

# ATTACHMENTS

Attachment	1	Easement Deed and Agreement, including Exhibit "B", Reserved and Restricted Rights
Attachment	2	Summary of Easements between Sonoma Land Trust and Joseph and Genevieve Roche
Attachment	3	Applicable Sonoma County Zoning Regulations
Attachment 4		Soil Descriptions

**ROCHE RANCH CONSERVATION EASEMENT**

**BASEL**

**INE DOCUMENTATION**

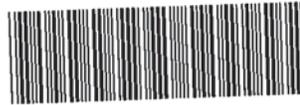
**A**

**TTACHMENT 1  
EASEMENT DEED AND AGREEMENT, INCLUDING EXHIBIT "B",  
RESERVED AND RESTRICTED RIGHTS**

9

RECORDING REQUESTED BY AND  
RETURN TO:

Sonoma County Agricultural  
Preservation and Open Space District  
575 Administration Drive, Room 102A  
Santa Rosa, CA 95403



2007134280

CHICAGO TITLE CO.  
12/21/2007 15:16 DEED  
RECORDING FEE: 0.00  
PAID

OFFICIAL RECORDS OF  
SONOMA COUNTY  
JANICE ATKINSON

29 PGS



EXEMPT FROM RECORDING FEES  
GOV. CODE SECTION 6103

DEED AND AGREEMENT  
BY AND BETWEEN  
THE SONOMA LAND TRUST  
AND  
THE SONOMA COUNTY AGRICULTURAL PRESERVATION  
AND OPEN SPACE DISTRICT

The Sonoma Land Trust, a California non-profit corporation (hereinafter referred to as GRANTOR), and the Sonoma County Agricultural Preservation and Open Space DISTRICT, a public agency formed pursuant to the provisions of Public Resources Code sections 5500 et seq. (hereinafter DISTRICT), its successors and assigns, agree as follows:

RECITALS

A. GRANTOR is the owner in fee simple of certain real property (hereinafter "the Property") located in Sonoma County and more particularly described in Exhibit A, attached hereto and made a part of hereof.

B. In 1990 the voters of Sonoma County approved the creation of DISTRICT and the imposition of a transactions and use tax by the Sonoma County Open Space Authority ("the Authority"). The purpose for the creation of DISTRICT and the imposition of the tax by the Authority was to preserve agriculture and open space by acquiring interests in appropriate properties from willing sellers in order to meet the mandatory requirements imposed on the County and each of its cities by Government Code sections 65560 et seq. and by the open space elements of their respective general plans. In order to accomplish that purpose, DISTRICT entered into a contract with the Authority whereby, in consideration of that entity financing DISTRICT's acquisitions, DISTRICT agreed to and did adopt an acquisition program that was in conformance with the Authority's voter approved Expenditure Plan.

C. On November 6, 2007, DISTRICT's Board of Directors, in its Resolution No. 07-0930 determined that the acquisition of a conservation easement in the Property, pursuant to Government Code section 65402 and Sonoma County Ordinance No. 5180, was consistent with the 1989 Sonoma County General Plan (specifically the Plan's Open Space element) because the acquisition of the Property will ensure the preservation of its largely open, scenic character as well as the preservation of critical plant and animal habitat areas. On October 11, 2007 the Sonoma County Open Space Authority determined, in its Resolution No. 2007-024 that the acquisition was consistent with its Expenditure Plan.

D. DISTRICT has the authority to acquire conservation easements by virtue of Public Resources Code section 5540 and possesses the ability and intent to enforce the terms of this Agreement.

THEREFORE, in consideration of the foregoing recitations and of the mutual covenants, terms, conditions, and restrictions herein set forth and other valuable consideration receipt of which is hereby acknowledged, GRANTOR and DISTRICT agree as follows:

1. **Grant and Acceptance of Conservation Easement.** Pursuant to the common and statutory law of the State of California including the provisions of Civil Code sections 815 to 816, inclusive, GRANTOR hereby grants to DISTRICT and DISTRICT accepts a conservation easement (hereinafter "this Easement" or "the Easement") in the Property in perpetuity.

2. **Statement of Purpose.** It is the purpose of this Conservation Easement Agreement to preserve the open space, scenic, and natural resource values of the Property, and each of them, and to prevent any uses of the Property that will significantly impair or interfere with those values. The Property possesses natural, scenic, open space, wildlife and watershed values (collectively, "Conservation Values") of importance to the DISTRICT, the GRANTOR, the people of Sonoma County, and the people of the State of California. In particular the Conservation Values include:

**Tolay Creek and Watershed.** the Property includes approximately 3 miles of Tolay Creek, which is identified as a Priority Riparian Corridor by Sonoma County Agricultural Preservation and Open Space District ("SCAPOS") and the Sonoma County General Plan. (Connecting Communities and The Land, A Long-Range Acquisition Plan. SCAPOS. June, 2006; Acquisition Plan 2000. SCAPOS. July, 2000.) Tolay Creek feeds into the California Department of Fish and Game Napa Sonoma Marsh complex and the U. S. Fish and Wildlife Service San Pablo Bay

Wildlife Refuge, a biologically rich seasonal wetland and tidal wetland complex in Sonoma County, and ultimately into San Francisco Bay. Restoration and protection of the Tolay Creek watershed is major concern of the State of California and Sonoma County. (The Goals Project. 1999. Baylands Ecosystem Habitat Goals U. S. Environmental Protection Agency).

**Habitat.** The preservation of the Property provides habitat for important plant and animal species integral to preserving the natural character of Sonoma County. Habitats on the property include moist grasslands, serpentine grasslands, approximately 3 miles of Tolay Creek and riparian corridor, open meadows, and oak woodlands. Uplands, such as those that occur on the Property, have been identified as an integral component of the San Francisco Bay ecosystem and this Property provides an opportunity to protect key watershed habitats associated with San Francisco Bay. The variety of habitats on the Property will support an abundance of species, including an active golden eagle nest site, the Opler's longhorn moth, Prairie falcon, and northern burrowing owl; all of which are on the California "Special Animals" list. Accordingly, this Agreement will primarily preserve the Property's unique natural habitats and associated wildlife including Tolay Creek and its riparian zone. The Property is located in an area designated (a) by SCAPOSD as a Species Rich Area (Connecting Communities and The Land, A Long-Range Acquisition Plan. SCAPOSD. June, 2006; Acquisition Plan 2000. SCAPOSD. July, 2000.); (b) by Sonoma County as a sensitive natural area with occurrences of special status species (Sonoma County General Plan, 1989. Biotic Resource Area Map, Figure OSRC-2); The special status species in the area may include California red-legged frog (California Department of Fish and Game's Natural Diversity Database (CNDDDB)).

**Connectivity.** The Riparian Corridor is immediately adjacent to approximately 20,000 acres of state, federal, local and privately protected lands. It represents one of the only remaining undeveloped natural freshwater to salt marsh ecosystems, including approximately 3 miles of the Tolay Creek riparian corridor, connecting Tolay Lake to San Francisco Bay. The Property is adjacent to Tolay Lake Regional Park and the Sonoma County Cougar Mountain open space easement, which in turn is contiguous with Sonoma Land Trust's 2,327 acre Sears Point Restoration Project and in close proximity to California Department of Fish and Game's Napa-Sonoma Marsh complex, and the San Pablo Bay National Wildlife Refuge and other public protected lands. Its protection furthers SCAPOSD's objectives to (a) protect land that provides viable habitat linkages for wildlife and intact core habitat areas, (b) conserve contiguous areas of high quality riparian habitat, and (c) provide connections between natural areas throughout the county. (Connecting Communities and The Land, A Long-Range Acquisition Plan. SCAPOSD. June, 2006; Acquisition Plan 2000. SCAPOSD. July, 2000.).

**Open Space and Scenic Resources.** The Property ranges from 100 feet on the valley floor to 780 feet in the hills, with several overlooks providing spectacular views of the Petaluma River basin, Mt. Tamalpais, San Francisco, Oakland, Mt. Diablo, Mt. St. Helena and other scenic points in the Bay Area. The Property is prominently visible from and provides scenic enjoyment to the general public from State Highways 37 and 121. In summary, it is the purpose of this Agreement to protect the Property's Conservation Values and to prevent any uses of the Property that would significantly impair or interfere with those values. These purposes, as further defined by the provisions of this Agreement, are generally referred to collectively hereinafter as "the Conservation Purpose of this Easement".

GRANTOR intends that this Agreement will confine the uses of the Property to the following, which are consistent with the Conservation Purpose of this Easement: (a) habitat management restoration and enhancement, including compatible agriculture, including grazing and rangeland management; (b) management and conservation of natural resources, including related scientific research; (c) low intensity outdoor public educational and recreational activities and (d) residential uses within one area of approximately five (5) acres (hereinafter, the "Residential Envelope"); all as allowed by Exhibit "B" hereto. GRANTOR shall prepare a Management Plan for the Property that addresses (a) through (d) above in this paragraph and provide the Management Plan to DISTRICT for review. In addition, GRANTOR shall refrain from those uses and practices that are inconsistent with the conservation purpose of this Agreement, which include, but are not limited to, the uses and practices identified in Exhibit "B."

3. **Affirmative Rights Granted to the DISTRICT.** GRANTOR conveys the following rights to DISTRICT:

3.1 **Protecting Conservation Values.** DISTRICT shall have the right to identify, preserve and protect the Conservation Values of the Property; and

3.2 **Property Inspections.** DISTRICT shall have the right to enter upon the Property and to inspect, observe, and study the Property for the purposes of (i) identifying the current uses and practices thereon and the condition thereof, (ii) monitoring the uses and practices regarding the Property to determine whether they are consistent with this Easement, and (iii) enforcing the terms of this Easement pursuant to Section 13 below. Entry shall be permitted at least once a year at reasonable times, upon 24 hours' prior notice to GRANTOR, and shall be made in a manner that will not unreasonably interfere with GRANTOR's use and quiet enjoyment of the Property pursuant to the terms and conditions of this Easement. Each entry shall be for only so long a duration as is reasonably necessary to achieve the inspection, monitoring and subsequent enforcement, if applicable, but may not be limited to a single physical entry during a single twenty-four hour period; and

3.3 **Approval of Certain Activities.** DISTRICT shall have the right to review and approve proposed uses and activities as more specifically set forth in Section 5 and Exhibit B herein, and in accordance with Section 7.

4. **Prohibited and Restricted Uses of the Property.** Any activity on the Property or use of the Property which is inconsistent with the Conservation Purpose of this Easement is prohibited. Without limiting the generality of the foregoing, the activities and uses described in Exhibit B attached hereto are expressly prohibited or restricted.

5. **GRANTOR's Reserved Rights.** The allowed uses, practices and rights to improve the Property which are not retained by GRANTOR above or allowed under Exhibit B are hereby extinguished. In the event that such extinguishment is determined to be unlawful or otherwise unenforceable, then those uses, practices and rights contributing to the improvement of the Property are hereby assigned by GRANTOR to DISTRICT. Neither GRANTOR nor DISTRICT shall use or receive the benefit from any increase in allowable uses, practices and rights to improve the Property, that are inconsistent with this Easement, resulting from any change in applicable governmental land use regulations.

6. **Merger of Parcels.** GRANTOR acknowledges that the Property currently consists of a single parcel as shown on the current Sonoma County Assessment Roll. GRANTOR further acknowledges that one or more additional parcels may exist on the Property through the recognition of previously unrecognized parcels created by patent or deed conveyances, subdivisions, lot line adjustments, surveys, recorded or unrecorded maps or other documents and, that existing or future land use regulations might permit these parcels to be sold or otherwise conveyed separately from one another as separate legal parcels. It is the intent of GRANTOR and DISTRICT to prevent the separate conveyance of any of these parcels. To the extent not already accomplished as a condition precedent to the acceptance by DISTRICT of this Easement, GRANTOR shall apply for and pursue to completion an application to the County of Sonoma, or, such other governmental agency having jurisdiction, for the consolidation or merger of any existing parcels or claimed parcels of the Property into a single parcel. If the parcels cannot be merged because of their lack of contiguity or for any other reason, GRANTOR shall pursue and secure such other applicable legal restrictions so that no such existing parcels or claimed parcels may be separately sold or conveyed from the others or the property as a whole.

7. **Notice and Approval Procedures.** Some uses permitted by this Easement require that prior written notice be given by GRANTOR to DISTRICT, while other uses permitted by this Easement require the prior written approval of DISTRICT. Any activity proposed to be done or undertaken by GRANTOR which requires prior notice or the prior

approval of DISTRICT shall be commenced only after satisfaction of the requirements of this Section and of Section 18. Notice shall be given or approval requested by using the appropriate form available at DISTRICT's offices. DISTRICT may consider notices and requests for approval in different forms, provided that all necessary information is provided to permit DISTRICT to make an informed judgment as to the consistency of the GRANTOR's request with the terms of this Easement.

7.1 **Uses/Activities Requiring Notice to DISTRICT.** GRANTOR shall deliver the notice to DISTRICT at least forty-five (45) days prior to the commencement of any use or practice requiring notification.

7.2 **Uses/Activities Requiring Prior Approval from DISTRICT.** DISTRICT shall have forty-five (45) days from the receipt of a complete request for approval to review the proposed use or practice and to approve, conditionally approve, approve with modifications, disapprove or otherwise respond to the request. If the request for approval is approved, conditionally approved or approved with modifications, the requested use or practice may only be undertaken in accordance with the terms, conditions and modifications of the approval. DISTRICT's decision to disapprove a request for approval shall be supported by a finding that the requested use or practice is inconsistent with the Conservation Purpose of this Easement or that the request for approval is incomplete or inaccurate. The approval of the DISTRICT obtained in one circumstance shall not be deemed or construed to be a waiver by DISTRICT of any subsequent change in use or practice.

7.3 **DISTRICT's Failure to Respond.** Should DISTRICT fail to post its response to GRANTOR's request for approval within forty-five (45) days of the receipt of said notice, GRANTOR shall send a second notice by registered or certified mail. Should DISTRICT fail to respond to the second notice within ten (10) days of the receipt thereof, GRANTOR may appeal to DISTRICT's Board of Directors.

7.4 **Non-Permitted Uses; DISTRICT's Approval.** In the event GRANTOR desires to commence a use or practice on the Property which is not expressly reserved or prohibited in Exhibit B or Section 5, GRANTOR shall seek DISTRICT's prior written approval of such use or practice in accordance with the procedure set forth in Section 7.2 above. The exercise of any use or practice pursuant to a right not expressly reserved in Exhibit B or Section 5 may constitute a breach of this Easement and be subject to the provisions of Section 13.

8. **Costs and Liabilities Related to the Property.**

8.1 **Maintenance of the Property.** GRANTOR agrees to bear all costs and liabilities of any kind related to the operation, upkeep, and maintenance of the Property and does hereby indemnify and hold DISTRICT harmless therefrom. Without

limiting the foregoing, GRANTOR agrees to pay any and all real property taxes, fees, exactions and assessments and each of them levied or imposed by local, state or federal authorities on the Property. GRANTOR shall be solely responsible for any costs related to the maintenance of general liability insurance covering acts on the Property. Except as specifically set forth in Section 9.2 below, DISTRICT shall have no responsibility whatever for the operation of the Property, the monitoring of hazardous conditions thereon, or the protection of GRANTOR, the public, or any third parties from risks relating to conditions on the Property. GRANTOR hereby agrees to indemnify and hold DISTRICT harmless from and against any damage, liability, claim, or expense (including attorneys' fees) relating to such matters. Without limiting the foregoing, DISTRICT shall not be liable to GRANTOR or any other person or entity in connection with consents given or withheld hereunder, or in connection with any entry upon the Property occurring pursuant to this Easement, or on account of any claim, liability, damage, or expense suffered or incurred by or threatened against GRANTOR or any other person or entity, except as such claim, liability, damage, or expense is the result of DISTRICT'S negligence, gross negligence, or intentional misconduct.

8.2 *Hazardous Materials*. Notwithstanding any other provision of this Easement to the contrary, the parties do not intend and this Easement shall not be construed such that (1) it creates in DISTRICT the obligations or liabilities of an "owner" or "operator" as those words are defined and used in environmental laws, as defined below, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 United States Code, sections 9601 et seq. and hereinafter "CERCLA") or (2) it creates in DISTRICT the obligations or liabilities of a person described in 42 United States Code section 9607(a)(3) or (3) DISTRICT has the right to investigate and remediate any hazardous materials, as defined below, associated with the Property or (4) DISTRICT has any control over GRANTOR'S ability to investigate and remediate any hazardous materials associated with the Property. GRANTOR represents, warrants and covenants to DISTRICT that GRANTOR'S use of the Property shall comply with all environmental laws as that phrase is defined below. For the purposes of this Easement:

i. The term "hazardous materials" includes, without limitation, any flammable explosives, radioactive materials, hazardous materials, hazardous wastes, hazardous or toxic substances, or related materials defined in CERCLA, the Hazardous Materials Transportation Act, as amended (49 United States Code sections 1801 et seq.), the Resource Conservation and Recovery Act of 1976, as amended (42 United States Code sections 6901 et seq.), sections 25117 and 25316 of the California Health & Safety Code, and in the regulations adopted and publications promulgated pursuant to them, or any other federal, state, or local environmental laws, ordinances, rules, or regulations concerning the environment, industrial hygiene or public health or safety now in effect or enacted after this date of this Easement.

ii. The term "environmental laws" includes, without limitation, any federal, state, local or administrative agency statute, regulation, rule, ordinance, order or requirement relating to environmental conditions or hazardous materials.

9. **Indemnities.**

9.1 **GRANTOR'S Indemnity.** GRANTOR shall hold harmless, indemnify, and defend DISTRICT, its agents, employees, volunteers, successors and assigns, from and against damages, liabilities, claims and expenses, including reasonable attorneys' fees, arising from or in any way connected with (i) injury to or the death of any person, or physical damage to property resulting from any act, omission, condition or other matter related to or occurring on or about the Property, except as such damage, liability, claim or expense is the result of the negligence, gross negligence, or intentional misconduct of DISTRICT (it being the intent of this provision to limit GRANTOR'S indemnity to the proportionate part of DISTRICT'S damage, liability, claim or expense for which GRANTOR is responsible); and (ii) the obligations specified in Section 8. In the event of any claim, demand, or legal complaint against DISTRICT, the right to the indemnification provided by this Section 9.1 shall not apply to any cost, expense, penalty, settlement payment, or judgment, including attorneys' fees, incurred prior to DISTRICT'S written notice of such claim, demand, or legal complaint to GRANTOR, unless GRANTOR has acquired knowledge of the matter by other means, nor to any costs, expenses, or settlement payment, including attorneys' fees, incurred subsequent to that notice unless such cost, expense, or settlement payment shall be approved in writing by GRANTOR, which approval shall not be unreasonably withheld.

9.2 **DISTRICT'S Indemnity.** DISTRICT shall hold harmless, indemnify, and defend GRANTOR, its heirs, devisees, successors, agents and assigns, from and against all damages, liabilities, claims and expenses, including reasonable attorneys' fees, arising from or in any way connected with injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property and attributable to DISTRICT, except to the extent that such damage, liability, claim or expense is the result of the negligence, gross negligence, or intentional misconduct of GRANTOR (it being the intent of this provision to limit DISTRICT'S indemnity to the proportionate part of GRANTOR'S damage, liability, claim or expense for which DISTRICT is responsible). In the event of any claim, demand, or legal complaint against GRANTOR, the right to the indemnification provided by this Section 9.2 shall not apply to any cost, expense, penalty, settlement payment, or judgment, including attorneys' fees, incurred prior to GRANTOR'S written notice of such claim, demand, or legal complaint to DISTRICT, nor to any costs, expenses, or settlement payment, including attorneys' fees, incurred subsequent to that notice unless such cost, expense, or settlement payment shall be

approved in writing by DISTRICT, which approval shall be in DISTRICT'S sole discretion. DISTRICT hereby also agrees to hold harmless, indemnify and defend GRANTOR from and against all damages, liabilities, claims and expenses, including attorneys' fees, asserted against GRANTOR by any officer, agent, employee, or volunteer of DISTRICT, for personal injury and/or property damage arising out of any inspection or visit to the Property by any such officer, agent, employee or volunteer of DISTRICT, except to the extent that such injury is attributable to the negligence, intentional act or willful misconduct of GRANTOR.

10. **Public Access to the Property.** Nothing in this Easement shall be construed to preclude GRANTOR's right to grant access to third parties across the Property, provided that such access is allowed in a reasonable manner and is consistent with the Conservation Purpose of this Easement and so long as such activity is undertaken subject to the terms and conditions of this Easement.

11. **Interpretation and Construction.** To the extent that this Easement may be uncertain or ambiguous such that it requires interpretation or construction, then it shall be interpreted and construed in such a way that meets the Conservation Purpose of this Easement. It is the intention of the parties that any interpretation or construction shall promote the Conservation Purpose of this Easement.

12. **Baseline Documentation for Enforcement.** District acknowledges that the present uses of the Property are consistent with the Conservation Purpose of this Easement. In order to establish the present condition of the Property, DISTRICT has prepared a Baseline Documentation Report which will be maintained on file with DISTRICT and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this Easement. The parties agree that the Baseline Documentation Report will provide an accurate representation of the Property at the time of the execution of this Easement.

13. **Remedies for Breach.**

13.1 **DISTRICT's Remedies.** In the event of a violation or threatened violation of any term, condition, covenant, or restriction contained in this Easement, DISTRICT may, following notice to GRANTOR, which notice shall contain a reasonable and specific cure period, institute a suit to enjoin and/or recover damages for such violation and/or to require the restoration of the Property to the condition that existed prior to such violation. The notice shall be a general written notification of the condition claimed by the DISTRICT to be a violation that is either mailed or otherwise delivered by DISTRICT to GRANTOR. If DISTRICT reasonably determines that circumstances require immediate action to prevent or mitigate damage to the values protected by this Easement, DISTRICT may pursue its remedies under this paragraph without waiting for the cure period to expire, and shall have the right, upon the giving of 24 hours' notice, to

enter the Property for the purpose of assessing damage or threat to the Conservation Values protected by this Easement and determining the nature of curative or mitigation actions that should be taken. DISTRICT's rights under this Section apply equally in the event of either actual or threatened violations of the terms of this Easement, and GRANTOR agrees that DISTRICT's remedies at law for any violation of the terms of this Easement are inadequate and that DISTRICT shall be entitled to the injunctive relief described herein, both prohibitive and mandatory, in addition to such other relief, including damages, to which DISTRICT may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies.

13.2 **DISTRICT'S Discretion.** Enforcement of the terms of this Easement shall be at the sole discretion of DISTRICT, and any forbearance by DISTRICT to exercise its rights under this Easement in the event of any breach of any term of this Easement by GRANTOR shall not be deemed or construed to be a waiver by DISTRICT of such term or of any subsequent breach of the same or any other term of this Easement. Any failure by DISTRICT to act shall not be deemed a waiver or forfeiture of DISTRICT'S right to enforce any term, condition, covenant, or purpose of this Easement in the future.

13.3 **Liquidated Damages.** Inasmuch as the actual damages resulting from the loss or depreciation of the Conservation Values of the Property and caused by its breach by GRANTOR are uncertain and would be impractical or extremely difficult to measure, the parties agree that the damages allowed by Civil Code section 815.7(c) shall be measured as follows:

(a) For an improvement prohibited by this Easement, an amount equal to the product of (i) the market value of the improvement, (ii) the length of time that the improvement exists on the Property (in terms of years), and (iii) the then current annual interest rate for post judgment interest; and

(b) For an activity or change in use prohibited by this Easement, whether or not it involves an improvement, an amount equal to any economic gain realized by GRANTOR because of the activity or change in use; and

(c) For an activity or change in use prohibited by this Easement, whether or not it involves an improvement and where there is no measurable economic gain realized by GRANTOR, the product of (i) the cost of restoration, as set forth in a written estimate by a qualified person selected by DISTRICT, (ii) the length of time that the prohibited activity or use continues (in terms of years) and (iii) the then current annual interest rate for post judgment interest.

13.4 **GRANTOR'S Compliance.** If DISTRICT, in the notice to GRANTOR, demands that GRANTOR remove an improvement, discontinue a use or both and claims the damages allowed by Civil Code section 815.7(c), then GRANTOR may mitigate damages by fully complying with DISTRICT'S notice within the cure period provided therein. In the event of litigation arising out of the notice, brought either by GRANTOR or by DISTRICT, in which GRANTOR prevails, then GRANTOR shall be entitled to economic damages; provided, however, that neither DISTRICT nor GRANTOR shall be entitled to damages where DISTRICT has not claimed damages in its notice.

13.5 **Remedies Nonexclusive.** The remedies set forth in this Section 13 are not intended to displace any other remedy available to either party as provided by this Easement, Civil Code sections 815 et seq. or any other applicable local, state or federal law.

14. **Acts Beyond GRANTOR'S Control.** Nothing contained in this Easement shall be construed to entitle DISTRICT to bring any action against GRANTOR for any injury to or change in the Property resulting from causes beyond GRANTOR'S control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by GRANTOR under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes so long as such action, to the extent that GRANTOR has control, is designed and carried out in such a way as to further the Conservation Purpose of this Easement.

15. **Condemnation.** In the event that the Property or some portion thereof is condemned for public use by an entity other than DISTRICT, the market value for purposes of just compensation shall be determined as though this Easement did not exist and GRANTOR and DISTRICT shall share the compensation on the following basis: **GRANTOR 84.6% and DISTRICT 15.4%.** These percentages are derived from the purchase price paid for the fee title of the property before being encumbered by the conservation easement. In the apportionment of the proceeds from an eminent domain proceeding, an adjustment shall be made in GRANTOR's favor for any increase in value after the date of this Easement that is attributable to improvements; provided such increase in value is earned through GRANTOR's efforts and is not the result of value added by this easement, the passage of time or other passive means; and provided, further, that such increase in value is not the result of activities constituting a breach of this Easement.

16. **Agreement to Bind Successors.** The Easement herein granted shall be a burden upon and shall continue as a restrictive covenant and equitable servitude running in perpetuity with the Property and shall bind GRANTOR, GRANTOR's heirs, personal representatives, lessees, executors, all persons claiming under GRANTOR, and

GRANTOR's successors, including but not limited to purchasers at tax sales, and assigns forever. The parties intend that this Easement shall benefit and burden, as the case may be, their respective successors, assigns, heirs, executors, administrators, agents, employees, and all other persons claiming by or through them pursuant to the common and statutory law of the State of California, including, *inter alia*, Civil Code sections 815-816.

17. **Subsequent Deeds and Leases.** GRANTOR agrees that a clear reference to this Easement will be made in any subsequent deed, or other legal instrument, by means of which any interest in the Property (including, but not limited to, a leasehold interest) is conveyed, that GRANTOR will attach a copy of this Easement to any such instrument, and that GRANTOR will notify DISTRICT in writing ten (10) days prior to any such conveyance. These obligations of GRANTOR shall not be construed as a waiver or relinquishment by DISTRICT of rights created in favor of DISTRICT by this Easement.

18. **Notices.** All notices, (including requests, demands, approvals, or communications) under this Easement shall be in writing.

18.1 **Method of Delivery.** Notice shall be sufficiently given for all purposes as follows:

(a) When personally delivered to the recipient, notice is effective on delivery.

(b) When mailed first class to the last address of the recipient known to the party giving notice, notice is effective on delivery.

(c) When mailed by certified mail with return receipt requested, notice is effective on receipt if delivery is confirmed by a return receipt.

(d) When delivered by overnight delivery with charges prepaid or charged to the sender's account, notice is effective on delivery if delivery is confirmed by the delivery service.

(e) When sent by telex or fax to the last telex or fax number of the recipient known to the party giving notice, notice is effective on receipt as long as (1) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery or (2) the receiving party delivers a written confirmation of receipt. Subject to the foregoing requirements, any notice given by telex or fax shall be considered to have been received on the next business day if it is received after 5 p.m. (recipient's time) or on a nonbusiness day.

18.2 **Refused, Unclaimed, or Undeliverable Notices.** Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be considered to be effective as of the first date

that the notice was refused, unclaimed, or considered undeliverable by the postal authorities, messenger, or overnight delivery service.

18.3 Addresses. Addresses for purposes of giving notice are set forth below:

**To GRANTOR:** Ralph Benson, Executive Director  
Sonoma Land Trust  
966 Sonoma Avenue  
Santa Rosa, CA 95404

**To DISTRICT:** Andrea Mackenzie, General Manager  
Sonoma County Agricultural Preservation  
and Open Space DISTRICT  
747 Mendocino Avenue  
Santa Rosa, CA 95401

19. Entire Agreement; Severability. This instrument sets forth the entire agreement of the parties with respect to the Easement and supercedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein. No alteration or variation of this instrument shall be valid or binding unless contained in a written amendment executed by GRANTOR and DISTRICT and recorded by the Sonoma County Recorder. In the event any provision of this Easement is determined by the appropriate court to be void and unenforceable, all remaining terms and conditions will remain valid and binding.

20. Estoppel Certificates. DISTRICT shall, at any time during the existence of the Easement, upon not less than thirty (30) days' prior written notice from GRANTOR, execute and deliver to GRANTOR a statement in writing certifying that the Easement is unmodified and in full force and effect (or, if modified, stating the date of execution and date of recording of the respective amendment) and acknowledging that there is not, to DISTRICT'S knowledge, any default by GRANTOR hereunder, or, if DISTRICT alleges a default by GRANTOR, specifying such default. DISTRICT's obligation to deliver the statement of certification is conditioned on GRANTOR's reimbursing DISTRICT for all costs and expenses reasonably and necessarily incurred in its preparation as determined by DISTRICT's General Manager.

IN WITNESS WHEREOF, GRANTOR and DISTRICT have executed this Easement this <sup>10<sup>th</sup></sup> day of December, 2007

GRANTOR: \_\_\_\_\_

By: \_\_\_\_\_

Ralph Benson, Executive Director

SONOMA LAND TRUST

(The signatory warrants and represents to DISTRICT that he has been authorized by the Corporation to execute this Agreement)

\_\_\_\_\_  
VALENE BROWN, President of the Board of Directors

ATTEST:

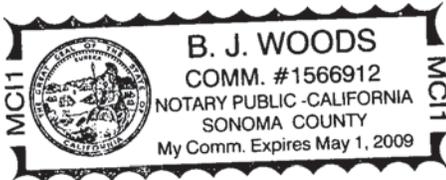
Robert Deis, Clerk of the Board of  
Directors

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California }  
County of Sonoma } ss.

On 12/10/07, before me, B.J. Woods, Notary Public,  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")  
personally appeared Ralph Benson,  
Name(s) of Signer(s)

- personally known to me
- proved to me on the basis of satisfactory evidence



to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

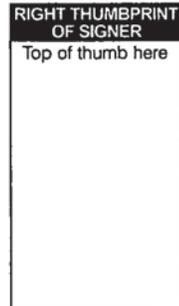
Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_



**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Sonoma

On Dec. 11, 2007 before me, Mary J. Bowman, Notary Public

personally appeared Valerie Brown

personally known to me

(or proved to me on the basis of satisfactory evidence)



to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

**OPTIONAL**

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

**Description of Attached Document**

Title or Type of Document: Deed and Agreement (Sonoma Land Trust and Sonoma County Agricultural Preservation and Open Space - Roche Project)

Document Date: \_\_\_\_\_ Number of Pages: 20

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

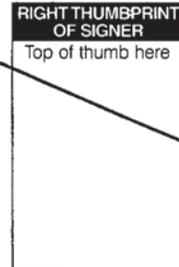
- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

**LEGAL DESCRIPTION**

**EXHIBIT "A"**

The land referred to herein is situated in the State of California, County of Sonoma, Unincorporated Area, and is described as follows:

Parcel One:

All of Fields 2, 3, 5, 6, 7, 8, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 34 and 35, as numbered and designated upon the Map of Lakeville Stock Farms, filed April 25, 1934 in Book 50 of Maps, pages 11, 12 and 13, Sonoma County Records, and more particularly described as follows:

Beginning at the Southwesterly corner of Field No. 4, a point on the Easterly line of the right of way of the Northwestern Pacific Railroad Company, and distant North 81° 10' East, 3157.8 feet from "Iron Axel Tree" mentioned in Suit "Harrison Mecham vs. William Eihler" in 1879; thence along said Easterly right of way line, North 24° 55' 30" East 584.69 feet; thence on a curve to the Left, the radius of which is 1472.69 feet, a distance of 510.0 feet; thence North 5° 05' 30" East, 545.0 feet; thence on a curve to the Right, the radius of which is 1597.38 feet, a distance of 1301.57 feet; thence leaving said Easterly line, North 38° 13' West, 80.0 feet to a point on the Westerly line of said Railroad right of way, at the Southeasterly corner of Field No. 10; thence North 56° 45' West, 417.81 feet to the Southwesterly corner of Field No. 10, a point on the Easterly right of way line of the State Highway; thence North 61° 59' West 60.0 feet to a point on the Westerly right of way line of said State Highway; thence along said Westerly line, South 28° 01' West 739.61 feet; thence on a curve to the Right, the radius of which is 670 feet, a distance of 531.88 feet; thence South 70° 20' 30" West, 378.29 feet; thence on a curve to the Right, the radius of which is 1970 feet, a distance of 138.0 feet to a point which bears North 75° 18' East, 60.0 feet from the Southeasterly corner of Field No. 16; thence leaving the Westerly line of said State Highway, North 52° 06' West, 2339.0 feet; North 8° 39' West, 17.28 feet; North 8° 46' West, 186.71 feet; North 36° 09' West, 100.93 feet; North 57° 24' West, 361.06 feet; North 35° 05' West, 76.29 feet; North 5° 12' East 122.20 feet; North 54° 31' West, 51.09 feet; North 49° 38' West, 8.14 feet; North 35° 19' West, 8.50 feet; North 26° 25' West, 36.72 feet; North 67° 13' West, 48.67 feet; North 42° 49' West, 460.35 feet; North 62° 47' West, 270.96 feet; North 47° 59' West, 509.1 feet; North 58° 21' West 72.0 feet; North 75° 21' West, 87.51 feet; South 89° 03' West 400.2 feet; North 64° 19' West, 45.37 feet; North 43° 54' West, 79.52 feet; North 26° 19' West, 79.39 feet; North 4° 43' East, 142.7 feet; North 19° 36' West, 25.4 feet; North 57° 30' West, 25.97 feet; South 68° 02' West, 29.87 feet; South 82° 17' West 16.98 feet; North 61° 27' West, 14.48 feet; South 81° 49' West, 16.7 feet; South 62° 18' West, 23.79 feet; South 45° 29' West, 350.13 feet; South 85° 36' West, 127.97 feet; North 71° 40' West, 213.81 feet; North 29° 42' West 567.69 feet; North 76° 34' West 959.0 feet; South 87° 10' West 480.18 feet; North 70° 16' West 129.68 feet; South 75° 45' West, 162.16 feet; South 86° 50' West, 182.81 feet; South 60° 38' West, 78.51 feet; South 60° 23' West, 52.85 feet; South 60° 30' West 144.50 feet; South 83° 09' West, 397.89 feet; South 61° 48' West 183.42 feet; South 82° 35' West, 309.55 feet; North 66° 04' West, 217.0 feet; North 60° 36' West, 17.76 feet; North 28° 16' West, 31.02 feet; North 19° 33' East, 82.25 feet; North 10° 28' West, 17.73 feet; North 78° 18' West, 15.38 feet to the Southwesterly corner of Field No. 24, at the Westerly end of a private road; thence North 7° 05' West, 444.31 feet to the corner common to Fields 24, 33 and 34; thence along the line between Fields 33 and 34, North 25° 57' West, 19.73 feet; North 58° 31' West, 262.14 feet; North 30° 20' West, 166.63 feet; North 32° 08' East, 116.78 feet; North 23° 18' East, 269.38 feet; North 17° 46' West, 1053.26 feet; North 64° 27' West, 265.12 feet; North 24° 02' West, 1289.11 feet; North 39° 57' West, 902.06 feet; North 67° 56' West, 959.53 feet; North 51° 46' West, 92.49 feet; North 66° 24' West, 26.03 feet; North 81° 48' West, 304.79 feet; North 72° 16' West, 221.71 feet, and North 61° 31' West, 479.78 feet to the corner common to Fields 33, 34 and 55; thence along the dividing line between Fields 34 and 55, North 60° 52' West, 30.26 feet; North 79° 46' West, 424.31 feet; North 73° 21' West, 162.17 feet; North 85° 12' West, 47.15 feet; North 42° 51' West, 9.41 feet to the common corner of Fields 34, 55 and 54; thence along the dividing line between Fields 34 and 54, South 58° 17' West, 17.12 feet; North 33° 19' West, 5.10 feet; North 85° 32' West, 333.66 feet; South 73° 03' West, 190.56 feet to the common corner of Fields 34, 53 and 54; thence along the dividing line between Fields 34 and 53, South 32° 56' West, 262.29 feet; South 20° 39' West, 238.12 feet; South 69° 44' West, 264.44 feet; North 61° 23' West, 288.78 feet; North 77° 57' West, 649.37 feet; South 85° 16' West, 192.19 feet; South 30° 54' West, 241.19 feet; South 03° 48' East, 696.11 feet; South 33° 57' East, 1252.08 feet; South 66° 10' East,

268.72 feet; South 72° 31' East, 397.02 feet; South 28° 22' West, 191.65 feet; South 66° 12' West, 237.51 feet; South 38° 55' West, 198.09 feet; South 30° 56' East, 68.07 feet; South 44° 35' East, 197.06 feet; South 43° 59' East, 24.81 feet; South 26° 31' East, 32.88 feet; South 02° 26' East, 23.31 feet; South 34° 51' West, 19.08 feet; South 31° 07' East, 20.31 feet; South 07° 50' West, 37.44 feet; North 86° 13' West, 196.68 feet; South 84° 13' West, 178.39 feet; North 36° 19' West, 17.36 feet; North 14° 31' East, 15.64 feet; North 52° 44' West, 47.40 feet to the common corner to Fields 35, 36 and 53; thence South 66° 46' West, 271.43 feet; South 89° 54' West, 233.73 feet; South 01° 50' West, 13.09 feet; South 81° 31' West, 78.58 feet; South 39° 29' West, 301.53 feet; South 24° 02' West, 173.64 feet; South 05° 05' West, 98.63 feet; South 28° 03' West, 64.06 feet; South 55° 16' West, 64.10 feet; South 71° 10' West, 113.01 feet; South 67° 58' West, 150.60 feet; South 57° 38' West, 236.74 feet; South 39° 36' West, 116.39 feet; South 39° 20' West, 980.60 feet to the most Westerly corner of Field 35; thence along the dividing line, between Lots 16, 17, 18 and 21, 22, 23 and 24, La Croze Survey of Petaluma Rancho, as per Map recorded February 8, 1864 in Liber 8 of Maps, page 13; being also the Westerly line of Fields 35 and 22, South 44° 36' East, 621.20 feet; South 44° 29' East, 4766.3 feet to the common corner to Fields 35 and 22; South 44° 07' East, 3095.80 feet to the Southerly line of Lot 24, La Croze Survey, being also the Northerly line of the 1000 acre tract known as Mecham Relief Fund; thence along the Southerly line of Lots 24, 31 and 40, South 89° 33' East, 4913 feet; North 89° 32' East, 644.60 feet; North 89° 16' East, 1725.20 feet to the Iron Axel Tree; South 19° 43' East, 47.09 feet to the common corner to Mecham Relief Fund, M.S. Almeida and North Bay Farms Company; thence along the Northerly line of Lands of Almeida, North 89° 43' East, 278.3 feet to Engineer's Station 319+72.7 of State Highway; North 89° 43' East, 1679.50 feet; thence along the Easterly line of Almeida, South 14° 11' West, 2463.50 feet to the point on the Easterly line of said Highway, at a point which bears North 56° 38' East, 30 feet from Engineer's Station "R" 300+30.56; South 33° 22' East, 786.50 feet to an iron pipe on the Easterly line of the State Highway, from which Engineer's Station "L" 293+64.64 bears South 56° 38' West, 30 feet distant; South 11° 04' West, 584.50 feet; South 51° 49' East, 615.6 feet to an iron pipe; South 39° 23' East 480.10 feet to an iron pipe; South 50° 36' East, 201.40 feet to an iron pipe on the Westerly line of the right of way of the Northwestern Pacific Railroad Company, from which Engineer's Station 472+90 bears North 78° 10' East, 40 feet distant; thence leaving Lands of Almeida, South 50° 03-1/2' East, 127.8 feet to a point on the Easterly line of said right of way; thence along said right of way, South 11° 17-1/2' East, 1082.1 feet to the Southwesterly corner of Field 3; thence East, 91.3 feet to the Southeasterly corner of said Field; thence along the Easterly line of Field 3, North 03° 52' West, 783.42 feet; North 00° 53' East, 506.38 feet; North 00° 38' West, 947.03 feet; North 19° 14' East, 468.68 feet; North 30° 26' East, 251.20 feet; North 36° 57' East, 945.53 feet; North 20° 53' East, 429.72 feet; North 02° 49' West, 177.20 feet; North 53° 33' East, 219.25 feet; North 87° 54' East, 293.65 feet; North 73° 58' East, 530.04 feet to the common corner between Fields 3 and 4; thence along the Southerly line of the Lands of O.D. Donnell, Jr., North 33° 23' West, 529.20 feet; North 71° 04' West, 184.11 feet; North 05° 06' East, 545.41 feet; North 65° 26' West, 1462.09 feet to the point of beginning.

Excepting therefrom any portion lying within the State Highway, and the Northwestern Pacific Railroad Right of Way.

Also excepting all that portion lying Southerly of the Northerly line, Easterly of the Westerly line and Southeasterly of the Southwesterly line of the State Highway.

Also excepting all that portion conveyed in the Deed to the State of California recorded September 22, 1994 under Document No. 1994-0108938 of Official Records of Sonoma County.

Also excepting therefrom all that certain real properties described in Certificates of Compliance recorded October 2, 1996, as Document Nos. 96-87909, 96-87910, 96-87911, 96-87913, 96-87914, and 96-87915, Sonoma County Records.

The following Parcel Two is described for convenience only, and may be included in conveying documents; but cannot be included in a policy of title insurance.

EXHIBIT "A" (continued)

Title No. 06-886982-G  
Locate No. CACTI7728-7728-2540-0000886982

Parcel Two:

A right of way within Field 16, as delineated on said Map from the Northeasterly corner thereof to its Southeasterly corner along the Easterly boundary of that Field, being the Westerly line of the State Highway, for a telephone line of two wires strung on poles, and the right of maintenance and replacement thereof, and ingress and egress for those purposes, being a right reserved to North Bay Farms Company, a corporation, in and by said Deed dated December 30, 1941, to said O.D. Donnell, Jr.

APN: 068-090-001, 022, 023, 068-080-002, 003

RESERVING THEREFROM:

See Exhibit "B" attached hereto and made a part hereof

EXHIBIT "B"

**Deed reservation - Pipeline to Winery east of Hwy 121**

Reserving therefrom a right of access in favor of Grantor for the exclusive purpose of performing maintenance and repairs of the existing water transmission lines crossing portions of Sonoma County Assessor's Parcel Number 068-080-022, which water transmission lines are described in that certain Water Sharing Agreement dated December 13, 2006, and recorded December 18, 2006 as Instrument No. 2006-156163 in the Sonoma County Records ("Water Sharing Agreement"), and which lines are located as described and depicted in the attached Exhibit "B1" and "B2".

Such right of access and right to maintain the existence of said water transmission lines terminates no later than December 13, 2011, after which time Grantee shall be free to remove said lines at Grantee's sole expense. Grantor shall indemnify, defend, and hold harmless Grantee, its agents, successors and assigns, from and against any and all liabilities, claims or demands relating to or arising from entry onto Grantee's property for the purposes described herein by Grantor or by any party to the Water Sharing Agreement, or by any of their contractors, agents and employees. To the extent reasonably possible, Grantor shall restore the Grantee's property to its condition immediately preceding Grantor's entry for the purposes contemplated hereby. Upon the request of Grantee or Grantee's successor, Grantor or Grantor's successor shall promptly execute any documents deemed necessary by the title company selected by Grantee to remove any cloud on title caused by the right of access for maintenance and repairs and the right to maintain the existence of said water transmission lines.

**EXHIBIT "B1"**

Being an easement 12 feet in width for water line purposes, said centerline being more particularly described as follows.

Commencing at a set ½" iron pipe tagged LS 3890 at the most southerly corner of Lot 39 as shown on that map titled "Subdivision of a portion of the Petaluma Rancho" filed in Book 8 of Maps, at Page 13, Sonoma County Records; thence along the common line of Lots 39 and 40 of said map North 45 degrees 55 minutes 11 seconds East, 2206.00 feet to the TRUE POINT OF BEGINNING from which a set ½" iron pipe marking the most easterly corner of Lot 39 of said map bears North 45 degrees 55 minutes 11 seconds East, 434.00 feet; thence leaving said common line South 40 degrees 12 minutes 33 seconds East, 246.74 feet; thence South 46 degrees 49 minutes 57 seconds East, 115.96 feet; thence South 45 degrees 32 minutes 24 seconds West, 33.53 feet; thence South 28 degrees 19 minutes 43 seconds East, 10.37 feet, to the northerly right of way of State Highway Route 121 and the terminus of the hereon described centerline.

Sideline of this easement or to lengthen or shorten to conform to the common boundary line between Lots 39 and 40 and the northerly right of way of State Highway Route 121.

BASIS OF BEARINGS: North 45 degrees 55 minutes 11 seconds East, 2640 feet between set ½" iron pipe tagged LS 3890 at the southerly corner of Lot 39 and set ½" iron pipe tagged LS 3890 at the easterly corner of Lot 39 as shown on that map titled "Subdivision of a portion of the Petaluma Rancho" filed in Book 8 of Maps, at Page 13, Sonoma County Records. Said pipes will be shown on a map to be filed with the County of Sonoma (see note below). Said bearing is based upon the North American Datum of 1983, California Zone 2 on October 30, 2007, having a mean convergence angle of minus 00 degrees 18 minutes 11 seconds. To obtain ground distances multiply distances by 0.99996575.

All set ½" iron pipes referred to above will be shown and delineated on a Record of Survey map to be filed with the County of Sonoma at the request of Sonoma Land Trust in 2007.

APN 068-090-016, 019, 021 (ESMT)  
SONOMA LAND TRUST  
Job No. 2007-094  
December 4, 2007

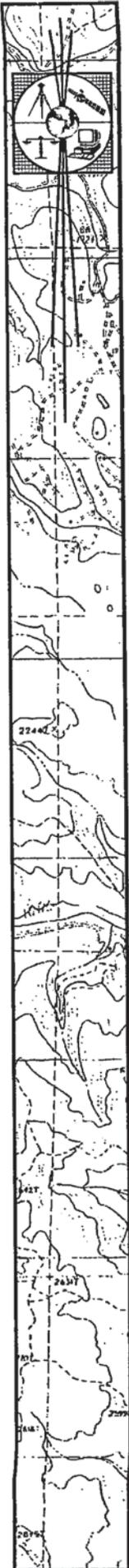


EXHIBIT "B2"

LANDS OF ROCHE  
CENTERLINE EASEMENT FOR WATERLINE PURPOSES

LOT 39

N45°55'11"E 2640.00'  
2206.00'

LOT 40

HIGHWAY  
ROUTE 121  
RW

P.O.B.

434.00'

S40°12'33"E  
246.74'

115.96'  
S46°49'57"E

TERMINUS

33.53'  
S45°32'24"W

10.37'  
S28°19'43"E



**EXHIBIT "A"**  
FOR GRAPHICAL PURPOSES ONLY



**Ray Carlson & Associates, Inc.**  
LAND SURVEYING [www.rcmaps.com](http://www.rcmaps.com)  
411 Russell Avenue Santa Rosa, California 95403  
(707) 528-7649 • Fax: (707) 571-5541  
© 2005, Ray Carlson & Associates, Inc.

**EXHIBIT B**  
**RESERVED AND RESTRICTED RIGHTS**

Any activity on the Property or use of the Property that is inconsistent with the Conservation Purpose of this Easement is prohibited.

Without limiting the generality of the foregoing, the following activities and uses are expressly reserved or restricted as set forth below. This list does not constitute an exhaustive recital of consistent and inconsistent activities and uses, but rather (a) establishes specific allowed and prohibited activities and uses and (b) provides guidance in determining the consistency of other activities with the Conservation Purpose of this Easement pursuant to the procedure set forth in Section 7 of this Easement Agreement.

1. **Subdivision/Development Rights.** The legal or de facto subdivision of the Property or any of its constituent parcels for any purpose, including but not limited to gaining recognition of previously unrecognized parcels created by patent or deed, conveyance, subdivision or survey; the seeking of a partition remedy in a lawsuit; the recordation of a tentative map, final map, parcel map or equivalent document, the transfer of development rights within or outside the ownership of the Property; and/or the sale, alienation, finance or conveyance of any parcels of the Property is prohibited, except through the power of Eminent Domain. Notwithstanding anything stated to the contrary in the previous sentence, GRANTOR may, subject to DISTRICT's prior written approval, undertake the following actions:

1.1 **Conveyance for Conservation Purposes.** Subject to prior written approval by the DISTRICT, GRANTOR may voluntarily convey the Property or a portion of the Property to a government or non-profit entity exclusively to provide for conservation and public access purposes consistent with the Conservation Purpose of this Easement.

2. **Land Uses.** Use of the Property is permanently restricted solely to open space and natural resource protection, habitat enhancement and restoration, recreation, education, residential, and grazing and rangeland management uses as defined in this Exhibit B. Any commercial or industrial use of or activity on the Property is prohibited except as expressly reserved herein. Any alteration of the contour of the Property in any manner whatsoever including, but not limited to, excavating or removing soil, sand, gravel, rock, peat or sod is prohibited except as necessary in connection with the allowed uses as provided in this Easement. Further, no use allowed below shall result in significant soil degradation, or significant pollution or degradation of any surface or subsurface waters. Any use or activity that causes soil degradation, loss of productivity, or erosion, or contributes to the pollution of any surface or sub-surface waters is prohibited.

2.1 **Recreational and Educational Use.** GRANTOR reserves the right to use the Property for low-intensity public recreational and educational purposes. All improvements associated

with the low-intensity recreational and educational uses, such as hiking, horseback riding, bicycling, camping, outdoor education, docent-led public tours, ecological and archaeological research and study, enjoyment of open space and other such uses similar in nature and intensity, shall be placed or constructed in a manner that shall minimize surface alteration of the land and reduce any significant impact to natural and cultural resources in connection with such use and is consistent with the Conservation Purpose of this Easement. At such time that the Property would be open to the general public for recreational uses, the recreational provider shall develop a Park Master Plan with prior review and approval by the District of said Plan. Uses and practices that are consistent with the Park Master Plan are permitted under this Easement provided that they are undertaken in accordance with the terms and provisions of this Agreement and in a manner that is consistent with the Conservation Purpose of this Easement, and further provided that they are undertaken in compliance with all applicable laws and regulations and that all applicable governmental approvals and permits are properly obtained and followed. The Park Master Plan may be further amended from time to time as required by changed conditions such as the evolving recreational needs of the public so long as any amendment to uses within the subject Property is not inconsistent with the Conservation Purpose of this Easement and is subject to approval of DISTRICT's General Manager.

2.1.1 Public Access. GRANTOR reserves the right to charge a fee for low-intensity public recreational access, including tours and outings, that require GRANTOR's staff and/or consultants time to plan, arrange and/or participate in the tours and outings. The fee shall not exceed GRANTOR's reasonable and necessary costs actually incurred in conducting said public access and maintaining the Property.

2.2 Vegetation and Fire Management. GRANTOR reserves the right to undertake vegetation management plans for the purpose of fire control and/or natural resource management in a manner that is consistent with the Conservation Purpose of this Easement. Such methods may include prescriptive and nonprescriptive burning, livestock grazing and removal of non-native flora and poison oak. Such methods shall comply with GRANTOR's Management Plan or other planning documents including the Park Master Plan and all applicable laws, ordinances, and regulations, including those of the California Department of Forestry and Fire Protection and appropriate local fire protection agencies.

2.2.1 Livestock Grazing. GRANTOR reserves the right to lease all or a portion of the Property solely for livestock grazing in a manner that is consistent with the Conservation Purpose of this Easement including for the purpose of resource protection, including fire fuel control, weed management, enhancement of grassland biodiversity and improvement of wildlife habitat and provided that such grazing shall be in sufficient number of livestock to ensure proper rangeland management and reduce the risk of soil degradation on the Property.

2.3 Residential Use. GRANTOR reserves the right to reside on, and use the Property within a 5-acre Residential Envelope, for typical residential domestic activities, consistent with the terms, conditions of this Easement and in a manner that is consistent with the Conservation Purpose of this Easement. The location of the Residential Envelope is subject

to prior written DISTRICT approval unless provided for in a DISTRICT approved Park Master Plan pursuant to Paragraph 2.1 of this Exhibit B. The right to use the property for residential purposes includes the right to rent and lease the property for residential purposes in a manner that is consistent with the Conservation Purpose of this Easement.

3. **Restoration and Enhancement.** GRANTOR reserves the right to undertake conservation and restoration activities including, but not limited to, bank and soil stabilization; practices to reduce erosion; enhancement of water quality and plant and wildlife habitat; creation of ponds; restoration, conservation and management of wetlands, ponds and in-stream habitats for fish and wildlife and activities which promote biodiversity in accordance with sound, generally accepted practices and all applicable laws, ordinances and regulations. GRANTOR reserves the right to remove or control invasive, non-native plant species or feral, non-native animal species that threaten the Conservation Purpose of this Easement, using techniques that minimize harm to native wildlife and plants and in accordance with all applicable laws. All activities pursuant to the restoration and enhancement of the Property shall be done in accordance with sound, generally accepted practices and all applicable laws, ordinances and regulations and in a manner that is consistent with the Conservation Purpose of this Easement.

4. **Structures and Improvements.** As of the date of this Easement, there are no structures on the Property except for a dirt and gravel road which provides access to the Property from Highway 121 (the "Access Road"), additional dirt and gravel ranch roads, small former hunting shack, and spring boxes and pipes related to conveyance of water from the springs to the adjacent property as depicted on the Baseline Documentation Report as well as wire fences, a stone wall, gates, culverts, and livestock water troughs. No buildings, roads, utilities or other structural improvements, shall be placed, constructed or reconstructed on the Property except the following:

4.1 **New Residential Structures.** GRANTOR reserves the right, within a 5-acre Residential Envelope only, to construct, alter, improve, remove, replace and maintain the following additional structures: not more than one residence, ranger or caretaker's residence which shall not exceed 3,000 square feet in size and 25 feet in height, and associated outbuildings and other structures usual and customary to permitted residential uses, as well as utilities including, but not limited to, septic waste disposal systems, freshwater supply, power, access road and communication systems to serve the Property only.

4.2 **Improvements for Restoration and Vegetation Management Uses.** GRANTOR reserves the right to construct, place, reconstruct and maintain improvements for restoration and vegetation management uses, including but not limited to water cisterns or similar containers and associated water conveyance and storage infrastructure, such as piping and pumps for livestock grazing as allowed in Paragraph 2.2.1 and in connection with fire management and restoration and enhancement activities provided said improvements are located, designed and constructed in a manner to prevent (a) soil erosion, (b) impairment of streams and water quality, (c) damage to native plant communities and wildlife habitat and (d) to prevent impact to the open space, scenic, cultural, biotic and natural resources of the Property with prior written DISTRICT approval unless provided for in a DISTRICT approved Park Master Plan pursuant to Paragraph 2.1 of this Exhibit B.

4.3 Improvements for Recreation and Education Uses. GRANTOR reserves the right to repair, replace, construct, place, reconstruct and maintain the following public recreation management structures and facilities for education and recreation uses, including but not limited to unpaved pedestrian and equestrian trails, interpretive signage, picnic tables, restrooms, parking areas, registration and information kiosks, potable water facilities, campsites, study markers and grids, gates, barriers or low fences to control unauthorized use, prevent access by motor vehicles or protect fragile areas and areas under active management or study, viewing platforms, boardwalks, and foot bridges for recreation and education uses which will lessen the impact of human foot traffic over the natural and cultural resources of the Property, provided said improvements are located, designed and constructed in a manner to prevent (a) soil erosion, (b) impairment of streams and water quality, and (c) damage to native plant communities and wildlife habitat. All structures, improvements and trails shall be sited in locations that do not impact the open space, scenic, cultural, biotic and natural resources of the Property with prior written DISTRICT approval unless provided for in a DISTRICT approved Park Master Plan pursuant to Paragraph 2.1 of this Exhibit B.

4.4 New Structural Improvements for Alternative Energy Resources. Subject to the DISTRICT's prior written approval, GRANTOR may place or construct improvements for the development and utilization of wind and solar energy resources for use solely on the Property in a manner that is consistent with the Conservation Purpose of this Easement.

4.5 Fences. Construction of new fences is prohibited, except as may be necessary for uses and activities permitted herein including livestock grazing. Such fencing must be the minimum necessary for such uses and must (i) be consistent with the Conservation Purpose of this Agreement, including the preservation of scenic values; (ii) must not unreasonably impede wildlife movement; and (iii) must comply with the DISTRICT's standards for fences on conservation lands. In the event of destruction or deterioration of any fences, whether existing at the date hereof or constructed subsequently pursuant to the provisions of this Agreement, GRANTOR may replace such fencing with a fence of similar size (i.e., no greater in height or length), function, capacity and location, without prior notice to or approval by DISTRICT, in accordance with the above referenced standards. In the event any fence, or portion thereof, becomes unnecessary for the uses described in this paragraph, GRANTOR shall remove such fencing from the Property.

4.6 Roads. Except as provided for in a District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, construction of new roads, reconstruction or expansion of existing roads is subject to the DISTRICT's prior written approval, and are restricted to roads as may be directly required for uses and activities permitted herein, so long as such road construction, expansion or reconstruction is otherwise consistent with the purposes, terms and conditions of this Easement. Roads shall be constructed and maintained so as to minimize erosion and sedimentation and ensure proper drainage, utilizing Best Management Practices as recommended by the U.S. Natural Resources Conservation Service or other similar or successor entity. For the purpose of this Agreement, a Best Management Practice is a practice, technique, or measure that is currently considered to be the most effective, practical means of preventing or minimizing soil, sediment, and pollution run-off to a water body. Roads may not be paved with impervious surface materials unless such paving is

required by any law, code, ordinance or regulation. Roads that are abandoned, permanently closed and/or decommissioned shall be restored or revegetated with native species, stabilized and ensured of proper drainage.

4.7 **Public Parking.** GRANTOR reserves the right to construct, improve and maintain a permeable public parking area and access road in a location identified in GRANTOR's Management Plan and/or a Park Master Plan, as necessary for the permitted public recreational, educational or resource management uses of the Property and in a manner that is consistent with the Conservation Purpose of this Easement.

4.8 **Signs.** Except as provided for in District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, construction of outdoor advertising structures such as signs and billboards is prohibited, provided however, that GRANTOR reserves the right to place the following types of signs on the Property, (a) two signs identifying the Property which shall individually not exceed thirty-two (32) square feet; (b) signs to mark the boundary of the Property or to prevent trespass sign shall individually not exceed four (4) square feet and (c) four (4) directional signs, which shall individually not exceed thirty-two (32) square feet, to be erected on Sonoma County Assessor's Parcel Number 068-090-022, within fifty (50) feet of the Highway 121, generally in the following locations; one (1) approach sign adjacent to the Highway facing traffic traveling west, one (1) approach sign adjacent to the Highway facing traffic traveling east, and two (2) signs at the Access Road entrance with one (1) sign on each side.

4.9 **Utilities.** GRANTOR reserves the right to reconstruct, replace and maintain utility systems. Except as provided for in District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, expansion, development or construction of utilities, including but not limited to electric power, septic or sewer, communication lines, and water storage and delivery systems ("Utility Systems") is prohibited, except subject to DISTRICT's approval, when directly required for the uses permitted in Paragraphs 2, 3, 4, and 6 of this Exhibit B, so long as such development and expansion of the Utility Systems is constructed in a manner that is consistent with the terms, conditions and Conservation Purpose of this Easement.

5. **Water Resources.** Except as provided for in District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, the draining, filling, dredging, diking, damming or other alteration, development or manipulation of watercourses, springs and wetlands is prohibited, except as is expressly allowed in Paragraphs 2, 3 and 4 of this Exhibit B.

6. **Easements.** Use of existing easements of record granted prior to this Agreement may continue. The granting of new temporary or permanent easements, and the modification or amendment of existing easements is prohibited without the prior approval of the DISTRICT. DISTRICT's approval shall be based upon its finding that such new or modified easement does not negatively impact the open space, scenic and natural resource values of the Property or the Conservation Purpose of this Easement. It is the duty of GRANTOR to prevent the use of the Property by third parties that may result in the creation of prescriptive rights.

7. **Motorized Vehicles.** Motorized vehicles are prohibited except for emergency purposes, or directly in connection with permitted recreational, restoration and Property management activities in a manner that is consistent with the Conservation Purpose of this Easement.

8. **Mineral Exploration and Surface Alteration.** The exploration for, or development and extraction of, geothermal resources, minerals and hydrocarbons by any surface or sub-surface mining or any other method is prohibited. Except as provided for in District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, any alteration of the surface of the land is prohibited, including, without limitation, the excavation, mining, or removal of soil, sand, gravel, rock, peat, minerals, or sod, except as required in the course of any activity permitted herein. Best Management Practices shall be employed to minimize soil erosion during and after construction of all permitted structures. For the purpose of this Agreement, a Best Management Practice is a practice, technique, or measure that is currently considered to be the most effective, practical means of preventing or minimizing soil, sediment, and pollution run-off to a water body. Notwithstanding the foregoing, surface alterations may be made to for purposes of scientific research and to investigate archeological features of the Property with the approval of the District and when such field investigations meet the standards required for "state sites" or "state archeological sites" under California Law.

9. **Storage/Dumping.** The dumping, release, burning, permanent storage, or other disposal of wastes, refuse, debris, motorized vehicles or hazardous substances is prohibited, except for the following rights reserved by GRANTOR in connection with the permitted uses under the terms of this Easement.

9.1 **Storage of Construction Materials.** Except as provided for in District approved Park Master Plan, pursuant to Paragraph 2.1 of this Exhibit B, construction and other work materials, during a construction period, which are visible from public roadways may be stored outside in an area that will not impact the natural or cultural resources of the Property, while work is in progress for a period not to exceed ninety (90) days.

10. **Native Tree and Plant Removal.** The harvesting, cutting, removal, or destruction of any native tree or plant is prohibited, provided, however, that GRANTOR reserves the right to cut or remove trees or plants to (a) control insects and disease, (b) prevent personal injury and property damage, (c) as allowed under Paragraphs 2.2, and (d) the collection of seeds or plants for the purpose of scientific research and/or the propagation of plants for future restoration activities, and/or natural resource management as more specially defined in Paragraph 3 of this Exhibit.

CERTIFICATE OF ACCEPTANCE  
(Government Code Section 27281)  
OF REAL PROPERTY BY THE  
BOARD OF DIRECTORS OF THE  
SONOMA COUNTY AGRICULTURAL PRESERVATION  
AND OPEN SPACE DISTRICT

This is to certify that the interests in real property conveyed by the Conservation Easement Agreement dated December 10, 2007, from Sonoma Land Trust to the Sonoma County Agricultural Preservation and Open Space District, a governmental agency formed pursuant to the provisions of Public Resources Code Section 5506.5, is hereby accepted by the President of the Board of Directors on behalf of the District pursuant to the authority conferred by Resolution No. 07-0930 of the Board of Directors, dated November 6, 2007 and the District consents to the recording thereof by its duly authorized officer.

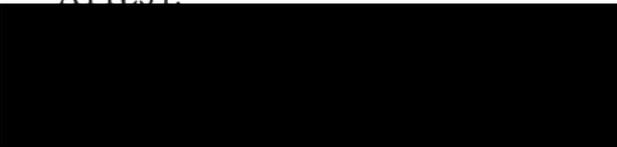
Sonoma County Agricultural Preservation  
and Open Space District

Dated: 12/11/07

By

  
Valerie Brown  
President Board of Directors

ATTEST:

  
Robert Deis, Clerk of the Board of  
Directors

**ROCHE RANCH CONSERVATION EASEMENT**

**BASELINE DOCUMENTATION**

**ATTACHMENT 2**

**SUMMARY OF EASEMENTS BETWEEN  
SONOMA LAND TRUST AND JOSEPH AND GENEVIEVE ROCHE**

Easements between Sonoma Land Trust and Joseph and Genevieve Roche, executed as part of the fee purchase of 1665 acres of the Roche Ranch.

**(A) Easements from Seller to Buyer:**

1. Easement for Right of Way to and from the Property for operations and maintenance of the subject property and for emergency purposes over the existing road starting at Highway 121 and running along on the northeasterly and/or northerly boundaries of Seller's retained parcels 068-090-015, -016, -017, -020 and -021, including those portions of the existing roads running to the northeasterly boundary of parcel 068-090-001 and to the southeasterly boundary of parcel 068-080-003 (parcels being acquired by Buyer), all in the general area described as "Proposed O&M, Emergency Access" on the Site Map attached hereto as Exhibit C-1.

2. Easement for Right of Way for Public Access, a Parking Area, and Public Access Trail. The easement will commence at Highway 121 and cross Seller's retained parcels 068-090-021, -019, and 016 following the route of an existing dirt road to and across an existing seasonal crossing at Tolay Creek, in the general area described as "Proposed Road Easement" on the Site Map attached hereto as Exhibit C-1. The purpose of this access easement is to provide public access and parking for access to the Property. The terms of the easement shall, at a minimum, include:

(a) In the event Seller or Seller's successors develop a winery, or develop other structures on parcel 068-090-016 or -019, Seller will bear the expense of improving the easement roadway to County of Sonoma standards for public access, of maintaining the roadway and providing public parking for the Property at the proposed Winery; and

(b) In the event that Seller's development plans require that the roadway be moved to another location on Seller's parcel 068-090-016 or -019, the new roadway shall provide access to the existing Tolay Creek seasonal crossing at Seller's expense, and shall continue to serve as the right of way for public access to the Property and its parking area; and

(c) In the event Buyer desires that the easement roadway be improved prior to the time Seller or Seller's successors develop a winery or other structures, Buyer may develop, improve and maintain the easement roadway at its own expense until such time as Seller utilizes the roadway for any purpose, at which time maintenance expense shall be shared equally; and

(d) In the event that as a condition of Buyer's improvement of the roadway any governmental agency requires that the alignment of the easement be moved, Seller shall approve the realignment location and Seller's consent shall not be unreasonably withheld or delayed.

(e) Buyer shall remove all litter along the easement roadway at least monthly. Buyer and Seller shall each take reasonable measures to ensure the public is not speeding, driving off of the roadway, littering, or otherwise causing unlawful levels of noise or other unlawful disturbances along the easement roadway.

3. Conservation Easement donated by Seller to Buyer along the portions of Tolay Creek retained by Seller and not included in the purchase, extending onto Seller's property a distance 200 feet wide from center of the creek and approximately 32 acres in size, in the general area described as "Proposed riparian set-back" on the Site Map attached hereto as Exhibit C-1. Allowed uses

within the easement will be limited and, subject to Buyer's review and approval of all water rights being acquired by Buyer and those being retained by Seller, as provided in Section 4(d) above, may include the right to draw water from Tolay Creek for the benefit of the property adjacent to the Real Property retained by Seller, to the extent otherwise permitted by law.. The terms of the easement shall include, at a minimum, and in Buyer's sole discretion as to extent and location:

- (a) Cattle-exclusionary fencing; and
- (b) Riparian restoration (such as planting, bank stabilization and in-stream work);  
and
- (c) Public access trail.

**(B) Easements from Buyer to Seller:**

1. Conditional Easement for Right of Way and Directional Signs. The agreement shall, at a minimum, include the following terms:

(a) In the event Seller builds a winery on Seller's retained parcel 068-090-016 or -019, and as a condition thereof the County of Sonoma requires public access right of way across Buyer's parcel 068-090-022 to the winery, Buyer will provide Seller an easement for public access to the winery across Buyer's parcel 068-090-022, and for no more than two (2) directional signs to the winery, which signs shall be erected on parcel 068-090-022 within fifty (50) feet of the highway, in locations that are mutually acceptable to Buyer or Buyer's successor, the California Department of Transportation, and the agencies responsible for enforcement of all applicable sign ordinances. The form of this easement will not contain the legal description for the easement locations, which shall be determined, if at all, at the time the need arises. At that time, Seller shall obtain Buyer's prior approval of the right of way and sign easement locations, the design of the signs, and Seller's consent thereto shall not be unreasonably withheld or delayed; and

(b) Seller will bear all costs and expenses for developing, improving and maintaining the easement in the event it becomes effective.

2. Water Easement. An easement granting Seller use of fifty percent (50%) of the water produced by fourteen (14) existing spring boxes located generally in the areas shown on the aerial map entitled "Roche Spring Locations and Pipeline to Roche Residence" attached as hereto as Exhibit C-2; ten (10) of the spring boxes connect to a 4" pipeline to the adjacent property to be retained by Seller, and four (4) of the spring boxes connect to a 6" pipeline to such adjacent property. The agreement shall, at a minimum, include the following terms:

(a) Seller's obligation to maintain and repair the water delivery system that serves the Seller's retained property, as long as Seller is using water from any of the springs;

(b) Seller's right to maintain, repair and replace the springs and the existing delivery system for this water (including pumps and pipelines and related electrical supply);

(c) Environmental limitations, including but not limited to restrictions on the amount of water to be used, and monitoring of water use by installation of meters, in the event of reduced spring production.

(d) Buyer will be permitted to take and use water from these springs for watering livestock and for public drinking water, including the right to develop a spring or springs to public drinking water standards. If Buyer develops any spring for drinking water use on the Property, Buyer will bear the cost of development, and of maintenance and repair of the related components of the drinking water system.

(e) To negotiate and prepare this easement, the following information must be obtained:

(i) Identification and mapping of the exact locations of these springs, the related infrastructure and piping, and the access road between them and Seller's retained property; and

(ii) Measurement of each springs' output.

The cost and expense for these activities will be paid for initially by Buyer, and based upon receipts and invoices submitted to Seller for Seller's review and approval, which shall not be unreasonably withheld or delayed, one-half of said costs and expenses shall be credited against the Purchase Price at the Closing. Should the transaction not close for any reason except default of Seller, Buyer shall be solely responsible for all such cost and expense.

The following provision is hereby made part of this Agreement and shall also be included in the Water Easement:

Prior to entering this Agreement Seller commenced performing work to bury the water pipelines described above, including in and adjacent to Tolay Creek. Seller warrants and represents that Seller has obtained all required permits, agreements and approvals for this pipeline work, including but not limited to those necessary for any work on portions of the pipelines located within the Tolay Creek area ("streambed" permits). Seller agrees to defend, indemnify and hold harmless Buyer, Buyer's successors in interest, and each of their officers, directors, agents and employees from and against, and shall reimburse each of them for, any and all losses, claims, liabilities, damages, injunctive relief, injuries to person, property or natural resources, fines, penalties, costs, expenses, including, without limitation, attorneys' fees, expenses and court costs, actions, and causes of action to the extent arising directly or indirectly, in whole or in part, out of Seller's work to bury the water pipelines described herein, and any related work in the stream area.

**ROCHE RANCH CONSERVATION EASEMENT**

**BASELINE DOCUMENTATION**

**ATTACHMENT 3  
APPLICABLE SONOMA COUNTY ZONING REGULATIONS**

**Article 06.**  
**LEA Land Extensive Agriculture District.**

**Sec. 26-06-005. Purpose.**

Purpose: to enhance and protect lands best suited for permanent agricultural use and capable of relatively low production per acre of land; and to implement the provisions of the land extensive agriculture land use category (Section 2.7.2) of the general plan and the policies of the agricultural resources element. (Ord. No. 4643, 1993.)

**Sec. 26-06-010. Permitted uses.**

(a) On parcels exceeding two (2) acres, raising, feeding, maintaining and breeding of farm animals. When such farming involves animals which are continuously confined, such as veal calves, poultry, hogs and pigs, dairy cows or similar livestock which may result in concentrations of animal waste, the use shall be subject to issuance of a zoning permit based upon written approval of the Sonoma County public health department and the applicable Regional Water Quality Control Board of a confined animal management plan. Horses, goats, sheep and similar farm animals are not considered to be confined animals for purposes of this chapter. The plan shall include provisions for:

- (1) Containment of waste to the site,
- (2) Reuse or disposal of waste in accordance with health and/or water quality regulations,
- (3) Mitigation of potential water quality impacts due to surface runoff of waste,
- (4) Control of vectors,

In the event that the confined animal use is proposed within five hundred feet (500') of a nonagricultural land use category, it shall require prior approval of a use permit;

(b) On parcels of two (2) acres or less, raising, feeding, maintaining and breeding of not more than one of the following per twenty thousand (20,000) square feet of area:

- (1) Five (5) hogs or pigs,
- (2) One (1) horse, mule, cow or steer,
- (3) Five (5) goats, sheep or similar animals,
- (4) Fifty (50) chickens or similar fowl,
- (5) Fifty (50) ducks or geese or one hundred (100) rabbits or similar animals.

(6) The above limitations may be modified by the planning director upon submittal of a proposal statement which describes the extent of the domestic farming use and which is signed by the owners of all property within three hundred feet (300') of the subject property. The planning director may require the applicant to obtain a use permit if the

director determines that the project might be detrimental to surrounding uses.

- (7) 4-H and FFA animal husbandry projects are permitted without limitation of parcel size; provided, that the parcel contains at least twenty thousand (20,000) square feet and provided further, a letter of project authorization is first submitted by the project advisor. The planning director may require the applicant to obtain a use permit when the director determines that the project might be detrimental to surrounding uses;
- (c) Beekeeping;
  - (d) The growing and harvesting of shrubs, plants, flowers, trees, vines, fruits, vegetables, hay, grain and similar food and fiber crops, including wholesale nurseries. Except as noted below, agricultural cultivation shall not be permitted in the following areas:
    - (1) Within one hundred feet (100') from the top of the bank of the Russian River Riparian Corridor,
    - (2) Within fifty feet (50') from the top of the bank of designated flatland riparian corridors,
    - (3) Within twenty-five feet (25') from the top of the bank of designated upland riparian corridors.

Agricultural cultivation may be allowed in those areas set out in subsections (d)(1) through (3) of this section upon approval of a management plan which includes appropriate mitigations for potential erosion, bank stabilization and biotic impacts. This plan may be approved by the planning director or by use permit pursuant to Section 26-06-020(a);

- (e) Agricultural support services involving no more than one (1) employee and occupying no more than one half (1/2) acre of land and subject, at a minimum to the criteria of general plan Policies AR-5c and AR-5d. Such services may include incidental sales of products related to the support service use but shall not include additional walk-in, over-the-counter retail sales.

The following factors shall be considered in determining an agricultural support service to be "clearly subordinate to on-site agricultural production" as provided in Policy AR-5c:

- (1) The geographic area of the lot devoted to the support service use in comparison to that remaining in agricultural production,
  - (2) Whether or not new structures or significant expansion of existing structures are needed to accommodate the support service use,
  - (3) The relative number of employees devoted to the support service use in comparison to that needed for agricultural production;
- (f) Incidental cleaning, grading, packing, polishing, sizing and similar preparation of crops which are grown on the site, but not including agricultural processing;
  - (g) Temporary or seasonal sales and promotion and incidental storage of crops which are grown or animals which are raised on the site;
  - (h) Residential uses include the following:

- (1) Single-family detached dwelling unit(s) in accordance with the residential density permitted by the general plan land use element, or permitted by a "B" combining district, whichever is more restrictive. These unit(s) may be manufactured homes, but only one (1) may be a manufactured home without a permanent foundation.

A manufactured home without a permanent foundation shall require prior approval of a zoning permit notice of which shall be posted at least ten (10) days prior to issuance, during which an appeal may be filed and processed pursuant to Section 26-92-040. Issuance of the zoning permit shall be subject, at a minimum, to the following conditions:

- (i) The manufactured home shall be at least twelve feet (12') in width except those that are owned and occupied on the effective date of the ordinance codified in this chapter,
  - (ii) The manufactured home shall be skirted. All skirting shall be of a type approved by the state of California,
  - (iii) The manufactured home shall have one (1) patio awning with a minimum dimension of nine feet (9') by twenty feet (20') and either a garage, carport or awning with a minimum dimension of ten feet (10') and twenty feet (20') for covered parking,
  - (iv) All manufactured home sites shall be landscaped, and
  - (v) The manufactured home shall be occupied by the owner of the property or a relative of the owner,
- (2) One (1) detached farm family dwelling unit per lot, provided that the following requirements are met:
    - (i) An agricultural easement having a term equal to the useful life of the structure, but in no event less than twenty (20) years, shall be offered to the county at the time of application,
    - (ii) A covenant shall be recorded, in a form satisfactory to county counsel, which acknowledges that, in the event that the agricultural use is terminated on the property, the farm family dwelling shall become a nonconforming residential use,
- (3) One (1) dwelling unit for full-time agricultural employees for each of the following agricultural uses conducted on the site:
    - (i) At least fifty (50) mature cows or one hundred (100) beef cattle,
    - (ii) At least twenty (20) acres of grapes, apples, pears, prunes,
    - (iii) At least twenty thousand (20,000) broilers, fifteen thousand (15,000) egg-layers, or three thousand (3,000) turkeys,
    - (iv) At least two hundred fifty (250) sheep or goats, fifty (50) dairy goats or hogs,
    - (v) At least thirty (30) mature horses,

- (vi) Wholesale nurseries with a minimum of either one (1) acre of propagating greenhouse or outdoor containers or three (3) acres of field-grown plant materials,
- (vii) Any other agricultural use which the planning director determines to be of the same approximate agricultural value and intensity as subsections (h)(3)(i) through (vi) of this section.

The dwelling unit(s) may be conventionally built homes or manufactured homes (with or without permanent foundations), provided that manufactured homes without a permanent foundation shall require a zoning permit approved in the manner described in Section 26-06-010(h)(1). Prior to the issuance of building or zoning permits for the employee unit(s), the property owner shall place on file with the planning department an affidavit that the unit(s) will be used to house persons employed on the premises for agricultural purposes. Further, a covenant shall be recorded, in a form satisfactory to county counsel, which acknowledges that in the event that the agricultural use is terminated on the property, the agricultural employee dwelling shall become a nonconforming residential use,

- (4) Self-contained recreational vehicles and/or travel trailers to house persons solely employed on the site for agricultural purposes for less than ninety (90) days, subject to the following:

The property owner must submit a written affidavit to the planning department, stating that the recreational vehicle and/or travel trailer will only be used to house persons solely employed on the site of a bona fide agricultural enterprise. A bona fide agricultural enterprise is defined for this purpose as an operation which derives its primary and principal income from agricultural production. The recreational vehicle or trailer shall be immediately removed from the site when it is no longer occupied by persons who are solely employed on the site,

- (5) Seasonal farmworker housing which meets the standards set forth in Section 26-88-010(l). Seasonal farmworker housing shall also conform to such public health, building and fire safety criteria established by resolution or ordinance of the board of supervisors,
- (6) Year-round farmworker housing which meets the standards set forth in Section 26-88-010(p). Year-round farmworker housing shall also conform to such public health, building, and fire safety criteria as may be established by resolution or ordinance of the board of supervisors,
- (7) One guest house per lot,
- (8) One (1) travel trailer per lot for use as temporary housing in accordance with Section 26-88-010(q) and provided that a travel trailer administrative permit is obtained and renewed annually;
- (9) One (1) second dwelling unit per lot, pursuant to Section 26-88-060, provided that the water supply for the second dwelling unit is proposed to be located within a designated Class 1, 2 or 3 groundwater availability area. Second units may be established within designated Class 4 water-scarce areas only where a hydro-geotechnical report, as defined, certifies that the establishment and continuation of the secondary residential use will not have significant adverse impacts on local or cumulative groundwater availability or yield.

- (i) The following nonagricultural uses; provided, that the applicant must demonstrate that the use meets a local need, avoids conflict with agricultural activities and is consistent with Objective AR-4.1 and Policy AR-4a of the Agricultural Resources Element.
- (1) Boarding of horses subject to issuance of a zoning permit,
  - (2) Home occupations subject to the requirements of Section 26-88-121 and approval of a zoning permit. Any home occupation use on a parcel under a Williamson Act contract must be consistent with Government Code Section 51200 et seq. (the Williamson Act) and local rules, regulations and ordinances adopted thereunder,
  - (3) Small residential community care facilities,
  - (4) Occasional cultural events, provided that a written notice stating "The Sonoma County Planning Department will issue a zoning permit for a cultural event (state nature and duration) on this property if a written appeal is not received within ten (10) days from the date of this notice." is posted on the property at least ten (10) days prior to issuance of a zoning permit, and no appeal pursuant to Section 26-92-040 has been received from any interested person, and provided that approval is secured from the following departments: sheriff, public health, fire services, building inspection and public works. In the event of an appeal, a hearing on the project shall be held pursuant to Section 26-92-040,
  - (5) Management of land for watershed, for fish and wildlife habitat, fish rearing ponds, hunting and fishing, where these uses are incidental to the primary use,
  - (6) Small family day care,
  - (7) Pet fancier facilities, provided, that a pet fancier license is obtained from the division of animal regulation and renewed annually,
  - (8) Public parks,
  - (9) Craft sales and garage sales not exceeding two (2) sales days per calendar year provided that prior notification is given to the California Highway Patrol and that adequate off-street parking is provided;
  - (10) Attached commercial telecommunication facilities subject to the applicable criteria set forth in Section 26-88-130,
  - (11) Minor freestanding commercial telecommunication facilities, subject to the applicable criteria set forth in Section 26-88-130, and subject to approval of a zoning permit, including environmental review, for which notice, including a site plan and one (1) elevation with dimensions for such facility, is mailed to adjacent property owners and posted on the subject property at least ten (10) days prior to issuance of the permit and provided that no appeal pursuant to Section 26-92-040 has been received from any interested person. In the event of an appeal, a hearing on the project shall be held pursuant to the above section,
  - (12) Noncommercial telecommunication facilities eighty feet (80') or less in height subject to the applicable criteria set forth in Section 26-88-130. Facilities between forty feet (40') and eighty feet (80') in height are subject to approval of a ministerial zoning permit for which

notice is mailed to adjacent property owners and posted on the subject property at least ten (10) days prior to issuance of the permit and provided that no appeal pursuant to Section 26-92-040 has been received from any interested person. In the event of an appeal, a hearing on the project shall be held pursuant to the above section,

- (13) Small wind energy systems not located within a county-designated urban service area or within two thousand five hundred feet (2,500') of a county-designated urban service area, subject to zoning permit approval and the standards in Section 26-88-135;
- (j) Accessory buildings and uses appurtenant to the operation of the permitted uses. Accessory buildings may be constructed on vacant parcels of two (2) acres or more in advance of a primary permitted use. On vacant parcels less than two (2) acres, accessory buildings may only be constructed if less than one hundred twenty (120) square feet or as incidental to an existing agricultural use;
- (k) Minor timberland conversions, subject to compliance with the requirements of Section 26-88-140;
- (l) Other nonresidential uses which in the opinion of the planning director are of a similar and compatible nature to those uses described in this section;
- (m) Bed and breakfast inns, containing not more than one (1) guest room, contained within a single-family dwelling, subject to issuance of a zoning permit. No bed and breakfast inn shall displace nor interfere with any existing agricultural use on the property. No bed and breakfast inn shall be located on land under Williamson Act contract. Food service shall be limited to breakfast served to inn guests only, and shall be subject to the approval of the Sonoma County department of health services. No weddings, lawn parties or similar activities shall be permitted. No outdoor amplified sound shall be permitted. At least ten (10) days prior to issuance of a zoning permit pursuant to this subsection, a written notice stating: "The Sonoma County Permit and Resource Management Department will issue a zoning permit for a one guest room bed and breakfast inn on the property located at [address and APN] if a written appeal is not received within ten (10) days from the date of this notice" shall be posted on the subject parcel and shall be mailed or delivered to all owners of real property as shown on the latest equalized assessment roll within three hundred feet (300') of the subject parcel. If no written appeal is received during the ten (10)-day period following the posting and mailing or delivery of notice, a zoning permit shall be issued if the proposed inn satisfies the requirements of this subsection. In the event of a timely appeal, a hearing on the proposed inn shall be held before the board of zoning adjustments pursuant to Section 26-92-040 and the proposed inn shall be evaluated under the provisions of this subsection and the standards set forth in Section 26-92-080. (Ord. No. 5569 § 7, 2005; Ord. 5435 § 2(d), 2003; Ord. 5429 § 3(a), 2003; Ord. No. 5361 § 2(b), 2002; Ord. No. 5342 § 4, 2002; Ord. No. 5265 § 1(b), 2001; Ord. No. 5016 § 1(B), 1997; Ord. No. 4985 § 1(b), 1996; Ord. No. 4973 § 3(a), 1996; Ord. No. 4723 § 1(c), 1993; Ord. No. 4653 § 1(d), 1993; Ord. No. 4643, 1993.)

**Sec. 26-06-020. Uses permitted with a use permit.**

- (a) Agricultural cultivation in the following areas, for which a management plan has not been approved pursuant to Section 26-06-010(d):
  - (1) Within one hundred feet (100') from the top of the bank in the Russian River Riparian Corridor,

- (2) Within fifty feet (50') from the top of the bank in designated flatland riparian corridors,
  - (3) Within twenty-five feet (25') from the top of the bank in designated upland riparian corridors;
- (b) Livestock feed yards, animal sales yards;
  - (c) Commercial mushroom farming;
  - (d) Commercial stables not permitted under Section 26-06-010(i)(1), riding academies, equestrian riding and driving clubs, and hunting clubs;
  - (e) Commercial aquaculture, provided that, at a minimum, the use does not adversely affect biotic resources and does not take place on prime soils;
  - (f) Agricultural support services with more than one (1) employee or occupying more than one-half acre of land, but otherwise subject to the same criteria as Section 26-06-010(e);
  - (g) Preparation of agricultural products which are not grown on site, processing of agricultural products of a type grown or produced primarily on site or in the local area, storage of agricultural products grown or processed on site, and bottling or canning of agricultural products grown or processed on site, subject, at a minimum, to the criteria of general plan Policies AR-5e and AR-5f;
  - (h) Slaughterhouses, animal processing plants, rendering plants, fertilizer plants or yards which serve agricultural production in the local area and subject, at a minimum, to the criteria of general plan Policies AR-5e and AR-5f;
  - (i) Retail nurseries involving crops/plants which are not grown on the site;
  - (j) Tasting rooms and other temporary, seasonal or year-round sales and promotion of agricultural products grown or processed in the county subject to the minimum criteria of general plan Policies AR-6d and AR-6g. This subsection shall not be interpreted so as to require a use permit for uses allowed by Section 26-06-010(g);
  - (k) Promotional or marketing accommodations for private guests, provided that the use, at a minimum, meets all of the following criteria:
    - (1) The use promotes or markets agricultural products grown or processed on the site,
    - (2) The scale of the use is appropriate to the production and/or processing use on the site,
    - (3) The use complies with general plan Policies AR-6d and AR-6g,
    - (4) No commercial use of private guest accommodations is allowed;
  - (l) Dwelling unit(s) for full-time agricultural employees which are transferred from another lot within this district and which is under the same ownership as the subject property. The number of units allowed shall be determined by the standards in Section 26-06-010(h)(3). The units shall be located on the receiving parcel such that they are closer to the primary dwelling unit than to the property line;

- (m) Farm labor camps not permitted by Section 26-06-010(h);
- (n) The following nonagricultural uses; provided, that the applicant must demonstrate that the use meets a local need, avoids conflict with agricultural activities and is consistent with Objective AR-4.1 and Policy AR-4a of the Agricultural Resources Element.
  - (1) Game preserves and refuges,
  - (2) Public schools, subject, at a minimum, to the criteria of general plan Policy LU-6e,
  - (3) Private nursery, primary or secondary schools, and churches subject, at a minimum, to the criteria of general plan Policy LU-6f,
  - (4) Campgrounds with a maximum of thirty (30) sites; provided, that the subject area is not under a Williamson Act contract, and subject, at a minimum, to the criteria of general plan Policy AR-6e,
  - (5) Cemeteries,
  - (6) Commercial kennels,
  - (7) Private landing strips,
  - (8) Bed and breakfast inns, containing not more than five (5) guest rooms, subject to Article 82 (Design Review), Article 86 (Parking Regulation), and the criteria of general plan Policy AR-6e. No bed and breakfast inn shall displace nor interfere with any existing agricultural use on the property. No bed and breakfast inn shall be located on land under Williamson Act contract. Food service shall be limited to breakfast served to inn guests only, and shall be subject to the approval of the Sonoma County department of health services. Weddings, lawn parties or similar activities may be allowed if specifically authorized by the use permit. No outdoor amplified sound shall be permitted at any time. No bed and breakfast inn shall include the use of more than one (1) single-family dwelling and one (1) accessory structure for transient occupancy. No more than two (2) of the five (5) guest rooms allowed by this section may be located in the accessory structure, if any. If an accessory structure is used for transient occupancy, the total floor area available for use by guests, including guest rooms and common areas, shall not exceed six hundred forty (640) square feet. There shall be no internal doorway or passage between the area available for use by guests and any remaining area of the accessory structure, (Ord. No. 5265 1(c), 2001; Ord. No. 3662.)
  - (9) Minor public service uses or facilities (transmission and distribution lines and telecommunication facilities excepted), including but not limited to reservoirs, storage tanks, pumping stations, transformer stations, fire and police stations and training centers, service yards and related parking lots which, at a minimum, meet the criteria of general plan Policy PF-2s and which are not otherwise exempt by state law,
  - (10) Intermediate and major freestanding commercial telecommunication facilities subject at a minimum to the applicable criteria set forth in Section 26-88-130,
  - (11) Noncommercial telecommunication facilities greater than eighty feet (80') in height subject at a minimum to the applicable criteria set forth in Section 26-88-130,

- (12) Exploration and development of low temperature geothermal resources for other than power development purposes, provided that, at a minimum, it is compatible with surrounding land uses,
- (13) Application of sludge from wastewater treatment plants to agricultural land subject, at a minimum, to the criteria of general plan Policies PF-2q and PF-2r,
- (14) Art studios and arts and crafts centers not involving retail or wholesale sales. A use permit for such uses may be granted only when the use is conducted within an existing abandoned agricultural building feasible for such use,
- (15) Granges and similar community service facilities which do not adversely impact agriculture in the area,
- (16) Large residential community care facility,
- (17) Day care center,
- (18) Large family day care,
- (19) Golf courses and driving ranges shall be at the sole discretion of the county and subject, at a minimum, to the following criteria:
  - (i) The proposed use is adjacent to a designated urban service boundary or includes an irrevocable offer of offsite unutilized development rights for all lands between the use and the urban service boundary,
  - (ii) Permanent open space or agricultural preservation is provided for the site of the proposed use and all areas for which development rights are acquired,
  - (iii) The use is located in close proximity to an existing wastewater treatment facility and includes the use of reclaimed wastewater in accordance with the regulations of the applicable regional water quality control agency,
  - (iv) The use is subject to design review approval and includes setbacks, buffers or other measures designed to minimize its impact on existing and potential agricultural uses in the area,
  - (v) Under no circumstances shall housing be included as part of the use, provided that a caretaker unit may be considered,
  - (vi) The use must be compatible with and not result in limitations on any agricultural operation,
  - (vii) The use shall not be conducted on lands subject to a Williamson Act contract or included in a Timber Production zone,
  - (viii) Facilities associated with the golf course and/or driving range shall be limited to those which serve golfers on the course or range, such as locker and shower facilities, pro shop with incidental sales of golfing equipment, snack bar and maintenance operations. Such facilities shall not include restaurants, other retail sales, lodging or

similar uses,

- (ix) Driving ranges shall not be operated during nighttime hours.

In the event that the above uses are proposed within a designated community separator, the criteria established by general plan Policy OS-1c shall supersede the above criteria.

- (20) Craft sales and garage sales involving three (3) or four (4) sales days per year;

- (21) Small wind energy systems located within a county-designated urban service area or within two thousand five hundred feet (2,500') of a county-designated urban service area, subject to the standards in Section 26-88-135.

- (o) Live/work uses in conjunction with a legally established single family residential unit subject to the requirements of Section 26-88-122. Any live/work use on a parcel under a Williamson Act contract must be consistent with Government Code Section 51200 et seq. (the Williamson Act) and local rules, regulations and ordinances adopted thereunder.
- (p) Other nonresidential uses which in the opinion of the planning director are of a similar and compatible nature to those uses described in Section 26-06-020. (Ord. No. 5569 § 7, 2005; Ord. No. 5435 § 2(c), 2003; Ord. No. 5429 § 3, 2003; Ord. No. 5361 § 2(j), 2002; Ord. No. 5342 § 5, 2002; Ord. 4973 § 3(b), 1996; Ord. No. 4781 § 2(B), 1994; Ord. No. 4643, 1993.)

**Sec. 26-06-030. Permitted residential density and development criteria.**

The use of land and structures within this district is subject to this article, the general regulations of this chapter, and the provisions of any district which is combined herewith. Policies and criteria of the general plan and any applicable specific or area plan or local area development guidelines shall supersede the standards herein.

- (a) **Density.** Residential density shall be between sixty (60) and three hundred twenty (320) acres per dwelling unit as shown in the general plan land use element or permitted by a B combining district, whichever is more restrictive. However, dwelling units described in Section 26-06-010(h)(2) through (7) inclusive may be permitted in addition to the residential density.
- (b) **Minimum Lot Size.** The minimum lot size for creation of new parcels shall be 1.5 acres, provided that it shall also meet the criteria of general plan Policies AR-8c and AR-3b. In such cases where lots are clustered, a protective easement shall be applied to the remaining large parcel(s) which indicates that density has been transferred to the clustered area.
- (c) **Minimum Lot Width.** The minimum average lot width within each lot is one hundred twenty-five feet (125').
- (d) **Maximum Building Height.**
  - (1) Thirty-five feet (35') except that agricultural buildings and structures may reach up to fifty feet (50'). Additional height may be permitted provided that site plan approval in accordance with Article 82 is first secured.
  - (2) Maximum height for telecommunication facilities is subject to the provisions of this article and Section 26-88-130.

- (e) Maximum Lot Coverage. Thirty-five percent (35%). Lot coverage limitations may be waived by the planning director for commercial greenhouses and swimming pools.
- (f) Yard Requirements.
  - (1) Front Yard. Thirty feet (30') except where combined with any B district and in no case shall the setback be less than fifty-five feet (55') from the centerline of all roads and streets, except as may be otherwise indicated on the district maps.
  - (2) Side Yard. Minimum ten feet (10').
  - (3) Rear Yard. Twenty feet (20').
  - (4) Watering troughs, feed troughs, accessory buildings used for the housing or maintenance of farm animals and accessory buildings and runs used for the housing or maintenance of kennel animals shall be located at least fifty feet (50') from the front property line, twenty feet (20') from any side or rear property line, and thirty feet (30') from any dwelling on the adjacent property.
  - (5) No garage or carport opening facing the street shall be located less than twenty feet (20') from any exterior property line, except that where twenty-five percent (25%) or more of the lots on any one block or portion thereof in the same zoning district have been improved with garages or carports, the required front yard may be reduced to a depth equal to the average of the front yards of the such garages or carports. However, in no case shall the front yards be reduced to less than ten feet (10'). Further, the permit and resource management department director may require a use permit if the reduction might result in a traffic hazard.

Notwithstanding the above, if a residence is elevated to meet flood requirements, the space underneath the structure may be utilized for a garage or carport if it will meet building codes, even if the ten foot (10') to twenty foot (20') setback cannot be met, subject to approval of administrative design review.

- (6) Cornices, eaves, canopies, bay windows, fireplaces and/or other cantilevered portions of structures, and similar architectural features may extend two feet (2') into any required yard. The maximum length of the projections shall not occupy more than one-third of the total length of the wall on which it is located. Uncovered porches, fire escapes or landing places may extend six feet (6') into any required front or rear yard and three feet (3') into any required side yard.
- (7) Where twenty-five percent (25%) or more of the lots on any one (1) block or portion thereof in the same zoning district have been improved with buildings, the required front yard may be reduced to a depth equal to the average of the front yards of the improved lots, subject to the limitations of Section 26-06-030(f)(5).
- (8) Accessory buildings may be constructed within the required yards on the rear half of the lot; provided, that such building(s) shall not occupy more than thirty percent (30%) of the width of any rear yard. Such accessory buildings shall not be located closer than ten feet (10') to the main buildings on adjacent lots. Notwithstanding the foregoing, swimming pools may occupy more than thirty percent (30%) of the width of any rear yard. A minimum of three feet (3') shall be maintained between the wall of a pool and the rear and

side property lines, and from the main building on the same lot. Conventional pool accessory equipment (pump, filters, etc.) shall be exempt from setback restrictions. Additional setbacks may be required under the Uniform Building Code. (Ord. No. 3932.)

- (9) The yard requirements of subsections (f)(1) and (2) of this section may be reduced up to fifty percent (50%) for agricultural buildings and structures if necessary for efficient farming operation.
- (g) In compliance with applicable sections of the State Subdivision Map Act and the subdivision ordinance, a two (2)-way division of a parcel of land that is currently subject to a Williamson Act contract may be allowed, if all of the following apply:
  - (1) The resulting parcel is to be sold or leased for agricultural employee ("farmworker") housing, and is not more than five (5') acres in size. For the purpose of this section, "agricultural employee" shall have the same meaning as defined by subdivision (b) of Section 1140.4 of the Labor Code.
  - (2) The parcel shall be sold or leased to a nonprofit organization, a city, a county, a housing authority, or a state agency, for the sole purpose of the provision and operation of farmworker housing. A lessee that is a nonprofit organization shall not sublease that parcel without the written consent of the landowner, and shall notify the county of such sublease.
  - (3) The parcel to be sold or leased shall be subject to a deed restriction that limits the use of the parcel to farmworker housing facilities for not less than thirty (30) years. The deed restriction shall also provide, through reversionary or similar provision, that the parcel shall automatically revert to and be merged with the parcel from which it was subdivided when the parcel ceases to be used for farmworker housing for a period of more than one (1) year. The deed restriction shall be in a form satisfactory to county counsel.
  - (4) There is a written agreement between the parties to the sale or lease of the parcel and their successors to operate the parcel to be sold or leased under joint management of the parties, subject to the terms and conditions and for the duration of the Williamson Act contract.
  - (5) The parcel to be sold or leased is contiguous to one (1) or more parcels that are located within a designated urban service area, and which are zoned for and developed with urban residential, commercial, or industrial land uses.
  - (6) The farmworker housing project is provided pursuant to Section 26-88-010(l) (Seasonal farmworker housing) or Section 26-88-010(o) (Year-round farmworker housing), and includes provisions designed to minimize potential impacts on surrounding agricultural and rural residential land uses.

A subdivision of land pursuant to this section shall not affect any Williamson Act contract executed pursuant to Article 3 (commencing with Section 51240) of the Government Code, and the parcel to be sold or leased shall remain subject to that contract. (Ord. No. 5569 § 9, 2005; Ord. No. 4973 § 3(c), 1996; Ord. No. 4927 §§ 1, 6, 11, 1996; Ord. No. 4643, 1993.)

**Article 76.**  
**Z Second Unit Exclusion Combining District.**

**Sec. 26-76-005. Purpose.**

Purpose: the purpose of this district is to provide for the exclusion of second units in the following areas:

- (a) Areas where there is an inadequate supply of water for drinking or firefighting purposes;
- (b) Areas where there are inadequate sewer services or danger of groundwater contamination;
- (c) Areas where the addition of second units would contribute to existing traffic hazards or increase the burden on heavily impacted streets, roads or highways; and
- (d) Areas where, because of topography, access or vegetation, there is a significant fire hazard. (Ord. No. 4643, 1993.)

**Sec. 26-76-010. Permitted uses.**

All uses permitted in the respective district with which the Z district is combined shall be permitted in the Z district, except for the establishment, placement or construction of a second unit otherwise authorized by Section 26-92-040. (Ord. No. 4643, 1993.)

**Article 67.**  
**VOH Valley Oak Habitat Combining District.**

**Sec. 26-67-005. Purpose.**

Purpose: to protect and enhance valley oaks and valley oak woodlands and to implement the provisions of Section 5.1 of the general plan resource conservation element. (Ord. No. 4991 § 1(h), 1996.)

**Sec. 26-67-010. Interpretation.**

The provisions of this article shall be liberally construed to effectuate the purpose of this article. Where a provision of this article conflicts with another provision of this chapter or this code, the more restrictive provision shall prevail. (Ord. No. 4991 § 1(h), 1996.)

**Sec. 26-67-020. Permitted uses.**

All uses permitted within the respective district with which the VOH district is combined shall be permitted in the VOH district, subject to the provisions of this article. (Ord. No. 4991 § 1(h), 1996.)

**Sec. 26-67-030. Mitigation required—Exceptions.**

- (a) Except as provided in subsection (b), when any person cuts down or removes any large valley oak, or any small valley oaks having a cumulative diameter at breast height greater than sixty inches (60"), on any property within the VOH district, such person shall mitigate the resulting valley oak loss by one of the following measures: (1) retaining other valley oaks on the subject property, (2) planting replacement valley oaks on the subject property or on another site in the county having the geographic, soil, and other conditions necessary to sustain a viable population of valley oaks, (3) a combination of measures (1) and (2), or (4) paying an in-lieu fee, which shall be used exclusively for valley oak planting programs in the county. Such person shall have the sole discretion to determine which mitigation measure to use to mitigate the valley oak loss. The requirements for each mitigation measure are specified in Table 26-67-030. The selected mitigation measure shall be undertaken and completed within one (1) year after the valley oak or valley oaks are cut down or removed in accordance with guidelines established by resolution or ordinance of the board of supervisors.
- (b) This section shall not apply to the cutting down or removal of any valley oak within the VOH district that is (1) determined necessary by emergency personnel engaged in emergency procedures, (2) dead or irretrievably damaged or destroyed by causes beyond the property owner's control, including, without limitation, fire, flood, wind, lightning, or earth movement, or (3) part of a development project subject to the provisions of Section 26-67-040.

**Table 26-67-030  
Mitigation Requirements for Cutting Down or  
Removing Valley Oaks Within the VOH District**

**Large Valley Oaks**

Diameter at Breast Height of Large Valley Oak Being Cut Down or Removed	Valley Oak Retention Requirement <sup>1</sup>	Valley Oak Replacement Requirement <sup>2</sup>	Valley Oak Retention and Replacement Requirement <sup>2</sup>	In-Lieu Fee Requirement
Greater than 20 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the diameter at breast height being cut down or removed	Plant 16 trees	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than one-half the diameter at breast height being cut down or removed and plant 8 trees	\$ 50.00

- 1 All retained trees shall be valley oaks.
- 2 All replacement trees shall be valley oak acorns, seedlings, saplings, or container grown stock.

**Small Valley Oaks**

Cumulative Diameter at Breast Height of Small Valley Oaks Being Cut Down or Removed	Valley Oak Retention Requirement <sup>1</sup>	Valley Oak Replacement Requirement <sup>2</sup>	Valley Oak Retention and Replacement Requirement <sup>2</sup>	In-Lieu Fee Requirement
60 inches or less	None	None	None	None
Greater than 60 inches up to and including 80 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed	Plant 16 trees	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed and plant 8 trees	\$ 50.00
Greater than 80 inches up to and including 100 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed	Plant 20 trees	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed and plant 10 trees	\$ 75.00
Greater than 100 inches up to and including 120 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed	Plant 24 trees	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed and plant 12 trees	\$100.00

Cumulative Diameter at Breast Height of Small Valley Oaks Being Cut Down or Removed	Valley Oak Retention Requirement <sup>1</sup>	Valley Oak Replacement Requirement <sup>2</sup>	Valley Oak Retention and Replacement Requirement <sup>2</sup>	In-Lieu Fee Requirement
Greater than 120 inches up to and including 140 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed	Plant 28 trees	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed and plant 14 trees	\$125.00
Greater than 140 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed	Plant 32 trees plus additional 4 trees for each 20 inches of cumulative diameter at breast height being cut down or removed over 140 inches	Retain 1 or more trees having a cumulative diameter at breast height equal to or greater than the cumulative diameter at breast height being cut down or removed and plant 16 trees, plus additional 2 trees for each 20 inches of cumulative diameter at breast height being cut down or removed over 140 inches	\$150.00, plus additional \$25.00 for each 20 inches of cumulative diameter at breast height being cut down or removed over 140 inches

1 All retained trees shall be valley oaks.

2 All replacement trees shall be valley oak acorns, seedlings, saplings, or container grown stock.

(Ord. No. 4991 § 1(h), 1996.)

**Sec. 26-67-040. Design review approval.**

Where any development project within the VOH district is subject to design review pursuant to another provision of this chapter, the design review approval shall include measures to protect and enhance valley oaks on the project site in accordance with guidelines adopted by resolution or ordinance of the board of supervisors. Such measures shall include, but not be limited to, a requirement that valley oaks shall comprise a minimum of fifty percent (50%) of the required landscape trees for the development project. (Ord. No. 4991 § 1(h), 1996.)

**Sec. 26-67-050. Penalty for violation of article.**

Any person who knowingly fails to comply with the mitigation or design review requirements of this article shall be required to mitigate any valley oak loss at five (5) times the rate otherwise required by this article. (Ord. No. 4991 § 1(h), 1996.)

**Article 64.**  
**SR Scenic Resources Combining District.**

**Sec. 26-64-005. Purpose.**

Purpose: to preserve the visual character and scenic resources of lands in the county and to implement the provisions of Sections 2.1, 2.2 and 2.3 of the general plan open space element. (Ord. No. 4643, 1993.)

**Sec. 26-64-010. Development criteria.**

Maximum building heights, minimum lot areas and lot widths, yard requirements and maximum percentages of lot coverage shall comply with the requirements for the districts with which the SR regulations are combined unless otherwise provided herein. (Ord. No. 4643, 1993.)

**Sec. 26-64-020. Community separators and scenic landscape units.**

(a) All structures, except certain telecommunications facilities as provided for in Section 26-64-040, located within community separators and scenic landscape units illustrated on Figures OS-5a through OS-5i, inclusive, of the general plan open space element and included within the SR district shall be subject to the following criteria:

- (1) Structures shall be sited below exposed ridgelines;
- (2) Structures shall use natural landforms and existing vegetation to screen them from view from public roads. On exposed sites, screening with native, fire resistant plants may be required;
- (3) Cuts and fills are discouraged, and where practical, driveways are screened from public view;
- (4) Utilities are placed underground where economically practical;

The above criteria shall not apply to agricultural accessory structures which do not require a use permit in the district with which this district is combined.

In the event that compliance with these standards would make a parcel unbuildable, structures shall be sited where minimum visual impacts would result.

(b) In addition to the criteria listed in subsection (a) of this section, the following standards shall apply to subdivisions within community separators and scenic landscape units and included within the SR district unless otherwise provided herein:

- (1) Building envelopes shall be established for structures. Use of height limitations should be considered, if necessary to further mitigate visual impacts;
- (2) Clustering shall be used to reduce visual impact where consistent with the applicable base district;

- (3) Building sites and roadways shall be located to preserve trees and tree stands as provided in Section 26-88-040(m) of this chapter;
- (4) To the extent allowed by law, dedication of a permanent scenic or agricultural easement shall be required at the time of subdivision for projects in community separators. Consider requiring such easements in critical scenic landscape units pursuant to general plan Policy OS-2g.
- (c) Where development occurs on parcels located both within scenic landscape units and adjacent to scenic corridors, the more restrictive provisions set forth in this article shall apply.
- (d) Additional or varied development may be allowed in designated community separators and scenic landscape units in accordance with general plan Policies OS-1c, and OS-2c, respectively.
- (e) Minor timberland conversions shall be allowed within community separators and scenic landscape units, subject to compliance with the requirements of this article and Section 2-88-140.
- (f) Certain single-family dwelling units and appurtenant structures within the area covered by the Taylor Mountain/Sonoma Mountain development guidelines shall be subject to Section 26-90-050, as specified therein. Where the provisions of this section conflict with the provisions of Section 26-90-050, the general plan, or any applicable area plan, the more restrictive provisions shall apply. (Ord. No. 5132 § 2, 1999; Ord. No. 4985 § 1(d), 1996; Ord. No. 4973 § 12(a), 1996; Ord. No. 4643, 1993.)

**Sec. 26-64-030. Scenic corridors.**

The following provisions shall apply to properties along scenic corridors illustrated on Figures OS-5a through OS-5i, inclusive, of the general plan open space element unless otherwise provided herein:

- (a) All structures located within scenic corridors established outside of the urban service area boundaries shown on Figures LU-5a through LU-5i, inclusive, of the general plan land use element shall be subject to the setbacks of thirty percent (30%) of the depth of the lot to a maximum of two hundred feet (200') from the centerline of the road. Development within the setback shall be prohibited with the following exceptions, where such uses are allowed by the base district with which this district is combined:
  - (1) New barns and similar agricultural support structures which are added to existing farm complexes provided that such structures proposed within a state scenic highway or where local design review exists by community choice in an adopted specific or area plan are subject to design review;
  - (2) New barns and similar agricultural support structures which do not require a use permit in this chapter; provided, however, that such structures proposed within a State Scenic Highway or where local design review exists by community choice in an adopted specific or area plan are subject to design review;
  - (3) Maintenance, restoration, reconstruction or minor expansion of existing structures;

- (4) Certain telecommunication facilities as provided in Section 26-64-040;
  - (5) Other new structures provided they are subject to design review and
    - (i) They are associated with existing structures,
    - (ii) There is no other reasonable location for the structure,
    - (iii) The location within the setback is necessary for the use, or
    - (iv) Existing vegetation and topography screen the use;
  - (6) Compliance with the setback would render the parcel unbuildable;
  - (7) Satellite dishes which are not visible from the roadway.
- (b) Where the scenic corridor setback provided for in Section 26-64-030(a), conflicts with the scenic corridor setback along Highway 12 established by Ordinance 1810, the latter shall apply.
  - (c) A building setback of twenty feet (20') shall be applied along the Highway 101 scenic corridor to properties which are within the urban service area boundaries shown on Figures LU-5b, -5c, -5e, -5g, and -5h of the general plan land use element, to be reserved for landscaping.
  - (d) Where development occurs on parcels located both within scenic landscape units and adjacent to scenic corridors, the more restrictive provisions set forth in this article shall apply.
  - (e) Building permits within the setback established in Section 26-64-030(a) along Bohemian Highway between Occidental and Freestone and Bodega Highway between Bodega and Freestone shall be referred to the county landmarks commission for review and recommendation. (Ord. No. 4973 § 12(b), 1996; Ord. No. 4643, 1993.)

**Sec. 26-64-040. Telecommunication facilities in the SR district.**

The following provisions shall apply to telecommunication facilities on properties in community separators, scenic landscape units, and scenic corridors as shown on Figures OS-5a through OS-5i, inclusive, of the general plan open space element.

Telecommunication facilities which are allowed by the applicable base district shall meet the provisions of said base district and the applicable standards of Section 26-64-020 or 26-64-030, except that:

- (a) An attached commercial telecommunication facility shall also be subject to design review approval.
- (b) A noncommercial telecommunication facility shall be located, designed, and screened to blend with the existing natural or built surroundings so as to minimize visual impacts to the extent feasible. While cuts and fills are discouraged, they should be considered if, on balance, they enhance the overall scenic quality of the designated scenic resource area.
- (c) A freestanding commercial telecommunication facility may be considered subject to the

following additional criteria:

- (1) The facility shall be subject to approval of a use permit.
- (2) While cuts and fills are discouraged, they should be considered if they result in enhancement of the overall scenic quality of the designated scenic resource area.
- (3) An alternatives analysis shall be prepared by or on behalf of the applicant, subject to the approval of the decision making body, which meets the requirements of Section 26-88-130(a)(3)(xiv).
- (4) A visual analysis, which may include photo montage, field mock up, or other techniques, shall be prepared by or on behalf of the applicant which identifies the potential visual impacts, at design capacity, of the proposed facility and its feasible alternatives. Consideration shall be given to views from public areas as well as from private residences, but shall focus on preservation of scenic resources. The analysis shall assess the cumulative impacts of the proposed facility and other existing and foreseeable telecommunication facilities, and shall identify and include all feasible mitigation measures consistent with the technological requirements of the proposed telecommunication service. (Ord. No. 4973 § 12(c), 1996.)

**Sec. 26-64-050. Design review approval.**

- (a) All plans for land divisions or development projects shall be reviewed and approved, conditionally approved, or denied by the planning director on the basis of compliance with the provisions of this article. Where a use permit is required and following design review approval, development plans shall be reviewed and acted upon by the board of zoning adjustments/planning commission. Where a local citizen's committee has been recognized by the board of supervisors, development plans shall be submitted to such committee for review and advisory recommendation prior to action by the planning director.
- (b) For purposes of this section, "development project" means construction, alteration, or modification of a residential, commercial, or industrial structure or appurtenant structure, except as follows. Agricultural uses and structures, including agricultural employee housing and farm family dwellings, are exempt from design review under this section to the extent consistent with the agricultural resources and open space elements of the Sonoma County general plan or other sections of this chapter.
- (c) Nothing in this section is intended to trigger the requirements of the California Environmental Quality Act beyond what would exist in the absence of this section. (Ord. 5132 § 3, 1999.)

**Article 70.**  
**G Geologic Hazard Area Combining District.**

**Sec. 26-70-005. Purpose.**

Purpose: to reduce unnecessary exposure of people and property to risks of damage or injury from earthquakes, landslides and other geologic hazards in the Alquist-Priolo Special Studies Zone and to implement the provisions of Section 2.3 of the general plan public safety element. (Ord. No. 4643, 1993.)

**Sec. 26-70-010. Location and boundaries.**

The G district may be applied to properties which are located within the Alquist-Priolo Special Studies zone. (Ord. No. 4643, 1993.)

**Sec. 26-70-020. Permitted uses.**

All uses permitted within the respective district with which the G district is combined shall be permitted, except that no structure intended for human occupancy or otherwise defined as a project in the Alquist-Priolo Special Studies Zone Act, shall be permitted to be placed across the trace of an active fault or within fifty feet (50') of the surface trace of any fault. (Ord. No. 4643, 1993.)

**Sec. 26-70-030. Geologic reports required.**

Geologic reports shall be required for development of properties within the G district and shall describe the hazards and shall include mitigation measures to reduce risks to acceptable levels. (Ord. No. 4643, 1993.)

## Article 78. B Combining Districts.

**Sec. 26-78-005. Purpose.**

Purpose: to specify residential density and/or minimum parcel or lot size for a particular parcel, lot or area (Ord. No. 4643, 1993.)

**Sec. 26-78-010. Generally.**

The following regulations shall apply to the respective B districts:

Combining District:	Requirements:
B6	The adopted zoning maps shall specify the maximum permitted density, determined by gross acreage for all residential uses. Minimum front, side and rear yard requirements and the minimum parcel or lot size, if not otherwise specified, shall conform to the base district with which the B6 district is combined unless specifically approved otherwise by the planning commission.
B7	Minimum parcel or lot size shall be as specified on the recorded final or parcel maps and the parcels or lots shall not be further subdivided. The B7 combining district signifies that the lot has been frozen in order to restrict further subdivision of large remaining parcels left after approval of a clustered subdivision as provided in general plan Policy LU-6c. A lot line adjustment may be applied for, processed, and approved pursuant to Chapter 25 of the Sonoma County Code and this chapter. Minimum front, side and rear yard requirements shall conform to the base district with which the B7 district is combined unless specifically approved otherwise by the planning commission.
B8	Minimum parcel or lot size shall be as specified on the recorded final or parcel map and the parcels or lots shall not be further subdivided. The B8 combining district signifies that the lot has been frozen for one of the following reasons: <ol style="list-style-type: none"> <li>1. The property is designated rural residential on the general plan land use map, but is subject to a Williamson Act contract;</li> <li>2. The property lies within the designated urban service boundary surrounding a city where the county intends to limit urban development until annexation or similar occurrence pursuant to a general plan area policy;</li> <li>3. The property is subject to a specific plan or area plan policy where the county intends to limit urban development for the reasons set forth in the applicable plan.</li> </ol>

A lot line adjustment may be applied for, processed, and approved pursuant to Chapter 25 of the Sonoma County Code and this chapter. Minimum front, side and rear yard requirements shall conform to the base district with which the B8 district is combined unless specifically approved otherwise by the planning commission. (Ord. No. 4643, 1993.)

**ROCHE RANCH CONSERVATION EASEMENT**

**BASELINE DOCUMENTATION**

**ATTACHMENT 4  
SOIL DESCRIPTIONS**

The available water capacity is 9 to 11 inches. Runoff is rapid, and the hazard of erosion is high.

This soil is used mainly for the production of timber. Capability unit VIe-1; woodland group 5.

### Cibo Series

The Cibo series consists of well-drained clays underlain, at a depth of 30 to 55 inches, by strongly weathered, fine-grained, basic igneous rocks. These soils are on mountainous uplands. They are on hillsides and ridges surrounding the Russian River which flows through the north-central part of the county. Slopes are 15 to 50 percent. Elevation ranges from 400 to 2,500 feet. Annual rainfall is 40 to 60 inches, annual temperature is about 60° F., and the frost-free season is about 250 days. The vegetation is chiefly annual grasses, forbs, and scattered oaks. The Cibo soils are associated with the Boomer and Dibble soils.

In a typical profile dark-brown and dark yellowish-brown, slightly acid and neutral clay and gravelly clay extend to a depth of about 48 inches. At a depth of about 48 inches is decomposed and strongly weathered gabbro.

Cibo soils are used mainly for pasture and for grazing.

Cibo clay, 15 to 50 percent slopes (CbF).--This soil is on uplands. Most of the slopes are short and abrupt. In most places slopes range from 15 to 30 percent.

Typical profile in a pasture; convex slope of 28 percent that faces northwest; about 500 feet west of turnoff from West Side Road to MacMurray Ranch Road and about 1,600 feet north to road cut (SW1/4 NE1/4 sec. 19, T. 8 N., R. 9 W.); the profile was dry when examined:

All--0 to 11 inches, dark-brown (10YR 4/3) clay, very dark grayish brown (10YR 3/2) moist; weak, medium, subangular blocky structure but granular in upper 2 inches; slightly hard, friable, sticky and plastic; common fine roots; common, fine, tubular pores; common thin clay films in pores; slightly acid (pH 6.5); gradual, wavy boundary.

A12--11 to 27 inches, dark yellowish-brown (10YR 4/4) clay, dark brown (10YR 3/3) moist; moderate, medium, subangular blocky structure; hard, friable, sticky and plastic; common fine and medium roots; common slickensides; common, fine, tubular and interstitial pores; many moderately thick clay films in pores; neutral (pH 7.0); gradual, irregular boundary.

C1--27 to 48 inches, dark yellowish-brown (10YR 4/4) gravelly clay, dark brown (10YR 3/3) moist; moderate, medium, subangular blocky structure; hard, friable, slightly sticky and plastic; a few fine roots; common, fine, tubular and interstitial pores; common slickensides; many moderately thick clay films in pores and on ped faces; neutral, (pH 7.0); about 15 percent gravel; gradual, irregular boundary.

C2--48 inches, variegated, strongly weathered gabbro that has some gravelly sandy clay; granular structure; friable, sticky and plastic; a few fine roots; a few, medium, tubular pores; continuous clay films in pores and on ped faces; neutral (pH 7.0); about 25 percent gravel. Seams of weathered parent material appear throughout the profile.

The A horizon ranges from dark gray and dark grayish brown to dark brown and dark yellowish brown in color. The percentage of gravel and stone varies from approximately 25 percent to very little. Depth to the C2 horizon varies from 30 to 55 inches.

Included in mapping are small areas of Boomer loam and Dibble clay loam, as well as soils that have a slope of less than 15 percent.

Permeability is slow in the subsoil of this Cibo soil. Runoff is medium to rapid, and the hazard of erosion is moderate to high. Fertility is moderate. The available water capacity is 4 to 9 inches.

This soil is used mainly for pasture or range. Capability unit VIe-5; range site 3.

### Clear Lake Series

The Clear Lake series consists of clays that formed under poorly drained conditions. These soils are underlain by alluvium from basic and sedimentary rock. They are on plains and flat basin areas. They occur in an area that extends from approximately 5 miles south of Santa Rosa and east of Petaluma to north of the tidelands bordering San Francisco Bay. There are also scattered areas south and southwest of the town of Sonoma. Slopes are 0 to 5 percent. Elevation ranges from 20 to 300 feet. Annual rainfall is 22 to 35 inches, the annual temperature is 58° to 60° F., and the frost-free season is 260 to 280 days. Where not cultivated, the vegetation is chiefly annual or perennial grasses and forbs. The Clear Lake soils are associated with the Haire, Huichica, Reyes, Wright, and Zamora soils.

In a typical profile the surface layer is a dark-gray, medium acid and slightly acid clay about 39 inches thick. This is underlain by a dark-gray, moderately alkaline clay that has light gray mottles. At a depth of about 46 inches is gray and light brownish-gray, moderately alkaline clay. At a depth of about 60 inches is light-gray to white, mildly alkaline sandy clay loam.

Clear Lake soils are used mainly for growing oat-vetch hay and oat hay for dairy and horse feed. A few small areas are used for irrigated pasture and row crops.

Clear Lake clay, 0 to 2 percent slopes (CeA).--This soil is in poorly drained basins and on flood plains. Most of the acreage is characterized by extremely long, smooth areas.

Typical profile in an oat-hay pasture on Dangers Ranch; slope of 1 percent; 0.5 mile southeast of the junction of Corona and Ely Road (NW1/4 NW1/4 sec. 21, T. 5 N., R. 7 W.):

- Apl--0 to 2 inches, dark-gray (N 4/0) clay, very dark gray (10YR 3/1) moist; fine and medium granular structure; hard, very firm, sticky and plastic; many fine, very fine, and micro roots; common, fine and very fine, interstitial pores; medium acid (pH 6.0), clear, wavy boundary.
- Ap2-- 2 to 8 inches, dark-gray (N 4/0) clay, very dark gray (10YR 3/1) moist; massive and coarse subangular blocky structure; very hard, very firm, sticky and plastic; many, fine, very fine, and micro roots; many, fine and very fine, interstitial pores; medium acid (pH 6.0); clear, wavy boundary.
- All--8 to 25 inches, dark-gray (N 4/0) clay, black (10YR 2/1) moist; massive; extremely hard, extremely hard, extremely firm, sticky and plastic; many very fine and fine roots; common, very fine, tubular pores; many slickensides; medium acid (pH 6.0); gradual, smooth boundary.
- A12--25 to 39 inches, dark-gray (N 4/0) clay that has common, fine, distinct, light-gray mottles; black (10YR 2/1) when moist; massive; extremely hard, extremely firm, sticky and plastic; many very fine and fine roots; common, very fine, tubular pores; many slickensides; slightly acid (pH 6.5); gradual, smooth boundary.
- AC--39 to 46 inches, dark-gray (N 4/0) clay that has common, fine, distinct, light-gray mottles; black (10YR 2/1) when moist; massive; very hard, extremely firm, very sticky and plastic; common, very fine and micro roots; common, very fine, interstitial pores; many slickensides, moderately alkaline (pH 8.0); gradual, smooth boundary.
- Clca--46 to 52 inches, gray (N 5/0) clay that has common, fine, distinct, light-gray mottles; very dark grayish brown (10YR 3/2) when moist; massive; very hard, extremely firm, very sticky and very plastic; common, very fine and fine roots; common, very fine and fine, tubular pores; many slickensides; moderately alkaline (pH 8.0); scattered lime blotches; gradual, smooth boundary.
- C2--52 to 60 inches, light brownish-gray (2.5Y 6/2) light clay that has white lime splotches; dark grayish brown (2.5Y 4/2) when moist; massive; very hard, extremely firm, sticky and plastic; a few very fine roots; common, very fine and fine, tubular pores; moderately alkaline (pH 8.0); large scattered lime blotches; clear, smooth boundary.
- C3--60 to 72 inches, light-gray (10YR 7/2) to white (10YR 8/2) sandy clay loam, light olive gray (5Y 6/2) moist; massive; hard, firm, slightly sticky and slightly plastic; a few, fine, tubular pores and common, very fine and fine, interstitial pores; many moderately thick clay films in pores; moderately alkaline (pH 8.0); disseminated lime; weakly effervescent.

The A horizon ranges from dark gray to black in color and from strongly acid to neutral in reaction.

The C horizon ranges from light brownish gray to gray to light gray and white in color and from clay to sandy clay loam in texture. Lime is usually encountered in the upper C horizon. The gravel content in the C horizon is variable but not more than 15 percent, by volume.

Included in mapping are small areas of Haire clay loam, Reyes silty clay, and Wright loam, as well as some soils that have slopes of up to 4 percent.

Permeability is slow. Runoff is slow, and the hazard of erosion is slight. Fertility is moderately high. The available water capacity is 8 to 10 inches. This Clear Lake soil is drained.

This soil is used mainly for producing oat-vetch hay or oat hay for feeding cattle and horses. Capability unit IIs-5.

Clear Lake clay, 2 to 5 percent slopes (CeB).-- This soil is similar to Clear Lake clay, 0 to 2 percent slopes, but it is steeper and less lime is encountered in the lower part of the soil than in the surface layer.

Included in mapping are small areas of Haire clay loam, Huichica loam; and Wright loam. Also included are some soils that have slopes of less than 2 percent. Some included areas have slightly steeper slopes along drainageways and upper edges of fans.

This Clear Lake soil is drained.

This soil is used mainly for producing oat hay. Capability unit IIs-5.

Clear Lake clay, ponded, 0 to 2 percent slopes (CfA).--This soil is similar to Clear Lake clay, 0 to 2 percent slopes. The soil is in basinlike areas and is subject to temporary ponding. This soil is more difficult to work, and the surface does not dry so fast as in adjacent areas. Cultivation and planting is delayed following the rainy season.

Included in mapping are small areas of Huichica loam, Wright loam, and Zamora silty clay loam.

The main use of this soil is for the production of oat-vetch hay and oat hay. In the Laguna de Santa Rosa near Sebastopol, some areas of this soil are inundated and stay wet into late spring. Much of this area is used as pasture or is planted to sudangrass. Occasionally, field corn is grown for silage. Capability unit IIIw-5.

Clear Lake clay loam, 0 to 2 percent slopes (CcA).--This soil is similar to Clear Lake clay, 0 to 2 percent slopes, but it has a clay loam surface layer, 10 to 15 inches thick, underlain by clay. This soil is on the Russian River alluvium and alluvial fans in the Alexander Valley northwest of Healdsburg and on the edges of the large bodies of Clear Lake clay south and southeast of Santa Rosa.

Included in mapping are small areas of Huichica loam and Wright loam. Also included are some soils that have slopes of 2 to 5 percent.

This Clear Lake soil is drained.

The main use of the soil is for irrigated pasture and for producing prunes and oat hay. It is somewhat easier to work than Clear Lake clay, 0 to 2

percent slopes, because of the clay loam surface layer. Capability unit IIs-5.

Clear Lake clay loam, 2 to 5 percent slopes (CcB).--This soil is similar to Clear Lake clay, 0 to 2 percent slopes, but it is steeper and has a clay loam surface layer about 10 to 15 inches thick. This soil is located in the Alexander Valley north-east of Healdsburg, and in the southeastern Santa Rosa plains.

Included in mapping are small areas of Huichica loam and Wright loam. Also included are some soils that have slopes of less than 2 percent.

This Clear Lake soil is drained.

This soil is used mainly for irrigated pasture and for producing prunes and oat hay. Capability unit Iie-5.

### Clough Series

The Clough series consists of moderately well drained gravelly loams that have a very gravelly clay subsoil. At a depth of 12 to 34 inches these soils are underlain by an indurated hardpan. These soils are on old bench terraces. They are in the valleys along and above stream and river channels, on undulating slopes north of Healdsburg between Dry Creek and the Russian River. Some areas are scattered through the Sonoma Valley area between Kenwood and the town of Sonoma. Slopes are 2 to 30 percent. Elevation ranges from 200 to 500 feet. Annual rainfall is 30 to 50 inches, the annual temperature is 60° to 62° F., and the frost-free season is 220 to 250 days. The vegetation is chiefly oaks, manzanita, poison oak, annual grasses, and forbs; but there are occasional patches of Douglas-fir and redwood. The Clough soils are associated with the Haire, Manzanita, and Positas soils.

In a typical profile the surface layer is light yellowish-brown and yellowish-brown, strongly acid gravelly loam about 10 inches thick. The subsoil is strong-brown, very strongly acid, very gravelly clay loam and reddish-yellow and gray, very strongly acid, very gravelly clay. At a depth of about 23 inches is an indurated hardpan. At a depth of about 38 inches is stratified cobbly and gravelly old alluvium.

Clough soils are used mainly for grazing. A few areas have been cleared and are used for grapes and prunes. There are some areas of irrigated pasture.

Clough gravelly loam, 2 to 9 percent slopes (CgC).--This soil is on bench terraces. In most places, the slopes range from 3 to 6 percent.

Typical profile 3 miles north of Healdsburg, west of Norton Sky Ranch (SE1/4 NW1/4 sec. 6, T. 9 N., R. 9 W.); the profile was slightly moist at a depth of 4 inches when examined:

A1--0 to 4 inches, light yellowish-brown (10YR 6/4) gravelly loam, brown (7.5YR 4/4) moist; massive; soft, friable, slightly sticky and slightly plastic; many micro and very fine

roots and a few medium roots; many, very fine and fine, tubular and interstitial pores; common thin clay films in pores and bridges; strongly acid (pH 5.5); abrupt, wavy boundary. A3--4 to 10 inches, yellowish-brown (10YR 5/4) gravelly loam; when moist, brown (7.5YR 4/4) and having common, fine, distinct, strong-brown mottles; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine, and medium roots; many, very fine and fine, tubular and interstitial pores; many moderately thick clay films in pores and as bridges; strongly acid (pH 5.3); abrupt, wavy boundary.

B21t--10 to 18 inches, strong-brown (7.5YR 5/6) very gravelly clay loam, yellowish red (5YR 5/6) moist; massive; slightly hard, friable, sticky and plastic; common very fine roots and many fine roots; common, very fine and fine, tubular and interstitial pores; a few thin clay films in pores and as bridges; very strongly acid (pH 5.0); clear, wavy boundary.

B22t--18 to 23 inches, reddish-yellow (7.5YR 6/6) and gray (10YR 6/1) very gravelly clay; when moist, yellowish red (5YR 5/8) and having many, medium, prominent, light brownish-gray mottles; massive; slightly hard, friable, sticky and plastic; a few micro roots; many medium roots, and common coarse roots; many, fine, tubular and interstitial pores; common, moderately thick clay films in pores; very strongly acid (pH 5.0); abrupt, wavy boundary.

C1m--23 to 38 inches, strong-brown (7.5YR 5/6) and light-gray (10YR 6/1) indurated hardpan; when moist, light brownish gray (2.5Y 6/2) and having strong-brown mottles; massive; a few very fine roots; very strongly acid (pH 4.5).

C2--38 to 60 inches, stratified cobbly and gravelly old alluvium.

The A horizon ranges from grayish brown to yellowish brown to light yellowish brown to reddish brown in color. Gravel and stone fragments range from 15 to 35 percent. The B horizon ranges from strong brown to reddish brown or reddish yellow in color. Gravel and stone fragments make up 35 to 60 percent of the B horizon.

Depth to the consolidated C1m horizon varies from about 20 to 34 inches.

Included in mapping are small areas of Manzanita gravelly silt loam and Positas gravelly loam. Also included are soils that have slopes of less than 2 percent.

Permeability is very slow in this Clough soil. Runoff is slow to medium, and the hazard of erosion is slight to moderate. Fertility is moderate. The available water capacity is 3.5 to 4.5 inches.

Some areas of this soil are used for grapes and hay. Other areas are used for range and grazing. Capability unit IIIe-3, range site 4.

Clough gravelly loam, 9 to 15 percent slopes (CgD).--This soil is similar to Clough gravelly loam, 2 to 9 percent slopes, but it is steeper and is 16 to 21 inches deep over the cemented hardpan.

Steinbeck loam. Also included are small areas with a surface layer that ranges from 8 to 20 inches in thickness. Scattered, small areas of Cotati soils have varying amounts of highly polished quartz gravel throughout the soil.

Permeability is slow in the subsoil of this Cotati soil. Runoff is medium, and the hazard of erosion is moderate. Fertility is low. The available water capacity is 4 to 6 inches. The effective rooting depth is 20 to 36 inches for those crops which have difficulty penetrating the slowly permeable subsoil.

This soil is used mainly for pasture. Capability unit IIIe-3; range site 2.

Cotati fine sandy loam, 9 to 15 percent slopes (CtD).--This soil is similar to Cotati fine sandy loam, 2 to 9 percent slopes, but the surface layer is 20 to 24 inches thick, and the clay subsoil is 6 to 8 inches thinner.

Included in mapping are small areas of Goldridge fine sandy loam and Steinbeck loam.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 5 inches.

This soil is used mainly for grazing. There are a few small chicken ranches and oat-vetch hay is grown in a few areas. Capability unit IVe-3; range site 2.

Cotati fine sandy loam, 15 to 30 percent slopes (CtE).--This soil is similar to Cotati fine sandy loam, 2 to 9 percent slopes but the surface layer is about 18 to 24 inches thick, and the subsoil is about 10 to 28 inches thick.

Included in mapping are small areas of Goldridge fine sandy loam and Sebastopol sandy loam.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 3 to 5 inches.

This soil is used mainly for pasture. Capability unit VIe-3; range site 2.

### Diablo Series

The Diablo series consists of well-drained clay soils. At a depth of 25 to more than 60 inches the soils overlie interbedded calcareous fine-grained sandstone, clayey shale, and weathered siltstone. These soils are on terraces and rolling uplands. They are mainly in the south-central quarter of the county on the open grass hills west of Sonoma Valley and east of the Petaluma plains. Slopes are 2 to 50 percent. Elevation ranges from 200 to 1,200 feet. Annual rainfall is 22 to 35 inches, annual temperature is 58° to 60° F., and the frost-free season is 260 to 290 days. Where not cultivated, the vegetation is chiefly annual and perennial grasses and scattered oaks. The Diablo soils are associated with the Clear Lake, Haire, and Raynor soils.

In a typical profile the surface layer is dark-gray and very dark gray, slightly acid and moderately alkaline clay about 30 inches thick. The

next layer is dark-gray, moderately alkaline clay. At a depth of about 38 inches, is light olive-gray, moderately alkaline clay that extends to a depth of more than 60 inches.

Diablo soils are used mainly for pasture. A few of the less sloping and ridgetop areas are used for hay crops. The soils in this series are subject to land slippage, especially those that have steep slopes.

Diablo clay, 9 to 15 percent slopes (DbD).--This strongly sloping soil is on rolling hills. In most places, the slopes are long and smooth.

Typical profile in a grazed hayfield in good condition; slightly concave slope of 14 percent that faces southeast; on Sartori's Ranch 1,600 feet west and 1,000 feet south of the northernmost water tank on Manor Lane (SW1/4 NW1/4 sec. 13, T. 5 N., R. 7 W.); the profile was dry to a depth of 19 inches when examined:

Ap--0 to 7 inches, dark-gray (N 4/0) clay, very dark gray (10YR 3/1) moist; strong, fine, subangular blocky structure that grades with depth to weak, coarse, subangular blocky structure; very hard, firm, very sticky and very plastic; many very fine and fine roots; many, very fine and fine, interstitial pores; slightly acid (pH 6.5); abrupt, wavy boundary.

All--7 to 19 inches, very dark gray (N 3/0) clay that has common, fine, distinct, light-gray mottles; black (10YR 2/1) moist; massive; extremely hard, extremely firm, very sticky, and very plastic; many very fine and fine roots; common, very fine, tubular pores; slightly acid (pH 6.5) with a few small scattered lime concretions; gradual, smooth boundary.

A12--19 to 30 inches, dark-gray (5Y 4/1) clay, very dark grayish brown (2.5Y 3 3/2) moist; weak, fine, subangular blocky structure; extremely hard, very firm, very sticky and very plastic; common very fine roots; common, fine, tubular pores; moderately alkaline (pH 8.0); a few small lime concretions and blotches; gradual, smooth boundary.

AC--30 to 38 inches, dark-gray (N 4/0) clay that has many, medium, distinct, white mottles; olive gray (5Y 4/2) moist; massive; extremely hard, very firm, very sticky and very plastic; a few very fine roots; common, very fine, tubular pores; moderately alkaline (pH 8.0); scattered fine and medium lime blotches; common slickensides; gradual, smooth boundary.

C1--38 to 46 inches, light olive-gray (5Y 6/2) clay, olive gray (5Y 4/2) moist; massive; extremely hard, very firm, very sticky and very plastic; a few very fine roots; common, very fine and fine, tubular pores; moderately alkaline (pH 8.0); scattered lime blotches; some tonguing of A horizon material; a few slickensides; gradual, wavy boundary.

22--46 to 56 inches, light olive-gray (5Y 6/2) light clay, olive-gray (5Y 4/2) moist; massive; extremely hard, firm, sticky and plastic; very fine roots; common, very fine and fine, tubular pores; moderately alkaline (pH 8.0); a few large streaks of lime mixed with black material; fragments of weathered siltstone which break to medium subangular blocky structure; gradual, irregular boundary.

23--56 to 73 inches, light olive-gray (5Y 6/2) clay, olive-gray (5Y 4/2) moist; massive; extremely hard, firm, very sticky and very plastic; very fine roots; common, very fine and fine, tubular pores; moderately alkaline (pH 8.0); large blotchy lime areas; many slickensides; small fragments of weathered siltstone.

The A horizon ranges from gray to very dark gray in color. Quantity and size of tonguing of the A horizon into the C horizon varies considerably over short distances. Flecks and blotches of lime are in the A horizon at depths ranging from 7 to 18 inches. The number and size of slickensides vary in the A and C horizons, but are nearly always discernible. Weathered sandstone, shale, or siltstone occur at depths of 40 inches to more than 60 inches.

Included in mapping are small areas of Clear Lake clay, Haire clay loam, and Raynor clay.

Permeability is slow. Runoff is medium, and the hazard of erosion is moderate. Fertility is moderately high. The available water capacity is 6 to 9 inches. The surface layer has deep, irregular cracks upon drying. The effective rooting depth is 40 to more than 60 inches. Land slippage is a concern to management in some areas of this soil.

Each of the soil on the lower slopes is used for producing oat hay or grain, and also oat-vetch hay. Other areas are used for range. Capability unit IIIe-5; range site 3.

Diablo clay, 2 to 9 percent slopes (DbC).--This soil is similar to Diablo clay, 9 to 15 percent slopes, but lime is generally closer to the surface than on the steeper slopes, and the surface layer is gray.

Included in mapping are small areas of Clear Lake clay, Haire clay loam, and Raynor clay.

Runoff is slow to medium, and the hazard of erosion is slight to moderate.

The main use of this soil is for oat hay and oat-vetch hay. Lower slopes are irrigated when water is available. In past years, some of the oat crop has been threshed for grain. Capability unit IIe-5.

Diablo clay, 15 to 30 percent slopes (DbE).--This soil is similar to Diablo clay 9 to 15 percent slopes, but the depth to weathered rock generally is 30 to 45 inches. This soil contains less lime than Diablo clay, 9 to 15 percent slopes, and the lime is not so near the surface. Slickensides are more pronounced and are more numerous in this soil.

Included in mapping are small areas of Haire clay loam and Raynor clay.

Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is 5 to 7 inches. Landslips are common on this soil.

This soil is used mainly for range. Capability unit IVe-5; range site 3.

Diablo clay, 15 to 30 percent slopes, eroded (DbE2).--This soil is similar to Diablo clay, 9 to 15 percent slopes. Small gullies are visible and sheet erosion is indicated by deposition at the lower end of the slopes. Depth to parent rock is 25 to 30 inches.

Included in mapping are small areas of Haire clay loam and Raynor clay.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 5 inches. The effective rooting depth is about 25 to 30 inches. This soil is subject to land slippage.

This soil is used mainly for range. Capability unit IVe-5; range site 3.

Diablo clay, 30 to 50 percent slopes (DbF).--This soil is similar to Diablo clay, 9 to 15 percent slopes, but the surface layer is not so thick and slickensides are more abundant. Depth to weathered rock is 30 to 40 inches.

Included in mapping are small areas of Haire clay loam and Raynor clay. Outcrops of basic rock and inclusions of Raynor clay are frequent on the steeper slopes.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 5 to 6 inches. Landslips are a concern to management on this soil.

This soil is used mainly for range. Capability unit VIe-5; range site 7.

Diablo clay, 30 to 50 percent slopes, eroded (DbF2).--This soil is similar to Diablo clay, 9 to 15 percent slopes, but it is eroded and the depth to weathered rock is 25 to 30 inches.

Included in mapping are areas of Raynor clay and scattered outcrops of basic rock. Other areas include places where landslides have occurred.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 5 inches. The effective rooting depth is 25 to 30 inches. This soil is subject to land slippage.

This soil is used mainly for range, though most has been overgrazed. In many places rock outcrops have reduced the plant cover on these steep slopes. Capability unit VIe-5; range site 7.

#### Dibble Series

The Dibble series consists of well-drained, clay loams that have a clay subsoil. They are underlain, at a depth of 30 to 60 inches, by fine-grained sandstone and brittle shale interbedded with siltstone. These soils are rolling and hilly and are on uplands. They are in the hills east of Windsor along

The main use of this soil where it is adjacent to Sebastopol soils is for apple orchards. Other inland areas between Cazadero and Annapolis have been cleared and are used for grazing. Still other areas are used for timber production. Capability unit IVE-1; woodland group 4.

Goldridge fine sandy loam, 9 to 15 percent slopes (GdD2).--This soil is similar to Goldridge fine sandy loam, 2 to 9 percent slopes, but the surface layer is less than 20 inches thick as a result of erosion.

Included in mapping are small areas of Cotati fine sandy loam, Sebastopol sandy loam, and Steinbeck loam.

Runoff is medium, and the hazard of erosion is moderate. The available water capacity is 8 to 10 inches.

The main use of the soil is for apple orchards. Other areas are used for timber production. Capability unit IVE-1; woodland group 4.

Goldridge fine sandy loam, 15 to 30 percent slopes (GdE).--This soil is similar to Goldridge fine sandy loam, 2 to 9 percent slopes, but the surface layer is less than 16 inches thick. Slopes are moderately steep.

Included in mapping are small areas of Cotati fine sandy loam, Sebastopol sandy loam, and Steinbeck loam.

Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is 8 to 10 inches.

This soil is used mainly for timber and apple orchards. Inland areas between Cazadero and Annapolis have been cleared and are used for grazing. Capability unit VIe-1; woodland group 4.

Goldridge fine sandy loam, 15 to 30 percent slopes, eroded (GdE2).--This soil is similar to Goldridge fine sandy loam, 2 to 9 percent slopes, but there is moderate erosion. Soil depth to the substratum varies from 15 to 36 inches as a result of past erosion. Soft, weathered sandstone occurs at depths from 40 to more than 60 inches. Slopes are moderately steep.

Included in mapping are small areas of Cotati fine sandy loam, Sebastopol sandy loam, and Steinbeck loam.

Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is 7 to 9 inches.

This soil is used mainly as woodland. Areas adjacent to Sebastopol soils are used for apple orchards. Other areas inland from the coast between Cazadero and Annapolis, have been cleared and are used to grow grass. Capability unit VIe-1; woodland group 4.

Goldridge fine sandy loam, 30 to 50 percent slopes (GdF).--This soil is similar to Goldridge fine sandy loam, 2 to 9 percent slopes, but it is steep and occupies side hills. Soft sandstone occurs at a depth of 40 to more than 60 inches.

Included in mapping are small areas of Sebastopol sandy loam and Steinbeck loam.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 7 to 9 inches.

This soil is used mainly for Douglas-fir timber. Capability unit VIe-1; woodland group 5.

Goldridge fine sandy loam, 30 to 50 percent slopes, eroded (GdF2).--This soil is similar to Goldridge fine sandy loam, 2 to 9 percent slopes, but the surface layer is 10 to 20 inches thick because of moderate erosion. Sandstone occurs at depths of 40 to 50 inches. Accelerated erosion and occasional gullying have occurred in most places.

Included in mapping are small areas of Sebastopol sandy loam and Steinbeck loam.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 6 to 8 inches.

The main use of this soil is for timber production, chiefly Douglas-fir and redwood. Capability unit VIe-1; woodland group 5.

#### Goulding Series

The Goulding series consists of well-drained cl loams. These soils are underlain at a depth of 12 to 24 inches by metamorphosed basic igneous and weathered andesitic basalt of old volcanic formations. These soils are on mountainous uplands. They are mainly in the hilly, eastern third of the county from the Mark West Springs area southward to the vicinity of the town of Sonoma. Slopes are 5 to 75 percent. Elevation ranges from 500 to 2,500 feet. Annual rainfall is 30 to 50 inches, annual temperature is 54° to 56° F., and the frost free season is 220 to 240 days. In most places the vegetation is chiefly annual and perennial grasses with scattered clumps of oak trees, manzanita, and small shrubs. The Goulding soils are associated with the Boomer, Henneke, Spreckels, and Toomes soils.

In a typical profile the surface layer is brown and dark-brown, slightly acid and medium acid clay loam about 11 inches thick. The subsoil is dark-brown, slightly acid very gravelly clay loam about 11 inches thick. Fractured basalt occurs at a depth of about 22 inches.

Goulding soils are used mainly for grazing by sheep and cattle. A few lower slope areas are used for such crops as cultivated oat and vetch hay or for dryland pasture.

Goulding clay loam, 5 to 15 percent slopes (GgD).--This moderately sloping to strongly sloping soil is on ridgetops and on low rolling hills. Most of the slopes are smooth.

Typical profile in a southeast-facing pasture in good range condition, 300 feet north of Guenza Road and about 3,000 feet west of Grange Road (SE1/4 NE1/4 sec. 8, T. 6 N., R. 7 W.); the profile was slightly moist when examined:

A11--0 to 2 inches, brown (10YR 4/3) clay loam, dark brown (10YR 3/3) moist; strong, fine, granular structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine roots; slightly acid (pH 6.5); abrupt, smooth boundary.

A12--2 to 11 inches, dark-brown (10YR 3/3) clay loam, very dark brown (10YR 2/2) moist; moderate, fine and medium, subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many fine pores and common, very fine, tubular pores; medium acid (pH 6.0); profuse worm activity; clear, wavy boundary.

B2--11 to 22 inches, dark-brown (7.5YR 3/2) very gravelly clay loam, dark reddish brown (5YR 2/2) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many, fine and very fine, interstitial pores and common, fine, tubular pores; a few thin clay films in pores; slightly acid (pH 6.2); clear, irregular boundary.

re--22 inches, highly fractured rock separated by reddish-brown (5YR 4/4) soil material that has yellowish-red (5YR 5/6) common, medium, distinct mottles; dark reddish brown (5YR 3/4) moist; slightly hard, sticky and plastic; a few very fine roots; common moderately thick clay films on rock faces; slightly acid (pH 6/2); highly fractured vesicular basalt that breaks to angular fragments throughout horizon, about 95 percent by volume.

The A horizon ranges in color from brown to reddish brown and contains as much as 15 percent coarse fragments, such as gravel, cobblestones, and stones. Depth to shattered bedrock ranges from 20 to 24 inches.

Included in mapping are small areas of Boomer loam, Henneke gravelly loam, Spreckels loam, and Toomes loam. There are also scattered areas of basaltic rock outcrop, as well as areas consisting of 24 to 36 inches of soil over rock.

Permeability in the subsoil is moderate. Runoff is medium, and the hazard of erosion is moderate. Fertility is low. The available water capacity is approximately 3.5 to 4.5 inches.

This soil is used mainly for grazing, but some fields on the lower slopes have been planted with oats and vetch for hay. A few areas are irrigated where adequate water is available. Much of this soil has been cleared of the oak and brush to increase grazing acreage and to supply firewood. Capability unit IIIe-1; range site 1.

Goulding clay loam, 15 to 30 percent slopes (GgE).--This soil is similar to Goulding clay loam, 5 to 15 percent slopes.

Included in mapping are small areas of Boomer loam, Spreckels loam, Toomes loam, and a few areas of rock outcrops.

Runoff is medium to rapid, and the hazard of erosion is moderate to high.

The main use of this soil is for grazing. Other uses are similar to those of Goulding clay loam, 5 to 15 percent slopes. Capability unit IVe-1; range site 1.

Goulding clay loam, 30 to 50 percent slopes (GgF).--This soil is slightly shallower to shattered rock than Goulding clay loam, 5 to 15 percent slopes. The average soil depth is 16 to 20 inches.

Included in mapping are small areas of Henneke gravelly loam, Spreckels loam, Toomes loam, and a few areas of rock outcrops.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 3 to 3.5 inches.

The main use of this soil is for grazing, where it has been cleared. The cleared areas have also provided firewood. Capability unit VIe-1; range site 1.

Goulding clay loam, 30 to 50 percent slopes, eroded (GgF2).--This soil is shallower than Goulding clay loam, 5 to 15 percent slopes. Because of erosion this Goulding soil has an effective rooting depth of 14 to 20 inches.

Included in mapping are small areas of Henneke gravelly loam, Spreckels loam, and Toomes loam. Outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 2.5 to 3.5 inches.

This soil is used mainly for range. Capability unit VIe-1; range site 1.

Goulding clay loam, 50 to 75 percent slopes (GgG).--This soil is somewhat shallower than Goulding clay loam, 5 to 15 percent slopes. Depth to bedrock ranges from 16 to 20 inches.

Included in mapping are small areas of Boomer loam, Spreckels loam, and Toomes loam. Outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is very rapid, and the hazard of erosion is very high. The available water capacity is 3 to 3.5 inches.

This soil is used mainly for range. Capability unit VIIe-1; range site 5.

Goulding cobbly clay loam, 5 to 15 percent slopes (G1D).--This soil is shallower and contains more cobblestones than Goulding clay loam, 5 to 15 percent slopes. The surface layer contains as much as 20 percent cobblestones and stones, by volume, and ranges from 16 to 24 inches deep. Also, the parent rock under this soil is harder.

Included in mapping are small areas of Henneke gravelly loam, Spreckels loam, Toomes loam, and a few rock outcrops.

Available water capacity is 3 to 4.5 inches.

The use of this soil is similar to that of Goulding clay loam, 5 to 15 percent slopes. A few family-owned vineyards and orchards have been planted, but most of this soil is used for grazing. In some places, there are excavations 10 to 15 feet deep. These resulted from the digging of cobblestones for use in building the streets of San Francisco. Also, many miles of stone fences were built around fields now used for grazing. Capability unit IVe-8; range site 4.

Goulding cobbly clay loam, 15 to 30 percent slopes (GlE).--This soil contains more cobblestones and is shallower than Goulding clay loam, 5 to 15 percent slopes. The surface layer contains as much as 25 percent cobblestones and stones and ranges in depth from 16 to 20 inches. The parent rock under this soil is harder.

Included in mapping are small areas of Boomer loam, Sprackels loam, and Toomes loam. Also, outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is 3 to 3.5 inches.

This soil is used mainly for range. Capability unit VIe-8; range site 4.

Goulding cobbly clay loam, 30 to 50 percent slopes (GlF).--This soil is shallower than Goulding clay loam, 5 to 15 percent slopes. Depth ranges from 16 to 20 inches. The surface layer contains about 25 percent cobblestones and stones, by volume. The parent rock under this soil is harder.

Included in mapping are small areas of Boomer loam, Henneke gravelly loam, and Toomes rocky loam. Outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is about 3 to 3.5 inches.

This soil is used mainly for range. Capability unit VIIe-8; range site 8.

Goulding cobbly clay loam, 30 to 50 percent slopes, eroded (GlF2).--This soil is similar to Goulding clay loam, 5 to 15 percent slopes but is shallower and contains 10 to 25 percent cobblestones and stones in the surface layer. It is seldom more than 12 to 18 inches deep because of soil erosion. Also, the parent rock under this soil is harder.

Included in mapping are small areas of Boomer loam, Henneke gravelly loam, and Toomes rocky loam. Outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is about 2.5 to 3 inches.

This soil is used mainly for range. Capability unit VIIe-8; range site 8.

Goulding cobbly clay loam, 50 to 75 percent slopes (GlG).--This soil contains more cobblestones and is shallower than Goulding loam, 5 to 15 percent

slopes. Also, the parent material of this soil is harder. Depth of this Goulding soil ranges from 12 to 18 inches. The surface layer contains 10 to 25 percent cobblestones and stones by volume.

Included in mapping are small areas of Henneke gravelly loam and Toomes loam. Outcrops of basaltic rock are scattered throughout areas of this soil.

Runoff is very rapid, and the hazard of erosion is very high. The available water capacity is about 2.5 to 3 inches.

This soil is used for range. Capability unit VIIe-8; range site 8.

Goulding-Toomes complex, 9 to 50 percent slopes (GoF).--This complex is in the southeastern portion of the county and in the hills southeast of Santa Rosa over the Santa Rosa Mountains to north of Sears Point. Goulding soils make up about 45 percent of this complex and Toomes soils, about 45 percent; the remaining 10 percent is Rock land.

The Goulding soils have a profile similar to that of Goulding clay loam, 5 to 15 percent slopes but are 16 to 24 inches deep to rock. Runoff is medium to rapid, and the hazard of erosion is moderate to high.

The Toomes soils resemble Toomes rocky loam, 2 to 30 percent slopes. Depth to rock is 5 to 20 inches. Surface runoff is medium to rapid, and the hazard of erosion is moderate to high.

These soils are used mainly for range. Capability unit VIIe-8; Goulding, range site 1; Toomes, range site 9.

#### Guenoc Series

The Guenoc series consists of well-drained gravelly silt loams that have a clay subsoil. At a depth of 20 to 40 inches the soils are underlain by andesitic basalt. These soils are on mountainous uplands. They are in the central part of the county east and north of Santa Rosa, and from the east side of the Russian River near Geyserville to south of the Alexander Valley in the foothills. Slopes are 5 to 75 percent. Elevation ranges from 400 to 1,000 feet. Annual rainfall is 30 to 50 inches, annual temperature is 58° to 60° F., and the frost-free season is 260 to 280 days. In most places the vegetation is chiefly grass, oak, and brush. The Guenoc soils are associated with the Boomer, Goulding, Spreckels, and Supan soils.

In a typical profile the surface layer is a weak red, neutral gravelly silt loam and heavy loam about 17 inches thick. The subsoil is weak-red, slightly acid clay loam and clay. At a depth of about 38 inches is basalt mixed with medium acid red clay.

Guenoc soils are used for range and grazing. A few small areas are used for seeded dryland pasture.

Guenoc gravelly silt loam, 5 to 30 percent slopes (GrE).--This soil is on broad ridgetops or rolling hills. Most of the slopes are long.

Typical profile on a southeast-facing hill; slope of 5 percent; 8.5 miles north-northwest of Healdsburg (NE1/4 SW1/4 sec. 7, T. 10 N., R. 9 W.); profile was moist below a depth of 14 inches examined:

A11--0 to 4 inches, weak-red (10YR 4/2) gravelly silt loam, dusky red (10R 3/3) moist; strong, fine, angular blocky structure; slightly hard, friable, slightly sticky and plastic; many very fine, fine, medium, and coarse roots; many, very fine and fine; tubular and interstitial pores; neutral (pH 7.0); clear, smooth boundary.

A12--4 to 17 inches, weak-red (10R 4/3) heavy loam, dusky red (10R 3/3) moist; strong, fine and medium, subangular blocky structure; slightly hard, friable, slightly sticky and plastic; many fine, medium, and coarse roots; many, very fine, tubular pores; many thin clay films in pores and as bridges; neutral (pH 6.8); approximately 5 percent stones by volume; clear, wavy boundary.

B1--17 to 26 inches, weak-red (10R 4/3) clay loam, dusky red (10R 3/3) moist; strong, fine and medium, subangular blocky structure; hard, friable, sticky and plastic; common medium and coarse roots; many, fine and very fine, tubular pores; many thin clay films in pores and as bridges; slightly acid (pH 6.5); approximately 5 percent stones by volume; clear, wavy boundary.

B2t--26 to 38 inches, weak-red (10R 4/4) clay, dark reddish brown (2.5YR 3/4) moist; strong, coarse, subangular blocky structure; extremely hard, very firm, very sticky, very plastic; many medium roots; a few, fine, tubular pores and common, very fine, tubular pores; continuous moderately thick clay films on ped faces, in pores, and as bridges; slightly acid (pH 6.5); strongly weathered rock fragments; clear, wavy boundary.

R--38 inches, highly weathered basalt mixed with red (2.5YR 4/6) clay, dark reddish brown (2.5YR 3/4) moist; continuous thick clay films; medium acid (pH 6.0).

The A horizon ranges from red or weak red to dark reddish brown in color, and in texture from loam to silty clay loam with varying amounts of gravel. The B2 horizon varies from reddish brown to red or weak red in color and from heavy clay loam to clay in texture. Reaction generally is more acid as depth increases and ranges from neutral to medium acid. Depth to weathered basalt varies from 20 to 40 inches, sometimes within short distances.

Included in mapping are small areas of Goulding clay loam, Boomer loam, Spreckels loam, Supan silt loam, and rock outcrops.

Permeability is moderately slow in the subsoil of this Guenoc soil. Runoff is medium to rapid, and the hazard of erosion is moderate to high. Fertility is moderate. The available water capacity is 4 to 8 inches.

This soil is used mainly for grazing. Capability unit VIe-1; range site 1.

Guenoc gravelly silt loam, 30 to 75 percent slopes (GrG).--This soil is similar to Guenoc gravelly silt loam, 5 to 30 percent slopes, but it is steeper and is only 20 to 30 inches deep.

Included in mapping are small areas of Boomer loam, Goulding cobbly clay loam, Spreckels loam, and rock outcrops or stony areas.

Runoff is rapid to very rapid, and the hazard of erosion is high to very high. The available water capacity is 4 to 6 inches.

The main use of this soil is for grazing. Capability unit VIIe-1; range site 5.

### Gullied Land

Gullied land (GuF) consists of gently sloping to steep, rounded hills that have been severely damaged by gullying. The largest acreage of Gullied land lies east of Petaluma between Penngrove and Lakeville. Smaller areas are in other parts of the county along streams and drainageways.

Gullying has occurred in places where excess runoff has cut into natural water courses on hillsides. Overgrazing by livestock has thinned or destroyed plant cover, and this has resulted in increased runoff and in aggravated headcutting of the gullies. In areas where overlying soil material has been eroded away, the parent material of soft coastal sandstone is exposed and is subject to severe erosion.

Gullied land provides drainageways for water that flows from nearby hills during rainy periods. Capability unit VIIIe-1.

### Haire Series

The Haire series consists of moderately well-drained clay loams that have a clay subsoil, and are underlain by old terrace-alluvium from mixed sedimentary and basic rock sources. These soils are on terraces and rolling hills. They are mainly in the southeastern part of the county near the town of Sonoma and in scattered areas east and southeast of Healdsburg. Slopes are 0 to 30 percent. Elevation ranges from 100 to 800 feet. Annual rainfall is 25 to 45 inches, annual temperature is 58° to 60° F., and the frost-free season is 250 to 275 days. In most places the vegetation is chiefly annual and perennial grasses and scattered oaks, but some areas have a cover of pasture or hay. The Haire soils are associated with the Arbuckle, Clear Lake, Diablo, and Zamora soils.

In a typical profile the surface layer is grayish-brown, neutral and slightly acid clay loam about 24 inches thick. The subsoil is pale-brown, strongly acid clay about 12 inches thick. The substratum, to a depth of 60 inches or more, is pale-yellow and pale-brown, strongly acid very gravelly and cobbly clay loam.

pores and as bridges; strongly acid (pH 5.3); diffuse, irregular boundary.

C--54 inches, pale-yellow (SY 8/4) strongly weathered sandstone and shale.

The A horizon color ranges from pale brown to brown or yellowish brown and from light yellowish brown to yellow. This horizon is heavy loam to heavy clay loam. Depth varies from 40 to 60 inches to weathered soft sandstone and shale.

Included in mapping are small areas of Caspar sandy loam, Empire loam, Goldridge fine sandy loam, and Hugo loam.

Permeability is moderately slow in the subsoil of this Mendocino soil. Runoff is slow to medium, and the hazard of erosion is slight to moderate. Fertility is moderate. The available water capacity is 6 to 10 inches.

This soil is used mainly for the production of timber. Grazing is very limited on areas of this soil that have been cleared. Capability unit VIe-1; woodland group 1.

Mendocino sandy clay loam, 30 to 50 percent slopes (MmF).--This soil is similar to Mendocino sandy clay loam, 9 to 30 percent slopes, but it is 30 to 50 inches deep.

Included in mapping are small areas of Empire loam, Goldridge fine sandy loam, and Hugo loam.

Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 8.5 inches.

The soil is used mainly for the commercial production of timber. Grazing is very limited on areas of this soil that have been cleared. Capability unit VIe-1; woodland group 2.

Mendocino-Empire complex, 0 to 50 percent slopes (MnF).--This complex is above the lower coastal bench terraces in the northwestern part of the county, in the vicinity of Stewart's Point, and 10 miles north and northeast of Stewart's Point. Mendocino soils make up about 55 percent of the complex and Empire soils about 45 percent. Some of these soils are steep and are on uplands, but generally they are gently to strongly sloping and are on terraces.

The Mendocino soils have a profile similar to that of Mendocino sandy clay loam, 9 to 30 percent slopes. Runoff is slow to rapid, and the hazard of erosion is slight to high, depending on slope.

The Empire soils have a profile similar to that of Empire loam, 9 to 30 percent slopes. Runoff is slow to rapid, and the hazard of erosion is slight to high, depending on slope.

These soils are used mainly for the production of timber. Capability unit VIe-1; woodland group 2.

#### Montara Series

The Montara series consists of well-drained cobbly clay loams. These soils are underlain, at a depth of 8 to 20 inches, by weathered serpentine or

serpentine rock. They are on hillsides, ridgetop or mountainous uplands, mainly in hilly mountain ranges in the eastern and northern parts of the county. Slopes are 2 to 75 percent. Elevation ranges from 600 to 2,000 feet. Annual rainfall is 30 to 45 inches, annual temperature is between 57 and 59° F., and the frost-free season is 260 to 2 days. In most places the vegetation is chiefly annual grasses, forbs, and small woody shrubs, but few areas have scattered scrub oak trees, and manzanita. The Montara soils are associated with the Henneke, Raynor, and Yorkville soils.

In a typical profile the surface layer is very dark gray, neutral cobbly clay loam about 9 inches thick. At a depth of about 9 inches is weathered pale-olive and variegated brown, green, and blue serpentine parent material.

Montara soils are used mainly as wildlife habitat, for recreation, and watershed. A few small areas are used for limited grazing.

Montara cobbly clay loam, 2 to 30 percent slopes (MoE).--This soil is in small scattered areas throughout the eastern and northern parts of the county. It is mainly on foothills and ridgetops. Most of the slopes are hummocky or gently undulating. Typical profile 0.6 mile east of Occidental near the junction of Occidental Road and Facendini Lane (NE1/4 SW1/4, sec. 35, T. 7 N., R. 10 W.):

All--0 to 9 inches, very dark-gray (10YR 3/1) cobbly clay loam, black (10YR 2/1) moist; moderate, fine and medium, subangular blocky structure; slightly hard, firm, sticky and plastic; common fine and very fine roots; common, very fine and fine, tubular pores; a few thin clay films in pores; neutral (pH 7.0); clear, wavy boundary.

R--9 inches, pale-olive and variegated brown, green and blue serpentine bedrock.

The A horizon ranges from cobbly clay loam to light clay. Occasionally the texture is loam. The horizon ranges in color from very dark gray to dark grayish brown, and is neutral to moderately alkaline. Depth to rock varies from 8 to 20 inches. The content of cobblestones is 15 to 25 percent throughout the profile, and the content of gravel is 15 to 20 percent.

Included in mapping are small areas of Henneke gravelly loam, Raynor clay, and Yorkville clay loam. Also included are scattered areas of serpentine outcrop.

Permeability is moderately slow in this Montara soil. Runoff is slow to rapid, and the hazard of erosion is slight to high. The available water capacity is 1 to 3 inches. Fertility is very low.

This soil is used primarily for range and pasture. Capability unit VIIe-9; range site 11.

Montara cobbly clay loam, 30 to 75 percent slopes (MoG).--This soil is similar to Montara cobbly clay loam, 2 to 30 percent slopes, but it is 8 to 16 inches deep.