

SUMMARY NOTES:

DEVELOPER/OWNER: EMILIANO GUERRERO
FORESTAR (USA) REAL ESTATE GROUP
16500 SAN PEDRO AVE.,
SUITE 400
SAN ANTONIO, TX 78232

ENGINEER: BGE, INC., TBPE-1046
CONTACT: AARON NEUMANN, P.E.
EMAIL: ANEUMANN@BGEINC.COM
7330 SAN PEDRO AVENUE SUITE 202
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SAN ANTONIO, TEXAS 78216
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CIVIL CONSTRUCTION DRAWINGS:
WEATHERWOOD PHASE 1
SAN ANTONIO WATER SYSTEM

WATER PLANS

MAY 2024

FLOODPLAIN INFORMATION

A PORTION OF THE LOT IN THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOODPLAIN OF ANY WATERWAY THAT IS WITHIN THE LIMITS OF THE FEDERAL FLOOD INSURANCE ADMINISTRATION FIRM PANEL.

CONTROL POINTS

PANEL POINT 103
SURFACE
GRID N. 13,735,448.23
E. 2,026,254.82

PANEL POINT 104
SURFACE
GRID N. 13,738,239.53
E. 2,025,887.19

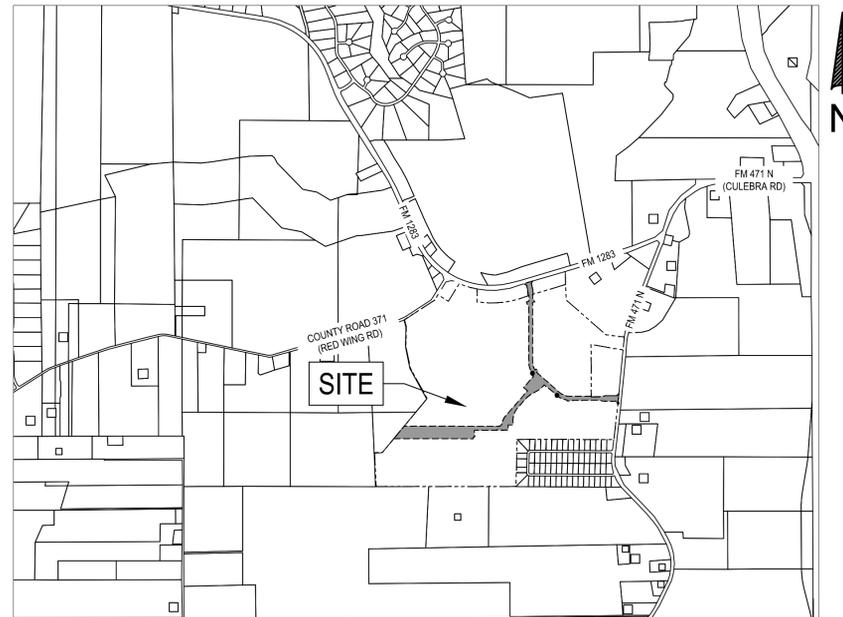
PANEL POINT 107
SURFACE
GRID N. 13,735,419.26
E. 2,023,790.18

GENERAL NOTES
1. COORDINATES ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, NAD 83, AND ARE IN SURFACE COORDINATES.
2. PANEL POINTS ARE SURVEYED WITH BGE CAPS OR A MAG NAIL WITH A BGE WASHER IN ASPHALT AND 1" X 2" CHEVRON FOR PANEL POINT.

GENERAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION.

VICINITY MAP - 1" = 2000'



SHEET LIST TABLE

Sheet Description	Sheet Title
C00.00	W - TITLE SHEET
C01.00	W - CIVIL GENERAL NOTES
C02.10	W - MASTER UTILITY PLAN
C08.00	W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 1 OF 3)
C08.01	W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 2 OF 3)
C08.02	W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 3 OF 3)
C10.00	W - CIVIL UTILITY DETAILS

REVISIONS/CORRECTIONS

SHEET LIST	DESCRIPTION	DATE	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	ACCEPTED BY	APPROVAL DATE

SUBMITTED BY

DATE: _____



Know what's below.
Call before you dig.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

SAWS PRESSURE ZONE 1170
DEVELOPER NAME: FORESTAR (USA) REAL ESTATE GROUP
DEVELOPER ADDRESS: 16500 SAN PEDRO AVE
CITY: SAN ANTONIO STATE: TX ZIP: 78232
PHONE: N/A FAX: N/A
SAWS BLOCK MAP # XXXX TOTAL EDUS 22 TOTAL ACREAGE 29.3
TOTAL LINEAR FOOTAGE OF PIPE 4,843 PLAT NO. 22-11800271
NUMBER OF LOTS 0 SAWS JOB NO. 22-1128

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San Antonio, TX 78216
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TBPE Registration No. F-1046



05/14/2024

C00.00

G:\TXC\Projects\San Antonio Projects\3439-00 - Schuchart Ranch\05 - Phase 1 Design\03_CADD\01_Sha..._Water Plans\02 W C01.00 CIVIL GENERAL NOTES.dwg Plotfile: 5/13/2024 5:08:55 PM By: Aguevora-stevens

GENERAL CONSTRUCTION :

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
2. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL.
3. THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHRUBS, BUSHES OR DRIVEWAYS.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED.
6. IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
7. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192, 171 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES.
8. CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY-FOUR (24) HOURS PRIOR TO BACKFILL OF ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
9. CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES.
11. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK.
12. ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT.
13. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
14. THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND / OR TRACKED CONSTRUCTION MATERIALS AND / OR DEBRIS.
15. IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS, C. O. S. A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS.
16. CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB.
17. CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT.

TREE PROTECTION AND PRESERVATION GENERAL NOTES :

- 1. NO UTILITY OR STREET EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
2. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.
3. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES.
4. ALL CURB AND SIDEWALK WORK SHALL USE ALTERNATIVE CONSTRUCTION METHODS TO MINIMIZE EXTENSIVE ROOT DAMAGE TO TREES.
5. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
6. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT.
7. ROOTS SHALL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.
8. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
9. NO WIRES, NAILS OR OTHER MATERIAL MAY BE ATTACHED TO PROTECTED TREES.
10. TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE CITY STREET OR ALLEY RIGHT - OF - WAY OR PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES SHALL BE PROPERLY PRUNED FOLLOWING THE ANSI A-300 STANDARDS FOR PRUNING.
11. NO EXCESSIVE TREE TRIMMING WILL BE PERMITTED.
12. ALL DEBRIS GENERATED BY THE PRUNING AND TRIMMING OF THE TREES AND / OR BUSHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY (NO SEPARATE PAY ITEM).
13. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS.
14. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST.
15. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
16. TREE PLANTING FOR MITIGATION OR ENHANCEMENT: ALL PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES.

ACCESSIBILITY REQUIREMENTS:

- 1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
2. WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS, ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES, THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY.
3. PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES, THE CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON, OR IN WRITING, OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED.
4. FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED.

SAWS GENERAL CONSTRUCTION :

- 1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
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 CONSTRUCTION PUBLIC WORKS CONSTRUCTION."
E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS.
3. THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE, HTTPS://WWW.SAWS.ORG/BUSINESS_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.
5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATION SAND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING, AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT BY THE PROJECT'S CONSTRUCTION.
8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.
9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.
10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOR PLAIN PERMIT.
11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS.
WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK.
ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.
12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRANCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY.
13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

SAWS WATER NOTES :

- 1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION 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.
2. FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014
3. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS.
4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS:
5. ALL VALVES SHALL READ "OPEN RIGHT".
6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF .985 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI.
7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET.
8. BACKFLOW PREVENTION DEVICES: ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.
10. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS.

SAWS WATER NOTES :

- 23. 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.
A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER IMMEDIATELY AT 210-704-SAWS (210-704-7297).
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 TELEVISIONING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.
24. THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED.
25. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN.
26. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY.
27. MANHOLE REMOVAL: WHERE EXISTING MANHOLES ARE TO BE REPLACED BY THE CONTRACTOR, THE EXISTING MANHOLES SHALL BE REMOVED.
28. SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY SAWS EOC AT 210-704-SAWS (210-233-7297) AND EITHER AMERICA ESPINOZA AT 210-233-2934 OR JOSE A. MARTINEZ AT 210-233-3071 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS.
29. FLOW METERS IN MANHOLES: THE CONTRACTOR SHALL NOTIFY BOBBY JOHNSON AT 210-233-3493 OR ABEL BORUNDA AT 210-233-3704 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS.

Table with columns for DATE (APR) and DESCRIPTION.

DESIGNED BY: AGS
REVIEWED BY: KWH
DRAWN BY: AGS

BGE logo and contact information for BROWN & GAY ENGINEERS, INC. including address, phone, and website.

WEATHERWOOD PHASE 1
W - CIVIL GENERAL NOTES



Table with project details: SAWS PRESSURE ZONE 1170, DEVELOPER NAME, DEVELOPER ADDRESS, CITY, STATE, ZIP, PHONE, FAX, SAWS BLOCK MAP #, TOTAL EDUS, TOTAL ACREAGE, TOTAL LINEAR FOOTAGE OF PIPE, PLAT NO., NUMBER OF LOTS, SAWS JOB NO.

05/14/2024
C01.00

G:\TX\Projects\San Antonio Projects\6439-00 - Schuchart Ranch\05 - Phase 1 Design\03_CADD\01_Sheet_Water Plans\05 W C08.00 PHASE 1 WATER DISTRIBUTION PLAN.dwg Layout: 66 W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 1 OF 3) Plotted: 5/13/2024 5:06:33 PM By: Aguirre-stevens

UTILITY TRENCH COMPACTION
ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. 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 GEO-TECHNICAL ENGINEER AND APPROVED BY THE CITY OF SAN ANTONIO STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF SAN MARCOS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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 COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

NOTE:
1. SEE SHEET C10.00 AND THE SAWS WEBSITE FOR UTILITY DETAILS
2. ELECTRIC PLANS SHOWN FOR SCHEMATIC PURPOSES ONLY. REFER TO CPS PLANS FOR FULL ELECTRIC LAYOUT.

NOTE:
IF THE MAXIMUM STATIC PRESSURE EXCEEDS 80 PSI, A PRV WILL BE REQUIRED ON THE PROPERTY OWNER'S SIDE OF THE WATER METER.

FIRE HYDRANT LEAD FREE NOTE:
SAWS REQUIRES GCPS AND COUNTER PERMITS TO USE LEAD FREE (<0.25% LEAD) FIRE HYDRANTS

PROPOSED WATER MAIN SHALL BE:
HDPE PIPE WITH 4" TO 65" DIAMETER SHALL BE PE4710 SOLID WALL PIPE AND FITTINGS THAT ARE IN CONFORMANCE WITH ASTM F714, AWWA C901 AND C906, AND NSF 61 REQUIREMENTS STATED HEREIN

PIPE 6" AND LARGER DIAMETER SHALL BE A MINIMUM OF DR 9 (PRESSURE RATING OF 250 PSI) AND DUCTILE IRON PIPE SIZE (DIPS) OUTSIDE DIAMETER. ALL PIPE AND FITTINGS WILL BE HIGH DENSITY POLYETHYLENE PIPE AND MADE OF VIRGIN MATERIAL.

ANCHORAGE/THRUST BLOCKING AND JOINT RESTRAINTS SHALL BE DONE IN ACCORDANCE WITH SAWS STANDARDS SPECIFICATION FOR CONSTRUCTION (ITEM NO. 839).

BACK FLOW PREVENTION DEVICES FOR RESIDENTIAL SUBDIVISIONS:
ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACK FLOW PREVENTION DEVICES.

PROPOSED WATER SERVICE SHALL BE:
3/4" COPPER SERVICE LINE WITH 5/8" METER

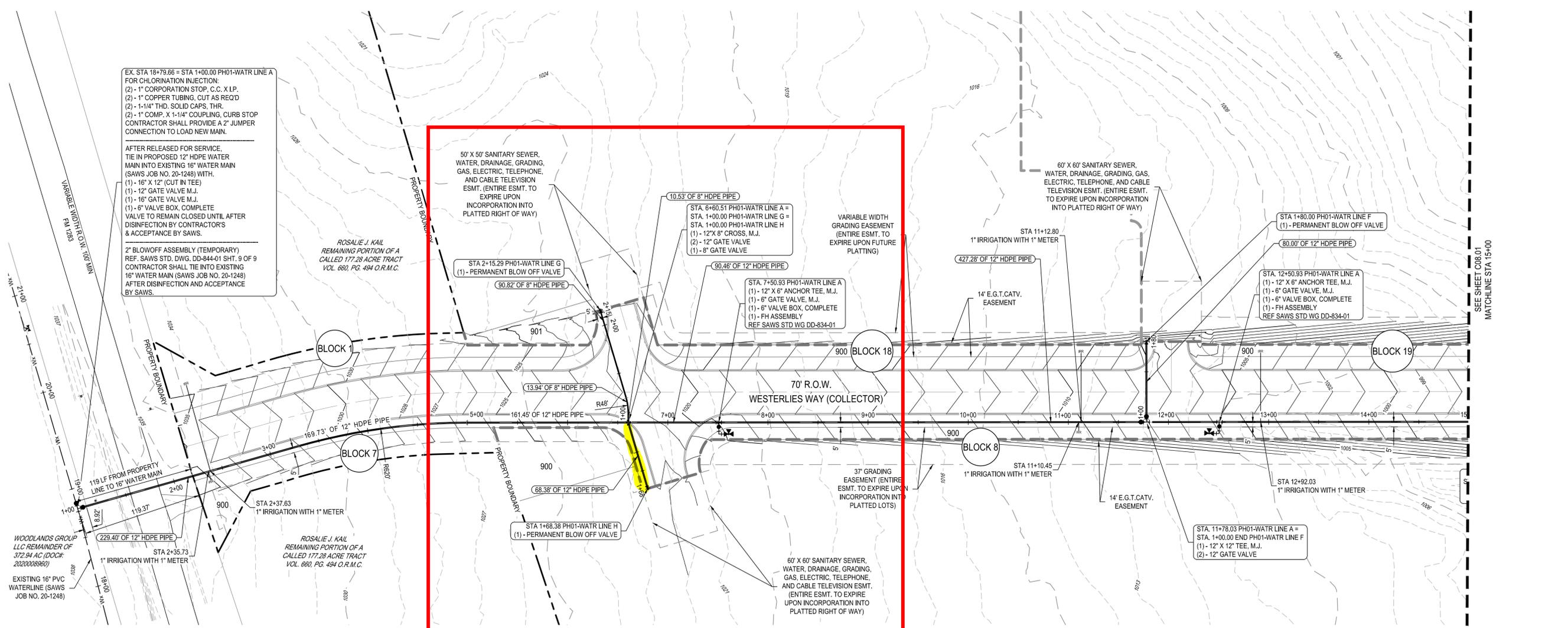
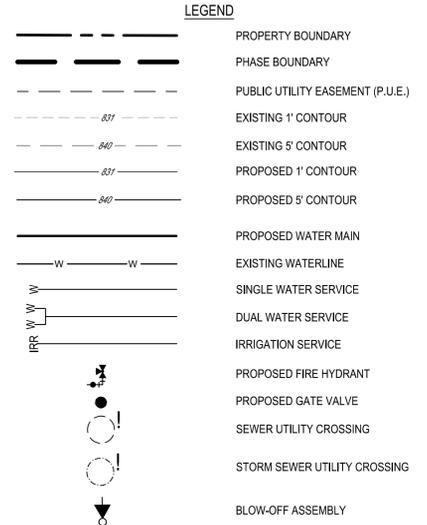
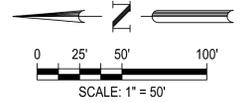
UTILITY NOTE:
UTILITY SYMBOLS ARE NOT TO SCALE AND ARE ONLY FOR ILLUSTRATION PURPOSES. PREFER TO SAWS DETAILS ON THEIR WEBSITE FOR CONSTRUCTION STANDARDS AND SPECIFICATIONS.

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 1,300 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 MARSHALL.

PRESSURE REDUCING VALVE NOTE:
CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 985 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 985 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMERS SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF PRESSURE REDUCING VALVE IS/ARE REQUIRED FOR SUCH LOT(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED

UTILITY GENERAL NOTES:

- ALL MAINS SHALL BE FLUSHED, HYDROSTATICALLY TESTED, AND DISINFECTED BY THE CONTRACTOR.
- THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
- ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT THEIR EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS.
- DEPTH OF BURY FOR ALL PIPING SHALL BE A MINIMUM OF 4' UNLESS OTHERWISE NOTED OR APPROVED BY SAWS.
- CONTRACTOR TO GRADE SITE TO WITHIN +/- 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED.
- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES REGARDING THE LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.
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- FOR WATER METER BOX LOCATION DETAIL, SEE SHEET C10.00.



EX. STA 18+79.66 = STA 1+00.00 PH01-WATR LINE A FOR CHLORINATION INJECTION:
(2) - 1" CORPORATION STOP, C.C. X I.P.
(2) - 1" COPPER TUBING, CUT AS REQ'D
(2) - 1-1/4" THD. SOLID CAPS, THR.
(2) - 1" COMP. X 1-1/4" COUPLING, CURB STOP
CONTRACTOR SHALL PROVIDE A 2" JUMPER CONNECTION TO LOAD NEW MAIN.

AFTER RELEASED FOR SERVICE, TIE IN PROPOSED 12" HDPE WATER MAIN INTO EXISTING 16" WATER MAIN (SAWS JOB NO. 20-1248) WITH:
(1) - 16" X 12" (CUT IN TEE)
(1) - 12" GATE VALVE, M.J.
(1) - 16" GATE VALVE, M.J.
(1) - 6" VALVE BOX, COMPLETE
VALVE TO REMAIN CLOSED UNTIL AFTER DISINFECTION BY CONTRACTOR'S & ACCEPTANCE BY SAWS.

2" BLOWOFF ASSEMBLY (TEMPORARY)
REF. SAWS STD. DWG. DD-844-01 SHT. 9 OF 9
CONTRACTOR SHALL TIE INTO EXISTING 16" WATER MAIN (SAWS JOB NO. 20-1248) AFTER DISINFECTION AND ACCEPTANCE BY SAWS.

ROSALIE J. KAIL
REMAINING PORTION OF A CALLED 177.28 ACRE TRACT VOL. 660, PG. 494 O.R.M.C.

ROSALIE J. KAIL
REMAINING PORTION OF A CALLED 177.28 ACRE TRACT VOL. 660, PG. 494 O.R.M.C.

WOODLANDS GROUP LLC-REMAINDER OF 372.94 AC (DOC# 202008960)
EXISTING 16" PVC WATERLINE (SAWS JOB NO. 20-1248)

DATE	DESCRIPTION
APR	
REV	
TR	DESIGNED BY:
KH	REVIEWED BY:
MV	DRAWN BY:

BROWN & GAY ENGINEERS, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 214-348-3800 www.bgeinc.com
TXE Registration No. P-1046

WEATHERWOOD PHASE 1
W - PHASE 1 WATER DISTRIBUTION PLAN
(SHEET 1 OF 3)



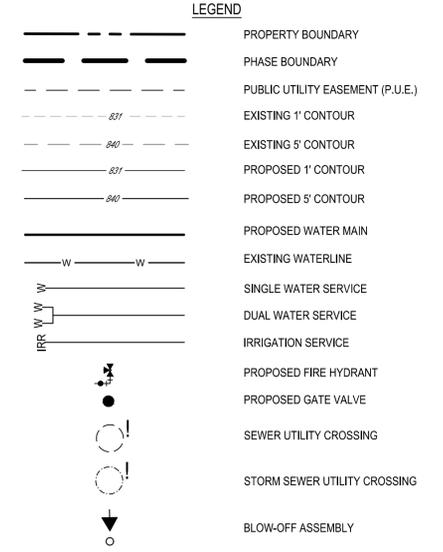
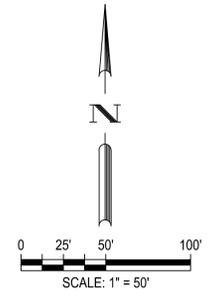
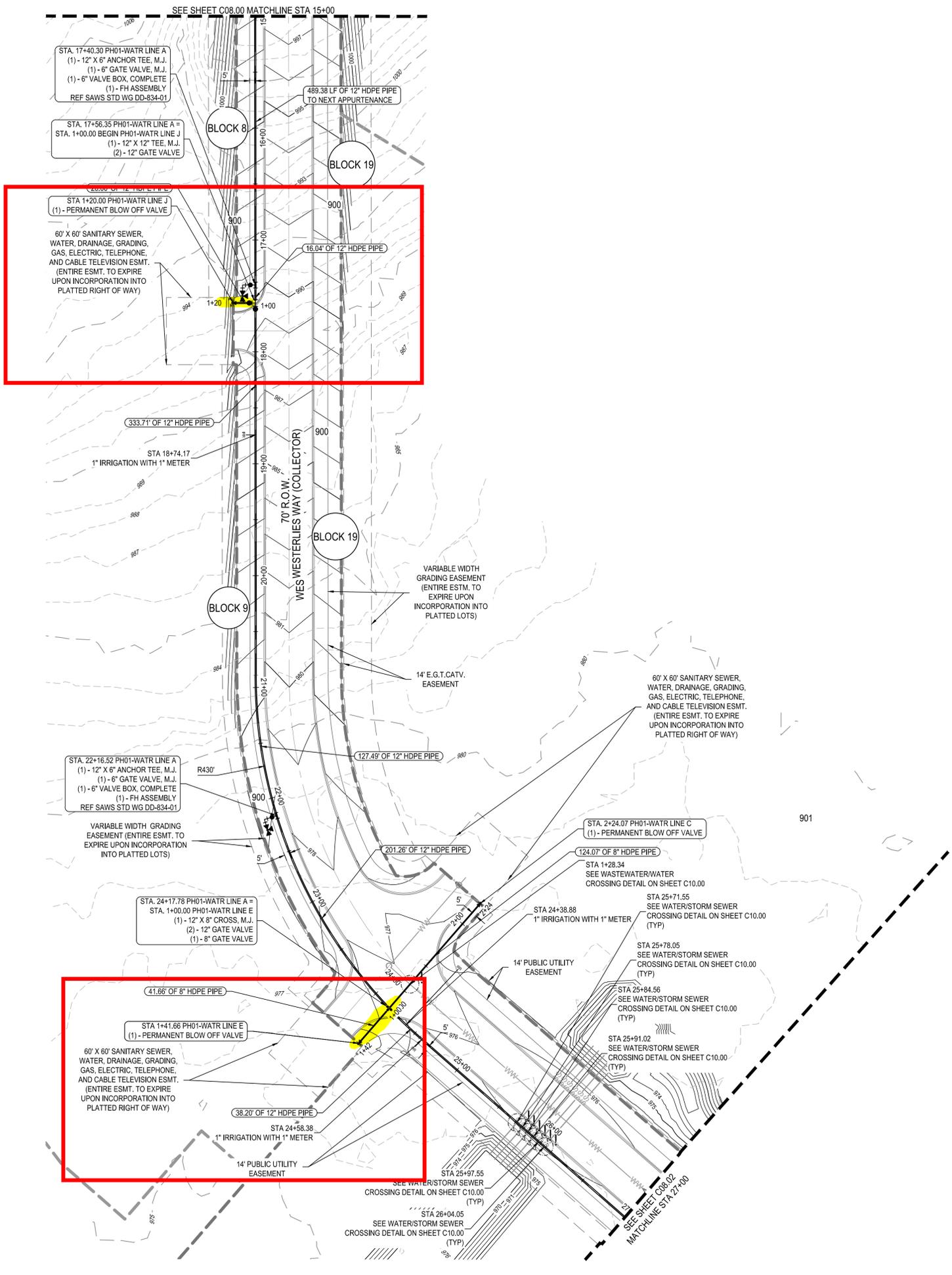
05/14/2024

SAWS PRESSURE ZONE 1170

DEVELOPER NAME	FORESTAR (USA) REAL ESTATE GROUP
DEVELOPER ADDRESS	16500 SAN PEDRO AVE
CITY	SAN ANTONIO, STATE TX ZIP 78232
PHONE N/A	FAX N/A
SAWS BLOCK MAP #	XXXX TOTAL EDUS 22 TOTAL ACREAGE 29.3
TOTAL LINEAR FOOTAGE OF PIPE	4,843 PLAT NO. 22-11800271
NUMBER OF LOTS	0 SAWS JOB NO. 22-1128

C08.00

G:\TX\Projects\San Antonio Projects\8439-00 - Schuchart Ranch\05 - Phase 1 Design\03_CADD\01_Sht_1_Water Plans\05 W C08.00 PHASE 1 WATER DISTRIBUTION PLAN.dwg Layout: 67' W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 2 OF 3) Plotted: 5/13/2024 5:07:18 PM By: Aguiar-stevens



UTILITY TRENCH COMPACTION
ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 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 GEO-TECHNICAL ENGINEER AND APPROVED BY THE CITY OF SAN ANTONIO STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF SAN ANTONIO STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

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 ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES 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 COVERING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

NOTE:
1. SEE SHEET C10.00 AND THE SAWS WEBSITE FOR UTILITY DETAILS
2. ELECTRIC PLANS SHOWN FOR SCHEMATIC PURPOSES ONLY. REFER TO CPS PLANS FOR FULL ELECTRICAL LAYOUT.

NOTE:
IF THE MAXIMUM STATIC PRESSURE EXCEEDS 80 PSI, A PRV WILL BE REQUIRED ON THE PROPERTY OWNER'S SIDE OF THE WATER METER.

FIRE HYDRANT LEAD FREE NOTE:
SAWS REQUIRES GPCS AND COUNTER PERMITS TO USE LEAD FREE (<0.25% LEAD) FIRE HYDRANTS

PROPOSED WATER MAIN SHALL BE:
HDPE PIPE WITH 4" TO 65" DIAMETER SHALL BE PE4710 SOLID WALL PIPE AND FITTINGS THAT ARE IN CONFORMANCE WITH ASTM F714, AWWA C901 AND C906, AND NSF 61 REQUIREMENTS STATED HEREIN

PIPE 6" AND LARGER DIAMETER SHALL BE A MINIMUM OF DR 11 (PRESSURE RATING OF 200 PSI) AND DUCTILE IRON PIPE SIZE (DIPS) OUTSIDE DIAMETER. ALL PIPE AND FITTINGS WILL BE HIGH DENSITY POLYETHYLENE PIPE AND MADE OF VIRGIN MATERIAL.

ANCHORAGE/THRUST BLOCKING AND JOINT RESTRAINTS SHALL BE DONE IN ACCORDANCE WITH SAWS STANDARDS SPECIFICATION FOR CONSTRUCTION (ITEM NO. 839).

BACK FLOW PREVENTION DEVICES FOR RESIDENTIAL SUBDIVISIONS:
ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACK FLOW PREVENTION DEVICES.

PROPOSED WATER SERVICE SHALL BE:
3/4" COPPER SERVICE LINE WITH 5/8" METER

UTILITY NOTE:
UTILITY SYMBOLS ARE NOT TO SCALE AND ARE ONLY FOR ILLUSTRATION PURPOSES. REFER TO SAWS DETAILS ON THEIR WEBSITE FOR CONSTRUCTION STANDARDS AND SPECIFICATIONS.

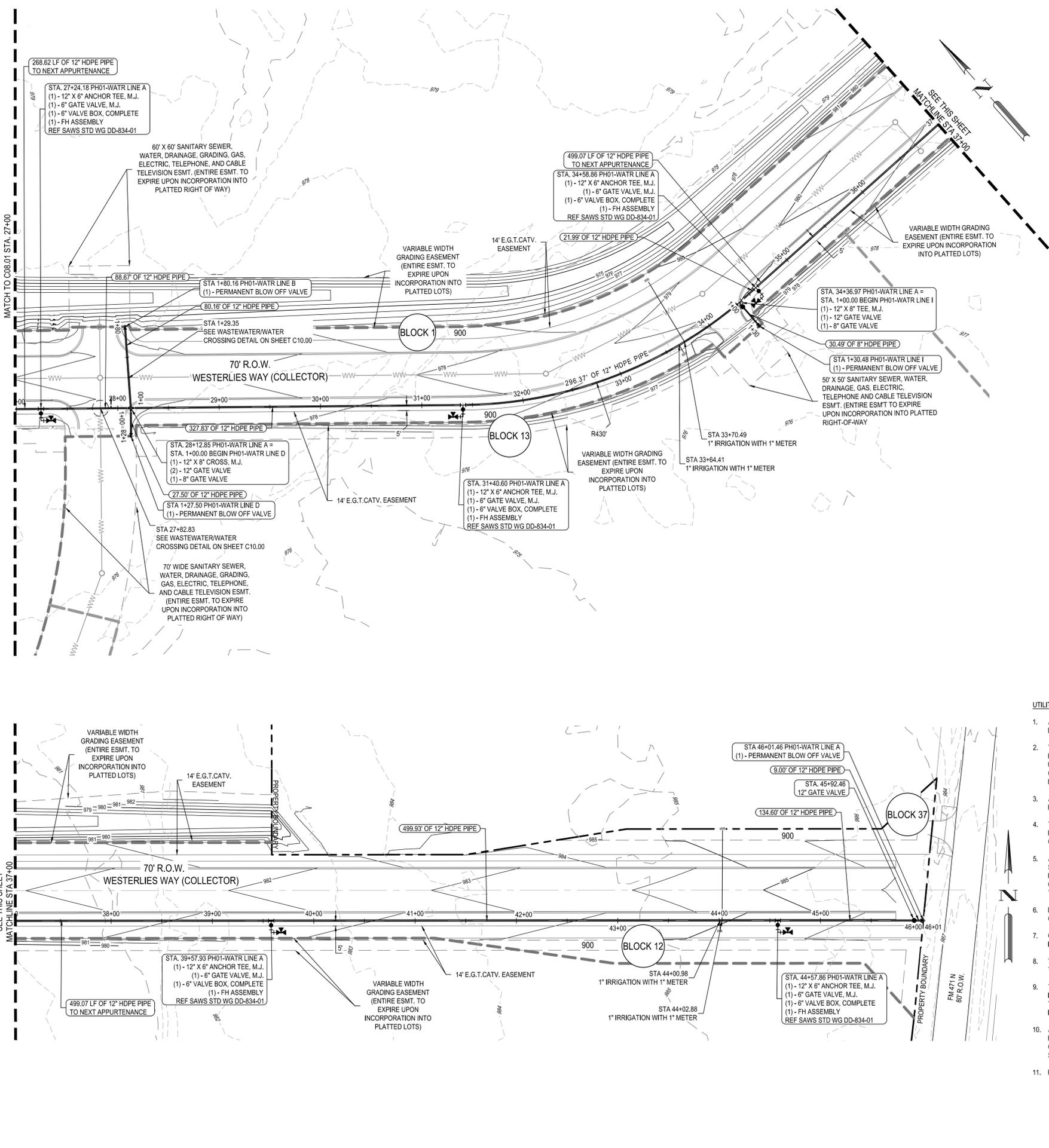
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PRESSURE REDUCING VALVE NOTE:
CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 985 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSF. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 985 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMERS SIDE OF THE METER, AN APPROVED TYPE PRESSURE REDUCING VALVE IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF PRESSURE REDUCING VALVE IS/ARE REQUIRED FOR SUCH LOT(S). ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED

- UTILITY GENERAL NOTES:
1. ALL MAINS SHALL BE FLUSHED, HYDROSTATICALLY TESTED, AND DISINFECTED BY THE CONTRACTOR.
2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
3. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT THEIR EXPENSE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
5. ALL ITEMS NOT SPECIFICALLY CALLED FOR ON THE PLANS, OR IN THE SPECIFICATIONS, BUT NECESSARY TO REASONABLY CONSTRUCT THE FACILITY OR IMPROVEMENT, SHALL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT AND NO SEPARATE PAYMENTS WILL BE MADE FOR THESE ITEMS.
6. DEPTH OF BURY FOR ALL PIPING SHALL BE A MINIMUM OF 4' UNLESS OTHERWISE NOTED OR APPROVED BY SAWS.
7. CONTRACTOR TO GRADE SITE TO WITHIN +/- 0.10' BEFORE THE INSTALLATION OF UTILITIES TO ENSURE PROPER COVER IS ACHIEVED.
8. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES REGARDING THE LOCATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION.
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11. FOR WATER METER BOX LOCATION, SEE SHEET C10.00.

SAWS PRESSURE ZONE 1170
DEVELOPER NAME: FORESTAR (USA) REAL ESTATE GROUP
DEVELOPER ADDRESS: 16300 SAN PEDRO AVE
CITY: SAN ANTONIO, STATE: TX ZIP: 78232
PHONE: N/A FAX: N/A
SAWS BLOCK MAP #: XXXX TOTAL EDUS: 22 TOTAL ACREAGE: 29.3
TOTAL LINEAR FOOTAGE OF PIPE: 4.843 PLAT NO.: 22-11800221
NUMBER OF LOTS: 0 SAWS JOB NO.: 22-1128

WEATHERWOOD PHASE 1
W - PHASE 1 WATER DISTRIBUTION PLAN (SHEET 2 OF 3)
BROWN & GAY ENGINEERS, INC.
7330 San Pedro, Suite 202
San Antonio, TX 78216
TEL: 210-358-3800 www.bgeinc.com
TXE Registration No. P-1046
DESIGNED BY: TR
REVIEWED BY: KH
DRAWN BY: MV
DATE: APR
DESCRIPTION: C08.01
05/14/2024



LEGEND

	PROPERTY BOUNDARY
	PHASE BOUNDARY
	PUBLIC UTILITY EASEMENT (P.U.E.)
	EXISTING 1' CONTOUR
	EXISTING 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR
	PROPOSED WATER MAIN
	EXISTING WATERLINE
	SINGLE WATER SERVICE
	DUAL WATER SERVICE
	IRRIGATION SERVICE
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE
	SEWER UTILITY CROSSING
	STORM SEWER UTILITY CROSSING
	BLOW-OFF ASSEMBLY

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SAWS PRESSURE ZONE 1170

DEVELOPER NAME	FORESTAR (USA) REAL ESTATE GROUP
DEVELOPER ADDRESS	16500 SAN PEDRO AVE
CITY	SAN ANTONIO, STATE TX ZIP 78232
PHONE N/A	FAX N/A
SAWS BLOCK MAP #	XXXX TOTAL EDUS 22 TOTAL ACREAGE 29.3
TOTAL LINEAR FOOTAGE OF PIPE	4,843 PLAT NO. 22-11800271
NUMBER OF LOTS	0 SAWS JOB NO. 22-1128

DATE	APR
DESCRIPTION	
REV	
DESIGNED BY:	TR
REVIEWED BY:	KH
DRAWN BY:	MV

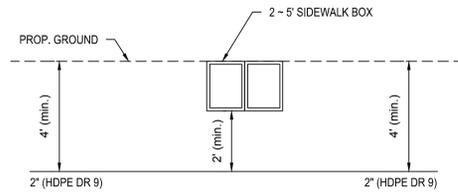
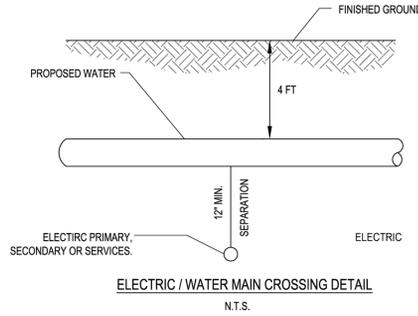
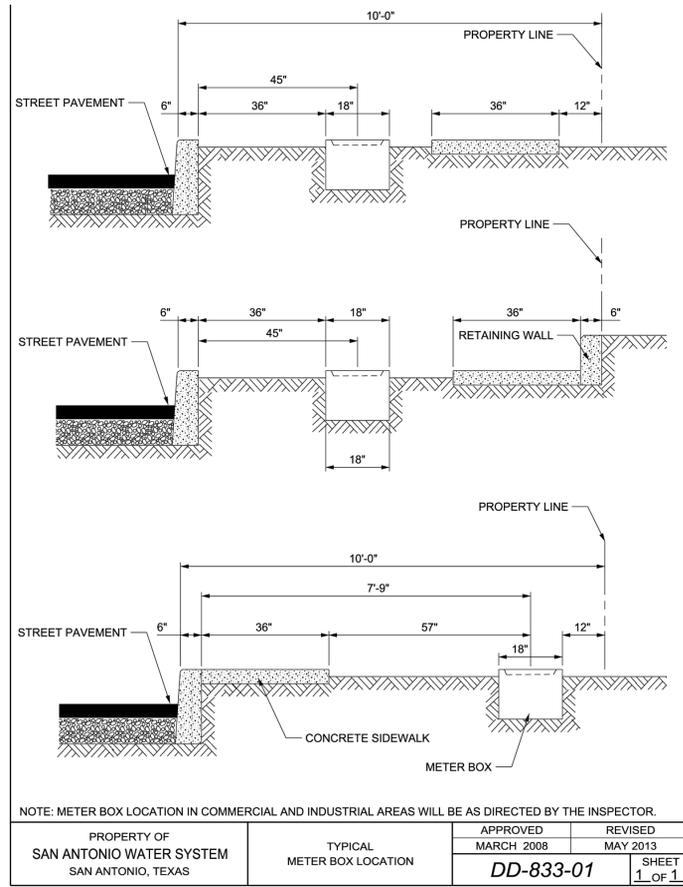
BROWN & GAY ENGINEERS, INC.
 7330 San Pedro, Suite 202
 San Antonio, TX 78216
 TEL: 210-581-3800 www.bgeinc.com
 E-MAIL: bge@bgeinc.com
 EIT Registration No. P-1046

WEATHERWOOD PHASE 1
 W - PHASE 1 WATER DISTRIBUTION PLAN
 (SHEET 3 OF 3)

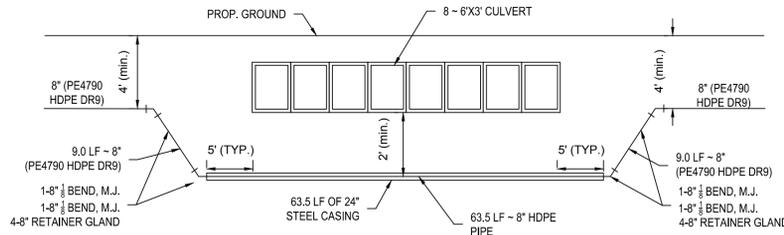
STATE OF TEXAS
 AARON J. NEUMANN
 114451
 APR 11 2024
 05/14/2024

C08.02

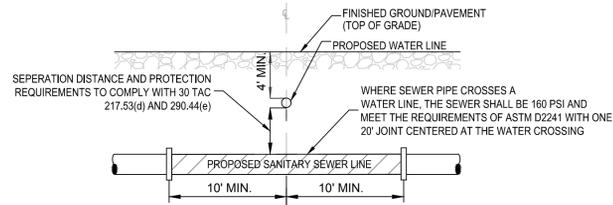
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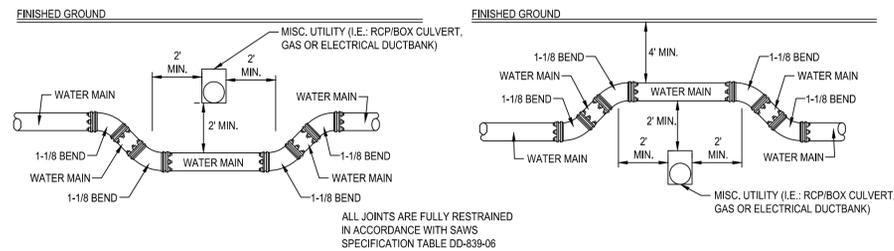
NOTE: ALL RETAINER GLANDS SHALL BE MEG-A-LUG TYPE



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WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING



ALL JOINTS ARE FULLY RESTRAINED IN ACCORDANCE WITH SAWS SPECIFICATION TABLE DD-839-06

SAWS PRESSURE ZONE 1170

DEVELOPER NAME	FORESTAR (USA) REAL ESTATE GROUP
DEVELOPER ADDRESS	16500 SAN PEDRO AVE
CITY	SAN ANTONIO, STATE TX ZIP 78232
PHONE N/A	FAX N/A
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TOTAL LINEAR FOOTAGE OF PIPE	4.843 PLAT NO. 22-11800271
NUMBER OF LOTS	0 SAWS JOB NO. 22-1128

REV	DESCRIPTION	DATE	APR

DESIGNED BY: AGS
REVIEWED BY: KWH
DRAWN BY: AGS



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7330 San Pedro, Suite 202
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Tel: 210-358-3800 www.bgeinc.com
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WEATHERWOOD PHASE 1

W - CIVIL UTILITY DETAILS



05/14/2024

C10.00