

Construction excavations shall be made under the supervision of a qualified “competent person” along with periodic review performed by this office. A “competent person” as defined by California/OSHA, is one who is capable of identifying existing and predictable hazards that are unsanitary or dangerous to employees. The competent person has the authority to impose prompt corrective measures to eliminate these hazards.

All excavations should be stabilized within 15 days of initial excavation. If this time is exceeded, the project soils engineer must be notified, and modifications, such as shoring or slope trimming may be required. Water should not be allowed to pond on top of the excavation, nor to flow toward it. All excavations should be protected from inclement weather. The top of the excavations should be barricaded to ensure that no vehicular surcharge be allowed within five feet (5') of the top of cut.

All other construction methods shall meet the requirements of the Construction and General Industry Safety Orders, the Occupational Safety and Health Act, California OSHA in addition to other public agencies having jurisdiction.

CONCRETE DECKING

Concrete decking should be a minimum of four inches (4") thick, reinforced with minimum #3 reinforcing bars placed at eighteen inches (18") on center each way. The decking should be underlain by two inches (2") sand to aid in concrete curing. It should be noted that cracking of concrete slabs and decking is very common during curing. The cracking occurs because concrete shrinks as it dries. It is important that additional water not be added to concrete at the site to make pumping easier as this will increase the magnitude of shrinkage and thus cracking.

For crack control in concrete decking, the maximum control joint spacing should be eight feet (8'). A closer control joint spacing would provide greater crack control. Additional control joints at 90° corners, curves, angle points and where decking transitions to a narrower segment are recommended. Cracks in slabs or decking, and gaps between the structure and decking, that develop will require periodic caulking to limit infiltration of moisture into the underlying soil.

Decking that adjoins a lawn, planters or the top of a slope should be provided with a twelve inch (12") thick deepened edge. The deck reinforcement should be bent down into the thickened edge. Steel reinforcing bars (#3) should be provided at the top and bottom of the deepened edge. Although precautions can be taken, the recommendations are not intended to stop movement, settlement, differential settlement, or cracking. Recommendations provided are only to reduce movement, settlement and cracking as a result of expansion/contraction or consolidation of the supporting soil.

Footing trench spoils should either be removed from the slab areas or compacted into place by mechanical means and tested for compaction.

UTILITY TRENCHES

It is recommended that utility trenches are not planned or placed parallel to and below a 1½:1 plane projected down from the base of the outer edge of a conventional foundation. Footings should be deepened to satisfy the above recommendations. Clean sand should be placed around utility lines and properly jetted. Flooding and/or jetting of utility trenches does not create compact trench backfill and should be limited to backfilling around, and up to six inches (6") above, utility pipes. Backfill for the remaining portion of the trench above the pipes should be placed by mechanical compaction methods to a minimum of 90 or 95 percent of the maximum density, as determined by the latest version of ASTM D 1557. The higher compaction is required for fill material that has less than fifteen percent (15%) of the material finer than 0.005mm. The upper twelve inches (12") of the certified fill shall be compacted to at least 95 percent of the maximum density in all areas where vehicle loading occurs. All compaction should be tested and certified by this office. Failure to properly backfill and compact utility trenches can result in water migrating through the trench which could lead to foundation settlement or slope instability. Utility penetrations through footings should be tightly sealed when raised-floor construction is utilized.

DRAINAGE AND MAINTENANCE

General

Maintenance of structures and slopes must be performed to minimize the chance of serious damage and/or instability to improvements. Most problems are associated with, or triggered by water. Therefore, a comprehensive drainage system should be designed and incorporated into the final plans. In addition, pad areas should be maintained and planted in a way that will allow this drainage system to function as intended. The following are drainage, maintenance and landscaping recommendations that should be implemented at minimum. Reductions in these recommendations will reduce their effectiveness and may lead to damage and/or instability to site improvements and adjacent properties. It is the responsibility of the property owner to ensure that the residence and site drainage devices are maintained in accordance with the following recommendations, including the requirements of applicable governing agency.

1. Pad Drainage
 - (a) Positive pad drainage shall be incorporated into the final plans. All drainage from the roof and pad shall be directed so that water does not pond adjacent to the foundations or flow toward them. All drainage from the site shall be collected and directed via non-erosive devices to a location approved by the building official. **No alteration of this system shall be allowed.**
 - (b) Planters placed adjacent to the structures shall be designed to drain away from the structure. Care should be taken to not saturate the soils (i.e. leaking irrigation lines or excessive landscape watering).

2. Slope Drainage

No water shall be allowed to flow over any slopes. The drainage structures constructed to enhance slope stability shall be cleaned and/or maintained. This includes, but is not limited to, interceptor ditches, drainage terraces, downdrains, berms, debris fences, grates, and exits for subsurface devices.

3. Landscaping (Planting)

It is recommended that a landscape architect be consulted regarding planting adjacent to the development and on any slopes. Plants surrounding the development shall be of a variety that requires a minimum of watering. Slope landscaping shall consist of plants with dense and deep root structures that require a minimum of watering. It will be the responsibility of the property owner to maintain the planting. Alterations of planting schemes shall be reviewed by the landscape architect.

4. Irrigation

An adequate irrigation system will be required to sustain landscaping. Any leaks or defective sprinklers shall be repaired immediately. To mitigate erosion and saturation, automatic sprinkling systems shall be adjusted for rainy seasons. A landscape irrigation specialist should be consulted to determine the best times for landscape watering and the maximum amount of water usage.

5. Rodent Control

The property owner must undertake and maintain a program which eliminates or controls burrowing animals. This must be an ongoing program in order to provide protection to the slope's stability. The uncontrolled burrowing by rodents has proven to be one of the major causes for surficial slope stability problems.

REVIEWS

Plan Review and Plan Notes

The final construction and/or grading plans shall be reviewed and approved by the consultants. This is required to determine if the recommendations of the report have been properly understood and carried forth in the design drawings.

The final plans should reflect the following:

1. The Soils Engineering Investigation by SubSurface Designs, Inc., as a part of the plans.

2. Plans must be reviewed and signed by this office.
3. All grading must be reviewed by a representative of this office.
4. All foundations shall be reviewed by a representative of this office.
5. All utility trench backfill shall be reviewed and tested by a representative of this office.

Reviews will be required to verify all work. A review will be performed to determine if the intent of the report has been adequately carried forth. This office should be notified at least **two working days** in advance of any reviews of this nature so that staff personnel may be made available.

Construction Review

It is required that all grading, foundation excavations, slot cutting, pile foundations, underpinning, shoring, utility trench backfill, pre-moistened soil, retaining wall backdrain systems and backfill be reviewed by this office. A review will be performed to determine if the intent of the report has been adequately carried forth. This office should be notified at least **two working days** in advance of any reviews of this nature so that staff personnel may be made available. The reviews will be billed at our current hourly rate.

LIMITATIONS

General

Subsurface conditions were determined on the basis of our field explorations and appear to be relatively uniform. Although, between exploratory excavations, subsurface earth materials may vary in type, strength, and many other properties. The recommendations presented herein are for soil conditions encountered in specific locations. Other soil conditions due to non-uniformity of the soil conditions or manmade alterations may be revealed during construction. At that time, further recommendations may be made if required.

Conclusions and recommendations presented herein are based on our experience and background. Therefore, the conclusions and recommendations are professional opinions and are not meant to indicate a control of nature. This report makes no other warranty, either expressed or implied, concerning the advice presented herein.

Expansive soils were encountered on the subject property. Design for foundations, slabs on grade, and retaining walls have been provided to mitigate this soil condition. These designs do not guarantee or warrant that cracking will not occur. Site conditions can and do change from those which were first envisioned.

These conditions can have a significant impact on the overall functionality of the structure and the appurtenant structures.

Conclusions on building site stability, settlement, slippage, and its affects on off-site property are based on our visual examination, the placement of explorations, laboratory testing of samples obtained during explorations, analysis of our data, and our experience. It is our opinion that our standard-of-care analysis provides an adequate assessment of the site conditions. Our examination does not, however, imply that the subject property is risk free.

This report may not be copied. If you wish additional copies, you may order them from this office. See your contract for charges.

111 Statement

It is the finding of this firm, based upon the subsurface data, that the proposed additions, detached garage and guest house will not be affected by settlement, landsliding, or slippage. Further, the proposed development and grading will not have an adverse effect on off-site property.

Construction Notice

Construction can be difficult. Recommendations contained herein are based upon several windows (explorations) excavated at locations deemed suitable by your consultants. It is this corporation's aim to advise you through this report of the general site conditions, suitability for construction, and overall stability. It must be understood that the opinions are based upon testing, analysis, and interpretation thereof.

All properties are subject to risk, these risks can be mitigated but not be eliminated. Properties are subject to hazards including but not limited to, floods, mudslides, landslides, seepage, erosion, raveling of slopes, concentrated drainage, limited access, differential settlement, heaving and fire. The damage from these hazards may be reduced by the property owner by maintaining yards, slopes, walls, slough protection devices, drainage facilities, and by correcting any deficiencies found during occupancy of the property. It is not possible to eliminate all hazards.

Quantities for foundation concrete and steel may be estimated, based on the findings given in this report. However, you must be aware that depths and magnitudes will most likely vary between the excavated windows (explorations) given in the report.

SubSurface Designs, Inc.

PIN # 7387

If you have any questions concerning this report, please contact this office.

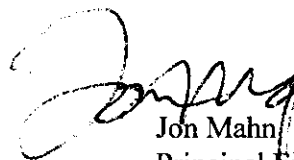
Respectfully submitted:
SUBSURFACE DESIGNS, INC.

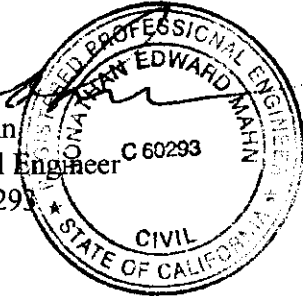
Cameron Kennedy

Cameron Kennedy
Staff Engineer

CLK/JEM: 7387.01S

dist: (4) Addressee
(1) file


Jon Mahn
Principal Engineer
RCE 60293



REGISTERED PROFESSIONAL ENGINEER
JONATHAN EDWARD MAHN
C 60293
CIVIL
STATE OF CALIFORNIA

APPENDIX I

SITE INFORMATION

Vicinity Map

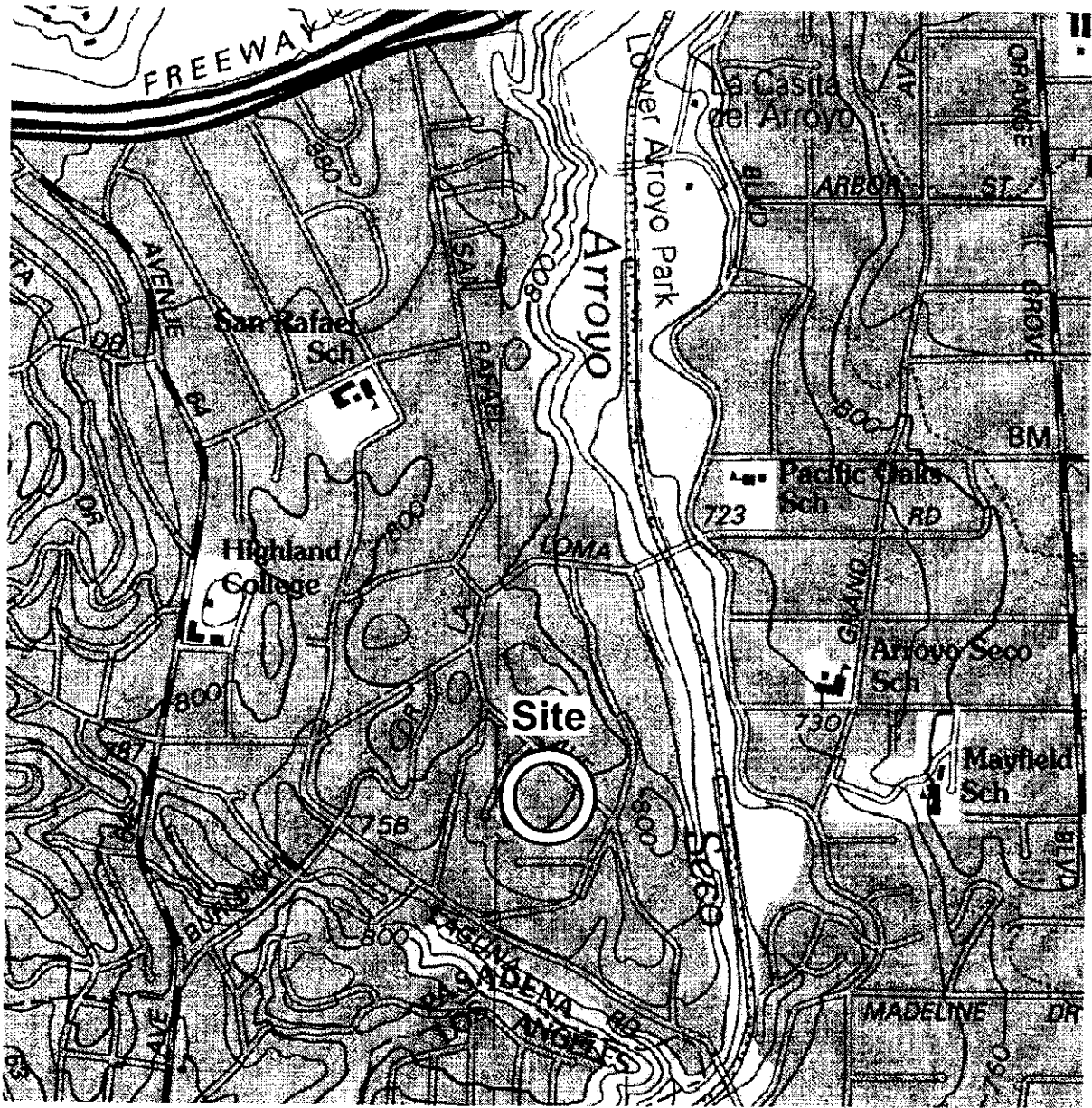
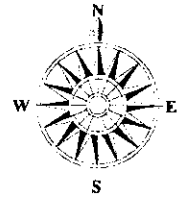
Seismic Hazard Map

Exploration Logs, Figure E.1 through E.6

Site Plan, Plate A



VICINITY MAP

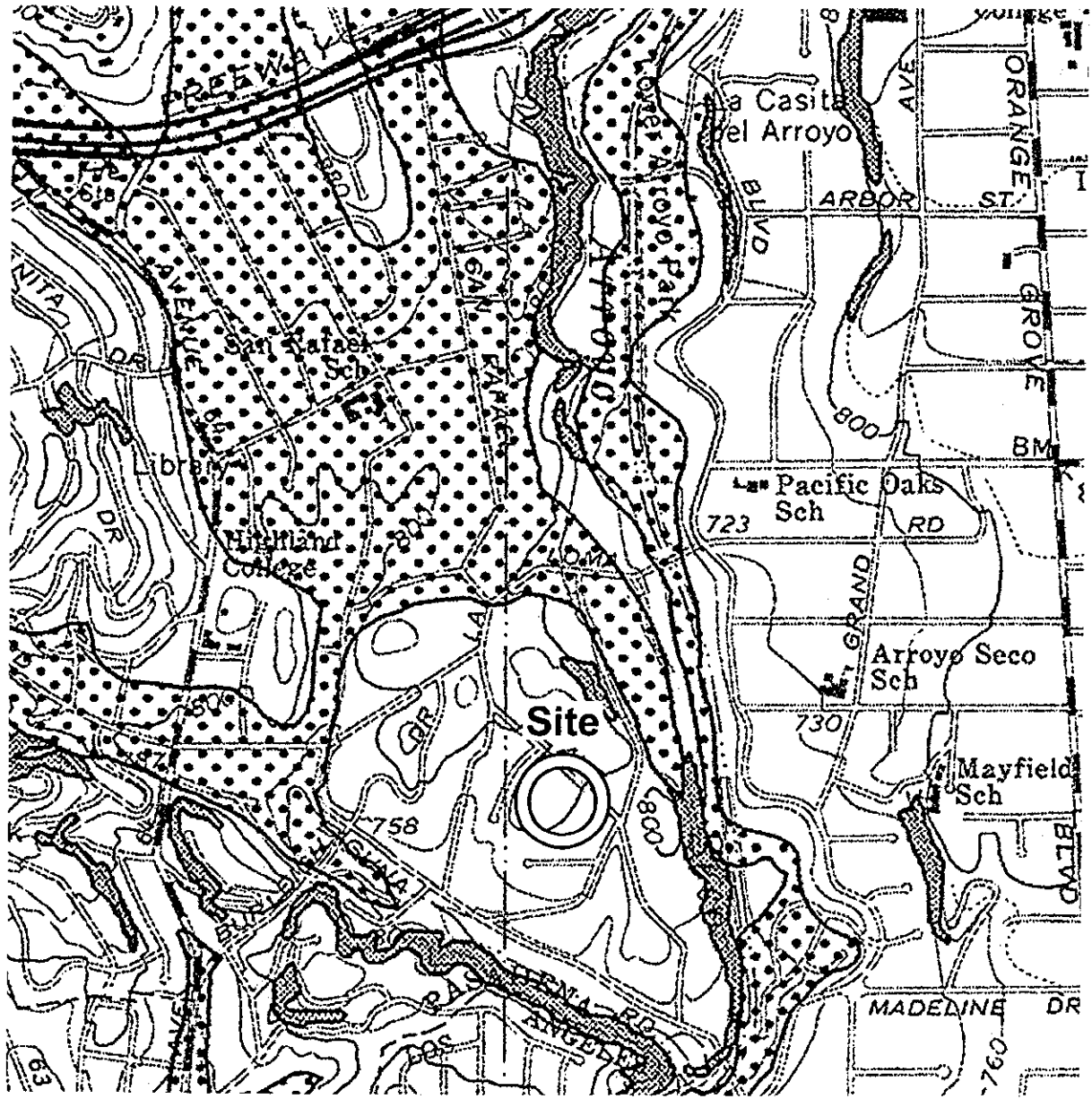
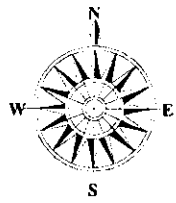


SubSurface Designs, Inc.
Geotechnical Engineers
Engineering Geologists

Ref: Modified from the Topographic Map of the Pasadena
Quadrangle, prepared by U.S.G.S., 1995.
Scale: 1" = 2000'



SEISMIC HAZARD MAP



SubSurface Designs, Inc.
Geotechnical Engineers
Engineering Geologists

Ref: Modified from the Seismic Hazard Zone Map of the Pasadena Quadrangle, prepared by the State of California Division of Mines and Geology, 1999.
Scale: 1" = 1000'

EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 01</i>		PAGE <i>1</i> OF <i>1</i>		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>10.0'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
					Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>	
LITHOLOGIC DESCRIPTION							
1	6	17	91	0		Earth Fill (ef) Silty Sand - medium brown fine- to coarse-grained, some gravel, slightly moist to moist, moderately compact, some rootlets	
2	-	8		2		Alluvium (Qa) Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense	
3	6	5	103	4		hand augered 4.0' - 10.0'	
4	6	7	119	6		7.0' - Clayey Sand - medium brown, fine- to medium-grained, moist	
5	6	3	121	10		9.5' - abundant gravel	

EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 02</i>		PAGE <i>1</i> OF <i>1</i>		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>5.5'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
						Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>
						LITHOLOGIC DESCRIPTION	
						<p>Earth Fill (ef) Silty Sand - medium brown fine- to medium-grained, slightly moist to moist, moderately compact, some rootlets</p>	
	6	13	115	2		<p>Alluvium (Qa) Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense</p> <p>36" - base of footing exposed</p>	
	6	6	123	6			
				8			
				10			

EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 03</i>		PAGE <i>1</i> OF <i>1</i>		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>3.5'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
						Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>
LITHOLOGIC DESCRIPTION							
				0		Earth Fill (ef) Silty Sand - medium brown fine- to medium-grained, slightly moist to moist, moderately compact, rootlets	
				2		Alluvium (Qa) Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense	
						36" - base of footing exposed	
				4			
				6			
				8			
				10			

EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 04</i>		PAGE 1 OF 1		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf.)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>4.0'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
					Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>	
LITHOLOGIC DESCRIPTION							
					Earth Fill (ef)	Silty Sand - medium brown fine- to medium-grained, slightly moist to moist, moderately compact, some rootlets	
					Alluvium (Qa)	Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense 18" - base of footing exposed	
10							
8							
6							
4							
2							
					6		
					0		
					6		

EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 05</i>		PAGE <i>1</i> OF <i>1</i>		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf.)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>4.0'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
						Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>
						LITHOLOGIC DESCRIPTION	
				0		Earth Fill (ef) Silty Sand - medium brown fine- to medium-grained, slightly moist to moist, moderately compact, some rootlets	
				2		Alluvium (Qa) Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense	
6	12	99		4		Bedrock Sandstone - grayish-brown to medium brown, fine- to medium-grained, moderately hard	
-	30			6			
				8			
				10			

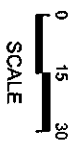
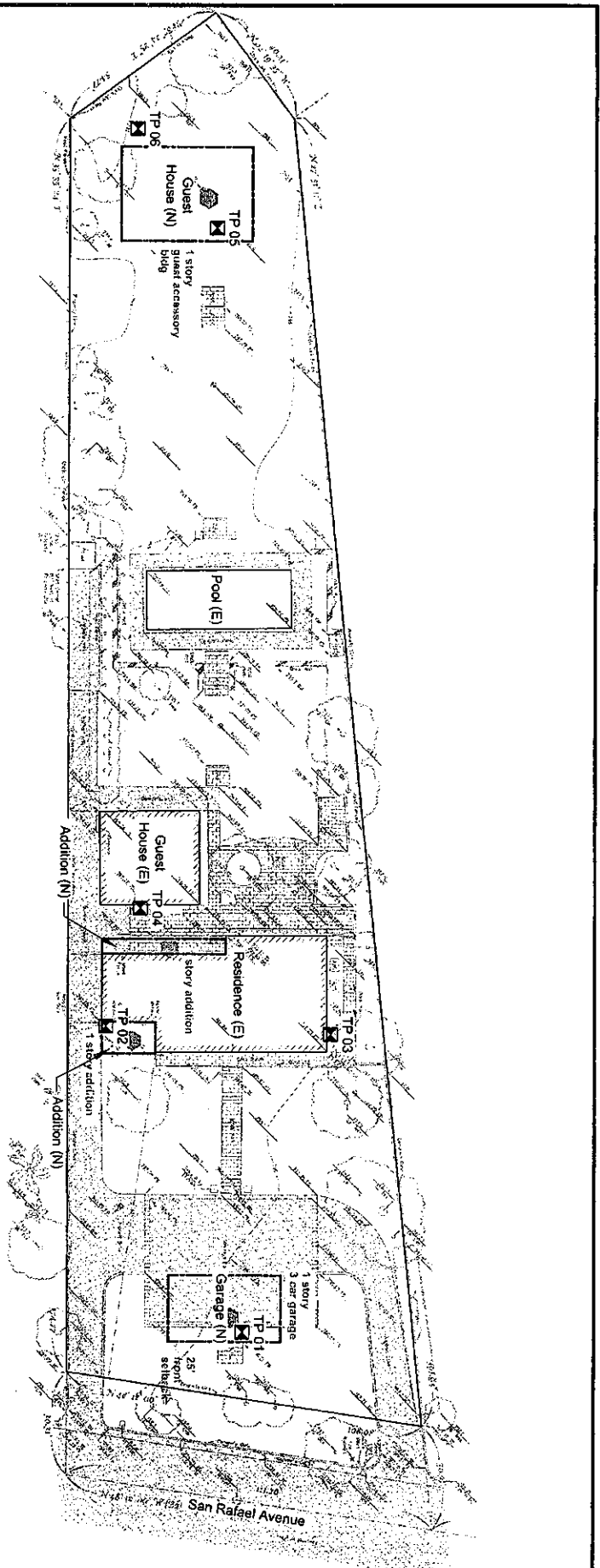
EXPLORATION LOG

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>			EXPLORATION NO: <i>TP 06</i>		PAGE 1 OF 1		
PROJECT NUMBER: <i>PIN 7387</i>			EXPLORATION EQUIPMENT: <i>Hand-Dug</i>				
Comments: <i>See attached Site Plan for location.</i>							
Sample Graphics	Recovery (No. of Rings)	Moisture Content (%)	Unit Dry Wt. (pcf)	Depth (ft.)	Lithologic Graphics	Logged By: <i>CLK</i>	Total Depth: <i>6.5'</i>
						Date Started: <i>August 15, 2019</i>	Top Elevation (ft.):
					Date Completed: <i>August 15, 2019</i>	Excavation Width: <i>24"x36"</i>	
LITHOLOGIC DESCRIPTION							
	6	14	74		0	Earth Fill (ef) Silty Sand - medium brown, fine- to medium-grained, slightly moist to moist, moderately compact, some rootlets	
	6	15	102	2	1	Alluvium (Qa) Silty Sand - medium brown, fine- to medium-grained, clay binder, moist, moderately dense	
	6	11	108	4	2	Bedrock Sandstone - grayish-brown to medium brown, fine- to medium-grained, moderately hard, upper 1.0' weathered hand augered 4.0' - 6.5'	
	6	10	116	6	3		
				8			
				10			

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Figure E.6

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LEGEND
 = Hand-dug test pit

NOTE: This document has been created from a topographic base map and plans provided by the client. Analyses and/or professional opinions generated from this plan are only as accurate as the plan(s) provided to this office. If discrepancies are found to exist between the plan(s) and the actual site conditions, they should be brought to our immediate attention so that revisions may be made as required.

SubSurface Designs Inc.
 12848 Foothill Boulevard, Sylmar, CA 91342
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This Old House, LLC
 801 S. San Rafael Avenue, Pasadena
 Pin# 7387.01S

Site Plan

September, 2019

Plate A

APPENDIX II

LABORATORY TEST RESULTS

Laboratory Testing

Laboratory Recapitulation - Table I-1

Shear Strength Diagram, Figure S.1 through S.2

Consolidation Diagram, Figure C.1 through C.4

Maximum Density, Figure M.1

LABORATORY TEST RESULTS

Moisture and Density Tests

The moisture content and in-place dry density of all undisturbed samples obtained were determined. The test results are presented in the Laboratory Recapitulation - Table I. Tests are performed in accordance with the latest version of ASTM D 2216.

Shear Tests

Direct single-shear tests were performed on representative undisturbed samples to determine their strength characteristics. The desired normal load was applied to the specimen and allowed to come to equilibrium. The rate of deflection on the sample is approximately 0.005 inches per minute. Depending upon the sample location and future site condition, samples may be tested at field moisture. The results are plotted on the Shear Test Diagrams and in the Laboratory Recapitulation - Table I. Tests are performed in accordance with the latest version of ASTM D 3080.

Consolidation

Consolidation tests were performed on undisturbed samples to predict the soils behavior under a specific load. Loads are applied in increasing load increments and the results are recorded. The samples are usually inundated at a designated load to determine the effect of water contacting the bearing soil. The results are plotted on the "Consolidation Pressure Curve," figures. The load at which the water is added is noted on the drawing. Tests are performed in accordance with the latest version of ASTM D 2435.

Expansion Tests

Expansion tests are performed on representative samples to determine the expansive potential of compacted soils when inundated with water. The test was performed in accordance with the latest version of ASTM D 4829. The classification of potentially expansive soil is based on the following table.

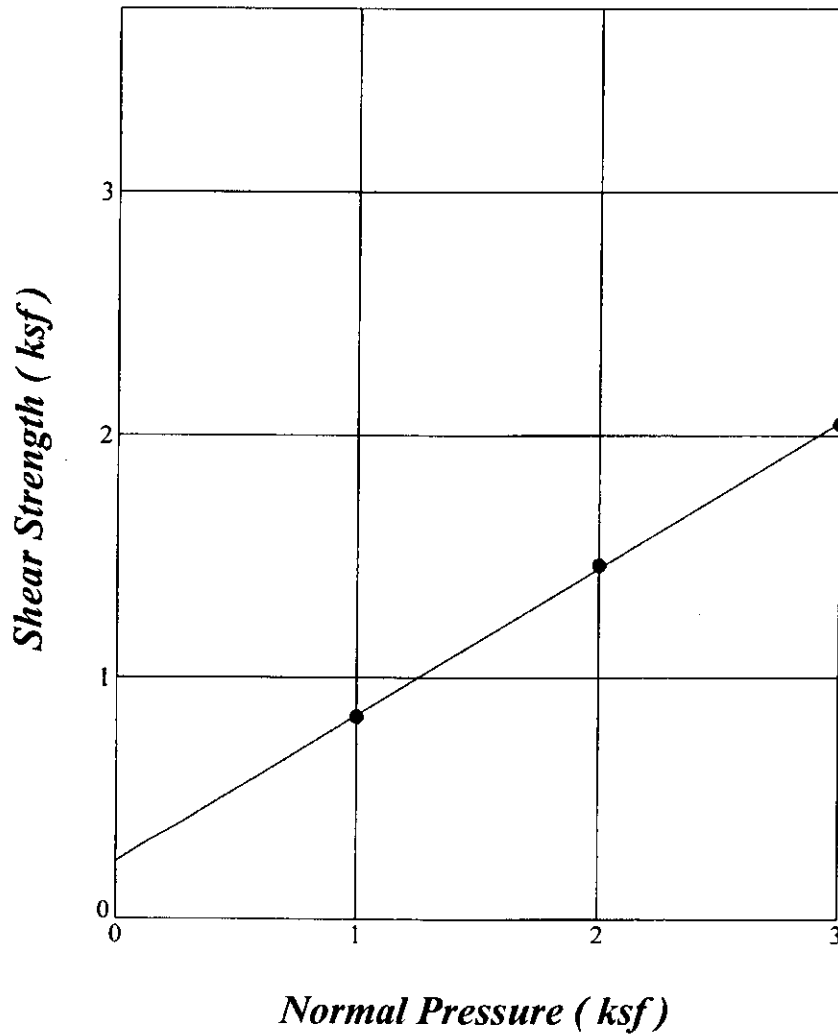
Expansion Index	Potential Expansion
0-20	Very Low
20-50	Low
50-90	Medium
90-130	High
Above 130	Very High

LABORATORY RECAPITULATION

Table I-1							
Location	Depth (ft)	Material Type	In Situ Dry Density (PCF)	In Situ Water (%)	Expansion Index	Cohesion (ksf)	Friction Angle (deg)
TP 01	0.5	ef	91.5	17.1			
TP 01	2.5	Qa	Bulk	8.4	73	0.210	31.0
TP 01	3.0	Qa	103.2	4.7			
TP 01	6.0	Qa	119.0	7.2			
TP 01	9.0	Qa	121.4	3.3			
TP 02	2.0	Qa	114.9	12.7		0.245	31.0
TP 02	5.0	Qa	122.8	6.0			
TP 04	2.0	Qa	119.9	0.3			
TP 05	3.0	Bedrock	98.9	11.6			
TP 05	3.5	Bedrock	Bulk	30.1	1		
TP 06	1.0	Qa	73.6	14.2			
TP 06	2.0	Qa	101.9	15.3			
TP 06	4.0	Bedrock	107.6	10.6			
TP 06	6.0	Bedrock	116.2	10.0			

SHEAR TEST DIAGRAM

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>	SAMPLE ID: <i>TP 01 @ 2.50'</i>
PROJECT NUMBER: <i>PIN 7387</i>	MATERIAL DESCRIPTION: <i>Alluvium (Qa)</i>
TEST METHOD: <i>90% Remolded Ultimate Saturated Shear</i>	



MOISTURE CONTENT (%)	DENSITY (pcf)	RESULTS
In Situ: 8.4	Dry Density:	Phi (deg.): 31.0
Saturated: 22.0		Cohesion (ksf): 0.245

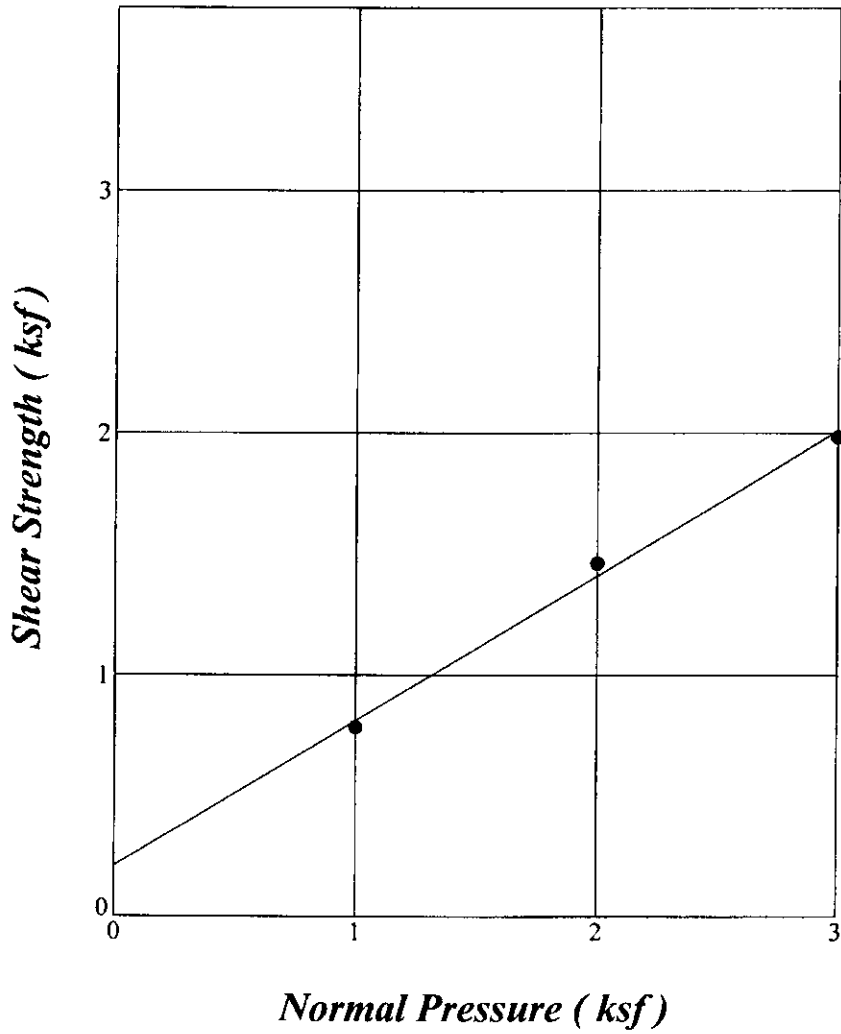
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Figure S.1

SHEAR TEST DIAGRAM

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>	SAMPLE ID: <i>TP 02 @ 2.00'</i>
PROJECT NUMBER: <i>PIN 7387</i>	MATERIAL DESCRIPTION: <i>Alluvium (Qa)</i>
TEST METHOD: <i>Ultimate Saturated Shear</i>	



MOISTURE CONTENT (%)	DENSITY (pcf)	RESULTS
In Situ: <i>12.7</i>		Phi (deg.): <i>31.0</i>
Saturated: <i>20.9</i>	Dry Density: <i>114.9</i>	Cohesion (ksf): <i>0.210</i>

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Figure S.2

CONSOLIDATION TEST

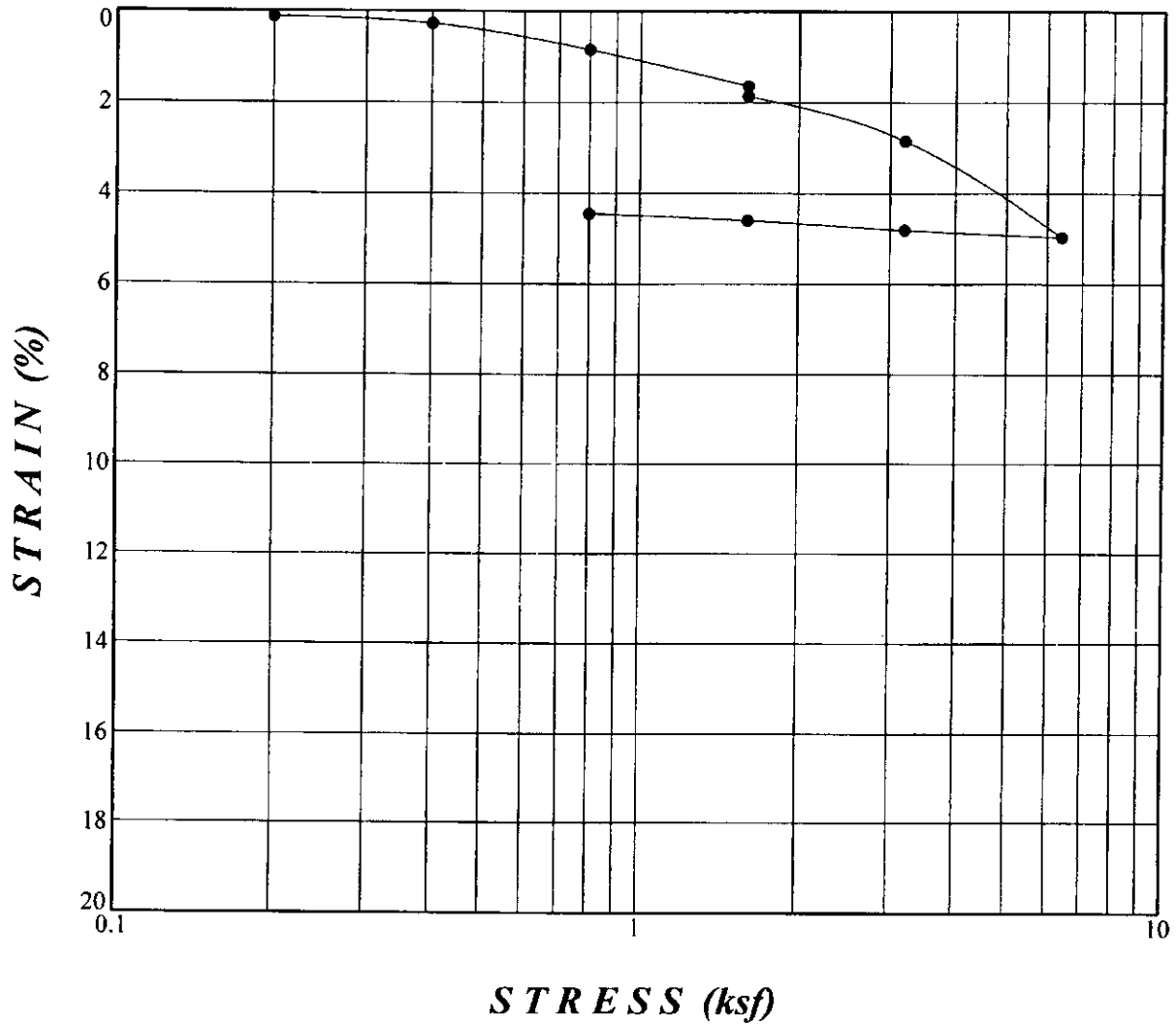
PROJECT NAME: *This Old House, LLC / San Rafael Ave.*

SAMPLE ID: *TP 01 @ 3.00'*

PROJECT NUMBER: *PIN 7387*

MATERIAL DESCRIPTION: *Alluvium (Qa)*

Load (psf) water added to test at: 1600



MOISTURE CONTENT (%)

DRY DENSITY (pcf)

RESULTS

In Situ: *4.7*

Before Test: *103.2*

Initial Void Ratio: *0.8502*

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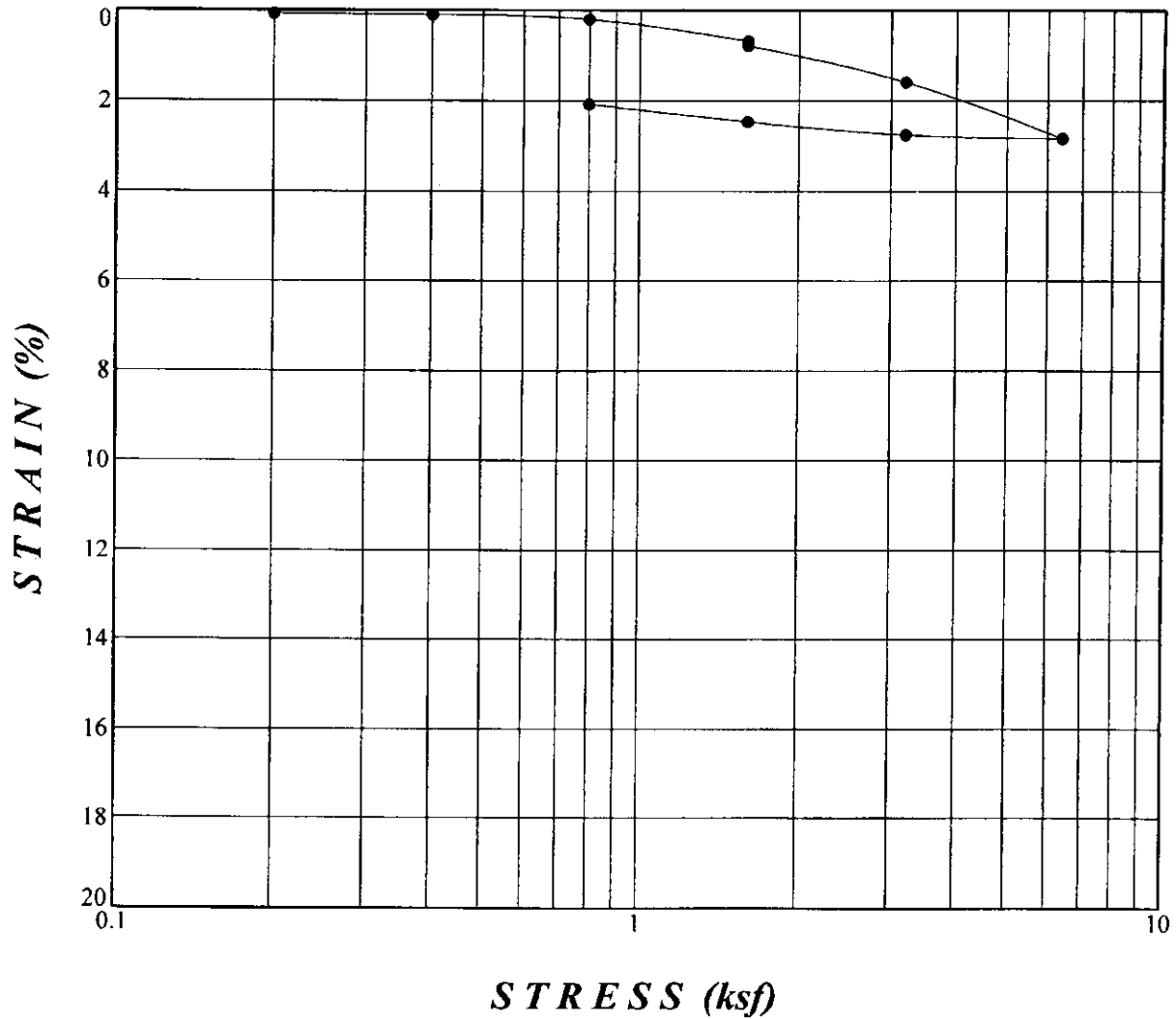
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Figure C.1

CONSOLIDATION TEST

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>	SAMPLE ID: <i>TP 01 @ 6.00'</i>
PROJECT NUMBER: <i>PIN 7387</i>	MATERIAL DESCRIPTION: <i>Alluvium (Qa)</i>

Load (psf) water added to test at: 1600



MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RESULTS
In Situ: <i>7.2</i>	Before Test: <i>119.2</i>	Initial Void Ratio: <i>0.4306</i>

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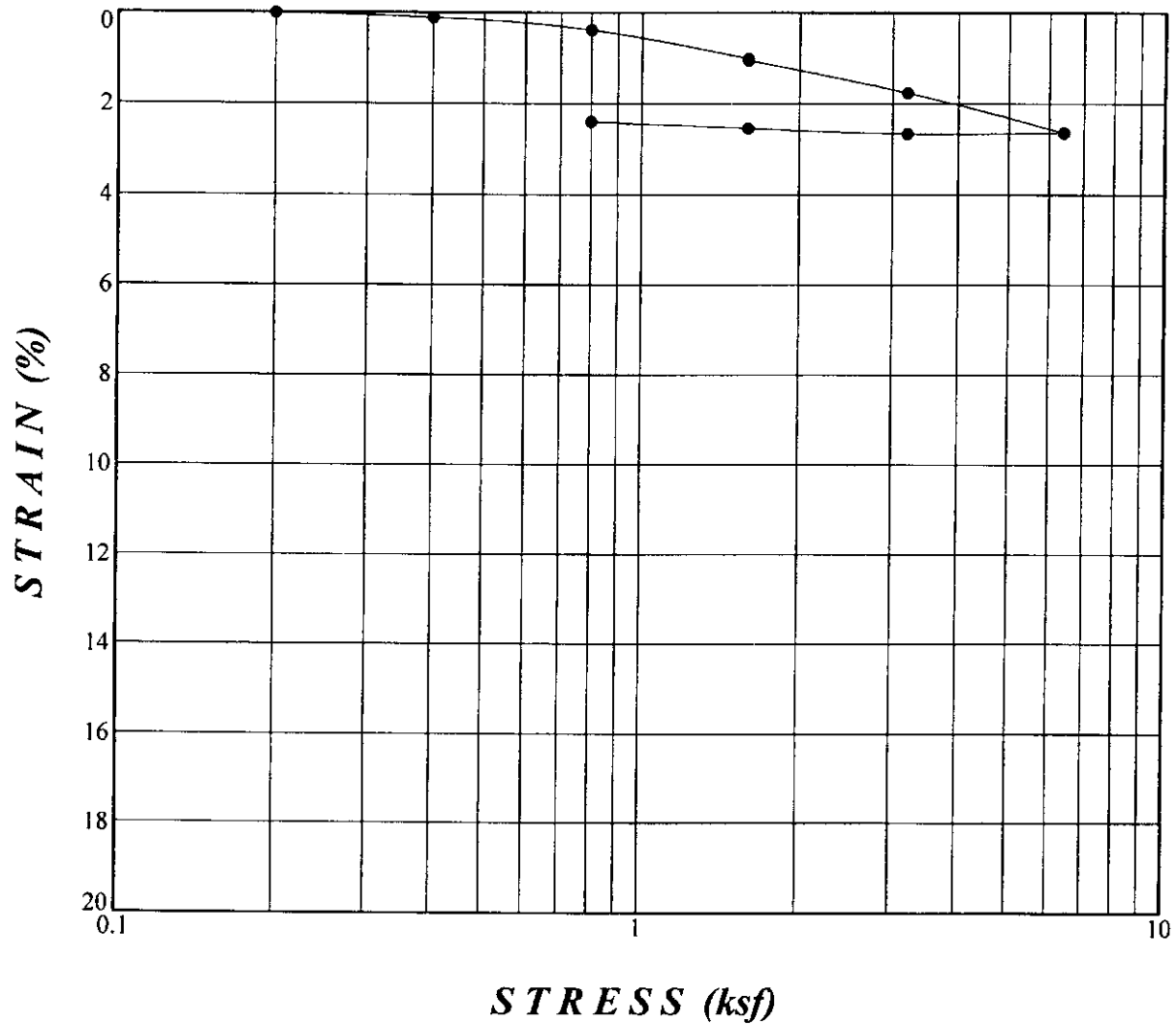
GEOTECHNICAL ENGINEERS & ENGINEERING GEOLOGISTS

Figure C.2

CONSOLIDATION TEST

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>	SAMPLE ID: <i>TP 02 @ 2.00'</i>
PROJECT NUMBER: <i>PIN 7387</i>	MATERIAL DESCRIPTION: <i>Alluvium (Qa)</i>

Load (psf) water added to test at: 1600



MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RESULTS
In Situ: <i>12.7</i>	Before Test: <i>114.9</i>	Initial Void Ratio: <i>0.4661</i>

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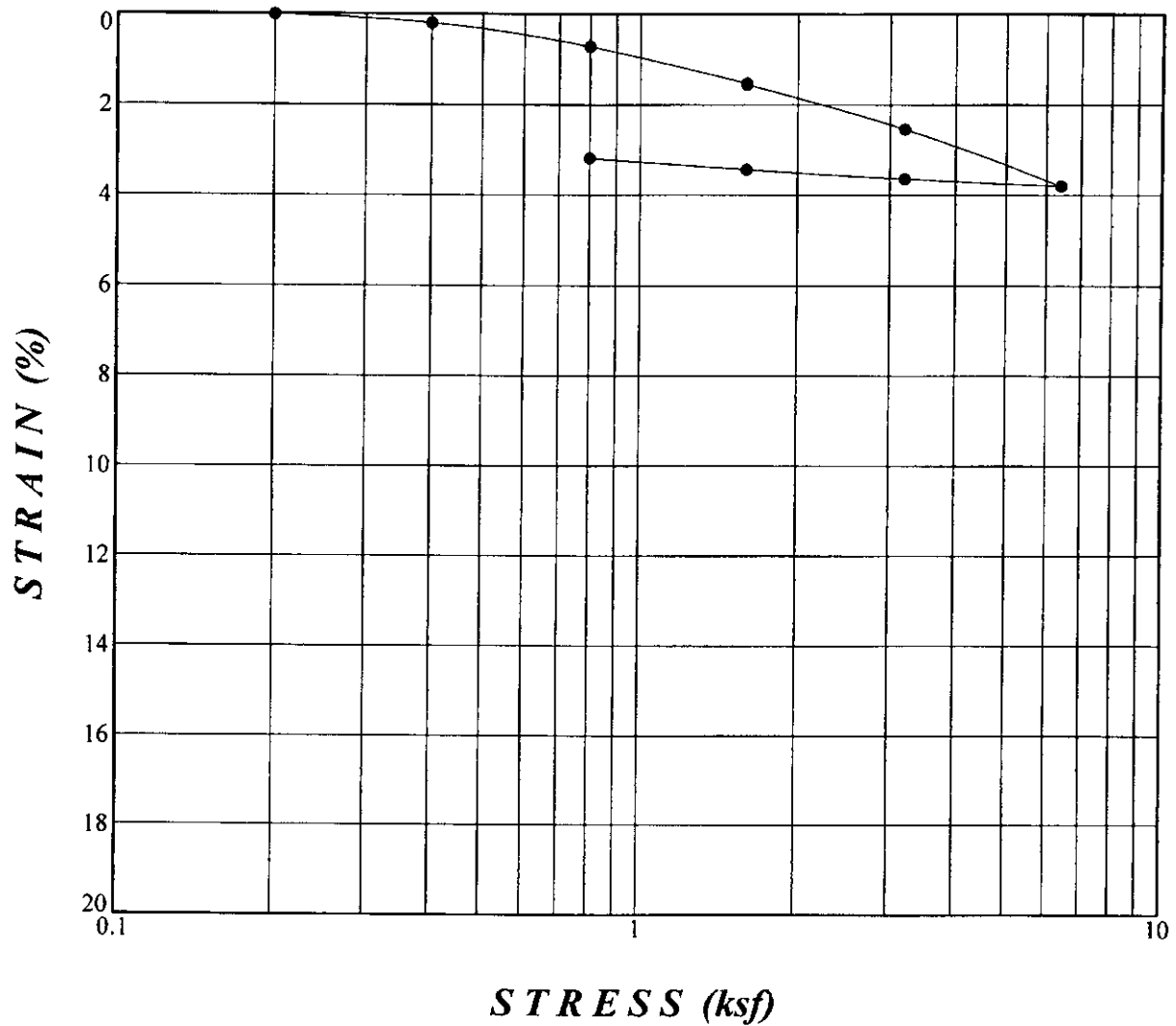
GEOTECHNICAL ENGINEERS & ENGINEERING GEOLOGISTS

Figure C.3

CONSOLIDATION TEST

PROJECT NAME: <i>This Old House, LLC / San Rafael Ave.</i>	SAMPLE ID: <i>TP 02 @ 5.00'</i>
PROJECT NUMBER: <i>PIN 7387</i>	MATERIAL DESCRIPTION: <i>Alluvium (Qa)</i>

Load (psf) water added to test at: 1600



MOISTURE CONTENT (%)	DRY DENSITY (pcf)	RESULTS
In Situ: <i>6.0</i>	Before Test: <i>122.8</i>	Initial Void Ratio: <i>0.3721</i>

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Figure C.4