

APPENDIX A

Grading Ordinance Guidelines for Native Oak Tree Removal

*Incorporated into Chapter 14 of Santa Barbara County Code: Grading
April 22, 2003*

PREAMBLE

The goal of the Oak Tree Protection and Regeneration Program is to sustain and, where possible, enhance the native oak resources of Santa Barbara County. Specifically, the program seeks to ensure that there is no net loss of native oak trees and that, if possible and with the help of incentives, the number and extent of remaining valley, blue, and live oak trees grow greater. To accomplish this, the program combines elements of landowner flexibility and voluntary oak regeneration with oak protection. This approach will benefit the county's oaks, avoid undue burdens on private property, and foster trust between land stewards, concerned citizens and local government.

These guidelines constitute the rules for agricultural and non-agricultural deciduous oak (valley and blue oaks) removals as well as for agricultural and non-agricultural live oak removals.

Pursuant to the Santa Barbara County Grading Ordinance (Chapter 14 of the County Code) these provisions shall apply to all private land outside of the coastal zone and urban boundaries. This includes Agriculture I, Agriculture II, Mountainous Goleta, and Resource Management zone districts of Article III of Chapter 35 of the Santa Barbara County Code; Agriculture I and Resource Management zone districts of Article IV of Chapter 35 of the Santa Barbara County Code; and Unlimited Agriculture, Exclusive Agriculture, Watershed Agriculture, General Agriculture, Intensive General Agriculture, and Limited Agriculture zone districts of Article V of the Santa Barbara County Ordinance 661.

These guidelines govern deciduous and live oak removals, replacing the County of Santa Barbara Environmental Thresholds and Guidelines Manual as a standard in Chapter 14 for addressing significant environmental damage and significant environmental impact associated with native oak tree removal of protected and unprotected size, as defined in this Appendix, for agricultural and non-agricultural practices not requiring a discretionary permit.

I. DECIDUOUS OAK PROGRAM

A. OAK REMOVAL FOR AGRICULTURAL PRACTICES (AS DEFINED IN THE GRADING ORDINANCE SEC. 14-8)

The rules in this section are less restrictive than those discussed under sections B and C below for non-agricultural removals, and include voluntary and self-regulating components under tiers 1 and 2 of the four-tiered structure.

Deciduous Oak Removal Thresholds for Agricultural Operations 4-Tiered Program:

The program is based on the following 4-tiered system (see Table 1, below). Requirements that are triggered by agricultural deciduous oak removal within Tiers 1 through 3 are hereby set forth within these guidelines; those for Tier 4 are set forth in Article IX of Chapter 35 of the Santa Barbara County Code.

Table 1. Tiers for Agricultural Deciduous Oak Removal

Lot Size (acres)	Tier 1 Exempt From Regeneration Requirement; Count Toward Cumulative # Removed	Tier 2 Landowner Regeneration Required; Self- Certification of Compliance	Tier 3 Management Plan Required	Tier 4 P&D Discretionary Permit Required
Less than 50	1	2 – 3	4 – 8	> 8
50 – < 100	2	3 – 6	7 – 17	> 17
100 – < 150	3	4 – 10	11 – 26	> 26
150 – < 200	4	5 – 13	14 – 34	> 34
200 – < 250	5	6 – 16	17 – 42	> 42
250 – < 300	6	7 – 19	20 – 50	> 50
300 – < 350	7	8 – 22	23 – 58	> 58
350 – < 400	8	9 – 25	26 – 66	> 66
400 – < 450	9	10 – 28	29 – 74	> 74
450 – < 500	10	11 – 31	32 – 82	> 82
500 – < 550	11	12 – 34	35 – 90	> 90
550 – < 600	12	13 – 37	38 – 98	> 98
600 – < 650	13	14 – 40	41 – 106	> 106
650 – < 700	14	15 – 43	44 – 114	> 114
700 – < 750	15	16 – 46	47 – 122	> 122
750 – < 800	16	17 – 49	50 – 131	> 131
800 – < 850	17	18 – 52	53 – 138	> 138
850 – 899	18	19 – 55	56 – 146	> 146
Greater than 899	19	20 – 58	59 – 154	> 154
<p>Removals of deciduous oaks that equal or exceed 30% of all deciduous oaks on legal lots 100 acres or greater, or which equal or exceed 50% of deciduous oaks on lots less than 100 acres shall be deemed significant and trigger Tier 4 review.</p>				

Requirements under each Tier:

1. Tier 1: Exempt

- a. No regeneration or reporting required. (The Oak Tree Specialist and Agricultural Commissioner should outreach to landowners to request that they voluntarily report Deciduous Oak removals as part of efforts to work with the community to encourage replanting and regeneration of valley and blue oaks.) Consistent with the Program Basics below, removals exempt under Tier 1 shall count as part of the total number of trees removed during the removal period for purposes of determining when/if tiers 2, 3 and 4 apply.

2. Tier 2: Landowner Regeneration Required; Self-Certification

In balancing voluntary and regulatory components of the Guidelines, this tier is designed as the predominantly voluntary, self-regulating element.

- a. Cumulative removals within the removal period exceeding Tier 1 allowances are subject to the requirements of Tier 2.
- b. 15:1 replanting ratio is required. Replacement trees shall be planted no closer than 20 feet from each other or from existing deciduous oak trees, and no farther than 165-180 feet from each other or from existing deciduous oak trees, unless recommended otherwise by the Oak Tree Specialist. Landowners shall be encouraged to consult with the Oak Tree Specialist and replant consistent with other recommended Tier 2 replanting standards (see Attachment 1). Although consultation with the Oak Tree Specialist is encouraged, the landowner self-evaluates and determines success or failure. The recommended survival target for replacement trees should be a 2/3 survival rate at five years or 1/3 surviving and attaining a height above the browse line (8 feet).
- c. On-site Monitoring by the Agricultural Commissioner's Office requires landowner's voluntary cooperation.
- d. Documentation of oak tree removals at Tier 2 is required through self-certification and notification to the Agricultural Commissioner's Office.
- e. Willful failure to notify the Agricultural Commissioner's Office of tree removals, carry out required replanting, or pursue regeneration are violations of this Chapter or Chapter 35, Article IX, at the discretion of the Agricultural Commissioner.
- f. Violations trigger Tier 3 management plan or Tier 4 permit (see County Code Chapter 35, Article IX), and/or fines, at the discretion of the Agricultural Commissioner in consultation with the Oak Tree Specialist. Violations which are determined to trigger Tier 3 shall be considered a violation under this chapter. Violations which are

determined to trigger Tier 4 shall be considered to have arisen under Chapter 35, Article IX and be a violation of Article IX.

3. Tier 3: Management Plan Required

In balancing voluntary and regulatory components of the Guidelines, this tier is designed to have more regulatory elements. The Oak Tree Specialist shall provide or arrange for assistance with drafting management plans if requested by the landowner. Management plans must meet the minimum standards contained in Attachment 2 as well as all of the other appropriate requirements set forth in the Program Basics below.

- a. Management plan approval by the Agricultural Commissioner is required before cumulative removals within the removal period exceed allowances under Tier 2.
- b. Agricultural Commissioner's Office shall approve management plans on a case-by-case basis without additional CEQA review or hearings where the plan for a particular property is consistent with Tier 3 management plan standards (e.g. avoidance of removal of actively used granary trees, raptor roosting or nesting trees, trees in riparian corridors, fragmentation of habitats, corridors or links to other habitat – see Attachment 2).
- c. Management plan standards must be met in order for project to be approved (see Attachment 2).
- d. Monitoring by Oak Tree Specialist is required as a condition of the Management Plan.
- e. Willful failure to adhere to management plan standards is a violation of Chapter 35, Article IX.
- f. Violations trigger Tier 4 permit requirement. Violations which are determined to trigger Tier 4 shall be considered to have arisen under Chapter 35, Article IX and be a violation of Article IX.

4. Tier 4: Planning and Development Discretionary Permit Required

- a. Cumulative removals exceeding Tier 3 allowances require separate discretionary review and permit approval from P&D, including CEQA review and Planning Commission hearing.
- b. Tier 4 standards and procedures are set forth in Article IX of Chapter 35 of the Santa Barbara County Code.
- c. Consistency with the Comprehensive Plan is required as part of the discretionary review.

B. DECIDUOUS OAK REMOVAL FOR NON-AGRICULTURAL PURPOSES, WHERE A DEVELOPMENT PERMIT IS NOT REQUIRED

The requirements for deciduous oak removals for non-agricultural purposes shall apply to all removals on private land outside of the coastal zone and urban boundaries, including all zone districts listed under Section I.A above, not done as agriculturally associated earthwork as defined in Section 14-8 of the Grading Ordinance. The following thresholds shall apply (see Table 2 below).

Requirements under each Tier

1. Tier 1: Exempt
 - a. Removal of one protected deciduous oak on legal lots of any size shall be exempt. No regeneration or reporting required. (The Oak Tree Specialist and Agricultural Commissioner should outreach to landowners to request that they voluntarily report Deciduous Oak removals as part of efforts to work with the community to encourage replanting and regeneration of valley and blue oaks.) Consistent with the Program Basics below, removals exempt under Tier 1 shall count as part of the total number of trees removed during the removal period for purposes of determining when/if tiers 2 or 3 apply.
2. Tier 2: Landowner Regeneration Required; Self-Certification
 - a. Landowner must adhere to the requirements of Section I.A.2 above (Tier 2 for agricultural deciduous oak removal). Regeneration must be consistent with the standards in Attachment 1.

Table 2. Tiers for Non-agricultural Deciduous Oak Removals.

Lot Size (acres)	Tier 1 Exempt Removals	Tier 2 Removals (Replanting Required)	Tier 3 Removals (P&D Discretionary Permit Required)
< 50	1	2	> 2
50 – <100	1	2 – 3	> 3
100 – < 200	1	2 – 4	> 4
200 – < 300	1	2 – 5	> 5
300 – < 400	1	2 – 6	> 6
400 – < 500	1	2 – 7	> 7
500 – < 600	1	2 – 8	> 8
600 – < 700	1	2 – 9	> 9
700 – < 800	1	2 – 10	> 10
800 – 899	1	2 – 11	> 11
> 899	1	2 – 12	> 12

3. Tier 3: Planning and Development Discretionary Permit Required

- a. Cumulative removals exceeding Tier 2 allowances require separate discretionary review and permit approval from P&D, including CEQA review and Planning Commission hearing.
- b. Tier 3 standards and procedures are set forth in Article IX of Chapter 35 of the Santa Barbara County Code.
- c. Consistency with the Comprehensive Plan is required as part of the discretionary review.

C. DECIDUOUS OAK REMOVAL ASSOCIATED WITH ACTIVITIES REQUIRING A DEVELOPMENT PERMIT (e.g. LUP, CUP, DP)

Deciduous oak removals associated with activities requiring a development permit shall be considered during the development permit process pursuant to the requirements of Chapter 35, Article III.

II. LIVE OAK PROGRAM

A. LIVE OAK REMOVAL FOR AGRICULTURAL PRACTICES

The following standards and requirements shall apply to all live oak removals associated with agricultural practices (as defined in Section 14-8 of the Grading Ordinance) on private lands outside of the coastal zone and urban boundaries subject to Santa Barbara County's Zoning Ordinance, including all of those zone districts listed under Section I.A above. These provisions replace the County of Santa Barbara Environmental Thresholds and Guidelines Manual as a standard for addressing significant environmental damage associated with agricultural grading on the issue of live oak removal for agricultural practices.

1. Management plan approval by the Agricultural Commissioner's Office is required before cumulative live oak removals within the 30-year removal period exceed 15 percent of live oak canopy cover on a given lot.
2. The Agricultural Commissioner's Office shall approve management plans on a project-specific, case-by-case basis without additional CEQA review or hearings where the plan for particular property is consistent with the Live Oak Management Plan Standards (see Attachment 3).
3. Management plan standards must be met for the removal project to be approved (see Attachment 3).

4. Monitoring by the Oak Tree Specialist is required as a condition of the Management Plan.
5. Failure to adhere to management plan standards is a violation.
6. Violations of a management plan trigger intervention by the Oak Tree Specialist, administrative fines pursuant to the Administrative Fine Ordinance, and/or mandatory assistance by the Oak Tree Specialist to ensure compliance, at the discretion of the Oak Tree Specialist.
7. Landowners are encouraged to voluntarily develop their own management plan or follow the general principles of the management plan standards (e.g. avoidance of granary trees and trees within riparian and wildlife corridors, minimization of habitat fragmentation, etc. - see Attachment 3) when designing agricultural projects not expected to trigger the 15 percent canopy removal threshold. Landowners should, where appropriate, consider leaving habitat elements such as dead trees, snags, and downed wood in place and look into financial incentive programs from county, state, and federal programs to help them in developing strategies for protecting the resources without impinging on their proposed agricultural projects. Where live oak tree removal is necessary, landowners are encouraged to engage in voluntary regeneration programs prior to reaching the 15 percent canopy removal threshold and consult with the Oak Tree Specialist on successful replanting strategies, as well as general oak management, project design, and incentives.

B. LIVE OAK REMOVAL FOR NON-AGRICULTURAL PURPOSES, WHERE A DEVELOPMENT PERMIT IS NOT REQUIRED

The guidelines for live oak removals not associated with an agricultural activity (as defined by Section 14-8 of the Grading Ordinance), but for which no development permit is required, are the same as for agricultural removals except that 5 percent canopy removal triggers a management plan requirement, rather than 15 percent. All other aspects of the program are the same as those for agricultural removals, pursuant to Section II.A above.

C. LIVE OAK REMOVAL ASSOCIATED WITH ACTIVITIES REQUIRING A DEVELOPMENT PERMIT

Consistency with the Comprehensive Plan shall apply only to live oak removal associated with activities requiring a development permit, pursuant to Chapter 35, Article III.

III. PROGRAM BASICS

A. GENERAL (Apply to Agricultural and Non-Agricultural removals in both Deciduous and Live Oak Programs)

1. Removal Period: The Oak Tree Protection and Regeneration Program shall be implemented during a recurring 30-year “removal period” beginning on the date of program adoption. Removals would be calculated cumulatively during the removal period.
2. Unit of land that the removal thresholds are based on: Legal lots or, where applicable, contiguous legal lots under single ownership, as determined by the Agricultural Commissioner.
3. Definition of Removal: “Causing an oak tree to die, be uprooted and/or removed from the ground by any means, including, but not limited to, cutting, uprooting, poisoning, or burning (unrelated to controlled burns)¹. Excessive pruning or topping, or severing an oak tree’s roots enough to lead to the death of the tree, would also be considered oak tree removal.” Death by natural causes (e.g. sudden oak death syndrome) or removals required due to disease, regulatory requirements or trees removed that pose an immediate threat to safety² shall not be considered a removal.
4. Where a public utility or other public entity has an easement over a portion of a lot, and if a public utility or other public entity removes protected oak trees within a utility or other public easement located over a portion of a lot, those protected oak tree removals shall not be counted toward the cumulative thresholds set out in these guidelines for the remainder of the lot.
5. Administering Agency: Agricultural Commissioner’s Office, with technical assistance from the CRCDD and an Oak Tree Advisory Committee.
6. Naturally occurring valley, blue, and live oak seedlings/saplings, growing on the lot and between six (6) inches and six (6) feet in height that are protected and nurtured for five (5) years, may be counted as replacement (mitigation) trees under the Program.
7. Any combination of acorns, planted seedlings/saplings, or naturally occurring valley, blue, and live oaks between six (6) inches and six (6) feet tall, if established according to the program guidelines, may be used to achieve the required number of replacement trees. Valley oaks shall replace valley oaks removed, blue oaks shall replace blue oaks removed, and live oaks shall replace live oaks removed.

¹ The Oaks Tree Specialist shall work with landowners, APCD, the Range Improvement Association and the Fire Districts to coordinate protocols for controlled burns that protect native oaks where feasible.

² An example of “an immediate threat to safety” would be an oak that, through natural causes, is imminently and highly likely to fall directly onto a structure, such as a residence, barn, or shed.

8. Replanting shall occur on the lot from which the protected oak trees are to be removed, unless the Oak Tree Specialist determines it precludes reasonable use of the lot, or no suitable area exists on the lot for replanting oak trees. In such cases the replacement oak trees may be planted in an off-site location acceptable to the applicant/landowner and the Oak Tree Specialist.
9. Program Review: Both the Deciduous Oak Program and the Live Oak Program will be the subject of an effectiveness review by the Board of Supervisors to determine, among other things, if regeneration is working. In addition, the amount of oak acreage removed versus the amount of oak acreage created and/or replaced will be analyzed at the time of these reviews to determine the effect of the program on the amount of oak habitat. There will be an initial review after two years from the date of adoption, then a second review after five years and periodic reviews every five years thereafter. The Board could initiate program changes depending on the results of the reviews, after meeting noticing and other legal requirements.

B. DECIDUOUS OAK PROGRAM

1. The removals authorized under tiers 1-4 of Section IA and tiers 1-3 of Section IB above shall each be calculated cumulatively during the 30-year removal period. As removal numbers cumulatively move from one tier to the next, the process for removal shall similarly change and be governed by the next tier.
2. Protected Trees: Valley and blue oak trees of 4" DBH or greater count towards the basic numerical removal thresholds in Table 1 and Table 2 and when measuring the 30 and 50 percent triggers. Replacement trees required as mitigation under the Deciduous Oak Program are protected trees regardless of size. Trees voluntarily planted are not protected unless credited as pre-mitigation.
3. Pre-Mitigation: For every ten deciduous oak trees voluntarily planted and nurtured for a minimum of five years, or existing oak tree seedlings or saplings six inches to six feet in height and less than two inches DBH that have been nurtured for a minimum of five years, one additional deciduous oak tree of the same species can be removed under the thresholds in Table 1 and Table 2. Documentation of planting pre-mitigation trees or commencing nurturing of naturally-occurring pre-mitigation trees must be submitted to the Agricultural Commissioner's office prior to claiming such trees for pre-mitigation credit. Planting of pre-mitigation trees should adhere to the replacement standards listed in Attachment 1 and coordination with the Oak Tree Specialist should be pursued by landowners when designing their credit tree projects.

C. LIVE OAK PROGRAM

1. Thinning of live oak woodlands and forests for rangeland management/improvement purposes is exempt from this program. However, if rangeland is converted to cultivated agriculture, resulting in the removal of live oak tree canopy, any thinning of live oak tree canopy prior to the conversion within the 30-year removal period will be added to the landowner's cumulative live oak removal in determining whether a management plan is required. For the purposes of this program, thinning for rangeland management/improvement is defined as "the removal of understory vegetation and/or evenly reducing the canopy cover of a live oak woodland or forest by means of cutting or pruning (where the root system remains in place) without removing contiguous areas of canopy (i.e. removal is scattered across the canopy and no two adjacent protected trees are removed together)."
2. Protected Trees: Live oak trees of 8" DBH or greater are protected trees and count towards calculating the number of required live oaks to be replaced. Replacement trees required as mitigation under the Live Oak Program are protected trees regardless of size. Trees voluntarily planted are not protected.

Attachment 1

Replanting Standards for Tier 2 of Deciduous Oak Program

1. Replacement deciduous oak trees that are planted should come from nursery stock grown from locally-sourced acorns, or use acorns gathered locally, preferably from the same watershed in which they are planted. If planting is done using acorns, the ratio of acorns to protected oak trees removed should be a minimum of forty-five (45) acorns for every protected deciduous oak tree removed. Up to three (3) acorns should be planted in the same hole.
2. Replacement deciduous oak trees should be established in a location suitable for their growth and survival as determined by the landowner and Oak Tree Specialist.
3. The replacement deciduous oak trees should be nurtured for five (5) years, the last two without supplemental watering, using techniques consistent with the most current version of the University of California publication "How to Grow California Oaks." At the end of the five years, ten trees for every protected tree removed should be alive and in good health. Alternatively, five trees for every protected tree removed should attain a height above the browse line. (See Tier 2 description.)
4. Each replacement deciduous oak tree should be protected against damaging ground disturbance, soil compaction, or over-irrigation within the dripline. It should be fenced to protect it from grazing or browsing by animals both below and above ground, until the tree has reached a minimum of eight (8) feet in height.
5. Valley oaks shall replace valley oaks removed and blue oaks shall replace blue oaks removed.

Attachment 2

Management Plan Standards for Tier 3 of Deciduous Oak Program for Agricultural Removals

1. The plan shall:
 - a. Provide a means to accomplish the long-term goal of the program which is to promote the conservation and regeneration of areas where oaks occur and work to increase the native oak population and extent. It is recognized that the replacement ratios, planting distances, and fencing and watering requirements represent averages and norms. They may be adjusted by the Oak Tree Specialist on a case-by-case basis reflecting the proven record of a participant so as to establish a practical and working relationship while meeting the goal of the program.
 - b. Demonstrate how the mix of deciduous oak tree savannas, woodlands, and forests on the lot will be preserved, created, enhanced, restored, and maintained, so that:
 - (1) The removal of protected oak trees does not divide the remaining savanna, woodland, and forest habitats into small, isolated fragments.
 - (2) Protection, maintenance, restoration, and enhancement of large blocks of savanna, woodland, and forests are given priority over maintenance, restoration, and enhancement of smaller, more isolated habitat patches.
 - (3) Valley and blue oak trees that link on- or off-site oak tree savannas, woodlands, forests, or other existing, proximate habitats are retained to the maximum extent feasible.
 - (4) On-site replacement is given priority over off-site replacement except where no suitable on-site locations exist, or reasonable use of the lot would be precluded.
 - (5) There is avoidance of removal of actively used granary trees, raptor roosting or nesting trees, and trees in riparian and other wildlife corridors.
 - c. Comply with the following requirements, when applicable.
 - (1) When required by the Oak Tree Specialist on a case-by-case basis, a buffer area protecting the critical root zone shall be maintained around identified valley and blue oak trees retained on the lot.
 - (2) Protected oak trees that are removed shall be compensated at a 15:1 ratio by replacement planting, or protection of naturally occurring oak trees between six (6) inches and six (6) feet tall on the lot.

- d. Identify valley and blue oak tree replanting, restoration, conservation and enhancement sites on a plan or aerial photograph to facilitate mitigation monitoring and tracking; and identify the species, location, and size of all oak trees that are planted or protected as mitigation or to fulfill a condition on the permit.
 - e. Provide the deciduous oak tree replanting schedule and nurturing regime.
2. Replacement deciduous oak trees that are planted must come from nursery stock grown from locally-sourced acorns, or use acorns gathered locally, preferably from the same watershed in which they are planted. If planting is done using acorns, the ratio of acorns to protected oak trees removed shall be a minimum of forty-five (45) acorns for every protected deciduous oak tree removed. Up to three (3) acorns may be planted in the same hole.
 3. Replacement deciduous oak trees shall be established in a location suitable for their growth and survival as determined by the Oak Tree Specialist, no closer than twenty (20) feet from each other or from existing oak trees and no farther than 165-180 feet from each other or existing oak trees unless otherwise approved by the Oak Tree Specialist.
 4. Valley oaks shall replace valley oaks removed and blue oaks shall replace blue oaks removed.
 5. The replacement deciduous oak trees shall be nurtured for a minimum of five (5) years, the last two without supplemental watering, using techniques consistent with the most current version of the University of California publication "How to Grow California Oaks." At the end of the five years, ten trees for every protected tree removed must be alive, in good health as determined by the Oak Tree Specialist, and capable of surviving without nurturing and protection.
 6. Each replacement deciduous oak tree must be protected against damaging ground disturbance, soil compaction, or over-irrigation within the dripline. It must be fenced to protect it from grazing or browsing by animals both below and above ground until it has reached a minimum of eight (8) feet in height.
 7. Where conditions warrant and where agreed to by the landowner and Oak Tree Specialist, tree planting designs and nurturing practices (i.e. protective structures, watering schedules) may be adjusted to improve the probability that replacement trees will be established successfully.

Attachment 3

Management Plan Standards for the Live Oak Program

1. The plan shall:
 - a. Provide a means to accomplish the long-term goal of the program which is to promote the conservation and regeneration of areas where oaks occur and work to increase the native oak population and extent. It is recognized that the replacement ratios, planting distances, and fencing and watering requirements represent averages and norms. They may be adjusted by the Oak Tree Specialist on a case-by-case basis reflecting the proven record of a participant so as to establish a practical and working relationship while meeting the goal of the program.
 - b. Demonstrate how the mix of live oak savannas, woodlands and forests on the lot will be preserved, created, enhanced, restored, and maintained, so that:
 - (1) The removal of live oak trees does not divide the remaining savannas, woodlands and forests into small, isolated fragments.
 - (2) Protection, maintenance, restoration, and enhancement of large blocks of savannas, woodlands and forests are given priority over maintenance, restoration, and enhancement of smaller, more isolated habitat patches.
 - (3) Live oak trees that link on- or off-site oak tree savannas, woodlands, forests, or other existing, proximate habitats are retained to the maximum extent feasible.
 - (4) On-site replacement is given priority over off-site replacement except where no suitable on-site locations exist, or reasonable use of the lot would be precluded.
 - (5) There is avoidance of removal of actively used granary trees, raptor roosting or nesting trees, and trees in riparian and other wildlife corridors.
 - c. Comply with the following requirements, when applicable:
 - (1) When required by the Oak Tree Specialist on a case-by-case basis, a buffer area protecting the critical root zone shall be maintained around identified native oak trees retained on the lot.
 - (2) Protected oak trees (greater than 8 inches dbh) that are removed shall be compensated at a 10:1 ratio by replacement planting, or protection of naturally occurring oak trees between six (6) inches and six (6) feet tall on the lot. In situations where counting individual trees is infeasible or impractical given the density of the canopy, the

- canopy removed shall be compensated at a ratio of 360 trees for every 1 acre of canopy removed (or fraction thereof). However, the Oak Tree Specialist shall have the discretion to reduce the replacement ratio if the goal of “no net loss” could be better achieved through creative use of conservation easements and other preservation/restoration options.
- d. Identify live oak tree replanting, restoration, conservation and enhancement sites on a plan or aerial photograph to facilitate mitigation monitoring and tracking; and identify the species, location, and size of all oak trees that are planted or protected as mitigation or to fulfill a condition on the permit.
 - e. Provide the live oak tree replanting schedule and nurturing regime.
2. Replacement live oak trees that are planted must come from nursery stock grown from locally-sourced acorns, or use acorns gathered locally, preferably from the same watershed in which they are planted. If planting is done using acorns, the ratio of acorns to protected oak trees removed shall be a minimum of thirty (30) acorns for every protected live oak tree removed. Up to three (3) acorns may be planted in the same hole. Live oaks of the same species as those removed shall be replanted as replacement live oaks.
 3. Replacement live oak trees shall be established in a location suitable for their growth and survival as determined by the Oak Tree Specialist. Twenty-foot spacing from each other or from existing oak trees is the general standard, but the Oak Tree Specialist can adjust this spacing requirement up or down based on site conditions in an effort to best meet the overall goals of this program.
 4. The replacement live oak trees shall be nurtured for five (5) years, the last two without supplemental watering, using techniques consistent with the most current version of the University of California publication “How to Grow California Oaks.” At the end of the five years, six trees for every protected tree removed must be alive, in good health as determined by the Oak Tree Specialist, and capable of surviving without nurturing and protection.
 5. Each replacement live oak tree (including natural sprouts and seedlings that are protected) must be protected against damaging ground disturbance, soil compaction, or over-irrigation within the dripline. It must be fenced to protect it from grazing or browsing by animals both below and above ground, until it has reached a minimum of eight (8) feet in height.
 6. Where conditions warrant and where agreed to by the landowner and Oak Tree Specialist, tree planting designs and nurturing practices (i.e. protective structures, watering schedules) may be adjusted to improve the probability that replacement trees will be established successfully.