



**The
Oakley
Group**

Tree Protection Plan

for

10 Higuera Street
San Luis Obispo, CA 93401

Prepared for:

Ten Over Studio, Inc.

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Project Assignment

This report was prepared for the proposed project at 10 Higuera Street within the city-limits of San Luis Obispo. The proposed project consists of the development of a 21,900-sf commercial building and associated site improvements on an existing 2.96-acre lot.

As part of a Project Completeness Letter issued by the City of San Luis Obispo on August 10, 2023, you were asked to identify all tree removals on the site plan (as described in Municipal Code Section 12.24.090(D)(2)) as well as submit a tree removal application and arborist report for review by the City Arborist.

This report identifies the proposed removals related to the project and provides additional tree protection guidelines to successfully retain trees that are directly adjacent to the project/property.

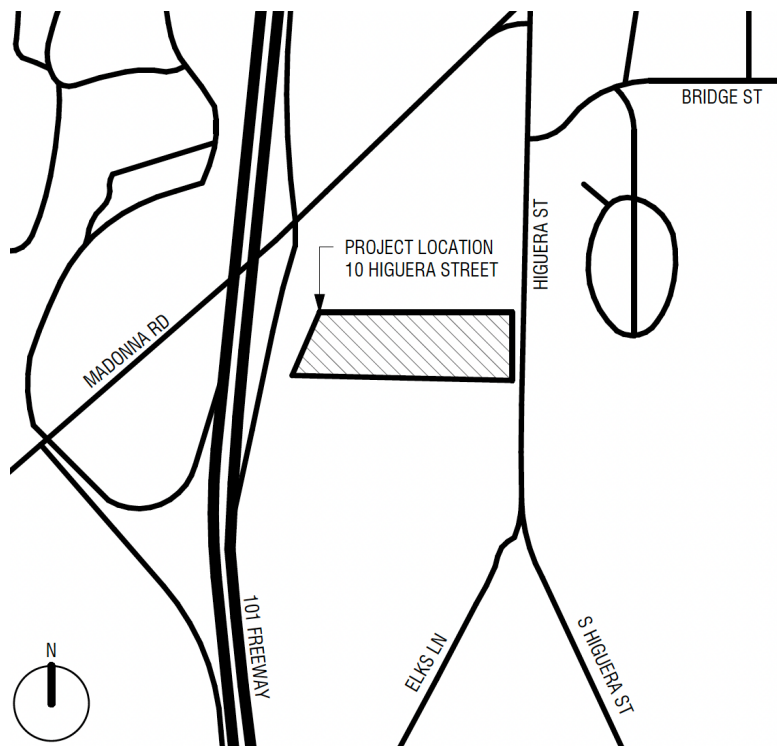


Figure 1: 10 Higuera Street. Courtesy of Ten Over Studio, Inc.

Analysis

1. Site Visit on August 25, 2023.
2. Identify tree location, species, trunk diameter at 4.5 feet above grade, and size.
3. Digitally image trees & their surroundings.
4. Evaluate trees and their surroundings.
5. Analysis of basic impacts based on a discussion about the scope of the project.

Site Description

The project location is situated between 101 highway and Higuera Street. Directly south of the property is a cemetery, and to the north is a CalTrans corporate yard. The property is bordered to the east and south by Exposition Creek and San Luis Creek, respectively.

There are two existing buildings on the Higuera Street-side of the property housing a distillery and brewery. The rear portion of the property, where the proposed development is to occur, is an unmaintained open field (Fig. 2). The rear of the lot faces a perennial stream that is densely vegetated.

The lot is sparsely vegetated with a large pepper tree prominently growing towards the middle of the lot, another pepper in the southwest corner of the lot, and overgrowth towards the back and south-side of the property. There are no structures on the property (Fig. 3).



Figure 2: looking southeast across the open lot toward exposition creek.



Site Plan

I reviewed the preliminary Site Plan prepared by Ten Over Studios, dated July 14, 2023. The main structure is to be built directly over the location of Tree 1 towards top of the property. Tree 2 is located at the southwest corner of the project and is in the footprint of the proposed parking lot.

Although there are trees located in San Luis Creek and Exposition Creek, the impact will be negligible if basic tree protection is performed as outlined in this report. A fence will help mitigate any encroachment into the creek trees' critical root zones.

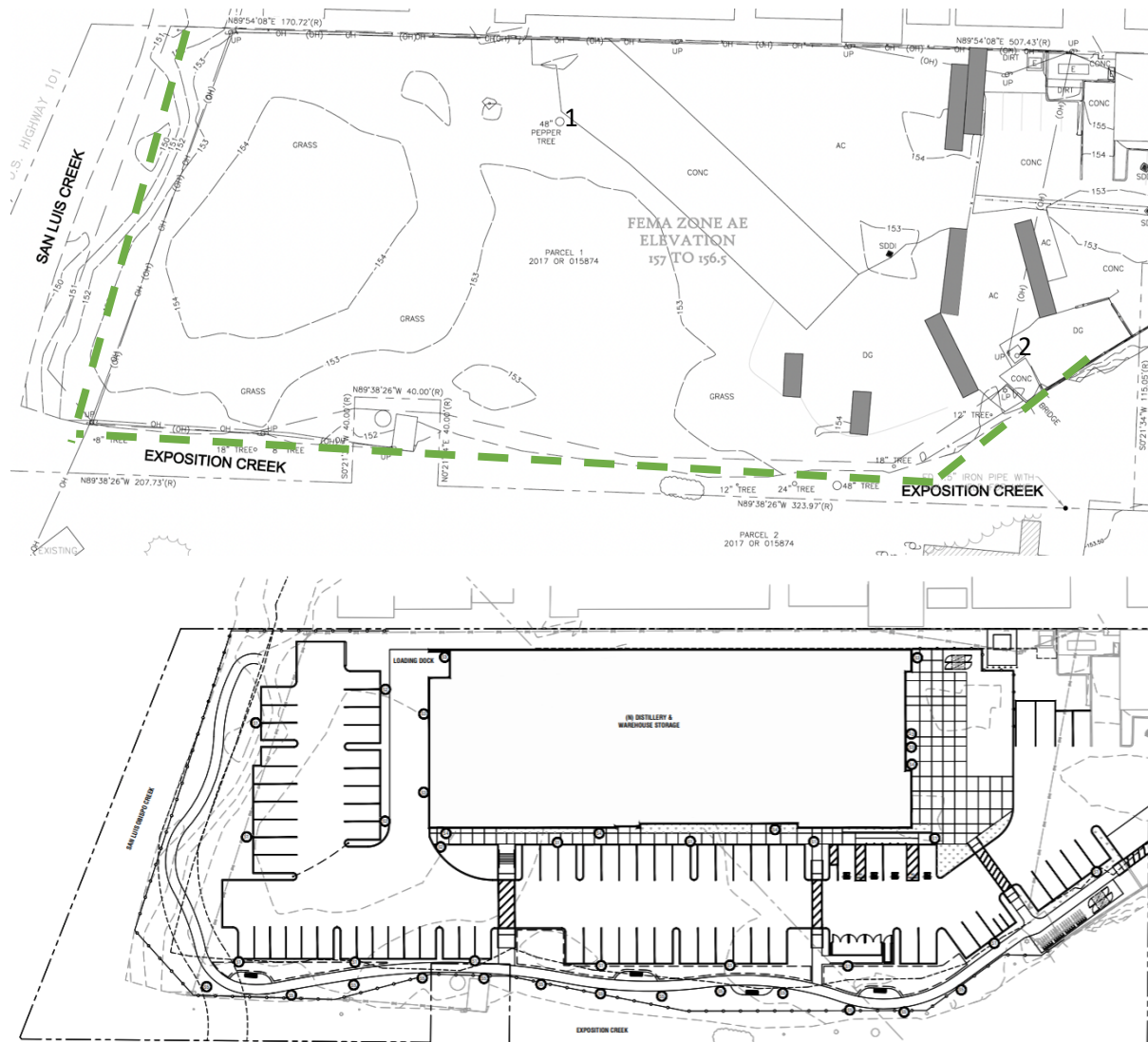


Figure 3: (top) site plan of existing conditions—numbered tree locations for removal. Tree protection locations in green. (bottom) A site plan of the proposed site improvements.

Tree Disposition

The two (2) trees on-site will need to be removed due to proposed improvements that cannot be reasonably designed to avoid the need for tree removal.

These trees are:

Tree 1 is a *Schinus mole* (Peruvian pepper) in good health, structure, and form. It is 48-inches in diameter at standard height (4.5-feet above natural grade).

Tree 2 is also *Schinus mole* (Peruvian pepper) in good health but fair structure and poor form. The issues with the tree's form and structure have been created by clearance pruning for overhead utilities, creating an off-balanced tree. It is 36-inches in diameter at standard height (4.5-feet above natural grade).

The Peruvian pepper tree, as a species, is mildly invasive and can be problematic near washes, creeks, and waterways. These trees may need to be mitigated 1:1 with the appropriate size and species of tree. I recommend placing replacements on the creek-side and perimeter of the property to provide screening from adjacent properties.

The proposed improvements have the potential to impact creek trees that are to be preserved. These impacts can be mitigated by erecting tree protection fencing along the boundary of the existing top of bank.



Figure 4: Tree 1 located towards the center of the lot.



Figure 5: Tree 2 located along the south property line.

Tree Protection Measures

The objective of this section is to reduce the negative impacts of construction on trees to a less than significant level. Trees vary in their ability to adapt to altered growing conditions, while mature trees have established stable biological systems in the preexisting physical environment. Disruption of this environment by construction activities interrupts the tree's physiological processes, causing depletion of energy reserves and a decline in vigor. This sometimes is exhibited as death.

The tree protection regulations are intended to guide a construction project to ensure that appropriate practices will be implemented in the field to eliminate undesirable consequences that may result from uninformed or careless acts and preserve both trees and property values.

The following details are required to be implemented prior to any construction activities:

The Project Arborist or contractor shall verify, in writing, that all preconstruction conditions have been met (tree fencing, erosion control, pruning, etc.).

Fenced enclosures shall be erected around trees to be protected to achieve three primary goals:

- To keep the foliage crowns and branching structure of the trees to be preserved clear from contact by equipment, materials, and activities. Dead, diseased, and dying material may be pruned at this time.
- Preserve roots intact and maintain proper soil conditions in a non-compacted state and;
- To identify the tree protection zone (TPZ) in which no soil disturbance is permitted, and activities are restricted.

Tree Protection Zone (TPZ)



Each tree to be preserved shall have a designated TPZ identifying the area sufficiently large enough to protect the tree and roots from disturbance. The recommended TPZ area can be determined by the CRZ formula of 10 X diameter at 4.5-feet above grade.

Because multiple trees have a shared canopy footprint, the TPZ can be joined together into one fenced area.

The TPZ shall be shown on all site plans for the project. Improvements or activities such as paving, utility and irrigation trenching and other ancillary activities shall occur outside the TPZ, unless authorized by the Project Arborist. Unless otherwise specified, the protective fencing shall serve as the TPZ boundaries.

Activities prohibited within the TPZ include:

Storage or parking vehicles, building materials, refuse, excavated spoils or dumping of poisonous materials on or around trees and roots. Poisonous materials include, but are not limited to, paint, petroleum products, concrete or stucco mix, dirty water or any other material which may be deleterious to tree health.

The use of tree trunks as a winch support, anchorage, as a temporary power pole, signposts, or other similar function.

Cutting of tree roots by utility trenching, foundation digging, placement of curbs and trenches and other miscellaneous excavation without prior approval of the Project Arborist.

Activities required within the TPZ include:

Mulching: Any wood chips generated on-site from the proposed removals will need to remain on-site and can be spread within the TPZ of trees to remain that are within the building envelope. The mulch shall be spread within the TPZ to a maximum six (6) inch depth, while leaving the trunk clear of mulch. This mulch will help inadvertent compaction and soil moisture loss from occurring.

Irrigation, aeration, fertilizing or other beneficial practices that have been specifically approved for use within the TPZ.

Size and type of fence

A sturdy, temporary barrier should be placed around the tree dripline until construction activities are done. This detail shall appear on grading, demolition, and improvement plans (Figs. 5 & 6).

The fence shall enclose as much of the area under the canopy dripline as possible, being set up under the direction of the Project Arborist and to remain throughout the duration of the project, or until final improvement work within the area is required, typically near the end of the project. If the fencing must be located on the edge of paving or sidewalk that will not be demolished, the posts may be supported by an appropriate grade level concrete base.

Tree Protection Fencing locations are shown in the above Site Plan section of this report. Exact dimensions will need to be determined in the field during job set-up in coordination with the Project Arborist.

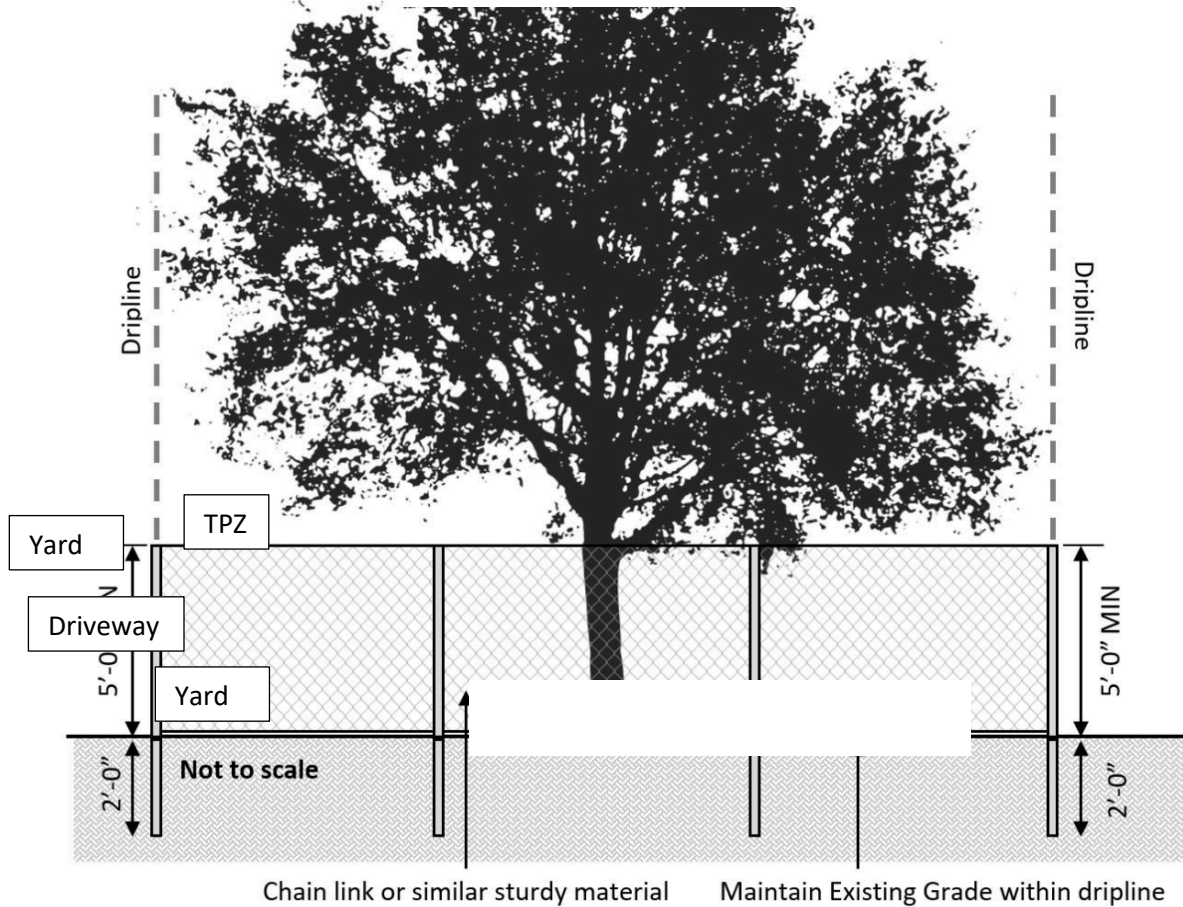


Figure 5: tree protection detail showing the modified Tree Protection Zone to accommodate the area required for the driveway. Tree Protection Zone and driveway are to be installed prior to any construction activity to ensure their proper function of protecting the protected oaks.

Duration of Tree Protection Fencing

Tree fencing shall be erected prior to demolition, grading or construction and remain in place until final inspection.

“Warning” Signage

Warning signs a minimum of 8.5x11-inches shall be prominently displayed on each fence. The sign shall clearly state:

WARNING - Tree Protection Zone - This fence shall not be removed and is subject to a penalty.

Tree protection fencing, if required to be moved, must be moved under the direction of the Project Arborist. All tree protection zones need to be clear of debris and construction materials, and cleared of weeds regardless of if fencing is present or not.

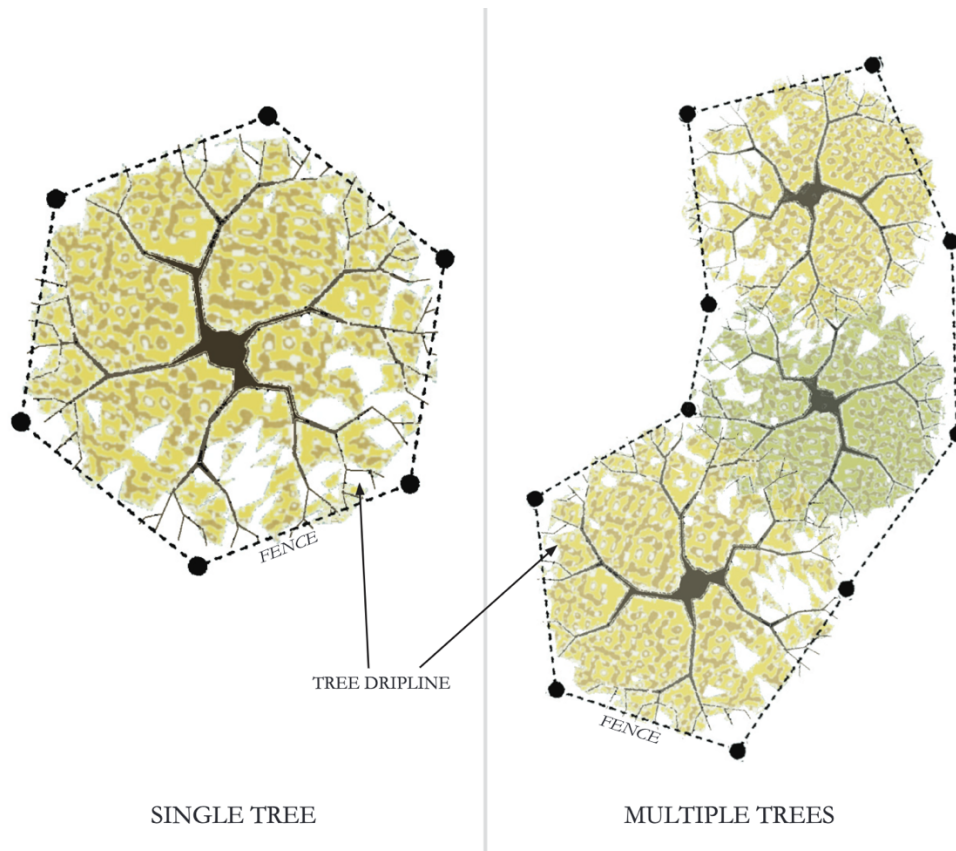


Figure 6: tree protection detail in plan-view.

Pruning, Surgery & Removal

Prior to construction, trees may require that branches be pruned clear from proposed/existing structures, activities, building encroachment or may need to be strengthened by means of mechanical support (cabling) or surgery. Such pruning, surgery or the removal of trees shall adhere to the following standards:

Pruning limitations:

Minimum Pruning: If the Project Arborist recommends that trees be pruned, and the type of pruning is left unspecified, the standard pruning shall consist of 'crown cleaning' as defined by ISA Pruning Guidelines. Trees shall be pruned to reduce hazards and develop a strong, safe framework.

Maximum Pruning: Maximum pruning should only occur in the rarest situation approved by the Project Arborist. No more than one-fourth (1/4) of the functioning leaf and stem area may be removed within one

(1) calendar year of any tree, or removal of foliage to cause the unbalancing of the tree. It must be recognized that trees are individual in form and structure, and that pruning needs may not always fit strict rules. The Project Arborist shall assume all responsibility for special pruning practices that vary from the standards outlined in this TPP.

Tree Workers: Pruning shall not be attempted by construction or contractor personnel.

Activities During Construction & Demolition Near Trees

Soil disturbance or other injurious and detrimental activity within the TPZ is prohibited unless approved by the Project Arborist. If an injurious event inadvertently occurs, or soil disturbance has been specifically conditioned for project approval, then the following mitigation is required:

Soil Compaction: If compaction of the soil occurs, it shall be mitigated as outlined in Soil Compaction Damage, and/or Soil Improvement.

Grading Limitations within the Tree Protection Zone:

Grade changes outside of the TPZ shall not significantly alter drainage to the tree.

Grade changes within the TPZ are not permitted.

Trenching, Excavation & Equipment Use

Excavation or boring activity within 5-feet of the TPZ is restricted to the following activities, conditions and requirements if approved by the Project Arborist:

Notification. Contractor shall notify the Project Arborist a minimum of twenty-four (24) hours in advance of the activity in the TPZ.

Root Severance. Roots that are encountered shall be cut to sound wood and repaired. Roots two (2) inches and greater must remain injury free. See the section below.

Excavation. Any approved excavation, demolition or extraction of material shall be performed with equipment sitting outside the TPZ. Methods permitted within 5-feet of the TPZ are by hand digging, hydraulic or pneumatic air excavation technology only. Avoid excavation within the TPZ during hot, dry weather.

If excavation or trenching within 5-feet of the TPZ for drainage, utilities, irrigation lines, etc., it is the duty of the contractor to tunnel under any roots two (2) inches in diameter and greater.

Heavy Equipment. Use of backhoes, steel tread tractors or any heavy vehicles within the TPZ is prohibited.

Root Severance

Cutting and removal of roots within 5-feet of the TPZ that are smaller than two (2) inches in diameter shall be done by chain saw or hand saw to provide a flat and smooth cut and cause the least damage possible to



the root and tree's health. Cutting roots by means of tractor-type equipment or other than chain saws and hand saws is prohibited.

Proper pruning technique shall encourage callusing of the roots. Root cutting and removal shall not exceed thirty-five (35) percent of total root surface of the tree.

The Contractor shall remove any wood chips or debris that may be left over from root removal.

If any roots over two (2) inches in diameter are severed during any excavation, the following procedure shall be followed:

The roots shall be shaded by immediately covering the entire trench with plywood, or by covering the sides of the trench with burlap sheeting that is kept moist by watering twice per day.

When ready to backfill, each root shall be severed cleanly with a handsaw. Where practical, they should be cut back to a side root. Immediately, a plastic bag shall be placed over the fresh cut and secured with a rubber band or electrical tape. Shading should immediately be placed until backfilling occurs.

Plastic bags shall be removed prior to backfilling.

Backfill shall be clean, native material free of debris, gravel, or wood chips.

If roots three (3) inches in diameter, or larger, are encountered during excavation, Contractor shall contact the Project Arborist and request a field inspection, or their designated representatives, and obtain instruction as to how the roots should be treated. No roots three (3) inches in diameter, or larger, shall be cut and removed without prior approval from the Project Arborist, or their designated representatives.

Damage to Trees - Reporting

Any damage or injury to trees shall be reported immediately to the Project Arborist and job superintendent so that mitigation can take place. All mechanical or chemical injury to branches, trunk or to roots over two (2) inches in diameter shall be reported to the Project Arborist. In the event of injury, the following mitigation and damage control measures shall apply:

Root injury: If trenches are cut and tree roots two (2) inches or larger are encountered they must be cleanly cut back to a sound wood lateral root. The end of the root shall be covered with either a plastic bag and secured with tape or rubber band or be coated with latex paint. All exposed root areas within the TPZ shall be backfilled or covered within one (1) hour. Exposed roots may be kept from drying out by temporarily covering the roots and draping layered burlap or carpeting over the upper three (3) feet of trench walls. The materials must be kept wet until backfilled to reduce evaporation from the trench walls.

Bark or trunk wounding: Current bark tracing and treatment methods shall be performed by a qualified tree care specialist within two (2) days.

Scaffold branch or leaf canopy injury: Remove broken or torn branches back to an appropriate branch capable of resuming terminal growth within five (5) days. If leaves are heat scorched from equipment exhaust pipes, consult the Project Arborist within six (6) hours.



Any damage to any tree's canopy will need to be restoratively pruned effective immediately after the damage occurs and no later than 48 hours after the damage occurs.

Inspection Schedule

The Project Arborist retained by the applicant shall conduct the following required inspections of the construction site:

Inspections shall verify that the type of tree protection and/or plantings are consistent with the standards outlined within this report. For each required inspection or meeting, a written summary of the changing tree related conditions, actions taken, and condition of trees shall be provided to the contactor.

Inspection of Protective Tree Fencing & Pre-Construction Meeting: Prior to commencement of construction, the contractor shall conduct a pre-construction meeting to discuss tree protection with the job site superintendent, grading equipment operators, and the Project Arborist.

Inspection of Rough Grading: The Project Arborist shall perform an inspection during rough grading adjacent to the TPZ to ensure trees will not be injured by compaction, cut or fill, drainage, and trenching, and if required, inspect aeration systems, tree wells, drains and special paving. The contractor shall provide the Project Arborist at least forty-eight (48) hours advance notice of such activity.

Any special activity within the Tree Protection Zone: Work in this area (TPZ) requires the direct on-site supervision of the Project Arborist.

Conclusion

It is the nature of trees exposed to construction that some do not survive, and mortality cannot be predicted. If due care is exercised, all the trees on the project are expected to remain healthy and alive.

Certification

I, Sam Oakley, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions, and conclusions.
3. That I have no present or prospective interest in the plants that are the subject of this analysis and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. That my appraisal is based on the information known to me at this time. If more information is disclosed, I may have further opinions.