

AHERA Three-Year Re-inspection

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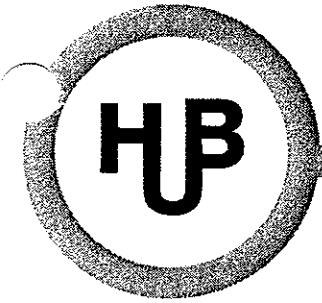
Crowell Elementary School
26 Belmont Avenue
Haverhill, MA 01830

HUB TESTING LABORATORY, INC.

Environmental Testing Service



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



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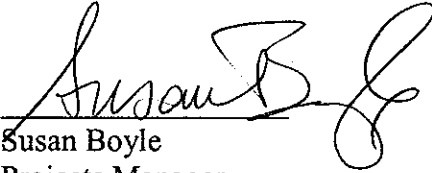
REPORT FOR: Haverhill Public School District
Central Administration
4 Summer Street
Room 104
Haverhill, MA 01830

ATTENTION: Mr. Tom Geary
Supervisor of Energy & Maintenance

PROJECT: AHERA 3-Year Re-Inspection

SUBJECT: Crowell Elementary School
26 Belmont Ave.
Haverhill, MA 01830

PREPARED BY: Hub Testing Laboratory, Inc.


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

DATE: April 2011

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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 Crowell 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 Crowell 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. Pipe insulation

Location: Rooms 1, 2, 3, 4, 8, 9, 9A, 11, 10A

Quantity: \approx 740 LF

Condition: Not damaged (Removed from room 5 (boiler room))

2. Pipe Fittings *

Location: Associated with pipe insulation

Quantity: \approx 86 fittings

Condition: Not damaged (Removed from room 5 (boiler room))

3. Bulletin board *

Location: Rooms 104, 202

Quantity: \approx 125 SF (each)

Note: Material could not be located during recent inspection

4. 12x12 White/gray mottled floor tile *

Location: Cafeteria

Quantity: \approx 240 SF

Condition: Not damaged

5. Mastic associated with floor tiles *

Location: Cafeteria

Condition: Not damaged

6. Yellow swirled linoleum *

Location: Bathroom of temporary building

Quantity: \approx 160 SF

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. Exterior caulking

Location: Windows

Condition: Damaged

2. Glazing/caulking associated with window walls

Location: Window walls (see floor plans)

Condition: Not damaged

3. Brick mortar

Location: Exterior walls

Condition: Not damaged

4. Red fire stop

Location: Boiler room

Quantity: \approx 10 SF

Condition: Not damaged

5. Breeching

Location: Boiler room

Quantity: \approx 180 SF

Condition: Not damaged

SUSPECT ACM FOUND NOT TO CONTAIN ASBESTOS

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

1. Hardwood
2. Ceiling & wall plaster
3. Rough plaster
4. Wall board
5. Pre-fabricated sheetrock
6. 2x2 ceiling tiles

ACTION SHEET

Based on the current three-year AHERA Re-inspection of the Crowell 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 the pipe insulation and fittings.

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 inspector did not note issues that require immediate attention. However, funding should 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. Appropriate funding into account for future sampling.
2. As custodial & maintenance personnel have changes, provide awareness training (\$1,800 for all schools)

Approximate funds: \$2,800.00

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 **Crowell 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					3-YR
						6-mo.	12-mo.	18-mo.	24-mo.	30-mo.	
Pipe insulation ≈ 740 LF	Rooms 1, 2, 3, 4, 8, 9, 9A, 11, 10A	TSL, F	ND, PD, M	* CRO 30	Removed in room 5 (boiler room) 6/05						C
Pipe fittings ≈ 86 fittings	Associated with pipe insulation	TSL, F	ND, PD, M		Removed in room 5 (boiler room) 6/05						C
Bulletin board ≈ 125 SF (each)	Rooms 104, 202	M, NF	ND, PD, L	* CRO 06, 08	This material is a presumed material. One more sample should be collected to prove material is non-asbestos.						C
12x12 White/gray mottled floor tile ≈ 240 SF	Cafeteria	M, NF	ND, PD, L		This material is a presumed material.						C
Associated mastic ≈ 240 SF	Cafeteria	M, NF	ND, PD, L		This material is a presumed material.						C
Yellow swirl linoleum ≈ 160 SF	Bathroom of Temporary Building	M, NF	ND, PD, L	CRO 50	This material is a presumed material. Two more samples should be collected to prove material is non-asbestos.						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
Type
 T – TSL
 S – surfacing
 M – misc.
Assessment
 L – low access.
 M – medium access.
 H – high accessibility
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: Signature:
 12-mo. Date: Signature:
 30-mo. Date: Signature:

18-mo. Date: Signature:
 24-mo. Date: Signature:
 3-YR Re-inspect: Date: Signature:

Dayne White

3 YEAR RE-INSPECTION

Crowell 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.
Exterior caulking	Exterior windows	M, NF	ND, PD, M		New material identified.					
Glazing/ Caulking	Interior window walls	M, NF	ND, PD, L		New material identified.					
Brick mortar	Exterior walls	M, NF	ND, PD, L		New material identified.					
Red fire stop ≈ 10 SF	Boiler room	M, NF	ND, PD, L		New material identified.					
Boiler breeching ≈ 180 SF	Boiler room	TSL, F	ND, PD, M		New material identified.					

Comments: * Indicates previously sampled material from original inspection.

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

Six Month Surveillance & Re-inspections

Fill in the corresponding box with a V 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:
 12-mo. Date: Signature:
 30-mo. Date: Signature:

18-mo. Date: Signature:
 24-mo. Date: Signature:
 3-YR Re-inspect: Date: Signature:

Deanne W. W. W.

3 YEAR RE-INSPECTION

Crowell Elementary School

April 2011

MATERIALS THAT HAVE BEEN ABATED/REMOVED OR PROVEN TO NOT CONTAIN ASBESTOS			
Material	Location	Samples	Comment
Hardwood	Throughout school except locations noted above		Wood is not considered a suspect material.
Boiler insulation, firebrick, rope gaskets, boiler jacket, pipe insulation	Boiler room		Abated in June of 2005. Replaced with a new HB Smith boiler 28 A series and fiberglass.
Plaster (≈ 16,400 SF)	Ceilings & walls throughout unless noted	CRO 9, 10, 11, 12, 13, 14, 16	Previously sampled and found not to be asbestos containing
Rough plaster (≈ 6,400 SF)	Ceilings basement	CRO 3 - 5, 20, 21 - 23	Previously sampled and found not to be asbestos containing
Wallboard (≈ 500 SF)	Rooms 8, 10, 105	CRO 01, 02, 07, 15	Previously sampled and found not to be asbestos containing
Pre-fabricated Sheetrock (≈ 1000 SF)	Temporary Building	CRO 52, Hub ID: 13246-2-1A, 13246-2-1B, 13246-2-1C, 13246-2-2A, 13246-2-2B, 13246-2-2C	Previously sampled and found not to be asbestos containing
2x2 Ceiling Tile (≈ 900 SF)	Temporary Building	Hub ID: 13246-2-3, 13246-2-4, 13246-2-5	Previously sampled and found not to be asbestos containing

Comments: * Indicates previously sampled material from original inspection.

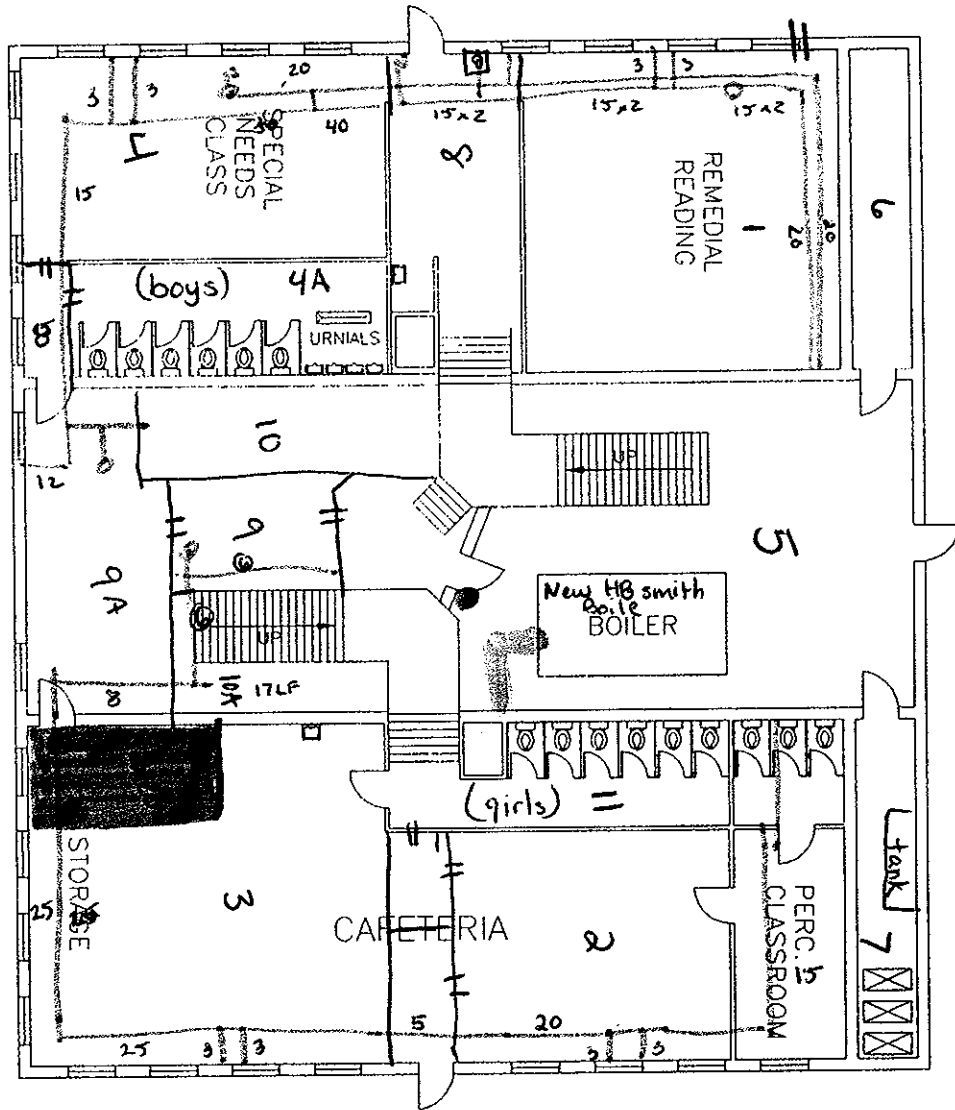
Key	Fraility	Assessment
Amount		
SF - square feet	F - friable	ND - not damaged
LF - linear feet	NF - not friable	D - damage
Type		SD - significantly damaged
T - TSI		PD - potential for damage
S - surfacing	L - low access.	PSD - potential for significant damage
M - misc.	M - medium access.	
	H - high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

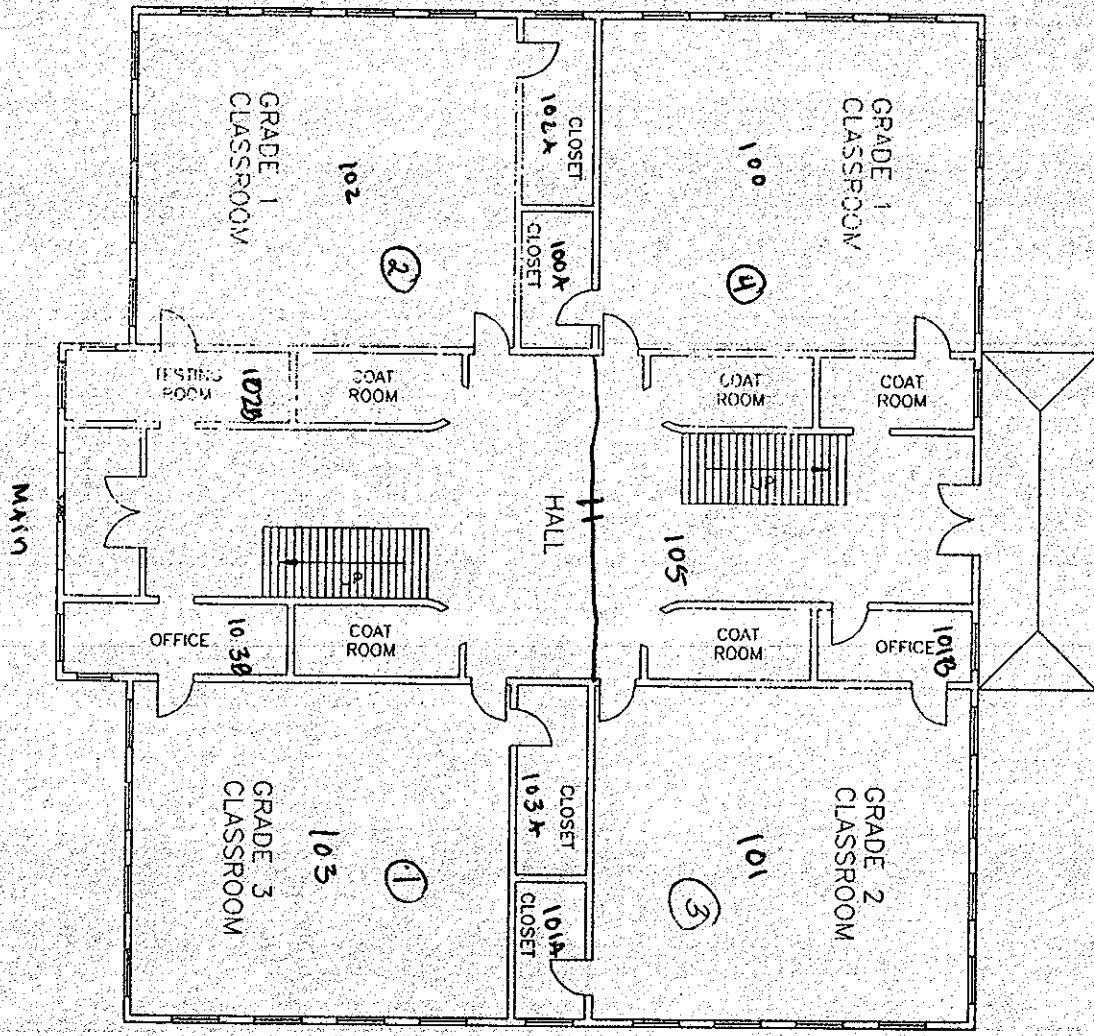
6-mo. Date: _____ Signature: _____ 12-mo. Date: _____ Signature: _____ 30-mo. Date: _____ Signature: _____	18-mo. Date: _____ Signature: _____ 24-mo. Date: _____ Signature: _____ 3-YR Re-inspect: _____ Date: 4/20/11 Signature: <i>Deanne Wunsche</i>
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CROWELL ELEMENTARY SCHOOL - BASEMENT FLOOR PLAN



- TSI
- Floor tile
- Red Fire stop
- Breaching

CROWELL ELEMENTARY SCHOOL - FIRST FLOOR PLAN

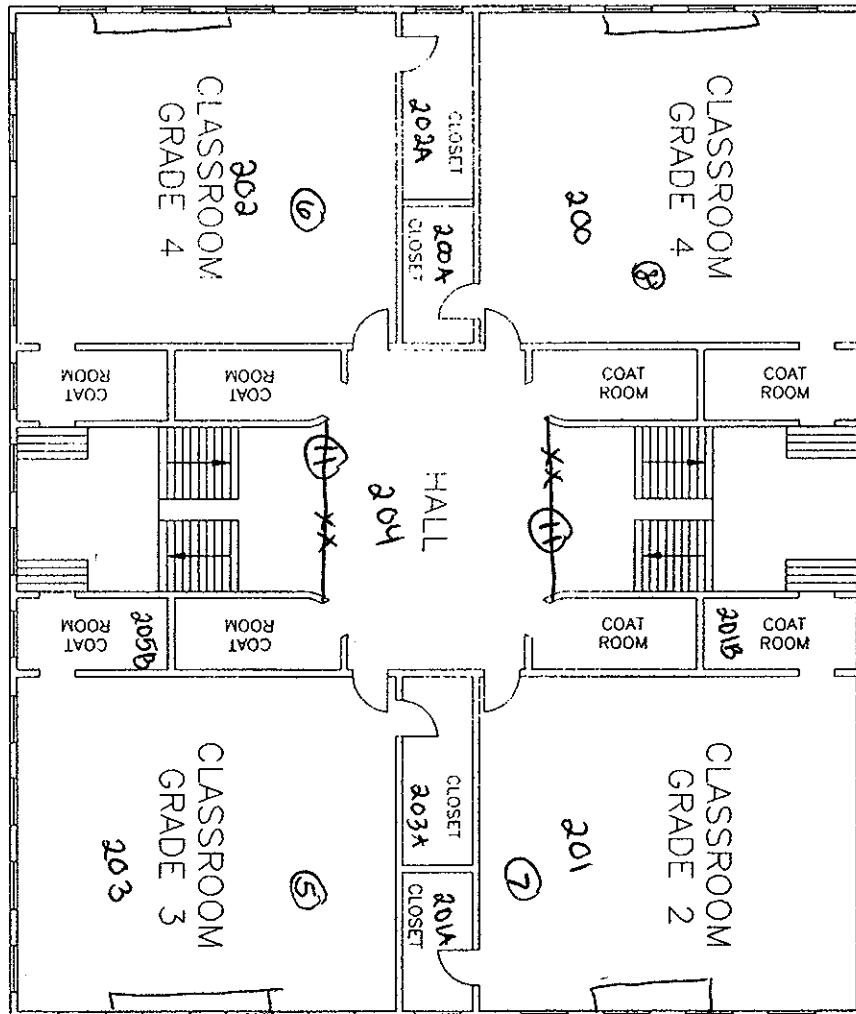


03

EXISTING FIRST
FLOOR PLAN

CROWELL ELEMENTARY SCHOOL
26 BELMONT AVENUE • HAVERHILL, MASS.

ARCADD, INC.
1111 BELMONT AVENUE
HAVERHILL, MASS. 01830
TEL: 978/326-1111
WWW.ARCADD.COM



□ univent
 x - window well
 ⑪ window door