

## ASBESTOS CONTAINING MATERIAL INVESTIGATION REPORT

COMMERCIAL STRUCTURE  
TRACT #402 – 500 LAWAND DRIVE  
COLUMBIA, SOUTH CAROLINA 29210  
TMS # R07302-05-01

### PREPARED FOR:



HDR  
C/O Ms. Erin N. Slayton, PE.DBIA, ENV SP  
Project Manager  
1122 Lady Street, Suite 1100  
Columbia, SC, 29201

### PREPARED BY:

FME Consultants  
1825 Blanding Street  
Columbia, South Carolina 29201

November 17, 2020

☒ Yes, asbestos was found.  
☐ No, asbestos was not found.

FME Project No.: G5662.020

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## 1. EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. This report should be reviewed in its entirety prior to making any decisions regarding this project.

F&ME Consultants Inc. (FME) completed an Asbestos Containing Material (ACM) Investigation of the interior and exterior portions of the 2-story commercial building structure located at 500 Lawand Drive (Building), Columbia, SC, at the request of HDR (Client). This Investigation was conducted in accordance with South Carolina Department of Health and Environmental Control (SCDHEC), United States Environmental Protection Agency (USEPA), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Occupational Safety and Health Administration (OSHA) regulations requiring an ACM Investigation prior to any demolition and/or renovation activities.

It is FME's understanding that the Building is to be demolished as function of the Carolina Crossroads Project for the South Carolina Department of Transportation (SCDOT). Per an agreed upon scope of work, FME performed a full investigation of both the interior and exterior of the Building, to identify ACM that will be encountered during the planned demolition to the existing structure, and to make recommendations regarding proper handling and disposal of any ACM found. The field investigation was performed on October 23, 2020.

This ACM Investigation of the Building identified numerous suspect materials associated with the interior and exterior of the Building that will be impacted by the planned demolition. ACM materials identified will need to be removed, handled, and disposed of prior to the start of demolition activities. Of the suspect materials sampled and analyzed during this investigation, laboratory results indicate that the following materials were found to be positive for asbestos content:

- Grey Duct Mastic on Fiberglass Duct Board
- Pink Sink Undercoating
- White Roof Drainpipe Mastic (1 Location)
- Roof Flashing



We appreciate the opportunity to assist you with this project. If you have any questions or require additional information, please feel free to contact our office at (803) 254-4540.

Sincerely,

F&ME CONSULTANTS, INC.



James T. Timmons  
Asbestos Consultant/Management Planner  
SCDHEC License No. MP-00196  
Exp. Date 01/26/2021



Glynn M. Ellen  
Environmental Department Manager  
Asbestos Consultant/Management Planner  
SCDHEC License No: ASB-22641  
Expiration Date 01/26/2021



## 2. INTRODUCTION

F&ME Consultants Inc. (FME) completed an Asbestos Containing Material (ACM) Investigation of the 2-story commercial building structure located at 500 Lawand Drive (Building), Columbia, SC, at the request of HDR (Client). This Investigation was conducted in accordance with South Carolina Department of Health and Environmental Control (SCDHEC), United States Environmental Protection Agency (USEPA), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Occupational Safety and Health Administration (OSHA) regulations requiring an ACM Investigation prior to any demolition and/or renovation activities.

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The results, conclusions and recommendations from this Investigation are representative of the conditions observed at the site on the dates of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that occur after the inspection. No other environmental issues were addressed as part of this report.

## 3. EXISTING SITE INFORMATION

The Building is a steel and wood framed commercial structure (~6,900 SF) that was constructed in 1985, according to the Richland County Assessors office and is located at 500 Lawand Drive in Columbia, South Carolina. The Building is a 2-story steel and wood framed structure with exterior brick veneer, and a flat built-up roofing system under a white membrane. The interior finishes consist of drywall walls, multiple applications of suspended ceiling systems below a metal deck, concrete slab flooring with carpet overlay, an 18" x 18" floor tile and linoleum flooring. See Appendix A – Site Vicinity Map, for the location of the structure. See Appendix B –General Building Plans, for a layout of the Building.



*Photo 1 – 500 Lawand Drive, Columbia, SC*



## 4. FIELD ASSESSMENT

The purpose of this investigation was to locate, sample, and record the physical characteristics of suspect ACM identified within the interior and exterior, including the roof, of the existing Building. During the field investigation, building components were visually inspected for suspect ACM. Once reviewed, the quantities and physical condition of suspect materials identified were assessed, and bulk samples of these materials were collected and submitted for laboratory analysis.

### 4.1 Suspect Materials

The purpose of this investigation was to locate, sample and record the physical characteristics of suspect ACM associated with the interior and exterior portions of the subject structure and roof. Therefore, the quantities and physical condition of suspect materials were assessed, and bulk samples of suspect materials were submitted for laboratory analysis. The following suspect materials and approximate amounts were identified during this ACM Investigation:

- Drywall and Associated Joint Compound (> 5,000 SF)
- Three (3) Separate Applications of Suspended Ceiling Panel Systems (~ 6,500 SF)
- Two (2) Applications of Cove Base Mastic ( > 1,000 SF)
- Two (2) Applications of Carpet Adhesive (~ 6,800 SF)
- Gray Duct Mastic on Fiberglass Duct Board (~1,000 LF)
- White Bathroom Sink Caulk (~ 10 LF)
- Brown Bathroom Sink Caulk (~15 LF)
- Pink Sink Undercoating (~8 SF)
- Interior Door Caulk ( ~ 550 LF)
- Kitchen Sink Caulk (~ 16 LF)
- White Roof Drainpipe Mastic (~ 20 LF)
- Exterior Door Caulk (~ 40 LF)
- Black Built-up Roofing Felt (~ 3,550 SF)
- White Roof Membrane (~ 4,350 SF)
- Black Roof Mastic (120 SF)
- Roof Flashing (~ 800 SF)
- White Roof HVAC Caulk (~ 4 LF)
- Roof Pitch Pocket Tar (~ 4 SF)
- Exterior Wall Caulk (~ 155 LF)
- Brown 18" Self-Stick Floor Tiles (~40 SF)
- Cream Linoleum Flooring (~ 80 SF)



Random samples of the suspect materials identified during the investigation were collected for laboratory analysis, and their physical characteristics were recorded. Building materials such as concrete, metal, wood, brick, carpet, etc., were not considered suspect ACM. Bulk samples of suspect materials were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA 600/R-93/116. Confirmation Transmission Electron Microscopy (TEM) was also performed on any non-friable organically bound materials that tested negative for asbestos content as per SCDHEC regulations effective May 27, 2011. See Appendix E – Summary of Samples, for complete list of all samples taken.

Proper sampling and chain-of-custody protocols were followed to ensure appropriate handling and delivery of samples to the analytical laboratory. Refer to Appendix K – Personnel Certifications, for SCDHEC qualifications of Investigation personnel, and Appendix J– Chain of Custody Form, for documentation of proper handling and delivery of samples.

## 5. ASSESSMENT RESULTS

A total of eighty-two (82) samples were collected that were associated with the Building. A “*first positive stop*” protocol was implemented for this sampling. This protocol establishes that if the first sample of a material tested positive for asbestos content, subsequent samples were not to be analyzed, and would be considered positive as well. Due to multiple layers of some materials, sixty (60) samples were analyzed by PLM and seventeen (17) were confirmed by TEM. Analysis of these materials indicated that the **grey duct mastic on fiberglass duct board, pink sink undercoating, white roof drainpipe mastic (1 location), and roof flashing are asbestos containing materials.**

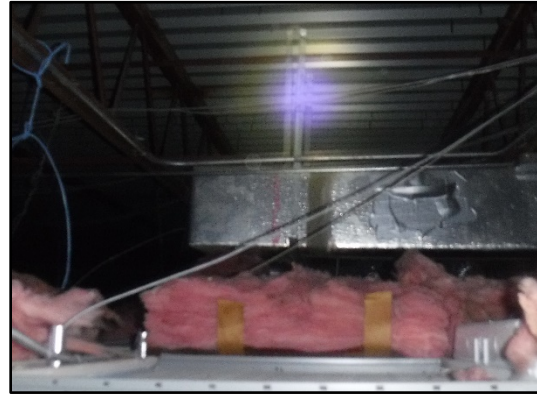
Appropriate sampling and chain-of-custody protocols were followed during the investigation to ensure proper handling and delivery of samples to the analytical laboratory. Appendix I – Bulk Asbestos Analytical Reports and Appendix J – Laboratory Chain of Custody were provided to show laboratory documentation of the analytical results. Appendix K – Personnel Certifications, provides the qualifications for the FME Inspectors.



## 5.1 Homogeneous Area Locations Where ACM Was Identified

The following are photographs, descriptions, and approximate quantities of the ACM identified during the Investigation. Guidance is also provided for the proper handling and disposition if the materials in these areas are to be removed. See Appendix D – Homogeneous Area Plans, for homogeneous sampling areas for the ACM identified below.

**HA-1 – Grey Duct Mastic on Fiberglass Duct Board (1,000 LF).** Asbestos-containing grey duct mastic on fiberglass duct board was noted above the suspended ceilings throughout both floors of the Building. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.



**HA-2 – Pink Sink Undercoating (8 SF).** Asbestos-containing pink sink undercoating was noted in the break room on the first floor. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.





#### HA-3 – White Roof Drainpipe Mastic (20 LF).

Asbestos-containing white roof drain mastic was identified associated with one of the roof drains located above the suspended ceilings on the 2<sup>nd</sup> floor. This mastic was not found at other roof drains. This material was found in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.



HA-4 – Roof Flashing (800 SF). Asbestos-containing roof flashing was noted around the perimeter of the roof and on flashing associated with curbing that supports roof mounted mechanical systems for the Building. This material was found under a white non-ACM roof membrane. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.



## 6. RECOMMENDATIONS

The results, conclusions, and recommendations of this investigation are representative of the conditions observed at the site on the dates of the field investigation. FME does not assume responsibility for any changes in conditions or circumstances that may have occurred after this investigation.

It is our understanding that this investigation was requested to provide the Client with Environmental information in regard to ACM that will be encountered during the demolition of the Building. Based on the results of the ACM Investigation, the **grey duct mastic on fiberglass duct board, pink sink undercoating, white roof drainpipe mastic, and roof flashing** were found to contain ACM. All ACM identified during this investigation must be abated prior to the commencement of demolition activities. **Based on the quantities of identified ACM, an abatement project design will not be required for the removal of these materials identified herein.**

If any suspect ACM is encountered during demolition activities other than those identified herein, the affected contractor(s) must stop work, take appropriate actions, and notify the Owner and/or



the Asbestos Consultant for an appropriate response action. The SCDHEC must be notified in the event any ACM is discovered, as well as changes in the condition of identified ACM. Appendix M – Abatement Project Forms, are provided for more information. See Appendix G- Summary of Inspection and Appendix H – Physical Assessment Data Sheets, for description and condition of ACM materials.

All abatement work must be performed by an AHERA certified and SCDHEC- licensed Abatement Contractor. This work must be performed in accordance with all applicable regulations and guidelines, such as notification and air monitoring requirements. All asbestos waste, including contaminated building materials (i.e. original window frames etc.), must be deposited in a landfill permitted by the SCDHEC for receiving ACM.

The SCDHEC's Standards of Performance for Asbestos Projects (R 61-86.1) includes requirements for abatement projects regarding notifications, project design, air sampling and analysis, etc. For informational purposes, some of these requirements are summarized below:

*Notifications.* Written notification (SCDHEC Form 3430) must be submitted to SCDHEC at least two (2) calendar weeks prior to initiation of abatement activities for renovation/demolition projects. A copy of this inspection report and applicable fee payment must be attached to the notification. Additional fees may be required. Copies of all notifications and documents pertinent to the abatement operations must be posted on the job site during abatement work. The Owner/Operators must notify all parties involved with this project of the nature of the work as well as the locations and quantities of asbestos materials to be disturbed or those located near demolition/removal work areas. This notification requirement is also extended to any persons/employees who work near the demolition/removal work areas.

*Project Design.* Furthermore, abatement projects that will remove more than 3,000 square feet, 1,500 linear feet, or 656 cubic feet of regulated asbestos-containing materials are required to have a licensed and certified Abatement Project Designer develop a project design prior to the commencement of any abatement activities. The Abatement Contractor is required to adhere to the design, which must address all information as directed by the regulations.

*Air Monitoring.* The Abatement Contractor is responsible for daily personal air sampling for Abatement Workers in compliance with current OSHA standard 29 CFR 1926.1101. All remaining air monitoring services required for a renovation project (i.e. backgrounds, areas, and clearances) will be provided by the Owner or the Owner's Representative, as required by SCDHEC.

Quantities referenced in this report are approximations to aid in establishing the number of samples required to meet the SCDHEC and EPA regulations. If this document is utilized as an aid for bidding of demolition or abatement or other construction or remediation activities the bidder shall verify the quantities.



## 7. APPENDICES

Appendix A – Site Vicinity Map

Appendix B – General Building Plans

Appendix C – Sample Location Plans

Appendix D – Homogeneous Area Plans

Appendix E – Summary of Samples

Appendix F – Summary of ACM

Appendix G – Summary of Inspection

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Appendix I – Laboratory Analysis Reports

Appendix J – Chain of Custody Forms

Appendix K – Personnel Certifications

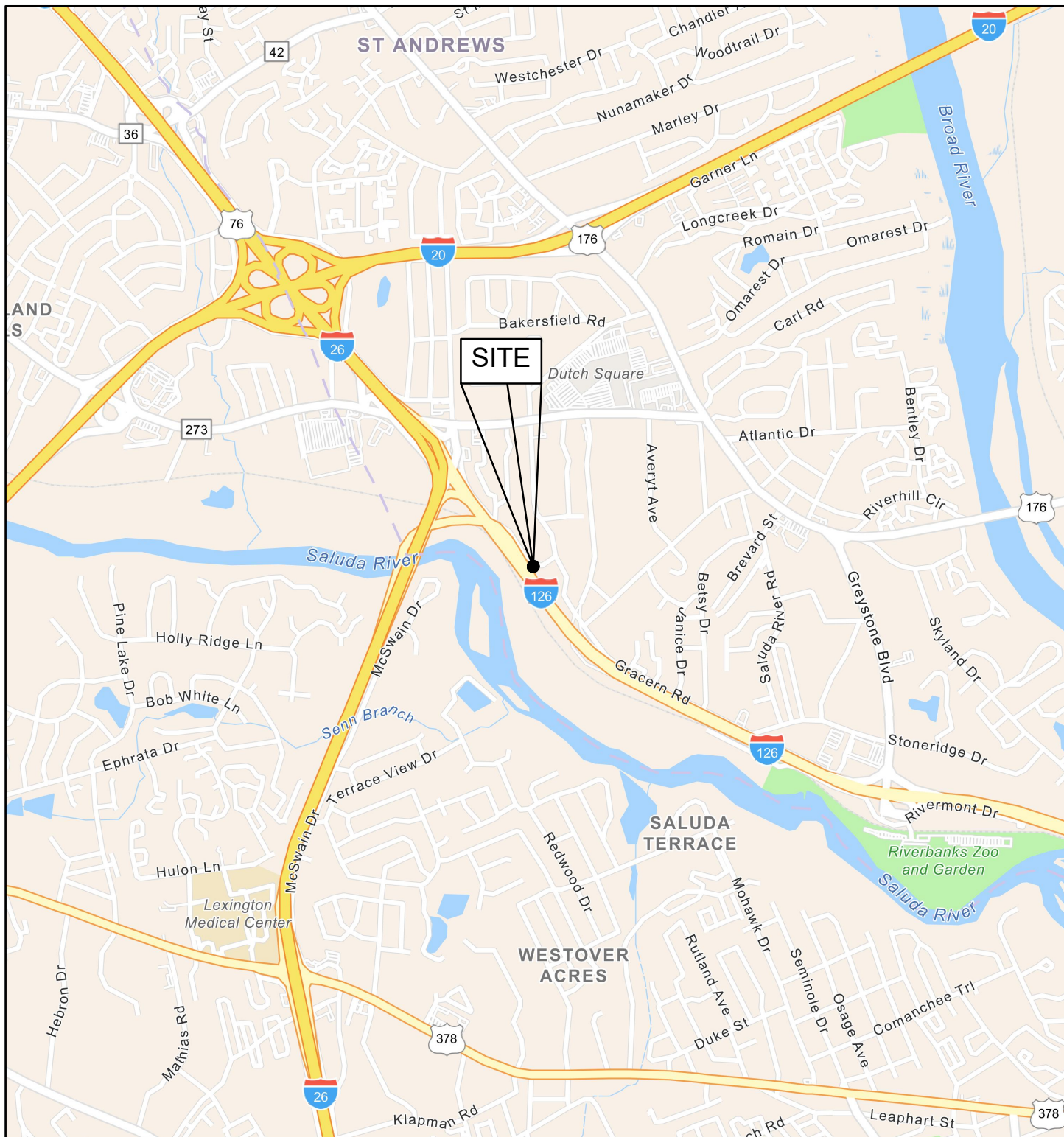
Appendix L – Regulatory Summary

Appendix L – Abatement Project Forms



## Appendix A

### Site Vicinity Map



1:36,000

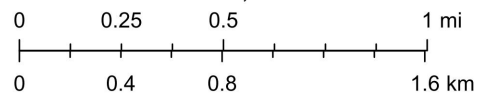


FIGURE  
NUMBER:

1

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
SITE VICINITY MAP  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29201



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
2  
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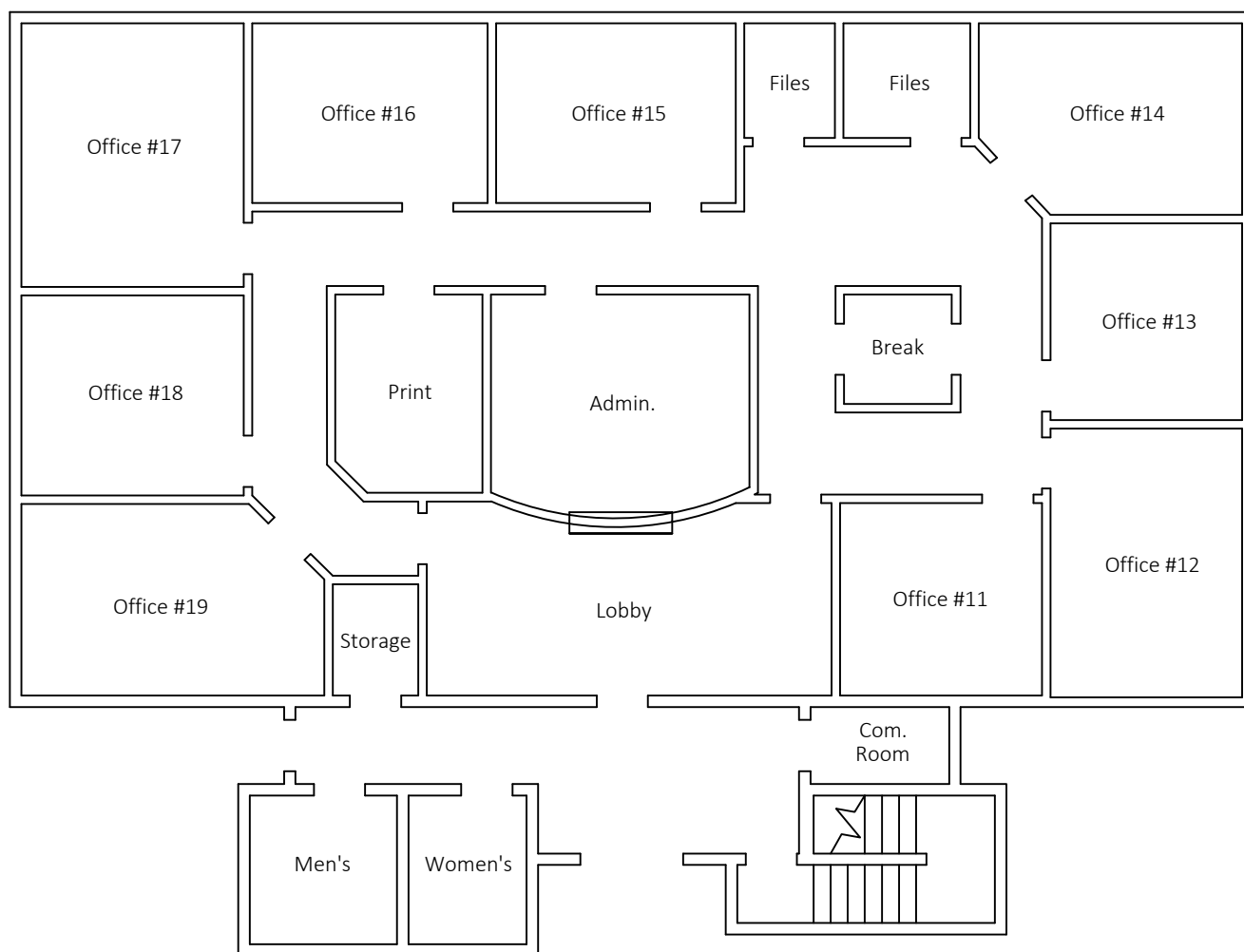
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CHKD. BY: JTT  
APPR. BY: GME

NOTES:

## Appendix B

### General Building Plans



First Floor

FIGURE  
NUMBER:

2

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
General Building Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

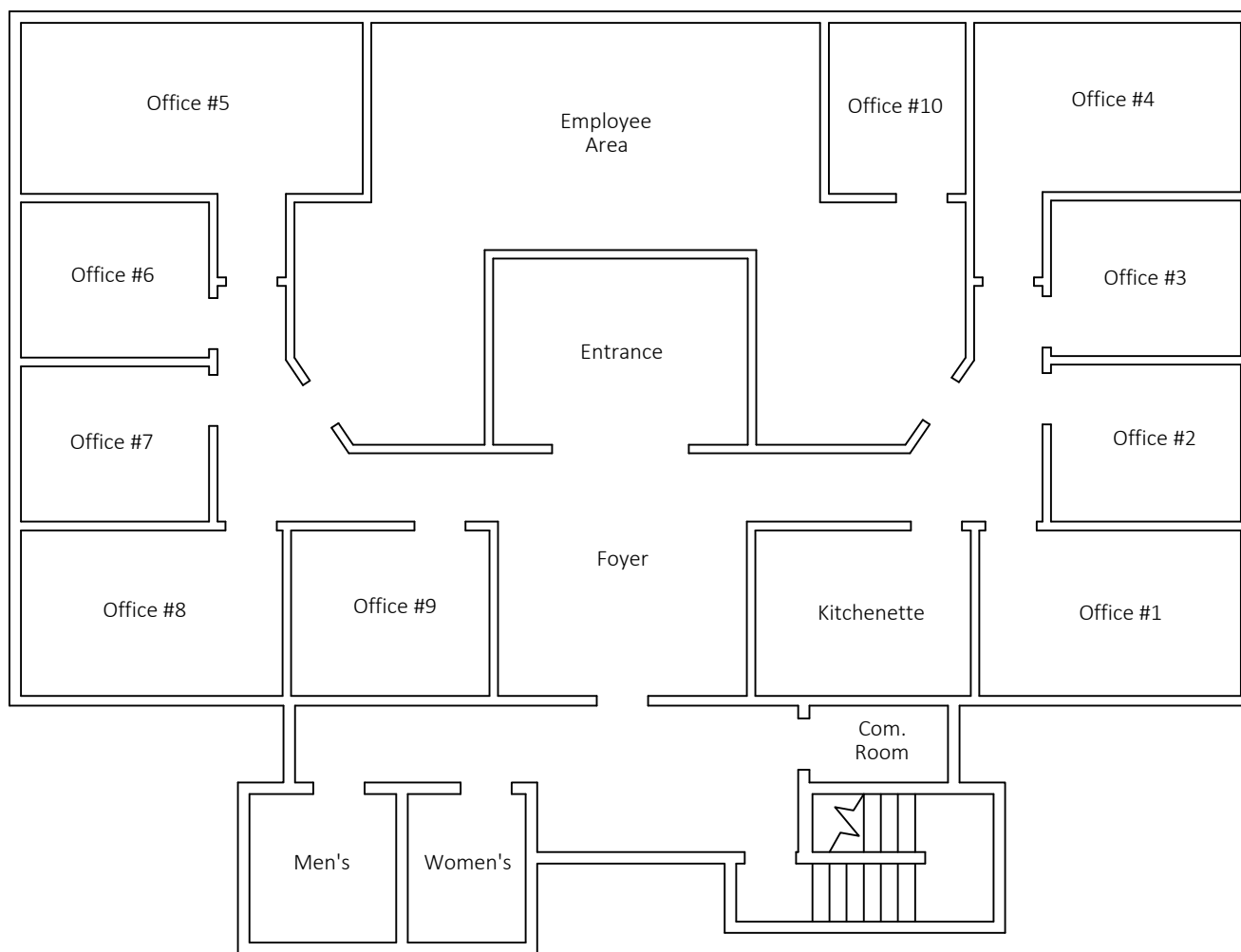
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SCALE:

1/8" = 1'

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

NOTES:



Second Floor

FIGURE  
NUMBER:

3

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
General Building Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
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SCALE:

$\frac{3}{8}" = 1'$

DRWN. BY: MSM

CHKD. BY: JTT

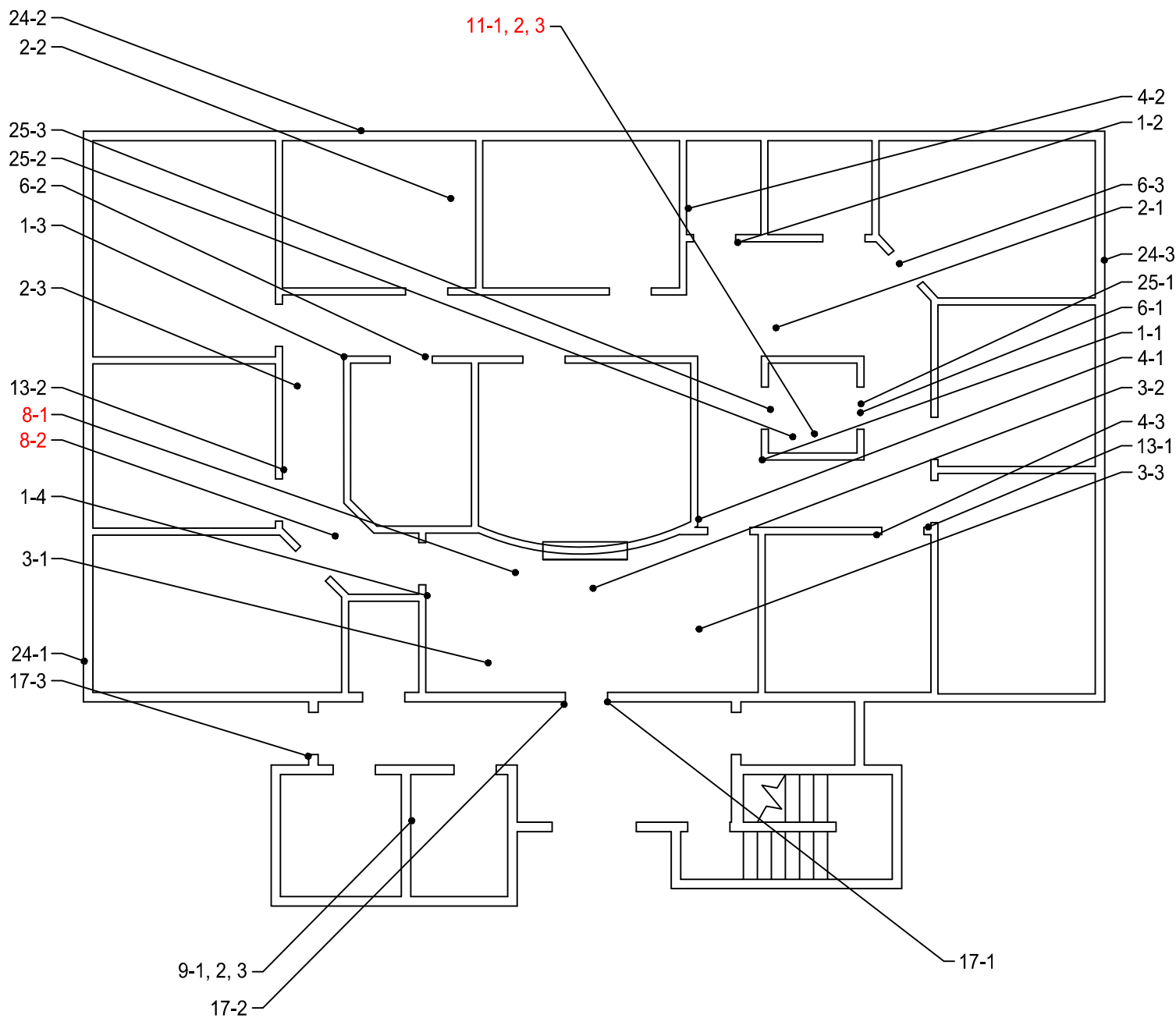
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## Appendix C

### Sample Location Plans



First Floor

FIGURE  
NUMBER:

4

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
Sample Location Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
2  
3

SCALE:

1/8" = 1'

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

NOTES:

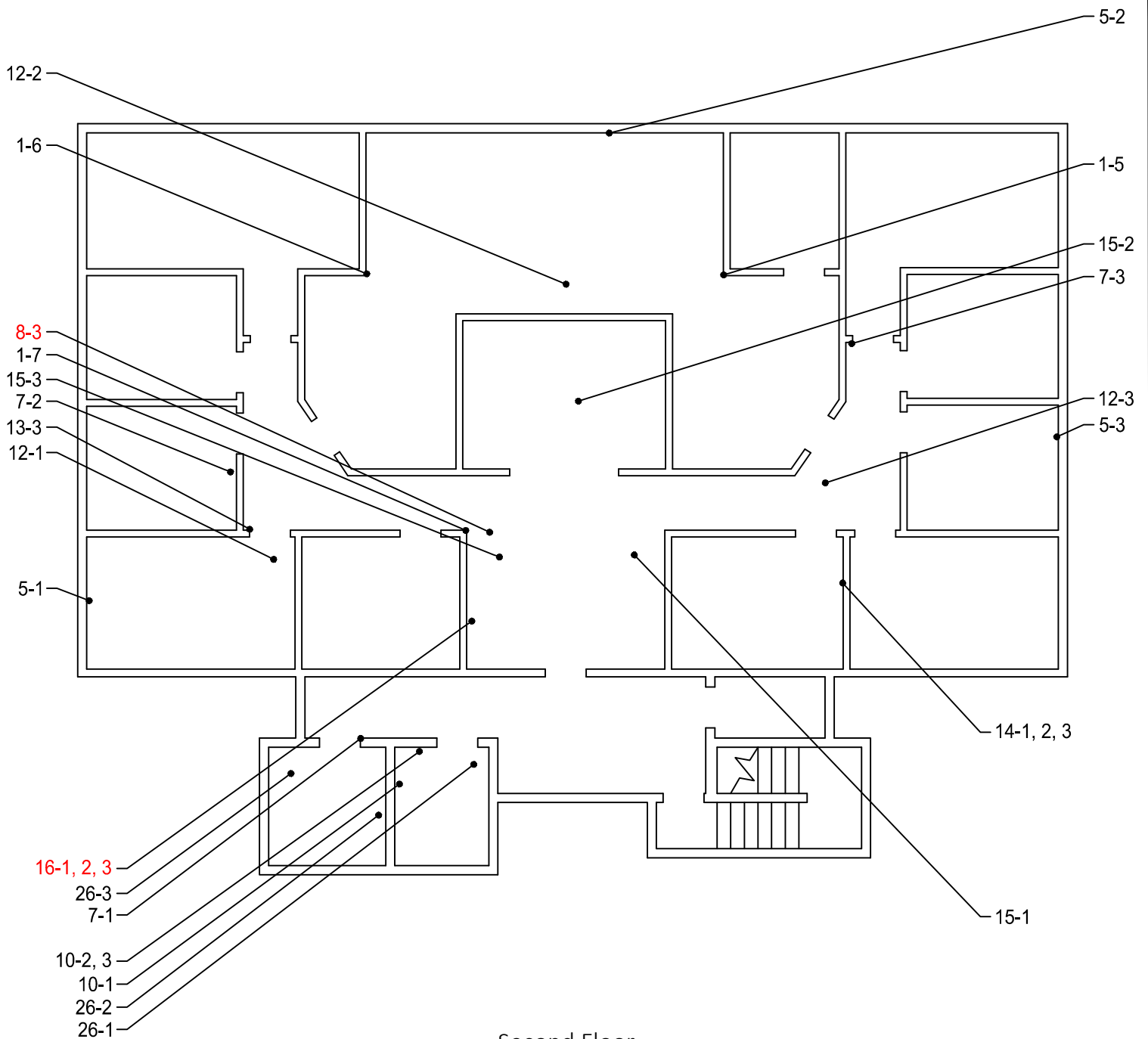


FIGURE  
NUMBER:

5

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
Sample Location Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1  
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SCALE:  
1/4" = 1'

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

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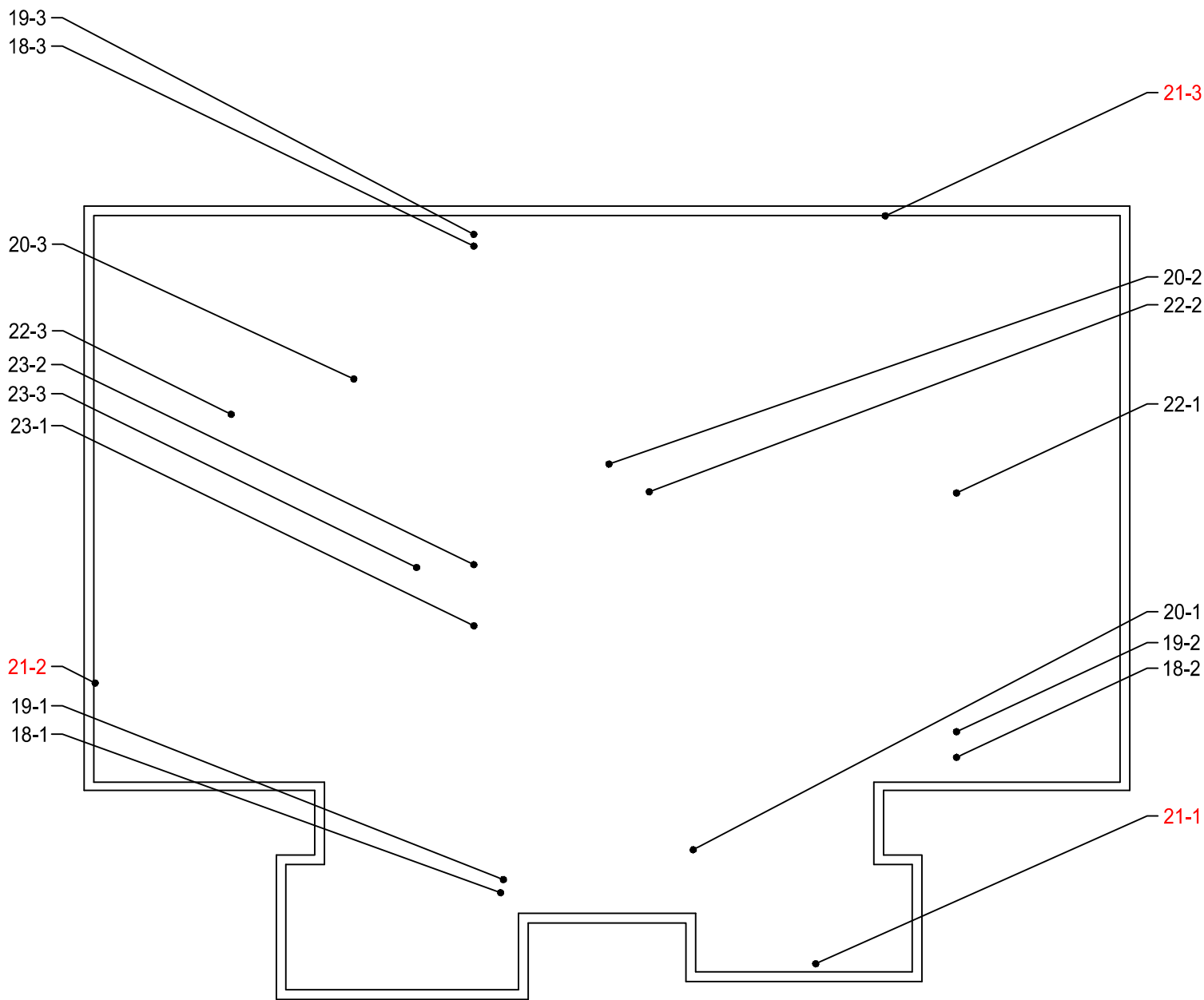


FIGURE  
NUMBER:

6

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION

500 Lawand Drive  
Columbia, SC 29210

Sample Location Plan

Prepared for:

HDR

1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1

2

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SCALE:

$\frac{3}{8}" = 1'$

DRWN. BY: MSM

CHKD. BY: JTT

APPR. BY: GME

NOTES:

## Appendix D

### Homogeneous Area Plans



HA-1 - Grey Duct Mastic



HA-2 - Pink Sink Undercoating

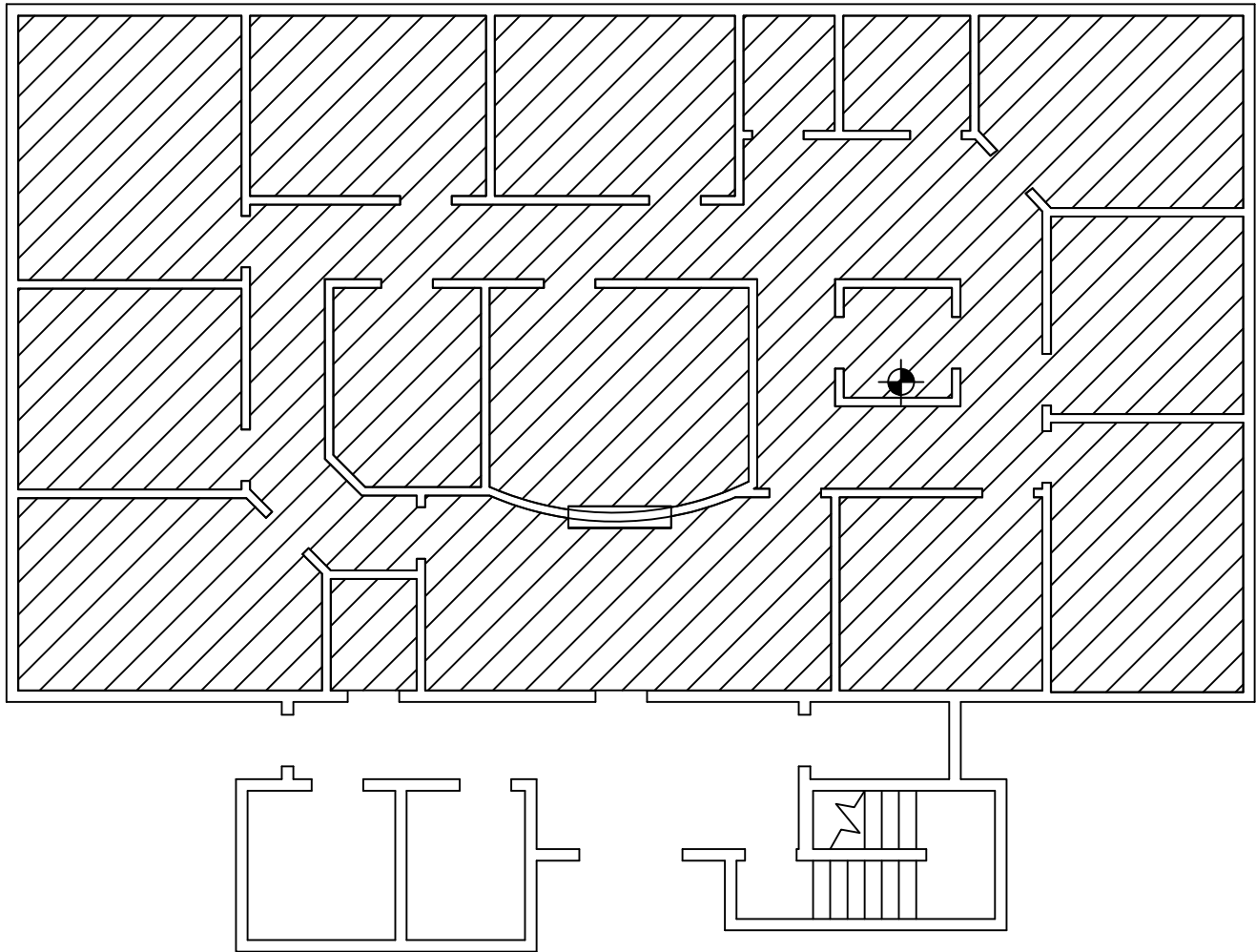


FIGURE  
NUMBER:

5

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
Homogeneous Area Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

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SCALE:

$\frac{3}{8}'' = 1'$

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

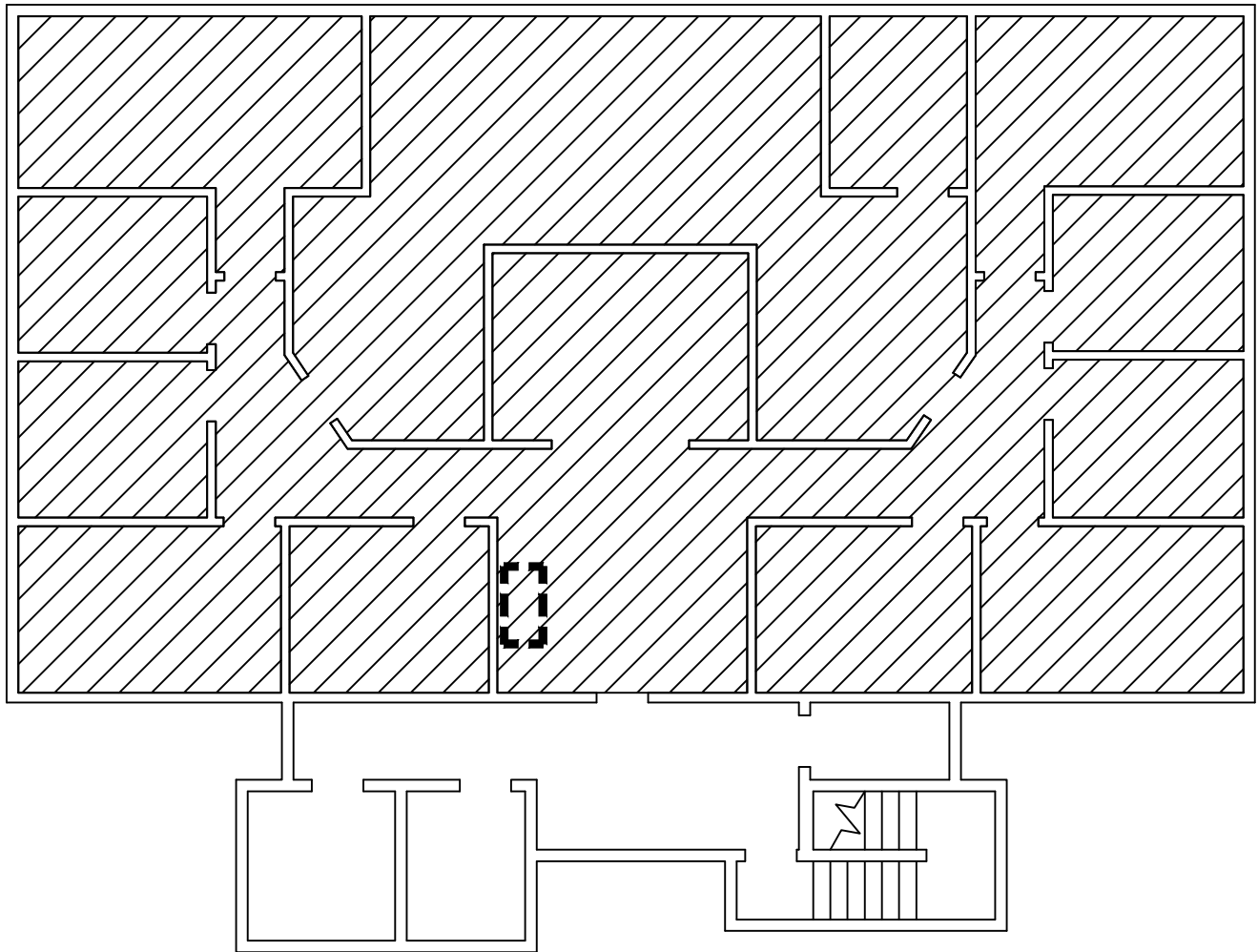
NOTES:



HA-1 - Grey Duct Mastic



HA-3 - White Roof Drainpipe Mastic



Second Floor

FIGURE  
NUMBER:

8

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
Homogeneous Area Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

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2 \_\_\_\_\_  
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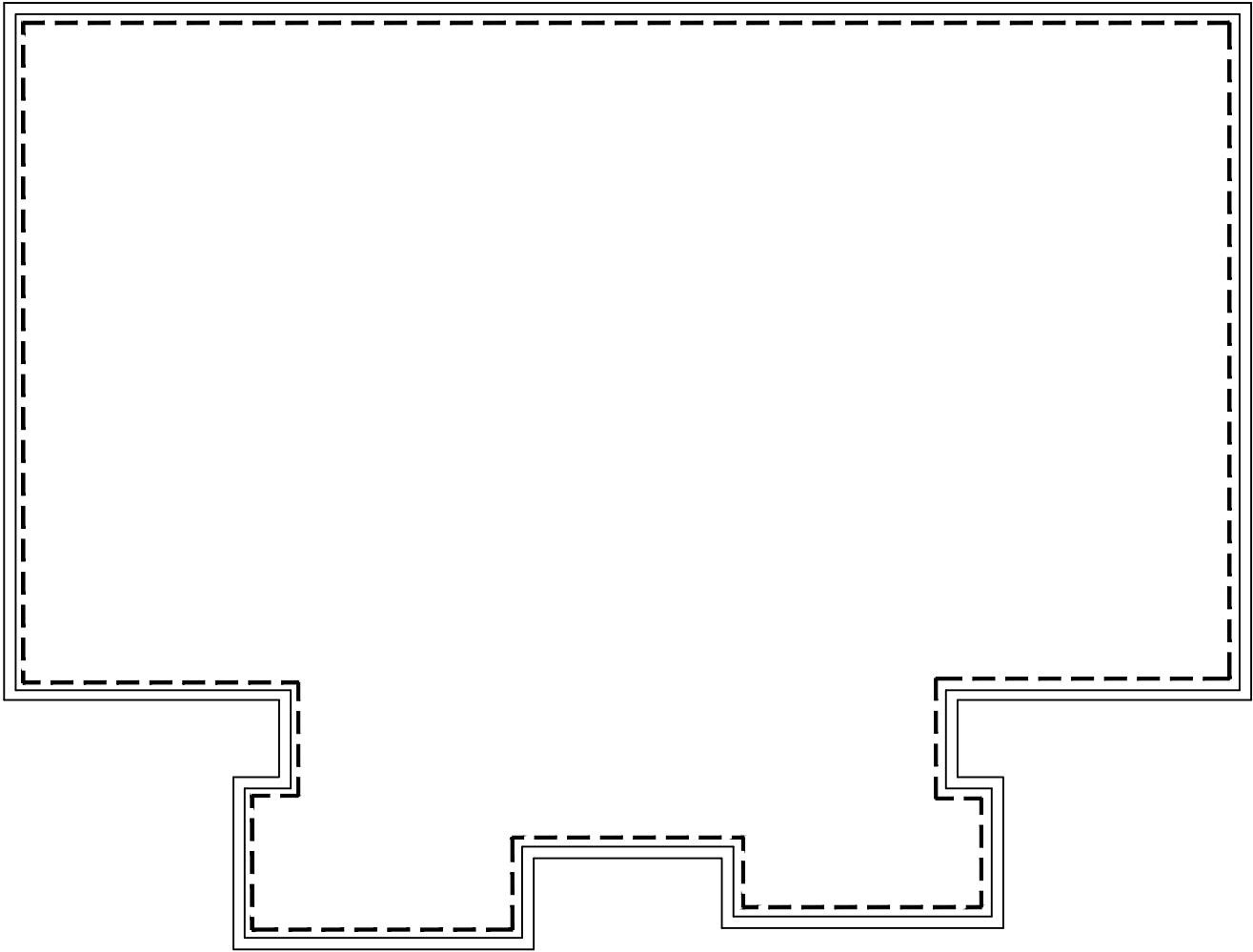
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 $\frac{3}{8}" = 1'$

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

NOTES:



HA-4 - Roof Flashing



Roof

FIGURE  
NUMBER:

9

F&ME CONSULTANTS  
PROJECT NUMBER:

G5662.020

ASBESTOS CONTAINING MATERIALS INVESTIGATION  
500 Lawand Drive  
Columbia, SC 29210  
Homogeneous Area Plan  
Prepared for:  
HDR  
1122 Lady Street, Suite 1100  
Columbia, SC 29210



1825 BLANDING STREET  
COLUMBIA, SC 29201

ORIGINAL:  
October 28, 2020

REVISIONS:

1 \_\_\_\_\_  
2 \_\_\_\_\_  
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SCALE:  
 $\frac{3}{8}" = 1'$

DRWN. BY: MSM  
CHKD. BY: JTT  
APPR. BY: GME

NOTES:



## Appendix E

### Summary of Samples

## APPENDIX E: SUMMARY OF SAMPLES

Sample ID	Sample Description
1-1	Drywall and Associated Joint Compound
1-2	Drywall and Associated Joint Compound
1-3	Drywall and Associated Joint Compound
1-4	Joint Compound
1-5	Joint Compound
1-6	Joint Compound
1-7	Joint Compound
2-1	2' x 2' Suspended Ceiling Panel
2-2	2' x 2' Suspended Ceiling Panel
2-3	2' x 2' Suspended Ceiling Panel
3-1	2' x 2' Square Pattern Suspended Ceiling Panel
3-2	2' x 2' Square Pattern Suspended Ceiling Panel
3-3	2' x 2' Square Pattern Suspended Ceiling Panel
4-1	Cove Base Mastic Associated with Gray Cove Base
4-2	Cove Base Mastic Associated with Gray Cove Base
4-3	Cove Base Mastic Associated with Gray Cove Base
5-1	Cove Base Mastic Associated with Cream Cove Base
5-2	Cove Base Mastic Associated with Cream Cove Base
5-3	Cove Base Mastic Associated with Cream Cove Base
6-1	1 <sup>st</sup> Floor Carpet Adhesive
6-2	1 <sup>st</sup> Floor Carpet Adhesive
6-3	1 <sup>st</sup> Floor Carpet Adhesive
7-1	2 <sup>nd</sup> Floor Carpet Adhesive
7-2	2 <sup>nd</sup> Floor Carpet Adhesive
7-3	2 <sup>nd</sup> Floor Carpet Adhesive
8-1	Grey Duct Mastic on Fiberglass Duct Board
8-2	Grey Duct Mastic on Fiberglass Duct Board
8-3	Grey Duct Mastic on Fiberglass Duct Board
9-1	White Bathroom Sink Caulk
9-2	White Bathroom Sink Caulk
9-3	White Bathroom Sink Caulk
10-1	Brown Bathroom Sink Caulk
10-2	Brown Bathroom Sink Caulk
10-3	Brown Bathroom Sink Caulk



## APPENDIX E: SUMMARY OF SAMPLES

Sample ID	Sample Description
11-1	Pink Sink Undercoating
11-2	Pink Sink Undercoating
11-3	Pink Sink Undercoating
12-1	2' x 4' Suspended Ceiling Panel
12-2	2' x 4' Suspended Ceiling Panel
12-3	2' x 4' Suspended Ceiling Panel
13-1	Interior Door Caulk
13-2	Interior Door Caulk
13-3	Interior Door Caulk
14-1	Kitchen Sink Caulk
14-2	Kitchen Sink Caulk
14-3	Kitchen Sink Caulk
15-1	2' x 2' Textured Suspended Ceiling Panel
15-2	2' x 2' Textured Suspended Ceiling Panel
15-3	2' x 2' Textured Suspended Ceiling Panel
16-1	White Roof Drainpipe Mastic
16-2	White Roof Drainpipe Mastic
16-3	White Roof Drainpipe Mastic
17-1	Exterior Door Caulk
17-2	Exterior Door Caulk
17-3	Exterior Door Caulk
18-1	Black Built-up Roofing Felt
18-2	Black Built-up Roofing Felt
18-3	Black Built-up Roofing Felt
19-1	White Roof Membrane
19-2	White Roof Membrane
19-3	White Roof Membrane
20-1	Black Roofing Mastic
20-2	Black Roofing Mastic
20-3	Black Roofing Mastic
21-1	Roof Flashing



## APPENDIX E: SUMMARY OF SAMPLES

Sample ID	Sample Description
21-2	Roof Flashing
21-3	Roof Flashing
22-1	White Roof HVAC Caulk
22-2	White Roof HVAC Caulk
22-3	White Roof HVAC Caulk
23-1	Roofing Pitch Pocket Tar
23-2	Roofing Pitch Pocket Tar
23-3	Roofing Pitch Pocket Tar
24-1	Exterior Wall Caulk
24-2	Exterior Wall Caulk
24-3	Exterior Wall Caulk
25-1	Brown 18" Self-Stick Floor Tile
25-2	Brown 18" Self-Stick Floor Tile
25-3	Brown 18" Self-Stick Floor Tile
26-1	Cream Linoleum Flooring
26-2	Cream Linoleum Flooring
26-3	Cream Linoleum Flooring



## Appendix F

### Summary of ACM

## Appendix F – Summary of ACM

Sample ID	Description	Asbestos % Type
8-1	Grey Duct Mastic on Fiberglass Duct Board	2% Chrysotile
8-2	Grey Duct Mastic on Fiberglass Duct Board	Positive Stop
8-3	Grey Duct Mastic on Fiberglass Duct Board	Positive Stop
11-1	Pink Sink Undercoating	3% Chrysotile
11-2	Pink Sink Undercoating	Positive Stop
11-3	Pink Sink Undercoating	Positive Stop
16-1	White Roof Drainpipe Mastic	2% Chrysotile
16-2	White Roof Drainpipe Mastic	Positive Stop
16-3	White Roof Drainpipe Mastic	Positive Stop
21-1	Roof Flashing	8% Chrysotile
21-2	Roof Flashing	Positive Stop
21-3	Roof Flashing	Positive Stop



## Appendix G

### Summary of Inspection

## SUMMARY OF INSPECTION

### SUMMARY OF INSPECTION

The following tables summarize the physical assessment data, sampling and assessment results.

As exhibited on these tables, coding is used to abbreviate the asbestos containing materials' (ACM) locations, characteristics and results. These codes are as follows:

#### TYPES OF ACM:

Misc. = Miscellaneous

Sur. = Surfacing

TSI = Thermal System Insulation

#### ACM LOCATIONS:

Homogeneous areas = Indicated by Roman Numerals, Room Number or Area Designation

<u>Functional Space No.:</u>	<u>Functional Space Type:</u>	
1.	ED	Exterior Doors
2.	R	Roof
3.	SW	Stairwell
4.	BR	Break Room
5.	AC2	Above Suspended Ceiling System 2 <sup>nd</sup> Floor
6.	ER	Electrical Room
7.	O	Office
8.	L	Lobby
9.	RR	Rest Room
10.	AC1	Above Suspended Ceiling Panels 1 <sup>st</sup> Floor
11.	EW	EW
12	W	Window

#### ACM CHARACTERISTICS:

F = Friable

NF = Non-Friable

#### ASSESSMENT RESULTS:

(Refer to Physical Assessment Data)

#### POTENTIAL FOR DISTURBANCE:

(Refer to Physical Assessment Data)



## SUMMARY OF INSPECTION

### PHYSICAL ASSESSMENT CATEGORIES:

1. Damaged or significantly damaged friable thermal system insulation ACM.
2. Damaged friable surfacing ACM.
3. Significantly damaged friable surfacing ACM.
4. Damaged or significantly damaged friable miscellaneous ACM.
5. ACM with potential for significant damage.
6. ACM with potential for damage.
7. Any remaining friable ACM or friable suspect ACM.
8. Non-friable ACM.

### CLASSIFICATION FOR HAZARD POTENTIAL:

(Tabular Display)

<u>Hazard Rank</u>	<u>ACM Condition</u>	<u>ACM Disturbance Potential</u>
7	Significantly Damaged	Any
6	Damaged	Potential for Significant Damage
5	Damaged	Potential for Damage
4	Damaged	Low
3	Good	Potential for Significant Damage
2	Good	Potential for Damage
1	Good	Low

## Appendix H

### Physical Inspection Sheets

# PHYSICAL ASSESSMENT DATA SHEET

**Building:** 500 Lawand Drive

**Functional Space No:** 5, 10 **Type:** AC1, AC2 **Location:** (See Homogeneous Area Plan)

**Type of Suspect Material:** TSI **Surfacing** X **Misc.**

**Description:** HA-1, Grey Duct Mastic on Fiberglass Duct Board

**Approximate Amount of Material (SF or LF):** ~1,000 LF

## Condition:

**Percent Damage:** X >0% \_\_\_\_\_ <10% \_\_\_\_\_ >10% \_\_\_\_\_ <25% \_\_\_\_\_ >25%

**Extent of Damage:** \_\_\_\_\_ Localized \_\_\_\_\_ X Distributed

**Type of Damage:** X Deterioration \_\_\_\_\_ Water \_\_\_\_\_ Physical

## Description:

Asbestos-containing grey duct mastic on fiberglass duct board was noted above the suspended ceilings throughout both floors of the Building. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.

**Overall Condition Rating:** Sig. Damaged \_\_\_\_\_ Damaged \_\_\_\_\_ Good \_\_\_\_\_ X

## Potential for Disturbance:

	High	Moderate	Low	Friable ACM
Frequency of Potential Contact:	_____	_____	X	_____
Influence of Vibration	_____	_____	X	_____
Frequency of Air Erosion	_____	_____	X	_____
Potential of Water Erosion	_____	_____	X	_____

## Overall Potential Disturbance Rating:

Potential for Sig. Damage	Potential for Damage	Low Potential for Damage
_____	_____	8

## Overall Hazard Rank #:

Sig. Damaged	Pot. Sig. Damage	Potential Damage	Low Pot. Damage
_____	_____	_____	1

**Comments:** Potential for Disturbance and Hazard Ranking assessed is based on current usage of the facility.

**Signed:**  **Date:** 10/29/2020

# PHYSICAL ASSESSMENT DATA SHEET

**Building:** 500 Lawand Drive

**Functional Space No:** 4 **Type:** BR **Location:** (See Homogeneous Area Plan)

**Type of Suspect Material:** TSI **Surfacing** X **Misc.**

**Description:** HA-2, Pink Sink Undercoating

**Approximate Amount of Material (SF or LF):** ~ 8 SF

## Condition:

**Percent Damage:** X >0% \_\_\_\_\_ <10% \_\_\_\_\_ >10% \_\_\_\_\_ <25% \_\_\_\_\_ >25%

**Extent of Damage:** \_\_\_\_\_ Localized \_\_\_\_\_ X Distributed

**Type of Damage:** \_\_\_\_\_ Deterioration \_\_\_\_\_ Water \_\_\_\_\_ Physical

## Description:

Asbestos-containing pink sink undercoating was noted in the break room on the first floor. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.

**Overall Condition Rating:** Sig. Damaged \_\_\_\_\_ Damaged \_\_\_\_\_ Good \_\_\_\_\_ X

## Potential for Disturbance:

	High	Moderate	Low	Friable ACM
Frequency of Potential Contact:	_____	_____	X	_____
Influence of Vibration	_____	_____	X	_____
Frequency of Air Erosion	_____	_____	X	_____
Potential of Water Erosion	_____	_____	X	_____

## Overall Potential Disturbance Rating:

Potential for Sig. Damage	Potential for Damage	Low Potential for Damage
_____	_____	8

## Overall Hazard Rank #:

Sig. Damaged	Pot. Sig. Damage	Potential Damage	Low Pot. Damage
_____	_____	_____	1

**Comments:** Potential for Disturbance and Hazard Ranking assessed is based on current usage of the facility.

**Signed:**  **Date:** 10/29/2020

# PHYSICAL ASSESSMENT DATA SHEET

**Building:** 500 Lawand Drive

**Functional Space No:** 5 **Type:** AC2 **Location:** (See Homogeneous Area Plan)

**Type of Suspect Material:** TSI **Surfacing** X **Misc.**

**Description:** HA-3, White Roof Drainpipe Mastic

**Approximate Amount of Material (SF or LF):** ~20 LF

## Condition:

**Percent Damage:** X >0% \_\_\_\_\_ <10% \_\_\_\_\_ >10% \_\_\_\_\_ <25% \_\_\_\_\_ >25%

**Extent of Damage:** \_\_\_\_\_ Localized \_\_\_\_\_ X Distributed

**Type of Damage:** X Deterioration \_\_\_\_\_ X Water \_\_\_\_\_ Physical

## Description:

Asbestos-containing white roof drainpipe mastic was identified associated with one of the roof drains located above the suspended ceilings on the 2<sup>nd</sup> floor. This mastic was not found at other roof drains. This material was found in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.

**Overall Condition Rating:** Sig. Damaged \_\_\_\_\_ Damaged \_\_\_\_\_ Good \_\_\_\_\_ X

## Potential for Disturbance:

	High	Moderate	Low	Friable ACM
Frequency of Potential Contact:	_____	_____	X	_____
Influence of Vibration	_____	_____	X	_____
Frequency of Air Erosion	_____	_____	X	_____
Potential of Water Erosion	_____	_____	X	_____

## Overall Potential Disturbance Rating:

Potential for Sig. Damage	Potential for Damage	Low Potential for Damage
_____	_____	8

## Overall Hazard Rank #:

Sig. Damaged	Pot. Sig. Damage	Potential Damage	Low Pot. Damage
_____	_____	_____	1

**Comments:** Potential for Disturbance and Hazard Ranking assessed is based on current usage of the facility.

**Signed:**  **Date:** 10/29/2020

# PHYSICAL ASSESSMENT DATA SHEET

**Building:** 500 Lawand Drive

**Functional Space No:** 2 **Type:** R **Location:** (See Homogeneous Area Plan)

**Type of Suspect Material:** TSI **Surfacing** X **Misc.**

**Description:** HA-4, Roof Flashing

**Approximate Amount of Material (SF or LF):** ~800 SF

## Condition:

**Percent Damage:** X >0% \_\_\_\_\_ <10% \_\_\_\_\_ >10% \_\_\_\_\_ <25% \_\_\_\_\_ >25%

**Extent of Damage:** \_\_\_\_\_ Localized \_\_\_\_\_ X Distributed

**Type of Damage:** X Deterioration \_\_\_\_\_ Water \_\_\_\_\_ Physical

## Description:

Asbestos-containing roof flashing was noted on around the perimeter of the roof and on flashing associated with curbing that supports roof mounted mechanical systems for the Building. This material was found under a white non-ACM roof membrane. This material was in an intact non-friable condition with no evidence of damage being noted. This material must be removed, handled, and disposed of as ACM by a licensed abatement contractor prior to the start of demolition activities.

**Overall Condition Rating:** Sig. Damaged \_\_\_\_\_ Damaged \_\_\_\_\_ Good \_\_\_\_\_ X

## Potential for Disturbance:

	High	Moderate	Low	Friable ACM
Frequency of Potential Contact:	_____	_____	X	_____
Influence of Vibration	_____	_____	X	_____
Frequency of Air Erosion	_____	_____	X	_____
Potential of Water Erosion	_____	_____	X	_____

## Overall Potential Disturbance Rating:

Potential for Sig. Damage	Potential for Damage	Low Potential for Damage
_____	_____	8

## Overall Hazard Rank #:

Sig. Damaged	Pot. Sig. Damage	Potential Damage	Low Pot. Damage
_____	_____	_____	1

**Comments:** Potential for Disturbance and Hazard Ranking assessed is based on current usage of the facility.

**Signed:**  **Date:** 10/29/2020

## Appendix I

### Laboratory Analysis Reports



# EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

<http://www.EMSL.com/greensborolab@emsl.com>

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

**Attention:** Glynn M. Ellen  
F & ME Consultants  
1825 Blanding Street  
Columbia, SC 29201

**Phone:** (803) 254-4540

**Fax:** (803) 254-4542

**Received Date:** 10/26/2020 9:00 AM

**Analysis Date:** 10/27/2020

**Collected Date:**

**Project:** 500 Lawand Dr.

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-1-Drywall 022006285-0001	Drywall and Associated Joint Compound	Gray Non-Fibrous Homogeneous	6% Cellulose 1% Glass	93% Non-fibrous (Other)	None Detected
1-1-Joint Compound 022006285-0001A	Drywall and Associated Joint Compound	White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-2-Drywall 022006285-0002	Drywall and Associated Joint Compound	Gray/Tan Fibrous Homogeneous	8% Cellulose 1% Glass	91% Non-fibrous (Other)	None Detected
1-2-Joint Compound 022006285-0002A	Drywall and Associated Joint Compound	White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-3-Drywall 022006285-0003	Drywall and Associated Joint Compound	Brown/Gray Fibrous Heterogeneous	40% Cellulose <1% Glass	60% Non-fibrous (Other)	None Detected
1-3-Joint Compound 022006285-0003A	Drywall and Associated Joint Compound	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-4 022006285-0004	Joint Compound Associated with Drywall	Gray/White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-5 022006285-0005	Joint Compound Associated with Drywall	White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-6 022006285-0006	Joint Compound Associated with Drywall	White Non-Fibrous Homogeneous	<1% Cellulose	30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-7 022006285-0007	Joint Compound Associated with Drywall	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2-1 022006285-0008	2x2 Suspended Ceiling Panels	Gray/White Fibrous Homogeneous	40% Cellulose	30% Perlite 30% Non-fibrous (Other)	None Detected
2-2 022006285-0009	2x2 Suspended Ceiling Panels	Gray/White Fibrous Homogeneous	45% Cellulose	35% Perlite 20% Non-fibrous (Other)	None Detected
2-3 022006285-0010	2x2 Suspended Ceiling Panels	Gray/White Fibrous Homogeneous	60% Cellulose 5% Min. Wool	30% Perlite 5% Non-fibrous (Other)	None Detected
3-1 022006285-0011	2x2 Square Pattern Ceiling Panels	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
3-2 022006285-0012	2x2 Square Pattern Ceiling Panels	Gray/White Fibrous Homogeneous	40% Cellulose 50% Min. Wool	10% Non-fibrous (Other)	None Detected
3-3 022006285-0013	2x2 Square Pattern Ceiling Panels	Gray/White Fibrous Homogeneous	55% Cellulose 20% Min. Wool	20% Perlite 5% Non-fibrous (Other)	None Detected

Initial report from: 10/29/2020 08:06:26





# EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

<http://www.EMSL.com> / [greensborolab@emsl.com](mailto:greensborolab@emsl.com)

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4-1 022006285-0014	Cove Base Mastic Associated with Grey Cove Base	Tan/Beige Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
4-2 022006285-0015	Cove Base Mastic Associated with Grey Cove Base	Tan/Beige Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
5-1 022006285-0016	Cove Base Mastic Associated with Cream Cove Base	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
5-2 022006285-0017	Cove Base Mastic Associated with Cream Cove Base	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
6-1 022006285-0018	1st Floor Carpet Adhesive	Yellow Non-Fibrous Homogeneous	<1% Cellulose <1% Synthetic	100% Non-fibrous (Other)	None Detected
6-2 022006285-0019	1st Floor Carpet Adhesive	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
7-1 022006285-0020	2nd Floor Carpet Adhesive	Tan/Green Non-Fibrous Homogeneous	<1% Cellulose <1% Synthetic	100% Non-fibrous (Other)	None Detected
7-2 022006285-0021	2nd Floor Carpet Adhesive	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
8-1 022006285-0022	Grey Duct Mastic	Gray/Tan Fibrous Homogeneous	40% Glass	58% Non-fibrous (Other)	2% Chrysotile
8-2 022006285-0023	Grey Duct Mastic				Positive Stop (Not Analyzed)
9-1 022006285-0024	White Bathroom Sink Caulk	White Non-Fibrous Homogeneous	<1% Cellulose	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
9-2 022006285-0025	White Bathroom Sink Caulk	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
10-1 022006285-0026	Brown Bathroom Sink Caulk	Tan/Clear Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
10-2 022006285-0027	Brown Bathroom Sink Caulk	Clear Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
11-1 022006285-0028	Pink Sink Undercoating	Gray/White/Purple Non-Fibrous Homogeneous		5% Ca Carbonate 92% Non-fibrous (Other)	3% Chrysotile
11-2 022006285-0029	Pink Sink Undercoating				Positive Stop (Not Analyzed)
12-1 022006285-0030	2x4 Suspended Ceiling Panels	Gray/White Fibrous Homogeneous	45% Cellulose 10% Glass	35% Perlite 10% Non-fibrous (Other)	None Detected
12-2 022006285-0031	2x4 Suspended Ceiling Panels	Gray/White Fibrous Homogeneous	45% Cellulose 10% Glass	35% Perlite 10% Non-fibrous (Other)	None Detected
12-3 022006285-0032	2x4 Suspended Ceiling Panels	Brown/White Fibrous Homogeneous	55% Cellulose 10% Min. Wool	30% Perlite 5% Non-fibrous (Other)	None Detected

Initial report from: 10/29/2020 08:06:26



# EMSL Analytical, Inc.

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<http://www.EMSL.com> / [greensborolab@emsl.com](mailto:greensborolab@emsl.com)

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
13-1 022006285-0033	Interior Door Caulk	Gray/White Non-Fibrous Homogeneous	<1% Cellulose	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
13-2 022006285-0034	Interior Door Caulk	Gray/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
14-1 022006285-0035	Kitchen Sink Caulk	White Non-Fibrous Homogeneous	<1% Cellulose	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
14-2 022006285-0036	Kitchen Sink Caulk	Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
15-1 022006285-0037	2x2 Textured Ceiling Panels	Gray/White Fibrous Homogeneous	<1% Cellulose 98% Min. Wool	2% Non-fibrous (Other)	None Detected
15-2 022006285-0038	2x2 Textured Ceiling Panels	Gray/White Fibrous Homogeneous	<1% Cellulose 98% Min. Wool	2% Non-fibrous (Other)	None Detected
15-3 022006285-0039	2x2 Textured Ceiling Panels	White Fibrous Homogeneous	<1% Cellulose 98% Min. Wool	2% Non-fibrous (Other)	None Detected
16-1 022006285-0040	White Drain Pipe Mastic	Brown/White/Silver Non-Fibrous Heterogeneous	<1% Cellulose 3% Glass	95% Non-fibrous (Other)	2% Chrysotile
16-2 022006285-0041	White Drain Pipe Mastic				Positive Stop (Not Analyzed)
17-1 022006285-0042	Exterior Door Caulk	Gray Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
17-2 022006285-0043	Exterior Door Caulk	Gray Non-Fibrous Homogeneous	<1% Cellulose <1% Glass	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
18-1 022006285-0044	Black Built Up Roofing Felt	Brown/Black Fibrous Heterogeneous	8% Cellulose 12% Glass	80% Non-fibrous (Other)	None Detected
18-2 022006285-0045	Black Built Up Roofing Felt	Tan/Black Fibrous Homogeneous	20% Cellulose 8% Glass	72% Non-fibrous (Other)	None Detected
19-1 022006285-0046	White Roof Membrane	White/Black Fibrous Heterogeneous	15% Synthetic	85% Non-fibrous (Other)	None Detected
19-2 022006285-0047	White Roof Membrane	Gray/White Non-Fibrous Homogeneous	10% Synthetic	5% Ca Carbonate 85% Non-fibrous (Other)	None Detected
20-1 022006285-0048	Black Roofing Mastic	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
20-2 022006285-0049	Black Roofing Mastic	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
21-1 022006285-0050	Roof Flashing	Black Fibrous Heterogeneous	8% Cellulose 5% Glass	81% Non-fibrous (Other)	6% Chrysotile
21-2 022006285-0051	Roof Flashing				Positive Stop (Not Analyzed)

Initial report from: 10/29/2020 08:06:26



# EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

<http://www.EMSL.com / greensborolab@emsl.com>

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
22-1 022006285-0052	White Roof HVAC Caulk	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
22-2 022006285-0053	White Roof HVAC Caulk	White/Beige Non-Fibrous Homogeneous	<1% Cellulose	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
23-1 022006285-0054	Roofing Patch Pocket Tar	Black Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
23-2 022006285-0055	Roofing Patch Pocket Tar	Black Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
24-1 022006285-0056	Exterior Wall Caulk	Gray Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
24-2 022006285-0057	Exterior Wall Caulk	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
25-1 022006285-0058	Brown 18" Self Stick Floor Tile	Brown/Black Non-Fibrous Heterogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected
25-2 022006285-0059	Brown 18" Self Stick Floor Tile	Brown/Gray/Black Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
26-1 022006285-0060	Cream Linoleum Flooring Material	White/Beige Fibrous Heterogeneous	15% Cellulose 1% Glass	84% Non-fibrous (Other)	None Detected
26-2 022006285-0061	Cream Linoleum Flooring Material	Gray/White Fibrous Homogeneous	15% Cellulose 1% Glass	84% Non-fibrous (Other)	None Detected

Analyst(s)

Cameron Evans (33)

Ryan Rains (27)

Stephen Bennett, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Kernersville, NC NVLAP Lab Code 102104-0, CA ELAP 2689, Virginia 3333-000228, West Virginia LT000321

Initial report from: 10/29/2020 08:06:26



# EMSL Analytical, Inc.

706 Gralin Street Kenersville, NC 27284

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<http://www.EMSL.com> / [greensborolab@emsl.com](mailto:greensborolab@emsl.com)

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

**Attention:** Glynn M. Ellen  
F & ME Consultants  
1825 Blanding Street  
Columbia, SC 29201

**Phone:** (803) 254-4540

**Fax:** (803) 254-4542

**Received Date:** 10/26/2020 9:00 AM

**Analysis Date:** 10/28/2020

**Collected Date:**

**Project:** 500 Lawand Dr.

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
4-3 022006285-0062	Cove Base Mastic Associated with Grey Cove Base	Tan/Yellow Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
5-3 022006285-0063	Cove Base Mastic Associated with Cream Cove Base	Tan/Yellow Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-3 022006285-0064	1st Floor Carpet Adhesive	Yellow/Orange Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
7-3 022006285-0065	2nd Floor Carpet Adhesive	Brown/Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-3 022006285-0066	White Bathroom Sink Caulk	Gray/White Non-Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected
10-3 022006285-0067	Brown Bathroom Sink Caulk	Beige/Clear Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
13-3 022006285-0068	Interior Door Caulk	Gray/White/Beige Non-Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected
14-3 022006285-0069	Kitchen Sink Caulk	White/Beige Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
17-3 022006285-0070	Exterior Door Caulk	Gray/Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
18-3 022006285-0071	Black Built Up Roofing Felt	Brown/Black/Purple Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected
19-3 022006285-0072	White Roof Membrane	White/Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
20-3 022006285-0073	Black Roofing Mastic	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Kenersville, NC

Initial report from: 10/29/2020 08:06:24



# EMSL Analytical, Inc.

706 Gralin Street Kenersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

<http://www.EMSL.com> / [greensborolab@emsl.com](mailto:greensborolab@emsl.com)

EMSL Order: 022006285

Customer ID: FMEC62

Customer PO: G5662.020

Project ID:

**Attention:** Glynn M. Ellen  
F & ME Consultants  
1825 Blanding Street  
Columbia, SC 29201

**Phone:** (803) 254-4540

**Fax:** (803) 254-4542

**Received Date:** 10/26/2020 9:00 AM

**Analysis Date:** 10/28/2020

**Collected Date:**

**Project:** 500 Lawand Dr.

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
22-3 022006285-0074	White Roof HVAC Caulk	Gray/White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
23-3 022006285-0075	Roofing Patch Pocket Tar	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
24-3 022006285-0076	Exterior Wall Caulk	Gray/Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
25-3 022006285-0077	Brown 18" Self Stick Floor Tile	Brown/Gray/Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
26-3 022006285-0078	Cream Linoleum Flooring Material	Gray/Tan/Beige Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Kristie Elliott (17)

Stephen Bennett, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Kenersville, NC

Initial report from: 10/29/2020 08:06:24

## Appendix J

### Chain of Custody Form

EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

## Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

0285

Company Name : F&amp;ME Consultants

EMSL Customer ID:

Street: 3112 Devine Street

City: Columbia

State/Province: SC

Zip/Postal Code: 29205

Country: USA

Telephone #: 803-254-4540

Fax #: 803-254-4542

Report To (Name): Glynn Ellen

Please Provide Results: ☐ Fax ☒ Email

Email Address: gellen@fmecol.com, jtimmons@fmecol.com

Purchase Order: G5662.020

Project Name/Number: 500 Lawand Drive

EMSL Project ID (Internal Use Only):

U.S. State Samples Taken: SC

CT Samples: ☒ Commercial/Taxable ☐ Residential/Tax ExemptEMSL-Bill to: ☒ Same ☐ Different - If Bill to is Different note instructions in Comments\*\*

Third Party Billing requires written authorization from third party

## Turnaround Time (TAT) Options\* - Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☒ 72 Hour ☒ 96 Hour ☐ 1 Week ☐ 2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

**PCM - Air** ☐ Check if samples are from NY☐ NIOSH 7400☐ w/ OSHA 8hr. TWA**PLM - Bulk (reporting limit)**☒ PLM EPA 600/R-93/116 (<1%)☐ PLM EPA NOB (<1%)

Point Count

☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric

☐ 400 (<0.25%) ☐ 1000 (<0.1%)☐ NYS 198.1 (friable in NY)☐ NYS 198.6 NOB (non-friable-NY)☐ NYS 198.8 SOF-V☐ NIOSH 9002 (<1%)**TEM - Air** ☐ 4-4.5hr TAT (AHERA only)☐ AHERA 40 CFR, Part 763☐ NIOSH 7402☐ EPA Level II☐ ISO 10312**TEM - Bulk**☒ TEM EPA NOB☐ NYS NOB 198.4 (non-friable-NY)☐ Chatfield SOP☐ TEM Mass Analysis-EPA 600 sec. 2.5**TEM - Water:** EPA 100.2Fibers >10µm ☐ Waste ☐ DrinkingAll Fiber Sizes ☐ Waste ☐ Drinking**TEM- Dust**☐ Microvac - ASTM D 5755☐ Wipe - ASTM D6480☐ Carpet Sonication (EPA 600/J-93/167)**Soil/Rock/Vermiculite**☐ PLM EPA 600/R-93/116 with milling prep (<1%)☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)☐ TEM Qualitative via Filtration Prep☐ TEM Qualitative via Drop Mount Prep☐ Cincinnati Method EPA 600/R-04/004 - PLM/TEM (BC only)**Other:**☐☒ Check For Positive Stop - Clearly Identify Homogenous GroupFilter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name: James T. Timmons

Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1-1 thru 1-3	Drywall and Associated Joint Compound		
1-4 thru 1-7	Joint Compound Associated with Drywall		
2-1 thru 2-3	2' x 2' Suspended Ceiling panels		
3-1 thru 3-3	2' x 2' Square Pattern Ceiling Panels		
*4-1 thru 4-5	Cove Base Mastic Associated with Grey Cove Base		

Client Sample # (s): 1-1

- 16-3

Total # of Samples:

12/21

Relinquished (Client):

Date: 10/23/2020

Time: 17:00

Received (Lab):

Date: 10/26/20

Time: 9:00

Comments/Special Instructions: \* TEM 3rd sample

① EMSL FX 79595638 2358



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

0285

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
*5-1 thru 5-3	Cove Base Mastic Associated with Cream Cove Base		
*6-1 thru 6-3	1 <sup>st</sup> Floor Carpet Adhesive		
*7-1 thru 7-3	2 <sup>nd</sup> Floor Carpet Adhesive		
*8-1 thru 8-3	Grey Duct Mastic		
*9-1 thru 9-3	White Bathroom Sink Caulk		
*10-1 thru 10-3	Brown Bathroom Sink Caulk		
*11-1 thru 11-3	Pink Sink Undercoating		
12-1 thru 12-3	2' x 4' Suspended Ceiling Panels		
*13-1 thru 13-3	Interior Door Caulk		
*14-1 thru 14-3	Kitchen Sink Caulk		
15-1 thru 15-3	2' x 2' Textured Ceiling Panels		
*16-1 thru 16-3	White Drain Pipe Mastic		
*17-1 thru 17-3	Exterior Door Caulk		
*18-1 thru 18-3	Black Built-up Roofing Feltr		
*19-1 thru 19-3	White Roof Membrane		
*20-1 thru 20-3	Black Roofing Mastic		
*21-1 thru 21-3	roof Flashing		
*22-1 thru 22-3	White Roof HVAC Caulk		
*23-1 thru 23-3	Roofing Pitch Pocket Tar		
*24-1 thru 24-3	Exterior Wall Caulk		
*25-1 thru 25-3	Brown 18" self-stick Floor Tile		
*26-1 thru 26-3	Cream Linoleum Flooring Material		

\*Comments/Special Instructions:



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

## Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

6285

EMSL ANALYTICAL, INC.  
706 GRALIN ST.  
KERNERSVILLE, NC 27284  
PHONE: (336) 992-1025  
FAX: (336) 992-4175

Company Name : F&ME Consultants		EMSL Customer ID:	
Street: 3112 Devine Street		City: Columbia	State/Province: SC
Zip/Postal Code: 29205	Country: USA	Telephone #: 803-254-4540	Fax #: 803-254-4542
Report To (Name): Glynn Ellen		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: gellen@fmecon.com, jtimmons@fmecon.com		Purchase Order: G5662.020	
Project Name/Number: 500 Lawand Drive		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: SC		CT Samples: <input checked="" type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If Bill to is Different note instructions in Comments** Third Party Billing requires written authorization from third party			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input checked="" type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<1%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep <input type="checkbox"/> Cincinnati Method EPA 600/R-04/004 - PLM/TEM (BC only) <b>Other:</b> <input type="checkbox"/>	
<input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: James T. Timmons		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1-1 thru 1-3	Drywall and Associated Joint Compound		
1-4 thru 1-7	Joint Compound Associated with Drywall		
2-1 thru 2-3	2' x 2' Suspended Ceiling panels		
3-1 thru 3-3	2' x 2' Square Pattern Ceiling Panels		
*4-1 thru 4-3	Cove Base Mastic Associated with Grey Cove Base 1 <sup>st</sup> Floor		
Client Sample # (s):	1-1 - 16-3	Total # of Samples:	58
Relinquished (Client):	Date: 10/23/2020	Time:	17:00
Received (Lab):	Date:	Time:	
Comments/Special Instructions: * TEM 3 <sup>rd</sup> sample			

updated C.O.C. : Samples 4-1 → 4-5  
changed to 4-1 → 4-3

10/28/20



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

6285

EMSL ANALYTICAL, INC.  
706 GRALIN ST.  
KERNERSVILLE, NC 27284  
PHONE: (336) 992-1025  
FAX: (336) 992-4175

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
*5-1 thru 5-3	Cove Base Mastic Associated with Cream Cove Base 2 <sup>nd</sup> Fl		
*6-1 thru 6-3	1 <sup>st</sup> Floor Carpet Adhesive		
*7-1 thru 7-3	2 <sup>nd</sup> Floor Carpet Adhesive		
*8-1 thru 8-3	Grey Duct Mastic		
*9-1 thru 9-3	White Bathroom Sink Caulk		
*10-1 thru 10-3	Brown Bathroom Sink Caulk		
*11-1 thru 11-3	Pink Sink Undercoating		
12-1 thru 12-3	2' x 4' Suspended Ceiling Panels		
*13-1 thru 13-3	Interior Door Caulk		
*14-1 thru 14-3	Kitchen Sink Caulk		
15-1 thru 15-3	2' x 2' Textured Ceiling Panels		
*16-1 thru 16-3	White Drain Pipe Mastic		
*17-1 thru 17-3	Exterior Door Caulk		
*18-1 thru 18-3	Black Built-up Roofing Feltr		
*19-1 thru 19-3	White Roof Membrane		
*20-1 thru 20-3	Black Roofing Mastic		
*21-1 thru 21-3	roof Flashing		
*22-1 thru 22-3	White Roof HVAC Caulk		
*23-1 thru 23-3	Roofing Pitch Pocket Tar		
*24-1 thru 24-3	Exterior Wall Caulk		
*25-1 thru 25-3	Brown 18" self-stick Floor Tile		
*26-1 thru 26-3	Cream Linoleum Flooring Material		

\*Comments/Special Instructions:

## Appendix K

### Personnel Certifications

# SCDHEC ISSUED

## Asbestos ID Card

---

**Glynn M Ellen**



Expiration Date:

<b>SUPERAHERA</b>	<b>SA-00455</b>	<b>01/27/21</b>
<b>CONSULTMP</b>	<b>ASB-22641</b>	<b>01/26/21</b>
<b>CONSULTPD</b>	<b>PD-00098</b>	<b>06/06/20</b>
<b>AIRSAMPLER</b>	<b>AS-00079</b>	<b>01/27/21</b>

This card is nontransferable and is considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

**YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.**

For information of corrections contact: SCDHEC – Asbestos Section  
2600 Bull Street  
Columbia, SC 29201  
(803) 898-4289

# SCDHEC ISSUED

## Asbestos ID Card

---

**James T Timmons**



		Expiration Date:
<b>SUPERAHERA</b>	<b>SA-02244</b>	<b>01/27/21</b>
<b>CONSULTMP</b>	<b>MP-00196</b>	<b>01/26/21</b>
<b>AIRSAMPLER</b>	<b>AS-00423</b>	<b>01/27/21</b>

This card is nontransferable and is considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

**YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.**

For information of corrections contact: SCDHEC – Asbestos Section  
2600 Bull Street  
Columbia, SC 29201  
(803) 898-4289

## Appendix L

### Regulatory Summary

# Asbestos Regulatory Information

## Renovations & Demolitions

### Definitions

**Renovation** means altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos-containing materials (RACM) from a facility component. "Remodeling" is considered renovation.

**Demolition** is wrecking or taking out any load-supporting structural member of a facility together and any related handling operations. Structural burns are prohibited by State Open Burning Regulations.

### Applicability

Renovation and demolition of most facilities (including buildings, structures, and other installations), are subject to State and Federal asbestos regulations. Certain residential buildings may be exempt. Contact the SCDHEC Asbestos Section for additional information.

All asbestos-containing materials must be removed from a facility prior to demolition. Only the following asbestos-containing materials (ACM) may be left in place during demolition:

- ACM on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition
- RACM that was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, cannot be safely removed. If not removed for safety reasons, all exposed RACM and any asbestos-contaminated debris must be treated as regulated asbestos-containing waste material. Category I and Category II non-friable mastic, glue, and adhesive ACM that is not friable or in poor condition, and where the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition operations.
- Category I and Category II non-friable mastic, glue, and adhesive ACM that is not friable or in poor condition, and where the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition operations.

**The facility owner and the renovation or demolition contractor are both responsible for ensuring compliance with these regulations.**

## Building Inspections

Before a facility or a portion of a facility is renovated or demolished, the owner/operator of the facility or renovation or demolition activity must ensure that the facility or portion of the facility being renovated or demolished has been thoroughly inspected for the presence of asbestos. The inspection must be performed by a person who has been trained and licensed as an Asbestos

Building Inspector or management planner in accordance with State training and licensing requirements.

The inspector must identify, quantify, and assess the condition of all suspect asbestos-containing material, either friable or non-friable, on interior and exterior portions of the facility. The inspector must also comply with the procedures specified in Regulation 61-86.1 VI D. In addition, the inspector is required to prepare a written report detailing the findings of the inspection. At a minimum, the report must include information required in Regulation 61-86.1 VI C. A legible copy of the building inspection report must be provided to the Department prior to each demolition, and upon request for renovations. **(Note: " BUILDING INSPECTIONS "can be consulted for a detailed explanation of the aforementioned sampling and reporting protocols.)**

A building inspection will only be acceptable if performed **within three years** prior to the demolition or renovation. If an inspection report is more than three years old, then it must be confirmed and verified by a licensed Asbestos Building Inspector or Management Planner.

### **Friable Asbestos Containing Materials**

If friable asbestos-containing materials (e.g., pipe insulation) are present, they must be removed prior to being disturbed during renovation or demolition activities. Removal (abatement) must be performed by trained, licensed persons using procedures detailed in State and Federal regulations.

A project design must be prepared for each asbestos abatement project involving the abatement of greater than 3,000 square feet, 1,500 linear feet and/or 656 cubic feet of RACM in a facility to be reoccupied. Such designs must be prepared by a person licensed by DHEC as an Asbestos Project Designer.

### **Non-Friable Asbestos Containing Materials**

Please note that when it can reasonably be expected that non-friable materials will become friable during removal, that these materials must be considered friable from the beginning. If non-friable Asbestos Containing Materials (ACM) becomes friable during an abatement project, the removal becomes subject to the same requirements as friable materials, including training, licensing, notification, and work practices.

- Material should always be lowered to the ground carefully. Throwing or dropping non-friable ACM to the ground or into a truck will cause the material to become friable.
- Materials should be kept wet or misted with water during removal to minimize potential fiber release. **NOTE: The use of water is only a control measure and by no means prevents a material from becoming friable.**
- Once removed, materials may be placed in 6-mil polyethylene bags or drums or wrapped with 6-mil polyethylene sheeting. Additional water may be added to ensure thorough wetting, but do not add so much that the bag or wrapping breaks when lifted.



- Debris already on the ground should be wet and either collected manually or gathered with a shovel and bagged for disposal. These materials can be potential sources of airborne asbestos fiber releases.
- South Carolina Regulation 61-86.1 requires that containers (bags, drums, wrapped components) holding asbestos waste must be labeled with the following: **DANGER - CONTAINS ASBESTOS FIBERS - AVOID CREATING DUST - CANCER AND LUNG DISEASE HAZARD.**
- Materials should be taken to a landfill as soon as possible but may be stored temporarily in a secure area subject to Departmental approval. Transport the materials so as to prevent them from leaking, spilling, or blowing off the vehicle.
- You should contact the landfill directly to make sure it will accept the material. You must obtain written approval from DHEC in advance for the disposal. You can get this approval by writing to the following address:

**South Carolina Department of Health and Environmental Control  
Attn: Bureau of Air Quality/Asbestos Section  
2600 Bull Street Columbia, SC 29201**

Be sure to include the following:

1. the address where the material is to be removed;
2. a brief description of the content (cement-like tiles, asphaltic shingles, etc.);
3. the volume of waste in cubic yards or the area in square feet of material removed, and;
4. the name and location of the landfill which has agreed to accept the waste.

*Please remember to include your name, return address, and phone number.*

- **DO NOT BURN OR RECYCLE** any asbestos-containing or asbestos-contaminated materials.

The Occupational Safety and Health Administration (OSHA) has rules for workers affected by asbestos-containing materials. These rules must be complied with by all contractors and facility owners and include specific work practices, respiratory protection, and asbestos training requirements, **even for activities involving only non-friable asbestos-containing materials.** Contact the Department of Labor at (803) 896-7665 for details.

## **Notification of Renovations & Demolitions**

Prior to removing regulated asbestos-containing materials, [written notification](#) must be submitted to DHEC (up to 10 working days in advance, depending on the amount of asbestos to be removed). The notification must include certain required items of information about the owner, the contractor, the facility, and the asbestos removal project. Required fees must be submitted along with the notification. You must obtain a permit from the Department prior to the renovation activity.

Prior to the demolition of any regulated facility, [written notification](#) must be submitted to DHEC *at least 10 working days* in advance **even if a building inspector determines that asbestos is not present at the facility**. The notification must include certain required items of information about the owner, the contractor, the facility, and the demolition project. Required fees and a copy of the building inspector's report must be submitted along with the notification of demolition. You must obtain a permit from the Department prior to the demolition activity.

## Disposal

***Never burn any asbestos-containing waste material.***

Non-asbestos-containing demolition debris and debris which contains only non-regulated roofing or flooring may be disposed of at a DHEC-approved disposal site for cellulosic or inert waste. Waste consolidation activities involving grinding, cutting, or compacting of non-friable asbestos-containing materials will subject these materials to more stringent State and Federal asbestos disposal regulations.

Regulated asbestos waste must be handled by properly licensed asbestos abatement personnel and disposed of at a landfill permitted to accept regulated asbestos waste. A list of approved landfills may be obtained from the Asbestos Section.

## Building Inspection Report Directions

As required by the National Emission Standard for Hazardous Air Pollutants (NESHAP) and Regulation 61-86.1, an owner/operator shall ensure that a building inspection, to detect the presence of asbestos-containing material (ACM), has been performed prior to any renovation or demolition activity at a regulated facility.

Under Regulation 61-86.1, Section VI.A.6., an inspection cannot have been performed more than three years prior to a renovation or demolition activity. If more than three years have elapsed since the most recent inspection, the previous inspection shall be confirmed and verified by a licensed building inspector and/or management planner.

Regulation 61-86.1 requires that all inspections be performed by persons trained and licensed as either a building inspector and/or management planner. In order to be licensed in these disciplines, persons must have successfully completed a DHEC approved initial training course specific to inspecting for ACM in a building and/or a course specific to management planning for ACM in a building. Persons must also have taken and passed an examination at the end of the course with a score of 70 percent or above.

In performing inspections, Regulation 61-86.1 requires that a building inspector and/or management planner comply with the requirements of Section VI, Asbestos Building Inspection Requirements. An inspection shall include samples from suspect friable and non-friable ACM on interior and exterior portions of a facility or its facility components.

In performing inspections, Regulation 61-86.1 requires that a building inspector and/or management planner follow specific sampling procedures. According to Section IV.B.3.a of the regulation, a building inspector and/or management planner shall comply with the procedures specified in **40 CFR 763.86** in determining sampling locations and the number of representative samples to be collected. An inspection shall include samples from suspect friable and non-friable ACM on interior and exterior portions of a facility or its facility components.

Under 40 CFR Part 763.86, suspect ACM are divided into three categories: surfacing materials, thermal system insulation (commonly referred to as TSI), and miscellaneous materials. Regulation 61-86.1, Section VI contains sampling procedures specific to each category of material.

**Surfacing material** includes, but is not limited to, joint compound, plaster, and painted, troweled on, or spray-applied textured material. To remain in compliance with Regulation 61-86.1, surfacing materials on exterior and interior portions of a facility shall be sampled according to procedures outlined in Regulation 61-86.1, Section VI.D.1. (a)-(c):

- A licensed asbestos inspector shall collect, in a statistically random manner, a minimum of three bulk samples from each homogeneous area of any surfacing that is not assumed to be ACM, and shall collect the samples as follows:
  - At least three bulk samples shall be collected from each homogeneous area that is 1,000 or fewer square feet (sf) or linear feet (Lf) in size.
  - At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 but fewer than or equal to 5,000 sf or Lf.
  - At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 sf or Lf.

**Thermal System Insulation (TSI)** is any material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other facility components for the purpose of preventing heat loss or gain, water condensation, or for other purposes. **Miscellaneous Material** is any material that is not considered a surfacing material or thermal system insulation and includes, but is not limited to, flooring, roofing, mastics, gaskets, cementitious materials, caulking's, ceiling tiles, fire doors, wall boards, and flexible duct connections. To remain in compliance with Regulation 61-86.1, TSI and miscellaneous materials on exterior and interior portions of a facility shall be sampled in accordance with procedures outlined in Regulation 61-86.1, Section VI.D.2:

- A licensed asbestos inspector shall collect, in a statistically random manner, at least three bulk samples from each homogeneous area of TSI and any miscellaneous material that is not assumed to be ACM.
- In accordance with ASTM E2356, and any subsequent amendments and editions, negative results for non-friable organically bound material (NOB) shall be verified with at least one TEM analysis.
- NOBs include flooring, roofing, mastics, adhesives, caulks, and glazing.
- If an accredited inspector has determined the thermal system insulation to be fiberglass, foam glass, rubber, or other non-suspect material, then bulk samples are not required.

Regulation 61-86.1, Section VI.C requires that a building inspector and/or management planner prepare a written asbestos building inspection report to include the following:

- A title page denoting:
  1. The client's name, company, address, and telephone number, and the name and exact location of the facility inspected;
  2. the date the inspection was performed;
  3. the date the inspection report was written; and
  4. the printed name and telephone number of the inspector(s), and his or her affiliated company name, address, and telephone number.
- A cover letter to the building owner or owner's representative that describes the purpose of the inspection; a general synopsis of the inspection and results; and the name, title, and signature of the inspector(s) and report writer, if different.
- A detailed narrative of the physical description of the building or part of the building affected by the renovation or demolition operation that includes:
  1. The square footage of the building or part of the building affected by the renovation or demolition operation;
  2. The building materials used in the construction of the exterior, roof, interior, and basement or crawlspace of the building affected by the demolition or affected by the renovation materials operation;
  3. An estimated or exact quantity (square or linear feet) for all suspect materials whether sampled for or assumed to be asbestos that may be affected by the renovation or demolition operation;
  4. Also include a description of non-suspect materials excluding: glass, metals, kiln brick, cement, fiberglass, concrete, pressed wood, cinder block, and rubber.
- An executive summary that details:
  1. The type of suspect ACM (e.g., TSI, floor tile, mastic), total square or linear footage, and the total number of samples collected for each separate homogenous area affected by the renovation or demolition operation;
  2. The date of the inspection, type, condition, quantity, sample results, and exact location of ACM positively identified or assumed to be ACM in the part of the building affected by the renovation or demolition operation;
  3. A list of the homogeneous areas identified;
  4. Whether the material is accessible for the building or part of the building affected by the renovation or demolition operation; and (5) The material's potential for disturbance for the building or part of the building affected by the renovation or demolition operation.
- For renovation and demolition operations, the inspector's determination that ACM is friable or non-friable.
- Except when suspect ACM materials are assumed to be asbestos, include a complete, clear, legible copy of all laboratory bulk sample results.
- Clear, legible drawings and/or photographs to clarify the scope of the renovation or demolition operation. Illustrate the exact location of each sample collected. For facilities

that involve a trade secret or confidential component or an affected area process, a request for a variance may be submitted.

- The printed name and signature of each accredited inspector who collected the samples, and a clear legible copy of his or her DHEC issued asbestos building inspector or management planner license.

#### **Things to Note:**

- At no time will negative assumptions about a suspect material's content be acceptable. There are only two acceptable options:
  1. Positive assumptions of suspect materials or
  2. Sampling of suspect materials per the procedures specified in 40 CFR 763.86
- A homogenous area is considered not to contain ACM only if the results of all samples required to be collected from the area are one percent or less.
- Bulk samples shall not be composited for analysis.
- In a multi-unit building, each separate room in each part of the building or areas affected by the renovation or demolition operation shall be inspected to confirm and quantify ACM homogeneous areas for sampling purposes.
- DHEC will not accept an asbestos building inspection or written report for any structure from an employee of an abatement company also involved in the removal of asbestos-containing materials from that structure, unless the licensed inspector is an employee of an entity regulated under Regulation 61-86.1, Section XX, Industrial Manufacturing and Electrical Generation Facilities.
- An asbestos building inspector shall not participate in the analysis of the bulk samples he or she has collected.
- Destructive sampling techniques shall be utilized.
- Material Safety Data Sheets (MSDS), statements from the manufacturer, and architecture signoff will not be accepted as proof that a building product contains no asbestos, except in cases where the owner can verify the direct correlation of the building product to the MSDS, statements from the manufacturer, and/or architecture signoff documents. DHEC reserves the right to reject documentation that it deems unacceptable.

## Appendix M

### Abatement Project Forms



## ASBESTOS ABATEMENT PROJECT LICENSE APPLICATION

BUREAU OF AIR QUALITY • ASBESTOS SECTION • 2600 BULL STREET • COLUMBIA • SC • 29201

TYPE OF OPERATION: ☐ Standard Removal ☐ Emergency Removal ☐ Enclosure ☐ Encapsulation ☐ Cleanup ☐ Disposal

FOR OFFICE USE

Postmark/Received: \_\_\_\_\_

Original ☐ / Revised ☐ / Cancellation ☐ (check one)

Project License I.D. (For Revisions/Cancellations): \_\_\_\_\_

I. FACILITY OWNER: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

II. REMOVAL CONTRACTOR: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_ E-MAIL PERMIT ☐ OR MAIL PERMIT ☐

FEDERAL I.D. NUMBER: \_\_\_\_\_

DHEC CONTRACTOR LICENSE NO. (If applicable): \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

III. FACILITY NAME: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ COUNTY: \_\_\_\_\_

SITE (ROOM, FLOOR, WING, UNIT, MACHINE, ETC.): \_\_\_\_\_

BUILDING SIZE: \_\_\_\_\_ NO. OF FLOORS: \_\_\_\_\_ AGE IN YEARS: \_\_\_\_\_

PRESENT USE: \_\_\_\_\_ PRIOR USE: \_\_\_\_\_ FUTURE USE: \_\_\_\_\_

IV. PROCEDURES, INCLUDING ANALYTICAL METHOD IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

FACILITY OR FACILITY COMPONENT SURVEYED BY (INSPECTOR NAME): \_\_\_\_\_

COMPANY: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

DHEC LICENSE NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

V. PROJECT DESIGN PERFORMED BY (IF APPLICABLE): \_\_\_\_\_

COMPANY: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

DHEC LICENSE NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

VI. ASBESTOS-CONTAINING MATERIALS (ACM) **TO BE REMOVED ONLY:**

TYPE (TSI, SURFACING, FLOORING, ROOFING, ETC.)	AMOUNT (SQUARE FEET, LINEAR FEET, CUBIC FEET)	CONDITION (CIRCLE ONE)
		<input type="checkbox"/> FRIABLE <input type="checkbox"/> NON-FRIABLE
		<input type="checkbox"/> FRIABLE <input type="checkbox"/> NON-FRIABLE
		<input type="checkbox"/> FRIABLE <input type="checkbox"/> NON-FRIABLE
		<input type="checkbox"/> FRIABLE <input type="checkbox"/> NON-FRIABLE

VII. SCHEDULED DATES OF REMOVAL: START DATE: \_\_\_\_\_ COMPLETION DATE: \_\_\_\_\_

WORK DAYS: \_\_\_\_\_ WORK HOURS: \_\_\_\_\_

**APPLICATIONS MUST BE SUBMITTED WITH FEES  
PRIOR TO THE SCHEDULED START DATE AS FOLLOWS:**

NESHAP PROJECTS: 10 WORKING DAYS

SMALL PROJECTS: 4 WORKING DAYS

MINOR PROJECTS: 2 WORKING DAYS

**FEE SCHEDULE FOR FRIABLE ASBESTOS-CONTAINING  
MATERIALS:**

10 CENTS PER SQUARE FOOT OR LINEAR FOOT

MINIMUM FEE OF \$25.00

MAXIMUM FEE OF \$1000.00

Non-Friable (NESAP-sized) Projects: 4 working days. No fee for non-friable ACM.

For additional information concerning regulatory requirements call or visit our Web site at <http://www.scdhec.gov/environment/baq/asbestos.aspx>

VIII. DESCRIPTION OF PLANNED ABATEMENT WORK & METHOD(S) TO BE USED:

IX. DESCRIPTION OF WORK PRACTICES & ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE RENOVATION SITE:

X. WASTE TRANSPORTER #1: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

WASTE TRANSPORTER #2: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

XI. WASTE DISPOSAL SITE: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

TEMPORARY ASBESTOS STORAGE CONTAINMENT AREA LICENSE NUMBER (IF APPLICABLE): \_\_\_\_\_

XII. DESCRIPTION OF EMERGENCY REMOVAL (PLEASE ATTACH A LETTER FROM THE FACILITY OWNER EXPLAINING THE NATURE OF THE EMERGENCY)

DATE & HOUR OF EMERGENCY (MM/DD/YY): \_\_\_\_\_

DESCRIPTION OF SUDDEN, UNEXPECTED EVENT:

EXPLANATION OF HOW THE EVENT CAUSED UNSAFE CONDITIONS AND/OR WOULD CAUSE EQUIPMENT DAMAGE AND/OR AN UNREASONABLE FINANCIAL BURDEN:

XIII. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NON-FRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED OR REDUCED TO POWDER:

XIV. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS.

\_\_\_\_\_  
(SIGNATURE OF OWNER/OPERATOR)

\_\_\_\_\_  
(DATE)

XIV. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

\_\_\_\_\_  
(SIGNATURE OF OWNER/OPERATOR)

\_\_\_\_\_  
(DATE)





# DEMOLITION LICENSE APPLICATION

BUREAU OF AIR QUALITY • ASBESTOS SECTION • 2600 BULL STREET • COLUMBIA • SC • 29201

TYPE OF OPERATION: ☐ Total Demolition ☐ Partial Demolition ☐ Ordered Demolition

## FOR OFFICE USE

Postmark/Received: \_\_\_\_\_

Original/Revised/Cancellation (circle one)

Project License I.D. (For Revisions/Cancellations): \_\_\_\_\_

I. FACILITY OWNER: \_\_\_\_\_  
 MAILING ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

II. IS ASBESTOS PRESENT IN THE FACILITY?: YES ☐ / NO ☐ (check one)

III. DEMOLITION CONTRACTOR: \_\_\_\_\_ FEDERAL ID NO.: \_\_\_\_\_  
 MAILING ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_  
 E-MAIL ADDRESS: \_\_\_\_\_ E-MAIL PERMIT ☐ OR MAIL PERMIT ☐  
 FEDERAL I.D. NUMBER: \_\_\_\_\_  
 ASBESTOS REMOVAL CONTRACTOR (If applicable): \_\_\_\_\_  
 MAILING ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

IV. FACILITY NAME: \_\_\_\_\_  
 STREET ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ COUNTY: \_\_\_\_\_  
 SITE (ROOM, FLOOR, WING, UNIT, MACHINE, ETC.): \_\_\_\_\_  
 BUILDING SIZE: \_\_\_\_\_ NO. OF FLOORS: \_\_\_\_\_ AGE IN YEARS: \_\_\_\_\_  
 PRESENT USE: \_\_\_\_\_ PRIOR USE: \_\_\_\_\_ FUTURE USE: \_\_\_\_\_

V. PROCEDURES, INCLUDING ANALYTICAL METHOD IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:  
 FACILITY OR FACILITY COMPONENT SURVEYED BY (INSPECTOR NAME): \_\_\_\_\_  
 COMPANY: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_  
 DHEC LICENSE NUMBER: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

## VI. NON-FRIABLE MASTIC, GLUE, AND ADHESIVE ASBESTOS-CONTAINING MATERIALS **REMAINING IN PLACE DURING DEMOLITION** (IF APPLICABLE):

TYPE (MASTIC, GLUE, AND ADHESIVE)	AMOUNT (SQUARE FEET)

VII. SCHEDULED DATES OF DEMOLITION (YOU MUST SPECIFY DATES):  
 START DATE: \_\_\_\_\_ COMPLETION DATE: \_\_\_\_\_  
 WORK DAYS: \_\_\_\_\_ WORK HOURS: \_\_\_\_\_

- **Applications must be mailed along with a \$50.00 fee (payable to SCDHEC) at least 10 working days prior to the scheduled start date. Faxes will not be accepted.**
- **A copy of an asbestos survey report (no older than 3 years) must accompany the application.**

For additional information concerning regulatory requirements call or visit our Web site at <http://www.scdhec.gov/environment/baq/asbestos.aspx>

VIII. DESCRIPTION OF PLANNED DEMOLITION METHOD(S) TO BE USED:

☐ BULLDOZER      ☐ LOADER      ☐ WRECKING BALL      ☐ MANUAL      ☐ BURNING      ☐ IMPLOSION/EXPLOSION

IF OTHER PLEASE DESCRIBE:

IX. DESCRIPTION OF WORK PRACTICES & ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION SITE:

X. WASTE TRANSPORTER #1: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_\_) \_\_\_\_\_

WASTE TRANSPORTER #2: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_\_) \_\_\_\_\_

XI. WASTE DISPOSAL SITE: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_ PHONE: (\_\_\_\_\_) \_\_\_\_\_

XII. IF DEMOLITION ORDERED BY GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW: (PLEASE ATTACH A COPY OF THE ORDER)

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

AUTHORITY: \_\_\_\_\_

DATE OF ORDER (MM/DD/YY): \_\_\_\_\_ DATE ORDERED TO BEGIN(MM/DD/YY): \_\_\_\_\_

XIII. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:

XIV. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION INVOLVING RACM AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS.

\_\_\_\_\_  
(SIGNATURE OF OWNER/OPERATOR)

\_\_\_\_\_  
(DATE)

XV. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

\_\_\_\_\_  
(SIGNATURE OF OWNER/OPERATOR)

\_\_\_\_\_  
(DATE)

- **Applications must be mailed along with a \$50.00 fee (payable to SCDHEC) at least 10 working days prior to the scheduled start date. Faxes will not be accepted.**
- **A copy of an asbestos survey report (no older than 3 years) must accompany the application.**

For additional information concerning regulatory requirements call or visit our Web site at <http://www.scdhec.gov/environment/baq/asbestos.aspx>



## Asbestos Waste Shipment Record

### 1. SCDHEC ASBESTOS ABATEMENT PROJECT LICENSE:

#### Generator Information

2. Waste Generator/Owner Name & Address:	Work Site Name & Physical Address:	Waste Generator/Owner Telephone Number (     )
--	------------------------------------	---

3. Abatement Contractor Name & Address:	Abatement Contractor Telephone Number (     )
---	--

4. Name of waste disposal site (WDS), mailing address, and physical site location:	WDS Telephone Number: (     )
--	----------------------------------

5. Description of Waste Materials (please circle): Friable (Regulated) / Nonfriable (Nonregulated)	6. Bags of Containers: No.    Type    _____ Drums _____ Bags _____ Bulk Load	7. Total Quantity: m3                      (yd3)
---	---	---

8. Special handling instructions & additional information:

9. Generator's/Contractor's Certification: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled. The contents are in all respects in proper condition for transport by highway according to applicable international and government regulations.

Print Name:

Signature:

Date:

#### Transporter Information (Acknowledgment of Receipt of Materials):

10. Name, title, address, telephone number:	Signature:	Date:
---	------------	-------

11. Name, title, address, telephone number:	Signature:	Date:
---	------------	-------

#### Disposal Site Operator

12. Discrepancy:	<u>Bags or Containers</u>	<u>Total Quantity</u>
------------------	---------------------------	-----------------------

13. Waste Disposal Site Owner or Operator certification of receipt of asbestos materials covered by this manifest except as noted in item 11.

Print Name:

Signature:

Date:

Please forward a completed copy of this record to: SCDHEC, Bureau of Air Quality, Asbestos Section, 2600 Bull Street, Columbia, SC 29201  
(803) 898-4389 office. (803) 898-4281 fax.