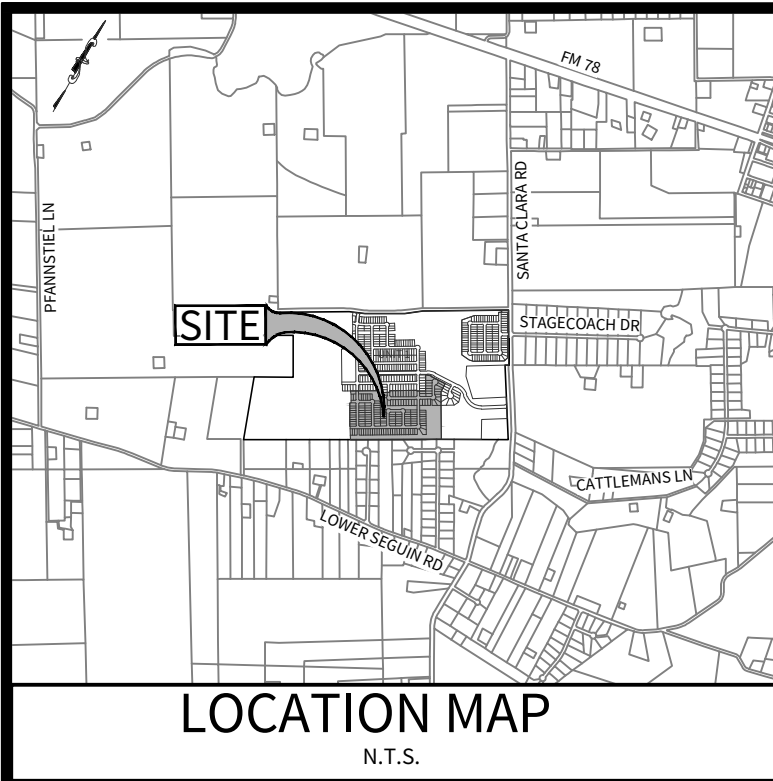


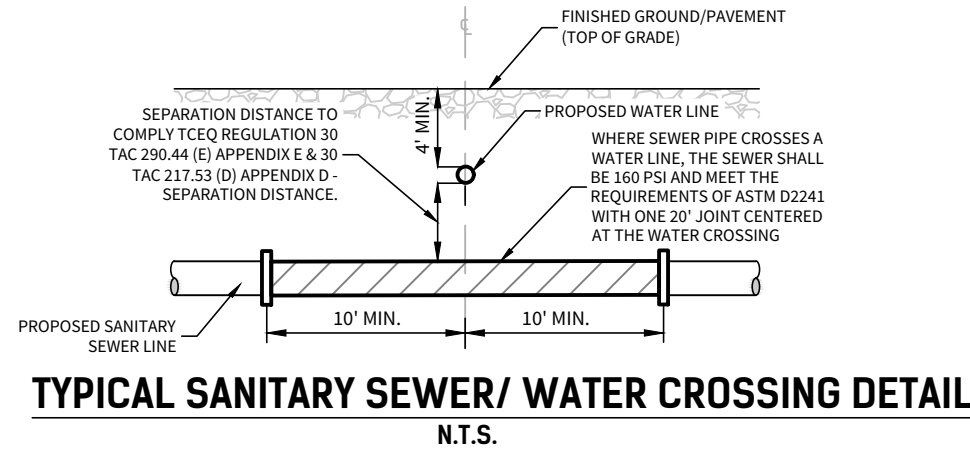
CUDE ENGINEERS, LLC - THIS DOCUMENT, ANY PORTION THEREOF, AND ANY ASSOCIATED COPYRIGHTS SHALL REMAIN THE PROPERTY OF A.W. CUDE ENGINEERS, LLC. THIS DOCUMENT MAY NOT BE REPRODUCED, USED, OR DISTRIBUTED IN ANY FORM OR BY ANY MEANS TO ANYONE FOR ANY OTHER ENDORSEMENT, ADAPTATION, OR MODIFICATION OF, AND ADAPTATION BY, A.W. CUDE ENGINEERS, LLC. THIS DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR USE OTHER THAN AS ORIGINALLY INTENDED BY A.W. CUDE ENGINEERS, LLC AND ANY UNAUTHORIZED REPRODUCTION, USE, OR DISTRIBUTION OF THIS DOCUMENT WILL BE AT THE USER'S SOLE RISK, WITHOUT ANY LIABILITY TO A.W. CUDE ENGINEERS, LLC, AND WILL BE USED AGAINST ANY AND ALL PARTIES TO THE GREATEST EXTENT PERMITTED BY LAW.



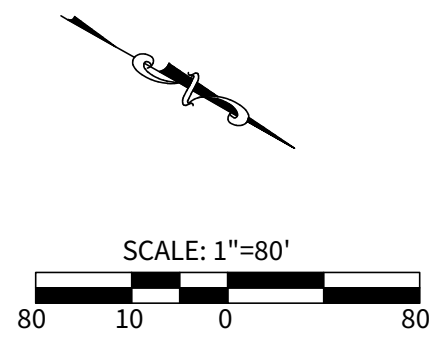
## BENCHMARK BM-1

BENCHMARK TO BE SET BY ENGINEER PRIOR TO CONSTRUCTION.

SEWER/WATER LINE CROSSINGS	
LINE	STATION
"W"	17+40.17
"W"	20+29.28
"W"	23+19.28
"W"	26+51.78
"W"	28+99.28
"W"	36+82.38
"AJ"	1+21.25
"K"	8+05.17

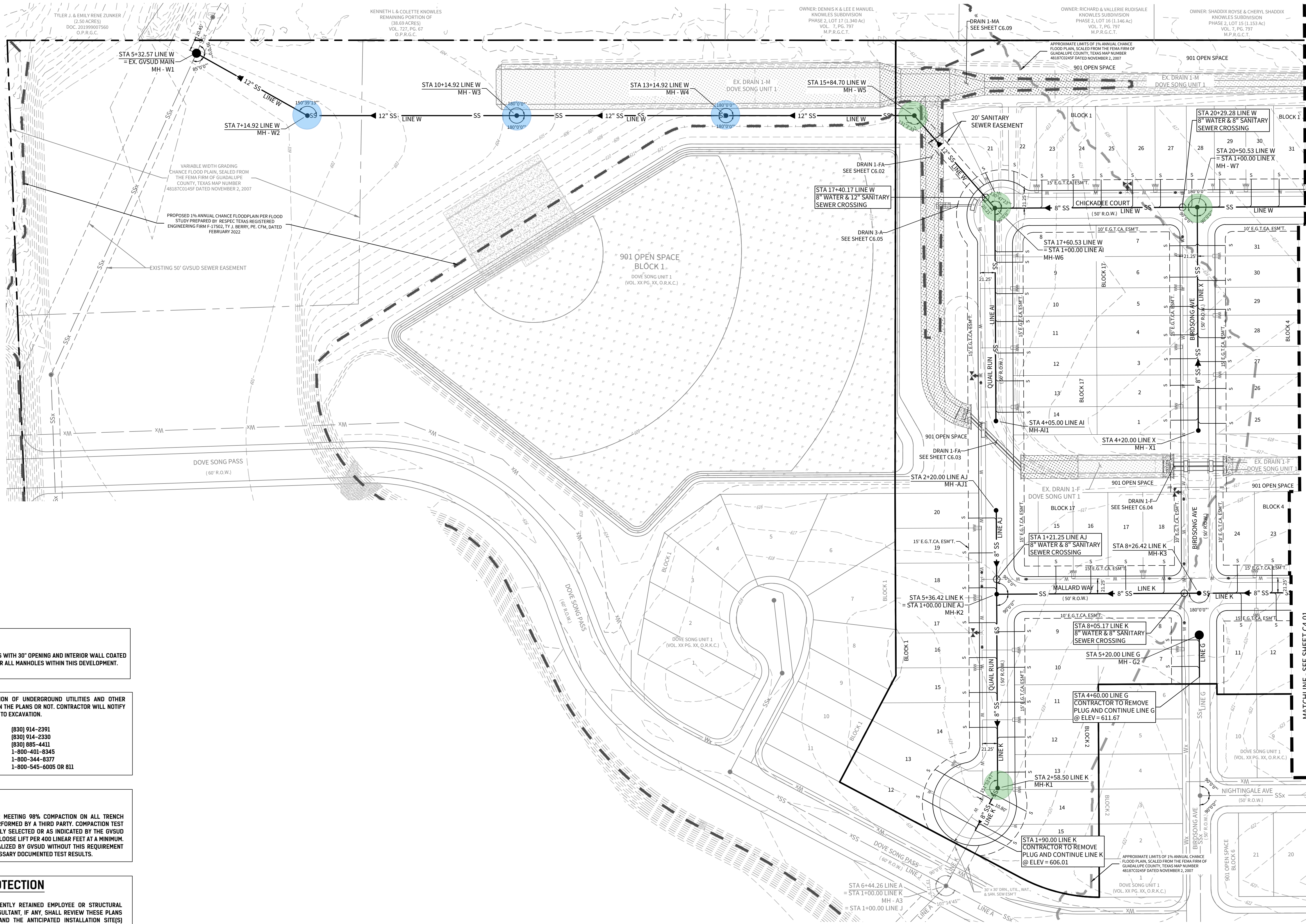


- VENTED MANHOLE
- VENTED MANHOLE W/ INFILTRATION DISC



## LEGEND

OVERALL UNIT BOUNDARY	---
UNIT BOUNDARY	---
PROPOSED LOT LINE	---
PROPOSED RIGHT OF WAY	---
E.G.T.C.A. EASEMENT	---
EXISTING 1' CONTOUR	499
EXISTING 5' CONTOUR	500
PROJECT 100 YR. FLOOD PLAIN	---
EFFECTIVE 100 YR. FLOOD PLAIN	---
EXISTING WATER LINE	Wx
EXISTING SEWER LINE	SSx
EXISTING MANHOLE	●
PROPOSED WATER LINE	W
PROPOSED WATER SERVICE	Wp
PROPOSED FIRE HYDRANT	+
PROPOSED SEWER MAIN	SS
PROPOSED MANHOLE	●
PROPOSED SEWER SERVICE	Sp



## NOTE:

CONTRACTOR TO INSTALL WATERTIGHT MANHOLES WITH 30" OPENING AND INTERIOR WALL COATED WITH A GVSUD APPROVED SEWER STRUCTURE FOR ALL MANHOLES WITHIN THIS DEVELOPMENT.

CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND OTHER UNDERGROUND STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. CONTRACTOR WILL NOTIFY ALL UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO EXCAVATION.

CITY OF MARION (830) 914-2391  
GVSUD (830) 914-2330  
GVTC (830) 885-4411  
OPEC 1-800-401-6345  
DIG TESS 1-800-344-8377  
TEXAS STATE WIDE ONE CALL LOCATORS 1-800-545-6005 OR 811

## NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 90% COMPACTION ON ALL TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TEST WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE GVSUD INSPECTOR/TEST ADMINISTER, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY GVSUD WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

## TRENCH EXCAVATION PROTECTION

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 SITES) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTORS 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 CONTRACTORS 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.

## CAUTION!!

EXISTING UTILITIES ARE WITHIN THE LIMITS OF CONSTRUCTION. CONTRACTORS SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE, VERIFY THE EXACT LOCATION & IDENTIFY AREA OF CONFLICTS WITH EXISTING UTILITIES AND SHALL NOTIFY THE ENGINEER IF CONFLICT IS FOUND.

## CAUTION!!

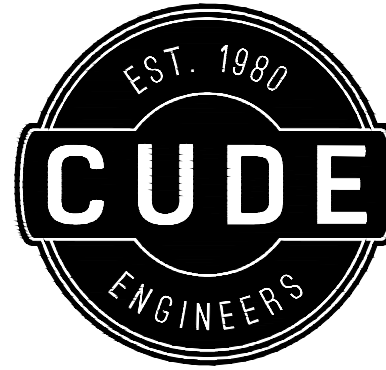
THE CONTRACTOR SHALL BE AWARE THAT OVERHEAD ELECTRIC LINES EXIST WITHIN THE VICINITY OF THE SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THESE UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THIS AREA. ANY DAMAGE DONE TO THESE EXISTING FACILITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR.

## TRENCH EXCAVATION PROTECTION

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 SITES) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTORS 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 CONTRACTORS 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.

## NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 90% COMPACTION ON ALL TRENCH BACKFILL. COMPACTION TEST WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE DISTRICT INSPECTOR. PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY THE DISTRICT WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.
- ALL SANITARY SEWER PIPE SHALL BE SDR-26 PVC PIPE MEETING ASTM SPECIFICATION D-3034.
- MANHOLE OPENING INCREASED TO 30" AS PER TAC CHAPTER 237.55.
- REFERENCE STREET DETAIL SHEET AND GEOTECHNICAL ENGINEERING REPORT FOR PAVEMENT DESIGN INFORMATION.
- ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPGRADE SIDE OF THE SEWER TRENCH THUS ALLOWING THE TRENCH TO INTERCEPT ANY SILT CONTAMINATED RUNOFF.
- ALL LATENTALS SHALL BE INSTALLED AT A MINIMUM 2.0% SLOPE UNLESS OTHERWISE NOTED.
- BENCHMARK TO BE SET BY ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- ALL SEWER LATENTALS TO BE INSTALLED WITH A MINIMUM 150 PSI PRESSURE RATED PIPE AND EMBEDDED IN CEMENT STABILIZED SAND AT ALL WATER MAIN AND LATERAL SERVICE CROSSINGS PER 30 TAC CHAPTER 290.44(a).
- CONTRACTOR TO INSTALL A 2" X 4" LUMBER ON EACH SEWER LATERAL LOCATION AND PAINT IT IN GREEN.



4122 Pond Hill Road, Suite 101  
San Antonio, Texas 78231  
P:(210) 681.2951 F:(210) 523.7112

## DOVE SONG SUBDIVISION

### UNIT 3

## OVERALL SANITARY SEWER PLAN

DATE 09/05/2024  
PROJECT NO. 03608.004  
DRAWN BY JG/SG/KM  
CHECKED BY AM/AL

## REVISIONS

DATE 1 2 3 4 5 6 7 8 9

PROFESSIONAL SEAL OF A.W. CUDE ENGINEERS, LLC  
ANDREW R. LOWRY  
123410  
REGISTERED PROFESSIONAL ENGINEER  
09/05/2024  
CUDE ENGINEERS  
TBPE No. 455  
TBPLS No. 10048500

C4.00



