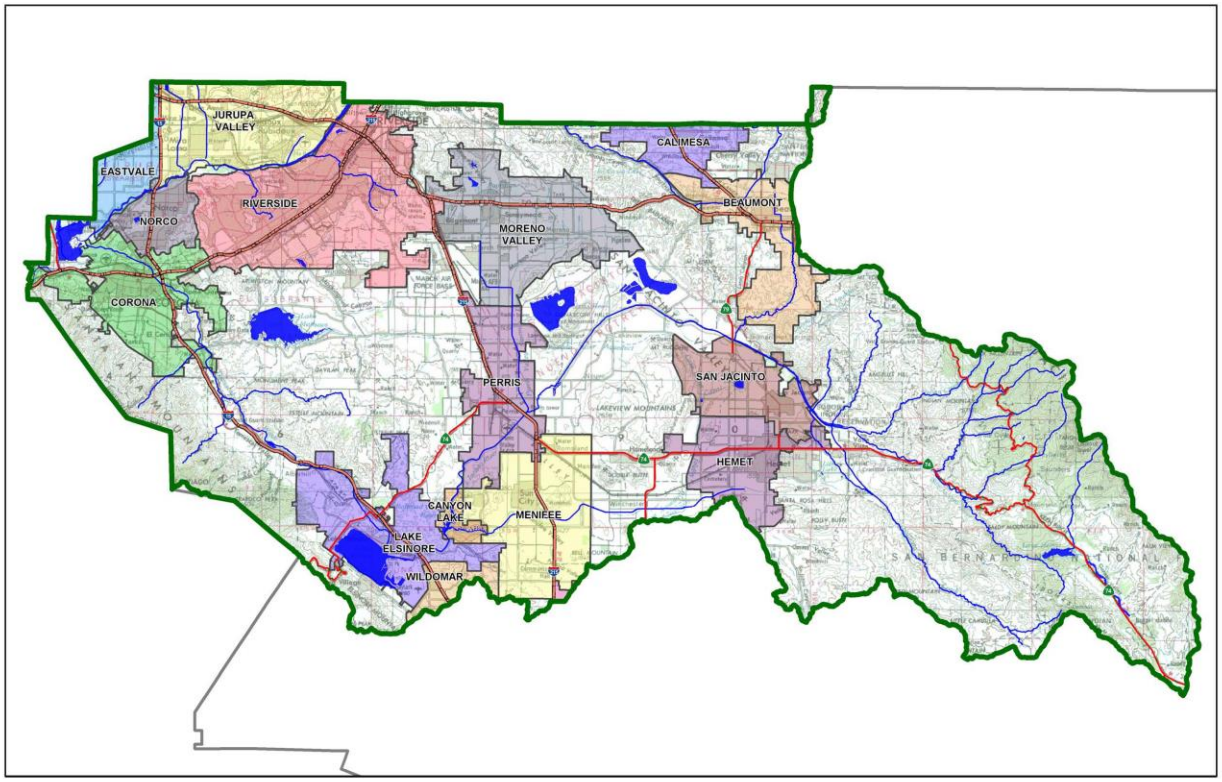
Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

Project Title: Duke Barrett Building Option

Development Plan No: P18-00011



☒ **Preliminary**
☐ **Final**

Original Date Prepared: October 2018

Revision Date(s): February 2019

Prepared for Compliance with
Regional Board Order No. **R8-2010-0033**
Template revised June 30, 2016

Contact Information:

Prepared for:
Duke Realty Corporation
Attn: Adam Schmid
300 Spectrum Center Drive, Suite 1450
Irvine, CA 92618
(949) 797-7000

Prepared by:
Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506
(951) 686-1070

OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Duke Realty by Albert A. Webb Associates for the Duke Barrett project P18-00011.

This WQMP is intended to comply with the requirements of City of Perris for Water Quality Ordinance 1194 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Perris Water Quality Ordinance (Municipal Code Section 1194).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."

Preparer's Signature	Date
Preparer's Printed Name	Preparer's Title/Position

Preparer's Licensure:

Section A: Project and Site Information

PROJECT INFORMATION			
Type of Project:	Commercial/Industrial		
Planning Area:	Mead Valley Area Plan (RCIP)		
Community Name:	Perris Valley Commerce Center		
Development Name:	Duke Barrett Building Option		
PROJECT LOCATION			
Latitude & Longitude (DMS): 33°50'50.76", 117°13'45.85"			
Project Watershed and Sub-Watershed: Santa Ana River, San Jacinto River			
Gross Acres: 7.26 ac			
APN(s): 302-060-011, 302-060-026, 302-060-030, 302-060-031			
Map Book and Page No.: Thomas Bros. Map Page 777, Grid G1			
PROJECT CHARACTERISTICS			
Proposed or Potential Land Use(s)		Commercial/Industrial	
Proposed or Potential SIC Code(s):	**1541** (General Contractors-Industrial Buildings & 1541, 4225 Warehouses)		
	4225 (General Warehousing & Storage)		
Area of Impervious Project Footprint (SF)		267,185	
Total Area of proposed Impervious Surfaces within the Project Footprint (SF)/or Replacement		267,185	
Does the project consist of offsite road improvements?		☒ Y	☐ N
Does the project propose to construct unpaved roads?		☐ Y	☒ N
Is the project part of a larger common plan of development (phased project)?		☐ Y	☒ N
EXISTING SITE CHARACTERISTICS			
Total area of existing Impervious Surfaces within the Project limits Footprint (SF)		0	
Is the project located within any MSHCP Criteria Cell?		☐ Y	☒ N
If so, identify the Cell number:		n/a	
Are there any natural hydrologic features on the project site?		☐ Y	☒ N
Is a Geotechnical Report attached?		☒ Y	☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)		n/a	
What is the Water Quality Design Storm Depth for the project?		0.63 in	

Project Description

The project is proposing a commercial/industrial facility on approximately 312,758 square feet (7.2 acres) of vacant land. The project is bounded by Perry Street to the North, Barrett Avenue to the West, existing residential lots to the East, and an existing residential lot and vacant lot to the South. The existing elevations across the site vary from 1461 at the northwesterly corner to 1459 at the southeasterly corner (NAVD88 datum). The site currently slopes at approximately 0.3% from the northwesterly corner to the southeasterly corner. The existing drainage pattern for the site is characterized by sheet flows that follow the slope. Currently, the runoff sheet flows in a southeasterly direction and drains to the existing Line E swale located approximately 600 feet south of the site's southerly property line along Ramona Expressway. Line E discharges into the Perris Valley Storm Drain. The proposed site will have one bio-retention basin that occupies an area in the southeasterly corner. This basin will collect the runoff from the whole site, treat the water and discharge to existing Lateral E-11 in Perris Boulevard; which drains to Line E.

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling
- BMP Locations (Lat/Long)

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Perris Valley Storm Drain	None	None	Not a water body classified as RARE
San Jacinto River (Reach 3) (HU#802.11)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE
San Jacinto River (Reach 2) (HU#802.11)	None	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE
Canyon Lake (HU#802.11, 802.12)	Nutrients, Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Consideration of "highest and best use" of the discharge should also be considered. For example, Lake Elsinore is evaporating faster than runoff from natural precipitation can recharge it. Requiring infiltration of 85% of runoff events for projects tributary to Lake Elsinore would only exacerbate current water quality problems associated with Pollutant concentration due to lake water evaporation. In cases where rainfall events have low potential to recharge Lake Elsinore (i.e. no hydraulic connection between groundwater to Lake Elsinore, or other factors), requiring infiltration of Urban Runoff from projects is counterproductive to the overall watershed goals. Project proponents, in these cases, would be allowed to discharge Urban Runoff, provided they used equally effective filtration-based BMPs.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?
The project site naturally drains towards the south. The project proposes to generally preserve the existing drainage pattern.

Did you identify and protect existing vegetation? If so, how? If not, why?
The project site will not protect the existing vegetation as it is currently vacant with very little vegetation.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?
The attached infiltration report recommends a design infiltration rate of 0.4 in/hr. This is well below the BMP design handbook's required 1.6 in/hr. Bio-treatment will be used because of these findings.

Did you identify and minimize impervious area? If so, how? If not, why?
The project intends to provide the standard amount of pervious and impervious cover.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?
Runoff will be dispersed to the onsite bio-retention basin.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)[1][2]	Area (Sq. Ft.)	DMA Type
L-A	LANDSCAPE	37,122	D
R-A	ROOF	145,263	D
H-A	HARDSCAPE	121,922	D
BMP-A	LANDSCAPE	7,960	N/A

[1]*Reference Table 2-1 in the WQMP Guidance Document to populate this column*
[2]*If multi-surface provide back-up*

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
*			

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				**Type 'C' DMAs that are draining to the Self-Retaining Area**		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	[C] from Table C.4 = [C]	Required Retention Depth (inches) [D]
*						

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Impervious fraction	Product	DMA name /ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]
N/A							

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
L-A, R-A, H-A	BMP-A

Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

*Self-treating and self-retaining areas might exist, but they will be looked at further during final. For this PWQMP we opted to be conservative by assuming all landscape to be Type D.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
DMA-A	☐	☐	☒	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

N/A

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First**,** calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second**,** design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Enter BMP Name / Identifier Here*		
	[A]		[B]	[C]	[A] x [C]			
L-A	*37,122*	*LANDSCAPE*	*0.1*	*0.11*	*4100.4*	*Design Storm Depth (in)*	*Design Capture Volume,* V_{BMP} *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
R-A	*145,263*	*ROOF*	*1.0*	*0.89*	*129574.6*			
H-A	*121,922*	*HARDSCAPE*	*1.0*	*0.89*	*108754.4*			
BMP-A	*7,960*	*LANDSCAPE*	*0.1*	*0.11*	*879.2*			
	312,267				243,308.6	0.63	12,773.7	12,774

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

All DMAs will be treated using a bio-retention basin.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Susceptibility Maps.

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

Per Riverside County Flood Control found from their Santa Ana HCOC applicability map, this project is within an exemption area. According to the map found in Appendix 7, all downstream conveyance systems are hardened/engineered (Blue Lines) with an ultimate sump at Canyon Lake.

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

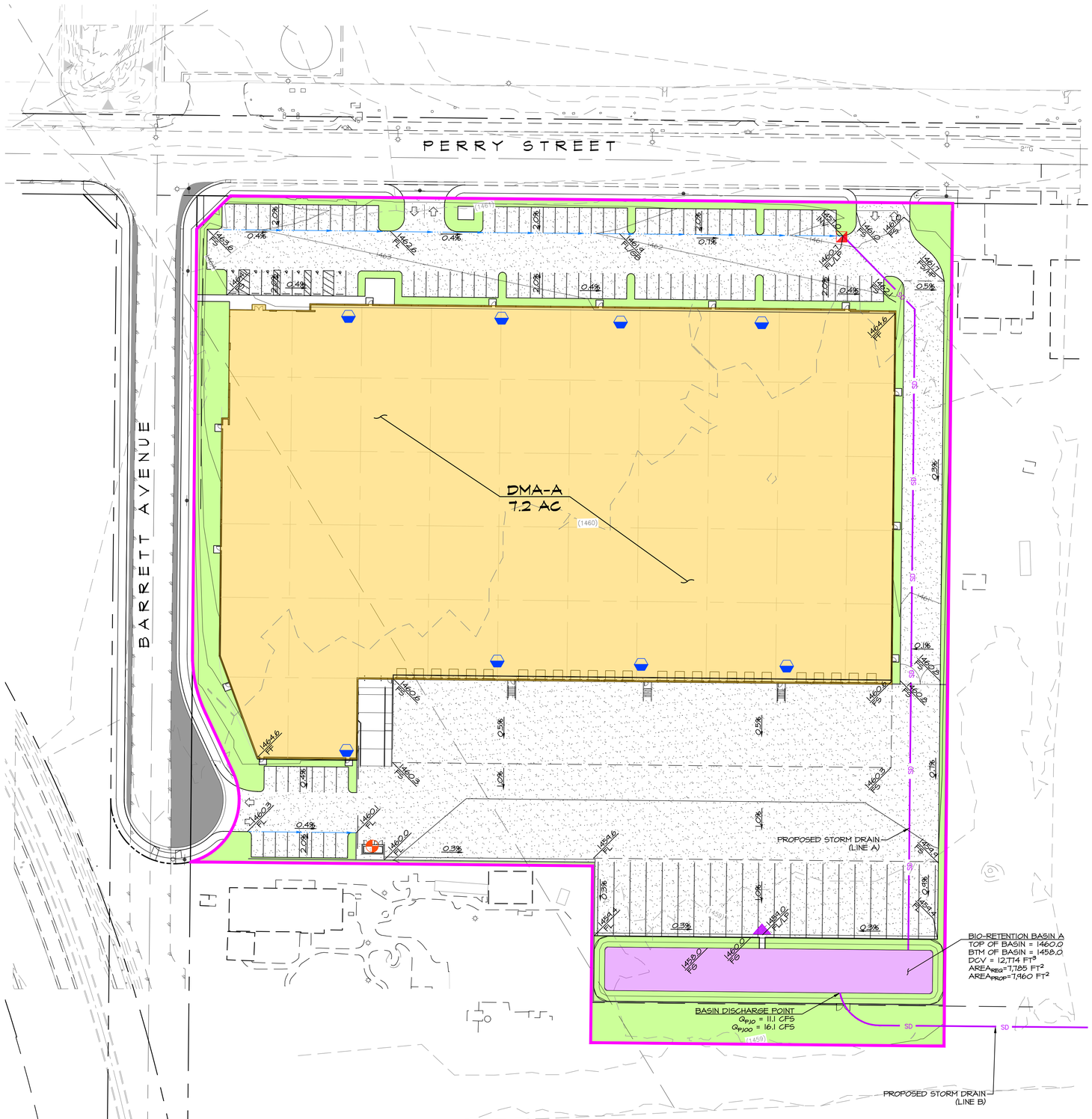
a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year, 24-hr peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

	2 year – 24 hour		
	Pre-condition	**Post-condition**	**% Difference**
Peak Flow Rate	N/A	N/A	N/A



LEGEND

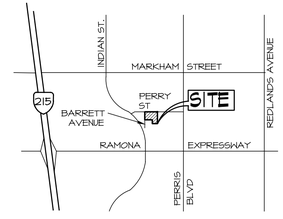
- DRAINAGE MANAGEMENT BOUNDARY
- LANDSCAPING
- ROOF
- CONCRETE OR ASPHALT
- WQ BASIN
- FLOW DIRECTION
- SD — STORM DRAIN PIPE
- ROOF DRAIN DOWNSPOUT
- CURB OPENING/CUT
- STORM INLET
- TRASH ENCLOSURE

DRAINAGE MANAGEMENT AREAS

LEGEND	DMA-ID	TYPE	AREA (SF)
	L-A	LANDSCAPE	37,122
	R-A	ROOF	145,263
	H-A	HARDSCAPE	121,922
	BMP-A	LANDSCAPE	7,960

GENERAL NOTES

1. THIS PRELIMINARY WATER QUALITY REPORT IS BASED ON THE CURRENT AVAILABLE INFORMATION AND IS SUBJECT TO MINOR MODIFICATIONS.
2. *POTENTIAL SELF-RETAINING AREAS EXIST AND WILL BE ANALYZED FURTHER DURING FINAL ENGINEERING..



VICINITY MAP
NOT TO SCALE

N W WEBB E S

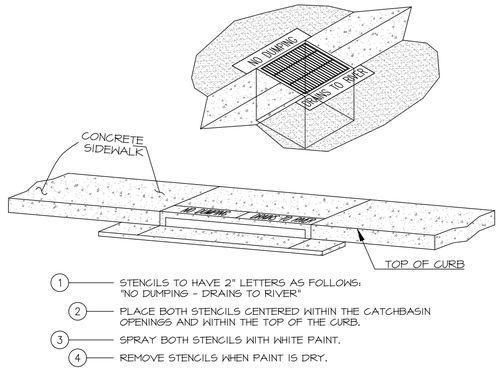
1" = 40'
20 0 40 80 120

CITY OF PERRIS

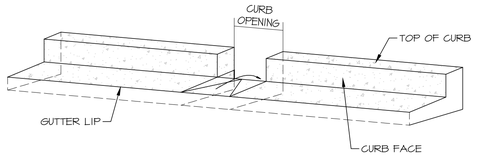
POST CONSTRUCTION B.M.P. SITE MAP
DUKE BARRETT BUILDING OPTION
DPR NO. 18-00011

SCALE:	1"=40'	ALBERT A. WEBB ASSOCIATES	W.O. 18-0240
DATE:	3/26/19	ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE, CA. 92506 PH. (951) 686-1070 FAX (951) 788-1256	SHEET 1 OF 2 SHEETS
DESIGNED:	TSW		
CHECKED:			DWG. NO.
PLN CK REF:			
F.B.			

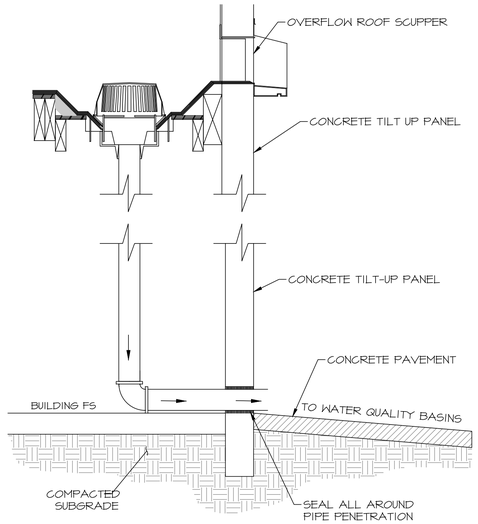
G:\2018\18-0240\DRAINAGE\WQMP BUILDING OPTION\DWG DRAWINGS\18-0240-PWQMP-BLDG.DWG 3/26/2019 5:23:37 PM



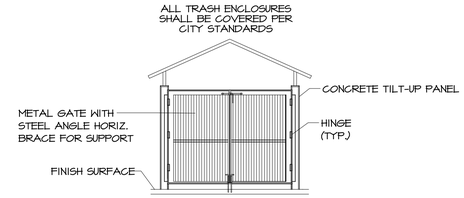
CATCH BASIN STENCILING DETAIL
N.T.S.



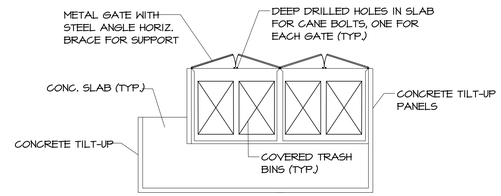
TYPICAL CURB OPENING DETAIL
N.T.S.



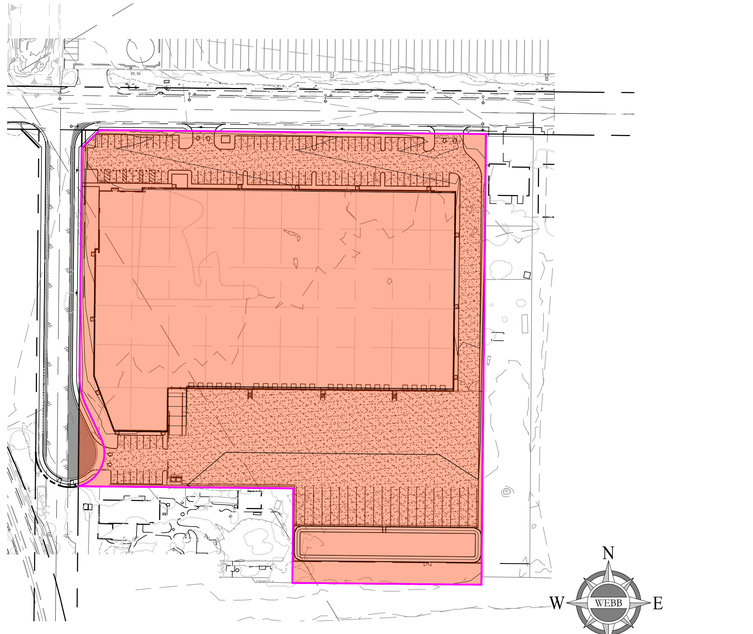
ROOF DRAIN DETAIL
N.T.S.

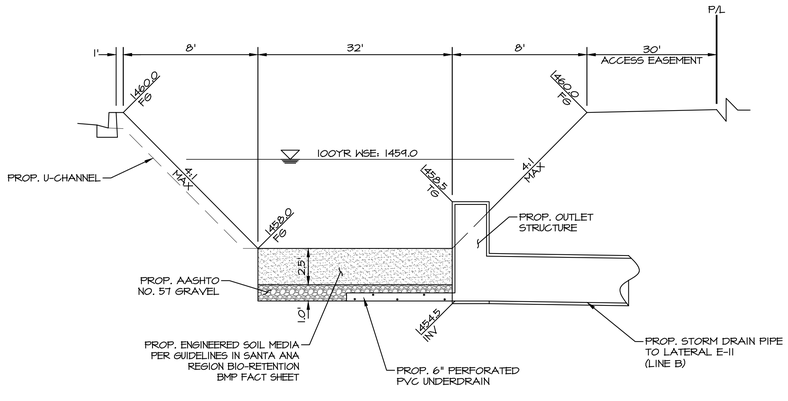


TRASH ENCLOSURE GATE ELEVATION
N.T.S.

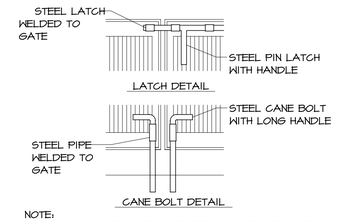


TRASH ENCLOSURE PLAN DETAIL
N.T.S.





BIO-RETENTION BASIN A TYPICAL SECTION
N.T.S.



NOTE:
LATCH AND CANE TO BE AT EXTERIOR SIDE OF GATES

TRASH ENCLOSURE GATE LATCHES DETAIL
N.T.S.

CITY OF PERRIS

POST CONSTRUCTION B.M.P. SITE MAP
DUKE BARRETT BUILDING OPTION
DPR NO. 18-00011

SCALE:	1"=100'	ALBERT A. WEBB ASSOCIATES	W.O. 18-0240
DATE:	3/26/19	ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE CA. 92506 PH. (951) 686-1070 FAX (951) 788-1256	SHEET 2 OF 2 SHEETS
DESIGNED:	TSW		
CHECKED:			DWG. NO.
PLN CK. REF:			
F.B.			

G:\2018\18-0240\DRAINAGE\WQMP BUILDING OPTION\DWG DRAWINGS\18-0240-PWQMP-BLDG.DWG 3/26/2019 5:23:37 PM

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

GEOTECHNICAL INVESTIGATION
PROPOSED WAREHOUSE

Perry Street, East of Indian Avenue
Perris, California
for
Duke Realty

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

July 19, 2018

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Duke Realty
200 Spectrum Center Drive, Suite 1600
Irvine, California 92618

Attention: Mr. Adam Schmid
Development Services Manager

Project No.: **18G160-1**

Subject: **Geotechnical Investigation**
Proposed Warehouse
Perry Street, East of Indian Avenue
Perris, California

Gentlemen:

In accordance with your request, we have conducted a geotechnical investigation 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.

Pablo Montes Jr.
Staff Engineer

Robert G. Trazo, GE 2655
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
ROBERT TRAZO
No. 2655
GEOTECHNICAL
STATE OF CALIFORNIA

Distribution: (1) Addressee

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

2.0 SCOPE OF SERVICES 3

3.0 SITE AND PROJECT DESCRIPTION 4

3.1 Site Conditions 4
3.2 Proposed Development 4

4.0 SUBSURFACE EXPLORATION 5

4.1 Scope of Exploration/Sampling Methods 5
4.2 Geotechnical Conditions 5

5.0 LABORATORY TESTING 6

6.0 CONCLUSIONS AND RECOMMENDATIONS 8

6.1 Seismic Design Considerations 8
6.2 Geotechnical Design Considerations 10
6.3 Site Grading Recommendations 11
6.4 Construction Considerations 14
6.5 Foundation Design and Construction 14
6.6 Floor Slab Design and Construction 16
6.7 Exterior Flatwork Design and Construction 17
6.8 Retaining Wall Design and Construction 17
6.9 Pavement Design Parameters 19

7.0 GENERAL COMMENTS 22

APPENDICES

A Plate 1: Site Location Map
Plate 2: Boring Location Plan
B Boring Logs
C Laboratory Test Results
D Grading Guide Specifications
E Seismic Design Parameters

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.

Geotechnical Design Considerations

- The subject site is located within an area of low liquefaction susceptibility.
- The subsurface conditions encountered at this site are not considered to be conducive to liquefaction. These conditions consist of moderate to high strength alluvium below depths of 3 to 5± feet, and the absence of a historic groundwater table within 25 feet of the ground surface.
- Based on these considerations, liquefaction is not considered to be a design concern for this project.

Site Preparation

- Initial site preparation should include stripping of the existing native grass and weed growth.
- The near-surface soils generally consist of very low expansive native alluvium which possesses a moderate to high potential for consolidation/collapse. Therefore, remedial grading is recommended to remove the upper portion of the near-surface native alluvium and replace these soils as compacted structural fill.
- The proposed building area should be overexcavated to a depth of at least 5 feet below existing grade and to a depth of 5 feet below proposed building pad subgrade elevation. Within the foundation influence zones, the overexcavation should extend to a depth of at least 3 feet below proposed foundation bearing grade. The overexcavation should extend horizontally at least 5 feet beyond the building and foundation perimeters.
- After the overexcavation has been completed, the resulting subgrade soils should be evaluated by the geotechnical engineer to identify any additional soils that should be removed. Resulting subgrade should then be scarified to a depth of 12 inches and moisture conditioned to 0 to 4 percent above optimum. The previously excavated soils may then be replaced as compacted structural fill. All structural fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density.
- The new pavement and flatwork subgrade soils are recommended to be scarified to a depth of 12± inches, thoroughly moisture conditioned and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

Building Foundations

- Conventional shallow foundations, supported in newly placed compacted fill.
- 2,500 lbs/ft^2 maximum allowable soil bearing pressure.
- Reinforcement consisting of at least four (4) No. 5 rebars (2 top and 2 bottom) in strip footings. Additional reinforcement may be necessary for structural considerations.

Building Floor Slab

- Conventional Slab-on-Grade, 6 inches thick.
- Modulus of Subgrade Reaction: k = 100 psi/in.

- 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.

Pavements

ASPHALT PAVEMENTS (R = 30)					
Materials	**Thickness (inches)**				
	Auto Parking and Auto Drive Lanes (TI = 4.0 to 5.0)	Truck Traffic			
		TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	3½	4	5	6
Aggregate Base	6	8	10	11	12
Compacted Subgrade	12	12	12	12	12

PORTLAND CEMENT CONCRETE PAVEMENTS (R = 30)				
Materials	**Thickness (inches)**			
	Autos and Light Truck Traffic (TI = 6.0)	Truck Traffic		
		TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	5½	6½	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12

2.0 SCOPE OF SERVICES

The scope of services performed for this project was in accordance with our Proposal No. 18P290, dated June 12, 2018. The scope of services included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for preparing the design of the building foundations, building floor slab, and parking lot pavements along with site preparation recommendations and construction considerations for the proposed development. The evaluation of the environmental aspects of this site was beyond the scope of services for this geotechnical investigation.

3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Conditions

The subject site is located on the south side of Perry Street, east of Indian Avenue in Perris, California. The site is bounded to the north by Perry Street, to the west by a vacated street (Barret Avenue), and to the south and east by residential lots and vacant property. The general location of the site is illustrated on the Site Location Map included as Plate 1 in Appendix A of this report.

The site consists of a nearly rectangular-shaped parcel, 7.25± acres in size. The site is currently vacant and undeveloped. The ground surface consists of exposed soil with areas of sparse to moderate native grass and weed growth. Topographic information was not available at the time of this report. Based on visual observations, the site topography with the area of the proposed development appears to be relatively level ground, sloping gently downward to the south at a gradient of less than 1± percent.

3.2 Proposed Development

Based on the conceptual site plan provided by the client, the site will be developed with a warehouse, 149,437± ft^2 in size. The building will be constructed with dock-high doors along the south side of the building. It is expected that the building will be surrounded by asphaltic concrete pavements for parking and drive lanes and Portland cement concrete pavements for the loading dock areas. Several landscape planters and concrete flatwork will be included throughout the site.

Detailed structural information has not been provided. It is assumed that the new building will be a single-story structure of tilt-up concrete construction, supported on a conventional shallow foundation system with a concrete slab-on-grade floor. Based on the assumed construction, maximum column and wall loads are expected to be on the order of 80 kips and 4 to 7 kips per linear foot, respectively.

The proposed development is not expected to include any significant amounts of below grade construction such as basements or crawl spaces. Based on the existing topography, cuts and fills of up 1 to 3± feet are expected to be necessary in order 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 seven (7) borings, advanced to depths of 5 to 25± feet below currently existing site grades. All of the borings were logged during drilling by a member of our staff.

The borings were advanced with hollow-stem augers, by a conventional truck-mounted drilling rig. Representative bulk and in-situ soil samples were taken during drilling. Relatively undisturbed in-situ 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. In-situ 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 Location Plan, included as Plate 2 in Appendix A of this report. The Boring Logs, which illustrate the conditions encountered at the boring locations, as well as the results of some of the laboratory testing, are included in Appendix B.

4.2 Geotechnical Conditions

Alluvium

Native alluvium was encountered at the ground surface at all of the boring locations. The near-surface alluvial soils generally consist of loose to medium dense silty fine sands with varying clay content, extending to depths of up to 4 to 6½± feet below existing site grades. At Boring No. B-3, a dense fine to medium sand stratum was encountered, extending to depths of 6½ to 8½± feet. At greater depths, the alluvium consists of medium dense to very dense clayey sands, fine to medium sands and silty fine sands and medium stiff to hard fine sandy clays, silty clays and clayey silts, extending to the maximum depth explored of 25± feet.

Groundwater

Free water was not encountered during drilling of any of the borings. In addition, delayed readings taken within the open boreholes did not identify any free water. Based on the lack of any water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 25± feet at the time of the subsurface exploration.

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. Field identifications were then supplemented with additional visual classifications and/or by laboratory testing. The USCS classifications are shown on the Boring 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 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-8 in Appendix C of this report.

Maximum Dry Density and Optimum Moisture Content

Two (2) representative bulk samples have been tested for their maximum dry densities and optimum moisture contents. The results have been obtained using the Modified Proctor procedure, per ASTM D-1557, and are presented on Plates C-9 and C-10 in Appendix C of this report. These tests are generally used to compare 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.

Expansion Index

The expansion potential of the on-site soils was determined in general accordance with ASTM D-4829. 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:

Sample Identification	Expansion Index	Expansive Potential
B-1 @ 0 to 5 feet	1	Very Low
B-5 @ 0 to 5 feet	0	Non-Expansive

Soluble Sulfates

Representative samples of the near-surface soils have been 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.

Sample Identification	Soluble Sulfates (%)	Severity
B-1 @ 0 to 5 feet	0.012	Not Applicable (S0)
B-5 @ 0 to 5 feet	0.003	Not Applicable (S0)

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. The recommendations are provided with the assumption that an adequate program of client consultation, construction monitoring, and testing will be performed during the final design and construction phases to verify compliance with these recommendations. Maintaining Southern California Geotechnical, Inc., (SCG) as the geotechnical consultant from the beginning to the end of the project will provide continuity of services. The geotechnical engineering firm providing testing and observation services shall assume the responsibility of Geotechnical Engineer of Record.

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.

Seismic Design Parameters

Based on standards in place at the time of this report, the proposed development is expected to be designed in accordance with the requirements of the 2016 edition of the California Building Code (CBC). 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 2016 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 2016 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 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:

2016 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	---	D
Site Modified Spectral Acceleration at 0.2 sec Period	S_{MS}	1.500
Site Modified Spectral Acceleration at 1.0 sec Period	S_{M1}	0.900
Design Spectral Acceleration at 0.2 sec Period	S_{DS}	1.000
Design Spectral Acceleration at 1.0 sec Period	S_{D1}	0.600

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.

The Riverside County GIS website indicates that the subject site is located within a zone of low liquefaction susceptibility. In addition, the soil conditions encountered at the boring locations are not considered to be conducive to liquefaction. These conditions consist of well-graded moderate to high strength native alluvial soils and no evidence of a long-term groundwater table within the depths explored by the borings. Based on these considerations, liquefaction is not considered to be a design concern for this project.

6.2 Geotechnical Design Considerations

General

The subsurface conditions encountered at the boring locations generally consist of variable strength native alluvium. The results of laboratory testing indicate that the near surface alluvium (within the upper 5± feet) possesses a potential for moderate collapse when exposed to moisture infiltration as well as consolidation when exposed to load increases in the range of those that will be exerted by the new foundations. Based on these conditions, remedial grading will be necessary within the proposed building area to provide a subgrade suitable for support of the new foundations and floor slab.

Settlement

The recommended remedial grading will remove the potentially compressible/collapsible near-surface native alluvium, and replace these materials as compacted structural fill. The native soils that will remain in place below the recommended depth of overexcavation will not be subject to significant load increases from the foundations of the new structure. Provided that the recommended remedial grading is completed, the post-construction static settlements of the proposed structure are expected to be within tolerable limits.

Soluble Sulfates

The results of soluble sulfate testing on selected samples of the on-site soils contain soluble sulfate concentrations that are considered to be not applicable, in accordance with American Concrete Institute (ACI) guidelines. 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 pad grade within the building areas.

Expansion

Laboratory testing performed on representative samples of the near surface soils indicates that these materials possess a very low non-expansive expansion potential (EI = 1 and 0). Based on these test results, no design considerations related to expansive soils are considered warranted for this project.

Shrinkage/Subsidence

Removal and recompaction of the near-surface native fill soils is estimated to result in an average shrinkage of 16 to 20 percent. However, the estimated shrinkage of the individual soil layers at the site is highly variable, locally ranging from a minimum shrinkage value of 1 percent to a maximum shrinkage of 25 percent at varying sample depths and locations. It should be noted that the potential shrinkage estimate is based on dry density testing performed on small-diameter samples taken at the boring locations. If a more accurate and precise shrinkage estimate is desired, SCG can perform a shrinkage study involving several excavated test-pits where in-place densities are determined using in-situ testing methods instead of laboratory density testing on

small-diameter samples. Please contact SCG for details and a cost estimate regarding a shrinkage study, if desired.

Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The subsidence is estimated to be 0.10 feet.

These estimates are based on previous experience and the subsurface conditions encountered at the boring locations. The actual amount of subsidence is expected to be variable and will be dependent 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

It is recommended that we be provided with copies of the grading and foundation plans, when they become available, for review with regard to the conclusions, recommendations, and assumptions contained within this report.

6.3 Site Grading Recommendations

The grading recommendations presented below are based on the subsurface conditions encountered at the boring locations and our understanding of the proposed development. We recommend that all grading activities be completed in accordance with the Grading Guide Specifications included as Appendix D of this report, unless superseded by site-specific recommendations presented below.

Site Stripping

Initial site preparation should include removal of the surficial vegetation and organic soils. Based on conditions encountered at the time of the subsurface exploration, minor to moderate stripping of the native grass and weed growth is expected to be necessary. These materials should be disposed of offsite. 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 encountered materials.

Treatment of Existing Soils: Building Pad

Remedial grading should be performed within the proposed building pad area in order to remove the existing potentially compressible/collapsible native alluvium. It is recommended that the overexcavation extend to a depth of at least 5 feet below existing grade and to a depth of at least 5 feet below proposed grade, whichever is greater. Within the influence zones of the new foundations, the overexcavation should extend to a depth of at least 3 feet below proposed foundation bearing grade.

The overexcavation areas should extend at least 5 feet beyond the building perimeter, and to an extent equal to the depth of fill below the new foundations. If the proposed structure incorporates any exterior columns (such as for a canopy or overhang) the area of overexcavation should also encompass these areas.

Following completion of the overexcavation, the subgrade soils within the overexcavation areas should be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. This evaluation should include proofrolling and probing to identify any soft, loose or otherwise unstable soils that must be removed. Some localized areas of deeper excavation may be required if undocumented fill materials or loose, porous, overly moist, or low density native soils are encountered at the base of the overexcavation.

After a suitable overexcavation subgrade has been achieved, the exposed soils should be scarified to a depth of at least 12 inches and moisture conditioned or air dried to achieve a moisture content of 0 to 4 percent above optimum moisture content. The subgrade soils should then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The building pad areas may then be raised to grade with previously excavated soils or imported, structural fill. All structural fill soils present within the proposed building area should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density.

Treatment of Existing Soils: Retaining Walls and Site Walls

The existing soils within the areas of any proposed retaining walls and non-retaining site walls should be overexcavated to a depth of 3 feet below foundation bearing grade and replaced as compacted structural fill as discussed above for the proposed building pad. Any undocumented fill soils within any of these foundation areas should be removed in their entirety. The overexcavation areas should extend at least 5 feet beyond the foundation perimeters, and to an extent equal to the depth of fill below the new foundations. Please note that any erection pads used to construct the walls are considered to be part of the foundation system. The overexcavation subgrade soils should be evaluated by the geotechnical engineer prior to scarifying, moisture conditioning, and recompacting the upper 12 inches of exposed subgrade soils. The previously excavated soils may then be replaced as compacted structural fill.

Treatment of Existing Soils: Parking Areas

Based on economic considerations, overexcavation of the surficial alluvial 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 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 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. Based on the presence of variable strength alluvial 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 completely mitigate the extent of existing collapsible and compressible alluvium 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, the parking and drive areas should be overexcavated to a depth of 2 feet below proposed pavement subgrade elevation, with the resulting soils replaced as compacted structural fill.

Treatment of Existing Soils: Flatwork Areas

Subgrade preparation in the new flatwork 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 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. Based on the presence of variable strength alluvial 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.

Fill Placement

- Fill soils should be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 0 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 Perris.
- 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 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 soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. As an alternative, a clean sand (minimum Sand Equivalent of 30) may be placed within trenches and compacted in place (jetting or flooding is not recommended). Compacted trench backfill should conform to the requirements of the local grading code, and more restrictive requirements may be indicated by the city of Perris. 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 moderate strength silty sands with varying clay content. These materials may be subject to minor caving within shallow excavations. Where caving occurs within shallow excavations, flattened excavation slopes may be sufficient to provide excavation stability. On a preliminary basis, the inclination of temporary slopes should not exceed 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. All excavation activities on this site should be conducted in accordance with Cal-OSHA regulations.

Moisture Sensitive Subgrade Soils

Most of the near surface soils possess appreciable silt and clay 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.

Groundwater

The static groundwater table is considered to exist at a depth in excess of 25± feet below existing grade. Therefore, groundwater is not expected to impact the grading or foundation construction activities.

6.5 Foundation Design and Construction

Based on the preceding grading recommendations, it is assumed that the new building pad will be underlain by structural fill soils extending to depths of at least 3 feet below foundation bearing grade. Based on this subsurface profile, the proposed structure may be supported on conventional shallow foundations.

Foundation Design Parameters

New square and rectangular footings may be designed as follows:

- Maximum, net allowable soil bearing pressure: 2,500 lbs/ft^2.
- Minimum wall/column footing width: 14 inches/24 inches.

- Minimum longitudinal steel reinforcement within strip footings: Four (4) No. 5 rebars (2 top and 2 bottom).

- Minimum foundation embedment: 12 inches into suitable structural fill soils, and at least 18 inches below adjacent exterior grade. Interior column footings may be placed immediately beneath the floor slab.

- It is recommended that the perimeter building foundations be continuous across all exterior doorways. Any flatwork adjacent to the exterior doors should be doweled into the perimeter foundations in a manner determined by the structural engineer.

The allowable bearing pressures presented above may be increased by 1/3 when considering short duration wind or seismic loads. The minimum steel reinforcement recommended above is based on standard geotechnical practice. Additional rigidity may be necessary for structural considerations. The actual design of the foundations should be determined by the structural engineer.

Foundation Construction

The foundation subgrade soils should be evaluated at the time of overexcavation, as discussed in Section 6.3 of this report. It is further recommended that the foundation subgrade soils be evaluated by the geotechnical engineer immediately prior to steel or concrete placement. Soils suitable for direct foundation support should consist of newly placed structural fill compacted at least 90 percent of the ASTM D-1557 maximum dry density. Any unsuitable materials should be removed to a depth of suitable bearing compacted structural fill, with the resulting excavations backfilled with compacted fill soils. As an alternative, lean concrete slurry (500 to 1,500 psi) may be used to backfill such isolated overexcavations.

The foundation subgrade soils should also be properly moisture conditioned to 0 to 4 percent above the Modified Proctor optimum, to a depth of at least 12 inches below bearing grade. Since it is typically not feasible to increase the moisture content of the floor slab and foundation subgrade soils once rough grading has been completed, care should be taken to maintain the moisture content of the building pad subgrade soils throughout the construction process.

Estimated Foundation Settlements

Post-construction total and differential static settlements of shallow foundations designed and constructed in accordance with the previously presented recommendations are estimated to be less than 1.0 and 0.5 inches, respectively. Differential movements are expected to occur over a 30-foot span, thereby resulting in an angular distortion of less than 0.002 inches per inch.

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: 300 lbs/ft^3
- Friction Coefficient: 0.30

These are allowable values, and include a factor of safety. When combining friction and passive resistance, the passive pressure component should be reduced by one-third. These values assume that footings will be poured directly against compacted structural fill soils. The maximum allowable passive pressure is 2,500 lbs/ft^2.

6.6 Floor Slab Design and Construction

Subgrades which will support new floor slabs should be prepared in accordance with the recommendations contained in the ***Site Grading Recommendations*** section of this report. Based on the anticipated grading which will occur at this site, the floor of the proposed structure may be constructed as a conventional slab-on-grade supported on newly placed structural fill, extending to a depth of at least 5 feet below finished pad grade. Based on geotechnical considerations, the floor slab may be designed as follows:

- Minimum slab thickness: 6 inches.

- Modulus of Subgrade Reaction: 100 lbs/in^3.

- 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.

- Slab underlayment: If moisture sensitive floor coverings will be used then minimum slab underlayment should consist of a moisture vapor barrier constructed below the entire slab area where such 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 0 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 Exterior Flatwork Design and Construction

Subgrades which will support new exterior slabs-on-grade for sidewalks, patios, and other concrete flatwork, should be prepared in accordance with the recommendations contained in the ***Grading Recommendations*** section of this report. Based on geotechnical considerations, exterior slabs on grade may be designed as follows:

- Minimum slab thickness: 4½ inches.
- Minimum slab reinforcement: No. 3 bars at 18 inches on center, in both directions.
- The flatwork at building entry areas should be structurally connected to the perimeter foundation that is recommended to span across the door opening. This recommendation is designed to reduce the potential for differential movement at this joint.
- Moisture condition the slab subgrade soils to at least 0 to 4 percent of optimum moisture content, to a depth of at least 12 inches. Adequate moisture conditioning should be verified by the geotechnical engineer 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.
- Control joints should be provided at a maximum spacing of 8 feet on center in two directions for slabs and at 6 feet on center for sidewalks. Control joints are intended to direct cracking. Minor cracking of exterior concrete slabs on grade should be expected.

Expansion or felt joints should be used at the interface of exterior slabs on grade and any fixed structures to permit relative movement.

6.8 Retaining Wall Design and Construction

Although not indicated on the site plan, some small (less than 6 feet in height) retaining walls may be required to facilitate the new site grades and in the loading dock areas. 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 near surface soils generally consist of silty sands with varying clay content. 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 Silty Sands and Clayey Sands
Internal Friction Angle (ϕ)		30°
Unit Weight		133 lbs/ft^3
Equivalent Fluid Pressure:	Active Condition (level backfill)	44 lbs/ft^3
	Active Condition (2h:1v backfill)	72 lbs/ft^3
	At-Rest Condition (level backfill)	67 lbs/ft^3

The walls should be designed using a soil-footing coefficient of friction of 0.30 and an equivalent passive pressure of 300 lbs/ft^3. 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.

Seismic Lateral Earth Pressures

In accordance with the 2016 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.

Retaining Wall Foundation Design

The retaining wall foundations should be supported within newly placed compacted structural fill, extending to a depth of at least 3 feet below proposed foundation 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. 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). 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.

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.

6.9 Pavement Design Parameters

Site preparation in the pavement area should be completed as previously recommended in the ***Site Grading Recommendations*** section of this report. The subsequent pavement recommendations assume proper drainage and construction monitoring, and are based on either PCA or CALTRANS design parameters for a twenty (20) year design period. However, these

designs also assume a routine pavement maintenance program to obtain the anticipated 20-year pavement service life.

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 with varying clay content. These soils are generally considered to possess fair pavement support characteristics with an estimated R-values of 30 to 40. R-value testing was outside the scope of services. The subsequent pavement design is therefore based upon an assumed R-value of 30. 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
7.0	11
8.0	35
9.0	93

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 = 30)					
Materials	**Thickness (inches)**				
	Auto Parking and Auto Drive Lanes (TI = 4.0 to 5.0)	Truck Traffic			
		TI = 6.0	TI = 7.0	TI = 8.0	TI = 9.0
Asphalt Concrete	3	3½	4	5	6
Aggregate Base	6	8	10	11	12
Compacted Subgrade	12	12	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 (R = 30)				
Materials	**Thickness (inches)**			
	Autos and Light Truck Traffic (TI = 6.0)	Truck Traffic		
		TI = 7.0	TI = 8.0	TI = 9.0
PCC	5	5½	6½	8
Compacted Subgrade (95% minimum compaction)	12	12	12	12

The concrete should have a 28-day compressive strength of at least 3,000 psi. Any reinforcement within the PCC pavements should be determined by the project structural engineer. The maximum joint spacing within all of the PCC pavements is recommended to be equal to or less than 30 times the pavement thickness.

7.0 GENERAL COMMENTS

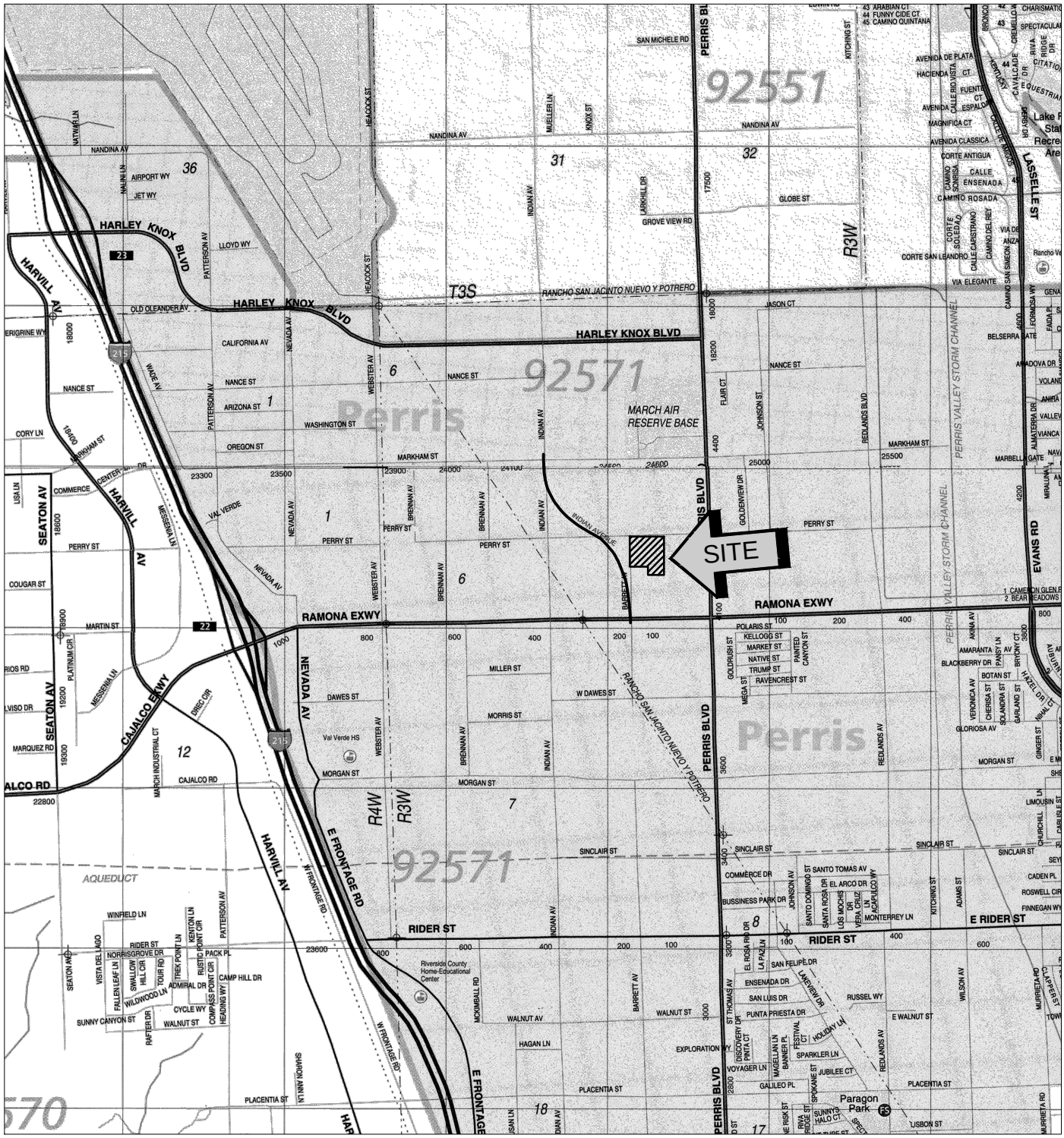
This report has been prepared as an instrument of service for use by the client, in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other 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

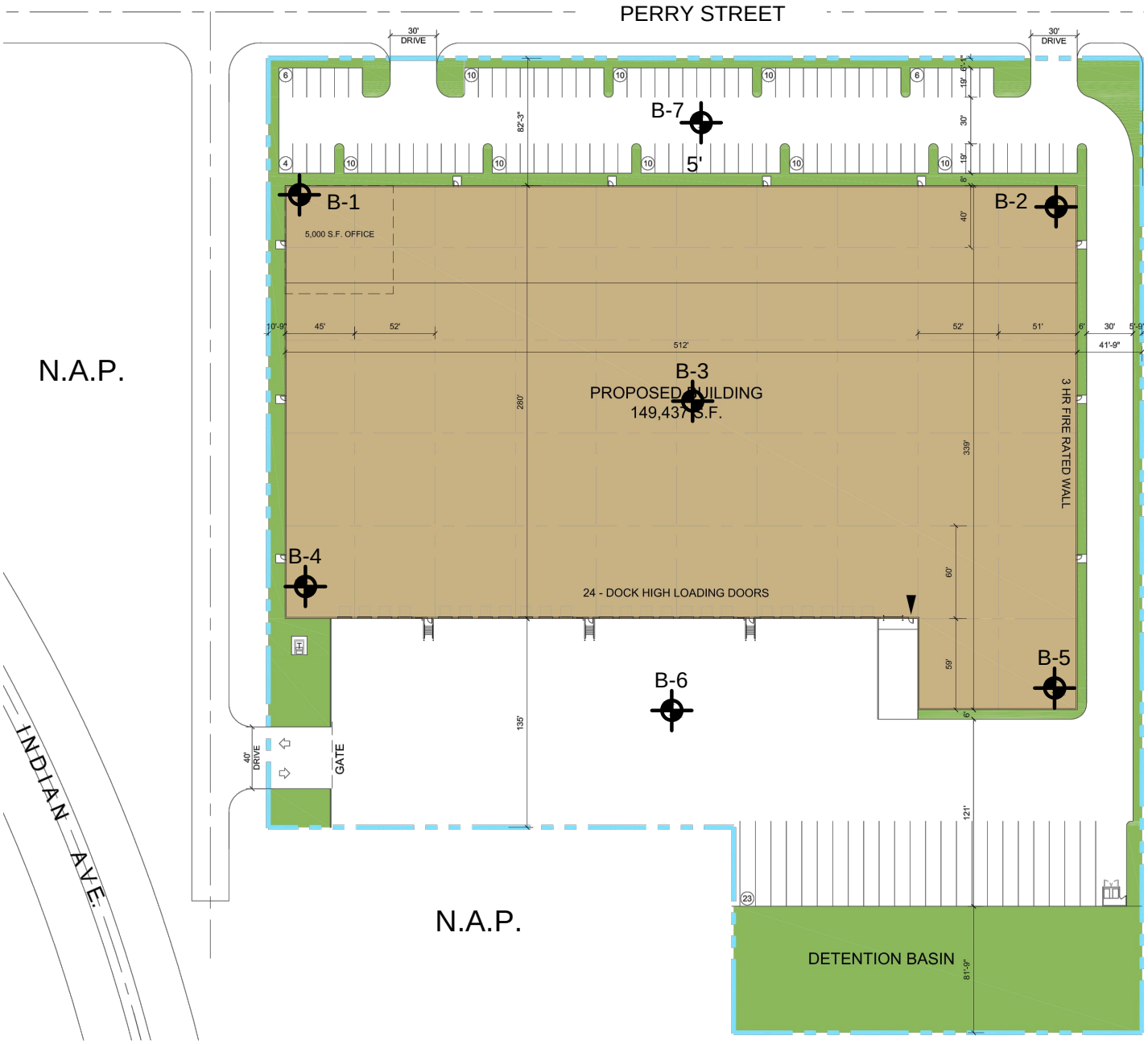
PROPOSED WAREHOUSE

PERRIS, CALIFORNIA

SCALE: 1" = 2400'	
DRAWN: CT CHKD: RGT	
SCG PROJECT 18G160-1	
PLATE 1	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



GEOTECHNICAL LEGEND

APPROXIMATE BORING LOCATION

NOTE: SITE PLAN PROVIDED BY HERDMAN ARCHITECTURE + DESIGN.

BORING LOCATION PLAN

PROPOSED WAREHOUSE

PERRIS, CALIFORNIA

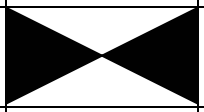
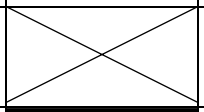
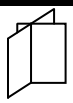
SCALE: 1" = 100'	
DRAWN: PM CHKD: RGT	
SCG PROJECT 18G160-1	
PLATE 2	

SoCalGeo

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/ft^3.

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

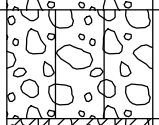
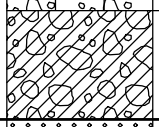
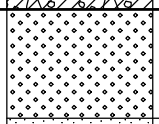
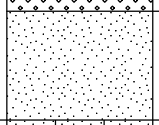
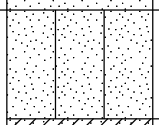
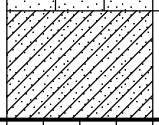
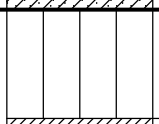
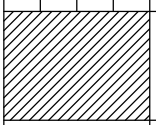
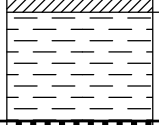
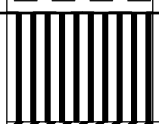
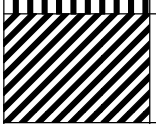
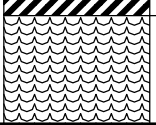
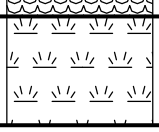
LIQUID LIMIT: The moisture content above which a soil behaves as a liquid.

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

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

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

SOIL CLASSIFICATION CHART

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

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-1

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 21 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		15			ALLUVIUM: Brown Silty fine Sand, little Clay, slightly porous, trace medium Sand, trace calcareous veining, loose to medium dense-damp to moist	96	5					EI = 1 @ 0 to 5'
		25				99	9					
5		19			Brown Silty fine to medium Sand, trace Clay, slightly porous, medium dense-damp	100	4					
		44			Brown Clayey fine to medium Sand, slightly cemented, medium dense-damp	112	7					
		36			Brown fine to medium Sand, trace coarse Sand, trace Iron oxide staining, medium dense-damp to moist	94	6					
10												
					Red Brown Clayey fine Sand to fine Sandy Clay, trace Iron oxide staining, medium dense to very stiff-moist							
		23	4.5+			111	18					
15												
		40	4.5+			119	13					
20												
					Brown Silty fine Sand, trace medium Sand, trace Clay, dense-damp							
		46				112	8					
25												
					Boring Terminated at 25'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-1**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-2

JOB NO.: 18G160
PROJECT: Proposed Warehouse
LOCATION: Perris, California

DRILLING DATE: 6/25/18
DRILLING METHOD: Hollow Stem Auger
LOGGED BY: Anthony Luna

WATER DEPTH: Dry
CAVE DEPTH: 13.5 feet
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		21			ALLUVIUM: Brown Silty fine to medium Sand, medium dense-dry to damp		3					
		33			Brown Silty fine Sand to fine Sandy Silt, trace medium Sand, trace calcareous veining, dense-moist		11					
5		20			Red Brown Clayey fine Sand, trace medium Sand, medium dense-moist		11					
		24	4.5+		Red Brown to Brown fine Sandy Clay, very stiff to hard-moist		14					
10												
		30	4.5+				12					
15												
		25	4.5+		Brown Silty Clay, trace to little fine Sand, trace Iron oxide staining, very stiff-moist to very moist		19					
20					Boring Terminated at 20'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG

PLATE B-2

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-3

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 11 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		23			ALLUVIUM: Brown Silty fine Sand, trace Clay, slightly porous, weakly cemented, little calcareous veining, medium dense-dry to damp	99	3					
		35				101	4					
5		28				109	6					
		46			Brown fine to medium Sand, trace Silt, trace Clay, dense-damp	100	6					
		37	4.5		Brown fine Sandy Clay, trace Iron oxide staining, stiff to very stiff-damp to moist	117	11					
10												
		22	2.5			103	18					
15					Boring Terminated at 15'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-3**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-4

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 15 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		12			ALLUVIUM: Brown Silty fine to medium Sand, porous, loose to medium dense-dry to damp		3					
		8					4					
5		42	4.5+		Brown Clayey fine Sand to fine Sandy Clay, trace calcareous , weakly cemented, medium dense to very stiff-moist	109	9					
		28	4.5+		Red Brown fine Sandy Clay, very stiff-moist	123	10					
		28	4.5+				13					
10												
		27	4.5+				14					
15												
					Brown Silty fine Sand, little medium Sand, trace Clay, dense-damp							
		46					7					
20					Boring Terminated at 20'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-4**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-5

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 21 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		40			ALLUVIUM: Brown Silty fine to medium Sand, slightly porous, weakly cemented, porous, medium dense to dense-dry to damp	102	3					EI = 0 @ 0 to 5'
		52				107	4					
5		42	4.5+		Red Brown to Brown Clayey fine Sand to fine Sandy Clay, trace calcareous veining, slightly porous, medium dense to very stiff-damp to moist	116	8					
		28	4.0			104	8					
10		42	4.5+			122	12					
		20	4.0		Brown Clayey Silt, trace fine Sand, trace Iron oxide staining, very stiff-very moist		21					
15												
		25	4.5+		Brown fine Sandy Clay, trace Iron oxide staining, very stiff-moist		13					
20												
		19	3.5				10					
25					Boring Terminated at 25'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-5**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-6

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 3 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		29			ALLUVIUM: Brown Clayey fine Sand, trace calcareous, medium dense-damp		7					
		16			Brown Silty fine to medium Sand, medium dense-moist		11					
5					Boring Terminated at 5'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-6**

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. B-7

JOB NO.: 18G160 | DRILLING DATE: 6/25/18 | WATER DEPTH: Dry
PROJECT: Proposed Warehouse | DRILLING METHOD: Hollow Stem Auger | CAVE DEPTH: 3 feet
LOCATION: Perris, California | LOGGED BY: Anthony Luna | READING TAKEN: At Completion

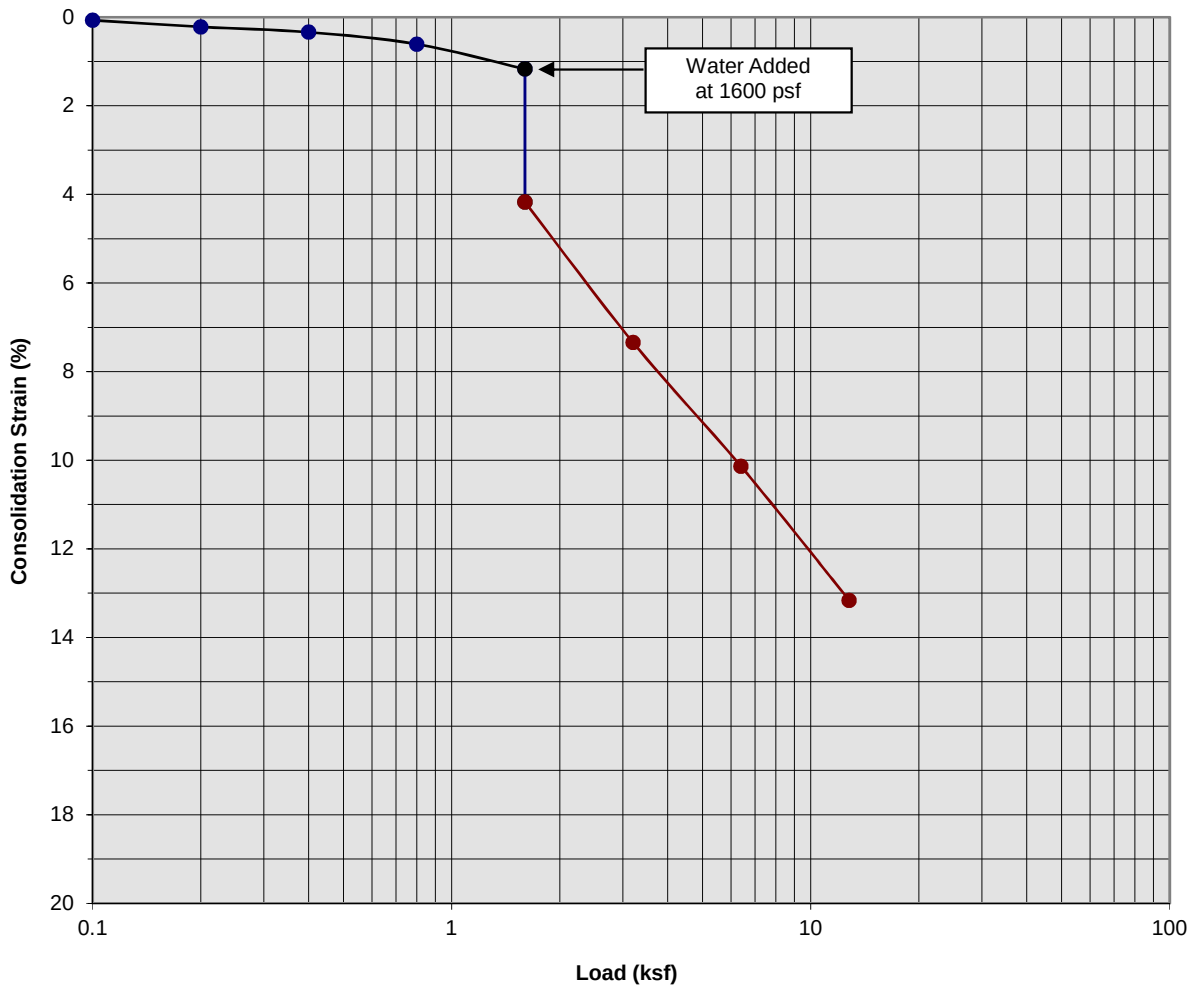
FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		22			ALLUVIUM: Brown Silty fine Sand, trace to little medium Sand, trace Clay, medium dense-damp		3					
		28					5					
5					Boring Terminated at 5'							

TBL 18G160.GPJ SOCALGEO.GDT 7/19/18

TEST BORING LOG **PLATE B-7**

APPENDIX C

Consolidation/Collapse Test Results



Classification: Brown Silty fine Sand, little Clay

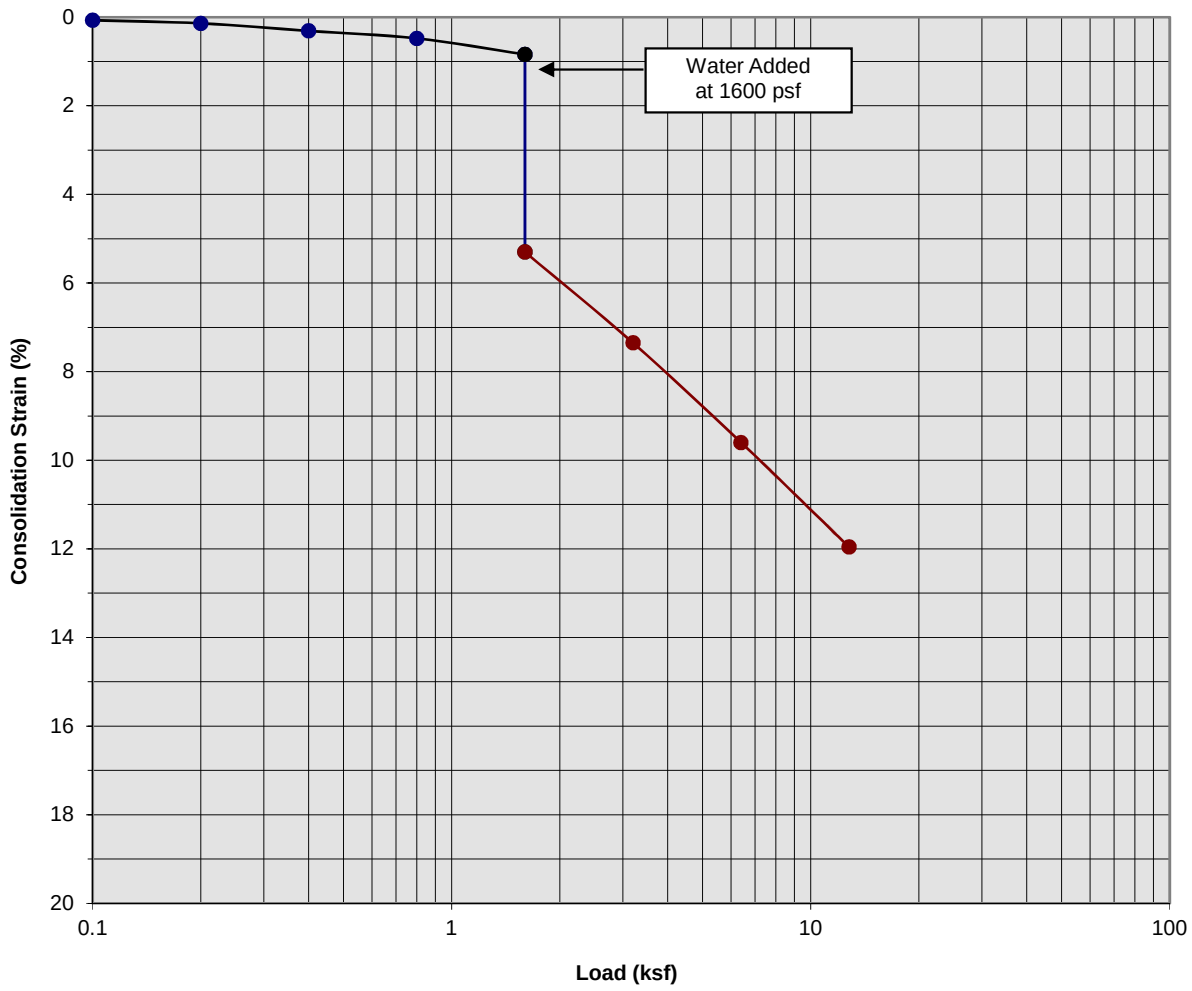
Boring Number:	B-1	Initial Moisture Content (%)	5
Sample Number:	---	Final Moisture Content (%)	14
Depth (ft)	1 to 2	Initial Dry Density (pcf)	95.0
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	109.6
Specimen Thickness (in)	1.0	Percent Collapse (%)	3.00

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 1

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Brown Silty fine Sand, little Clay

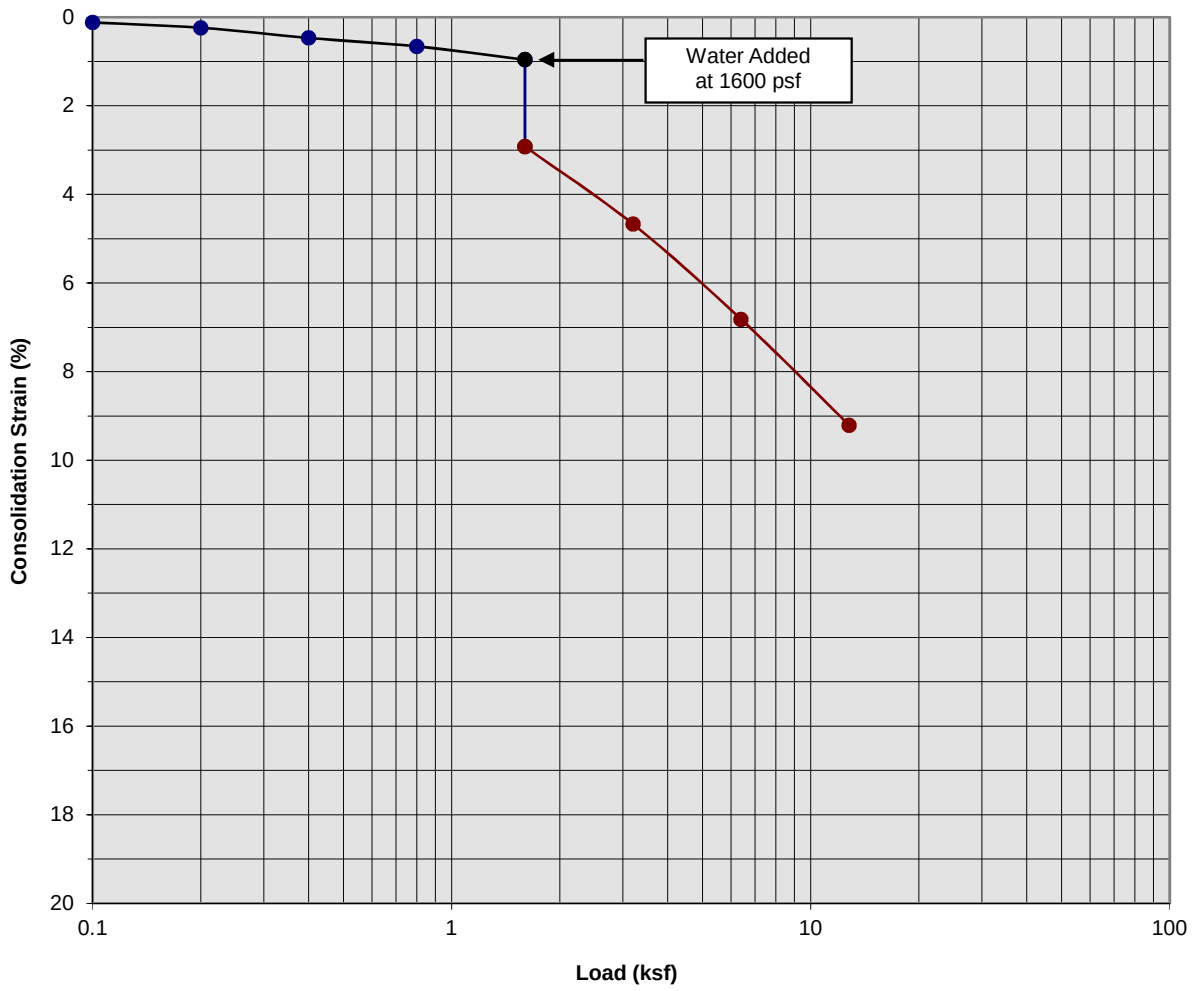
Boring Number:	B-1	Initial Moisture Content (%)	9
Sample Number:	---	Final Moisture Content (%)	12
Depth (ft)	3 to 4	Initial Dry Density (pcf)	98.9
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	112.4
Specimen Thickness (in)	1.0	Percent Collapse (%)	4.46

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 2

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Brown Silty fine to medium Sand, trace Clay

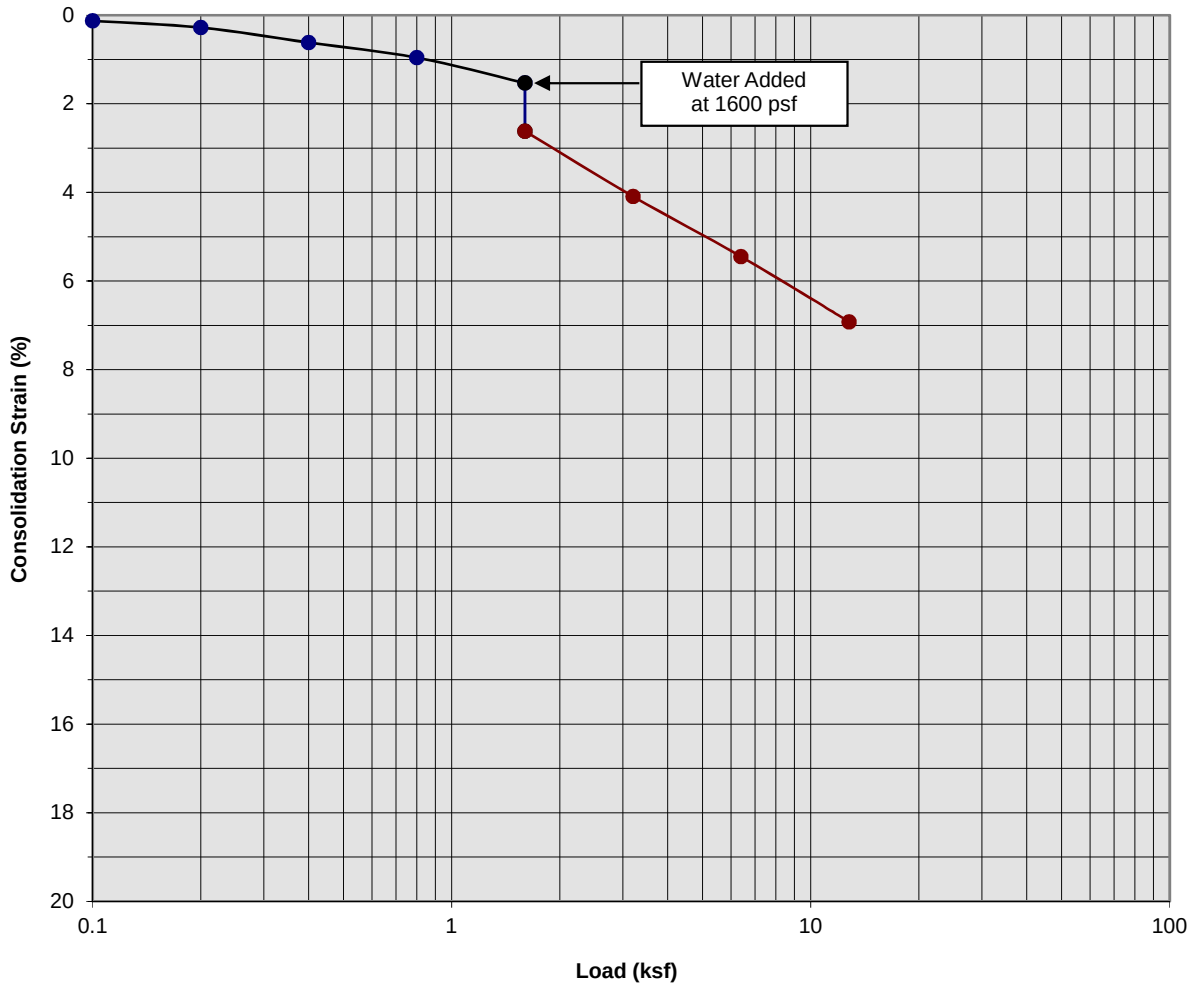
Boring Number:	B-1	Initial Moisture Content (%)	4
Sample Number:	---	Final Moisture Content (%)	14
Depth (ft)	5 to 6	Initial Dry Density (pcf)	100.2
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	110.4
Specimen Thickness (in)	1.0	Percent Collapse (%)	1.96

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 3

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Brown Clayey fine to medium Sand

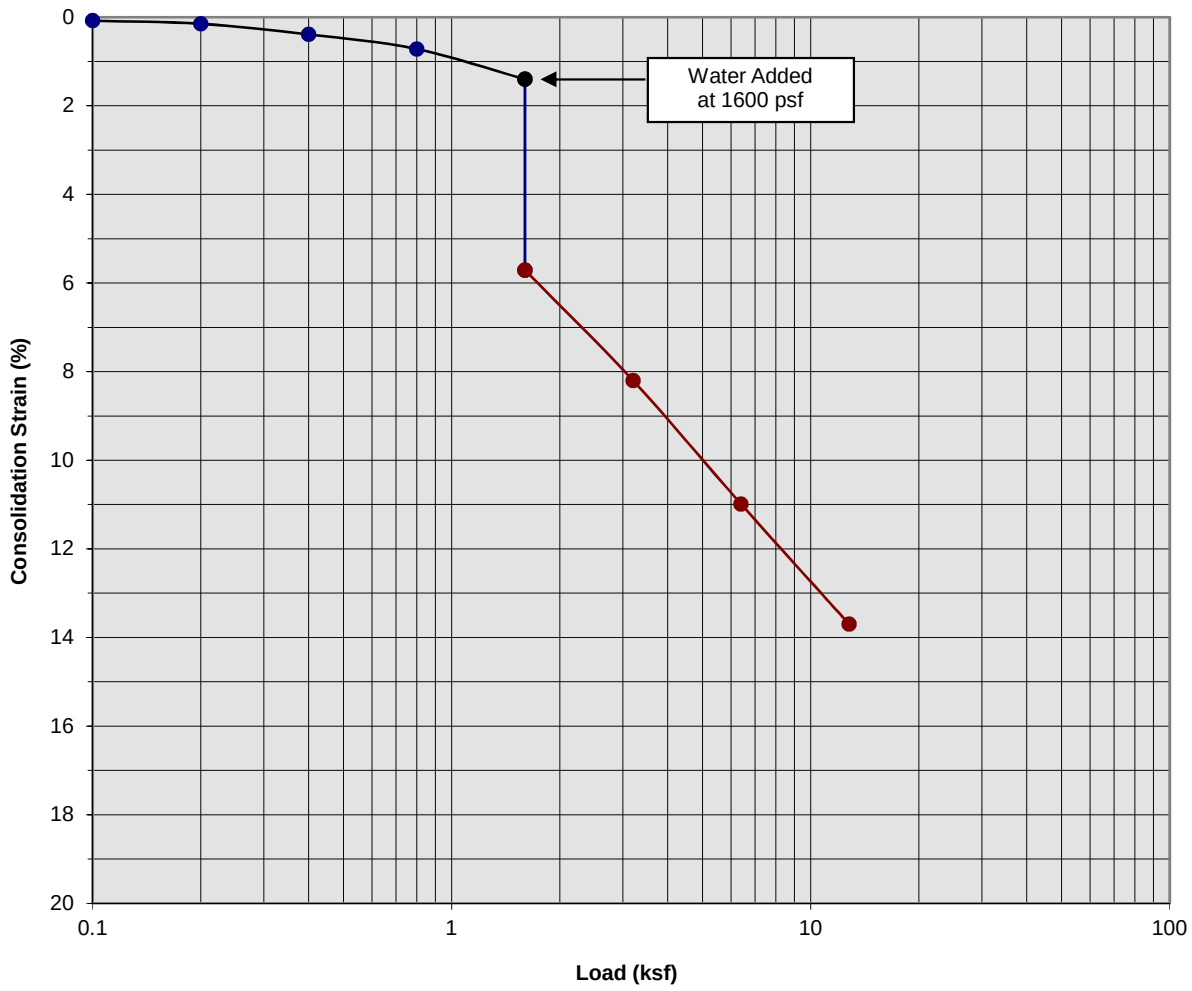
Boring Number:	B-1	Initial Moisture Content (%)	7
Sample Number:	---	Final Moisture Content (%)	12
Depth (ft)	7 to 8	Initial Dry Density (pcf)	112.0
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	120.3
Specimen Thickness (in)	1.0	Percent Collapse (%)	1.09

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 4

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Brown Silty fine to medium Sand

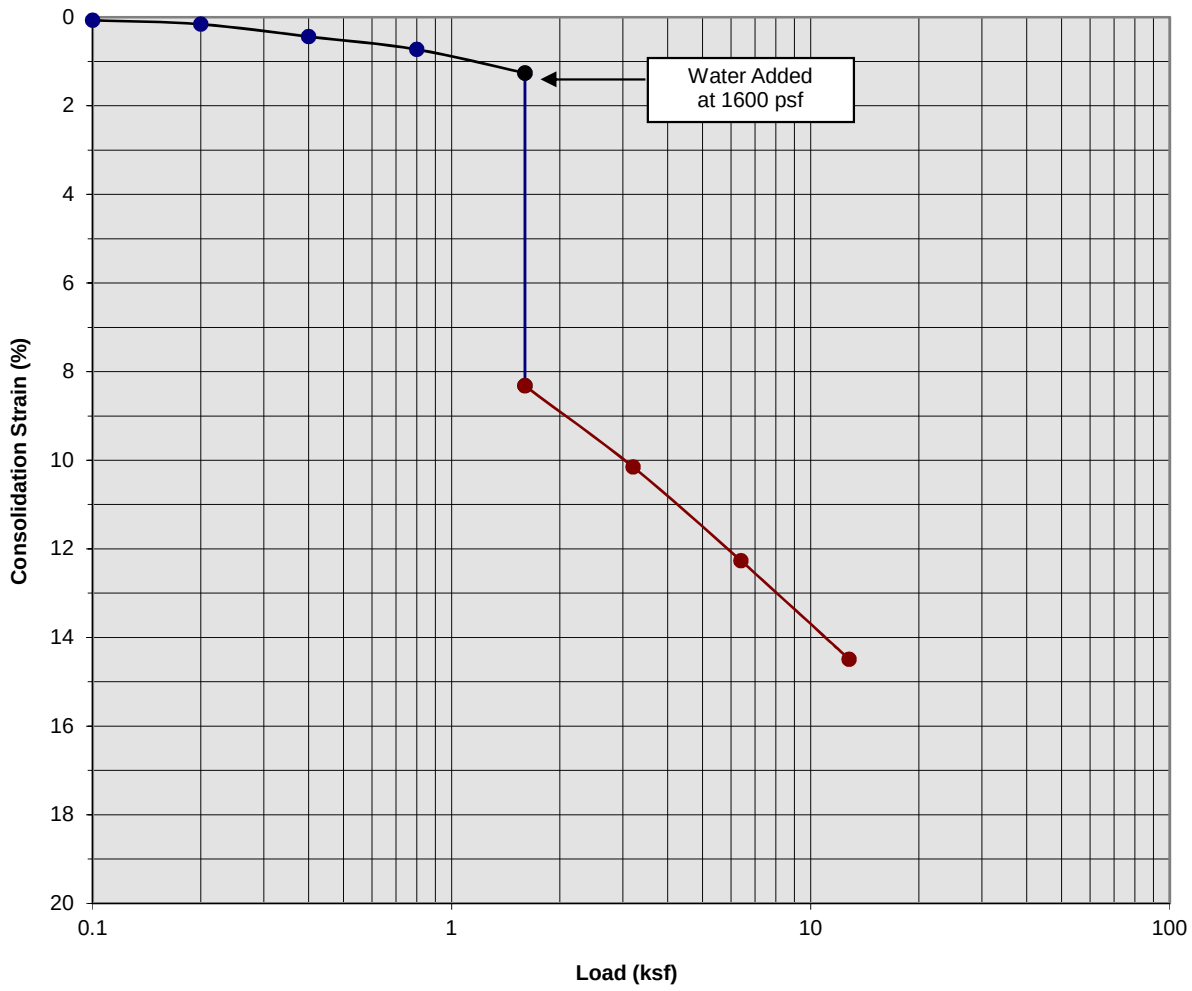
Boring Number:	B-5	Initial Moisture Content (%)	3
Sample Number:	---	Final Moisture Content (%)	13
Depth (ft)	1 to 2	Initial Dry Density (pcf)	102.2
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	118.4
Specimen Thickness (in)	1.0	Percent Collapse (%)	4.31

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 5

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Brown Silty fine to medium Sand

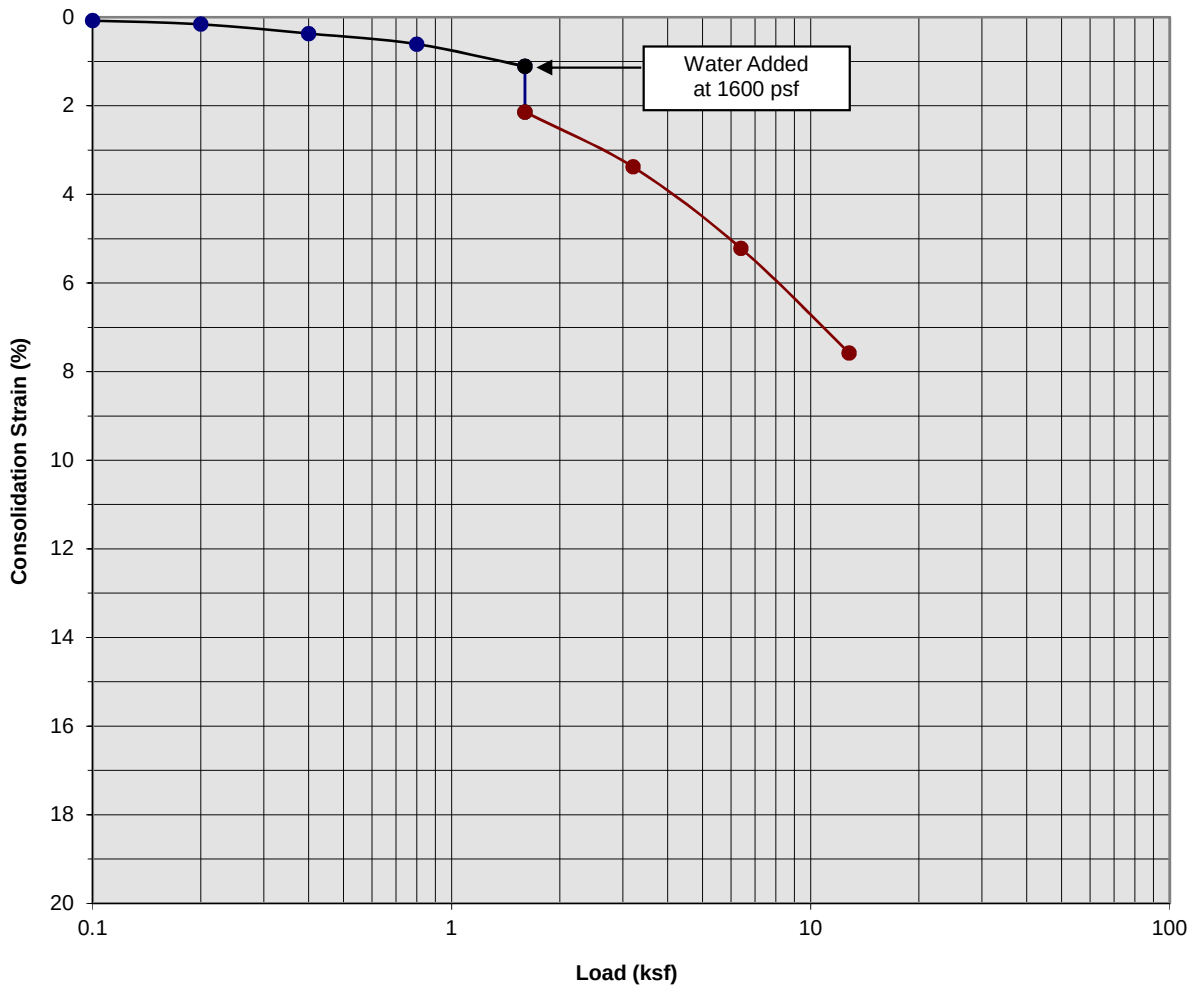
Boring Number:	B-5	Initial Moisture Content (%)	4
Sample Number:	---	Final Moisture Content (%)	13
Depth (ft)	3 to 4	Initial Dry Density (pcf)	106.9
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	124.8
Specimen Thickness (in)	1.0	Percent Collapse (%)	7.06

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 6

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Red Brown to Brown Clayey fine Sand to fine Sandy Clay

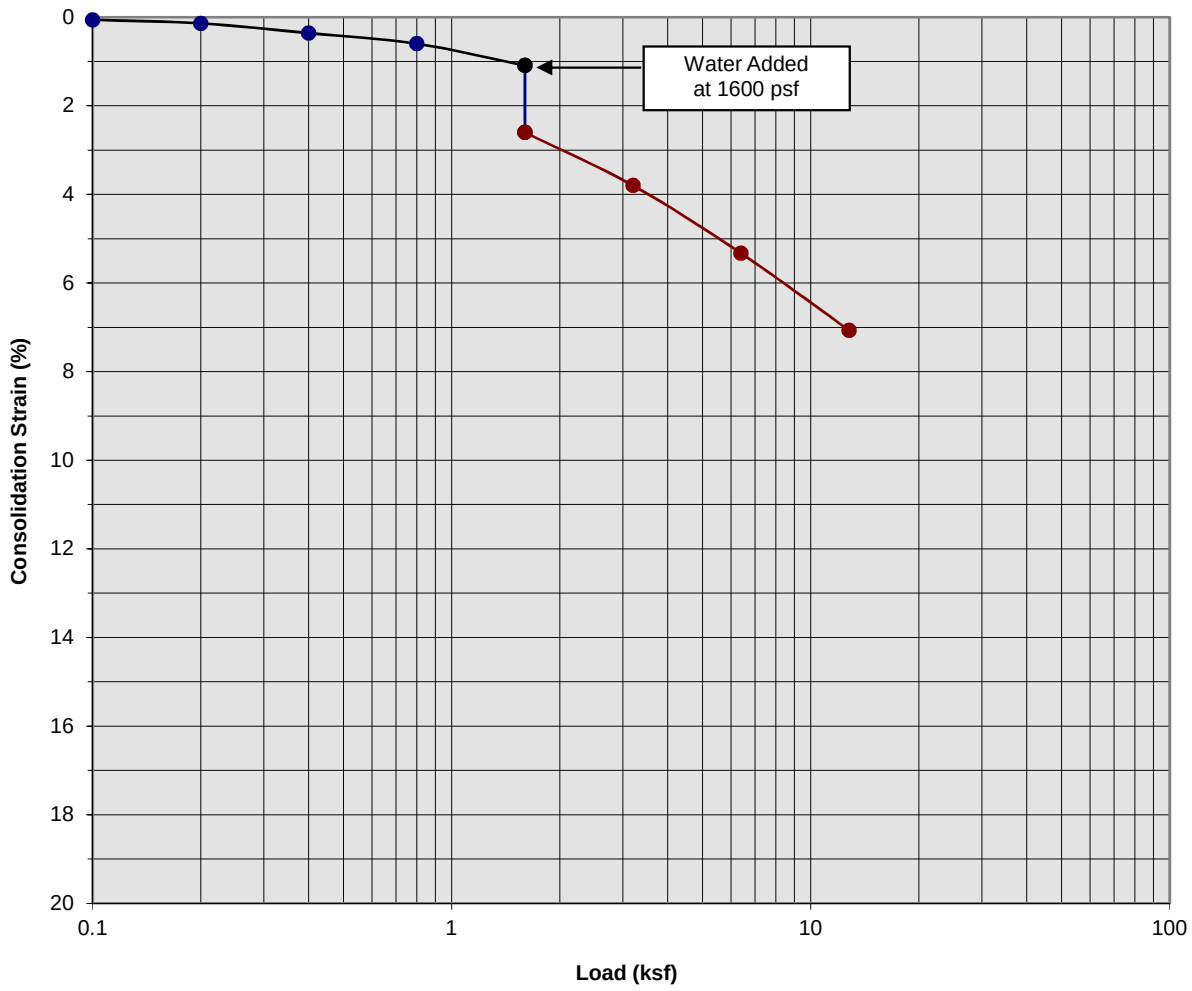
Boring Number:	B-5	Initial Moisture Content (%)	9
Sample Number:	---	Final Moisture Content (%)	14
Depth (ft)	5 to 6	Initial Dry Density (pcf)	115.3
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	124.0
Specimen Thickness (in)	1.0	Percent Collapse (%)	1.03

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 7

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Consolidation/Collapse Test Results



Classification: Red Brown to Brown Clayey fine Sand to fine Sandy Clay

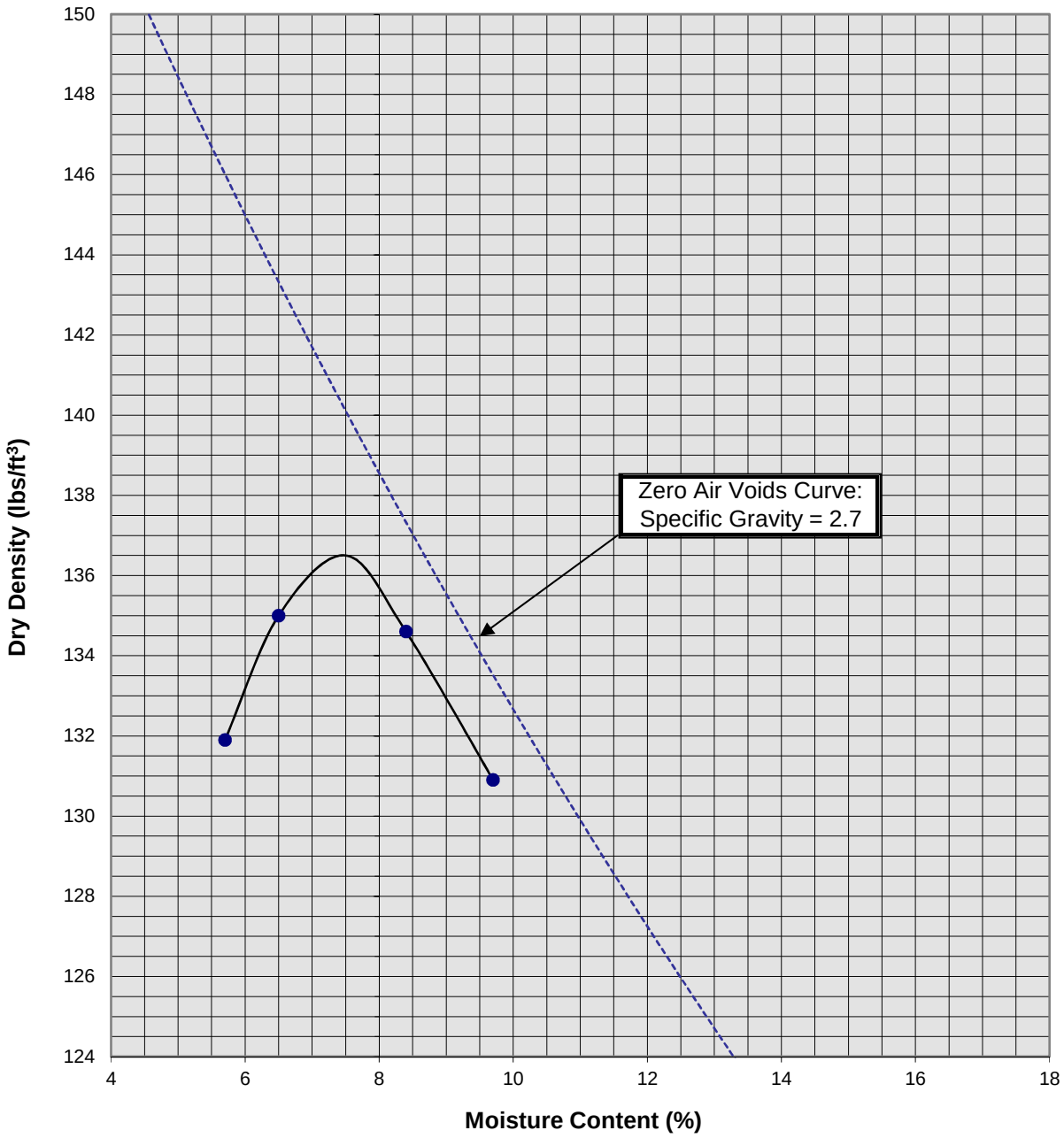
Boring Number:	B-5	Initial Moisture Content (%)	8
Sample Number:	---	Final Moisture Content (%)	14
Depth (ft)	7 to 8	Initial Dry Density (pcf)	104.2
Specimen Diameter (in)	2.4	Final Dry Density (pcf)	112.2
Specimen Thickness (in)	1.0	Percent Collapse (%)	1.51

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C- 8

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Moisture/Density Relationship
ASTM D-1557



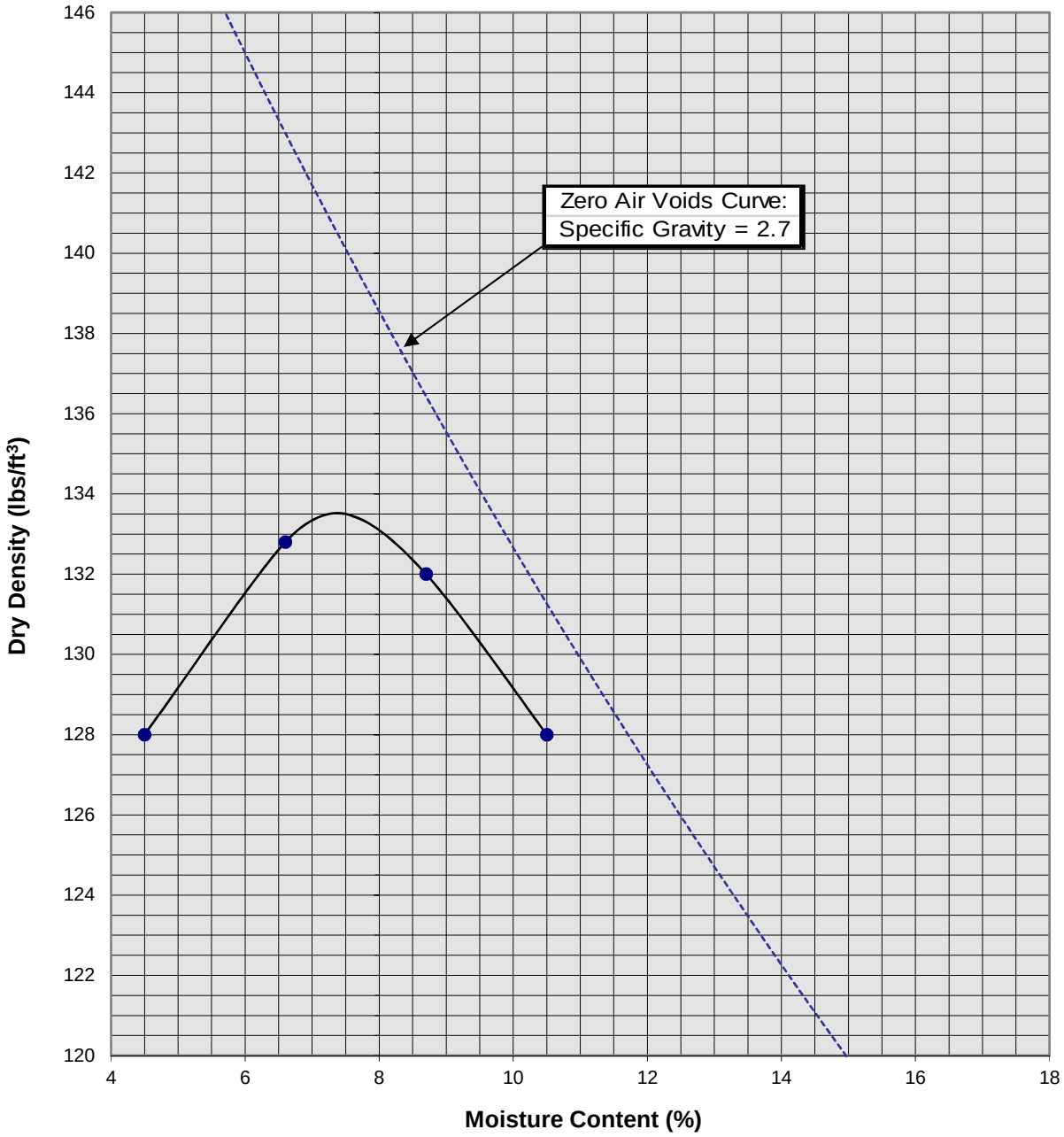
Soil ID Number	B-1 @ 0 to 5'
Optimum Moisture (%)	7.5
Maximum Dry Density (pcf)	136.5
Soil Classification	Brown Silty fine to medium Sand, trace to little Clay

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C-9

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Moisture/Density Relationship
ASTM D-1557



Soil ID Number	B-5 @ 0 to 5'
Optimum Moisture (%)	7.5
Maximum Dry Density (pcf)	133.5
Soil Classification	Brown Silty fine to medium Sand

Proposed Warehouse
Perris, California
Project No. 18G160

PLATE C-10

SoCalGeo
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 ½ 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.

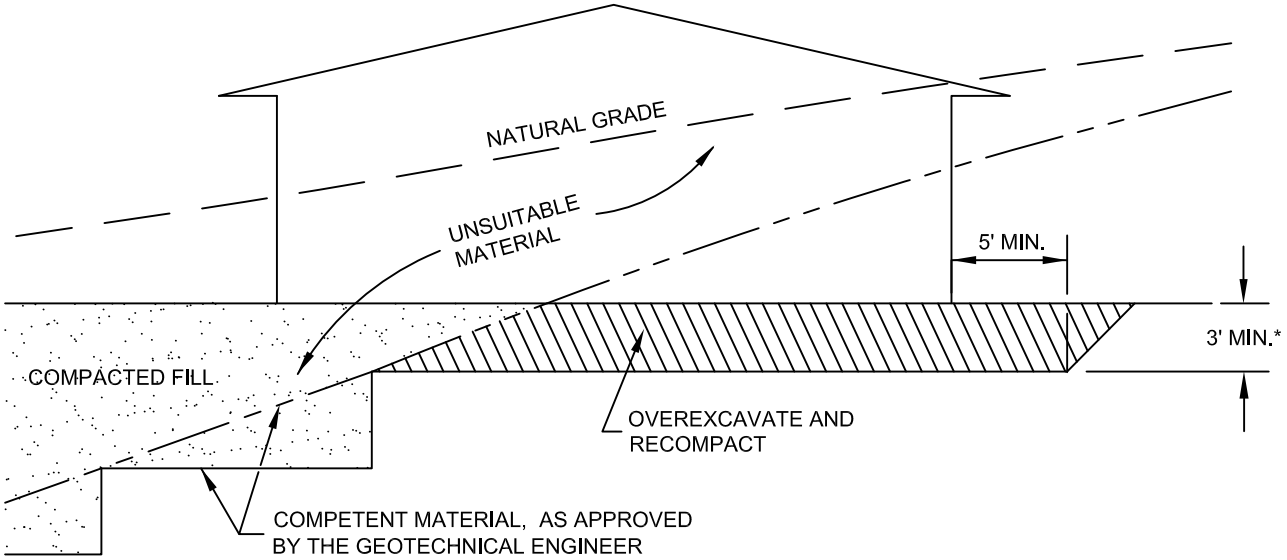
Subdrains

- 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.

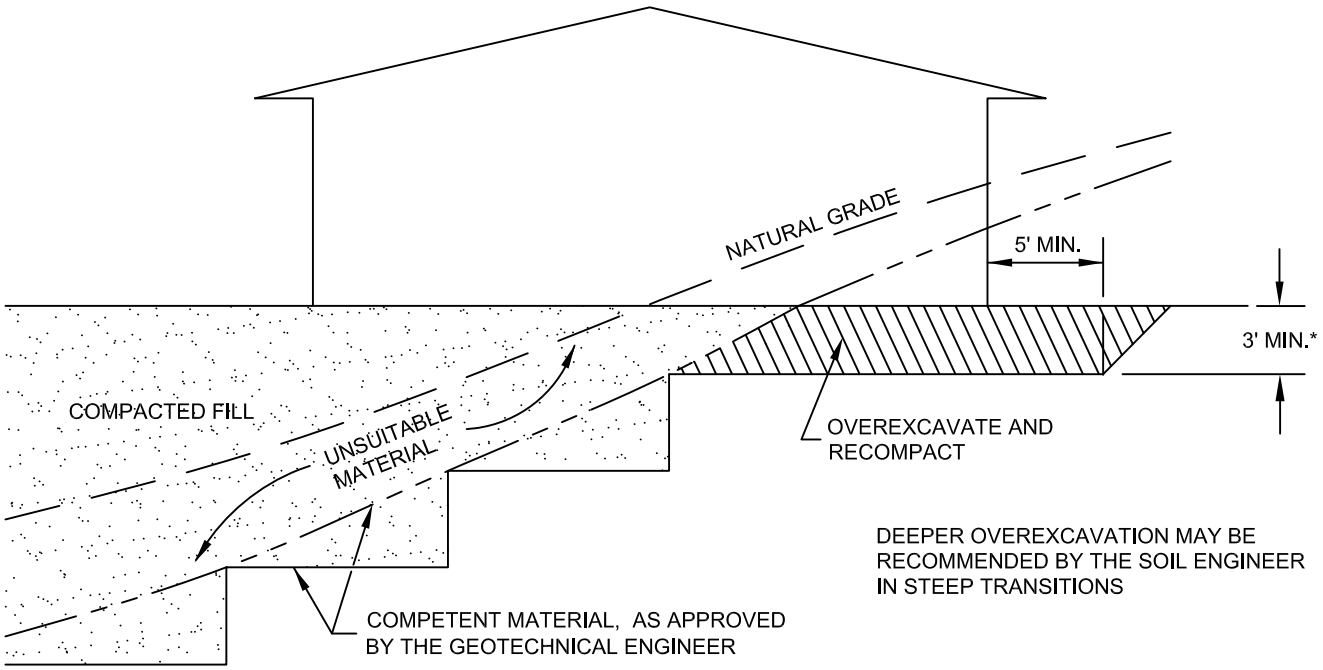
- Plastic pipe may be used for subdrains provided it is Schedule 40 or SDR 35 or equivalent. Pipe should be protected against breakage, typically by placement in a square-cut (backhoe) trench or as recommended by the manufacturer.

- 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 ¾-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.

CUT LOT



CUT/FILL LOT (TRANSITION)



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

TRANSITION LOT DETAIL

GRADING GUIDE SPECIFICATIONS

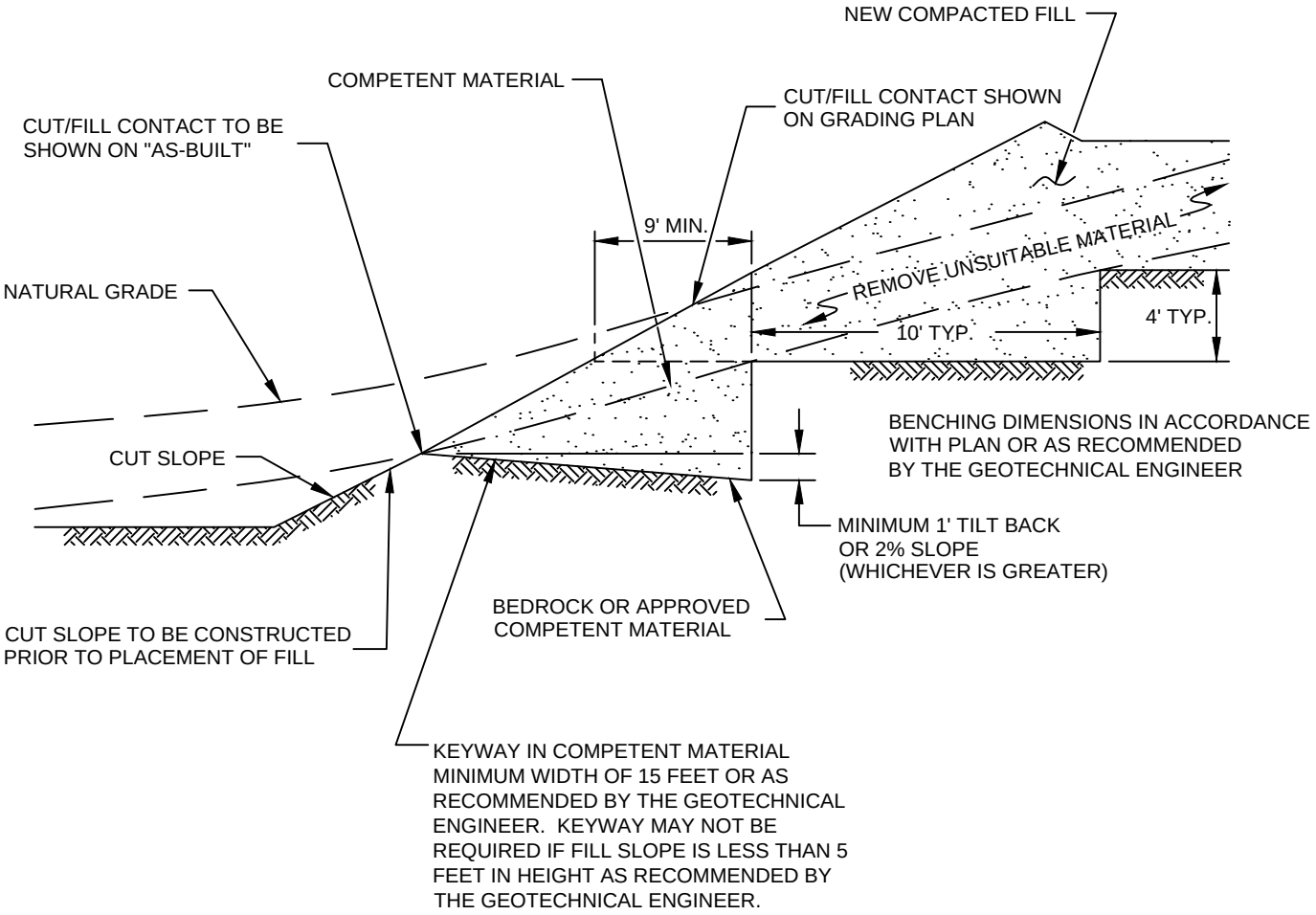
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-1

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



FILL ABOVE CUT SLOPE DETAIL

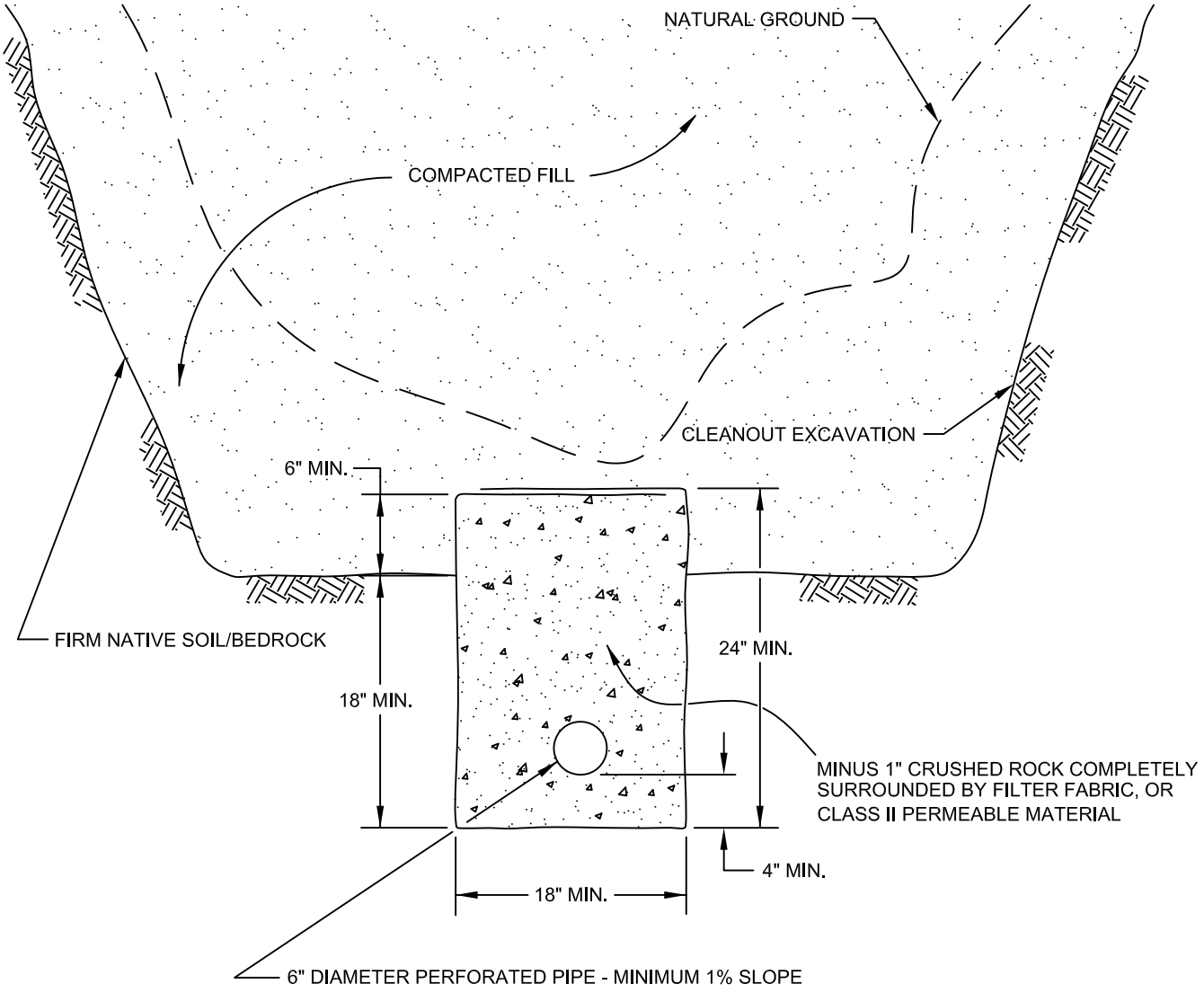
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-2

SoCalGeo
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

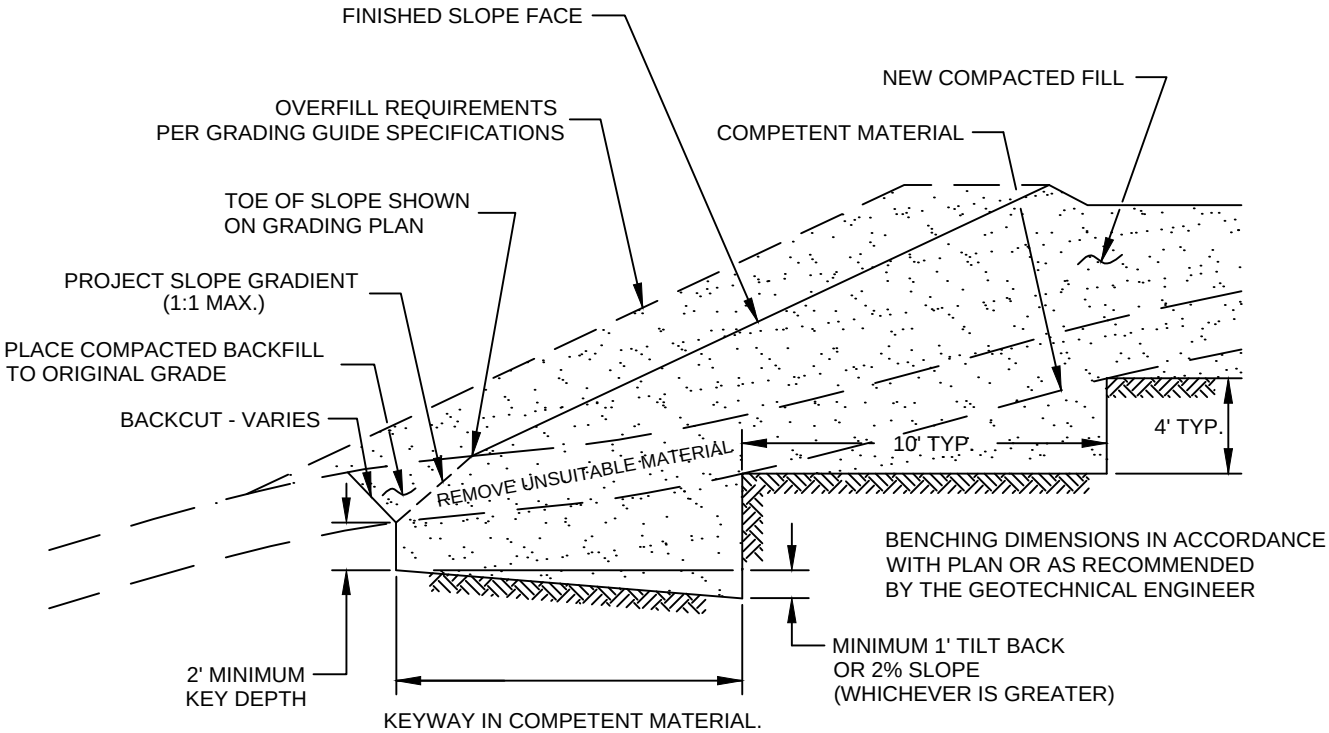
SCHEMATIC ONLY
NOT TO SCALE

CANYON SUBDRAIN DETAIL
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE
DRAWN: JAS
CHKD: GKM

PLATE D-3

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL



NOTE:
BENCHING SHALL BE REQUIRED WHEN NATURAL SLOPES ARE EQUAL TO OR STEEPER THAN 5:1 OR WHEN RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

FILL ABOVE NATURAL SLOPE DETAIL

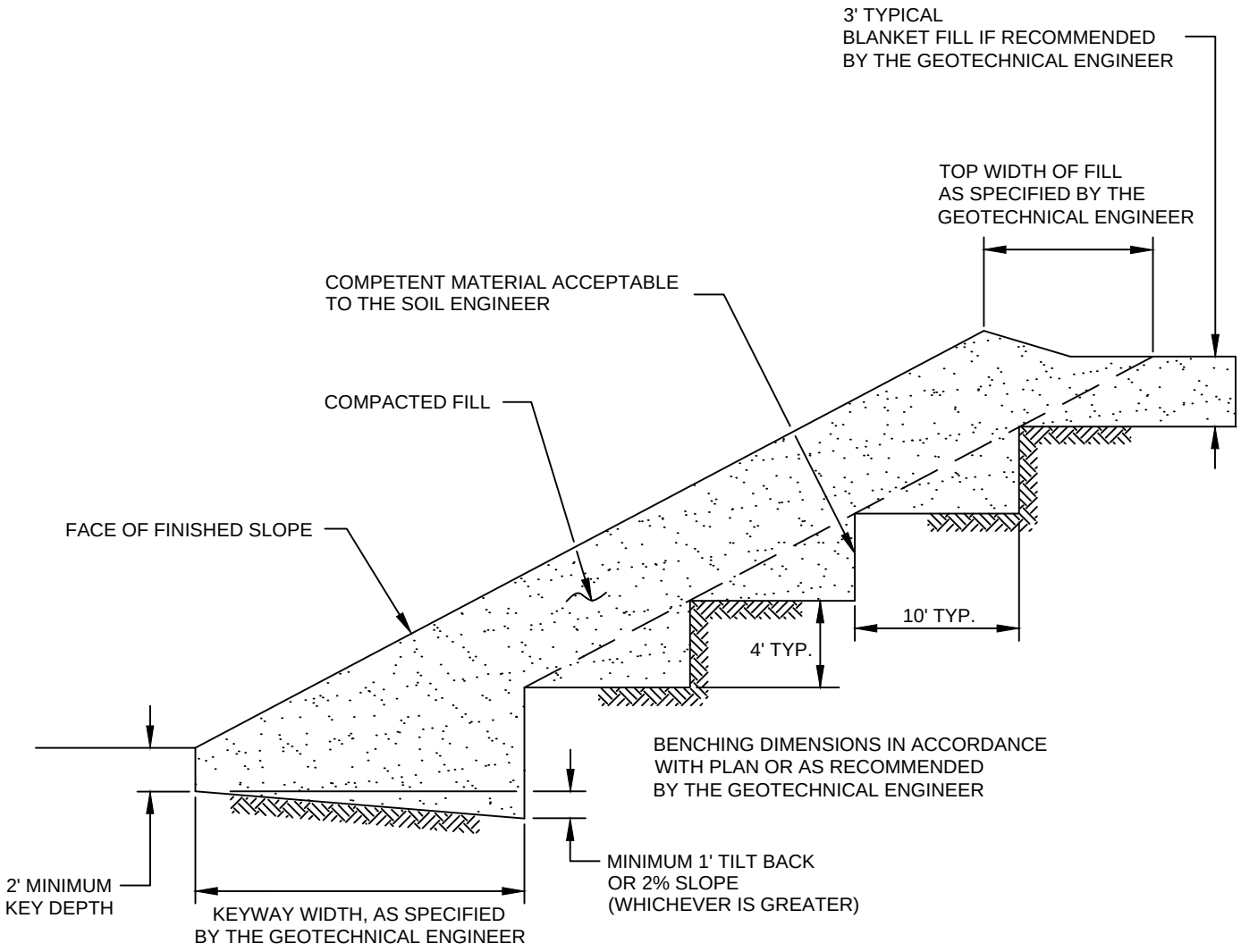
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-4

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL



STABILIZATION FILL DETAIL

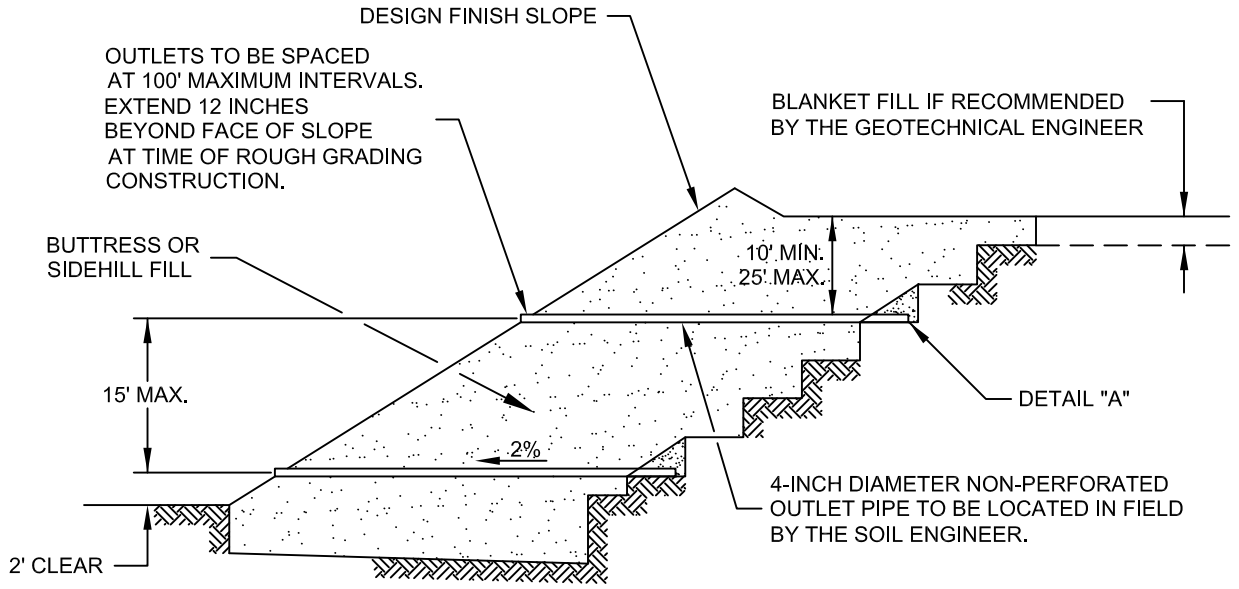
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-5

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL



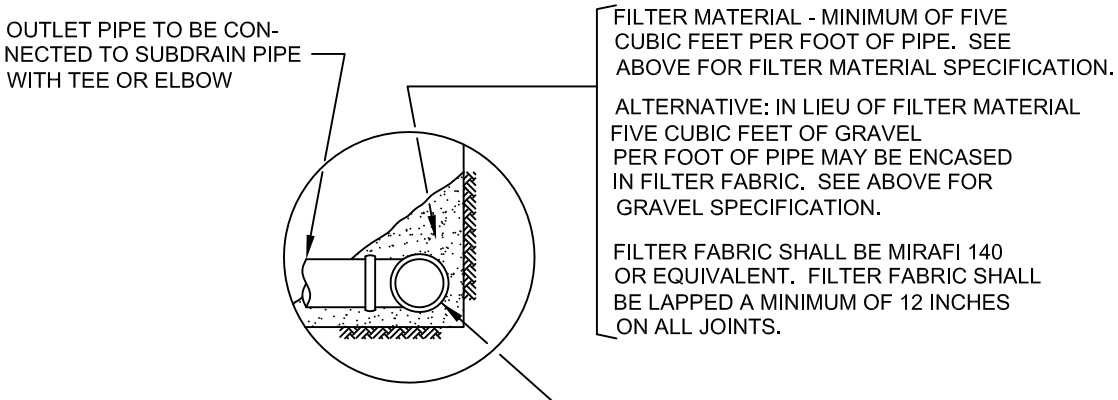
"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT: (CONFORMS TO EMA STD. PLAN 323)

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



DETAIL "A"

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

SLOPE FILL SUBDRAINS

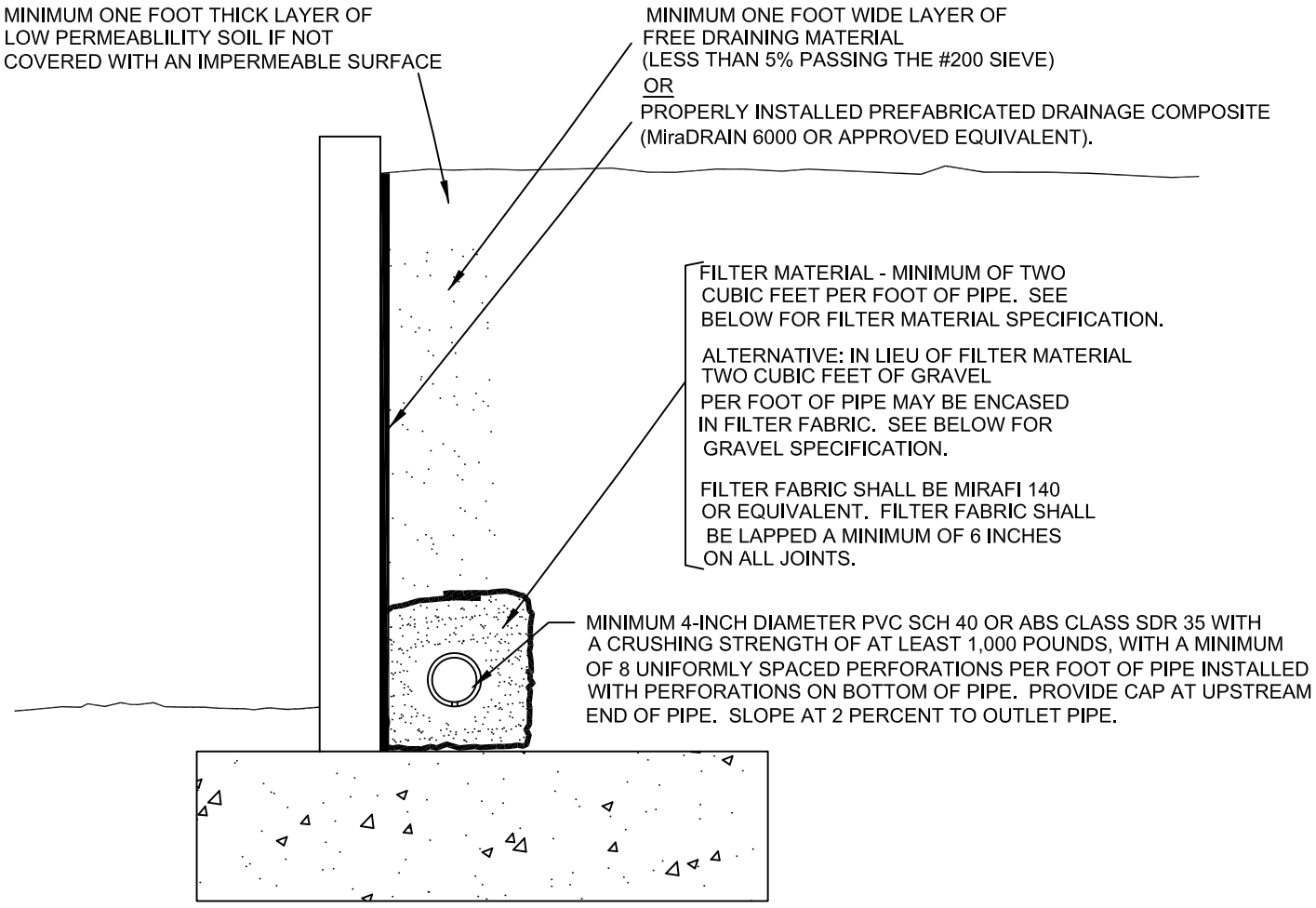
GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: JAS
CHKD: GKM

PLATE D-6

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL



"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

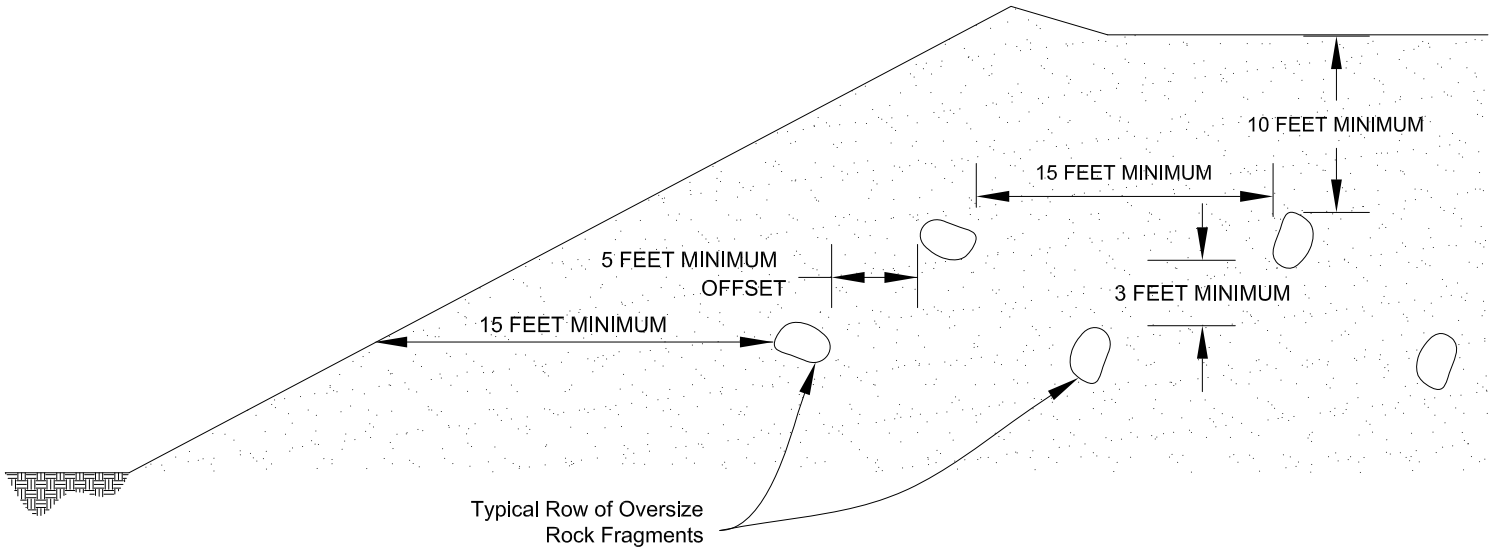
NOT TO SCALE

DRAWN: JAS
CHKD: GKM

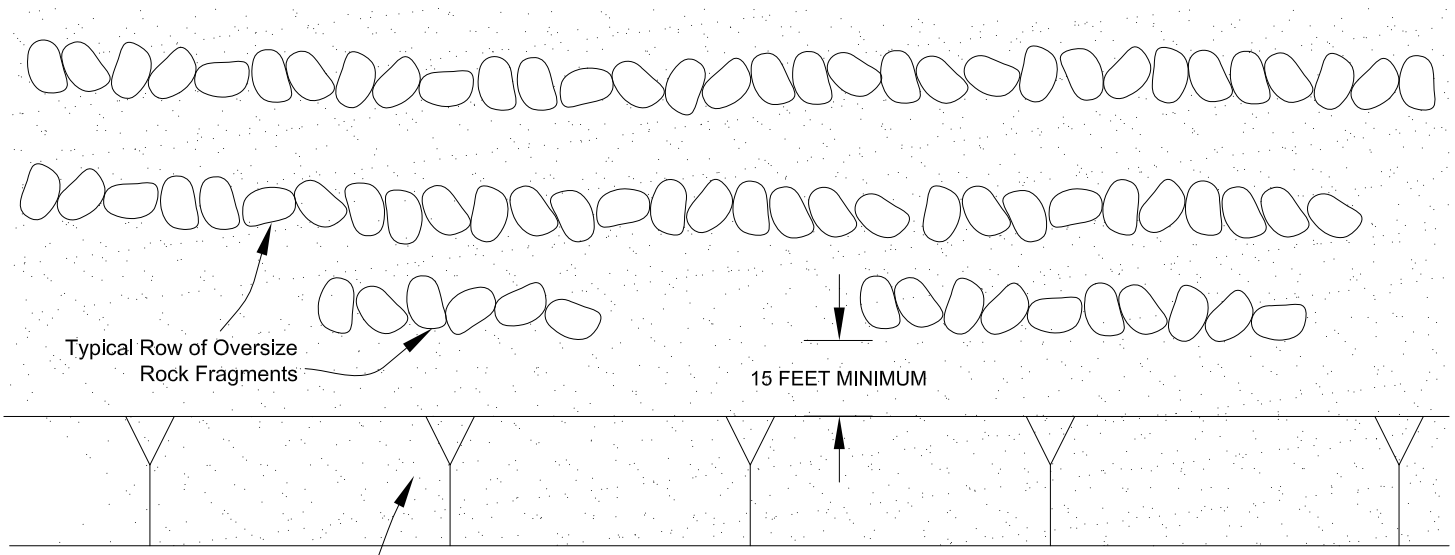
PLATE D-7

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



Section View



Plan View

PLACEMENT OF OVERSIZED MATERIAL

GRADING GUIDE SPECIFICATIONS

NOT TO SCALE

DRAWN: PM
CHKD: GKM

PLATE D-8

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL

APPENDIX E

USGS Design Maps Summary Report

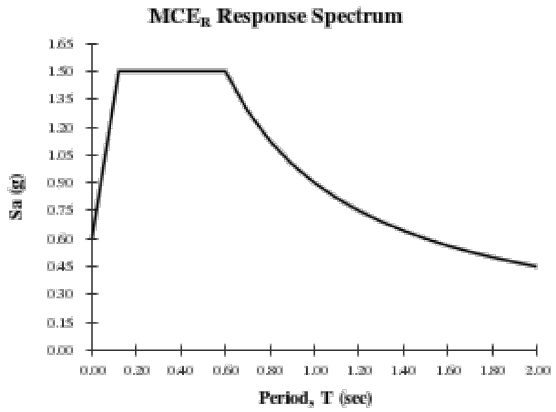
User–Specified Input

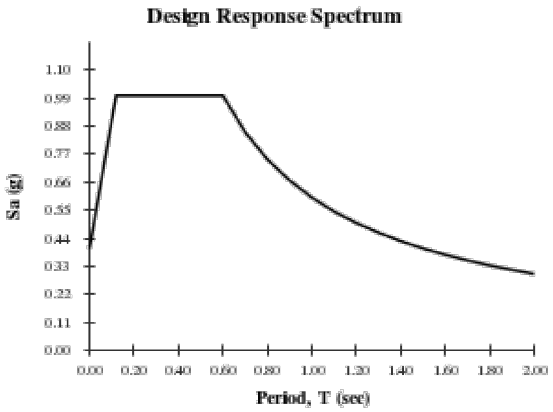
Building Code Reference Document	ASCE 7-10 Standard (which utilizes USGS hazard data available in 2008)
Site Coordinates	33.84744°N, 117.22947°W
Site Soil Classification	Site Class D – "Stiff Soil"
Risk Category	I/II/III

USGS–Provided Output

S_S =	1.500 g	S_{MS} =	1.500 g	S_{DS} =	1.000 g
S_1 =	0.600 g	S_{M1} =	0.900 g	S_{D1} =	0.600 g

For information on how the SS and S1 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.





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

SEISMIC DESIGN PARAMETERS
PROPOSED WAREHOUSE
PERRIS, CALIFORNIA

DRAWN: CT
CHKD: RGT
SCG PROJECT 18G160-1
PLATE E-1

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL

October 26, 2018

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Duke Realty
200 Spectrum Center Drive, Suite 1600
Irvine, California 92618

Attention: Mr. Adam Schmid
Development Services Manager

Project No.: **18G160-2**

Subject: **Results of Infiltration Testing**
Proposed Warehouse
Perry Street, East of Indian Avenue
Perris, California

Reference: Geotechnical Investigation, Proposed Warehouse, Perry Street, East of Indian Avenue, Perris, California, prepared by Southern California Geotechnical, Inc. (SCG) for Duke Realty, SCG Project No. 18G160-1, dated July 19, 2018.

Gentlemen:

In accordance with your request, we have conducted infiltration testing at the subject site. We are pleased to present this report summarizing the results of the infiltration testing and our design recommendations.

Scope of Services

The scope of services performed for this project was in general accordance with our Change Order 18G160-CO, dated October 2, 2018. The scope of services included site reconnaissance, subsurface exploration, field testing, and engineering analysis to determine the infiltration rates of the onsite soils. The infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer.

Site and Project Description

The subject site is located on the south side of Perry Street, east of Indian Avenue in Perris, California. The site is bounded to the north by Perry Street, to the west by a vacated street (Barrett Avenue), and to the south and east by residential lots and vacant property. The general location of the site is illustrated on the Site Location Map, enclosed as Plate 1 of this report.

The site consists of a nearly rectangular-shaped parcel, 7.26± acres in size. The site is currently vacant and undeveloped. The ground surface consists of exposed soil with areas of sparse to moderate native grass and weed growth. Topographic information was not available at the time of this report. Based on visual observations, the site topography within the area of the proposed development appears to be relatively level ground, sloping gently downward to the south at a gradient of less than 1± percent.

Proposed Development

Based on a site plan provided to our office by the client, the site will be developed with a new warehouse. The building will be located in the north-central area of the site and will be 148,297± ft^2 in size. The building will be constructed with dock-high doors along the south side of the building. It is expected that the building will be surrounded by asphaltic concrete pavements for parking and drive lanes and Portland cement concrete pavements for the loading dock areas. Several landscape planters and concrete flatwork will be included throughout the site.

We understand that the proposed development will include on-site infiltration to dispose of storm water. Based on an infiltration test location plan provided, the proposed infiltration systems will consist of a below-grade chamber system located in the proposed loading dock areas and a detention basin located in the southeastern area of the site. The proposed infiltration systems will extend to depths ranging from 5 to 10± feet below the existing site grades.

Concurrent Study

Southern California Geotechnical, Inc. (SCG) recently conducted a geotechnical investigation at the subject site, which is referenced above. As part of this study, seven (7) borings were advanced to depths of 5 to 25± feet below the existing site grades. Native alluvium was encountered at the ground surface at all of the boring locations. The near-surface alluvial soils generally consist of loose to medium dense silty fine sands with varying clay content, extending to depths of up to 4 to 6½± feet below existing site grades. One of the borings encountered a dense fine to medium sand stratum, extending to depths of 6½ to 8½± feet. At greater depths, the alluvium consists of medium dense to very dense clayey sands, fine to medium sands, silty fine sands, and medium stiff to hard fine sandy clays, silty clays, and clayey silts, extending to the maximum depth explored of 25± feet.

Groundwater

Free water was not encountered during drilling of any of the borings. In addition, delayed readings taken within the open boreholes did not identify any free water. Based on the lack of any water within the borings and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 25± feet at the time of the subsurface exploration. As part of our research, we reviewed available groundwater data in order to determine the historic high groundwater level for the site. The primary reference used to determine the groundwater depths in this area is the California Department of Water Resources website, http://www.water.ca.gov/waterdatalibrary/. The nearest monitoring well is located 550± feet southwest from the site. Water level readings within this monitoring well indicates a high groundwater level of 81± feet (April 2017) below the ground surface.

Subsurface Exploration

Scope of Exploration

The subsurface exploration for the infiltration testing consisted of five (5) backhoe-excavated trenches, extending to depths of 5 to 10± feet below existing site grades. The trenches were

logged during excavation by a member of our staff. The approximate locations of the infiltration trenches (identified as I-1 through I-5) are indicated on the Infiltration Test Location Plan, enclosed as Plate 2 of this report.

Geotechnical Conditions

Disturbed alluvial soils were encountered at the ground surface at all five (5) of the infiltration trenches, extending to depths of ½ to 1± foot below existing grades. These soils consist of loose fine to medium sandy silts with trace to little coarse sand. These soils possess a disturbed, loose appearance from possible tillage of the soils, resulting in their classification as disturbed alluvial soils. Native alluvial soils were encountered beneath the disturbed alluvial soils at all of the infiltration trenches, extending to the maximum depth explored of 10± feet below existing site grades. The native alluvial soils generally consist of medium dense to dense clayey fine sands and silty fine sands, and stiff to hard silty clays and fine sandy clays with varying amounts of medium to coarse sands, silt, and clay content. Free water was not encountered during the excavation of any of the trenches. The Trench Logs, which illustrate the conditions encountered at the infiltration test locations, are included with this report.

Infiltration Testing

The infiltration testing was performed in general accordance with ASTM Test Method D-3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using Double Ring Infiltrometer. Two stainless steel infiltration rings were used for the infiltration testing. The outer infiltration ring is 2 feet in diameter and 20 inches in height. The inner infiltration ring is 1 foot in diameter and 20 inches in height. At the test locations, the outer ring was driven 3± inches into the soil at the base of each trench. The inner ring was centered inside the outer ring and subsequently driven 3± inches into the soil at the base of the trench. The rings were driven into the soil using a ten-pound sledge hammer. The soil surrounding the wall of the infiltration rings was only slightly disturbed during the driving process.

Infiltration Testing Procedure

The infiltration testing was performed at all five (5) of the test locations. The infiltration testing consisted of filling the inner ring and the annular space (the space between the inner and outer rings) with water, approximately 3 to 4 inches above the soil. To prevent the flow of water from one ring to the other, the water level in both the inner ring and the annular space between the rings was maintained using constant-head float valves. The volume of water that was added to maintain a constant head in the inner ring and the annular space during each time interval was determined and recorded. A cap was placed over the rings to minimize the evaporation of water during the tests.

The schedule for readings was determined based on the observed soil type at the base of each backhoe-excavated trench. Based on the existing soils at each infiltration test location, the volumetric measurements were made at increments of 20 and 30 minutes. The water volume measurements are presented on the spreadsheets enclosed with this report. The infiltration rates for each of the timed intervals are also tabulated on these spreadsheets.

The infiltration rates for the infiltration tests are calculated in centimeters per hour and then converted to inches per hour. The rates are summarized below:

Infiltration Test No.	Depth (feet)	Soil Description	Infiltration Rate (inches/hour)
I-1	5½	Fine Sandy Clay, trace medium Sand	0.2
I-2	10	Fine Sandy Clay, little medium Sand, trace Silt	0.4
I-3	5	Fine Sandy Clay, trace medium Sand	0.2
I-4	5	Fine Sandy Clay, trace medium Sand, trace Silt	0.3
I-5	10	Clayey fine to medium Sand, trace Silt	1.1

Laboratory Testing

Moisture Content

The moisture contents for selected soil samples taken from the trenches were determined in accordance with ASTM D-2216 and are expressed as a percentage of the dry weight. These test results are presented on the Trench Logs.

Grain Size Analysis

The grain size distribution of selected soils collected from the base of each infiltration test trench has been determined using a range of wire mesh screens. These tests were performed in general accordance with ASTM D-422 and/or ASTM D-1140. The weight of the portion of the sample retained on each screen is recorded and the percentage finer or coarser of the total weight is calculated. The results of these tests are presented on Plates C-1 through C-5 of this report.

Design Recommendations

Five (5) infiltration tests were performed at the subject site. As noted above, the calculated infiltration rates at the infiltration test locations range from **0.2** to **1.1** inches per hour. The primary factors affecting the infiltration rates are the varying relative densities and the silt and clay content of the encountered soils, which vary at different depths and locations at the subject site.

Based on the infiltration test results from Infiltration Test Nos. I-1 through I-3, we recommend a design infiltration rate of 0.4 inches per hour be used for the proposed below-grade chamber system located in the proposed loading dock areas, if the bottom of the system extends to a depth of 10± feet below the existing site grades.

Based on the infiltration test results from Infiltration Test Nos. I-4 and I-5, we recommend a design infiltration rate of 0.3 inches per hour be used for the proposed detention basin located in the southeastern area of the site, if the bottom of the system extends to a depth of 5± feet below the existing site grades and a design rate of 1.1 inches per hour if the system extends to a depth of 10± feet below the existing site grades.

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration systems to identify the soil classification at the base of each system. It should be confirmed that the soils at the base of the proposed infiltration systems correspond with those presented in this report to ensure that the performance of the systems will be consistent with the rates reported herein.

The design of the proposed storm water infiltration system should be performed by the project civil engineer, in accordance with the City of Perris and/or County of Riverside guidelines. However, it is recommended that the systems be constructed so as to facilitate removal of silt and clay, or other deleterious materials from any water that may enter the systems. The presence of such materials would decrease the effective infiltration rate. **It is recommended that the project civil engineer apply an appropriate factor of safety. The infiltration rates recommended above are based on the assumption that only clean water will be introduced to the subsurface profile. Any fines, debris, or organic materials could significantly impact the infiltration rates.** It should be noted that the recommended infiltration rates are based on infiltration testing at five (5) discrete locations and the overall infiltration rates of the storm water infiltration systems could vary considerably.

Infiltration versus Permeability

Infiltration rates are based on unsaturated flow. As water is introduced into soils by infiltration, the soils become saturated and the wetting front advances from the unsaturated zone to the saturated zone. Once the soils become saturated, infiltration rates become zero, and water can only move through soils by hydraulic conductivity at a rate determined by pressure head and soil permeability. The infiltration rates presented herein were determined in accordance with the ASTM Test Method D-3385-03 standard and are considered valid for the time and place of the actual test. Changes in soil moisture content will affect these infiltration rates. Infiltration rates should be expected to decrease until the soils become saturated. Soil permeability values will then govern groundwater movement. Permeability values may be on the order of 10 to 20 times less than infiltration rates. The system designer should incorporate adequate factors of safety and allow for overflow design into appropriate traditional storm drain systems, which would transport storm water off-site.

Location of Infiltration Systems

The use of on-site storm water infiltration systems carries a risk of creating adverse geotechnical conditions. Increasing the moisture content of the soil can cause the soil to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Overlying structures and pavements in the infiltration areas could potentially be damaged due to saturation of subgrade soils. **The proposed infiltration systems for this site should be located at least 25 feet away from any structures, including retaining**

walls. Even with this provision of locating the infiltration systems at least 25 feet from the building, it is possible that infiltrating water into the subsurface soils could have an adverse effect on the proposed or existing structures. It should also be noted that utility trenches which happen to collect storm water can also serve as conduits to transmit storm water toward the structure, depending on the slope of the utility trench. Therefore, consideration should also be given to the proposed locations of underground utilities which may pass near the proposed infiltration systems.

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, structural engineer, and/or civil engineer. The design of the infiltration system is the responsibility of the civil engineer. The role of the geotechnical engineer is limited to determination of infiltration rate only. By using the design infiltration rates contained herein, the civil engineer agrees to indemnify, defend, and hold harmless the geotechnical engineer for all aspects of the design and performance of the infiltration system. 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 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 trench locations and testing 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.

Closure

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

Respectfully Submitted,

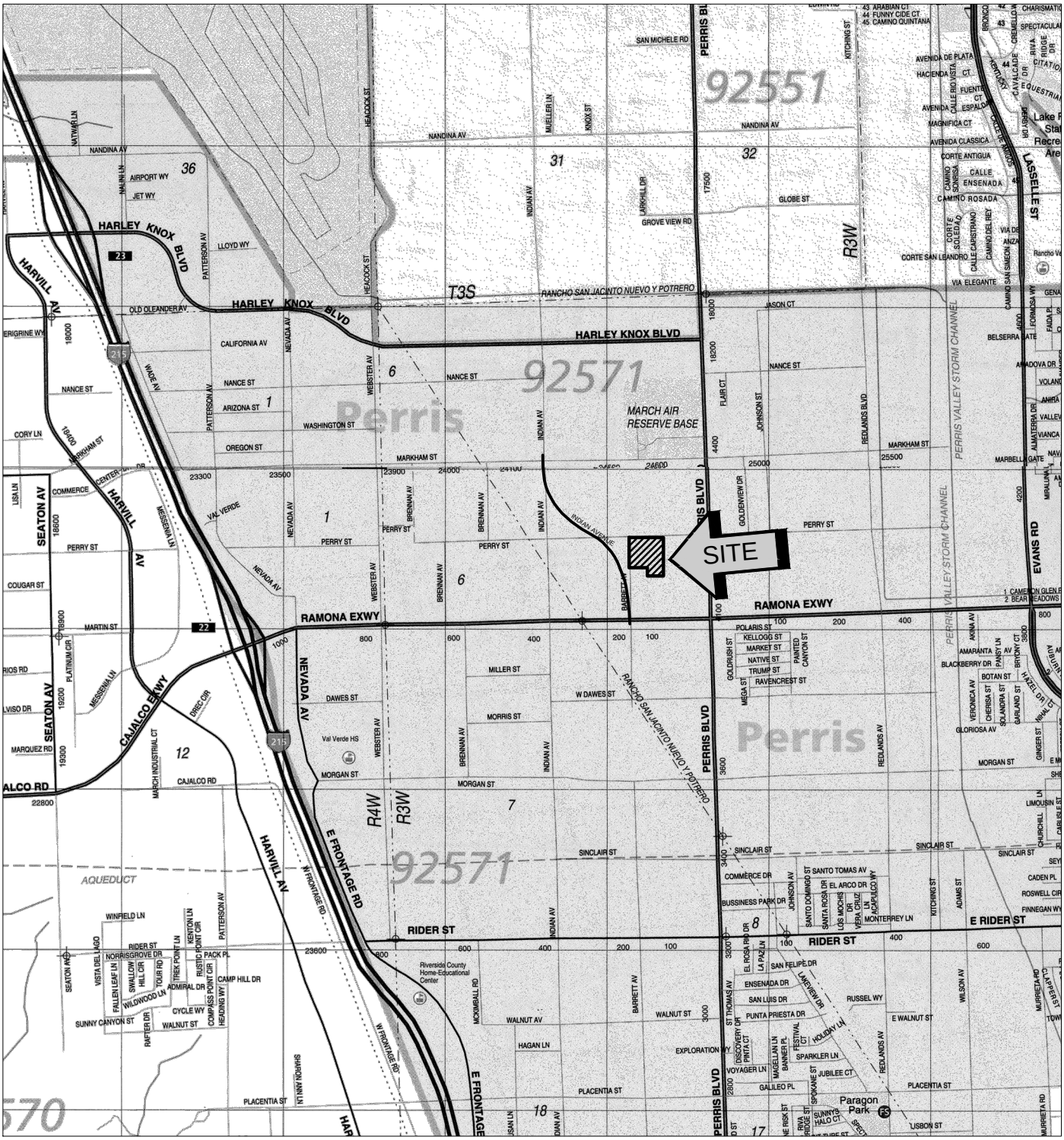
SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

Scott McCann
Staff Scientist

Robert G. Trazo, GE 2655
Project Engineer

Distribution: (1) Addressee

Enclosures: Plate 1 - Site Location Map
Plate 2 - Infiltration Test Location Plan
Trench Logs (5 pages)
Infiltration Test Results Spreadsheets (5 pages)
Grain Size Distribution Graphs (5 pages)



SOURCE: RIVERSIDE COUNTY
THOMAS GUIDE, 2013

SITE LOCATION MAP

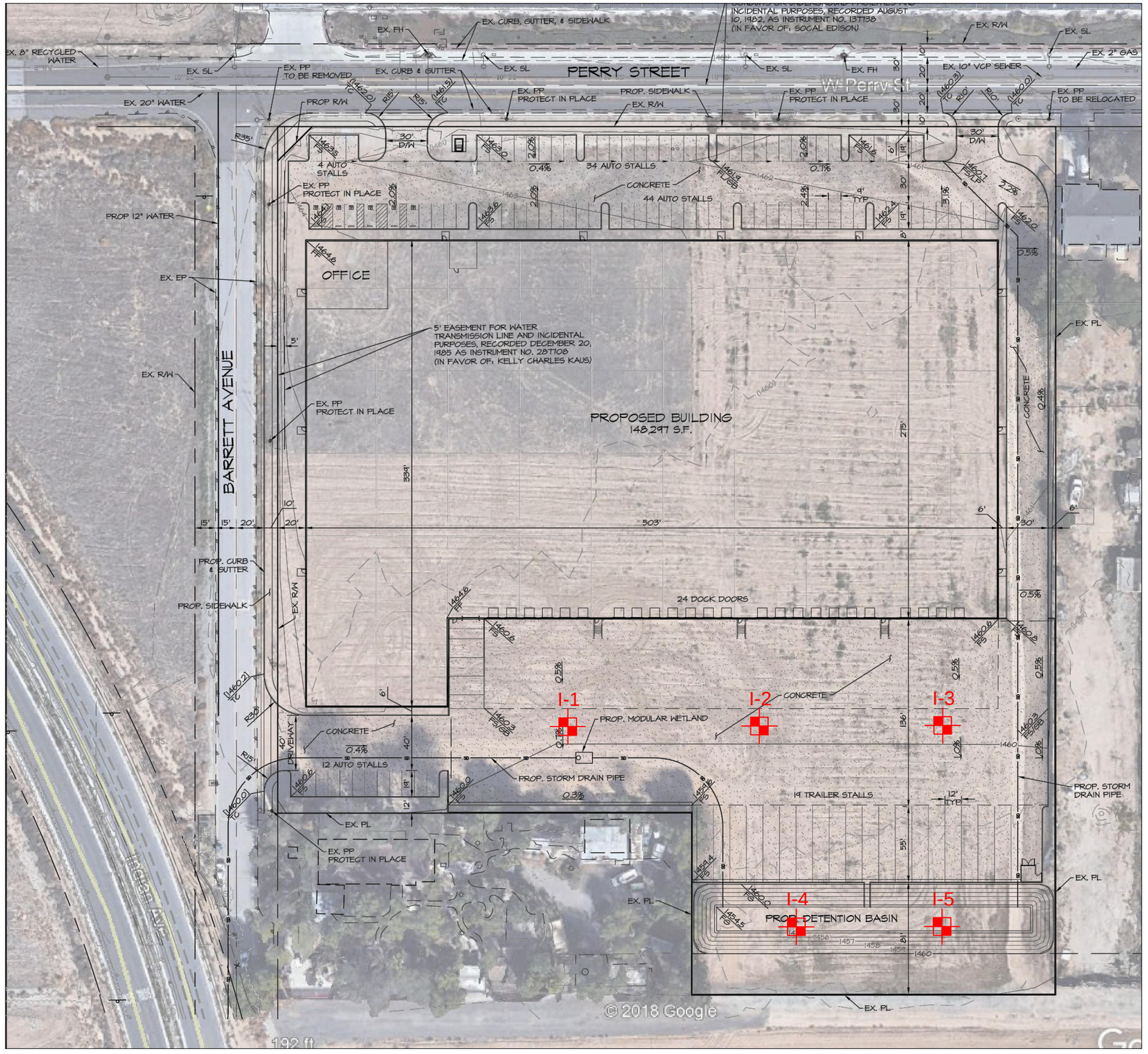
PROPOSED WAREHOUSE

PERRIS, CALIFORNIA

SCALE: 1" = 2400'	
DRAWN: SAM CHKD: RGT	
SCG PROJECT 18G160-2	
PLATE 1	

SoCalGeo

SOUTHERN CALIFORNIA GEOTECHNICAL



NORTH

SoCalGeo

GEOTECHNICAL LEGEND

APPROXIMATE INFILTRATION LOCATION

NOTE: BASE MAP PREPARED BY WEBB AND ASSOCIATES

INFILTRATION LOCATION PLAN

PROPOSED WAREHOUSE

PERRIS, CALIFORNIA

SCALE: 1" = 80'	
DRAWN: DRK CHKD: RGT	
SCG PROJECT 18G160-2	
PLATE 2	

SOUTHERN CALIFORNIA GEOTECHNICAL

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO. I-1

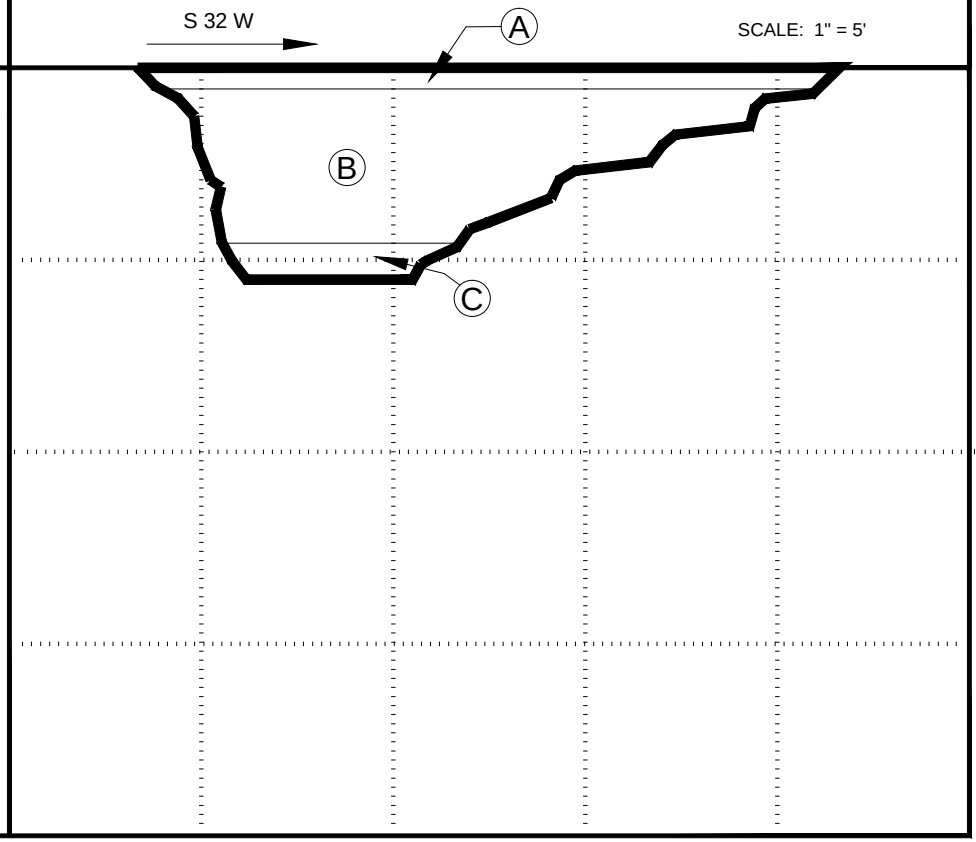
JOB NO.: 18G160-2
PROJECT: Proposed Warehouse
LOCATION: Perris, CA
DATE: 10-10-2018

EQUIPMENT USED: Backhoe
LOGGED BY: Scott McCann
ORIENTATION: S 32 W
ELEVATION:

WATER DEPTH: Dry
SEEPAGE DEPTH: Dry
READINGS TAKEN: At Completion

DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION
5	b		6	A: DISTURBED ALLUVIUM: Light Brown fine to medium Sandy Silt, trace coarse Sand, abundant fine root fibers, loose - dry B: ALLUVIUM: Brown Clayey fine Sand, little medium Sand, little Silt, trace calcareous veining, medium dense to dense - damp
	b		9	C: ALLUVIUM: Brown fine Sandy Clay, trace medium Sand, little calcareous veining, very stiff to hard - damp Trench Terminated @ 5.5 feet
10				
15				

GRAPHIC REPRESENTATION



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

TRENCH LOG

PLATE B-1

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO. I-2

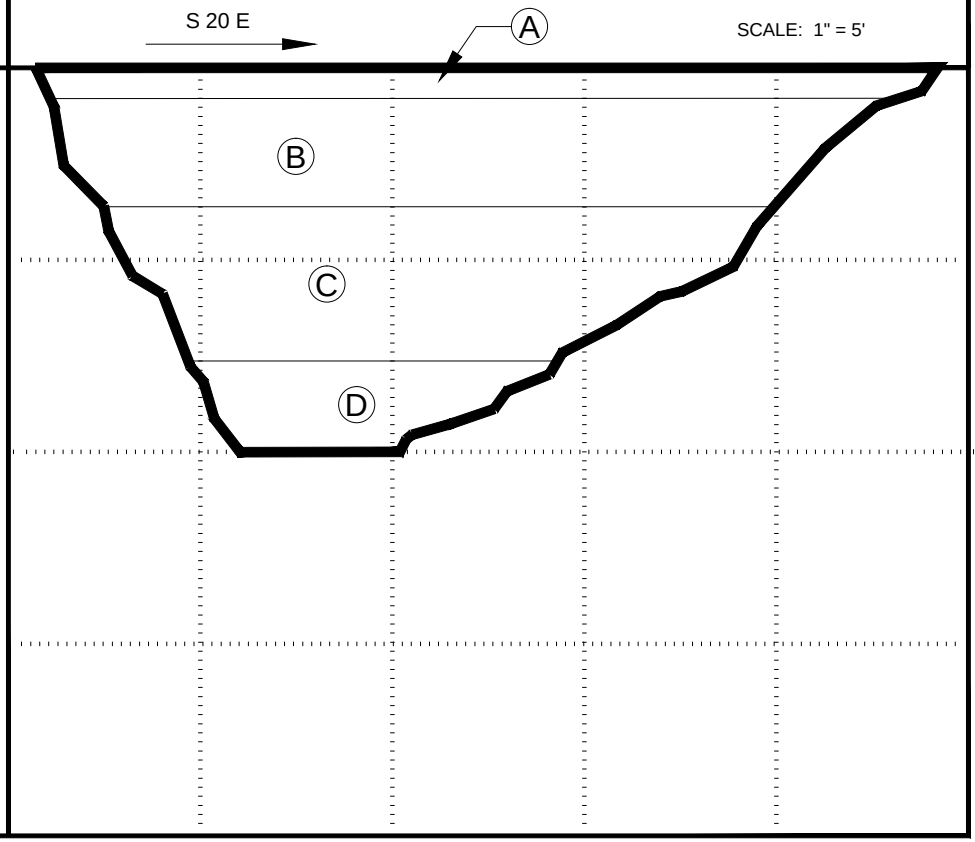
JOB NO.: 18G160-2
PROJECT: Proposed Warehouse
LOCATION: Perris, CA
DATE: 10-9-2018

EQUIPMENT USED: Backhoe
LOGGED BY: Scott McCann
ORIENTATION: S 20 E
ELEVATION:

WATER DEPTH: Dry
SEEPAGE DEPTH: Dry
READINGS TAKEN: At Completion

DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION
	b		2	A: DISTURBED ALLUVIUM: Light Brown fine to medium Sandy Silt, trace to little coarse Sand, abundant fine root fibers, loose - dry B: ALLUVIUM: Light Brown Silty fine to medium Sand, little coarse Sand, trace fine root fibers, dense - dry to damp
5	b		9	C: ALLUVIUM: Brown Silty fine to coarse Sand, medium dense - damp to moist
				D: ALLUVIUM: Brown fine Sandy Clay, little medium Sand, trace Silt, very stiff - moist
10	b		11	Trench Terminated @ 10 feet
15				

GRAPHIC REPRESENTATION



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

TRENCH LOG

PLATE B-2

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO. I-3

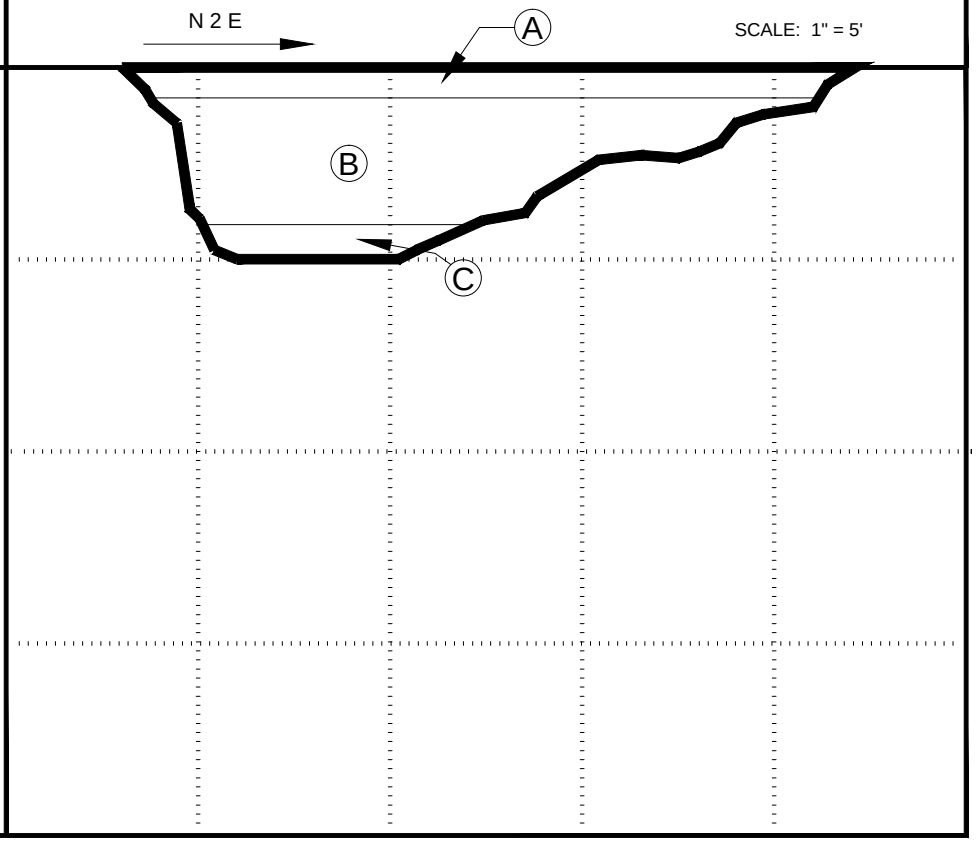
JOB NO.: 18G160-2
PROJECT: Proposed Warehouse
LOCATION: Perris, CA
DATE: 10-10-2018

EQUIPMENT USED: Backhoe
LOGGED BY: Scott McCann
ORIENTATION: N 2 E
ELEVATION:

WATER DEPTH: Dry
SEEPAGE DEPTH: Dry
READINGS TAKEN: At Completion

DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION
	b		4	A: DISTURBED ALLUVIUM: Light Brown fine to medium Sandy Silt, trace coarse Sand, abundant fine root fibers, loose - dry B: ALLUVIUM: Light Brown Clayey fine Sand, little medium Sand, little Silt, trace calcareous veining, dense - damp
5	b		9	C: ALLUVIUM: Brown fine Sandy Clay, trace medium Sand, little calcareous veining, very stiff to hard - damp Trench Terminated @ 5 feet
10				
15				

GRAPHIC REPRESENTATION



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

TRENCH LOG

PLATE B-3

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO. I-4

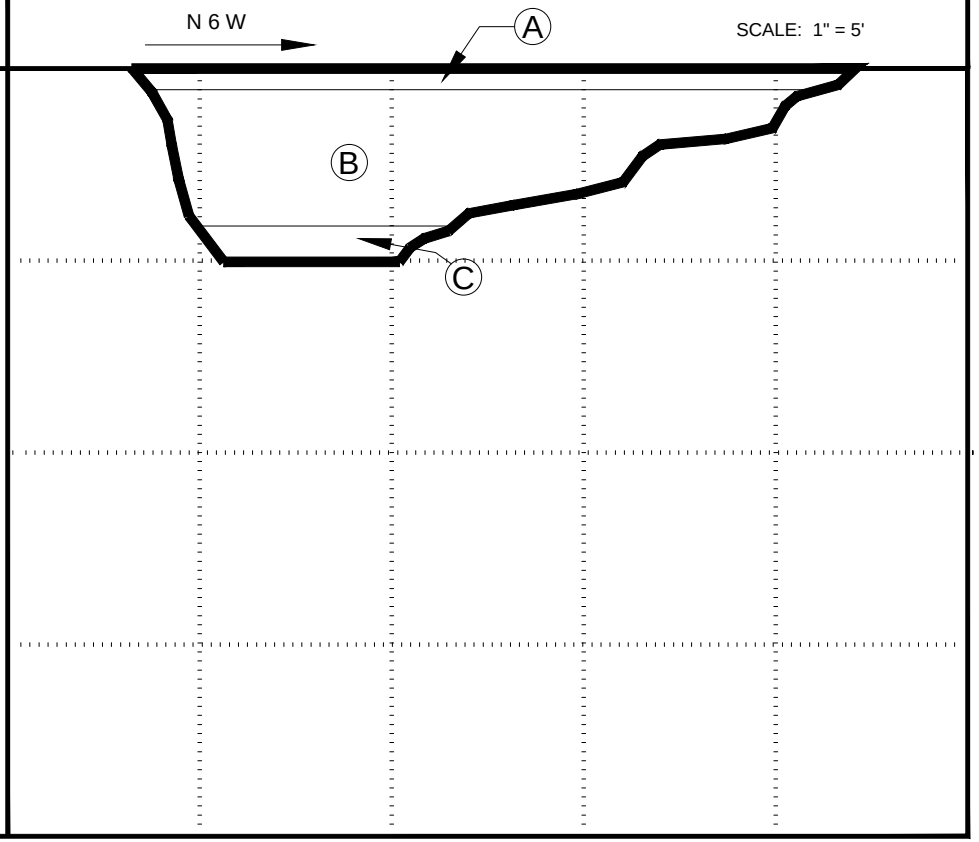
JOB NO.: 18G160-2
PROJECT: Proposed Warehouse
LOCATION: Perris, CA
DATE: 10-10-2018

EQUIPMENT USED: Backhoe
LOGGED BY: Scott McCann
ORIENTATION: N 6 W
ELEVATION:

WATER DEPTH: Dry
SEEPAGE DEPTH: Dry
READINGS TAKEN: At Completion

DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION
	b		3	A: DISTURBED ALLUVIUM: Light Brown fine to medium Sandy Silt, little coarse Sand, abundant fine root fibers, loose - dry B: ALLUVIUM: Brown Silty fine to medium Sand, trace to little coarse Sand, trace fine root fibers, medium dense to dense - damp
5	b		12	C: ALLUVIUM: Brown fine Sandy Clay, trace medium Sand, trace Silt, little calcareous veining, very stiff - moist Trench Terminated @ 5 feet
10				
15				

GRAPHIC REPRESENTATION



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

TRENCH LOG

PLATE B-4

SOUTHERN CALIFORNIA GEOTECHNICAL

TRENCH NO.
I-5

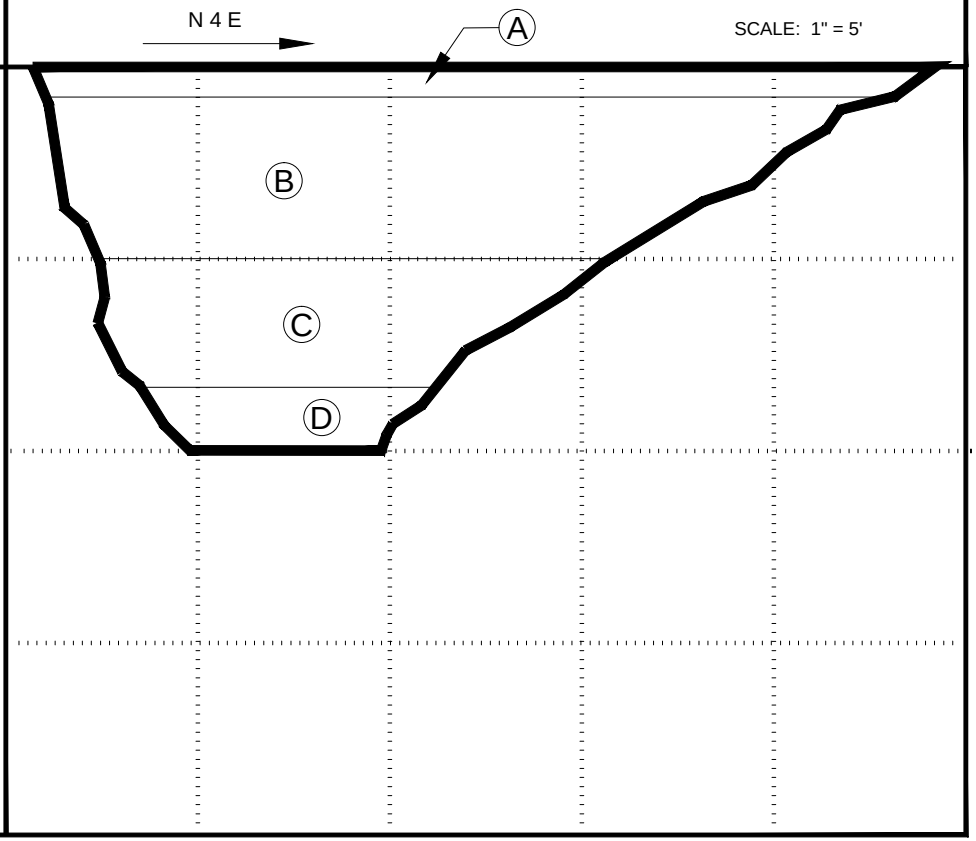
JOB NO.: 18G160-2
PROJECT: Proposed Warehouse
LOCATION: Perris, CA
DATE: 10-9-2018

EQUIPMENT USED: Backhoe
LOGGED BY: Scott McCann
ORIENTATION: N 4 E
ELEVATION:

WATER DEPTH: Dry
SEEPAGE DEPTH: Dry
READINGS TAKEN: At Completion

DEPTH	SAMPLE	DRY DENSITY (PCF)	MOISTURE (%)	EARTH MATERIALS DESCRIPTION
	b		5	A: DISTURBED ALLUVIUM: Light Brown fine to medium Sandy Silt, little coarse Sand, abundant fine root fibers, loose - dry B: ALLUVIUM: Brown Silty Clay, little fine Sand, trace medium Sand, trace fine root fibers, stiff - damp
5	b		16	C: ALLUVIUM: Brown fine Sandy Clay, trace medium Sand, trace Silt, little calcareous veining, very stiff - very moist
10	b		9	D: ALLUVIUM: Brown Clayey fine to medium Sand, trace Silt, medium dense to dense - damp Trench Terminated @ 10 feet
15				

GRAPHIC REPRESENTATION



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

TRENCH LOG

PLATE B-5

INFILTRATION CALCULATIONS

Project Name	Proposed Warehouse
Project Location	Perris, CA
Project Number	18G160-2
Engineer	Scott McCann

Infiltration Test No: I-1

Constants

	Diameter (ft)	Area (ft^2)	Area (cm^2)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval **Elapsed** (min)	Flow Readings: Inner Ring (ml)	Flow Readings: Ring Flow (cm^3)	Flow Readings: Annular Ring (ml)	Flow Readings: Space Flow (cm^3)	Infiltration Rates: Inner Ring* (cm/hr)	Infiltration Rates: Annular Space* (cm/hr)	Infiltration Rates: Inner Ring* (in/hr)	Infiltration Rates: Annular Space* (in/hr)
1	Initial	1:00 PM	30	250	600	950	2100	1.64	1.92	0.65	0.76
	Final	1:30 PM	**30**	850		3050					
2	Initial	1:30 PM	30	50	325	200	1600	0.89	1.46	0.35	0.58
	Final	2:00 PM	**60**	375		1800					
3	Initial	2:00 PM	30	100	300	400	1450	0.82	1.32	0.32	0.52
	Final	2:30 PM	**90**	400		1850					
4	Initial	2:30 PM	30	100	225	450	1350	0.62	1.23	0.24	0.49
	Final	3:00 PM	**120**	325		1800					
5	Initial	3:00 PM	30	150	200	300	1300	0.55	1.19	0.22	0.47
	Final	3:30 PM	**150**	350		1600					

INFILTRATION CALCULATIONS

Project Name	Proposed Warehouse
Project Location	Perris, CA
Project Number	18G160-2
Engineer	Scott McCann

Infiltration Test No: I-2

Constants

	Diameter (ft)	Area (ft^2)	Area (cm^2)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval **Elapsed** (min)	Flow Readings: Inner Ring (ml)	Flow Readings: Ring Flow (cm^3)	Flow Readings: Annular Ring (ml)	Flow Readings: Space Flow (cm^3)	Infiltration Rates: Inner Ring* (cm/hr)	Infiltration Rates: Annular Space* (cm/hr)	Infiltration Rates: Inner Ring* (in/hr)	Infiltration Rates: Annular Space* (in/hr)
1	Initial	1:00 PM	30	200	800	900	3600	2.19	3.29	0.86	1.30
	Final	1:30 PM	**30**	1000		4500					
2	Initial	1:30 PM	30	550	750	1150	3250	2.06	2.97	0.81	1.17
	Final	2:00 PM	**60**	1300		4400					
3	Initial	2:00 PM	30	50	600	600	3000	1.64	2.74	0.65	1.08
	Final	2:30 PM	**90**	650		3600					
4	Initial	2:30 PM	30	750	425	200	2950	1.16	2.70	0.46	1.06
	Final	3:00 PM	**120**	1175		3150					
5	Initial	3:00 PM	30	300	425	550	2850	1.16	2.60	0.46	1.03
	Final	3:30 PM	**150**	725		3400					
6	Initial	3:30 PM	30	200	400	500	2850	1.10	2.60	0.43	1.03
	Final	4:00 PM	**180**	600		3350					

INFILTRATION CALCULATIONS

Project Name	Proposed Warehouse
Project Location	Perris, CA
Project Number	18G160-2
Engineer	Scott McCann

Infiltration Test No: I-3

Constants

	Diameter (ft)	Area (ft^2)	Area (cm^2)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval **Elapsed** (min)	Flow Readings: Inner Ring (ml)	Flow Readings: Ring Flow (cm^3)	Flow Readings: Annular Ring (ml)	Flow Readings: Space Flow (cm^3)	Infiltration Rates: Inner Ring* (cm/hr)	Infiltration Rates: Annular Space* (cm/hr)	Infiltration Rates: Inner Ring* (in/hr)	Infiltration Rates: Annular Space* (in/hr)
1	Initial	8:00 AM	30	100	500	100	2950	1.37	2.70	0.54	1.06
	Final	8:30 AM	**30**	600		3050					
2	Initial	8:30 AM	30	600	300	3050	1600	0.82	1.46	0.32	0.58
	Final	9:00 AM	**60**	900		4650					
3	Initial	9:00 AM	30	150	225	900	1350	0.62	1.23	0.24	0.49
	Final	9:30 AM	**90**	375		2250					
4	Initial	9:30 AM	30	300	200	800	1300	0.55	1.19	0.22	0.47
	Final	10:00 AM	**120**	500		2100					
5	Initial	10:00 AM	30	500	200	550	1250	0.55	1.14	0.22	0.45
	Final	10:30 AM	**150**	700		1800					

INFILTRATION CALCULATIONS

Project Name	Proposed Warehouse
Project Location	Perris, CA
Project Number	18G160-2
Engineer	Scott McCann

Infiltration Test No: I-4

Constants

	Diameter (ft)	Area (ft^2)	Area (cm^2)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval **Elapsed** (min)	Flow Readings: Inner Ring (ml)	Flow Readings: Ring Flow (cm^3)	Flow Readings: Annular Ring (ml)	Flow Readings: Space Flow (cm^3)	Infiltration Rates: Inner Ring* (cm/hr)	Infiltration Rates: Annular Space* (cm/hr)	Infiltration Rates: Inner Ring* (in/hr)	Infiltration Rates: Annular Space* (in/hr)
1	Initial	11:00 AM	30	200	525	1100	2300	1.44	2.10	0.57	0.83
	Final	11:30 AM	**30**	725		3400					
2	Initial	11:30 AM	30	300	400	800	1750	1.10	1.60	0.43	0.63
	Final	12:00 PM	**60**	700		2550					
3	Initial	12:00 PM	30	50	325	200	1500	0.89	1.37	0.35	0.54
	Final	12:30 PM	**90**	375		1700					
4	Initial	12:30 PM	30	0	250	350	1500	0.69	1.37	0.27	0.54
	Final	1:00 PM	**120**	250		1850					
5	Initial	1:00 PM	30	100	250	900	1400	0.69	1.28	0.27	0.50
	Final	1:30 PM	**150**	350		2300					

INFILTRATION CALCULATIONS

Project Name	Proposed Warehouse
Project Location	Perris, CA
Project Number	18G160-2
Engineer	Scott McCann

Infiltration Test No: I-5

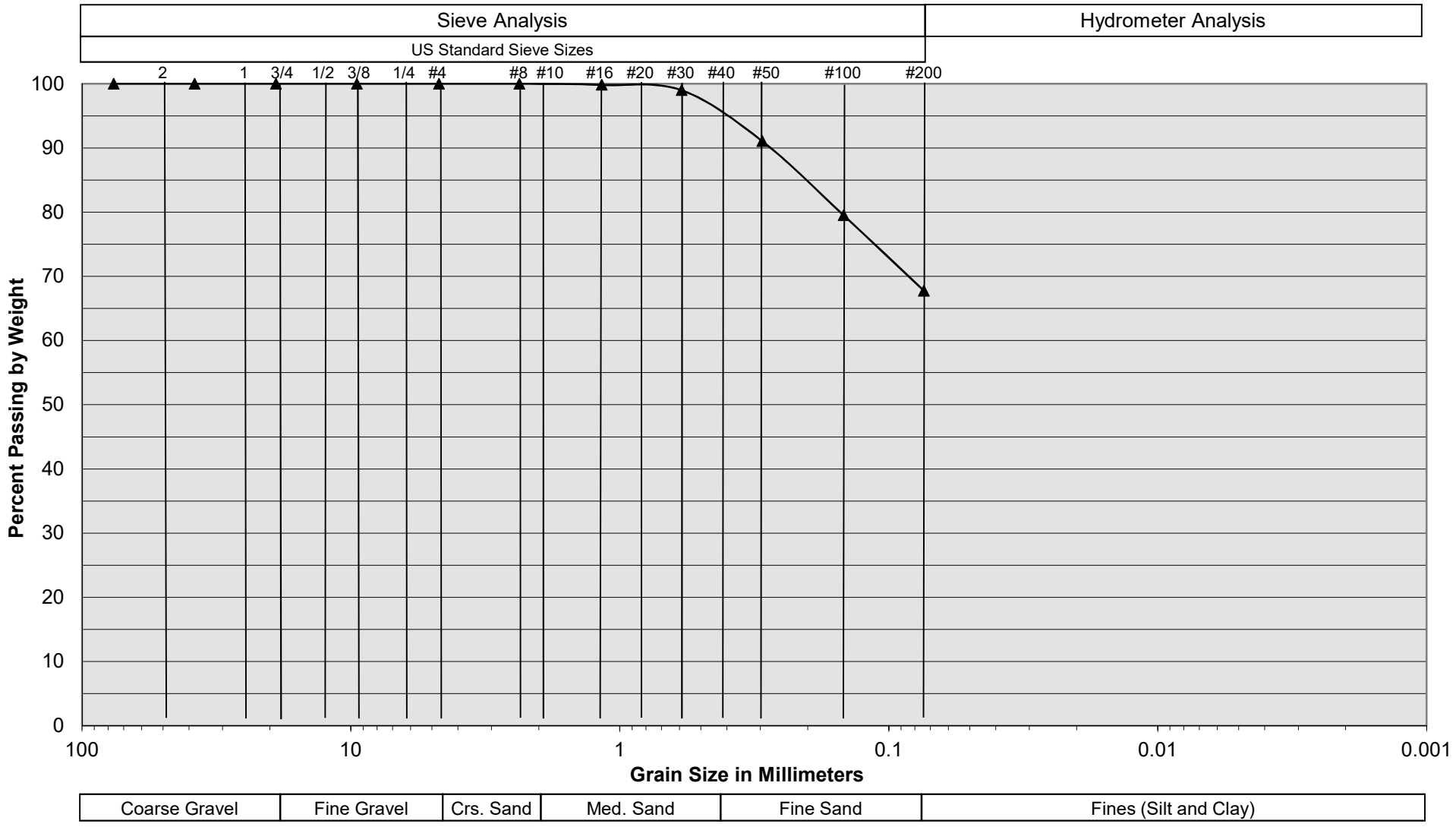
Constants

	Diameter (ft)	Area (ft^2)	Area (cm^2)
Inner	1	0.79	730
Anlr. Spac	2	2.36	2189

*Note: The infiltration rate was calculated based on current time interval

Test Interval		Time (hr)	Interval **Elapsed** (min)	Flow Readings: Inner Ring (ml)	Flow Readings: Ring Flow (cm^3)	Flow Readings: Annular Ring (ml)	Flow Readings: Space Flow (cm^3)	Infiltration Rates: Inner Ring* (cm/hr)	Infiltration Rates: Annular Space* (cm/hr)	Infiltration Rates: Inner Ring* (in/hr)	Infiltration Rates: Annular Space* (in/hr)
1	Initial	9:30 AM	20	100	825	800	5800	3.39	7.95	1.34	3.13
	Final	9:50 AM	**20**	925		6600					
2	Initial	9:50 AM	20	100	800	600	4900	3.29	6.72	1.30	2.64
	Final	10:10 AM	**40**	900		5500					
3	Initial	10:10 AM	20	125	775	650	3900	3.19	5.35	1.25	2.10
	Final	10:30 AM	**60**	900		4550					
4	Initial	10:30 AM	20	400	775	300	3550	3.19	4.87	1.25	1.92
	Final	10:50 AM	**80**	1175		3850					
5	Initial	10:50 AM	20	550	750	3900	3400	3.08	4.66	1.21	1.83
	Final	11:10 AM	**100**	1300		7300					
6	Initial	11:10 AM	20	1300	700	7300	3400	2.88	4.66	1.13	1.83
	Final	11:30 AM	**120**	2000		10700					

Grain Size Distribution

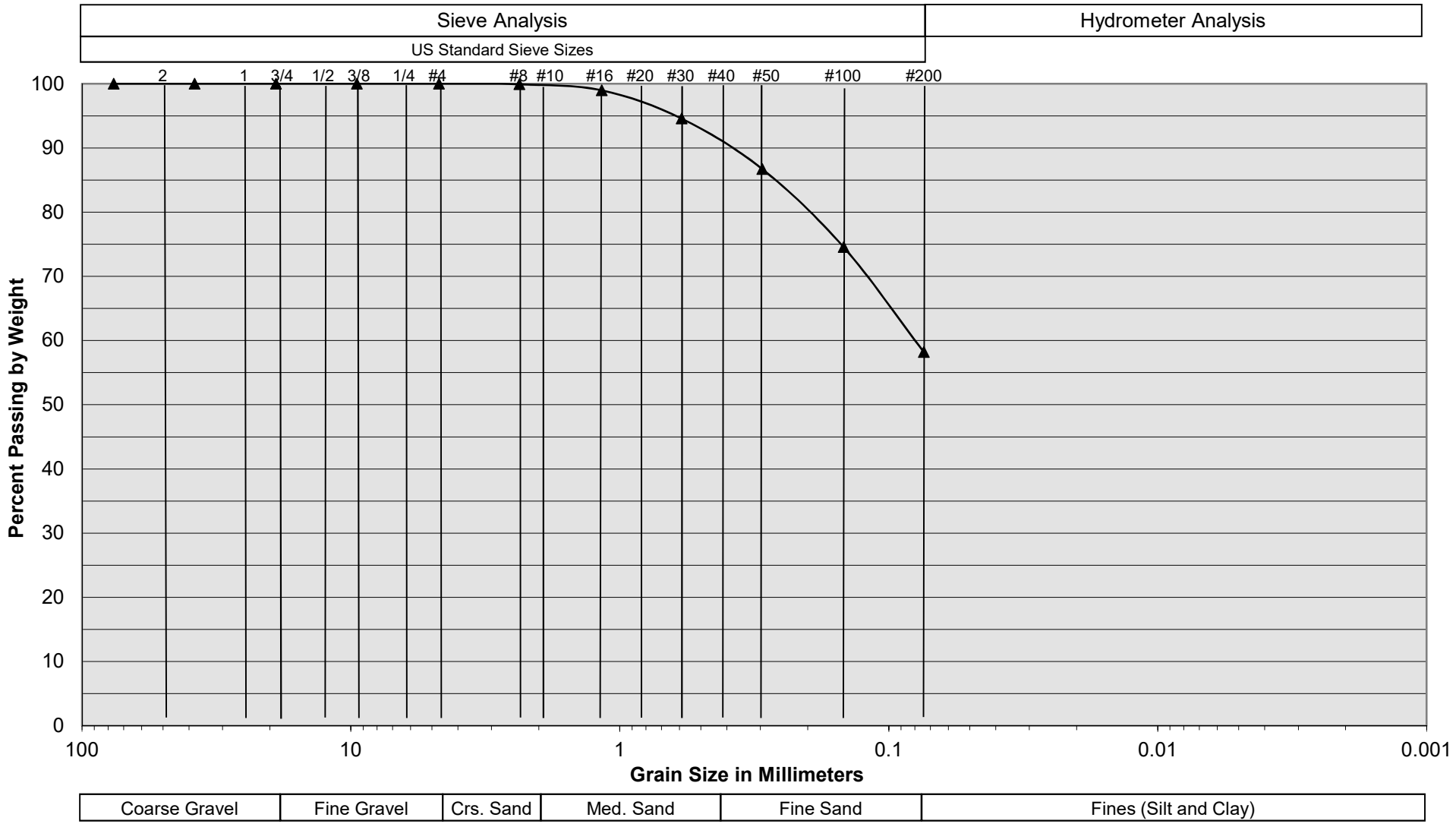


Sample Description	I-1 @ 5½ feet
Soil Classification	Brown fine Sandy Clay, trace medium Sand

Proposed Warehouse
Perris, CA
Project No. 18G160-2
PLATE C-1

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution

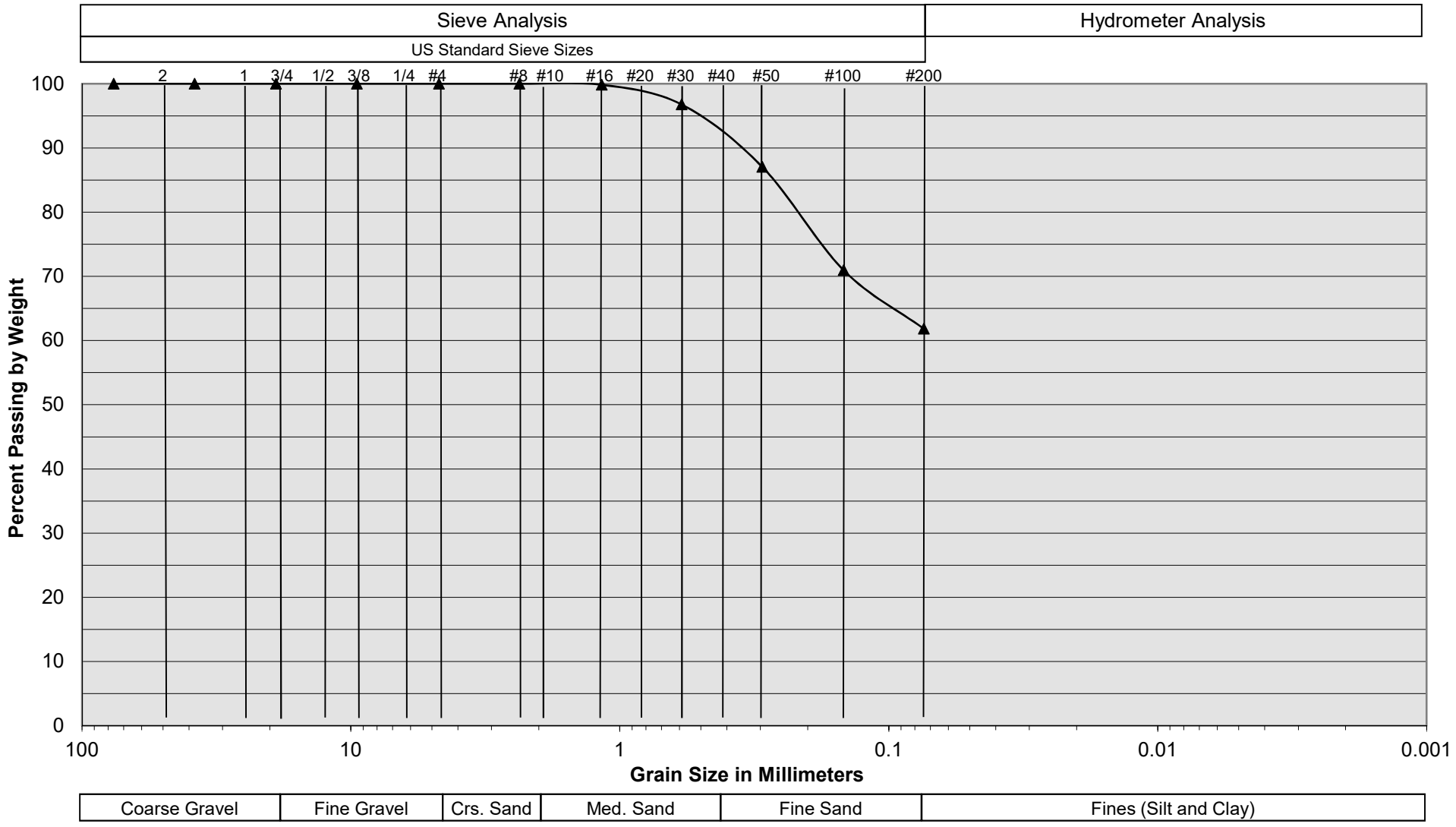


Sample Description	I-2 @ 10 feet
Soil Classification	Brown fine Sandy Clay, little medium Sand, trace Silt

Proposed Warehouse
Perris, CA
Project No. 18G160-2
PLATE C-2

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution

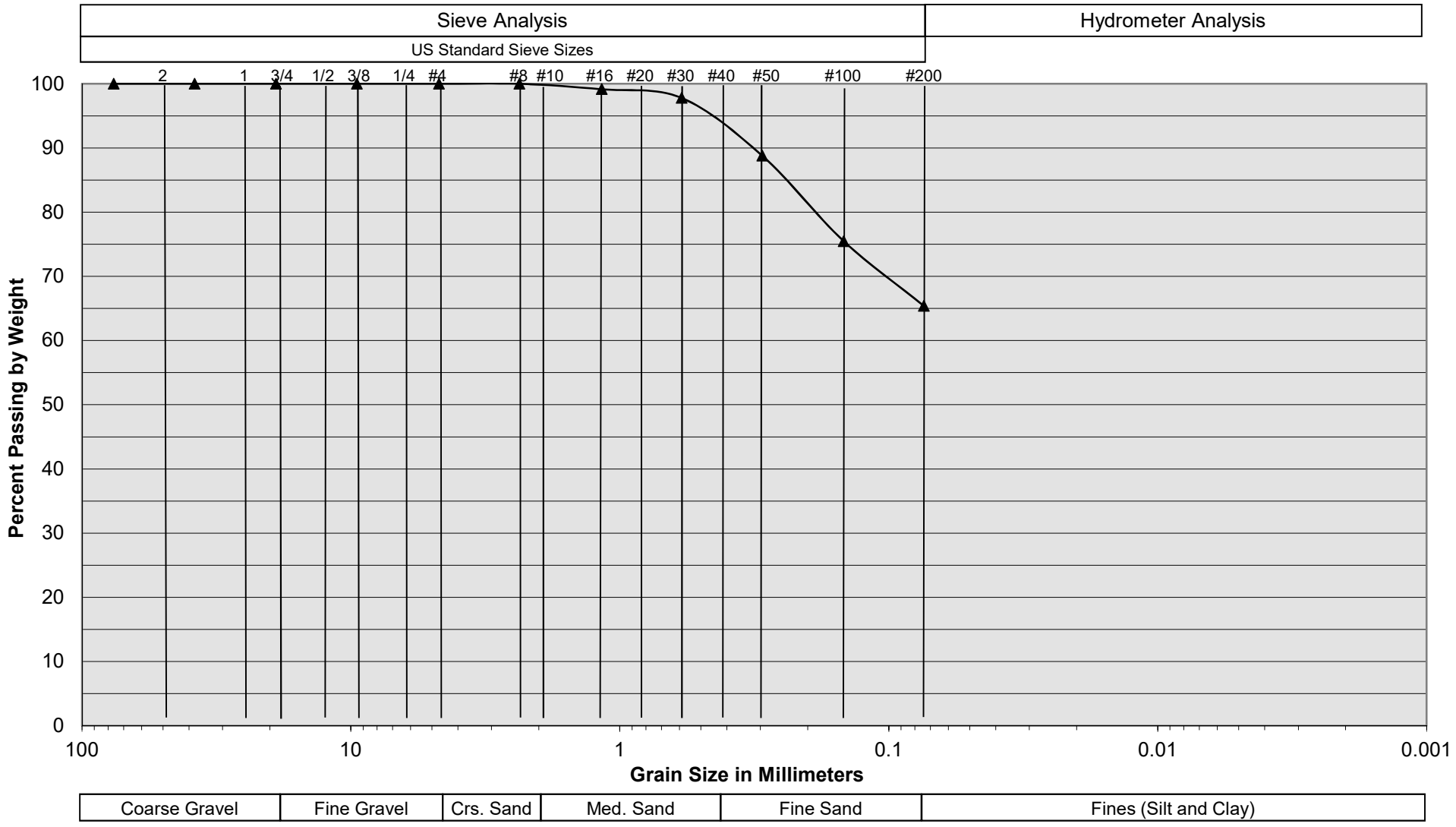


Sample Description	I-3 @ 5 feet
Soil Classification	Brown fine Sandy Clay, trace medium Sand

Proposed Warehouse
Perris, CA
Project No. 18G160-2
PLATE C-3

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution

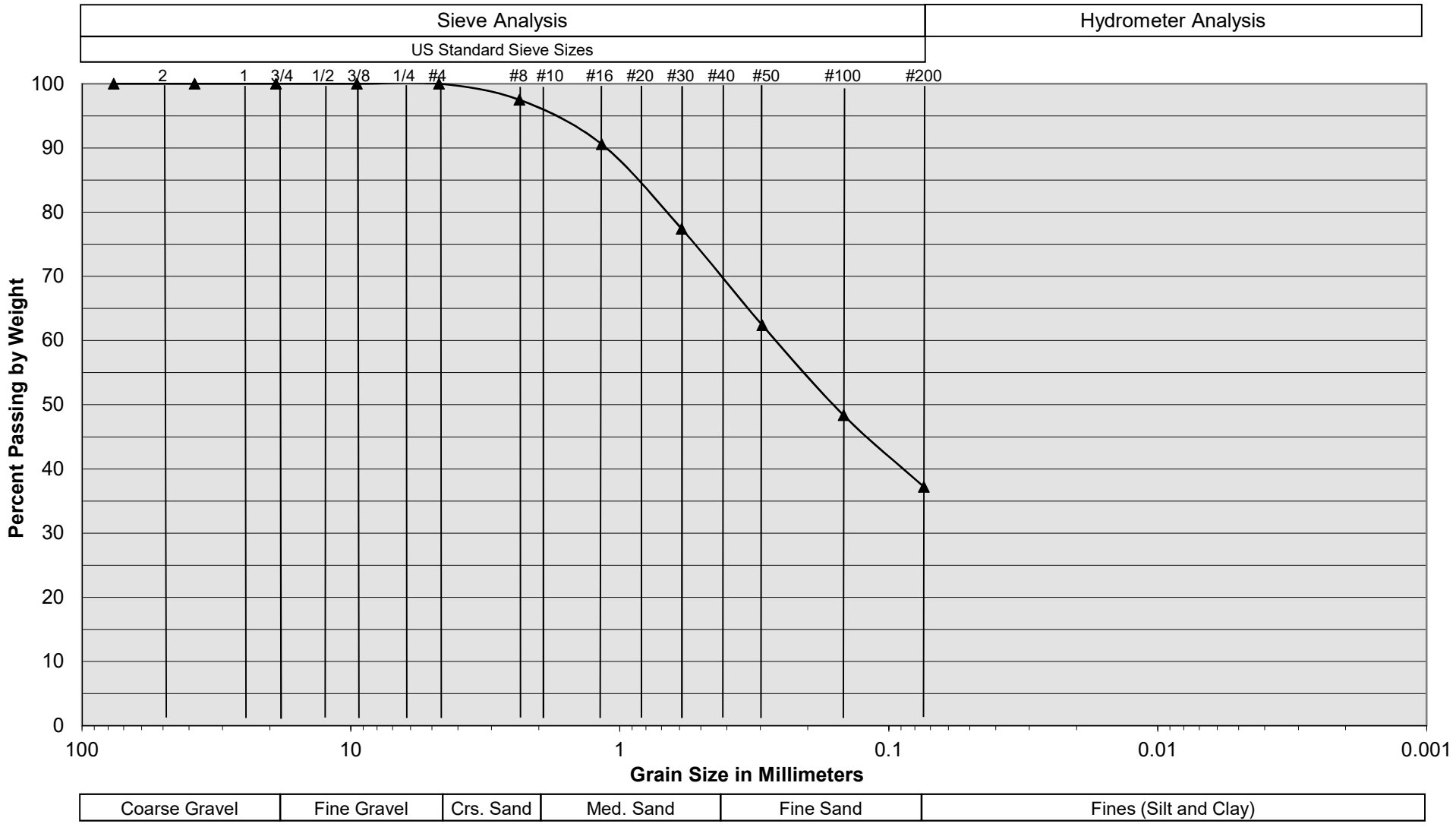


Sample Description	I-4 @ 5 feet
Soil Classification	Brown fine Sandy Clay, trace medium Sand, trace Silt

Proposed Warehouse
Perris, CA
Project No. 18G160-2
PLATE C-4

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution



Sample Description	I-5 @ 10 feet
Soil Classification	Brown Clayey fine to medium Sand, trace Silt

Proposed Warehouse
Perris, CA
Project No. 18G160-2
PLATE C-5

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

PHASE I ENVIRONMENTAL SITE ASSESSMENT

West Perry Street
Perris, California

Prepared For:

Duke Realty
200 Spectrum Center Drive, Suite 1600
Irvine, California 92618

Prepared By:

3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

July 24, 2018

TABLE OF CONTENTS

PAGE

LIST OF FIGURES ..... **iv**
LIST OF TABLES ..... **iv**
LIST OF APPENDICES ..... **iv**

EXECUTIVE SUMMARY ..... **v**

TERMINOLOGY ..... **vi**

LIST OF ACRONYMS ..... **vii**

1.0 INTRODUCTION **1-1**
1.1 Purpose 1-1
1.2 Scope of Services 1-1
1.3 Significant Assumptions 1-1
1.4 Limitations and Exceptions 1-2
1.5 Special Terms and Conditions 1-3
1.6 User Reliance 1-3
1.7 Data Gaps 1-3

2.0 SITE DESCRIPTION **2-1**
2.1 Site Location and Ownership 2-1
2.2 Current Uses and Improvements of Subject Property 2-1
2.3 Current Land Uses of Adjoining and Surrounding Properties 2-1

3.0 USER PROVIDED INFORMATION **3-1**

4.0 RECORDS REVIEW **4-1**
4.1 Physical Setting Sources 4-1
4.1.1 Topography 4-2
4.1.2 Geology and Soils 4-2
4.1.3 Hydrology and Hydrogeology 4-2
4.2 Environmental Record Review 4-2
4.2.1 Standard and Additional Environmental Record Sources 4-3
4.2.1 Subject Property Environmental Record Results 4-4
4.2.2 Adjacent and Surrounding Properties' Environmental Record Results 4-4
4.2.3 Environmental Liens Search 4-5
4.3 Historical Use Records 4-5
4.3.1 Aerial Photographs 4-6
4.3.2 Topographic Maps 4-6
4.3.3 City Directories 4-6
4.3.4 Fire Insurance Maps 4-6
4.3.5 Recorded Land Title Records 4-6
4.3.6 Building Permit Records 4-6

TABLE OF CONTENTS

PAGE

4.4 Record Review Findings 4-7

5.0 SITE RECONNAISSANCE 5-1
5.1 Hazardous Substances and Petroleum Products 5-1
5.2 Waste Generation, Storage, and Disposal 5-1
5.3 Underground Storage Tanks & Aboveground Storage Tanks 5-1
5.4 Polychlorinated Biphenyls (PCBs) and Oil-Containing Equipment 5-1
5.5 Other Observations 5-1
5.6 Findings from the Site Reconnaissance 5-2

6.0 INTERVIEWS 6-1

7.0 CONDITIONS OUTSIDE THE SCOPE OF ASTM E1527-13 7-1

8.0 CONCLUSIONS AND RECOMMENDATIONS 8-1

9.0 ENVIRONMENTAL PROFESSIONALS 9-1
9.1 Signatures of Responsible Environmental Professionals 9-1
9.2 Qualifications of Responsible Environmental Professionals 9-1

10.0 REFERENCES 10-1

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Site Plan

LIST OF TABLES

Table 2-1 Adjacent and Surrounding Properties
Table 3-1 User Provided Information
Table 4-1 Physical Setting Sources
Table 4-2 Summary of Environmental Database Information
Table 4-3 Historical Use Summary
Table 4-4 Historical City Directory Listings of the Subject Property

LIST OF APPENDICES

Appendix A Proposal
Appendix B Site Reconnaissance Photographs and Field Form
Appendix C User Questionnaire
Appendix D Environmental Data Resources Report
Appendix E Environmental Lien and Activity and Use Limitation Report
Appendix F Aerial Photographs
Appendix G Topographic Maps
Appendix H City Directories Report
Appendix I Fire Insurance Maps
Appendix J Building Permits Report

EXECUTIVE SUMMARY

Apex Companies, LLC (Apex) performed a Phase I Environmental Site Assessment (ESA) of the property located to the southeast of the West Perry Street and Barrett Avenue intersection in Perris, California (Subject Property) on behalf of Duke Realty (Duke). The Subject Property is comprised of four parcels identified as City of Perris Assessor's Parcel Numbers (APNs) 302-060-011, 302-060-026, 302-060-030, and 302-060-031. The approximately 7.25-acre Subject Property is undeveloped land. The objective of this ESA was to identify recognized environmental conditions (RECs) in connection with the Subject Property.

Apex performed this ESA in accordance with the proposal dated June 12, 2018 and the American Society and Testing Materials (ASTM) E1527-13 and the U.S. Environmental Protection Agency's Standards and Practices for All Appropriate Inquiries, 40 CFR 312. The findings, opinions and conclusions of this ESA are for the confidential and exclusive use of Duke, its affiliates, employees, agents, successors, and assigns. Reliance on this report for any use by parties other than specifically stated is prohibited without the express written consent of Apex and Duke, and such use is at the sole risk of the User. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

Based on historical information reviewed, the Subject Property was shown as agricultural land from at least 1938 to 1967. The historic usage of the subject property as cultivated agricultural land for at least 29 years likely included the application of pesticides and herbicides, as well as the potential application of nitrate containing fertilizers, for that period of time. Apex considers the historic usage of the Subject Property a REC.

Based on these findings, Apex recommends conducting a Phase II Environmental Site Assessment consisting of collecting shallow soil samples for analysis of pesticides and herbicides to determine impacts from historical agricultural use.

TERMINOLOGY

This section contains definitions for technical terms used in the report. Italicized terms are defined in the American Society and Testing Materials (ASTM) Standard Practice E 1527-13 and provided below for easy reference.

Recognized Environmental Condition (REC): "The presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

Historical Recognized Environmental Condition (HREC): "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a HREC, the environmental professional (EP) must determine whether the past release is a REC at the time the Phase I Environmental Site Assessment (ESA) is conducted (for example, if there has been a change in regulatory criteria). If the EP considers the past release to be a REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a REC."

Controlled Recognized Environmental Condition (CREC): "A REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by the regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the EP to be a CREC shall be listed in the findings section of the Phase I ESA report, and as a REC in the conclusions section of the Phase I ESA report."

De minimis condition: "A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis conditions* are not *RECs* nor *controlled recognized environmental conditions*."

Business Environmental Risk: "A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations."

Data Gap: " A lack of or inability to obtain information required by this practice despite good faith efforts by the EP to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

LIST OF ACRONYMS

AAI	All Appropriate Inquiries
APEX	Apex Companies, LLC
APN	Assessor's Parcel Number
AST	Aboveground Storage Tank
AUL	Activity and Use Limitations
ASTM	American Society and Testing Materials
CFR	Code Federal of Regulations
CREC	Controlled Recognized Environmental Condition
CUPA	Certified Unified Program Agency
Duke	Duke Realty
ECHO	Enforcement & Compliance History Information
EDR	Environmental Data Resources, Inc.
EMI	Emission Inventory Data
EP	Environmental Professional
EPA	Environmental Protection Agency
ESA	Phase I Environmental Site Assessment
ESL	Environmental Screening Level
ft bgs	Feet Below Ground Surface
FEMA	Emergency Management Agency
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
FWS	Fish and Wildlife Services
HAZMAT	Hazardous Material

HAZNET	Hazardous Waste Information System
HIST LUST	Historical Leaking Underground Storage Tank
HREC	Historical Recognized Environmental Condition
HWP	EnviroStor Permitted Facilities Listing
LUST	Leaking Underground Storage Tank
mg/kg	milligram per kilogram
NPDES	National Pollutant Discharge Elimination System
PCB	Polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
NON-GEN/NLR	Non-Generator / No Longer Regulated
REC	Recognized Environmental Condition
SLIC	Spills, Leaks, Investigation, and Cleanup
SQG	Small Quantity Generator
SWEEPS	Statewide Environmental Evaluation and Planning System
USDA-NRCS	United States Department of Agriculture; Natural Resources Conservation Service
USGS	United States Geological Society
UST	Underground Storage Tank

1.0 INTRODUCTION

1.1 Purpose

Apex Companies, LLC has prepared this Phase I Environmental Site Assessment (ESA) at the request of the Duke Realty (Duke) to identify recognized environmental conditions (RECs) that may pose potential environmental risks associated with the Subject Property, located to the southeast of the West Perry Street and Barrett Avenue intersection in Perris, California.

1.2 Scope of Services

This ESA was conducted in good commercial and customary practice by utilizing the American Society and Testing Materials (ASTM) E1527-13 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and the U.S. Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (AAI), 40 CFR, Part 312. The scope of services performed were in accordance with the proposal dated May 3, 2018 in **Appendix A** and included evaluation of the following:

- Environmental databases to determine the likelihood of current and historical releases of hazardous substances and petroleum through storage, treatment, and/or disposal on or near the Subject Property where migration could occur;
- Subject Property's history through prior reports on the GeoTracker database, interviews, historical aerial photographs, topographic maps, fire insurance maps, city directories, building permits, and the preliminary title report provided by the User;
- The Subject Property's current conditions by conducting an on-site survey of the Subject Property and visual evaluation of surrounding properties, and conducting interviews with representatives of regulatory agency(s), current property owner/operator, and/or consultants for owner/operator, and;
- Physical characteristics of the Subject Property including hydrologic and soil data through available environmental files from local agencies including California Regional Water Quality Control Board, California Department of Toxic Substances Control, the City of Ontario, San Bernardino County Division of Environmental Health Services, and other appropriate agencies.

Any *RECs, historical RECs* (HREC) or *controlled RECs* (CREC), as defined by ASTM E1527-13, that were identified during the assessment are discussed in the findings and conclusions sections of this report.

1.3 Significant Assumptions

Apex has performed the historical and environmental record searches in accordance with current ASTM and industry practice. The data, findings, and conclusions presented in this ESA are based upon a detailed search, review, and analysis of the documents and interviews as well as

observations made during the site reconnaissance. Conclusions reached regarding the conditions of the Subject Property do not represent a warranty that all areas within the Subject Property are of a similar quality as may be inferred from observable conditions and available history of the Subject Property. As stated in the ASTM Standard, no ESA can wholly eliminate uncertainty regarding the potential for environmental liability in connection with the Subject Property. Apex's evaluation and analysis are intended to reduce, not eliminate, the potential for conditions that result in liability for the User of this ESA.

1.4 Limitations and Exceptions

This report was prepared as a result of a contractual agreement that defined the approach and scope of services to be employed during the course of the investigation. The opinions and conclusions expressed in this study have been based strictly on the results of these contracted services. The scope of this ESA is intended to aid in the evaluation of RECs. The services provided by Apex should not be construed as a warranty or guarantee that no RECs exist at the Subject Property or that all RECs have been uncovered. No conclusions are stated or implied concerning the suitability of the Subject Property for its eventual use. This document is not intended for purposes other than those expressly set forth herein or for use by parties other than for whom it has been prepared.

As outlined in the ASTM Standard for ESAs and Apex's scope of work, this project was non-intrusive in nature and did not include any sampling or testing of soils, groundwater, surface water, or other materials. Additionally, unless specifically described in this report, Apex's scope of work explicitly excluded issues that are outside the scope of ASTM E1527-13 which would constitute a business environmental risk as defined by ASTM. The ASTM Standard Practice E1527-13 recognizes, but not limited to, the following inherent limitations for this ESA:

- Uncertainty is Not Eliminated - 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, and this practice recognizes reasonable limits of time and cost.
- Not Exhaustive - All Appropriate Inquiry does not mean an exhaustive assessment of a property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions.
- Level of Inquiry Is Variable - Not every property will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of environmental site assessment will be guided by the type of property, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry.

In general, the EPA does not regulate indoor air quality except to the extent that indoor air impacts are caused by releases of hazardous substances into subsurface soil or groundwater (vapor intrusion). ASTM E1527-13 defines "migrate" and "migration" as referring to the movement of hazardous substances or petroleum products in any form, including solid and liquid at the surface or

subsurface, and vapor in the subsurface. Vapor migration in the subsurface is described in Guide E2600 – Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions; however, nothing in ASTM E1527-13 requires application of the Guide E2600 to achieve compliance with all appropriate inquiries.

An ESA completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction, is presumed to be valid. An ESA meeting or exceeding this practice and for which the information was collected or updated within one year prior to the date of the intended transaction, may be used provided that the following components of the ESA were conducted or updated within 180 days of the date of purchase or the date of the intended transaction:

- interviews with owners, operators, and occupants;
- searches for recorded environmental cleanup liens;
- reviews of federal, tribal, state, and local government records;
- visual inspections of the property and of adjoining properties, and;
- the declaration by the environmental professional responsible for the assessment or update.

1.5 Special Terms and Conditions

This project was performed in accordance with the scope of work, terms and conditions and limitations stated in the proposal dated June 12, 2018 (**Appendix A**), and as stated in this report. There are no other special terms or conditions concerning this project.

1.6 User Reliance

This report documents the ESA of the Subject Property performed by Apex in accordance with the proposal in **Appendix A** and in accordance with ASTM E1527-13 and the U.S. EPA Standards and Practices for All Appropriate Inquiries, 40 CFR 312. The findings, opinions and conclusions of this Phase I ESA are for the confidential and exclusive use of Duke, its affiliates, employees, agents, successors, and assigns. Reliance on this report for any use by parties other than specifically stated is prohibited without the express written consent of Apex and Duke, and such use is at the sole risk of the user.

1.7 Data Gaps

Available historical information enabled Apex to identify the first developed use of the property and at approximately five-year intervals to the present, such that significant data gaps were not encountered.

2.0 SITE DESCRIPTION

2.1 Site Location and Ownership

The Subject Property is located on the south side of West Perry Street, bounded by Barrett Avenue to the west, an unnamed drive to the south, and a residential property to the east, in the City of Perris, California (**Figure 1)**. The Subject Property is approximately 7.25 acres and is identified as City of Perris Assessor's Parcel Numbers (APNs) 302-060-011, 302-060-026, 302-060-030, and 302-060-031, and has no assigned address. According to the Environmental Lien Search Reports, APN 302-060-011 is owned by Christopher Gonzalez; APN 302-060-026 is owned by Pivovaroff Second Family; and APNs 302-060-030 and 302-060-031 are owned by Vera Pivovaroff Trustee.

2.2 Current Uses and Improvements of Subject Property

The subject property is undeveloped. Photographs taken during the Site Reconnaissance are located in **Appendix B** which show current uses and improvements of the Subject Property.

2.3 Current Land Uses of Adjoining and Surrounding Properties

The Subject Property is located in the Perris Valley Commerce Center zoned area consisting of commercial and light industrial land use area as shown on the Site and Adjacent Properties Plan, provided as **Figure 2**. Properties surrounding the Subject Property are primarily light industrial properties to the north, east, and southwest, and vacant land to the west and south (**Table 2-1**).

TABLE 2-1: Adjacent and Surrounding Properties

Direction	Description
North	West Perry Street with a commercial warehouse addressed as 4244 North Perris Boulevard beyond.
East	Light industrial properties.
South	Vacant land.
Southwest	Light industrial property addressed as 4111 Barrett Avenue.
West	Barrett Avenue with vacant land and Indian Avenue beyond.

3.0 USER PROVIDED INFORMATION

This section summarizes the information provided by the User, Duke Realty (Duke), for this Phase I Environmental Site Assessment (ESA). A User Questionnaire was prepared and sent to Duke to help retrieve the needed information and assist in gathering appropriate information that may help identify potential RECs on the property. The completed questionnaire was returned to Apex and a copy is provided in **Appendix C**. Mr. Bill Pivovaroff, the seller of the Subject Property completed the User Questionnaire. Information provided is summarized in **Table 3-1** and elsewhere in this report.

TABLE 3-1: User Provided Information

Data Type	Information Provided
Environmental Liens, AUL, Title Records	The Subject Property does not have an environmental lien or AUL.
Specialized User Knowledge	Mr. Pivovaroff indicated he had no specialized knowledge related to the property.
Commonly Known or Reasonably Ascertainable Information	No information provided.
Valuation Reduction for Environmental Issues	The User is responsible to perform the additional inquiries regarding purchase price to the fair market value of the Site.
Reason for Performing Phase I ESA	This Phase I ESA was performed at the request of Duke in anticipation of an acquisition involving the Subject Property, for the User to qualify for defenses to CERCLA liability, and as part of Duke's Due Diligence for the acquisition loan requirements.
Other User Provided Information	The User did not provide additional information regarding the Subject Property.

4.0 RECORDS REVIEW

This section summarizes all records obtained by Environmental Data Resources, Inc.(EDR) and reviewed by Apex to help identify RECs in connection with the Subject Property. The first section discusses the physical setting sources that will provide an understanding of the physical characteristics of the Subject Property and surrounding area. This important information will help determine likelihood of potential of contaminants migrating onto the Subject Property from surrounding properties with environmental contaminants. The next section reviews current and historical environmental records associated with the Subject Property and surrounding properties. Relevant listings will be discussed and reviewed for potential RECs. The section for historical use record review will follow to develop a history of the previous uses of the Subject Property and surrounding area to help identify RECs from past uses followed by a findings section where identified RECs and information is summarized. The full EDR report can be found in **Appendix D**.

4.1 Physical Setting Sources

Although the ASTM E1527-13 Standards only require a current U.S. Geological Survey (USGS) 7.5 Minute Topographic Map for analysis, that is not enough information to fully characterize the physical setting of the Subject Property. Apex utilized several sources to understand the physical properties of the Subject Property and surrounding area, as shown in **Table 4-1**. This information will determine the likelihood of hazardous substances and/or petroleum contaminants migrating from surrounding areas through the soil and groundwater onto the Subject Property. More importantly, it will also identify significant environmental record listings in the following sections that are upgradient of groundwater flow where the contaminants could migrate onto the Subject Property.

TABLE 4-1: Physical Setting Sources

Data Type	Data Source
Topography	2012 U.S. Geological Survey 7.5 -minute Topographic Map
Floodplain	Federal Emergency Management Agency, Flood Insurance Rate Map
Wetlands	Fish and Wildlife Service (FWS) National Wetlands Inventory (http://www.fws.gov/wetlands/data/mapper.HTML)
Soils	United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) (http://websoilsurvey.nrcs.usda.gov/app/)
Geology	Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

4.1.1 Topography

The United States Geological Survey (USGS), Perris, California Quadrangle 7.5-minute series topographic map was reviewed for this ESA. This map was published by the USGS in 2012. Based on a review of the topographic map, the Property is approximately 1,460 feet above mean sea level. The contour lines also indicate that the Subject Property area is sloping to the east. The nearest water body is the San Jacinto River and it is located approximately 1.5 miles southeast.

4.1.2 Geology and Soils

According to the USGS Groundwater Atlas of the United States, the site is located within the Pacific Border physiographic region of California. The Pacific Border physiographic province was formed by several coastal mountain ranges underlain by severely folded, faulted, commonly metamorphosed marine and continental sediments of the Cenozoic and Mesozoic ages.

Based on a review of the US Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) maps, the subject property is primarily underlain by the Exeter sandy loam series and Pachappa fine sandy loam series. The Exeter soil series consists of moderately deep to a duripan, moderately well drained soils that formed in alluvium mainly from granitic sources. The Pachappa soil series consists of well drained (minimal) Noncalcic Brown soils developed from moderately coarse textured alluvium.

4.1.3 Hydrology and Hydrogeology

The Subject Property does not have surface water bodies on the property or in the immediate vicinity. The nearest water body is the San Jacinto River and it is located approximately 1.5 miles southeast. The radius map within the EDR Report (**Appendix D**) contains layers from the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) and the FWS National Wetlands Inventory Map. This figure shows that the Subject Property is not located on a national or state wetland or within a 100-year or 500-year flood zone.

Groundwater flow beneath the Subject Property was determined using several sources on the California Water Resources Control Board's GeoTracker Database. The closest site with groundwater data is the Texaco Service Station cleanup project located at 4039 N Perris Blvd, Perris located approximately 900 feet southeast of the Subject Property. According to a Case Closure Summary dated May 7, 2009, the depth to groundwater was approximately 80.52 to 83.09 feet with a flow direction reported southwest.

4.2 Environmental Record Review

The purpose of the environmental record review is to identify any records that the Subject Property or adjacent/surrounding properties are currently or historically associated with. This information will help identify any RECs in connection with the Subject Property and whether the listed sites with environmental records have current or former releases of hazardous substances and/or petroleum products that may have the potential to migrate onto the Subject Property.

4.2.1 Standard and Additional Environmental Record Sources

Consistent with ASTM E1527-13, a search of federal, state, and tribal environmental record sources within the established minimum search distances was conducted for the Subject Property by Environmental Data Resources, Inc. (EDR) and provided to Apex for review. The records search is used to identify adjoining or surrounding properties within the minimum search distance that may have a REC, HREC, CREC, or a de minimis condition that may exist at the Subject Property in connection with the searched listing. Apex reviewed the listings provided in the EDR report and summarized significant listings below. A full list of databases searched for this review can be found in the EDR report in **Appendix D**.

Environmental record sources required by the ASTM standard are listed below in **Table 4-2** along with the additional database sources that were searched and produced a record result. Pertinent findings from the Record Review are discussed at the end of this section while significant findings as they pertain to RECs are discussed in **Section 4.4** and referenced in **Section 8.0**, Conclusions and Recommendations.

TABLE 4-2: Summary of Environmental Database Information

Environmental Record	Search Distance (Miles)	Off-site Listings within Search Distance	Subject Property Listed?
Standard Environmental Records Sources Required by ASTM E1527-13			
Federal National Priorities Sites List	1.0	0	No
Federal Delisted NPL Sites	1.0	0	No
Federal CERCLIS Sites	0.5	0	No
Federal CERCLIS NFRAP Sites	0.5	0	No
Federal RCRA CORRACTS Facilities	1.0	0	No
Federal RCRA Non-CORRACTS TSD Facilities List	0.5	0	No
Federal RCRA Generators List (RCRA-LQG, -SQG, -CESQG)	0.25	**3**	No
Federal Institutional Control / Engineering Control Registries (IC/EC)	0.5	0	No
Federal Emergency Response Notification System (ERNS) List	0.5	0	No
CA NPL Sites (CA RESPONSE)	1.0	0	No
CA CERCLIS Sites (CA ENVIROSTOR)	1.0	0	No
CA Landfill and Solid Waste Disposal Sites (CA SWF/LF)	0.5	0	No
CA Hazardous Waste and Substances Sites List (CORTESE, HIST CORTESE)	0.5	0	No

TABLE 4-2: Summary of Environmental Database Information			
Environmental Record	**Search Distance (Miles)**	**Off-site Listings within Search Distance**	**Subject Property Listed?**
CA Leaking Storage Tank (LUST) Sites: Regional Water Quality Control Board (RWQCB) List (LUST, HIST LUST, SLIC, INDIAN LUST)	0.5	**4**	No
CA Storage Tank List (FEMA UST, CA UST, CA AST, INDIAN UST)	0.25	**6**	No
CA Institutional Control / Engineering Control Registries: (CA DEED)	0.5	0	No
CA Voluntary Cleanup Sites (CA VCP, INDIAN VCP)	0.5	**0**	No
CA Brownfields Sites (CA BROWNFIELDS)	0.5	0	No
Additional State and Federal Record Sources			
CA Registered Storage Tanks (SWEEPS UST, HIST UST, FID)	0.25	**2**	No
CA Certified Unified Program Agency of Hazardous Materials and Waste Regulatory Program (CA CUPA)	0.5	0	No
CA Hazardous Waste Manifest Database (CA HAZNET)	0.5	0	No
Enforcement & Compliance History Information (ECHO)	0.001	0	No
Federal RCRA NonGen / NLR	0.25	**1**	No
Facility Index System (FINDS)	0.001	0	No
Hazardous Substance Cleanup Bond Act (CA BOND EXP. PLAN)	1.0	0	No
Permitted Hazardous Waste Facilities and Corrective Action (“cleanups”) (CA HWP)	1.0	0	No
Reported RWQCB Proposition 65 Incidents (CA NOTIFY 65)	1.0	0	No

4.2.1 Subject Property Environmental Record Results

The Subject Property was not listed in any databases in the EDR report. As such, Apex did not identify any RECs associated with its listings in the environmental databases.

4.2.2 Adjacent and Surrounding Properties’ Environmental Record Results

There are several listings in the EDR report for off-site facilities within the applicable ASTM search radii. Several of these listings (i.e., small quantity hazardous waste generators, registered and historical underground storage tanks [USTs], solid waste disposal sites, permitted hazardous waste facilities), by themselves, are not necessarily indicative of a contamination concern and, therefore, are not discussed herein and were not further evaluated for purposes of this assessment. A number

of facilities appear on databases indicating potential contamination concerns (e.g., ENVIROSTOR, Leaking Underground Storage Tank [LUST]; Spills, Leaks, Investigation, and Cleanup [SLIC]). Of the sites representing a potential environmental concern, Apex did not identify any sites located adjacent to or upgradient that would indicate an environmental risk to the Subject Property was present.

4.2.3 Environmental Liens Search

Environmental liens and AULs can commonly be found within recorded land title records (e.g., County Recorder/Registry of Deeds). The types of title reports that may disclose environmental liens and AULs include Preliminary Title Reports, Title Commitments, Condition of Title, and Title Abstracts. Chain-of-title reports will not normally disclose environmental liens or AULs. Environmental liens and AULs that are imposed by judicial authorities may be recorded or filed in judicial records only. An environmental lien report was provided to Apex for review. No environmental liens or AULs are associated with the Subject Property. The Environmental Lien and AUL Search Report is included in **Appendix E**.

4.3 Historical Use Records

Apex reviewed reasonably ascertainable records documenting the history of the use and/or ownership of the Subject Property and adjoining/surrounding properties. **Table 4-4** below summaries this historical use information. Further significant details of displayed uses in **Table 4-4** are summarized in this section by the source of which the information was obtained.

TABLE 4-3: Historical Use Summary

Period	Historical Uses		Source
	Subject Property	Surrounding Properties	
1901 – 1978	Vacant undeveloped agricultural land	Agricultural and residential uses	Aerial Photographs Topographic Maps Sanborn Maps City Directories
1978 – 2009	Vacant undeveloped land	Agricultural and residential uses to the north, south, and west, commercial and residual use to the east	Aerial Photographs Topographic Maps City Directories
2009 - Present	Vacant undeveloped land	Commercial, residential, and vacant//undeveloped land	Sanborn Map Topographic Maps Aerial Photographs City Directories

4.3.1 Aerial Photographs

Digital aerial photographs dated 1938, 1949, 1953, 1959, 1961, 1967, 1978, 1985, 1989, 1997, 2002, 2006, 2009, 2012, and 2016 provided by EDR were reviewed by Apex. Copies of aerial photographs can be found in **Appendix F**.

4.3.2 Topographic Maps

EDR provided historic topographic maps with coverage of the Subject Property dated 1901, 1942, 1943, 1953, 1967, 1973, 1979, and 2012. Because they show many man-made features not evident in photographs, historical topographic maps are useful in documenting the history of developments and land use features on many properties, particularly those in rural, unincorporated areas. Copies of these maps are included in **Appendix G**.

4.3.3 City Directories

EDR provided historic city directories for the years 1992, 2000, 2005, 2010, and 2014. Historical city directories, listed by street address, are frequently useful in documenting the historical occupancy of properties in urban or otherwise incorporated areas that have a significant history of developed commercial use. A copy of the City Directories Results is included as **Appendix H**. Surrounding property listings were also reviewed for historical dry cleaning, automotive, or trucking businesses. No previous businesses of concern were found in the area. No listings for the Subject Property were found. A summary of the city directory listings of the Subject Property are included in **Table 4-5** below.

4.3.4 Fire Insurance Maps

EDR did not find any fire insurance maps associated with the Subject Property. The certified Sanborn results as included in **Appendix I**.

4.3.5 Recorded Land Title Records

Information for all four parcels of the Subject Property on the EDR Environmental Lien and AUL Search report identified Greg & Martha Gonzalez as the owners of the 302-060-011 parcel prior to the current owner Christopher Gonzalez; Pivovaroff Thirs Family LP as the owner of the 302-060-026 parcel prior to the current owner Pivovaroff Second Family; and Vera Pivovaroff as the owner of the 302-060-030 and 302-060-031 parcels prior to the current owner Vera Pivovaroff Trustee. A copy can be found in **Appendix E.**

4.3.6 Building Permit Records

Building permit records can be used to identify structures and/or features of previous or current properties on the Subject Property and adjacent/surrounding properties. This information can be used to determine potential environmental concerns through the presence of USTs, sump pumps,

septic tanks and connection dates to sewer, electrical, water, and natural gas. The complete collection of Building Permit data available to EDR was searched and no building permits at the Subject Property was identified. A copy of the building permits report can be found in **Appendix J.**

4.4 Record Review Findings

Apex reviewed the available environmental and historical records for the Subject Property according to ASTM E1527-13 Standards.

Based on historical information reviewed, the Subject Property was shown as vacant undeveloped agricultural land from 1938 to 1967. The historic usage of the Subject Property as cultivated agricultural land for at least 29 years likely included the application of pesticides and herbicides, as well as the potential application of nitrate containing fertilizers, for that period of time. Apex considers the historic usage of the Subject Property a REC.

5.0 SITE RECONNAISSANCE

The Subject Property was inspected on July 11, 2018 by Apex representative, Erik Harz, a qualified environmental professional. Weather conditions at the time of the inspection were clear, with temperatures of approximately 90 degrees Fahrenheit. During the site reconnaissance, the Apex representative was unaccompanied. Site reconnaissance consisted of a walk-through of the Subject Property which was entirely accessible. Detailed information on the Site Reconnaissance can be found in **Appendix B** which contains photographs taken during the site walk and the field form used with detailed information on what was seen on the Subject Property. This section summarizes significant findings observed during the site inspection of the Subject Property.

5.1 Hazardous Substances and Petroleum Products

Apex did not find any evidence of hazardous substances or petroleum products on the Subject Property.

5.2 Waste Generation, Storage, and Disposal

Apex did not observe evidence of waste generation, storage, or disposal on the Subject Property. Apex did not find storage of regulated waste or biomedical waste.

5.3 Underground Storage Tanks & Aboveground Storage Tanks

Apex did not find any evidence of existing underground storage tanks (USTs) or aboveground storage tanks (ASTs) on the Subject Property.

5.4 Polychlorinated Biphenyls (PCBs) and Oil-Containing Equipment

Polychlorinated biphenyls (PCBs) are known to be a component in fluids used in electrical and hydraulic equipment, lubricating oils, paints and coatings manufactured prior to 1979. In the event of a leak or release of fluid or oil-containing equipment, the owner is responsible for remediation. A pole-mounted transformer was observed on the northeastern corner of the Subject Property. No evidence of releases or leaks was observed in the vicinity of this pole-mounted transformers. Apex does not consider the pole-mounted transformer a REC.

5.5 Other Observations

Apex did not find evidence of unusual odors, drums, wells, septic systems, stressed vegetation, concrete staining, pits, ponds, or lagoons on the Subject Property. Apex notes that the Subject Property was graded vacant land with tilled soil observed on the southern end of the Site.

5.6 Findings from the Site Reconnaissance

Apex did not identify anything from the Site Reconnaissance that would qualify as a REC for this Phase I Assessment.

6.0 INTERVIEWS

An individual knowledgeable about the Subject Property and adjoining property use was not provided to Apex.

7.0 CONDITIONS OUTSIDE THE SCOPE OF ASTM E1527-13

According to the ASTM E1527-13 Standards, Duke may conduct additional investigations to assess the in connection with the commercial real estate. Apex did not conduct any other additional assessments on the Subject Property that are outside the scope of ASTM E1527-13 Standards.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Apex performed this Phase I ESA in accordance with the U.S. Environmental Protection Agency's 40 CFR, Part 312 Standards and Practices for All Appropriate Inquiries (AAI) and ATSM E1527-13: "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" and the work order from Duke to Apex dated May 11, 2018. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. This assessment has revealed no evidence of RECs in connection with the Subject Property except for the following:

Based on historical information reviewed, the Subject Property was shown as agricultural land from at least 1938 to 1967. The historic usage of the subject property as cultivated agricultural land for at least 29 years likely included the application of pesticides and herbicides, as well as the potential application of nitrate containing fertilizers, for that period of time. Apex considers the historic usage of the Subject Property a REC.

Based on these findings, Apex recommends conducting a Phase II Environmental Site Assessment consisting of collecting shallow soil samples for analysis of pesticides and herbicides to determine impacts from historical agricultural use.

9.0 ENVIRONMENTAL PROFESSIONALS

9.1 Signatures of Responsible Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR Part 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Dan Hisey Project Scientist	Paisha Jorgensen. P.G. Principal Geologist

9.2 Qualifications of Responsible Environmental Professionals

Mr. Hisey has a Bachelor of Science Degree in Environmental Science and has been performing environmental assessments of commercial/industrial real estate for over fifteen years. Mr. Hisey is also an environmental professional as defined in § 312.10 of 40 CFR Part 312.

Mr. Jorgensen has 18 years of professional experience in the environmental consulting field. His responsibilities include managing and coordinating environmental assessments and remedial programs, including preparing cost proposals and work plans, permitting, scheduling, and performing related regulatory negotiation. He has extensive experience in field investigation activities, including initial site investigation, soil and groundwater sampling, soil logging, bedrock drilling, well installation and abandonment, dye tracer studies, and UST removal. His background includes having worked as a San Francisco Bay Regional Water Quality Control Board (SFRWQCB) regulator for nearly two years, during which time he provided regulatory oversight for cleanup actions at former military bases. Mr. Jorgensen is an environmental professional as defined in § 312.10 of 40 CFR Part 312.

10.0 REFERENCES

ASTM Designation E1527 – 13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. 2013.

California State Water Resources Control Board (SWRCB). GeoTracker data management system. 2015. http://www.geotracker.waterboards.ca.gov

Department of Toxic Substances Control (DTSC). Envirostor data management system. 2018. http://www.envirostor.dtsc.ca.gov

Environmental Data Resources, Inc. EDR Aerial Photo Decade Package. June 19, 2018

Environmental Data Resources, Inc. EDR Building Permit Report. June 18, 2018

Environmental Data Resources, Inc. The EDR City Directory Image Report. June 21, 2018

Environmental Data Resources, Inc. EDR Historical Topo Map Report. June 18, 2018

Environmental Data Resources, Inc. The EDR Radius Map Report with GeoCheck. June 18, 2018

Environmental Data Resources, Inc. The EDR Property Tax Map Report. June 18, 2018

Environmental Data Resources, Inc. Certified Sanborn Map Report, June 18, 2018

Environmental Data Resources, Inc. EDR Environmental Lien and AUL Search, July 2, 2018

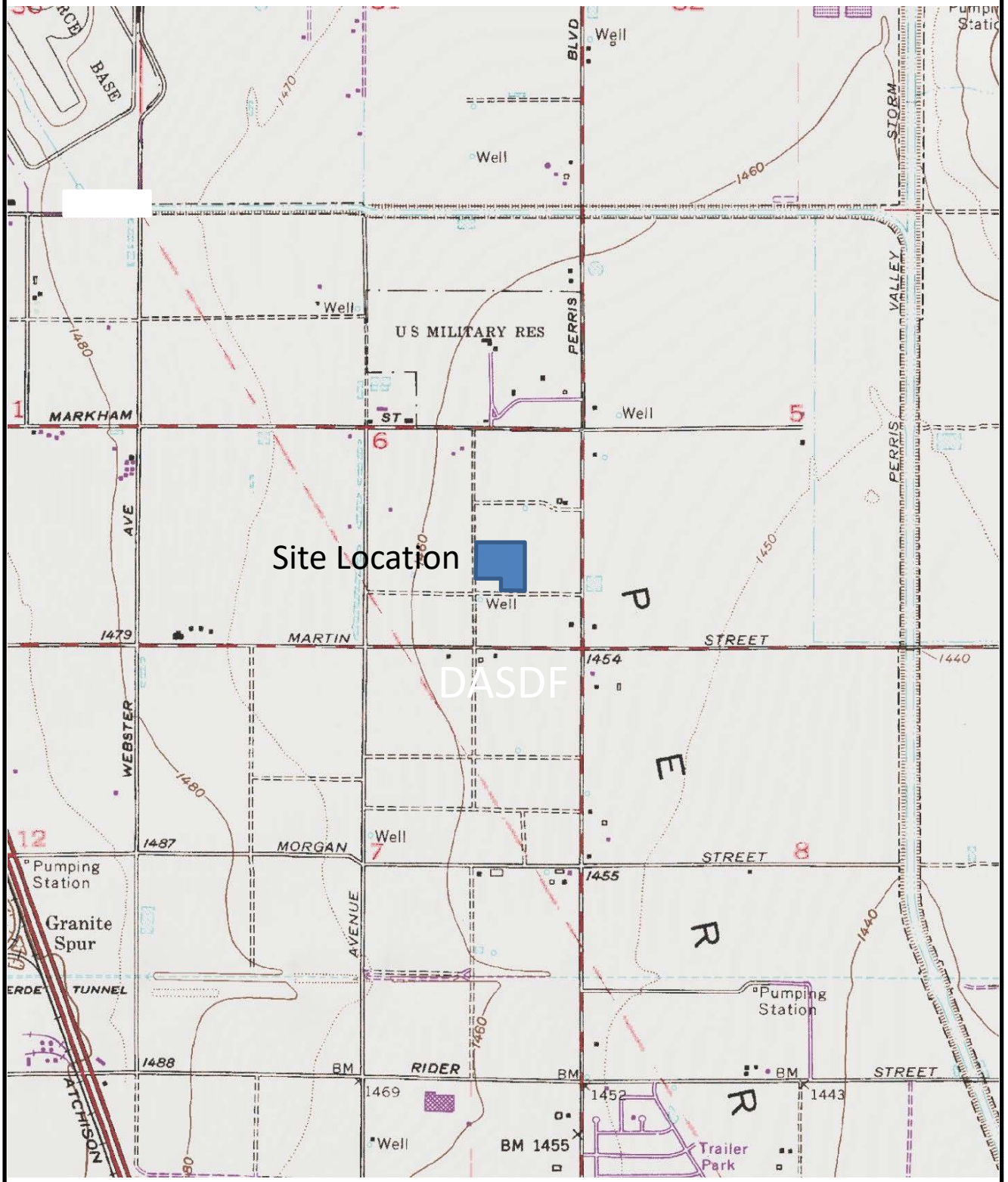
Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map

Fish and Wildlife Service (FWS) National Wetlands Inventory. 2018. http://www.fws.gov/wetlands/data/mapper.HTML

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS). http://websoilsurvey.nrcs.usda.gov/app/

FIGURES



APEX 3478 BUSKIRK AVENUE, SUITE 100 PLEASANT HILL, CA 94523	WEST PERRY STREET PERRIS, CA					SITE LOCATION MAP
	FILE NAME	DATE 7/18/18	DR. BY DH	APP. BY PJ	PROJECT # 093-DUKE-013	FIGURE # **1**

Figure 2
Site Plan

West Perry Street Property
Perris, CA

3478 Buskirk Avenue
Suite 100
Pleasant Hill, CA 94523
Telephone: (925) 951-5653

APEX

Legend

Subject property

Project: Phase I ESA

Client: Duke Realty

Apex Job #: 093-DUKE-013

APPENDIX A

PROPOSAL

APEX
Apex Companies, LLC
3478 Buskirk Avenue, Suite 100 • Pleasant Hill, CA 94523
P: (925) 944-2856 • F: (925) 944-2859

June 12, 2018

Mr. Adam Schmid
Duke Realty
200 Spectrum Center Drive, Suite 1600
Irvine, CA 92618

Subject: Proposal for Phase I Environmental Site Assessment
7.25-Acre Site, Perris, California

Dear Mr. Schmid:

In response to your request, Apex Companies, LLC (Apex), is pleased to submit this proposal to conduct an Phase I Environmental Site Assessment (ESA) for Duke Realty's (Duke) prospective purchase of the 7.25-acre property located to the southeast of the West Perry Street and Barrett Avenue intersection in Perris, California (the Subject Property). This proposal details the due diligence tasks that will be conducted.

Task 1 – Phase I Environmental Site Assessment

Apex will conduct a Phase I ESA of the Subject Property and vicinity to identify potential environmental concerns through the evaluation of (1) current conditions and environmental status, (2) history, and (3) setting based on the scope of services outlined below. The Phase I ESA will be conducted in conformance with the American Society and Testing Materials (ASTM) E 1527-13 and all appropriate inquiry (40 CFR § 312.2) standards.

Tasks to complete the Phase I ESA include, but are not limited to, the following:

- Review of environmental databases to obtain information concerning the current and historical usage, storage, treatment, and disposal of hazardous substances on and in the vicinity of the Subject Property;
- Review available files, as appropriate, from the California Regional Water Quality Control Board, California Department of Toxic Substances Control, California Department of Conservation Division of Oil, Gas, & Geothermal Resources, Riverside County, and City of Perris;
- Review of historical aerial photographs, topographic maps, fire insurance maps, and city directories;
- An on-site survey of the Subject Property and visual evaluation of surrounding properties;
- Conduct interviews with representatives of regulatory agency(s), current property owner/operator, and/or consultants for owner/operator; and

- Prepare draft Phase I ESA Report documenting findings for review by Duke prior to finalizing.

Apex's fee for completion of this task is **$5,500**.

Work will be billed as a lump sum in accordance with the existing consulting agreement between Apex and Duke.

Closing

Apex appreciates the opportunity to provide you with this proposal. Should you have any questions about the scope of work, costs, or any other issues, please call us at (925) 951-6380.

Sincerely,

Apex Companies, LLC

Paisha Jorgensen, P.G.
Principal Geologist

cc: Peter Fuller, Apex Companies, LLC

APPENDIX B

SITE RECONNAISSANCE PHOTOGRAPHS AND FIELD FORM

PHOTOGRAPH LOG

Project Name: West Perry Street
Project Number: 093-Duke-013

Client: Duke Realty
Location: Perris, California

Photo No: 1	
Photo Date: 07/11/2018	
Description: Northwestern corner of the Subject Property.	

Photo No: 2	
Photo Date: 07/11/2018	
Description: Eastern end of the Subject Property from the southeast looking north.	

APEX

PHOTOGRAPH LOG

Project Name: West Perry Street
Project Number: 093-Duke-013

Client: Duke Realty
Location: Perris, California

Photo No: 3 **Photo Date:** 07/11/2018 **Description:** Southern end of the Subject Property from the southeastern corner looking west.	

Photo No: 4 **Photo Date:** 07/11/2018 **Description:** Subject Property from the southeastern corner facing northwest.	

APEX

PHOTOGRAPH LOG

Project Name: West Perry Street
Project Number: 093-Duke-013

Client: Duke Realty
Location: Perris, California

Photo No: 5	
Photo Date: 07/11/2018	
Description: Northeastern corner of the Subject Property facing southwest. Note underground communication lines and aboveground power lines.	

Photo No: 6	
Photo Date: 07/11/2018	
Description: Subject Property from the northwestern corner facing southeast. Note aboveground power lines.	

APEX

PHOTOGRAPH LOG

Project Name: West Perry Street
Project Number: 093-Duke-013

Client: Duke Realty
Location: Perris, California

Photo No: 7	
Photo Date: 07/11/2018	
Description: Property located beyond West Perry Street to the north. Note above ground storage tank. Suspected use, fire suppression or water use.	

Photo No: 8	
Photo Date: 07/11/2018	
Description: Property located to the east.	

APEX

PHOTOGRAPH LOG

Project Name: West Perry Street
Project Number: 093-Duke-013

Client: Duke Realty
Location: Perris, California

Photo No: 9	
Photo Date: 07/11/2018	
Description: Western edge of Site, Barrett Avenue and undeveloped land to the west of the Subject Property	

Photo No: 10	
Photo Date: 07/11/2018	
Description: Pole-mounted transformer located on the northern end of the Subject Property.	

APEX

PHASE I ENVIRONMENTAL ASSESSMENT
Site Reconnaissance Form

Site Name:	7.25-Acre Site	**Site Address:**	West Perty Str
Date:	7/11/18		Perris, CA
Business Name:		**Business Address:**	Same
Personnel:	Erik Herz @ Apex		

Objective of the Reconnaissance:
The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying environmental conditions in connection with the property.

Section 1: General Site Settings

Property Uses

Current Site Uses of Property: No evidence of current use. Site is a barren but graded field. Evidence of tiling on south end of site

Past Site Uses of the Property: Assumed Agriculture. Residential property adjacent to site

General Description of Structures:

	Y	N	
Number of Buildings/Stories:	☐	☒	Description:
Approximate Age of Buildings:	☐	☒	Description:
Ancillary Structures:	☐	☒	Description:
Unoccupied Occupant Spaces?	☐	☒	Description:
Evidence of Former Structures:	☐	☒	Description: No evidence
Above ground storage tanks:	☐	☒	Content:
			Location:
			Capacity: Age:
Underground storage tanks:	☐	☒	Content:
			Location:
			Capacity: Age:
Vent pipes or fill pipes:	☐	☒	Description:
Odors:	☐	☒	Description:

PHASE I ENVIRONMENTAL ASSESSMENT
Site Reconnaissance Form

Roads:

Names of adjoining roads: W. Perry Street

Location of adjoining roads: North of Site

Roads or paths with no apparent outlet: Y [X] N [ ] Description: Spur road on W Perry St, running south, west of site

Parking facilities on the property: Y [ ] N [X] Description: _____

Additional observations: _____

Utilities:

Potable Water Supply Source: lateral supply on Perry St

Sewage Disposal System: No

Approximate Age of Sewage Disposal System: NA

Electrical Source: overhead High Voltage lines, underground communication

Gas (piped natural vs propane): Not observed

Additional observations: overhead power bounding North & western edge of property. Underground communication lines bounding North and west edge of property

Geologic, Hyrogeologic, and Topographical Conditions:

Visual and/or physical observations: Flat graded surface. Tilled soil to South

Section 2: Exterior Observations

	Y	N	
Pools of Liquid:	☐	☒	Description:
Drums:	☐	☒	Content: / Leaking: Y ☐ N ☐
5-gallon Buckets:	☐	☒	Content: / Leaking: Y ☐ N ☐
Odors:	☐	☒	Description:
Unidentified Substance Containers:	☐	☒	Description: / Leaking: Y ☐ N ☐
PCBs in Lighting or Hydraulic Equipment:	☐	☒	Description: High Voltage lines West/North small transformer
Pits, Pools, or Lagoons:	☐	☒	Description:
Stained Soil or Pavement:	☐	☒	Description:
Stressed Vegetation:	☐	☒	Description:
Solid Waste Disposal:	☐	☒	Description:
Waste Water Discharge Points (septic, sewer, ditches):	☐	☒	Description:
Wells (dry, irrigation, injection, and abandoned wells)	☐	☒	Description:
Septic Systems:	☐	☒	Description:
Retention Basin:	☐	☒	Description: / Source: / Location: / Receive off-site drainage? Y ☐ N ☒
Filled or re-graded areas:	☐	☒	Description:

Additional observations: _____

Section 4: Adjacent & Surrounding Properties

Adjoining Property Observations:

Current Uses of Adjoining Property:

North: Warehouse distribution facility. Large AST - Appears to be for water use

East: Residential. Fenced. Cars stored in rear behind fence No evidence of staining or USTs

South: Residential buildings on southwest. open land to south

West: Road. Empty land west of road to another road.

Past Uses of Adjoining Property: Unknown.

Pits, Pools, or Lagoons: ☐ ☒ Description: _____

Waste Water (e.g. drains, ditches, streams): ☐ ☑ Description: _____

Additional observations: _____

Surrounding Area Observations:

General Use of Surrounding Area (e.g. residential, commercial, industrial): Warehouse + agricultural, and residential

Additional observations: _____

APPENDIX C

USER QUESTIONNAIRE

APEX

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Property Location: Perry and Barrett, Perris, California
Project Number: 093-DUKE-013

(Please circle your answer and explain any yes answers in the space provided below each question. Please also provide copies of any supporting information, permits, or reports if possible.)

Owner / Site Manager

To the best of your knowledge:

1) Was the property used for industrial purposes in the past? Yes (No) Unknown

2) Was the property used as gas station, for motor repair, printing, plating, dry cleaning, laboratory, junkyard, landfill, recycling, or waste treatment? If yes, have there been any unauthorized release(s) of chemicals associated with such past use? Yes (No) Unknown

3) Are there or have there been any discarded automobiles, batteries, pesticides, paints, or other chemicals over 5 gallons on the property? Yes (No) Unknown

4) Are there or were there any industrial 55 gallon drums or sacks of chemicals at facility in the past? Yes (No) Unknown

5) Has fill dirt been brought in? Yes (No) Unknown

6) Are there or have there been pits, ponds, or lagoons used for waste treatment? Yes (No) Unknown

7) Are there or have there been any above or below ground storage tanks? Yes (No) Unknown

8) Is there a well on the property? If yes, do you have test results? Yes (No) Unknown

9) Does you have knowledge of environmental liens, or governmental notifications relating to past or recurring violations of environmental laws with respect to the property? Yes (No) Unknown

10) Have you been informed of the current or past existence of hazardous substances or petroleum products with respect to the property? Yes (No) Unknown

APEX

11) Have you been informed of the current or past existence of environmental violations with respect to the property? Yes (No) Unknown

12) Have you been informed of any environmental assessments of the property indicating the presence of hazardous substances or petroleum products? Yes (No) Unknown

13) Do you know of any past threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance involving the property? Yes (No) Unknown

14) Does or has the property discharge waste water (not including sanitary or storm sewer) onto or adjacent to the property? Yes (No) Unknown

15) Do you have knowledge that any hazardous substance or petroleum product, unidentified waste, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade on the property? Yes (No) Unknown

16) Is there a transformer, capacitor, or hydraulic equipment for which there are any records indicating the presence of PCBs? Yes (No) Unknown

17) Are there lead- or asbestos-containing materials on the property? Yes (No) Unknown

The Owner/Site Manager questionnaire was completed by:

Name: Bill Pivovaroff Phone: (562) 882-3745

Title: General Partner Date: 7/10/18

Firm: _____

Relationship to site: Owner

Address: 16202 Alpine Pl., La Mirada, CA 90638

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct, and no material facts have been suppressed or miss-stated.

Owner Signature: _____ Date: 7-10-2018

Consultant Signature: _____ Date: _____

APPENDIX D

ENVIRONMENTAL DATA RESOURCES REPORT

7.25-Acre Site
West Perry Street and Barrett Avenue
Perris, CA 92571

Inquiry Number: 5336054.2s
June 18, 2018

The EDR Radius Map™ Report with GeoCheck®

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

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	36
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-13
Physical Setting Source Map Findings	A-15
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.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2018 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

WEST PERRY STREET AND BARRETT AVENUE
PERRIS, CA 92571

COORDINATES

Latitude (North):	33.8473840 - 33° 50' 50.58''
Longitude (West):	117.2293550 - 117° 13' 45.67''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	478781.2
UTM Y (Meters):	3745064.2
Elevation:	1460 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5641330 PERRIS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
WEST PERRY STREET AND BARRETT AVENUE
PERRIS, CA 92571

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	EMWD PERRY WELL #56	303 PERRY ST	RCRA-SQG, FINDS	Higher	753, 0.143, WNW
A2	SAFAR & SAFAR BROTHE	4040 N PERRIS BLVD	UST	Lower	798, 0.151, SE
B3	LOWE'S #966	3984 INDIAN AVE	AST	Higher	872, 0.165, SSW
B4	LOWES RDC #966	3984 INDIAN AVENUE	RCRA-LQG, FINDS, ECHO	Higher	872, 0.165, SSW
A5	TESORO (SHELL) 68585	4039 N PERRIS BLVD	UST	Lower	926, 0.175, SE
A6	TEXACO SERVICE STATI	4039 N PERRIS	LUST, RCRA NonGen / NLR, FINDS, ECHO, HAZNET	Lower	926, 0.175, SE
C7	MOBIL #18-BLN	3995 PERRIS BLVD	SWEEPS UST, CA FID UST	Lower	1084, 0.205, SE
C8	MOBIL STATION #18-BL	3995 PERRIS BLVD	UST	Lower	1084, 0.205, SE
C9	MOBIL #18-BLN	3995 NORTH PERRIS BL	LUST	Lower	1201, 0.227, SE
C10	MOBIL #18-BLN	3995 N PERRIS BLVD	LUST, CHMIRS	Lower	1201, 0.227, SE
C11	MOBIL #18-BLN	3995 N PERRIS BLVD.	LUST	Lower	1201, 0.227, SE
C12	EXXON MOBIL OIL COPR	3995 N PERRIS BLVD	RCRA-LQG, UST, FINDS	Lower	1201, 0.227, SE
13	JIFFY LUBE #3294	118 E RAMONA EXPRESS	AST	Lower	1317, 0.249, ESE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---- State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ---- EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ---- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing
VCP ---- Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ---- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs

Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register
CERS HAZ WASTE ---- CERS HAZ WASTE

Local Lists of Registered Storage Tanks

HIST UST ---- Hazardous Substance Storage Container Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem

US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
ECHO ---- Enforcement & Compliance History Information
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
UXO ---- Unexploded Ordnance Sites
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
CA BOND EXP. PLAN ---- Bond Expenditure Plan
Cortese ---- "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings ---- CUPA Resources List
DRYCLEANERS ---- Cleaner Facilities
EMI ---- Emissions Inventory Data
ENF ---- Enforcement Action Listing
Financial Assurance ---- Financial Assurance Information Listing
HAZNET ---- Facility and Manifest Data
ICE ---- ICE
HIST CORTESE ---- Hazardous Waste & Substance Site List
HWP ---- EnviroStor Permitted Facilities Listing
HWT ---- Registered Hazardous Waste Transporter Database
MINES ---- Mines Site Location Listing
MWMP ---- Medical Waste Management Program Listing
NPDES ---- NPDES Permits Listing
PEST LIC ---- Pesticide Regulation Licenses Listing
PROC ---- Certified Processors Database
Notify 65 ---- Proposition 65 Records
UIC ---- UIC Listing
WASTEWATER PITS ---- Oil Wastewater Pits Listing
WDS ---- Waste Discharge System
WIP ---- Well Investigation Program Case List
OTHER OIL GAS ---- OTHER OIL & GAS (GEOTRACKER)
NON-CASE INFO ---- NON-CASE INFO (GEOTRACKER)
MILITARY PRIV SITES ---- MILITARY PRIV SITES (GEOTRACKER)
CERS ---- CERS
PROJECT ---- PROJECT (GEOTRACKER)
PROD WATER PONDS ---- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---- SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ ---- Well Stimulation Project (GEOTRACKER)
UIC GEO ---- UIC GEO (GEOTRACKER)
CIWQS ---- California Integrated Water Quality System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---- Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/11/2017 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOWES RDC #966	***3984 INDIAN AVENUE***	***SSW 1/8 - 1/4 (0.165 mi.)***	***B4***	***11***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
EXXON MOBIL OIL COPR	***3995 N PERRIS BLVD***	***SE 1/8 - 1/4 (0.227 mi.)***	***C12***	***34***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EMWD PERRY WELL #56	***303 PERRY ST***	***WNW 1/8 - 1/4 (0.143 mi.)***	***1***	***8***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEXACO SERVICE STATI	***4039 N PERRIS***	***SE 1/8 - 1/4 (0.175 mi.)***	***A6***	***19***
Database: LUST, Date of Government Version: 03/12/2018 Database: RIVERSIDE CO. LUST, Date of Government Version: 04/05/2018 Status: Completed - Case Closed Facility Id: 200723493 Global Id: T0606524504 Facility Status: 9				
MOBIL #18-BLN	3995 NORTH PERRIS BL	SE 1/8 - 1/4 (0.227 mi.)	C9	30
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606505176				
MOBIL #18-BLN	***3995 N PERRIS BLVD***	***SE 1/8 - 1/4 (0.227 mi.)***	***C10***	***31***
Database: RIVERSIDE CO. LUST, Date of Government Version: 04/05/2018 Facility Id: 200117733 Facility Status: 9				
MOBIL #18-BLN	3995 N PERRIS BLVD.	SE 1/8 - 1/4 (0.227 mi.)	C11	32
Database: LUST, Date of Government Version: 03/12/2018 Status: Completed - Case Closed Global Id: T0606505176				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFAR & SAFAR BROTHE	4040 N PERRIS BLVD	SE 1/8 - 1/4 (0.151 mi.)	A2	10
Database: UST, Date of Government Version: 03/12/2018 Database: RIVERSIDE CO. UST, Date of Government Version: 04/05/2018				
TESORO (SHELL) 68585	4039 N PERRIS BLVD	SE 1/8 - 1/4 (0.175 mi.)	A5	19
Database: UST, Date of Government Version: 03/12/2018 Database: RIVERSIDE CO. UST, Date of Government Version: 04/05/2018 Facility Id: 753 Facility Id: FA0019645				
MOBIL STATION #18-BL	3995 PERRIS BLVD	SE 1/8 - 1/4 (0.205 mi.)	C8	29
Database: UST, Date of Government Version: 03/12/2018				

Facility Id: 512

EXXON MOBIL OIL COPR	***3995 N PERRIS BLVD***	***SE 1/8 - 1/4 (0.227 mi.)***	***C12***	***34***

Database: UST, Date of Government Version: 03/12/2018
Database: RIVERSIDE CO. UST, Date of Government Version: 04/05/2018
Facility Id: FA0036723

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOWE'S #966	3984 INDIAN AVE	SSW 1/8 - 1/4 (0.165 mi.)	B3	10

Database: AST, Date of Government Version: 07/06/2016

Lower Elevation	Address	Direction / Distance	Map ID	Page
JIFFY LUBE #3294	118 E RAMONA EXPRESS	ESE 1/8 - 1/4 (0.249 mi.)	13	35

Database: AST, Date of Government Version: 07/06/2016

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: 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. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #18-BLN	***3995 PERRIS BLVD***	***SE 1/8 - 1/4 (0.205 mi.)***	***C7***	***28***

Status: A
Tank Status: A
Comp Number: 39996

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL #18-BLN	***3995 PERRIS BLVD***	***SE 1/8 - 1/4 (0.205 mi.)***	***C7***	***28***

Facility Id: 33007030
Status: A

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

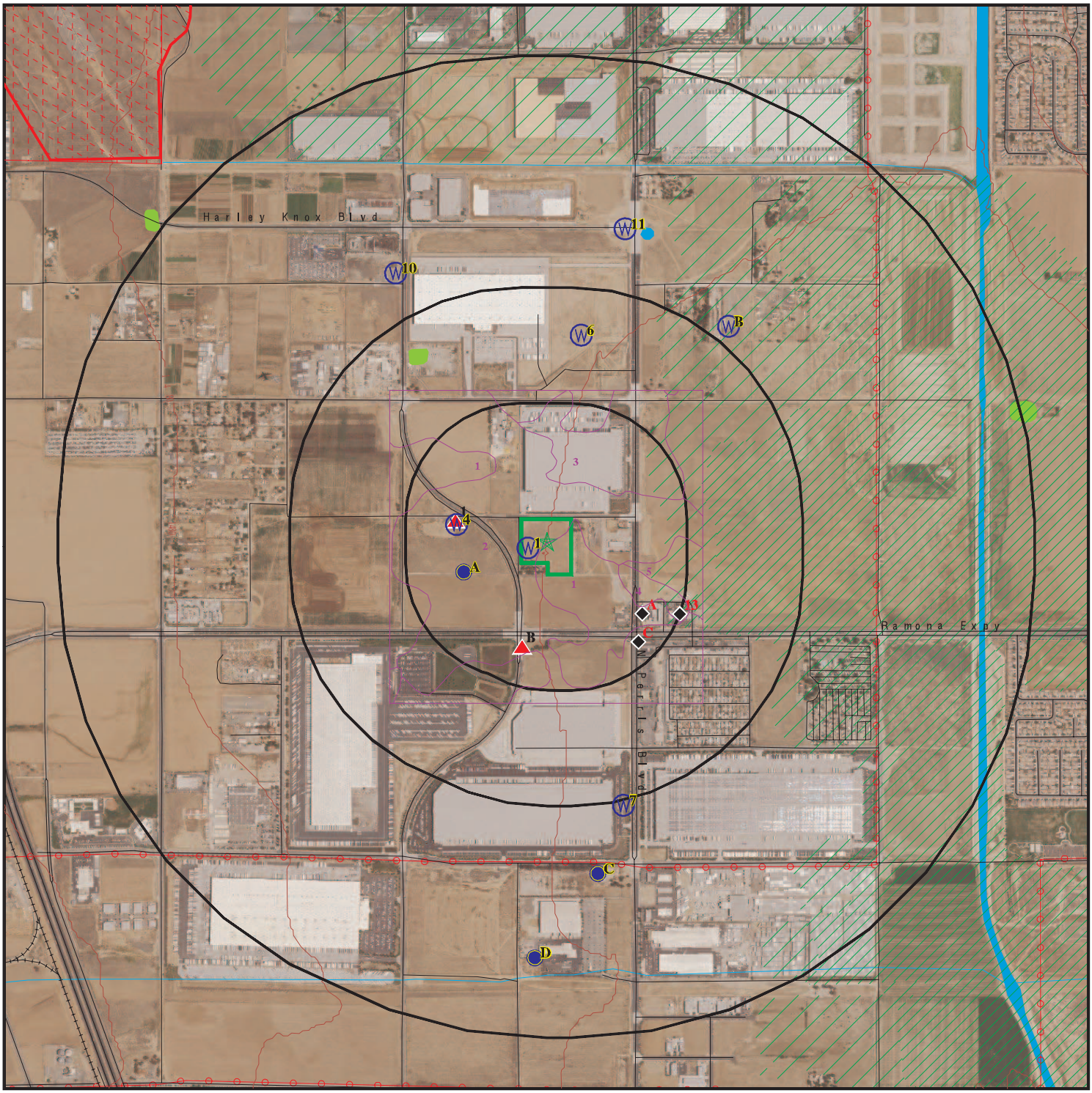
A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEXACO SERVICE STATI	***4039 N PERRIS***	***SE 1/8 - 1/4 (0.175 mi.)***	***A6***	***19***

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5336054.2S



0 1/4 1/2 1 Miles

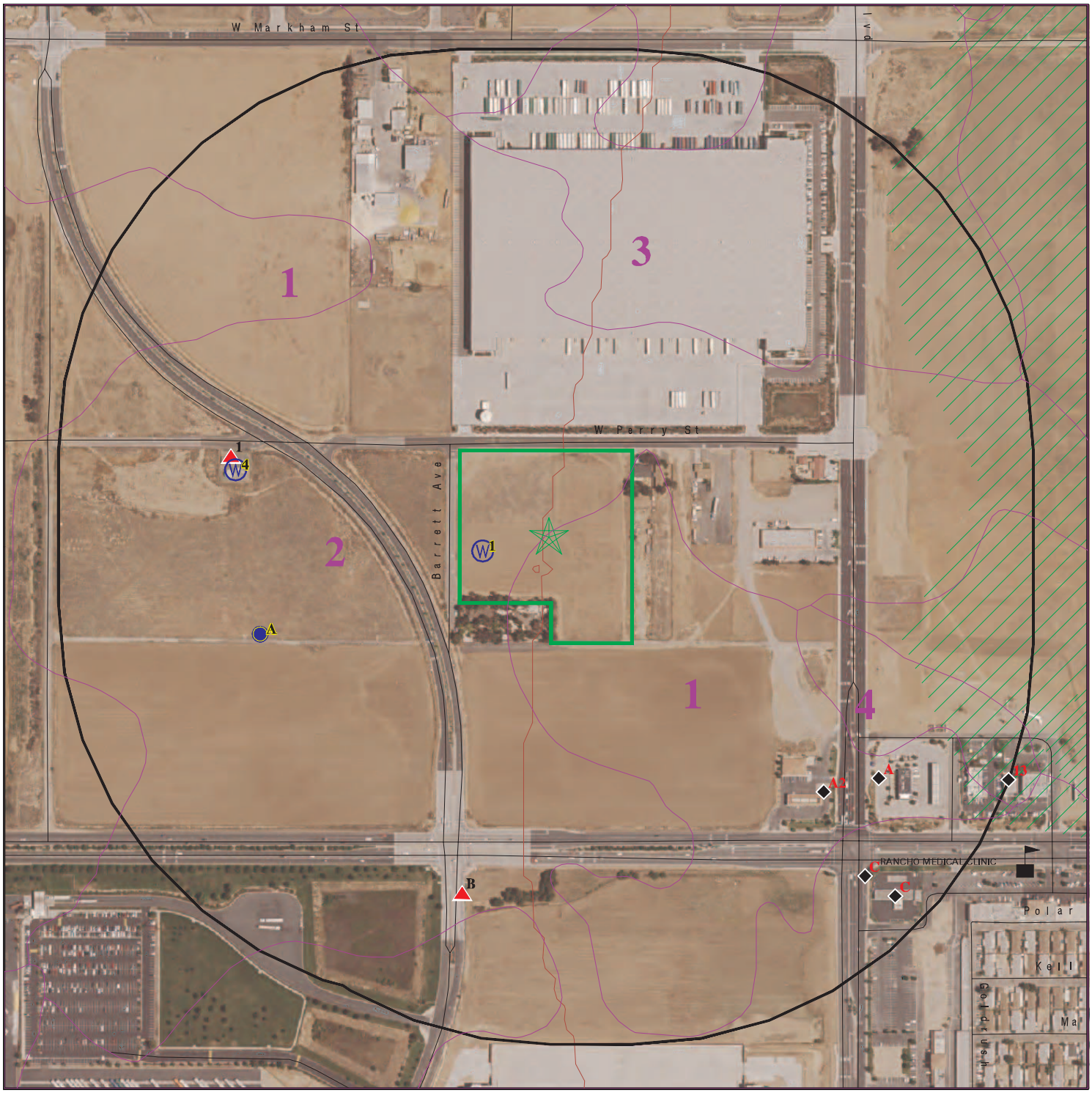
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- 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: 7.25-Acre Site	CLIENT: APEX Companies LLC
ADDRESS: West Perry Street and Barrett Avenue Perris CA 92571	CONTACT: Dan Hisey
LAT/LONG: 33.847384 / 117.229355	INQUIRY #: 5336054.2s DATE: June 18, 2018 4:07 pm

Copyright © 2018 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 5336054.2S



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

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

Areas of Concern

N

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:	7.25-Acre Site	CLIENT:	APEX Companies LLC
ADDRESS:	West Perry Street and Barrett Avenue Perris CA 92571	CONTACT:	Dan Hisey
		INQUIRY #:	5336054.2s
LAT/LONG:	33.847384 / 117.229355	DATE:	June 18, 2018 4:08 pm

Copyright © 2018 EDR, Inc. © 2015 TomTom Rel. 2015.

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								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	2	NR	NR	NR	2
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	4	0	NR	NR	4

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
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	4	NR	NR	NR	4
AST	0.250		0	2	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0

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
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0

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
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	16	0	0	0	16

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
WNW
1/8-1/4
0.143 mi.
753 ft.

EMWD PERRY WELL #56
303 PERRY ST
PERRIS, CA 92571

RCRA-SQG
FINDS

1007989025
CAR000159327

Relative:
Higher

Actual:
1463 ft.

RCRA-SQG:

Date form received by agency:	02/17/2006
Facility name:	WELL 56
Facility address:	303 PERRY STREET PERRIS, CA 92571
EPA ID:	CAR000159327
Mailing address:	P.O. BOX 8300 PERRIS, CA 92572
Contact:	JUDY J ADAMS
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	951-928-3777
Telephone ext.:	6252
Contact email:	ADAMSJ@EMWD.ORG
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	EASTERN MUNICIPAL WATER DISTRICT
Owner/operator address:	P.O. BOX 8300 PERRIS, CA 92572
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	10/16/1950
Owner/Op end date:	Not reported

Owner/operator name:	EASTERN MUNICIPAL WATER DISTRICT
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	10/16/1950
Owner/Op end date:	Not reported

Owner/operator name:	EASTERN MUNICIPAL WATER DISTRICT
Owner/operator address:	PO BOX 8300 PERRIS, CA 92572

EMWD PERRY WELL #56 (Continued) **1007989025**

Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 10/16/1950
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/17/2006
Site name: WELL 56
Classification: Large Quantity Generator

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D002
. Waste name: CORROSIVE WASTE

Date form received by agency: 01/03/2005
Site name: WELL 56
Classification: Large Quantity Generator

. Waste code: D002
. Waste name: CORROSIVE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110055725210

Environmental Interest/Information System
STATE MASTER

EMWD PERRY WELL #56 (Continued) **1007989025**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A2
SE
1/8-1/4
0.151 mi.
798 ft.

SAFAR & SAFAR BROTHERS', INC **UST** **U003864986**
4040 N PERRIS BLVD **N/A**
PERRIS, CA 92571

Site 1 of 3 in cluster A

Relative:
Lower

Actual:
1458 ft.

UST:

Facility ID:	Not reported
Permitting Agency:	Riverside County Department of Environmental Health
Latitude:	33.84507
Longitude:	-117.22657

RIVERSIDE CO. UST:

Region:	RIVERSIDE
Total Tanks:	4

B3
SSW
1/8-1/4
0.165 mi.
872 ft.

LOWE'S #966 **AST** **A100422044**
3984 INDIAN AVE **N/A**
PERRIS, CA 92571

Site 1 of 2 in cluster B

Relative:
Higher

Actual:
1461 ft.

AST:

Certified Unified Program Agencies:	Not reported
Owner:	Lowe's Home Centers, LLC
Total Gallons:	Not reported
CERSID:	10321390
Facility ID:	Not reported
Business Name:	Lowe's HIW, Inc.
Phone:	(888) 429-6281
Fax:	Not reported
Mailing Address:	1000 Lowe's Blvd., Mail Code A2ELP
Mailing Address City:	Mooresville
Mailing Address State:	NC
Mailing Address Zip Code:	28117
Operator Name:	Lowe's Home Centers, LLC
Operator Phone:	(951) 443-2500
Owner Phone:	(704) 758-6033
Owner Mail Address:	1605 Curtis Bridge Rd, Mailcode A2ELP
Owner State:	NC
Owner Zip Code:	28697
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAR000096867

B4 **LOWES RDC #966** **RCRA-LQG** **1004677410**
SSW **3984 INDIAN AVENUE** **FINDS** **CAR000096867**
1/8-1/4 **PERRIS, CA 92571** **ECHO**
0.165 mi.
872 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
1461 ft.

RCRA-LQG:

Date form received by agency:	10/26/2016
Facility name:	LOWES RDC #966
Facility address:	3984 INDIAN AVENUE PERRIS, CA 92571
EPA ID:	CAR000096867
Mailing address:	LOWES BLVD MOORESVILLE, NC 28117
Contact:	ROB GASS
Contact address:	LOWES BLVD MOORESVILLE, NC 28117
Contact country:	US
Contact telephone:	704-758-6033
Contact email:	ROB.GASS@LOWES.COM
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	LOWES RDC #966
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/2001
Owner/Op end date:	Not reported
Owner/operator name:	LOWES CORPORATION
Owner/operator address:	LOWES BLVD MOORESVILLE, NC 28117
Owner/operator country:	US
Owner/operator telephone:	704-758-6033
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner

LOWES RDC #966 (Continued) **1004677410**

Owner/Op start date: 01/01/2001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D011
. Waste name: SILVER

. Waste code: D016

LOWES RDC #966 (Continued) **1004677410**

. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

Historical Generators:
Date form received by agency: 03/01/2014
Site name: LOWE'S CALFI. RDC #966
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

Date form received by agency: 06/03/2010
Site name: LOWE'S CALFI. RDC #966
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006

LOWES RDC #966 (Continued) **1004677410**

. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Date form received by agency: 03/01/2006
Site name: LOWES HIW INC. NO. 966
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

LOWES RDC #966 (Continued) **1004677410**

. Waste code: D008
. Waste name: LEAD

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: P012
. Waste name: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Date form received by agency: 02/23/2004
Site name: LOWES HIW - PERRIS RDC 966
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

LOWES RDC #966 (Continued) **1004677410**

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Date form received by agency: 05/17/2001
Site name: LOWES HOME IMPROVEMENT WAREHOUSE 966
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

LOWES RDC #966 (Continued) **1004677410**

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 20294

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 15660

Waste code: D005
Waste name: BARIUM
Amount (Lbs): 20073

Waste code: D006
Waste name: CADMIUM

LOWES RDC #966 (Continued) **1004677410**

Amount (Lbs): 3131

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 20073

Waste code: D008
Waste name: LEAD
Amount (Lbs): 3131

Waste code: D011
Waste name: SILVER
Amount (Lbs): 3131

Waste code: D016
Waste name: 2,4-D
Amount (Lbs): 3131

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 13561

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 20073

Violation Status: No violations found

FINDS:

Registry ID: 110055707926

Environmental Interest/Information System
STATE MASTER

Registry ID: 110012240716

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

LOWES RDC #966 (Continued) **1004677410**

ECHO:
Envid: 1004677410
Registry ID: 110012240716
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110012240716

A5 **TESORO (SHELL) 68585** **UST** **U003886141**
SE **4039 N PERRIS BLVD** **N/A**
1/8-1/4 **PERRIS, CA 92571**
0.175 mi.
926 ft. **Site 2 of 3 in cluster A**

Relative:
Lower

Actual:
1457 ft.

UST:
Facility ID: 753
Permitting Agency: RIVERSIDE COUNTY
Latitude: 33.8465083
Longitude: -117.2241719

Facility ID: FA0019645
Permitting Agency: Riverside County Department of Environmental Health
Latitude: 33.84519
Longitude: -117.22544

RIVERSIDE CO. UST:
Region: RIVERSIDE
Total Tanks: 3

A6 **TEXACO SERVICE STATION** **LUST** **1006805307**
SE **4039 N PERRIS** **RCRA NonGen / NLR** **CAR000125716**
1/8-1/4 **PERRIS, CA 92571** **FINDS**
0.175 mi. **ECHO**
926 ft. **Site 3 of 3 in cluster A** **HAZNET**

Relative:
Lower

Actual:
1457 ft.

LUST:
Lead Agency: RIVERSIDE COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606524504
Global Id: T0606524504
Latitude: 33.844968564
Longitude: -117.22585011
Status: Completed - Case Closed
Status Date: 03/22/2010
Case Worker: Not reported
RB Case Number: Not reported
Local Agency: Not reported
File Location: Local Agency
Local Case Number: 200723493
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline, Diesel
Site History: On April 12 and 13, 2007, a Phase II assessment was completed for the sale of the property. 8 borings were drilled; 3 near the tank pit to 51.5 and 5 near the dispensers to 31.5. Up to 2.2 ppm TPHg, 16 ppm TPHd, 4.5 ppm MTBE, and 1.3 ppm TBA were detected in the soil. The site was placed into the LOP program. Three groundwater monitoring wells were installed to 100 on July 16-19, 2007. The soil from well 1 had ND TPHg, BTEX and a high of 0.027 ppm MTBE. Soil from Well 2 had

TEXACO SERVICE STATION (Continued) **1006805307**

0.9 ppm TPHg, ND BTEX, up to 2.8 ppm MTBE, 0.41 ppm TBA, 0.017 ppm TAME. Well 3 had up to 11 ppm TPHg, ND BTEX, up to 17 ppm MTBE, 0.89 ppm TBA, 0.062 ppm TAME. Highest concentrations were between 30-45 ft in the borings. GW encountered at approximately 80 ft bgs 3 SVE wells were installed November 12 and 13, 2007. Wells were drilled to 40and screened from 25-40. Up to 0.83 ppm TPHg, 7.8 ppm TPHd, 2 ppmv MTBE, 0.18 ppm TBA and 0.0084 ppm TAME was detected in the soil. Soil Vapor Extraction was conducted from June 26, 2008 to December 9, 2008 when the system was shut down for a successful rebound test. 44 lbs of TPHg and 37 lbs of MTBE were removed. Influent TPHg went from 41 ppmv to 2.1 ppmv. MTBE started at 47 ppmv and ended at 1.9 ppmv. Four confirmation borings were proposed; however CB-4 (to be drilled north of MW-3) could not be drilled due to pea gravel in the air-knifed hole and could not be relocated due to an electric transformer and power pole, tree, vent lines, and a water line in the area around the proposed boring location. On March 30 and 31, 2009, three borings were drilled to 85 and soil samples were taken every 5 beginning at 10. TPHg was detected in one sample (CB-2 at 40) at 0.7 ppm. MTBE was detected in 6 samples from all three borings between 40-55 with a maximum of 0.64 ppm. TBA was detected in one sample (CB-1 at 40) at 0.2 ppm. No BTEX, DIPE, ETBE, TAME or ethanol was detected. The groundwater was sampled quarterly from the third quarter 2007 until the first quarter 2009. No TPHg or BTEX was detected. All three wells had MTBE (2.2, 29 and 1.3 ppb) during the first sampling event but have been ND<1 ppb since. MW-1 had 24 ppb TBA during the second quarter of 2008. The consultant is requesting no further action be conducted at the site due to the minimal hydrocarbons remaining in the soil. Even though CB-4 could not be drilled, the ROI for the site is 31, which encompasses the soil in the vicinity of MW-3. Additionally, groundwater analytical data of MW-3 indicates MTBE degraded from 1.3 ppb to ND<1 ppb and has not been detected since the third quarter 2007. Access of the alley to the north of the site was investigated in order to relocate CB-4. The alley is shared with 8 parcels of land and would require a city issued encroachment permit and notification of all the property owners. The alley is trafficked by large trucks and due to a power pole located near the alley, overhead obstructions would require the entire alley be blocked for further soil investigations. Subsurface Soil types: fine to coarse grained sands, silty sand, sandy silt and silt Depth to GW: 80.52 ft bgs to 83.09 ft bgs Current Depth To GW: 80.52 GW Flow: southwest Remediation: soil vapor extraction Sensitive Receptors: one active public well located 2212 northeast of site Other information: UST system currently installed and operating at the site.

LUST:

Global Id:	T0606524504
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

LUST:

Global Id:	T0606524504
Action Type:	ENFORCEMENT

TEXACO SERVICE STATION (Continued) **1006805307**

Date: 06/18/2007
Action: Staff Letter - #061807

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 01/08/2008
Action: File review

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 08/31/2009
Action: Staff Letter - #Riv Co 083109

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 04/08/2009
Action: File review

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 06/03/2009
Action: Staff Letter - #RCDEH060309

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 02/24/2009
Action: Staff Letter - #RCDEH 022409

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 09/23/2009
Action: Staff Letter - #RCDEH 092309

Global Id: T0606524504
Action Type: REMEDIATION
Date: 06/26/2008
Action: Soil Vapor Extraction (SVE)

Global Id: T0606524504
Action Type: RESPONSE
Date: 04/24/2009
Action: Other Report / Document

Global Id: T0606524504
Action Type: RESPONSE
Date: 10/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 05/15/2007
Action: Staff Letter - #051507

Global Id: T0606524504
Action Type: RESPONSE
Date: 08/15/2008
Action: Remedial Progress Report

TEXACO SERVICE STATION (Continued) **1006805307**

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 03/22/2010
Action: Closure/No Further Action Letter - #RCDEH Closure

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 01/09/2008
Action: Staff Letter - #010908

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 02/22/2008
Action: Staff Letter - #022208

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 10/09/2007
Action: File review

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 04/04/2008
Action: File review

Global Id: T0606524504
Action Type: RESPONSE
Date: 08/18/2007
Action: Preliminary Site Assessment Report

Global Id: T0606524504
Action Type: Other
Date: 05/01/2007
Action: Leak Reported

Global Id: T0606524504
Action Type: RESPONSE
Date: 06/15/2007
Action: Preliminary Site Assessment Workplan

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 10/22/2008
Action: File review

Global Id: T0606524504
Action Type: Other
Date: 07/02/2007
Action: Leak Stopped

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 07/16/2008
Action: File review

Global Id: T0606524504
Action Type: RESPONSE

TEXACO SERVICE STATION (Continued) **1006805307**

Date: 12/28/2009
Action: Well Destruction Report

Global Id: T0606524504
Action Type: Other
Date: 05/01/2007
Action: Leak Discovery

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 01/12/2009
Action: File review

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 03/21/2010
Action: Other Report - #UST Sample Analytical Report

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 03/21/2010
Action: Other Report - #UST Sample Analytical Report

Global Id: T0606524504
Action Type: RESPONSE
Date: 02/29/2008
Action: CAP/RAP - Final Remediation / Design Plan

Global Id: T0606524504
Action Type: ENFORCEMENT
Date: 12/08/2008
Action: Staff Letter - #RCDEH120808

LUST:
Global Id: T0606524504
Status: Open - Case Begin Date
Status Date: 05/01/2007

Global Id: T0606524504
Status: Open - Site Assessment
Status Date: 05/15/2007

Global Id: T0606524504
Status: Open - Site Assessment
Status Date: 06/15/2007

Global Id: T0606524504
Status: Open - Site Assessment
Status Date: 08/21/2007

Global Id: T0606524504
Status: Open - Remediation
Status Date: 02/22/2008

Global Id: T0606524504
Status: Completed - Case Closed
Status Date: 03/22/2010

TEXACO SERVICE STATION (Continued) **1006805307**

RIVERSIDE CO. LUST:

Region:	RIVERSIDE
Facility ID:	200723493
Employee:	Shurlow-LOP
Site Closed:	Yes
Case Type:	Soil only
Facility Status:	closed/action completed
Casetype Decode:	Soil only is impacted
Fstatus Decode:	Closed/Action completed

RCRA NonGen / NLR:

Date form received by agency:	04/03/2017
Facility name:	TEXACO SERVICE STATION
Facility address:	4039 N PERRIS SAP #121222 PERRIS, CA 92571
EPA ID:	CAR000125716
Mailing address:	SHELL OIL PRODUCTS US 12700 NORTHBOROUGH DR MFT240G HOUSTON, TX 77067-2508
Contact:	FRANCISCO O BERNAL
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	818-759-7910
Contact email:	FOBERNAL@SHELLOPUS.COM
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	SHELL OIL PRODUCTS US
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

Owner/operator name:	EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Owner/operator address:	PO BOX 2648 HOUSTON, TX 77252
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	08/01/1998
Owner/Op end date:	Not reported

TEXACO SERVICE STATION (Continued) **1006805307**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/26/2004
Site name: TEXACO SERVICE STATION
Classification: Small Quantity Generator

Date form received by agency: 02/26/2004
Site name: TEXACO SERVICE STATION
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 08/14/2002
Site name: TEXACO SERVICE STATION
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110013308740

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

TEXACO SERVICE STATION (Continued) **1006805307**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Registry ID: 110058266237

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1006805307
Registry ID: 110013308740
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110013308740

HAZNET:
envid: 1006805307
Year: 2007
GEPAID: CAR000125716
Contact: R HULL/ENV. REPORTING ANALYST
Telephone: 2818742224
Mailing Name: Not reported
Mailing Address: 12700 NORTHBOROUGH DR 300G03
Mailing City,St,Zip: Houston, TX 770670000
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Tons: 0
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Riverside

envid: 1006805307
Year: 2007
GEPAID: CAR000125716
Contact: R HULL/ENV. REPORTING ANALYST
Telephone: 2818742224
Mailing Name: Not reported
Mailing Address: 12700 NORTHBOROUGH DR 300G03
Mailing City,St,Zip: Houston, TX 770670000
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: Not reported
Cat Decode: Not reported
Method Decode: Not reported

TEXACO SERVICE STATION (Continued) **1006805307**

Facility County: Riverside

envid: 1006805307
Year: 2007
GEPAID: CAR000125716
Contact: R HULL/ENV. REPORTING ANALYST
Telephone: 2818742224
Mailing Name: Not reported
Mailing Address: 12700 NORTHBOROUGH DR 300G03
Mailing City,St,Zip: Houston, TX 770670000
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.12
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Riverside

envid: 1006805307
Year: 2007
GEPAID: CAR000125716
Contact: R HULL/ENV. REPORTING ANALYST
Telephone: 2818742224
Mailing Name: Not reported
Mailing Address: 12700 NORTHBOROUGH DR 300G03
Mailing City,St,Zip: Houston, TX 770670000
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.08
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Riverside

envid: 1006805307
Year: 2006
GEPAID: CAR000125716
Contact: R HULL/ENV. REPORTING ANALYST
Telephone: 2818742224
Mailing Name: Not reported
Mailing Address: 12700 NORTHBOROUGH DR 300G03
Mailing City,St,Zip: Houston, TX 770670000
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Recycler
Tons: 0.05
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Riverside

TEXACO SERVICE STATION (Continued) **1006805307**

Click this hyperlink while viewing on your computer to access
7 additional CA_HAZNET: record(s) in the EDR Site Report.

C7 **MOBIL #18-BLN** **SWEEPS UST** **S101590321**
SE **3995 PERRIS BLVD** **CA FID UST** **N/A**
1/8-1/4 **PERRIS, CA 92370**
0.205 mi.
1084 ft. **Site 1 of 6 in cluster C**

Relative:
Lower

Actual:
1457 ft.

SWEEPS UST:

Status:	Active
Comp Number:	39996
Number:	1
Board Of Equalization:	Not reported
Referral Date:	05-08-91
Action Date:	05-08-91
Created Date:	05-08-91
Owner Tank Id:	1
SWRCB Tank Id:	33-000-039996-000001
Tank Status:	A
Capacity:	10000
Active Date:	05-08-91
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	4

Status:	Active
Comp Number:	39996
Number:	1
Board Of Equalization:	Not reported
Referral Date:	05-08-91
Action Date:	05-08-91
Created Date:	05-08-91
Owner Tank Id:	2
SWRCB Tank Id:	33-000-039996-000002
Tank Status:	A
Capacity:	10000
Active Date:	05-08-91
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	39996
Number:	1
Board Of Equalization:	Not reported
Referral Date:	05-08-91
Action Date:	05-08-91
Created Date:	05-08-91
Owner Tank Id:	3
SWRCB Tank Id:	33-000-039996-000003
Tank Status:	A
Capacity:	10000
Active Date:	05-08-91
Tank Use:	M.V. FUEL
STG:	P

MOBIL #18-BLN (Continued) **S101590321**

Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 39996
Number: 1
Board Of Equalization: Not reported
Referral Date: 05-08-91
Action Date: 05-08-91
Created Date: 05-08-91
Owner Tank Id: 4
SWRCB Tank Id: 33-000-039996-000004
Tank Status: A
Capacity: 10000
Active Date: 05-08-91
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 33007030
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149435292
Mail To: Not reported
Mailing Address: 3225 GALLOWS RD
Mailing Address 2: Not reported
Mailing City,St,Zip: PERRIS 92370
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

C8 **MOBIL STATION #18-BLN** **UST** **U003936671**
SE **3995 PERRIS BLVD** **N/A**
1/8-1/4 **PERRIS, CA 92571**
0.205 mi.
1084 ft. **Site 2 of 6 in cluster C**

Relative: **Lower**
Actual: **1457 ft.**

UST:
Facility ID: 512
Permitting Agency: RIVERSIDE COUNTY
Latitude: 33.8454709
Longitude: -117.2243543

C9
SE
1/8-1/4
0.227 mi.
1201 ft.

MOBIL #18-BLN
3995 NORTH PERRIS BLVD.
PERRIS, CA 92571

Site 3 of 6 in cluster C

LUST **S105960688**
N/A

Relative:
Lower

Actual:
1457 ft.

LUST REG 8:

Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	200117733
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	RAMONA EXPRESSWAY
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	OM
How Stopped:	Other Means
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606505176
How Stopped Date:	8/20/2001
Enter Date:	Not reported
Date Confirmation of Leak Began:	8/20/2001
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/20/2001
Enforcement Date:	Not reported
Close Date:	6/20/2003
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	0
Longitude:	0
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	SCB
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	Not reported
Beneficial:	Not reported

MOBIL #18-BLN (Continued) **S105960688**

Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

C10 **MOBIL #18-BLN** **LUST S106410451**
SE **3995 N PERRIS BLVD** **CHMIRS N/A**
1/8-1/4 **PERRIS, CA**
0.227 mi.
1201 ft. **Site 4 of 6 in cluster C**

Relative: **Lower**

Actual: **1457 ft.**

RIVERSIDE CO. LUST:

Region:	RIVERSIDE
Facility ID:	200117733
Employee:	Boltinghous-LOP
Site Closed:	Yes
Case Type:	Soil only
Facility Status:	closed/action completed
Casetype Decode:	Soil only is impacted
Fstatus Decode:	Closed/Action completed

CHMIRS:

OES Incident Number:	10-5738
OES notification:	09/24/2010
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Service Station
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported

MOBIL #18-BLN (Continued) **S106410451**

Type:	Not reported
Measure:	Cup(s)
Other:	Not reported
Date/Time:	1030
Year:	2010
Agency:	Veeder Root
Incident Date:	9/24/2010
Admin Agency:	Riverside County Environmental Health
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Gasoline
Quantity Released:	1
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	The caller is reporting a gasoline spill due to a leaking nozzle.

C11 **MOBIL #18-BLN** **LUST S113804499**
SE **3995 N PERRIS BLVD.** **N/A**
1/8-1/4 **PERRIS, CA 92571**
0.227 mi.
1201 ft. **Site 5 of 6 in cluster C**

Relative: LUST:
Lower

Lead Agency:	RIVERSIDE COUNTY LOP
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606505176
Global Id:	T0606505176
Latitude:	33.844283
Longitude:	-117.225606
Status:	Completed - Case Closed
Status Date:	06/20/2003
Case Worker:	SCB
RB Case Number:	Not reported
Local Agency:	RIVERSIDE COUNTY LOP
File Location:	Not reported
Local Case Number:	200117733
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Actual:
1457 ft.

LUST:

MOBIL #18-BLN (Continued) **S113804499**

Global Id: T0606505176
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rose.scott@waterboards.ca.gov
Phone Number: 9513206375

Global Id: T0606505176
Contact Type: Local Agency Caseworker
Contact Name: SHARON BOLTINGHOUSE
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email: sbolting@rivco.org
Phone Number: 9519558980

LUST:
Global Id: T0606505176
Action Type: Other
Date: 08/20/2001
Action: Leak Discovery

Global Id: T0606505176
Action Type: Other
Date: 08/20/2001
Action: Leak Reported

Global Id: T0606505176
Action Type: Other
Date: 08/20/2001
Action: Leak Stopped

Global Id: T0606505176
Action Type: REMEDIATION
Date: 08/20/2001
Action: Other (Use Description Field)

LUST:
Global Id: T0606505176
Status: Open - Case Begin Date
Status Date: 08/20/2001

Global Id: T0606505176
Status: Open - Site Assessment
Status Date: 08/20/2001

Global Id: T0606505176
Status: Completed - Case Closed
Status Date: 06/20/2003

C12 **EXXON MOBIL OIL COPR** **RCRA-LQG** **1007200125**
SE **3995 N PERRIS BLVD** **UST** **CAL000055799**
1/8-1/4 **PERRIS, CA 92571** **FINDS**
0.227 mi.
1201 ft. **Site 6 of 6 in cluster C**

Relative:
Lower

Actual:
1457 ft.

RCRA-LQG:

Date form received by agency:	02/28/2002
Facility name:	EXXON MOBIL OIL COPR
Facility address:	3995 N PERRIS BLVD PERRIS, CA 92571
EPA ID:	CAL000055799
Mailing address:	12265 W BAYAUD AVE LAKEWOOD, CA 80228
Contact:	WENDY MCCARVILLE
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	303-986-8011
Contact email:	Not reported
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

UST:

Facility ID:	FA0036723
Permitting Agency:	Riverside County Department of Environmental Health
Latitude:	33.84412
Longitude:	-117.22561

EXXON MOBIL OIL COPR (Continued) **1007200125**

RIVERSIDE CO. UST:
Region: RIVERSIDE
Total Tanks: 4

FINDS:

Registry ID: 110055915737

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

13
ESE
1/8-1/4
0.249 mi.
1317 ft.

JIFFY LUBE #3294 **AST** **A100421201**
118 E RAMONA EXPRESSWAY **N/A**
PERRIS, CA 92571

Relative:
Lower

Actual:
1456 ft.

AST:

Certified Unified Program Agencies:	Not reported
Owner:	Najar Lube Centers, Inc
Total Gallons:	Not reported
CERSID:	10325710
Facility ID:	Not reported
Business Name:	Jiffy Lube
Phone:	(951) 943-2200
Fax:	Not reported
Mailing Address:	490 W. Arrow Hwy
Mailing Address City:	San Dimas
Mailing Address State:	CA
Mailing Address Zip Code:	91773
Operator Name:	Elias Najar
Operator Phone:	951-694-5460
Owner Phone:	909-592-8484
Owner Mail Address:	490 W. Arrow Hwy
Owner State:	CA
Owner Zip Code:	91773
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAL000325687

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls 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.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls 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.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes 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.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/12/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 48

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 15
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 39

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Quarterly

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 44

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

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. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 27

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 04/19/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 44

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 46

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/08/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 0

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

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).

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 51
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/04/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 01/04/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 79

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 02/28/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 72

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 87

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 02/25/2018
Date Data Arrived at EDR: 03/17/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 06/01/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

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).

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 04/03/2018
Date Data Arrived at EDR: 05/07/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 39

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA SAN FRANCISCO CO

Cupa facilities

Date of Government Version: 04/20/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

DRYCLEAN AVAQMD: DRYCLEAN AVAQMD

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

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; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 36

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: DRYCLEAN SOUTH COAST

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/16/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 06/11/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 54

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2018
Date Data Arrived at EDR: 02/16/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 46

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. 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. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

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 [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 01/09/2018
Date Made Active in Reports: 02/06/2018
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/27/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/19/2018
Number of Days to Update: 45

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/23/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/14/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region’s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

UIC GEO: UIC GEO (GEOTRACKER)
Underground control injection sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

NON-CASE INFO: NON-CASE INFO (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 44

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

OTHER OIL GAS: OTHER OIL & GAS (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

PROD WATER PONDS: PROD WATER PONDS (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

PROJECT: PROJECT (GEOTRACKER)
Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

SAMPLING POINT: SAMPLING POINT (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

WELL STIM PROJ: WELL SAMP PROJ (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

CIWQS: The California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 60

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 65

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/31/2018
Date Data Arrived at EDR: 04/05/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 70

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/14/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 05/07/2018
Date Data Arrived at EDR: 05/09/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 36

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/26/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/26/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 14

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 48

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 44

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 39

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 9

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/30/2018
Number of Days to Update: 53

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 50

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/02/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 54

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/09/2018
Date Data Arrived at EDR: 05/11/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 34

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 04/16/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 60
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/16/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 29
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/14/2018
Number of Days to Update: 13
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 01/17/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 28
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 40

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 28

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/12/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 15

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 18

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 30

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 45

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/19/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 46

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 50

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 71

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 42

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/07/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 40

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Local Oversight Program Listing
A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/23/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 11
Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/20/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 43
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/14/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/04/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 42
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90
Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51
Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 16
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 20

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 33

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/11/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 35

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 29

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 01/26/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 51

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 04/17/2018
Number of Days to Update: 26

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 50

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 48

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 54
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 16
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/13/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 31
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/10/2018
Date Data Arrived at EDR: 05/15/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 31
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 36
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 04/30/2018
Date Data Arrived at EDR: 05/03/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 35

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

7.25-ACRE SITE
WEST PERRY STREET AND BARRETT AVENUE
PERRIS, CA 92571

TARGET PROPERTY COORDINATES

Latitude (North):	33.847384 - 33° 50' 50.58''
Longitude (West):	117.229355 - 117° 13' 45.68''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	478781.2
UTM Y (Meters):	3745064.2
Elevation:	1460 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641330 PERRIS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

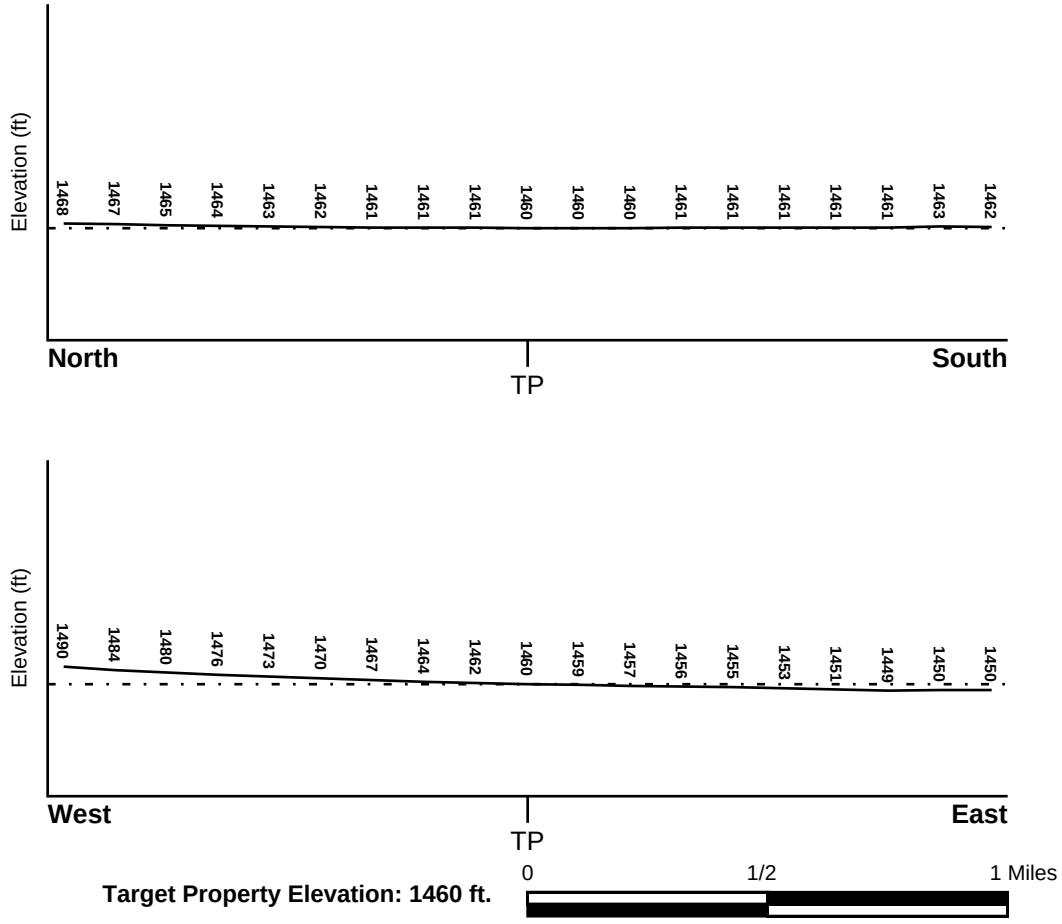
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 1460 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06065C1430H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

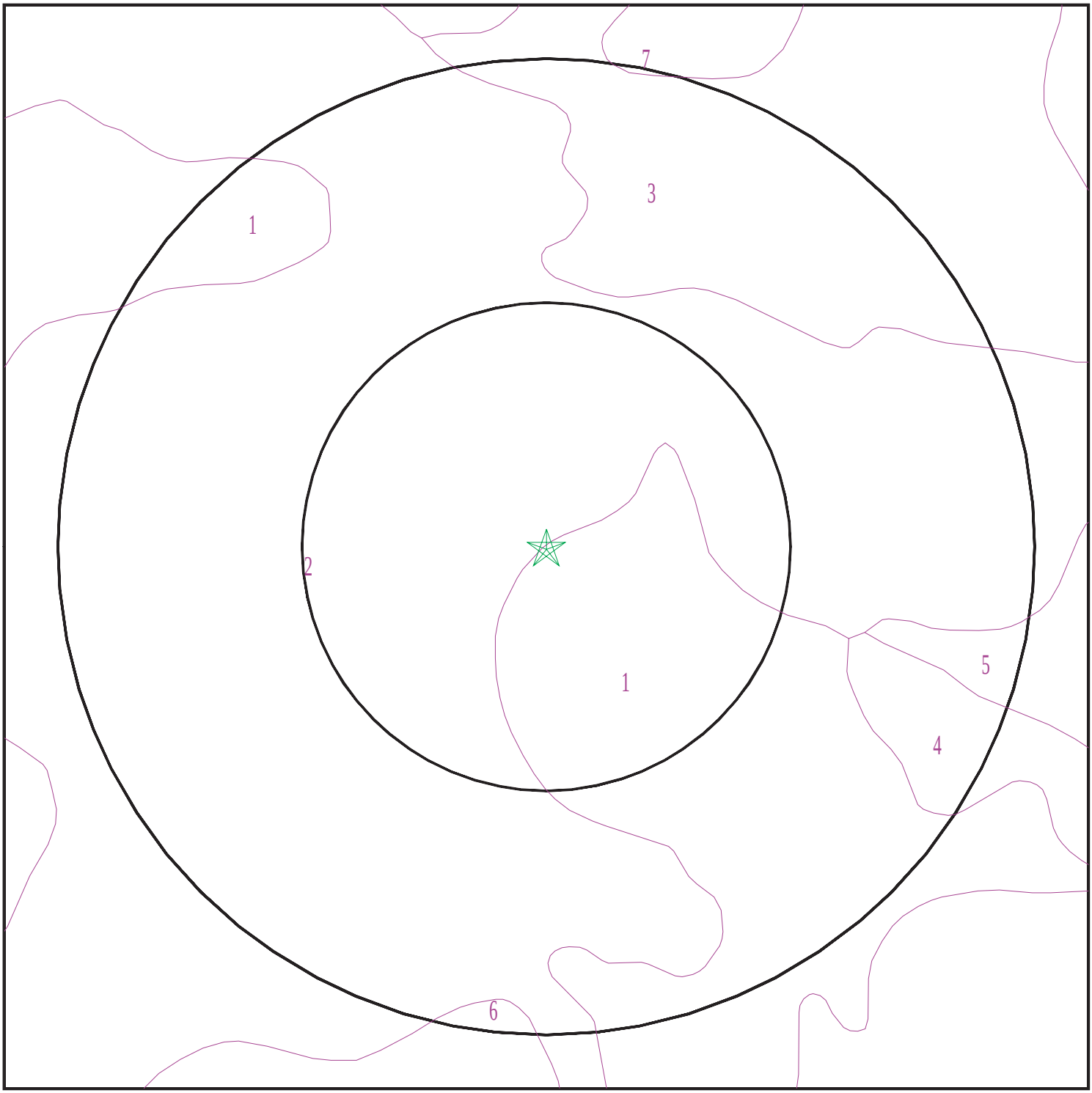
Era:	Mesozoic
System:	Cretaceous
Series:	Cretaceous granitic rocks
Code:	Kg *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5336054.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	7.25-Acre Site	CLIENT:	APEX Companies LLC
ADDRESS:	West Perry Street and Barrett Avenue Perris CA 92571	CONTACT:	Dan Hisey
LAT/LONG:	33.847384 / 117.229355	INQUIRY #:	5336054.2s
		DATE:	June 18, 2018 4:08 pm

Copyright © 2018 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: PACHAPPA

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
2	20 inches	62 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.8 Min: 6.6

Soil Map ID: 2

Soil Component Name: EXETER

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
3	37 inches	50 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: DOMINO

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	14 inches	27 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	27 inches	35 inches	cemented	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	35 inches	62 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name: HANFORD

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	coarse sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6
2	7 inches	40 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6
3	40 inches	59 inches	stratified loamy sand to coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 5.6

Soil Map ID: 5

Soil Component Name: EXETER

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.8 Min: 6.6
3	37 inches	50 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

Soil Map ID: 6

Soil Component Name: GREENFIELD

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	25 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	25 inches	42 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
3	42 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.8 Min: 6.1
4	59 inches	72 inches	stratified loamy sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

Soil Map ID: 7

Soil Component Name: EXETER

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	16 inches	37 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
3	37 inches	50 inches	indurated	Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:
4	50 inches	59 inches	stratified sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
4	USGS40000138576	1/8 - 1/4 Mile WNW
A5	USGS40000138560	1/8 - 1/4 Mile WSW
B8	USGS40000138608	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B9	USGS40000138607	1/2 - 1 Mile NE
10	USGS40000138615	1/2 - 1 Mile NNW
11	USGS40000138621	1/2 - 1 Mile NNE
C13	USGS40000138517	1/2 - 1 Mile South
D14	USGS40000138509	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

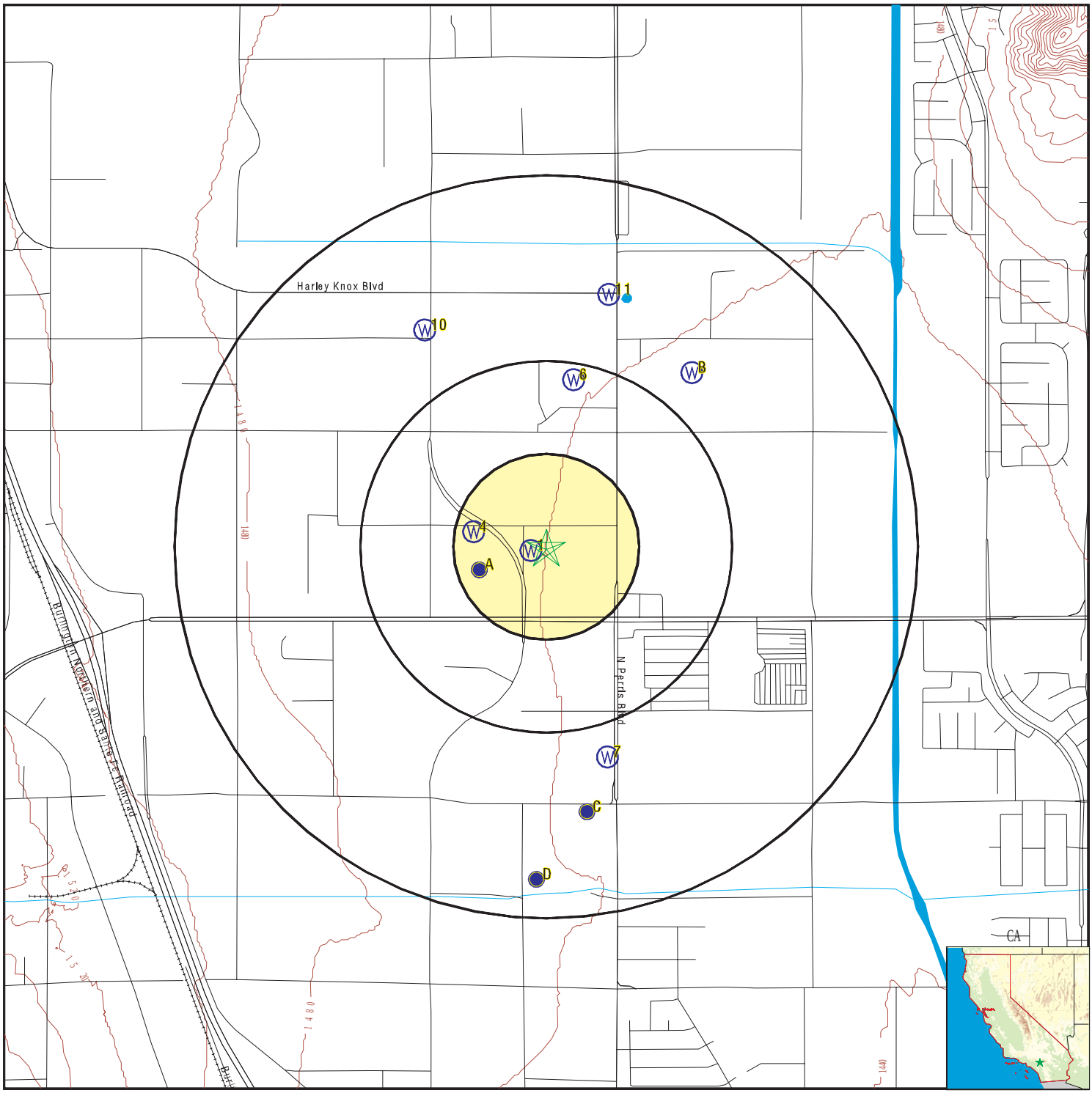
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	4816	0 - 1/8 Mile WSW
A2	CADW60000010021	1/8 - 1/4 Mile WSW
A3	4815	1/8 - 1/4 Mile West
6	4814	1/4 - 1/2 Mile North
7	CADW60000010022	1/2 - 1 Mile SSE
C12	CADW60000010023	1/2 - 1 Mile South
D15	CADW60000010024	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 5336054.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	7.25-Acre Site	CLIENT:	APEX Companies LLC
ADDRESS:	West Perry Street and Barrett Avenue Perris CA 92571	CONTACT:	Dan Hisey
LAT/LONG:	33.847384 / 117.229355	INQUIRY #:	5336054.2s
		DATE:	June 18, 2018 4:08 pm

Copyright © 2018 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database	EDR ID Number
CA WELLS	**4816**

1
WSW
0 - 1/8 Mile
Higher

Water System Information:

Prime Station Code:	04S/03W-06Q04 S	User ID:	WAT
FRDS Number:	3310009045	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	335050.0 1171345.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	PERRY STREET #2 WELL		
System Number:	3310009		
System Name:	Eastern Municipal WD		
Organization That Operates System:			
	P.O. Box 8300		
	San Jacinto, CA 92381-1300		
Pop Served:	253705	Connections:	84839
Area Served:	HEMET-SAN JACINTO-SUN CITY		
Sample Collected:	11-JAN-12	Findings:	0.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-12	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-12	Findings:	0.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-12	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-AUG-12	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-AUG-12	Findings:	5000. MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	01-AUG-12	Findings:	0.63 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-OCT-12	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-OCT-12	Findings:	0.62 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-JAN-13	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-JAN-13	Findings:	0.65 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-13	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-AUG-13	Findings:	1410. US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	14-AUG-13	Findings:	7.2
Chemical:	PH, LABORATORY		
Sample Collected:	14-AUG-13	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-AUG-13	Findings:	190. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-AUG-13	Findings:	390. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	14-AUG-13	Findings:	110. MG/L
Chemical:	CALCIUM		
Sample Collected:	14-AUG-13	Findings:	27. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	14-AUG-13	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	14-AUG-13	Findings:	3.4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	14-AUG-13	Findings:	270. MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-AUG-13	Findings:	57. MG/L
Chemical:	SULFATE		
Sample Collected:	14-AUG-13	Findings:	0.35 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-AUG-13	Findings:	41. MG/L
Chemical:	SILICA		
Sample Collected:	14-AUG-13	Findings:	250. UG/L
Chemical:	BARIUM		
Sample Collected:	14-AUG-13	Findings:	560. UG/L
Chemical:	BORON		
Sample Collected:	14-AUG-13	Findings:	850. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	14-AUG-13	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-AUG-13	Findings:	0.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	14-AUG-13	Findings:	4600. MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	14-AUG-13	Findings:	0.55 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-NOV-13	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-NOV-13	Findings:	0.53 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-JAN-14	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	24-APR-14	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-AUG-14	Findings:	1370. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-AUG-14	Findings:	7.4
Chemical:	PH, LABORATORY		
Sample Collected:	14-AUG-14	Findings:	140. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-AUG-14	Findings:	170. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-AUG-14	Findings:	430. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	14-AUG-14	Findings:	120. MG/L
Chemical:	CALCIUM		
Sample Collected:	14-AUG-14	Findings:	30. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	14-AUG-14	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	14-AUG-14	Findings:	3.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	14-AUG-14	Findings:	330. MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-AUG-14	Findings:	61. MG/L
Chemical:	SULFATE		
Sample Collected:	14-AUG-14	Findings:	0.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-AUG-14	Findings:	45. MG/L
Chemical:	SILICA		
Sample Collected:	14-AUG-14	Findings:	270. UG/L
Chemical:	BARIUM		
Sample Collected:	14-AUG-14	Findings:	620. UG/L
Chemical:	BORON		
Sample Collected:	14-AUG-14	Findings:	940. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	14-AUG-14	Findings:	0.101
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	14-AUG-14	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-AUG-14	Findings:	1.8 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	14-AUG-14	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	14-AUG-14	Findings:	1.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

Sample Collected:	14-AUG-14	Findings:	0.54 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-AUG-14	Findings:	6.04 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	14-AUG-14	Findings:	2.51 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	14-AUG-14	Findings:	1.53 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		
Sample Collected:	14-AUG-14	Findings:	0.462 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	14-AUG-14	Findings:	3.7 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	14-AUG-14	Findings:	1.24 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	14-AUG-14	Findings:	2.08 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	14-AUG-14	Findings:	0.3 PCI/L
Chemical:	URANIUM MDA95		
Sample Collected:	14-AUG-14	Findings:	0.253 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	14-AUG-14	Findings:	1.72 PCI/L
Chemical:	GROSS BETA MDA95		
Sample Collected:	14-AUG-14	Findings:	0.116 PCI/L
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Sample Collected:	14-AUG-14	Findings:	0.179 PCI/L
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.		
Sample Collected:	14-AUG-14	Findings:	0.47 PCI/L
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Sample Collected:	14-JAN-15	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-APR-15	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-AUG-15	Findings:	1490. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-AUG-15	Findings:	7.2
Chemical:	PH, LABORATORY		
Sample Collected:	05-AUG-15	Findings:	150. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05-AUG-15	Findings:	180. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05-AUG-15	Findings:	0.48 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	05-AUG-15	Findings:	440. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		

Sample Collected:	05-AUG-15	Findings:	130. MG/L
Chemical:	CALCIUM		
Sample Collected:	05-AUG-15	Findings:	31. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05-AUG-15	Findings:	130. MG/L
Chemical:	SODIUM		
Sample Collected:	05-AUG-15	Findings:	320. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05-AUG-15	Findings:	62. MG/L
Chemical:	SULFATE		
Sample Collected:	05-AUG-15	Findings:	0.43 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05-AUG-15	Findings:	46. MG/L
Chemical:	SILICA		
Sample Collected:	05-AUG-15	Findings:	270. UG/L
Chemical:	BARIUM		
Sample Collected:	05-AUG-15	Findings:	630. UG/L
Chemical:	BORON		
Sample Collected:	05-AUG-15	Findings:	980. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05-AUG-15	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-AUG-15	Findings:	0.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	05-AUG-15	Findings:	11.9
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	05-AUG-15	Findings:	5.2 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	05-AUG-15	Findings:	5200. MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	17-NOV-15	Findings:	4.8 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	09-FEB-16	Findings:	4.9 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	02-MAR-16	Findings:	4.9 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	16-JUN-16	Findings:	5. MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	02-AUG-16	Findings:	5.1 MG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	02-AUG-16	Findings:	1530. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-AUG-16	Findings:	7.3
Chemical:	PH, LABORATORY		

Sample Collected:	02-AUG-16	Findings:	140. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	02-AUG-16	Findings:	170. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02-AUG-16	Findings:	5.1 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	02-AUG-16	Findings:	0.42 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	02-AUG-16	Findings:	410. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	02-AUG-16	Findings:	120. MG/L
Chemical:	CALCIUM		
Sample Collected:	02-AUG-16	Findings:	29. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02-AUG-16	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	02-AUG-16	Findings:	310. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02-AUG-16	Findings:	63. MG/L
Chemical:	SULFATE		
Sample Collected:	02-AUG-16	Findings:	0.39 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02-AUG-16	Findings:	42. MG/L
Chemical:	SILICA		
Sample Collected:	02-AUG-16	Findings:	270. UG/L
Chemical:	BARIUM		
Sample Collected:	02-AUG-16	Findings:	610. UG/L
Chemical:	BORON		
Sample Collected:	02-AUG-16	Findings:	890. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02-AUG-16	Findings:	11.9
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	13-SEP-16	Findings:	5. MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	10-OCT-16	Findings:	5.2 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	10-JAN-17	Findings:	5.2 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	19-APR-17	Findings:	1.3 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	20-JUL-17	Findings:	5.1 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	01-AUG-17	Findings:	1350. US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	01-AUG-17	Findings:	7.3
Chemical:	PH, LABORATORY		
Sample Collected:	01-AUG-17	Findings:	150. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01-AUG-17	Findings:	180. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01-AUG-17	Findings:	5.2 MG/L
Chemical:	NITRATE (AS N)		
Sample Collected:	01-AUG-17	Findings:	420. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	01-AUG-17	Findings:	120. MG/L
Chemical:	CALCIUM		
Sample Collected:	01-AUG-17	Findings:	29. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01-AUG-17	Findings:	120. MG/L
Chemical:	SODIUM		
Sample Collected:	01-AUG-17	Findings:	320. MG/L
Chemical:	CHLORIDE		
Sample Collected:	01-AUG-17	Findings:	64. MG/L
Chemical:	SULFATE		
Sample Collected:	01-AUG-17	Findings:	0.38 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01-AUG-17	Findings:	45. MG/L
Chemical:	SILICA		
Sample Collected:	01-AUG-17	Findings:	260. UG/L
Chemical:	BARIUM		
Sample Collected:	01-AUG-17	Findings:	620. UG/L
Chemical:	BORON		
Sample Collected:	01-AUG-17	Findings:	980. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01-AUG-17	Findings:	4.4 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01-AUG-17	Findings:	11.9
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	01-AUG-17	Findings:	1.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	01-AUG-17	Findings:	7.58 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01-AUG-17	Findings:	2.13 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01-AUG-17	Findings:	4.82 PCI/L
Chemical:	GROSS BETA		
Sample Collected:	01-AUG-17	Findings:	1.53 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		

Sample Collected:	01-AUG-17	Findings:	0.145 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	01-AUG-17	Findings:	0.44 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	01-AUG-17	Findings:	4.51 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	01-AUG-17	Findings:	1.49 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	01-AUG-17	Findings:	2.07 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	01-AUG-17	Findings:	0.47 PCI/L
Chemical:	URANIUM MDA95		
Sample Collected:	01-AUG-17	Findings:	0.363 PCI/L
Chemical:	RADIUM 226 MDA95		
Sample Collected:	01-AUG-17	Findings:	0.506 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	01-AUG-17	Findings:	1.6 PCI/L
Chemical:	GROSS BETA MDA95		
Sample Collected:	03-OCT-17	Findings:	4.9 MG/L
Chemical:	NITRATE (AS N)		

A2
WSW **CA WELLS** **CADW60000010021**
1/8 - 1/4 Mile
Higher

Objectid:	10021
Latitude:	33.846375
Longitude:	-117.231861
Site code:	338464N1172319W001
State well numbe:	Not Reported
Local well name:	'EMWD11044'
Well use id:	3
Well use descrip:	Irrigation
County id:	33
County name:	Riverside
Basin code:	'8-5'
Basin desc:	San Jacinto
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000010021

A3
West **CA WELLS** **4815**
1/8 - 1/4 Mile
Higher

Water System Information:

Prime Station Code:	04S/03W-06Q03 S	User ID:	WAT
FRDS Number:	3310009010	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	335049.0 1171355.0	Precision:	100 Feet (one Second)
Source Name:	WELL 1341 PERRY - ABANDONED		

System Number: 3310009
System Name: Eastern Municipal WD
Organization That Operates System:
P.O. Box 8300
San Jacinto, CA 92381-1300
Pop Served: 253705 Connections: 84839
Area Served: HEMET-SAN JACINTO-SUN CITY

4
WNW **FED USGS** **USGS40000138576**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335053117135801		
Monloc name:	004S003W06Q004S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8479722
Longitude:	-117.23275	Sourcemap scale:	24000
Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Cenozoic Erathem		
Aquifer type:	Unconfined single aquifer		
Construction date:	19940115	Welldepth:	760
Welldepth units:	ft	Wellholedepth:	905
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2001-03-12	109.8	

A5
WSW **FED USGS** **USGS40000138560**
1/8 - 1/4 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335046117135501		
Monloc name:	004S003W06Q001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8461295
Longitude:	-117.2328155	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1460
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

6
North **CA WELLS** **4814**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	04S/03W-06H02 S	User ID:	WAT
FRDS Number:	3310700002	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	335114.0 1171338.0	Precision:	100 Feet (one Second)
Source Name:	WELL 06 - ABANDONED		
System Number:	3310700		
System Name:	MARCH AFB		
Organization That Operates System:	722 CES/CC 840 MACDILL,BLD2506 MARCH AFB, CA 92518		
Pop Served:	8186	Connections:	2348
Area Served:	MARCH AFB		

7
SSE **CA WELLS** **CADW60000010022**
1/2 - 1 Mile
Lower

Objectid:	10022
Latitude:	33.839173
Longitude:	-117.226488
Site code:	338392N1172265W001
State well numbe:	Not Reported
Local well name:	'EMWD11048'
Well use id:	3
Well use descrip:	Irrigation
County id:	33
County name:	Riverside
Basin code:	'8-5'
Basin desc:	San Jacinto
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000010022

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B8
NE **FED USGS** **USGS40000138608**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335115117131802		
Monloc name:	004S003W06H002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.854185
Longitude:	-117.2225373	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B9
NE **FED USGS** **USGS40000138607**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335115117131801		
Monloc name:	004S003W06H001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.854185
Longitude:	-117.2225373	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

10
NNW **FED USGS** **USGS40000138615**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335121117140301		
Monloc name:	004S003W06C001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8558516
Longitude:	-117.235038	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1465
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

11
NNE **FED USGS** **USGS40000138621**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126117133201		
Monloc name:	004S003W06A003S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572405
Longitude:	-117.2264265	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

C12
South
1/2 - 1 Mile
Lower

CA WELLS **CADW60000010023**

Objectid:	10023
Latitude:	33.837111
Longitude:	-117.227354
Site code:	338371N1172274W001
State well numbe:	Not Reported
Local well name:	'EMWD11049'
Well use id:	3
Well use descrip:	Irrigation
County id:	33
County name:	Riverside
Basin code:	'8-5'
Basin desc:	San Jacinto
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000010023

C13
South
1/2 - 1 Mile
Lower

FED USGS **USGS40000138517**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335013117133601		
Monloc name:	004S003W07J002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.836963
Longitude:	-117.2275373	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	1455
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D14
South
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000138509**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335004117134501		
Monloc name:	004S003W07J001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070202	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8344631
Longitude:	-117.2300374	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	420
Welldepth units:	ft	Wellholedepth:	420
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

D15
South
1/2 - 1 Mile
Higher | **CA WELLS** | **CADW60000010024**

Objectid:	10024
Latitude:	33.834329
Longitude:	-117.229585
Site code:	338343N1172296W001
State well numbe:	Not Reported
Local well name:	'EMWD12404'
Well use id:	3
Well use descrip:	Irrigation
County id:	33
County name:	Riverside
Basin code:	'8-5'
Basin desc:	San Jacinto
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000010024

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92571	1	0

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX E

ENVIRONMENTAL LIEN AND ACTIVITY AND USE LIMITATION REPORT

7.25-Acre Site
West Perry Street and Barrett Avenue
Perris, CA 92571

Inquiry Number: 5336054.7
July 02, 2018

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

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

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

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

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

West Perry Street and Barrett Avenue
7.25-Acre Site
Perris, CA 92571

RESEARCH SOURCE

Source 1:

Riverside Recorder
Riverside, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	Christopher Gonzalez
Title received from:	Greg & Martha Gonzalez
Deed Dated	8/26/2013
Deed Recorded:	8/26/2013
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	Christopher Gonzalez
Parcel # / Property Identifier:	302-060-011
Comments:	See Exhibit

Deed 2:

Type of Deed:	deed
Title is vested in:	Pivovaroff Second Family
Title received from:	Pivovaroff Thirs Family LP
Deed Dated	11/19/2013
Deed Recorded:	1/7/2014
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	

Miscellaneous Comments:

Legal Description: See Exhibit

Legal Current Owner: Pivovaroff Second Family LP

Parcel # / Property Identifier: 302-060-026

Comments: See Exhibit

Deed 3:

Type of Deed:	deed
Title is vested in:	Vera Pivovaroff Trustee
Title received from:	Vera Pivovaroff
Deed Dated	11/19/2013
Deed Recorded:	1/7/2014
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	

Legal Description: See Exhibit

Legal Current Owner: Vera Pivovaroff Trustee

Parcel # / Property Identifier: 302-060-030

Comments: See Exhibit

Deed 4:

Type of Deed:	deed
Title is vested in:	Vera Pivovaroff Trustee
Title received from:	Vera Pivovaroff
Deed Dated	11/19/2013
Deed Recorded:	1/7/2014
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	

Legal Description: See Exhibit

EDR Environmental Lien and AUL Search

Legal Current Owner: Vera Pivovaroff Trustee

Parcel # / Property Identifier: 302-060-031

Comments: See Exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

Deed Exhibit 1

DOC # 2013-0417778
08/26/2013 03:31P Fee:15.00
Page 1 of 1
Recorded in Official Records
County of Riverside
Larry W. Ward
Assessor, County Clerk & Recorder

S	R	U	PAGE	SIZE	DA	MISC	LONG	RFD	COPY
M	A	L	465	426	PCOR	NCOR	SMF	NCHG	EXAM
					T:		CTY	UNI	

RECORDING REQUESTED BY:

AND WHEN RECORDED MAILTO:
Christopher Gonzalez
717 Periwinkle Lane
Perris, CA 92571

A.P.N.: 302-060-011-3 Order No.: Escrow No.:

15

C
061

GRANT DEED

DOCUMENTARY TRANSFER TAX $ -0-

Signature of Declarant or Agent determining tax - Firm Name

..Computed on the consideration or value of property conveyed; OR

..Computed on the consideration or value less liens or encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Greg Gonzalez and Martha Gonzalez, Husband and Wife as Joint Tenants

hereby GRANT(S) to

Christopher Gonzalez, A Married Man, Sole and Separate Property

the real property in the City of _____, County of Riverside, State of California, described as:

LOTS A AND B IN BLOCK 1 OF FIGADOTA FARMS NO.17, AS SHOWN BY MAP ON FILE IN BOOK 17, PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

Dated August 26, 2013

STATE OF CALIFORNIA
COUNTY OF RIVERSIDE

Greg Gonzalez

Martha Gonzalez

On AUGUST 26, 2013 before me, JOSE CASTELLON, NOTARY PUBLIC
personally appeared GREG GONZALEZ AND MARTHA GONZALEZ
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that ~~he/she~~/they executed the same in ~~his/her~~/their authorized capacity(ies), and that by ~~his/her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under the PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature (Notary seal)

Jose Castellon
COMM. #1997536
NOTARY PUBLIC • CALIFORNIA
RIVERSIDE COUNTY
My Comm. Expires Nov. 10, 2016

Mail tax statements to: Christopher Gonzalez, 717 Periwinkle Lane, Perris, CA 92571

Deed Exhibit 2

DOC # 2014-0007216
01/07/2014 04:41P Fee:15.00
Page 1 of 1
Recorded in Official Records
County of Riverside
Larry W. Ward
Assessor, County Clerk & Recorder

RECORDING REQUESTED BY:
AND WHEN RECORDED RETURN TO:

Thomas R. Kroesche, Esq.
Cooksey, Toolen, Gage, Duffy & Woog
535 Anton Blvd., 10th Floor
Costa Mesa, CA 92626

Title Order No. ____ Escrow No. ____

MAIL TAX STATEMENTS TO:

Vera Pivovaroff
17863 Calle Aurora
Rowland Heights, California 91748

S	R	U	PAGE	SIZE	DA	MISC	LONG	RFD	COPY
1			1						1.50
M	A	L	465	42[illegible]	PCOR	NCOR	SMF	NCHG	EXAM
					T:		CTY	UNI	062

File No. 86.0381

SPACE ABOVE THIS LINE FOR RECORDER'S USE

16.50

C
062

Grant Deed

THE UNDERSIGNED GRANTOR(s) DECLARE(s)
DOCUMENTARY TRANSFER TAX IS $ EXEMPT*
☐ _____ unincorporated area City of Perris
Parcel No. 302-060-026
☐ computed on full value of interest or property conveyed, or
☐ computed on full value less value of liens or encumbrances remaining at time of sale, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
THE PIVOVAROFF THIRD FAMILY LIMITED PARTNERSHIP, a California limited partnership

Hereby GRANT(S) to THE PIVOVAROFF SECOND FAMILY LIMITED PARTNERSHIP, a California limited partnership
the following described real property in the City of Perris
county of RIVERSIDE, state of California:

PARCEL 1: LOTS C AND D IN BLOCK 1 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 2: LOTS A, B, C AND D OF BLOCK 2 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

*The Grantors and Grantees in this conveyance are comprised of the same parties who continue to hold the same proportionate interests in the property, and is exempt pursuant to Rev. & Tax § 11925

Dated November 19, 2013

Vera Pivovaroff
VERA PIVOVAROFF, General Partner, The Pivovaroff Third Family Limited Partnership

STATE OF CALIFORNIA
COUNTY OF Orange } S.S.
On November 19, 2013, before me, Kimberly M. Lipscomb, Notary Public, personally appeared VERA PIVOVAROFF, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal
Signature Kimberly M. Lipscomb

KIMBERLY M. LIPSCOMB
COMM. #1966595
Notary Public California
Orange County
My Comm. Expires Feb. 10, 2016

(This area for official notarial seal)

Deed Exhibit 3

DOC # 2014-0007218
01/07/2014 04:41P Fee:15.00
Page 1 of 1
Recorded in Official Records
County of Riverside
Larry W. Ward
Assessor, County Clerk & Recorder

RECORDING REQUESTED BY:
AND WHEN RECORDED RETURN TO:

Thomas R. Kroesche, Esq.
Cooksey, Toolen, Gage, Duffy & Woog
535 Anton Blvd., 10th Floor
Costa Mesa, CA 92626

Title Order No. ____ Escrow No. ____

MAIL TAX STATEMENTS TO:

Vera Pivovaroff
17863 Calle Aurora
Rowland Heights, California 91748

S	R	U	PAGE	SIZE	DA	MISC	LONG	RFD	COPY
									1.50
M	A	L	465	426	PCOR	NCOR	SMF	NCHG	EXAM
					T:		CTY	UNI	062

16.50

File No. 86.0381

SPACE ABOVE THIS LINE FOR RECORDER'S USE

C
062

Grant Deed

THE UNDERSIGNED GRANTOR(s) DECLARE(s)
DOCUMENTARY TRANSFER TAX IS $ EXEMPT*
☐ _____ unincorporated area City of Perris
Parcel No. 302-060-030
☐ computed on full value of interest or property conveyed, or
☐ computed on full value less value of liens or encumbrances remaining at time of sale, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
VERA PIVOVAROFF, a Widow

Hereby GRANT(S) to VERA PIVOVAROFF, TRUSTEE OF THE VERA PIVOVAROFF TRUST U/A 1/6/99

the following described real property in the City of Perris
county of RIVERSIDE, state of California:

PARCEL 1: LOTS C AND D IN BLOCK 1 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 2: LOTS A, B, C AND D OF BLOCK 2 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

*This convevance transfers an interest into a Living Trust (R&T 11930)

Dated November 19, 2013

VERA PIVOVAROFF

STATE OF CALIFORNIA

COUNTY OF Orange } S.S.

On November 19, 2013, before me, Kimberly M. Lipscomb, Notary Public, personally appeared VERA PIVOVAROFF, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature Kimberly M. Lipscomb

KIMBERLY M. LIPSCOMB
COMM. #1966595
Notary Public California
Orange County
My Comm. Expires Feb. 10, 2016

(This area for official notarial seal)

Deed Exhibit 4

DOC # 2014-0007220
01/07/2014 04:41P Fee:15.00
Page 1 of 1
Recorded in Official Records
County of Riverside
Larry W. Ward
Assessor, County Clerk & Recorder

RECORDING REQUESTED BY:
AND WHEN RECORDED RETURN TO:

Thomas R. Kroesche, Esq.
Cooksey, Toolen, Gage, Duffy & Woog
535 Anton Blvd., 10th Floor
Costa Mesa, CA 92626

Title Order No. _____ Escrow No. _____

MAIL TAX STATEMENTS TO:

Vera Pivovaroff
17863 Calle Aurora
Rowland Heights, California 91748

S	R	U	PAGE	SIZE	DA	MISC	LONG	RFD	COPY
1			1						1.50
M	A	L	465	426	PCOR	NCOR	SMF	NCHG	EXAM
					T:		CTY	UNI	0e2

16.50

File No. 86.0381

SPACE ABOVE THIS LINE FOR RECORDER'S USE

C
062

Grant Deed

THE UNDERSIGNED GRANTOR(s) DECLARE(s)
DOCUMENTARY TRANSFER TAX IS $ EXEMPT*
☐ _____ unincorporated area City of Perris
Parcel No. 302-060-031
☐ computed on full value of interest or property conveyed, or
☐ computed on full value less value of liens or encumbrances remaining at time of sale, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
VERA PIVOVAROFF, a Widow

Hereby GRANT(S) to VERA PIVOVAROFF, TRUSTEE OF THE VERA PIVOVAROFF TRUST, U/A 1/6/99

the following described real property in the City of Perris
county of RIVERSIDE, state of California:

PARCEL 1: LOTS C AND D IN BLOCK 1 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

PARCEL 2: LOTS A, B, C AND D OF BLOCK 2 OF FIGADOTA FARMS NO. 17, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE 32 OF MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

* This conveyance transfers an interest into a Living Trust (R&T 11930)

Dated November 19, 2013

VERA PIVOVAROFF

STATE OF CALIFORNIA

COUNTY OF Orange } S.S.

On November 19, 2013, before me, Kimberly M. Lipscomb, Notary Public, personally appeared VERA PIVOVAROFF, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

KIMBERLY M. LIPSCOMB
COMM. #1966595
Notary Public California
Orange County
My Comm. Expires Feb. 10, 2016

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature Kimberly M. Lipscomb

(This area for official notarial seal)

APPENDIX F

AERIAL PHOTOGRAPHS

7.25-Acre Site

West Perry Street and Barrett Avenue

Perris, CA 92571

Inquiry Number: 5336054.11

June 19, 2018

The EDR Aerial Photo Decade Package

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

EDR Aerial Photo Decade Package

06/19/18

Site Name:

7.25-Acre Site
West Perry Street and Barrett A
Perris, CA 92571
EDR Inquiry # 5336054.11

Client Name:

APEX Companies LLC
15850 Crabbs Branch Way
Rockville, MD 20855
Contact: Dan Hisey

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: June 06, 2002	USGS/DOQQ
1997	1"=500'	Flight Date: October 16, 1997	USGS
1989	1"=500'	Flight Date: August 15, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1978	1"=500'	Flight Date: September 20, 1978	USDA
1967	1"=500'	Flight Date: May 15, 1967	USDA
1961	1"=500'	Flight Date: June 14, 1961	USDA
1959	1"=500'	Flight Date: September 05, 1959	USGS
1953	1"=500'	Flight Date: August 28, 1953	USDA
1949	1"=500'	Flight Date: May 08, 1949	USDA
1938	1"=500'	Flight Date: June 14, 1938	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2018 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 5336054.11
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 5336054.11

YEAR: 2012

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 2009

= 500'

N

EDR

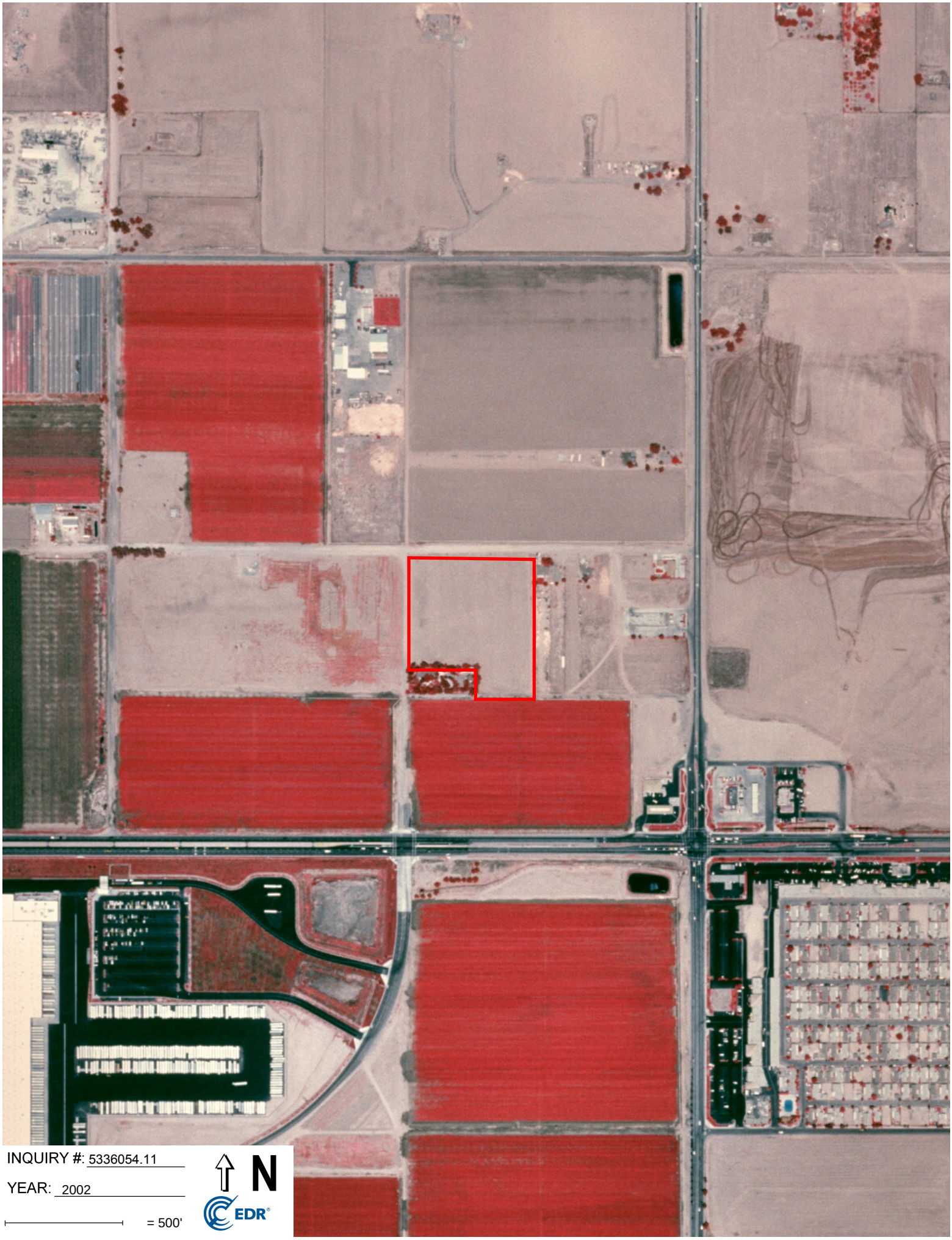
INQUIRY #: 5336054.11

YEAR: 2006

= 500'

N

EDR


INQUIRY #: 5336054.11
YEAR: 2002
= 500'
N
EDR

INQUIRY #: 5336054.11

YEAR: 1997

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1989

= 500'

N

EDR

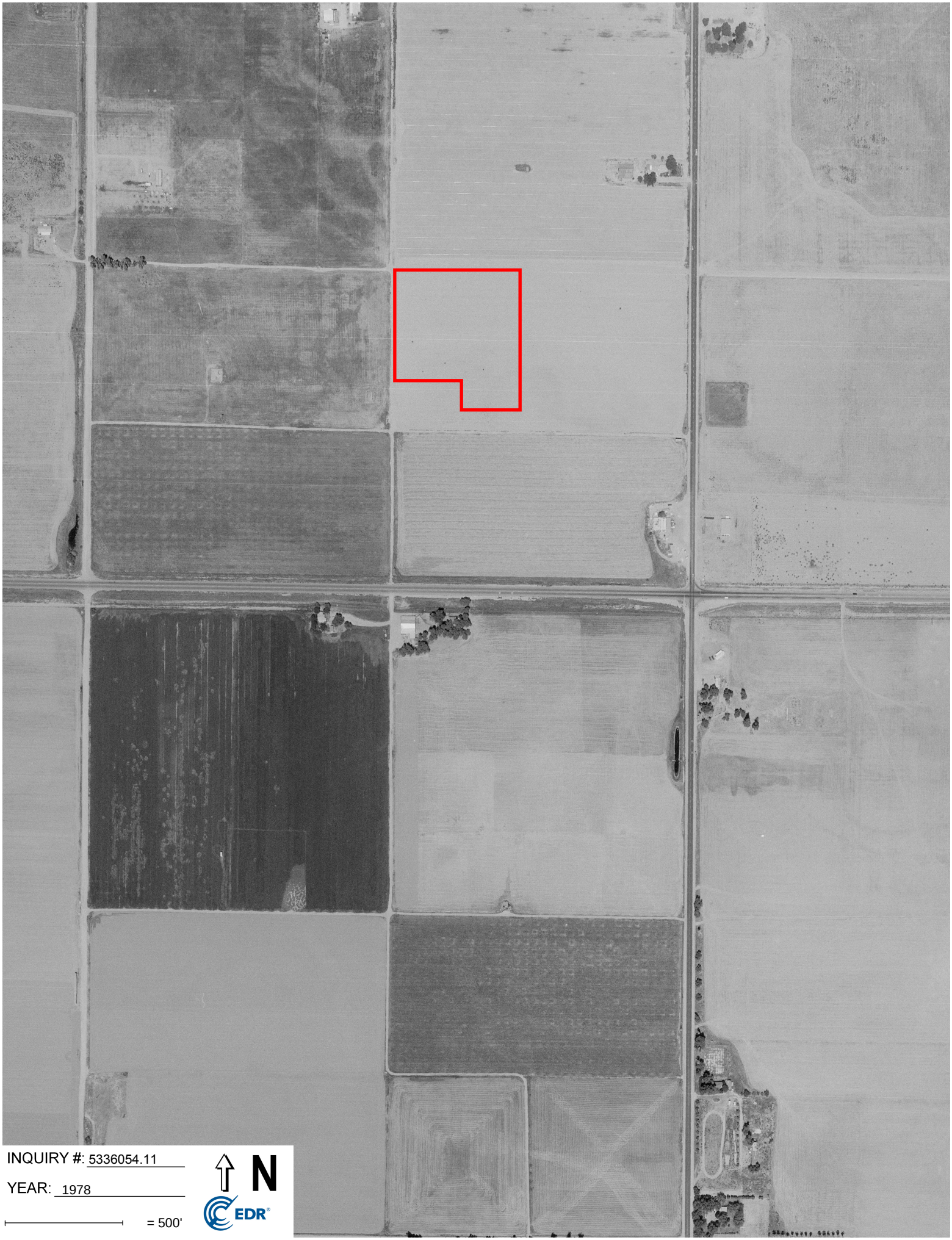
INQUIRY #: 5336054.11

YEAR: 1985

= 500'

N

EDR



INQUIRY #: 5336054.11

YEAR: 1978

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1967

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1961

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1959

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1953

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1949

= 500'

N

EDR

INQUIRY #: 5336054.11

YEAR: 1938

= 500'

N

EDR

APPENDIX G

TOPOGRAPHIC MAPS

7.25-Acre Site

West Perry Street and Barrett Avenue

Perris, CA 92571

Inquiry Number: 5336054.4

June 18, 2018

EDR Historical Topo Map Report

with QuadMatch™

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

EDR Historical Topo Map Report

06/18/18

Site Name:

7.25-Acre Site
West Perry Street and Barrett A
Perris, CA 92571
EDR Inquiry # 5336054.4

Client Name:

APEX Companies LLC
15850 Crabbs Branch Way
Rockville, MD 20855
Contact: Dan Hisey

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by APEX Companies LLC were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: 093-DUKE-013

Coordinates:

Latitude:	33.847384 33° 50' 51" North
Longitude:	-117.229355 -117° 13' 46" West
UTM Zone:	Zone 11 North
UTM X Meters:	478781.74
UTM Y Meters:	3745258.08
Elevation:	1460.00' above sea level

Maps Provided:

2012
1979
1973
1967
1953
1943
1942
1901

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2018 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

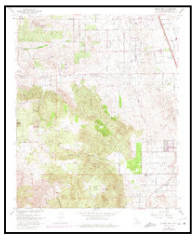
Perris
2012
7.5-minute, 24000

Steele Peak
2012
7.5-minute, 24000

1979 Source Sheets

Perris
1979
7.5-minute, 24000
Aerial Photo Revised 1978

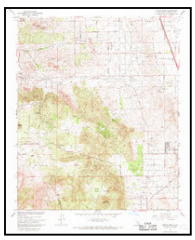
1973 Source Sheets



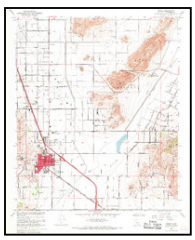
Steele Peak
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Perris
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1967 Source Sheets



Steele Peak
1967
7.5-minute, 24000
Aerial Photo Revised 1966



Perris
1967
7.5-minute, 24000
Aerial Photo Revised 1966

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953 Source Sheets

Perris
1953
7.5-minute, 24000
Aerial Photo Revised 1951

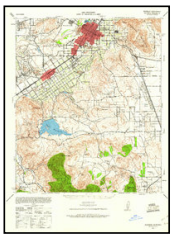
Steele Peak
1953
7.5-minute, 24000
Aerial Photo Revised 1951

1943 Source Sheets

PERRIS
1943
15-minute, 62500

1942 Source Sheets

Perris
1942
15-minute, 62500
Aerial Photo Revised 1939



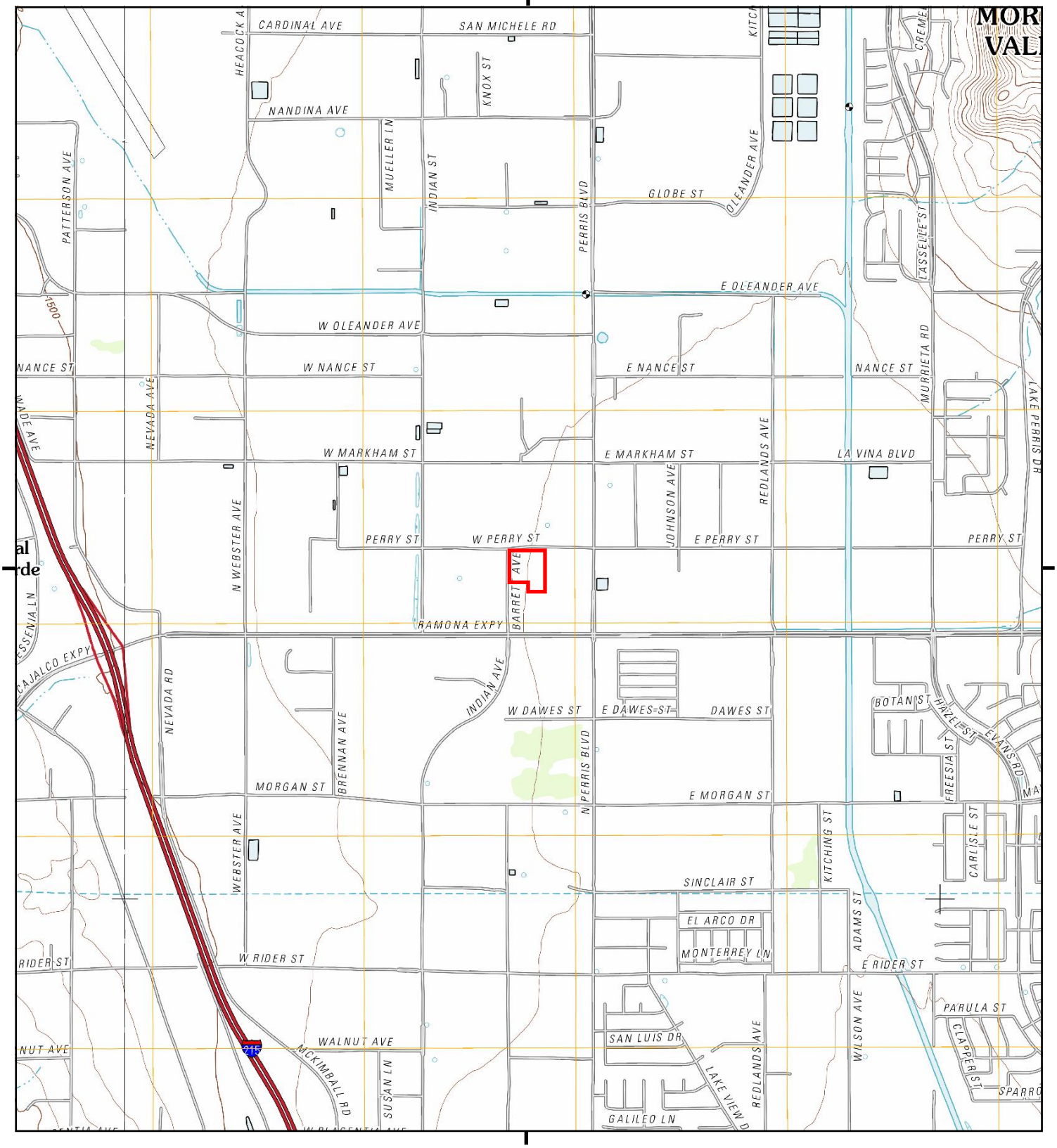
Riverside
1942
15-minute, 62500
Aerial Photo Revised 1939

1901 Source Sheets

Elsinore
1901
30-minute, 125000

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

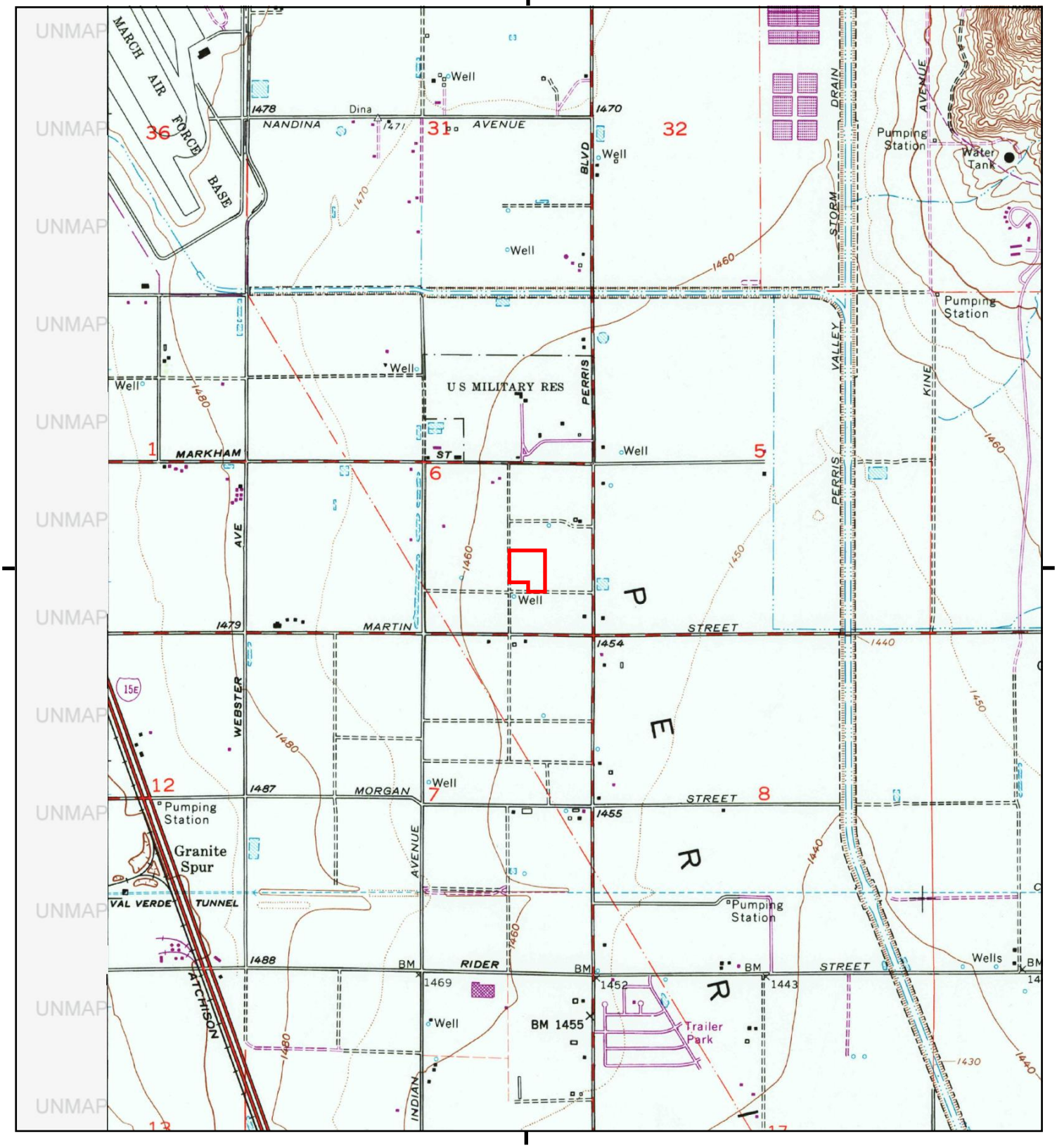
TP, Perris, 2012, 7.5-minute
SW, Steele Peak, 2012, 7.5-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

Historical Topo Map

1979



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

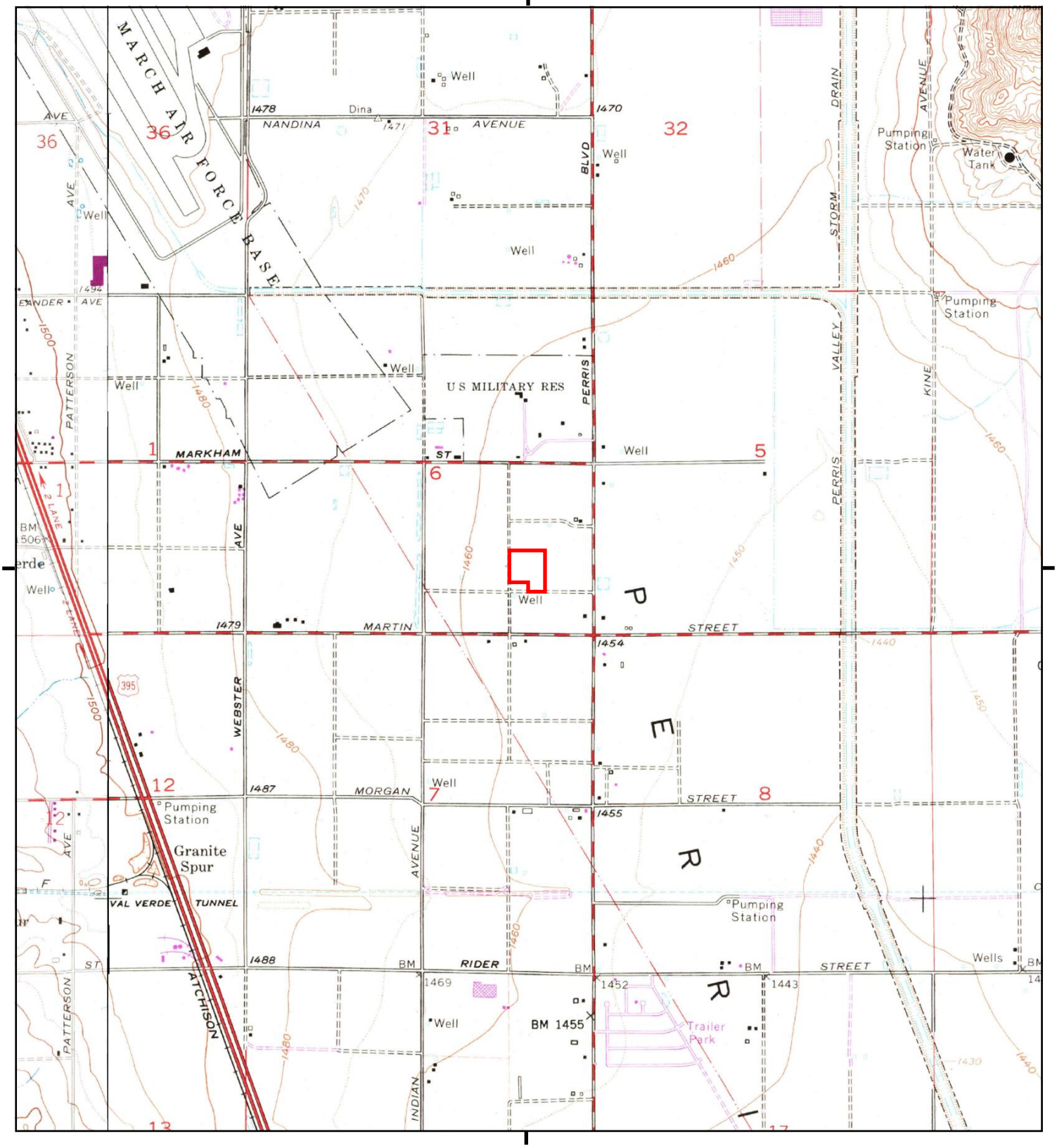
TP, Perris, 1979, 7.5-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

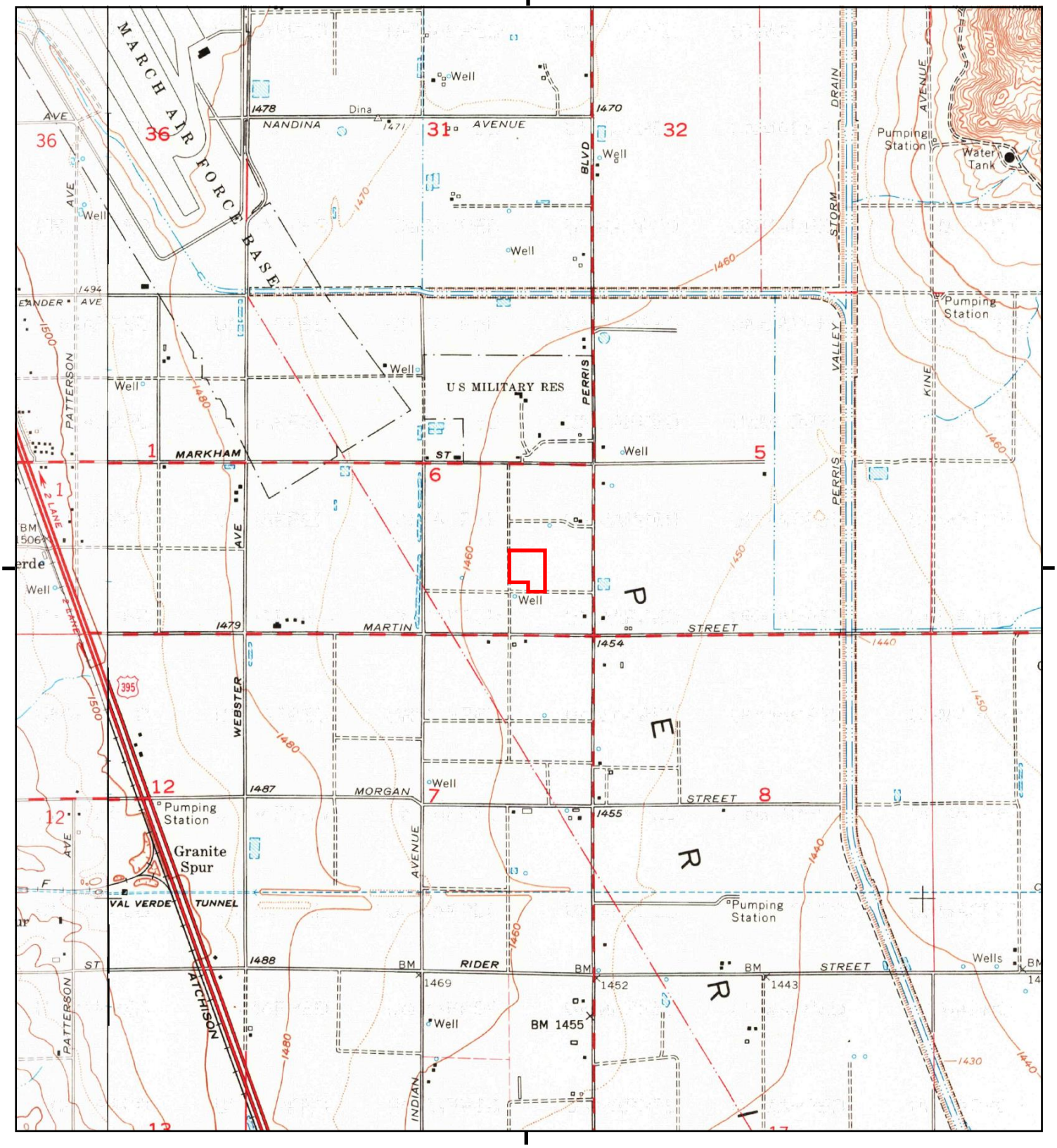
TP, Perris, 1973, 7.5-minute
SW, Steele Peak, 1973, 7.5-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

Historical Topo Map

1967



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

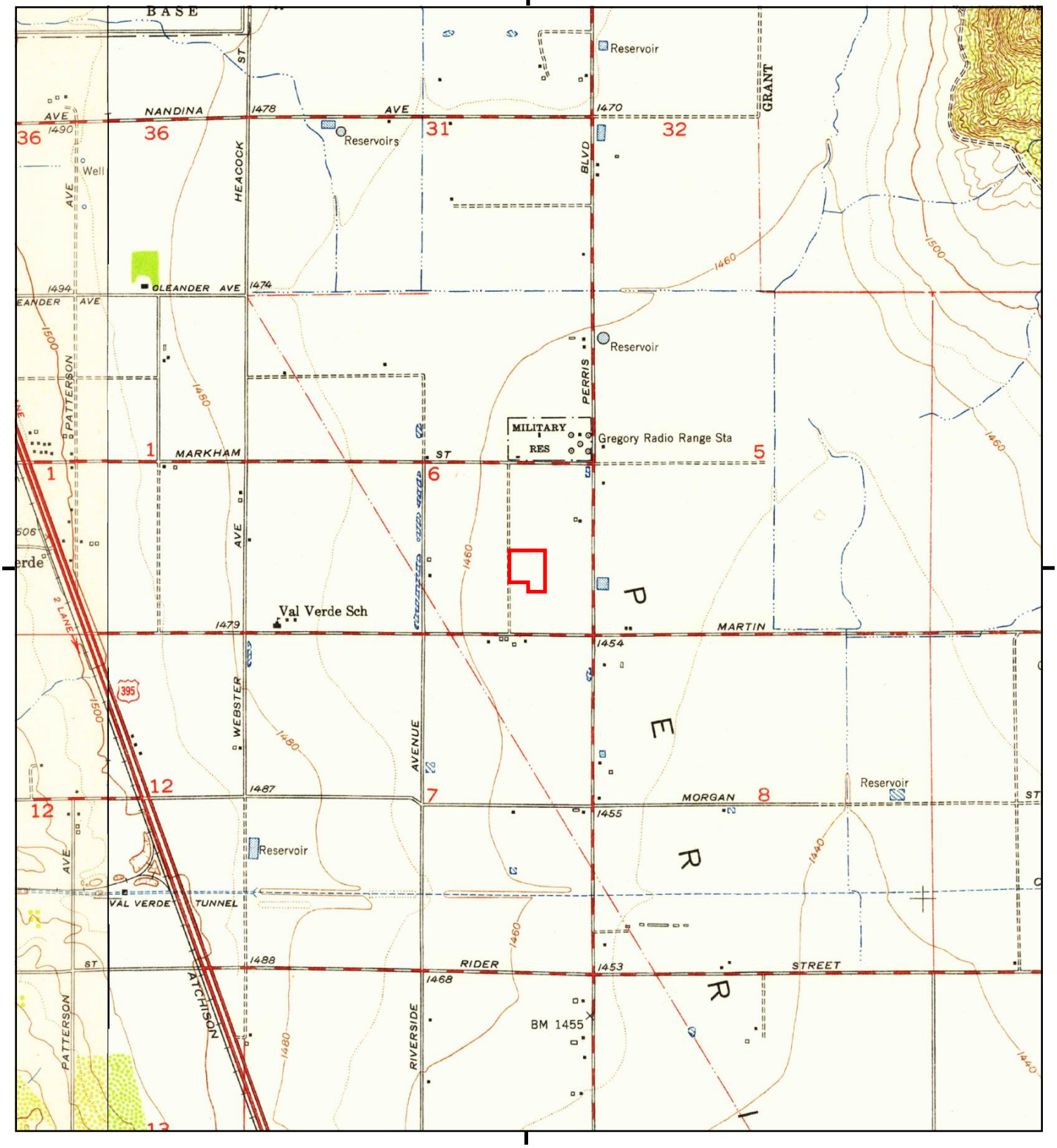
TP, Perris, 1967, 7.5-minute
SW, Steele Peak, 1967, 7.5-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

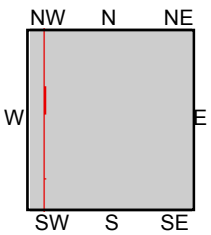
Historical Topo Map

1953



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



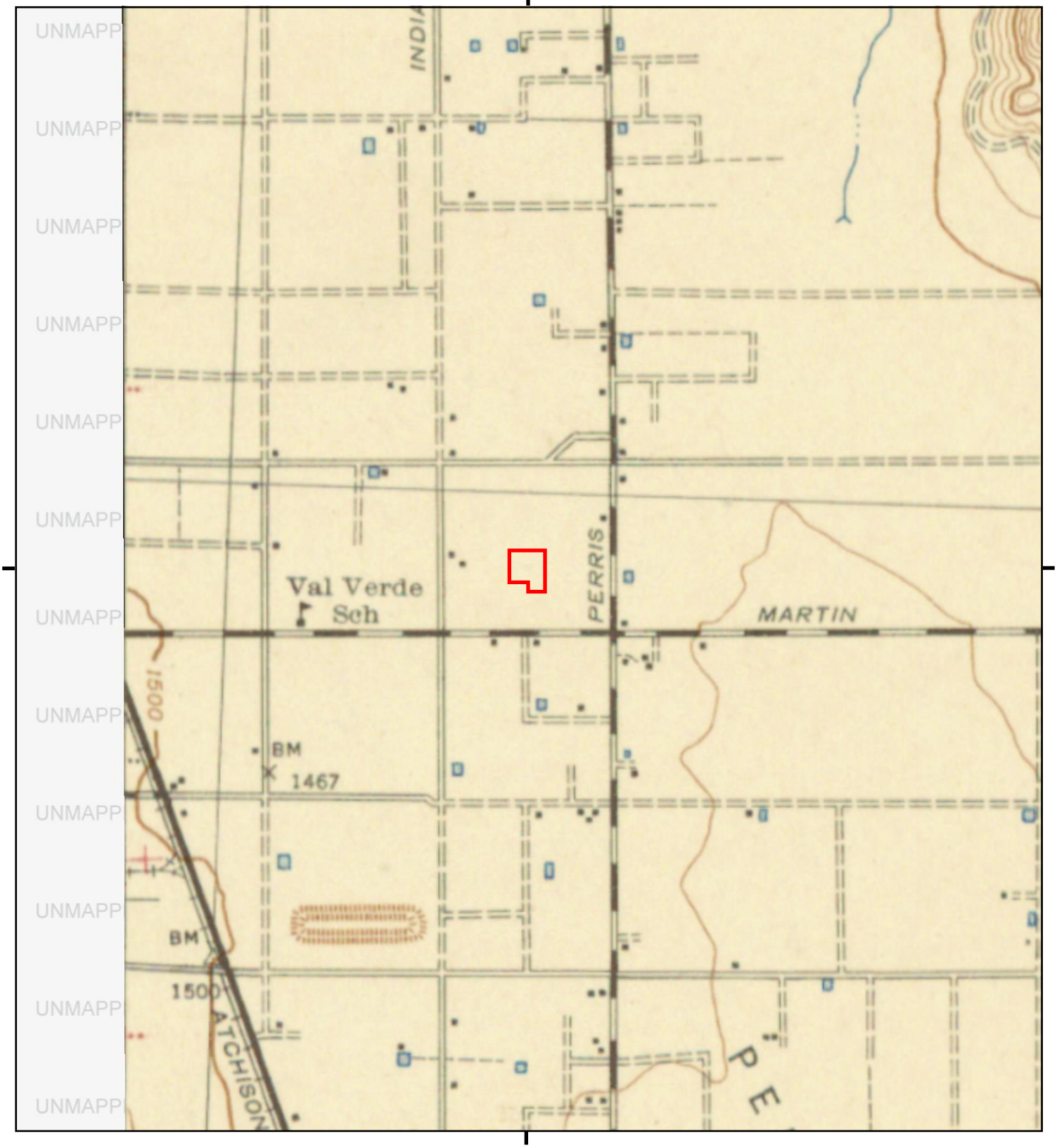
TP, Perris, 1953, 7.5-minute
SW, Steele Peak, 1953, 7.5-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

Historical Topo Map

1943



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

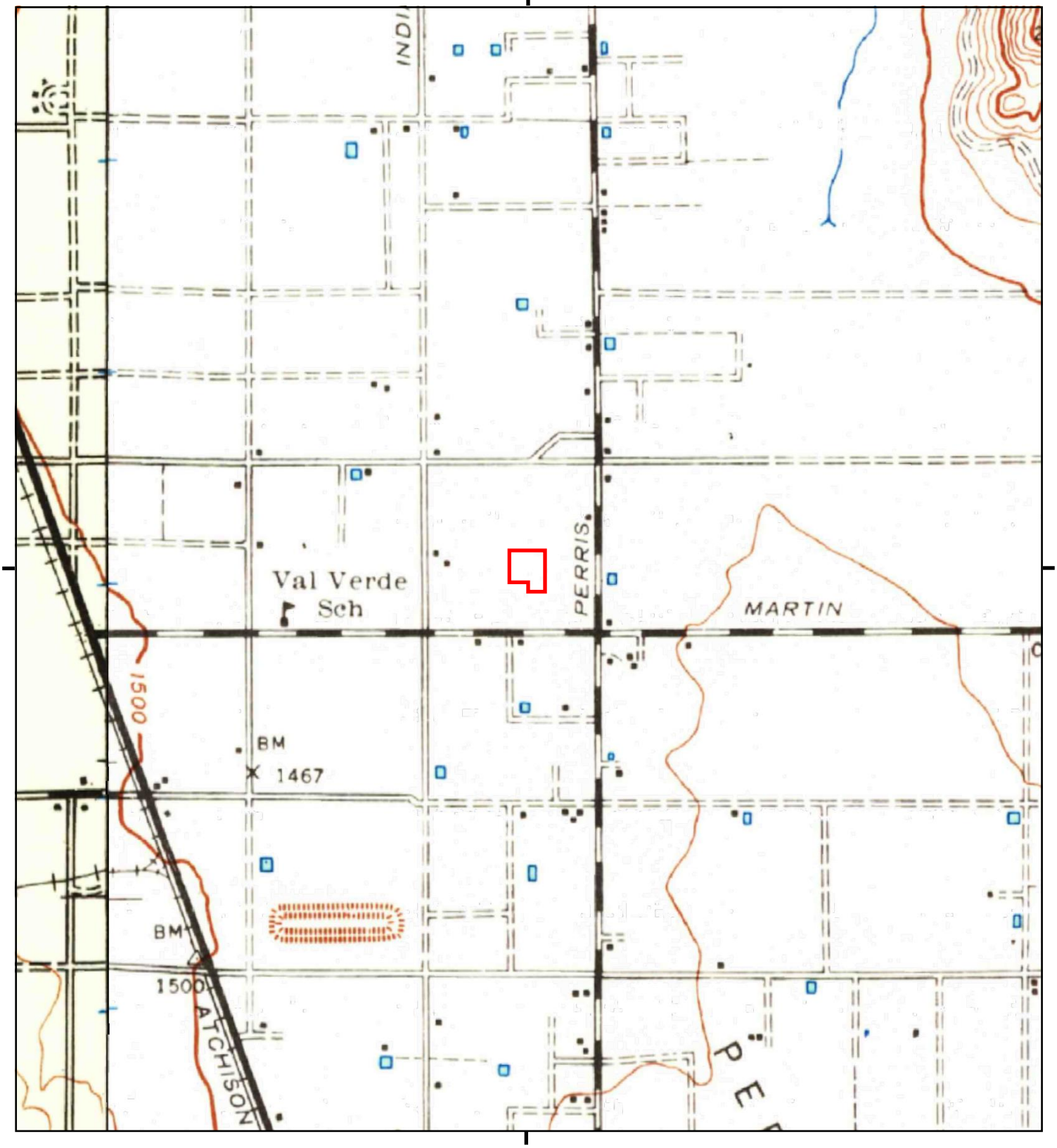
TP, PERRIS, 1943, 15-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

Historical Topo Map

1942



This report includes information from the following map sheet(s).

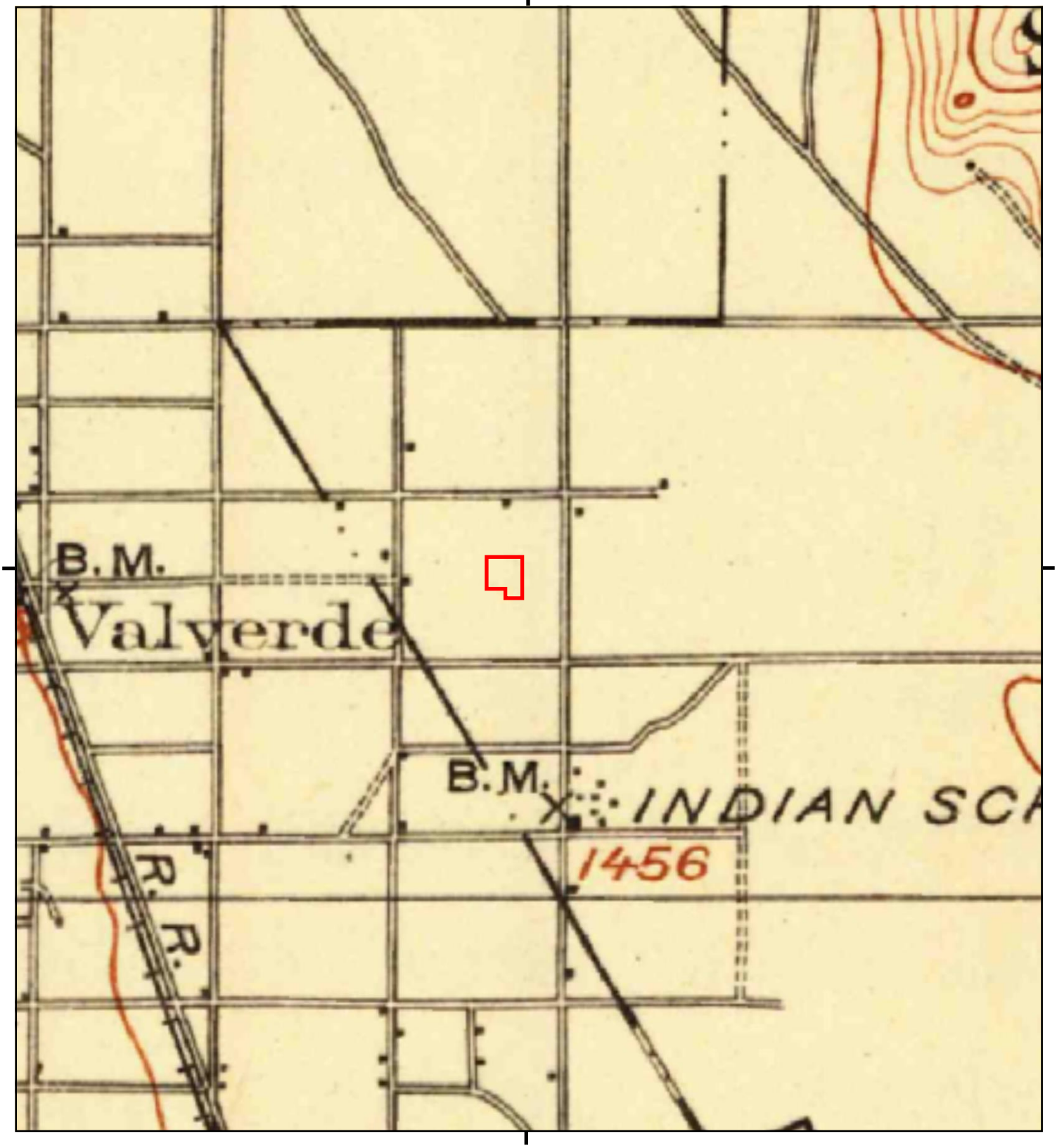
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Perris, 1942, 15-minute
W, Riverside, 1942, 15-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Elsinore, 1901, 30-minute

SITE NAME: 7.25-Acre Site
ADDRESS: West Perry Street and Barrett Avenue
Perris, CA 92571
CLIENT: APEX Companies LLC

N

APPENDIX H

CITY DIRECTORIES REPORT

7.25-Acre Site
West Perry Street and Barrett Avenue
Perris, CA 92571

Inquiry Number: 5336054.5
June 21, 2018

The EDR-City Directory Image Report

Environmental Data Resources Inc

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

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report 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 Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by
infoUSA®
Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☐	☑	EDR Digital Archive
1992	☑	☑	EDR Digital Archive
1985	☐	☐	Haines Criss-Cross Directory
1980	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

West Perry Street and Barrett Avenue
Perris, CA 92571

Year	*CD Image*	*Source*	
W PERRY ST			
2014	pg A2	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	pg A6	EDR Digital Archive	
2000	pg A8	EDR Digital Archive	
1992	pg A11	EDR Digital Archive	
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
BARRETT AVE			
2014	pg. A1	EDR Digital Archive	
2010	pg. A3	EDR Digital Archive	
2005	pg. A5	EDR Digital Archive	
2000	pg. A7	EDR Digital Archive	
1995	pg. A9	EDR Digital Archive	
1992	pg. A10	EDR Digital Archive	
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1975	-	Haines Criss-Cross Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 2014

2830	SILVER CREEK CONSTRUCTION
	SILVER CREEK INDUSTRIES INC
	SOUTHERN MODULAR INDS CAL LP
	SOUTHERN MODULAR INDUSTRIES
3020	PERRIS ELITE COLLISION CTR LLC
3060	CALVARY CHAPEL PERRIS VALLEY
4111	NEIIENDAM, JENNIFER

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PERRY ST 2014

111 SALAZAR, JORGE A

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 2010

2830	ECOCORE LLC
	PACIFIC CONTINENTAL MODULARS
	SOUTHERN MODULAR INDS CAL LP
3020	PERRIS ELITE COLLISION CTR LLC
3060	CALVARY CHAPEL PERRIS VALLEY
4111	KAUS, KELLY C

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PERRY ST 2010

111 CAPRICORN CONSTRUCTION INC
LOPEZ, AIDA
616 STRANGE, CHARLES
636 GLENNEY, ROGER D
1209 PERRIS JURASSIC PARK

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 2005

2830	ARIZONA MILLWORK INC A CORP
	MODTECH HOLDINGS INC
	MODTECH INC
	PACIFIC CONTINENTAL MODULARS
	QED INDUSTRIES
4111	KAUS, KELLY C
	KELLY C ENTERPRISES

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PERRY ST 2005

111 SAVIN, ALFREDO P

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 2000

2830 MODTECH HOLDINGS INC
MODTECH INC
SPI MANUFACTURING INC
4111 KAUS, KELLY C

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PERRY ST 2000

111 IRWIN, ROGER L

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 1995

2830 MODTECH INC

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BARRETT AVE 1992

4111 KAUS, K C

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PERRY ST 1992

616 CHUCK STRANGE ENT

APPENDIX I

FIRE INSURANCE MAPS

7.25-Acre Site

West Perry Street and Barrett Avenue

Perris, CA 92571

Inquiry Number: 5336054.3

June 18, 2018

Certified Sanborn® Map Report

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

Certified Sanborn® Map Report

06/18/18

Site Name:

7.25-Acre Site
West Perry Street and Barrett A
Perris, CA 92571
EDR Inquiry # 5336054.3

Client Name:

APEX Companies LLC
15850 Crabbs Branch Way
Rockville, MD 20855
Contact: Dan Hisey

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by APEX Companies LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 4946-41A0-A946

PO # NA

Project 093-DUKE-013

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 4946-41A0-A946

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

APEX Companies LLC (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2018 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

APPENDIX J

BUILDING PERMITS REPORT

7.25-Acre Site
West Perry Street and Barrett Avenue
Perris, CA 92571

Inquiry Number: 5336054.8
June 18, 2018

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

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

TABLE OF CONTENTS

SECTION

About This Report

Executive Summary

Findings

Glossary

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

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2017 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILDFAX® PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of APEX Companies LLC on Jun 18, 2018.

TARGET PROPERTY

West Perry Street and Barrett Avenue
Perris, CA 92571

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

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.

Perris

Year	*Source*	*TP*	*Adjoining*
2018	City of Perris, Development Services		X
2017	City of Perris, Development Services		X
2016	City of Perris, Development Services		X
2015	City of Perris, Development Services		X
2014	City of Perris, Development Services		X

Riverside County

Year	*Source*	*TP*	*Adjoining*
2017	Riverside County, Building and Safety		
2016	Riverside County, Building and Safety		
2015	Riverside County, Building and Safety		X
2014	Riverside County, Building and Safety		
2013	Riverside County, Building and Safety		
2012	Riverside County, Building and Safety		
2011	Riverside County, Building and Safety		
2010	Riverside County, Building and Safety		
2009	Riverside County, Building and Safety		
2008	Riverside County, Building and Safety		
2007	Riverside County, Building and Safety		
2006	Riverside County, Building and Safety		
2005	Riverside County, Building and Safety		
2004	Riverside County, Building and Safety		
2003	Riverside County, Building and Safety		
2002	Riverside County, Building and Safety		
2001	Riverside County, Building and Safety		
2000	Riverside County, Building and Safety		
1999	Riverside County, Building and Safety		
1998	Riverside County, Building and Safety		

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1997	Riverside County, Building and Safety		
1996	Riverside County, Building and Safety		
1995	Riverside County, Building and Safety		
1994	Riverside County, Building and Safety		
1993	Riverside County, Building and Safety		
1992	Riverside County, Building and Safety		
1991	Riverside County, Building and Safety		
1990	Riverside County, Building and Safety		
1989	Riverside County, Building and Safety		
1988	Riverside County, Building and Safety		
1987	Riverside County, Building and Safety		
1986	Riverside County, Building and Safety		
1985	Riverside County, Building and Safety		
1984	Riverside County, Building and Safety		X
1983	Riverside County, Building and Safety		
1982	Riverside County, Building and Safety		
1981	Riverside County, Building and Safety		
1980	Riverside County, Building and Safety		
1979	Riverside County, Building and Safety		
1978	Riverside County, Building and Safety		
1977	Riverside County, Building and Safety		
1976	Riverside County, Building and Safety		
1975	Riverside County, Building and Safety		
1974	Riverside County, Building and Safety		
1973	Riverside County, Building and Safety		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Riverside County
Years: 1973-2017
Source: Riverside County, Building and Safety, PERRIS, CA
Phone: (951) 955-6742

Name: Perris
Years: 2014-2018
Source: City of Perris, Development Services, PERRIS, CA
Phone: (951) 443-1029

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

West Perry Street and Barrett Avenue
Perris, CA 92571

No Permits Found

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

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

BARRETT AVE

4111 BARRETT AVE

Date:	**9/29/2015**
Permit Type:	**BRI**
Description:	**REQUEST FOR RECORDS**
Permit Description:	
Work Class:	
Proposed Use:	BUILDING RECORDS INQUIRY
Permit Number:	BRI151054
Status:	PAID
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LOYO MIKE

Date:	**5/15/1984**
Permit Type:	**NSFR**
Description:	**DWLG (REF#68389)**
Permit Description:	**NEW SINGLE FAMILY RESIDENTIAL**
Work Class:	
Proposed Use:	
Permit Number:	70455
Status:	FINALED
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KAUS KELLY

ADJOINING PROPERTY FINDINGS

INDIAN AVE

4120 INDIAN AVE

Date:	**1/31/2018**
Permit Type:	
Description:	**FINAL C OF O - SHELL** **FINAL CERTIFICATE OF OCCUPANCY - BUILDING SHELL**
Permit Description:	**Certificate of Occupancy**
Work Class:	
Proposed Use:	
Permit Number:	PMT18-00281
Status:	Plan Review
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**1/31/2018**
Permit Type:	
Description:	**FINAL C OF O - GENERAL MILLS TENANT** **FINAL CERTIFICATE OF OCCUPANCY - TENANT GENERAL MILLS**
Permit Description:	**Certificate of Occupancy**
Work Class:	
Proposed Use:	
Permit Number:	PMT18-00282
Status:	Plan Review
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**9/28/2017**
Permit Type:	
Description:	**ANNUAL FIRE INSPECTION** **Annual Fire & Public safety inspection**
Permit Description:	**Commercial Fire Permit**
Work Class:	
Proposed Use:	
Permit Number:	PMT17-01860
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**5/25/2016**
Permit Type:	
Description:	**NON ILLUMINATED MONUMENT SIGN** **NON-ILLUMINATED MONUMENT SIGN "GENERAL MILLS"**
Permit Description:	**Sign - Permanent**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00757
Status:	Finaled
Valuation:	$8,500.00
Contractor Company:	
Contractor Name:	JON HOFFMAN ASSOCIATES INC

ADJOINING PROPERTY FINDINGS

Date:	**5/2/2016**
Permit Type:	
Description:	**TCO** **90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY FOR THE TENANT-GENERAL MILLS. PERMIT FOR EXPANSION IS PMT15-06573 AND ORIGINAL BUILDING IS PERMIT 11070149. ALL CONDITIONS FROM EACH DEPARTMENT MUST BE MET PRIOR TO A FINAL C OF O. TEMPORARY CERTIFICATE TO EXPIRE DECEMBER 1, 2016.**
Permit Description:	**Certificate of Occupancy**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00623
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**4/19/2016**
Permit Type:	
Description:	**TCO** **90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY FOR THE SHELL OF GENERAL MILLS. PERMIT FOR EXPANSION IS PMT15-06573. ALL CONDITIONS FROM EACH DEPARTMENT MUST BE MET PRIOR TO A FINAL C OF O. TEMPORARY CERTIFICATE TO EXPIRE DECEMBER 1, 2016**
Permit Description:	**Certificate of Occupancy**
Work Class:	
Proposed Use:	Shell Industrial
Permit Number:	PMT16-00572
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**4/12/2016**
Permit Type:	
Description:	**INSTALLATION OF STORAGE** **INSTALLATION OF STORAGE & RACKS**
Permit Description:	**Fire**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00538
Status:	Finaled
Valuation:	$8,500.00
Contractor Company:	
Contractor Name:	

Date:	**3/30/2016**
Permit Type:	
Description:	**REVISIONS TO APPROVE PLAN** **REVISIONS TO APPROVE PLAN MANUFACTURE CHANGE FOR SCALE**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00475
Status:	Plan Review
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**3/14/2016**
Permit Type:	
Description:	**COMMERCIAL GAS LINE** **MEDIUM PRESSURE GAS LINE TO (3) SHRINK WRAP MAHCINES**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00355
Status:	Ready to Issue
Valuation:	$40,000.00
Contractor Company:	
Contractor Name:	

Date:	**3/14/2016**
Permit Type:	
Description:	**SPRINKLER MONITORING SYSTEM** **VFS TO REPLACE FACP & CONNECT 11 RISERS 12 DUCT DETECTORS & 8 RELAY TO BIG FANS TO EXISTING SPRINKER MONITORING SYSTEM**
Permit Description:	**Fire**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00356
Status:	Finaled
Valuation:	$30,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**2/22/2016**
Permit Type:	
Description:	**INSTALLATION OF STORAGE RACKS** **INSTALLATION OF STORAGE RACKS 15,000 SQ FT**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00257
Status:	Finaled
Valuation:	$8,500.00
Contractor Company:	
Contractor Name:	

Date:	**2/17/2016**
Permit Type:	
Description:	**COMM T.I** **INSTALLATION OF CONVEYING EQUIPMENT TO ASSIST WITH CREATING OF PRODUCT DISTRIBUTION**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-00233
Status:	Submitted
Valuation:	$793,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**11/18/2015**
Permit Type:	
Description:	**NEW WET FIRE SPRINKLERS** **NEW WET FIRE SPRINKLERS FOR CR&R**
Permit Description:	**Fire**
Work Class:	
Proposed Use:	
Permit Number:	PMT15-06765
Status:	Finaled
Valuation:	$433,360.00
Contractor Company:	
Contractor Name:	J M CARDEN SPRINKLER CO INC

Date:	**11/17/2015**
Permit Type:	
Description:	**COMM T.I** **CONSTURCT 885 GUARD SHACK, NEW LUNCH PATIO AND CANOPY, NEW TURCK SCALE AND PIT,**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT15-06754
Status:	Revisions Received
Valuation:	$172,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**10/19/2015**
Permit Type:	
Description:	**TI IMPROVEMENT PERRIS VALLEY LOGISTICS - GENERAL MILLS OFFICE WH IMPROVEMENTS** **CONSTRUCTION OF 20,840 SF OF NEW INTERIOR OFFICE AND RESTROOM IMPROVEMENTS AND INTERIOR LOADING DOCK IMPROVMENTS. NO NEW SITE IMPROVEMENTS PROPOSED WITH THIS PERMIT SET**
Permit Description:	**Commercial Alteration**
Work Class:	
Proposed Use:	
Permit Number:	PMT15-06573
Status:	Finaled
Valuation:	$625,200.00
Contractor Company:	
Contractor Name:	

Date:	**10/13/2015**
Permit Type:	**Commercial/Fire**
Description:	**FIRE SPRINKLER SYSTEM UNDER GROUND TO EXISTING SYSTEM.**
Permit Description:	
Work Class:	
Proposed Use:	
Permit Number:	PMT15-06551
Status:	
Valuation:	$263,000.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date: **9/23/2015**
Permit Type:
Description: **NEW COMMERCIAL BUILDING 414,000 IIIB**

Permit Description: **Commercial New**
Work Class:
Proposed Use:
Permit Number: PMT15-06467
Status: Submitted
Valuation: $5,280,000.00
Contractor Company:
Contractor Name:

Date: **9/23/2015**
Permit Type:
Description: **EXPANSION TO EXISTING COMMERCIAL BUILDING 413863 IIIB**

Permit Description: **Commercial New**
Work Class:
Proposed Use:
Permit Number: PMT15-06468
Status: Finaled
Valuation: $5,280,000.00
Contractor Company:
Contractor Name:

Date: **11/4/2014**
Permit Type:
Description: **DEFERRED SUBMITAL**
DEFERRED SUBMITAL (JOIST CALCULATIONS)

Permit Description: **Commercial Alteration**
Work Class:
Proposed Use:
Permit Number: PMT14-00101
Status: Submitted
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **9/2/2014**
Permit Type: **FIRE**
Description: **FIRE ALARM INSTALLING A SPRINKLER MONITORING**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 14080077
Status:
Valuation: $27,000.00
Contractor Company:
Contractor Name:

Date: **7/2/2014**
Permit Type: **FIRE**
Description: **FIRE SPRINKLER**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 14030060
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **4/8/2014**
Permit Type: **ENG GRADE**
Description: **ROUGH GRADING**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 14040072
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

Date: **4/8/2014**
Permit Type: **ENG GRADE**
Description: **PRECISE GRADING**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 14040073
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **8/8/2011**
Permit Type: **COMBO**
Description: **TILT-UP**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 11070149
Status: Open
Valuation: $29,805,317.00
Contractor Company:
Contractor Name:

4122 INDIAN AVE

Date: **5/12/2014**
Permit Type: **ELEC**
Description: **TEMP POWER POLES FOR CONSTRUCTION**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 14050060
Status:
Valuation: $1,200.00
Contractor Company:
Contractor Name:

ADJOINING PROPERTY FINDINGS

W PERRY ST

111 W PERRY ST

Date:	**11/1/2016**
Permit Type:	
Description:	**FORECLOSURE** **payoff demand- TITLE 365 COMPANY - 877-365-9365**
Permit Description:	**Payoff Demand**
Work Class:	
Proposed Use:	
Permit Number:	PMT16-01635
Status:	Accepted
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

616 W PERRY ST

Date:	**4/14/2016**
Permit Type:	
Description:	**SOLAR PERMIT** **PV ROOF RESIDENTIAL SOLARS 19 PANELS 4.94 KW (NO ELECTRTICAL PANEL UPGRADE)**
Permit Description:	**Solar**
Work Class:	
Proposed Use:	1 & 2 Family Residence
Permit Number:	PMT16-00559
Status:	Finaled
Valuation:	$10,868.00
Contractor Company:	
Contractor Name:	VIVINT SOLAR DEVELOPER LLC

ADJOINING PROPERTY FINDINGS

Date: **8/27/2013**
Permit Type: **PLUMBING**
Description: **WATER HEATER 40 GAL PROPANE TANK**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 13080104
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

Date: **6/20/2013**
Permit Type: **MECH**
Description: **HVAC CHANGE OUT (80,000 BTU)FURNACE, 4 TON A/C,**

Permit Description:
Work Class:
Proposed Use:
Permit Number: 13060060
Status:
Valuation: $0.00
Contractor Company:
Contractor Name:

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: Albert A. Webb Associates | Date: 2/25/2019

Designed by: TSW | Case No: 18-00011

Company Project Number/Name: Duke Barrett Building Option

BMP Identification

BMP NAME / ID: Basin A

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.63 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
L-A	*37,122*	*Ornamental Landscaping*	*0.1*	*0.11*	*4100.4*			
R-A	*145,263*	*Concrete or Asphalt*	*1*	*0.89*	*129574.6*			
H-A	*121,922*	*Roofs*	*1*	*0.89*	*108754.4*			
BMP-A	*7,960*	*Ornamental Landscaping*	*0.1*	*0.11*	*879.2*			
	312267		***Total***		**243308.6**	**0.63**	***12773.7***	***12774***

Notes:

Bioretention Facility - Design Procedure	BMP ID	Legend:	Required Entries
			Calculated Cells

Company Name:	Albert A. Webb Associates	Date:	2/25/2019
Designed by:	TSW	County/City Case No.:	18-00011

Design Volume

Enter the area tributary to this feature	A_T=	7.2	acres
Enter V_{BMP} determined from Section 2.1 of this Handbook	V_{BMP}=	12,774	ft^3

Type of Bioretention Facility Design

(●) Side slopes required (parallel to parking spaces or adjacent to walkways)

( ) No side slopes required (perpendicular to parking space or Planter Boxes)

Bioretention Facility Surface Area

Depth of Soil Filter Media Layer	d_S =	2.5	ft
Top Width of Bioretention Facility, excluding curb	w_T =	78.0	ft
Total Effective Depth, d_E $d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$	d_E =	1.64	ft
Minimum Surface Area, A_m $A_M\ (ft^2) = \frac{V_{BMP}\ (ft^3)}{d_E\ (ft)}$	A_M =	7,785	ft^2
Proposed Surface Area	A=	7,960	ft^2

Bioretention Facility Properties

Side Slopes in Bioretention Facility	z =	4	:1
Diameter of Underdrain		6	inches
Longitudinal Slope of Site (3% maximum)		0	%
6" Check Dam Spacing		0	feet
Describe Vegetation:		Other	

Notes:

Weir Inlet
Ponding Depth Calculation

ALBERT A WEBB ASSOCIATES
ENGINEERING CONSULTANTS

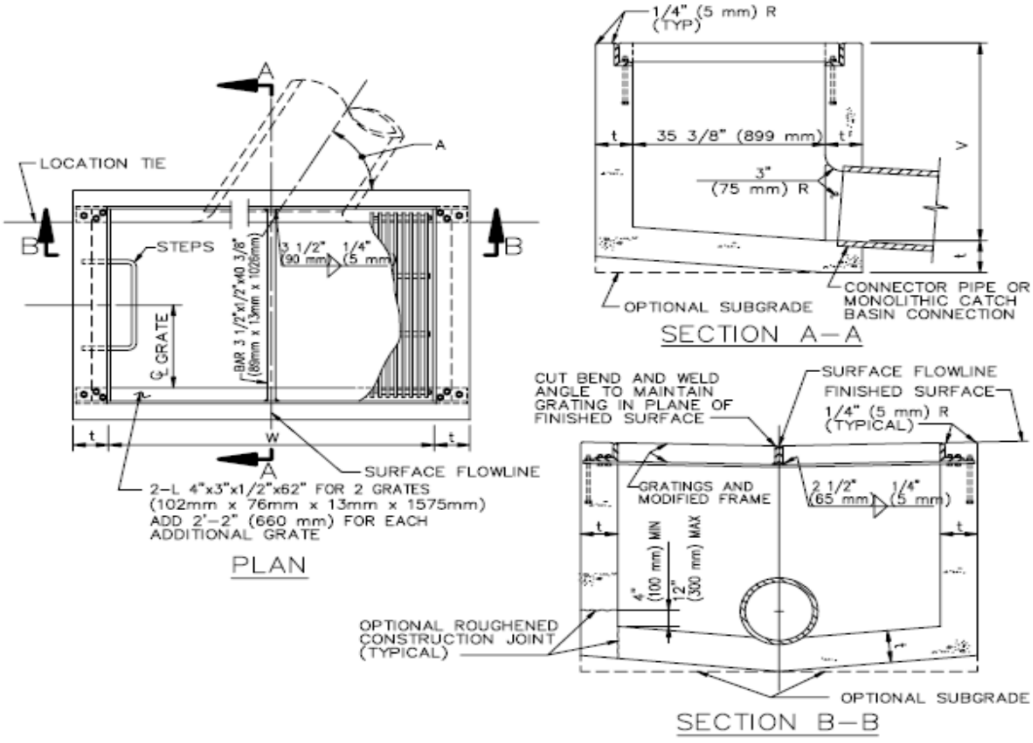
Designer:	TSW
Date:	2/25/2019
Project:	Duke Barrett
Location:	Outlet Structure for WQ Basin A

OUTLET STRUCTURE PONDING DEPTH SPPWC 305-3

DISCHARGE (cfs)		16.1	
NUMBER OF GRATES		2	
LENGTH (ft)		14.479	
WEIR COEFFICIENT	C	3	
WEIR LENGTH	L	14.479	ft^2
HEAD	h	0.52	ft
Flow	Q	16.10	cfs

$$Q = C L (h)^{3/2}$$

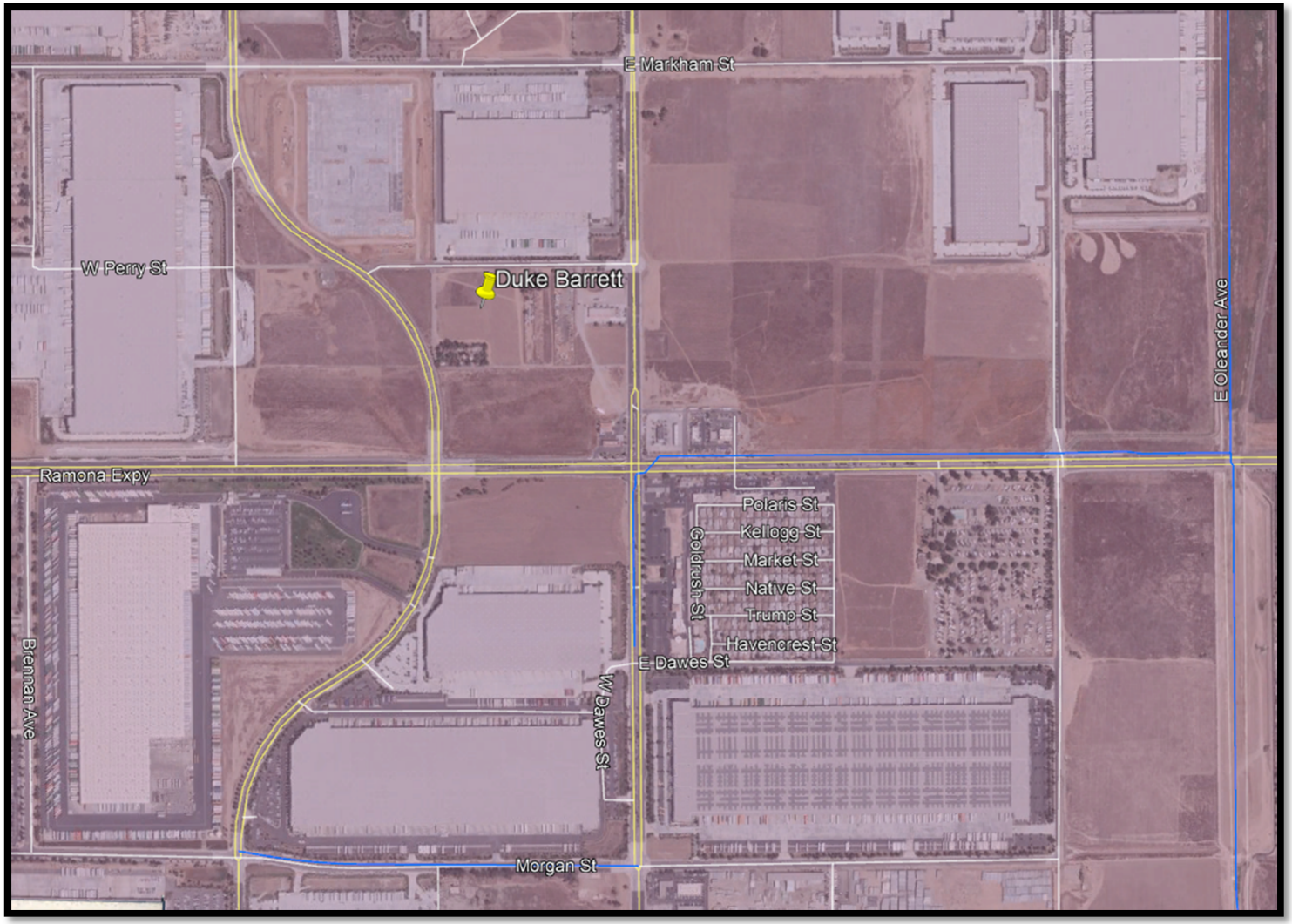
Top of Weir Elevation: 1458.5
Water Surface Elevation: 1459.02

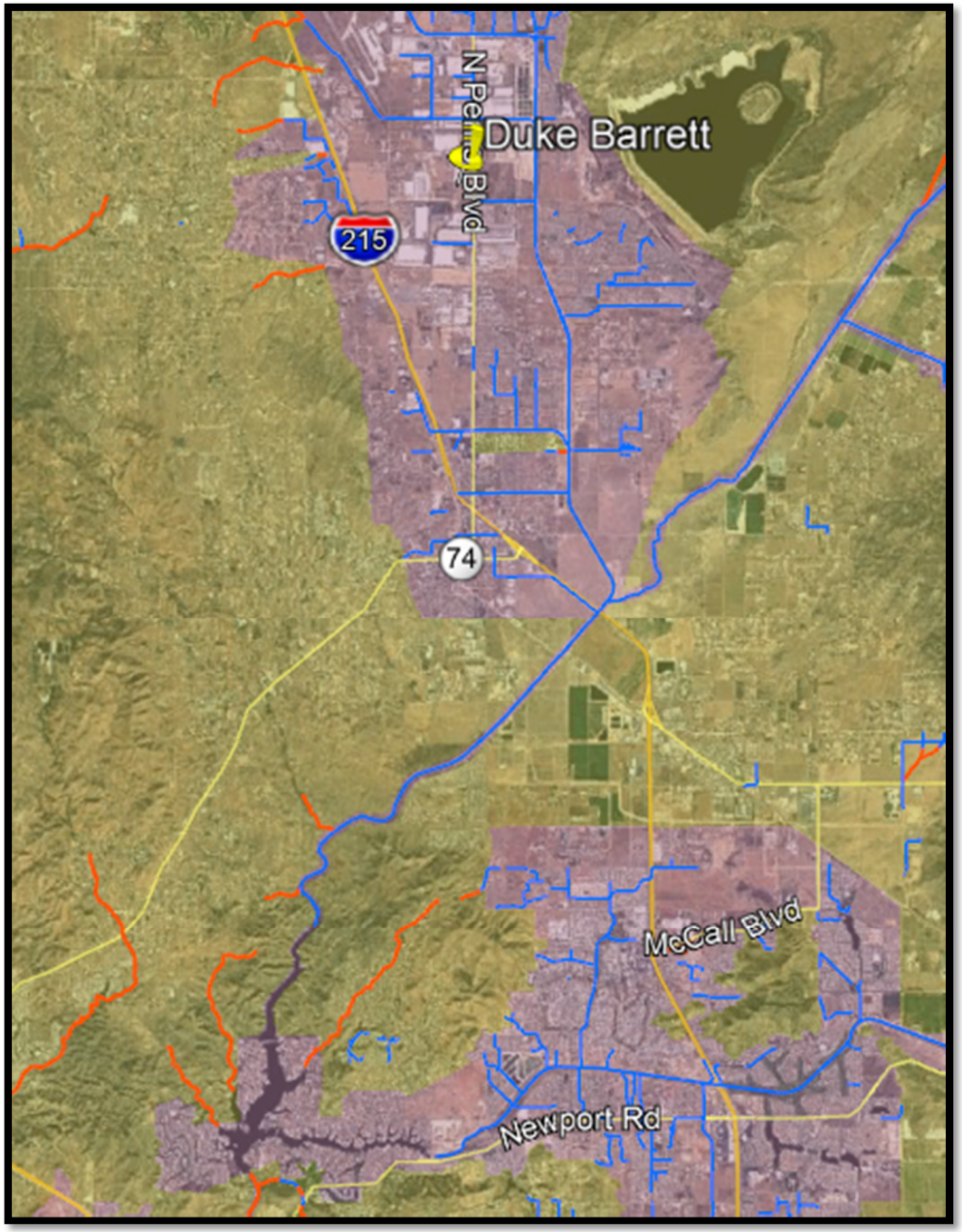


Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

HCOC APPLICABILITY




Duke Barrett
N Perris Blvd
215
74
McCall Blvd
Newport Rd