

# Environmental Quality Commission



## REGULAR MEETING AGENDA

**Date:** 8/19/2020

**Time:** 5:00 p.m.

**Regular Meeting Location:** [Zoom.us/join](https://zoom.us/join) – ID# 915 4675 0502

### NOVEL CORONAVIRUS, COVID-19, EMERGENCY ADVISORY NOTICE

On March 19, 2020, the Governor ordered a statewide stay-at-home order calling on all individuals living in the State of California to stay at home or at their place of residence to slow the spread of the COVID-19 virus. Additionally, the Governor has temporarily suspended certain requirements of the Brown Act. For the duration of the shelter in place order, the following public meeting protocols will apply.

Teleconference meeting: All members of the Environmental Quality Commission, city staff, applicants, and members of the public will be participating by teleconference. To promote social distancing while allowing essential governmental functions to continue, the Governor has temporarily waived portions of the open meetings act and rules pertaining to teleconference meetings. This meeting is conducted in compliance with the Governor Executive Order N-25-20 issued March 12, 2020, and supplemental Executive Order N-29-20 issued March 17, 2020.

- How to participate in the meeting
  - Access the special meeting real-time online at:  
[Zoom.us/join](https://zoom.us/join) – Regular Meeting ID 915 4675 0502

Subject to Change: Given the current public health emergency and the rapidly evolving federal, state, county and local orders, the format of this meeting may be altered or the meeting may be canceled. You may check on the status of the meeting by visiting the City's website [www.menlopark.org](http://www.menlopark.org). The instructions for logging on to the Zoom webinar and/or the access code is subject to change. If you have difficulty accessing the Zoom webinar, please check the latest online edition of the posted agenda for updated information ([menlopark.org/agenda](http://menlopark.org/agenda)).

### Regular Session ([Zoom.us/join](https://zoom.us/join) – ID# 915 4675 0502)

#### A. Call To Order

#### B. Roll Call - Gaillard, Kabat, London, Martin, Payne, Price, Turley

#### C. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under public comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under public comment other than to provide general information.

## **D. Regular Business**

- D1. Approve June 24, 2020 minutes ([Attachment](#))
- D2. Issue determination on appeal of staff's denial of three heritage tree removal permits at 2458 and 2460 Sharon Oaks Drive ([Staff Report #20-003-EQC](#))
- D3. Review and discuss climate action plan subcommittee to move forward on strategies 2, 4, and 6 of the adopted climate action plan ([Attachment](#))
- D4. Select chair and vice chair

## **E. Adjournment**

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

For appeal hearings, appellant and applicant shall each have 10 minutes for presentations.

If you challenge any of the items listed on this agenda in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City of Menlo Park at, or prior to, the public hearing.

Any writing that is distributed to a majority of the City Council by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available by request by emailing the city clerk at [jaherren@menlopark.org](mailto:jaherren@menlopark.org). Persons with disabilities, who require auxiliary aids or services in attending or participating in Commission meetings, may call the City Clerk's Office at 650-330-6620.

Agendas are posted in accordance with Government Code §54954.2(a) or §54956. Members of the public can view electronic agendas and staff reports by accessing the City website at [menlopark.org/agenda](http://menlopark.org/agenda) and can receive email notification of agenda and staff report postings by subscribing to the "Notify Me" service at [menlopark.org/notifyme](http://menlopark.org/notifyme). Agendas and staff reports may also be obtained by contacting City Clerk at 650-330-6620. (Posted: 8/13/2020)



**SPECIAL MEETING MINUTES – DRAFT**

**Date:** 6/24/2020  
**Time:** 4:00 p.m.  
**Special Meeting Location:** Zoom.us/join – ID# 983-4564-7162

**A.** Chair Price called the meeting to order at 4:07 p.m.

**B. Roll Call**

**Present:** Gaillard, Kabat, London, Martin, Payne (Vice Chair), Price (Chair), Turley  
**Absent:** None  
**Staff:** Rebecca Lucky, Sustainability Manager

**C. Regular Business**

C1. Approve December 10, 2019 and February 19, 2020 minutes

Chair Price introduced item.

**ACTION:** Motion and second (Gaillard/London) to approve December 10, 2019 and February 19, 2020 minutes, passed unanimously.

C2. Recommend subcommittee's draft Climate Action Plan to City Council

Commissioner Gaillard from Climate Action Plan Subcommittee made a presentation (Attachment).

- Jen Wolosin spoke in support of the draft climate action plan, read an email from Adina Levin in support of the draft climate action plan, and requested increasing the vehicle miles traveled (VMT) reduction goal (Attachment).
- Scott Marshall from Canopy spoke in support of the draft climate action plan, and requested inclusion of developing an urban forest master plan to reduce greenhouse gas emissions.
- Pam Jones spoke in support of the draft climate action plan.
- Staff read an email from Menlo Spark that supported the draft climate action plan (Attachment).
- Staff read an email from Mitch Slomiak that supported the draft climate action plan (Attachment).

**ACTION:** Motion and second (Gaillard/Payne) to recommend the draft climate action plan to City Council with the following changes: (1) Include a goal to achieve net zero emissions by 2030 (2) Revisit the plan in one year to incorporate further actions to achieve net zero goal by 2030, and (3) Modify proposed climate action plan strategies No. 2, No. 4, and No. 6 based on the commission's consensus to include a gasoline reduction goal, increase VMT reductions to 25%, and remove the moratorium on development, and instead include developing a climate adaptation and implementation plan that protects the Belle Haven Community from sea level rise, passed unanimously.

**D. Adjournment**

Chair Price adjourned the meeting at 7:24 p.m.

Rebecca Lucky, Sustainability Manager





**STAFF REPORT**

**Environmental Quality Commission**

**Meeting Date:** 8/19/2020  
**Staff Report Number:** 20-003-EQC

**Regular Business:** Issue determination on appeal of staff’s denial of three heritage tree removal permits at 2458 and 2460 Sharon Oaks Drive.

**Recommendation**

Staff recommends the Environmental Quality Commission (EQC) to uphold the decision to deny the permit application to remove three coast redwood trees at 2458 and 2460 Sharon Oaks Drive.

**Policy Issues**

Under the previous heritage tree ordinance in the Menlo Park Municipal Code, any resident or property owner may appeal a heritage tree permit decision to the EQC. In addition, any resident or property owner may appeal the decision of the EQC to the City Council within 15 days after commission’s decision. Tree removal decisions made by staff, the EQC, or City Council must be related to the decision-making criteria in section 13.24.040 of the heritage tree ordinance.

**Background**

The appeal is grandfathered under the previous heritage tree ordinance because the heritage tree removal permit application and staff’s decision were made before July 1, the effective date of the current ordinance. Therefore the permit applicant or any community member may appeal staff’s decision to EQC. If the permit applicant or a community member disagrees with EQC’s decision, he/she may appeal to City Council within 15 days of the Commission’s decision. The City Council hearing is scheduled at the City Council’s earliest convenience to make a determination.

On June 15, 2020 the Sharon Oaks Homeowner’s Association (HOA) submitted a heritage tree removal permit application (Attachment A) for the removal of three coast redwood (*Sequoia sempervirens*). The project arborist, Michael Young evaluated the trees on June 11 as shown in Table 1.

Table 1: Summary of Mr. Young’s arborist forms			
Tree	Measurements (height/diameter)	Condition	Recommendation
1	90 inches/54 inches	Health and structure is rated fair.	Removal based on tree roots damaging the building structure (stairway, patio, and pathways).
2	90 inches/53.5 inches		
3	75 inches/25.5 inches		

Based on Mr. Young’s report the trees are in “Fair” health and structure indicating that the trees are showing initial or temporary disease, pest, or lack of vitality. Measures should be taken to improve health and

appearance. "Fair" structure indicates that routine tree maintenance is needed, such as pruning or end weight reduction as the tree grows according to Mr. Young's report.

The Sharon Oaks HOA requested a permit to remove the three redwood trees on the basis that their roots are causing damage to townhome structures located at 2458 and 2460 Sharon Oaks Drive and that further damage is likely in the future. The SOHOA submitted an engineer's report documenting inspection and condition assessment for the foundations of both townhomes completed by George E Drew, a Certified Inspection Engineer (BIECI) (Attachment B). Based on Mr. Drew's report, the differential levels of the foundations across the level of both structures is within the normally accepted tolerances for good foundation performance. Mr. Drew's report recommends the removal of 2 redwoods to eliminate any potential for damage to the foundation of the structures that is likely to occur at an unspecified point in the future.

Despite the level of the foundations being within normal accepted tolerances, Mr. Drew's report goes on to identify interior slab distress to the foundation of 2460 Sharon Oaks Drive. The report suggests the distress is likely caused by a number of factors, such as construction tolerances, expansive soils, and potential root growth by the redwoods allowing ground moisture to intrude. Mr. Drew's reports identifies that there is also distress to the patio immediately behind the structure at 2460 that appears to be clearly associated with root growth. The reports identifies that similar distress to both the foundation slab and patio at 2458 Sharon Oaks Drive had previously existed and was effectively repaired with no further damage. A representative for the property owners at 2458 indicated that repair work to the patio, including root pruning, and waterproofing work to the slab was completed in 2017. No subsequent damage has been reported since that time.

The city arborist visited the site on June 29, July 10, and July 22 to inspect the trees, townhomes and conduct a Level 2, basic inspection and site assessment. The permit application was denied based on the following conditions:

- The trees are in fair to good health with low risk ratings; and
- There is insufficient evidence showing that tree roots are the sole cause of damage to structures and that tree removal would effectively prevent any further damage; and
- Reasonable and feasible alternatives to tree removal are available to address both the current slab distress and to minimize the likelihood of current and future potential root conflicts.

City staff spoke with the property owner of 2460 Sharon Oaks Drive on July 10 to discuss different reasonable and feasible options to preserve the trees. Due to COVID-19 pandemic, city staff received an appeal letter through electronic submission on July 15 and city staff received hardcopy of the appeal submission (Attachment C) on July 22. The appeal package includes the appellant's written statement, two foundation inspection reports, an insurance claim, two additional arborist reports, an air fungal analysis report, and cost estimates for new flooring and root barrier.

## Analysis

Under the previous heritage tree ordinance, staff and EQC shall consider the following eight decision making criteria when determining whether or not there is good cause for the removal of three coast redwood heritage trees:

1. The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services;
2. The necessity to remove the tree or trees in order to construct proposed improvements to the property;

3. The topography of the land and the effect of the removal of the tree on erosion, soil retention and diversion or increased flow of surface waters;
4. The long-term value of the species under consideration, particularly lifespan and growth rate;
5. The ecological value of the tree or group of trees, such as food, nesting, habitat, protection and shade for wildlife or other plant species;
6. The number, size, species, age distribution and location of existing trees in the area and the effect the removal would have upon shade, privacy impact and scenic beauty;
7. The number of trees the particular parcel can adequately support according to good arboricultural practices; and
8. The availability of reasonable and feasible alternatives that would allow for the preservation of the tree(s).

Staff’s denial of the removal permit is based on **Criteria 1, 4, and 8**.

Criterion 1

The city arborist inspected the condition of all three redwoods and summaries his assessment in Table 1:

Table 1: Summary of city arborist’s tree evaluation			
Tree	Measurements in inches (height/diameter)	Health	Risk Rating
1	90”/54”	Good	Low
2	90”/53.5”	Fair	
3	75”/25.5”	Good	

The health ratings indicate the following:

- Fair health means reduced vigor. Damage due to insects or diseases may be significant and associated with defoliation, but is not likely to be fatal. Twig dieback, defoliation, discoloration, and/or dead branches may comprise up to 50 percent of crown.
- Good health means vigor is normal for the species. No significant damage due to diseases or pests. Twig dieback, defoliation, or discoloration is minor.

All three trees are growing at the top of a short moderate slope, which is approximately 26” in height (based on the height of the adjacent retaining wall). The slope extends approximately 60” (or 5 feet) in length from the tree trunks, which was measured from the top edge of the adjacent stairs to the landing at the bottom of stairs. There is an asphalt parking area at the base of the slope.

The redwood located behind 2460 Sharon Oaks Drive (tree #1) has a trunk diameter of 54” and was measured by the city arborist to be located approximately 216” (or 18 feet) from the edge of the slab foundation. Damage to the interior hardwood floors, and exterior patio was visible during inspection and were reported to be associated with root development. Industry best management practices for arboriculture advise that root pruning be limited within three times the diameter of the trunk to avoid compromising tree stability (Costello, Waton & Smiley, 2017). In this case, root pruning can be effectively done within 54” (or 4.5 feet) of the slab foundation to accommodate repair work, reinforcement of foundation, waterproofing and drainage without compromising the structural integrity of the redwood. This still preserves 162” (or 13.5 feet) of the root system, which is still equivalent to three times the trunk diameter.

Trees #2 and #3, with trunk diameters of 53.5 and 25.5 inches respectively, are located approximately 180” (or 15 feet) from the rear slab foundation of the townhome at 2458 Sharon Oaks Drive. The previous

damage to the interior slab and patio, which was reported to be associated with root development, had been repaired in 2017 and no further damage was reported nor was visible at the time of inspections.

#### Criterion 4

The following was assessed related to the long-term value of the coast redwoods:

The Western Chapter of the International Society of Arboriculture classifies the overall desirability of coast redwood in the Menlo Park region as the highest rating given for plant appraisal, which is specified as being 90 percent (Neal & Spohn, 2004). The subject trees are estimated to be between 50 and 60 years old. The expected longevity of coast redwood under cultivation is greater than 150 years with individual specimens growing in their natural environment living more than 2000 years.

#### Criterion 8

The following reasonable and feasible alternatives to tree removal were assessed:

Based on best management practices, the trunk diameter of tree #1 (54 inches), and the distance of the trunk to the closest structure at 2460 Sharon Oaks Drive, root pruning can be safely done within 54 inches (or 4.5 feet) of the slab foundation. Redwood trees are known to be highly tolerant of root disturbance when provided with supplemental irrigation (Matheny and Clark, 1998). Further root pruning work to repair the patio can be done within this area if limited to selective pruning as necessary under the supervision of a certified arborist to limit impacts.

Mr. Drew's inspection report identifies that distress to both the foundation slab and patio at 2458 Sharon Oaks Drive, which was similar to that reported at 2460 Sharon Oaks Drive, had previously existed and was effectively repaired with no further damage reported. The report recommends that the same approach be used to address the deterioration of the slab at 2460. The property owners at 2458 confirmed that the repair work completed in 2017 was done to address a similar condition and was successful in preventing further moisture intrusion in the interior slab. Redwood trees #2 and #3 are located approximately three feet closer to the foundation of 2458 (at 15 feet) than redwood tree #1 is to the foundation of 2460 (at 18 feet). Nonetheless, the effective repair work to address similar slab distress at 2458 did not require the removal of any trees. Therefore, the same repair work 2460 would not necessitate the removal of the redwood tree #1 nor any of the other redwoods, which are all located a greater distance from the foundation of 2460.

There is insufficient information available to evaluate the conjecture regarding the likelihood of future root intrusion within the foundation slabs at an unspecified time beyond three years, which is the period of time since the patio and foundation repair was completed at 2458 Sharon Oaks Drive with no further reported conflicts. However, there are an abundance of cultural practices and construction methods, which have been proven to be effective in limiting root growth nearby hardscape and development such as the following examples:

- Root pruning;
- Reducing adjacent landscape irrigation;
- Grading and drainage;
- Using alternative base materials;
- Deepening perimeter footings;
- Reinforcing slabs;
- Continuing root paths; and
- Installing root barriers.

Several of these approaches were recommended in Mr. Drew's report as standard practice of foundation renovation and could be effectively be implemented under the supervision of a project arborist with minor

impacts to subject Heritage Trees. Per the City of Menlo Park Heritage Tree Ordinance and current policy, a project arborist would be required to review such renovation plans which may adversely affect the Heritage Trees and specify tree protections to ensure any impacts are minimized. Tree protection measures associated with construction are required to be submitted for City review prior to the issuance of building permits.

### **Impact on City Resources**

There are no additional City resources required for this item.

### **Environmental Review**

This action is not a project within the meaning of the California Environmental Quality Act (CEQA) Guidelines §§ 15378 and 15061(b)(3) as it is a minor change that will not result in any direct or indirect physical change in the environment.

### **Public Notice**

Public Notification of the appeal was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

### **Attachments**

- A. Heritage tree removal permit application
- B. Engineer's foundation inspection and condition assessment
- C. Heritage tree appeal submission

### **Literature Cited**

Costello, L., Watson, G., & Smiley, T. E. (2017). *Root Management -Best Management Practices*. Champaign, IL: International Society of Arboriculture.

Matheny, N., & Clark, J. (1998). *Trees and Development, A Technical Guide to Preservation of Trees During Development*. Champaign, IL: International Society of Arboriculture.

Neal, M., & Spohn, J. (2004). *Species Classification And Group Assignment*. CA: Western Ch. ISA.

Report prepared by:  
Joanna Chen, Sustainability Specialist  
Christian Bonner, City Arborist



# Heritage Tree Removal Permit Application

This application must be submitted with the Arborist Report Form  
Please submit completed forms to:  
701 Laurel St., Menlo Park, CA 94025

Application No. \_\_\_\_\_

Purpose of application: Removal  Pruning of more than 25%

Permit Fee: \$210.00 (each tree, up to 3 trees); \$174 each additional tree (separate forms required for each tree)

**PLEASE PRINT CLEARLY**

Site Address: 2458/2460 Sharon Oaks Dr

Name of Applicant: Sharon Oaks Association c/o Manor Inc Phone: [REDACTED] FAX: \_\_\_\_\_

Mailing Address: [REDACTED] Email: [REDACTED]

Type of Tree: Coast redwood Location on property: Behind both properties

Reasons for Request:

Tree roots are causing damage to structures

**IF TREE IS DEAD or DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING CONDITION.**

**ARE YOU CONSIDERING ANY CONSTRUCTION ON YOUR PROPERTY IN THE NEXT 12 MONTHS?**

Yes  No


If yes, please submit additional information describing what type of construction is planned and a site plan.

- Tree may not be removed (or pruned over 25%) unless and until the applicant has received final permission from the City as indicated below.
- The signed permit approval form must be on site and available for inspection while the tree work is being performed.
- A suitable replacement tree, 15 gallon size or larger with a mature height of 40 feet or more, is to be installed in the time frame indicated below.

I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City, including but not limited to, all cost in the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to the proposed tree removal.

**Incomplete applications will not be processed.**

Signature of property owner authorizing access and inspection of tree in his/her absence.

 President, Sharon Oaks Association Date: 6/11/2020

-----PLEASE DO NOT WRITE BELOW THIS LINE-----

PERMIT APPROVED

PERMIT DENIED

**TIMING OF REMOVAL**

- Upon receipt of this approved permit
- After applying for a Building Permit for associated construction

**TIMING OF REPLANTING**

- Within 30 days of Heritage Tree removal
- Prior to final building inspection of associated construction

Staff Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print name and title: \_\_\_\_\_

# Arborist Form

Please complete one form for each tree. Mark each tree with colored ribbon or tape prior to our inspection.

**Site Address:**

2458/2460 Sharon Oaks Dr

**ARBORIST INFORMATION:**

Name of Certified Arborist Michael Young

ISA or ASCA number: 623 Menlo Park Business License number: on file

Company: Urban Tree Management

Address: PO Box 971 Los Gatos, CA 95031

Phone: 408-313-1937 FAX: \_\_\_\_\_ Email: operations@urbantreemanagement.com

**TREE INFORMATION:**

Date of Inspection: 6/11/2020

Common Name: Coast redwood Botanical Name: Sequoia sempervirens

Location of Tree: Behin back fence Height of Tree: 90'

Diameter of tree at 54 inches above natural grade: 54"

Circumference of tree at 54 inches above natural grade 169.5

**Condition of Tree:**

Tree's health and structure are rated fair

**If recommending removal or pruning, please list all reasons:**

Tree roots are causing damage to structure. Tree roots are causing damage to  
Structures - Stairway, pathways, patios, homes

**Suggested Replacement Tree:**

Red oak (Quercus rubra)

Signature of Arborist:  Date: 6/11/2020



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**PLEASE PRINT CLEARLY**

Site Address: 2458/2460 Sharon Oaks Dr

Name of Applicant: Sharon Oaks Association c/o Manor Inc Phone: [REDACTED] FAX: [REDACTED]

Mailing Address: [REDACTED] Email: [REDACTED]

Type of Tree: Coast redwood Location on property: Behind both properties

Reasons for Request:

Tree roots are causing damage to structures

**IF TREE IS DEAD or DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING CONDITION.**

**ARE YOU CONSIDERING ANY CONSTRUCTION ON YOUR PROPERTY IN THE NEXT 12 MONTHS?**

Yes  No


If yes, please submit additional information describing what type of construction is planned and a site plan.

- Tree may not be removed (or pruned over 25%) unless and until the applicant has received final permission from the City as indicated below.
- The signed permit approval form must be on site and available for inspection while the tree work is being performed.
- A suitable replacement tree, 15 gallon size or larger with a mature height of 40 feet or more, is to be installed in the time frame indicated below.

I (we) hereby agree to hold the City harmless from all costs and expenses, including attorney's fees, incurred by the City, including but not limited to, all cost in the City's defense of its actions in any proceeding brought in any State or Federal Court challenging the City's actions with respect to the proposed tree removal.

**Incomplete applications will not be processed.**

Signature of property owner authorizing access and inspection of tree in his/her absence.

 Sharon Oaks  
President, Association Date: 6/11/2020

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PERMIT DENIED

**TIMING OF REMOVAL**

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- After applying for a Building Permit for associated construction

**TIMING OF REPLANTING**

- Within 30 days of Heritage Tree removal
- Prior to final building inspection of associated construction

Staff Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print name and title: \_\_\_\_\_



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**ARBORIST INFORMATION:**

Name of Certified Arborist Michael Young

ISA or ASCA number: 623 Menlo Park Business License number: on file

Company: Urban Tree Management

Address: PO Box 971 Los Gatos, CA 95031

Phone: 408-313-1937 FAX: \_\_\_\_\_ Email: operations@urbantreemanagement.com

**TREE INFORMATION:**

Date of Inspection: 6/11/2020

Common Name: Coast redwood Botanical Name: Sequoia sempervirens

Location of Tree: Behind back fence Height of Tree: 90'

Diameter of tree at 54 inches above natural grade: 53.5"

Circumference of tree at 54 inches above natural grade 167.9

**Condition of Tree:**

Tree's health and structure are rated fair

**If recommending removal or pruning, please list all reasons:**

Tree roots are causing damage to structures - Stairway, pathways, patios, homes, etc.

**Suggested Replacement Tree:**

Red oak (Quercus rubra)

Signature of Arborist: Michael Young

Date: 6/11/2020

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Application No. \_\_\_\_\_

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PLEASE PRINT CLEARLY

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Name of Applicant: Sharon Oaks Association c/o Manor Inc Phone [REDACTED] FAX [REDACTED]

Mailing Address: [REDACTED] Email: [REDACTED]

Type of Tree: Coast redwood Location on property: Behind both properties

Reasons for Request:

Tree roots are causing damage to structures

IF TREE IS DEAD or DAMAGING STRUCTURE PLEASE ATTACH PHOTOS DEMONSTRATING CONDITION.

ARE YOU CONSIDERING ANY CONSTRUCTION ON YOUR PROPERTY IN THE NEXT 12 MONTHS?

Yes  No

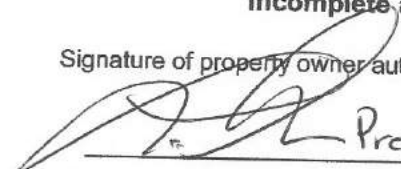
If yes, please submit additional information describing what type of construction is planned and a site plan.

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Incomplete applications will not be processed.

Signature of property owner authorizing access and inspection of tree in his/her absence.

  
President, Sharon Oaks HOA Date: 6/11/2020

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PERMIT APPROVED  PERMIT DENIED

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- Upon receipt of this approved permit
- After applying for a Building Permit for associated construction

**TIMING OF REPLANTING**

- Within 30 days of Heritage Tree removal
- Prior to final building inspection of associated construction

Staff Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print name and title: \_\_\_\_\_

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Name of Certified Arborist Michael Young

ISA or ASCA number: 623 Menlo Park Business License number: on file

Company: Urban Tree Management

Address: PO Box 971 Los Gatos, CA 95031

Phone: 408-313-1937 FAX: \_\_\_\_\_ Email: operations@urbantreemanagement.com

**TREE INFORMATION:**

Date of Inspection: 6/11/2020

Common Name: Coast redwood Botanical Name: Sequoia sempervirens

Location of Tree: Behin back fence Height of Tree: 75'

Diameter of tree at 54 inches above natural grade: 25.5"

Circumference of tree at 54 inches above natural grade 80.1"

**Condition of Tree:**

Tree's health and structure are rated fair

**If recommending removal or pruning, please list all reasons:**

Tree roots are causing damage to structure. Tree roots are causing damage to structures - Stairway, pathways, patios, homes

**Suggested Replacement Tree:**

Red oak (Quercus rubra)

Signature of Arborist: Michael Young

Date: 6/11/2020



## Tree Removal Request for

Sharon Oaks  
Menlo Park, CA 94025



Prepared by  
Urban Tree Management, Inc.

June 11, 2020

Sharon Oaks  
Menlo Park, CA 94025

## Assignment

It was our assignment to physically inspect the three Coast Redwood trees (*Sequoia sempervirens*) and give recommendation based on health, structure, and location.

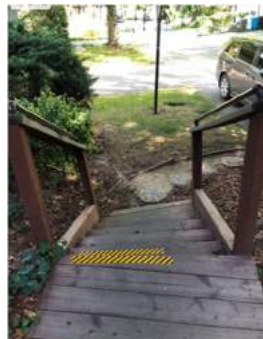
## Summary

The three Coast redwood tree's roots are causing damage to stairways, pathways, patios, and all structures in and around the large tree's vicinity. These three trees are hazards to nearby structures and should be removed and replaced with three Red oaks (*Quercus rubra*). Please refer to the discussion section below for further details and images.

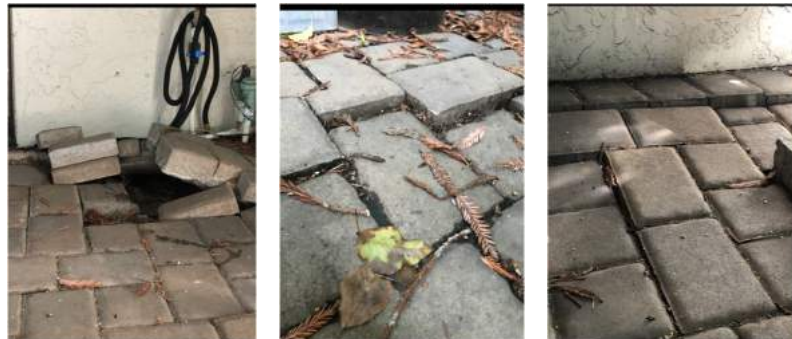
## Discussion

The three Coast redwoods all receive fair ratings for both Health and structure based on the table below. The trees have DBH's of 54", 53.5" and 25.5" respectively. These three trees stand 90', 90, and 75' with canopy spreads of 45', 35' and 25'. The images below show the damage being caused by the roots of the large Coast redwoods.

Damage caused to stairway



Damage to patio flooring



Redwoods are frequently planted as a “quick screening tree” in developments. The problem is that nobody thinks about how large these trees grow (120’+) and how aggressive their roots systems are. You cannot plant Redwoods in the vicinity of structures without expecting major damages. Sharon Oaks HOA will experience this problem again and again as the trees mature at this site. All of the Redwoods near structures will eventually need to be removed and replaced. There are several ongoing issues with Redwoods and complaints from homeowners. These three Redwoods represent the most urgent need. The parking lot adjacent to these trees was recently redone and it is already showing signs of new disruptions. The adjacent homeowners are also complaining about patio encroachments and damage to their slab foundations.

The roots from the three Coast redwoods are causing and will continue to cause property damage until removed. We recommend removal and replacement with three Red oaks.

<b><u>Rating</u></b>	<b><u>Health</u></b>	<b><u>Structure</u></b>
<b>Good</b>	excellent/vigorous	flawless
<b>Fair/good</b>	no significant health concerns	very stable
<b>Fair</b>	showing initial or temporary disease, pests, or lack of vitality. measures should be taken to improve health and appearance.	routine maintenance needed such as pruning or end weight reduction as tree grows
<b>Fair/poor</b>	in decline, significant health issues	significant structural weakness(es), mitigation needed, mitigation may or may not preserve the tree
<b>Poor</b>	dead or near dead	hazard

## **Methods**

The trunks of the trees are measured using an arborist’s diameter tape at 54” above soil grade. In cases where the main trunk divides below 54”, the tree is measured (per the City of Menlo Park’s heritage tree ordinance) at the point where the trunks divide. In these cases, the height of that measurement is given in the note’s column on the attached data sheet. The canopy height and spread are estimated using visual references only.

The condition of each tree is assessed by visual observation only from a standing position without climbing or using aerial equipment. No invasive equipment is used. Consequently, it is possible that individual tree(s) may have internal (or underground) health problems or structural defects, which are not detectable by visual inspection. In cases where it is thought further investigation is warranted, a “full tree risk assessment” is recommended. This

assessment may be inclusive of drilling or using sonar equipment to detect internal decay and include climbing or the use of aerial equipment to assess higher portions of the tree.

The health of an individual tree is rated based on leaf color and size, canopy density, new shoot growth and the absence or presence of pests or disease.

Individual tree structure is rated based on the growth pattern of the tree (including whether it is leaning); the presence or absence of poor limb attachments (such as co-dominant leaders); the length and weight of limbs and the extent and location of apparent decay. For each tree, a structural rating of fair or above indicates that the structure can be maintained with routine pruning such as removing dead branches and reducing end weight as the tree grows. A fair/poor rating indicates that the tree has significant structural weaknesses and corrective action is warranted. The notes section for that tree will then recommend a strategy/technique to improve the structure or mitigate structural stresses. A poor structural rating indicates that the tree or portions of the tree are likely to fail and that there is little that can constructively be done about the problem other than removal of the tree or large portions of the tree. Very large trees that are rated Fair/Poor for structure AND that are near structures or in an area frequently traveled by cars or people, receive an additional \*\*CONSIDER REMOVAL" notation under recommendations. This is included because structural mitigation techniques do not guarantee against structural failure, especially in very large trees. Property owners may or may not choose to remove this type of tree but should be aware that if a very large tree experiences a major structural failure, the danger to nearby people or property is significant.

### **Survey Area Observations**

The property is in the residential community of Sharon Oaks in the City of Menlo Park. The surveyed area is basically rectangular and flat. The surveyed area is occupied.

### **Local Regulations Governing Trees**

#### **Definitions of Heritage Tree**

- 1) Any tree having a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more measured at 54 inches above natural grade.
- 2) Any oak tree native to California, with a circumference of 31.4 inches (diameter of 10 inches) or more measured at 54 inches above natural grade.
- 3) Any tree or group of trees specifically designated by the City Council for protection because of its historical significance, special character or community benefit.
- 4) Any tree with more than one trunk measured at the point where the trunks divide, with a circumference of 47.1 inches (diameter of 15 inches) or more, with the exception of trees that are under twelve (12) feet in height, which are exempt from the ordinance.

+ + + + +

I certify that the information contained in this report is correct to the best of my knowledge and that this report was prepared in good faith. Please call me if you have questions or if I can be of further assistance.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael P. Young". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael P. Young





AMERICAN NATIONAL

1949 E. Sunshine St., Springfield, MO 65899

May 8, 2020

[REDACTED]  
2460 Sharon Oaks Dr  
Menlo Park, CA 94025-6829

RE: Claim # [REDACTED]  
Date of Loss: April 15, 2020  
Policy [REDACTED]

Dear [REDACTED]

Thank you for submitting your claim to us. We have taken your claim under careful consideration.

We have received and reviewed the adjuster's report and photographs. Inspection of your loss revealed the following:

- Roots from redwood trees in the HOA's common area are causing damage to your foundation and the interior of your condominium over an extended period of time dating back to 2013.

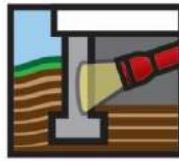
Your California American National Condominium Policy, FX-6.04 (1-19), provides coverage for accidental direct physical loss to your dwelling, subject to certain exclusions. The policy specifically excludes damage from wear and tear, cracking of foundations, as well as earth movement. The policy reads in part as follows:

#### SECTION I – EXCLUSIONS

##### EXCLUSIONS APPLYING ONLY TO COVERAGE A - DWELLING

6. We do not cover loss caused by:
  - a. wear and tear, marring, deterioration, erosion;
  - b. inherent vice, latent defect, mechanical breakdown;
  - c. smog, rust, mold, or wet or dry rot;
  - d. smoke from agricultural smudging or industrial operations;
  - e. pollution or contamination;
  - f. settling, cracking, shrinking, bulging, or expansion of pavements, patios, foundations, slabs, walls, floors, roofs, or ceilings, regardless of whether such





**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

June 17, 2020

Ms. Jennifer Buenrostro

[REDACTED]

[REDACTED]

Menlo Park, CA 94025

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REGARDING: FOUNDATION INSPECTION AND CONDITION ASSESSMENT  
2458 Sharon Oaks Drive  
Menlo Park, CA.

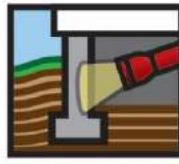
Dear Ms. Buenrostro,

In response to your request, we have prepared the following Foundation Inspection Site Drainage Analysis Report for your and your client's use. Our inspection was made and this condition assessment report was prepared by a trained and experienced, licensed Professional Engineer and General Engineering Contractor.

Our perimeter and interior reconnaissance, performed on June 16, 2020, was limited to accessible areas of the home, and the immediately adjacent site. The professional opinions offered are based on visual observations of apparent conditions existing at the time of the inspection (latent and concealed defects and deficiencies are excluded). Document search and review, destructive testing, subsurface investigation, structural calculation, geologic study and seismic analysis, as well as the preparation of engineering specifications and construction drawings for any recommended repairs or improvements are beyond the scope of services provided. An independent consulting Geotechnical Engineer and Engineering Geologist should be retained if a complete geotechnical investigation is desired.

PLEASE READ THIS REPORT CAREFULLY, A FULL UNDERSTANDING OF THE INFORMATION IT CONTAINS MAY BE CRITICAL TO THE SUCCESSFUL OUTCOME OF THE HOME'S SALE!

The single story, 46+/- year-old, attached townhome with its attached garage was constructed on a reinforced concrete, slab-on-grade foundation. I found the building pad to have been developed at, or very near to, the native grade with minor cut and fill operations. My observations suggest that the home's footprint sits on soils which are slightly expansive.



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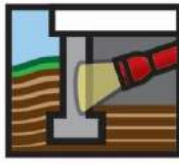
**FLOOR LEVEL SURVEY:** Our hydrolevel survey of the home's interior floors, attached to this report as Appendix 1, found a maximum of 0.8" of differential level across the structure. This differential is within normally accepted tolerances for good foundation performance (up to 1 1/2" of differential level across a residential structure is typically considered acceptable). The measured differentials are also within of another criterion for good foundation performance (1" in 20').

My on-site observations suggest that the measured differentials result from measuring and construction tolerances as well as expansive soil movement. My inspection experience with many area homes has found that most of them have been adversely affected by the areas highly expansive soils. In this case, the extent of differential movement associated with the swell/shrink cycles of the supporting soils has been and can be expected to continue to be minor. However, past issues with excessive slab moisture intrusion issues appear to be associated with tree root growth (there is a massive redwood at the right rear corner of the property).

I understand the owner successfully resolved the problem by removing and replacing the rear patio (the work include a supporting base rock bed) and the hardwood floors. In my opinion, the reconstruction of the rear patio and the restoration of the finished floor surfaces has, for now, resolved the moisture intrusion issue. Never-the-less, it is likely to return if the offending trees are not removed. Accordingly, the two large redwood trees located on HOA property immediately adjacent to the area of interior slab damage at 2458 and 2460 Sharon Oaks Drive should be removed.

**DRAINAGE:** The Uniform Building Code (UBC) requires 6" soil to wood clearance and positive fall away from the structure. I found the nearly level lawn areas at the perimeter of the structure, while well drained, to be nearly saturated (most likely the result of an overly aggressive irrigation schedule). I recommend, limiting irrigation throughout the dry months and monitoring surface flow during storm conditions with local regrading as necessary to direct storm water flow away from the perimeter foundation as practical. It should be recognized that an analysis of surface and subsurface drainage conditions with a single inspection conducted months after the last saturating rains is problematic at best. I recommend a re-inspection at the end of the winter storm season.

**MAINTENANCE:** The site drainage system will require continuing care which should be incorporated into the buyer's property maintenance program. Specifically: area drainage should be observed during rainy periods and steps taken to direct all surface flow away from the structure. In addition, the buried downspout collection system and storm water control system should be cleaned at the start of the storm season and their proper operation monitored through the storm season. Finally, irrigation should be reduced to the minimum necessary to keep things green.



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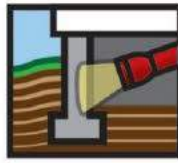
Unanticipated subsurface conditions may develop during the life of the structure that cannot be predicted from the limited visual inspection performed. Our inspection, oral comments and this report are not intended to be used as a guarantee or warranty, expressed or implied, regarding the adequacy, performance or condition of any inspected structure. This report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Please recognize that we have not addressed the possible presence of or danger from any potentially harmful substances and environmental hazards including but not limited to radon gas, lead paint, asbestos, urea formaldehyde, toxic or flammable chemicals and water or air born hazards. Specifically excluded are inspections of and report on decks, wells, septic systems, safety equipment and the presence or absence of rodents, termites, fungus and other organisms. During the life of the structure, there may develop unanticipated subsurface conditions that cannot be predicted from the limited visual inspection performed.

The observations noted and repair recommendations offered (if any) should be considered valid for four years, after which time a reinspection is prudent. This report is not a complete geotechnical study or distress survey nor is it intended for use as a complete description of the property. It is intended to provide information regarding the home's foundation and site drainage conditions. Our observations, conclusions and guideline recommendations have been made using the degree of care and skill originally exercised, under similar conditions, by reputable professional engineers practicing in this area. No other warranty, expressed or implied, is made.

**CONTRACTOR LICENSING INFORMATION:** "STATE LAW REQUIRES ANYONE WHO CONTRACTORS TO DO CONSTRUCTION WORK TO BE LICENSED BY THE CONTRACTORS STATE LICENSE BOARD IN THE LICENSE CATEGORY IN WHICH THE CONTRACTOR IS GOING TO BE WORKING IF THE TOTAL PRICE OF THE JOB IS \$300.00 OR MORE (INCLUDING LABOR AND MATERIALS). LICENSED CONTRACTORS ARE REGULATED BY LAWS DESIGNED TO PROTECT THE PUBLIC.

IF YOU CONTRACT WITH SOMEONE WHO DOES NOT HAVE A LICENSE, THE CONTRACTORS STATE LICENSE BOARD MAY BE UNABLE TO ASSIST YOU WITH A COMPLAINT. YOUR ONLY REMEDY AGAINST AN UNLICENSED CONTRACTOR MAY BE IN CIVIL COURT, AND YOU MAY BE LIABLE FOR DAMAGES ARISING OUT OF ANY INJURIES. YOU MAY CONTACT THE CONTRACTORS STATE LICENSE BOARD TO FIND OUT IF THIS CONTRACTOR HAS A VALID LICENSE. THE BOARD HAS COMPLETE INFORMATION ON THE HISTORY OF LICENSED CONTRACTOR'S, INCLUDING ANY POSSIBLE SUSPENSIONS, REVOCATIONS, JUDGMENTS, AND CITATIONS. THE BOARD HAS OFFICES THROUGHOUT CALIFORNIA. PLEASE CHECK THE GOVERNMENT PAGES ON THE WHITE PAGES FOR THE OFFICE NEAREST OR CALL 1-800-321-CSLB FOR MORE INFORMATION.





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**ARBITRATION OF DISPUTES:** ANY CONTROVERSY OR CLAIM FOR DAMAGES ARISING OUT OF OR RELATING TO THIS CONDITION ASSESSMENT OR ANY WORK PERFORMED IN CONNECTION THEREWITH INCLUDING BUT NOT LIMITED TO NEGLIGENCE, ERRORS OR OMISSION SHALL BE SETTLED IN ACCORDANCE WITH THE CONSTRUCTION INDUSTRY ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION OR ALTERNATE DISPUTE RESOLUTION FORM ACCEPTABLE TO ALL PARTIES.

Acceptance and use of this report bind the parties to the limitation and conditions included in it. Should GCD and/or its agents or employees be found liable for any loss or damages resulting from a failure to perform any of its obligations, including and not limited to negligence, breach of contract, or otherwise, then the liability of GCD and/or its agents or employees, shall be limited to a sue equal to 5 times the amount of the fee paid by the Customer for the inspection and this condition assessment report.

It has been a pleasure providing you with a professional Foundation Inspection and Site Drainage Analysis Report. Please do not hesitate to call if we may be of further assistance or if you have any questions or concerns.

Very truly yours,


George E. Drew, P.E., GCD, INC.

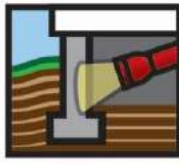
California Professional Engineer license #20681

Member American Society of Civil Engineers I.D. #19732B

Member National Society of Professional Engineers

General Engineering Contractor license #A64788

Certified Inspection Engineer (BIECI)



**FOUNDATION INSPECTION SERVICES**  
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## **Inspection Agreement and Contract for Services**

### **SCOPE OF SERVICES**

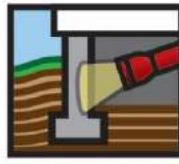
GCD, INC. ("GCD") has been engaged by the undersigned client(s) to inspect foundation and drainage conditions and thereafter issue a report as to the observations made by the inspector. GCD's inspection report is based on a visual reconnaissance of the structure, its foundation and the immediately adjacent site. This study is limited to observation of the general nature of the building pad and the structure as well as drainage characteristics immediately adjacent to the home and in its sub area. GCD does not perform, nor is it engaged in the performance of, a home inspection as defined by Business and Professions Code Section 7195 et. seq.

### **LIMITATIONS OF WARRANTY/DISCLAIMER AND STATUTE OF LIMITATIONS**

It is hereby acknowledged that there may be hidden or obscured conditions that are not observed by the inspector and seasonal environmental and soil conditions that may change after the inspection. Because of inherent conditions associated with unstable land and unknown soil conditions no warranty can be made with respect to the possibility of erosion, faulting, and slope stability problems. GCD warrants that the services provided are within the reasonable standard of care provided by other inspectors practicing in this area and offering similar services. No other warranty expressed or implied is made. This report does not include an analysis of the presence of any environmental hazards including, but not limited to toxins, mold, carcinogens, hazardous materials, and contaminants in the soil, water, and air. GCD's site reconnaissance visually identifies actual conditions only at those points where and when observed. This report is based on conditions that exist at the time of GCD's inspection, no warranty or guarantee can be made as to future conditions. It is hereby agreed that the time to begin legal action for a claim under this contract shall not exceed two years from the date of the inspection.

### **LIQUIDATED DAMAGES**

It is understood and agreed to by the client(s) that GCD is not an insurer and the amounts payable to GCD for its services by the client are not sufficient for GCD to assume the risk of consequential or other damages to the client(s) for any act of negligence, omission or commission. From the nature of the services to be performed it is hereby agreed that it is impractical and extremely difficult to fix actual damages in the event of an act of negligence, omission or commission, if any, which may result these services. If GCD should be found liable for loss or damage due to an act of omission of commission or for breach of this contract, its liability shall be limited to no more than five (5) times the amount paid by client for the services performed under this contract as liquidated damages. It is hereby agreed and understood that said amount agreed to as liquidated damages are not a penalty, irrespective of cause or origin of the loss or damage. Alternatively, the client may request in writing that the aforementioned limitation of liability clause be excluded or modified for an appropriate increase in the inspection fee. If the client selects this alternative, he or she must contact GCD for a quote as to the increased inspection fee and/or any other desired modification to the services provided or the terms under which they are offered.



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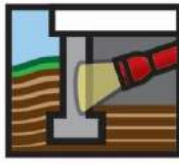
A separate written agreement must be executed to facilitate the selection of this alternative and until said writing is executed by both parties, the liquidated damages provisions set forth in the previous paragraph shall remain in full force and effect.

**DISPUTE RESOLUTION**

ANY DISPUTE OR CLAIM BETWEEN THE CLIENT(S) AND GCD AND/OR ITS AGENTS, OR AFFILIATES ARISING OUT OF THIS CONTRACT, THE OBSERVATIONS SET FORTH THEREIN OR THE RESULTING REPORT SHALL BE SUBMITTED FIRST TO MEDIATION BEFORE A MUTUALLY ACCEPTABLE MEDIATOR. IF THE DISPUTE OR CLAIM IS NOT RESOLVED BY MEDIATION, THE DISPUTE OR CLAIM WILL THEN BE SUBMITTED TO AND DECIDED BY NEUTRAL BINDING ARBITRATION IN ACCORDANCE WITH CHAPTER 3, TITLE 9 OF THE CALIFORNIA CODE OF CIVIL PROCEDURES (C.C.P. 1282, ET SEQ.). UPON SELECTION OF AN ARBITRATOR, THE PARTIES SHALL AGREE UPON THE LIMIT AND EXTENT OF NECESSARY DISCOVERY PRIOR TO THE HEARING. THE PARTIES SHALL AGREE UPON THE SELECTION OF AN ARBITRATOR WHO SHALL BE EITHER A RETIRED SUPERIOR COURT JUDGE, A LICENSED CALIFORNIA ATTORNEY WITH AT LEAST TEN (10) YEARS OF REAL ESTATE LITIGATION EXPERIENCE, A LICENSED GENERAL ENGINEERING CONTRACTOR OR LICENSED PROFESSIONAL ENGINEER WITH AT LEAST FIVE YEARS OF EXPERIENCE AS DEFINED IN BUSINESS AND PROFESSIONAL CODE 7195 ET SEQ. THE ARBITRATION SHALL TAKE PLACE IN THE COUNTY WHERE THE PROPERTY IS LOCATED. TO THE EXTENT THE PARTIES CANNOT AGREE UPON AN ARBITRATOR, ONE OR BOTH OF THE PARTIES MAY PETITION THE SUPERIOR COURT IN THE COUNTY WHERE THE PROPERTY IS LOCATED TO COMPEL ARBITRATION AND MAY IN SAID PETITION REQUEST THE COURT TO APPOINT A NEUTRAL ARBITRATOR. THE PREVAILING PARTY IN ANY ARBITRATION UNDER THIS ARBITRATION AGREEMENT SHALL BE ENTITLED TO RECOVERY OF ATTORNEY'S FEES AND COSTS INCURRED IN THE ARBITRATION AND THOSE RELATED TO ANY PETITION TO COMPEL ARBITRATION OR APPOINT AN ARBITRATOR, IF ONE IS NECESSARY. JUDGMENT ON THE AWARD RENDERED BY THE ARBITRATOR MAY BE ENTERED IN ANY COURT HAVING JURISDICTION.

**IMPORTANT NOTICE**

YOU ARE AGREEING TO HAVE ANY DISPUTE ARISING OUT OF THE MATTERS IN THIS AGREEMENT DECIDED BY NEUTRAL BINDING ARBITRATION AS PROVIDED BY CALIFORNIA LAW AND YOU ARE GIVING UP ANY RIGHTS YOU MIGHT POSSESS TO HAVE THE DISPUTE LITIGATED IN A COURT OF LAW OR BY JURY TRIAL. BY SIGNING IN THE SPACE BELOW YOU ARE GIVING UP YOUR RIGHTS TO CIVIL DISCOVERY AND YOUR RIGHTS TO AN APPEAL SINCE THE GROUNDS FOR AN APPEAL OF THE DECISION RENDERED MAY BE LIMITED. BY SIGNING BELOW, YOU ARE SPECIFICALLY AGREEING TO THE SCOPE OF SERVICES, LIMITATION OF LIABILITY AND DISPUTE RESOLUTION PROVISIONS, AND ALL CONDITIONS AS DESCRIBED ON THIS CONTRACT.



**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

IF THIS AGREEMENT IS NOT SIGNED WITHIN THREE (3) CALENDAR DAYS OF THE INSPECTION BY THE CLIENT OR THEIR AUTHORIZED AGENT, THE INSPECTION AND/OR REPORT WILL CARRY NO WARRANTY OR GUARANTEE AS TO ITS CONTENTS, AND NO ONE SHALL BE ENTITLED TO RELY ON ITS CONTENTS FOR ANY PURPOSE. THIS AGREEMENT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA.

**CLIENT REVIEW AND INTERPRETATION OF TERM**

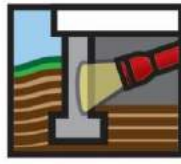
The client acknowledges that he/she had the opportunity to review the entirety of this contract. Client further agrees that he/she will not later contend that any ambiguity should be construed against GCD as the purported drafter of the Agreement.

WE HAVE READ AND UNDERSTAND THE FOREGOING:

CLIENT(S): \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_





**FOUNDATION INSPECTION SERVICES**  
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**IMPORTANT ISSUES**

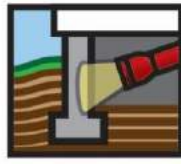
OUR CLIENTS AND ANY SUBSEQUENT BUYER OF THE PROPERTY SHOULD BE AWARE OF THE FOLLOWING CONDITIONS OF THE REPORT.

If this inspection was performed for the seller and if the subsequent buyer of the property wishes to rely on this inspection report in any way, including determining whether or not to purchase the property described in the report; he/she must read, date, sign and return a copy of the Inspection Agreement and Contract for Services, pages 1:2a and 1:2b, to the inspector, or the buyer may not rely on this report, and, further, it will serve as "Information Only" to the buyer, with no Errors or Omissions warranties shall be, or shall be deemed to be, applicable to the inspection or report. Please send a signed and dated copy of pages 1:2a and 1:2b within 30 days of the close of escrow to: GEOTECHNICAL CONSTRUCTION & DESIGN, INC., 7236 Via Mimosa, San Jose, CA. 95135 or email to: [gcdinc94@aol.com](mailto:gcdinc94@aol.com).

If the information contained in this inspection report is to be relied on by another buyer in a future sales transaction, completed more than twelve months after this report was prepared, we must be contacted and a re-inspection must be completed; or the report will serve as "Information Only" to the buyer with no Errors or Omissions warranties applicable to the inspection or report. If a re-inspection is desired, please call (408) 812 4355 to schedule an appointment and email a signed and dated copy of pages 1:2a and 1:2b to GCD at: [gcdinc94@aol.com](mailto:gcdinc94@aol.com).

It should be noted that, our inspection is limited to the referenced property. However, if the property is located within and is governed by a Homeowners Association with related CC&R's, I recommend a thorough review of the Association's responsibilities and further consultations with the Association or their Property Manager, as well as the current homeowner regarding the history of the observed conditions (when repairs had been performed, who paid for the work, who performed the work, and what were the conditions before the repairs and/or improvements were implemented). The Association also should be consulted regarding their possible involvement with the recommended repairs, as well as their maintenance schedules for the surface drainage system.

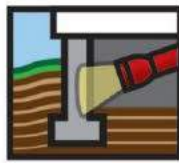
Please note that licensed contractors are regulated by laws designed to protect the public. If you contract with someone who does not have a license, the Contractors State License Board may be unable to assist to you with a complaint. Your only remedy against an unlicensed contractor may be in civil court, and you may be liable for damages arising out of injuries to the contractor or his employees. You may contact the Contractors State License Board to find out if a contractor has a valid license. The board has complete information on the history of licensed contractors, including any possible suspensions, revocations, judgments, and citations. The board has offices throughout California. Please check the government pages on the white pages for the office nearest or call 1-800-321-CSLB for more information.



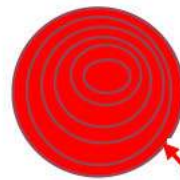
**FOUNDATION INSPECTION SERVICES**  
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## **APPENDIX**

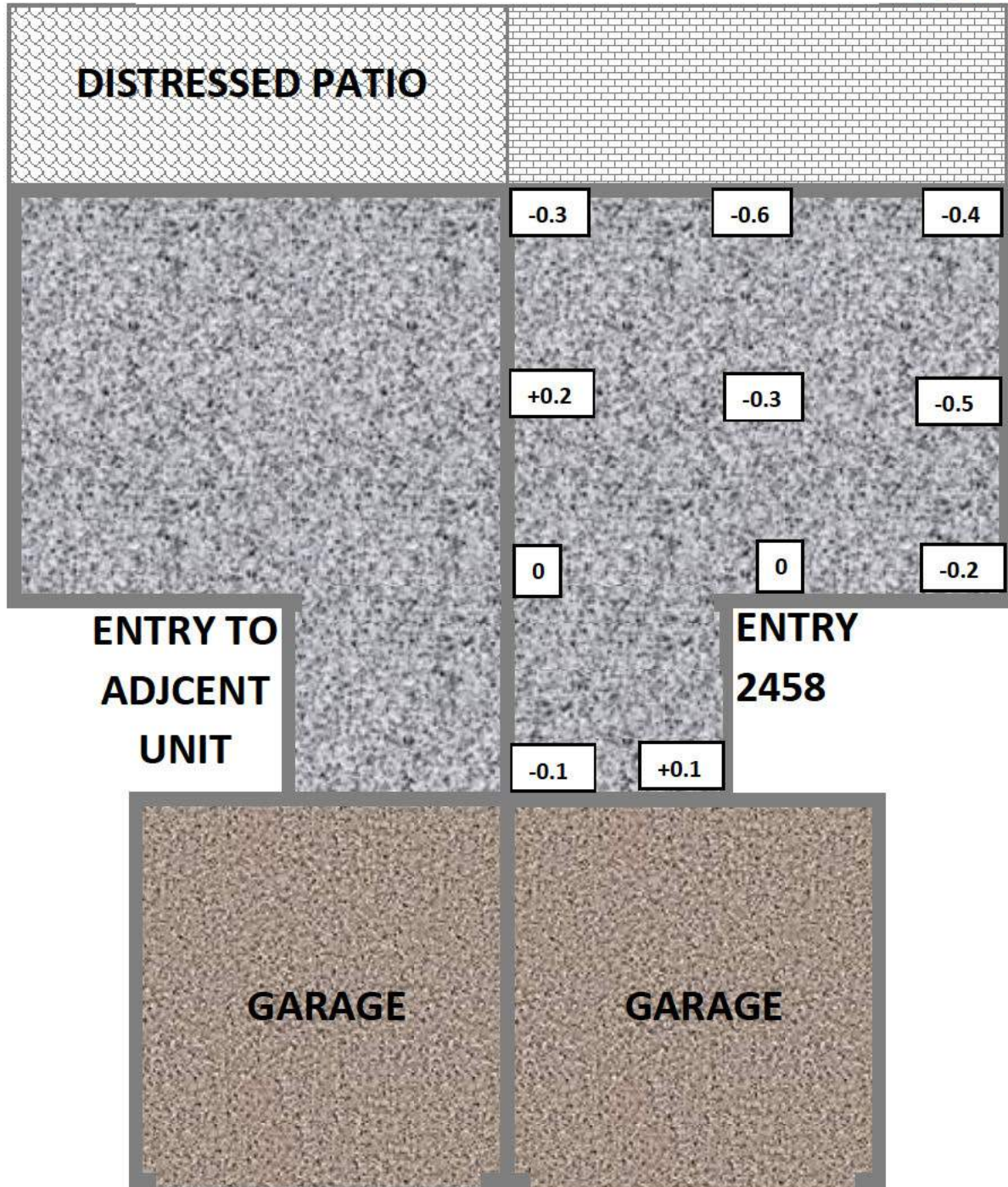
- 1. Partial Plot Plan and Level Survey**
- 2. Foundations (4 pages)**
- 3. Special Hardware for Seismic Upgrade**
- 4. Expansive Soils**
- 5. Site Drainage (2 pages)**
- 6. Retaining Walls**
- 7. Informational References (2 pages)**
- 8. Glossary (4 pages)**
- 9. Invoice**

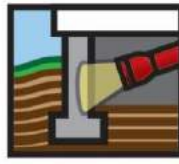


**LEVEL READINGS ARE IN INCHES RELATIVE TO A "0"  
ASSUMED AT THE HOME'S MEASURED LOW POINT.  
(ACCURACY +/-1/4")**



**REDWOOD**



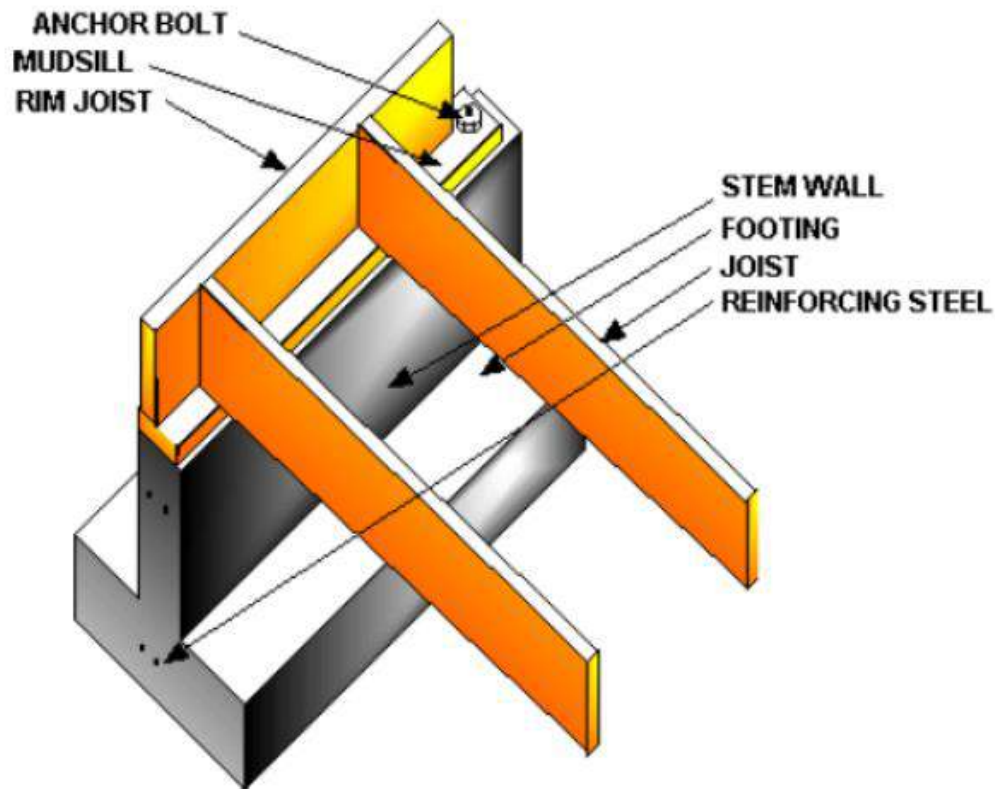


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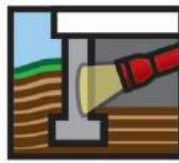
## FOUNDATIONS

Foundations connect the structure to the property, provide support (spread) the structure's load on the soil) and separate the wood frame from the soil's moisture and bug problems. Most foundations are constructed of reinforced concrete and fall into one of 3 major categories, i.e., pier and grade beam, spread footings or slab-on-grade. Each type is described and illustrated below.

**SPREAD FOOTING:** A spread footing foundation, as the name implies, is designed to distribute (spread) the structures loads over a wide footprint on the near surface soil. The footing configuration is illustrated below.



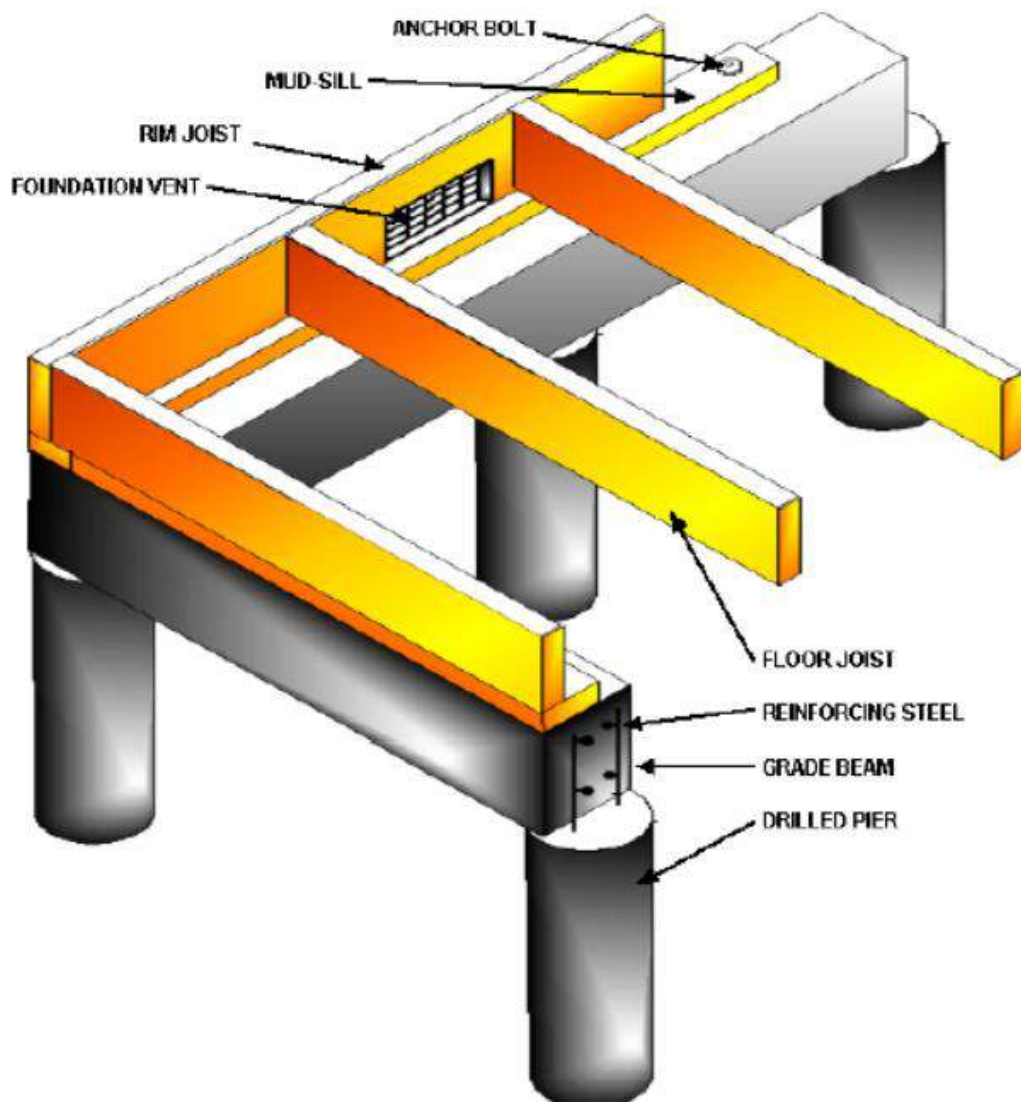


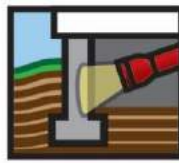


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**PIER AND GRADE BEAM FOUNDATION:** Drilled piers are typically employed when fill is encountered, slopes are involved, or the near surface soil's bearing capacity is limited. Under these conditions, firm support is obtained by drilling to the depth necessary to provide both vertical and lateral restraint, filling the resulting hole with reinforced concrete. Each individual pier is then interconnected with reinforced concrete tie beams (grade beams). Please see illustration below.

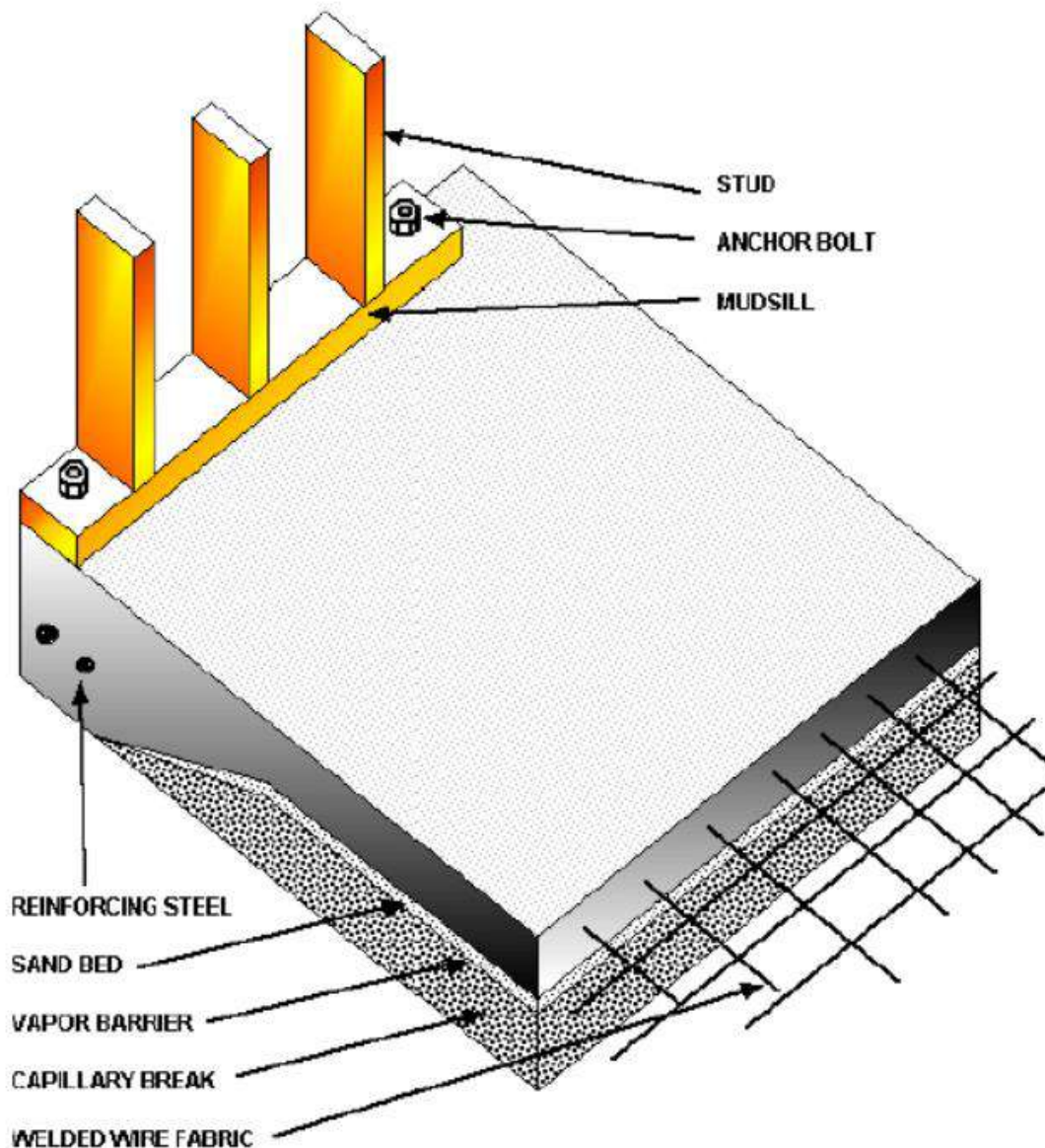




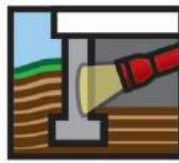
## FOUNDATION INSPECTION SERVICES

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**SLAB-ON-GRADE FOUNDATION:** A slab-on-grade foundation is normally constructed over an engineered base incorporating a moisture barrier (polyethylene membrane) and sand bed. Like spread footing, a slab-on-grade is designed to distribute the structure's load over a wide area of supporting soil.

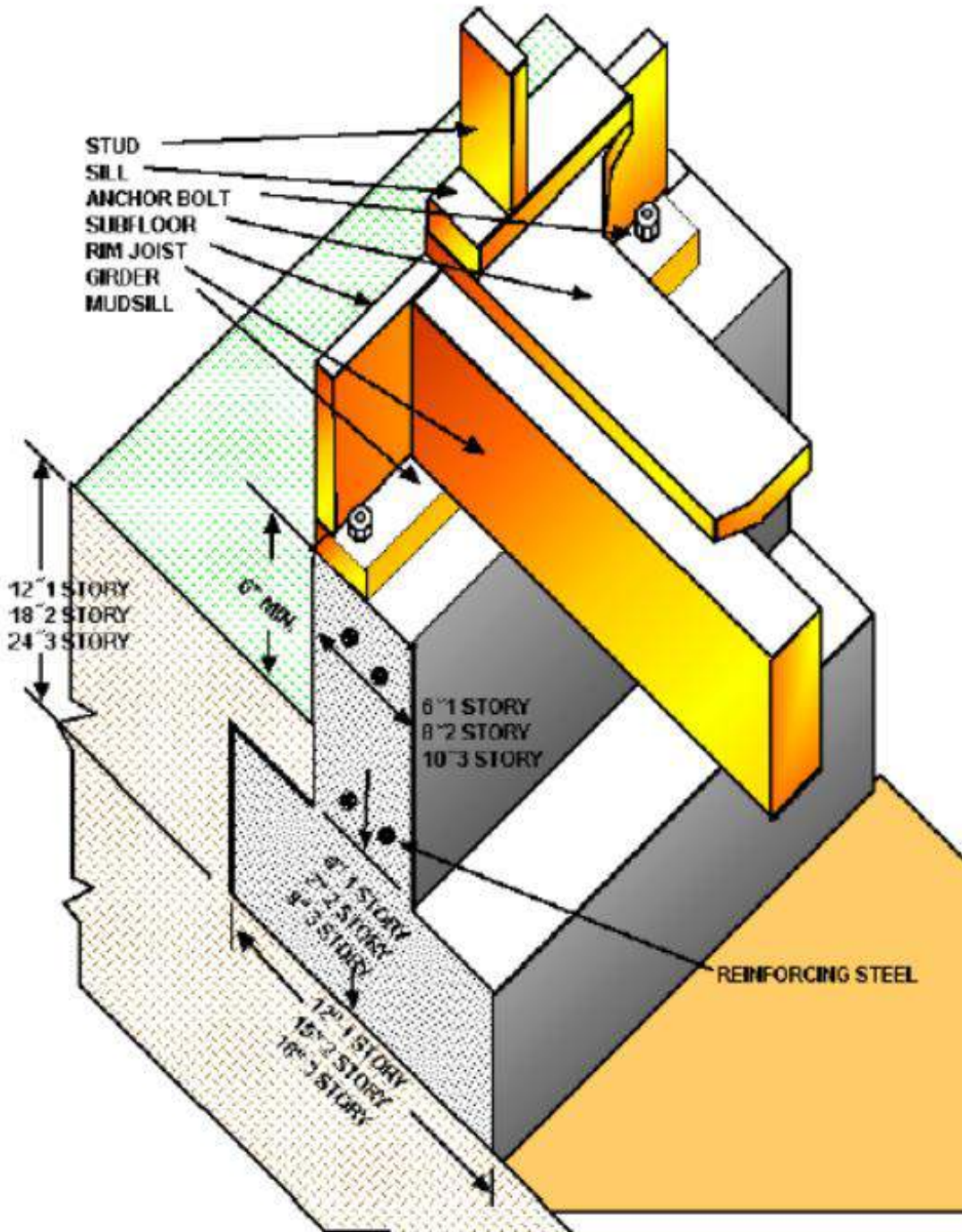


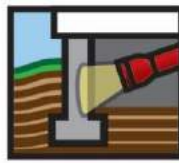




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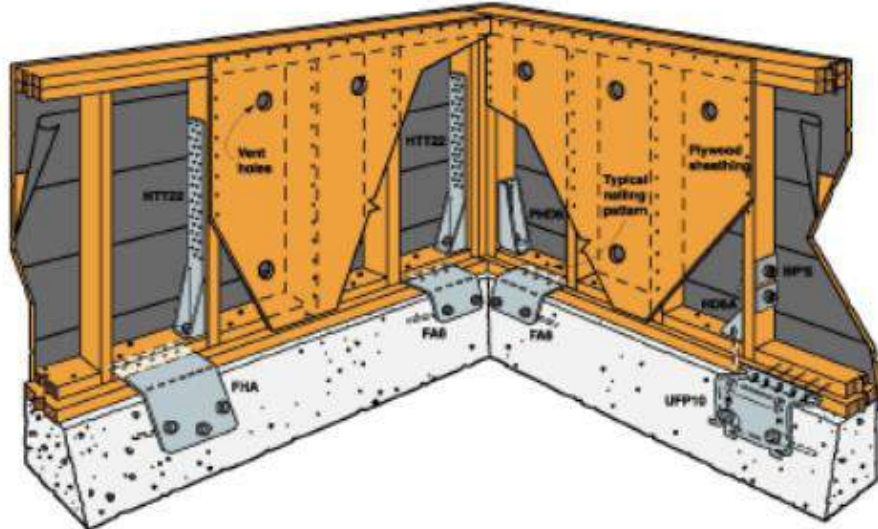
**MINIMUM "UBC" UNIFORM BUILDING CODE REQUIREMENTS  
FOR CONCRETE SPREAD FOOTING FOUNDATIONS**





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**SPECIAL HARDWARE FOR SEISMIC UPGRADE AND FOUNDATION REPAIR**



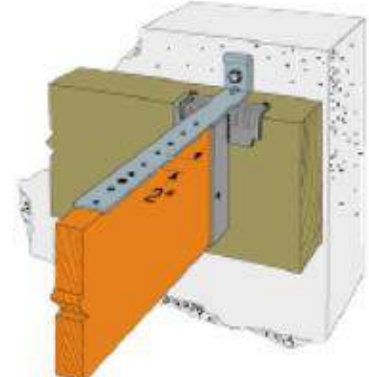
This illustration shows shearwall strengthening of a cripple wall (pony wall) area constructed between the mudsill and the floor framing system. Generally, the recommended structural panel is 1/2" 5-ply plywood or 7/16" OSB panels. The width of the panels required depends on the space between studs; the greater the distance between studs, the wider the panels should be. We recommend having vent holes drilled in the sheathing to eliminate moisture build-up which can lead to wood deterioration. Accurate and complete nailing of the structural panel to the stud, mudsill, and top plates is important to ensure that it performs adequately as a shearwall. Minimum nailing requirements is 8d nails nailed every 4" around the edges of the panel, and every 6" on center field nailing (along the studs).



Existing 4X4 crawl space area pier posts can be easily replaced with adjustable steel levelers.

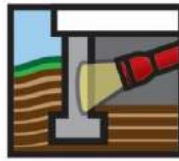


The steel strap assembly shown allows for a direct connection between the foundation and the subfloor joists.



The ledger/hanger assembly shown can be restrained with a Simpson LTT19 light tension tie as illustrated above.

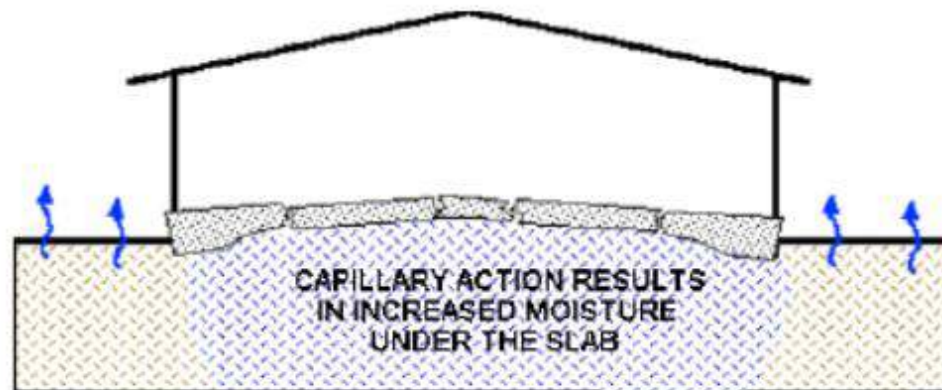




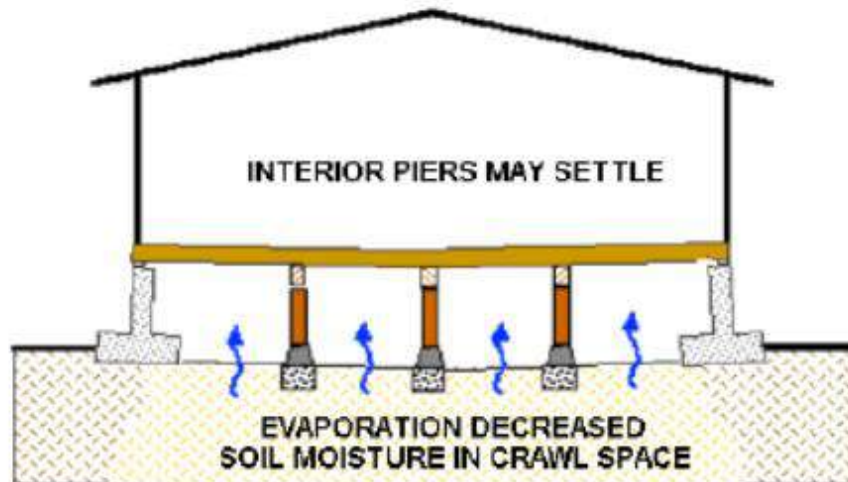
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## EXPANSIVE SOILS

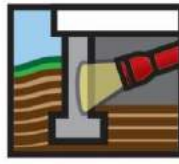
Many Bay Area homes are subject to distress and differential foundation movement as their foundations respond to the annual swell/shrink cycles of the supporting highly expansive soils. Seasonal changes in soil moisture can also result in the down-slope creep of near surface soils.



EVAPORATION DECREASES MOISTURE AT PERIMETER  
SLABS OFTEN HEAVE WHEN SUPPORTED ON EXPANSIVE SOIL



FOOTINGS OFTEN SETTLE WHEN SUPPORTED ON EXPANSIVE SOIL



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## **SITE DRAINAGE**

### **SURFACE WATER CONTROL**

Poor surface drainage can lead to severe foundation problems, slope instabilities and retaining wall failures. Conversely, a little preventive maintenance and drainage improvement work can often mitigate the potential for soils related distress at far less expense than structural solutions for failures. Ideally homes are located on the “high” ground with slope contours directing all surface flow away from the structure. Since, in the real world, homes are often constructed on poorly graded building pads with up slope properties and roofs discharging surface water flow toward your foundation, the following good practices should be considered:

1. Collect roof drainage in a gutter and downspout system that directs all flow to splash blocks provided with positive slope (3” fall 6’ out from structure). Gutters must be cleaned of leaves and debris periodically to insure proper function. Downspouts should be checked for adequate capacity during heavy rains (in general 1 downspout for every 40’ of gutter should be adequate). As a preferred alternative to splash blocks, catch basins can be installed at each downspout with a buried (3” minimum diameter) tight line provided and extended to daylight well away from the foundation (a minimum of 1/8” of fall per foot of pipe is standard). NOTE: Perforated pipe should never be used for this application.
2. Intercept surface water flow from up slope areas with a berm, concrete lined “V” ditch or swale which will direct the flow to a suitable outlet or storm drain well away from the foundation (1/2” of fall per foot of run is preferred for unlined swales).
3. Grade soil area adjacent to foundation to expose a minimum of 6” of the stem wall or grade beam (code requires 6” clearance between soil and untreated wood). Provide positive drainage away from the home for a minimum of 6’ out from foundation.
4. Minimize irrigation watering adjacent to the foundation and eliminate water dams resulting from raised walkways and planter strips which trap water against the foundation.

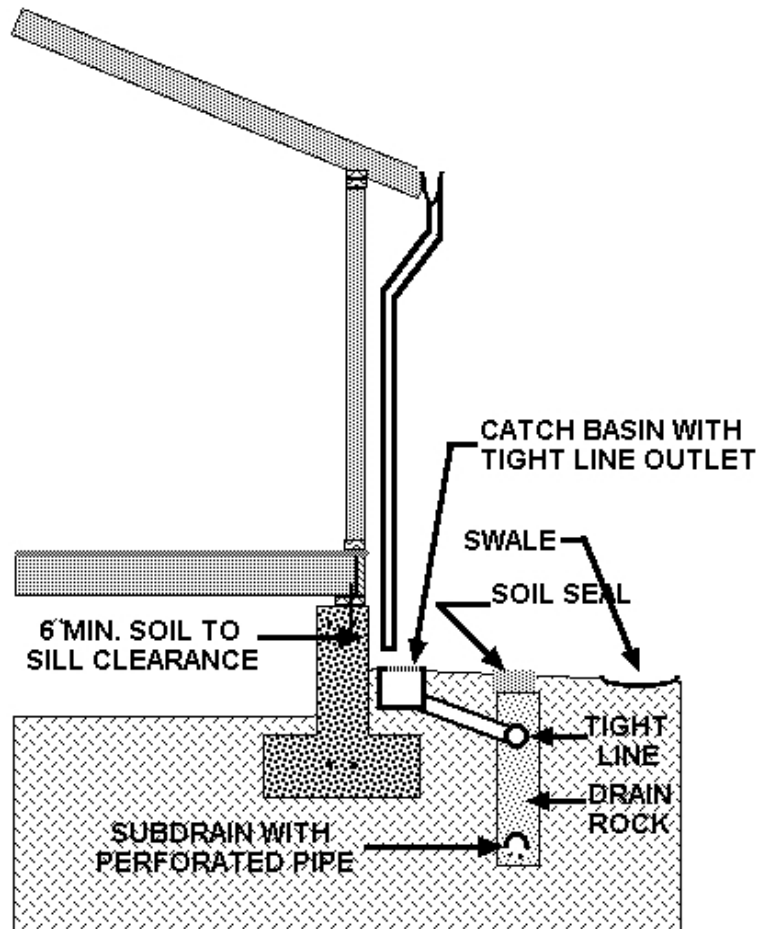
### **SUBSURFACE DRAINAGE**

If you have controlled surface drainage and have not experienced problems with excessive crawl space or basement moisture, I recommend that you leave well enough alone since a subsurface drain could introduce water to subsurface soils and create a problem where none existed previously. If expansive soils are causing foundation distress or if excessive moisture is entering the basement/crawl space area, you should consider the installation of a sub-drain.

A sub-drain consists of a trench cut to a depth approximately 1’ below the crawl space or basement grade. Drain rock, (CALTRANS Permeable Class II material or filter fabric encased drain rock, pea gravel or crushed rock), is installed in the trench with a perforated pipe, (SDR-35 with perforations down), at the bottom. The trench is positioned to intercept ground water, drop it into the perforated pipe and convey it to a suitable outlet well downslope of foundation elements.



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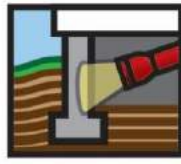


As an alternate to, or in addition to a sub-drain, it may be found cost effective to install a finger drain in the sub-area. A finger drain is constructed much like the perimeter sub-drain, but is typically positioned in the sub-area, just inside the perimeter foundation. A finger drain typically varies in depth from 6" to 15" and often outlets to an 18" diameter, 30" deep, cased sump that is provided with a float-switch activated pump.

**Precautions**

Do not introduce surface water from catch basins or roof downspouts into the perforated pipe since this may inject water into the ground. You may use the trench for a separate tight line carrying all collected storm water flow.

Do not (unless no alternative exists) use a sump pump to discharge the collected storm water flow. Sump pumps invariably require maintenance and seldom receive it. Sump pumps do not work without power and in the worst storms when you need it the most, you can expect to lose power.

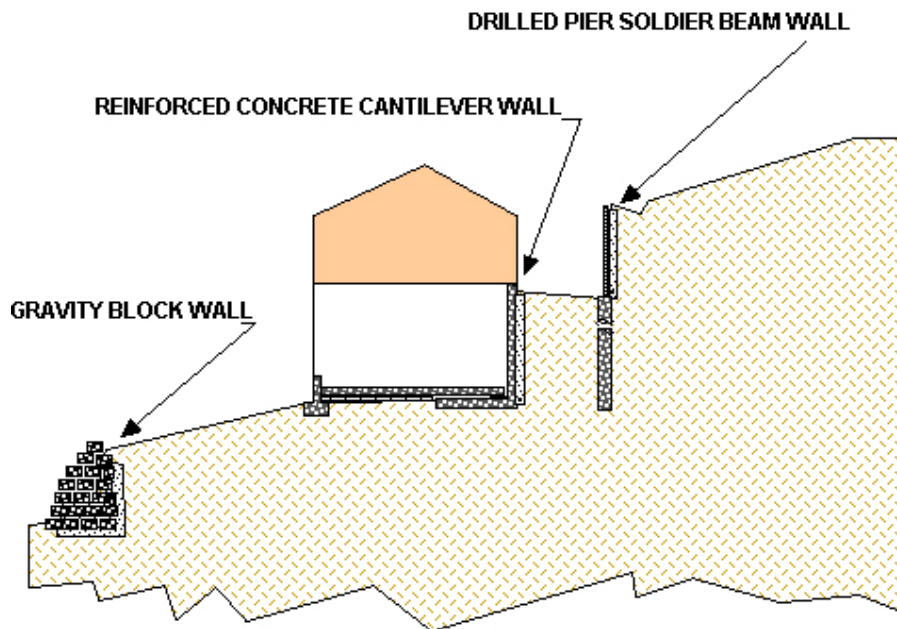


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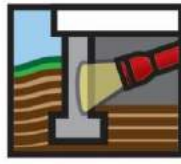
# RETAINING WALLS

The development of residential properties often involves the design and construction of retaining walls. These engineered structures are used to stabilize cut and fill slopes, to provide flat usable yard areas and to allow grade separations. Since they represent a significant investment, are subject to deterioration, and can present high replacement cost, their condition should be assessed.

Retaining walls are typically designed as gravity structures or are embedded into the soil to develop resistance to the lateral loads imposed by the supported slope.



Properly constructed retaining walls must be designed to support soil and surcharge loads and be provided with functional back drains.



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## **INFORMATIONAL REFERENCES**

These publications, or similar publications are probably in your local library's collection or are available through inter library loan. Publications without price information may be available from bookstores. Various web sites offer current information, data and recommendations. SBI, LLC. cannot endorse or guarantee the results of any of the procedures described in these publications.

### **GEOLOGIC HAZARDS**

Earthquake Planning Scenario for the Magnitude 8.3 Earthquake on the San Andreas Fault in the San Francisco Bay Area. James Davis, et al. California Department of Conservation, Division of Mines and Geology Special Publication 61, 1982. Description of anticipated damage caused by earthquake, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

Earthquake Planning Scenario for a Magnitude 7.5 Earthquake on the Hayward Fault in the San Francisco Bay Area. James Davis et al. California Department of Conservation, Division of Mines and Geology Special Publication 78, 1987. Description of anticipated damage caused by earthquake, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

Fault-rupture Hazard Zones in California. James Davis et al. California Department of Conservation, Division of Mines and Geology Special Publication 42, 1988 (revised). Presentation of anticipated fault rupture zones, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

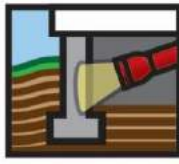
### **FOUNDATIONS**

Foundations, Retaining and Earth Structures. Gregory P. Tschebotarioff. A technical reference on the design and construction of foundations and retaining walls. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020.

Guideline for Structural Condition Assessment of Existing Buildings ASCE. A technical standard for the evaluation of foundations and structures. American Society of Civil Engineers, 345 East 47 Street, New York, NY 10017-2398.

Foundation Behavior and Repair. Robert Wade Brown. McGraw-Hill, Inc. 1221 Avenue of the Americas, New York, NY 10020.





## **FOUNDATION INSPECTION SERVICES**

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### **HOME STRENGTHENING**

Strengthening Wood Frame Houses for Earthquake Safety. Bay Area Regional Earthquake Preparedness Project. Details fifteen procedures to make homes safer. Association of Bay Area Governments,  
P.O. Box 1050, Oakland, CA 94604.

Introduction to Earthquake Retrofitting Builder Educations Center. A guide to the tools and techniques needed to complete the primary retrofitting projects. Builder Education Center, 912 Page Street, Berkeley, CA 94710.

Earthquake Ready. Virginia Kimball. Advise on preparations for home, office, and school as well as on special care for infants, the elderly, and pets. Round table Publishing Inc., Santa Monica, CA.

The Home Builder's Guide for Earthquake Design. Applied Technology Council. A guide detailing methods and materials to provide earthquake resistant design for residential structures. Applied Technology Council, 555 Twin Dolphin Drive, Suite 270, Redwood City, CA 94065.

### **WORLD WIDE WEB RESOURCES**

[www.homerisk.com](http://www.homerisk.com) This site, hosted by EQE International, offers information on seismic risk, home strengthening and earthquake preparedness.

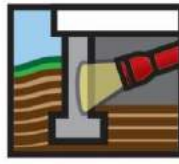
[www.usgs.gov](http://www.usgs.gov) This site, hosted by the U.S. Geological Survey, provides flood and earthquake information as well as landslide data.

[www.quakesafe.com](http://www.quakesafe.com) This site provides information on the design and installation of seismic upgrades for residential structures. Quakesafe is a consulting firm specializing in the analysis of the seismic resistance of wood framed buildings.

[www.bayarearetrofit.com](http://www.bayarearetrofit.com) This site is hosted by a Bay Area contractor specializing in the implementation of seismic bracing at residential properties. The site provides information on appropriate seismic upgrades.

[www.wellconnectedhouse.com](http://www.wellconnectedhouse.com) This site was prepared to improve a layman's "homeowners" understanding of the forces acting on residential structures and the systems available to properly connect wood framed structures to their foundations.

[www.soilengineeringconstruction.com](http://www.soilengineeringconstruction.com) This site provides information on and photographic illustrations of geotechnical engineering projects including foundation underpinning, retaining wall construction, and the installation of coastal protection structures.



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## **GLOSSARY**

**ALLUVIUM:** A soil type resulting from water borne (river or stream) deposits.

**ANCHOR BOLT:** A steel bolt anchoring a wood frame structure to the foundation. Current UBC Code requires anchor bolts at 6" centers and within 4" to 12" of the ends of each sill board.

**BEARING PILE:** A shaft or column drilled or driven into the ground to act as a foundation by transferring the load that it supports to the very firm soil or bedrock on which it rests.

**BEDROCK:** The solid crust of the earth, which may be exposed at the surface or located several hundred feet below the surface.

**COLLUVIUM:** A soil type resulting from the deposition of material at the base of a hillside.

**CAP:** A concrete pad that ties the top end of a pile group together either in a cluster or row, which in turn supports a column or wall.

**CATCH BASIN:** Surface drain inlet with grate (also "drop inlet").

**COSMETIC:** Minor distress that does not impact structural integrity, i.e. drywall cracks, door offsets.

**CREEP:** The slow down slope movement of near surface soils usually related to annual wetting and drying cycles of expansive clay soils or poorly consolidated fill.

**CRIPPLE WALL:** The wall in the crawl space of a home between the foundation and home's first floor.

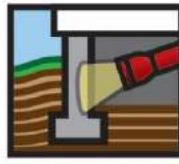
**CUT:** The ground surface remaining after the removal of soil by excavation.

**EARTH TO WOOD SEPARATION:** Current UBC Code and good construction practice requires a 6" separation between soil and the wood elements of a home to minimize pest infestation and rot problems.

**EFFLORESCENCE:** An indication of excessive moisture resulting in a white salt deposit remaining on a concrete surface after repeated drying cycles (also calcium deposit).

**END BEARING PIER:** A drilled shaft, extended to bedrock, providing foundation support.

**EXCAVATION:** The digging out and removal of soil from a site.



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**EXPANSIVE SOIL:** A type of clay soil which expands when moisture is added and shrinks during drying cycles (also adobe soil).

**FILL:** The material used to fill & level, or adjust the grade of, a sloping site or to rebuild the base of an excavation to the required height (imported, not native soil).

**FINGER DRAIN:** A finger drain is constructed much like a sub-drain, but is typically positioned in the sub-area, just inside the perimeter foundation. A finger drain is typically 8" wide and varies in depth from 6" to 15" and often outlets to an 18" diameter, 30" deep, cased sump that is provided with a float-switch activated pump.

**FLOATING FOUNDATION:** A continuous spread footing foundation that extends under an entire building replacing many separate footings (also "mat").

**FLOOR JOISTS:** The beams beneath a floor that hold it up.

**FOOTING:** The portion of the foundation that bears on the supporting soil.

**FORM WORK:** The temporary mold into which liquid concrete is poured to create a specific shape and the associated structure.

**FOUNDATIONS:** The structural system constructed below a building that transfers the vertical weight and lateral loads of the building to the ground on which it stands.

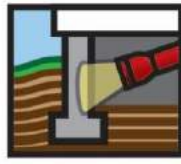
**FOUNDATION WALL:** A wall (usually concrete) built below ground level to transfer the weight of the exposed wall it supports to the footing on which it rests (also stem wall).

**FRICITION PIER:** A drilled shaft extended into the ground normally filled with reinforced concrete which provide support through friction between the piers surface and the soil.

**FRICITION PILE:** A shaft or column that is hammered into the ground until the pressure or friction developed between the pile surface and the soil into which it is forced (driven) enables it to become a firm foundation support on which, when combined or grouped with other piles, to build heavy structures.

**GRADE:** Soil surface or the inclination of a pipe or the property (also site slope). Grade is often expressed as a ratio of the horizontal to the vertical components of slope i.e. 2:1.

**GRADE BEAM:** A reinforced concrete foundation element used to distribute building loads to foundations piers and to interconnect the piers.



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**HONEYCOMB:** Voids in concrete typically resulting from inadequate vibration during placement (also "popcorn concrete").

**INVERT:** The lowest point on the inside surface of a pipe or channel.

**LANDSLIDE:** A slope failure resulting in the downward movement of a section of a hillside.

**LATERAL LOAD:** A horizontally applied force typically resulting from seismic loads on foundations and wind loads on walls.

**PIER:** A column or shaft (also caisson) in the ground that serves as a foundation constructed by drilling a hole and filling it with concrete and reinforcing steel.

**PIPE PILES:** A type of underpinning in which steel pipes are driven into the ground below an existing foundation to provide stable support (also mini-pile).

**PONY WALL:** A less than standard height stud wall (also known as a cripple wall). It is usually employed to provide support between the foundation and the floor on a sloping site.

**REINFORCING:** The deformed steel rods or mesh embedded in concrete to strengthen it.

**RETAINING WALL:** A wall built to retain soil or support a foundation on sloping ground. The Uniform Building Code requires walls over 4 feet to be designed by a licensed Civil Engineer.

**SEISMIC STRAP:** A steel strap used to restrain the structure or an element of the structure from the lateral forces developed during earthquakes by connecting the frame to the foundation (also "tie-down"). The term used to describe the exact location of a building.

**SHEARPLY:** Plywood reinforcement used to improve the strength of stud walls to resist lateral loads (earthquake forces).

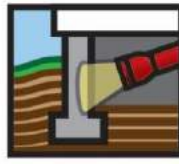
**SHEAR TRANSFER TIE:** A metal brace nailed into both the shear wall and the floor joists that allows the shear wall to support the house during the shaking of an earthquake.

**SHEAR WALL:** Sheets of plywood nailed to the studs of an exterior wall, such as a cripple wall, to provide bracing against the shaking forces of an earthquake.

**SILL:** The first wood element above the foundation (also mudsill).

**SIMPSON:** A manufacturer of steel connectors for wood frame construction. Seismic tie-downs are available at Home Depot, Peninsula Building Materials and Muller Construction Supply.

**SLAB:** A flat, thin, horizontal concrete element.



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**SLIPOUT:** A small slope failure that moves (also "mud flow").

**SOFT STORY:** An open area, commonly a garage, at ground level with a room directly above it. Because of the garage door, one wall of the house can't be secured with shear wall.

**SOIL PROFILE:** A vertical cross-section drawing of the ground showing the type and depth of each layer of material between the surface and bedrock.

**SPREAD FOOTING FOUNDATION:** A very common type of foundation that involves placing a wide flat concrete footing under the perimeter building walls distributing the weight over a greater area.

**STANDING WATER:** Water within the crawl space that has not evaporated or percolated away.

**STEM WALL:** The portion of the foundation above the footing that supports the wood frame by connection to the sill plate.

**SUBDRAIN:** A subsurface moisture collection system normally designed to cut off underground water flow (also "back drain", "curtain drain" or "French drain").

**SWALE:** Linear depression which forms a drainage channel.

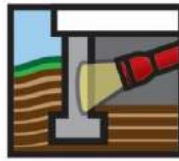
**UBC:** Uniform Building Code; the code that each building permit authority uses as a basis for review and acceptance at residential design and construction (the code is updated periodically).

**UNDERPINNING:** Added foundation support placed under an existing building foundation.

**WATERPROOF MEMBRANE:** An impermeable barrier placed to prevent moisture intrusion.

**WATER TABLE:** The distance below the surface at which the soil is completely saturated with water. A perched water table can develop above the actual water table when a clay lens or other impermeable layer prevents or delays vertical percolation.





**FOUNDATION INSPECTION SERVICES**  
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# INVOICE

June 17, 2020

Ms. Jennifer Buenrostro

[REDACTED]

[REDACTED]

Menlo Park, CA 94025

[REDACTED]

[REDACTED]

**DESCRIPTION OF SERVICES: FOUNDATION INSPECTION & CONDITION ASSESSMENT**

**2468 Sharon Oaks Drive, Menlo Park, CA**

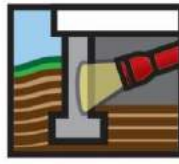
**TOTAL AMOUNT DUE: \$495.00**

**TERMS:** Please include report no. (J20-174B) on check payable to **GCD** & send to: **GCD, 7236 Via Mimosa, San Jose, CA. 95135**, Total due within 7 days.

*It's been a pleasure doing business with you. Thanks for the work!  
And, don't hesitate to call me if you have any questions or concerns.*

*George*

408 812 4355



**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

June 17, 2020

Mr. & Mrs. Mark Danielson  
C/O Ms. Jennifer Buenrostro

[REDACTED]

[REDACTED]

Menlo Park, CA 94025

**REGARDING:** FOUNDATION INSPECTION AND CONDITION ASSESSMENT  
2460 Sharon Oaks Drive, Menlo Park, CA

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Dear Mr. & Mrs. Danielson,

In response to your request, we have prepared the following Foundation Inspection and Site Drainage Analysis Report for your use. Our inspection was made and this condition assessment report was prepared by a trained and experienced, licensed Professional Engineer and General Engineering Contractor.

Our perimeter and interior reconnaissance, performed on June 16, 2020, was limited to accessible areas of the home, and the immediately adjacent site. The professional opinions offered are based on visual observations of apparent conditions existing at the time of the inspection (latent and concealed defects and deficiencies are excluded). Document search and review, destructive testing, subsurface investigation, structural calculation, geologic study and seismic analysis, as well as the preparation of engineering specifications and construction drawings for any recommended repairs or improvements are beyond the scope of services provided. An independent consulting Geotechnical Engineer and Engineering Geologist should be retained if a complete geotechnical investigation is desired.

PLEASE READ THIS REPORT CAREFULLY, A FULL UNDERSTANDING OF THE INFORMATION IT CONTAINS MAY BE CRITICAL TO THE SUCCESSFUL OUTCOME OF THE NECESSARY IMPROVEMENTS!

The two story, 46+/- year-old, attached townhome with its attached garage was constructed on a reinforced concrete, slab-on-grade foundation. I found the building pad to have been developed at, or very near to, the native grade with minor cut and fill operations. My observations suggest that the home's footprint sits on soils which are expansive.

J20-174A

2460 Sharon Oaks Drive, Menlo Park, CA

Page 1 of 28

**GEOTECHNICAL CONSTRUCTION & DESIGN, INC.**

**7236 Via Mimosa, San Jose, CA. 95135**

**Email: gcdinc94@aol.com Cell: 408.812.4355**



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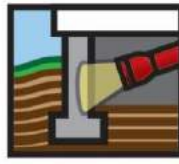
**LEVEL SURVEY:** Our hydrolevel survey of the home's interior floors, attached to this report as Appendix 1, found a maximum of 0.8" of differential level across the structure. This differential is within normally accepted tolerances for good foundation performance (up to 1 1/2" of differential level across a residential structure is typically considered acceptable). The measured differentials are also within another criterion for good foundation performance (1" in 20').

My on-site observations suggest that the measured differentials result from construction and measuring tolerances, expansive soil movement and tree root growth (there is a mature redwood tree immediately adjacent to the left rear corner of the subject property). The tree lines up with an area of patio distress (obviously associated with the tree root growth). In addition, the area of interior slab distress appears to have allowed ground moisture to reach the hardwood floor with resulting cupping and finished floor damage.

I understand that the adjacent home owner (attached unit 2458) abated ongoing damage to their hardwood floor by removing their rear patio, excavating the underlying soil and cutting back the roots from an even larger redwood located just beyond the right rear corner of their property. The roots of that redwood damaged their rear patio and interior hardwood floors. Once the damage was mitigated, they installed a water proof membrane and replaced their entry level hardwood floors. This repair program resolved their current issues. In my opinion, the two large redwood trees located on HOA property immediately adjacent to the area of interior slab damage at 2458 and 2460 Sharon Oaks Drive should be removed and the slab damage at 2460 Sharon Oaks Drive should be addressed as outlined below.

**SCOPE OF PROPOSED INTERIOR SLAB RESTORATION:** First the rear patio should be removed and the underlying roots cut. The patio can then be reconstructed following the procedures implemented in the restoration of the 2458 patio. The approximate area of hardwood floor damage associated with tree root growth is limited to the rear portion of the home's first floor. In my opinion, the flooring should be removed and any exposed slab cracks should then be sealed and bonded using epoxy injection techniques. Once this work is completed, a waterproof membrane (vapor barrier) should be installed and the finished floor should be replaced. I have outlined the steps required to properly complete the necessary work below:

1. Design a suitable repair.
2. Prepare construction drawings as necessary for permit procurement.
3. Apply for, pick up and pay for the required City of Menlo Park Building Permit.
4. Demo rear patio and excavate/off-haul about of soil 12" of soil.
5. Cut exposed roots, place and compact a 12" base rock bed and reconstruct the rear patio.
6. Demo and restore finished hardwood floor, clean up and move out.



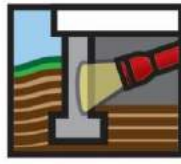
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**DRAINAGE:** The Uniform Building Code (UBC) requires 6" soil to wood clearance and positive fall away from the structure. I found the nearly level lawn areas at the perimeter of the structure, while well drained, to be nearly saturated (most likely the result of an overly aggressive irrigation schedule). I recommend, limiting irrigation throughout the dry months and monitoring surface flow during storm conditions with local regrading as necessary to direct storm water flow away from the perimeter foundation as practical. It should be recognized that an analysis of surface and subsurface drainage conditions with a single inspection conducted months after the last saturating rains is problematic at best. I recommend a re-inspection at the end of the winter storm season.

**MAINTENANCE:** The site drainage system will require continuing care which should be incorporated into the buyer's property maintenance program. Specifically: area drainage should be observed during rainy periods and steps taken to direct all surface flow away from the structure. In addition, the buried downspout collection system and storm water control system should be cleaned at the start of the storm season and their proper operation monitored through the storm season. Finally, irrigation should be reduced to the minimum necessary to keep things green.

Unanticipated subsurface conditions may develop during the life of the structure that cannot be predicted from the limited visual inspection performed. Our inspection, oral comments and this report are not intended to be used as a guarantee or warranty, expressed or implied, regarding the adequacy, performance or condition of any inspected structure. This report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Please recognize that we have not addressed the possible presence of or danger from any potentially harmful substances and environmental hazards including but not limited to radon gas, lead paint, asbestos, urea formaldehyde, toxic or flammable chemicals and water or air born hazards. Specifically excluded are inspections of and report on decks, wells, septic systems, safety equipment and the presence or absence of rodents, termites, fungus and other organisms. During the life of the structure, there may develop unanticipated subsurface conditions that cannot be predicted from the limited visual inspection performed.

The observations noted and repair recommendations offered (if any) should be considered valid for four years, after which time a reinspection is prudent. This report is not a complete geotechnical study or distress survey nor is it intended for use as a complete description of the property. It is intended to provide information regarding the home's foundation and site drainage conditions. Our observations, conclusions and guideline recommendations have been made using the degree of care and skill originally exercised, under similar conditions, by reputable professional engineers practicing in this area. No other warranty, expressed or implied, is made.



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**CONTRACTOR LICENSING INFORMATION:** "STATE LAW REQUIRES ANYONE WHO CONTRACTORS TO DO CONSTRUCTION WORK TO BE LICENSED BY THE CONTRACTORS STATE LICENSE BOARD IN THE LICENSE CATEGORY IN WHICH THE CONTRACTOR IS GOING TO BE WORKING IF THE TOTAL PRICE OF THE JOB IS \$300.00 OR MORE (INCLUDING LABOR AND MATERIALS). LICENSED CONTRACTORS ARE REGULATED BY LAWS DESIGNED TO PROTECT THE PUBLIC.

IF YOU CONTRACT WITH SOMEONE WHO DOES NOT HAVE A LICENSE, THE CONTRACTORS STATE LICENSE BOARD MAY BE UNABLE TO ASSIST YOU WITH A COMPLAINT. YOUR ONLY REMEDY AGAINST AN UNLICENSED CONTRACTOR MAY BE IN CIVIL COURT, AND YOU MAY BE LIABLE FOR DAMAGES ARISING OUT OF ANY INJURIES.

YOU MAY CONTACT THE CONTRACTORS STATE LICENSE BOARD TO FIND OUT IF THIS CONTRACTOR HAS A VALID LICENSE. THE BOARD HAS COMPLETE INFORMATION ON THE HISTORY OF LICENSED CONTRACTOR'S, INCLUDING ANY POSSIBLE SUSPENSIONS, REVOCATIONS, JUDGMENTS, AND CITATIONS. THE BOARD HAS OFFICES THROUGHOUT CALIFORNIA. PLEASE CHECK THE GOVERNMENT PAGES OF THE WHITE PAGES FOR THE OFFICE NEAREST OR CALL FOR MORE INFORMATION.

**ARBITRATION OF DISPUTES:** ANY CONTROVERSY OR CLAIM FOR DAMAGES ARISING OUT OF OR RELATING TO THIS CONDITION ASSESSMENT OR ANY WORK PERFORMED IN CONNECTION THEREWITH INCLUDING BUT NOT LIMITED TO NEGLIGENCE, ERRORS OR OMISSION SHALL BE SETTLED IN ACCORDANCE WITH THE CONSTRUCTION INDUSTRY ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION OR ALTERNATE DISPUTE RESOLUTION FORM ACCEPTABLE TO ALL PARTIES.

Acceptance and use of this report bind the parties to the limitation and conditions included in it. Should GCD and/or its agents or employees be found liable for any loss or damages resulting from a failure to perform any of its obligations, including and not limited to negligence, breach of contract, or otherwise, then the liability of GCD and/or its agents or employees, shall be limited to a sue equal to 5 times the amount of the fee paid by the Customer for the inspection and this condition assessment report.





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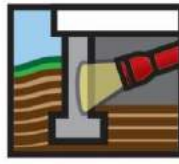
It has been a pleasure providing you with a professional Foundation Inspection and Sits Drainage Analysis Report. Please do not hesitate to call if we may be of further assistance or if you have any questions or concerns.

Very truly yours,



George E. Drew, P.E., GCD, INC.

California Professional Engineer license #20681  
Member American Society of Civil Engineers I.D. #19732B  
Member National Society of Professional Engineers  
General Engineering Contractor license #A64788  
Certified Inspection Engineer (BIECI)



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## **Inspection Agreement and Contract for Services**

### **SCOPE OF SERVICES**

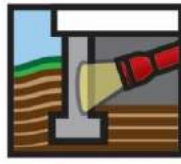
GCD, INC. ("GCD") has been engaged by the undersigned client(s) to inspect foundation and drainage conditions and thereafter issue a report as to the observations made by the inspector. GCD's inspection report is based on a visual reconnaissance of the structure, its foundation and the immediately adjacent site. This study is limited to observation of the general nature of the building pad and the structure as well as drainage characteristics immediately adjacent to the home and in its sub area. GCD does not perform, nor is it engaged in the performance of, a home inspection as defined by Business and Professions Code Section 7195 et. seq.

### **LIMITATIONS OF WARRANTY/DISCLAIMER AND STATUTE OF LIMITATIONS**

It is hereby acknowledged that there may be hidden or obscured conditions that are not observed by the inspector and seasonal environmental and soil conditions that may change after the inspection. Because of inherent conditions associated with unstable land and unknown soil conditions no warranty can be made with respect to the possibility of erosion, faulting, and slope stability problems. GCD warrants that the services provided are within the reasonable standard of care provided by other inspectors practicing in this area and offering similar services. No other warranty expressed or implied is made. This report does not include an analysis of the presence of any environmental hazards including, but not limited to toxins, mold, carcinogens, hazardous materials, and contaminants in the soil, water, and air. GCD's site reconnaissance visually identifies actual conditions only at those points where and when observed. This report is based on conditions that exist at the time of GCD's inspection, no warranty or guarantee can be made as to future conditions. It is hereby agreed that the time to begin legal action for a claim under this contract shall not exceed two years from the date of the inspection.

### **LIQUIDATED DAMAGES**

It is understood and agreed to by the client(s) that GCD is not an insurer and the amounts payable to GCD for its services by the client are not sufficient for GCD to assume the risk of consequential or other damages to the client(s) for any act of negligence, omission or commission. From the nature of the services to be performed it is hereby agreed that it is impractical and extremely difficult to fix actual damages in the event of an act of negligence, omission or commission, if any, which may result these services. If GCD should be found liable for loss or damage due to an act of omission of commission or for breach of this contract, its liability shall be limited to no more than five (5) times the amount paid by client for the services performed under this contract as liquidated damages. It is hereby agreed and understood that said amount agreed to as liquidated damages are not a penalty, irrespective of cause or origin of the loss or damage. Alternatively, the client may request in writing that the aforementioned limitation of liability clause be excluded or modified for an appropriate increase in the inspection fee. If the client selects this alternative, he or she must contact GCD for a quote as to the increased inspection fee and/or any other desired modification to the services provided or the terms under which they are offered.



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A separate written agreement must be executed to facilitate the selection of this alternative and until said writing is executed by both parties, the liquidated damages provisions set forth in the previous paragraph shall remain in full force and effect.

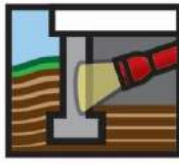
**DISPUTE RESOLUTION**

ANY DISPUTE OR CLAIM BETWEEN THE CLIENT(S) AND GCD AND/OR ITS AGENTS, OR AFFILIATES ARISING OUT OF THIS CONTRACT, THE OBSERVATIONS SET FORTH THEREIN OR THE RESULTING REPORT SHALL BE SUBMITTED FIRST TO MEDIATION BEFORE A MUTUALLY ACCEPTABLE MEDIATOR. IF THE DISPUTE OR CLAIM IS NOT RESOLVED BY MEDIATION, THE DISPUTE OR CLAIM WILL THEN BE SUBMITTED TO AND DECIDED BY NEUTRAL BINDING ARBITRATION IN ACCORDANCE WITH CHAPTER 3, TITLE 9 OF THE CALIFORNIA CODE OF CIVIL PROCEDURES (C.C.P. 1282, ET SEQ.). UPON SELECTION OF AN ARBITRATOR, THE PARTIES SHALL AGREE UPON THE LIMIT AND EXTENT OF NECESSARY DISCOVERY PRIOR TO THE HEARING. THE PARTIES SHALL AGREE UPON THE SELECTION OF AN ARBITRATOR WHO SHALL BE EITHER A RETIRED SUPERIOR COURT JUDGE, A LICENSED CALIFORNIA ATTORNEY WITH AT LEAST TEN (10) YEARS OF REAL ESTATE LITIGATION EXPERIENCE, A LICENSED GENERAL ENGINEERING CONTRACTOR OR LICENSED PROFESSIONAL ENGINEER WITH AT LEAST FIVE YEARS OF EXPERIENCE AS DEFINED IN BUSINESS AND PROFESSIONAL CODE 7195 ET SEQ. THE ARBITRATION SHALL TAKE PLACE IN THE COUNTY WHERE THE PROPERTY IS LOCATED. TO THE EXTENT THE PARTIES CANNOT AGREE UPON AN ARBITRATOR, ONE OR BOTH OF THE PARTIES MAY PETITION THE SUPERIOR COURT IN THE COUNTY WHERE THE PROPERTY IS LOCATED TO COMPEL ARBITRATION AND MAY IN SAID PETITION REQUEST THE COURT TO APPOINT A NEUTRAL ARBITRATOR. THE PREVAILING PARTY IN ANY ARBITRATION UNDER THIS ARBITRATION AGREEMENT SHALL BE ENTITLED TO RECOVERY OF ATTORNEY'S FEES AND COSTS INCURRED IN THE ARBITRATION AND THOSE RELATED TO ANY PETITION TO COMPEL ARBITRATION OR APPOINT AN ARBITRATOR, IF ONE IS NECESSARY. JUDGMENT ON THE AWARD RENDERED BY THE ARBITRATOR MAY BE ENTERED IN ANY COURT HAVING JURISDICTION.

**IMPORTANT NOTICE**

YOU ARE AGREEING TO HAVE ANY DISPUTE ARISING OUT OF THE MATTERS IN THIS AGREEMENT DECIDED BY NEUTRAL BINDING ARBITRATION AS PROVIDED BY CALIFORNIA LAW AND YOU ARE GIVING UP ANY RIGHTS YOU MIGHT POSSESS TO HAVE THE DISPUTE LITIGATED IN A COURT OF LAW OR BY JURY TRIAL. BY SIGNING IN THE SPACE BELOW YOU ARE GIVING UP YOUR RIGHTS TO CIVIL DISCOVERY AND YOUR RIGHTS TO AN APPEAL SINCE THE GROUNDS FOR AN APPEAL OF THE DECISION RENDERED MAY BE LIMITED. BY SIGNING BELOW, YOU ARE SPECIFICALLY AGREEING TO THE SCOPE OF SERVICES, LIMITATION OF LIABILITY AND DISPUTE RESOLUTION PROVISIONS, AND ALL CONDITIONS AS DESCRIBED ON THIS CONTRACT.

IF THIS AGREEMENT IS NOT SIGNED WITHIN THREE (3) CALENDAR DAYS OF THE INSPECTION BY THE CLIENT OR THEIR AUTHORIZED AGENT, THE INSPECTION AND/OR REPORT WILL CARRY NO WARRANTY OR



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GUARANTEE AS TO ITS CONTENTS, AND NO ONE SHALL BE ENTITLED TO RELY ON ITS CONTENTS FOR ANY PURPOSE. THIS AGREEMENT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA.

**CLIENT REVIEW AND INTERPRETATION OF TERM**

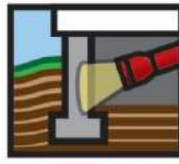
The client acknowledges that he/she had the opportunity to review the entirety of this contract. Client further agrees that he/she will not later contend that any ambiguity should be construed against GCD as the purported drafter of the Agreement.

WE HAVE READ AND UNDERSTAND THE FOREGOING:

CLIENT(S): \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_





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**IMPORTANT ISSUES**

OUR CLIENTS AND ANY SUBSEQUENT BUYER OF THE PROPERTY SHOULD BE AWARE OF THE FOLLOWING CONDITIONS OF THE REPORT.

If this inspection was performed for the seller and if the subsequent buyer of the property wishes to rely on this inspection report in any way, including determining whether or not to purchase the property described in the report; he/she must read, date, sign and return a copy of the Inspection Agreement and Contract for Services, pages 1:2a and 1:2b, to the inspector, or the buyer may not rely on this report, and, further, it will serve as "Information Only" to the buyer, with no Errors or Omissions warranties shall be, or shall be deemed to be, applicable to the inspection or report. Please send a signed and dated copy of pages 1:2a and 1:2b within 30 days of the close of escrow to: GEOTECHNICAL CONSTRUCTION & DESIGN, INC., 7236 Via Mimosa, San Jose, CA. 95135 or email to: [gcdinc94@aol.com](mailto:gcdinc94@aol.com).

If the information contained in this inspection report is to be relied on by another buyer in a future sales transaction, completed more than twelve months after this report was prepared, we must be contacted and a re-inspection must be completed; or the report will serve as "Information Only" to the buyer with no Errors or Omissions warranties applicable to the inspection or report. If a re-inspection is desired, please call (408) 812 4355 to schedule an appointment and email a signed and dated copy of pages 1:2a and 1:2b to GCD at: [gcdinc94@aol.com](mailto:gcdinc94@aol.com).

It should be noted that, our inspection is limited to the referenced property. However, if the property is located within and is governed by a Homeowners Association with related CC&R's, I recommend a thorough review of the Association's responsibilities and further consultations with the Association or their Property Manager, as well as the current homeowner regarding the history of the observed conditions (when repairs had been performed, who paid for the work, who performed the work, and what were the conditions before the repairs and/or improvements were implemented). The Association also should be consulted regarding their possible involvement with the recommended repairs, as well as their maintenance schedules for the surface drainage system.

**ARBITRATION OF DISPUTES:** ANY CONTROVERSY OR CLAIM FOR DAMAGES ARISING OUT OF OR RELATING TO THIS CONDITION ASSESSMENT OR ANY WORK PERFORMED IN CONNECTION THEREWITH INCLUDING BUT NOT LIMITED TO NEGLIGENCE, ERRORS OR OMISSION SHALL BE SETTLED IN ACCORDANCE WITH THE CONSTRUCTION INDUSTRY ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION OR ALTERNATE DISPUTE RESOLUTION FORM ACCEPTABLE TO ALL PARTIES.



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Acceptance and use of this report bind the parties to the limitation and conditions included in it. Should GCD and/or its agents or employees be found liable for any loss or damages resulting from a failure to perform any of its obligations, including and not limited to negligence, breach of contract, or otherwise, then the liability of GCD and/or its agents or employees, shall be limited to a sue equal to 5 times the amount of the fee paid by the Customer for the inspection and this condition assessment report. It has been a pleasure providing you with a professional Foundation Inspection and Site Drainage Analysis Report. Please do not hesitate to call if we may be of further assistance or if you have any questions or concerns.

Very truly yours,



George E. Drew, P.E., GCD, INC.

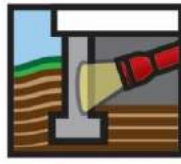
California Professional Engineer license #20681

Member American Society of Civil Engineers I.D. #19732B

Member National Society of Professional Engineers

General Engineering Contractor license #A64788

Certified Inspection Engineer (BIECI)



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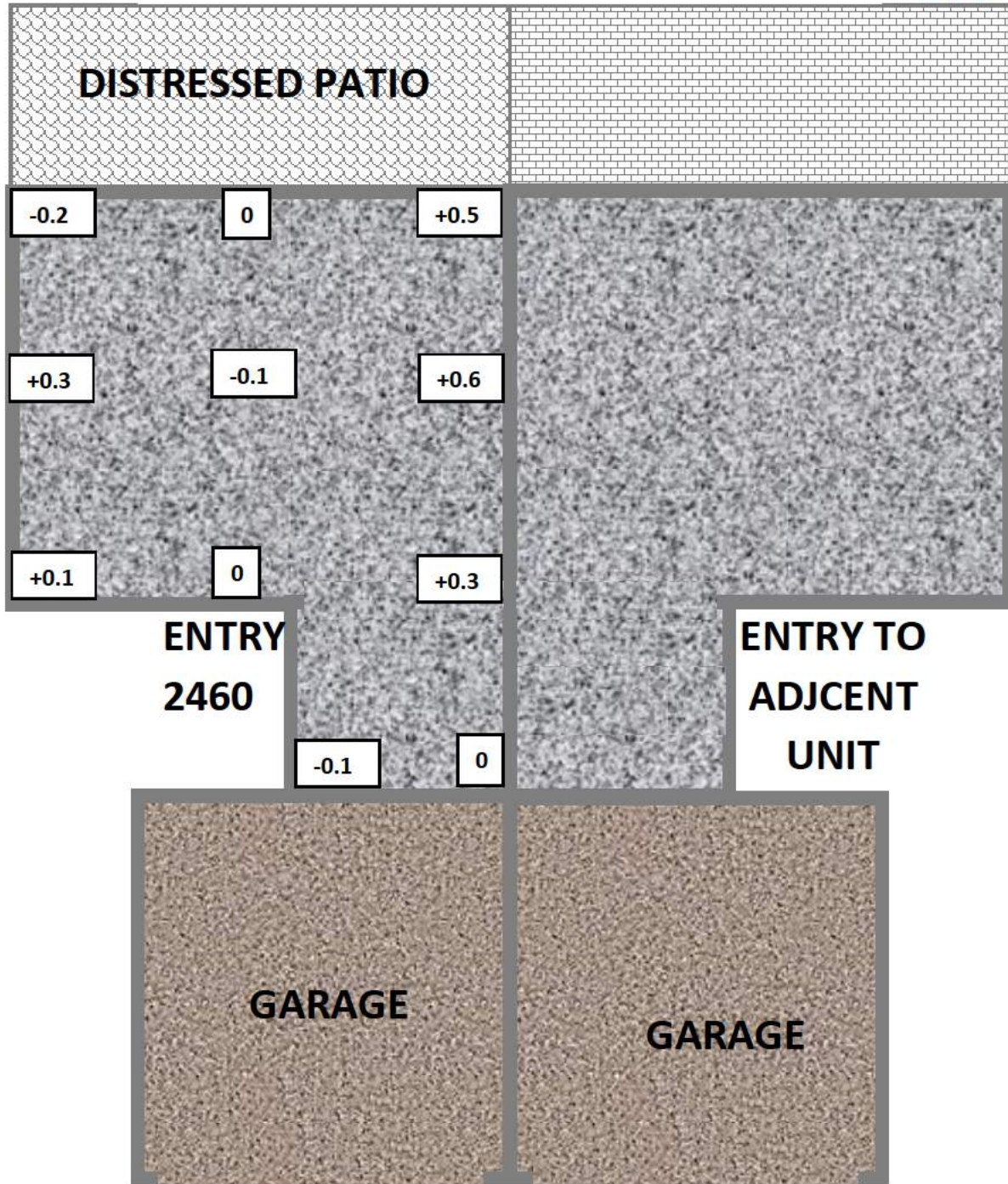
## **APPENDIX**

- 1. Partial Plot Plan and Level Survey**
- 2. Foundations (4 pages)**
- 3. Special Hardware for Seismic Upgrade**
- 4. Expansive Soils**
- 5. Site Drainage (2 pages)**
- 6. Retaining Walls**
- 7. Informational References (2 pages)**
- 8. Glossary (4 pages)**
- 9. Invoice**

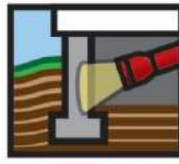




**LEVEL READINGS ARE IN INCHES RELATIVE TO A "0"  
ASSUMED AT THE HOME'S MEASURED LOW POINT.  
(ACCURACY +/-1/4")**





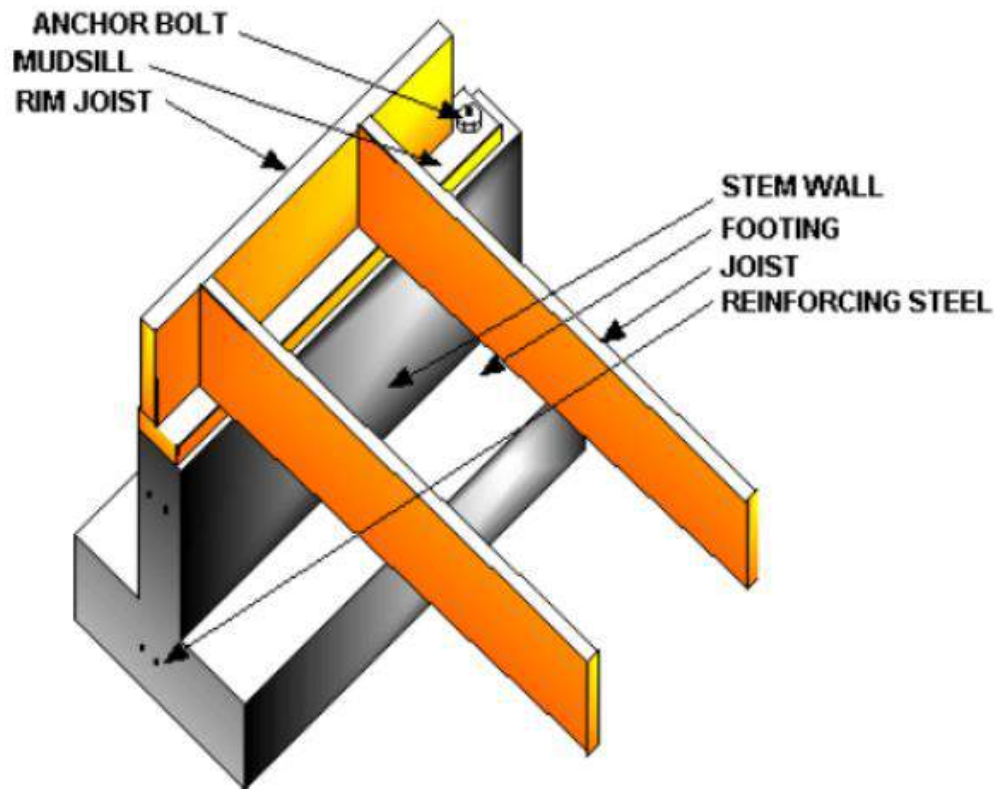


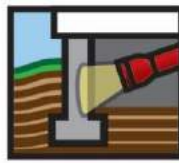
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## FOUNDATIONS

Foundations connect the structure to the property, provide support (spread) the structure's load on the soil) and separate the wood frame from the soil's moisture and bug problems. Most foundations are constructed of reinforced concrete and fall into one of 3 major categories, i.e., pier and grade beam, spread footings or slab-on-grade. Each type is described and illustrated below.

**SPREAD FOOTING:** A spread footing foundation, as the name implies, is designed to distribute (spread) the structures loads over a wide footprint on the near surface soil. The footing configuration is illustrated below.

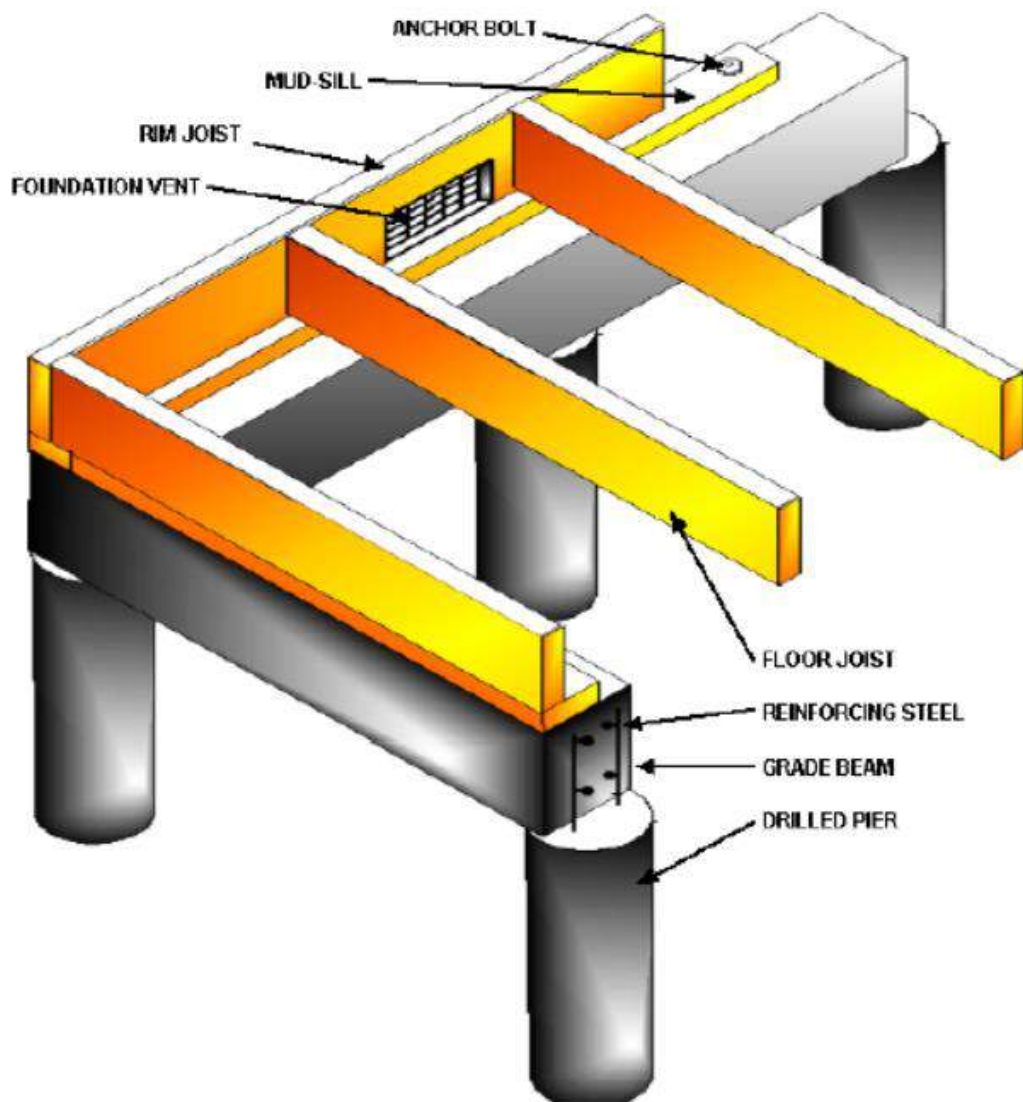


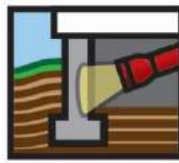


## FOUNDATION INSPECTION SERVICES

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**PIER AND GRADE BEAM FOUNDATION:** Drilled piers are typically employed when fill is encountered, slopes are involved, or the near surface soil's bearing capacity is limited. Under these conditions, firm support is obtained by drilling to the depth necessary to provide both vertical and lateral restraint, filling the resulting hole with reinforced concrete. Each individual pier is then interconnected with reinforced concrete tie beams (grade beams). Please see illustration below.

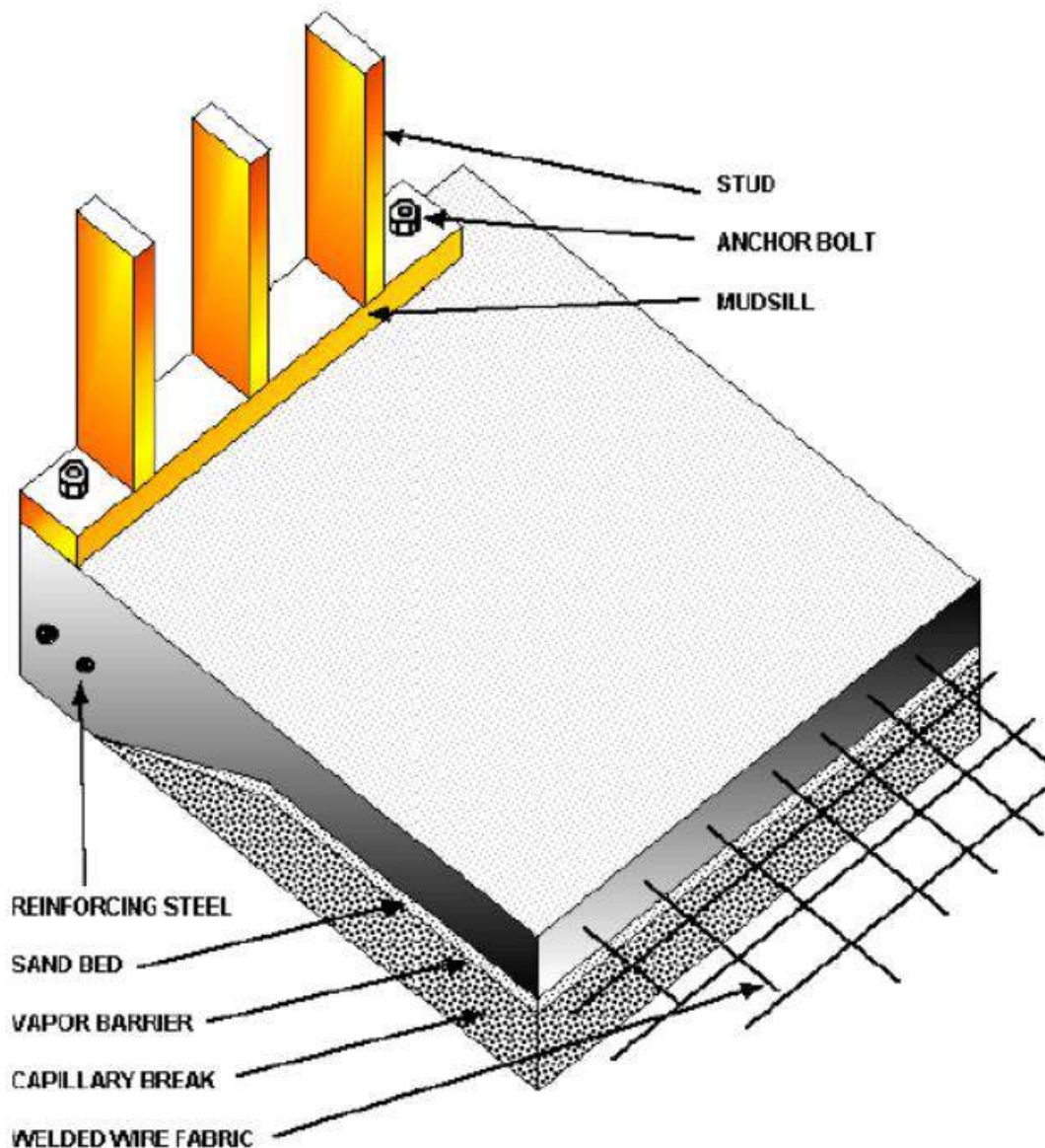




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**SLAB-ON-GRADE FOUNDATION:** A slab-on-grade foundation is normally constructed over an engineered base incorporating a moisture barrier (polyethylene membrane) and sand bed. Like spread footing, a slab-on-grade is designed to distribute the structure's load over a wide area of supporting soil.

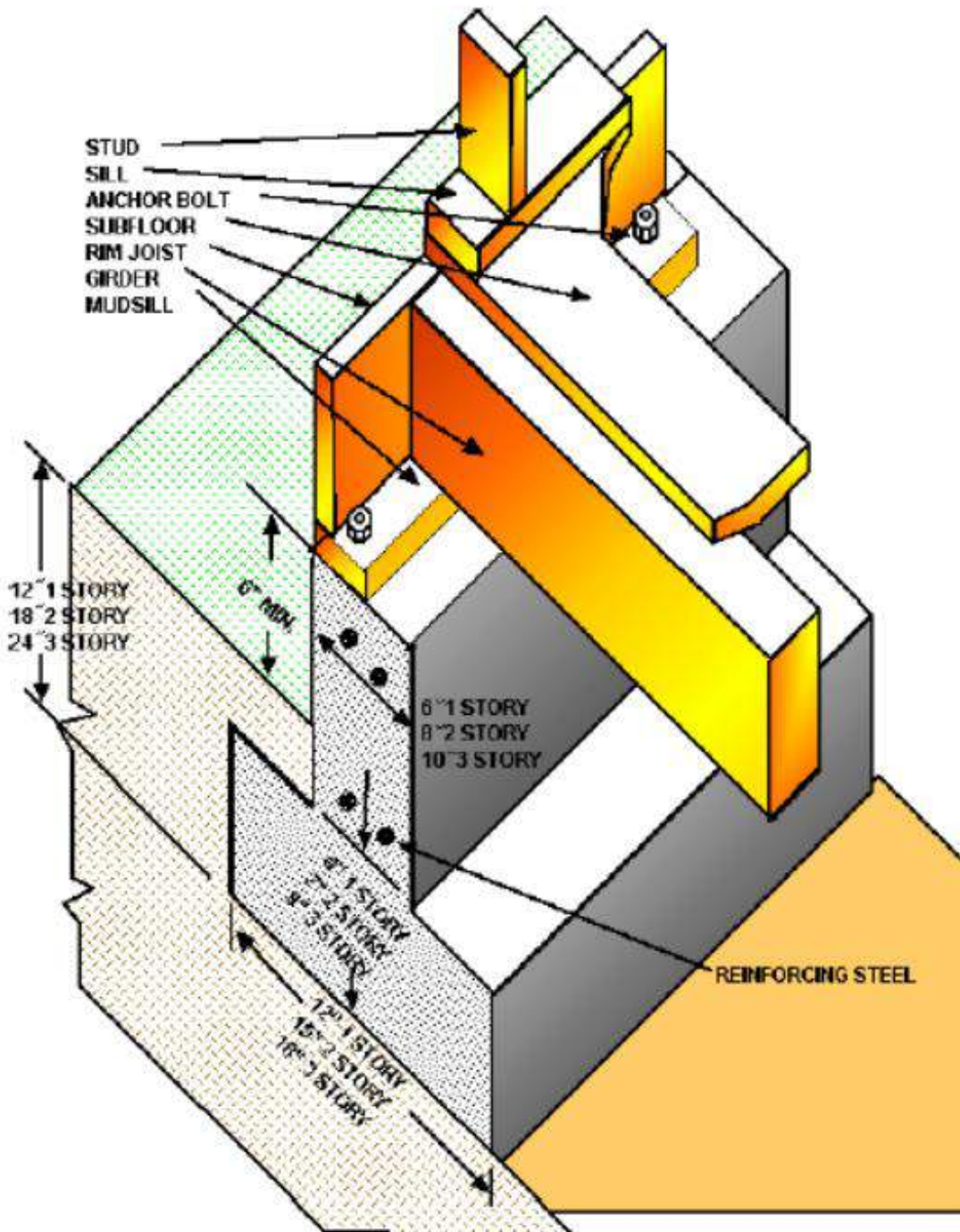






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**MINIMUM "UBC" UNIFORM BUILDING CODE REQUIREMENTS  
FOR CONCRETE SPREAD FOOTING FOUNDATIONS**



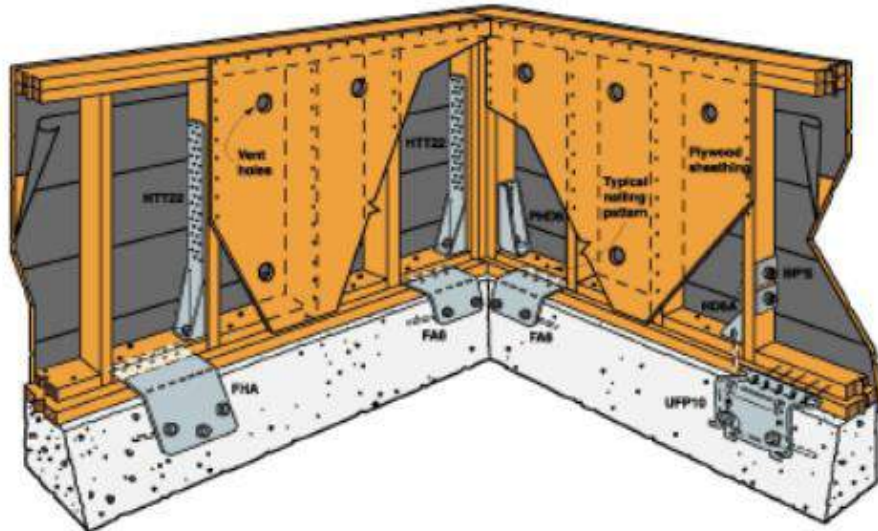




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### SPECIAL HARDWARE FOR SEISMIC UPGRADE AND FOUNDATION REPAIR



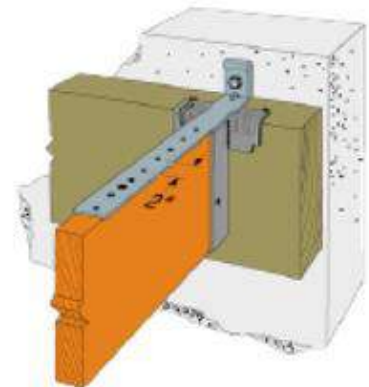
This illustration shows shearwall strengthening of a cripple wall (pony wall) area constructed between the mudsill and the floor framing system. Generally, the recommended structural panel is 1/2" 5-ply plywood or 7/16" OSB panels. The width of the panels required depends on the space between studs; the greater the distance between studs, the wider the panels should be. We recommend having vent holes drilled in the sheathing to eliminate moisture build-up which can lead to wood deterioration. Accurate and complete nailing of the structural panel to the stud, mudsill, and top plates is important to ensure that it performs adequately as a shearwall. Minimum nailing requirements is 8d nails nailed every 4" around the edges of the panel, and every 6" on center field nailing (along the studs).



Existing 4X4 crawl space area pier posts can be easily replaced with adjustable steel levelers.



The steel strap assembly shown allows for a direct connection between the foundation and the subfloor joists.



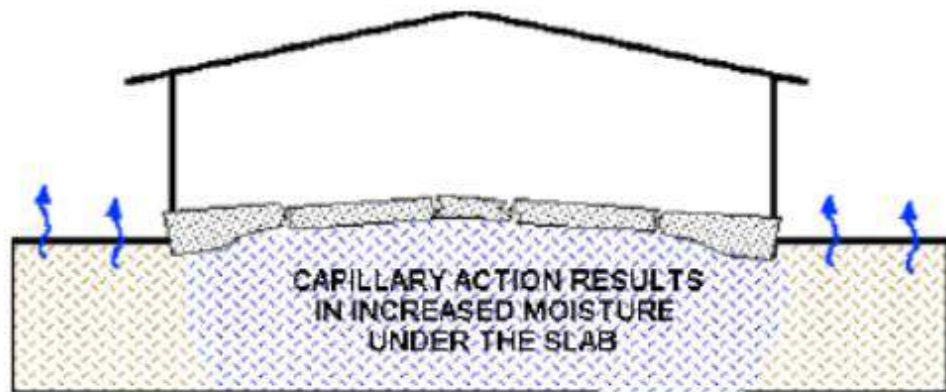
The ledger/hanger assembly shown can be restrained with a Simpson LTT19 light tension tie as illustrated above.



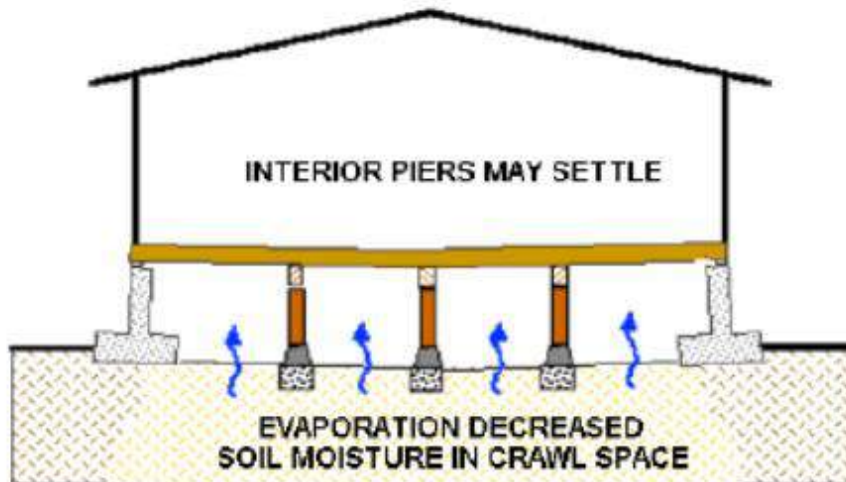
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## EXPANSIVE SOILS

Many Bay Area homes are subject to distress and differential foundation movement as their foundations respond to the annual swell/shrink cycles of the supporting highly expansive soils. Seasonal changes in soil moisture can also result in the down-slope creep of near surface soils.



EVAPORATION DECREASES MOISTURE AT PERIMETER  
SLABS OFTEN HEAVE WHEN SUPPORTED ON EXPANSIVE SOIL



FOOTINGS OFTEN SETTLE WHEN SUPPORTED ON EXPANSIVE SOIL



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## **SITE DRAINAGE**

### **SURFACE WATER CONTROL**

Poor surface drainage can lead to severe foundation problems, slope instabilities and retaining wall failures. Conversely, a little preventive maintenance and drainage improvement work can often mitigate the potential for soils related distress at far less expense than structural solutions for failures. Ideally homes are located on the “high” ground with slope contours directing all surface flow away from the structure. Since, in the real world, homes are often constructed on poorly graded building pads with up slope properties and roofs discharging surface water flow toward your foundation, the following good practices should be considered:

1. Collect roof drainage in a gutter and downspout system that directs all flow to splash blocks provided with positive slope (3” fall 6’ out from structure). Gutters must be cleaned of leaves and debris periodically to insure proper function. Downspouts should be checked for adequate capacity during heavy rains (in general 1 downspout for every 40’ of gutter should be adequate). As a preferred alternative to splash blocks, catch basins can be installed at each downspout with a buried (3” minimum diameter) tight line provided and extended to daylight well away from the foundation (a minimum of 1/8” of fall per foot of pipe is standard). NOTE: Perforated pipe should never be used for this application.
2. Intercept surface water flow from up slope areas with a berm, concrete lined “V” ditch or swale which will direct the flow to a suitable outlet or storm drain well away from the foundation (1/2” of fall per foot of run is preferred for unlined swales).
3. Grade soil area adjacent to foundation to expose a minimum of 6” of the stem wall or grade beam (code requires 6” clearance between soil and untreated wood). Provide positive drainage away from the home for a minimum of 6’ out from foundation.
4. Minimize irrigation watering adjacent to the foundation and eliminate water dams resulting from raised walkways and planter strips which trap water against the foundation.

### **SUBSURFACE DRAINAGE**

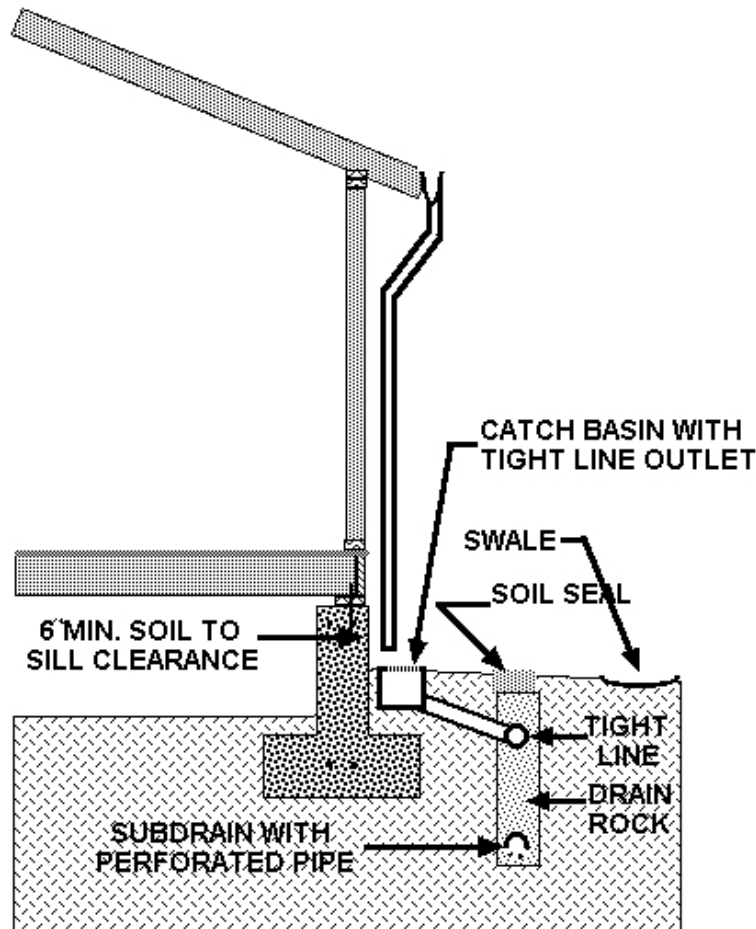
If you have controlled surface drainage and have not experienced problems with excessive crawl space or basement moisture, I recommend that you leave well enough alone since a subsurface drain could introduce water to subsurface soils and create a problem where none existed previously. If expansive soils are causing foundation distress or if excessive moisture is entering the basement/crawl space area, you should consider the installation of a sub-drain.

A sub-drain consists of a trench cut to a depth approximately 1’ below the crawl space or basement grade. Drain rock, (CALTRANS Permeable Class II material or filter fabric encased drain rock, pea gravel or crushed rock), is installed in the trench with a perforated pipe, (SDR-35 with perforations down), at the bottom. The trench is positioned to intercept ground water, drop it into the perforated pipe and convey it to a suitable outlet well downslope of foundation elements.





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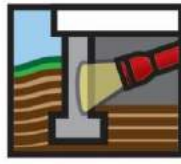
As an alternate to, or in addition to a sub-drain, it may be found cost effective to install a finger drain in the sub-area. A finger drain is constructed much like the perimeter sub-drain, but is typically positioned in the sub-area, just inside the perimeter foundation. A finger drain typically varies in depth from 6" to 15" and often outlets to an 18" diameter, 30" deep, cased sump that is provided with a float-switch activated pump.

**Precautions**

Do not introduce surface water from catch basins or roof downspouts into the perforated pipe since this may inject water into the ground. You may use the trench for a separate tight line carrying all collected storm water flow.

Do not (unless no alternative exists) use a sump pump to discharge the collected storm water flow. Sump pumps invariably require maintenance and seldom receive it. Sump pumps do not work without power and in the worst storms when you need it the most, you can expect to lose power.



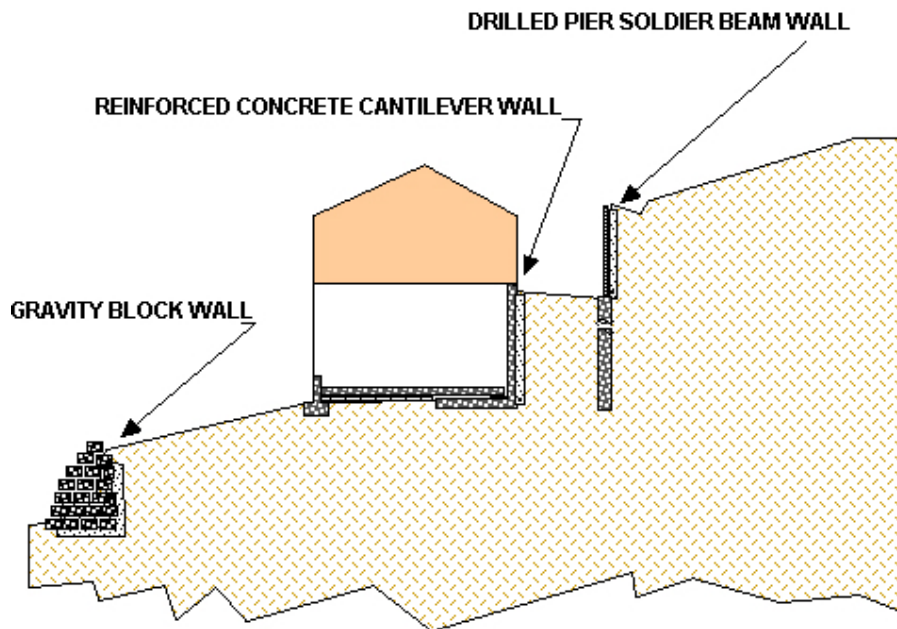


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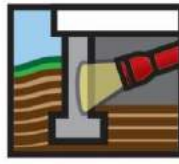
# RETAINING WALLS

The development of residential properties often involves the design and construction of retaining walls. These engineered structures are used to stabilize cut and fill slopes, to provide flat usable yard areas and to allow grade separations. Since they represent a significant investment, are subject to deterioration, and can present high replacement cost, their condition should be assessed.

Retaining walls are typically designed as gravity structures or are embedded into the soil to develop resistance to the lateral loads imposed by the supported slope.



Properly constructed retaining walls must be designed to support soil and surcharge loads and be provided with functional back drains.



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## **INFORMATIONAL REFERENCES**

These publications, or similar publications are probably in your local library's collection or are available through inter library loan. Publications without price information may be available from bookstores. Various web sites offer current information, data and recommendations. SBI, LLC. cannot endorse or guarantee the results of any of the procedures described in these publications.

### **GEOLOGIC HAZARDS**

Earthquake Planning Scenario for the Magnitude 8.3 Earthquake on the San Andreas Fault in the San Francisco Bay Area. James Davis, et al. California Department of Conservation, Division of Mines and Geology Special Publication 61, 1982. Description of anticipated damage caused by earthquake, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

Earthquake Planning Scenario for a Magnitude 7.5 Earthquake on the Hayward Fault in the San Francisco Bay Area. James Davis et al. California Department of Conservation, Division of Mines and Geology Special Publication 78, 1987. Description of anticipated damage caused by earthquake, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

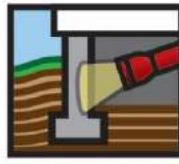
Fault-rupture Hazard Zones in California. James Davis et al. California Department of Conservation, Division of Mines and Geology Special Publication 42, 1988 (revised). Presentation of anticipated fault rupture zones, includes maps. California Division of Mines and Geology, Department of Conservation, 801 K Street, Sacramento, CA 95814.

### **FOUNDATIONS**

Foundations, Retaining and Earth Structures. Gregory P. Tschebotarioff. A technical reference on the design and construction of foundations and retaining walls. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020.

Guideline for Structural Condition Assessment of Existing Buildings ASCE. A technical standard for the evaluation of foundations and structures. American Society of Civil Engineers, 345 East 47 Street, New York, NY 10017-2398.

Foundation Behavior and Repair. Robert Wade Brown. McGraw-Hill, Inc. 1221 Avenue of the Americas, New York, NY 10020.



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### **HOME STRENGTHENING**

Strengthening Wood Frame Houses for Earthquake Safety. Bay Area Regional Earthquake Preparedness Project. Details fifteen procedures to make homes safer. Association of Bay Area Governments,  
P.O. Box 1050, Oakland, CA 94604.

Introduction to Earthquake Retrofitting Builder Educations Center. A guide to the tools and techniques needed to complete the primary retrofitting projects. Builder Education Center, 912 Page Street, Berkeley, CA 94710.

Earthquake Ready. Virginia Kimball. Advise on preparations for home, office, and school as well as on special care for infants, the elderly, and pets. Round table Publishing Inc., Santa Monica, CA.

The Home Builder's Guide for Earthquake Design. Applied Technology Council. A guide detailing methods and materials to provide earthquake resistant design for residential structures. Applied Technology Council, 555 Twin Dolphin Drive, Suite 270, Redwood City, CA 94065.

### **WORLD WIDE WEB RESOURCES**

[www.homerisk.com](http://www.homerisk.com) This site, hosted by EQE International, offers information on seismic risk, home strengthening and earthquake preparedness.

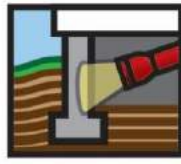
[www.usgs.gov](http://www.usgs.gov) This site, hosted by the U.S. Geological Survey, provides flood and earthquake information as well as landslide data.

[www.quakesafe.com](http://www.quakesafe.com) This site provides information on the design and installation of seismic upgrades for residential structures. Quakesafe is a consulting firm specializing in the analysis of the seismic resistance of wood framed buildings.

[www.bayarearetrofit.com](http://www.bayarearetrofit.com) This site is hosted by a Bay Area contractor specializing in the implementation of seismic bracing at residential properties. The site provides information on appropriate seismic upgrades.

[www.wellconnectedhouse.com](http://www.wellconnectedhouse.com) This site was prepared to improve a layman's "homeowners" understanding of the forces acting on residential structures and the systems available to properly connect wood framed structures to their foundations.

[www.soilengineeringconstruction.com](http://www.soilengineeringconstruction.com) This site provides information on and photographic illustrations of geotechnical engineering projects including foundation underpinning, retaining wall construction, and the installation of coastal protection structures.



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## **GLOSSARY**

**ALLUVIUM:** A soil type resulting from water borne (river or stream) deposits.

**ANCHOR BOLT:** A steel bolt anchoring a wood frame structure to the foundation. Current UBC Code requires anchor bolts at 6" centers and within 4" to 12" of the ends of each sill board.

**BEARING PILE:** A shaft or column drilled or driven into the ground to act as a foundation by transferring the load that it supports to the very firm soil or bedrock on which it rests.

**BEDROCK:** The solid crust of the earth, which may be exposed at the surface or located several hundred feet below the surface.

**COLLUVIUM:** A soil type resulting from the deposition of material at the base of a hillside.

**CAP:** A concrete pad that ties the top end of a pile group together either in a cluster or row, which in turn supports a column or wall.

**CATCH BASIN:** Surface drain inlet with grate (also "drop inlet").

**COSMETIC:** Minor distress that does not impact structural integrity, i.e. drywall cracks, door offsets.

**CREEP:** The slow down slope movement of near surface soils usually related to annual wetting and drying cycles of expansive clay soils or poorly consolidated fill.

**CRIPPLE WALL:** The wall in the crawl space of a home between the foundation and home's first floor.

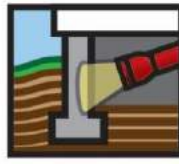
**CUT:** The ground surface remaining after the removal of soil by excavation.

**EARTH TO WOOD SEPARATION:** Current UBC Code and good construction practice requires a 6" separation between soil and the wood elements of a home to minimize pest infestation and rot problems.

**EFFLORESCENCE:** An indication of excessive moisture resulting in a white salt deposit remaining on a concrete surface after repeated drying cycles (also calcium deposit).

**END BEARING PIER:** A drilled shaft, extended to bedrock, providing foundation support.

**EXCAVATION:** The digging out and removal of soil from a site.



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**EXPANSIVE SOIL:** A type of clay soil which expands when moisture is added and shrinks during drying cycles (also adobe soil).

**FILL:** The material used to fill & level, or adjust the grade of, a sloping site or to rebuild the base of an excavation to the required height (imported, not native soil).

**FINGER DRAIN:** A finger drain is constructed much like a sub-drain, but is typically positioned in the sub-area, just inside the perimeter foundation. A finger drain is typically 8" wide and varies in depth from 6" to 15" and often outlets to an 18" diameter, 30" deep, cased sump that is provided with a float-switch activated pump.

**FLOATING FOUNDATION:** A continuous spread footing foundation that extends under an entire building replacing many separate footings (also "mat").

**FLOOR JOISTS:** The beams beneath a floor that hold it up.

**FOOTING:** The portion of the foundation that bears on the supporting soil.

**FORM WORK:** The temporary mold into which liquid concrete is poured to create a specific shape and the associated structure.

**FOUNDATIONS:** The structural system constructed below a building that transfers the vertical weight and lateral loads of the building to the ground on which it stands.

**FOUNDATION WALL:** A wall (usually concrete) built below ground level to transfer the weight of the exposed wall it supports to the footing on which it rests (also stem wall).

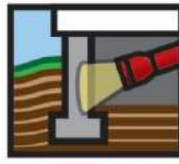
**FRICITION PIER:** A drilled shaft extended into the ground normally filled with reinforced concrete which provide support through friction between the piers surface and the soil.

**FRICITION PILE:** A shaft or column that is hammered into the ground until the pressure or friction developed between the pile surface and the soil into which it is forced (driven) enables it to become a firm foundation support on which, when combined or grouped with other piles, to build heavy structures.

**GRADE:** Soil surface or the inclination of a pipe or the property (also site slope). Grade is often expressed as a ratio of the horizontal to the vertical components of slope i.e. 2:1.

**GRADE BEAM:** A reinforced concrete foundation element used to distribute building loads to foundations piers and to interconnect the piers.





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**HONEYCOMB:** Voids in concrete typically resulting from inadequate vibration during placement (also "popcorn concrete").

**INVERT:** The lowest point on the inside surface of a pipe or channel.

**LANDSLIDE:** A slope failure resulting in the downward movement of a section of a hillside.

**LATERAL LOAD:** A horizontally applied force typically resulting from seismic loads on foundations and wind loads on walls.

**PIER:** A column or shaft (also caisson) in the ground that serves as a foundation constructed by drilling a hole and filling it with concrete and reinforcing steel.

**PIPE PILES:** A type of underpinning in which steel pipes are driven into the ground below an existing foundation to provide stable support (also mini-pile).

**PONY WALL:** A less than standard height stud wall (also known as a cripple wall). It is usually employed to provide support between the foundation and the floor on a sloping site.

**REINFORCING:** The deformed steel rods or mesh embedded in concrete to strengthen it.

**RETAINING WALL:** A wall built to retain soil or support a foundation on sloping ground. The Uniform Building Code requires walls over 4 feet to be designed by a licensed Civil Engineer.

**SEISMIC STRAP:** A steel strap used to restrain the structure or an element of the structure from the lateral forces developed during earthquakes by connecting the frame to the foundation (also "tie-down"). The term used to describe the exact location of a building.

**SHEARPLY:** Plywood reinforcement used to improve the strength of stud walls to resist lateral loads (earthquake forces).

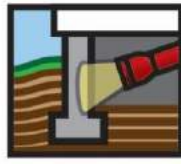
**SHEAR TRANSFER TIE:** A metal brace nailed into both the shear wall and the floor joists that allows the shear wall to support the house during the shaking of an earthquake.

**SHEAR WALL:** Sheets of plywood nailed to the studs of an exterior wall, such as a cripple wall, to provide bracing against the shaking forces of an earthquake.

**SILL:** The first wood element above the foundation (also mudsill).

**SIMPSON:** A manufacturer of steel connectors for wood frame construction. Seismic tie-downs are available at Home Depot, Peninsula Building Materials and Muller Construction Supply.

**SLAB:** A flat, thin, horizontal concrete element.



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**SLIPOUT:** A small slope failure that moves (also "mud flow").

**SOFT STORY:** An open area, commonly a garage, at ground level with a room directly above it. Because of the garage door, one wall of the house can't be secured with shear wall.

**SOIL PROFILE:** A vertical cross-section drawing of the ground showing the type and depth of each layer of material between the surface and bedrock.

**SPREAD FOOTING FOUNDATION:** A very common type of foundation that involves placing a wide flat concrete footing under the perimeter building walls distributing the weight over a greater area.

**STANDING WATER:** Water within the crawl space that has not evaporated or percolated away.

**STEM WALL:** The portion of the foundation above the footing that supports the wood frame by connection to the sill plate.

**SUBDRAIN:** A subsurface moisture collection system normally designed to cut off underground water flow (also "back drain", "curtain drain" or "French drain").

**SWALE:** Linear depression which forms a drainage channel.

**UBC:** Uniform Building Code; the code that each building permit authority uses as a basis for review and acceptance at residential design and construction (the code is updated periodically).

**UNDERPINNING:** Added foundation support placed under an existing building foundation.

**WATERPROOF MEMBRANE:** An impermeable barrier placed to prevent moisture intrusion.

**WATER TABLE:** The distance below the surface at which the soil is completely saturated with water. A perched water table can develop above the actual water table when a clay lens or other impermeable layer prevents or delays vertical percolation.



**FOUNDATION INSPECTION SERVICES**  
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# INVOICE

June 17, 2020

Mr. & Mrs. Mark Danielson  
C/O Ms. Jennifer Buenrostro

[REDACTED]

[REDACTED]

Menlo Park, CA 94025

[REDACTED]

[REDACTED]

**DESCRIPTION OF SERVICES: FOUNDATION INSPECTION & CONDITION ASSESSMENT**  
**2460 Sharon Oaks Drive, Menlo Park, CA**  
**TOTAL AMOUNT DUE: \$495.00**

Paid in full

*It's been a pleasure doing business with you. Thanks for the work!  
And, don't hesitate to call me if you have any questions or concerns.*

*George*

408 812 4355

RECEIVED

ATTACHMENT C

# HERITAGE TREE PERMIT APPEAL FORM

Public Works  
701 Laurel Street, Menlo Park, CA 94025  
tel (650) 330-6720

July JUN 22 2020

City of Menlo Park  
City Manager's Office



<b>Instructions</b>	
Please complete this form and mail to the City Clerk's office (City Hall – City Clerk, 2 <sup>nd</sup> floor, 701 Laurel Street), along with the appeal fee of \$200 for the first tree and \$100 for each additional tree. The postmark date must be within the appeal period of 15 days after staff's decision. Please make the check payable to "City of Menlo Park." Incomplete form will not be accepted.	
<b>Appellant's information</b>	
Name:	Mark Danielson
Address:	[REDACTED]
Phone #:	[REDACTED]
Email address:	[REDACTED]
<b>Heritage tree information</b>	
Property address:	2458 & 2460 Shivan Oaks Dr., Menlo Park CA 94025
Tree inventory:	
1. Common name:	Coast Redwood
Botanical name:	Sequoia sempervirens
2. Common name:	Coast Redwood
Botanical name:	Sequoia sempervirens
3. Common name:	Coast Redwood
Botanical name:	Sequoia sempervirens
4. Common name:	
Botanical name:	
5. Common name:	
Botanical name:	
<b>Reason to appeal (attach additional paper if needed):</b>	
What are the reasons you would like to appeal staff's decision?	
See attached	

Signature: Mark Danielson

Date: 7/15/20

RECEIVED

JUL 22 2020

City of Menlo Park  
City Manager's Office



Re: Application to remove three (3) coast redwood Heritage Trees at 2458 & 2460 Sharon Oaks Drive

We respectfully appeal the City's decision of June 30, 2020 to deny the application for removal for the following reasons:

1. Roots from the trees have been and are continuing to cause severe damage to the foundations of the structures at 2458 & 2460 Sharon Oaks. No fewer than three different professionals have inspected these structures and have confirmed that the roots from the subject trees are the source of the foundation damage and resulting moisture intrusion (Ex. A at 2, "My on-site observations suggest that the measured differentials [in the slab of 2460] result from . . . expansive soil movement and tree root growth (there is a mature redwood tree immediately adjacent to the left rear corner of the subject property). The tree lines up with an area of patio distress (obviously associated with the tree root growth). In addition, the area of interior slab distress appears to have allowed ground moisture to reach the hardwood floor with resulting cupping and finished floor damage."; Ex. B at 2, "My on-site observations suggest that the measured differentials [in the slab of 2458] result from . . . expansive soil movement. My inspection experience with many area homes has found that most of them have been adversely affected by the areas highly expansive soils. In this case, the extent of differential movement associated with the swell/shrink cycles of the supporting soils has been and can be expected to continue to be minor. However, past issues with excessive slab moisture intrusion issues appear to be associated with tree root growth (there is a massive redwood at the right rear corner of the property)."; Ex. C at 1, "Roots from redwood trees in the HOA's common area are causing damage to your foundation and the interior of your condominium [2460] over an extended period of time dating back to 2013."; Ex. D at 1 "The Redwood tree is a large tree and with a large root system. The tree is in close proximity to the unit [2460], thus the invasive root system has caused damage to the fence, gate, pavers, and structure."; and Ex. E at 2 "The Redwood tree is a large tree and has a large root system. The tree is in close proximity to the unit, approximately 15 feet, thus the invasive root system has caused damage to the structure.").

2. One expert explains how invasive tree root systems can cause moisture intrusion into a structure through a damaged foundation as follows: “Despite the fact that tree roots grow very slowly, they exert tremendous amounts of pressure on whatever they are growing through or near. As they move through the ground in their eternal search for water and nutrients, they displace the soil around them. Clay soils compact more tightly, while loose, dry soil in arid climates shifts and becomes inefficient at supporting a structural load. While the roots themselves aren't capable of causing direct damage to buildings and foundations, increasingly greater soil displacement can compromise the integrity of the soil the building sits on as well as its supporting structure. If soil moves, whatever is sitting on it moves, too. Older building materials that have deteriorated over time can rise or settle as the soil displaced by extensive tree root systems moves, and the structures may develop cracks that smaller tree roots may be able to penetrate.” Ex. E at 2.

3. The moisture intrusion from the roots has caused, and continues to cause very visible and substantial damage to the patios and hardwood floors of both units. E.g., Ex. F. This damage currently renders the property at 2460 unmarketable and unrentable.

4. In addition to this structural damage, the moisture intrusion at 2460 is currently causing toxic levels of unhealthy mold. Ex. G. This has required the purchase and 24 hour operation of two HEPA filters at the cost of about \$800 each, and further renders the property at 2460 unmarketable and unrentable.

5. Recently, the owners of 2458 temporarily repaired their patio and floors at the cost of about \$30,000. This included removing their rear patio, excavating the underlaying soil and cutting back the roots from the redwood located just beyond the right rear corner of their property. The roots of that redwood damaged their rear patio and interior hardwood floors. Once the damage was mitigated, they installed a water proof membrane and replaced their entry level hardwood floors. However, this damage and resulting repair expense for 2458 will likely re-occur in the near future if the trees are not removed. (Ex. B at 2).

6. To simply restore the property at 2460 to healthy and marketable conditions, at the following repairs will be required:

a. Repair interior foundation and floors. This includes removing the flooring should be and sealing and bonding any exposed slab cracks using epoxy injection techniques. Once this work is completed, a waterproof membrane (vapor barrier) should be installed and the finished floor should be replaced. (Ex. A. at 2). Simply replacing the floor and installing a barrier will cost at least \$20,000, not even including the foundation repair. (Ex. H).

b. Repair and replace exterior patio, excavate roots, etc. This includes demo of rear patio and excavate/off-haul about of 12” of soil, cutting exposed roots, place and compact a 12” base rock bed and reconstruct the rear patio. (Ex. A at 2).

c. Remove and remediate mold. According to Michael Sullivan, a mold specialist, this would include at least:

i. Create and construct a negative pressure enclosure to include the areas from the sliding glass doors and ending at the start of the kitchen

ii. Remove all layers of flooring within this perimeter to expose the concrete.

iii. Make cuts on the two sheetrock walls opposite of the sliding glass door . Each wall will require 4' high cuts from the floor up and approximately 8' out from the sliding glass door. Any and all mold discovered will be remediated per mold industry standards. If mold is found to extend beyond the noted areas photographic documentation will be provided to the concerned parties. The subsequent work will then be agreed upon.

iv. If the mold intrusion can be addressed and eliminated within the original negative pressure enclosure then the area will be left contained from the remainder of the residence, to allow the necessary contractors following the remediation to inspect and generate a plan of action.

v. The underlying conditions should be addressed prior to the commencement of mold remediation i/e root intrusion, to avoid any recontamination of the residence.

vi. All areas of removal based on the aforementioned protocols are also subject to asbestos and lead testing, prior to removal. As the residence in question was constructed prior to 1979.

6. It has been proposed that a trench and root barrier can be installed to address future damages to the foundations of the units. This would be unreasonable and unfeasible.

7. First, such a barrier would require at least \$15k to install, which is an unreasonable expense on top of the repairs that will be required. Ex. I.

8. Such a barrier would also not be feasible at least because:

a. It would need to be installed at least 24" away from the slab due to the protruding fireplace enclosures in the backs of both units, which would place them within 156" of the tree, which is inside the CRZ of the trees.

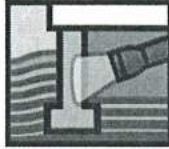
b. It would need to be replaced every 10 years or so, because there is no guarantee roots will not grow around the barrier. (Ex. I).

c. Cutting roots to install the barrier may cause structural damage to the tree (Ex. I).

d. The required maintenance of the barrier and its risk of failure will reduce the market value of the home.

9. Finally, the permanent expense and risk of installing and maintaining such a root barrier are far worse than the marginal and temporary loss of replacing the trees with other trees.





**FOUNDATION INSPECTION SERVICES**  
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A

June 17, 2020

Mr. & Mrs. Mark Danielson  
C/O Ms. Jennifer Buenrostro

[REDACTED]  
[REDACTED] 0  
[REDACTED] 5

**REGARDING:** FOUNDATION INSPECTION AND CONDITION ASSESSMENT  
2460 Sharon Oaks Drive, Menlo Park, CA

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Dear Mr. & Mrs. Danielson,

In response to your request, we have prepared the following Foundation Inspection and Site Drainage Analysis Report for your use. Our inspection was made and this condition assessment report was prepared by a trained and experienced, licensed Professional Engineer and General Engineering Contractor.

Our perimeter and interior reconnaissance, performed on June 16, 2020, was limited to accessible areas of the home, and the immediately adjacent site. The professional opinions offered are based on visual observations of apparent conditions existing at the time of the inspection (latent and concealed defects and deficiencies are excluded). Document search and review, destructive testing, subsurface investigation, structural calculation, geologic study and seismic analysis, as well as the preparation of engineering specifications and construction drawings for any recommended repairs or improvements are beyond the scope of services provided. An independent consulting Geotechnical Engineer and Engineering Geologist should be retained if a complete geotechnical investigation is desired.

PLEASE READ THIS REPORT CAREFULLY, A FULL UNDERSTANDING OF THE INFORMATION IT CONTAINS MAY BE CRITICAL TO THE SUCCESSFUL OUTCOME OF THE NECESSARY IMPROVEMENTS!

The two story, 46+/- year-old, attached townhome with its attached garage was constructed on a reinforced concrete, slab-on-grade foundation. I found the building pad to have been developed at, or very near to, the native grade with minor cut and fill operations. My observations suggest that the home's footprint sits on soils which are expansive.



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**LEVEL SURVEY:** Our hydrolevel survey of the home's interior floors, attached to this report as Appendix 1, found a maximum of 0.8" of differential level across the structure. This differential is within normally accepted tolerances for good foundation performance (up to 1 1/2" of differential level across a residential structure is typically considered acceptable). The measured differentials are also within another criterion for good foundation performance (1" in 20').

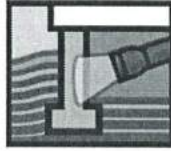
My on-site observations suggest that the measured differentials result from construction and measuring tolerances, expansive soil movement and tree root growth (there is a mature redwood tree immediately adjacent to the left rear corner of the subject property). The tree lines up with an area of patio distress (obviously associated with the tree root growth). In addition, the area of interior slab distress appears to have allowed ground moisture to reach the hardwood floor with resulting cupping and finished floor damage.

I understand that the adjacent home owner (attached unit 2458) abated ongoing damage to their hardwood floor by removing their rear patio, excavating the underlaying soil and cutting back the roots from an even larger redwood located just beyond the right rear corner of their property. The roots of that redwood damaged their rear patio and interior hardwood floors. Once the damage was mitigated, they installed a water proof membrane and replaced their entry level hardwood floors. This repair program resolved their current issues. In my opinion, the two large redwood trees located on HOA property immediately adjacent to the area of interior slab damage at 2458 and 2460 Sharon Oaks Drive should be removed and the slab damage at 2460 Sharon Oaks Drive should be addressed as outlined below.

**SCOPE OF PROPOSED INTERIOR SLAB RESTORATION:** First the rear patio should be removed and the underlaying roots cut. The patio can then be reconstructed following the procedures implemented in the restoration of the 2458 patio. The approximate area of hardwood floor damage associated with tree root growth is limited to the rear portion of the home's first floor. In my opinion, the flooring should be removed and any exposed slab cracks should then be sealed and bonded using epoxy injection techniques. Once this work is completed, a waterproof membrane (vapor barrier) should be installed and the finished floor should be replaced. I have outlined the steps required to properly complete the necessary work below:

1. Design a suitable repair.
2. Prepare construction drawings as necessary for permit procurement.
3. Apply for, pick up and pay for the required City of Menlo Park Building Permit.
4. Demo rear patio and excavate/off-haul about of soil 12" of soil.
5. Cut exposed roots, place and compact a 12" base rock bed and reconstruct the rear patio.
6. Demo and restore finished hardwood floor, clean up and move out.





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**DRAINAGE:** The Uniform Building Code (UBC) requires 6" soil to wood clearance and positive fall away from the structure. I found the nearly level lawn areas at the perimeter of the structure, while well drained, to be nearly saturated (most likely the result of an overly aggressive irrigation schedule). I recommend, limiting irrigation throughout the dry months and monitoring surface flow during storm conditions with local regrading as necessary to direct storm water flow away from the perimeter foundation as practical. It should be recognized that an analysis of surface and subsurface drainage conditions with a single inspection conducted months after the last saturating rains is problematic at best. I recommend a re-inspection at the end of the winter storm season.

**MAINTENANCE:** The site drainage system will require continuing care which should be incorporated into the buyer's property maintenance program. Specifically: area drainage should be observed during rainy periods and steps taken to direct all surface flow away from the structure. In addition, the buried downspout collection system and storm water control system should be cleaned at the start of the storm season and their proper operation monitored through the storm season. Finally, irrigation should be reduced to the minimum necessary to keep things green.

Unanticipated subsurface conditions may develop during the life of the structure that cannot be predicted from the limited visual inspection performed. Our inspection, oral comments and this report are not intended to be used as a guarantee or warranty, expressed or implied, regarding the adequacy, performance or condition of any inspected structure. This report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Please recognize that we have not addressed the possible presence of or danger from any potentially harmful substances and environmental hazards including but not limited to radon gas, lead paint, asbestos, urea formaldehyde, toxic or flammable chemicals and water or air born hazards. Specifically excluded are inspections of and report on decks, wells, septic systems, safety equipment and the presence or absence of rodents, termites, fungus and other organisms. During the life of the structure, there may develop unanticipated subsurface conditions that cannot be predicted from the limited visual inspection performed.

The observations noted and repair recommendations offered (if any) should be considered valid for four years, after which time a reinspection is prudent. This report is not a complete geotechnical study or distress survey nor is it intended for use as a complete description of the property. It is intended to provide information regarding the home's foundation and site drainage conditions. Our observations, conclusions and guideline recommendations have been made using the degree of care and skill originally exercised, under similar conditions, by reputable professional engineers practicing in this area. No other warranty, expressed or implied, is made.



## FOUNDATION INSPECTION SERVICES

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**CONTRACTOR LICENSING INFORMATION:** "STATE LAW REQUIRES ANYONE WHO CONTRACTORS TO DO CONSTRUCTION WORK TO BE LICENSED BY THE CONTRACTORS STATE LICENSE BOARD IN THE LICENSE CATEGORY IN WHICH THE CONTRACTOR IS GOING TO BE WORKING IF THE TOTAL PRICE OF THE JOB IS \$300.00 OR MORE (INCLUDING LABOR AND MATERIALS). LICENSED CONTRACTORS ARE REGULATED BY LAWS DESIGNED TO PROTECT THE PUBLIC.

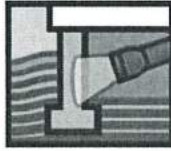
IF YOU CONTRACT WITH SOMEONE WHO DOES NOT HAVE A LICENSE, THE CONTRACTORS STATE LICENSE BOARD MAY BE UNABLE TO ASSIST YOU WITH A COMPLAINT. YOUR ONLY REMEDY AGAINST AN UNLICENSED CONTRACTOR MAY BE IN CIVIL COURT, AND YOU MAY BE LIABLE FOR DAMAGES ARISING OUT OF ANY INJURIES.

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**ARBITRATION OF DISPUTES:** ANY CONTROVERSY OR CLAIM FOR DAMAGES ARISING OUT OF OR RELATING TO THIS CONDITION ASSESSMENT OR ANY WORK PERFORMED IN CONNECTION THEREWITH INCLUDING BUT NOT LIMITED TO NEGLIGENCE, ERRORS OR OMISSION SHALL BE SETTLED IN ACCORDANCE WITH THE CONSTRUCTION INDUSTRY ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION OR ALTERNATE DISPUTE RESOLUTION FORM ACCEPTABLE TO ALL PARTIES.

Acceptance and use of this report bind the parties to the limitation and conditions included in it. Should GCD and/or its agents or employees be found liable for any loss or damages resulting from a failure to perform any of its obligations, including and not limited to negligence, breach of contract, or otherwise, then the liability of GCD and/or its agents or employees, shall be limited to a sue equal to 5 times the amount of the fee paid by the Customer for the inspection and this condition assessment report.





**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

It has been a pleasure providing you with a professional Foundation Inspection and Sits Drainage Analysis Report. Please do not hesitate to call if we may be of further assistance or if you have any questions or concerns.

Very truly yours,



George E. Drew, P.E., GCD, INC.

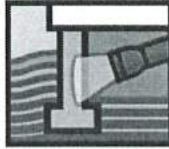
California Professional Engineer license #20681

Member American Society of Civil Engineers I.D. #197328

Member National Society of Professional Engineers

General Engineering Contractor license #A64788

Certified Inspection Engineer (BIECI)



**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

B

June 17, 2020

Ms. Jennifer Buenrostro

[REDACTED]  
[REDACTED]  
[REDACTED]

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REGARDING: FOUNDATION INSPECTION AND CONDITION ASSESSMENT  
2458 Sharon Oaks Drive  
Menlo Park, CA.

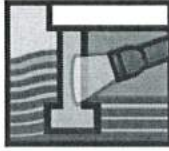
Dear Ms. Buenrostro,

In response to your request, we have prepared the following Foundation Inspection Site Drainage Analysis Report for your and your client's use. Our inspection was made and this condition assessment report was prepared by a trained and experienced, licensed Professional Engineer and General Engineering Contractor.

Our perimeter and interior reconnaissance, performed on June 16, 2020, was limited to accessible areas of the home, and the immediately adjacent site. The professional opinions offered are based on visual observations of apparent conditions existing at the time of the inspection (latent and concealed defects and deficiencies are excluded). Document search and review, destructive testing, subsurface investigation, structural calculation, geologic study and seismic analysis, as well as the preparation of engineering specifications and construction drawings for any recommended repairs or improvements are beyond the scope of services provided. An independent consulting Geotechnical Engineer and Engineering Geologist should be retained if a complete geotechnical investigation is desired.

PLEASE READ THIS REPORT CAREFULLY, A FULL UNDERSTANDING OF THE INFORMATION IT CONTAINS MAY BE CRITICAL TO THE SUCCESSFUL OUTCOME OF THE HOME'S SALE!

The single story, 46+/- year-old, attached townhome with its attached garage was constructed on a reinforced concrete, slab-on-grade foundation. I found the building pad to have been developed at, or very near to, the native grade with minor cut and fill operations. My observations suggest that the home's footprint sits on soils which are slightly expansive.



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**FLOOR LEVEL SURVEY:** Our hydrolevel survey of the home's interior floors, attached to this report as Appendix 1, found a maximum of 0.8" of differential level across the structure. This differential is within normally accepted tolerances for good foundation performance (up to 1 1/2" of differential level across a residential structure is typically considered acceptable). The measured differentials are also within of another criterion for good foundation performance (1" in 20').

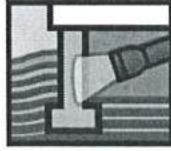
My on-site observations suggest that the measured differentials result from measuring and construction tolerances as well as expansive soil movement. My inspection experience with many area homes has found that most of them have been adversely affected by the areas highly expansive soils. In this case, the extent of differential movement associated with the swell/shrink cycles of the supporting soils has been and can be expected to continue to be minor. However, past issues with excessive slab moisture intrusion issues appear to be associated with tree root growth (there is a massive redwood at the right rear corner of the property).

I understand the owner successfully resolved the problem by removing and replacing the rear patio (the work include a supporting base rock bed) and the hardwood floors. In my opinion, the reconstruction of the rear patio and the restoration of the finished floor surfaces has, for now, resolved the moisture intrusion issue. Never-the-less, it is likely to return if the offending trees are not removed. Accordingly, the two large redwood trees located on HOA property immediately adjacent to the area of interior slab damage at 2458 and 2460 Sharon Oaks Drive should be removed.

**DRAINAGE:** The Uniform Building Code (UBC) requires 6" soil to wood clearance and positive fall away from the structure. I found the nearly level lawn areas at the perimeter of the structure, while well drained, to be nearly saturated (most likely the result of an overly aggressive irrigation schedule). I recommend, limiting irrigation throughout the dry months and monitoring surface flow during storm conditions with local regrading as necessary to direct storm water flow away from the perimeter foundation as practical. It should be recognized that an analysis of surface and subsurface drainage conditions with a single inspection conducted months after the last saturating rains is problematic at best. I recommend a re-inspection at the end of the winter storm season.

**MAINTENANCE:** The site drainage system will require continuing care which should be incorporated into the buyer's property maintenance program. Specifically: area drainage should be observed during rainy periods and steps taken to direct all surface flow away from the structure. In addition, the buried downspout collection system and storm water control system should be cleaned at the start of the storm season and their proper operation monitored through the storm season. Finally, irrigation should be reduced to the minimum necessary to keep things green.





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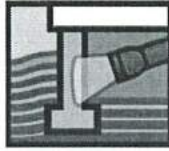
Unanticipated subsurface conditions may develop during the life of the structure that cannot be predicted from the limited visual inspection performed. Our inspection, oral comments and this report are not intended to be used as a guarantee or warranty, expressed or implied, regarding the adequacy, performance or condition of any inspected structure. This report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Please recognize that we have not addressed the possible presence of or danger from any potentially harmful substances and environmental hazards including but not limited to radon gas, lead paint, asbestos, urea formaldehyde, toxic or flammable chemicals and water or air born hazards. Specifically excluded are inspections of and report on decks, wells, septic systems, safety equipment and the presence or absence of rodents, termites, fungus and other organisms. During the life of the structure, there may develop unanticipated subsurface conditions that cannot be predicted from the limited visual inspection performed.

The observations noted and repair recommendations offered (if any) should be considered valid for four years, after which time a reinspection is prudent. This report is not a complete geotechnical study or distress survey nor is it intended for use as a complete description of the property. It is intended to provide information regarding the home's foundation and site drainage conditions. Our observations, conclusions and guideline recommendations have been made using the degree of care and skill originally exercised, under similar conditions, by reputable professional engineers practicing in this area. No other warranty, expressed or implied, is made.

**CONTRACTOR LICENSING INFORMATION:** "STATE LAW REQUIRES ANYONE WHO CONTRACTORS TO DO CONSTRUCTION WORK TO BE LICENSED BY THE CONTRACTORS STATE LICENSE BOARD IN THE LICENSE CATEGORY IN WHICH THE CONTRACTOR IS GOING TO BE WORKING IF THE TOTAL PRICE OF THE JOB IS \$300.00 OR MORE (INCLUDING LABOR AND MATERIALS). LICENSED CONTRACTORS ARE REGULATED BY LAWS DESIGNED TO PROTECT THE PUBLIC.

IF YOU CONTRACT WITH SOMEONE WHO DOES NOT HAVE A LICENSE, THE CONTRACTORS STATE LICENSE BOARD MAY BE UNABLE TO ASSIST YOU WITH A COMPLAINT. YOUR ONLY REMEDY AGAINST AN UNLICENSED CONTRACTOR MAY BE IN CIVIL COURT, AND YOU MAY BE LIABLE FOR DAMAGES ARISING OUT OF ANY INJURIES. YOU MAY CONTACT THE CONTRACTORS STATE LICENSE BOARD TO FIND OUT IF THIS CONTRACTOR HAS A VALID LICENSE. THE BOARD HAS COMPLETE INFORMATION ON THE HISTORY OF LICENSED CONTRACTOR'S, INCLUDING ANY POSSIBLE SUSPENSIONS, REVOCATIONS, JUDGMENTS, AND CITATIONS. THE BOARD HAS OFFICES THROUGHOUT CALIFORNIA. PLEASE CHECK THE GOVERNMENT PAGES ON THE WHITE PAGES FOR THE OFFICE NEAREST OR CALL 1-800-321-CSLB FOR MORE INFORMATION.





**FOUNDATION INSPECTION SERVICES**  
A DIVISION OF GCD INC.

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Acceptance and use of this report bind the parties to the limitation and conditions included in it. Should GCD and/or its agents or employees be found liable for any loss or damages resulting from a failure to perform any of its obligations, including and not limited to negligence, breach of contract, or otherwise, then the liability of GCD and/or its agents or employees, shall be limited to a sue equal to 5 times the amount of the fee paid by the Customer for the inspection and this condition assessment report.

It has been a pleasure providing you with a professional Foundation Inspection and Site Drainage Analysis Report. Please do not hesitate to call if we may be of further assistance or if you have any questions or concerns.

Very truly yours,

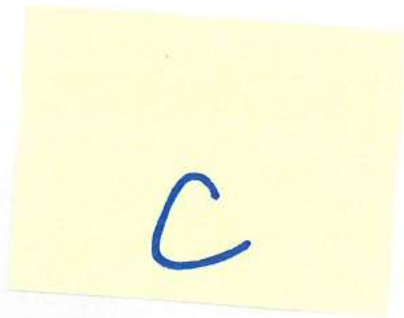


George E. Drew, P.E., GCD, INC.

California Professional Engineer license #20681  
Member American Society of Civil Engineers I.D. #19732B  
Member National Society of Professional Engineers  
General Engineering Contractor license #A64788  
Certified Inspection Engineer (BIECI)



AMERICAN NATIONAL  
1949 E. Sunshine St., Springfield, MO 65899



May 8, 2020

Denise Danielson  
[REDACTED]

RE: Claim #: [REDACTED]  
Date of Loss: April 15, 2020  
Policy: [REDACTED]

Dear Ms. Danielson:

Thank you for submitting your claim to us. We have taken your claim under careful consideration.

We have received and reviewed the adjuster's report and photographs. Inspection of your loss revealed the following:

- Roots from redwood trees in the HOA's common area are causing damage to your foundation and the interior of your condominium over an extended period of time dating back to 2013.

Your California American National Condominium Policy, FX-6.04 (1-19), provides coverage for accidental direct physical loss to your dwelling, subject to certain exclusions. The policy specifically excludes damage from wear and tear, cracking of foundations, as well as earth movement. The policy reads in part as follows:

#### SECTION I – EXCLUSIONS

##### EXCLUSIONS APPLYING ONLY TO COVERAGE A - DWELLING

6. We do not cover loss caused by:
  - a. wear and tear, marring, deterioration, erosion;
  - b. inherent vice, latent defect, mechanical breakdown;
  - c. smog, rust, mold, or wet or dry rot;
  - d. smoke from agricultural smudging or industrial operations;
  - e. pollution or contamination;
  - f. settling, cracking, shrinking, bulging, or expansion of pavements, patios, foundations, slabs, walls, floors, roofs, or ceilings, regardless of whether such



- loss ensues from any loss which is covered under this policy; or
- g. birds, rodents, insects, or animals owned by an **insured**. This exclusion includes the costs of extermination, removal, and clean-up.

If any of these result in a loss which is not otherwise excluded by this policy, we cover damage to covered property from the resulting loss.

7. We do not insure loss to property described in Coverage A caused by any of the following. However, any ensuing loss to property described in Coverage A not excluded or excepted in this policy is covered.

**Planning, Standards, Design, Construction, or Maintenance.** This means any acts, errors, or omissions (whether by the **insured** or others) in:

- a. planning, zoning, development, surveying, or siting;
- b. establishing or enforcing building codes or standards for construction of materials;
- c. the design, specifications, or construction of the following property or facilities:
  - (1) buildings or structures;
  - (2) improvements or changes in, or additions to, land or other property; or
  - (3) roads, water mains, sewers, drainage systems, levees, dams, or other facilities;
- d. the furnishing of work, materials, parts, or equipment in connection with any of such property or facilities; or
- e. the maintenance of any of such property or facilities.

All whether on or away from the insured premises or property insured or covered by this policy.

#### **EXCLUSIONS APPLYING TO COVERAGE A – DWELLING AND COVERAGE C – PERSONAL PROPERTY**

When loss is caused directly or indirectly by any of the following, we do not provide coverage, regardless of whether the loss occurs suddenly or gradually, affects a small or large area, is caused by natural, man-made, or external forces of any type, or involves any other cause whether directly, indirectly, prior to, during, or after the loss.

1. **Earth Movement**, meaning any loss caused by, resulting from, contributed to, or aggravated by:
  - a. earthquake, including land shock waves or tremors, before, during, or after volcanic eruption;
  - b. landslide or mudflow, unless the efficient proximate cause is an insured peril;
  - c. earth sinking, rising, or shifting;
  - d. settlement or subsidence due to the sinking, shifting, or compaction of soil, fill material, or organic matter; or





e. **hydraulic fracturing**

Earth movement also means volcanic eruption, explosion, or effusion, except as provided in Additional Coverages for Volcanic Eruption.

We do cover direct loss caused by earth movement for:

- a. fire;
- b. explosion other than the explosion of a volcano;
- c. breakage of glass or safety glazing material which is part of a building, storm door, or storm window; or
- d. theft.

---

Based on the information available, American National must deny payment for your April 15, 2020, homeowners loss. This correspondence is not to be construed as a waiver of any other terms, conditions, or exclusions contained in the policy. American National specifically reserves the right to supplement this letter should additional facts or information indicate the applicability of other policy conditions.

If you have information you would like us to consider or that you believe may alter our position, please contact me at your earliest convenience. We are happy to provide further consideration if you have additional facts or documentation for us to review.

Pursuant to Fair Claims Settlement Practices Regulations, we must notify you that you may have this matter reviewed by the California Department of Insurance, Consumer Services Division, 300 South Spring Street, Los Angeles, California 90013, telephone #1-800-927-4357.

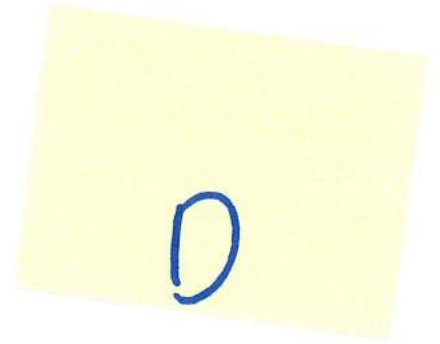
Sincerely,



Evan Wheeler FCLS, CCLS, PCLS  
Senior Claims Specialist • Pacific Property And Casualty Company  
800-333-2861 x2449 (Direct) 417-887-6532 (Fax)  
evan.wheeler@americannational.com







October 29<sup>th</sup>, 2019

Denise Danielson  
[REDACTED]  
[REDACTED]  
[REDACTED]

## ARBORIST REPORT

On October 10<sup>th</sup>, 2019, I inspected one – *Sequoioideae* - Redwood tree behind 2460 Sharon Oaks Drive in Menlo Park, California 94022. Although the recommendations in this report are based on sound and accepted horticultural practices, the author cannot be held responsible for the final outcome of the recommendations or any liabilities associated with this project. Tree inspections, in this case, do not cover all internal cavities, condition of the root system nor non-visible structural defects or disease.

Please consider my observations as noted below:

**Subject tree** – *Sequoioideae* – Redwood tree

**DBH** – 51 inches

**Height** – Approximately 90 feet

**Canopy Spread** – Approximately 50 feet

**Observations** – The Redwood tree is a large tree and with a large root system. The tree is in close proximity to the unit, thus the invasive root system has caused damage to the fence, gate, pavers, and structure (please see photos below). Root pruning and installing root barriers is not an option as it would be in the CRZ (critical root zone) of the tree and would compromise the integrity of the tree. Therefore, I am recommending the removal of the tree to prevent further damage to persons and/or properties.

Photos –













If you have any questions or require any additional information, please do not hesitate to contact me. You may contact me on my cell phone at 925-260-6740 or by email at [dmcintyre@arborworksinc.com](mailto:dmcintyre@arborworksinc.com). Thank you in advance for your prompt consideration in this matter.

Regards,

*Don A. McIntyre*

Don A. McIntyre  
Certified Arborist WE-7183A  
ArborWorks, Inc.



CA Contractor 879506



May 18, 2020

Keiko Nakajima  
c/o Jennifer Buenrostro

[Redacted] 5  
[Redacted]  
[Redacted] t

## ARBORIST REPORT

On May 13<sup>th</sup>, 2020, I inspected two – *Sequoioideae* - Redwood trees located at 2458 Sharon Oaks Drive in Menlo Park, California 94022. Although the recommendations in this report are based on sound and accepted horticultural practices, the author cannot be held responsible for the final outcome of the recommendations or any liabilities associated with this project. Tree inspections, in this case, do not cover all internal cavities, condition of the root system nor non-visible structural defects or disease.

Please consider my observations as noted below:

### **Tree #1**

**Subject tree** – *Sequoioideae* – Redwood tree

**DBH** – 54 inches

**Height** – Approximately 85 feet

**Canopy Spread** – Approximately 45 feet

**Observations** – The Redwood tree is a large tree and has a large root system. The tree is in close proximity to the unit, approximately 15 feet, thus the invasive root system has caused damage to the structure. Root pruning and installing root barriers is not an option as it would be in the CRZ (critical root zone) of the tree and would compromise the integrity of the tree. Therefore, I am recommending the removal of the tree to prevent further damage to persons and/or properties.

## **Tree #2**

**Subject tree** – *Sequoioideae* – Redwood tree

**DBH** – 30 inches

**Height** – Approximately 60 feet

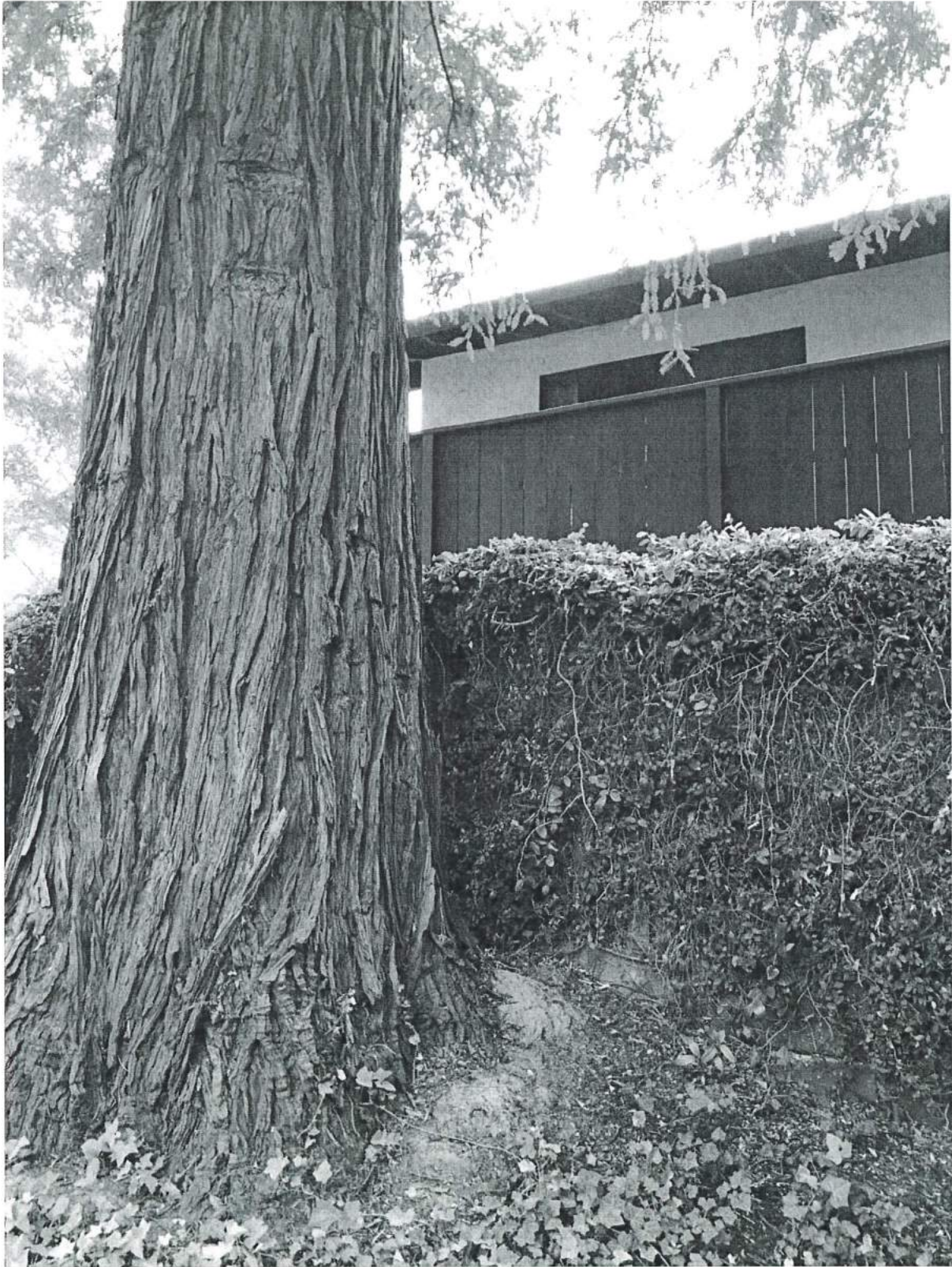
**Canopy Spread** – Approximately 35 feet

**Observations** – The Redwood tree is a large tree and has a large root system. The tree is in close proximity to the unit, approximately 15 feet, thus the invasive root system has caused damage to the structure. Root pruning and installing root barriers is not an option as it would be in the CRZ (critical root zone) of the tree and would compromise the integrity of the tree. Therefore, I am recommending the removal of the tree to prevent further damage to persons and/or properties.

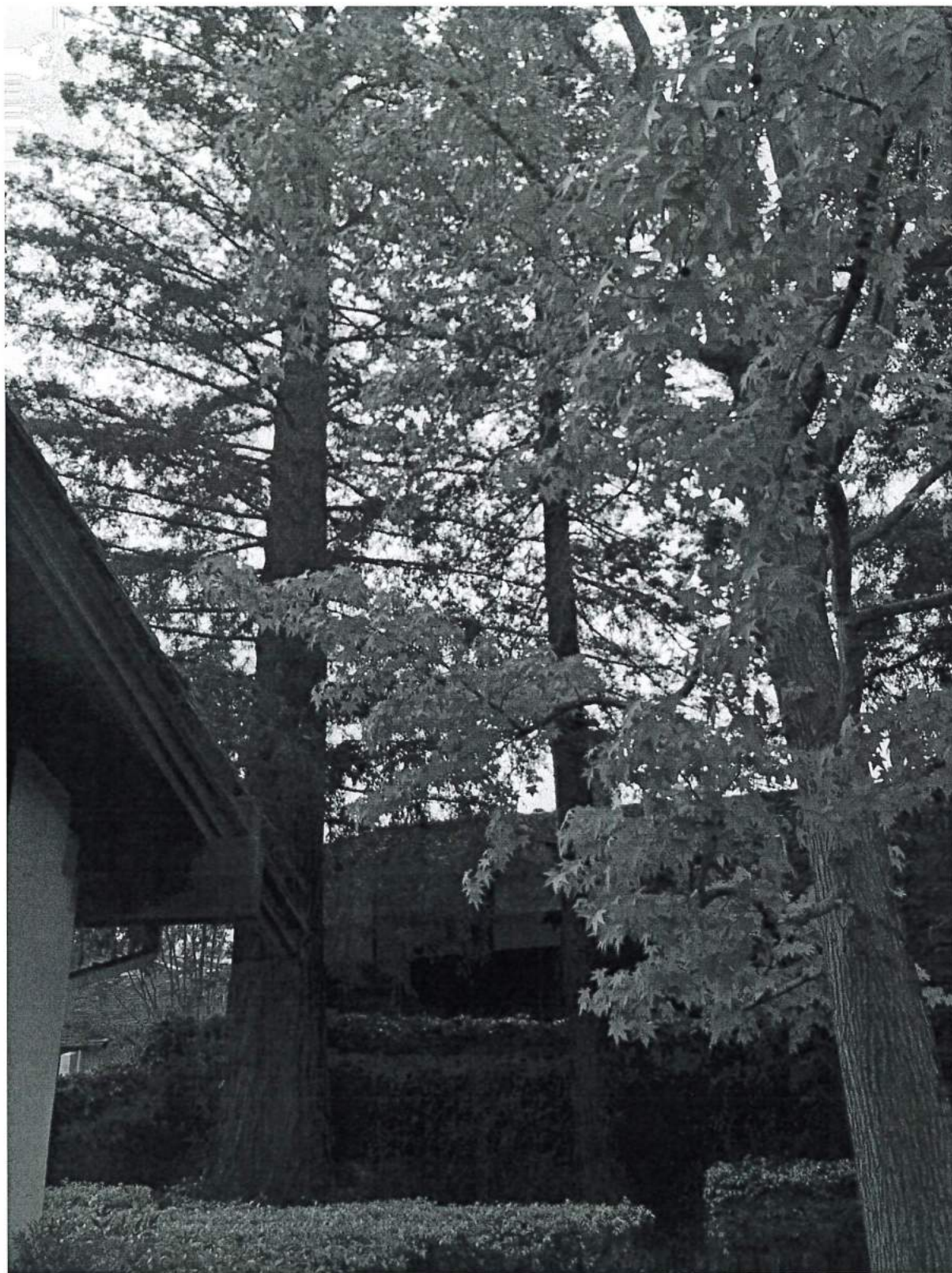
Despite the fact that tree roots grow very slowly, they exert tremendous amounts of pressure on whatever they are growing through or near. As they move through the ground in their eternal search for water and nutrients, they displace the soil around them. Clay soils compact more tightly, while loose, dry soil in arid climates shifts and becomes inefficient at supporting a structural load. While the roots themselves aren't capable of causing direct damage to buildings and foundations, increasingly greater soil displacement can compromise the integrity of the soil the building sits on as well as its supporting structure. If soil moves, whatever is sitting on it moves, too. Older building materials that have deteriorated over time can rise or settle as the soil displaced by extensive tree root systems moves, and the structures may develop cracks that smaller tree roots may be able to penetrate.



Photos –







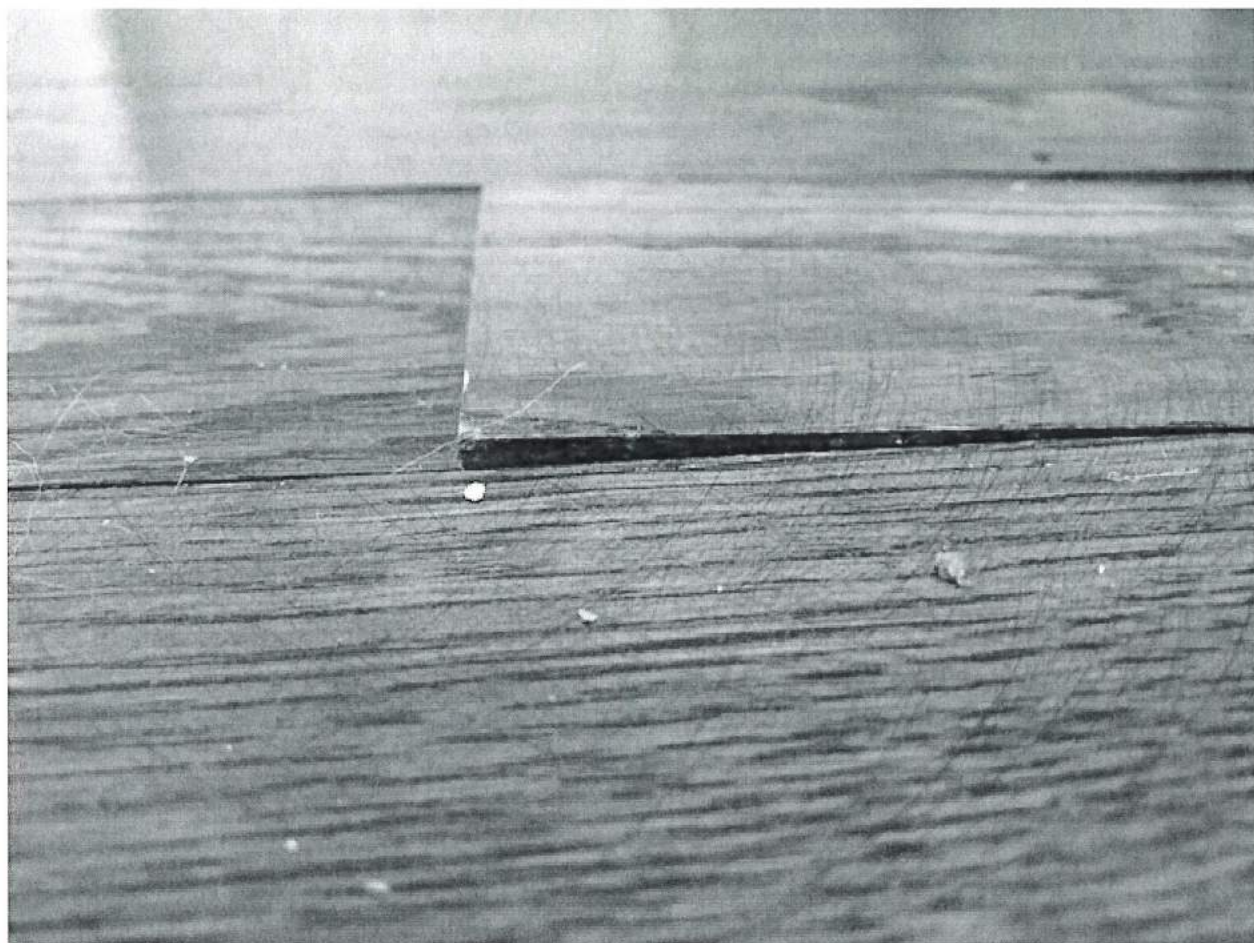
**Recommendations** - It is my recommendation the Redwood trees should be removed to prevent further damage to the structure.

If you have any questions or require any additional information, please do not hesitate to contact me. You may contact me on my cell phone at 925-260-6740 or by email at [dmcintyre@arborworksinc.com](mailto:dmcintyre@arborworksinc.com). Thank you in advance for your prompt consideration in this matter.

Regards,

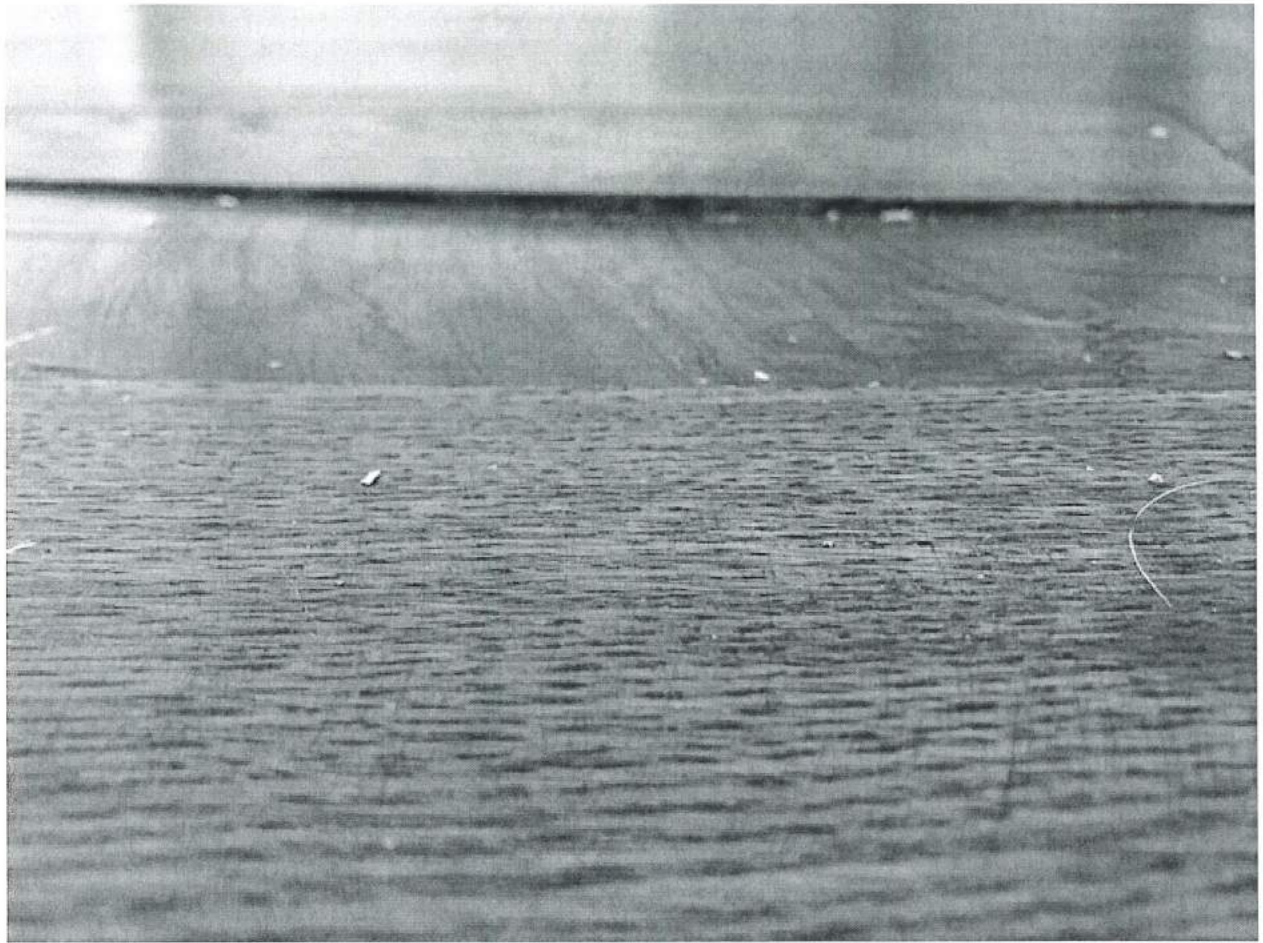
*Don A. McIntyre*

Don A. McIntyre  
Certified Arborist WE-7183A  
ArborWorks, Inc.



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## Non-Viable Air Fungal Analysis

Reliance Construction  
Michael Sullivan  
851 Burlway Road, #800

Burlingame, CA 94010

**Sample Type:** Air-O-Cell  
**Analysis:** Direct Microscopy; FALI Method IAQ 101; Modified ASTM D7391  
**Job ID / Site:** 2460 Sharon Oaks Cir.; 2460

**Client ID:** L1044  
**Report Number:** F138902  
**SGSFL Job ID:** L1044  
**Date Received:** 06/25/20  
**Date Analyzed:** 06/26/20  
**Date Printed:** 06/26/20  
**First Reported:** 06/26/20

**Total Samples Submitted:** 1  
**Total Samples Analyzed:** 1

<b>Lab Number</b>	40203825												
<b>Sample ID</b>	A-1												
<b>Location</b>	Living Room												
<b>Sample Date</b>	06/25/20												
<b>Volume</b>	75.0 L												
<b>Organism</b>	<b>Spores<sup>+</sup></b>	<b>%</b>	<b>LOD</b>	<b>S/m<sup>3</sup></b>	<b>Spores<sup>+</sup></b>	<b>%</b>	<b>LOD</b>	<b>S/m<sup>3</sup></b>	<b>Spores<sup>+</sup></b>	<b>%</b>	<b>LOD</b>	<b>S/m<sup>3</sup></b>	
Alternaria	10	2.8	13	130									
Ascospores	55	40.7	35	1,900									
Basidiospores	17	12.6	35	590									
Cladosporium	56	41.3	35	1,900									
Curvularia	1	0.3	13	13									
Epicoccum	1	0.3	13	13									
Oidium	3	0.9	13	40									
Rusts/smuts/myxomycetes	4	1.1	13	53									
<b>Total</b>	147			4,700									
<b>Particulate Density</b>	Abundant												
<b>Particles</b>	<b>Number</b>		<b>LOD</b>	<b>P/m3</b>	<b>Number</b>		<b>LOD</b>	<b>P/m3</b>	<b>Number</b>		<b>LOD</b>	<b>P/m3</b>	
HYPHAL FRAGMENTS *	7	-	35	240									
<b>Comments</b>													





# Non-Viable Air Fungal Analysis

Reliance Construction  
Michael Sullivan  
851 Burlway Road, #800

Burlingame, CA 94010

**Sample Type:** Air-O-Cell  
**Analysis:** Direct Microscopy; FALI Method IAQ 101; Modified ASTM D7391  
**Job ID / Site:** 2460 Sharon Oaks Cir.; 2460

**Client ID:** L1044  
**Report Number:** F138902  
**SGSFL Job ID:** L1044  
**Date Received:** 06/25/20  
**Date Analyzed:** 06/26/20  
**Date Printed:** 06/26/20  
**First Reported:** 06/26/20

**Total Samples Submitted:** 1  
**Total Samples Analyzed:** 1

**Explanations:**

Spores <sup>+</sup>	Actual number of spores counted in portion of sample examined
%	Percent of Total
LOD	Limit of Detection (Units are the same as result units)
S/m <sup>3</sup>	Spores per cubic meter of air sampled
Spores/S	Number of spores per sample
*	Not included in Totals Calculations
ND	None Detected
Particulate Density	Amount of background particulate present
-	Not Applicable
P	Particles excluding fungal spores
P/m <sup>3</sup>	Particles per cubic meter of air sampled
P/S	Number of particles per sample

**Background Particulate Density Estimated As Follows:**

Trace	1 (<5% Occluded) Very little present
Minor	2 (>5% & <25% Occluded) Present but not in large quantity
Major	3 (>25% & <50% Occluded) Present in most of sample
Abundant	4 (>50% Occluded) Covering almost entire sample
Overloaded	5 Covering entire sample

**Guidelines For Interpretation:**

No accepted quantitative regulatory standards currently exist by which to assess the health risks related to mold exposure. Molds have been associated with a variety of health effects and sensitivity varies from person to person.

Several organizations, including: the American Conference of Governmental Industrial Hygienists (ACGIH); the American Industrial Hygiene Association (AIHA); the Indoor Air Quality Association (IAQA); the United States Environmental Protection Agency (USEPA); the Centers for Disease Control (CDC), as well as the California Department of Health Services (CADHS), have all published guidelines for assessment and interpretation of mold resulting from water intrusion in buildings.

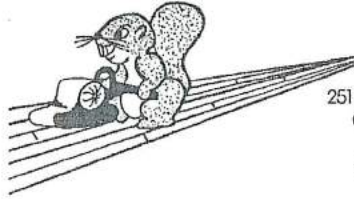
SGSFL reports solely the organisms observed on the sample(s). The limit of detection is based on observing one spore/colony per area analyzed. This is not an inclusive list of the fungal types identified in the microbiology laboratory.

**Magdalena Zafirovska, Laboratory Supervisor, Hayward Laboratory**

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGSFL reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Unless otherwise noted, these samples were not blank corrected. All samples were received in acceptable condition unless otherwise noted.



# Clark's Hardwood Floors, Inc.



251 E. Hacienda Ave., Ste A  
Campbell, CA 95008  
(408) 866-5485  
FAX (408) 866-8313  
License #314894

# Proposal

Date
5/14/2020
Estimate #
4241
Project Name
Insur Bid
Phone #

Name / Address
Denise Danielson [REDACTED]s [REDACTED]
Project Address



Item	Description	Qty-SFt/LFt	Cost	Total
Ashawa Bay	LIVING ROOM, DINING ROOM, ENTRY, CLOSET OFFICE (5/8 x 3 White Oak Ashawa Bay Engineered) supply, install, sand, finish, apply 1 coat sealer and 2 coats Bona Mega water base polyurethane	825	19.25	15,881.25
glue down	glue down installation add \$.75 per sq ft.	825	0.75	618.75
Bona Moisture...	Apply Bona Moisture barrier	825	0.75	618.75
labor/tear out ...	tear out and dispose of wood		1,500.00	1,500.00
Concrete Prep	Prep concrete for flooring AS LOW AS \$250 - \$600			
trims	supply, install T molding or reducer	40	15.00	600.00
baseboard pain...	supply, install our standard paint grade baseboard (customer is responsible for painting baseboard)	180	4.50	810.00
Atomic dust fr...	optional - use of atomic dust free system		500.00	500.00
Discount for at...	1/2 off for atomic dust free system		-250.00	-250.00
note	please note - Concrete may be damaged, may need to be repaired & sealed by contractor			

**Commercial grade water base is additional \$.50 per sq ft (Traffic)**  
**Fourth coat is additional \$1.00 per sq ft**  
**Existing baseboards may need touch up by homeowner.**  
**All baseboards trims and moldings not included in contract are an additional cost.**  
**Unless specified this contract DOES NOT include sub-floor preparation / leveling. If needed will be additional charge.**  
**Wood price subject to change after 30 days**

MATERIAL COST UPON INVOICE, BALANCE DUE UPON COMPLETION.	<b>Total</b>	\$20,278.75
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**IT WILL TAKE 72 HOURS FOR FLOOR TO CURE COMPLETELY**  
**BOTH PAGES OF PROPOSAL MUST BE SIGNED TO START JOB**

\_\_\_\_\_  
Signature



Thurs 11-30

No. 12541

# PROPOSAL

## VALLEY TREE CARE INC

Serving Northern California Since 1976

**GARY ORTEGA**  
Owner

Bus. (650) 964-6995  
Fax (650) 962-8244

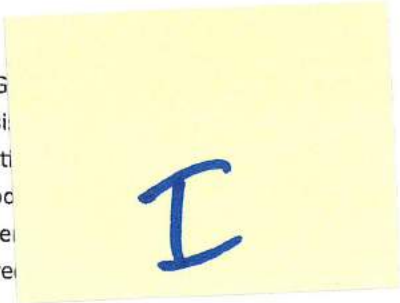
valleytreecare@gmail.com

www.valleytreecare.org

Your Satisfaction: Our Pride



- Consultations
- Arborists Reports
- Appraisals
- Pruning
- Safe Removals
- Cabling
- Stump G
- Diagnosi
- Fertilizat
- Firewood
- Crane Re
- Large Tre



Proposal submitted to <b>Denise DANIELSON</b>	Job Location (Street)	Special Equipment
Street	City	Contact
City, State & Zip Code	Email	
Fax	Bus. Phone	Res. Phone
		Today's Date <b>7-11-20</b>

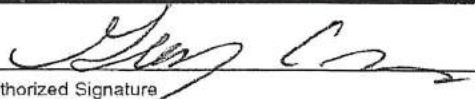
### WORK ESTIMATED TO BE AS FOLLOWS:

- 1) Install approximately 40' root barrier at 2460 Sharon Oaks Dr and neighbors to the right. Remove pavers and 2" barrier under pavers. Trench 2' deep through roots then install 2' barrier at drip line. Fill in with soil and replace pavers. \$15,000
- 2) There is no guarantee how long this will keep root from going through or under root barrier, plus cutting root can structural damage to redwoods.
- 3) If root barrier is installed recommend balancing of redwoods thinning.
- 4) I recommend removal of redwoods.

All work to be completed in a workmanlike manner according to standard practices. Valley Tree Care warrants that we are insured for property damage, public liability and that our employees are covered by workman's compensation insurance.

Payment to be made **UPON COMPLETION**. A finance charge of 10% will be charged monthly after 90 days of any unpaid invoices.

**VISA & MASTERCARD accepted.**

  
Authorized Signature

NOTE: This proposal may be withdrawn by us if not accepted within \_\_\_\_\_ days.

### Acceptance of Proposal

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. To cancel you must give 72 hours notice.

Date of acceptance \_\_\_\_\_

NOTICE: Owner assumes all responsibility for damage to underground utilities during grinding process.

Authorized Signature \_\_\_\_\_

**MEMORANDUM**

Date: 8/11/2020  
 To: Environmental Quality Commission  
 From: Climate Action Plan subcommittee  
 Re: Moving forward on CAP Actions #2, #4 and #6

On July 14, Menlo Park's City Council unanimously approved the EQC-approved Climate Action Plan (CAP), which sets a goal of reducing the city's greenhouse gas emissions by 90% from 2005 levels by the year 2030. Recognizing the City's current COVID-related staffing constraints, Council adopted staff's recommendation to move forward this fiscal year on actions #1, #3 and #5 and defer action on #2, #4 and #6 until 2021 and 2022.

Meanwhile, climate change continues to accelerate and a study published in the July issue of Reviews of Geophysics (<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019RG000678>) shows that humans are extremely unlikely to keep global temps below 1.5 degrees C, as targeted by the Paris Climate Accords. Instead, it is likely (66%) that temperatures by the end of the century will range from 2.6 to 3.9 degrees C. This is a concerning development, given the much greater damage that will result from this higher temperature range. While it is difficult to predict exactly how much more damage, or how many more feet of sea level rise, will happen in a world that is 2.6-3.9 degrees C warmer, World Resources Institute has estimated that damages roughly double with a half degree temperature increase from 1.5 to 2.0 degrees C (<https://www.wri.org/blog/2018/10/half-degree-and-world-apart-difference-climate-impacts-between-15-c-and-2-c-warming>).

This concerning development compels the EQC CAP subcommittee to recommend accelerating our climate action efforts using whatever means at our disposal, no matter how unconventional. The subcommittee recognizes that City staff is currently time constrained and therefore recommends that members of the EQC and Complete Streets Commission, who are willing and able, assume responsibility for CAP Actions #2, #4 and #6, until City staff can resume ownership of these actions. Specifically, we recommend that City Council take the following steps:

**Action #2.** Please empower EQC to:

- set goals for EV uptake and gasoline sales reductions for the community,
- propose a simple on-line tracking report that commissioners or staff can maintain and
- develop a plan for marketing the goals to the community

**Action #4.** Please express support for a 25% reduction in VMT and request that the Complete Streets Commission be empowered to present strategies to Council for achieving the goal.

**Action #6.** Please request a quarterly update from Public Works or the EQC on adaptation plans being developed at the County level. Given the real threat to Menlo Park's District 1, Council deserves to be informed about what the City can expect, so that we can plan appropriately.

**Metrics.** Request that progress against the 9 metrics identified in the CAP be reported to EQC quarterly and Council annually.