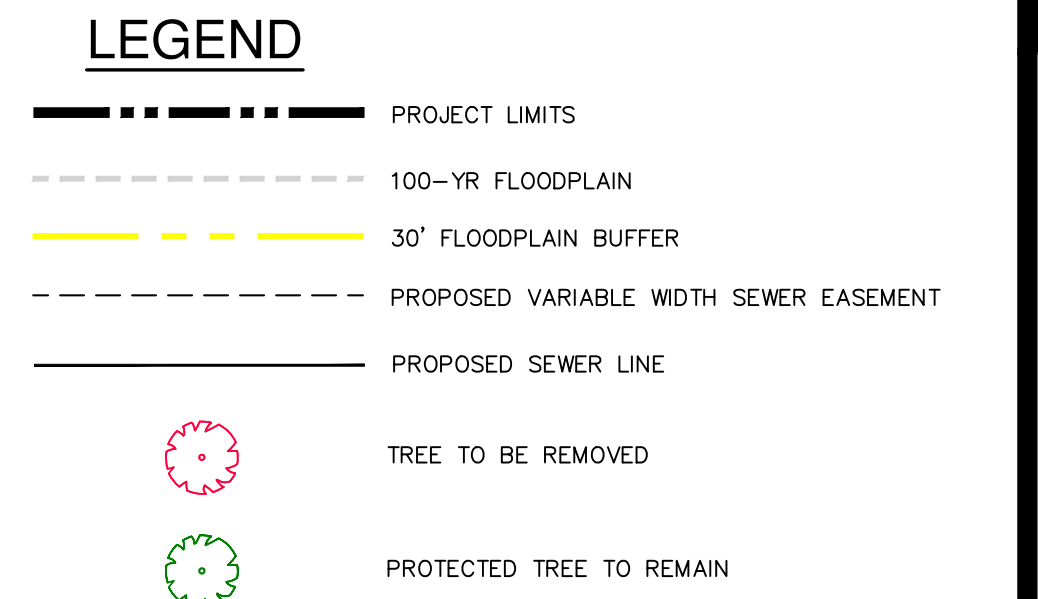
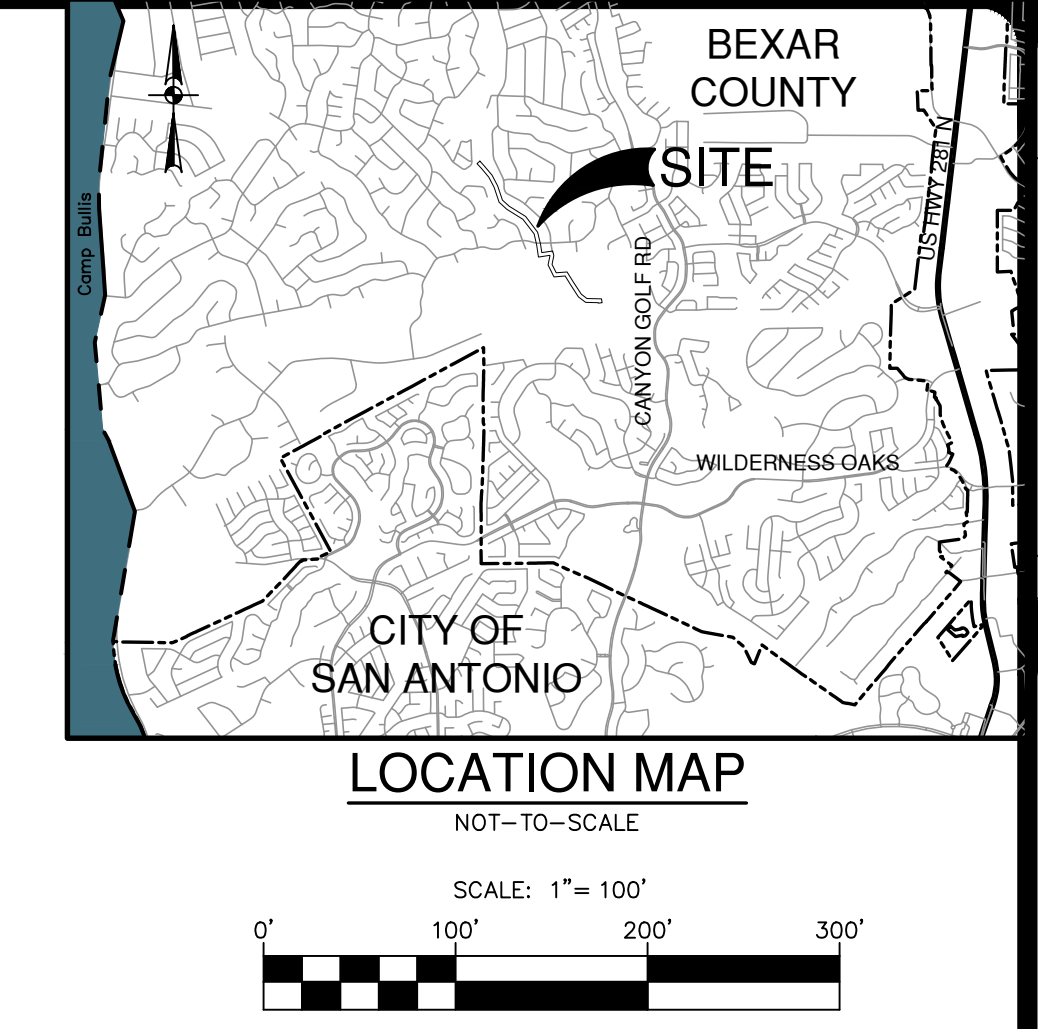
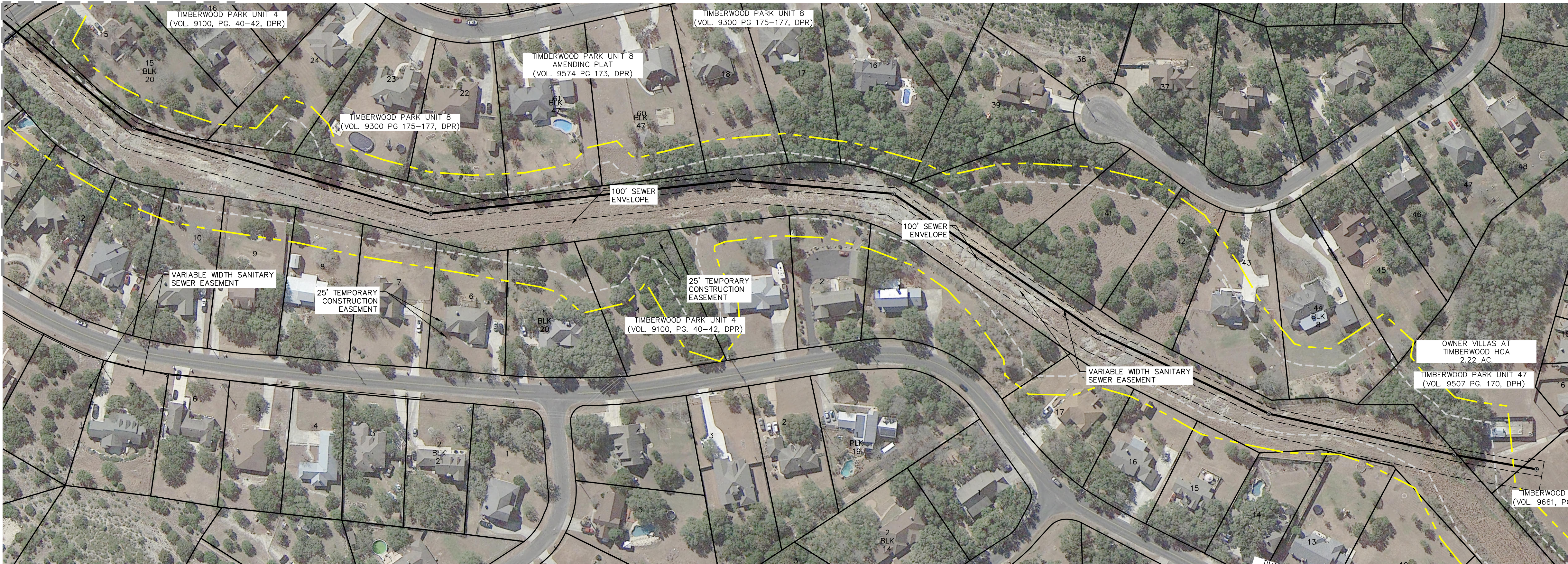


CITY OF SAN ANTONIO
DEVELOPMENT SERVICES DEPARTMENT
SERVICES
THE APPLICABLE ORDINANCE IS:
TREE PRESERVATION PERMIT
APPROVED FOR ONLY TREE REMOVAL
MUST PASS PRE-CONSTRUCTION AND TESTING INSPECTION PRIOR TO ANY SITE WORK
Walter J. Johnson
REGISTERED PROFESSIONAL ENGINEER
NO. 114,818



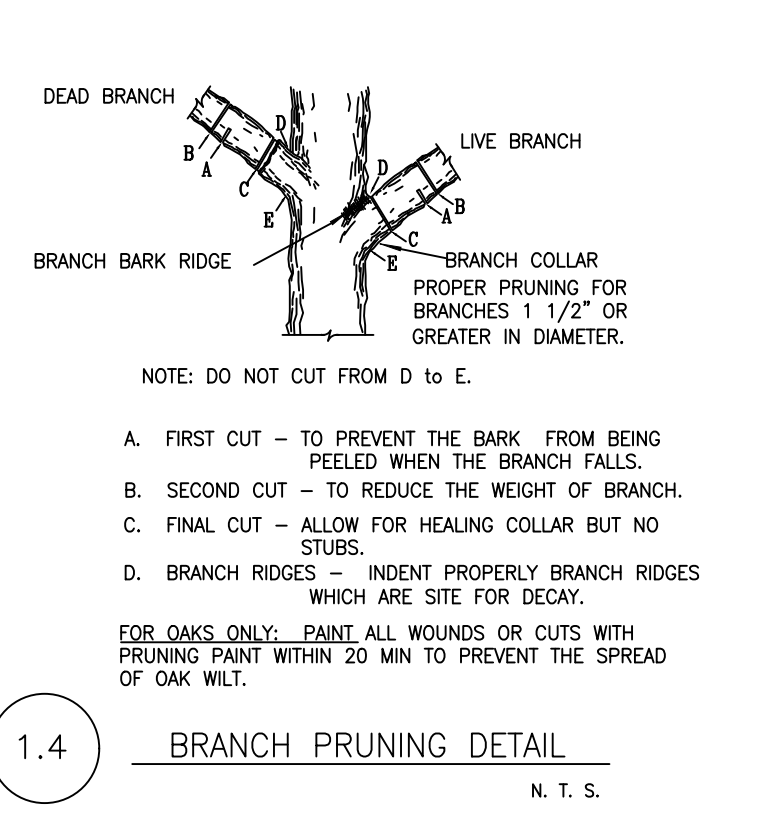
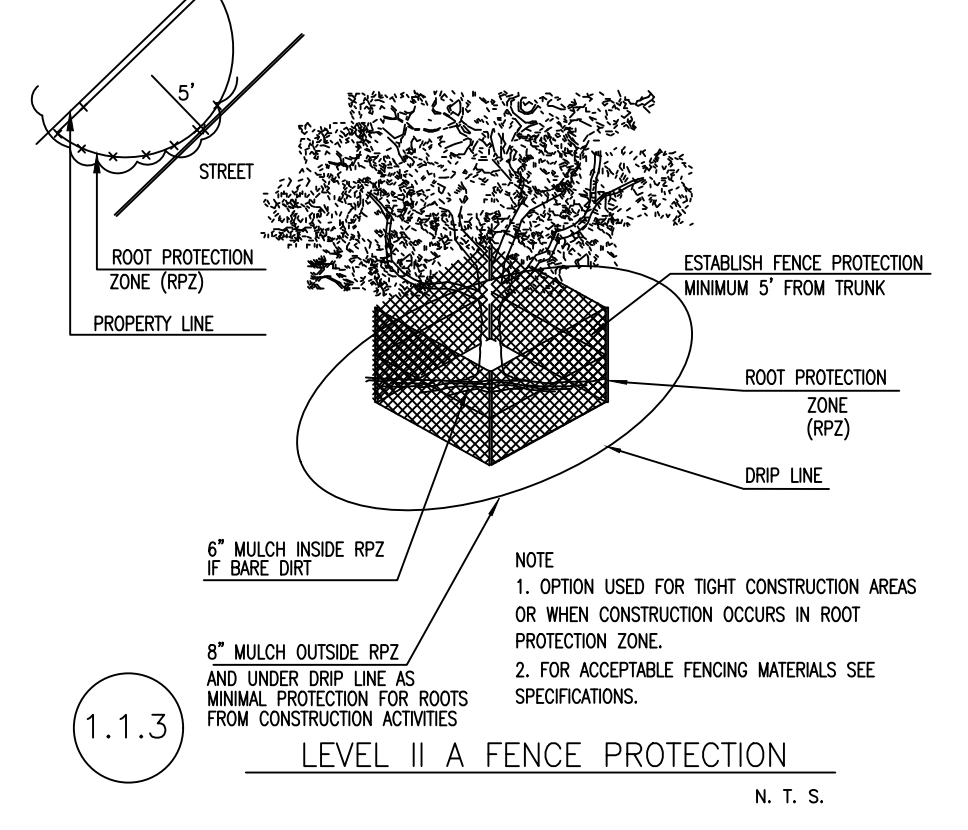
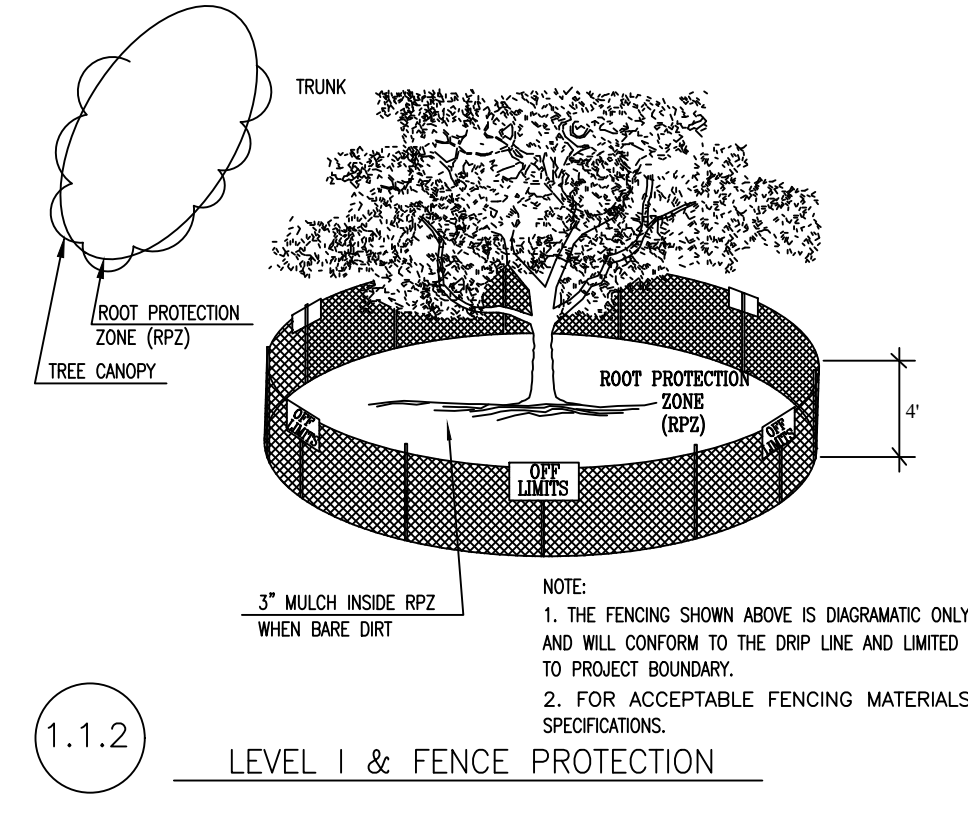
NO.	REVISION	DATE

PAPE-DAWSON ENGINEERS
2000 HW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #1008800



- TREE PRESERVATION NOTES:**
- ALL EXISTING TREES DENOTED ON THIS PLAN TO BE PRESERVED AS SHOWN AND PROTECTED AT THE ROOT PROTECTED ZONE (RPZ). THE RPZ SHALL BE DETERMINED BY TREE SIZE (RECOMMENDED 1' RADIUS FROM TRUNK FOR EVERY 1" DIAMETER OF TRUNK AT 4.5' FROM GROUND) WITH A MINIMUM 5' DIAMETER FROM THE TRUNK.
 - A (CHAIN LINK OR ORANGE MESH FENCE) BARRIER AROUND THE RPZ SHALL BE ERECTED AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED.
 - RPZ SHALL BE SUSTAINED IN A NATURAL STATE AND SHALL BE FREE FROM VEHICULAR OR MECHANICAL TRAFFIC; NO FILL, EQUIPMENT, LIQUIDS, OR CONSTRUCTION DEBRIS SHALL BE PLACED INSIDE THE PROTECTIVE ZONE.
 - THE RPZ SHALL BE COVERED WITH MULCH TO REDUCE MOISTURE STRESS.
 - ANY DAMAGE DONE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY. ALL WOUNDS TO TREES WILL BE PAINTED WITH PRUNING PAINT WITHIN 30 MINUTES AFTER DAMAGE. ROOTS EXPOSED DURING CONSTRUCTION OPERATIONS WILL BE CUT CLEANLY.
 - THE PROPOSED FINISHED GRADE AND ELEVATION OF LAND WITHIN THE ROOT PROTECTION ZONE OF ANY TREES TO BE PRESERVED SHALL NOT BE RAISED OR LOWERED MORE THAN 3". WELLING AND RETAINING METHODS ARE ALLOWED OUTSIDE THE RPZ.
 - THE RPZ SHALL REMAIN PVIOUS, I.E. GROUND COVER OR TURF AT COMPLETION OF LANDSCAPE DESIGN.
 - ALL BROKEN BRANCHES AND EXPOSED ROOTS OF SIGNIFICANT, HERITAGE OR MITIGATION TREES SHALL BE CUT CLEANLY AND IN ACCORDANCE WITH ANSI-300 STANDARDS. IN THE CASE OF OAK SPECIES, IN ORDER TO PREVENT INFECTION BY OAK WILT SPORES, WOUNDS MUST BE PAINTED WITH AN ACCEPTABLE WOUND DRESSING WITHIN THIRTY (30) MINUTES.

- GENERAL NOTES:**
- 2010 TREE ORDINANCE WITH TREE SURVEY - 100% HERITAGE TREES WITHIN EASEMENT ARE PROTECTED AND SHALL BE MITIGATED AT 3:1 RATIO.
 - ALL TREES SPECIES OF ASH (ALL FRAXINUS SPECIES), HACKBERRY (ALL CELTIS SPECIES), HUISACHE, ASHE JUNIPER, AND MESQUITE WILL BE MITIGATED AT 1:1.
 - TREES LOCATED OUTSIDE THE LIMITS OF THE TREE SURVEY WILL REMAIN UNDISTURBED.



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THE VILLAS AT TIMBERWOOD OFFSITE
SANITARY SEWER EXTENSION
SAN ANTONIO, TEXAS

PLAT NO.	-
JOB NO.	13370-00
DATE	JANUARY 2025
DESIGNER	RA
CHECKED	BL
DRAWN	RA
SHEET	1 OF 2

Date: July 26, 2024, 9:14 AM - User ID: rahvarez
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SIGNIFICANT TREES SAVED IN FLOODPLAIN					
3033	CEDAR	10	3152	LIVE OAK	9
3034	OAK	10	3153	LIVE OAK	16
3035	OAK	13	3154	LIVE OAK	11
3036	OAK	10	3159	LIVE OAK	9
3039	OAK	9	3160	LIVE OAK	8
3040	OAK	7	3161	LIVE OAK	6
3041	OAK	10	3162	LIVE OAK	11
3042	OAK	13	3163	LIVE OAK	10
3043	OAK	13	3166	LIVE OAK	9
3044	OAK	8	3167	LIVE OAK	8
3046	OAK	11	3171	LIVE OAK	21
3047	OAK	10	3173	LIVE OAK	16
3048	OAK	8	3176	LIVE OAK	10
3049	OAK	13	3177	LIVE OAK	12
3050	OAK	21	3178	LIVE OAK	8
3051	OAK	10	3179	LIVE OAK	21
3055	CEDAR	10	3181	LIVE OAK	9
3057	CEDAR	10	3182	LIVE OAK	8
3058	OAK	22	3185	LIVE OAK	6
3059	OAK	10	3186	ELM	6
3060	OAK	13	3187	LIVE OAK	6
3061	OAK	16	3188	LIVE OAK	8
3062	OAK	10	3189	LIVE OAK	7
3063	OAK	12	3190	LIVE OAK	12
3064	OAK	7	3191	LIVE OAK	8
3065	OAK	15	3192	LIVE OAK	12
3066	OAK	16	3193	LIVE OAK	13
3067	OAK	15	3194	LIVE OAK	18
3068	ELM	6	3195	LIVE OAK	11
3071	OAK	19	3197	LIVE OAK	12
3072	OAK	18	3198	LIVE OAK	22
3073	OAK	18	3199	LIVE OAK	21
3074	OAK	19	3200	LIVE OAK	17
3075	OAK	12	3202	LIVE OAK	7
3076	OAK	18	3203	LIVE OAK	9
3082	OAK	8	3204	LIVE OAK	10
3083	OAK	11	3205	LIVE OAK	6
3084	OAK	15	3206	LIVE OAK	10
3085	OAK	12	3207	LIVE OAK	10
3086	OAK	12	3208	LIVE OAK	11
3087	OAK	14	3209	LIVE OAK	8
3088	OAK	12	3210	LIVE OAK	7
3089	OAK	11	3211	LIVE OAK	10
3092	OAK	13	3212	LIVE OAK	9
3093	OAK	11	3213	LIVE OAK	8
3095	OAK	13	3214	LIVE OAK	8
3101	CEDAR	9	3215	LIVE OAK	8
3103	OAK	11	3216	LIVE OAK	6
3108	OAK	10	3217	LIVE OAK	10
3110	OAK	11	3219	ELM	8
3111	OAK	14	3220	LIVE OAK	8
3125	OAK	9	3221	LIVE OAK	8
3135	LIVE OAK	17	3223	LIVE OAK	7
3136	LIVE OAK	17	3224	LIVE OAK	7
3137	LIVE OAK	23	3225	LIVE OAK	7
3138	LIVE OAK	11	5559	OAK	12
3139	LIVE OAK	7	5560	OAK	11
3140	LIVE OAK	17	5561	OAK	10
3141	LIVE OAK	15	5566	OAK	9
3142	LIVE OAK	11	5567	OAK	9
3143	LIVE OAK	8	5568	OAK	6
3144	LIVE OAK	8	5569	OAK	6
3145	LIVE OAK	11	5570	OAK	7
3146	LIVE OAK	10	5572	OAK	5
3147	LIVE OAK	14	5573	OAK	9
3148	LIVE OAK	6	5574	OAK	17
3149	LIVE OAK	10	5575	OAK	12
3150	LIVE OAK	6	5576	OAK	11
3151	LIVE OAK	9			

SIGNIFICANT TREES REMOVED INSIDE FLOODPLAIN				
3056	CEDAR	13		
3070	CEDAR	12		
3077	OAK	13		
3078	CEDAR	11		
3079	OAK	16		
3080	OAK	16		
3081	OAK	16		
3090	OAK	12		
3091	OAK	13		
3094	OAK	11		
3096	OAK	8		
3097	OAK	12		
3098	OAK	10		
3099	OAK	14		
3100	OAK	7		
3105	OAK	7		
3106	OAK	10		
3107	OAK	7		
3109	OAK	14		
3165	OAK	13		
3170	CEDAR	10		
3183	ELM	13		
3184	LIVE OAK	7		
3196	LIVE OAK	15		

SIGNIFICANT TREES SAVED OUTSIDE FLOODPLAIN				
5455	OAK	8		
5458	OAK	8		
5460	OAK	10		
5461	OAK	8		
5462	OAK	8		
5463	OAK	9		
5464	OAK	7		
5465	OAK	7		
5466	OAK	6		
5467	OAK	5		
5468	OAK	8		
5469	OAK	7		
5470	OAK	6		
5471	OAK	8		
5472	OAK	12		
5473	OAK	4		
5474	OAK	4		
5475	OAK	7		
5476	OAK	11		
5477	OAK	10		
5478	OAK	9		
5479	OAK	8		
5480	OAK	14		
5482	OAK	10		
5483	OAK	10		
5484	OAK	9		
5485	OAK	8		
5486	OAK	11		
5487	OAK	11		
5488	OAK	11		
5489	OAK	6		
5490	OAK	10		
5491	OAK	9		
5492	OAK	9		
5493	OAK	9		
5494	OAK	9		
5495	OAK	6		
5496	OAK	9		
5497	OAK	17		
5498	OAK	7		
5499	OAK	7		
5500	OAK	12		
5501	OAK	18		
5502	OAK	17		
5503	OAK	9		
5504	OAK	8		
5505	OAK	8		
5506	OAK	8		
5508	OAK	10		
5509	OAK	10		
5510	OAK	9		
5511	OAK	10		
5512	OAK	12		
5513	OAK	9		
5514	OAK	7		
5515	OAK	8		
5516	OAK	7		
5517	OAK	12		
5520	OAK	8		
5521	OAK	8		
5522	OAK	10		
5523	OAK	7		
5524	OAK	10		
5525	OAK	8		
5526	OAK	8		
5527	OAK	8		
5528	OAK	8		
5529	OAK	7		
5530	OAK	9		
5531	OAK	6		
5532	OAK	6		
5533	OAK	8		
5534	OAK	8		
5535	OAK	10		
5536	OAK	9		
5537	OAK	10		
5538	OAK	11		
5539	OAK	9		
5540	ELM	6		
5546	OAK	7		
5547	OAK	8		
5551	OAK	15		
5552	OAK	11		
5553	OAK	11		
5554	OAK	10		
5555	OAK	10		
5556	OAK	9		
5557	ELM	9		
5558	OAK	8		

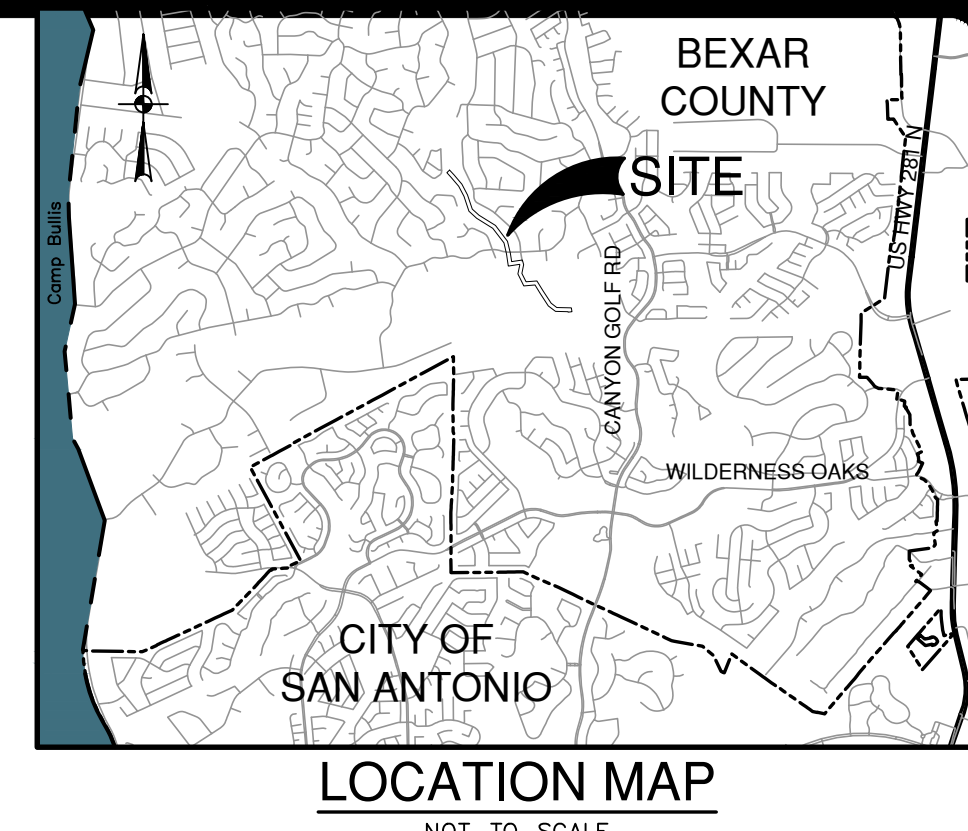
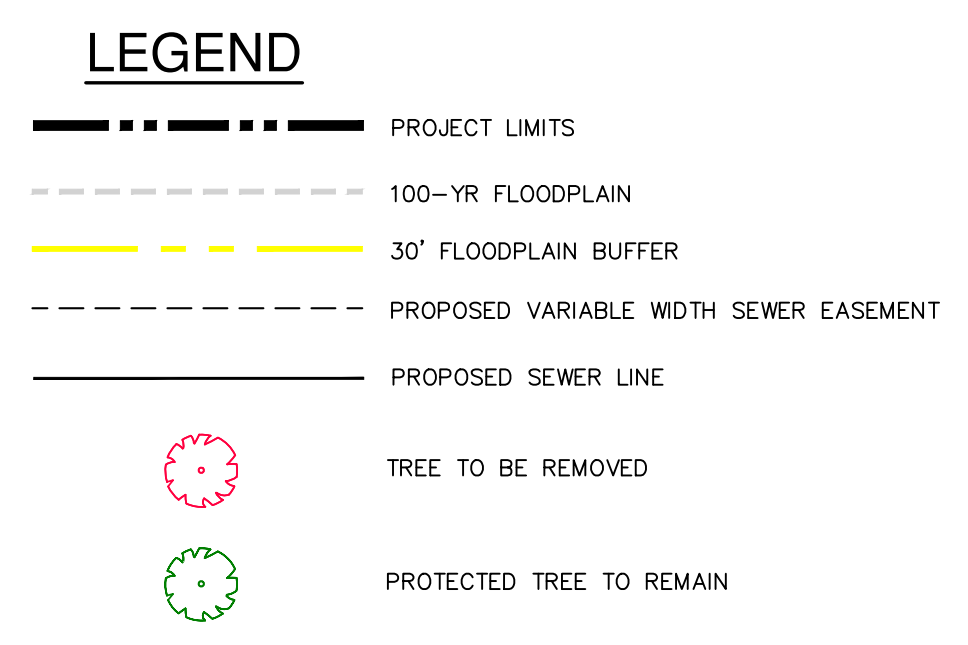
SIGNIFICANT TREES REMOVED OUTSIDE FLOODPLAIN				
5456	OAK	10		
5457	OAK	8		
5459	OAK	8		
5481	OAK	14		
5518	OAK	13		
5519	OAK	7		
5522	OAK	8		
5525	OAK	8		
5526	OAK	8		
5527	OAK	8		
5541	OAK	10		
5542	OAK	9		
5543	OAK	9		
5544	OAK	13		

SIGNIFICANT TREES SAVED IN FLOODPLAIN BUFFER				
3038	OAK	14		
3045	OAK	8		
3053	ELM	16		
3054	ELM	9		
3112	CEDAR	11		
3113	OAK	14		
3114	CEDAR	14		
3116	OAK	11		
3117	OAK	11		
3118	OAK	9		
3119	OAK	11		
3120	OAK	12		
3121	OAK	12		
3122	OAK	11		
3123	OAK	11		
3124	OAK	10		
5507	OAK	7		
5548	OAK	9		
5549	OAK	10		
5550	OAK	9		
5564	OAK	11		
5565	OAK	10		

SIGNIFICANT TREES REMOVED IN FLOODPLAIN BUFFER				
5562	OAK	11		
5563	OAK	10		

HERITAGE TREES SAVED IN FLOODPLAIN				
3052	OAK	29		
3069	OAK	24		
3102	OAK	24		
3170	LIVE OAK	31		
3172	LIVE OAK	31		
3180	LIVE OAK	26		
5571	OAK	32		

HERITAGE TREES SAVED IN FLOODPLAIN BUFFER				
3037	OAK	24		
3115	OAK	32		



SIGNIFICANT TREE PRESERVATION OUTSIDE FLOODPLAIN:
 TOTAL INCHES OF SIGNIFICANT TREES = 890 INCHES
 REQUIRED PRESERVATION = 890 INCHES X 25% = 222.5 INCHES
 TOTAL INCHES OF REMOVED SIGNIFICANT TREES = 133 INCHES
 TOTAL INCHES OF SAVED SIGNIFICANT TREES = 757 INCHES
 EXCESS MITIGATION = 890 INCHES - 222.5 INCHES = 534.5 INCHES
 PERCENTAGE OF TREES PRESERVED = 757/890 = 85.06%

HERITAGE TREE PRESERVATION OUTSIDE FLOODPLAIN:
 TOTAL INCHES OF HERITAGE TREE = 0 INCHES
 TOTAL INCHES OF REMOVED HERITAGE TREES = 0 INCHES
 MITIGATION OF HERITAGE TREES 3:1 = 0 INCHES X (3:1 RATIO) = 0 INCHES
 TOTAL INCHES OF SAVED HERITAGE TREES = 0 INCHES

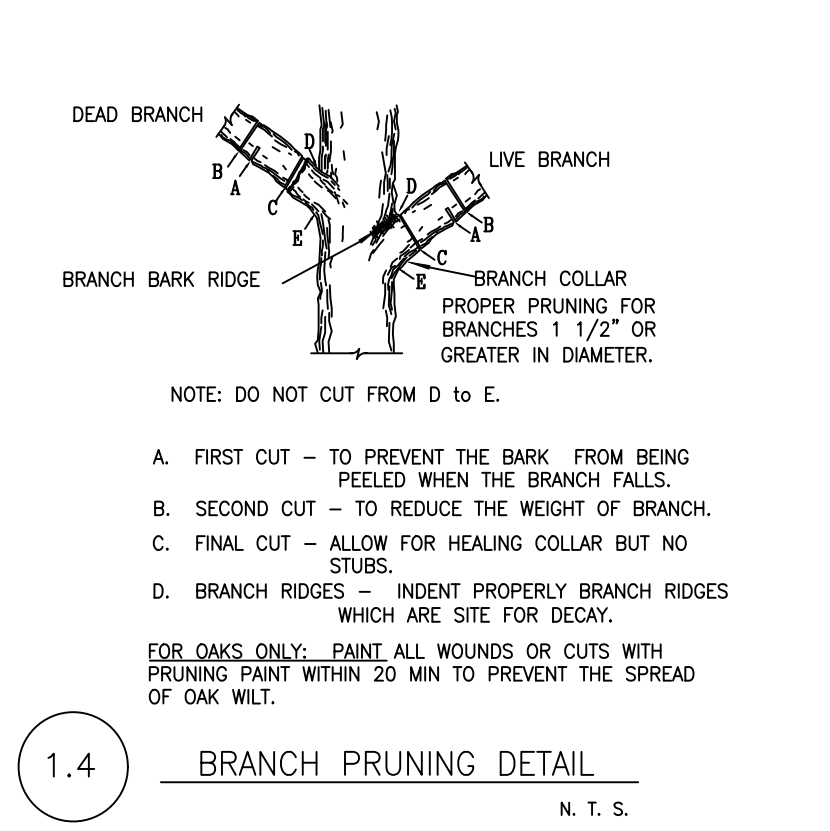
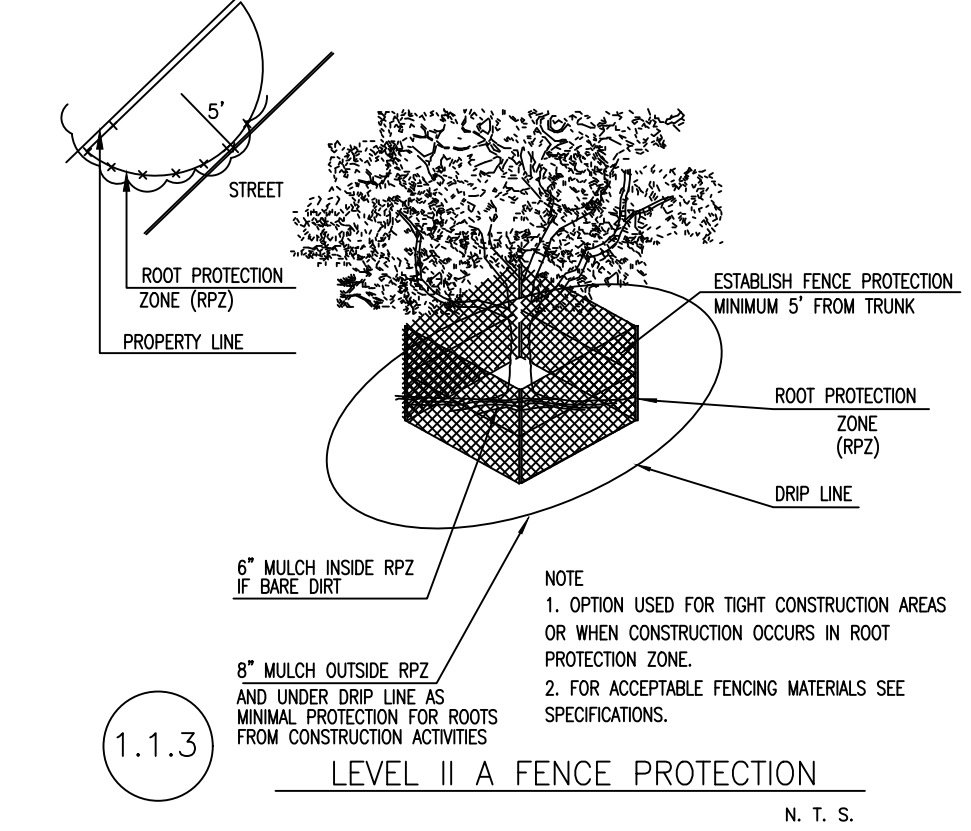
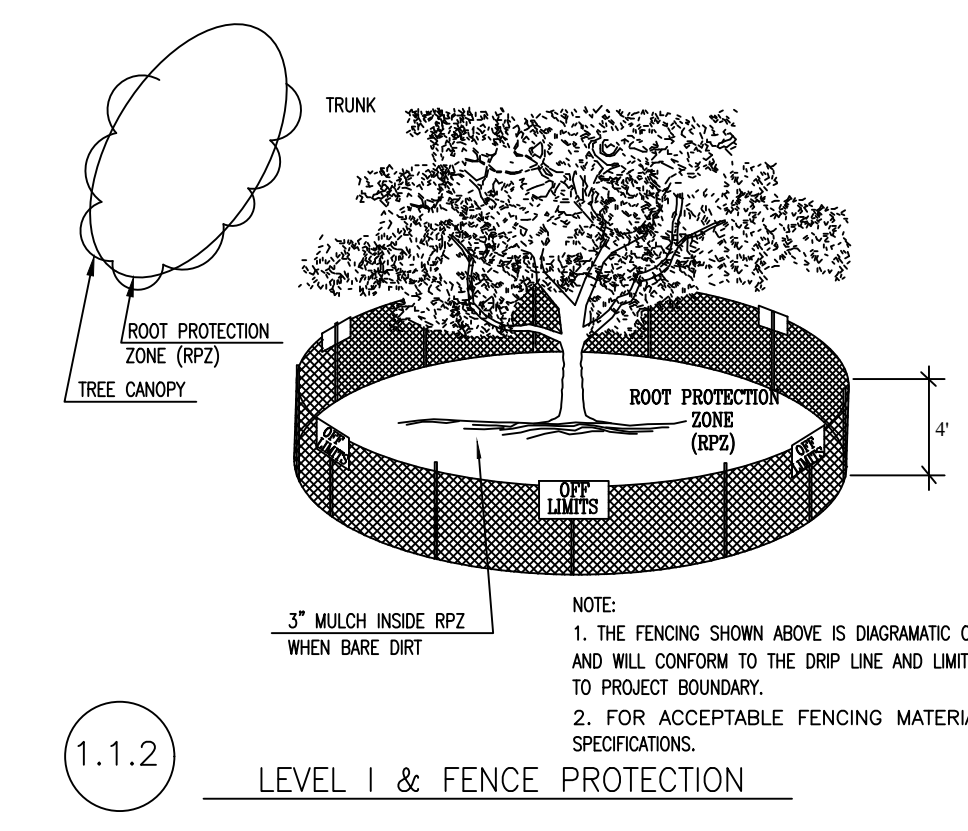
SIGNIFICANT TREE PRESERVATION IN FLOODPLAIN:
 TOTAL INCHES OF SIGNIFICANT TREES = 1,804 INCHES
 REQUIRED PRESERVATION = 1,804 INCHES X 80% = 1,443.2 INCHES
 TOTAL INCHES OF REMOVED SIGNIFICANT TREES = 280 INCHES
 TOTAL INCHES OF SAVED SIGNIFICANT TREES = 1,524 INCHES
 EXCESS MITIGATION = 1,524 INCHES - 1,443.2 INCHES = 80.8 INCHES
 PERCENTAGE OF TREES PRESERVED = 1,524/1804 = 84.48%

HERITAGE TREE PRESERVATION IN FLOODPLAIN:
 TOTAL INCHES OF HERITAGE TREE = 197 INCHES
 TOTAL INCHES OF REMOVED HERITAGE TREES = 0 INCHES
 MITIGATION OF HERITAGE TREES 3:1 = 0 INCHES X (3:1 RATIO) = 0 INCHES
 TOTAL INCHES OF SAVED HERITAGE TREES = 197 INCHES
 PERCENTAGE OF TREES PRESERVED = 197/197 = 100.0%

SIGNIFICANT TREE PRESERVATION IN FLOODPLAIN BUFFER:
 TOTAL INCHES OF SIGNIFICANT TREES INSIDE FLOODPLAIN BUFFER = 261 INCHES
 REQUIRED TREE PRESERVATION AREA = 261 INCHES X (80% MIN) = 208.8 INCHES
 TOTAL INCHES OF REMOVED SIGNIFICANT TREES = 21 INCHES
 TOTAL INCHES OF SAVED SIGNIFICANT TREES = 240 INCHES
 EXCESS INCHES PRESERVED = 240 INCHES - 208.8 INCHES = 31.2 INCHES
 PERCENTAGE OF TREES PRESERVED = 240/261 = 91.95%

HERITAGE TREE PRESERVATION IN FLOODPLAIN BUFFER:
 TOTAL INCHES OF HERITAGE TREES INSIDE FLOODPLAIN BUFFER = 56 INCHES
 TOTAL INCHES OF REMOVED HERITAGE TREES INSIDE FLOODPLAIN BUFFER = 0
 MITIGATION OF HERITAGE TREES 3:1 = 0 INCHES X (3:1 RATIO) = 0 INCHES
 TOTAL INCHES OF SAVED HERITAGE TREES INSIDE FLOODPLAIN BUFFER = 56 INCHES
 PERCENTAGE OF TREES PRESERVED = 56/56 = 100%

- GENERAL NOTES:**
- 2010 TREE ORDINANCE WITH TREE SURVEY - 100% HERITAGE TREES WITHIN EASEMENT ARE PROTECTED AND SHALL BE MITIGATED AT 3:1 RATIO.
 - ALL TREES SPECIES OF ASH (ALL FRAXINUS SPECIES), HACKBERRY (ALL CELTIS SPECIES), HUISACHE, ASHE JUNIPER, AND MESQUITE WILL BE MITIGATED AT 1:1.
 - TREES LOCATED OUTSIDE THE LIMITS OF THE TREE SURVEY WILL REMAIN UNDISTURBED.
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PAPE-DAWSON ENGINEERS