GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING CONSTRUCTION TESTING & INSPECTION

September 21, 2022 KA Project No. 112-22117

Mr. Luis Gomez goUrban Development lagomez@gourbandev.com

RE: Update to Geotechnical Engineering Investigation Report

Proposed Jefferson Square Development

44125 Jefferson Street La Quinta, California

Reference: Geotechnical Engineering Investigation, Proposed Jefferson Square, Jefferson

Street & Fred Waring Drive, La Quinta, California, Project No. 112-07036, dated

May 25, 2007.

Dear Mr. Gomez:

In accordance with your request, we are providing this letter to update our previous Geotechnical Engineering Investigation report, KA Project No. 112-07036, dated May 25, 2007 for the above-referenced project site.

Based on our review of the proposed site plan and our discussions with the project representative, we understand that the proposed development includes construction of three (3) new multi-story buildings on existing out-lot parcels located at the subject site. These out-lot parcels have been previously graded for the proposed development back then. It is understood that the new proposed structures will be of masonry, wood, or metal framed structure supported on a conventional shallow foundation system.

Based on our recent observation and field work of the subject site, review of the previous geotechnical investigation report, and review of the proposed development site plan, the site and proposed development are consistent with the conclusions and recommendations presented in the previous Geotechnical Engineering Investigation report. Additional information to conform to seismic design requirements of the 2019 California Building Code (2019 CBC) is provided below.

Also, grading recommendations associated with the proposed buildings to be located at the subject site are provided below. In order to prepare these recommendations, we have reviewed the preliminary site plans prepared by Aero Collective and the Geotechnical Engineering Investigation Report prepared by Krazan & Associates, Inc. These recommendations are intended to provide supplemental grading recommendations for preparation of the proposed building pad areas and surrounding paved areas. These recommendations have been requested based on the significant period of time since the initial preparation of the building pad areas.

In the event these structural or grading details are inconsistent with the final design criteria, we should be notified so that we can evaluate the potential impacts of the changes on the recommendations presented in this report and provide an updated report as necessary.

The Site Class per Section 1613 of the 2019 California Building Code (2019 CBC) and ASCE 7-16, Chapter 20 is based upon the site soil conditions. It is our opinion that a Site Class D is most consistent with the subject site soil conditions. For seismic design of the structures based on the seismic provisions of the 2019 CBC, we recommend the following parameters:

Seismic Item	Value	CBC Reference	
Site Class	D	Section 1613.2.2	
Site Coefficient Fa	1.000	Table 1613.2.3 (1)	
S_{S}	1.948	Section 1613.2.1	
S_{MS}	1.948	Section 1613.2.3	
$S_{ m DS}$	1.298	Section 1613.2.4	
Site Coefficient F _v	1.700	Table 1613.2.3 (2)	
S_1	0.760	Section 1613.2.1	
S_{M1}	1.292	Section 1613.2.3	
S_{D1}	0.861	Section 1613.2.4	
T_{S}	0.664	Section 1613.2	
PGA_{M}	0.887g	Figure 22.7	

^{*} Based on Equivalent Lateral Force (ELF) Design Procedure being used.

Site Conditions

It is our understanding, based on a review of the referenced Compaction Reports for Building 1 and Building 3 per the proposed site plan, that remedial grading of the proposed building pad area was performed in 2008. Preliminary site plans indicate the buildings to be of similar size and orientation as the previously graded building pads. Based on our recent site visit and field work, the exposed subgrade associated with the subject building pads was noted to be weathered. The near surface soils were found to possess varying in-place densities and moisture contents.

Building 2 per the proposed site plan is currently been used as an asphalt paved parking lot for the existing shopping center. Site preparation for this area should be perform based on the recommendations presented on the Geotechnical Engineering Investigation referenced above.

Site Preparation

As previously discussed, rough grading of the subject building pads was performed in 2008. Based on visual observations made during a recent site visit, the near surface soils were found to possess varying in-place densities and moisture contents. The near surface soil conditions present at the site are not

considered suitable to support the proposed structures. As such, remedial grading is recommended for the proposed development.

Overexcavation and Recompaction – Building and Foundation Areas

To reduce post-construction soil movement and provide uniform support for the buildings and other foundations, overexcavation and recompaction within the proposed building footprint areas should be performed to a minimum depth of at least twelve (12) inches below existing grades. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction. The exposed subgrade at the base of the overexcavation should then be scarified, moisture-conditioned as necessary, and compacted. The overexcavation and recompaction should also extend laterally five feet (5') beyond edges of the proposed footings or building limits. Any undocumented fill encountered during grading should be removed and replaced with Engineered Fill. This will apply to Building 1 and Building 3 (See Figure 1). For Building 2, recommendations presented on the Geotechnical Engineering Investigation referenced above should be follow.

Overexcavation and Recompaction – Proposed Parking Area

To reduce post-construction soil movement and provide uniform support for the proposed parking and drive areas, overexcavation and recompaction of the near surface soil in the proposed parking area should be performed to a minimum depth of at least twelve (12) inches below existing grades or proposed subgrade, whichever is deeper. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction. The overexcavation and recompaction should also extend laterally at least three (3) feet beyond edges of the proposed paving limits or to the property boundary. Any undocumented fill encountered during grading should be removed and replaced with Engineered Fill.

Any buried structures encountered during construction should be properly removed and the resulting excavations backfilled with Engineered Fill, compacted to a minimum of 95 percent of the maximum dry density based on ASTM Test Method D1557. Excavations, depressions, or soft and pliant areas extending below planned finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Soils Engineer. Any other buried structures encountered, should be removed in accordance with the recommendations of the Soils Engineer. The resulting excavations should be backfilled with Engineered Fill.

The upper soils, during wet winter months become very moist due to the absorptive characteristics of the soil. Earthwork operations performed during winter months may encounter very moist unstable soils, which may require removal to grade a stable building foundation. Project site winterization consisting of placement of aggregate base and protecting exposed soils during the construction phase should be performed.

A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of

the material. The Soils Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section and the Engineered Fill section.

The recommendations and limitations provided in the Geotechnical Engineering Investigation Report prepared by Krazan & Associates, Inc., Project No. 112-07036 apply to this letter and should be incorporated into the design and construction of the proposed development.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (951) 273-1011.

Respectfully submitted,

KRAZAN & ASSOCIATES, INC.

Jorge A. Pelayo, MS, PE

Project Engineer RCE No. 91269



APPROXIMATE BORING LOCATION



	Scale:	Date:
SITE MAP	NTS	September,
2-2-1-2-2		2022
PROPOSED JEFFERSON	Drawn by:	Approved by:
SQUARE DEVELOPMENT	AM	JAP
44125 JEFFERSON STREET	Project No.	Figure No.
LA QUINTA, CALIFORNIA	112-22117	1







	Scale:	Date:
VICINITY MAP	NTS	September,
,		2022
PROPOSED JEFFERSON	Drawn by:	Approved by:
SQUARE DEVELOPMENT	AM	JAP
44125 JEFFERSON STREET	Project No.	Figure No.
LA QUINTA, CALIFORNIA	112-22117	2

