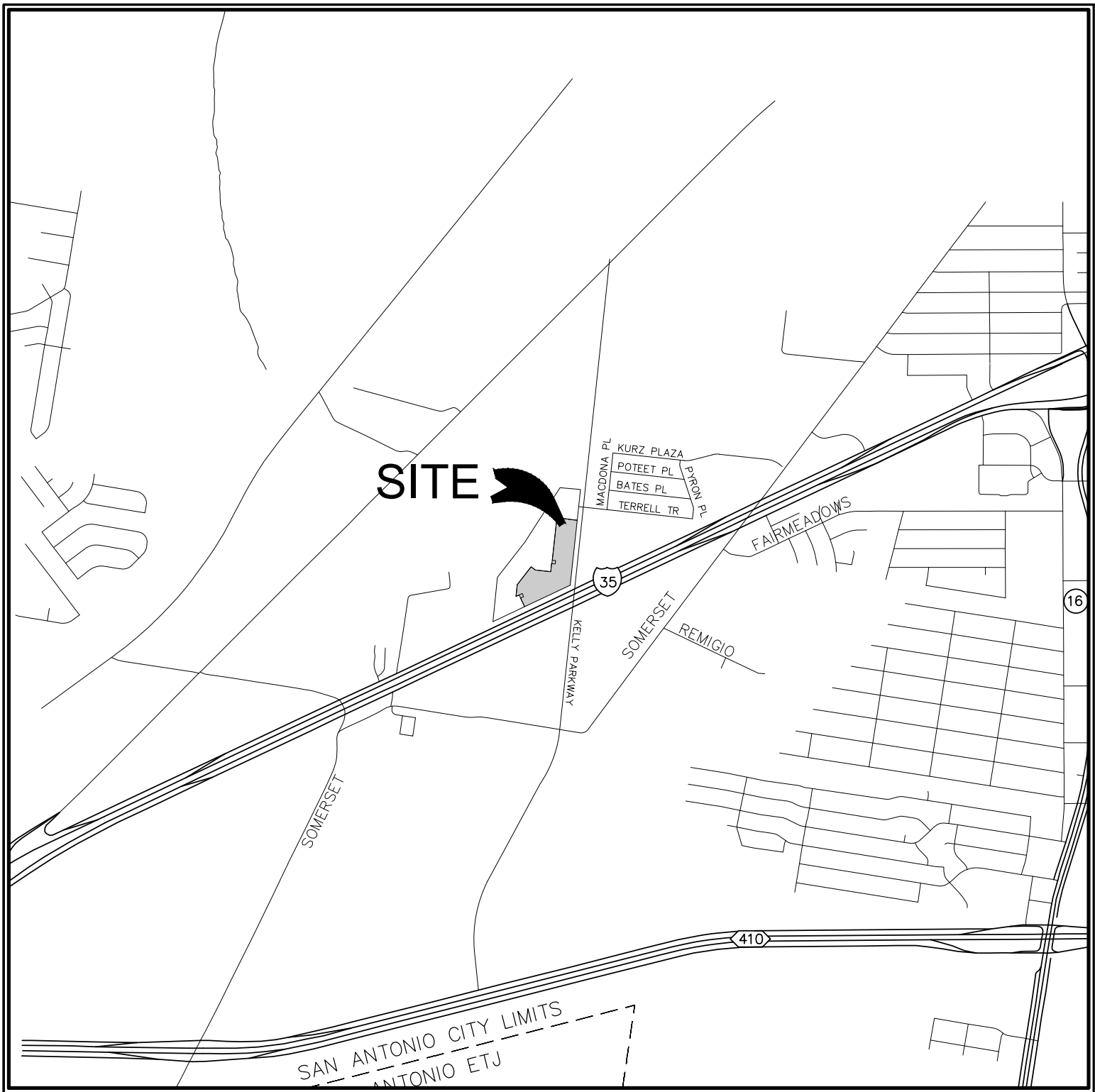


# SOMERSET GROVE, UNIT 4

## SAWS SEWER PLANS

### SAN ANTONIO, TEXAS



PROJECT LOCATION MAP

SCALE: N.T.S.

GENERAL SECTION:

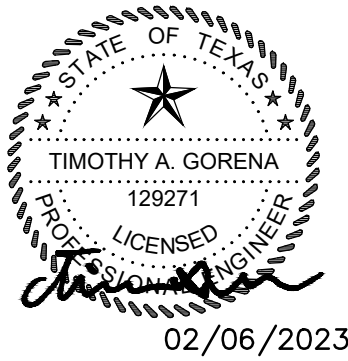
SAWS GENERAL CONSTRUCTION NOTES

- All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
  - A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
  - B. Current TxDOT "Standard Specifications for Construction of Highways, Streets and Drainage".
  - C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
  - D. Current City of San Antonio "Standard Specifications for Public Works Construction".
  - E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).
- 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 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.
- 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.
- 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.
- 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.
- 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
- 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
- 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.
- 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.
- Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to [constworkreq@saws.org](mailto: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](mailto:constworkreq@saws.org).  
Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.
- 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 without this requirement being met and verified by providing all necessary documented test results.
- A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division

SEWER NOTES:

- 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:
  - A. 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.
  - B. Attempt to eliminate the source of the SSO.
  - C. Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
  - D. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soil/materials.
  - E. Clean the affected sewer mains and remove any debris.
  - F. 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 costs 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 the TCEQ and SAWS.
- 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. 564, "Bypass Pumping".
- 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 to sequence the work accordingly.
- Sewer pipe where water line crosses shall be 160 psi and meet the requirements of ASTM D2241, TAC 217.53 and TCEQ 290.44(e)(4)(B). Contractor shall center a 20" joint of 160 psi pressure rated PVC at the proposed water crossing.
- 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)
- 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.
- 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 the SAWS Specifications For Water and Sanitary Sewer Construction
- All PVC pipe over 14 feet of cover shall be extra strength with minimum pipe stiffness of 115 psi.

# FEBRUARY 2023



## PREPARED BY:



290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
HMTNB.COM  
P(830)625-8555\*F(830)625-8556  
TBPE FIRM F-10961  
TBPLS FIRM 1053600

NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH OF THE INDIVIDUAL UTILITIES FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

PROJECT BENCHMARK

TBM #54	TBM #56
16 HMT IN SW	12 HMTCNTRL
N: 13670885.531	N: 13671302.806
E: 2106886.081	E: 2104066.408
ELEV: 633.37	ELEV: 634.21
TBM #55	
16 HMT IN BC	
N: 13671511.796	
E: 2107417.495	
ELEV: 634.70	

LEGAL DESCRIPTION

BEING A TOTAL OF 11.780 ACRE TRACT OF LAND INCLUSIVE OF A 0.428 ACRE RIGHT OF WAY DEDICATION TO THE CITY OF SAN ANTONIO OUT OF PART OF A 29.68 ACRE TRACT LOCATED IN OLD CITY LOTS (OCL) 19 AND 20, RANGE 4, DISTRICT 6 OF THE CITY TRACT OF SAN ANTONIO DE BEKAR, AS SURVEYED AND DIVIDED IN 1852, BEING A PORTION OF A CALLED 57.21 ACRE TRACT AND A CALLED 20.25 ACRE TRACT, BOTH DESCRIBED IN VOLUME 2631, PAGE 483, DEED RECORDS, BEXAR COUNTY, TEXAS.

Sheet List Table	
Sheet Number	Sheet Title
C7.0	COVER SEWER
C7.1	OVERALL WWTR (1 OF 2)
C7.2	OVERALL WWTR (2 OF 2)
C7.3	SEWER LINE F P&P (1 OF 2)
C7.4	SEWER LINE F P&P (2 OF 2)
C7.5	SEWER LINE G P&P

SEWER: LOWER LEON CREEK WATERSHED — LEON CREEK W.R.C.

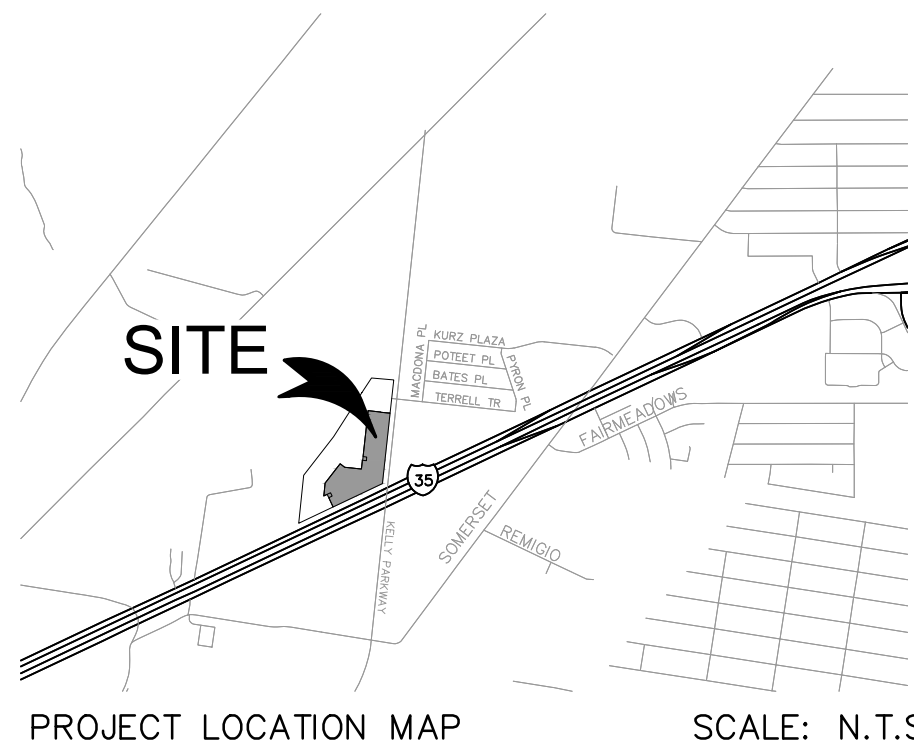
Developer's Name: LENNAR HOMES  
Developer's Address: 100 NE LOOP 410, SUITE 1155  
City SAN ANTONIO State TX ZIP 78259  
Phone # (210) 403-6200 FAX # (\_\_\_\_\_) \_\_\_\_\_  
SAWS Block Map #138546 Total EDU's 76 Total Acreage 11.78  
Total Linear Footage of Pipe: 1,577 Plat No. 21-11800345  
Number of Lots: 76 SAWS JOB NO. #22-1698

SOMERSET GROVE, UNIT 4  
SAWS SEWER CONSTRUCTION PLANS

337.060

HMT #

Drawing Name: M:\\_Projects\337 - Lennar Homes\060 Somerset Grove Unit 4\03a\337.060 - SEWER (OVERALL).dwg User: BRUCE-TALKNER Feb 06, 2023 - 10:23am



RESTRAINED LENGTH NOTES:

1. ALL RESTRAINT LENGTHS CALCULATED USING SAWS DETAILS.  
DD-839-04, DD-839-05, DD-839-06, DD-839-07, DD-839-08

NOTE:

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) AND SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES IN 21 DAYS, PER TPDES REQUIREMENTS.

DEEP UTILITY TRENCH NOTE

THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5 FEET IN DEPTH LOCATED IN PUBLIC RIGHT OF WAY OR EASEMENTS. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE. A UTILITY COMPACTION PLAN WILL BE REQUIRED AND MUST BE SUBMITTED FOR APPROVAL TO CITY PRIOR TO UTILITY INSTALLATION.

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 FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S 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 CONTRACTOR'S 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 EXCAVATIONS.

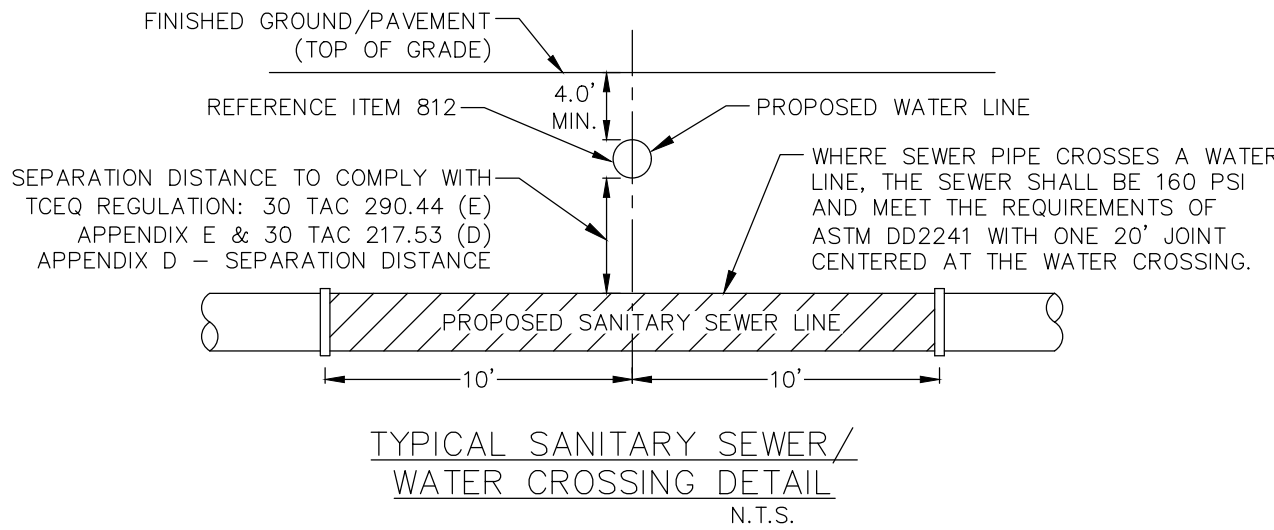
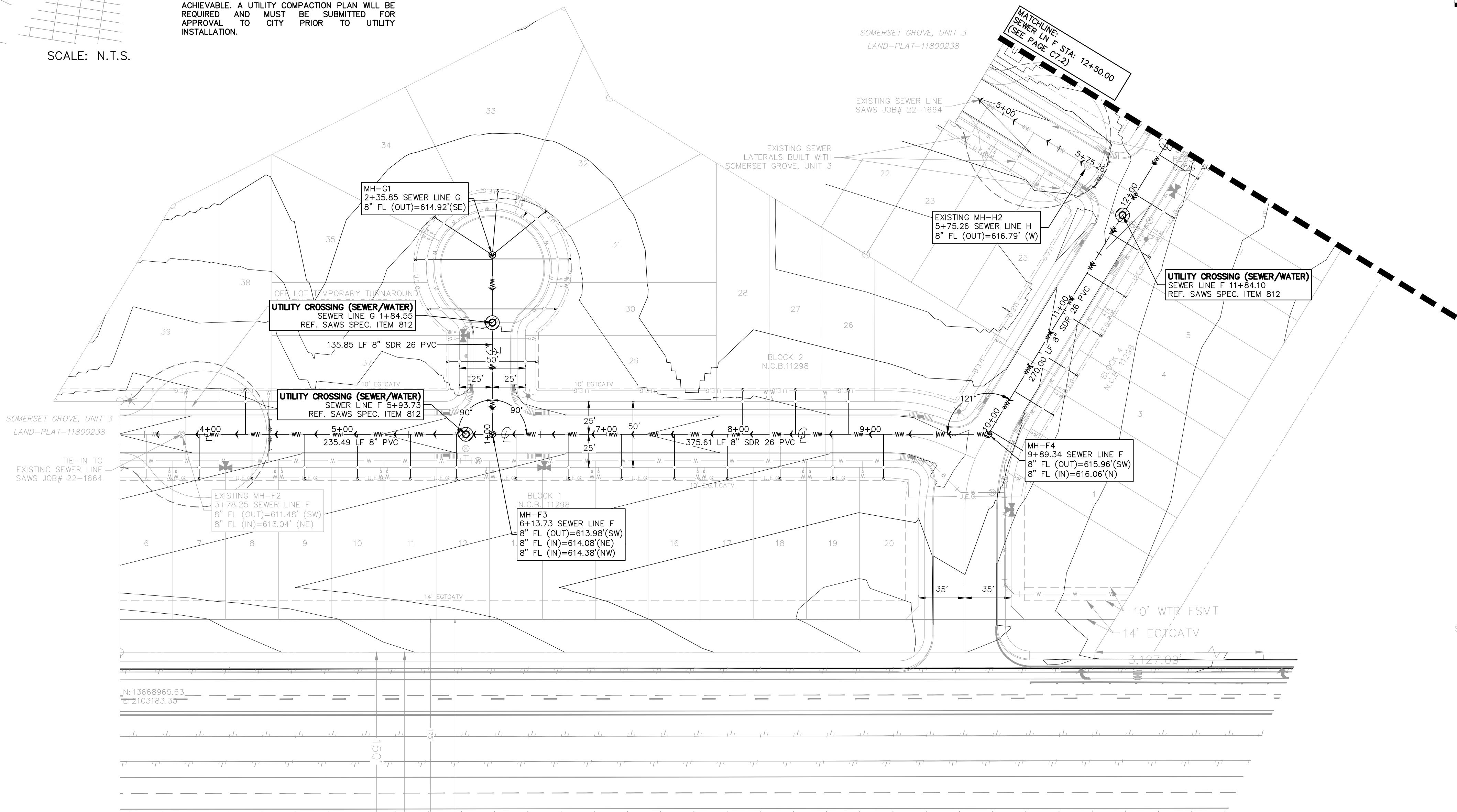
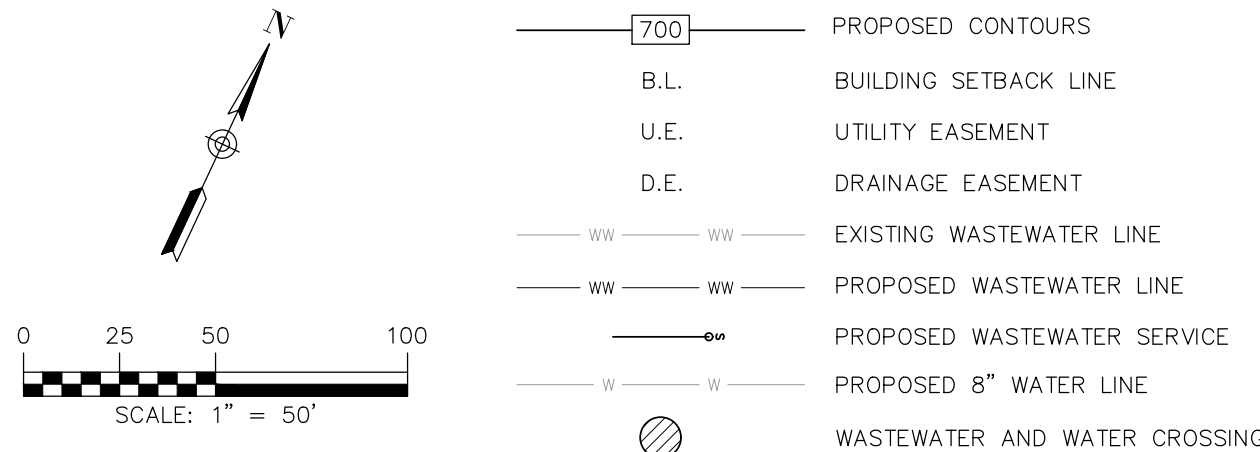
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1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.  
2. CONTRACTOR TO CONSTRUCT SEWER FROM DOWNSTREAM TO UPSTREAM UNLESS AUTHORIZED IN WRITING FROM ENGINEERING OF RECORD.

FIRE FLOW NOTE:

IN AN EFFORT TO MEET THE CITY OF SAN ANTONIO'S FIRE FLOW REQUIREMENTS FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PUBLIC WATER MAIN SYSTEM HAS BEEN DESIGNED FOR A MINIMUM FIRE FLOW DEMAND OF 1000 GPM AT 25 PSI RESIDUAL PRESSURE. THE FIRE FLOW REQUIREMENTS FOR INDIVIDUAL STRUCTURES WILL BE REVIEWED DURING THE BUILDING PERMIT PROCESS IN ACCORDANCE WITH THE PROCEDURES SET FORTH BY THE CITY OF SAN ANTONIO DIRECTOR OF DEVELOPMENT SERVICES DEPARTMENT AND THE SAN ANTONIO FIRE DEPARTMENT FIRE MARSHAL.

LAND-PLAT 22-11800345



SAWS DETAILS

DETAIL #	DETAIL DESCRIPTION
DD-804-01	SANITARY SEWER PIPE Laid IN TRENCH
DD-804-02	TRENCH COMPACTION DETAIL
DD-848-01	GO, NO GO DEFLECTION TESTING MANDREL
DD-852-01	STANDARD PRECAST MANHOLE
DD-852-02	VENTED MANHOLE RING AND COVER DETAIL (WHEN SPECIFIED)
DD-852-03	MANHOLE RING ENCASUREMENT DETAIL
DD-852-07	MANHOLE RING AND COVER DETAIL
DD-854-01	HOUSE LATERAL DETAIL
DD-854-02	TYPICAL CLEANOUT DETAIL
DD-854-03	LATERAL CONNECTION
DD-858-01	TYPICAL CONCRETE ENCASUREMENT DETAILS

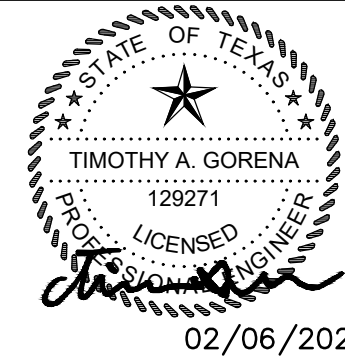
SEWER: LOWER LEON CREEK WATERSHED - LEON CREEK W.R.C.

Developer's Name: LENNAR HOMES  
Developer's Address: 100 NE LOOP 410, SUITE 1155  
City SAN ANTONIO State TX ZIP 78259  
Phone # (210) 403-6200 FAX # ( )  
SAWS Block Map # 138546 Total EDU's 76 Total Acreage 11.78  
Total Linear Footage of Pipe: 1,577 Plat No. 22-11800345  
Number of Lots: 76 SAWS JOB NO. #22-1698

REFER TO THE COVER SHEET  
FOR BENCHMARK INFORMATION.

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290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPE FIRM F-10961  
TBPLS FIRM 1053600



OVERALL WWTR (1 OF 2)

SOMERSET MEADOWS, UNIT 4

SAN ANTONIO, TEXAS

REVISION	DESCRIPTION	DATE
NO.		

DATE: **FEBRUARY 2023**  
DRAWN BY: **BF**  
DESIGNED BY: **MTA**  
REVIEWED BY: **TAG**  
HMT PROJECT NO.: **337.060**

**SHEET**  
**C7.1**



1. ALL RESTRAINT LENGTHS CALCULATED USING SAWS DETAILS  
DD-839-04, DD-839-05, DD-839-06, DD-839-07, DD-839-08

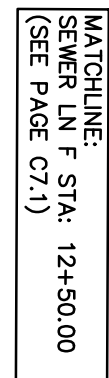
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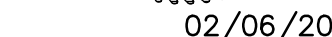
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SEWER: LOWER LEON CREEK WATERSHED – LEON CREEK W.R.C.

Developer's Name: LENNAR HOMES  
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City SAN ANTONIO State TX ZIP 78259  
Phone # (210) 403-6200 FAX # ( )  
SAWS Block Map #138546 Total EDU's 76 Total Acreage 11.78  
Total Linear Footage of Pipe: 1,577 Plat No. 22-11800345  
Number of Lots: 76 SAWS JOB NO. #22-1698

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FOR BENCHMARK INFORMATION.

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**OVERALL WWTR (2 OF 2)**

[illegible]DRAWN BY: **BI**

REVIEWED BY: T.

HMT PROJECT NO.:

**SHEET**

## C7.2





1. ALL RESTRAINT LENGTHS CALCULATED USING SAWS DETAILS  
DD-839-04, DD-839-05, DD-839-06, DD-839-07, DD-839-08

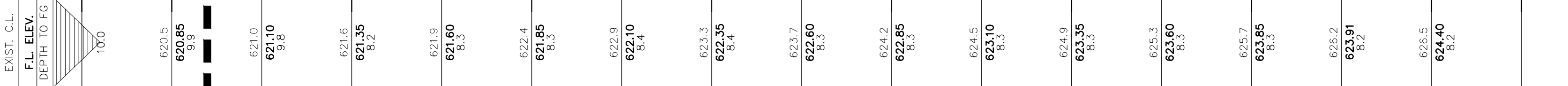
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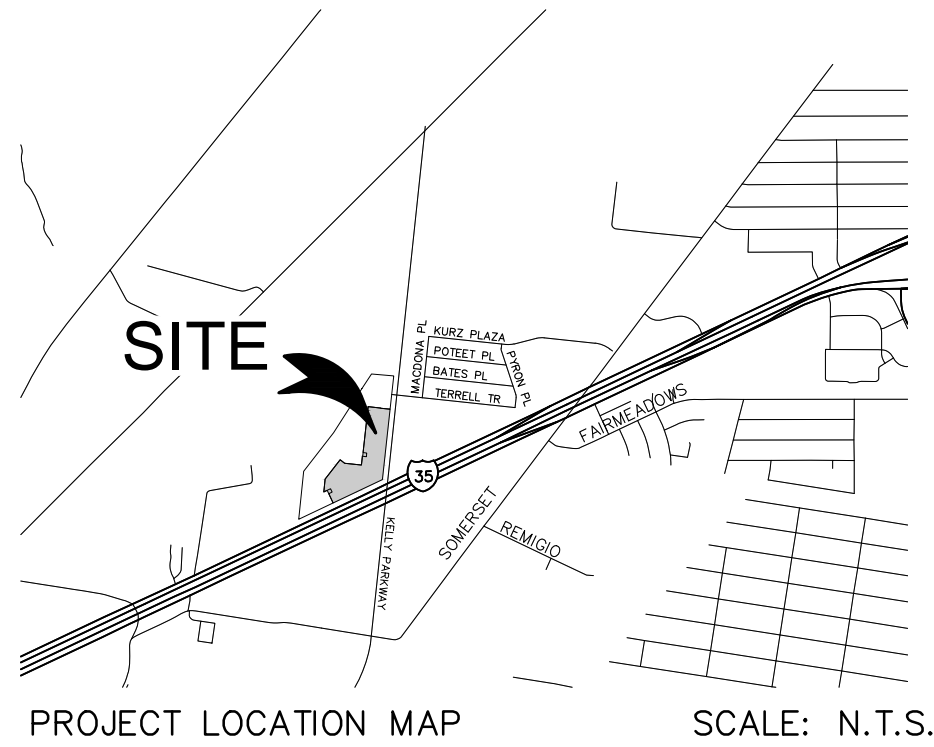
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DD-858-01	TYPICAL CONCRETE ENCASEMENT DETAILS
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SEWER: LOWER LEON CREEK WATERSHED – LEON CREEK W.R.C.

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RESTRAINED LENGTH NOTES:  
1. ALL RESTRAINT LENGTHS CALCULATED USING SAWS DETAILS.  
DD-839-04, DD-839-05, DD-839-06, DD-839-07, DD-839-08

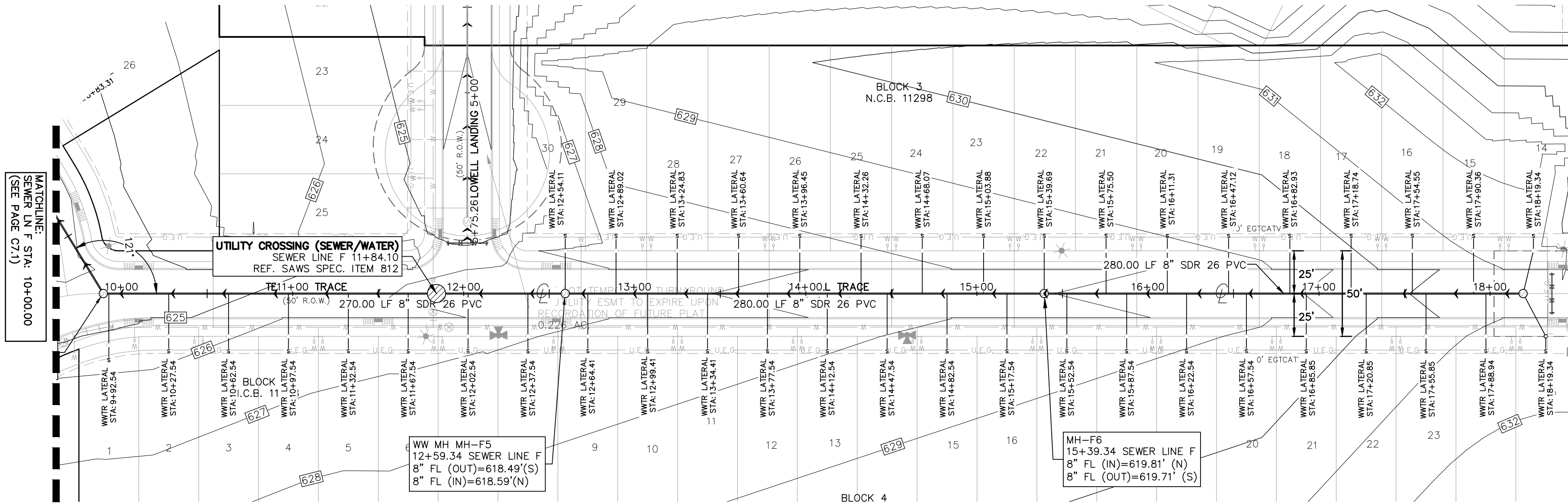
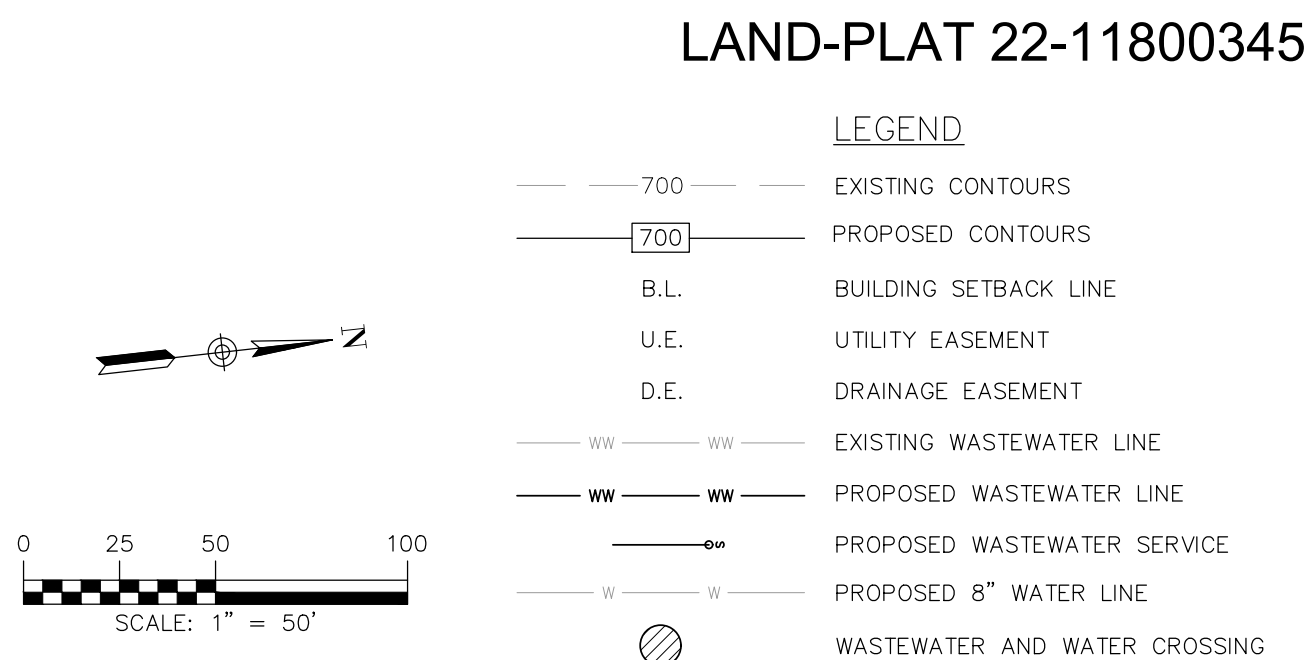
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DEEP UTILITY TRENCH NOTE  
THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5 FEET IN DEPTH LOCATED IN PUBLIC RIGHT OF WAY OR EASEMENTS. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE. A UTILITY COMPACTION PLAN WILL BE REQUIRED AND MUST BE SUBMITTED FOR APPROVAL TO CITY PRIOR TO UTILITY INSTALLATION.

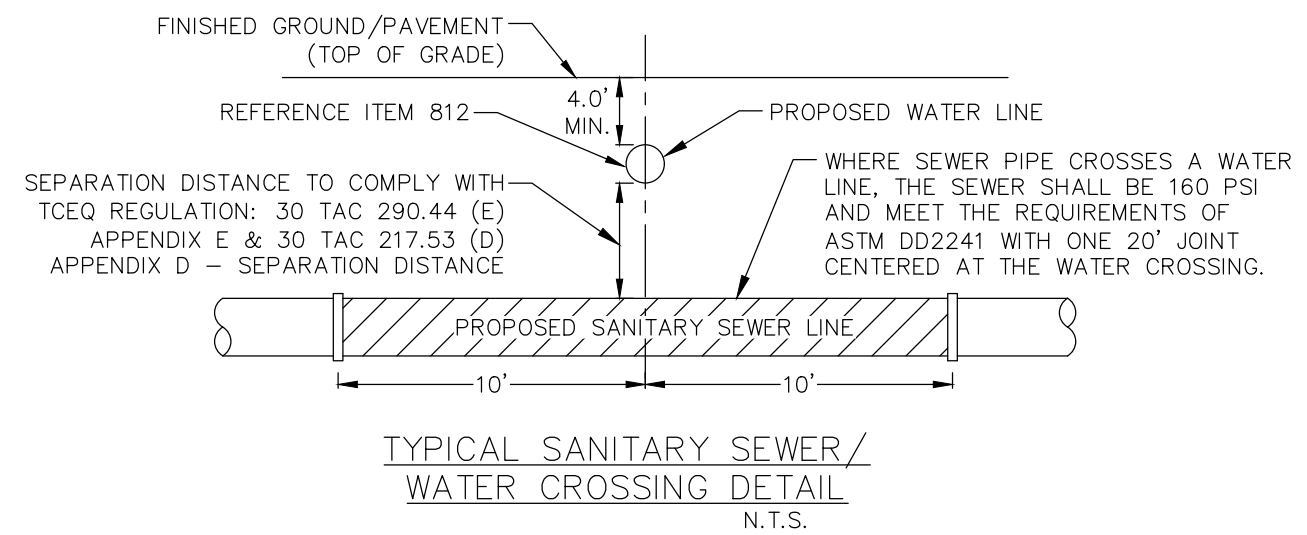
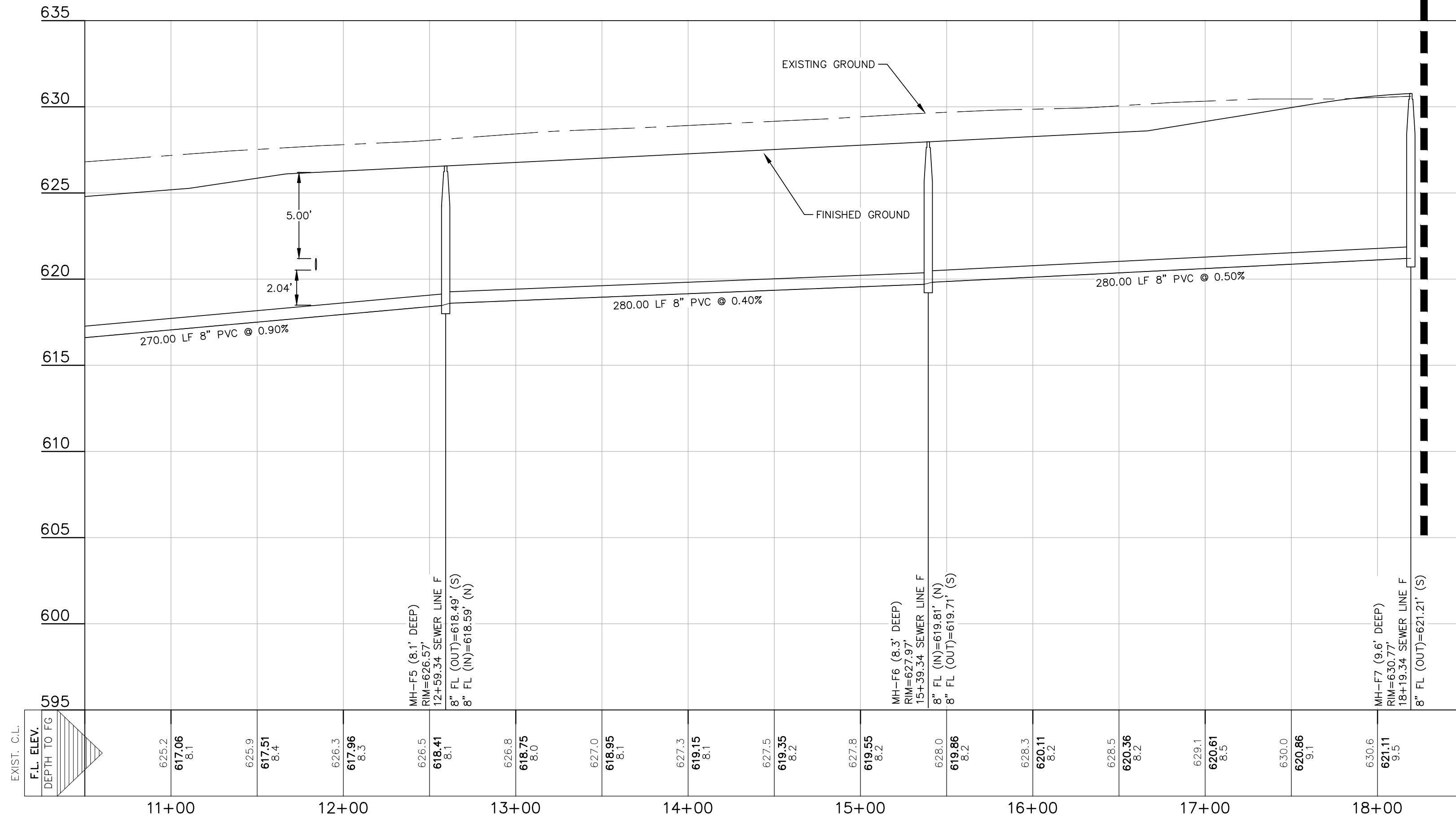
TRENCH EXCAVATION SAFETY PROTECTION  
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S 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 CONTRACTOR'S 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 EXCAVATIONS.

UTILITY NOTES:  
1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.  
2. CONTRACTOR TO CONSTRUCT SEWER FROM DOWNSTREAM TO UPSTREAM UNLESS AUTHORIZED IN WRITING FROM ENGINEERING OF RECORD.

FIRE FLOW NOTE:  
IN AN EFFORT TO MEET THE CITY OF SAN ANTONIO'S FIRE FLOW REQUIREMENTS FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PUBLIC WATER MAIN SYSTEM HAS BEEN DESIGNED FOR A MINIMUM FIRE FLOW DEMAND OF 1000 GPM AT 25 PSI RESIDUAL PRESSURE. THE FIRE FLOW REQUIREMENTS FOR INDIVIDUAL STRUCTURES WILL BE REVIEWED DURING THE BUILDING PERMIT PROCESS IN ACCORDANCE WITH THE PROCEDURES SET FORTH BY THE CITY OF SAN ANTONIO DIRECTOR OF DEVELOPMENT SERVICES DEPARTMENT AND THE SAN ANTONIO FIRE DEPARTMENT FIRE MARSHAL.



#### SEWER LINE F 10+50 - 20+00



SAWS DETAILS	
DETAIL #	DETAIL DESCRIPTION
DD-804-01	SANITARY SEWER PIPE LAIN IN TRENCH
DD-804-02	TRENCH COMPACTION DETAIL
DD-848-01	GO, NO GO DEFLECTION TESTING MANDREL
DD-852-01	STANDARD PRECAST MANHOLE
DD-852-02	VENTED MANHOLE RING AND COVER DETAIL (WHEN SPECIFIED)
DD-852-03	MANHOLE RING ENCASUREMENT DETAIL
DD-852-07	MANHOLE RING AND COVER DETAIL
DD-854-01	HOUSE LATERAL DETAIL
DD-854-02	TYPICAL CLEANOUT DETAIL
DD-854-03	LATERAL CONNECTION
DD-858-01	TYPICAL CONCRETE ENCASUREMENT DETAILS

SEWER: LOWER LEON CREEK WATERSHED - LEON CREEK W.R.C.

Developer's Name: LENNAR HOMES  
Developer's Address: 100 NE LOOP 410, SUITE 1155  
City SAN ANTONIO State TX ZIP 78259  
Phone # (210) 403-6200 FAX # ( )  
SAWS Block Map #138546 Total EDU's 76 Total Acreage 11.78  
Total Linear Footage of Pipe: 1,577 Plot No. 22-11800345  
Number of Lots: 76 SAWS JOB NO. #22-1698

REFER TO THE COVER SHEET  
FOR BENCHMARK INFORMATION.

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPB FIRM F-10961  
TBPB FIRM 1053600

**HMT**  
ENGINEERING & SURVEYING

TIMOTHY A. GORENZA  
129271  
PROF. LICENSED ENGINEER  
02/06/2023

SEWER LINE F P&P (2 OF 2)

SOMERSET MEADOWS, UNIT 4

SAN ANTONIO, TEXAS

NO.	REVISION	DESCRIPTION	REVISION DATE

DATE: **FEBRUARY 2023**

DRAWN BY: **BF**

DESIGNED BY: **MTA**

REVIEWED BY: **TAG**

HMT PROJECT NO.: **337.060**

**SHEET**

**C7.4**



1. ALL RESTRAINT LENGTHS CALCULATED USING SAWS DETAILS  
DD-839-04, DD-839-05, DD-839-06, DD-839-07, DD-839-08

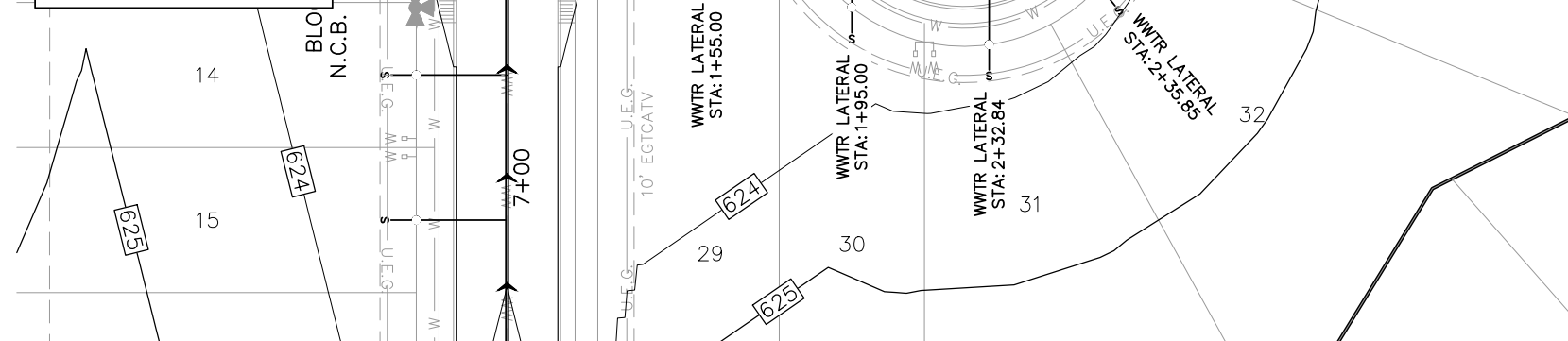
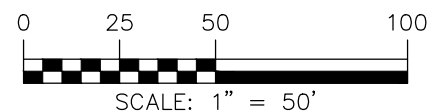
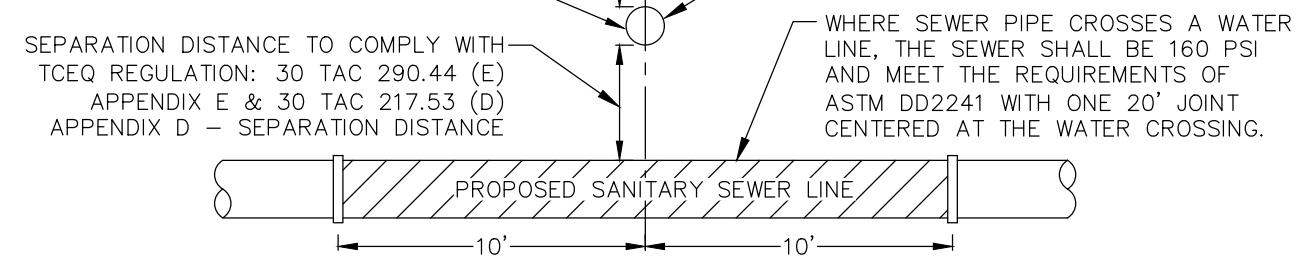
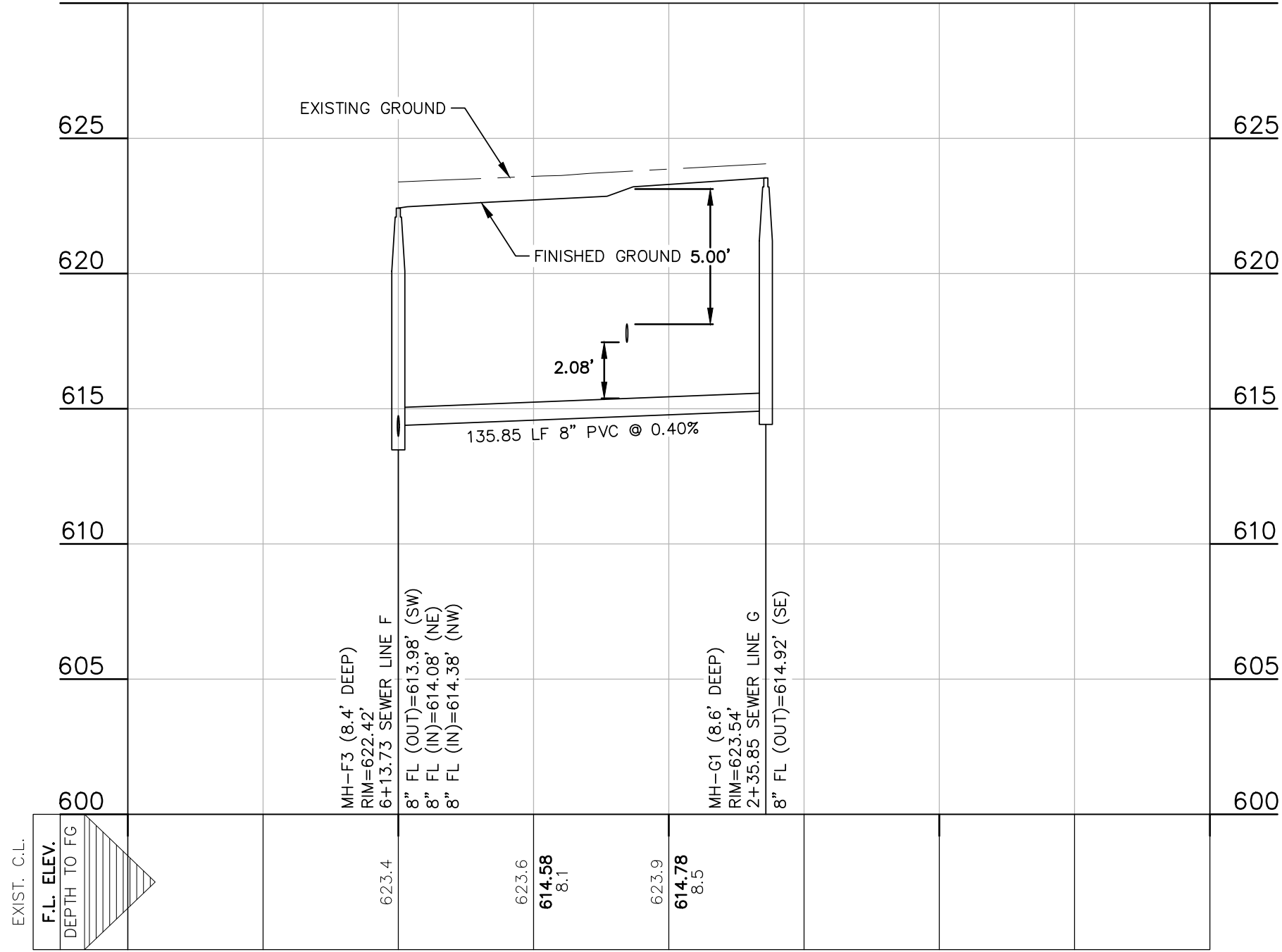
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$$\underline{0+00 - 4+00}$$


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