

Cultural Landscape Activities  
Rancho Camulos  
Ventura County  
2005

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**DRAFT**

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JORDAN • GILBERT • BAIN  
LANDSCAPE ARCHITECTS INC.

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**RANCHO CAMULOS**  
**CULTURAL LANDSCAPE ACTIVITIES**  
**FOCUS AREA PLAN EVALUATIONS**

**RANCHO CAMULOS**  
**NATIONAL HISTORIC LANDMARK**  
**VENTURA COUNTY, CALIFORNIA**

**Prepared For:**

**County of Ventura**  
**Watershed Protection District**  
**800 South Victoria Avenue**  
**Ventura, California 93006**

**Prepared By:**

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**And**

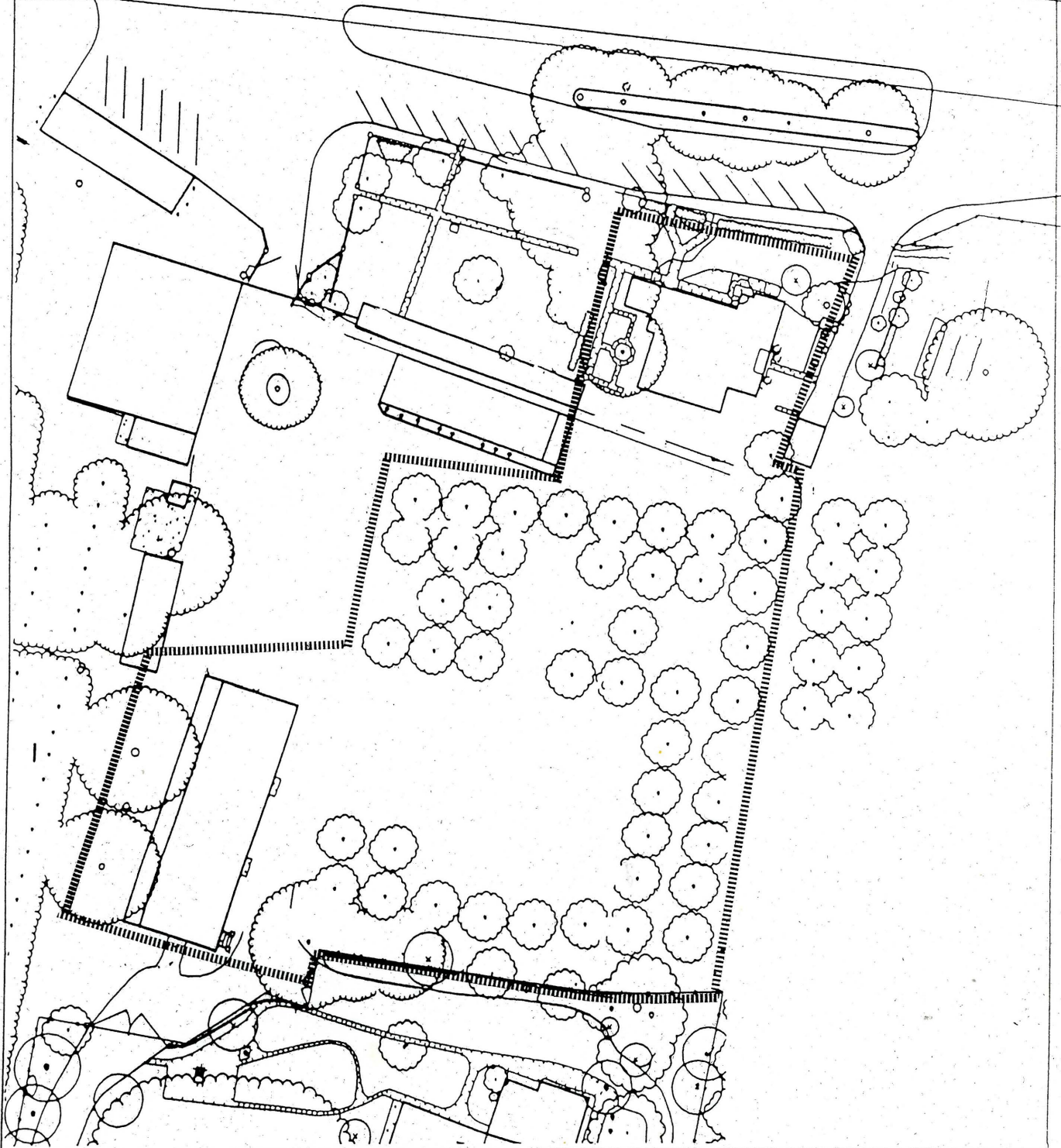
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**1000 Woodstock Lane**  
**Ventura, California 93001**

**January 2005**

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HIGHWAY 126



Not to Scale



NORTH  
10638-00

**LIMITS OF STUDY AREA**

Rancho Camulos

## DRAFT REPORT

# **RANCHO CAMULOS CULTURAL LANDSCAPE ACTIVITIES**

## **Focus Area Plant Evaluation Report**

### **Introduction**

The focus of this study is a horticultural and botanical documentation and evaluation of a portion of the Rancho Camulos historic site. The focus planting area commences on the north surrounding the Nachito del Valley Adobe (Visitor Center) extending south along the old drive ending at the orchard terminus then west to include the plantings surrounding the Winery on the west boundary.

Prior to mapping and evaluating the study area vegetation, a review was completed of the following resources:

1. *Piru Community Enhancement Plan*, Mainstreet Architects & Planners, 1996.
2. *Rancho Camulos Historical Museum Master Plan*, Mainstreet Architects & Planners, Stephanie Diaz, Planning Consultant and Susan Van Atta, ASLA & Associates, 1997.
3. *Rancho Camulos Cultural Landscape Study, Area 2 Ranch Entrance and Work Area*, Historic Resources Group, Inc., 2002.
4. *Rancho Camulos Technical Report*, Historic Resources Group, Inc., 2002.
5. *Southern California Gardens, an Illustrated History*, Victoria Padilla, 1961.
6. *The California Garden*, Jere Stuart French, 1993.

These resources provided a historical perspective of the site and an excellent review of the proposed master plan, which includes the focus portion of this study.

Mapping and evaluation of the study area existing vegetation commenced on December 21, 2004 and was completed on January 5, 2005. Thirty one (31) species were identified, mapped, numbered, photographed and evaluated utilizing the enclosed field evaluation form.

The numbered site map identifies the specie location with the numbers corresponding to the evaluation forms and discussion herein. A photographic depiction and location map are also included as part of this report.

### Plant Findings

The following table summarizes the individual plant findings and identifies the corresponding photographic illustration:

<u>Plant No.</u>	<u>Botanical Name</u>	<u>Common Name</u>	<u>Photograph No.</u>	<u>Comments</u>
1.	Schinus molle	California Pepper	1A-B	West side Winery
2.	Schinus molle	California Pepper	2A-B	West side Winery
3.	Schinus molle	California Pepper	3A-B	West side Winery
4.	Bougainvillea spp.	Bougainvillea	4A	South side Winery
5.	Rose spp.	Rose	4B	East side Winery
6.	Rose spp.	Rose	4B	East side Winery
7.	Euphobia pulcherrima	Poinsettia	4B	East side Winery
8.	Rose spp.	Rose	4B	East side Winery
9.	Hylocercus undatus	Pitahaya Cactus	4C	East side Winery
10.	Rose spp.	Rose	4B	East side Winery
11.	Bougainvillea spectabilis	Bougainvillea	4D	North side Winery
12/13/14	Calamondin Citrus	Sour-Acid Mandarin	5A	East of Winery
15/16/17	Calamondin Citrus	Sour-Acid Mandarin	5B	East of Winery
18.	Juglans nigra	Black Walnut	6A	East of Winery
19.	Phoenix canariensis	Canary Island Date Palm	6B	South Boundary
20.	Schinus molle	California Pepper	7A	South Boundary
21.	Eucalyptus sideroxylon	Red Iron Bark Eucalyptus	7B	South Boundary
22.	Citrus orchard	Various Citrus	8A-B, 9A-B	Center of Project
22.	Deciduous Fruits	Various Fruit Trees	10A-B	South of Visitor Center
23.	Cupressus sempervirens	Italian Cypress	11A	South of Visitor Center
24.	Syzygium paniculatum	Eugenia	12A	South of Visitor Center
25.	Araucaria heterophylla	Norfolk Island Pine	11B	West of Visitor Center
26.	Jacaranda mimosifolia	Jacaranda	13	West of Visitor Center
27.	Syzygium paniculatum	Eugenia	14A	North of Visitor Center
28.	Juniperus c. Torulosa	Hollywood Juniper	14B	North of Visitor Center
29.	Syagrus romanzoffianum	Queen Palm	15A	North of Visitor Center
30.	Pinus canariensis	Canary Island Pine	15B	NE of Visitor Center
31.	Ficus elastica	Rubber Tree	16A	East of Visitor Center

*Summary of  
which are historic*

## Discussion and Recommendations

A total of thirty-one (31) plants were mapped and evaluated. Although several of the species appeared to lack historical or botanical relevance, their on-site existence within the focus area precluded their inclusion for potential future planning analysis.

The Rose species, Bougainvillea and Poinsettia adjacent to the winery appear as relatively new plantings with no site historical significance (No. 4 -8 & 10 -11). Removal of these plants would not affect the cultural or heritage aspects of preservation planning. It also should be noted that the Eugenia shrubs (No. 24 & 27), Hollywood Juniper (23), Oleander, Eugenia hedge and Ficus (31) surrounding the Nachito vel Valley Adobe (Visitor Center) are either in poor condition or represent plantings since the 1920's historical period. Only the Eugenia hedge and large Eugenia shrub mass Number 24 merit consideration for preservation.

Three (3) of the deciduous fruit trees at the north end of the orchard and the Italian Cypress (No. 23) are recommended for removal due to declining health and poor form. These trees are beyond remediation for potential development into long term desirable specimens.

Climbing the east wall of the Winery is a unique epiphytic cactus, *Hylocereus undatus* (Number 9). Based on the size of this specimen, it appears that this was one of the original ranch plantings. It is indigenous to tropical forest regions of Mexico and Central and South America where natives commonly call it 'Pitaya'. In Asia, it is called the 'Dragon Fruit'. The cactus produces a nocturnal blooming white flower followed with a 4" red oval fruit that is edible and considered to have good flavor and sweetness. The fruit is consumed fresh and has been developed into a commercial crop in many regions of the world.

Historic

The Pitahaya cactus is worthy of preservation as part of the original heritage site. Depending on the proposed renovation of the Winery, this plant may require removal but is easily propagated for replanting.

Although the three (3) *Schinus molle* (California Pepper) numbered 1, 2 and 3 appear relatively healthy all three trees exhibit significant defects. Tree number one has trunk and branch cavities and dieback. Tree number two is a regrowth from a decayed trunk. Tree number three has a major trunk cavity with active decay and exhibits a weak branch structure.

The three (3) California Pepper would be considered undesirable specimens in a highly utilized public landscape. Tree number 1 and 3 have a high potential for failure based on the evident trunk cavities and decay. Tree number 2 is basically a regrowth from a failed and decayed tree stump and should be removed.

In order to preserve trees numbered 1 and 3, the trees would require considerable pruning to reduce branch and foliage density including significant crown reduction. All of the materials, debris and soil covering the base of the trunks require removal.

I would recommend removal of all three (3) California Pepper specimens.

The citrus orchard (No. 22) contains a mixed assembly of various evergreen fruit types. Trees numbered 12 – 17 are groupings of Calamondin (Sour-Acid Mandarin). These are exhibited in photographs 5A-B. There is one Avocado in the orchard. The remaining trees are orange and grapefruit. Most of the trees appear fairly mature with some new plantings present. Overall, the trees evidence lack of maintenance. Dieback, deadwood and nutrient deficiencies are common throughout the orchard. Photographic exhibits 8A-B and 9A-B illustrate the orchard tree conditions.

In order to preserve the orchard, the weed growth needs to be controlled. The seedling palm and volunteer California Pepper trees require removal. All of the trees are in need of a nutrient fertilization program. Pruning is required throughout to remove the deadwood and shape the trees. The orchard would benefit from installation of a permanent irrigation system. It would be further recommended that the entire orchard ground area be covered with a 4-6" layer of mulch.

Tree Number 18 is a fairly young Black Walnut located east of the winery. This tree is in overall good condition with only winter dormant pruning required. A portion of the root zone is covered with an asphalt driveway. Removal of the asphalt within the canopy drip line and addition of mulch would be of benefit to this specimen.

The Canary Island Date Palm (No. 19) is located on the south perimeter of the study zone. The trunk measures 29" with a height and spread of 45' x 25'. This tree is fairly immature, most likely not more than 20- 25 years old. The palm is in good health and would only require lower dead frond removal for preservation. Should this tree not be acceptable where located, it can be easily transplanted to another location.



Tree Number 20 is a small young seedling *Schinus molle* (California Pepper) located on the south property boundary near the Canary Island Date Palm. The tree is in good condition. This specimen did not exist as part of the original historical development of the property.

Although tree Number 21 is located outside of the study area, a portion of the canopy extends into the southeast corner of the study site. This is a large multi-trunk Red Iron Bark Eucalyptus. The overall tree health is good. The tree would benefit from pruning to shape the canopy and remove deadwood. In addition, the soil and debris covering the base of the trunk should be removed to expose the original root crown flare. There are several large cactus plants that are growing up through the Eucalyptus canopy. These cactus should be transplanted to a more desirable location.

Surrounding the Nachito del Valley Adobe (Visitor Center) are four (4) significant trees of substantial size. These include Number's 25, 26, 29 and 30. All are worthy of preservation.

✓  
historic

Tree Number 25 is a 75' tall *Araucaria heterophylla* (Norfolk Island Pine) located in the west side garden area adjacent to the Adobe. Remnants of an old brick walk surround the tree. The tree is in excellent condition and requires no mitigations for preservation.

✓

Tree Number 26 is a Jacaranda specimen located just north of the Norfolk Island Pine. The foliage canopy spreads 48' extending into the Norfolk Island Pine and over the Adobe. A small myrtle bush adjacent to the tree trunk should be removed. The soil and debris covering the base of the trunk requires removal to expose the root flare and original grade. The tree would benefit from removing the trunk sucker growth and deadwood with pruning to shape the overall canopy.

✓

Tree Number 29 is a Queen Palm. The trunk diameter is 15" with a height and spread of 55' x 20'. The west side lacks foliage. The trunk evidences spike marks from previous climbing spurs. This tree is worthy of preservation where located. However, the tree can also be easily transplanted. No mitigations are required.

✓

The largest tree in the study area is a 42" trunk diameter Canary Island Pine located to the northeast side of the Adobe. This is evaluated as tree number 30. The height and canopy spread are 90' x 40'. The tree leans slightly to the east, but appears to be stable. Minor deadwood and twig dieback were observed. This tree requires no mitigations at this time.

✓  
historic

## **Plant Protection for Preserved Specimens**

All plant species to be preserved and especially those in construction and or renovation zones should adhere to the following protection guidelines:

1. Fencing shall be required five (5) feet outside of the tree drip line to establish a protective zone surrounding the plant. A minimum five foot high chain link fence with posts every 8' is required prior to commencing any grading or construction. The fence shall remain during all phases of construction and shall not be moved or removed without the written authorization of the administrative agency responsible for the project work.
2. All work within the protected zone of any plant shall require an encroachment permit. All approved work shall be under the direct on-site observation of the client's landscape architect or horticulture consultant and shall be certified to the administrative agency within five working days of completion of said work.
3. All excavations within the protected zone of any plant shall be accomplished by hand tools under the direct on-site observation of a Certified Arborist. If any roots are encountered, they shall be saved and covered with a minimum of 6" clean washed sand. Those roots to be severed shall be clean cut with pruning tools to the edge of the excavation.
4. No materials may be nailed or staked to any preserved plant. No materials or equipment may be stored at any time within the protected zone of any plant. No parking shall be allowed adjacent or under any preserved plant.
5. During all phases of construction, the health of the plants shall be monitored and maintained as required.
6. All pruning, other than dead wood removal shall be conducted by a professional arborist under the direct observation of the clients Certified Arborist.

## **Replacement Plantings**

The historical period of significance for this project is from 1853 to 1943. Based on a literature review of plants utilized during this early California period, the following horticulture species are identified as appropriate for the site.

## Ornamental Trees

<u>Botanical Name</u>	<u>Common Name</u>	<u>Botanical Name</u>	<u>Common Name</u>
Ceratonia siliqua	Carob Tree	Populus nigra "Italica"	Poplar
Cupressus sempervirens	Italian Cypress	Prunus ilicifolia	Hollyleaf Cherry
Eucalyptus species	Eucalyptus	Prunus lyonii	Catalina Cherry
Ficus species	Ficus	Quercus agrifolia	Coast Live Oak
Jacaranda mimosifolia	Jacaranda	Quercus suber	Cork Oak
Phoenix dactylifera	Date Palm	Schinus molle	Ca. Pepper
Pinus pinea	Italian Stone Pine	Schinus terebinthifolius	Brazilian Pepper
Pinus radiata	Monterey Pine	Washingtonia filifera	Ca. Fan Palm
Pistacia chinensis	Pistache	Washingtonia robusta	Mexican Fan Palm
Platanus racemosa	Ca. Sycamore	Umbellularia californica	Ca. Bay

## Fruit Producing Trees

<u>Botanical Name</u>	<u>Common Name</u>	<u>Botanical Name</u>	<u>Common Name</u>
Citrus species	Orange, Lemon, Lime Grapefruit	Olea europaea	Olive
Deciduous Fruits	Apple, Apricot, Almond, Fig, Peach, Pear, Plum, Walnut	Psidium species	Guava
Eriobotrya japonica	Loquat	Punica granatum	Pomegrante
Feijoa sellowiana	Pineapple Guava	Ziziphus jujube	Jujube

## Shrubs

<u>Botanical Name</u>	<u>Common Name</u>	<u>Botanical Name</u>	<u>Common Name</u>
Agave Americana	Century Plant	Lavatera maritima	Tree Mallow
Brugmansia x candida	Angel's Trumpet	Musa spp.	Banana
Brugmansia x insignis	Angel's Trumpet	Nerium Oleander	Oleander
Canna generalis	Canna Lily	Opuntia tuna	Prickly Pear Cactus
Heteromeles arbutifolia	Toyon	Rosa spp.	Rose
Juniperus spp.	Juniper	Vitus spp.	Grape

The replacement and/or addition of plantings should be implemented under the guidance of a detailed cultural landscape plan as described in the *Rancho Camulos Historic Museum Master Plan* prepared in 1997, pages 75 – 79.

Remnants of a formal garden exist about the Nachito del Valle Adobe, which are proposed for restoration including enhancement to represent a typical garden of the 1920's. The orchard area will be utilized, in part, for parking keeping the perimeter trees as a visual screen for the vehicles. Consideration may be given to developing a demonstration orchard with a variety of citrus trees in this area.

# HORTICULTURE TREE EVALUATION FIELD SURVEY

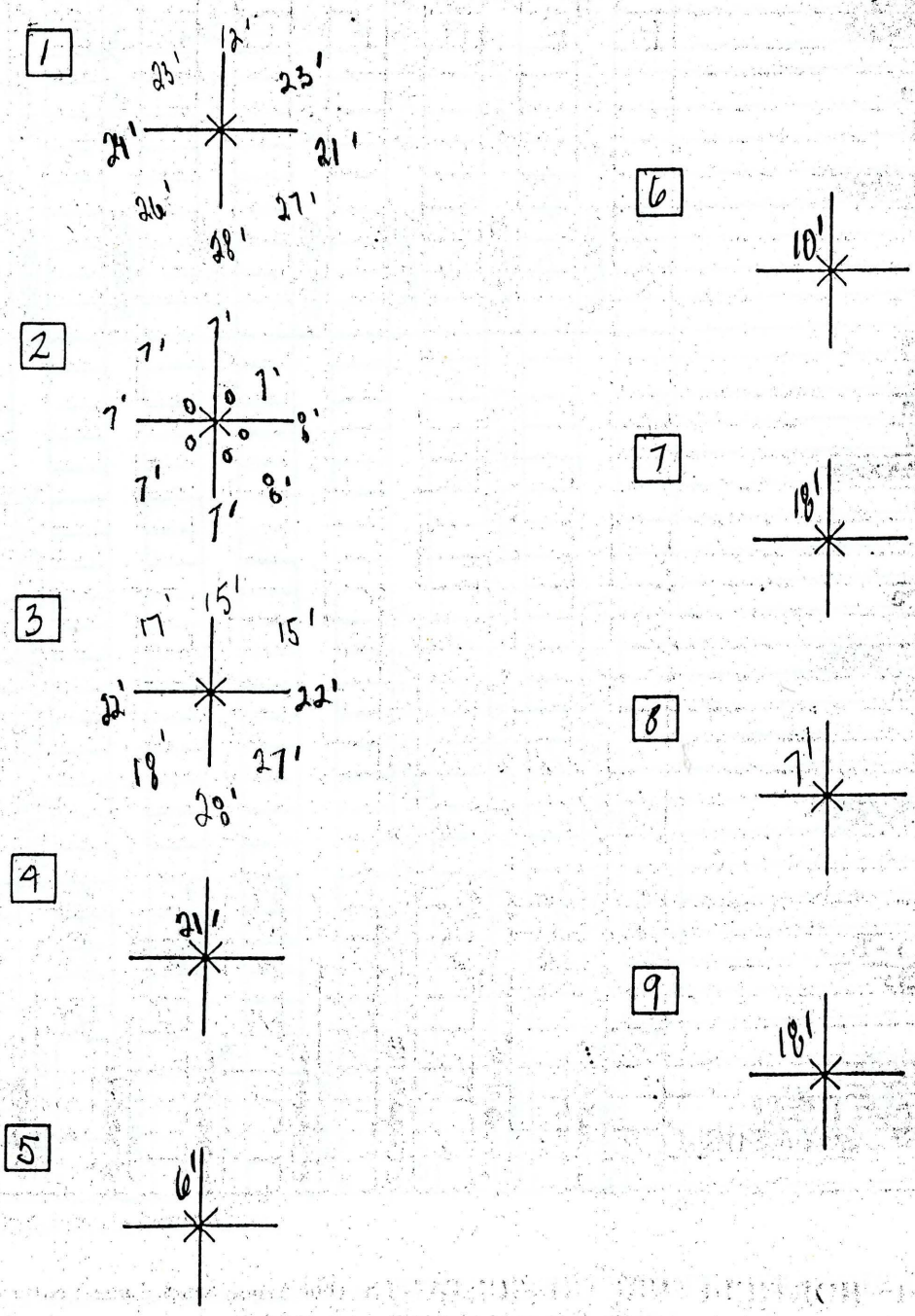
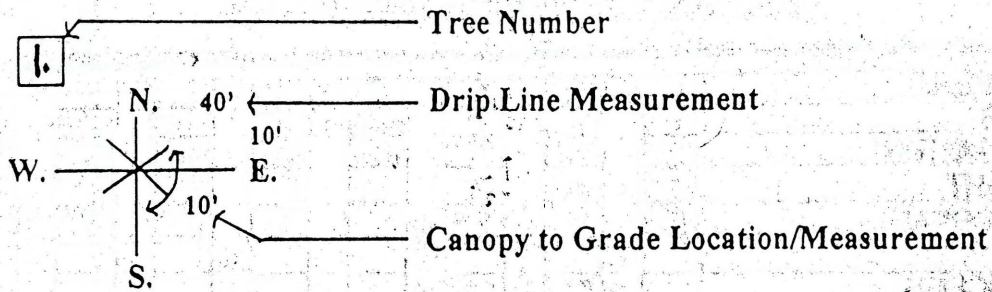
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	SPECIMEN DATA	1	2	3	4	5	6	7	8	9	
	TREE NUMBER	1	2	3	4	5	6	7	8	9	
	No TRUNKS	1	1	1	Multi	1	Multi	Multi	Multi	Multi	
	TRUNK DIAMETER	53"	45"	55"	Varies	2"	Varies	Varies	Varies	Varies	
	TREE HEIGHT	65'	20'	50'	12'	5'	5'	12'	5'	18'	
	CANOPY SPREAD	45'	15'	44'	21'	6'	10'	18'	7'	18'	
	LEANING										
	LOW BRANCHES										
	TERRAIN Flat-Slope	F	F	F	F	F	F	F	F	F	
	CROWDED										
	Damaged Roots										
	Exposed Roots										
	Girdled Roots										
	Covered Soil / Debris	X	X	X							
	Trunk Damage	X	X	X							
	Buned	X	X	X							
	Trunk Cavity	X	X	X							
	Exudations										
	Disease/Insects										
	Weak Structure			X							
	Branch Cavities	X									
	Weak Crotches			X							
	Twig-Branch Dieback	X		X							
	Sparse Foliage										
	Chlorotic										
	Wilt										
	Abnormal foliage										
	Deadwood	X		X	X				X	X	
	Insects-Mites Present			X							
	Disease Present										
	Stress										
	Poor Form		X								
	Obstructions										
	POTENTIAL HAZARD	X		X							
	Dead Tree										
	VIGOR 1-5	2	2	2	2	3	2	2	3	3	
	HEALTH 1-5	4	4	4	2	2	2	2	3	3	
	AESTHETICS 1-5	2	4	2	3	3	2	2	3	3	
	REMOVE TREE		X				X		X		
	PRUNE				X			X			
	DEADWOOD	X			X			X			
	WATER-FERTILIZE										
	INSECT-DISEASE TREAT										
	REMOVE BASAL SOIL/DEBRIS	X		X							
	OTHER										
	COMMENTS:		SPECIES: <i>Schinus molle</i> SIGNIFICANT TRUNK & BRANCH CAVITIES	SPECIES: <i>Schinus molle</i> Cut Stump with Regrowth - Trunk hollow & decayed	SPECIES: <i>Schinus molle</i> MAJOR TRUNK DECAY & CAVITY	SPECIES: <i>ROSE SPECIES</i>	SPECIES: <i>ROSE SPECIES</i>	SPECIES: <i>ROSE SPECIES</i>	SPECIES: <i>Poinsettia - Yellow</i> SHRUB GROWING AT BASE	SPECIES: <i>ROSE SPECIES</i>	SPECIES: <i>HYLOCICLUS UNDATUS</i>

Measured Canopy Spreads on Back →

# HORTICULTURE TREE EVALUATION FIELD SURVEY DRIP LINE AND CANOPY TO GRADE MEASUREMENTS

## LEGEND



# HORTICULTURE TREE EVALUATION FIELD SURVEY

PROJECT: RANCHO CAMULOS DATE: 12-21-04  
 LOCATION: PIRU, CALIFORNIA  
 CLIENT: JORDAN, GILBERT & BAIN - Mike Gilbert  
 ADDRESS: 3350 LOMA VISTA ROAD  
VENTURA, CALIFORNIA (805) 642-3641

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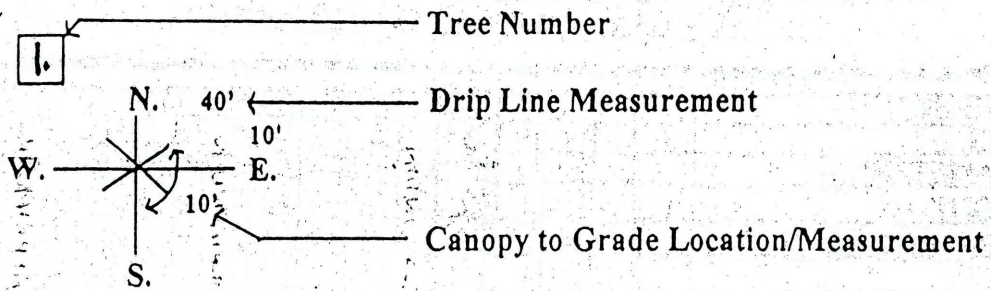
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SPECIMEN DATA	TREE NUMBER	10	11	12	13	14	15	16	17	18	
No TRUNKS		N/A	N/A	4	3	3	4	3	3	1	
TRUNK DIAMETER		Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	25"	
TREE HEIGHT		4'	20'	23'	18'	22'	20'	23'	20'	35'	
CANOPY SPREAD		5'	21'	22'	20'	16'	22'	17'	15'	40'	
LEANING							↑				
LOW BRANCHES											
TERRAIN Flat-Slope		F	F	F	F	F	F	F	F	F	
CROWDED				X	X	X	X	X	X	X	
Damaged Roots											
Exposed Roots											
Girdled Roots											
Covered Soil / Debris				X	X	X	X	X	X	X	
Trunk Damage				X	X	X	X	X	X	X	
Buried				X	X	X	X	X	X	X	
Trunk Cavity											
Exudations											
Disease/Insects											
Weak Structure											
Branch Cavities											
Weak Crotches											
Twig-Branch Dieback				X	X	X	X	X	X	X	
Sparse Foliage											
Chlorotic											
Wilt											
Abnormal foliage											
Deadwood			X	X	X	X	X	X	X	X	
Insects/Mites Present											
Disease Present											
Stress											
Poor Form				X	X	X	X	X	X	X	
Obstructions											
POTENTIAL HAZARD											
Dead Tree											
VIGOR 1-5		2	2	3	3	3	3	3	3	2	
HEALTH 1-5		2	2	3	3	3	3	3	3	3	
AESTHETICS 1-5		2	2	2	2	2	3	2	2	2	
REMOVE TREE											
PRUNE		X	X	X	X	X	X	X	X	X	
DEADWOOD				X	X	X	X	X	X	X	
WATER-FERTILIZE				X	X	X	X	X	X	X	
INSECT-DISEASE TREAT				X	X	X	X	X	X	X	
REMOVE BASAL SOIL/DEBRIS				X	X	X	X	X	X	X	
OTHER											
SPECIES:		Rose species		BOUGHAINVILLEA Spectabilis	CITRUS - CALAMONDIN	CITRUS - CALAMONDIN	CITRUS - CALAMONDIN	CITRUS - CALAMONDIN	CITRUS - CALAMONDIN	CITRUS - CALAMONDIN	JUGLANS nigra
COMMENTS:					dbh: 5", 7", 5 1/4"	dbh: 3 1/2", 3 1/2", 1 1/2"	dbh: 5", 7", 4 1/2"	dbh: 3 1/2", 5", 4 1/4"	dbh: 4", 4", 6"	dbh: 4", 4", 5"	1/2 BASE COVERED WITH ASPHALT (driveway)

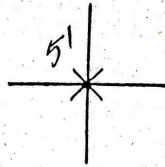
Measured Canopy Spreads on Back →

# HORTICULTURE TREE EVALUATION-FIELD SURVEY DRIP LINE AND CANOPY TO GRADE MEASUREMENTS

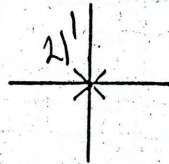
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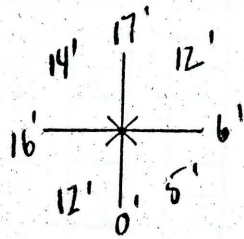
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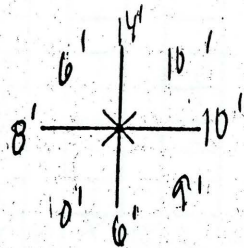
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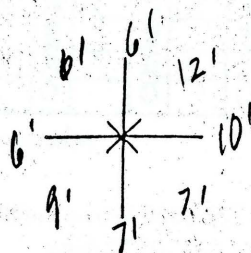
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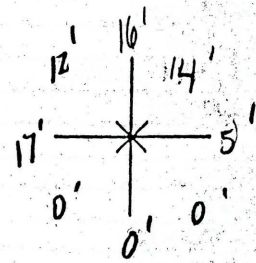
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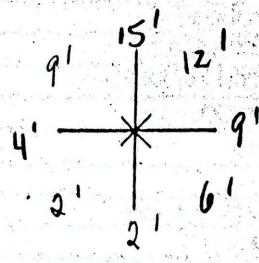
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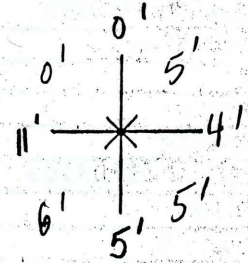
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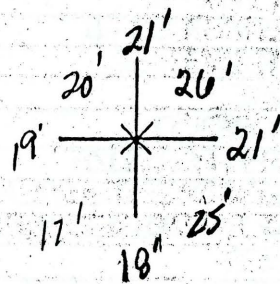
14



17



18



# HORTICULTURE TREE EVALUATION FIELD SURVEY

PROJECT: RANCHO CAMULOS DATE: 12-21-04  
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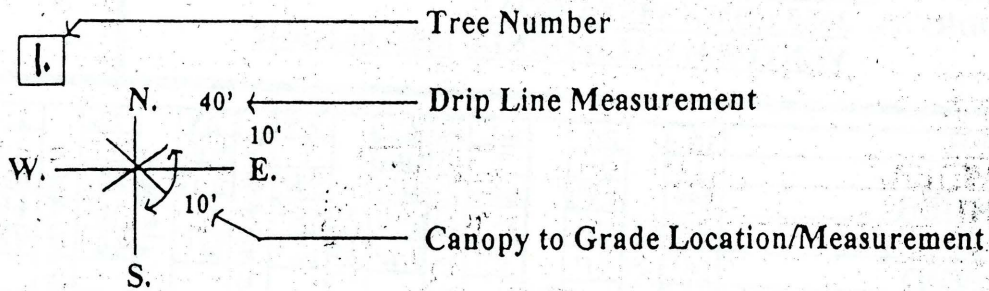
SPECIMEN DATA		PHYSICAL OBSERVATIONS		RATING		MITIGATIONS													
TREE NUMBER	19	20	21	22	23	24	25	26	27										
No TRUNKS	1	2	3	VARIES	1	MULTI	1	1	1										
TRUNK DIAMETER	29"	2.4"	VARIES	VARIES	22"	22-24"	25"	28"	4"										
TREE HEIGHT	45'	110'	35'	6-10'	15'	17'	15'	65'	20'										
CANOPY SPREAD	25'	21'	39'	6-20'	12'	30'	30'	48'	8'										
LEANING																			
LOW BRANCHES																			
TERRAIN Flat-Slope	F	F	F	F	F	F	F	F	F										
CROWDED																			
Damaged Roots																			
Exposed Roots																			
Girdled Roots																			
Covered Soil / Debris																			
Trunk Damage																			
Buried																			
Trunk Cavity																			
Exudations																			
Disease/Insects																			
Weak Structure																			
Branch Cavities																			
Weak Crotches																			
Twig/Branch Dieback																			
Sparse Foliage																			
Chlorotic																			
Wilt																			
Abnormal foliage																			
Deadwood	X		X					X											
Insects-Mites Present																			
Disease Present																			
Stress																			
Poor Form																			
Obstructions																			
POTENTIAL HAZARD																			
Dead Tree																			
VIGOR 1-5	2	2	2	3	4	2	2	2	2										
HEALTH 1-5	2	2	2	3	4	2	2	2	2										
AESTHETICS 1-5	2	2	2	2	4	2	2	3	3										
REMOVE TREE																			
PRUNE	X			X				X											
DEADWOOD	X			X				X											
WATER-FERTILIZE																			
INSECT-DISEASE TREAT																			
REMOVE BASAL SOIL/DEBRIS																			
OTHER																			
COMMENTS:		SPECIES: <i>PHOENIX CALABARICENSIS</i>		SPECIES: <i>SCHIVUS MOLLE</i>		SPECIES: <i>EUCALYPTUS SIMPLEX</i>		SPECIES: <i>ORCHARD TREES</i>		SPECIES: <i>CUPRESSUS SEMPERVIRENS</i>		SPECIES: <i>SYZYGIUM PANICULATUM</i>		SPECIES: <i>APURCARIA heterophylla</i>		SPECIES: <i>JACARANDA mimosifolia</i>		SPECIES: <i>SYZYGIUM paniculatum</i>	
		COMMENTS: X		COMMENTS: X		COMMENTS: CROWNED WITH CACTUS		COMMENTS: 3B CITRUS, AVOCADO, 4 DEC. FRUIT TREES		COMMENTS: TRUNK DECAY. TRUNKS CAT OFF		COMMENTS: LARGE SHRUBS		COMMENTS: X		COMMENTS: TRUNK SUGAR GROWTH. NITRILE AT BASE		COMMENTS: X ADJACENT TO BUILDING	

Measured Canopy Spreads on Back →

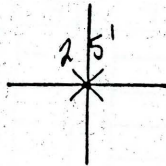


# HORTICULTURE TREE EVALUATION FIELD SURVEY DRIP LINE AND CANOPY TO GRADE MEASUREMENTS

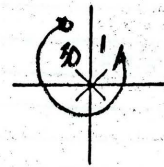
## LEGEND



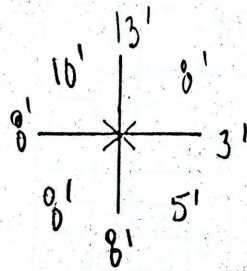
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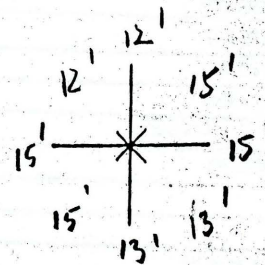
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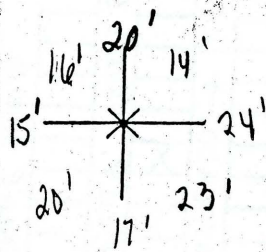
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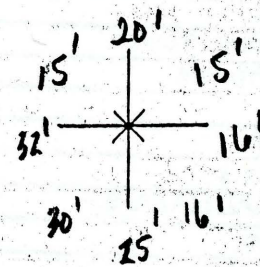
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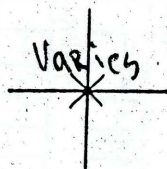
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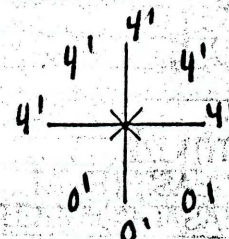
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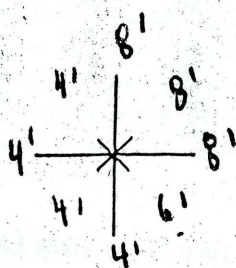
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27



23



# HORTICULTURE TREE EVALUATION FIELD SURVEY

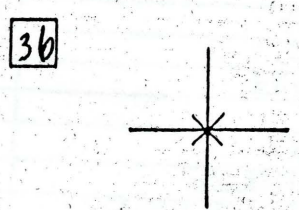
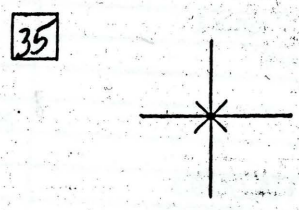
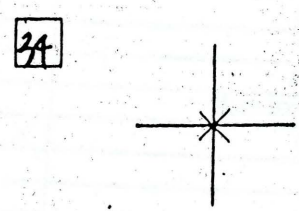
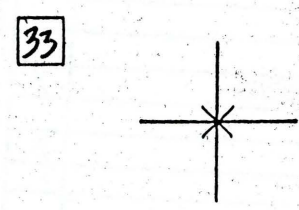
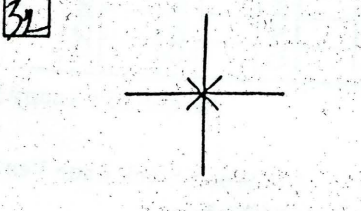
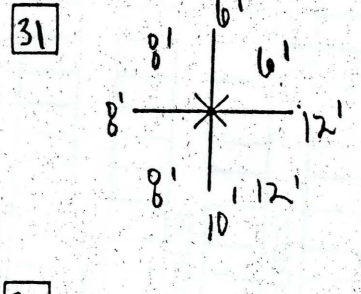
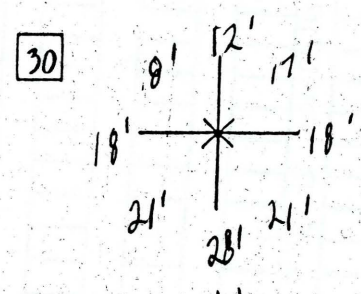
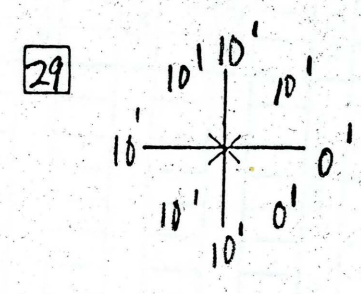
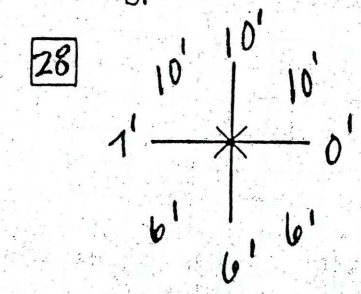
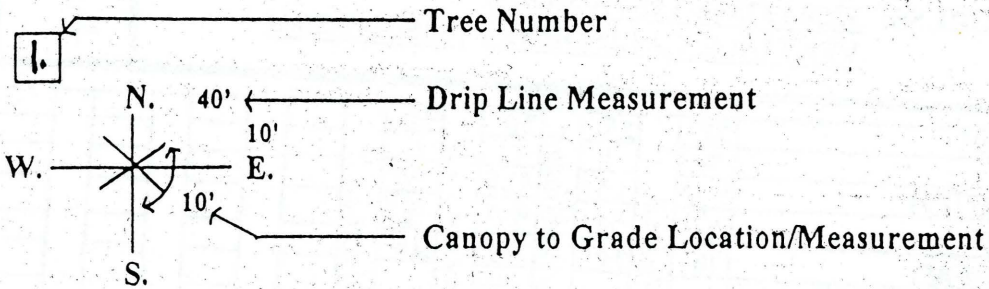
PROJECT: <u>RANCHO CAMULOS</u> DATE: <u>12-21-04</u> LOCATION: <u>PIRU, CALIFORNIA</u> CLIENT: <u>JORDAN, GILBERT &amp; BAIN</u> - Mike Gilbert ADDRESS: <u>3350 LOMA VISTA ROAD</u> <u>VENTURA, CALIFORNIA (805) 642-3641</u>	PAGE <span style="font-size: 2em;">4</span> of <span style="font-size: 2em;">4</span>
--	--

	TREE NUMBER									
SPECIMEN DATA	No TRUNKS	28	29	30	31					
	TRUNK DIAMETER	2	1	1	1					
	TREE HEIGHT	5' 6"	15'	42'	5'					
	CANOPY SPREAD	20'	55'	90'	18'					
	LEANING	16'	20'	40'	20'					
	LOW BRANCHES			↓						
	TERRAIN Flat-Slope	F	F	F	F					
	CROWDED									
	Damaged Roots									
	Exposed Roots									
PHYSICAL OBSERVATIONS	Girdled Roots									
	Covered Soil / Debris	X			X					
	Trunk Damage		X		X					
	Buried	X			X					
	Trunk Cavity				X					
	Exudations									
	Disease/Insects									
	Weak Structure									
	Branch Cavities									
	Weak Crotches									
	Twig-Branch Dieback				X					
	Sparse Foliage	X								
	Chlorotic									
	Wilt									
	Abnormal foliage									
	Deadwood		X		X					
	Insects/Mites Present									
	Disease Present									
	Stress									
	Poor Form	X								
	Obstructions									
	POTENTIAL HAZARD									
	Dead Tree									
	MITIGATIONS	WIGOR 1-5	2	2	2	2				
		HEALTH 1-5	2	2	2	3				
AESTHETICS 1-5		3	2	2	2					
REMOVE TREE										
PRUNE										
DEADWOOD			X		X					
WATER-FERTILIZE										
INSECT-DISEASE TREAT										
REMOVE BASAL SOIL/DEBRIS		X								
OTHER										

Measured Canopy Spreads on Back →

# HORTICULTURE TREE EVALUATION FIELD SURVEY DRIP LINE AND CANOPY TO GRADE MEASUREMENTS

## LEGEND





1A – Schinus molle No. 1



1B – Basal Cavity No. 1

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 1



2A – Schinus molle No. 2



2B - Decayed trunk No. 2

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 2



3A – Schinus molle No. 3



3B – Trunk cavity No. 3

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

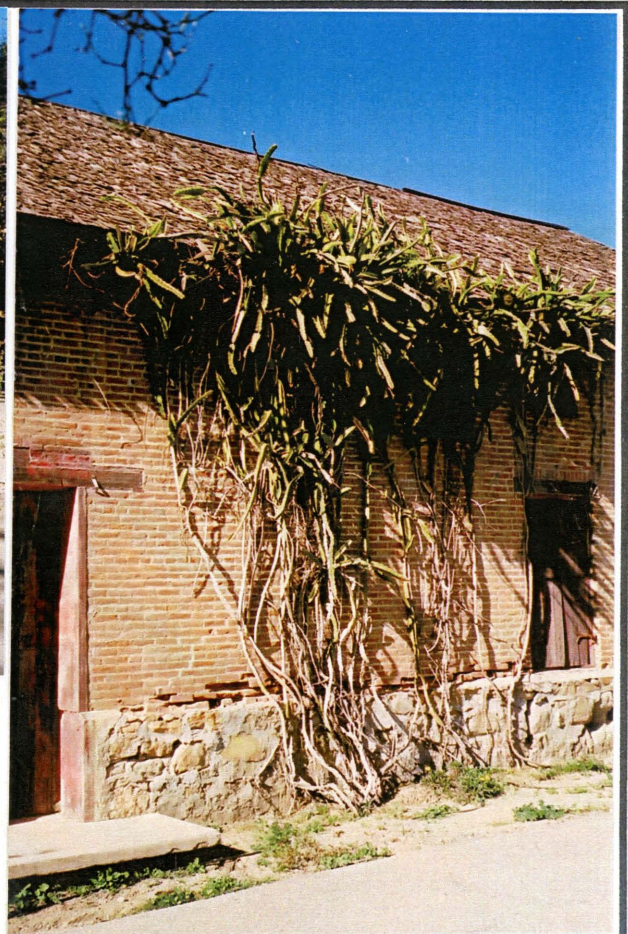
**Exhibit No.:** 3

**PACIFIC HORTICULTURE CONSULTANTS**



4A – Bougainvillea

4C – Cactus >



4D – Bougainvillea



4B – Roses & Poinsettia

**FIELD PHOTO REPORT**

Project: RANCHO CAMULOS

Subject: EXISTING PLANTINGS

Date: 12-21-04

By: D. F. Rodrigues

Exhibit No.: 4



5A – Calamondin Citrus No. 12, 13, 14

5B – Calamondin Citrus No. 15, 16, 17

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 5





6A – *Juglans nigra* No. 18



6B – *Phoenix canariensis* No. 19

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 6



7A – *Schinus molle* No. 20



7B – *Eucalyptus sideroxylon* No. 21

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 7



**8A - Orchard**



**8B - Orchard**

**FIELD PHOTO REPORT**

**Project: RANCHO CAMULOS**

**Subject: EXISTING PLANTINGS**

**Date: 12-21-04**

**By: D. F. Rodrigues**

**Exhibit No.: 8**



9A - Orchard



9B - Orchard

**FIELD PHOTO REPORT**

**Project: RANCHO CAMULOS**

**Subject: EXISTING PLANTINGS**

**Date: 12-21-04**

**By: D. F. Rodrigues**

**Exhibit No.: 9**



10A – Deciduous Fruit Tree



10B – Deciduous Fruit Tree

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 10



11A – Italian Cypress No. 23



11B – Norfolk Isl. Pine No. 25

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 11



12A – Eugenia Shrub No. 24



12B – Eugenia Hedge

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 12



Jacaranda No. 26

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 13





14A – Syzygium No. 27



14B – Juniper torulosa No. 28

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 14



15A- Queen Palm No. 29  
(Canary Island Pine No. 30 in background)



15B – Canary Island Pine No. 30  
(Queen Palm No. 29 on Right, Araucaria No. 25 in background)

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 15



16A – Ficus elastica No. 31



16B – View of Queen Palm No. 29

(Jacaranda & Coast Live Oak in Background, Pittosporum hedge on right)

**FIELD PHOTO REPORT**

**Project:** RANCHO CAMULOS

**Subject:** EXISTING PLANTINGS

**Date:** 12-21-04

**By:** D. F. Rodrigues

**Exhibit No.:** 16

**PART 7 – LANDSCAPE**

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**7.9 IRRIGATION ..... 8**

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## **LANDSCAPE**

### **7.1 LANDSCAPE PLANTING PLAN**

The Contractor shall obtain and use the services of a qualified landscape architect, experienced in site planning and planting design. A complete, integrated landscape-planting plan shall be provided for the overall Phase IV housing project and the overall Phase V housing project including the Phase 5-a area. The design shall reflect appropriate groupings, foundation plantings, and street tree plantings to define the open spaces to ensure a complete landscaped project. The contractor is encouraged to retain as many healthy existing trees as possible, especially in common areas and greenbelts. Existing trees may be substituted for new trees on a one for one basis. Foundation plantings shall be provided in continuously mulched beds. Design shall provide for a minimum of 50 square feet of open bed area in front of family units for seasonal flowers by tenant. Screening of mechanical equipment and transformers for housing units shall be accomplished with landscaping and will be in accordance with Architectural and Landscape Guidelines for Dyess Air force Base, December 2003 (See Appendix 4). Planting or seeding shall occur only during periods when beneficial results can be obtained. The Contractor shall be responsible for total care of turf and plant materials for a period of 1 year after turfing and landscaping operations under this Contract are complete or after all work under this entire Contract has been completed and accepted, whichever period is longer.

Design for the Landscape Areas as noted in the Phase Va plans shall provide for screening of the drainage channel to the south and east by providing an aesthetically arranged grouping of Shade Trees, Specimen Trees, and Shrubs and Groundcovers. Plantings shall be arranged with at least 75% of the Shade Trees closest to the drainage area, and 75% of the ground cover closest to the housing units. Specimen Trees and Shrubs shall be arranged between and mixed in with the Shade Trees and Groundcovers. The bed line on all sides of the Landscape area shall meander so that artificially straight lines shall not occur except as desired for aesthetic purposes. The design intent for the Landscape area is that it shall appear to be a natural arrangement of plantings that provides a visual screen between the Phase 5a housing and the drainage channel.

Planting or seeding shall occur only during periods when beneficial results can be obtained. The Contractor shall be responsible for total care of turf and plant materials for a period of 1 year after turfing and landscaping operations under this Contract are complete or after all work under this entire Contract has been completed and accepted, whichever period is longer. Abilene has had drought conditions in recent years, and it is likely that there will be watering restrictions in effect during the construction period that could be a factor in establishing landscaping.

### **7.2 TREES, SHRUBS, AND GROUND COVER**

Plant varieties shall be nursery grown or plantation grown stock conforming to ANSI Z60.1. They shall be grown under climatic conditions similar to those in the locality of the project. Plant material used for this project shall be in accordance with materials specified in the approved Xeroscape List provided in Appendix 10.

Table 7-1  
Minimum Landscaping per Housing Unit

Plant Material	Number of Plants	Size of Plants
Shade Trees	1 ea.	2" Cal., 12' to 14' high
Specimen Trees	1 ea.	2" Cal., 8' to 10' high, 4'-5' wide
Shrubs-Standard	-*	5 gallon
Shrubs-Dwarf	-*	5 gallon
* A total of 10 shrubs shall be provided for each housing unit.		

In addition to the minimum requirements set forth above for the housing units, additional landscaping is desired in the new common areas. Unless noted otherwise, the minimum landscaping requirement for all common areas is grass ground cover. See PART 4 of Section 01000 for requirements.

Table 7-2  
Minimum Landscaping in Landscape for Phase Va

Plant Material	Number of Plants	Size of plants
Shade Trees	1 per 6000 s.f. grouped for aesthetic appeal	2" cal. 12'-14' high
Specimen Trees	1 per 4500 s.f. grouped for aesthetic appeal	8'-10' high, 4'-5' wide
Shrubs - standard	10 per 5000 s.f. planted in masses at key points	10 gal.
Shrubs - dwarf	1 per 750 s.f. planted in masses at key points	5 gal.
Ground cover	Install grass sod or seed in all areas between street or housing and Drainage Channel	

## 7.2.1 QUALITY

Well-shaped, well-grown, vigorous, healthy plants having healthy and well-branched root systems shall be provided. Plants shall be free from disease, harmful insects and insect eggs, sun-scald injury, disfigurement, and abrasion. Plants shall be provided that are typical of the species or variety, and conforming to standards as set forth in ANSI Z60.1. Plants shall be balled and burlapped or container grown.

### 7.2.1.1 Shade and Specimen Trees

A height relationship to caliper shall be provided as recommended by ANSI Z60.1. Height of branching should bear a relationship to the size and variety of tree specified, and with the crown in good balance with the trunk. Trees shall not be topped, "poled", or the leader removed.

### 7.2.1.2 Single Stem

Trunk shall be reasonably straight and symmetrical with crown and have a persistent main leader.

### 7.2.1.3 Multi-Stem

All countable stems, in aggregate, shall average the size specified. To be considered a stem, there should be no division of the trunk which branches more than 6 inches from the ground level.

## **7.6 MAINTENANCE DURING PLANTING OPERATION**

Installed plants shall be maintained in a healthy growing condition. Maintenance operations shall begin immediately after each plant is installed and shall continue until the plant establishment period commences. On completion of the last day of the planting operation, the plant establishment period for maintaining installed plants in a healthy growing condition shall commence and shall be in effect for the remaining contract time period not to exceed 12 months. When the planting operation extends over more than one season or there is a variance to the planting times, the plant establishment periods shall be established for the work completed.

### **7.6.1 MAINTENANCE DURING ESTABLISHMENT PERIOD**

The maintenance of plants shall include periodically straightening plants, tightening stakes and guying material, repairing tree wrap, protecting plant areas from erosion, maintaining erosion material, supplementing mulch, accomplishing wound dressing, removing dead or broken tip growth by pruning, maintaining edging of beds, checking for girdling of plants and maintaining plant labels, watering, weeding, removing and replacing unhealthy plants.

### **7.6.2 UNHEALTHY PLANT**

A plant shall be considered unhealthy or dead when the main leader has died back, or 25 percent of the crown is dead. Determine the cause for an unhealthy plant. Unhealthy or dead plants shall be removed immediately and shall be replaced as soon as seasonal conditions permit in accordance with the following warranty paragraph.

### **7.6.3 WARRANTY**

All plant materials of the landscape plan in this project shall be warranted for one year after final acceptance of the entire project. Transplanting existing plants, for the convenience of the Government, requires no guarantee.

## **7.7 TURF**

### **7.7.1 SOIL PREPARATION**

Prior to seeding or sodding, all surface soils shall be loosened to a minimum depth of 6 inches and broken up to a fine, workable texture suitable for seeding and sodding. Areas within the limits of seeding and sodding shall have a 1-inch layer of approved compost worked into the top 3 inches of soil.

### **7.7.2 SEEDING AND SODDING**

#### **7.7.2.1 Seeding**

Basic requirement is to seed all disturbed areas. All newly seeded areas shall be fertilized with no less than 200 lbs of 18-46-0 fertilizers per acre. All seeded areas shall be seeded by hydromulching techniques using 2000 lbs of green-tinted, wood-fiber hydromulch per acre. Seed shall be hydromulched at 3.0 pounds per 1,000 square feet. State approved seed of the latest season's crop shall be provided in the original sealed packages bearing the producer's guaranteed analysis for percentages of mixture, purity, germination, hard seed, weed seed content, and inert material. Labels shall be in conformance with applicable State seed laws. Seed mixtures shall be proportioned by weight. Weed seed shall not exceed one percent by weight of the total mixture. Moldy, or otherwise damaged seed shall be rejected. Seed mixing shall be performed by a seed supplier prior to delivery to the site.



**7.7.7.4 Sprigged Area**

A satisfactory stand of turf from the sprigging operation is defined as a minimum of 2 sprigs per square foot. Bare spots shall be no larger than 9-inch square. The total bare spots shall not exceed 2 percent of the total sprigged area.

**7.8 EDGING**

Provide continuous, staked, galvanized steel or PVC edging at the juncture of all planting beds or mulched areas and turf. Edging is not required around individual, isolated trees. Design and installation of edging shall avoid sharp edges that could present a danger people and pets.

**7.9 IRRIGATION**

Provide a drip irrigation system for the landscaping area in Phase Va under the Base Bid for phase. The irrigation system shall be a fully programmable and automated irrigation system. The irrigation shall be designed to conserve water and to minimize run-off. The irrigation shall provide full coverage of all areas and plant materials in the area. The irrigation system shall be set up into logical zones and shall utilize high quality commercial grade components.

