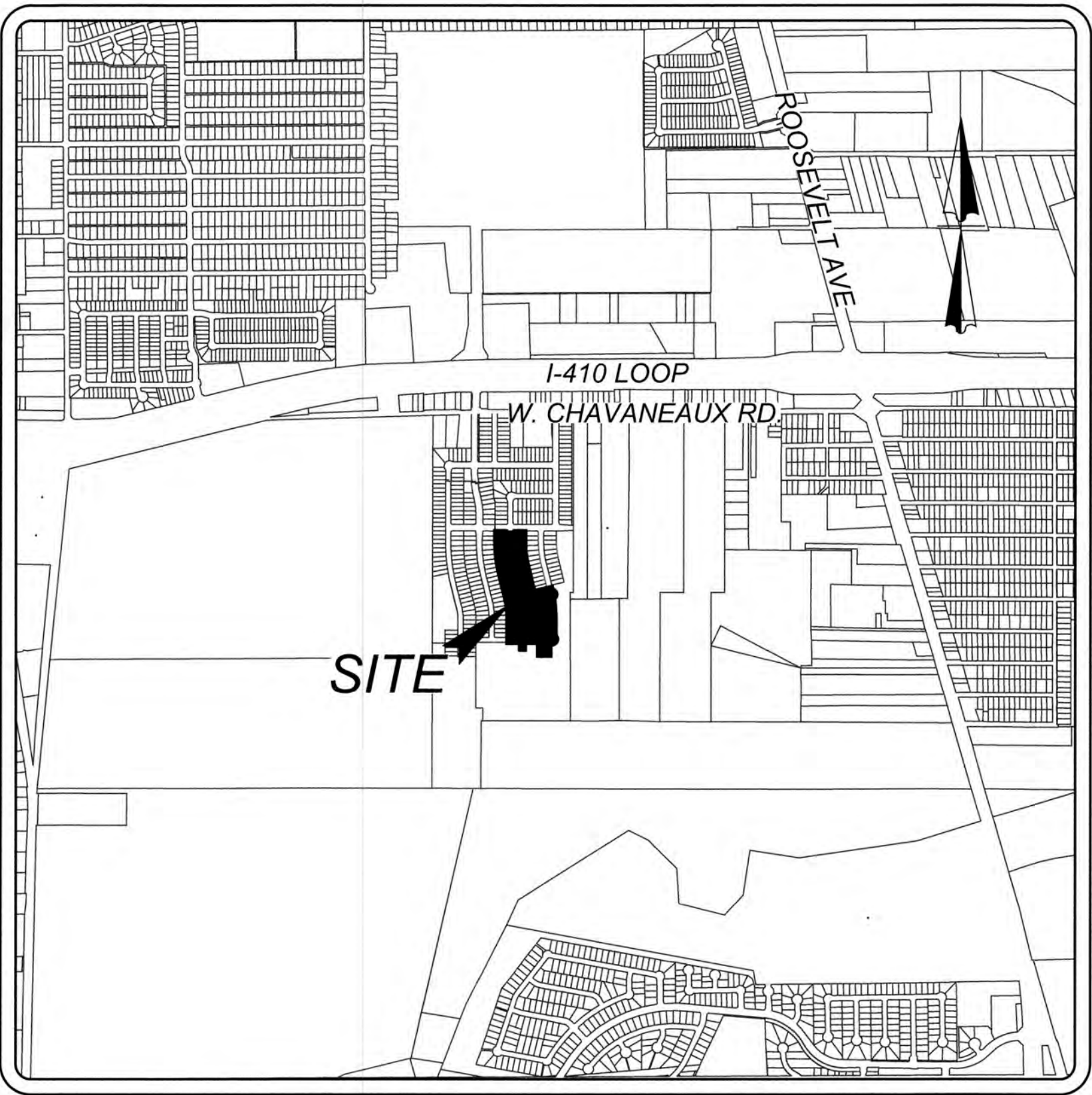


CHAVANEAUX SUBDIVISION UNIT 4

SAN ANTONIO, TX

STREET, DRAINAGE, WATER, SANITARY SEWER, AND UTILITY IMPROVEMENTS



LOCATION MAP NOT-TO-SCALE

VIVA LAND VENTURES, L.P.
11427 ROJAS DRIVE
EL PASO, TX 79936

Sheet List Table

SHEET TITLE	SHEET NUMBER
COVER SHEET	0.0
OVERALL UTILITY PLAN	1.0
MASTER DRAINAGE PLAN	2.0
OVERALL GRADING PLAN	3.0
DRAIN "A" PLAN & PROFILE	4.0
DRAIN "B" PLAN & PROFILE	4.1
DRAIN DETAILS (SHEET 1 OF 2)	4.2
DRAIN DETAILS (SHEET 2 OF 2)	4.3
BEAUMONT BRK PLAN & PROFILE	5.0
AUGER RUN, VOLAND VLY PLAN AND PROFILE	5.1
TYPICAL STREET DETAILS	5.2
WHEELCHAIR RAMP DETAILS	5.3
CONCRETE DRIVEWAY DETAILS	5.4
TXDOT PEDESTRIAN CURB RAMP DETAIL	5.5
TRAFFIC SIGNAGE & PEDESTRIAN ACCESSIBILITY PLAN	5.6
TRAFFIC SIGNAGE DETAILS	5.7
SANITARY SEWER COVER SHEET	6.0
OVERALL SANITARY SEWER PLAN	6.1
LINE "B" PLAN & PROFILE	6.2
WATER DISTRUBUTION COVER SHEET	7.0
WATER DISTRIBUTION PLAN	7.1
STORM WATER POLLUTION PREVENTION PLAN	8.0
STORM WATER POLLUTION PREVENTION PLAN DETAILS	8.1

SHEET REVISION LOG

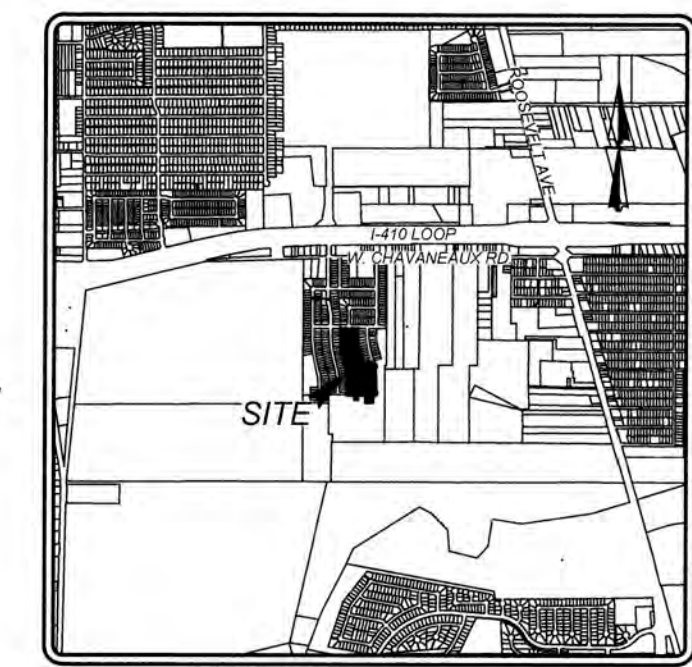
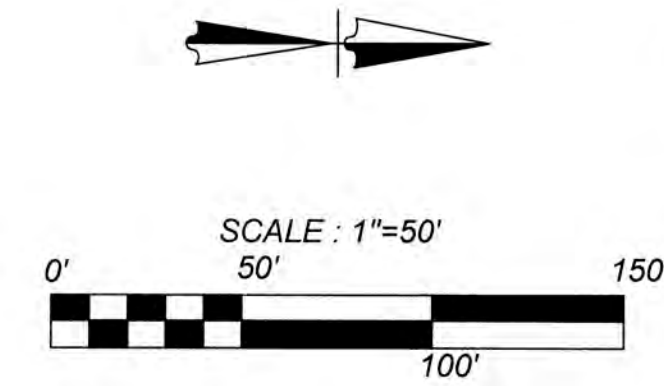
DATE	SHEET NO.	REVISION NO.	DESCRIPTION



TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR AND/OR CONTRACTORS 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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

COMPACTION 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. RESULTS AND/OR WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

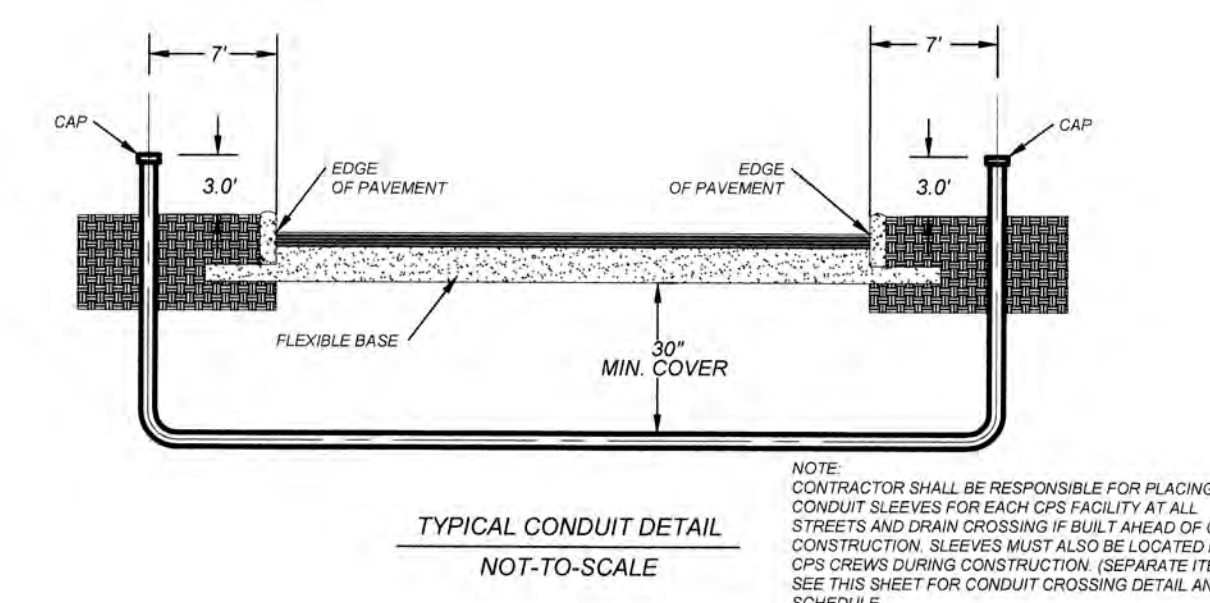
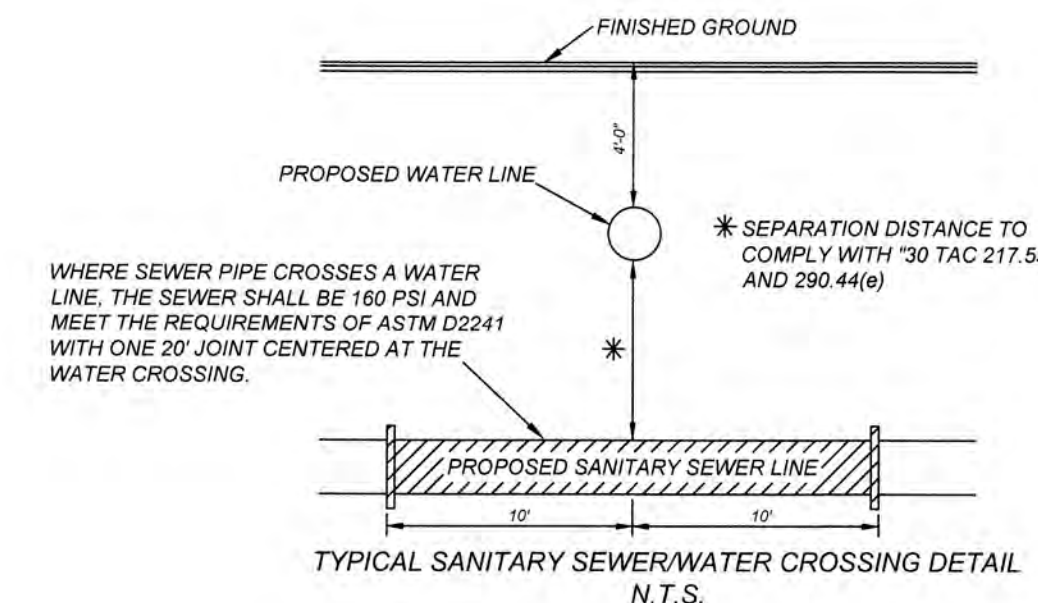
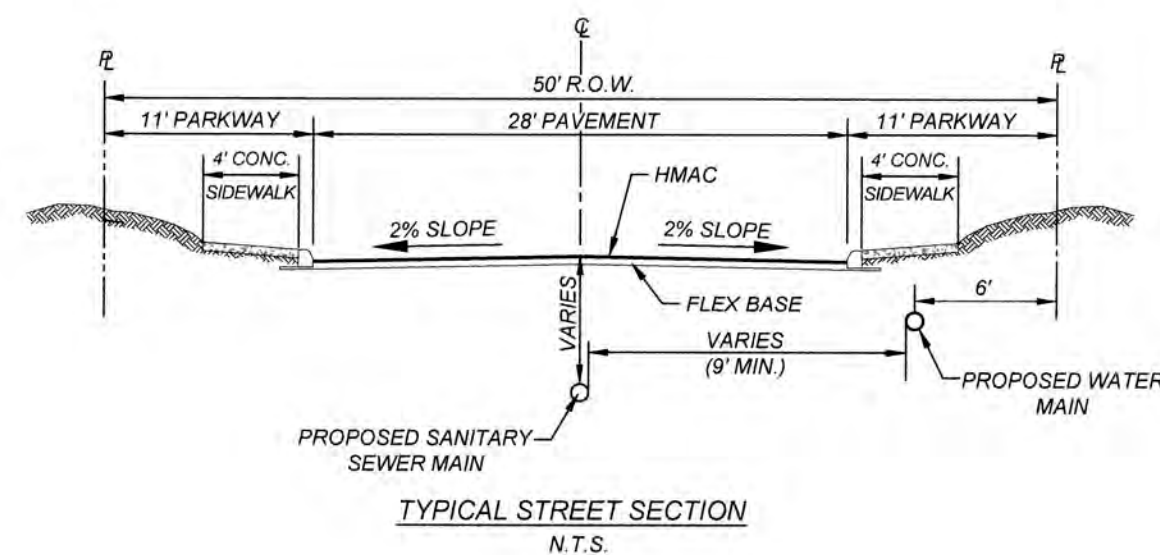
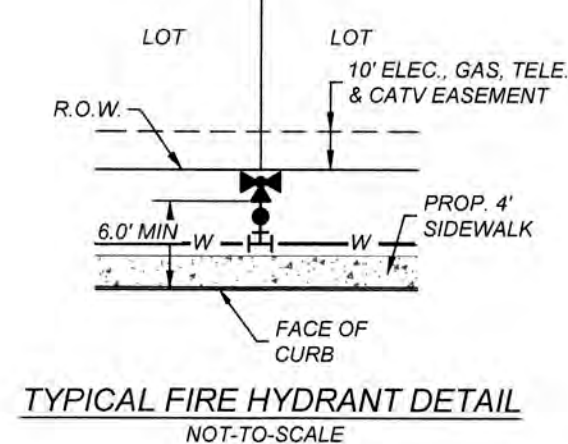
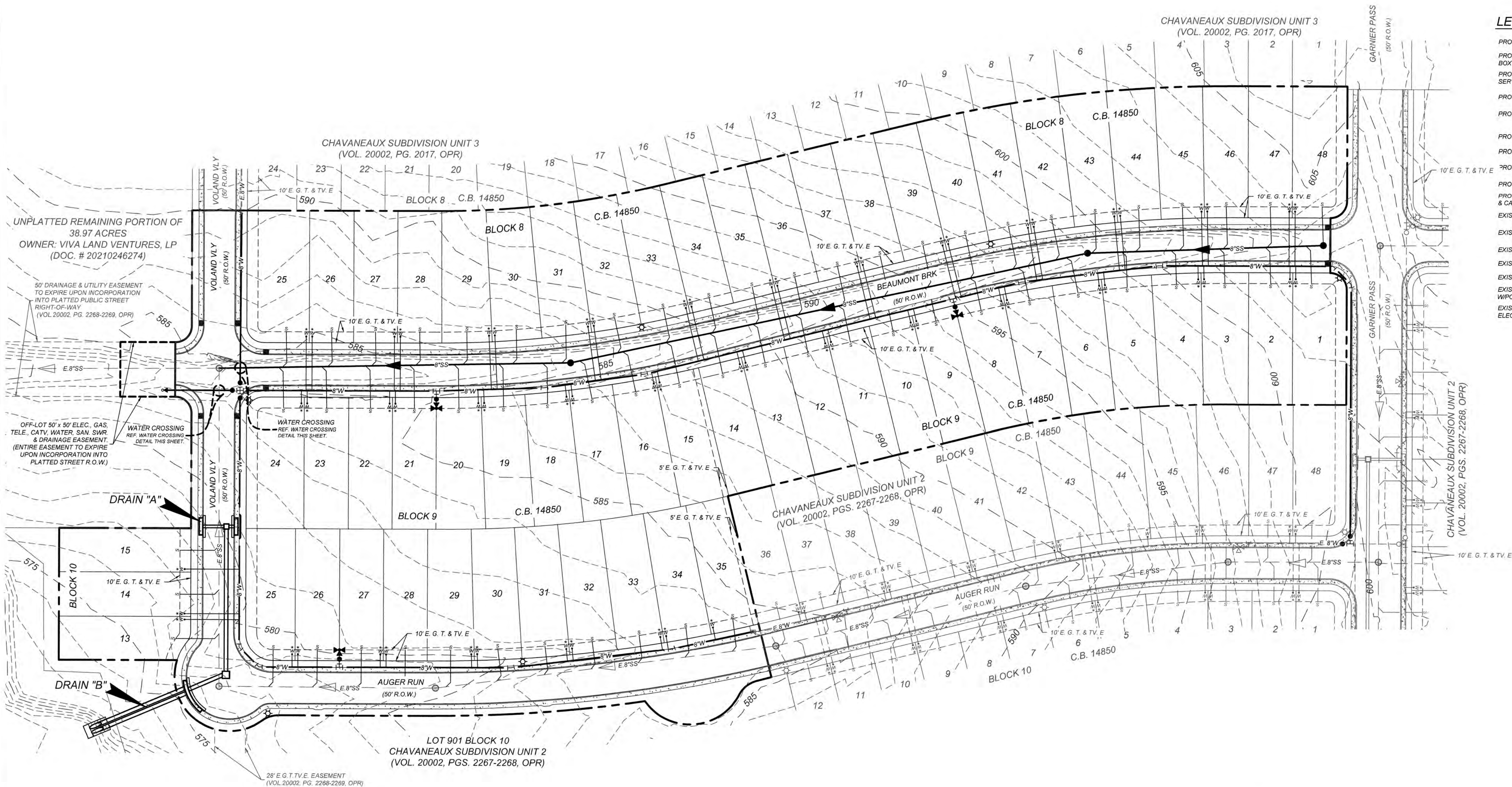
DRY UTILITY CONDUIT NOTE:
CONDUIT LOCATIONS SHOWN ON PLAN ARE FOR GEOGRAPHICAL PURPOSES ONLY AND ARE APPROXIMATE. CONTRACTOR TO INSTALL PROPOSED CONDUITS IN ACCORDANCE WITH DRY UTILITY PURVEYOR'S SPECIFICATIONS. CONTRACTOR TO VERIFY THE CONDUIT LOCATIONS AND SIZES BASED ON THE DRY UTILITY PURVEYOR'S PLAN.



LOCATION MAP
NOT-TO-SCALE

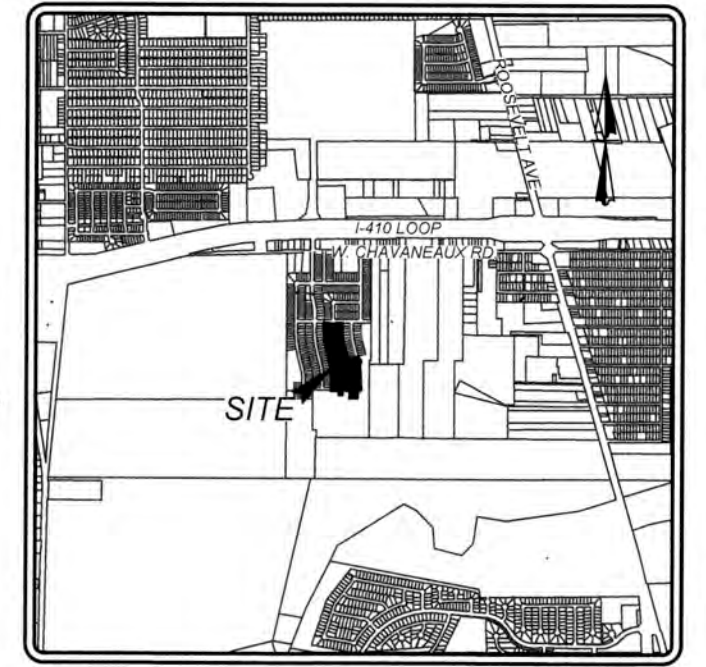
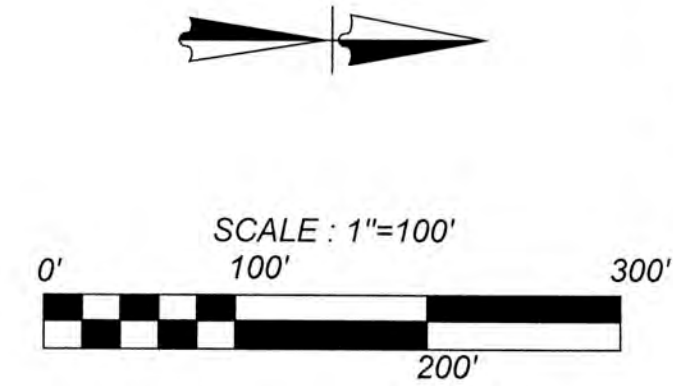
LEGEND

- | | |
|--|--------------------|
| PROPOSED WATER MAIN | — W — |
| PROPOSED WATER SERVICE & METER BOX | — S — |
| PROPOSED WATER 3/4" IRRIGATION SERVICE & METER BOX | — I — |
| PROPOSED FIRE HYDRANT | — F — |
| PROPOSED WATER VALVE | — V — |
| PROPOSED 100W STREETLIGHT | — S — |
| PROPOSED SANITARY SEWER MAIN | — SS — |
| PROPOSED SANITARY SEWER MANHOLE | — M — |
| PROPOSED SANITARY SEWER LATERAL | — SL — |
| PROPOSED ELECTRIC, GAS, TELEPHONE, & CABLE TV EASEMENT | — E, G, T, TV, E — |
| EXISTING WATER MAIN | — EW — |
| EXISTING FIRE HYDRANT | — FH — |
| EXISTING WATER VALVE | — WV — |
| EXISTING SANITARY SEWER MAIN | — ESS — |
| EXISTING SANITARY SEWER MANHOLE | — ESM — |
| EXISTING OVERHEAD ELECTRIC W/POWER POLE | — OHE — |
| EXISTING GUY WIRE/OVERHEAD ELECTRIC | — GWE — |



CHAVANEAUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
OVERALL UTILITY PLAN

PLAT NO.
22-11800405
JOB NO. 984-02-01
DATE: APRIL, 2022
DRAWN WDS CHECKED SM
SHEET NUMBER:



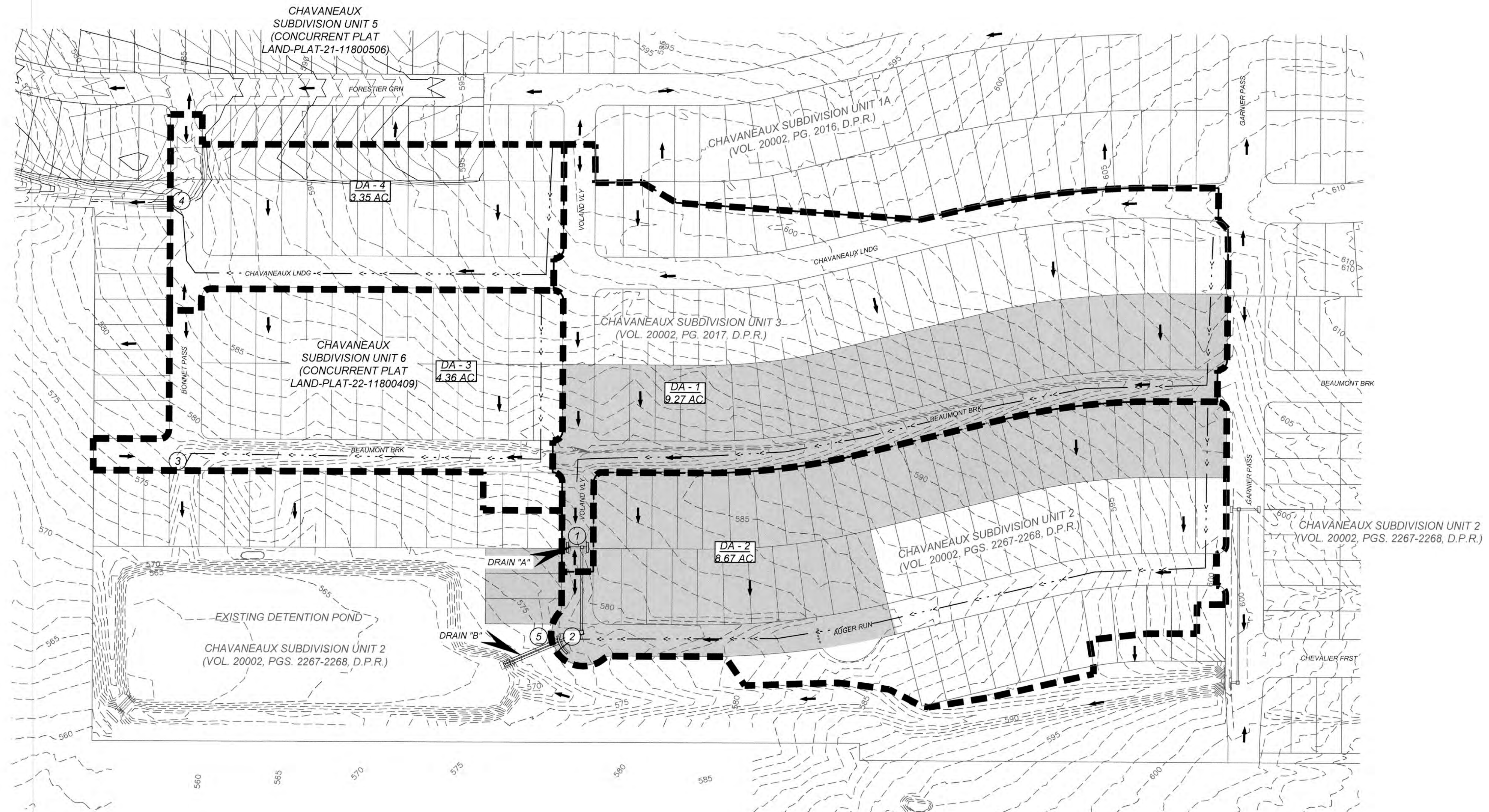
LOCATION MAP
NOT-TO-SCALE

LEGEND

- ① STUDY POINT
- DRAINAGE AREA BOUNDARY
- 802--- EXISTING CONTOURS
- PROPOSED UNIT
- FLOW ARROW

Ultimate Conditions:

Study Point	AREA	(Acres)	C	T _{ovrl} (min)	Carryover	T _{sc} (min)	T _{ch} (min)	T _{tot} (min)	I ₅ (in/hr)	I ₂₅ (in/hr)	I ₁₀₀ (in/hr)	Q ₅ (ft ³ /s)	Q ₂₅ (ft ³ /s)	Q ₁₀₀ (ft ³ /s)
1	DA-1	9.43	0.77	9		2	2	13	5.61	7.82	9.76	40.75	56.77	70.87
2	DA-2	8.51	0.77	8		2	2	12	5.81	8.12	10.14	38.07	53.21	66.45
3	DA-3	4.36	0.77	8		2	1	11	6.02	8.43	10.54	20.20	28.31	35.37
4	DA-4	3.35	0.77	13		2	1	16	5.06	6.99	8.71	13.06	18.03	22.46
5	PT 1. + PT 2	17.94	0.77	9	CARRYOVER FROM PT. 1	2	2	13	5.61	7.82	9.76	77.52	108.00	134.82



CHAVANEAUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
MASTER DRAINAGE PLAN

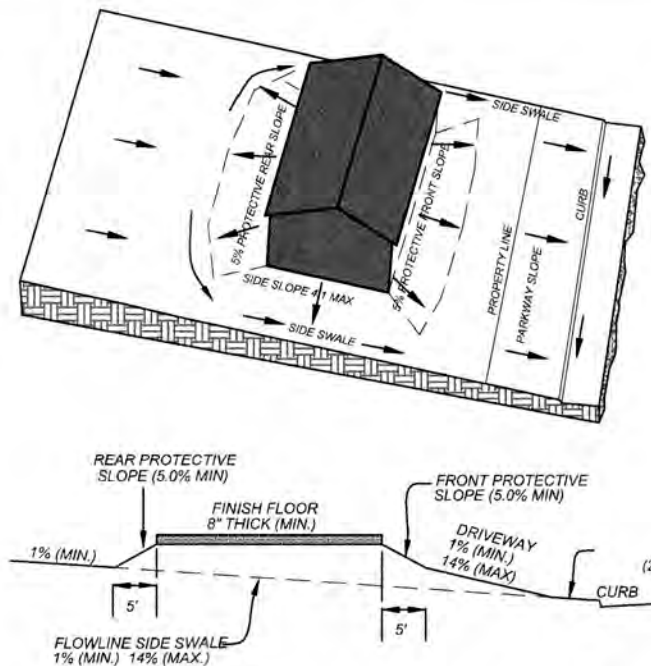
PLAT NO.
22-11800405
JOB NO: 984-02-01
DATE: APRIL, 2022
DRAWN: WDS CHECKED: SM
SHEET NUMBER:

2.0

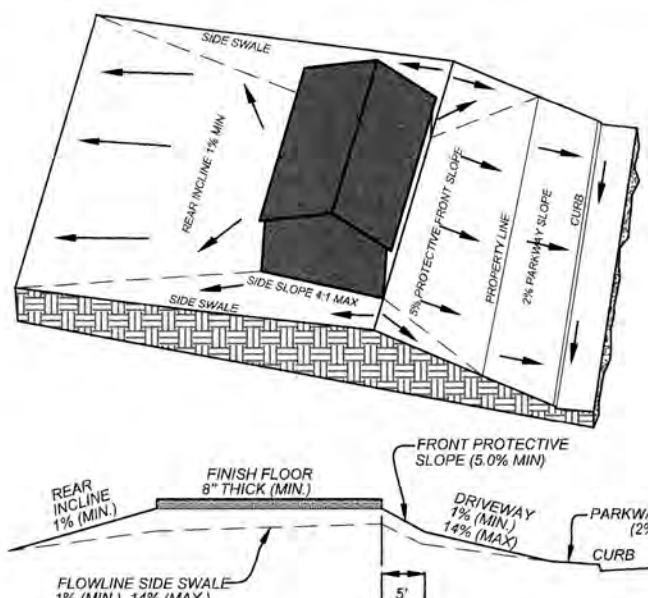


KFW
ENGINEERS + SURVEYING
2000 E. Loop West, Suite 200
San Antonio, TX 78201
Phone #: (210) 975-8444 • Fax #: (210) 975-8441
TBPB Firm #: 9513 • TBPB S Firm #: 1012290

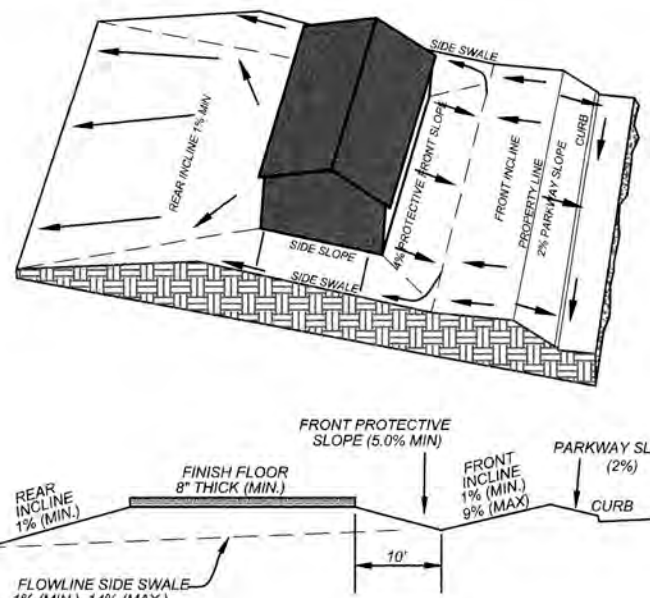
- GENERAL NOTES:
- ELEVATION SHOWN ON FOUNDATION IS FOR FINISHED FLOOR.
 - CONTRACTOR SHALL PROVIDE OWNER ALL NECESSARY DENSITY TESTS FOR FILL LOTS AS REQUIRED BY HUD SPECIFICATIONS.
 - HOME BUILDER SHALL REFER TO THE APPROVED SUBDIVISION PLAT TO CONFIRM ALL BUILDING SETBACKS PRIOR TO ANY FOUNDATION WORK.
 - AS SOON AS PRACTICAL HOME BUILDER SHALL ESTABLISH VEGETATION (HYDROMULCH, SEEDING, SODDING, ETC.) TO PREVENT EROSION FROM OCCURRING.
 - CONTRACTOR SHALL CONTACT ENGINEER REGARDING ANY QUESTIONS ON THE INTENT OF THIS PLAN.
 - POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS AND TOWARDS THE PROPER DRAINAGE EASEMENT OR STREET RIGHT OF WAY ACCORDING TO THE MASTER DRAINAGE PLAN FOR THE PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW PONDING OF WATER.
 - ALL ELEVATIONS AND CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVEMENT, CURBS, AND SIDEWALKS MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
 - GRADING PLAN IS INTENDED FOR USE IN LOT GRADING ONLY. CONTRACTOR SHOULD REFER TO CONSTRUCTION DRAWINGS FOR ALL OTHER GRADES, INCLUDING, BUT NOT LIMITED TO, CHANNELS, ROADS, AND DETENTION PONDS.
 - CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ALL SWALES.



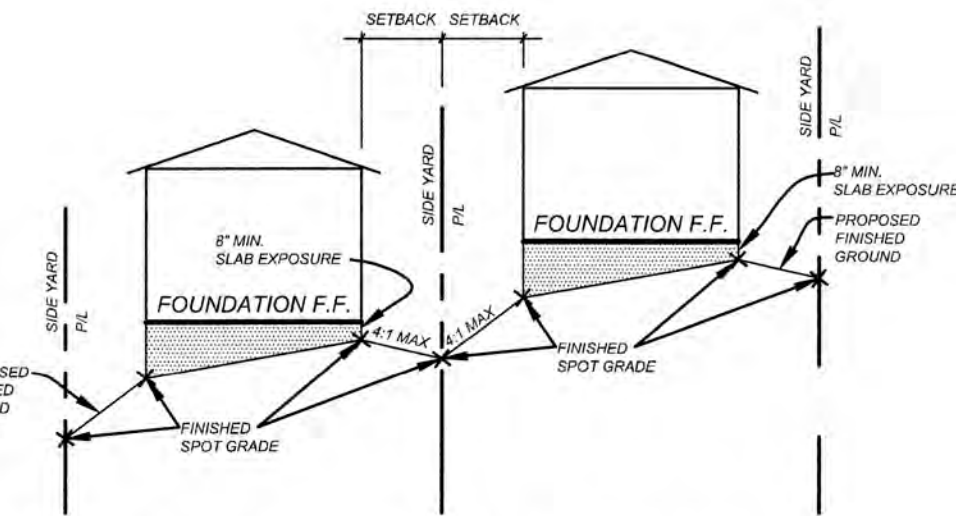
TYPE 'A' LOT GRADING



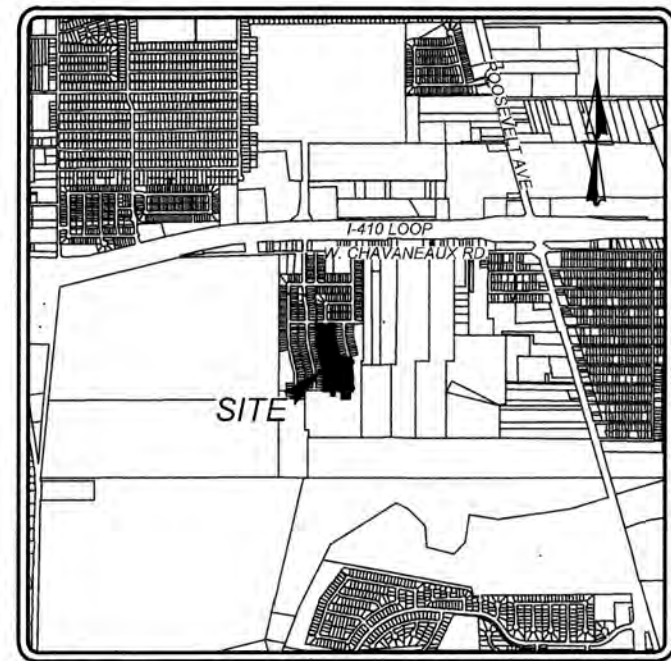
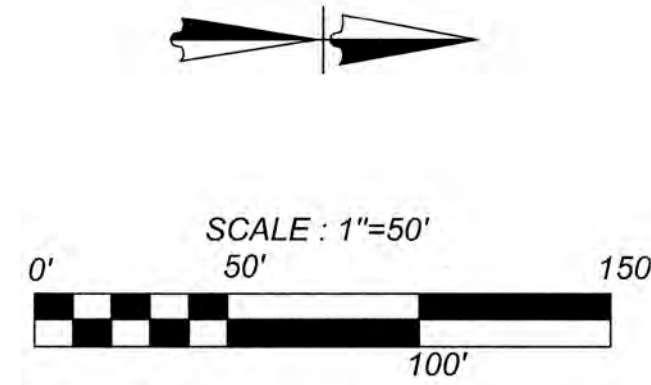
TYPE 'B' LOT GRADING



TYPE 'C' LOT GRADING



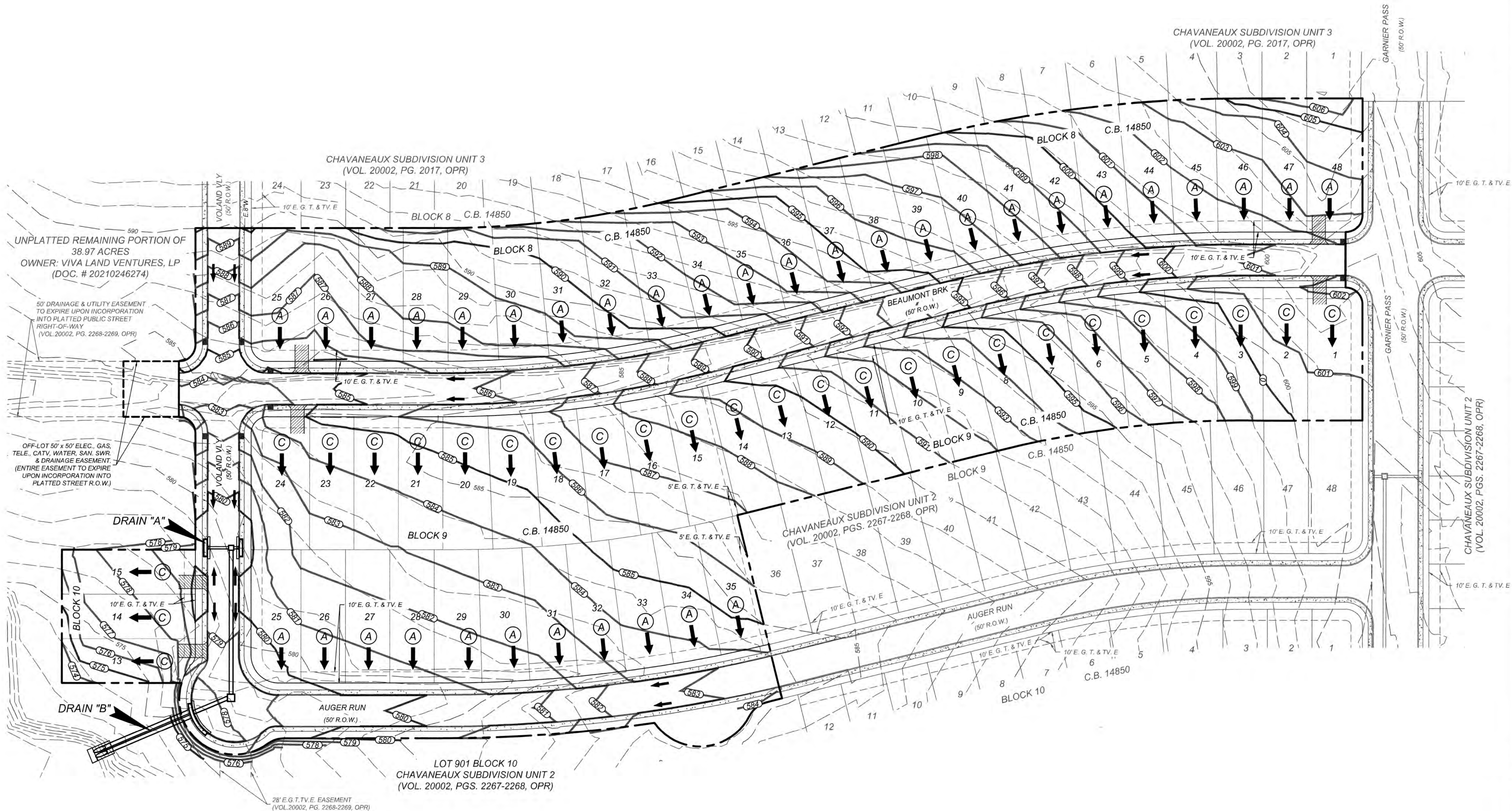
TYPICAL SIDE YARD GRADING
N.T.S.



LOCATION MAP
NOT-TO-SCALE

LEGEND

- E. G. T. & TV. E. = GAS, ELECTRIC, TELEPHONE, CABLE T.V. EASEMENT
- = FLOW ARROW
- (A) = LOT GRADE TYPE
- ▨ = PROPOSED DRIVEWAY LOCATION
- H.P. = HIGH POINT



CHAVANEAUX SUBDIVISION UNIT 4

SAN ANTONIO, TX

OVERALL GRADING PLAN

PLAT NO.
22-11800405

JOB NO. 984-02-01

DATE: APRIL, 2022

DRAWN: WDS CHECKED: SM

SHEET NUMBER:

3.0

TRENCH EXCAVATION SAFETY PROTECTION

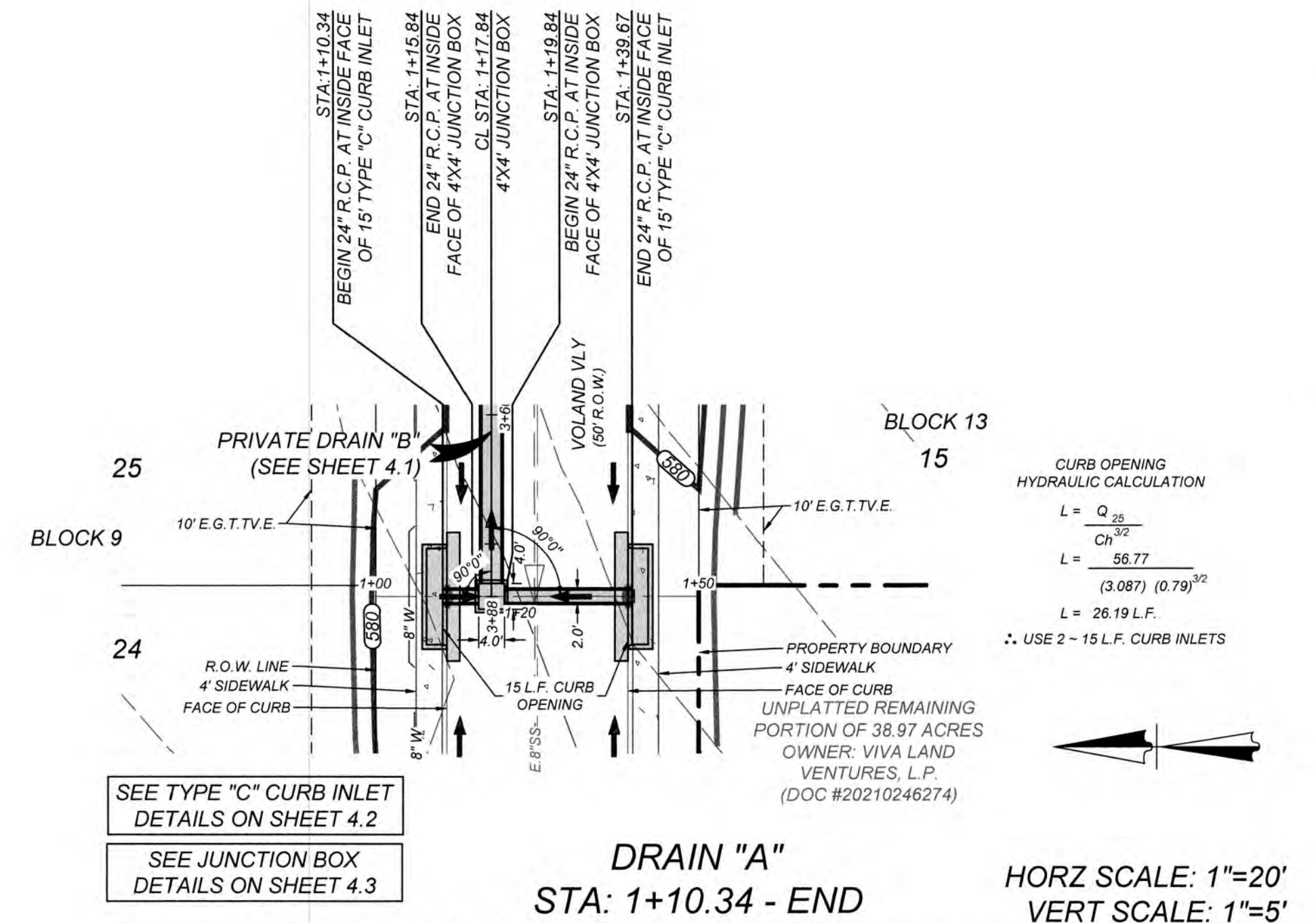
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CAUTION!!

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NOTE:

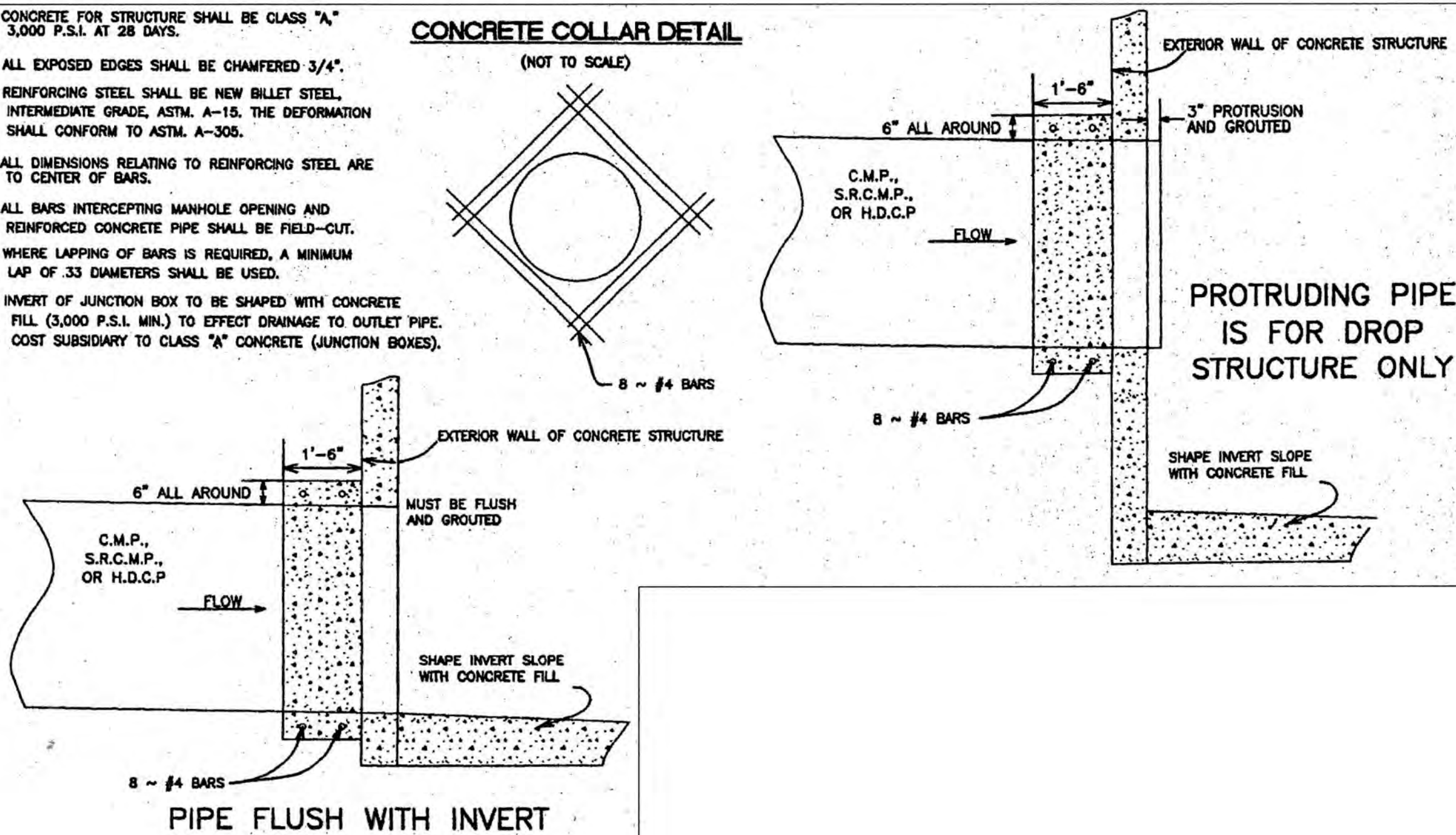
1. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 3000 PSI IN 28 DAYS.
2. ANY DISTURBED AREAS WILL BE VEGETATED BY SEEDING OR SODDING. EIGHTY-FIVE PERCENT OF THE DISTURBED SURFACE AREA MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.



1. CONCRETE FOR STRUCTURE SHALL BE CLASS "A", 3,000 P.S.I. AT 28 DAYS.
2. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4".
3. REINFORCING STEEL SHALL BE NEW BILLET STEEL, INTERMEDIATE GRADE, ASTM. A-15. THE DEFORMATION SHALL CONFORM TO ASTM. A-305.
4. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
5. ALL BARS INTERCEPTING MANHOLE OPENING AND REINFORCED CONCRETE PIPE SHALL BE FIELD-CUT.
6. WHERE LAPPING OF BARS IS REQUIRED, A MINIMUM LAP OF 33 DIAMETERS SHALL BE USED.
7. INVERT OF JUNCTION BOX TO BE SHAPED WITH CONCRETE FILL (3,000 P.S.I. MIN.) TO EFFECT DRAINAGE TO OUTLET PIPE. COST SUBSIDIARY TO CLASS "A" CONCRETE (JUNCTION BOXES).

CONCRETE COLLAR DETAIL

(NOT TO SCALE)



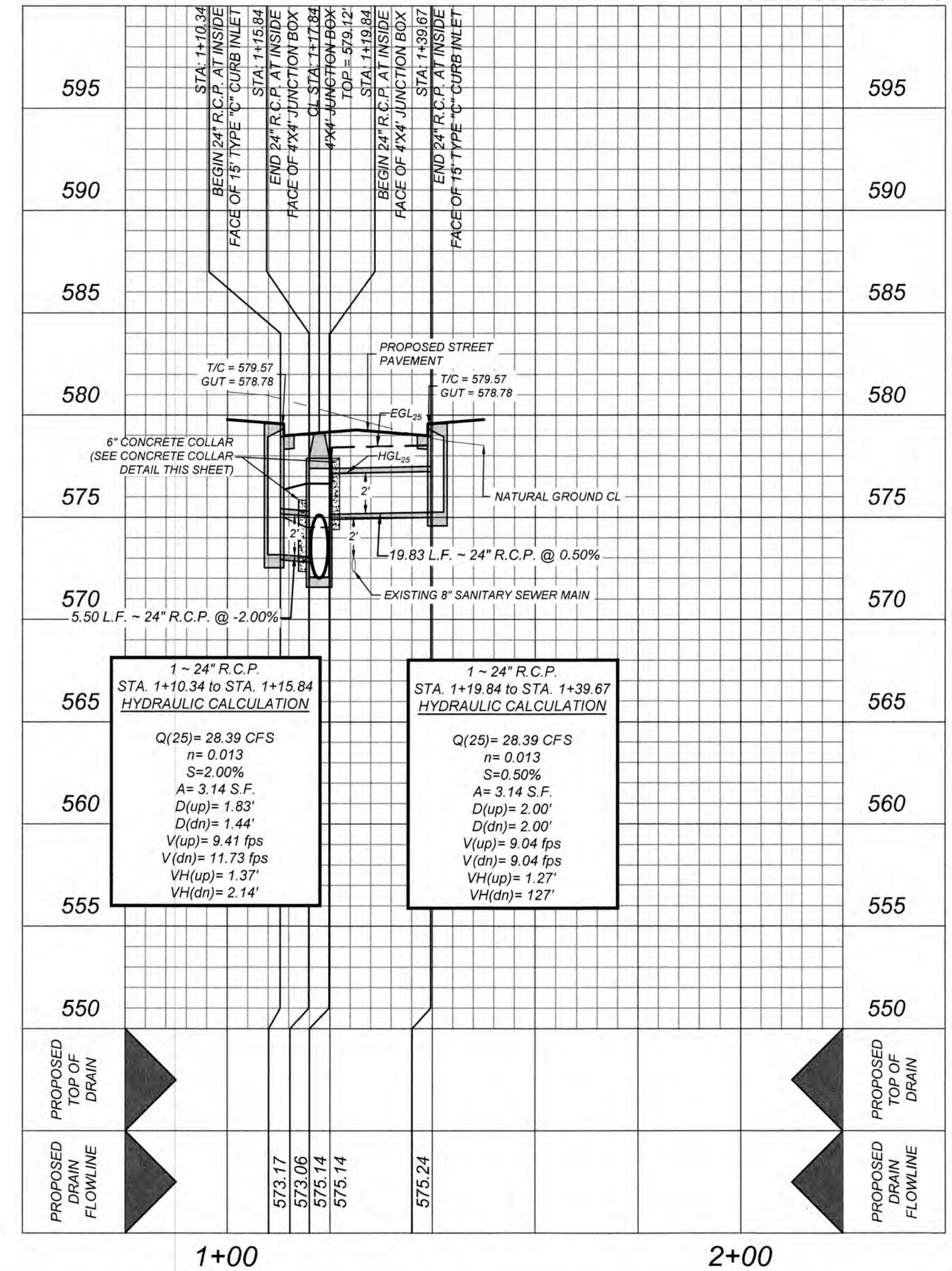
JANUARY 2006

STANDARD PLANS
CITY OF SAN ANTONIO, TEXAS
DEVELOPMENT SERVICES

CONCRETE COLLAR DETAIL

DRAWN BY	DATE	REVISIONS	SCALE	SIZE ABOVE
ANDREW VINTON, P.E.				
CHECKED BY				
SAN ANTONIO, P.E.				

SHEET 1 OF 1



CHAVANEAU SUBDIVISION UNIT 4

SAN ANTONIO, TX

DRAIN "A" PLAN & PROFILE

PLAT NO.
22-11800405

JOB NO. 984-02-01

DATE: APRIL, 2022

DRAWN: WDS CHECKED: SM

SHEET NUMBER:

4.0

TRENCH EXCAVATION SAFETY PROTECTION

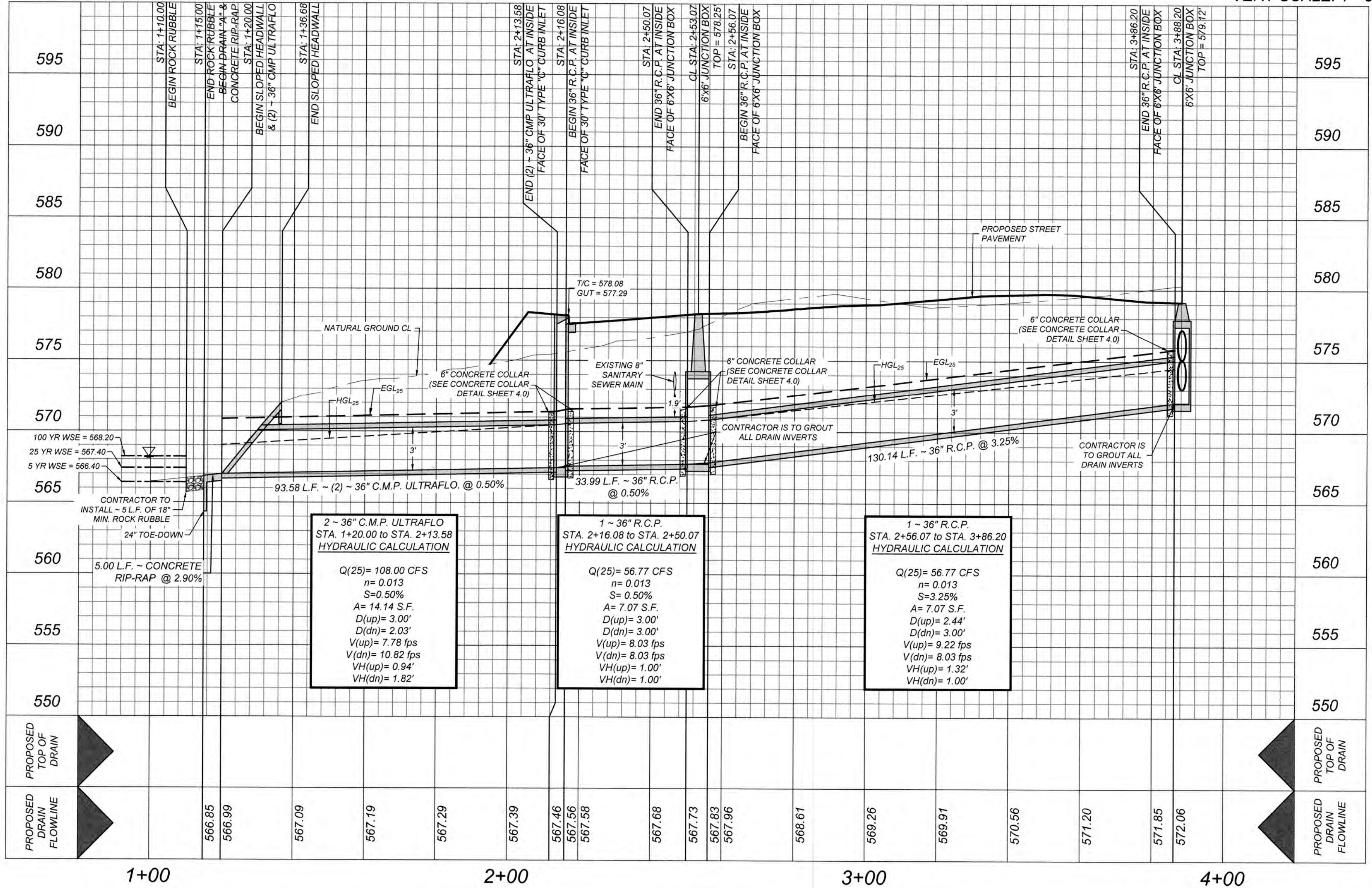
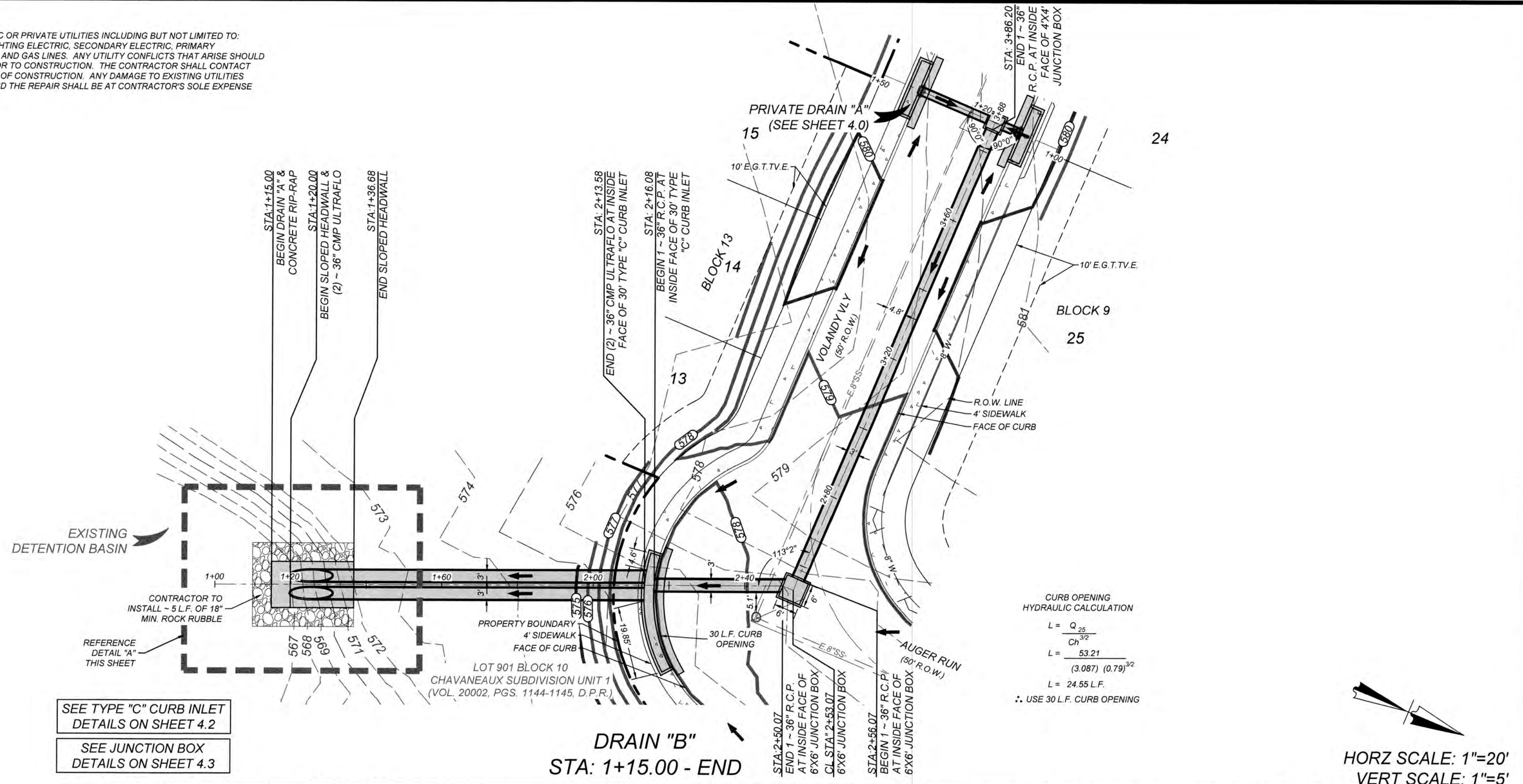
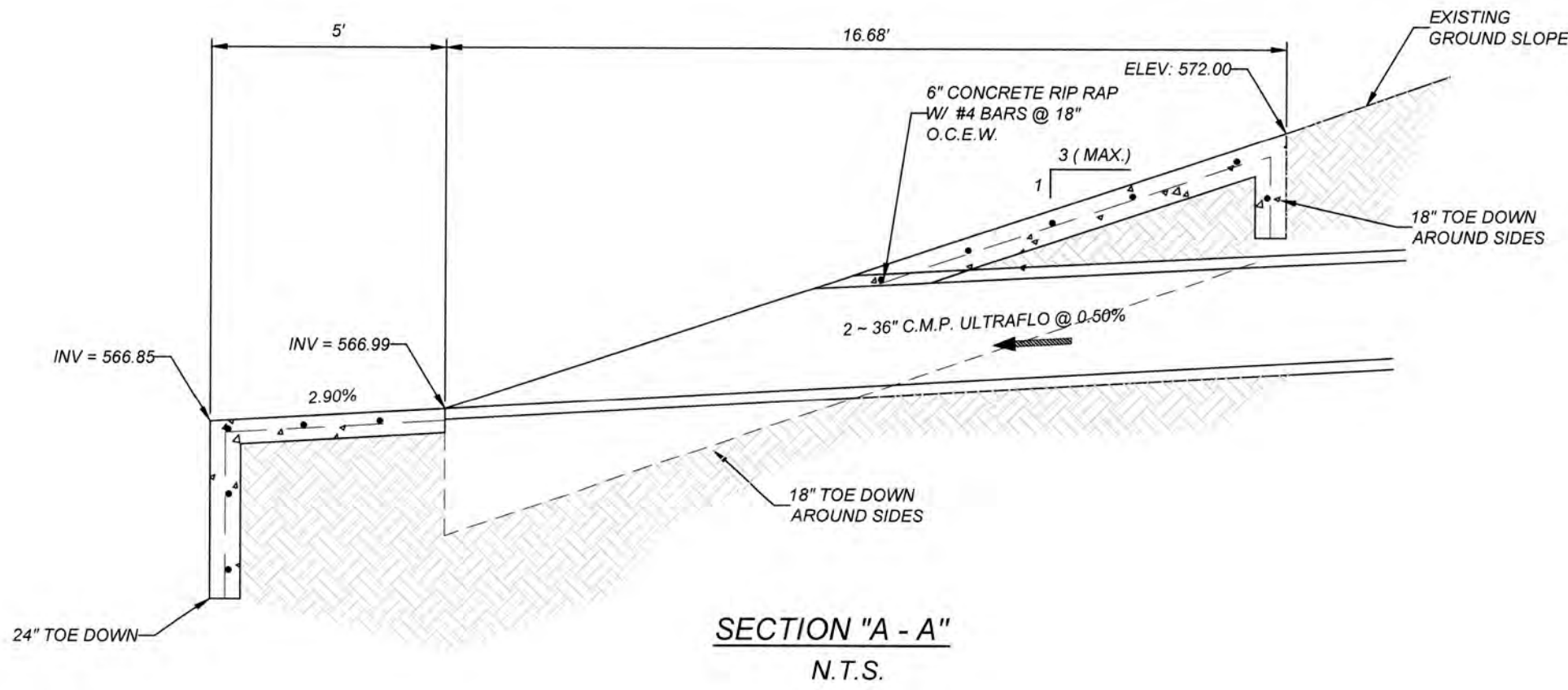
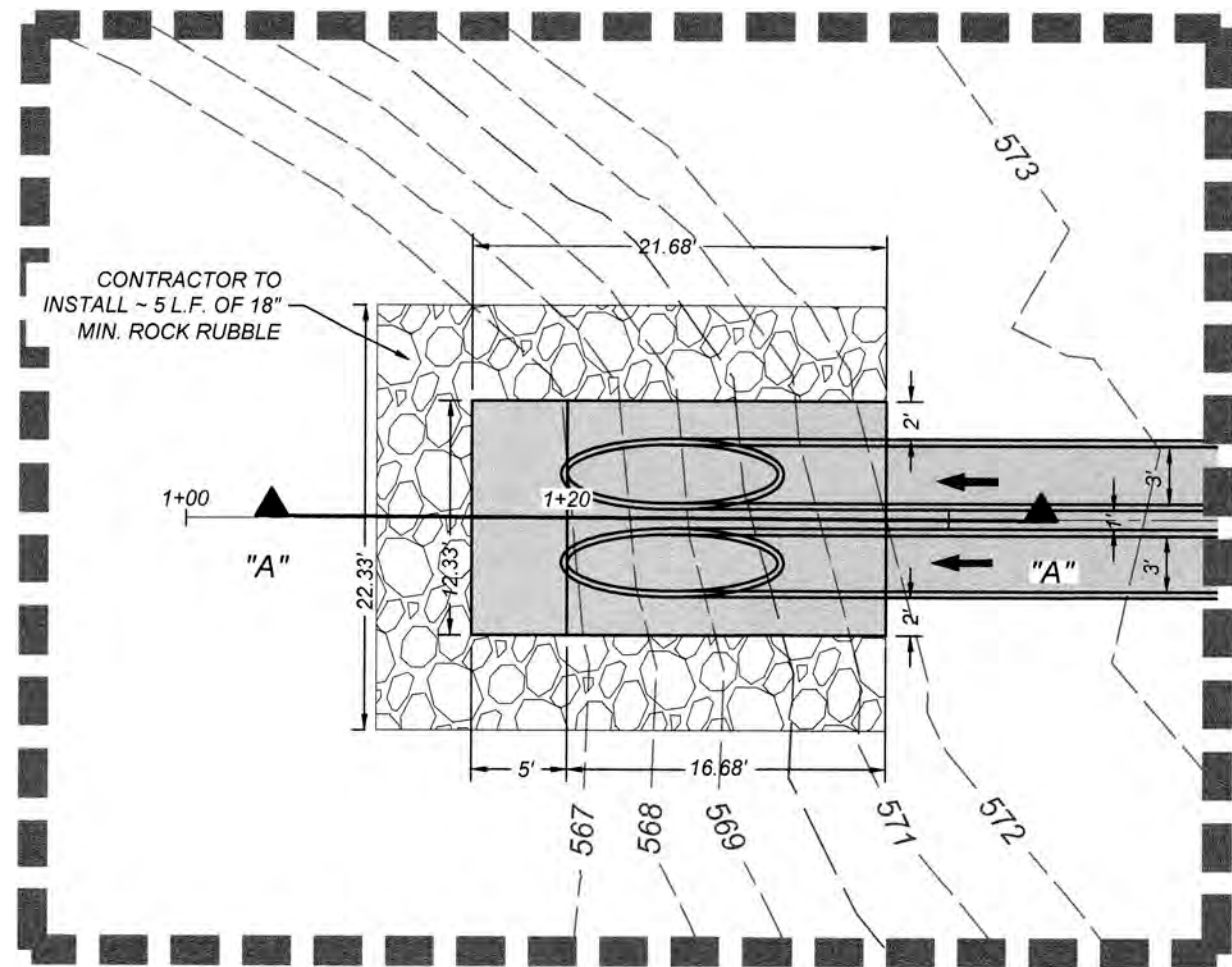
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CHAVANEUX SUBDIVISION UNIT 4
SAN ANTONIO, TX

DRAIN "A" PLAN & PROFILE

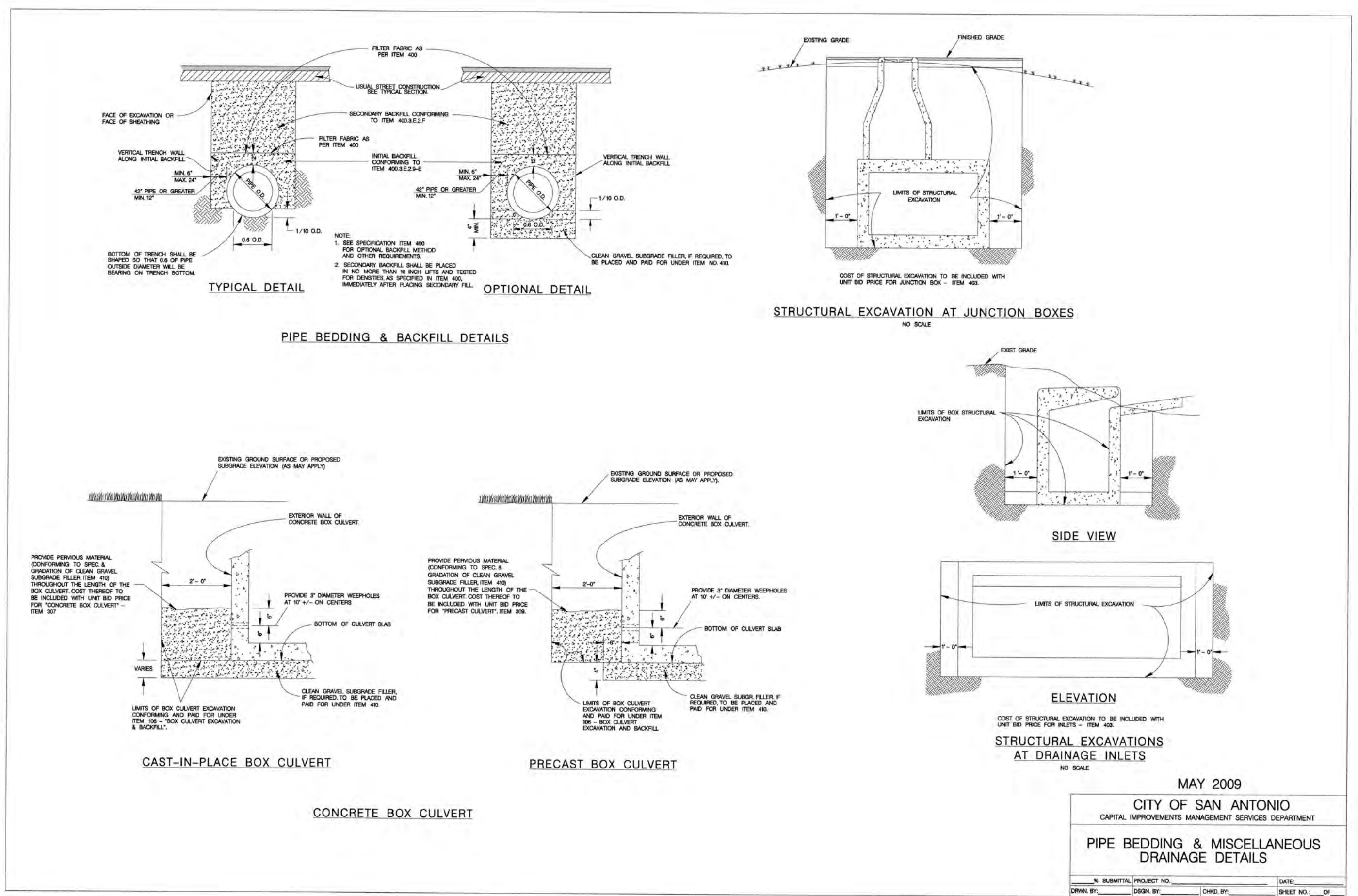
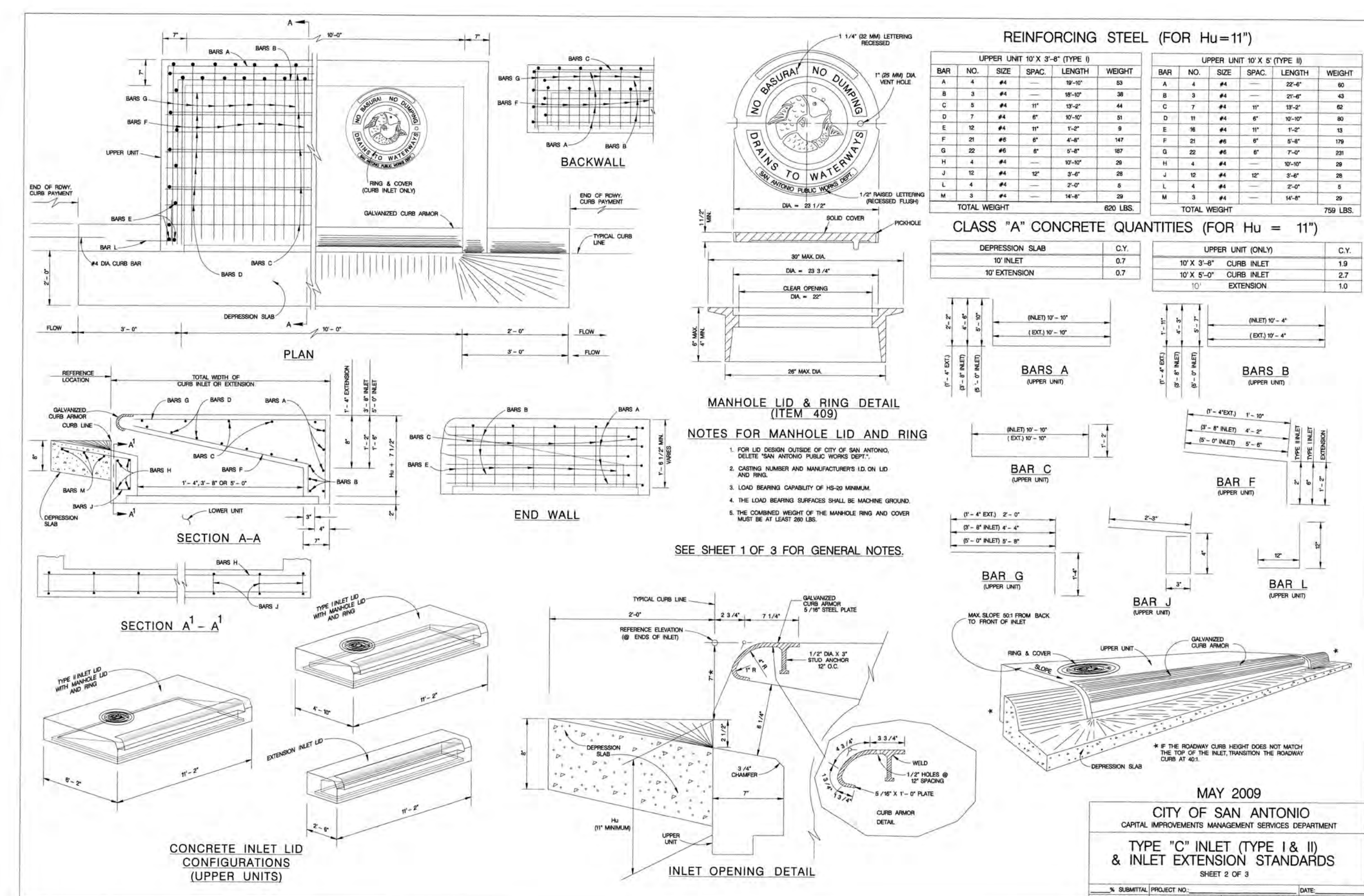
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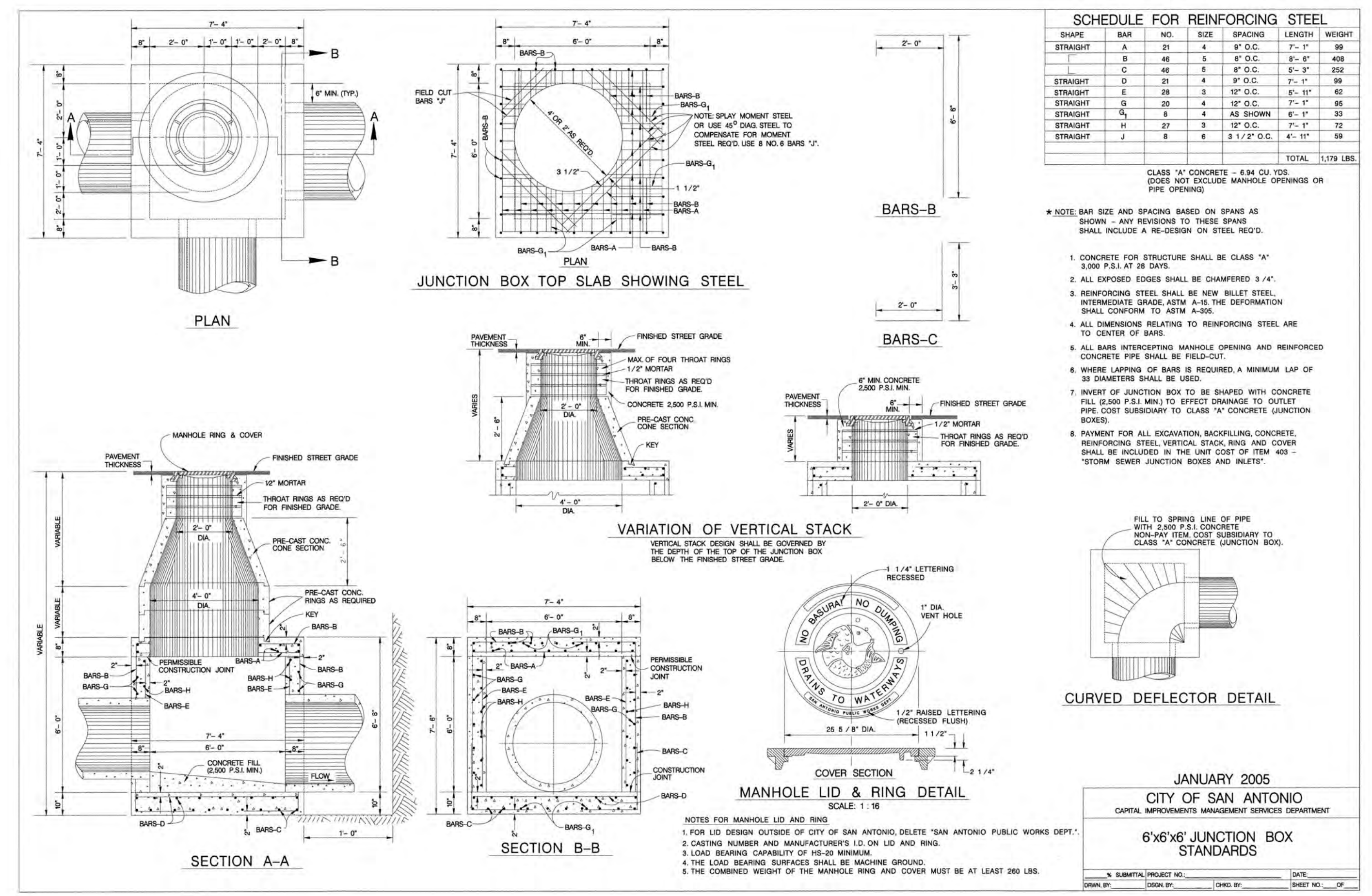
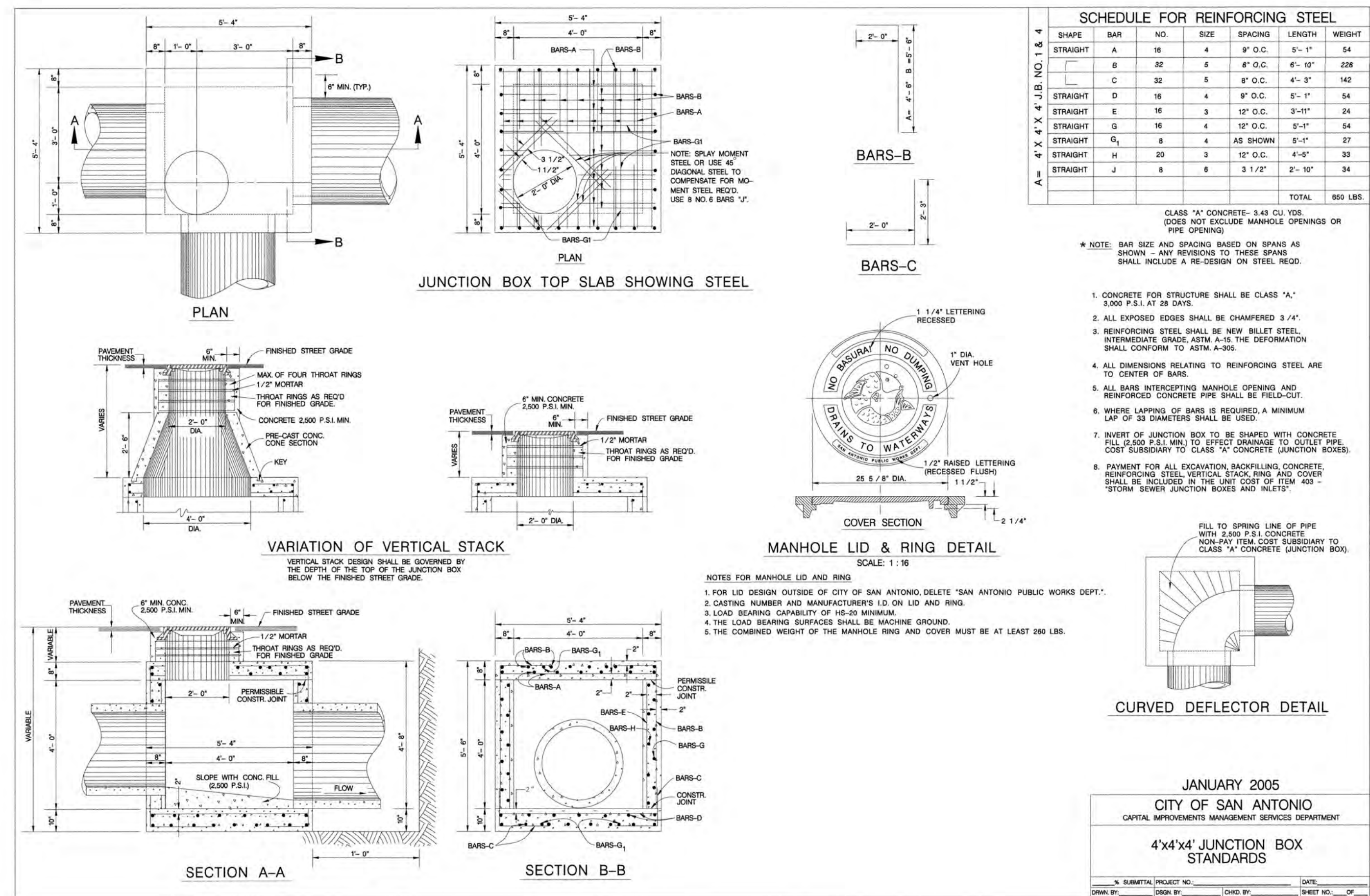
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K&W
ENGINEERS & SURVEYING
3421 Research Drive, Suite 200, San Antonio, TX 78231
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TPEP Firm #: 9513 • TPEP Firm #: 10122600

ISSUE DATE
REVISIONS







TRENCH EXCAVATION SAFETY PROTECTION

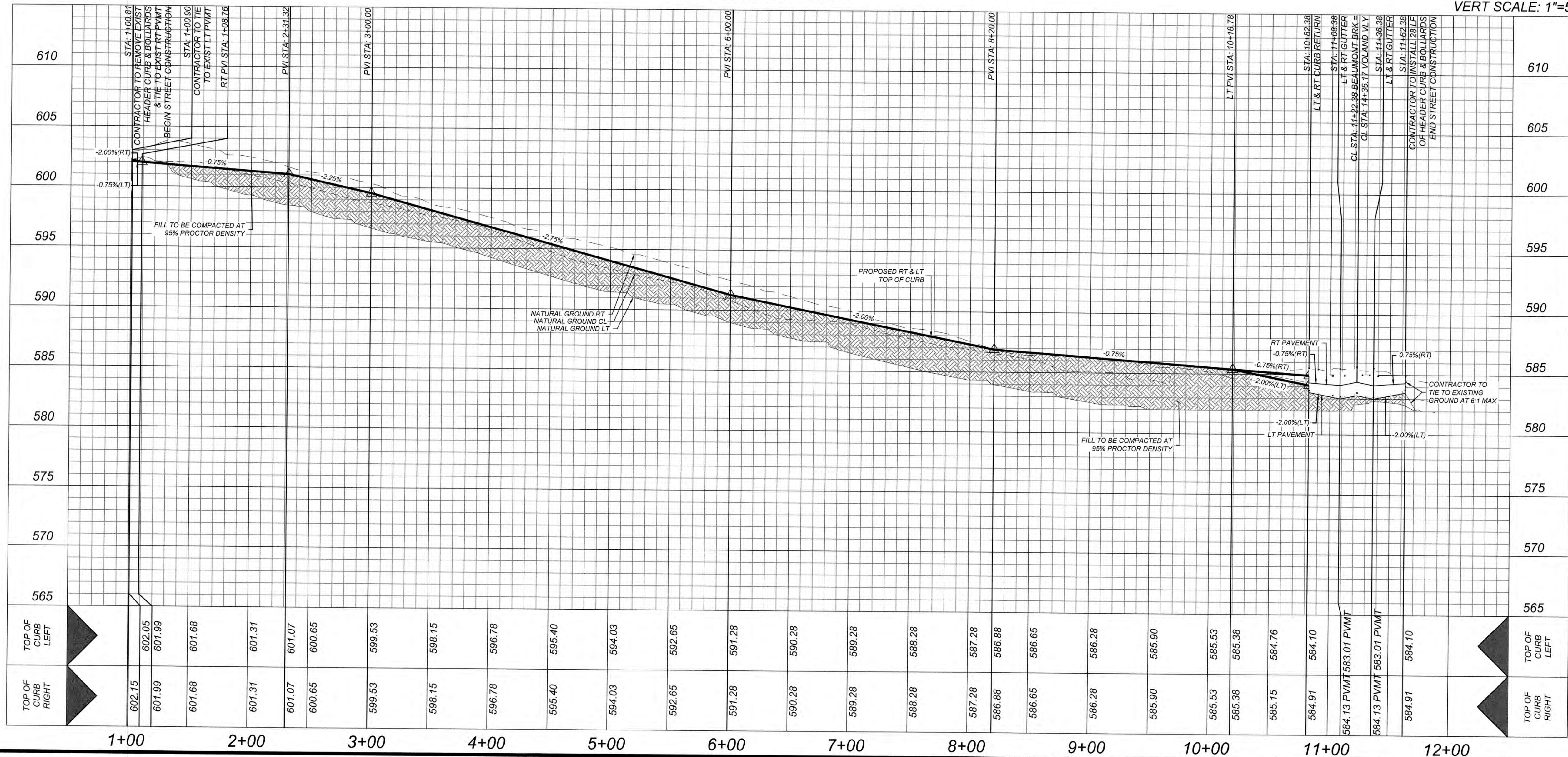
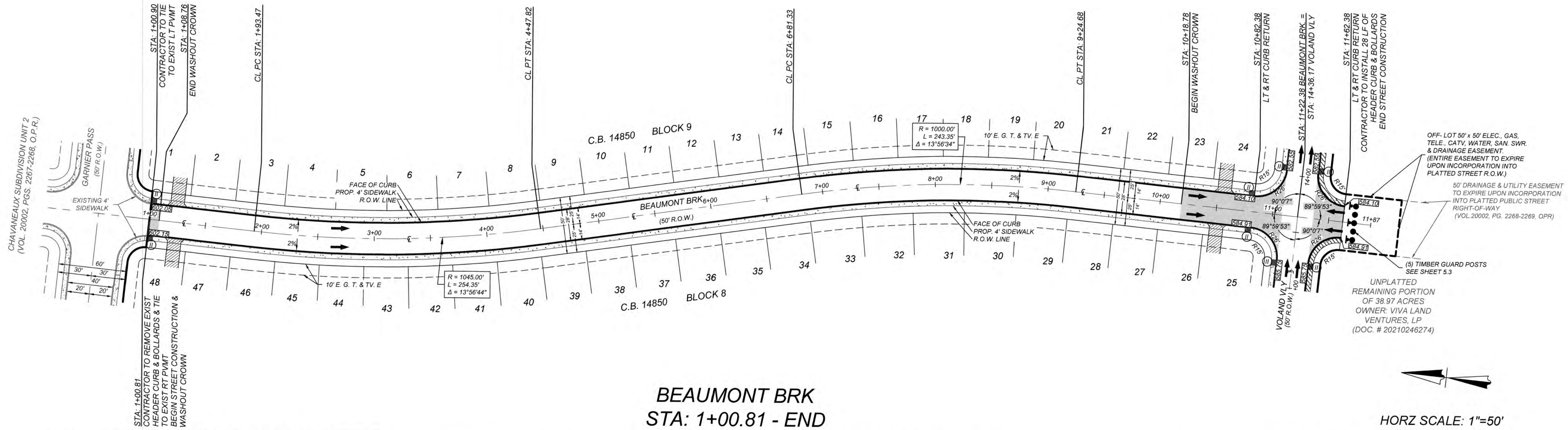
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LEGEND

- R.O.W. = RIGHT OF WAY
G.E.T.V.E. = GAS, ELECTRIC, TELEPHONE & CABLE EASEMENT
= FLOW ARROW
= WASHOUT CROWN
= WHEELCHAIR RAMP TYPE III
SEE SHEET ----
= WHEELCHAIR RAMP TYPE II
SEE SHEET ----
- = SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
= SIDEWALK TO BE BUILT AT THE TIME OF HOME CONSTRUCTION
= PROPOSED DRIVEWAY LOCATION
H.P. = HIGH POINT
L.P. = LOW POINT
= PROPOSED TOP OF CURB ELEVATION



CHAVANEUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
BEAUMONT BRK PLAN & PROFILE

PLAT NO.
22-11800405

JOB NO. 984-02-01

DATE: APRIL, 2022

DRAWN: WDS CHECKED: SM

SHEET NUMBER:

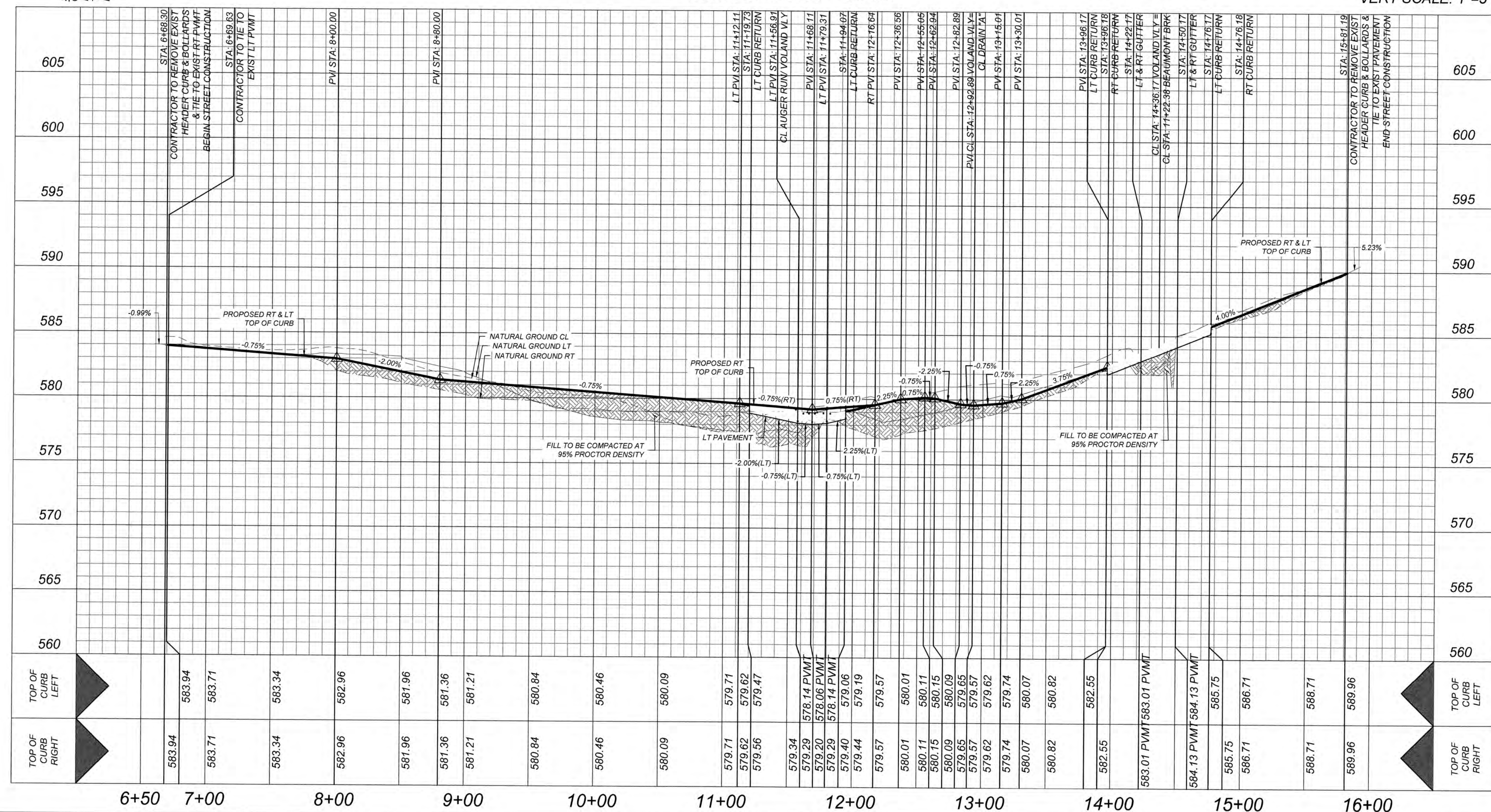
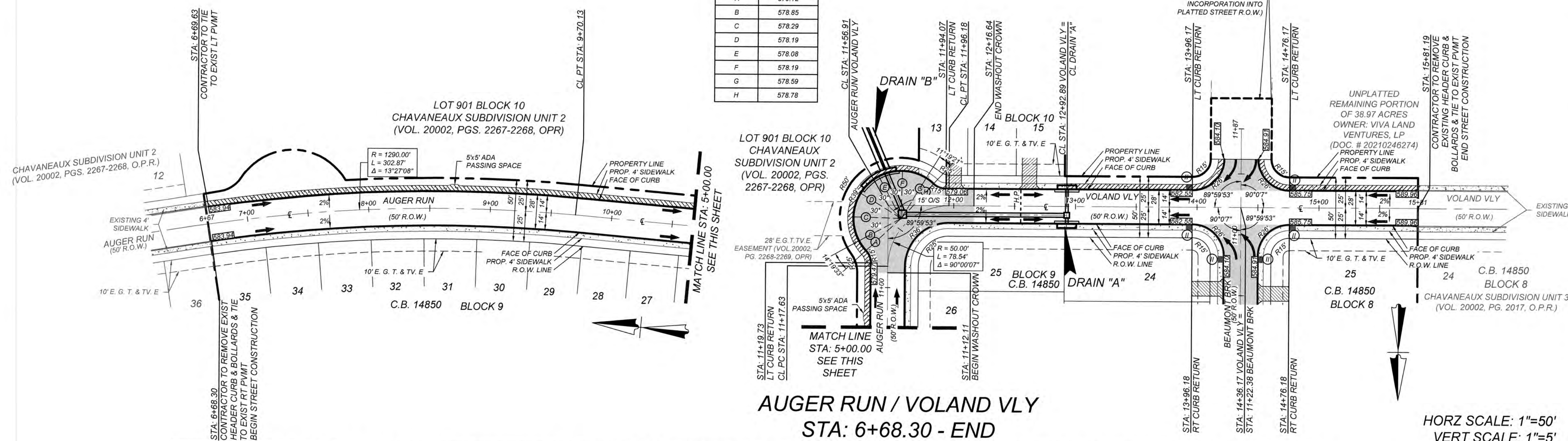
5.0

CAUTION!!!

THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRIC, PRIVATE AND PUBLIC DRAINAGE, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IMMEDIATELY AND PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT 1-800-762-7468 TO REQUEST A MINUTE TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

R.O.W.	=	RIGHT OF WAY		=	SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
G.E.T.T.V.E.	=	GAS, ELECTRIC, TELEPHONE & CABLE EASEMENT		=	SIDEWALK TO BE BUILT AT THE TIME OF HOME CONSTRUCTION
→	=	FLOW ARROW		=	PROPOSED DRIVEWAY LOCATION
	=	WASHOUT CROWN		=	PROPOSED DRIVEWAY LOCATION
Ⓘ	=	WHEELCHAIR RAMP TYPE III SEE SHEET ----	H.P.	=	HIGH POINT
Ⓙ	=	WHEELCHAIR RAMP TYPE II SEE SHEET ----	L.P.	=	LOW POINT
				=	PROPOSED TOP OF CURB ELEVATION

KNUCKLESAC ELEVATIONS	
STATION	TOP OF CURB ELEVATION
A	579.12
B	578.85
C	578.29
D	578.19
E	578.08
F	578.19
G	578.59
H	578.78



CHAVANEAU SUBDIVISION UNIT 4
SAN ANTONIO, TX
AUGER RUN, VOLAND VLY PLAN AND PROFILE

PLAT NO.
22-11800405

JOB NO. 984-02-01

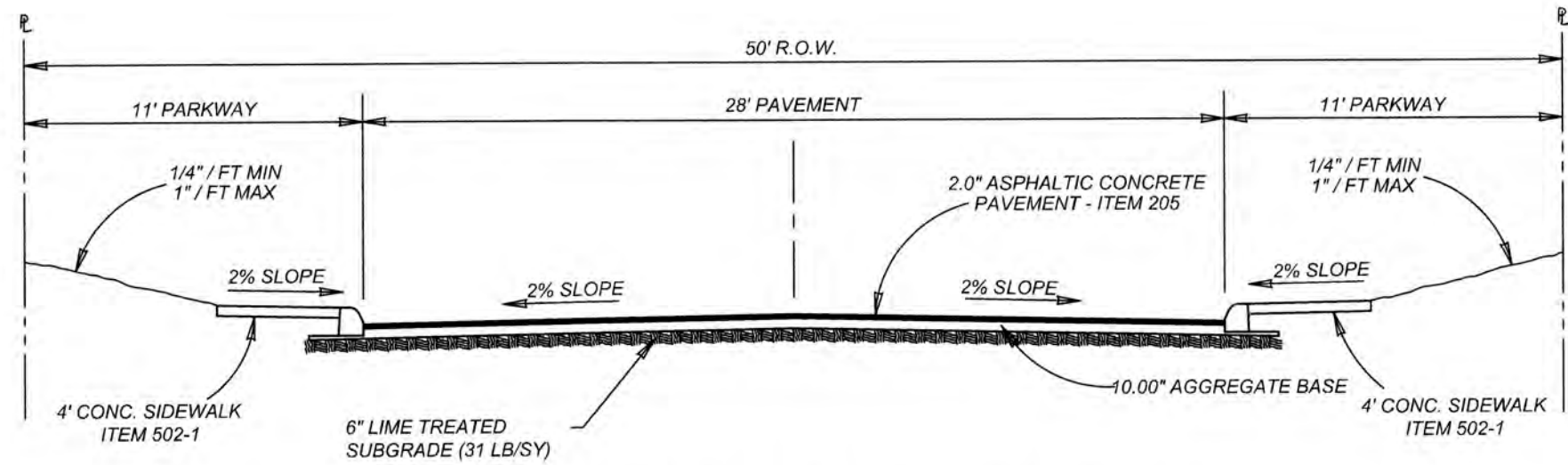
DATE: APRIL, 2022

DRAWN: WDS CHECKED: SM

SHEET NUMBER

5.1

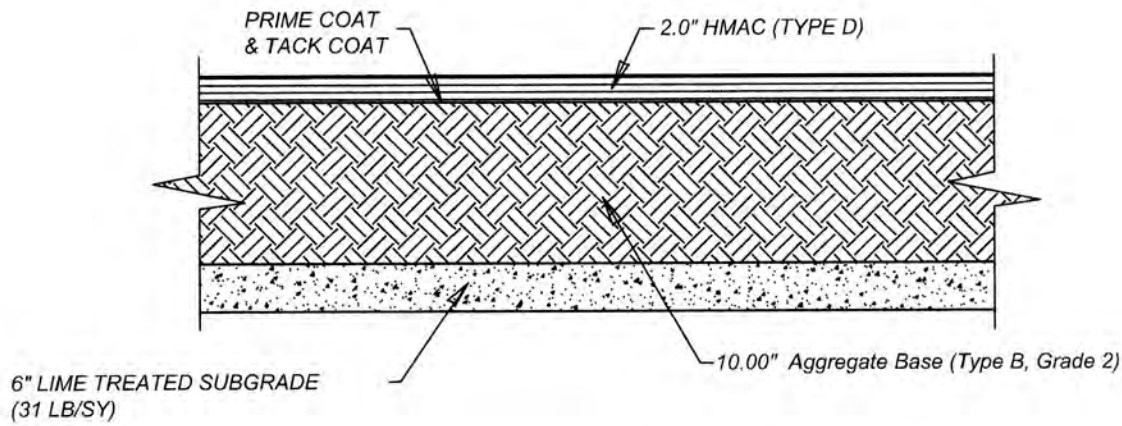
THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.



TYPICAL LOCAL "A" STREET SECTION

NOT TO SCALE
AUGER RUN - VOLAND VLY STA: 6+88.30 TO END
BEAUMONT BRK STA: 1+00.81 TO END

Pavement Section
2.0" HMAc Type "D"
10.00" Aggregate Base (Type A, Grade 1 OR 2)
6.0" Lime Treated Subgrade (31 LB/SY)
Total: 18.00"
Structural No: 2.76
CBR: 2.5



ASPHALT PAVEMENT DETAIL

NOT TO SCALE
DETAIL FOR ALL LOCAL TYPE A

- NOTES:
- PAVEMENT DESIGN THICKNESS BASED ON GEOTECHNICAL REPORT BY INTEC, LLC, PROJECT NO. S241182, DATED AUGUST 29, 2024.
 - REFERENCE PROJECT GEOTECHNICAL REPORT AND PROJECT SPECIFICATION FOR ADDITIONAL REQUIREMENTS AND ALTERNATE PAVEMENT SECTIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING MATERIAL TESTING. TESTING TO BE PAID BY OWNER.
 - CONTRACTOR MAY LEAVE VERTICAL CUT BANKS AT R.O.W. LINE AND MEDIANS PROVIDED PROJECT GEOTECHNICAL ENGINEER DETERMINES ROCK IS COMPETENT TO STAND ON ITS OWN.

GENERAL NOTES:

- THE SUBGRADE SOILS SHOULD BE TESTED FOR SOLUBLE SULPHATE CONTENT PRIOR TO INSTALLATION OF THE LIME OR CEMENT.
- THE APPLICATION RATE OF LIME SHALL BE DETERMINED BASED ON LABORATORY TESTING AND SHALL BE THE LOWEST PERCENTAGE OF LIME THAT PROVIDES AN UNCONFINED COMPRESSIVE STRENGTH (UCS) AT 7-DAYS OF AT LEAST 160 PSI IN ACCORDANCE WITH ASTM D5102 STANDARD TEST METHODS FOR UNCONFINED COMPRESSIVE STRENGTH OF COMPACTED SOIL-LIME MIXTURES (PROCEDURE B) (IN ADDITION, CURING SHOULD OCCUR FOR 7 DAYS AT 40° AND SPECIMENS SHOULD BE SUBJECT TO 24-HR CAPILLARY SOAK PRIOR TO TESTING).

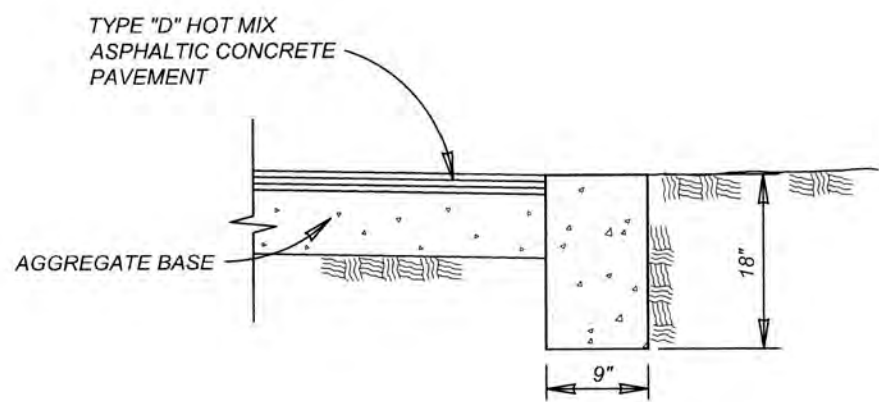
FOR CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED IN THE FIELD:

- AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2 - 3) DAYS. MAINTAIN MOISTURE DURING MELLOWING;
- AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE NON-SLAKING AGGREGATES RETAINED ON THE 3/4 INCH SIEVE FROM THE SAMPLE):

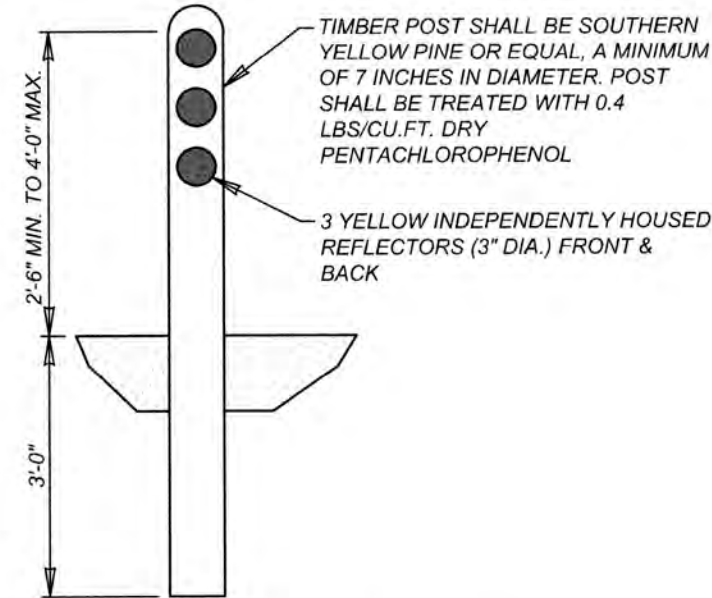
MINIMUM PASSING 1 1/2" SIEVE	100
MINIMUM PASSING 3/4" SIEVE	85
MINIMUM PASSING NO. 4 SIEVE	60
- SAMPLE SOIL-LIME MIXTURE FOR DETERMINATION OF MAXIMUM DRY DENSITY (MDD), IN THE LABORATORY, MOLD SPECIMENS TO 95% OF MDD AT OPTIMUM MOISTURE CONTENT AND VERIFY UCS TO BE AT LEAST 160 PSI IN ACCORDANCE WITH PROCEDURE OUTLINED ABOVE FOR MIXTURE DESIGN.
- COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED)
- CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
- VERIFY DEPTH OF LIME TREATED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN ± 1.0 INCH.

NOTES:

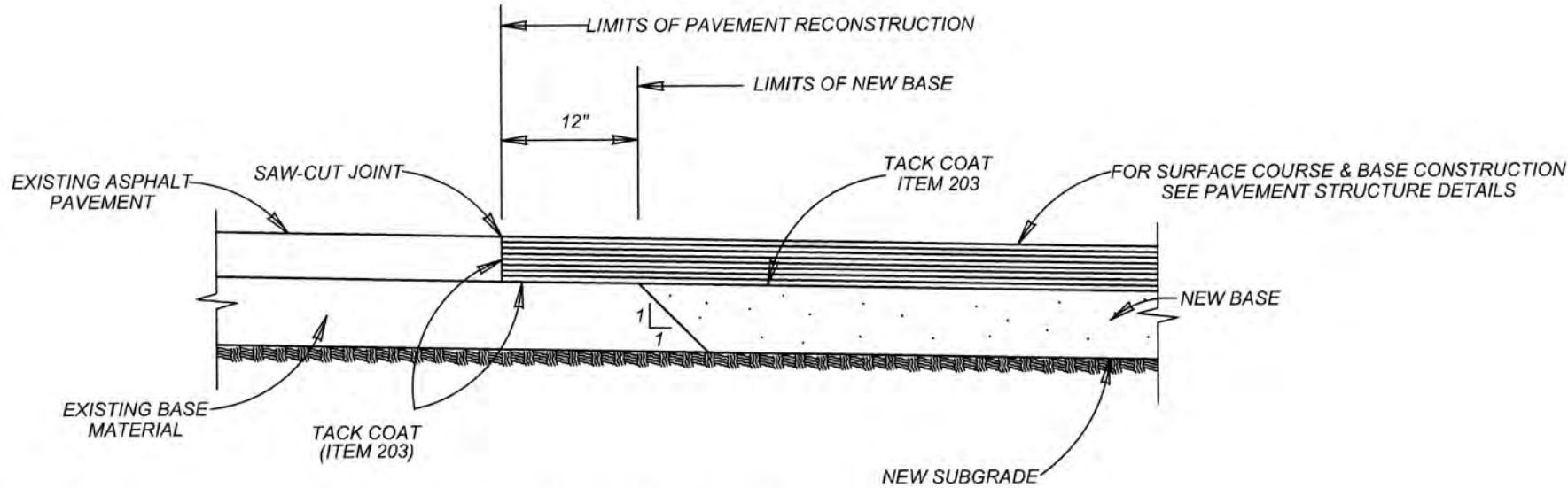
- ANY FILL USED TO RAISE THE SUBGRADE:
- SHOULD NOT CONTAIN ANY DELETERIOUS MATERIAL.
 - SHOULD HAVE A CBR VALUE OF 2.5 OR GREATER
 - SHOULD HAVE THE "LIME PERCENTAGE/APPLICATION RATE" RE-RUN
 - PRIOR TO INSTALLATION
 - PI SHOULD BE LESS THAN 45



HEADER CURB
ITEM 500 ON SAND OR GRAVEL
NOT TO SCALE

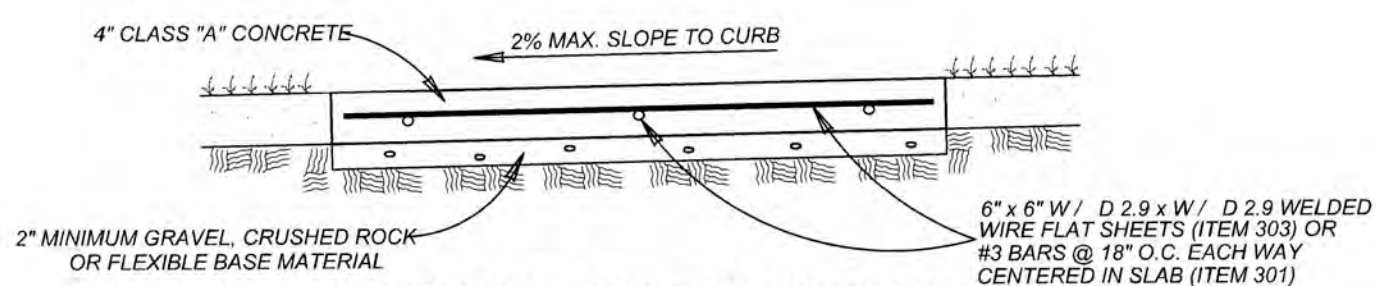


TIMBER GUARD POST DETAIL
NOT TO SCALE



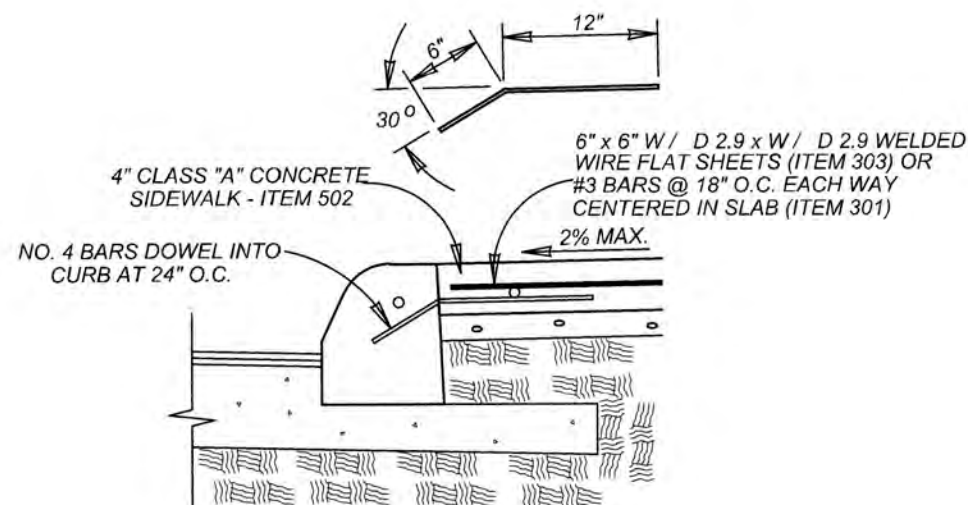
PAVEMENT JUNCTION DETAILS

NOT TO SCALE



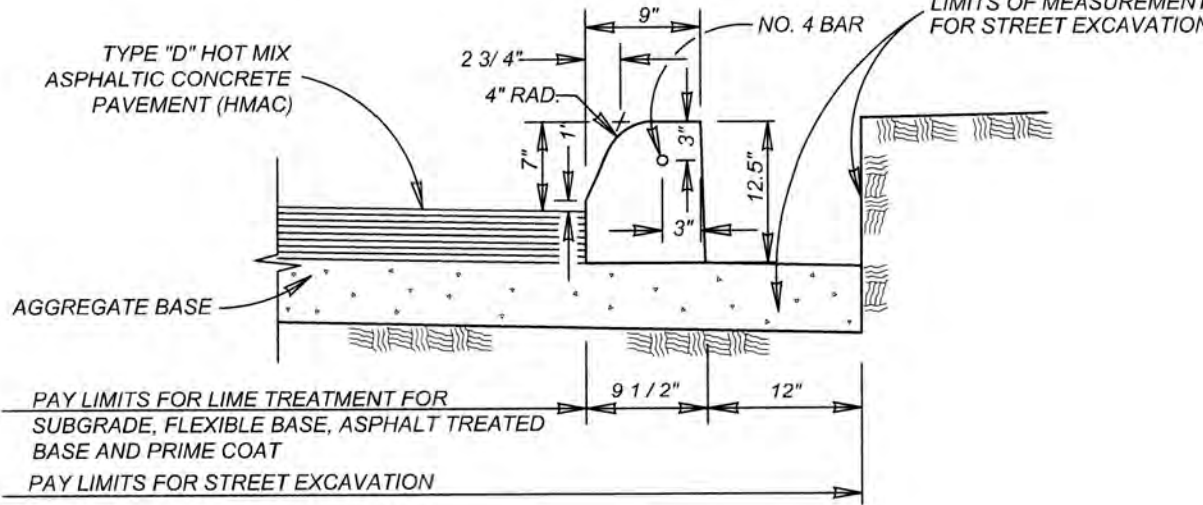
CONCRETE SIDEWALK SECTION

ITEM 502
NOT TO SCALE



**CONCRETE SIDEWALK
ABUTTING CURB SECTION**

ITEM 502
NOT TO SCALE



CONCRETE CURB

ITEM 500 ON ASPHALT TREATED BASE OR ASPHALTIC CONCRETE BASE
NOT TO SCALE

CHAVANEAUX SUBDIVISION UNIT 4

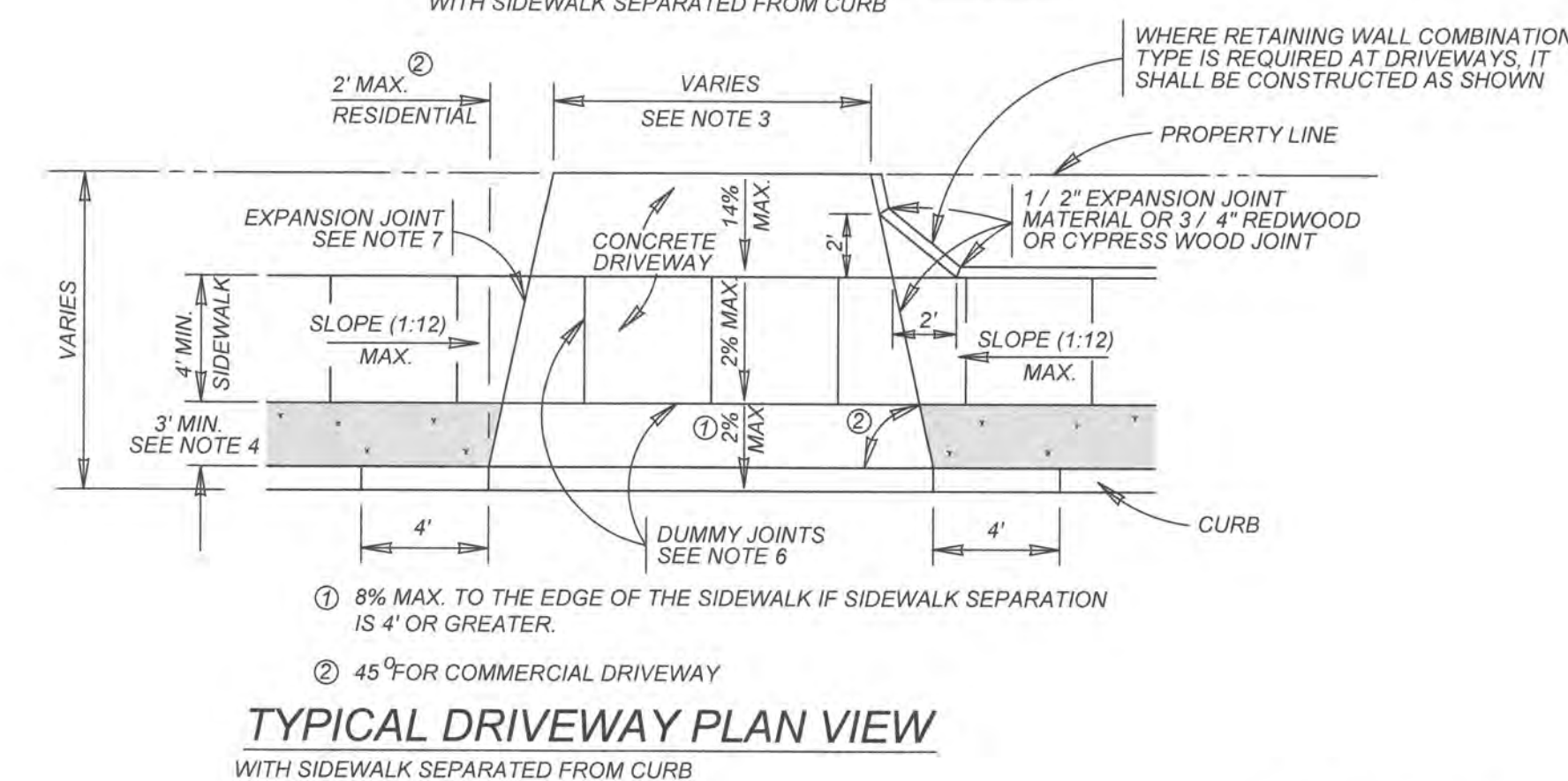
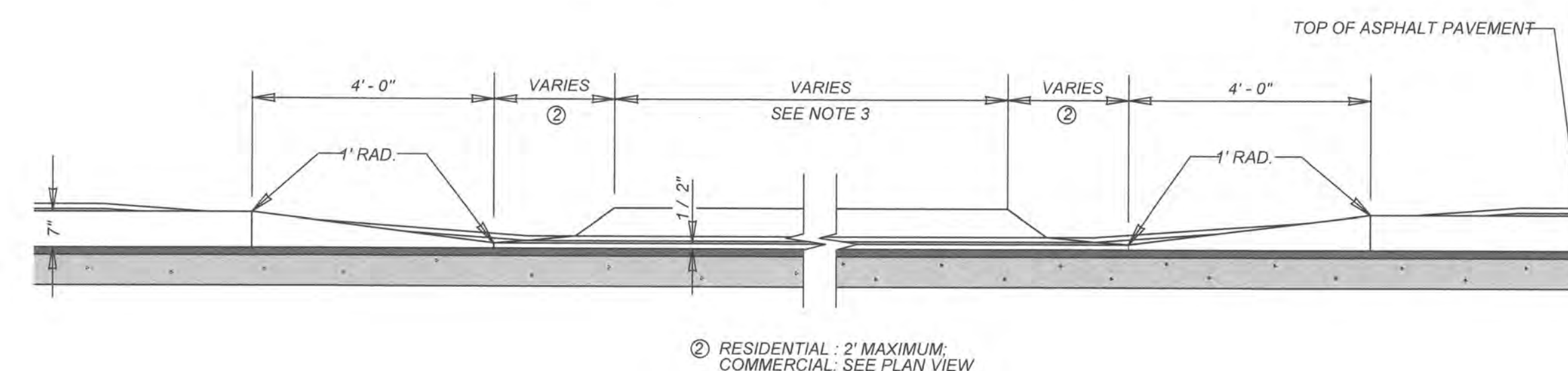
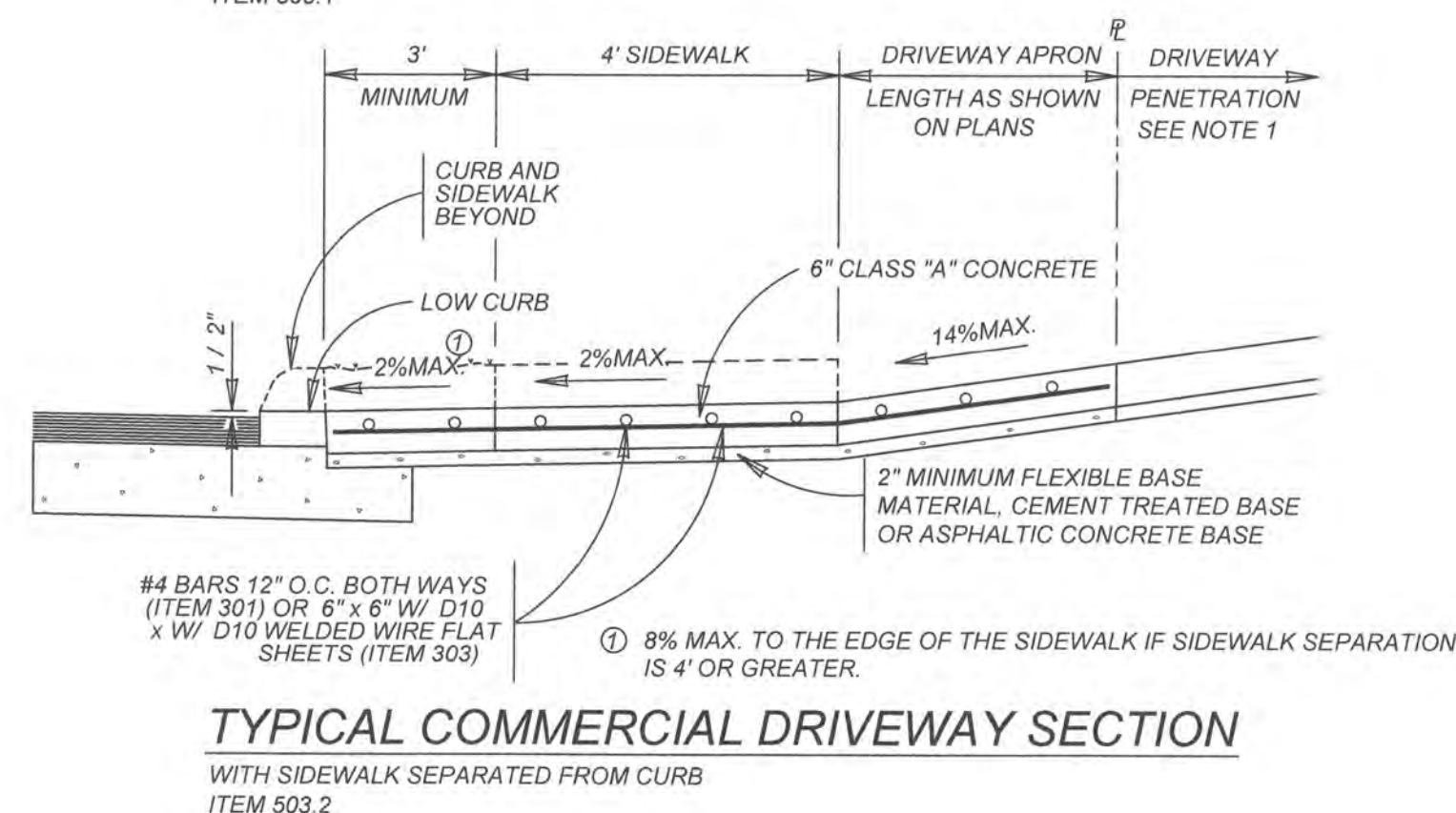
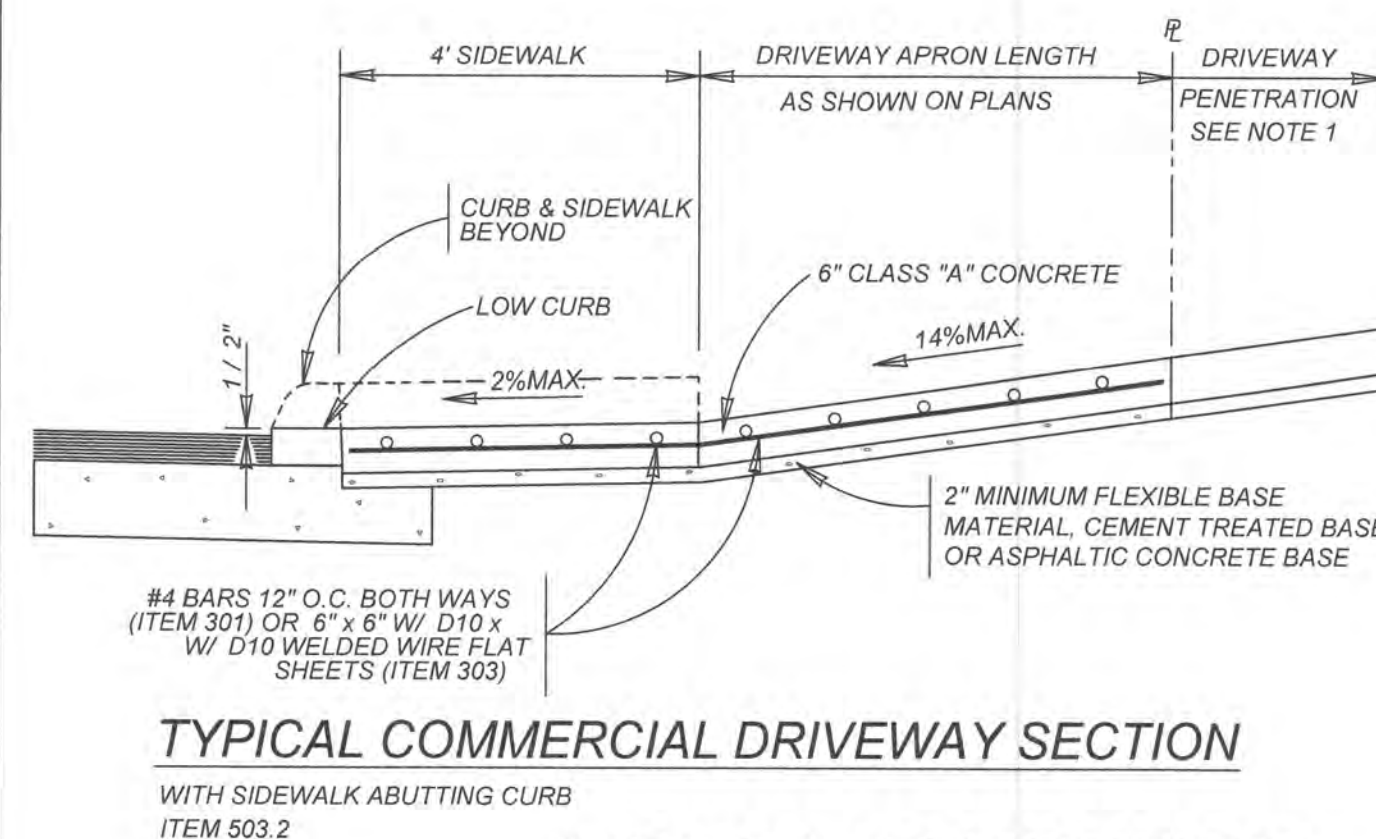
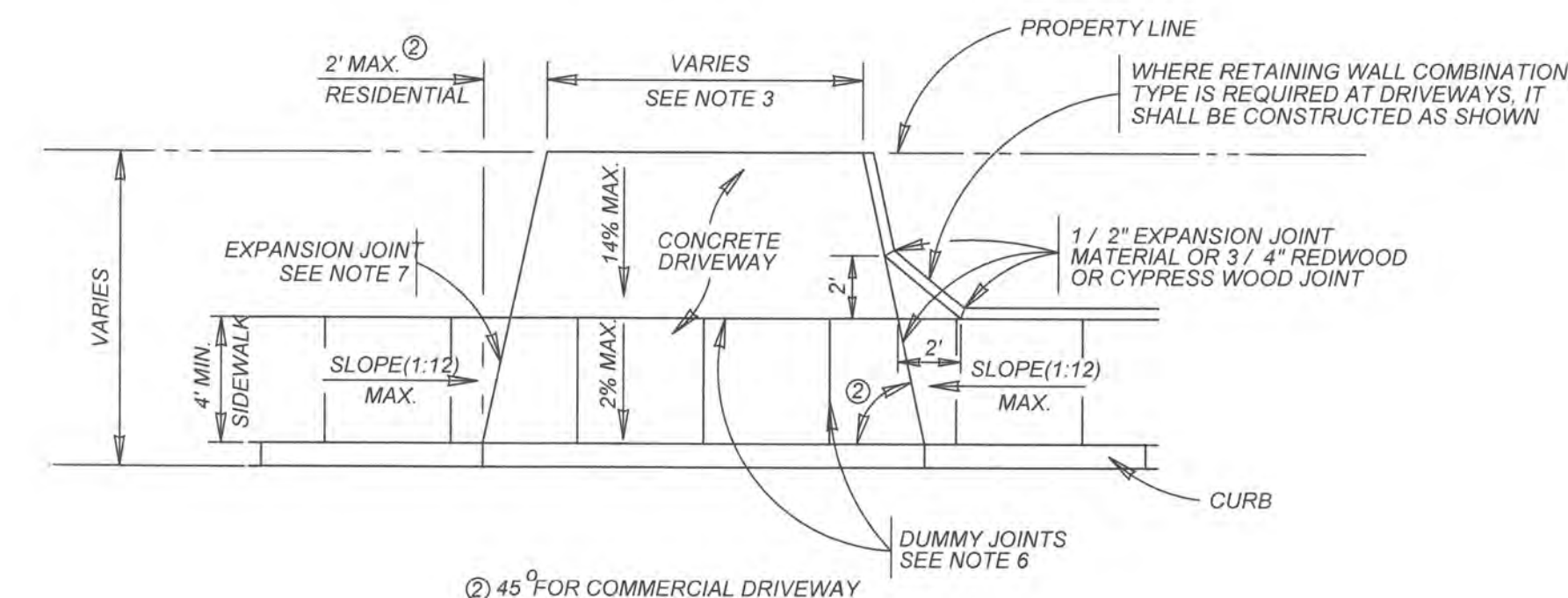
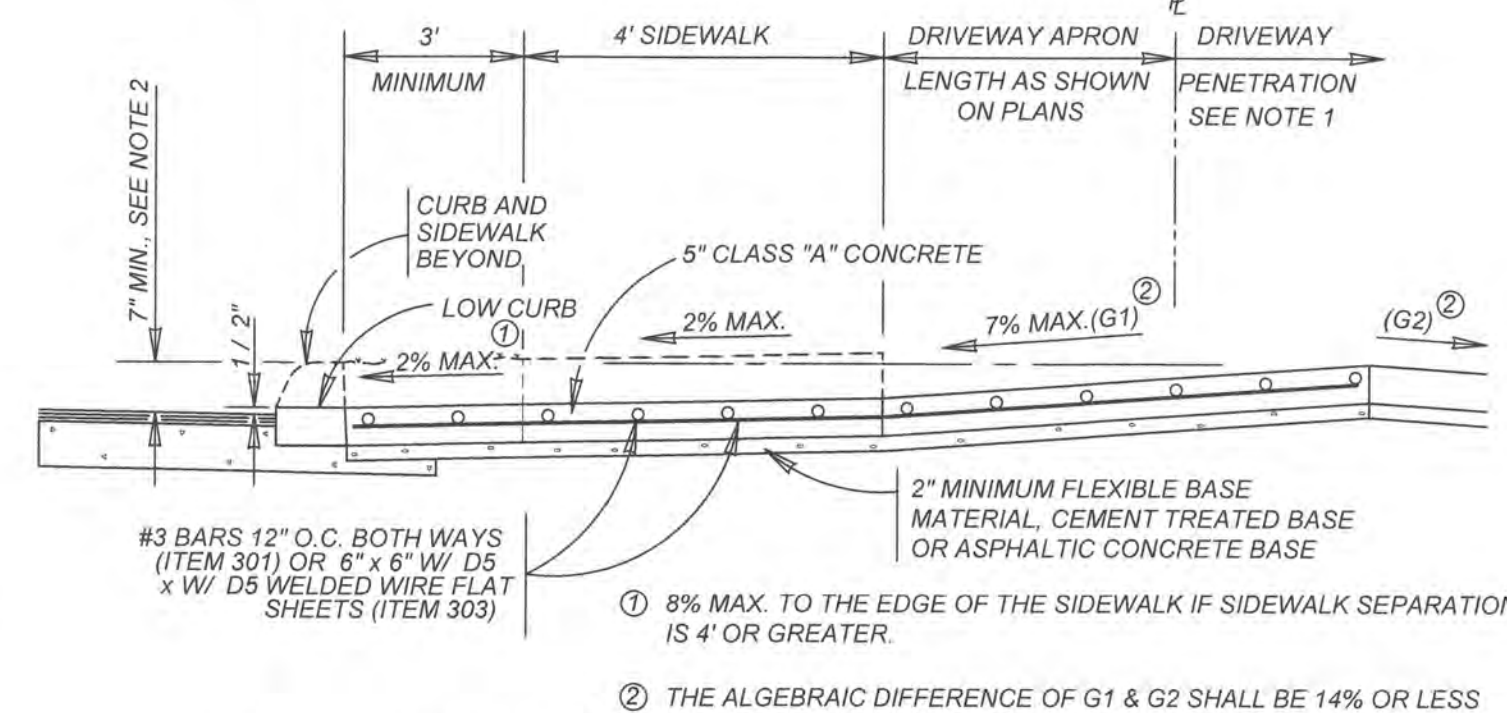
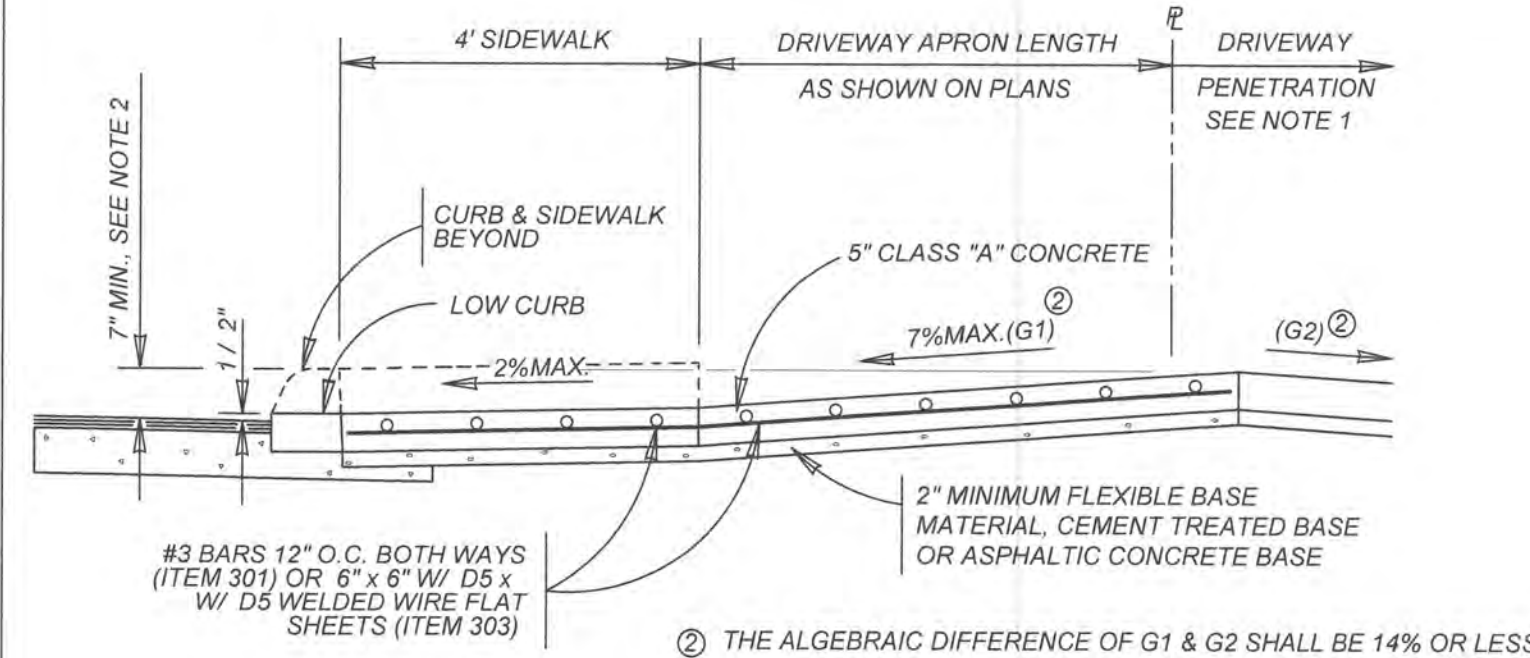
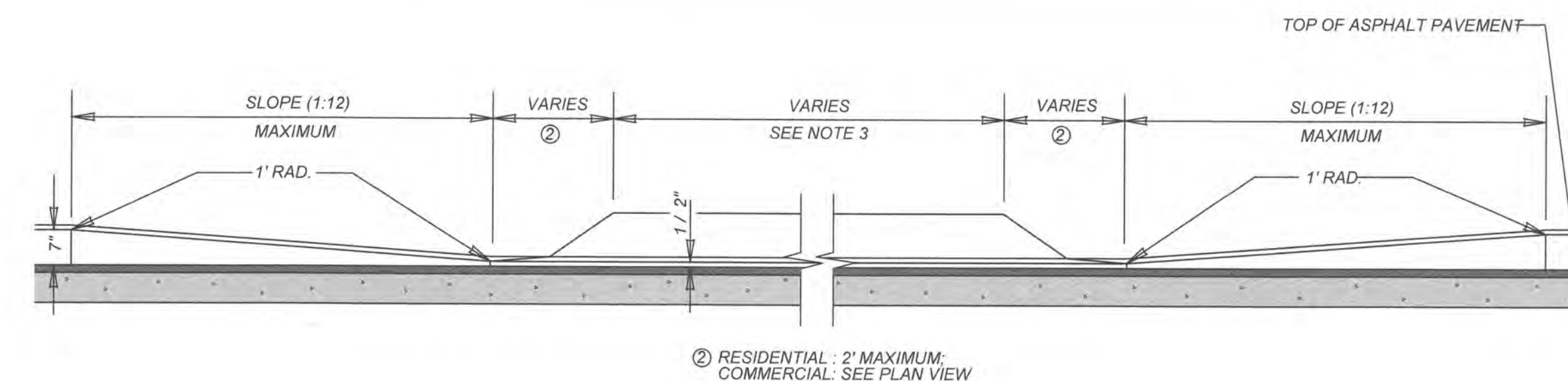
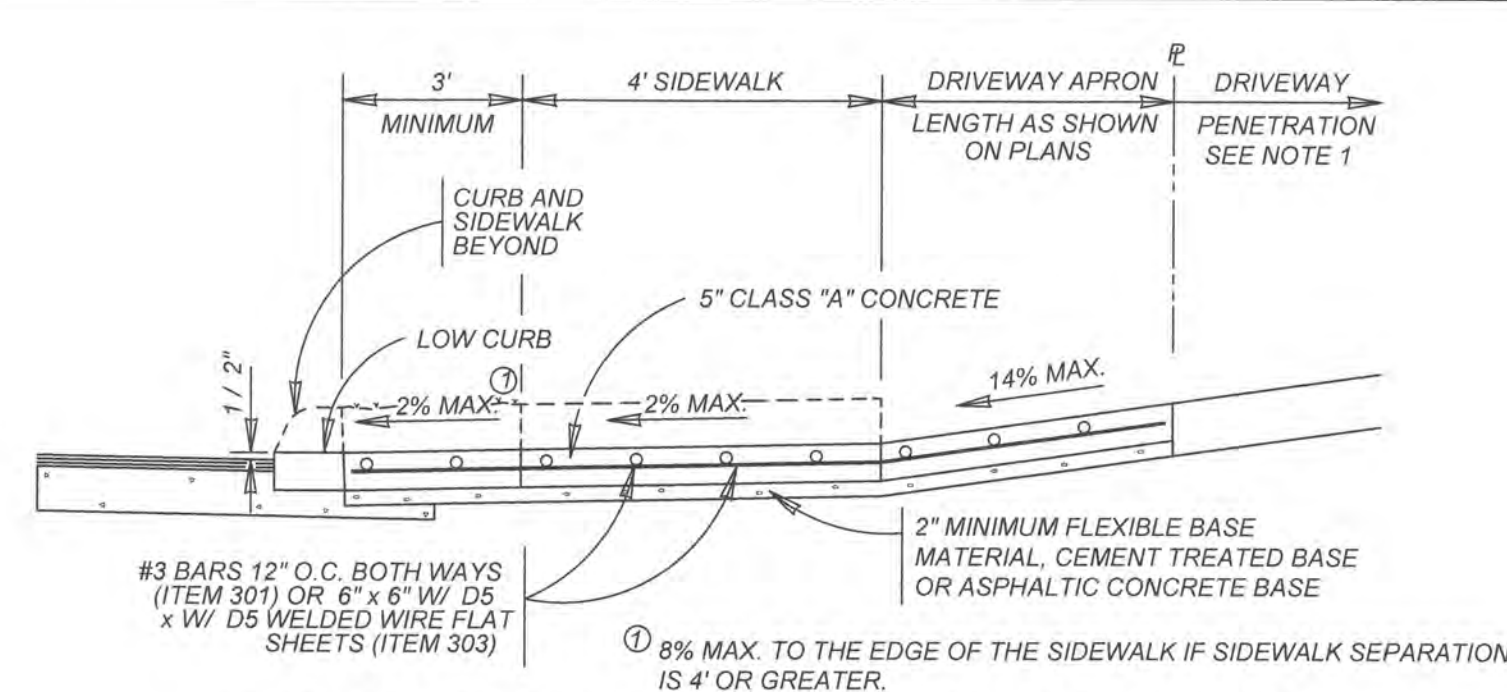
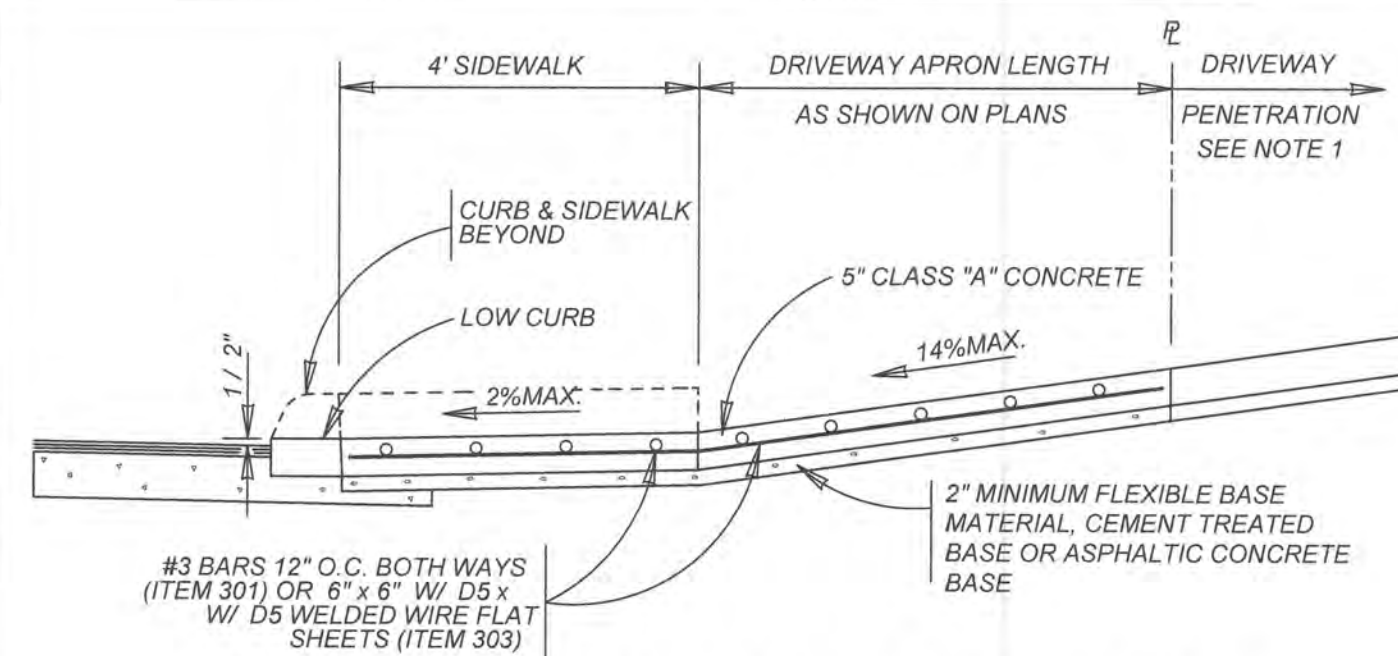
SAN ANTONIO, TX

TYPICAL STREET DETAILS



PLAT NO.
22-11800405
JOB NO. 984-02-01
DATE: APRIL, 2022
DRAWN: WDS CHECKED: SM
SHEET NUMBER:

5.2



1. DRIVEWAY PENETRATION REFERS TO A PORTION OF THE DRIVEWAY THAT MAY BE NECESSARY TO RECONSTRUCT WITHIN PRIVATE PROPERTY TO COMPLY WITH A MAXIMUM DRIVEWAY SLOPE. THIS PORTION OF THE DRIVEWAY SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS AS MAY APPLY:
- A.) CONCRETE DRIVEWAY PAID FOR UNDER ITEM NO. 503.1 OR 503.2
 - B.) ASPHALTIC CONCRETE DRIVEWAY PAID FOR UNDER ITEM NO. 503.4 AND SHALL INCLUDE A MINIMUM OF 1" ASPHALT TYPE 'D' & 6" FLEXIBLE BASE
 - C.) GRAVEL DRIVEWAY PAID FOR UNDER ITEM NO. 503.5 AND SHALL INCLUDE A MINIMUM OF 6" FLEXIBLE BASE

2. 7" MINIMUM HEIGHT WILL NOT NECESSARILY OCCUR AT THE PROPERTY LINE. IT MAY OCCUR WITHIN THE RIGHT OF WAY OR WITHIN THE DRIVEWAY PENETRATION ON PRIVATE PROPERTY.

3. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

TYPE	MINIMUM	MAXIMUM
RESIDENTIAL	10'	20'
COMMERCIAL - ONE WAY	12'	20'
COMMERCIAL - TWO WAY	24'	30'

4. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.

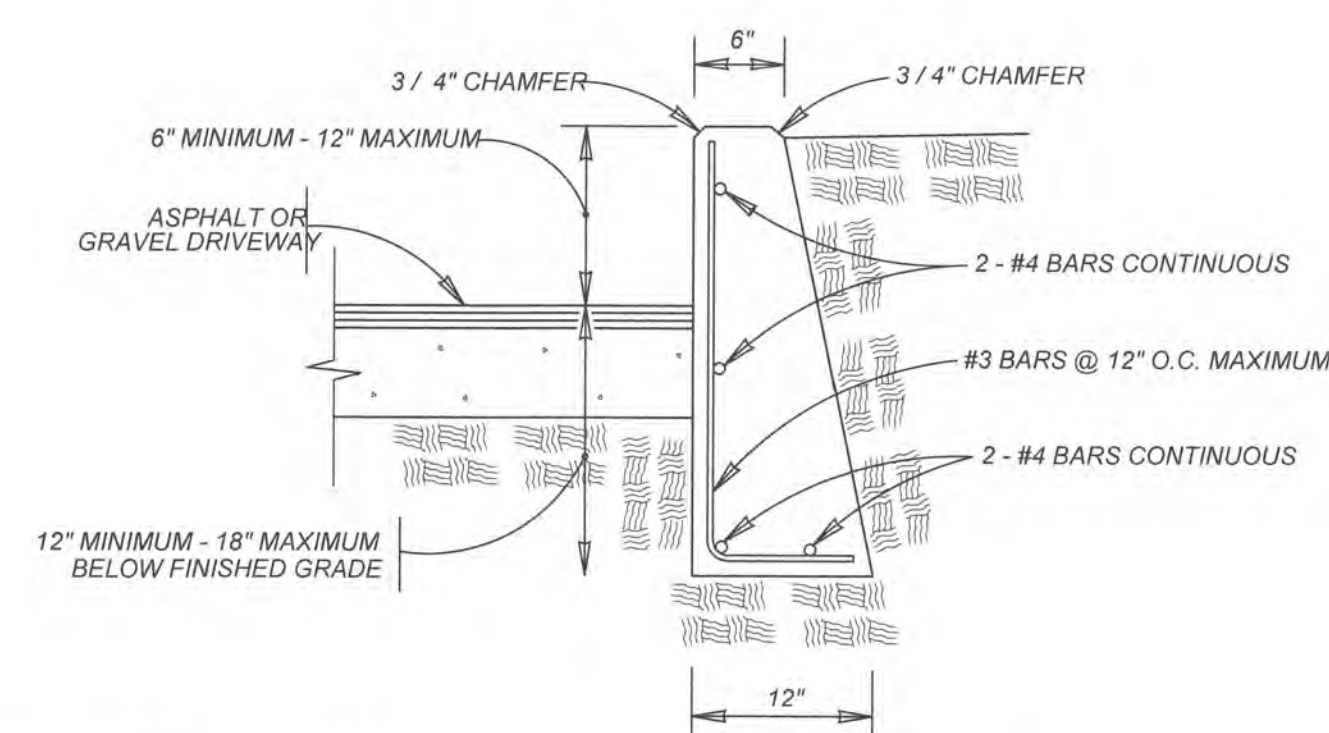
5. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND SEPARATED A MINIMUM OF 3' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.

6. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY. DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.

7. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3/8" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.

8. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

9. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



- NOTE:
1. COST OF REINFORCEMENT TO BE INCLUDED IN UNIT COST OF ITEM 307.1.
 2. CONCRETE RETAINING WALL COMBINATION TYPE SHALL BE USED FOR CONCRETE DRIVEWAYS.

DRIVEWAY - CONCRETE RETAINING WALL

ON COMPACTED SUBGRADE
ITEM 307.1

MAY 2009

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CONCRETE DRIVEWAY STANDARDS

_____ % SUBMITTAL	PROJECT NO.:	DATE:
DRWN BY: V. VASQUEZ	DSGN BY:	CHKD BY: R.S. HOSSEINI, P.E.
		SHEET NO. OF

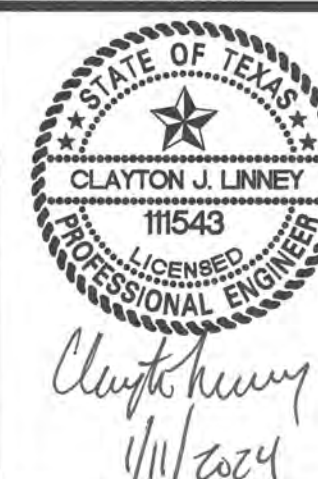
NEW

ENGINEERS + SURVEYING

3421 Paessanos Pkwy, Suite 200, San Antonio, TX 78205
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPB Firm #: 9513 • TBPB Firm #: 10122300

ISSUE DATE

REVISIONS



CHAVANEAU SUBDIVISION UNIT 4

CONCRETE DRIVEWAY DETAILS

PLAT NO.
22-11800405

JOB NO. 984-02-01

DATE: APRIL 2022

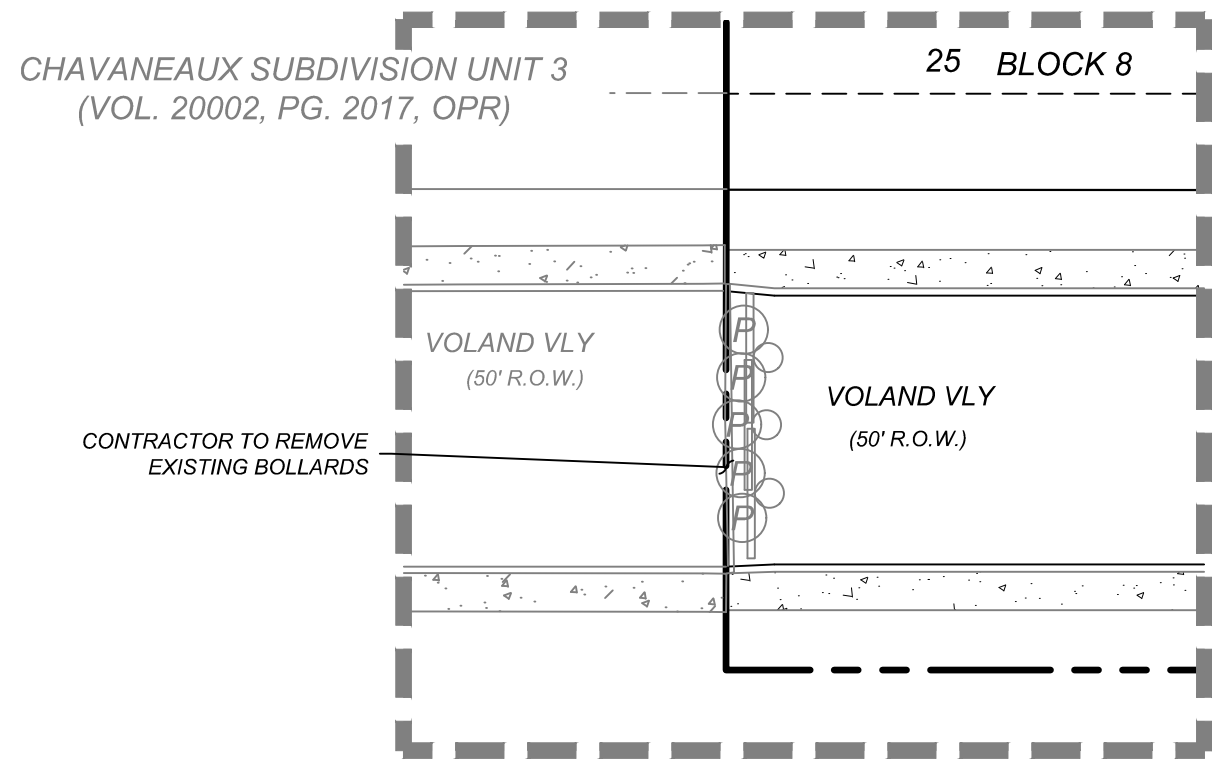
DRAWN:### CHECKED:

SHEET NUMBER

5.4

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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

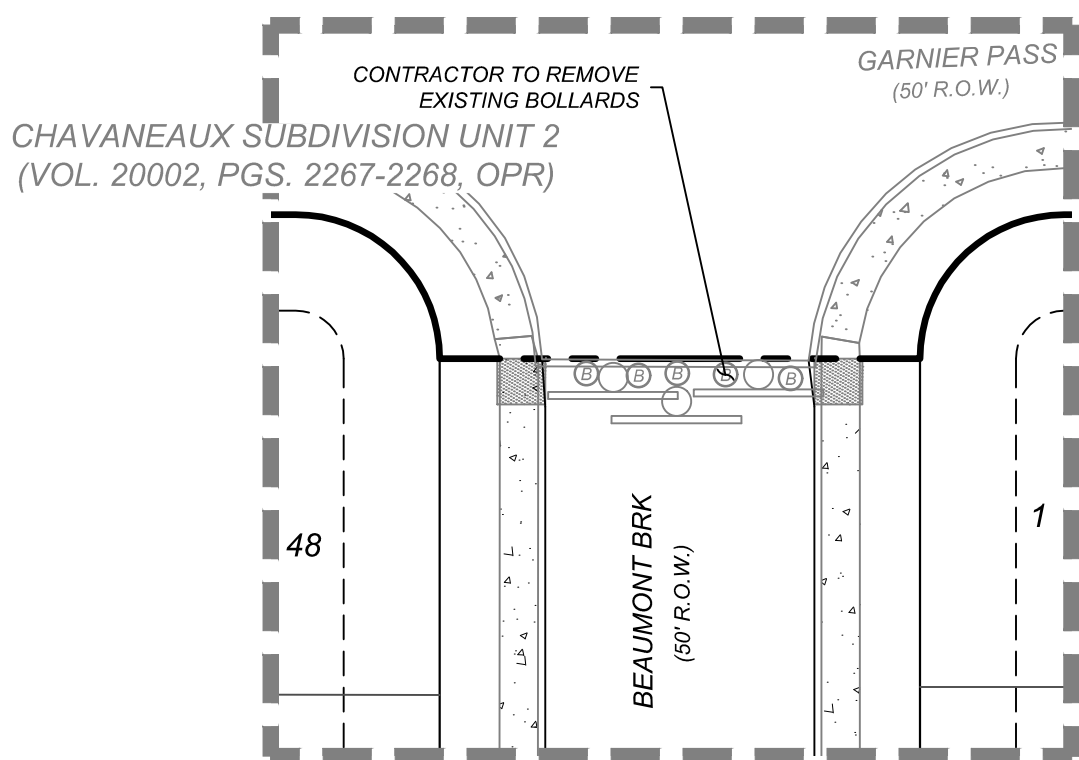
SIGN LEGEND		
SYMBOL	ITEM NUMBER	
	R1-1 30"x30"	531.3
	STANDARD BEAR COUNTY STREET NAME SIGN STD. X 9"	531.57



**DETAIL "A"
DEMOLITION PLAN**

SCALE: 1" = 20'

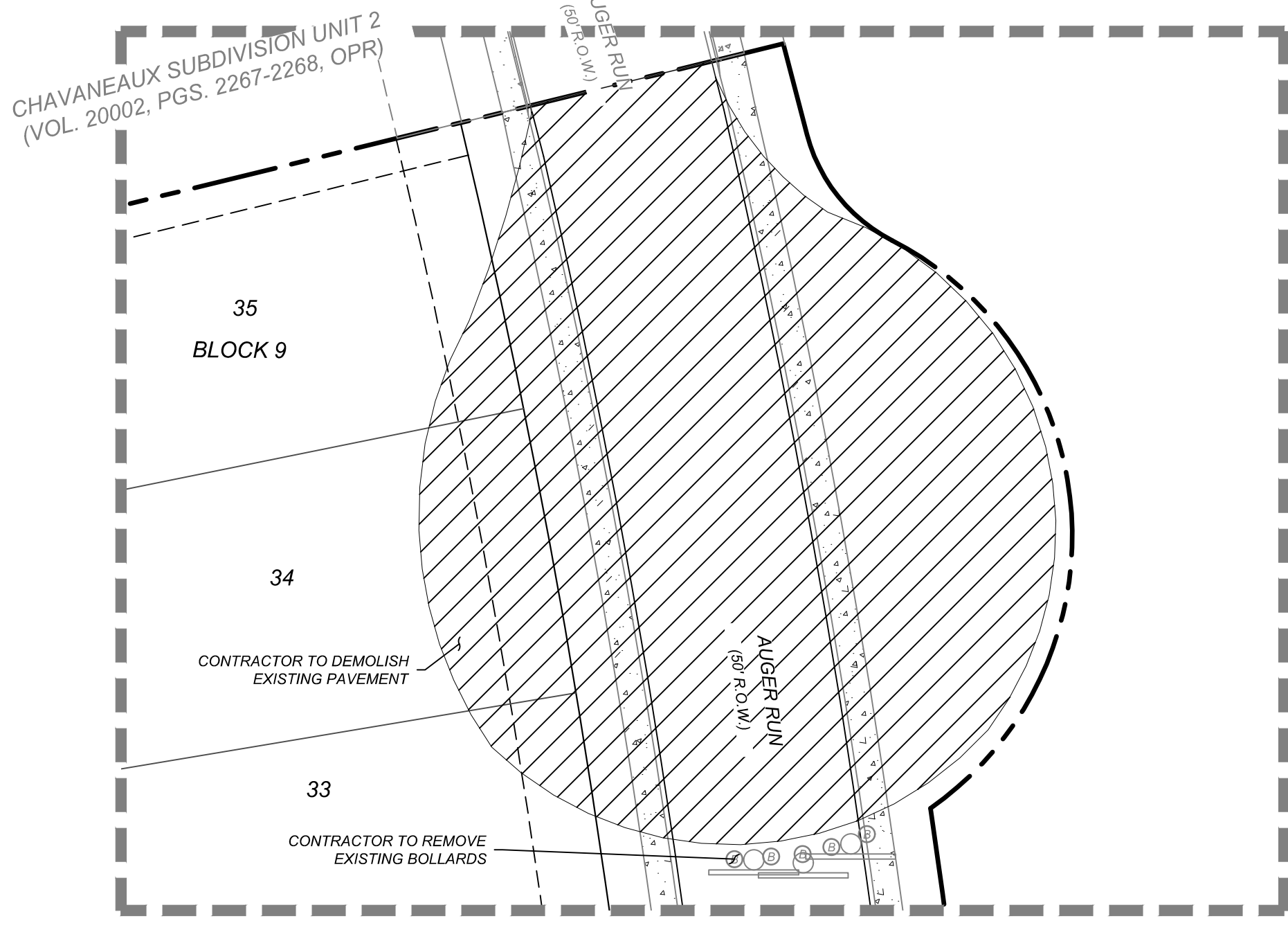
MATERIAL	UNITS	QUANTITIES
BOLLARDS	EA	5



**DETAIL "B"
DEMOLITION PLAN**

SCALE: 1" = 20'

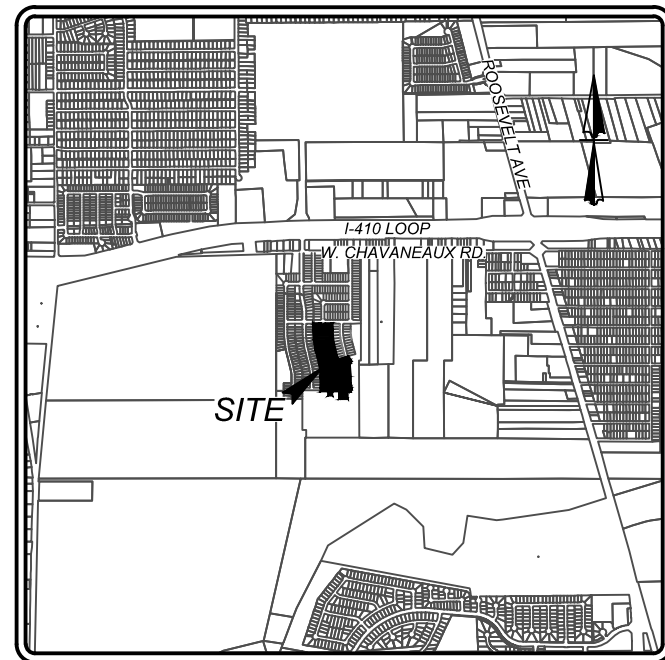
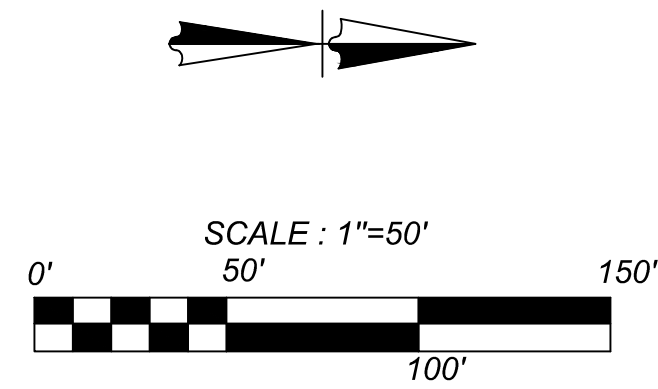
MATERIAL	UNITS	QUANTITIES
BOLLARDS	EA	5



**DETAIL "C"
DEMOLITION PLAN**

SCALE: 1" = 20'

MATERIAL	UNITS	QUANTITIES
PAVEMENT	S.Y.	911
BOLLARDS	EA	5

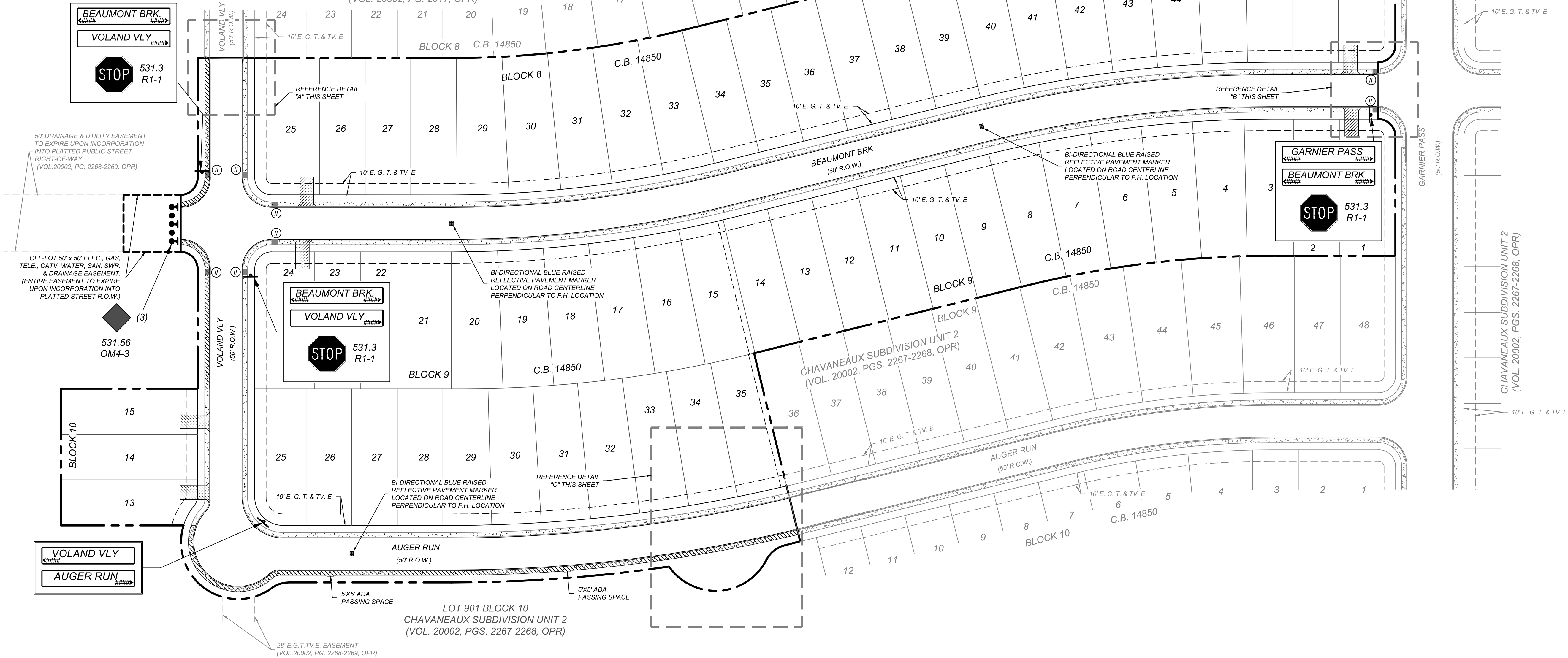


**LOCATION MAP
NOT-TO-SCALE**

LEGEND

- C.B. = COUNTY BLOCK
- E. G. T. & TV. E. = GAS, ELECTRIC, TELEPHONE & CABLE EASEMENT
- V.N.A.E. = VEHICULAR NON-ACCESS EASEMENT
- Ⓢ = WHEELCHAIR RAMP TYPE II SEE SHEET 5.5
- = SIDEWALK TO BE CONSTRUCTED BY DEVELOPER
- = SIDEWALK TO BE BUILT AT THE TIME OF HOME CONSTRUCTION
- = PROPOSED DRIVEWAY LOCATION

UNPLATTED REMAINING PORTION OF
38.97 ACRES
OWNER: VIVA LAND VENTURES, LP
(DOC. # 20210246274)



CHAVANEAUX SUBDIVISION UNIT 4

SAN ANTONIO, TX

TRAFFIC SIGNAGE & PEDESTRIAN ACCESSIBILITY PLAN

PLAT NO.
22-11800405

JOB NO. 994-02-01

DATE: APRIL, 2022

DRAWN:WDS CHECKED:SM

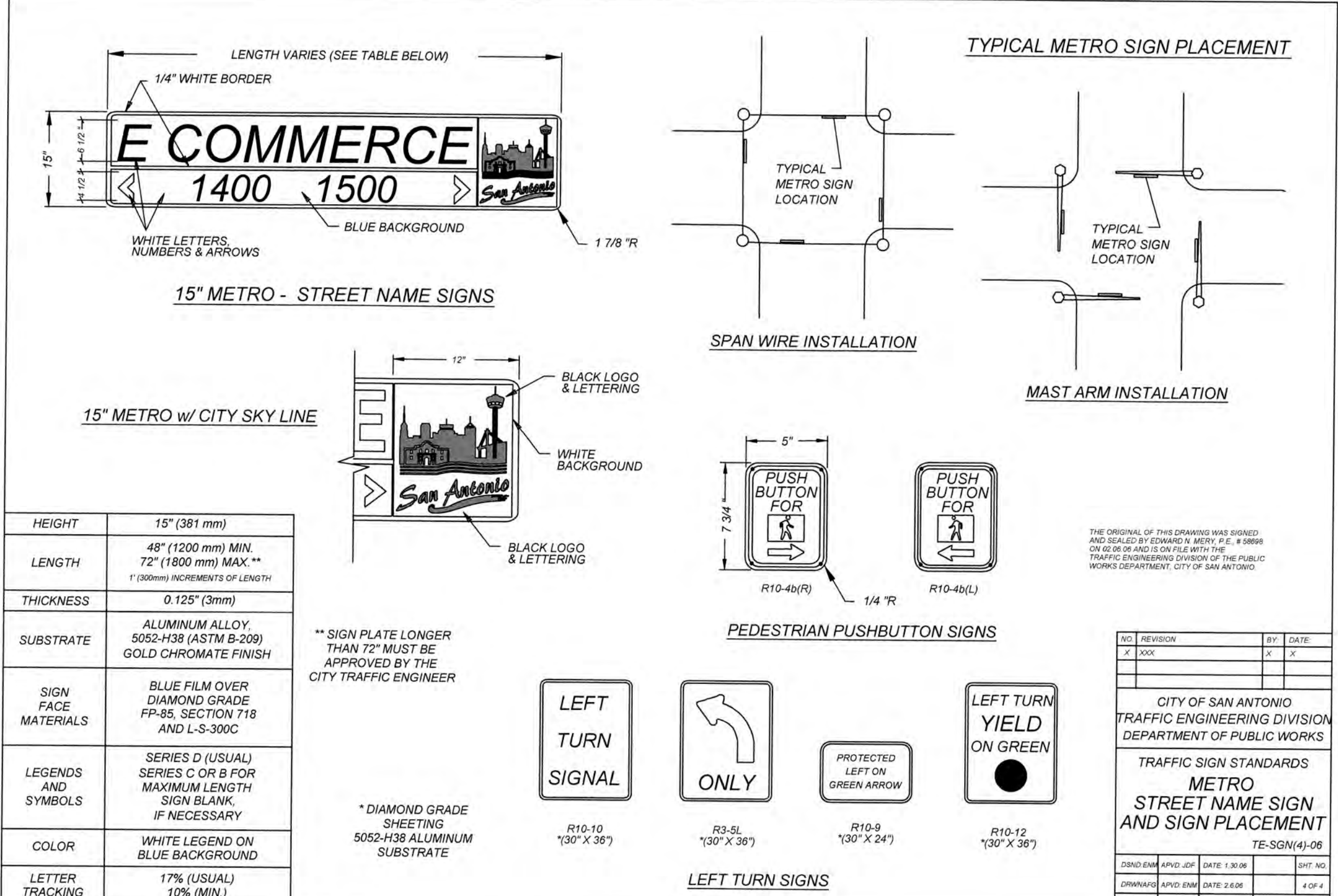
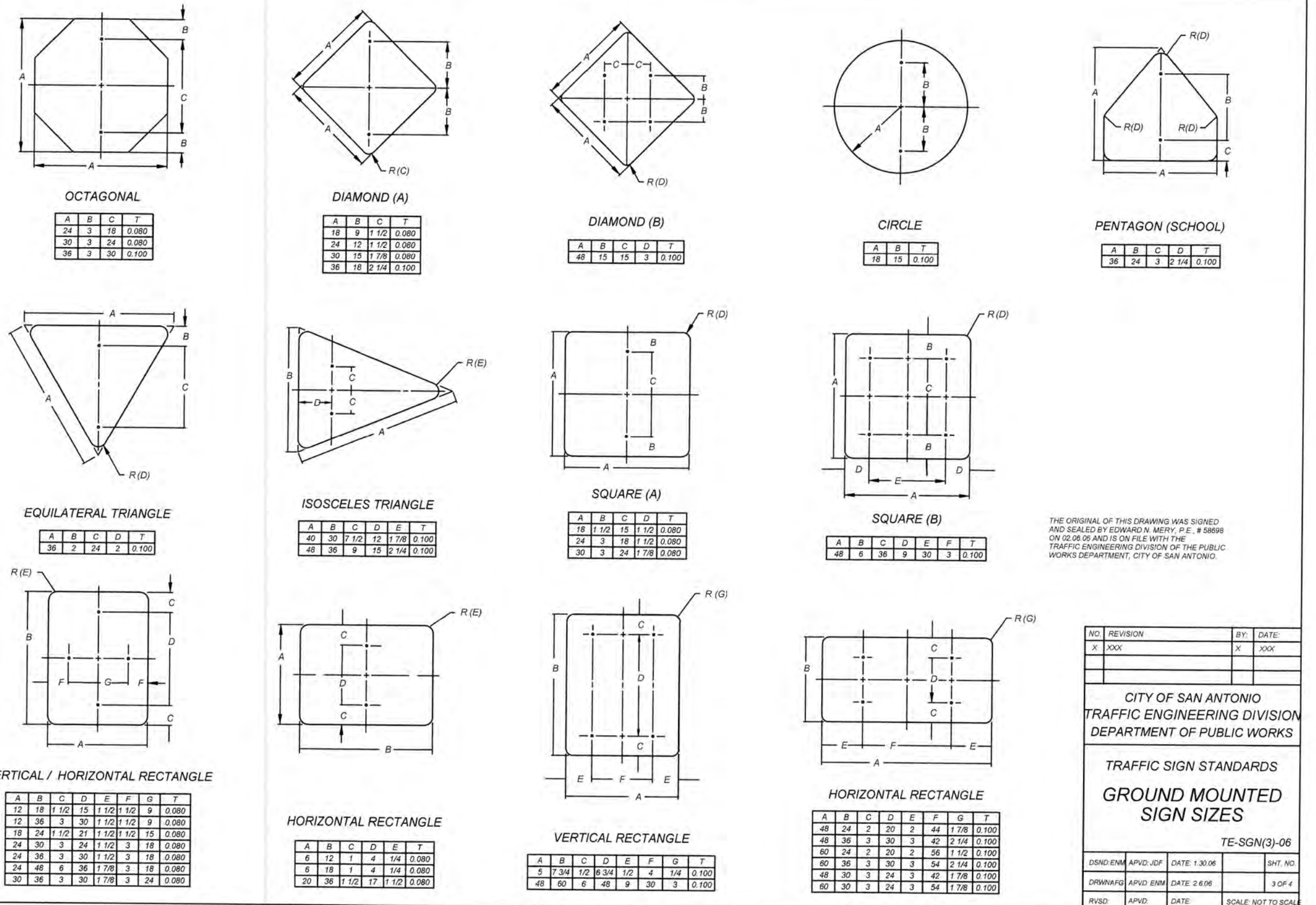
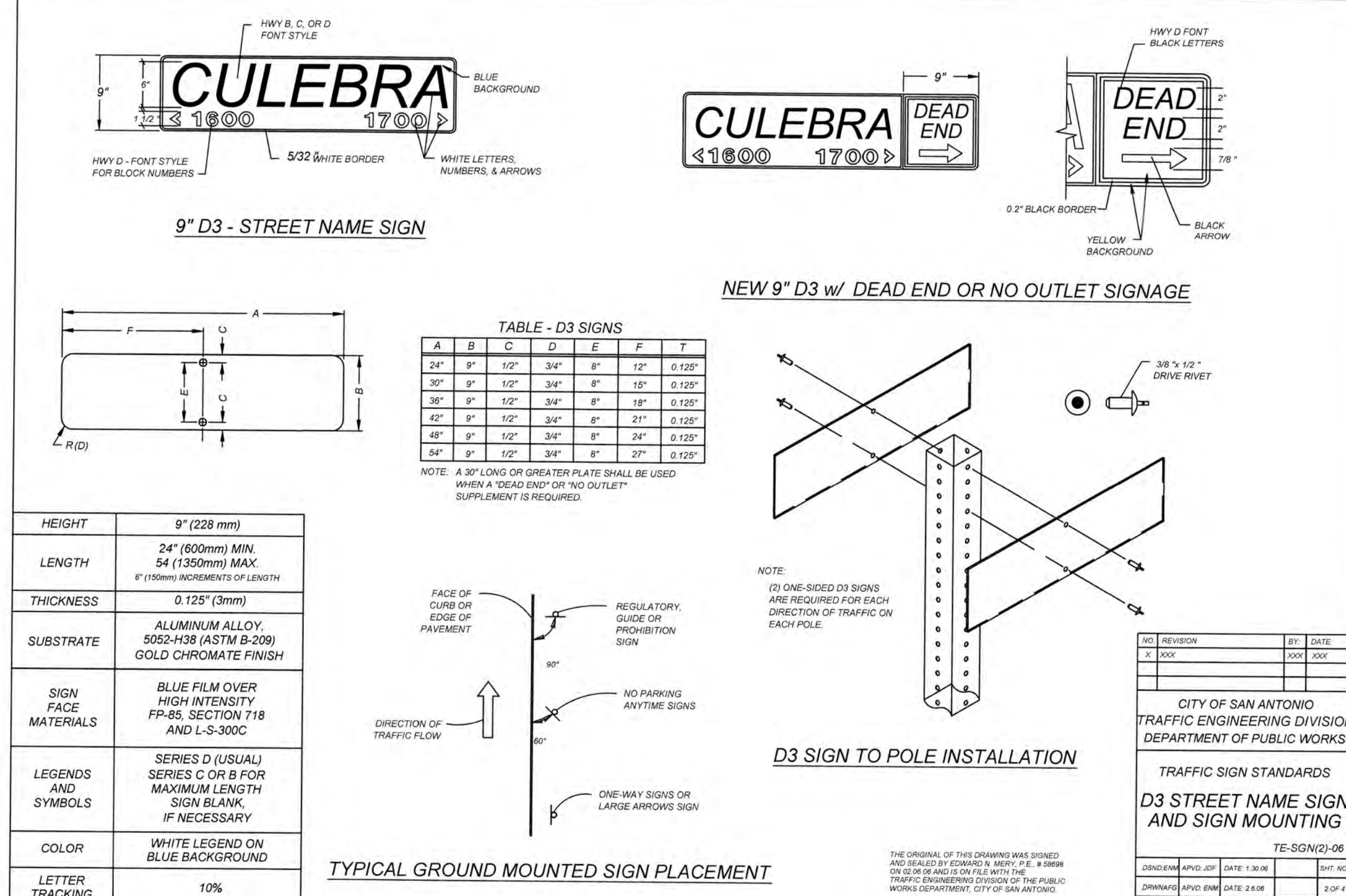
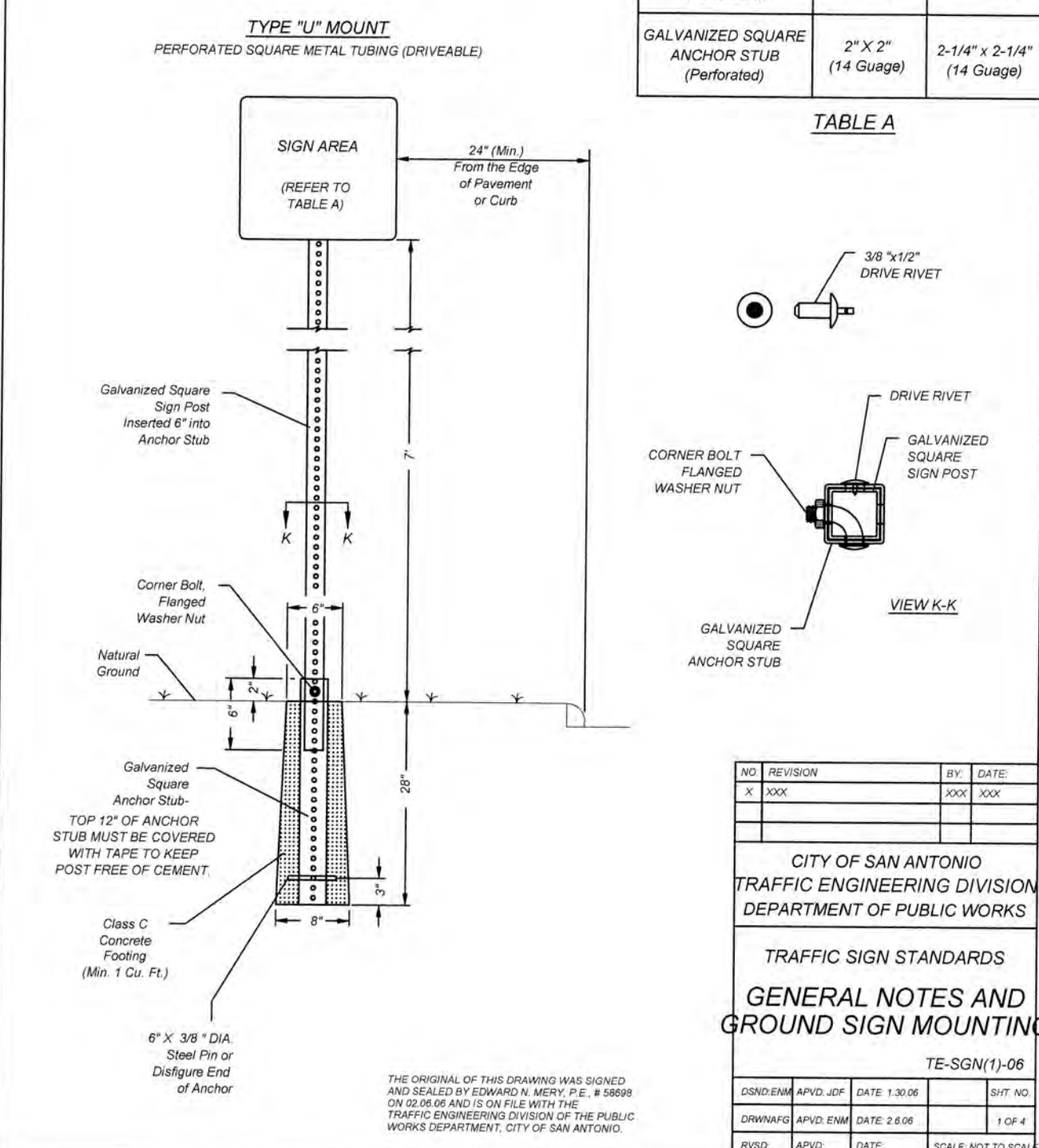
SHEET NUMBER:

5.6

GENERAL NOTES

- 1) THE EXISTING SIGNS LOCATED ON THE JOBSITE ARE THE PROPERTY OF THE CITY OF SAN ANTONIO. THROUGHOUT THE PERIOD OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT THESE SIGNS SUCH THAT THEY ARE NOT DAMAGED IN THE COURSE OF CONSTRUCTION ACTIVITY. SUCH PROTECTION SHALL INCLUDE THE PERIOD AFTER SIGNS ARE REMOVED FROM INSTALLATION AND STORED BY THE CONTRACTOR OR DELIVERED TO TRAFFIC OPERATIONS. THE ASSISTANT TRAFFIC SUPERINTENDENT (207-7765) MUST BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO DELIVERY.
- 2) AFTER SIGNS ARE REMOVED FROM INSTALLATION AND ARE BEING STORED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS SECTION OF THE PUBLIC WORKS DEPARTMENT (207-7765) AND ARRANGE FOR A CONVENIENT TIME TO DELIVER CITY SIGNS AND POLES.
- 3) PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SIGNS WITHIN THE AREA OF CONSTRUCTION WILL BE INVENTORIED AND DOCUMENTED JOINTLY BY THE TRAFFIC ENGINEERING (207-7720) CONSTRUCTION INSPECTION AND THE CONTRACTOR. THIS DOCUMENT WILL BE JOINTLY SIGNED BY BOTH PARTIES REFLECTING THE SIGN TYPE, SIGN SIZE, SIGN CONDITION, SIGN LOCATION, REFLECTIVITY ADEQUACY, ETC. THE CONTRACTOR IS HELD ACCOUNTABLE FOR THESE SIGNS THROUGHOUT THE PROJECT AND AT THE PROJECTS COMPLETION.
- 4) ALL GROUND MOUNTED SHALL USE HIGH INTENSITY REFLECTIVE SHEETING.
- 5) ALL OVERHEAD SIGNS SHALL USE DIAMOND GRADE REFLECTIVE SHEETING.
- 6) ALL BLANKS TO BE ALUMINUM ALLOY NO. 5052-H38.
- 7) "T" DENOTES THICKNESS OF SIGN BLANKS.
- 8) ALL HOLES SHALL BE 3/8" DIAMETER DRILLED OR PUNCHED AS SHOWN ON EACH BLANK DETAIL AND SHALL BE FREE OF BURRS AND/OR ROUGH EDGES.
- 9) SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL.
- 10) ALL SIGN BLANK TO BE ETCHED, DEGREASED, AND HAVE AN ALODINE FINISH PRIOR TO APPLICATION OF LEGENDS.
- 11) ALL DETAILS ARE NOT TO SCALE.
- 12) ALL DIMENSIONS ARE IN INCHES.
- 13) ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN CONFORMANCE TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD HIGHWAY SIGNS (FHWA) LATEST EDITION.
- 14) REINSTALLATION OF PREVIOUSLY EXISTING SIGNS, WHERE REQUIRED BY THE CITY TRAFFIC ENGINEER, SHALL BE AT THE CONTRACTOR'S EXPENSE.

TYPICAL GROUND SIGN INSTALLATION



SANITARY SEWER IMPROVEMENTS

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

TRENCH EXCAVATION SAFETY PROTECTION
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COMPACTION NOTE:

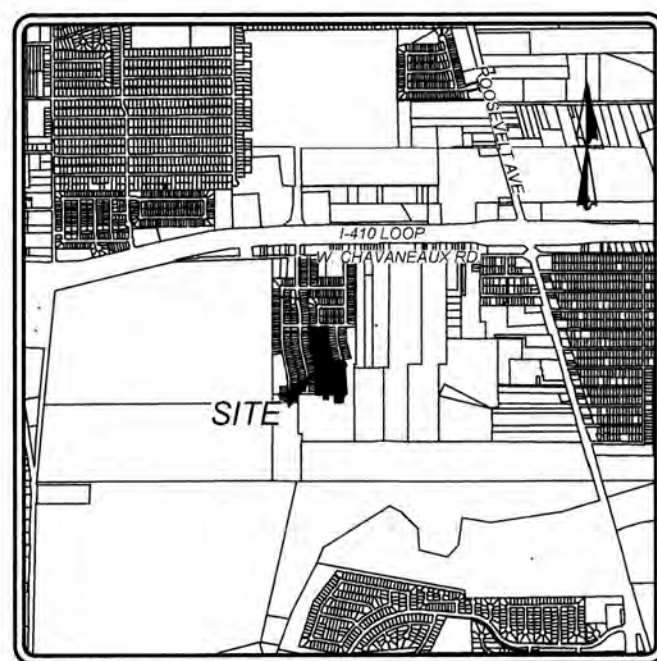
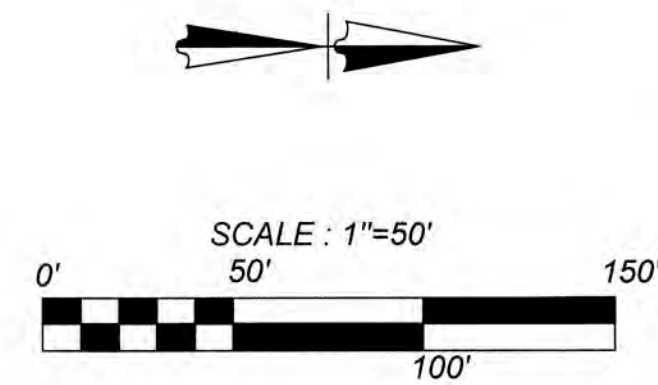
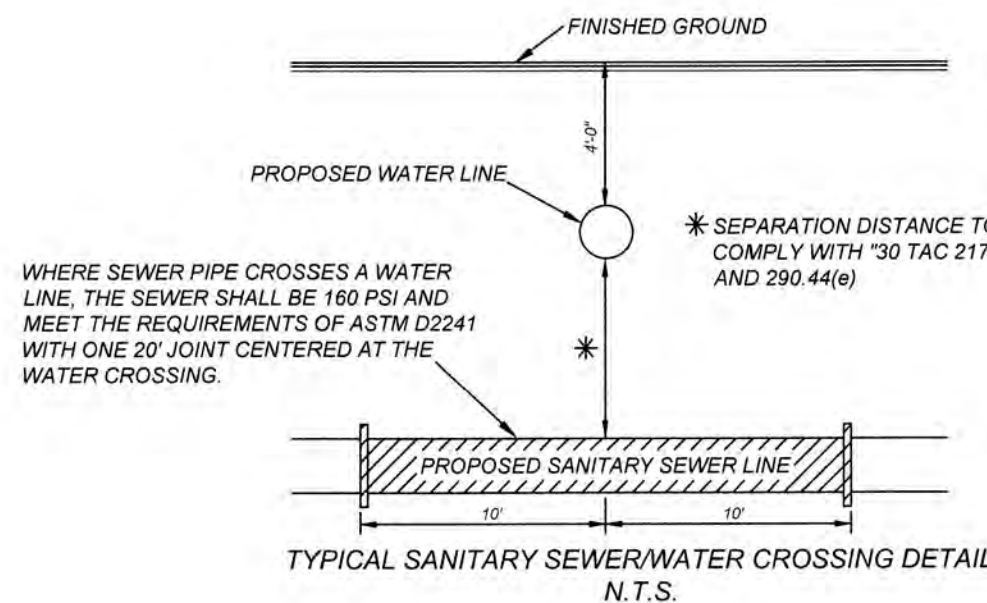
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12 INCH LOOSE LIFT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

CAUTION: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

NOTE:

- SEWER PIPE WHERE WATER LINE CROSSES SHALL BE MEET THE REQUIREMENTS OF ASTM D2241. CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). SEE THIS SHEET FOR BENCHMARK INFORMATION.
- PIPE TYPE DESIGNATIONS ARE SDR 26.
- SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
- ALL MANHOLES SHALL HAVE CONCRETE RING ENCASUREMENT AND A WATER TIGHT RING AND COVER.

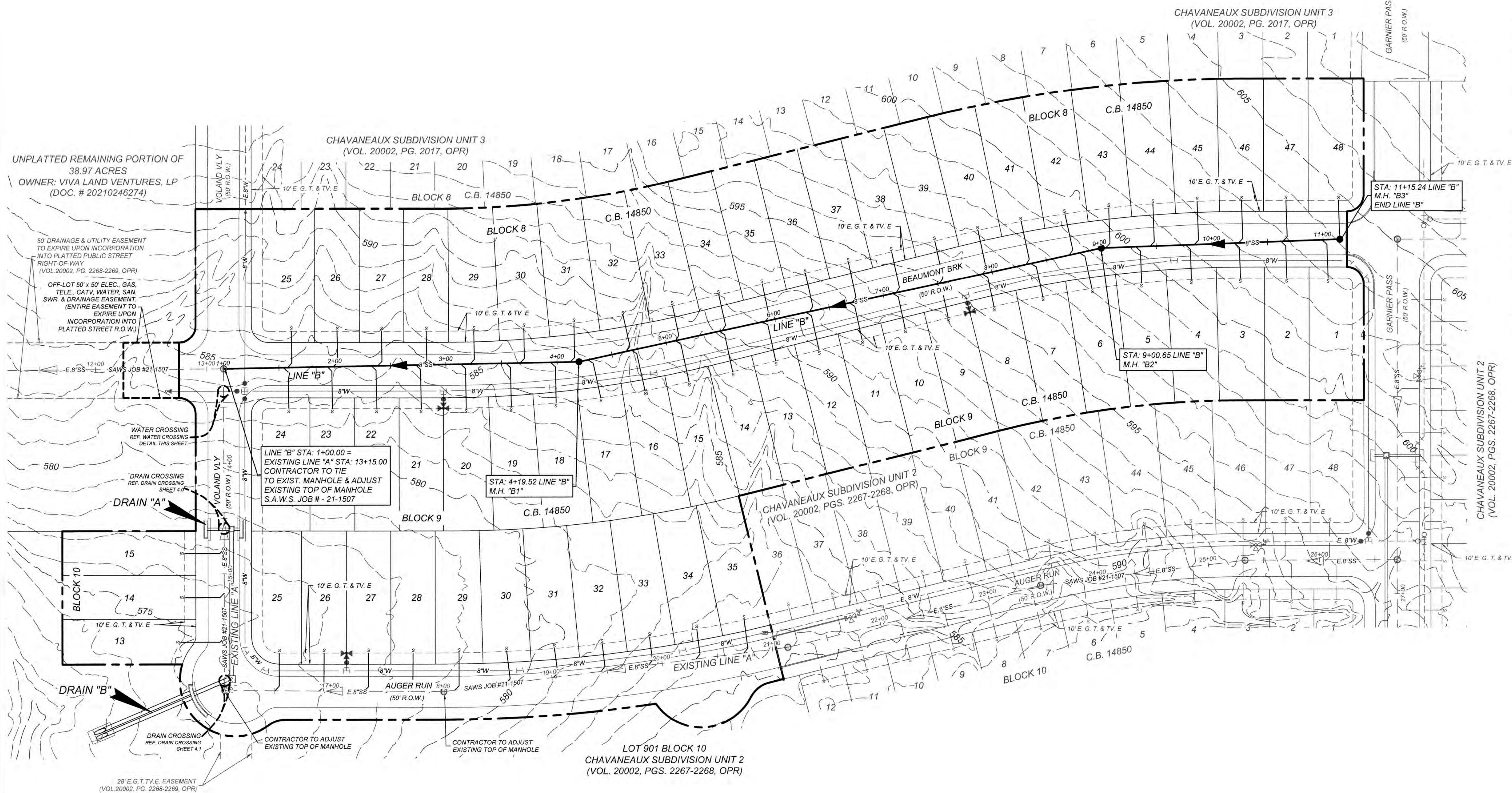
MANHOLE NOTE:
ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS. THESE MANHOLES MUST BE VENTED PER SAWS DETAIL DD852-02.



**LOCATION MAP
NOT-TO-SCALE**

LEGEND

PROPOSED WATER MAIN	= W
PROPOSED WATER SERVICE & METER BOX	=
PROPOSED WATER 3/4" IRRIGATION SERVICE & METER BOX	=
PROPOSED FIRE HYDRANT	=
PROPOSED WATER VALVE	=
PROPOSED SANITARY SEWER MAIN	= SS
PROPOSED SANITARY SEWER MANHOLE	=
PROPOSED SANITARY SEWER LATERAL	=
PROPOSED ELECTRIC, GAS, TELEPHONE, & CABLE TV EASEMENT	= E, G, T, & TV, E
VEHICULAR NON-ACCESS EASEMENT	= V.N.A.E.
EXISTING WATER MAIN	= E-W
EXISTING FIRE HYDRANT	=
EXISTING WATER VALVE	=
EXISTING SANITARY SEWER MAIN	= E-SS
EXISTING SANITARY SEWER MANHOLE	=
EXISTING OVERHEAD ELECTRIC W/POWER POLE	= -OHE- -OHE-
EXISTING GUY WIRE/OVERHEAD ELECTRIC	= -OHE-



SEWER: WEST SEWERSHED, LEON CREEK

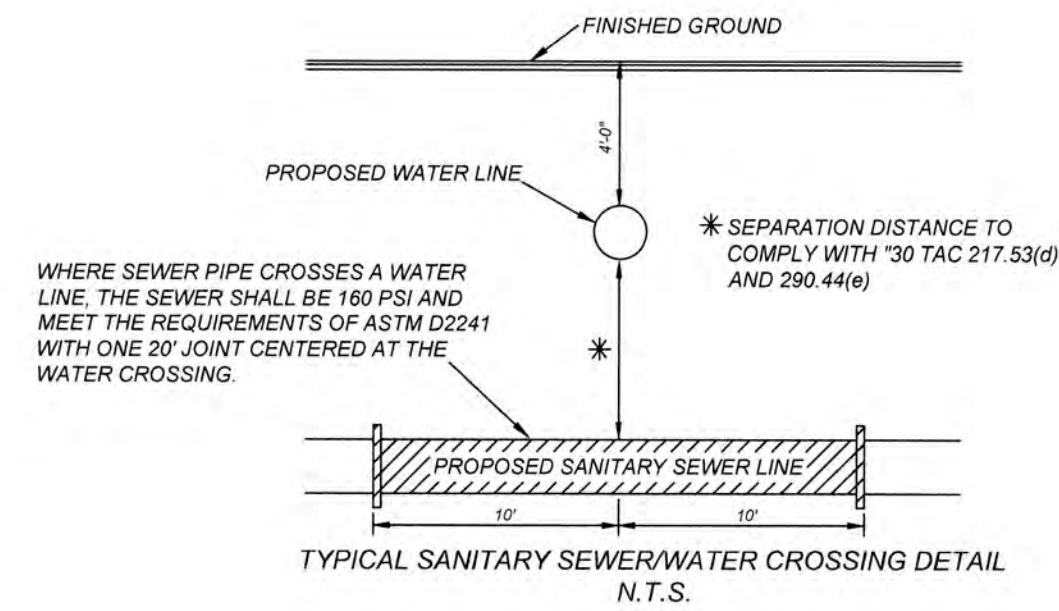
DEVELOPER'S NAME: VIVA LAND VENTURES, LP	STATE: TEXAS	ZIP: 79936
DEVELOPER'S ADDRESS: 11427 ROJAS DRIVE		
CITY: EL PASO		
PHONE#:	FAX#:	TOTAL ACREAGE: 9.53
SAWS BLOCK MAP#: 162538		TOTAL EDU'S: 62
TOTAL LINEAR FOOTAGE OF PIPE: 1,015 L.F. 8" SDR 26 PIPE		PLAT NO.: 22-11800405
NUMBER OF LOTS: 62	SAWS JOB#: 24-1521	

**CHAVANEAUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
OVERALL SANITARY SEWER PLAN**

PLAT NO. 22-11800405
JOB NO. 984-02-01
DATE: APRIL, 2022
DRAWN: WDS CHECKED: SM
SHEET NUMBER: 6.1

CAUTION!! THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, ELECTRIC, SECONDARY ELECTRICAL, DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

MANHOLE NOTE:
ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS. THESE MANHOLES MUST BE VENTED PER SAWS DETAIL DD852-02.

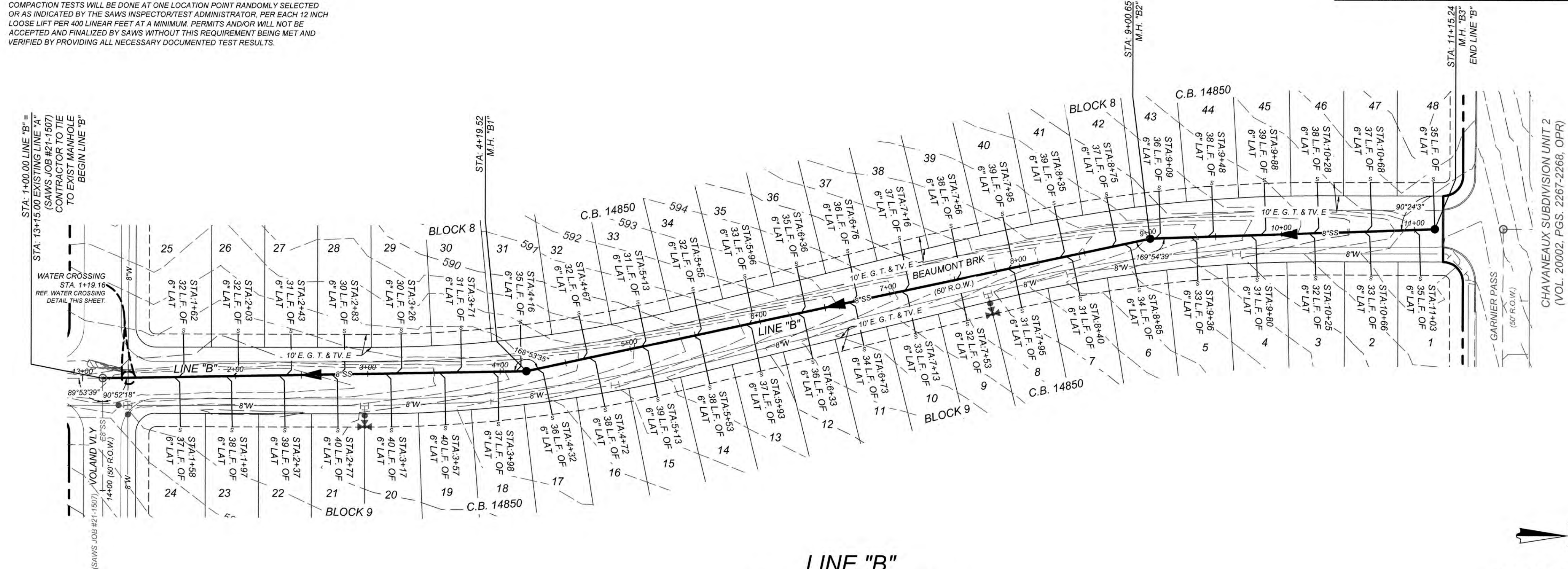


TRENCH EXCAVATION SAFETY PROTECTION
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK 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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

COMPACTION 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. PERMITS AND/OR WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

NOTE:

- SEWER PIPE WHERE WATER LINE CROSSES SHALL BE MEET THE REQUIREMENTS OF ASTM D2241. CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 180 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). SEE THIS SHEET FOR BENCHMARK INFORMATION.
- PIPE TYPE DESIGNATIONS ARE SDR 26
- SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
- ALL MANHOLES SHALL HAVE CONCRETE RING ENCASUREMENT AND A WATER TIGHT RING AND COVER.



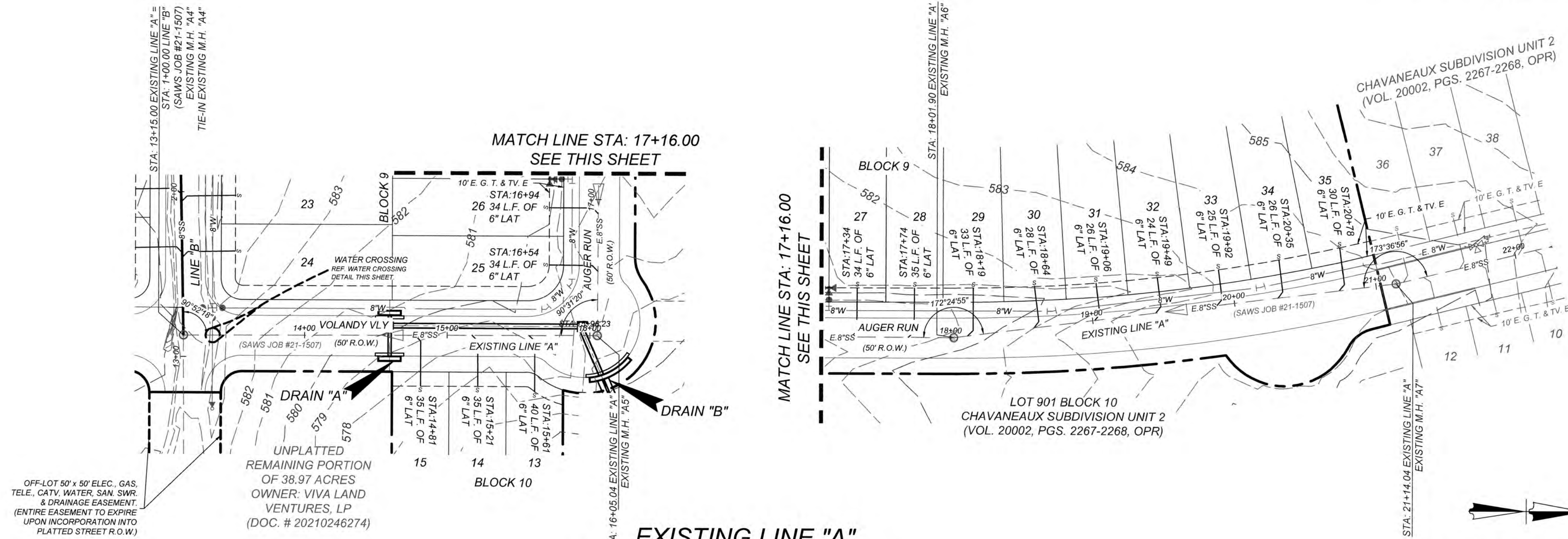
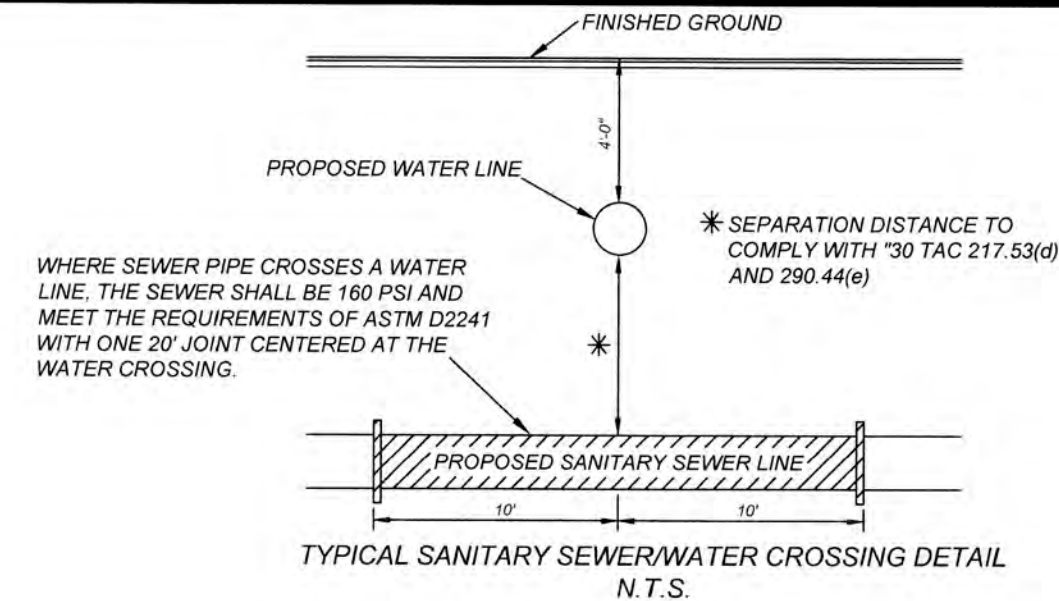
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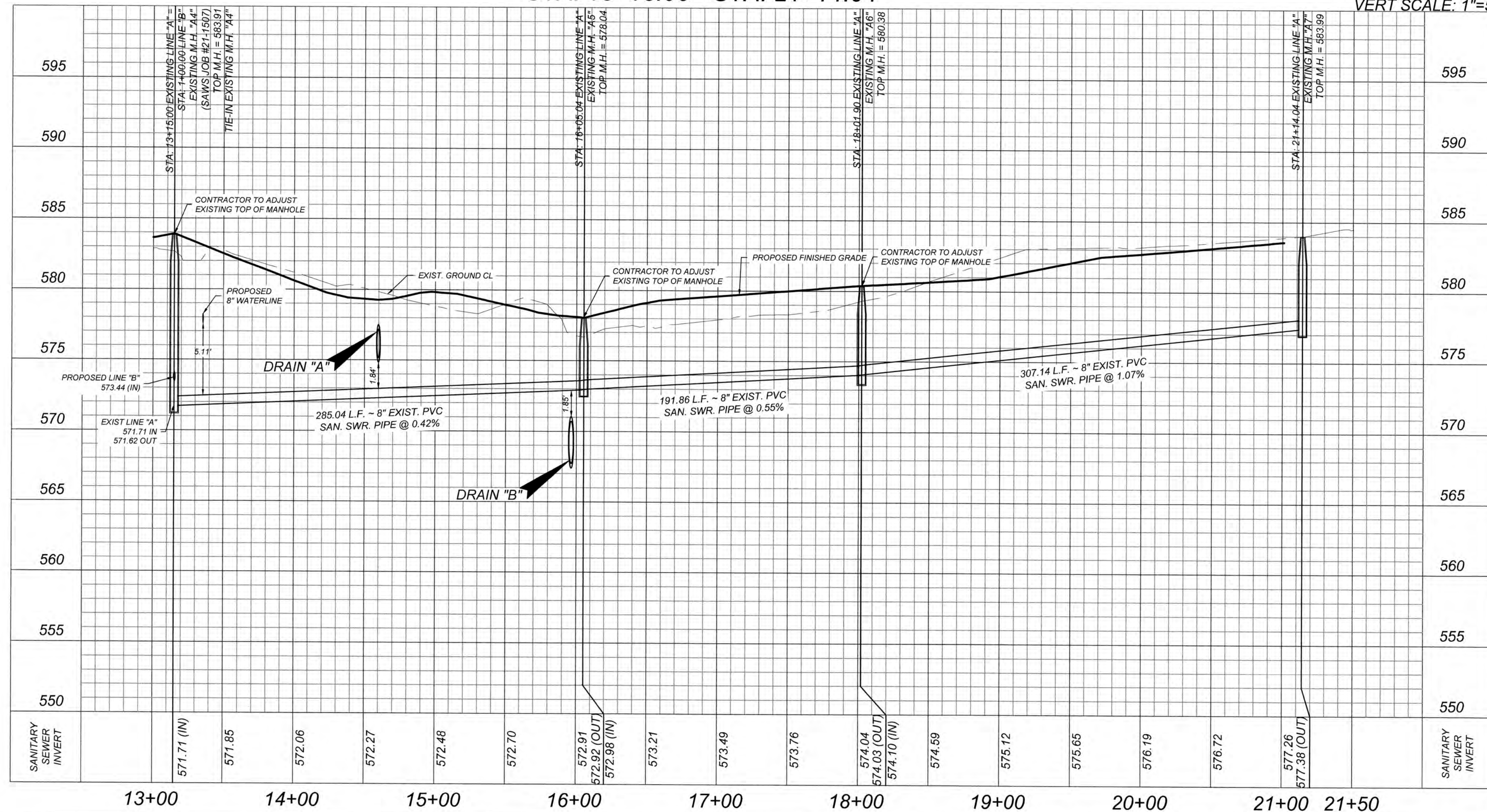
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 - PIPE TYPE DESIGNATIONS ARE SDR 28.
 - SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
 - ALL MANHOLES SHALL HAVE CONCRETE RING ENCASUREMENT AND A WATER TIGHT RING AND COVER.



EXISTING LINE "A"
STA: 13+15.00 - STA: 21+14.04

HORZ SCALE: 1"=50'
VERT SCALE: 1"=5'



CHAVANEAUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
EXISTING LINE "A" PLAN & PROFILE

PLAT NO.
22-11800405
JOB NO. 984-02-01
DATE: APRIL, 2022
DRAWN: WDS CHECKED: SM
SHEET NUMBER:

6.3

CHAVANEAUX SUBDIVISION UNIT 4

SAN ANTONIO, TX

WATER IMPROVEMENTS

GENERAL WATER NOTES

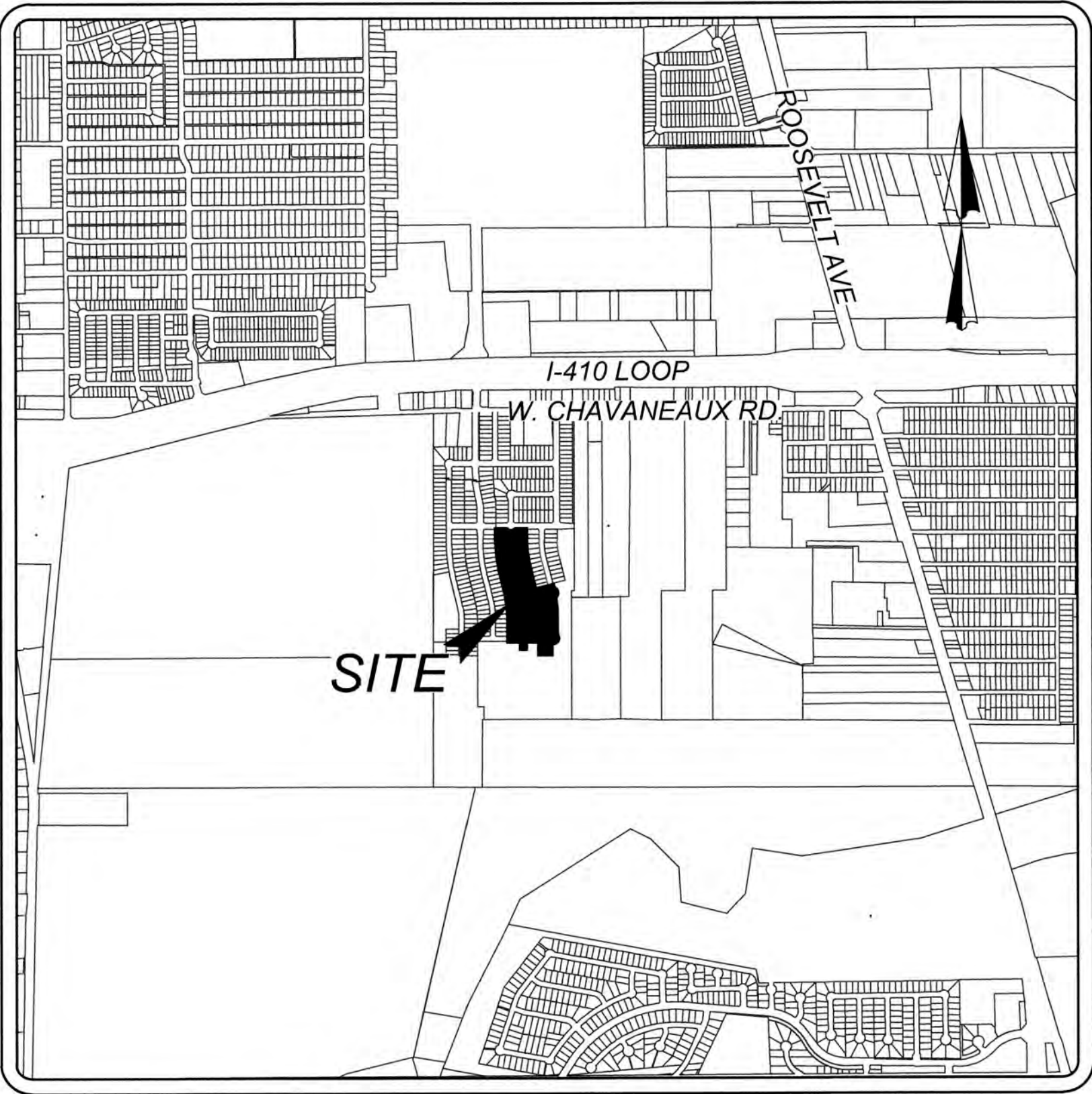
1. All materials and construction procedures within the scope of this project shall be approved by the San Antonio Water System (SAWS) and comply with the following as applicable:
- A. Current "San Antonio Water System Standard Specifications for Construction"
 - B. Current "San Antonio Water System Utility Service Regulations"
 - 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".
2. The Contractor shall not proceed with any pipe installation work until they obtain a copy of the approved G.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.
3. 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 (Water, Sewer & Recycle Water) 210-233-2010
COSA Drainage 210-207-6200
City Sidewalk and Trenching Division 210-821-3240
COSA Traffic Signal Operations 210-207-7765
Texas State Wide One Call Locator 1-800-545-6005
City Public Service -
AT & T -
Time Warner -
Valero Energy Co. -
4. 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.
5. 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.
6. 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 and the SAWS construction inspector for guidance.

SUPPLEMENTARY NOTES

7. 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.
8. The Developer dedicates the water mains upon completion by the Developer and acceptance by the San Antonio Water System. The San Antonio Water System will own and maintain said water mains which are located within this particular subdivision. (As applicable)
9. 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. 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.
10. 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.
11. The contractor will keep the area on top of and around the water meter box free of all objects and debris.
12. Water System to be completely restrained. Restrained length calculations are for P.V.C. Pipe bedded in compacted granular material extending to the top of the pipe. The native soil material is assumed to be inorganic clay of high plasticity. Depth of bury is assumed to be 4 feet.
- Note: These calculations are provided for reference. The restrained lengths shall be designed base upon the conditions encountered during the installation. See SAWS Specification Book

ADDITIONAL WATER NOTES

1. All valves shall read "open right"
2. Lead Free Fire Hydrants:
"SAWS require GCPs and counter permits to use lead free (< 0.25% lead) fire hydrants."
3. PRVs Required:
Contractor to verify that no portion of the tract is below ground elevation of _____ feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below _____ feet, the Developer or Builder shall install at each lot, on the customer's 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 *PRV is/are required for such lot(s), only single service connections shall be allowed. *Note: A pressure regulator is also known as a pressure reducing valve (PRV).
4. 98% COMPACTION NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND FOR 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.
5. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item #847):
Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.
6. Spills, Overflows, or Discharges of Wastewater:
Attention Contractors: All spills, overflows, or discharges of wastewater, recycled water, petroleum products, or chemicals must be reported immediately to the SAWS Inspector assigned to your counter permit or General Construction Permit (GCP). This requirement applies to every spill, overflow, or discharge - regardless of size. Your compliance will enable SAWS to fulfill regulatory reporting requirements.
- It is the Contractor's responsibility to control sewer flows so that a spill overflow, or discharge does not occur. In the event that a spill, overflows, or discharge occurs, the Contractor may liable for:
1. All fines, penalties, or other costs assessed to or against SAWS by any State, Federal, or other governmental agency.
2. SAWS staff and material costs to respond to the spill, overflow, or discharge, or to mitigate the effects of the spill, overflow, or discharge, or to support the cleanup effort.
3. All damages caused to SAWS, or any other persons or entities that result from the spill, overflow or discharge.



LOCATION MAP

NOT-TO-SCALE

VIVA LAND VENTURES, LP.,
11427 ROJAS DRIVE
EL PASO, TX 79936
PHONE:



PRESSURE ZONE: 790

DEVELOPER'S NAME: VIVA LAND VENTURES, LP.		
DEVELOPER'S ADDRESS: 11427 ROJAS DRIVE		
CITY: EL PASO	STATE: TEXAS	ZIP: 79936
PHONE#:	FAX#:	TOTAL ACREAGE: 9.53
SAWS BLOCK MAP#: 162538		TOTAL EDU'S: 62
TOTAL LINEAR FOOTAGE OF PIPE: 1,801 L.F. ~ 8" C900 P.V.C.		PLAT NO.: 22-11800405
NUMBER OF LOTS: 62		SAWS JOB#: 24-1027



PLAT NO.22-11800405

SHEET 7.0

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

Public Job: 15_2024_25000 User ID: jclark
File: C:\984020\104\984020\104\WATER\WATERCVDW9840201.dwg

CHAVANEAUX SUBDIVISION UNIT 4

JOB NO.: 984-02-01

CAUTION!! THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

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JOINT RESTRAINT NOTE:
CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESS OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT. OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESS AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

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 GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

WATER PLAN NOTES:

- FOR TYPICAL STREET SECTIONS SEE DETAIL THIS SHEET.
- FOR ADDITIONAL WATER NOTES AND DETAILS SEE SHEET 7.
- WATER METER BY LOCATIONS BY LOCATIONS ARE SHOWN SYMBOLICALLY TO SERVICE THE LOTS BUT SHALL BE LOCATED IN ACCORDANCE WITH THE STANDARD S.A.W.S. WATER DETAILS & SPECIFICATIONS.
- WHERE WATER SERVICES AND LIGHT POLE FOUNDATIONS ARE PROPOSED TO BE AT THE SAME LOT CORNERS, SERVICE TAPS AND LEADS SHOULD BE AT LEAST 3 FEET FROM THE LIGHT POLE FOUNDATION.
- ALL VALVES SHALL READ "OPEN RIGHT"
- ALL PVC PIPE TO BE C-900 CLASS 150 (DR 18)
- FOR PRV DETAIL SEE S.A.W.S. STANDARD DETAIL DD-833-03.

SAWS NOTE:

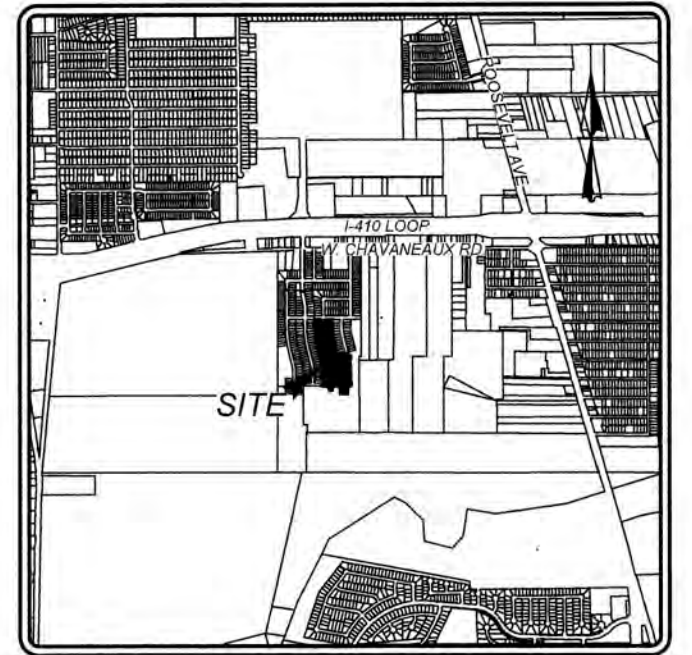
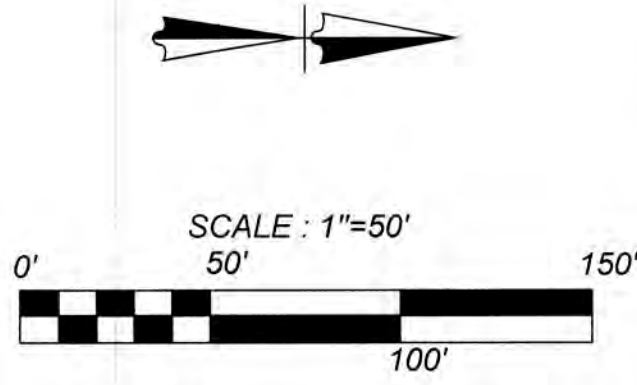
- "SAWS REQUIRES GCPs AND COUNTER PERMIT TO USE LEAD FREE (0-25% LEAD) FIRE HYDRANTS."
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM (S.A.W.S.) STANDARD SPECIFICATIONS.

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 1,500 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 FIRE MARSHAL.

REFERENCE S.A.W.S. WATER DETAILS

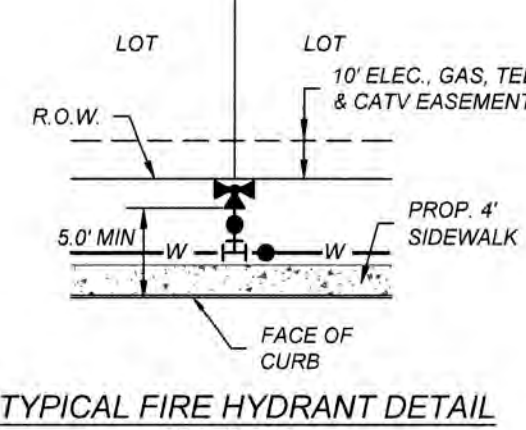
DD-824-01 COPPER SERVICE INSTALLATION MAIN IN TERRACE
DD-824-01 COPPER SERVICE INSTALLATION TAPPING SCHEDULE
DD-824-05 TYPICAL SERVICE ARRANGEMENT
DD-833-01 TYPICAL METER BOX INSTALLATION
DD-834-01 FIRE HYDRANT INSTALLATION
DD-834-01 FIRE HYDRANT INSTALLATION (JOINT RESTRAINT)
DD-844-01 2" TEMPORARY BLOWOFF ASSEMBLY ON 12" & 16" D.I. MAINS
DD-839-01 THRUST BLOCKS FOR FITTINGS (WATER ONLY)
DD-839-01 JOINT RESTRAINTS FOR FITTINGS (WATER ONLY)
DD-839-04 RESTRAINED LENGTHS FOR TEES
DD-839-04 RESTRAINED LENGTHS FOR REDUCERS
DD-839-08 RESTRAINED LENGTHS FOR HORIZONTAL BENDS
DD-839-05 RESTRAINED LENGTHS FOR DEAD ENDS/INLINE VALVES
DD-844-02 2" PERMANENT BLOW-OFF ASSEMBLY ON 6" & 8" MAINS
DD-833-03 SERVICE INSTALLATION WITH PRESSURE REDUCING VALVE
DD-844-01 2" (TEMPORARY) BLOW-OFF ASSEMBLY ON 6" & 8" D.I.P.V.C. MAINS (JOINT RESTRAINT)



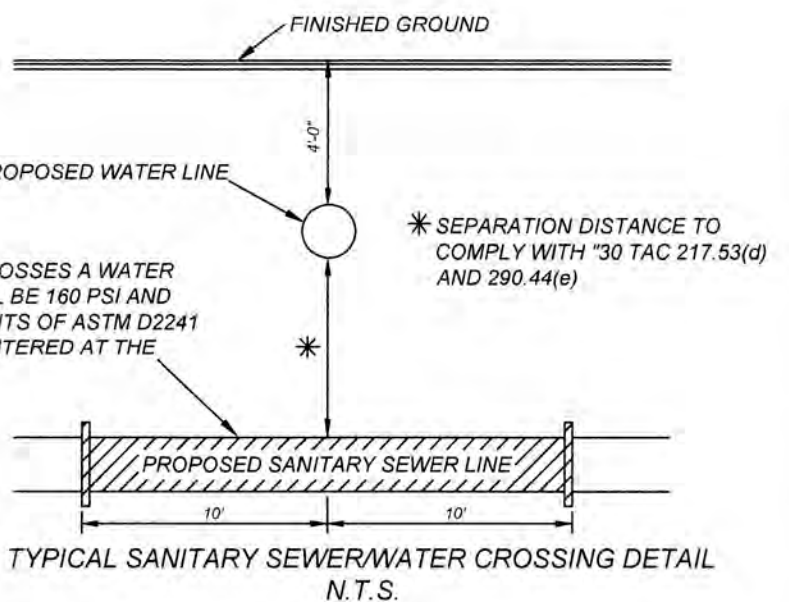
LOCATION MAP NOT-TO-SCALE

LEGEND

- PROPOSED WATER MAIN = W
- PROPOSED WATER SERVICE & METER BOX WITH PRESSURE REDUCING VALVE = S
- PROPOSED WATER 3/4" IRRIGATION SERVICE & METER BOX = I
- PROPOSED FIRE HYDRANT = H
- PROPOSED WATER VALVE = V
- PROPOSED SANITARY SEWER MAIN = SS
- PROPOSED SANITARY SEWER MANHOLE = SM
- PROPOSED ELECTRIC, GAS, TELE, & CABLE TV EASEMENT = E, G, T, & TV ESMT
- EXISTING WATER MAIN = E-W
- EXISTING FIRE HYDRANT = E-H
- EXISTING WATER VALVE = E-V
- EXISTING SANITARY SEWER MAIN = E-SS
- EXISTING SANITARY SEWER MANHOLE = E-SM
- EXISTING OVERHEAD ELECTRIC WIPOWER POLE = OHE
- EXISTING GUY WIRE/OVERHEAD ELECTRIC = OHE



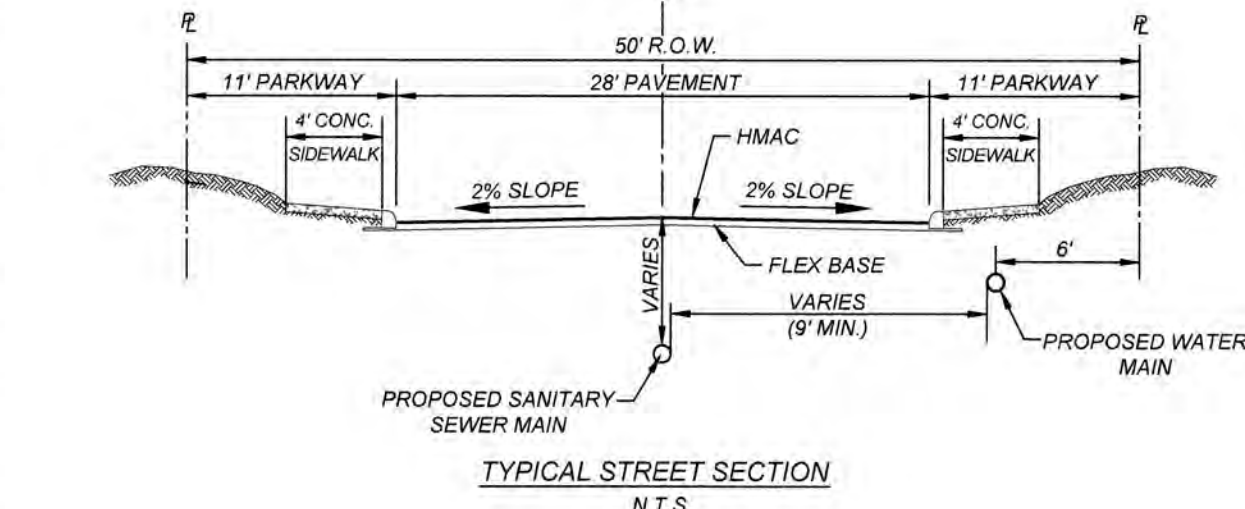
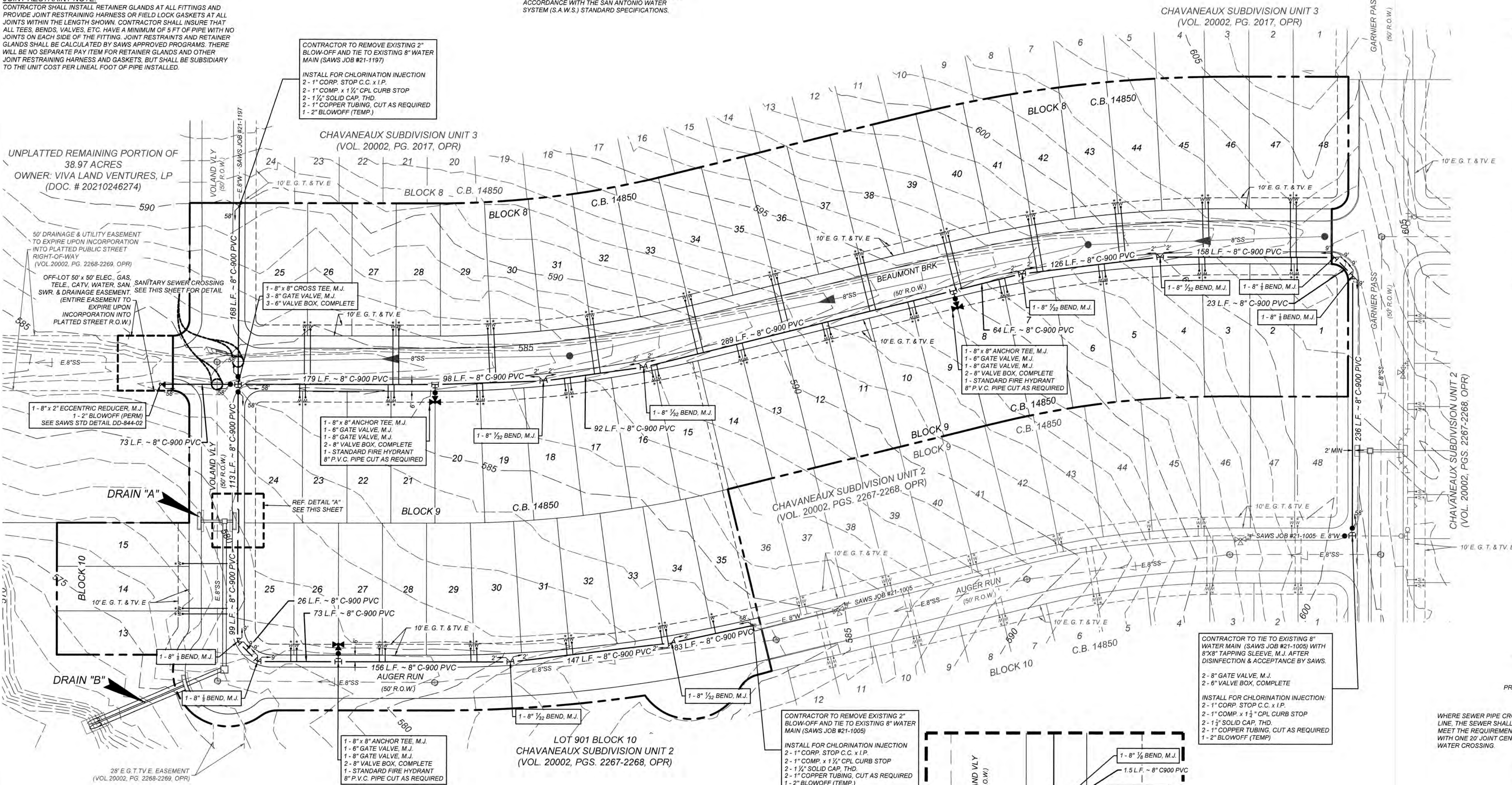
TYPICAL FIRE HYDRANT DETAIL NOT-TO-SCALE



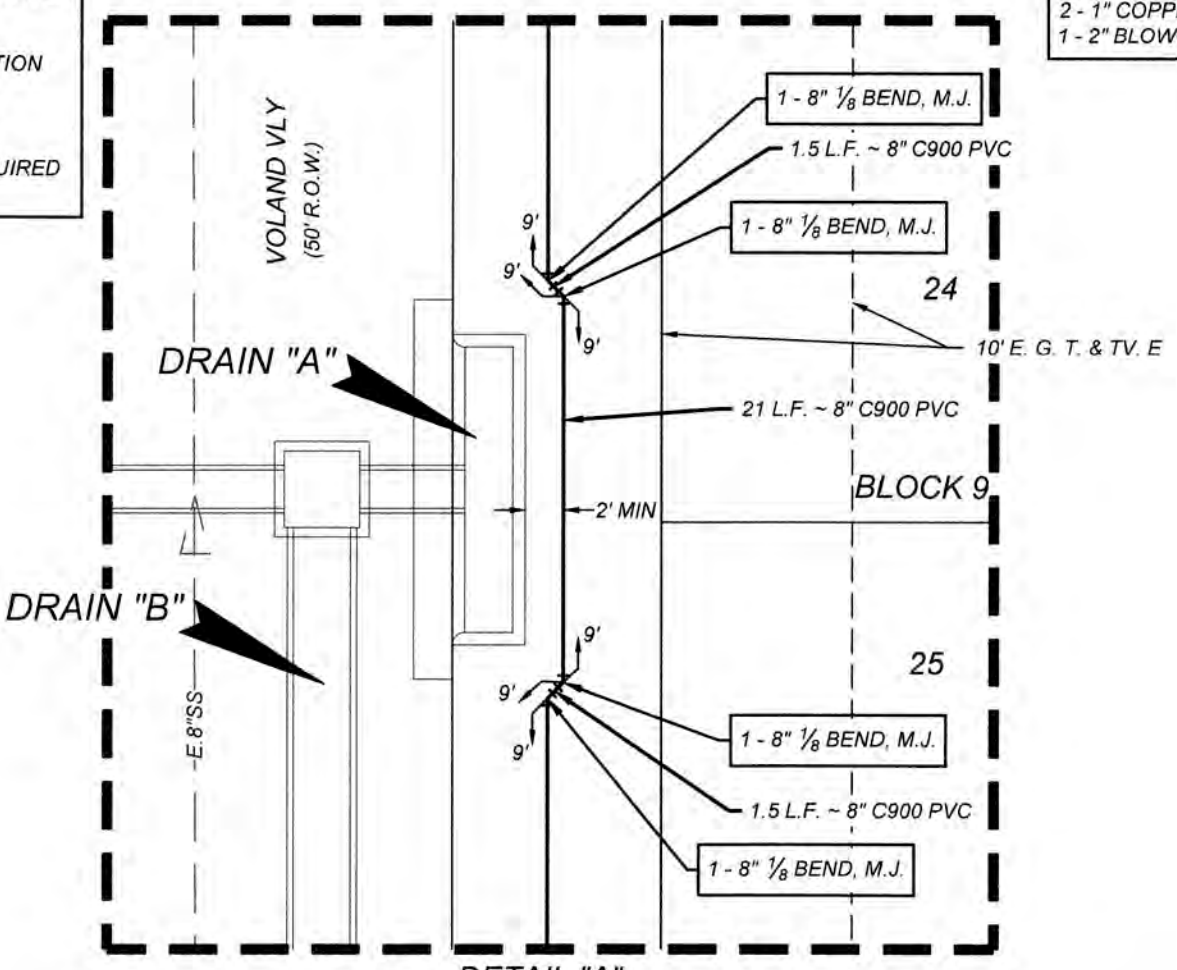
TYPICAL SANITARY SEWER/WATER CROSSING DETAIL N.T.S.

PRESSURE ZONE: 790

DEVELOPER'S NAME: VIVA LAND VENTURES, LP
DEVELOPER'S ADDRESS: 11427 ROJAS DRIVE
CITY: EL PASO STATE: TEXAS ZIP: 79936
PHONE: FAX# TOTAL ACRES: 9.53
SAWS BLOCK MAP#: 162638 TOTAL EDU'S: 62
TOTAL LINEAR FOOTAGE OF PIPE: 1,801 L.F. ~ 8" C900 P.V.C. PLAT NO.: 22-11800405
NUMBER OF LOTS: 62 SAWS JOB#: 24-1027



TYPICAL STREET SECTION N.T.S.



DETAIL "A" SCALE: 1"=10'

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

**CHAVANEAU SUBDIVISION UNIT 4
SAN ANTONIO, TX
WATER DISTRIBUTION PLAN**

PLAT NO.
22-11800405
JOB NO. 984-02-01
DATE: APRIL 2022
DRAWN WDS CHECKED SM

SHEET NUMBER:

INSTALLATION:

1. ALL OPERATORS SHALL SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS IN ADVANCE AND ALL BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
2. CONTRACTOR TO ENSURE THAT STRUCTURAL BMP'S ARE INSTALLED WITHIN THE LIMITS OF THE SITE BOUNDARY.
3. CONTRACTOR MAY INSTALL THE BEST MANAGEMENT PRACTICES IN PHASES THAT COINCIDE WITH THE DISTURBANCE OF UP GRADIENT AREAS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
4. CONTRACTOR TO VERIFY SUFFICIENT VEGETATION IN AREAS DENOTED AS VEGETATED FILTER STRIP. IF INSUFFICIENT VEGETATION EXISTS, CONTRACTOR SHALL IMPLEMENT A DIFFERENT BEST MANAGEMENT PRACTICE AND WILL SHOW IT ON THIS PLAN WITH NOTATION IN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.

MAINTENANCE AND INSPECTION:

1. CONTRACTOR SHOULD LIMIT CONSTRUCTION ACTIVITIES TO ONLY THOSE AREAS SHOWN TO BE DISTURBED ON THIS PLAN. IF ADDITIONAL VEGETATED AREAS ARE DISTURBED, THEY SHOULD BE PROTECTED WITH APPROPRIATE BEST MANAGEMENT PRACTICES UNTIL THE AREAS HAVE BEEN STABILIZED AS PER THE SPECIFICATIONS OF THE SWPPP. THE AREAS OF THIS ADDITIONAL SOIL DISTURBANCE AND THE MEASURES USED SHOULD BE SHOWN ON THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF BMP'S AS PER THE SPECIFICATIONS OF THE SWPPP. THE CONTRACTOR MAY MODIFY THE CONTROLS AS NECESSARY TO PREVENT SEDIMENT RUNOFF. THESE MODIFICATIONS SHOULD BE SHOWN AND THE SITE PLAN AND NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
3. LOCATION OF CONSTRUCTION ENTRANCE/EXIT, CONCRETE WASHOUT PIT, AND EQUIPMENT AND STORAGE ARE TO BE FIELD DETERMINED. LOCATIONS SHALL BE UPDATED ON THIS PLAN.

PROJECT COMPLETION:

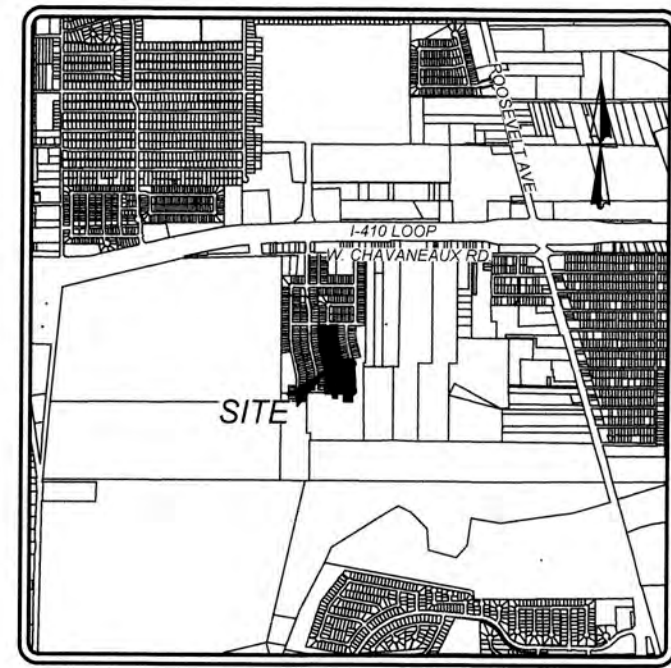
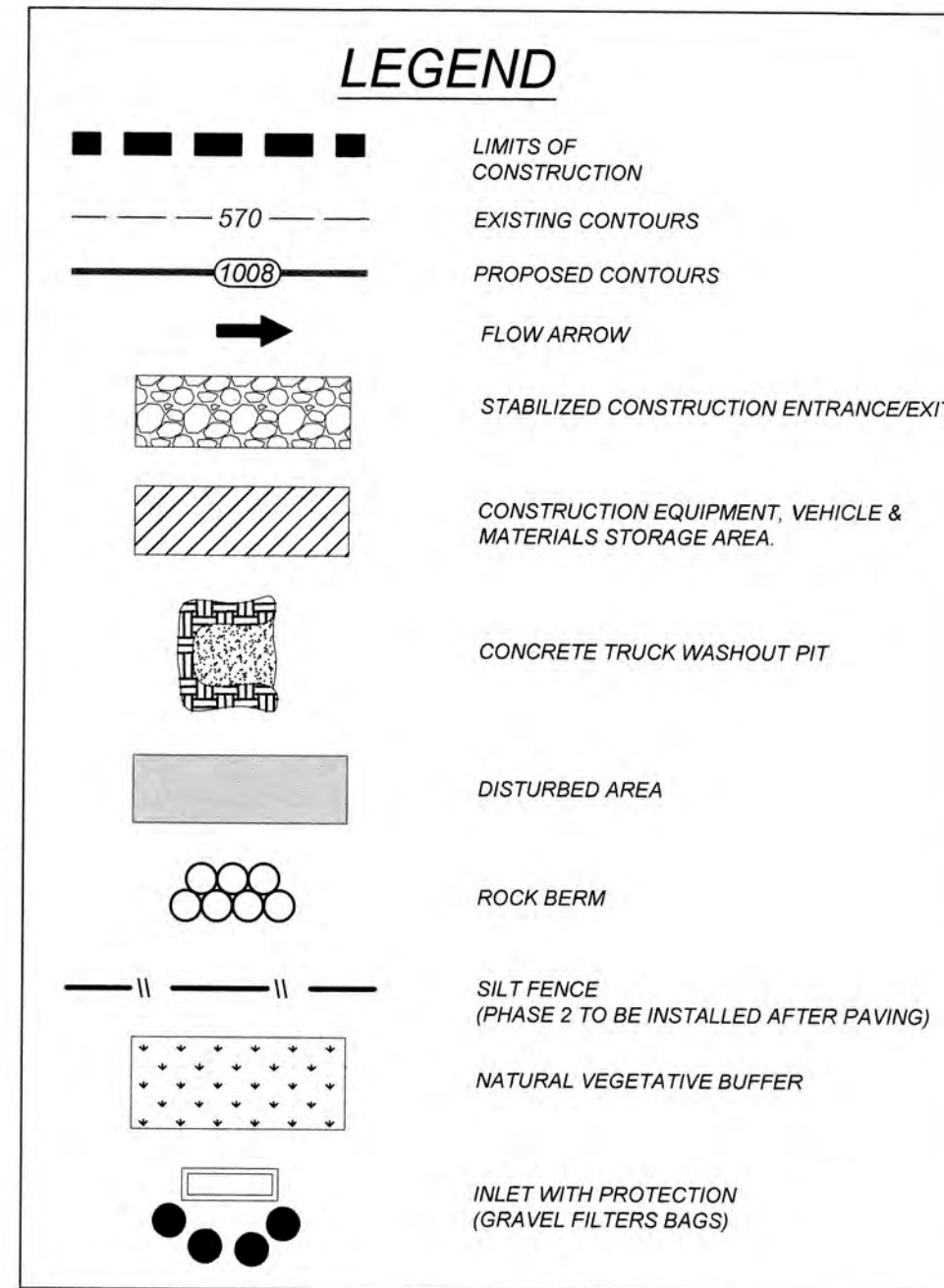
1. ALL DISTURBED AREAS ARE NOT COVERED BY IMPERVIOUS COVER ARE TO BE STABILIZED PER THE SWPPP AND PROJECT SPECIFICATIONS PRIOR TO REMOVAL OF ANY BMP'S AND/OR PRIOR TO FILING A NOTICE OF TERMINATION (NOT).
2. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN PHASES IF ALL UPGRADIENT AREAS HAVE BEEN STABILIZED PER SWPPP AND PROJECT SPECIFICATIONS. THIS PHASING SHOULD BE NOTED WITHIN THE MODIFICATIONS SECTION WITH THE SIGNATURE AND DATE OF THE RESPONSIBLE PARTY.
3. CONTRACTOR TO ENSURE THEY HAVE MET ALL REQUIREMENTS OF THE SWPPP BEFORE FILING A NOTICE OF TERMINATION (NOT).

GENERAL:

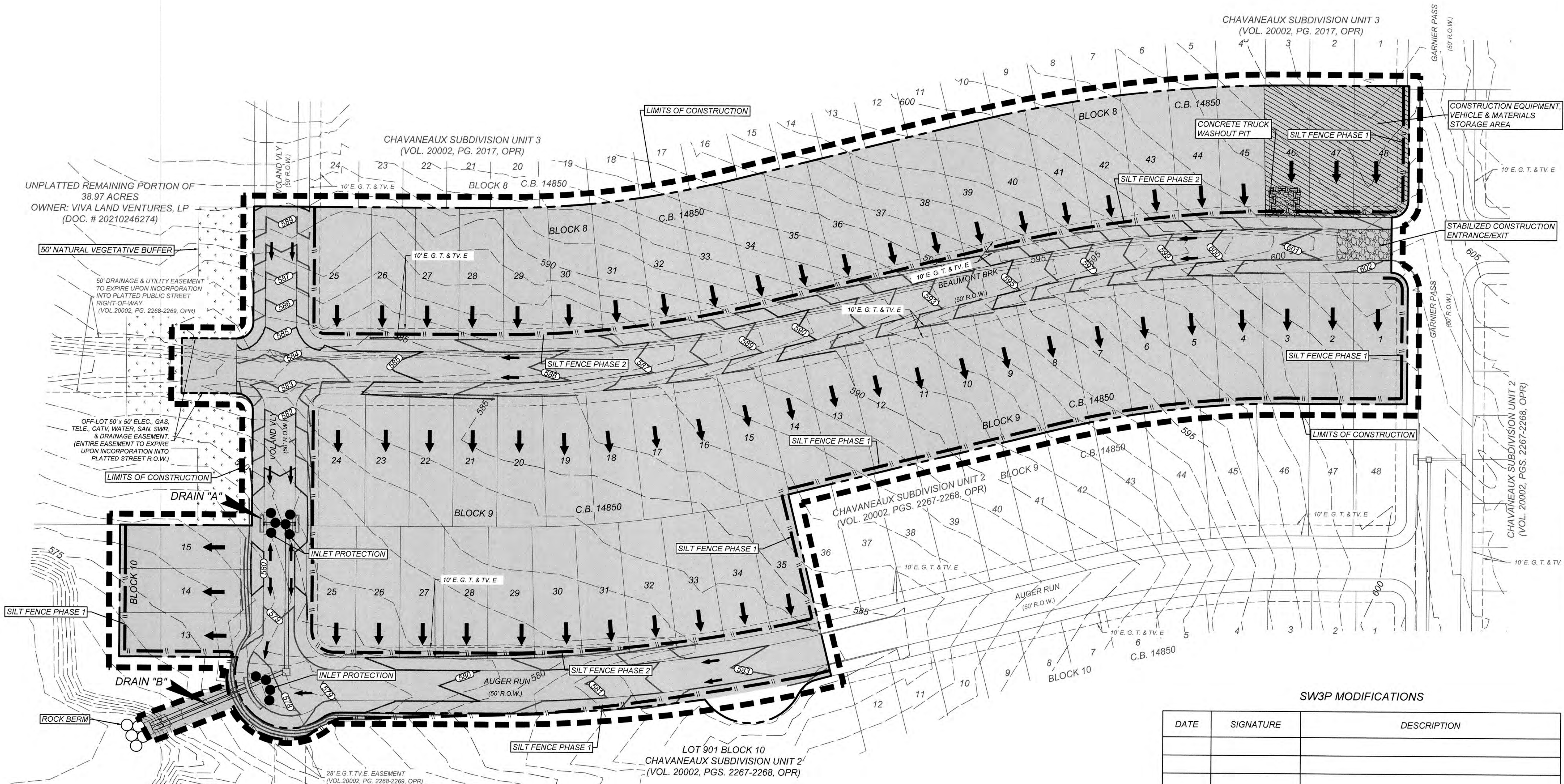
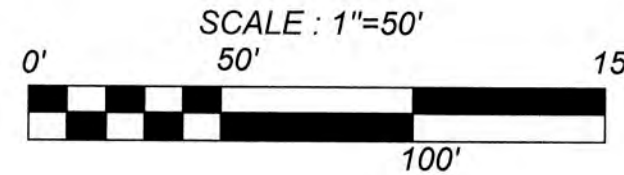
1. THIS EXHIBIT IS TO BE USED FOR THE PURPOSES OF STORMWATER POLLUTION PREVENTION ONLY. ALL OTHER CIVIL ENGINEERING INFORMATION SHOULD BE OBTAINED FROM THE APPROPRIATE CONSTRUCTION DOCUMENTS.
2. THE PURPOSE OF THE SIGNATURE AND SEAL OF THE ENGINEER ON THIS DOCUMENT IS TO DEMONSTRATE COMPLIANCE WITH THE TPDES STORMWATER POLLUTION PREVENTION PLAN REGULATIONS ONLY.
3. ALL OWNERS/OPERATORS ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH THE STORMWATER POLLUTION PREVENTION PLAN AND COMPLYING WITH THE REGULATIONS CONTAINED WITHIN IT.

COORDINATION NOTE:

1. CONTACT TIME WARNER TO COORDINATE CABLE TV SERVICE. (210) 244-0500
2. CONDUIT FOR ELECTRICAL SERVICE, CONFIRM REQUIREMENTS AND COORDINATE WITH GPS FOR INSPECTION. (210) 353-2246.
3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-449-7928.
4. CONTRACTOR TO COORDINATE WITH CPS PRIOR TO CONSTRUCTION TO PLAN ELECTRIC SERVICE.
5. CONTRACTOR TO COORDINATE WITH SAWS TO PLAN WATER AND SANITARY SEWER SERVICES (210) 704-7297.
6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.



LOCATION MAP
NOT-TO-SCALE



SW3P MODIFICATIONS

DATE	SIGNATURE	DESCRIPTION

CHAVANEAUX SUBDIVISION UNIT 4
SAN ANTONIO, TX
STORM WATER POLLUTION PREVENTION PLAN

PLAT NO.
22-11800405
JOB NO. 984-02-01
DATE: APRIL 2022
DRAWN: WDS CHECKED: SM
SHEET NUMBER:

8.0

