

# WESTOVER VILLAGE TOWNHOMES

## SAN ANTONIO, TEXAS

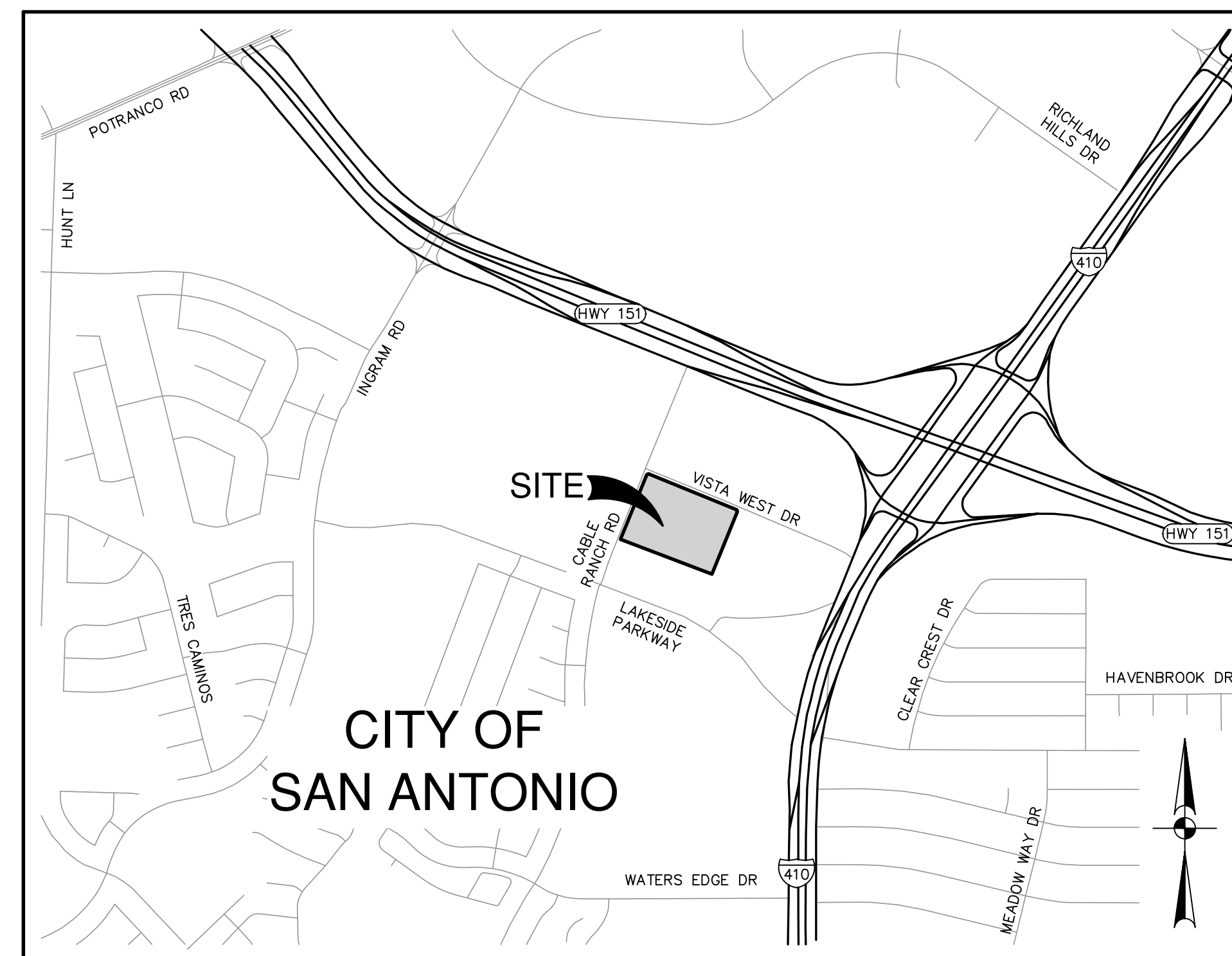
### CIVIL CONSTRUCTION PLANS

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#### SHEET INDEX

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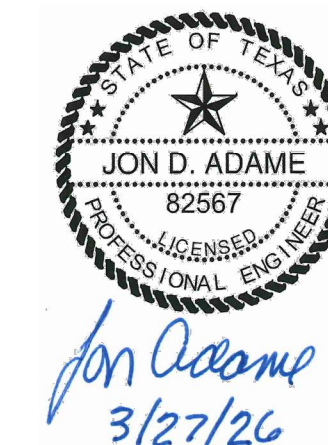


LOCATION MAP  
NOT-TO-SCALE

PREPARED FOR:

MERITAGE HOMES OF TEXAS, LLC  
2722 WEST BITTERS ROAD  
SAN ANTONIO, TEXAS 78248

MARCH 2026

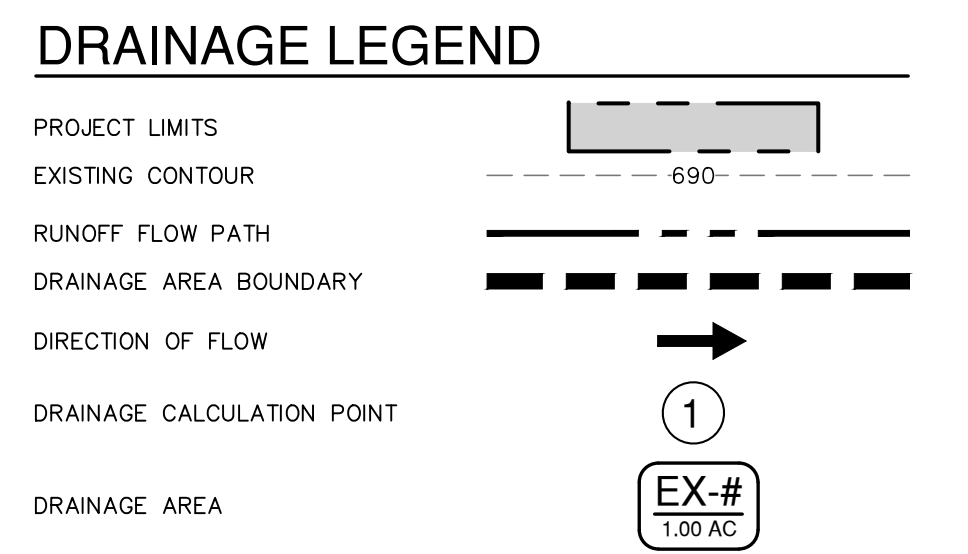
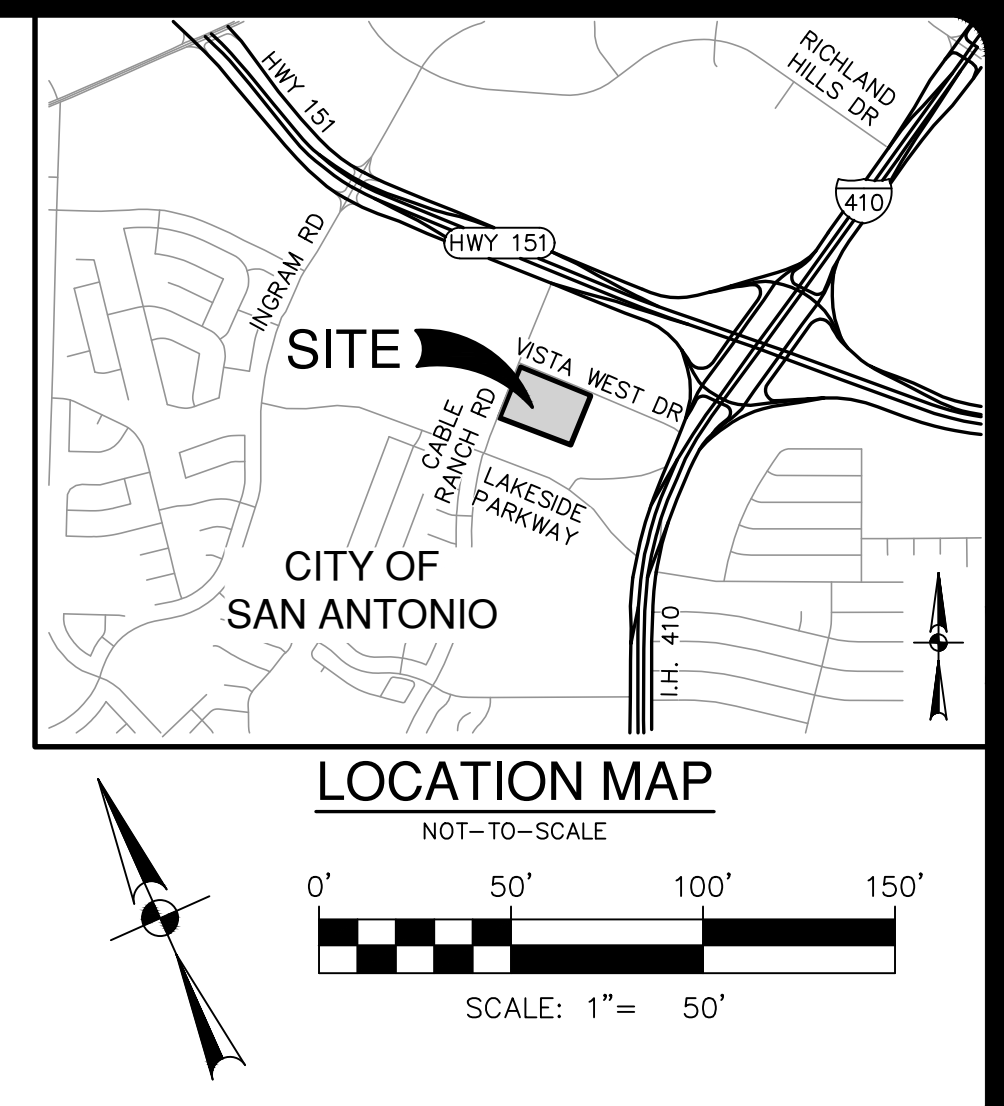


**PAPE-DAWSON**  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

WATER (SAWS PRESSURE ZONE 4)	
DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC	
ADDRESS: 2722 WEST BITTERS ROAD	
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248	
PHONE# (844) 860-7365 FAX#	
SAWS BLOCK MAP# 110580 TOTAL EDU'S 100 TOTAL ACREAGE 10.33	
8" PVC 2054 LF, 2" HOPE 334 LF &	
TOTAL LINEAR FOOTAGE OF PIPE: 12" PVC 157 LF PLAT NO. 25-11800523	
NUMBER OF LOTS 98 SAWS JOB NO. 26-1022	

SEWERSHED - WEST	
DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC	
ADDRESS: 2722 WEST BITTERS ROAD	
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248	
PHONE# (844) 860-7365 FAX#	
SAWS BLOCK MAP# 110580 TOTAL EDU'S 98 TOTAL ACREAGE 10.33	
8" PVC 2978 LF PLAT NO. 25-11800523	
TOTAL LINEAR FOOTAGE OF PIPE: 8" 2978 LF PLAT NO. 25-11800523	
NUMBER OF LOTS 98 SAWS JOB NO. 26-1515	

Date: November 14, 2025, 5:00 PM - User ID: crodriguez  
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AREA C VALUES (UD)

WATERSHED	AREA 1	C VALUE	AREA 2	C VALUE	AREA 2	C VALUE	TOTAL AREA	Cw Value
EXA	2.84	47	4.01	77	1.16	96	8.01	69
EXB	0.00	47	0.00	77	0.75	96	0.75	96
EXC	7.21	47	1.02	77	0.92	96	9.15	55
EXD	0.85	47	0.00	77	3.33	96	4.18	86
EXE	0.00	47	0.00	77	0.93	96	0.93	96
EXF1	0.00	47	1.48	77	6.55	96	8.03	92
EXF2	0.00	47	0.00	77	5.21	96	5.21	96
EXG	13.65	47	0.00	77	2.44	96	16.09	54
EXH1	0.00	47	0.00	77	8.82	96	8.82	96
EXH2	2.02	47	0.00	77	0.00	96	2.02	47

HYDROLOGY SUMMARY TABLE (EX DEVELOPMENT - ATLAS 14 - PA3)

POINT	STRUCTURE	WATERSHED	TOTAL AREA (ACRES)	COMPOSITE C VALUE	OVERLAND FLOW		SHALLOW CHANNEL FLOW @ FPS		TIME OF CONCENTRATION	INTENSITY			FLOW			POINT		
					LENGTH FEET	TRAVEL TIME MINUTES	LENGTH FEET	TRAVEL TIME MINUTES		I <sub>5</sub> IN/HR	I <sub>10</sub> IN/HR	I <sub>25</sub> IN/HR	Q <sub>5</sub> CFS	Q <sub>25</sub> CFS	Q <sub>100</sub> CFS			
	Street	EXA	8.01	0.69	70	9.0	880	8.0	0.0	17.0	4.99	6.86	8.47	27.57	37.92	46.81		
	Street	EXB	0.75	0.96	100	9.0	350	3.0	0.0	12.0	5.83	8.04	9.96	4.20	5.79	7.17		
1	Curb Inlets	EXA + EXB	8.76		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										30.02	41.30	50.96	1
	Street	EXC	9.15	0.55	90	7.5	1135	11.5	0.0	19.0	4.72	6.50	8.02	23.77	32.69	40.35		
2	Storm Drain Inlet	EXD	4.18	0.86	95	5.0	475	4.0	0.0	9.0	6.54	9.04	11.22	23.51	32.51	40.33	2	
	Street	EXE	0.93	0.96	30	6.0	630	7.0	0.0	13.0	5.65	7.77	9.60	5.04	6.94	8.57		
3	Curb Inlets	EXC + EXE	10.08		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										26.33	36.21	44.71	3
4	Storm Drain Pipe	EXA + EXB + EXC + EXD + EXE	23.02		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										54.51	77.04	96.59	4
5	Storm Drain Inlet	EXF1	8.03	0.92	0	5.0	695	6.0	565	1.0	12.0	5.84	8.05	9.95	43.13	59.44	73.51	5
	Curb Inlets	EXF2	5.21	0.96	50	5.0	565	5.0	0.0	10.0	6.29	8.68	10.75	31.44	43.41	53.78		
6	Storm Drain Pipe	EXA + EXB + EXC + EXD + EXE + EXF1 + EXF2	36.26		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										114.17	163.31	205.47	6
7	Channel	EXG	16.09	0.54	100	10.0	710	8.5	660	0.5	19.0	7.52	10.34	12.77	65.36	89.88	110.94	7
	Storm Drain	EXH1	8.82	0.96	0	5.0	605	5.5	350	0.5	11.0	6.05	8.35	10.33	51.25	70.68	87.49	
	CHANNEL	EXH2	2.02	0.47	100	15.0	320	4.0			19.0	4.72	6.50	8.02	4.48	6.17	7.61	
8	Storm Drain Pipe	EXG + EXH1	24.91		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										83.97	116.95	145.40	8
9	Outfall	EXA + EXB + EXC + EXD + EXE + EXF1 + EXF2 + EXG + EXH1 + EXH2	61.17		REFERENCE STORM WATER MANAGEMENT REPORT FOR HYDRAULIC CALCULATIONS										196.90	279.66	350.56	9

DATE	
NO. REVISION	

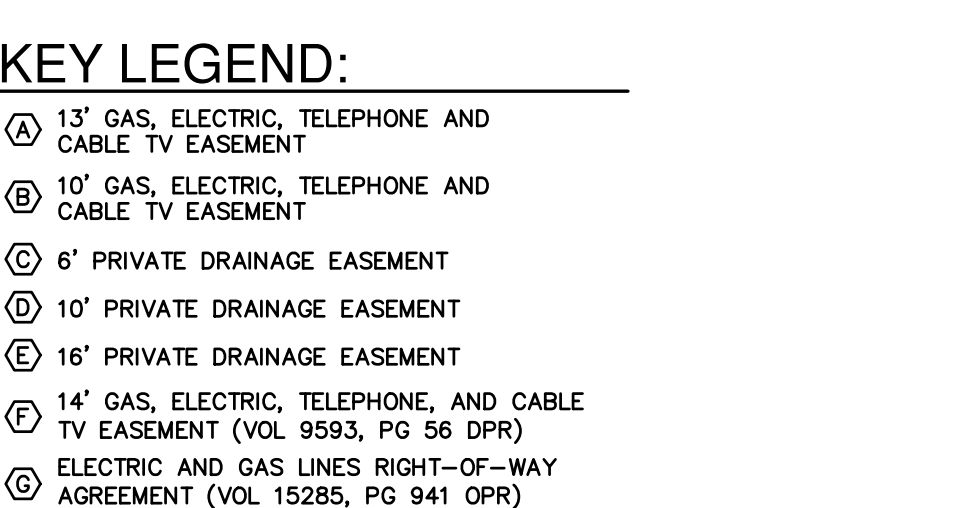
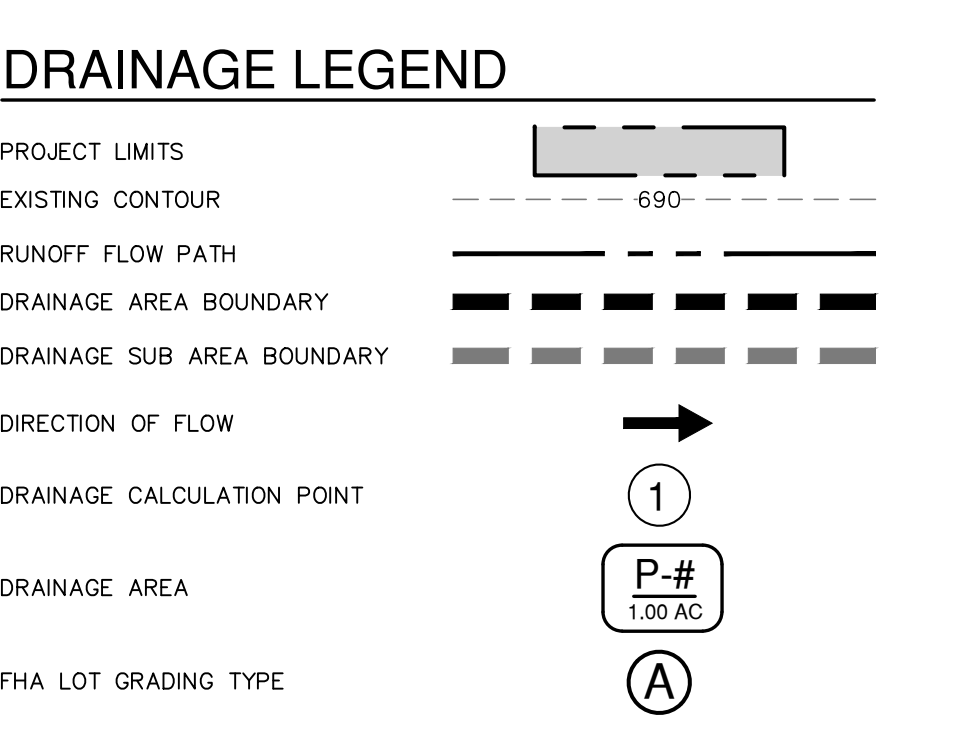
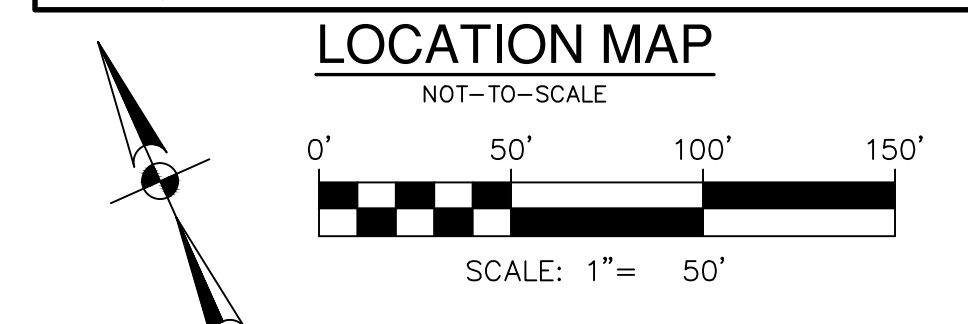
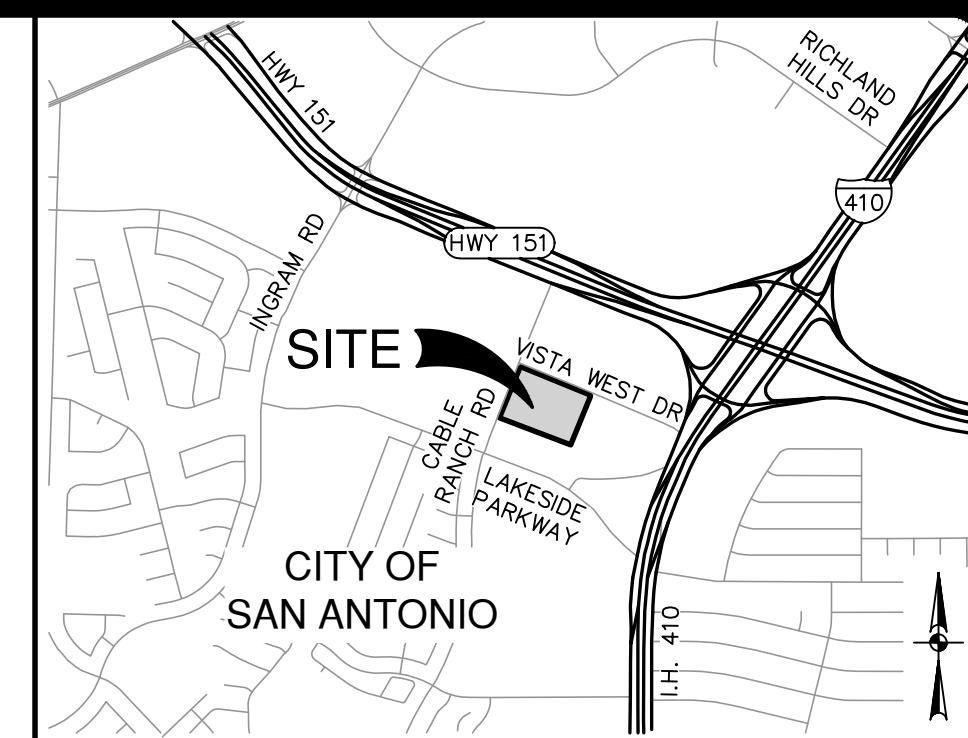
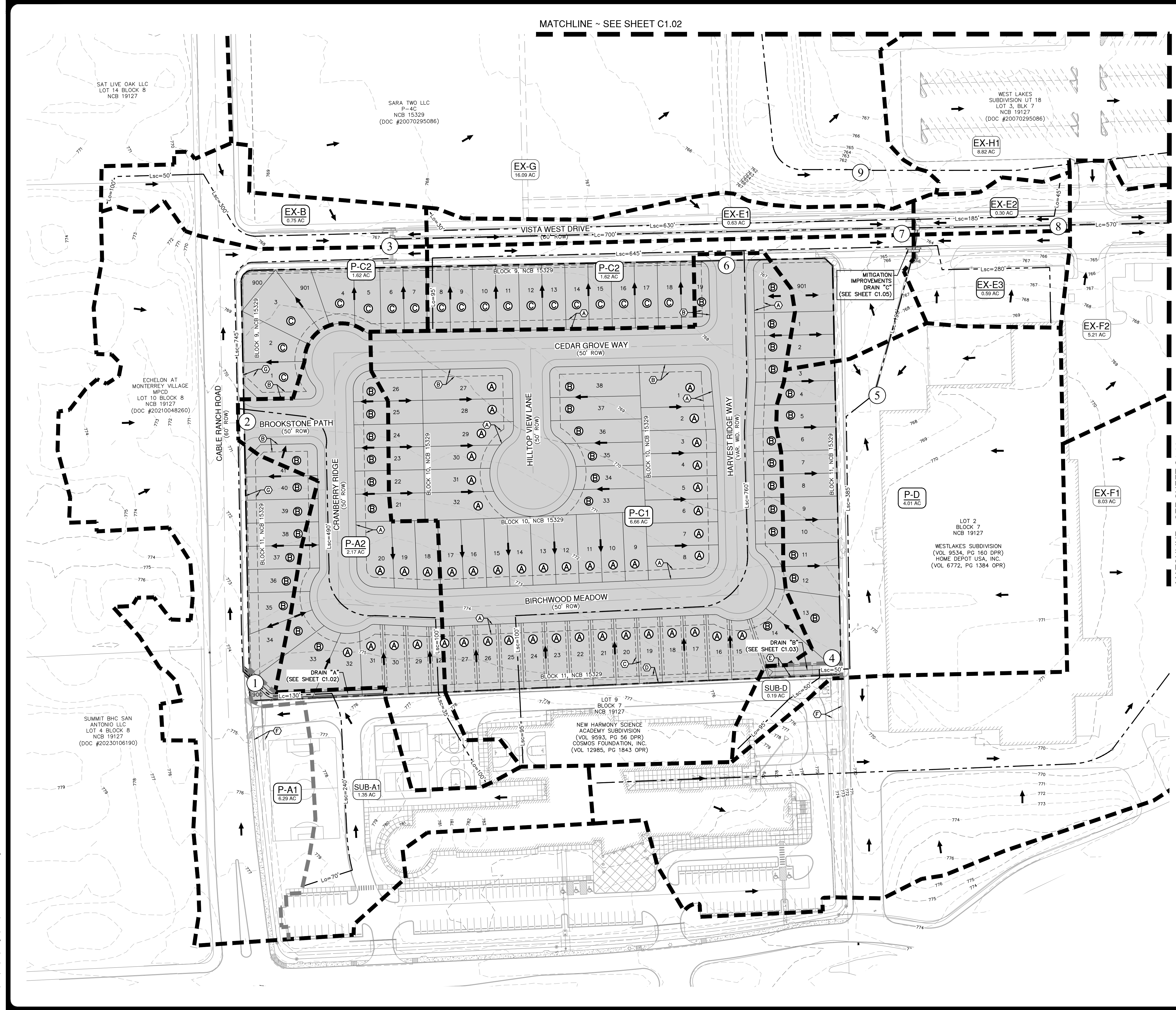
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 2000 NW LOOP 410 | SAN ANTONIO, TX 78243 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 OVERALL DRAINAGE PLAN (EXISTING CONDITIONS)

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C1.00

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. IMAGERY PROVIDED BY GOOGLE; UNLESS OTHERWISE NOTED. Imagery © 2016, CAPOCO, DigitalGlobe, Terra, OrthoImage, Program, USDA Farm Service Agency.

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- DRAINAGE & GRADING NOTES:**
- THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
  - ALL CONCRETE FOR TxDOT DRAINAGE STRUCTURES SHALL MEET TxDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
  - REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
  - CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
  - EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.
  - CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

**CAUTION!!**  
 CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTWORKS, 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.

**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.

DATE	
NO.	REVISION

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 2000 NW LOOP 410 | SAN ANTONIO, TX 78243 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

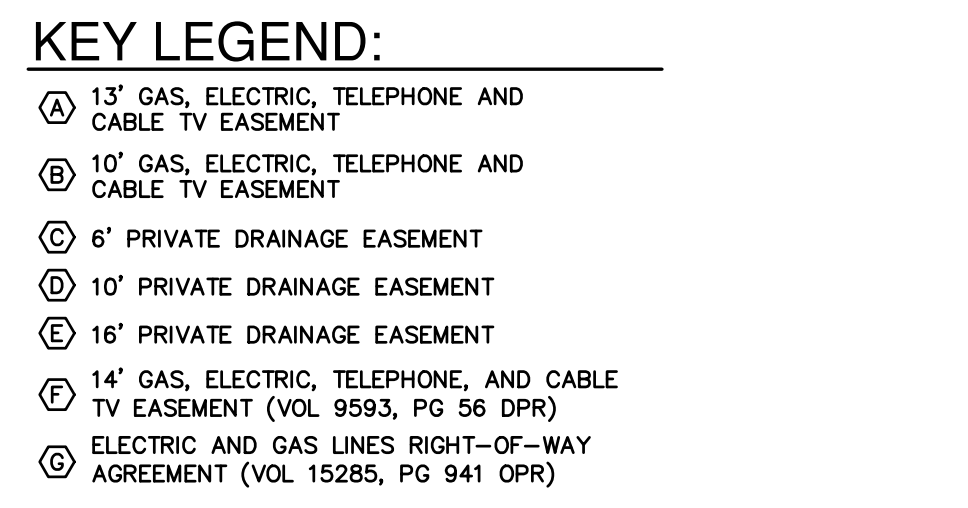
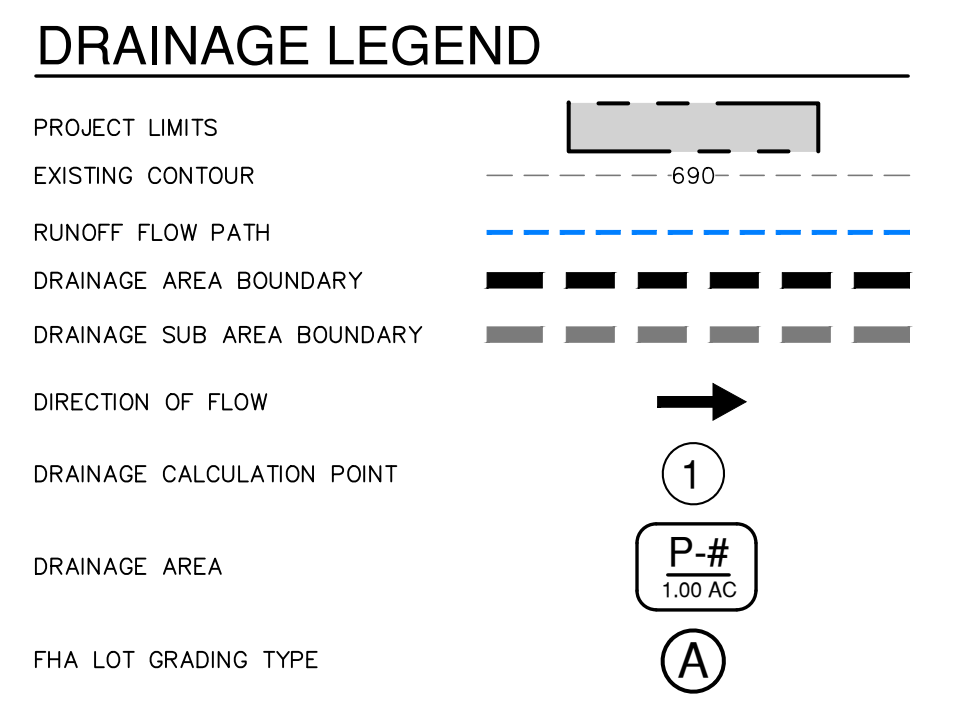
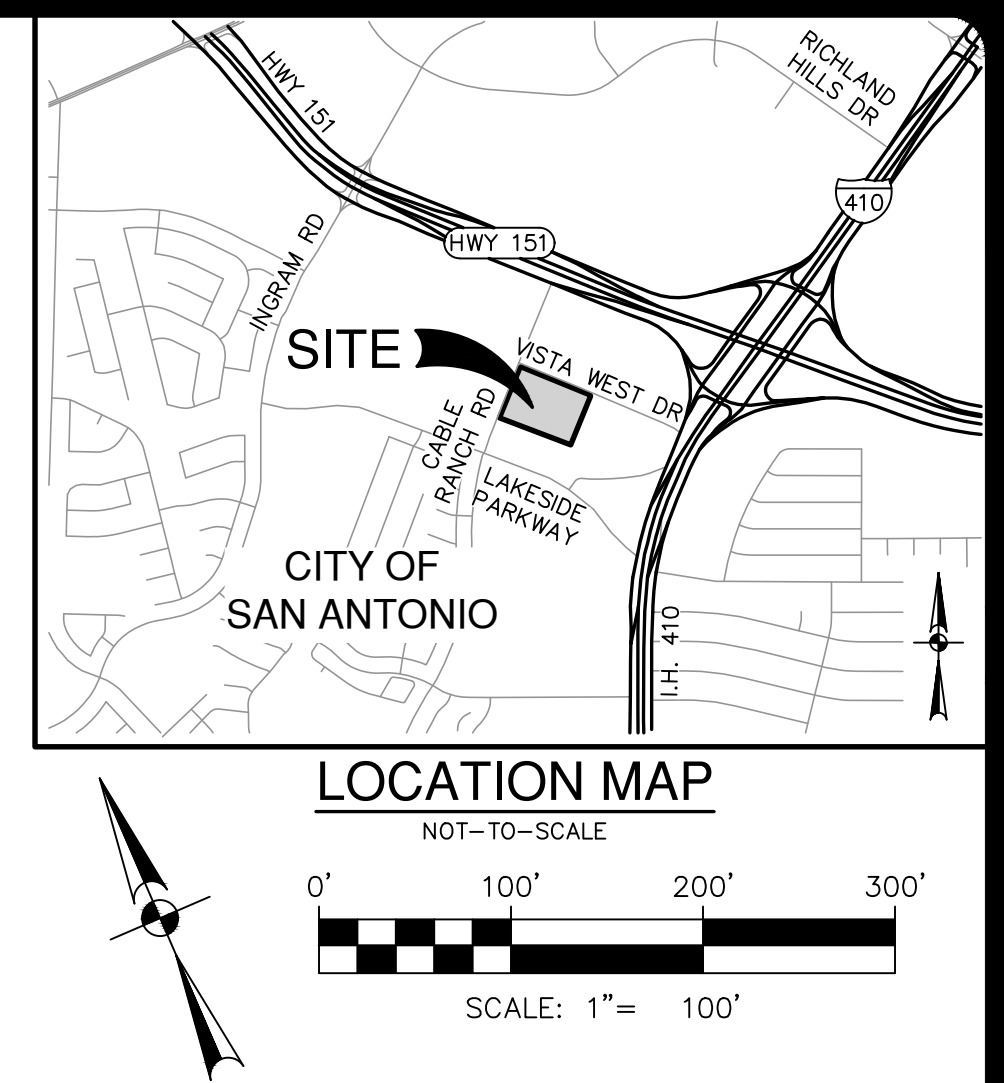
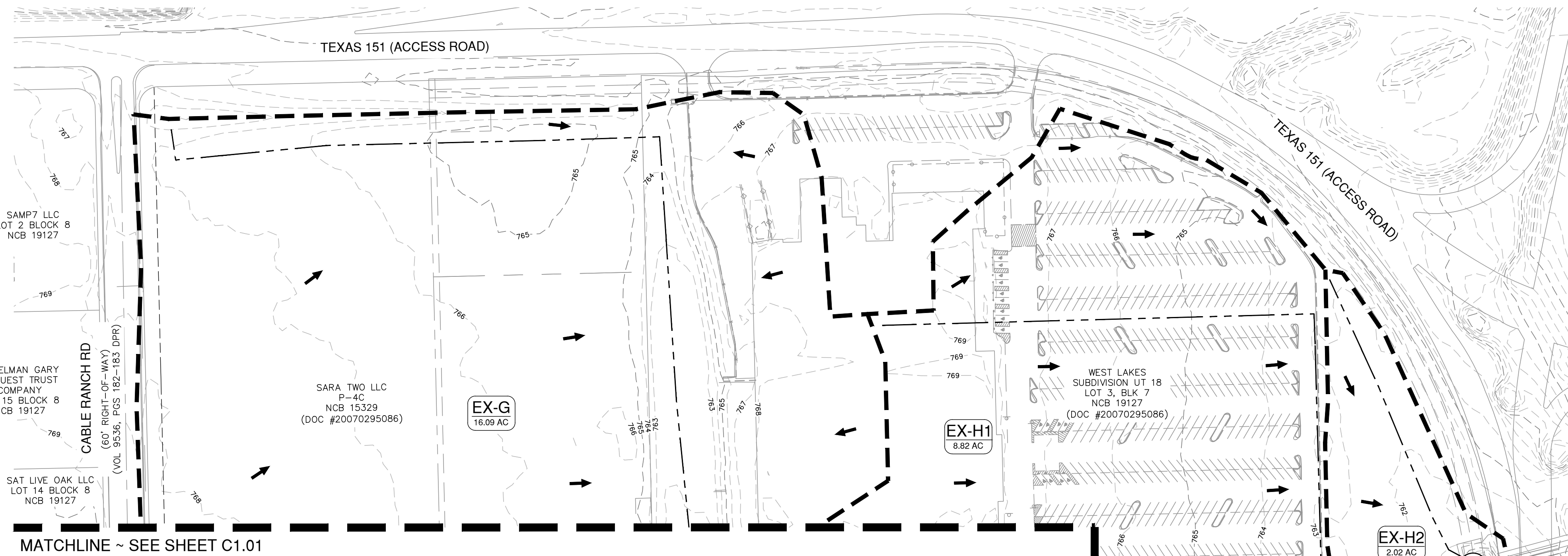
*Jon Adams*  
 2-23-26

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS

**OVERALL DRAINAGE PLAN (ULTIMATE DEVELOPMENT)**

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C1.01

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**DRAINAGE & GRADING NOTES:**

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**TRENCH EXCAVATION SAFETY PROTECTION:**

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**AREA C VALUES (UD)**

WATERSHED	AREA 1	C VALUE	AREA 2	C VALUE	TOTAL AREA	Cw Value
EXB	0.00	77	0.75	96	0.750	96
EXE1	0.00	77	0.63	96	0.630	96
EXE2	0.00	77	0.30	96	0.300	96
EXE3	0.00	77	0.59	96	0.590	96
P-A1	5.13	77	1.16	96	6.290	81
P-A2	2.81	77	0.00	96	2.810	77
SUB-A1	1.35	77	0.00	96	1.350	77
P-C1	6.66	77	0.00	96	6.660	77
P-C2	1.62	77	0.00	96	1.620	77
P-D	0.83	77	3.18	96	4.010	92
SUB-D	0.19	77	0.00	96	0.190	77

**HYDROLOGY SUMMARY TABLE (UD DEVELOPMENT - ATLAS 14 - PA3)**

POINT	STRUCTURE	WATERSHED	TOTAL AREA (ACRES)	COMPOSITE C VALUE	OVERLAND FLOW				SHALLOW CHANNEL FLOW (6 FPS)				TIME OF CONCENTRATION			INTENSITY			FLOW			POINT
					LENGTH FEET	TRAVEL TIME MINUTES	LENGTH FEET	TRAVEL TIME MINUTES	LENGTH FEET	TRAVEL TIME MINUTES	MINUTES	I <sub>5</sub> IN/HR	I <sub>10</sub> IN/HR	I <sub>100</sub> IN/HR	Q <sub>5</sub> CFS	Q <sub>10</sub> CFS	Q <sub>100</sub> CFS					
																		Q <sub>5</sub> CFS	Q <sub>10</sub> CFS	Q <sub>100</sub> CFS		
	Curb Inlets	EXB	0.75	0.96	100	9.0	350	3.0	0	0.0	12.0	5.83	8.04	9.96	4.20	5.79	7.17					
	Curb Inlets	EXE1	0.63	0.96	30	6.0	630	7.0	0	0.0	13.0	5.64	7.77	9.59	3.41	4.70	5.80					
	Curb Inlets	EXE2	0.30	0.96	45	5.0	185	1.0	0	0.0	6.0	7.50	10.42	13.02	2.16	3.00	3.75					
	Curb Inlets	EXE3	0.59	0.96	0	5.0	280	2.0	0	0.0	7.0	7.13	9.90	12.32	4.04	5.61	6.98					
1	Channel	SUB-A1	1.35	0.77	70	8.5	240	2.0	130	0.5	11.0	6.05	8.35	10.33	6.29	8.68	10.74	1				
	Curb Inlets	P-A1	6.29	0.81	70	8.5	985	8.0	130	0.5	17.0	4.99	6.86	8.47	25.42	34.95	43.15					
2	Street	P-A2	2.17	0.77	100	10.0	625	6.0	0	0.0	16.0	5.13	7.06	8.72	8.58	11.80	14.57	2				
3	Curb Inlets	EXB + P-A1 + P-A2	9.21												35.57	49.11	60.77	3				
6	Street	P-C1	6.66	0.77	95	8.0	860	7.0	0	0.0	15.0	5.29	7.28	8.99	27.14	37.34	46.11	6				
	Curb Inlets	P-C2	1.62	0.77	95	7.0	645	7.0	0	0.0	14.0	5.46	7.52	9.28	6.81	9.38	11.58					
7	Curb Inlets	EXE1 + EXE2 + EXE3 + P-C1 + P-C2	9.80												36.72	50.54	62.42	7				
4	Channel	SUB-D	0.19	0.77	95	5.0	50	0.5	50	0.5	6.0	7.52	10.39	12.99	1.10	1.52	1.90	4				
5	Exist Drain Pipe	P-D	4.01	0.92	95	5.0	435	3.5	50	0.5	9.0	6.54	9.05	11.22	24.13	33.37	41.39	5				
8	Exist Drain Pipe	EXB + EXE1 + EXE2 + EXE3 + P-A1 + P-A2 + P-C1 + P-C2 + P-D	23.02												72.47	102.01	127.50	8				
	Storm Drain Inlet	EXF1	8.03	0.92	0	5.0	695	6.0	565	1.0	5.84	8.05	9.95	43.13	69.44	73.51						
	Curb Inlets	EXF2	5.21	0.96	50	5.0	565	5.0	0	0.0	10.0	6.29	8.68	10.75	31.44	43.41	53.78					
9	Storm Drain Pipe	EXB + EXE1 + EXE2 + EXE3 + P-A1 + P-A2 + P-C1 + P-C2 + P-D + EXF1 + EXF2	36.26												131.30	186.33	233.55	9				
	Channel	EXG	16.09	0.54	100	10.0	710	8.5	660	0.5	19.0	7.52	10.34	12.77	65.36	89.88	110.04					
	Storm Drain	EXH1	8.82	0.96	0	5.0	605	5.5	350	0.5	11.0	6.05	8.35	10.33	51.25	70.68	87.49					
	CHANNEL	EXH2	2.02	0.47	100	15.0	320	4.0			19.0	4.72	6.50	8.02	4.48	6.17	7.61					
9	Storm Drain Pipe	EXG + EXH1	24.91												83.97	116.95	145.40	9				
10	Outfall	EXB + EXE1 + EXE2 + EXE3 + P-A1 + P-A2 + P-C1 + P-C2 + P-D + EXF1 + EXF2 + EXG + EXH1 + EXH2	61.17												214.40	302.90	378.75	10				

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DATE	
NO.	REVISION

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 2000 NW LOOP 410 | SAN ANTONIO, TX 78243 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS

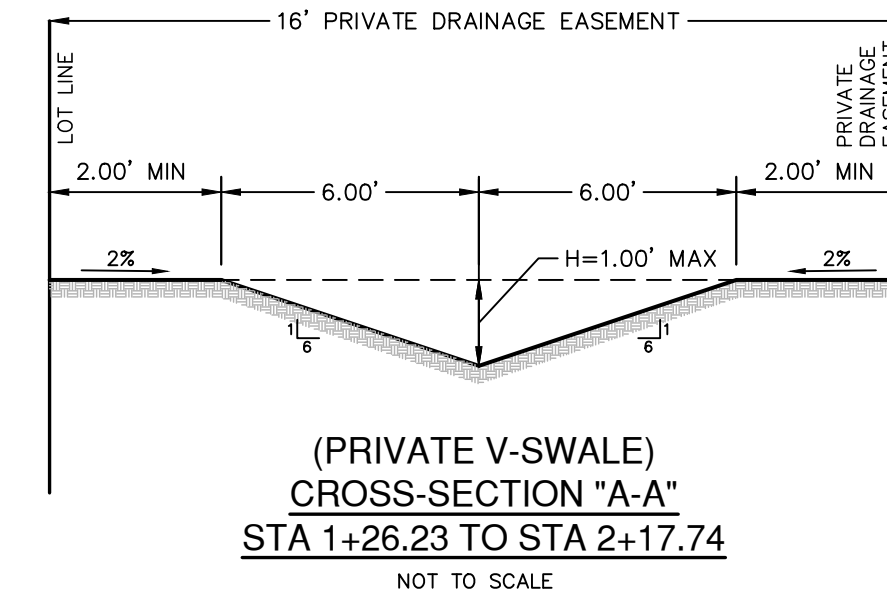
**OVERALL DRAINAGE PLAN (ULTIMATE DEVELOPMENT)**

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C1.02

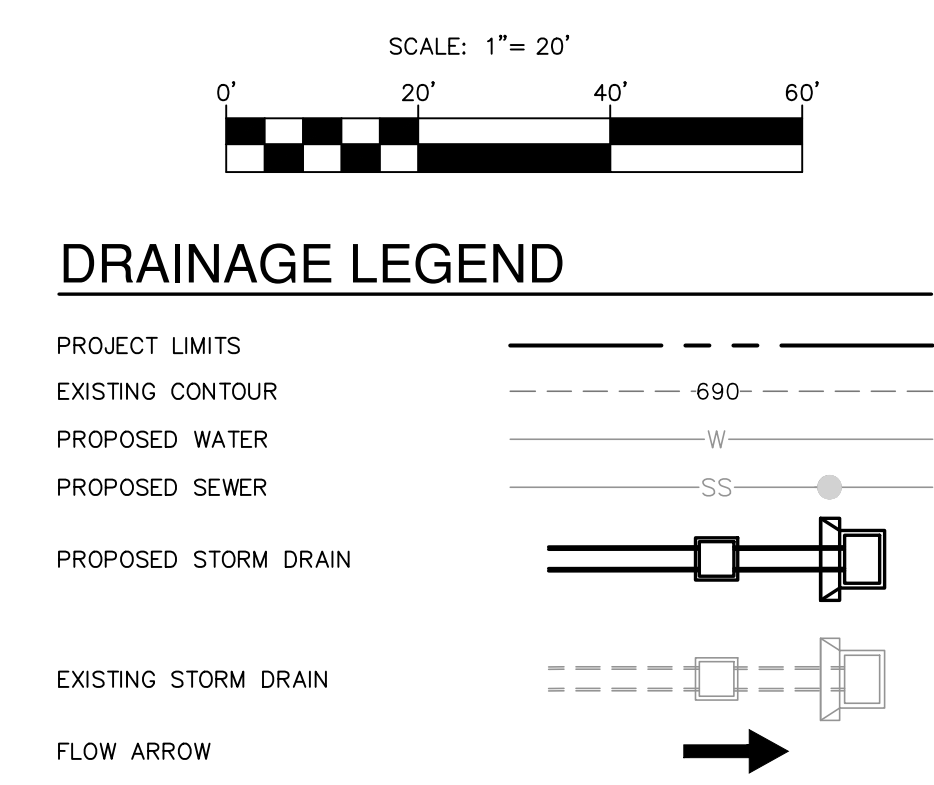


**Table 9.3.8.1 - Retardance Class for Lining Materials**  
(Source TxDOT - Hydraulic Design Manual, Chapter 7, Section 3 - Roadside Channel Design)

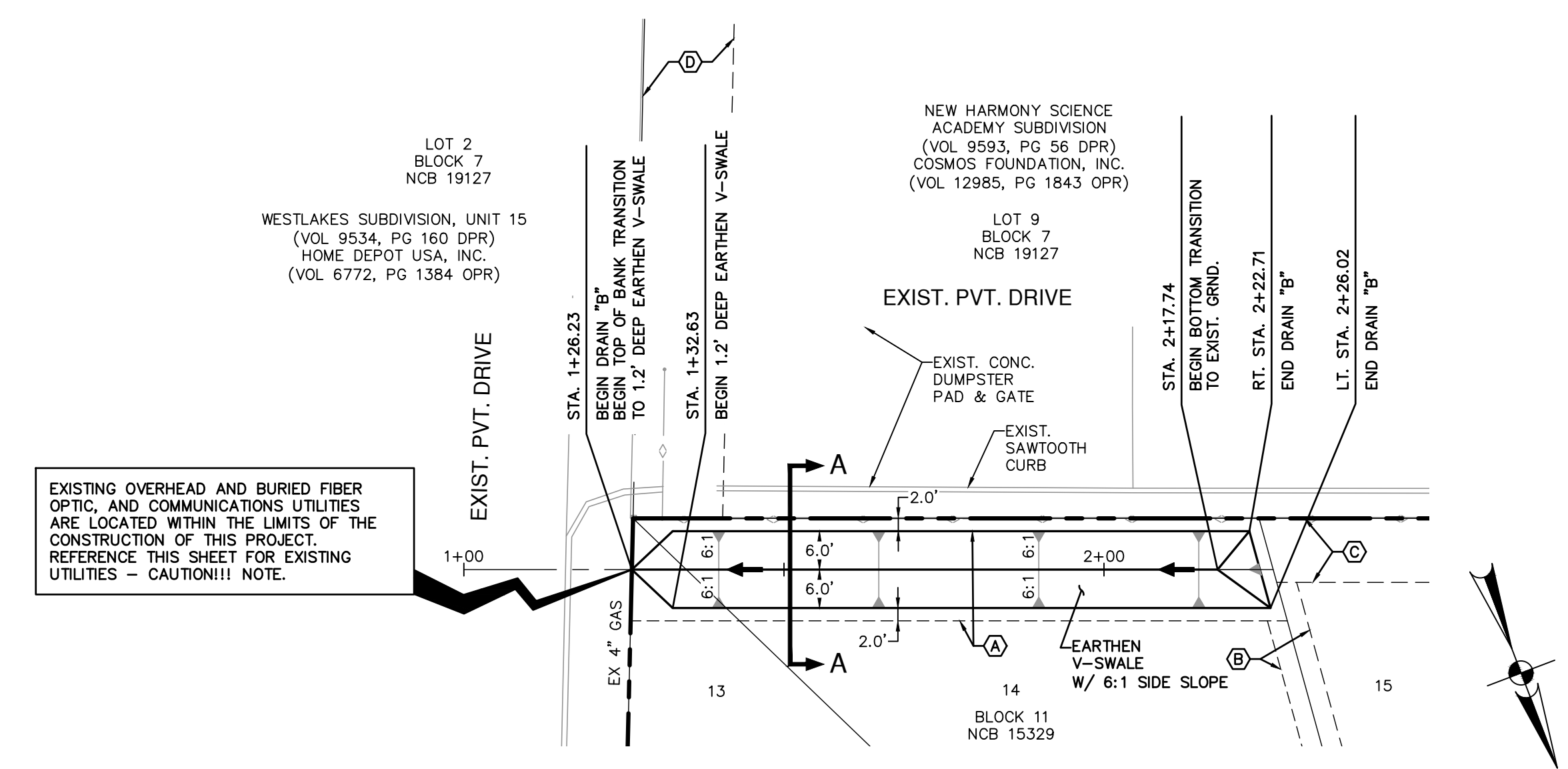
Retardance Class	Permissible Shear Stress (t) (lbs./sq.ft.)	Cover	Condition
B	2.1	Bermuda grass	Good stand, tall (average 12 in. or 305 mm)
		Native grass mixture little bluestem, bluestem, blue gamma, other short and long stem midwest grasses	Good stand, unmowed
		Lespedeza sericea	Good stand, not woody, tall (Average 19 in. or 480mm)
		Alfalfa	Good stand, uncut (Average 11 in. or 280mm)
		Blue gamma	Good stand, uncut (Average 11 in. or 280mm)
C	1.1	Crabgrass	Fair stand, uncut (10-to-48 in. or 55-to- 1220 mm)
		Bermuda grass	Good stand, mowed (average 6 in. or 150 mm)
		Common lespedeza	Good Stand, uncut (average 11 in. Or 280 mm)
		Grass-legume mixture: summer (orchard grass redtop, Italian ryegrass, and common lespedeza)	Good Stand, uncut (6-8 in. or 150-200 mm)
D	0.6	Centipede grass	Very dense cover (average 6 in. or 150 mm)
		Kentucky bluegrass	Good stand, headed (6-12 in. or 150- 305 mm)
		Bermuda grass	Good stand, cut to 2.5 in. or 65 mm
		Common lespedeza	Excellent stand, uncut (average 4.5 in. or 115 mm)
E	0.35	Buffalo grass	Good stand, uncut (3-6 in. or 75-150 mm)
		Grass-legume mixture: fall, spring (orchard grass Italian ryegrass, and common lespedeza)	Good stand, uncut (4-5 in. or 100-125 mm)
		Lespedeza sericea	After cutting to 2 in. or 50 mm (very good before cutting)
		Bermuda grass	Good stand, cut to 1.5 in. or 40 mm
		Bermuda grass	Burned Stubble
	2.5	Rock D50=6 in. or 150 mm	
	5.0	Rock D50=12 in. or 300 mm	
	2.5	Type III Curlex Soil Retention Blanket	



(PRIVATE) HYDRAULIC CALCULATIONS V-SWALE SECTION A-A	(PRIVATE) HYDRAULIC CALCULATIONS V-SWALE SECTION A-A	(PRIVATE) HYDRAULIC CALCULATIONS V-SWALE SECTION A-A
STA. 1+26.23 TO 1+68.18	STA. 1+68.18 TO 1+95.50	STA. 1+95.50 TO 2+17.74
Q25 = 1.52 cfs n = 0.035 S = 1.25% D = 1 dh = 0.40' V = 1.58 FPS τ <sub>a</sub> = 0.15 LB/FT <sup>2</sup> RC = C SEE THIS SHEET FOR OPEN EARTHEN CHANNEL NOTE	Q25 = 1.52 cfs n = 0.035 S = 3.55% D = 1 dh = 0.33' V = 2.33 FPS τ <sub>a</sub> = 0.36 LB/FT <sup>2</sup> RC = C SEE THIS SHEET FOR OPEN EARTHEN CHANNEL NOTE	Q25 = 1.52 cfs n = 0.035 S = 1.90% D = 1 dh = 0.37' V = 1.85 FPS τ <sub>a</sub> = 0.22 LB/FT <sup>2</sup> RC = C SEE THIS SHEET FOR OPEN EARTHEN CHANNEL NOTE

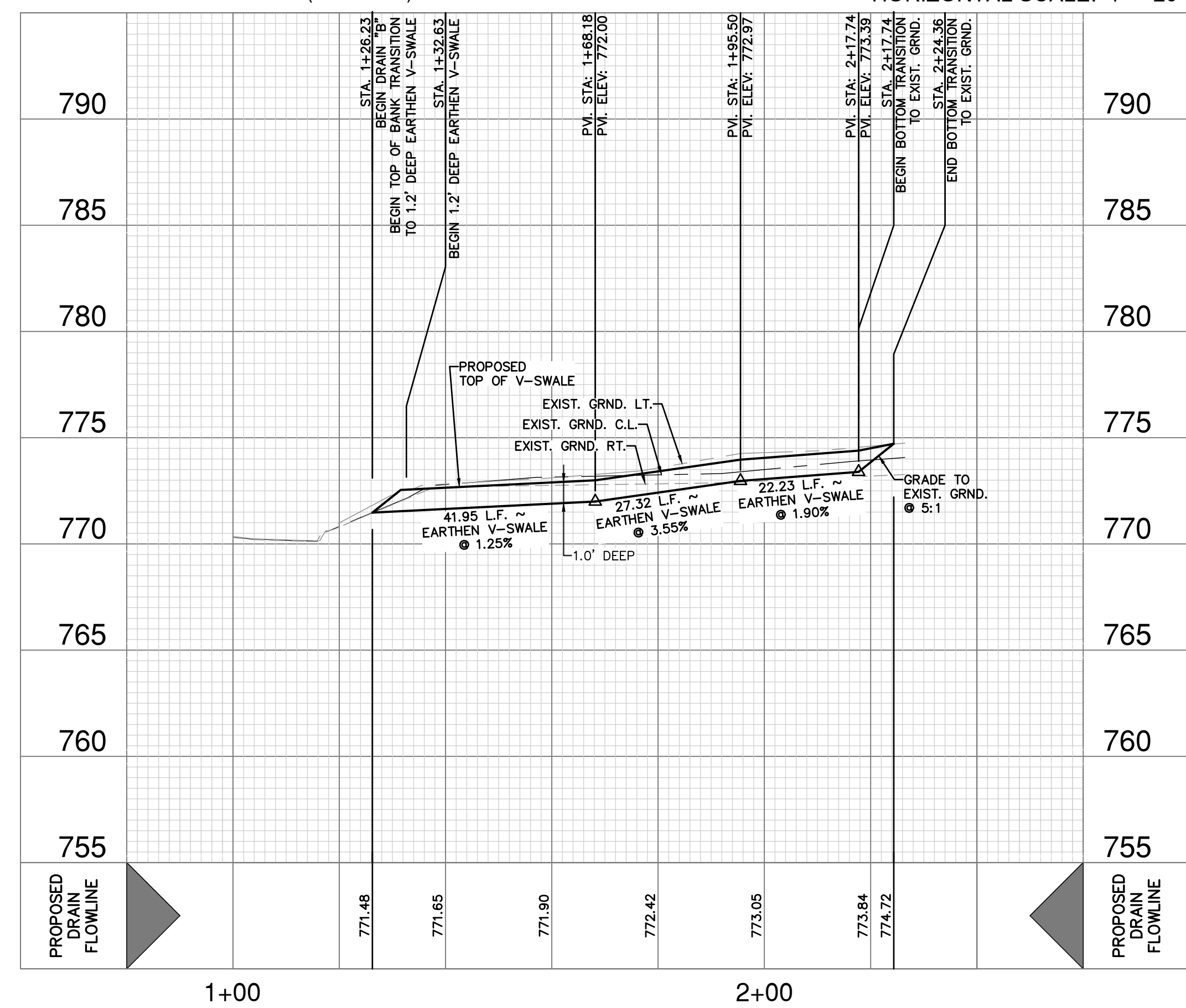


- KEY LEGEND:**
- Ⓐ 16' PRIVATE DRAINAGE EASEMENT
  - Ⓑ 6' PRIVATE DRAINAGE EASEMENT
  - Ⓒ 10' PRIVATE DRAINAGE EASEMENT
  - Ⓓ 14' GAS, ELECTRIC, TELEPHONE, AND CABLE TV EASEMENT (VOL 9593, PG 56 DPR)



EXISTING OVERHEAD AND BURIED FIBER OPTIC AND COMMUNICATIONS UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. REFERENCE THIS SHEET FOR EXISTING UTILITIES - CAUTION!!! NOTE.

(PRIVATE) DRAIN B ~ STA. 1+00.00 TO END  
VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 20'



**OPEN CHANNEL NOTE:**  
CONTRACTOR SHALL REFERENCE TABLE 9.3.8.1 - "RETARDANCE CLASS FOR LINING MATERIALS" PROVIDED ON THIS SHEET AND SUPPLIED RETARDANCE CLASS (RC) FOR CHOICE OF COVER WITHIN OPEN EARTHEN CHANNEL CROSS-SECTIONS.

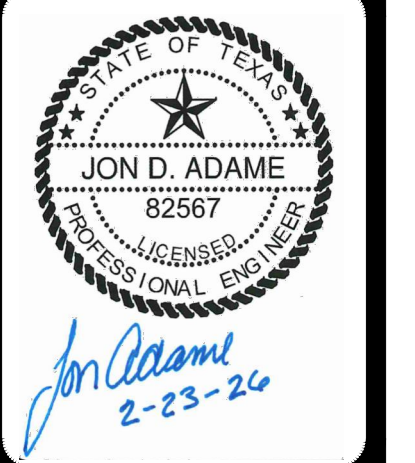
**EXISTING UTILITIES - CAUTION!!**  
EXISTING UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, VERIFYING THE EXACT LOCATION AND IDENTIFYING ANY AREAS OF CONFLICTS WITH EXISTING UTILITIES AND WILL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS ARE FOUND.

- DRAINAGE & GRADING NOTES:**
- A CITY OF SAN ANTONIO ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN COSA ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
  - THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
  - ALL CONCRETE FOR TxDOT DRAINAGE STRUCTURES SHALL MEET TxDOT SPECIFICATIONS. ALL OTHER CONCRETE SHALL BE CLASS "A" 3000 PSI CYLINDER STRENGTH IN 28 DAYS.
  - REFERENCE DRAINAGE DETAILS FOR PIPE TRENCH DETAILS, BOX CULVERT, HEADWALL, AND WINGWALL CONSTRUCTION DETAILS, AND BOX CULVERT BEDDING AND EXCAVATION LIMITS.
  - CONTRACTOR SHALL GROUT ALL CURB INLETS AND JUNCTION BOXES TO PROVIDE FOR POSITIVE DRAINAGE.
  - EARTHEN CHANNELS WILL BE VEGETATED BY SEEDING OR SODDING. 85% OF THE CHANNEL SURFACE MUST HAVE ESTABLISHED VEGETATION BEFORE THE CITY OF SAN ANTONIO WILL ACCEPT.
  - CONTRACTOR SHALL MATCH TOP OF CHANNEL TO NATURAL GROUND AND MAINTAIN A MINIMUM CHANNEL DEPTH OF "D" AS SHOWN IN THE PROFILE.

**CAUTION!!**  
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING 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.

**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.

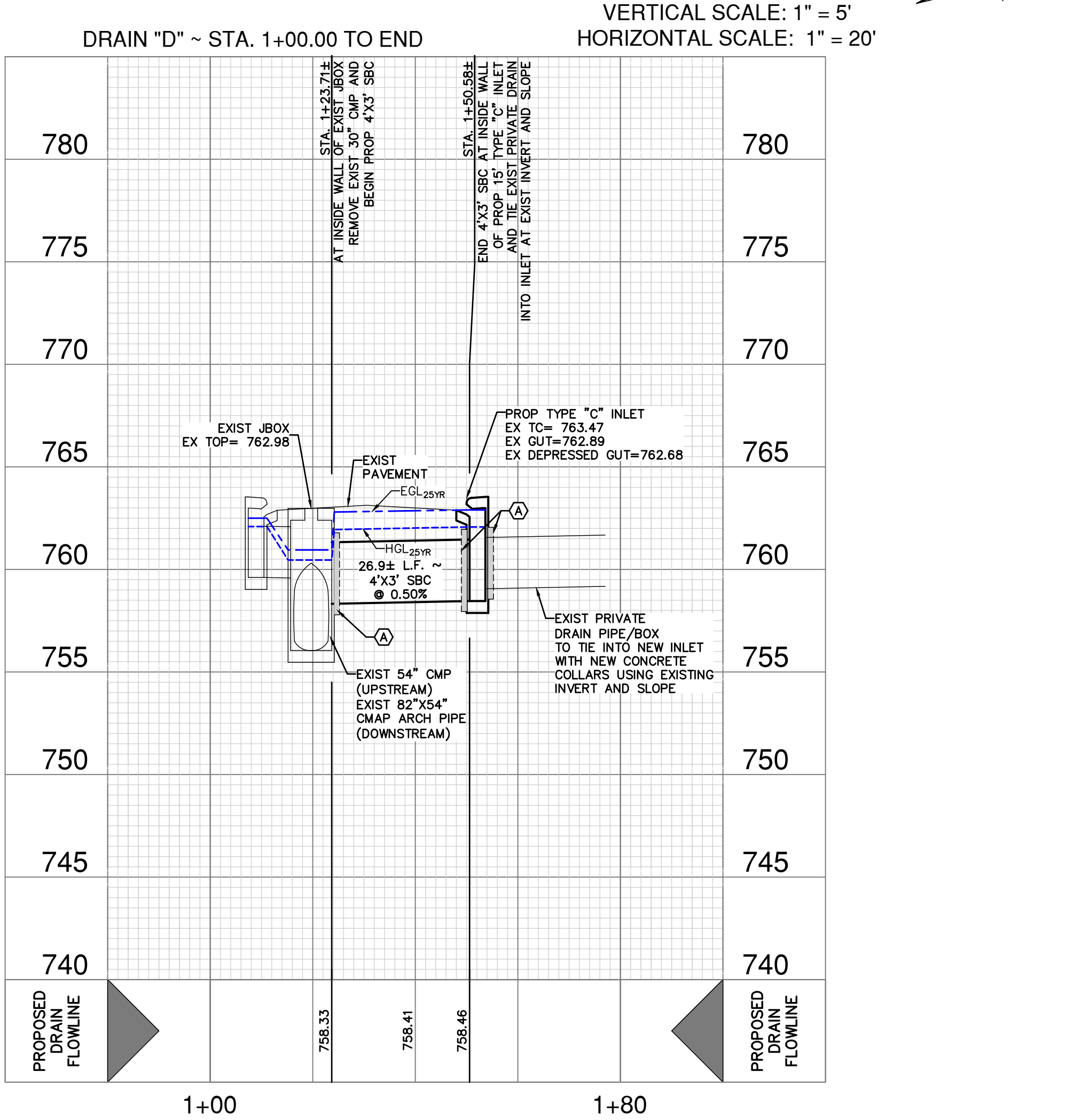
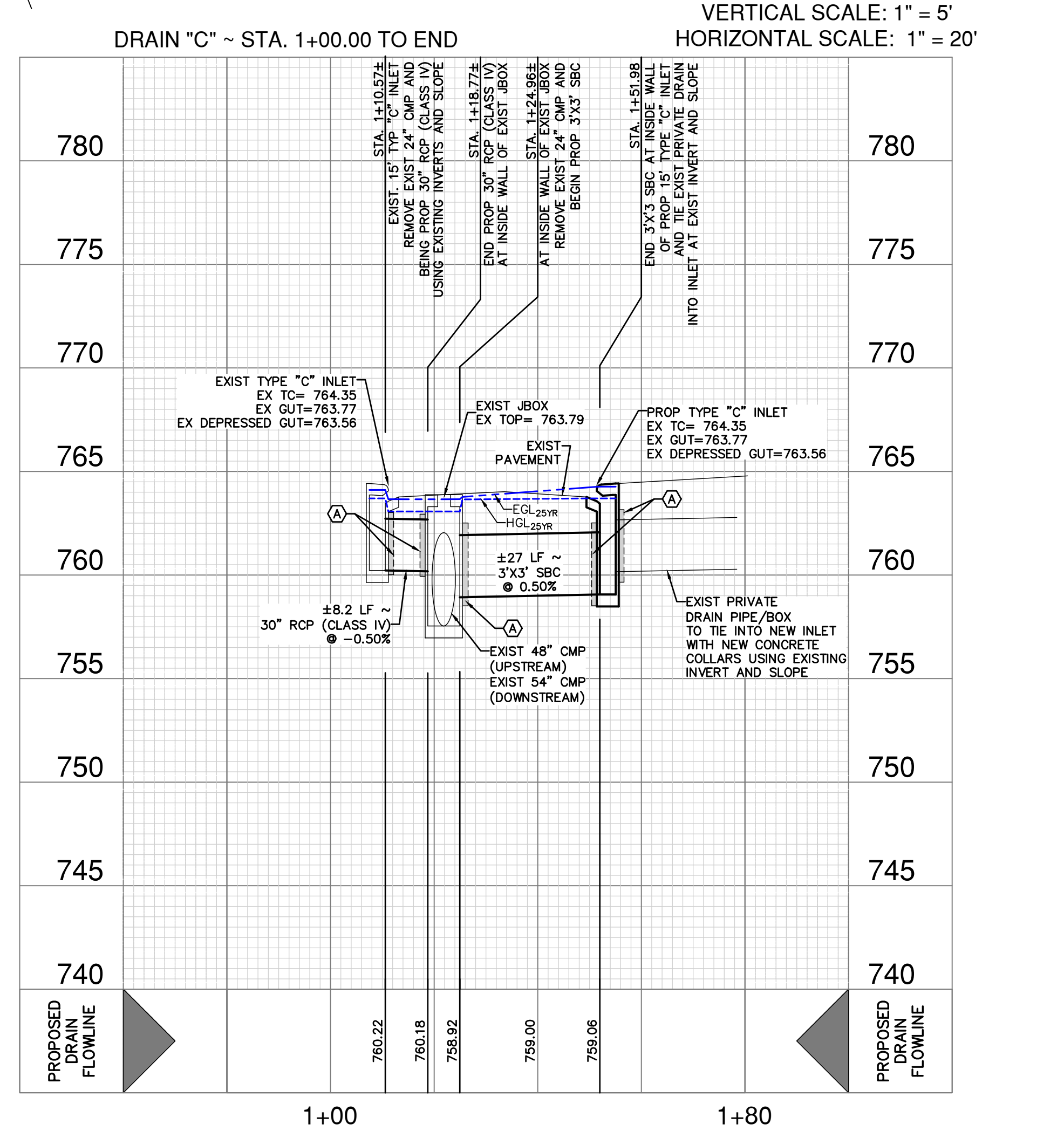
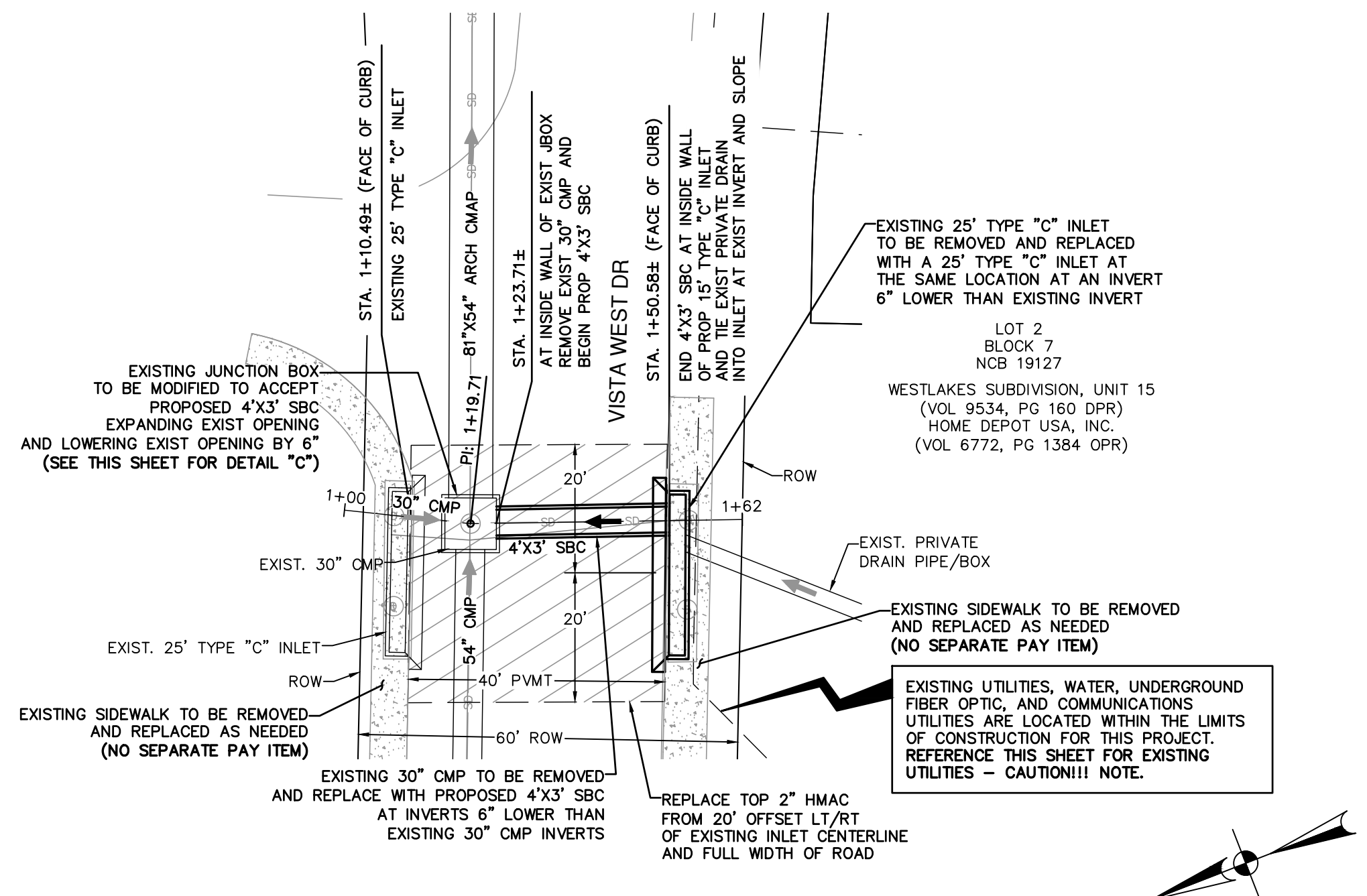
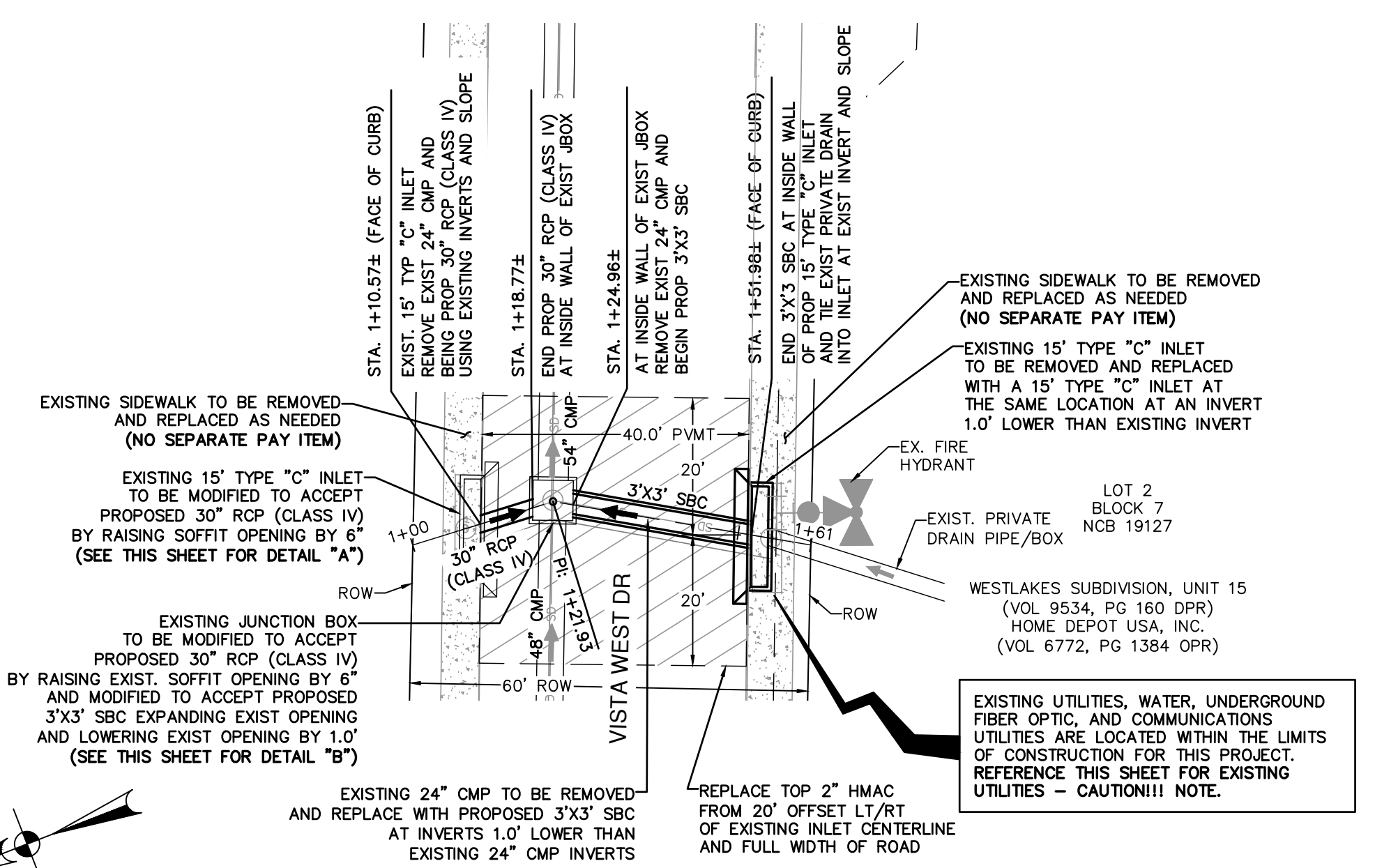
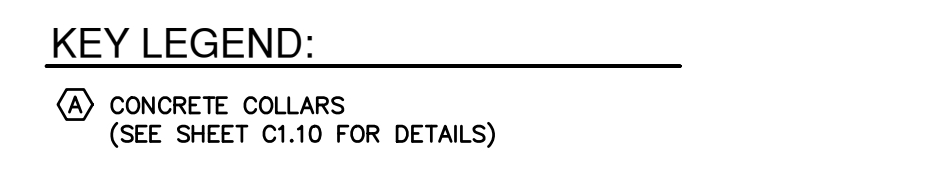
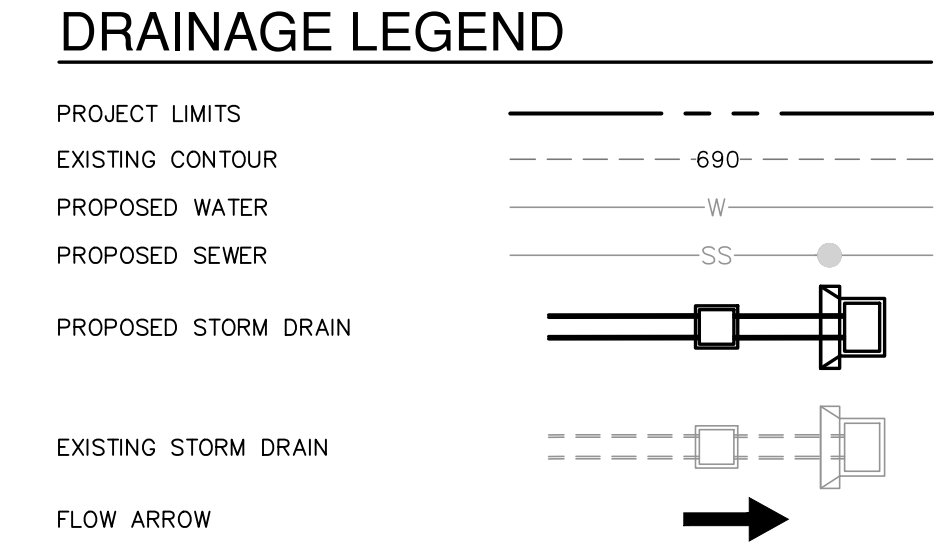
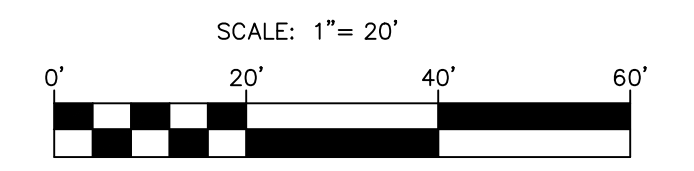
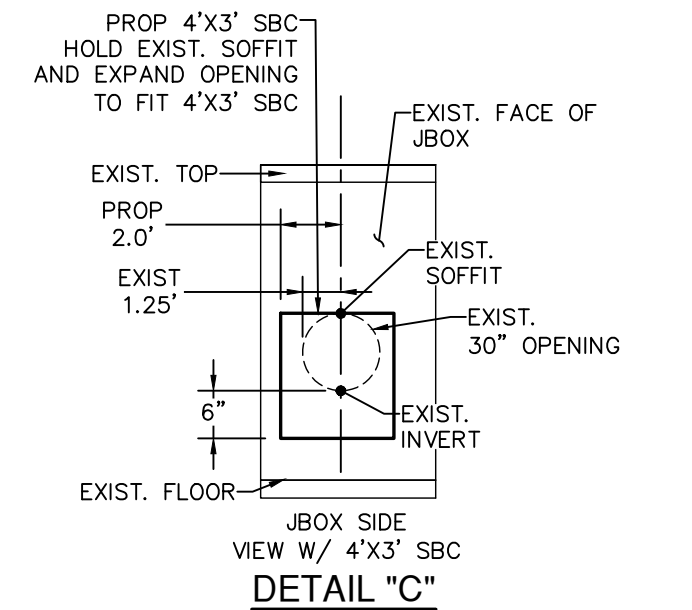
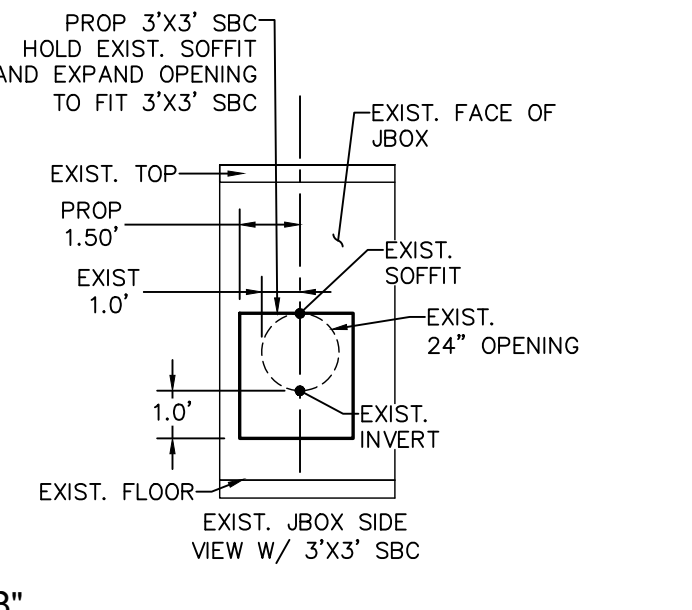
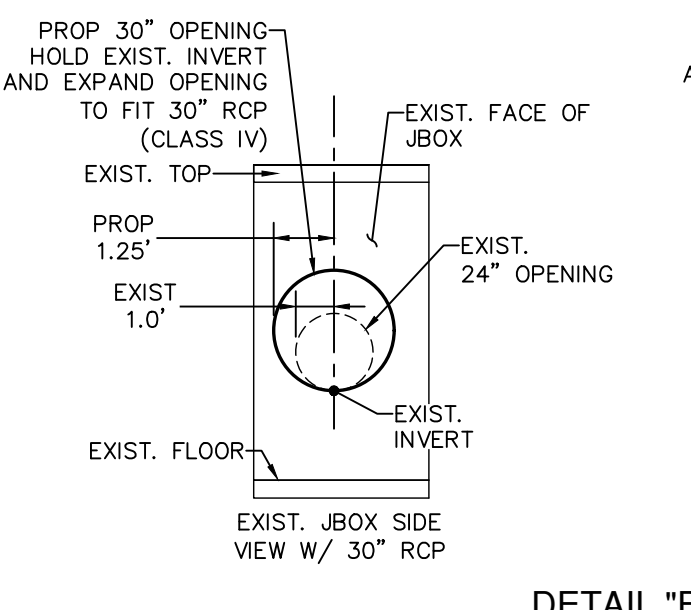
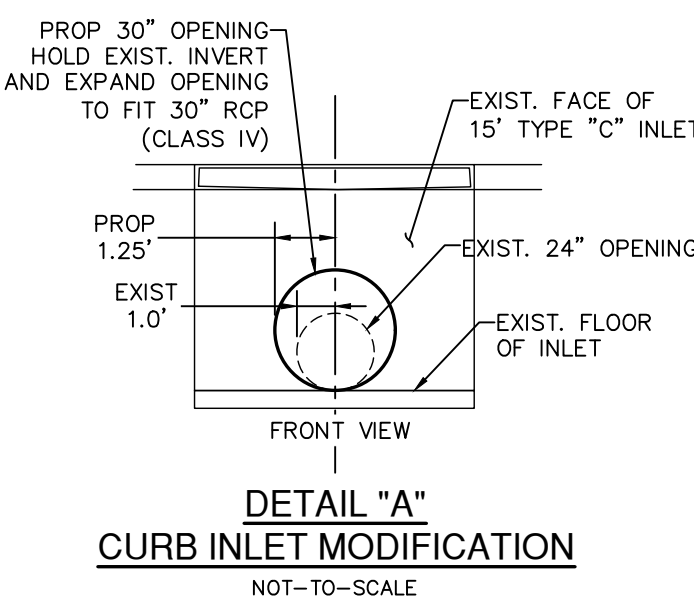
DATE	NO.	REVISION



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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028800

**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS  
(PRIVATE) DRAIN B ~ STA. 1+00.00 TO END  
DRAIN PLAN & PROFILE

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C1.04



**EXISTING UTILITIES - CAUTION!!**  
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DATE: \_\_\_\_\_

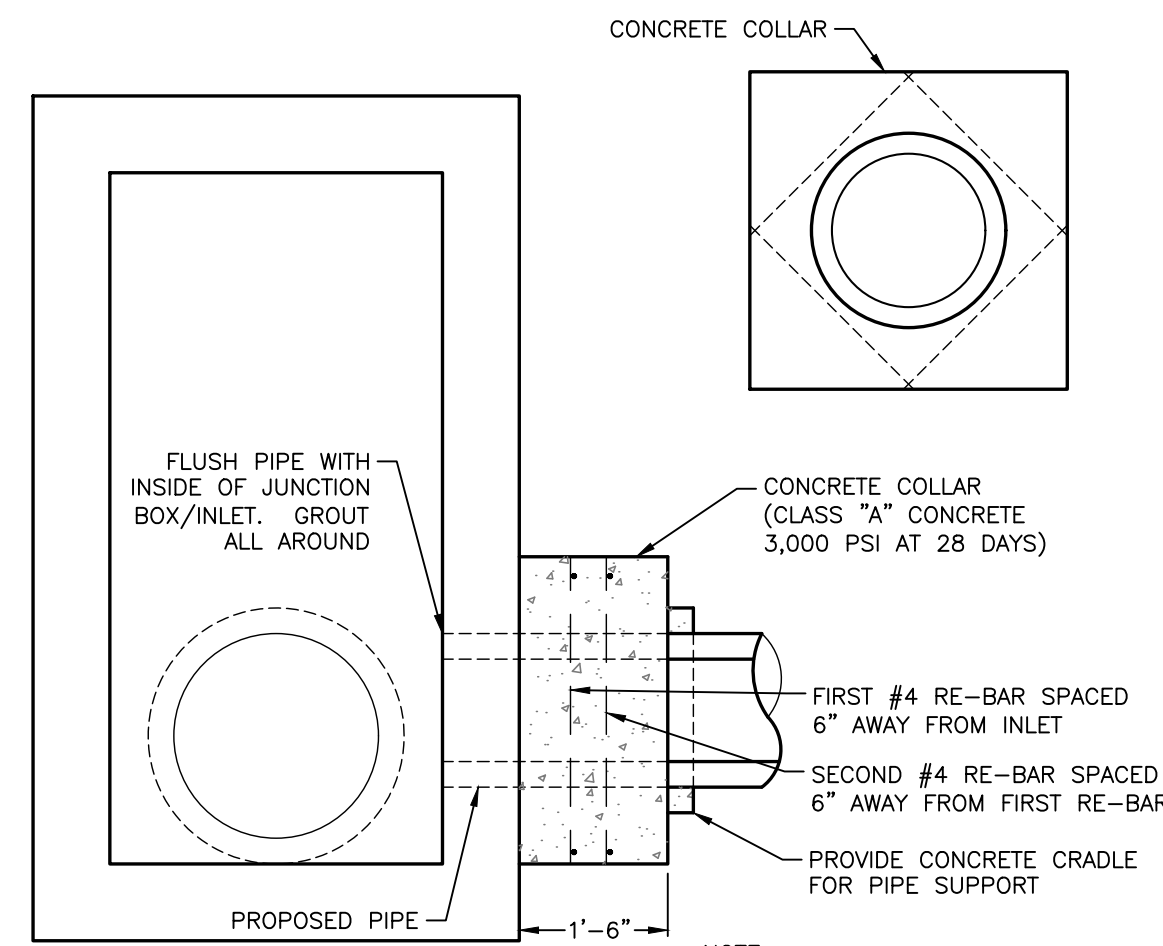
NO. REVISION: \_\_\_\_\_

Jon Adams  
2-23-26

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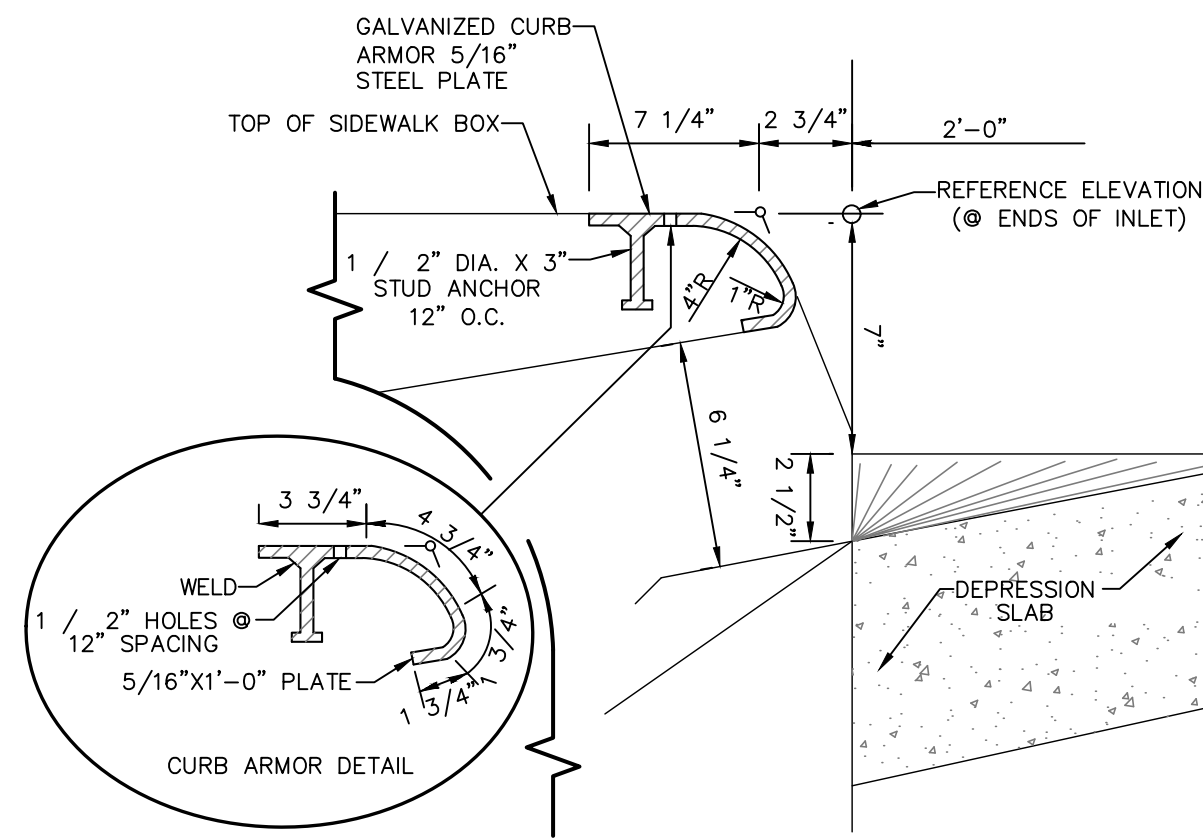
**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS  
DRAIN "C" ~ STA. 1+00.00 TO END  
DRAIN "D" ~ STA. 1+00.00 TO END  
MITIGATION IMPROVEMENTS DRAIN PLAN & PROFILE

PLAT NO. 25-11800523  
JOB NO. 13832-51  
DATE FEBRUARY 2026  
DESIGNER CB  
CHECKED JA DRAWN CB  
SHEET C1.05



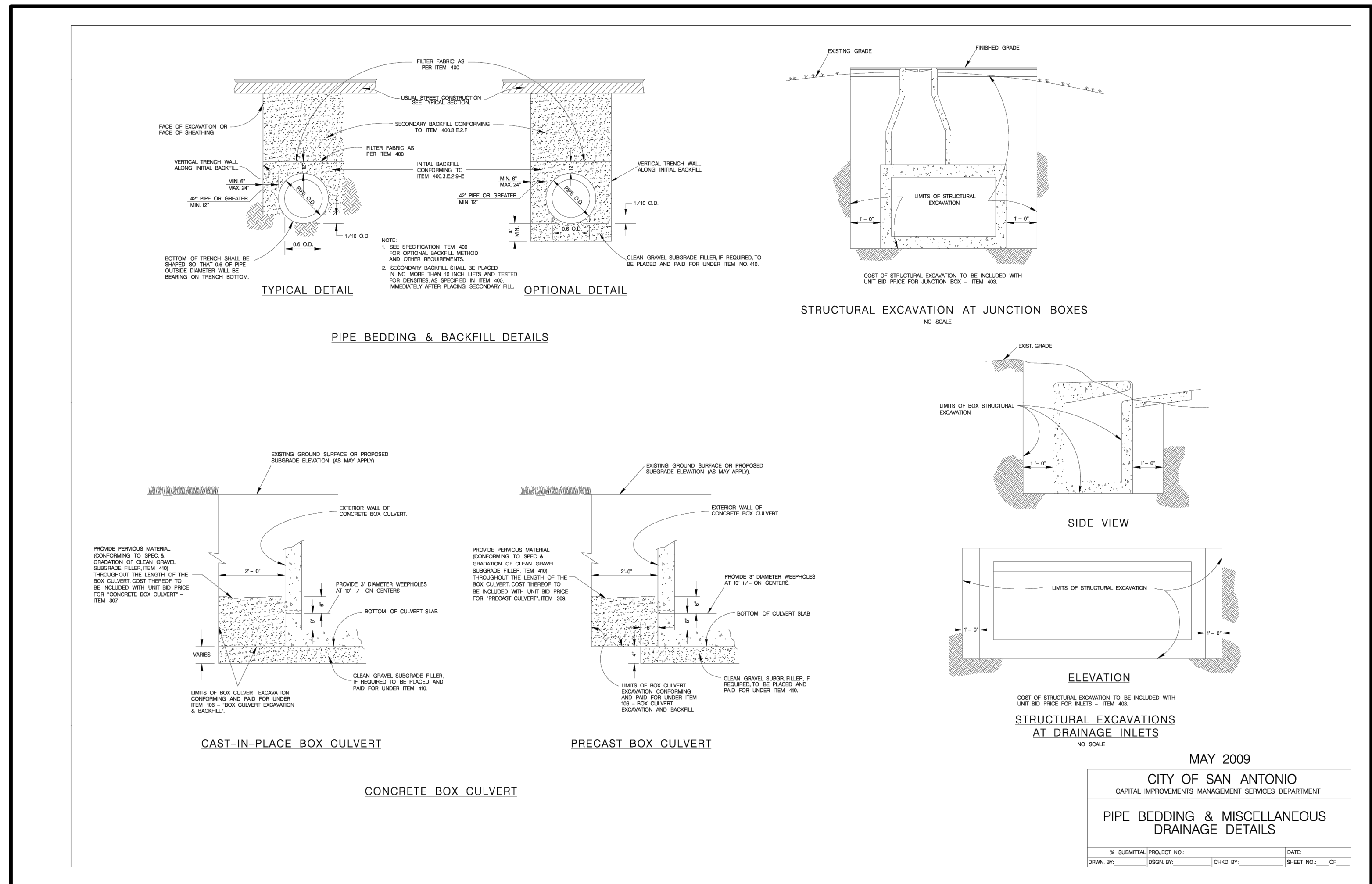
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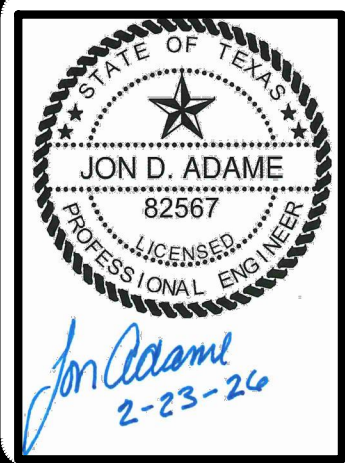


**CURB ARMOR DETAIL**

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DATE	
NO.	REVISION

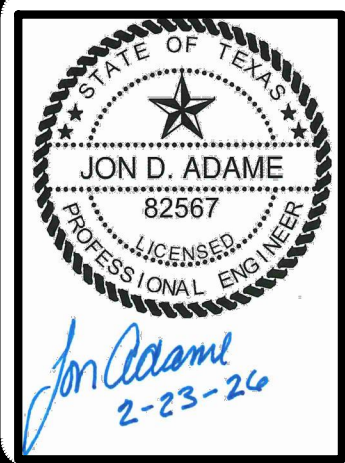


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 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 DRAIN DETAILS

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C1.10

Date: November 14, 2025, 5:01 PM - User ID: crodriguez  
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**UPPER UNIT**  
**LOWER UNIT**  
**INLET BOLTING DETAILS**  
**PLATES**  
**SECTION A-A CURB INLET EXTENSION TYPE E**  
**TYPE 'C' INLET WITH INLET EXTENSION BOXES**

BAR NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	#4	12"	10'-2"	43
B	#4	12"	14'-2"	58
C	#4	12"	10'-2"	43
D	#4	6"	10'-2"	29
E	#4	12"	11'-2"	47
F	#4	6"	2'-0"	63
G	#4	6"	3'-4"	110
H	#4	12"	10'-2"	39
I	#4	12"	2'-0"	28
J	#4	12"	3'-4"	110
K	#4	12"	10'-2"	39
L	#4	12"	2'-0"	28
M	#4	12"	10'-2"	39
N	#4	12"	10'-2"	39
O	#4	12"	10'-2"	39
P	#4	12"	10'-2"	39
Q	#4	12"	10'-2"	39
R	#4	12"	10'-2"	39
S	#4	12"	10'-2"	39
T	#4	12"	10'-2"	39
U	#4	12"	10'-2"	39
V	#4	12"	10'-2"	39
W	#4	12"	10'-2"	39
X	#4	12"	10'-2"	39
Y	#4	12"	10'-2"	39
Z	#4	12"	10'-2"	39
AA	#4	12"	10'-2"	39
AB	#4	12"	10'-2"	39
AC	#4	12"	10'-2"	39
AD	#4	12"	10'-2"	39
AE	#4	12"	10'-2"	39
AF	#4	12"	10'-2"	39
AG	#4	12"	10'-2"	39
AH	#4	12"	10'-2"	39
AI	#4	12"	10'-2"	39
AJ	#4	12"	10'-2"	39
AK	#4	12"	10'-2"	39
AL	#4	12"	10'-2"	39
AM	#4	12"	10'-2"	39
AN	#4	12"	10'-2"	39
AO	#4	12"	10'-2"	39
AP	#4	12"	10'-2"	39
AQ	#4	12"	10'-2"	39
AR	#4	12"	10'-2"	39
AS	#4	12"	10'-2"	39
AT	#4	12"	10'-2"	39
AU	#4	12"	10'-2"	39
AV	#4	12"	10'-2"	39
AW	#4	12"	10'-2"	39
AX	#4	12"	10'-2"	39
AY	#4	12"	10'-2"	39
AZ	#4	12"	10'-2"	39
BA	#4	12"	10'-2"	39
BB	#4	12"	10'-2"	39
BC	#4	12"	10'-2"	39
BD	#4	12"	10'-2"	39
BE	#4	12"	10'-2"	39
BF	#4	12"	10'-2"	39
BG	#4	12"	10'-2"	39
BH	#4	12"	10'-2"	39
BI	#4	12"	10'-2"	39
BJ	#4	12"	10'-2"	39
BK	#4	12"	10'-2"	39
BL	#4	12"	10'-2"	39
BM	#4	12"	10'-2"	39
BN	#4	12"	10'-2"	39
BO	#4	12"	10'-2"	39
BP	#4	12"	10'-2"	39
BQ	#4	12"	10'-2"	39
BR	#4	12"	10'-2"	39
BS	#4	12"	10'-2"	39
BT	#4	12"	10'-2"	39
BU	#4	12"	10'-2"	39
BV	#4	12"	10'-2"	39
BW	#4	12"	10'-2"	39
BX	#4	12"	10'-2"	39
BY	#4	12"	10'-2"	39
BZ	#4	12"	10'-2"	39
CA	#4	12"	10'-2"	39
CB	#4	12"	10'-2"	39
CC	#4	12"	10'-2"	39
CD	#4	12"	10'-2"	39
CE	#4	12"	10'-2"	39
CF	#4	12"	10'-2"	39
CG	#4	12"	10'-2"	39
CH	#4	12"	10'-2"	39
CI	#4	12"	10'-2"	39
CJ	#4	12"	10'-2"	39
CK	#4	12"	10'-2"	39
CL	#4	12"	10'-2"	39
CM	#4	12"	10'-2"	39
CN	#4	12"	10'-2"	39
CO	#4	12"	10'-2"	39
CP	#4	12"	10'-2"	39
CQ	#4	12"	10'-2"	39
CR	#4	12"	10'-2"	39
CS	#4	12"	10'-2"	39
CT	#4	12"	10'-2"	39
CU	#4	12"	10'-2"	39
CV	#4	12"	10'-2"	39
CW	#4	12"	10'-2"	39
CX	#4	12"	10'-2"	39
CY	#4	12"	10'-2"	39
CZ	#4	12"	10'-2"	39

**GENERAL NOTES**

- WHEN INLET EXTENSIONS ARE REQUIRED FOR ON GRADE UPSTREAM END OF THE INLET.
- FOR CURB INLET EXTENSION REINFORCING STEEL NOTES & DIMENSIONS OTHER APPLICABLE DETAILS NOT FOUND ON THIS SHEET REFER TO SHEETS 1 & 2.

MAY 2009  
CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
**TYPE 'C' INLET (TYPE I & II) & INLET EXTENSION STANDARDS**  
SHEET 3 OF 3

**REINFORCING STEEL**

BAR NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	#4	12"	10'-0"	40
B	#4	12"	14'-0"	55
C	#4	12"	10'-0"	40
D	#4	6"	10'-0"	26
E	#4	12"	11'-0"	44
F	#4	6"	2'-0"	60
G	#4	6"	3'-4"	107
H	#4	12"	10'-0"	38
I	#4	12"	2'-0"	27
J	#4	12"	3'-4"	107
K	#4	12"	10'-0"	38
L	#4	12"	2'-0"	27
M	#4	12"	10'-0"	38
N	#4	12"	10'-0"	38
O	#4	12"	10'-0"	38
P	#4	12"	10'-0"	38
Q	#4	12"	10'-0"	38
R	#4	12"	10'-0"	38
S	#4	12"	10'-0"	38
T	#4	12"	10'-0"	38
U	#4	12"	10'-0"	38
V	#4	12"	10'-0"	38
W	#4	12"	10'-0"	38
X	#4	12"	10'-0"	38
Y	#4	12"	10'-0"	38
Z	#4	12"	10'-0"	38
AA	#4	12"	10'-0"	38
AB	#4	12"	10'-0"	38
AC	#4	12"	10'-0"	38
AD	#4	12"	10'-0"	38
AE	#4	12"	10'-0"	38
AF	#4	12"	10'-0"	38
AG	#4	12"	10'-0"	38
AH	#4	12"	10'-0"	38
AI	#4	12"	10'-0"	38
AJ	#4	12"	10'-0"	38
AK	#4	12"	10'-0"	38
AL	#4	12"	10'-0"	38
AM	#4	12"	10'-0"	38
AN	#4	12"	10'-0"	38
AO	#4	12"	10'-0"	38
AP	#4	12"	10'-0"	38
AQ	#4	12"	10'-0"	38
AR	#4	12"	10'-0"	38
AS	#4	12"	10'-0"	38
AT	#4	12"	10'-0"	38
AU	#4	12"	10'-0"	38
AV	#4	12"	10'-0"	38
AW	#4	12"	10'-0"	38
AX	#4	12"	10'-0"	38
AY	#4	12"	10'-0"	38
AZ	#4	12"	10'-0"	38

**GENERAL NOTES**

- INLETS AND EXTENSIONS MUST BE IN ACCORDANCE WITH THE LATEST DRAINAGE CURB INLET TYPE "C" AND EXTENSION TYPE E & C.
- TYPE "C" INLET TO BE USED OVER BENCH FROM BENCH TO INLET WITH CURB INLET AND APPROVED BY THE ENGINEER.
- QUANTITIES SHOWN ARE FOR CONTRACTORS INFORMATION ONLY.
- CONCRETE FOR STRUCTURES SHALL BE CLASS "A" CONCRETE PER 28 DAYS.
- ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
- ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 1 1/2".
- ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615, GRADE 60 REQUIREMENTS.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- REINFORCING STEEL SHALL BE SHAPED WITH CONCRETE FILL TO AFFECT DRAINAGE TO OUTLET PIPE.
- DELETED 4" BARS FROM SCHEDULE QUANTITIES IF MANHOLE RING AND COVER ARE PLACED AT END OF INLET.
- CAST FROM MANHOLE RING AND COVER TO BE PLACED NEXT TO OUTLET PIPE, EXCEPT FOR VERTICAL OUTLET PIPE IN WHICH CASE MANHOLE RING AND COVER WILL BE OFFSET.
- PAINT FOR ALL EXCAVATION, BACK FILLING, CONCRETE, REINFORCING STEEL, RING AND COVER SHALL BE INCLUDED IN THE UNIT COST OF ITEM 403 "STORM SEWER JUNCTION BOXES AND INLETS".

**PHASE CONSTRUCTION**

- THE CURB INLET AND EXTENSION SHALL BE CONSTRUCTED TO A DEPTH 1/2" BELOW THE INLET AND EXTENSION.
- CUT THE CURB INLET AND EXTENSION WITH A STEEL PLATE APPROVED BY THE ENGINEER AND CONTACT THE ROADWAY OVER THE INLET.
- AFTER THE ROADWAY IS COMPLETED BUT PRIOR TO THE FINAL MANHOLE COVER, CUT THE EXCAVATION THROUGH THE PLATE AND COMPLETE THE UPPER PORTION OF THE CURB INLET AND CURB EXTENSION.
- ALL LOWER UNITS SHALL RECEIVE INTERIOR FINISHES.
- PIPE BLOSSOMS IN BENCH SHALL BE REMOVED BY REMOVING THE OUTER SHELL OF THE PIPE FRINGE INTO ACCORDANCE WITH THE SPEC. OF THE PIPE AS NECESSARY. CONSTRUCTION JOINT MAY BE MADE A MAXIMUM OF 4".

**CONCRETE INLET BOX CONFIGURATIONS (LOWER UNITS)**

MAY 2009  
CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
**TYPE 'C' INLET (TYPE I & II) & INLET EXTENSION STANDARDS**  
SHEET 1 OF 3

**MANHOLE LID & RING DETAIL (ITEM 409)**

**REINFORCING STEEL (FOR H<sub>u</sub> = 11")**

BAR NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	#4	12"	10'-0"	40
B	#4	12"	14'-0"	55
C	#4	12"	10'-0"	40
D	#4	6"	10'-0"	26
E	#4	12"	11'-0"	44
F	#4	6"	2'-0"	60
G	#4	6"	3'-4"	107
H	#4	12"	10'-0"	38
I	#4	12"	2'-0"	27
J	#4	12"	3'-4"	107
K	#4	12"	10'-0"	38
L	#4	12"	2'-0"	27
M	#4	12"	10'-0"	38
N	#4	12"	10'-0"	38
O	#4	12"	10'-0"	38
P	#4	12"	10'-0"	38
Q	#4	12"	10'-0"	38
R	#4	12"	10'-0"	38
S	#4	12"	10'-0"	38
T	#4	12"	10'-0"	38
U	#4	12"	10'-0"	38
V	#4	12"	10'-0"	38
W	#4	12"	10'-0"	38
X	#4	12"	10'-0"	38
Y	#4	12"	10'-0"	38
Z	#4	12"	10'-0"	38
AA	#4	12"	10'-0"	38
AB	#4	12"	10'-0"	38
AC	#4	12"	10'-0"	38
AD	#4	12"	10'-0"	38
AE	#4	12"	10'-0"	38
AF	#4	12"	10'-0"	38
AG	#4	12"	10'-0"	38
AH	#4	12"	10'-0"	38
AI	#4	12"	10'-0"	38
AJ	#4	12"	10'-0"	38
AK	#4	12"	10'-0"	38
AL	#4	12"	10'-0"	38
AM	#4	12"	10'-0"	38
AN	#4	12"	10'-0"	38
AO	#4	12"	10'-0"	38
AP	#4	12"	10'-0"	38
AQ	#4	12"	10'-0"	38
AR	#4	12"	10'-0"	38
AS	#4	12"	10'-0"	38
AT	#4	12"	10'-0"	38
AU	#4	12"	10'-0"	38
AV	#4	12"	10'-0"	38
AW	#4	12"	10'-0"	38
AX	#4	12"	10'-0"	38
AY	#4	12"	10'-0"	38
AZ	#4	12"	10'-0"	38

**GENERAL NOTES**

- ALL BARS INTERCEPTING MANHOLE RING & REINFORCING CONCRETE PIPE SHALL BE FIELD CUT.
- CONCRETE FOR STRUCTURES SHALL BE CLASS "A", 3000 PSI IN 28 DAYS.
- ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED TO 3/4".
- CONSTRUCTION JOINT SHOWN AT FLOWLINE MAY BE PLACED AT A MAXIMUM OF 6" AT THE CONTRACTOR'S DISCRETION. ADJUST LENGTH OF VERTICAL STEEL AS REQUIRED.
- ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615, GRADE 60 REQUIREMENTS.
- INLET OF DROP INLET TO BE SHAPED WITH CONCRETE FILL TO AFFECT DRAINAGE TO OUTLET PIPE.
- DELETED 4" BARS FROM SCHEDULE QUANTITIES IF MANHOLE RING AND COVER ARE PLACED AT END OF INLET.
- CAST FROM MANHOLE RING AND COVER TO BE PLACED NEXT TO OUTLET PIPE, EXCEPT FOR VERTICAL OUTLET PIPE IN WHICH CASE MANHOLE RING AND COVER WILL BE OFFSET.
- PAINT FOR ALL EXCAVATION, BACK FILLING, CONCRETE, REINFORCING STEEL, RING AND COVER SHALL BE INCLUDED IN THE UNIT COST OF ITEM 403 "STORM SEWER JUNCTION BOXES AND INLETS".

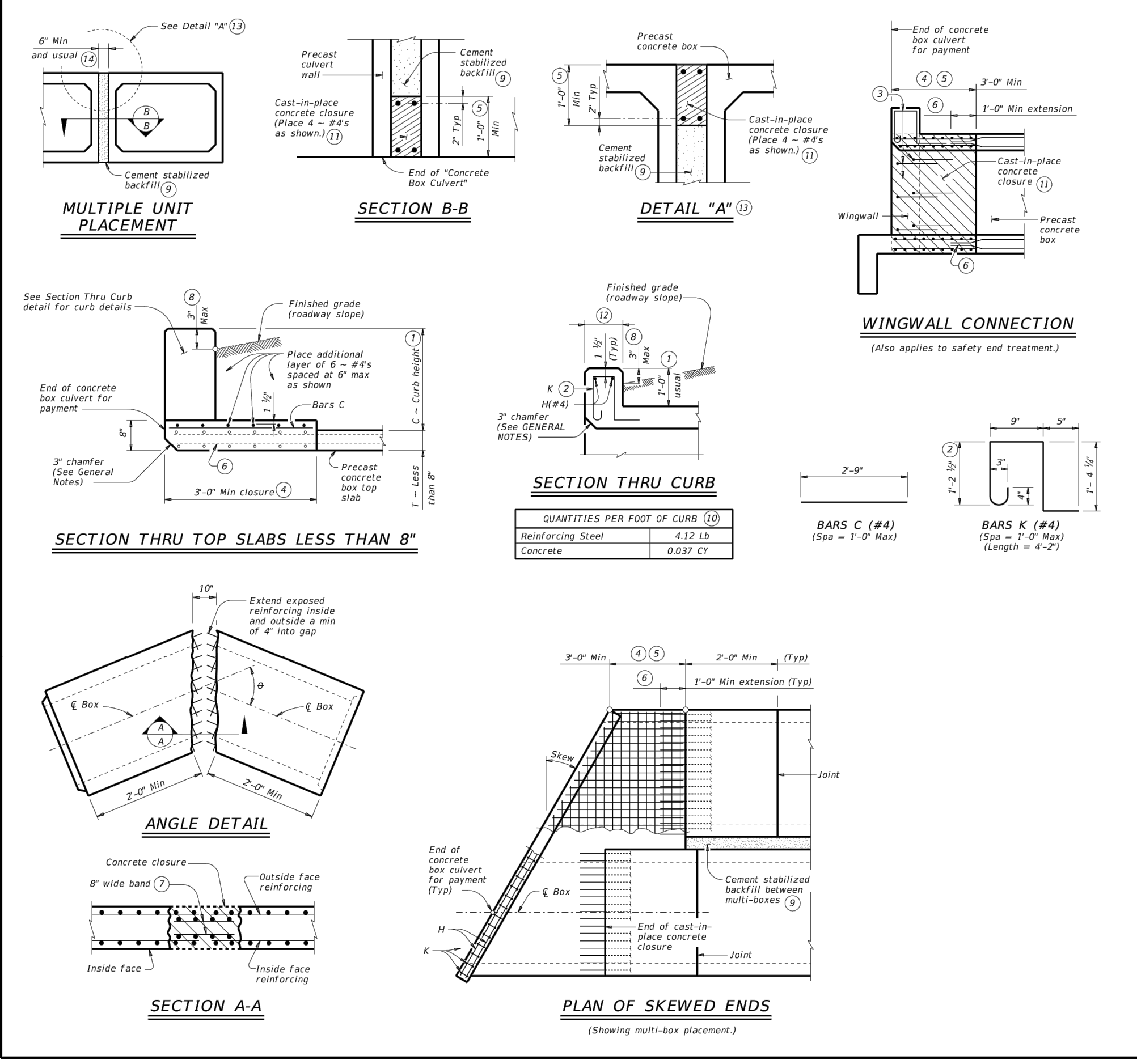
**STANDARD PLANS**  
CITY OF SAN ANTONIO, TEXAS  
DEPARTMENT OF PUBLIC WORKS  
**TYPE 'C' INLET STANDARDS**  
SHEET 2 OF 3

**MANHOLE LID & RING DETAIL (ITEM 409)**

**REINFORCING STEEL (FOR H<sub>u</sub> = 11")**

BAR NO.	SIZE	SPAC.	LENGTH	WEIGHT
A	#4	12"	10'-0"	40
B	#4	12"	14'-0"	55
C	#4	12"	10'-0"	40
D	#4	6"	10'-0"	26
E	#4	12"	11'-0"	44
F	#4	6"	2'-0"	60
G	#4	6"	3'-4"	107
H	#4	12"	10'-0"	38
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K	#4	12"	10'-0"	38
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N	#4	12"	10'-0"	38
O	#4	12"	10'-0"	38
P	#4	12"	10'-0"	38
Q	#4	12"	10'-0"	38
R	#4	12"	10'-0"	38
S	#4	12"	10'-0"	38
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U	#4	12"	10'-0"	38
V	#4	12"	10'-0"	38
W	#4	12"	10'-0"	38
X	#4	12"	10'-0"	38
Y	#4	12"	10'-0"	38
Z	#4	12"	10'-0"	38
AA	#4	12"	10'-0"	38
AB	#4	12"	10'-0"	38
AC	#4	12"	10'-0"	38
AD	#4	12"	10'-0"	38
AE	#4	12"	10'-0"	38
AF	#4	12"	10'-0"	38
AG	#4	12"	10'-0"	38
AH	#4	12"	10'-0"	38
AI	#4	12"	10'-0"	38
AJ	#4	12"	10'-0"	38
AK	#4	12"	10'-0"	38
AL	#4	12"	10'-0"	38
AM				

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1) 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail, or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet. For structures with 1631 or 1631S bridge rail, refer to the Mounting Details for 1631 & 1631S Rails (R31)-CM standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than 1631 or 1631S.

2) For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.

3) Extend curb, wingwall, or safety and treatment reinforcing into concrete closure. Bend or trim, as necessary, any reinforcing that does not fit into closure area.

4) Provide a 3'-0" Min cast-in-place concrete closure. Break back boxes in the field of cast bases short. Provide bands of reinforcing in the closure that are the same size and spacing as in the precast box section. Provide #4 longitudinal reinforcement spaced at 12 inches Max within the closure. Except where shown otherwise, construct the cast-in-place closure flush with the inside and outside faces of the precast box section.

5) For multiple unit placements, adjust the length of the closure for the interior walls as necessary. Provide a 2'-0" Min cast-in-place closure in the top slab, bottom slab, and exterior wall. See Section B-B detail when interior walls are cast full length.

6) Extend precast box reinforcing a minimum of 1'-0" into concrete closure (Typ).

7) Place bands of reinforcing matching the inside and outside face reinforcing in the gaps of the top and bottom slabs. Place a band matching the outside face reinforcing of the wall in the gaps of the walls (placed in the outside face only). Tack weld the bands to the exposed reinforcing at each point of contact.

8) For vehicle safety, the following requirements must be met:  
 a) For structures without bridge rail, construct curbs no more than 3" above finished grade.  
 b) For structures with bridge rail, construct curbs flush with finished grade. Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

9) Cement stabilized backfill between boxes is considered part of the box culvert for payment.

10) All curb concrete and reinforcing is considered part of the box culvert for payment.

11) Any additional concrete and reinforcing required for the closures will be considered subsidiary to the box culvert for payment.

12) 1'-0" typical 3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.

13) For multiple unit placement with overlay, with 1 to 2 course surface treatment, or with the top slab as the final riding surface, provide wall closure as shown in Detail "A".

14) This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked in accordance with Item 426, "Jacking, Boring, or Tunneling Pipe or Box." No payment will be made for any additional material in the gap between adjacent boxes.

**MATERIAL NOTES:**  
 Provide Class H reinforcing steel.  
 Provide ASTM A1064 welded wire reinforcement.  
 Provide cement stabilized backfill meeting the requirements of Item 400, "Excavation and Backfill for Structures."  
 Any additional concrete required for the closures will be considered subsidiary to the box culvert.

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 Refer to the Single Box Culverts Precast (SCP) standard sheets for details and notes not shown.  
 Extension and backfill for structures.  
 Chamfer the bottom edge of the top slab closure 3 inches at culvert closure ends.

Cover dimensions are clear dimensions, unless noted otherwise.  
 Reinforcing bars dimensions are not-cov'd of bars.

**HL93 LOADING**

Texas Department of Transportation  
 Bridge Division Standard

**BOX CULVERTS PRECAST MISCELLANEOUS DETAILS**

**SCP-MD**

Rev: CD-SCP-MD-2019g  
 (C) 2019 February 2020  
 DATE: FILE:

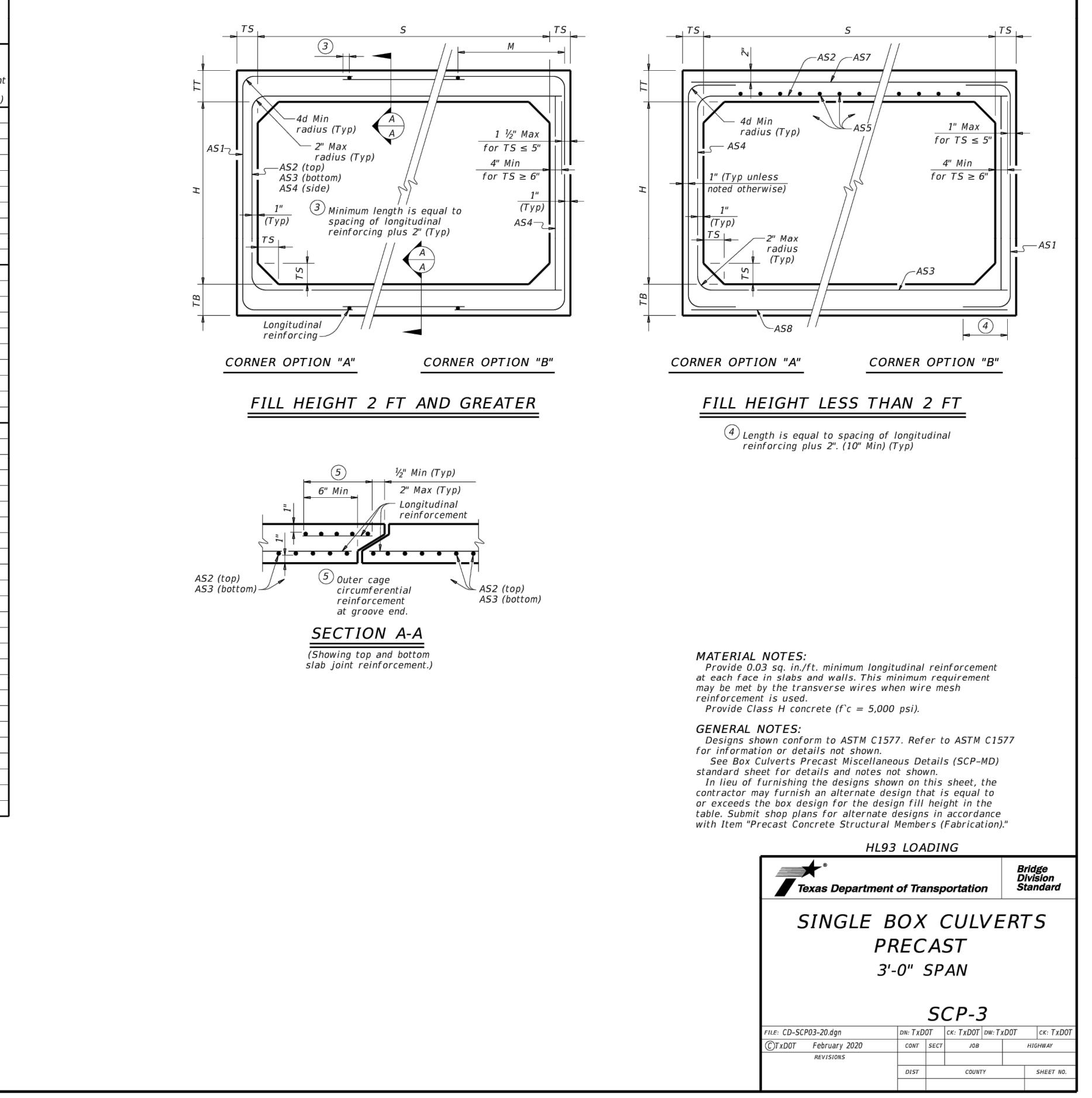
**BOX DATA**

SECTION DIMENSIONS	REINFORCING (sq. in. / ft.) <sup>(2)</sup>								Lift Height (ft.)					
	S	H	TT	TB	TS	TS	M	(ft.)						
3	2	7	6	4	< 2	-	0.17	0.25	0.16	0.10	0.17	0.17	0.14	3.3
3	2	4	4	4	2 < 3	31	0.13	0.19	0.18	0.10	-	-	-	2.4
3	2	4	4	4	3 - 5	31	0.10	0.11	0.12	0.10	-	-	-	2.4
3	2	4	4	4	10	31	0.10	0.10	0.10	0.10	-	-	-	2.4
3	2	4	4	4	15	31	0.10	0.13	0.13	0.10	-	-	-	2.4
3	2	4	4	4	20	31	0.11	0.17	0.17	0.10	-	-	-	2.4
3	2	4	4	4	25	31	0.14	0.21	0.21	0.10	-	-	-	2.4
3	2	4	4	4	30	31	0.17	0.25	0.25	0.10	-	-	-	2.4
3	2	4	4	4	35	31	0.20	0.29	0.29	0.10	-	-	-	2.4
3	3	7	6	4	< 2	-	0.17	0.27	0.17	0.10	0.17	0.17	0.14	3.7
3	3	4	4	4	2 < 3	31	0.10	0.22	0.21	0.10	-	-	-	2.8
3	3	4	4	4	3 - 5	31	0.10	0.14	0.14	0.10	-	-	-	2.8
3	3	4	4	4	10	31	0.10	0.11	0.11	0.10	-	-	-	2.8
3	3	4	4	4	15	31	0.10	0.14	0.15	0.10	-	-	-	2.8
3	3	4	4	4	20	31	0.10	0.18	0.19	0.10	-	-	-	2.8
3	3	4	4	4	25	31	0.10	0.23	0.23	0.10	-	-	-	2.8
3	3	4	4	4	30	31	0.12	0.27	0.28	0.10	-	-	-	2.8
3	3	4	4	4	35	31	0.14	0.32	0.32	0.10	-	-	-	2.8

1) For box length = 8'-0"

2) AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

DATE: FILE:



DATE: REVISION:

STATE OF TEXAS  
 JON D. ADAME  
 PROFESSIONAL ENGINEER  
 82567  
 2-23-26

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800



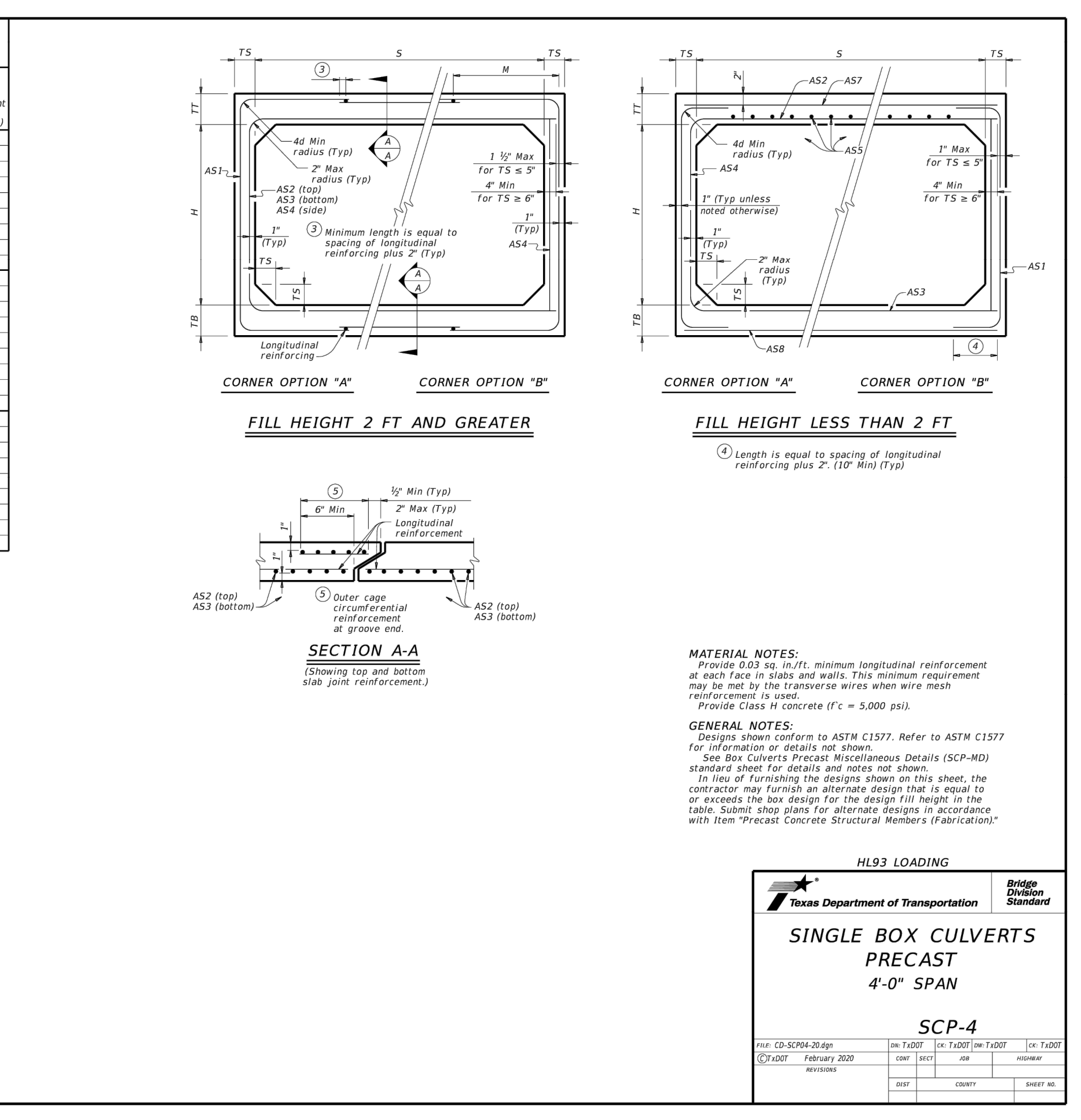
**BOX DATA**

SECTION DIMENSIONS	REINFORCING (sq. in. / ft.) <sup>(2)</sup>								Lift Height (ft.)					
	S	H	TT	TB	TS	TS	M	(ft.)						
4	2	7.5	6	5	< 2	-	0.18	0.27	0.15	0.12	0.18	0.18	0.14	4.5
4	2	5	5	5	2 < 3	38	0.16	0.19	0.17	0.12	-	-	-	3.6
4	2	5	5	5	3 - 5	38	0.13	0.13	0.13	0.12	-	-	-	3.6
4	2	5	5	5	10	38	0.12	0.12	0.12	0.12	-	-	-	3.6
4	2	5	5	5	15	38	0.14	0.16	0.16	0.12	-	-	-	3.6
4	2	5	5	5	20	38	0.16	0.20	0.21	0.12	-	-	-	3.6
4	2	5	5	5	25	38	0.23	0.25	0.25	0.12	-	-	-	3.6
4	2	5	5	5	30	38	0.28	0.30	0.30	0.12	-	-	-	3.6
4	3	7.5	6	5	< 2	-	0.18	0.31	0.18	0.12	0.18	0.18	0.14	5.0
4	3	5	5	5	2 < 3	38	0.15	0.23	0.20	0.12	-	-	-	4.1
4	3	5	5	5	3 - 5	38	0.12	0.16	0.16	0.12	-	-	-	4.1
4	3	5	5	5	10	38	0.12	0.14	0.14	0.12	-	-	-	4.1
4	3	5	5	5	15	38	0.12	0.18	0.18	0.12	-	-	-	4.1
4	3	5	5	5	20	38	0.14	0.23	0.24	0.12	-	-	-	4.1
4	3	5	5	5	25	38	0.17	0.29	0.29	0.12	-	-	-	4.1
4	3	5	5	5	30	38	0.21	0.35	0.35	0.12	-	-	-	4.1
4	4	7.5	6	5	< 2	-	0.18	0.33	0.20	0.12	0.18	0.18	0.14	5.5
4	4	5	5	5	2 < 3	38	0.12	0.26	0.23	0.12	-	-	-	4.6
4	4	5	5	5	3 - 5	38	0.12	0.18	0.18	0.12	-	-	-	4.6
4	4	5	5	5	10	38	0.12	0.15	0.15	0.12	-	-	-	4.6
4	4	5	5	5	15	38	0.12	0.19	0.20	0.12	-	-	-	4.6
4	4	5	5	5	20	38	0.12	0.25	0.25	0.12	-	-	-	4.6
4	4	5	5	5	25	38	0.14	0.31	0.31	0.12	-	-	-	4.6
4	4	5	5	5	30	38	0.17	0.37	0.37	0.12	-	-	-	4.6

1) For box length = 8'-0"

2) AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

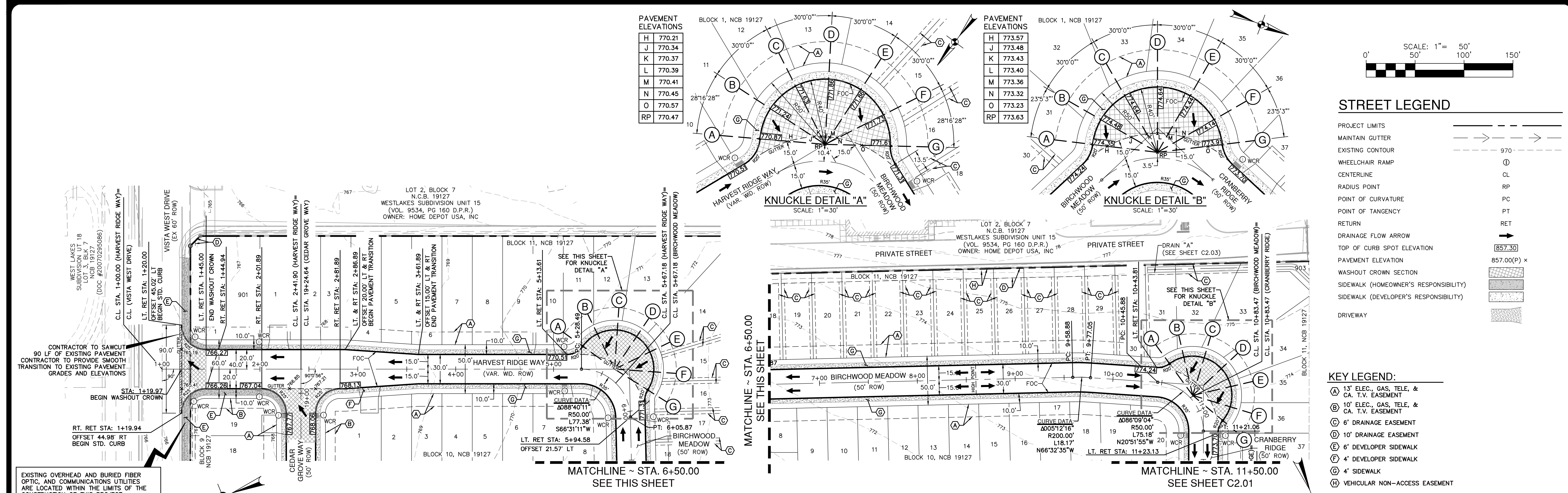
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DATE: REVISION:

STATE OF TEXAS  
 WESTOVER VILLAGE TOWNHOMES  
 SAN ANTONIO, TEXAS  
 DRAIN DETAILS  
 SHEET TITLE - LINE 2  
 SHEET TITLE - LINE 3

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C1.12

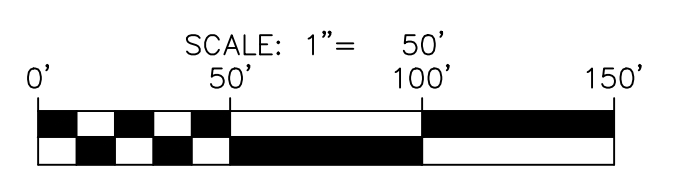


PAVEMENT ELEVATIONS

H	770.21
J	770.34
K	770.37
L	770.39
M	770.41
N	770.45
O	770.57
RP	770.47

PAVEMENT ELEVATIONS

H	773.57
J	773.48
K	773.43
L	773.40
M	773.36
N	773.32
O	773.23
RP	773.63



**STREET LEGEND**

- PROJECT LIMITS
- MAINTAIN GUTTER
- EXISTING CONTOUR
- WHEELCHAIR RAMP
- CENTERLINE
- RADIUS POINT
- POINT OF CURVATURE
- POINT OF TANGENCY
- RETURN
- DRAINAGE FLOW ARROW
- TOP OF CURB SPOT ELEVATION
- PAVEMENT ELEVATION
- WASHOUT CROWN SECTION
- SIDEWALK (HOMEOWNER'S RESPONSIBILITY)
- SIDEWALK (DEVELOPER'S RESPONSIBILITY)
- DRIVEWAY

**KEY LEGEND:**

- (A) 3" ELEC. GAS, TELE, & CA. T.V. EASEMENT
- (B) 10' ELEC. GAS, TELE, & CA. T.V. EASEMENT
- (C) 6" DRAINAGE EASEMENT
- (D) 10' DRAINAGE EASEMENT
- (E) 6" DEVELOPER SIDEWALK
- (F) 4" DEVELOPER SIDEWALK
- (G) 4' SIDEWALK
- (H) VEHICULAR NON-ACCESS EASEMENT

DATE

NO. REVISION

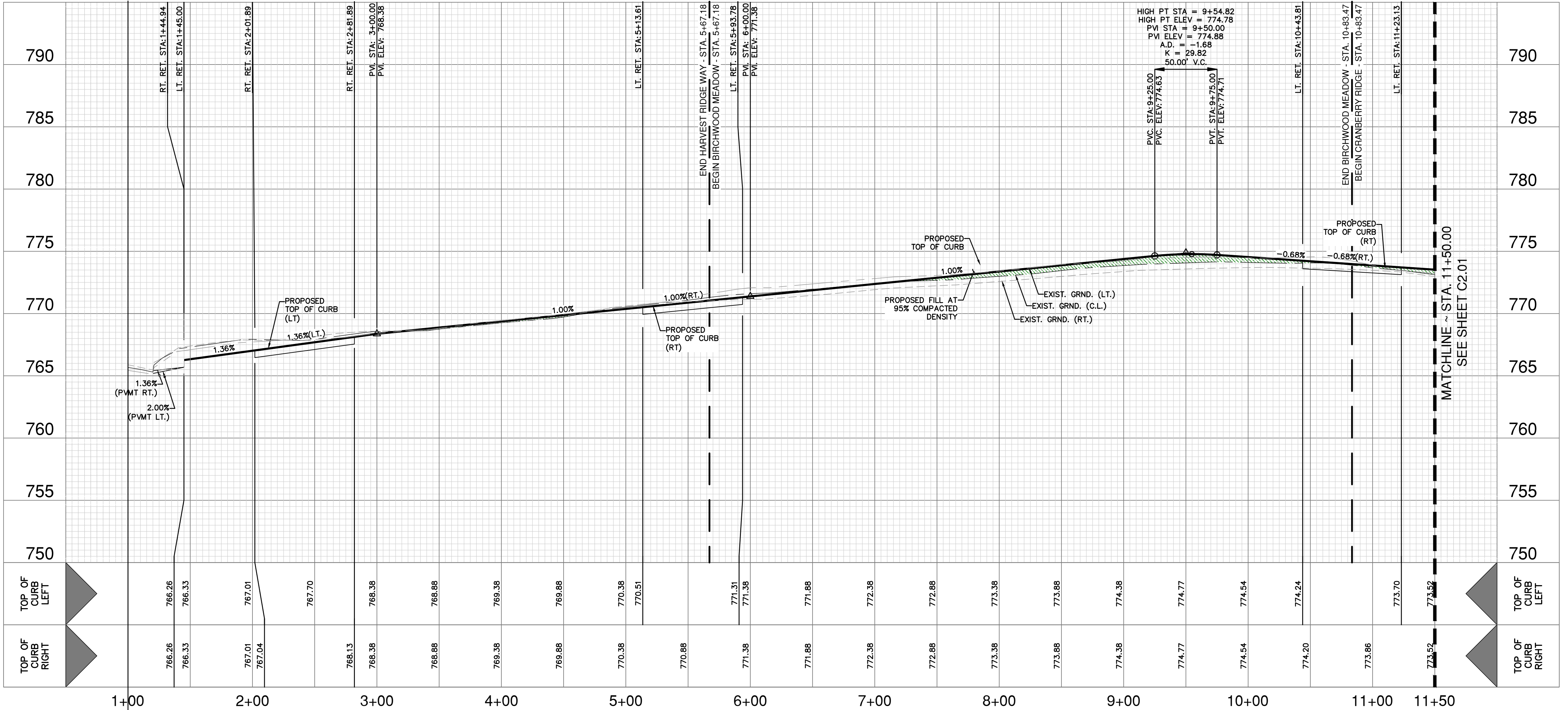
Jon D. Adame  
 2-5-26

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

HARVEST RIDGE WAY ~ STA. 1+00.00 TO STA. 5+67.18

BIRCHWOOD MEADOW ~ STA. 5+67.18 TO STA. 10+83.47

CRANBERRY RIDGE ~ STA. 10+83.47 TO STA. 11+50.00



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**COSA ROW NOTES:**  
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**SIDEWALK NOTE:**  
 THE CONSTRUCTION OF SIDEWALKS ADJACENT TO ALL 900 SERIES LOTS WILL BE THE RESPONSIBILITY OF THE DEVELOPER AS SHOWN ON THE OVERALL SIGNAGE PLAN (SHEET C3.00). REFER TO SHEET C3.00 FOR LOCATIONS OF SIDEWALK CONSTRUCTION WHERE SIDEWALKS ARE NOT SHOWN.

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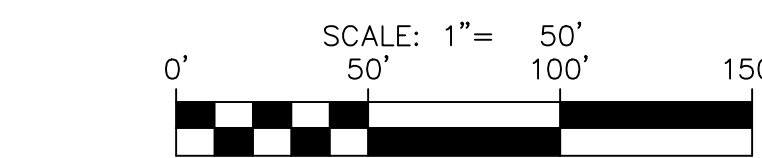
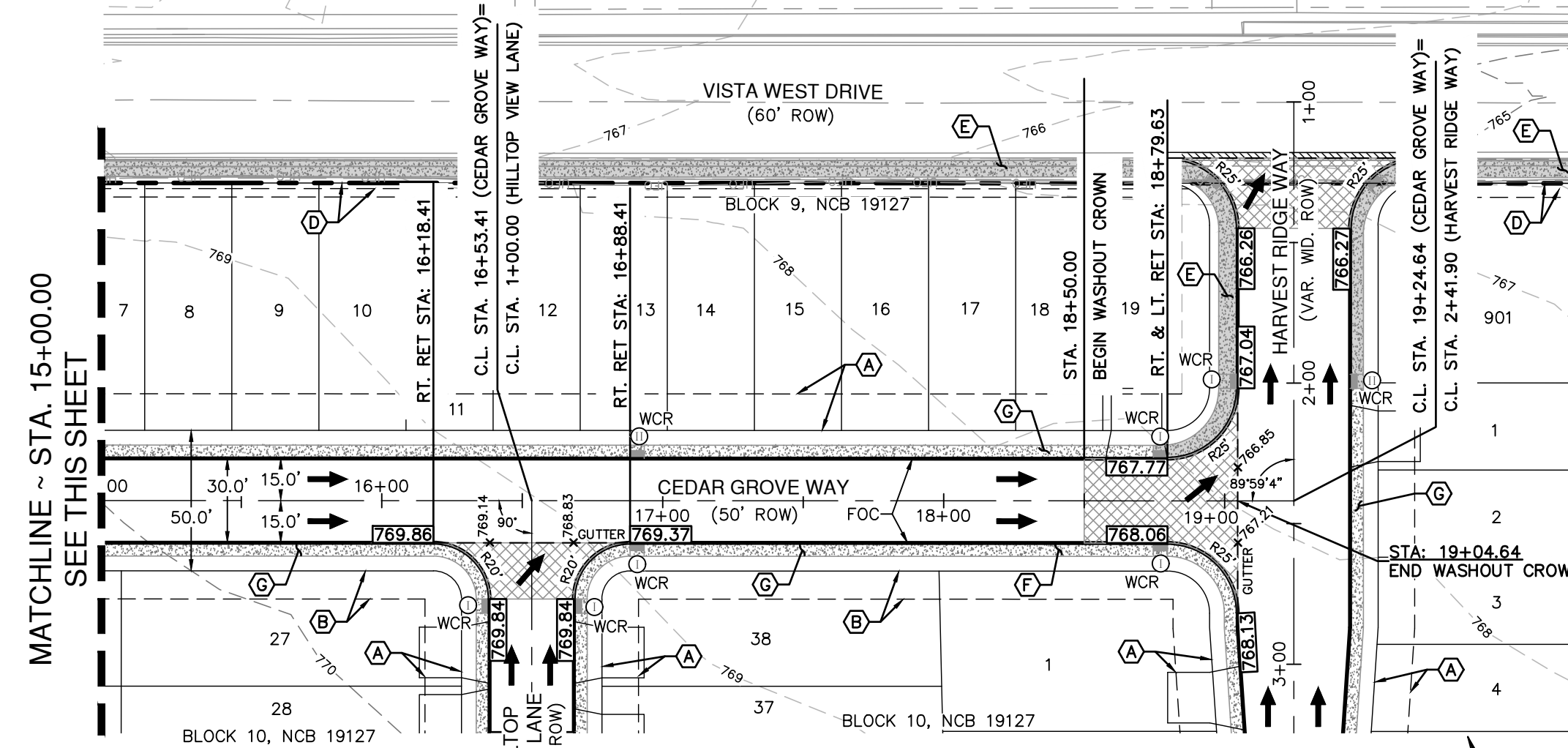
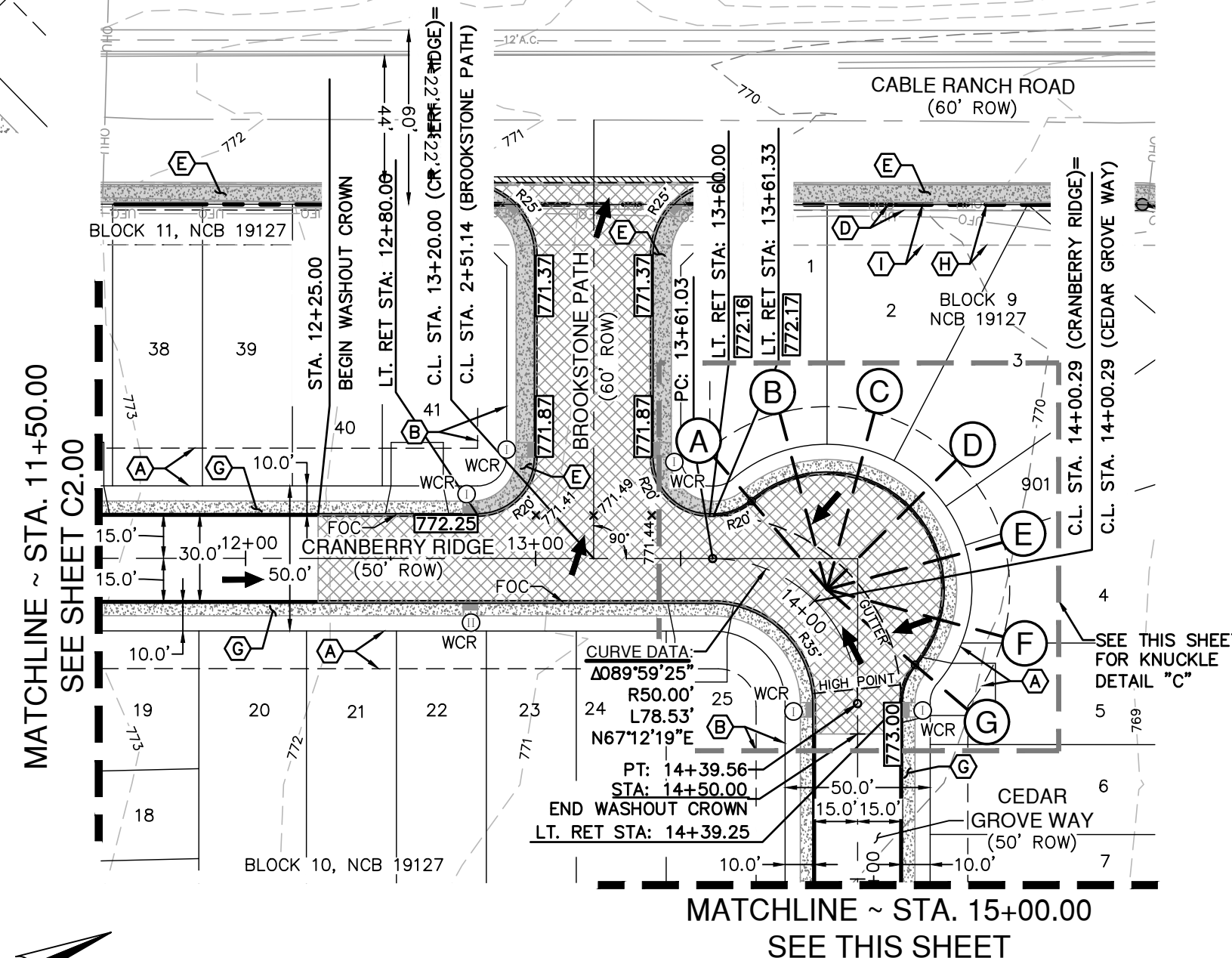
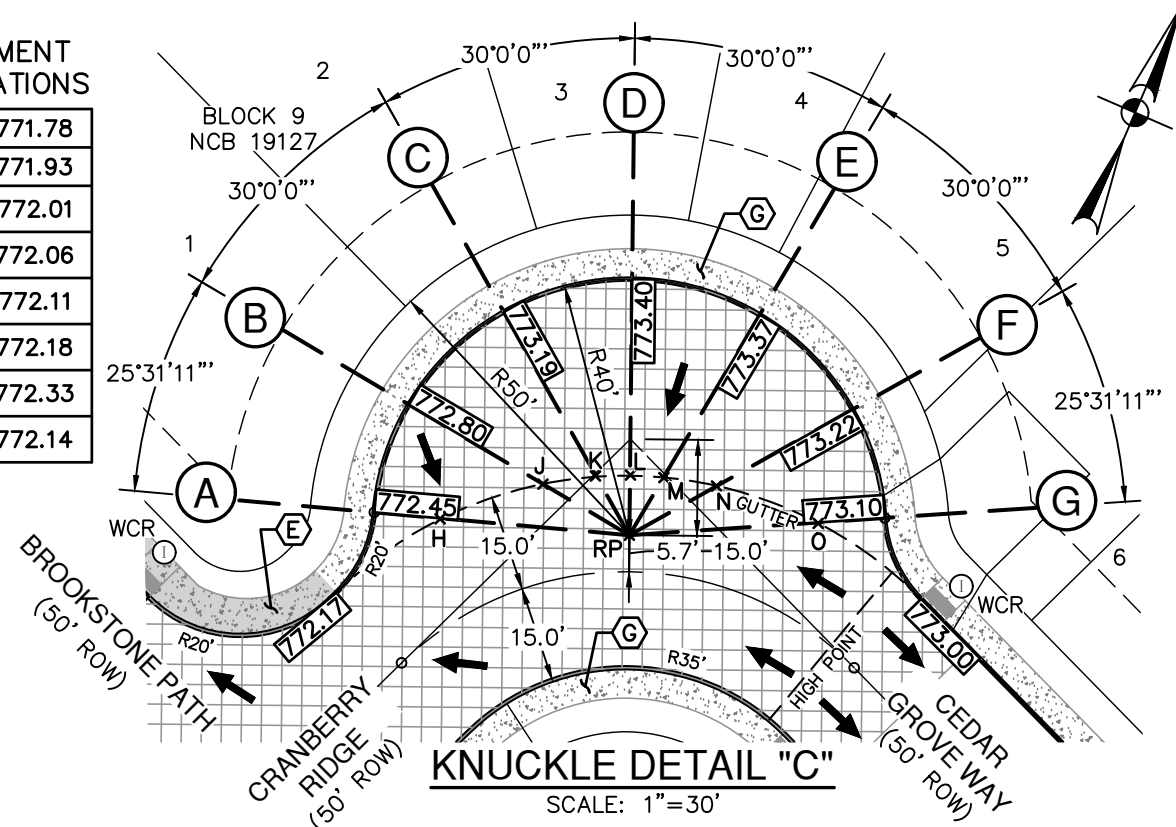
**WHEEL CHAIR NOTE:**  
 WHEEL CHAIR RAMP (WCR) TO BE CENTERED ON STATION NOTED BELOW. ELEVATION SHOWN ARE TOP OF CURB AND NOT GUTTER.

- STREET NOTES:**
- CONTRACTOR SHALL MATCH EXISTING PAVEMENT AT TIE-IN. IF EXISTING PAVEMENT ELEVATION DIFFERS SIGNIFICANTLY, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.
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  - DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.
  - CHANGES IN THE SIDEWALK LOCATION FOR A MAXIMUM LINEAR DISTANCE OF TWO HUNDRED (200) FEET ARE PERMITTED TO BE APPROVED BY THE FIELD INSPECTOR WITHOUT AMENDING THE STREET PLAN OR UTILITY LAYOUT PER UDC SECTION 35-506 (Q)(6).

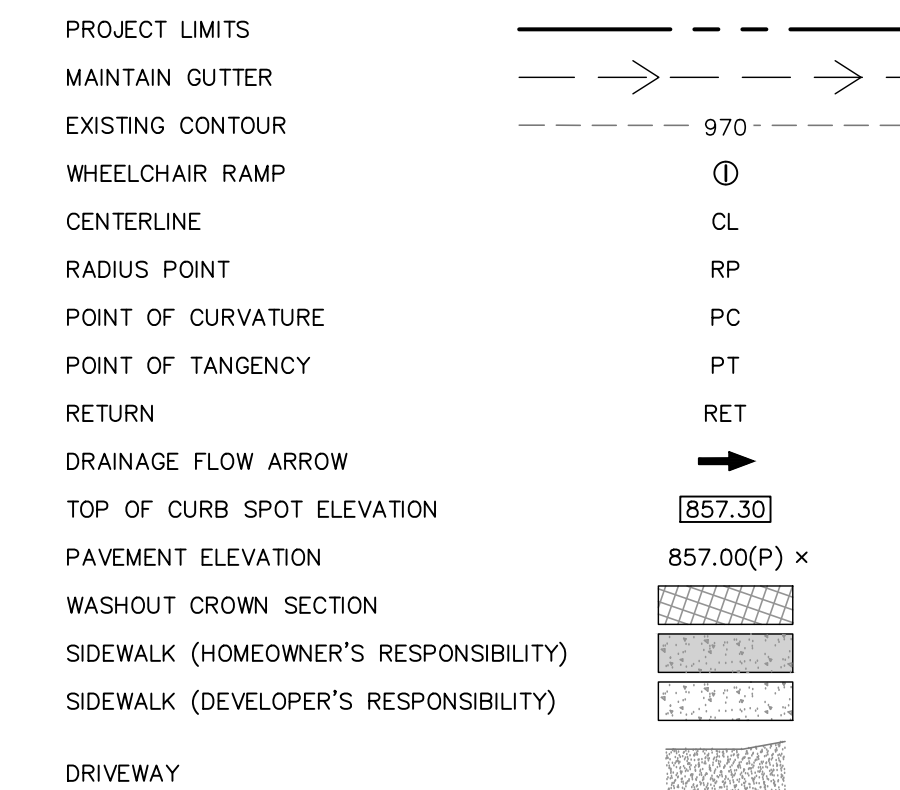
**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 HARVEST RIDGE WAY ~ STA. 1+00.00 TO STA. 5+67.18  
 BIRCHWOOD MEADOW ~ STA. 5+67.18 TO STA. 10+83.47  
 CRANBERRY RIDGE ~ STA. 10+83.47 TO STA. 11+50.00

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C2.00

PAVEMENT ELEVATIONS	
H	771.78
J	771.93
K	772.01
L	772.06
M	772.11
N	772.18
O	772.33
RP	772.14



### STREET LEGEND



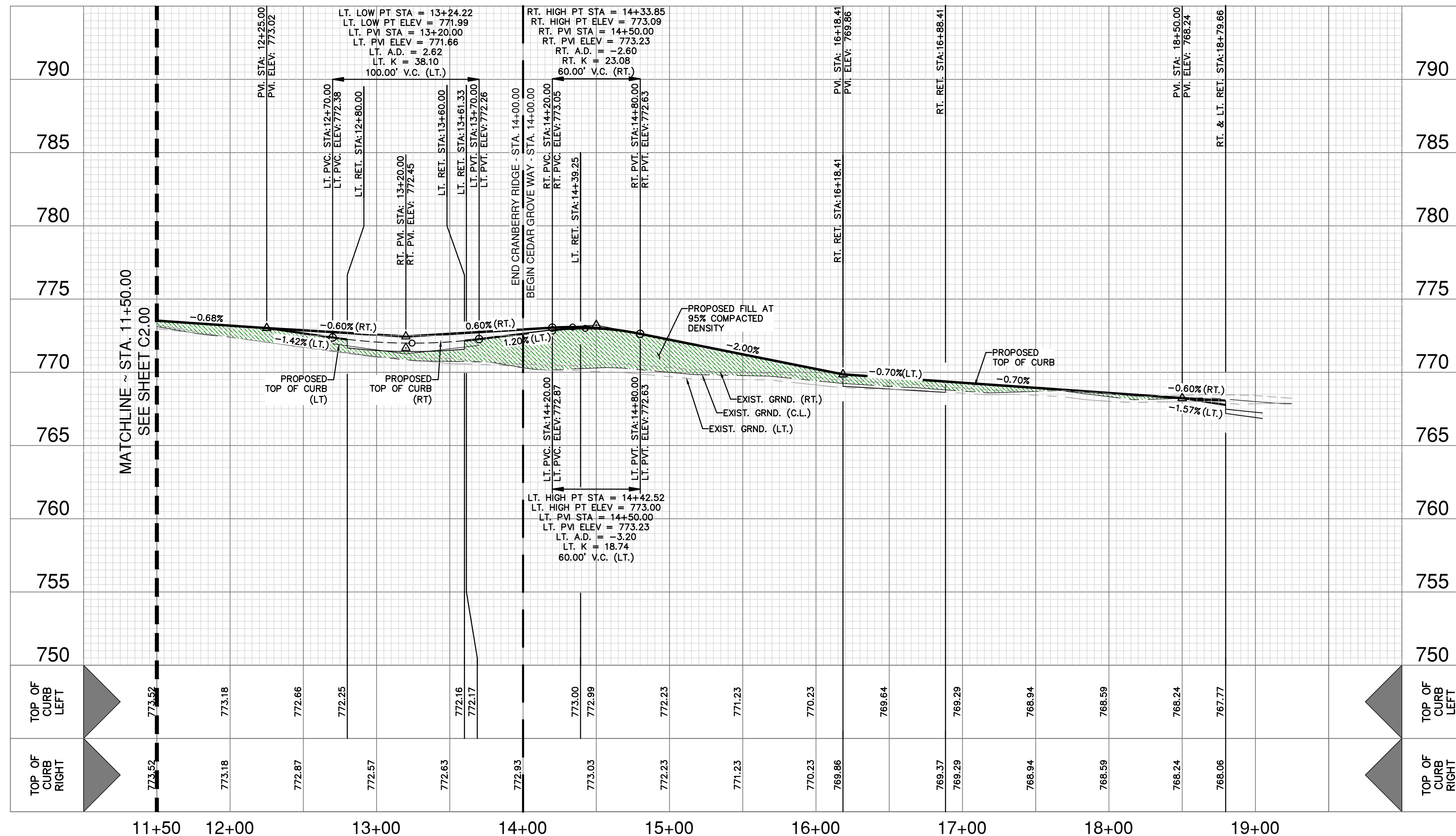
### KEY LEGEND:

- (A) 3' ELEC., GAS, TELE., & CA. T.V. EASEMENT
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- (G) 4' SIDEWALK
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- (I) 14' GAS, ELEC., TELE., & CA. T.V. EASEMENT (VOL. 9593, PG. 56 D.P.R.)

CRANBERRY RIDGE ~ STA. 11+50.00 TO STA. 14+00.00

CEDAR GROVE ~ STA. 14+00.00 TO END

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HORIZONTAL SCALE: 1" = 50'



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### SIDEWALK NOTE:

THE CONSTRUCTION OF SIDEWALKS ADJACENT TO ALL 900 SERIES LOTS WILL BE THE RESPONSIBILITY OF THE DEVELOPER AS SHOWN ON THE OVERALL SIGNAGE PLAN (SHEET C3.00). REFER TO SHEET C3.00 FOR LOCATIONS OF SIDEWALK CONSTRUCTION WHERE SIDEWALKS ARE NOT SHOWN.

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DATE: \_\_\_\_\_

NO. REVISION: \_\_\_\_\_

Jon D. Adame  
2-5-26

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TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

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STREET PLAN & PROFILE

PLAT NO. 25-11800523  
JOB NO. 13832-51  
DATE FEBRUARY 2026  
DESIGNER CB  
CHECKED JA DRAWN CB  
SHEET C2.01

DATE

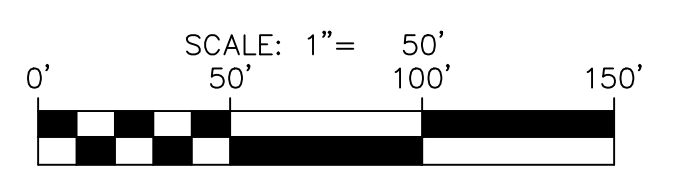
NO. REVISION

STATE OF TEXAS  
 JON D. ADAME  
 82567  
 LICENSED PROFESSIONAL ENGINEER  
 Jon Adame  
 2-5-26

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78243 | 210.375.9000  
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PLAT NO. 25-11800523  
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 SHEET C2.02

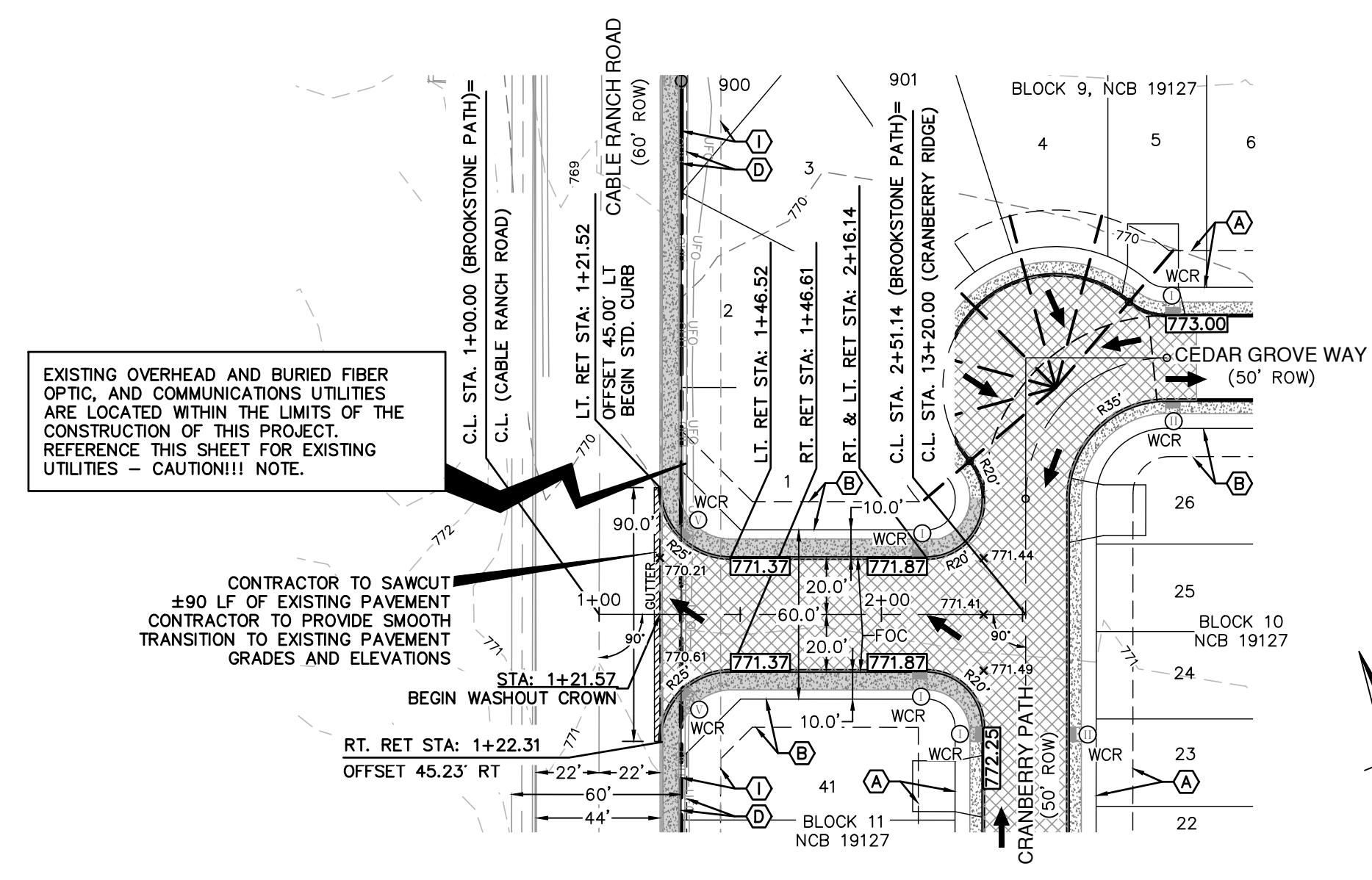
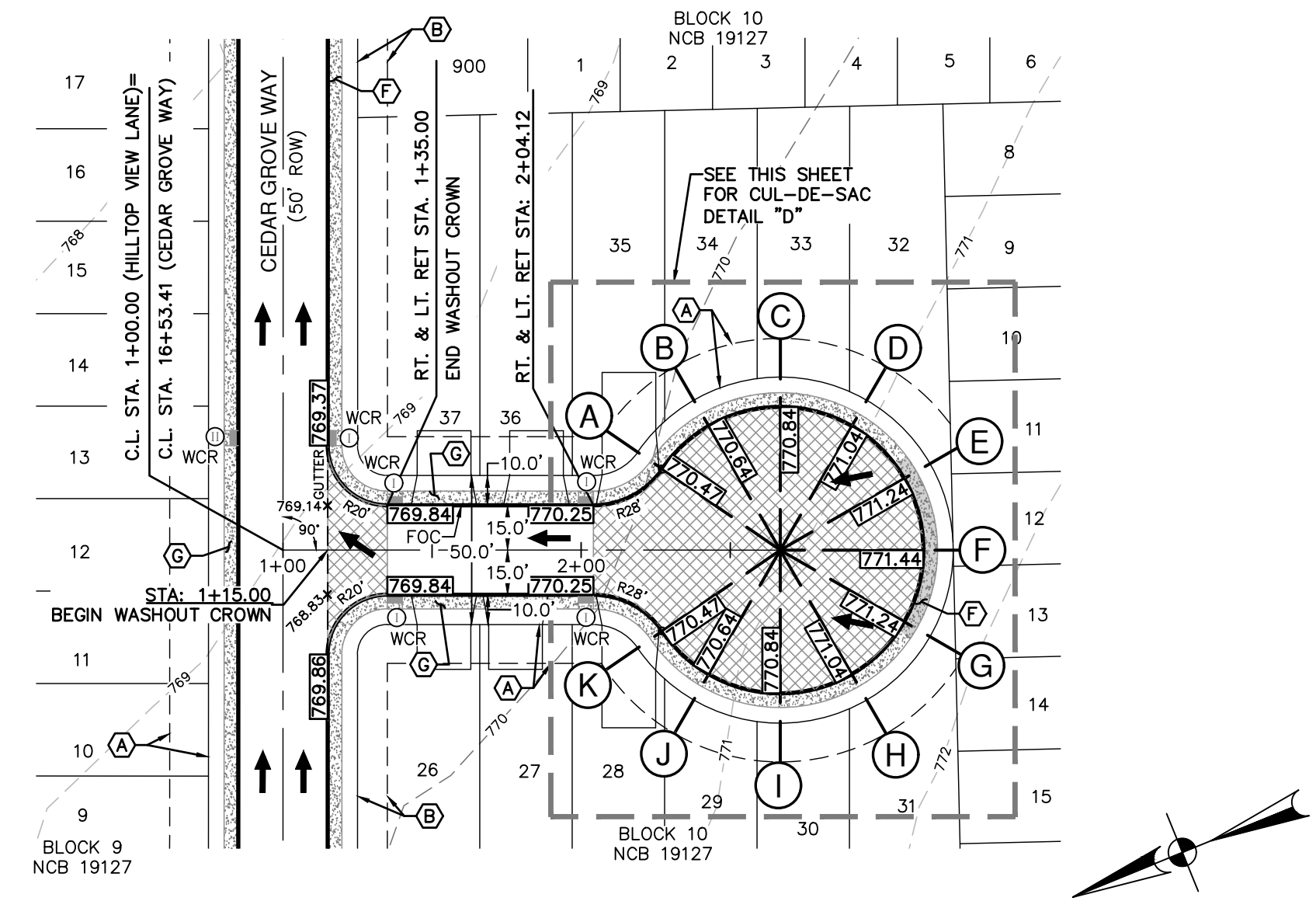
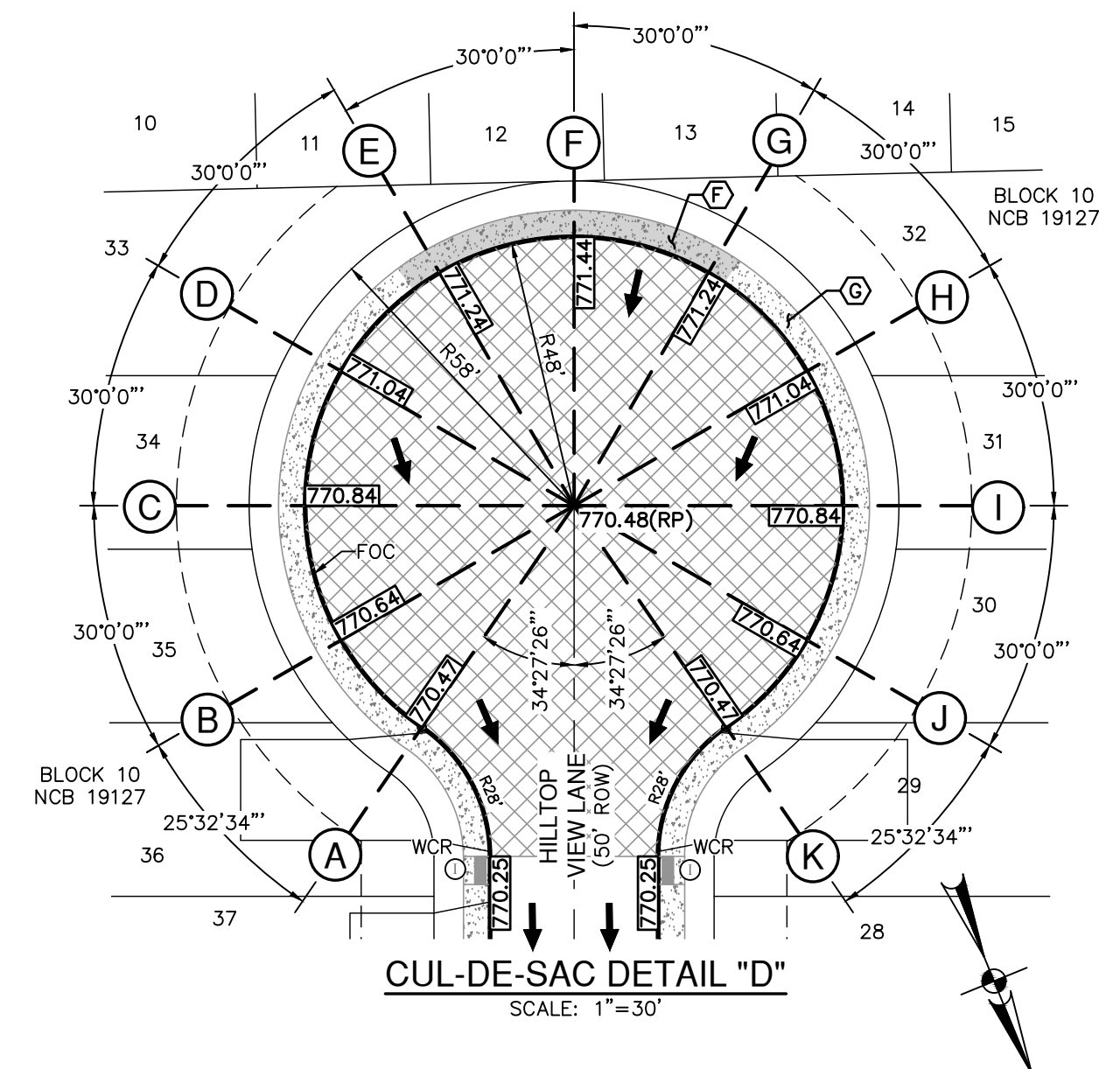


**STREET LEGEND**

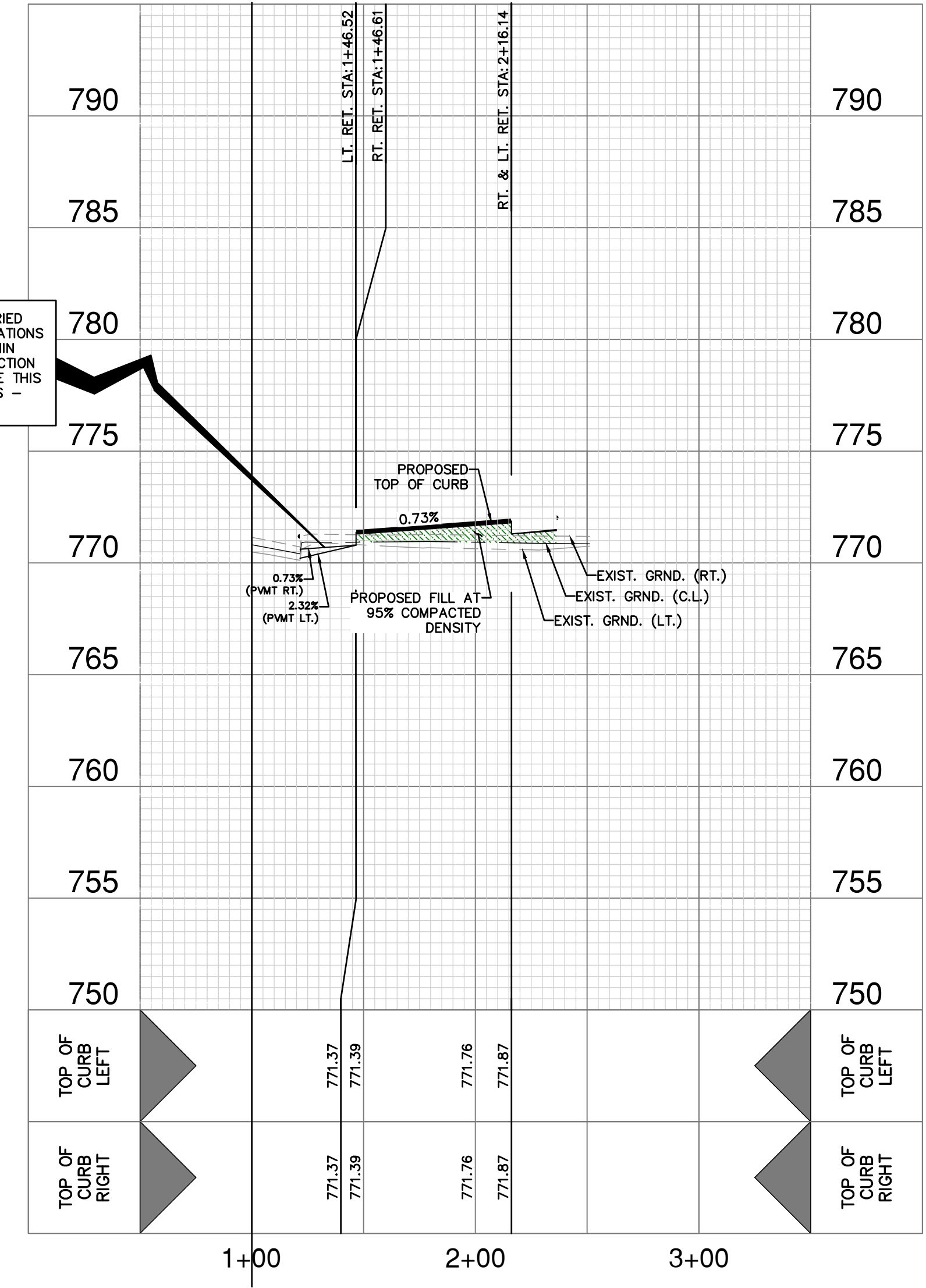
PROJECT LIMITS	---
MAINTAIN GUTTER	→ →
EXISTING CONTOUR	----- 970
WHEELCHAIR RAMP	⊕
CENTERLINE	CL
RADIUS POINT	RP
POINT OF CURVATURE	PC
POINT OF TANGENCY	PT
RETURN	RET
DRAINAGE FLOW ARROW	→
TOP OF CURB SPOT ELEVATION	857.30
PAVEMENT ELEVATION	857.00(P) x
WASHOUT CROWN SECTION	[Pattern]
SIDEWALK (HOMEOWNER'S RESPONSIBILITY)	[Pattern]
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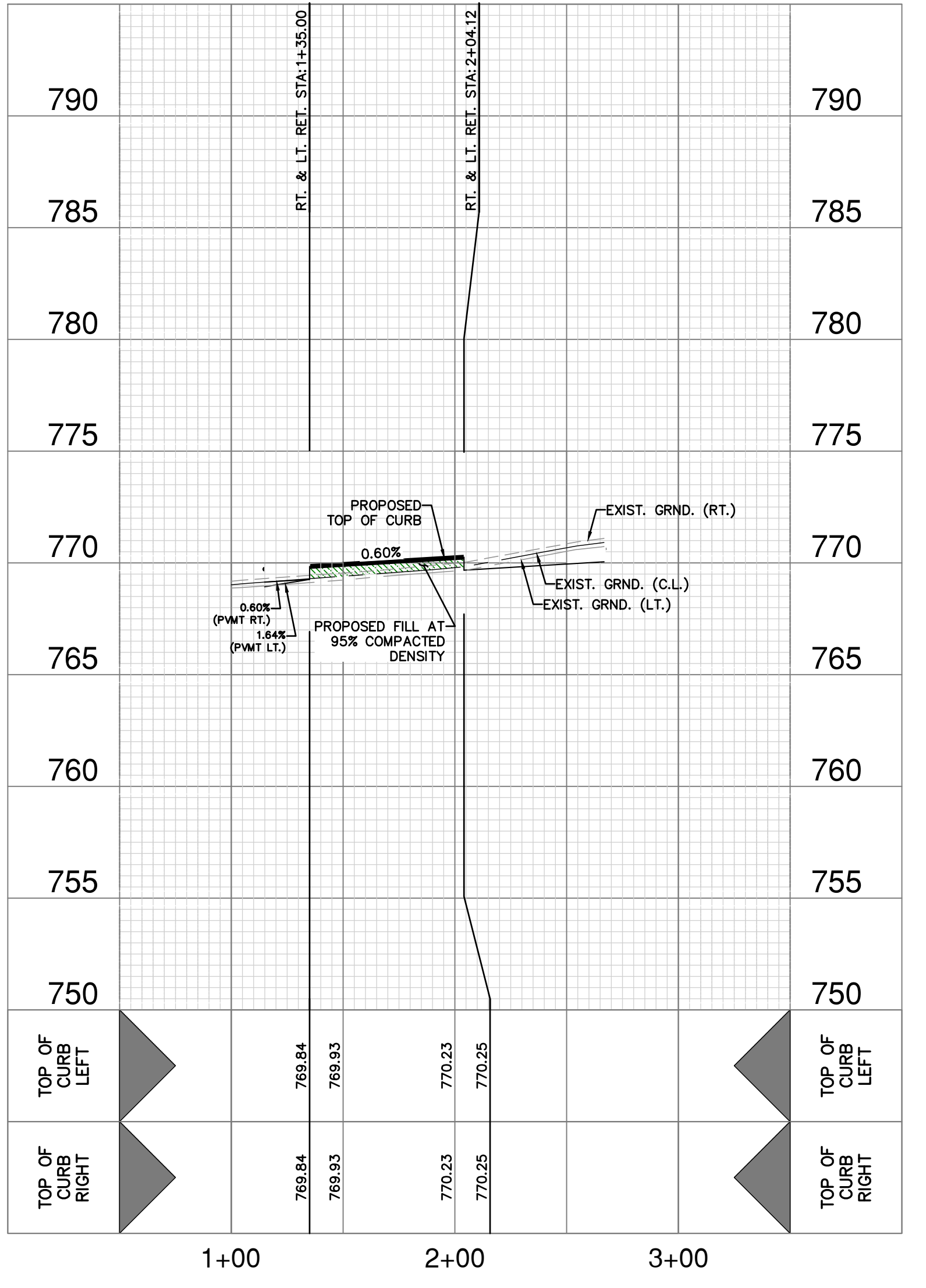


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EXISTING OVERHEAD AND BURIED FIBER OPTIC, AND COMMUNICATIONS UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. REFERENCE THIS SHEET FOR EXISTING UTILITIES - CAUTION!!! NOTE.

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PAVEMENT SECTION DETAIL								
STREET NAME	STATION	TYPE "D" HMAC	TYPE "C" HMAC	AGGREGATE BASE	LIME STABILIZED SUBGRADE	GEOGRID (TENSAR HX5.5 TRIAX)	CBR	STRUCTURAL NUMBER
BROOKSTONE PATH (LOCAL B)	1+00.00 TO 2+51.14	3.0"	-	12"	8.0"	NO	3.0	4.37
HARVEST RIDGE WAY (LOCAL B)	1+00.00 TO 3+61.89	3.0"	-	12"	8.0"	NO	3.0	4.37
HARVEST RIDGE WAY (LOCAL A)	3+61.89 TO 5+67.18	2.0"	2.0"	16"	8.0"	NO	3.0	3.53
BIRCHWOOD MEADOW (LOCAL A)	5+67.18 TO 10+83.47	2.0"	2.0"	16"	8.0"	NO	3.0	3.53
CRANBERRY RIDGE (LOCAL A)	10+83.47 TO 14+00.00	2.0"	2.0"	16"	8.0"	NO	3.0	3.53
CEDAR GROVE WAY (LOCAL A)	14+00.00 TO 19+24.64	2.0"	2.0"	16"	8.0"	NO	3.0	3.53
HILLTOP VIEW LANE (LOCAL A)	1+00.00 TO 2+66.78	2.0"	2.0"	16"	8.0"	NO	3.0	3.53

\* STREET TRANSITIONS FROM STREET CLASSIFICATIONS OF DIFFERING PAVEMENT WIDTHS SHALL BE CONSTRUCTED WITH PAVEMENT SECTION OF STREET CLASSIFICATION WITH WIDER PAVEMENT SECTION

**GENERAL NOTES:**

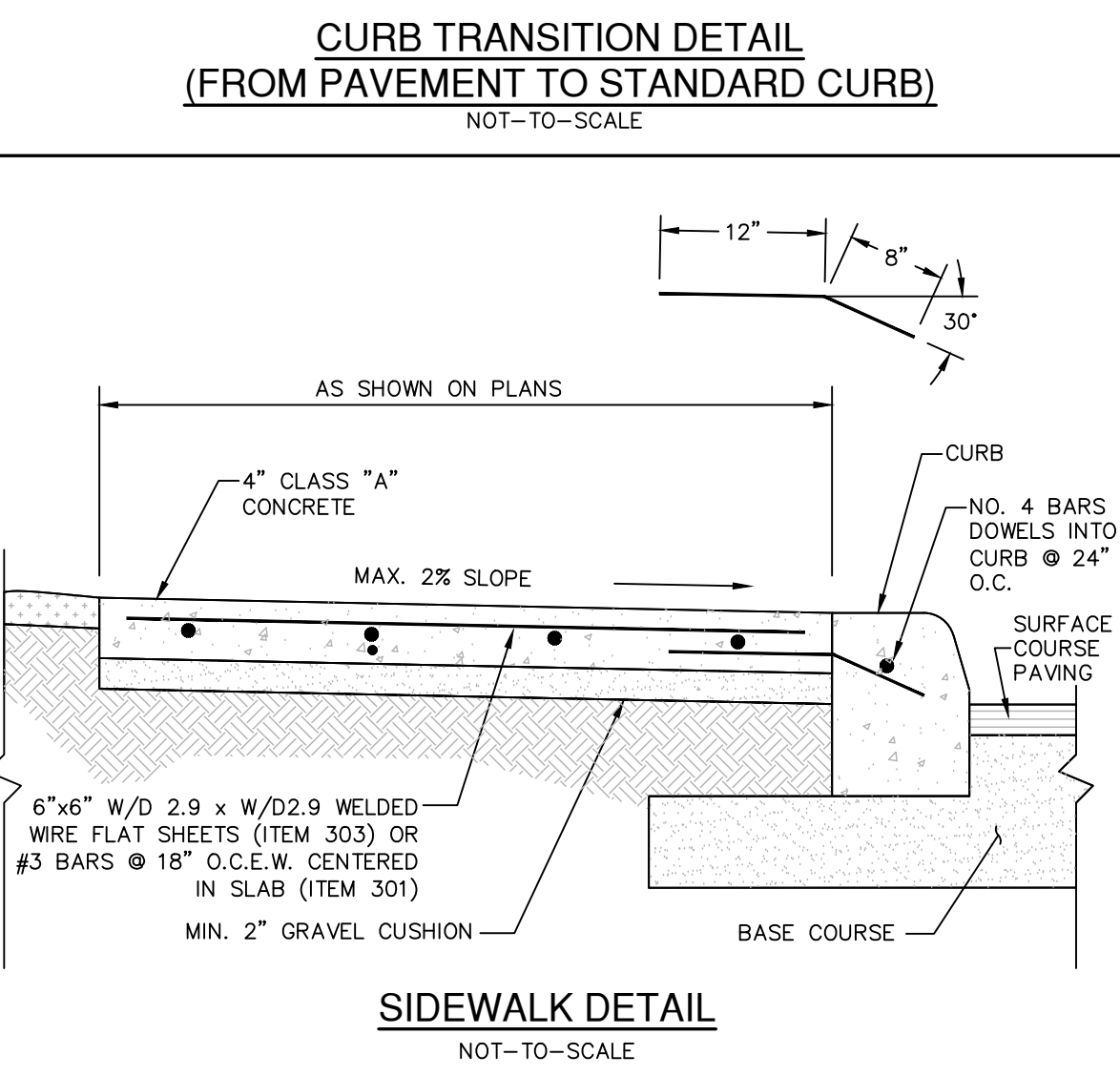
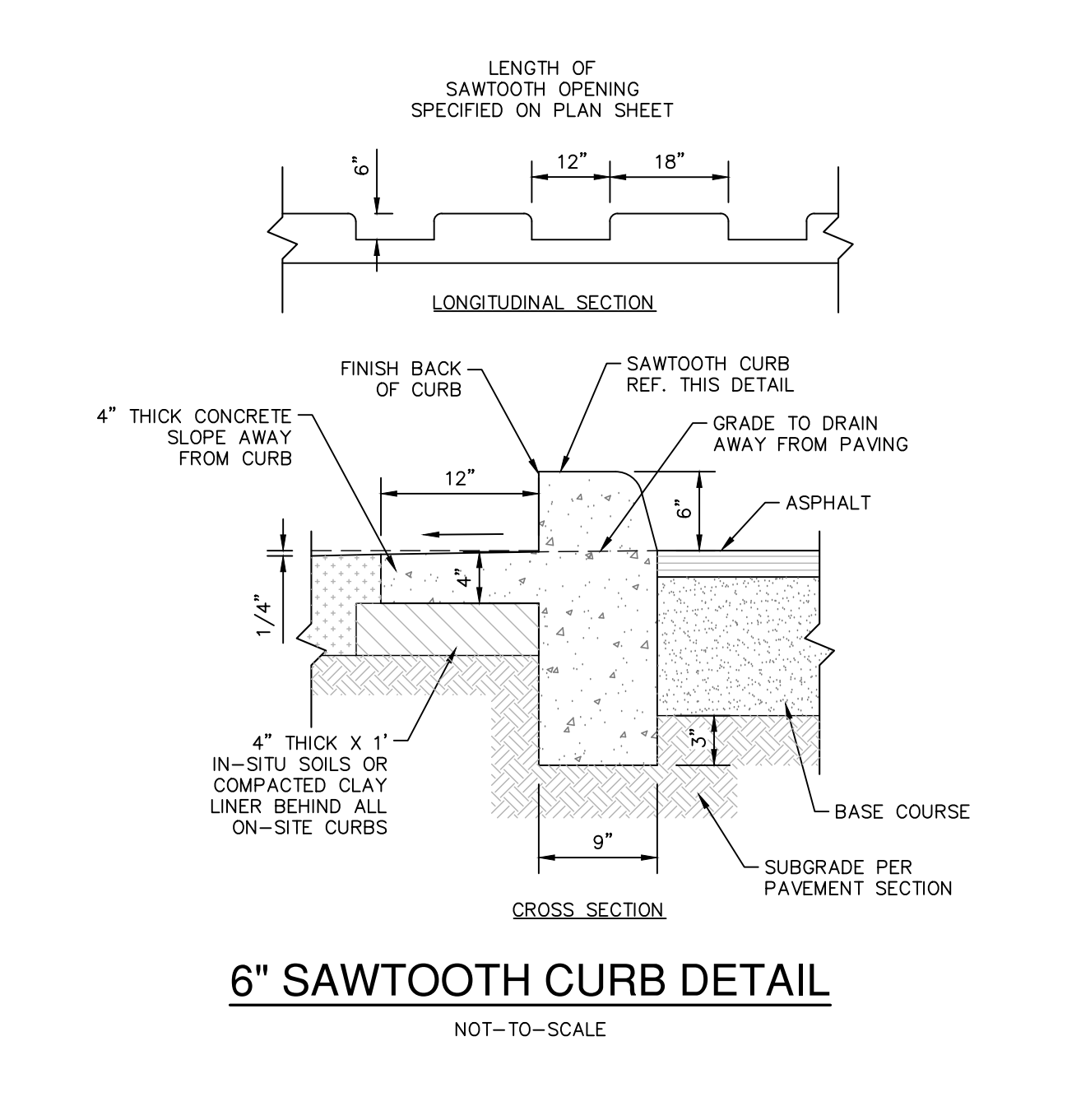
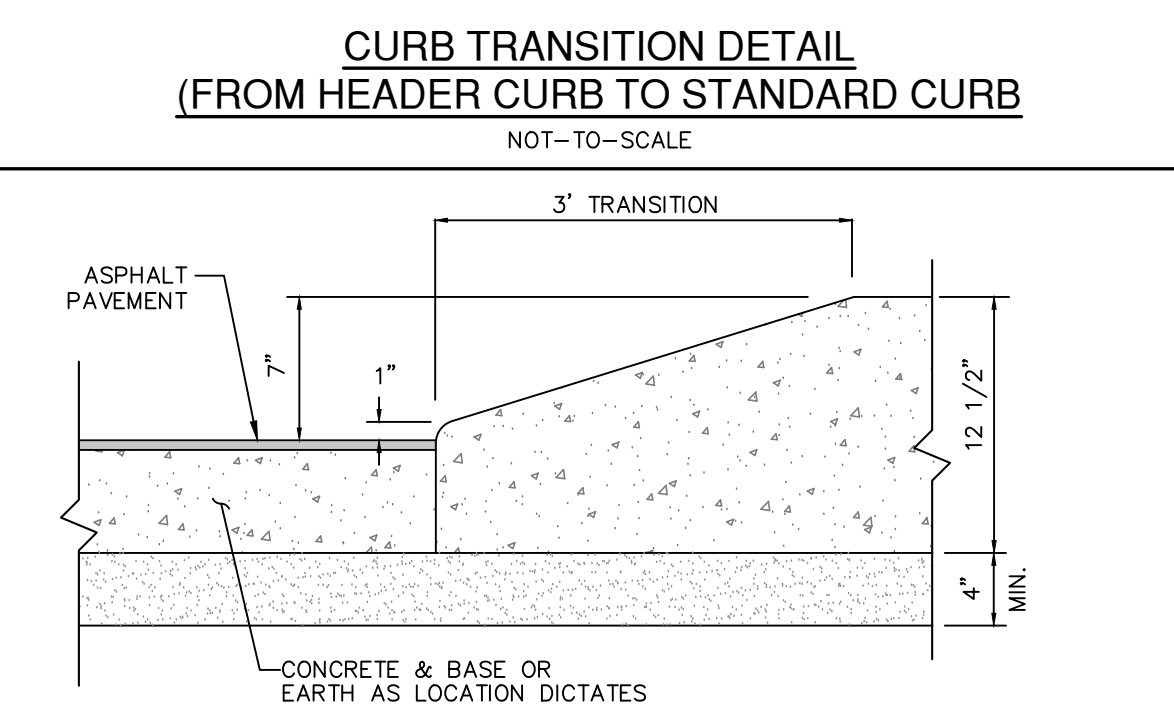
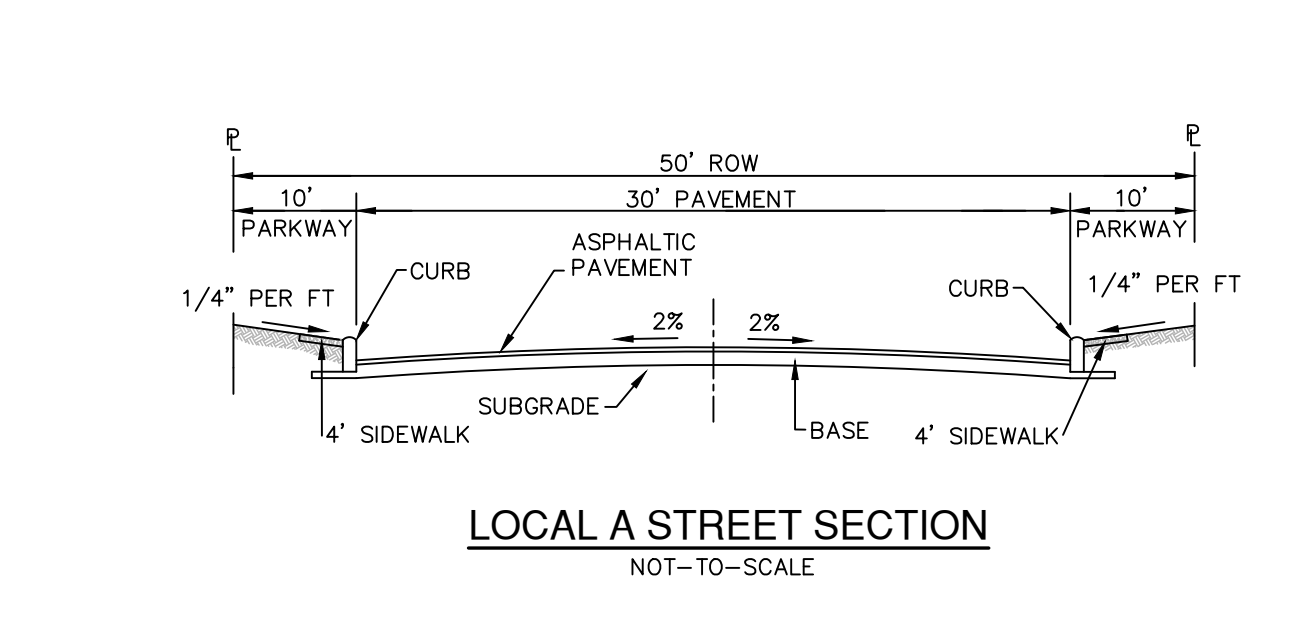
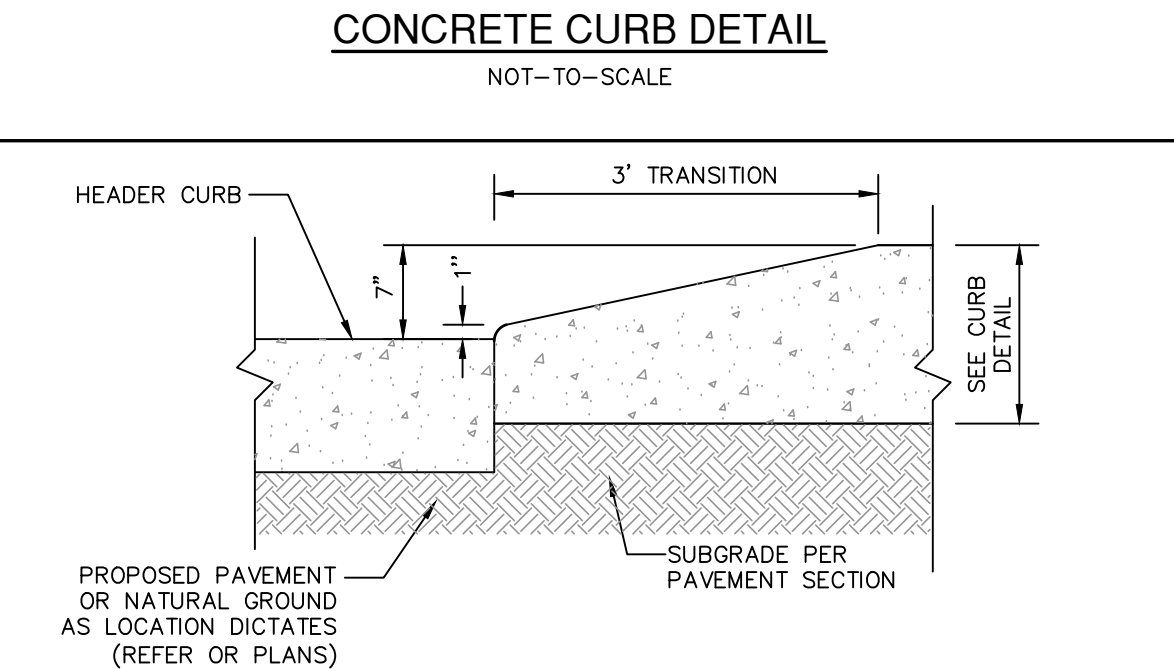
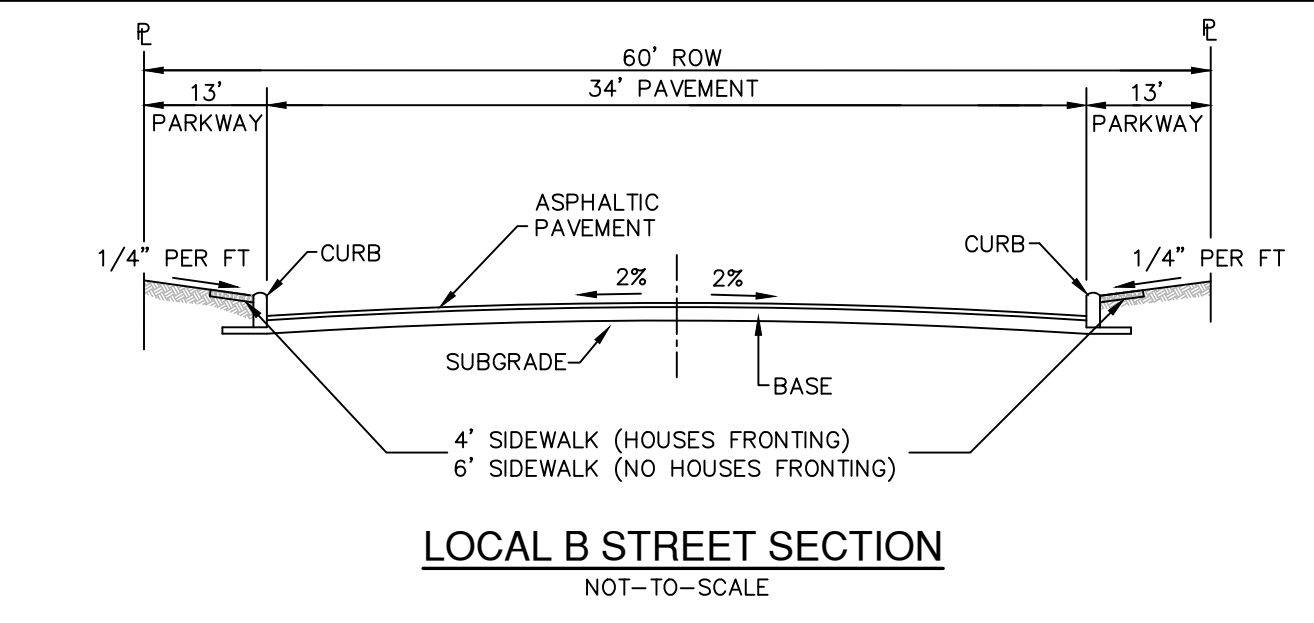
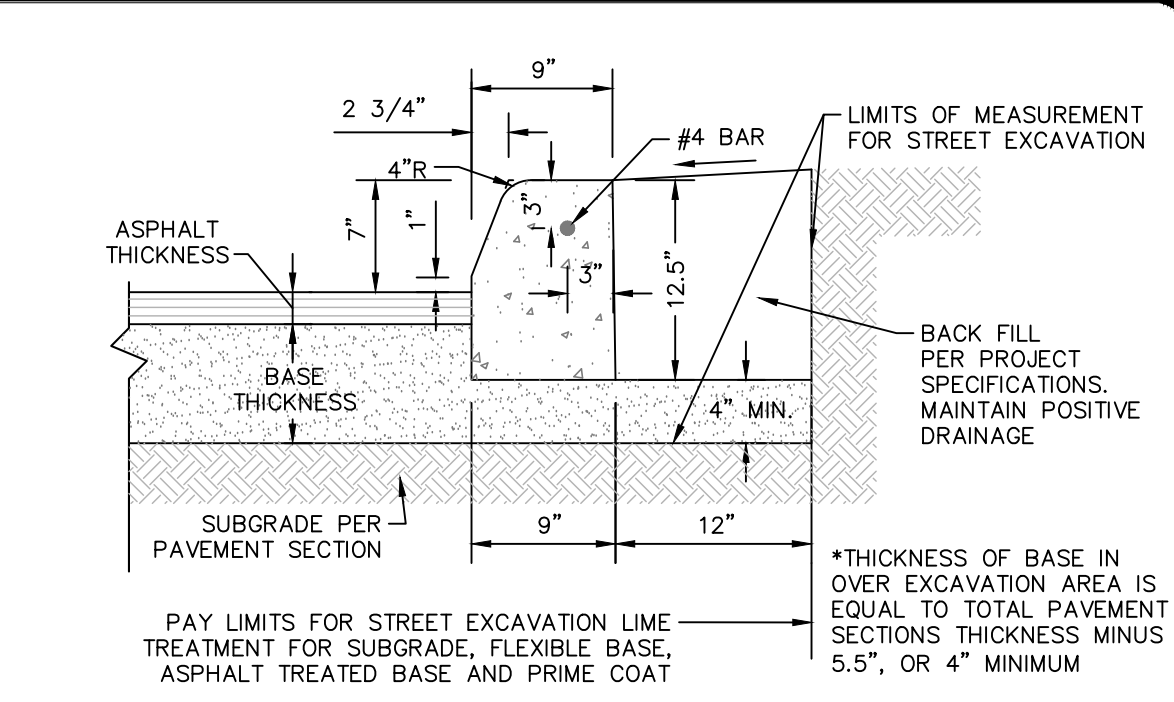
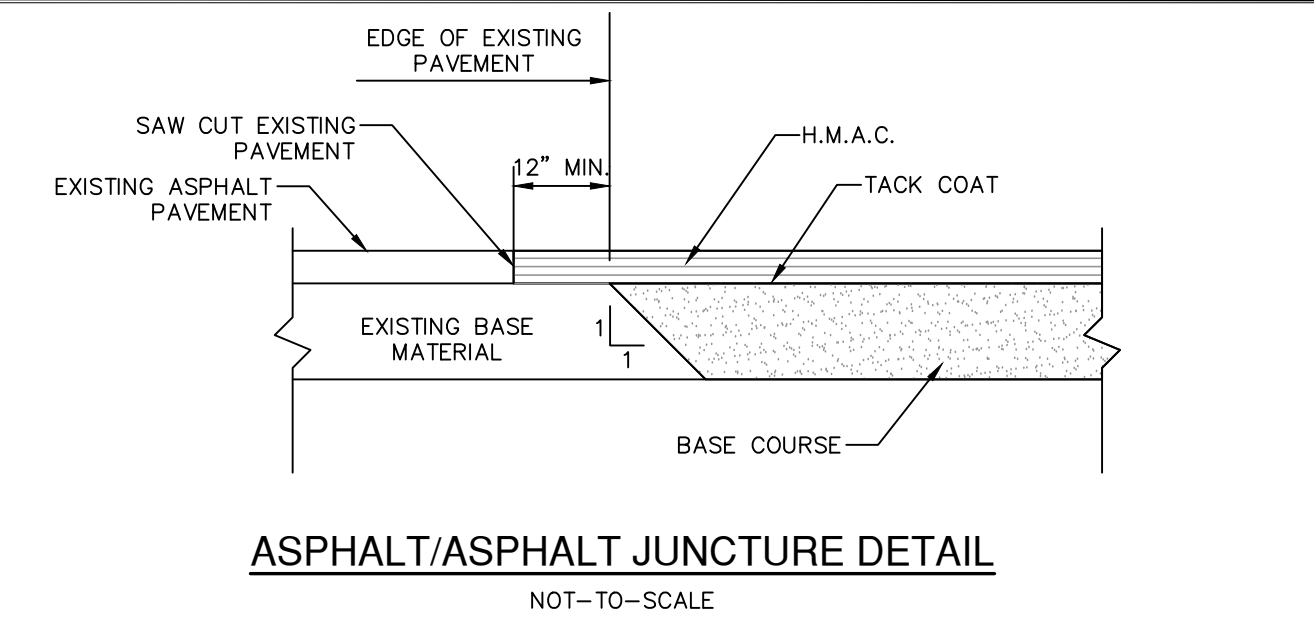
- CONTRACTOR SHALL REFERENCE THE PROJECT PAVEMENT DESIGN REPORT PREPARED BY TERRADYNE ENGINEERING, INC. DATED NOVEMBER 14, 2025.
- CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEER TO VERIFY THE SUB GRADE CONDITION PRIOR TO PLACING ANY BASE MATERIAL. GEOTECHNICAL ENGINEER SHALL DETERMINE THE SUB GRADE CONDITION AND IF LIME STABILIZATION IS REQUIRED.
- GEOTECHNICAL ENGINEER SHOULD VERIFY THE STREET SUBGRADE AT THE TIME OF CONSTRUCTION PRIOR TO PLACEMENT OF AGGREGATE BASE.
- THE FLEXIBLE BASE COURSE SHOULD BE CRUSHED LIMESTONE CONFORMING TO TxDOT STANDARD SPECIFICATIONS, ITEM 247, TYPE A, GRADES 1 OR 2.
- THE MOISTURE CONTENT OF THE FILL SHOULD BE MAINTAINED WITHIN THE RANGE OF OPTIMUM WATER CONTENT TO 5 PERCENTAGE POINTS ABOVE THE OPTIMUM WATER CONTENT UNTIL PERMANENTLY COVERED.
- IN THE EVENT THAT THE CLAY FILL USED IS DIFFERENT THAN THE EXISTING SUBGRADE, THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT COULD BE INVALIDATED AND THE DESIGN ENGINEER MUST BE CONSULTED TO DETERMINE IF ADDITIONAL CBR TESTING AND THICKER PAVEMENT SECTIONS ARE REQUIRED.
- WHERE PAVEMENT SUBGRADE IS LOCATED WITHIN 2- FEET OF THE EXISTING GROUND SURFACE (STRATUM 1 CLAYS), MOISTURE CONDITIONED SUBGRADE WILL BE REQUIRED. GEOTECHNICAL ENGINEER SHOULD VERIFY THE STREET SUBGRADE AT THE TIME OF CONSTRUCTION PRIOR TO PLACEMENT OF AGGREGATE BASE TO DETERMINE WHERE THE MOISTURE CONDITIONED SUBGRADE IS NEEDED. REFERENCE GEOTECHNICAL ENGINEERING REPORT FOR MORE INFORMATION.
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**STREET SUBGRADE NOTES:**

- IF THE STREET SUBGRADE PLASTICITY INDEX VALUE IS GREATER THAN 20, SUBGRADE STABILIZATION IS NEEDED AS PER CITY OF SAN ANTONIO REQUIREMENTS.
- IF THE SUBGRADE PLASTICITY INDEX VALUE IS 20 OR LESS, SUBGRADE STABILIZATION IS NOT NEEDED. THE SUBGRADE SHOULD BE MOISTURE CONDITIONED (COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT A MINIMUM MOISTURE CONTENT OF OPTIMUM PLUS 2 PERCENT (TEX114E)).
- THE SUBGRADE SHOULD BE STABILIZED USING 4 PERCENT LIME TO A DEPTH OF 8 INCHES AS NOTED ABOVE.
- THE SUBGRADE SOILS SHOULD BE TESTED FOR SOIL SULFATE CONTENT PRIOR TO STABILIZATION. IF THE SOIL SULFATE CONTENT IS HIGH, AN ALTERNATE PROCEDURE / RECOMMENDATION WILL BE NEEDED.
- LIME APPLICATION RATE OF 23 LBS PER SQ YARD FOR 8 INCH DEPTH OF STABILIZATION IS RECOMMENDED.
- APPROVED FILL MATERIAL SHOULD BE USED TO RAISE THE GRADE. THE FILL SHOULD BE FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 3. LIME APPLICATION RATES SHOULD BE RE-EVALUATED AND TESTED FOR SULFATE CONTENT PRIOR TO USE OF THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.
- THE SUBGRADE SHOULD BE PROOF ROLLED TO IDENTIFY SOFT AREAS BEFORE STABILIZATION.

**LIME NOTES:**

- FOR LIME STABILIZATION CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED ON 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 IN THE BEXAR COUNTY FLEXIBLE PAVEMENT DESIGN CRITERIA GUIDE 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 STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN +/- 1.0 INCH.



DATE: \_\_\_\_\_

NO. REVISION: \_\_\_\_\_

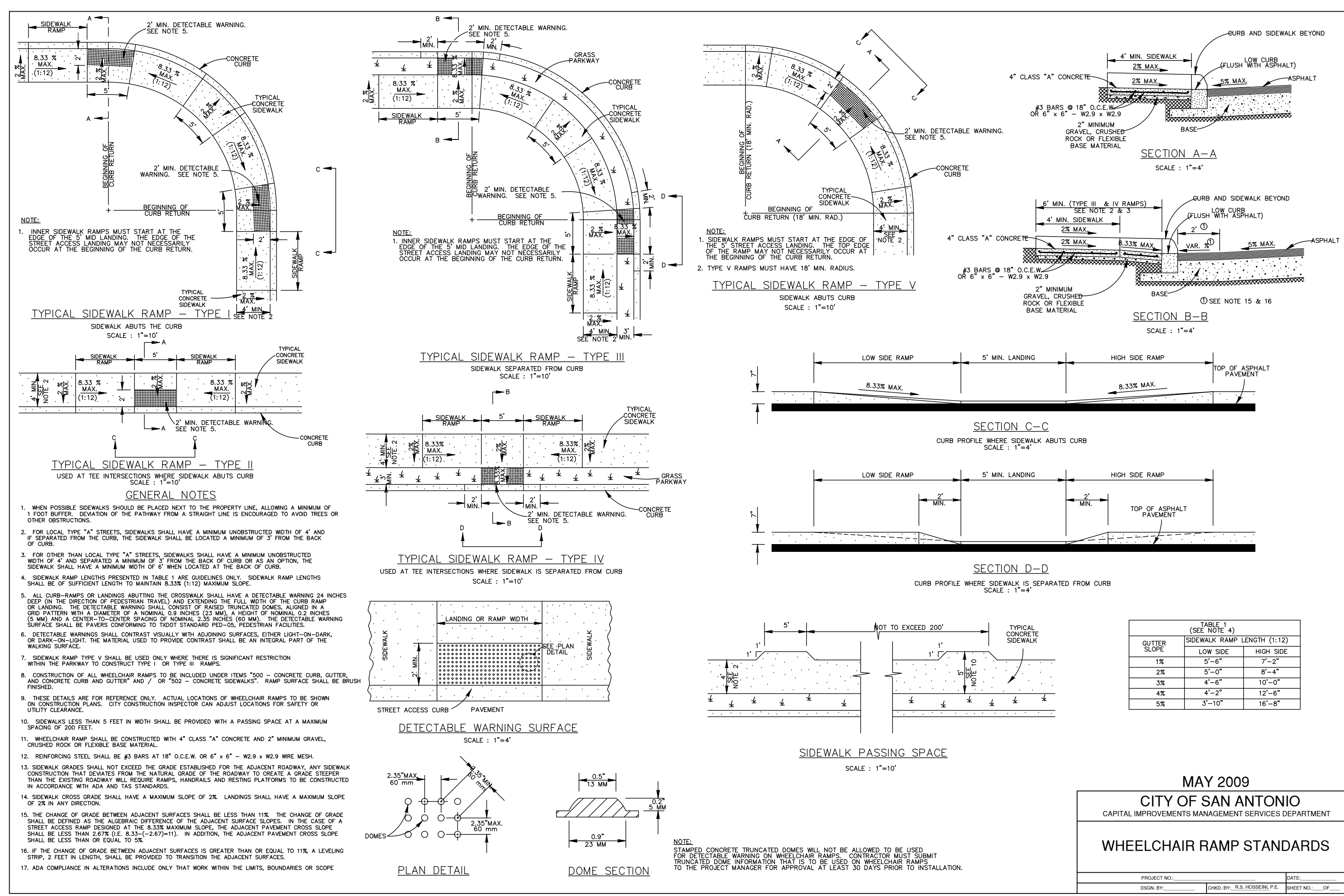
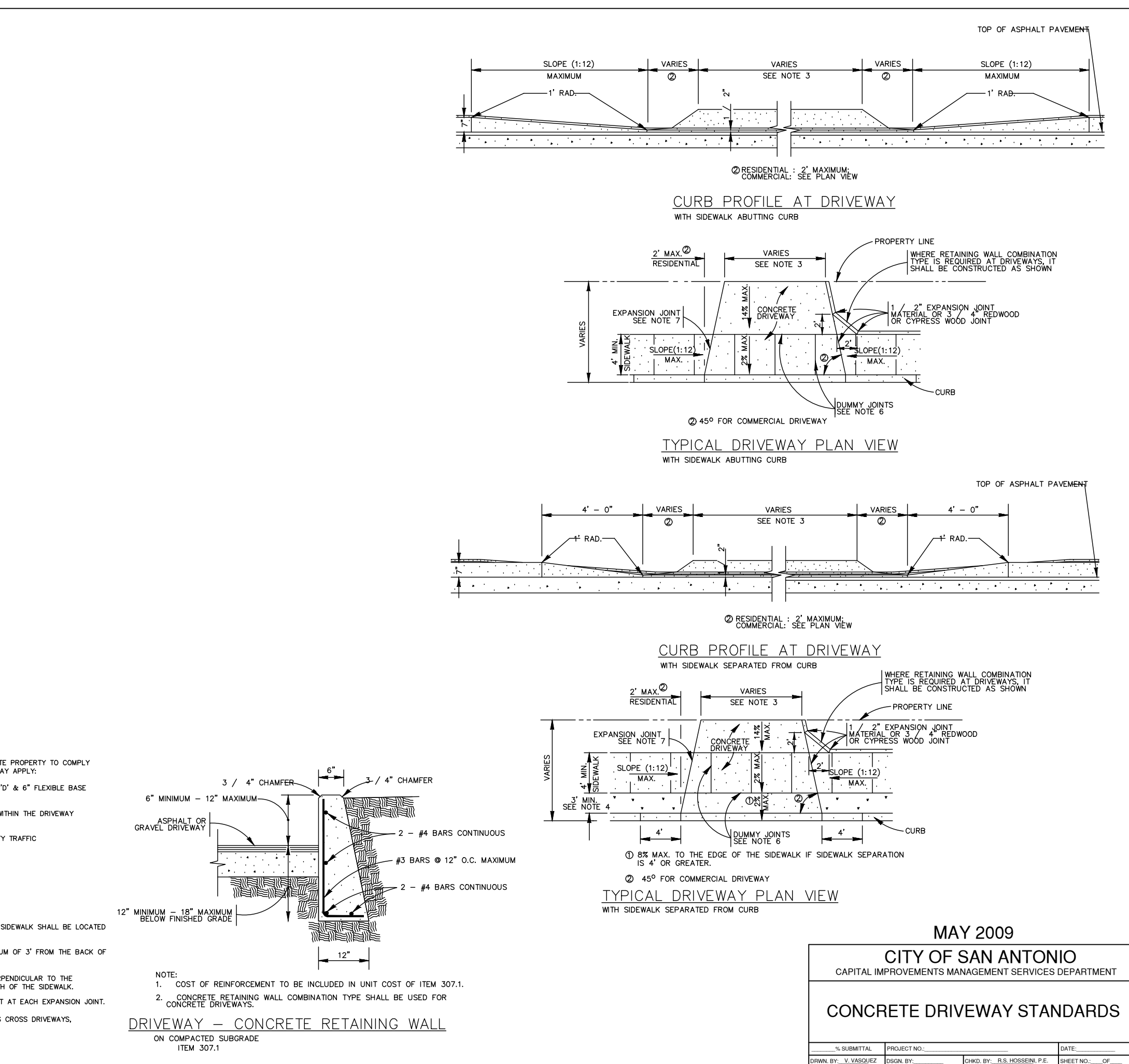
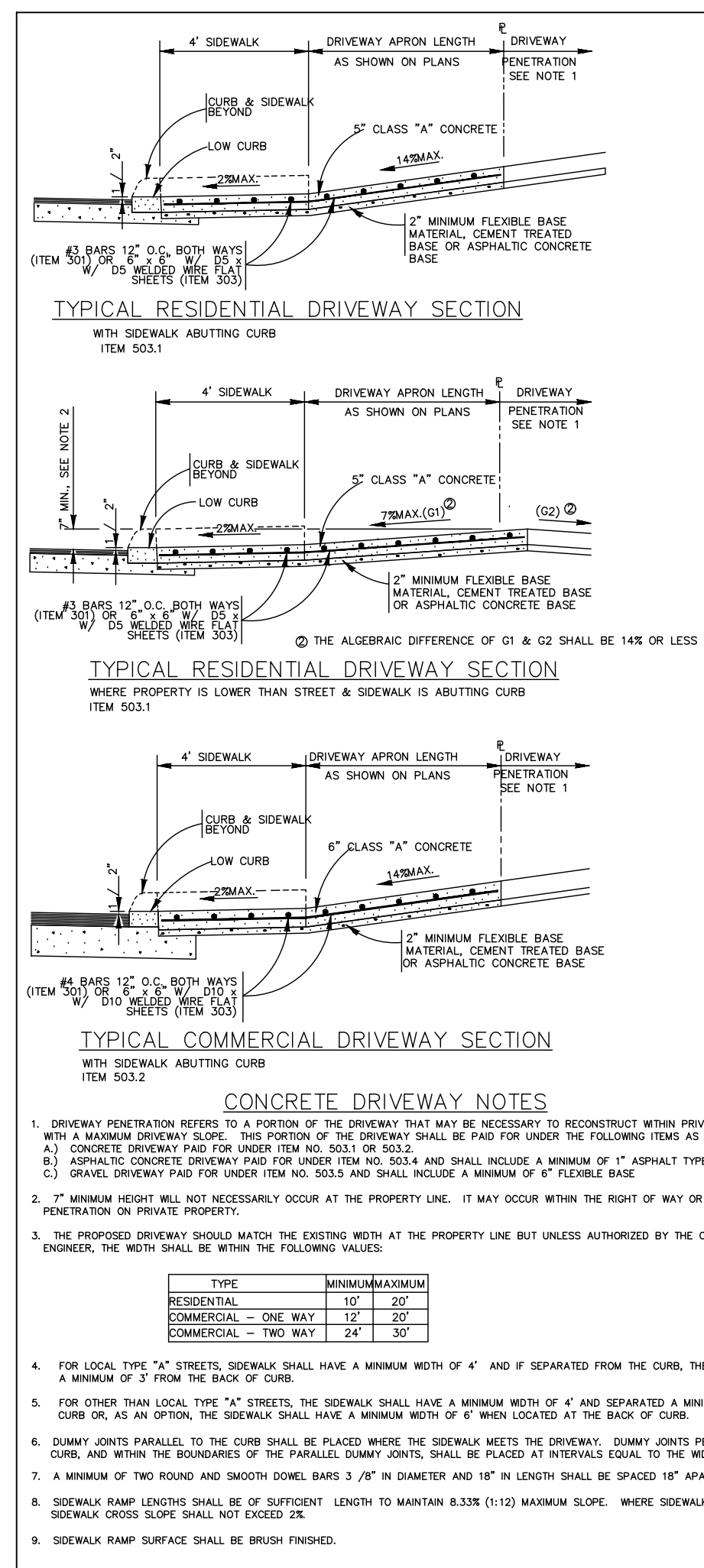
*Jon Adame*  
2-11-26

**PAPE-DAWSON**  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1022860

**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS

STREET DETAILS

PLAT NO. 25-11800523  
JOB NO. 13832-51  
DATE FEBRUARY 2026  
DESIGNER CB  
CHECKED JA DRAWN CB  
SHEET C2.10



DATE: \_\_\_\_\_

NO. REVISION: \_\_\_\_\_

STATE OF TEXAS  
 JON D. ADAME  
 82567  
 LICENSED PROFESSIONAL ENGINEER

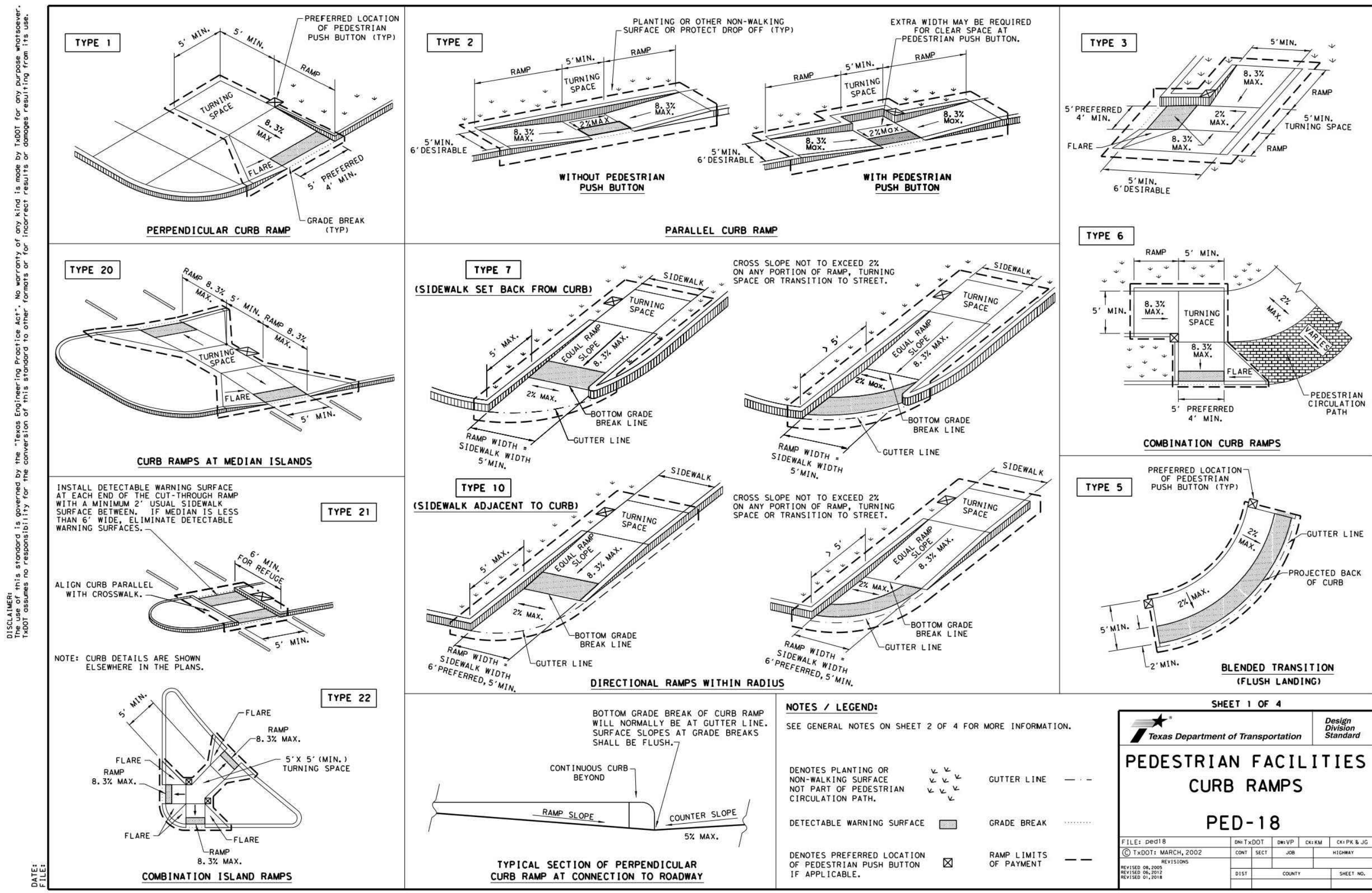
Jon Adame  
 2-5-26

**PAPE - DAWSON**  
 2000 NW LOOP 410 I SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 1022860

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS

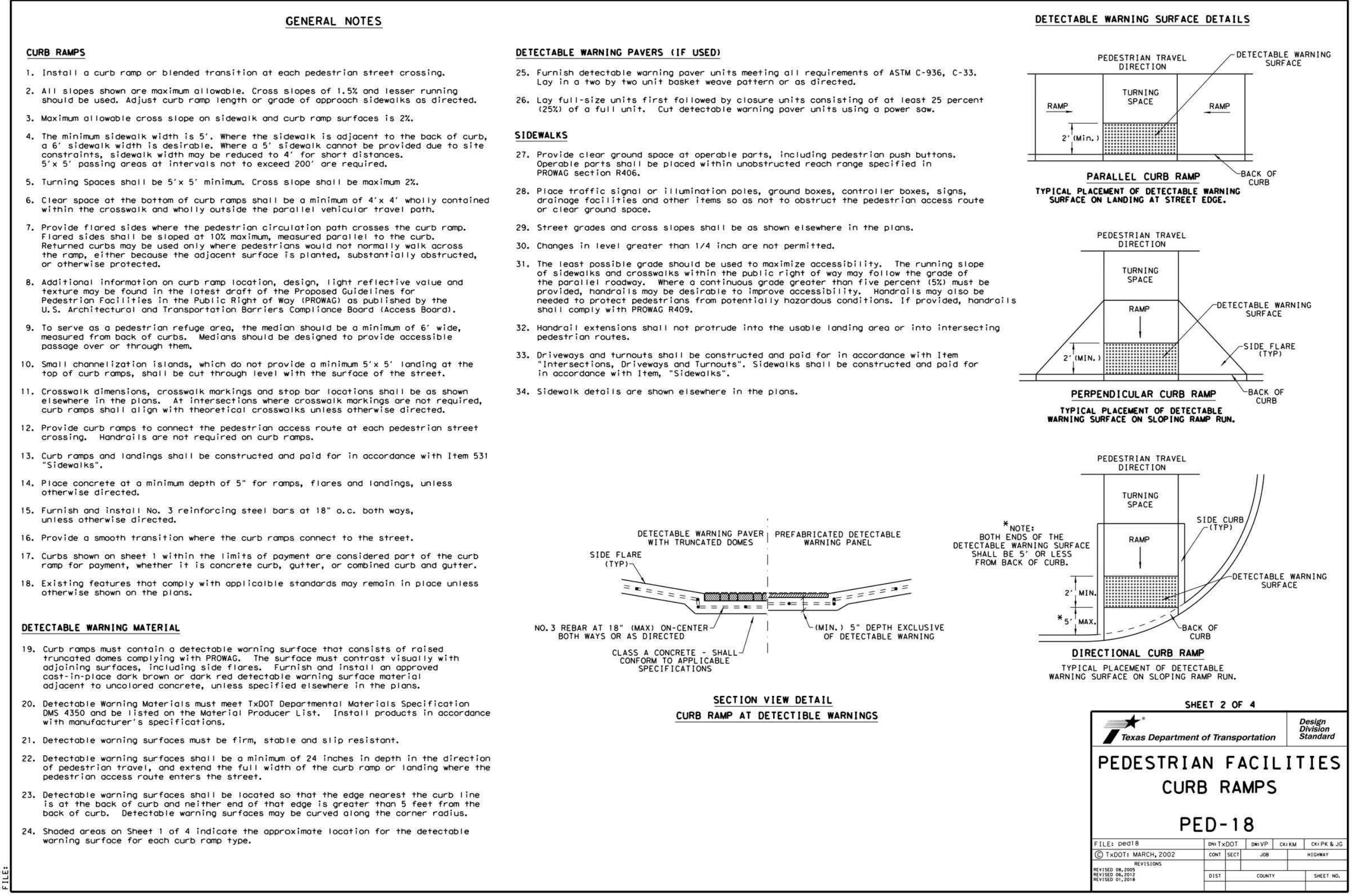
STREET DETAILS

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C2.11



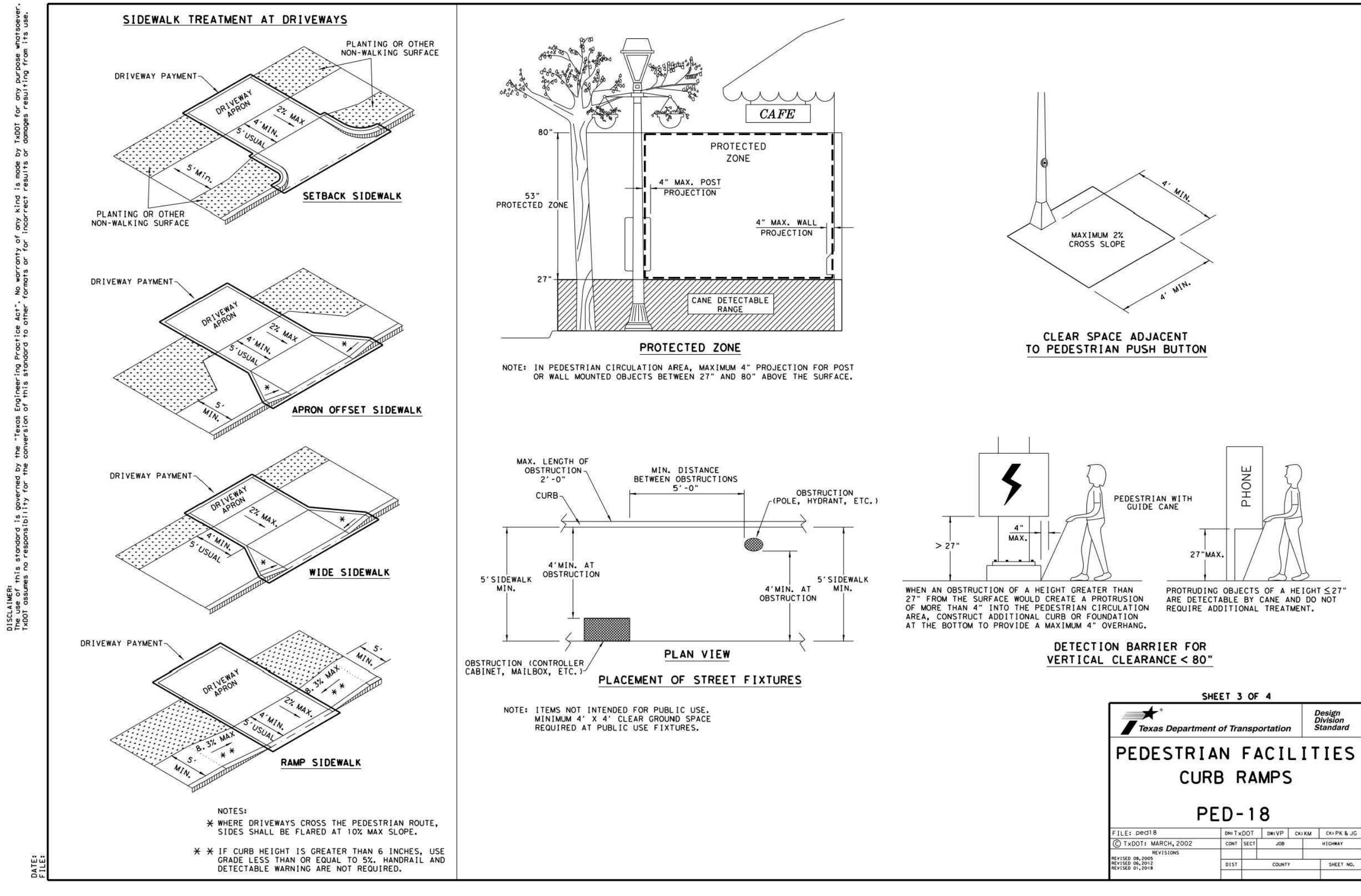
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**PEDESTRIAN FACILITIES**  
**CURB RAMPS**  
**PED-18**

FILED: 03/18/2022  
 DATE: 03/18/2022  
 COUNTY: TARRANT  
 SHEET NO. 1 OF 4



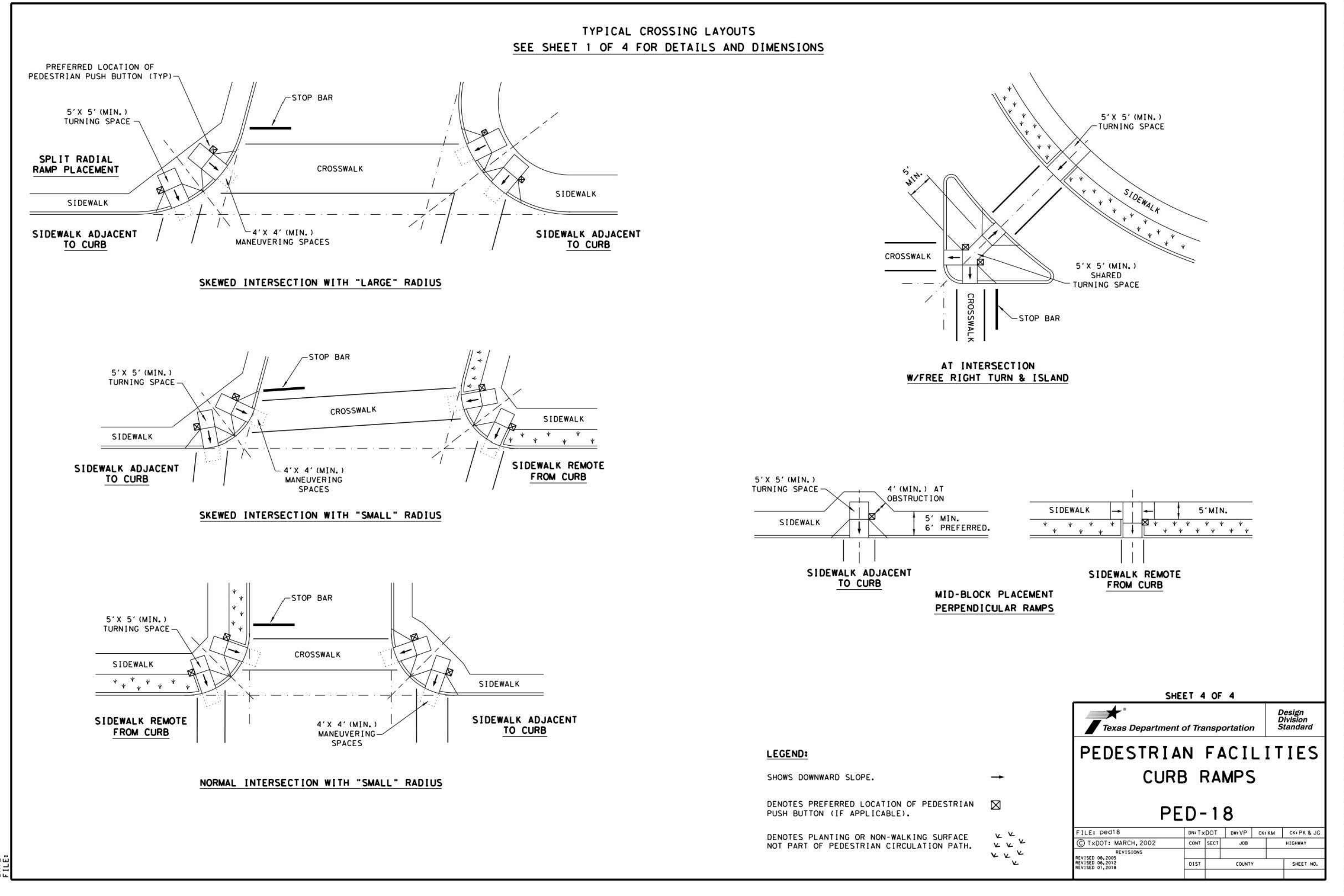
**TEXAS DEPARTMENT OF TRANSPORTATION**  
**PEDESTRIAN FACILITIES**  
**CURB RAMPS**  
**PED-18**

FILED: 03/18/2022  
 DATE: 03/18/2022  
 COUNTY: TARRANT  
 SHEET NO. 2 OF 4



**TEXAS DEPARTMENT OF TRANSPORTATION**  
**PEDESTRIAN FACILITIES**  
**CURB RAMPS**  
**PED-18**

FILED: 03/18/2022  
 DATE: 03/18/2022  
 COUNTY: TARRANT  
 SHEET NO. 3 OF 4



**TEXAS DEPARTMENT OF TRANSPORTATION**  
**PEDESTRIAN FACILITIES**  
**CURB RAMPS**  
**PED-18**

FILED: 03/18/2022  
 DATE: 03/18/2022  
 COUNTY: TARRANT  
 SHEET NO. 4 OF 4

Date: November 14, 2025, 4:39 PM - User ID: bmcquillan  
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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. AERIAL IMAGERY PROVIDED BY GOOGLE/UNLESS OTHERWISE NOTED. Imagery © 2016, CAROLINA Digital Globe, Texas Orthographic Program, USDA Farm Service Agency.

DATE: \_\_\_\_\_  
 NO. REVISION: \_\_\_\_\_

**STATE OF TEXAS**  
**PROFESSIONAL ENGINEER**  
**JON D. ADAME**  
**82567**  
 J. Adame  
 2-5-26

**PAPE - DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 STREET DETAILS

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C2.12

Date: November 14, 2025, 4:39 PM - User ID: bmcquillen  
 File: P:\38\32\5\Design\Chal\SCOA-1383251.dwg

MV PALIO MPCD  
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 NCB 19127

SARA TWO LLC  
 P-4C  
 NCB 15329  
 (DOC #20070295086)

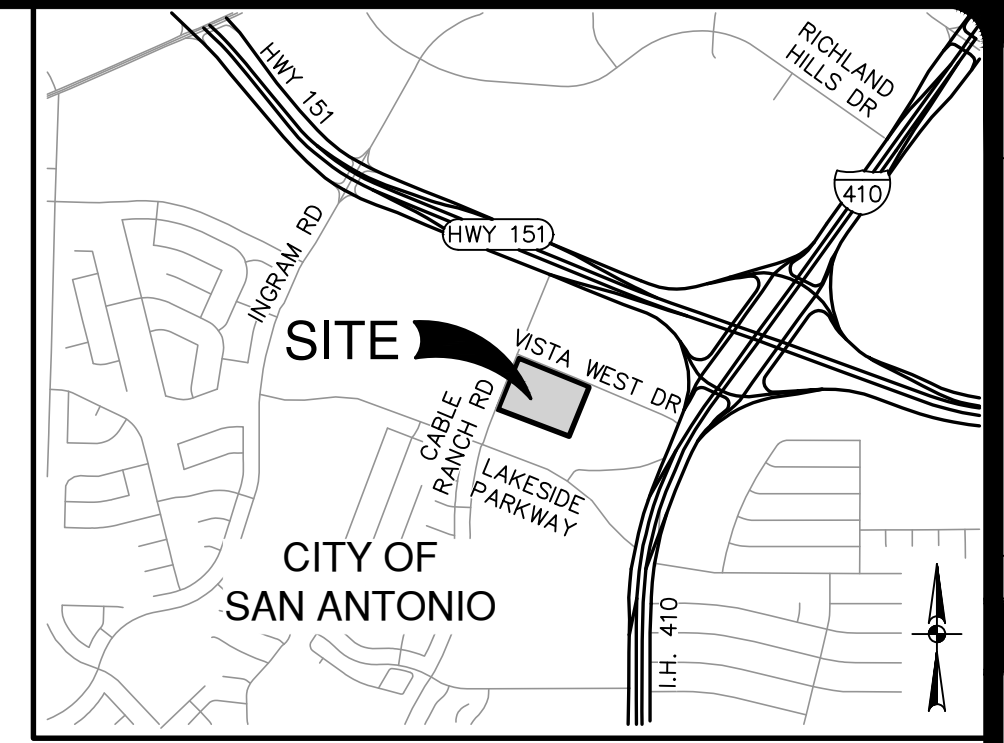
WEST LAKES  
 SUBDIVISION UT 18  
 LOT 3, BLK 7  
 NCB 19127  
 (DOC #20070295086)

ECHOLON AT MONTERREY VILLAGE  
 LOT 10  
 BLOCK 8  
 NCB 19127

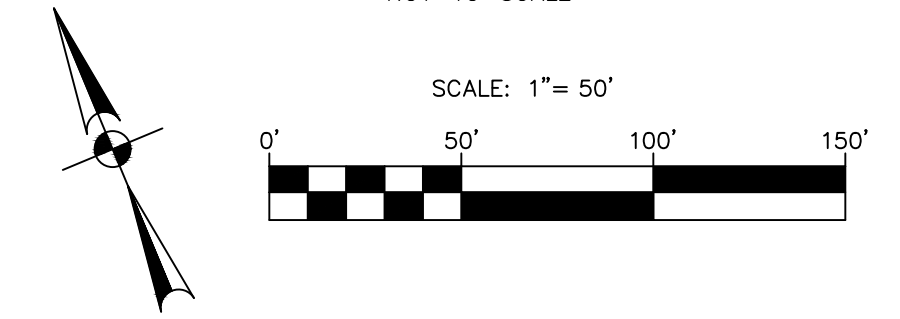
LAKESSIDE ASSISTED LIVING MPCD  
 LOT 4  
 BLOCK 8  
 NCB 19127

NEW HARMONY SCIENCE ACADEMY SUBDIVISION  
 (VOL 9593, PG 56 D.P.R.)

LOT 2  
 BLOCK 7  
 N.C.B. 19127  
  
 WESTLAKES SUBDIVISION UNIT-15  
 OWNER: HOME DEPOT USA, INC  
 (VOL 9534, PG 160 D.P.R.)



LOCATION MAP  
 NOT-TO-SCALE



SYMBOL	ITEM NUMBER
--- UNIT BOUNDARY	
▭ PROPOSED DRIVEWAY	
→ TRAFFIC FLOW ARROW	
▬ SIDEWALK (HOMEBUILDER RESPONSIBILITY)	
▬ SIDEWALK (SITE WORK CONTRACTOR RESPONSIBILITY)	502.1
▬ TYPE II BLUE RAISED PAVEMENT MARKERS - NO SEPARATE PAY ITEM (N.T.S.)	537.8
STOP R1-1 30"X30"	531.3
Street Name	531.57

DATE

NO. REVISION

Jon D. Adame  
 2-5-26

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 OVERALL SIGNAGE PLAN

**COSA ROW NOTES:**  
 A CITY OF SAN ANTONIO ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN COSA ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

**DRIVEWAY NOTE:**  
 DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

**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.

PLAT NO.	25-11800523
JOB NO.	13852-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C3.00

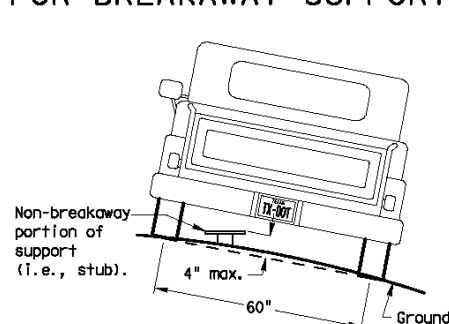
**SIGN SUPPORT DESCRIPTIVE CODES**  
(Descriptive codes correspond to project name and quantities sheet)

**SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)**  
 Post Type:  
 FRP = Fiberglass Reinforced Plastic Pipe (see SMD(FRP))  
 TM = Thin-Walled Tubing (see SMD(TM))  
 TUBE = 10 IRG Tubing (see SMD(SLIP-1) to (SLIP-3))  
 S80 = Schedule 80 Pipe (see SMD(SLIP-1) to (SLIP-3))

**Number of Posts (1 or 2)**  
 Anchor Type:  
 UA = Universal Anchor - Castored (see SMD(FRP) and (TM))  
 UB = Universal Anchor - Bolted down (see SMD(FRP) and (TM))  
 UC = Wedge Anchor Steel - (see SMD(TM))  
 UD = Wedge Anchor Plastic - (see SMD(TM))  
 UE = 1/2" x 1/2" Castored (see SMD(SLIP-1) to (SLIP-3))  
 SF = Slip-on - Bolted down (see SMD(SLIP-1) to (SLIP-3))

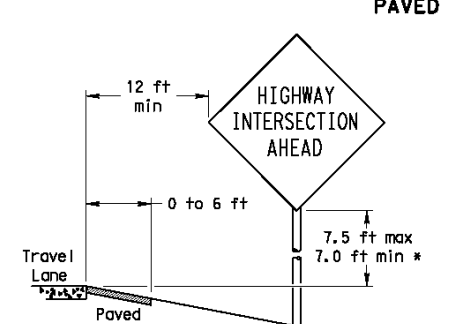
**Sign Mounting Detail**  
 P = Parallel (see SMD(SLIP-1) to (SLIP-3), (TM), (FRP))  
 T = Perpendicular (see SMD(SLIP-1) to (SLIP-3), (TM))  
 18X1 or 20X1 = Number of Extensions (see SMD(SLIP-1) to (SLIP-3), (TM))  
 S80 = Extended Aluminum Sign (see SMD(SLIP-1) to (SLIP-3))  
 MC = 1.12 4x11 Wing Channel (see SMD(SLIP-1) to (SLIP-3))  
 EXL = Extruded Aluminum Sign Panels (see SMD(SLIP-3))

**REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT**



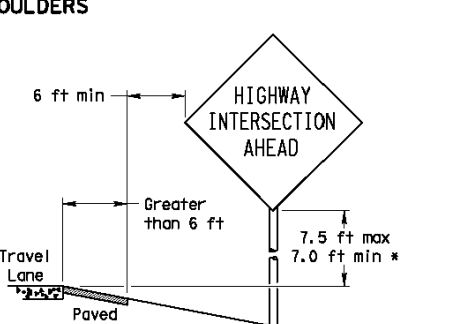
To avoid vehicle underbody snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., top edge) between wheel paths.

**PAVED SHOULDERS**



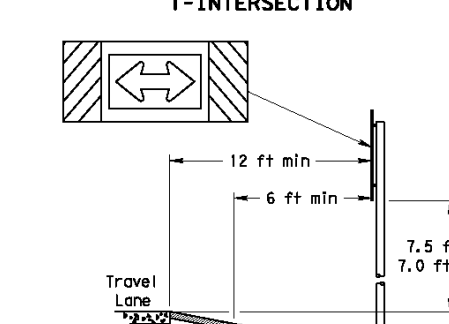
**LESS THAN 6 FT. WIDE**  
 When the shoulder is 6 ft. or less in width, the sign must be placed at least 12 ft. from the edge of the travel lane.

**T-INTERSECTION**



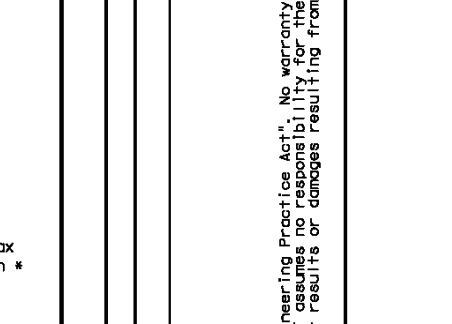
When this sign is needed at the end of a two-lane, two-way roadway, the right edge of the sign should be in line with the center line of the roadway. Place as close to ROW as practical.

**BEHIND BARRIER**



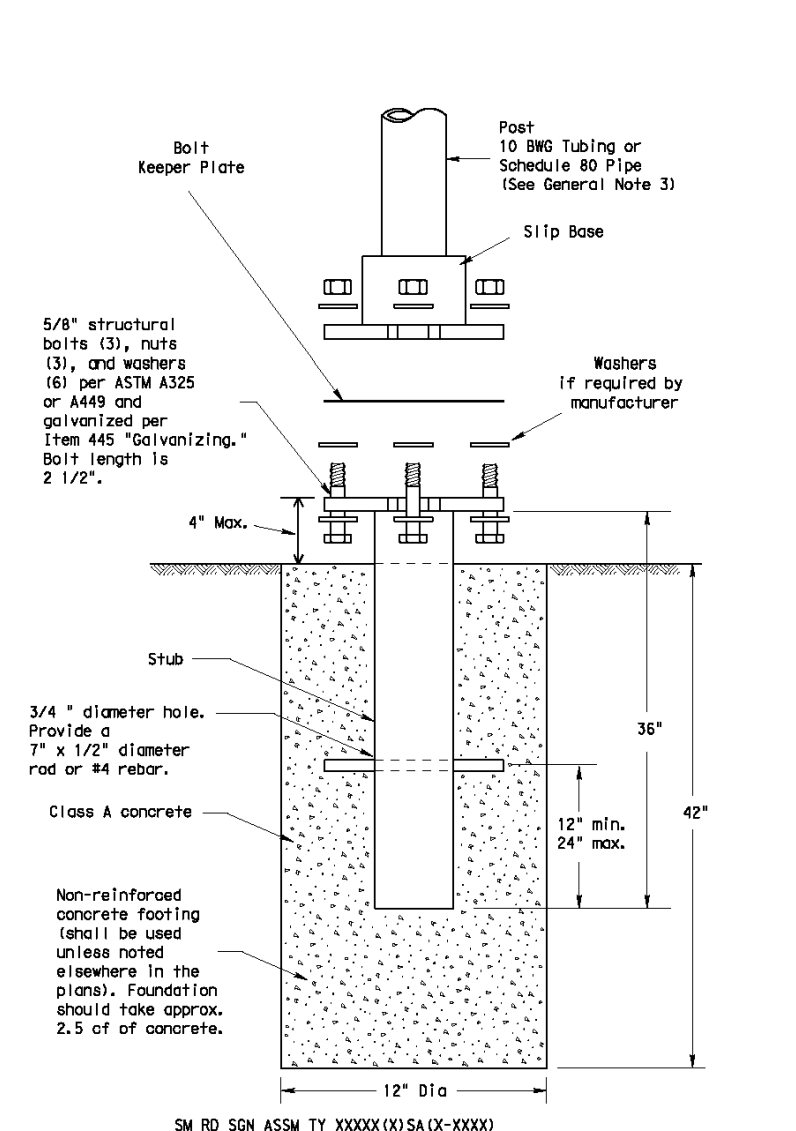
**BEHIND GUARDRAIL**  
 \*Sign clearance based on distance required for proper guard rail or concrete barrier performance.

**RESTRICTED RIGHT-OF-WAY (When 6 ft. min. is not possible.)**



Sign-of-way restrictions may be created by rocks, water, vegetation, forests, buildings, a narrow island, or other factors.

**TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS**



**NOTE**

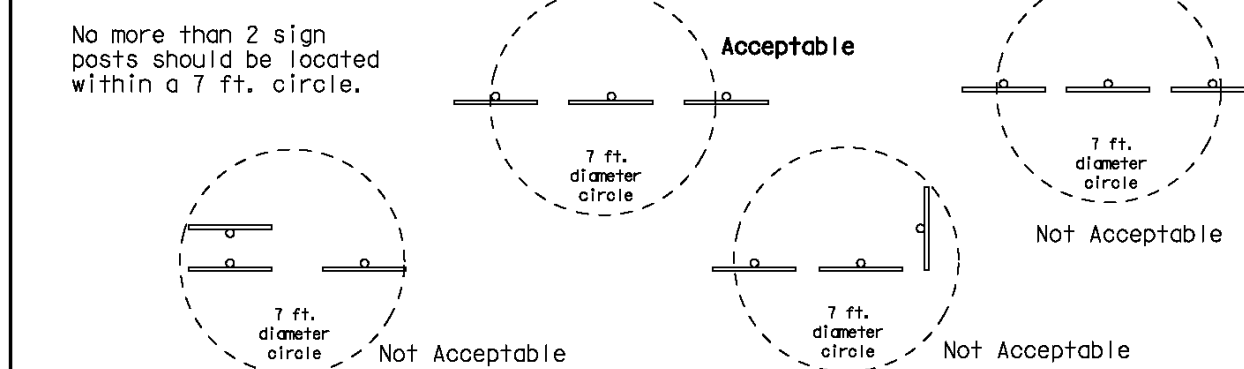
There are various devices approved for the Triangular Slipbase System. Please reference the Material Producer List for approved slip base systems. [http://www.tdot.gov/business/producer\\_list.htm](http://www.tdot.gov/business/producer_list.htm) The devices shall be installed per manufacturers' recommendations. Installation procedures shall be provided to the Engineer by Contractor.

**GENERAL NOTES:**

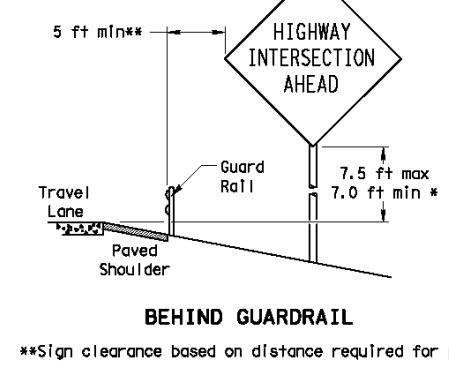
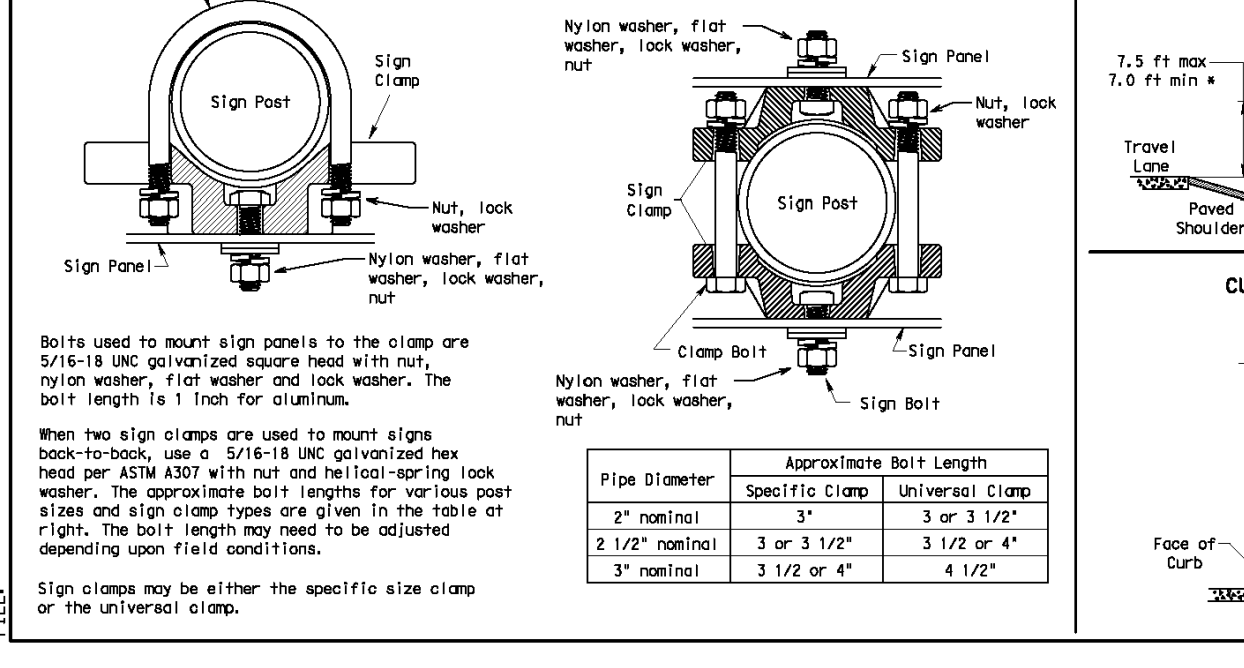
- Slip base shall be permanently marked to indicate manufacturer, method, design, and location of marking are subject to approval of the TxDOT Traffic Standards Engineer.
- Material used as post with this system shall conform to the following specifications:  
 10 IRG Tubing (2.875" outside diameter)  
 1.315" nominal wall thickness  
 Seamless or electric-resistance welded steel tubing or pipe  
 Steel shall be A513 or 95 per ASTM A513 or ASTM A513M  
 Other steels may be used if they meet the following:  
 20,000 PSI minimum tensile strength  
 215 minimum elongation in 2"  
 Wall thickness (uncoated) shall be within the range of 0.122" to 0.131"  
 Outside diameter (uncoated) shall be within the range of 2.867" to 2.893"  
 Galvanization per ASTM A123 or ASTM A653. For protected steel tubing (ASTM A653), recoat tube outside diameter weld seam by metalizing with zinc wire per ASTM B833.  
 Schedule 80 Pipe (2.875" outside diameter)  
 0.276" nominal wall thickness  
 Steel tubing per ASTM A500 Gr. C  
 Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:  
 42,000 PSI minimum yield strength  
 215 minimum elongation in 2"  
 Wall thickness (uncoated) shall be within the range of 0.248" to 0.264"  
 Outside diameter (uncoated) shall be within the range of 2.855" to 2.895"  
 Galvanization per ASTM A123
- The Traffic Operations Division website for detailed drawings of sign clips and Texas Universal Triangular Slipbase System components. The website address is: [http://www.tdot.gov/business/producer\\_list.htm](http://www.tdot.gov/business/producer_list.htm)  
 Sign supports shall not be loaded except where shown. Sign support posts shall not be applied.

**ASSEMBLY PROCEDURE**

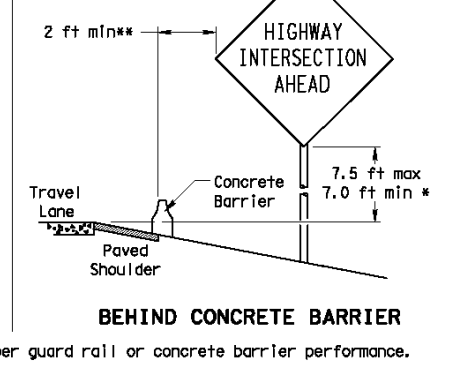
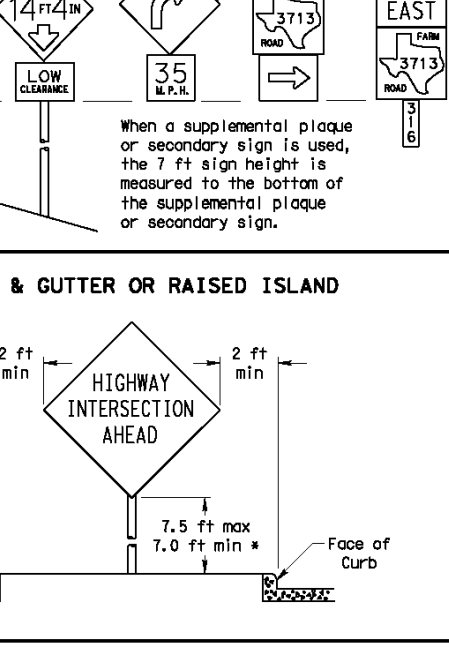
- Foundation:  
 1. Prepare 12-inch diameter by 42-inch deep hole. If solid rock is encountered, the depth of the foundation may be reduced such that it is embedded a minimum of 18 inches into the solid rock.  
 2. The Engineer may permit bases of concrete less than 2 cubic yards to be mixed with portland, motor-driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.  
 3. Pump the pipe and end of the slip base into the center of the concrete. Rotate the stub and form while continuing to pour the concrete to ensure good contact between the concrete and stub. Continue to pump the stub into the concrete until it is between 2 to 4 inches above the ground.  
 4. Flush the stub. Allow a minimum of 4 days to cure before release from the Engineer.  
 5. The triangular slipbase system is multi-directional and is designed to release when struck from any direction.
- Support:  
 1. Cut support so that the bottom of the sign will be 7 to 7.5 feet above the edge of the travel lane (i.e., edge of the closest lane) when slip base is below the edge of pavement or 7 to 7.5 feet above edge of pipe when the slip base is above the edge of the travelway. The cut shall be plane and straight.  
 2. All sign to support using connections shown. When multiple signs are installed on the same support, ensure the minimum clearance between each sign is maintained. See SMD(SLIP-2) for clearances based on sign types.



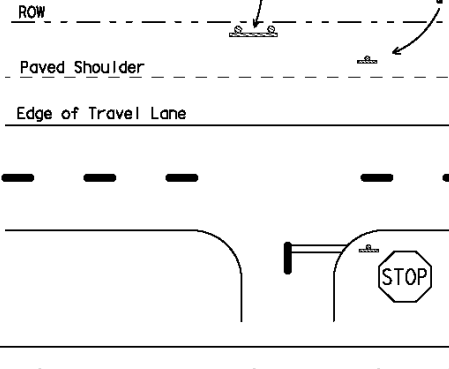
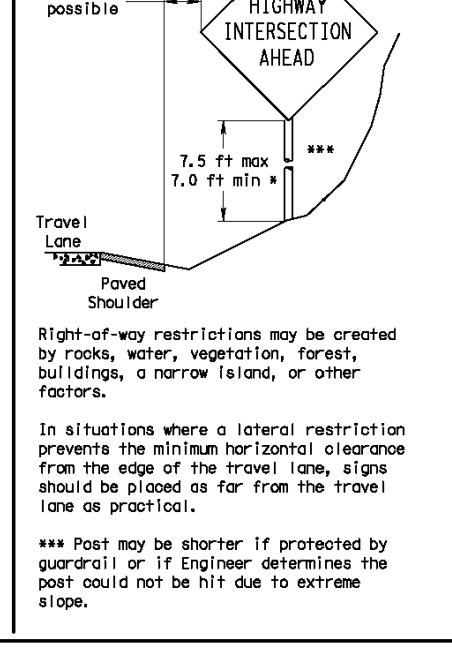
**TYPICAL SIGN ATTACHMENT DETAIL**



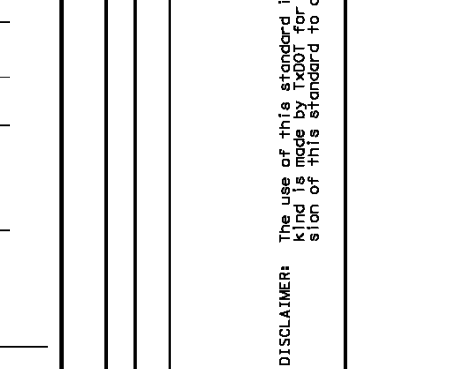
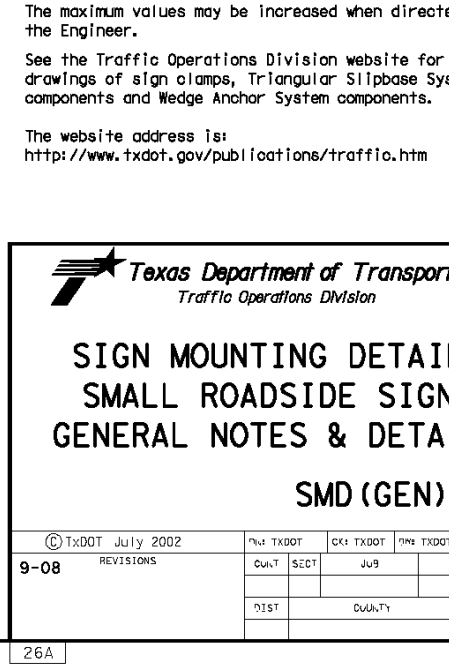
**BEHIND BARRIER**



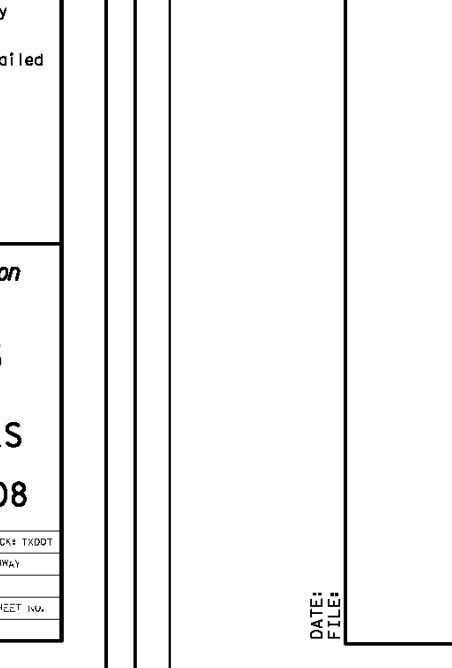
**BEHIND CONCRETE BARRIER**



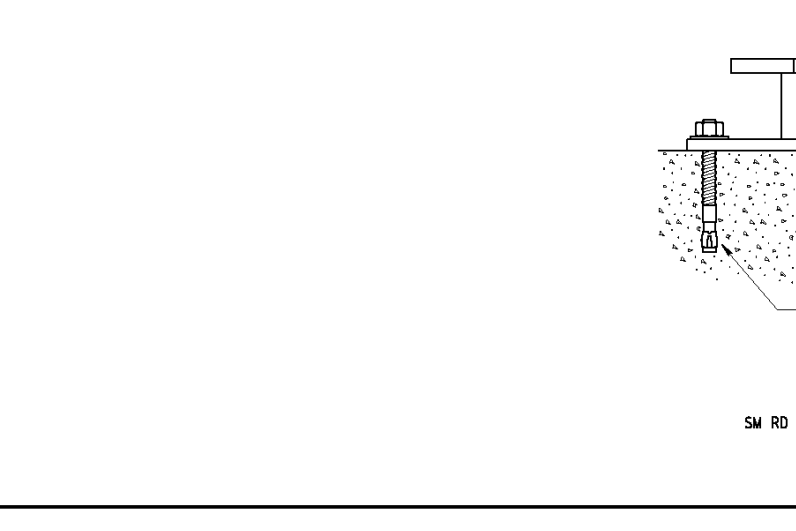
**RESTRICTED RIGHT-OF-WAY**



**T-INTERSECTION**



**CONCRETE ANCHOR**



DATE: \_\_\_\_\_ FILE: \_\_\_\_\_

DATE: \_\_\_\_\_ FILE: \_\_\_\_\_

DATE: \_\_\_\_\_ FILE: \_\_\_\_\_

DATE: \_\_\_\_\_ FILE: \_\_\_\_\_

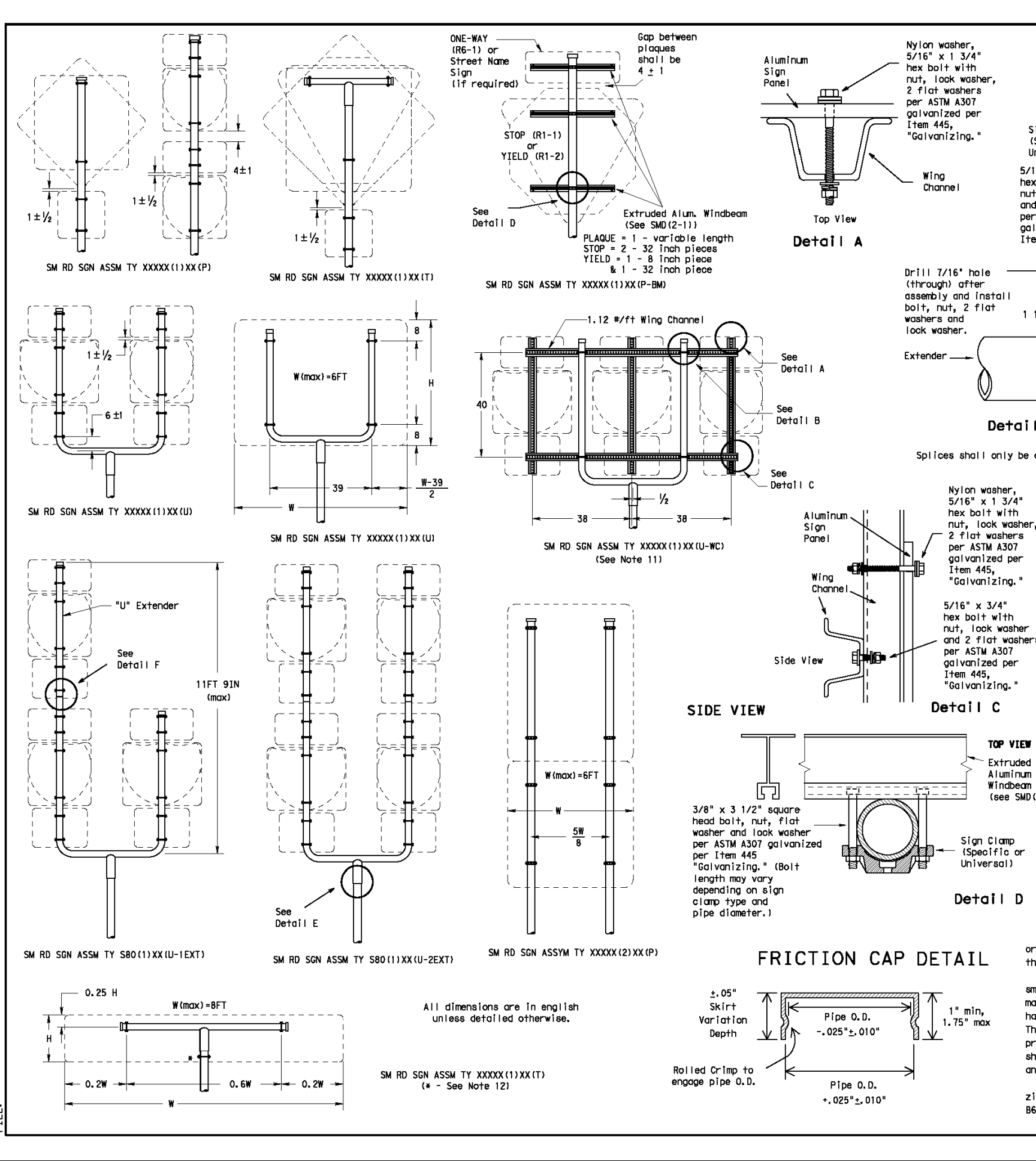
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**Texas Department of Transportation**  
 Traffic Operations Division  
**SIGN MOUNTING DETAILS**  
**SMALL ROADSIDE SIGNS**  
**GENERAL NOTES & DETAILS**  
**SMD (GEN)-08**

01/07/07	JULY 2002	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED
0-08	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07

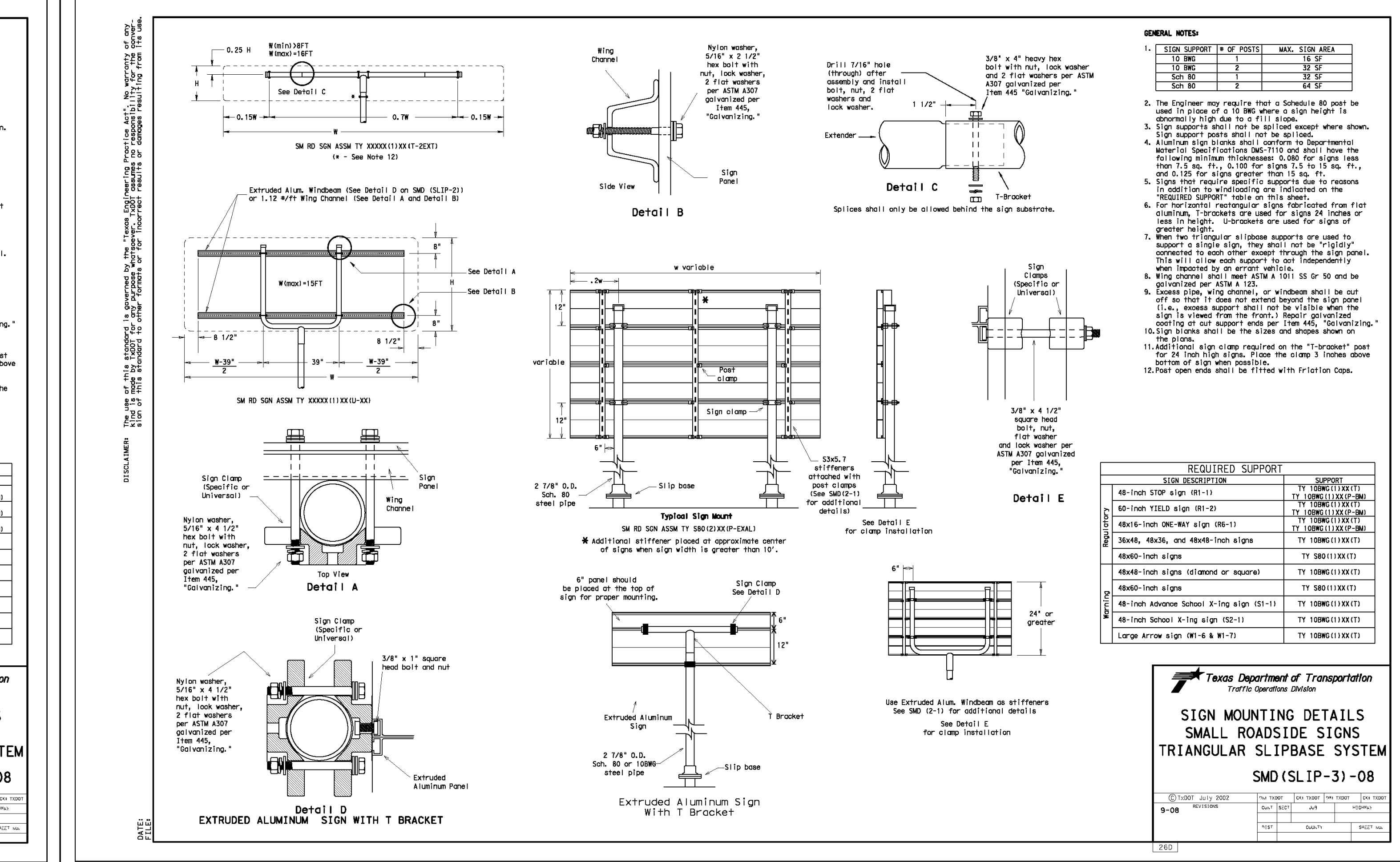
**Texas Department of Transportation**  
 Traffic Operations Division  
**SIGN MOUNTING DETAILS**  
**SMALL ROADSIDE SIGNS**  
**TRIANGULAR SLIPBASE SYSTEM**  
**SMD (SLIP-1)-08**

01/07/07	JULY 2002	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED
0-08	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07



**Texas Department of Transportation**  
 Traffic Operations Division  
**SIGN MOUNTING DETAILS**  
**SMALL ROADSIDE SIGNS**  
**TRIANGULAR SLIPBASE SYSTEM**  
**SMD (SLIP-2)-08**

01/07/07	JULY 2002	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED
0-08	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07



**Texas Department of Transportation**  
 Traffic Operations Division  
**SIGN MOUNTING DETAILS**  
**SMALL ROADSIDE SIGNS**  
**TRIANGULAR SLIPBASE SYSTEM**  
**SMD (SLIP-3)-08**

01/07/07	JULY 2002	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED
0-08	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07	01/07/07

**PAPE - DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78243 | 210.375.9000  
 TEXAS ENGINEERING FIRM #471 | TEXAS SURVEYING FIRM # 0028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 SIGNAGE DETAILS

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE FEBRUARY 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C3.10

**OCTAGONAL**

A	B	C	T
18	3	18	0.080
30	3	24	0.080
36	3	30	0.100
48	3	36	0.100

**DIAMOND (A)**

A	B	C	D	E	T
24	12	11.2	2	0.080	
30	15	11.2	2	0.080	
36	18	11.2	2	0.080	
48	24	11.2	2	0.080	

**DIAMOND (B)**

A	B	C	D	T
18	15	3	0.100	
24	18	3	0.100	
30	24	3	0.100	
48	36	3	0.100	

**CIRCLE**

A	B	T
18	18	0.100
24	24	0.100
30	30	0.100
48	48	0.100

**PENTAGON (SCHOOL)**

A	B	C	D	T
30	3	3	0.100	
36	24	3	2.14	0.100
48	36	3	3	0.100

**EQUILATERAL TRIANGLE**

A	B	C	D	T
18	2	18	2	0.100
30	2	24	2	0.100
36	2	24	2	0.100
48	2	24	2	0.100

**ISOSCELES TRIANGLE**

A	B	C	D	E	T
40	13	17.2	11.2	2	0.080
48	16	17.2	11.2	2	0.080
60	24	17.2	11.2	2	0.080

**SQUARE (A)**

A	B	C	D	T
18	11.2	2	0.080	
24	3	18	11.2	0.080
30	3	24	11.2	0.080
48	3	30	11.2	0.080

**SQUARE (B)**

A	B	C	D	E	T
30	3	3	0.100		
36	24	3	2.14	0.100	
48	36	3	3	0.100	

**VERTICAL / HORIZONTAL RECTANGLE**

A	B	C	D	E	F	G	T
12	18	11.2	15	11.2	11.2	9	0.080
12	36	3	30	11.2	11.2	9	0.080
18	24	11.2	21	11.2	11.2	15	0.080
24	30	3	24	11.2	3	18	0.080
24	36	3	30	11.2	3	18	0.080
24	48	3	36	11.2	3	18	0.080
30	36	3	30	11.2	3	24	0.080
36	48	3	30	11.2	3	24	0.080
48	60	3	30	11.2	3	24	0.080

**VERTICAL RECTANGLE**

A	B	C	D	E	F	T	
12	18	11.2	15	11.2	11.2	9	0.080
12	36	3	30	11.2	11.2	9	0.080
18	24	11.2	21	11.2	11.2	15	0.080
24	30	3	24	11.2	3	18	0.080
24	36	3	30	11.2	3	18	0.080
24	48	3	36	11.2	3	18	0.080
30	36	3	30	11.2	3	24	0.080
36	48	3	30	11.2	3	24	0.080
48	60	3	30	11.2	3	24	0.080

**HORIZONTAL RECTANGLE**

A	B	C	D	E	F	G	T
48	24	3	18	9	30	11.2	0.100
48	30	6	24	9	30	11.2	0.100
48	36	2	20	3	41	11.2	0.100
48	36	3	30	3	42	11.2	0.100
48	36	6	24	12	36	11.2	0.100
60	30	3	24	3	42	11.2	0.100
60	24	2	20	2	36	11.2	0.100
60	24	3	30	3	36	11.2	0.100
60	30	3	30	3	54	11.2	0.100
60	30	3	24	3	54	11.2	0.100

**GENERAL NOTES:**

- ALL BLANKS TO BE ALUMINUM ALLOY NO. 5052-H38.
- "T" DENOTES THICKNESS OF SIGN BLANKS.
- 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.
- SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL.
- ALL SIGN BLANKS TO BE ETCHED, DEGREASED, AND HAVE AN ALKALINE FINISH PRIOR TO APPLICATION OF LEGENDS.
- ALL DETAILS ARE NOT TO SCALE.
- ALL DIMENSIONS ARE IN INCHES.
- \* HOLE PLACEMENT AS INDICATED ON THE PLANS.

**SEPTEMBER 2024**  
CITY OF SAN ANTONIO  
PUBLIC WORKS DEPARTMENT  
TRAFFIC ENGINEERING AND OPERATIONS STANDARDS  
BLANK SIGN  
DETAILS  
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SM(3)-24

**9" D3 - STREET NAME SIGN**

**9" D3 WITH DEAD END OR NO OUTLET SIGNAGE**

**D3 SIGN TO POLE INSTALLATION**

**TABLE - D3 SIGNS**

A	B	C	D	E	F	T
24"	9"	1 1/2"	1 1/2"	8"	12"	1/8"
30"	9"	1 1/2"	1 1/2"	8"	15"	1/8"
36"	9"	1 1/2"	1 1/2"	8"	18"	1/8"
42"	9"	1 1/2"	1 1/2"	8"	21"	1/8"
48"	9"	1 1/2"	1 1/2"	8"	24"	1/8"
54"	9"	1 1/2"	1 1/2"	8"	27"	1/8"

**GENERAL NOTES:**

- "9-INCH STREET NAME" SIGN (1-EA) INCLUDES THE INSTALLATION OF (2) ONE-SIDED D3 SIGNS. THIS SHALL BE FULL COMPENSATION FOR MATERIALS AND LABOR AS DESCRIBED IN C.O.S.A. STANDARD SPECIFICATIONS AND GROUND SIGN MOUNTING STANDARD DETAIL.
- "9-INCH STREET NAME PLATE" (1-EA) INCLUDES THE INSTALLATION OF (2) ONE-SIDED D3 SIGNS ON TOP OF EXISTING SIGN (I.E., STOP SIGN OR YIELD SIGN, EXTRA LENGTH POLE AND APPURTENANCES REQUIRED TO MEET SPECIFICATIONS).

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D3 STREET NAME SIGN MOUNTING  
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SM(2)-24

**Wedge Anchor Steel System**

**Wedge Anchor High Density Polyethylene (HDPE) System**

**Sign Installation Using a Prefabricated T-Bracket for Thin-Wall Tubing Post**

**GENERAL NOTES:**

- The Wedge Anchor System and the Universal Anchor System with thin wall tubing post may be used to support up to 32 square feet of sign area.
- The tubular socket, wedge anchor (steel) or post (FRP) shall be permanently marked to indicate manufacturer, method, design, and location of marking are subject to the approval of the TxDOT Traffic Operations Division.
- Except for posts (1/2" O.D. FRP), all components shall be galvanized per ASTM A653, Class 40, and all components shall be galvanized per Item 445, "Galvanizing".
- Material used on post with this system shall conform to the following specifications:
  - 1/2" x 2 1/2" steel rod posts as a "stop" for the sign post and prevents stub from turning in the foundation.
  - 3 1/2" diameter Schedule 40 Stub Pipe (13" nominal).
  - 1/2" x 7 1/2" steel rod posts as a "stop" for the sign post and prevents stub from turning in the foundation.
  - 3 1/2" diameter Schedule 40 Stub Pipe (13" nominal).
  - 2.375" diameter 0.095 Thick Bolt Tube (2" nominal).
  - 3/4" dia. Coupler.
  - 3/2" Pipe Stub.
  - Base Flange.
- Sign blanks shall be the size and shape shown on the plans.
- Additional sign clamp required on the "T-Bracket" post for 24" high signs. Please clamp at least 3" above bottom of sign when installed.
- Sign supports shall not be applied except where shown. Sign support posts shall not be applied.
- See the Traffic Operations Division website for detailed drawings of sign clamps and Wedge Anchor System components. The website address is: <http://www.tdot.gov/publications/traffic.htm>

**UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURES:**

- Drill foundation hole. Where soil rock is encountered at ground level, the foundation hole shall be a minimum depth of 18". When soil rock is encountered below ground level, the foundation hole shall extend in the solid rock a minimum depth of 18" or provide a minimum foundation depth of 30". If soil rock is encountered, the socket shall be reduced in length as required to a minimum length of 18". Any material removed from the socket/stub shall be from the bottom and the clearance requirements given on O&E(1) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
- The Engineer may permit both of concrete less than 2 cubic yards to be mixed with a portable motor driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Place concrete into hole until it is approximately flush with the ground. Concrete shall be Class A.
- Insert tubular socket into concrete until top of socket is approximately 1/4" above the concrete footing.
- Attach the sign to the sign post.
- Insert the sign post into socket and align sign face with roadway.
- Attach the wedge into the socket to secure post. This will leave approximately 3 inches of the wedge exposed.

**UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURES:**

- Drill foundation hole. Where soil rock is encountered at ground level, the foundation hole shall be a minimum depth of 18". When soil rock is encountered below ground level, the foundation hole shall extend in the solid rock a minimum depth of 18" or provide a minimum foundation depth of 30". If soil rock is encountered, the socket shall be reduced in length as required to a minimum length of 18". Any material removed from the socket/stub shall be from the bottom and the clearance requirements given on O&E(1) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
- The Engineer may permit both of concrete less than 2 cubic yards to be mixed with a portable motor driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
- Insert base post in foundation hole to rest on and fill hole with concrete. Cut base post from bottom and ensure a minimum of 18" embedment if installed in soil rock.
- Level and plate the base post with coupler using a torx/wal level and let concrete set a minimum of 4 days, unless otherwise directed by Engineer. Bottom of base post shall be above the concrete footing.
- Attach sign to FRP post.
- Insert sign post into base post. Lower until the post comes to rest on the steel rod.
- Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
- Check sign to ensure there is no twist. If loose, increase the tightening of the coupler.

**BOLT DOWN SIGN SUPPORT:**

- Position base plate with coupler on existing concrete.
- Drill holes into concrete and insert the 3/4" diameter bolts with wedge anchors, and tighten nuts.
- Attach sign to FRP post.
- Insert bottom of sign post into pipe stub.
- Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
- Check sign to ensure there is no twist. If loose, increase the tightening of the coupler.

**SEPTEMBER 2024**  
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**Universal Anchor System with Fiberglass Reinforced Plastic (FRP) Post**

**Typical Sign Mounting Detail for FRP Support with Single Sign**

**Typical Sign Mounting Detail for FRP Support with Back-to-Back Signs**

**GENERAL NOTES:**

- FRP sign supports for a single type sign support may be used for signs up to and including 32 square feet.
- All nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing".
- See the Traffic Operations Division website for detailed drawings of sign clamps. The website address is: <http://www.tdot.gov/publications/traffic.htm>

**FRP POST REQUIREMENTS:**

- Materials shall conform to the requirements of Departmental Material Specification DM-4410 and will be furnished in a yellow or gray color as specified elsewhere in the plans.
- Thickness of FRP sign support is 0.125" ± 0.031", 0.095" ± 0.031", or 0.075" ± 0.031", as specified on the plans.
- Prequalification procedures are obtained by writing: Texas Department of Transportation, Traffic Operations Division, 105 East 11th Street, Austin, Texas 78701-2483

**UNIVERSAL ANCHOR SYSTEM INSTALLATION PROCEDURES:**

- Drill foundation hole. Where soil rock is encountered at ground level, the foundation hole shall be a minimum depth of 18". When soil rock is encountered below ground level, the foundation hole shall extend in the solid rock a minimum depth of 18" or provide a minimum foundation depth of 30". If soil rock is encountered, the socket shall be reduced in length as required to a minimum length of 18". Any material removed from the socket/stub shall be from the bottom and the clearance requirements given on O&E(1) must be followed. The inner surfaces of the socket/stub must remain free of concrete or other debris.
- The Engineer may permit both of concrete less than 2 cubic yards to be mixed with a portable motor driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
- Insert base post in foundation hole to rest on and fill hole with concrete. Cut base post from bottom and ensure a minimum of 18" embedment if installed in soil rock.
- Level and plate the base post with coupler using a torx/wal level and let concrete set a minimum of 4 days, unless otherwise directed by Engineer. Bottom of base post shall be above the concrete footing.
- Attach sign to FRP post.
- Insert sign post into base post. Lower until the post comes to rest on the steel rod.
- Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
- Check sign to ensure there is no twist. If loose, increase the tightening of the coupler.

**BOLT DOWN SIGN SUPPORT:**

- Position base plate with coupler on existing concrete.
- Drill holes into concrete and insert the 3/4" diameter bolts with wedge anchors, and tighten nuts.
- Attach sign to FRP post.
- Insert bottom of sign post into pipe stub.
- Use hammer to ensure the coupler is firmly seated. Top of coupler should be level with top of base post in most instances.
- Check sign to ensure there is no twist. If loose, increase the tightening of the coupler.

**SEPTEMBER 2024**  
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PUBLIC WORKS DEPARTMENT  
TRAFFIC ENGINEERING AND OPERATIONS STANDARDS  
BLANK SIGN  
DETAILS  
SHEET 02 OF 02  
SM(2)-24

DATE: \_\_\_\_\_

NO. \_\_\_\_\_

REVISION: \_\_\_\_\_

STATE OF TEXAS  
JON D. ADAME  
82567  
PROFESSIONAL ENGINEER

PAPE-DAWSON  
2000 NW LOOP #10 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 0028890

WESTOVER VILLAGE TOWNHOMES  
SAN ANTONIO, TEXAS  
SIGNAGE DETAILS

PLAT NO. 25-11800523

JOB NO. 13832-51

DATE FEBRUARY 2026

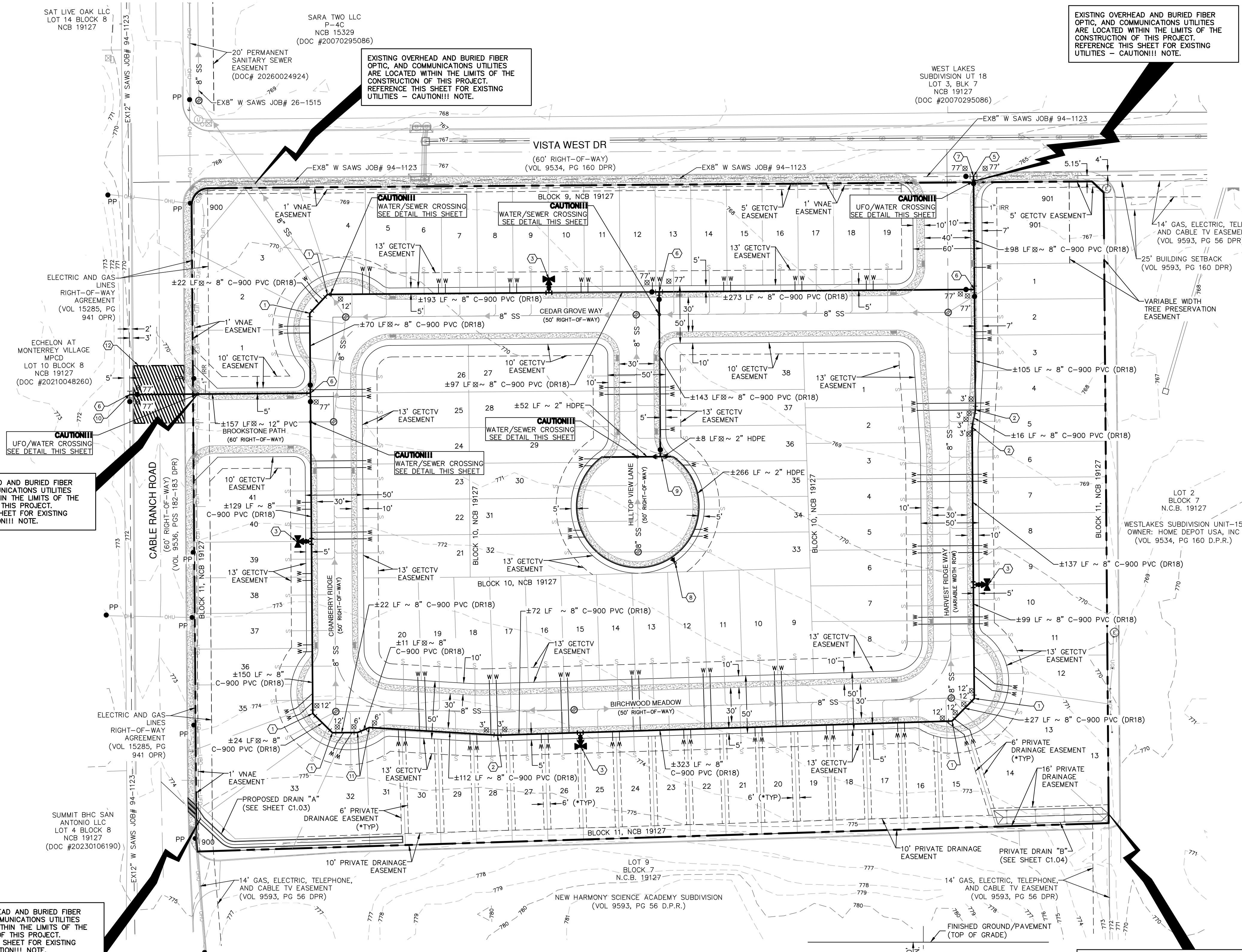
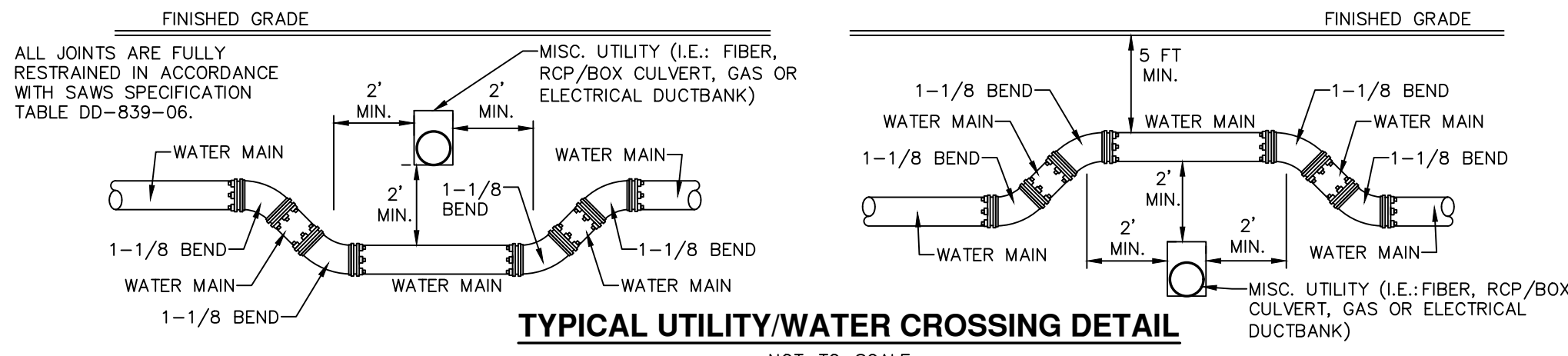
DESIGNER CB

CHECKED JA DRAWN CB

SHEET C3.11

**KEYED NOTES:**

- ① 1-8" 1/8 BEND, M.J
- ② 1-8" 1/32 BEND, M.J
- ③ 1-8"x6" ANCHOR TEE, M.J  
1-STD. FIRE HYDRANT ASSEMBLY  
1-8" GATE VALVE, M.J  
1-8" 1/2 BEND, M.J  
1-STD. FIRE HYDRANT  
6" D.I. PIPE, CUT AND RESTRAIN AS REQUIRED  
(SEE SAWS STD DWG DD-834-01)
- ④ FOR CHLORINATION INJECTION  
2 - 1" CORPORATION STOP, C.C.I.P  
1 - 1" COPPER TUBING, CUT AS REQUIRED  
2 - 1" COMP. 1 1/4 COUPLING, CORP. STOP  
2 - 1 1/4" THD. SOLID CAPS, THR.
- ⑤ 12" VALVE CONSTRUCTED WITH SAWS JOB NUMBER 94-1123 SHALL REMAIN CLOSED UNTIL NEW MAINS HAVE BEEN DISINFECTED AND ACCEPTED BY SAWS  
CONTRACTOR SHALL TIE TO EXISTING 12" WATERLINE (SAWS JOB NO. 94-1123) AFTER DISINFECTION AND ACCEPTANCE BY SAWS  
2" TEMPORARY BLOWOFF ASSEMBLY SEE SAWS DWG DD-844-01 SHEET 1 OF 4  
1 - 8" SOLID SLEEVE, M.J
- ⑥ FOR CHLORINATION INJECTION  
2 - 1" CORPORATION STOP, C.C.I.P  
1 - 1" COPPER TUBING, CUT AS REQUIRED  
2 - 1" COMP. 1 1/4 COUPLING, CORP. STOP  
2 - 1 1/4" THD. SOLID CAPS, THR.
- ⑦ 8" VALVE CONSTRUCTED WITH SAWS JOB NUMBER 94-1123 SHALL REMAIN CLOSED UNTIL NEW MAINS HAVE BEEN DISINFECTED AND ACCEPTED BY SAWS  
CONTRACTOR SHALL TIE TO EXISTING 8" WATERLINE (SAWS JOB NO. 94-1123) AFTER DISINFECTION AND ACCEPTANCE BY SAWS  
2" TEMPORARY BLOWOFF ASSEMBLY SEE SAWS DWG DD-844-01 SHEET 1 OF 4  
1 - 8" SOLID SLEEVE, M.J
- ⑧ 1-12" X 8" CUT IN TEE, M.J.  
2-8" GATE VALVE, M.J.  
2-6" VALVE BOX, COMPLETE
- ⑨ 1-8" X 8" CUT IN TEE, M.J.  
2-8" GATE VALVE, M.J.  
2-6" VALVE BOX, COMPLETE
- ⑩ 1-2" PERMANENT BLOW-OFF ASSEMBLY
- ⑪ 1-8" X 2" TEE, M.J.  
1-8" GATE VALVE, M.J.  
1-2" GATE VALVE, M.J.  
2-2" REDUCER  
2-6" VALVE BOX, COMPLETE
- ⑫ 1-12" X 12" CUT IN TEE, M.J.  
2-12" GATE VALVE, M.J.  
2-6" VALVE BOX, COMPLETE
- ⑬ 1-8" 1/16 BEND, M.J
- ⑭ CONTRACTOR TO OPEN CUT CABLE RANCH ROAD AND REMOVE/REPLACE ±50 LF WIDE EXISTING PAVEMENT, SUBGRADE, CURB AND SIDEWALK. CONTRACTOR TO USE FLOWABLE FILL AS APPROVED BY CITY/SAWS. (SEPARATE PAY ITEM)

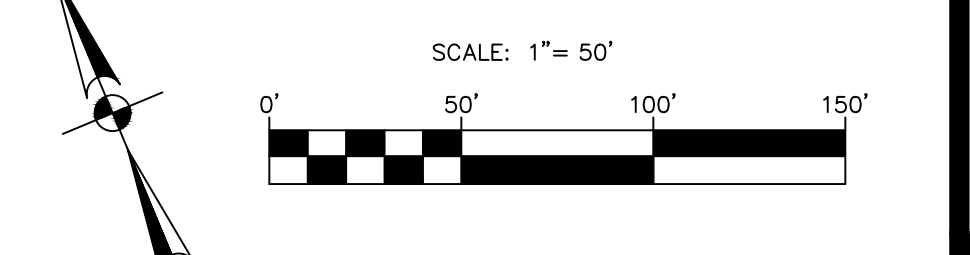
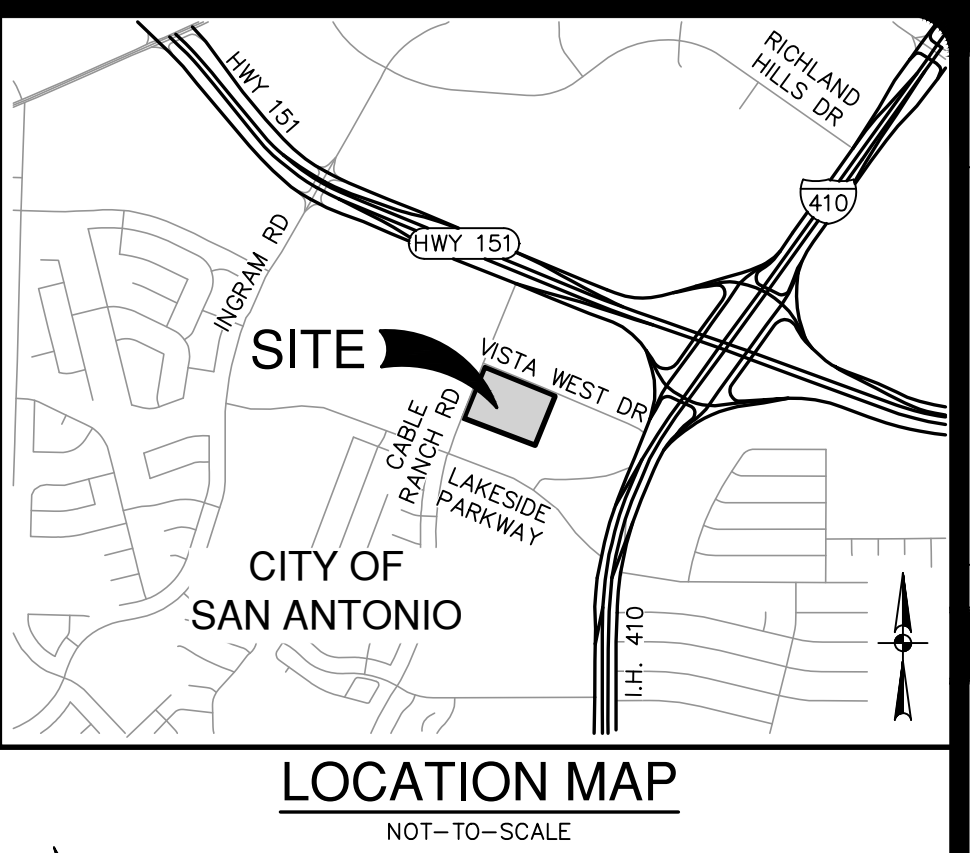
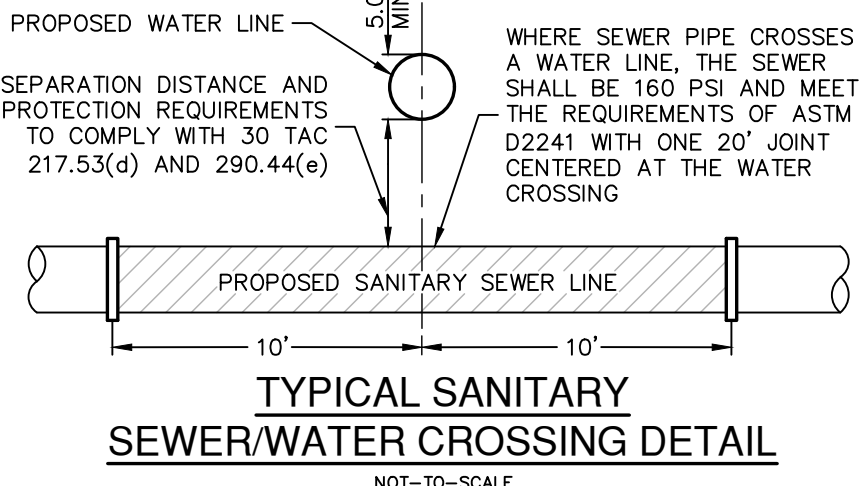


**CAUTION!!!**  
EXISTING OVERHEAD AND BURIED FIBER OPTIC, AND COMMUNICATIONS UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. REFERENCE THIS SHEET FOR EXISTING UTILITIES - CAUTION!!! NOTE.

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**WATER LEGEND**

PROJECT LIMITS	---
EXISTING WATER	---
EXISTING SEWER	---
PROPOSED SEWER	---
PROPOSED WATER	---
PROPOSED 3/4" SINGLE SERVICE WITH 5/8" METER	---
SINGLE IRRIGATION SERVICE (REF. PLAN VIEW FOR SIZE)	---
JOINT RESTRAINT	---

**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 1500 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.

**COSA ROW NOTES:**  
A CITY OF SAN ANTONIO ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN COSA ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

**EXISTING UTILITIES - CAUTION!!!**  
EXISTING UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, VERIFYING THE EXACT LOCATION AND IDENTIFYING ANY AREAS OF CONFLICTS WITH EXISTING 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.

**PRESSURE REDUCING VALVE NOTE:**  
PRESSURE REDUCING VALVE TO BE INSTALLED ON CUSTOMER'S SIDE OF METER BY HOMEBUILDER.

**PRESSURE NOTE:**  
CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 746 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 746 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 LOTS IF PRIVATE ARE REQUIRED FOR SUCH LOTS(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED.  
\*NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

**JOINT RESTRAINT NOTE:**  
CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES 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 HARNESSES 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 AT 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 (SAWS PRESSURE ZONE 4)**

DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC
ADDRESS: 2722 WEST BITTERS ROAD
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248
PHONE# (844) 860-7365 FAX#
SAWS BLOCK MAP# 110580 TOTAL EDU'S 100 TOTAL ACREAGE 10.33
8" PVC 2054 LF, 2" HDPE 334 LF &
TOTAL LINEAR FOOTAGE OF PIPE: 12" PVC 157 LF PLAT NO. 25-11800523
NUMBER OF LOTS 98 SAWS JOB NO. 26-1022

DATE: \_\_\_\_\_  
NO. REVISION: \_\_\_\_\_

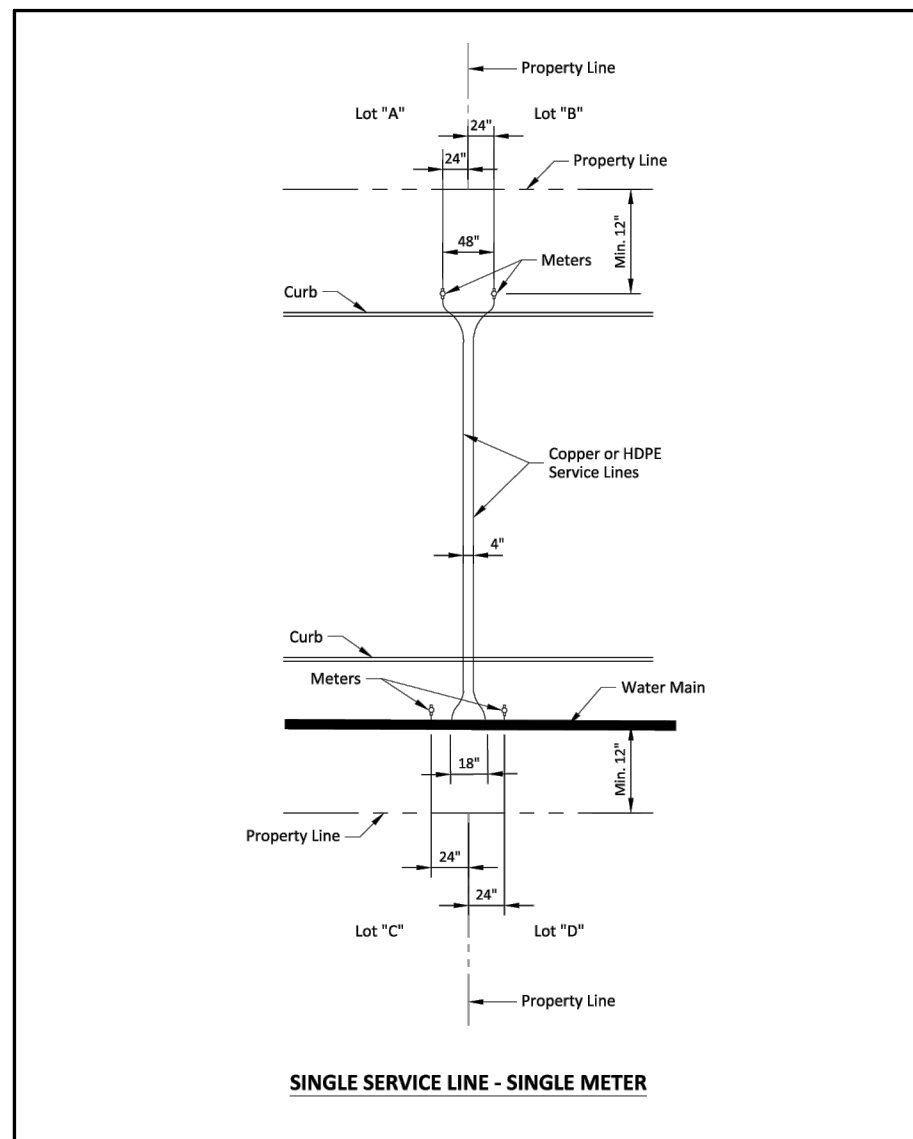
Jon Adame  
3/27/26

**PAPE - DAWSON**  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028800

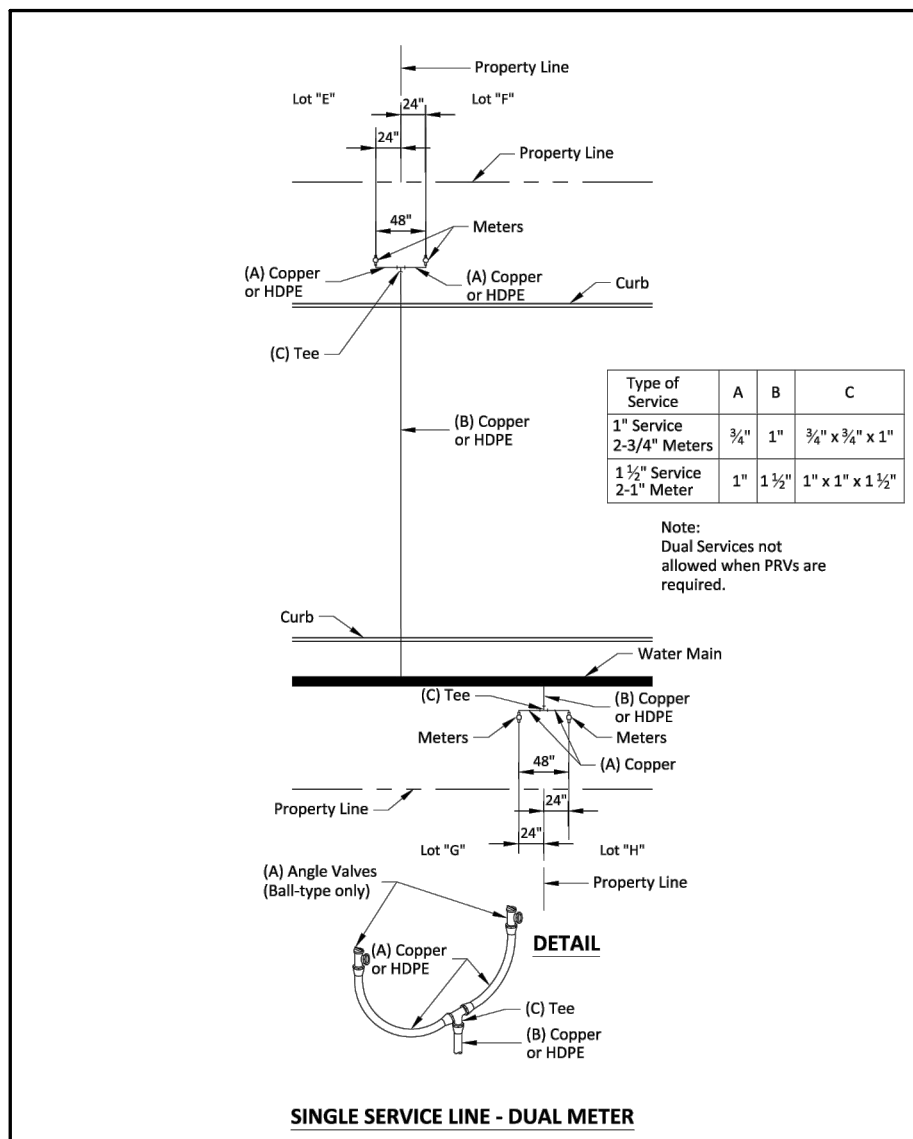
**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS

**OVERALL WATER DISTRIBUTION PLAN**

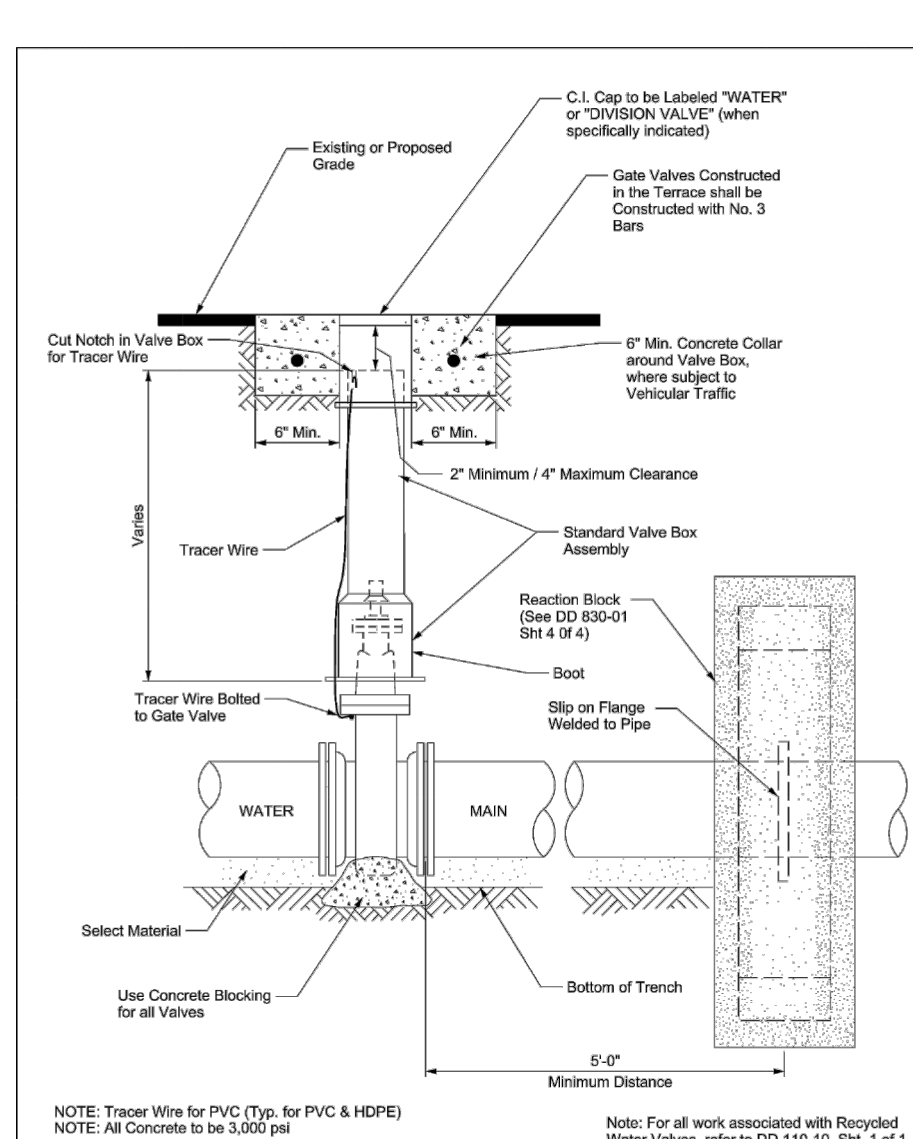
PLAT NO.	25-11800523
JOB NO.	13852-51
DATE	MARCH 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C4.00



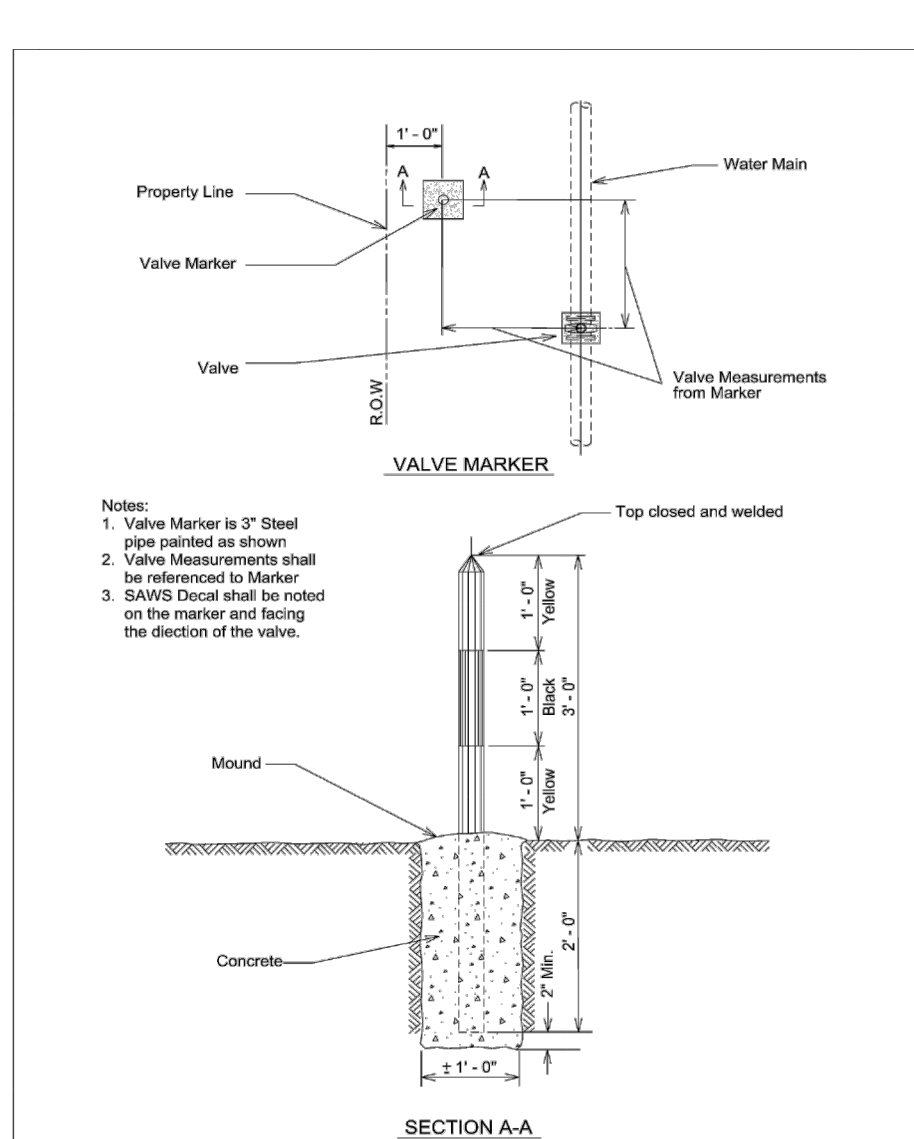
PROPERTY OF	TYPICAL	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	NEW DEVELOPMENT	MARCH 2008	DECEMBER 2019
SAN ANTONIO, TEXAS	SERVICE ARRANGEMENT	DD-824-05	SHEET 1 OF 1



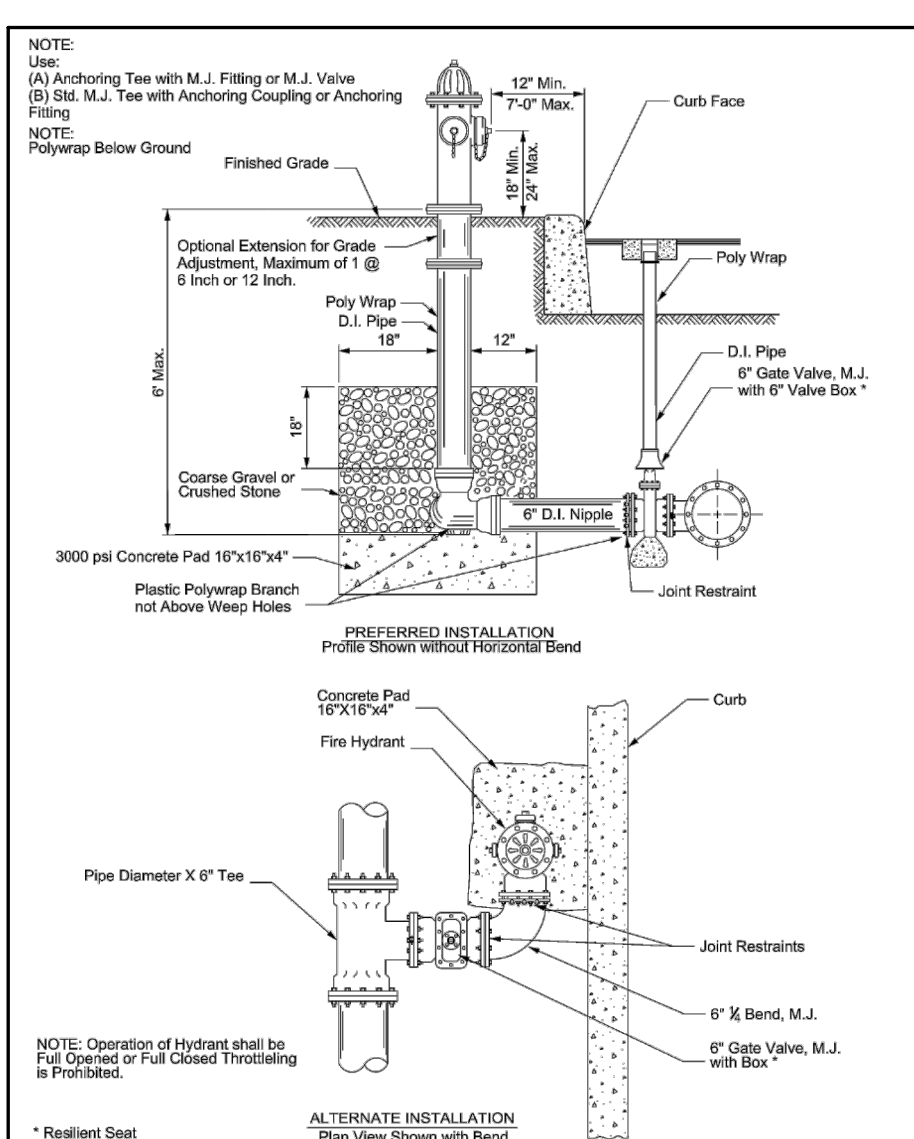
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SAN ANTONIO, TEXAS		DD-824-05	SHEET 2 OF 3



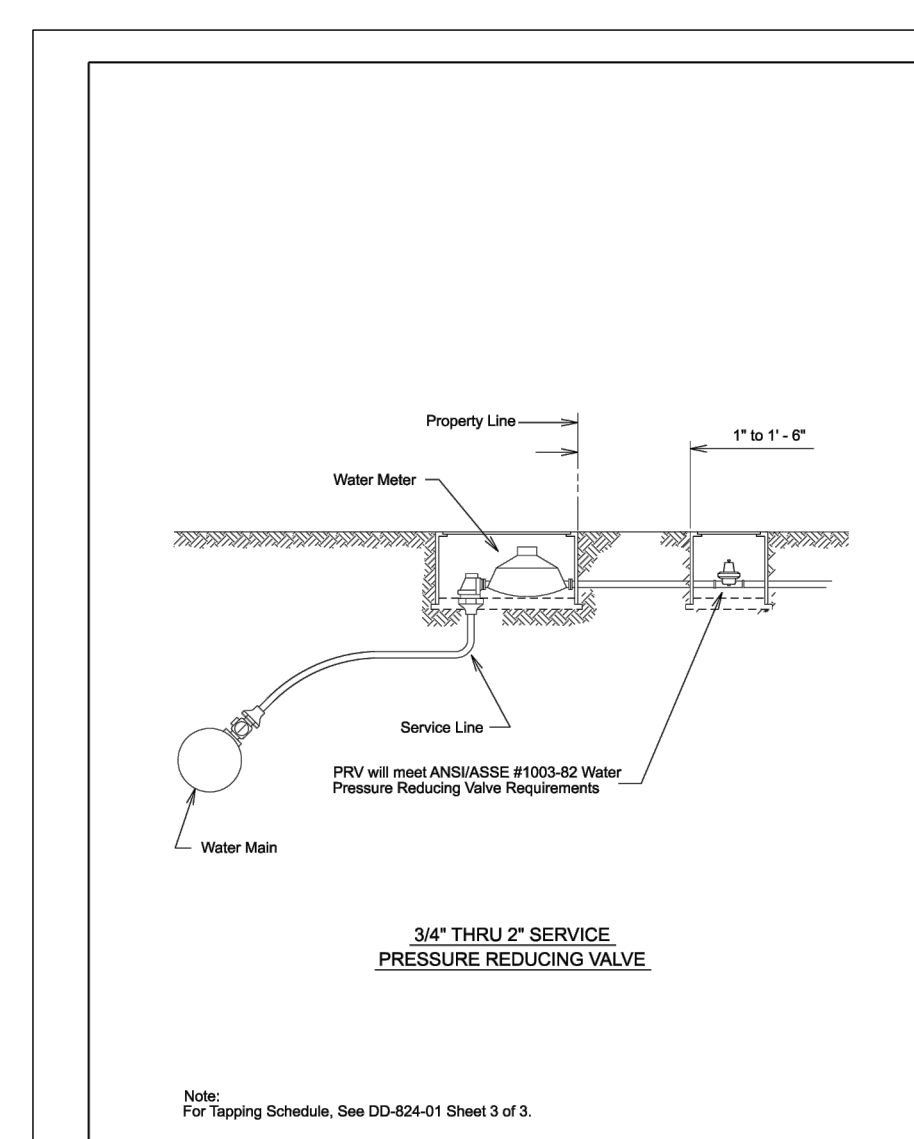
PROPERTY OF	INSTALLATION OF NON-DEAIRED	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	GATE VALVES WITH VALVE BOX	MARCH 2008	AUG 2019
SAN ANTONIO, TEXAS		DD-828-01	SHEET 1 OF 1



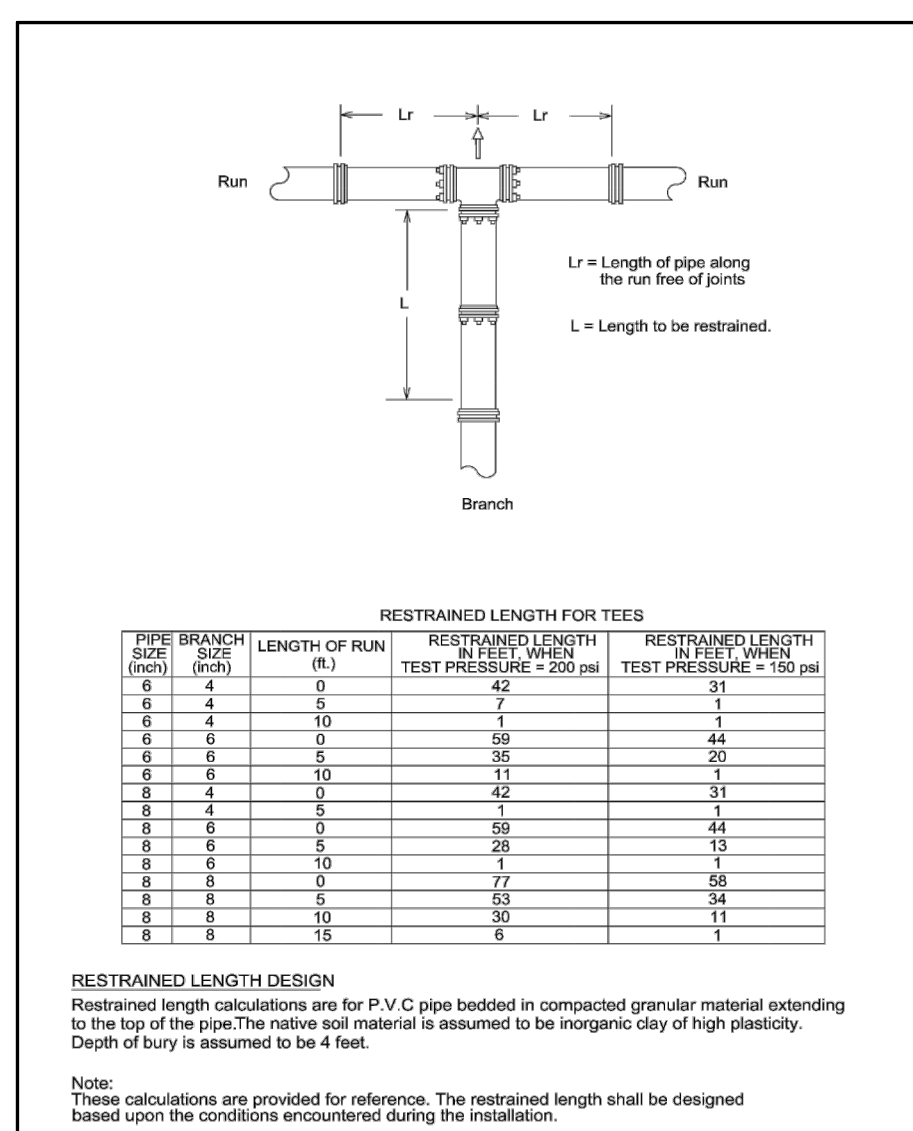
PROPERTY OF	VALVE MARKER	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM		MARCH 2008	AUG 2019
SAN ANTONIO, TEXAS		DD-828-04	SHEET 1 OF 1



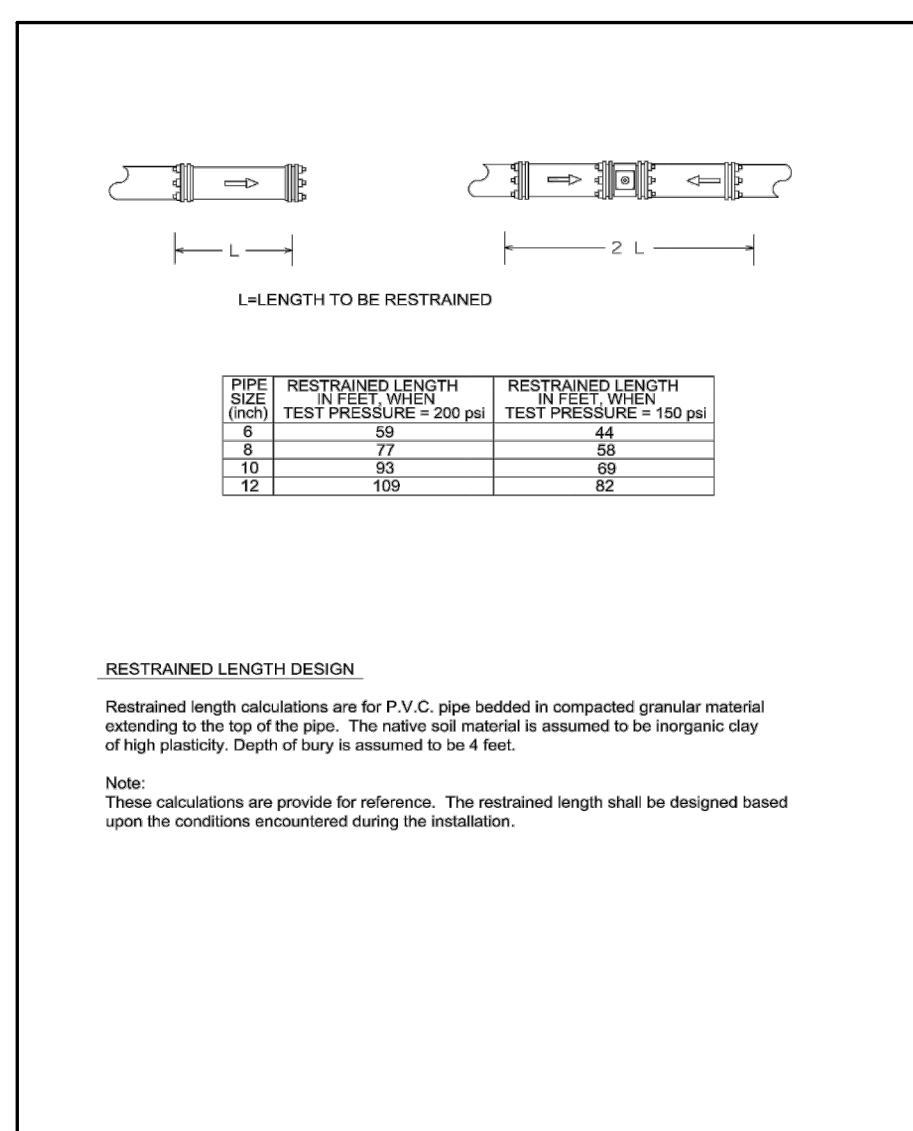
PROPERTY OF	FIRE HYDRANT	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	INSTALLATION (JOINT RESTRAINT)	MAY 2013	AUG 2019
SAN ANTONIO, TEXAS		DD-834-01	SHEET 1 OF 1



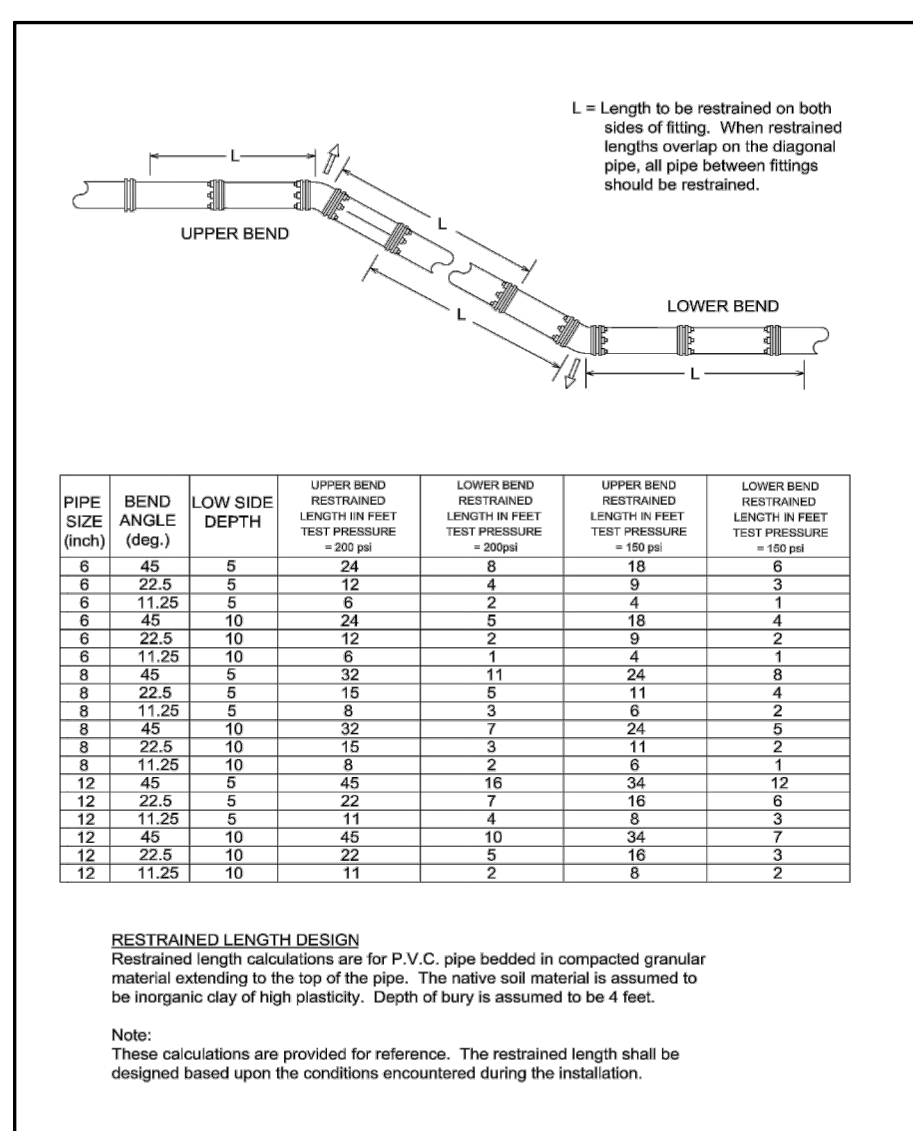
PROPERTY OF	SERVICE INSTALLATION	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	WITH PRESSURE REDUCING VALVE	MARCH 2008	APRIL 2014
SAN ANTONIO, TEXAS		DD-833-03	SHEET 1 OF 3



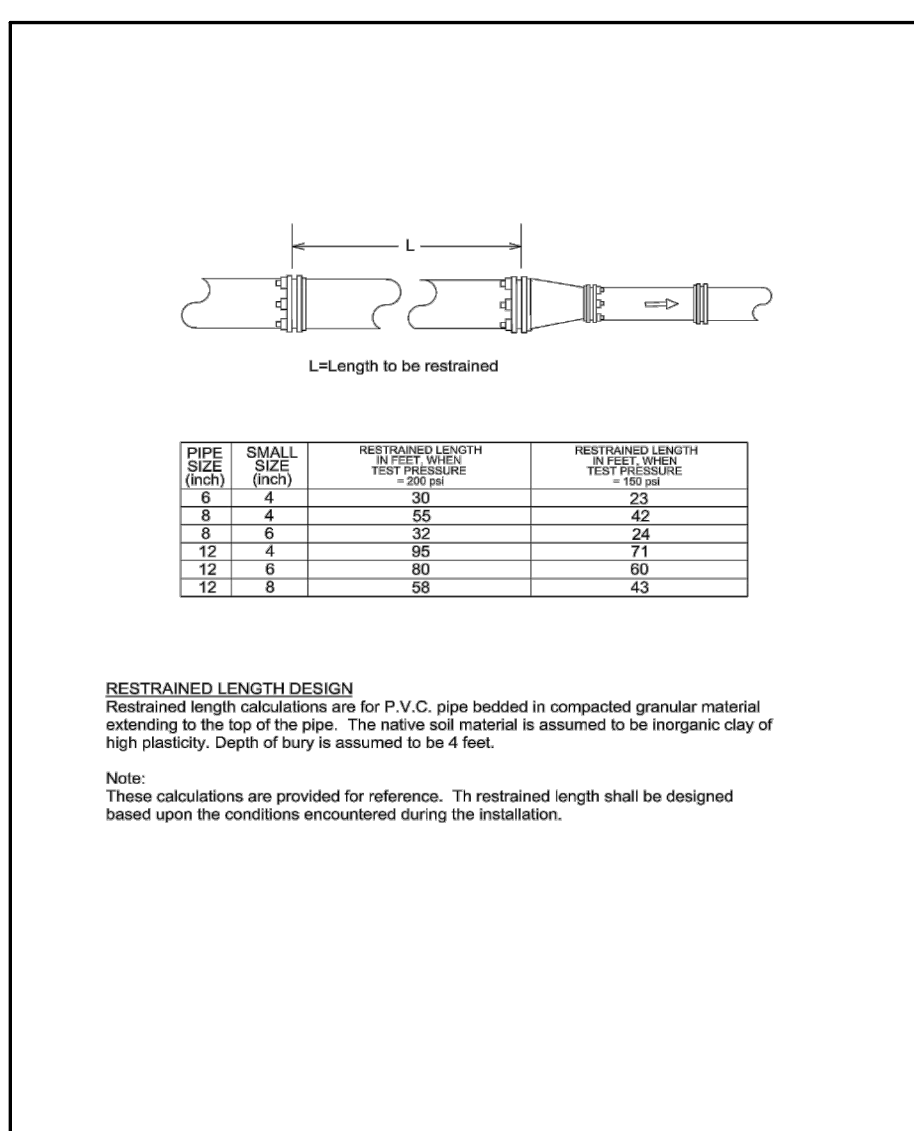
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SAN ANTONIO WATER SYSTEM	FOR TEES	MARCH 2008	AUG 2019
SAN ANTONIO, TEXAS		DD-839-04	SHEET 1 OF 2



PROPERTY OF	RESTRAINED LENGTHS	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	FOR DEAD ENDS / INLINE VALVES	MARCH 2008	AUG 2019
SAN ANTONIO, TEXAS		DD-839-05	SHEET 1 OF 1



PROPERTY OF	RESTRAINED LENGTHS	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	FOR VERTICAL OFFSETS	MARCH 2008	AUG 2019
SAN ANTONIO, TEXAS		DD-839-06	SHEET 1 OF 1



PROPERTY OF	RESTRAINED LENGTHS	APPROVED	REVISED
SAN ANTONIO WATER SYSTEM	FOR REDUCERS</		

**SAWS CONSTRUCTION NOTES**

(LAST REVISED JANUARY 2022)

**SAWS GENERAL SECTION**

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM," TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER," TAC TITLE 30 PART 1 CHAPTER 290.
- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE".
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.

3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, HTTP://WWW.SAWS.ORG/BUSINESS\_CENTER/SPECS. UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.

4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.

5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES. REQUESTING LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

- SAWS UTILITY LOCATES: HTTP://WWW.SAWS.ORG/SERVICE/LOCATES
- COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
- COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
- TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.

8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.

9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.

11. ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE 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.

13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.

**SAWS WATER NOTES**

1. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS. THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

• FOR WATER MAINS 12" OR HIGHER: SAWS EMERGENCY OPERATIONS CENTER (210) 233-2014

2. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS- CONTAINING MATERIAL (ACM), MAY BE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS. SUCH WORK IS TO BE MADE UNDER SPECIAL SPECIFICATION ITEM NO. 3000, "SPECIAL SPECIFICATION FOR HANDLING ASBESTOS CEMENT PIPE".

3. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSP)

4. SUITABLE ANCHORAGE/THRUST BLOCKING OR JOINT RESTRAINT SHALL BE PROVIDED AT ALL OF THE FOLLOWING MAIN LOCATIONS: DEAD ENDS, PLUGS, CAPS, TEES, CROSSES, VALVES, AND BENDS, IN ACCORDANCE WITH THE STANDARD DRAWINGS DD-839 SERIES AND ITEM NO. 839, IN THE SAWS STANDARD SPECIFICATIONS FOR CONSTRUCTION.

5. ALL VALVES SHALL READ "OPEN RIGHT".

6. PRVS REQUIRED: CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF 745 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 746 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).

7. PIPE DISINFECTION WITH DRY HTH FOR PROJECTS LESS THAN 800 LINEAR FEET. (ITEM NO. 847.3); 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.

8. BACKFLOW PREVENTION DEVICES:

- ALL IRRIGATION SERVICES WITHIN RESIDENTIAL AREAS ARE REQUIRED TO HAVE BACKFLOW PREVENTION DEVICES.
- ALL COMMERCIAL BACKFLOW PREVENTION DEVICES MUST BE APPROVED BY SAWS PRIOR TO INSTALLATION.

9. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED, AND SAWS HAS RELEASED THE MAIN FOR TIE-IN AND USE.

10. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN SAWS CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES, OR OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATION OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAID FOR BY THE CONTRACTOR BUT WILL BE INSTALLED BY SAWS DISTRIBUTION AND COLLECTION STAFF.

**PROJECT WATER NOTES**

1. MACHINE CHLORINATION BY THE S.A.W.S.  
2. ALL 8" AND 12" PIPE SHALL BE P.V.C. C-900 CLASS 235 DR 18.  
3. ALL MAINS SHALL BE HYDROSTATICALLY TESTED BY THE CONTRACTOR, AS PROVIDED FOR IN THE SPECIAL CONDITIONS.

4. THE WATER LINES WILL BE SET FROM THE STREET HUBS BEFORE THIS CONTRACT BEGINS. STREET CUT SHEETS WILL BE SUPPLIED TO THE CONTRACTOR. THERE SHOULD BE NO ADDITIONAL STAKES REQUIRED, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE SITE AND VERIFY THAT ALL STAKES REQUIRED FOR HIS WORK ARE IN PLACE AT THE TIME THE CONSTRUCTION BEGINS. IF ANY STAKES ARE MISSING THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY AFTER CONSTRUCTION BEGINS. ALL CONSTRUCTION STAKES, MARKS, ETC., SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR, AND IN CASE OF DESTRUCTION OR REMOVAL BY THE CONTRACTOR, HIS EMPLOYEE, OR ANY OTHER MEANS, SUCH STAKES, MARKS, ETC., SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

5. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL THE FINAL MEASUREMENTS, TAPS AND LENGTH OF SERVICE CONNECTIONS.

6. THE LOT CORNERS WILL BE SET BY THE ENGINEER FOR INSTALLATION OF ALL WATER SERVICES. THESE LOT CORNERS SHALL BE CAREFULLY PRESERVED BY THE CONTRACTOR SO THE METER BOXES CAN BE SET IN PHASE II. ANY LOT CORNER DESTROYED OR REMOVED BY THE CONTRACTOR, HIS EMPLOYEES, OR BY ANY OTHER MEANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.  
7. STREETS WILL HAVE BEEN EXCAVATED DOWN TO SUBGRADE AND THE PARKWAY WILL BE CUT DOWN TO TOP OF CURB BY THE STREET CONTRACTOR, PRIOR TO CONSTRUCTION OF THE WATER MAINS. IT WILL BE THE UTILITY CONTRACTOR'S RESPONSIBILITY TO PROVIDE A PAD FOR HIS EQUIPMENT.

8. WATER METER BOXES IF APPLICABLE SHALL BE INSTALLED NINE FEET FROM FACE OF CURB TO CENTER OF THE METER BOX.

9. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.

10. FINAL CONNECTION TO THE EXISTING WATER MAIN SHALL NOT BE MADE UNTIL WATER MAIN HAS BEEN PRESSURE TESTED, CHLORINATED AND THE S.A.W.S. RELEASES THE MAIN FOR TIE-IN AND USE.

11. UNIT PRICE BID FOR "STANDARD FIRE HYDRANT ASSEMBLY" SHALL INCLUDE FIRE HYDRANT, 6-INCH GATE VALVE AND 6-INCH VALVE BOX COMPLETE, ANCHOR BEND, AND ALL 6-INCH DI PIPE REQUIRED (DI PIPE REQUIRED SHALL INCLUDE ALL PIPE FROM THE TEE ON THE MAIN LINE TO THE FIRE HYDRANT).

12. WHEN SEWER LINES ARE INSTALLED IN THE VICINITY OF WATER MAINS, SUCH INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS" (1988 OR ANY REVISIONS THERETO).

13. A CLEAR SPACE SHALL BE PROVIDED AROUND ALL FIRE HYDRANTS. THIS AREA SHOULD HAVE A MINIMUM DIAMETER OF 3.0' AND BE CLEAN OF VERTICAL OBSTRUCTIONS, VALVES, AND METER BOXES.

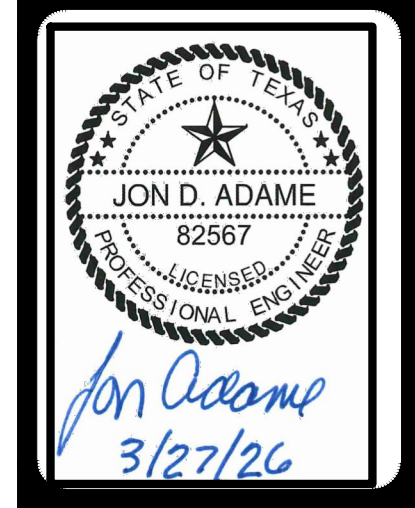
14. SAWS REQUIRES LEAD FREE (< 0.25%) FIRE HYDRANTS.

15. UNLESS OTHERWISE NOTED ALL SERVICES SHALL BE 3/4" WITH 5/8" METER.

**WATER (SAWS PRESSURE ZONE 4)**

DEVELOPER'S NAME:	MERITAGE HOMES OF TEXAS, LLC
ADDRESS:	2722 WEST BITTERS ROAD
CITY:	SAN ANTONIO
STATE:	TEXAS
ZIP:	78248
PHONE#	(844) 860-7365
FAX#	
SAWS BLOCK MAP#	110580
TOTAL EDU'S	100
TOTAL ACREAGE	10.33
4" PVC 2054 LF, 2" HOPE 334 LF &	
TOTAL LINEAR FOOTAGE OF PIPE: 12" PVC 187 LF	PLAT NO. 25-11800523
NUMBER OF LOTS	98
SAWS JOB NO.	28-1022

DATE	
NO.	
REVISION	

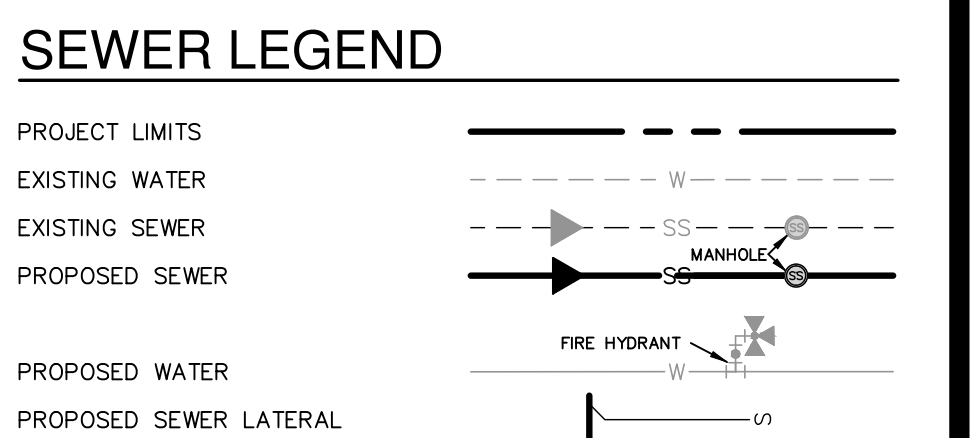
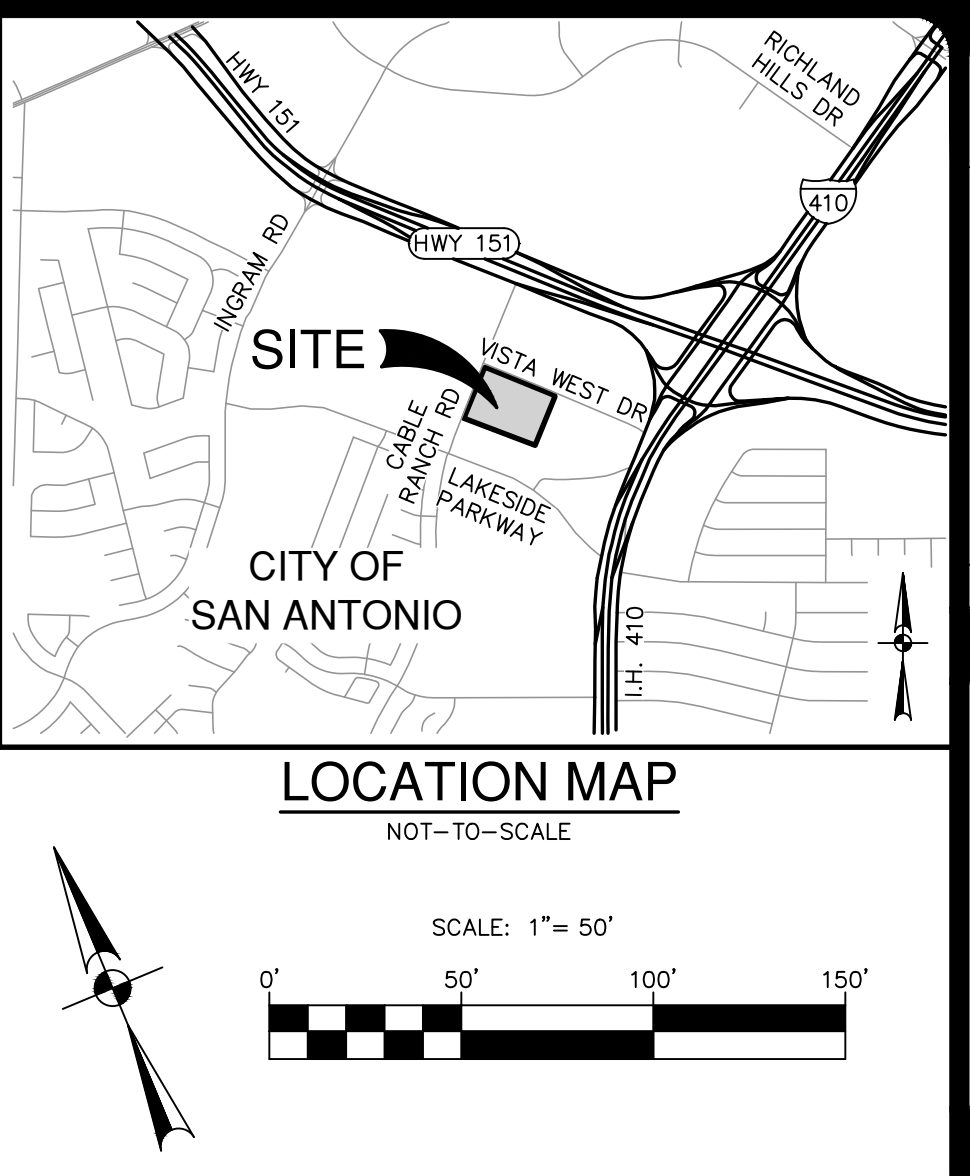
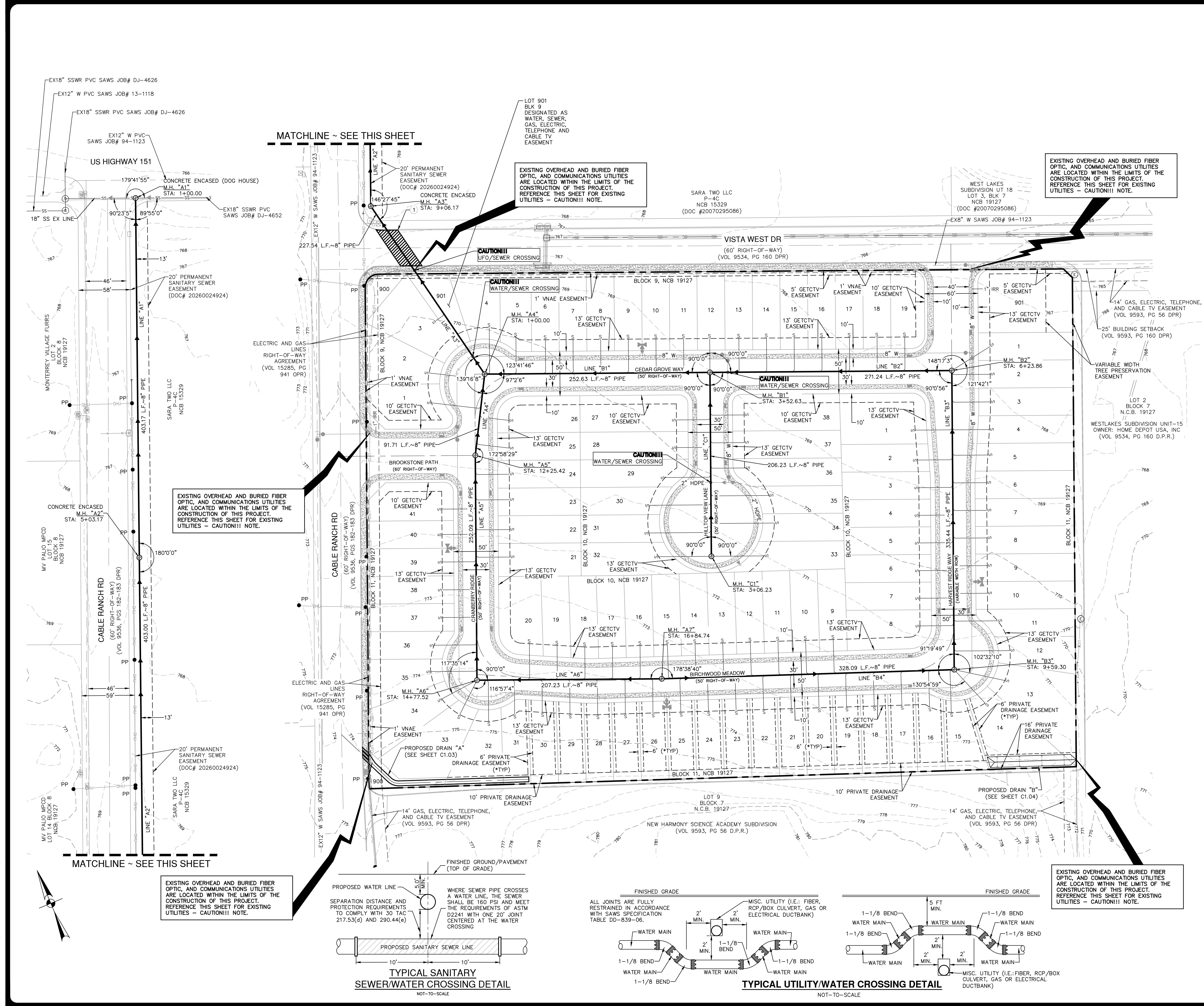


**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 WATER DISTRIBUTION PLAN NOTES

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	MARCH 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C4.11

Date: November 14, 2025, 9:25 AM - User ID: bmoquillen  
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**CAUTION!!!**  
 CONTRACTOR TO OPEN CUT VISTA WEST DRIVE AND REMOVE/REPLACE ±50 LF EXISTING PAVEMENT, SUBGRADE, CURB AND SIDEWALK. CONTRACTOR TO USE FLOWABLE FILL AS APPROVED BY CITY OF SAN ANTONIO (SEPARATE PAY ITEM).

**COSA ROW NOTES:**  
 A CITY OF SAN ANTONIO ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN COSA ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

**EXISTING UTILITIES - CAUTION!!!**  
 EXISTING UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, VERIFYING THE EXACT LOCATION AND IDENTIFYING ANY AREAS OF CONFLICTS WITH EXISTING UTILITIES AND WILL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS ARE FOUND.

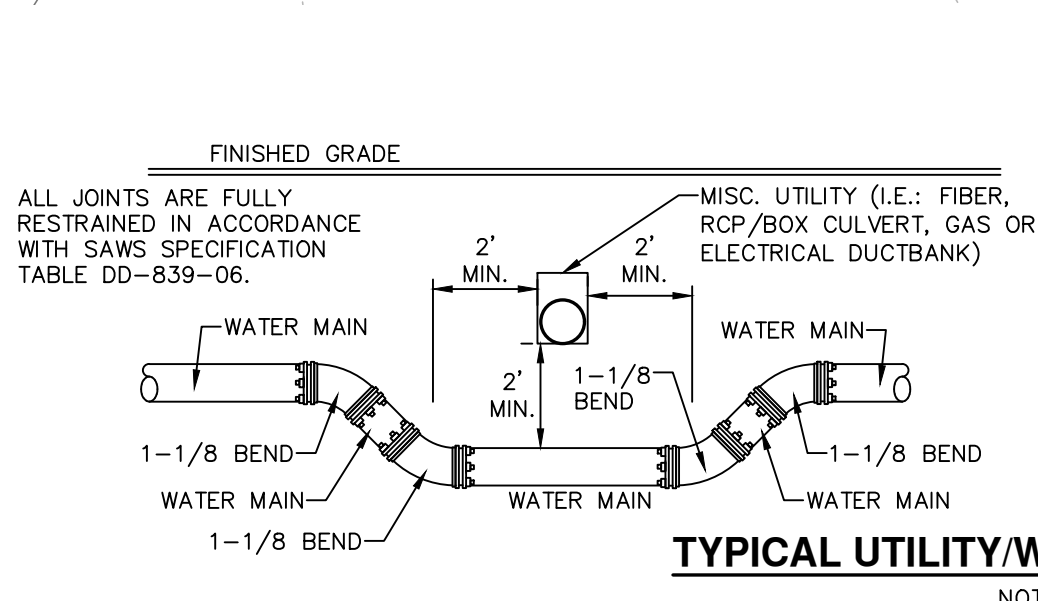
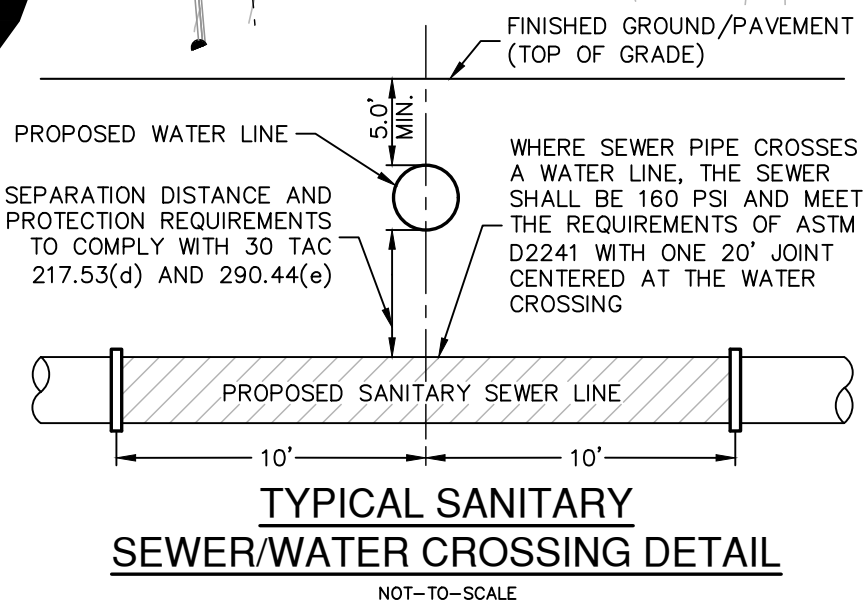
**CAUTION!!!**  
 CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY 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.

**FINISHED FLOOR NOTES:**  
 1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER AND SHALL TAKE INTO CONSIDERATION AS-BUILT CONDITIONS FOR FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.  
 2. THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

**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 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.

**SEWERSHED - WEST**

DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC
ADDRESS: 2722 WEST BITTERS ROAD
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248
PHONE# (844) 860-7365 FAX#
SAWS BLOCK MAP# 110580 TOTAL EDU'S 98 TOTAL ACREAGE 10.33
TOTAL LINEAR FOOTAGE OF PIPE: 8' 2978 LF PLAT NO. 25-11800523
NUMBER OF LOTS 98 SAWS JOB NO. 26-1515



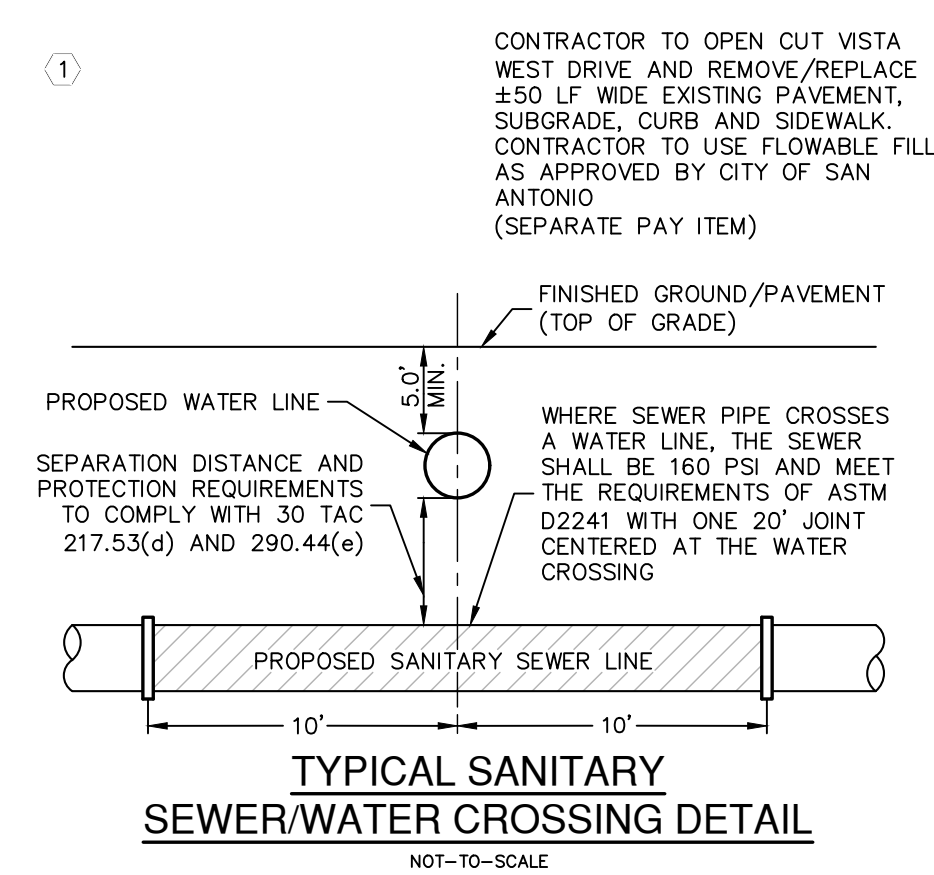
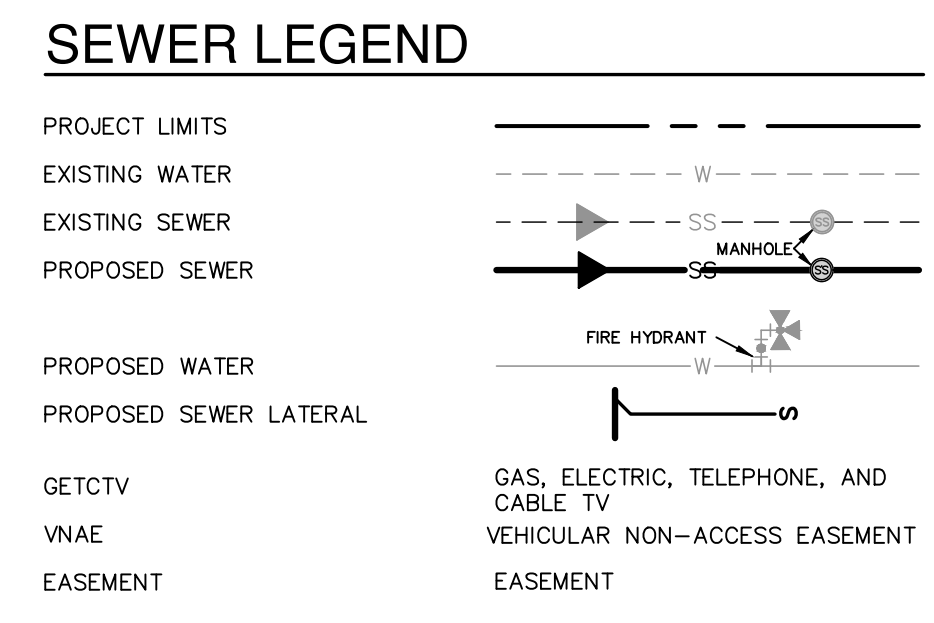
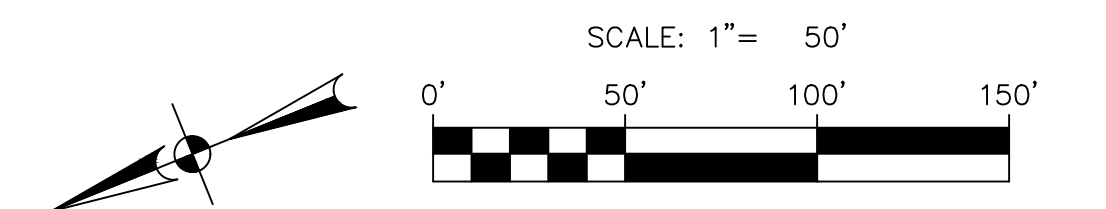
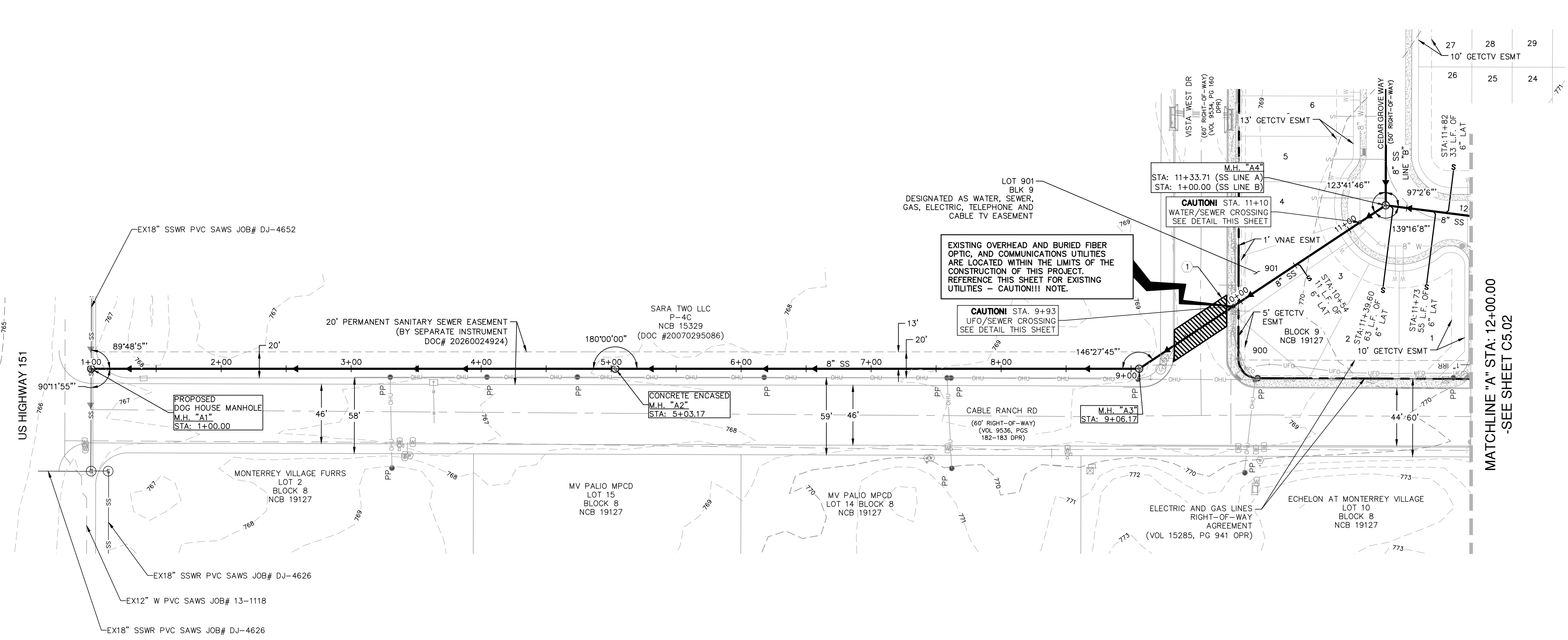
**EXISTING OVERHEAD AND BURIED FIBER OPTIC, AND COMMUNICATIONS UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. REFERENCE THIS SHEET FOR EXISTING UTILITIES - CAUTION!!! NOTE.**

DATE: \_\_\_\_\_  
 NO. REVISION: \_\_\_\_\_

**PAPE - DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 0028890

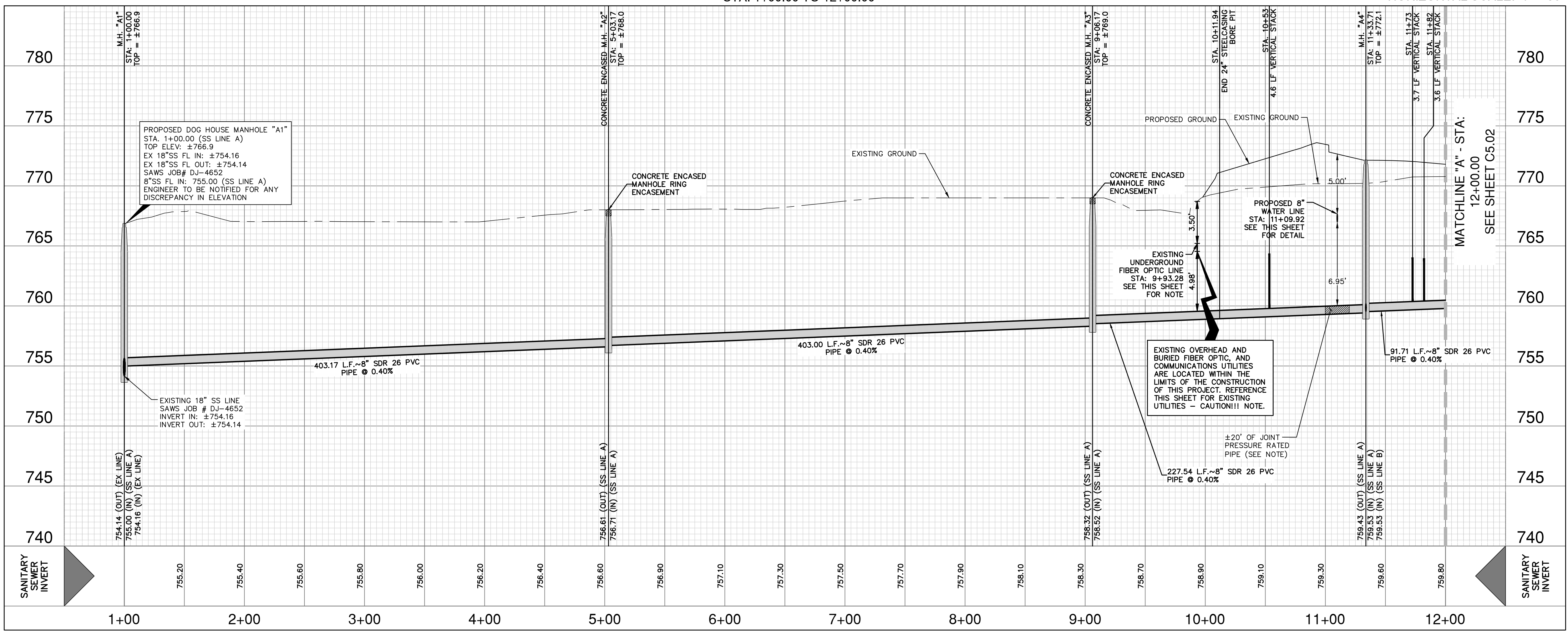
**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 OVERALL SANITARY SEWER PLAN

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE MARCH 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C5.00



SANITARY SEWER LINE "A"  
STA. 1+00.00 TO 12+00.00

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



**COSA ROW NOTES:**  
A CITY OF SAN ANTONIO ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN COSA ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

**EXISTING UTILITIES - CAUTION!!**  
EXISTING UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTRA CARE IN DIGGING ANY TRENCH FOR PROPOSED UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, VERIFYING THE EXACT LOCATION AND IDENTIFYING ANY AREAS OF CONFLICTS WITH EXISTING UTILITIES AND WILL NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS ARE FOUND.

**CAUTION!!**  
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, 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.

**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.

**SEWERSHED - WEST**

DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC  
 ADDRESS: 2722 WEST BITTERS ROAD  
 CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248  
 PHONE# (844) 860-7365 FAX#  
 SAWS BLOCK MAP# 110590 TOTAL EDU'S 98 TOTAL ACREAGE 10.33  
 TOTAL LINEAR FOOTAGE OF PIPE: 8" 2978 LF PLAT NO. 25-11800523  
 NUMBER OF LOTS 98 SAWS JOB NO. 26-1515

DATE	
NO.	REVISION

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 0028800

Professional Engineer  
 JON D. ADAME  
 82567  
 3/27/26

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS

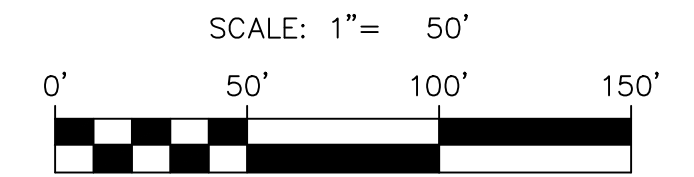
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PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE MARCH 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C5.01

Date: November 14, 2025, 9:25 AM - User ID: bmcquillan  
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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. AERIAL IMAGERY PROVIDED BY GOOGLE/UNLESS OTHERWISE NOTED. Imagery © 2016, CAROL Digital Globe, Texas Orthographic Program, USDA Farm Service Agency.





**SEWER LEGEND**

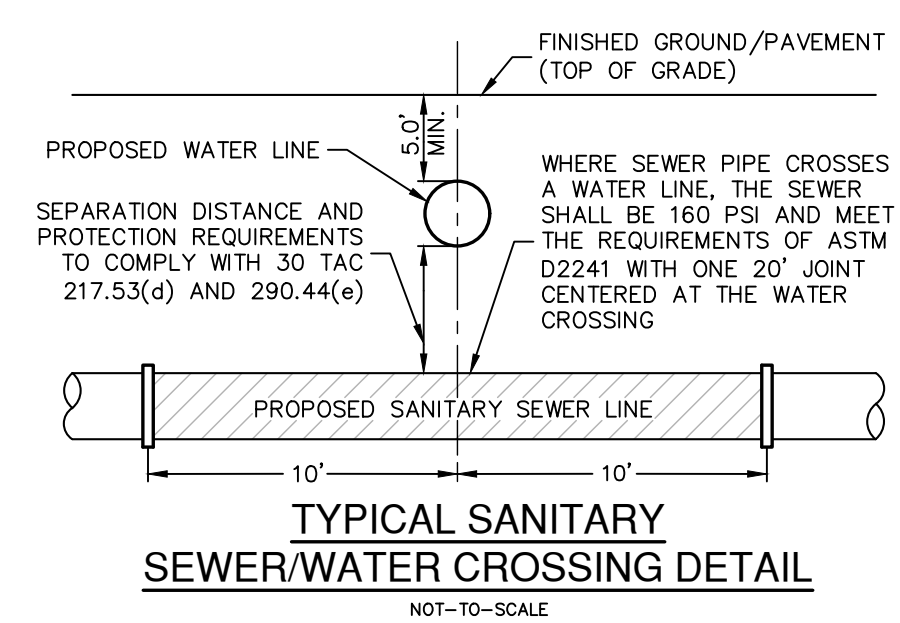
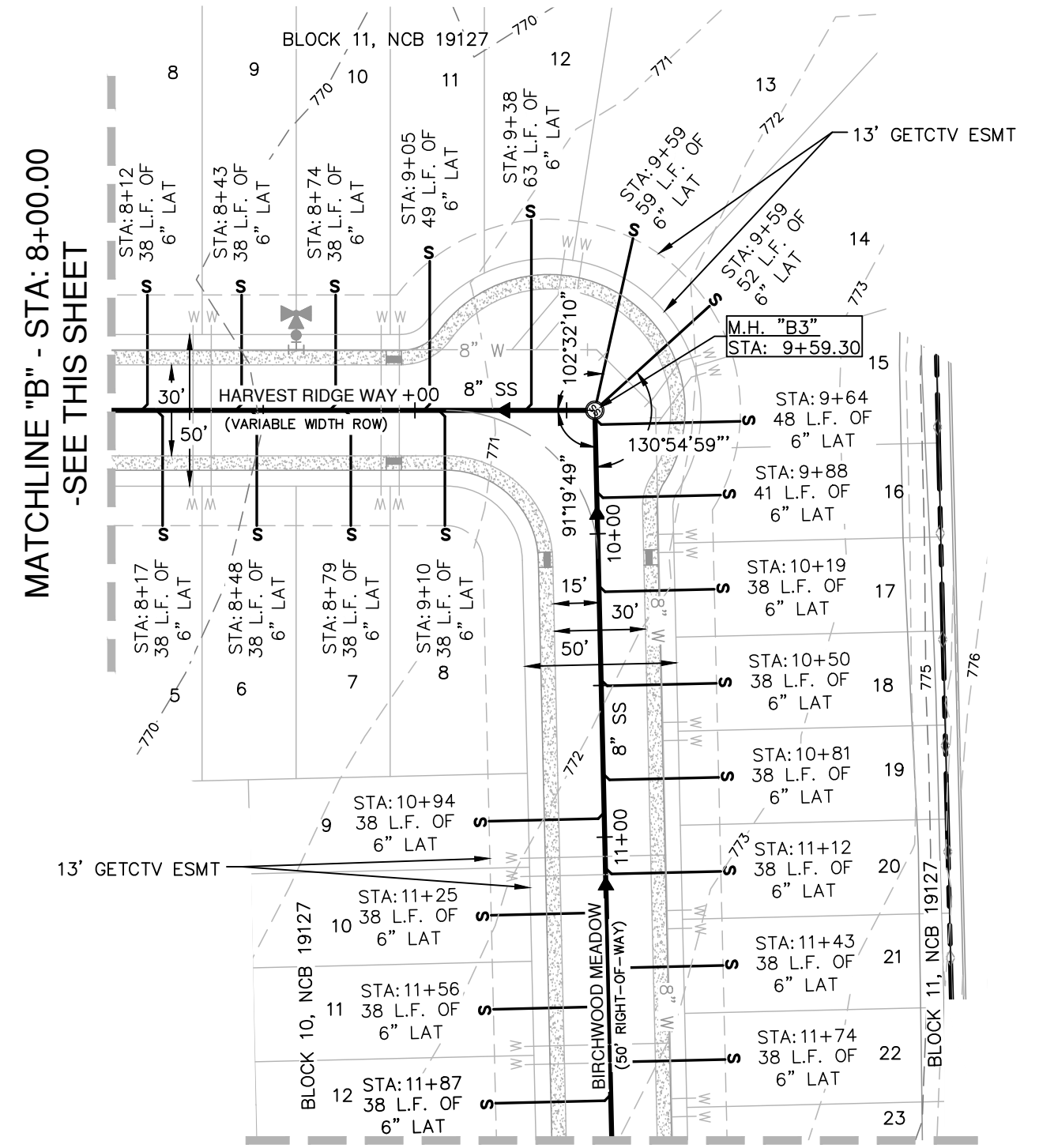
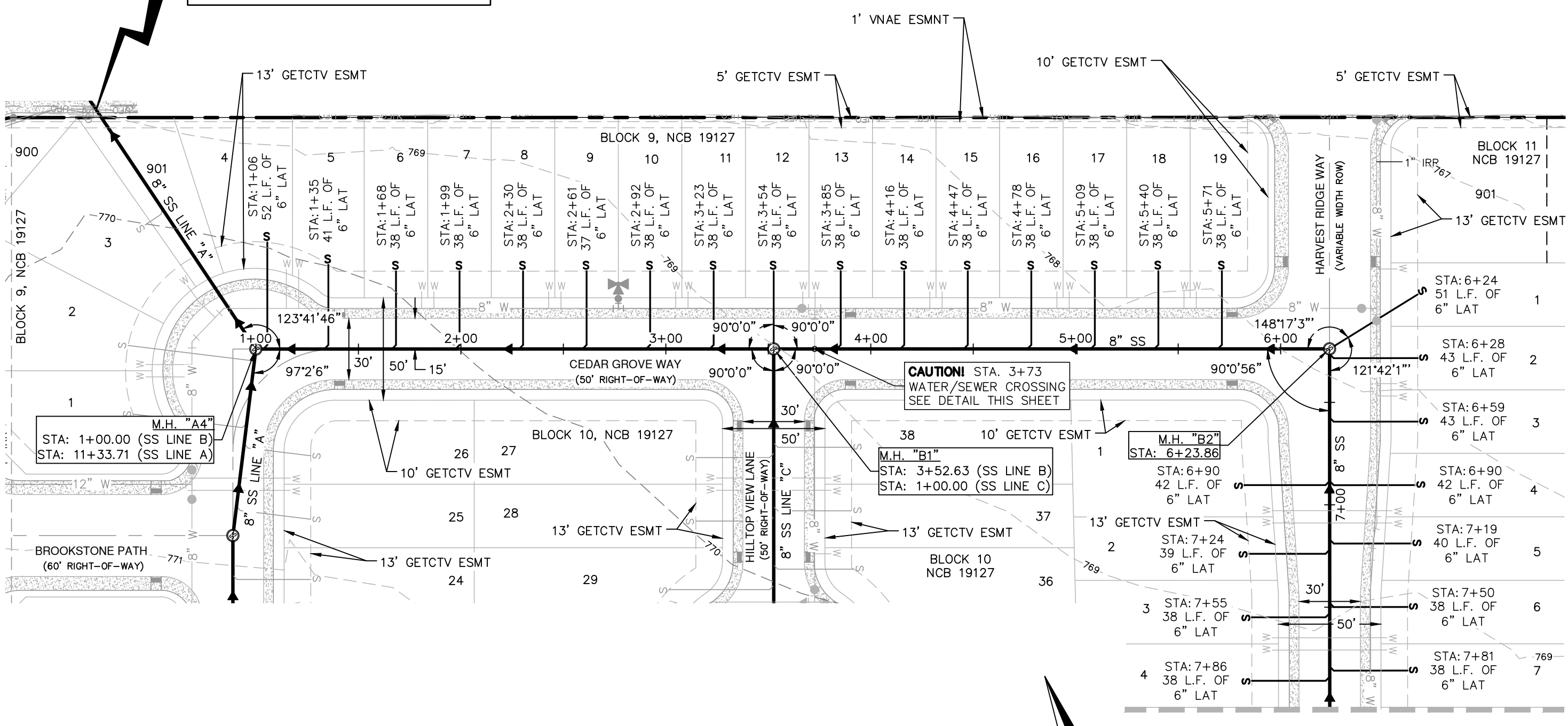
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- EXISTING WATER
- EXISTING SEWER
- PROPOSED SEWER
- PROPOSED WATER
- PROPOSED SEWER LATERAL
- GETCTV
- VNAE
- EASEMENT

DATE

NO. REVISION

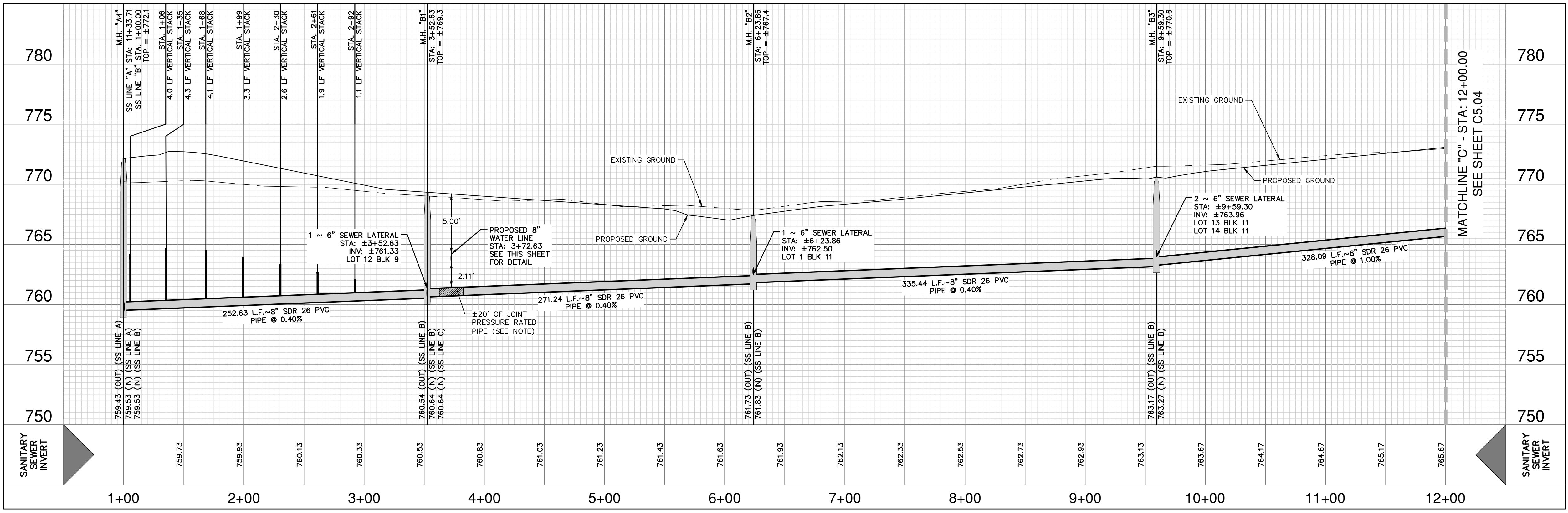
Jon Adame  
3/27/26

EXISTING OVERHEAD AND BURIED FIBER OPTIC, AND COMMUNICATIONS UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION OF THIS PROJECT. REFERENCE THIS SHEET FOR EXISTING UTILITIES - CAUTION!! NOTE (SEE SHEET C5.01 FOR CROSSING DETAIL)



**SANITARY SEWER LINE "B"**  
STA. 1+00.00 TO 12+00.00

VERTICAL SCALE: 1" = 5'  
HORIZONTAL SCALE: 1" = 50'



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**SEWERSHED - WEST**

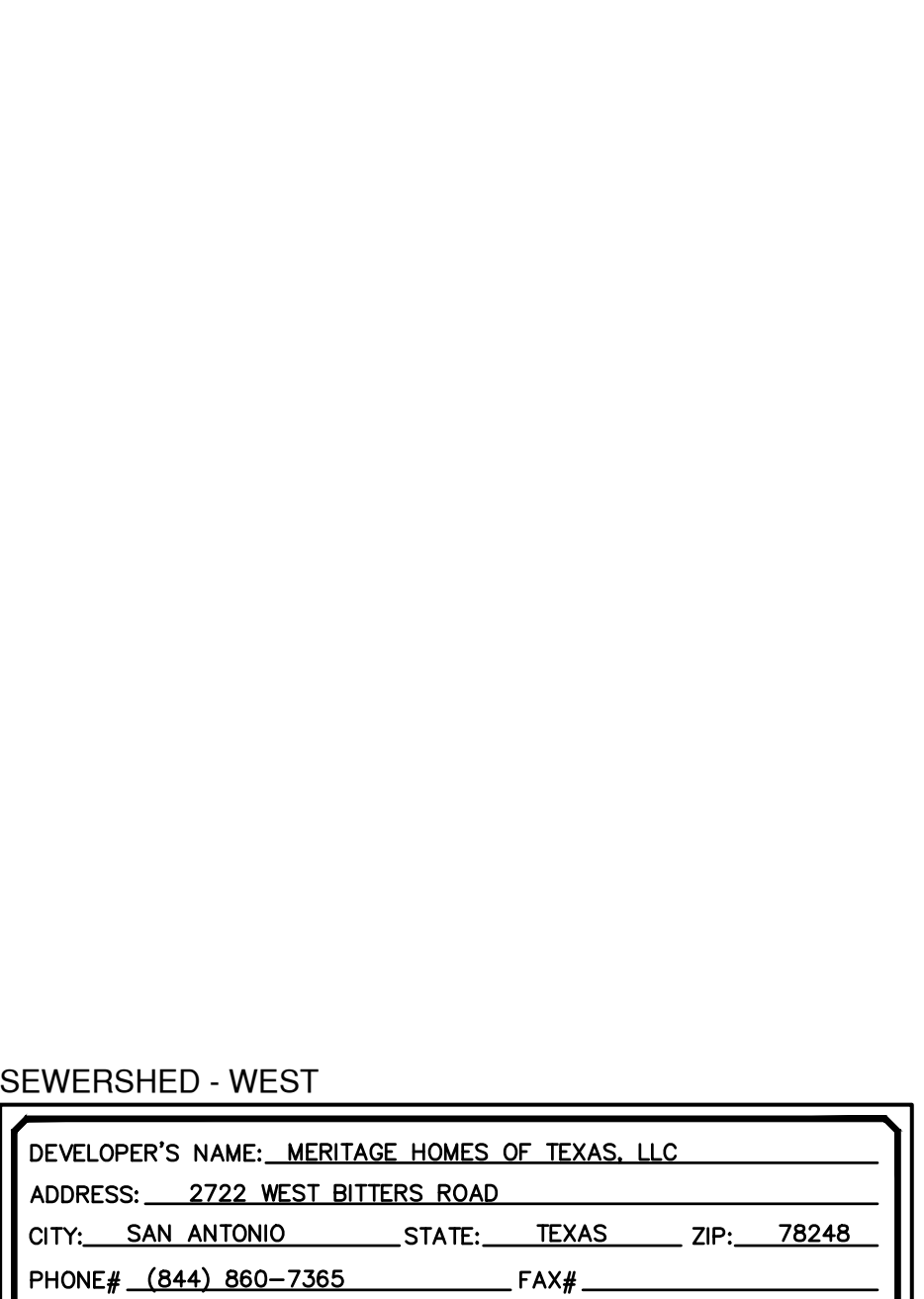
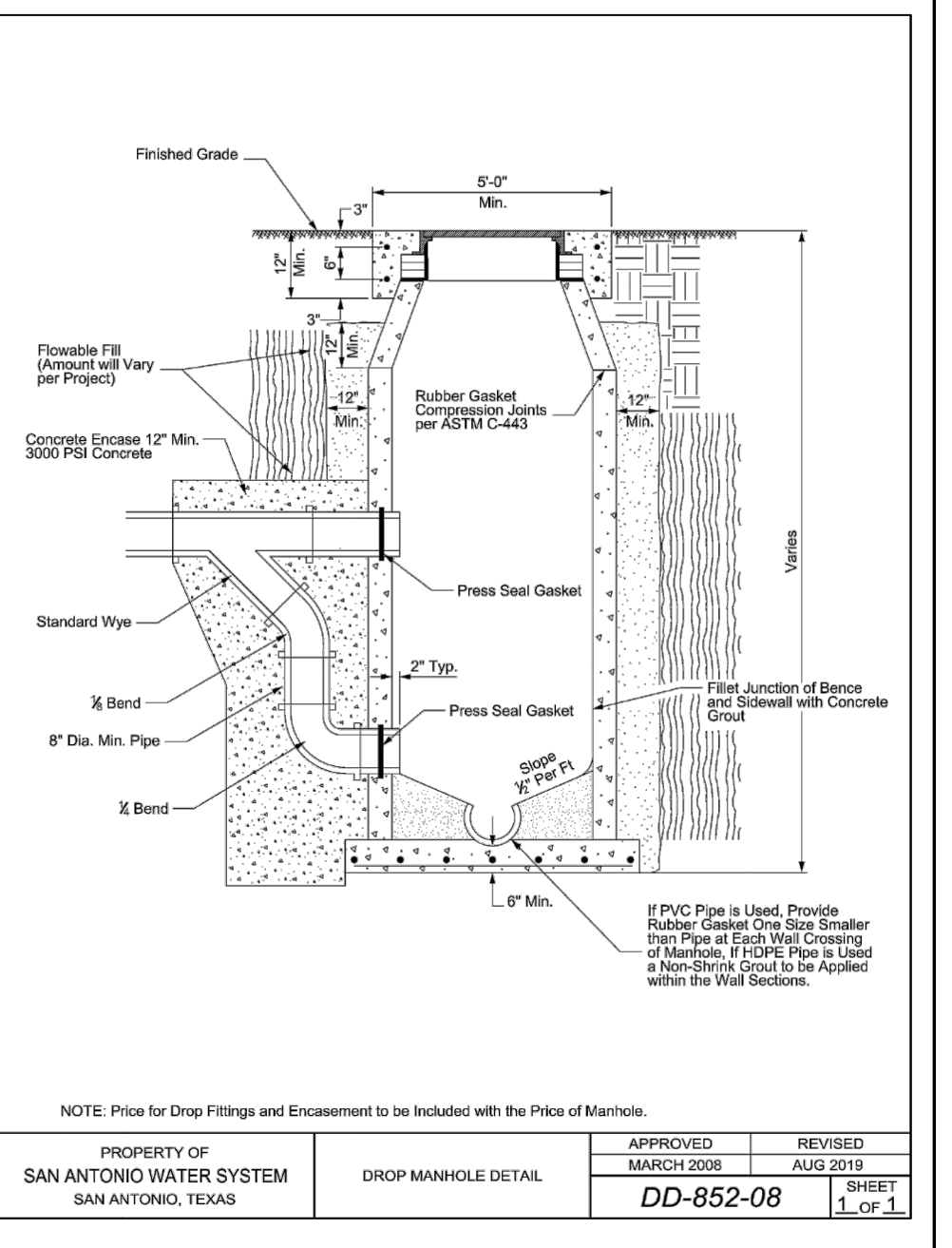
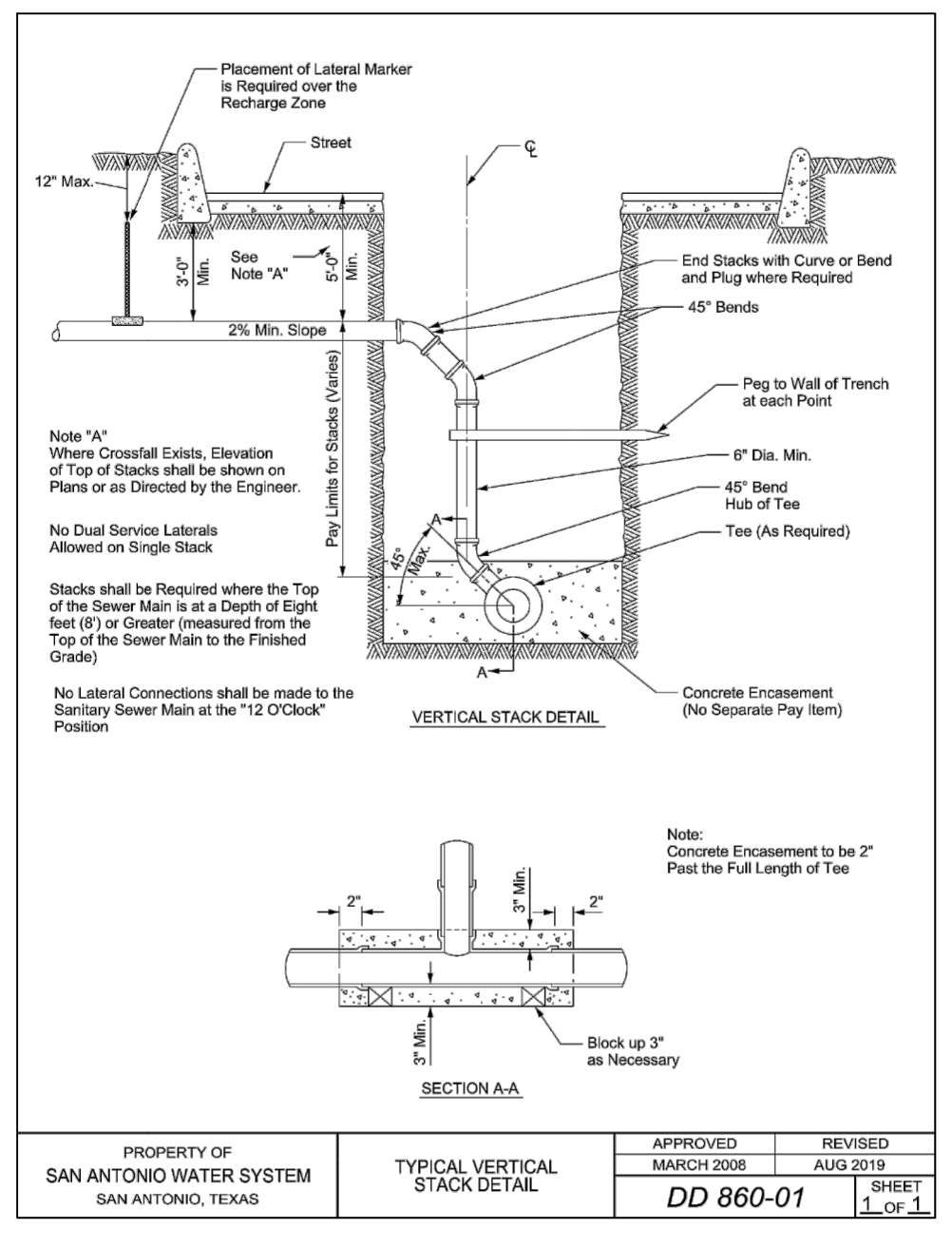
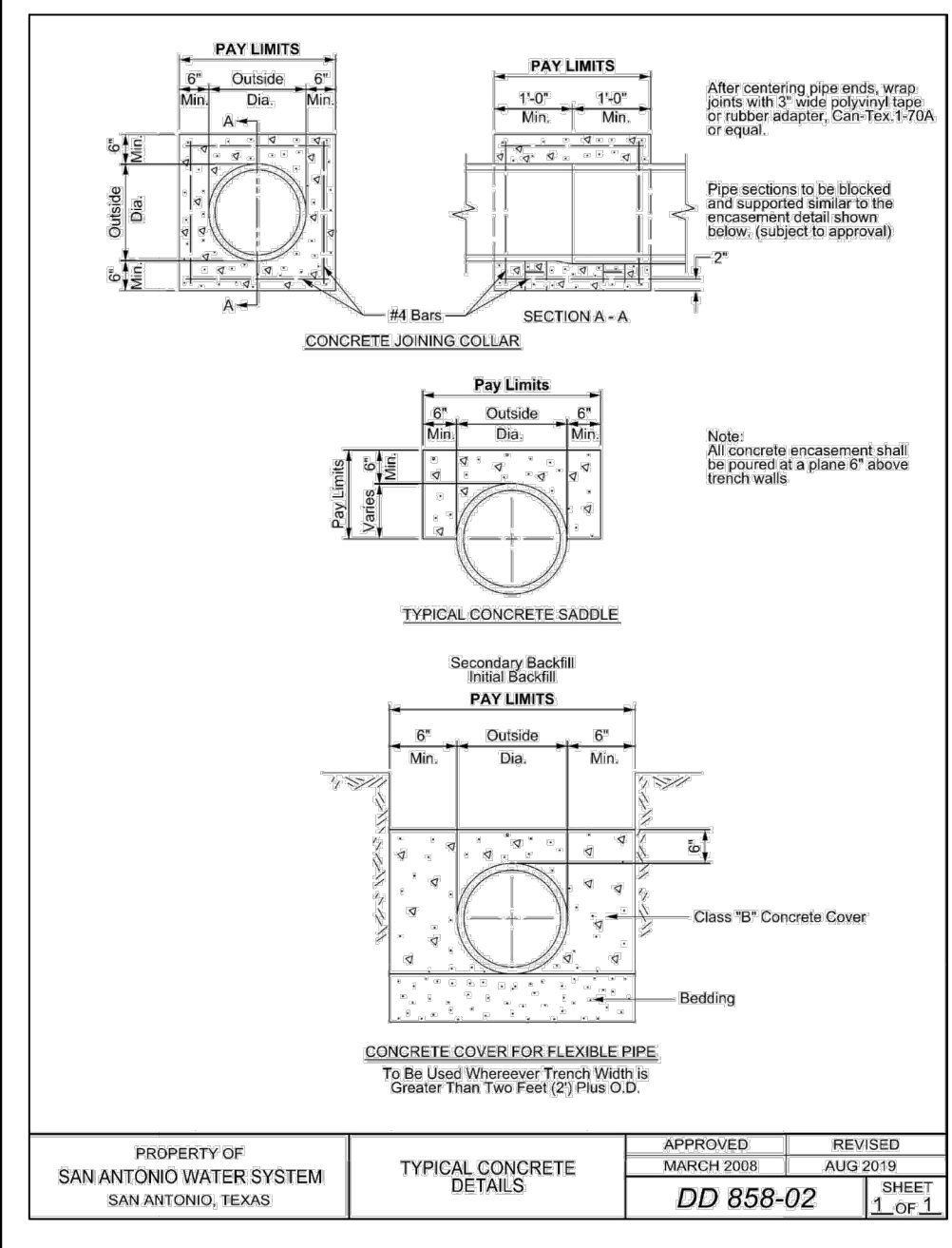
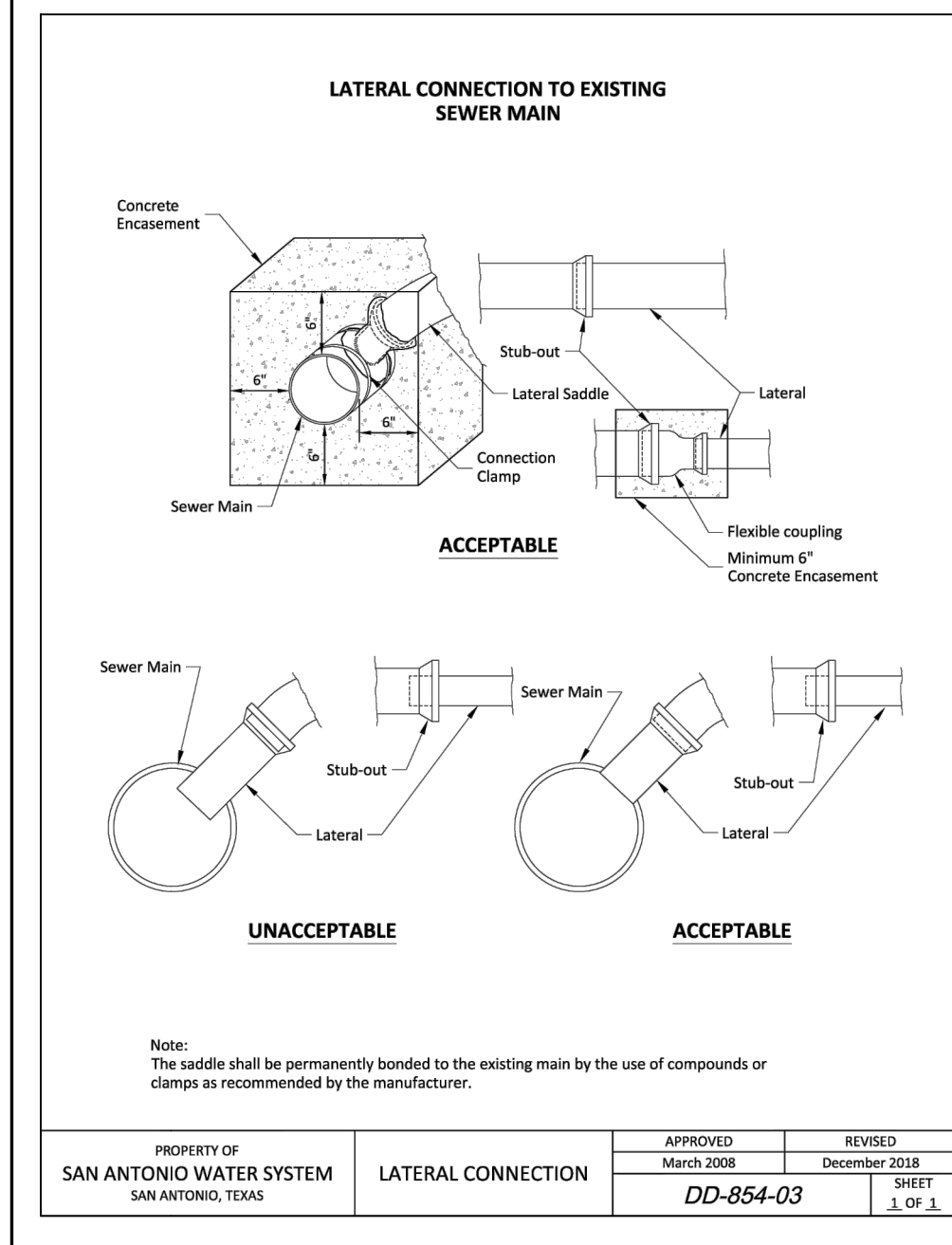
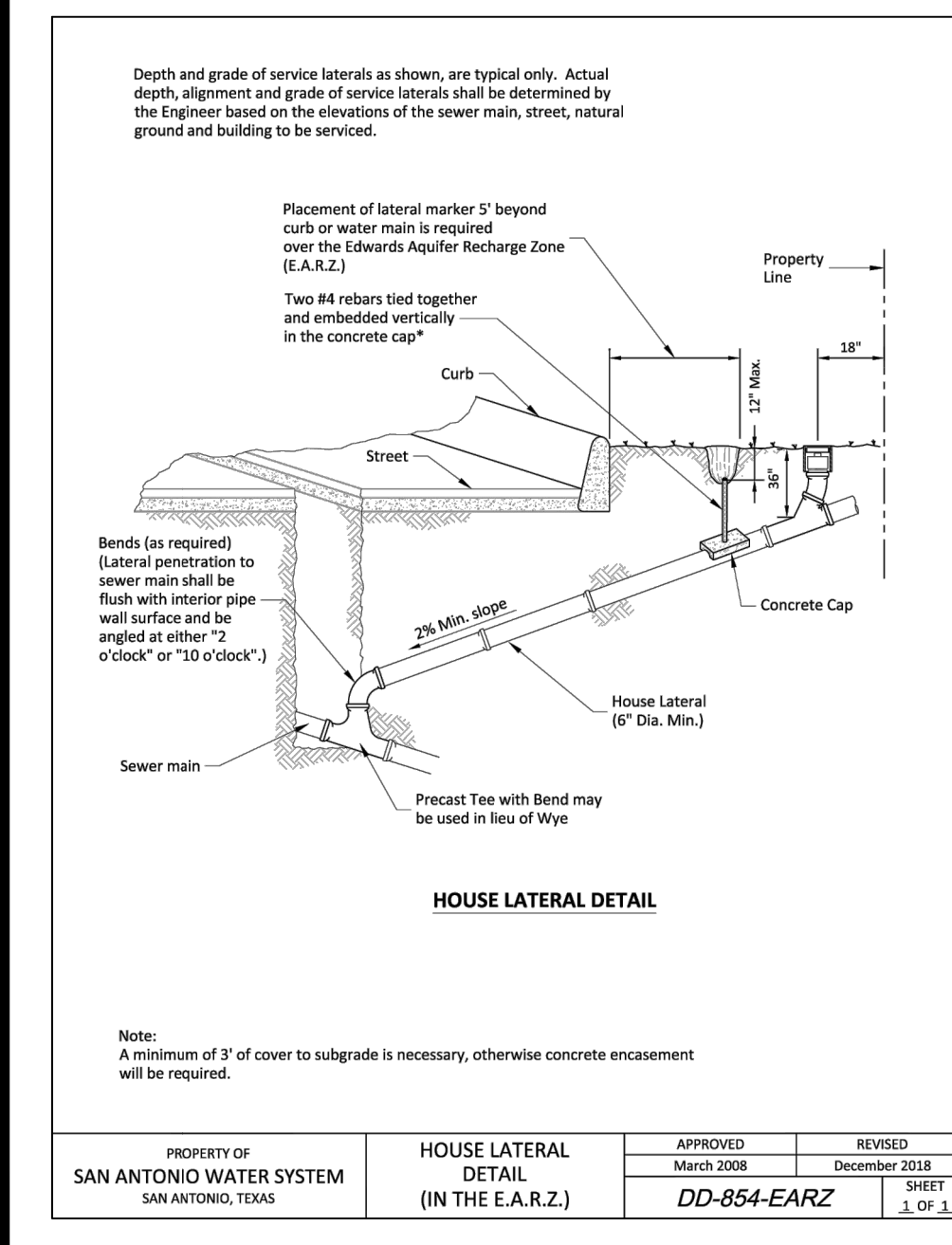
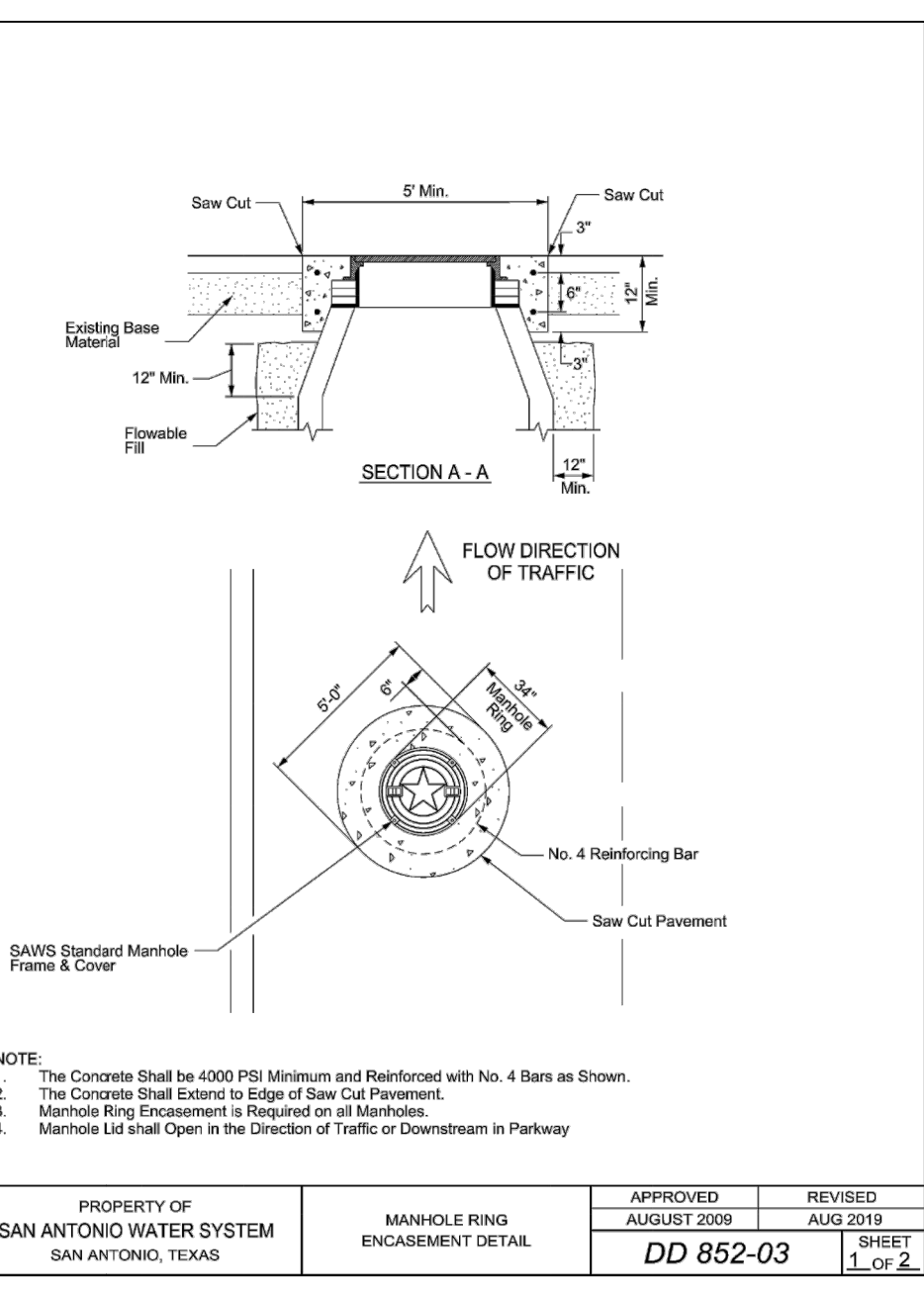
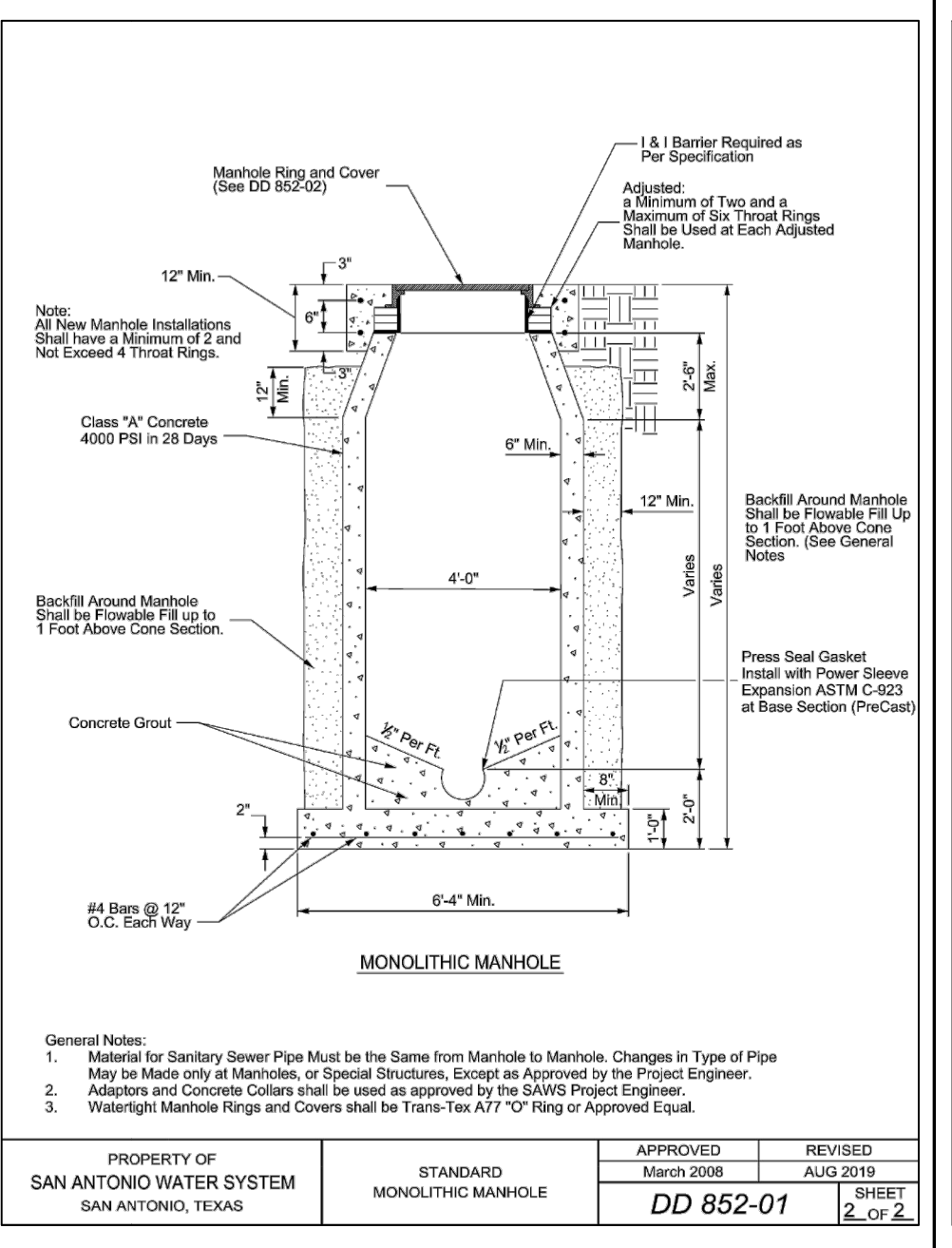
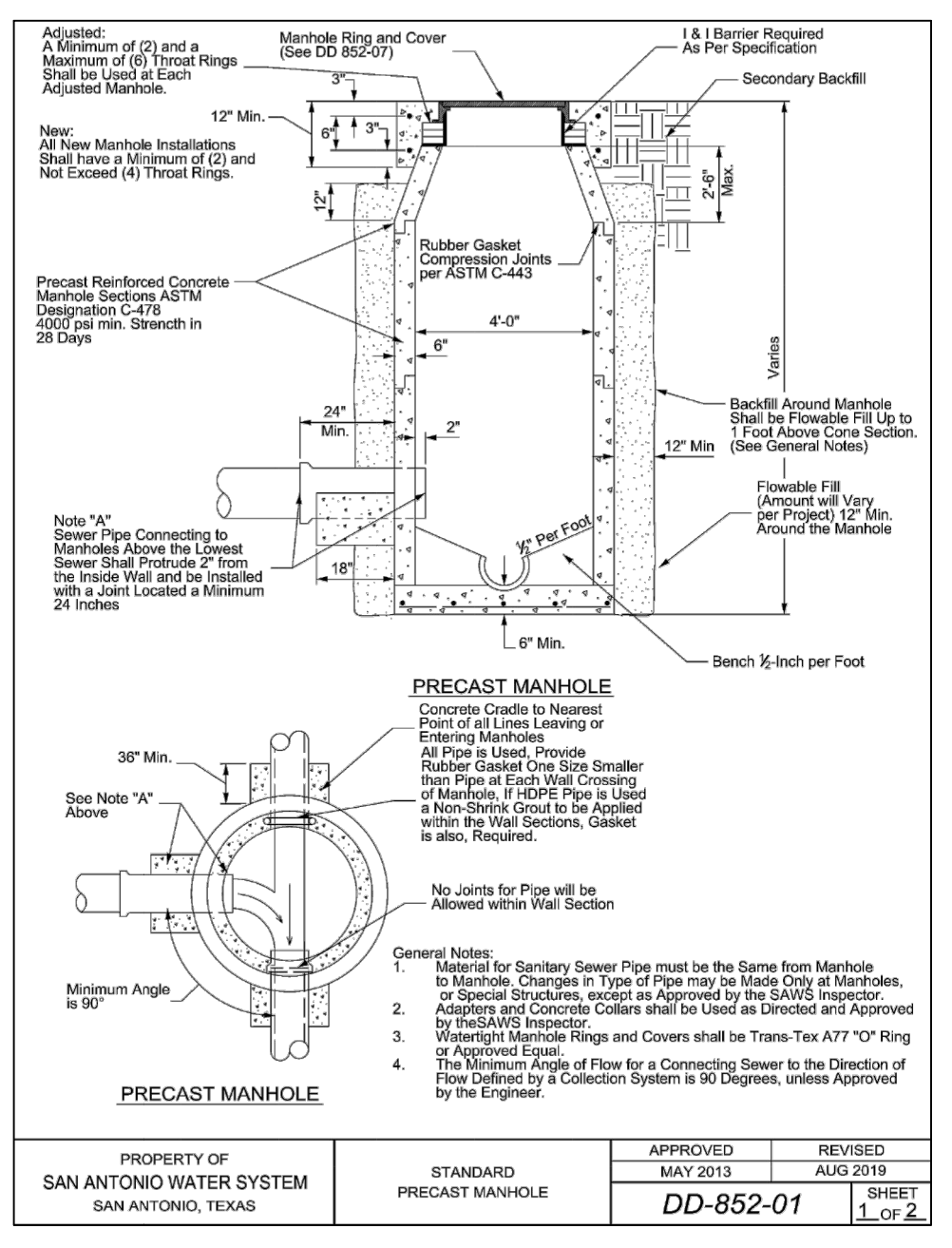
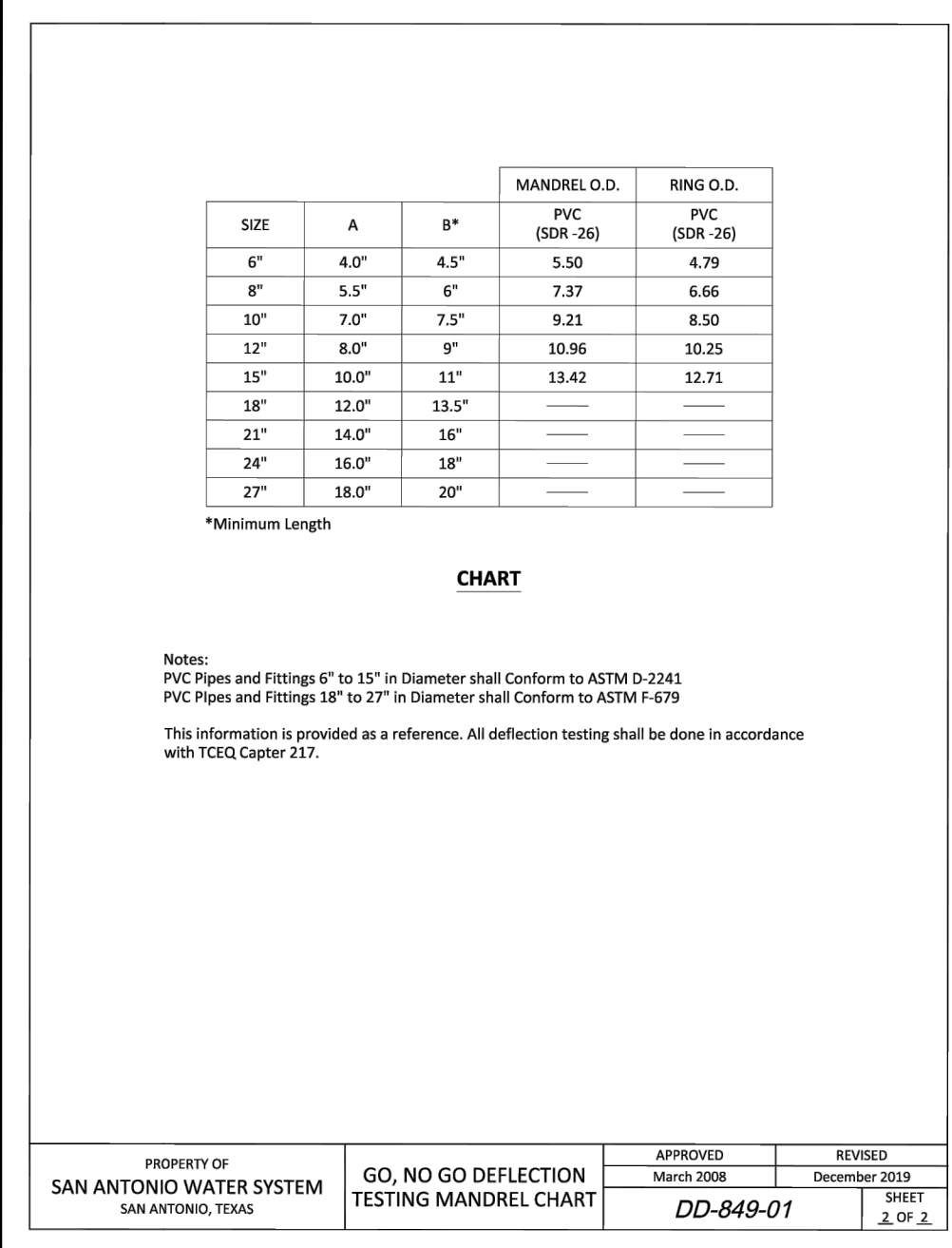
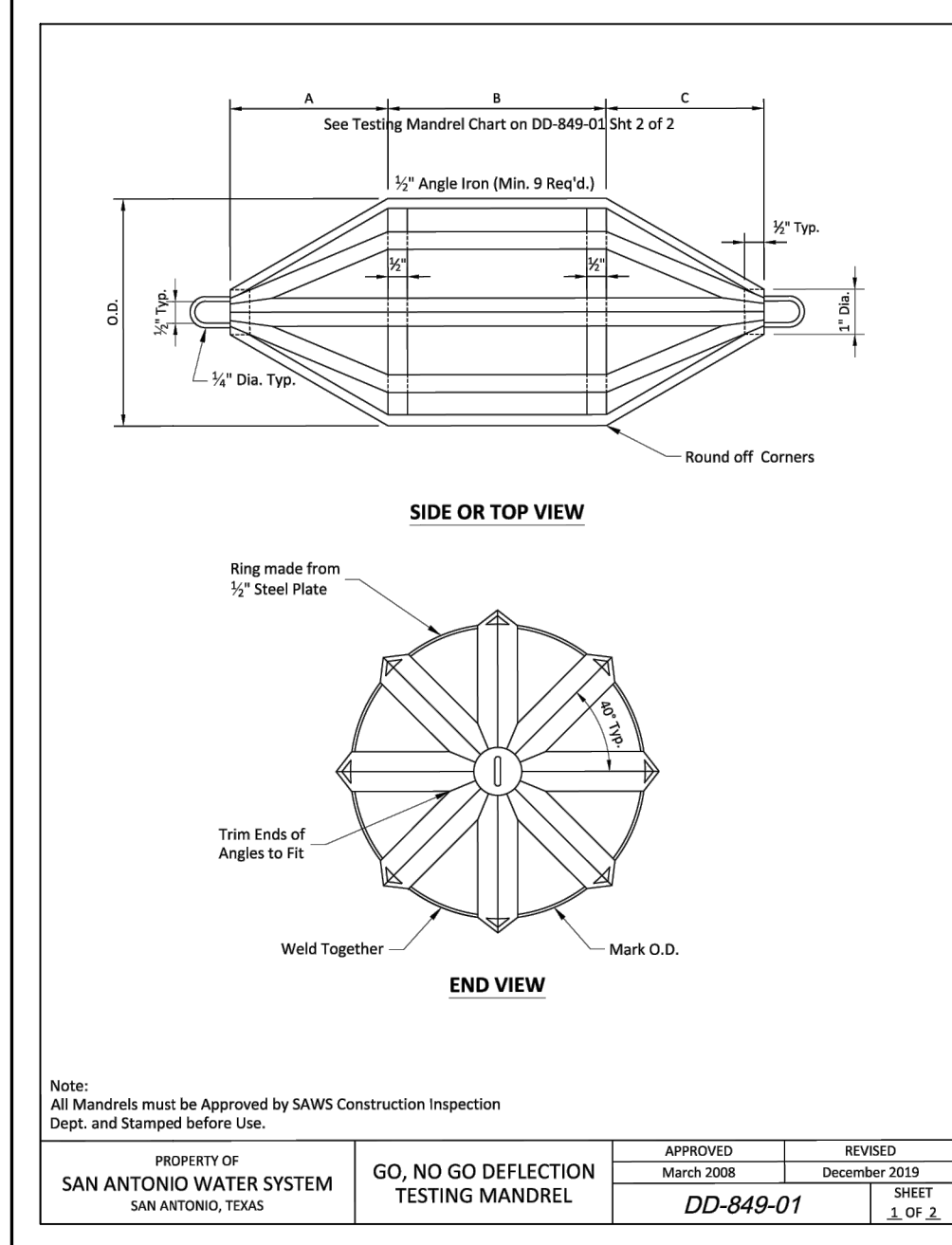
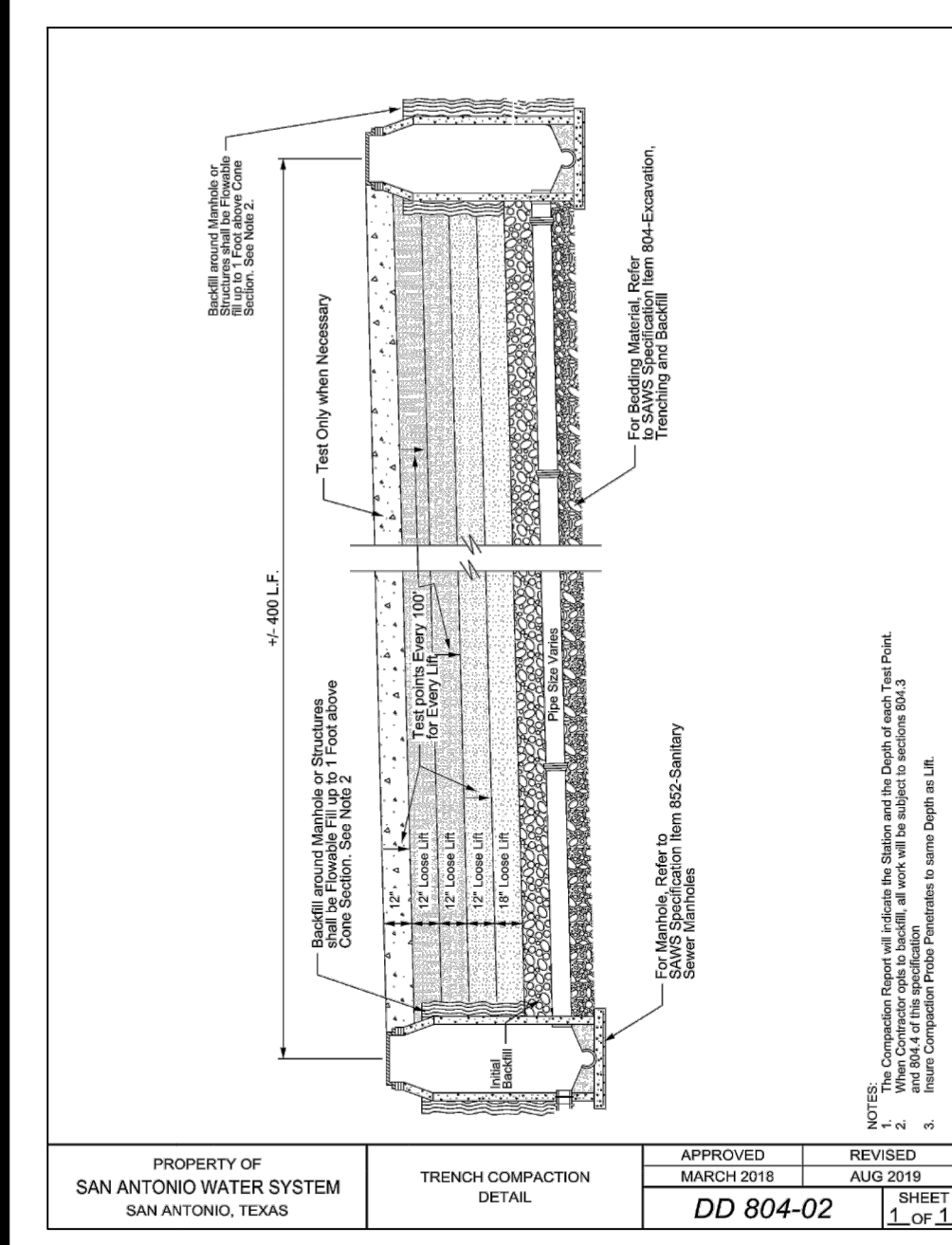
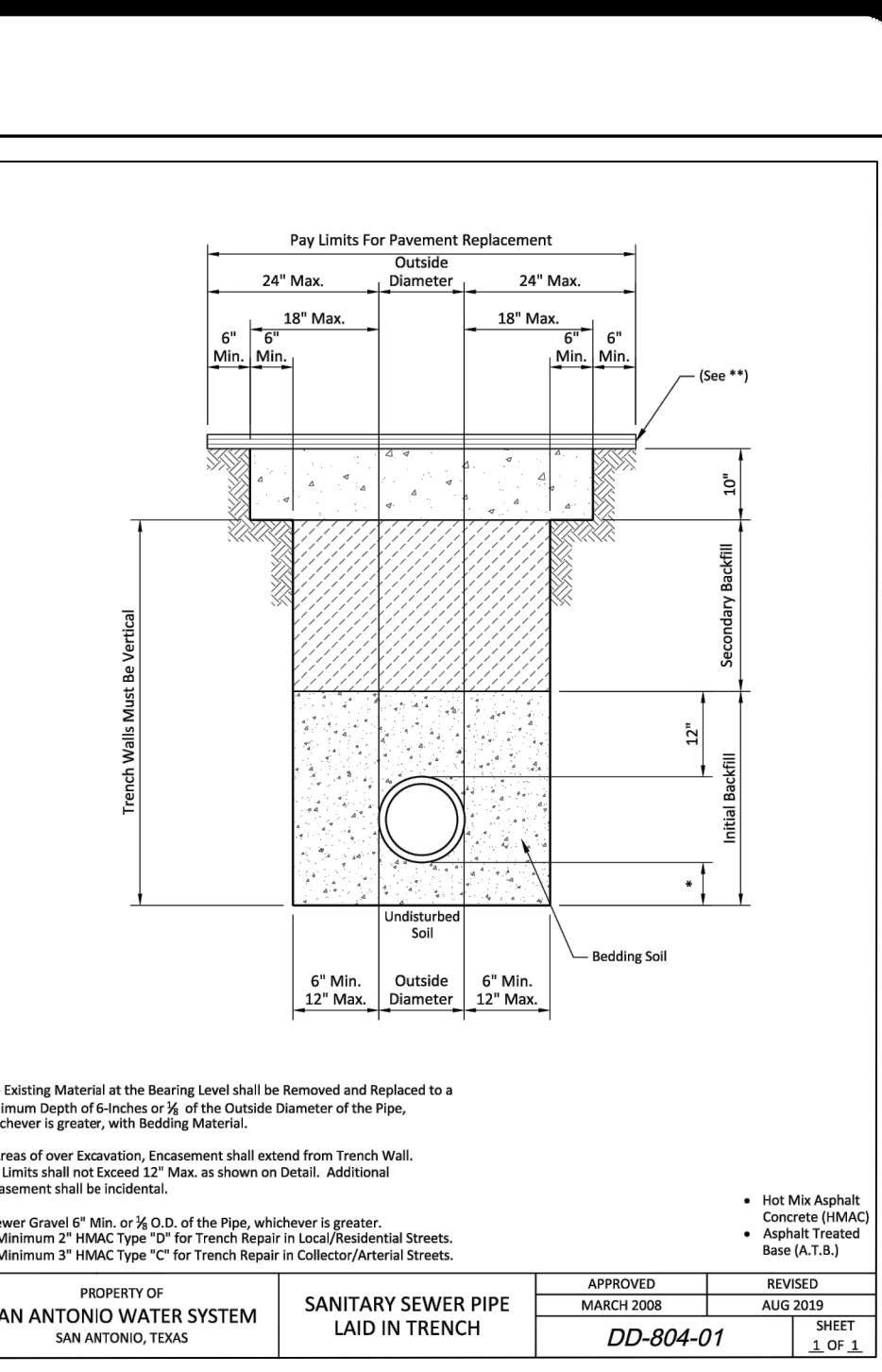
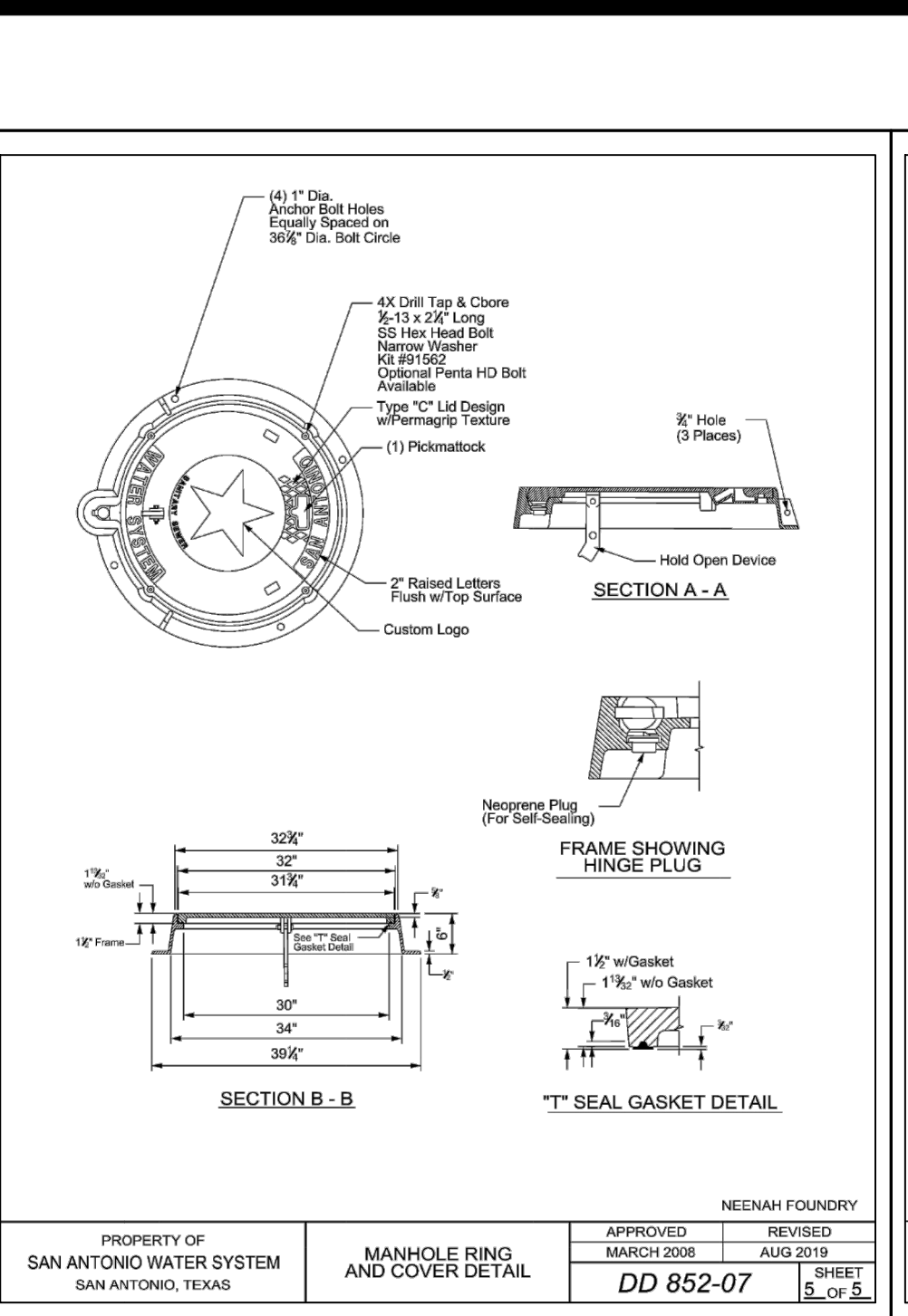
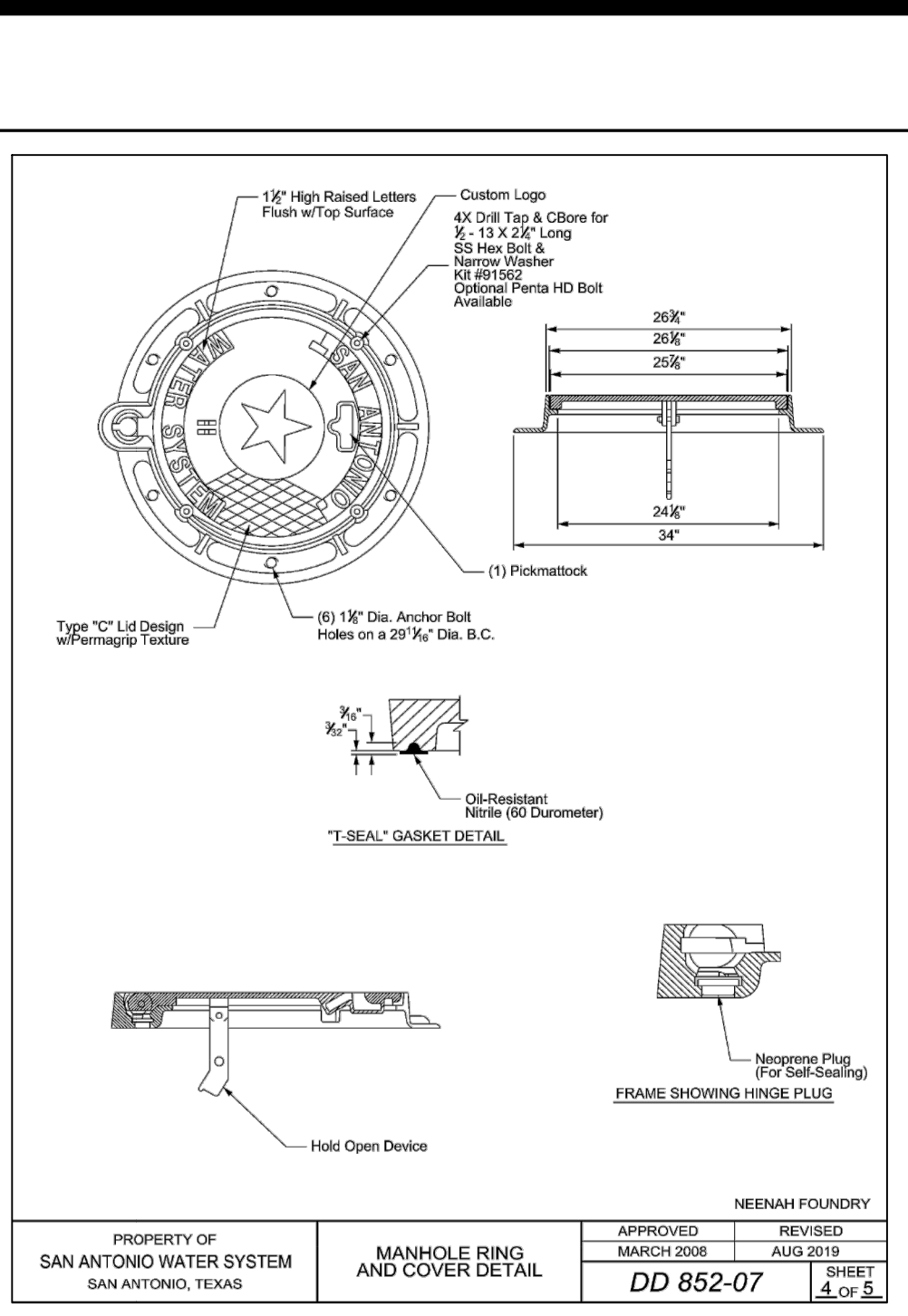
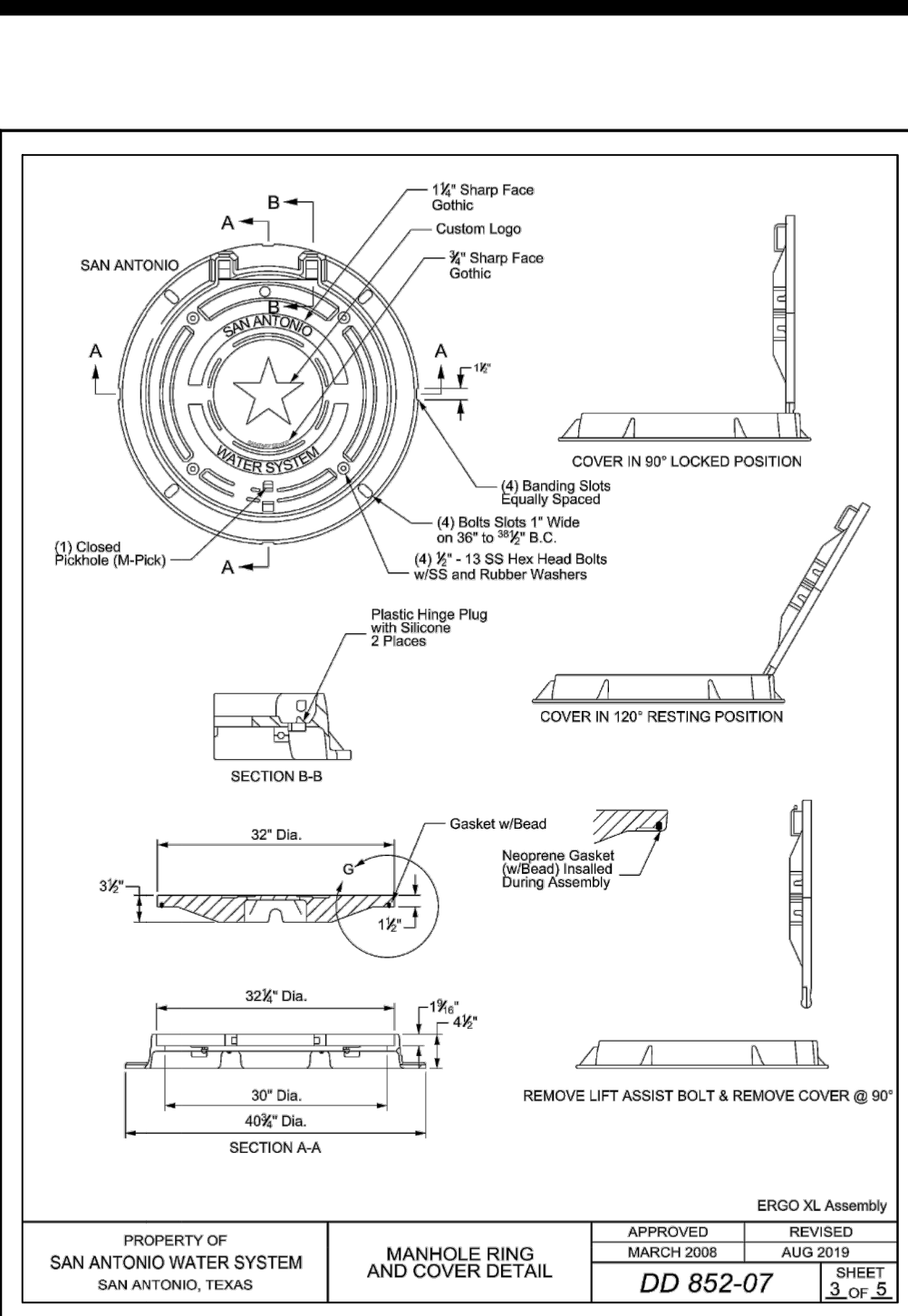
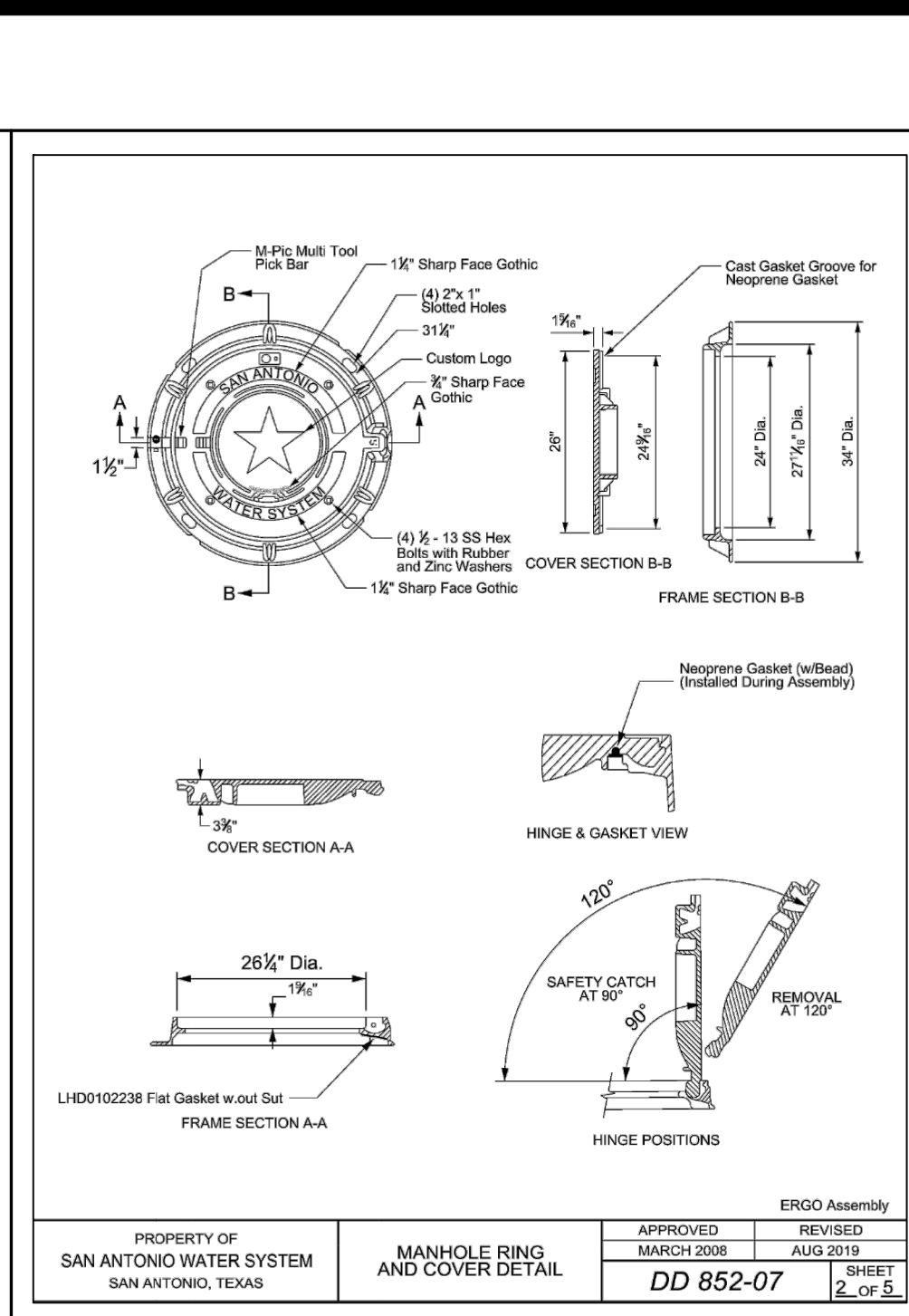
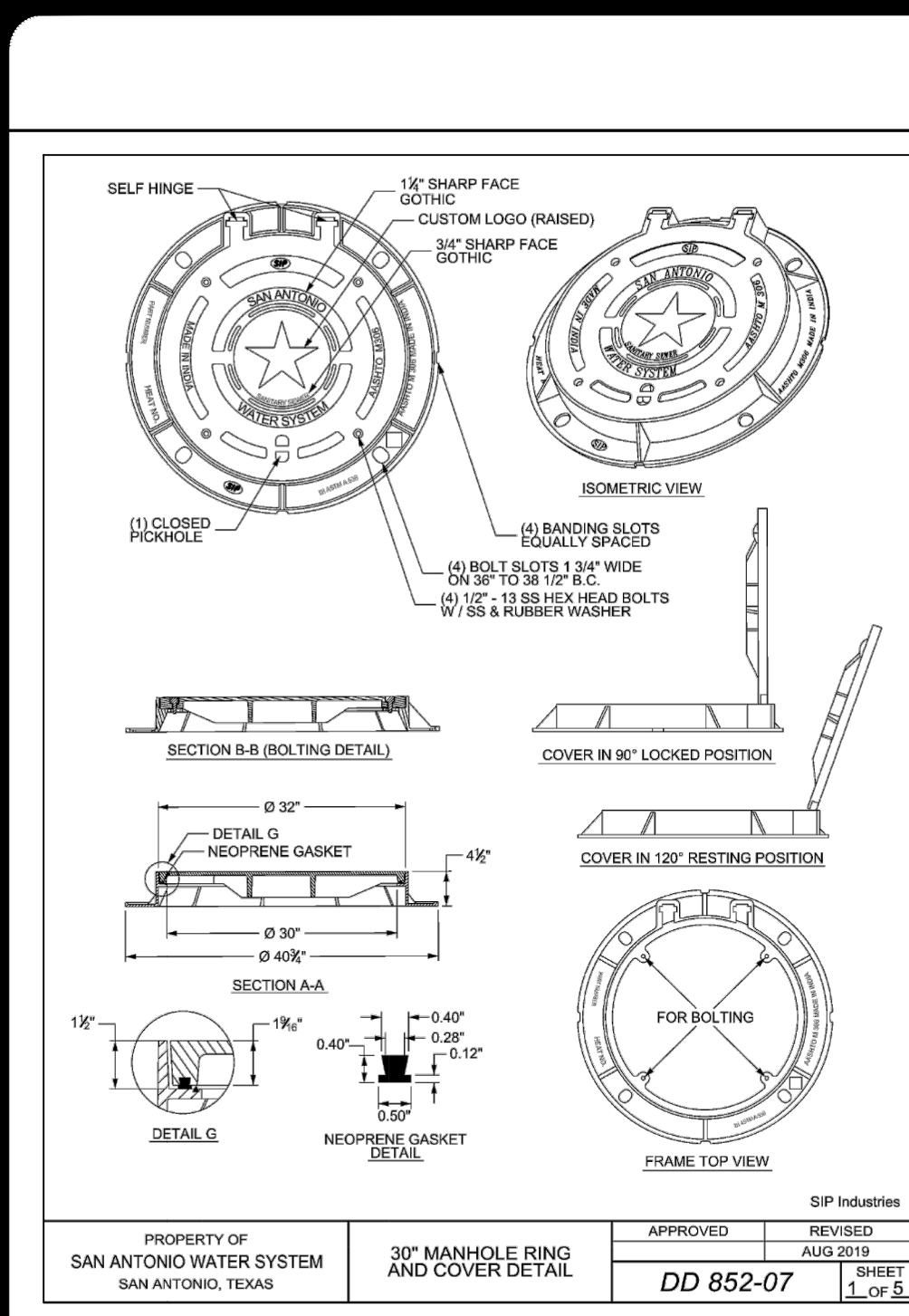
DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC  
 ADDRESS: 2722 WEST BITTERS ROAD  
 CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248  
 PHONE# (844) 860-7365 FAX#  
 SAWS BLOCK MAP# 110590 TOTAL EDU'S 98 TOTAL ACREAGE 10.33  
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 NUMBER OF LOTS 98 SAWS JOB NO. 26-1515

**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS

SS LINE B PLAN & PROFILE (STA 1+00.00 TO 12+00.00)

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE MARCH 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C5.03





DATE: \_\_\_\_\_

NO. REVISION: \_\_\_\_\_

Jon Adame  
 3/27/26

**PAPE-DAWSON**  
 2000 NW LOOP #101 SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #4701 TEXAS SURVEYING FIRM # 1022860

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
 SANITARY SEWER DETAILS

PLAT NO. 25-11800523  
 JOB NO. 13832-51  
 DATE MARCH 2026  
 DESIGNER CB  
 CHECKED JA DRAWN CB  
 SHEET C5.10

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**SAWS CONSTRUCTION NOTES**  
(LAST REVISED JANUARY 2022)

**SAWS GENERAL SECTION**

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:

- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS"; TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER"; TAC TITLE 30 PART 1 CHAPTER 290.
- B. CURRENT TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND DRAINAGE.
- C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION".
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
- E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).

2. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE APPROVED COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP) FROM THE CONSULTANT AND HAS BEEN NOTIFIED BY SAWS CONSTRUCTION INSPECTION DIVISION TO PROCEED WITH THE WORK AND HAS ARRANGED A MEETING WITH THE INSPECTOR AND CONSULTANT FOR THE WORK REQUIREMENTS. WORK COMPLETED BY THE CONTRACTOR WITHOUT AN APPROVED COUNTER PERMIT AND/OR A GCP WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE EXPENSE OF THE CONTRACTORS AND/OR THE DEVELOPER.

3. THE CONTRACTOR SHALL OBTAIN THE SAWS STANDARD DETAILS FROM THE SAWS WEBSITE, [HTTP://WWW.SAWS.ORG/BUSINESS\\_CENTER/SPECS](http://www.saws.org/business_center/specs). UNLESS OTHERWISE NOTED WITHIN THE DESIGN PLANS.

4. THE CONTRACTOR IS TO MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973, ON NOTIFICATION PROCEDURES THAT WILL BE USED TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS 48 HOURS PRIOR TO BEGINNING ANY WORK.

5. LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR AT LEAST 1 WEEK PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.

6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES AT LEAST 1-2 WEEKS PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS FACILITIES. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

- SAWS UTILITY LOCATES: [HTTP://WWW.SAWS.ORG/SERVICE/LOCATES](http://www.saws.org/service/locates)
- COSA DRAINAGE (210) 207-0724 OR (210) 207-6026
- COSA TRAFFIC SIGNAL OPERATIONS (210) 206-8480
- COSA TRAFFIC SIGNAL DAMAGES (210) 207-3951
- TEXAS STATE WIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION IF DAMAGES ARE MADE AS A RESULT OF THE PROJECT'S CONSTRUCTION.

8. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) AND/OR BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT REQUIREMENTS.

9. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN EXCAVATING NEAR TREES.

10. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN PERMIT.

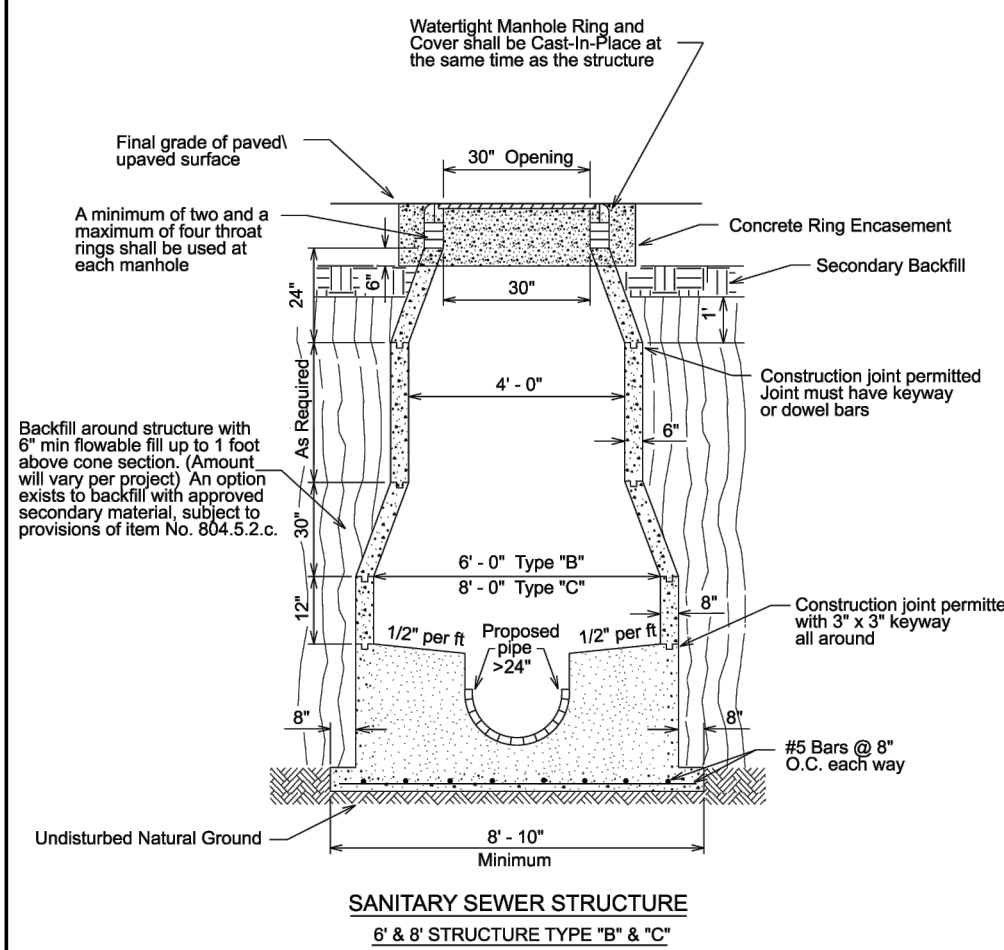
11. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS. REQUEST SHOULD BE SENT TO [CONSTWORKREQ@SAWS.ORG](mailto:CONSTWORKREQ@SAWS.ORG).

WEEKEND WORK: CONTRACTORS ARE REQUIRED TO NOTIFY THE SAWS INSPECTION CONSTRUCTION DEPARTMENT 48 HOURS IN ADVANCE TO REQUEST WEEKEND WORK. REQUEST SHOULD BE SENT TO [CONSTWORKREQ@SAWS.ORG](mailto:CONSTWORKREQ@SAWS.ORG).

ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT HOLIDAY/WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION.

12. COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE 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.

13. A COPY OF ALL TESTING REPORTS SHALL BE FORWARDED TO SAWS CONSTRUCTION INSPECTION DIVISION.



Notes:  
The channel depth shall be at least equal to the largest pipe diameter. Structures shall be designed and installed on all mains greater than 24" in diameter.

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	TYPICAL SANITARY SEWER STRUCTURE	APPROVED JANUARY 2022	REVISED APRIL 2024
		DD-650-01	SHEET 1 of 1

**SAWS SEWER NOTES**

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:

- A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT (210) 233-2014. PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
- B. ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO.
- C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- D. CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS.
- E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
- F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISIONING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.

SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA, TCEQ AND/OR ANY OTHER FEDERAL, STATE OR LOCAL AGENCIES.

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.

2. IF BYPASS PUMPING IS REQUIRED, THE CONTRACTOR SHALL PERFORM SUCH WORK IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION FOR WATER AND SANITARY SEWER CONSTRUCTION, ITEM NO. 864, "BYPASS PUMPING".

3. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT (210) 233-2973 AT LEAST ONE WEEK IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.

4. SEWER PIPE WHERE WATER LINE CROSSES SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241, TAC 217.53 AND TCEQ 290.44C(4)(E). CONTRACTOR SHALL CENTER A JOINT OF 160 PSI PRESSURE RATED PVC AT THE PROPOSED WATER CROSSING.

5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY; IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS. (NSPI)

6. SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER: ALL SPILLS, OVERFLOWS, OR DISCHARGES OF WASTEWATER, RECYCLED WATER, PETROLEUM PRODUCTS, OR CHEMICALS MUST BE REPORTED IMMEDIATELY TO THE SAWS INSPECTOR ASSIGNED TO THE COUNTER PERMIT OR GENERAL CONSTRUCTION PERMIT (GCP). THIS REQUIREMENT APPLIES TO EVERY SPILL, OVERFLOW, OR DISCHARGE REGARDLESS OF SIZE.

7. MANHOLE AND ALL PIPE TESTING (INCLUDING THE TV INSPECTION) MUST BE PERFORMED AND PASSED PRIOR TO FINAL FIELD ACCEPTANCE BY SAWS CONSTRUCTION INSPECTION DIVISION, AS PER THE SAWS SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION.

8. ALL PVC PIPE OVER 14 FEET OF COVER SHALL BE EXTRA STRENGTH WITH MINIMUM PIPE STIFFNESS OF 115 PSI.

**PROJECT SEWER NOTES**

1. ALL RESIDENTIAL SEWER SERVICE LATERALS ARE 6" DIA. AND SHALL BE EXTENDED TO 10' PAST THE PROPERTY LINE AND GAPPED AND SEALED. CONTRACTOR SHALL INSTALL A 2" X 4" STAKE, FOUR (4) FEET LONG, TWO (2) FEET DEEP INTO THE GROUND AT THE END OF EACH SERVICE. NO SEPARATE PAY ITEM.

2. CONTRACTOR TO INSTALL CLEANOUTS AT THE END OF ALL SEWER LATERALS, PER LATERAL DETAIL SHEET C5.10.

3. NO VERTICAL STACKS ALLOWED FOR ANY LOTS UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

4. ALL 6" SEWER LATERALS WILL BE SET AT 2% GRADE FROM THE MAIN TO THE PROPERTY LINE.

5. WHEN HORIZONTAL DISTANCE BETWEEN SEWER PIPES AND WATER MAIN IS LESS THAN 9 FOOT OF SEPARATION, SEWER MAIN SHALL BE INSTALLED WITH 150 PSI (MIN) PRESSURE PIPE AND FITTINGS IN ACCORDANCE WITH SAWS CONSTRUCTION CRITERIA FOR CONSTRUCTION OF SEWER MAINS IN THE VICINITY OF WATER MAINS.

6. CONTRACTOR SHALL ENSURE THAT MANHOLES OUTSIDE OF PAVED AREAS ARE SET WITH TOP ELEVATIONS 6" ABOVE FINISHED GRADE WITH CONCRETE RING ENCASUREMENT.

7. ALL SEWER PIPES SHALL BE 8" PVC (SDR 26), UNLESS OTHERWISE NOTED.

8. CONTRACTOR IS TO VERIFY EXISTING INVERT OF EXISTING SANITARY SEWER MAINS AND ALERT ENGINEER IMMEDIATELY OF ANY DIFFERENCE FROM INVERT SHOWN ON PLANS.

9. CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. ANY FENCE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.

10. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.

11. CONCRETE RING ENCASUREMENT TO BE INSTALLED ON ALL MANHOLES AND, WITHIN LIMITS OF PAVEMENT, BE INSTALLED TO THE TOP OF THE BASE LAYER WITH A MINIMUM OF 2" OF ASPHALT ON TOP OF THE RING ENCASUREMENT.

12. MANHOLE OPENING INCREASED TO 30" AS PER TAC CHAPTER 217.55.

13. ALL SEWER PIPE LATERALS SHALL BE SDR 26 (CLASS 160) PVC PIPE.

14. IF THE GIVEN TOP OF MANHOLE ELEVATION DOES NOT AGREE ON ACTUAL GROUND SURFACE OR FINISH PAVEMENT, THE CONTRACTOR SHALL ADJUST ELEVATIONS SUCH THAT THE TOP OF MANHOLE SHALL BE 0.5' ABOVE EXISTING GROUND, OR FLUSH TO FINISH ASPHALT PAVEMENT.

15. ALL MANHOLES CONSTRUCTED OVER THE EDWARDS AQUIFER RECHARGE ZONE SHOULD BE WATERTIGHT.

**SEWERSHED - WEST**

DEVELOPER'S NAME: MERITAGE HOMES OF TEXAS, LLC
ADDRESS: 2722 WEST BITTERS ROAD
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78248
PHONE# (844) 860-7365 FAX#
SAWS BLOCK MAP# 110580 TOTAL EDU'S 98 TOTAL ACREAGE 10.33
TOTAL LINEAR FOOTAGE OF PIPE: 8" 2978 LF PLAT NO. 25-11800523
NUMBER OF LOTS 98 SAWS JOB NO. 26-1515

DATE	
NO.	REVISION

**PAPE-DAWSON**  
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028800

**JON D. ADAME**  
PROFESSIONAL ENGINEER  
82567  
3/27/26

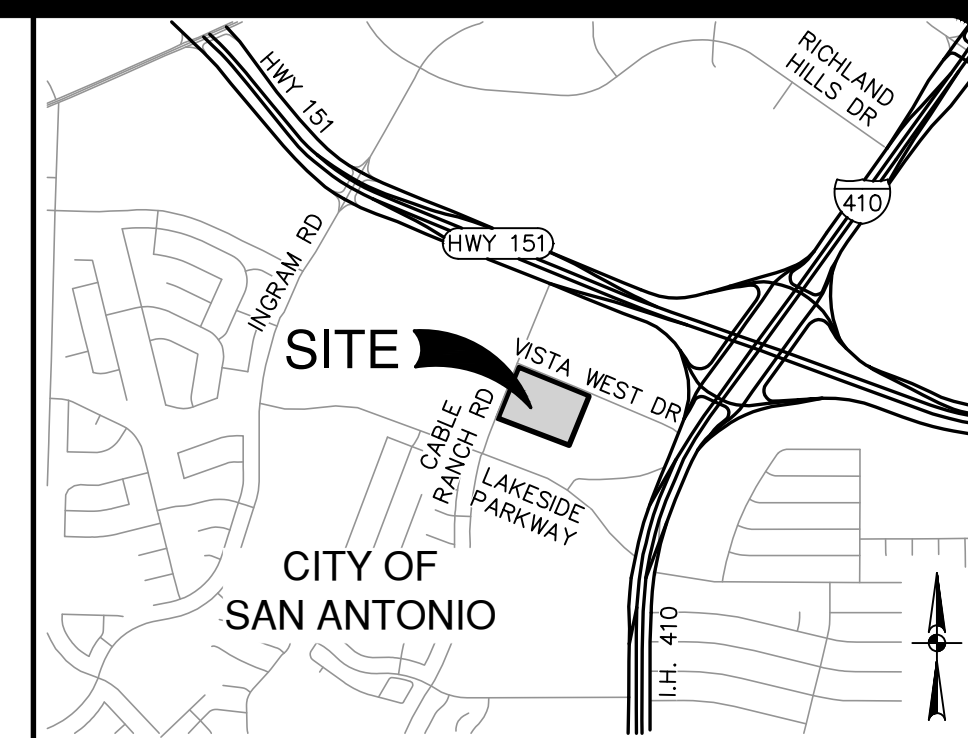
**WESTOVER VILLAGE TOWNHOMES**  
SAN ANTONIO, TEXAS

**SANITARY SEWER NOTES**

PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	MARCH 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C5.11



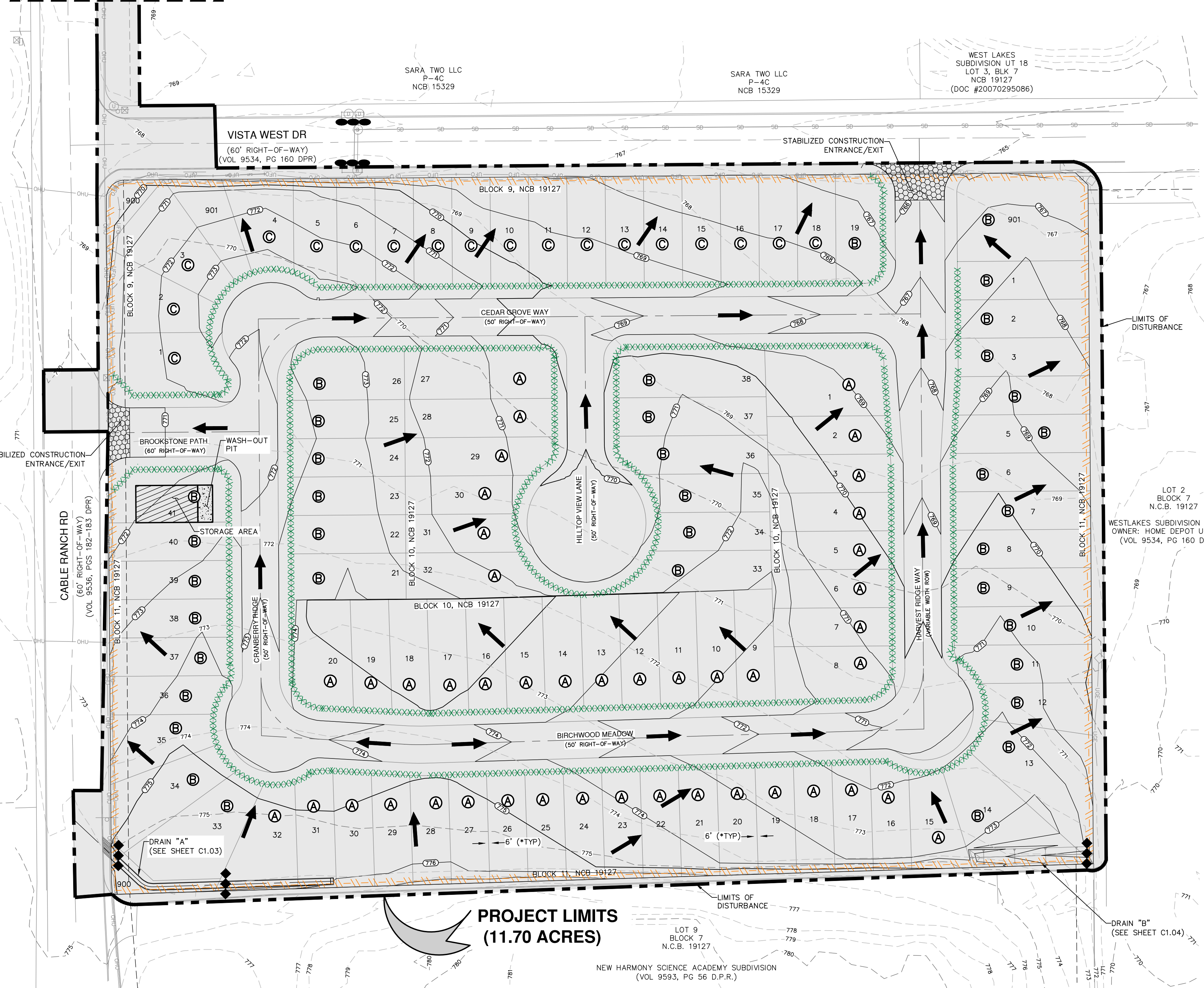




DATE: \_\_\_\_\_  
 NO. REVISION: \_\_\_\_\_

STATE OF TEXAS  
 JON D. ADAME  
 82567  
 LICENSED PROFESSIONAL ENGINEER  
 Jon D. Adame  
 2-5-26

MATCHLINE "A" ~ SEE THIS SHEET



**PROJECT LIMITS  
 (11.70 ACRES)**

**SWPPP LEGEND**

- PROJECT LIMITS: - - - - - 976
- EXISTING CONTOUR: - - - - - 970
- PROPOSED CONTOUR: - - - - - 970
- FLOW ARROW: →
- SILT FENCE - 2638 LF: - - - - -
- SILT FENCE (PHASE II) (4222 LF): - - - - -
- ROCK BERM: [Symbol]
- GRAVEL FILTER BAGS: [Symbol]
- LIMITS OF DISTURBED AREA (±11.70 AC): [Symbol]
- STABILIZED CONSTRUCTION ENTRANCE/EXIT (FIELD LOCATE): [Symbol]
- CONSTRUCTION EQUIPMENT, VEHICLE & MATERIALS STORAGE AREA (FIELD LOCATE): [Symbol]
- CONCRETE TRUCK WASH-OUT PIT (FIELD LOCATE): [Symbol]
- AREA TO BE REVEGETATED PER TPDES PERMIT REQUIREMENTS: [Symbol]

- GENERAL NOTES**
- DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.
  - CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT PIT, AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO BE DETERMINED IN THE FIELD.
  - STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO BE MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. ALL MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATED BY THE RESPONSIBLE PARTY.
  - RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS BY USE OF ADEQUATE FENCING, IF NECESSARY.
  - ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO BE MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES.
  - FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION PREVENTION PLAN.
  - STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD BE CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL CLARITY.
  - AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT BE COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT AREAS, EMBANKMENT SLOPES, ETC. WILL BE STABILIZED PER APPLICABLE PROJECT SPECIFICATIONS.
  - BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES TO COINCIDE WITH THE DISTURBANCE OF UPGRADE AREAS.
  - BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE THE WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES REQUIREMENTS.
  - UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION, AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.
  - WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHALL VERIFY THAT SUFFICIENT VEGETATION EXISTS. OTHERWISE, CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.
  - SHADED AREA [Symbol] DENOTES LIMITS OF DISTURBED AREAS. OTHER AREAS WITHIN THE PROJECT LIMITS WITH THE EXCEPTION OF A CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT A PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP3) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.
  - PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TXDOT RIGHT-OF-WAY WITH TXDOT.
  - CPS ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITIES FOR ON-SITE CONSTRUCTION AND OFF-SITE FEED TO THE PROJECT.

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

**EXHIBIT 2**

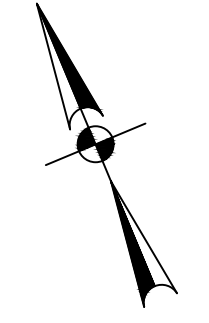
**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS  
**STORM WATER POLLUTION PREVENTION PLAN**

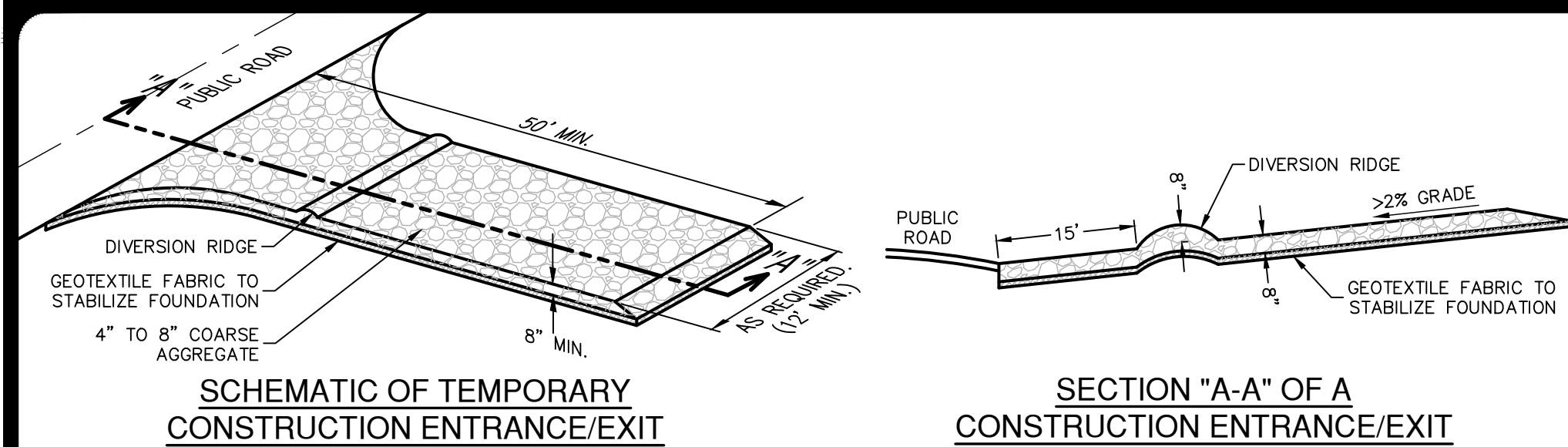
PLAT NO.	25-11800523
JOB NO.	13832-51
DATE	FEBRUARY 2026
DESIGNER	CB
CHECKED	JA DRAWN CB
SHEET	C8.00

**PAPE-DAWSON**  
 2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

US HIGHWAY 151

MATCHLINE "A" ~ SEE THIS SHEET





**SCHEMATIC OF TEMPORARY CONSTRUCTION ENTRANCE/EXIT**

**SECTION "A-A" OF A CONSTRUCTION ENTRANCE/EXIT**

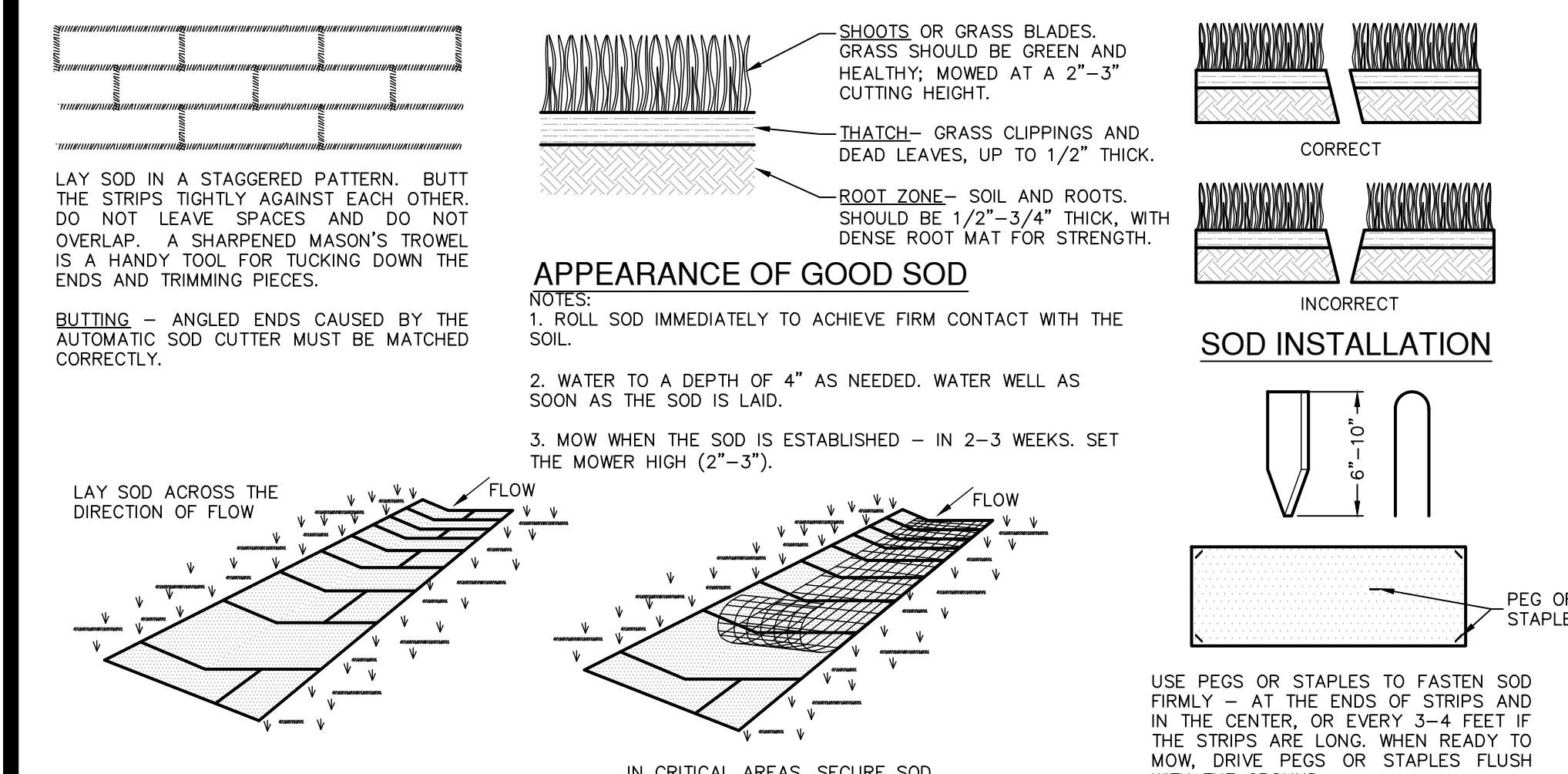
**MATERIALS**

1. THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8-INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD<sup>2</sup>, A MULLEN BURST RATING OF 140 LB/IN<sup>2</sup>, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

**INSTALLATION**

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

**STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL**



**APPEARANCE OF GOOD SOD**

**NOTES:**

1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.
2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.
3. MOW WHEN THE SOD IS ESTABLISHED - IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

**SOD INSTALLATION**

USE PEGS OR STAPLES TO FASTEN SOD FIRMLY - AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3-4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.

**GENERAL INSTALLATION (VA. DEPT. OF CONSERVATION, 1992)**

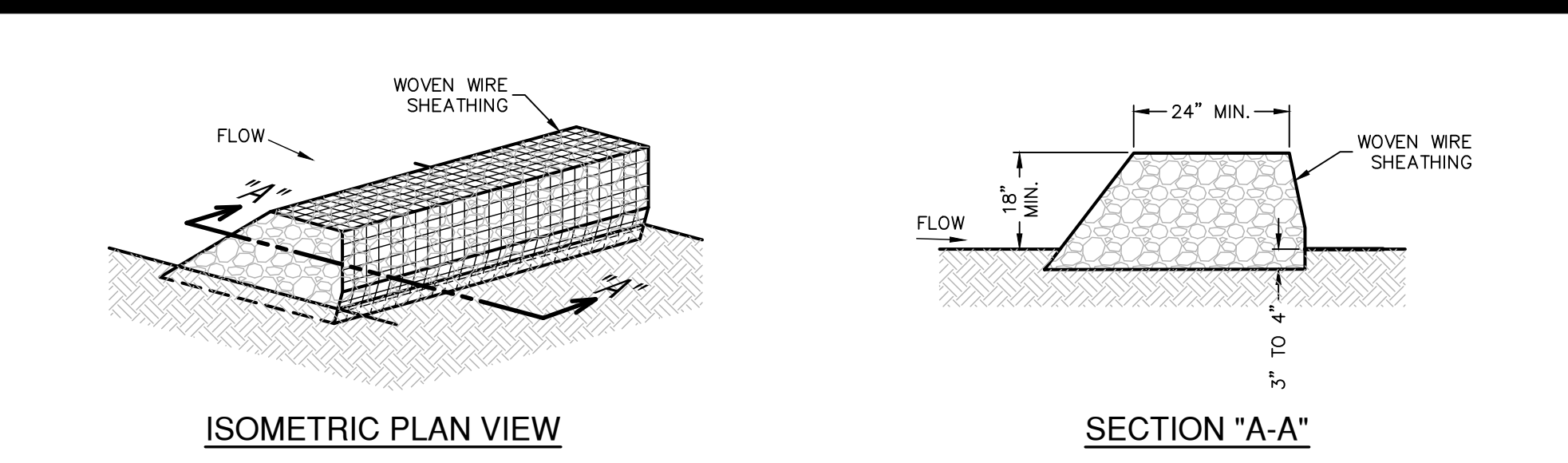
1. SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.
2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.
3. THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).
4. ON SLOPES 3:1 OR GREATER, OR WHERE EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).
5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROWS AND SOIL.
6. AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET.
7. UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4 INCHES.
8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

**INSPECTION AND MAINTENANCE GUIDELINES**

1. SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.
2. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

**SOD INSTALLATION DETAIL**

NOT-TO-SCALE



**ISOMETRIC PLAN VIEW**

**SECTION "A-A"**

**ROCK BERMS**

THE PURPOSE OF A ROCK BERM IS TO SERVE AS A CHECK DAM IN AREAS OF CONCENTRATED FLOW, TO INTERCEPT SEDIMENT-LADEN RUNOFF, DETAIN THE SEDIMENT AND RELEASE THE WATER IN SHEET FLOW. THE ROCK BERM SHOULD BE USED WHEN THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES. ROCK BERMS ARE USED IN AREAS WHERE THE VOLUME OF RUNOFF IS TOO GREAT FOR A SILT FENCE TO CONTAIN. THEY ARE LESS EFFECTIVE FOR SEDIMENT REMOVAL THAN SILT FENCES, PARTICULARLY FOR FINE PARTICLES, BUT ARE ABLE TO WITHSTAND HIGHER FLOWS THAN A SILT FENCE. AS SUCH, ROCK BERMS ARE OFTEN USED IN AREAS OF CHANNEL FLOWS (DITCHES, GULLIES, ETC.). ROCK BERMS ARE MOST EFFECTIVE AT REDUCING BERM LOAD IN CHANNELS AND SHOULD NOT BE SUBSTITUTED FOR OTHER EROSION AND SEDIMENT CONTROL MEASURES FURTHER UP THE WATERSHED.

**INSTALLATION**

1. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM TO A HEIGHT NOT LESS THAN 18".
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH THE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

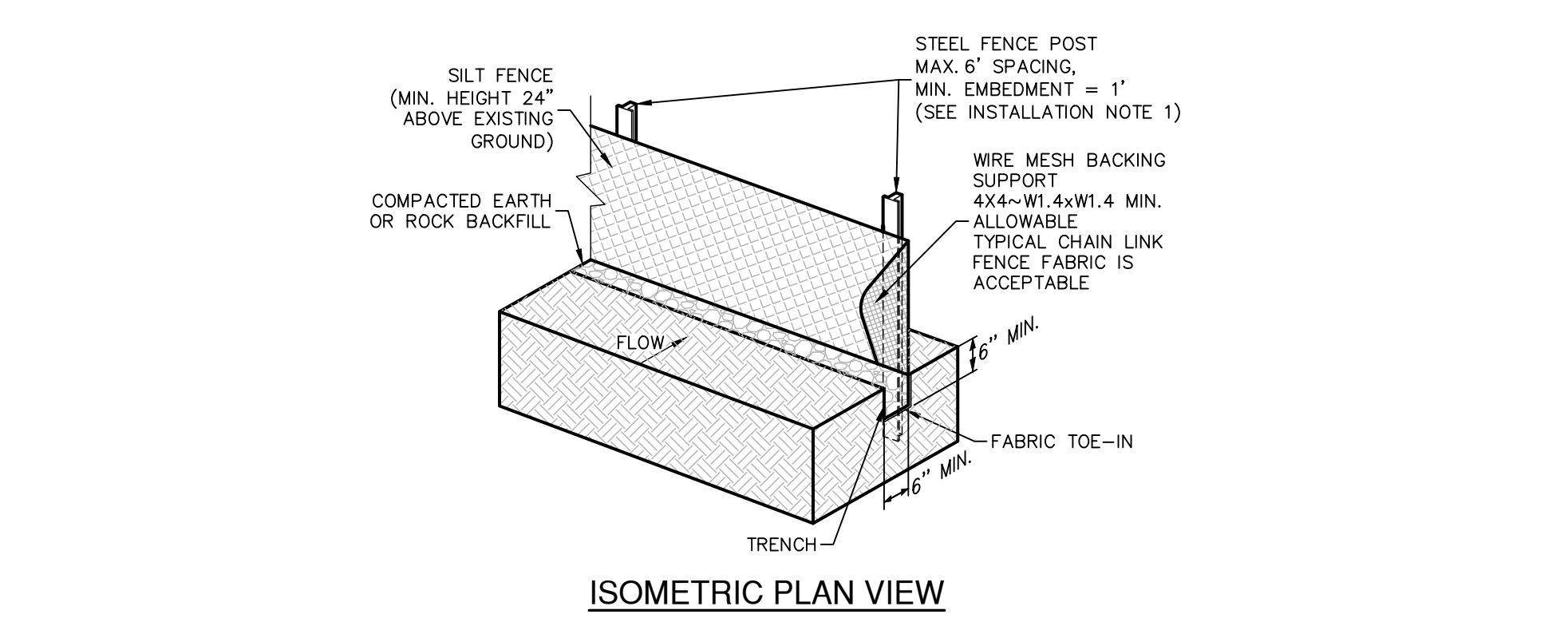
**COMMON TROUBLE POINTS**

1. INSUFFICIENT BERM HEIGHT OR LENGTH (RUNOFF QUICKLY ESCAPES OVER THE TOP OR AROUND THE SIDES OF BERM).
2. BERM NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND ONE SIDE).

**INSPECTION AND MAINTENANCE GUIDELINES**

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

**ROCK BERM DETAIL**



**ISOMETRIC PLAN VIEW**

**SILT FENCE**

A SILT FENCE IS A BARRIER CONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PREVENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, SILT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FROM DISTURBED AREAS. THEY CAUSE RUNOFF TO POND, ALLOWING HEAVIER SOLIDS TO SETTLE OUT. IF NOT PROPERLY INSTALLED, SILT FENCES ARE NOT LIKELY TO BE EFFECTIVE.

THE PURPOSE OF A SILT FENCE IS TO INTERCEPT AND DETAIN WATER-BORN SEDIMENT FROM UNPROTECTED AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONCENTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST BE TAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED FLOW.

SILT FENCING WITHIN THE SITE MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION ACTIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUND AT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE OR AROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

**MATERIALS**

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN<sup>2</sup>, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NUMBER 30.

2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WEIGHT 1.25 LB/FT, AND BRINDELL HARDNESS EXCEEDING 40.

3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

**INSTALLATION**

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER, WHERE WATER CONCENTRATES. THE MAXIMUM SPACING SHOULD BE 6 FEET.

2. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE.

**COMMON TROUBLE POINTS**

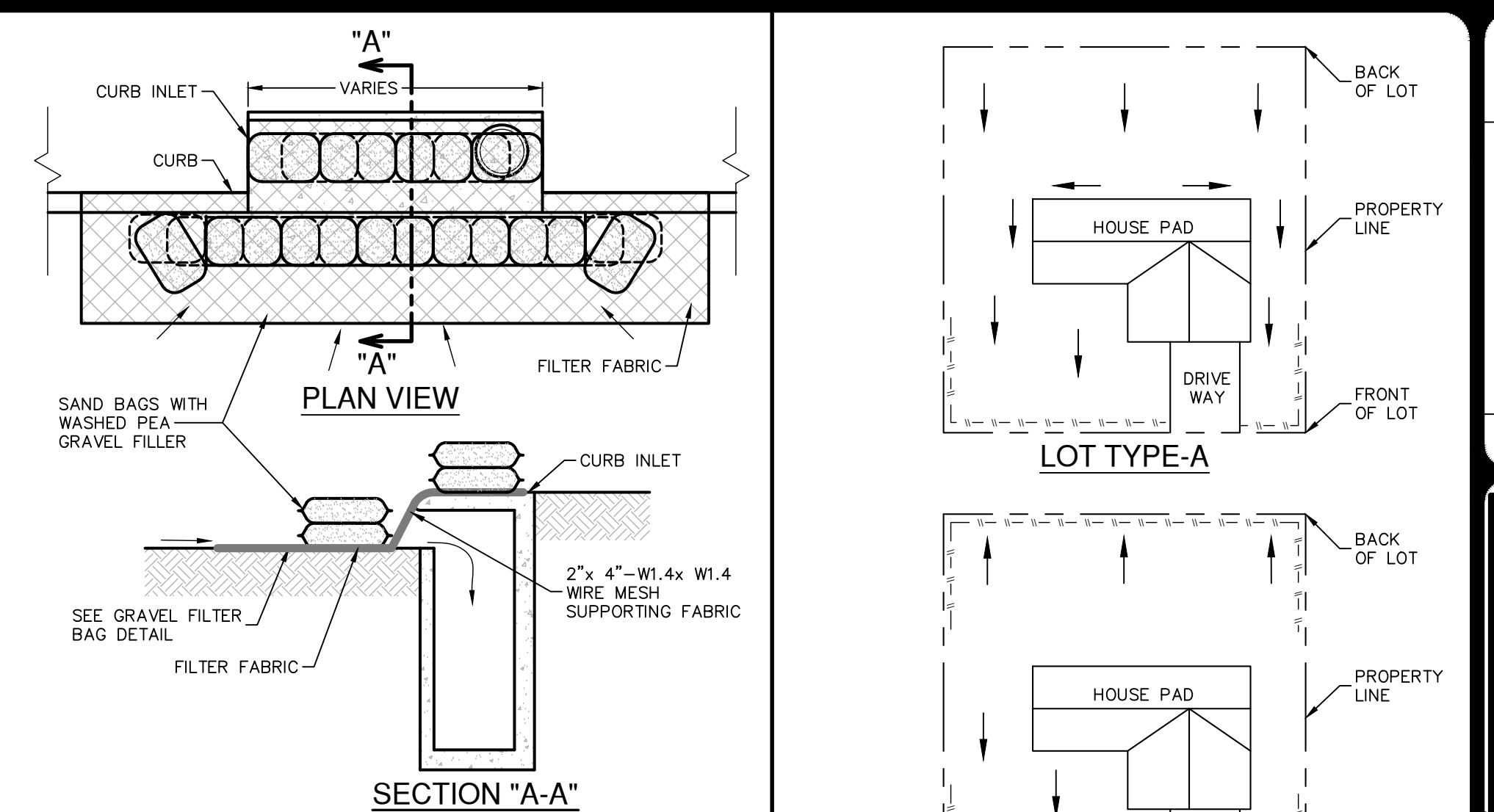
1. FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE.
2. FABRIC NOT SEALED SECURELY TO GROUND (RUNOFF PASSING UNDER FENCE).
3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING AROUND SIDES).
4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

**INSPECTION AND MAINTENANCE GUIDELINES**

1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

**CONCRETE TRUCK WASHOUT PIT DETAIL**

NOT-TO-SCALE



**BAGGED GRAVEL CURB INLET PROTECTION DETAIL**

NOT-TO-SCALE

**GENERAL NOTES**

1. CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE CURB AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.
2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

**INSPECTION AND MAINTENANCE GUIDELINES**

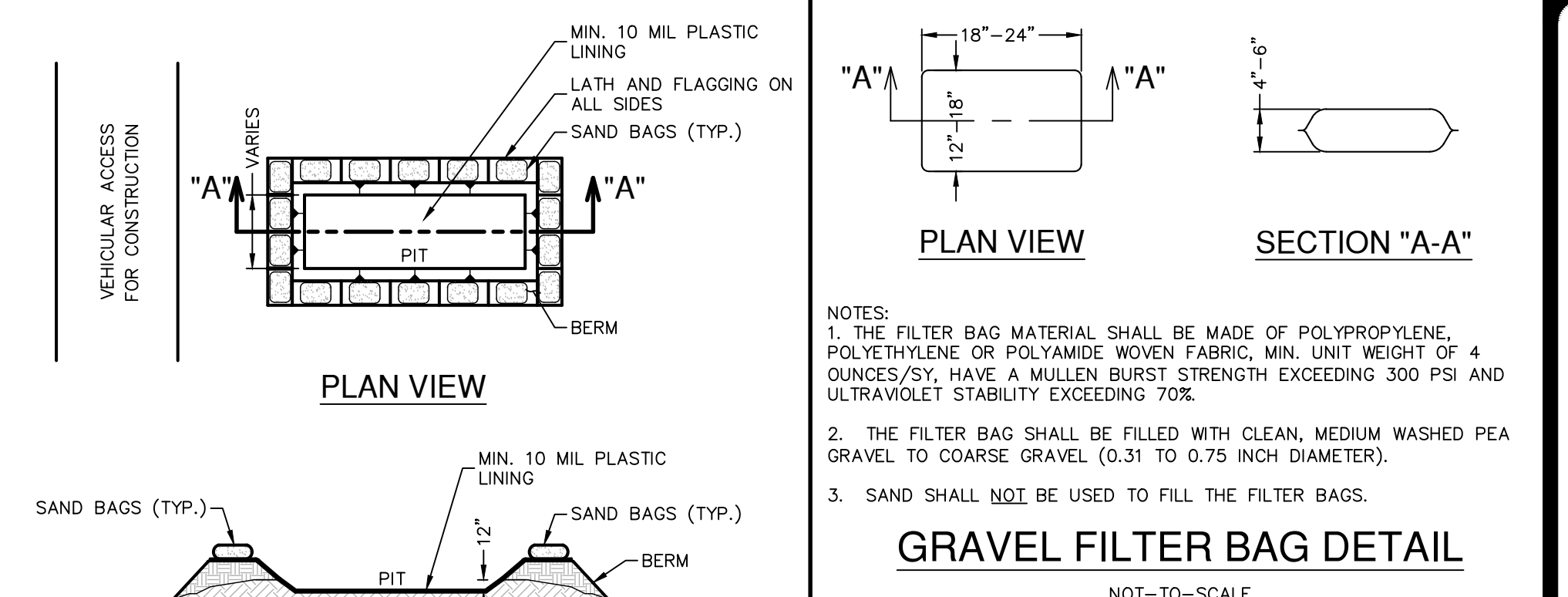
1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB.
4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING.
5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**TYPICAL HOUSE LOT LAYOUTS**

NOT-TO-SCALE

**LEGEND**

--- SILT FENCE DRAINAGE FLOW



**GRAVEL FILTER BAG DETAIL**

NOT-TO-SCALE

**GENERAL NOTES**

1. THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.
2. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER).
3. SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

**CONSTRUCTION STAGING AREA**

NOT-TO-SCALE

**LEGEND**

--- SILT FENCE FLOW ARROWS

**CONSTRUCTION STAGING AREA**

NOT-TO-SCALE

**MATERIALS**

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

**MAINTENANCE**

1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF.
2. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
3. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

**CONCRETE TRUCK WASHOUT PIT DETAIL**

NOT-TO-SCALE

DATE

NO. REVISION

STATE OF TEXAS  
 JON D. ADAME  
 82567  
 LICENSED PROFESSIONAL ENGINEER  
 2-5-26

**PAPE-DAWSON**

2000 NW LOOP #10 | SAN ANTONIO, TX 78213 | 210.375.9000  
 TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM # 10028800

**WESTOVER VILLAGE TOWNHOMES**  
 SAN ANTONIO, TEXAS

**STORM WATER POLLUTION PREVENTION PLAN DETAILS**

PLAT NO. 25-11800523

JOB NO. 13832-51

DATE FEBRUARY 2026

DESIGNER CB

CHECKED JA DRAWN CB

SHEET C8.10

EXHIBIT 3

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