



**HAZARDOUS MATERIALS SURVEY
COMMERCIAL BUILDING
4 SOUTH BROADWAY
SALEM, NEW HAMPSHIRE**

January 2020

Project 19039



HAZARDOUS MATERIALS SURVEY

Commercial Property
4 South Broadway
Salem, New Hampshire

January 9, 2020

Project 19039

Prepared for:

Vanasse Hangen Brustlin
101 Walnut Street
Watertown, MA 02472
ATTN: Katherine Kudzma

Prepared by:

Green Environmental, Inc.
296 Weymouth Street, Unit C
Rockland, MA 02370
Phone: (617) 479-0550
Fax: (617) 479-5150
www.greenenvironmental.com



GREEN
ENVIRONMENTAL



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1.0 INTRODUCTION

Green Environmental, Inc. (GREEN) was retained by Vanasse Hangen Brustlin (VHB) to conduct a hazardous materials survey of the commercial building located at 4 South Broadway in Salem, New Hampshire. GREEN understands the surrounding area is scheduled to be redeveloped and that the existing structure will be demolished. GREEN completed this Hazardous Materials Survey to support the planned redevelopment.

1.1 Building Description

According to the Town of Salem Assessor field card and GREEN's site inspection, the building located at 4 South Broadway is an approximately 4,886 square-foot, single-story, commercial building constructed in 1950.

The building has a concrete slab foundation, with a concrete block and wood frame construction and an asphalt shingle and flat rubber roof. Representative site photographs for the building are included in **Appendix A**. Site plans are provided for reference included as **Figure 1 and 2**.

1.2 Scope of Work

GREEN was retained to conduct a Hazardous Materials Survey to document the presence of oil or hazardous materials at the subject building that may require abatement and/or special handling and disposal prior to building demolition. The Survey included assessment for the presence of asbestos and lead-based paint, and the cataloging of oils and/or hazardous materials located within the building. Bulk samples of suspect building materials were collected using destructive measures, and submitted for laboratory analysis as appropriate. The presence of lead-based paint was evaluated using an X-Ray fluorescence (XRF) field instrument.

2.0 ASBESTOS SURVEY

2.1 Regulatory Background

Regulations for asbestos exposure and/or asbestos release have been promulgated by the United States Environmental Protection Agency (EPA), U.S. Occupational Safety and Health Administration (OSHA), and New Hampshire Department of Environmental Services (NHDES).

OSHA regulates asbestos in the workplace through the Asbestos for General Industry Standard (29 Code of Federal Regulations [CFR] 1910.1001) and the removal of regulated asbestos-containing material (RACM) through the Asbestos Standard for Construction (29 CFR 1926.1101). OSHA regulations are created for the protection of the health of workers who may be occupationally exposed to asbestos. These occupations include asbestos abatement, construction activities, building maintenance, and others. OSHA requires that asbestos ACM be removed or appropriately abated prior to any work which will disturb the material, including demolition and renovation. Additionally, OSHA stipulates that thermal system insulation (TSI), surfacing materials and floor tile installed before 1980 must be presumed to be ACM unless appropriate sampling and analysis prove otherwise.

EPA and NHDES regulate ACM associated with building demolition, renovation, and abatement projects. The regulations are promulgated via the National Emission Standards for Hazardous Air Pollutants (NESHAP 40 CFR part 61) and the New Hampshire Code of Administrative Rules (Env-A 1800). The regulations are developed to protect public health and the environment and require that buildings be inspected for asbestos prior to any demolition or renovation. Further, the regulations require that all affected friable and non-friable ACM which is damaged or will be damaged as a result of the demolition or renovation activities be properly removed or abated prior to disturbance by the work.

NESHAP defines three types of ACM:

- Friable ACM: ACM that can be reduced to powder by hand pressure requiring removal prior to renovation or demolition (e.g., thermal system insulation (TSI), plaster, joint compound, ceiling tiles).
- Category I non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (e.g., resilient floor covering, packings, gaskets, asphalt roofing).
- Category II non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (all other non-friable ACM).

RACM is friable ACM and non-friable ACM that may become friable during demolition or renovation activities. Practically speaking, both Category I non-friable ACM and Category II non-friable ACM will become friable in a typical commercial demolition or renovation scenario and must be abated prior to the work.

2.2 Sample Collection and Analysis

Bulk samples were collected based on type and quantity of each suspect material following the sampling guidelines set forth in the Asbestos Hazard Emergency Response Act (AHERA 40 CFR 763.86). Green inspected for materials among those defined as suspect ACM by EPA's AHERA regulation which include:

- Thermal system insulation (TSI) (e.g., pipe/boiler lagging, duct insulation);
- Surfacing materials (e.g., spray-on insulation, texturing materials, plaster), and;
- Miscellaneous materials (e.g., ceiling tiles, transite panels, flooring, vibration joints, drywall).

Fiberglass, foam glass, rubber, wood products, plastic products, glass and steel were not sampled since they are not considered suspect ACM.

The asbestos survey was conducted by Mr. Luke Krzyzewski, New Hampshire Accredited Asbestos Inspector AI100882. A copy of personnel accreditation is included as **Appendix B**. A total of 59 bulk samples were collected from the 4 South Broadway building on December 11, 2019. The samples were collected using hand tools, and sampling equipment was cleaned between the collection of each sample. Each sample location was wet with water prior to sampling to avoid creating dust during sampling. Bulk samples were placed in individual air tight plastic bags and transferred to Asbestos Identification Laboratory of Woburn, Massachusetts for analysis via EPA 600/R-93/116 and/or EPA Interim Method 600/M4-82-020 methods using Polarized Light Microscopy (PLM). Asbestos Identification Laboratory is licensed by the National Voluntary Laboratory Accreditation Program (NVLAP) (#200919-00) for bulk asbestos analysis. The field survey, chain of custody documentation and laboratory certificates of analysis are included in **Appendix C**. In accordance with NESHAP and NHDES regulations, materials are considered asbestos-containing if they contain greater than 1% asbestos as determined by PLM.

The following is a list of materials that were determined to be **non-asbestos-containing**:

Interior: Unit 4

- | | |
|-------------------------------|---|
| - 12" White Floor Tile | - 12" Gray Floor Tile and Adhesive |
| - Gray Cove Base and Adhesive | - Drywall |
| - Joint Compound | - Textured Ceiling |
| - Panel Adhesive | - Panel Material |
| - 1' x 1' Smooth Ceiling Tile | - Ceramic Floor Tile Grout and Adhesive |

Exterior: Unit 4

- Gray Door Caulking

The following is a list of materials that were determined to be **asbestos-containing**:

Unit 4:

- | | |
|-------------------------------------|-------------------------|
| - 12" White Floor Tile Black Mastic | - Interior Window Glaze |
| - Field Flash Material | |

The following is a list of materials that were determined to be **non-asbestos-containing**: (*Continued*)

Interior: Unit 6

- Yellow Carpet Mastic
- Gray Floor Leveler
- 12" Green Floor Tile and Mastic
- Drywall
- 2' x 4' Smooth Ceiling Tile
- Window Caulking
- Interior Window Glaze
- White Floor Leveler
- 12" White Floor Tile and Mastic
- Ceramic Floor Tile Grout and Adhesive
- Joint Compound
- 2' x 4' Fissure Dot Ceiling Tile
- Black Window Glaze

Exterior: Unit 6

- Roof Paper
- Asphalt Shingle

The following is a list of materials that were determined to be **asbestos-containing**:

Unit 6:

- Exterior White Window Caulking
- Exterior Window Glaze
- Black Chimney Flash

The following is a list of materials that were determined to contain **trace (<1%) asbestos**:

- Field/Flash Material

Based on the review of analytical data associated with the above bulk sample collection, asbestos was **positively** identified at the 14 South Broadway building. Please refer to **Appendix E** which summarizes the materials, locations, and estimated quantities that tested positive for asbestos at the 4 South Broadway building. Site photographs are included in **Appendix A**. A Site Plan is included as **Figure 1**.

Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in New Hampshire, however, they must still be handled in accordance with OSHA 1926.1101 and per current NHDES regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material. Site schematics depicting the approximate layout of the building are included as **Appendix E**.

3.0 LEAD BASED PAINT SURVEY

3.1 Regulatory Background

The Occupational Safety and Health Administration (OSHA) worker protection rule has established a permissible exposure limit (PEL) of 0.050 milligrams per cubic meter for airborne lead. OSHA worker protection rules are applicable for any amount of lead. The Resource Conservation and Recovery Act (RCRA) regulates wastes containing lead as hazardous wastes if the leachable lead in the waste exceeds 5 parts per million (ppm) by Toxicity Characteristic Leachate Procedure (TCLP).

The United States Department of Housing and Urban Development (HUD) has established a threshold for in-lace paint of 1 mg/cm² lead as measured by X-ray fluorescence (XRF), above which paint is considered lead-containing. Although HUD guidelines are only directly applicable to residential buildings, the threshold is useful as a guideline for identifying exposure and waste disposal issues in non-residential buildings.

3.2 Sample Analysis

A Lead Based Paint (LBP) Survey was conducted on December 12 and 13, 2020 by Mr. David Pesce, New Hampshire Lead Paint Inspector and Risk Assessor No. RA-00059, utilizing an XRF. This is a non-destructive analytical technique used to determine the elemental composition of materials. XRF analyzers determine the chemistry of a sample by measuring the fluorescent (or secondary) X-ray emitted from a sample when it is excited by a primary X-ray source. This release of energy is then registered by the detector in the XRF instrument, which in turn categorizes the energies by element.

The investigation included a survey of painted surfaces for the presence of lead-based paint (LBP) throughout the building. Painted surfaces containing elevated levels of lead were identified during the survey. Please refer to the field inspection log sheets, included as **Appendix F**, which identifies the locations of elevated lead painted surfaces.

The purpose of the LBP survey was to assist the owner and/or contractor in OSHA compliance for worker protection during the planned renovation of the subject building. Survey results may also assist with characterization of construction debris/waste prior to disposal.

4.0 OTHER HAZARDOUS MATERIALS

4.1 Oil, Paints & Cleaners

No cleaning, maintenance supplies, or paints were noted within the property building.

4.2 Mercury Containing Devices

No mercury containing thermostats were identified within the building.

4.3 Fluorescent Lights & Ballasts

Fluorescent light fixtures were noted throughout the building. Fluorescent lighting tubes can contain both mercury and lead, and have special handling and disposal requirements. Under federal regulations used fluorescent lamp becomes a waste on the day that it is discarded. The disposal of fluorescent lighting tubes is regulated under the Resource Conservation and Recovery Act (RCRA).

Additionally, fluorescent light ballasts manufactured prior to 1979 may contain polychlorinated biphenyls (PCBs). PCB-based oils were used as insulating oil in many types of ballast to provide cooling and electrical isolation. PCBs are regulated by the EPA and also have special handling and disposal requirements, depending on the concentration.

Each light fixture should be inspected for “No PCBs” labeling, prior to removal. Lighting ballasts which contain PCBs should be segregated from non-PCB containing ballasts and properly disposed. Ballasts with no labeling should be considered PCB. The fluorescent tubes should be transported off-site for recycling. Please refer to **Appendix G**, for approximate quantities and locations of fluorescent lights and ballasts.

4.4 Refrigerants

No refrigerants were noted within the building.

4.5 Emergency Equipment

Emergency lights were observed within the subject building. Batteries associated with these units are an alkaline, NiMH and NiCAD source. The batteries should be either recycled or properly disposed, prior to being disturbed. Emergency exit signs can also contain radioactive components requiring proper disposal. Please refer to **Appendix G**, for approximate quantities and locations of emergency equipment.

5.0 RESULTS AND RECOMMENDATIONS

GREEN has completed a Hazardous Materials Survey of the building located at 4 South Broadway in Salem, New Hampshire. The property building consists of an approximately 4,868 square foot warehouse structure. GREEN understands the existing structure will be demolished. GREEN completed this Hazardous Materials Survey to support the planned redevelopment. The Survey included assessment for the presence of asbestos via bulk sample collection and laboratory analysis, a lead-based paint XRF survey, and the cataloging of oils and/or hazardous materials located within the building.

Asbestos was positively identified at the 14 South Broadway building, as summarized in **Section 2** and **Appendix E**. In accordance with NESHAP and NHDDES regulations, all friable ACM, or materials made friable by demolition or renovation activities, must be removed from the building by a licensed asbestos abatement contractor, prior to demolition or renovation. Removal of ACM is regulated by NHDDES. GREEN recommends the identified ACMs be removed from the buildings in accordance with applicable asbestos abatement regulations prior to the start of planned demolition activities. Asbestos abatement must be done by a New Hampshire licensed Asbestos Abatement Contractor and be properly disposed of offsite at an appropriate receiving facility in compliance with all applicable state and federal regulations. The New Hampshire asbestos regulations require visual inspection and clearance air monitoring at the completion of an asbestos abatement project. Additionally, full-time monitoring of asbestos abatement procedures in compliance with design specifications and regulations is recommended during major asbestos abatement projects.

NHDDES regulations require notification to the Department and local government officials using the Asbestos Demolitions/Renovation Notification Form, 201-05-31 at least 10 working days prior to conducting of an asbestos response action of more than 10 linear-feet or 25 square feet of ACM.

Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in New Hampshire, however, they must still be handled in accordance with OSHA 1926.1101 and per current NHDDES regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material.

Based on the results of the lead-based paint survey, lead concentrations at or greater than 1.0 mg/cm² were identified as described in the XRF field inspection sheets included as **Appendix F**. OSHA worker protection rules apply for any amount of lead in paint, GREEN recommends that the owner provide the results of the LBP survey provided in this report to its demolition contractor. The contractor should consider this information in planning for worker protection during the renovation waste disposal. Removal of the paint prior to demolition is not required. However, the contractor may choose to monitor ambient air for lead during demolition, or demonstrate through air monitoring data collected from previous similar projects that the concentrations of lead identified will not result in an exceedance of the OSHA PEL during the demolition. The demolition contractor should also consider whether TCLP characterization of the demolition debris in accordance with RCRA is appropriate. Demolition work must be conducted in accordance with applicable federal, state, and local regulations.

Other oil and hazardous materials were identified within the building and should be properly segregated, disposed/or recycled as appropriate as summarized in **Section 4 and Appendix G** of this Survey report.

6.0 LIMITATIONS

The opinions expressed by GREEN are based solely on the observations, sampling and analysis, and information cited in this report. Observations were made at the subject site under the conditions stated. The purpose of this study was to determine the nature and approximate quantities of hazardous materials prior to demolition activities. This report does not constitute a complete determination of whether past or current owners, operators or occupants of the site have been in compliance with all applicable state, federal or local environmental regulations. This report does not constitute an AHERA survey. GREEN makes no representation regarding material located in inaccessible areas.

Semi-destructive measures were implemented to obtain bulk samples for asbestos analysis. GREEN makes no representation regarding inaccessible materials which may be located within walls, ceilings, ducts, roofs, below grade or other inaccessible areas. Additional field measurements and/or bulk sampling may be required following the exposure/removal of walls, flooring, etc. Should additional material be identified during demolition activities that are not listed in this report the work should be stopped and samples be collected to determine if hazardous classification is warranted.

Our conclusions are based solely on the information described herein and are believed to be representative of conditions at the time of the building survey. If additional information concerning the environmental conditions of the subject site becomes available, GREEN should be notified and presented with that information. Based on the new information, we will reevaluate the conclusions stated in this report to determine whether modifications are warranted.

This report is not a project specification and should not be used as a bidding document, including an asbestos abatement or building demolition specification.

We appreciate the opportunity to provide you with these environmental services. Please contact the undersigned with any questions at 617-479-0550.

Sincerely,
GREEN ENVIRONMENTAL, INC.



Luke Krzyzewski
Project Manager
Environmental Consulting Services

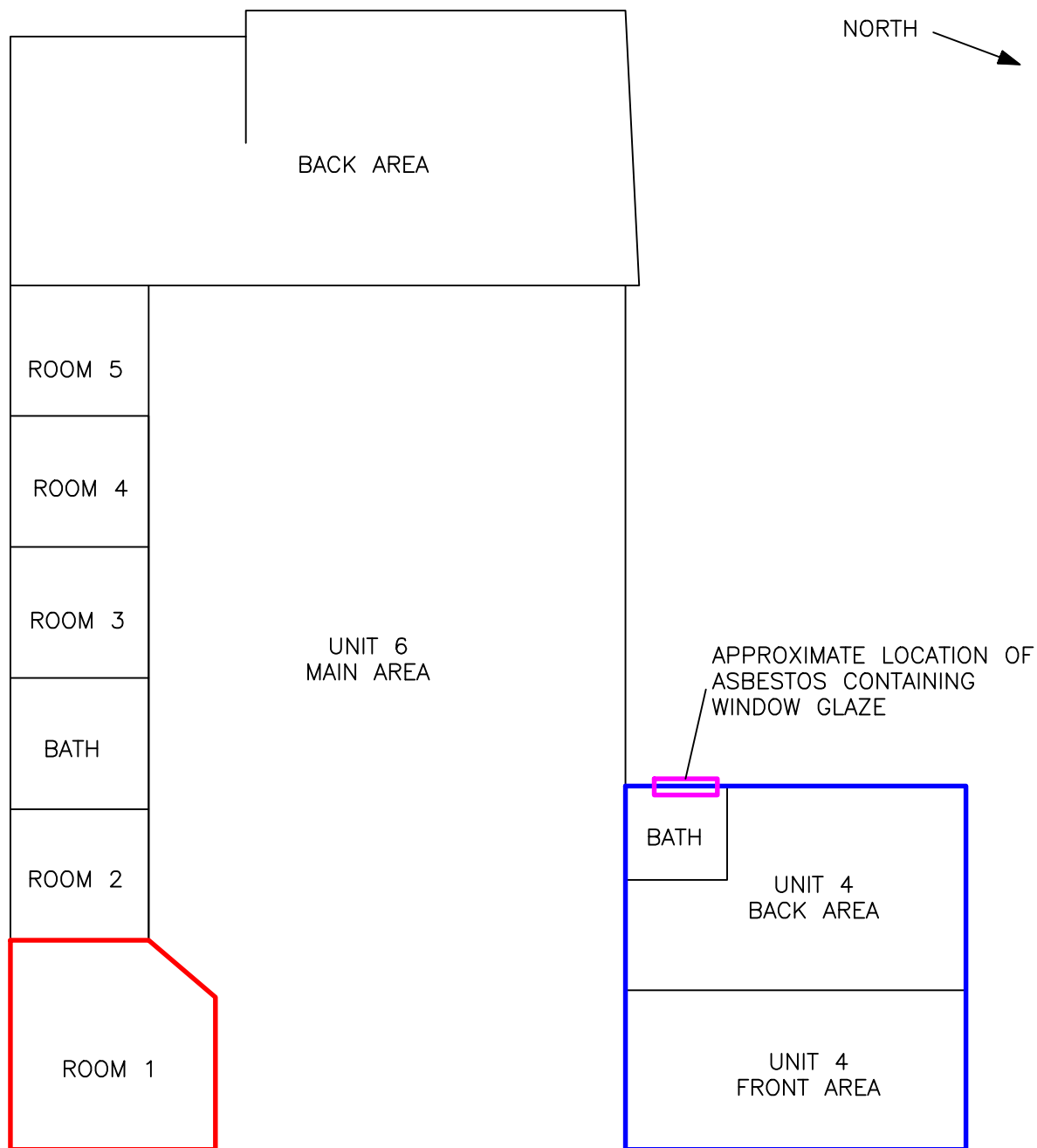


Kristen Awed-Ladas
Senior Project Manager
Environmental Consulting Services



Plans and Figures





— APPROXIMATE LOCATION OF
ASBESTOS CONTAINING 9"
GRAY FLOOR TILE AND MASTIC

— APPROXIMATE LOCATION OF
ASBESTOS CONTAINING 12"
WHITE FLOOR TILE MASTIC

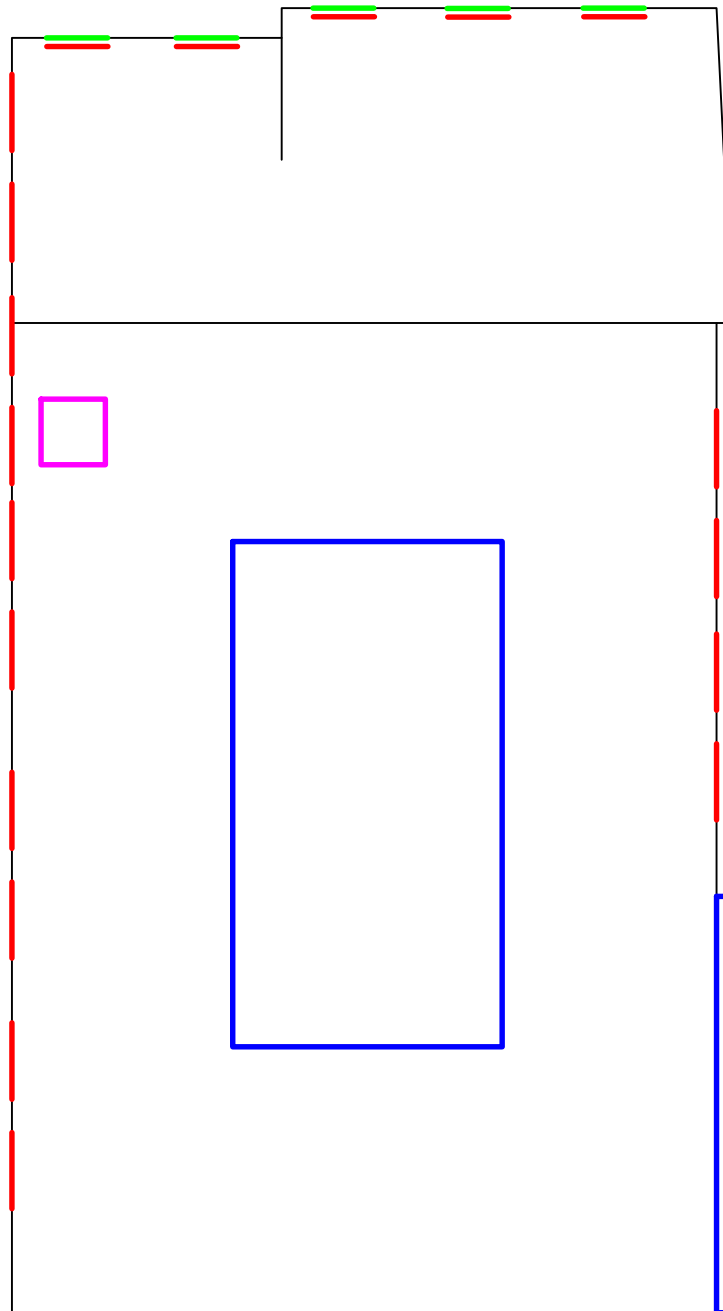
SITE PLAN
4 SOUTH BROADWAY
SALEM, NH

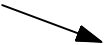
GREEN
ENVIRONMENTAL

VHB
101 WALNUT STREET
WATERTOWN, MA

FIGURE: 1
PROJECT NO.: 19039
DATE: JANUARY 2020

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



NORTH 

— APPROXIMATE LOCATION OF ASBESTOS
CONTAINING WINDOW GLAZE

— APPROXIMATE LOCATION OF ASBESTOS
CONTAINING WINDOW CAULKING

— APPROXIMATE LOCATION OF ASBESTOS
CONTAINING FIELD/FLASH MATERIAL

— APPROXIMATE LOCATION OF ASBESTOS
CONTAINING CHIMNEY FLASH

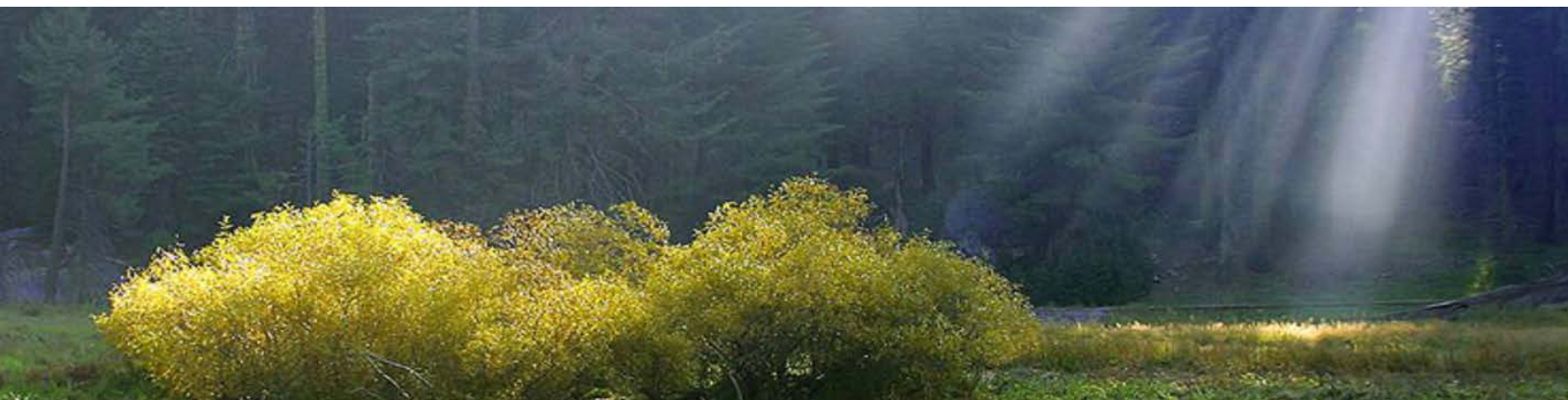
EXTERIOR SITE PLAN
4 SOUTH BROADWAY
SALEM, NH

GREEN 
ENVIRONMENTAL

VHB
101 WALNUT STREET
WATERTOWN, MA

FIGURE: 2
PROJECT NO.: 19039
DATE: JANUARY 2020

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



Appendix A





A view of the east side of the building facing northwest



A view of the north side of the building, facing south.



A view of the west side of the building, facing south



A view of the exterior windows, behind plywood



A view of the front area of Unit 4



A view of the bath of Unit 4



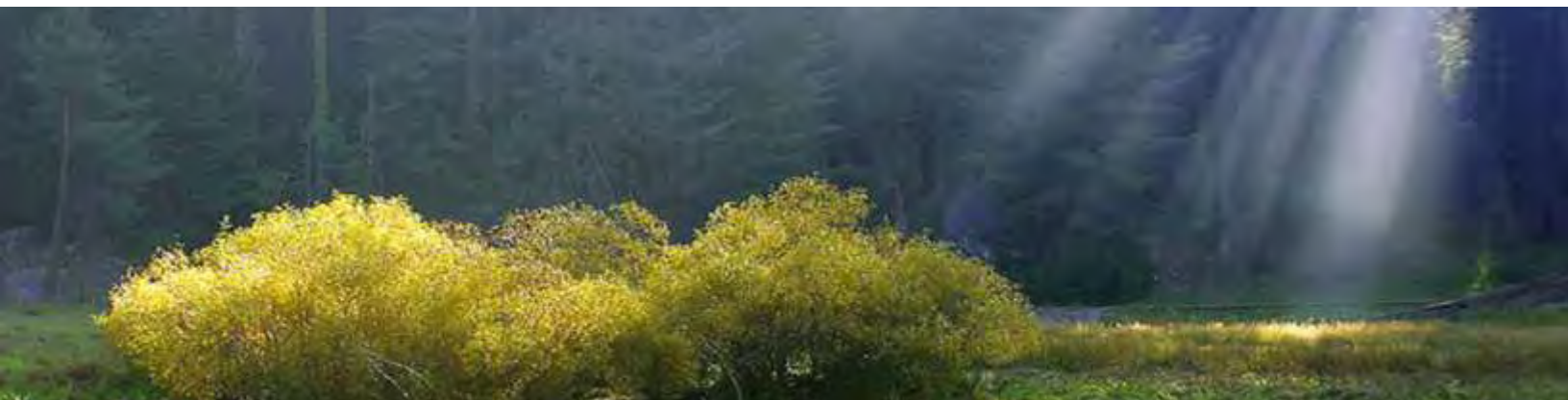
A view of the main area of Unit 6



A view of Room 1 within Unit 6



A view of the back area of Unit 6



Appendix B



4 S BROADWAY**Location** 4 S BROADWAY**Mblu** 89/ / 1094/ /**Acct#****Owner** 4-6 SOUTH BROADWAY LLC**Assessment** \$427,800**Appraisal** \$427,800**PID** 6364**Building Count** 1**Current Value**

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$145,500	\$282,300	\$427,800
Assessment			
Valuation Year	Improvements	Land	Total
2018	\$145,500	\$282,300	\$427,800

Owner of Record**Owner** 4-6 SOUTH BROADWAY LLC**Sale Price** \$0**Co-Owner****Certificate****Address** PO BOX 90**Book & Page** 3339/2944

SALEM, NH 03079-0090

Sale Date 10/21/1998**Ownership History**

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
4-6 SOUTH BROADWAY LLC	\$0		3339/2944	10/21/1998
	\$0		2566/1652	10/03/1985

Building Information**Building 1 : Section 1**

Year Built: 1950
Living Area: 4,886
Replacement Cost: \$273,738
Replacement Cost
Less Depreciation: \$142,300

Building Photo

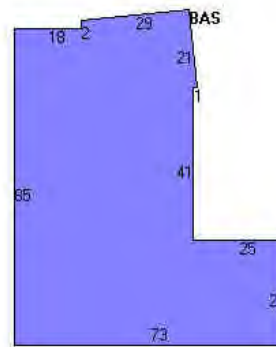
Building Attributes	
Field	Description
STYLE	Store
MODEL	Comm/Ind
Stories:	1

Occupancy	2
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Minim/Masonry
Interior Wall 2	Plywood Panel
Interior Floor 1	Concr-Finished
Interior Floor 2	Inlaid Sht Gds
Heating Fuel	Oil
Heating Type	Forced Air-Duc
AC Type	None
Bldg Use	STORE/SHOP MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	322I
Heat/AC	NONE
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL/MN WL
Rooms/Prtns	AVERAGE
Wall Height	10
% Comn Wall	0



(<http://images.vgsi.com/photos/SalemNHPhotos//\01\00\42\19.jpg>)

Building Layout



(<http://images.vgsi.com/photos/SalemNHPhotos//Sketches/6364>)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	4,886	4,886
		4,886	4,886

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use

Use Code	3220
Description	STORE/SHOP MDL-94
Zone	CA
Neighborhood	600
Alt Land Appr Category	No

Land Line Valuation

Size (Acres)	0.3
Frontage	0
Depth	0
Assessed Value	\$282,300
Appraised Value	\$282,300

Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Assessed Value	Bldg #
PAV1	PAVING-ASPHALT			4300 S.F.	\$3,200	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$145,500	\$282,300	\$427,800
2016	\$145,500	\$282,300	\$427,800
2015	\$140,700	\$261,800	\$402,500

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$145,500	\$282,300	\$427,800
2016	\$145,500	\$282,300	\$427,800
2015	\$140,700	\$261,800	\$402,500

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Appendix C



GREEN ENVIRONMENTAL, INC.

Personnel Accreditation

Accredited Inspector

Name: Luke Krzyzewski

Accreditation Number: AI100882

Signature: _____



Licensure:





Appendix D





Asbestos Identification Laboratory

165 New Boston St., Ste 227

Woburn, MA 01801

781-932-9600

Web: www.asbestosidentificationlab.com

Email: mikemanning@asbestosidentificationlab.com

Batch:

49441



December 30, 2019

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name: 4 South Broadway, Salem, NH
Project Number: #19039
Date Sampled: 2019-12-11
Work Received: 2019-12-23
Work Analyzed: 2019-12-30

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Luke Krzyzewski,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Luke Krzyzewski for your business.

Michael Manning
Owner/Director

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name: 4 South Broadway, Salem, NH
Project Number: #19039
Date Sampled: 2019-12-11
Work Received: 2019-12-23
Work Analyzed: 2019-12-30

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1A	12" White Floor Tile	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547754					
1B	12" White Floor Tile	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547755					
2A	12" White Floor Tile Mastic	1st Floor, Unit 4	black	Non-Fibrous 97	Detected Chrysotile 3
547756					
2B	12" White Floor Tile Mastic	1st Floor, Unit 4			Not Analyzed
547757					
3A	12" Gray Floor Tile	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547758					
3B	12" Gray Floor Tile	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547759					
4A	12" Gray Floor Tile Adhesive	1st Floor, Unit 4	clear	Non-Fibrous 100	None Detected
547760					
4B	12" Gray Floor Tile Adhesive	1st Floor, Unit 4	clear	Non-Fibrous 100	None Detected
547761					
5A	Gray Cove Base	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547762					
5B	Gray Cove Base	1st Floor, Unit 4	gray	Non-Fibrous 100	None Detected
547763					
6A	Gray Cove Base Adhesive	1st Floor, Unit 4	tan	Non-Fibrous 100	None Detected
547764					
6B	Gray Cove Base Adhesive	1st Floor, Unit 4	tan	Non-Fibrous 100	None Detected
547765					
7A	Drywall	1st Floor, Unit 4	multi	Cellulose 15 Non-Fibrous 85	None Detected
547766					
7B	Drywall	1st Floor, Unit 4	gray	Cellulose 2 Non-Fibrous 98	None Detected
547767					

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
8A 547768	Joint Compound	1st Floor, Unit 4	white	Non-Fibrous 100	None Detected
8B 547769					
8C 547770	Joint Compound	1st Floor, Unit 4	white	Non-Fibrous 100	None Detected
9A 547771					
9B 547772	Textured Ceiling	1st Floor, Unit 4	white	Non-Fibrous 100	None Detected
9C 547773					
10A 547774	Panel Adhesive	1st Floor, Unit 4	tan	Non-Fibrous 100	None Detected
10B 547775					
11A 547776	Panel Material	1st Floor, Unit 4	brown	Cellulose 95 Non-Fibrous 5	None Detected
11B 547777					
12A 547778	Interior Window Glaze	1st Floor, Unit 4	gray	Non-Fibrous 98	Detected Chrysotile 2
12B 547779					
13A 547780	1x1 Smooth Ceiling Tile	1st Floor, Unit 4	brown	Cellulose 98 Non-Fibrous 2	None Detected
13B 547781					
14A 547782	Gray Door Caulking	Exterior, Unit 4, East Side	gray	Non-Fibrous 100	None Detected
14B 547783					
15A 547784	Field/Flash Material	Exterior, Unit 4, Roof	black	Cellulose 50 Non-Fibrous 48	Detected Chrysotile 2
15B 547785					

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
16A 547786	Yellow Carpet Mastic	1st Floor, Unit 6, Main Area	brown	Cellulose 2 Non-Fibrous 98	None Detected
16B 547787					
17A 547788	White Floor Leveler	1st Floor, Unit 6, Main Area	white	Non-Fibrous 100	None Detected
17B 547789					
18A 547790	Gray Floor Leveler	1st Floor, Unit 6, Main Area	gray	Fiberglass 2 Non-Fibrous 98	None Detected
18B 547791					
19A 547792	9" Gray Floor Tile	1st Floor, Unit 6, Area 1	gray	Non-Fibrous 98	Detected Chrysotile 2
19B 547793					
20A 547794	9" Gray Floor Tile Mastic	1st Floor, Unit 6, Area 1	black	Non-Fibrous 98	Detected Chrysotile 2
20B 547795					
21A 547796	12" White Floor Tile	1st Floor, Unit 6, Area 1	white	Non-Fibrous 100	None Detected
21B 547797					
22A 547798	12" White Floor Tile Mastic	1st Floor, Unit 6, Area 1	yellow	Non-Fibrous 100	None Detected
22B 547799					
23A 547800	12" Green Floor Tile	1st Floor, Unit 6, Area 1	gray	Non-Fibrous 100	None Detected
23B 547801					
24A 547802	12" Green Floor Tile Mastic	1st Floor, Unit 6, Area 1	yellow	Non-Fibrous 100	None Detected
24B 547803					

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
25A 547804	Ceramic Floor Tile Adhesive	1st Floor, Unit 6, Bath	brown	Non-Fibrous 100	None Detected
25B 547805					
26A 547806	Ceramic Floor Tile Grout	1st Floor, Unit 6, Bath	tan	Non-Fibrous 100	None Detected
26B 547807					
27A 547808	Drywall	1st Floor, Unit 6, Main Area	multi	Cellulose 5 Non-Fibrous 95	None Detected
27B 547809				Cellulose 10 Non-Fibrous 90	
28A 547810	Joint Compound	1st Floor, Unit 6, Main Area	white	Non-Fibrous 100	None Detected
28B 547811					
28C 547812	Joint Compound	1st Floor, Unit 6, Area 1	white	Non-Fibrous 100	None Detected
28D 547813					
28E 547814	Joint Compound	1st Floor, Unit 6, Bath	white	Non-Fibrous 100	None Detected
29A 547815					
29B 547816	Drywall	1st Floor, Unit 6, Back Area	multi	Cellulose 20 Non-Fibrous 80	None Detected
30A 547817				Cellulose 30 Non-Fibrous 70	
30B 547818	Joint Compound	1st Floor, Unit 6, Back Area	white	Non-Fibrous 100	None Detected
30C 547819					
31A 547820	2x4 Smooth Ceiling Tile	1st Floor, Unit 6, Back Area	white	Non-Fibrous 100	None Detected
31B 547821					
31A 547820	2x4 Smooth Ceiling Tile	1st Floor, Unit 6, Main Area	brown	Cellulose 98 Non-Fibrous 2	None Detected
31B 547821				Cellulose 98 Non-Fibrous 2	

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
32A	2x4 Fissure Dot Ceiling Tile	1st Floor, Unit 6, Bath	gray	Mineral Wool 20	None Detected
547822				Cellulose 70	
				Non-Fibrous 10	
32B	2x4 Fissure Dot Ceiling Tile	1st Floor, Unit 6, Bath	gray	Mineral Wool 20	None Detected
547823				Cellulose 70	
				Non-Fibrous 10	
33A	Window Caulking	1st Floor, Unit 6, Area 1	white	Non-Fibrous 100	None Detected
547824					
33B	Window Caulking	1st Floor, Unit 6, Area 1	white	Non-Fibrous 100	None Detected
547825					
34A	Black Window Glaze	1st Floor, Unit 6, Main Area	black	Non-Fibrous 100	None Detected
547826					
34B	Black Window Glaze	1st Floor, Unit 6, Main Area	black	Non-Fibrous 100	None Detected
547827					
35A	Interior Window Glaze	1st Floor, Unit 6, Back Area	multi	Non-Fibrous 100	None Detected
547828					
35B	Interior Window Glaze	1st Floor, Unit 6, Back Area	multi	Non-Fibrous 100	None Detected
547829					
36A	Window Caulking	Exterior , Unit 6, West Side	multi	Non-Fibrous 97	Detected Chrysotile 3
547830					
36B	Window Caulking	Exterior , Unit 6, West Side			Not Analyzed
547831					
37A	Exterior Window Glaze	Exterior , Unit 6, South Side	gray	Non-Fibrous 98	Detected Chrysotile 2
547832					
37B	Exterior Window Glaze	Exterior , Unit 6, South Side			Not Analyzed
547833					
38A	Black Chimney Flash	Exterior , Unit 6, Roof	black	Non-Fibrous 97	Detected Chrysotile 3
547834					
38B	Black Chimney Flash	Exterior , Unit 6, Roof			Not Analyzed
547835					
39A	Roof Paper	Exterior , Unit 6, Roof	black	Fiberglass 5	None Detected
547836				Non-Fibrous 95	
39B	Roof Paper	Exterior , Unit 6, Roof	black	Fiberglass 5	None Detected
547837				Non-Fibrous 95	
40A	Asphalt Shingle	Exterior , Unit 6, Roof	black	Fiberglass 20	None Detected
547838				Non-Fibrous 80	
40B	Asphalt Shingle	Exterior , Unit 6, Roof	black	Fiberglass 25	None Detected
547839				Non-Fibrous 75	

FieldID	Material	Location	Color	Non-Asbestos %		Asbestos %
LabID						
41A	Field/Flash Material	Exterior , Unit 6, Roof	black	Cellulose	60	Detected Chrysotile < 1
547840				Non-Fibrous	40	
41B	Field/Flash Material1st Floor, Unit	Exterior , Unit 6, Roof	black	Cellulose	60	Detected Chrysotile < 1
547841				Non-Fibrous	40	

Client: Green Insurance Co

Address: _____

Project Site & #: 4 Santa Barbara

Phone / email address:

Contact: _____

Relinquish by/date: _____

Received by/date: 12-23-1

of Samples Received: 33

CHAIN OF CUSTODY

EPA/600/R-93/116

Asbestos Identification Lab

165 New Boston St.

Suite 227

Woburn, MA 01801

(781)932-9600

www.asbestosidentificationlab.com



Date Sampled:

BATCH#

Rev 06/16

Page 1 of 1

Turnaround Time	Sample Method
-----------------	---------------

Less 3 Hrs	
------------	--

<input checked="" type="checkbox"/>	Bulk
-------------------------------------	------

Same Day

Soil

Next Day

Wipe

☒ ~~FWD~~ Day

Point Count

Stop on 1st Positive? ☒ Yes/☐ No

Notify Method: ☐ Mail/E-Mail/☒ Verbal

Analyzed By: [Signature]

Date: 07/30/24

[illegible]

Lab ID# (Lab Use Only)		Field ID/ (Client Reference)	Temp in Celcius = <u>11</u>	Stereo Scope					Optical Properties										Non-Asbestos Percentage (%)						
Material / Location				% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous		
57	2B																								
	Material							Chrysotile																	
	Location							Amosite																	
								Crocidolite																	
								Tremolite																	
								Anthophyllite																	
								Actinolite																	
58	3A																								
	Material							Chrysotile																	
	Location							Amosite																	
								Crocidolite																	
								Tremolite																	
								Anthophyllite																	
								Actinolite																	
59	3B																								
	Material							Chrysotile																	
	Location							Amosite																	
								Crocidolite																	
								Tremolite																	
								Anthophyllite																	
								Actinolite																	
60	4A																								
	Material							Chrysotile																	
	Location							Amosite																	
								Crocidolite																	
								Tremolite																	
								Anthophyllite																	
								Actinolite																	
61	4B																								
	Material							Chrysotile																	
	Location							Amosite																	
								Crocidolite																	
								Tremolite																	
								Anthophyllite																	
								Actinolite																	

DNA

[illegible]

[illegible]

[illegible]

DW

Lab ID# (Lab Use Only)		Field ID/ (Client Reference)	Temp in Celcius = 22	Stereo Scope				Optical Properties							Non-Asbestos Percentage (%)									
		Material / Location		% of Asbestos	Color	Homogeneity	Texture	Friable								RI								
									Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	+	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
83	14A	Material		0.95%	3	3	3	3	Chrysotile															100
		Location							Amosite															
		Material							Crocidolite															
		Location							Tremolite															
		Material							Anthrophyllite															
		Location							Actinolite															
84	15B	Material		2					Chrysotile															
		Location							Amosite															
		Material							Crocidolite															
		Location							Tremolite															
		Material							Anthrophyllite															
		Location							Actinolite															
85	16A	Material		0.95%	3	3	3	3	Chrysotile															
		Location							Amosite															
		Material							Crocidolite															
		Location							Tremolite															
		Material							Anthrophyllite															
		Location							Actinolite															

DATA
EC

Lab ID# (Lab Use Only)		Field ID/ (Client Reference)		Temp in Celcius = 21	Stereo Scope					Optical Properties										RI	Non-Asbestos Percentage (%)								
		Material / Location			% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals					Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	+	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
87	16B	Material	Location		0.5%	gray	hom	smooth		Chrysotile																			98
88	17A	Material	Location		0.5%	gray	hom	smooth		Chrysotile																			100
89	17B	Material	Location		0.5%	gray	hom	smooth		Chrysotile																			100
90	18A	Material	Location		0.5%	gray	hom	smooth		Chrysotile																			98
91	18B	Material	Location		0.5%	gray	hom	smooth		Chrysotile																			98

EC

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = <i>21</i>	Stereo Scope					Optical Properties							Non-Asbestos Percentage (%)							
	Material / Location		% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
<i>93</i>	<i>19A</i>	Material						Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite	<i>2</i>	<i>3</i>	<i>2</i>	<i>+</i>	<i>✓</i>	<i>✓</i>	<i>(low) (low)</i>							<i>as</i>
	Location																					
	Material							Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
<i>94</i>	<i>19B</i>	Material						Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite	<i>2</i>	<i>3</i>	<i>3</i>	<i>+</i>	<i>✓</i>	<i>✓</i>	<i>(low) (low)</i>							
	Location																					
	Material							Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
<i>95</i>	<i>20A</i>	Material						Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
	Location																					
	Material							Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
<i>96</i>	<i>20B</i>	Material						Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
	Location																					
	Material							Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
<i>97</i>	<i>21A</i>	Material						Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														
	Location																					
	Material							Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite														

*PNA**PNA*

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = 21	Stereo Scope					Optical Properties								RI	Non-Asbestos Percentage (%)							
	Material / Location		% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	⊥	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous	
22 32A	Material Location		0	2	4	7		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite										2	2	2				10
23 32B	Material Location		0	2	4	7		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite										2	2	2				10
24 33A	Material Location		0	2	4	7		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite																10
25 33B	Material Location		0	2	4	7		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite																10
26 34A	Material Location		0	2	4	7		Chrysotile Amosite Crocidolite Tremolite Anthophyllite Actinolite																10

EC

EC

Lab ID# (Lab Use Only)		Temp in Celcius = 27		Stereo Scope					Optical Properties							RI	Non-Asbestos Percentage (%)						
Field ID/ (Client Reference)	Material / Location	% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	T	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous	
27 34B	Material Location						Chrysotile Amosite Crocidolite Tremolite Anthrophyllite Actinolite																
28 35A	Material Location						Chrysotile Amosite Crocidolite Tremolite Anthrophyllite Actinolite																
29 35B	Material Location						Chrysotile Amosite Crocidolite Tremolite Anthrophyllite Actinolite																
30 36A	Material Location						Chrysotile Amosite Crocidolite Tremolite Anthrophyllite Actinolite																
31 36B	Material Location						Chrysotile Amosite Crocidolite Tremolite Anthrophyllite Actinolite																

END

[illegible]

Lab ID# (Lab Use Only)		Temp in Celcius = 81		Stereo Scope					Optical Properties							Non-Asbestos Percentage (%)						
Field ID/ (Client Reference)	Material / Location	% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	=	+	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
37	Material						Chrysotile									8						85
38	Material						Amosite									8						82
39	Material						Crocidolite									8						75
40	Material						Tremolite									8						30
41A	Material						Anthrophyllite									8						30
41B	Material						Actinolite									8						30

DUE Monday

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019 Page: 1 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com 88

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 4	12" White Floor Tile	1A		-
			↓	1B		-
			12" White Floor Tile mastic	2A		-
			↓	2B		-
			12" Gray Floor Tile	3A		-
			↓	3B		-
			12" Gray Floor Tile Adhesive	4A		-
			↓	4B		-
			Gray Core Base	5A		-
			↓	5B		-
			Gray Core Base Adhesive	6A		-
			↓	6B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples
<u>[Signature]</u>	<u>12/16/19</u>	<u>88</u>	<u>[Signature]</u>	<u>12/23/19</u>		

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

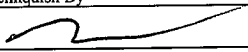
Client: VHB Date: 12/11/2019 Page: 2 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 4	Drywall	7A		-
↓		↓	↓	7B		-
			Joint Compound	8A		-
			↓	8B		-
			↓	8C		-
			Textured Ceiling	9A		-
			↓	9B		-
			↓	9C		-
			Panel Adhesive	10A		-
			↓	10B		-
			Panel Material	11A		-
↓	11B		-			

Relinquish By	Date	#Samples	Received By	Date	Time	#Samples
		88				

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019

Page: 3 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 4	Interior window Glaze	12A		-
			↓	12B		-
			1x1 Smooth Ceiling Tile	13A		-
			↓	13B		-
	Exterior	Unit 4 - East Side	Gray Door Caulking	14A		-
		↓	↓	14B		-
		Unit 4 - Roof	Field / Flash material	15A		-
		↓	↓	15B		-
	1st	Unit 6 - Main Area	Yellow Carpet Mastic	16A		-
			↓	16B		-
			White Floor Levee	17A		-
			↓	17B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019

Page: 4 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 6 main Area	Gray floor Leveles	18A		-
		↓	↓	18B		-
		Unit 6 Area 1	9" Gray Floor Tile	19A		-
			↓	19B		-
			9" Gray Floor Tile Black mastic	20A		-
			↓	20B		-
			12" white Floor Tile	21A		-
			↓	21B		-
			12" white Floor Tile Mastic	22A		-
			↓	22B		-
			12" Green floor Tile	23A		-
			↓	23B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019 Page: 5 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 6 - Area 1	12" Green Floor Tile mortar	24A		-
		↓	↓	24B		-
		Unit 6 - Bath	Ceramic Floor Tile Adhesive	25A		-
		↓	↓	25B		-
		↓	Ceramic Floor Tile Grout	26A		-
		↓	↓	26B		-
		Unit 6 - Main Area	Drywall	27A		-
		Unit 6 - Area 5	↓	27B		-
		Unit 6 - Main Area	Joint Compound	28A		-
		Unit 6 - Main Area	↓	28B		-
		Unit 6 - Area 1	↓	28C		-
		Unit 6 - Bath	↓	28D		-

Relinquish By	Date	#Samples	Received By	Date	Time	#Samples

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019 Page: 6 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 6 - Area 3	Joint Compound	28 E		-
		Unit 6 Back Area	Dry wall	29A	Ceiling	-
		↓	↓	29B		-
		↓	Joint Compound	30A		-
		↓		30B		-
		↓		30C		-
		Unit 6 - Main Area	2x4 Smooth Ceiling Tile	31A		-
		↓	↓	31B		-
		Unit 6 - Bath	2x4 Fissure Dot Ceiling Tile	32A		-
		↓	↓	32B		-
		Unit 6 - Area 1	Window Caulking	33A		-
		↓	↓	33B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

**GREEN
ENVIRONMENTAL**
Bulk Sampling Chain-of-Custody

Client: VHB Date: 12/11/2019

Page: 7 of 8

Project Address: 4 South Broadway, Salem, NH Project #: 19039

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 3 days

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
4 South Broadway	1st	Unit 6 - main Area	Black window Glaze	34A		
		↓	↓	34B		
		Unit 6 - Back Area	Interior window Glaze	35A		
		↓	↓	35B		
	Exterior	Unit 6 - West Side	Window Caulking	36A	wood frame	
		↓	↓	36B		
		Unit 6 - South Side	Exterior window Glaze	37A	Behind wood	
		↓	↓	37B		
		Unit 6 - Roof	Black Chimney Flash	38A		
			↓	38B		
			Roof Paper	39A		
			↓	39B		

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

Page: 8 of 8

Inspector: Luke Krzyzewski

TAT: 3 days

lkrzyzewski@greenenvironmental.com

296 Weymouth Street, Rockland MA 02370 - P: (617)479-0550 - F: (617) 479-5150



Appendix E



Appendix E Locations of the Identified Asbestos-Containing Materials 4 South Broadway Salem, NH		
Location	Material Description	Estimated Quantity
<i>Unit 4</i>		
Throughout	12" White Floor Tile Mastic	700 SF
Bath	Interior Window Glaze	1 Unit
Roof	Field/Flash Material	840 SF
<i>Unit 6</i>		
Room 1	9" Gray Floor Tile and Black Mastic	256 SF
Exterior - West Side	Window Caulking (on plywood)	70 LF
Exterior - West Side	Exterior Window Glaze	5 Units
Exterior - South Side	Exterior Window Glaze	12 Units
Exterior - North Side	Exterior Window Glaze	4 Units
Roof	Black Chimney Flash	10 SF
Roof	Field/Flash Material (Trace <1%)	950 SF
Notes:	1. SF = Square Feet 2. LF = Linear Feet 3. Unit = Each	



Appendix F





Titan Lead Testing, LLC
PO Box 760709
Melrose, MA 02176

Tel: 781-799-8763
Fax: 781-662-3300

December 31, 2019
Luke Krzyzewski
Green Environmental
296 Weymouth St., Unit C
Rockland, MA 02370

RE: Lead Paint Testing Results
4-6 South Broadway
Salem, New Hampshire

Dear Mr. Krzyzewski:

This report presents the results of testing for the presence of lead paint on interior painted at 4-6 South Broadway, Salem, New Hampshire. Representative of Titan Lead Testing (Titan), Mr. David Pesce performed the testing on December 12, 2019 and December 13, 2019. Mr. Pesce is manufacturer's-trained in the proper use and interpretation of results of the XRF Spectrum Analyzer. Mr. Pesce is also a New Hampshire Department of Health and Human Services licensed Lead Inspector and Risk Assessor (Lic # RA-00059).

Scope of Work

The purpose of the lead testing was to determine the lead content of various painted building substrates prior to renovation and demolition activities. Selected relevant accessible painted surfaces were tested by Titan. Concentrations of lead in paint were measured on site by portable XRF analysis.

Sampling Protocol

The lead content of painted surfaces was determined using a portable X-ray Fluorescence (XRF) Spectrum Analyzer (HEURESIS Pb200i; Serial # 1645). The XRF Spectrum Analyzer uses a radioactive source to excite the electrons of lead atoms (if present) in paints. As the lead atom electrons return to their normal state, they emit X-rays, which are counted by the XRF Spectrum Analyzer. This data is processed and the results are converted to milligrams of lead per square centimeter (mg/cm^2) of sampled surface area.

Results

The XRF testing results indicate that levels of lead on surfaces tested range from less than $0.1 \text{ mg}/\text{cm}^2$ (lower limit of quantification of the XRF) to $9.6 \text{ mg}/\text{cm}^2$. Renovation and demolition activities that impact surfaces where lead may be present require specific work practices and disposal requirements. A summary of the lead testing results is attached.

Recommendations

The employer of workers who disturb or remove lead paint must comply with OSHA Standard 29 CFR 1926.62 - Lead. This applies to all construction work, alteration, or repair, including painting, where an employee may be occupationally exposed to lead. This standard does not establish a minimum threshold for the lead content, below which an initial exposure assessment is not required. An initial exposure assessment is required for each renovation or demolition activity that will disturb lead. This standard also contains additional requirements concerning the disturbance or removal of lead.

Limitations

Lead paint testing was performed on representative building substrates in selected building areas. Additional lead-containing building substrates and components may be present in other building areas or hidden by floor, wall and ceiling finishes or otherwise may be inaccessible.

Lead paint testing was performed to determine the lead content of painted building components that may be impacted by renovation activities and should **not** be used to determine compliance with the New Hampshire Lead Paint Poisoning Prevention and Control Act (RSA 130-A)

Please call if you have any questions or require additional information.

Sincerely,

A handwritten signature in blue ink that reads "David Pesce". The signature is fluid and cursive, with the first name "David" and last name "Pesce" clearly legible.

David Pesce

Attachment

ATTACHMENT

LEAD TESTING RESULTS BY XRF

Lead Paint Testing Results by XRF
4-6 South Broadway
Salem, New Hampshire
December 12-13, 2019

Room/Area	Location/Component	Color	Substrate	Results (mg/cm ²)
6 - Entryway	Wall	Beige	Gypsum	< 0.1
6 - Entryway	Railing	White	Wood	< 0.1
6 - Entryway	Door	Gray	Metal	< 0.1
6 - Entryway	Door Frame	Gray	Metal	0.2
6 - Entryway	Door	White	Wood	< 0.1
6 - Entryway	Door Casing	White	Wood	< 0.1
6 - Entryway	Cubbies	White	Wood	< 0.1
6 - Entryway	Baseboard	White	Wood	< 0.1
6 - Entryway	Lower Wall	Beige	Gypsum	< 0.1
6 - Entryway	Wall Trim	White	Wood	< 0.1
6 - Entryway	Window Sash	Gray	Metal	< 0.1
6 - Entryway	Ceiling	Beige	Plaster	< 0.1
6 - Entryway	Beam	Beige	Wood	< 0.1
6 - Main Room	Wall	Beige	Gypsum	< 0.1
6 - Main Room	Door	White	Wood	< 0.1
6 - Main Room	Door Casing	White	Wood	< 0.1
6 - Main Room	Lower Wall	White	Wood	< 0.1
6 - Main Room	Floor	Gray	Concrete	< 0.1
6 - Main Room	Step	Beige	Wood	< 0.1
6 - Main Room	Door	White	Metal	< 0.1
6 - Main Room	Door Frame	White	Metal	< 0.1
6 - Main Room	Ceiling	White	Gypsum	< 0.1
6 - Front Office	Wall	Beige	Gypsum	< 0.1
6 - Front Office	Floor	Green	Concrete	0.2
6 - Front Office	Door	White	Wood	< 0.1
6 - Front Office	Door Casing	White	Wood	< 0.1
6 - Front Office	Window Sash	White	Wood	2.8
6 - Front Office	Window Casing	White	Wood	< 0.1
6 - Front Office	Ceiling	Beige	Gypsum	< 0.1
6 - Front Office	Beam	Beige	Wood	< 0.1
6- Bathroom	Wall	Beige	Gypsum	< 0.1
6- Bathroom	Ceiling	White	Gypsum	< 0.1
6- Bathroom	Door	White	Wood	< 0.1
6- Bathroom	Door Casing	White	Wood	< 0.1
6- Bathroom	Baseboard	White	Wood	< 0.1
6- Bathroom	Cabinet	Brown	Wood	< 0.1
6- Boiler Room	Column	White	Wood	5.6

Lead Paint Testing Results by XRF
4-6 South Broadway
Salem, New Hampshire
December 12-13, 2019

Room/Area	Location/Component	Color	Substrate	Results (mg/cm ²)
6- Boiler Room	Door Frame	White	Wood	5.1
4 - Front Room	Wall	Beige	Gypsum	< 0.1
4 - Front Room	Lower Wall	Brown	Gypsum	< 0.1
4 - Front Room	Cabinet	Beige	Wood	< 0.1
4 - Front Room	Column	Beige	Metal	< 0.1
4 - Front Room	Ceiling	White	Gypsum	< 0.1
4 - Front Room	Shelf	Red	Metal	< 0.1
4 - Front Room	Door	Gray	Metal	< 0.1
4 - Front Room	Door Frame	Gray	Metal	< 0.1
4 - Front Room	Window Sash	Gray	Metal	< 0.1
4 - Back Room	Wall	White	Gypsum	< 0.1
4 - Back Room	Wall Panel	White	Vinyl	< 0.1
4 - Back Room	Wall	Gray	Metal	< 0.1
4 - Back Room	Sink	Gray	Metal	< 0.1
4 - Back Room	Door	White	Wood	< 0.1
4 - Back Room	Door Casing	White	Wood	< 0.1
4 - Back Room	Shelf	White	Wood	0.2
4 - Back Room	Pipe Chase	White	Wood	0.2
4 - Back Room	Shelf	White	Metal	< 0.1
4 - Back Room	Ceiling Tile	White	Wood	< 0.1
4 - Bathroom	Wall	Brown	Wood	< 0.1
4 - Bathroom	Wall Panel	White	Wood	< 0.1
4 - Bathroom	Door	White	Wood	< 0.1
4 - Bathroom	Door Casing	White	Wood	< 0.1
4 - Bathroom	Door Jamb	White	Wood	< 0.1
4 - Bathroom	Window Sash	Brown	Metal	< 0.1
4-6 Exterior	Brick	White	Brick	< 0.1
4-6 Exterior	Window Sill	Brown	Concrete	< 0.1
4-6 Exterior	Window Frame	Brown	Metal	< 0.1
4-6 Exterior	Window Sash	Gray	Metal	< 0.1
4-6 Exterior	Lower Trim	White	Wood	< 0.1
4-6 Exterior	Window Sill	Brown	Metal	< 0.1
4-6 Exterior	Blacks	White	Concrete	< 0.1
4-6 Exterior	Door	Gray	Metal	< 0.1
4-6 Exterior	Door Frame	Gray	Metal	< 0.1
4-6 Exterior	Door Casing	Brown	Wood	4.6
4-6 Exterior	Foundation	White	Concrete	0.3

Lead Paint Testing Results by XRF
4-6 South Broadway
Salem, New Hampshire
December 12-13, 2019

Room/Area	Location/Component	Color	Substrate	Results (mg/cm ²)
4-6 Exterior	Window Sill	Brown	Wood	6.6
4-6 Exterior	Window Sash	Brown	Wood	6.1
4-6 Exterior	Window Casing	Brown	Wood	3.9
4-6 Exterior	Upper Trim	Brown	Wood	8.4
4-6 Exterior	Blocks	Brown	Concrete	0.2
4-6 Exterior	Foundation	Brown	Concrete	< 0.1
4-6 Exterior	Window Casing	Brown	Wood	8.6
4-6 Exterior	Conduit	Brown	Metal	0.3
4-6 Exterior	Upper Trim	Black	Wood	9.6
4-6 Exterior	Window Casing	Green	Wood	5.4
4-6 Exterior	T-111 Paneling	Brown	Wood	< 0.1
4-6 Exterior	Door	White	Metal	< 0.1
4-6 Exterior	Door Casing	White	Wood	< 0.1
4-6 Exterior	Column	Brown	Wood	< 0.1

- <0.1 = less than the limit of quantification of the XRF.
- mg/cm² = milligrams of lead per square centimeter of sampled surface area.



Appendix G



Appendix G Locations of the Regulated Materials 4 South Broadway Salem, NH		
Location	Material Description	Quantity
<i>Unit 4</i>		
Throughout	4' Fluorescent Tubes	40
	PCB/Non-PCB Containing Ballasts	16
	Exit Sign	1
<i>Unit 6</i>		
Throughout	4' Fluorescent Tubes	54
	8' Fluorescent Tubes	20
	PCB/Non-PCB Containing Ballasts	25
	Emergency Light/Exit Sign	2