PARTNER
Engineering and Science, Inc.®

AERIAL DEPOSITED LEAD INVESTIGATION REPORT

I-210 Expansion
San Bernardino, California

June 26, 2015
Partner Project Number: 14-121800.1

Prepared for:

Epic Land Solutions, Inc
3850 Vine Street, Suite 200
Riverside, California 92507

Engineers who understand your business

PARTNER
Engineering and Science, Inc.

June 26, 2015

Karen Starr
Epic Land Solutions, Inc.
3850 Vine Street, Suite 200
Riverside, California 92507

Subject: Aerially Deposited Lead Investigation Report
I-210 Expansion
San Bernardino, California
Partner Project Number: 14-121800.1

Dear Ms. Starr:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed on the above-referenced property. The following report describes the field activities, methods, and findings of the Aerial Deposited Lead (ADL) Investigation conducted at the above-referenced property.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact the undersigned at (310) 622-8855.

Sincerely,

Partner Engineering and Science, Inc.

Ian Penney
Project Scientist

Debbie Stott, P.G.
Project Manager

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1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate soil at along the median of the 210 Freeway between Highland Avenue and Pioneer Avenue for the potential presence of hazardous concentrations of lead in shallow soil. The presence of lead is suspected due to impact from vehicle exhaust emissions when leaded gasoline was used. Epic Land Solutions, Inc. provided project authorization of Partner Proposal Number 14-121800.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally-accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by Epic Land Solutions to perform this assessment. The engagement agreement specifically states the scope and purpose of the assessment, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Epic Land Solutions, SANBAG, and Caltrans. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, Epic Land Solutions, and SANBAG and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed.

2.0 SITE BACKGROUND

2.1 Aerially Deposited Lead in Soil

Testing by Caltrans throughout the State has shown that ADL exists in soil along major highway routes due to vehicle exhaust containing lead from the combustion of leaded gasoline. The concentration and distribution of ADL in soil is a function of many variables, but in general, highway age and traffic volume appear to be primary factors.

2.2 Site Description

Within the project limits, the first segment of SR210 was constructed in 1984 between San Bernardino Avenue and 5th Street-Greenspot Road. The remaining portions of the SR210 freeway were constructed in 1993. Old SR-30 overlaps SR-210 between Sterling and Arden Avenues. Aerially deposited lead (ADL) from leaded fuel exhaust may contaminate soils adjacent to freeways. Leaded gasoline was phased out beginning in 1973 and as of January 1, 1991, was no longer for sale in California. Based on the presence of the freeway within the timeframe that leaded gasoline was in use in California and roadway location, an aerially deposited lead (ADL) site investigation was conducted in exposed soil along the median (the Site) in the following areas:

- The portion of SR210 between San Bernardino Avenue and 5th street due to the construction and use while leaded gasoline was in use (between 1984 and 1991).
- The portion of SR210 that overlaps old SR30 (between Sterling an Arden Avenues) due to the existence of SR30 as a roadway prior to the phasing out of leaded gasoline.
- An isolated sample as a spot check along a portion of the median where ADL is not anticipated.

The segment within the project limits of SR-210 is an east-west state highway between Highland Avenue and Palm Avenue then curves to the south at Palm Avenue and extends to Interstate 10 just south of West San Bernardino Avenue in San Bernardino County, California. The segment of SR-210 within the project limits consists of two mixed flow lanes in each travel direction. The highway is separated by an unpaved median.

This project was conducted in anticipation of widening of both north and southbound lanes of the highway into the median.

Refer to Figure 1 for a site plan showing site features and surrounding properties. GPS coordinates for each sample location are included in Table 1.

3.0 FIELD ACTIVITIES

Refer to Table 1 for a summary of the sampling schedule and laboratory analyses for this investigation.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Permitting

Prior to drilling, Epic Land Solutions secured Encroachment Permit Number 08-15-A-SV-0371 from the State of California Department of Transportation (DOT) for grab groundwater sampling. Refer to Appendix A for a copy of the permit acquired for this investigation.

On June 9, 2015, Partner subcontracted with Right of Way, Inc. to provide traffic control as stipulated in the DOT Encroachment Permit.

3.1.2 Health and Safety Plan

Partner prepared a Health and Safety Plan (HSP) to provide guidelines on the use of personal protective equipment and the health and safety procedures to be implemented by personnel during field activities. The HSP specified the safety procedures for field work, summarized chemical hazard information, and identified site safety officers, emergency contacts, and the locations of emergency medical care facilities.

3.2 Sampling Equipment

On June 9, 2015, Partner collected 12 soil samples from six borings (B1 through B6) with a hand auger with a 2.5-inch diameter, stainless steel bucket attached. Prior to the beginning of hand augering, and between sample intervals and boring locations, sampling equipment was decontaminated by washing the equipment with an Alconox™ tap water solution followed by a distilled/purified water rinse and a final rinse with distilled/purified water to prevent cross-contamination.

3.3 Boring Locations

Borings B1 and B2 were advanced between Sterling and Arden Avenues approximately 900 and 1,800 feet east of Sterling Avenue, respectively. Borings B3 through B5 were advanced at approximately 2,000 foot linear intervals between West San Bernardino Avenue and 5th Street. And, Boring B6 was advanced at approximately 1,000 feet north of Baseline Road.

The global positioning satellite (GPS) coordinates for each boring location were recorded utilizing a Trimble GPS GeoExplorer Handheld. Refer to Table 1 for a record of each borings respective GPS coordinates.

3.4 Soil Sampling

Borings B1 through B6 were unpaved.

At the desired sampling depth, soil was transferred from the auger bucket into to a new re-sealable plastic bag and the soil was field-homogenized within the sample bag. Homogenized soil within the bag was then transferred into a new four-ounce, laboratory-provided, glass jar, labeled with the sample date/time and a unique soil sample number, placed in a chilled ice chest, and delivered to the analytical laboratory the same day the sample was collected.

Soil samples were collected from each boring at approximately 0.5 and 1.5 feet bgs.

4.0 LABORATORY ANALYSIS

4.1 Laboratory Analysis

Partner collected 12 soil samples on June 9, 2015 which were transported in an iced cooler under proper chain-of-custody protocol to Alpha Scientific Corporation (ASC), a state-certified laboratory [California Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP) certificate number 2633] in the City of Cerritos, California, for analysis on the same day. Each soil sample was analyzed for lead in accordance with the United States Environmental Protection Agency (EPA) Method 6010B.

4.2 Laboratory Analytical Results

Laboratory analytical results are included in Appendix B and discussed below.

4.2.1 Soil Sample Analytical Results

Soil samples B1-0.5, B1-1.5, B2-0.5, B2-1.5, B3-0.5, B3-1.5, B4-0.5, B4-1.5, B5-0.5, B5-1.5, B6-0.5, and B6-1.5 had detected lead concentrations of 19.5, 555.5, 3.8, 5.9, 4.1, 2.3, 6.0, 6.9, 3.8, 2.5, 4.0, and 4.8 milligrams per kilogram (mg/kg), respectively. All samples had a lead concentration less than 25 mg/kg.

Based on the low concentrations, no additional analyses were performed.

Refer to Table 2 for a summary of the soil sample lead laboratory analysis results.

5.0 DISCUSSION AND CONCLUSIONS

5.1 Regulatory Agency Guidance

5.1.1 Hazardous Waste Classification Criteria

Regulatory criteria to classify a waste as "California hazardous" for handling and disposal purposes are contained in the California Code of regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, §66261.24. Criteria to classify a waste as "Resource, Conservation and Recovery Act (RCRA) hazardous" are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), §261. For a waste containing metals, the waste is classified as "California hazardous" when: (1) the total metal content exceeds the respective Total Threshold Limit Concentration (TTLC); or (2) the soluble metal content exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste may have the potential of exceeding the STLC when the waste's total metal content is greater than or equal to ten times the respective STLC value, since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal analysis is typically performed. A material is classified as "RCRA hazardous" when the soluble metal content exceeds the Federal Regulatory Level based on the Toxicity Characteristic Leaching Procedure (TCLP). The TTLC value for lead is 1,000 milligrams per kilogram (mg/kg). The STLC and TCLP values for lead are both 5.0 milligrams per liter (mg/l).

The above regulatory criteria are based on toxicity. Wastes may also be classified as hazardous based on other criteria such as ignitability, corrosivity, and reactivity. For the purposes of ADL investigations, toxicity and corrosivity (e.g., chemical concentrations and soil pH values, respectively) are the primary factors considered for waste classification. Waste that is classified as either "California hazardous" or "RCRA hazardous" requires management as a hazardous waste and disposal at an appropriately permitted disposal facility.

The Department of Toxic Substances Control (DTSC) regulates and interprets hazardous waste laws in California. DTSC generally considers excavated or transported materials that exhibit "hazardous waste" characteristics to be a "waste" requiring proper management, treatment and disposal. Soil that contains lead above hazardous waste thresholds and is left in-place would not be necessarily classified by DTSC as a "waste." The DTSC has provided site-specific determinations that "movement of wastes within an area of contamination does not constitute "land disposal" and, thus, does not trigger hazardous waste disposal requirements." Therefore, lead-impacted soil that is scarified in-place, moisture-conditioned, and re-compacted during roadway improvement activities might not be considered a "waste." DTSC should be consulted to confirm waste classification. It is noted that in addition to DTSC regulations, health and safety requirements and other local agency requirements may also apply to the handling and disposal of lead-impacted soil.

5.1.2 DTSC Variance

Effective July 1, 2009, the DTSC issued a statewide Variance regarding the reuse of ADL-impacted soils within Caltrans right-of-way. According to the Variance, soil classified as a non-RCRA hazardous waste (based primarily on ADL content) may be suitable for reuse within Caltrans right-of-way. ADL impacted soil classified as a RCRA hazardous waste is not eligible for reuse under the Variance and must be disposed of as a RCRA hazardous waste (Caltrans Type Z-3).

ADL-impacted soil reused under the Variance must always be at least 5 feet above the highest groundwater elevation and, depending on lead concentrations, must be covered with at least one foot of non-hazardous soil or a pavement structure. The ADL-impacted soil may not be placed in areas where it might contact groundwater or surface water (such as streams and rivers), and must be buried in locations that are protected from erosion that may result from storm water run-on and run-off. Review of the statewide Variance indicates the following conditions regarding the reuse and management of ADL-impacted soil as fill material for construction and maintenance operations. If ADL-impacted soil meets the Variance criteria but is not intended to be reused within Caltrans right-of-way, then the excavated soil must be disposed of as a California hazardous waste (Caltrans Type Z- 2).

5.1.3 Caltrans Soil Management Categories

Caltrans soil management categories are summarized below:

Caltrans Type Y-1:

ADL-impacted soil exhibiting a total lead concentration less than or equal to 1,411 mg/kg, a DI-WET (WET using deionized water as the extractant) soluble lead concentration less than or equal to 1.5 mg/l, and a pH value greater than or equal to 5.5 may be reused within the same Caltrans corridor and must be covered with at least one foot of nonhazardous soil.

Caltrans Type Y-2:

ADL-impacted soil exhibiting a total lead concentration less than or equal to 1,411 mg/kg, a DI-WET lead concentration less than or equal to 1.5 mg/l, and a pH value greater than 5.5 and less than 12.5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

ADL-impacted soil exhibiting a total lead concentration less than or equal to 1,411 mg/kg, a DI-WET lead concentration greater than 1.5 mg/l and less than or equal to 150 mg/l, and a pH value greater than 5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

ADL-impacted soil exhibiting a total lead concentration greater than 1,411 mg/kg and less than or equal to 3,397 mg/kg, a DI-WET lead concentration less than or equal to 150 mg/l, and a pH value greater than 5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

Caltrans Type Z-2:

ADL-impacted soil exhibiting a total lead concentration greater than 3,397 mg/kg, or a DI-WET lead concentration greater than 150 mg/l, or a pH value less than or equal to 5 is not eligible for reuse under the Variance and must be disposed of as a California hazardous waste. Surplus Type Y-1 and Type Y-2 soil which requires offsite disposal is also classified as Type Z-2.

Caltrans Type Z-3:

ADL-impacted soil exhibiting a TCLP lead concentration greater than or equal to 5 mg/l is not eligible for reuse under the Variance and must be disposed of as a RCRA hazardous waste.

5.2 Discussion

Lead was not detected in any of the samples at concentrations above the criteria. Due to the low levels below the criteria, statistical analyses were not performed.

5.3 Summary and Conclusions

Based on the results of the lead in soil analyses, the lead levels are not elevated and the soil would not be considered hazardous. No special handling or management will be required.

TABLES

PARTNER

Table 1: Summary of Investigation Scope
I-210 Expansion
San Bernardino, California 92401
Partner Project Number 14-121800.1
June 2015

Boring Identification	Location (GPS Coordinates)	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	Approximately 900 feet east of Sterling Avenue (34° 08' 14.765", 117° 14' 23.715")	1.5	Soil	**0.5**, **1.5**	Lead
B2	Approximately 1,800 feet east of Sterling Avenue (34° 08' 03.614", 117° 13' 56.557")	1.5	Soil	**0.5**, **1.5**	Lead
B3	Between San Bernardino Avenue and 5th Street (34° 07' 29.648", 117° 12' 03.954")	1.5	Soil	**0.5**, **1.5**	Lead
B4	Between San Bernardino Avenue and 5th Street (34° 05' 46.439", 117° 12' 01.176")	1.5	Soil	**0.5**, **1.5**	Lead
B5	Between San Bernardino Avenue and 5th Street (34° 05' 27.910", 117° 12' 02.388")	1.5	Soil	**0.5**, **1.5**	Lead
B6	Approximately 1,000 feet north of Baseline Road (34° 04' 48.669", 117° 12' 02.526")	1.5	Soil	**0.5**, **1.5**	Lead

Notes:
*Depths in **bold** analyzed forlead in accordance with EPA Method 6010.

Table 2: Comparison of Lead Laboratory Results and Regulatory Guidelines
I-210 Expansion
San Bernardino, California 92401
Partner Project Number 14-121800.1
June 2015

Sample	Total Lead Concentration (mg/kg)*
B1-0.5	**19.5**
B1-1.5	**5.5**
B2-0.5	**3.8**
B2-1.5	**5.9**
B3-0.5	**4.1**
B3-1.5	**2.3**
B4-0.5	**6.0**
B4-1.5	**6.9**
B5-0.5	**3.8**
B5-1.5	**2.5**
B6-0.5	**4.0**
B6-1.5	**4.8**
10x STLC	50
TTLC	1,000

Notes:

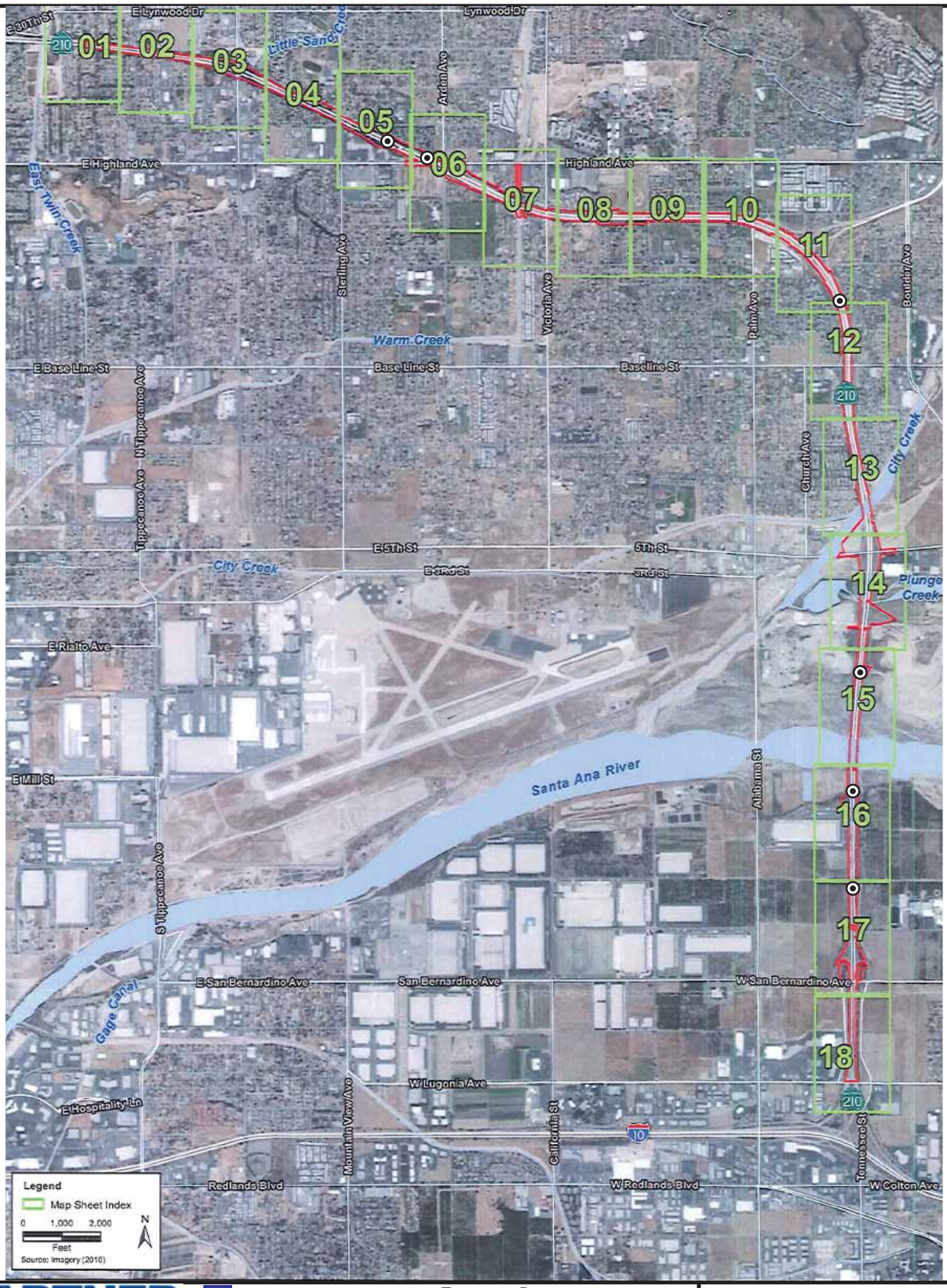
mg/kg = milligrams per kilogram

STLC = Soluble Threshold Limit Concentration (California Code of Regulations Title 22, Chapter 11, Article 3, Table 2)

TTLC = Total Threshold Limit Concentration (California Code of Regulations Title 22, Chapter 11, Article 3, Table 2)

FIGURES

PARTNER



PARTNER
Engineering and Science, Inc.
2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 14-121800.1

Legend

Approximate Boring Location

N

Approximate Boring Locations

Figure	Prepared By	Date
1	T. Men	July 2014

SR-210
Highland Ave. to San Bernardino Ave.

APPENDIX A: PERMIT

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION

ENCROACHMENT PERMIT

TR-0120 (REV. 6/2012)

Permit No.	08-15-A-SV-0371
Dist/Co/Rte/PM	08-SBD-210 PM 26.73-PM 32.08
Date	05/27/2015
Fee Paid	$ EA 0C700
Deposit	$ EA 0C700
Performance Bond Amount (1)	$ 0.00
Payment Bond Amount (2)	$ 0.00
Bond Company	
Bond Number (1)	
Bond Number (2)	

In compliance with:

☒ Your application of May 20, 2015

☐ Utility Notice No. _____ of _____

☐ Agreement No. _____ of _____

☐ R/W Contract No. _____ of _____

TO: Epic Land Solutions Inc.
3850 Vine Street, Suite 200
Riverside, CA 92507
Attn: Karen Starr (951) 321-1800

, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:

Enter onto State Route 210 (SR-210) right of way between Highland Avenue to Pioneer Avenue, within the cities of San Bernardino, Highland, and Redlands, county of San Bernardino, to conduct lead, asbestos, and aerially deposited lead (ADL) survey to support the Project Approval and Environmental Documentation phase of the SR-210 Mixed Flow Lane Addition project as per location maps date stamped May 18, 2015 by the California State Department of Transportation (Caltrans) District 8 Encroachment Permits Office and/or as directed by the State Representative.
Traffic control shall be per Caltrans Revised Standard Plans (RSP) T9, T10, and T11.

A pre-job meeting with the assigned Caltrans Representative, Ray Behbahani, 909-383-6348, is required at least 7 days prior to start of any work under this permit! Failure to do so may result in permit revocation with no prejudice.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit *(Check applicable)*:

☒ Yes ☐ No General Provisions
☐ Yes ☒ No Utility Maintenance Provisions
☒ Yes ☐ No Storm Water Special Provisions
☒ Yes ☐ No Special Provisions
☐ Yes ☒ No A Cal-OSHA permit, if required: Permit No. _____
☐ Yes ☒ No As-Built Plans Submittal Route Slip for Locally Advertised Projects
☐ Yes ☒ No Storm Water Pollution Prevention Plan / Water Pollution Control Plan

In addition to fee, the permittee will be billed actual costs for:

☐ Yes ☒ No Review
☐ Yes ☒ No Inspection
☒ Yes ☐ No Field Work

(if any Caltrans effort expended)

☐ Yes ☒ No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before November 27, 2015
This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.
No project work shall be commenced until all the other necessary permits and the environmental clearances have been obtained.

PERMIT ENGINEER: Tan Nguyen
COPIES TO:
Inspector: Ray Behbahani
Maintenance: San Bernardino Metro Area
SANBAG: Gary Cohoe
File

APPROVED:

John Bulinski, Acting District Director

BY:

RAMAKRISHNA TADI, PHD , P.E., District Permit Engineer

FM 91 1436 (D8 Permit App.)

☒ All survey operations shall be conducted off the traveled way except where necessary to cross pavements and medians.

☒ When survey operations are being conducted, the permittee shall furnish, place and maintain signs and safety equipment in accordance with the latest edition of the "Manual of Traffic Controls for Construction and Maintenance Work Zones".

☒ All personnel shall wear hard hats and orange vests, shirts or jackets as appropriate. Any painted markings shall be made with water soluble paint.

☒ Permission is also granted to park survey vehicles temporarily within the right of way, outside the shoulders, while survey work is in progress.

☒ SURVEY WORK IS PROHIBITED ON FREEWAYS OR EXPRESSWAY.

☒ Freeway or expressway survey data or information may be obtained upon request to: Survey Section, Department of Transportation, 464 West 4th Street, MS 1066, 10th Floor, San Bernardino, California 92401.

TRAFFIC COUNTERS (SV) SPECIAL PROVISIONS

☐ Personnel installing or removing traffic counters shall wear an orange colored outer garment and a hard hat.

☐ Traffic counters installed on freeway ramps shall be located at the curb return as near as possible to the local street intersection.

☐ Counter tubes shall be securely attached to the pavement by taping. No nails, spikes or other material shall be driven into the pavement except to secure the tube at the outside edge of shoulder, at the lip of a gutter, or in the center line stripe.

☐ A copy of the collected data shall be sent to the Department's District Permit Engineer.

MONITORING WELL SPECIAL PROVISIONS:

☐ The monitoring well locations must be surveyed and marked by the Global Positioning System(GPS). All analytical data collected from these wells, drilling logs, and the established GPS information, must be provided to the Department at no cost. The reports must be submitted to Permit Office at 464 W. 4th Street, MS 619, San Bernardino, CA 92408-1400 with this permit number: 08-15-A-SV-0371 clearly labeled on all correspondence.

☐ The top of the protective well box with locking mechanism shall be one foot below the surface of the surrounding terrain and covered with soil or gravel. The lid shall be secured at all times when monitoring or testing operations are not being conducted.

☐ The top of the protective well box with locking mechanism shall be secured at all times when monitoring or testing operations are not being conducted.

☐ All drilling fluids must be contained, transported and disposed of outside the State right-of-way in accordance to the Federal and State environmental regulations and local ordinances.

☐ All monitoring wells shall be abandoned in accordance to the Federal and State environmental regulations and local ordinances at the end of the monitoring period at the Permittee own expense.

In addition to the attached General Provisions, the following checked special provisions are applicable:

☒ A PRE-JOB MEETING WITH THE ASSIGNED CALTRANS REPRESENTATIVE, Ray Behbahani, (909)383-6348 AT LEAST 7 DAYS IS REQUIRED PRIOR TO START OF ANY WORK UNDER THIS PERMIT. FAILURE TO DO SO WILL RESULT IN PERMIT CANCELLATION AND RESUBMITTAL MAY BE REQUIRED.

☐ Notwithstanding General Provision #4, your contractor is required to apply for and obtain an encroachment permit prior to starting work. A fee/deposit of $ _____ for inspection, and $ _____ for electrical equipment is required at the time of application.

☒ You are required to submit an approved Storm Water Pollution Prevention Plan (SWPPP) for projects with a cumulative disturbed soil area equal or greater than 1 acre, and an approved Water Pollution Control Program (WPCP) for projects with a disturbed soil area less than 1 acre, unless otherwise required by other agencies (RWQCBs, U.S. Army Corps of Engineers, Department of Fish and Game, etc.).

☐ Upon the expiration of this permit, the Permittee is required to apply for the countywide annual maintenance permit for this new facilities installed under the Permit No.: _____.

☐ The Permittee is required to apply for a separate permit to maintain and/or replace in kind of these facilities on each occurrence upon the expiration of this permit.

☐ The Permittee shall provide the stage construction traffic handling plans, work schedule and a list of all sub-contractors to the Department's Representative at the time of the pre-construction meeting or prior to start construction.

☒ All traffic control, signing and striping shall comply with California MUTCD 2014. It is available at: http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd.htm

☒ Contractor shall comply with Department 2010 Standard Specifications, Department 2010 Standard Plans, Revised Standard Plans and the project special provisions. The latest Revised Standard Plans are available at: http://www.dot.ca.gov/hq/esc/oe/standards.php

☒ All personnel shall wear hard hats and orange or lime vests, shirts or jackets as appropriate while on State property.

☒ The Permittee's work shall be subordinated to any operations which the Department may conduct and shall not delay, nor interfere with the Department's Forces or Department's Contractors.

☒ Attention is directed to Standard Specifications Section 7-1.11, Preservation of Property, and Business and Professions Code, Section 8771. The Permittee shall physically inspect the work site and locate survey monuments prior to work commencement. Monuments shall be referenced or reset in accordance with the Business and Professions Code.

☒ No lane may be closed or obstructed at any time unless specifically allowed per the encroachment permit, shown in approved traffic control plans, and/or as directed by the Department's Representative.

☒ Except for installing, maintaining and removing traffic control devices, any work encroaching within 3 feet of the edge of a travel lane for areas with a posted speed limit below 45mph, or 6 feet of the edge of a travel lane, for areas with a speed limit posted at 45mph or higher, shall require closing of that travel lane. Any work encroaching within 6 feet of the edge of the shoulder, shall require closing of that shoulder. Permittee shall notify the Department's Representative, and obtain approval of, all traffic control, lane closures or detours, at least seven (7) WORKING DAYS prior to setting up of any traffic control.

☒ Traffic control is generally authorized between 9:00 AM and 3:00 PM only on Monday through Thursday and until 1:00 PM on Fridays, excluding holidays except specified in the Permit. Lane closure is not allowed on Saturdays, Sundays and designated holidays. The designated holidays are: January 1st, the third Monday in January, the second and third Mondays in February, March 31, the last Monday in May, July 4th, the first Monday in September, the second Monday in October, November 11th, Thanksgiving Day, the day after Thanksgiving Day, and December 25th. When a fixed holiday falls on Saturday, the preceding Friday shall be designated as holiday.

☒ Should any deviation from these procedures or conditions be observed, all work shall be suspended until satisfactory steps have been taken to ensure compliance.

☒ If time extension is necessary, a request for time extension and the accompanying attachments must be made a minimum of two (2) weeks prior to completion date stated on face of permit. If work has not been started before completion date, the permit will be voided. Failure to comply with rules and regulations stated on permit will jeopardize future permit privileges.

☒ "AS-BUILT" PLANS ARE REQUIRED UPON COMPLETION OF ALL WORK. PLEASE REFER TO THE GENERAL PROVISION TR-0045, ITEM 22 FOR THE "AS-BUILT" REQUIREMENTS. NO FINAL INSPECTION WILL BE PERFORMED UNTIL THE DEPARTMENT IS IN RECEIPT OF "AS-BUILT" PLANS.

☒ No vehicle or equipment shall be stored overnight within the right of way; it shall be removed immediately at the completion of the day's work. Refueling of vehicle or equipment within the right of way is strictly prohibited.

☒ Required traffic control devices shall be installed around fixed objects to warn the motoring public for safety. Personal vehicles of the contractor shall not be parked within freeway right of way.

☒ No materials or waste shall be stockpiled within State right of way.

☒ Except as specifically provided herein, all requirements of the Vehicle Code and other applicable laws must be complied with in all particulars.

☒ When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane. The permittee shall not reduce the width of the existing lane to less than 10 feet without written approval from the Department's Representative.

☒ Excavations made within the limits of the right of way shall be backfilled and resurfaced to original condition before leaving the work area unless otherwise authorized by the Department's Representative.

☒ Permittee shall be responsible for arranging the services of a qualified traffic control contractor to provide any needed traffic control.

☒ The permittee shall arrange a meeting between his field representative, traffic control contractor, Department's Representative and/or CHP at least two (2) weeks prior to start of any work covered under this permit to arrange date and time of starting work and determine appropriate methods of handling traffic. At least 3 working days notice shall be given to the Caltrans representative and/or the CHP, prior to the meeting to allow time to arrange for attendance.

☒ A copy of this permit, complete with all attachments, shall be kept by permittee/contractor working under this permit and must be shown to the Department Permit Inspector, Department's Representatives, or Law Enforcement Officer, on demand.

☒ The permittee shall be responsible for notifying the appropriate utility companies or underground service alert prior to any excavation work.

☒ The permittee shall notify the California Highway Patrol Area Commander at least 72 hours prior to implementing traffic control.

☒ When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.

☒ Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards.

[For City or County projects with utility relocations:]

☐ If existing public or private utilities conflict with the construction PROJECT, PERMITTEE will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. PERMITTEE shall inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or removal which STATE or PERMITTEE must legally pay, will be borne by PERMITTEE. If any protection, relocation, or removal of utilities is required, including determination of liability for cost, such work shall be performed in accordance with STATE policy and procedure. PERMITTEE shall require any utility company performing relocation work in the STATE's right-of-way to obtain a State Encroachment Permit before the performance of said relocation work. Any relocated utilities shall be correctly located and identified on the as-built plans.

[For other projects with utility relocations:]

☐ If existing public or private utilities conflict with the construction PROJECT, PERMITTEE will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. PERMITTEE shall inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or removal shall be borne by PERMITTEE in compliance with the terms of the Highway Encroachment Permits, Case Law, Public Utility Regulations, and Property Rights. PERMITTEE shall require any utility company performing relocation work in the STATE's right-of-way to obtain a State Encroachment Permit before the performance of said relocation work. Any relocated utilities shall be correctly located and identified on the as-built plans.

PERMIT NO.: 08-15-A-SV-0371

CO/RTE/PM: 08/SBD/210/26.73-32.08

PRECONSTRUCTION MEETING AGREEMENT

I, _____, acting as an authorized agent for the permittee,_____ , do hereby agree to personally accomplish or have another designated person arrange for all involved company representatives to attend a pre-construction meeting with the authorized Department's Representative at_____ , as specified on this permit. Such meeting must be held two (2) days or more prior to the planned start of the work on this project. The Authorized Department's Representative shall have complete authority to determine whether the permit conditions, either implied or written, have been complied with. The Department's Representative may then allow the permit work to proceed as appropriate. The Pre-construction Meeting Record below must be signed by both the Department's Representative and the permittee before the permit work may start.

I have read and understand the attached General Provisions TR-0045 and other attached prosivions of this permit.

This agreement or a copy thereof, must be mailed back to the **Department's District 8 Encroachment Permit Office at 464 W. 4th. Street, MS 619, San Bernardino, CA 92401-1400**, within three (3) working days prior to the pre-construction meeting. Failure to return this form could delay the release of your bonds. A copy of this document shall be at the job site at all times when work is in progress and failure to do so may result in the suspension of work, as directed by the Department's Representative.

It is the permittee's responsibility to insure that the Department's Representative is notified of work completion and that the attached Completion Notice is mailed to the Department's Permit office.

Signature Date

Print or Type Name

Position or Title

PRECONSTRUCTION MEETING RECORD

Department's Representative Date

Permittee's Representative Date

Date Work May Begin: _____

PERMIT NO.: 08-15-A-SV-0371
CO/RTE/PM: 08/SBD/210/26.73-32.08

DEPARTMENT OF TRANSPORTATION-DISTRICT 8
ENCROACHMENT PERMITS OFFICE
464 W. 4th. Street, MS 619
San Bernardino, CA 92401-1400

100% COMPLETION NOTICE

Work on Permit No.: 08-15-A-SV-0371 has been completed. A final inspection meeting was held on

Permittee's Representative Date

Department's Representative Date

FAILURE TO COMPLETE AND RETURN THIS TO THE DISTRICT PERMITS OFFICE MAY CAUSE A DELAY IN THE RELEASE OF YOUR BONDS.

APPENDIX B: ANALYTICAL DATA

PARTNER

06-17-2015

Ms. Debra Stott
Partner Engineering & Science
2154 Torrance Boulevard
Torrance, CA 90501

Project: 14-121806
Project Site: 210 Freeway, San Bernardino
Sample Date: 06-09-2015
Lab Job No.: PA506043

Dear Ms. Stott:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 06-09-2015 and analyzed by the following EPA methods:

EPA 6010B (Total Lead)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client:	Partner Engineering & Science	Lab Job No.:	PA506043
Project:	14-121806		
Project Site:	210 Freeway, San Bernardino	Date Sampled:	06-09-2015
Matrix:	Soil	Date Received:	06-09-2015
Digestion Method:	EPA 3050B	Date Digested:	06-10-2015
Batch No.:	0612-MS1	Date Analyzed:	06-12-2015
		Date Reported:	06-17-2015

EPA 6010B for Total Lead
Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	Total Lead	Reporting Limit
Method Blank		ND	2
B1-0.5	PA506043-1	19.5	2
B1-1.5	PA506043-2	5.5	2
B2-0.5	PA506043-3	3.8	2
B2-1.5	PA506043-4	5.9	2
B3-0.5	PA506043-5	4.1	2
B3-1.5	PA506043-6	2.3	2
B4-0.5	PA506043-7	6.0	2
B4-1.5	PA506043-8	6.9	2
B5-0.5	PA506043-9	3.8	2
B5-1.5	PA506043-10	2.5	2
B6-0.5	PA506043-11	4.0	2
B6-1.5	PA506043-12	4.8	2

ND: Not Detected (at the specified limit).

06-17-2015

EPA 6010B for Lead
Batch QA/QC Report

Client:	Partner Engineering & Science	Lab Job No.:	PA506043
Project:	14-121806		
Matrix:	Soil	Lab Sample ID:	PA506043-1
Batch No:	0612-MS1	Date Analyzed:	06-12-2015

I. MS/MSD Report
Unit: ppm

Analyte	EPA Method	MB Conc.	Spike Conc.	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
Lead (Pb)	6010B	ND	4.0	100.1	107.1	6.7	30	70-130

II. LCS Result
Unit: ppm

Analyte	EPA Method	LCS Value	True Value	Rec.%	Accept. Limit
Lead (Pb)	6010B	4.06	4.0	101.5	80-120

ND:Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

CHAIN OF CUSTODY RECORD

Lab Job Number PA506043

Client: Partner ES

Address: 2154 Torrance Blvd, Torrance CA 90501

Report Attention: D. Stott | Phone: 310-615-4500 | Fax: 310-615-4544 | Sampled by: J. Penney

Project Name/No.: 14-121806 | Project Site: San Bernardino 210 Freeway

T.A.T. Requested: ☐ 8 hrs ☐ 24 hrs ☐ 48 hrs ☐ 3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

Analyses Requested

Client Sample ID	Lab Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No.,type* & size of container	TPH-Gasoline	TPH-Diesel	8260B (BTEX, Oxygenates)	8260B (VOCs)	8270C (SVOCs)	CAM Metals	8082 (PCBs)	Pb 6010					Remark
B1-0.5	PA506043-1	6/9/15	1148	Soil	ICE	1 4oz Jar								X					
B1-1.5	-2		1152											X					
B2-0.5	-3		1206											X					
B2-1.5	-4		1208											X					
B3-0.5	-5		1215											X					
B3-1.5	-6		1229											X					
B4-0.5	-7		1317											X					
B4-1.5	-8		1322											X					
B5-0.5	-9		1246											X					
B5-1.5	-10		1250											X					
B6-0.5	-11		1301											X					
B6-1.5	-12		1304											X					

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[signature]	PES	6/9/15	1455	[signature]	ABC	6/9/15	14:55
Relinquished by	Company	Date	Time	Received by	Company	Date	Time

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Alpha Scientific Corporation
16760 Gridley Road
Cerritos, CA 90703

Email: ascorp@verizon.net
Tel: (562) 809-8880
Fax: (562) 809-8801

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: White with report, Yellow to courier.