

AHERA Three-Year Re-inspection

At the

**Walnut Square Elementary School**  
645 Main Street  
Haverhill, MA 01830

**HUB TESTING LABORATORY, INC.**

Environmental Testing Service

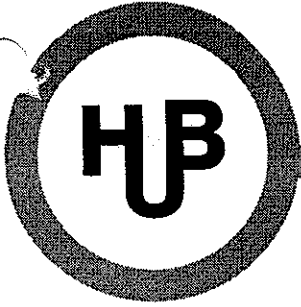


---

95 Beaver Street - Waltham, MA 02453  
(781) 893-8330 (781) 893-4414 (fax)

# HUB TESTING LABORATORY, INC.

Environmental Testing Service



95 Beaver Street - Waltham, MA 02453  
(781) 893-8330 (781) 893-4414 (fax)


REPORT FOR: Haverhill Public School District  
Central Administration  
4 Summer Street  
Room 104  
Haverhill, MA 01830

ATTENTION: Mr. Tom Geary  
Supervisor of Energy & Maintenance

PROJECT: AHERA 3-Year Re-Inspection

SUBJECT: Walnut Square Elementary School  
645 Main Street  
Haverhill, MA 01830

PREPARED BY: Hub Testing Laboratory, Inc.

  
Susan Boyle  
Projects Manager  
Management Planner  
MA License No.: AP060147

DATE: April 2011



# HUB TESTING LABORATORY, INC.

Environmental Testing Service

95 Beaver Street - Waltham, MA 02453  
(781) 893-8330 (781) 893-4414 (fax)

REPORT FOR: Haverhill Public School District  
4 Summer Street  
Haverhill, MA 01830

ATTENTION: Mr. Tom Geary  
Supervisor of Energy and Maintenance

PROJECT: Walnut Square Elementary School  
645 Main Street  
Haverhill, MA 01830

SUBJECT: AHERA Three-Year Re-inspection

DATE: April 2011

As required by the US Environmental Protection Agency's AHERA regulations, Hub Testing Laboratory has completed a survey and reassessment of asbestos containing materials in the Walnut Square Elementary School of the Haverhill Public School District. This report summarizes the locations and condition of materials remaining in the school and reviews the ongoing responsibilities of the Local Education Authority (LEA) pertaining to the building. Lynne Whitcraft (AI 61691) performed the inspection in April of 2011.

When sampling of suspect asbestos-containing materials was required, samples representative of the material were taken. Samples of thermal systems insulation and miscellaneous materials were collected in unobtrusive locations. Samples of surfacing materials were collected using the guidance document method for random sampling.

This latest survey report should be incorporated into the files that the LEA maintains, pertaining to response actions, operations & maintenance activities, six month reinspection, training, air sampling and major asbestos activities.

## SUMMARY OF AHERA RE-INSPECTION

The re-inspection consisted of reviewing previous documentation available, interviewing building personnel, and performing a thorough survey of each functional space in the building. The following sections summarize the current re-inspection, the presence of suspect or proven ACM in the building, any damage to the ACM, and response action proposals.

## CURRENT FINDINGS

### **MATERIALS FROM PREVIOUS INSPECTION**

During the previous three-year AHERA inspection of the Walnut Square Elementary School in 2000, the following materials were identified as either containing asbestos or assumed to contain asbestos (identified with an asterisk (\*)). The list is classified by material. Any change in the condition or presence of the material discovered in the current re-inspection is noted here.

1. Boiler breeching \*

*Location:* Boiler room

*Quantity:* ≈ 75 SF

*Condition:* Not damaged

2. 9x9 White floor tile w/ blue flecks

*Location:* Rooms 1 - 3

*Quantity:* ≈ 2400 SF

*Condition:* Damaged

3. Mastic associated with floor tile \*

*Location:* Rooms 1 - 3

*Quantity:* ≈ 2400 SF

*Condition:* Not damaged

4. Yellow pebbled linoleum\*

*Location:* Kindergarten bathrooms

*Quantity:* ≈ 120 SF

*Condition:* Not damaged

5. Brown cove base \*

*Location:* Kindergarten bathrooms

*Quantity:* ≈ 30 LF

*Condition:* Not damaged

6. Dark brown cove base \*

*Location:* Art room

*Quantity:* ≈ 25 LF

*Condition:* Not damaged

7. Mastic associated with cove base \*

*Location:* Kindergarten bathrooms & art room

*Quantity:* ≈ 15 LF

*Condition:* Not damaged

**NEW MATERIALS SINCE PREVIOUS INSPECTION**

The following homogeneous materials were newly identified during the current three-year AHERA inspection. The list is organized by material and all materials are assumed ACM at this time. All homogeneous materials not previously identified must be sampled and identified as ACM or non-ACM prior to any demolition or renovation in the area.

1. 1x1 Smooth spline ceiling tile

*Location:* Storage room after girl's bathroom (basement)

*Quantity:* ≈ 1444 SF

*Condition:* Damaged

2. 2x2 Random small fissured ceiling tile

*Location:* Rooms 5A & 8A

*Condition:* Significantly damaged

3. Glazing/caulking associated with window walls

*Location:* Window walls

*Condition:* Not damaged

4. Sheetrock

*Location:* Old art room, girls bathroom, boys bathroom, cafeteria & room 21

*Quantity:*  $\approx$  4600 SF

*Condition:* Damaged

5. Joint compound

*Location:* Associated with sheetrock

*Condition:* Not damaged

6. Adhesive behind wall covering

*Location:* Kindergarten bathrooms

*Quantity:*  $\approx$  250 SF

*Condition:* Damaged

7. Black adhesive

*Location:* On paper backing of fiberglass insulation

*Quantity:*  $\approx$  700 SF

*Condition:* Not damaged

8. Roof paper

*Location:* Accessible though side storage rooms

*Quantity:*  $\approx$  700 SF

*Condition:* Damaged

9. Boiler insulation

*Location:* boiler room

*Condition:* Not damaged

**SUSPECT ACM FOUND NOT TO CONTAIN ASBESTOS**

The following materials were sampled, analyzed and found not to contain asbestos.

1. Blown-in insulation
2. Ceiling plaster
3. Wall plaster
4. 2x4 Ceiling tile
5. Stair tread & associated mastic

**ACTION SHEET**

Based on the current three-year AHERA Re-inspection of the Walnut Square Elementary School, the following actions for ongoing asbestos management in the school are recommended.

**SIX-MONTH SURVEILLANCE**

Every six months a periodic surveillance of known and assumed asbestos-containing materials in the school must be conducted and documented. The chart included in this report may be used for the documentation. Use the right hand columns to indicate changes in a material's condition or quantity, and explain the changes in the comment section at the bottom of each page. Fill out the date of the survey and the signature of the person who conducted it at the end of the chart.

**TRAINING**

In the event that the LEA's Designated Person changes, or new maintenance personnel are hired, the LEA must have Asbestos Awareness Training provided for these individuals.

Staff has some knowledge of asbestos containing materials in their schools however if training has not been reviewed in a number of years this should be conducted again.

## **RECORDKEEPING**

Continue to update files pertaining to:

- a. Training/Licensing of school personnel
- b. Notifications
- c. Response Actions
- d. Re-inspections

## **LABELING**

All friable asbestos containing materials must be maintained with identifying labels. The labels can help to prevent the entry of untrained and unprotected personnel into areas, which may have been contaminated.

CAUTION  
ASBESTOS. HAZARDOUS.  
DO NOT DISTURB  
WITHOUT PROPER  
TRAINING AND EQUIPMENT

## **CLEANING**

In the case that friable materials become damaged in an occupied space, the materials should be repaired and debris cleaned by qualified trained personnel with proper cleaning equipment and personal protective equipment.

## **RECOMMENDED RESPONSE ACTIONS**

All known and assumed asbestos-containing materials must be monitored for any change in condition. Every precaution and extreme care should be taken to keep these materials in an undamaged condition. In the event that a material is damaged, the appropriate response action should be taken to deal with the situation. Proposed response actions are based on the inspector's visual assessment of ACM according to AHERA assessment categories and risk assessment categories. These categories are detailed on the attached chart. All response actions should be implemented in a timely manner and must be designed by an accredited Asbestos Abatement Designer.

## **FLOOR TILES**

All efforts should be taken to prevent the further cracking and delamination of the asbestos-containing floor tiles in the building. No removal or significant repair is necessary at this time, however funding should be appropriated for future needs. The condition of the floor tiles should be



monitored during the six-month surveillances, which is performed as required by a knowledgeable person. This process will aid in documenting when tiles become broken and to determine when and where significantly damaged tiles need to be replaced.

#### **THERMAL SYSTEMS INSULATION (TSI)**

Care should be taken not to disturb insulation.

#### **ASSUMED MATERIALS**

The majority of the materials identified during the re-inspection are assumed. Until such time as these materials are sampled and determined to be asbestos containing or not, they must be treated as asbestos containing. All efforts should be taken not to disturb the assumed materials. The 2x2 ceiling tiles are significantly damaged and therefore should be sampled to determine if they are asbestos containing. Funding should also start to be appropriated so that sampling can occur as needed. The condition of the materials should be monitored during the six-month surveillances, which is performed as required by a knowledgeable person.

#### **ASSOCIATED COSTS**

1. Sample 2x2 ceiling tiles
2. Appropriate funding into account for future sampling.
3. As custodial & maintenance personnel have changes, provide awareness training (\$1,800 for all schools)

Approximate funds: \$3,000.00

All work beyond the capabilities of a trained and licensed in house O&M maintenance person must be performed by a licensed and qualified asbestos removal contractor. A licensed Project Designer must design all abatement projects outside of O&M.

### 3 YEAR RE-INSPECTION Walnut Square Elementary School April 2011

#### ASSUMED AND PROVEN ASBESTOS-CONTAINING MATERIALS

Material & Amount	Location	Type & Friability	Assessment (ND, D, SD), (PD, PSD), (L, M, H)	Type/% Asbestos & # of Samples	Comment	Six Month Surveillances & Re-inspections					
						6-mo.	12-mo.	18-mo.	24-mo.	30-mo.	3-YR
Boiler Breaching ≈ 75 SF	Boiler room	TSI, F	ND, PD, M								C
9x9 White floor tile w/ blue flecks ≈ 2400 SF	Rooms 1 - 3	M, NF	D, PD, M	WS21	This material is a presumed material. Two more samples should be collected to prove material is non-asbestos.						C
Associated black mastic ≈ 2400 SF		M, NF	ND, PD, M		This material is a presumed material.						C
Yellow pebbled linoleum ≈ 60 SF (each)	Kindergarten Bathrooms	M, NF	ND, PD, L		This material is a presumed material						C
Brown cove base ≈ 30 LF (each)	Kindergarten Bathrooms	M, NF	ND, PD, L		This material is a presumed material						C
Dark brown cove base ≈ 25 LF	Art Room	M, NF	ND, PD, L		This material is a presumed material						C

Comments: \* Indicates previously sampled material from original inspection.

- Key**
- Amount**  
 SF - square feet  
 LF - linear feet
- Friability**  
 F - friable  
 NF - not friable
- Assessment**  
 ND - not damaged  
 D - damage  
 SD - significantly damaged  
 PD - potential for damage  
 PSD - potential for significant damage
- Type**  
 T - TSI  
 S - surfacing  
 M - misc.
- Access**  
 L - low access.  
 M - medium access.  
 H - high accessibility

**Six Month Surveillance & Re-inspections**

Fill in the corresponding box with a ✓ for no change in condition or a C for a change in the status of a material. Write details about changes in the comment area below the chart on the same page. The person conducting the surveillance must sign and date below.

6-mo. Date:	18-mo. Date:	Signature:	Signature:
12-mo. Date:	24-mo. Date:	Signature:	Signature:
30-mo. Date:	3-YR Re-inspect Date: 4/2011	Signature:	Signature: <i>Dynne Wintje</i>

# 3 YEAR RE-INSPECTION

## Walnut Square Elementary School

April 2011

### ASSUMED AND PROVEN ASBESTOS-CONTAINING MATERIALS

Material & Amount	Location	Type & Friability	Assessment (ND, D, SD), (PD, PSD), (L, M, H)	Type/% Asbestos & # of Samples	Comment	Six Month Surveillances & Re-inspections					
						6-mo.	12-mo.	18-mo.	24-mo.	30-mo.	3-YR
Cove base mastic ≈ 15 SF	Art Room, Kindergarten Bathrooms	M, NF	ND, PD, L		This material is a presumed material						C
1x1 Smooth spline ceiling tile ≈ 1444 SF	Storage room after girls bathroom	M, F	D, PD, L		New material identified.						C
2x2 Random small fissured ceiling tile	Rooms 5A & 8A	M, F	SD, PD, H		New material identified. Installed in 2001. Obtain MSDS sheets or sample.						C
Glazing/Caulking	Interior window walls	M, NF	ND, PD, L		New material identified.						C
Sheetrock ≈ 4600 SF	Old art room, girls bathroom, boys bathroom, cafeteria & room 21	M, NF	D, PD, L		New material identified.						C
Joint compound	Associated with sheetrock	M, NF	ND, PD, L		New material identified.						C
Adhesive behind wall covering ≈ 250 SF	Kindergarten bathrooms	M, NF	ND, PD, L		New material identified.						C

Comments: \* Indicates previously sampled material from original inspection.

**Key**  
**Amount**  
 SF - square feet  
 LF - linear feet  
**Friability**  
 F - friable  
 NF - not friable  
**Assessment**  
 ND - not damaged  
 D - damage  
 SD - significantly damaged  
 PD - potential for damage  
 PSD - potential for significant damage  
**Type**  
 T - TSI  
 S - surfacing  
 M - misc.  
 L - low access.  
 M - medium access.  
 H - high accessibility

#### Six Month Surveillance & Re-inspections

Fill in the corresponding box with a ✓ for no change in condition or a C for a change in the status of a material. Write details about changes in the comment area below the chart on the same page. The person conducting the surveillance must sign and date below.

6-mo. Date:	18-mo. Date:	Signature:	Signature:
12-mo. Date:	24-mo. Date:	Signature:	Signature:
30-mo. Date:	3-YR Re-inspect: 4/2011	Signature: <i>Deyme Wumpf</i>	Signature:

### 3 YEAR RE-INSPECTION

## Walnut Square Elementary School

April 2011

#### ASSUMED AND PROVEN ASBESTOS-CONTAINING MATERIALS

Material & Amount	Location	Type & Friability	Assessment (ND, D, SD), (PD, PSD), (L, M, H)	Type/% Asbestos & # of Samples	Comment	Six Month Surveillances & Re-inspections					
						6-mo.	12-mo.	18-mo.	24-mo.	30-mo.	3-YR
Black adhesive ≈ 700 SF	On paper backing of fiberglass insulation	M, F	ND, PD, L		New material identified.						C
Roof paper ≈ 700 SF	Accessible through side storage rooms	M, F	D, PD, L		New material identified.						C
Boiler insulation	Boiler room	TSL, F	ND, PD, M		HB Smith # N88950						C

#### MATERIALS THAT HAVE BEEN ABATED/REMOVED OR PROVEN TO NOT CONTAIN ASBESTOS

Material	Location	Samples	Comment
Blown-in Insulation (≈ 3200 SF)	Attic		Visually identified as fiberglass.
2x 4 Ceiling tile (≈ 3000 SF)	Rooms 5 and 21	WS 04, 05, 06	Previously sampled and found not to be asbestos containing
Ceiling Plaster (≈ 19,000 SF)	Rooms 1, 1A - C, 2 - 4, 4A - C, 5B, 5C, 6, 6C, 7, 7C, 8, 8A - C, 9, 9B, 9C, 10 - 20.	WS 1, 2, 3, 9, 10, 13, 17	Previously sampled and found not to be asbestos containing
Wall Plaster (≈ 6400 SF)	Rooms 1A - C, 2 - 4, 4A, 5, 5A - C, 6, 6C, 7, 7C, 8, 8A-C, 9, 9B, 9C, 21	WS 7, 8, 11, 12, 14, 22 Hub ID: 13246-8-6	Previously sampled and found not to be asbestos containing

**Key**

**Amount**  
 SF - square feet  
 LF - linear feet

**Friability**  
 F - friable  
 NF - not friable

**Assessment**  
 ND - not damaged  
 D - damage  
 SD - significantly damaged  
 PD - potential for damage  
 PSD - potential for significant damage  
 L - low access.  
 M - medium access.  
 H - high accessibility

**Comments:** \* Indicates previously sampled material from original inspection.

**Six Month Surveillance & Re-inspections**

Fill in the corresponding box with a ✓ for no change in condition or a C for a change in the status of a material. Write details about changes in the comment area below the chart on the same page. The person conducting the surveillance must sign and date below.

6-mo. Date:	Signature:	18-mo. Date:	Signature:
12-mo. Date:	Signature:	24-mo. Date:	Signature:
30-mo. Date:	Signature:	3-YR Re-inspect: 4/2011	Signature: <i>Rymel Umph</i>

### 3 YEAR RE-INSPECTION Walnut Square Elementary School April 2011

MATERIALS THAT HAVE BEEN ABATED/REMOVED OR PROVEN TO NOT CONTAIN ASBESTOS		
Material	Location	Samples
Stair Tread & associated mastic (≈ 640 SF)	Throughout	Hub ID 13129-1, 13129-2, 13129-3, 13129-4, 13129-5, 13129-6
12x12 Beige floor tile w/ streaks	Art room	Hub ID 20912-1A, 20912-1B, & 20912-1C
12x12 Green mottled floor tile	Art room	Hub ID 20912-2A, 20912-2B, & 20912-2C
Off white mastic associated with above floor tiles	Art room	Hub ID 20912-3A, 20912-3B, & 20912-3C

Comment

Previously sampled and found not to be asbestos containing  
 Previously sampled and found not to be asbestos containing. Flooring was removed.  
 Previously sampled and found not to be asbestos containing. Flooring was removed.  
 Previously sampled and found not to be asbestos containing

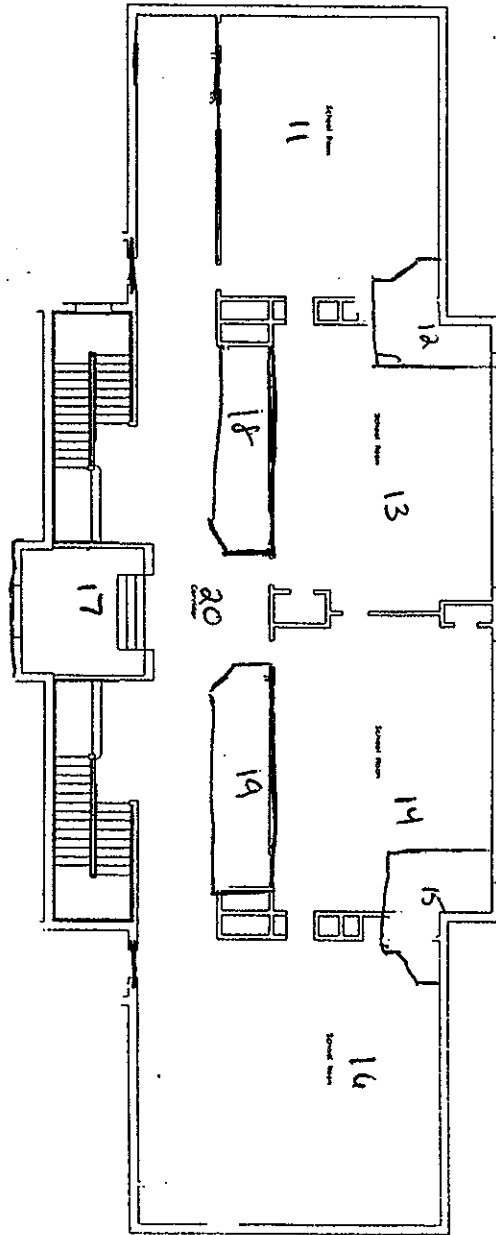
Comments: \* Indicates previously sampled material from original inspection.

- Key**
- Amount**
  - SF – square feet
  - LF – linear feet
  - Friability**
  - F – friable
  - NF – not friable
  - Assessment**
  - L – low access.
  - M – medium access.
  - H – high accessibility
  - Type**
  - T – TSI
  - S – surfacing
  - M – misc.
  - Assessment**
  - ND – not damaged
  - D – damage
  - SD – significantly damaged
  - PD – potential for damage
  - PSD – potential for significant damage

**Six Month Surveillance & Re-inspections**  
 Fill in the corresponding box with a ✓ for no change in condition or a C for a change in the status of a material. Write details about changes in the comment area below the chart on the same page. The person conducting the surveillance must sign and date below.

6-mo. Date:	18-mo. Date:	Signature:
12-mo. Date:	24-mo. Date:	Signature:
30-mo. Date:	3-YR Re-inspect: 4/2011	Signature: <i>Dymme W. G. [Signature]</i>

WALNUT SQUARE ELEMENTARY SCHOOL - BASEMENT PLAN

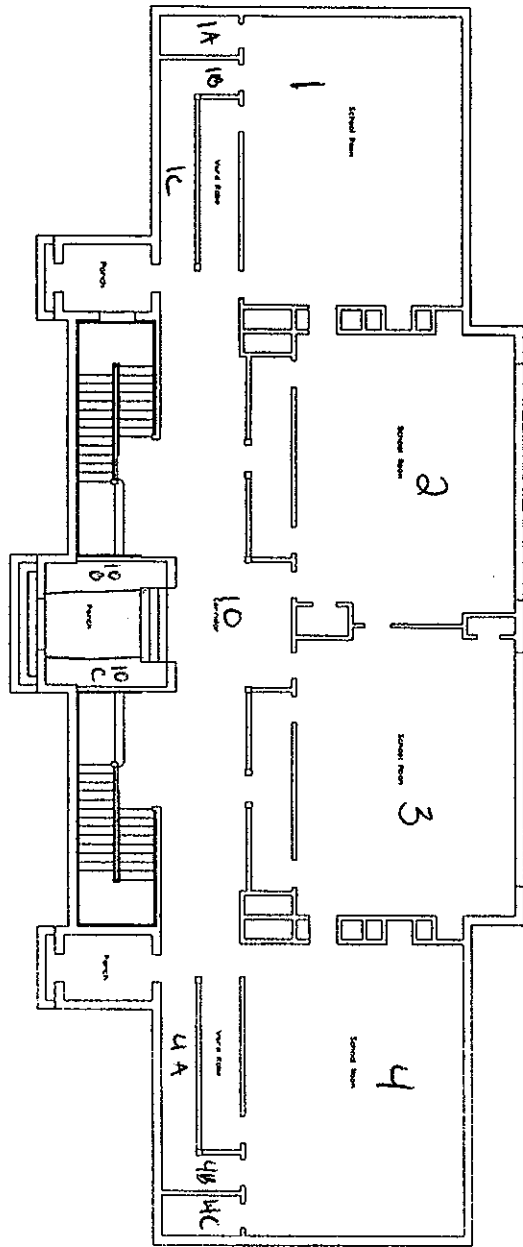


**02**  
 EXISTING  
 BASEMENT PLAN  
 DATE: 11/11/09  
 DRAWN BY: [illegible]  
 CHECKED BY: [illegible]  
 DATE: 11/11/09

**WALNUT SQUARE ELEMENTARY SCHOOL**  
 645 MAIN STREET - HAVERHILL, MASS.

ARCAD, INC.  
 ARCHITECTS, PLANNERS  
 100 WASHINGTON STREET  
 HAVERHILL, MA 01830  
 TEL: 978.371.1000  
 FAX: 978.371.1001  
 WWW.ARCAD.COM

WALNUT SQUARE ELEMENTARY SCHOOL - BASEMENT PLAN  
1st

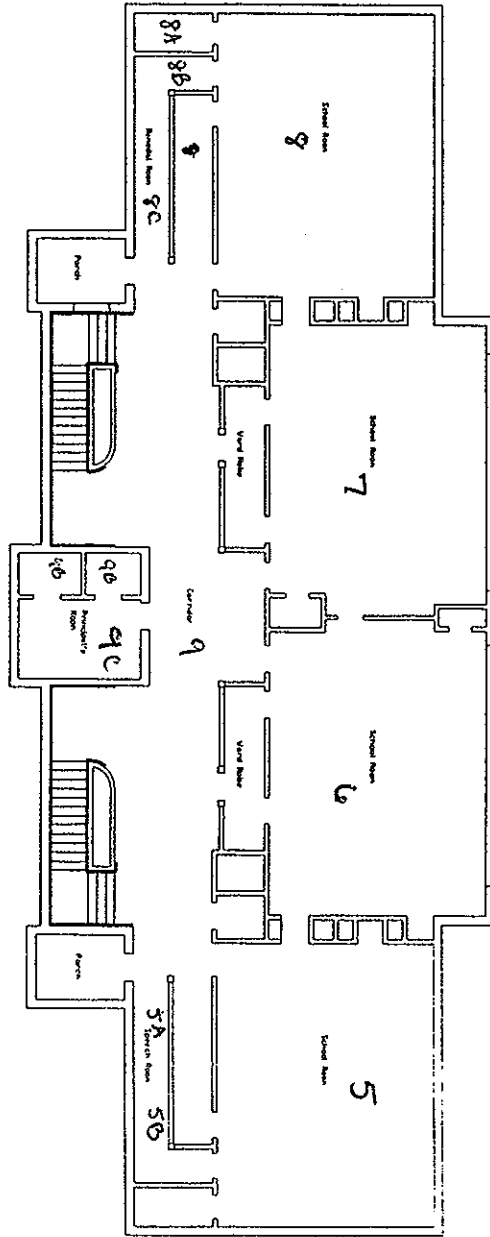


A102  
 EXISTING  
 BASEMENT PLAN  
 1st

**WALNUT SQUARE ELEMENTARY SCHOOL**  
 645 MAIN STREET · HAVERHILL, MASS.

ARCADD, INC.  
 ARCHITECTURE PLANNING  
 ENGINEERING & INTERIORS  
 100 WASHINGTON STREET  
 HAVERHILL, MASS. 01830  
 OFFICE (978) 866-1100  
 FAX (978) 866-1100  
 WEB PAGE: HTTP://WWW.ARCADD.COM

WALNUT SQUARE ELEMENTARY SCHOOL - THREE-FOOTER PLAN  
2nd



A103  
 DRAWN BY: J. M. B. 2.04.07  
 CHECKED BY: J. M. B. 2.04.07  
 DATE: 02/04/07

EXISTING FIRST FLOOR PLAN  
 SCALE: 1/8" = 1'-0"  
 DATE: 02/04/07

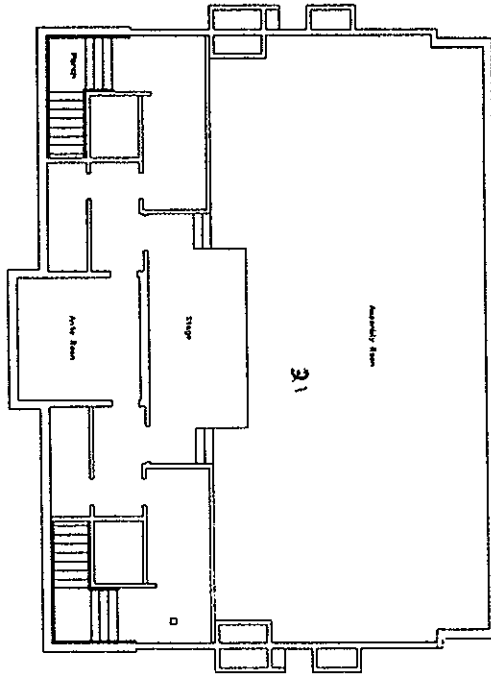
**WALNUT SQUARE ELEMENTARY SCHOOL**  
 645 MAIN STREET - HAVERHILL, MASS.

ARCADD, INC.  
 ARCHITECTS  
 100 STATE STREET, SUITE 200  
 HAVERHILL, MASSACHUSETTS 01830  
 TEL: 978.375.1100  
 FAX: 978.375.1101  
 WEB PAGE: HTTP://WWW.ARCADD.COM

2nd



WALNUT SQUARE ELEMENTARY SCHOOL - ~~SECOND~~ FLOOR PLAN  
 Third



Attic

Attic

A104  
 DATE: 11/11/11  
 DRAWN BY: [illegible]  
 CHECKED BY: [illegible]  
 SCALE: 1/8" = 1'-0"

EXISTING SECOND  
 FLOOR PLAN  
 DATE: 11/11/11  
 DRAWN BY: [illegible]  
 CHECKED BY: [illegible]  
 SCALE: 1/8" = 1'-0"

**WALNUT SQUARE ELEMENTARY SCHOOL**  
 645 MAIN STREET - HAVERHILL, MASS.

third

**ARCADD, INC.**  
 ARCHITECTURAL, PLANNING  
 & INTERIOR DESIGN  
 1000 WASHINGTON STREET  
 SUITE 2000  
 BOSTON, MA 02111  
 TEL: (617) 552-2000  
 FAX: (617) 552-2005  
 WWW.PAGE: 617-779-2000



**HUB TESTING LABORATORY, INC.**  
**Environmental Testing Service**

**95 Beaver Street - Waltham, MA 02453**  
**(781) 893-8330 (781) 893-4414 (fax)**

April 5, 2010

Report For: Haverhill Public Schools  
Attn: Jeff Dill  
4 Summer Street  
Haverhill, MA 01830-5877

Hub I.D.: 20912

Project: Walnut Square School

Date Collected: April 15, 2010

Scope: During the most recent three-year inspection, damaged floor tile was noted in the Art room in the basement. Samples of the flooring including mastic were collected as the school was thinking about having the floor removed and replaced. Nine samples of suspect material were collected by Hub Testing Laboratory. It was requested that the samples be analyzed for the presence of asbestos.

Analysis: Analysis for the presence of asbestos was performed using Polarized Light Microscopy EPA/600/R-93/116, July 1993.

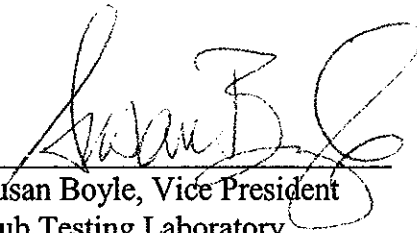
Results:	<u>Sample ID</u>	<u>Material/Location</u>	<u>Composition</u>	<u>%</u>
	20912-1A	12x12 Beige floor tile with streaks, Art room Color: Off White	Non-fibrous	100
	20912-1B	12x12 Beige floor tile with streaks, Art room Color: Off White	Non-fibrous	100
	20912-1C	12x12 Beige floor tile with streaks, Art room Color: Off White	Non-fibrous	100

Results:	<u>Sample ID</u>	<u>Material/Location</u>	<u>Composition</u>	<u>%</u>
	20912-2A	12x12 Green mottled floor tile, Art room Color: Light green	Non-fibrous	100
	20912-2B	12x12 Green mottled floor tile, Art room Color: Light green	Non-fibrous	100
	20912-2C	12x12 Green mottled floor tile, Art room Color: Light green	Non-fibrous	100
	20912-3A	Associated mastic Color: Off white	Non-fibrous	100
	20912-3B	Associated mastic Color: Off white	Non-fibrous	100
	20912-3C	Associated mastic Color: Off white	Non-fibrous	100

NVLAP 1150

**Condition:** All samples were received in good condition.

**Comment:** No asbestos was detected in the samples submitted. This analysis pertains only to the samples analyzed. This report shall not be reproduced except in full, without the written approval of the laboratory.

  
 \_\_\_\_\_  
 Susan Boyle, Vice President  
 Hub Testing Laboratory