

# SIMMONS VALLEY ENTRY ROAD

## SPRING BRANCH, TEXAS 78070

### CIVIL SITE CONSTRUCTION PLANS

LENNAR HOMES OF TEXAS LAND & CONSTRUCTION, LTD  
100 NE LOOP 410, SUITE 1155  
SAN ANTONIO, TX 78216

| REQUIRED PERMITS         | NUMBER |
|--------------------------|--------|
| 1. CITY OF SPRING BRANCH | #      |
| 2. TXDOT                 | #      |
| 3. TEXAS WATER CO.       | #      |

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|------------------|--|
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APRIL 2024

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.

ANY QUANTITIES PROVIDED BY HMT OR OWNER ON THE PLANS, OPINION OF PROBABLE COST, BID SUMMARIES, ETC. ARE FOR CURSORY USE ONLY. CONTRACTOR IS RESPONSIBLE FOR BIDDING SIGNED AND SEALED CONSTRUCTION PLANS. IF A DISCREPANCY EXIST, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.

CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL DOWNSTREAM CONNECTION POINTS PRIOR TO CONSTRUCTION. IF A DISCREPANCY EXIST, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.

CONTRACTOR SHALL INSTALL ALL GRAVITY SEWER, GRAVITY STORM SEWER, CURBS AND PAVEMENT FROM THE MOST DOWNSTREAM POINT OF CONNECTION. IF IMPROVEMENTS ARE CONSTRUCTED FROM UPSTREAM TO DOWNSTREAM, THEN THE CONTRACTOR WILL TAKE FULL RISK AND LIABILITY OF ANY ISSUES THAT MIGHT ARISE FROM FLOWLINE ELEVATION DISCREPANCIES, UTILITY CONFLICTS, ETC.

CONTRACTOR IS RESPONSIBLE FOR THE STOCKPILING OF ANY EXCESS DIRT. ALL BIDS FROM CONTRACTOR SHOULD ACCOUNT FOR THE REMOVAL AND PLACEMENT OF ALL EARTHWORK TO INCLUDE STOCKPILING, EXPORT, IMPORT, ETC. IF A LOCATION OF PLACEMENT OF EXCESS DIRT IS NOT SHOWN ON THE PLANS, THEN CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY TO DETERMINE THE MOST SUITABLE STOCKPILE LOCATION.

#### PROJECT BENCHMARK

SITE TBM #1  
SET TB #51 MAG SPIKE SET IN CDS  
N: 13884701.0742'  
E: 2154967.5518'  
ELEV: 1213.49'

SITE TBM #2  
SET TBM #53 6 12 HMT CONTROL  
N: 13883746.4564'  
E: 2154857.2693'  
ELEV: 1202.99'

#### LEGAL DESCRIPTION

BEING A 2.175 ACRE TRACT SITUATED IN THE CHARLES STROUD SURVEY NO. 26, ABSTRACT NO. 558, COMAL COUNTY, TEXAS, TEXAS, BEING A PORTION OF A CALLED 204.706 ACRE TRACT, RECORDED IN DOCUMENT NO. 202306040495, COMAL COUNTY, TEXAS OFFICIAL PUBLIC RECORDS.

#### PROJECT DESCRIPTION

THIS PROPOSED PROJECT INCLUDES A SUBDIVISION ENTRY ROAD AND OPEN SPACE LOT.

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JOSEPH T. SANDOVAL P.E. # 110257 ON 4/11/24. IT IS NOT TO BE USED FOR CONSTRUCTION, OR BIDDING PURPOSES.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

Joseph T. Sandoval P.E.  
License No. 110257

TCEQ\_CZP:  
THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE. A TCEQ CONTRIBUTING ZONE PLAN (CZP) WILL BE PREPARED AND SUBMITTED TO TCEQ BY ANOTHER ENGINEERING FIRM AND WILL PROVIDE THE REQUIRED WATER QUALITY TREATMENT FOR THE PROPOSED IMPERVIOUS COVER ASSOCIATED WITH THIS PROJECT.

#### GENERAL NOTES:

- IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.
- THE MOST CURRENT EDITIONS OF THE COMAL COUNTY SUBDIVISIONS REGULATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY THE CITY OF SPRING BRANCH SUBDIVISION REGULATIONS.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF SPRING BRANCH MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER IN RECORD.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
- NO PORTION OF THE SUBDIVISION IS LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREA (100 YR. FLOOD), AS DEFINED BY THE COMAL COUNTY, TEXAS, FIRM PANEL NUMBER 4809160070F EFFECTIVE DATE SEPTEMBER, 02, 2009, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
- GAS UTILITIES ARE NOT INCLUDED IN THE CIVIL CONSTRUCTION PLANS. FINAL GAS UTILITY DESIGN SHALL BE APPROVED BY THE CITY FOR ANY WORK WITHIN PUBLIC RIGHT-OF-WAY, IF APPLICABLE.

GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL COMPLY WITH:

A. CURRENT CITY SPRING BRANCH AND COMAL COUNTY SUBDIVISION REGULATIONS AS OF THE DATE OF THIS CONTRACT

B. THE MOST CURRENT EDITION OF TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES".

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES." ALONG WITH CURRENT CITY OF SPRING BRANCH AND **COMAL** COUNTY SPECIFICATIONS. ANY DISCREPANCIES BETWEEN SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES, AND TAXES AREA AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.

ANY EXISTING OFF-SITE IMPROVEMENTS THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE OWNER OF THE EXISTING IMPROVEMENT AT THE CONTRACTOR'S EXPENSE. (NO SEPARATE PAY ITEM)

WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OR CONSENT OF THE OWNER OR ENGINEER WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.

CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100YR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.

BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE LOCATED TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT WHILE PROVIDING CONTINUOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.

CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS. THE TERM "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY BOTH HORIZONTAL AND VERTICAL ALIGNMENT.

WHEN MATCHING EXISTING PAVEMENTS, CURBS, DRIVES, AND WALKS, THEY SHALL BE SAW CUT FULL DEPTH AND REMOVED TO ALLOW FOR PROPOSED CONSTRUCTION. IF ANY EXISTING JOINT IS ENCOUNTERED, PRECAUTION SHALL BE TAKEN DURING REMOVAL OF CONCRETE SO AS NOT TO DAMAGE EXISTING DOWELS. ALL EXISTING DOWELS SHALL BE EXPOSED AND CLEANED.

ITEM OF WORK DESIGNATED "BY OTHERS" SHALL NOT BE CONSIDERED PART OF THIS CONTRACT.

ALL "COMPACTED SUBGRADE" SHALL CONSIST OF NATIVE MATERIAL SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES AND COMPACTED TO 95% DENSITY ACCORDING TO DENSITY TEST METHOD TEX-115E OR ACCORDING TO ASTM D-698 AND TESTED BY ASTM D-2922.

ALL "FLEXIBLE BASE" SHALL BE TYPE "A", GRADE 4, ACCORDING TO TXDOT ITEM 247, COMPACTED TO 95% MODIFIED DENSITY AT A MOISTURE CONTENT BETWEEN -2 AND +3 OF OPTIMUM PERCENT MOISTURE ACCORDING TO ASTM D-1557 (MODIFIED PROCTOR) AND TESTED BY ASTM D-2922.

ASPHALT PAVEMENT SHALL BE THE TYPE SPECIFIED ON THE PLANS AND ACCORDING TO TXDOT ITEM 340 "HOT MIX ASPHALT CONCRETE PAVEMENT".

PRIME COAT USING MC-30 AT A RATE OF 0.2 GALLONS PER SQUARE YARD SHALL BE PLACED OVER PREPARED BASE AT LEAST ONE DAY PRIOR TO LAYING ASPHALTIC CONCRETE PAVEMENT. ANY NECESSARY TACK COAT SHALL BE MC-30 AT 0.05 GALLONS PER SQUARE YARD. IT IS REQUIRED THAT BOTH THE PRIME COAT AND THE TACK COAT BE APPLIED AT THE TEMPERATURE SPECIFIED UNDER TXDOT ITEM 300.3.

CONCRETE SHALL BE CLASS "A" ACCORDING TO TXDOT ITEM 421 UNLESS OTHERWISE ON PLANS.

REINFORCING STEEL SHALL BE FROM NEW BILLET AND SHALL CONFORM TO TXDOT ITEM 440. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS EXCEPT WHEN REFERRING TO CLEARANCE.

ALL SAWED JOINTS SHALL BE SAWED WITHIN 24 HOURS OF POURING.

ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.

ORDINARY COMPACTION CONTROL IS REQUIRED ON THIS PROJECT.

ALL ROLLING FOR COMPACTION OF ASPHALTIC CONCRETE PAVEMENT SHALL BE COMPLETED BEFORE THE MIXTURE TEMPERATURE DROPS BELOW 175 DEG. (F).

ALL FILL MATERIAL SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS AND THE ENGINEER AND HIS EMPLOYEES, PARTNERS, OFFICES, DIRECTORS, OR CONSULTANTS, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, ENGINEER'S DIRECTORS, OFFICERS, EMPLOYEES, OR CONSULTANTS.

ALL CMP (CORRUGATED METAL PIPE) USED ON THIS PROJECT SHALL HAVE A MANNING'S "N" VALUE OF 0.024-. UNLESS OTHERWISE SHOWN ON PLANS.

CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTING PER CURRENT CITY OF NEW BRAUNFELS REQUIREMENTS. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. ENGINEER AND OWNER RESERVE THE RIGHT TO HAVE THE CONTRACTOR REMOVE AND REPLACE ANY MATERIAL THAT WAS NOT TESTED OR FAILED TESTING. ALL COST ASSOCIATED WITH THE REMOVAL, REPLACEMENT AND TESTING SHALL BE PAID BY THE CONTRACTOR.

ALL PVC SLEEVES SHALL BE INSTALLED 3 FEET BELOW FINISHED GRADE AND ENDS SHALL BE MARKED SO THAT LOCATIONS OF SLEEVES CAN BE EASILY IDENTIFIED.

PRE-CONSTRUCTION CONFERENCE IS REQUIRED, ENGINEER WILL ARRANGE SUCH CONFERENCE IN COORDINATION WITH REQUIRED MUNICIPALITIES. NO CONSTRUCTION MAY BEGIN PRIOR TO THE PRE-CONSTRUCTION CONFERENCE.

CONTRACTOR SHALL COORDINATE WITH DRY UTILITY INSTALLERS AND SHARED TRENCHING SHALL BE UTILIZED, CUTTING THE STREETS AFTER COMPLETION BY DRY UTILITIES SHALL NOT BE ACCEPTABLE.

AS PER PLATTING ORDINANCE SECTION 118-38M: WHEN ALL IMPROVEMENTS ARE FOUND TO BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND WITH THE CITY'S STANDARDS, AND UPON RECEIPT OF ONE SET OF "RECORD DRAWINGS" PLANS, AND A DIGITAL COPY OF ALL PLANS (AUTOCAD 2000 MINIMUM) THE CITY ENGINEER SHALL ACCEPT SUCH IMPROVEMENTS FOR THE CITY OF NEW BRAUNFELS, SUBJECT TO THE GUARANTY OF MATERIAL AND WORKMANSHIP PROVISIONS IN THIS SECTION.

**EROSION / SEDIMENTATION CONTROL**

AT A MINIMUM, THESE CONTROLS SHALL CONSIST OF ROCK BERMS AND/OR SILT FENCES CONSTRUCTED PARALLEL TO AND DOWN GRADIENT FROM THE TRENCHES. THE ROCK BERM OR SILT FENCES SHALL BE INSTALLED IN A MANNER SUCH THAT ANY RAINFALL RUNOFF SHALL BE FILTERED. HAY BALES SHALL NOT BE USED FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS.

STRIPPING OF VEGETATION FROM THE PROJECT SITE SHALL BE PHASED SO AS TO EXPOSE THE MINIMUM AREA TO SOIL EROSION FOR THE SHORTEST PERIOD OF TIME.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE THE CONTROLS WHEN VEGETATION IS ESTABLISHED AND THE CONSTRUCTION AREA IS STABILIZED [31 TAC 313.5 (c)(12)]. ADDITIONAL PROTECTION MAY BE REQUIRED IF EXCESSIVE SOLIDS ARE BEING DISCHARGED FROM THE SITE.

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER/ENGINEER.

PLACEMENT OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS. ACTUAL LOCATIONS MAY VARY SLIGHTLY FROM THE PLANS, BUT WILL BE VERIFIED BY THE ENGINEER/INSPECTOR IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY SIGNIFICANT RAINFALL TO INSURE DISTURBANCE OF THE STRUCTURES HAS NOT OCCURRED. SEDIMENT DEPOSITED AFTER A RAINFALL SHALL BE REMOVED FROM THE SITE OR PLACED IN AN ENGINEER APPROVED DESIGNATED DISPOSAL AREA.

CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO EROSION CONTROL MEASURES BLOCK THE DRAINAGE SYSTEM FROM WORKING AS DESIGNED.

UTILITIES

LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION, INCLUDING THOSE NOT SHOWN ON THE DRAWINGS.

ANY EXISTING UTILITIES, ON OR OFF THE SITE, THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE RESPECTIVE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT:

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION

|  |                |
|--|----------------|
| TEXAS WATER COMPANY (WATER AND SEWER)  | (830) 312-4600 |
| PEDERNALES ELECTRIC COMPANY (ELECTRIC) | (830) 372-0391 |
| SPECTRUM CABLE                         | (855) 707-7328 |
| CENTERPOINT ENERGY (GAS)               | (800) 752-8036 |
| AT&T                                   | (830) 303-1333 |
| TEXAS ONE CALL SYSTEM                  | (800) 245-4545 |
| ENERGY TRANSFER (PETROLEUM PIPELINE)   | (512) 212-6134 |
| (GILBERT DE LA GARZA)                  |                |

CONTRACTOR SHALL REFERENCE PEDERNALES ELECTRIC COMPANY PLANS FOR FINAL ELECTRICAL LINE DESIGNS AND LAYOUT.


**SEQUENCE OF CONSTRUCTION**

1. INSTALL EROSION CONTROLS PER APPROVED PLAN.
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAINFALL EVENTS, AND AFTER RAINFALL EVENTS, AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB INLET INSTALLATION.
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.
7. INSTALL STREETSCAPE AND/OR LANDSCAPING IMPROVEMENTS.
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MIN OF 70% VEGETATION PRIOR TO COMPLETION.
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
10. TPDES REQUIREMENTS - DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY WILL BEGIN AGAIN WITHIN 21 DAYS

NOTE TO CONTRACTOR:

1. ANY QUANTITIES PROVIDED BY HMT OR OWNER ON THE PLANS, OPINION OF PROBABLE COST, BID SUMMARIES, ETC., ARE FOR CURSORY USE ONLY. CONTRACTOR IS RESPONSIBLE FOR BIDDING SIGNED AND SEALED CONSTRUCTION PLANS. IF A DISCREPANCY EXISTS, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.
2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATION AND ELEVATION OF ALL DOWNSTREAM CONNECTION POINTS PRIOR TO CONSTRUCTION. IF A DISCREPANCY EXISTS, CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY.
3. CONTRACTOR SHALL INSTALL ALL GRAVITY SEWER, GRAVITY STORM SEWER, CURBS AND PAVEMENT FROM THE MOST DOWNSTREAM POINT OF CONNECTION. IF IMPROVEMENTS ARE CONSTRUCTED FROM UPSTREAM TO DOWNSTREAM, THEN THE CONTRACTOR WILL TAKE FULL RISK AND LIABILITY OF ANY ISSUES THAT MIGHT ARISE FROM FLOWLINE ELEVATION DISCREPANCIES, UTILITY CONFLICTS, ETC.
4. CONTRACTOR IS RESPONSIBLE FOR THE STOCKPILING OF ANY EXCESS DIRT. ALL BIDS FROM CONTRACTOR SHOULD ACCOUNT FOR THE REMOVAL AND PLACEMENT OF ALL EARTHWORK TO INCLUDE STOCKPILING, EXPORT, IMPORT, ETC. IF A LOCATION OF PLACEMENT OF EXCESS DIRT IS NOT SHOWN ON THE PLANS, THEN CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY TO DETERMINE THE MOST SUITABLE STOCKPILE LOCATION.

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

**HMT**  
ENGINEERING & SURVEYING

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CONSTRUCTION NOTES  
(1 OF 2)

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION DESCRIPTION | REVISION DATE |
|-----|----------------------|---------------|
|     |                      |               |
|     |                      |               |
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|     |                      |               |
|     |                      |               |
|     |                      |               |

DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.: 337.082

SHEET

C0.01

**CONSTRUCTION NOTES** REVISED 03/2020  
IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.

THE MOST CURRENT EDITIONS OF THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY THE CITY OF SPRING BRANCH STANDARD DETAILS.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF SPRING BRANCH MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY OF SPRING BRANCH TO SCHEDULE A PRECONSTRUCTION MEETING.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF, IN THE OPINION OF THE ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME

AS THE CONDITIONS ARE CORRECTED. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

A TXDOT TYPE II B-B BLUE REFLECTIVE RAISED PAVEMENT MARKER SHALL BE INSTALLED IN THE CENTER OF THE ROADWAY ADJACENT TO ALL FIRE HYDRANTS. IN LOCATIONS WHERE HYDRANTS ARE SITUATED ON CORNERS, BLUE REFLECTIVE RAISED PAVEMENT MARKERS SHALL BE INSTALLED ON BOTH APPROACHES WHICH FRONT THE HYDRANT. THE RAISED PAVEMENT MARKER SHALL MEET TXDOT MATERIAL, EPOXY AND ADHESIVE SPECIFICATIONS.

**GROUNDWATER**  
IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, CONTRACTOR, SUBCONTRACTORS, BUILDERS, GEO-TECHNICAL ENGINEER, AND PROJECT ENGINEER TO IMMEDIATELY NOTIFY THE OFFICE OF THE CITY ENGINEER AND PROJECT ENGINEER IF THE PRESENCE OF GROUNDWATER WITHIN THE SITE IS EVIDENT. UPON NOTIFICATION THE PROJECT ENGINEER SHALL RESPOND WITH PLAN REVISIONS FOR THE MITIGATION OF THE GROUNDWATER ISSUE. THE CITY ENGINEER SHALL RESPOND WITHIN TWO (2) BUSINESS DAYS UPON RECEIPT OF THE MITIGATION PLAN. ALL CONSTRUCTION ACTIVITY, IMPACTED BY THE DISCOVERY OF GROUNDWATER, SHALL BE SUSPENDED UNTIL THE CITY ENGINEER GRANTS A WRITTEN APPROVAL OF THE GROUNDWATER MITIGATION PLAN.

**RECORD DRAWINGS**  
AS PER PLATTING ORDINANCE SECTION 118-38M.: WHEN ALL OF THE IMPROVEMENTS ARE FOUND TO BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND WITH THE CITY'S STANDARDS, AND UPON RECEIPT OF ONE SET OF 'RECORD DRAWING' PLANS, AND A DIGITAL COPY OF ALL PLANS (PDF COPY) THE CITY ENGINEER SHALL ACCEPT SUCH IMPROVEMENTS FOR THE CITY OF NEW BRAUNFELS, SUBJECT TO THE GUARANTY OF MATERIAL AND WORKMANSHIP PROVISIONS IN THIS SECTION.

**CONSTRUCTION NOTE**  
ENGINEER OF RECORD IS RESPONSIBLE TO ENSURE THAT EROSION CONTROL MEASURES AND STORMWATER CONTROL SUFFICIENT TO MITIGATE OFF SITE IMPACTS ARE IN PLACE AT ALL STAGES OF CONSTRUCTION.

**DRAINAGE NOTE**  
DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE THE IMPACT OF CONSTRUCTION SHALL BE INSTALLED PRIOR TO ADDING IMPERVIOUS COVER.

**FINISHED FLOOR ELEVATIONS**  
THE ELEVATION OF THE LOWEST FLOOR SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORMWATER AWAY FROM THE STRUCTURE. PROPERTIES ADJACENT TO STORMWATER CONVEYANCE STRUCTURES MUST HAVE FLOOR SLAB ELEVATION OR BOTTOM OF FLOOR JOISTS A MINIMUM OF ONE FOOT ABOVE THE 100-YEAR WATER FLOW ELEVATION IN THE STRUCTURE. DRIVEWAYS SERVING HOUSES ON THE DOWNHILL SIDE OF THE STREET SHALL HAVE A PROPERLY SIZED CROSS SWALE PREVENTING RUNOFF FROM ENTERING THE GARAGE.

**SOILS TESTING**  
PROCTORS SHALL BE SAMPLED FROM ON-SITE MATERIAL (ON-SITE IS DEFINED AS LIMITS OF CONSTRUCTION FOR THIS PLAN SET) AND A COPY OF THE PROCTOR RESULTS SHALL BE DELIVERED TO THE CITY OF SPRING BRANCH STREET INSPECTOR PRIOR TO ANY DENSITY TESTS.

**ROADWAY**  
ALL ROADWAY COMPACTION TESTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEOTECHNICAL ENGINEER. FLEXIBLE BASE OR FILL/EMBANKMENT MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED EIGHT INCHES (8") LOOSE. THE REQUIRED DENSITY FOR THE FILL/EMBANKMENT MATERIAL SHALL MEET THE REQUIREMENTS OF TXDOT'S SPECIFICATION ITEM 132. THE REQUIRED DENSITY FOR THE FLEXIBLE BASE MATERIAL SHALL MEET THE REQUIREMENTS OF TXDOT'S SPECIFICATION ITEM 247. EACH LAYER OF MATERIAL, INCLUSIVE OF SUBGRADE, SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 200 LF FOR EACH LIFT. UPON COMPLETION OF TESTING, THE GEOTECHNICAL ENGINEER WILL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FLEXIBLE BASE, AND FILL MATERIAL, AND SUBGRADE, HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. ADDITIONAL DENSITY TESTS MAY BE REQUESTED BY THE CITY OF NEW BRAUNFELS INSPECTOR.

**ITEM 340**  
ASPHALTIC CONCRETE PAVEMENT SHALL BE THE TYPE OF HOT MIX ASPHALT AS DEFINED IN TXDOT'S STANDARD SPECIFICATIONS FOR CURRENT TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREET AND BRIDGES.

THE ASPHALTIC CONCRETE PAVEMENT SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE 'D'MEETING THE SPECIFICATION REQUIREMENTS OF TXDOT ITEM 340. THE ASPHALTIC CONCRETE PAVEMENT SUB-SURFACE COURSES SHALL BE PLANT MIXED, HOT LAID TYPE 'B'MEETING THE SPECIFICATION REQUIREMENTS OF TXDOT ITEM 340. THE MIXTURE SHALL BE DESIGNED PER THE DESIGN REQUIREMENTS SPECIFIED IN TXDOT ITEM 340 AND SHALL BE COMPACTED TO BETWEEN 91 AND 95 PERCENT OF THE MAXIMUM THEORETICAL DENSITY AS DETERMINED BY TXDOT TEST METHOD TEX-227-F. PLACE THE MIXTURE WHEN THE ROADWAY SURFACE TEMPERATURE IS AT OR ABOVE 60°F. COMPLETE ALL COMPACTION OPERATIONS BEFORE THE PAVEMENT TEMPERATURE DROPS BELOW 160°F. THE ASPHALT CEMENT CONTENT BY PERCENT OF TOTAL MIXTURE WEIGHT SHALL FALL WITHIN A TOLERANCE OF +0.5 PERCENT FROM A SPECIFIC MIX DESIGN.

**CONSTRUCTION NOTES (CONTINUED)** REVISED 03/2020

**UTILITY TRENCH COMPACTION**  
ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT/SIDEWALK SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEOTECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. DETERMINE THE MAXIMUM LIFT THICKNESS BASED ON THE ABILITY OF THE COMPACTING OPERATION AND EQUIPMENT USED TO MEET THE REQUIRED DENSITY. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 200 LF FOR EACH LIFT AND EVERY OTHER SERVICE LINE. UPON COMPLETION OF TESTING THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. ADDITIONAL DENSITY TESTS MAY BE REQUESTED BY THE CITY OF SPRING BRANCH INSPECTOR.

**CURB CUT DUE TO CONSTRUCTION OF NEW RIGHT-OF-WAY CONSTRUCTION**  
(INDICATE THE 2 OPTIONS ON THE CONSTRUCTION PLANS).  
1. SAWCUT EXISTING STREET AND MATCH TO NEW CONSTRUCTION.  
2. SAWCUT EXISTING CURB TO TIE INTO EXISTING CONSTRUCTION.

**CONSTRUCTION STABILIZED ENTRANCE**  
SAWCUT CURB FOR CONSTRUCTION ENTRANCE.

STABILIZED CONSTRUCTION AREA SHALL BE CONSTRUCTED OF 3'X5"ROCK TO BE PLACED A MINIMUM LENGTH OF 25-FT. AND MAINTAINED SO THAT CONSTRUCTION DEBRIS DOES NOT FALL WITHIN THE CITY RIGHT-OF-WAY. RIGHT-OF-WAY MUST BE CLEARED FROM MUD, ROCKS, ETC. AT ALL TIMES.

**SIGNING AND PAVEMENT MARKING PLAN NOTES**  
THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REGULATORY AND WARNING SIGNS, STREETS NAME SIGNS AND SIGN MOUNTS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CITY WILL INSPECT ALL SIGNS AT FINAL INSPECTION.

THE CONTRACTOR SHALL INSTALL ALL PAVEMENT MARKINGS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST TWENTY-FOUR (24 HOURS PRIOR TO THE INSTALLATION OF ALL SEALER AND FINAL MARKINGS. THE CITY WILL INSPECT ALL MARKINGS AT FINAL APPLICATION.

**SEEDING AND ESTABLISHMENT OF VEGETATION WITHIN EARTHEN CHANNELS, STORMWATER BASINS AND DISTURBED AREAS**  
SEEDING FOR THE PURPOSE OF ESTABLISHING VEGETATION WITHIN CONSTRUCTED EARTHEN CHANNELS, BASINS AND DISTURBED AREAS SHALL BE CONDUCTED IN ACCORDANCE WITH ITEM 164 (SEEDING FOR EROSION CONTROL OF TXDOTS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES MANUAL. ONLY SEED TYPES AND MIXES SPECIFIED FOR THE SAN ANTONIO DISTRICT (DISTRICT 15 IN TABLES 1 AND 2 UNDER ITEM 164 SHALL BE UTILIZED. DURING THE COOL SEASON (SEPT 1-NOV 30, CEREAL RYE AND SEED SPECIES SPECIFIED FOR THE SAN ANTONIO DISTRICT IN TABLE 3 MAY BE USED. FOR COOL SEASON SEEDING APPLICATIONS, COOL SEASON SEED MIXES SHALL BE USED IN CONJUNCTION WITH SEED MIXES FOR THE SAN ANTONIO DISTRICT AS SPECIFIED IN TABLE 1 AND 2 UNDER ITEM 164.

IT MAY BE DEEMED NECESSARY TO INCORPORATE TOPSOIL AND SOIL AMENDMENTS (I.E. COMPOST/ FERTILIZER) INTO EXISTING SOIL IN ORDER TO FACILITATE VEGETATION GROWTH. TOPSOIL, COMPOST AND FERTILIZER ADDITIONS SHALL BE CONDUCTED ACCORDING TO ITEMS 160, 161 AND 166 OF TXDOT'S STANDARD SPECIFICATIONS MANUAL, RESPECTIVELY.

AREAS REQUIRING PERMANENT VEGETATION (EARTHEN CHANNELS, PONDS, ETC.) ARE REQUIRED TO MEET TXDOT SPECIFICATIONS FOR ITEM 160 TOPSOIL. TESTING PER TEX-128-E WILL BE REQUIRED AT THE CITY'S REQUEST.

WATERING MAY ALSO BE NECESSARY TO FACILITATE AND EXPEDITE THE SPROUTING AND GROWTH OF VEGETATION. ITEM 168 OF TXDOTS STANDARD SPECIFICATIONS MANUAL SHALL BE ADHERED TO FOR VEGETATIVE WATERING.

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



THIS DOCUMENT IS RELEASED  
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JOSEPH T. SANDOVAL  
P.E. # 110257 ON 4/11/24  
IT IS NOT TO BE USED FOR  
CONSTRUCTION, OR  
BIDDING PURPOSES.

CONSTRUCTION NOTES (2 OF 2)

NO.

REVISION DESCRIPTION

REVISION DATE

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DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.: 337.082

SHEET

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SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

TWC STANDARD CONSTRUCTION NOTES FOR PLANS  
Effective July 27th, 2023

GENERAL

1. SECTION 1 – INTRODUCTION

- a. SECTIONS OF THE TWC ENGINEERING DESIGN CRITERIA AND THE TWC STANDARD CONSTRUCTION NOTES FOR PLANS HAVE BEEN WRITTEN CONCURRENTLY. INFORMATION THAT APPLIES TO THE CONTRACTOR AND WORK PERFORMED ON-SITE IS LISTED IN THE TWC STANDARD CONSTRUCTION NOTES FOR PLANS. DURING DESIGN, BOTH DOCUMENTS SHOULD BE CHECKED FOR CLARITY.
- b. CONSTRUCTION OF DOMESTIC WATER PIPELINES AND APPURTENANCES ARE SUBJECT TO INSPECTION AND APPROVAL BY THE TEXAS WATER COMPANY (TWC) AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THIS DOCUMENT AND TWC'S STANDARD DRAWINGS AND TWC ENGINEERING DESIGN CRITERIA.
- c. ALL WATER DISTRIBUTION SYSTEMS, WATER MAIN EXTENSIONS, AND ALL APPURTENANT ITEMS SHALL BE DESIGNED IN ACCORDANCE WITH THESE STANDARDS, TWC STANDARD DETAILS AND TCEQ TITLE 30 CHAPTER 290 STANDARDS, WHICHEVER IS MOST STRINGENT. CONSULT TWC FOR CLARIFICATION OF SPECIFIC ITEMS.
- d. THE MOST RECENT TWC ENGINEERING DESIGN CRITERIA AND DETAILS SHALL APPLY TO ALL CONSTRUCTION REGARDLESS OF INFORMATION PROVIDED ON PLANS. CONTRACTORS ARE ENCOURAGED TO VERIFY CURRENT INFORMATION WITH TWC STAFF PRIOR TO THE BEGINNING OF CONSTRUCTION.
- e. CONTRACTORS ARE RESPONSIBLE FOR ALL SAFETY REQUIREMENTS (OSHA AND ANY OTHER AGENCIES THAT APPLY) ASSOCIATED WITH TRENCH CONSTRUCTION AND SHALL BE REQUIRED TO HAVE A TRENCH SAFETY PLAN PREPARED BY AN APPROVED PROFESSIONAL. UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS, THERE IS NO SEPARATE PAY ITEM FOR THIS REQUIREMENT FOR PROJECTS COMPLETED ON BEHALF OF TWC.
- f. IT IS THE INTENT OF THESE PLANS TO SHOW THE LOCATION OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH EXISTING RECORDS. HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND VERIFY THE EXACT LOCATION OF ALL EXISTING UNDERGROUND FACILITIES PRIOR TO EXCAVATION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES TO EXISTING FACILITIES.

2. SECTION 2 – PLAN PREPARATION

- a. PLAN REVIEW
- i. ONE SET OF THE "APPROVED FOR CONSTRUCTION" PLANS MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION.
- ii. ANY CHANGES TO THE PLANS DURING CONSTRUCTION MUST BE DOCUMENTED ON THE "APPROVED FOR CONSTRUCTION" PLANS AND DENOTED ON THE AS-BUILT PLANS.
- iii. MINOR CHANGES MAY BE REVIEWED AND APPROVED ON SITE BY A REPRESENTATIVE OF TWC AND THE CHANGES ANNOTATED ON THE AS-BUILT PLANS.
- iv. ALL MAJOR CHANGES DURING CONSTRUCTION SHALL BE SUBMITTED IN WRITING TO THE TWC ENGINEERING DEPARTMENT FOR FORMAL REVIEW AND APPROVAL. DETERMINATION AS TO WHETHER OR NOT AN RFI/SUBMITTAL IS REQUIRED SHALL BE DETERMINED ON A CASE BY CASE BASIS BY TWC PERSONNEL.

3. SECTION 3 – MANDATORY PRE-CONSTRUCTION MEETING

- a. NO LATER THAN ONE WEEK PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING WITH TWC, AT A LOCATION MUTUALLY DETERMINED.
- b. CONTRACTOR SHALL NOTIFY THE TWC CONSTRUCTION INSPECTION DEPARTMENT (830-312-4600) AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- c. THE PURPOSE OF THE PRE-CONSTRUCTION MEETING IS TO REVIEW PROJECT STATUS AND COORDINATE SCHEDULED ACTIVITIES.
- d. NO CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL A PRECONSTRUCTION MEETING HAS BEEN HELD BETWEEN THE CONTRACTOR, ENGINEER OF RECORD, AND A REPRESENTATIVE OF TWC.

4. SECTION 4 – PROJECT CLEANLINESS

- a. CONSTRUCTION METHODS, MATERIAL AND DISPOSAL OF PRODUCTS SHALL ALSO BE SUBJECT TO CURRENT STANDARDS ESTABLISHED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ANY OTHER LOCAL, STATE OR FEDERAL AGENCIES HAVING AUTHORITY IN THEIR RESPECTIVE JURISDICTIONS.
- b. BOUNDARY FENCES OR OTHER IMPROVEMENTS REMOVED TO PERMIT CONSTRUCTION SHALL BE REPLACED IN THE SAME LOCATION AND IN SAME CONDITION AS GOOD OR BETTER THAN IN WHICH THEY WERE FOUND. UNLESS OTHERWISE STATED ON THE PLANS, NO COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR REMOVAL AND REPLACEMENT OF FENCES.
- c. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO PROJECT FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION.
- d. CONTRACTOR SHALL NOT PLACE FILL OR WASTE MATERIAL ON ANY PRIVATE PROPERTY WITHOUT PRIOR WRITTEN AGREEMENT WITH THE PROPERTY OWNER. A COPY OF ANY WRITTEN AGREEMENT BETWEEN PROPERTY OWNER AND CONTRACTOR SHALL BE FURNISHED TO TWC.
- e. NO EXCESS EXCAVATION MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAY WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- f. REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, VEGETATION, LOGS, RUBBISH AND OTHER OBJECTIONABLE MATTER WITHIN THE LIMITS OF AREA AFFECTED BY THE WORK, INCLUDING ALL AREAS TO BE RE-GRADED. PROTECT TREES, SHRUBS, AND OTHER LANDSCAPE FEATURES SPECIFICALLY DESIGNATED FROM DAMAGE DURING CONSTRUCTION OPERATIONS.

5. SECTION 5 – PROJECT LAYOUT CONTROL AND SURFACE REPAIR

- a. CONTRACTOR TO CONFIRM ACTUAL HORIZONTAL AND VERTICAL LOCATION OF EXISTING STRUCTURES, PIPING, PAVING, FENCING, UNDERGROUND UTILITIES AND ALL OTHER EXISTING FACILITIES PRIOR TO CONSTRUCTION.
- b. CONTRACTOR SHALL COORDINATE FOR ALL NECESSARY UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- c. CONTRACTOR SHALL NOTIFY TEXAS DEPARTMENT OF TRANSPORTATION AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE STATE RIGHT-OF-WAY.
- d. NO UTILITY TRENCHES OR PITS ARE TO BE LEFT OPEN OVERNIGHT. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE SAFETY MEASURES ARE IN PLACE FOR BOTH HUMANS AND LIVESTOCK FOR ANY TRENCH LEFT OPEN OVERNIGHT. BACKFILLING WILL OCCUR DAILY AND AS SOON AS PRACTICAL FOLLOWING CONSTRUCTION OPERATIONS.
- e. CONTRACTOR SHALL NOT OPEN CUT ANY IMPROVED DRIVEWAY IN COUNTY OR STATE RIGHT-OF-WAY WITHOUT PRIOR WRITTEN APPROVAL OF THE AGENCY.
- f. FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS INDICATED OR RESTORE EXISTING GRADES. REMOVE RUBBISH VEGETATION AND ROCKS OVER 1 ½" IN DIAMETER. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM STRUCTURES. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER WILL STAND.
- g. ALL VEGETATED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITIONS THAN FOUND PRIOR TO THE BEGINNING OF CONSTRUCTION.

- h. BEFORE FINAL COMPLETION OF THE PROPOSED WORK, ALL ROADWAY, SLOPES, DITCHES AND BERMS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.

6. SECTION 6 – CONTRACT CLOSE-OUT

- a. FINAL INSPECTION
- i. TWC WILL REQUIRE A FIELD FINAL INSPECTION ON ALL MAIN LINE CONSTRUCTION PROJECTS. TWC WILL VERIFY OPERATION OF VALVES, HYDRANTS AND SERVCES. METER BOXES, VALVE BOXES AND VAULTS, MUST BE SET TO GRADE AND WORK SITE MUST BE FREE OF DEBRIS, EXCESS MATERIAL, ETC.
- ii. FIELD SET OF AS-BUILT DRAWINGS MUST BE PROVIDED AT THE FIELD FINAL INSPECTION.
- iii. BACTERIOLOGICAL TEST SAMPLES MUST HAVE RETURNED FROM THE DESIGNATED LAB FREE FROM COLIFORM BACTERIA AND MEET THE SAME STANDARDS AS THE SOURCE WATER. THIS MUST BE NOTED ON THE TWC ACCEPTANCE FORM BY A WATER QUALITY TECHNICIAN. INSPECTOR WILL THEN PROVIDE THREE DIGITAL ACCEPTANCE FORMS TO BE SIGNED BY THE ENGINEER, CONTRACTOR AND TWO INSPECTOR. EACH PARTY SHALL RECEIVE A DATED COPY OF THE FORM.
- iv. SEE SECTION 7B FOR FURTHER GUIDANCE ON DISINFECTION REQUIREMENTS.
- b. RECORD DRAWINGS
- i. CONTRACTOR SHALL PROVIDE A NEAT AS-BUILT DRAWING WITHIN 30 DAYS OF JOB COMPLETION IN BOTH PAPER AND ELECTRONIC (.PDF) FORMAT TO TWC AND THE ENGINEER OF RECORD.
- ii. ACCEPTANCE OF FACILITIES BY TWC WILL NOT BE AUTHORIZED UNTIL RECEIPT OF AN APPROVED SET OF RECORD DRAWINGS COMPLETED BY THE ENGINEER OF RECORD.
- iii. SEE GENERAL SECTION 2A OF TWC ENGINEERING DESIGN CRITERIA.
- c. WARRANTY PERIOD
- i. THE WARRANTY PERIOD FOR ALL WORK COMPLETED SHALL BEGIN UPON WRITTEN ACCEPTANCE OF FACILITIES BY TWC. THE WARRANTY PERIOD AND REQUIREMENTS FOR BONDING SHALL BE OUTLINED IN THE CONTRACT.

7. SECTION 7 – LINE SEPARATION

- a. HORIZONTAL SEPARATION
- i. HORIZONTAL SEPARATION SHOULD BE IN ACCORDANCE WITH TCEQ REQUIREMENTS.
- ii. JOINT TRENCHES OF WATER WITH OTHER UTILITIES SUCH AS ELECTRICAL, TELECOM, NATURAL GAS, FIBER OPTIC OR CABLE LINES ARE NOT PERMITTED.
- b. VERTICAL SEPARATION
- i. VERTICAL SEPARATION SHOULD BE IN ACCORDANCE WITH TCEQ REQUIREMENTS.
- ii. AT ALL WATER MAIN CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED AT THE CROSSING SO BOTH JOINTS OF THE WATER PIPE WILL BE AS FAR FROM THE OTHER PIPELINES AS POSSIBLE.
- iii. NATURAL OR PROPANE GAS LINE CROSSINGS SHALL BE ENCASED IN CONCRETE. THE CONCRETE ENCASEMENT SHALL EXTEND 12" ABOVE AND BELOW THE GAS LINE AND SHALL HAVE A MINIMUM SEPARATION OF 18" FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
- iv. ALL OTHER UTILITIES SHALL BE LOCATED BELOW WATER MAINS UNLESS OTHERWISE APPROVED BY TWC. THIS INCLUDES SERVICE LINES FOR ALL OTHER UTILITIES.
- c. TYPICAL SECTION SHOWING ALL UTILITIES
- i. SEE GENERAL SECTION 7 OF TWC ENGINEERING DESIGN CRITERIA.

8. SECTION 8 – PIPE LAYING REQUIREMENTS

- a. IF APPLICABLE, DEWATERING SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- b. PIPE SHALL BE CONSTRUCTED OF MATERIALS SPECIFIED AND AS SHOWN ON THE DRAWINGS.
- c. EXCAVATION, TRENCHING AND BACKFILLING SHALL BE IN ACCORDANCE WITH TWC ENGINEERING DESIGN CRITERIA AND DETAILS.
- i. ALL DCL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH STANDARDS SET FORTH IN THE DIPRA "INSTALLATION GUIDE FOR DUCTILE IRON PIPE" UNLESS SUCH STANDARDS CONFLICT WITH TWC STANDARDS IN WHICH CASE TWC STANDARDS SHALL APPLY.
- ii. ALL PVC AND PVCO PIPE SHALL BE INSTALLED IN ACCORDANCE WITH STANDARDS SET FORTH IN THE UNI-BELL "HANDBOOK OF PVC PIPE DESIGN AND CONSTRUCTION" UNLESS SUCH STANDARDS CONFLICT WITH TWC STANDARDS IN WHICH CASE TWC STANDARDS SHALL APPLY.
- d. NO PIPE SHALL BE LAID WHEN THE TRENCH CONDITIONS OR THE WEATHER IS UNSUITABLE FOR SUCH WORK, EXCEPT BY PERMISSION OF TWC.
- e. EACH SECTION OF PIPE SHALL REST UPON THE PIPE BED FOR THE FULL-LENGTH BARREL, WITH RECESSES EXCAVATED TO ACCOMMODATE BELLS AND JOINTS. ANY PIPE WHICH HAS A GRADE OR JOINT DISTURBED AFTER LYING SHALL BE TAKEN UP AND RE-LAID.
- f. ANY SECTION OF PIPE ALREADY LAID WHICH IS FOUND TO BE DEFECTIVE OR DAMAGED SHALL BE REPLACED WITH NEW PIPE WITHOUT ADDITIONAL COST TO TWC.
- g. USE DUCTILE IRON FITTING WITH MECHANICAL JOINT AND RESTRAIN PER TWC ENGINEERING DESIGN CRITERIA ON ALL PIPE REGARDLESS OF PIPE MATERIAL UNLESS OTHERWISE INDICATED ON PLANS.
- h. CONTRACTOR SHALL CUT DUCTILE IRON PIPE ONLY AS NECESSARY TO COMPLY WITH ALIGNMENT SHOWN ON THE DRAWINGS.

9. SECTION 9 – TRENCH EXCAVATION

- a. ALL EXCAVATIONS SHALL BE OPEN CUT, WITH BANKS OF TRENCHES KEPT AS NEARLY VERTICAL AS POSSIBLE IN ACCORDANCE WITH OSHA REQUIREMENTS.
- b. WATER MAINS MAY BE OFFSET TO ONE SIDE OF A TRENCH BUT A MINIMUM OF 6" CLEARANCE MUST BE MAINTAINED BETWEEN THE TRENCH WALL AND THE WATER MAIN.
- c. SEE TRENCHING REQUIREMENTS BELOW:

| PIPE DIAMETER<br>(INCHES) | MINIMUM TRENCH<br>WIDTH | MINIMUM<br>TRENCH DEPTH |
|---------------------------|-------------------------|-------------------------|
| 4"                        | 16"                     | 36"                     |
| 6"                        | 18"                     | 42"                     |
| 8"                        | 20"                     | 44"                     |
| 12"                       | 30"                     | 52"                     |
| 16"                       | 36"                     | 56"                     |
| >16"                      | DIAMETER + 24"          | DIAMETER + 40"          |

- d. THE TRENCH FLOOR SHALL PROVIDE A UNIFORM BEARING FOR EACH FULL LENGTH OF PIPE SECTION. EXCAVATE BELL HOLES AFTER THE BEDDING HAS BEEN GRADED. PERFORM ALL EXCAVATIONS OF WHATEVER SUBSTANCE ENCOUNTERED TO THE DEPTHS SHOWN OR INDICATED ON THE DRAWINGS.
- e. WHEN APPROPRIATE, TWC WILL ALLOW CUT OR FILL TECHNIQUES TO BE USED TO LEVEL AN AREA FOR EXCAVATION.

10. SECTION 10 – BEDDING, BACKFILL, COMPACTION, AND FINAL GRADING

- a. FOR ALL WATER LINES CROSSING COUNTY OR STATE ROADWAYS, THE PROVISIONS FOR TRENCH COMPACTION AND BACKFILL AS ESTABLISHED BY THESE AGENCIES SHALL BE MET. WHERE THESE PROVISIONS AND THE TWC ENGINEERING DESIGN CRITERIA ARE IN CONFLICT, THE MORE STRINGENT STANDARD SHALL APPLY.
- b. BEDDING
- i. PIPE SHALL BE BEDDED WITH A MINIMUM OF 6" OF THE SAWS MODIFIED GRADE 5 BEDDING. SCREENING OF EXCAVATED TRENCH MATERIAL FOR BEDDING MAY BE ALLOWED USING A 1" OR 1-1/4" SCREEN UNDER NO CIRCUMSTANCE WILL ROCKS LARGER THAN 2" BE ALLOWED IN BEDDING. BEDDING OF ALL WATER MAINS SHALL ADHERE TO THE STANDARD BEDDING DETAILS BASED ON BOTH CURRENT AND PROPOSED USAGE OF THE AREA ABOVE THE PIPE, WHICHEVER IS MORE STRINGENT.
- ii. BEDDING OF ALL WATER MAINS SHALL ADHERE TO THE STANDARD BEDDING DETAILS BASED ON BOTH CURRENT AND PROPOSED USAGE OF THE AREA ABOVE THE PIPE, WHICHEVER IS MORE STRINGENT.
- c. BACKFILL
- i. WHEN, IN THE OPINION OF TWC, MATERIAL EXCAVATED FROM THE TRENCH IS UNSUITABLE BACKFILL OR WHEN IT IS REQUIRED BY THE JURISDICTIONAL AGENCY, SUITABLE BACKFILL SHALL BE FURNISHED AND PLACED BY THE CONTRACTOR.
- ii. ALL UNSUITABLE MATERIAL AND EXCESS BACKFILL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR CONCURRENTLY WITH THE INSTALLATION OF THE MAIN.
- iii. BACKFILL SHALL NOT BE PLACED UNTIL THE PIPELINE HAS BEEN INSPECTED BY TWC. BACKFILL MATERIAL SHALL NOT BE DROPPED DIRECTLY UPON THE PIPELINE. THE BACKFILL MATERIAL SHALL BE DEPOSITED FROM ONE END OF THE TRENCH UNIFORMLY ON BOTH SIDES OF THE PIPE.
- iv. BACKFILL FOR HAND TAMPING SHALL BE DEPOSITED IN LAYERS NOT TO EXCEED 4" THICKNESS AND FOR MECHANICAL TAMPING NOT TO EXCEED 6". CARE SHALL BE TAKEN NOT TO INJURE THE PIPE WHILE ENSURING THOROUGH CONSOLIDATION. WHERE APPROPRIATE, EXCESS MATERIAL SHALL BE HEAPED OVER THE TRENCH TO ALLOW FOR SETTLEMENT.
- d. COMPACTION
- i. SEE TWC STANDARD DETAIL FOR COMPACTION REQUIREMENTS.
- e. FINAL GRADING
- i. ALL STREETS ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION WITH AT LEAST THE SAME AMOUNT OF PROPERLY COMPACTED SUB GRADE AND PAVEMENT.
- ii. FINAL GRADING OF THE AREA SURROUNDING THE TRENCH EXCAVATION SITE SHALL NOT INTERRUPT THE NATURAL DRAINAGE COURSE OF THE SITE. THE AREA SHALL BE RELATIVELY FREE OF LARGE ROCKS AND OTHER DEBRIS THAT IS GREATER THAN THAT OF ORIGINAL CONDITIONS.

WATER NOTES

1. SECTION 1 – SYSTEM DESIGN AND FLOW CRITERIA

- a. LINE SIZING CRITERIA
- i. SEE WATER SECTION 1 OF TWC ENGINEERING DESIGN CRITERIA.
- b. MINIMUM LINE SIZE
- i. THE MINIMUM PIPE SIZE FOR DISTRIBUTION MAINS SHALL BE 4 INCHES, UNLESS OTHERWISE AUTHORIZED BY TWC. THE MINIMUM SIZE FOR DISTRIBUTION MAINS SERVING FIRE HYDRANTS AND FIRE HYDRANT BRANCHES SHALL BE 6 INCHES IN DIAMETER.
- c. WATER LINE ROUTING AND LOOPING
- i. CONTRACTOR SHALL ESTABLISH PIPE GRADES USING TOP OF FINISHED GRADE UNLESS OTHERWISE INDICATED ON PLANS.
- ii. CONTRACTOR SHALL GRADE MAIN TO AVOID USE OF AIR VALVES.
- iii. ALL ROAD CROSSING UNDER COMAL COUNTY ROADWAYS SHALL REQUIRE A SEPARATE PERMIT FROM THE COMAL COUNTY ENGINEER. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS AND SHALL CONSTRUCT ALL CROSSINGS IN ACCORDANCE WITH COMAL COUNTY STANDARDS.
- iv. CONTRACTOR SHALL CONSTRUCT ALL CROSSINGS WITH SANITARY SEWER FACILITIES IN ACCORDANCE WITH THE MOST RECENT VERSION OF APPLICABLE TCEQ STANDARDS.
- d. WATER LINE EASEMENTS
- i. SEE WATER SECTION 1 OF TWC ENGINEERING DESIGN CRITERIA.
- e. DEPTH OF COVER
- i. COVER AS MEASURED FROM FINISHED GRADE TO TOP OF THE PIPELINE SHALL BE A MINIMUM OF 30 INCHES FOR PIPE DIAMETERS UP TO AND INCLUDING 12 INCHES. DEPTH OF COVER FOR PIPES 14 INCHES AND GREATER IN DIAMETER SHALL BE A MINIMUM OF 36 INCHES. EXCEPTIONS MUST BE APPROVED BY TWC AND MAY REQUIRE 4 INCHES OF CONCRETE ABOVE THE PIPING IN AREAS WHERE MINIMUM COVER CANNOT BE OBTAINED.
- ii. DEPTH OF COVER AND TRENCH WIDTH REQUIREMENTS CAN BE FOUND IN THE STANDARD DETAIL FOR TRENCH CONSTRUCTION.

2. SECTION 2 – CONNECTION TO EXISTING WATER MAINS

- a. TAPPING SLEEVES AND VALVES
- i. TAPPING SLEEVES FOR SIZE-ON-SIZE CONNECTIONS ARE NOT ALLOWED.
- ii. TAPPING SLEEVES SHALL HAVE AN OUTLET FLANGE PER ANSI B16.1.
- iii. FOR TAPPING PVC AND PVCO PIPE, TAPPING SLEEVES SHOULD BE STAINLESS STEEL MANUFACTURED BY SMITH BLAIR OR POWERSEAL.
- iv. FOR TAPPING DUCTILE IRON PIPE, USE THE MUELLER DUCTILE IRON TAPPING SLEEVE WITH EPOXY COATING.
- v. TAPPING VALVES SHALL BE MECHANICAL JOINT OUTLET, NON-RISING STEM, RESILIENT SEAT GATE VALVES MEETING THE APPLICABLE REQUIREMENTS OF AWWA C509 AND C550. TAPPING VALVES SHALL BE SPECIFICALLY DESIGNED FOR PRESSURE TAPPING WITH SUFFICIENT SEAT OPENING TO ALLOW FULL DIAMETER TAPS TO BE MADE.
- b. CONTRACTOR SHALL FOLLOW METHODS AND PROCEDURES OF SHUTDOWN AS DIRECTED BY THE TWC STAFF.
- c. CONTRACTOR SHALL NOTIFY CONSUMERS OF, AND COORDINATE ALL SHUTDOWNS WITH TWC, PER TWC GUIDELINES.
- d. ALL TAPS 2" AND LARGER MADE TO EXISTING WATER MAINS SHALL BE MADE BY A VENDOR APPROVED BY TWC ONLY.
- e. WATER MAINS SHALL BE TAPPED IN SUCH A MANNER AS TO AVOID DISTURBANCE OR DISRUPTION TO THE OPERATION OF THE MAIN IN SERVICE AND TO PROTECT THE POTABLE WATER SUPPLY FROM CONTAMINATION.

- f. IF APPLICABLE, THE CONTRACTOR SHALL DETERMINE THE OUTSIDE DIAMETER OF THE EXISTING MAIN BEFORE ORDERING THE SLEEVE.
- g. VALVES ON EXISTING MAINS SHALL ONLY BE OPERATED BY TWC PERSONNEL.
- h. WHEN SERVICE MUST BE INTERRUPTED TO EXISTING CUSTOMERS DURING CONSTRUCTION OF A TAP OR ADDITION OF APPURTENANCES:
- v. THE CONTRACTOR SHALL PROVIDE 3 DAYS NOTICE TO TWC.
- vi. THE CONTRACTOR OR DEVELOPER SHALL BE REQUIRED TO NOTIFY EXISTING CUSTOMERS AS DIRECTED BY TWC.

3. SECTION 3 – CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION

- a. SEE WATER SECTION 3 OF TWC ENGINEERING DESIGN CRITERIA.

4. SECTION 4 – FIRE PROTECTION STANDARDS

- a. FIRE FLOW
- i. SEE WATER SECTION 4 OF TWC ENGINEERING DESIGN CRITERIA.
- b. FIRE HYDRANT SPACING
- i. IN AREAS WHERE LOCAL MUNICIPOAL CODES ARE ENFORCED FOR DEVELOPMENT, AND CONFLICT WITH THIS INFORMATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ii. RESIDENTIAL AREAS: FIRE HYDRANTS SHALL BE PLACED A MAXIMUM OF 1,000 FEET APART MEASURED ALONG THE RIGHTS-OF-WAY WITH A MAXIMUM SEPARATION OF 500 FEET TO THE LAST LOT.
- iii. COMMERCIAL AND APARTMENT AREAS: FIRE HYDRANTS SHALL BE PLACED EVERY 500 FEET ALONG THE RIGHTS-OF-WAY WITH A MAXIMUM SEPARATION OF 250 FEET TO THE LAST LOT. THE REQUIRED FIRE FLOW SHALL BE DETERMINED BY TWC, OR LOCAL AGENCY REQUIREMENT, WHICHEVER IS GREATER.
- iv. MANUFACTURING AND INDUSTRIAL AREAS: FIRE HYDRANTS SHALL BE PLACED EVERY 300 FEET ALONG THE RIGHTS-OF-WAY WITH A MAXIMUM SEPARATION OF 150 FEET TO THE LAST LOT. THE REQUIRED FIRE FLOW SHALL BE DETERMINED BY TWC, OR LOCAL AGENCY REQUIREMENT, WHICHEVER IS GREATER.
- c. FIRE HYDRANT LOCATION

- i. HYDRANTS SHALL BE LOCATED WITHIN ONE FOOT OF THE SIDE LOT LINES, BETWEEN ADJACENT PROPERTIES IN RESIDENTIAL AREAS, OR IN FRONT OF COMMERCIAL AND INDUSTRIAL PROPERTIES AS REQUIRED.
- ii. HYDRANTS SHALL BE A MINIMUM OF 2 FEET FROM EDGE OF RIGHTS-OF-WAY OR CURB IN AREAS WITHOUT SIDEWALKS AND SHALL NOT OBSTRUCT SIDEWALKS.
- iii. THE LOCATION OF NEW FIRE HYDRANTS SHALL BE IDENTIFIED WITH A BLUE REFLECTIVE PAVEMENT MARKER INSTALLED ON THE ROADWAY. THE REFLECTIVE MARKER SHALL BE LOCATED PERPENDICULAR TO THE HYDRANT, IN THE CENTER OF THE LANE CLOSEST TO THE HYDRANT.
- iv. CONTRACTOR SHALL MAINTAIN MINIMUM 10 FEET CLEARANCE BETWEEN HYDRANTS AND DRIVEWAYS.
- d. FIRE HYDRANT REQUIREMENTS
- i. THE INTERIOR OF THE HYDRANT SHALL BE THOROUGHLY INSPECTED AND CLEANED OF ALL FOREIGN MATTER BEFORE BEING SET IN PLACE.
- ii. FIRE HYDRANTS SHALL BE OF THE DRY BARREL, COMPRESSION TYPE AND SHALL COMPLY WITH AWWA C502 "STANDARD FOR DRY-BARREL FIRE HYDRANTS" AND BE MUELLER CENTURION 200 TO 250 CLASS OR CLOW MEDALLION FIRE HYDRANTS. USE EPDM FOR O-RINGS AND SEATS (RUBBERS).
- iii. HYDRANT OPERATING NUT SHOULD OPEN LEFT.
- iv. GASKETS SHALL BE FURNISHED IN ALL OUTLET CAPS. THE BARREL LENGTH SHALL BE AS REQUIRED TO ACCOMMODATE THE DEPTH OF THE MAIN.
- v. HYDRANTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE DRAWINGS. IF ONE OR MORE HYDRANTS CANNOT BE INSTALLED AS SHOWN BECAUSE OF OBSTRUCTIONS, DRIVEWAYS, OR CHANGES, NEW LOCATIONS SHALL BE REQUESTED OF TWC OR THE FIRE DEPARTMENT HAVING JURISDICTION.
- vi. EACH HYDRANT SHALL STAND PLUMB, WITH STEAMER CONNECTION FACING STREET AND THE 2.5" NOZZLES ON EACH SIDE AT A 90 DEGREE ANGLE TO THE STREET.

e. STANDBY SERVICE LINES (FIRE LINES)

- i. STANDBY SERVICE LINES (FIRE LINES) SHALL BE DESIGNED WITH ADEQUATE CROSS-CONNECTION AND BACKFLOW PREVENTION MEASURES AS WELL AS A METHOD FOR DETERMINING WATER FLOW. SEE THE CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM FOR MORE INFORMATION.
- ii. IT IS NOT NECESSARY TO INSTALL A METER ON A STANDBY SERVICE LINE. A DETECTOR CHECK IS REQUIRED. AN EFFICIENT WAY TO MEET BOTH CROSS CONNECTION AND BACKFLOW PREVENTION REQUIREMENTS WITH ONE DEVICE IS TO INSTALL A DOUBLE CHECK DETECTOR ASSEMBLY (DCCA) ON THE STANDBY SERVICE LINE. THE DCCA SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE LOCATION OF CONNECTION TO THE PUBLIC MAIN AND SHALL BE ACCESSIBLE BY TWO PERSONNEL. DOUBLE CHECK VALVES, DOUBLE CHECK DETECTOR ASSEMBLIES, REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTERS, AND OTHER APPURTENANCES IF INSTALLED UNDERGROUND MUST HAVE A VAULT THAT MEETS THE STANDARDS OUTLINED IN THIS DOCUMENT. ALL UNDERGROUND INSTALLATIONS MUST BE REVIEWED AND APPROVED BY TWC.
- iii. THE BACKFLOW PREVENTION DEVICE WITH FLOW DETECTION SHALL BE INSTALLED ON THE LINE AS CLOSE AS POSSIBLE TO WHERE THE FIRE LINE CROSSES THE PROPERTY LINE.

290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPE FIRM F-10961  
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THE AUTHORITY OF  
JOSEPH T. SANDOVAL  
P.E. # 110257 ON 4/11/24  
IT IS NOT TO BE USED FOR  
CONSTRUCTION, OR  
BIDDING PURPOSES.

TEXAS WATER COMPANY NOTES

(1 OF 2)

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION | DESCRIPTION | REVISION DATE |
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DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.:  
337.082

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PLAT NOTES:

- ALL LOTS WITHIN THE SUBDIVISION WILL BE PROVIDED WATER AND ELECTRIC SERVICE. TELEPHONE AND CABLE SERVICES FOR THE SUBDIVISION WILL BE PROVIDED BY AT&T COMMUNICATIONS AND/OR SPECTRUM.
- ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED UPON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM 1983. DISTANCES SHOWN HEREON ARE BASED UPON SURFACE MEASUREMENTS. TO CONVERT SURFACE DISTANCES TO GRID, APPLY A COMBINED SCALE FACTOR OF 1.00015.
- MONUMENTS WERE FOUND OR SET AT EACH CORNER OF THE SURVEY BOUNDARY OF THE SUBDIVISION. MONUMENTS AND LOT MARKERS WILL BE SET WITH 1/2" IRON PINS WITH PLASTIC CAP STAMPED "HMT" IMMEDIATELY AFTER COMPLETION OF UTILITY INSTALLATION AND STREET CONSTRUCTION UNLESS NOTED OTHERWISE.
- THIS SUBDIVISION IS WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
- THIS SUBDIVISION IS WITHIN THE CITY LIMITS OF SPRING BRANCH, TEXAS.
- THIS SUBDIVISION IS WITHIN THE COMAL INDEPENDENT SCHOOL DISTRICT.
- NO PORTION OF THE SUBDIVISION IS LOCATED WITHIN AN INDICATED SPECIAL FLOOD HAZARD ZONE ACCORDING TO THE ADOPTED FLOOD MAPS OF THE CITY OF NEW BRAUNFELS, AS DEFINED BY THE COMAL COUNTY, TEXAS FLOOD INSURANCE RATE MAP NUMBER 4809160070F, EFFECTIVE DATE SEPTEMBER 2, 2009 AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- NO STRUCTURES, WALLS OR OTHER OBSTRUCTIONS OF ANY KIND SHALL BE PLACED WITHIN THE LIMITS OF THE DRAINAGE EASEMENTS SHOWN ON THIS PLAT. NO LANDSCAPING, FENCES, OR OTHER TYPE OF MODIFICATIONS WHICH ALTER THE CROSS SECTIONS OF THE DRAINAGE EASEMENTS OR DECREASE THE HYDRAULIC CAPACITY OF THE EASEMENT, AS APPROVED, SHALL BE ALLOWED WITHOUT THE APPROVAL OF THE CITY ENGINEER. THE CITY OF SPRING BRANCH SHALL HAVE THE RIGHT OF INGRESS AND EGRESS OVER GRANTOR'S ADJACENT PROPERTY TO REMOVE ANY OBSTRUCTIONS PLACED WITHIN THE LIMITS OF SAID DRAINAGE EASEMENTS AND TO MAKE ANY MODIFICATIONS OR IMPROVEMENTS WITHIN SAID DRAINAGE EASEMENTS.
- LOT 901 IS HEREBY RESERVED AS A PRIVATE STREET AND COMMON AREA SUBJECT TO THE JURISDICTION, CONTROL AND MAINTENANCE BY THE HOME OWNERS ASSOCIATION OR MUNICIPAL UTILITY DISTRICT. THE CITY OF SPRING BRANCH HAS NO MAINTENANCE RESPONSIBILITY FOR LOT 901.

STATE OF TEXAS  
COUNTY OF COMAL

I (WE) THE UNDERSIGNED OWNER(S) OF THE LAND SHOWN ON THIS PLAT, AND DESIGNATED HEREIN AS SIMMONS VALLEY ENTRY ROAD, A SUBDIVISION TO THE CITY OF SPRING BRANCH, COUNTY OF COMAL, TEXAS, AND WHOSE NAME IS SUBSCRIBED HERETO, DO HEREBY SUBDIVIDE SUCH PROPERTY AND DEDICATE TO THE USE OF THE PUBLIC ALL STREETS, ALLEYS, PARKS, DRAINS, EASEMENTS, AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

LENNAR HOMES OF TEXAS LAND & CONSTRUCTION, LTD.  
100 NE LOOP 410, SUITE 1155  
SAN ANTONIO, TX 78216

STATE OF TEXAS  
COUNTY OF COMAL

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY \_\_\_\_\_

NOTARY PUBLIC, STATE OF TEXAS  
MY COMMISSION EXPIRES: \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:

I, THE UNDERSIGNED DOROTHY J. TAYLOR, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE UNDER MY SUPERVISION AND IN COMPLIANCE WITH CITY AND STATE SURVEY REGULATIONS AND LAWS AND MADE ON THE GROUND AND THAT THE CORNER MONUMENTS WERE PROPERLY PLACED UNDER MY SUPERVISION.

**PRELIMINARY. THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE.**

DOROTHY J. TAYLOR  
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6295  
290 S. CASTELL AVE., SUITE 100, NEW BRAUNFELS, TEXAS 78130

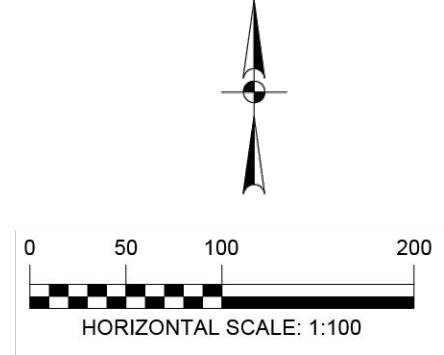
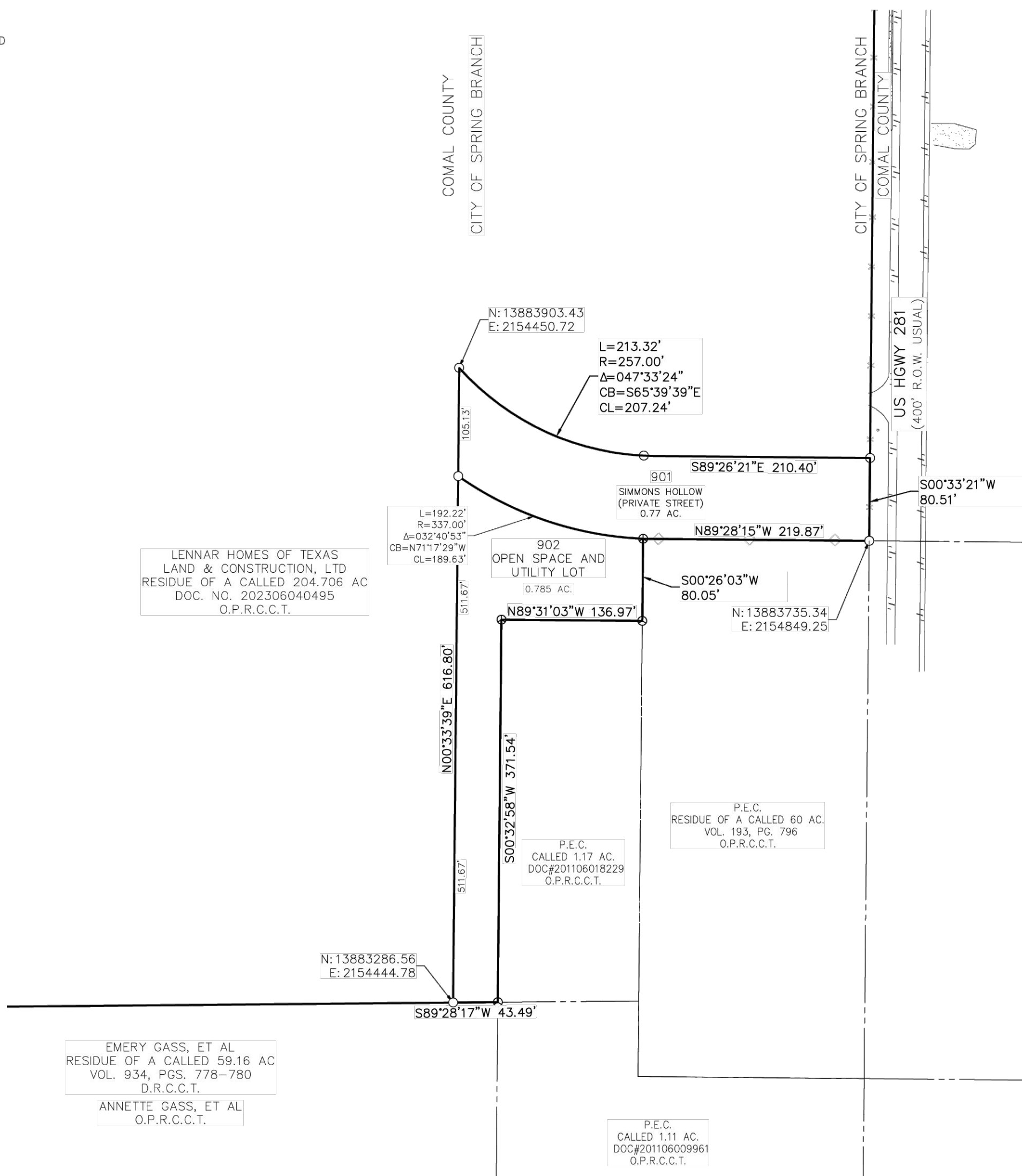
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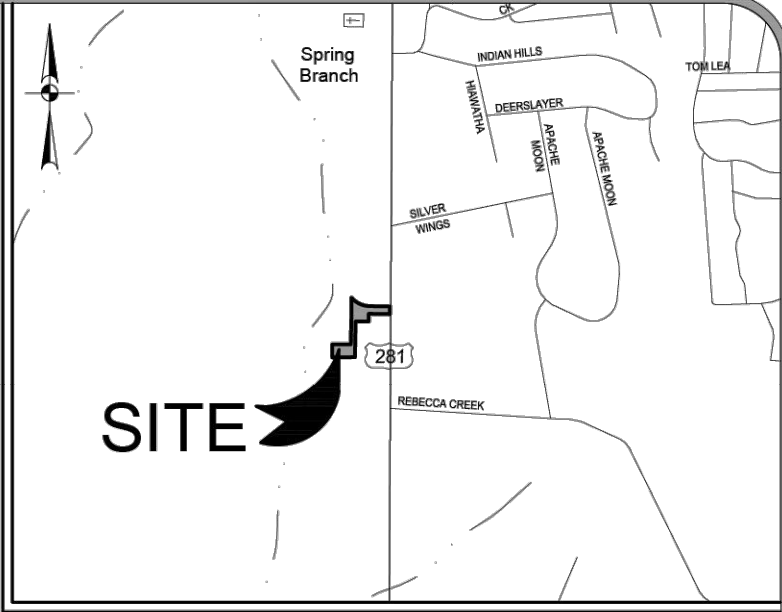
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TBPE FIRM F-10961  
TBPLS FIRM 10153600

PLAT ESTABLISHING  
SIMMONS VALLEY ENTRY ROAD

BEING A 2.175 ACRE TRACT SITUATED IN THE CHARLES STROUD SURVEY NO. 26, ABSTRACT NO. 558, COMAL COUNTY, TEXAS, TEXAS, BEING A PORTION OF A CALLED 204.706 ACRE TRACT, RECORDED IN DOCUMENT NO. 202306040495, COMAL COUNTY, TEXAS OFFICIAL PUBLIC RECORDS.



- LEGEND:
- = FND 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT" (UNLESS NOTED OTHERWISE)
  - = SET 1/2" IRON PIN W/ PLASTIC CAP STAMPED "HMT"
  - ⊙ = FND NAIL
  - ⊙ = PEDERNALES FND DISK
  - U.E. = UTILITY EASEMENT
  - DRNG = DRAINAGE
  - R.O.W. = RIGHT-OF-WAY
  - M.P.R.C.C.T. = MAP AND PLAT RECORDS, GUADALUPE COUNTY, TEXAS
  - O.P.R.C.C.T. = OFFICIAL PUBLIC RECORDS, GUADALUPE COUNTY, TEXAS
  - N.V.A.E. = NO VEHICLE ACCESS EASEMENT
  - = RIGHT OF WAY LINE
  - - - - - = EASEMENT LINE



LOCATION MAP  
SCALE: 1"=2000'

TXDOT NOTES:

- FOR RESIDENTIAL DEVELOPMENT DIRECTLY ADJACENT TO STATE RIGHT-OF-WAY, THE DEVELOPER SHALL BE RESPONSIBLE FOR ADEQUATE SETBACK AND/OR SOUND ABATEMENT MEASURES FOR FUTURE NOISE MITIGATION.
- OWNER/DEVELOPER IS RESPONSIBLE FOR PREVENTING ANY ADVERSE IMPACT TO THE EXISTING DRAINAGE SYSTEM WITHIN THE HIGHWAY RIGHT-OF-WAY. FOR PROJECTS IN THE EDWARDS AQUIFER RECHARGE OR CONTRIBUTING ZONES, OUTFALLS FOR WATER QUALITY AND/OR DETENTION PONDS TREATING IMPERVIOUS COVER RELATED TO THE DEVELOPMENT, WILL NOT ENCROACH BY STRUCTURE OR GRADING INTO STATE R.O.W. PLACEMENT OF PERMANENT STRUCTURAL BEST MANAGEMENT PRACTICE DEVICES OR VEGETATIVE FILTER STRIPS WITHIN STATE R.O.W. WILL NOT BE ALLOWED.
- MAXIMUM ACCESS POINTS TO STATE HIGHWAY FROM THIS PROPERTY WILL BE REGULATED AND DETERMINED AS DIRECTED BY TXDOT'S "ACCESS MANAGEMENT MANUAL" AND BASED ON AN APPROVED TRAFFIC IMPACT ANALYSIS. INTERNAL ACCESS SHOULD BE PROVIDED BETWEEN THE LOTS. WHERE TOPOGRAPHY OR OTHER EXISTING CONDITIONS MAKE IT INAPPROPRIATE OR NOT FEASIBLE TO CONFORM TO THE CONNECTION SPACING INTERVALS, THE LOCATION OF REASONABLE ACCESS WILL BE DETERMINED WITH CONSIDERATION GIVEN TO TOPOGRAPHY, ESTABLISHED PROPERTY OWNERSHIPS, UNIQUE PHYSICAL LIMITATIONS, AND/OR PHYSICAL DESIGN CONSTRAINTS. THE SELECTED LOCATION SHOULD SERVE AS MANY PROPERTIES AND INTERESTS AS POSSIBLE TO REDUCE THE NEED FOR ADDITIONAL DIRECT ACCESS TO THE HIGHWAY. IN SELECTING LOCATIONS FOR FULL MOVEMENT INTERSECTIONS, PREFERENCE WILL BE GIVEN TO PUBLIC ROADWAYS THAT ARE ON LOCAL THOROUGHFARE PLANS.
- IF SIDEWALKS ARE REQUIRED BY APPROPRIATE CITY ORDINANCE, A SIDEWALK PERMIT MUST BE APPROVED BY TXDOT, PRIOR TO CONSTRUCTION WITHIN STATE RIGHT-OF-WAY. LOCATIONS OF SIDEWALKS WITHIN STATE RIGHT-OF-WAY SHALL BE AS DIRECTED BY TXDOT.
- ANY TRAFFIC CONTROL MEASURES (LEFT-TURN LANE, RIGHT-TURN LANE, SIGNAL, ETC.) FOR ANY ACCESS FRONTING A STATE MAINTAINED ROADWAY SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER.

APPROVED THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
BY THE PLANNING COMMISSION OF THE CITY OF SPRING BRANCH, TEXAS.

CHAIRMAN \_\_\_\_\_

APPROVED FOR ACCEPTANCE

DATE \_\_\_\_\_ PLANNING DIRECTOR \_\_\_\_\_  
DATE \_\_\_\_\_ CITY ENGINEER \_\_\_\_\_

STATE OF TEXAS  
COUNTY OF COMAL

I, \_\_\_\_\_ DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT WAS FILED FOR RECORD IN THE MAP AND PLAT RECORDS, DOC# \_\_\_\_\_ OF COMAL COUNTY ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, AT \_\_\_\_\_ M.

WITNESS MY HAND AND OFFICIAL SEAL, THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

COUNTY CLERK, COMAL COUNTY, TEXAS

DEPUTY \_\_\_\_\_

SHEET 1 OF 1

FOR REFERENCE ONLY

This plat will be submitted to the Planning Division following approval of the construction plans.

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JOSEPH T. SANDOVAL P.E. #110257 ON 4/11/24. IT IS NOT TO BE USED FOR CONSTRUCTION, OR BIDDING PURPOSES.

PLAT  
SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION | DESCRIPTION | REVISION DATE |
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DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.: 337.082

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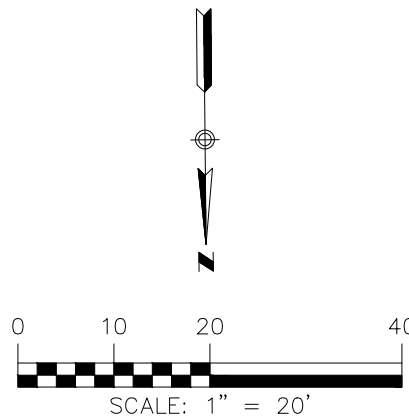
290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPE FIRM F-10961  
TBPLS FIRM 1053600



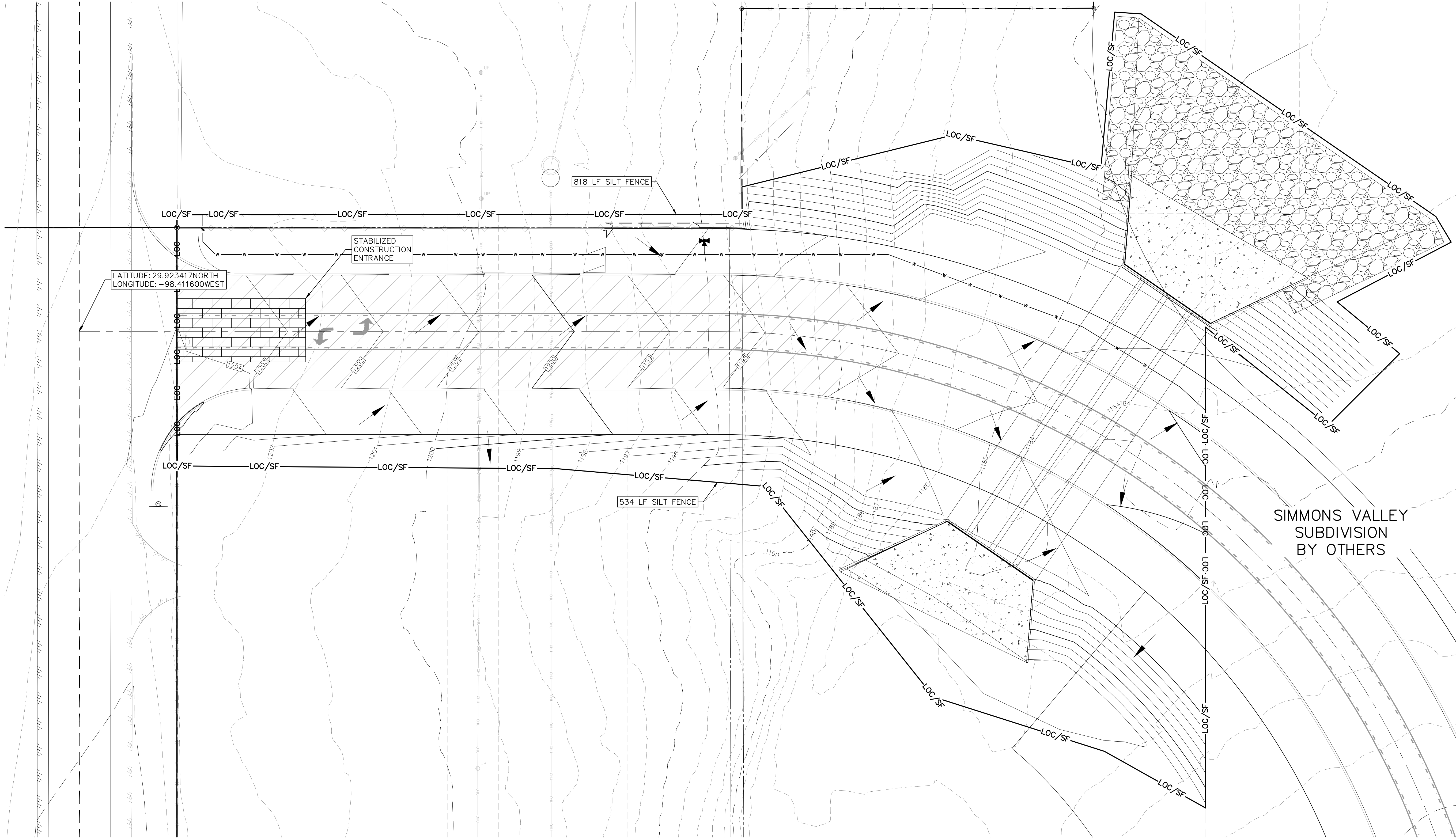
NOTE:

PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.

SILT FENCE AT PROPERTY LINE MAY BE SHOWN GRAPHICALLY OFFSET FROM PROPERTY LINE TO AVOID OVERLAP OF LINEWORK. CONTRACTOR SHALL NOT INSTALL EROSION CONTROL MEASURES BEYOND LIMITS OF CONSTRUCTION REGARDLESS OF GRAPHIC REPRESENTATION.



- LEGEND**
- 700 ——— EXISTING CONTOURS
  - 700 ——— PROPOSED CONTOURS
  - > DRAINAGE FLOW DIRECTION
  - SF — SF — SILT FENCE
  - LOC — LOC — LIMIT OF CONSTRUCTION
  - [Hatched Box] STABILIZED CONSTRUCTION ENTRANCE



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.

EROSION CONTROL PLAN

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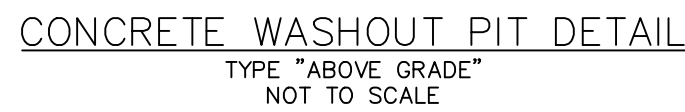
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TBPE FIRM F-10961  
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THE PURPOSE OF CONCRETE WASHOUT AREAS IS TO PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA, AND TRAINING EMPLOYEES AND SUBCONTRACTORS.

- INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO MATERIAL SUPPLIER AND SUBCONTRACTOR AGREEMENTS.
- AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE.
- PERFORM WASHOUT OF CONCRETE TRUCKS IN DESIGNATED AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED AREAS.

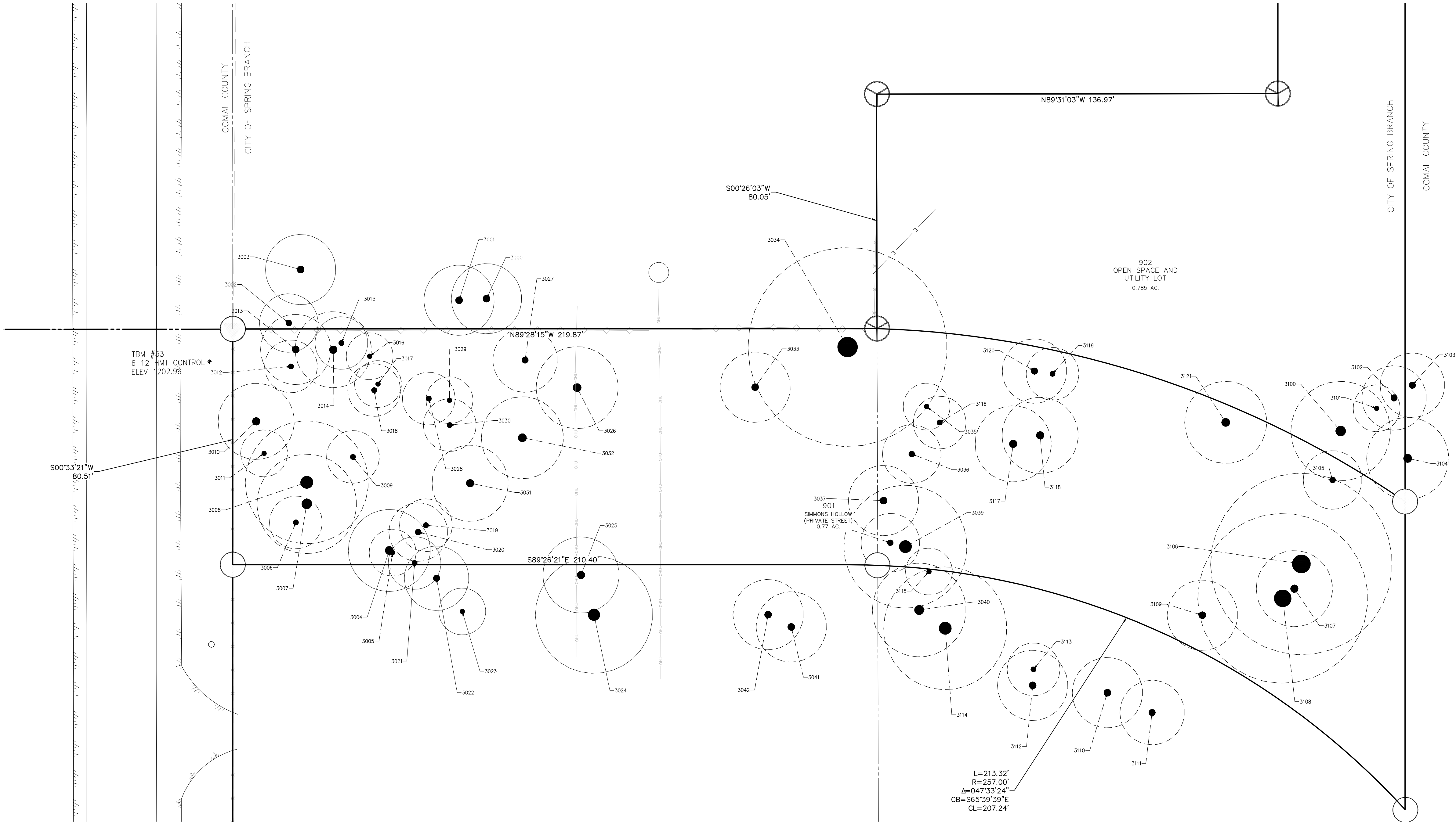
- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, OR WATER BODIES. DO NOT ALLOW RUNOFF FROM THIS AREA BY CONSTRUCTING A TEMPORARY PIT OR BERMED AREA LARGE ENOUGH FOR LIQUID AND SOLID WASTE.
- WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET, BE BROKEN UP, AND THEN DISPOSED PROPERLY.

WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.



1. INSTALL EROSION CONTROLS PER APPROVED PLAN.
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAINFALL EVENTS, AND AFTER RAINFALL EVENTS, AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB INLET INSTALLATION.
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.
7. INSTALL STREETScape AND/OR LANDSCAPING IMPROVEMENTS.
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MIN OF 70% VEGETATION PRIOR TO COMPLETION. PER TPDES REQUIREMENTS, DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
10. TPDES REQUIREMENTS – DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) AND SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES IN 21 DAYS.

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 DISCREPANCIE 24—HOURS PRIOR TO COMMENCING CONSTRUCTION.



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  
TBPE FIRM F-10961  
TBPLS FIRM 1053600

HMT

ENGINEERING & SURVEYING

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DEMOLITION PLAN

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

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DATE: APRIL 2024

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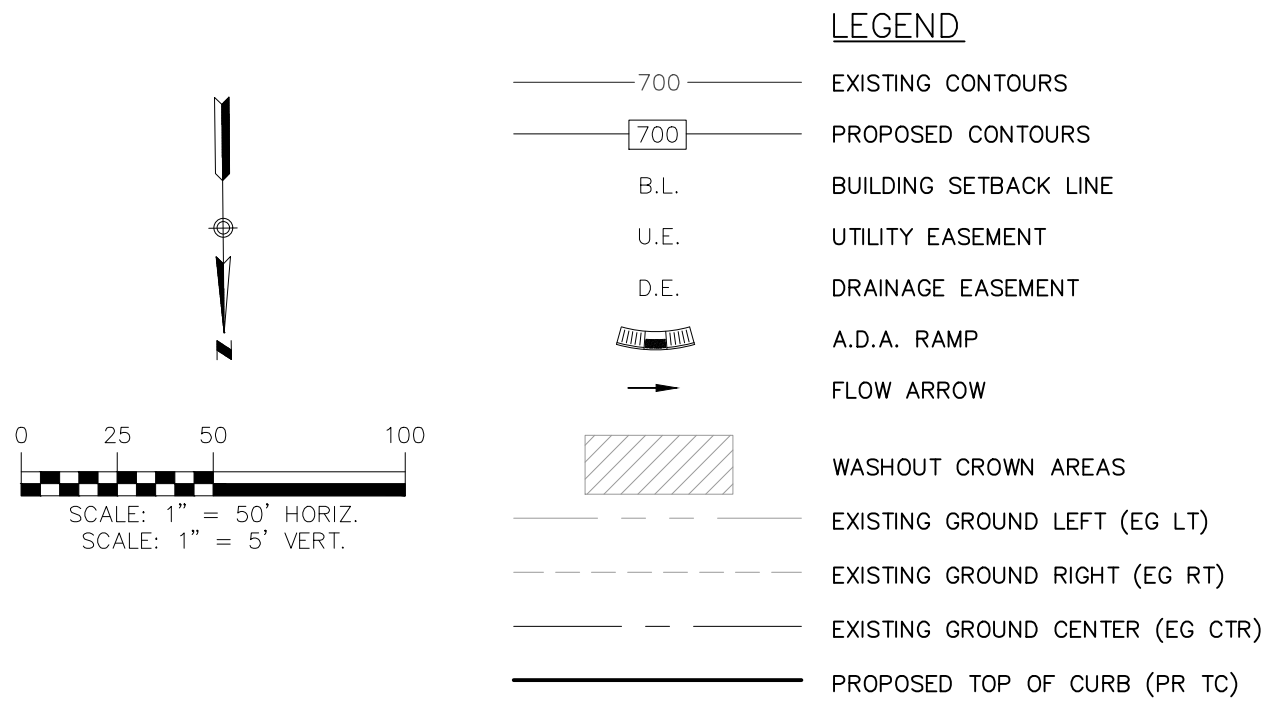
DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.: 337.082

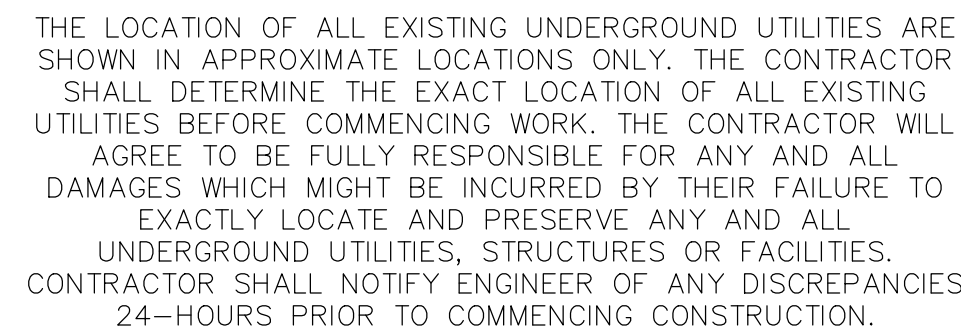
SHEET

C3.00



## NOTES

1. LOCAL STREETS WERE DESIGNED TO POSTED SPEED LIMIT OF **35** MPH.
2. CONTRACTOR TO CONSTRUCT SIDEWALK RAMPS WITH STREETS.
3. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM STREET STUB OUT ENDS SO THAT NO "PONDING" OF WATER OCCURS.
4. PER NEW BRAUNFELS ORDINANCE SEC. 114--98(a)(6) ALL DRIVEWAY LOCATED ON A SINGLE FAMILY RESIDENCE ON A LOCAL STREET SHALL HAVE A MINIMUM SPACING OF 20'



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



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JOSEPH T. SANDOVAL  
P.E. # 110257 ON 4/11/24.  
IT IS NOT TO BE USED FOR  
CONSTRUCTION, OR  
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**SIMMONS HOLLOW DRIVE  
STREET PLAN & PROFILE**

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

[illegible]

DATE: APRIL 2024

DRAWN BY: CAC

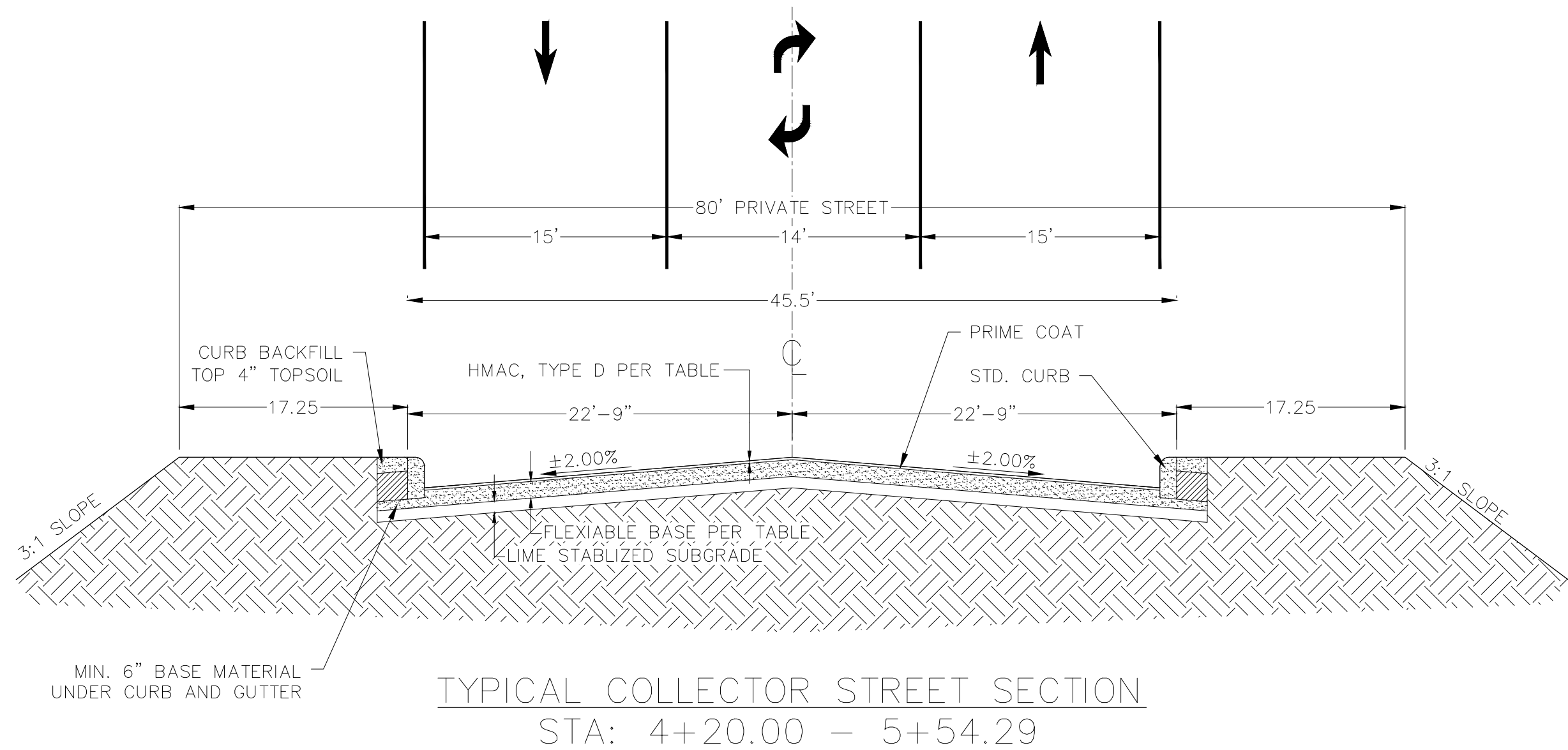
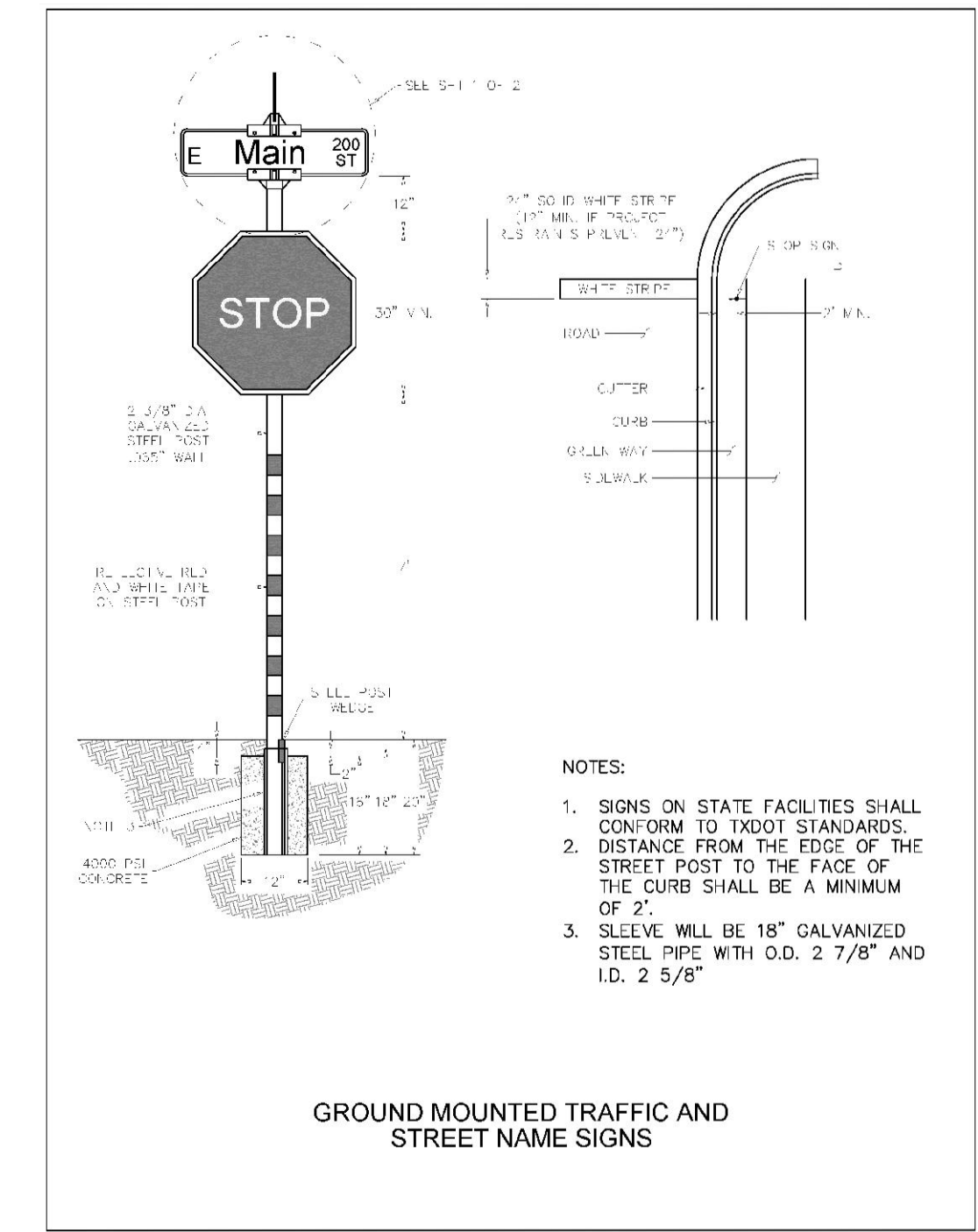
DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.:

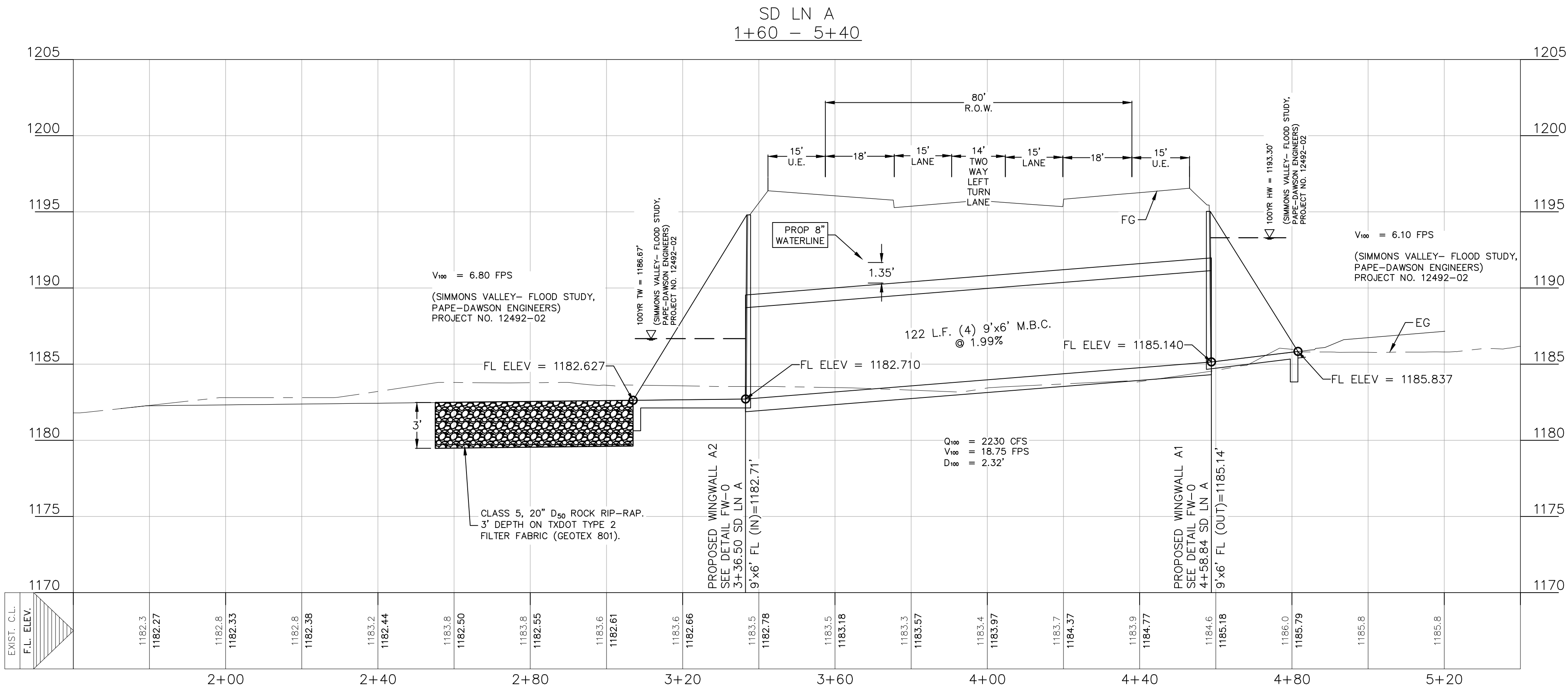
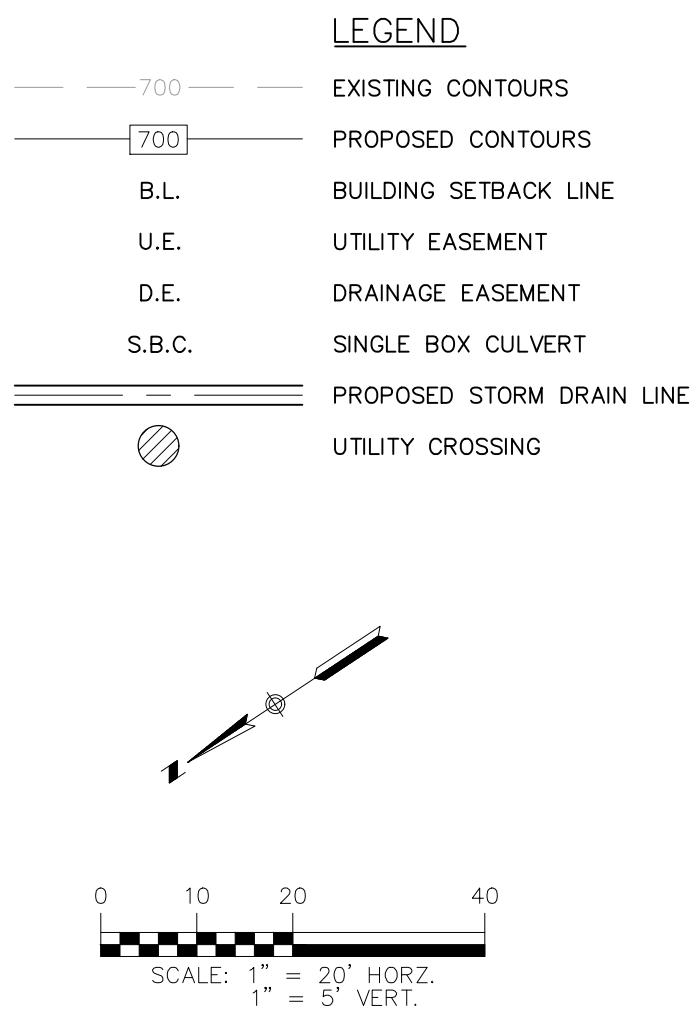
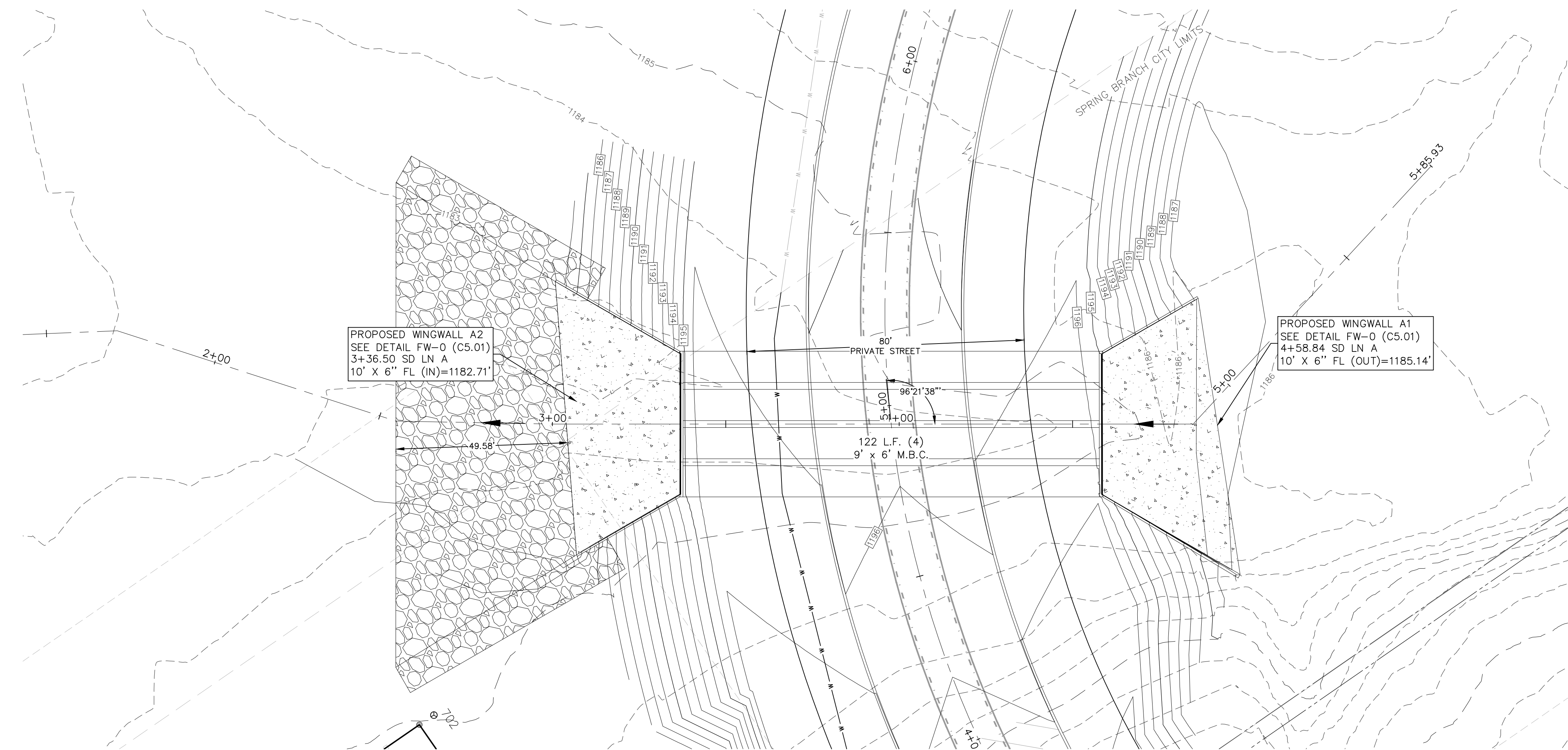
**SHEET**

## C4.00



NOTE:

1. ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE "PAVEMENT DESIGN AND PRELIMINARY FOUNDATIONS REPORT", BY TIL, INC., DATED JULY 7, 2021.
2. ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE ALL PAVEMENT SECTIONS SHOWN ON THE ABOVE TABLE SHALL SUPERCEDE ANY STANDARD DETAILS WITH RESPECT TO DEPTH OF MATERIALS ASSOCIATED WITH THIS PROJECT.



**DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:**

SILT SHALL BE REMOVED AND THE BASIN RETURNED TO ORIGINAL LINES AND GRADES WHEN STANDING WATER CONDITIONS OCCUR OR THE BASIN STORAGE VOLUME IS REDUCED BY MORE THAN 10%.

- TO LIMIT EROSION, NO UNVEGETATED AREA SHALL EXCEED 10' SQ. FT. IN EXTENT.
- ACCUMULATED PAPER, TRASH, AND DEBRIS SHALL BE REMOVED EVERY 6 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- BASINS SHALL BE MOWED ANNUALLY BETWEEN THE MONTHS OF JUNE AND SEPTEMBER.
- CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME A BASIN DOES NOT DRAIN COMPLETELY WITHIN 60 HOURS OR CESSATION OF INFLOW (IE: NO STANDING WATER IS ALLOWED).
- STRUCTURAL INTEGRITY OF BASINS SHALL BE MAINTAINED AT ALL TIMES.
- MAINTENANCE VEHICLE FOR POND ACCESS SHOULD BE A BOBCAT S175 SKID STEER LOADER OR VEHICLE OF EQUAL TO LESSER SIZE.

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.

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**BRIDGE CLASS  
CULVERT**  
SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION DESCRIPTION | REVISION DATE |
|-----|----------------------|---------------|
|     |                      |               |
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DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

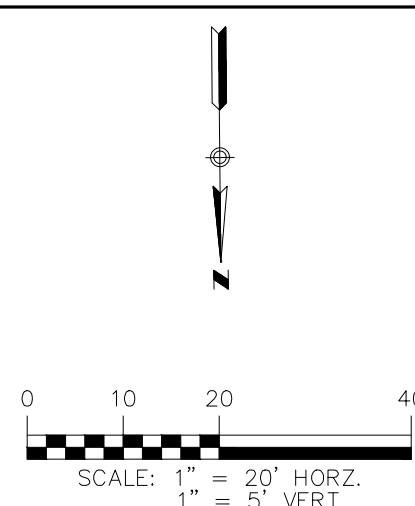
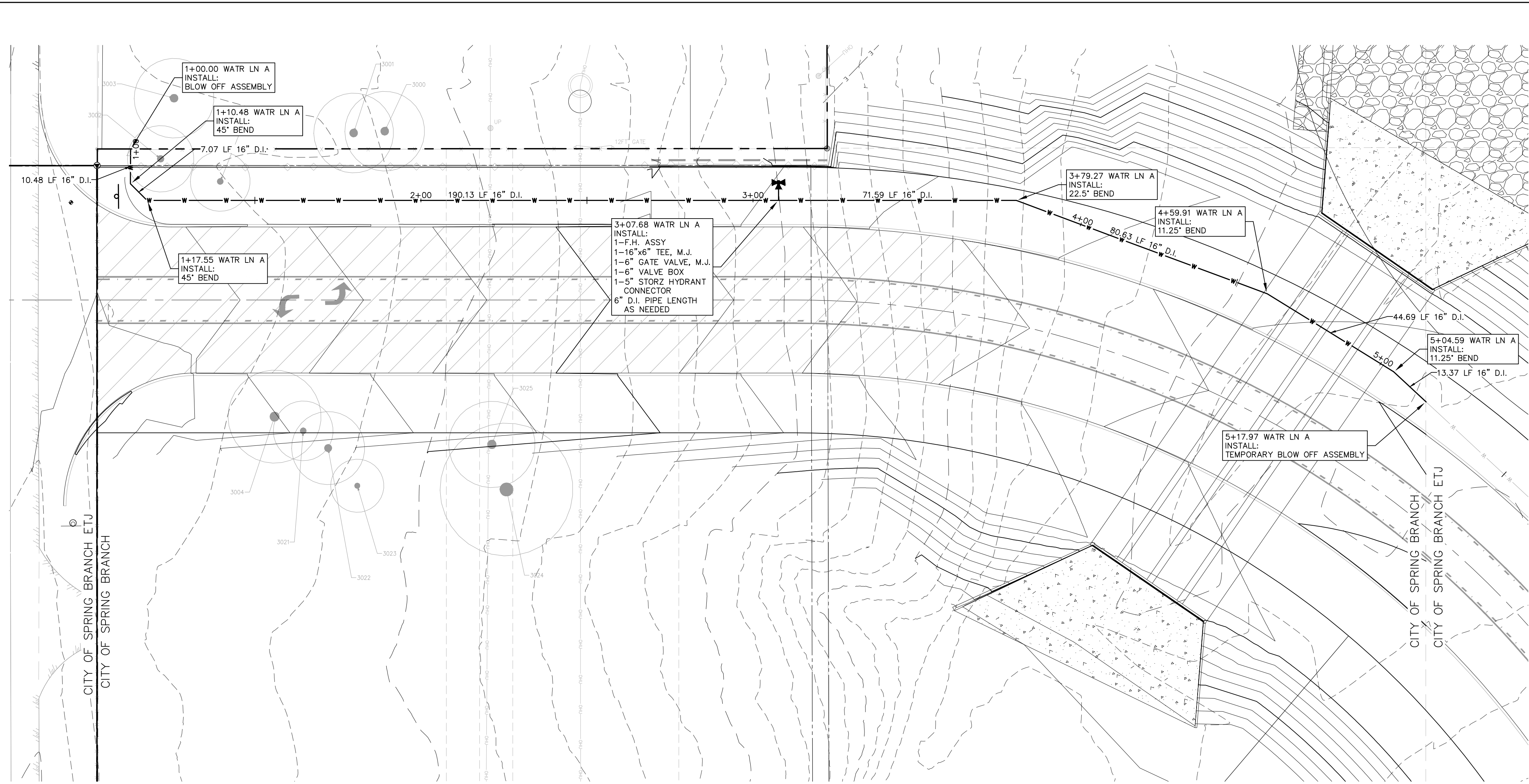
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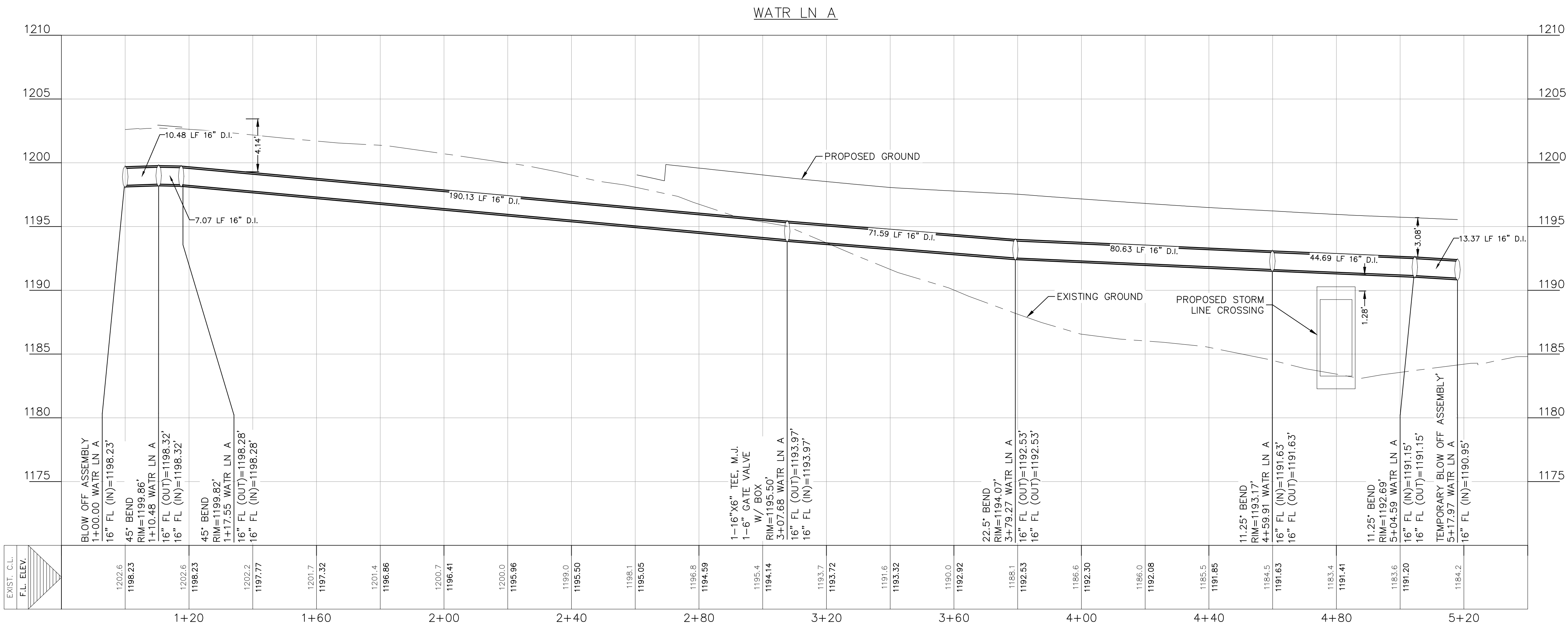
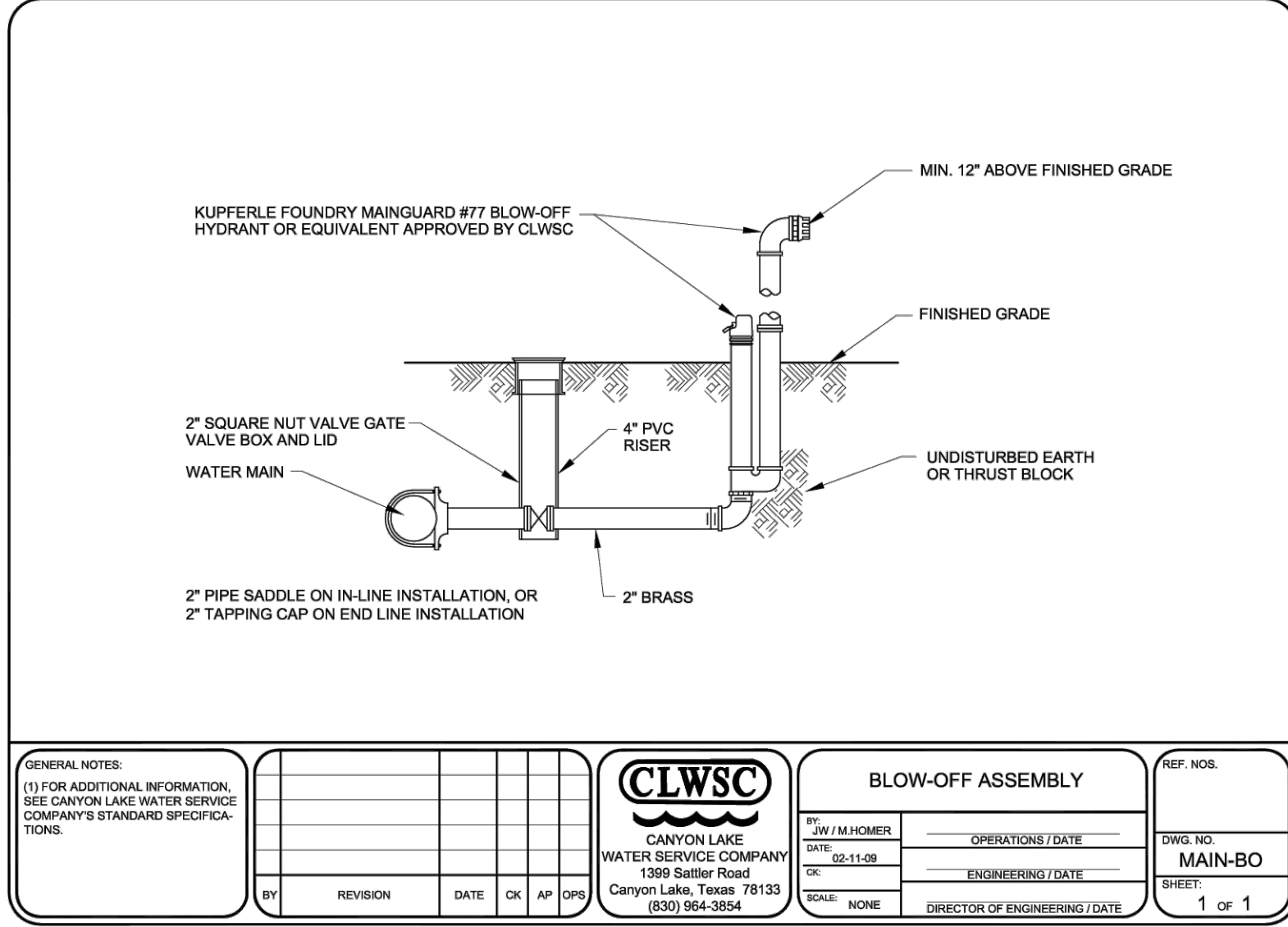
| NUMBER OF SPANS | SECTION DIMENSIONS |   | BILLS OF REINFORCING STEEL (For Box Length = 40 feet) |   |     |      |            |     |     |      |        |     |     |      |              |     |     |      |              |     |     |      |             |     |     |      |                 |     |     |      |               |     |     |      |        |     |                    |      |        |     |       |      |        |     |     |      |        |     |     |      | QUANTITIES |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     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|                 |                    |   | Bars B  |   |     |      | Bars C & D |     |     |      | Bars E |     |     |      | Bars F1 - #4 |     |     |      | Bars F2 - #4 |     |     |      | Bars M - #4 |     |     |      | Bars Y & Z - #4 |     |     |      | Bars H 4 - #4 |     |     |      | Bars K |     | Per Foot of Barrel |      | Curb   |     | Total |      |        |     |     |      |        |     |     |      |            |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |        |     |     |      |    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|                 | S                  | H | T   | U | No. | Size | Length     | Wt. | No. | Size | Length | Wt. | No. | Size | Length       | Wt. | No. | Size | Length       | Wt. | No. | Size | Length      | Wt. | No. | Size | Length          | Wt. | No. | Size | Length        | Wt. | No. | Size | Length | Wt. | No.                | Size | Length | Wt. | No.   | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length     | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length 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Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. 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Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. | Size | Length | Wt. | No. |  |



Drawing Name: N:\\_Projects\337 - Lennar\882 - Simmons Valley South Entry\03a\337.082\_WATR.dwg User: carbins Apr 11, 2024 - 8:43am



| LEGEND |                            |
|--------|----------------------------|
|        | EXISTING CONTOURS          |
|        | PROPOSED CONTOURS          |
|        | B.L. BUILDING SETBACK LINE |
|        | UTILITY EASEMENT           |
|        | DRAINAGE EASEMENT          |
|        | EXISTING WATER LINE        |
|        | PROPOSED WATER LINE        |
|        | PROPOSED WATER SERVICE     |
|        | UTILITY CROSSING           |



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



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## WATERLINE PLAN

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION | DESCRIPTION | DATE |
|-----|----------|-------------|------|
|     |          |             |      |
|     |          |             |      |
|     |          |             |      |
|     |          |             |      |

DATE: APRIL 2024

DRAWN BY: CAC

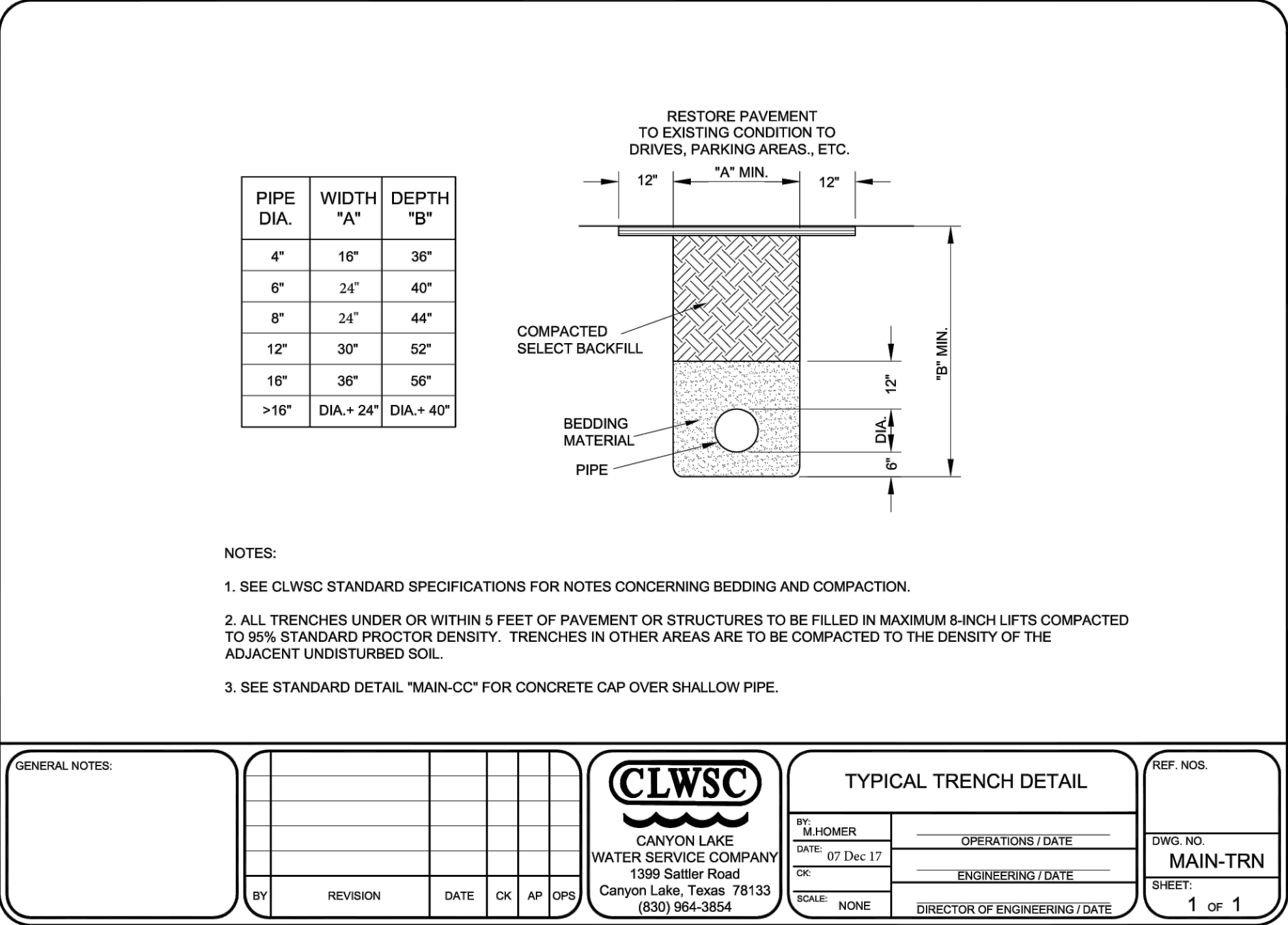
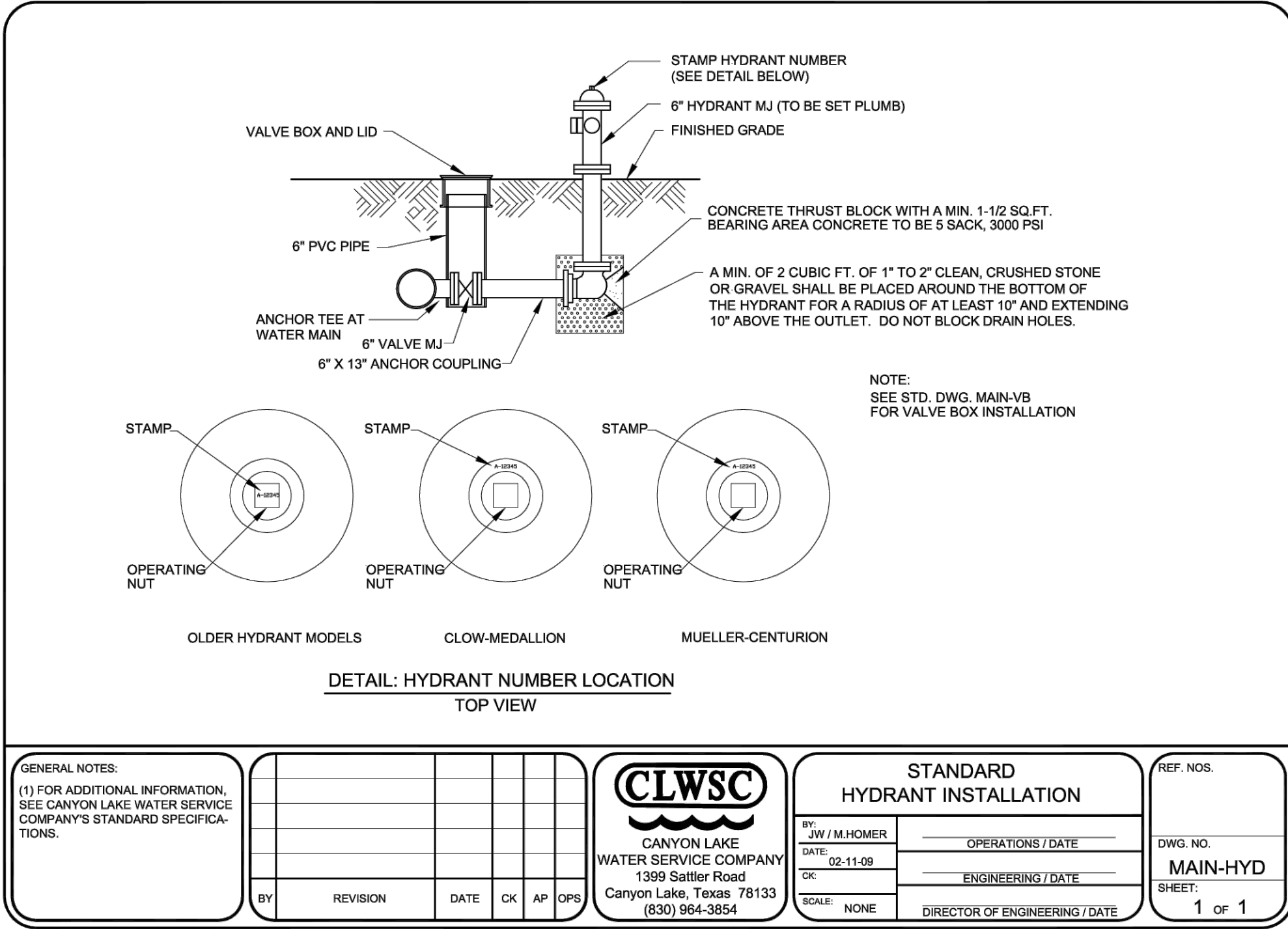
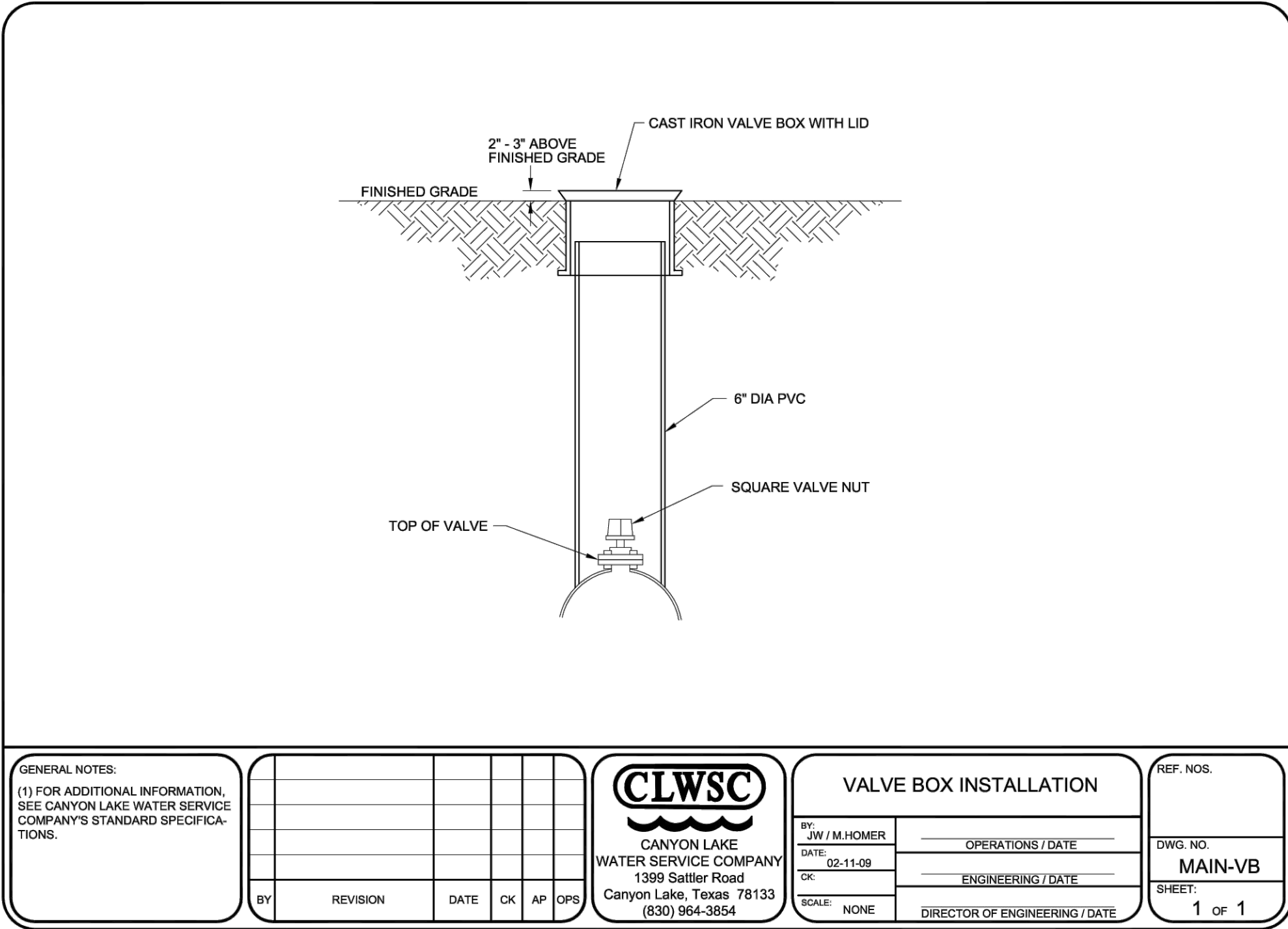
DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.: 337.082

SHEET

C6.00



- UTILITY NOTES:
1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
  2. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.

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



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## WATER DETAILS

SIMMONS VALLEY  
ENTRY ROAD  
SPRING BRANCH, TEXAS

| NO. | REVISION | DESCRIPTION | DATE |
|-----|----------|-------------|------|
|     |          |             |      |
|     |          |             |      |
|     |          |             |      |
|     |          |             |      |
|     |          |             |      |

DATE: APRIL 2024

DRAWN BY: CAC

DESIGNED BY: JTS

REVIEWED BY: JTS

HMT PROJECT NO.:  
337.082

**SHEET**  
**C6.01**