PO 2100023185

TERRA Environmental

Invoice

Date	Invoice #
2/28/2020	2654

12631 E. Imperial Hwy.
Suite # A225
Santa Fe Springs, CA 90670

Bill To :	Jobsite Adress :
CALSTATE LA Finance Department Attn: Admin 514 5151 State University Drive Los Angeles, CA 90032	CALSTATE LA Northend of King Hall 5151 State University Drive Los Angeles, CA 90032

Department Contact	Purchase Order No.	Claim No.	Terms	Project
JERRY MIERS			Net 30	72318 - King Hal...

Item	Description	Invoiced	Rate	Amount
	DEPARTMENT CONTACT: JERRY MIERS			
A-S-Limited	Asbestos Survey- Site Inspection & Sample Collection by DOSH CSST	1	360.00	360.00
A-PLM-S	Asbestos Bulk Sample Analysis per Layer - Polarized Light Microscopy (PLM) via EPA 600/R-93/116 Method. By NVLAP accredited laboratory per layer- TAT / 24 hrs	6	20.00	120.00
A-R	Asbestos Findings Report by CA DOSH Certified Asbestos Consultant (CAC)	1	150.00	150.00

7/7/20

ok to pay

Thank you for your business !

Total	$630.00
Payments/Credits	$0.00
Balance Due	$630.00

Make checks payable to:
Terra Environmental Services Inc.

Tel (562) 868-3777 Fax (562) 868-3778 www.terraeng.com

TERRA Environmental

Proposal: 72318

January 30, 2020

JERRY MIERS
Facilities Project Supervisor
Facilities Services
California State University, Los Angeles
5151 State University Drive
Los Angeles, CA 90032
C 323-312-9670

Re: CSULA – North end of King Hall - Transite Pipe
Asbestos Survey

Terra Environmental is pleased to provide you with this proposal and cost estimate to perform site specific asbestos survey of transite pipe at North end of King Hall , CSULA, 5151 State University Drive, Los Angeles CA 90032.

The following proposal is provided in good faith, based upon our understanding of the tasks desired. Written client approval will be sought if additional tasks or additional samples are either requested by the client, or recommended by Terra Environmental.

Field Activities and Report Cost Estimate			
Asbestos Survey			
Activity	**Quantity**	**Rate**	**Subtotal ($)**
Asbestos Survey- Site Inspection & Sample Collection by DOSH CSST	1	$ 360.00	$ 360.00
Asbestos Bulk Sample Analysis per Layer - Polarized Light Microscopy (PLM) via EPA 600/R-93/116 Method. By NVLAP accredited laboratory per layer- TAT / 24 hrs	6	$ 20.00	$ 120.00
Asbestos Findings Report by CA DOSH Certified Asbestos Consultant	1	$ 150.00	$ 150.00
Incidental Expenses			
Report Writing	Included	Included	Included
Lab weekend fee	N/A	-	-

Project Total (Estimated) $ 630.00

Note: Any additional samples and/or surveys requested by client will be charged at quoted prices.

No activities outside the scope of work will be performed without prior written consent by Terra Environmental and California State University Los Angeles.

TERRA Environmental

Proposal: 72318

TERMS AND CONDITIONS

The project will be performed on a date agreed upon by California State University Los Angeles and Terra Environmental. The client will grant access to the sites, and provide any additional information concerning the subject areas to Terra Environmental prior to field activities. Terra Environmental will strive to perform the tasks set forth above in a thorough and professional manner consistent with industry standards at the time the work is performed.

The results reported and any opinions by Terra Environmental are for the benefit of the client. The results and opinions set forth by Terra Environmental in the report will be valid as of the date of the report. Terra Environmental assumes no obligation to advise you of any changes that may be later brought to our attention.

Agreement and Acceptance

California State University Los Angeles
Project total: $ 630.00
King Hall
Asbestos survey (transite pipe)
5151 State University Drive
Los Angeles, CA 90032

Accepted and Agreed _____
Signature

Name _____

Date _____

Please indicate your acceptance of this proposal by signing and returning to us via email to:
Dianam@terraeng.com

ENTIRE AGREEMENT. This Agreement supersedes any and all other Agreements, either oral or written, and contains all of the covenants and agreements between the parties. Each party to this Agreement acknowledges that no representations, inducements, promises or agreements, orally or otherwise, have been made by either party, or anyone acting on behalf of any party to this Agreement, which are not embodied herein, and that no other agreement, statement or promise not contained in this Agreement shall be valid or binding. Any modification of this Agreement will be effective only if it is in writing, signed by the party to be changed.

TERRA Environmental

TO: Jerry Miers
Facilities Project Supervisor
Facilities Services
California State University Los Angeles
5151 State University Drive
Los Angeles, CA 90032

LIMITED ASBESTOS SURVEY REPORT
King Hall – Transite Pipe at North end
5151 State University Drive
Los Angeles, CA 90032

Date Prepared: February 4, 2020

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VII. Attachments

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2. Laboratory Results
3. Chain of Custody
4. Site Sketch
5. Laboratory accreditation
6. Consultant Certifications

I. Executive Summary and Purpose

At the request of Mr. Jerry Miers, Terra Environmental Services conducted a limited asbestos survey at a Transite Pipe located at the North end of King Hall Building at 5151 State University Drive Los Angeles, CA 90032. The Survey was authorized by Mr. Miers in acceptance of Terra Proposal for Asbestos Consulting Services.

II. Scope of services

The scope of this investigation included a visual inspection of the underground utilities Pipe, digital photography of key observations, sample collection of suspect asbestos containing building materials with laboratory analysis of samples, and production of this written report of findings, conclusions, and recommendations.

The building materials included in this assessment are those expected to be impacted during the renovation project. In general, the renovation project will involve the disturbance of the underground utilities' pipes.

III. Visual Survey, Sampling Methodology, and Analytical Procedures

a. Visual Survey

The Visual Survey consisted of a walk-through and visual inspection of the affected building. It included the identification of all suspect asbestos containing materials and the physical touching of suspect ACBM in an effort to determine the friability and condition of said materials.

In surveying the building, we used our training in identifying asbestos-containing materials, our familiarity with building construction and our general experience to locate potential sources of ACM and ACCM.

This evaluation was performed in accordance with the Asbestos-Containing Materials in Buildings rule prepared by the U.S. EPA. Destructive sampling collection methods were used by Terra Environmental on site representative. The asbestos building survey was performed by Mr. Xavier Avila AHERA Certified Asbestos Building Inspector (DOSH CSST Trainee) under the supervision of Mr. Israel Monsalvo a California, Division of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant, CAC #04-3551 on February 03, 2020.

b. Sampling Methodology

The next phase of the survey was the selection of sampling areas and collection of bulk samples. Material sampling areas were grouped based on material homogeneity. A homogeneous material is one, which contains the same texture, color, and uniform, applied during the same general time period. Terra employed destructive sampling

methods for the collection of bulk samples. All sampled materials were in good condition at the time of the inspection and sample collection.

c. Analytical Procedures

The PLM Method is the most commonly used method to analyze building materials for the presence of asbestos. This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a given sample. The detection limit of the PLM method for asbestos identification is about one percent (1%) asbestos.

Because the State of California recognizes asbestos-containing construction material (ACCM) as any material, which contains greater than or equal to one tenth of one percent (0.1%) asbestos, materials containing "trace" amounts of asbestos are reported by Terra Environmental as ACCM in the State of California.

Terra Environmental collected a total of six (6) bulk samples of suspect ACM. The samples were transferred following proper chain of custody protocol to LA Testing located at 520 Mission Street South Pasadena, CA 91030, for analysis.

LA Testing is an accredited laboratory for bulk asbestos analysis under the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (Certification Number 200232-0).The samples were analyzed by Polarized Light Microscopy (PLM) with optical dispersion staining in accordance with the United States Environmental Protection Agency (EPA) Method (EPA 600/M4-82-020 per 40 CFR 763, subpart F, Appendix A).

IV. Discussion of Survey Findings and Recommendations

ASBESTOS

Asbestos-containing material (ACM) means any material containing more than 1% asbestos. Asbestos Standard for Construction 29 CFR 1926.1101.

Asbestos-Containing Construction Material (ACCM) is defined by California DOSH Title 8, Section 1529 (341.6 Registration Requirements) to mean any manufactured construction material which contains more than 1/10th of 1 percent asbestos by weight.

The visual inspection and bulk sample analysis results revealed the following Asbestos-Containing Materials:

Homogeneous Material	Location	Lab Sample Numbers	Asbestos detected	Quantity
3" Transite Pipe	North Trench SW Corner	A01 A02 A03 A04 A05 A06	Chrysotile 17%-18% Crocidolite 2% - 3%	100 Ln. Ft.

Recommendations for handling ACM:

Asbestos containing materials will be impacted by the renovation project activities.

*Removal and disposal of Asbestos containing **3" Transite Pipe** must be performed by a California Licensed Asbestos Abatement Contractor, in accordance with all applicable regulations, including but not limited to, 29 CFR 1926.1101 (OSHA), 40 CFR 763 (AHERA), 40 CFR Part 61 (NESHAPS) and 8 CAC 1529 (Cal/OSHA Asbestos), including mandatory and non-mandatory appendices as applicable, and Local Air Quality Management District regulations (SCAQMD 1403).*

Should materials different to those identified in this report or, other forms of suspect hazardous materials be discovered during the renovation process, the contractor should be instructed to cease all work activities which may initiate an exposure episode and notify the appropriate management personnel.

V. General Recommendations and Notes

Terra has endeavored to observe the exiting conditions within the subject property using generally accepted procedures. Regardless of the thoroughness of a survey, there is always a possibility some areas containing asbestos were overlooked or were inaccessible, or are different from those at specific sample locations. Therefore, conditions at every location may not be as anticipated by our field representative. In addition, demolition may uncover altered or differing conditions.

Written by:

Israel Monsalvo,
CA DOSH Certified Asbestos Consultant
CAC #04-3551
Terra Environmental Services Inc.

VI. Confidentiality and Limitations

This report has been prepared for the sole use of California State University Los Angeles. Material quantities are, in some cases, listed within this document. Those quantities are not intended to be used for removal bidding purposes. This document also is not intended as a contract manual; work methods and sequence, coordination of participants, applicable codes, engineering controls, required submittals and notifications should in all cases be addressed in a separate and independent bidding and contract document.

Site Photos



ACM transite

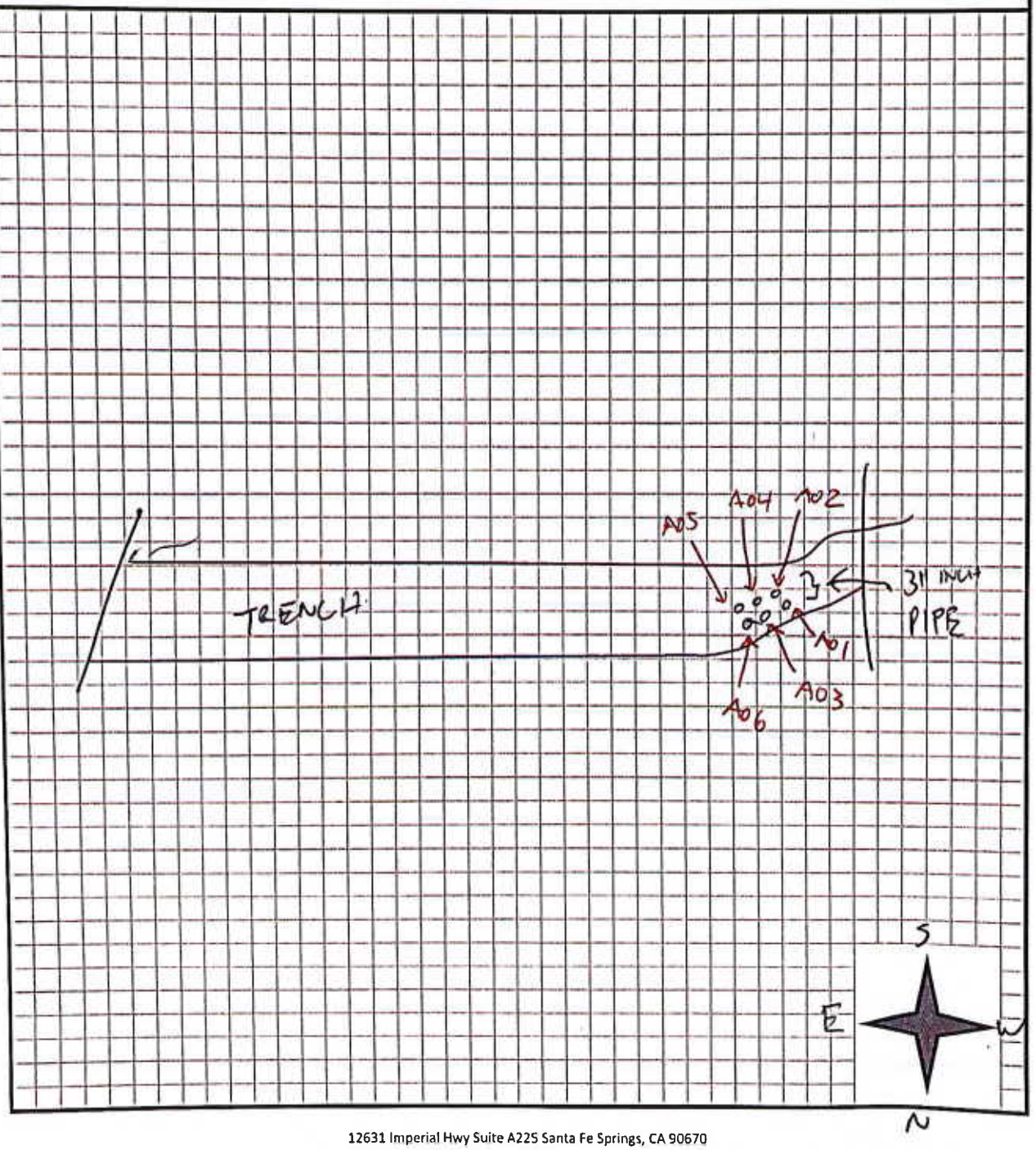


Underground utilities

Terra
Environmental

Project # 72318
Date: 02.03.20
Type of Work: AS

Customer: CAL STATE LA.
Project Name:
Project Adress: 5151 STATE UNIVERSITY DR. LOS ANGELES CA 90032



12631 Imperial Hwy Suite A225 Santa Fe Springs, CA 90670
Tel 562/868-3777 - Fax 562/868-3778 www.terraeng.com

Scanned with CamScanner

LABORATORY RESULTS
AND COC

LA Testing

520 Mission Street South Pasadena, CA 91030
Tel/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com / pasadenalab@latesting.com

LA Testing Order:	322002163
Customer ID:	32TESV78
Customer PO:	
Project ID:	

Attention:	Israel Monsalvo	**Phone:**	(562) 868-3777
	Terra Environmental Services	**Fax:**	
	12631 Imperial Hwy	**Received Date:**	02/03/2020 9:30 AM
	Suite A225	**Analysis Date:**	02/03/2020
	Santa Fe Springs, CA 90670	**Collected Date:**	
Project:	Cal State L.A. | 5151 State University Dr. Los Angeles CA 90032		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
A01 322002163-0001	North trench SW corner pipe 1 - 3" Transite pipe	Brown/Gray Fibrous Homogeneous		80% Non-fibrous (Other)	18% Chrysotile 2% Crocidolite
A02 322002163-0002	North trench SW corner pipe 2 - 3" Transite pipe	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	18% Chrysotile 2% Crocidolite
A03 322002163-0003	North trench SW corner pipe 3 - 3" Transite pipe	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	17% Chrysotile 3% Crocidolite
A04 322002163-0004	North trench SW corner pipe 4 - 3" Transite pipe	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	18% Chrysotile 2% Crocidolite
A05 322002163-0005	North trench SW corner pipe 5 - 3" Transite pipe	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	18% Chrysotile 2% Crocidolite
A06 322002163-0006	North trench SW corner pipe 6 - 3" Transite pipe	Gray Fibrous Homogeneous		80% Non-fibrous (Other)	18% Chrysotile 2% Crocidolite

Analyst(s)

Danielle Brand (4)
Tania Lopez (2)

Jerry Drapala Ph.D, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from: 02/03/2020 15:43:32

OrderID: 322002163

TERRA ENVIRONMENTAL

#322002163

Job Name - Location - Job Number	Billing Info:
CAL STATE L.A. 5151 STATE UNIVERSITY DR. LOS ANGELES CA 90032	Terra Environmental Services Inc. Technician: XAVIER A / ISRAEL M. 12631 Imperial Hwy Suite A225, Santa Fe Springs CA 90760 Email: israel@terraeng.com/ulises@terraeng.com

Sample Analysis:	PLM – Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy	TAT	24 HRS.

ID #	Material Description	HM	Location of Sample	Condition	Friable	Quantity
A01	3" TRANSITE PIPE	1	NORTH TRENCH SW CORNER PIPE 1	FAIR	N	APPROX. 100 LF
A02	↓	1	PIPE 2	↓	↓	↓
A03		1	PIPE 3			
A04		1	PIPE 4			
A05		1	PIPE 5			
A06	↓	1	PIPE 6	↓	↓	↓

Notes	

Relinquished By:	Date & Time
XAVIER A / ISRAEL M.	02.03.20
Received By:	**Date & Time**
Amalissa Cook (UPS)	2/3/2020 930

CERTIFICATIONS

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200232-0

LA Testing

South Pasadena, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-07-01 through 2018-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

LA Testing
520 Mission Street
South Pasadena, CA 91030
Mr. Jerry Drapala Ph.D.
Phone: (323) 254-9960 Fax: (323) 254-9982
Email: jdrapala@latesting.com
http://www.latesting.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200232-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- Appendix E to Subpart E of Part 763 -- Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Effective 2017-07-01 through 2018-06-30

TERRA Environmental

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Israel Monsalvo
Name



Certification No. 04-3551

Expires on 05/20/20

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

California Department of PublicHealth

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:	CERTIFICATE TYPE:	NUMBER:	EXPIRATION DATE:
 Israel Monsalvo	Lead Inspector/Assessor	LRC-00001220	9/1/2020
	Lead Project Monitor	LRC-00001219	9/1/2020

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

Israel Monsalvo, CAC, CDPH-I/A & PM
Cal/OSHA-Certified Asbestos Consultant #04-3551
CDPH-Certified Lead I/A, PM # 9699