Due Diligence Geotechnical Evaluation Report for a 32,000 square foot Industrial Development 15932-15942 Minnesota Ave, Paramount, California, 90723.

PN 22003-00
February 8, 2022

KCG KLING Consulting Group, Inc.

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Mr. Adam Lentz
Madison Capital Management LLC
450 Newport Center Drive, Suite 250
Newport Beach, California 92660

Subject: Due Diligence Geotechnical Evaluation Report for a 32,000 square foot Industrial Development **15932-15942 Minnesota Ave, Paramount, California, 90723.**

Dear Mr. Lentz,

At your request and authorization, Kling Consulting Group, Inc. (KCG) has performed a due diligence geotechnical evaluation report for the subject property located at 15932-15942 Minnesota Ave, Paramount, California. (**Figure 1 - Site Location Map**). The purpose of our evaluation is to review site geologic/geotechnical conditions and assess constraints for the development of the site. Subsurface exploration and laboratory testing were not performed as a part of this evaluation report.

We expect our findings and opinions will serve as a helpful guide during your decision-making process to acquire and develop the property and aid in your development of preliminary costs and budgets for the project.

We appreciate this opportunity to be of continued service and to work with you on this project. Should you have any questions regarding this report, please do not hesitate to call.

Respectfully,

KLING CONSULTING GROUP

Sean M. Webb
Staff Geologist/Engineer

Henry F. Kling
Principal Geotechnical Engineer
GE 2205 Expires 3/31/22

Jeffrey P. Blake
Associate Engineering Geologist
CEG 2248 Expires 10/31/23

Dist: (3) one electronic PDF

TABLE OF CONTENTS

Attachments:

1.0 INTRODUCTION

1.1 Site Description

The subject site is located at 15932, 15934, 15936, 15939 and 15942 Minnesota Avenue, Paramount, California. The Los Angeles County Assessor's office identifies the site as Assessor Parcel Numbers (APN) 7102-013-017, 7102-013-018, 7102-013-019, 7102-013-020. The site location (Longitude -118.16627°, Latitude 33.8882°) and surrounding area are shown in **Figure 1**.

The existing parcels are roughly 32,000 in square feet and surrounded by existing industrial developments. The site topography is level. Currently, several single-story industrial buildings occupy the site. Based on a review of historic aerial photos (NETR, 2010) dating back to 1954, the site was utilized as open pasture and farmland until the early 1960s, when the existing industrial buildings were constructed and remain essentially the same to the present day.

1.2 Proposed Development

Our understanding of the project is based on a conceptual site schematic provided by Madison Capital Management LLC. The proposed development will comprise a five-story industrial building with parking, loading areas and an office area within the northern portion of the site. Each floor area will range from 13,925 to 16,800 square feet.

1.3 Purpose and Scope

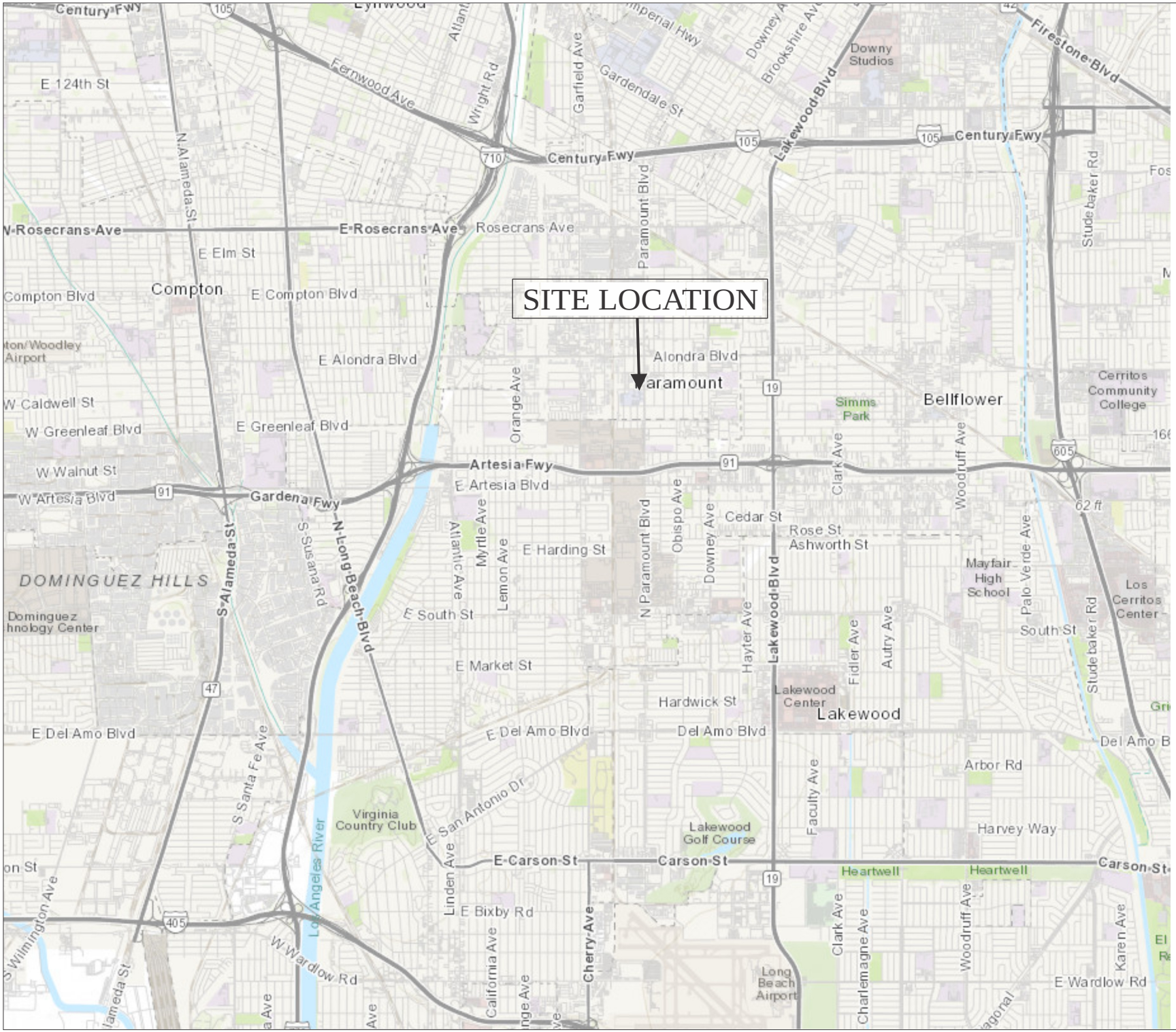
The purpose of our work is to evaluate the subsurface conditions as determined by published resources to the proposed development and provide preliminary feasibility level geotechnical recommendations to assist project planning. The scope of this evaluation included the following tasks:

- Review readily available geotechnical reports, literature, aerial photographs, and maps relevant to the site available from our library or from the public domain.

- Evaluate geological hazards and potential adverse geotechnical issues that could impact the site. The documents reviewed are listed in **Appendix A**.

- Data from our review was evaluated and analyzed to develop conclusions and preliminary recommendations for proposed improvements.

- This report presents our findings, conclusions, and preliminary and tentative recommendations for the proposed development.



Notes:

Scale: 1'': 5280'

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Madison Capital Management LLC

Address:
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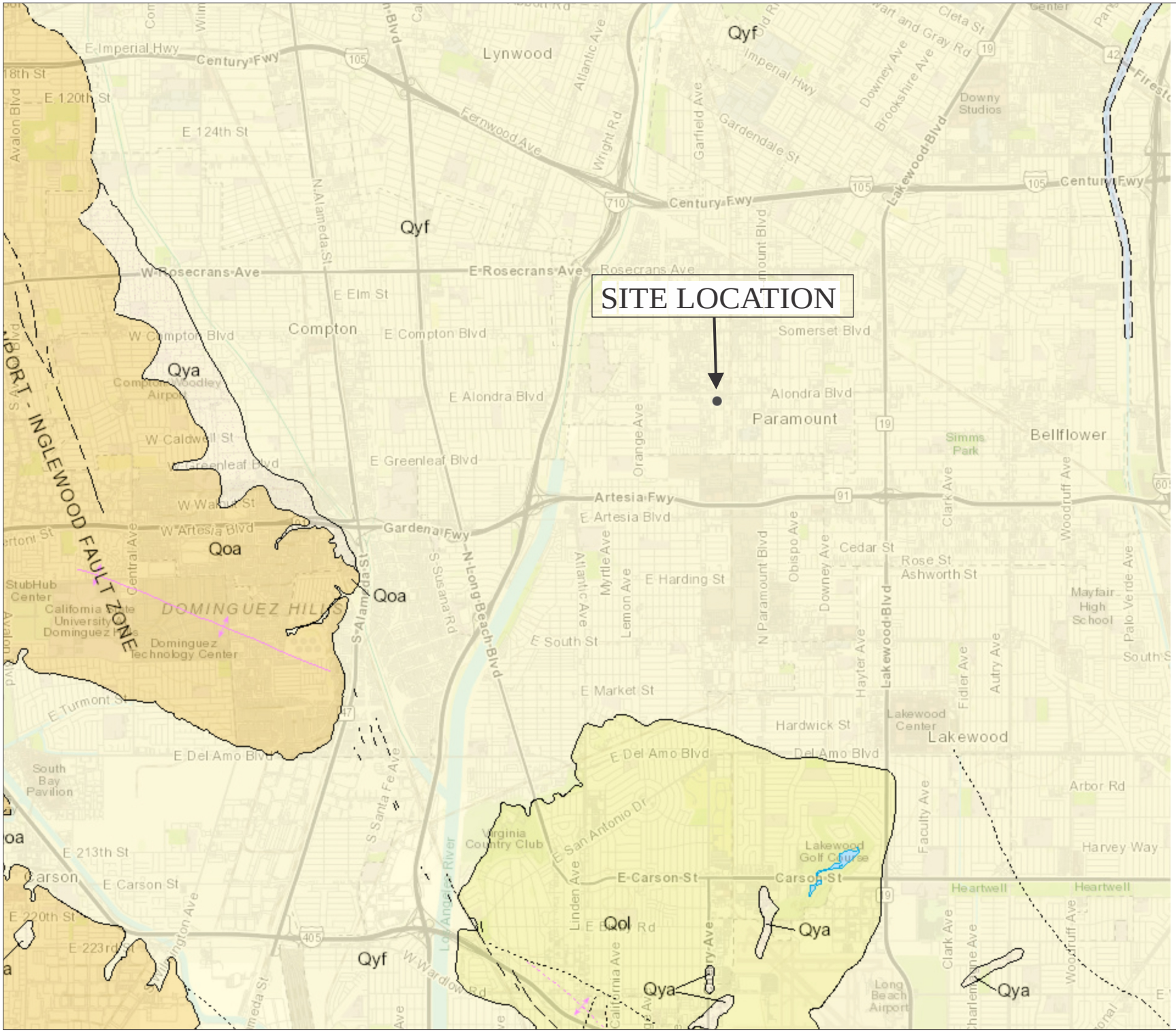
Exposure Location Map

Drawn: S.W	**Date:** 02/08/2022
P/N: 22003-00	**Figure:** 1



Notes:

Qyf - Young Alluvial Fan Deposits

Qf - Alluvial Fan Deposits

Qvof - Very Old Alluvial Fan Deposits

Qya - Young Alluvial Fan Deposits

Qyw - Young Alluvial Wash Deposits

Qls - Landslide Deposits

Scale: 1'': 5280'

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Regional Geology Map

Drawn: S.W.	**Date:** 02/08/2022
P/N: 22003-00	**Figure:** 2

2.0 GEOTECHNICAL FINDINGS

2.1 Regional Geologic Setting

The subject site is located in the regional coastal plain, also known as the Downey Plain. The Downey Plain is situated within the Peninsular Ranges within Southern California and is bounded by the Santa Ana Mountains to the east and the Santa Monica Mountains to the north.

2.2 Site Geologic Units

The native soils underlying the surface of the subject site are expected to consist of Young Alluvial Fan Deposits of Quaternary age. A general description of these alluvial deposits is presented as follows:

Young Alluvial Fan Deposits (Qyf): Slightly consolidated to cemented, undissected to slightly dissected deposits of unsorted boulders, cobbles, gravel, and sand that form inactive parts of alluvial fans.

2.3 Engineering Properties and Characteristics

Soil conditions that typically exist at subject sites that can affect recommendations for site preparation, foundation design, and construction of the development include:

- Susceptibility to volume changes with fluctuations in water content (i.e., swelling soils, soil heave);
- The collapse in soil structure upon exposure to water infiltration
- Compressibility typically exhibited by saturated clays that display soft to medium stiff consistency when subjected to stress increase;
- Chemical and physical characteristics that could potentially react negatively to construction materials (i.e., sulfate attack on concrete and corrosion to metals);
- Cemented material and/or shallow bedrock

A discussion regarding the potential for the subsurface soil conditions described above to be present at the subject site is presented in the following subsections. The discussion presented in the following subsections is based on our research and experience. A site-specific field investigation will be required to confirm the existing subsurface conditions.

2.3.1 Expansive Soil Characteristics

We anticipate that subsurface soils will consist of interbedded sand, silt, and clay. While sandy soils are generally not susceptible to expansion, the potential exists that layers of expansive clay could be present at the foundation elevation. These layers should not be left in place or used as fill if any clay beds are encountered. Laboratory testing to evaluate expansion potential would be recommended as part of a design-level exploration

of the site. Until future testing is performed, the soil should be considered as having moderate potential for expansion.

2.3.2 Soil Collapse

The collapse potential of the subsurface soils is anticipated to be relatively low. However, subsurface exploration and laboratory testing are necessary to confirm underlying soils' collapse potential.

2.3.3 Soil Compressibility

The site soils should be considered moderately compressible when subjected to a stress (load) increase. However, subsurface exploration and laboratory testing are necessary to confirm underlying soil compressibility characteristics.

2.3.4 Corrosion

Soil Resistivity: We anticipate that subsurface soils would be moderate to severely corrosive to buried metals.

Sulfate Exposure: Subsurface soils should be assumed to have a moderate potential for sulfate attack on concrete. Laboratory testing should be performed on representative samples of the underlying soils to check the sulfate content.

2.3.5 Excavation Characteristics

Based on our experience with the regional alluvial deposits, we anticipate no cemented zones would be encountered during grading and that the earth material can be graded with relative ease using conventional equipment in good working order. We expect that site soils will be considered Type D soil, prone to raveling and collapse in deeper, unshored excavations.

2.4 Groundwater Conditions

The California Geologic Survey Seismic Hazard Zone Report indicates that the historically highest groundwater level is 8 feet below the existing ground surface. The California Department of Water Resources, Water Data Online Library, indicates the nearest groundwater well in the vicinity of the subject site is located 2.4 miles south on Candlewood Avenue, the highest ever recorded depth to groundwater at this well was 47 feet below ground surface (bgs) recorded in February 1997.

Based on the information provided, we do not expect groundwater to be a significant constraint to planned grading or construction of the above-grade development.

2.5 Surface Fault Rupture

No known active faults have been mapped across the site, and the site is not located within a designated Alquist-Priolo Earthquake Fault Zone or a Fault Zone in the Los Angeles County Geological Hazard Maps. Therefore, the potential for surface fault rupture at the site is expected to be low, and a surface fault rupture hazard evaluation is

not mandated for this site. The location of the closest active faults to the site was evaluated using the United States Geological Survey (USGS) Earthquake Hazards Program National Seismic Hazard Maps. The closest active faults to the site are the Puente Hills Blind Thrust Fault and Newport Inglewood faults, located approximately 1.5 and 6 miles from the site, respectively. Major regional faults with surface expression in proximity to the site are shown in **Figure 3**.

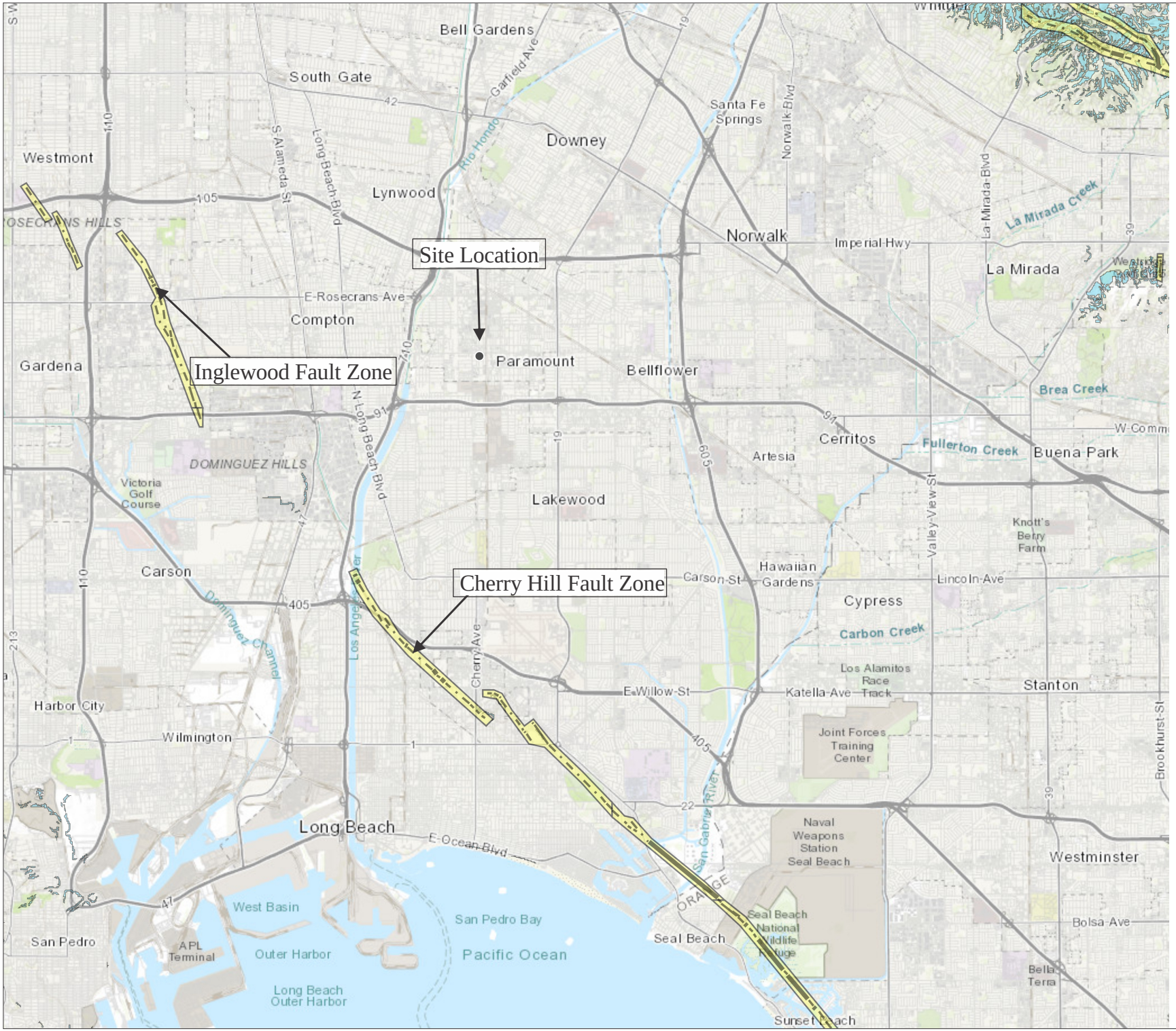
2.6 Seismicity and Ground Shaking

The principal seismic hazard to the site is ground shaking resulting from an earthquake along several major active and potentially active faults in southern California. The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. The site should be expected to experience strong ground shaking resulting from an earthquake occurring along one or more of the significant regional active faults (**Figure 3**). Accordingly, the project should be designed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117a. The 2019 edition of the CBC is the current edition of the code. Compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced.

The following parameters should be considered preliminary for design under the 2019 CBC:

2019 CBC Seismic Design Parameters

Site Class (Soil Profile)	D
Latitude	33.8881536
Longitude	-118.1162774
Short Period Spectral Acceleration, Ss:	1.632
1-Second Period Spectral Acceleration, S1:	0.584
Site Coefficient, Fa:	1.2
Site Coefficient, Fv:	1.716
Maximum Considered Earthquake Spectral Response Acceleration, SMS:	1.958
Maximum Considered Earthquake Spectral Response Acceleration, SM1:	1.002
Design Spectral Response Acceleration, SDS:	1.305
Design Spectral Response Acceleration, SD1:	0.668
Site modified peak ground acceleration PGA_M	0.837
Seismic Design Category	D



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Regional Fault Rupture Hazard Zone Map

Exploration Location Map

Drawn: S.W.	**Date:** 02/08/2022
P/N: 22003-00	**Figure:** 3

Note: A site specific ground motion analysis was not included in the scope of this evaluation.. Per ASCE 7-16, 11.4.8, structures on Site Class D with S_1 greater than or equal to 0.2 may require Site Specific Ground Motion Analysis. However, a site specific ground motion analysis may not be required based on exceptions listed in ASCE 7-16, 11.4.8. The project structural engineer should verify whether exceptions are valid for this site and if a Site Specific Ground Motion Analysis is required.

2.7 Liquefaction Potential

The State of California Geologic Survey Seismic Hazard Zone Map and the Los Angeles County Liquefaction Zone Map indicates the site is located within a liquefaction zone. The site is expected to be subject to liquefaction hazards. A site-specific liquefaction analysis will be required to evaluate the liquefaction potential.

2.8 Seismically-Induced Settlement

Seismically-induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily within low-density sandy soil due to a reduction in volume during and shortly after an earthquake event. Evaluation of the magnitude of seismically-induced settlement would be part of a site-specific subsurface exploration and evaluation. Considering the unconsolidated to semi-consolidated low cohesive soils expected beneath the site, seismically-induced settlement is anticipated to be a development constraint.

2.9 Seismically-Induced Lateral Displacements

The site could be susceptible to lateral spreading based on its potential to liquefy, as mentioned in section 2.7. A site-specific liquefaction analysis will be required to evaluate the potential for liquefaction and lateral spreading to occur.

2.10 Seismically-Induced Landsliding

The State of California Seismic Hazard Zone Map does not indicate the site is susceptible to seismically induced land sliding. The potential for seismically induced landsliding to occur at the site is considered very low due to the relatively flat topography and absence of significant slopes on or adjacent to the site. Slopes planned as part of the development should be engineered and constructed at a gradient of 2:1 (horizontal: vertical) or flatter.

2.11 Flooding

Federal Emergency Management Agency (FEMA) flood hazard layer map No. 06037C1820F (FEMA, 2008) indicates the project site is located within Zone X (0.2% Annual Chance Flood) designated as moderate to low-risk areas. As shown on **Figure 4**, *Flood Zone Hazard Map*, the site is **not** located within a special flood hazard area (1% Annual Flood Zone) flood hazard zone.

Earthquake-induced flooding can be caused by the failure of dams or other water-retaining structures due to earthquakes. According to the State of California Water Resources Dam Breach Inundation Map, the project site is **not** located within a flood impact zone. The nearest dam/reservoir is the Palos Verdes Reservoir, as indicated in **Figure 5**, *Palos Verdes Reservoir Inundation Map*. In the event of the catastrophic failure

Notes:

Scale: 1": 3500'

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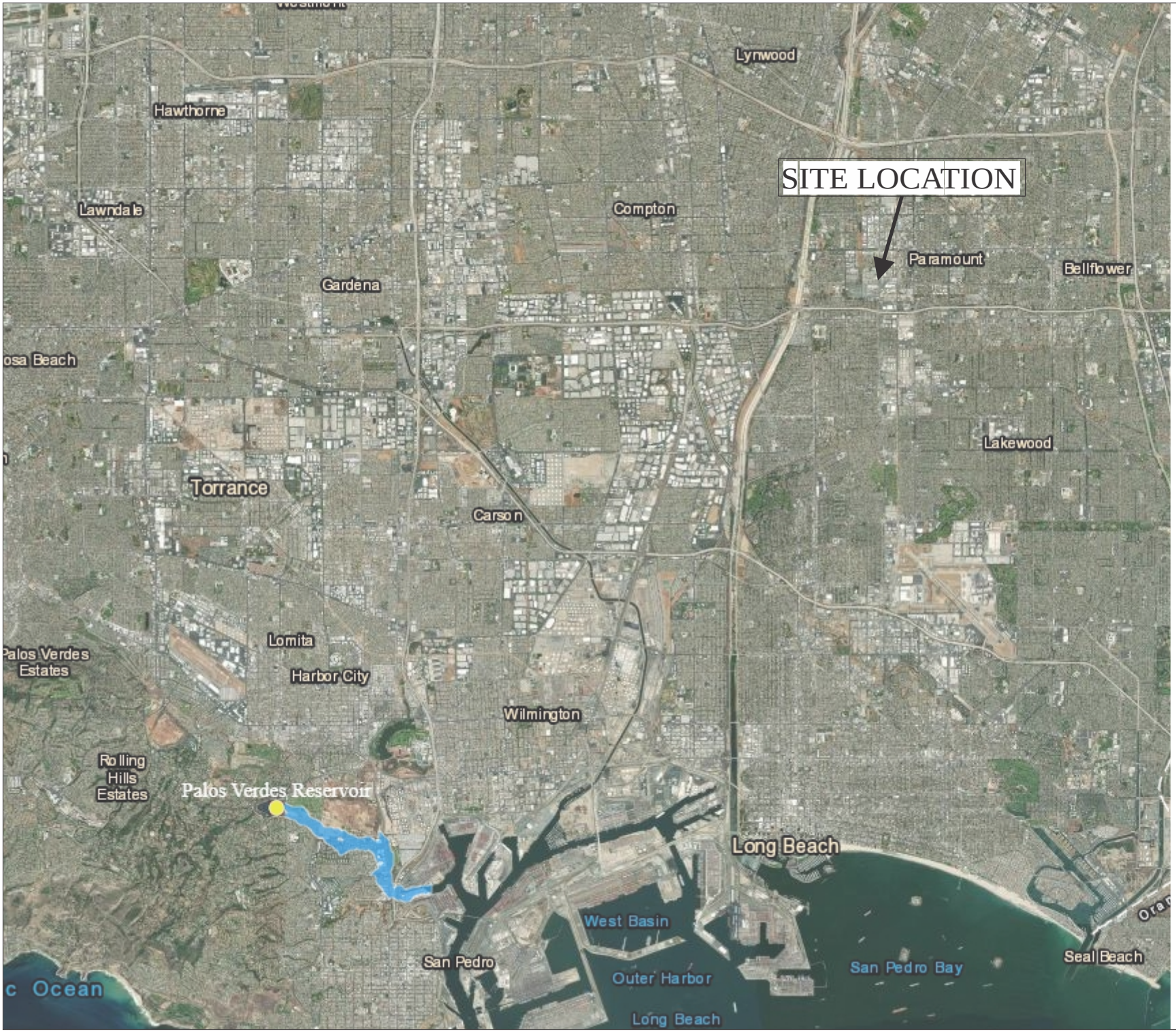
Tract 50387, Braunton

Exploration Location Map

Drawn: S.W	**Date:** 02/08/2022
P/N: 22003-00	**Figure:** 4



Notes:

Scale: 1'': 10,000'

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Palos Verdes Reservoir Flood Inundation Map
Exploration Location Map

Drawn: S.W.	**Date:** 02/08/2022
P/N: 22003-00	**Figure:** 5

of this dam, the subject site would not be affected by any flooding or other related damages. Catastrophic failure of this dam is expected to be an improbable event in that dam safety regulations exist and are enforced by the Division of Safety of Dams, Army Corp of Engineers, and Department of Water Resources. Inspectors may require dam owners to perform work, maintenance, or implement controls if issues are found with the safety of the dam.

2.12 Seiches and Tsunamis

Based on the absence of an enclosed water body near the site and the inland location away from any ocean, the potential for a seiche or tsunami to impact the site is considered remote/nil.

2.13 Methane

Our review of State of California Geologic Energy Management Division (CalGEM) records indicates the project site is not within a 500-foot radius of any active, inactive, or abandoned oil or natural gas well. In addition, the site is not located within an active or former well-field. Therefore, the potential for methane intrusion and mitigation requirements is considered low.

3.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

No evidence of adverse geological or geotechnical hazards was identified for the site in the course of review that would preclude the project's development as currently planned. Presented below is a summary of findings based upon the results of our due diligence geotechnical evaluation of the site:

- The site is not located in a designated Alquist-Priolo Earthquake Fault Zone or a designated geological hazard zone in Los Angeles County. The active fault nearest to the site with potential for surface rupture and generation of strong ground shaking is the Los Alamitos and Cherry Hill faults, located approximately 2.5 and 4 miles to the south, respectively.

- The site is located within an area shown as susceptible to seismically-induced liquefaction, and lateral spreading. Liquefaction assessment of the site will require in-situ measurements and observations obtained during a field investigation. A site-specific liquefaction analysis will need to be performed to confirm existing site conditions.

- The site is underlain by Holocene to late Pleistocene age alluvial fan deposits. The unit consists of slightly consolidated to cemented, undissected to slightly dissected deposits of unsorted boulders, cobbles, gravel, and sand that form inactive parts of alluvial fans.

- Historic groundwater levels recorded in nearby wells monitored by the California Department of Water Resources depths to the groundwater table between 47 feet below ground surface. The California Geologic Survey Seismic Hazard map indicates that the historic highest groundwater level is 8 feet below the existing ground surface. Groundwater is not anticipated to be a constraint to site grading or grade construction.

However, if subterranean levels are planned, groundwater could be a potential constraint.

Based on our geotechnical evaluation, the project appears feasible from a geotechnical perspective. With appropriate remedial grading and stiffened foundation systems, the subject site can likely be developed for structures supported by relatively shallow foundation systems without the need for extensive ground improvement. This evaluation did not include a subsurface exploration. Future design-level subsurface exploration, sampling, laboratory testing, and engineering analyses will be required to evaluate subsurface conditions further and develop geotechnical design recommendations.

4.0 PROFESSIONAL LIMITATIONS

Geotechnical services are provided by KCG in accordance with generally accepted professional engineering and geologic practice in the area where these services are to be rendered. Client acknowledges that the present standard in the engineering and geologic and environmental profession does not include a guarantee of perfection and, except as expressly set forth in the conditions above, no warranty, expressed or implied, is extended by KCG.

Geotechnical reports are based on the project description and proposed scope of work as described in the proposal. Our conclusions and recommendations are based on the results of the field, laboratory, and office studies, combined with an interpolation and extrapolation of soil conditions as described in the report. The results reflect our geotechnical interpretation of the limited direct evidence obtained. Our conclusions and recommendations are made contingent upon the opportunity for KCG to continue to provide geotechnical services beyond the scope in the proposal to include all geotechnical services. If parties other than KCG are engaged to provide such services, they must be notified that they will be required to assume complete responsibility for the geotechnical work of the project by concurring with the recommendations in our report or providing alternate recommendations.

It is the reader's responsibility to verify the correct interpretation and intention of the recommendations presented herein. KCG assumes no responsibility for misunderstandings or improper interpretations that result in unsatisfactory or unsafe work products. It is the reader's further responsibility to acquire copies of any supplemental reports, addenda, or responses to public agency reviews that may supersede recommendations in this report.

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

1. American Society for Testing and Materials (ASTM), 2018, Annual Book of ASTM Standards, Volume 04.08, Construction: Soil and Rock (I), Standards D 420 - D 5876

2. American Concrete Institute, 2014, Manual of Concrete Practice, Volume 1 through 6.

3. California Building Standards Commission, 2019, California Building Code, Volume 2.

4. California Department of Conservation, 2019, Well Finder, https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx, accessed January 2022.

5. California Department of Water Resources, 2015, California Dam Breach Inundation Maps, https://fmds.water.ca.gov/maps/damim/, accessed January 2022.

6. California Department of Water Resources, 2019, Groundwater Level Data, http://www.water.ca.gov/waterdatalibrary/, accessed January 2022.

7. California Geologic Survey (CGS), Compilation of Quaternary Surficial Deposits, https://maps.conservation.ca.gov/cgs/qsd/app/, accessed January 2022.

8. California Geological Survey (CGS), Earthquake Zones of Required Investigation Web Application, https://maps.conservation.ca.gov/cgs/eqzapp/app/, accessed January 2022.

9. County of Los Angeles, Property Assessment Information System, https://maps.assessor.lacounty.gov, accessed January 2022.

10. Federal Emergency Management Agency (FEMA), 2008, Flood Map Service Center. Map Number 06037C1820F, accessed January 2022.

11. Google Earth. (January 3, 2020). Paramount. 33.88860, -118.16664, Accessed January 2022.

12. Historical Aerials (NETR Online), 2020, website: https://www.historicaerials.com/viewer, accessed January 2022.

APPENDIX A

REFERENCES (CONTINUED)

13. Structural Engineers Association of California (SEAC)/Office of Statewide Health Planning and Development OSHPD: Seismic Design Maps: https://oshpd.ca.gov/seismicmaps.org, accessed January 2022.

14. USGS, National Geologic Map Data Base (NGMDB), https://ngmdb.usgs.gov/mapview/, accessed January 2022.

15. USGS, TopoView, https://ngmdb.usgs.gov/topoview/, accessed January 2022.

16. USGS, U.S. Quaternary Faults, https://www.usgs.gov/natural-hazards/earthquake-hazards/faults, accessed January 2022.

17. USGS, 2019, US Seismic Design Maps, accessed January 2022., URL: https://earthquake.usgs.gov/designmaps/us/application.php?