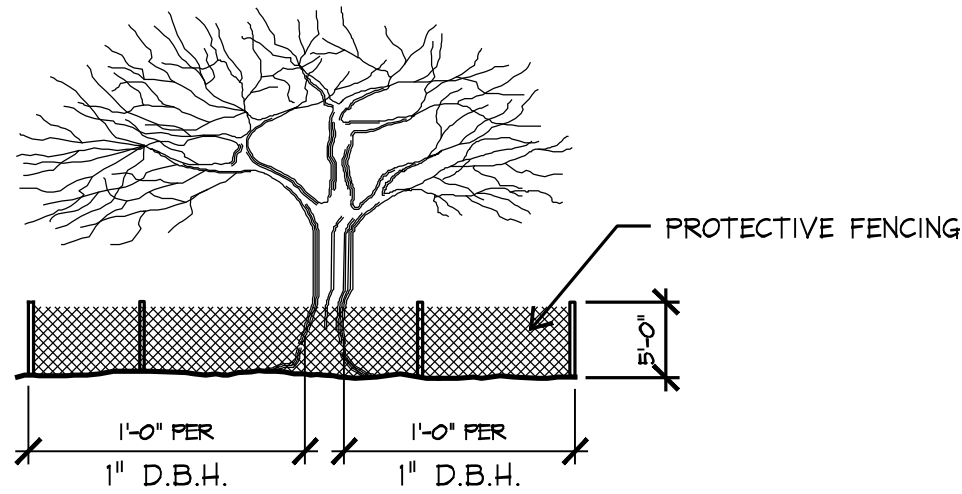


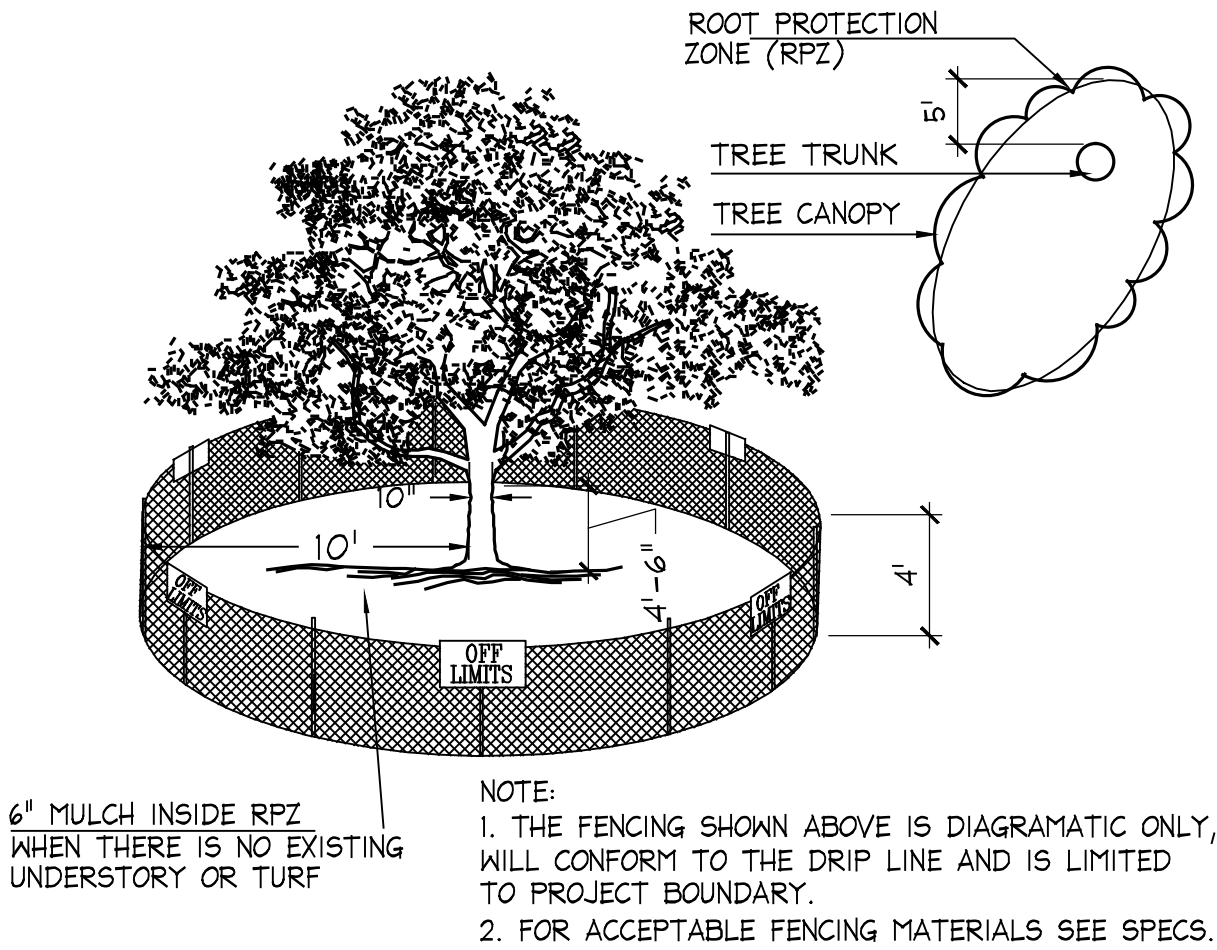
Z:\Temp\Trees\324x36.dwg

Steven's Ranch Recreation Center - TREE CALCULATIONS													
TREE SURVEY DATA			LAND ARCH		SIGNIFICANT			HERITAGE				***	NOTES
TAG	SPEC	DBH	LOC CODE	PLAN CODE	Understory *	Canopy **	Understory *	Canopy **	Understory *	Canopy **			
3001	OAK	7		P			6.5						
3002	OAK	6		P			6						
3003	OAK	7		P			6.5						
3004	OAK	6		P			6						
3005	OAK	7		P			6.5						
3006	ELM	6		P			6						
3007	OAK	7		P			6.5						
3008	OAK	7		P			6.5						
3009	OAK	7		P			7						
3010	OAK	7		P			7						
3011	OAK	7		P			7						
3012	OAK	7		P			6.5						
3013	OAK	8		P			7.5						
3014	OAK	7		P			7						
3015	OAK	8		P			8						
3016	OAK	7		P			7						
3017	OAK	8		P			7.5						
3018	OAK	7		P			6.5						
3019	OAK	6		P			6						
3020	OAK	6		P			6						
3023	OAK	8		P			7.5						
3024	OAK	7		P			6.5						
3025	OAK	6		P			6						
3026	OAK	7		P			7						
3027	OAK	9		P			8.5						
3028	OAK	9		P			9						
3029	OAK	7		P			7						
3030	OAK	7		P			7						
3031	OAK	7		P			7						
3032	OAK	6		P			6						
3033	OAK	6		P			6						
3035	OAK	6		P			6						
3036	OAK	8		P			7.5						
3037	OAK	7		P			7						
3038	OAK	9		P			8.5						
3039	OAK	7		P			6.5						
3040	OAK	7		P			6.5						
3041	OAK	6		P			6						
3042	OAK	7		P			7						
3043	OAK	6		P			6						
3044	OAK	7		P			7						
3045	OAK	7		P			7						
3046	OAK	8		P			7.5						
3047	OAK	8		P			7.5						
3048	OAK	6		P			6						
3049	OAK	7		P			6.5						
3050	OAK	8		P			7.5						
3051	OAK	7		P			6.5						
3052	OAK	7		P			6.5						
3053	OAK	7		P			6.5						
3054	OAK	10		P			9.5						
3055	OAK	7		P			7						
3056	OAK	6		P			6						
3057	OAK	10		P			9.5						
3058	OAK	7		P			7						
3059	OAK	9		P			9						
3060	OAK	10		P			10						
3061	OAK	6		P			6						
3062	OAK	6		P			6						
3063	ELM	15		P			14.5						
3066	OAK	7		P			6.5						
3067	OAK	7		P			6.5						
3068	OAK	8		P			7.5						
3069	OAK	7		P			7						
3070	OAK	9		P			9						
3071	OAK	8		P			7.5						
3072	OAK	8		P			7.5						
3073	OAK	7		P			6.5						
3074	OAK	7		P			7						
3075	OAK	7		P			7						
3076	OAK	7		P			6.5						
3077	OAK	7		P			7						
3078	OAK	6		P			6						
3079	ELM	6		P			6						
3080	OAK	7		P			6.5						
3081	OAK	7		P			6.5						
3082	OAK	6		P			6						
3083	ELM	7		P			6.5						
3084	OAK	6		P			6						
3085	OAK	6		P			6						
3086	OAK	6		P			6						
3087	OAK	7		P			6.5						
3088	OAK	6		P			6						
3089	OAK	6		P			6						
3090	OAK	7		P			6.5						
3091	OAK	7		P			7						
3092	OAK	8		P			7.5						
3093	OAK	8		P			8						
3094	OAK	7		P			6.5						
3095	OAK	7		P			6.5						
3096	OAK	6		P			6						
3097	OAK	6		P			6						
3098	OAK	10		P			10						
3099	OAK	8		P		8							
3100	OAK	7		P			6.5						
3101	OAK	8		P			7.5						
3102	OAK	8		P			8						
3103	OAK	10		P			9.5						
3104	OAK	16		P			15.5						
3105	OAK	10		P			10						
3106	OAK	8		P			7.5						
3107	OAK	7		P			6.5						
3108	OAK	6		P		6							
3109	OAK	8		P			8						
3110	OAK	7		P			6.5						
3111	OAK	10		P			10						
3112	OAK	11		P			11						
3113	OAK	7		P			7						
3114	OAK	7		P			6.5						
3115	OAK	8		P			8						
3116	OAK	10		P			10						
3117	OAK	8		P			8						
3118	OAK	7		P			6.5						
3119	OAK	8		P			7.5						
3120	OAK	33		P						33			
3121	OAK	8		P			8						



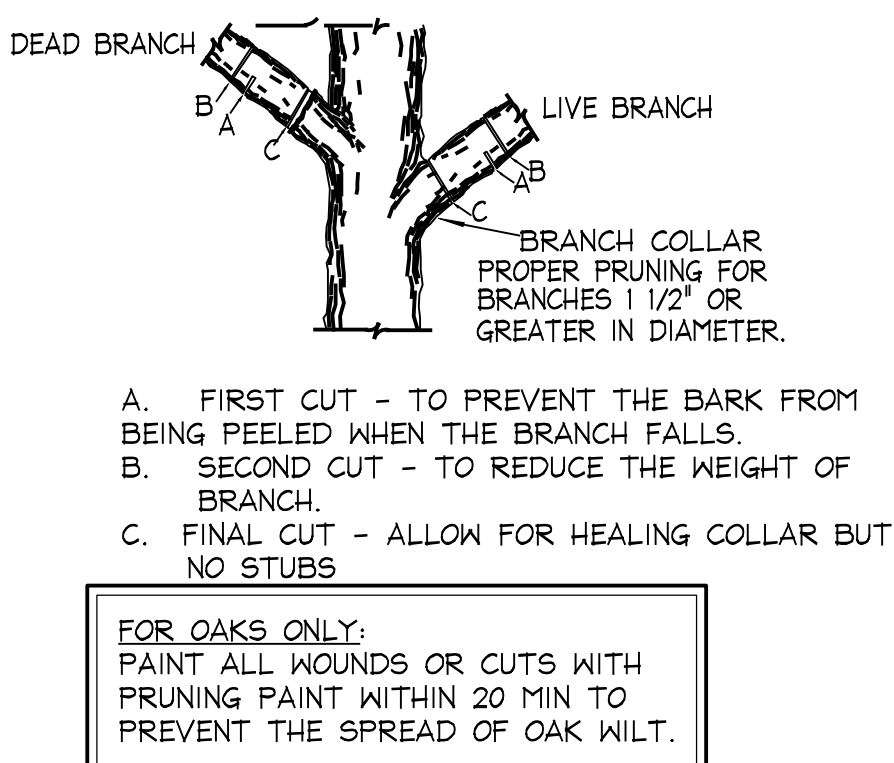
1 ROOT PROTECTION ZONE (RPZ)

ELEVATION NOT TO SCALE



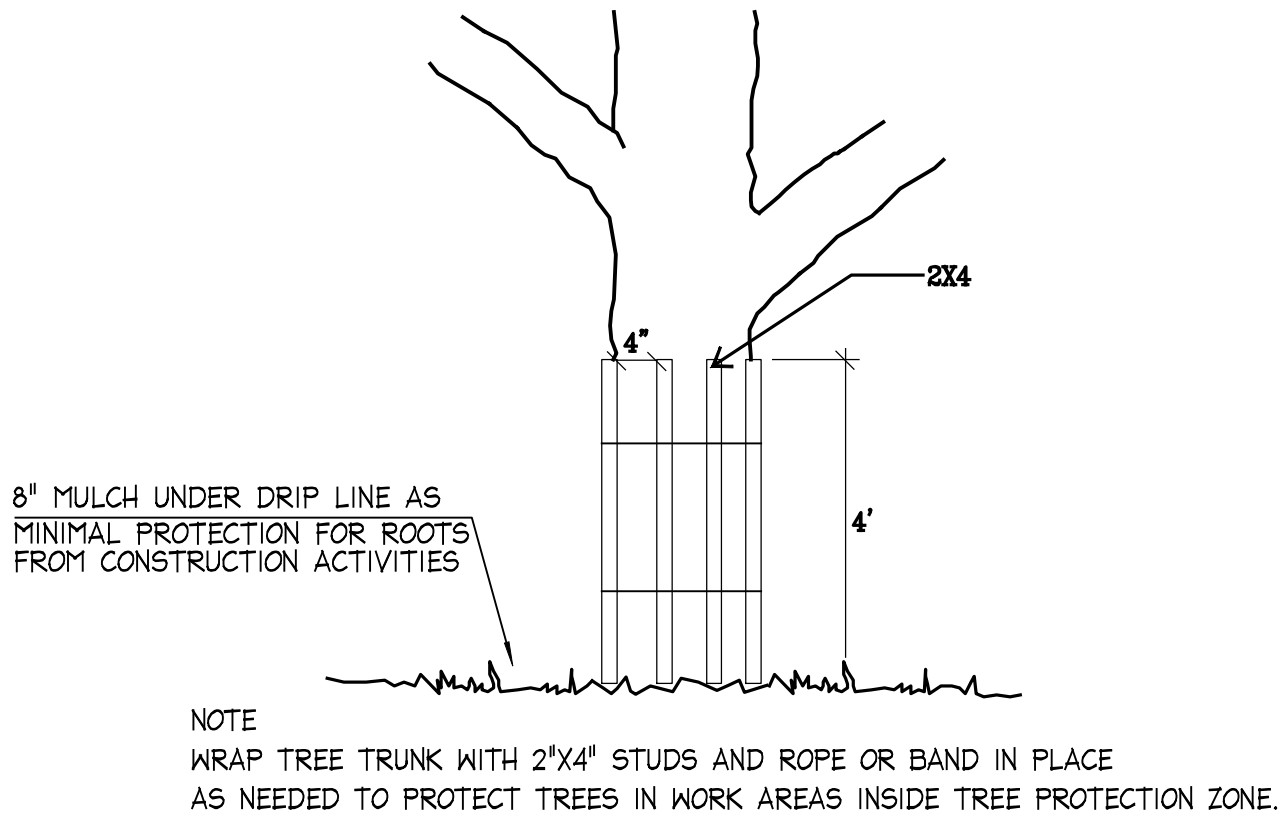
2 TREE PROTECTION ZONE

ELEVATION NOT TO SCALE



3 BRANCH PRUNING

ELEVATION NOT TO SCALE



4 TREE ARMOR DETAIL

ELEVATION NOT TO SCALE

TREE PROTECTION NOTES:

1.) ALL TREES SHOWN ON THIS PLAN TO BE RETAINED OR REPLANTED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.

2.) TREE PROTECTION FENCES SHALL BE ERECTED ACCORDING TO CITY OF SAN ANTONIO STANDARDS FOR TREE PROTECTION.

3.) TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.

4.) FENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES; SHALL BE LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIPLINE); AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:

A.) SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS.

B.) ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL) OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY ARBORIST.

C.) WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.

D.) OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING, AND FIRES.

5.) EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES: PROVIDED NO WORK IS CLOSER THAN 1/2 ROOT PROTECTION ZONE (RPZ) AND THE CONTRACTOR COORDINATES WITH THE CITY OF SAN ANTONIO INSPECTOR.

A.) WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.

B.) WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE BUILDING.

C.) WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY OF SAN ANTONIO ARBORIST AT 210-207-8063 TO DISCUSS ALTERNATIVES.

6.) WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE THAT IS CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.

7.) WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES (UNDER DRIPLINES) THOSE AREAS SHOULD BE COVERED WITH 6 INCHES OF ORGANIC MULCH OR GRAVEL TO MINIMIZE SOIL COMPACTION.

8.) ALL GRADING WITHIN PROTECTED ROOT ZONE AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. PRIOR TO GRADING, RELOCATE PROTECTIVE FENCING TO 2 FEET BEHIND THE GRADE CHANGE AREA.

9.) ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

10.) PRIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINES, A CLEAN CUT SHALL BE MADE BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE DAMAGE TO REMAINING ROOTS.

11.) TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES WILL BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS ARE TO BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

12.) WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE ROOT ZONE.

13.) ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.

14.) PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND CONSTRUCTION EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS (BEFORE DAMAGE OCCURS). ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY; REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES; CLASS IV OF PRUNING (AVAILABLE ON REQUEST FROM THE CITY ARBORIST).

15.) ALL WOUNDS ON OAK TREES MUST BE REPAIRED WITHIN 30 MIN. OF OCCURRENCE BY BARK TRACING TO REMOVE DAMAGED WOOD AND BARK THOROUGHLY SEAL WITH AN ACCEPTABLE TREE WOUND DRESSING.

16.) ALL WOUNDS WHICH OCCUR TO TREE TRUNKS AND LIMBS MUST BE REPAIRED WITHIN 24 HOURS OF OCCURRENCE BY BARK TRACING TO REMOVE DAMAGED WOOD AND BARK. THIS SPECIFICALLY APPLIES TO WOUNDS CREATED BY CON