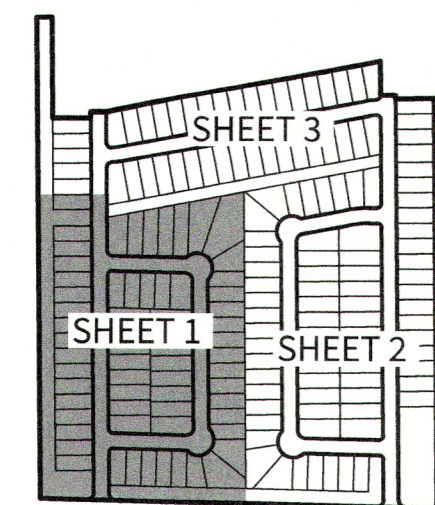


OWNER/DEVELOPER:
ASHTON WOODS HOMES
CONTACT PERSON: KYLE LENTS
17319 SAN PEDRO, SUITE 140
SAN ANTONIO, TX 78232
TEL: (210) 632-0753

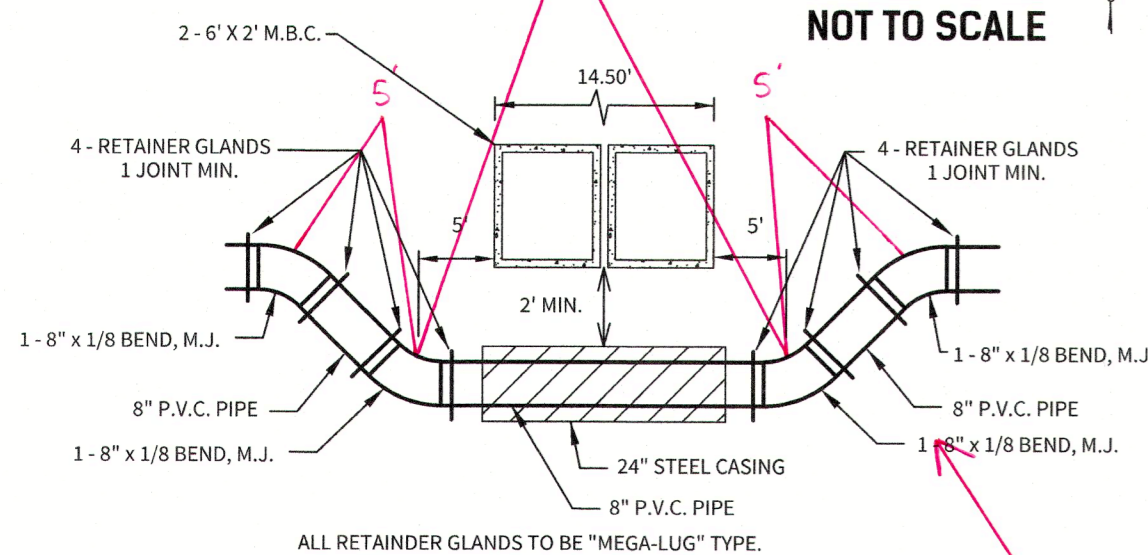
CIVIL ENGINEER:
M.W. CUDE ENGINEERS, L.L.C.
CONTACT PERSON: DAVID CUPIT, P.E.
4122 POND HILL ROAD, SUITE 101
SAN ANTONIO, TX 78231
TEL: (210) 681-2951
FAX: (210) 523-7112

LEGEND

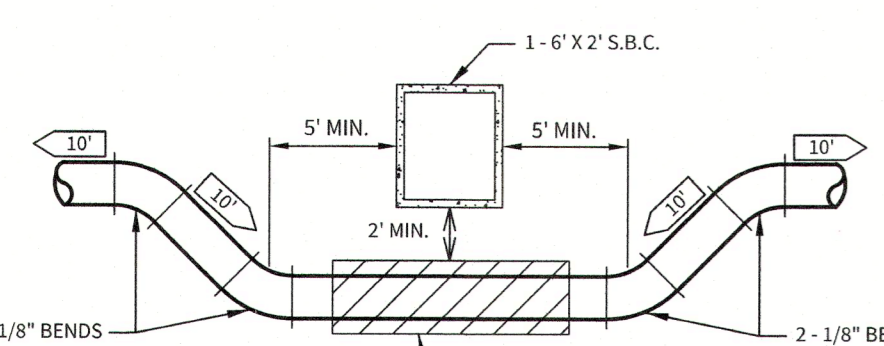
XXX L.F. - XX" PVC C-900 = PROPOSED WATER MAIN
8" SS = PROPOSED SEWER MAIN



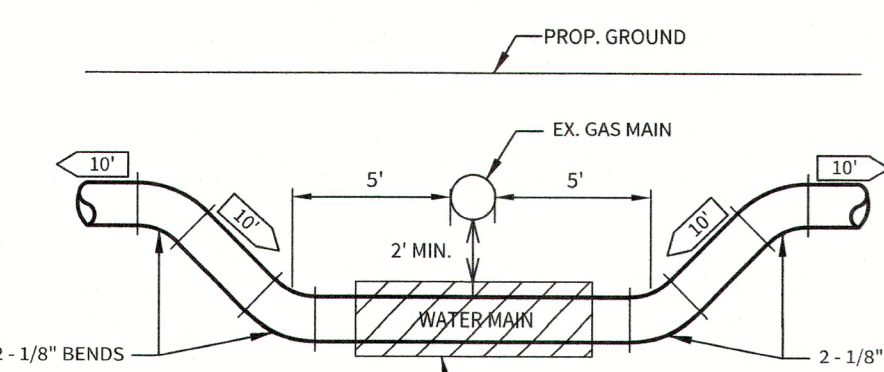
SITE MAP
NOT TO SCALE



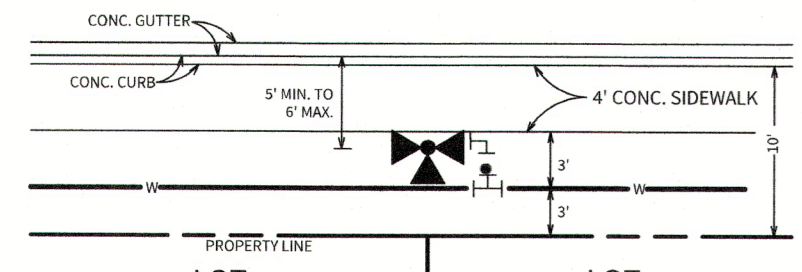
WATER / DRAIN "A" CROSSING
SIDE VIEW (THIS DETAIL IS VERTICAL ONLY, NOT HORIZONTAL.)
N.T.S.



WATER / DRAIN "C" CROSSING DETAIL
SIDE VIEW (THIS DETAIL IS VERTICAL ONLY, NOT HORIZONTAL.)
N.T.S.



WATER / GAS CROSSINGS DETAIL
SIDE VIEW (THIS DETAIL IS VERTICAL ONLY, NOT HORIZONTAL.)
N.T.S.

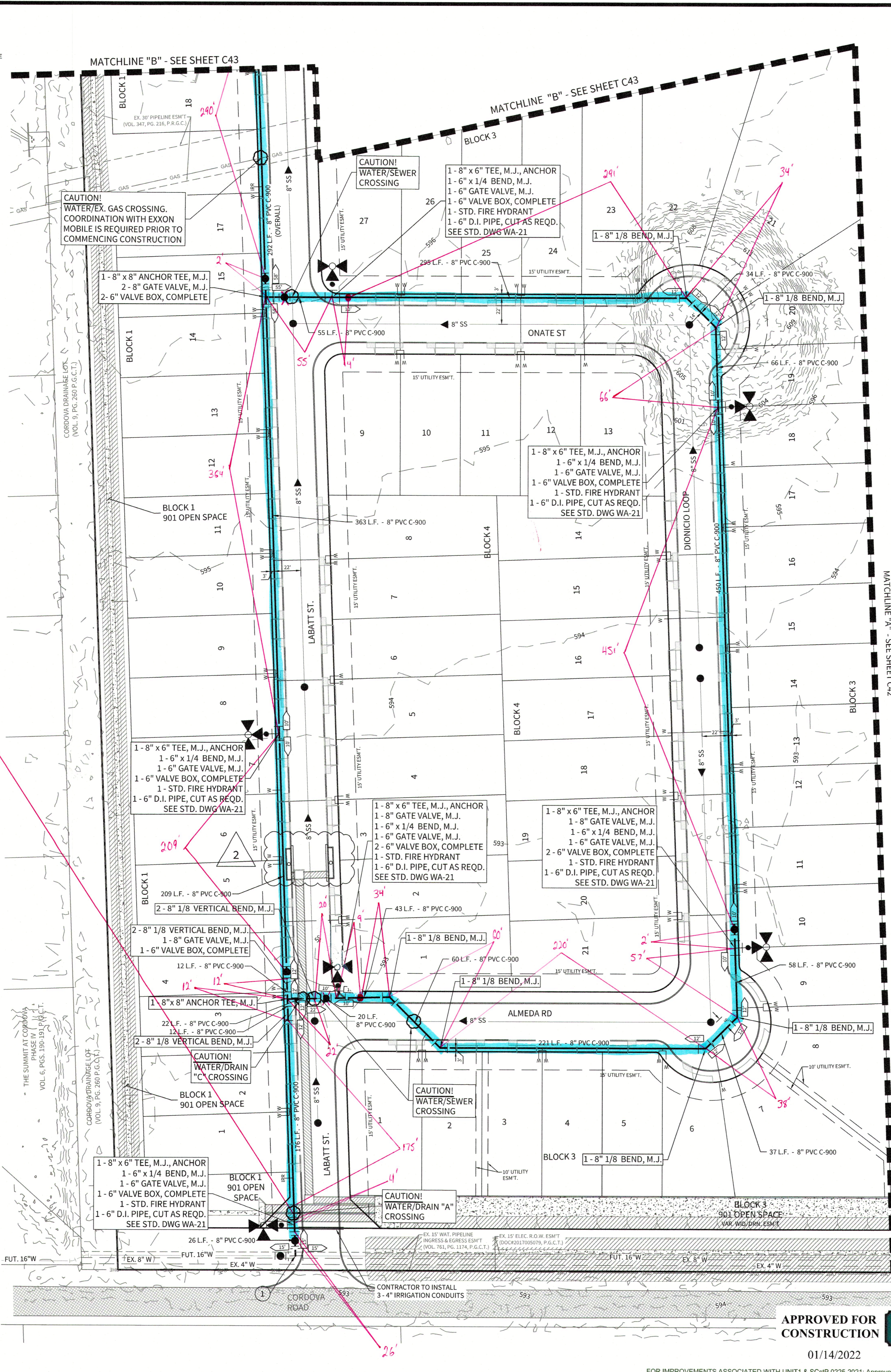


TYPICAL FIRE HYDRANT DETAIL (4' SIDEWALK / 50' ROW)
N.T.S.

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TRENCH EXCAVATION PROTECTION

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



APPROVED FOR CONSTRUCTION
SEGUIN TEXAS

01/14/2022

FOR IMPROVEMENTS ASSOCIATED WITH UNIT 1 & SCIP 0225-2021; Approved by CPJENGR 2022-01-14

REPRODUCTION OF THE ORIGINAL SIGNED AND SEALED PLAN AND/OR ELECTRONIC MEDIA MAY HAVE BEEN INADVERTENTLY ALTERED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE SCALE OF THE DOCUMENT AND CONTACTING CUDE ENGINEERS TO VERIFY DISCREPANCIES PRIOR TO CONSTRUCTION.

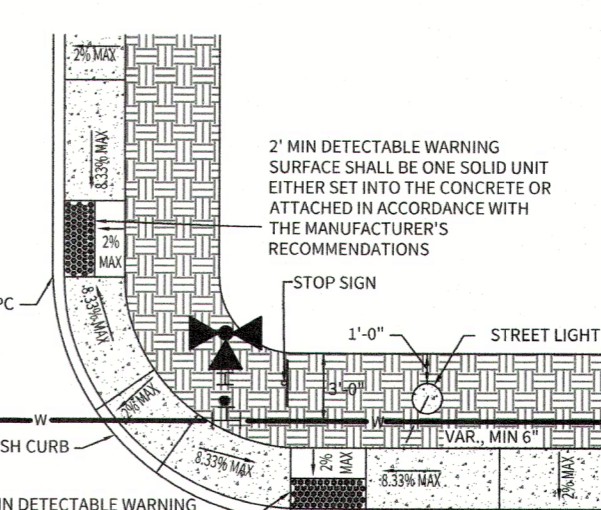
SHWSC GENERAL NOTES

GENERAL SECTION

- All materials and construction procedures within the scope of the project shall be approved by SHWSC and comply with all applicable standards and regulations.
- Contractor shall not proceed with any work until written approval is obtained from SHWSC. Work completed by the contractor, which has not received an approval will be subject to removal and replacement by and at the expense of the contractor at the prerogative of SHWSC.
- The developer dedicates the water mains upon completion by the developer and/or contractor. SHWSC. SHWSC will own and maintain said water mains which are located within said particular subdivision. (as applicable).
- 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. This requirement shall apply continuously and not be limited to normal working hours. The contractor shall defend, indemnify and hold the owners and the engineer and his employees, partners, officers, 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.
- 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 shall be responsible for restoring to its original or better condition, any damages done to existing fences, curbs, streets, driveways, landscaping and structures, and existing utilities (not adjusted on plans). Cost of restorations, if any, shall be the contractor's entire expense.
- 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.
- Contractor shall procure all permits and licenses, pay all charges, fees and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work.
- 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.
- 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.
- The contractor shall not place any materials on the recharge zone of the Edwards Aquifer without an approved Water Pollution Abatement Plan from the TCEQ 31 TAC 313.4 and 31 TAC 313.9.
- 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.
- The location of utilities, either underground or overhead, shown within the right of way are approximate and shall be verified by the contractor before beginning construction operations.

TRENCH EXCAVATION PROTECTION

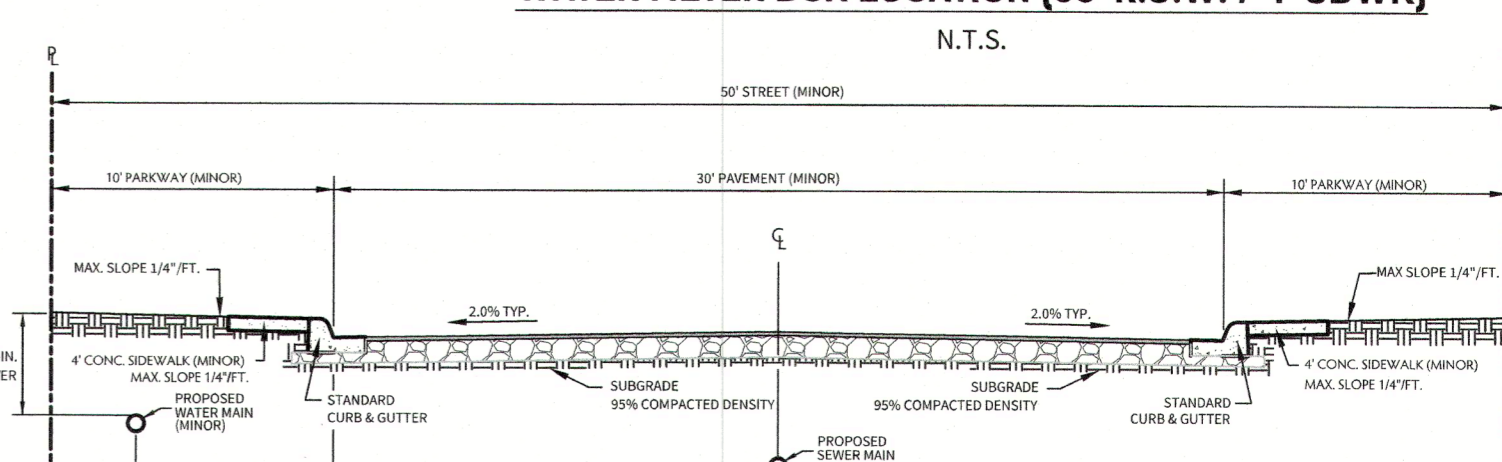
Contractor and/or contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, osha standards for trench excavations. Specifically, contractor and/or contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with osha standards governing the presence and activities of individuals working in and around trench excavation.



FIRE HYDRANT LOCATION ON RETURNS DETAIL
N.T.S.

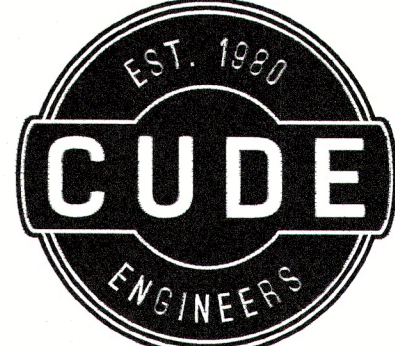
- NOTES:
- STREET LIGHTS SHALL BE INSTALLED 2' WITHIN R.O.W. AND A MINIMUM DISTANCE OF 6" FROM THE PROPOSED SIDEWALK, AND A MINIMUM DISTANCE OF 5' FROM FACE OF CURB.
 - FIRE HYDRANTS (AS APPLICABLE) SHALL BE INSTALLED WITHIN THE R.O.W. A MINIMUM OF 1' FROM THE BACK OF THE CURB AND A MINIMUM OF 1' AWAY FROM THE PROPOSED SIDEWALK.

WATER METER BOX LOCATION (50' R.O.W. / 4' SDWK)
N.T.S.



MINOR STREET CROSS SECTION
N.T.S.

CUDEENGINEERS.COM



4122 Pond Hill Road, Suite 101
San Antonio, Texas 78231
P:(210) 681-2951 F:(210) 523-7112

CORDOVA TRAILS
SUBDIVISION UNIT 1
AS-BUILT

WATER DISTRIBUTION PLANS

DATE

12/05/2021

PROJECT NO.

03480.002

DRAWN BY

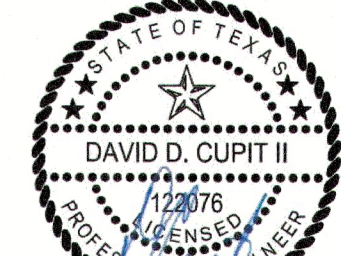
AC

CHECKED BY

DDC/JC

REVISIONS

- 07/06/2021 - UPDATED SHWSC GENERAL NOTES
- 09/23/2021 - UPDATED CURB INLETS AND SIDEWALKS
-
-
-
-
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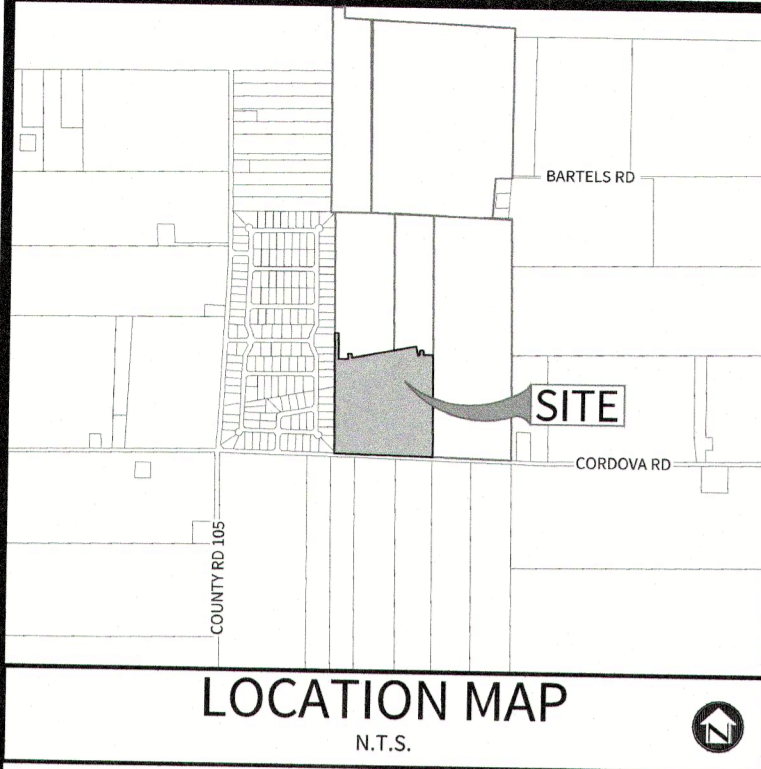
CUDE ENGINEERS

TBPE No. 455

TBPLS No. 10048500

C41

1 OF 6



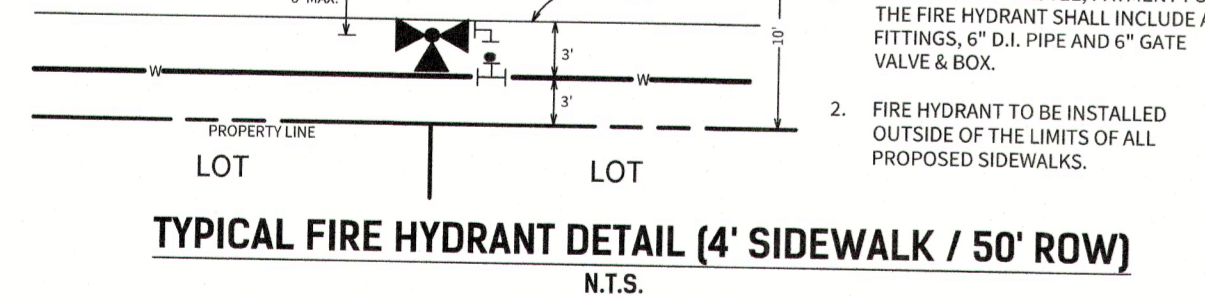
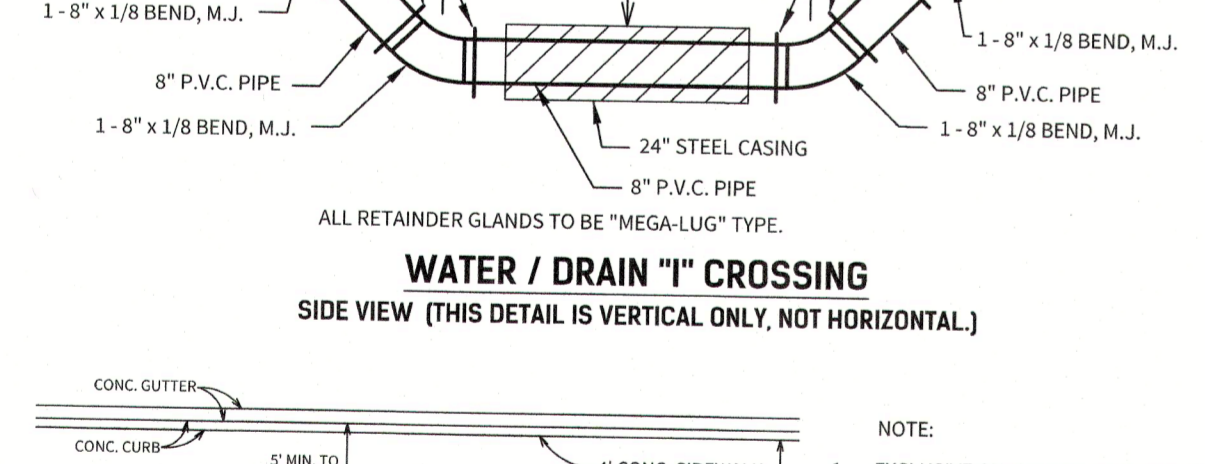
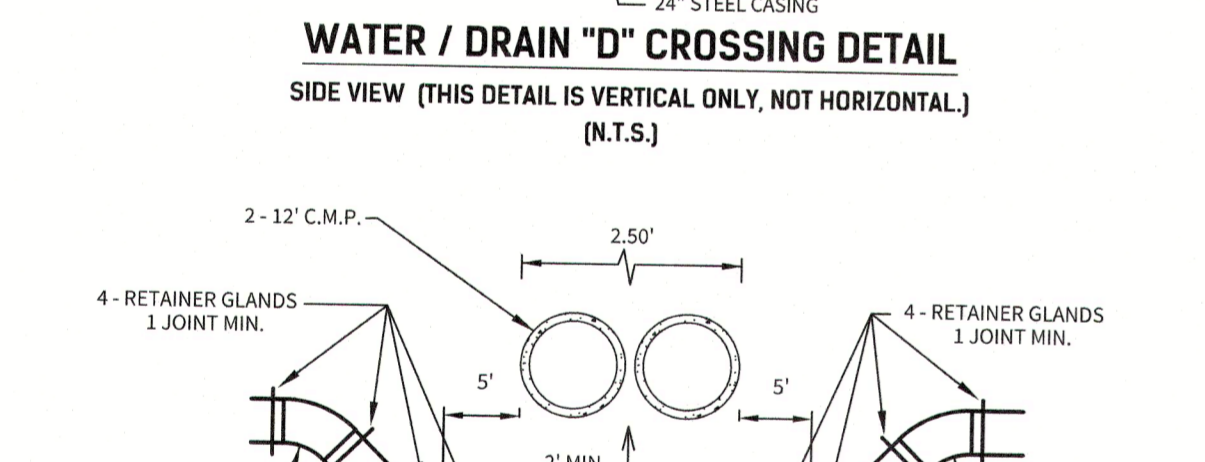
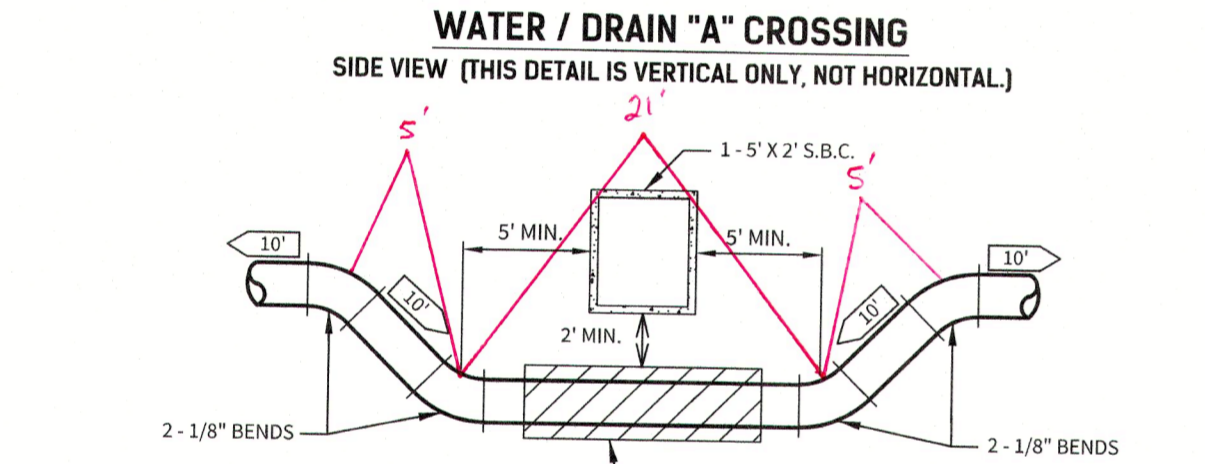
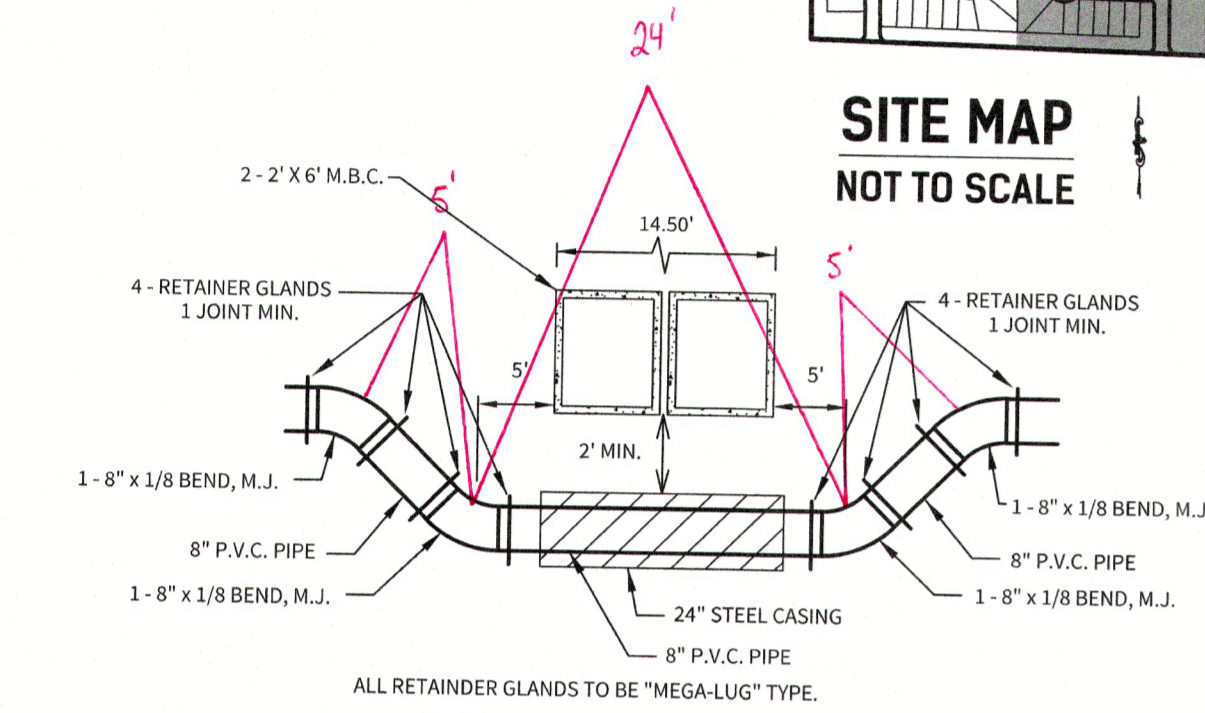
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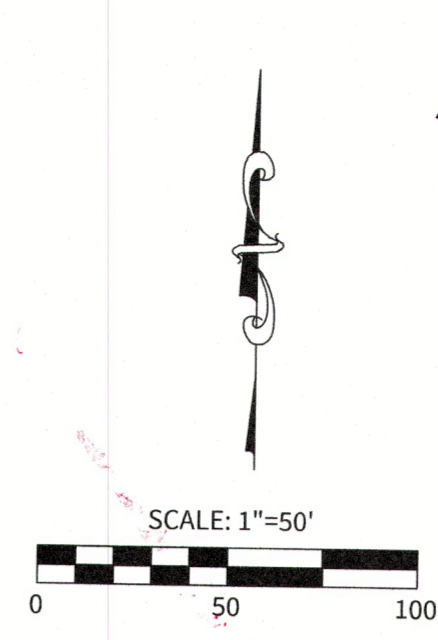
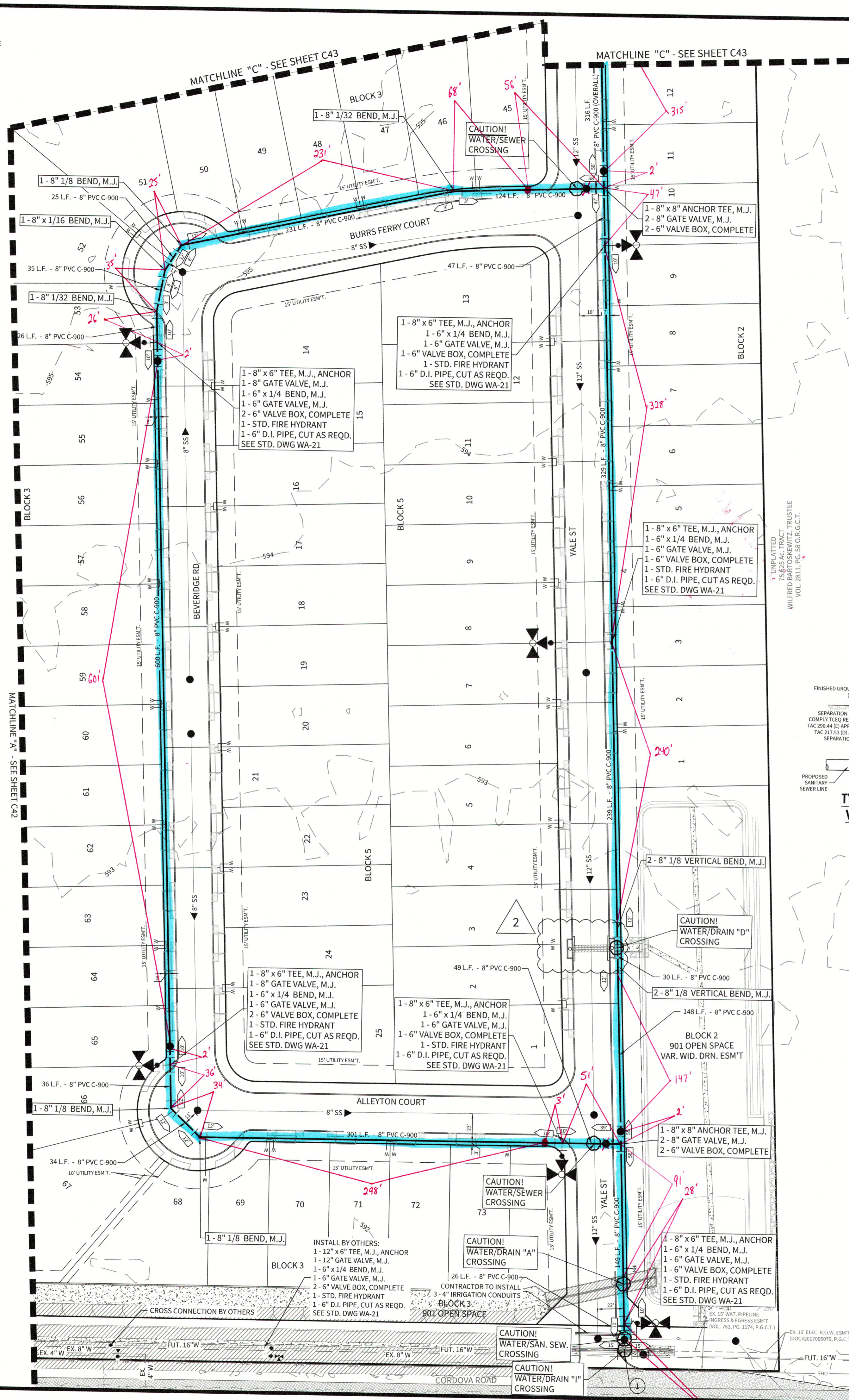
- XXX L.F. - XX" PVC C-900 = PROPOSED WATER MAIN
- 8" SS = PROPOSED SEWER MAIN

SITE MAP
NOT TO SCALE



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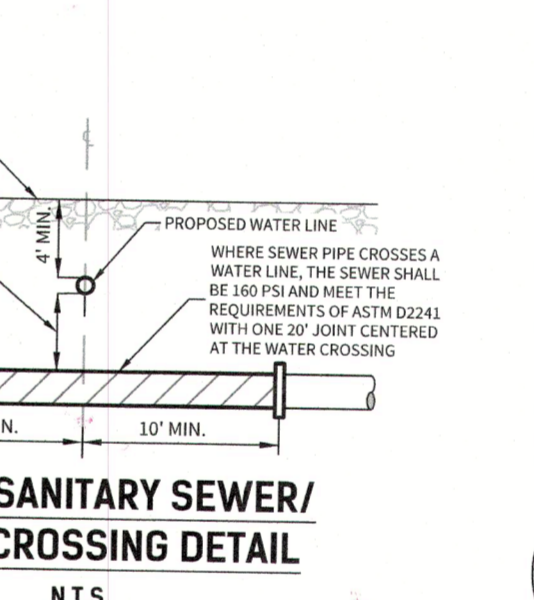
KEYNOTE 1
AFTER RELEASE FOR SERVICE, CONTRACTOR TO THE NEW 8" MAIN INTO EXIST. 16" WATER MAIN WITH ±5 L.F. OF 16" WATER MAIN, CUT AS REQ'D.

8" VALVE TO REMAIN CLOSED UNTIL AFTER DISINFECTION & ACCEPTANCE BY SPRINGS HILL WATER SUPPLY

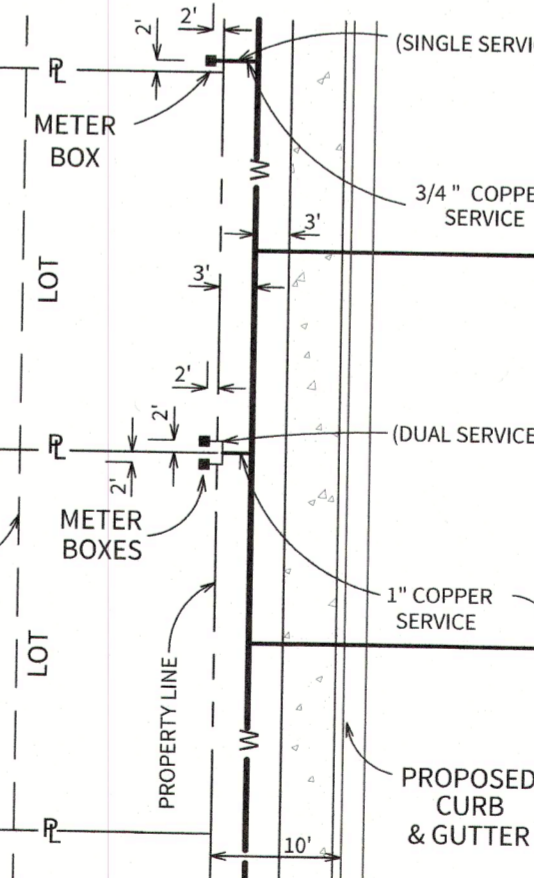
CONTRACTOR SHALL FIELD LOCATE & VERIFY DEPTH OF EXISTING 16" MAIN & FITTINGS PRIOR TO COMMENCING CONSTRUCTION

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

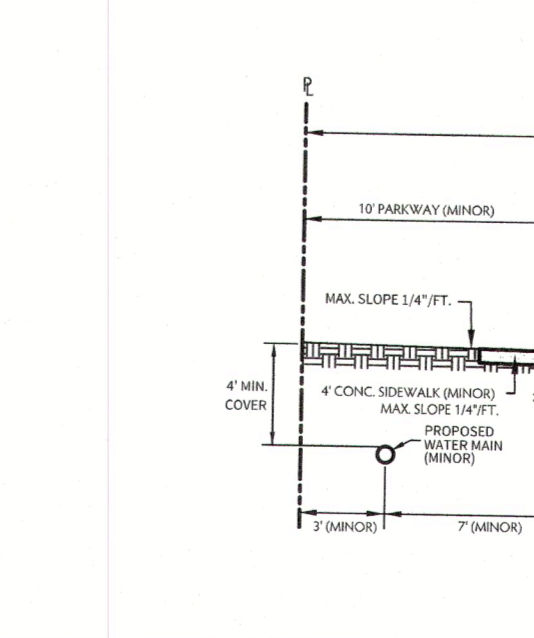
1 - 16" x 8" TEE
1 - 8" SOLID SLEEVE
1 - 2" BLOWOFF ASSEMBLY (TEMP.)
1 - 8"x2" THR. DI. ECCENTRICALLY TAPPED CAP, M.J. (TEMP.)



TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL
N.T.S.



WATER METER BOX LOCATION (50' R.O.W. / 4' SDWK)



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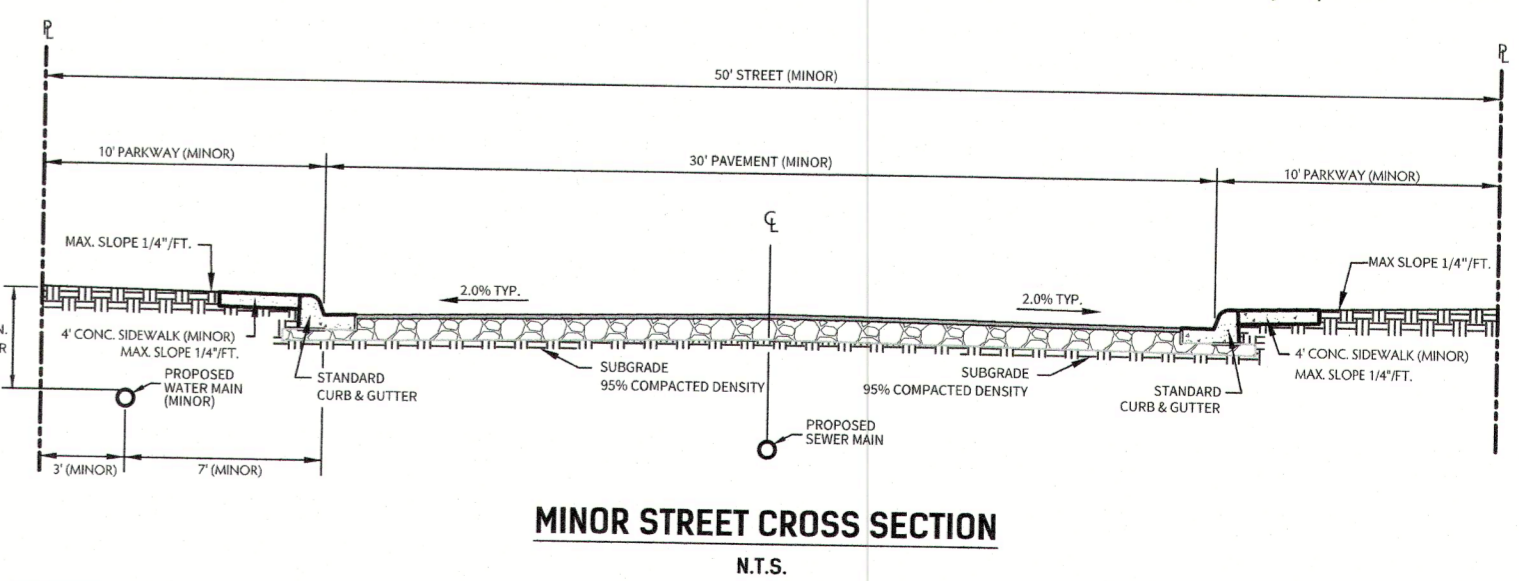
- OSHA regulations prohibit operations that will bring persons or equipment within 10 feet of an energized line. Where workers and/or equipment have to work close to an energized electrical line, the contractor shall notify the electrical power company involved and make whatever adjustments necessary to ensure the safety of those workers.
- It shall be the contractor's responsibility to locate utility service lines as required for construction. Utility companies are also previously mentioned in "utility company notification".
- Due to federal regulations title 49, part 192 (b), gas companies must maintain access to gas valves at all times. The contractor must protect and work around any gas valves that are in the project area.
- The contractor is fully responsible for the traffic control and will be responsible for furnishing all traffic control devices, and flaggers. The construction methods shall be conducted to provide the least possible interference to traffic in one direction at all times. The contractor shall clean up and remove from the work area any loose material resulting from contract operations at the end of each working day.
- Prior to ordering materials to be used in construction, contractor shall provide SHWSC with four (4) copies of the source, type, gradation, material specification data and / or shop drawings, as applicable, to satisfy the requirements of the following items and all material items referred to in these listed items:
 - Water mains and services
 - No meter boxes to be set in driveways. Any meter boxes set in driveways will be relocated at contractor's and/or developer's expense.
 - Where the minimum 9 foot separation distance between sewer lines and water lines / mains cannot be maintained, the installation of water lines shall be in strict accordance with TCEQ.
 - Contractor and/or contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement contractor's trench excavation safety protection that complies with 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.
 - Utility trench compaction with street r.o.w.
 - All utility trench compaction test 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 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 geo-technical engineer and approved by SHWSC.
 - Upon completion of testing the geo-technical engineer shall provide SHWSC street inspector with all testing documentation and a certification stating that the placement of fill material has been completed in accordance with the plans.

PRESSURE REDUCING VALVE NOTE:
Pressure reducing valve to be installed on customer's side of meter by homebuilder.

TRENCH EXCAVATION PROTECTION
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APPROVED FOR CONSTRUCTION
01/14/2022

FOR IMPROVEMENTS ASSOCIATED WITH UNIT 1 & SC&P 0225-2021; Approved by CPIENGR 2022-01-14



MINOR STREET CROSS SECTION
N.T.S.

CUDEENGINEERS.COM
EST. 1920
CUDE ENGINEERS
4122 Pond Hill Road, Suite 101
San Antonio, Texas 78231
P:(210) 681.2951 F: (210) 523.7112

CORDOVA TRAILS
SUBDIVISION UNIT 1
WATER DISTRIBUTION PLANS

DATE
12/05/2021
PROJECT NO.
03480.002
DRAWN BY
AC
CHECKED BY
DDC/JC

REVISIONS
1. 07/08/2021 - UPDATED SHWSC GENERAL NOTES
2. 09/24/2021 - UPDATED CURB INLETS AND SIDEWALKS
3.
4.
5.
6.
7.
8.
9.

STATE OF TEXAS
DAVID D. CUPIT II
12076
PROFESSIONAL ENGINEER
12.11.21
CUDE ENGINEERS
TBPE No. 455
TBPLS No. 10048500

C42

2 OF 6

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