TECHNICAL APPENDIX

- ***Tree Survey at the Springbrook Subdivision, Springbrook Avenue and Canyon Ridge Avenue, San Jose*** **- Barrie D. Coate and Associates**

- ***Springbrook Biological Evaluation San Jose, Santa Clara County, California*** **– Live Oak Associates, Inc., July 16, 2012**

- ***Geologic / Seismic Investigation, Norwood Avenue, San Jose, APN 654-03-009 for Mr. Richard Ceraolo, 5579 Morningside Drive, San Jose, California, 95138*** **– TERRASEARCH, Inc.**

- ***Phase I Environmental Site Assessment at Springbrook Avenue Subdivision, San Jose, California for Mr. Richard Ceraolo*** **– TERRASEARCH, Inc.**

BARRIE D. COATE and ASSOCIATES
Horticutural Consultants
23535 Summit Road
Los Gatos, CA 95033
408/353-1052

TREE SURVEY AT THE SPRINGBROOK SUBDIVISION SPRINGBROOK AVENUE AND CANYON RIDGE AVENUE SAN JOSE

Prepared at the Request of:
Maureen Basil
Sainte Claire Custom Homes
2021 The Alameda Suite 275
San Jose, CA 95126-1110

Site Visit by:
Michael L. Bench
and
Peter Quintanilla

July 16, 2002

Job #07-02-140

Please find attached the information that is now required by the San Jose Planning Department for a tree survey of the proposed Springbrook Subdivision. This survey includes 148 trees, of trunk diameters ranging from 6" trunk diameter to 63" trunk diameter.

The great majority of the entries are for trees of 10" trunk diameter or smaller. Forty-five different tree species were identified here. Of those, only four species are represented by more than ten specimens of the forty-five species, only six are California natives, represented by forty-one specimens.

However, I believe an explanation is required for tree #138, a 48-inch diameter (at 2 feet above grade) coast live oak (*Quercus agrifolia*). I am recommending the removal of this tree, because this specimen has an incurable disease that will cause it to fail. There is presently no good way of estimating when this may occur. The disease is fairly common to oak trees and other species.

The common name for this disease is Artist's conk (*Ganoderma applanatum*). The fruiting body of this fungus can be observed on the west side of the trunk near the base. The red dust on the trunk in this area is the spores of the fruiting body (the conk). I am not particularly concerned about the possibility of infecting other trees nearby, although the concentration of spore production by this fungus site does increase the risk to nearby trees.

I am concerned about the fact that this disease effectively destroys the heartwood of the tree. When a sufficient quantity of the heartwood is destroyed, the tree will fall over. There is no way of knowing when this might occur. This tree may be able to stand for several years, or it may fail next week. There is no effective treatment for this disease. Presently there is a mobile home in residence parked under the canopy of this tree. Unfortunately, I must recommend removal of this tree.

Inventory by Species
Common name, Genus species
1 Queen palm *Syagrus romanzoffianum*
2 African Yew Pine, *Podocarpus gracilior*
1 Mediterranean fan palm, *Chamaerops humilis*
1 Dracaena, *Cordyline australis*
4 Blackwood acacia, *Acacia melanoxylon*
5 Blue elderberry, *Sambucus caerulea*
16 Coast live oak, *Quercus agrifolia*
14 California pepper, *Schinus molle*
4 Deodara cedar, *Cedrus deodara*
5 Black locust, *Robinia pseudoacacia*
24 Horsetail beefwood, *Casuarina equisetifolia*
1 Crabapple, *Malus species*
2 Purple plum, *Prunus cerasifera*
1 Weeping willow, *Salix babylonica*

4 Silk tree, *Albizia julibrissin*
1 Italian cypress, *Cupressus sempervirens*
1 Weeping Deodara cedar, *Cedrus deodara* 'Pendula'
1 Edible fig, *Ficus carica*
7 Silk oak, *Grevillea robusta*
1 American sweetgum, *Liquidamber styraciflua*
1 Holly oak, *Quercus ilex*
3 Pink ironbark, *Eucalyptus sideroxylon*
1 Tree of Heaven, *Ailanthus altissima*
10 Monterey pine, *Pinus radiata*
4 European olive, *Olea europea*
1 Cypress species, *Cupressus species*
1 Weeping cherry, *Prunus serrulata pendula*
3 Windmill palm, *Trachycarpus fortunei*
2 Raywood ash, *Fraxinus oxycarpa* 'Raywood'
5 Valley oak, *Quercus lobata*
4 Coast redwood, *Sequoia sempervirens*
1 Scarlet oak, *Quercus coccinea*
2 Mexican fan palm, *Washingtonia robusta*
4 Silver dollar gum, *Eucalyptus polyanthemos*
1 Honey locust, *Gleditsia triacanthos*
2 Fruiting almond, *Prunus dulcis*
3 Baileys acacia, *Acacia baileyana*
1 Myoporum, *Myoporum laetum*
3 Italian stone pine, *Pinus pinea*
1 Aleppo pine, *Pinus halepensis*
1 Tasmanian blue gum, *Eucalyptus globulus*
2 Chinese elm, *Ulmus parvifolia*
1 California bay, *Umbellularia californica*
1 Japanese black pine, *Pinus thunbergiana*
1 Canary island pine, *Pinus canariensis*

By use of the tree replacement formula provided by the San Jose City Planning Department, the removal of the fifty-six trees which the owner plans to remove require equivalent replacement on the site of thirty-three 15-gallon and seventy 24-inch boxed specimens.

The site seems large enough to easily accommodate that many replacement trees.

A tree removal permit will be required for trees #18, 22, 26, 28, 29, 30, 40, 58, 84 and 138.

It should be noted that olive tree #40 could be transplanted, as could palms #50 and 61.

It should also be noted that trees #27, 58, 86, 110, and 138 are such poor specimens that it seems unfair to charge the site for their removal.

Respectfully submitted,

Michael L. Bench, Associate

Barrie D. Coate, Principal

Enclosures:
Assumptions and Limiting Conditions
Tree Charts (Barrie D. Coate & Associates)
Tree Chart Definitions
Tree Charts (City of San Jose)
Photo of each Tree
Map

MLB/sl

BARRIE D. COATE
and ASSOCIATES
Horticultural Consultants
408-353-1052
23535 Summit Road, Los Gatos, CA 95030

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the appraiser/consultant is assumed to be correct.

   Any titles and ownerships to any property are assumed to be good and marketable.

   No responsibility is assumed for matters legal in character nor is any opinion rendered as to the quality of any title.

2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.

3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the appraiser/consultant can neither guarantee nor be responsible for accuracy of information provided by others.

4. The appraiser/consultant shall not be required to give testimony or to attend court by reason of this appraisal unless subsequent written arrangements are made, including payment of an additional fee for services.

5. Loss or removal of any part of this report invalidates the entire appraisal/evaluation.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person(s) to whom it is addressed without written consent of this appraiser/consultant.

7. Neither all nor any part of the contents of this report, nor copy thereof,shall be used for any purpose by anyone but the client to whom it is addressed, without the prior written consent of the appraiser/consultant; nor shall it be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the written consent and approval of the author; particularly as to value considerations, identity of the appraiser/consultant or any professional society or institute or to any initialed designation conferred upon the appraiser/consultant as stated in his/her qualifications.

8. This report and the values expressed herein represent the opinion of the appraiser/consultant, and the appraiser's/consultant's fee is in no way contingent upon the reporting of a specified value nor upon any finding to be reported.

9. Sketches, diagrams, graphs, photos, etc. in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering reports or surveys.

10. This report has been made in conformity with acceptable appraisal/evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

11. When applying any pesticide, fungicide or herbicide, always follow label instructions.

12. No tree described in this report was climbed, unless otherwise stated. We cannot take responsibility for any defects which could only have been discovered by climbing. A full root collar inspection, consisting of excavating the soil around the tree to uncover the root collar and major buttress roots, was not performed, unless otherwise stated. We cannot take responsibility for any root defects which could only have been discovered by such an inspection.

BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems								
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
1	Blue Elderberry	10.0				12	20	15	2	4	6																		
	Sambucus caerulea																												
2	Coast Live Oak ok ✓	9.0				10	20	12	1	3	4																		
	Quercus agrifolia																												
3	California Pepper	16.0	x	11.0	5.0	20	20	35	1	2	3																		
	Schinus molle																												
4	California Pepper	10.0	x	5.0		12	15	20	3	2	5																		
5	Deodar Cedar	10.0	x	10.0	5.0	14	50	30	1	2	3																		
	Cedrus deodara				x5																								
6	Black Locust	6.0				7	15	15	3	3	6																		
	Robinia pseudoacacia																												
7	Horsetail Beefwood	11.0				13	35	20	3	3	6																		
	Casaurina equisetifolia																												
8	Horsetail Beefwood	12.0				14	25	20	3	3	6																		
9	Horsetail Beefwood	8.0	x	6.0	5.0	10\5	20	15	3	3	6																		
10	Horsetail Beefwood	12.0				14	30	20	3	3	6																		

Job Name: Springbrook Subdivision, San Jose
Job #: 07-02-140
Date: July 16, 2002

4 - 24"

1 = Best, 5 = Worst

BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements: DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	Condition: HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	Pruning/Cabling Needs: CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	Pest/Disease Problems: INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
11	Horsetail Beefwood	11.0				13	40	15	2	3	5																		
12	Horsetail Beefwood	14.0				16	40	25	4	3	7																		
13	Horsetail Beefwood	21.0				22	50	35	1	2	3																		
14	Horsetail Beefwood	12.0				13	50	30	3	2	5																		
15	Coast Live Oak OK	10.0	x	5.0		11\6	25	30	1	2	3																		
16	Crabapple	8.0				9	10	20	1	1	2																		
	Malus species																												
17	Purple Plum	8.0	x	7\6	4.0	11	20	35	1	2	3																		
	Prunus cerasifera+B66				x2																								
18	Weeping Willow	27.0				29	35	50	4	4	8																		
	Salix babilonica																												
19	California Pepper	13.0	x	6.0		14/8	25	35	1	3	4																		
20	Silk Tree	10.0				11	15	25	1	1	2																		
	Albizzia julibrissin																												

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1 = Best, 5 = Worst

BARRIE D. COATE
and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems									
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
21	Deodar Cedar	10.0				11	30	20	1	1	2																		
22	Deodar Cedar	13.0	x	8.0		16\10	20	35	1	3	4																		
23	Silk Tree	17.0				18	25	50	1	1	2																		
24	Italian Cypress Cupressus sempervirens	8.0				9	25	10	1	3	4																		
25	Weeping Deodar Cedar Cedrus deodara 'Pendula'	8.0				9	15	15	1	2	3																		
26	Edible Fig Ficas carica	18.0				20	8	20	1	3	4																		
27	Edible Fig	17.0				19	8	12	5	4	9																		
28	Silk Oak Grevillea robusta	23.0				25	45	35	2	4	6																		
29	Silk Oak	31.0				36	45	35	3	4	7																		
30	Silk Oak	20.0				23	40	45	3	3	6																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)				
31	American Sweet Gum	5.0				6	20	8	1	3	4																		
	Liquidamber styraciflua																												
32	Purple Plum	6.0	x	5.0	4.0	7	15	15	3	2	5																		
33	Silk Oak	10.0	x	9.0		11\10	45	25	3	3	9																		
34	Holly Oak	8.0				9	20	20	3	2	5																		
	Quercus ilex																												
35	Pink Ironbark	14.0	x	6.0		15\7	50	35	2	3	5																		
	Eucalytpus sideroxylon 'Rosea'																												
36	Horsetail Beefwood	9.0	x	6.0	4.0	11	35	25	1	3	4																		
37	Horsetail Beefwood	14.0				17	45	30	3	3	6																		
38	Tree of Heaven	7.0	x	4.0		8	20	15	1	3	4																		
	Ailantanthus altissima																												
39	Monterey Pine	8.0				9	35	12	1	1	2																		
	Pinus radiata																												
40	European Olive	31.0				33	35	40	1	2	3																		
	Olea europea																												

6-24a

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		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
41	Cypress	12.0				13	35	20	2	3	5																		
	Cupressus species																												
42	Horsetail Beefwood	9.0				10	45	15	2	3	5																		
43	Monterey Pine	13.0				14	30	35	1	4	5																		
44	Horsetail Beefwood	9.0				10	25	20	2	3	5																		
45	Horsetail Beefwood	10.0				11	20	25	3	3	6																		
46	Horsetail Beefwood	12.0				14	25	25	1	3	4																		
47	Monterey Pine	13.0				14	25	25	1	3	4																		
48	Horsetail Beefwood	14.0				15	25	15	1	4	5																		
49	Weeping Cherry	5.0				6	8	10	1	1	2																		
	Prunus cultivar																												
50	Windmill Palm	9.0				8	20	12	1	1	2																		
	Trachaecarpus fortunei																												

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems								
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
51	Black Locust	8.0	x	8.0	8\4	12\10	25	25	4	3	7																		
52	Black Locust	10.0	x	9.0		12\10	25	25	4	3	7																		
53	Horsetail Beefwood	10.0				11	30	20	3	4	7																		
54	Horsetail Beefwood	9.0	x	4.0 x3		11	25	25	3	4	7																		
55	Horsetail Beefwood	9.0				10	30	30	2	1	3																		
56	Ironbark Gum	14.0				15	40	35	1	3	4																		
57	Horsetail Beefwood	12.0	x	5.0	4.0	13	30	30	1	4	5																		
58	Blue Elderberry	16.0	x	15.0	9\6	28\10	20	30	4	4	8																		
59	Raywood Ash Fraxinus oxycarpa 'Raywood'	9.0				10	20	20	2	2	4																		
60	Valley Oak (R) Quercus lobata	9.0				10	25	20	2	2	4																		

BARRIE D. COATE and ASSOCIATES
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		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
61	Windmill Palm	8.0				7	25	10	1	1	2																		
	trunk height 20 feet																												
62	Coast Live Oak OK	5.0	x	4.0		6\5	15	15	1	3	4																		
63	Coast Redwood	10.0				11	35	15	2	1	3																		
	Sequoia sempervirens																												
64	Coast Redwood	11.0				12	40	20	2	2	4																		
65	Blackwood Acacia	8.0				9	40	20	2	3	5																		
	Acacia melanoxylon																												
66	Blackwood Acacia	9.0				10	40	20	1	3	4																		
67	Blackwood Acacia	10.0				11	40	20	1	3	4																		
68	Blackwood Acacia	10.0				11	40	20	2	3	5																		
69	Dracaena	5.0	x	5.0	4.0	10\9	15	15	1	3	4																		
	Cordyline australis				x4	8																							
70	Mediteranian Fan Palm	9.0	x	9.0	8.0	9\9	10	15	1	1	2																		
	Chamaerops humilis																												

Job Name: Springbrook Subdivision, San Jose
Job #: 07-02-140
Date: July 16, 2002

1 = Best, 5 = Worst

BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems									
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
71	AfricanYew Pine	9.0				10	20	20	1	3	4																		
	Podocarpus gracilior																												
72	AfricanYew Pine	13.0				15	30	25	1	3	4																		
73	Queen Palm	14.0				14	20	30	1	1	2																		
	Syagrus romanzoffianum																												
74	Scarlet Oak	6.0				7	20	20	1	1	2																		
	Quercus coccinea																												
75	Raywood Ash	11.0				12	45	35	1	3	4																		
76	Mexican Fan Palm	18.0				24	12	10	1	1	2																		
	Washingtonia robusta																												
77	Coast Live Oak OK	12.0				14	20	35	1	1	2																		
78	Valley Oak OK✓	4.0				5	15	10	1	2	3																		
79	Valley Oak ✓	6.0	x	4.0		7\5	20	15	1	3	4																		
80	Valley Oak ✓	4.0				5	15	15	1	3	4																		

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Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems						Preserve	Picture Taken	Recommend Removal	Removal Priority (1-3)
		Diameter @ 4-1/2 feet	Multi-System	DBH	DBH	Diameter @2 feet	Height Estimated	Spread Estimated	Health (1-5)	Structure (1-5)	Condition Rating (2-10)	Hazard Rating (4-12)	Crown Cleaning	Crown Thinning	Crown Restoration	Crown Raising	Remove End-Weight	Cables Needed #	Pruning Priority (1-5)	Insects (1-5)	Tree Crown Disease (1-5)	Dead Wood (1-5)	Trunk Decay(1-5)	Root Collar Covered (1-5)	Root Collar Disease (1-5)				
81	Silver Dollar Gum	8.0				9	30	25	2	4	6																		
	Eucalyptus polyanthemos																												
82	Silver Dollar Gum	7.0				8	25	20	1	4	5																		
83	Silver Dollar Gum	7.0				8	30	30	1	4	5																		
84	Silver Dollar Gum	31.0				36	50	90	1	2	3																		
85	Valley Oak ok*	31.0				36	50	90	1	2	3																		
86	Honey Locust	7.0				8	20	15	4	3	7																		
	Gleditsia triacanthos																												
87	Almond	12.0				13	10	20	3	3	6																		
	Prunus dulcis																												
88	Mexican Fan Palm	17.0				22	25	12	1	1	2																		
89	Blue Elderberry	10.0				11	20	25	1	4	5																		
90	Blue Elderberry	6.0	x	4.0		8	15	15	1	4	5																		

Job Name: Springbrook Subdivision, San Jose
Job #: 07-02-140
Date: July 16, 2002

1 = Best, 5 = Worst

BARRIE D. COATE and ASSOCIATES
(408) 353-1052
23535 Summit Road
Los Gatos, CA 95030

Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems								
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
91	Black Locust	18.0				20	30	35	1	4	5																		
92	Blue Elderberry	13.0	x	10\8	8\6	26	25	30	1	3	4																		
93	California Pepper	30.0	x	17.0		39	35	45	3	4	7																		
94	Coast Live Oak OK*	63.0				65	65	90	1	3	4																		
95	California Pepper	11.0	x	10.0		18	20	25	3	3	6																		
96	Coast Live Oak OK	9.0				10	15	15	1	2	3																		
97	Coast Live Oak OK*	20.0				50	15	30	4	4	8																		
98	Bailey Acacia Acacia baileyana	12.0				13	15	35	1	3	4																		
99	Horsetail Beefwood	9.0	x	7.0	5.0	12	15	20	1	4	5																		
100	Horsetail Beefwood	10.0				11	15	30	1	4	5																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems								
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
101	Monterey Pine	17.0				18	30	25	1	1	2																		
102	Monterey Pine	16.0		D	E	A	D																						
103	Monterey Pine	16.0				17	30	35	3	2	5																		
104	European Olive	8.0				10	15	20	1	3	4																		
105	California Pepper	7.0	x	5.0		8\5	15	15	1	2	3																		
106	California Pepper	14.0				15	20	35	1	2	3																		
107	Black Locust	16.0				17	30	35	1	3	4																		
108	Myoporum Myoporum laetum	12.0	x	6.0	4.0	14	12	20	1	2	3																		
109	Almond	3.0	x	3.0 x6		multi	10	15	1	3	4																		
110	Silk Oak	13.0				14	35	30	2	4	6																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems									
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
111	Silk Tree	14.0				15	25	45	1	2	3																		
112	Italian Stone Pine	7.0				8	15	12	1	1	2																		
	Pinus pinea																												
113	Aleppo Pine	11.0				13	30	25	1	3	4																		
	Pinus halepensis																												
114	Monterey Pine	10.0				11	25	15	1	2	3																		
115	Monterey Pine	10.0				11	20	20	1	3	4																		
116	Monterey Pine	9.0				10	20	25	1	3	4																		
117	California Pepper	8.0	x	7.0	6.0	10\7	15	20	1	3	4																		
						4																							
118	California Pepper	9.0	x	7.0		10\8	15	20	1	3	4																		
119	California Pepper	11.0				12	15	20	1	3	4																		
120	Italian Stone Pine	6.0	x	6.0		9	12	15	1	2	3																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems								
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
121	Italian Stone Pine	8.0				10	15	20	1	2	3																		
122	Tasmanian Blue Gum	36.0	x	11.0		49	70	40	1	4	5																		
	Eucalyptus globulus																												
123	Chinese Elm	5.0	x	5.0		6	15	20	1	2	3																		
	Ulmus parvifolia																												
124	Chinese Elm	10.0				11	25	40	1	2	3																		
125	California Pepper	8.0	x	6.0		10\8	15	20	2	1	3																		
126	European Olive	13.0	x	12.0	6.0	32	30	35	1	3	4																		
127	Horsetail Beefwood	12.0	x	6.0		14	40	20	1	4	5																		
128	Coast Live Oak OK	6.0	x	4.0		8	12	15	1	1	2																		
129	Deodar Cedar	11.0				13	40	30	1	1	2																		
130	Horsetail Beefwood	11.0				13	55	25	1	3	4																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems									
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
131	Coast Live Oak OK	4.0	x	4.0	4.0	7\5	12	12	1	3	4																		
132	Coast Live Oak OK	6.0	x	6.0		12	15	15	1	3	4																		
133	Coast Live Oak OK*	62.0				75	75	##	1	3	4																		
134	Coast Live Oak OK	16.0				17	35	35	1	3	4																		
135	California Bay Laurel Umbellularia californica	30.0	x	15\15	14\12	30\40	50	40	3	4	7																		
136	Coast Live Oak OK	25.0				30	40	60	1	2	3																		
137	Coast Live Oak OK	18.0	x	18.0	11.0	42	40	40	1	3	4													4					
138	Coast Live Oak (F)*	45.0				48	50	90	2	4	6																	x	1
139	Silk Tree	7.0				8	12	20	2	2	4																		
140	Japanese Black Pine Pinus thunbergiana	11.0				12	30	20	1	2	3																		

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Tree #	Plant Name	Measurements							Condition				Pruning/Cabling Needs							Pest/Disease Problems									
		DIAMETER @ 4-1/2 FEET	MULTI-SYSTEM	DBH	DBH	DIAMETER @2 FEET	HEIGHT ESTIMATED	SPREAD ESTIMATED	HEALTH (1-5)	STRUCTURE (1-5)	CONDITION RATING (2-10)	HAZARD RATING (4-12)	CROWN CLEANING	CROWN THINNING	CROWN RESTORATION	CROWN RAISING	REMOVE END-WEIGHT	CABLES NEEDED #	PRUNING PRIORITY (1-5)	INSECTS (1-5)	TREE CROWN DISEASE (1-5)	DEAD WOOD (1-5)	TRUNK DECAY(1-5)	ROOT COLLAR COVERED (1-5)	ROOT COLLAR DISEASE (1-5)	PRESERVE	PICTURE TAKEN	RECOMMEND REMOVAL	REMOVAL PRIORITY (1-3)
141	Pink Ironbark	14.0				15	35	30	1	3	4																		
142	Bailey Acacia	6.0	x	6.0	4\4	10	10	20	2	3	5																		
143	Canary Island Pine	8.0				9	30	15	1	2	3																		
	Pinus canariensis																												
144	Monterey Pine	8.0	x	5.0	4.0	12	25	20	1	3	4																		
					x5																								
145	Silk Oak	8.0	x	8.0		13	30	20	2	3	5																		
146	Silk Oak	12.0	x	7.0		14	30	20	3	3	6																		
147	Coast Live Oak ✓	6.0	x	5.0	5.0	11	15	12	1	2	3																		
148	Coast Live Oak ✓	5.0	x	5.0	3.0	8\3	12	12	1	3	4																		

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DEFINITION OF TERMS ON TREE EVALUATION CHARTS

DBH 1	Diameter in inches at breast height, or 4 ½ feet.
MULTI-STEM TREE	Check mark if the tree has more than one stem.
DBH 2 and DBH 3	Diameter at breast height for the multi-stem trunks, if any.
HEIGHT	As explained, listed by feet, approximately.
CANOPY DIAMETER	Canopy diameter listed by feet, approximately.
HEALTH	A judgment of relative health for the species in the subject area and soil. Number 1 signifies excellent health. A rating of number 5 represents specimens which are dead or actively dying.
STRUCTURE	Judgement of relative structure: 1= perfect structure; 2= good to average structure; 3= potentially hazardous and repairable; 4= actively hazardous, but repairable; 5= actively hazardous and not repairable.
HAZARD RATING	A proportionate degree of hazard, based on 3 factors, failure potential, size of part which would fail, and a target rating potential 4-12.
CONDITION RATING	A composite of Health and Structure ratings.
CROWN CLEANING	Crown cleaning is the removal of dead, dying, diseased, crowded, weakly attached, and low-vigor branches and watersprouts from a tree crown.
CROWN THINNING	Includes crown cleaning and the selective removal of branches to increase light penetration and air movement into the crown. Increased light and air stimulates and maintains interior foliage, which in turn improves branch taper and strength. Thinning reduces the wind-sail effect of the crown and the weight of heavy limbs. Thinning the crown can emphasize the structural beauty of trunk and branches as well as improve the growth of plants beneath the tree by increasing light penetration. When thinning the crown of mature trees, more than one-third of the live foliage should never be removed.
CROWN REDUCTION	Used to reduce the height and/or spread of a tree. Thinning cuts are most effective in maintaining the structural integrity and natural form of a tree and in delaying the time when it will need to be pruned again. The lateral to which a branch or trunk is cut should be at least one-half the diameter of the cut being made.
CROWN RESTORATION	Can improve the structure and appearance of trees that have been topped or severely pruned using heading cuts. One to three sprouts on main branch stubs should be selected to reform a more natural appearing crown. Selected vigorous sprouts may need to be thinned to a lateral, or even headed, to control length of growth in order to ensure adequate attachment for the size of the sprout. Restoration may require several prunings over a number of years.

CROWN RAISING	Removes the lower branches of a tree in order to provide clearance for buildings, vehicles, pedestrians, and vistas. It is important that a tree have at least one-half of its foliage on branches that originate in the lower two-thirds of its crown to ensure a well-formed, tapered structure and to uniformly distribute stress within a tree. When pruning for view, it is preferable to develop "windows" through the foliage of the tree, rather than to severely raise or reduce the crown.
PRUNING PRIORITY	The relative importance of the recommended pruning based on the danger created by the unpruned portions.
REMOVE END-WEIGHT	Defined as requiring the removal of the ends of major limbs or major branches in sufficient quantity to prevent the breakage of the limb in question. This is done by thinning. Different species will require different amounts of end-weight removal depending on the inherent structure of the tree. As an example, Elm trees must not be allowed to develop heavy end-weights, where the same amount of end-weight on Magnolia may not be dangerous. Possible entries in that column would be 1 through 5. Number 1 meaning no attention is needed, 5 meaning immediate attention is needed.
CABLES NEEDED	If support cables are needed, the quantity needed would be noted here.
INSECTS	This would define the proportion of insect presence and damage to a tree. A separate list might accompany this to show what insects might be found in each different species of tree. The potential numbers listed under this column would be 1 through 5 showing the proportionate severity of the infestation of insects. Number 1 being no presence visible at the time the survey was taken, 5 being a very severe case that should be treated immediately.
TREE CROWN DISEASES	Defined as the proportion of diseases present in the specimen at the time the survey was taken. Potential entries in this column would be 1 through 5. Number 1 signifying very severe disease presence that should be treated. For this column a high rating may only serve to provide warning for the following year that treatment for the diseases in question should be planned in advance. Examples are Anthracnose disease on Modesto Ash. They would have to be sprayed before foliage is developed far enough for the disease to damage the foliage, usually in early March.
DEAD WOOD	Self-explanatory. Defines the proportion of dead wood that is in the crown of a tree. Entries possible in that column would be 1 through 5. Number 1 meaning none present, 5 meaning a significant quantity of dead parts present. This would usually be reflected in the health rating for this tree, but not always if the species typically accumulates dead twigs in the tree, as does *Albizia julibrissin*.
TRUNK DECAY	Trunk decay would signify the proportionate amount of decay in the trunk of the tree. This is usually a result of removal of large limbs or branches from which decay travels and is a far more serious problem in some species than in others. Significant amounts of trunk decay in Elms would be a very serious potential problem, where the same amount of trunk decay in a Magnolia might not be nearly so dangerous. Potential entries in that column would be 1 through 5. Number 1 signifying no decay, 5 signifying so much decay that the tree should be immediately removed.
ROOT COLLAR COVERED	When the root collar of many species is covered, *Armillaria mellea*, *Phytophthora cactorum*, or other diseases, may kill vascular tissue, implying that this condition must be corrected.

ROOT COLLAR DISEASES	This column defines the amount of disease activity discovered. When more than 50 percent of the trunk circumference has been killed, the tree would be rated number 5, and a removal recommendation made.
DAMAGED PAVING	This relates to the amount of damage, usually by raising of sidewalks or movement of curbs caused by tree roots or tree trunk mass, and reflects the proportionate danger of pedestrians tripping over raised portions of paving. Possible entries in that column 1 through 5. Number 1 signifying a level pavement and no affect by the tree on the pavement surface, 5 signifying a very severe pavement interruption that should be repaired immediately.
NEEDS FERTILIZER	This column would signify the need of the tree in question to be fertilized. The entries possible in this column are 1 through 5. Number 1 signifying no need for fertilizer, 5 signifying a severe need for fertilizer. Many species used here would require very little fertilizing in these soils, but in a species such as Magnolia, it will often not be in good health unless it is fertilized.
NEEDS WATER	Defines the need for water of a given tree. The possible entries are 1 through 5. Number 1 signifying no water is necessary, 5 signifying the lack of available water is creating a severe impact on the health of the given specimen. Watering may be difficult on old specimens unless a water truck is used or homeowners are encouraged to do their own watering. The implication is not meant that weekly watering is necessary, nor should shallow watering, as once a month during the summer to supply several hundred gallons of water, slowly, would be the requirement.
REMOVAL PRIORITY	The level of the danger the tree presents.

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
1	Sambucus caerulea	37.7	No	Poor		X
2	Quercus agrifolia	31.4	No	Good		X
3	Schinus molle	62.8	Yes	Good		X
4	Schinus molle	37.7	No	Fair		X
5	Cedrus deodara	44	No	Good		X
6	Robinia pseudoacacia	22	No	Marginal		X
7	Casuarina equisetifolia	40.8	No	Marginal		X
8	Casuarina equisetifolia	44	No	Marginal		X
9	Casuarina equisetifolia	39.3	No	Marginal		X
10	Casuarina equisetifolia	44	No	Marginal		X
11	Casuarina equisetifolia	40.8	No	Fair		X
12	Casuarina equisetifolia	50.3	No	Poor		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
13	Casuarina equisetifolia	69.1	Yes	Good		X
14	Casuarina equisetifolia	50.3	No	Fair		X
15	Quercus agrifolia	44	No	Fine		X
16	Malus species	28.3	No	Exceptional	X	1-15g
17	Prunus cerasifera	34.6	No	Fine	X	1-15g
18	Salix babylonica	91.1	Yes	Poor	X	4-24"
19	Schinus molle	56.5	Yes	Good	X	4-24"
20	Albizzia julibrissin	34.6	No	Fine	X	1-15g
21	Cedrus deodara	34.6	No	Exceptional		X
22	Cedrus deodara	66	Yes	Fine	X	4-24"
23	Albizzia julibrissin	56.5	Yes	Exceptional		X
24	Cupressus sempervirens	28.3	no	Fair	X	1-15g

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Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
25	Cedrus deodara 'Pendula'	28.3	No	Fine	X	1-15g
26	Ficus carica	62.8	Yes	Good	X	4-24"
27	Ficus carica	59.7	Yes	Extremely poor	X	4-24"
28	Grevillea robusta	78.5	Yes	Marginal	X	4-24"
29	Grevillea robusta	113.1	Yes	Poor	X	4-24"
30	Grevillea robusta	72.3	no	Marginal	X	~~4-24"~~ 1-15g
31	American sweetgum	18.8	No	Fine	X	1-15g
32	Prunus cerasifera	22	No	Marginal	X	1-15g
33	Grevillea robusta	50.3	No	Marginal	X	2-24"
34	Quercus ilex	28.3	No	Marginal	X	1-15g
35	Eucalyptus sideroxylon 'Rosea'	59.7	Yes	Marginal	X	4-24"
36	Casuarina equisetifolia	34.6	No	Good	X	1-15g

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Prepared by: Barric D. Coate and Associates Horticultural Consultants July 16, 2002

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Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
37	Casuarina equisetifolia	53.4	No	Marginal	X	2-24"
38	Ailanthus altissima	25.1	No	Good	X	1-15g
39	Pinus radiata	28.3	No	Fine		X
40	Olea europea	103.7	Yes	Fine	X	4-24"
41	Cupressus species	40.8	No	Fair	X	2-24"
42	Casuarina equisetifolia	31.4	No	Fair	X	1-15g
43	Pinus radiata	44	No	Fair		X
44	Casuarina equisetifolia	31.4	No	Fair		X
45	Casuarina equisetifolia	34.6	No	Marginal		X
46	Casuarina equisetifolia	44	No	Fine		X
47	Pinus radiata	44	No	Fine		X
48	Casuarina equisetifolia	47.1	No	Fair		X

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Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

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Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
49	Prunus serrulata pendula	18.8	No	Exceptional	X	1-15g
50	Trachycarpus fortunei	25.1	No	Fine	X	1-15g
51	Robinia pseudoacacia	53.4	No	Poor	X	2-24"
52	Robinia pseudoacacia	53.4	No	Poor	X	2-24"
53	Casuarina equisetifolia	34.6	No	Poor	X	1-15g
54	Casuarina equisetifolia	34.6	No	Poor	X	1-15g
55	Casuarina equisetifolia	31.4	No	Fair		X
56	Eucalyptus sideroxylon 'Rosea'	47.1	No	Good		X
57	Casuarina equisetifolia	40.8	No	Fair		X
58	Sambucus caerulea	103.7	Yes	Very Poor	X	4-24"
59	Fraxinus oxycarpa 'Raywood'	31.4	No	Fair	X	1-15g
60	Quercus lobata	31.4	No	Fair	X	1-15g

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
61	Trachycarpus fortunei	22	No	Fine	X	1-15g
62	Quercus agrifolia	28.3	No	Fine		X
63	Sequoia sempervirens	34.6	No	Fair	X	1-15g
664	Sequoia sempervirens	37.7	No	Fair	X	1-15g
65	Acacia melanoxylon	28.3	No	Fair	X	1-15g
66	Acacia melanoxylon	31.4	No	Fine	X	1-15g
67	Acacia melanoxylon	34.6	No	Fine	X	1-15g
68	Acacia melanoxylon	34.6	No	fair	X	1-15g
69	Cordyline australis	56.5	yes	Fine	X	4-24"
70	Chamaerops humilis	53.4	No	Exceptional		X
71	Podocarpus gracilior	31.4	No	Fine	X	1-15g
72	Podocarpus gracilior	47.1	No	Fine	X	2-24"

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
73	Syagrus romanzoffianum	44	No	Exceptional		X
74	Quercus coccinea	22	No	Exceptional		X
75	Fraxinus oxycarpa 'Raywood'	37.7	No	Fine		X
76	Washingtonia robusta	75.4	Yes	Fine		X
77	Quercus agrifolia	44	No	Exceptional		X
78	Quercus lobata	15.7	No	Fine		X
79	Quercus lobata	31.4	No	Fine	X	1-15g
80	Quercus lobata	15.7	No	Fine	X	1-15g
81	Eucalyptus polyanthemos	28.3	No	Marginal	X	1-15g
82	Eucalyptus polyanthemos	25.1	No	Fair	X	1-15g
83	Eucalyptus polyanthemos	25.1	No	Fair	X	1-15g
84	Eucalyptus polyanthemos	113.1	Yes	Fine	X	4-24"

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
85	Quercus lobata	113.1	Yes	Exceptional		X
86	Gleditsia triacanthos	25.1	No	Extremely Poor	X	1-15g
87	Prunus dulcis	40.8	No	Fair		X
88	Washingtonia robusta	69.1	Yes	fine		X
89	Sambucus caerulea	34.6	No	Fair		X
90	Sambucus caerulea	25.1	No	Fair		X
91	Robinia pseudoacacia	62.8	Yes	Fair		X
92	Sambucus caerulea	81.7	Yes	Fine		X
93	Schinus molle	122.5	Yes	Poor		X
94	Quercus agrifolia	204.2	Yes	Fine		X
95	Schinus molle	56.5	Yes	Fair		X
96	Quercus agrifolia	31.4	No	Fine		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
97	Quercus agrifolia	157.1	Yes	Extremely Poor		X
98	Acacia baileyana	40.8	No	Fine		X
99	Casuarina equisetifolia	37.7	No	Fair		X
100	Casuarina equisetifolia	34.6	No	Fair		X
101	Pinus radiata	56.5	Yes	Fine		X
102	Pinus radiata	53.4	Yes	Dead	X	B-20
103	Pinus radiata	53.4	Yes	Fair		X
104	Olea europea	31.4	No	Fine		X
105	Schinus molle	34.6	No	Fine		X
106	Schinus molle	47.1	No	Fine		X
107	Robinia pseudoacacia	53.4	No	Fine		X
108	Myoporum laetum	44	No	Fine		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
109	Prunus dulcis	25.2	No	Fine		X
110	Grevillea robusta	44	No	Poor	X	2-24 D
111	Albizzia julibrissin	47.1	No	Fine		X
112	Pinus pinea	25.1	No	Fine		X
113	Pinus halepensis	40.8	No	Fine		X
114	Pinus radiata	34.6	No	Fine		X
115	Pinus radiata	34.6	No	Fine		X
116	Pinus radiata	31.4	No	Fine		X
117	Schinus molle	50.3	No	Fine		X
118	Schinus molle	44	No	Fine		X
119	Schinus molle	37.7	No	Fine		X
120	Pinus pinea	28.3	No	Fine		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
121	Pinus pinea	31.4	No	Fine		X
122	Eucalyptus globulus	453.9	Yes	Fair		X
123	Ulmus parvifolia	18.8	No	Fine		X
124	Ulmus parvifolia	34.6	No	Fine		X
125	Schinus molle	44	No	Good		X
126	Olea europea	100.5	Yes	Fine		X
127	Casuarina equisetifolia	44	No	Fair		X
128	Quercus agrifolia	25.1	No	Fine		X
129	Cedrus deodara	40.8	No	Fine		X
130	Casuarina equisetifolia	40.8	No	Fine		X
131	Quercus agrifolia	31.4	No	Fine		X
132	Quercus agrifolia	37.7	No	Fine		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
133	Quercus agrifolia	235.6	Yes	Fine		X
134	Quercus agrifolia	53.4	No	Fine		X
135	Umbellularia californica	251.3	Yes	Poor		X
136	Quercus agrifolia	94.2	No	Fine		X
137	Quercus agrifolia	131.9	Yes	Fine		X
138	Quercus agrifolia	150.8	Yes	Poor Hazardous	X	~~of 200~~
139	Albizzia julibrissin	25.1	No	Fair		X
140	Pinus thunbergiana	37.7	No	Fine		X
141	Eucalyptus sideroxylon 'Rosea'	47.1	No	Fine	X	2-24"
142	Acacia baileyana	31.4	No	Fair	X	1-15g
143	Pinus canariensis	28.3	No	Fine	X	1-15g
144	Pinus radiata	37.7	No	Fine		X

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

Environmental Clearance Application Tree Data Chart - San Jose
Address: Springbrook Subdivision, Springbrook Ave. & Canyon Ridge Drive

Tree #	Tree Species	Trunk Circumference	Ordinance size Tree?	Condition of Tree	Tree to be Removed	Tree to be Retained
145	Grevillea robusta	40.8	No	Fair	X	2-24"
146	Grevillea robusta	44	No	Fair	X	2-24"
147	Quercus agrifolia	34.6	No	Fine	X	1-15g
148	Quercus agrifolia	31.4	No	Fine	X	1-15g

Are There Heritage Trees On The Project Site?

Tree #	Address/Location	Location of Tree on Site	Species

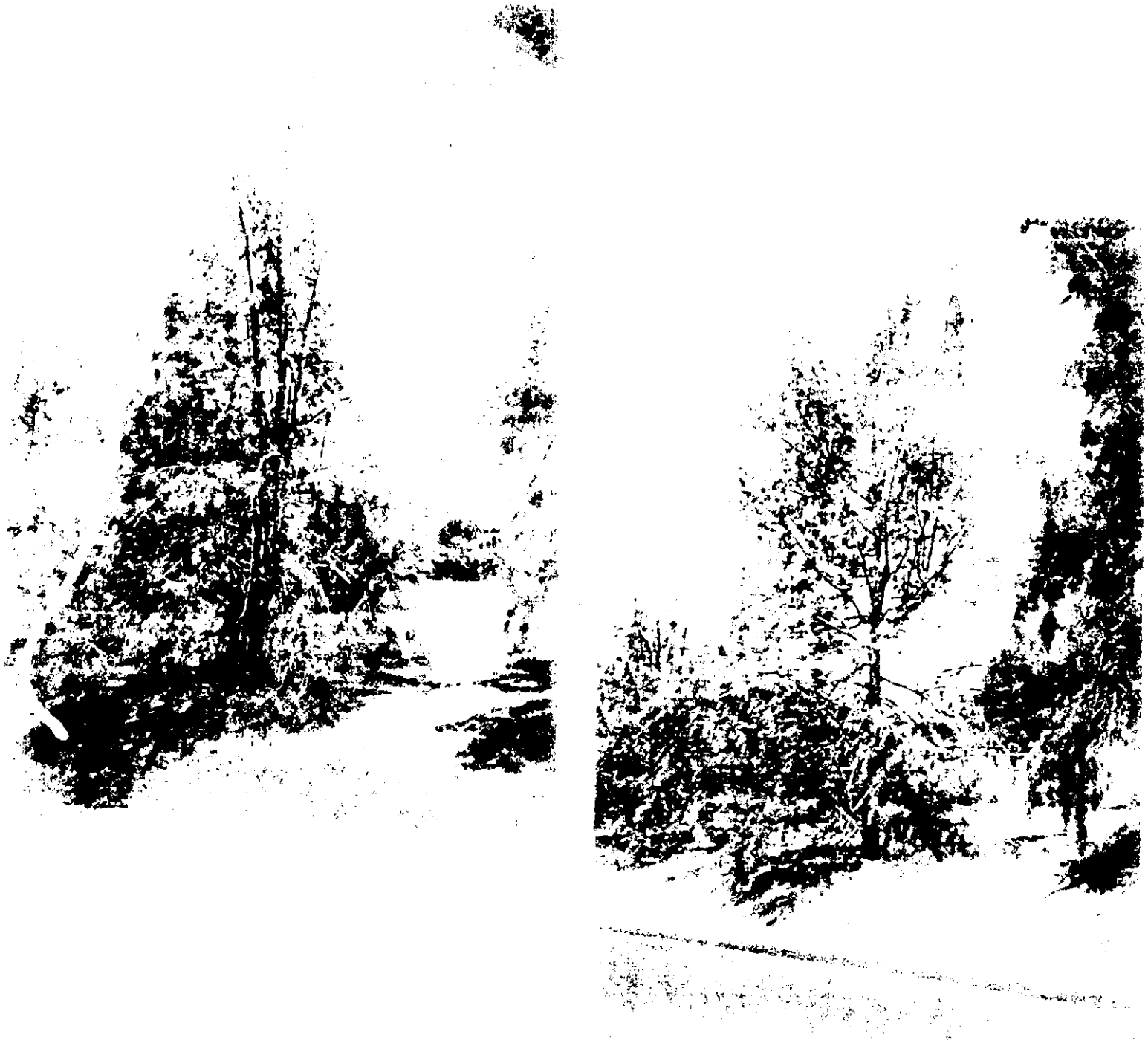
~~35-15g~~ 36-15g

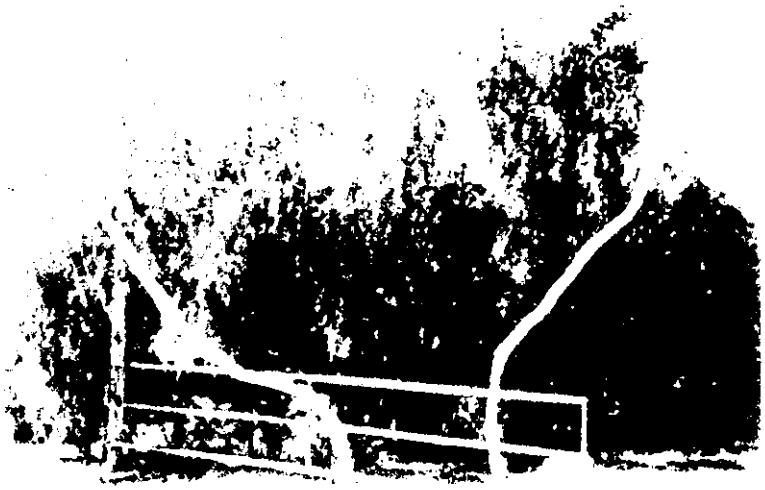
~~78-24"~~ 78 24"

Prepared by: Barrie D. Coate and Associates Horticultural Consultants July 16, 2002

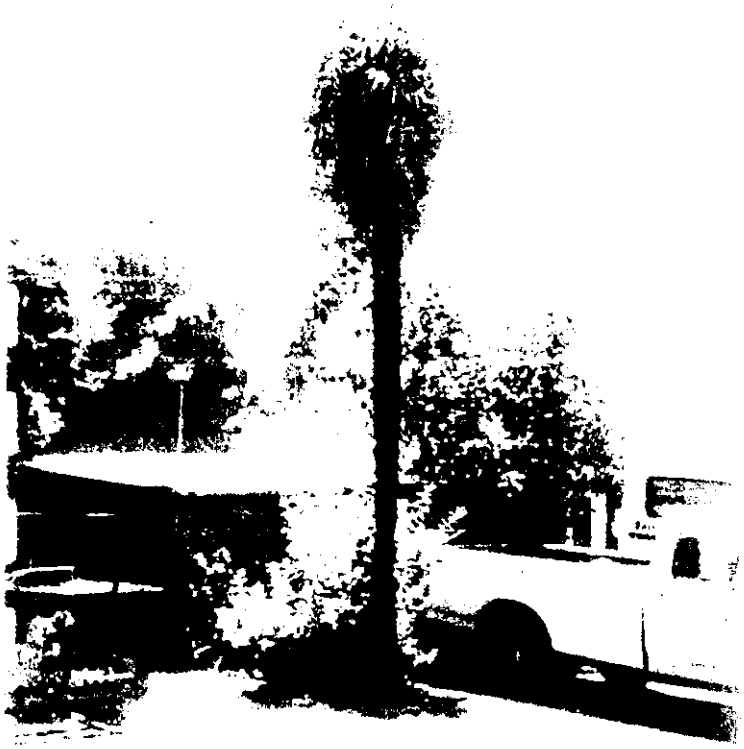
88 TREES TO BE RETAINED
18 OF WHICH ARE ORD. SIZE
17 OAKS

59 TOTAL

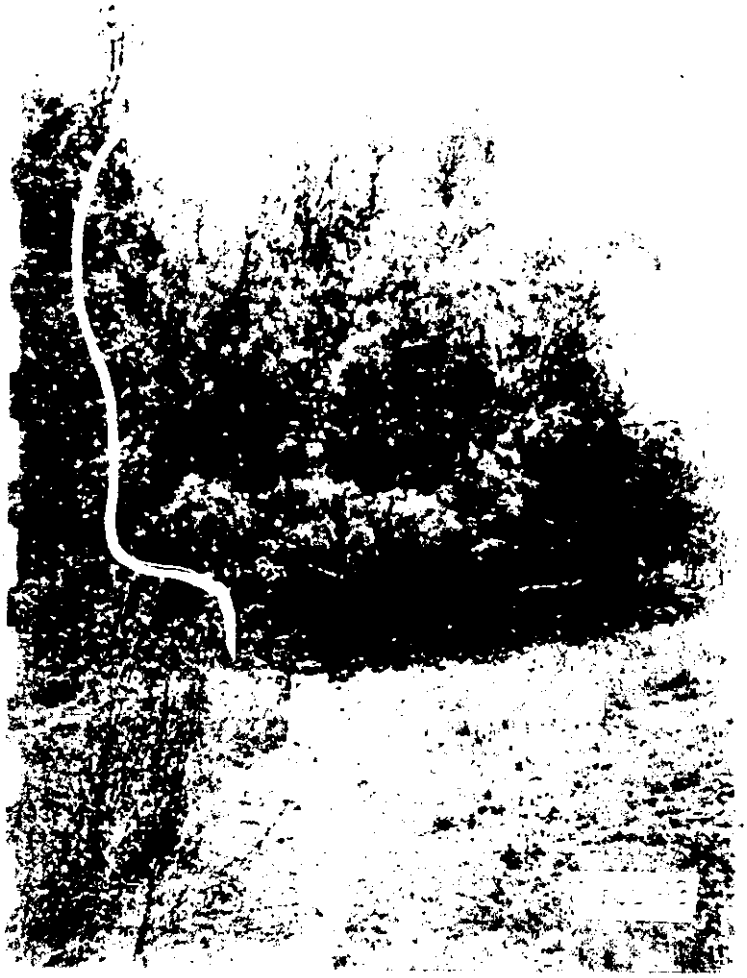


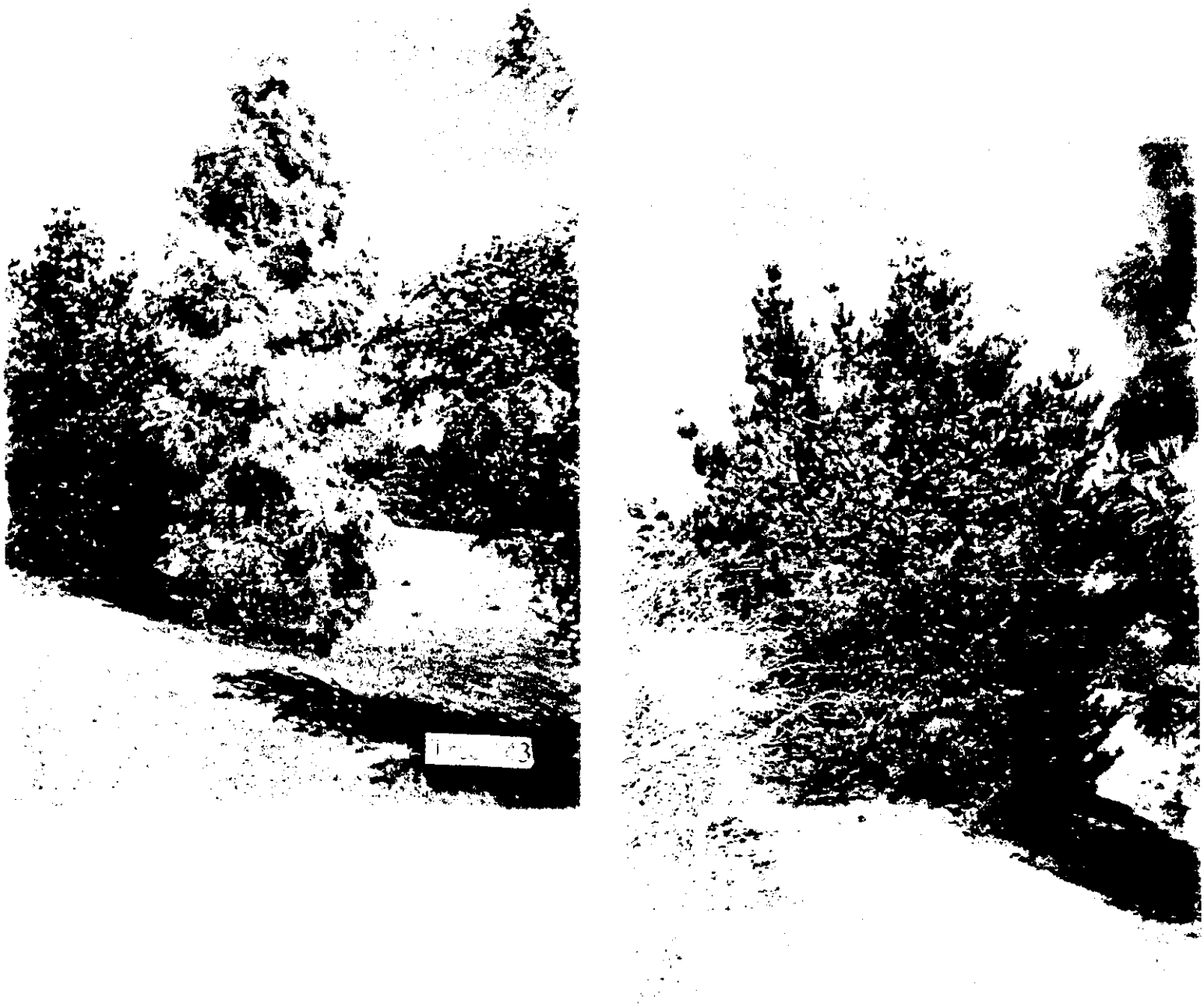



32
35



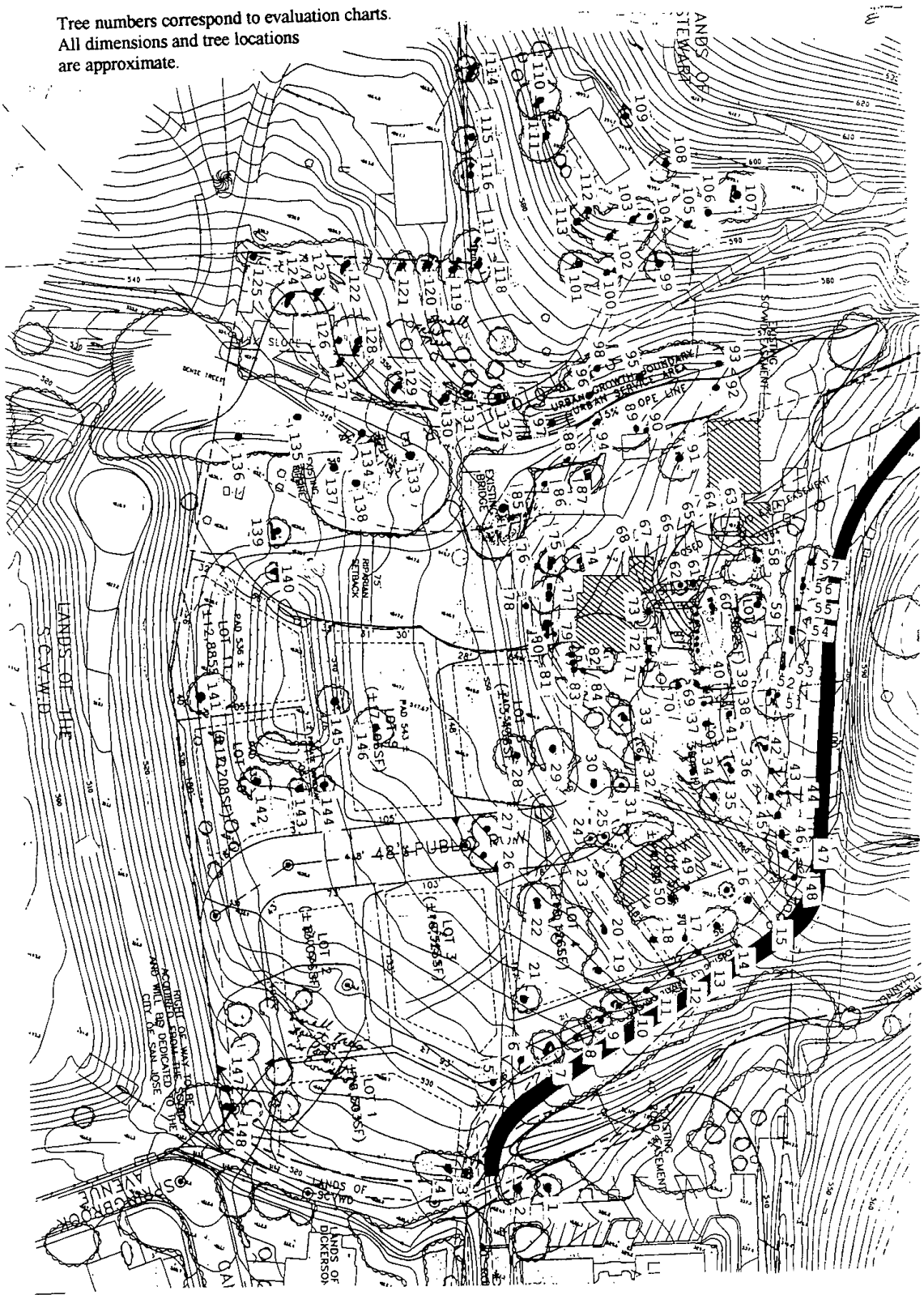

Tree 89





BARRIE D. COATE and ASSOCIATES (408) 353-1052 23535 Summit Road Los Gatos, CA 95030	Tree Survey at the Springbrook Subdivision
	Springbrook Ave. and Canyon Ridge Ave.
	Prepared for:
	Sainte Claire Custom Homes, Maureen Basil
HORTICULTURAL CONSULTANT CONSULTING ARBORIST	Date: July 16, 2002
	Job # 07-02-140

Tree numbers correspond to evaluation charts.
All dimensions and tree locations
are approximate.



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

SPRINGBROOK
BIOLOGICAL EVALUATION
SAN JOSE, SANTA CLARA COUNTY, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick Hopkins, Ph.D., Principal and Senior Wildlife Ecologist
Dave J. Hartesveldt, B.A., Senior Botanist/Wetland Ecologist
Wendy Fisher, Botanist and Wildlife Biologist
Katrina Krakow, M.S., Assistant Project Manager and Ecologist

Prepared for

Jim Meek
Tim Lewis Communities
3300 Douglas Blvd. Building 400, Suite 450
Roseville, CA 95661

July 16, 2012 PN 218-08

TABLE OF CONTENTS

1.0 INTRODUCTION

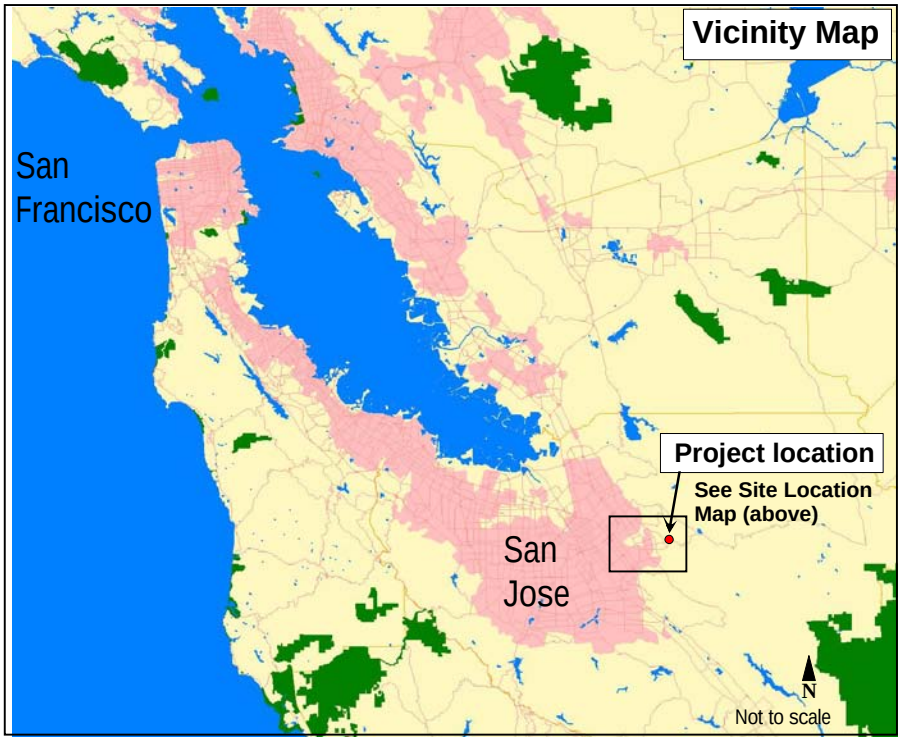
Live Oak Associates, Inc. (LOA), has prepared the following report, which describes the biotic resources of the approximately 8.5 acre Springbrook site in the city of San Jose, California. This report evaluates potential impacts the project may have on the biological resources of the area. The site (hereafter referred to as the study area) is located on the north side of Quimby Road, northeast of its intersection with Olivetti Road. The study area consists of ruderal (disturbed)/annual grassland and residential habitat. Norwood Creek and an unnamed seasonal creek border the study area to the west and east, respectively. An access road (i.e., driveway) for these residences bisects the study site (Figure 1).

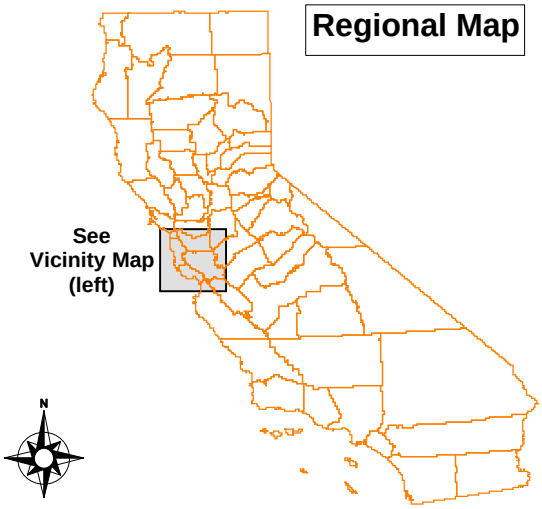
The proposed project is the development of a 12 lot subdivision in the hills of eastern San Jose (Figure 2).

This report updates the information in the *Lands of Stewart Biological Constraints Report* written by LOA (previously Hartesveldt Ecological) in 2000 and evaluates potential impacts to biological resources resulting from the proposed development of a 12-lot subdivision. The project site is located in the San Jose East 7.5" U.S. Geological Survey (USGS) quadrangle within the Sections 9 and 16 of Township 7 South, Range 2 East.

Site development can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, these projects may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of the City of San Jose. This report addresses issues related to: 1) sensitive biotic resources occurring on the site; 2) the federal, state, and local laws regulating such resources, and 3) mitigation measures which may be required based on potential impacts. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources;

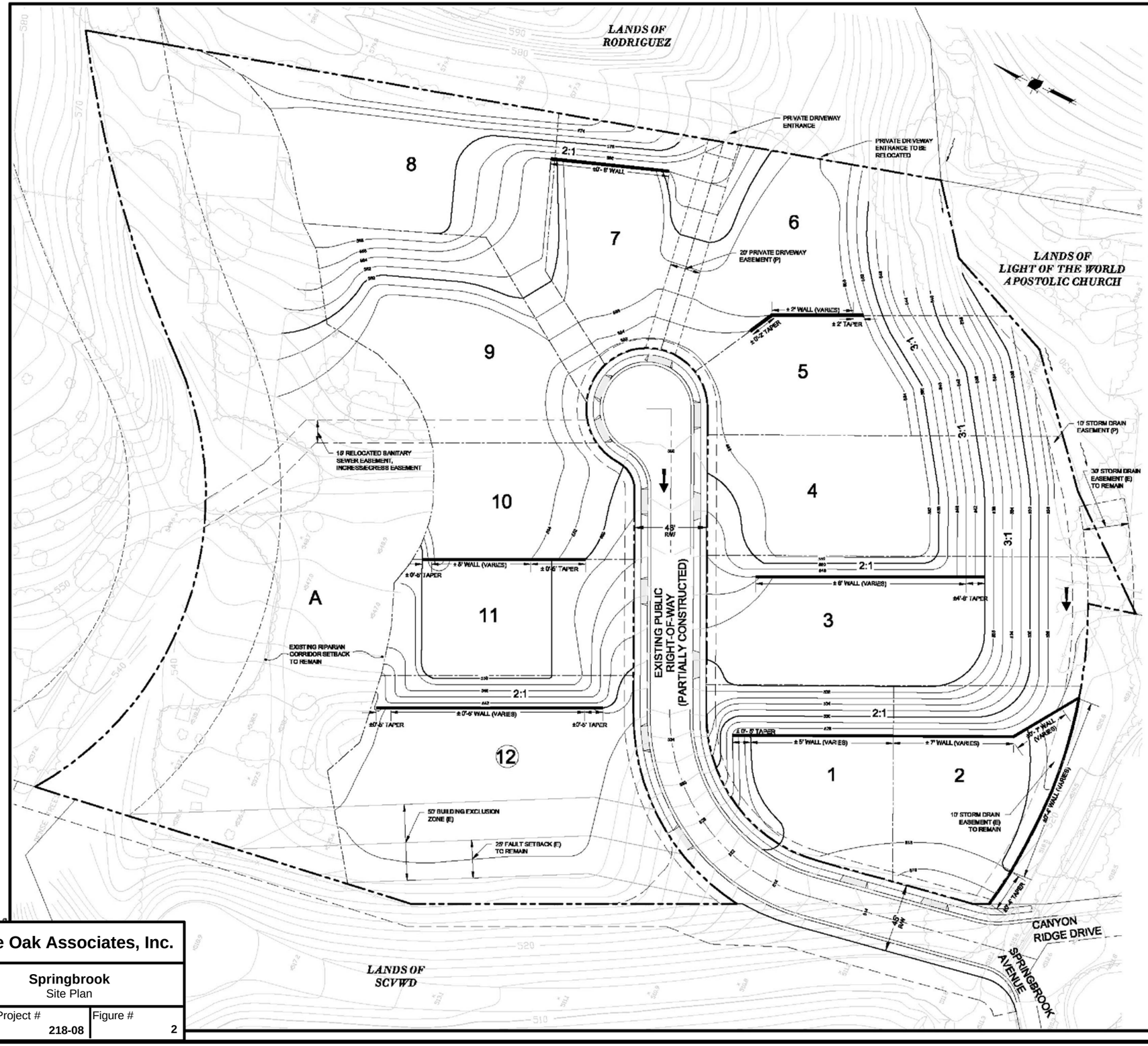


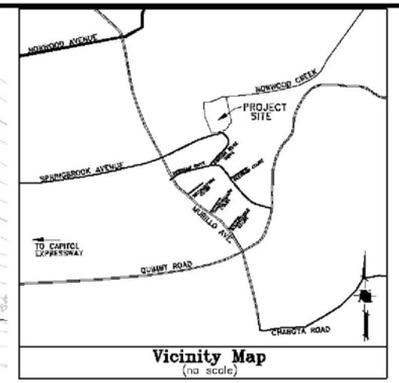


Live Oak Associates, Inc.

Springbrook
Site / Vicinity Map

Date	Project #	Figure #
7/3/2012	218-08	1





Vicinity Map
(no scale)

LEGEND

- PROJECT BOUNDARY
- STORM DRAIN PIPE
- STORM DRAIN PIPE (EXISTING)
- PROPERTY LINE
- PROPERTY LINE (EXISTING)
- RIGHT-OF-WAY
- EASEMENT
- SURFACE FLOW
- OVERLAND RELEASE PATH

NOTES

1. ALL PAD HEIGHTS ARE CONCEPTUAL AT THIS TIME

1 INCH = 30 FEET

Live Oak Associates, Inc.

Springbrook
Site Plan

Date	Project #	Figure #
7/10/2012	218-08	2

HMH
Land Use Entitlements
Land Planning
Landscape Architecture
Civil Engineering
Utility Design
Land Surveying
Stormwater Compliance
1570 Oakland Road (408) 487-2200
San Jose, CA 95131 HMHca.com

REGISTERED PROFESSIONAL ENGINEER — GERARD J. JIMENEZ — No. 72155 — CIVIL — STATE OF CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C
PDC07-077
TIM LEWIS COMMUNITIES

NO	DATE	DESCRIPTION
	4/18/2012	RE-SUBMITTAL

PROJECT NO:	2002.41
CAD DWG FILE:	2002.41GP.DWG
DESIGNED BY:	DWJJ
DRAWN BY:	DY
CHECKED BY:	TA
DATE:	MAR. 27, 2012
SCALE:	NOT TO SCALE
© HMH	

CONCEPTUAL GRADING AND DRAINAGE PLAN

4.0
OF 6

PLOTTED: 4/18/2012 10:19 AM

- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range;

- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development;

- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws; and

- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and that are generally consistent with recommendations of the resource agencies for affected biological resources.

The analysis of impacts, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the site, discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (CDFG 2012), 2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2012), and 3) manuals and references related to plants and animals of Santa Clara County.

Previous site visits include LOA Senior Wildlife Biologist, Rick Hopkins conducted a site reconnaissance on June 9 and 14, 2000, LOA Botanist, Wendy Fisher on June 14, 2000, LOA Wildlife Ecologist Michele Korpos conducted a Phase I burrowing owl survey and tree-nesting raptors and bat surveys on June 10, 2008, and Bat Biologist Grey Tatarian visited the site on June 25, 2008 to assess the site's structures for bats. A reconnaissance-level field survey of the study area was previously conducted on June 27, 2012 by LOA Ecologist Katrina Krakow in order to assess any changes in site conditions, at which time the principal biotic habitats and land uses of the various parcels were identified, and the constituent plants and animals were noted; during the June 2012 site visit, a Phase I burrowing owl survey was also conducted.

Focused surveys for sensitive plant and animal species, except for the burrowing owl, were not conducted as part of this study. The level of investigation was sufficient to locate and establish the general extent of potentially suitable habitat present for such species and the presence or absence of burrowing owls within the study area, but it was not sufficient to establish the

presence or absence of other special status species unless it was incidentally sighted during the general survey.

1.1 PROJECT DESCRIPTION

The proposed project is the development of a 12-lot subdivision in the hills of eastern San Jose.

2.0 EXISTING CONDITIONS

The study area is located in the City of San Jose, Santa Clara County, California. The Springbrook site is located on the north side of Quimby Road, northeast of it's intersection with Olivetti Road. The study area consists of ruderal (disturbed)/annual grassland and residential habitat. Norwood Creek and an unnamed seasonal creek border the study area to the west and east, respectively. An access road (i.e., driveway) for these residences bisects the study site.

Surrounding lands primarily consist of low density residential development and open grassland to the north, east, and south and high density residential development to the west and. The study area itself consists of ruderal grassland, developed areas including three residences consisting of two houses and one trailer with associated landscaping; one of the houses has associated outbuildings of a barn that the roof has been removed, a shed, and a detached garage, two seasonal creeks and their associated riparian corridors. The topography of the site consists of gently to moderately sloping terrain with elevations ranging from approximately 530 feet to 579 feet (161-177 meters) National Geodetic Vertical Datum (NGVD). Soil naming has been updated since the 2000 report; there is currently one soil-mapping unit, Urban land-Flaskan complex, 2 to 9 percent slopes identified on the site (Web Soil Survey 2012). These soils are well drained with moderate permeability and are not considered to be hydric. In addition, these soils are neither alkaline nor serpentinite (NRCS 2012).

Annual precipitation in the general vicinity of the study area is about 15-17 inches, almost 85% of which falls between the months of October and March. Virtually all precipitation falls in the form of rain.

2.1 BIOTIC HABITATS / LAND USES

The study area supports three biotic habitats that provide some biological habitat value for certain species. For the purposes of this report, the biotic habitats of the site are listed as, “Ruderal Grassland”, “Developed/Landscaped”, and “Riparian/Seasonal Creek” (Figure 3). These are discussed in greater detail below. A list of the vascular plant species observed on the

Source:
Aerial photo courtesy of Digital Globe

LEGEND

- Riparian / Seasonal Creek
- Developed / Landscaped
- Ruderal Grassland

N

100 feet 0 100 feet
approximate scale

Live Oak Associates, Inc.

Springbrook
Biotic Habitats

Date	Project #	Figure #
7/3/2012	218-08	3

site is provided in Appendix A and a list of animal species observed and expected to occur on the site is provided in Appendix B.

2.1.1 Ruderal Grassland

Most of the study area is comprised of ruderal grasslands. This habitat does not appear to be grazed or disced except for along the margins of the site, and appears to have been left fallow for several years. A scraper for grading was observed on the site and it appeared to have been used on the site in the area of the existing public right-of-way as shown in Figure 2. A large brush pile also exists in the grassland area and freshly bored holes were apparent throughout the grassland.

The most extensive biotic habitat of the study area is non-native grassland/ruderal. Weedy grasses and forbs of European origin dominated the vegetation. Grasses observed in this habitat during the site survey in June of 2000 included wild oats (*Avena setiva*.), ripgut (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow star thistle (*Centaurea solstitialis*), California poppy (*Eschscholzia californica*), Italian ryegrass (*Festuca perennis*), and barnyard barley (*Hordeum murinum* ssp. *leporinum*). Dominant forbs observed included black mustard (*Brassica nigra*), Italian thistle (*Carduus picnocephalus*), fennel (*Foeniculum vulgare*), bristly ox-tongue (*Helminthotheca echioides*), summer mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca serriola*), cheeseweed (*Malva parviflora*), common horehound (*Marrubium vulgare*), wild radish (*Raphanus sativus*), curly dock (*Rumex crispus*), milk thistle (*Silybum marianum*), and sowthistle (*Sonchus sp.*). Scattered shrubs of coyote brush (*Baccharis pilularis*), a blue elderberry (*Sambucus nigra ssp. caerulea*) and coast live oak (*Quercus agrifolia*) grow associated with a refuse pile within the ruderal grassland. A depressional area was located in the southern portion of the site; no hydrophytic vegetation was observed within this lowlying area.

Non-native grassland provides important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds and 50 species of mammals are known to use grassland habitats of central California (Mayer et al. 1988). The study area provides suitable habitat for many of these species. Some of these species are grassland residents. A good many

more use a variety of other habitats as well. Some are migrants that use the grasslands of the study area for only a portion of each year.

Resident and migratory birds occur here also. Resident birds include the California horned lark (*Eremophila alpestris*), western meadowlark (*Sturnella neglecta*), and the mourning dove (*Zeniada macroura*). Winter migrants include American pipits (*Anthus rubescens*), and savannah sparrows (*Passerculus sandwichensis*). Western kingbirds (*Tyrannus verticalis*) are commonly seen in this part of Santa Clara County foraging from fences and utility lines during spring and summer. A variety of raptors are attracted to this habitat by an abundance of invertebrates and small reptiles, birds and mammals. Raptors commonly observed in annual grassland in the vicinity include white-tailed kites (*Elanus caeruleus*), American kestrels (*Falco sparverius*) and turkey vultures (*Cathartes aura*). Terrestrial vertebrates observed during the site survey on June 14, 2000 included western scrub jay (*Aphelocoma californica*), killdeer (*Charadrius vociferus),* and mourning dove. Reptiles and birds observed during the site survey on June 27, 2012 include the western fence lizard (*Sceloporus occidentalis*), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), California towhee (*Melozone crissalis*), and house finch (*Carpodacus mexicanus*).

Small mammals are common to grasslands of the site. Few California ground squirrel (*Otospermophilus beecheyi*) burrows were observed during the site surveys in June 2000 and June 2012. A striped skunk (*Mephitis mephitis*) digging and Botta's pocket gopher (*Thomomys bottae*) sign was observed during the June 2012 site visit. The California vole (*Microtus californicus*), western harvest mouse (*Reithrodontomys megalotis*), black-tailed hare (*Lepus californicus*) and ornate shrew (*Sorex ornatus*) are likely residents. These small mammals attract a variety of predators, including various snakes and raptors as previously discussed, but also mammals such as coyotes (*Canis latrans*), red foxes (*Vulpes vulpes*), and bobcats (*Lynx rufus*).

2.1.2 Developed/Landscaped

The developed/landscaped areas of the site are the second largest habitat type onsite. The buildings onsite currently consist of two single-family houses, one trailer, one barn missing a roof, one shed with a caved in roof, and one detached garage. Planted and potted plants occur around all three residences.

A dirt road, a parking area, and two residences were observed on the site. Ornamental trees within the landscaped portions of the site included, but were not limited to, green wattle (*Acacia decurrens*), deodar cedar (*Cedrus deodara*), blue gum eucalyptus (*Eucalypatus globulus*), pine (*Pinus* sp.), blue elderberry, and California fan palm (*Washingtonia filifera*). The understory was composed of a variety of ornamental shrubs and herbs and weedy species including bougainvillea (*Bougainvillea spectabilis*), butterfly bush (*Buddleja davidii*), ice plant (*Carpobrotus edulis*), pampas grass (*Cortederia jubata*), jade plant (*Crassula ovata*), English ivy (*Hedera helix*), toyon (*Heteromeles arbutifolia*), mallow (*Malva sp.*), prickly pear cactus (*Opuntia occidentalis*), planted geranium (*Pelargonium sp.*), Cape leadwort (*Plumbago auriculata*), matilija poppy (*Romneya coulteri*), rosemary (*Rosemarinus* sp.), Peruvian peppertree (*Schinus molle*), bird of paradise (*Strelitzia reginae*), and periwinkle (*Vinca major*) to name a few. Various fruit trees (avocado, persimmon, nectarine, olive, citrus, etc.) are scattered throughout the developed/landscaped areas of the site.

Terrestrial species such as an American kestrel, turkey vulture, northern mockingbirds, house sparrows (*Passer domesticus*), house finches, American robins (*Turdus migratorius*), etc. would be expected to occur in the residential habitat. During the June 2012 site visit, the Anna's hummingbird (*Calypte anna*), western scrub jay, northern mockingbird, and house finch were observed in this habitat.

2.1.3 Riparian/Seasonal Creek

Two creeks exist on the site. Norwood Creek bounds the northern edge of the site and an un-named seasonal creek runs through the southeastern corner of the site.

Two seasonal creeks bordered the study area. Relatively large coast live oaks and California bay laurel (*Umbellularia californica*) were identified along both of these creeks. Water was flowing in Norwood Creek during the site survey in June of 2000 and was dry during the June 2012 survey. This creek occurred on the western portion of the site and the average width at ordinary high water (OHW) was approximately 12 to 15 feet. A few of the species of hydrophytic (water-loving) vegetation identified along Norwood Creek during the site survey included blue elderberry, wild cucumber (*Marah horridum*), narrow-leaved cattail (*Typha angustifolia*), stinging nettle (*Urtica dioica* ssp. *holosericea*), Calla lily (*Zantedeschia aethiopica*) and rabbit's foot grass (*Polypogon monspeliensis*). Other vegetation within Norwood Creek's riparian area included, but was not limited to, the Italian thistle, poison hemlock (*Conium maculatum*), English ivy, toyon, barnyard barley, tree tobacco (*Nicotiana glauca*), nightshade (*Solanum sp.*), stinging nettle, and California fan palm. The second unnamed seasonal creek bordered the study area on the east. Hydrophytic vegetation identified along this drainage included California bay laurel, poison oak (*Toxicodendron diversilobum*), and stinging nettle. Other vegetation within the un-named creek riparian area included, but was not limited to, the California sagebrush (*Artemisia californica*), California buckeye (*Aesculus californica*), coyote brush, poison hemlock, blue gum, blue elderberry, and smilo grass (*Stipa miliacea*). No water was flowing in this drainage at the time of the June 2000 or June 2012 surveys. A stick nest was observed in a blue gum tree within the un-named creek riparian corridor during the June 2012 site visit.

The riparian woodlands on the site support a diverse array of animal species due to the presence of seasonal water (at least in Norwood Creek) and the structural diversity of the vegetation. More vertebrate species are expected to be present in the riparian woodland than in any other habitat type on the project site or in the vicinity.

The combination of the streamside vegetation, and a stream with a perennial flow, provides habitat for several amphibian species, including the Pacific treefrog (*Hyla regilla*), slender salamander (*Batrachoceps attenuata*), ensatina (*Ensatina eschscholtzi*), and arboreal salamander (*Aneides lugubris*). A southern alligator lizard (*Elgaria multicarinata*) was observed in this habitat, and western fence lizards also occur here. Riparian-associated bird species, such as the Pacific-slope flycatcher (*Empidonax difficilis*), song sparrow (*Melospiza melodia*), and black phoebe (*Sayornis nigricans*), could nest in the riparian vegetation along Norwood Creek. The oak trees in this habitat support several bird species such as: western scrub jay, downy woodpecker (*Picoides pubescens*), California towhee (*Pipilo crissalis*), Hutton's vireo (*Vireo huttoni*), chestnut-backed chickadee (*Poecile rufescens*), bushtit (*Psaltriparus minimus*), and orange-crowned warbler (*Vermivora celata*). A diverse assemblage of small mammals, including the California mouse (*Permomyscus californicus*), deer mouse (*Peromyscus maniculatus*), brush rabbit (*Sylvilagus bachmani*), and Botta's pocket gopher (*Thomomys bottae*) are expected to occur in this habitat. Animals observed in the riparian/seasonal creek habitat during the June 2012 site visit included a wild turkey feather, the California towhee, mourning dove, Anna’s hummingbird, western scrub jay, northern mockingbird, yellow-rumped warbler (*Dendroica coronata*), house finch, a domestic cat (*Felis catus*), and black-tailed deer. Owl pellets were observed under the California fan palm within Norwood Creek’s riparian habitat.

2.2 MOVEMENT CORRIDORS

Many terrestrial animals need more than one biotic habitat in order to perform all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining

their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces to travel between their required habitats.

The importance of an area as a movement corridor depends on the species in question and its consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

Some lands surrounding the site have been developed with low-density residences. Many of these properties support livestock and are grazed to some extent, which do not constrain the movement of wildlife between the site and more open lands, as the adjacent hills to the west of the site may support a large number of wildlife, and they may find their way to the site from time to time, which is of moderate habitat value. Norwood Creek and an un-named seasonal creek and their associated riparian habitat exist onsite that serves as a movement corridor for local wildlife species that persist in nearby lands.

2.3 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations and/or limited distributions. Such species may be considered “rare” and are vulnerable to extirpation as the state’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife

Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2012). Collectively, these plants and animals are referred to as "special status species."

A number of special status plants and animals occur in the vicinity of the site (Figure 4). These species and their potential to occur on the site are listed in Table 1 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988), *California Natural Diversity Data Base* (CDFG 2012), *Endangered and Threatened Wildlife and Plants* (USFWS 2012), *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2012), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2012). This information was used to evaluate the potential for special status plant and animal species that occur on the site. Figure 4 depicts the location of special status species found by the California Natural Diversity Data Base (CNDDB). It is important to note that the CNDDB is a volunteer database; therefore, it may not contain all known or gray literature records.

A search of published accounts for all relevant special status plant and animal species was conducted for the San Jose East USGS 7.5" quadrangle in which the project site occurs and for the eight surrounding quadrangles (Milpitas, Calaveras Reservoir, Mt. Day, San Jose West, Lick Observatory, Los Gatos, Santa Teresa Hills, and Morgan Hill) using the California Natural Diversity Data Base Rarefind (CDFG 2012). All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, 3, or 4 were also reviewed.

Serpentine soils are absent from the site; as such, those species that are uniquely adapted to serpentine conditions, such as the chaparral harebell (*Campanula exigua*), triburon paintbrush (*Castilleja affinis ssp. neglecta*), pink creamsacks (*Castilleja rubicundula ssp. rubicundula*),

coyote ceanothus (*Ceanothus ferrisiae*), Mt. Hamilton fountain thistle (*Cirsium fontinale var. campylon*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii ssp. setchellii*), fragrant fritillary (*Fritillaria liliacea*), Loma Prieta hoita (*Hoita strobilina*), Wooly-headed lessingia (*Lessingia hololeuca*), smooth lessingia (*Lessingia micradenia var. glabrata*), woodland woollythreads (*Monolopia gracilens*), Metcalf Canyon jewel-flower (*Streptanthus albidus ssp. albidus*), and most beautiful jewel-flower (*Streptanthus albidus ssp. peramoenus*) are considered absent from the site. Other plant species occur in habitats not present in the study area (e.g., chaparral, broadleafed forest, coastal prairie, coastal scrub, etc.) or at elevations below or above onsite elevations and, therefore, are also considered absent from the site. These species include the Mount Day Rockcress (*Boechera rubicundula*)Point Reyes bird's-beak (*Chloropyron maritimum ssp. palusre*), Santa Cruz Mountains pussypaws (*Calyptridium parryi var. hesseae*), Santa Clara red ribbons (*Clarkia concinna ssp. automixa*), Mt. Hamilton Coreopsis (*Leptosyne hamiltonii*), Mt. Hamilton Lomatium (*Lomatium observatorium*), Indian Valley bush-mallow (*Malacothamnus aboriginum*), arcuate bush-mallow (*Malacothamnus arcuatus*), Hall's bush-mallow (*Malacothamnus hallii*), Santa Cruz Mountains beardtongue (*Penstemon rattanii var. kleei*), Mt. Diablo Phacelia (*Phacelia phacelioides*), Chaparral ragwort (*Senecio aphanactis*), Maple-leaved Checkerbloom (*Sidalcea malachroides*), California Seablite (*Suaeda californica*).

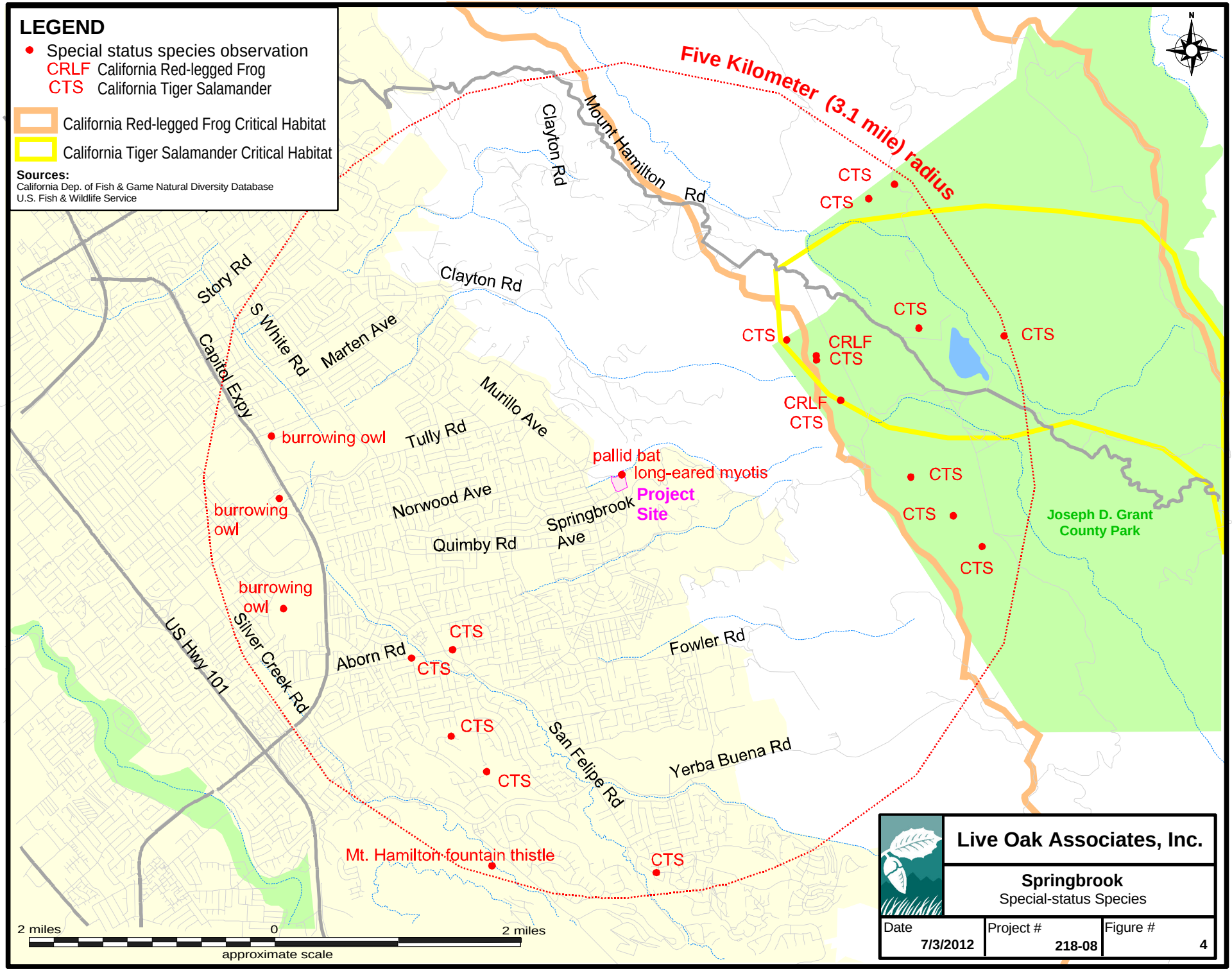

LEGEND
Special status species observation
CRLF California Red-legged Frog
CTS California Tiger Salamander
California Red-legged Frog Critical Habitat
California Tiger Salamander Critical Habitat
Sources:
California Dep. of Fish & Game Natural Diversity Database
U.S. Fish & Wildlife Service
Five Kilometer (3.1 mile) radius
Clayton Rd
Mount Hamilton Rd
Story Rd
S White Rd
Capitol Expy
Marten Ave
Murillo Ave
Tully Rd
burrowing owl
burrowing owl
burrowing owl
pallid bat
long-eared myotis
Project Site
Norwood Ave
Springbrook Ave
Quimby Rd
US Hwy 101
Silver Creek Rd
Aborn Rd
Fowler Rd
San Felipe Rd
Yerba Buena Rd
Mt. Hamilton fountain thistle
CTS
CRLF
Joseph D. Grant County Park
2 miles
0
2 miles
approximate scale
N
Live Oak Associates, Inc.
Springbrook
Special-status Species
Date 7/3/2012
Project # 218-08
Figure # 4

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2012 and CNPS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Robust Spineflower (*Chorizanthe robusta* ssp. *robusta*)	FE, CNPS 1B	Habitat: Occurs on sandy or gravelly soils in openings of cismontane woodlands, coastal dunes and coastal scrub. Elevation: 3-300 meters. Blooms: April – September.	**Absent.** Suitable habitat does not occur on the study area.
Contra Costa Goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	Habitat: Occurs in vernal pools and mesic areas of valley and foothill grasslands, typically alkaline. Elevation: 0-470 meters. Blooms: March-June.	**Absent.** Potentially suitable habitat is absent from the site. Nearest known occurrence is from 1999 near the intersection on Cushing and Landing Avenues, Fremont.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Bent-flowered fiddleneck (*Amsinckia lunaris*)	CNPS 1B	Habitat: Coastal bluff scrub, cismontane woodland, and valley and foothill grasslands. Elevation: 3-500 meters. Blooms: March–June.	**Absent.** The site provides poor habitat for this species. The closest record for this species is more than three miles from the site.
Alkali Milk-vetch (*Astragalus tener* var. *tener*)	CNPS 1B	Habitat: Occurs in alkaline soils in valley and foothill grassland and in vernal pools. Elevation: 1-60 meters. Blooms: March-June.	**Absent.** Although suitable habitat does occur on the site, this species has not been documented in the vicinity in the recent past. In addition, none were observed during June 2000 or June 2012 surveys.
Brittlescale (*Atriplex depressa*)	CNPS 1B.2	Habitat: Occurs on alkaline clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, and vernal pools. Elevation: 1-320 meters. Blooms: Annual herb; April-October.	**Absent.** Suitable habitat for brittlescale is absent from the site. The nearest recorded occurrence is more than three miles from the site.
San Joaquin Spearscale (*Atriplex joaquiniana*)	CNPS 1B	Habitat: Occurs in chenopod scrub, meadows and seeps, playas, and valley and foothill grasslands on alkaline soils. Elevation: 1-835 meters. Blooms: April-October.	**Absent.** Alkaline and clay soils do not occur on the site.
Lesser saltscale (*Atriplex minuscule*)	CNPS 1B.1	Habitat: Occurs in alkaline and sandy soils in chenopod scrub, playas, and valley and foothill grasslands. Elevation: 15-200 meters Blooms: Annual herb; May-October.	**Absent.** Alkaline and sandy soils are absent from the site. The nearest recorded occurrence is more than three miles from the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (Continued)

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Big-scale Balsamroot (*Balsamorhiza macrolepis* ssp. *macrolepis*)	CNPS 1B	Habitat: Occurs in chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine Elevation: 90-1400 meters. Blooms: March-June.	**Absent.** While potentially suitable habitat (albeit marginal) does occur on site, none were observed during surveys. Nearest known occurrence is from 1999 in the Silver Creek Hills of the Evergreen area (i.e., Ryland Ridge) and were apparently removed by CNPS prior to grading in 2001.
Round-leaved filaree (*California macrophylla*)	CNPS 1B	Habitat: Occurs on clay soils in cismontane woodlands and valley and foothill grasslands. Elevation: 15-1200 meters. Blooms: March to May.	**Unlikely.** Clay soils are absent from the site, and the site provides poor habitat for this species. The nearest recorded observance of this species is more than three miles from the site.
Congdon's tarplant (*Centromadia parryi ssp. congdonii*)	CNPS 1B	Habitat: Occurs on valley and foothill grasslands on alkaline soils. Elevation: 0-230 meters. Blooms: Annual herb; May-November.	**Absent.** Alkaline soils are absent from the site and this species was not observed during any of the site visits.
Western Leatherwood (*Dirca occidentalis*)	CNPS 1B	Habitats: Found in mesic habitats such as broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland. Elevation: 30-395 meters. Blooms: January-April.	**Absent.** While potentially suitable habitat may occur in riparian habitat that borders the site, none were detected during surveys. Nearest known occurrence is from the southwest side of the San Francisco Bay.
Hoover's Button-Celery (*Eryngium aristulatum* var. *hooveri*)	CNPS 1B	Habitat: Occurs in vernal pools. Elevation: 3-45 meters. Blooms: July-August.	**Absent.** Vernal pools do not occur onsite.
Diablo Helianthella (*Helianthella castanea*)	CNPS 1B	Habitat: Occurs in cismontane woodland, coastal scrub, chaparral, riparian woodland and broadleaved upland forest. Elevation: 60-1300 meters. Blooms: March-June.	**Unlikely.** While potentially suitable habitat occurs in the riparian woodlands that border the site, none were detected during surveys. Nearest known occurrence is from 1991 near Lake Chabot and from 1994 in the Diablo Range. Both of these records are more than 15 miles from the site.
Showy golden madia (*Madia radiata*)	CNPS 1B	Habitat: Occurs in cismontane woodland and valley and foothill grassland. Elevation: 25-900 meters. Blooms: March-May.	**Unlikely**. Although suitable habitat is present on the site, this species has not been documented within three miles of the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (Continued)

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Mt. Diablo Cottonweed (*Micropus amphibolus*)	CNPS 3	Habitat: Occurs in rocky soils in broadleafed upland forest, chaparral, cismontane woodland, and valley and foothill grassland. Elevation: 45-825 meters. Blooms: Annual herb; March-May.	**Unlikely**. Although suitable habitat is present on the site, this species has not been documented within three miles of the site.
Prostrate Vernal Pool Navarretia (*Navarretia prostrata*)	CNPS 1B	Habitat: Occurs in mesic areas within coastal scrub, meadows and seeps, alkaline valley and foothill grasslands, and vernal pools. Elevation: 15-1210 meters. Blooms: April-July.	**Absent.** Vernal pools do not occur onsite.
Hairless Popcorn-flower (*Plagiobothrys glaber*)	CNPS 1A	Habitat: Occurs on alkaline meadows and seeps and coastal salt marshes and swamps of Alameda, Merced, Marin, Santa Clara, and San Benito Counties. Elevation: 15-180 meters. Blooms: Annual herb; March-May.	**Absent.** Alkaline soils are absent from the site. Suitable habitat does not occur onsite.
Rock sanicle (*Sanicula saxatilis*)	CR, CNPS 1B	Habitat: Broadleaved upland forest, chaparral, and valley and foothill grassland. Elevation: 620-1175 meters. Blooms: April-May.	**Absent.** The site is below the elevation which rock sanicle grows.
Saline clover (*Trifolium depauperatum* var. *hydrophilum*)	CNPS 1B	Habitat: Marshes and swamps, valley and foothill grasslands on mesic or alkaline soils, and vernal pools. Elevation: 0-300 meters. Blooms: April–June.	**Unlikely.** Mesic, alkaline soils, and vernal pools are absent from the site.

ANIMALS (adapted from CDFG 2012 and USFWS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE	Primarily found in vernal pools, but may use other seasonal wetlands in mesic valley and foothill grasslands.	**Absent.** No vernal pools or other seasonal wetlands occur on the site.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (Continued)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
California Tiger Salamander (*Ambystoma californiense*)	FT, CT, CSC	Found primarily in annual grasslands; requires vernal pools for breeding and rodent burrows for refuge.	**Unlikely.** No suitable breeding habitat occurs on the site,; the SCVWD dentition basin just below the site does not likely support breeding habitat for CTS as the hydro periods for this basin are unpredictable. They are not expected to breed in this basin.
California Red-legged Frog (*Rana aurora draytonii*)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills, preferring pools with overhanging vegetation.	**Unlikely.** Norwood Creek supports only marginally suitable habitat. The dry seasonal drainage channel, could only provide frogs opportunity to move through the site during the wet season.

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Foothill Yellow-legged Frog (*Rana boylii*)	CSC	Found primarily in swiftly flowing creeks.	**Absent.** The creeks bordering the site do not support the type of creek habitat this frog prefers.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Found primarily in creeks and ponds of Central California.	**Unlikely.** Suitable habitat is not present. Norwood Creek is relatively steep through the site and is not expected to support suitable ponded areas for the turtle.
Coast horned lizard (*Phrynosoma blainvillii*)	CSC	Occur in grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	**Unlikely.** Habitats prefered by coast horned lizards are absent from the site. The nearest documented observation of this species is more than three miles from the site.
American peregrine falcon (nesting) (*Falco peregrines anatum*)	CP	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Absent.** The site does not support suitable breeding habitat.
Golden Eagle (*Aquila chrysaetos*)	CSC	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Possible.** The site provides marginal foraging habitat and limited breeding habitat.
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows.	**Possible**. A small number of ground squirrel burrows were detected on site. Neither owls nor evidence of their presence were detected at these three burrows (protocol-level surveys were not conducted. In addition, there are no records of owls breeding at this elevation in Santa Clara County.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS (Continued)

California Species of Special Concern and Protected Species

Species	Status	Habitat	*Occurrence in the Study Area
Black swift (nesting) (*Cypseloides niger*)	CSC	Migrants found in many habitats of state; in Sierra nests are often associated with waterfalls.	**Absent.** The site does not provide suitable breeding or foraging habitat for this species.
Tricolored Blackbird (*Agelaius tricolor*)	CSC	Occurs near fresh water with dense cattails, or thickets of willows or shrubs.	**Absent.** Suitable habitat is not present onsite.
Townsend's Big-eared Bat (*Corynorhinus townsendii*)	CSC	Ranges throughout the state, but especially common in wooded canyon bottoms.	**Possible.** Foraging habitat is present onsite. Bat surveys in 2008 did not detect Townsend's big-eared bat in any of the buildings, therefore it is likely that they still do not use onsite buildings as roost sites.
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	**Likely.** In 2008 a bat biologist identified pallid bat sign at the barn and attached rooms onsite. Although the main roof of the structure has been removed, pallid bats likely still use the other rooms of the barn.
San Francisco Dusky-Footed Woodrat (*Neotoma fuscipes annectens*)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	**Absent.** Although riparian habitat along the two creeks of the site support suitable habitat, San Francisco dusky-footed woodrats and their nests were not observed during any of the site visits. In addition, the nearest sighting recorded is more than three miles from the site.
American badger (*Taxidea taxus*)	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**Possible.** Although no burrows were observed on the site, badgers are known to occur in the hills to the east of the site and they could easily make their way onto the site.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the sites, but it could occur there from time to time.
Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FC	Federal Candidate

CE	California Endangered
CT	California Threatened
CR	California Rare
CP	California Protected
CSC	California Species of Special Concern

CNPS	California Native Plant Society Listing
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3	Plants about which we need more information – a review list
4	Plants of limited distribution – a watch list

2.4 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB). Aquatic features are typically only considered to be jurisdictional if they connect to other Waters of the United States per the U.S Supreme Court decision *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC Decision) and *Rapanos v. United States* and *Carabell v. Army Corps of Engineers* (referred together as the Rapanos decision).

A formal wetland delineation and waters of the U.S. analysis has not been completed at this time. However, it is assumed the site supports jurisdictional waters in the form of Norwood Creek and an un-named creek. Despite our preliminary analysis of the extent of agency jurisdiction, it is important to note that the USACE, CDFG, and RWQCB are the final arbiters and could claim jurisdiction over some or all of these features. However, the project as described herein would not impact or fill any potential wetland features, thus a wetland delineation would not be required.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

Approval of general plans, area plans, and specific projects is subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are carried out. CEQA is concerned with the significance of a proposed project's impacts. For example, a proposed development project may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory findings of significance" if the project has the potential to

> Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal "endangered species" legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both

agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as "an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering." For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered "Waters of the United States" (hereafter referred to as "jurisdictional waters") subject to the jurisdiction of the U.S.

Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands:
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to

methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.6 Local Ordinances, Policies, and Habitat Conservation Plans

City of San Jose Riparian Policy

The City of San José has developed a riparian policy, which addresses several issues that relate to the identification, management, and protection of riparian resources within the City's Urban Service Area (USA). The City has assumed that riparian corridors outside the USA are substantially protected by the General Plan Policy's that govern these areas. This policy has noted that areas "outside the USA and not subject to specific General Plan direction regarding riparian protection, should be subject, at a minimum, to the development guidelines in this

document" (City of San José, 1999). Norwood Creek and the un-named seasonal creek are covered by the City of San Jose's *Riparian Corridor Policy Study*.

For example, the riparian corridor policy study:

- Defines riparian corridors
- Inventories and describes biotic resources
- Identifies existing public and quasi-public lands adjacent to corridors
- Identifies future flood control activities
- Outlines guidelines that protect biotic resource values when development occurs near corridors
- Defines measures for development of recreational facilities along corridors

Ordinance-Size Trees and Heritage Trees

The City of San Jose Tree Removal Controls (San Jose City Code, sections 13.31.010 to 13.32.100) serve to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. The ordinance covers both native and non-native species. A tree removal permit is required from the City of San Jose for the removal of ordinance-sized trees. Additionally, any tree found by the city council to have special significance can be designated as a heritage tree, regardless of tree size or species. It is unlawful to vandalize, mutilate, remove, or destroy such heritage trees. In addition, the City of San Jose requires, prior to the issuance of any approval or permit for construction of any improvement of the project site, that all trees on the project site be inventoried and categorized according to size, species, and location. This work also includes the determination of the presence of heritage trees.

Santa Clara Valley HCP/NCCP. Currently there is no adopted Habitat Conservation Plan that covers the study area. Six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of San Jose, Gilroy and Morgan Hill) and two wildlife agencies (the California Department of Fish and Game and the U.S. Fish and Wildlife Service) are in the process of designing a multi-species habitat

conservation plan. The study area of the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) primarily covers southern Santa Clara County as well as the City of San Jose with the exception of the bayland areas. The HCP/NCCP will address listed species and species that are likely to become listed during the plan's 50-year permit term. The covered species include, but are not limited to, western burrowing owl, California tiger salamander, and California red-legged frog. The (HCP/NCCP) Planning Agreement requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value.

3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE

The proposed project is the development of the site into 12 residential lots.

3.3.1 Loss of Habitat for Special Status Plants

Potential Impacts. Nineteen (19) special status plant species could occur in the project vicinity. Although the riparian woodland on the site may provide potentially suitable habitat for three of these special status plant species (see Table 1): the big scale balsamroot (*Balsamorhiza macrolepis* ssp. *macrolepis*), the Western leatherwood (*Dirca occidentalis*), and the Diablo Helianthella (*Helianthella castanea*), none were detected during surveys of the riparian woodland on June 14, 2000 or June 27, 2012. If present, these perennials should have been detected. Furthermore, the riparian woodlands in which these species would occur will be avoided during project development. All 19 of the special status plant species in Table 1 are presumed absent or unlikely to occur on the site. The proposed project is not expected to have an adverse effect on regional populations of any of the plant species listed in Table 1.

Mitigation. Vascular plants listed as threatened or endangered under state and federal endangered species legislation are considered absent from or unlikely to occur on the study area. Therefore, mitigation measures are not warranted at this time.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impacts. Two of the fifteen (15) special-status species listed in Table 1 are expected to be resident or breed on the site including the burrowing owl and pallid bat. Of the remaining species, three are expected to occur rarely to occasionally for foraging activities or passing though the site, these species include the golden eagle, Townsend big-eared bat, and American badger. The remaining ten (10) species listed in Table 1 are considered absent or unlikely to occur on the site due to the lack of suitable habitat or the site is outside of the species' range. Species considered absent or unlikely to occur on the site include the vernal pool tadpole shrimp, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, coast horned lizard, American peregrine falcon, black swift, tricolored-blackbird, and San Francisco dusky-footed woodrat. The loss of foraging habitat for these species is

expected to result in a less-than-significant impact to forage habitat. While burrowing owls are not expected to occur on the site, protocol-level surveys would need to confirm their absence. See the Section regarding potential impacts to burrowing owls below.

The California red-legged frog has not been reported from any nearby drainages, and given the intermittent nature of Norwood Creek, habitat for them is limited and marginal. The proposed development of the site is not expected to adversely impact Norwood Creek given the 75-foot setback from development along Norwood Creek (see Section 3.3.8 discussing creek setback below).

No suitable breeding habitat exist on site for California tiger salamanders and the SCVWD detention basin is not expected to support breeding as the hydro period of this pond is unpredictable and generally unsuitable for CTS breeding. Thus, this species would not be expected to estivate during the summer months on the site.

Significant disturbances have already occurred within and adjacent to the project site that have diminished the value of its habitats for special status animal species. Therefore, the proposed project is expected to result in a less than significant impact to the loss of habitat for all of the species listed in Table 1.. See however discussion related to potential impacts to nesting raptors including burrowing owl, golden eagle and non-special status raptors.

Mitigation. As project impacts will be less than significant to loss of habitat, no mitigation is warranted.

3.3.3 Impacts to Golden Eagle, Other Listed Raptors and Non-special Status Raptors.

Potential Impacts. Although the loss of habitat for the golden eagle and other raptors would not be considered significant, activities that may result in harm, injury or death to these species would be considered a significant impact. Golden eagle nesting habitat is absent from the site. The larger trees of the site provide suitable nesting habitat for other raptor species including, but not limited to, the white-tailed kite and red-tailed hawk likewise protected by the California Fish and Game Code. Although a full pre-construction nesting raptor survey was not performed, one

stick nest was observed onsite in a eucalyptus tree within the riparian habitat of the un-named creek the June 2012 site visit. Breeding pairs of tree-nesting raptors could choose to nest in the onsite trees or in the nearby trees in future years. Project construction at the time of nesting (February 1 through August 31) could induce the adults to abandon the nest when juveniles are present, thus leading to their starvation. The mortality of juveniles would constitute a significant adverse impact of the project.

Mitigation. Site development during the raptor-nesting season (February 1 through August 31) could result in the abandonment of an active nesting raptor such as a white-tailed kite or red-tailed hawk. While golden eagles are not expected to nest on site, the following measure would provide for the most unusual circumstance. The harm injury or death to individuals that may result would constitute a significant adverse impact of the project. The following mitigation measures are warranted for tree nesting raptors:

- ***Mitigation Measure 3.3.3a:*** Should project construction be scheduled to commence between February 1 and August 31, a pre-construction survey will be conducted by a qualified biologist for nesting birds within the onsite trees as well as all trees within 250 feet of the site. This survey will occur within 30 days of the on-set of construction.

- ***Mitigation Measure 3.3.3b:*** If pre-construction surveys undertaken during the nesting season locate active nests within or near construction zones, these nests, and an appropriate buffer around them (as determined by a qualified biologist) will remain off-limits to construction until the nesting season is over. Suitable setbacks from occupied nests will be established by a qualified biologist and maintained until the conclusion of the nesting season.

3.3.4 Impacts to Western Burrowing Owl.

Potential Impacts. No burrowing owls have been observed on the site and based on past history over the last decade, their presence is unlikely. Nonetheless, potential nesting habitat for burrowing owls is present throughout the ruderal grassland of the site in the form of California ground squirrel burrows. Phase I protocol-level burrowing owl surveys of the site were conducted on June 10, 2008 by LOA wildlife ecologist Michele Korpos who found that suitable burrows were absent from the site, and on June 27, 2012 by LOA Ecologist Katrina Krakow,

who found that suitable burrows in the form of a few California ground squirrel burrows was present onsite. Nonetheless, if a burrowing owl were to nest or overwinter in the proposed development area prior to the start of construction, construction activities could result in the abandonment of active nests or direct harm, injury or death to these birds. Construction activities that adversely affect the nesting success or result in mortality of individual owls would be considered a significant impact to individual owls.

Mitigation. Mitigation for the western burrowing owl is therefore warranted and should include the following mitigation measures.

- ***Mitigation Measure 3.3.4a:*** In order to avoid impacts to active burrowing owl nests, a qualified biologist should conduct pre-construction surveys for burrowing owls within the construction footprint and within 250 feet of the footprint no more than 30 days prior to the onset of ground disturbance. These surveys should be conducted in a manner consistent with accepted burrowing owl survey protocols. If pre-construction surveys determine that burrowing owls occupy the site during the non-breeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction.

- ***Mitigation Measure 3.3.4b:*** Once it has been determined that owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction footprint or immediately adjacent lands (i.e., within 250 feet of the footprint) during the breeding season (February 1 through August 31), a construction-free buffer of 250 feet should be established around all active owl nests. The buffer area should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the breeding season, passive relocation of any remaining owls by a qualified biologist may take place.

3.3.5 Impacts to Pallid Bats and Other Roosting Bats.

Potential Impacts. A number of bat species including, but not limited to the Townsend's big-eared bat, pallid bat and long-eared myotis (*Myotis evotis*) may forage on the site year-round or during migration. Onsite residences and the detached garage provide suitable roosting habitat. On June 25, 2008, a bat biologist surveyed onsite buildings for sign of bat use. He observed

pallid bat sign in the barn and attached rooms (workshop and stables), which he concluded was most likely a night roost and two long-eared myotis roosting in the detached garage. Since this survey, the roof the barn has been demolished, however, the attached rooms still have an intact roof. Demolition of these onsite buildings may result in harm or injury to individuals of this species, which would constitute a significant adverse impact.

Mitigation. Mitigation measures that protect roosting bats from possible direct mortality are warranted for the above buildings only. The project applicant will implement the following measures to ensure that bat mortality from project construction is avoided.

- ***Mitigation Measure 3.3.6a:*** A detailed bat survey shall be conducted prior to demolition of the barn and its attached rooms and the detached garage, as conditions may have changed since the 2008 survey. If a non-breeding bat colony is found in the barn, the individuals shall be humanely evicted from the barn via a two-part roof removal consisting of a partial roof removal under the direction of a qualified biologist one day followed by full removal the next day and if a non-breeding bat colony is found in the detached garage, the individuals shall be humanely evicted from the barn via a separate procedure. Due to the construction style of the garage, all doors wind windows, as well as the small room extension on the back of the building shall be removed from the structure 7-10 days prior to demolition. This method will alter the roost environment sufficiently to cause bats to abandon the roost over successive nights. All demolition shall occur during daylight hours. This mitigation measure will ensure that no harm or "take" would occur to any bats as a result of demolition activities.

- ***Mitigation Measure 3.3.6b:*** If a maternity colony is detected in any of these buildings, then a construction-free buffer shall be established around the tree and remain in place until it has been determined by a qualified biologist that the nursery is no longer active. Removal should preferably be done between March 1 and April 15 or August 15 and October 15 to avoid interfering with an active nursery. Mitigation would not be required for the loss of roosting or foraging habitat for bats, as such habitat is abundantly available regionally.

3.3.6 Impacts to American Badger.

Potential Impacts. Although American badgers and their sign were not observed during the 2012 site visit, they are known to occur in the adjacent hills. Impacts to the American badger would be similar to those for the western burrowing owl. Conversion of grasslands to urban development would result in a less-than-significant loss of habitat for the American badger but

may result in harm or injury to individuals of this species, which would constitute a significant adverse impact.

Mitigation. Mitigation is warranted for the American badger.

- ***Mitigation Measure 3.3.7a:*** Pre-construction surveys conducted for burrowing owls should also be used to determine the presence or absence of badgers in the development footprint. If an active badger den is identified during pre-construction surveys within or immediately adjacent to the construction envelope, a construction-free buffer of up to 300 feet (or distance specified by the resource agencies, i.e., CDFG) should be established around the den. Because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor should be present onsite during construction activities to ensure the buffer is adequate to avoid direct impact to individuals or nest abandonment. The monitor would be necessary onsite until it is determined that young are of an independent age and construction activities would not harm individual badgers.

- ***Mitigation Measure 3.3.7b:*** Once it has been determined that badgers have vacated the site, the burrows can be collapsed or excavated, and ground disturbance can proceed.

3.3.7 Disturbance to Wetlands and Other Jurisdictional Waters

Potential Impacts. Waters of the U.S. occur on the study area in the form of jurisdictional wetlands and tributary waters associated with the two seasonal creeks (i.e., Norwood Creek and the unnamed seasonal drainage channel). Although the majority of the areas along these two seasonal creeks would be considered jurisdictional wetlands due to the presence of hydrophytic vegetation, portions of Norwood Creek lack hydrophytic vegetation and would therefore be considered tributary water. A small depression occurs on the lower end of the site (western boundary). This area was excavated in upland habitat in circa 1982 and artificially filled from Norwood Creek. It operated as a man-made pond/swimming hole until the drought of the late 1980's. Since that time this "pond" has not been artificially fed, and it does not hold water during the rainy season. This area lacks hydrophytic plants, hydrology and soils and therefore is not considered a "wetland". At this preliminary level, acreages of Waters of the U.S. were not determined.

The project is not expected to result in impacts to areas under the jurisdiction of the Corps, Regional Water Quality Control Board or CDFG, assuming that the project does not widen

existing crossings of Norwood Creek or the unnamed channel. Therefore, the project will result in a less than significant effect on wetlands and other jurisdictional waters, and on areas under the jurisdiction of CDFG.

Mitigation. No mitigation will be required, as no wetlands (Waters of the U.S.) occur within the proposed development area.

3.3.8 Encroachment Within the City of San Jose's Riparian Setback

Impacts. Two seasonal drainage channels occur on the northern and southern boundaries of the site. Current residential development on the site is within the requested 100 foot setback from the riparian area, thus, the project is presently being designed to setback a minimum of 75 feet from the dripline of the riparian vegetation or top-of-bank (whichever is greater) for the majority of the site bounding Norwood Creek. The project plans encroachment of 5250 square feet (0.12 acres) within the 75 foot setback. The encroachment into the setback will include a portion of a new road from the eastern boundary of the parcel and a new easement road that will connect with the existing bridge over Norwood Creek.

Mitigation. A Mitigated Negative Declaration (MND) has been approved by the City for this project, which calls for a 1:1 encroachment:enhancement ratio. Therefore, an area of 5250 square feet of currently ruderal habitat adjacent to the existing riparian habitat of Norwood Creek, within the riparian setback, that will be planted with riparian flora native to the area. A Riparian Mitigation and Monitoring Plan was previously prepared in 2006 by LOA for the purpose of mitigation for this encroachment. Please see Appendix C for the full Riparian Mitigation and Monitoring Plan. If the project plans change so that additional encroachments are necessary, this document should be updated to cover mitigation for those additional encroachments.

3.3.9 Impacts to Ordinance Sized Trees

Impacts. A tree survey was not conducted for this report. Based upon observations during reconnaissance-level surveys, trees that appear to be ordinance-sized occur onsite. The trees are

distributed along the two seasonal drainage channels that border the site and a number of landscaped/ornamental trees are concentrated around the residence and throughout the undeveloped portion of the site. Although some large trees are located on the project site, the City lists none as heritage trees. Some trees are expected to be removed for this project. The removal of non-native trees would not constitute a significant impact to biotic resources under CEQA, but the City may require replacement plantings via the City's tree ordinance. Most of the native trees occur along the two drainage channels and none of these are proposed to be removed. The removal of more than a couple of native trees that occur outside the riparian areas might constitute a significant impact and this would require implementing the following mitigation. Even if the removal of trees is found to be less-than-significant, the City of San Jose is likely to require the applicant to plant replacement trees.

Mitigation. A report should be prepared that inventories the tree resources on site. This report should categorize trees according to size, species, location, and health. Once completed, the project should determine the number of trees to be removed (native and non-native) and a determination of significance should be made. The City is likely to require the applicant to replace lost trees whether the loss is significant under CEQA or not. A tree restoration plan should be developed for tree impacts that are found to be significant. This plan should:

- Identify the ratio, location and species to be planted.
- Suitable restoration sites on the project site should be identified.
- Ordinance trees should be replaced at a 5:1 ratio with small nursery stock such as tree pots 2.5" x 10". This 5:1 ratio is necessary to compensate for the habitat values lost while restored ordinance trees are maturing (a process taking many years. All planting should be done from November to January. Seedlings should be propagated from acorns on site to preserve the local genetic stock. The replacement trees should be installed in an environment suitable for their establishment and growth. These trees should be irrigated and maintained for a period of not less than three years. The spacing of these trees should allow development of a full, mature canopy.

3.3.10 Loss of Habitat for Native Wildlife

Potential Impacts. The riparian habitat along Norwood Creek and the un-named seasonal creek is considered sensitive and may provide added value of the site to native wildlife such as the pacific tree frog. The remainder of the study area consists of approximately 8.5 acres of ruderal grassland, which provides moderate-quality habitat for most species, and developed/landscaped

areas, which provides only low-quality habitat for most species. While development will result in the loss of habitat for some species (see sections on California tiger salamander and burrow owl), development will not constitute a significant impact under CEQA.

Mitigation. Project impacts to habitat for native wildlife will be less than significant. Mitigation measures are not warranted and are not required.

3.3.11 Interference with the Movement of Native Wildlife

Potential Impacts. The large amount of contiguous grasslands of the site may facilitate the movement of wildlife through the region, from the hills to the east of the site and through the project site itself, however, the surrounding land use is sparse residential houses and ranch land providing ample space for wildlife movement and there is denser development to the west in the City of San Jose, so this property does not function as an important movement corridor for native wildlife. Site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region. Therefore, the project will result in a less-than-significant impact on the movements of native wildlife.

Mitigation. Mitigation measures are not warranted.

3.3.12 Degradation of Water Quality in Seasonal Drainages and Downstream Waters

Potential Impacts. Site development can result in soils being left barren in the development footprint. Additionally, extensive grading often leaves the soils of construction zones barren of vegetation and, therefore, vulnerable to erosion. Eroded soil can be carried as sediment in seasonal creeks to be deposited in creek beds and adjacent wetlands.

Furthermore, the applicant is expected to comply with the provisions of a City of San Jose grading permit, including standard erosion control measures that employ best management practices (BMPs). Compliance with the permit(s) should result in no impact to water quality in seasonal creeks and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

3.3.13 Local Habitat Conservation Plans

Potential Impacts. Several species and habitats potentially impacted by this project will be covered by the HCP/NCCP including the golden eagle, California tiger salamander, California red-legged frog, and western burrowing owl. If this HCP were approved prior to site development, the project would be subject to the provisions addressed in this HCP.

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APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below have been observed on the study area during surveys conducted in June 2000 and June 2012. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland
+/- - Higher/lower end of category
NR - No review
NA - No agreement
NI - No investigation

ACERACEAE – Maple Family		
Acer saccharum	Sugar Maple	UPL
AIZOACEAE – Fig-Marigold Family		
Carpobrotus edulis	Iceplant	UPL
ANACARDIACEAE – Cashew Family		
Schinus molle	Peruvian Pepper Tree	UPL
Toxicodendron diversilobum	Poison Oak	UPL
APIACEAE – Carrot Family		
Conium maculatum	Western Poison Hemlock	FAC
Foeniculum vulgare	Sweet Fennel	FACU
ARALIACEAE - Aralia Family		
Hedrera helix	English Ivy	UPL
ASTERACEAE - Sunflower Family		
Centauria solstitialis	Yellow Star Thistle	UPL
Carduus pycnocephalus	Italian Thistle	UPL
Chamomilla suaveolens	Chamomille	UPL
Gnaphalium sp.	Cudweed	NI
Hypochaeris glabra	Smooth Cat's Ear	UPL
Lactuca serriola	Prickly Lettuce	FAC-
Picris echiodes	Bristly Ox Tongue	FAC*
Silybum marianum	Milk Thistle	UPL
Sonchus asper	Common Sow Thistle	NI*
BRASSICACEAE - Mustard Family		
Brassica nigra	Black Mustard	UPL
Erysimum sp.	Cultivated Wallflower	UPL
Hirschfeldia incanna	Summer Mustard	UPL
Raphanus sativus	Wild Radish	UPL
Rorippa nasturtium-aquatica	Water-cress	OBL

Sisymbrium irio	Tumble Mustard	UPL
BUDDLEJACEAE – Buddleja Family		
Buddleya davidii	Butterfly Bush	UPL
CACTACEAE – Cactus Family		
Opuntia occidentalis	Prickly Pear Cactus	UPL
CAPRIFOLIACEAE – Honeysuckle Family		
Sambucus nigra ssp. caerulea	Blue Elderberry	FAC
CONVOLVULACEAE – Morning Glory Family		
Convolvulus arvense	Field Bindweed	UPL
CRASSULACEAE – Orpine Family		
Crassula ovata	Jade Plant	UPL
CUPRESSACEAE – Cypress Family		
Cupressus sp.	Cypress	UPL
ERICACEAE – Heath Family		
Heteromeles arbutifolia	Toyon	UPL
FABACEAE - Legume Family		
Acacia decurrens	Acacia	UPL
Robinia pseudoacacia	Black Locust	FAC*
FAGACEAE – Oak Family		
Quercus agrifolia	Coast Live Oak	UPL
Quercus lobata	Valley Oak	FAC*
GERANIACEAE - Geranium Family		
Erodium cicutarium	Red-stemmed Filaree	UPL
Pelargonium sp.	Planted Geranium	UPL
HIPPOCASTANACEAE – Buckeye Family		
Aesculus californica	California Buckeye	UPL
LAMIACEAE – Mint Family		
Marrubium vulgare	Common Horehound	FAC
Rosemarinus sp.	Rosemary	UPL
LAURACEAE – Laurel Family		
Umbellularia californica	California Bay Laurel	FAC
LEMNACEAE – Duckweed Family		
Lemna sp.	Duckweed	OBL
LILIACEAE – Lily Family		
Agave sp.	Agave	UPL
Zantedeschia aethiopica	Calla Lily	OBL
MALVACEAE – Mallow Family		
Malva parviflora	Cheeseweed	UPL
Malvella leprosa	Alkali mallow	FAC*
MORACEAE – Fig Family		
Ficus carica	Edible Fig	UPL
MYRTACEAE – Myrtle Family		
Eucalyptus globulus	Blue Gum Eucalyptus	UPL
Eucalyptus polyanthemos	Silver Dollar Eucalyptus	UPL
NYCTAGINACEAE – Four-O'clock Family		
Bouganvileia sp.	Bouganvillea	UPL

PALMAE – Palm Family		
Washingtonia filifera	California Fan Palm	UPL
PAPAVERACEAE – Poppy Family		
Eschscholzia californica	California Poppy	UPL
Romneya coulteri	Matilija Poppy	UPL
PINACEAE – Pine Family		
Pinus sp.	Pine	UPL
PLUMBAGINACEAE – Leadwort Family		
Plumbago auriculata	Cape Leadwort	UPL
POACEAE - Grass Family		
Avena sativa	Wild Oat	UPL
Bromus catharticus	Rescue grass	UPL
Bromus diandrus	Ripgut	UPL
Bromus hordeaceus	Soft Chess	FACU
Bromus madritensis ssp. *rubens*	Red Brome	NI
Cortederia jubata	Pampas Grass	UPL
Cynodon dactylon	Bermuda Grass	FACW
Hordeum murinum ssp. *leporinum*	Barnyard Barley	NI
Festuca perennis	Italian Ryegrass	FAC*
Nasella pulchra	Purple Needlegrass	UPL
Polypogon monspeliensis	Annual Beard Grass	FACW+
Vulpia bromoides	Six-weeks Brome Grass	FACW
POLYGONACEAE - Buckwheat Family		
Polygonum arenastrum	Prostrate Knotweed	FAC
Rumex crispus	Curly Dock	FACW-
RHAMNACEAE – Buckbrush Family		
Baccharis pilularis	Coyote Bush	UPL
Baccharis Salicifolia	Mule Fat	FACW
ROSACEAE – Rose Family		
Prunus sp.	Fruit Tree	UPL
Prunus domestica	Plum	UPL
SALICACEAE - Willow Family		
Populus fremontii	Fremont's Cottonwood	FACW
Salix lasiolepis	Arroyo Willow	FACW
SCROPHULARIACEAE – Figwort Family		
Hebe speciosa	Hebe	UPL
Mimulus guttatus	Common Monkey Flower	OBL
SIMAROUBACEAE – Quassia Family		
Ailanthus altissima	Tree of Heaven	FACU
SOLANACEAE – Tobacco Family		
Nicotiana glauca	Tree Tobacco	FAC
Solanum sp.	Nightshade	FAC/FACU
STRELITZIACEAE – Bird of Paridise Family		
Strelitzia reginae	Bird of Paridise	-
TYPHACEAE – Cattail Family		

Typha angustifolia	Narrow-leaf Cattail	OBL
URTICACEAE – Nettle Family		
Urtica dioica ssp. *holosericea*	Stinging Nettle	FACW

APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY OCCUR ON THE STUDY AREA

The species listed below are those that may reasonably be expected to use the habitats of the study area. The list was not intended to include birds that are vagrants or occasional transients. Its purpose was rather to include those species that may be expected to routinely, and predictably, use the study area and adjacent canal and riparian habitats during some or all of the year. An asterisk designates those species observed during the June 2000 and June 2012 site visits.

CLASS: AMPHIBIA
ORDER: SALIENTIA (Toads and Frogs)
FAMILY: BUFONIDAE (True Toads
Western Toad (*Bufo boreas*)

CLASS: REPTILIA
ORDER: SQUAMATA (Lizards and Snakes)
SUBORDER: SAURIA (Lizards)
FAMILY: IGUANIDAE (Iguanids)
Western Fence Lizard (*Sceloporus occidentalis*)
FAMILY: SCINCIDAE (Skinks)
Western Skink (*Eumeces skiltonianus*)
FAMILY: COLUBRIDAE (Colubrids)
Ring-necked Snake (*Diadophis punctatus*)
Racer (*Coluber constrictor*)
Gopher Snake, (*Pituophis melanoleucus*)
Common Kingsnake (*Lampropeltis getulus*)
Common Garter Snake (*Thamnophis sirtalis*)
Western Terrestrial Garter Snake (*Thamnophis elegans*)
Night Snake (*Hypsiglena torquata*)
FAMILY: VIPERIDAE (Vipers)
Western Rattlesnake (*Crotalus viridis*)

CLASS: AVES
ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)
FAMILY: CATHARTIDAE (American Vultures)
Turkey Vulture (*Cathartes aura*)
FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)
White-tailed Kite (*Elanus leucurus*)
Northern Harrier (*Circus cyaneus*)
Sharp-shinned Hawk (*Accipiter striatus*)
Cooper's Hawk (*Accipiter cooperi*)
Red-shouldered Hawk (*Buteo lineatus*)

Red-tailed Hawk (*Buteo jamaicensis*)
Ferruginous Hawk (*Buteo regalis*)
Golden Eagle (*Aquila chrysaetos*)

FAMILY: FALCONIDAE (Caracaras and Falcons)

American Kestrel (*Falco sparverius*)
Merlin (*Falco columbarius*)
American Peregrine Falcon (*Falco. peregrinus anatum*)

ORDER: GALLIFORMES (Megapodes, Currassows, Pheasants, and relatives)

FAMILY: PHASIANIDAE (Quails, Pheasants, and Relatives)

Ring-necked Pheasant (*Phasianus colchicus*)

FAMILY: ODONTOPHORIDAE (New World Quails)

California Quail (*Callipepla californica*)

ORDER: CHARADRIIFORMES (Shorebirds, Gulls, and Relatives)

FAMILY: CHARADRIIDAE (Plovers and Relatives)

* Killdeer (*Charadrius vociferus*)

ORDER: COLUMBIFORMES (Pigeons and Doves)

FAMILY: COLUMBIDAE (Pigeons and Doves)

Rock Dove (*Columba livia*)
Mourning Dove (*Zenaida macroura*)

ORDER: STRIGIFORMES (Owls)

FAMILY: TYTONIDAE (Barn Owls)

Barn Owl (*Tyto albo*)

ORDER: CAPRIMULGIFORMES (Goatsuckers and relatives)

FAMILY: CAPRIMULGIDAE

Lesser Nighthawk (*Chordeiles acutipennis*)

ORDER: APODIFORMES (Swifts and Hummingbirds)

FAMILY: APODIDAE (Swifts)

Vaux's Swift (*Chaetura vauxi*)
White-throated Swift (*Aeronautes saxatalis*)

FAMILY: TROCHILIDAE (Hummingbirds)

Anna's Hummingbird (*Calypte anna*)
Rufous Hummingbird (*Selasphorus rufus*)

ORDER: PICIFORMES (Woodpeckers and Relatives)

FAMILY: PICIDAE (Woodpeckers and Wrynecks)

Acorn Woodpecker (*Melanerpes formicivorus*)
Red-breasted Sapsucker (*Sphyrapicus ruber*)
Nuttall's Woodpecker (*Picoides nuttallii*)
Downy Woodpecker (*Picoides pubescens*)
Northern Flicker (*Colaptes auratus*)

ORDER: PASSERIFORMES (Perching Birds)

FAMILY: TYRANNIDAE (Tyrant Flycatchers)

Western Wood-Pewee (*Contopus sordidulus*)
Pacific-slope Flycatcher (*Empidonax difficilis*)
Black Phoebe (*Sayornis nigricans*)

Say's Phoebe (*Sayornis saya*)
Ash-throated Flycatcher (*Myiarchus cinerascens*)
Western Kingbird (*Tyrannus verticalis*)

FAMILY: ALAUDIDAE (Larks)

Horned Lark (*Eremophila alpestris*)

FAMILY: HIRUNDINIDAE (Swallows)

Tree Swallow (*Tachycineta bicolor*)
Violet-green Swallow (*Tachycineta thalassina*)
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)
*Cliff Swallow (*Petrochelidon pyrrhonota*)
Barn Swallow (*Hirundo rustica*)

FAMILY: CORVIDAE (Jays, Magpies, and Crows)

Western Scrub Jay (*Aphelocoma californica*)
American Crow (*Corvus brachyrhynchos*)
Common Raven (*Corvus corax*)

FAMILY: PARIDAE (Titmice)

Chestnut-backed Chickadee (*Parus rufescens*)
Oak Titmouse (*Baeolophus inornatus*)

FAMILY: AEGITHALIDAE (Bushtit)

Bushtit (*Psaltriparus minimus*)

FAMILY: SITTIDAE (Nuthatches)

White-breasted Nuthatch (*Sitta carolinensis*)

FAMILY: CERTHIIDAE (Creepers)

Brown Creeper (*Certhia americana*)

FAMILY: TROGLODYTIDAE (Wrens)

Bewick's Wren (*Thryomanes bewickii*)
House Wren (*Troglodytes aedon*)

FAMILY: MUSCICAPIDAE (Old World Warblers, Gnatcatchers, Kinglets, Thrushes, Bluebirds, and Wrentit)

Ruby-crowned Kinglet (*Regulus calendula*)
Western Bluebird (*Sialia mexicana*)
American Robin (*Turdus migratorius*)

FAMILY: MIMIDAE (Mockingbirds and Thrashers)

Northern Mockingbird (*Mimus polyglottos*)
California Thrasher (*Toxostoma redivivum*)

FAMILY: MOTACILLIDAE (Wagtails and Pipits)

American Pipit (*Anthus rubescens*)

FAMILY: BOMBYCILLIDAE

Cedar Waxwing (*Bombycilla cedrorum*)

FAMILY: PTILOGONATIDAE (Silky Flycatchers)

Phainopepla (*Phainopepla nitens*)

FAMILY: LANIIDAE (Shrikes)

Loggerhead Shrike (*Lanius ludovicianus*)

FAMILY: STURNIDAE (Starlings)

European Starling (*Sturnus vulgaris*)

FAMILY: VEREONIDAE (Typical Vireos)

Hutton's Vireo (*Vireo huttoni*)

FAMILY: EMBERIZIDAE (Wood Warblers, Sparrows, Blackbirds, and relatives)

Yellow-rumped Warbler (*Dendroica coronata*)
Hermit Warbler (*Dendroica occidentalis*)
Common Yellowthroat (*Geothlypis trichas*)
Western Tanager (*Piranga ludoviciana*)
Black-headed Grosbeak (*Pheucticus melanocephalus*)
California Towhee (*Pipilo crissalis*)
Rufous-crowned Sparrow (*Aimophila ruficeps*)
Lark Sparrow (*Chondestes grammacus*)
Savannah Sparrow (*Passerculus sandwichensis*)
Grasshopper Sparrow (*Ammodramus savannarum*)
Fox Sparrow (*Passerella iliaca*)
Song Sparrow (*Melospiza melodia*)
Golden-crowned Sparrow (*Zonotrichia atricapilla*)
White-crowned Sparrow (*Zonotrichia leucophrys*)
Dark-eyed Junco (*Junco hyemalis*)
Red-winged Blackbird, (*Agelaius phoeniceus*)
Western Meadowlark (*Sturnella neglecta*)
Brewer's Blackbird (*Euphagus cyanocephalus*)
Northern Oriole (*Icterus galbula*)

FAMILY: FRINGILLIDAE (Finches)

House Finch (*Carpodacus mexicanus*)
Lesser Goldfinch (*Carduelis psaltria*)
American Goldfinch (*Carduelis tristis*)

FAMILY: PASSERIDAE (Weaver Finches)

House Sparrow, (*Passer domesticus*)

CLASS: MAMMALIA

ORDER: MARSUPIALIA (Opossums, Kangaroos, and Relatives)

FAMILY: DIDELPHIDAE (Opossums)

Virginia Opossum (*Didelphis virginiana*)

ORDER: INSECTIVORA (Shrews and Moles)

FAMILY: SORICIDAE (Shrews)

Ornate Shrew (*Sorex ornatus*)

FAMILY: TALPIDAE (Moles)

Broad-footed Mole (*Scapanus latimanus*)

ORDER: CHIROPTERA (Bats)

Yuma Myotis (*Myotis yumanensis*)
Long-eared Myotis, (*Myotis evotis*)
California Myotis (*Myotis californicus*)
Western Pipistrelle (*Pipistrellus hesperus*)
Big Brown Bat (*Eptesicus fuscus*)
Western Red Bat (*Lasiurus blossevillii*)
Hoary Bat (*Lasiurus cinereus*)

Townsend's Big-eared Bat (*Plecotus townsendii*)
Pallid Bat (*Antrozous pallidus*)

FAMILY: MOLOSSIDAE (Free-tailed Bat)

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)
Western Mastiff Bat (*Eumops perotis*)

ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)

FAMILY: LEPORIDAE (Rabbits and Hares)

Desert Cottontail (*Sylvilagus audubonii*)
Black-tailed (Hare) Jackrabbit (*Lepus californicus*)

ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)

FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)

California Ground Squirrel (*Spermophilus beecheyi*)

FAMILY: GEOMYIDAE (Pocket Gophers)

Botta's Pocket Gopher (*Thomomys bottae*)

FAMILY: HETEROMYIDAE (Pocket Mice and Kangaroo Rats)

California Pocket Mouse (*Chaetodipus californicus*)

FAMILY: CRICETIDAE (Deer Mice, Voles, and Relatives)

Western Harvest Mouse (*Reithrodontomys megalotis*)
California Mouse (*Peromyscus californicus*)
Deer Mouse (*Peromyscus maniculatus*)
California Vole (*Microtus californicus*)

FAMILY: MURIDAE (Old World Rats and Mice)

Black Rat (*Rattus rattus*)
Norway Rat (*Rattus norvegicus*)
House Mouse (*Mus musculus*)

ORDER: CARNIVORA (Carnivores)

FAMILY: CANIDAE (Foxes, Wolves, and Relatives)

Coyote (*Canis latrans*)
Red Fox (*Vulpes vulpes*)

FAMILY: PROCYONIDAE (Raccoons and Relatives)

Raccoon (*Procyon lotor*)

FAMILY: MUSTELIDAE (Weasels, Badgers, and Relatives)

Long-tailed Weasel (*Mustela frenata*)
Badger (*Taxidea taxus*)
Striped Skunk (*Mephitis mephitis*)

FAMILY: FELIDAE (Cats)

Bobcat (*Lynx rufus*)
Domestic Cat (*Felis cattus*)

ORDER: ARTIODACTYLA

FAMILY: SUIDAE (Pigs)

Wild pig (*Sus scofa*)

FAMILY: CERVIDAE (Deer, Elk, and Relatives)

Black-tailed deer (*Odocoileus heminonus columbianus*)

APPENDIX C: RIPARIAN MITIGATION AND MONITORING PLAN

LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

SPRINGBROOK SUBDIVISION RIPARIAN MITIGATION AND MONITORING PLAN, CITY OF SAN JOSE, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick A. Hopkins, Ph.D., Principal and Senior Wildlife Ecologist
Pamela Peterson, M.S. Candidate, Project Manager/Plant and Wetland Ecologist

Prepared for:

Richard and Angie Ceraolo

3698 Norwood Avenue
San Jose, CA 95148

May 2, 2006 Project 218-05

TABLE OF CONTENT

1.0 INTRODUCTION

Live Oak Associates, Inc. (LOA) has developed a Riparian Mitigation and Monitoring Plan for 5250 square feet (0.12 acres) of riparian corridor encroachment into a 75-foot riparian setback along Norwood Creek within the approximately 25.69-acre Springbrook Subdivision project site (hereafter referred to as the study area or site) located in the City of San Jose, Santa Clara County, California. Elements of the Mitigation and Monitoring Plan include a Vegetation Enhancement Plan, Maintenance Plan, Monitoring Plan, and Adaptive Management Plan. A description of the project, existing conditions of the site, and the individual elements of the Plan are discussed in detail in the following sections.

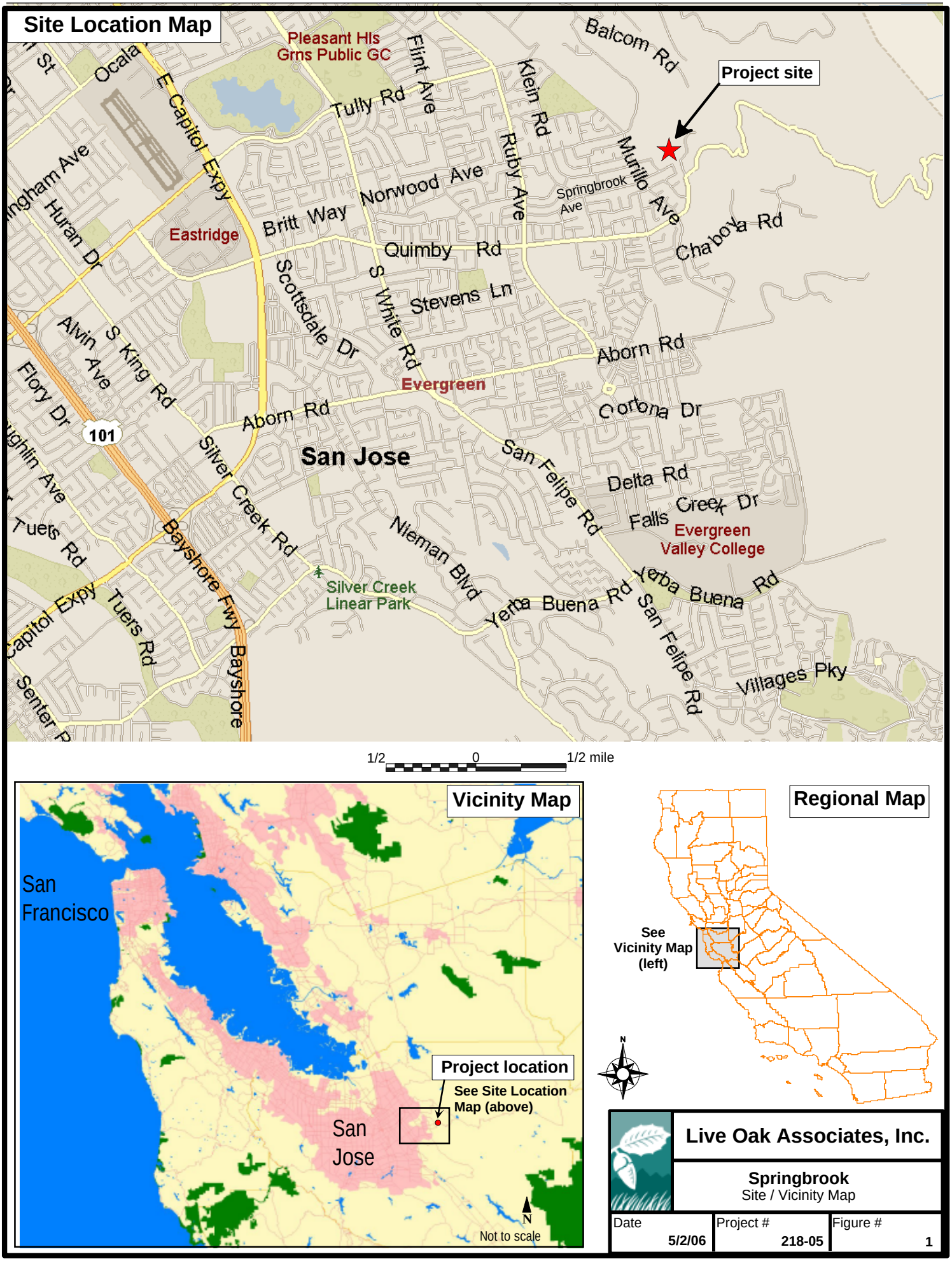
1.1 Project Location

The site is located on the north side of Quimby Road, northeast of its intersection with Olivetti Road (Figure 1). The site currently consists of ruderal non-native annual grassland habitat and rural residential development. Norwood Creek, with an associated narrow band of riparian vegetation border the study area to the west. An access road (i.e., driveway) for the existing residential development bisects the study site.

1.2 Project Description

According to the Conceptual Site Plan provided by HMH Engineers dated June 7, 2005, the proposed project will consist of the construction of six new homes on the southerly portion of the approximately 25.69-acre parcel. These six houses will be built on an area of approximately 7 acres. In addition, two residences will be removed, and the proposed work will result in the extraction of hardscape (paved driveway) and landscaped vegetation along this reach of Norwood Creek. The proposed project will also consist of development of a road easement that will extend north from the new cul-de-sac to connect with an existing bridge over Norwood Creek (Figure 2).

The project also includes a 75-foot riparian setback from the top of the bank or the dripline of riparian trees, whichever is greater, as required under the City of San Jose's Riparian Corridor Policy. However, the project as currently proposed will result in 5250 square feet (0.12 acres) of


Site Location Map
Project site
Pleasant Hls Grns Public GC
Balcom Rd
Tully Rd
Flint Ave
Klein Rd
Ruby Ave
Murillo Ave
Springbrook Ave
Norwood Ave
Britt Way
Eastridge
Quimby Rd
Chaboya Rd
Scottsdale Dr
S White Rd
Stevens Ln
Aborn Rd
Evergreen
Cortona Dr
San Jose
San Felipe Rd
Delta Rd
Falls Creek Dr
Evergreen Valley College
Silver Creek Rd
Nieman Blvd
Silver Creek Linear Park
Yerba Buena Rd
Villages Pky
Bayshore Fwy
Capitol Expy
Tuers Rd
Alvin Ave
S King Rd
Flory Dr
Huran Dr
Ingham Ave
Tuers Rd
101
1/2
0
1/2 mile
Vicinity Map
San Francisco
Project location
See Site Location Map (above)
San Jose
N
Not to scale
Regional Map
See Vicinity Map (left)
N
Live Oak Associates, Inc.
Springbrook
Site / Vicinity Map
Date
5/2/06
Project #
218-05
Figure #
1

100 feet 0 100 feet
approximate scale

N

URBAN GROWTH BOUNDARY / URBAN SERVICE AREA

660 SF OF VEGETATION ENHANCEMENT AREA

EXISTING 40' ROAD EASEMENT

15% SLOPE LINE

LOT 5 (±123,123SF)

LOT 6 (±57,585SF)

EXISTING 40' ROAD EASEMENT

LANDS OF LIGHT OF THE WORLD APOSTOLIC CHURCH

EXISTING BRIDGE

2,000 SF OF VEGETATION ENHANCEMENT

LOT 4 (±15,127SF)

75' RIPARIAN SETBACK

40' PUBLIC ROAD

LOT 3 (±29,181SF)

LOT 2 (±12,780SF)

LOT 1 (±14,061F)

EXISTING 40' ROAD EASEMENT

LANDS OF DICKERSON

LANDS OF CHAPMAN

LANDS OF AQUINO

CANYON RIDGE DRIVE

SPRINGBROOK AVENUE

LANDS OF THE S.C.V.W.D.

LEGEND

EXISTING	PROPOSED	
		PROJECT BOUNDARY
		RIGHT OF WAY
		LOT LINE
		EASEMENT
		CENTER LINE
		STORM DRAIN
		SANITARY SEWER
		WATER
		DRAINAGE SWALE
		LIMIT OF ROUGH GRADING
		CONTOUR LINE (MAJOR/MINOR)
		BENCH WITH SWALE
		RETAINING WALL (5' MAX)
		DEBRIS FENCE
		OVERLAND RELEASE
		OUTFALL
		FIELD INLET
		STORM MANHOLE
		STANDARD CURB INLET
		LARGE CURB INLET
		TYPE "GOLF" INLET

Source:
Base map courtesy of HMH Engineers

Live Oak Associates, Inc.

Springbrook
Site Plan

Date	Project #	Figure #
12/29/05	218-05	2

encroachment into this riparian setback. Elements of the project resulting in some encroachment into the setback include a portion of a new road from the eastern boundary of the parcel, the northwestern corner of Lot #5, and a new easement road that will connect with the existing bridge over Norwood Creek. The mitigation for this type of riparian habitat (of moderate value), per the Mitigated Negative Declaration (MND) that has been approved by the City for this project, calls for a 1:1 encroachment:enhancement ratio. Therefore, an area of 5250 square feet (0.12 acres) of currently ruderal habitat adjacent to the existing riparian habitat of Norwood Creek, within the riparian setback, will be planted with riparian flora native to the area.

Two areas were chosen to accomplish this enhancement. Area A, comprising 2309 square feet (0.05 acres) occurs adjacent to the existing riparian corridor of Norwood Creek in the western portion of the site, and Area B, comprising 2945 square feet (0.07 acres), occurs adjacent to the existing corridor in the eastern portion of the site. The encroachment and enhancement areas are illustrated in Figure 2.

Approximate Project Boundary

Area "A"
2,309 sq. ft.

Area "B"
2,945 sq. ft.

Edge of Riparian Corridor

75' Riparian Setback Line

Approximate Project Boundary

POOL

1

2

3

4

LEGEND

Encroachmet Area

Enhancement Area

Photo Point
with direction of view

Source:
Base map courtesy of HMH Engineers

N

100 feet 0 100 feet
approximate scale

Live Oak Associates, Inc.

Springbrook
Riparian Encroachment and Enhancement

Date	Project #	Figure #
12/29/05	218-05	3

1.3 Existing Conditions

Three biotic habitats have been identified on the study area and these include non-native grassland/ruderal, developed/landscaped, and riparian/seasonal creek. These are discussed in greater detail below.

The most extensive biotic habitat of the study area is non-native grassland/ruderal. Weedy grasses and forbs of European origin dominated the vegetation. Grasses observed in this habitat during the site survey conducted by LOA in June of 2000 included perennial ryegrass (*Lolium perenne*), wild oats (*Avena sativa*), ripgut (*Bromus diandrus*), soft chess (*Bromus hordeaceus*) and barnyard barley (*Hordeum murinum* ssp. *leporinum*). Dominant forbs observed included prickly lettuce (*Lactuca serriola*), common horehound (*Marrubium vulgare*), Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus sativus*), and black mustard (*Brassica nigra*). Scattered shrubs of coyote bush (*Baccharis pilularis*) and various fruit trees (avocado, persimmon, nectarine, etc.) are scattered throughout the grasslands of the study area.

Developed/landscaped areas on the site include a dirt road, a parking area, and two residences. Ornamental trees within the landscaped portions of the site included, but were not limited to, deodar cedar (*Cedrus deodara*), blue gum eucalyptus (*Eucalypatus globulus*), pine (*Pinus* sp.), Mexican fan palm (*Washingtonia filifera*), and green wattle (*Acacia decurrens*). The understory was composed of a variety of ornamental shrubs and herbs including prickly pear cactus (*Opuntia occidentalis*), pampas grass (*Cortederia jubata*), toyon (*Heteromeles arbutifolia*), butterfly bush (*Buddleja davidii*), rosemary (*Rosemarinus* sp.), periwinkle (*Vinca major*), and matilija poppy (*Romneya coulteri*), to name a few.

Norwood Creek borders the site on the west. Relatively large coast live oaks (*Quercus agrifolia*) and California bay laurels (*Umbellularia californica*) were identified along the creek and the average width at ordinary high water (OHW) was approximately 12 to 15 feet. Hydrophytic (water-loving) species identified along Norwood Creek include blue elderberry (*Sambucus mexicana*), wild cucumber (*Marah fabaceous*), narrow-leaved cattail (*Typha angustifolia*),

stinging nettle (*Urtica dioica* ssp. *holericea*), calla lily (*Zantedeschia aethiopica*) and rabbit's-foot grass (*Polypogon monspeliensis*).

2.0 VEGETATION ENHANCEMENT PLAN

A Vegetation Enhancement Plan has been developed to mitigate for 0.12 acres of encroachment into the 75-foot riparian setback and for the removal of one ordinance-size tree. This element of the Mitigation and Monitoring Plan includes recommendations on the species composition and planting numbers to be utilized within the enhancement areas. This element of the Plan also discusses requirements for irrigation, wildlife browsing protection, weed protection, and ongoing maintenance activities. These aspects are discussed in detail below.

2.1 Species Composition and Planting Numbers

To determine the species composition and the number of trees and shrubs to be utilized in the riparian enhancement, a field survey was conducted within existing riparian habitat on the site on September 8, 2005. A belt transect 150 feet long by 20 feet wide (totaling 3000 square feet in area) was run parallel to the edge of the low flow channel on the north side of Norwood Creek. This area was chosen as it was the least disturbed riparian area of the creek within the site, and was dominated by native riparian vegetation. All trees and shrubs occurring within the belt transect were tallied according to species. Results of the field survey are included in Table 1.

Table 1. Species and numbers of riparian trees and shrubs found within the 3000 square foot belt transect in the existing riparian corridor of Norwood Creek.

Species	Scientific Name	Number Tallied
Coast Live Oak	*Quercus agrifolia*	7
Holly-leaf Cherry	*Prunus ilicifolia*	8
Blue Elderberry	*Sambucus mexicanus*	6
California Bay Laurel	*Umbellularia californica*	4
Snowberry	*Symphoricarpos albus* ssp. *laevigatus*	5

Information gathered in the field was then utilized to determine the species and number of plantings to be used in the enhancement. Because some plant mortality is to be expected, the planting densities provided include an expected mortality factor of 20% over the course of the 5-year monitoring period. Table 2 below provides the total number of each species to be planted for the enhancement, and the planting stock size to be used in Area A and Area B of the enhancement area. Additionally, appropriate alternate species are noted that would be suitable for the riparian enhancement if the original indicated species are not available at the time of the

enhancement plantings. The alternative species' indicated are all species that would be expected to occur within riparian areas in the site's immediate vicinity.

Table 2. Plant species, number to be planted, and planting stock size to be utilized in the enhancement Areas A and B.

Species	Total Plantings*	Area A	Area B	Planting Stock	Appropriate Alternate Species
Coast Live Oak	15	7	8	One Gallon	Valley Oak (*Quercus lobata*)
Holly-leaf Cherry	15	7	8	One Gallon	California Buckeye (*Aesculus californicus*)
Blue Elderberry	13	6	7	One Gallon	Toyon (*Heteromeles arbutifolia*) Coffeeberry (*Rhamnus californica*)
California Bay Laurel	8	4	4	One Gallon	California Buckeye (*Aesculus californicus*)
Snowberry	10	4	6	One Gallon	California Blackberry (*Rubus ursinus*)
Total	61	28	33		

*Includes 20% additional plantings to compensate for expected mortality

2.2 Plant Installation

Planting stock for the revegetation should be collected locally (within a 10-mile radius of the project site) to the extent possible in order to maintain genetic integrity of the species naturally occurring in the vicinity of the project site. Installation of new plantings should be completed during the period between November and January. Once installation of the plants is completed, the restoration ecologist will be provided with the as-built installation plans to confirm that they are consistent with the planting plan. If a species that is called for in the planting plan, and the appropriate alternate species indicated in Table 2, are not available, the restoration ecologist will be consulted to provide recommendations for appropriate alternate replacement species.

Irrigation, wildlife browsing protection and weed barrier protection will be put in place for each planting at the time of the planting installation.

Figure 4 indicates the location of all trees and shrubs to be planted in the enhancement areas (Area A and Area B).

2.3 Maintenance Plan

The enhancement areas will be maintained throughout the five-year monitoring period. Elements of the Maintenance Plan are described below.

Approximate Project Boundary

Area "A"

Area "B"

Edge of Riparian Corridor

75' Riparian Setback Line

LEGEND

- Encroachmet Area
- Enhancement Area
- Coast Live Oak
- Holly-leaf Cherry
- Blue Elderberry
- California Bay Laurel
- Snowberry

Source:
Base map courtesy of HMH Engineers

50 feet 0 50 feet
approximate scale

Live Oak Associates, Inc.

Springbrook
Planting Plan

Date	Project #	Figure #
5/2/06	**218-05**	**4**

Irrigation. Riparian tree and shrub species included in the installation will be irrigated for no less than three years from the time of initial installation. Should replacement plantings be required, replacement plantings will be irrigated for the appropriate period following their installation. The irrigation period may be extended based on results of the annual monitoring should the monitoring indicate that it is required for plant establishment.

The condition of the irrigation system will be monitored quarterly during the required irrigation period and will be repaired as needed.

Protection from Wildlife Browsing and Weeds. The condition of wildlife browsing protection devices and weed barrier protection devices will be monitored semi-annually and repaired as needed.

Any non-native herbaceous vegetation occurring within a three-foot radius of any of the enhancement plantings will be removed by hand on a semi-annual basis during the five year monitoring period.

Semi-annual Maintenance Report. A quarterly report describing maintenance activities that have occurred on the enhancement area will be prepared and provided to the restoration ecologist responsible for monitoring the area. This information will be incorporated into the annual monitoring report.

3.0 MONITORING PLAN

The success of the riparian enhancement will be monitored by a qualified restoration ecologist annually for a 5-year period once it has been determined that the installation is consistent with the Vegetation Enhancement Plan during the Year 0 monitoring. Elements measured as part of the Monitoring Plan will include a tally by species of all surviving plantings, as well as an assessment of each plantings vigor/health and survivorship. Results of the annual monitoring will be compared against a set of performance criteria for each element measured. In cases where the results fall short of the performance criteria, an Adaptive Management Plan has also been included in this Mitigation and Monitoring Plan (see Section 4.0). An annual monitoring report will be completed and provided to the City of San Jose at the end of the annual monitoring period. Elements of the Monitoring Plan, including the methods, performance criteria, Adaptive Management Plan and annual report, are discussed in more detail in the following sections.

3.1 Monitoring Methods

Installed plantings will be monitored annually by a qualified restoration ecologist in the spring or early summer between April 15 and July 15 (during peak bloom season when most plant species are easiest to identify) for a 5-year period. Annual monitoring will begin with the Year 0 collection of baseline data immediately following installation of the new plantings. The Year 0 baseline monitoring will then be utilized to ensure that the installation has been completed as per the Vegetation Enhancement Plan and to establish each subsequent year's performance criteria.

Year 0 Baseline Monitoring. During the Year 0 monitoring in the spring immediately following the planting of the enhancement areas, a tally of all newly installed plantings by species will be made. This information will then be compared against the recommended planting numbers in the Vegetation Enhancement Plan to ensure that plantings were done as per the plan. If planting numbers fall below those required in the plan, additional plantings will be done the following fall to make up any differences.

Riparian Tree and Shrub Health/Vigor. The health/ vigor of all installed riparian trees or shrubs occurring over the line transect will be assessed along the following scale:

High = 1-3 = 67-100% healthy foliage and bark
Medium = 4-6 = 34-66% healthy foliage and bark
Low = 7-9 = 0-33% healthy foliage and bark
Dead = 10

Taken into consideration in the qualitative observation of health and vigor will be foliage color, bud development, new growth, herbivory, drought stress, fungal/insect infestation, and physical damage. If a tree or shrub's foliage is abnormally sparse, then the health and vigor rating will be lowered accordingly, even if the foliage present is healthy.

Riparian Tree and Shrub Survivorship. All trees and shrubs planted within the enhancement area will be tallied by species. Any naturally-recruited riparian trees and shrubs within the enhancement area will be tallied by species separately. Naturally-recruited native riparian trees and shrubs occurring within either Area A or Area B, although tallied separately, can be used to off-set mortality of the enhancement plantings at the restoration ecologist's discretion. This will be acceptable if the naturally-recruited species is determined to provide the same ecological value as those species originally included in the enhancement.

Photo documentation. Photo documentation of the enhancement area will be included in the annual monitoring report. This will be accomplished by taking photos at the four established photo points indicated on the planting plans, two for each enhancement area.

3.2 Performance Criteria

Specific annual incremental and final performance criteria have been developed for each of the measured elements. Failure to meet any of the final 5-Year performance criteria will result in an extension of the monitoring period until that particular criterion is met. The performance criteria are discussed in more detail below.

Riparian Tree and Shrub Mean Health/Vigor and Survivorship. Incremental and final performance criteria for mean health/vigor and survivorship of riparian trees and shrubs are provided in Table 2. The mean health and vigor ratings and survivorship criteria will need to be met individually in both Areas A and B.

Should the performance criteria for mean health/vigor and survivorship not be met in either Area A or Area B, the adaptive management strategies discussed in Section 4.0 will be implemented.

Planting numbers in the Revegetation Plan include an expected mortality of 20% over the 5-year monitoring period. It is expected that most of this mortality will occur in the initial three-year monitoring period as plants become established. This is reflected in the performance criteria for riparian tree and shrub survivorship. Should the performance criteria for survivorship not be met, adaptive management strategies discussed in Section 4.0 will be implemented.

Table 3. Incremental and final performance criteria for percent cover, mean health/vigor ratings, and survivorship.

Measurement	**Yr 0**	**Yr 1**	**Yr 2**	**Yr 3 – Yr 4**	**Yr 5 Final Performance Criteria**
Mean Health and Vigor Rating for Riparian Trees and Shrubs	Baseline	1-5	1-4	1-3	1-3
Riparian Tree and Shrub Survivorship	Baseline	95% of Baseline	90% of Baseline	80% of Baseline	80% of Baseline

Should the final performance criteria for mean health and vigor and/or survivorship not be met during Year 5 in either Area A or Area B, new plantings will be installed as necessary to meet the criteria in the area not meeting the criteria, and the annual monitoring will continue in that area until the performance criteria are met.

4.0 ADAPTIVE MANAGEMENT PLAN

Should the results of the annual monitoring fall below the incremental performance criteria indicated in Section 3.0 above, then the adaptive management strategies indicated below will be implemented.

Mean Riparian Tree and Shrub Health/Vigor, and Riparian Tree and Shrub Survivorship. Should the performance criteria for mean riparian tree and shrub health/vigor, and/or riparian tree and shrub survivorship not be met in either Area A or Area B, the following actions will be taken.

- The irrigation system will be evaluated for necessary repairs.
- The irrigation schedule will be evaluated for necessary adjustments.
- The need for additional wildlife browsing protection and/or weed barrier protection will be assessed.
- New plantings will be installed during the fall immediately following the monitoring period sufficient to meet the performance criteria in the next monitoring year. The number and species to be planted will be determined by the Restoration Ecologist.

Any performance criteria not met during the monitoring period and all adaptive management actions to be taken to rectify the situation will be discussed in the annual monitoring report.

5.0 ANNUAL MONITORING REPORT

At the end of each annual monitoring period, including the Year 0 baseline monitoring, a monitoring report will be completed by the Restoration Ecologist and submitted to the City of San Jose for their review.

For the Year 0 baseline monitoring, elements contained in the report will include the following:

- The final planting plan and the as-built plans (if different from the final planting plan). If inconsistencies were found between the two during the baseline monitoring, then the report will also include any additional plantings to be installed the following fall to make up the difference.
- Baseline results of the Year 0 monitoring.
- Photo documentation.

For the Year 1 through Year 5 monitoring, elements contained in the report will include the following:

- Monitoring results.
- A discussion of any performance criterion that was not met and any adaptive management strategies to be employed (i.e. additional plantings to be done, weeding activities to be implemented, adjustments to the irrigation schedule, etc.).
- A map showing the locations of all plantings to be removed and replaced.
- A discussion of all maintenance activities conducted on the enhancement area during the prior year.
- Photo documentation.

GEOLOGIC/SEISMIC INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA
APN 654-03-009

For

MR. RICHARD CERAOLO
5579 MORNINGSIDE DRIVE
SAN JOSE, CALIFORNIA 95138

By
TERRASEARCH, Inc.

Project No. 8567.G
8 June 2001

Environmental • Geotechnical • Special Inspections • Materials Testing

TERRASEARCH INC.

SERVING NORTHERN CALIFORNIA SINCE 1969

Project No. 8567.G
8 June 2001

GEOTECHNICAL

GEOLOGICAL

ENVIRONMENTAL

SPECIAL INSPECTIONS

MATERIALS TESTING

SAN JOSE:
6840 Via Del Oro
Suite 110
San Jose, CA 95119
(408) 362-4920
Fax: (408) 362-4926

DUBLIN:
11840 Dublin Blvd.
Dublin, CA 94568
(925) 833-9297
Fax: (925) 833-9548

FREMONT:
43353-B Osgood Rd.
Fremont, CA 94538
(510) 413-0100
Fax: (510) 413-0101

SACRAMENTO:
4200 N. Freeway Blvd.
Suite 2
Sacramento, CA 95834
(916) 564-7809
Fax: (916) 564-7672

Mr. Richard Ceraolo
5579 Morningside Drive
San Jose, CA 95138

Subject: 5-Acre Portion of Parcel (APN's 654-03-009)
3698 Norwood Avenue
San Jose, California
GEOLOGIC INVESTIGATION

Dear Mr. Ceraolo:

In accordance with your authorization dated May 22, 2001, Terrasearch, Inc. has performed a preliminary geologic investigation of a 5-acre portion of the Lands of Stewart, located at the southeast end of parcel APN 654-003-009. This geologic investigation was in response to the City of San Jose Planning Office's permit application requirements for a proposed lot-split and residential development of the lands currently under consideration for development.

Our investigation did not reveal any geologic conditions or materials that would preclude development of the subject property. The findings of this report are for the geologic fault assessment of the 5-acres under investigation for this study and are not intended for the geologic or geotechnical evaluation or development of any other portion of the 24-acre property.

TERRASEARCH appreciates the opportunity to be of services to you on this project and looks forward to working with you in the future. If you have any questions concerning this report, please contact us at your convenience.

Reviewed By:

George Makdissy, P.E.
Senior Engineer

Very truly yours,
TERRASEARCH, Inc.

Warham Stejer, CEG #1905
Engineering Geologist

Copies: 6 to Mr. Ceraolo

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GEOLOGIC INVESTIGATION

PURPOSE AND SCOPE

The purpose of this investigation was to evaluate the geologic conditions and materials in the area currently under consideration for development and look for the presence or absence of the Quimby Fault.

This assessment was performed as part of the City of San Jose Planning Office's permit application requirements for a proposed lot-split and residential development of 5-acre portion of parcel APN 654-3-009, located in the east foothills of San Jose. It is our understanding that the City of San Jose Public Works Department is requiring that a geologic fault hazard investigation of the subject site be completed prior to evaluating the proposed residential development application.

The scope-of-services for this investigation was developed to meet the specific requirements of this project and the site screening criteria outlined in California Division of Mines and Geology (CDMG) Special Publication 117 (1997). Our scope-of-services included the following tasks:

a) Review of reasonably available published and unpublished geologic references and maps pertinent to the site;

b) Stereoscopic examination of multiple sets of aerial photographs of the site;

c) Surface geologic mapping of the site;

d) Excavation and logging of four exploratory trenches; and

e) Preparation of this report.

SITE LOCATION AND DESCRIPTION

The area under study for this investigation is a 5-acre parcel of land located on the southeast side of Norwood Creek, northeast of the creek's confluence with Santa Clara Valley (See Figure 2).

The site is located in the southwest corner of Section 10, Township 7 south, Range 2 east of United States Geological Survey (USGS) 7.5 minute San Jose East quadrangle at an average elevation of approximately 560 feet above sea level.

SITE GEOLOGY

The site is situated on a topographically irregular southwest-facing slope of the San Jose East Foothills. The original topographic relief at the site has been modified by past grading activity. The existing slopes range from locally flat to moderately steep (>10:1 to <2:1 horizontal to vertical, respectively).

Access to the site is provided by a private driveway that comes off the east side of Murillo Avenue. The site is bordered on the north, east, south, and west by Norwood Creek, East foothills, Quimby Creek, and a flood retention basin, respectively. Currently the site is occupied by a single-family residence, barn, outbuildings, and two mobile homes.

The northeasterly portion of the study area has been landscaped with ornamental vegetation and non-native trees. The southeasterly portion of the site is occupied by open land, an abandoned (dry) fishpond, fill supporting a former horse-riding rink, and an access road. This area is primarily vegetated with annual grasses, brush, and abandoned fruit trees.

According to an untitled and undated topographic map, the elevation change across the 5-acres of land examined in this study is approximately 50 feet. The site topography has

been moderately to substantially modified by cuts and fills made for the construction of the existing site improvements.

REGIONAL GEOLOGY

The site is located near the base of the east foothills of San Jose, on the west flank of the Diablo Mountain Range. This range of mountains was formed by an uplifted block of complexly folded and faulted marine and terrestrial rocks of Jurassic to Quaternary age.

The Diablo Mountain Range along with Santa Clara Valley, THE Santa Cruz Mountains, and San Francisco Bay are part of the Coast Range Mountains. The Coast Range Mountains extend through northern and central California and make up one of nine geomorphic provinces in the State.

In the San Francisco Bay Area the Coast Range, geomorphic province is seismically impacted by several regional fault systems. The largest and most active of these faults are the San Andreas, Hayward, and Calaveras. In the vicinity of the site, the Quimby Fault is associated with the Hayward Fault Zone.

Geologic mapping by Dibblee, 1972 and Cooper-Clark Associates, 1974 indicate the northeast corner of the site is underlain by Cretaceous age Berryessa Formation (marine shale, sandstone, and conglomerate). The southwest portion of the site is underlain by late Quaternary age alluvial fan deposits (interbedded sands and gravels).

Geologic maps prepared by Rogers and Williams in 1974 indicate the northeast end of the site is underlain by Cretaceous age undivided sandstone and shale. The southwest portion of the site is underlain by fine-grained sand, silt, and gravel alluvial fan deposits.

Landslide mapping by the County of Santa Clara indicates that the northern most corner of the 5-acre section of land examined for this investigation is within the County's Ds zone (area of high potential for earthquake-induced landslides). Geologic maps prepared

by Dibblee, 1972 and Cooper-Clark Associates, 1974 do not show any landslides within the limits of the study area.

Geologic mapping by Dibblee, 1972; Rogers and Williams, 1974; and Cooper-Clark Associates, 1974 appear to indicate that the Quimby Fault may cross the southern end of the 5-acre section of land examined for this investigation. Fault zone mapping by the County of Santa Clara indicates that this 5-acre section of land is not within a County Dr zone (areas of high potential for ground displacement along fault traces). The State of California (1982) Special Studies Zones map of the San Jose East 7.5-minute quadrangle indicates that the study area is not in a fault rupture hazard zone. The City of San Jose 1983 Fault Hazard Map delineates a "Special Studies Zone" for the Quimby Fault that covers the entire site.

AERIAL PHOTO STUDY

We reviewed eight sets of stereoscopic aerial photographs and three individual photos of the project site and vicinity at the United States Geological Survey (USGS) in Menlo Park, California. The photos were examined for features that would indicate the presence of geologic hazards. Descriptive data for these photos are as follows:

DATE FLOWN	APPROX. SCALE	SOURCE*	SERIAL NUMBERS
9-26-48	1:24000 (black/white)	USGS	GS-HR 1-147
9-26-48	1:24000 (black/white)	USGS	GS-HR 1-148
8-16-53	1:24000 (black/white)	USGS	GS-YF 6-37
8-16-53	1:24000 (black/white)	USGS	GS-YF 6-38
8-23-60	1:30000 (black/white)	USGS	GS-VACY 2-152
8-23-60	1:30000 (black/white)	USGS	GS-VACY 2-153
9-28-63	1:20000 (black/white)	USGS	CIV-6DD-100
5-27-65	1:12000 (black/white)	USGS	SCL 22-167
5-27-65	1:12000 (black/white)	USGS	SCL 22-168
5-27-65	1:12000 (black/white)	USGS	SCL 22-223
5-27-65	1:12000 (black/white)	USGS	SCL 22-224
5-27-65	1:12000 (black/white)	USGS	SCL 22-237
5-27-65	1:12000 (black/white)	USGS	SCL 22-238
5-27-65	1:12000 (black/white)	USGS	SCL 22-239
6-13-68	1:30000 (black/white)	USGS	GS-VBZK 2-91
6-13-68	1:30000 (black/white)	USGS	GS-VBZK 2-92
6-26-74	1:20000 (color)	USGS	Area 9 9-166
10-14-74	1:20000 (color)	USGS	Area 9 13-103
2-22-81	1:24000 (color)	USGS	GS-VEZR 3-137
2-22-81	1:24000 (color)	USGS	GS-VEZR 3-138

*Source Code: USGS = U.S. Geological Survey

The 1948 photos indicate that the main residence and barn have already been constructed at the site. The property is connected to Quimby Road by a dirt driveway. (This road now connects Quimby Road with Norwood Avenue.) The land on the east, southeast, south, and southwest are planted with fruit trees. The land on the northwest side of the residence and barn are occupied by Norwood creek.

The 1953 photos show that all of the fruit trees have been removed from the site and replaced with hay fields. Three very long buildings (egg laying sheds?) have been located along the southwest side of the dirt driveway. Two rectangular structures have been located on the east side of the barn.

The 1960 photos indicate that the hay fields are not being cultivated and the egg laying sheds (?) have been removed from the site. It appears that some grading has been done to create a horse riding rink along the west side of the former location of the egg laying

sheds. A double row of trees has been planted along the southwest side of the dirt driveway.

The 1963 photos do not show any significant changes to the property.

The 1965 photos indicate that a swimming pool has been built on the northeast side of the main residence. The hay fields on the northeast side of the residence do not appear to be in agricultural production. The land extending between the residence, swimming pool, and riding rink area and Quimby Creek appears to be vacant.

The 1968 photos indicate that double row of trees along the southwest side of the driveway have been removed. The hay field on the southwest side of the riding rink still appears to be in agricultural production. The two rectangular structures on the east side of the barn have been removed from the site. The land extending between the residence, swimming pool, and riding rink area and Quimby Creek appears to still be vacant.

The 1974 photos show that the flood retention basin on the southwest side of the riding rink is under construction. It appears that the land on the southwest side of the main driveway and horse riding rink is no longer being maintained. The land extending between the residence, swimming pool, and riding rink area and Quimby Creek appears to still be vacant.

The 1981 photos show that the flood retention basin has been completed. Two mobile homes have been setup on the southeast side of the main residence. The land on the southwest side of the driveway is no longer being maintained. The existing (abandon) fish pond has not been build at this time.

There were no indications of on site faulting or landslide activity in the aerial photographs examined for this study.

EXPLORATORY FAULT TRENCHING

Four exploratory trenches were excavated in a general northeast-southwest direction across the site. The location of the trenches was selected to intercept the suspected trace of the Quimby Fault and work around some of the existing improvements at the site.

A rubber tired mounted backhoe, with a 30-inch wide bucket, was used to excavate and back fill the trenches. Hydraulic shoring was used to support the trench in areas where they extended below a depth of 5 feet. Underground Service Alert and a private underground utility locator were called out to the site in advance of our trenching activities.

The four trenches had a combined length of approximately 500 feet and extended to depths of approximately 7 to 16 feet below existing grade. The trenches were logged by a Certified Engineering Geologist from our office.

In accordance with City of San Jose requirements, Mr. Doug Jones of Archaeological Resource Management made periodic observation during our trenching activities. Mr. Jones reported that he did not see anything of archaeological significance exposed by our fault trenching.

The geologic conditions and materials that were observed in the exploratory trenches do not suggest that the Quimby Fault crosses the 5-acres of land investigated for this study. The alluvial and colluvial materials observed in all four trenches appeared to be in their original depositional position. We did not observe any of the typical geologic features commonly associated with recent faulting.

SURFICIAL GEOLOGIC MAPPING

No natural outcrops of bedrock material were observed at the site.

SURFACE SOIL DEPOSITS

The site is overlain by residual soils and unengineered fill. The residual soils have developed from the underlying alluvial and colluvial materials. The residual soils are generally silty clays with variable amounts of sand and gravel. They can be broken into small peds with some effort. The colors of these soils are mostly dark brown to black.

Poorly developed soil partings and ped structures associated with seasonal wetting and drying were also observed in the upper 1 to 2 feet of the soil profile. Soil shrinkage cracks 1/8 to 1/4 inch wide at the surface extended to depths of 1 to 1-1/2 feet.

From an engineering standpoint, these soils can be described as loose near the surface and become firm to stiff with increasing depth and moisture content. The shallow soils should be tested during the geotechnical investigation phase of this project to determine their expansion index.

It appears that fill has been placed in several locations at the site for the construction of the building sites, roads and driveways, fish pond, and horse riding rink. The location(s), depth, and engineering condition of these fill areas should be evaluated during the geotechnical investigation phase of this project.

SUBSURFACE SOIL MATERIALS

The subsurface soils underlying the site fall into two distinct types of geologic materials. The first is slope wash and colluvial deposits. Generally, these materials are poorly to moderately consolidated silty to sandy clay with subangular gravel size rock fragments. These materials are generally damp, firm to stiff, and medium to dark brown in color.

The second soil material encountered was alluvium. This material is made-up of discontinuous interbedded silty sands, sandy gravels, and clayey gravels. Well-developed bedding could be observed in several location and could be followed over short distances. These materials are generally damp, loose to very loose and light to medium brown in color. These materials were deposited by running water and indicate that Norwood and or Quimby Creek(s) flowed through this site in the past.

FAULTS AND SEISMICITY

It appears, from the information we have developed to date the Quimby Fault does not cross the area examined for this investigation. However, the study area is located in one of the most seismically active regions in the United States. The Hayward and Calaveras Faults are located approximately 0.2 and 0.9 miles northeast of the study area, respectively. The San Andreas Fault is located approximately 6.4 miles southwest of the site. These three faults have repeatedly generated earthquakes in excess of magnitude 7.0.

A moderate size earthquake (magnitude 5.3 to 6.5) on an adjacent segment of the Hayward and Calaveras Faults would be expected to generate very strong to violent ground shaking at the site.

Based on our current knowledge of earthquake mechanisms, the recorded history of the Bay Area, and geologic information that has been developed about Northern California, it is reasonable to expect that the study area will experience at least one major earthquake (magnitude 6.9 to 7.5) in the next 100 years. A near field earthquake of this magnitude will cause violent ground shaking capable of causing significant damage to residential structures and infrastructure. It is also our opinion that the site will periodically experience moderate earthquakes that will cause strong ground shaking capable of toppling unsecured objects.

Faults can cause a variety of seismic hazards based on 1) the earthquake magnitude, depth, and distance, 2) the local soil and rock conditions, and 3) the duration and type of ground movement. Primary seismic hazards include surface ruptures along a fault during an earthquake and damage produced directly from seismic shaking. Secondary seismic hazards include landslides, liquefaction, lateral spreading, lurching, settlement, and flooding caused by seismic shaking.

Another hazard associated with faults like the San Andreas, Hayward, and Calaveras is known as fault creep. This is very slow fault movement that occurs over several decades. This type of surface fault movement doses not generally produce felt earthquakes. The accumulated fault movement can cause significant damage if a structure, roads or utilities are located across the fault.

LANDSLIDES AND SLOPE STABILITY

Our investigation did not find any active landslides on the portion of the site under investigation for this study. However, the soils exposed in our fault trenches indicate that the site has periodically been inundated by slope-wash and colluvial deposits in the geologic past. In Holocene time, during wetter climatic conditions, loose soil and rock on the hills above the site would be mobilized by periods of very high precipitation and move down slope into the study area.

The alluvial deposits exposed in our fault trenching indicate that Norwood Creek and/or Quimby Creek have periodically changed course and flowed across the site. The creeks change of course probably was in response to wetter climatic conditions during Holocene time.

CONCLUSIONS AND RECOMMENDATIONS

1. Based on the information we have developed to date, it does not appear that the Quimby Fault cross the 5-acre parcel investigated for this report.

2. Based on surface geomorphology and aerial photograph analysis, it appears that no landslides have occurred within historic time on the site. However, the site has been modified by grading and past development activities. Evidence of localized landslide activity may have been obscured.

3. The subsurface exploration conducted for this study indicates that the site was inundated by slope-wash and colluvial deposits during Holocene time. Further that Norwood Creek and/or Quimby Creek have flowed over the site during Holocene time.

4. This investigation was intended to be a preliminary assessment of the geologic hazards, conditions, and materials at the site. The exploratory trenches were excavated to evaluate where or not the Quimby Fault is presence or absence at the site. This document is not a geotechnical report and is not intended to provide parameters for grading and foundation design of this project.

6. We recommend that a complete geotechnical investigation of the site be made prior to final grading and foundation design for the proposed subdivision.

7. The exploratory trenches made for this investigation were loosely back filled with the excavated soils. These loose soils will settle over time and may leave a shallow depression over the trenches. Therefore, the trenches should be reopened and back filled with engineered soil in accordance with the grading specifications contained in a geotechnical report during the construction phase of this project.

APPENDIX

References Cited

Field Notes

Location Map

Regional Geology

Seismic Hazards Zones

Site Plan & Geologic Map

Trench Logs

REFERENCES CITED

California Division of Mines and Geology, 1982 "Special Studies Zones, San Jose East Quadrangle": Revised Official Map Effective January 1, 1982.

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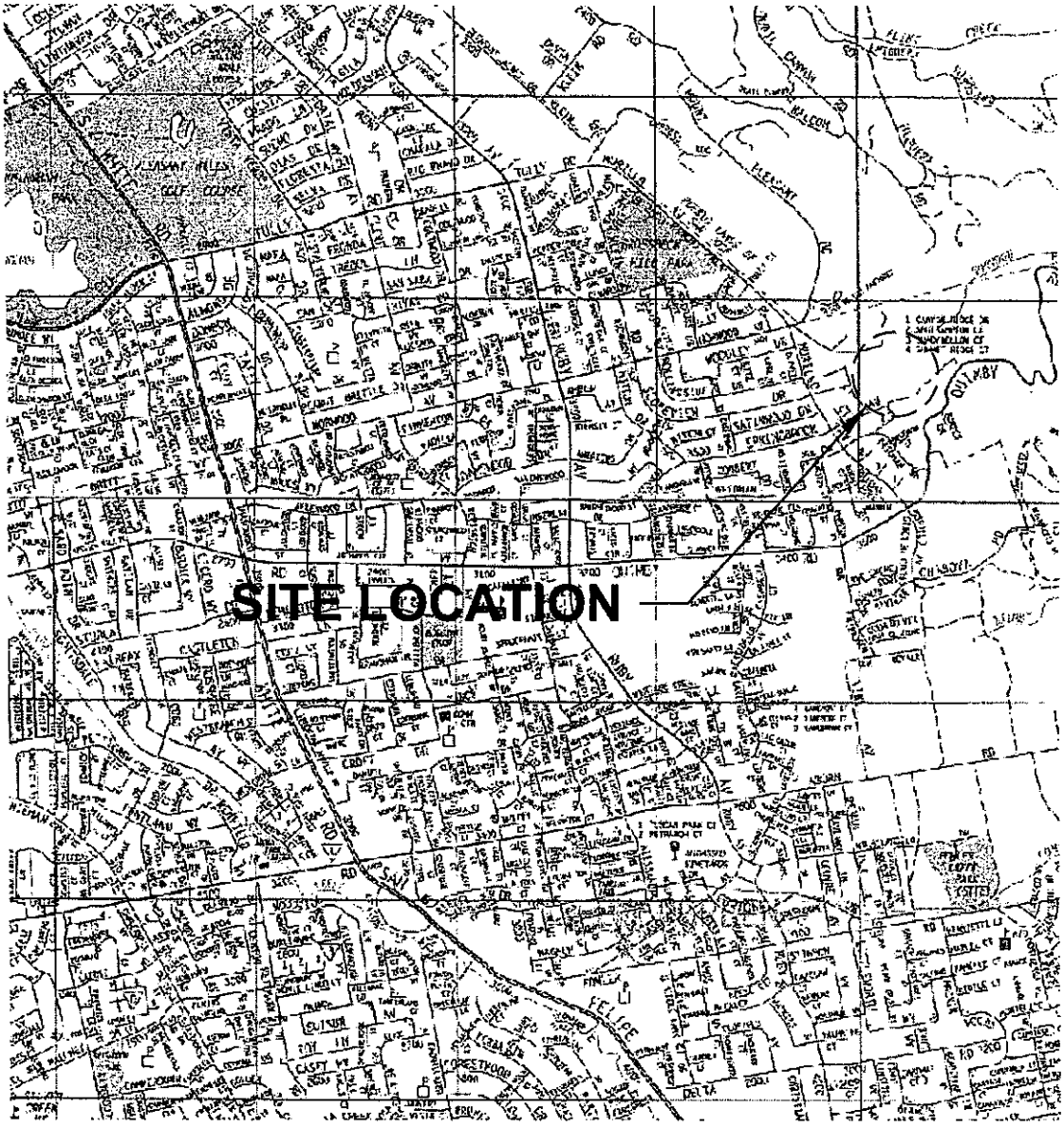
N



Source: Thomas Guide

VICINITY MAP

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TERRASEARCH INC.
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GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Ref: vicinity_map.dwg

Figure No. 1

Project No.	Drawn by:	Scale:	Date:
8567.G	ISRAEL R.	NONE	05/2001

N

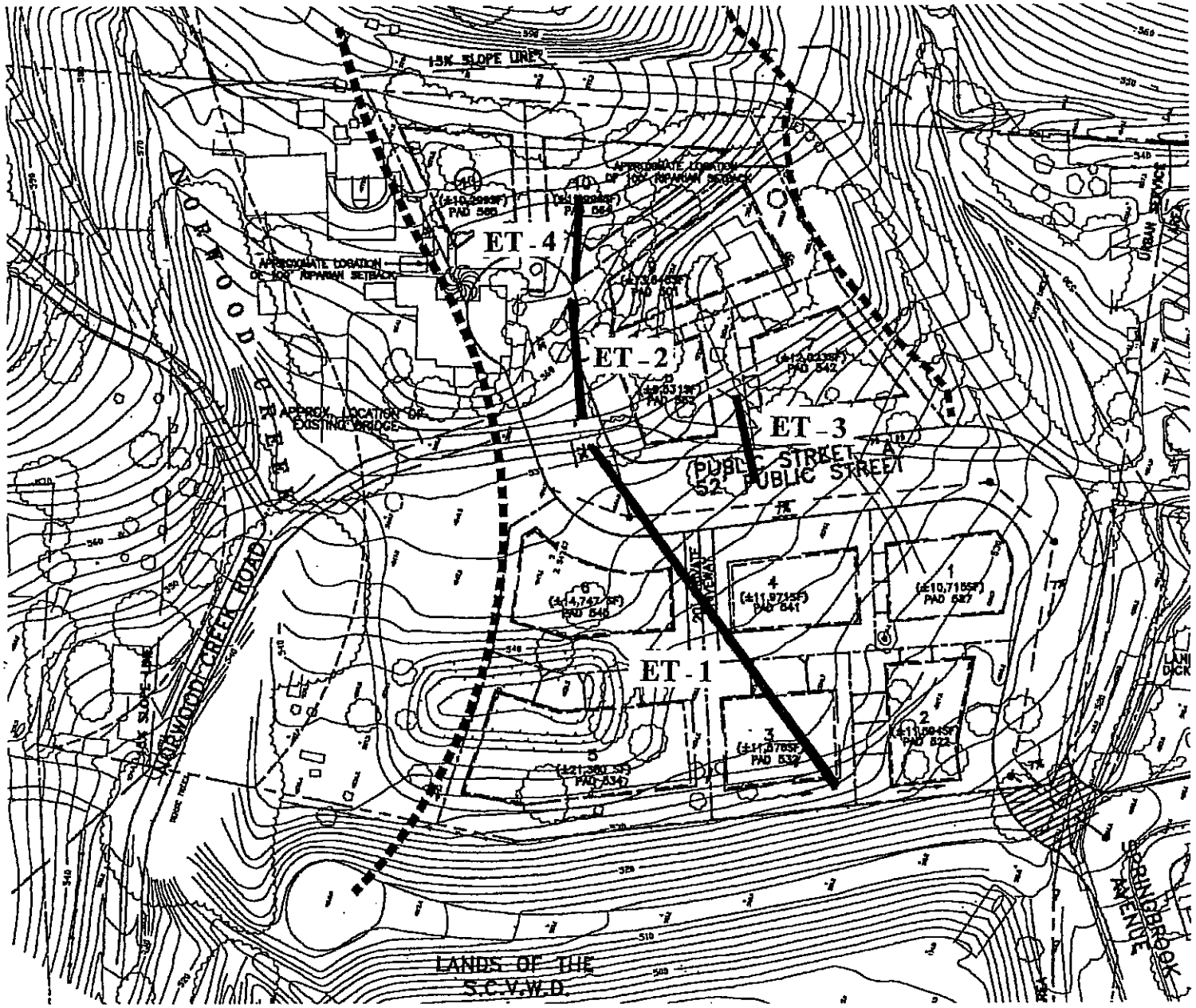
EXPLANATION

ET-4

Approximate location of trench

Scale 1" = 50'

Base map by HMH Engineering



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SITE PLAN

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
8567.G	ISRAEL R.	site_plan.dwg
Scale:	Date:	Figure No.
	05/2001	2

Fault Trench 1

Description of Soils

(1) Fill: sandy CLAY with silt and gravel (CH-CL), dry, soft, medium to dark brown

(2) Paleosole: silty CLAY with sand and gravel (CH), damp to moist, soft to firm, dark brown

(3) Colluvium: silty CLAY with minor sand and gravel, damp, stiff, dark red-brown

(4) Fill: silty GRAVEL (GP) dry, loose, light to medium gray

(5) Colluvium: sandy GRAVEL with silt and clay (GP), moist, medium dense, olive-green-brown

(6) Alluvium: gravely CLAY with sand (CL) to sandy CLAY with gravel (CL), damp, stiff, mottled light brown

(7) Sandstone: moderately to deeply weathered, moderately fractured, damp, hard, mottled olive-green and brown-black

(8) Alluvium: sandy GRAVEL with minor silt and clay (GP), dry to damp, loose, medium to dark brown

(9) Alluvium: SAND (SP) interbedded with silty SAND (SP), dry, loose, mottled gray-brown-tan

(s) Colluvium: cobble size, sub-angular clasts of medium grain moderately to deeply weathered gray to light brown sandstone

(g) Colluvium: bolder size, sub-rounded clasts of moderately to deeply weathered dark gray green greenstone

DESCRIPTION OF SOILS FOR EXPLORATORY TRENCH 1

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NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Ref: trench_log.dwg

Figure No. 3A

Project No.	Drawn by:	Scale:	Date:
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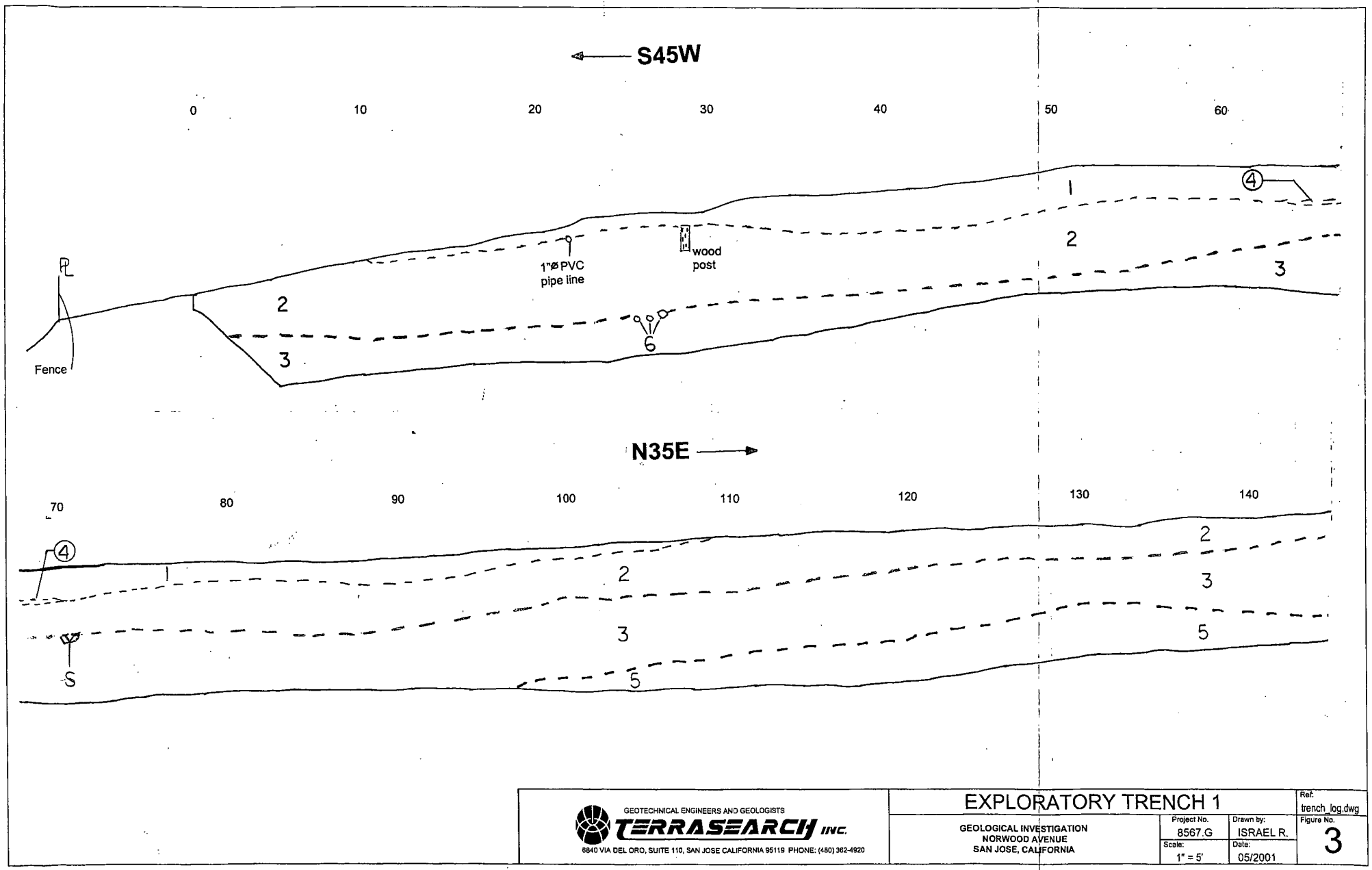

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EXPLORATORY TRENCH 1

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
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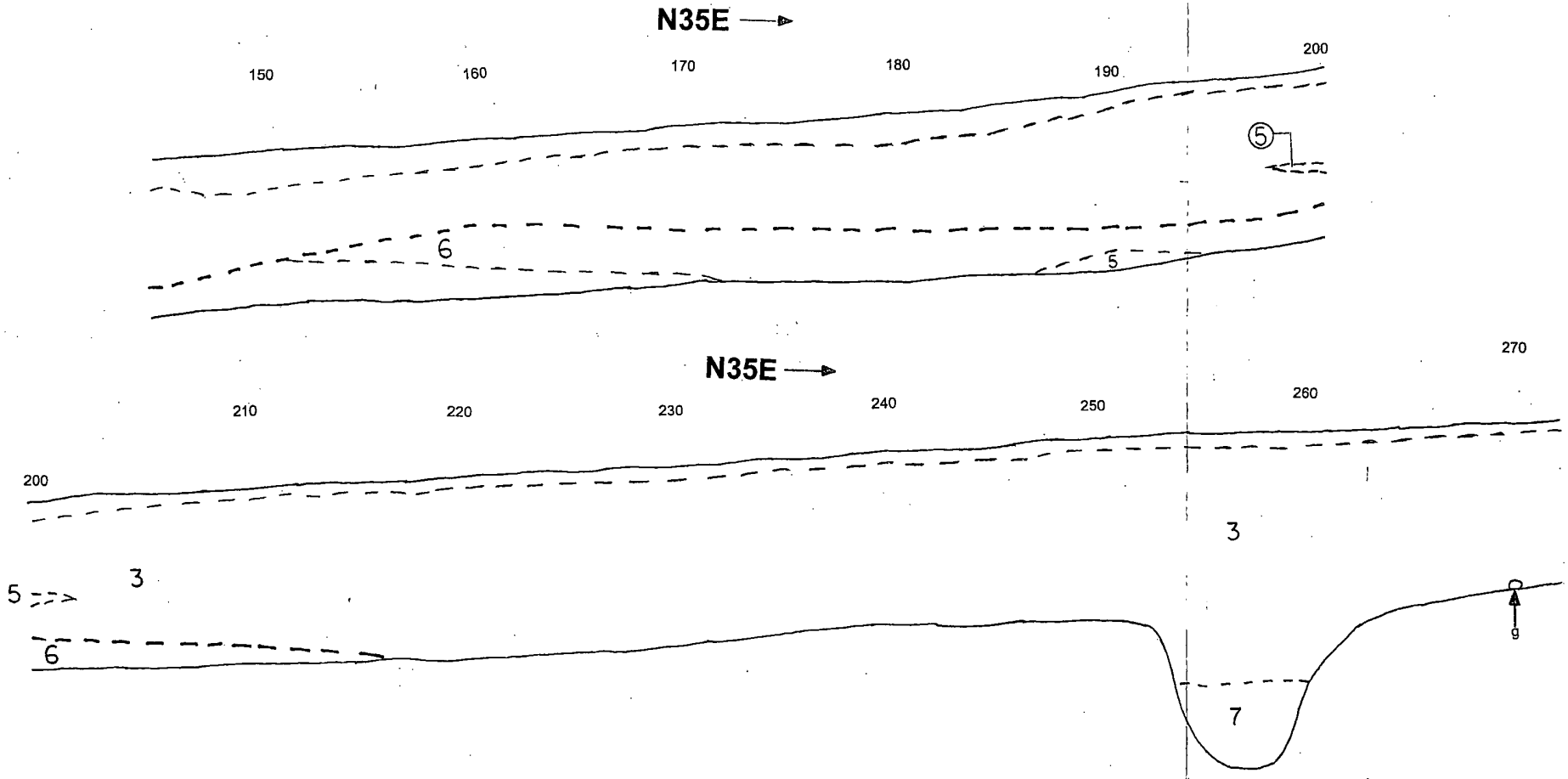
Scale: 1" = 5'	Date: 05/2001	Figure No. 3



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EXPLORATORY TRENCH 1

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
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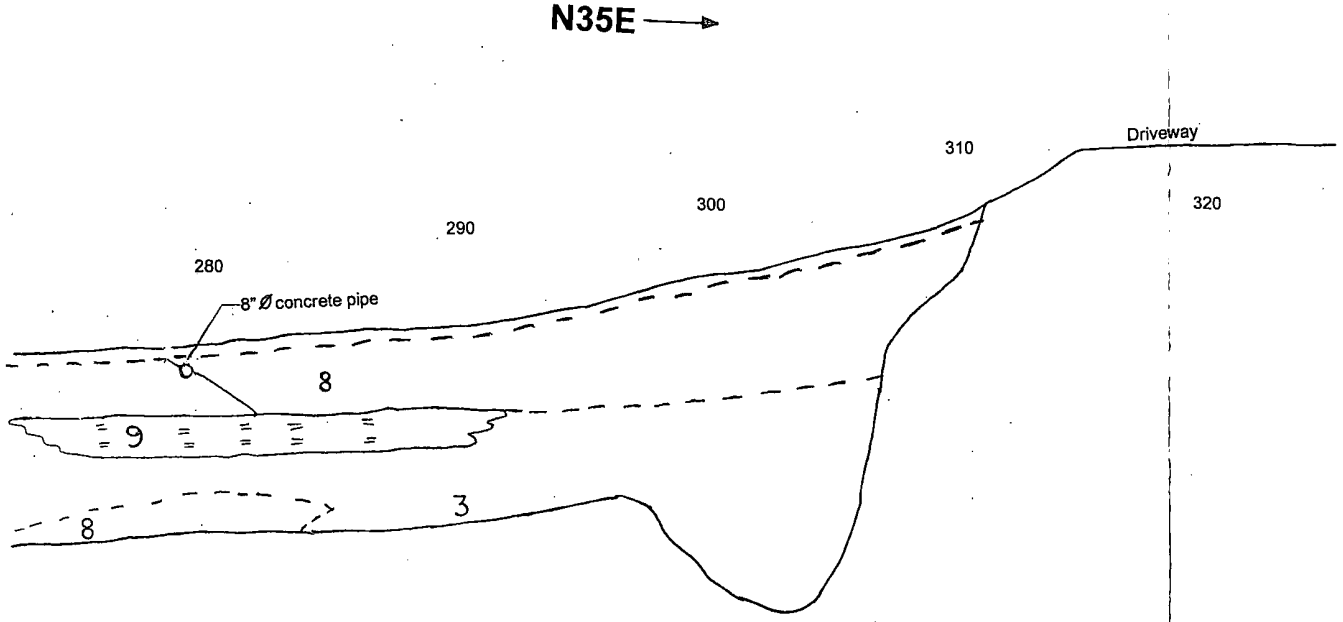

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EXPLORATORY TRENCH 1

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
8567.G	ISRAEL R.	trench_log.dwg
Scale:	Date:	Figure No.
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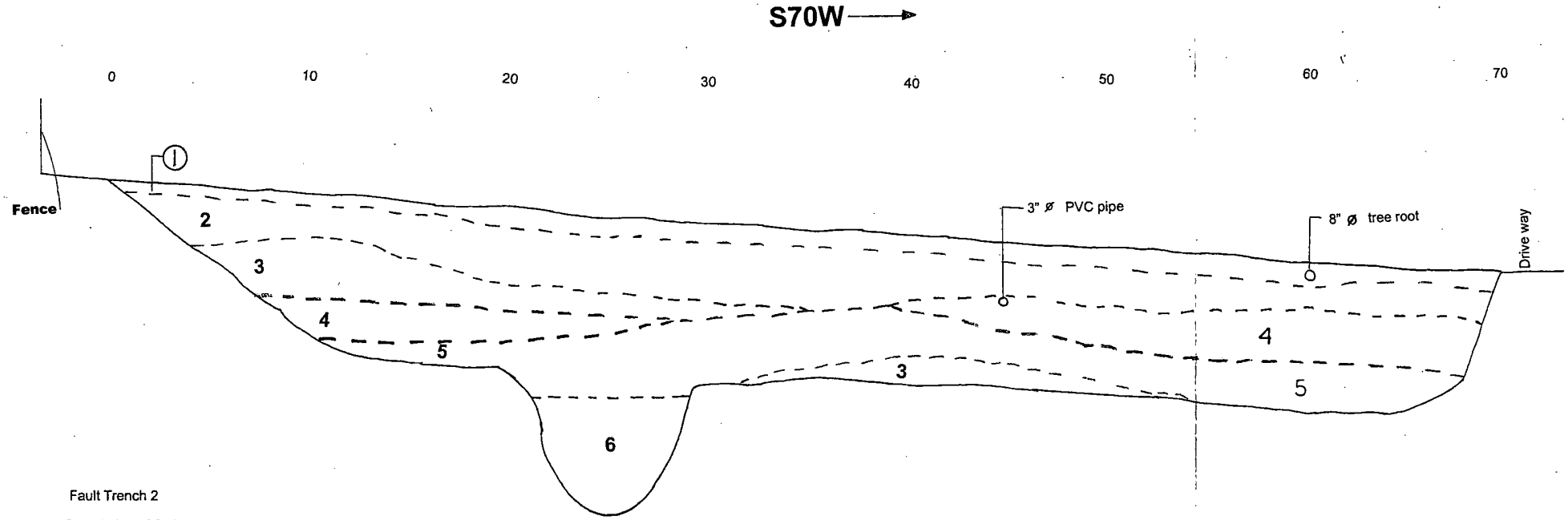

Fault Trench 2

Description of Soils

(1) Residual soil (plowed zone): silty CLAY with minor sand and gravel (CH-CL), dry, soft, dark brown to black

(2) Residual soil (undisturbed zone): silty CLAY with gravel (CH-CL), dry, soft, dark brown to black

(3) Alluvium: clayey GRAVEL with sand (GP), dry, firm, dark brown

(4) Alluvium: sandy GRAVEL with silt (GP), dry, loose, dark gray-brown

(5) Alluvium: silty CLAY with sand and gravel (CL), moist, very stiff, light brown to light red-brown

(6) Alluvium: sandy GRAVEL with silt and clay (GP), damp, medium dense, mottled brown

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EXPLORATORY TRENCH 2

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
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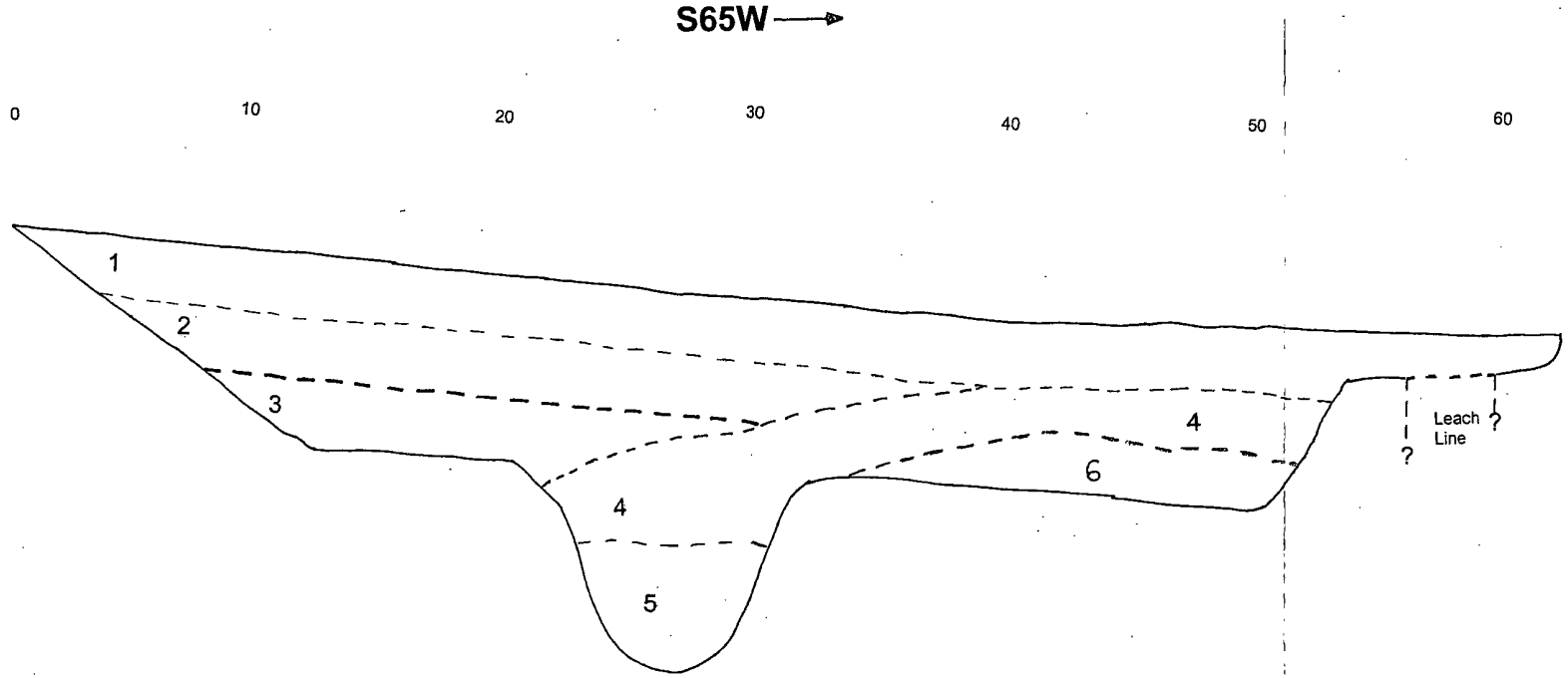

Fault Trench 3

Description of Soils

(1) Fill: gravely CLAY (CL), dry, very stiff, dark brown

(2) Colluvium: sandy GRAVEL with silt (GP), damp, loose to medium dense, light to yellow-brown

(3) Alluvium: sandy GRAVEL with sand and silt (GP), damp, very loose, light to yellow-brown

(4) Colluvium (?): gravely CLAY with occasional cobbles (CL), moist, stiff, medium brown

(5) Colluvium (?): gravely CLAY (CL), moist, stiff, medium brown

(6) Alluvium: sandy CLAY (CL) to silty CLAY with occasional gravels (CL), moist, stiff, dark brown

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EXPLORATORY TRENCH 3

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
8567.G	ISRAEL R.	trench_log.dwg
Scale:	Date:	Figure No.
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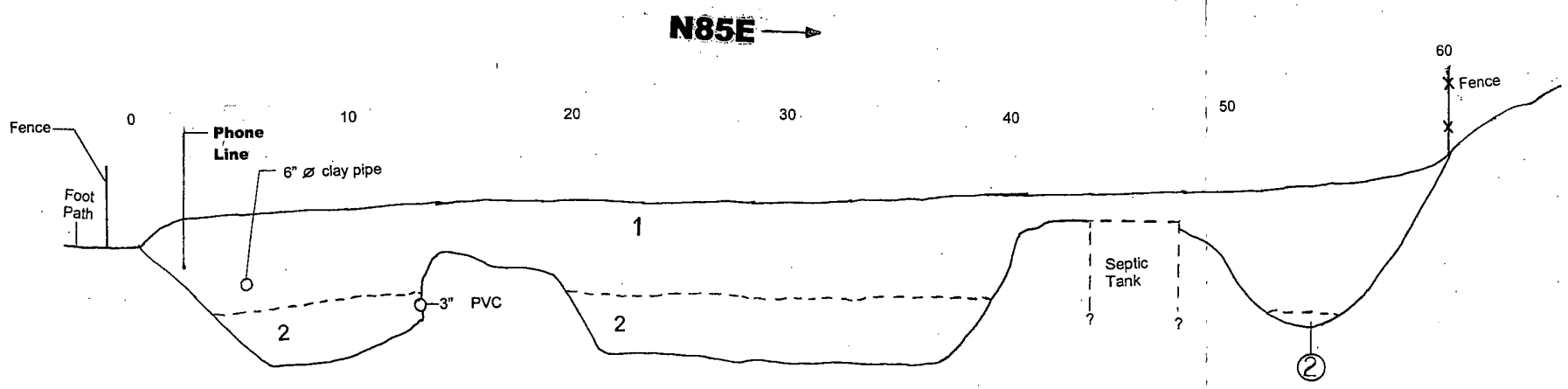

Fault Trench 4

Description of Soils

(1) Fill: silty CLAY with gravel (CL), damp, stiff, dark brown

(2) Alluvium: clayey GRAVEL (GP) and clayey SAND (SP), damp, loose to firm, olive-brown

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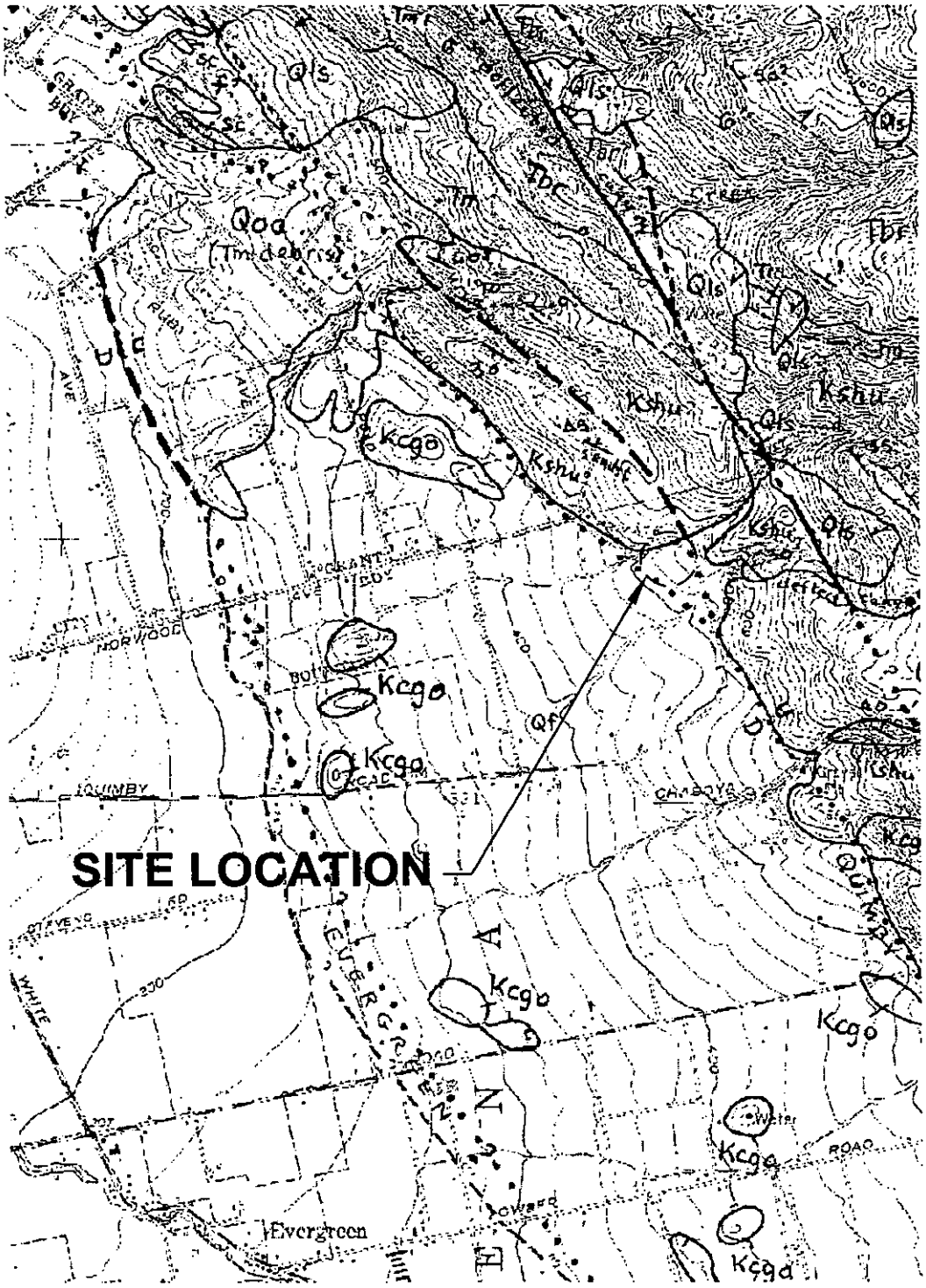
EXPLORATORY TRENCH 4

GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
8567.G	ISRAEL R.	trench_log.dwg
Scale:	Date:	Figure No.
1" = 5'	05/2001	8



Explanation

Qf	Quaternary fangravel
Qls	Quaternary landslide
Kshu	Cretaceuns Berryessa Formation
Kcgo	Cretaceuns Oakland Conglomerate

Source: Dibblee, 1972

GEOLOGIC MAP

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GEOLOGICAL INVESTIGATION
NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Ref: vicinity map.dwg

Figure No. 9

Project No.	Drawn by:	Scale:	Date:
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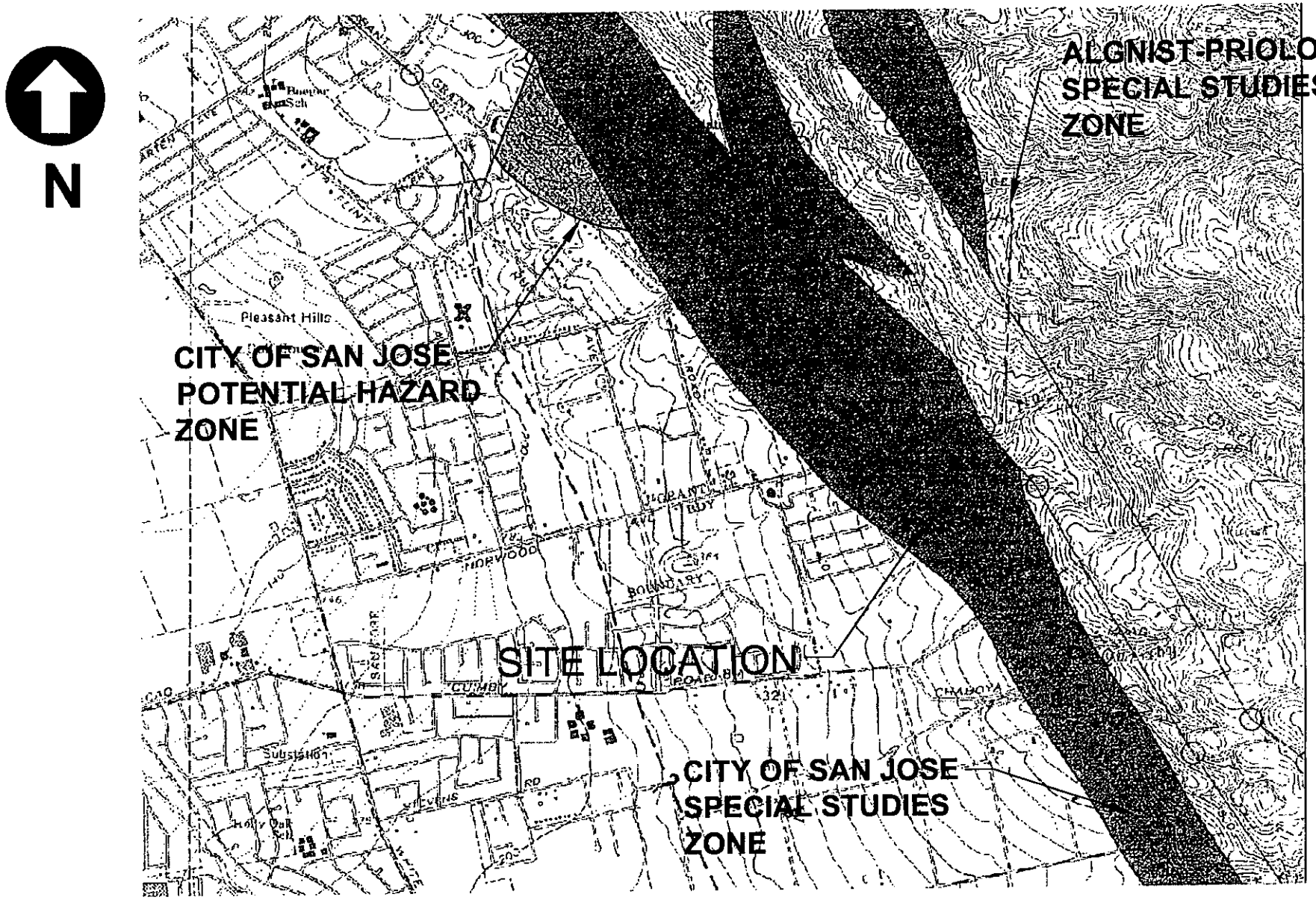

FAULT HAZARD MAP

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NORWOOD AVENUE
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Ref:
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Scale:	Date:	Figure No.
NONE	05/2001	10

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
AT
SPRINGBROOK AVENUE SUBDIVSION
SAN JOSE, CALIFORNIA

FOR

MR. RICHARD CERAOLO

Prepared
By
TERRASEARCH, inc.

Project No. 8567.E
31 July 2002

Environmental • Geotechnical • Special Inspections • Materials Testing

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Fax: (408) 362-4926

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Livermore, CA 94550
(925) 243-6662
Fax: (925) 243-6663

SACRAMENTO:
4200 N. Freeway Blvd.
Suite 2
Sacramento, CA 95834
(916) 564-7809
Fax: (916) 564-7672

Project No. 8567.E
31 July 2002

Mr. Richard Ceraolo
3698 Norwood Avenue
San Jose, California 95

Subject: 5-Acre Portion of Parcel (APN 654-03-009)
3698 Norwood Avenue
San Jose, California
SPRINGBROOK AVENUE SUBDIVISION
PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Ceraolo:

In accordance with your authorization, ***Terrasearch, inc.*** has conducted a Phase I Environmental Site Assessment for a 5-Acre Portion of Parcel (APN 654-03-009) located at 3698 Norwood Avenue in San Jose, California. The following report summarizes the results of our environmental assessment of the subject site.

Terrasearch, inc. appreciates the opportunity to be of services to you on this project and looks forward to working with you in the future. If you have any questions concerning this report or require additional information please contact our San Jose at your convenience.

Very truly yours,
Terrasearch, inc.

Warham Stejer, RG, CEG, CHG
Senior Engineering Geologist

CERTIFIED ENGINEERING GEOLOGIST
WARHAM A. STEJER
No. 1905
STATE OF CALIFORNIA

Copies: 6 to Mr. Richard Ceraolo

TABLE OF CONTENTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

1.0 INTRODUCTION

1.1 Project Objective

The purpose of conducting this Phase I Environmental Site Assessment is to satisfy the Innocent Landowner Defense in CERCLA liability provided in 42 USC § 9601 (35) and § 9607(b)(3) through detailed assessment of the past use of the property, historical research, site visit, file reviews and searches, and interviews with site managers/property owners. This Phase I Environmental Site Assessment conforms to ASTM E1527-2000 standards for conducting Phase I Environmental Site Assessments. The subject property was evaluated for the presence of potentially adverse environmental conditions and the surrounding area was evaluated for secondary potentially contaminated sites within a 1.25-mile radius of the subject site. The subject property is located at 3698 Norwood Avenue in San Jose, California. This Phase I Environmental Site Assessment was prepared for the site and client identified in this report. Mr. Richard Ceraolo can rely on this report for a period of six months following its date of publication.

1.2 Project Scope of Services

As authorized by Mr. Richard Ceraolo (Client) our services were limited to the following:

a) A field reconnaissance of the subject property to identify significant surficial signs of hazardous waste release, storage of hazardous materials, and surficial indications for the presence of underground storage tanks (USTs) and water wells;

b) A review of available aerial photographs and historical topographic maps for obvious surficial features indicative of past land use with attention to indicators of hazardous materials or waste use, disposal, or storage;

c) Off-site research into past land use of the property involving, as applicable, telephone and personal interviews with government personnel and the review of historical documents of the subject property;

d) A review of fuel leak and chemical release lists and files for soil and groundwater contamination cases within a 1.25-mile radius of the subject site as made available through the appropriate Federal and State and local regulatory agencies, if available;

e) Documentation of the site with digital photographs; and

f) Preparation of this report.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Project Location

The subject site is a 5-Acre portion of Parcel (APN 654-03-009) located at 3698 Norwood Avenue in San Jose, Santa Clara County, California (see Figure 1, Site Vicinity Map). The irregularly shaped property is approximately 5 acres in size and is located in the southwest corner of Section 10, Township 7 south, Range 2 east on the U.S. Geological Survey (USGS) 7.5-minute San Jose East quadrangle with an average elevation of approximately 560 feet above sea level.

A single-family residence, swimming pool, barn, paddocks, corrals, outbuildings, two mobile homes, and two travel trailers currently occupy the site. A truck, camper, automobile, and farm equipment are also stored at the property. In addition, miscellaneous farm equipment, and building materials were observed at the site.

Access to the site is provided by private driveways that come off the east side of Murillo Avenue and the north side of Quimby Road. Norwood Creek, east foothills, an unnamed creek, and a Santa Clara Valley Water District (SCVWD) flood retention basin border the site on the north, east, south, and west, respectively.

2.2 Topography and Drainage

The site is located near the top of a moderately sloping southwest facing alluvial fan. This area is at an average elevation of approximately 550 feet above mean sea level (MLS). Locally this area slopes at a gradient of about 0.1. Regionally this area slopes at a gradient of about 0.03 as it extends into Santa Clara Valley. Southwest draining Norwood Creek and an unnamed creek flank the northwest and southeast sides of the site, respectively. The 1980 San Jose East 7-½' topographic map indicates that both of these creeks are ephemeral drainages that "die out" on the alluvial fan before they reach any perennial streams. Coyote Creek is the closest perennial drainage and is located approximately 1.7 miles to the southwest of the site. This creek flows into San Francisco Bay near Milpitas, California. An unlined flood retention basin in located just west of the site.

2.3 Geology/Hydrogeology

Based on previous geological investigations and research conducted by ***Terrasearch, inc.*** at the subject property the site is underlain by Quaternary age alluvium, which in turn is underlain by Cretaceous age Berryessa Formation. The alluvial material is composed of stratified fan-glomerates. The Berryessa Formation is composed of moderately to deeply weathered fractured siltstone.

Based on a recent geotechnical investigation conducted by ***Terrasearch, inc.*** no groundwater was encountered to a depth of 45 feet below the ground surface (bgs). Information provide by the SCVWD indicated that groundwater is over 50 feet bgs. Based on the local and regional topography and projected bedrock profile, the regional groundwater flow direction should be toward the west-southwest.

2.4 Site Visit and Observations

A Certified Engineering Geologist from ***Terrasearch, inc.*** visited the site on 13 June 2002, and made the following observations:

- The site evaluation included a surface reconnaissance of the subject property with Mr. Richard Ceraolo.

- This property appeared to have been a working farm, and was being used as a private residence. The property is occupied by a one-story, wood frame, single-family residence; swimming pool, a barn; paddocks; workshop; shed, out building; two mobile homes, and two travel trailers. A truck, camper, and farm equipment are stored around the site. In addition, miscellaneous building materials and firewood are located around the property. Mature landscaping and large trees were also observed on the site. The general layout of the site is shown on Figure 2, Site Plan. Photographs were taken of the site to record the current condition and use of the property, which are attached as Figures 3 through 8.

- The residence (garage), barn, workshop, and out building contain small containers of miscellaneous paints, solvents, oil, and house hold products. These buildings also contained construction materials, tools and equipment, and household furniture and appliances. The workshop and garage appear to have concrete floors. The barn, out building, shed, and residence appear to have wood floors.

- No visual evidence of underground storage tanks was observed on the subject property. However, the current owner reports that an underground fuel tank was removed from the site in 1993. The tank was removed under the review of Santa Clara County Office of Toxics Enforcement. No noxious odors, waste ponds, or lagoons were observed and/or noted on the property.
- An active septic tank was identified immediately north of the existing residence.

3.0 SITE HISTORY REVIEW

An examination of historical aerial photographs and historical topographic maps was utilized to help determine the history of the site. A Sanborn Map search was also conducted for the subject site; however, no Sanborn Fire Insurance Maps were available for the area or its surroundings.

Eight sets of stereoscopic aerial photographs and three individual photos of the project site and vicinity were examined at the USGS in Menlo Park, California. The photos were examined for features that would indicate the presence of geologic hazards. Descriptive data for these photographs are as follows:

3.1 Aerial Photographs

The following aerial photographs were examined for indications of past and present use of the subject property.

Flight Date	Approximate Scale	Identification Number
09/26/48	1:24000	GS-HR 1- 147, 148
08/16/53	1:24000	GS-YF 6- 37, 38
08/23/60	1:30000	GS-VACY 2- 152, 153
09/28/63	1:20000	CIV-6DD 100
05/27/65	1:12000	SCL 22- 167, 168
05/27/65	1:12000	SCL 22- 223, 224
05/27/65	1:12000	SCL 22- 237, 238, 239
06/13/68	1:30000	GS-VBZK 2- 91, 92
06/26/74	1:20000	Area 9 9- 166
10/14/74	1:20000	Area 9 13- 103
02/22/81	1:24000	GS-VEZR 3- 137, 138

The 1948 photos indicate that the main residence and barn have already been constructed at the site. A dirt driveway on the south side of the barn and residence connect the property to Quimby Road. This road now connects Quimby Road with Norwood Avenue. The land to the east, southeast, south, and southwest of the site are planted with fruit trees. The land on the northwest side of the residence and barn are occupied by Norwood Creek.

The 1953 photos show that all of the fruit trees have been removed from the site and replaced with hay fields. Three very long buildings (egg laying sheds?) have been located along the southwest side of the dirt driveway. Two rectangular structures have been located on the east side of the barn.

The 1960 photos indicate that the hay fields are not being cultivated and the egg laying sheds (?) have been removed from the site. It appears that some grading has been done to create a horse-riding rink along the west side of the former location of the egg laying sheds. A double row of trees has been planted along the southwest side of the dirt driveway.
The 1963 photos do not show any significant changes to the property since 1960.

The 1965 photos indicate that a swimming pool has been built on the northeast side of the main residence. The hay fields on the northeast side of the residence do not appear to be in agricultural production. The land extending between the residence, swimming pool, and riding rink area and the unnamed creek on the south side of the property appears to be vacant.

The 1968 photos indicate that double row of trees along the southwest side of the driveway have been removed. The hay field on the southwest side of the riding rink still appears to be in agricultural production. The two rectangular structures on the east side of the barn have been removed from the site. The land extending between the residence, swimming pool, and riding rink area and the unnamed creek appears to still be vacant.

The 1974 photos show that the SCVWD flood retention basin on the southwest side of the riding rink is under construction. It appears that the land on the southwest side of the main driveway and horse-riding rink is no longer being maintained. The land extending between the residence, swimming pool, and riding rink area and Quimby Creek appears to still be vacant.

The 1981 photos show that the flood retention basin has been completed. Two mobile homes have been setup on the southeast side of the main residence. The land on the southwest side of the driveway is no longer being maintained. The existing dry fishpond has not been build at this time.

There did not appear to be any features that would indicate the use, storage or disposal of deleterious material at the site.

3.2 Historic Topographic Maps

The following topographic maps were examined for indications of past and present use of the subject property.

Date	Scale	USGS Topographic Map
1899	1:62500	15-Minute San Jose Quadrangle
1943	1:62500	15-Minute San Jose Quadrangle
1961	1:62500	15-Minute San Jose Quadrangle
1961	1:24000	7.5-Minute San Jose East Quadrangle
1968	1:24000	7.5-Minute San Jose East Quadrangle
1973	1:24000	7.5-Minute San Jose East Quadrangle
1980	1:24000	7.5-Minute San Jose East Quadrangle

A review of historical topographic maps revealed that four structures were present at or very close to the site in 1899. No other structures are mapped in the immediate vicinity of the property. Two structures are located in the vicinity of the subject property on the 1943 map. The two structures present in 1943 have been replaced with a single larger structure in the 1961 15-Minute topographic map. The 1968 and 1973 7 ½-Minute topographic map shows two structures present at the site and the addition of a pond on the southwest side of the property. The 1980 7 ½-Minute topographic map shows two structures present at the site. The location of the pond moved down slope and may be to the southwest side of the property. This new location is in the approximately where the SCVWD flood retention basin is.

3.3 Review of City and County Records

Documents provide to ***Terrasearch, inc.*** by Mr. Richard Ceraolo indicate that Mr. Steve Stewart was the previous owner of the property at 3698 Norwood Avenue in San Jose, California. Mr. Richard Ceraolo became the current owner of the subject property in November of 2000.

Terrasearch, inc. contacted the Santa Clara County Environmental and Hazardous Materials Department. They indicated that the only information they had on file for 3698 Norwood Avenue was an underground gasoline storage tank removal in July of 1993. Their information indicated that the tank had been properly removed, no leaks were detected, and the case was closed.

The Santa Clara County Building and Planning Departments files were reviewed for any building permits that may have been issued for the subject property. One permit for a mobile home awning was issued to Mr. Edward Stewart by the county in 1985.

3.4 Property Owner/Occupant Interview and Questionnaire

Terrasearch, inc. interviewed the owner/occupant of the subject site, Mr. Richard Ceraolo, regarding the current and past use of the subject property. Mr. Ceraolo filled out a Phase I Environmental Site Assessment Owner Questionnaire regarding the current and past use of the site. Mr. Ceraolo indicated that he has owned the property for the last 1½ years. Mr. Ceraolo indicated that there were no pits or trash disposal sites, French drains, monitoring, agricultural or domestic wells, past or present agricultural activity or archeological findings on the property. Mr. Ceraolo did indicate that there is a dry fishpond, and septic tank at the site. Mr. Ceraolo indicated that there was one underground gasoline storage tank at the site that was removed in 1993. Mr. Ceraolo indicated that he did not know of any "environmental factors" that could have affected the property.

4.0 REVIEW OF PUBLIC RECORDS OF REGULATORY AGENCIES

4.1 Primary Contamination Sources

Terrasearch, inc. spoke with Ms. Chris Tullock of the SCVWD to inquire about any information the District may have on file that would identify the property as a contaminant sources. Ms. Tullock indicated that the District did not have any record of contaminant spills at the site.

Based on the age of the residence, mobile homes, barn, outbuildings, workshop, and shed the building materials used on and within these structures may contain lead-based paint (LBP) and/or asbestos-containing material (ACM). ***Terrasearch, inc.*** conducted a walk-through and visually observed the exteriors of the structures at the subject site. Since most of the structures were constructed prior to 1960, the paint on the interior and exterior may be LBP, and may pose an LBM hazard.

A LBM hazard is defined as a condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by state and federal regulatory agencies. LBP is considered to be hazardous under the following conditions:

- Children under age seven chewing or mouthing on painted surfaces or when they are exposed to LBP dust, soil contaminated with lead, LBP which is in a deteriorated condition (i.e., flaking, peeling, or cracking); and

- Prolonged or repeated exposure of other facility occupants or workers to airborne LBP dust. Certain types of paint produced before 1980 are more likely to contain lead. These are oil-based paints used in industrial facilities as well as residences, applied primarily to kitchens, bathrooms, and interior and exterior wood trim in residences. Latex paint for architectural use, which normally does not contain lead, became popular after 1960, and nearly all paint applied after 1980 to the interior and exterior of houses and non-industrial buildings was latex. However, because of their durable properties and lack of federal regulation, LBP continued to be used in industrial facilities, on steel structures, and for pavement markings. Additionally, LBP may also be found in non-industrial facilities, primarily in primers on ferrous metal surfaces.

A second concern may be the presence of ACM within ceilings and floors. Asbestos products were used extensively in building construction prior to 1980, and have been used as thermal, fireproof, and acoustical insulation after 1980. It has also been woven into fabrics for use in expansion joints of ductwork as well as for fireproof curtains. It has been used as a strengthening agent in concrete, floor tile, mortar, grout, and drywall speckling compounds. In general, asbestos has been identified in over 3000 materials typically used in commercial and residential buildings.

4.2 Secondary Contamination Source Sites

For the purposes of this investigation, a search was made of over 64 State and Federal regulatory agency lists of contaminated or potentially contaminated sites, or properties where transportation, handling, storage, and/or disposal of hazardous materials occurs or has occurred. A computer search using the services of Environmental Data Resources, Inc. (EDR) was also conducted.

In accordance with recently adopted standards by the American Standard for Testing and Materials (ASTM, 2000), approximate minimum search distances for the various lists are presented in the follow table.

Table I
Radius Search of Federal and State Data Base(s)

Search Distance From Site (miles)	Regulatory Agency List Databases
1.0	NPL, CORRACTS, AWP, Cal-Sites, CHMIRS, Cortese, Prop 65, Toxic Pits, CA Bond Exp. Plan, CONSENT, ROD, Delisted NPL, Coal Gas
0.5	CERCLIS, RCRIS-TSD, State Landfills, WMUDS/SWAT, LUST, CA SLIC
0.25	CERC-NFRAP, RCRIS Lg. Quan. Gen., RCRIS, Sm. Quan. Gen, UST, CA FID UST, HIST UST, MINES, CLEANERS, HAZNET, SAN JOSE HAZNET
0.0	ERNS, FINS, HRIMS, MLTS, NPL Liens, PADS, RAATS, TRIS, TSCA, FTTS, AST, CA WDS, DEED

Details of the databases that were searched are given below. It should be noted that listings reported without location data were found to be more distant than the standard minimum search distance. In addition, some of the databases consist of lists of handlers, transporters, and generators of toxic materials rather than contaminated sites. Explanation of each database is presented within the attached EDR Report.

Out of all the databases searched by EDR no contaminated sites were identified within a one-mile radius of the subject site. The EDR report did identify eleven "orphan" sites. These are sites that could not be accurately located based on the information in their database. Based on the site addresses provided by EDR all of these sites appear to be down gradient and or ½ mile or further away from the subject property.

No up-gradient secondary contamination sites were identified within a 1.25-mile radius from the subject site.

5.0 SUMMARY OF FINDINGS

- The subject property consists of an irregularly shaped, 5-acre parcel of land located at 3698 Norwood Avenue in San Jose, California. The site is occupied by a wood-frame, single-family residence, swimming pool, two mobile homes, two travel trailers, a barn; paddocks, out buildings, workshops, and sheds. The buildings are primarily located over the eastern half of the site. A dry fishpond is located on the site western portion of the site. Based on historical aerial photographs and topographic maps, the property appears to have been developed with several structures prior to 1948. It appears that several structures were added and removed from the property during the 1950's, 1960's, 1970's, 1980's, and 1990's.

- There were no visual indications of UST's or dumping of hazardous waste at the subject site, with the exception of the paint cans and other household items. Garden clippings and a small amount to debris has been stacked on the east side of the fishpond. An active septic tank is located on the north side of the residence. Pair of abandon septic tanks are located on the south side of the residence. A few containers of household clearers, paint, solvent and gasoline are stored in the garage and workshop.

- Review of State and Federal agencies and databases indicated that there are no potential secondary contamination sources located down or cross gradient within a one mile radius of the subject property. There do not appear to be any up-gradient secondary contamination sources located within a one mile radius of the subject property.

In view of the above findings, it is the opinion of ***Terrasearch, inc.***, that the only further environmental assessment of the subject site that would be warranted is testing for lead based paint and asbestos containing materials.

- Retaining the services of state-certified LBP and ACM professional(s) to perform a LBP and ACM survey on the existing buildings for testing and confirmation of LBP and asbestos within and around the structures at the site;

- Proper disposal of the paint, solvents and oil stored in the out buildings.

6.0 LIMITATIONS

This environmental site assessment was performed in general conformance with the recommended guidelines established by ASTM designation E1527-00 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. This report has been prepared specifically for this project, in a manner consistent with the level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in this area.

This report contains information reported to ***Terrasearch, inc.***, by other sources, accordingly, and errors or omissions may be present that ***Terrasearch, inc.*** cannot be responsible for. The findings of this report apply to the present condition of the subject site only (as of 25 June 2002); the opinions expressed herein are subject to revision in light of new information relevant to the site and/or in its immediate surroundings.

Results from Phase I environmental investigations are based on surficial evidence and public records and databases only. Subsurface conditions at the site cannot be evaluated without performing a subsurface environmental investigation and actually testing the structures, soil, and groundwater for potential contaminants of concern.

Although no visual and/or documentary evidence for the existence of dumping of hazardous material was found for the subject property, very old and abandoned USTs may exist at this site based on the past history of similar sites of this age in this area.

7.0 INFORMATION SOURCES

ASTM, 2000 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process: ASTM Standards E1527-00.

City of San Jose Planning and Building Departments

Santa Clara County Planning and Building Departments

US Geological Survey

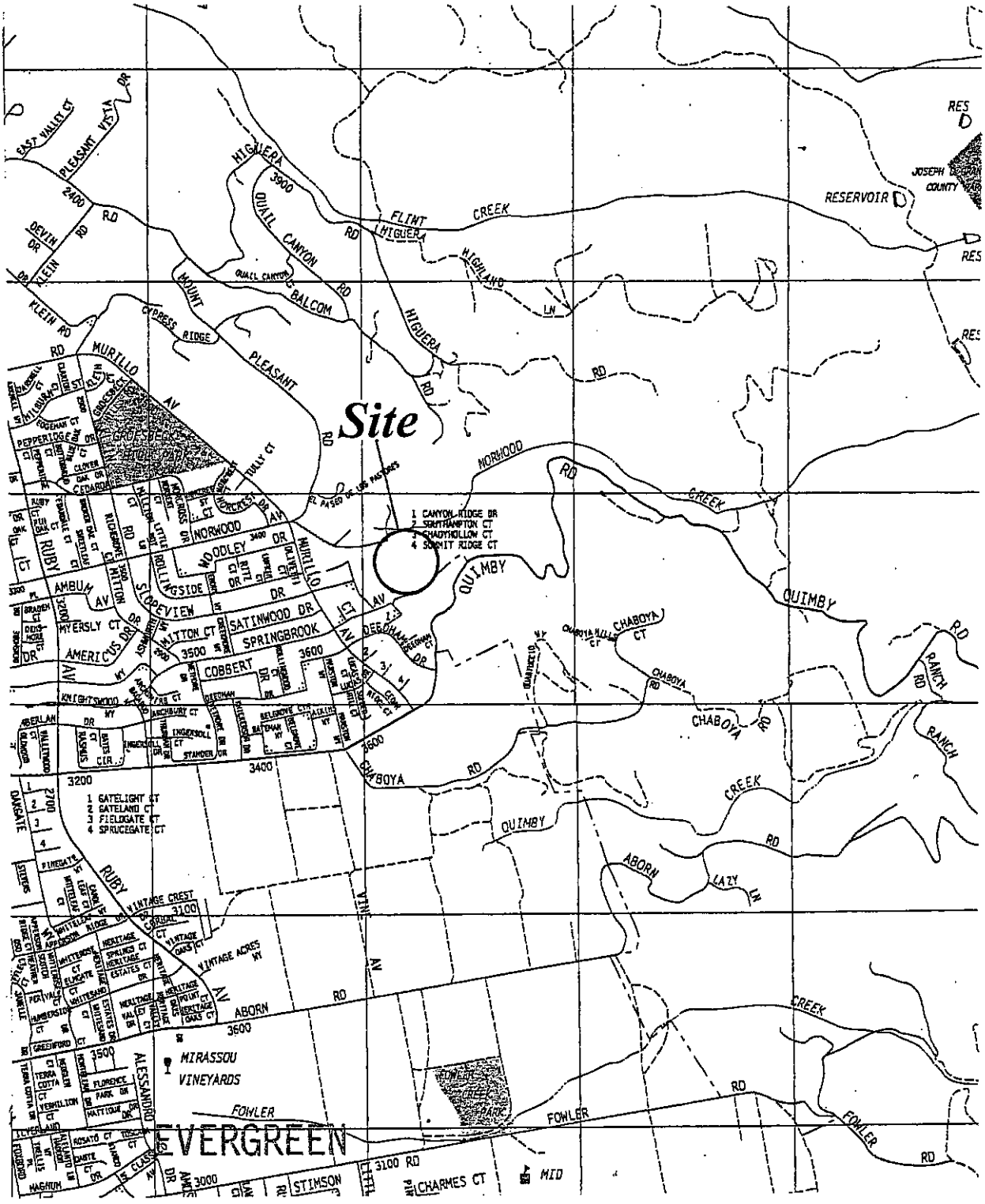
Mr. Ceraolo, owner/occupant of the subject property.

Terrasearch, inc., 8 June 2001, Geological Investigation, 3698 Norwood Avenue, San Jose, California. Project No. 8567.G

Terrasearch, inc., 28 June 2002, Geological and Geotechnical Investigation, 3698 Norwood Avenue, San Jose, California. Project No. 8567.G

Environmental Data Resources, Inc., Environmental Data Resources, Inc. Site Assessment Report, dated June 26, 2002.

Santa Clara Valley Water District Ms. Chris Tullock, verbal communication



Base: Thomas Bros. Maps
Approximate Scale 1inch = 0.36 miles

Project No. 8567.E	July 2002	**Site Location Map**	**FIGURE**
TERRASEARCH, inc. San Jose, California (408) 362-4920		Springbrook Avenue Subdivision San Jose, California	**1**

GEOTECHNICAL ENGINEERS AND GEOLOGISTS

TERRASEARCH INC.

6840 VIA DEL ORO, SUITE 110, SAN JOSE, CALIFORNIA 95119. PHONE: (408) 362-4920

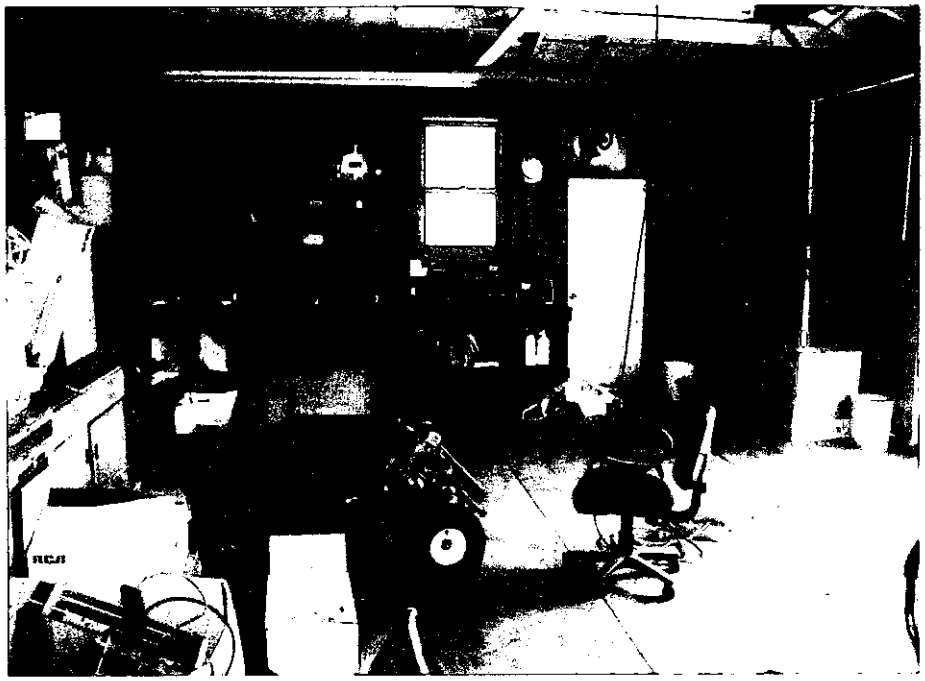
SITE PLAN

Ref: site_plan.dwg

SPRINGBROOK AVENUE SUBDIVISION
SAN JOSE, CALIFORNIA

Project No.	Drawn by:	Figure No.
8567.E	EDGAR.P	2
Scale: 1" = 100'	DATE: 07/2002	

SITE PHOTOGRAPHS



3a. View Looking Inside Workshop

3b. View looking inside workshop

SITE PHOTOGRAPHS

TERRASEARCH, INC.

Phase I Environmental Site Assessment
Norwood Avenue San Jose, California

Job Number	Date	By
8567.E	28 June 2002	S.T.

FIGURE 3

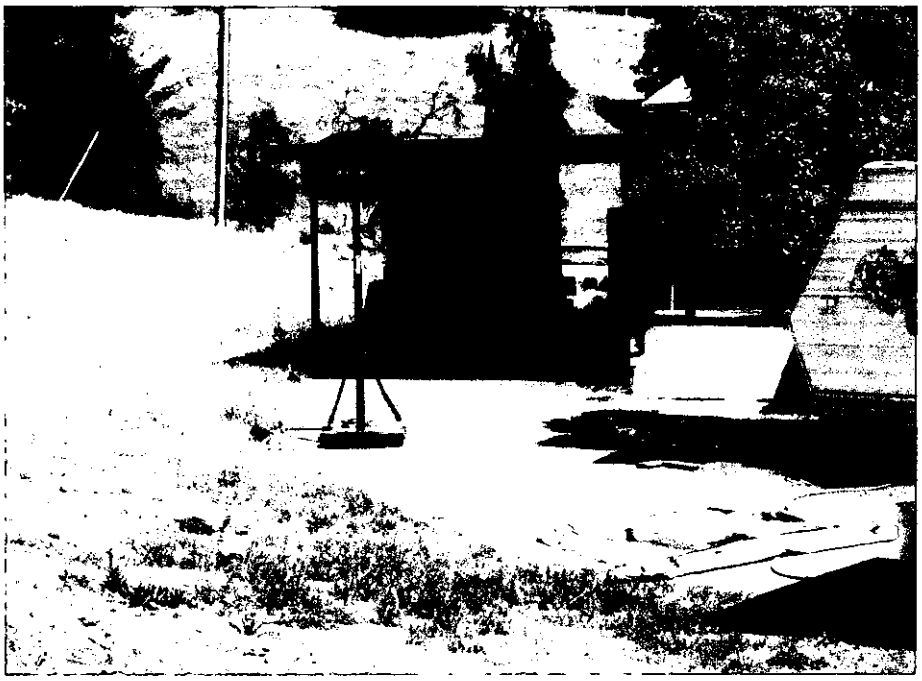
4a. View looking inside workshop.

4b. View looking inside out building.

SITE PHOTOGRAPHS

TERRASEARCH, INC.

Phase I Environmental Site Assessment Norwood Avenue San Jose, California			FIGURE
Job Number 8567.E	Date 28 June 2002	By S.T.	4



5a. View looking at mobile home and carport

5b. View looking out building, shed, building materials

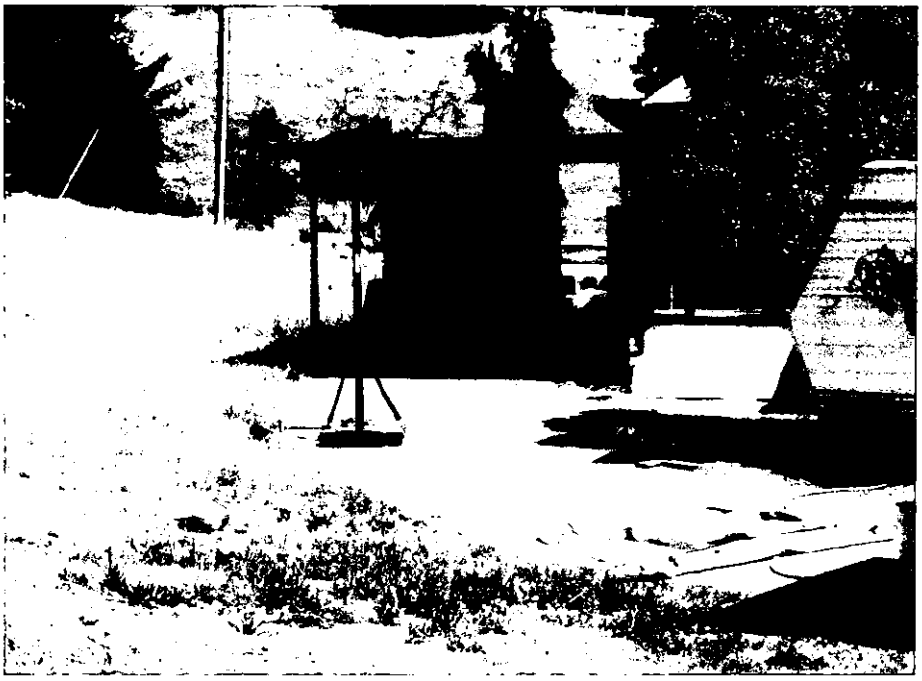
SITE PHOTOGRAPHS

TERRASEARCH, INC.

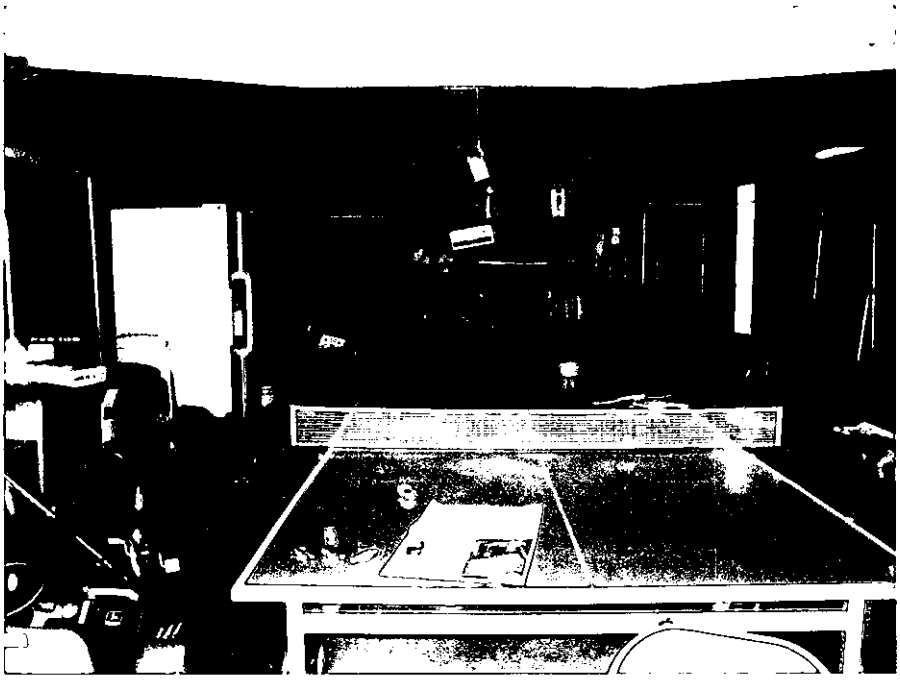
Phase I Environmental Site Assessment
Norwood Avenue San Jose, California

FIGURE 5

Job Number	Date	By
8567.E	28 June 2002	S.T.



6a. View looking at mobile home and travel trailer.



6b. View looking inside garage of main residence

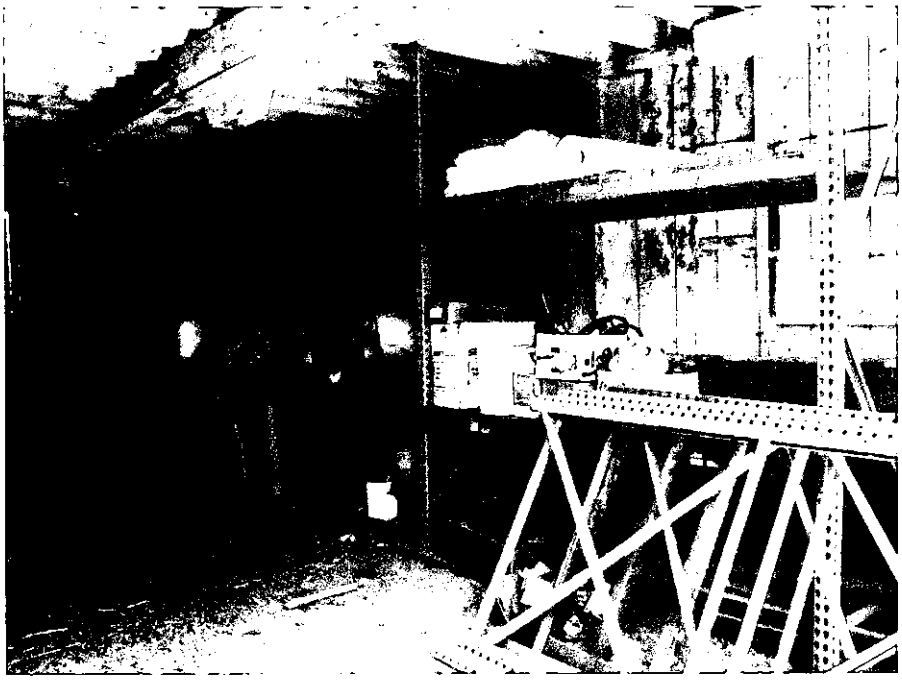
SITE PHOTOGRAPHS

TERRASEARCH, INC.

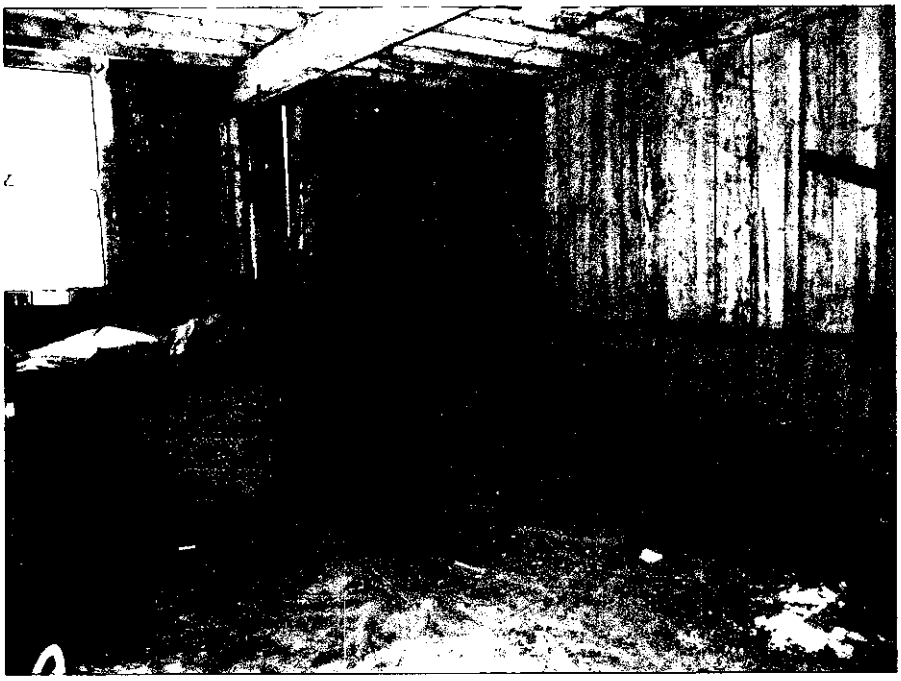
Phase I Environmental Site Assessment
Norwood Avenue San Jose, California

Job Number	Date	By
8567.E	28 June 2002	S.T.

FIGURE 6



7a. View looking inside old barn.



7b. View looking inside old barn.

SITE PHOTOGRAPHS

TERRASEARCH, INC.

Phase I Environmental Site Assessment
Norwood Avenue San Jose, California

FIGURE 7

Job Number	Date	By
8567.E	28 June 2002	S.T.

8a. View looking inside old barn.

8b. View looking inside old barn.

SITE PHOTOGRAPHS

TERRASEARCH, INC.

Phase I Environmental Site Assessment
Norwood Avenue San Jose, California

FIGURE 8

Job Number	Date	By
8567.E	28 June 2002	S.T.

ENVIRONMENTAL DATA RESOURCES, Inc.
SITE ASSESSMENT REPORT

The EDR Radius Map
with GeoCheck®

Norwood
3698 Norwood Avenue
San Jose, CA 95148

Inquiry Number: 805555.3s

June 26, 2002

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-RJC

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

3698 NORWOOD AVENUE
SAN JOSE, CA 95148

COORDINATES

Latitude (North):	37.332700 - 37° 19' 57.7"
Longitude (West):	121.767300 - 121° 46' 2.3"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	609206.0
UTM Y (Meters):	4132289.2

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2437121-C7 SAN JOSE EAST, CA
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report
RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-LQG..... Resource Conservation and Recovery Information System
RCRIS-SQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

AWP..... Annual Workplan Sites
Cal-Sites..... Calsites Database
CHMIRS..... California Hazardous Material Incident Report System
Cortese..... "Cortese" Hazardous Waste & Substances Sites List

Notify 65..... Proposition 65 Records
Toxic Pits..... Toxic Pits Cleanup Act Sites
SWF/LF..... Solid Waste Information System
WMUDS/SWAT..... Waste Management Unit Database
LUST..... Leaking Underground Storage Tank Information System
CA BOND EXP. PLAN..... Bond Expenditure Plan
UST..... List of Underground Storage Tank Facilities
CA FID UST..... Facility Inventory Database
HIST UST..... Hazardous Substance Storage Container Database

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST..... Aboveground Petroleum Storage Tank Facilities
CLEANERS..... Cleaner Facilities
CA WDS..... Waste Discharge System
DEED..... List of Deed Restrictions
CA SLIC..... Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
HAZNET..... Hazardous Waste Information System
SAN JOSE HAZMAT..... Hazardous Material Facilities

EDR PROPRIETARY HISTORICAL DATABASES

See the EDR Proprietary Historical Database Section for details

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

EDR PROPRIETARY HISTORICAL DATABASES

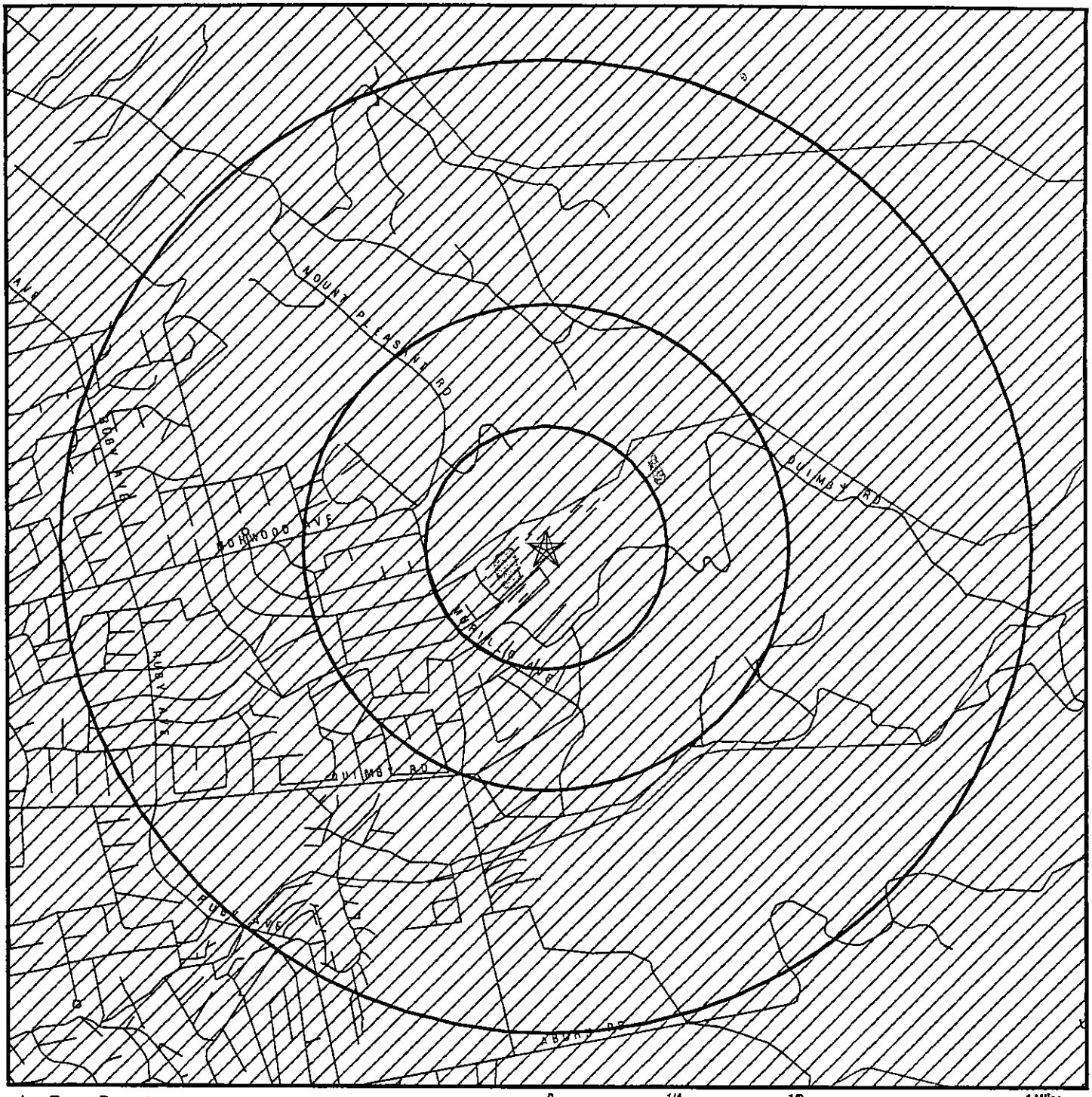
See the EDR Proprietary Historical Database Section for details

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
EVERGREEN ELEMENTARY SCHOOL #17 PROPOSED	Cal-Sites
SAN FELIPE ROAD IDS	SWF/LF
ROBERTS AVENUE LANDFILL	SWF/LF
P&G INVESTMENT COMPANY	LUST
COYOTE CREEK BUSINESS PARK	LUST
J.C. PENNEY	LUST
FIRESTONE MASTER CARE #3682	LUST
SEARS - EASTRIDGE	LUST
WDR-WATER TREATMENT SLUDGE DIS	WMUDS/SWAT
COYOTE CREEK BUSINESS PARK	HAZNET
1X CAL TRANS/DIST 4	HAZNET

OVERVIEW MAP - 805555.3s - Terrasearch Inc.



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

♟ Coal Gasification Sites

National Priority List Sites

Landfill Sites

Power transmission lines

Oil & Gas pipelines

100-year flood zone

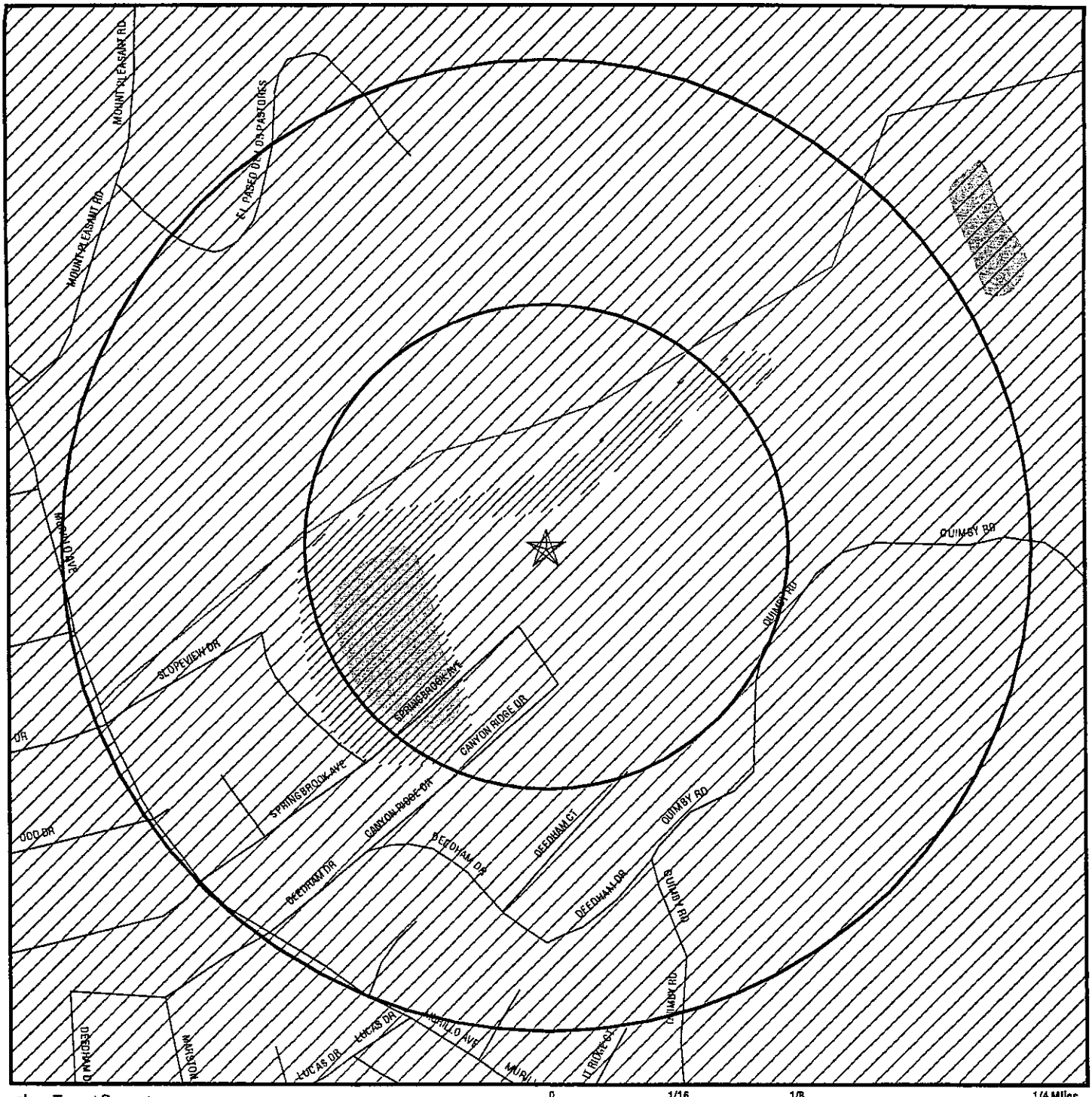
500-year flood zone

Wetlands

Areas of Concern

TARGET PROPERTY:	Norwood	CUSTOMER:	Terrasearch Inc.
ADDRESS:	3698 Norwood Avenue	CONTACT:	Warham Stejer
CITY/STATE/ZIP:	San Jose CA 95148	INQUIRY #:	805555.3s
LAT/LONG:	37.3327 / 121.7673	DATE:	June 26, 2002 2:04 pm

DETAIL MAP - 805555.3s - Terrasearch Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites
- Historical Gas Stations / Historical Dry Cleaners See the EDR Proprietary Historical Map Findings
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands
- Areas of Concern

NW

TARGET PROPERTY:	Norwood	CUSTOMER:	Terrasearch Inc.
ADDRESS:	3698 Norwood Avenue	CONTACT:	Warham Stejer
CITY/STATE/ZIP:	San Jose CA 95148	INQUIRY #:	805555.3s
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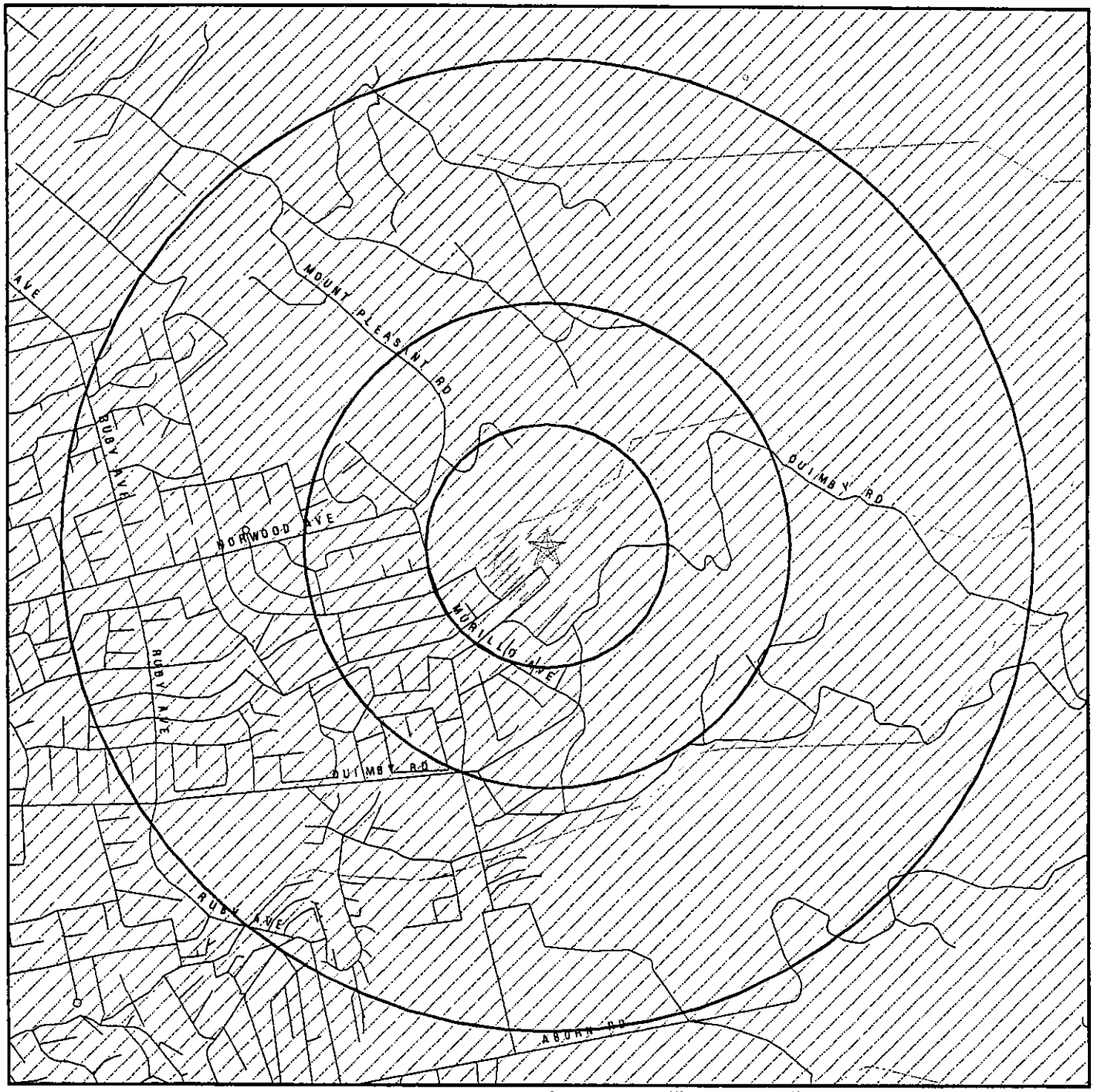

☆ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites

National Priority List Sites

Landfill Sites

0 1/4 1/2 1 Miles

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

Wetlands

Areas of Concern

TARGET PROPERTY:	Norwood	CUSTOMER:	Terrasearch Inc.
ADDRESS:	3698 Norwood Avenue	CONTACT:	Warham Stejer
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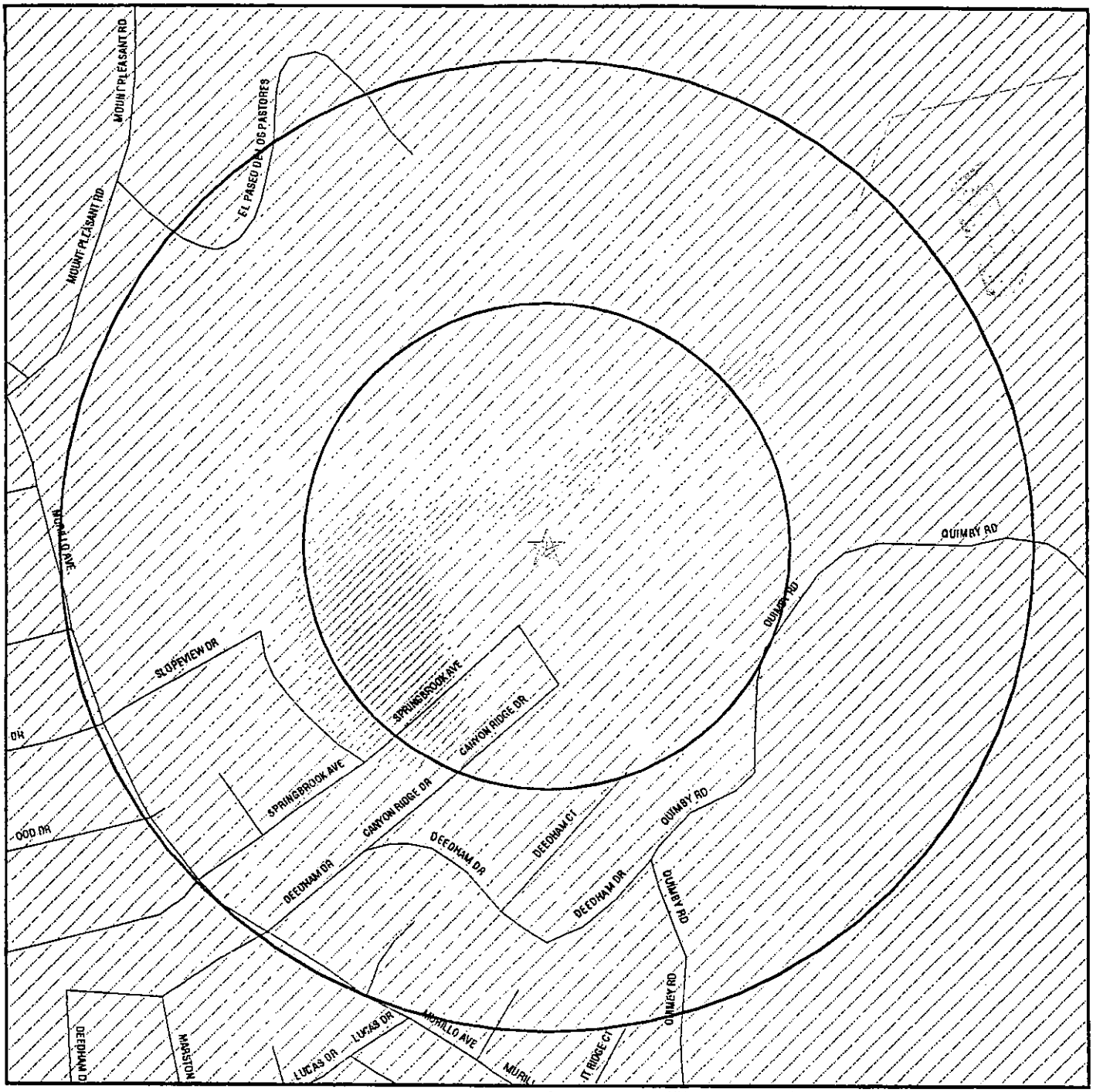


- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites
- Historical Gas Stations / Historical Dry Cleaners See the EDR Proprietary Historical Map Findings
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands
- Areas of Concern

TARGET PROPERTY:	Norwood	CUSTOMER:	Terrasearch Inc.
ADDRESS:	3698 Norwood Avenue	CONTACT:	Warham Stejer
CITY/STATE/ZIP:	San Jose CA 95148	INQUIRY #:	805555.3s
LAT/LONG:	37.3327 / 121.7673	DATE:	June 26, 2002 2:04 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
STATE ASTM STANDARD								
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
CHMIRS		1.000	0	0	0	0	NR	0
Cortese		1.000	0	0	0	0	NR	0
Notify 65		1.000	0	0	0	0	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
UST		0.250	0	0	NR	NR	NR	0
CA FID UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
AST		TP	NR	NR	NR	NR	NR	0
CLEANERS		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA WDS		TP	NR	NR	NR	NR	NR	0
DEED		TP	NR	NR	NR	NR	NR	0
CA SLIC		0.500	0	0	0	NR	NR	0
HAZNET		0.250	0	0	NR	NR	NR	0
SAN JOSE HAZMAT		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY HISTORICAL DATABASES								
Gas Stations/Dry Cleaners		0.250	0	0	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

See the EDR Proprietary Historical Database Section for details

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Distance (ft.) Elevation	Site	Database(s)	EDR ID Number EPA ID Number

NO SITES FOUND

MAP FINDINGS - EDR PROPRIETARY HISTORICAL DATABASES

YEAR	NAME	ADDRESS	CITY	ST	DIR.	DIST.	ELEV.	TYPE

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

EDR Historical Gas Station & Dry Cleaner Search: No mapped sites were found in EDR's search of the EDR Historical Gas Station & Dry Cleaner Database within 0.250 mile of the Target Property.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN JOSE	S103678909	COYOTE CREEK BUSINESS PARK	HWY 101 AT COYOTE CREEK		HAZNET
SAN JOSE	S102799170	1X CAL TRANS/DIST 4	CAL TRANS RGT OF WY HWY 101		HAZNET
SAN JOSE	S104889804	SAN FELIPE ROAD IDS	2 MILE STRETCH OF SAN FELIPE RD		SWF/LF
SAN JOSE	S104541917	P&G INVESTMENT COMPANY	1775 MONTEREY HWY BLDG. #64		LUST
SAN JOSE	S103441158	WDR-WATER TREATMENT SLUDGE DIS	SE OF DIXON LANDING / HWY 17		WMUDS/SWAT
SAN JOSE	S102362529	ROBERTS AVENUE LANDFILL	ROBERTS AVENUE		SWF/LF
SAN JOSE	S104241835	EVERGREEN ELEMENTARY SCHOOL #17 PROPOSEI	RUE MIRASSOU / RIGOR DRIVE	95148	Cal-Sites
SAN JOSE	S104542008	COYOTE CREEK BUSINESS PARK	SILVER CREEK VALLEY @ HWY 101		LUST
SAN JOSE	S105193444	J.C. PENNEY	2242 TULLY RD		LUST
SAN JOSE	S103881028	FIRESTONE MASTER CARE #3682	2240 TULLY RD		LUST
SAN JOSE	S103881029	SEARS - EASTRIDGE	2180 TULLY RD		LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/22/02
Date Made Active at EDR: 06/21/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/06/02
Elapsed ASTM days: 46
Date of Last EDR Contact: 05/06/02

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 6
Telephone: 214-655-6659

EPA Region 8
Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 02/26/02
Date Made Active at EDR: 06/21/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/06/02
Elapsed ASTM days: 46
Date of Last EDR Contact: 05/06/02

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/12/02
Date Made Active at EDR: 06/03/02
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/25/02
Elapsed ASTM days: 70
Date of Last EDR Contact: 03/25/02

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 02/14/02
Date Made Active at EDR: 06/03/02
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/25/02
Elapsed ASTM days: 70
Date of Last EDR Contact: 03/25/02

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/14/01
Date Made Active at EDR: 01/14/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 11/14/01
Elapsed ASTM days: 61
Date of Last EDR Contact: 06/10/02

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 04/01/02
Date Made Active at EDR: 06/21/02
Database Release Frequency: Varies

Date of Data Arrival at EDR: 05/20/02
Elapsed ASTM days: 32
Date of Last EDR Contact: 03/04/02

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/00
Date Made Active at EDR: 06/03/02
Database Release Frequency: Varies

Date of Data Arrival at EDR: 03/05/02
Elapsed ASTM days: 90
Date of Last EDR Contact: 04/29/02

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/17/02
Date of Next Scheduled EDR Contact: 09/16/02

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision
Source: EPA
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/30/01
Database Release Frequency: Annually

Date of Last EDR Contact: 04/09/02
Date of Next Scheduled EDR Contact: 07/08/02

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/22/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/06/02
Date of Next Scheduled EDR Contact: 08/05/02

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/21/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/22/02

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/12/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 12/14/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 05/28/02
Date of Next Scheduled EDR Contact: 08/26/02

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-564-3887
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 05/14/02
Date of Next Scheduled EDR Contact: 08/12/02

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/99
Database Release Frequency: Annually

Date of Last EDR Contact: 03/25/02
Date of Next Scheduled EDR Contact: 06/24/02

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-5521
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 01/14/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/25/02
Date of Next Scheduled EDR Contact: 06/24/02

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/25/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/25/02
Date of Next Scheduled EDR Contact: 06/24/02

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF CALIFORNIA ASTM STANDARD RECORDS

AWP: Annual Workplan Sites
Source: California Environmental Protection Agency
Telephone: 916-323-3400
Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 11/08/00
Date Made Active at EDR: 03/02/01
Database Release Frequency: Annually
Date of Data Arrival at EDR: 01/31/01
Elapsed ASTM days: 30
Date of Last EDR Contact: 04/12/02

CAL-SITES: Calsites Database
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 10/01/00
Date Made Active at EDR: 11/22/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 10/30/00
Elapsed ASTM days: 23
Date of Last EDR Contact: 04/12/02

CHMIRS: California Hazardous Material Incident Report System
Source: Office of Emergency Services
Telephone: 916-845-8400
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/94
Date Made Active at EDR: 04/24/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 03/13/95
Elapsed ASTM days: 42
Date of Last EDR Contact: 05/26/02

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-9100
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/01
Date Made Active at EDR: 07/26/01
Database Release Frequency: Varies
Date of Data Arrival at EDR: 05/29/01
Elapsed ASTM days: 58
Date of Last EDR Contact: 04/30/02

NOTIFY 65: Proposition 65 Records
Source: State Water Resources Control Board
Telephone: 916-445-3846
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Made Active at EDR: 11/19/93
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 11/01/93
Elapsed ASTM days: 18
Date of Last EDR Contact: 04/22/02

TOXIC PITS: Toxic Pits Cleanup Act Sites
Source: State Water Resources Control Board
Telephone: 916-227-4364
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Made Active at EDR: 09/26/95
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 08/30/95
Elapsed ASTM days: 27
Date of Last EDR Contact: 05/06/02

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SWF/LF (SWIS): Solid Waste Information System
Source: Integrated Waste Management Board
Telephone: 916-341-6320
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/15/02
Date Made Active at EDR: 04/16/02
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 03/18/02
Elapsed ASTM days: 29
Date of Last EDR Contact: 06/17/02

WMUDS/SWAT: Waste Management Unit Database
Source: State Water Resources Control Board
Telephone: 916-227-4448
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00
Date Made Active at EDR: 05/10/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 04/10/00
Elapsed ASTM days: 30
Date of Last EDR Contact: 06/10/02

LUST: Leaking Underground Storage Tank Information System
Source: State Water Resources Control Board
Telephone: 916-341-5740
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/17/02
Date Made Active at EDR: 02/12/02
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 01/21/02
Elapsed ASTM days: 22
Date of Last EDR Contact: 04/12/02

CA BOND EXP. PLAN: Bond Expenditure Plan
Source: Department of Health Services
Telephone: 916-255-2118
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Made Active at EDR: 08/02/94
Database Release Frequency: No Update Planned
Date of Data Arrival at EDR: 07/27/94
Elapsed ASTM days: 6
Date of Last EDR Contact: 05/31/94

CA UST:

UST: Active UST Facilities
Source: SWRCB
Telephone: 916-341-5700
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/17/02
Date Made Active at EDR: 02/12/02
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 01/21/02
Elapsed ASTM days: 22
Date of Last EDR Contact: 04/16/02

CA FID UST: Facility Inventory Database
Source: California Environmental Protection Agency
Telephone: 916-445-6532
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Made Active at EDR: 09/29/95
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 09/05/95
Elapsed ASTM days: 24
Date of Last EDR Contact: 12/28/98

HIST UST: Hazardous Substance Storage Container Database
Source: State Water Resources Control Board
Telephone: 916-341-5700
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Made Active at EDR: 02/12/91
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 01/25/91
Elapsed ASTM days: 18
Date of Last EDR Contact: 07/26/01

STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities
Source: State Water Resources Control Board
Telephone: 916-227-4382
Registered Aboveground Storage Tanks.

Date of Government Version: 02/27/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/06/02
Date of Next Scheduled EDR Contact: 08/05/02

CLEANERS: Cleaner Facilities
Source: Department of Toxic Substance Control
Telephone: 916-225-0873
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/18/02
Database Release Frequency: Annually

Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

CA WDS: Waste Discharge System
Source: State Water Resources Control Board
Telephone: 916-657-1571
Sites which have been issued waste discharge requirements.

Date of Government Version: 03/18/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 03/19/02
Date of Next Scheduled EDR Contact: 06/24/02

DEED: List of Deed Restrictions
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes.

Date of Government Version: 04/26/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/11/02
Date of Next Scheduled EDR Contact: 07/08/02

HAZNET: Hazardous Waste Information System
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/00
Database Release Frequency: Annually

Date of Last EDR Contact: 05/16/02
Date of Next Scheduled EDR Contact: 08/12/02

LOCAL RECORDS

ALAMEDA COUNTY:

Local Oversight Program Listing of UGT Cleanup Sites
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 07/01/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/01/02
Date of Next Scheduled EDR Contact: 07/29/02

Underground Tanks
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

Date of Government Version: 12/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/01/02
Date of Next Scheduled EDR Contact: 07/29/02

CONTRA COSTA COUNTY:

Site List
Source: Contra Costa Health Services Department
Telephone: 925-646-2286
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/01/00
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/03/02
Date of Next Scheduled EDR Contact: 09/02/02

FRESNO COUNTY:

CUPA Resources List
Source: Dept. of Community Health
Telephone: 559-445-3271
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/01/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/30/02
Date of Next Scheduled EDR Contact: 08/12/02

KERN COUNTY:

Underground Storage Tank Sites & Tanks Listing
Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Kern County Sites and Tanks Listing.

Date of Government Version: 03/01/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/03/02
Date of Next Scheduled EDR Contact: 09/02/02

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES COUNTY:

List of Solid Waste Facilities
Source: La County Department of Public Works
Telephone: 818-458-5185

Date of Government Version: 11/09/99
Database Release Frequency: Varies

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

City of El Segundo Underground Storage Tank
Source: City of El Segundo Fire Department
Telephone: 310-607-2239

Date of Government Version: 03/01/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

City of Long Beach Underground Storage Tank
Source: City of Long Beach Fire Department
Telephone: 562-570-2543

Date of Government Version: 10/01/99
Database Release Frequency: Annually

Date of Last EDR Contact: 05/30/02
Date of Next Scheduled EDR Contact: 08/26/02

City of Torrance Underground Storage Tank
Source: City of Torrance Fire Department
Telephone: 310-618-2973

Date of Government Version: 04/01/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

City of Los Angeles Landfills
Source: Engineering & Construction Division
Telephone: 213-473-7869

Date of Government Version: 03/01/02
Database Release Frequency: Varies

Date of Last EDR Contact: 06/19/02
Date of Next Scheduled EDR Contact: 09/16/02

HMS: Street Number List
Source: Department of Public Works
Telephone: 626-458-3517
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/31/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

Site Mitigation List
Source: Community Health Services
Telephone: 323-890-7806
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/28/02
Database Release Frequency: Annually

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

San Gabriel Valley Areas of Concern
Source: EPA Region 9
Telephone: 415-744-2407
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/29/99
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MARIN COUNTY:

Underground Storage Tank Sites
Source: Public Works Department Waste Management
Telephone: 415-499-6647
Currently permitted USTs in Marin County.

Date of Government Version: 03/06/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/06/02
Date of Next Scheduled EDR Contact: 08/05/02

NAPA COUNTY:

Sites With Reported Contamination
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 04/01/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

Closed and Operating Underground Storage Tank Sites
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

Date of Government Version: 04/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

ORANGE COUNTY:

List of Underground Storage Tank Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/27/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

List of Underground Storage Tank Facilities
Source: Health Care Agency
Telephone: 714-834-3446
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/27/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

List of Industrial Site Cleanups
Source: Health Care Agency
Telephone: 714-834-3446
Petroleum and non-petroleum spills.

Date of Government Version: 10/24/00
Database Release Frequency: Annually

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

PLACER COUNTY:

Master List of Facilities
Source: Placer County Health and Human Services
Telephone: 530-889-7312
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/31/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/25/02
Date of Next Scheduled EDR Contact: 06/24/02

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Source: Department of Public Health
Telephone: 909-358-5055
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/27/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/22/02

Underground Storage Tank Tank List
Source: Health Services Agency
Telephone: 909-358-5055

Date of Government Version: 03/01/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/22/02

SACRAMENTO COUNTY:

CS - Contaminated Sites
Source: Sacramento County Environmental Management
Telephone: 916-875-8406

Date of Government Version: 01/15/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/06/02
Date of Next Scheduled EDR Contact: 08/05/02

ML - Regulatory Compliance Master List
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 01/15/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/06/02
Date of Next Scheduled EDR Contact: 08/05/02

SAN BERNARDINO COUNTY:

Hazardous Material Permits
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 04/03/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

SAN DIEGO COUNTY:

Solid Waste Facilities
Source: Department of Health Services
Telephone: 619-338-2209
San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/00
Database Release Frequency: Varies

Date of Last EDR Contact: 05/29/02
Date of Next Scheduled EDR Contact: 08/26/02

Hazardous Materials Management Division Database
Source: Hazardous Materials Management Division
Telephone: 619-338-2268
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/31/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/09/02
Date of Next Scheduled EDR Contact: 07/08/02

SAN FRANCISCO COUNTY:

Local Oversite Facilities
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

Date of Government Version: 03/01/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

Underground Storage Tank Information
Source: Department of Public Health
Telephone: 415-252-3920

Date of Government Version: 03/01/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

SAN MATEO COUNTY:

Fuel Leak List
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

Date of Government Version: 04/04/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/29/02
Date of Next Scheduled EDR Contact: 07/29/02

Business Inventory
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 05/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 04/15/02
Date of Next Scheduled EDR Contact: 07/15/02

SANTA CLARA COUNTY:

Fuel Leak Site Activity Report
Source: Santa Clara Valley Water District
Telephone: 408-265-2600

Date of Government Version: 01/03/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

Hazardous Material Facilities
Source: City of San Jose Fire Department
Telephone: 408-277-4659

Date of Government Version: 01/03/02
Database Release Frequency: Annually

Date of Last EDR Contact: 06/10/02
Date of Next Scheduled EDR Contact: 09/09/02

SOLANO COUNTY:

Leaking Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 01/02/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/02
Date of Next Scheduled EDR Contact: 09/16/02

Underground Storage Tanks
Source: Solano County Department of Environmental Management
Telephone: 707-421-6770

Date of Government Version: 01/02/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/02
Date of Next Scheduled EDR Contact: 09/16/02

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
Source: Department of Health Services
Telephone: 707-565-6565

Date of Government Version: 11/29/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/29/02
Date of Next Scheduled EDR Contact: 07/29/02

SUTTER COUNTY:

Underground Storage Tanks
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500

Date of Government Version: 07/01/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

VENTURA COUNTY:

Inventory of Illegal Abandoned and Inactive Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 04/02/01
Database Release Frequency: Annually

Date of Last EDR Contact: 05/29/02
Date of Next Scheduled EDR Contact: 08/26/02

Listing of Underground Tank Cleanup Sites
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/12/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/02
Date of Next Scheduled EDR Contact: 09/16/02

Underground Tank Closed Sites List
Source: Environmental Health Division
Telephone: 805-654-2813
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/24/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/15/02
Date of Next Scheduled EDR Contact: 07/15/02

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 02/19/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/18/02
Date of Next Scheduled EDR Contact: 09/16/02

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Source: Yolo County Department of Health
Telephone: 530-666-8646

Date of Government Version: 05/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/22/02

California Regional Water Quality Control Board (RWQCB) LUST Records

LUST REG 1: Active Toxic Site Investigation
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/01
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 05/28/02
Date of Next Scheduled EDR Contact: 08/26/02

LUST REG 2: Fuel Leak List
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457

Date of Government Version: 12/01/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/16/02
Date of Next Scheduled EDR Contact: 07/15/02

LUST REG 3: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147

Date of Government Version: 05/22/02
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

LUST REG 4: Underground Storage Tank Leak List
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-266-6600
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 08/09/01
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

LUST REG 5: Leaking Underground Storage Tank Database
Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-255-3125

Date of Government Version: 04/01/02
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/12/02
Date of Next Scheduled EDR Contact: 07/08/02

LUST REG 6L: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 01/02/02
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/08/02

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491

Date of Government Version: 01/02/02
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

LUST REG 7: Leaking Underground Storage Tank Case Listing
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491

Date of Government Version: 04/01/02
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/01/02
Date of Next Scheduled EDR Contact: 07/01/02

LUST REG 8: Leaking Underground Storage Tanks
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4498
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 07/23/01
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/13/02
Date of Next Scheduled EDR Contact: 08/12/02

LUST REG 9: Leaking Underground Storage Tank Report
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/01
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 04/22/02
Date of Next Scheduled EDR Contact: 07/22/02

California Regional Water Quality Control Board (RWQCB) SLIC Records

SLIC REG 1: Active Toxic Site Investigations
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

Date of Government Version: 02/01/01
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 05/31/02
Date of Next Scheduled EDR Contact: 08/26/02

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 12/01/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/16/02
Date of Next Scheduled EDR Contact: 07/15/02

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 05/22/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/20/02
Date of Next Scheduled EDR Contact: 08/19/02

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/13/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/01/02
Date of Next Scheduled EDR Contact: 07/29/02

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-855-3075
Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 03/31/02
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/12/02
Date of Next Scheduled EDR Contact: 07/08/02

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583

Date of Government Version: 07/19/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/08/02
Date of Next Scheduled EDR Contact: 07/08/02

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-3298

Date of Government Version: 07/31/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/10/02
Date of Next Scheduled EDR Contact: 07/08/02

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980

Date of Government Version: 03/01/02
Database Release Frequency: Annually

Date of Last EDR Contact: 06/03/02
Date of Next Scheduled EDR Contact: 09/02/02

EDR PROPRIETARY HISTORICAL DATABASES

EDR Historical Gas Station and Dry Cleaners: EDR has searched select national collections of business directories and has collected listings of potential dry cleaner and gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning and gas station/filling station/service station establishments. The categories reviewed included, but were not limited to: *gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, dry cleaner, cleaners, laundry, laundromat, cleaning/laundry, wash & dry, etc.*

This information is meant to assist and complement environmental professionals in their conduct of environmental site assessments, and is not meant to be a substitute for a full historical investigation as defined in ASTM E1527. The information provided in this proprietary database may or may not be complete; i.e., the absence of a dry cleaner or gas station/filling station/service station site does not necessarily mean that such a site did not exist in the area covered by this report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

(A note on "dry cleaning" sites: it is not possible for EDR to differentiate betwee a cleaning solvent and sites that function simply as drop-off and pick-up locatio facilities. Therefore, it is essential for environmental professionals to incorporat each site.)

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NORWOOD
3698 NORWOOD AVENUE
SAN JOSE, CA 95148

TARGET PROPERTY COORDINATES

Latitude (North):	37.332699 - 37° 19' 57.7"
Longitude (West):	121.767303 - 121° 46' 2.3"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	609206.0
UTM Y (Meters):	4132289.2

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2437121-C7 SAN JOSE EAST, CA
Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: General SW

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SANTA CLARA, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0603370260D / CBPP

Additional Panels in search area: 0603370280D / CBPP
0603490027D / CBPP

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SAN JOSE EAST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Site-Specific Hydrogeological Data*:
Search Radius: 2.0 miles
Status: Not found

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Mesozoic
System: Cretaceous
Series: Upper Cretaceous
Code: uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Component Name: BOTELLA

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

Soil Layer Information

	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COURSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

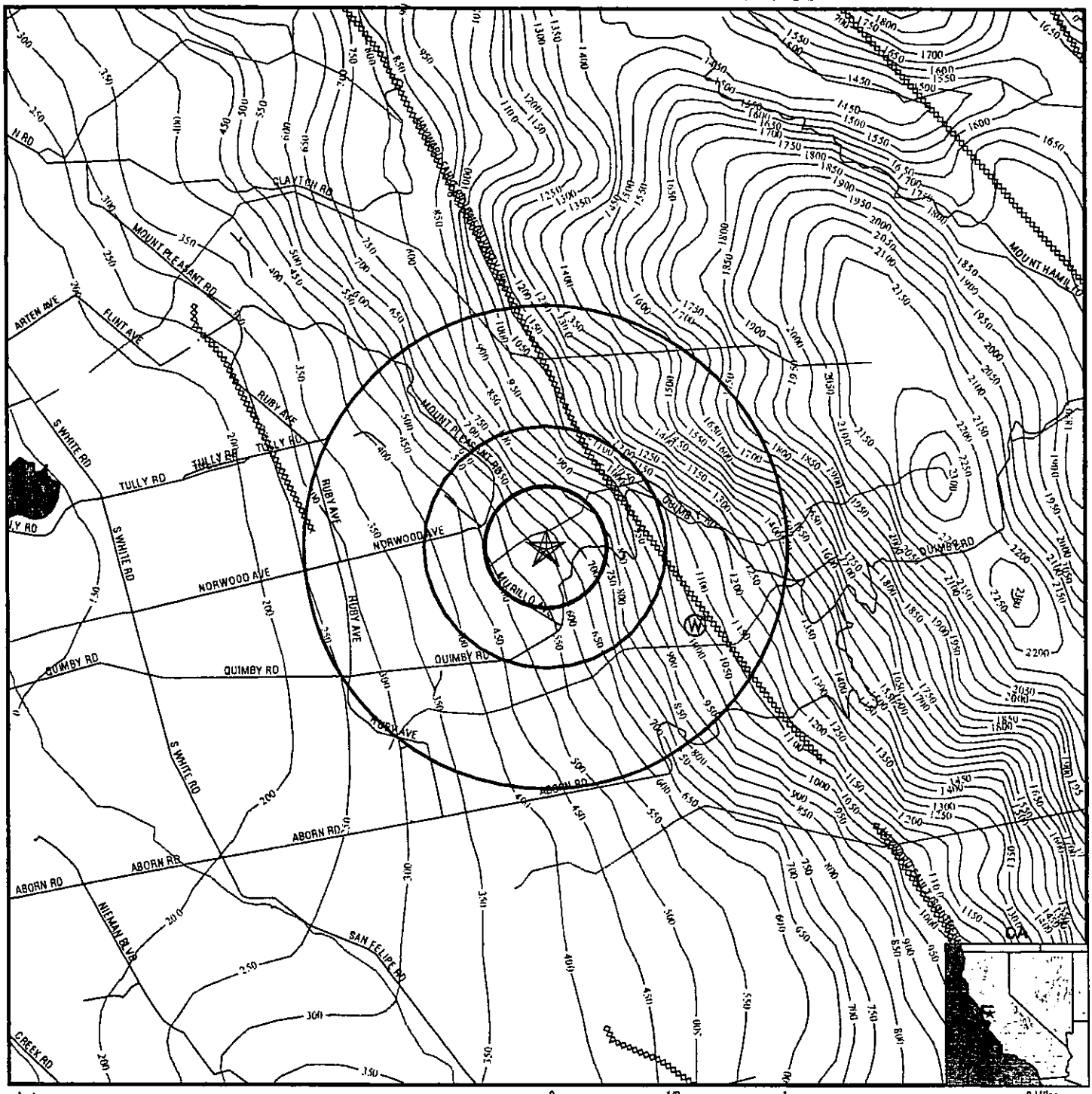
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	7818	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 805555.3s



- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Water Wells
- Public Water Supply Wells
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Cluster of Multiple Icons
- Earthquake epicenter, Richter 5 or greater
- HD Closest Hydrogeological Data
- Oil, gas or related wells

TARGET PROPERTY:	Norwood	CUSTOMER:	Terrasearch Inc.
ADDRESS:	3698 Norwood Avenue	CONTACT:	Warham Stejer
CITY/STATE/ZIP:	San Jose CA 95148	INQUIRY #:	805555.3s
LAT/LONG:	37.3327 / 121.7673	DATE:	June 26, 2002 2:05 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **ESE** **1/2 - 1 Mile** **Higher**		**CA WELLS**	**7818**

Water System Information:

Prime Station Code:	07S/02E-16B02 M	User ID:	43C
FRDS Number:	4300840001	County:	Santa Clara
District Number:	73	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	371941.0 1214518.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	WELL 02		
System Number:	4300840		
System Name:	CHABOYA HILLS ESTATES		
Organization That Operates System:			
	17575 DEPOT ST. MORGAN HILL, CA 95037		
Pop Served:	25	Connections:	11
Area Served:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95148

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-260-2805

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations for District 2, 3, 5 and 6
Source: Department of Conservation
Telephone: 916-323-1779

RADON

Area Radon Information
Source: EPA
Telephone: 303-236-1525
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 202-564-9370
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

PROPERTY OWNER INTERVIEW QUESTIONAIRE

PHASE I ENVIRONMENTAL SITE ASSESMENT
OWNER INTERVIEW QUESTIONAIRE

Project Name: Norwood
Project No.: 8567.E
Date: June 12, 2002

Current Property Owner: Mr. Richard Ceraolo

Telephone: (408) 639-0676 Fax: (408) 528-7758

Subject: Phase I Environmental Site Assessment
5-Acre Portion of Parcel APN 654-03-009
3698 Norwood Avenue
San Jose, California

As part of the Phase I Environmental Site Assessment conducted by ***TERRASEARCH, inc.*** (a consultant for Mr. Richard Ceraolo) on the subject site an owner interview is conducted to ascertain the past uses of the site, as well as any potential environmental threats. As the current property owner of the subject site, we would appreciate your assistance in obtaining the following information.

1. How long have you, the current property owner, owned the site? 1 ½ years

2. What (if any) were the previous uses of the site? Residential, 1 house, 1 cottage & barns. Date of construction not known

3. What improvements (if any) are currently on the site and date of their construction?

   a. Lead based paint or asbestos-containing materials may have been used in structures constructed prior to 1980. To your knowledge, does either of these conditions apply to any or all structures at the subject site? NO Knowledge

4. Do you know of the storage, use or disposal of any hazardous materials/substance on the site? NO

5. Do you know of any past or present agricultural use of site? NO

PHASE I ENVIRONMENTAL SITE ASSESMENT
OWNER INTERVIEW QUESTIONNAIRE

Project Name: Norwood
Project No.: 8567.E
Date: June 12, 2002

6. Do you know of any archeological findings on property? No

7. Do you know of any trash disposal on site? No

8. Do you know previous property owner name(s)? Stewarts

9. Do you know of any pits, ponds or French drains on property? one pond

10. Do you know of any above or underground fuel storage tanks at the site? ~~No~~ yes - closure certificate included

11. Are there any monitoring, domestic or agricultural water wells on the site? One domestic

12. Have there ever been any structures, basements, septic tanks and/or foundations at the subject site? yes - septic tank

13. Do you know of any environmental factors that could or have potentially affected the subject site? NO

TERRASEARCH, inc. appreciates the opportunity to be of services to you on this project and looks forward to working with you in the future. If you have any questions concerning this report, please contact our San Jose office at your convenience.

Very truly yours,
TERRASEARCH, Inc.

Warham Stejer, RG, CEG, CHG
Senior Engineering Geologist

UNDERGROUNDSTORAGE TANK REMOVAL CERTIFICATION

County of Santa Clara
Environmental Resources Agency
Office of Toxics Enforcement

2220 Moorpark Avenue
San Jose, CA 9512
(408) 299-693

FX

CERTIFICATION

COMPLETION OF HAZARDOUS MATERIALS STORAGE FACILITY CLOSURE

Facility Name Steve Stewart Residence

Facility Location 3695 Norwood Avenue, SAN JOSE, CA 95148

Mailing Address Same

Closure Contractor On-Site Technologies

Contractor Mailing Address 1715 S Bascom Avenue, Campbell CA 95008

Facility to be Closed: ☒ Underground Storage Tank(s)
Capacity & Contents 1000 gal gasoline

☐ Aboveground Storage Tank(s)
Capacity & Contents

☐ Others, specify

Permit No. 93-040 Issued By Christine Ruiz Date of Issue July 19, 1993

Certificate No. 014 Issued By Christine Ruiz Date of Issue July 19, 1993

Richard Quiroz
Hazardous Materials Specialist

Supervising Hazardous Materials Specialist

This document certifies that the above facility/tank was closed in accordance with Title 23 Code of California Regulations, Santa Clara County Hazardous Materials Storage Ordinance and the guidelines set by the Santa Clara County Office of Toxics Enforcement. Remediation of any contamination as a result of tank closure will be handled by the Regional Water Quality Control Board (RWQCB) or the Santa Clara Valley Water District (SCVWD). Remediation as a result of other types of closure activities will be handled by the RWQCB or California Department of Toxics Substances Control (DTSC).