STANDARD SPECIFICATIONS FOR BUILDING AROUND VALLEY OAKS



CITY OF VISALIA Parks & Recreation Department Urban Forestry Division



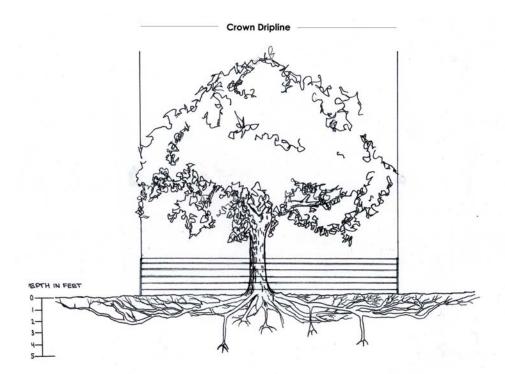
August 3, 2007

The citizens of Visalia are fortunate to live among the largest remaining stand of native Valley Oaks in the Central Valley. These magnificent trees need to be protected during development, so that they will survive for the next generation. By following these standard specifications we can ensure that all will enjoy the beauty of the Valley Oaks for generations to come.

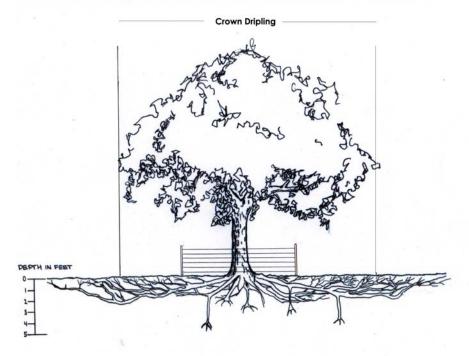
- 1. The developer shall submit a Valley Oak management plan to the City of Visalia at the entitlement phase of a project. The management plan shall contain a protective fencing detail including the date to be installed, a watering schedule including frequency and volume of water applied at each application, and the name of the contractor who will be watering the Valley Oak tree(s) through the construction process.
- 2. The protection zone of all Valley Oaks shall be drawn to scale on plans; this includes accurately locating the trunk and depicting the crown drip-line. There shall be no earthwork around the crown drip-line without the consent of the City Arborist.
- 3. All utility locations shall be included in all development plans involving Valley Oak(s).
- 4. Protective tree fencing shall be added prior to any earthwork, at least 3 ft. minimum in height, installed at outer most end of the drip-line surrounding the trunk of a Valley Oak. The temporary fencing shall be: safety orange color, plastic webbing, temporary construction type fencing. (Snow fencing) Fencing shall be supported by steel T-bar stakes. This fence is to remain until construction is complete and the City Arborist approves its removal. Nothing may be stored inside the protective fence. See detail 1.
- 5. There shall be no back filling within 10 ft. of the trunk of a Valley Oak and a maximum of 6 inches of backfill within the crown drip-line. Any deviation from this requires City Arborist approval. Backfill will be of a high quality soil and clean of any debris.
- 6. There shall be no trenching within the crown drip-line of the Valley Oak, or at a distance to be determined by the City Arborist. Utilities to be installed within the crown drip-line shall be bored at a minimum depth of 36". See detail 4
- 7. There shall be no soil compaction, paving or structures placed within the crown of a Valley Oaks without the written consent of the City Arborist.
- 8. Valley Oak trees shall be irrigated prior to construction starting and through construction starting in May and stopping at the end of September. Irrigation shall consist of 35 gallons of water applied per one inch measured at breast height. Trees shall be watered once every three weeks. Example 36" DBH Valley Oak shall receive 2205 gallons of water at each application. The City of Visalia can require more water if needed. This will help ensure that the tree can better withstand the stress of construction. Irrigation is extremely important during spring and summer when the environment around a mature Valley Oak is changed by construction. Irrigation shall water all of the area under the crown drip-line. See detail 3.
- 9. Permanent irrigation systems shall be overhead spray, bubbler, drip, flood or sub-terrain only. No sprinkler systems allowed within 6 ft. of tree. If an irrigation system is to be added it must be approved by the City Arborist.
- 10. Landscaping under Valley Oaks shall consist of drought tolerant plants or California native plants that are drought tolerant in nature. There is to be no landscaping within 6 ft. of the trunk. Chipped bark and mulch are suitable for this area. No lawns shall be planted within 10 ft. of the trunk. We recommend that there be no lawn placed within the crown drip-line.

Please contact the City Arborist at 559-713-4295 to answer questions or provide assistance.

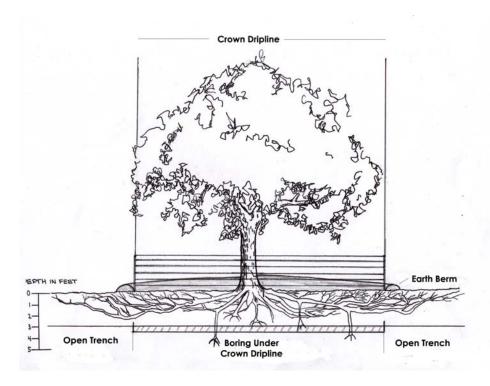
Detail 1. Proper Protective Tree Fencing: Protecting the root system under the crown drip-line is critical for the health, longevity and stability of a tree. Mature trees including Valley Oaks typically lack taproots as commonly thought. 80% of a mature trees root system is often within the top 18" of the soil surface. Protective fencing shall in place before any earth work begins on the site.



Detail 2. Improper Protective Tree Fencing: Protecting the health and stability of mature valley is impossible within out protecting the root system under the crown dripline. The detail below is not acceptable because it does not adequately protect the tree.



Detail 3. Irrigation: An eight inch tall by eight inch wide earth berm can be added direct outside the protective fence surrounding the crown dripline to direct water into the root zone. The area inside the earth berm under the crown dripline shall be flood irrigated.



Detail 4. Boring under the crown: Mechanical boring using a horizontal directional bore shall be required when tunneling under the crown dripline. The boring shall be at a minimum depth of 36".

