

November 18, 2016* Project No. 1555-CR

Shopoff Land Fund IV, L.P.

2 Park Plaza, Suite 700 Irvine, California 92614

Attention: Mr. John Santry

Subject: Geotechnical Due Diligence Proposed Residential Development 901 East South Street City of Anaheim, Orange County, California

References: See Page 8

Dear Mr. Santry:

In accordance with your request, GeoTek, Inc. (GeoTek) has prepared this geotechnical due diligence letter for the subject property. Our general review and comments are based on several site reconnaissances by representatives of GeoTek; excavation of eight exploratory borings on-site; collection of soil samples of the on-site materials; laboratory testing of selected soil samples collected from the site; review of readily available geologic data for the site and site area; and our experience in the vicinity and with this type of project. This report is not intended to be used for any design or permitting process.

Site Description

The subject site is comprised of two parcels of land [Assessor Parcel Numbers (APNs) 037-130-29 and 037-271-24] and encompasses a total of approximately 20.57 acres. The site is also addressed as 901 East South Street, Anaheim, Orange County, California (see Site Location Map, Figure 1). The site is currently occupied by Freeman, an event staging company. An approximately 334,000 square foot building, which is comprised of approximately 51,000 square feet of office area and the remaining 283,000 square feet is warehouse area, currently occupies the southwest portion of the site. Additionally, an approximately 30,000 square foot building currently occupies the north-central portion of the site. This building is understood to be used as a shipping coordination center for the site occupants. The remainder of the site is paved parking/drive areas.

The site is bounded by East South Street, followed by the city's parks and recreation department central yard; a Metro Link railway, followed by residential development, to the west; East Santa Ana Street, followed by residential development, to the north; and several industrial facilities to the east. Several structures appear to be located immediately adjacent the property line on the east side of the site. The site can be accessed from either East South Street or East Santa Ana Street.

The Site and Site area can be considered as having relatively flat terrain. Based on the United States Geologic Survey (USGS) topographic map for the area and other documents reviewed for this report, the elevation of the subject site ranges from approximately 163 to 164 feet above mean sea level (see Figure 1). Natural drainage at the site is interpreted to be dominantly directed toward the southwest, conforming to the natural topography in the area.

Proposed Development

Based on information provided by Shopoff Land Fund IV, L.P., proposed development for the subject property includes earthwork and construction necessary for 530 dwelling units in single-family or attached residential buildings, a parking structure, parking, drive and landscape areas. The site structures are proposed to be two- to four-stories in height. No specific building loads for the proposed structures were available at the time this report was prepared. Other related improvements (flatwork, screen walls, underground utilities, etc.) are also anticipated. It is also anticipated that minimal cuts and fills will be required to achieve finished grade elevations on the site.

Field Exploration

Our geotechnical field exploration was conducted on September 28, 2016. An engineer from GeoTek logged eight exploratory borings excavated by a truck mounted hollow-stem auger drill rig. The borings were located within the vicinity of the proposed improvements (see Boring Location Map, Figure 2). Logs of the exploratory borings are included in Appendix A.



Samples of on-site soils encountered in the excavations were returned to the laboratory for testing and evaluation.

General Soil and Geologic Conditions

Based on our field exploration and observations, the site is generally underlain by fills soils which are in turn underlain by alluvium.

Fill soils were encountered in four of exploratory borings (Borings B-1, B-2, B-3 and B-4) excavated on the site. The depth of the fill soils ranged from 3.5 to 9 feet below ground surface.

Overexcavation and recompaction is recommended below the proposed improvements in order to provide uniform bearing materials beneath the planned footings and slabs. All fill soils should be completely removed below all proposed structural improvements. Additionally, the upper one to two feet of alluvial materials may need to be completely removed below all proposed structural improvements depending on exposed conditions during grading.

A minimum of three (3) feet of engineered fill should be provided below the bottom of the proposed footings. The horizontal extent of removals should extend at least five (5) feet outside the perimeter footings and floor-slabs, or a distance equal to the depth of overexcavation below the bottom of the structural elements, whichever is greater.

A minimum of 12 inches of engineered fill should be provided below asphaltic concrete pavement and Portland cement concrete hardscape areas. The horizontal extent of removals should extend at least two (2) feet beyond the edge.

The on-site soils are generally considered suitable for reuse as engineered fill provided they are free from vegetation, debris and other deleterious material. The undercut areas should be brought to the final subgrade elevations with fill materials that are placed in eight (8) inch or less loose lifts, moisture conditioned to at least the optimum moisture content and compacted to a minimum relative compaction of 90 percent as determined by ASTM Test Method D 1557.

Laboratory Testing

Laboratory testing was performed on selected relatively undisturbed and bulk soil samples collected during our field exploration. The purpose of the laboratory testing was to confirm the field classification of the soils encountered and to evaluate their physical properties for use in the engineering design and analysis. Results of the laboratory testing program along with a

*Revised 12-22-2016 to Include Reliance Section



brief description and relevant information regarding testing procedures are included in Appendix B or on the exploratory logs included in Appendix A.

<u>Findings</u>

The subject property is not currently located within a State of California designated Earthquake Fault Zone (*Alquist-Priolo*) (<u>http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm</u>) nor within a State of California Special Studies Zone (<u>http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm</u>) for earthquake induced liquefaction potential or seismically induced landslides.

Based on our field exploration and observations, the site is generally underlain by undocumented fill overlying alluvium. Fill soils were encountered in four of the borings (Borings B-I through B-4) excavated on the site to a maximum depth of approximately nine feet. In general, the fill soils typically consist of medium dense sand and silty sand. Alluvial materials were encountered in all of the borings excavated on the site, below the fill soils. In general, the alluvial materials typically consist of sand, clay and silt.

According to the results of the laboratory testing performed on one near surface sample, the on-site materials exhibited a "very low" expansion potential when tested in accordance with ASTM D 4829. Additionally, the near-surface soils are subject to low collapse potential upon saturation. The test results are provided in Appendix B.

The soil resistivity at this site was tested in the laboratory on one sample collected during the field investigation. The results of the testing indicate that the on-site soils (resistivity = 2,881 ohm-cm) are considered "highly corrosive" to buried ferrous metal in accordance with current standards used by corrosion engineers. We recommend that a corrosion engineer be consulted to provide recommendations for the protection of buried ferrous metal at this site.

The sulfate content was determined in the laboratory for one on-site soil sample. The results indicate that the water soluble sulfate result is less than 0.1 percent by weight, which is considered "not applicable" (negligible) as per Table 4.2.1 of ACI 318.

Several factors will impact earthwork balancing on the site, including shrinkage, subsidence, bulking, trench spoil from utilities and footing excavations, as well as the accuracy of topography. Shrinkage is primarily dependent upon the degree of compactive effort achieved during construction. For planning purposes, a shrinkage factor of 5 to 15 percent may be considered for the materials that will be removed and recompacted. Site balance areas should be available in order to adjust project grades, depending on actual field conditions at the



conclusion of site earthwork construction. Subsidence of up to 0.1 feet may occur due to the underlying materials within the vicinity of the proposed construction.

Conclusions and Recommendations

A summary of our findings is provided below:

- Based on our field exploration and observations, the site is generally underlain by fill soils which are in turn underlain by alluvium. The fill soils were encountered in four of the exploratory borings (Borings B-1, B-2, B-3 and B-4) excavated on the site. The depth of the fill soils ranged from 3.5 to 9 feet below ground surface.
- Overexcavation and recompaction is recommended below the proposed improvements in order to provide uniform bearing materials beneath the planned footings and slabs. All fill soils should be completely removed below all proposed structural improvements. Additionally, the upper one to two feet of alluvial materials may need to be completely removed below all proposed structural improvements, depending upon exposed conditions during grading. Total removal depths are anticipated to range from 3 to 10 feet. Additional removals may locally be necessary based on as-graded conditions.
- The on-site soils are generally considered suitable for reuse as engineered fill provided they are free from vegetation, debris and other deleterious material. The undercut areas should be brought to the final subgrade elevations with fill materials that are placed in eight (8) inch or less loose lifts, moisture conditioned to at least the optimum moisture content and compacted to a minimum relative compaction of 90 percent as determined by ASTM Test Method D 1557.
- According to the results of the laboratory testing performed on one near surface sample, the on-site materials exhibited a "very low" expansion potential when tested in accordance with ASTM D 4829. Additionally, the near-surface soils are subject to low collapse potential upon saturation.
- The results of the testing indicate that the on-site soils (resistivity = 2,881 ohm-cm) are considered "highly corrosive" to buried ferrous metal in accordance with current standards used by corrosion engineers.
- Sulfate content testing indicates that the water soluble sulfate result is less than 0.1 percent by weight, which is considered "not applicable" (negligible) as per Table 4.2.1 of ACI 318.
- For planning purposes, a shrinkage factor of 5 to 15 percent may be considered for the materials that will be removed and recompacted. Subsidence of up to 0.1 feet may occur due to the underlying materials within the vicinity of the proposed construction



The following items should be noted:

• A full geotechnical evaluation should be completed for the site. The full report should provide complete earthwork, seismic and foundation design/recommendations criteria.

<u>Reliance</u>

Subject to the terms and conditions of that certain Work Authorization and Agreement dated September 1, 2016 between GeoTek, Inc. and Shopoff Land Fund IV, L.P., this Report is for the use and benefit of, and may be relied upon by, C3 Capital, LLC and ABP Capital II, LLC, Fortress Credit Co LLC, Fortress Credit Corp., Fortress Credit Advisors LLC, Fortress Real Estate Opportunities Advisors LLC, Drawbridge Special Opportunities Fund LP, any fund or account managed directly or indirectly by Fortress Investment Group LLC, and any of its and their respective assigns, affiliates, agents and advisors; any initial and subsequent holders from time to time of any debt and/or securities backed in whole or in part, directly or indirectly, by assets covered by this Report; any initial and subsequent holders of any participation or beneficial interest in any such debt and/or securities; any trustee, servicer or other agent acting on behalf of holders of such debt and/or securities; any rating agencies providing ratings to any such securities; and any institutional providers from time to time of any liquidity facility or credit support for the financing of any such debt and/or securities; and their respective successors and assigns. In addition, this Report and/or a reference to this Report may be included or quoted in any offering circular, registration statement, prospectus or sales brochure (in either electronic or hard copy format) in connection with a securitization, syndication or similar transaction involving such debt and/or such securities.

LIMITATIONS

Our findings are based on site conditions observed and the stated sources. Thus, our comments are professional opinions that are limited to the extent of the available data.



This report was prepared for Shopoff Land Fund IV, L.P. in accordance with generally accepted geotechnical engineering standards of practice at the referenced locality. Standards of practice are subject to change with time. No warranty of any kind expressed or implied.

Respectfully submitted, GeoTek, Inc.





Edul H. Lit

Edward H. LaMont CEG 1892, Exp. 07/31/18 Principal Geologist

amatr. Scotto

Anna M. Scott Project Geologist

Enclosures: Figure I – Site Location and General Site Topography Map Figure 2 – Boring Location Map Appendix A – Logs of Exploratory Borings Appendix B – Laboratory Test Results

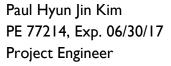
Distribution: (1) Addressee via email (one PDF file)

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Appendix A – Appendix B –

*Revised 12-22-2016 to Include Reliance Section



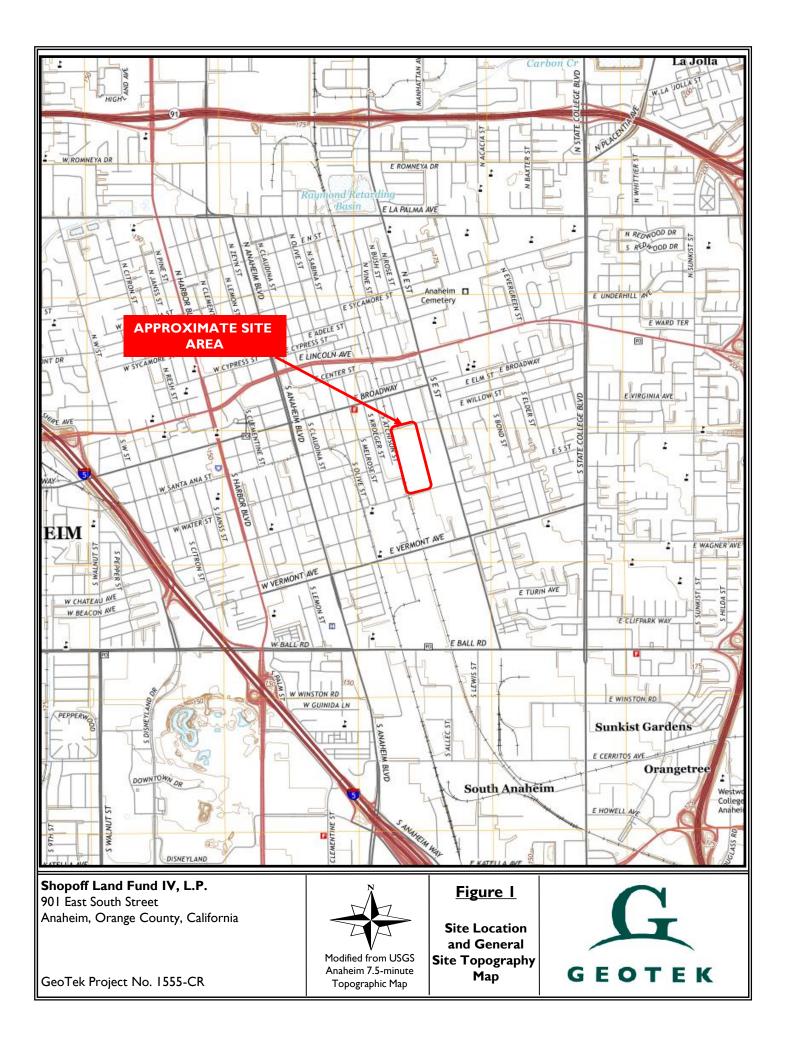


REFERENCES

Geologic Map of the San Bernardino and Santa Ana 30'x60'-minute Quadrangles, California, U.S. Geological Survey OF-2006-1217, scale 1:100,000.

GeoTek, Inc., In-house proprietary information.







APPENDIX A

LOGS OF EXPLORATORY BORINGS

901 East South Street City of Anaheim, Orange County, California Project No. 1555-CR



A - FIELD TESTING AND SAMPLING PROCEDURES

The Modified Split-Barrel Sampler (Ring)

The ring sampler is driven into the ground in accordance with ASTM Test Method D 3550. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

The Split-Spoon Sampler (SPT)

During the sampling procedure, Standard Penetration Tests (SPT) were performed in accordance with ASTM D1586. The SPT for soil borings is performed by driving a split-spoon sampler with an outside diameter of 2 inches into the undisturbed formation located at the bottom of the advanced borehole with repeated blows of a 140-pound hammer falling a vertical distance of 30 inches. The number of blows required to drive the sampler for three consecutive 6-inch intervals were recorded, and the sum of the blow counts for the last 12 inches of penetration is a measure of the soil consistency. Samples were identified in the field, placed in sealed containers and transported to the laboratory for further classification and testing.

Bulk Samples (Large)

These samples are normally large bags of earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.



B – BORING LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the logs of borings:

<u>SOILS</u>	
USCS	Unified Soil Classification System
f-c	Fine to coarse
f-m	Fine to medium
<u>GEOLOGIC</u>	
B: Attitudes	Bedding: strike/dip
J: Attitudes	Joint: strike/dip
C: Contact line	
	Dashed line denotes USCS material change
	Solid Line denotes unit / formational change
	Thick solid line denotes end of the boring

(Additional denotations and symbols are provided on the log of borings)



CLIENT: PROJECT NAME: PROJECT NO.:		S	901 E. So	d Fund IV, LP outh Street	DRIL	DRILLER:	2R Drillir Hollow Ste	em	LOGGED OPERATO	OR:		R. Hankes Ish/Garrett
	-			5-CR		HAMMER:	140#/30		RIG TY			CME 75
OCATIO	-		Anahe	im, CA					DA	TE:		9/28/2016
Depth (ft) Sample Type	SAMPLE u. 9 /swo B	Sample Number	USCS Symbol	МА	TERIAL D	Boring No.		MENTS	Water Content	(%)	Dry Density (pcf)	oratory Testing
0_				4" Asphaltic Conc	rete over 7	" Aggregate Bas	e					
	14 12 13		SM	Fill Soils: Silty f SAND with	some cobb	les, dark brown	, slightly moist,	medium den		.3	108.0	
	7 8 8											
	5 9 9		SP	Alluvium: F-c SAND, gray a	nd tan, slight	tly moist, mediu	m dense		1	.3		
- - - -	6 8 11			F-m SAND, gray a	and tan, sligt	ntly moist, medi	um dense		I	.2		
	6 8 9			F-m SAND, gray a	and tan, sligh	ntly moist, media	um dense		1	.8		
	3 5 5			Silty CLAY, brown								
	3 4 6		CL-ML	Clayey SILT, brow	vn, slightly n	noist, stiff						
	7 9 12		SP	M-c SAND, gray a	and tan, sligh	itly moist, medii	um dense					
Sam	nple type	<u>e:</u>		RingSPT	/	-Small Bulk	XLarge	Bulk	No Reco	very		Water Table
j				erberg Limits	FI = F~	pansion Index			_	-	R-Value T	
Sam	testing:			erberg Limits ate/Resisitivity Test		pansion Index near Test		Sieve Analysis Consolidation			R-Value I Maximum	

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PRO		NO.:		155	5-CR	HAMMER:	140#/30"	RIG TYPE:		CME 75
	ΑΤΙΟΙ			Anahe	eim, CA			DATE:		9/28/2016
	T	SAMPLES							Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	МАТ	Boring No.: B-I (C		S Water Content (%)	Dry Density (pcf)	Others
30										
- - - - - - - - - - - - - - - - - - -		6 9 12		SP	M-c SAND, gray an	d tan, slightly moist, mediur	m dense			
40 -		8 11 16			SAME					
- - - - - - - - - - - - - - - - - - -		7 12 12			F-m SAND, gray an	d tan, slightly moist, mediu	m dense			
50 -		10 14 18			M-c SAND, gray an	d tan, slightly moist, dense				
-	1					Boring Terminated	at 50 feet			
- - - - - - - - - - - - - - - - - - -					Boring backfilled wi No groundwater er					
-	-									
LEGEND	Sam	ple type:	:		RingSPT	Small Bulk	Large Bulk	No Recovery		∠Water Table
U U U	11	4		AL = Att	erberg Limits	EI = Expansion Index	SA = Sieve An	alysis RV =	R-Value	ſest
Ξ	Lab	testing:			ate/Resisitivity Test	SH = Shear Test	HC= Consolie		= Maximun	n Density

CLIENT: PROJECT NAME: PROJECT NO.:			S		d Fund IV, LP	DRILLER: DRILL METHOD:	2R Drilling Hollow Stem	LOGGED BY		R. Hankes Ish/Garrett
		-			5-CR	HAMMER:	140#/30"	RIG TYPE		CME 75
LOCA		-		Anahe	im, CA	—		DATE		9/28/2016
		SAMPLES							Lab	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	ма	Boring No.:		Water Content (%)	Isity	C the stand
0					3" Asphaltic Con	crete over 7" Aggregate Base				
		16 21 22		SP	Fill Soils:	gravel, dark brown to mediu		3.4 ist, medium	116.0	
		9 12 14			Alluvium: M-c SAND, tan a	nd gray, slightly moist, mediu	n dense	2.0	101.1	
		 3 4			M-c SAND, tan a	nd gray, slightly moist, mediui	n dense	1.4	106.6	
10 -		8 10 14			SAME			2.1	98.4	
15 1 1		8 16 16			SAME					
		2 3		SM/ML	Silty f SAND/sand	dy SILT, brown, slightly moist,	loose/medium stiff			
.0 -		4							+	
25					Boring backfilled No groundwater	Boring Terminated with excavated soils. encountered.	at 20 feet			
9 2 2										
LEGEND	Sam	ple type	:		RingSPT	Small Bulk	Large Bulk	No Recover	/	✓Water Table
EG	Lab	tostina		AL = Atte	erberg Limits	EI = Expansion Index	SA = Sieve Ana	lysis RV	= R-Value	Test
Ľ		testing:		SR = Sulfa	ate/Resisitivity Test	SH = Shear Test	HC= Consolid	lation ME) = Maximur	n Density

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oc		N:		Anahe	eim, CA		_		DATE:		9/28/2016
		SAMPLES								Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	ма	Boring N		OMMENTS	Water Content (%)	Dry Density (pcf)	Others
0			•,			crete over 7" Aggregate B					
°-	-				5 Asphaltic Conc		ase				
		9 11 12		SM	Fill Soils: Silty f SAND, darl	k brown, slightly moist, m	edium dens	2	7.2	100.4	
; -	\sim										
, = - - - -		5 7 8		SP	<u>Alluvium:</u> M-c SAND, tan ai	nd gray, slightly moist, me	dium dense		2.3	100.9	
- 0		6 6 9			becomes moist				8.3	109.4	
- - 5 - - - -		3 3 6		SM	Silty f SAND, bro	wn, moist, loose			8.4		
-		3 3 5			SAME						
20 -						Boring Terminat	ted at 20 f	et			
					Boring backfilled v No groundwater	with excavated soils.					
		ple type:	:	AL = Att	RingSPT erberg Limits	Small Bulk El = Expansion Index		-Large Bulk	No Recovery RV =	R-Value 1	도Water Table
	Lav	-cacini Br		SR = Sulf	ate/Resisitivity Test	SH = Shear Test		HC= Consolidation	MD :	= Maximun	n Density

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PROJ		_			5-CR	HAMMER:	140#/30"	RIG TY	-		CME 75
LOC		N:		Anahe	im, CA			DA			9/28/2016
		SAMPLES								Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	МАТЕ	Boring No.:		Vater Content	(%)	Dry Density (pcf)	Others
0					3" Asphaltic Concret	te over 7" Aggregate Base			1		
Ŭ -	-					te over 7 7 teer egate base					
-					Fill Soils:				-		
-		5 7 8		SM		avel, dark brown, moist, n	nedium dense	ç	9.6	113.0	
5 -	1										
		2 3 4		ML/SM	F sandy SILT/silty SA gravel	ND, dark brown, moist, n	nedium stiff/loose, w	ith some I	0.4	110.1	НС
-	-										
		6 12 14		SP	<u>Alluvium:</u> M-c SAND, tan and ;	gray, slightly moist, mediui	n dense		1.0		
		2 3 6		SM/ML	Silty SAND/sandy SII	LT, brown, moist, loose/st	iff	ç	9.5		
- - - 20 -		3 4 7			becomes medium de						
_	1					Boring Terminated	at 20 feet				
25					Boring backfilled witl No groundwater end						
30 - 											
Q	Sam	ple type			RingSPT	Small Bulk	Large Bulk	No Reco	overv		💆Water Table
LEGEND	Jail	<u></u>	•								
LEC	<u>Lab</u>	testing:			erberg Limits ate/Resisitivity Test	El = Expansion Index SH = Shear Test	SA = Sieve Ana HC= Consolic			R-Value T Maximum	

	ЕСТ І		Sł	901 E. Sc	d Fund IV, LP	DRILLER: DRILL METHOD:	2R Drilling Hollow Stem	LOGGED BY OPERATOR		R. Hankes Ish/Garrett
-	ECT	_			5-CR	HAMMER:	140#/30"	RIG TYPE		CME 75
LOC	ΑΤΙΟΙ	N: _		Anahe	eim, CA			DATE		9/28/2016
		SAMPLES	5						Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	МАТ	Boring No		Water Content (%)	Dry Density (pcf)	Others
0			07			ete over 6" Aggregate Bas				
- ⁰	-				4 Asphaltic Concre	ete over 6 Aggregate bas	e			
-					<u>Alluvium:</u>					
- 5 - -		4 9 12		SP	M-c SAND, tan and	l gray, slightly moist, medi	um dense	2.1	107.1	
		10 12 18			M-c SAND, tan and	l gray, slightly moist, medi	um dense	2.4	108.9	
10 -		2 5 3			M-c SAND, tan and	l gray, slightly moist, medi	ium dense	2.5	106.9	
		2 3 5		ML	F sandy SILT with ti	race clay, brown, moist, n	nedium stiff	18.4		
- - - 20 -		5 6 7		SM	Silty f SAND, browi	n, slightly moist, medium	dense			
					Boring backfilled wi No groundwater er		d at 20 feet			
25 -	-									
30 - - -										
LEGEND	Sam	ple type	:		RingSPT	Small Bulk	Large Bulk	No Recovery		Water Table
LEG	Lab	testing:			erberg Limits ate/Resisitivity Test	El = Expansion Index SH = Shear Test	SA = Sieve / HC= Conso		= R-Value = Maximun	

CLIE PROJ			Sh	901 E. So	id Fund IV, LP outh Street	DRILLER DRILL METHOD		2R Drilling Hollow Stem		TOR:		R. Hankes Ish/Garrett
	ECT N	_			5-CR	HAMME	R:	140#/30"		TYPE:		CME 75
LOC	ΙΟΙΤΑ	N:		Anahe	eim, CA					DATE:		9/28/2016
		SAMPLES		_							Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MA	Boring I			s	Water Content (%)	Dry Density (pcf)	Others
0						rete over 6" Aggregate						
Ŭ-					o vopilalite cone		Dase					
-		15 32 42		SP	Alluvium: F-m SAND, dark b	orown to tan gray, sligh	tly moist, o	dense		3.0	111.5	
5 -		10 13 15			M-c SAND, tan ar	id gray, slightly moist, m	nedium der	nse		1.4		Disturbed Sample
-		5 8 8			SAME					2.0	106.5	
		4 8 11		CL	Silty CLAY with sa	and, brown, moist, stiff				10.9	103.3	
		5 7 6		SP	F-m SAND, gray a	nd light brown, slightly	moist, me	dium dense		2.7		
	-	2 5 5		CL SM		vn. slighty moist, mediu rown and gray, slightly i		lium dense				
-	-					Boring Termin	ated at 2	0 feet				
- - - - 25 -					Boring backfilled v No groundwater (vith excavated soils.						
30 - - -	-											
LEGEND	Sam	ple type			RingSPT	Small Bulk	\geq	Large Bulk	No R			₩Water Table
LEG	Lab	testing:			erberg Limits fate/Resisitivity Test	EI = Expansion Index SH = Shear Test		SA = Sieve Ana HC= Consolid			R-Value T = Maximum	

CLIEI PROJ			S		d Fund IV, LP outh Street	DRILLER: DRILL METHOD:	2R Drilling Hollow Stem	LOGGED BY: OPERATOR:		R. Hankes Ish/Garrett
PROJ	ЕСТ І	NO.:		155	5-CR	HAMMER:	I 40#/30"	RIG TYPE:		CME 75
LOC		N:		Anahe	eim, CA			DATE:		9/28/2016
		SAMPLES							Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MA	Boring No.: TERIAL DESCRIPTION		X Mater Content (%)	Dry Density (pcf)	Others
0			0)			rete over 6" Aggregate Base				
<u> </u>	-				4 Asphaltic Conc	rete over 6 Aggregate base				
-					Alluvium:					
-		9 14		SP		and tan, slightly moist, mediu	n dense	1.6	110.5	
- - 5 -		17 7 12			SAME			1.7	102.8	
		14								
10 -		6 			M-c SAND, gray a	and tan, slightly moist, mediu	n dense	2.7	105.0	
		4 7 7			SAME			3.2		
-		2			CAME					
_		7			SAME					
20 -		10								
-						Boring Terminated	at 20 feet			
-					Boring backfilled v No groundwater (with excavated soils. encountered.				
25 - -										
30 - -										
DN	Sam	ple type	:		RingSPT	Small Bulk	Large Bulk	No Recovery		Water Table
LEGEND	Lab	testing:			erberg Limits ate/Resisitivity Test	El = Expansion Index SH = Shear Test	SA = Sieve Ana HC= Consolid		• R-Value 1 = Maximun	

			Sł		nd Fund IV, LP	DRILLER: DRILL METHOD:	2R Drilling Hollow Stem	LOGGED BY: OPERATOR:		R. Hankes Ish/Garrett
	ECTN	-			i5-CR	HAMMER:	140#/30"	RIG TYPE:		CME 75
		_		Anahe	eim, CA			DATE:		9/28/2016
	1	SAMPLES							Labo	oratory Testing
Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MA	Boring No.:		Water Content	Dry Density (pcf)	stating the to the to to the to to the to to the to to the to to to to to to to to to to to to to
_			ŝ					3 >		
0_					3" Asphaltic Conc	crete over 9" Aggregate Base				
-	X			SP	Alluvium: F SAND, dark bro	own, slightly moist, medium	dense			MD, EI, SR
- - 5 -		9 9 11		SM	Silty f SAND with	trace gravel, dark brown, m	oist, medium dense	7.6	117.6	HC
-		12 23 23		SP	M-c SAND, tan an	nd gray, slightly moist, mediu	m dense	2.6	104.8	
- - - - - - -		10 12 13			M-c SAND, tan an	nd gray, slightly moist, mediu	m dense	2.3	100.4	
		5 7 12			SAME			1.8		
- - - - 20 -		5 6 7			SAME					
_						Boring Terminated	at 20 feet			
- - - - - - - - - - - - - - - - - - -					Boring backfilled v No groundwater o	with excavated soils. encountered.				
- - - - - - - - - - - - - - - - - - -										
LEGEND	Sam	ple type	:		RingSPT	Small Bulk	Large Bulk	No Recovery		⊥Water Table
LEGE	Lab	testing:			erberg Limits fate/Resisitivity Test	El = Expansion Index SH = Shear Test	SA = Sieve Ana HC= Consolid		· R-Value T = Maximum	

APPENDIX B

LABORATORY TESTING RESULTS

901 East South Street City of Anaheim, Orange County, California Project No. 1555-CR



SUMMARY OF LABORATORY TESTING

Classification

Soils were classified visually in general accordance to the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the log of borings in Appendix A.

Collapse

One-dimensional collapse testing was performed on selected samples of the site soils according to ASTM Test Method D 4546. The results of this testing is presented in Appendix B.

Expansion Index

Expansion Index testing was performed on one soil sample. Testing was performed in general accordance with ASTM Test Method D 4829. The results of the testing are provided below.

Boring No.	Depth (ft.)	Soil Type	Expansion Index	Classification
B-8	0-5	Silty Sand	0	Very Low

Moisture-Density Relationship

Laboratory testing was performed on one sample collected during the subsurface exploration. The laboratory maximum dry density and optimum moisture content for the soil type was determined in general accordance with test method ASTM Test Procedure D 1557. The results of the testing are provided below.

Boring No.	Depth (ft.)	Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
B-8	0-5	Silty Sand	127.0	8.0

Sulfate Content, Resistivity and Chloride Content

Testing to determine the water-soluble sulfate content was performed by others in general accordance with California Test No. 417. Resistivity testing was completed by others in general accordance with California Test No. 643. Testing to determine the chloride content was performed by others in general accordance with California Test No. 422. The results of the testing are provided below.

Boring No.	Depth (ft.)	рН СТМ-643	Chloride CTM-422 (mg/kg)	Sulfate CTM-417 (% by weight)	Resistivity ASTM G187 (ohm-cm)
B-8	0-5	8.8	180.0	0.0030	2,881



