

Mr. Emmanuel Robinson  
Vice President of Development  
City Ventures  
444 Spear Street, Suite 200  
San Francisco, CA 94105



Subject: Proposed Residential Development  
922 and 944 San Leandro Street  
Mountain View, California  
**PRELIMINARY GEOTECHNICAL FEASIBILITY ASSESSMENT**

Dear Mr. Robinson,

At your request, Quantum Geotechnical Inc. has completed the field drilling portion of our geotechnical investigation and are presenting herein our preliminary geotechnical feasibility assessment for the subject project. The purpose of this assessment is to identify any geotechnical concerns that may exist at the site as part of your due diligence process. Laboratory testing is in progress.

#### **PROJECT DESCRIPTION**

The project is currently in the planning stages and details are being developed. We understand the preliminary plan consists of developing the site for the construction of a multi-family residential development, comprising 34 townhome units in 5 buildings and associated improvements. The buildings are planned to be two to three stories in height and founded on a post-tensioned slab foundation system. Grading details are not known, but the site is relatively flat, and it is anticipated that minimal cuts and fills may be needed to achieve design pad grades.

#### **SITE DESCRIPTION**

The site is located in the northeastern part of Mountain View in an existing mixed residential and commercial district that is southwest of the Hwy 101/85 intersection. The site is approximately 1.7 acres in size and consists of two parcels, with the southern parcel currently occupied by a single-story office building and parking, and the northern parcel currently occupied by an older residence built in the 1930s of vintage wood frame and stucco construction, including a detached garage and driveway. There is an open field and abandoned garden plot behind the house which is surrounded by wooden fencing on three sides. The commercial property is also fenced off with a metal sliding gate in the front. There is a hedgerow between the two parcels with some entangled bushes and smaller trees,

but no large trees on either parcel. The freeway structure lies on the opposite side of San Leandro Street and construction occurred after the house was built, with no evidence of disturbance from the construction apparent in the onsite soils that we observed.

## **SITE GEOLOGY**

Geologic maps show the site is underlain by mostly fine-grained Holocene alluvial fan deposits consisting of silts and clays with intermittent beds of sand and occasional gravel layers. According to the California Geologic Survey (CGS), Seismic Hazard Zones Map for the USGS 7.5 Minute Mountain View Quadrangle, dated 2006, the site is in an area of potential moderate liquefaction risk requiring specific investigation. According to the CGS, Seismic Hazard Zone Report (2006), the historic high groundwater level is shallower than 10 feet deep below the ground surface. The site is not located in a mapped earthquake fault rupture (Alquist-Priolo Fault Zone) hazard zone.

## **SUBSURFACE CONDITIONS**

A total of (5) borings were advanced, including four (4) borings drilled with a truck-mounted rig operated by Exploration Geoservices Inc. (EGI) of San Jose and one that was hand augured in the backyard of the property at #944 San Leandro Street within the site on December 7, 2023. The borings were completed to depths ranging from 5 to 41.5 feet. The borehole locations are shown on the attached site plan. The subsurface conditions encountered in the boreholes were somewhat consistent and consisted of an estimated 11 to 16 feet of shallow, stiff clays that were moderately to highly plastic. Underlying these soils, we encountered medium-dense to dense silty, clayey sands that continued to approximately 20 feet in Borings B-2 and B-4, and to an estimated depth of 23 or 24 feet in Boring B-3. There is a layer of dense gravelly sands we found at the bottom of B-2, and that continued to the bottom of Boring B-4 at 31.25 feet, with increasing clay near the bottom. In Boring B-3 we saw less gravel, with interbedded stiff sandy clay and medium stiff fat clay from about 23 or 24 feet to 35 feet, overlying very dense sand, and then stiff clay that continued to the bottom depth of 41.5 feet.

Groundwater was initially encountered at depths ranging from 13 to 16 feet below the existing ground surface (bgs) in Borings B-2, B-3, and B-4, rising as shallow as 9 feet bgs in Borings B-3 and B-4, and to about 11 feet bgs inside Boring B-3.

## PRELIMINARY GEOTECHNICAL EVALUATION

Based on our site reconnaissance and borings, the site is suitable for the proposed development.

The site is not located within an Alquist Priolo Earthquake Fault Special Studies Zone, and the potential for surface rupture due to faulting is therefore nil.

In addition, based on the stiff shallow subsurface clay soils and mainly dense nature of the deeper granular soils, the potential for liquefaction is considered low, but still requires further evaluation.

The groundwater is shallow enough that it may be encountered in the deepest potential excavations, depending on the proposed civil design of the utility infrastructure, affecting the underground, plumbing and landscape contractors.

There may be some old fill associated with the building pad of the existing office building, but is expected to be minor.

The near surface soil appears to have a high expansion potential. This material is prone to some heave and shrink movements with changes in moisture content and must be carefully considered in the design and construction of foundations, drainage, hardscape and pavements. Standard grading practices for the site and standard utility trenching operations are anticipated.

A post-tensioned slab foundation is an appropriate foundation system for the proposed structures.

### CLOSURE

Should there be any questions or should you require any additional information, please contact our office at your convenience.

Sincerely,  
*Quantum Geotechnical Inc.*




Simon Makdessi, P.E., G.E.  
President

Attachments:        Boring Site Plan

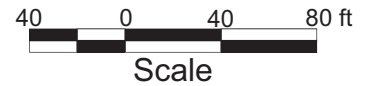


**LEGEND**

 SOILS BORING  
 B-5

 SUBJECT PROPERTY

**PROPOSED BORING PLAN**



**QUANTUM  
GEOTECHNICAL INC.**

Geotechnical Investigation  
 Proposed Development  
 922 and 944 San Leandro Street, Mountain View CA

Project No.  
 K018.G

Drawn By  
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