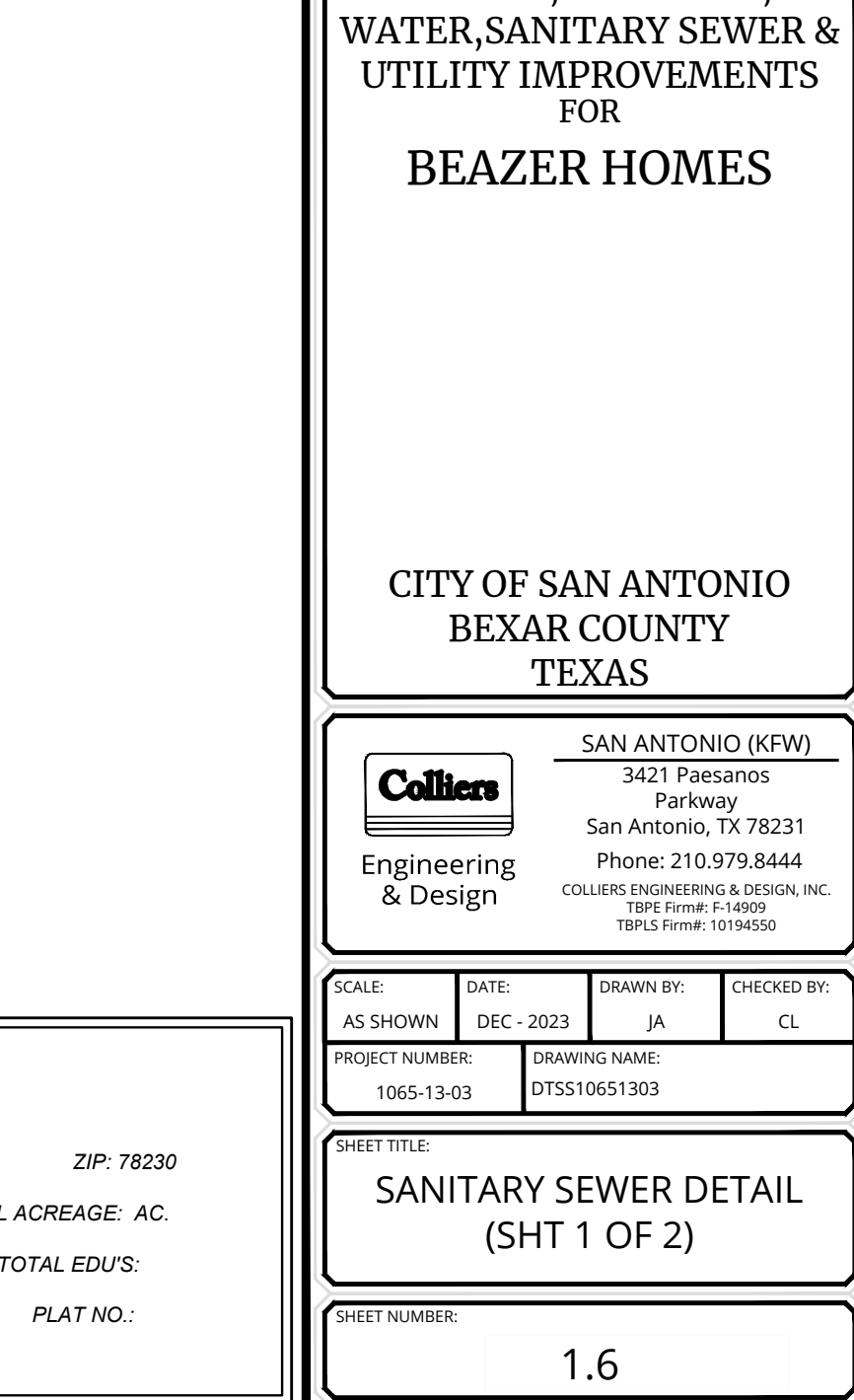
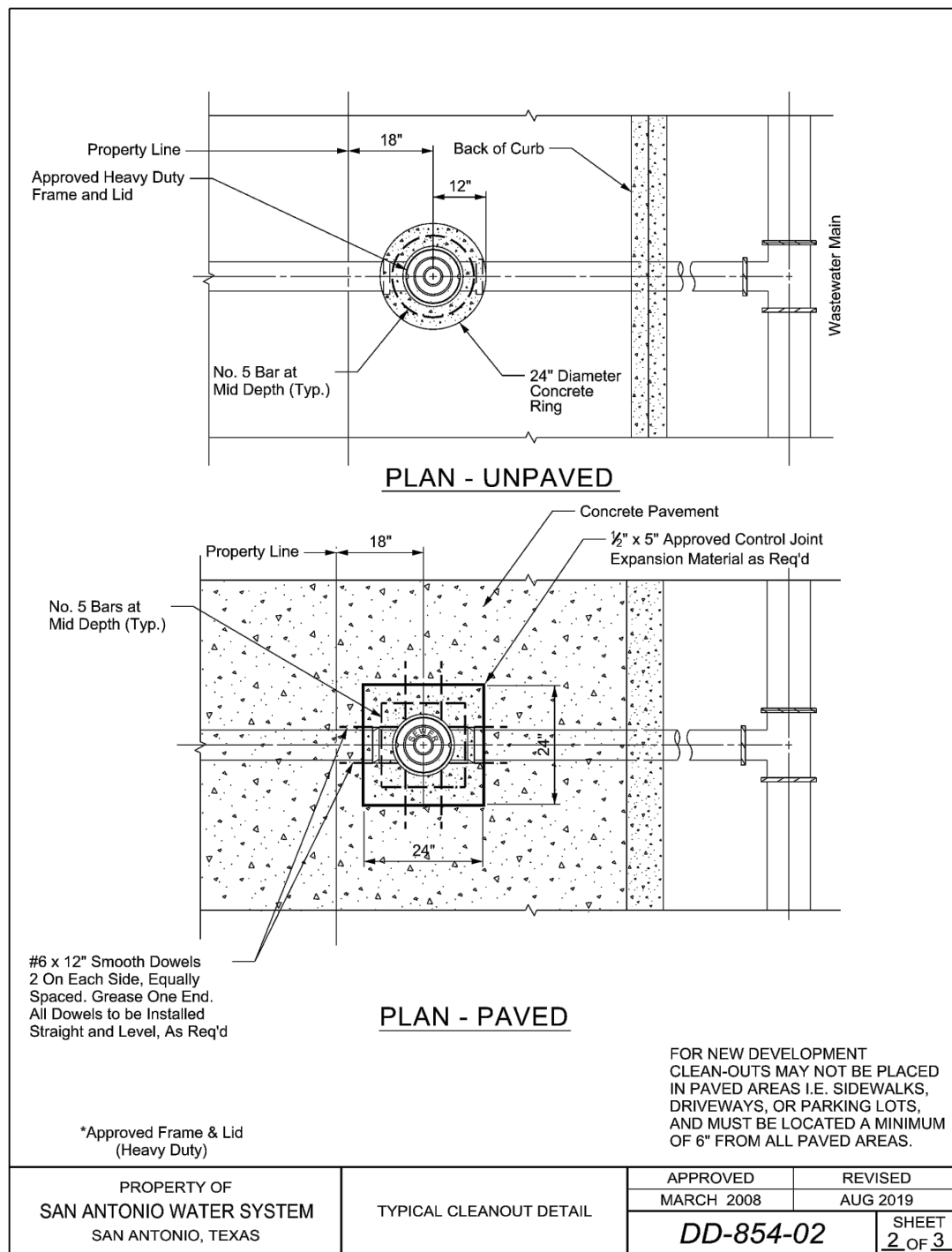
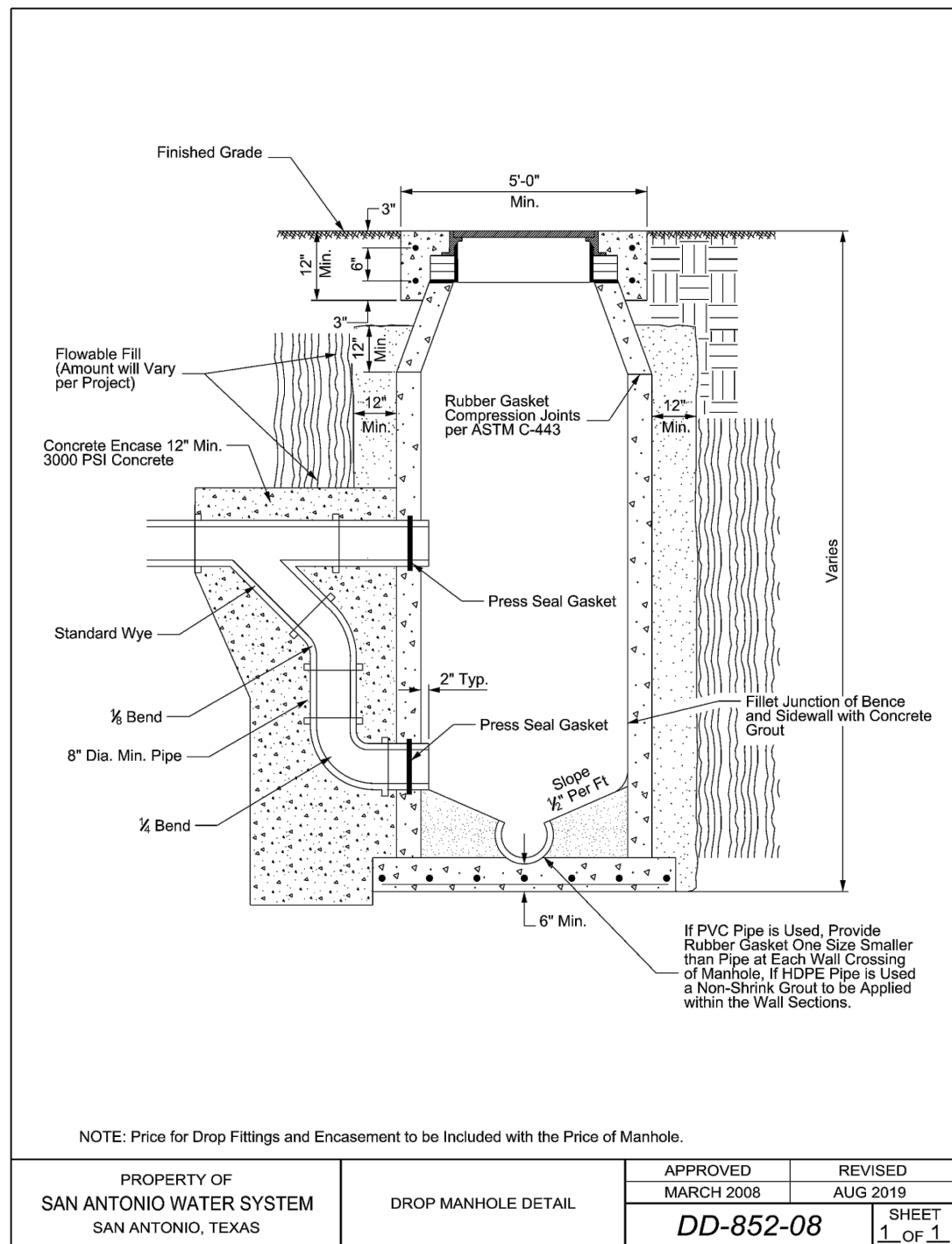
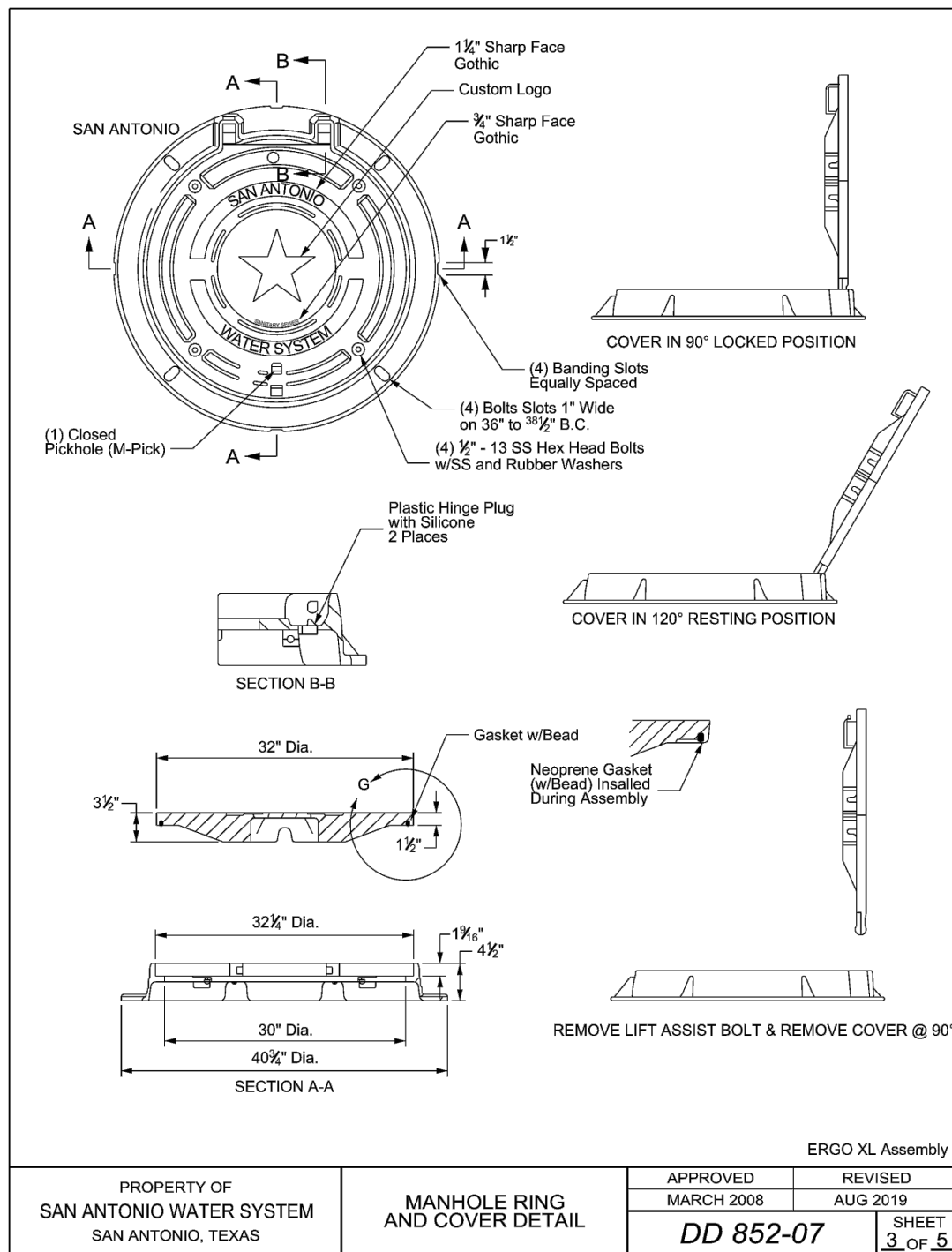
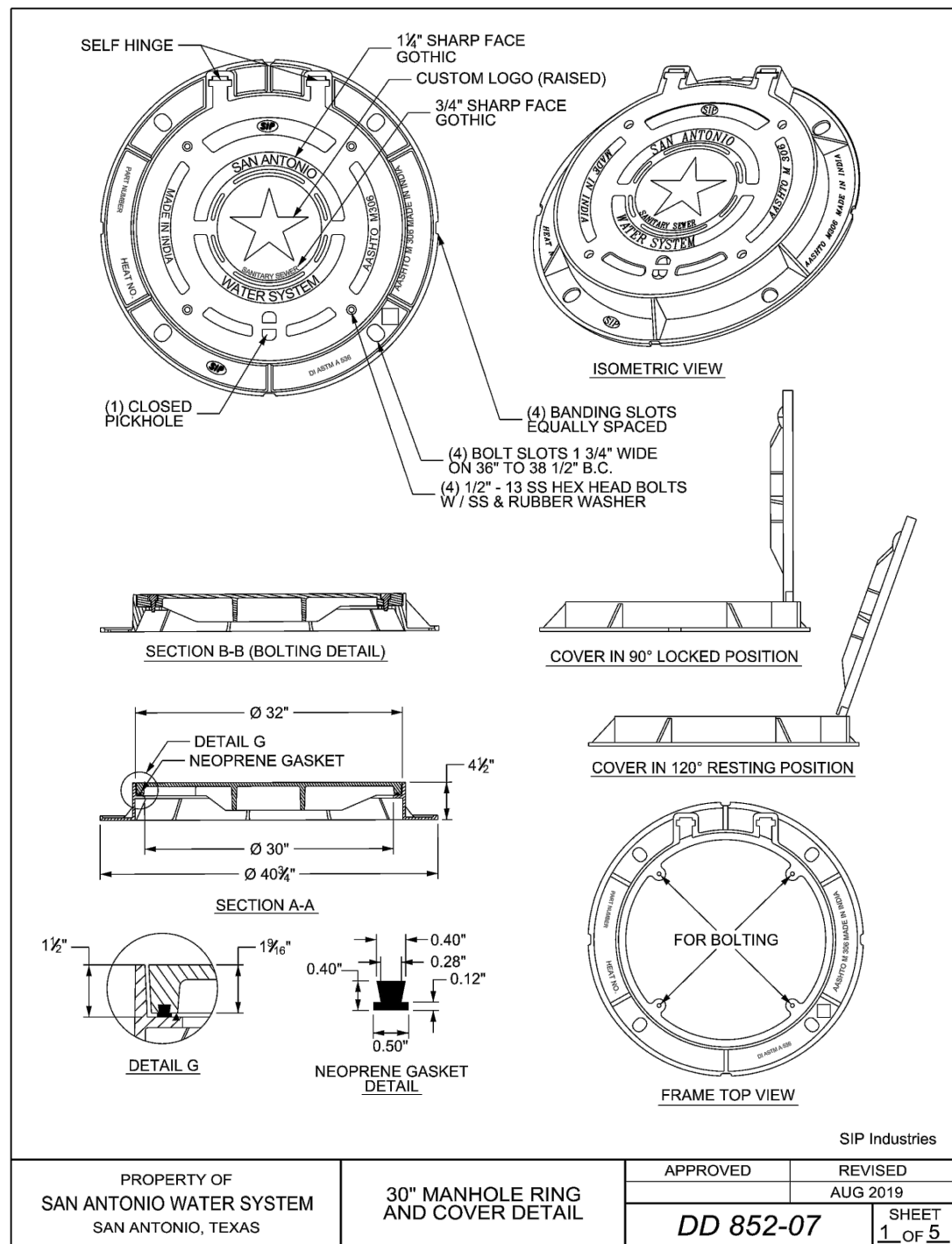
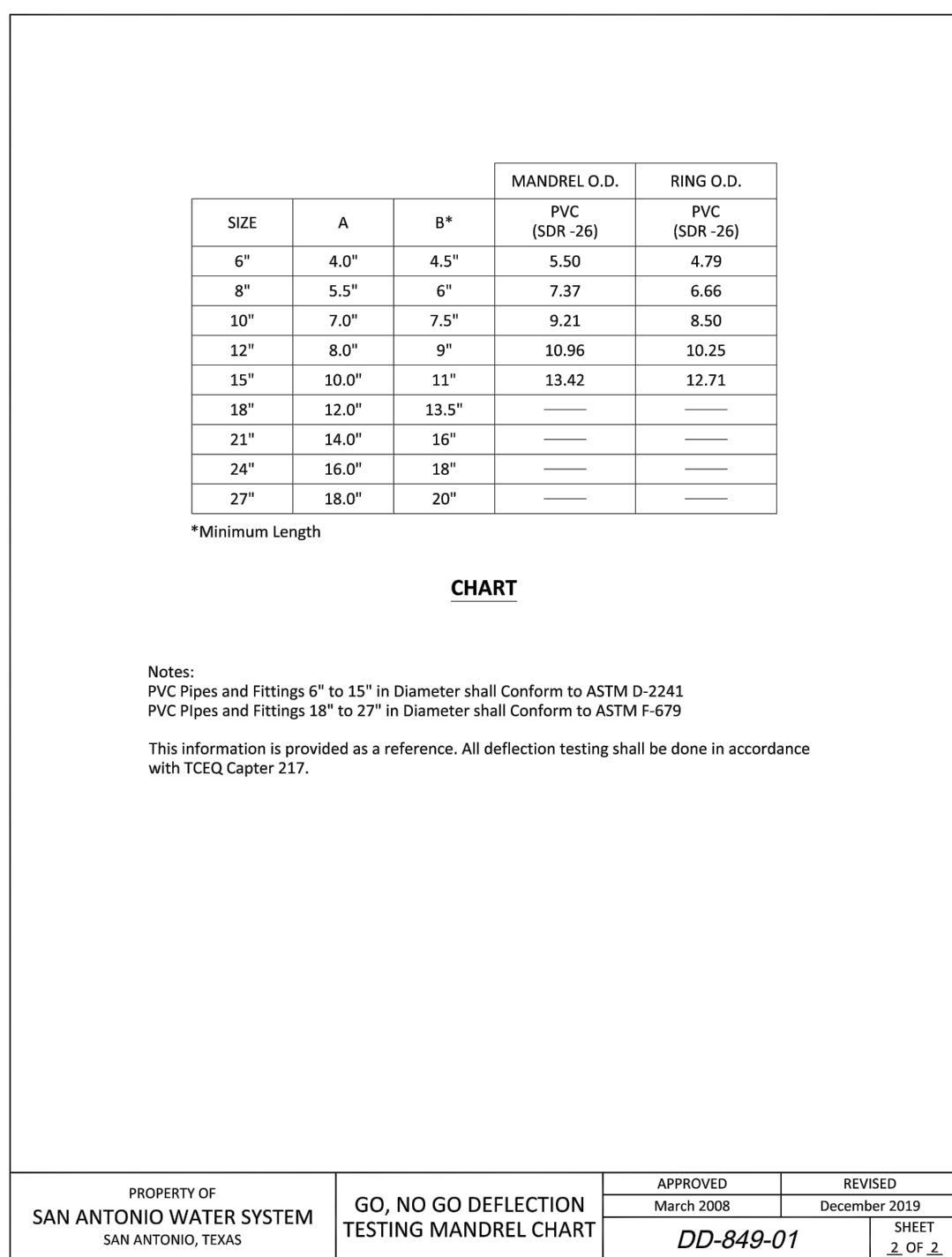
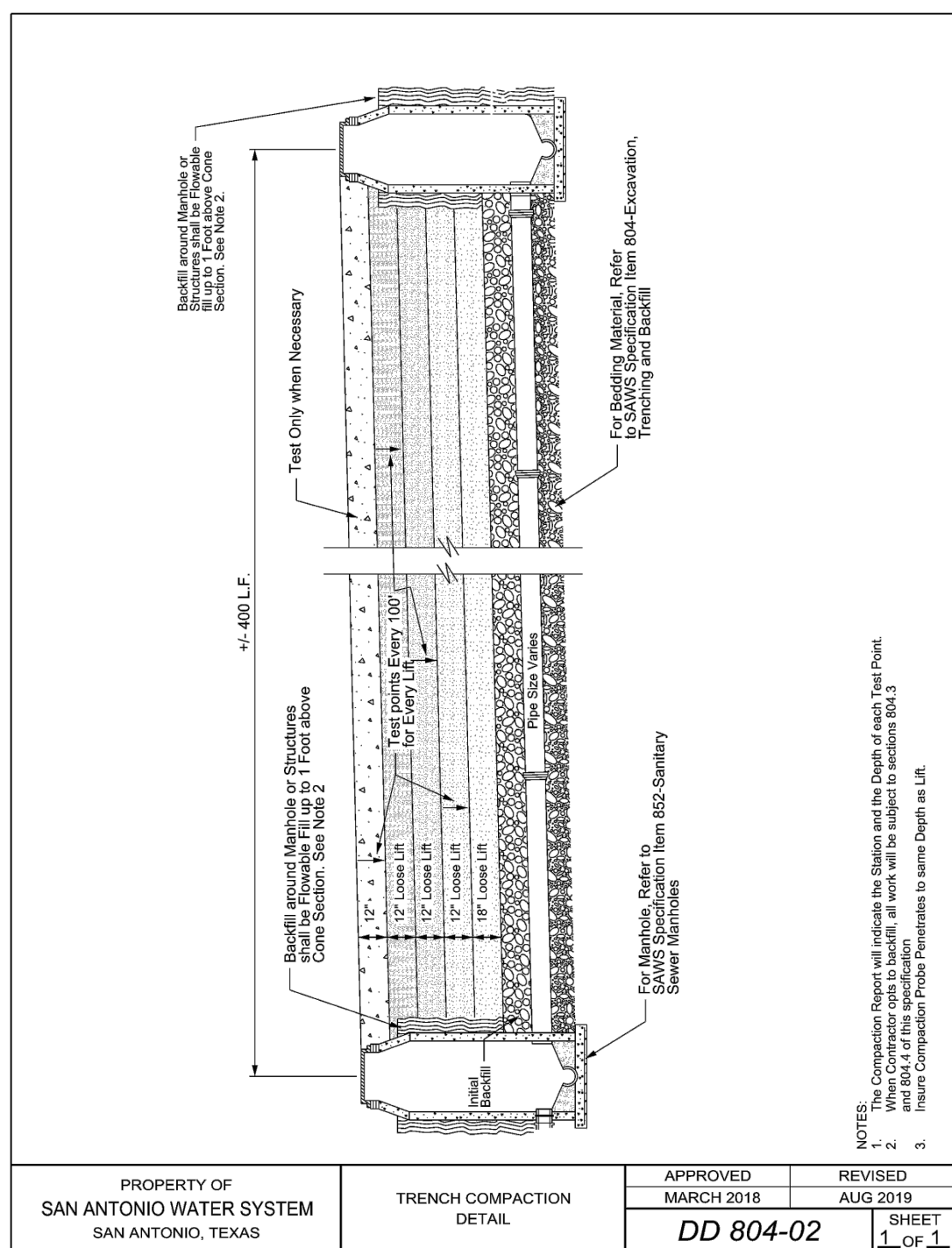
\\n\SENWER\SS10651303.dwg\1.4 LINE "A" (SHT 2 OF 2) & LINE "B" PLAN & PROFILE By: ABROWNE

**NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION**









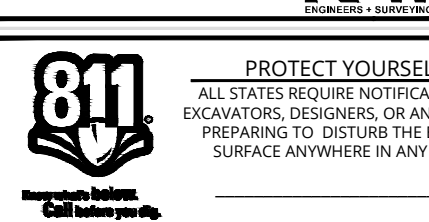




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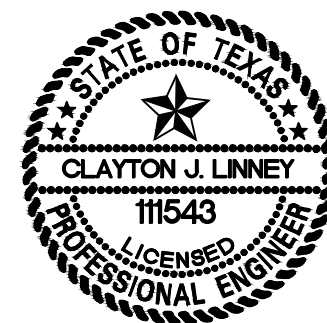
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Formerly Known as



FOR STATE SPECIFIC DIRECT PHONE NUMBERS  
VISIT: [WWW.CALL811.COM](http://WWW.CALL811.COM)

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**CLAYTON J. LINNEY**  
TEXAS LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 111543  
COLLIERS ENGINEERING & DESIGN, INC.  
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

**TREVOR FIELDS, UNIT 1  
STREET, DRAINAGE,  
WATER, SANITARY SEWER &  
UTILITY IMPROVEMENTS  
FOR  
BEAZER HOMES**

CITY OF SAN ANTONIO  
BEXAR COUNTY  
TEXAS



**SAN ANTONIO (KFW)**  
3421 Paesanos  
Parkway  
San Antonio, TX 78231  
Phone: 210.979.8444  
COLLIERS ENGINEERING & DESIGN, INC.  
TBPE Firm#: F-14909  
TBPLS Firm#: 10194550

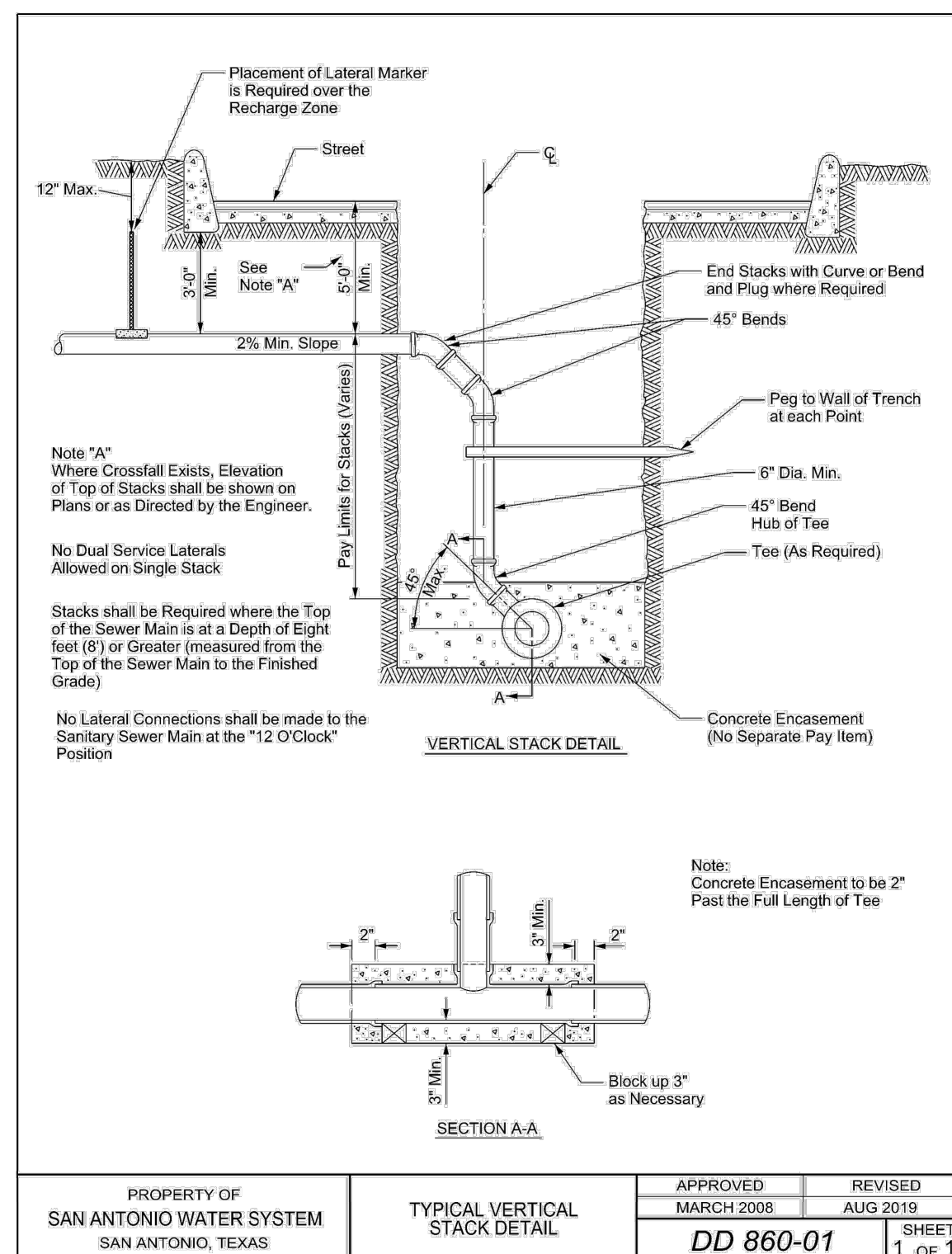
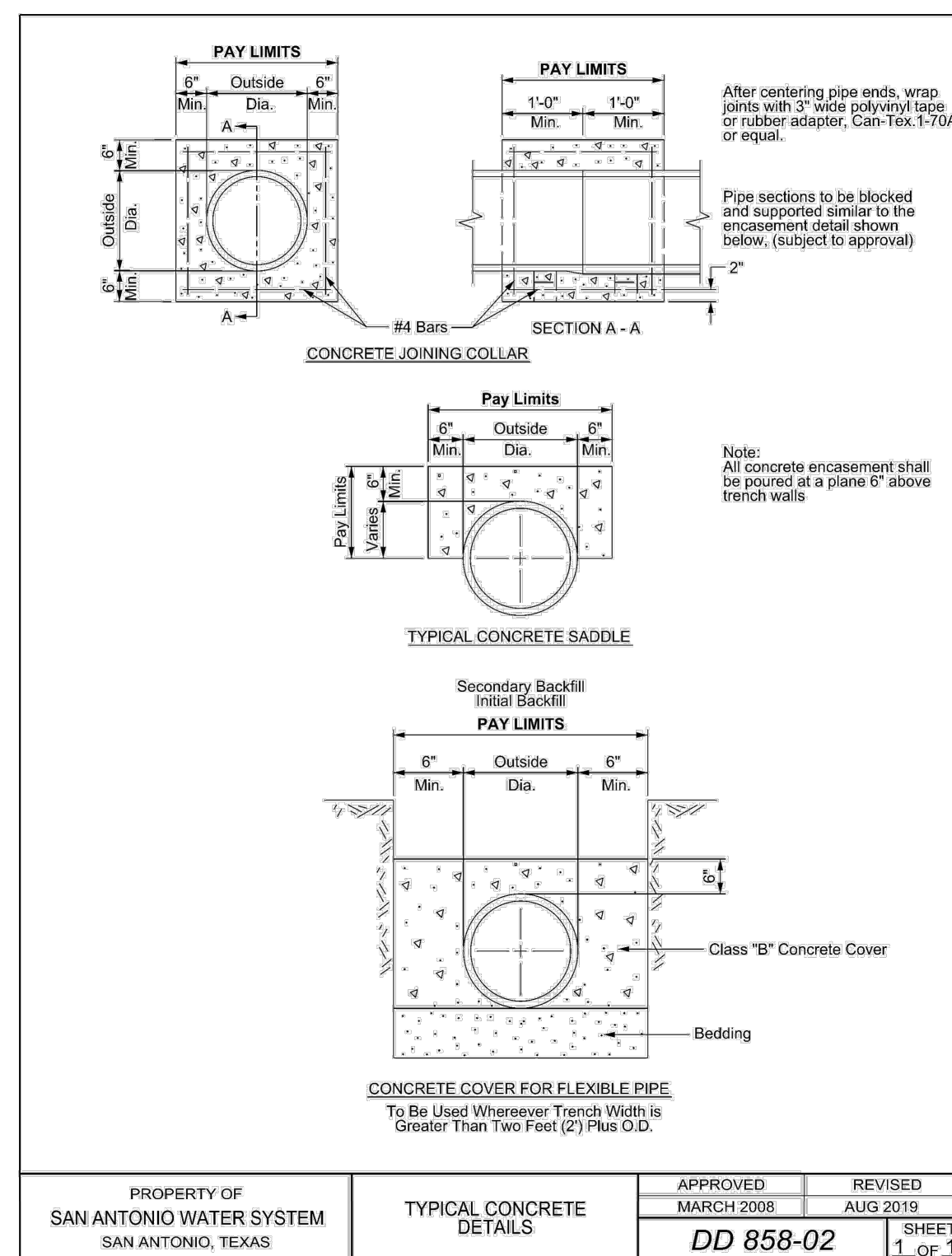
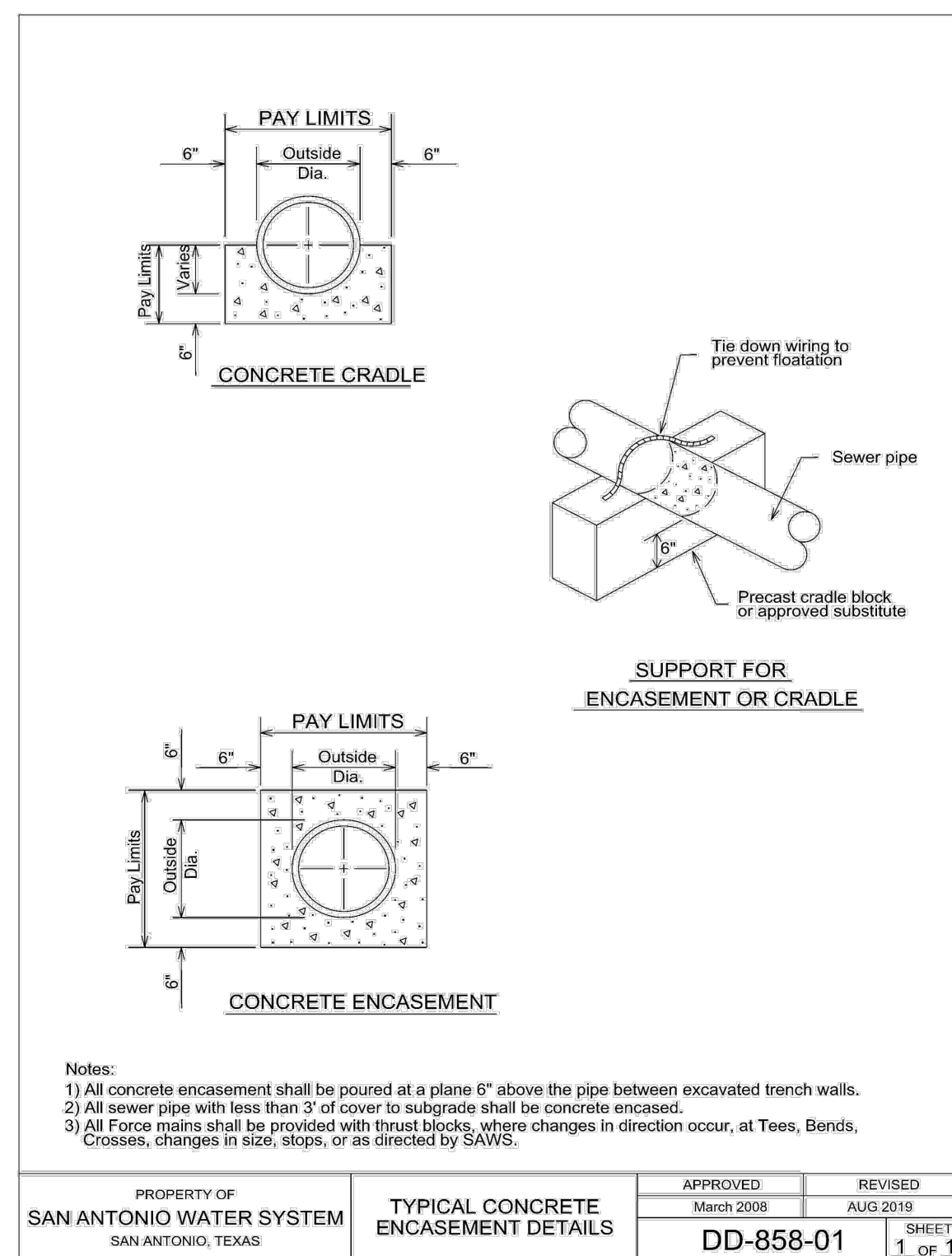
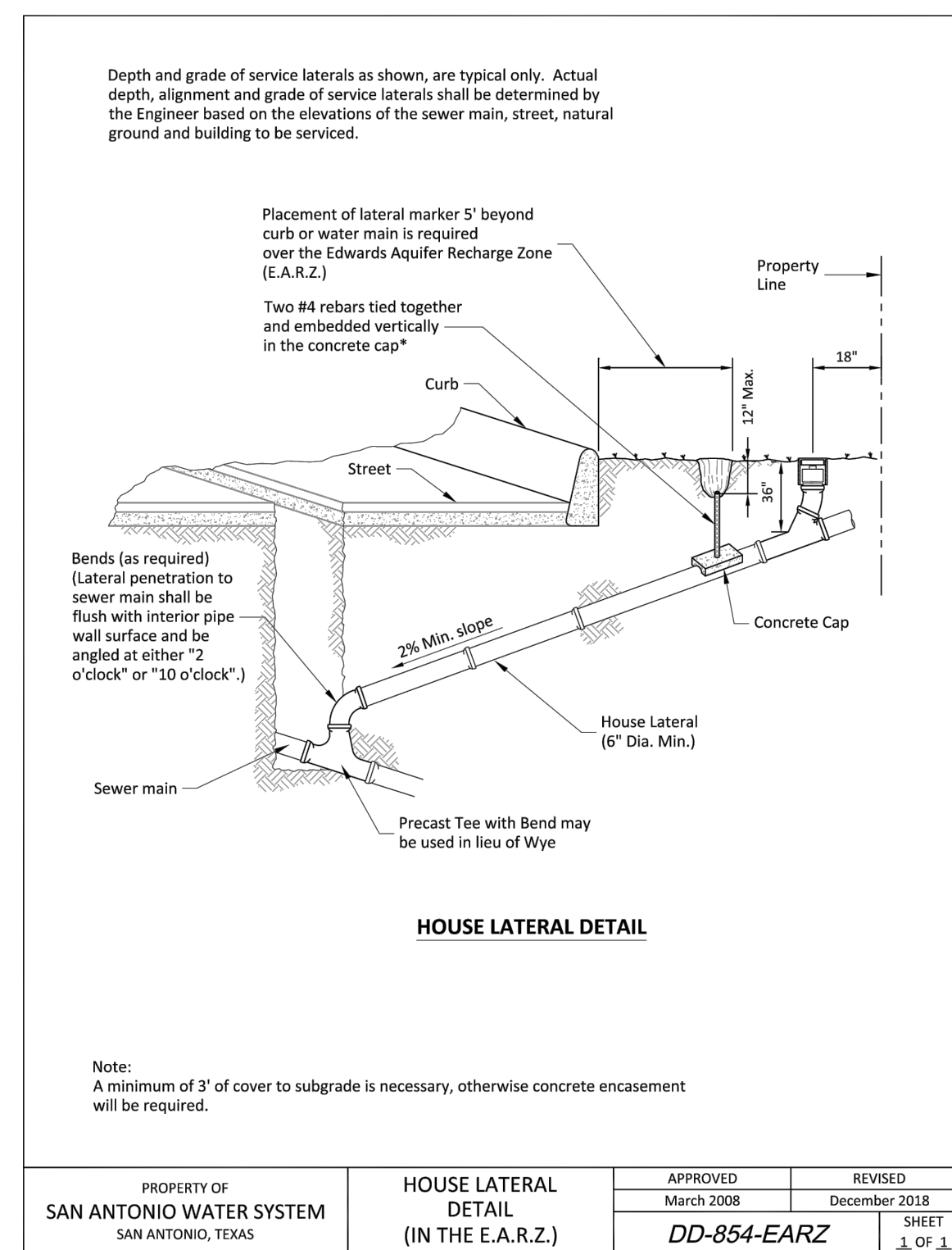
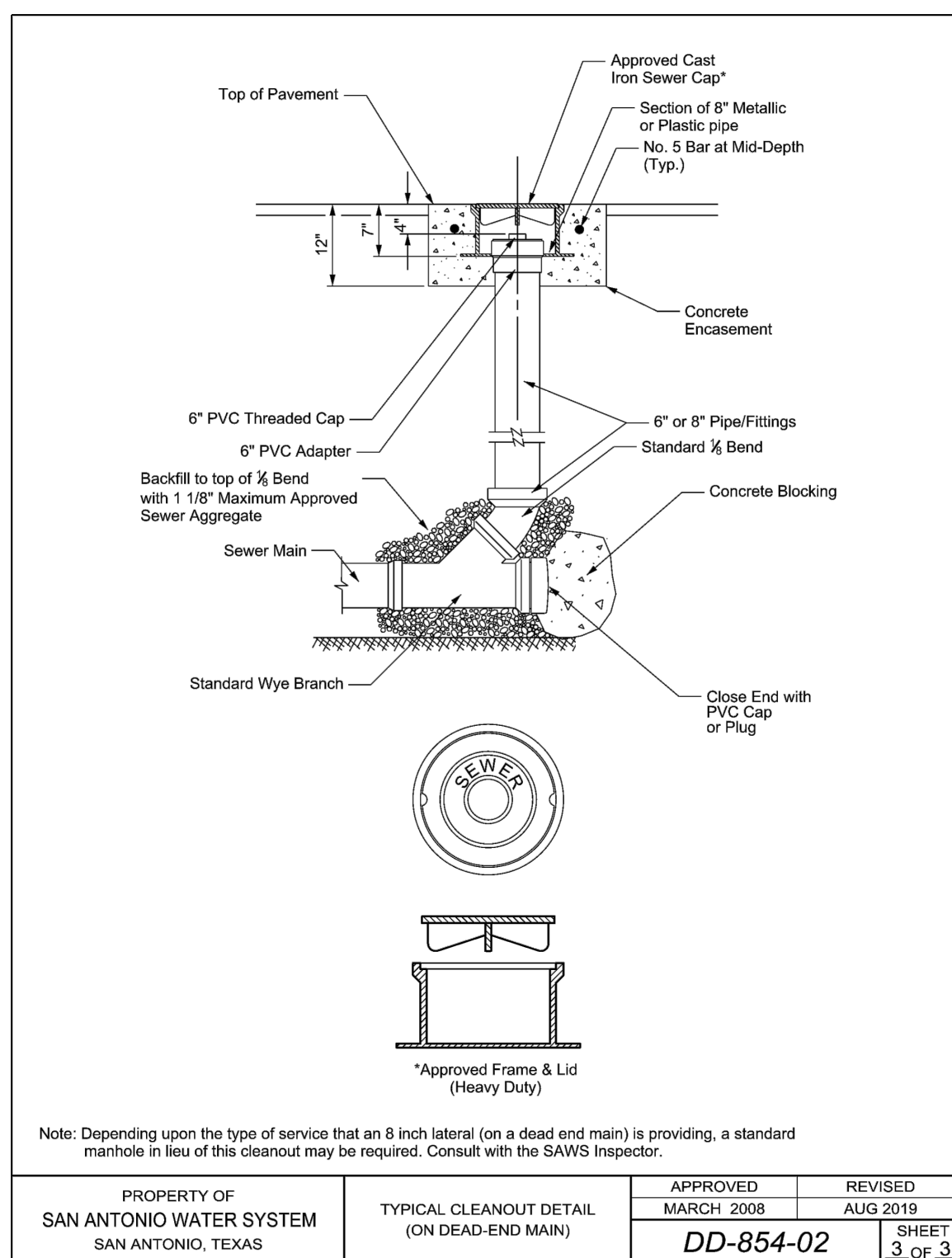
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	DEC - 2023	JA	CL
PROJECT NUMBER:	DRAWING NAME:		
1065-13-03	DTSS10651303		

SHEET TITLE:

**SANITARY SEWER DETAIL**  
**(SHT 2 OF 2)**

SHEET NUMBER:

1.7



DEVELOPER'S NAME: BEAZER HOMES

DEVELOPER'S ADDRESS: 11467 HUEBNER ROAD, SUITE 225

CITY: SAN ANTONIO STATE: TX ZIP: 78230

PHONE#: FAX#: TOTAL ACREAGE: AC.

SAWS BLOCK MAP#: 118630, 118632, 120630, 120632 TOTAL EDU'S:

TOTAL LINEAR FOOTAGE OF PIPE: 487.52 L.F. - SDR 26 PVC PLAT NO.:

NUMBER OF LOTS: SAWS JOB#:

**NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION**