January 17, 2025

Watson Land Development
22010 Wilmington Avenue
Carson, California 90745

Attention: Mr. Daniel Wilson
Director of Construction

Project No.: **22G196-2**

Subject: **Geotechnical Research and Document Review**
Watson High Desert Logistics- East
SEC Johnson Road and Navajo Road
Apple Valley, California

Reference: Results of Infiltration Testing, Proposed Industrial Building, SEC Johnson Road and Navajo Road, Apple Valley, California, prepared for Watson Land Development, by Southern California Geotechnical, Inc. (SCG), SCG Project No. 22G196-1, dated July 1, 2022.

Mr. Wilson:

In accordance with your request, we have performed geotechnical research and reviewed the referenced geotechnical infiltration testing report for the proposed development at the subject site. We have also discussed our findings with respect to the CEQA Soils and Geology Checklist you recently provided to our office. We are pleased to present this letter report summarizing our research and findings for the site.

Scope of Service

The scope of services performed for this project was in accordance with our change order, 22G196-CO, dated December 30, 2024. The scope of services included reviewing a previous geotechnical infiltration testing report the subject site and performing research of available geologic and hazard maps. It should be noted that the scope of services for this letter report does not include any subsurface exploration nor any laboratory testing.

Site Conditions

The subject site is located at the southeast corner of Johnson Road and Navajo Road in Apple Valley, California. The site is bounded to the north by Johnson Road, to the west by Navajo Road, to the south by Kensington Street and vacant land, and to the east by Central Road. The general location of the site is illustrated on the Site Location Map, included as Plate 1 of this report.

The site consists of several parcels, which total 142± acres in size. The site is presently vacant and undeveloped. The ground surface cover consists of exposed soil with sparse native weed and shrub growth. Several dirt roads are present throughout the site.

Detailed topographic information was not available at the time of this report. Based on visual observations made at the time of the referenced infiltration study, as well as our review of the USGS Topographic map, included as Plate 1 of this report, the overall site slopes to the southwest at an estimated gradient of about 2± percent. The site possesses hilly topography, with north-south trending drainage channels. The approximate elevation difference between the lowest point in the channels and the nearby crests throughout the site varies from about 5 to 20± feet.

Proposed Development

Based on the conceptual site plan provided to our office by the client, the site will be developed with two (2) warehouses, 1,631,800± ft^2 and 1,200,000± ft^2 in size, located in the western and eastern areas of the site, respectively. Dock-high doors will be constructed along the north and south walls of each building. The buildings are expected to be surrounded by asphaltic concrete or Portland cement concrete pavements in the parking and drive areas, Portland cement concrete pavements in the truck court areas and heavy truck traffic areas. Landscape planters will be included throughout the site, especially around the overall site perimeter. Some limited areas of decorative concrete flatwork may be included near the buildings.

Based on the site plan provided at the time of the referenced infiltration report, the proposed development will include on-site stormwater infiltration. The infiltration system will consist of basins located in the western and southern areas of the site. Based on the exhibit provided at the time of the report, we expected the bottom of the infiltration basins to be about 12± feet below the existing ground surface.

Previous Study

SCG has previously performed infiltration testing at the subject site and prepared the referenced report documenting the test methods and results of the infiltration testing. The infiltration testing included the drilling of three (3) borings for infiltration testing advanced to depths of about 12± feet below the existing site grades and one (1) exploratory boring, advanced to a depth of about 22± feet below the existing ground surface.

The borings were advanced using a truck-mounted drilling rig, equipped with 8-inch-diameter hollow-stem augers and were logged during drilling by a member of our staff. The approximate locations of the infiltration test borings (identified as I-1 through I-3, inclusive) and the exploratory boring (identified as B-1) are indicated on the updated Infiltration Test Location Plan, enclosed as Plate 2 of this report. The Boring Logs are included as an enclosure to this report.

Geotechnical Conditions

Native alluvium was encountered at the ground surface at each boring location, extending to at least the maximum depth explored of 22± feet below ground surface. The alluvial soils generally consist of loose to very dense silty fine to medium sand and silty fine to coarse sand with trace fine gravel. Occasional samples possess slight cementation and trace to little calcareous nodules.

Geologic Conditions and Seismic Hazards Research

Geologic Map Review

The local geologic conditions of the subject site were determined by research of the Geologic Map of the Apple Valley North 7.5' Quadrangle, San Bernardino, California, compiled by Janis L. Hernandez, and Siang S. Tan, 2007. The map indicates that the majority of the site is underlain by old alluvial deposits (Map Symbol Qoa). This unit is described as late Pleistocene age, medium-grained sand and fine to medium gravel of inactive alluvial fans. The map indicates that a small area in the southern portion of the site is underlain by Cretaceous age Biotite Granodiorite (Map Symbol Kgd). Gravel wash deposits (Map Symbol Gw) are present in the west portion of the site, as well as the southeast corner of the site. The gravel wash deposits are considered to be late Holocene age, unconsolidated fine to coarse grained sands and fine gravels. A portion of the geologic map is enclosed as Plate 3 of this report.

Fault Rupture and Seismic Hazards

SCG reviewed the San Bernardino County Land Use Plan Geologic Hazard Overlays for the Apple Valley North Quadrangle, Map EH31 C. A portion of this map is included as Plate 4 of this report. The San Bernardino County Geologic Hazard Overlay maps indicate the locations of designated liquefaction hazard zones, earthquake fault zones, and mapped areas of landslide susceptibility. Based on this map, the site is not located in any county of San Bernardino designated liquefaction hazard zones, earthquake fault zones, nor in any earthquake-induced landslide hazard zones.

SCG performed research of the available Alquist-Priolo (AP) zone maps. No AP map is presently available for the Apple Valley North quadrangle. Therefore, the site is not located within a designated AP fault zone.

The geologic map referenced above does not indicate that any faults are present on the subject site.

Soils and Geology Questionnaire

The client's representative has provided our office with a Geology and Soils Questionnaire. The source of the questionnaire is CEQA Appendix G: Environmental Checklist Form, Section VI. We have answered these questions to the best of our ability at this time, based on the subsurface exploration performed for the referenced previous study, as well as our research of the available geologic maps and hazard maps for the area of the subject site. We recommend that a design-level geotechnical report which includes subsurface exploration throughout the proposed building areas, be performed in order to confirm the actual site conditions and to provide design-level geotechnical recommendations for the proposed development. Each of the questions included on the Environmental Checklist Form in Appendix G of the CEQA questionnaire has been reproduced below, in italics, followed by our response:

Would the project expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving:

a) i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong Seismic Ground Shaking

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides

SCG Response: As discussed above, based on our research of the available hazard maps, the site is not located within an AP zone, a county fault zone, nor is the site located within any seismic hazard zones, including liquefaction hazard zones and zones of landslide susceptibility. The geologic mapping indicates that the site is generally underlain by older alluvial soils and by biotite granodiorite bedrock. Based on the geologic mapping and our research of the available hazard maps, seismic hazards such as fault rupture, liquefaction, and earthquake induced landslides are not considered to be significant design concerns for this project.

Although the site is not in a fault zone, the subject site is located in an area which is subject to strong ground motions due to earthquakes. The performance of a site-specific seismic hazards analysis was beyond the scope of this research report. However, faults capable of producing significant ground motions are located near the subject site. Due to economic considerations, it is not generally considered reasonable to design a structure that is not susceptible to earthquake damage. Therefore, some damage to structures may be unavoidable during large earthquakes. The proposed structures should, however, be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life.

The 2022 California Building Code (CBC) provides procedures for earthquake resistant structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. Based on the preliminary nature of this report, some of this information is presently unknown. However, seismic design parameters, based on the soil profile and the proximity of known faults with respect to the subject site, can be provided at the time of the design-level geotechnical investigation for the proposed development at the site.

b) Result in substantial soil erosion or the loss of topsoil?

SCG Response: The soils encountered at the four borings performed in the western and southern portions of the site for the referenced infiltration testing report indicate that the near-surface soils generally consist of silty sands possessing occasional gravel content. Due to their granular composition these soils are considered to be susceptible to erosion. Generally, the design of the grading and drainage plans for the site is within the purview of the project civil engineer. The project civil engineer should consider the potential for

erosion of the on-site soils in their development of the grading plans for the proposed project.

c) *Be located on a geologic unit or soils that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, liquefaction or collapse.*

SCG Response: The geologic map indicates the soils at this site generally consist of older alluvium, and the site is not located within any designated seismic hazard zones. The soils at this site are not considered to be located on a geologic unit that would become unstable as a result of the project. SCG should review any grading plans developed for the proposed development, and if necessary, slope stability analyses may be performed to confirm the stability of proposed slopes. The future geotechnical investigation for the proposed development at the subject site should provide recommendations for the proposed site grading as well as recommendations for the design and construction of any new fill slopes or earth retaining structures, if applicable.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

SCG Response: The reference to the 1994 Uniform Building Code is obsolete. The current edition of the California Building Code (CBC), which is based on the International Building Code, references ASTM D-4825 as the current standard for determining the expansion potential for soils. Only occasional soils possessing trace clay content were encountered at the four borings performed for the referenced infiltration testing report. The soils encountered at the boring locations for the previous study are considered to be very low expansive to non-expansive based on the lack of significant clay content in the recovered samples. This classification would require no special design considerations for expansive soils, in accordance with the CBC. We recommend that the future geotechnical investigation for the project include exploration throughout the proposed building pad areas. Expansion index testing should be performed to confirm the actual expansion potential of the soils located throughout the site.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.*

SCG Response: The results of the infiltration testing performed during the time of the referenced study indicated infiltration rates of 1.4 to 3.7 inches per hour for clean water and an average infiltration rate of 2.5 inches per hour was recommended for the design of a storm water disposal system. With respect to stormwater disposal (which was the subject of the previous study), the onsite soils are considered to possess a low to moderate infiltration rate. If the proposed development will incorporate the use of septic systems, testing should be performed in accordance with the county standards for wastewater disposal systems in the specific location(s) of the proposed septic systems. Based on the results of the previous infiltration testing, we expect that some infiltration of wastewater

may be feasible. However, infiltration rates can vary considerably because soil compositions and densities can vary with location and depth.

Conclusions

The results of our research of the available geologic and hazard maps for the area of the subject site indicate that the site is not located within any designated seismic hazard zones. However, we recommend that a geotechnical investigation be performed at the site to confirm that the on-site conditions are consistent with the mapped conditions, and to provide geotechnical design parameters for the proposed development.

Closure

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

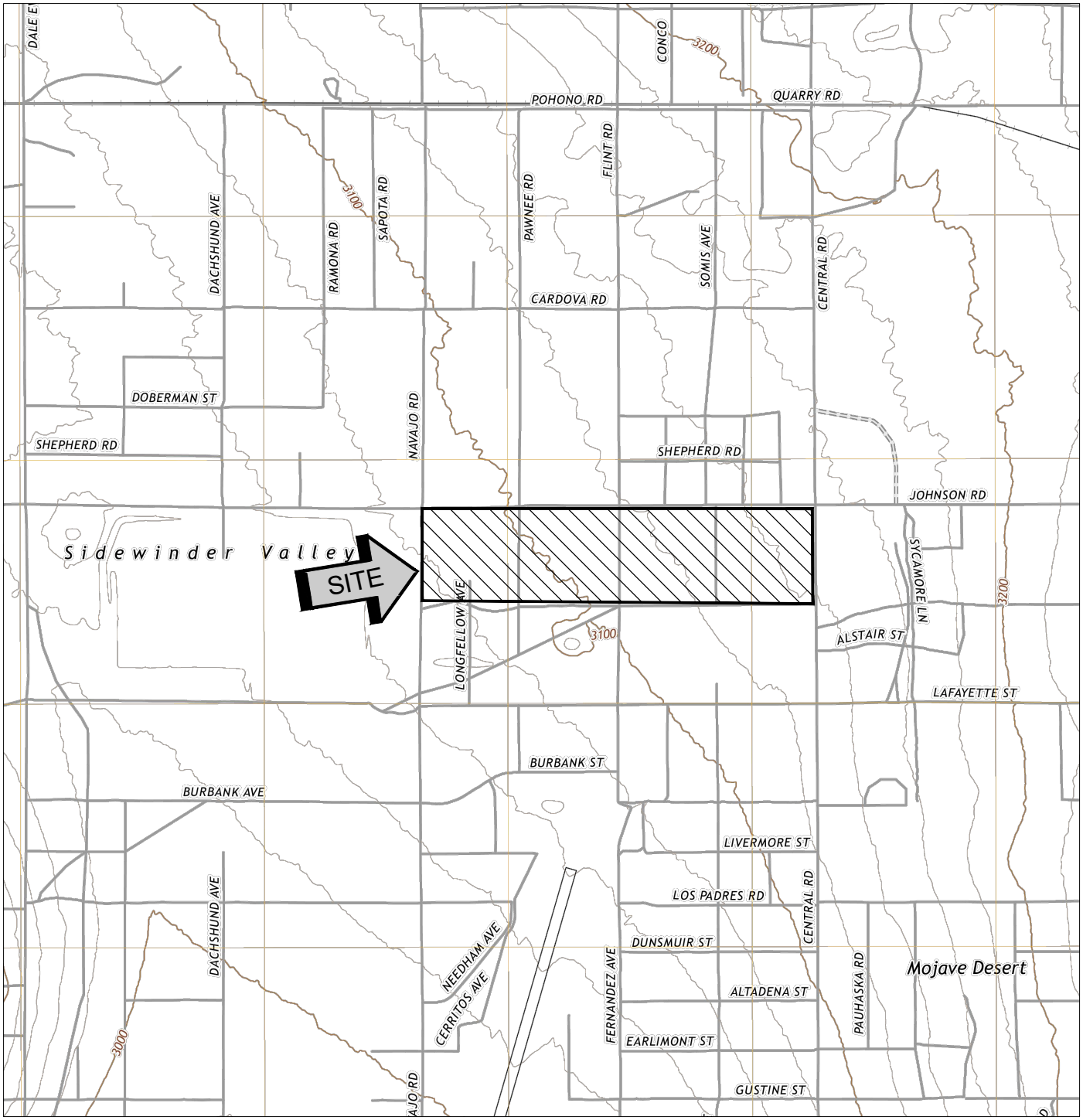
Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Daniel W. Nielsen, GE 3166
Senior Engineer

Enclosures: Plate 1: Site Location Map
Plate 2: Updated Infiltration Test Location Plan
Plate 3: Geologic Map
Plate 4: County Hazard Map
Boring Logs and Legend from Previous Study (SCG Project No. 22G196-1)

Distribution: (1) Addressee



SOURCE: USGS TOPOGRAPHIC MAP OF THE APPLE VALLEY NORTH QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA, 2021.

SITE LOCATION MAP

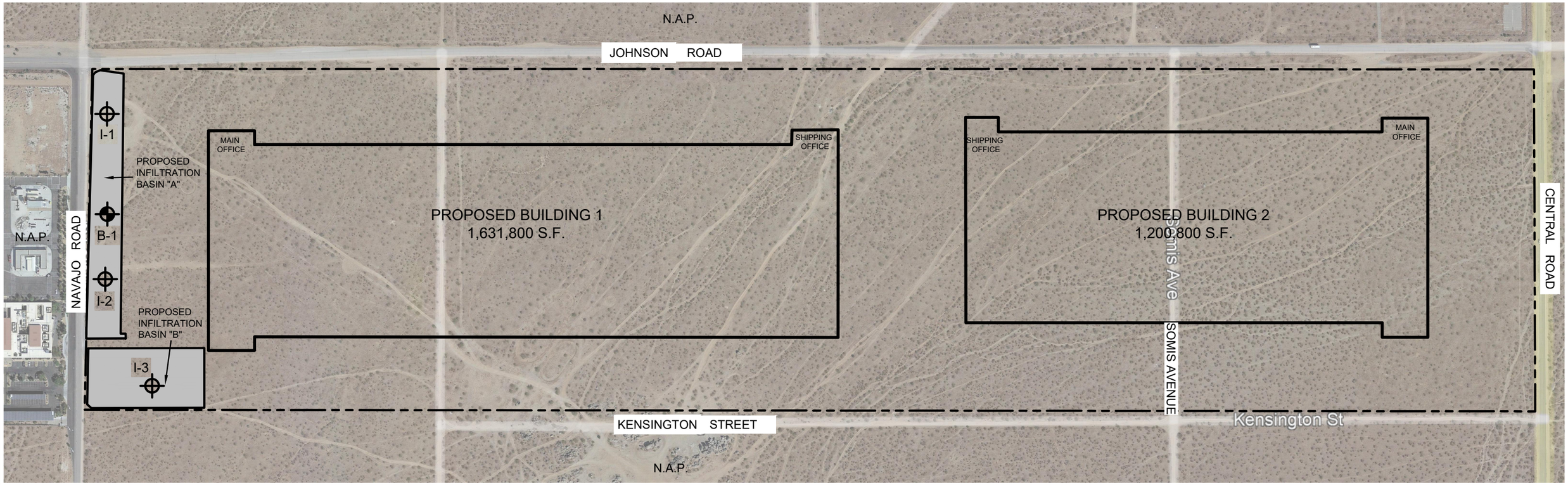
PROPOSED INDUSTRIAL BUILDINGS

APPLE VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: MK CHKD: DN	
SCG PROJECT 22G196-2	
PLATE 1	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



GEOTECHNICAL LEGEND

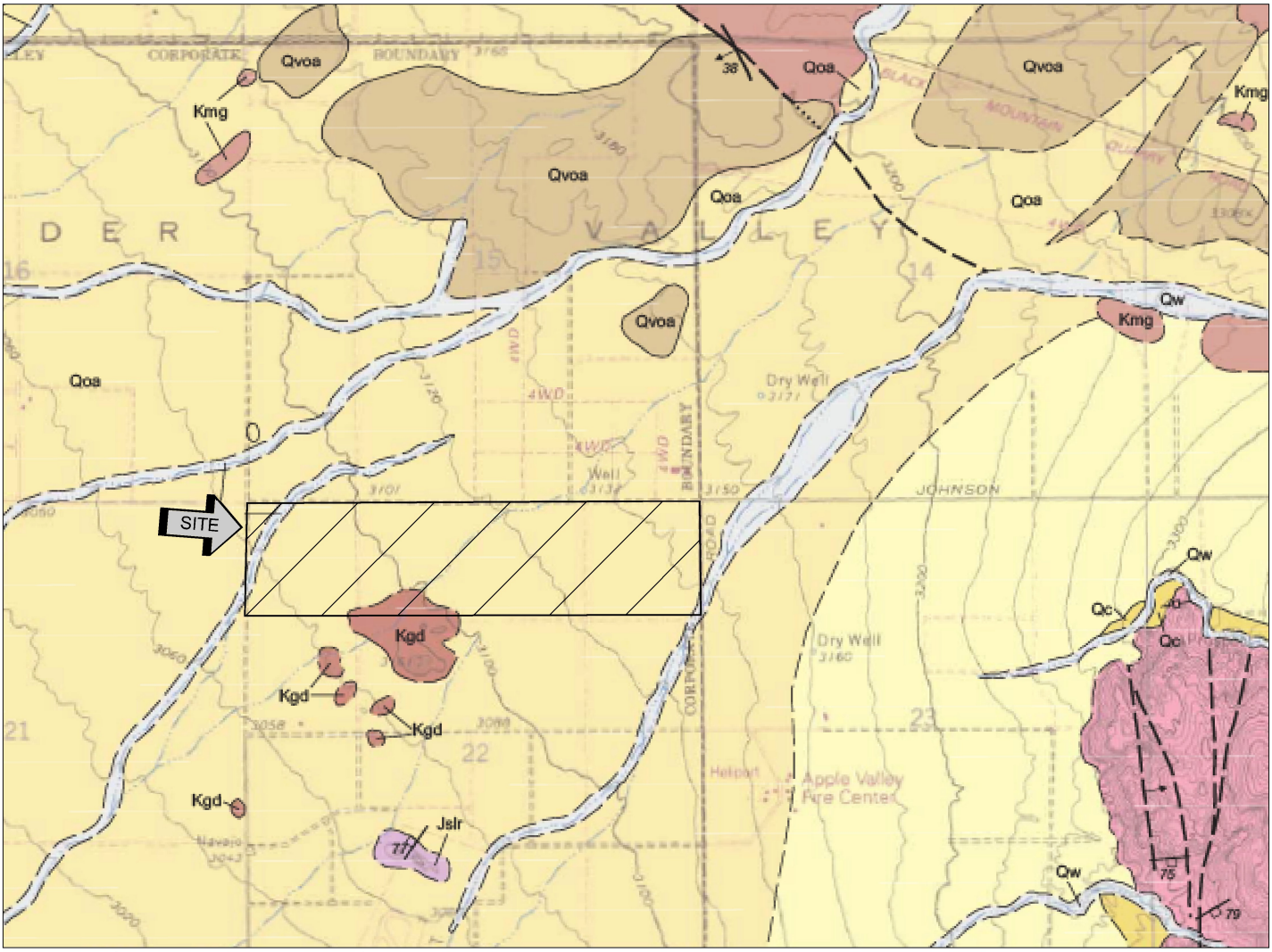
- APPROXIMATE INFILTRATION TEST LOCATION (SCG PROJECT NO. 22G196-1)
- APPROXIMATE BORING LOCATION (SCG PROJECT NO. 22G196-1)
- PROPERTY LINE
- BUILDING OUTLINE
- PROPOSED INFILTRATION BASIN

NORTH

NOTE: CONCEPTUAL SITE PLAN PREPARED BY RGA ARCHITECTS.
AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH.

INFILTRATION TEST LOCATION PLAN
PROPOSED INDUSTRIAL BUILDINGS
APPLE VALLEY, CALIFORNIA

SCALE: 1" = 350'	SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: MK CHKD: DN	
SCG PROJECT 22G196-2	
PLATE 2	



DESCRIPTION OF MAP UNITS

Qc	**Colluvium (Holocene to late Pleistocene)** – Unconsolidated sand, gravel, and rock fragments flanking bedrock slopes. Deposited by down-slope creep or slope wash. Mapped where thick and continuous enough to obscure underlying bedrock.
Qw	**Wash deposits (late Holocene)** – Unconsolidated fine- to coarse-grained sand and fine gravel, very pale-brown (10YR 7/3), angular to sub-angular grains, derived from local bedrock. Subject to localized reworking and new sediment deposition during storm events.
Qoa	**Old alluvial deposits (late Pleistocene)** – Moderately consolidated brown (7.5YR 4/6) to strong-brown (7.5YR 5/4) fine- to medium-grained sand and fine to medium gravel of inactive alluvial fans. Surfaces are smooth, slightly varnished pavements composed of sand and angular gravel clasts. Gravel clasts range from fine to medium gravel, and consist of slightly metamorphosed sedimentary units of the Fairview Valley Formation, volcanic rocks of the Sidewinder Volcanic series, and minor plutonic clasts. Surfaces are slightly dissected by modern ephemeral minor washes. Soil development includes some clay coatings on sand and gravel clasts and moderate amounts of desert varnish. Minor pinhole porosity in upper few centimeters of soil is common. In the vicinity of Black Mountain, these deposits are mapped as Qia by Stone (2006).
Qvoa	**Very old alluvial deposits (early Pleistocene to late Miocene?)** – Moderately consolidated, strong-brown (7.5YR 5/6) to yellowish-red (5YR 5/6) sand and gravel deposits. Gravel clasts range from fine to coarse gravel with rare boulders, and consist of slightly metamorphosed sedimentary units of the Fairview Valley Formation, volcanic rocks of the Sidewinder Volcanic series, and minor plutonic clasts. Locally occurs northwest of Bell Mountain, and immediately southwest of Black Mountain in the northern third of the map area. Locally overlies both Cretaceous and Jurassic monzogranite units (Kmg, Jmg) at Black Mountain and occurs as gently dipping, dissected, elevated surfaces. Distinguished from older alluvial deposits by moderate to significant amounts of desert varnish and common caliche-coated gravel clasts. These deposits are mapped in the Black Mountain area as QToa by Stone (2006).
Kgd	**Biotite Granodiorite (Cretaceous)** – Consists of biotite granodiorite and hornblende-biotite granodiorite. Unit is fine- to medium-grained, and typically composed of plagioclase feldspar, potassium feldspar, quartz, with biotite. In thin section, samples have zoned plagioclase and secondary epidote and opaques. Feldspars have graphic intergrowths, with migrographic eutectic texture and features. Potassium feldspar and quartz formed with simultaneous magma crystallization. Microcline feldspar shows tartan twinning. Samples contain dark sphene, accessory apatitie, and possible actinolite (D.M. Morton, personal communication, 2007). Unit is exposed in the north half of the map near the Apple Valley County Airport and at Bell Mountain and vicinity. In hand specimen, granodiorite contains large gray potassium feldspar phenocrysts, up to 8 mm in long dimension. Weathered unit is medium gray color; surfaces are light gray
Kmg	**Monzogranite (Cretaceous)** – Consists of fine-grained to aplitic monzogranite. Unit is light yellowish-gray. In thin section, contains biotite, late-phase secondary muscovite, with potassium feldspar and plagioclase twinning. Samples also contain substantial plain light quartz, with occasional pyrite opaques and zircon (D.M. Morton, personal communication, 2007). This unit is mapped in the northeast portion of the map area, within the Sidewinder Valley area. It is poorly exposed, and generally forms small, low-lying weathered jagged and blocky outcrops, with local spheroidally weathered boulders of coarser grain size. Sparse outcrops of large boulders of monzogranite are found near active washes in the northeast map area.
Jslr	**Laminated rhyolite (Late to Middle Jurassic)** – Consists of very fine-grained, laminated porphyritic rhyolite. Unit is slightly metamorphosed, and, in thin section, consists of feldspar, weathered biotite, microcline feldspar with tartan twinning, and plagioclase phenocrysts (D.M. Morton, personal communication, 2007). Typical outcrops are moderate-brown to dark yellowish-brown weathered color, and form blocky, jagged, resistant outcrops. Fresh surfaces are typically light yellowish-gray to light bluish-gray with common thin laminations. Unit is exposed in the central portion of the map, north of the Apple Valley County Airport, as well as in small, isolated outcrops north of Bell Mountain and Catholic Hill.

SOURCE: "GEOLOGIC MAP OF THE APPLE VALLEY NORTH 7.5' QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA" BY JANIS L. HERNANDEZ, AND SIANG S. TAN, 2007.

GEOLOGIC MAP

PROPOSED INDUSTRIAL BUILDINGS

APPLE VALLEY, CALIFORNIA

SCALE: 1" = 2000'

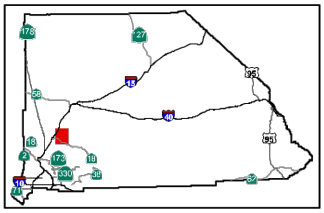
DRAWN: MK
CHKD: RGT

SCG PROJECT
22G196-2

PLATE 3

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL

San Bernardino County Land Use Plan
GENERAL PLAN
Geologic Hazard Overlays


SAN BERNARDINO COUNTY
MAP LOCATION

EH31 C
Apple Valley North

Generalized Liquefaction Susceptibility

- Low
- Medium
- High

Earthquake Fault Zones

- Earthquake Fault Zone Boundary
- County Designated Fault Zones

Cities

Generalized Landslide Susceptibility

- Low to moderate
- Moderate to high
- Mapped, Existing Landslide
- Rockfall/Debris-Flow Hazard Area (Forest Falls Only)

SOURCE: "SAN BERNARDINO COUNTY LAND USE PLAN, GEOLOGIC HAZARD OVERLAYS, APPLE VALLEY NORTH QUADRANGLE" PUBLISHED BY SAN BERNARDINO COUNTY LAND USE SERVICES.

HAZARD MAP

PROPOSED INDUSTRIAL BUILDINGS

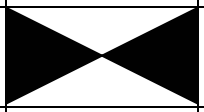
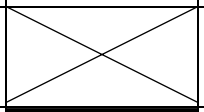
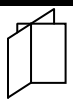
APPLE VALLEY, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: MK CHKD: DN	
SCG PROJECT 22G196-2	
PLATE 4	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL

BORING LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB		SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH: Distance in feet below the ground surface.

SAMPLE: Sample Type as depicted above.

BLOW COUNT: Number of blows required to advance the sampler 12 inches using a 140 lb hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to push the sampler 6 inches or more.

POCKET PEN.: Approximate shear strength of a cohesive soil sample as measured by pocket penetrometer.

GRAPHIC LOG: Graphic Soil Symbol as depicted on the following page.

DRY DENSITY: Dry density of an undisturbed or relatively undisturbed sample in lbs/ft^3.

MOISTURE CONTENT: Moisture content of a soil sample, expressed as a percentage of the dry weight.

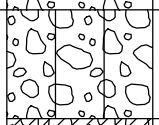
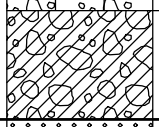
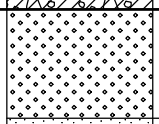
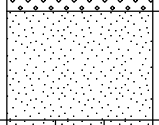
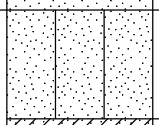
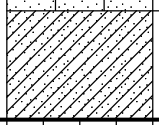
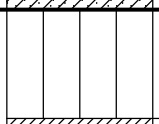
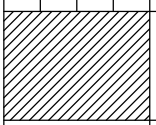
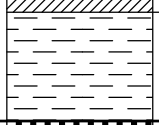
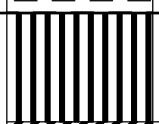
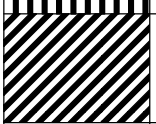
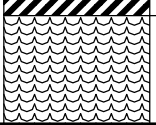
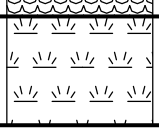
LIQUID LIMIT: The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT: The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE: The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR: The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	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 SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-1

JOB NO.: 22G196-1
PROJECT: Proposed Industrial Building
LOCATION: Apple Valley, California

DRILLING DATE: 6/6/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Michelle Esparza

WATER DEPTH: Dry
CAVE DEPTH: 13 feet
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		7			ALLUVIUM: Light Brown Silty fine to coarse Sand, trace Calcareous veining, trace fine Gravel, loose to very dense-dry to damp		1					
		56			@ 3½ feet, trace fine to coarse Gravel		3					
5		79/9"					4					
		50/4"					3					
10					Light Brown Silty fine to medium Sand, little coarse Sand, trace fine Gravel, very dense-damp							
		50/5"					3					
15												
		50/3"					3					
20												
					Boring Terminated at 22'							

TBL 22G196-1.GPJ SOCALGEO.GDT 7/1/22

TEST BORING LOG

PLATE B-1

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-1

JOB NO.: 22G196-1
PROJECT: Proposed Industrial Building
LOCATION: Apple Valley, California

DRILLING DATE: 6/6/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Michelle Esparza

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
5		44			ALLUVIUM: Red Brown Silty fine to medim Sand, little coarse Sand, trace Calcareous veining and nodules, slightly cemented, dense to very dense-damp		3					
10		50/5"					3					
		50/3"					3			28		
					Boring Terminated at 12'							

TBL 22G196-1.GPJ SOCALGEO.GDT 7/1/22

TEST BORING LOG **PLATE B-2**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-2

JOB NO.: 22G196-1
PROJECT: Proposed Industrial Building
LOCATION: Apple Valley, California

DRILLING DATE: 6/6/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Michelle Esparza

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					ALLUVIUM: Light Red Brown Silty fine to coarse Sand, trace fine Gravel, trace fine root fibers, trace to little Calcareous nodules, dense to very dense-damp							
5		30					2					
		50/5"			@ 8½ feet, little fine Gravel		4					
10		50/3"					4			20		
					Boring Terminated at 12'							

TBL 22G196-1.GPJ SOCALGEO.GDT 7/1/22

TEST BORING LOG **PLATE B-3**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-3

JOB NO.: 22G196-1
PROJECT: Proposed Industrial Building
LOCATION: Apple Valley, California

DRILLING DATE: 6/6/22
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Michelle Esparza

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
5		50			ALLUVIUM: Red Brown Silty fine to medium Sand, trace Clay, trace to little coarse Sand, little Calcareous nodules, dense to very dense-damp		3					
10		47					4					
		50/5"			Light Brown Silty fine to coarse Sand, trace fine Gravel, very dense-damp		3			20		
					Boring Terminated at 12'							

TBL 22G196-1.GPJ SOCALGEO.GDT 7/1/22

TEST BORING LOG **PLATE B-4**