



August 17, 2015

Kimley-Horn & Associates
2000 South Boulevard, Suite 440
Charlotte, North Carolina 28203

Attention: Mr. Chris Tinklenberg, P.E.

Reference: Geotechnical Letter Report – Asbestos Sampling
Proposed Potts-Sloan Roadway
Davidson, North Carolina
S&ME Project No. 1335-14-117
NC PE Firm License No. F-0176

Dear Mr. Tinklenberg:

S&ME, Inc. (S&ME) is pleased to present this geotechnical – asbestos sampling letter report for the proposed roadway in Davidson, North Carolina. This exploration was performed in general accordance with our proposal No. 13-1400486R dated September 3, 2014. Authorization to proceed with the sampling was provided by execution of an IPO referencing the “Standard Master Agreement for Continuing Professional Services between Kimley-Horn and Associates, Inc. and a Subconsultant” executed by Kimley-Horn and Associates, Inc. and S&ME, Inc. dated March 9, 2010.

The purpose of this study was to determine the asbestos content of soil borings collected from the referenced site. This report presents our findings and conclusions concerning the asbestos analysis of soil boring materials.

PROJECT INFORMATION

Project information is based on telephone and e-mail correspondence between Rob Hume and Chris Tinklenberg of Kimley-Horn and Associates, Inc. (KHA) and Duane Bents of S&ME from June 18 through August 28, 2014. It is also based on a meeting between Mr. Tinklenberg and Mr. Bents on August 22, 2014, telephone conversations between Mr. Tinklenberg and Mr. Bents on September 4, 2014, and a telephone conversation between Mr. Tinklenberg and Luis Campos of S&ME on November 18, 2014.

We understand that KHA is providing preliminary design and environmental consulting services to the Town of Davidson for a planned roadway connecting Sloan Street and Potts Street. Currently, two roadway alignments are being pursued in order to assess the impact to residences. Both alignments are likely to require up to 15 feet of fill placement. In addition, streetscape improvements (e.g., sidewalks, etc.) are planned along the west

site of Sloan Street north of the new connector roadway. Some limited grading (less than 2 feet) will be required for the streetscape improvements along Sloan Street.

We understand that the large parcel located north and east of the study area (Mecklenburg County Parcel ID No. 00325301) addressed 301 Depot Street houses an industrial building that previously operated as an asbestos manufacturing facility (Carolina Asbestos Company). A *Report of Phase I ESA – Metrolina Warehouses* prepared by MACTEC and dated December 20, 2007 was provided to us and indicates that buried asbestos had been discovered during previous warehouse construction activities. This asbestos assessment investigated the soils along the side of an approximately 160 foot section of roadway

PURPOSE AND SCOPE

The purpose of this study was to assess the presence of asbestos-containing materials in site soils.

S&ME has completed the following scope of services for this project:

- A Certified Industrial Hygienist (CIH) and geotechnical engineer marked test locations based upon information from the Client and provided drilling oversight.
- Drilled four (4) soil test borings at the site.
- Visually observed each sample in the field for potential asbestos-containing materials and collected representative samples of materials. In the event that no suspect asbestos-containing materials were observed, random sampling of the soil within each boring was to be performed.
- Backfilled the boreholes with soil cuttings, installed a hole closure device near the ground surface in each borehole, and backfilled with soil cuttings to the ground surface.
- Submitted samples to our NVLAP accredited laboratory for analysis using polarized light microscopy (PLM) with dispersion staining in accordance with the EPA 600/R-93/116 Method.
- Prepared this geotechnical/asbestos letter report.

EXPLORATION PROCEDURES

During drilling activities, Thomas Gardner visually examined each sample in the field to assess the potential for asbestos-containing materials. Mr. Gardner is accredited by the State of North Carolina as an Asbestos Inspector, North Carolina accreditation number 12408. Samples were taken from 4 borings, approximately 40 feet apart.

ASBESTOS CONTAINING MATERIALS

During the field evaluation, the Asbestos Inspector did not observe potential asbestos-containing materials within the soil samples obtained. A total of four (4) samples were selected from those obtained for further laboratory analysis. The results of the laboratory testing are attached in the Asbestos Analysis Summary sheets.

No Asbestos Containing Materials (ACMs) were identified in the soil samples obtained during the evaluation.

In the event that suspect material not addressed in this report is discovered, contact S&ME to test the material before it is disturbed.

LIMITATIONS OF REPORT

The boring locations given in this report should be considered accurate only to the degree implied by the methods used to determine them.

This report has been prepared for the exclusive use of the client for specific application to the subject project and project site. It has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other warranty, expressed or implied, is made.

CLOSURE

S&ME appreciates the opportunity to assist you during this phase of the project. If you should have any questions concerning this report or if we may be of further assistance, please contact us.

Very truly yours,

S&ME, Inc.



Jena R. Abney, MPH.
Project Professional



C. Mike Cashio, Jr. CIH
Principal Industrial Hygienist

Senior Reviewed by: C. Mike Cashio, Jr. CIH

Attachments: Asbestos Analysis Summary and Lab Report

T:\Projects\2014\GEO\1335-14-117 Potts Sloan Roadway\Deliverables



ASBESTOS INSPECTION DATA SHEET

Project Number: 1335-14-117
Phase 02

Date of Inspection: 7/29/15

Inspector: Thomas Gardner

Project Name: Potts – Sloan Roadway

Accreditation No: 12408

Assistant(s):

Description of Structure(s) Inspected: Soil Borings

HOMOGENEOUS AREA:

SAMPLE DATA:

Area ID	Area Description	Area Location	Approx Size (SF or LF)	Cat ¹ (F/I/II)	Condition ² (PD/PSD/D/SD)	Sample Number	Sample Location	Asbestos Content
S1	Soil	Boring S1	NA	I	PD	S1-1	-4'	None Detected
		*No suspect materials -4' Soil sample taken				S1-1	-10'	None Detected
		*No suspect material -10' natural soil at -9'						
S2	Soil	Boring S2	NA	I	PD	S2-1	-4'	None Detected
		*No suspect materials at -4' Soil sample taken				S2-2	-9.5'	None Detected
		*No suspect materials at -8' Natural soil at 9.5'						
S3	Soil	Boring S3	NA	I	PD	S3-1	-5'	None Detected
		*No suspect materials at -10' Soil sample taken				S3-2	-10'	None Detected
		*No suspect material at -15' Natural soil at -14'				S3-3	-15'	None Detected

¹Category: F=Friable; I=Category I, Non-Friable; II=Category II, Non-Friable

²Condition: PD=Potential for Damage; PSD=Potential for Significant Damage; D=Damaged; SD=Significantly Damaged

Tom Gardner

Inspector Signature



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Assistant(s):

Description of Structure(s) Inspected: Soil Borings

HOMOGENEOUS AREA:

SAMPLE DATA:

Area ID	Area Description	Area Location	Approx Size (SF or LF)	Cat ¹ (F/I/II)	Condition ² (PD/PSD/D/SD)	Sample Number	Sample Location	Asbestos Content
S4	Soil	Boring S4	NA	I	PD	S4-1	-3'	None Detected
		*No suspect materials at -3' Soil sample taken				S4-2	-6'	None Detected
		*Asphalt like material at -6' *No suspect materials at -10' Soil sample taken -14' native soil				S4-3	-10'	None Detected

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Tom Gardner

Inspector Signature



9771D Southern Pine Boulevard
 Charlotte, NC 28273
 704-940-1830 Fax 704-565-4929
 NVLAP Lab Code 102075-0

POLARIZED LIGHT MICROSCOPY

Performed by EPA 600/R-93/116 Method

Asbestos Analysis Summary

Client Name Charlotte Branch

9751 Southern Pine Blvd.

Date Received 7/29/2015

Client Job Potts Sloan Roadway

Charlotte NC 28273

Date Analyzed 8/3/2015

Job Number 1335-14-117

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
15-8786	S1-1	GREY GRANULAR		ND		100 OTHER
15-8787	S1-2	GREY GRANULAR		ND		100 OTHER
15-8788	S2-1	RED/BROWN GRANULAR		ND	<1 CELLULOSE	100 OTHER
15-8789	S2-2	GREY GRANULAR		ND		100 OTHER

Analyzed by: Jane Wasilewski

Additional Comments:

Jane Wasilewski
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample). RCF= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This sheet may not be reproduced except with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.

<i>Lab ID:</i>	<i>Sample #:</i>	<i>Appearance</i>	<i>Comments</i>	<i>Asbestos %/Type</i>	<i>Non-Asbestos Fibrous %/Type</i>	<i>Non-Fibrous %/Type</i>
15-8790	S3-1	BROWN GRANULAR		ND	<1 CELLULOSE	100 OTHER
15-8791	S3-2	RED/GREY GRANULAR		ND		100 OTHER
15-8792	S3-3	RED/GREY GRANULAR		ND		100 OTHER
15-8793	S4-1	BROWN GRANULAR		ND	<1 CELLULOSE	100 OTHER
15-8794	S4-2	BROWN GRANULAR		ND		100 OTHER
15-8795	S4-3	GREY GRANULAR		ND		100 OTHER

Analyzed by: Jane Wasilewski

Additional Comments:

Jane Wasilewski
Laboratory Manager

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BULK SAMPLE
CHAIN OF CUSTODY RECORD

POLARIZED LIGHT MICROSCOPY
PERFORMED BY EPA 600/R-93/116 METHOD

PROJECT NO. 1335-14-117		PROJECT NAME Potts Sloan Roadway				RELINQUISHED BY: Tom Sanchez		DATE 7/29/15	TIME 1430	RECEIVED BY:
FACILITY						RELINQUISHED BY:		DATE	TIME	RECEIVED BY:
SAMPLER(S) Thomas Gardner			DATE TAKEN 7/29/15			RELINQUISHED BY:		DATE	TIME	RECEIVED BY:
SAMPLE #	LAB NUMBER	DATE ANALYZED	ANALYSTS INITIALS	ASBESTOS +	N/D	ARCHIVE NUMBER	DATE ARCH	ARCHIVER INITIALS	SPECIAL INSTRUCTIONS	
51-1	15-8786								PM M. Cashua	
51-2	87									
52-1	88									
52-2	89									
53-1	90									
53-2	91									
53-3	92									
54-1	93									
54-2	94									
54-3	8795									
<input type="checkbox"/> Same Day <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 3-5 Day <input type="checkbox"/> 6-10 Day										
ALL SAMPLES WILL BE DISPOSED OF AFTER ANALYSIS UNLESS OTHERWISE REQUESTED										

By signing below, I warrant that I am authorized to enter into this agreement for the client named below, and that I authorize the above analysis subject to the terms and conditions on the reverse hereof.

AUTHORIZED BY _____ (DATE & TITLE) This agreement is governed by the terms and conditions on the reverse side hereof.

PRINT NAME _____ Analysis charges shall be as included in S&ME, Inc.'s fee schedule in effect at the time of the analysis.

CLIENT INVOICE INFORMATION	Client Name	ATTN:	SEND COPIES OF RESULTS TO	Name, Dept.
	Client PO#			Co.
	Address			Address
	City, State, Zip			City, State, Zip
	Phone:	FAX:		Phone:

WHITE COPY-LABORATORY
YELLOW COPY-ACCOUNTING
PINK COPY-CLIENT