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July 10, 2026
Project 2269

Housing Mendocino Coast
c/o Cynthia Sharon
PO Box 1172
Fort Bragg, CA 95437

Subject: **Geotechnical Investigation**
Proposed Housing Development
251 S. Franklin Street
Ft. Bragg, CA 95437
APN: 008-172-09-00

Dear Housing Mendocino Coast:

In accordance with your request, Jim Glomb Consulting, Inc. submits this geotechnical investigation for a proposed housing project at 251 S. Franklin Street in Ft. Bragg, California.

The purpose of this geotechnical investigation was to assess the relative soil and geologic conditions of the subject site and to provide appropriate geotechnical design criteria for the proposed improvements. Based on our research, observations, on-site subsurface exploration, field/lab testing and analyses, we submit the following comments.

Scope

The scope of the geotechnical investigation consisted of the following tasks:

1. Review of pertinent regional geologic, seismic hazard, and soil maps.
2. Geologic reconnaissance of the site vicinity.
3. Excavation of 5 exploratory test pits using an excavator.
4. Field and lab testing of onsite soils.
5. Analyses of field and lab data.
6. Preparation of this report.

Site Conditions

The existing property consists of a 1.064-acre rectangular shaped parcel in the west portion of downtown Ft. Bragg. The subject lot is generally flat and is unimproved. Residential and commercial properties surround the subject lot. South Franklin Street bounds the site on the east. The approximate site location is shown on the Vicinity Map, Plate 1.

Proposed Development

It is our understanding that the proposed improvements will consist of constructing 12 to 13 wood-frame, one and two-story housing units with either slab on grade or raised wood floors. Preliminary plans are not

yet available. A parking area will be located along the west property boundary. No significant grading is anticipated other than for building pad preparation and drainage. Site features and the approximate locations of proposed improvements are shown on the Site Plan, Plate 2.

Soil and Geologic Conditions

According to reviewed geologic mapping (see References), the site vicinity is underlain by old alluvium. Regional geologic maps indicate that sandstone, shale and conglomerate bedrock underlies the alluvium at depth at the site. The depth to bedrock was not determined as part of this investigation. No mapped landslides, faults or other geologic hazards are shown on reviewed mapping for the site or in the immediate vicinity.

Our site investigation, performed on 7/1/26, included 5 exploratory test pits excavated to depths of 3.5 to 5 feet at the approximate locations shown on the attached Site Plan, Plate 2. The test pits were logged, sampled and field tested by a Certified Engineering Geologist from this office. The materials encountered are described in the test pit logs, attached as T-1 to T-5, Plates 3.1 to 3.3, and are summarized below.

The test pits encountered fill, topsoil and old alluvium. The fill was only encountered in T-4 to a depth of 3 feet and consisted of dry loose to medium dense gravelly silty fine sand. Elsewhere on the surface of the site was 1.5 to 2 feet of dry, loose to medium dense silty fine sand that was locally porous. Underlying the fill and topsoil was old alluvial soil consisting of slightly moist to moist, dense to very dense fine to medium grained sand. Soils are classified in accordance with the Unified Soil Classification System, presented on Figure 1.

It should be noted that our exploration test pits were loosely backfilled and are not suitable for support of improvements, including floor slabs, driveways, parking areas, walkways, decks, and patios without recompaction or other remedial measures to reduce potential settlement of the backfill.

Groundwater

No groundwater was observed at the exploration location at the time of this geotechnical study. However, water levels must be expected to vary due to seasonal changes and physical changes to the site, including landscape irrigation. Seasonal ground water may occur at very shallow depths at or near the surface.

Expansion Potential

Based on our site observations, lab testing and field testing, we conclude that the soils encountered at the site of the planned improvements have a generally low expansion potential. However, it is possible that layers and areas of expansive soils exist at the site. These characteristics have been taken into consideration in the development of the following conclusions and recommendations.

Faulting and Seismicity

Like most of California, the site will be subject to future strong ground shaking from an earthquake. The intensity of future earthquake shaking will depend on the distance from the site to the earthquake focus, magnitude, and the response of the structures to the underlying soil and/or rock. The time, location, and magnitude of earthquakes are not accurately predictable with existing technology.

Active faults, as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972, are not present on the site. The closest Alquist-Priolo active fault trace is the San Andreas Fault, located offshore about 6 miles west of the site. Other active and potentially active faults are present in the region. No signs of active faulting were observed on or immediately adjacent to the site. Available geologic mapping indicates no other geologic hazards in the immediate vicinity.

The subject site was observed to be underlain by alluvial terrace deposits to the depths explored. Field data, and our experience in the site vicinity, as well as reviewed geologic mapping, indicate that the site and proximity can be assigned a Site Class D. The project designers should determine the appropriate Occupancy Category and Seismic Design Category per the 2025 CBC.

Based on our evaluation, we submit the following seismic parameters for the subject site. The seismic design criteria are based on the guidelines in ASCE 7-22 Standard using the site address and coordinates (longitude and latitude), Site Class D for site-specific subsurface conditions, and an assumed Risk Category=II for the proposed structure. The resulting seismic design factors are summarized below.

SUMMARY OF SEISMIC DESIGN FACTORS

Site Location: Lat. 39.43968 Long. -123.80496; Site Class: D

Factor	Value
S_S	1.65
S_1	0.62
S_{DS}	1.18
PGA_M	0.61

If another Standard or other parameters are preferred, please advise. Final determination of the seismic design factors should be provided by the structural designer.

Conformance to the above criteria for seismic design does not constitute any kind of guarantee or provide any specific assurance that significant structural damage or ground failure will not occur during a significant seismic event. The primary goal of seismic design is to protect life, and not to avoid all damage, since such design may be economically prohibitive. Following a major earthquake, a building may be damaged beyond repair, yet not collapse.

Liquefaction Potential and Other Seismic Hazards

Liquefaction occurs when loose, saturated, granular deposits experience substantial strength loss and, subsequently, flow due to increased pore pressure during cyclic seismic loading.

The dense to very dense alluvial soils encountered in the test pits are judged to be generally low in liquefaction potential. However, soil layers and groundwater conditions may be present at depth that have potential for liquefaction. It is our opinion, based upon our review of available geologic mapping and the subsurface conditions encountered at the site, that the risk of damage to the site due to liquefaction is low to moderate and typical of the residential/commercial area in which it is located. The potential for liquefaction would be mitigated significantly by the light construction anticipated and design and construction of the improvements in accordance with the appropriate building codes and the foundation and drainage recommendations presented below.

It will be necessary to design and construct the structure in accordance with current standards for earthquake-resistant construction. Construction in accordance with our recommendations will enhance the integrity of the development; however, damage related to faults, earthquake shaking and liquefaction may still occur during the life of the development.

Seismically induced ground shaking should be expected to occur within the economic life of the structure and structural damage may result. The hazard of seismic shaking is common to the subject geographic area.

In general, we observed no indications of other seismic hazards that would preclude the proposed development of this site as planned.

Conclusions

Based on our investigation, we judge that development of the site as planned is feasible from a geotechnical standpoint. The primary geotechnical concerns are (1) the presence of localized loose fill and surface soils; and 2) the potential for ground shaking at the site from seismic activity.

Recommendations

The following recommendations should be incorporated into the final design and construction phases of the project.

Site Preparation and Grading

General

In the case where grading is planned, it is most economically performed during the summer months when soils are driest. Delays should be anticipated in site grading performed during the rainy season due to excessive soil moisture. Special and comparatively expensive construction procedures should be anticipated if grading must be completed during the winter.

Clearing and Stripping

Areas to be graded or receive improvements should be cleared of roots, tree root boles and organic materials. We anticipate that the required depth of stripping will generally be about 6 inches. Deeper stripping may be required to remove localized concentrations of organic matter, such as tree roots or debris. The cleared organic materials should be removed from the site; strippings may be stockpiled for reuse as topsoil in landscaping areas. Any debris or remnants of the previous garage should be removed from the site.

Overexcavation

Weak, wet or expansive soil, if encountered, should be overexcavated in areas designated for placement of fill or other improvements and a minimum of 3 feet horizontally outside the perimeter of the planned improvements, or as determined by the Geotechnical Consultant. Difficulty in achieving the recommended minimum degree of compaction described below should be used as a field criterion by the Geotechnical Consultant to identify areas of unstable soils that should be removed and replaced with non-expansive, properly moisture conditioned and compacted fill. The depth and extent of overexcavation should be approved in the field by the Geotechnical Consultant.

Subgrade Preparation

Loose/soft surface soils should be removed from areas designated to receive engineered fill and/or pavements. Exposed suitable subgrade should be scarified to a minimum depth of 8 inches, properly moisture conditioned to within approximately 2 percent of optimum moisture, and compacted to at least 90 percent relative compaction in accordance with ASTM test designation D1557 or as recommended by the Geotechnical Consultant.

General Engineered Fill

The onsite soils are considered to be acceptable for reuse as engineered fill. Approved imported fill must have an Expansion Index of 50 (or Plasticity Index of 15) or less. Approved imported non-expansive soils should be free of rocks or lumps greater than 4 inches in largest dimension and organic materials. Fill material should be approved by the Geotechnical Consultant prior to use.

General engineered fill should be placed in level lifts not exceeding 8 inches in loose thickness. Each lift should be moisture conditioned to within approximately 2 percent of optimum moisture and compacted to

at least 90 percent relative compaction in accordance with ASTM test designation D1557. Fill moisture content and density should be verified by the Geotechnical Consultant.

Foundations

Based upon the information obtained from our investigation, we recommend that the foundations for the proposed housing units consist of reinforced spread/pad perimeter and interior footings, supported on dense alluvial soil at estimated depths of 1.5 to 3 feet. We recommend that the floor slabs, where applicable, be supported by engineered fill after removal of unsuitable soils within the building area. The foundations for the proposed improvements should be designed and constructed based on the following design criteria:

SPREAD FOOTING CRITERIA

Description	Criteria
Width	Minimum 18 inches for spread footings supporting walls. Minimum 24 inches for pad footings supporting isolated or concentrated loads, columns or posts.
Embedment	We recommend a minimum depth of 18 inches, supported by dense alluvial soil or engineered fill, or as determined by the Geotechnical Consultant. See Foundation Note 1.
Allowable Bearing Capacity	2,000 pounds per square foot (psf). See Foundation Note 2.
Coefficient of Sliding Friction	0.30 on suitable subgrade materials.

Foundation Notes:

1. Footing embedment depth is measured from the lowest adjacent finished soil grade (or pad grade) to the bottom of the footing. Final footing depths may vary, depending on materials encountered. If expansive soils are encountered, additional overexcavation may be recommended.

2. The allowable bearing capacity is for dead plus live loads. The bearing capacity may be increased by 1/3 for wind or seismic loads. Lateral structural loads, where applicable, may be countered by a passive resistance of 250 pcf (EFP). Passive pressures should be disregarded for the uppermost 1 foot of foundation depth unless confined by concrete slabs or asphalt pavements.

The excavations for footings should be cleaned of loose material and debris prior to placement of concrete. All footing excavations should be observed by a representative of our firm to observe the competence of material in the excavations and to check the suitability of the subsurface conditions for the planned foundation.

Differential Settlements

The design of the framing and structural connections for the proposed structure must consider the potential for differential settlement across the width or length of the structure of about 1/2 inch with a total settlement of up to about 1 inch. Similar additional settlement due to potential seismic activity should be anticipated due to subsurface conditions.

Expansive soils may be present at this site, which is typical of the area in which the proposed improvements are located. Expansive soils may cause significant differential movement in the structure, regardless of the measures taken to reduce such movement. Such movement usually causes cracks in foundations, on interior walls, ceilings and tile or concrete floors, primarily at corners of doors and windows and at high stress

points at structural connections. Differential movement of the foundation may cause uneven floor levels over time. This is a normal condition for construction of structures in such expansive soil areas.

Utility Trenches

Utility trenches that parallel the sides of the foundation should be placed so that they do not extend below a line sloped down and away at a 2:1 (H:V) slope from the bottom outside edges of the perimeter footings or grade beams, as applicable. All trenches should be backfilled with native soils compacted uniformly to the relative compaction specified above for fill. If local building codes require the usage of sand as the trench backfill, all utility trenches entering the building must be provided with impervious seals of either cohesive soil or lean concrete where the trenches pass under the building perimeter. Each impervious plug should extend two feet into, and out of, the building perimeter. Jetting of backfill is not recommended as it may result in an irregular and unsatisfactory degree of compaction.

Slab on Grade Floors

We understand that slab floors may be planned for some or all of the new structures. We recommend that any planned slab-on-grade floor be placed wholly on a prepared subgrade, including removal of unsuitable soils to estimated depths of about 1.5 to 3.0 feet, followed by placement of engineered fill, as determined by the Geotechnical Consultant, to bring the subgrade up to design pad grade.

Slabs should have a minimum thickness of 5 inches. Thicker slabs are recommended for floor areas that may be subject to heavy traffic, equipment, or storage loads. Thicker slabs would tend to reduce the potential for cracking. Floor slabs should be structurally tied to the foundations. The slab thickness and reinforcement should be determined by the structural designer.

To retard moisture penetration, the slabs should be underlain by a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel graded such that 100 percent will pass the 1-inch sieve and none will pass the No. 4 sieve. We recommend that an impermeable membrane be placed on the crushed rock and may be overlain by 2 inches of clean sand to assist in the proper curing of the slab. In place of the typical minimum 10-mil thick visqueen moisture vapor barrier, we recommend installation of a product from Stego Industries called Stego Wrap Vapor Barrier (15-mil) (or equivalent) to reduce the potential for moisture vapor to migrate through the floor slab. The vapor barrier must be installed in accordance with the manufacturer's recommendations, including use of appropriate tape on all seams and mastic to seal the perimeter of the floor membrane to the adjacent concrete foundation elements and at utility penetrations. If the vapor barrier is damaged during construction it should be repaired in accordance with the manufacturer's specifications.

This installation should help to significantly reduce the potential for moisture vapor transmission upward through the floor slab. If there are any concerns regarding the potential for migration of moisture through the floor slab or if further protection against slab moisture penetration is desired, we recommend that the owner contact a consultant that is expert in moisture barrier issues.

Miscellaneous Flatwork

We recommend that exterior flatwork be placed on at least 4-inches of clean crushed rock over a prepared subgrade, or as determined by the Geotechnical Consultant. Slabs should be a minimum thickness of 4-inches and be structurally independent of the foundation system to provide freedom of movement due to concrete shrinkage and expansion, potential changes in soil volume or differential settlement. We recommend that the exterior edges of any deck or patio slabs have a thickened edge or footing to reduce the potential for intrusion of water under the flatwork. Flatwork reinforcement and crack control design should be provided by the structural designer.

It should be noted that some vertical displacement (differential settlement) of exterior flatwork, decks, patios, sidewalks and pavements should be expected. We recommend maintaining proper site drainage and controlling irrigation of landscaping to reduce the amount of vertical displacement that may occur.

Driveway and Parking Areas

Any proposed new driveway or parking area may be constructed with crushed rock, asphalt concrete, or reinforced concrete surfacing. If pavement is preferred, based on the observed soil conditions, we recommend a minimum pavement section of 2.5 inches of asphalt concrete, or 4 inches of reinforced concrete, over a minimum of 6 inches of compacted aggregate base rock on a prepared subgrade for the driveway. The pavement design should be in accordance with local building and fire department requirements, which may require thicker pavement sections. The design of asphalt or concrete pavement is not within our scope of services.

We recommend that the pavement, if any, be constructed in accordance with the following criteria:

1. All pavement soil subgrade should be free of organic and perishable material. We recommend that all weak materials be removed from the area of the proposed pavement and replaced with compacted clean fill or crushed rock.

2. The upper 6 inches of subgrade should be moisture-conditioned and compacted to a minimum relative compaction of 95 percent. All pavement subgrade should be stable and "non-pumping" at the time the base rock is placed.

3. Materials of the type and thickness (minimum) specified should be used. All base rock should meet the Standard Specifications of the State of California for Class 2 base rock and be angular in shape.

4. The base rock should be uniformly compacted to a minimum relative compaction of 95 percent at or near optimum moisture content.

5. Asphalt concrete should only be placed during periods of fair weather when the free air temperature is within the prescribed limits as set by Caltrans.

6. All trench backfill material underneath the pavement should be compacted, as previously recommended in this section, to reduce fill settlement and minimize pavement damage that may result from such settlement.

7. Adequate drainage must be provided adjacent to the pavement area to prevent surface water from saturating the pavement subgrade. This is especially important for areas along the driveway and where pavement abuts landscaping.

Site Drainage

An experienced drainage design professional should design an appropriate site drainage system considering the local hydrology and the existing onsite conditions. We do not provide drainage design as part of the scope of this study. However, we submit these general recommendations as guidelines.

Surface Drainage

Surface waters must not be allowed to pond or saturate soil adjacent to the structure foundation. Irrigation of planting next to the foundation must be kept to the minimum necessary for maintaining landscaping. Hardscape, such as planter boxes or walkways, must be drained away from the structure and constructed in a way that does not trap water near the foundation. Excessive irrigation of landscaping anywhere near the structure must be prevented.

We recommend the use of continuous roof gutters and downspouts. We recommend that all water flow from downspouts be directed away from the structure within non-perforated solid PVC Schedule 40, ABS SDR-35 or better, drain pipes preferably to a storm drain system or swale as far from the structural foundation as feasible. Drainage swales, drop inlets and storm drain systems should be provided to remove surface water from the perimeter of the building, as determined by the project civil engineer, architect or others responsible for drainage design. For exposed ground surfaces, the 2025 CBC requires a minimum slope gradient downward away from the structure of 6 inches in 10 feet, or into a drainage swale. Walkways or paved areas should have a minimum 2% slope downward away from the foundation. The perimeter drainage swale flow line should be a minimum of 6 inches below the structural pad grade or as much as practicable given site topography.

Drain Cleanouts and Outlets

Drains should flow by gravity to suitable outlets downslope and well away from structural foundations. Subdrains, if any, and downspout drains must not be combined, but may share the same trench. All buried drains should have suitable, accessible cleanouts to facilitate cleaning and maintenance. Drains should not be allowed to cause erosion, ground soaking or ponding. Exposed outlets should have grills and be protected from damage by placement of a cover of riprap, concrete box, or similar means. Additional drainage recommendations may be provided based on our review of site development and foundation plans or during construction.

Maintenance

Periodic land maintenance will be required. Drains, drainage swales and other drainage features on the subject property and adjacent to the planned structure should be regularly monitored, cleaned and maintained, as necessary. If signs of drainage problems, erosion or surficial soil instability occur, they should be promptly evaluated by the Geotechnical Consultant.

Concrete Construction

The Owner is advised that all concrete construction, including foundations, floor slabs, decks, and walkways are subject to minor shrinkage and cracking, which are not indicative of loss of structural integrity or geotechnical issues. Proper concrete mix design moisture control and construction should help reduce the potential for shrinkage and cracking. We are not responsible for concrete work for the project.

Supplemental Services

Plan Review

Jim Glomb Consulting recommends that we be retained to review the project plans and specifications to determine if they are consistent with our recommendations. When tentative grading plans and or building plans are prepared for the site they should be forwarded to this office for review and additional geotechnical studies, if indicated.

Construction Observations

We recommend having a pre-construction meeting, including the Owner, contractor, and the Geotechnical Consultant to discuss the planned work and scheduling. In addition, we should be retained to observe geotechnical construction, particularly site grading and excavation of foundations, as well as to perform appropriate field observations. If, during construction, subsurface conditions different from those described in this report are observed, or appear to be present beneath excavations, we should be advised at once so that these conditions may be reviewed and our recommendations reconsidered.

Site Condition Review

The recommendations made in this report are contingent upon our notification and review of the changed conditions. If more than 1.5 years have elapsed between the submittal of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at or adjacent to the site, the recommendations of this report may no longer be valid or appropriate. In such case, we recommend that we review this report to determine the applicability of the conclusions and recommendations considering the time elapsed or changed conditions. The recommendations made in this report are contingent upon such a review. These services are performed on an as-requested basis and are in addition to this geotechnical investigation. We cannot accept responsibility for conditions, situations or stages of construction that we are not notified to observe.

Limitations

This report has been prepared for the exclusive use of Housing Mendocino Coast or their consultants for this site. Our services consist of professional opinions and conclusions developed by a certified engineering geologist and geotechnical engineer in accordance with generally-accepted geotechnical engineering and engineering geologic principles and practices. We provide no other warranty, either expressed or implied. Our conclusions and recommendations are based upon the information provided us regarding the proposed project and professional judgment. Site conditions and cultural features described in the text of this report are those existing at the time of our field work and may not necessarily be the same or comparable at other times.

Our scope of services does not include obtaining permits for any aspect of the subject project. The project Owner or Owner's representative is responsible for obtaining necessary permits for the project.

The scope of our services did not include an evaluation of water availability or soil absorption capacity, an environmental assessment or an investigation of the presence or absence of hazardous, toxic or corrosive materials in the soil, surface water, groundwater or air, on or below, or around the site, nor did it include an evaluation or investigation of the presence or absence of wetlands or flood zone considerations.

We trust this provides the information you require at this time. If you have questions or wish to discuss this further, please call.

Jim Glomb Consulting, Inc.

Jim Glomb 7/10/26

CERTIFIED ENGINEERING GEOLOGIST
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Don R.

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7/10/2026

Jim Glomb
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Attachments: References
Vicinity Map, Plate 1
Site Plan, Plate 2
Log of Test Pits, Plates 3.1 to 3.3
Soil Classification Chart, Figure 1

References

1. California Division of Mines and Geology, 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, ICBO.

2. California Division of Mines and Geology, 1986, State of California Special Studies Zones Fault Maps, Scale 1:24,000.

3. California Division of Mines and Geology, 1984, Geology and Geomorphic Features Related To Landsliding, DMG OFR 84-12.

4. Jennings, C.W., 1975, Fault Map of California with Locations of Volcanoes, Thermal Springs and Thermal Wells: California Division of Mines and Geology, Geologic Data Map No. 1, Scale 1:750,000.

5. 2025 California Building Code.

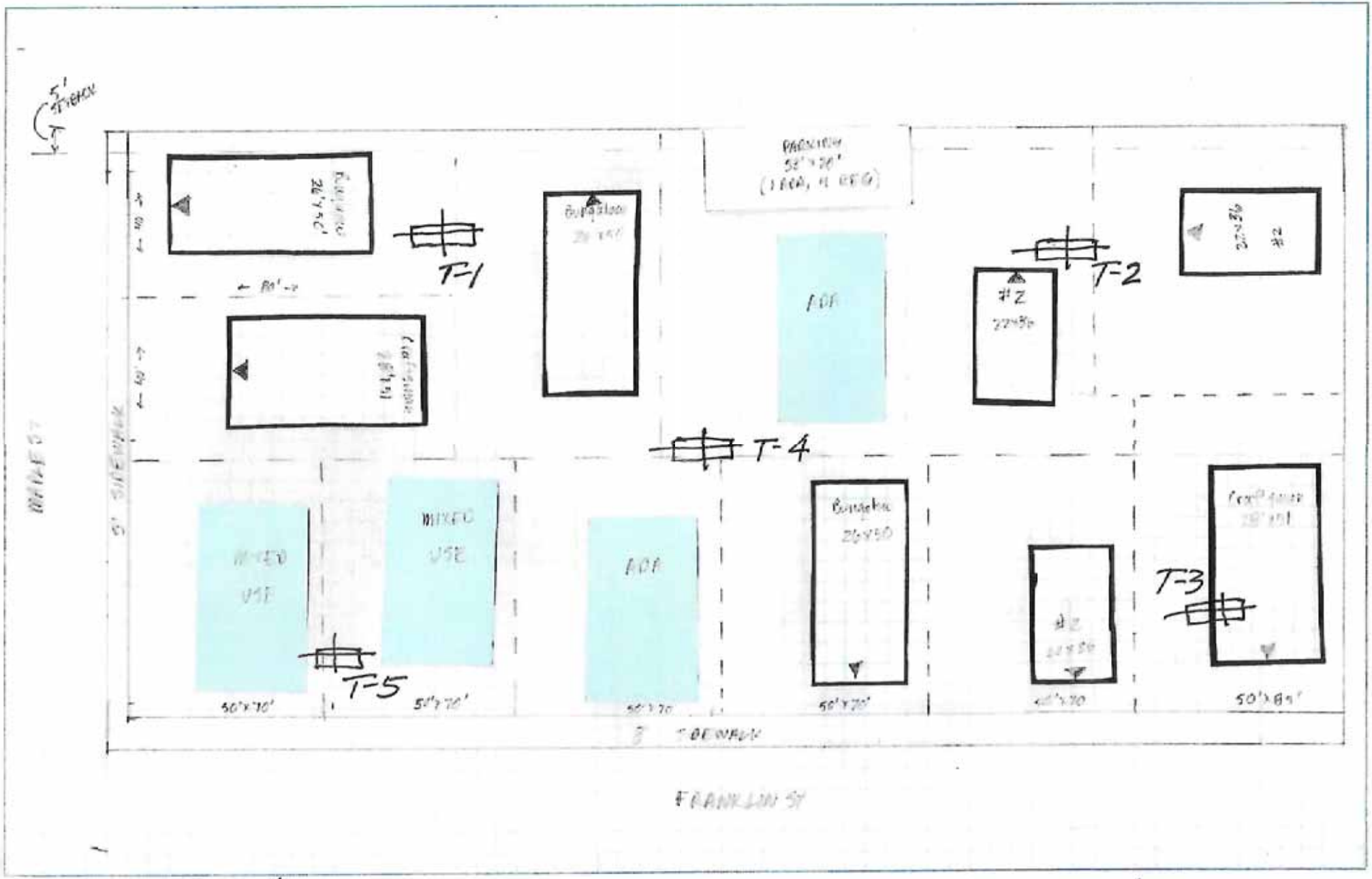
6. ASCE/SEI Hazard Tool Website.

7. CGS Earthquake Zones of Required Investigation, (http://maps.conservation.ca.gov/cgs/EQZApp/)

8. NRCS USDA, Web Soil Survey, (http://websoilsurvey.mres.usda.gov/app/WebSoilSurvey.aspx).

9. USGS, U.S. Quaternary Faults, (https://usgs.maps.arcgis.com), V10.61,7/2021.

SITE PLAN



Jim Glomb Consulting, Inc.
Project 2269 7/26

Housing Mendocino Plate 2

LOGS OF TEST PITS

Date: 7/1/26 Surface gradient: level Pit orientation: NS	Pit dimensions: 2×10×4 Groundwater depth: none enc.	Logged by: J. Glomb Contractor: Fienburg Equipment: mini-x	Test Pit T-1

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt)	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1			C1-2.5': 4.5+					C0-2' Gray brn. Silty Sand: dry, dense, sl. porous	
2		[redacted]			80.7	10.9		Topsoil	
3	[redacted]	[redacted]	C2.5': 3.3		89.0	9.6		C2-4' yel. brn. fine to med. clean Sand: sl. moist, dense to very dense	
4								Old Alluvium	
5									
6									
7									
8									
9									
10									
11									
12									
13									
14								note: old tree trunk near pit	
15									

Date: 7/1/26 Surface gradient: level Pit orientation: NS	Pit dimensions: 2×10×3.5 Groundwater depth: none enc.	Logged by: J. Glomb Contractor: Fienburg Equipment: mini-x	Test Pit T-2

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt)	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1			C1': 4.0					C0-1.5' Gray silty fine Sand: dry, med. dense to dense, locally porous	
2			C2-3': 4.5+					Topsoil	
3								C1.5-3.5' Gray brn. fine to med. Sand: sl. moist, very dense	
4								Old Alluvium	
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

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Client: Housing Mendocino
Project: 2269
Date: 7/26

Plate 3.1

LOGS OF TEST PITS

Date: 7/1/26 Surface gradient: level Pit orientation: NS	Pit dimensions: 2x10x3.5' Groundwater depth: none enc.	Logged by: J. Glomb Contractor: Fienburg Equipment: mini-x	Test Pit T-3

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt)	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1								C0-1.5' Gray Silty fine Sand: dry, med. dense to dense, locally porous Topsoil	
2									
3									
4									
5									
6								C1.5-3.5' Gray brn. fine to med. Sand: sl. moist, very dense Old Alluvium	
7									
8									
9									
10									
11									
12									
13									
14									
15									

Date: 7/1/26 Surface gradient: level Pit orientation: NS	Pit dimensions: 2x12x5 Groundwater depth: none enc.	Logged by: J. Glomb Contractor: Fienburg Equipment: mini-x	Test Pit T-4

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt)	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1								C0-3' Lt. gray-orange Gravelly Silty fine Sand: dry, loose to med. dense Fill	
2									
3			C3': 2						
4									
5									
6									
7								C3-5' Org. brn. fine to med. Sand: sl. moist to moist, dense to v. dense Old Alluvium	
8									
9									
10									
11									
12									
13								note: Fill limits localized	
14									
15									

Jim Glomb Geotechnical Consulting, Inc. 8255 Vulture Vista Lane, Sebastopol, CA 95472 • 707/696-1415	Client: Housing - Mendocino Project: 2269 Date: 7/26	Plate 3.2

LOGS OF TEST PITS

Date: 7/1/26 Surface gradient: level Pit orientation: NS	Pit dimensions: 2x10x4 Groundwater depth: none enc	Logged by: J. Glomb Contractor: Fienberg Equipment: mini-x	Test Pit T-5

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1							SM	C0-1.5' Lt. gray silty fine sand: dry, loose to med. dense Topsoil	
2									
3									
4									
5									
6									
7								C1.5-4' Org. brn. clean medium sand: sl. moist, very dense Old Alluvium	
8									
9									
10									
11									
12									
13									
14									
15									

Date: Surface gradient: Pit orientation:	Pit dimensions: Groundwater depth:	Logged by: J. Glomb Contractor: Equipment:	Test Pit T-

Depth (ft.)	Samples: Bulk	Samples: Tube	Pocket pen (tons/ft²)	Expansion Index	Dry density (PCF)	Field moisture (% dry wt)	Soil type USCS	Geologic/Engineering Description and Remarks	Geologic Attitudes
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

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Client: Housing - Mendocino
Project: 2269
Date: 7/26

Plate 3.3

UNIFIED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			*TYPICAL NAMES*	
COARSE GRAINED SOILS More than Half > #200 sieve	**GRAVELS** More than half coarse fraction is larger than No. 4 sieve	Clean gravels with little or no fines	GW	Well graded gravels, gravel-sand mixtures
			GP	Poorly graded gravels, gravel-sand mixtures
		Gravels with over 12% fines	GM	Silty gravels, poorly graded gravel-sand silt mixtures
			GC	Clayey gravels, poorly graded gravel-sand-clay mixtures
	SANDS More than half coarse fraction is smaller than No. 4 sieve	Clean sands with little or no fines	SW	Well graded sands, gravelly sands
			SP	Poorly graded sands, gravelly sands
		Sands with over 12% fines	SM	Silty sands, poorly graded sand-silt mixtures
			SC	Clayey sands, poorly graded sand-clay mixtures
FINE GRAINED SOILS More than Half < #200 sieve	**SILTS AND CLAYS** Liquid limit less than 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic clays and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

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Figure 1