

Roanoke County Schools

Three Year AHERA Reinspection

William Byrd High School
Facility 005

Reinspection Date:

February 19, 2008

Baratta & Associates, Inc

PO Box 293

Vinton, Virginia 24179

540-890-4875

Michael Baratta, PE

Virginia Asbestos Inspector License: 3303-000065

Virginia Asbestos Management Planner License: 3304-000208

Baratta & Associates, Inc.

Virginia Department of Education
Energy and Facilities Service

LEA Roanoke County Schools
School 005 William Byrd High School
Building Main

SCHOOL BUILDINGS

Building Name	Location	Check here for the presence of:				No ACBM
		ACBM		Suspect ACBM		
		Friable	Non- friable	Friable	Non- friable	
005 William Byrd High School	2902 Washington Avenue Vinton, VA 24179	X	X			

Inspector:

Name: Michael Baratta Signature 

Date 3/4/08

Accreditation Number: 3303 000065 Agency: Virginia DPOR

Virginia Department of Education
Energy and Facilities Services

LEA Roanoke County Schools
School: 005 William Byrd High School
Building: Main

**DETERMINATION OF EACH
SAMPLE AREA**

The H-K drawing indicates that ceiling sample 10 was positive. We could not find a sample 10 in the H-K inspection results section nor in the petrographic analysis data. Therefore, we resampled all LIC and ACT tiles. A new homogeneous area HA-16 was created to help distinguish between the various ceiling finishes. HA-10, (tan 9" x 9" floor tile in the Band Room) was deemed an ACM by H-K. A similar floor tile was noted in the auditorium balcony (HA-13). This was reported as a non-ACM. We obtained two (2) samples of each of these tiles and their mastics to confirm these findings. We designated the black mastic found on some of the fiberglass covered domestic water piping HA-17 and obtained two (2) samples.

Homogeneous Area	Material	Sample Number	Location
02	LIC 2' x 4', long holes parallel to short side	02-1	Store Room at shower area doors
		02-2	Store Room debris on floor
03	ACT 12"x 12" parallel perforated pattern	03-1	Teacher's lounge, center of room
		03-2	216 at hall door
10A	Floor tiles 9" x 9" cream & beige	10A-1	Band room, center of room
		10A-2	Band room, NW corner
10B	Black mastic for HA-10A	10B-1	Band room, center of room
		10B-2	Band room, NW corner
13A	Floor tiles 9" x 9" cream & beige	13A-1	Balcony at W hall door
		13A-2	Balcony at E hall door
13B	Black mastic for HA-13A	13B-1	Balcony at W hall door
		13B-2	Balcony at E hall door
16	LIC 2' x 2', parallel holes	16-1	Hall between cafeteria doors
		16-2	Center of the senior hall
17	Black mastic on domestic water fiberglass TSI	17-1	Bathroom chase near LD classroom
		17-2	Bathroom chase near teacher work room

Name: Michael Baratta

Signature



Date

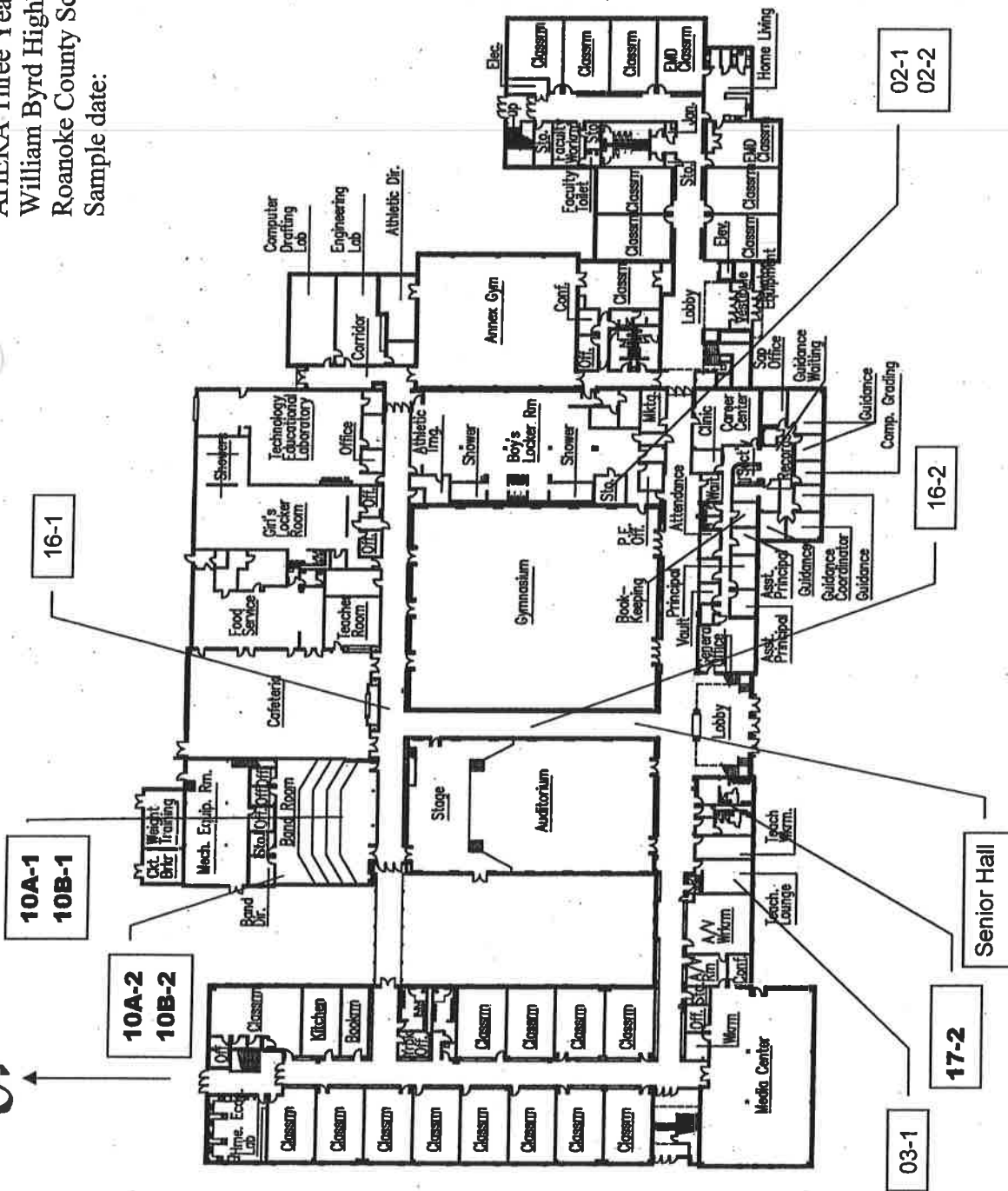
3-4/06
Accreditation Number: 3303 000065 Agency: Virginia DPOR

AHERA Three Year Inspection
 William Byrd High School
 Roanoke County Schools
 Sample date:

Main Building 005
 Sample Locations
 L001
 February 19, 2008

- HA-02 LIC 2'x4', long holes parallel to short side
 Samples 02-1, 02-2
- HA-03 ACT 12"x12" parallel perforated pattern
 Samples 03-1, 03-2
- HA-10A Floor tiles 9"x9" cream & beige
 Samples 10A-1, 10A-2
- HA-10B Black mastic for HA-10A
 Samples 10B-1, 10B-2
- HA-16 LIC 2'x2' parallel holes
 Samples 16-1, 16-2
- HA-17 Black mastic on domestic water fiberglass
 Samples 17-1, 17-2

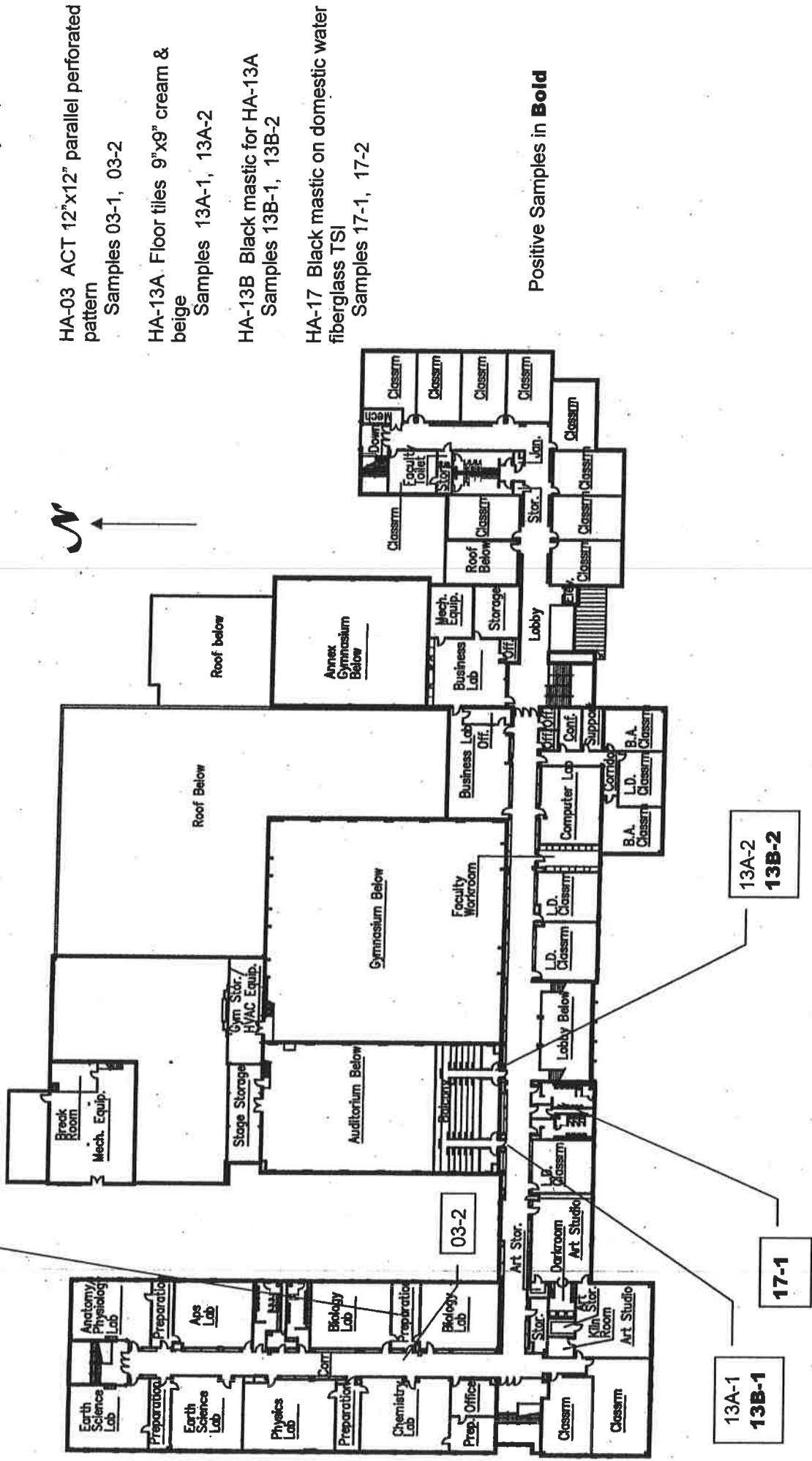
Positive Samples in **Bold**



● First Floor Plan ●

AHERA Three Year Inspection
 William Byrd High School
 Roanoke County Schools
 Sample date:

Main Building 005
 Sample Locations
 L001
 February 19, 2008



HA-03 ACT 12"x12" parallel perforated pattern
 Samples 03-1, 03-2

HA-13A Floor tiles 9"x9" cream & beige
 Samples 13A-1, 13A-2

HA-13B Black mastic for HA-13A
 Samples 13B-1, 13B-2

HA-17 Black mastic on domestic water fiberglass TSI
 Samples 17-1, 17-2

Positive Samples in **Bold**



Second Floor Plan

ASBESTOS MANAGEMENT, OPERATIONS AND MAINTENANCE PLAN

William Byrd High School
March 3, 2008

This Asbestos Management Operations and Maintenance Plan is based on the three year AHERA Reinspection performed by Baratta & Associates, Inc on February 19, 2008. It covers procedures to be followed in dealing with the Asbestos-Containing Materials (ACMs) found in the William Byrd High School.

SUMMARY

Although ACMs exist in William Byrd High School, an asbestos related health hazard does not exist. ACMs include floor tiles, floor tile mastics, fitting muds, tank insulation and mastic used on some water lines.

Asbestos warning labels or warning signs should be applied to various areas and materials in the school building.

STAFF NOTIFICATION

The School should send all staff members a brief notice stating that Asbestos-Containing Materials exist in the building.

ACM IDENTIFICATION

The following products were found to be Asbestos-Containing Materials (ACMs):

HA Number	Material
05	Fitting muds on drain lines
08	Fitting muds on domestic cold water lines
09	Fitting muds on domestic hot water lines
10A	Floor tiles 9" x 9" cream & beige in Band Room
10B	Black mastic for HA-10A
13B	Black mastic for 9" x 9" cream & beige floor tiles (HA-13A) in Balcony
14	Tank TSI in Mechanical room
15	Fitting muds in boiler room
17	Black mastic on fiberglass insulated domestic water lines

CARE OF THE FITTING MUDS

Repair the damaged areas. Any repair work or removal should be carried out by a licensed asbestos abatement contractor.

Custodial and maintenance personnel should take care not to damage or disturb the fitting muds while working near them.

Any damaged fitting muds should be reported to the Principal so the matter can be addressed.

CARE OF THE FLOOR TILES IN BAND ROOM

No drilling, sanding, or other abrasive or penetrating activities shall be used on the asbestos containing floor tiles. To do so may release asbestos fibers into the environment.

The flooring is tough and non-friable. It is doubtful anything other than forceful vandalism will deteriorate this material to a point where significant fiber release will occur.

CARE OF THE FLOOR TILE MASTIC IN BALCONY

The tan 9" x 9" floor tiles in the balcony are non-asbestos containing materials. However, the black mastic under the tiles is. Since the mastic is covered with non-asbestos containing tile, the likelihood of any contamination is minimal. Care should be taken not to drill into or dislodge the floor tiles. This could expose the mastic to foot traffic.

Any loose tile should be reinstalled over the mastic.

CARE OF THE THERMAL SYSTEM INSULATION (TSI) ON THE TANK

This tank is located in the upper level of the mechanical room. It has a red "X" on it. An asbestos warning label should be applied to the tank.

Custodial and maintenance personnel should take care not to damage or disturb the tanks insulation while working in its vicinity.

Any damaged areas should be reported to the Principal so appropriate action can be taken.

CARE OF THE MASTIC ON THE DOMESTIC WATER SYSTEM

Black mastic was observed on the fiberglass covered domestic water system lines in the bathroom chases. This mastic is an ACM. It is non-friable and therefore not a direct asbestos health threat.

An asbestos warning sign should be applied to all chase access doors.

Custodial and maintenance personnel should take care not to damage or disturb the domestic water lines in the chases.

PERMIT REQUIREMENTS

Before any work that may require the disturbance of the noted Asbestos Containing Materials is performed, maintenance personnel or contractors shall obtain an Asbestos Work Area Permit from the School System's Asbestos Program Manager.

Virginia Department of Education
Energy and Facilities Services

LEA Roanoke County Schools
School: 005 William Byrd High School
Building: Main
Sample Date: February 19, 2008
Analysis Date: February 22, 2008
Analysis Method: PLM EPA 6000/M4-82-020

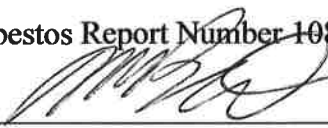
BULK SAMPLE ANALYSIS

None of the ceiling finishes tested to be ACMs. Samples 13A-1 and 13A-2 confirm H-K's initial classification of the balcony floor tiles as non-ACMs. The mastics for floor tiles HA-10 and HA-13 did test positive and are therefore deemed ACMs.

Homogeneous Area	Sample Number	Material	Asbestos Content
02	02-1	LIC 2' x 4', long holes parallel to short side	NAD
	02-2		NAD
03	03-1	ACT 12"x 12"parallel perforated pattern	NAD
	03-2		NAD
10A	10A-1	Floor tiles 9" x 9"cream & beige	2 % chrysotile
	10A-2		2 % chrysotile
10B	10B-1	Black mastic for HA-10A	8 % chrysotile
	10B-2		8 % chrysotile
13A	13A-1	Floor tiles 9" x 9"cream & beige	trace
	13A-2		trace
13B	13B-1	Black mastic for HA-13A	8 % chrysotile
	13B-2		8 % chrysotile
16	16-1	LIC 2' x 2', parallel holes	NAD
	16-2		NAD
17	17-1	Black mastic on domestic water fiberglass TSI	10 % chrysotile
	17-2		10 % chrysotile

NAD – no asbestos detected

See attached AmeriSci PLM Bulk Asbestos Report Number 108021595

Name: Michael Baratta Signature  Date 3/4/08
Accreditation Number: 3303 000065 Agency: Virginia DPOR



AmeriSci Richmond

13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Baratta & Associates, Inc.
Attn: Michael Baratta
1150 Shady Run Road

Vinton, VA 24179

Date Received 02/21/08
Date Examined 02/22/08

RE: L001; WB HS; Ahera

AmeriSci Job # 108021595
P.O. #
Page 1 of 4

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
02-1 Location: Lay-In-Ceiling	108021595-01	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 20 %, Fibrous glass 65 %, Non-fibrous 15 %			
02-2 Location: Lay-In-Ceiling	108021595-02	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 20 %, Fibrous glass 65 %, Non-fibrous 15 %			
03-1 Location: Acoustic Ceiling Tile	108021595-03	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 20 %, Fibrous glass 65 %, Non-fibrous 15 %			
03-2 Location: Acoustic Ceiling Tile	108021595-04	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 15 %, Fibrous glass 70 %, Non-fibrous 15 %			
10A-1 Location: Floor Tile	108021595-05	Yes	2 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			

See Reporting notes on last page

Client Name: Baratta & Associates, Inc.

PLM Bulk Asbestos Report

L001; WB HS; Ahera

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
10A-2 Location: Floor Tile	108021595-06	Yes	2 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 2.0 % Other Material: Non-fibrous 98 %			
10B-1 Location: Floor Tile Mastic	108021595-07	Yes	8 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 8.0 % Other Material: Non-fibrous 92 %			
10B-2 Location: Floor Tile Mastic	108021595-08	Yes	8 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 8.0 % Other Material: Non-fibrous 92 %			
13A-1 Location: Floor Tile	108021595-09	Yes	Trace (<1 %) (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile <1. % Other Material: Non-fibrous 100 %			
13A-2 Location: Floor Tile	108021595-10	Yes	Trace (<1 %) (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile <1. % Other Material: Non-fibrous 100 %			
13B-1 Location: Floor Tile Mastic	108021595-11	Yes	8 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 8.0 % Other Material: Non-fibrous 92 %			

See Reporting notes on last page

Client Name: Baratta & Associates, Inc.

PLM Bulk Asbestos Report

L001; WB HS; Ahera

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
13B-2 Location: Floor Tile Mastic	108021595-12	Yes	8 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 8.0 % Other Material: Non-fibrous 92 %			
16-1 Location: Lay-In-Ceiling	108021595-13	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 40 %, Fibrous glass 30 %, Non-fibrous 30 %			
16-2 Location: Lay-In-Ceiling	108021595-14	No	NAD (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material Asbestos Types: Other Material: Cellulose 30 %, Fibrous glass 40 %, Non-fibrous 30 %			
17-1 Location: Pipe Mastic	108021595-15	Yes	10 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 10.0 % Other Material: Non-fibrous 90 %			
17-2 Location: Pipe Mastic	108021595-16	Yes	10 % (by CVES) by William M. Dunstan on 02/22/08
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material Asbestos Types: Chrysotile 10.0 % Other Material: Non-fibrous 90 %			

Client Name: Baratta & Associates, Inc.

PLM Bulk Asbestos Report

L001; WB HS; Ahera

Reporting Notes:

Analyzed by: William M. Dunstan

William Dunstan

Date

2/23/08

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 800/M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples (198.6 for NOB samples)(NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

Baratta & Associates, Inc.
P.O. Box 293
Vinton, Virginia

LEA Roanoke County Schools
School 005 William Byrd High School
Building Main

REASSESSMENT OF MATERIALS

Past or Initial Assessment: Hall-Kimbrell April 1989

No HA-04

Homogeneous Area	Description	Past Assessment Category #	Reassessment Category #
02	LIC 2' x 4', long holes parallel to short side	Non-ACM	Non-ACM
03	ACT 12"x 12", parallel perforated pattern	Non-ACM	Non-ACM
05	Fitting muds on drain lines	1	1
06	Fitting muds on domestic cold water lines	Non-ACM	Non-ACM
07	Fitting muds on domestic heating water lines	Non-ACM	Non-ACM
08	Fitting muds on domestic cold water lines	1	1
09	Fitting muds on domestic hot water lines	1	1
10A	Floor tiles 9" x 9" cream & beige (band room)	5	5
10B	Black mastic for HA-10A	Not evaluated	5
11	LIC 2' x 4', long holes parallel to short side (note 1)	Non-ACM	Removed
12	Vinyl floor tile (note 1)	Non-ACM	Removed
13A	Floor tiles 9" x 9" cream & beige (balcony)	Not evaluated	Non-ACM
13B	Black mastic for HA-13A	Not evaluated	5
14	Boiler & tank TSI (note 2)	1	1
15	Fitting muds in boiler room (note 3)	1	1
16	LIC 2' x 4', long holes parallel to short side	Not evaluated	Non-ACM
17	Black mastic on fiberglass insulated domestic water lines (bathroom chases)	Not evaluated	5

Note 1 Removed when the East Wing was added

Note 2 The Boiler TSI was removed. Only the tank TSI remains ("red X")

Note 3 A few TSI-ACM fittings remain in the boiler room. Most fittings have fiberglass TSI.

AHERA - Physical Assessment Categories - 763.88(a)(2)(b)

- 1 Damaged or significantly damaged TSI-ACBM
5 ACBM with potential for damage

Inspector:

Name: Michael Baratta

Signature 

Date

3/4/09

Accreditation Number: 3303 000065 Agency: Virginia DPOR

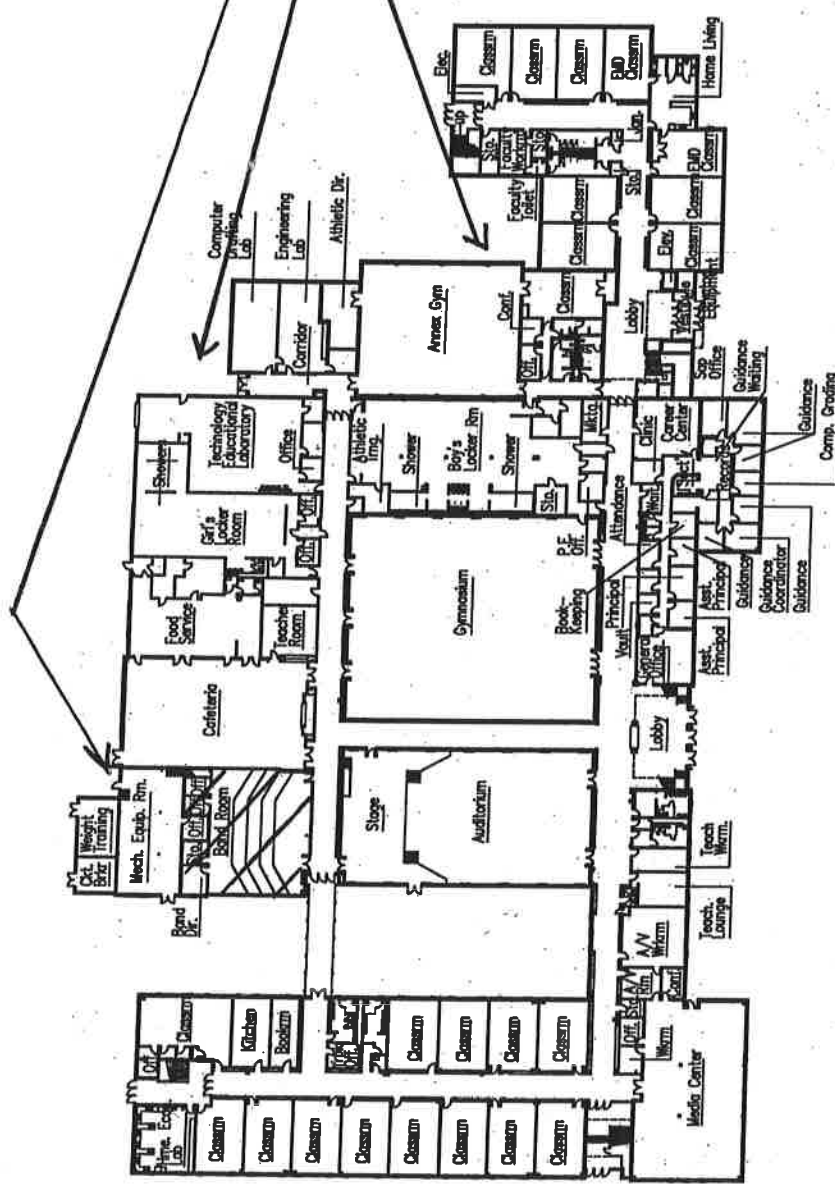
LOCATION OF ACBMs William Byrd High School

First Floor

Scale: see drawing

Reinspection Date: February 19, 2008

Asbestos containing fitting TSI and black mastic on domestic water system piping throughout building



	Asbestos containing floor tile and mastic
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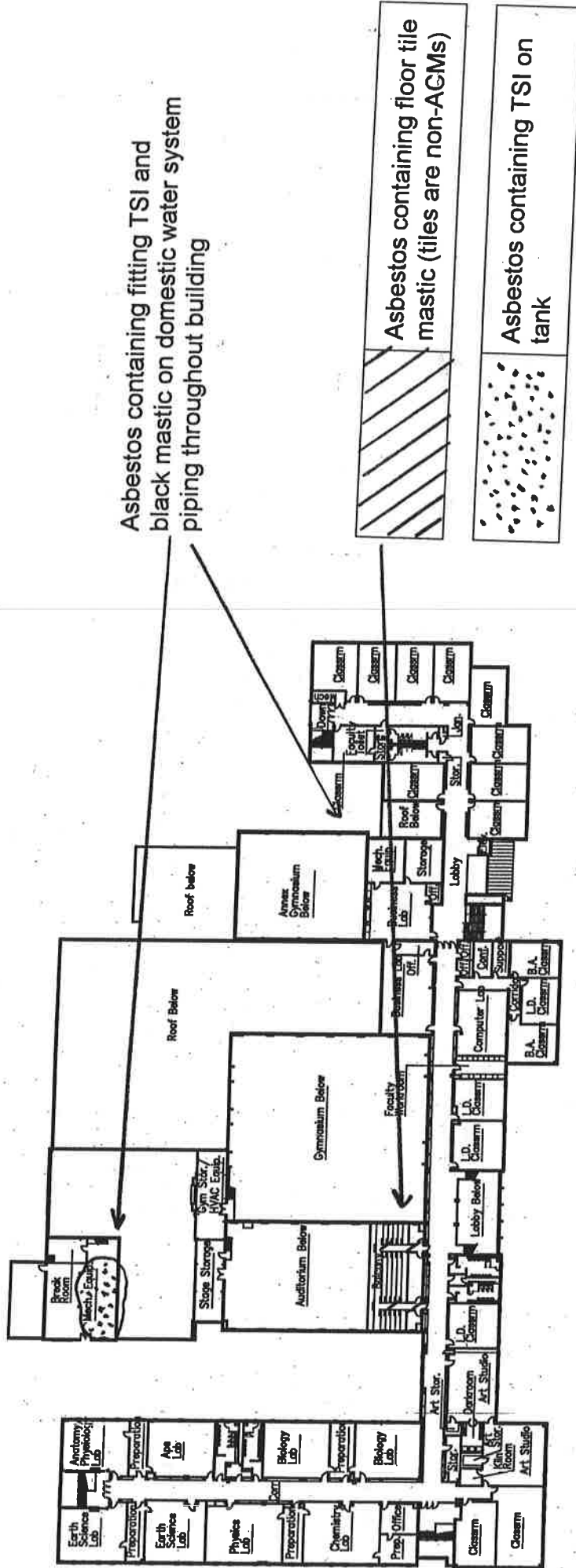
First Floor Plan



LOCATION OF ACBMS William Byrd High School
Second Floor

Scale: see drawing

Reinspection Date: February 19, 2008



Second Floor Plan



Virginia Department of Education
Energy and Facilities Service

LEA Roanoke County Schools
School 005 William Byrd High School
Building: Main

**RESPONSE ACTIONS
RECOMMENDED**

Total cost to remove \$83,000.00

Each Location	Recommended Response Actions	Scheduled To Begin	Scheduled To Be Completed	Est. Cost To Remove
Floor tile and mastic in Band Room	Place in O & M Plan until other needs require the floor tile to be removed	none	none	10,000
Floor tile mastic in Balcony	Place in O & M Plan until other needs require the floor tile to be removed	none	none	4,000
Tank TSI in upper level of Mechanical Room	Install asbestos label on tank. Place in O & M Plan until work needs to be performed on the tank	none	none	4,000
Fitting TSI throughout building	Remove damaged TSI. Place in O & M Plan until work that will disturb the fitting muds is required	none	none	\$50,000
Black mastic on fiberglass insulated domestic water systems	Install asbestos warning signs on chase doors. Place in O & M Plan until work that will disturb the mastics is required	none	none	\$15,000

Management Planner:

Name: Michael Baratta Signature  Date 3/4/08

Accreditation Number: 3304 000208 Agency: Virginia DPOR