Tree Protection Plan

for

SLOCA

3450 Broad Street
San Luis Obispo, CA 93401

Prepared for:
Bosky Landscape Architecture
590 East Gutierrez Street
Santa Barbara, CA 93103

Prepared by:
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February 7, 2025

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Project Assignment

The City of San Luis Obispo requires an arborist report prepared that identifies and discusses each tree within the development footprint (including, but not limited to, structural development, grading, staging areas, ground cover removal, changes in drainage patterns, and associated off-site improvements) including those tree proposed for removal and those tree that will remain. This report was prepared for a total of forty (40) trees, located on the site at 3450 Broad Street as required by the City of San Luis Obispo (Fig. 1).

The owner of 3450 Broad Street in San Luis Obispo, California, is preparing to renovate the existing commercial building and perform capital improvements to the landscape. There are twenty (20) trees on the property to be protected during the project and twenty (20) will require removal.

The trees that are to be preserved may be impacted by the proposed development. Specifically, a group of three (3) *Quercus agrifolia.* (Coast Live Oaks; Trees 28, 29 & 33) in the rear parking lot, a *Platanus racimosa* (California Sycamore; Tree 34), and various small *Pyrus ssp.* (Pear) and *Geijera sp.* (Australian Willow) located along the property frontage may be impacted by the renovation. To what extent cannot be specifically determined, but by implementing the following Tree Protection Plan, impacts may be mitigated to a degree that the trees will survive and thrive.

No trees on neighboring properties will be subjected to potential impacts to the project.

This document estimates the proposed impacts and provides mitigation. It also serves as a tree protection plan to avoid damage during the construction.

Project Description

The commercial structure is to be converted to a school and landscaping upgraded with sports facilities.

Tree Inventory

Site evaluation was conducted on January 24, 2025, to include all trees 3-inches diameter or greater measured at 4.5-feet above grade, located within or directly adjacent to the property.

The field analysis was conducted to document the following:

- Unique identifying tree number consistent with numbering shown on the tree site plan/map;
- Tree species;
- Trunk diameter/ DBH;
- Health and structural condition with brief description of relevant characteristics;
- Suitability for preservation based on existing conditions and reason for removal (when recommended);

During the site visits, a visual inspection of the Roots, Trunk, Scaffold (Large) Branches, Small Branches & Twigs as well as Foliage & Buds was conducted using the following health, structure, and form determinations:

Scoring System:

1. Poor: Extreme problems, decay and/or structural defects present, potential for future removal
2. Fair: Minor to Major problems present; Problems treatable and/or correctable
3. Good: No apparent problems, tree is in overall good health and vigor

Inventory Map

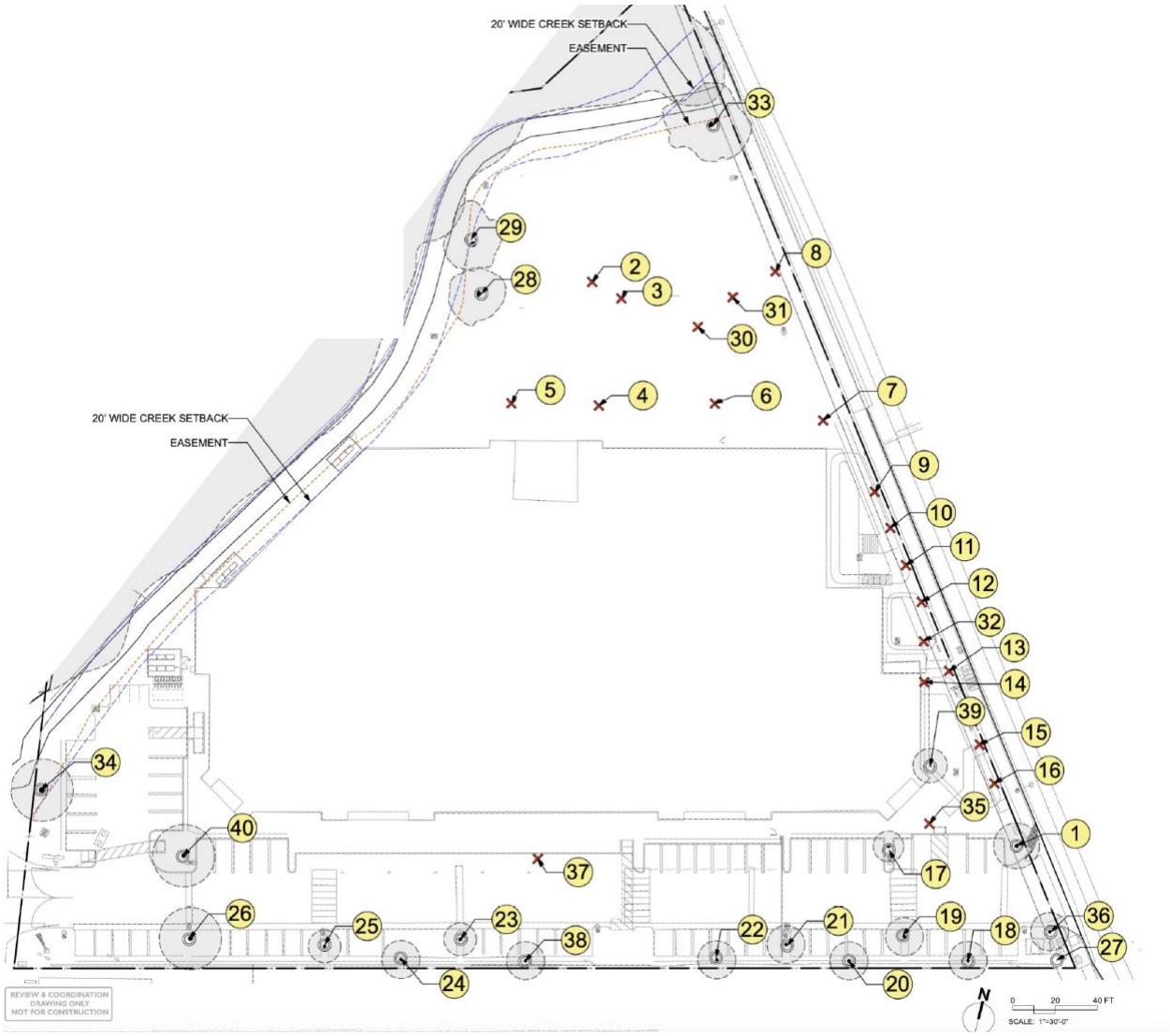

Figure 1: the existing structure and trees at 3450 Broad Street with tree locations numbered 1 through 40.

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Inventory Data

ID	Tag	Common Name	Species	DBH (inches)	Condition	Suitability for Preservation	Notes
1	2401	Evergreen Pear	Pyrus kawakamii	6	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
2	2402	Evergreen Pear	Pyrus kawakamii	3	Fair	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Guyed With Rope
3	2403	Evergreen Pear	Pyrus kawakamii	8	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
4	2404	Ornamental Pear	Pyrus calleryana	8	Poor	Remove	Marginal Structure; Unbalanced Crown; Seasonal Leafdrop
5	2405	Ornamental Pear	Pyrus calleryana	8	Poor	Remove	Marginal Structure; Advantitious Shoot Growth; Seasonal Leafdrop
6	2406	Evergreen Pear	Pyrus kawakamii	9	Fair	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
7	2407	Evergreen Pear	Pyrus kawakamii	9	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
8	2408	--	--				Stump
9	2409	Evergreen Pear	Pyrus kawakamii	10	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
10	2410	Evergreen Pear	Pyrus kawakamii	7	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
11	2411	Evergreen Pear	Pyrus kawakamii	10	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
12	2412	Evergreen Pear	Pyrus kawakamii	11	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
13	2413	Evergreen Pear	Pyrus kawakamii	6	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
14	2414	Ornamental Pear	Pyrus calleryana	9	Poor	Remove	Marginal Structure; Advantitious Shoot Growth; Seasonal Leafdrop; Growing Too Close To Structure
15	2415	Evergreen Pear	Pyrus kawakamii	4	Fair	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
16	2416	Evergreen Pear	Pyrus kawakamii	8	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions; Crown Dieback
17	2417	Evergreen Pear	Pyrus kawakamii	6	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
18	2418	Evergreen Pear	Pyrus kawakamii	6	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
19	2419	Evergreen Pear	Pyrus kawakamii	7	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
20	2420	Evergreen Pear	Pyrus kawakamii	7	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown; Leaning In Small Growing Space
21	2421	Evergreen Pear	Pyrus kawakamii	5	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
22	2422	Australian Willow	Geijera parviflora	7	Poor	Protect	Advanced Dieback In Crown; Waterstressed; Leaning
23	2423	Evergreen Pear	Pyrus kawakamii	9, 16	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown; Marginal Structure
24	2424	Australian Willow	Geijera parviflora	6	Good	Protect	Full Crown; Multidominant Stems; Mild Waterstress
25	2425	Evergreen Pear	Pyrus kawakamii	12	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
26	2426	Evergreen Pear	Pyrus kawakamii	9, 16	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
27	2427	Australian Willow	Geijera parviflora	8, 10, 12	Good	Protect	Full Crown; Multidominant Stems; Mild Waterstress
28	2428	Coast Live Oak	Quercus agrifolia	6, 6	Fair	Protect	Thin Crown Due to Pre-Leaf/Flower Emergence; Stress From Overwatering
29	2429	Coast Live Oak	Quercus agrifolia	12, 12	Good	Protect	Thin Crown Due to Pre-Leaf/Flower Emergence
30	2430	Evergreen Pear	Pyrus kawakamii	3	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown; Stunted Growth
31	2431	Evergreen Pear	Pyrus kawakamii	11	Fair	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
32	2432	Evergreen Pear	Pyrus kawakamii	10	Poor	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown; Dieback; Overcrowded
33	2433	Coast Live Oak	Quercus agrifolia	3	Good	Protect	Thin Crown Due to Pre-Leaf/Flower Emergence
34	2434	California Sycamore	Platanus racimosa	3	Good	Protect	Large Native Tree
35	2435	Ornamental Pear	Pyrus calleryana	8	Fair	Remove	Marginal Structure; Advantitious Shoot Growth; Seasonal Leafdrop
36	2436	Australian Willow	Geijera parviflora	12, 10, 8, 6	Fair	Protect	Full Crown; Multidominant Stems; Waterstress
37	2437	Evergreen Pear	Pyrus kawakamii	8	Fair	Remove	Flowering At Time Of Survey; Small Fireblight Lessions In Crown
38	2438	Australian Willow	Geijera parviflora	8, 8, 8, 6	Fair	Protect	Full Crown; Multidominant Stems; Waterstress
39	2439	Ornamental Pear	Pyrus calleryana	6	Poor	Protect	Marginal Structure; Advantitious Shoot Growth; Seasonal Leafdrop; Growing Too Close To Structure
40	2440	Evergreen Pear	Pyrus kawakamii	12	Fair	Protect	Flowering At Time Of Survey; Small Fireblight Lessions In Crown

Table 1: the tree information for the existing trees at 3450 Broad Street.

Site Description

3450 Broad Street is an occupied, single-level commercial property. The southern parking lot along the frontage contains many ornamental trees. There is a steep berm up to Sacramento Drive. The northern parking lot has several sitting areas and is bounded by a creek.

Site Plan Review

The landscape design plans A1.0-4.0, dated 12/20/24, showing the proposed building footprint and landscape upgrades were issued to me.

Impacts to Trees

The following are potential impacts to trees from the proposed construction activities:

Trees 1, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 36, 38, 39, & 40 – The existing root zone and canopy footprint will be protected with tree protection fencing (see Size and Type of Fence section). Impacts are not likely to the critical root zone and pruning is not anticipated. Existing ground cover should be removed and replaced with mulch. Any work performed within proximity to these trees will need to be done so under the supervision of the Project Arborist.

Trees 28, 28, & 33 – The existing root zone and canopy footprint will be protected with tree protection fencing (see Size and Type of Fence section). There may be impacts to the critical root zone with the construction of raised wood decks. Pruning may be needed (Fig. 3). Existing ground cover should be removed and replaced with mulch. Any work performed within proximity to these trees will need to be done so under the supervision of the Project Arborist.

Trees 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 30, 31, 32, 35, & 37 – these trees will be removed based as will be close to footprint of the proposed construction.

Tree 34 —I do not foresee any impacts to this tree from any proposed construction activities including grading, excavation for utility installation, retaining walls, drainage, landscaping, or any other aspects of the project so long as construction activities remain out of their tree protection zones

Replacement Trees

The proposed removals are proposed to be replaced with the following quantities, species, and sizes:

Four (4) 24-inch box *Angophora costata* (Sydney Red Gum)
Two (2) 24-inch box *Chitalpa taskentensis* (Chitalpa)
Six (6) 36-inch box *Quercus agrifolia* (Coast Live Oak)
Four (4) 60-inch box *Quercus engelmannii* (Engelman Oak)
Fourteen (14) 24-inch box *Quercus tomentella* (Island Oak)

Ten (10) 24-inch box *Tristaniopsis laurina* (Swamp Myrtle)
Two (2) 48-inch box *Ulmus parvifolia* (Chinese Elm)

Tree Protection Guidelines

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 sometime is exhibited as death. Typically, this reaction may develop several years or more after disruption.

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 a required to be implemented along with the TPP:

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

The demolition, grading and underground contractors, construction superintendent and other pertinent personnel are required to meet with the project arborist at the site prior to beginning work to review procedures, tree protection measures and to establish haul routes, staging, areas, contacts, watering, etc.

Tree Protection 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;

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.

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 Allowed

Activities allowed or required within the TPZ include:

Mulching: During construction, wood chips shall be spread within the TPZ to a six (6) inch depth, leaving the trunk clear of mulch to help inadvertent compaction and moisture loss from occurring. The mulch may be removed if improvements or other landscaping is required. Mulch material shall be two (2) inch unpainted, untreated wood chip mulch or approved equal.

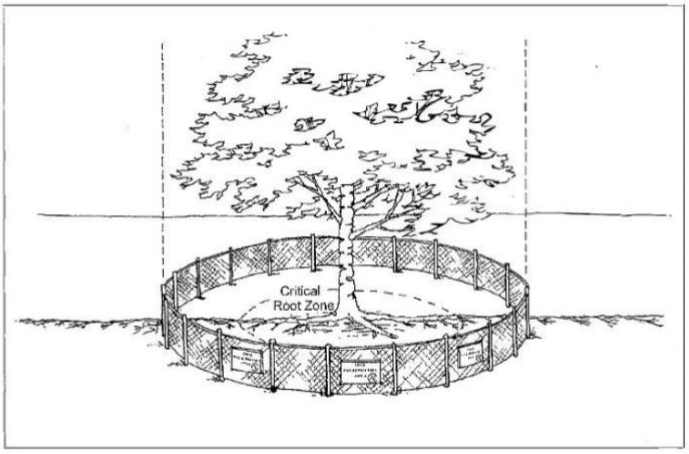
Root Buffer: When areas under the tree canopy cannot be fenced, a temporary buffer is required and shall cover the root zone and remain in place at the specified thickness until final grading stage.

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

Size and type of fence

Trees shall be protected with the following specifications:

Six (6)-foot-tall chain link fencing shall be installed around the landscaped dripline of the trees. Fence posts shall be 1.5 inches in diameter, driven 2 feet into the ground, at most 10 feet apart. Signage (in both English and Spanish) should be printed on an 11" x 17" yellow-colored paper and secured in a prominent location on each protection fence. Signage shall include the Project Arborist's contact information. Fencing may only be moved to within the TPZ if authorized by the Project Arborist and City Arborist. The fence must remain at least 1.5 times the diameter of the tree from its trunk (i.e. The fence must remain at least 30-inches from the trunk of a 20-inch tree). The builder may not move the fence without authorization from the Project Arborist or City Arborist.



Matheny, N., Smiley, E. T., Gilpin, R., & Hauer, R. (2023). Managing trees during construction (3rd ed.). International Society of Arboriculture.

Duration of Tree Protection Fencing

Tree fencing shall be erected prior to demolition, grading or construction and remain in place until final inspection or under the direction of the Project Arborist.

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.

"Warning" Signage

Warning signs a minimum of 8.5x11-inches shall be prominently displayed on each fence. The sign shall clearly state the following in both English and Spanish:

WARNING TREE PROTECTION AREA

ONLY AUTHORIZED PERSONNEL MAY ENTER THIS AREA

No excavation, trenching, material storage, cleaning, equipment access, or dumping is allowed behind this fence.

Do not remove or relocate this fence without approval from the project arborist. This fencing must remain in its approved location throughout demolition and construction.

Project Arborist contact information:

Name:
Business:
Phone number:

ADVERTENCIA: ÁREA DE PROTECCIÓN DE ÁRBOLES

SÓLO EL PERSONAL AUTORIZADO PUEDE INGRESAR A ESTA ÁREA

No se permite la excavación, zanjas, almacenamiento de materiales, limpieza, acceso de equipos, o vertido de residuos detrás de esta cerca.

No retire ni reubique esta cerca sin la aprobación del arborista del proyecto. Esta cerca debe permanecer en su ubicación aprobada durante todo el proceso de demolición y construcción.

Información de contacto del arborista de este proyecto:

Nombre:
Empresa:
Número de teléfono:

Pruning, Surgery& Removal

Any pruning shall occur prior to construction, pruning to clear from 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 but shall be performed by a qualified tree care specialist or certified tree worker.

The Project Arborist shall provide a follow-up letter documenting the pruning has been completed to specification.

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.
- Grade changes under specifically approved circumstances shall not allow more than six (6) inches of fill soil added or allow more than four (4) inches of existing soil to be removed from natural grade unless mitigated.

Trenching, Excavation & Equipment Use

No trenching, excavation, and heavy equipment used is permitted for this project unless specifically approved by the Project Arborist.

Root Severance

No cutting and removal of roots is permitted for this project unless specifically approved by the Project Arborist.

Irrigation Program

Irrigate to wet the soil within the TPZ to a depth of twenty-four to thirty (24-30) inches at least once a month, preferably twice a month. Ten (10) gallons per inch DBH is enough. Begin irrigating immediately prior to any construction activity. Alternatively, sub-surface irrigation may be used at regular specified intervals by injecting on approximate three (3) foot centers, ten (10) gallons of water per inch trunk diameter within the TPZ. Duration shall be until project completion plus monthly until seasonal rainfall totals at least eight (8) inches of rain, unless specified otherwise by the project arborist.

Damage to Trees - Reporting

Any damage or injury to trees shall be reported within 6-hours to the project arborist and job superintendent or City Arborist so that mitigation can take place. Remedial action should be taken within 48-hours.

All mechanical or chemical injury to branches, trunk or to roots over two (2) inches in diameter shall be reported in the monthly inspection report. 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 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.

Any tree on-site protected by the City's Municipal Code will require replacement according to its appraised value if it is damaged beyond repair because of construction activities.

The Project Arborist shall provide a follow-up letter documenting the mitigation has been completed to specification.

Inspection Schedule

The project arborist retained by the applicant shall conduct the following required inspections of the construction site:

At least once every four (4) weeks;

Monitor the effectiveness of the Tree Protection Plan;

Provide recommendations for any necessary additional care or treatment; and

Will be followed by monthly construction monitoring reports emailed directly to the City Arborist.

The Project Arborist shall provide a follow-up letter documenting any mitigation has been completed to specification.

A required final inspection is to be completed by the City Arborist at the end of the project. This is to be done before the tree protection fencing is taken down. Replacement trees should be planted at this time as well (before the tree protection fencing is taken down).

Maintenance of Trees After Construction

All trees to remain will need to be irrigated post-construction. Each tree should be inspected annually to monitor for disease or external stress and treated accordingly.

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.

Figure 2: Trees 1 (top left), 2 (top right), 3 (bottom left), and 4 (bottom right).

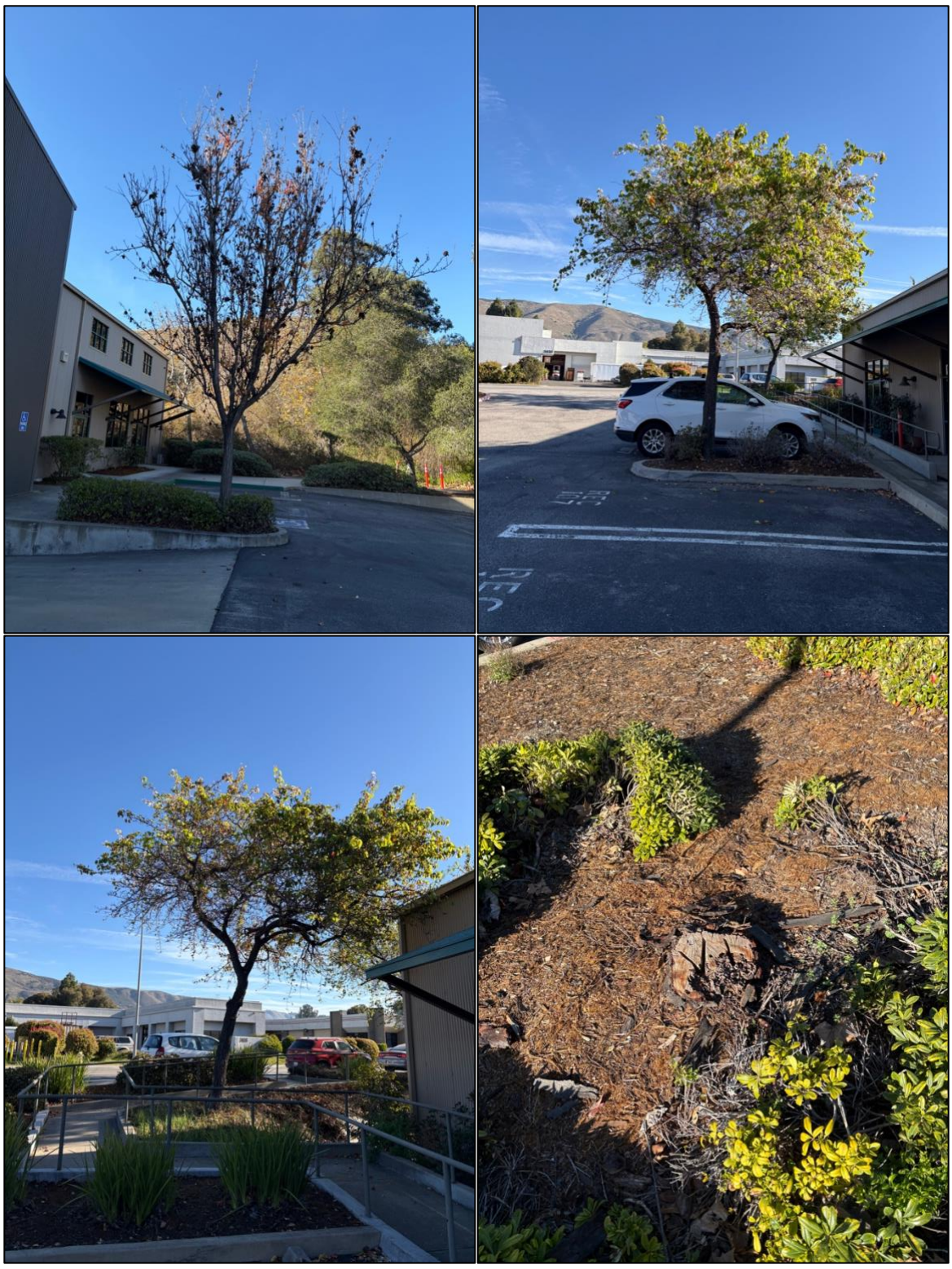


Figure 3: Trees 5 (top left), 6 (top right), 7 (bottom left), and 8 (bottom right).

Figure 4: Trees 9 (top left), 10 (top right), 11 (bottom left), and 12 (bottom right).

Figure 5: Trees 13 (top left), 14 (top right), 15 (bottom left), and 16 (bottom right).

Figure 6: Trees 17 (top left), 18 (top right), 19 (bottom left), and 20 (bottom right).

Figure 7: Trees 21 (top left), 22 (top right), 23 (bottom left), and 24 (bottom right).

Figure 8: Trees 25 (top left), 26 (top right), 27 (bottom left), and 28 (bottom right).

Figure 9: Trees 29 (top left), 30 (top right), 31 (bottom left), and 32 (bottom right).

Figure 10: Trees 33 (top left), 34 (top right), 35 (bottom left), and 36 (bottom right).

Figure 11: Trees 37 (top left), 38 (top right), 39 (bottom left), and 40 (bottom right).

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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.