

Appendix E

Phase I ESA

**Appendix D:
Phase I ESA**

Phase I Environmental Site Assessment

Riverside Tennis Center

5695 Glenhaven Avenue

Riverside, Riverside County, California

June 11, 2015

Terracon Project No. 60157786



Prepared for:

Oakmont Senior Living

Corona, California

Prepared by:

Terracon Consultants, Inc.

Irvine, California

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials

June 11, 2015



Oakmont Senior Living
8779 Soothing Court
Corona, CA 92883

Attn: Mr. Wayne Sant
P: (714) 270-1980
E: wayne.sant@oakmontsl.com

Re: Phase I Environmental Site Assessment
Riverside Tennis Center
5695 Glenhaven Avenue
Riverside, Riverside County, California 92506
Terracon Project No. 60157786

Dear Mr. Sant:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced site. This assessment was performed in accordance with Terracon Proposal No. P60150172 dated April 28, 2015.

We appreciate the opportunity to be of service to you on this project. In addition to Phase I services, our professionals provide geotechnical, environmental, construction materials, and facilities services on a wide variety of projects locally, regionally and nationally. For more detailed information on all of Terracon's services please visit our website at www.terracon.com. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
Terracon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "JS", followed by a horizontal line.

Jennifer S. Van
Staff Environmental Scientist

A handwritten signature in blue ink, appearing to read "CAP", followed by a horizontal line.

Carl A. Parten
Principal / Office Manager II

Attachments

Terracon Consultants Inc. 2817 McGaw Ave. Irvine, CA 92614

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EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment (ESA) was performed in accordance with Terracon Proposal No. P60150172 dated April 28, 2015, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA was conducted under the supervision or responsible charge of Carl A. Parten, Environmental Professional. Jennifer S. Van performed the site reconnaissance on May 7, 2015.

Findings

A summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Site Description and Use

The site is located at 5695 Glenhaven Avenue in Riverside, Riverside County, California and consists of an approximately 5.27-acre tract of land improved with two recreational buildings; 2,100 square-feet (SF) and 2,736 SF, one 36 SF equipment building, eight tennis courts, an asphalt-paved parking lot and utilities. During the site reconnaissance, the site was observed to be unoccupied.

Historical Information

Based on a review of historical information, the site consisted of undeveloped land with a creek the western portion of the site from as early as 1901 through the late 1930s, when disturbed soils were observed on-site; indicative of historical quarry operations. By 1961, the site was developed with a recreational center which included two buildings, two pools, tennis courts and basketball courts, with exterior renovations including the construction of additional tennis courts in the mid-1970s. The existing telecommunications building located on the southern portion of the site was developed in the mid-1970s and has remained relatively unchanged through the present.

The surrounding properties consisted of undeveloped, agricultural and/or vacant land from as early as 1901 through residential development commenced to the east and south of the site in the mid-1960s and have remained relatively unchanged through the present. The existing residential neighborhood to the adjacent north of the site was developed in the mid-2000s. The property to the adjacent west has remained undeveloped and/or vacant land from 1901 through the late 2000s, when the property was graded and remained relatively unchanged through the present.

Records Review

Selected federal and state environmental regulatory databases as well as responses from state and local regulatory agencies were reviewed. Based on a review of the regulatory database, the site and surrounding properties were not identified within the specified search radii.

Site Reconnaissance

During the site reconnaissance, interior floor drains, one pole-mounted transformer, approximately two cubic yards of debris (concrete rubble, PVC piping, wood, and gardening pots), two filled pools, and three six inch circular patches were observed. Indications of RECs were not observed.

Adjoining Properties

The property to the adjacent north consists of a residential neighborhood (5652-5670 Glen Cliff Drive and 5640-5668 Queen Drive). Glenhaven Avenue abuts the site to the east followed by a residential neighborhood (5650-5668 Glenhaven Avenue and 2090 Benedict Avenue). Alessandro Boulevard abuts the site to the south followed by a residential neighborhood (5710-5730 Alessandro Boulevard). The property to the adjacent west consists of graded vacant lots. Indications of RECs were not observed with the adjoining properties.

Additional Services

Per the agreed scope of services specified in the proposal, additional services (e.g. asbestos survey and limited lead-based paint survey) were conducted. The asbestos survey and lead-based paint survey were performed concurrently with the Phase I ESA and are presented under a separate cover.

Prior Report

Southern California Geotechnical (SCG) completed a Geotechnical Feasibility Study for the site in June 2014. SCG advanced a total of six soil borings and three test pits at depths ranging from 7 to 35 feet bgs. Based on a review of the boring logs, fill was observed on-site to estimated depths ranging from 1 to 23 feet below grade surface (bgs). Trace concrete fragments, asphaltic concrete fragments, and wood chips were observed in soil borings (B-1 & B-2) located on the central and northern portion of the site. Debris included concrete, brick, wood, asphalt, and rebar were observed in test pits located on the west portion of the site. The report did not indicate the presence of odors or staining in the exploratory borings or test pits, with the exception of some apparent iron oxide staining at depths ranging from 1 to 21 feet bgs observed in the soil borings located on the eastern portion of the site. Based on a review of the SCG geotechnical report, the presence of the fill was observed on the northern, central, southern and western portions of the site to a depth of as much as 23 feet bgs. SCG indicated fill was detected at the greatest depths on the southern and western portions of the site and recommended locating the proposed structure on the northeast portion of the site to minimize the amount of remedial grading. SCG recommended that the fill material be removed prior to the construction of the proposed on-site structure. Based on the nature of the reported

undocumented fill and presence of construction-related debris, the fill material represents a REC in connection with the site. Refer to Appendix C for Geotechnical Feasibility Study.

Opinions and Conclusions

We have performed a Phase I ESA consistent with the procedures included in ASTM Practice E 1527-13 at 5695 Glenhaven Avenue, Riverside, Riverside County, California, the site. The following REC was identified in connection with the site:

- The existing on-site undocumented fill and presence of construction related debris.

Recommendations

Based on the identified undocumented fill and construction-related debris, Terracon recommends if soil or groundwater at the site is to be disturbed during future excavations, proper procedures should be followed with respect to worker health and safety, and any affected soil or groundwater encountered should be properly managed and disposed in accordance with local and state regulations. In addition, Terracon recommends that a qualified environmental professional oversee excavation activities of the undocumented backfill reported on the western and southwestern portions of the site to identify the need for alternative soil management or sampling and analysis.

1.0 INTRODUCTION

1.1 Site Description

Site Name	Riverside Tennis Center
Site Location/Address	5695 Glenhaven Avenue, Riverside, Riverside County, California
Land Area	Approximately 5.27-acre
Site Improvements	The site is improved with two recreational buildings; 2,100 square-feet (SF) and 2,736 SF, one 36 SF equipment building, eight tennis courts, an asphalt-paved parking lot and utilities.

The site location is depicted on Exhibit 1 of Appendix A, which was reproduced from a portion of the USGS 7.5-minute series topographic map. A Site Diagram of the site and adjoining properties is included as Exhibit 2 of Appendix A. Acronyms and terms used in this report are described in Appendix F.

1.2 Scope of Services

This Phase I ESA was performed in accordance with our Terracon Proposal No. P60150172 dated April 28, 2015, and was conducted consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The purpose of this ESA was to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, user-provided information, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are noted in the applicable sections of the report.

- Asbestos Survey
- Lead-based Paint Survey

1.3 Standard of Care

This ESA was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during performance, a client-driven scope of work, or inability to review information not received by the report date. Where appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I ESAs, such as the one performed at this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this ESA. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated – but not eliminated – through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

1.4 Additional Scope Limitations, ASTM Deviations and Data Gaps

Based upon the agreed-on scope of services, this ESA did not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e. evaluation of the presence of vapors within a building structure), business environmental risk evaluations, or other services not particularly identified and discussed herein. Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request. Pertinent documents are referred to in the text of this report, and a separate reference section has not been included. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this ESA was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This ESA was further limited by the following:

- At the time of the site reconnaissance, the 6'x6' building on the southern portion of the site was locked and inaccessible.
- Based on observations made during the site reconnaissance, three 6-inches soil borings were observed. The purpose of these borings was not identified based on interviews conducted with the current owner.

Based on a review of the historical information, regulatory databases, and local agencies inquiries, the unknown nature of these borings does not appear to represent a significant data gaps have been determined.

An evaluation of the significance of limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an

evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

1.5 Reliance

This ESA report is prepared for the exclusive use and reliance of Oakmont Senior Living. Use or reliance by any other party is prohibited without the written authorization of Oakmont Senior Living and Terracon Consultants, Inc. (Terracon).

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ESA report, and Terracon's Agreement for Services. The limitation of liability defined in the Agreement for Services is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

1.6 Client Provided Information

Prior to the site visit, Mr. Sant, was asked to provide the following user questionnaire information as described in ASTM E1527-13 Section 6.

Client Questionnaire Responses

Client Questionnaire Item	Client Did Not Respond	Client's Response	
		Yes	No
Specialized Knowledge or Experience that is material to a REC in connection with the site.			X
Actual Knowledge of Environmental Liens or Activity Use Limitations (AULs) that may encumber the site.			X
Actual Knowledge of a Lower Purchase Price because contamination is known or believed to be present at the site.			X
Commonly Known or Reasonably Ascertainable Information that is material to a REC in connection with the site.			X
Obvious Indicators of Contamination at the site.			X

Terracon's consideration of the client provided information did not identify RECs. A copy of the questionnaire is included in Appendix C.

2.0 PHYSICAL SETTING

Physical Setting

Physical Setting Information		Source
Topography (Refer to Appendix A for an excerpt of the Topographic Map)		
Site Elevation	Ranging from 890 to 1,265 feet (NGVD) throughout the site.	USGS Topographic Map, Riverside East Quadrangle, California 1967, revised 1980
Surface Runoff/ Topographic Gradient	Sloping towards the southeast	
Closest Surface Water	Siphon Gage Aqueduct, approximately 1.870 feet east of the site.	
Soil Characteristics		
Soil Type and Description	<p>Buren fine sandy loam – this soil is located on the eastern portion of the site. Moderately well drained soils with 8 to 15 percent slopes. A typical soil profile consists of 0 to 12 inches of fine sandy loam, 12 to 37 inches of loam underlain by 37 to 57 inches of cemented soils.</p> <p>Fallbrook rocky sandy loam – this soil is located on the west portion of the site. Well drained soils with 15 to 20 percent slopes. A typical soil profile consists of 0 to 8 inches of sandy loam, 8 to 18 inches of sandy clay loam underlain by 18 to 22 inches of bedrock.</p>	Riverside County, CA USDA-NRCS Web Soil Survey issued Site Soil Survey, Version 2, dated December 9, 2013
Geology/Hydrogeology		
Formation	Plutonic rocks	Geological Map of California, Dated 2010
Description	Mesozoic granite, quartz monzonite, granodiorite and quartz diorite.	
Estimated Depth to First Occurrence of Groundwater	Greater than 100 feet bgs at a facility located approximately 1.75 miles to the west of the site.	Geotracker.waterboards.ca.gov Mobil #18-D7Y 6608 Indiana Avenue, Case No. 200420661
*Hydrogeologic Gradient	Not known - may be inferred to be parallel to topographic gradient (primarily to the southeast).	

* The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources to develop a history of the previous uses of the site and surrounding area, in order to help identify past uses for indications of RECs. Copies of selected historical documents are included in Appendix C.

3.1 Historical Topographic Maps, Aerial Photographs, Sanborn Maps

Readily available historical USGS topographic maps, selected historical aerial photographs (at approximately 10 to 15 year intervals) and historical fire insurance maps produced by the Sanborn Map Company were reviewed to evaluate land development and obtain information concerning the history of development on and near the site. Reviewed historical topographic maps, aerial photographs and Sanborn Maps are summarized below.

Historical fire insurance maps produced by the Sanborn Map Company were requested from EDR to evaluate past uses and relevant characteristics of the site and surrounding properties. EDR provided Sanborn maps as summarized below. Based upon inquiries to the above-listed Sanborn provider, Sanborn maps were not available for the site.

- Topographic map:
 - Riverside, California, published **1901** (1:62,500)
 - Riverside, California, published **1947** (1:50,000)
 - Riverside East, California, published **1953** and **1967** (1:24,000)
 - Riverside East, California, published 1967, photorevised **1973** and **1980** (1:24,000)
- Aerial photograph: USGS and USDA, **1938, 1949, 1953, 1967, 1975, 1978, 1985, 1989, 1994, 2005, 2006, 2009, 2010** and **2012**, 1"=500'

Historical Topographic Maps and Aerial Photographs

Direction	Description
Site	Undeveloped land, apparent creek on the western portion of the site and road on the southern portion of the site (1901); <i>disturbed soils; indicative of an apparent quarry</i> , road on the southeast portion of the site (1938-1953); developed with two commercial buildings, two pools, four tennis courts and one basketball court (1967); basketball court on the northern portion of the site has been cleared, developed with an additional tennis court on the north portion of the site (1975); developed with a total of eight existing tennis courts and existing building on the southern portion of the site (1978-2010); the two pools appeared to be filled (2012).
North	Undeveloped land and apparent creek (1901); disturbed soils; indicative of a quarry (1938-1953); graded vacant land (1967-1994); developed with existing residential neighborhood (2005-2012).

Direction	Description
East	A road abuts the site followed by undeveloped land (1901); agricultural land (1938-1953); agricultural land has been cleared, developed with existing residential neighborhood (1967-2012).
South	A road followed by undeveloped land (1901); agricultural land (1938-1953); developed with existing residential neighborhood (1967-2012).
West	Undeveloped land (1901-2006); graded vacant land (2009-2012).

Based on a review of the historical aerial photographs, evidence of quarry activities on the western portion of the site was observed from the late 1930s through the 1950s; however, indication of deep excavations or areas of likely potential filling was not readily apparent. A review of the historical information and regulatory databases, evidence of use of petroleum hydrocarbons, underground storage tanks, spills or releases was not identified to have been associated with the site. Refer to Section 3.7 regarding the review of a prior geotechnical report and discussion of fill material observed on the site.

3.2 Historical City Directories

The Cole Information Services, Haines & Company, Inc., Pacific Telephone, and Luskeys Brothers & Co. city directories used in this study were made available through EDR (selected years reviewed: 1921 through 2013) and were reviewed at approximate five-year intervals, if readily available. Street listings were not available prior to 1966. The current street address for the site was identified as 5695 Glenhaven Avenue.

Historical City Directories

Direction	Description
Site	5695 Glenhaven Avenue – Riverside Tennis Club (1966-1981); Paradise Luau & Catering, Riverside Tennis Club (1986); Riverside Swim and Tennis Center (1996-2003); Riverside Tennis Center (2008); no listings (2013).
North	5652-5670 Glencliff Drive – No listings (1966-2013). 5640-5668 Queen Drive – No listings (1966-2013).
East	2091 Benedict Avenue – Residential listings (1966-2013). 5650 and 5668 Glenhaven Avenue – No listings (1966-2013).
South	5710-5730 Alessandro Boulevard – No listings (1966-2013).
West	Unaddressed vacant land

3.3 Site Ownership

Based on a review of information obtained from the City or County assessor's records, the current site owner is listed as Steven T. Wuo.

3.4 Title Search

At the direction of the client, a title search was not included as part of the scope of services. Based on a review of the Preliminary Report for the site, prepared by Chicago Title Company, dated April 21, 2015, the current owner is listed as Steven T. Wuo. The small building on the southern portion of the site appears to be associated with the Pacific Telephone and Telegraph Company, dated August 9, 1974.

3.5 Environmental Liens and Activity and Use Limitations

Environmental lien and activity and use limitation records recorded against the site were not provided by the client. Based on a review of the Preliminary Report for the site, prepared by Chicago Title Company, dated April 21, 2015, environmental liens and activity and use limitations were not identified.

3.6 Interviews Regarding Current and Historical Site Uses

The following individuals were interviewed regarding the current and historical use of the site.

Interviewees

Interviewer	Interviewee/Phone #	Title	Date
Jennifer Van	Mr. Steve T. Wuo / 951-686-6196	Owner	May 12, 2015
Jennifer Van and Sami Noaman	Mr. Wayne Sant / (714) 270-1980	Prospect Purchaser Representative	May 13, 2015

Terracon interviewed Mr. Steve T. Wuo subsequent to the site reconnaissance. Mr. Wuo indicated he has been associated with the site as the owner for the past four years. Mr. Wuo indicated the site has been vacant since 2014. Mr. Wuo indicated the 6'x6' building on the southern portion of the site may be associated with telecommunications equipment and was not able to provide access to the small building. Mr. Wuo was not aware of septic tanks, water wells, grease traps, petroleum pipelines, USTs or ASTs associated with the site. Mr. Wuo was not aware of environmental concerns associated with the site or in the site vicinity. In addition, Mr. Wuo was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability or potential environmental concerns in connection with the site.

Subsequent to the site reconnaissance, Terracon interviewed Mr. Wayne Sant with Oakmont Senior Living regarding the soil borings and on-going geotechnical investigation conducted at the site. According to Mr. Sant, the observed soil borings are not associated with the on-going geotechnical exploration activities at the site conducted by Southern California Geotechnical. He also indicated that concrete debris was reportedly identified during test pits excavation. Mr.

Sant was not aware of the source of this concrete debris. Terracon attempted contacting Southern California Geotechnical regarding the nature of the concrete debris reported at the site, and at this time a response from Southern California Geotechnical was not available.

3.7 Prior Report Review

Terracon requested the client provide any previous environmental reports, permits, registrations, and geotechnical reports they are aware of for the site. Previous reports were provided by the client to Terracon for review.

Geotechnical Feasibility Study, Proposed Senior Housing, 5695 Glenhaven Avenue, Riverside, California, prepared by Southern California Geotechnical, dated June 2, 2015

Southern California Geotechnical (SCG) completed a Geotechnical Feasibility Study for the site in June 2014. SCG advanced a total of six soil borings and three test pits at depths ranging from 7 to 35 feet bgs. Based on a review of the boring logs, fill was observed on-site to estimated depths ranging from 1 to 23 feet below grade surface (bgs). Trace concrete fragments, asphaltic concrete fragments, and wood chips were observed in soil borings (B-1 & B-2) located on the central and northern portion of the site. Debris included concrete, brick, wood, asphalt, and rebar were observed in test pits located on the west portion of the site. The report did not indicate the presence of odors or staining in the exploratory borings or test pits, with the exception of some apparent iron oxide staining at depths ranging from 1 to 21 feet bgs observed in the soil borings located on the eastern portion of the site. Based on a review of the SCG geotechnical report, the presence of the fill was observed on the northern, central, southern and western portions of the site to a depth of as much as 23 feet bgs. SCG indicated fill was detected at the greatest depths on the southern and western portions of the site and recommended locating the proposed structure on the northeast portion of the site to minimize the amount of remedial grading. SCG recommended that the fill material be removed prior to the construction of the proposed on-site structure. Based on the nature of the reported undocumented fill and presence of construction-related debris, the fill material represents a REC in connection with the site.

4.0 RECORDS REVIEW

Regulatory database information was provided by EDR, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the

benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

Federal and State Databases

Database	Description	Radius (miles)	Listings
Federal			
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.	1.0	0
NPL (Delisted)	The NPL (Delisted) refers to facilities that have been removed from the NPL.	0.5	0
CERCLIS	The CERCLIS database is a compilation of facilities which the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the CERCLA of 1980.	0.5	0
CERCLIS/ NFRAP	CERCLIS/NFRAP refers to facilities that have been removed and archived from EPA's inventory of CERCLA sites.	0.5	0
RCRA CORRACTS/ TSD	The EPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous waste that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.0	0
RCRA Non-CORRACTS/ TSD	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.	0.5	0

Database	Description	Radius (miles)	Listings
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.	0.1	0
IC / EC	A listing of sites with institutional and/or engineering controls in place. IC include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls. EC include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.	Site	0
ERNS	The Emergency Response Notification System (ERNS) is a listing compiled by the EPA on reported releases of petroleum and hazardous substances to the air, soil and/or water.	Site	0
State/Tribal			
RESPONSE	State-equivalent and/or Tribal-equivalent database of NPL sites.	1.0	0
CHMIRS	California Hazardous Material Incident Report System California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).	Site	0
CORTESE	The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.1	0

Database	Description	Radius (miles)	Listings
ENVIROSTOR	The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1.0	0
SWF / LF	State and/or Tribal database of solid waste facilities located within California. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.	0.5	0
LUST	State and/or Tribal database of leaking underground storage tanks in state of California.	0.5	0
SWEEPS	Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and Maintained by a company contacted by the SWRCB in the early 1990's.	0.25	0
UST/AST	State and/or Tribal database of registered storage tanks in the State of California which may include the owner and location of the tanks.	0.25	0
DRYCLEANERS	A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25	0
IC/EC	State and/or Tribal equivalent to the Federal IC / EC database list.	Site	0
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.	0.5	0
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.	0.5	0

Database	Description	Radius (miles)	Listings
SLIC	The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.	0.25	0
HAZNET	The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 – 1,000,000 annually, representing approximately 350,000 – 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.	Site	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The site was not identified in the regulatory database.

The remaining facilities listed in the database report do not appear to represent RECs to the site at this time based upon regulatory status, apparent topographic gradient, and/or distance from the site.

Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed two facilities in the unmapped section. Determining the location of unmapped facilities is beyond the scope of this assessment; however, none of these facilities were identified as the site or adjacent properties. These facilities are listed in the database report in Appendix D

4.2 Local Agency Inquiries

Agency Contacted/ Contact Method	Response
Riverside County Environmental Health Department / By fax 951-358-5017	On May 28, 2015, Terracon received a letter response from the agency indicating records were not found for the site.
Department of Toxic Substances Control / by e-mail pubreqact@dtsc.ca.gov	On May 12, 2015, Terracon received an e-mail response from the agency indicating records were not found for the site.
City of Riverside Department of Building and Safety – / on-line database	Based on a review of permits on-line, the two existing recreational buildings were developed in 1961. The two pools were demolished in 2011.

Agency Contacted/ Contact Method	Response
Santa Ana Regional Water Quality Control Board/ by e-mail FileReview8@waterboards.ca.gov	On May 5, 2015, Terracon received an e-mail response from the agency indicating records were not found for the site.
South Coast Air Quality Management District/ by fax 909-396-3330	On May 19, 2015, Terracon received an e-mail response from the agency indicating records were not found for the site.

5.0 SITE RECONNAISSANCE

5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. Exhibit 2 in Appendix A is a Site Diagram of the site. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix B. Credentials of the individuals planning and conducting the site visit are included in Appendix E.

General Site Information

Site Reconnaissance				
Field Personnel	Jennifer S. Van			
Reconnaissance Date	May 7, 2015			
Weather Conditions	Sunny, 65 °F			
Site Contact/Title	Mr. Ryan Taylor / OSL Construction			
Building Description				
Building Identification	Building Use	Approx. Construction Date	Number of Stories	Approx. Size (ft²)
5695 Glenhaven Avenue	Recreational and kitchen	1961	1	2,100
	Lockers and office	1961	1	2,736
	Telecommunications equipment	Mid-1970s	1	36

Site Utilities	
Electricity	City of Riverside
Drinking Water	City of Riverside
Wastewater	City of Riverside
Natural Gas	Southern California Gas

5.2 Overview of Current Site Occupants and Operations

The site is located at 5695 Glenhaven Avenue in Riverside, Riverside County, California and consists of an approximately 5.27-acre tract of land improved with two recreational buildings; 2,100 square-feet (SF) and 2,736 SF, one 36 SF equipment building, eight tennis courts, an asphalt-paved parking lot and utilities. During the site reconnaissance, the site was observed to be vacant.

5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

Site Characteristics

Category	Item or Feature	Observed or Identified
Site Operations, Processes, and Equipment	Emergency generators	
	Elevators	
	Air compressors	
	Hydraulic lifts	
	Dry cleaning	
	Photo processing	
	Ventilation hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
	Heating and/or cooling systems	
	Paint booths	
	Sub-grade mechanic pits	
	Wash-down areas or carwashes	
	Vehicle repair or maintenance	
	Pesticide/herbicide production or storage	
	Printing operations	

Category	Item or Feature	Observed or Identified
	Electroplating, chrome plating or galvanizing	
	Salvage operations	
	Oil, gas or mineral production	
	Other processes or equipment	
Aboveground Chemical or Waste Storage	Aboveground storage tanks	
	Drums, barrels and/or containers ≥ 5 gallons	
	MSDS	
Underground Chemical or Waste Storage, Drainage or Collection Systems	Underground storage tanks or ancillary UST equipment	
	Sumps, cisterns, French drains, catch basins and/or dry wells	
	Grease traps	
	Septic tanks and/or leach fields	
	Oil/water separators, clarifiers, sand traps, triple traps, interceptors	
	Pipeline markers	
	Interior floor drains	X
Electrical Transformers/PCBs	Transformers and/or capacitors	X
	Other equipment	
Releases or Potential Releases	Stressed vegetation	
	Stained soil	
	Stained pavement or similar surface	
	Leachate and/or waste seeps	
	Trash, debris and/or other waste materials	X
	Dumping or disposal areas	
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	
Other Notable Site Features	Surface water bodies	X
	Quarries or pits	
	Wastewater lagoons	
	Wells	
	Borings	X

Underground Chemical or Waste Storage, Drainage or Collection Systems

Interior floor drains

Interior floor drains were observed at the following site locations: showers and restrooms. According to Mr. Wuo, the floor drains discharge to the city sanitary sewer. Staining and/or releases to the floor drains was not observed during the site reconnaissance. Potentially hazardous materials did not appear to be stored in the vicinity of the floor drains. Based on site observations, the interior floor drains do not constitute a REC.

Electrical Transformers/PCBs

Pad or pole mounted transformers and/or capacitors

During Terracon's site visit, one pole-mounted transformer, owned and serviced by the City of Riverside, was observed on the south portion of the site; however, no information with regard to PCB content of the transformer fluids was observed. Transformers contain mineral oil which may contain minor amounts of PCB and could be considered "PCB contaminated" (PCB content of 50-500 ppm).

The City of Riverside maintains responsibility for the transformers, and if the transformers were "PCB contaminated," the utility company is not required to replace the transformer fluids until a release is identified. However, no evidence of current or prior release was observed in the vicinity of the electrical equipment during the site reconnaissance. Based on site observations, the pole-mounted transformer does not constitute a REC.

Releases or Potential Releases

Trash, debris and/or other waste materials

Trash and debris were observed throughout the northern and western portions of the site during the site reconnaissance. Based on visual observation (only of surface materials), approximately 2 cubic yards of debris, which consisted of concrete rubble, PVC piping, wood, and gardening pots were observed. Leakage, spills or other releases from these materials were not observed during the visual reconnaissance. The debris materials did not appear to be hazardous in nature. Based on site observations, the two cubic yard of trash and debris does not constitute a REC.

Other Notable Site Features

Surface water bodies

Evidence of two historical swimming pools was observed on the central east and southern portion of the site. The two pools were observed to be filled with soil. According to Mr. Wuo, the pools were demolished in 2011 and back filled with soils from the western portion of the site and off-site soils. Mr. Wuo was not aware of the source of the off-site soils. Staining and/or odors were not observed within the pool area.

Borings

Three approximately six inch circular patches were observed in the vicinity of the historical pool on the central-eastern portion of the site. Mr. Wuo was not aware of the nature of the circular patches. Based on the location of the circular patches and proximity to the former swimming pool, indication of RECs was not identified.

6.0 ADJOINING PROPERTY RECONNAISSANCE

Visual observations of adjoining properties (from site boundaries) are summarized below.

Adjoining Properties

Direction	Description
North	The property to the adjacent north consists of a residential neighborhood (5652-5670 Glen Cliff Drive and 5640-5668 Queen Drive).
East	Glenhaven Avenue abuts the site to the east followed by a residential neighborhood (5650-5668 Glenhaven Avenue and 2090 Benedict Avenue).
South	Alessandro Boulevard abuts the site to the south followed by a residential neighborhood (5710-5730 Alessandro Boulevard).
West	The property to the adjacent west consists of graded vacant lots.

Indications of RECs were not observed with the adjoining properties.

7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, additional services (e.g. asbestos survey and limited lead-based paint survey) were conducted. The asbestos survey and lead-based paint survey were performed concurrently with the Phase I ESA and are presented under a separate cover.

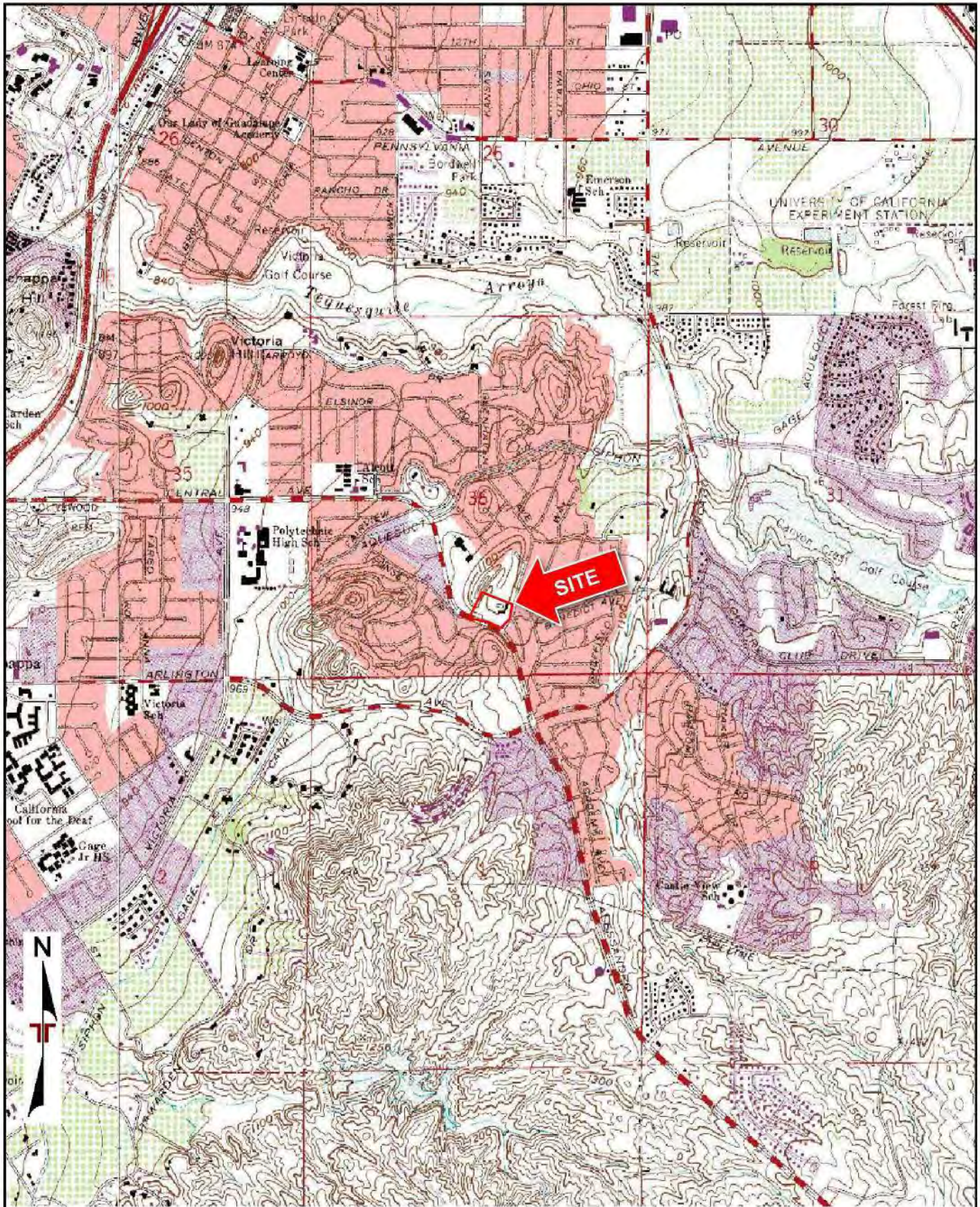
8.0 DECLARATION

I, Carl A. Parten, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Carl A. Parten
Principal / Office Manager II

APPENDIX A
EXHIBIT 1 – TOPOGRAPHIC MAP
EXHIBIT 2 – SITE DIAGRAM



Project Manager:	JSV
Project No.	60157786
Drawn by:	JSV
Scale:	1:24,000
Checked by:	CAP
File Name:	N/A
Approved by:	CAP
Date:	MAY 2015

Terracon
 2817 McGaw Avenue
 Irvine, CA 92614

TOPOGRAPHIC MAP
RIVERSIDE TENNIS CLUB 5695 GLENHAVEN AVENUE RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA

EXHIBIT
1

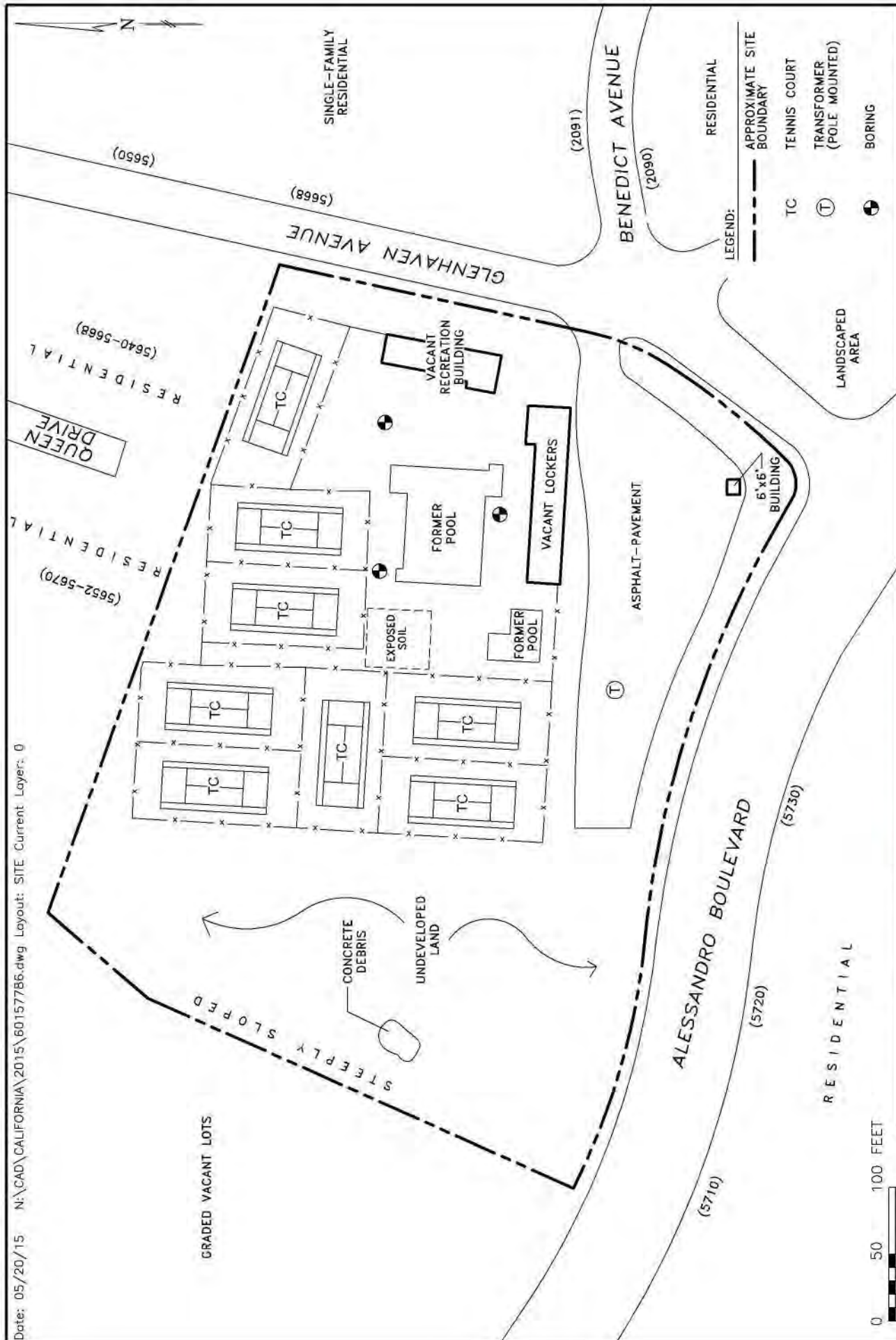


EXHIBIT <div style="font-size: 2em; float: right;">2</div>	
SITE DIAGRAM RIVERSIDE TENNIS CENTER 5695 GLENHAVEN AVENUE RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA	
<div style="text-align: right;"> </div> Consulting Engineers and Scientists 2817 MCGAW AVENUE IRVINE, CALIFORNIA 92614 PH: (949) 261-0051 FAX: (949) 261-0110	
Project No: 60157786 Scale: AS SHOWN Date: 05/08/2015	Project Mgr: JSV Drawn By: DLC Checked By: JSV Approved By: JSV
THIS DRAWING SHOULD NOT BE USED SEPARATELY FROM ORIGINAL REPORT.	

APPENDIX B SITE PHOTOGRAPHS



Photo #1 View of the recreation building located on the east portion of the site.



Photo #2 View of the recreational building located on the central-south portion of the site.



Photo #3 View of the equipment building located on the south portion of the site.



Photo #4 Interior view of the recreation building located on the east portion of the site.



Photo #5 View of the kitchen area located in the south portion of the recreational building on the east portion of the site.



Photo #6 View of a storage area located in the south portion of the building on the east portion of the site.



Photo #7 View of the office/locker area located in the building on the south portion of the site.



Photo #8 View of the restroom area located in the recreational building on the south portion of the site.



Photo #9 View of the showers located in the building on the south portion of the site.



Photo #10 View of the floor drain located in the shower area.



Photo #11 View of the pole-mounted transformer located on the south portion of the site.



Photo #12 View of the concrete rubble located on the west portion of the site.



Photo #13 View of gardening pots located on the northern portion of the site.



Photo #14 View of wood debris located on the northern portion of the site.



Photo #15 View of a former pool located on the central-south portion of the site.



Photo #16 View of the former pool located on the central-east portion of the site.



Photo #17 View of a circular concrete patch located in the vicinity of the former pool area.



Photo #18 Typical view of a tennis court located on the northern portion of the site.



Photo #19 View of the eastern border of the site.



Photo #20 View of the asphalt-paved parking lot located on the southern portion of the site.



Photo #21 View of the vacant land located on the west portion of the site.



Photo #22 View of the sloped rocky hillside located along the western border of the site.



Photo #23 View of the residence located to the adjacent north of the site.



Photo #24 View of the residences located to the adjacent east of the site.



Photo #25 View of the residences located to the adjacent southeast of the site.



Photo #26 View of the residence located to the adjacent south of the site.



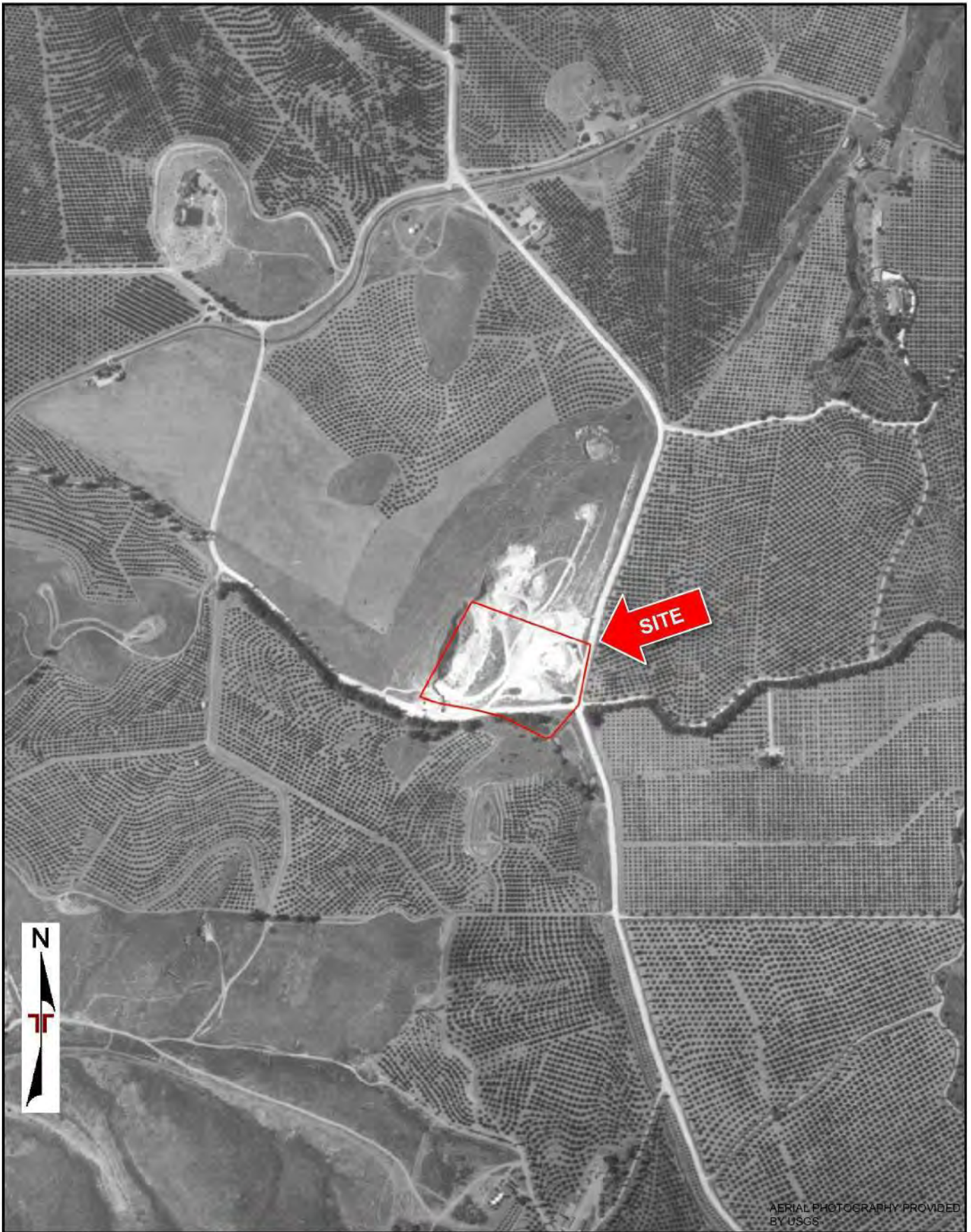
Photo #27 Additional view of the property to the adjacent south of the site.



Photo #28 View of the property to the adjacent west of the site.

APPENDIX C

HISTORICAL DOCUMENTATION AND USER QUESTIONNAIRE

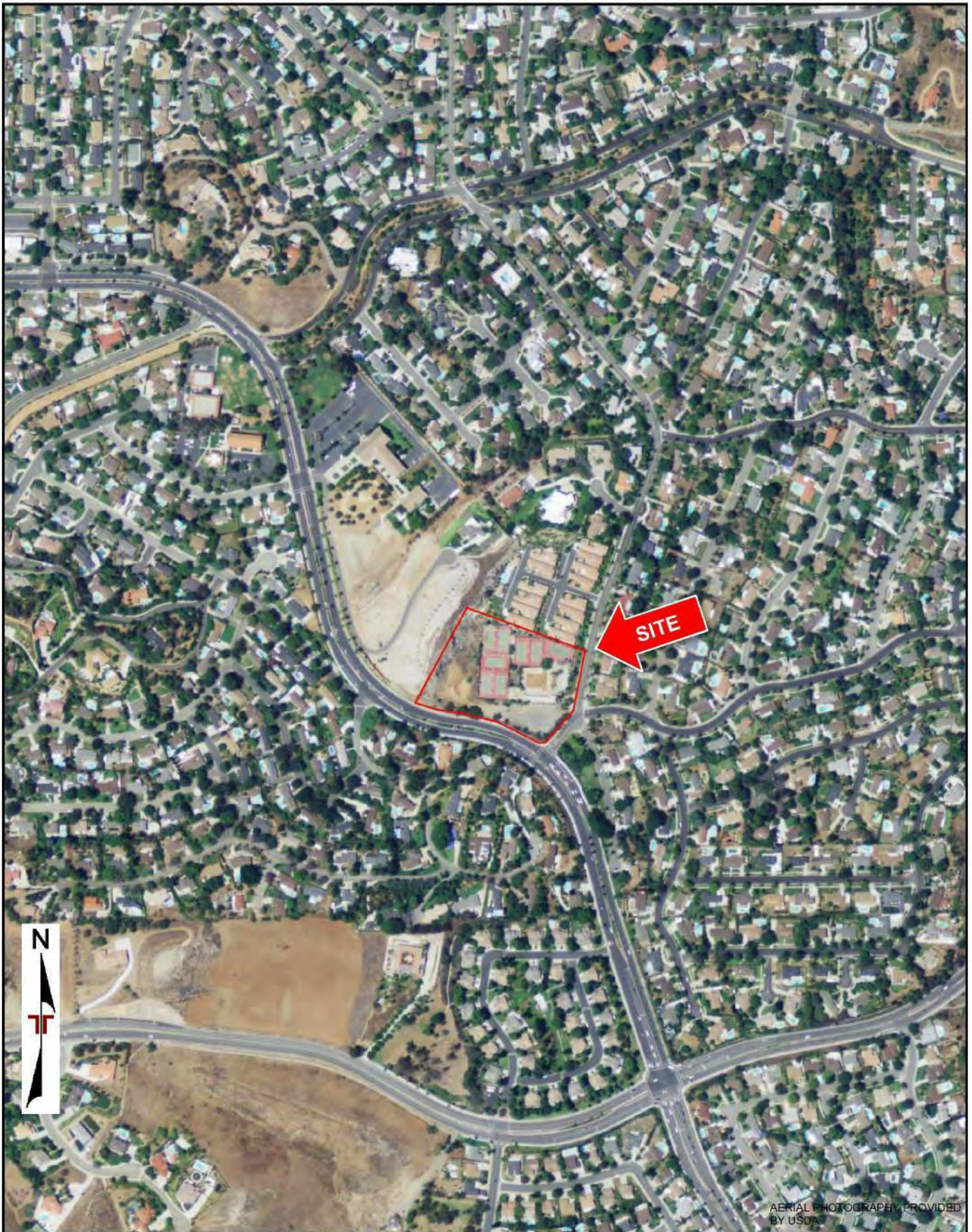


AERIAL PHOTOGRAPHY PROVIDED BY USGS

Project Manager: JSV	Project No. 60157786	 <p>2817 McGaw Avenue Irvine, California 92614</p>	AERIAL MAP	AERIAL
Drawn by: JSV	Scale: 1"=500'		<p>RIVERSIDE TENNIS CLUB 5695 GLENHAVEN AVENUE RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA</p>	1938
Checked by: CAP	File Name: N/A			
Approved by: CAP	Date: May 2015			



Project Manager: JSV Drawn by: JSV Checked by: CAP Approved by: CAP	Project No. 60157786 Scale: 1"=500' File Name: N/A Date: May 2015	Terracon 2817 McGaw Avenue Irvine, California 92614	AERIAL MAP RIVERSIDE TENNIS CLUB 5695 GLENHAVEN AVENUE RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA	AERIAL 1967
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Project Manager: JSV	Project No. 60157786	 Terracon 2817 McGaw Avenue Irvine, California 92614	AERIAL MAP	AERIAL
Drawn by: JSV	Scale: 1"=500'		RIVERSIDE TENNIS CLUB 5695 GLENHAVEN AVENUE RIVERSIDE, RIVERSIDE COUNTY, CALIFORNIA	2012
Checked by: CAP	File Name: N/A			
Approved by: CAP	Date: May 2015			

ASTM E1527-13 USER QUESTIONNAIRE

Proposal No: P60150172

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must respond to the following questions. Failure to provide this information to the environmental professional may result in significant data gaps, which may limit our ability to identify recognized environmental conditions resulting in a determination that "all appropriate inquiry" is not complete. This form represents a type of interview and as such, the user has an obligation to answer all questions in good faith, to the extent of their actual knowledge.

Site Name: Riverside Tennis Club _____ Site Address: 5695 Glenhaven Avenue _____

1) Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state, or local law (40 CFR 312.25)? ☒ No ☐ Yes If yes, please explain.

2) Did a search of recorded land title records (or judicial records where appropriate) identify any activity and use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state, or local law (40 CFR 312.26)? ☒ No ☐ Yes If yes, please explain.

3) Do you have any specialized knowledge or experience related to the site or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the site or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business (40 CFR 312.28)? ☒ No ☐ Yes If yes, please explain.

4) Do you have actual knowledge of a lower purchase price because contamination is known or believed to be present at the site (40 CFR 312.29)? ☒ No ☐ Yes

5) Are you aware of commonly known or reasonably ascertainable information about the site that would help the environmental professional to identify conditions indicative of releases or threatened releases (40 CFR 312.30)? ☒ No ☐ Yes If yes, please explain.

6) Based on your knowledge and experience related to the site, are there any obvious indicators that point to the presence or likely presence of contamination at the site (40 CFR 312.31)? ☒ No ☐ Yes If yes, please explain.

Please return this form with the signed and completed Agreement for Services.

Responsive ■ Resourceful ■ Reliable

ASTM E1527-13 USER QUESTIONNAIRE
Proposal No: P60150172
Request for Information and Documentation

In addition to the specific questions outlined above, the user is requested to provide the following information and documentation, as available. ASTM requires that this information, if available, be provided to the environmental professional prior to the site visit.

Item Supplied "X"	Not Applicable, Not Available or Not Known "X"	Item Requested (See Proposal)	Contacts/Comments or Indicate Attachment
X		Point of Contact for Access	WAYNE SANT Name/Phone: 714 270-1980
X		Current Site Owner	STEVE WUO Name/Phone:
	X	Current Facility Operator	Name/Phone:
	X	Contacts for Prior Owners	Name/Phone:
	X	Contacts for Prior Occupants	Name/Phone:
X		Access Restrictions	KEYS TO GATE + BUILDINGS ARE IN A LOCK BOX - CALL WAYNE SANT FOR CODE.
	X	Notification of Special Requirements Regarding Confidentiality	
X		Legal Description and Diagram / Survey of Site	AP MAP PROVIDED TO CONSULTANT
	X	Chain of Title with Grantor/Grantee Summary (back to 1940 or first developed use)	
X		Reasons for Conducting ESA	PROPOSED PURCHASE OF PROPERTY

Please return this form with the signed and completed Agreement for Services.

Responsive ■ Resourceful ■ Reliable

ASTM E1527-13 USER QUESTIONNAIRE

Proposal No: P60150172

Helpful Documents Checklist

Pursuant to ASTM E1527-13 § 10.8, do you know whether any of the following documents exist related to the subject property and, if so, whether copies can and will be provided to the environmental professional? Check all that apply.

- | | |
|---|---|
| <input type="checkbox"/> Environmental site assessment reports | <input type="checkbox"/> Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property |
| <input type="checkbox"/> Environmental compliance audit reports | |
| <input type="checkbox"/> Geotechnical studies - IN PROCESS | |
| <input type="checkbox"/> Reports regarding hydrogeologic conditions on the property or surrounding area | <input type="checkbox"/> Registrations for underground injection systems |
| <input type="checkbox"/> Registrations for above or underground storage tanks | <input type="checkbox"/> Environmental permits/plans, solid waste permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits, SPCC plans |

WAYNE SANT

Name (Authorized Client Representative)

VP DEVELOPMENT

Title

W Sant

Signature

4/30/15

Date

Please return this form with the signed and completed Agreement for Services.

Responsive ■ Resourceful ■ Reliable



CHICAGO TITLE COMPANY

PRELIMINARY REPORT

Order No.: 131500823-DH
Property: 5695 Glenhaven Avenue
Riverside, CA

*In response to the application for a policy of title insurance referenced herein, **Chicago Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Chicago Title Insurance Company, a Nebraska corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Insurance Company

Countersigned By:

Authorized Officer or Agent



By:

President

Attest:

Secretary



CHICAGO TITLE COMPANY

ISSUING OFFICE: 500 E. Esplanade Dr, Suite 102, Oxnard, CA 93036

FOR SETTLEMENT INQUIRIES, CONTACT:

Fidelity National Title Company
1309 College Avenue, #100 • Santa Rosa, CA
(707)541-0300 • FAX (707)541-7300

PRELIMINARY REPORT

Title Officer: Denise Hume
Email: HumeD@ctt.com
Phone No.: (805)656-1300 x5216
Fax No.: (805)642-8280
Title No.: 131500823-DH

Escrow Officer: Linda Silva
Email: lsilva@fnf.com
Phone No.: (707)541-0300
Fax No.: (707)541-7300
Escrow No.: 7011500583

PROPERTY ADDRESS(ES): 5695 Glenhaven Avenue, Riverside, CA

EFFECTIVE DATE: April 21, 2015 at 07:30 AM

The form of policy or policies of title insurance contemplated by this report is:

CLTA Standard Coverage Policy 1990 (04-08-14)

1. The estate or interest in the Land hereinafter described or referred to covered by this Report is:

Fee

2. Title to said estate or interest at the date hereof is vested in:

Steve T. Wuo, as his sole and separate property

3. The Land referred to in this Report is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 222-250-006-1

Parcel 1 of a Record of Survey, in the City of Riverside, County of Riverside, State of California, as per Map recorded in Book 34, Page 71 of Record of Survey, in the office of the County Recorder of said County.

AT THE DATE HEREOF, EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2015-2016.
2. Property taxes, including any personal property taxes and any assessments collected with taxes are as follows:

Code Area:	009-002
Tax Identification No.:	222-250-006-1
Fiscal Year:	2014-2015
1st Installment:	\$3,582.10 Paid
2nd Installment:	\$3,582.10 Unpaid
Land:	\$553,300.00
Improvements:	\$20,492.00
Bill No.:	0176532
3. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	Riverside Water Company, a corporation
Purpose:	Water pipes, ditches, other conduits
Recording Date:	August 14, 1885
Recording No.:	Book 42 Page 296 of Deeds
Affects:	Said land
5. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date:	December 15, 1916
Recording No.:	Book 455 Page 43 of Deeds

Said covenants, conditions and restrictions provide that a violation thereof shall not defeat the lien of any mortgage or deed of trust made in good faith and for value.

Said instrument provides or establishes: Easements over a portion of said land for the purpose therein shown, and rights incidental thereto.
6. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to:	City of Riverside
Purpose:	Utilities
Recording Date:	April 3, 1961
Recording No.:	27867 Official Records
Affects:	A portion of said land

EXCEPTIONS
(continued)

7. Easement(s) for the purpose(s) shown below and rights incidental thereto as delineated or as offered for dedication, on the map of said tract/plat;
- Purpose: Public utilities
Affects: Northeasterly 5 feet
8. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;
- Reserved by: City of Riverside
Purpose: Public utilities
Recording Date: May 1, 1961
Recording No.: 36955 Official Records
Affects: The portion of the vacated street
9. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document;
- Granted to: City of Riverside
Purpose: Utilities
Recording Date: August 28, 1961
Recording No.: Book 2971 Page 41 Official Records
Affects: A portion of said land
10. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document;
- Granted to: Pacific Telephone and Telegraph Company
Purpose: Public utilities
Recording Date: August 9, 1974
Recording No.: 102281 Official Records
Affects: A portion of said land
11. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;
- Reserved by: City of Riverside
Purpose: Public utilities, telecommunication facilities, ingress and egress, and distribution facilities
Recording Date: November 1, 2002
Recording No.: 626684 Official Records
Affects: Portions of said land
12. Easement(s) for the purpose(s) shown below and rights incidental thereto as reserved in a document;
- Granted to: City of Riverside
Purpose: Telecommunication facilities
Recording Date: November 1, 2002
Recording No.: 626684 Official Records
Affects: A portion of said land

EXCEPTIONS
(continued)

- 13.** A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$360,000.00
 Dated: October 27, 2011
 Trustor/Grantor: Steve T. Wuo and Kuan-Yih Wuo, husband and wife, as joint tenants
 Trustee: Chicago Title Company
 Beneficiary: First General Bank
 Loan No.: Wuo
 Recording Date: October 31, 2011
 Recording No.: 2011-0480049 Official Records

- 14.** An assignment of all moneys due, or to become due as rental or otherwise from said Land, to secure payment of an indebtedness, shown below and upon the terms and conditions therein

Amount: \$360,000.00
 Assigned to: First General Bank
 Assigned By: Steve T. Wuo and Kuan-Yih Wuo, husband and wife, as joint tenants
 Recording Date: October 31, 2011
 Recording No.: 2011-0480050 Official Records

- 15.** Matters contained in that certain document

Entitled: Hazardous Substance Certificate and Indemnity Agreement
 Dated: October 27, 2011
 Executed by: Steve T. Wuo and Kuan-Yih Wuo
 Recording Date: October 31, 2011
 Recording No.: 2011-0480051 Official Records

Reference is hereby made to said document for full particulars.

- 16.** A Notice

Entitled: Notice of Pendency of Administrative Proceedings
 For: CASE CE 13 08886 Violation landscape maintenance; overgrown/dead/hazardous vegetation and un-permitted permanent sign
 Executed by: City of Riverside, Community Development Department, Code Enforcement
 Recording Date: June 10, 2014
 Recording No.: as Document No. 2014-211825 of Official Records

Reference is hereby made to said document for full particulars.

END OF EXCEPTIONS

NOTES

Note 1. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below.

Limited Liability Company: Oakmont Senior Living LLC

- a. A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member.
- b. If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendment thereto with the appropriate filing stamps.
- c. If the Limited Liability Company is member-managed a full and complete current list of members certified by the appropriate manager or member.
- d. If the Limited Liability Company was formed in a foreign jurisdiction, evidence, satisfactory to the Company that it was validly formed, is in good standing and authorized to do business in the state of origin.
- e. If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

Note 2. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below.

Limited Liability Company: OSL Properties LLC

- a. A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member.
- b. If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendment thereto with the appropriate filing stamps.
- c. If the Limited Liability Company is member-managed a full and complete current list of members certified by the appropriate manager or member.
- d. If the Limited Liability Company was formed in a foreign jurisdiction, evidence, satisfactory to the Company that it was validly formed, is in good standing and authorized to do business in the state of origin.
- e. If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

Note 3. Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.

NOTES
(continued)

- Note 4.** Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of an agent, an authorized employee of the insured lender, or by using Bancserv or other approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.
- Note 5.** Note: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.

END OF NOTES

**FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE
Effective: January 6, 2015**

Order No.: 131500823--PW

Fidelity National Financial, Inc. and its majority-owned subsidiary companies providing real estate- and loan-related services (collectively, "FNF", "our" or "we") respect and are committed to protecting your privacy. This Privacy Notice lets you know how and for what purposes your Personal Information (as defined herein) is being collected, processed and used by FNF. We pledge that we will take reasonable steps to ensure that your Personal Information will only be used in ways that are in compliance with this Privacy Notice. The provision of this Privacy Notice to you does not create any express or implied relationship, or create any express or implied duty or other obligation, between Fidelity National Financial, Inc. and you. See also **No Representations or Warranties** below.

This Privacy Notice is only in effect for any generic information and Personal Information collected and/or owned by FNF, including collection through any FNF website and any online features, services and/or programs offered by FNF (collectively, the "Website"). This Privacy Notice is not applicable to any other web pages, mobile applications, social media sites, email lists, generic information or Personal Information collected and/or owned by any entity other than FNF.

How Information is Collected

The types of personal information FNF collects may include, among other things (collectively, "Personal Information"): (1) contact information (e.g., name, address, phone number, email address); (2) demographic information (e.g., date of birth, gender marital status); (3) Internet protocol (or IP) address or device ID/UDID; (4) social security number (SSN), student ID (SIN), driver's license, passport, and other government ID numbers; (5) financial account information; and (6) information related to offenses or criminal convictions.

In the course of our business, we may collect Personal Information about you from the following sources:

- Applications or other forms we receive from you or your authorized representative;
- Information we receive from you through the Website;
- Information about your transactions with or services performed by us, our affiliates, or others; and
- From consumer or other reporting agencies and public records maintained by governmental entities that we either obtain directly from those entities, or from our affiliates or others.

Additional Ways Information is Collected Through the Website

Browser Log Files. Our servers automatically log each visitor to the Website and collect and record certain information about each visitor. This information may include IP address, browser language, browser type, operating system, domain names, browsing history (including time spent at a domain, time and date of your visit), referring/exit web pages and URLs, and number of clicks. The domain name and IP address reveal nothing personal about the user other than the IP address from which the user has accessed the Website.

Cookies. From time to time, FNF or other third parties may send a "cookie" to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive and that can be re-sent to the serving website on subsequent visits. A cookie, by itself, cannot read other data from your hard disk or read other cookie files already on your computer. A cookie, by itself, does not damage your system. We, our advertisers and other third parties may use cookies to identify and keep track of, among other things, those areas of the Website and third party websites that you have visited in the past in order to enhance your next visit to the Website. You can choose whether or not to accept cookies by changing the settings of your Internet browser, but some functionality of the Website may be impaired or not function as intended. See the Third Party Opt Out section below.

Web Beacons. Some of our web pages and electronic communications may contain images, which may or may not be visible to you, known as Web Beacons (sometimes referred to as "clear gifs"). Web Beacons collect only limited information that includes a cookie number; time and date of a page view; and a description of the page on which the Web Beacon resides. We may also carry Web Beacons placed by third party advertisers. These Web Beacons do not carry any Personal Information and are only used to track usage of the Website and activities associated with the Website. See the Third Party Opt Out section below.

Unique Identifier. We may assign you a unique internal identifier to help keep track of your future visits. We may use this information to gather aggregate demographic information about our visitors, and we may use it to personalize the information you see on the Website and some of the electronic communications you receive from us. We keep this information for our internal use, and this information is not shared with others.

Third Party Opt Out. Although we do not presently, in the future we may allow third-party companies to serve advertisements and/or collect certain anonymous information when you visit the Website. These companies may use non-personally identifiable information (e.g., click stream information, browser type, time and date, subject of advertisements clicked or scrolled over) during your visits to the Website in order to provide advertisements about products and services likely to be of greater interest to you. These companies typically use a cookie or third party Web Beacon to collect this information, as further described above. Through these technologies, the third party may have access to and use non-personalized information about your online usage activity.

You can opt-out of online behavioral services through any one of the ways described below. After you opt-out, you may continue to receive advertisements, but those advertisements will no longer be as relevant to you.

- You can opt-out via the Network Advertising Initiative industry opt-out at <http://www.networkadvertising.org/>.
- You can opt-out via the Consumer Choice Page at www.aboutads.info.
- For those in the U.K., you can opt-out via the IAB UK's industry opt-out at www.youonlinechoices.com.
- You can configure your web browser (Chrome, Firefox, Internet Explorer, Safari, etc.) to delete and/or control the use of cookies.

More information can be found in the Help system of your browser. Note: If you opt-out as described above, you should not delete your cookies. If you delete your cookies, you will need to opt-out again.

PRIVACY NOTICE

(continued)

Use of Personal Information

Information collected by FNF is used for three main purposes:

- To provide products and services to you or one or more third party service providers (collectively, "Third Parties") who are obtaining services on your behalf or in connection with a transaction involving you.
- To improve our products and services that we perform for you or for Third Parties.
- To communicate with you and to inform you about FNF's, FNF's affiliates and third parties' products and services.

When Information Is Disclosed By FNF

We may provide your Personal Information (excluding information we receive from consumer or other credit reporting agencies) to various individuals and companies, as permitted by law, without obtaining your prior authorization. Such laws do not allow consumers to restrict these disclosures. Disclosures may include, without limitation, the following:

- To agents, brokers, representatives, or others to provide you with services you have requested, and to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure in connection with an insurance transaction;
- To third-party contractors or service providers who provide services or perform marketing services or other functions on our behalf;
- To law enforcement or other governmental authority in connection with an investigation, or civil or criminal subpoenas or court orders; and/or
- To lenders, lien holders, judgment creditors, or other parties claiming an encumbrance or an interest in title whose claim or interest must be determined, settled, paid or released prior to a title or escrow closing.

In addition to the other times when we might disclose information about you, we might also disclose information when required by law or in the good-faith belief that such disclosure is necessary to: (1) comply with a legal process or applicable laws; (2) enforce this Privacy Notice; (3) respond to claims that any materials, documents, images, graphics, logos, designs, audio, video and any other information provided by you violates the rights of third parties; or (4) protect the rights, property or personal safety of FNF, its users or the public.

We maintain reasonable safeguards to keep the Personal Information that is disclosed to us secure. We provide Personal Information and non-Personal Information to our subsidiaries, affiliated companies, and other businesses or persons for the purposes of processing such information on our behalf and promoting the services of our trusted business partners, some or all of which may store your information on servers outside of the United States. We require that these parties agree to process such information in compliance with our Privacy Notice or in a similar, industry-standard manner, and we use reasonable efforts to limit their use of such information and to use other appropriate confidentiality and security measures. The use of your information by one of our trusted business partners may be subject to that party's own Privacy Notice. We do not, however, disclose information we collect from consumer or credit reporting agencies with our affiliates or others without your consent, in conformity with applicable law, unless such disclosure is otherwise permitted by law.

We also reserve the right to disclose Personal Information and/or non-Personal Information to take precautions against liability, investigate and defend against any third-party claims or allegations, assist government enforcement agencies, protect the security or integrity of the Website, and protect the rights, property, or personal safety of FNF, our users or others.

We reserve the right to transfer your Personal Information, as well as any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets. We also cannot make any representations regarding the use or transfer of your Personal Information or other information that we may have in the event of our bankruptcy, reorganization, insolvency, receivership or an assignment for the benefit of creditors, and you expressly agree and consent to the use and/or transfer of your Personal Information or other information in connection with a sale or transfer of some or all of our assets in any of the above described proceedings. Furthermore, we cannot and will not be responsible for any breach of security by any third parties or for any actions of any third parties that receive any of the information that is disclosed to us.

Information From Children

We do not collect Personal Information from any person that we know to be under the age of thirteen (13). Specifically, the Website is not intended or designed to attract children under the age of thirteen (13). You affirm that you are either more than 18 years of age, or an emancipated minor, or possess legal parental or guardian consent, and are fully able and competent to enter into the terms, conditions, obligations, affirmations, representations, and warranties set forth in this Privacy Notice, and to abide by and comply with this Privacy Notice. In any case, you affirm that you are over the age of 13, as **THE WEBSITE IS NOT INTENDED FOR CHILDREN UNDER 13 THAT ARE UNACCOMPANIED BY HIS OR HER PARENT OR LEGAL GUARDIAN.**

Parents should be aware that FNF's Privacy Notice will govern our use of Personal Information, but also that information that is voluntarily given by children - or others - in email exchanges, bulletin boards or the like may be used by other parties to generate unsolicited communications. FNF encourages all parents to instruct their children in the safe and responsible use of their Personal Information while using the Internet.

Privacy Outside the Website

The Website may contain various links to other websites, including links to various third party service providers. FNF is not and cannot be responsible for the privacy practices or the content of any of those other websites. Other than under agreements with certain reputable organizations and companies, and except for third party service providers whose services either we use or you voluntarily elect to utilize, we do not share any of the Personal Information that you provide to us with any of the websites to which the Website links, although we may share aggregate, non-Personal Information with those other third parties. Please check with those websites in order to determine their privacy policies and your rights under them.

European Union Users

If you are a citizen of the European Union, please note that we may transfer your Personal Information outside the European Union for use for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information, you consent to both our collection and such transfer of your Personal Information in accordance with this Privacy Notice.

PRIVACY NOTICE

(continued)

Choices With Your Personal Information

Whether you submit Personal Information to FNF is entirely up to you. You may decide not to submit Personal Information, in which case FNF may not be able to provide certain services or products to you.

You may choose to prevent FNF from disclosing or using your Personal Information under certain circumstances ("opt out"). You may opt out of any disclosure or use of your Personal Information for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization by notifying us by one of the methods at the end of this Privacy Notice. Furthermore, even where your Personal Information is to be disclosed and used in accordance with the stated purposes in this Privacy Notice, you may elect to opt out of such disclosure to and use by a third party that is not acting as an agent of FNF. As described above, there are some uses from which you cannot opt-out.

Please note that opting out of the disclosure and use of your Personal Information as a prospective employee may prevent you from being hired as an employee by FNF to the extent that provision of your Personal Information is required to apply for an open position.

If FNF collects Personal Information from you, such information will not be disclosed or used by FNF for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization unless you affirmatively consent to such disclosure and use.

You may opt out of online behavioral advertising by following the instructions set forth above under the above section "Additional Ways That Information Is Collected Through the Website," subsection "Third Party Opt Out."

Access and Correction

To access your Personal Information in the possession of FNF and correct inaccuracies of that information in our records, please contact us in the manner specified at the end of this Privacy Notice. We ask individuals to identify themselves and the information requested to be accessed and amended before processing such requests, and we may decline to process requests in limited circumstances as permitted by applicable privacy legislation.

Your California Privacy Rights

Under California's "Shine the Light" law, California residents who provide certain personally identifiable information in connection with obtaining products or services for personal, family or household use are entitled to request and obtain from us once a calendar year information about the customer information we shared, if any, with other businesses for their own direct marketing uses. If applicable, this information would include the categories of customer information and the names and addresses of those businesses with which we shared customer information for the immediately prior calendar year (e.g., requests made in 2015 will receive information regarding 2014 sharing activities).

To obtain this information on behalf of FNF, please send an email message to privacy@fnf.com with "Request for California Privacy Information" in the subject line and in the body of your message. We will provide the requested information to you at your email address in response.

Please be aware that not all information sharing is covered by the "Shine the Light" requirements and only information on covered sharing will be included in our response.

Additionally, because we may collect your Personal Information from time to time, California's Online Privacy Protection Act requires us to disclose how we respond to "do not track" requests and other similar mechanisms. Currently, our policy is that we do not recognize "do not track" requests from Internet browsers and similar devices.

No Representations or Warranties

By providing this Privacy Notice, Fidelity National Financial, Inc. does not make any representations or warranties whatsoever concerning any products or services provided to you by its majority-owned subsidiaries. In addition, you also expressly agree that your use of the Website is at your own risk. Any services provided to you by Fidelity National Financial, Inc. and/or the Website are provided "as is" and "as available" for your use, without representations or warranties of any kind, either express or implied, unless such warranties are legally incapable of exclusion. Fidelity National Financial, Inc. makes no representations or warranties that any services provided to you by it or the Website, or any services offered in connection with the Website are or will remain uninterrupted or error-free, that defects will be corrected, or that the web pages on or accessed through the Website, or the servers used in connection with the Website, are or will remain free from any viruses, worms, time bombs, drop dead devices, Trojan horses or other harmful components. Any liability of Fidelity National Financial, Inc. and your exclusive remedy with respect to the use of any product or service provided by Fidelity National Financial, Inc. including on or accessed through the Website, will be the re-performance of such service found to be inadequate.

Your Consent To This Privacy Notice

By submitting Personal Information to FNF, you consent to the collection and use of information by us as specified above or as we otherwise see fit, in compliance with this Privacy Notice, unless you inform us otherwise by means of the procedure identified below. If we decide to change this Privacy Notice, we will make an effort to post those changes on the Website. Each time we collect information from you following any amendment of this Privacy Notice will signify your assent to and acceptance of its revised terms for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you may submit in any manner that we may choose without notice or compensation to you.

If you have additional questions or comments, please let us know by sending your comments or requests to:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer
(888) 934-3354 privacy@fnf.com

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ATTACHMENT ONE

CALIFORNIA LAND TITLE ASSOCIATION STANDARD COVERAGE POLICY - 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims, or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records. Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

ATTACHMENT ONE (CONTINUED)

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (02-03-10) ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (02-03-10)

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$5,000.00

**ATTACHMENT ONE
(CONTINUED)**

**AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-1-87)**

EXCLUSIONS

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:
 - land use
 - improvements on the land
 - land division
 - environmental protection

This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at policy date.

This exclusion does not limit the zoning coverage described in Items 12 and 13 of Covered Title Risks.

2. The right to take the land by condemning it, unless:
 - a notice of exercising the right appears in the public records on the Policy Date
 - the taking happened prior to the Policy Date and is binding on you if you bought the land without knowledge of the taking
3. Title Risks:
 - that are created, allowed, or agreed to by you
 - that are known to you, but not to us, on the Policy Date-unless they appeared in the public records
 - that result in no loss to you
 - that first affect your title after the Policy Date - this does not limit the labor and material lien coverage in Item 8 of Covered Title Risks

4. Failure to pay value for your title.

5. Lack of a right:
 - to any land outside the area specifically described and referred to in Item 3 of Schedule Aor
 - in streets, alleys, or waterways that touch your land

This exclusion does not limit the access coverage in Item 5 of Covered Title Risks.

ATTACHMENT ONE (CONTINUED)

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy; but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy;
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) that arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

ATTACHMENT ONE (CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy; but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) that arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

ATTACHMENT ONE (CONTINUED)

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy;

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the filed rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for such discount. These discounts only apply to transactions involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

Not all discounts are offered by every FNF Company. The discount will only be applicable to the FNF Company as indicated by the named discount.

FNF Underwritten Title Companies

CTC - Chicago Title Company

Underwritten by FNF Underwriters

CTIC - Chicago Title Insurance Company

Available Discounts

CREDIT FOR PRELIMINARY TITLE REPORTS AND/OR COMMITMENTS ON SUBSEQUENT POLICIES (CTIC)

Where no major change in the title has occurred since the issuance of the original report or commitment, the order may be reopened within 12 to 36 months and all or a portion of the charge previously paid for the report or commitment may be credited on a subsequent policy charge.

FEE REDUCTION SETTLEMENT PROGRAM (CTC, CTIC)

Eligible customers shall receive a \$20.00 reduction in their title and/or escrow fees charged by the Company for each eligible transaction in accordance with the terms of the Final Judgments entered in *The People of the State of California et al. v. Fidelity National Title Insurance Company et al.*, Sacramento Superior Court Case No. 99AS02793, and related cases.

DISASTER LOANS (CTIC)

The charge for a Lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within 24 months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be 50% of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC)

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be 50% to 70% of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be 32% to 50% of the appropriate title insurance rate, depending on the type of coverage selected.

222-25
440-1, 2, 3, 4

TRA 009-002

POR. SEC. 36, T2SR5W
CITY OF RIVERSIDE

36



Legend

—	Lot Lines
—	Right-Of-Way
- - -	Old Lot Lines
- - -	Reference R.O.W.
- - -	Other Easements
- - -	Lease Area
- - -	Subdivision Tie Mark

Date	Old Number	New Number
11/19/83	4	210
5/11/90	5	11
1/12/05	11	203.30
1/12/05	12	12.13
1/12/05	13	14.16
1/12/05	14	14.17
1/12/05	15	14.18
1/12/05	16	14.19
6/13/08	12.13	20
8/15/08	20	21.43
10/27/08	18	21.25
10/27/08	14.25	28
3/17/09	1	27.28

Map Reference

MB 459	VICTORIA RANCH
RS 3474-0	RECORD OF SURVEY
PM 11787-88	PARCEL MAP NO. 15370
PM 22467-69	PARCEL MAP NO. 33376



Data
RS 2022 4552

S. Hemmatt

ASSESSOR'S MAP BK222 PG 25
Riverside County, Calif.



HIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

MAR 07 2011



Riverside Tennis Club

5695 Glenhave Avenue
Riverside, CA 92506

Inquiry Number: 4284028.5
May 05, 2015

The EDR-City Directory Abstract



Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1921 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2013	Cole Information Services	-	X	X	-
2008	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2003	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2002	SBC PACIFIC BELL	-	X	X	-
	SBC PACIFIC BELL	X	X	X	-
2001	Haines & Company, Inc.	-	X	X	-
	Haines & Company, Inc.	X	X	X	-
1996	Pacific Bell	-	X	X	-
	Pacific Bell	X	X	X	-
1993	Pacific Bell	-	-	-	-
1990	Pacific Bell	-	-	-	-
1986	Pacific Bell Yellow Pages	-	X	X	-
	Pacific Bell Yellow Pages	X	X	X	-
1981	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1977	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1970	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1967	Luskey Brothers & Co.	-	-	-	-
1966	Luskey Brothers & Company Inc.	-	X	X	-
	Luskey Brothers & Company Inc.	X	X	X	-
1961	Luskey Brothers & Co.	-	-	-	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>IP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1960	Luskeys Brothers & Co., Publishers	-	X	X	-
1956	Luskey Brothers & Co.	-	-	-	-
1955	Luskeys Brothers Co., Publishers	-	-	-	-
1951	Los Angeles Directory Co.	-	-	-	-
1946	Southern California Telephone Company	-	-	-	-
1945	Los Angeles Directory Co.	-	-	-	-
1941	Pacific Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1936	Los Angeles Directory Co.	-	-	-	-
1931	Southern California Telephone Co.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Kaasen Directory Co.	-	-	-	-
1921	Riverside Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

5695 Glenhave Avenue
Riverside, CA 92506

FINDINGS DETAIL

Target Property research detail.

GLENHAVEN AVE

5695 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	RIVERSIDE TENNIS CENTER	Cole Information Services
2003	RIVERSIDE SWIM/TENNS RCRTNL	Cole Information Services
2002	CENTER	SBC PACIFIC BELL
	RECREATIONAL ASSOC	SBC PACIFIC BELL
	RIVERSIDE SWIM & TENNIS	SBC PACIFIC BELL
2001	ASSOC	Haines & Company, Inc.
	RIVERSD	Haines & Company, Inc.
	SWIM&TENNIS REC	Haines & Company, Inc.
1996	RIVERSIDE SWIM & TENNIS CENTER	Pacific Bell
	RIVERSIDE SWIM & TENNIS RECREATIONAL ASSOC	Pacific Bell
1986	Paradise Luau & Catering	Pacific Bell Yellow Pages
	Paradise Michelle	Pacific Bell Yellow Pages
	Riverside Tennis Club	Pacific Bell Yellow Pages
1981	Riverside Tennis Club	Pacific Telephone
1977	Riverside Tennis Club	Pacific Telephone
1966	Min 5 Attempts Made	Luskey Brothers & Company Inc.
	No Return	Luskey Brothers & Company Inc.

GLENHAVEN WAY

5695 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	RIVERSIDE SWIM CLUB	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ALESSANDRO RD

5785 ALESSANDRO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	B Murphy Derrili L Lois 5915 Allesandro Bl Apt BRiv	Luskey Brothers & Company Inc.
	Curci John A Rose 5785 Alesandro Rd Riv 86 6771 h Riverside Fish	Luskey Brothers & Company Inc.

ARGYLE WAY

5607 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	ALLEN Thomas	Haines & Company, Inc.
1986	Malhiot Eugene T	Pacific Bell Yellow Pages
1981	Malhiot Eugene T	Pacific Telephone
1977	Malhiot Eugene T	Pacific Telephone
1966	Malhiot Eug T Mary 5607 Argyle Wy Riv h 4 retired	Luskey Brothers & Company Inc.

5620 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Pilon Oliver J	Pacific Bell Yellow Pages
1981	Pilon Oliver d	Pacific Telephone
1977	Pilon Oliver J	Pacific Telephone
1966	Pilong Oliver J Marjorie 5620 Argyle Wy Riv h Captain USA retire	Luskey Brothers & Company Inc.

5625 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Hanna N	SBC PACIFIC BELL
2001	KELLEYSidney	Haines & Company, Inc.
1986	Kelley T L	Pacific Bell Yellow Pages
	Kelley Sidney B	Pacific Bell Yellow Pages
1981	Kelley Sidney B	Pacific Telephone
1966	Kelley Sidney B Dorothy 5625 Argyle Wy Riv h 5 electronics engin	Luskey Brothers & Company Inc.

FINDINGS

5636 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	OLORENZI Richard	Haines & Company, Inc.
1966	Orr Bert K Kathryn 5636 Argyle Wy Riv h 1 Bert K Orr Real Estate	Luskey Brothers & Company Inc.

5645 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	0 HURT Harvey R	Haines & Company, Inc.
1996	Hurt Harvey R	Pacific Bell
1986	i Hurt Harvey R	Pacific Bell Yellow Pages
1981	Hurt Harvey R	Pacific Telephone
1977	Hurt Harvey R	Pacific Telephone
1966	Di Caro Peter P Peggy 5645 Argyle Wy Riv h 3 manager Acacia Mutu	Luskey Brothers & Company Inc.

5658 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	LINGLEYWilliam	Haines & Company, Inc.
1966	Kienle Walter C Helga 5658 Argyle Wy Riv h 3 Walters Auto Repa	Luskey Brothers & Company Inc.

5659 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Schreiber William	SBC PACIFIC BELL
2001	OSCHREIBER William	Haines & Company, Inc.
1996	Schreiber William	Pacific Bell
1986	Rogers Bob	Pacific Bell Yellow Pages
1977	Wahlin John	Pacific Telephone
1966	James Ruby P Mrs 5659 Argyle Wy Riv h 1 employee County	Luskey Brothers & Company Inc.

5670 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Reid Renee D	SBC PACIFIC BELL
2001	REIDRena D	Haines & Company, Inc.
1981	Paddock David	Pacific Telephone
1966	Turnbull Frank T Jean res 5670 Argyle Wy Riv h 4 physician	Luskey Brothers & Company Inc.

5683 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	KRAVITZJa S	Haines & Company, Inc.

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Kravitz Jas	Pacific Bell Yellow Pages
1981	Kravite Jas	Pacific Telephone
1977	Kravltz Jas	Pacific Telephone
1966	Kravitz Jas Gertraud 5683 Argyle Wy Riv h assistant civil engine	Luskey Brothers & Company Inc.

5690 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2003	ELLENS ANGELS	Cole Information Services
2002	Vanta M P	SBC PACIFIC BELL
2001	VANTAMP	Haines & Company, Inc.
1996	Vanta M P	Pacific Bell
1986	Vantage Wholesale	Pacific Bell Yellow Pages
	Vanta M P	Pacific Bell Yellow Pages
1981	Bennett James C	Pacific Telephone
1977	Dirksen Christiaan	Pacific Telephone
1966	Jolliffe Virgil A Marion 5690 Argyle Wy Riv h 2 chemist UC Citru	Luskey Brothers & Company Inc.

5717 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Busch Matthew	SBC PACIFIC BELL
2001	BUSCH Matthew	Haines & Company, Inc.
1996	Cavanaugh James R Sr	Pacific Bell
1986	Cavanaugh Janis	Pacific Bell Yellow Pages
	Cavanaugh Jas R Sr	Pacific Bell Yellow Pages
1981	Cavanaugh Jas R Sr	Pacific Telephone
1977	Cavanau h Jas R	Pacific Telephone
1966	Cavanaugh Jas R Frances 5717 Argyle Wy Riv h 2 insurance agent	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5731 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Brazill Debbie	SBC PACIFIC BELL
	Brazill Steve	SBC PACIFIC BELL
2001	SBRAZILLDebbie	Haines & Company, Inc.
	SBRAZILLSteve	Haines & Company, Inc.
1996	Menzia Jack	Pacific Bell
1986	Menzia Jack	Pacific Bell Yellow Pages
1981	Menzia Jack	Pacific Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Dulmage Howard T Eileen 5731 Argyle Wy Riv h 2director of resear	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5738 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	KORNBLUM Philip	Haines & Company, Inc.
1996	Mata Thomas G	Pacific Bell
1986	Ekdahl Henry	Pacific Bell Yellow Pages
1981	Ekdahl Henry	Pacific Telephone
1977	Ekdahl Henry	Pacific Telephone
1966	Ekdahl Henry R Sylvia 5738 Argyle Wy Riv h retired	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5743 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	JOHNSON James R	Haines & Company, Inc.
1986	Johnson James R	Pacific Bell Yellow Pages
1981	Johnson James R	Pacific Telephone
1977	Johnson James R	Pacific Telephone
1966	Speciale Mabel R Mrs 5743 Argyle Wy Riv h 3 artist	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5761 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Ahsue Herman L	SBC PACIFIC BELL
2001	ALEXANDERDean	Haines & Company, Inc.
	AHSUE Sandy	Haines & Company, Inc.
	AHSUE Herman	Haines & Company, Inc.
1986	Doyle John T	Pacific Bell Yellow Pages
1981	Doyle John T	Pacific Telephone
1966	Doyle John T Grace 5761 Argyle Wy Riv h with Calif Rehabilitatio	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5764 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PETERS Brad	Haines & Company, Inc.
1981	Boshart Carrick	Pacific Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1981	Boshart Philip G	Pacific Telephone
1977	Clawson Dan E	Pacific Telephone
1966	Green Kenneth J Christine 5764 Argyle Wy Riv h 2 Lieutenant Colo	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

5775 ARGYLE WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	D ANDRAWISWadie	Haines & Company, Inc.
1996	SATIRE	Pacific Bell
1986	Satire	Pacific Bell Yellow Pages
1981	Moss Gerald L	Pacific Telephone
1977	Moss Gerald L	Pacific Telephone
1966	Morrow Donald L Diane 5775 Argyle Wy Riv h 3 sales manager Jone	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

ARGYLL WAY

5561 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Boroff D H	Pacific Telephone

5562 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Schwalm Hal	Pacific Telephone

5594 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Houser Norris W	Pacific Telephone

5607 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Malhiot Eugene T	Pacific Telephone

5620 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Pilon Oliver J	Pacific Telephone

5625 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kelley Sidney B	Pacific Telephone

FINDINGS

5636 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Orr Bert K	Pacific Telephone

5645 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Hurt Harvey R	Pacific Telephone

5659 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Glendenning Herbert D	Pacific Telephone

5670 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Wiley P R	Pacific Telephone

5683 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Kravitz Jas	Pacific Telephone

5690 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Jolliffe Virgil A Jr	Pacific Telephone

5717 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Cavanaugh Jas R	Pacific Telephone

5738 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Ekdahl Henry	Pacific Telephone

5743 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Johnson James R	Pacific Telephone

5761 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Doyle John T	Pacific Telephone
	Doyle Grayce F	Pacific Telephone

FINDINGS

5764 ARGYLL WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Coleman Jas K	Pacific Telephone

BENEDICT AVE

2010 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	AMERICAN EX PRISONERS OF WAR	Cole Information Services
2003	AMERICAN EX PRISONERS	Cole Information Services
2002	Ellsworth Robt I	SBC PACIFIC BELL
2001	ELLSWORTHRob	Haines & Company, Inc.
1996	Ellsworth Robt I	Pacific Bell
1986	Ellsworth Robt I	Pacific Bell Yellow Pages
1981	Ellsworth Robt I	Pacific Telephone
1977	Ellsworth Robt I	Pacific Telephone
1966	Miller Ruth Mrs 2010 Benedict Av Riv	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

2024 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SMITH Bobby	Haines & Company, Inc.
1981	Smith B Glenn Dr	Pacific Telephone
1966	Smith BG 2024 Benedict Av Riv	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

2027 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Del Grippo William & Kaja	SBC PACIFIC BELL
2001	SDELGRIPPOKa	Haines & Company, Inc.
	SDELGRIPPO William	Haines & Company, Inc.
1996	Del Grippo William & Kaja	Pacific Bell
1986	Clark T L	Pacific Bell Yellow Pages
1966	Schlobohm Wm Margaret 2027 Benedict Av Riv h 1 retired	Luskey Brothers & Company Inc.

2046 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	TAFRESHNIAM	Haines & Company, Inc.
1981	Parker Keith B	Pacific Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Badraun Warren W Jean 2046 Benedict Av Riv h 3 Hicks & Badraun	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

2090 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Steward Jamie	SBC PACIFIC BELL
2001	STEWARTDonr	Haines & Company, Inc.
	STEWART Jamie	Haines & Company, Inc.
1986	Stewart David	Pacific Bell Yellow Pages
1977	Young	Pacific Telephone
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	Vacant	Luskey Brothers & Company Inc.
1960	Under constr	Luskeys Brothers & Co., Publishers

2091 BENEDICT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	h 2 controller Federal Aviation Agency March AFB	Luskey Brothers & Company Inc.
	Entoyan Benj Elizabeth 2091 Benedict Av Riv	Luskey Brothers & Company Inc.

BENEDICT CT

2010 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Ellsworth Robt I Lt Col	Pacific Telephone

2024 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Smith B Glenn Dr	Pacific Telephone

2027 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Schlobohm Wm A Maj Ret	Pacific Telephone

2046 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Parker Keith B	Pacific Telephone

FINDINGS

2090 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Morgan Bruce	Pacific Telephone

2091 BENEDICT CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Antoyan Benjamin	Pacific Telephone

GLENHAVEN AVE

5616 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	ROBERTSPhilip	Haines & Company, Inc.
1986	eggeland Edw M	Pacific Bell Yellow Pages
1981	Weggeland Edw M	Pacific Telephone

5632 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Washburn W Bill	SBC PACIFIC BELL
	GLENHAVEN AV CONT D	SBC PACIFIC BELL
2001	WASHBURNWBrI	Haines & Company, Inc.
1996	Washburn W Bill	Pacific Bell
1986	Manzanares C	Pacific Bell Yellow Pages
	Manyo J G Col Ret	Pacific Bell Yellow Pages
1981	Manyo J O Col Ret	Pacific Telephone
1977	Manyo J G Col Ret	Pacific Telephone
1966	Manyo Jos G Adeline 5632 Glenhaven Av Riv 83 5750 h Colonel USAF	Luskey Brothers & Company Inc.

5650 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	GALLERIA ADVERTISING SPC	Cole Information Services

5660 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Min 5 Attempts Made	Luskey Brothers & Company Inc.
	No Return	Luskey Brothers & Company Inc.

5668 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	Krieger Bob & Lee	SBC PACIFIC BELL
2001	KRIEGERLee 90 S 3680 S	Haines & Company, Inc.

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	0 KRIEG	Haines & Company, Inc.
1996	Krieger Bob & Lee	Pacific Bell
1981	Kelley John K	Pacific Telephone
1966	Johnson Byron C Marion 5668 Glenhaven Ct Riv h 2 administrator R	Luskey Brothers & Company Inc.

5676 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	White Maxwell Helen 5676 Glenhaven Av Riv h 2 engineer Aerospace	Luskey Brothers & Company Inc.

5722 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Versyp Lewis H Stephanie 5722 Glen Haven Ct Riv h 3 manager Bark	Luskey Brothers & Company Inc.

5738 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Matthews Edw E Mary 5738 Glenhaven Ct Riv h 2 Matthews Insurance	Luskey Brothers & Company Inc.

5750 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Bobach S	Pacific Bell Yellow Pages
1981	Bobach S	Pacific Telephone
1966	Swanson Harry B Ethel 5750 Glenhaven Ct Riv h retired	Luskey Brothers & Company Inc.

5768 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Porter Jay B Jean 5768 Glenhaven Ct Riv h 2 counselor School f	Luskey Brothers & Company Inc.

5782 GLENHAVEN AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1977	BE N TE R KE N TILE CO	Pacific Telephone
	BE N TE R BAIL BON DS	Pacific Telephone
1966	No Return	Luskey Brothers & Company Inc.
	Min 5 Attempts Made	Luskey Brothers & Company Inc.

FINDINGS

GLENHAVEN CT

5722 GLENHAVEN CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	FERGUSON Mike	Haines & Company, Inc.
	FERGUSON Dusty	Haines & Company, Inc.
1986	Kreigh David L Maj	Pacific Bell Yellow Pages
1981	Kreigh David I Maj	Pacific Telephone
1977	Kreigh David L Maj	Pacific Telephone

5738 GLENHAVEN CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1996	Ducas Larry	Pacific Bell
1986	Rue John E	Pacific Bell Yellow Pages
1981	Rue John E	Pacific Telephone
1977	Rue John E	Pacific Telephone

5750 GLENHAVEN CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2013	SHAKLEE	Cole Information Services
2001	COBARRUBIAS Dennis	Haines & Company, Inc.
1996	Womack Priscilla	Pacific Bell
1986	Bobach Klaus	Pacific Bell Yellow Pages
	Bobach Hazel & Klaus	Pacific Bell Yellow Pages
	Jiu Edw	Pacific Bell Yellow Pages
1981	Jiu Edw	Pacific Telephone
	S HAKLE E DIS TRIBUTOR	Pacific Telephone
	Bobach Klaus	Pacific Telephone
1977	Bobach Klaus	Pacific Telephone
	Jiu Edw	Pacific Telephone
	S HAKLE E DIS TRIBUTOR	Pacific Telephone

5768 GLENHAVEN CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	PORTERJean	Haines & Company, Inc.

5782 GLENHAVEN CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	BENTERHelen	Haines & Company, Inc.

FINDINGS

GLENHAVEN WAY

5632 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Manyo J G Col Ret	Pacific Telephone

5668 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Johnson Byron C	Pacific Telephone

5722 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Sawdon Stephen Capt	Pacific Telephone

5738 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Matthews Edw E	Pacific Telephone

5750 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Jiu Edw	Pacific Telephone

5782 GLENHAVEN WAY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	BENTER KEN TILE CO	Pacific Telephone
	BENTER BAIL BONDS	Pacific Telephone

OAK CREST DR

2102 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	DALKERay	Haines & Company, Inc.
1996	Weber John R	Pacific Bell
1986	Weber John R	Pacific Bell Yellow Pages
1981	Weber John R	Pacific Telephone
1977	Weber John R	Pacific Telephone
1966	Weber John R Sarah 2102 Oak Crest Dr Riv h 2 sales supervisor FM	Luskey Brothers & Company Inc.

2108 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	KOPENGAJoseph	Haines & Company, Inc.

FINDINGS

2114 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HOLDENFlorastene	Haines & Company, Inc.
1981	Wallgreen Ake A	Pacific Telephone

2118 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Shipman Wm H 2118 Oak Crest Dr Riv h retired	Luskey Brothers & Company Inc.
1960	Shipman WH	Luskeys Brothers & Co., Publishers

2127 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1966	Pickett Edw H Rowena 2127 Oak Crest Dr Riv h rancher	Luskey Brothers & Company Inc.

2128 OAK CREST DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1996	MEGABITE COMPUTERS	Pacific Bell
1986	Felps Hugh E MD	Pacific Bell Yellow Pages
1981	Felps Hugh E MD	Pacific Telephone
1977	Felps Hugh E MD	Pacific Telephone
1966	Felps Hugh E Ottlia 2128 Oak Crest Dr Riv h retired	Luskey Brothers & Company Inc.
1960	Felps HE	Luskeys Brothers & Co., Publishers

ROYAL HILL DR

5740 ROYAL HILL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	ESPWNOSAArthur	Haines & Company, Inc.
1986	Allen Harry P	Pacific Bell Yellow Pages
	Teenage Telephone	Pacific Bell Yellow Pages
1977	Pernett G M	Pacific Telephone
1960	Pernett AI	Luskeys Brothers & Co., Publishers

5753 ROYAL HILL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	MITCHELL D Ouglas E	Haines & Company, Inc.
	OMITCHELLTedl	Haines & Company, Inc.
1960	Lytle HP	Luskeys Brothers & Co., Publishers

FINDINGS

ROYL HI DR

5760 ROYL HI DR

Year

Uses

Source

1970

Stevens H B

Pacific Telephone

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

5695 Glenhave Avenue

Address Not Identified in Research Source

2013, 1993, 1990, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched

2010 BENEDICT AVE

Address Not Identified in Research Source

2013, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2010 BENEDICT AVE

2013, 2008, 2003, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2010 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2024 BENEDICT AVE

2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2024 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2027 BENEDICT AVE

2013, 2008, 2003, 1993, 1990, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2027 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2046 BENEDICT AVE

2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2046 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2090 BENEDICT AVE

2013, 2008, 2003, 1996, 1993, 1990, 1981, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2090 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2091 BENEDICT AVE

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

2091 BENEDICT CT

2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

<u>Address Researched</u>	<u>Address Not Identified in Research Source</u>
2102 OAK CREST DR	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2108 OAK CREST DR	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2114 OAK CREST DR	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2118 OAK CREST DR	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2127 OAK CREST DR	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2128 OAK CREST DR	2013, 2008, 2003, 2002, 2001, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5561 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5562 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5594 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5607 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5607 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5616 GLENHAVEN AVE	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5620 ARGYLE WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5620 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5625 ARGYLE WAY	2013, 2008, 2003, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5625 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5632 GLENHAVEN AVE	2013, 2008, 2003, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5632 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5636 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

<u>Address Researched</u>	<u>Address Not Identified in Research Source</u>
5636 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5645 ARGYLE WAY	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5645 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5650 GLENHAVEN AVE	2013, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5658 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5659 ARGYLE WAY	2013, 2008, 2003, 1993, 1990, 1981, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5659 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5660 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5668 GLENHAVEN AVE	2013, 2008, 2003, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5668 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5670 ARGYLE WAY	2013, 2008, 2003, 1996, 1993, 1990, 1986, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5670 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5676 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5683 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5683 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5690 ARGYLE WAY	2013, 2008, 2003, 1993, 1990, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5690 ARGYLE WAY	2013, 2008, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5690 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5717 ARGYLE WAY	2013, 2008, 2003, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched

Address Not Identified in Research Source

5717 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5722 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5722 GLENHAVEN CT	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5722 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5731 ARGYLE WAY	2013, 2008, 2003, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5738 ARGYLE WAY	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5738 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5738 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5738 GLENHAVEN CT	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5738 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5740 ROYAL HILL DR	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5743 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5743 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5750 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5750 GLENHAVEN CT	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5750 GLENHAVEN CT	2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5750 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5753 ROYAL HILL DR	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5760 ROYL HI DR	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched

Address Not Identified in Research Source

5761 ARGYLE WAY	2013, 2008, 2003, 1996, 1993, 1990, 1977, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5761 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5764 ARGYLE WAY	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5764 ARGYLL WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5768 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5768 GLENHAVEN CT	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5775 ARGYLE WAY	2013, 2008, 2003, 2002, 1993, 1990, 1970, 1967, 1961, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5782 GLENHAVEN AVE	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5782 GLENHAVEN CT	2013, 2008, 2003, 2002, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5782 GLENHAVEN WAY	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5785 ALESSANDRO RD	2013, 2008, 2003, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921



Riverside Tennis Club

5695 Glenhave Avenue
Riverside, CA 92506

Inquiry Number: 4284028.3
May 05, 2015

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Shelton, Connecticut 06484
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5/05/15

Site Name:

Riverside Tennis Club
5695 Glenhave Avenue
Riverside, CA 92506

Client Name:

Terracon
2817 McGraw Ave
Irvine, CA 92606

EDR Inquiry # 4284028.3

Contact: Jennifer Van



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Site Name: Riverside Tennis Club
Address: 5695 Glenhave Avenue
City, State, Zip: Riverside, CA 92506
Cross Street:
P.O. # NA
Project: 60157786
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**GEOTECHNICAL FEASIBILITY STUDY
PROPOSED SENIOR HOUSING**

5695 Glenhaven Avenue
Riverside, California
For
Oakmont Senior Living



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

June 2, 2015

Oakmont Senior Living
8779 Soothing Court
Corona, California 92883



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

Attention: Mr. Wayne Sant
Vice President, Development

Project No.: **15G150-1**

Subject: **Geotechnical Feasibility Study**
Proposed Oakmont Senior Housing
5695 Glenhaven Avenue
Riverside, California

Gentlemen:

In accordance with your request, we have conducted a geotechnical feasibility study at the subject site. We are pleased to present this report summarizing the conclusions and recommendations developed from our investigation.

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, RCE 77915
Project Engineer



John A. Seminara, GE 2294
Principal Engineer

Distribution: (2) Addressee

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SOUTHERN
CALIFORNIA
GEOTECHNICAL

Proposed Senior Housing –Riverside, CA
Project No. 15G150-1

1.0 EXECUTIVE SUMMARY

Presented below is a brief summary of the conclusions and recommendations of this investigation. Since this summary is not all inclusive, it should be read in complete context with the entire report.

It should be noted that this investigation was focused on determining the geotechnical feasibility of the proposed development. **It was not intended to be a design level investigation. Future studies will be necessary to refine the preliminary design parameters that are presented within this report.**

Preliminary Geotechnical Design Recommendations

- The subject site is underlain by artificial fill soils used to backfill excavations made for former mining operations. Based on our understanding of the site history, mining of granitic bedrock materials was performed at the site. These mining activities had ceased and the excavations were backfilled with sometime prior to 1948. Construction of the existing tennis facility and former swimming pools commenced in 1966. The fill soils consist of fine to medium sands and silty fine to medium sands with varying coarse sand and varying gravel content. The fill soils also contain significant debris content including concrete and rebar, asphalt, and brick fragments of varying size, and wood chips. At the boring and trench locations, the fill soils extend to depths of 2½ to 23± feet below the existing site grades. No documentation regarding the placement of these fill soils is known to exist.
- The most feasible method to develop this site is considered to be removal and recompaction of the existing undocumented fill soils. It is recommended that the fill soils be removed in their entirety in order to support the proposed structure on a shallow foundation system.
- Site stripping of any existing vegetated areas should include all vegetation, organic soils, and root masses. These materials should be disposed of offsite.
- Demolition of the existing structures, tennis courts, and pavements will be necessary to facilitate the proposed development. Any subsurface improvements, including utilities, foundations, and remnants of the former swimming pools should also be removed in their entirety.
- Preliminary remedial grading and foundation design recommendations have been provided herein, based on assumed site grading, and assumed foundation loads.
- Based on these preliminary assumptions, remedial grading should be performed within the proposed building area, to remove the undocumented fill soils in their entirety. Additionally, the overexcavation should also extend to a depth of at least 5 feet below the proposed foundation bearing grade, due to the differing support characteristics of the very dense bedrock materials and compacted fill soils.
- After the overexcavation subgrade soils have been approved by the geotechnical engineer, the excavated soils may be replaced as compacted structural fill, provided that they are cleaned of any debris and organic materials, to the satisfaction of the geotechnical engineer.
- It should be noted that the greatest depths of artificial fill were observed at the borings and trenches performed in the southern and western portions of the site. The client may wish to consider locating the proposed structure in the northeast portion of the site, in order to minimize the amount of remedial grading required to prepare the proposed building pad.

- Preliminarily, the new parking area subgrade soils are recommended to be scarified to a depth of 12± inches, thoroughly moisture conditioned and recompact to at least 90 percent of the ASTM D-1557 maximum dry density.

Preliminary Building Floor Slab Design Recommendations

- Based on discussions with the client, we understand that the client is considering the use of a post-tensioned slab to support the proposed building.
- Modulus of Subgrade Reaction: 125-175 lbs/in³.
- 2,000 to 3,000 lbs/ft² maximum allowable soil bearing pressure.
- Alternative design recommendations for conventional slabs-on-grade have also been provided in Section 6.6.

Preliminary Foundation Design Recommendations

- Conventional shallow foundations, supported in newly placed compacted fill.
- 2,000 to 3,000 lbs/ft² maximum allowable soil bearing pressure.
- Reinforcement consisting of two (2) to four (4) No. 5 rebars in strip footings. Additional reinforcement may be necessary for structural considerations.

Preliminary Pavement Design Recommendations

ASPHALT PAVEMENTS (R = 40)			
Materials	Thickness (inches)		
	Parking Stalls (TI = 4.0)	Auto Drive Lanes (TI = 5.0)	Light Truck Traffic (TI = 6.0)
Asphalt Concrete	3	3	3½
Aggregate Base	3	4	6
Compacted Subgrade	12	12	12

PORTLAND CEMENT CONCRETE PAVEMENTS	
Materials	Thickness (inches)
	Automobile and Light Truck Traffic (TI = 5.0 & 6.0)
PCC	5
Compacted Subgrade (95% minimum compaction)	12

2.0 SCOPE OF SERVICES

The scope of services performed for this project was in general accordance with our Proposal No. 15P158, dated March 2, 2015. The scope of services included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to determine the geotechnical feasibility of the proposed development. The evaluation of the environmental aspects of this site was beyond the scope of services for this geotechnical feasibility study.

3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Conditions

The subject site is located at the northwest corner of Alessandro Boulevard and Glenhaven Avenue in Riverside, California. The site is bounded to the north by multi-family residences, to the east by Glenhaven Avenue, to the south by Alessandro Boulevard, and to the west by graded pads. The general location of the site is illustrated on the Site Location Map, included as Plate 1 of this report.

The site consists of a nearly rectangular-shaped parcel, $5.27\pm$ acres in size. The site is currently developed with two (2) buildings, eight (8) tennis courts, and a parking lot. The southern building is approximately $3,500\pm$ ft² in size and the eastern building is approximately $2,500\pm$ ft² in size. The buildings are single story structures of masonry block construction and are assumed to be supported on shallow foundations with a concrete slab-on-grade floor. We understand that the site was previously utilized as a tennis club. However, the site is not currently operational. An asphaltic concrete parking lot is located in the southern area of the site. The pavements are in poor condition with severe cracking throughout. The ground surface cover in the tennis court areas consist of concrete flatwork and the ground surface in the area west of the tennis courts consists of exposed soil with moderate native grass and weed growth. Turf grass and palm trees are located east of the tennis courts and eastern building.

Based on our review of readily available historic aerial photographs obtained from the internet, two (2) swimming pools were previously located in the central area of the site. However, the swimming pools have been backfilled. The existing facility and swimming pools were under construction at the time of an aerial photograph dated 1966. Based on our discussions with the client and the subsurface conditions encountered at the site, we understand that the site was formerly mined before it was developed as an athletic facility. The mining operations appear to have ceased and the resultant excavation was backfilled before 1948, the date of the earliest aerial photograph.

A descending slope is located on the west and south sides of the tennis courts. Based on a partial topographic site plan provided to our office by the client, the slope ranges from 1 foot in height in the northern portion of the slope to $10\pm$ feet in the southwestern portion of the slope and then 1 foot in the eastern portion of the slope. The inclination of the slope varies from 4h:1v in the northern portion of the site to 2.5h:1v in the southwestern and eastern portions of the slope. A slope also descends from the southern and a portion of the eastern property lines to the existing parking lot. The slope ranges from 1 to $9\pm$ feet in height with an inclination of 2h:1v. A large ascending slope is located along the western property line. The slope height is as much as 75 feet with near vertical to 1h:1v inclinations. Based on our historical aerial photo review, it appears that the site was previously mined prior to the development of the tennis club. It is assumed that this slope created during the previous mining operation. Bedrock is exposed on the face of this slope.

Topographic information for the site was obtained from a partial topographic plan provided by the client. The plan indicates that the topographic high is located at 1167.1± feet mean sea level (msl) at the top of the western slope and a topographic low is located at 1078.1± feet msl in the southern portion of the site.

3.2 Proposed Development

Based on a preliminary site plan provided by the client, the site will be developed with a senior housing facility, consisting of a roughly rectangular-shaped building, located in the north-central portion of the site. The building will include an open courtyard located in the center of the building and will possess a footprint area of 46,000± ft². Asphaltic concrete pavements will be utilized in the parking lot and drive areas located to the west, south and east of the building. A pet park will be located to the south of the proposed building. The remainder of the site will be developed with landscaped planters and areas of concrete flatwork.

Detailed structural information has not been provided. It is assumed that the senior housing facility will be a two or three-story structure of light wood-frame and/or masonry block construction. The client's representative has indicated that the client intends to support the new structure on a post-tensioned slab foundation.

No significant amounts of below grade construction, such as basements or crawl spaces, are expected to be included in the proposed development. Based on the relatively level site topography, cuts and fills of less than 3 to 5± feet are expected to be necessary to achieve the proposed building pad grade.

4.0 SUBSURFACE EXPLORATION

4.1 Scope of Exploration/Sampling Methods

The subsurface exploration conducted for this project consisted of six (6) borings advanced to depths of 7 to 35± feet below current existing site grades. In addition to the six borings, a total of three (3) trenches were excavated at the site to depths of 13 to 17± feet below existing site grades. All of the borings and trenches were logged during drilling and excavation by a member of our staff.

The borings were advanced with hollow-stem augers, by a truck-mounted drilling rig and the test pits were performed using a conventional backhoe with rubber tires. Representative bulk and relatively undisturbed soil samples were taken during drilling. Relatively undisturbed samples were taken with a split barrel "California Sampler" containing a series of one inch long, 2.416± inch diameter brass rings. This sampling method is described in ASTM Test Method D-3550. Samples were also taken using a 1.4± inch inside diameter split spoon sampler, in general accordance with ASTM D-1586. Both of these samplers are driven into the ground with successive blows of a 140-pound weight falling 30 inches. The blow counts obtained during driving are recorded for further analysis. Bulk samples were collected in plastic bags to retain their original moisture content. The relatively undisturbed ring samples were placed in molded plastic sleeves that were then sealed and transported to our laboratory.

The approximate locations of the borings are indicated on the Boring and Trench Location Plan, included as Plate 2 in Appendix A of this report. The Boring and Trench Logs, which illustrate the conditions encountered at the boring and trench locations, as well as the results of some of the laboratory testing, are included in Appendix B.

4.2 Geotechnical Conditions

Pavements

Three (3) of the borings were drilled through Portland cement concrete pavements. At these boring locations, the pavements consist of 4± inches of concrete with no discernable layer of aggregate base. One (1) of the borings was drilled through asphaltic concrete pavements. At this boring location, the pavement consists of 3± inches of asphaltic concrete underlain by 2± inches of aggregate base.

Topsoil/Rootmat Materials

Topsoil was encountered at the ground surface at Boring No. B-5. The topsoil consists of silty fine to medium sands with abundant fine root fibers and extends to ½ to 1± foot below the ground surface.

Artificial Fill

Artificial fill soils were encountered at the ground surface or beneath the pavements at four (4) of the boring locations and all of the trench locations. The fill soils generally consist of loose to medium dense silty fine sands, silty fine to medium sands, fine sands, fine to medium sands, and fine to coarse sands, extending to depths of 2½ to 23± feet below the existing site grades. The fill soils possess a disturbed appearance and contain an abundance of concrete, asphalt, rebar, wood, and brick debris and fragments, resulting in their classification as artificial fill. The debris and fragments ranged in size from less than 1 foot to 6± feet in length.

It should be noted that Trench Nos. T-2 and T-3 encountered refusal conditions within the fill materials at depths of 17 and 13± feet, respectively. Therefore, the depth of the fill is greater than 17 and 13 feet at these locations.

Bedrock

Bedrock was encountered beneath the artificial fill, topsoil materials, or pavements at all of the boring locations and one of the trench locations extending to the maximum depth explored of 35± feet. The bedrock consists of brown to gray brown, weathered, friable, medium to coarse grained granite.

Groundwater

Groundwater was not encountered during the drilling of any of the borings or the excavation of any of the trenches. In addition, delayed readings taken within the open boreholes and trenches did not identify any free water. Based on the lack of any water within the borings and trenches, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 35± feet at the time of the subsurface exploration.

4.3 Geologic Conditions

Geologic research indicates that the site is underlain by artificial fill and Granite of the Riverside area of Cretaceous age (Map Symbol Krg). Intermixed Paleozoic schist and gneiss and Cretaceous granitic rocks (Map Symbol KgPz) are located within the outcrop of the western slope of the site. The primary available reference applicable to the subject site is Geologic Map of the Riverside East 7.5 Minute Quadrangle, Riverside County, California, by Douglas M. Morton and Brett F. Cox, 2001 (Plate 3).

Based on the materials encountered in the exploratory borings and trenches, it is our opinion that the majority of the site is underlain by artificial fill (Map Symbol Af) and granite (Map Symbol Krg). Based on surface mapping of the bedrock exposed on the western slope, the western slope consists of intermixed schist and gneiss (Map Symbol KgPz). Overall, the bedrock encountered in the exploratory borings and trenches consists of granite which is consistent with the mapped Krg granite that is located in the southern portion of the site. The bedrock

encountered at the surface of the exposed western slope face consists of KgPz schist and gneiss which is also consistent with the mapped geologic conditions at the subject site.



5.0 LABORATORY TESTING

The soil samples recovered from the subsurface exploration were returned to our laboratory for further testing to determine selected physical and engineering properties of the soils. The tests are briefly discussed below. It should be noted that the test results are specific to the actual samples tested, and variations could be expected at other locations and depths.

Classification

All recovered soil samples were classified using the Unified Soil Classification System (USCS), in accordance with ASTM D-2488. The field identifications were then supplemented with additional visual classifications and/or by laboratory testing. The USCS classifications are shown on the Boring and Trench Logs and are periodically referenced throughout this report.

Density and Moisture Content

The density has been determined for selected relatively undisturbed ring samples. These densities were determined in general accordance with the method presented in ASTM D-2937. The results are recorded as dry unit weight in pounds per cubic foot. The moisture contents are determined in accordance with ASTM D-2216, and are expressed as a percentage of the dry weight. These test results are presented on the Boring and Trench Logs.

Consolidation

Selected soil samples have been tested to determine their consolidation potential, in accordance with ASTM D-2435. The testing apparatus is designed to accept either natural or remolded samples in a one-inch high ring, approximately 2.416 inches in diameter. Each sample is then loaded incrementally in a geometric progression and the resulting deflection is recorded at selected time intervals. Porous stones are in contact with the top and bottom of the sample to permit the addition or release of pore water. The samples are typically inundated with water at an intermediate load to determine their potential for collapse or heave. The results of the consolidation testing are plotted on Plates C-1 through C-4 in Appendix C of this report.

Maximum Dry Density and Optimum Moisture Content

Representative bulk samples were tested to determine their maximum dry density and optimum moisture content. The results have been obtained using the Modified Proctor procedure, per ASTM D-1557, and are presented on Plates C-5 and C-6 in Appendix C of this report. This test is generally used for comparison with the in-situ densities of undisturbed field samples, and for later compaction testing. Additional testing of other soil types or soil mixes may be necessary at a later date.

Soluble Sulfates

Representative samples of the near-surface soils were submitted to a subcontracted analytical laboratory for determination of soluble sulfate content. Soluble sulfates are naturally present in soils, and if the concentration is high enough, can result in degradation of concrete which comes

into contact with these soils. The results of the soluble sulfate testing are presented below, and are discussed further in a subsequent section of this report.

<u>Sample Identification</u>	<u>Soluble Sulfates (%)</u>	<u>ACI Classification</u>
B-1 @ 0 to 5 feet	0.013	Negligible
B-3 @ 0 to 5 feet	0.002	Negligible

Expansion Index

The expansion potential of the on-site soils was determined in general accordance with ASTM D-4829 as required by the California Building Code (CBC). The testing apparatus is designed to accept a 4-inch diameter, 1-in high, remolded sample. The sample is initially remolded to 50± 1 percent saturation and then loaded with a surcharge equivalent to 144 pounds per square foot. The sample is then inundated with water, and allowed to swell against the surcharge. The resultant swell or consolidation is recorded after a 24-hour period. The results of the EI testing are as follows:

<u>Sample Identification</u>	<u>Expansion Index</u>	<u>Expansive Potential</u>
B-1 @ 0 to 5 feet	0	Very Low

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our review, field exploration, laboratory testing and geotechnical analysis, the proposed development is considered feasible from a geotechnical standpoint. The recommendations contained in this report should be taken into the design, construction, and grading considerations. The recommendations are contingent upon all grading and foundation construction activities being monitored by the geotechnical engineer of record.

Based on the preliminary nature of this investigation, further geotechnical investigation(s) will be required prior to construction of the proposed development. The Grading Guide Specifications, included as Appendix D, should be considered part of this report, and should be incorporated into the project specifications. The contractor and/or owner of the development should bring to the attention of the geotechnical engineer any conditions that differ from those stated in this report, or which may be detrimental for the development.

6.1 Seismic Design Considerations

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 investigation. However, numerous 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, significant 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.

Faulting and Seismicity

Research of available maps indicates that the subject site is not located within an Alquist-Priolo Earthquake Fault Zone. Furthermore, SCG did not identify any evidence of faulting during the geotechnical investigation. Therefore, the possibility of significant fault rupture on the site is considered to be low.

The potential for other geologic hazards such as seismically induced settlement, lateral spreading, tsunamis, inundation, seiches, flooding, and subsidence affecting the site is considered low.

Seismic Design Parameters

The 2013 California Building Code (CBC) was adopted by all municipalities within Southern California on January 1, 2014. The 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. The seismic design parameters presented below are based on the soil profile and the proximity of known faults with respect to the subject site.

The 2013 CBC Seismic Design Parameters have been generated using U.S. Seismic Design Maps, a web-based software application developed by the United States Geological Survey. This software application, available at the USGS web site, calculates seismic design parameters in accordance with the 2013 CBC, utilizing a database of deterministic site accelerations at 0.01 degree intervals. The table below is a compilation of the data provided by the USGS application. A copy of the output generated from this program is included as Plate E-1 in Appendix E of this report. A copy of the Design Response Spectrum, as generated by the USGS application is also included in Appendix E. Based on this output, the following parameters may be utilized for the subject site:

2013 CBC SEISMIC DESIGN PARAMETERS

Parameter		Value
Mapped Spectral Acceleration at 0.2 sec Period	S_S	1.500
Mapped Spectral Acceleration at 1.0 sec Period	S_1	0.600
Site Class	---	C
Site Modified Spectral Acceleration at 0.2 sec Period	S_{MS}	1.500
Site Modified Spectral Acceleration at 1.0 sec Period	S_{M1}	0.780
Design Spectral Acceleration at 0.2 sec Period	S_{DS}	1.000
Design Spectral Acceleration at 1.0 sec Period	S_{D1}	0.520

Liquefaction

Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and plasticity characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean (d_{50}) grain size in the range of 0.075 to 0.2 mm (Seed and Idriss, 1971). Non-sensitive clayey (cohesive) soils which possess a plasticity index of at least 18 (Bray and Sancio, 2006) are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table.

Research of the Riverside County GIS website indicates that the subject site is located within a mapped zone of moderate liquefaction susceptibility. However, the subsurface conditions encountered at the boring and test pit locations consist of artificial fill materials underlain by very dense bedrock. Also, no water was encountered within the depths explored by our borings and test pits. Based on these condition, no design considerations related to liquefaction are considered warranted for this project.

6.2 Geotechnical Design Considerations

General

The subsurface conditions at the subject site generally consist of variable depths of artificial fill soils underlain by very dense weathered bedrock materials. Based on subsurface information obtained from our borings and test pits, the fill soils consist of silty fine sands, and fine to coarse sands, extending to depths of 2½ to 23± feet below the existing site grades. The fill soils possess appreciable debris content including concrete and asphalt debris, wood chips and some traces of other highly organic matter. The results of consolidation and collapse testing indicate that the existing fill materials possess significant potential for both consolidation settlement and hydro-collapse when subjected to the load increases anticipated for the proposed structure. No documentation regarding the placement of these fill soils is known to exist, and based on the variable densities, debris content, and collapse potential, the existing fill materials are not considered suitable to support the foundation loads of the proposed structure. Therefore, remedial grading is considered warranted within the proposed building area, in order to remove the unsuitable fill soils and replace these materials with compacted structural fill. Some minor remedial grading will also be necessary across geologic contacts due to the differing support conditions of newly placed compacted fill and the existing very dense bedrock.

The borings and test pits performed in the western and southern halves of the site generally encountered greater depths of artificial fill ranging in depths from 13 to 23± feet below the existing site grades. The depths of fill encountered at the boring locations in the northeast quadrant of the site ranged from 1 to 2± feet. The client may wish to consider locating the proposed structure in the northeast portion of the site, in order to minimize the amount of remedial grading required to prepare the proposed building pad.

Cut/Fill Transitions

The proposed grading may create cut/fill transitions between the bedrock and the newly placed fill soils within the building areas. Any cut/fill transition conditions at or near foundation bearing grade raise a potential for additional differential settlement. This report contains recommendations for additional remedial grading to remove cut/fill transitions.

Settlement

The recommended remedial grading will remove the any artificial fill soils from the foundation influence zones of the new structure and replace these soils as compacted structural fill materials. The underlying bedrock materials are very dense and considered to be incompressible. Provided that the recommended remedial grading is completed, the post-construction static settlement of the proposed structure is expected to be within tolerable limits.

Soluble Sulfates

The results of the soluble sulfate testing, as discussed in Section 5.0 of this report, indicate soluble sulfate concentrations of 0.002 and 0.013 percent. This concentration is considered to be negligible with respect to the American Concrete Institute (ACI) Publication 318-05 Building Code Requirements for Structural Concrete and Commentary, Section 4.3. Therefore, specialized

concrete mix designs are not considered to be necessary, with regard to sulfate protection purposes. It is, however, recommended that additional soluble sulfate testing be conducted at the completion of rough grading to verify the soluble sulfate concentrations of the soils which are present at the proposed building pad grades.

Expansion

The near surface soils at this site generally consist of silty sands, and sands. Laboratory testing indicates that these materials have a very low expansion potential ($EI = 0$). Additionally, the bedrock near surface bedrock materials are composed of granite and do not possess appreciable plasticity. Based on these conditions, no design considerations related to expansive soils are considered warranted for this site. It is recommended that additional expansion index testing be conducted during subsequent geotechnical investigation and at the completion of rough grading to verify the expansion potential of the as-graded building pad.

Shrinkage/Subsidence

Based on the results of the laboratory testing, removal and recompaction of the undocumented fill soils is estimated to result in an average shrinkage of 12 to 16 percent. Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The subsidence in existing fill soils is estimated to be 0.10 to 0.15 feet. No significant subsidence is expected in areas where the existing fill soils are completely removed and granitic bedrock is exposed at the overexcavation subgrade, such as in building areas.

These estimates are based on previous experience and the subsurface conditions encountered at the boring and trench locations. The actual amount of subsidence is expected to be variable and will be dependant on the type of machinery used, repetitions of use, and dynamic effects, all of which are difficult to assess precisely.

Grading and Foundation Plan Review

No grading or foundation plans were available at the time of this report. It is therefore recommended that we be provided with copies of the preliminary plans, when they become available, for review with regard to the conclusions, recommendations, and assumptions contained within this report. These plans should also be made available prior to performance of the design level geotechnical investigation.

6.3 Preliminary Site Grading Recommendations

The preliminary grading recommendations presented below are based on the design details that were available at the time of this report, and the subsurface conditions encountered at our boring and test pit locations. These recommendations are general in nature, and should be confirmed as part of the design level geotechnical investigation.

Site Stripping and Demolition

Initial site stripping should include removal of all surficial vegetation and the existing organic topsoil materials. Topsoil, possessing an abundance of fine root fibers, and appreciable organic matter was encountered at one of the boring locations and extended to a depth of $1 \pm$ foot below

the ground surface. The actual extent of site stripping should be determined in the field by the geotechnical engineer, based on the organic content and stability of the materials encountered.

Demolition of the existing tennis courts, asphaltic concrete pavements, and remnants of any subsurface improvements will be required in order to facilitate the proposed development at the subject site. Any remnants of the former swimming pools and any foundations, slabs, utilities, and/or any other subsurface improvements should be demolished. Debris resultant from demolition should be disposed of offsite. Alternatively, concrete and asphalt debris may be pulverized to a maximum 2 inch particle size, well mixed with the on-site soils, and incorporated into new structural fills or it may be crushed and made into CMB, if desired.

Treatment of Existing Soils: Building Pad

Remedial grading is recommended within the proposed building pad area in order to remove the undocumented fill soils in their entirety. The depth of overexcavation should be determined during the design level geotechnical investigation. On a preliminary basis, overexcavation to depths of 2½ to 23± feet below existing and proposed site grades should be anticipated to remove the existing fill materials.

Due to the differing support characteristics of the existing bedrock and structural fill soils, it is also recommended that the existing bedrock materials within the proposed building areas be overexcavated to a depth of at least 5 feet below existing grade and to a depth of at least 5 feet below proposed pad grade. Within the foundation influence zones, the overexcavations should extend to depths of at least 5 feet below proposed foundation bearing grades.

The minimum lateral extent of the overexcavation should extend beyond the building perimeter and foundations to a distance equal to the depth of fill below the foundations. If the proposed structure incorporates any exterior columns (such as for a canopy or overhang) the overexcavation should also encompass these areas.

After a suitable overexcavation subgrade has been achieved, the previously excavated soils and bedrock materials may be replaced as compacted structural fill, provided that any debris and organic materials are removed to the satisfaction of the geotechnical engineer.

Treatment of Existing Soils: Retaining Walls and Site Walls

Although not indicated on the site plan, it may be necessary to construct some small retaining walls or site walls at or near the existing surface grade. Overexcavation will also be necessary in these areas to remove the existing fill soils. The overexcavation should extend to a depth sufficient to remove any underlying fill soils.

Treatment of Existing Soils: Parking Areas

Based on economic considerations, overexcavation of the existing soils in the new parking areas is not considered warranted, with the exception of areas where lower strength or unstable soils are identified by the geotechnical engineer during grading.

Subgrade preparation in the new parking areas should initially consist of removal of all soils disturbed during stripping and demolition operations. The geotechnical engineer should then

evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils should then be scarified to a depth of 12± inches, moisture conditioned to 2 to 4 percent above optimum, and recompact to at least 90 percent of the ASTM D-1557 maximum dry density. Based on the presence of variable strength artificial fill soils throughout the site, it is expected that some isolated areas of additional overexcavation may be required to remove zones of lower strength, unsuitable soils.

The grading recommendations presented above for the proposed parking and drive areas assume that the owner and/or developer can tolerate minor amounts of settlement within the proposed parking areas. The grading recommendations presented above do not mitigate the extent of undocumented fill soils in the parking areas. As such, settlement and associated pavement distress could occur. Typically, repair of such distressed areas involves significantly lower costs than completely mitigating these soils at the time of construction. If the owner cannot tolerate the risk of such settlements, all of the existing undocumented fill soils within these areas should be removed and replaced as structural fill.

Fill Placement

- Fill soils should be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 2 to 4 percent above the optimum moisture content, and compacted.
- On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer.
- All grading and fill placement activities should be completed in accordance with the requirements of the CBC and the grading code of the city of Riverside.
- All fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Fill soils should be well mixed.
- Compaction tests should be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore should not relieve the contractor of his responsibility to meet the job specifications.

Imported Structural Fill

All imported structural fill should consist of very low to non-expansive ($EI < 20$), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D.

Utility Trench Backfill

In general, all utility trench backfill should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Compacted trench backfill should conform to the requirements of the local grading code, and more restrictive requirements may be indicated by the city of Riverside. All utility trench backfills should be witnessed by the geotechnical engineer. The trench backfill soils should be compaction tested where possible; probed and visually evaluated elsewhere.

Utility trenches which parallel a footing, and extending below a 1h:1v plane projected from the outside edge of the footing should be backfilled with structural fill soils, compacted to at least 90 percent of the ASTM D-1557 standard. Pea gravel backfill should not be used for these trenches.

6.4 Construction Considerations

Excavation Considerations

The near surface soils generally consist of silty sand and fine to medium sands. These materials will be subject to caving within shallow excavations. Where caving occurs within shallow excavations, flattened excavation slopes may be sufficient to provide excavation stability. On a preliminary basis, temporary excavation slopes should be made no steeper than 2h:1v. Deeper excavations may require some form of external stabilization such as shoring or bracing. Maintaining adequate moisture content within the near-surface soils will improve excavation stability. The near surface bedrock materials are very dense, but also highly weathered. On a preliminary basis, temporary slopes within the bedrock materials should be made no steeper than 1/2h:1v. All excavation activities on this site should be conducted in accordance with Cal-OSHA regulations.

As discussed in Section 4 of this report, dense to very dense bedrock conditions were encountered at most of the boring and trench locations. All of the hollow stem auger borings extended into the bedrock materials, penetrating the upper 6 1/2 to 12± feet of the existing bedrock before encountering refusal conditions or voluntary termination of the boring. Based on the fact that refusal conditions were encountered at two of the boring locations, at depths of 7 and 9± feet below the existing site grades, it is expected that a large track mounted excavator and/or a large track mounted dozer equipped with a ripping shank will be required for excavation of very dense bedrock materials. Although it is not expected to be necessary, blasting or other specialized excavation techniques may be required in some limited areas of the site.

Moisture Sensitive Subgrade Soils

Most of the artificial fill soils possess appreciable silt content and may become unstable if exposed to significant moisture infiltration or disturbance by construction traffic. In addition, based on their granular content, some of the on-site soils will also be susceptible to erosion. The site should, therefore, be graded to prevent ponding of surface water and to prevent water from running into excavations.

If the construction schedule dictates that site grading will occur during a period of wet weather, allowances should be made for costs and delays associated with drying the on-site soils or import of a drier, less moisture sensitive fill material.

Groundwater

Based on the conditions encountered in the borings and trenches, groundwater is not present within 30± feet of the ground surface. Based on the anticipated depth to groundwater, it is not expected that the groundwater will affect excavations for the foundations or utilities.

6.5 Preliminary Foundation Design and Construction

Based on conversations with the client, we understand that the client intends to support the proposed building on a post-tensioned slab foundation system. Design recommendations for post-tensioned and conventional floor slabs are provided in Section 6.6 of this report. Alternatively, conventional shallow foundations may also be used to support the proposed structure. Preliminary recommendations for conventional shallow foundations are provided below.

The foundation design parameters presented below provide anticipated ranges for the allowable soil bearing pressures. These ranges should be refined during the subsequent design level geotechnical investigation.

Building Foundation Design Parameters

New square and rectangular footings may be designed as follows:

- Maximum, net allowable soil bearing pressure: 2,000 to 3,000 lbs/ft².
- Minimum longitudinal steel reinforcement within strip footings: Two (2) to Four (4) No. 5 rebars.

General Foundation Design Recommendations

The allowable bearing pressures presented above may be increased by one-third when considering short duration wind or seismic loads. Additional reinforcement may be necessary for structural considerations. The actual design of the foundations should be determined by the structural engineer.

Estimated Foundation Settlements

Typically, foundations designed in accordance with the preliminary foundation design parameters presented above will experience total and differential settlements of less than 1.0 and 0.5 inches, respectively. A detailed settlement analysis should be conducted as part of the design level geotechnical investigation, once detailed foundation loading information is available.

Lateral Load Resistance

Lateral load resistance will be developed by a combination of friction acting at the base of foundations and slabs and the passive earth pressure developed by footings below grade. The following friction and passive pressure may be used to resist lateral forces:

- Passive Earth Pressure: 275 - 325 lbs/ft³
- Friction Coefficient: 0.25 to 0.35

6.6 Preliminary Floor Slab Design and Construction

We understand that the client intends to support the proposed structure on a post-tensioned slab foundation. As an alternative, the building may also be supported using conventional shallow foundations with a conventional slab-on-grade floor. Subgrades which will support new post-tensioned slabs or conventional floor slabs should be prepared in accordance with the recommendations contained Section 6.3 of this report. Based on the anticipated grading which will occur at this site, the floor of the new structure may be constructed as a post-tensioned slab or a conventional slab-on-grade, supported on newly placed structural fill, extending to a depth of at least 5 feet below the proposed finished pad grade. Based on geotechnical considerations, the floor slab may be designed as follows:

Post-Tensioned Slab Design

- Modulus of Subgrade Reaction: 125 – 175 lbs/in³.
- Maximum, net allowable soil bearing pressure: 2,000 – 3,000 lbs/ft².
- We recommend that the designer incorporate a thickened edge of at least 18 inches in thickness to limit the potential for moisture penetration beneath the structure.

Conventional Slab-On-Grade Design

- Minimum slab thickness: 4 to 5 inches.
- Minimum slab reinforcement: Not required for geotechnical considerations. The actual floor slab reinforcement should be determined by the structural engineer, based upon the imposed loading.

General

- Slab underlayment: Minimum slab underlayment should consist of a moisture vapor barrier constructed below the entire area of the proposed slab where any moisture sensitive floor coverings are expected. The moisture vapor barrier should meet or exceed the Class A rating as defined by ASTM E 1745-97 and have a permeance rating less than 0.01 perms as described in ASTM E 96-95 and ASTM E 154-88. A polyolefin material such as Stego® Wrap Vapor Barrier or equivalent will meet these specifications. The moisture vapor barrier should be properly constructed in accordance with all applicable manufacturer specifications. Given that a rock free subgrade is anticipated and that a capillary break is not required, sand below the barrier is not required. The need for sand and/or the amount of sand above the moisture vapor barrier should be specified by the structural engineer or concrete contractor. The selection of sand above the barrier is not a geotechnical engineering issue and hence outside our purview. Where moisture sensitive floor coverings are not anticipated, the vapor barrier may be eliminated.
- Moisture condition the floor slab subgrade soils to 2 to 4 percent above the Modified Proctor optimum moisture content, to a depth of 12 inches. The moisture content of the floor slab subgrade soils should be verified by the geotechnical engineer within 24 hours prior to concrete placement.
- Proper concrete curing techniques should be utilized to reduce the potential for slab curling or the formation of excessive shrinkage cracks.

The actual design of the floor slab should be completed by the structural engineer to verify adequate thickness and reinforcement.

6.7 Preliminary Retaining Wall Design and Construction

Although not indicated on the site plan, the proposed development may require some small retaining walls to facilitate the new site grades. The parameters recommended for use in the design of these walls are presented below.

Retaining Wall Design Parameters

Based on the soil conditions encountered at the boring locations, the following parameters may be used in the design of new retaining walls for this site. The following parameters assume that only the on-site soils will be utilized for retaining wall backfill. The on-site soils generally consist of silty sands, sandy silts and fine sands. Based on their composition, the on-site soils have been assigned a friction angle of 30 degrees.

If desired, SCG could provide design parameters for an alternative select backfill material behind the retaining walls. The use of select backfill material could result in lower lateral earth pressures. In order to use the design parameters for the imported select fill, this material must be placed within the entire active failure wedge. This wedge is defined as extending from the heel of the retaining wall upwards at an angle of approximately 60° from horizontal. If select backfill material behind the retaining wall is desired, SCG should be contacted for supplementary recommendations.

RETAINING WALL DESIGN PARAMETERS

Design Parameter		Soil Type
		On-Site Sands and Silty Sands
Internal Friction Angle (ϕ)		30°
Unit Weight		125 lbs/ft ³
Equivalent Fluid Pressure:	Active Condition (level backfill)	42 lbs/ft ³
	Active Condition (2h:1v backfill)	67 lbs/ft ³
	At-Rest Condition (level backfill)	63 lbs/ft ³

Regardless of the backfill type, the walls should be designed using a soil-footing coefficient of friction of 0.30 and an equivalent passive pressure of 300 lbs/ft³. The structural engineer should incorporate appropriate factors of safety in the design of the retaining walls.

The active earth pressure may be used for the design of retaining walls that do not directly support structures or support soils that in turn support structures and which will be allowed to deflect. The at-rest earth pressure should be used for walls that will not be allowed to deflect.

such as those which will support foundation bearing soils, or which will support foundation loads directly.

Where the soils on the toe side of the retaining wall are not covered by a "hard" surface such as a structure or pavement, the upper 1 foot of soil should be neglected when calculating passive resistance due to the potential for the material to become disturbed or degraded during the life of the structure.

Retaining Wall Foundation Design

The retaining wall foundations should be supported within newly placed compacted structural fill, extending to a depth of at least 2 feet below the proposed bearing grade. Foundations to support new retaining walls should be designed in accordance with the general Foundation Design Parameters presented in a previous section of this report.

Backfill Material

On-site soils may be used to backfill the retaining walls. However, all backfill material placed within 3 feet of the back wall face should have a particle size no greater than 3 inches. The retaining wall backfill materials should be well graded.

It is recommended that a minimum 1 foot thick layer of free-draining granular material (less than 5 percent passing the No. 200 sieve) be placed against the face of the retaining walls. This material should extend from the top of the retaining wall footing to within 1 foot of the ground surface on the back side of the retaining wall. This material should be approved by the geotechnical engineer. In lieu of the 1 foot thick layer of free-draining material, a properly installed prefabricated drainage composite such as the MiraDRAIN 6000XL (or approved equivalent), which is specifically designed for use behind retaining walls, may be used. If the layer of free-draining material is not covered by an impermeable surface, such as a structure or pavement, a 12-inch thick layer of a low permeability soil should be placed over the backfill to reduce surface water migration to the underlying soils. The layer of free draining granular material should be separated from the backfill soils by a suitable geotextile, approved by the geotechnical engineer.

All retaining wall backfill should be placed and compacted under engineering controlled conditions in the necessary layer thicknesses to ensure an in-place density between 90 and 93 percent of the maximum dry density as determined by the Modified Proctor test (ASTM D1557-91). Care should be taken to avoid over-compaction of the soils behind the retaining walls, and the use of heavy compaction equipment should be avoided.

Seismic Lateral Earth Pressures

In accordance with the 2013 CBC, any retaining walls more than 6 feet in height must be designed for seismic lateral earth pressures. If walls 6 feet or more are required for this site, the geotechnical engineer should be contacted for supplementary seismic lateral earth pressure recommendations.

Subsurface Drainage

As previously indicated, the retaining wall design parameters are based upon drained backfill conditions. Consequently, some form of permanent drainage system will be necessary in conjunction with the appropriate backfill material. Subsurface drainage may consist of either:

- A weep hole drainage system typically consisting of a series of 4-inch diameter holes in the wall situated slightly above the ground surface elevation on the exposed side of the wall and at an approximate 8-foot on-center spacing. The weep holes should include a 2 cubic foot pocket of open graded gravel, surrounded by an approved geotextile fabric, at each weep hole location.
- A 4-inch diameter perforated pipe surrounded by 2 cubic feet of gravel per linear foot of drain placed behind the wall, above the retaining wall footing. The gravel layer should be wrapped in a suitable geotextile fabric to reduce the potential for migration of fines. The footing drain should be extended to daylight or tied into a storm drainage system.

6.8 Preliminary Pavement Design Parameters

Presented below are preliminary recommendations for pavements that may be required around the perimeters of the proposed structures. Grading recommendations for these pavement areas should be developed during the design level geotechnical investigation.

Pavement Subgrades

It is anticipated that the new pavements will be primarily supported on a layer of compacted structural fill, consisting of scarified, thoroughly moisture conditioned and recompacted existing soils. The near-surface soils generally consist of silty sands, sandy silts and fine sands. These soils are considered to possess fair to good pavement support characteristics with an estimated R-values ranging from 40 to 50. The subsequent pavement design is based upon an assumed R-value of 40. Any fill material imported to the site should have support characteristics equal to or greater than that of the on-site soils and be placed and compacted under engineering controlled conditions. It is recommended that R-value testing be performed after completion of rough grading. Depending upon the results of the R-value testing, it may be feasible to use thinner pavement sections in some areas of the site.

Asphaltic Concrete

Presented below are the recommended thicknesses for new flexible pavement structures consisting of asphaltic concrete over a granular base. The pavement designs are based on the traffic indices (TI's) indicated. The client and/or civil engineer should verify that these TI's are representative of the anticipated traffic volumes. If the client and/or civil engineer determine that the expected traffic volume will exceed the applicable traffic index, we should be contacted for supplementary recommendations. The design traffic indices equate to the following approximate daily traffic volumes over a 20 year design life, assuming six operational traffic days per week.

Traffic Index	No. of Heavy Trucks per Day
4.0	0
5.0	1
6.0	3

For the purpose of the traffic volumes indicated above, a truck is defined as a 5-axle tractor trailer unit with one 8-kip axle and two 32-kip tandem axles. All of the traffic indices allow for 1,000 automobiles per day.

ASPHALT PAVEMENTS (R = 40)			
Materials	Thickness (inches)		
	Parking Stalls (TI = 4.0)	Auto Drive Lanes (TI = 5.0)	Light Truck Traffic (TI = 6.0)
Asphalt Concrete	3	3	3½
Aggregate Base	3	4	6
Compacted Subgrade	12	12	12

The aggregate base course should be compacted to at least 95 percent of the ASTM D-1557 maximum dry density. The asphaltic concrete should be compacted to at least 95 percent of the Marshall maximum density, as determined by ASTM D-2726. The aggregate base course may consist of crushed aggregate base (CAB) or crushed miscellaneous base (CMB), which is a recycled gravel, asphalt and concrete material. The gradation, R-Value, Sand Equivalent, and Percentage Wear of the CAB or CMB should comply with appropriate specifications contained in the current edition of the "Greenbook" Standard Specifications for Public Works Construction.

Portland Cement Concrete

The preparation of the subgrade soils within concrete pavement areas should be performed as previously described for proposed asphalt pavement areas. The minimum recommended thicknesses for the Portland Cement Concrete pavement sections are as follows:

PORTLAND CEMENT CONCRETE PAVEMENTS	
Materials	Thickness (inches)
	Automobile and Light Truck Traffic (TI = 5.0 & 6.0)
PCC	5
Compacted Subgrade (95% minimum compaction)	12

The concrete should have a 28-day compressive strength of at least 3,000 psi. The maximum joint spacing within all of the PCC pavements is recommended to be equal to or less than 30

times the pavement thickness. The actual joint spacing and reinforcing of the Portland cement concrete pavements should be determined by the structural engineer.



7.0 GENERAL COMMENTS

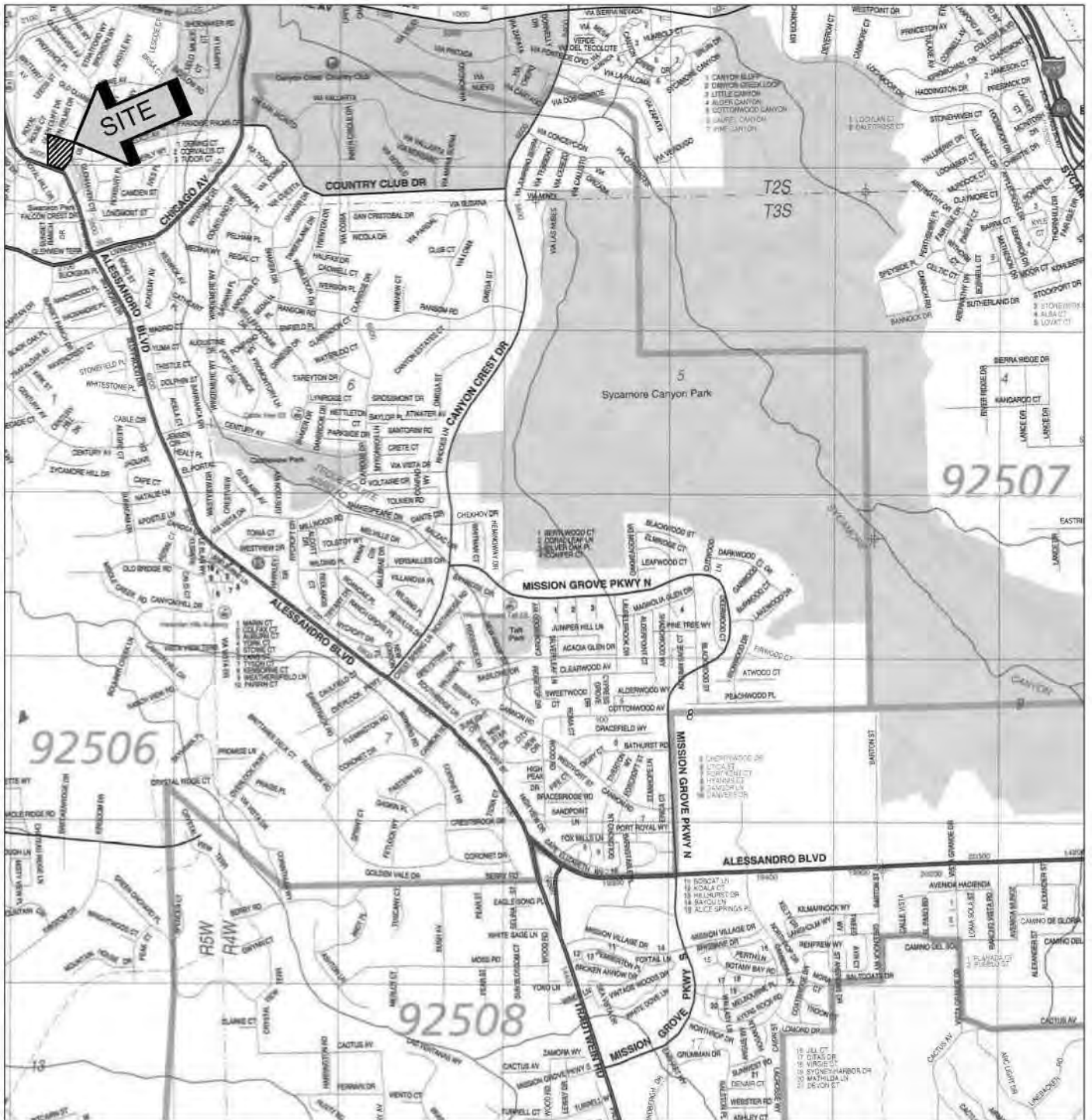
This report has been prepared as an instrument of service for use by the client, in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other design consultants to disclose information relative to the project. However, this report is not intended to be utilized as a specification in and of itself, without appropriate interpretation by the project architect, civil engineer, and/or structural engineer. The reproduction and distribution of this report must be authorized by the client and Southern California Geotechnical, Inc. Furthermore, any reliance on this report by an unauthorized third party is at such party's sole risk, and we accept no responsibility for damage or loss which may occur. The client(s)' reliance upon this report is subject to the Engineering Services Agreement, incorporated into our proposal for this project.

The analysis of this site was based on a subsurface profile interpolated from limited discrete soil samples. While the materials encountered in the project area are considered to be representative of the total area, some variations should be expected between boring locations and sample depths. If the conditions encountered during construction vary significantly from those detailed herein, we should be contacted immediately to determine if the conditions alter the recommendations contained herein.

This report has been based on assumed or provided characteristics of the proposed development. It is recommended that the owner, client, architect, structural engineer, and civil engineer carefully review these assumptions to ensure that they are consistent with the characteristics of the proposed development. If discrepancies exist, they should be brought to our attention to verify that they do not affect the conclusions and recommendations contained herein. We also recommend that the project plans and specifications be submitted to our office for review to verify that our recommendations have been correctly interpreted.

The analysis, conclusions, and recommendations contained within this report have been promulgated in accordance with generally accepted professional geotechnical engineering practice. No other warranty is implied or expressed.

APPENDIX A



SOURCE: RIVERSIDE COUNTY
THOMAS GUIDE, 2013



SITE LOCATION MAP
PROPOSED SENIOR HOUSING
RIVERSIDE, CALIFORNIA




SCALE: 1" = 2400'
DRAWN: DRK
CHKD: JAS
SCG PROJECT
15G150-1
PLATE 1



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

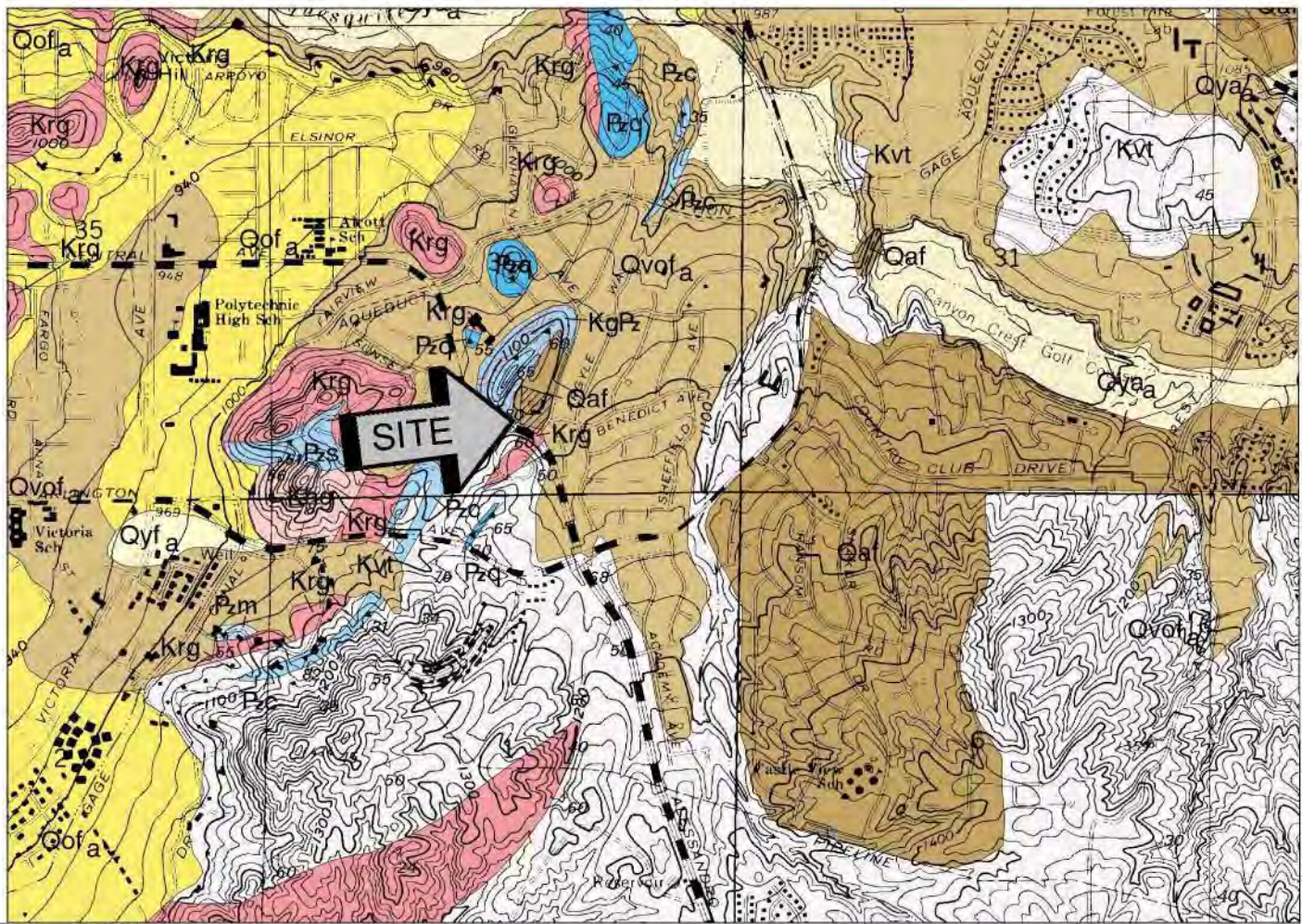


GEOTECHNICAL LEGEND

-  APPROXIMATE BORING LOCATION
-  APPROXIMATE TRENCH LOCATION
-  APPROXIMATE FILL DEPTHS (IN FEET)

NOTE: BASE MAP PREPARED BY LANDESIGN GROUP

BORING AND TRENCH LOCATION PLAN	
PROPOSED SENIOR HOUSING	
RIVERSIDE, CALIFORNIA	
SCALE 1" = 50'	
DRAWN: DRK	
CHECK: GRM	
SOG PROJECT 155150-1	
PLATE 2	



DESCRIPTION OF MAP UNITS

VERY YOUNG SURFICIAL DEPOSITS—Sediment, recently transported and deposited in channels and washes, on surfaces of alluvial fans and alluvial plains, and on hillslopes. Soil-profile development is non-existent. Includes:

Artificial fill (late Holocene)—Deposits of fill resulting from human construction or mining activities, restricted to large area of regrading related to residential development in west central part of quadrangle and several smaller areas nearby.

YOUNG SURFICIAL DEPOSITS—Sedimentary units that are slightly consolidated to cemented and slightly to moderately dissected. Alluvial fan deposits (Qyf) have typical fine high coarse-fine clay ratios. Younger surficial units have upper surfaces that are capped by light to moderately developed pedogenic soil profiles (A/C to A/CB/CX/B/CX profiles).

Young alluvial fan deposits (Holocene and late Pleistocene)—Gray-buff sand and cobble- and gravel-sand deposits derived directly from rocks of Peninsular Ranges batholith. Found in restricted drainages along west edge of quadrangle, but contiguous with much more extensively developed deposits west of quadrangle.

Young axial channel deposits (Holocene and late Pleistocene)—Gray, micaceous siltstone consisting of medium- to fine-grained sand and lower silt floorings several low relief valleys and their tributaries in northwestern and northeastern part of quadrangle. Includes sediments in Tequesquite Arroyo and Pigeon Pass Valley.

OLD SURFICIAL DEPOSITS—Sedimentary units that are moderately consolidated and slightly to moderately dissected. Older surficial deposits have upper surfaces that are capped by moderately to well-developed pedogenic soils (A/CB/CX/B/CX profiles and Bt horizons as much as 1 to 2 m thick and maximum hues in the range of 10YR 5/4 and 6/4 through 7.5YR 6/4 to 4/4 and mature Bt horizons reaching 5YR 5/6). Includes:

Old alluvial fan deposits (late to middle Pleistocene)—Indurated, sandy alluvial fan deposits developed extensively in western part of quadrangle. Most of unit is slightly to moderately dissected and reddish-brown. Some Qof includes thin, discontinuous surface layer of Holocene alluvial fan material.

VERY OLD SURFICIAL DEPOSITS—Sediments that are slightly to well consolidated to indurated and moderately to well dissected. Upper surfaces are capped by moderate to well developed pedogenic soils (A/CB/CX/B/CX profiles having Bt horizons as much as 2 to 3 m thick and maximum hues in the range 7.5YR 6/4 and 4/4 to 2.5YR 5/6).

Very old alluvial fan deposits (early Pleistocene)—Mostly well-dissected, well-indurated, reddish-brown deposits. Commonly contains diatrichs and locally silicified. Forms large area in southeastern part of quadrangle in area of March Air Force Base, and numerous smaller areas in northern part of quadrangle. Derived chiefly from rocks of southern California batholith.

Unnamed late Cenozoic sedimentary rocks in Riverside and Corona areas (early Pleistocene to late Pliocene?)—Lithologically diverse, moderately indurated, gray to brown, coarse-grained sandstone, pebbly sandstone, and conglomerate. Restricted to two small areas near southeast end of Box Springs Canyon. In the Riverside East 7.5' quadrangle, most clasts in unit were derived from San Bernardino Mountains. In Riverside East 7.5' quadrangle, appears to be derived from units found in Santa Ana River drainage. Southeast of Riverside, clasts are locally derived from Peninsular Ranges sources.

Box Springs plutonic complex (Cretaceous)—Box Springs plutonic complex is an elliptical, historically-flashed, basin-shaped granitic complex centered on Box Springs Mountains, apparently lower part of granitic diatrich. Layering and foliation in granitic rocks is primary. Complex consists of essentially massive to indistinctly primary layered biotite tonalite in core, surrounded by layer of foliated biotite granodiorite to tonalite. Further outward in complex is discontinuous layer of foliated, heterogeneous, porphyritic granodiorite, succeeded by uniform porphyritic granodiorite. Other compositionally and texturally diverse granitic rocks also occur within complex, but in relatively small amounts. All rocks of complex were included in Perris quartz diorite by Dudley (1935) and in Box Hill tonalite by Lawson (1939). Box Hill tonalite rocks, units

Krg Porphyritic granodiorite—Coarse-grained, light gray, foliated, porphyritic biotite granodiorite and subordinate tonalite. In most places grades into heterogeneous porphyritic granodiorite unit (Krbg). Groundmass is plagioclase, quartz (30 to 40 percent), and mafic minerals (5 to 10 percent). Mafic minerals are biotite and sparse hornblende, which are more evenly distributed than in heterogeneous granodiorite (Krbg). Subhedral potassium feldspar phenocrysts are up to 2.5 cm in length. Discoidal mesocratic inclusions are oriented parallel to foliation.

Biotite-hornblende tonalite—Light to medium gray, medium- to coarse-grained, foliated tonalite. Forms discontinuous, pod-shaped masses surrounding, but not in contact with, biotite tonalite (Krt). Contains 20 to 25 percent quartz and about 25 percent biotite and hornblende in subequal amounts. Hornblende and biotite occur as ragged crystals. Potassium feldspar present, but very sparse. Anhedral, interstitial sphere is conspicuous accessory mineral. Contains abundant, fine-grained, microcrystic, elliptical to discoidal-shaped mafic inclusions aligned parallel to foliation.

Heterogeneous biotite tonalite—Light-gray, inequigranular, medium- to coarse-grained, foliated biotite tonalite, restricted to northwestern Box Springs Mountains. Leucocratic, containing 1 to 4 percent biotite, which occurs in thin, subhedral plates, irregularly concentrated and aligned to produce wispy, swirled foliation. Leucocratic tonalite encloses pods and lenses of tonalite containing about 15 percent biotite as large ragged plates. Both types of tonalite contain abundant quartz (30 to 40 percent) and very sparse potassium feldspar (1 percent in less). Contains dispersed, mesocratic, discoidal inclusions. Granitic pegmatite dikes are abundant.

Heterogeneous granodiorite and tonalite—Light- to medium-gray medium- to coarse-grained, texturally heterogeneous, foliated hornblende-biotite tonalite and granodiorite, restricted to northern Box Springs Mountains near Pigeon Pass. Common discoidal, mesocratic inclusions oriented parallel to foliation.

Amphibolitic gabbro—Dark-gray to black, fine- to medium-grained, foliated, hornblende-rich amphibolitic gabbro forming lenses and elongate masses within biotite granodiorite and tonalite (Krbg). Foliation is parallel to foliation in that unit.

Val Verde pluton (Cretaceous)—Relatively uniform pluton composed of biotite-hornblende tonalite. Titled Perris quartz diorite by Dudley (1935). Val Verde tonalite by Osborn (1939), and included within Box Hill tonalite by Lawson (1938). Name Val Verde adopted by Morton (1999) based on detailed study of Osborn (1939) near Val Verde, a former settlement and railway siding midway between Perris and Riverside. Apparently steep-walled Val Verde pluton is eroded to mud-pluton level. Emplacement age of the pluton is 105.7 Ma. ⁴⁰Ar/³⁹Ar age of hornblende is 100 Ma, biotite 95 Ma and potassium feldspar 95.5 Ma. Includes:

Val Verde tonalite—Gray-weathering, relatively homogeneous, massive- to well-foliated, medium- to coarse-grained, hypocrystalline-granular biotite-hornblende tonalite; principal rock type of Val Verde pluton. Contains subequal biotite and hornblende, quartz and plagioclase. Potassium feldspar generally less than two percent of rock. Where present, foliation typically strikes northwest and dips moderately to steeply northeast. Northern part of pluton contains younger, intermittently developed, northeast-striking foliation. In central part of pluton, tonalite is mostly massive, and contains few segregations of mesocratic to melanocratic tonalite. Elliptical- to punctate-shaped, meso- to melanocratic inclusions are common.

Granite of the Riverside area (Cretaceous)—Medium- to coarse-grained, massive- to finely-foliated, leucocratic biotite granite. Contains about 1 to 3 percent biotite. Inclusions are sparse or absent except locally in western part of body, west of quadrangle, where rock contains 2 to 8 percent biotite and sparse to abundant inclusions of quartz diorite, granodiorite, and fine-grained mafic rock. At Mount Rubidoux, west of quadrangle, rocks contain sparse hypersthene and fayalite olivine and moderately abundant equant inclusions of dark gray fine-grained rock.

Intermediate Paleozoic(?) schist and gneiss and Cretaceous granitic rocks (Cretaceous and Paleozoic?)—Intermediate Paleozoic(?) schist and gneiss and Cretaceous granitic rocks, mostly tonalite and granodiorite. Forms elongate mass within Val Verde tonalite (Krt) west of Sycamore Canyon and small mass south of Tequesquite Arroyo.

Biotite Schist (Paleozoic?)—Medium- to dark-gray, fine-grained biotite schist and biotite-quartz-feldspar schist. Locally contains sillimanite and cordierite. Commonly includes minor amounts of quartzite and calc-silicate hornfels. Limited exposures in hills south of Tequesquite Arroyo, and as pediments in Val Verde tonalite.

Impure quartzite (Paleozoic?)—Quartzite, impure, light-gray to light-greenish-gray, fine- to medium-grained, layered to massive. Limited exposures in hills south of Tequesquite Arroyo.

Marble (Paleozoic?)—Marble: white to light-gray, locally bluish-gray and blue, coarse to extremely coarse grained.

Calc-silicate rocks (Paleozoic?)—Heterogeneous, massive to well-layered calc-silicate rocks.

Marble and schist, undifferentiated (Paleozoic?)—Intermediate marble, calc-silicate rock, and biotite schist. Mapped on North Hill in northwestern part of quadrangle.



SOURCE: "GEOLOGIC MAP OF THE RIVERSIDE EAST 7.5' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA" MORTON AND COX 2001

GEOLOGIC MAP PROPOSED SENIOR HOUSING RIVERSIDE, CALIFORNIA






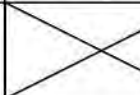
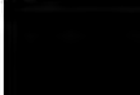

SCALE: 1" = 2000'
DRAWN: DRK
CHKD: JAS
SCG PROJECT
15G150-1



SOUTHERN
CALIFORNIA
GEOTECHNICAL

APPENDIX B

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/ft³.

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.






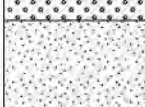
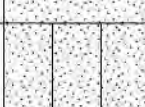
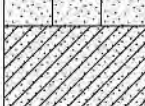


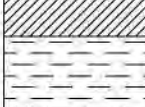



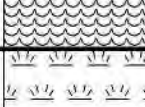
PASSING #200 SIEVE:

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





























JOB NO.: 15G150	DRILLING DATE: 5/13/15	WATER DEPTH: Dry
PROJECT: Proposed Senior Housing	DRILLING METHOD: Hollow Stem Auger	CAVE DEPTH: 14 feet
LOCATION: Riverside, California	LOGGED BY: Daryl Kas	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
5		19			<u>FILL</u> : Brown Silty fine Sand, trace medium to coarse Sand, trace fine Gravel, medium dense-damp	100	4					
		33				111	4					
		44			<u>FILL</u> : Brown Silty fine Sand, trace medium Sand, dense-damp	113	4					
		90/11"			<u>FILL</u> : Light Gray Silty fine to medium Sand, trace Concrete fragments, very dense-damp	114	5					
		87				110	6					
10												
15		37/11"			<u>FILL</u> : Brown Silty fine to medium Sand, trace coarse Sand, trace Concrete fragments, very dense-damp to moist	118	7					
20		50/4"			<u>BEDROCK</u> : Dark Gray medium to coarse grained Granite, phanentic, friable, weathered, very dense-dry	112	2					
25		50/3"					2					
Boring Terminated at 26½'												

TBL 15G150.GPJ, SOCALGEO.GDT 6/3/15



JOB NO.: 15G150	DRILLING DATE: 5/13/15	WATER DEPTH: Dry
PROJECT: Proposed Senior Housing	DRILLING METHOD: Hollow Stem Auger	CAVE DEPTH: 16 feet
LOCATION: Riverside, California	LOGGED BY: Daryl Kas	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
					4± inches Portland cement concrete							
		6			<u>FILL:</u> Gray Brown fine to medium Sand, trace coarse Sand, loose-moist	109	8					
		47			<u>FILL:</u> Brown Silty fine Sand, trace medium to coarse Sand, dense-moist	90	8					
5		5			<u>FILL:</u> Dark Brown Silty fine Sand, trace medium Sand, loose-damp to very moist	102	8					
		5			@ 7 to 10 feet, abundant Asphaltic concrete fragments and Wood chips	86	10					
10		8				80	27					
					<u>FILL:</u> Brown Silty fine to medium Sand, trace Asphaltic concrete fragments and Wood chips, loose-damp							
15		9				102	6					
					<u>FILL:</u> Gray Brown fine to coarse Sand, trace fine Gravel, loose-damp							
20		11				108	3					
					<u>BEDROCK:</u> Gray medium to coarse grained Granite, phaneritic, friable, highly weathered, medium dense-dry to damp							
25		20				121	2					
												
30		18				116	3					
												
35												
Boring Terminated at 35½'												

TBL 15G150.GPJ, SOCCALGEO.GDT 6/3/15



JOB NO.: 15G150 DRILLING DATE: 5/13/15 WATER DEPTH: Dry
PROJECT: Proposed Senior Housing DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 8 feet
LOCATION: Riverside, California LOGGED BY: Daryl Kas READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
	X	77/11"			4± inches Portland cement concrete		6					
	X				<u>FILL:</u> Gray Brown Silty fine to coarse Sand, very dense-damp		5					
5	X	90/10"			<u>BEDROCK:</u> Brown to Light Gray Brown medium to coarse grained Granite, phaneritic, friable, weathered, very dense-damp		4					
	X	79/3"					5					
10	X	50/5"	2.5				9					
	X	73/4"	2.0				7					
15												
Boring Terminated at 15'												

TBL 15G150.GPJ, SOCALGEO.GDT 6/3/15



JOB NO.: 15G150 DRILLING DATE: 5/13/15 WATER DEPTH: Dry
PROJECT: Proposed Senior Housing DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 4 feet
LOCATION: Riverside, California LOGGED BY: Daryl Kas READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
5		36	4.5+		6± inches Portland cement concrete	118	4					
		56	4.5+		<u>BEDROCK:</u> Brown medium to coarse grained Granite, phaneritic, friable, highly weathered, trace Iron oxide staining, medium dense-damp	128	3					
		23	3.5			124	3					
					Boring Terminated at 7' due to refusal on very dense Bedrock							

TBL 15G150.GPJ, SOCALGEO.GDT 6/3/15



JOB NO.: 15G150	DRILLING DATE: 5/13/15	WATER DEPTH: Dry
PROJECT: Proposed Senior Housing	DRILLING METHOD: Hollow Stem Auger	CAVE DEPTH: 3 feet
LOCATION: Riverside, California	LOGGED BY: Daryl Kas	READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
5	X	96/9"	2.75		TOPSOIL: Light Gray Brown Silty fine to medium Sand, abundant fine root fibers, loose-dry to damp BEDROCK: Light Gray Brown medium to coarse grained Granite, phaneritic, friable, weathered, trace Iron oxide staining, very dense-dry to damp		2					
	X	97/1"					4					
	X	50/3"					1					
	X	50/1"	2.5			121	2					
					Boring Terminated at 9' due to refusal on very dense Bedrock							

TBL 15G150.GPJ, SOCALGEO.GDT 6/3/15



JOB NO.: 15G150 DRILLING DATE: 5/13/15 WATER DEPTH: Dry
PROJECT: Proposed Senior Housing DRILLING METHOD: Hollow Stem Auger CAVE DEPTH: 15 feet
LOCATION: Riverside, California LOGGED BY: Daryl Kas READING TAKEN: At Completion

FIELD RESULTS				GRAPHIC LOG	DESCRIPTION	LABORATORY RESULTS						COMMENTS
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)			DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	UNCONFINED SHEAR (TSF)	
SURFACE ELEVATION: — MSL												
		19			3± inches Asphaltic concrete, 2± inches Aggregate base	114	8					
		19			FILL: Brown Silty fine Sand, trace medium Sand, medium dense-damp to moist	118	4					
5		12			FILL: Brown fine to coarse Sand, loose-damp	104	3					
		35			FILL: Brown Silty fine to medium Sand, trace coarse Sand, medium dense-damp	119	3					
10		50			@ 9 feet, dense	120	5					
15		58	4.5+		BEDROCK: Brown medium to coarse grained Granite, phaneritic, friable, weathered, trace Iron oxide staining, dense-damp to moist	117	3					
20		86/9"	4.5+				10					
Boring Terminated at 21½'												

TBL 15G150.GPJ, SOCALGEO.GDT 6/3/15

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO.
T-1

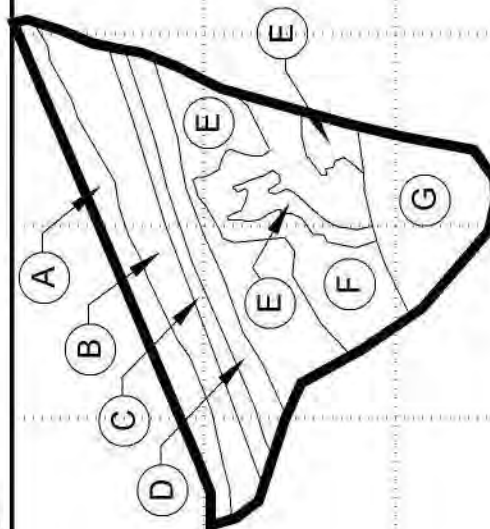
JOB NO.: 15G150-1				EQUIPMENT USED: Backhoe				WATER DEPTH: Dry					
PROJECT: Proposed Senior Housing				LOGGED BY: Daryl Kas				SEEPAGE DEPTH: Dry					
LOCATION: Riverside, CA				ORIENTATION: N 90 E				READINGS TAKEN: At Completion					
DATE: 05-12-2015				ELEVATION: 1089 feet msl									
DEPTH		SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION								
		b		3	A: FILL: Brown Silty fine to coarse Sand, porous, abundant root fibers, loose-dry to damp								
		b		2	B: FILL: Brown Silty fine Sand, trace medium to coarse Sand, slightly porous, trace fine root fibers, medium dense - dry to damp								
		b		5	C: FILL: Gray fine to coarse Sand, loose to medium dense - damp								
		b		4	D: FILL: White concrete slurry, cemented, very dense dry								
		b		2	E: FILL: Light Gray Silty fine to medium Sand, trace coarse Sand, medium dense - dry to damp								
		b		2	F: FILL: Brown fine to coarse Sand, medium dense - dry to damp								
		b		5	G: BEDROCK (Krg): Brown medium to coarse grained Granite, phaneritic, weathered, friable, dense to very dense - damp								
					Trench Terminated @ 13 feet								

GRAPHIC REPRESENTATION	
<div><div></div><div>N 90 E</div></div> <div><div>SCALE: 1" = 5'</div><div></div></div>	

GRAPHIC REPRESENTATION



SCALE: 1" = 5'



KEY TO SAMPLE TYPES:
b - BULK SAMPLE (DISTURBED)
R - RING SAMPLE 2-1/2" DIAMETER
(RELATIVELY UNDISTURBED)

TRENCH LOG

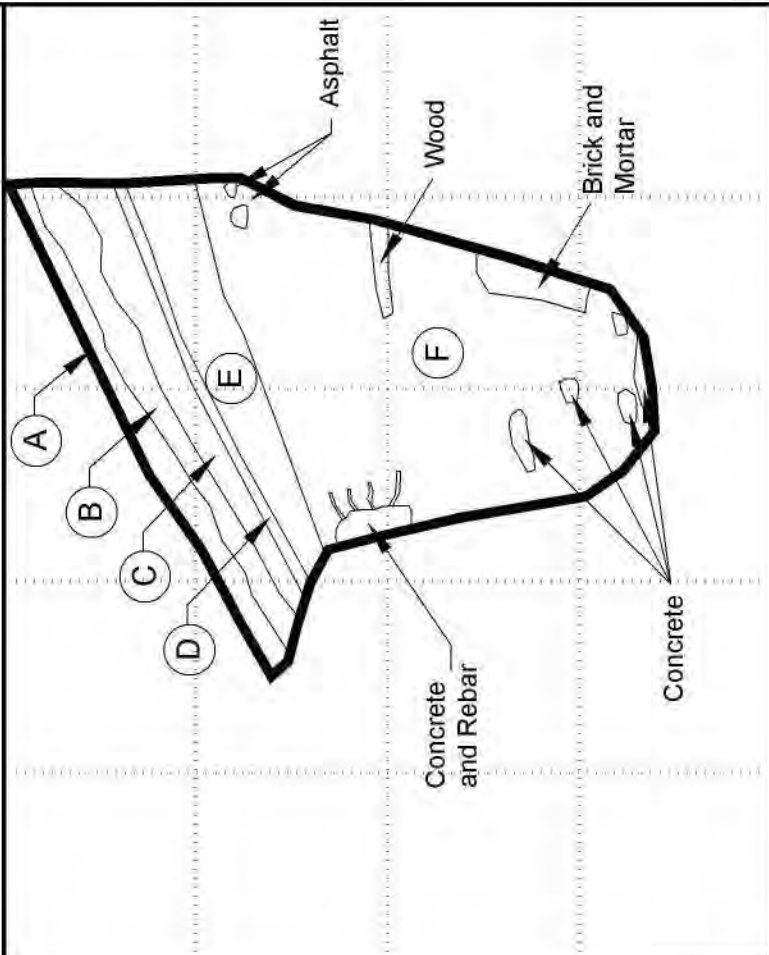
PLATE B-7

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO.
T-2

JOB NO.: 15G150-1	EQUIPMENT USED: Backhoe	WATER DEPTH: Dry
PROJECT: Proposed Senior Housing	LOGGED BY: Daryl Kas	SEEPAGE DEPTH: Dry
LOCATION: Riverside, CA	ORIENTATION: N 90 E	READINGS TAKEN: At Completion
DATE: 05-12-2015	ELEVATION: 1090 feet msl	

EARTH MATERIALS DESCRIPTION		GRAPHIC REPRESENTATION	
DEPTH	SAMPLE	MOISTURE (%)	DRY DENSITY (PCF)
5	b	3	
	b	4	
	b	4	
	b	3	
	b	4	
10	b	4	
	b	5	
15	b	5	
	b		



TRENCH LOG

PLATE B-8

KEY TO SAMPLE TYPES:
B - BULK SAMPLE (DISTURBED)
R - RING SAMPLE 2-1/2" DIAMETER (RELATIVELY UNDISTURBED)

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO.
T-3

JOB NO.: 15G150-1 PROJECT: Proposed Senior Housing LOCATION: Riverside, CA DATE: 05-12-2015		EQUIPMENT USED: Backhoe LOGGED BY: Daryl Kas ORIENTATION: N 90 E ELEVATION: 1091 feet msl		WATER DEPTH: Dry SEEPAGE DEPTH: Dry READINGS TAKEN: At Completion	
DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION	GRAPHIC REPRESENTATION
5	b		6	A: FILL: Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, abundant root fibers, loose - damp	
	b		2	B: FILL: Gray Brown Silty fine to coarse Sand, trace fine Gravel, asphaltic and concrete fragments, medium dense - dry to damp	
	b		3	C: FILL: Gray Brown Silty fine to medium Sand, medium dense - damp	
	b		3	D: FILL: Gray to Brown fine to coarse Sand, medium dense - dry to damp	
10	b		6	E: FILL: Light Gray Silty fine to medium Sand, some coarse Sand, medium dense - damp	
	b		6	F: FILL: Brown Silty fine Sand, trace medium to coarse Sand, medium dense - damp	
15	b		6	Trench Terminated @ 13 feet Due to Refusal on Concrete debris	

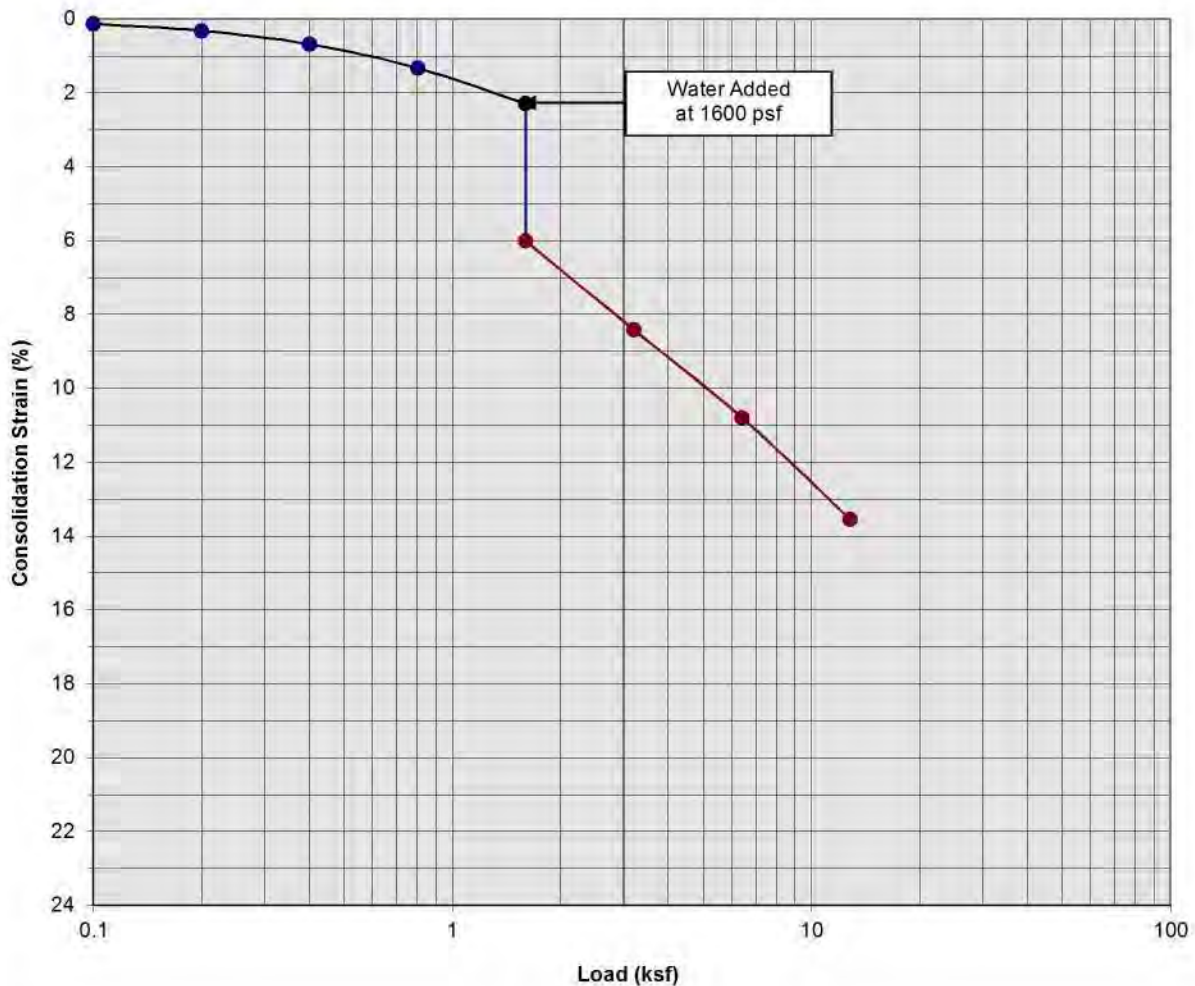
KEY TO SAMPLE TYPES:
 b - BULK SAMPLE (DISTURBED)
 R - RING SAMPLE 2-1/2" DIAMETER
 (RELATIVELY UNDISTURBED)

TRENCH LOG

PLATE B-9

APPENDIX C

Consolidation/Collapse Test Results



Classification: FILL: Gray Brown fine to medium Sand, trace coarse Sand

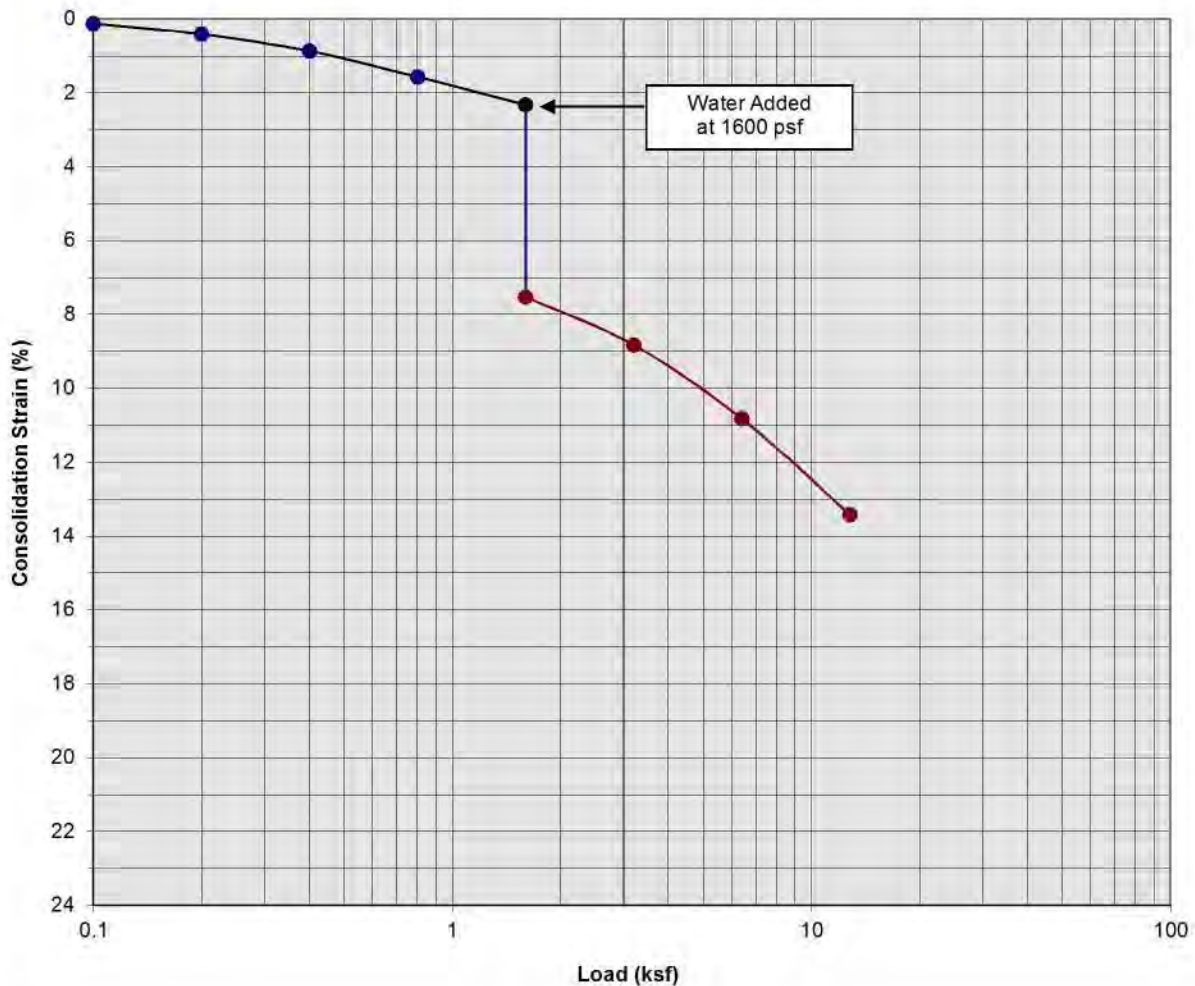
Boring Number:	B-2	Initial Moisture Content (%)	8
Sample Number:	---	Final Moisture Content (%)	15
Depth (ft)	1 to 2	Initial Dry Density (pcf)	109.2
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	125.9
Specimen Thickness (in)	1.0	Percent Collapse (%)	3.72

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C- 1



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A LAMSON COMPANY

Consolidation/Collapse Test Results



Classification: FILL: Dark Brown Silty fine Sand, trace medium Sand

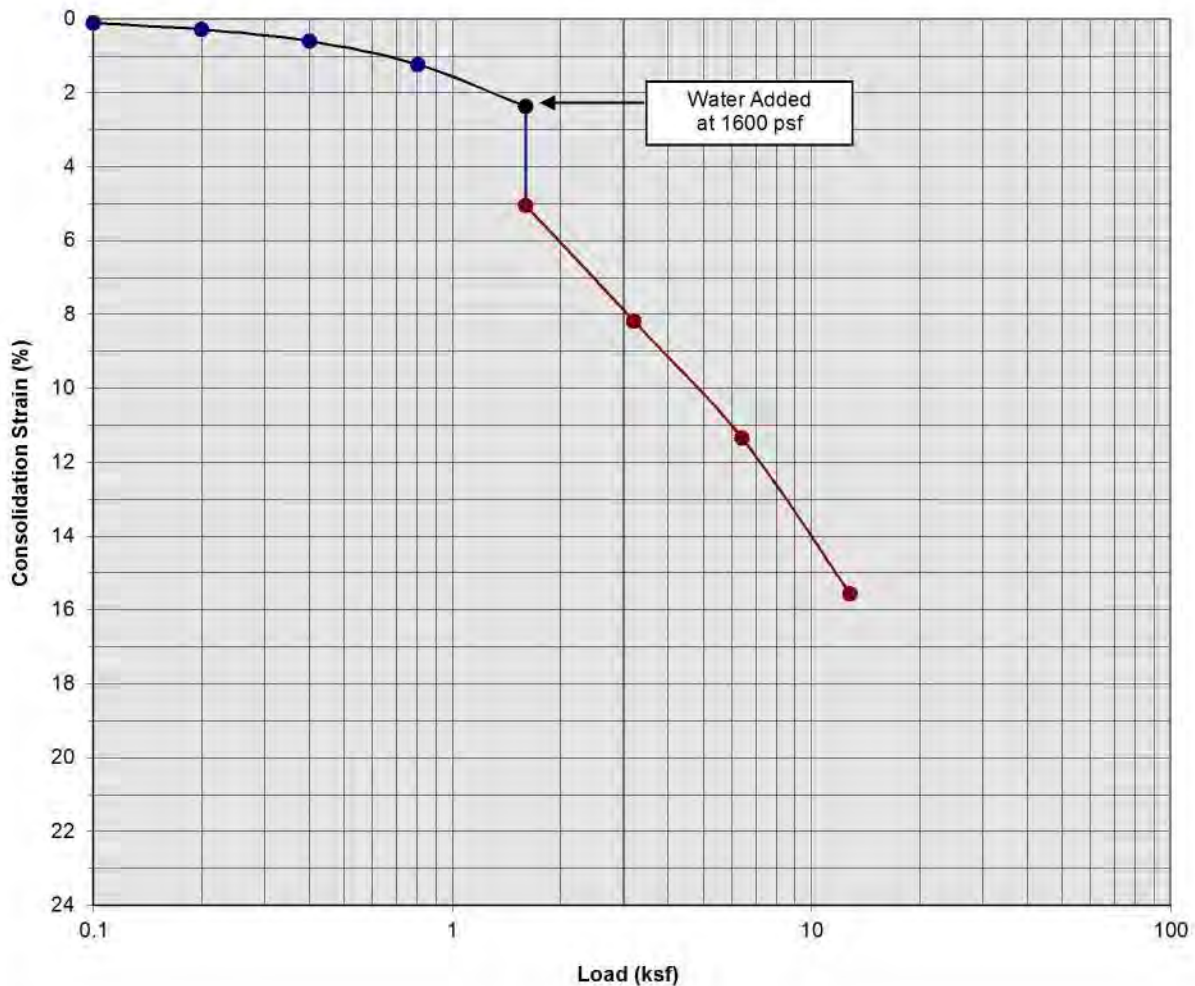
Boring Number:	B-2	Initial Moisture Content (%)	8
Sample Number:	---	Final Moisture Content (%)	18
Depth (ft)	5 to 6	Initial Dry Density (pcf)	101.8
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	116.2
Specimen Thickness (in)	1.0	Percent Collapse (%)	5.20

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C- 2



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

Consolidation/Collapse Test Results



Classification: FILL: Dark Brown Silty fine Sand, trace medium Sand

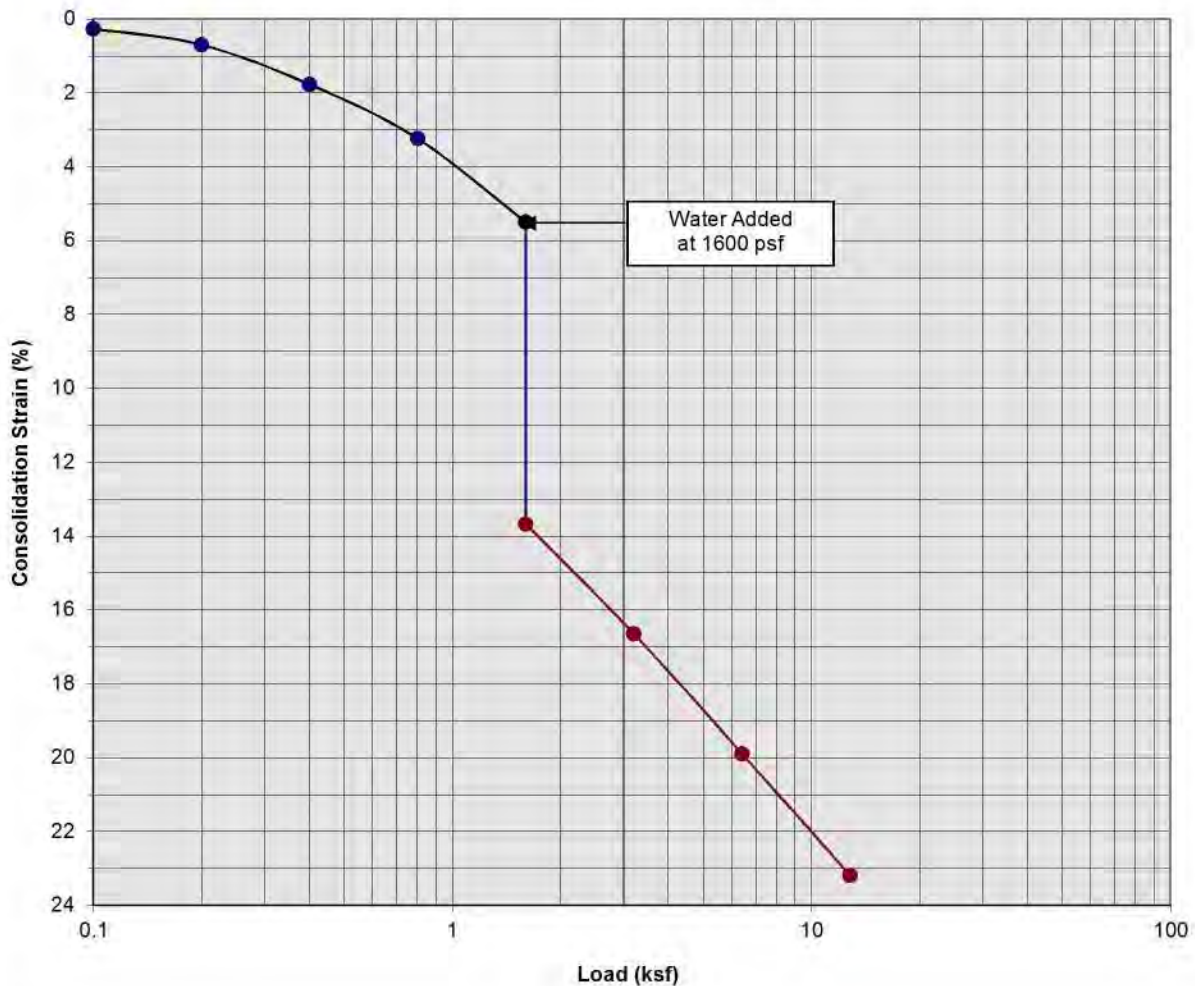
Boring Number:	B-2	Initial Moisture Content (%)	10
Sample Number:	---	Final Moisture Content (%)	25
Depth (ft)	7 to 8	Initial Dry Density (pcf)	86.5
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	102.4
Specimen Thickness (in)	1.0	Percent Collapse (%)	2.68

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C- 3



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

Consolidation/Collapse Test Results



Classification: FILL: Dark Brown Silty fine Sand, trace medium Sand

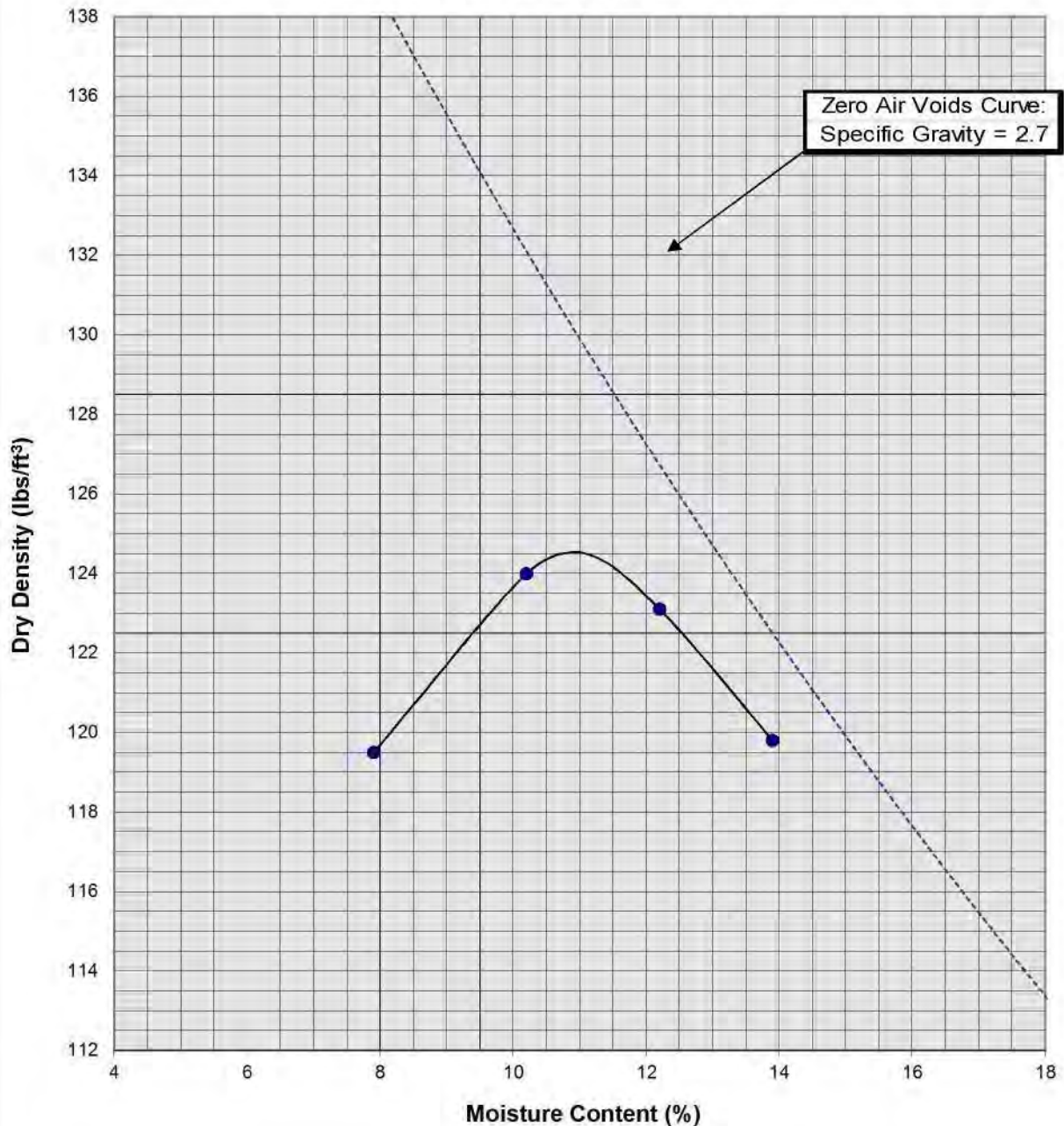
Boring Number:	B-2	Initial Moisture Content (%)	27
Sample Number:	---	Final Moisture Content (%)	17
Depth (ft)	9 to 10	Initial Dry Density (pcf)	81.4
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	106.1
Specimen Thickness (in)	1.0	Percent Collapse (%)	8.18

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C- 4



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

Moisture/Density Relationship ASTM D-1557



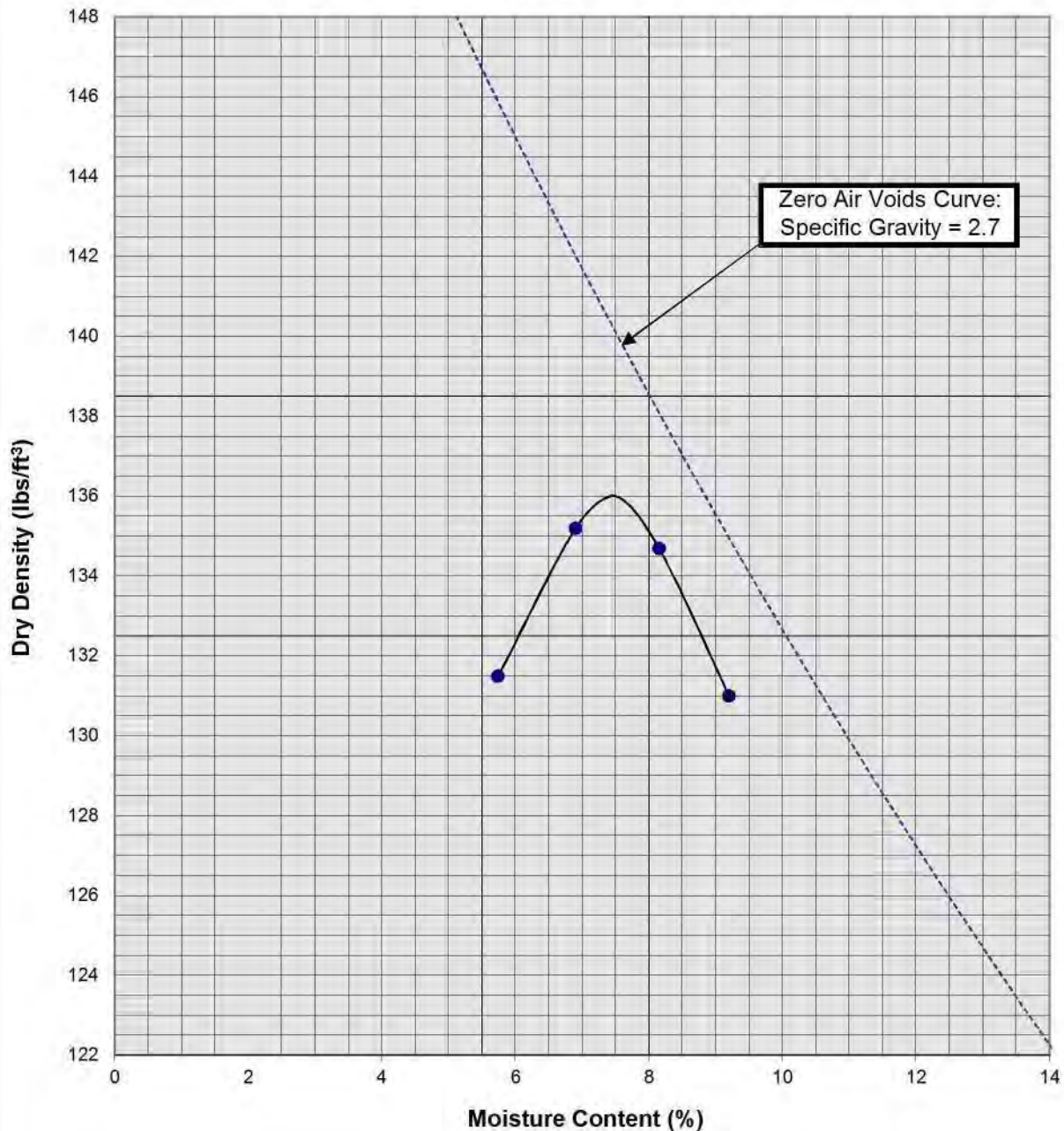
Soil ID Number	B-2 @ 0 to 5'
Optimum Moisture (%)	11
Maximum Dry Density (pcf)	124
Soil Classification	Gray Brown to Dark Brown Silty fine Sand, trace fine Gravel

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C-5



**SOUTHERN
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Moisture/Density Relationship ASTM D-1557



Soil ID Number	B-6 @ 0 to 5'
Optimum Moisture (%)	7.5
Maximum Dry Density (pcf)	136
Soil Classification	Brown Silty fine Sand, trace Gravel

Oakmont Senior Housing
Riverside, California
Project No. 15G150
PLATE C-6



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**
A California Corporation

APPENDIX D

GRADING GUIDE SPECIFICATIONS

These grading guide specifications are intended to provide typical procedures for grading operations. They are intended to supplement the recommendations contained in the geotechnical investigation report for this project. Should the recommendations in the geotechnical investigation report conflict with the grading guide specifications, the more site specific recommendations in the geotechnical investigation report will govern.

General

- The Earthwork Contractor is responsible for the satisfactory completion of all earthwork in accordance with the plans and geotechnical reports, and in accordance with city, county, and applicable building codes.
- The Geotechnical Engineer is the representative of the Owner/Builder for the purpose of implementing the report recommendations and guidelines. These duties are not intended to relieve the Earthwork Contractor of any responsibility to perform in a workman-like manner, nor is the Geotechnical Engineer to direct the grading equipment or personnel employed by the Contractor.
- The Earthwork Contractor is required to notify the Geotechnical Engineer of the anticipated work and schedule so that testing and inspections can be provided. If necessary, work may be stopped and redone if personnel have not been scheduled in advance.
- The Earthwork Contractor is required to have suitable and sufficient equipment on the job-site to process, moisture condition, mix and compact the amount of fill being placed to the approved compaction. In addition, suitable support equipment should be available to conform with recommendations and guidelines in this report.
- Canyon cleanouts, overexcavation areas, processed ground to receive fill, key excavations, subdrains and benches should be observed by the Geotechnical Engineer prior to placement of any fill. It is the Earthwork Contractor's responsibility to notify the Geotechnical Engineer of areas that are ready for inspection.
- Excavation, filling, and subgrade preparation should be performed in a manner and sequence that will provide drainage at all times and proper control of erosion. Precipitation, springs, and seepage water encountered shall be pumped or drained to provide a suitable working surface. The Geotechnical Engineer must be informed of springs or water seepage encountered during grading or foundation construction for possible revision to the recommended construction procedures and/or installation of subdrains.

Site Preparation

- The Earthwork Contractor is responsible for all clearing, grubbing, stripping and site preparation for the project in accordance with the recommendations of the Geotechnical Engineer.
- If any materials or areas are encountered by the Earthwork Contractor which are suspected of having toxic or environmentally sensitive contamination, the Geotechnical Engineer and Owner/Builder should be notified immediately.

- Major vegetation should be stripped and disposed of off-site. This includes trees, brush, heavy grasses and any materials considered unsuitable by the Geotechnical Engineer.
- Underground structures such as basements, cesspools or septic disposal systems, mining shafts, tunnels, wells and pipelines should be removed under the inspection of the Geotechnical Engineer and recommendations provided by the Geotechnical Engineer and/or city, county or state agencies. If such structures are known or found, the Geotechnical Engineer should be notified as soon as possible so that recommendations can be formulated.
- Any topsoil, slopewash, colluvium, alluvium and rock materials which are considered unsuitable by the Geotechnical Engineer should be removed prior to fill placement.
- Remaining voids created during site clearing caused by removal of trees, foundations basements, irrigation facilities, etc., should be excavated and filled with compacted fill.
- Subsequent to clearing and removals, areas to receive fill should be scarified to a depth of 10 to 12 inches, moisture conditioned and compacted
- The moisture condition of the processed ground should be at or slightly above the optimum moisture content as determined by the Geotechnical Engineer. Depending upon field conditions, this may require air drying or watering together with mixing and/or discing.

Compacted Fills

- Soil materials imported to or excavated on the property may be utilized in the fill, provided each material has been determined to be suitable in the opinion of the Geotechnical Engineer. Unless otherwise approved by the Geotechnical Engineer, all fill materials shall be free of deleterious, organic, or frozen matter, shall contain no chemicals that may result in the material being classified as "contaminated," and shall be very low to non-expansive with a maximum expansion index (EI) of 50. The top 12 inches of the compacted fill should have a maximum particle size of 3 inches, and all underlying compacted fill material a maximum 6-inch particle size, except as noted below.
- All soils should be evaluated and tested by the Geotechnical Engineer. Materials with high expansion potential, low strength, poor gradation or containing organic materials may require removal from the site or selective placement and/or mixing to the satisfaction of the Geotechnical Engineer.
- Rock fragments or rocks less than 6 inches in their largest dimensions, or as otherwise determined by the Geotechnical Engineer, may be used in compacted fill, provided the distribution and placement is satisfactory in the opinion of the Geotechnical Engineer.
- Rock fragments or rocks greater than 12 inches should be taken off-site or placed in accordance with recommendations and in areas designated as suitable by the Geotechnical Engineer. These materials should be placed in accordance with Plate D-8 of these Grading Guide Specifications and in accordance with the following recommendations:
 - Rocks 12 inches or more in diameter should be placed in rows at least 15 feet apart, 15 feet from the edge of the fill, and 10 feet or more below subgrade. Spaces should be left between each rock fragment to provide for placement and compaction of soil around the fragments.
 - Fill materials consisting of soil meeting the minimum moisture content requirements and free of oversize material should be placed between and over the rows of rock or

concrete. Ample water and compactive effort should be applied to the fill materials as they are placed in order that all of the voids between each of the fragments are filled and compacted to the specified density.

- Subsequent rows of rocks should be placed such that they are not directly above a row placed in the previous lift of fill. A minimum 5-foot offset between rows is recommended.
- To facilitate future trenching, oversized material should not be placed within the range of foundation excavations, future utilities or other underground construction unless specifically approved by the soil engineer and the developer/owner representative.
- Fill materials approved by the Geotechnical Engineer should be placed in areas previously prepared to receive fill and in evenly placed, near horizontal layers at about 6 to 8 inches in loose thickness, or as otherwise determined by the Geotechnical Engineer for the project.
- Each layer should be moisture conditioned to optimum moisture content, or slightly above, as directed by the Geotechnical Engineer. After proper mixing and/or drying, to evenly distribute the moisture, the layers should be compacted to at least 90 percent of the maximum dry density in compliance with ASTM D-1557-78 unless otherwise indicated.
- Density and moisture content testing should be performed by the Geotechnical Engineer at random intervals and locations as determined by the Geotechnical Engineer. These tests are intended as an aid to the Earthwork Contractor, so he can evaluate his workmanship, equipment effectiveness and site conditions. The Earthwork Contractor is responsible for compaction as required by the Geotechnical Report(s) and governmental agencies.
- Fill areas unused for a period of time may require moisture conditioning, processing and recompaction prior to the start of additional filling. The Earthwork Contractor should notify the Geotechnical Engineer of his intent so that an evaluation can be made.
- Fill placed on ground sloping at a 5-to-1 inclination (horizontal-to-vertical) or steeper should be benched into bedrock or other suitable materials, as directed by the Geotechnical Engineer. Typical details of benching are illustrated on Plates D-2, D-4, and D-5.
- Cut/fill transition lots should have the cut portion overexcavated to a depth of at least 3 feet and rebuilt with fill (see Plate D-1), as determined by the Geotechnical Engineer.
- All cut lots should be inspected by the Geotechnical Engineer for fracturing and other bedrock conditions. If necessary, the pads should be overexcavated to a depth of 3 feet and rebuilt with a uniform, more cohesive soil type to impede moisture penetration.
- Cut portions of pad areas above buttresses or stabilizations should be overexcavated to a depth of 3 feet and rebuilt with uniform, more cohesive compacted fill to impede moisture penetration.
- Non-structural fill adjacent to structural fill should typically be placed in unison to provide lateral support. Backfill along walls must be placed and compacted with care to ensure that excessive unbalanced lateral pressures do not develop. The type of fill material placed adjacent to below grade walls must be properly tested and approved by the Geotechnical Engineer with consideration of the lateral earth pressure used in the design.

Foundations

- The foundation influence zone is defined as extending one foot horizontally from the outside edge of a footing, and proceeding downward at a 1/2 horizontal to 1 vertical (0.5:1) inclination.
- Where overexcavation beneath a footing subgrade is necessary, it should be conducted so as to encompass the entire foundation influence zone, as described above.
- Compacted fill adjacent to exterior footings should extend at least 12 inches above foundation bearing grade. Compacted fill within the interior of structures should extend to the floor subgrade elevation.

Fill Slopes

- The placement and compaction of fill described above applies to all fill slopes. Slope compaction should be accomplished by overfilling the slope, adequately compacting the fill in even layers, including the overfilled zone and cutting the slope back to expose the compacted core
- Slope compaction may also be achieved by backrolling the slope adequately every 2 to 4 vertical feet during the filling process as well as requiring the earth moving and compaction equipment to work close to the top of the slope. Upon completion of slope construction, the slope face should be compacted with a sheepsfoot connected to a sideboom and then grid rolled. This method of slope compaction should only be used if approved by the Geotechnical Engineer.
- Sandy soils lacking in adequate cohesion may be unstable for a finished slope condition and therefore should not be placed within 15 horizontal feet of the slope face.
- All fill slopes should be keyed into bedrock or other suitable material. Fill keys should be at least 15 feet wide and inclined at 2 percent into the slope. For slopes higher than 30 feet, the fill key width should be equal to one-half the height of the slope (see Plate D-5).
- All fill keys should be cleared of loose slough material prior to geotechnical inspection and should be approved by the Geotechnical Engineer and governmental agencies prior to filling.
- The cut portion of fill over cut slopes should be made first and inspected by the Geotechnical Engineer for possible stabilization requirements. The fill portion should be adequately keyed through all surficial soils and into bedrock or suitable material. Soils should be removed from the transition zone between the cut and fill portions (see Plate D-2).

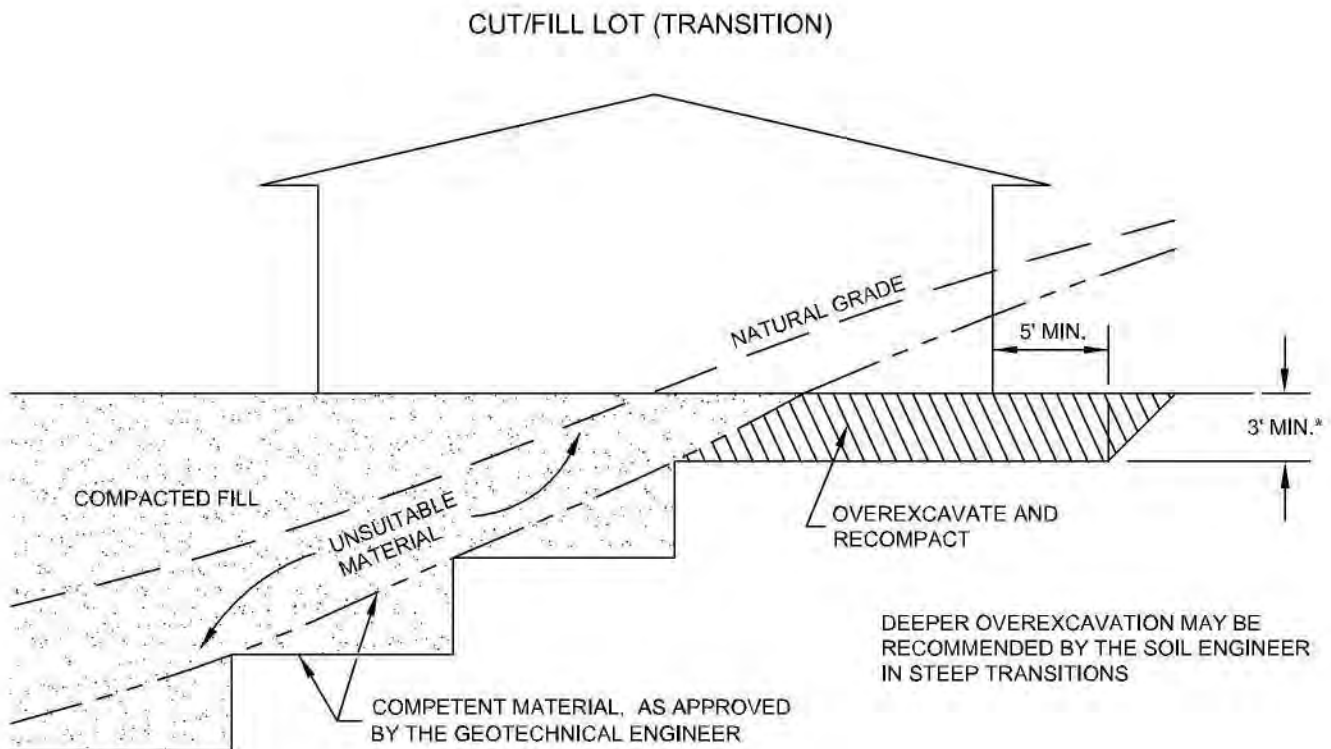
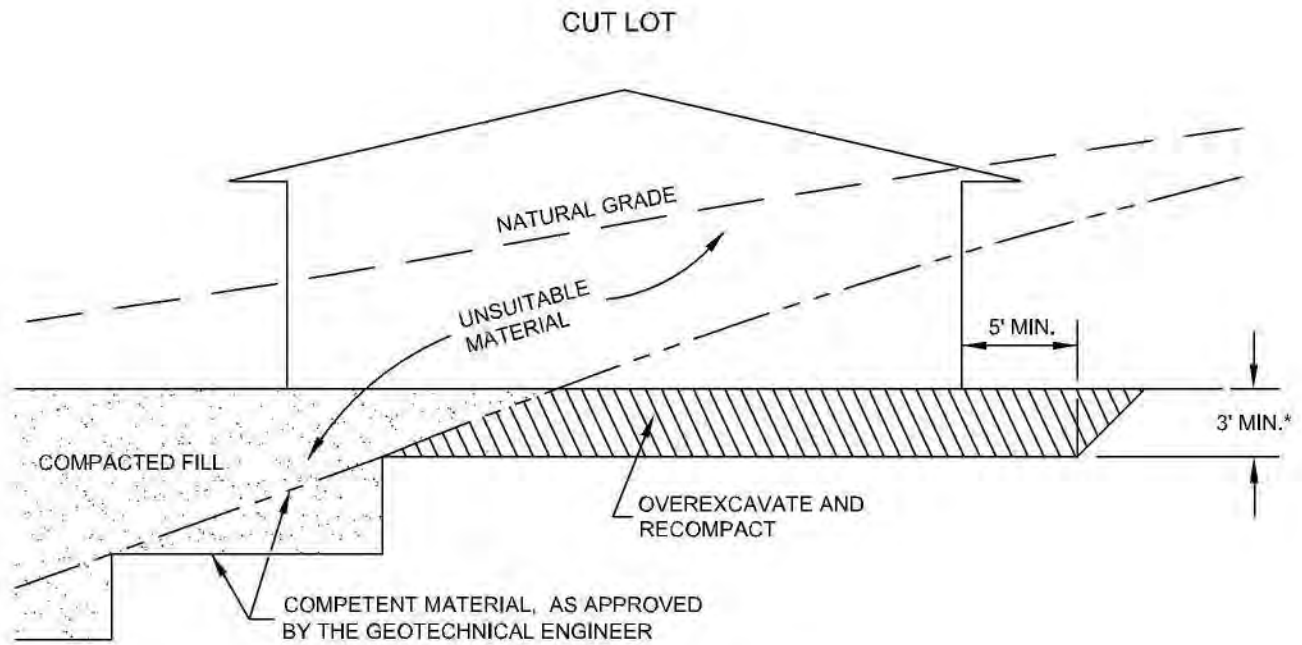
Cut Slopes

- All cut slopes should be inspected by the Geotechnical Engineer to determine the need for stabilization. The Earthwork Contractor should notify the Geotechnical Engineer when slope cutting is in progress at intervals of 10 vertical feet. Failure to notify may result in a delay in recommendations.
- Cut slopes exposing loose, cohesionless sands should be reported to the Geotechnical Engineer for possible stabilization recommendations.
- All stabilization excavations should be cleared of loose slough material prior to geotechnical inspection. Stakes should be provided by the Civil Engineer to verify the location and dimensions of the key. A typical stabilization fill detail is shown on Plate D-5.

- Stabilization key excavations should be provided with subdrains. Typical subdrain details are shown on Plates D-6.

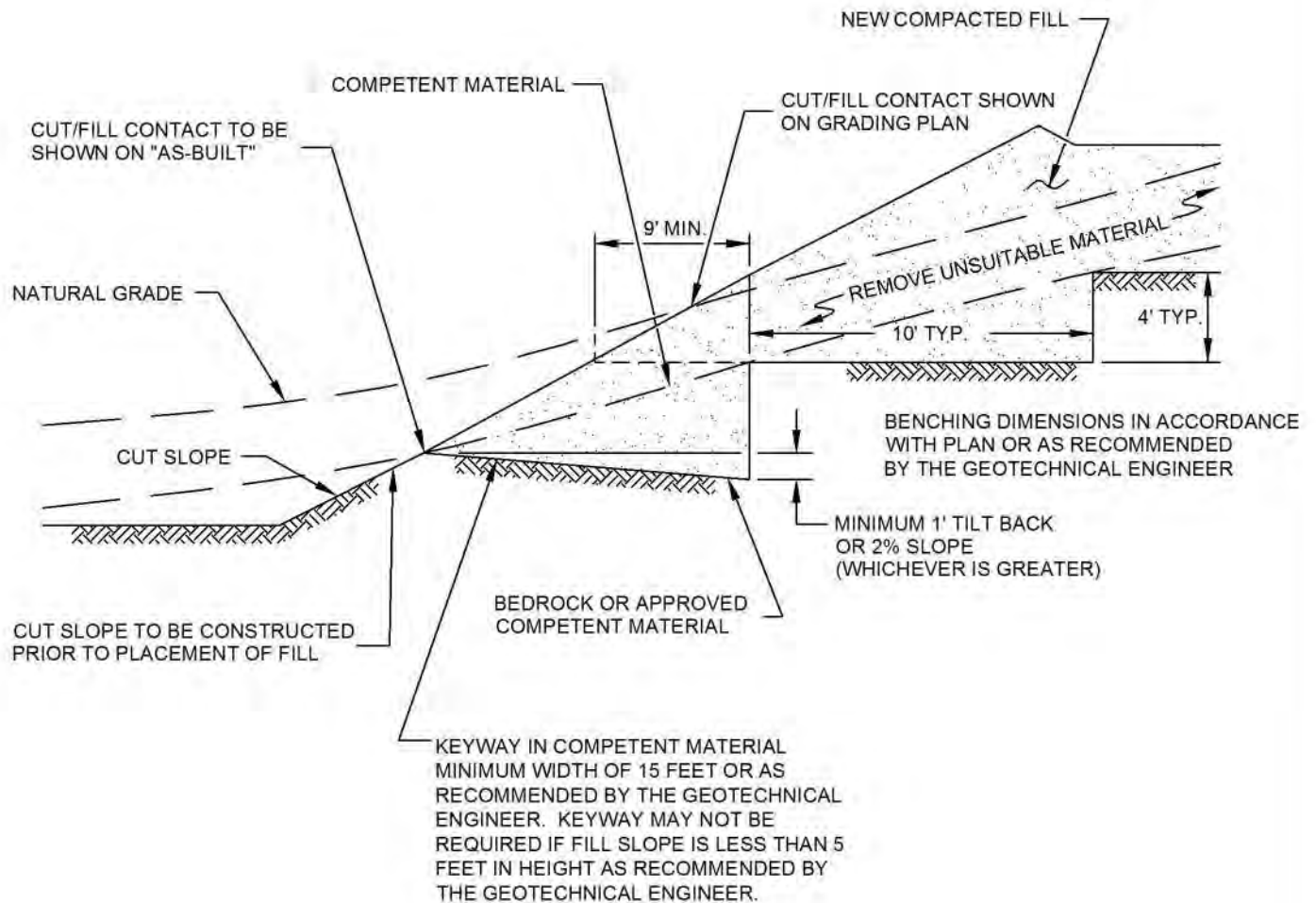
Subdrains

- Subdrains may be required in canyons and swales where fill placement is proposed. Typical subdrain details for canyons are shown on Plate D-3. Subdrains should be installed after approval of removals and before filling, as determined by the Soils Engineer.
- Plastic pipe may be used for subdrains provided it is Schedule 40 or SDR 35 or equivalent. Pipe should be protected against breakage, typically by placement in a square-cut (backhoe) trench or as recommended by the manufacturer.
- Filter material for subdrains should conform to CALTRANS Specification 68-1.025 or as approved by the Geotechnical Engineer for the specific site conditions. Clean $\frac{3}{4}$ -inch crushed rock may be used provided it is wrapped in an acceptable filter cloth and approved by the Geotechnical Engineer. Pipe diameters should be 6 inches for runs up to 500 feet and 8 inches for the downstream continuations of longer runs. Four-inch diameter pipe may be used in buttress and stabilization fills.



*SEE TEXT OF REPORT FOR SPECIFIC RECOMMENDATION.
ACTUAL DEPTH OF OVEREXCAVATION MAY BE GREATER.

TRANSITION LOT DETAIL	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JAS	
CHKD: GKM	
PLATE D-1	



FILL ABOVE CUT SLOPE DETAIL
GRADING GUIDE SPECIFICATIONS

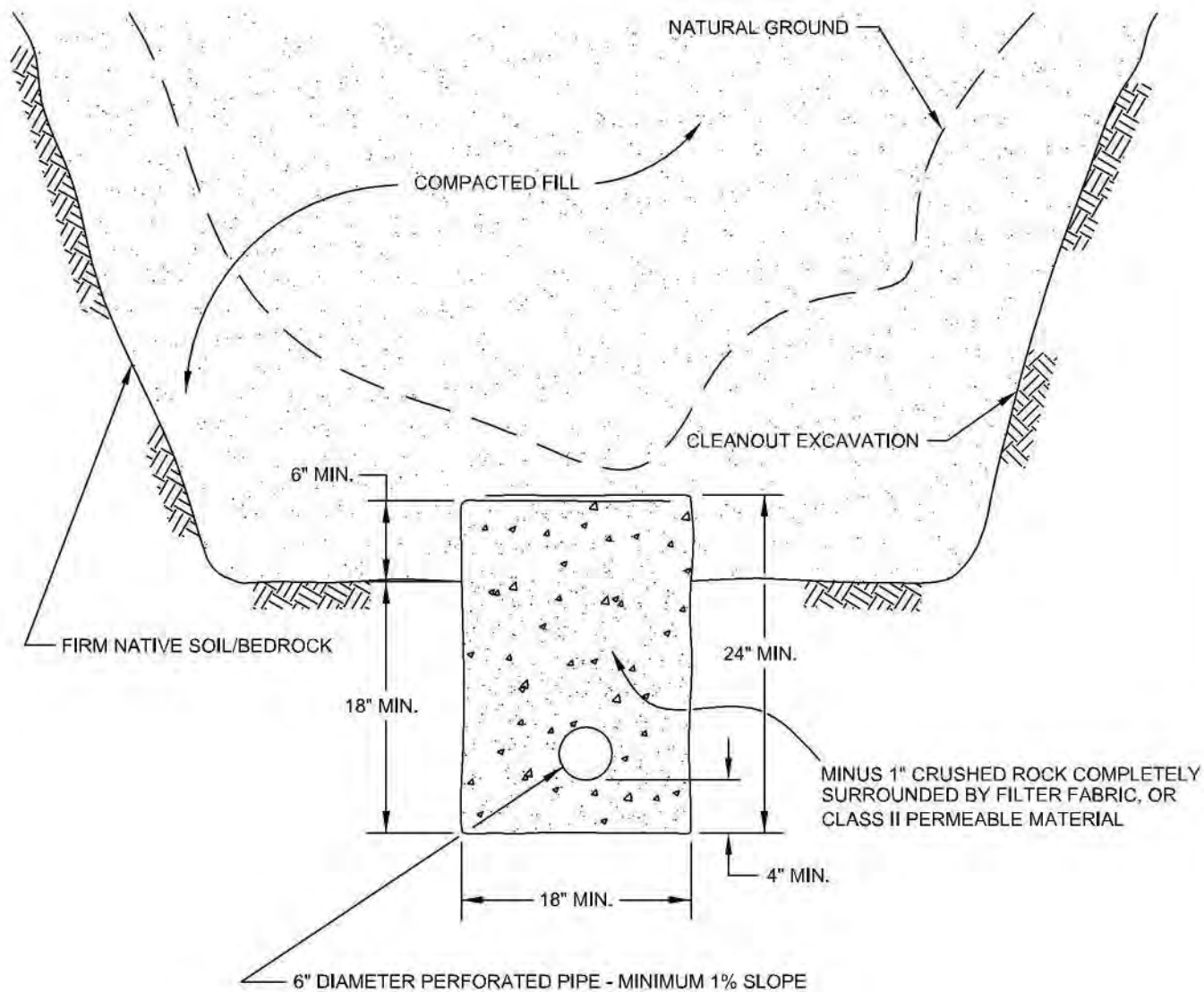
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-2




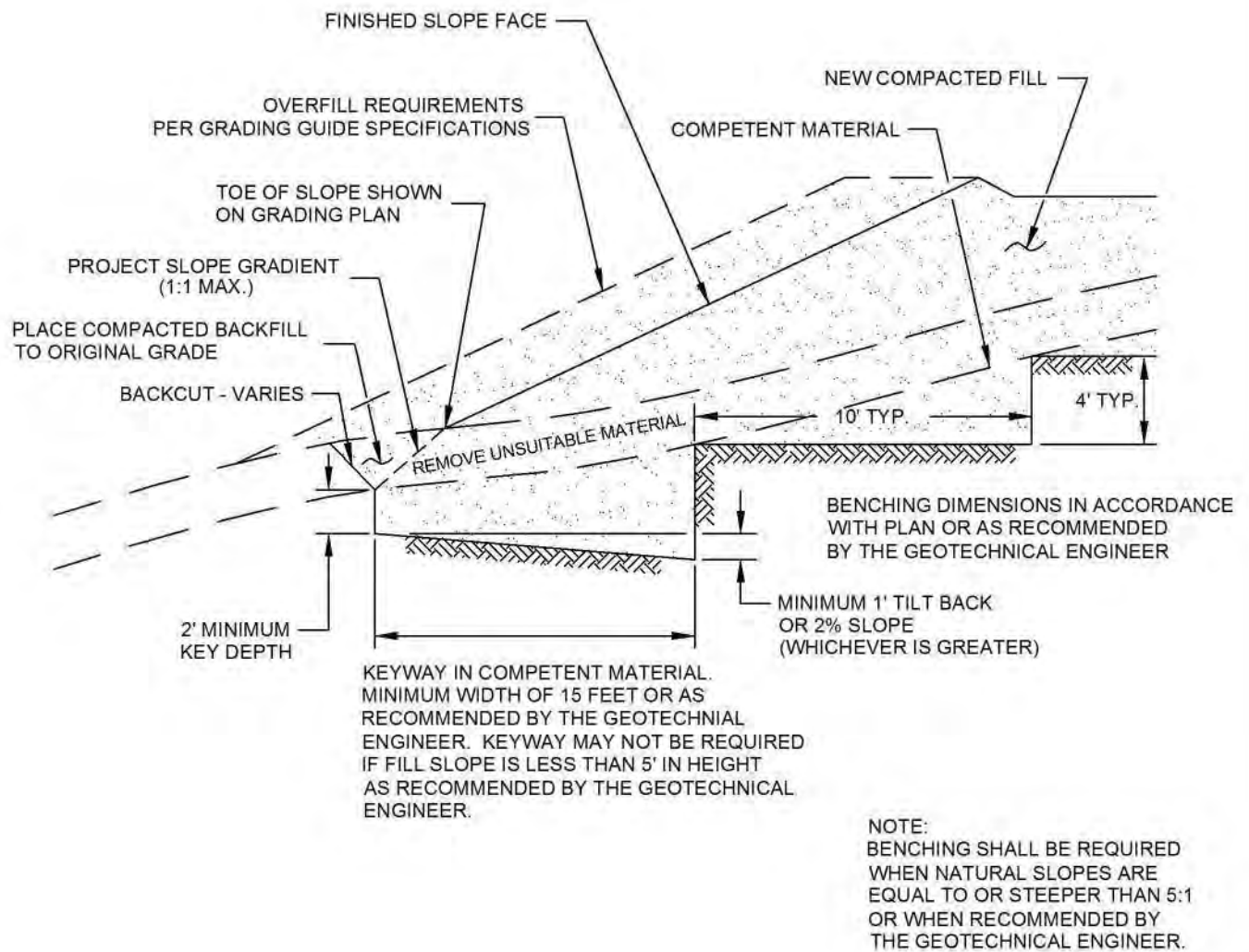
**SOUTHERN
CALIFORNIA
GEOTECHNICAL**



PIPE MATERIAL	DEPTH OF FILL OVER SUBDRAIN
ADS (CORRUGATED POLETHYLENE)	8
TRANSITE UNDERDRAIN	20
PVC OR ABS: SDR 35	35
SDR 21	100

**SCHEMATIC ONLY
NOT TO SCALE**

CANYON SUBDRAIN DETAIL	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JAS CHKD: GKM	
PLATE D-3	



FILL ABOVE NATURAL SLOPE DETAIL
GRADING GUIDE SPECIFICATIONS

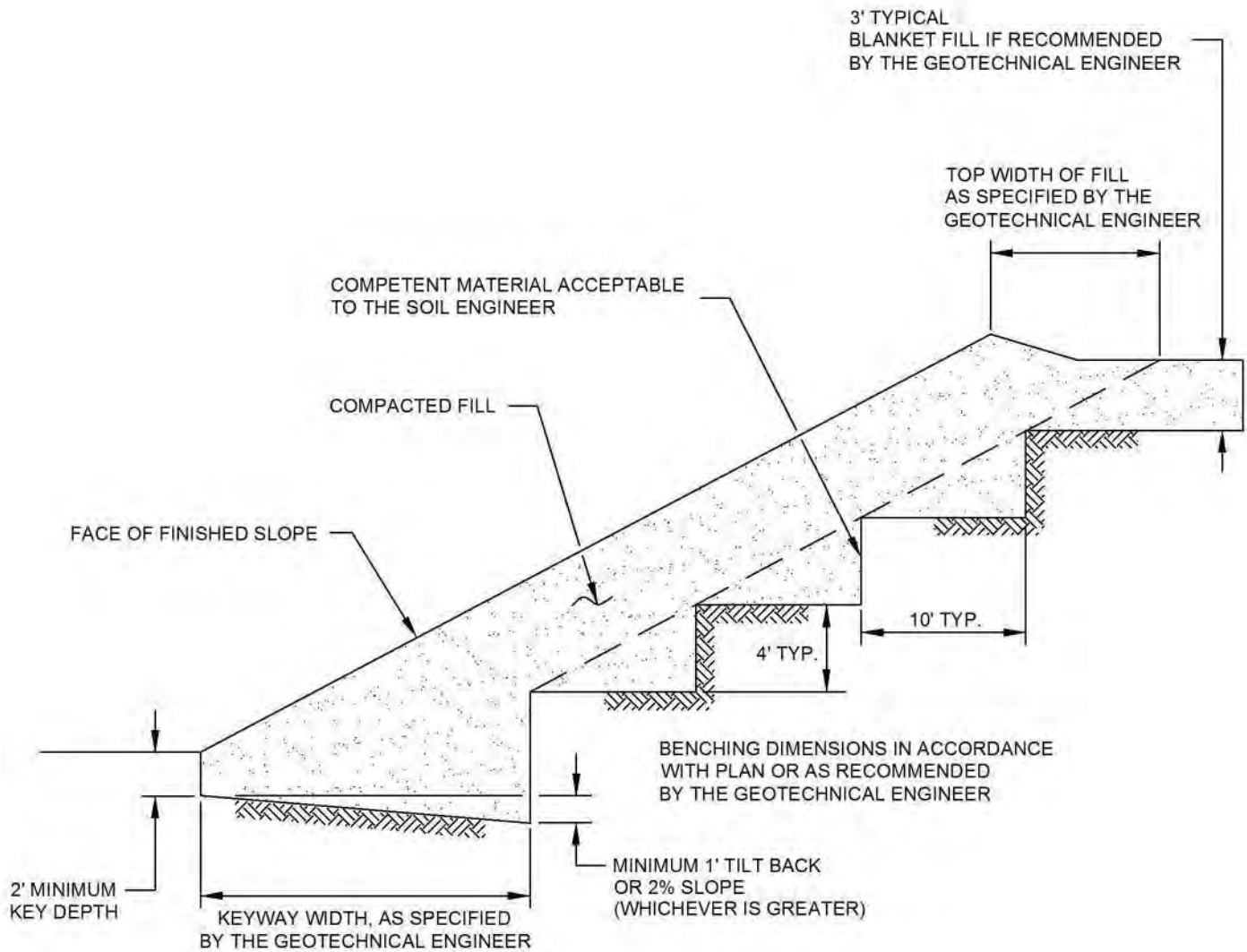
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DRAWN: JAS
CHKD: GKM

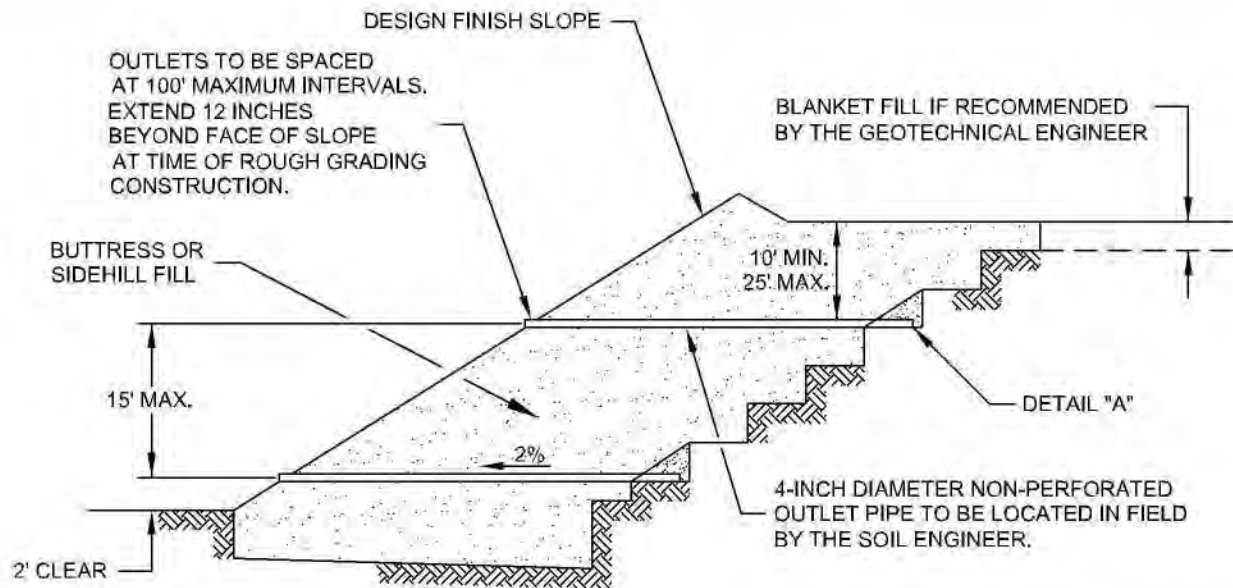
PLATE D-4



**SOUTHERN
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STABILIZATION FILL DETAIL	
GRADING GUIDE SPECIFICATIONS	
NOT TO SCALE	 SOUTHERN CALIFORNIA GEOTECHNICAL
DRAWN: JAS	
CHKD: GKM	
PLATE D-5	



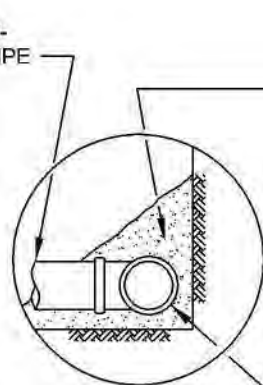
"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323)

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

"GRAVEL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT:

SIEVE SIZE	MAXIMUM PERCENTAGE PASSING
1 1/2"	100
NO. 4	50
NO. 200	8
SAND EQUIVALENT = MINIMUM OF 50	

OUTLET PIPE TO BE CONNECTED TO SUBDRAIN PIPE WITH TEE OR ELBOW



DETAIL "A"

FILTER MATERIAL - MINIMUM OF FIVE CUBIC FEET PER FOOT OF PIPE. SEE ABOVE FOR FILTER MATERIAL SPECIFICATION.

ALTERNATIVE: IN LIEU OF FILTER MATERIAL FIVE CUBIC FEET OF GRAVEL PER FOOT OF PIPE MAY BE ENCASED IN FILTER FABRIC. SEE ABOVE FOR GRAVEL SPECIFICATION.

FILTER FABRIC SHALL BE MIRAFI 140 OR EQUIVALENT. FILTER FABRIC SHALL BE LAPPED A MINIMUM OF 12 INCHES ON ALL JOINTS.

MINIMUM 4-INCH DIAMETER PVC SCH 40 OR ABS CLASS SDR 35 WITH A CRUSHING STRENGTH OF AT LEAST 1,000 POUNDS, WITH A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

NOTES:

1. TRENCH FOR OUTLET PIPES TO BE BACKFILLED WITH ON-SITE SOIL.

SLOPE FILL SUBDRAINS
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-6



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

MINIMUM ONE FOOT THICK LAYER OF
LOW PERMEABILITY SOIL IF NOT
COVERED WITH AN IMPERMEABLE SURFACE

MINIMUM ONE FOOT WIDE LAYER OF
FREE DRAINING MATERIAL
(LESS THAN 5% PASSING THE #200 SIEVE)

OR
PROPERLY INSTALLED PREFABRICATED DRAINAGE COMPOSITE
(MiraDRAIN 6000 OR APPROVED EQUIVALENT).

FILTER MATERIAL - MINIMUM OF TWO
CUBIC FEET PER FOOT OF PIPE. SEE
BELOW FOR FILTER MATERIAL SPECIFICATION.

ALTERNATIVE: IN LIEU OF FILTER MATERIAL
TWO CUBIC FEET OF GRAVEL
PER FOOT OF PIPE MAY BE ENCASED
IN FILTER FABRIC. SEE BELOW FOR
GRAVEL SPECIFICATION.

FILTER FABRIC SHALL BE MIRAFL 140
OR EQUIVALENT. FILTER FABRIC SHALL
BE LAPPED A MINIMUM OF 6 INCHES
ON ALL JOINTS.

MINIMUM 4-INCH DIAMETER PVC SCH 40 OR ABS CLASS SDR 35 WITH
A CRUSHING STRENGTH OF AT LEAST 1,000 POUNDS, WITH A MINIMUM
OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED
WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM
END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION
OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD, PLAN 323)

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

"GRAVEL" TO MEET FOLLOWING SPECIFICATION OR
APPROVED EQUIVALENT:

SIEVE SIZE	MAXIMUM PERCENTAGE PASSING
1 1/2"	100
NO. 4	50
NO. 200	8
SAND EQUIVALENT = MINIMUM OF 50	

RETAINING WALL BACKDRAINS GRADING GUIDE SPECIFICATIONS

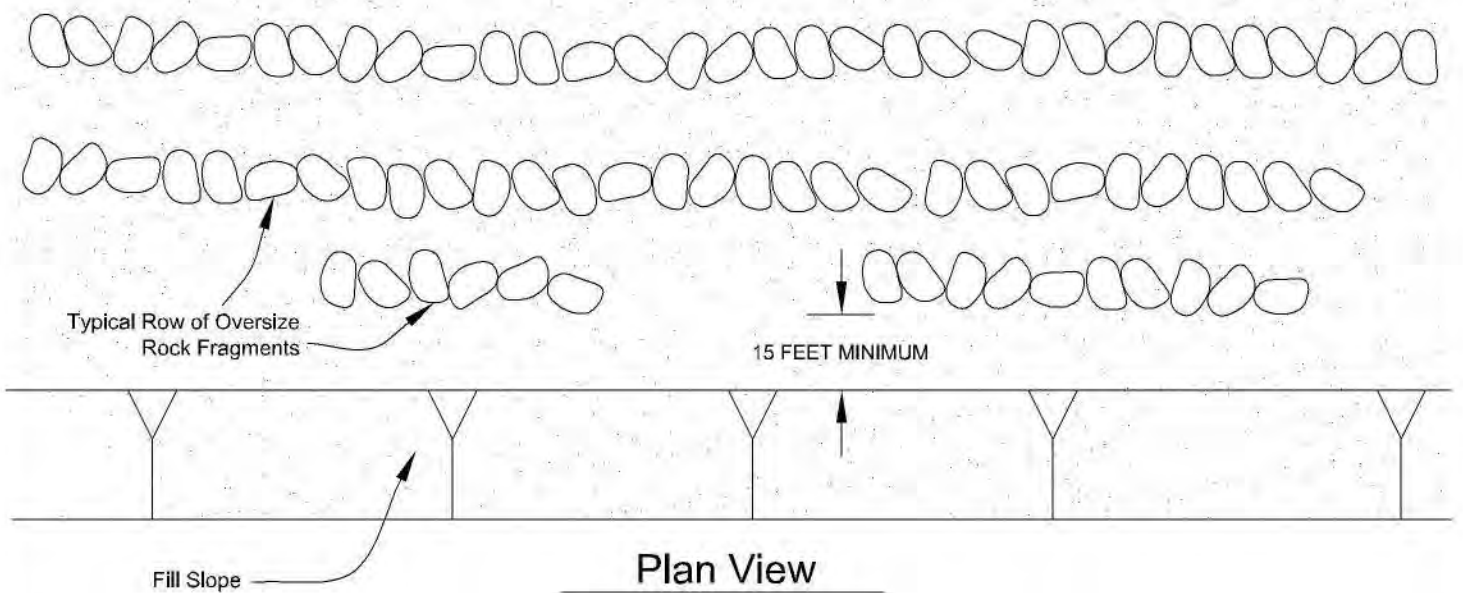
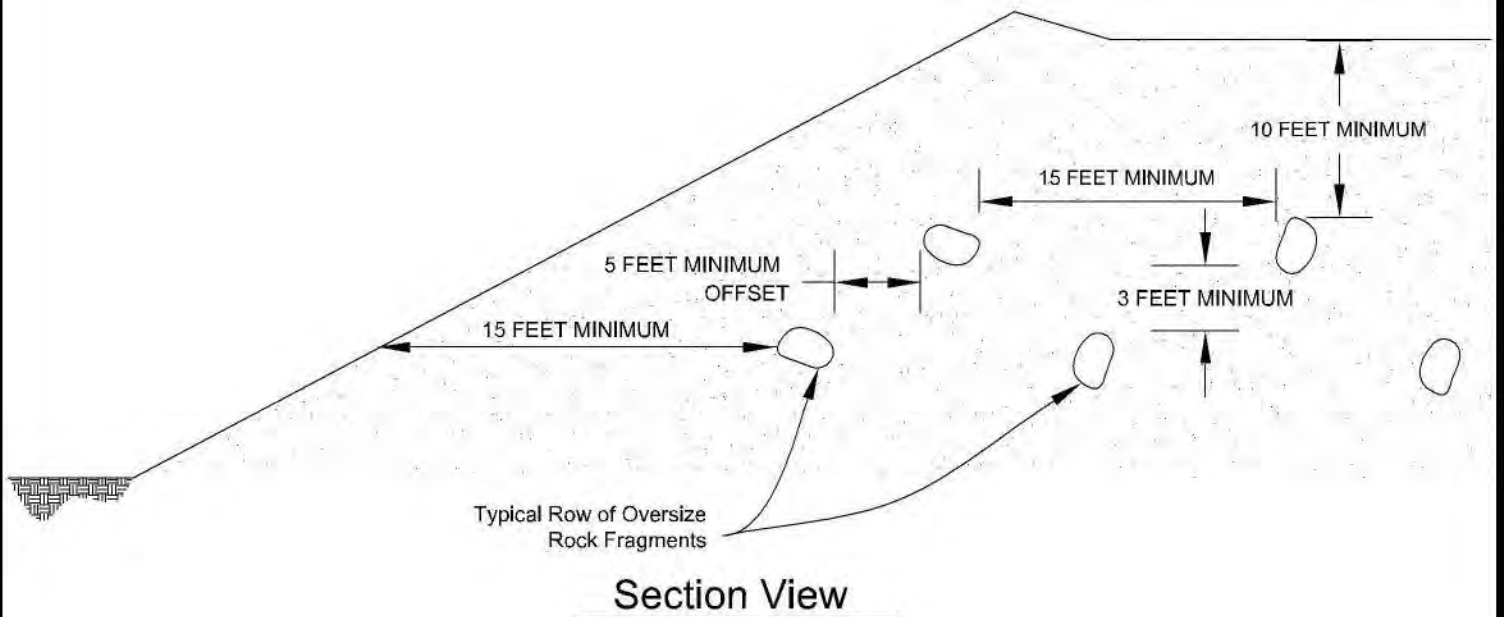
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-7



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**



**PLACEMENT OF OVERSIZED MATERIAL
GRADING GUIDE SPECIFICATIONS**

NOT TO SCALE

DRAWN: PM
CHKD: GKM

PLATE D-8



**SOUTHERN
CALIFORNIA
GEOTECHNICAL**

APPENDIX

USGS Design Maps Summary Report

User-Specified Input

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 33.9493°N, 117.35627°W

Site Soil Classification Site Class C – “Very Dense Soil and Soft Rock”

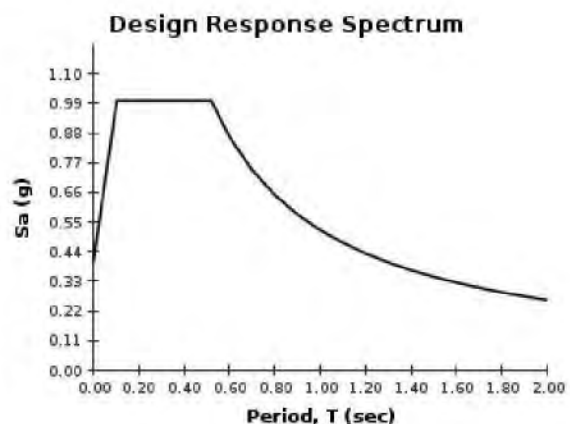
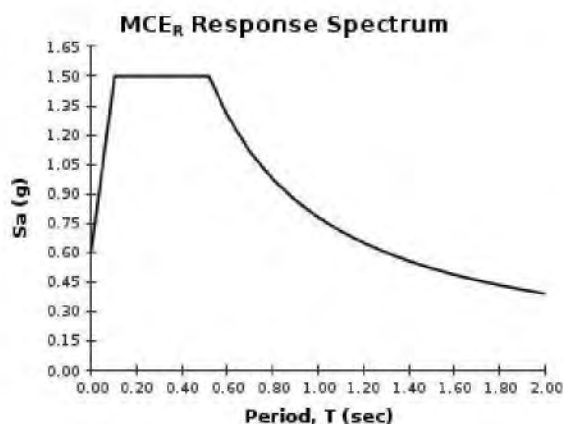
Risk Category I/II/III



USGS-Provided Output

$S_s = 1.500 \text{ g}$ $S_{MS} = 1.500 \text{ g}$ $S_{DS} = 1.000 \text{ g}$
 $S_1 = 0.600 \text{ g}$ $S_{M1} = 0.780 \text{ g}$ $S_{D1} = 0.520 \text{ g}$

For information on how the S_s and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



For PGA_M , T_L , C_{RS} , and C_{R1} values, please [view the detailed report](#).

SOURCE: U.S. GEOLOGICAL SURVEY (USGS)
<<http://geohazards.usgs.gov/designmaps/us/application.php>>



SEISMIC DESIGN PARAMETERS	
PROPOSED SENIOR HOUSING	
RIVERSIDE, CALIFORNIA	
	 <div>SOUTHERN CALIFORNIA GEOTECHNICAL</div>
DRAWN: JL	
CHKD: JAS	
SCG PROJECT 15G150-1	
PLATE E-1	

APPENDIX D

ENVIRONMENTAL DATABASE INFORMATION

Riverside Tennis Club

5695 Glenhave Avenue
Riverside, CA 92506

Inquiry Number: 4284028.2s
May 05, 2015

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

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Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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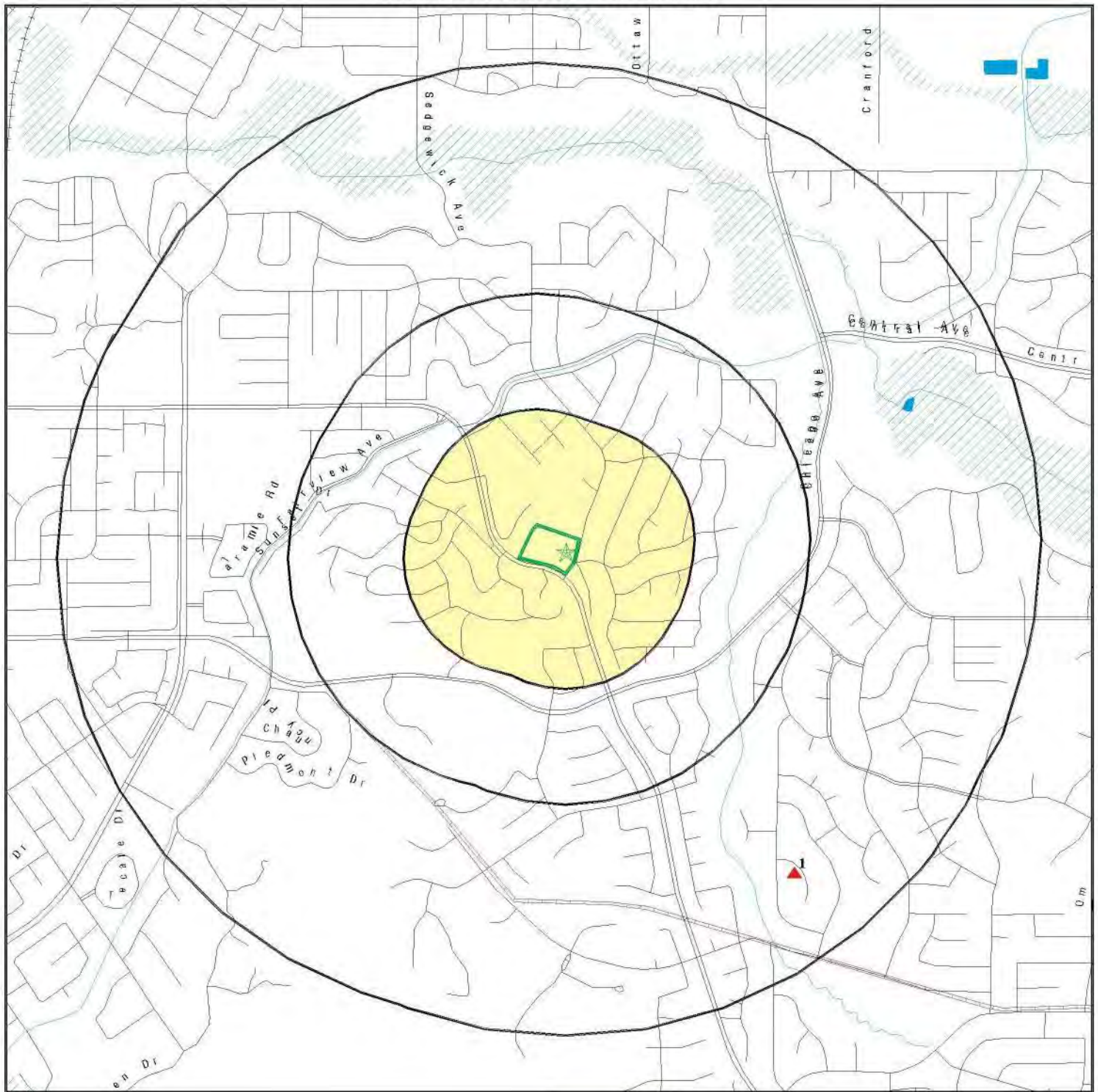
EXECUTIVE SUMMARY

Search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The results of the search follow:

Map ID: Director: City: County: Distance ft: Elevation ft:	Map ID: Director: City: County: Distance ft: Elevation ft:	STANDARD ENVIRONMENTAL RECORDS		ADDITIONAL ENVIRONMENTAL RECORDS	
		NPL Proposed NPL NPL Liens Designated NPL CERCLIS FEDERAL FACILITY CERCLA-NEPAP CERCLA-TRSDP CERCLA-LOG CERCLA-SOG CERCLA-CE-SOG US ENG CONTROLS US INST CONTROL LUCIS LEMS RESPONSE ENVIRONMENTAL SW-TLF LUST SUC INDIAN LUST AST INDIAN UST FEMA UST INDIAN VCP VCP US BROWN-FIELDS DEBRIS REGION B COI SWRCY HAULERS INDIAN ODI WADSWORTH US ODI HIST Cal-Shares SCH Toxic Pits CDL US HIST CDL CA FID UST HIST UST SWEEPS UST LEMS 2 LEMS DEED HMIRS CHMIRS LDS MCS SPILLS 90 RCRA NonGen / NLR DOT OPS DOD FUDS CONSENT ROD UMTRA US MINES TRIS TSCA FTS HIST FTS STS ICIS PADS MLTS RADONHO FINDS RAIS RMP CA BOND EXP PLAN LIC NPDES Consent HIST CORPSE CUPA Findings Neely DB DRYCLEANERS WIP ENP HAZNET EMI INDIAN RESERV SCRD DRYCLEANERS LEAD SMELTERS HWP HWT PROC Financial Assurance EPA WATCH LIST US PIN ASSUR WOS MMWP PCB TRANSFORMER COAL ASH EPA US AIRS US AIRS PPAP 2020 COR ACTION		X 	

The target property was not listed in any of the databases searched by EDR.

OVERVIEW MAP - 4284028.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

0 1/4 1/2 1 Miles



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

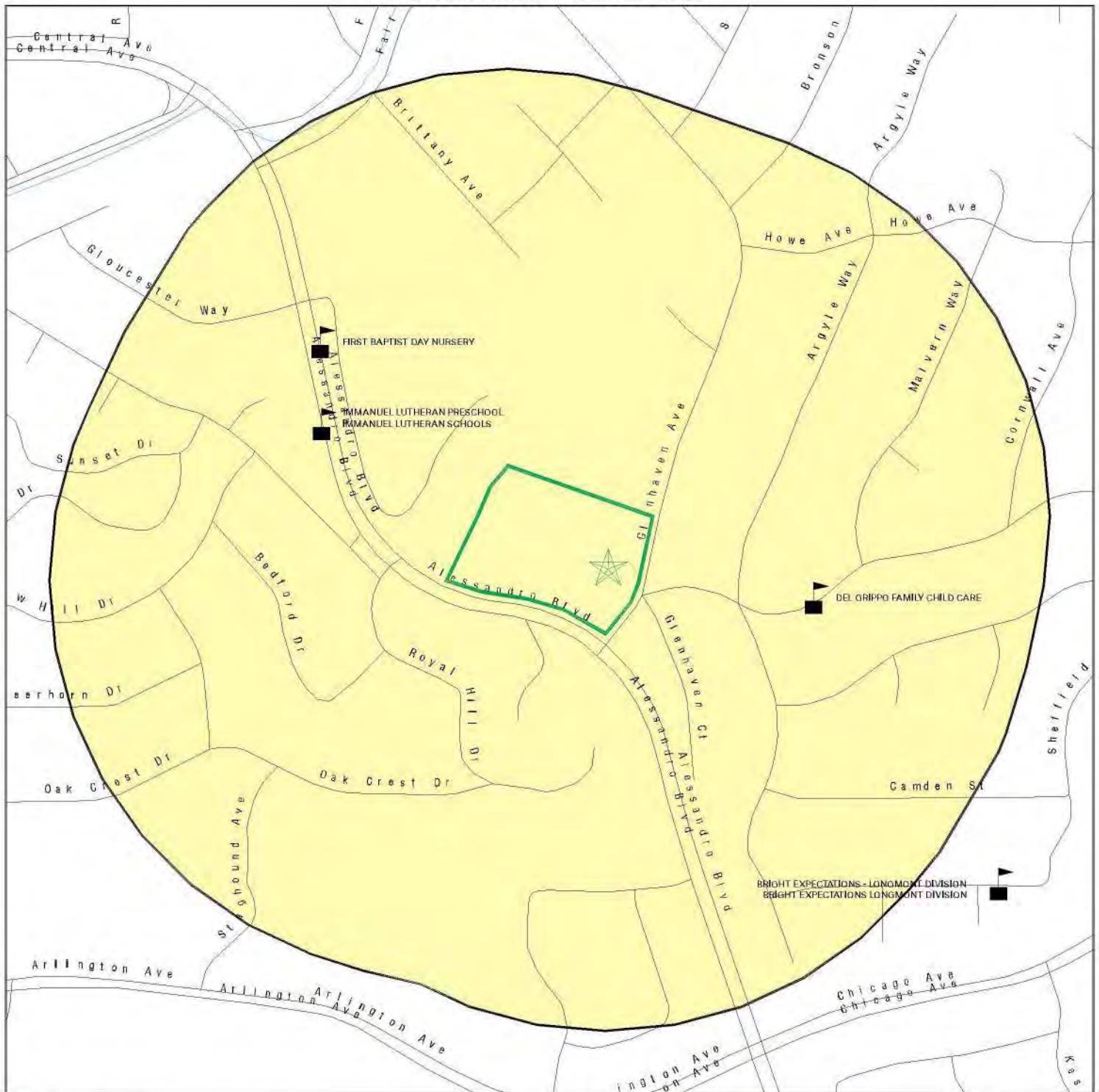
SITE NAME: Riverside Tennis Club
ADDRESS: 5695 Glenhave Avenue
Riverside CA 92506

LAT/LONG: 33.9490177, -117.558

CLIENT: Terracon
CONTACT: Jennifer Van
INQUIRY #: 4284028.2S

DATE: 05/20/2016 9:54 am

DETAIL MAP - 4284028.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Riverside Tennis Club
ADDRESS: 5695 Glenhaven Avenue
Riverside CA 92506

CLIENT: Terracon
CONTACT: Jennifer Van
INQUIRY #: 4284028.2s

LAT/LONG: 33.04900170, -117.0356

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	1	NR	1
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	0	1	NR	1
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0