

REFERENCE SHEET C10 AND C11 FOR WATER AND SEWER DETAILS.

LEGEND

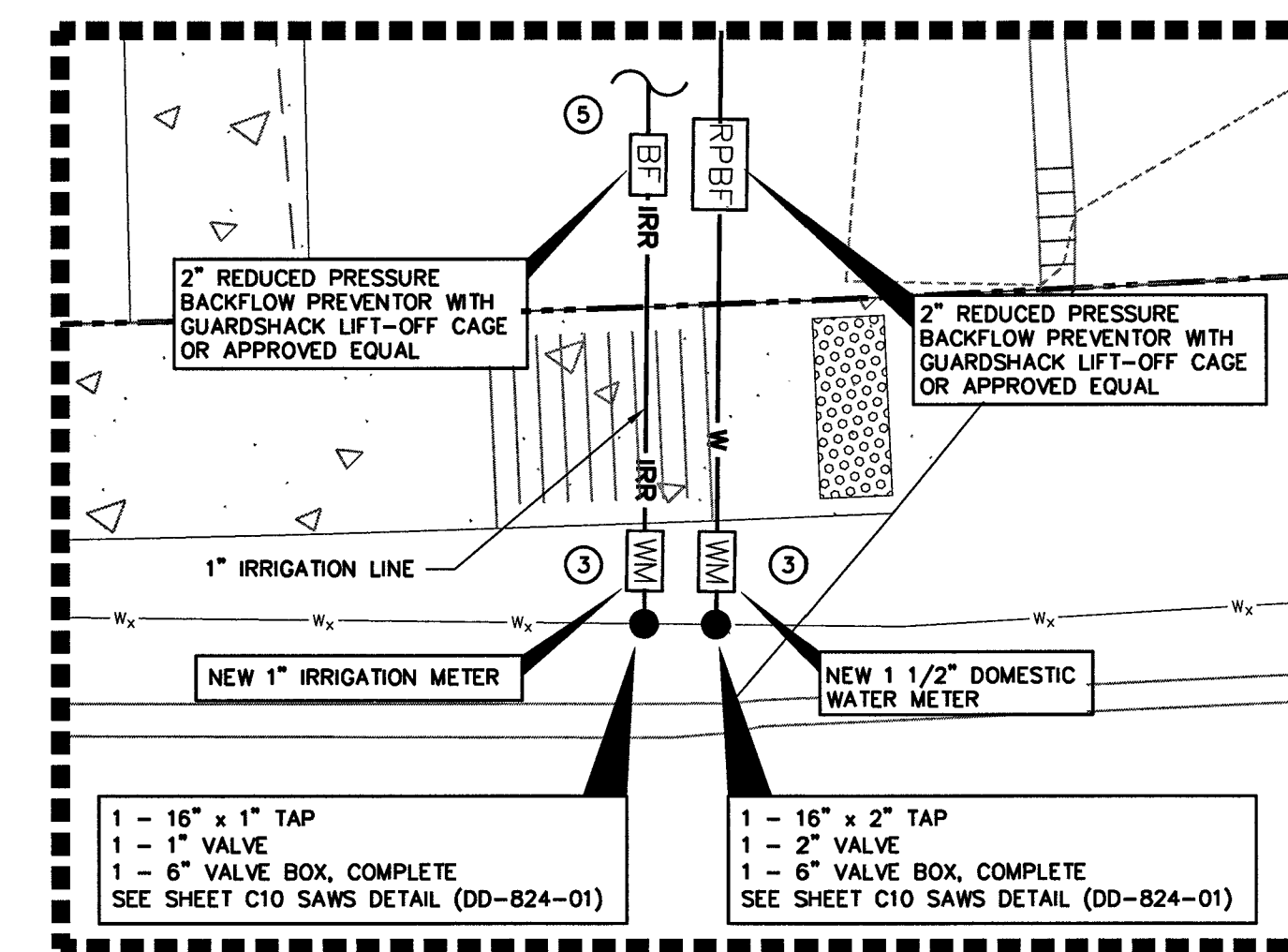
- W_e — EXISTING WATER LINE
- SS_e — EXISTING SANITARY SEWER
- ⊗ EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER CLEANOUT
- W — PROPOSED WATER LINE
- FIRE — PROPOSED FIRE LINE
- SS — PROPOSED SANITARY SEWER
- PROPOSED SEWER CLEANOUT
- ⊗ PROPOSED FIRE HYDRANT
- WM PROPOSED WATER METER
- BF PROPOSED REDUCED PRESSURE BACKFLOW PREVENTER

GENERAL NOTES

1. ALL WATER PIPE SHALL BE C900 PVC CLASS 150 DR 18 UNLESS NOTED OTHERWISE.
2. WATER LINE SHALL HAVE A MINIMUM OF FOUR FEET (4') OF COVER.
3. ALL SEWER SHALL BE SDR 26.
4. CONTRACTOR SHALL INSTALL SANITARY SEWER CLEANOUTS NO FURTHER THAN 90 FEET APART ON SANITARY SEWER SERVICES.
5. PRIOR TO CONSTRUCTION, VERIFY LOCATION OF ALL EXISTING UTILITIES. CONTACT ENGINEER WITH ANY DISCREPANCY.
6. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
7. CONTRACTOR SHALL COORDINATE UTILITIES WITH BROOKS DEVELOPMENT AUTHORITY. CONTACT CARLOS SALINAS AT (210) 678-3299.

PLAN NOTES

- ① REFERENCE MEP PLANS FOR UTILITY CONTINUATION.
- ② LOCATION OF EXISTING SANITARY SEWER AND WATER UTILITIES. CONTACT ENGINEER WITH ANY DISCREPANCY.
- ③ CONTRACTOR SHALL COORDINATE WITH SAWS FOR METER INSTALLATION AND LOCATION. CONTACT SAWS FOR PRICING AND SCHEDULING.
- ④ CONTRACTOR SHALL ADJUST TOP OF MANHOLE TO PROPOSED FINISHED GRADE.
- ⑤ REFERENCE LANDSCAPE ARCHITECT PLANS FOR CONTINUATION.



DETAIL #1
SCALE: 1" = 5'

SCALE: 1" = 10'

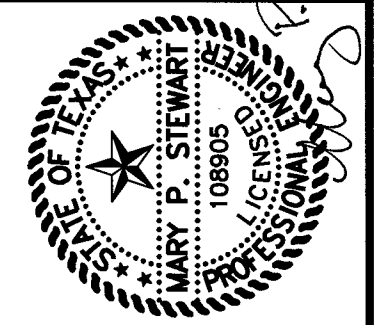
DESIGNED BY: MFS
DRAWN BY: MFS
DATE: DEC 2015
JOB NO. E0585200

CIVIL ENGINEERING CONSULTANTS
DON D. JORDEN, INC.
11550 IH 10 WEST, SUITE 395
SAN ANTONIO, TEXAS 78230-1037
TEL: (210) 841-9999
FAX: (210) 841-8440
REGISTRATION #F-2214



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY W. STEWART P.E. NO. 1068906

ON: 1-6-2016 DATE

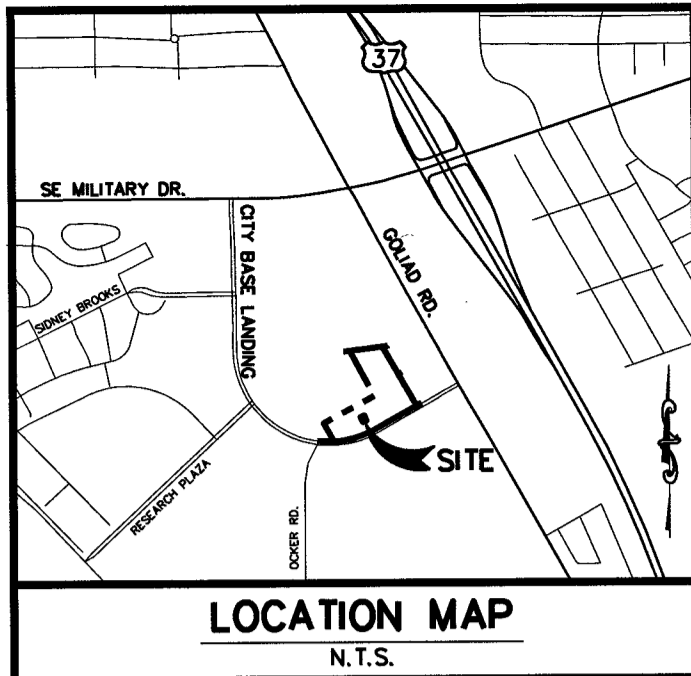


REV	DATE	DESCRIPTION
1	1/5/16	UPDATED INVERTS.

VETERINARY CLINIC AT BROOKS
SITE UTILITY PLAN

SHEET NO. C05

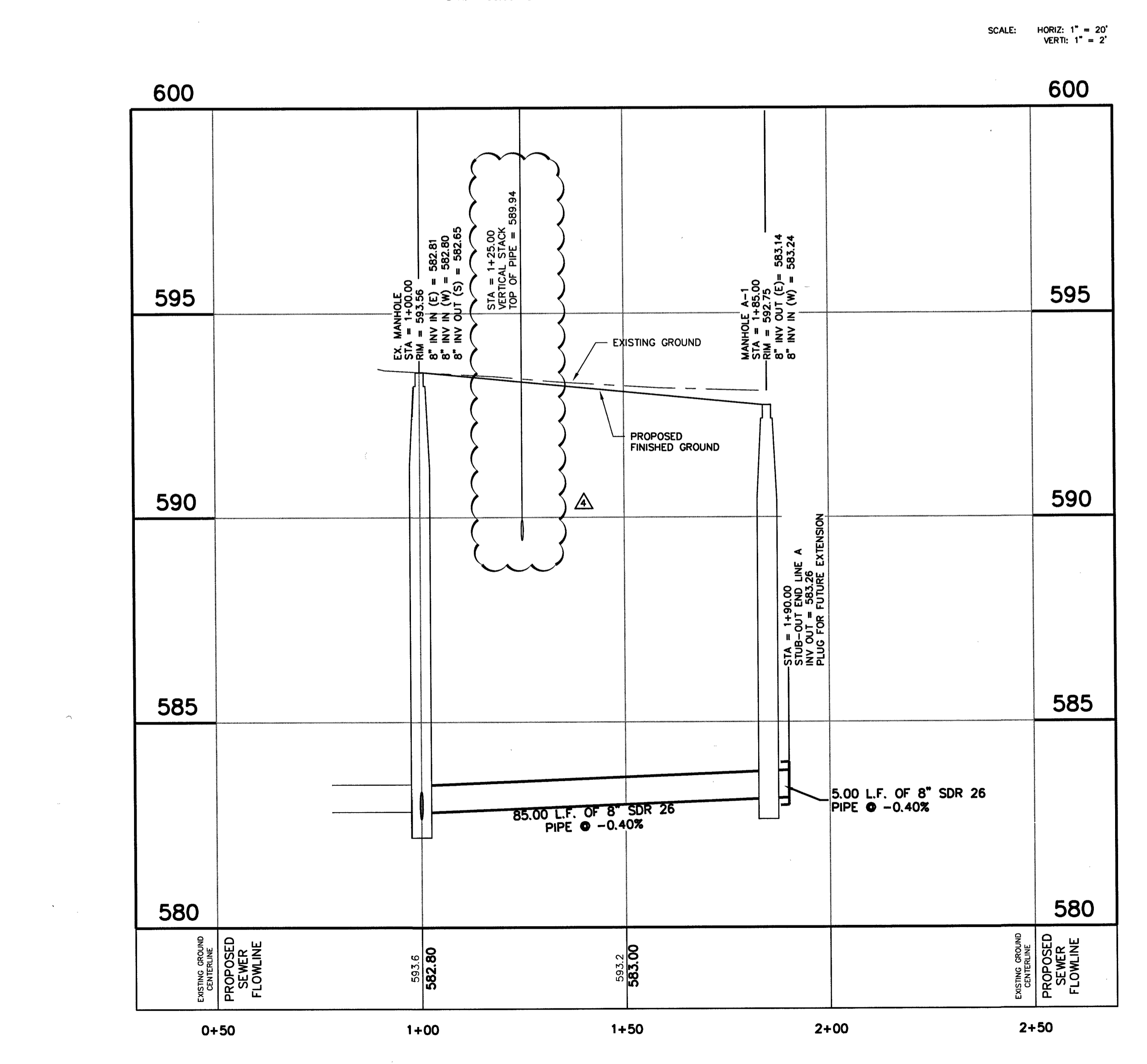
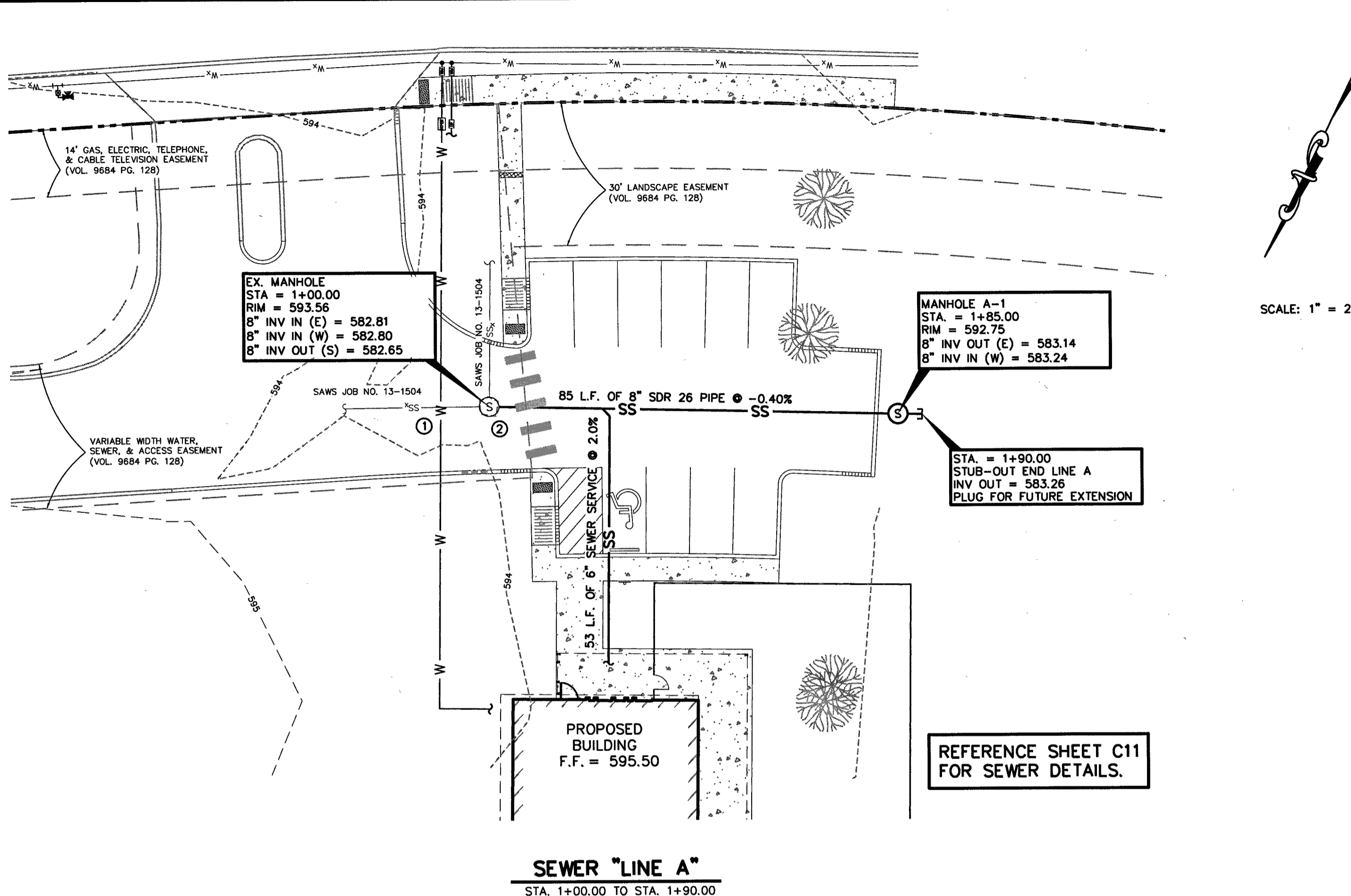




NON-EDWARDS AQUIFER RECHARGE ZONE
SANITARY SEWER SYSTEM
GENERAL NOTES
REVISED JANUARY 26, 2006

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE FOLLOWING AS APPLICABLE:
A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S DESIGN CRITERIA FOR SEWERAGE SYSTEMS [30 TAC 317.1, 30 TAC 317.2, 30 TAC 317.3 AND 30 TAC 317.13]
B. CURRENT SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR CONSTRUCTION
C. CURRENT CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
D. CURRENT TxDOT STANDARD SPECIFICATION FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE
E. CURRENT CITY OF SAN ANTONIO RIGHT-OF-WAY ORDINANCE AND CRITERIA MANUAL
- THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED C.C.P. 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.
- THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS, AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT, AND TO PROTECT THE SAME DURING CONSTRUCTION.
SAN ANTONIO WATER SYSTEM 233-2010
COSA DRAINAGE 207-2800
COSA TRAFFIC SIGNAL OPERATIONS 207-7765 TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005
CITY PUBLIC SERVICE
SOUTH WESTERN BELL
TIME WARNER CABLE
VALERO ENERGY CO.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION FROM DAMAGE DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES.
- THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY ARBORIST AT 207-8053 FOR GUIDANCE. SAWS CONSTRUCTION INSPECTOR SHALL ALSO BE NOTIFIED.
- THE CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING SANITARY SEWERS AT ALL TIMES DURING CONSTRUCTION.
- DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CITY PUBLIC SERVICE MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND GAS VALVES THAT ARE IN THE PROJECT AREAS.
- ALL RESIDENTIAL SEWER SERVICE LATERALS SHALL BE EXTENDED TO THE PROPERTY LINE AND CAPPED AND SEALED.
- ON ALL MANHOLES TO BE ABANDONED, THE RINGS AND COVERS SHALL BE SALVAGED IN ACCORDANCE WITH THE MOST CURRENT SAN ANTONIO WATER SYSTEM'S STANDARD SPECIFICATION FOR CONSTRUCTION, ITEM 101: PREPARATION OF RIGHT-OF-WAY. THE HOLE SHOULD BE BACKFILLED TO THE SATISFACTION OF THE INSPECTOR.
- WHEN ALLOWABLE, BLASTING SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE CRITERIA ESTABLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION [30 TAC 313.5 (C) (6)].
- BLASTING FOR SEWER LINE EXCAVATION MUST BE DONE IN SUCH A MANNER AS TO MINIMIZE THE FRACTURING OF ROCK BEYOND THE REQUIRED EXCAVATION. THE CONTRACTOR SHALL CONSIDER THE ELEVATION OF THE EXISTING SANITARY SEWER MAIN IN RELATION TO THE BLASTING CHARGE AND THE RELATIVE DIRECTION OF EXISTING AND PROPOSED TRENCHES. BLASTING WITHIN SUCH AREAS SHALL BE ACCOMPLISHED ONLY BY QUALIFIED BLASTING CONTRACTORS WHO HOLD BLASTING LICENSES FROM A QUALIFIED AGENCY SUCH AS THE SAN ANTONIO FIRE DEPARTMENT IN BEAR COUNTY. ANY DAMAGE TO EXISTING SANITARY SEWERS RESULTING FROM BLASTING SHALL BE REPAIRED AND RETESTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- NO BLASTING SHALL BE PERFORMED WITHIN 75 FEET OF EXISTING UTILITIES.
- AFTER CONSTRUCTION, TESTING WILL BE DONE BY TV CAMERA BY THE CONTRACTOR AND OBSERVED BY INSPECTOR, AND WASTEWATER ENGINEERING PERSONNEL, AS THE CAMERA IS RUN THROUGH THE LINES. ANY ABNORMALITIES, SUCH AS BROKEN PIPE OR MISALIGNED JOINTS, MUST BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. CONTRACTOR TO PROVIDE TAPE TO CONSTRUCTION INSPECTION FOR REVIEW PRIOR TO FINAL INSPECTION OF THE PROJECT.
- CONTRACTOR AND/OR CONTRACTORS INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PERMANENTLY PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
- WATER SETTING THE BACKFILL WITHIN A STREET WILL NOT BE PERMITTED. SANITARY SEWER TRENCHES SUBJECT TO TRAFFIC SHALL CONFORM TO THE S.A.W.S. STANDARD SPECIFICATIONS FOR CONSTRUCTION, ITEM NO. 550 & 804. WATER LINE CROSSING
- WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN SEWER LINES AND WATER LINES/MAINS CANNOT BE MAINTAINED, THE INSTALLATION OF SEWER LINES SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION'S RULES (30 TAC 317.13 APPENDIX E).
- THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIRE EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION OF SEWER COLLECTION SYSTEMS. DEVELOPER OR AUTHORIZED REPRESENTATIVE SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL AS NOTES ON THE PROJECT'S PLAN AND PROFILE SHEETS.
- ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE SAN ANTONIO WATER SYSTEM.
- NO EXTRA-PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SCHEDULE. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.
- THE DEVELOPER DEDICATES THE SANITARY SEWER MAINS UPON COMPLETION BY THE DEVELOPER AND ACCEPTANCE BY THE SAN ANTONIO WATER SYSTEM. THE SAN ANTONIO WATER SYSTEM WILL OWN AND MAINTAIN SAID SANITARY SEWER MAINS WHICH ARE LOCATED WITHIN THIS PARTICULAR SUBDIVISION. (AS APPLICABLE)
- THE DEVELOPER WILL BE RESPONSIBLE FOR THE LIFT STATION MAINTENANCE FEE IN EFFECT AT THE TIME OF CERTIFICATION. THE CURRENT MAINTENANCE FEE PER LIFT STATION WILL BE COLLECTED PRIOR TO PLAT RECORDATION
- ALL PVC SEWER PIPE WITH OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH PIPE, MINIMUM STIFFNESS OF 115 PSI.
- WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OR THE NOTICE TO PROCEED WITH THE SAN ANTONIO WATER SYSTEM CONSTRUCTION INSPECTION DIVISION WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.

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



- LEGEND**
- (S) EXISTING SANITARY SEWER MANHOLE
 - SS- EXISTING SANITARY SEWER
 - SS PROPOSED SANITARY SEWER
 - W PROPOSED WATER

GENERAL NOTES

- CONTRACTOR SHALL COORDINATE UTILITIES WITH BROOKS DEVELOPMENT AUTHORITY. CONTACT CARLOS SALINAS AT (210) 678-3299.

PLAN NOTES

- CAUTION: UTILITY CROSSING.
- CONTRACTOR SHALL ADJUST TOP OF EXISTING MANHOLE TO FINISHED GRADE.

Supplemental Notes

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN THE SANITARY SEWER CONSTRUCTION WILL COMMENCE AT LEAST 72 HOURS PRIOR TO BEGINNING INSTALLATION FOR OBSERVATION AND CERTIFICATION PURPOSES.
- PERSONAL GAS DETECTORS ARE REQUIRED FOR WEAR BY ALL PERSONNEL WHOSE JOBS REQUIRE ENTERING ENCLOSED SPACES (SUCH AS MANHOLES AND LIFT STATIONS) CAPABLE OF HAVING ACCUMULATIONS OF HYDROGEN SULFIDE OR OTHER HARMFUL GASES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THESE DETECTORS ARE PROVIDED TO THE APPROPRIATE PERSONNEL.
- SANITARY SEWER PIPE TO HAVE A MINIMUM TENSILE STRENGTH OF 7000 PSI AND BE CELL CLASS 12454-B.
- REFERENCE SAWS CONSTRUCTION SPECIFICATION ITEM NO. 804 FOR TRENCH BACKFILL REQUIREMENTS.
- CLASS 1A (ASTM D-2321) IS TO BE USED FOR THE PIPE BEDDING.
- PROVIDE BACKFILL COMPACTION OF 95% MAXIMUM DRY DENSITY FOR EACH LIFT
- CHARLOTTE PRECAST MANHOLES ARE TO BE USED ON THIS PROJECT.
- A MANHOLE COVER MUST BE CONSTRUCTED OF IMPERVIOUS MATERIAL. MANHOLE COVERS THAT ARE LOCATED IN A ROADWAY MUST MEET OR EXCEED THE AMERICAN ASSOCIATION OF STATE HIGHWAYS AND TRANSPORTATION OFFICIALS STANDARD M-306 FOR LOAD BEARING.
- STEPS AND RUNGS SHALL NOT BE CONSTRUCTED WITHIN MANHOLES.
- IN ACCORDANCE WITH 30 TAC §217.55, MANHOLE INVERTS:
(a) THE BOTTOM OF A MANHOLE MUST CONTAIN A U-SHAPED CHANNEL THAT IS A SMOOTH CONTINUATION OF THE INLET AND OUTLET PIPES.
(b) A MANHOLE CONNECTED TO A PIPE LESS THAN 15 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST HALF THE LARGEST PIPE'S DIAMETER.
(c) A MANHOLE CONNECTED TO A PIPE AT LEAST 15 INCHES IN DIAMETER BUT NOT MORE THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THREE-FOURTHS THE LARGEST PIPE'S DIAMETER.
(d) A MANHOLE CONNECTED TO A PIPE GREATER THAN 24 INCHES IN DIAMETER MUST HAVE A CHANNEL DEPTH EQUAL TO AT LEAST THE LARGEST PIPE'S DIAMETER.
(e) A MANHOLE WITH PIPES OF DIFFERENT SIZES MUST HAVE THE TOPS OF THE PIPES AT THE SAME ELEVATION AND FLOW CHANNELS IN THE INVERT SLOPED ON AN EVEN SLOPE FROM PIPE TO PIPE.
(f) A BENCH PROVIDED ABOVE A CHANNEL MUST SLOPE AT A MINIMUM OF 0.5 INCH PER FOOT.
(g) AN INVERT MUST BE FILLETED TO PREVENT SOLIDS BEING DEPOSITED IF A WASTEWATER COLLECTION SYSTEM PIPE ENTERS A MANHOLE HIGHER THAN THE 24 INCHES ABOVE THE MANHOLE INVERT.
(h) A WASTEWATER COLLECTION SYSTEM PIPE ENTERING A MANHOLE MORE THAN 24 INCHES ABOVE AN INVERT MUST HAVE A DROP PIPE.
- A MANHOLE PIPE CONNECTION MUST USE WATERTIGHT, SIZE-ON-SIZE RESILIENT CONNECTORS THAT ALLOW FOR DIFFERENTIAL SETTLEMENT AND MUST CONFORM TO ASTM C-923.
- IN ACCORDANCE WITH 30 TAC §217.58:
(a) ALL MANHOLES MUST PASS A LEAKAGE TEST.
(b) AN OWNER SHALL TEST EACH MANHOLE AFTER ASSEMBLY AND PRIOR TO BACKFILLING. MANHOLES WHICH HAVE BEEN BACKFILLED SHALL EITHER BE EXCAVATED TO EXPOSE THE ENTIRE EXTERIOR PRIOR TO VACUUM TESTING OR THE MANHOLE SHALL BE TESTED FOR LEAKAGE BY MEANS OF A HYDROSTATIC TEST. THE MINIMUM REQUIREMENTS OF BOTH TCEQ AND SAWS SHALL BE MET OR EXCEEDED.
(1) HYDROSTATIC TESTING
(A) THE MAXIMUM LEAKAGE FOR HYDROSTATIC TESTING OR ANY ALTERNATIVE TEST METHODS IS 0.025 GALLONS PER FOOT DIAMETER PER FOOT OF MANHOLE DEPTH PER HOUR.
(B) TO PERFORM A HYDROSTATIC EXFILTRATION TEST, AN OWNER SHALL SEAL ALL WASTEWATER PIPES COMING INTO A MANHOLE WITH AN INTERNAL PIPE PLUG, FILL THE MANHOLE WITH WATER, AND MAINTAIN THE TEST FOR AT LEAST ONE HOUR.
(C) A TEST FOR CONCRETE MANHOLES MAY USE A 24-HOUR WETTING TEST COVER TO THE TOP OF A MANHOLE.
(2) VACUUM TESTING
(A) TO PERFORM A VACUUM TEST, AN OWNER SHALL PLUG ALL LIFT LINES AND EXTERIOR JOINTS WITH NON-SHRINK GROUT AND PLUG ALL PIPES ENTERING A MANHOLE.
(B) NO GROUT MUST BE PLACED IN HORIZONTAL JOINTS BEFORE TESTING.
(C) STUB-OUTS, MANHOLE BOOTS, AND PIPE PLUGS MUST BE SECURED TO PREVENT MOVEMENT WHILE VACUUM IS DRAWN.
(D) AN OWNER SHALL USE A MINIMUM 80 INCH LBS TORQUE WRENCH TO TIGHTEN THE EXTERNAL CLAMPS THAT SECURE AT TEST COVER TO THE TOP OF A MANHOLE.
(E) A TEST HEAD MUST BE PLACED AT THE INSIDE OF THE TOP OF A CONE SECTION, AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
(F) THERE MUST BE A VACUUM OF 10.0 INCHES OF MERCURY INSIDE A MANHOLE TO PERFORM A VALID TEST.
(G) A TEST DOES NOT BEGIN UNTIL AFTER THE VACUUM PUMP IS OFF.
(H) A MANHOLE PASSES THE TEST IF AFTER 2.0 MINUTES AND WITH ALL VALVES CLOSED, THE VACUUM IS AT LEAST 9.0 INCHES OF MERCURY.
- ALL TESTING OF THE SANITARY SEWER SYSTEM SHALL BE WITNESSED BY THE ENGINEER AS DICTATED BY SAWS AND TCEQ REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO TESTING FOR TESTING OBSERVATION AND CERTIFICATION PURPOSES.
- IN THE EVENT OF A CONFLICT BETWEEN THE CONSTRUCTION PLANS AND SPECIFICATIONS, THE SPECIFICATION WILL GOVERN.

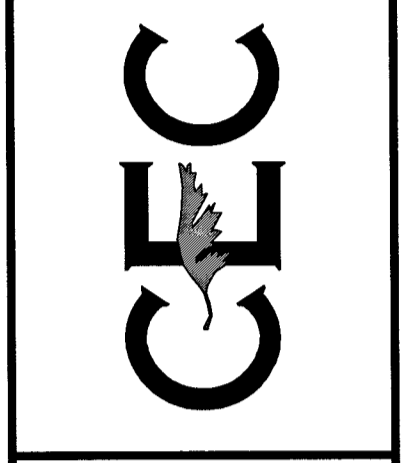
TRENCH EXCAVATION SAFETY PROTECTION

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

DEVELOPER'S NAME: BROOKS DEVELOPMENT AUTHORITY
 DEVELOPER'S ADDRESS: 3201 SIDNEY BROOKS
 CITY: SAN ANTONIO STATE: TX ZIP: 78235
 PHONE# (210) 678-3300 FAX# (210) 678-3338
 SAWS BLOCK MAP # 180550 TOTAL EDU'S 1 TOTAL ACREAGE 0.62
 TOTAL LINEAR FOOTAGE OF PIPE: 90 PLAT NO. 960149
 NUMBER OF LOTS: 1 SAWS JOB NO. 13-1504

DESIGNED BY: **MPS**
DRAWN BY: **MPS**
DATE: **DEC 2015**
JOB NO.: **E0533200**

CIVIL ENGINEERING CONSULTANTS
d/b/a DON DURDEN, INC.
11550 IH 10 WEST, SUITE 395
SAN ANTONIO, TEXAS 78230-1037
TEL: (210) 641-8448
FAX: (210) 641-8448
REGISTRATION #F-2214

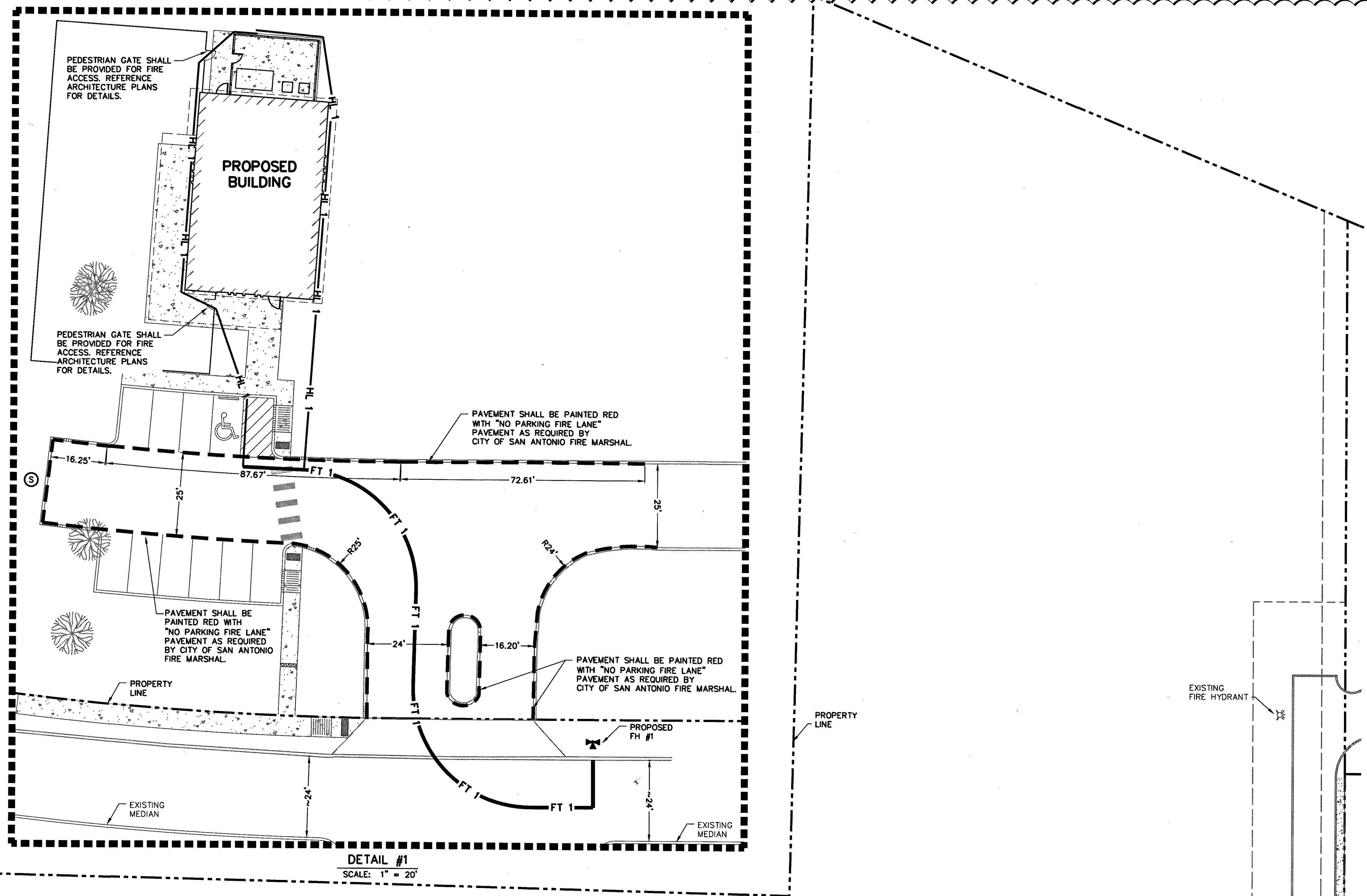
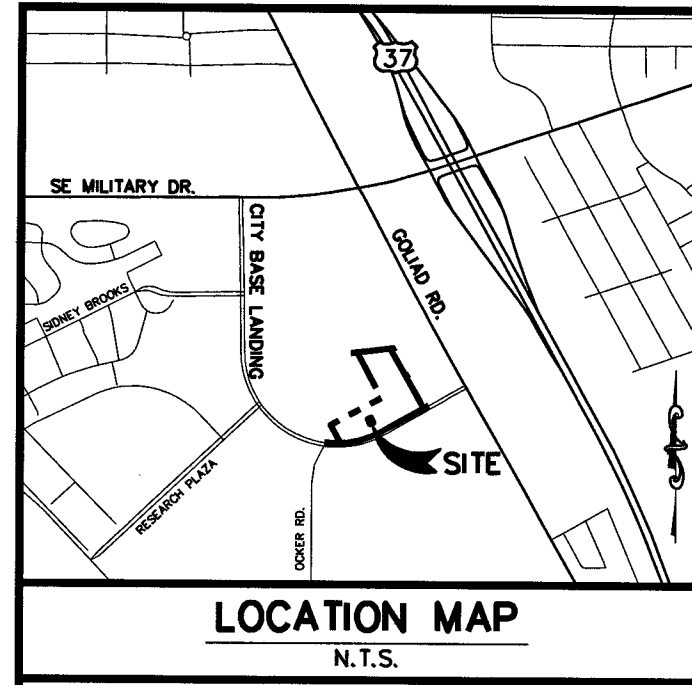


THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY: **MARY P. STEWART P.E.** NO. **108905** ON: **1-6-2016** DATE

REV	DATE	DESCRIPTION
1	1/5/16	UPDATED TOP OF PIPE.

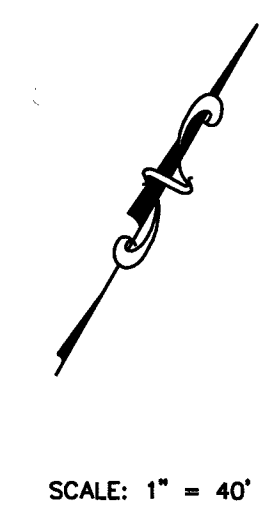
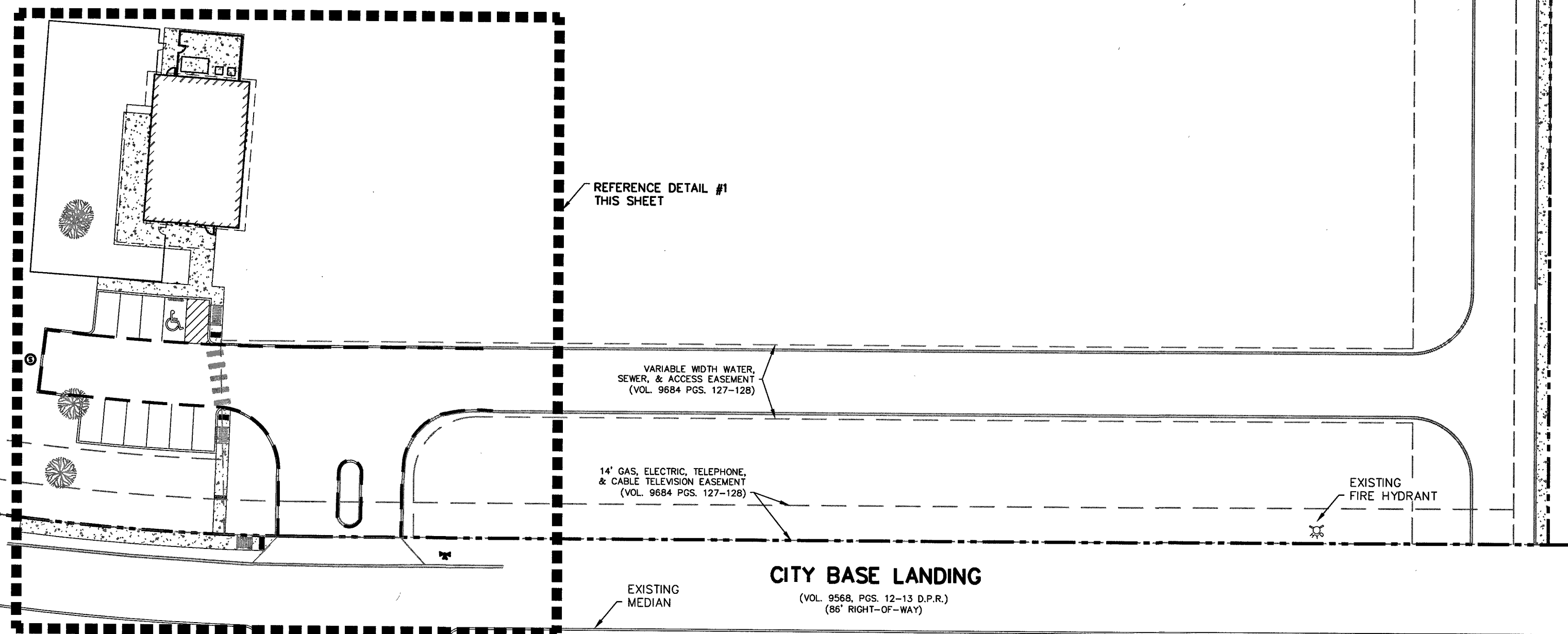
VETERINARY CLINIC AT BROOKS
SEWER PLAN AND PROFILE

SHEET NO. **C06**
CITY BASE



DETAIL #1
SCALE: 1" = 20'

LOT 7, BLK 3
N.C.B. 10879
9.885 ACRES
(VOL. 9684, PGS. 127-128 D.P.R.)



LEGEND

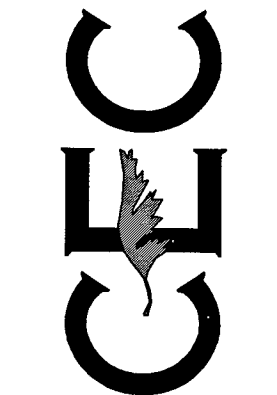
- FIRE LANE (20' MINIMUM WIDTH)
- HL # 150' HOSE LAY
- FT # 350' FIRE TRUCK HOSE
- ☼ EXISTING FIRE HYDRANT
- ⊕ PROPOSED FIRE HYDRANT

NOTE:
ALL CURBS AND PAVEMENT SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF STRIPING.

NOTE:
CONTRACTOR SHALL PROVIDE FIRE LANE ACCESS SIGNAGE AS REQUIRED BY CITY OF SAN ANTONIO FIRE MARSHAL.

DESIGNED BY: MPS
DRAWN BY: MPS
DATE: DEC 2015
JOB NO.: E0538200

CIVIL ENGINEERING CONSULTANTS
CITY OF SAN ANTONIO
11550 IH 10 WEST, SUITE 335
SAN ANTONIO, TEXAS 78230-1037
TEL: (210) 641-9899
FAX: (210) 641-6440
REGISTRATION #F-2214



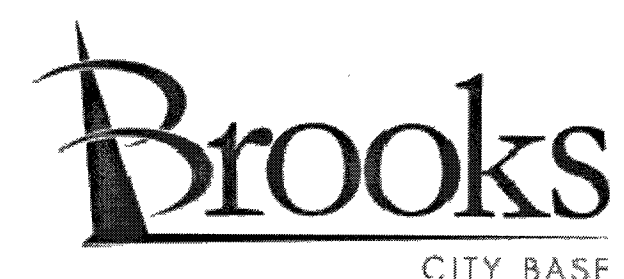
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARY P. STEWART P.E. NO. #108805



REV	DATE	DESCRIPTION
1	1/5/16	UPDATED PLAN SHEET TO SHOW PROPERTY LINE, UPDATED FENCING, ADDED DIMENSIONS, ADDED ADDITIONAL FIRE LANE STRIPING.

VETERINARY CLINIC AT BROOKS
FIRE PROTECTION PLAN

SHEET NO.
C07



K:\data\lms\lms\proj\2015\10538200_Brooks City Base - Spay-Neuter - Clinic\Draws\10538200_C07 Fire Protection Plan.dwg Rev: 2015/07/16 12:41:16pm cecuser