

Scituate High School

606 Chief Justice Cushing Highway
Scituate, Massachusetts 02066

3-Year AHERA Reinspection June 2024

PREPARED FOR:

Scituate Public Schools
606 Chief Justice Cushing Highway
Scituate, Massachusetts 02066

PREPARED BY:

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Introduction

The Vertex Companies, LLC (VERTEX) conducted a 3-Year Re-inspection on June 7, 2024, as required by the 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA) at the Scituate High School located at 606 Chief Justice Cushing Highway in Scituate, Massachusetts. The AHERA regulation requires that each Local Education Agency (LEA) retain a certified/accredited Asbestos Inspector to conduct an initial inspection of all friable and non-friable known or assumed asbestos-containing materials (ACMs) in each school building that they lease, own, or otherwise uses as a school building. The AHERA re-inspection is to be performed by an accredited inspector at least once every three years from the time of implementation of the original management plan. In addition, the LEA is responsible for conducting Six-Month Periodic Surveillance Inspections as required to effectively manage the identified ACMs in place at the school.

The Scituate Public School District may utilize the information obtained from the AHERA inspection to effectively manage the ACMs identified at the Scituate High School.

SECTION 1
INSPECTION REPORT

Section 1
Inspection Report

Inspection Protocol

Massachusetts Department of Labor Standards (DLS) Certified Asbestos Inspector, Jason Mohre (AI#000262) performed the AHERA inspection. The Management Plan was updated by Massachusetts DLS Certified Asbestos Management Planner, Jason Mohre (AP#000080). The purpose of the inspection was to identify friable and non-friable ACMs and perform a hazard assessment. As required by the AHERA regulation, the inspection survey procedures must include a visual inspection and assessment of the condition of all known locations of friable and non-friable ACMs. It should be noted that under the AHERA regulations only ACMs are inspected within the school building, other asbestos containing materials (ACMs) may be associated with the school that do not fall under AHERA ACM definition. Examples of materials which have been found to contain asbestos include but are not limited to exterior window caulking, window glazing, and roofing material. Prior to school renovations any suspect materials not sampled or listed within the school's AMP, must be tested prior to disturbance. Furthermore, VERTEX recommends an Asbestos Containing Materials (ACMs) Survey be conducted prior to any renovation activities to comply with the Environmental Protection Agency (EPA) Title 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and the Massachusetts Department of Environmental Protection Regulations. Documentation for subsequent surveys not related to AHERA should be included in the overall Management Plan.

Assessment of potential asbestos hazards are subject to each individual inspector's judgment, and as a result, hazard assessments may vary.

Furthermore, the LEA Designated Person should assume that potential asbestos-containing pipe and fitting insulation or other ACMs may be located behind walls and ceilings not accessible. Any renovation/demolition work that may penetrate these areas should be inspected prior to disturbance.

All available documentation of asbestos abatement projects, which have occurred since the initial AHERA inspection should be included with the Management Plan for the school.

VERTEX was provided and reviewed the following documents for the Scituate High School facility:

- AHERA Inspection and Management Plan for Scituate High School prepared by Covino, dated November 2013.
- AHERA Inspection and Management Plan for Scituate High School prepared by TRC, dated November 2017.

Appendix D contains Certification Page for the Inspector and Management Planner involved with the inspection of the school.

Locations of the identified ACMs with quantities observed, conditions assessed, homogeneous hazard assessment are presented in Appendix A of this report.



Section 1
Inspection Report (continued)
Bulk Sampling Methodology

Bulk samples were not collected during the current reinspection. Bulk samples were collected by Covino Environmental (Covino) during their August 2013 inspection activities. The following table outlines the building materials collected and analyzed by Covino:

Scituate High School
August 2013 Sample Locations and Results
Table I

Sample Number	Sample Description	Sample Location	Asbestos Content
1A	12" Blue Floor Tile	Room 137F	None Detected
1B	12" Blue Floor Tile	Room 140	None Detected
1C	12" Blue Floor Tile	ST-1	None Detected
2A	12" Blue Floor Tile Mastic	Room 137F	None Detected
2B	12" Blue Floor Tile Mastic	Room 140	None Detected
2C	12" Blue Floor Tile Mastic	ST-1	None Detected
3A	12" White Floor Tile	Hall by 136B	None Detected
3B	12" White Floor Tile	Room 152	None Detected
3C	12" White Floor Tile	Hall by 261	None Detected
4A	12" White Floor Tile Mastic	Hall by 136B	None Detected
4B	12" White Floor Tile Mastic	Room 152	None Detected
4C	12" White Floor Tile Mastic	Hall by 261	None Detected
5A	Bottom Layer 9" Floor Tile	Room 137E	7 % Chrysotile
5B	Bottom Layer 9" Floor Tile	Room 130	Positive Stop
5B	Bottom Layer 9" Floor Tile	Principal Office	Positive Stop
6A	Bottom Layer 9" Floor Tile Mastic	Room 137E	None Detected
6B	Bottom Layer 9" Floor Tile Mastic	Room 130	10 % Chrysotile
6C	Bottom Layer 9" Floor Tile Mastic	Principal Office	Positive Stop
7A	2' x 4' Ceiling Tile w/2' Squares	Room 137	None Detected
7B	2' x 4' Ceiling Tile w/2' Squares	Room 213	None Detected
7C	2' x 4' Ceiling Tile w/2' Squares	Room 273	None Detected
8A	Gold Carpet Adhesive	Room 137	None Detected
8B	Gold Carpet Adhesive	Bank	None Detected
8C	Gold Carpet Adhesive	Room 245	None Detected
9A	Plaster Wall Base Coat	Room 137	None Detected
9B	Plaster Wall Base Coat	Room 150	None Detected
9C	Plaster Wall Base Coat	Kitchen	None Detected
9D	Plaster Wall Base Coat	Hall by 244	None Detected
9E	Plaster Wall Base Coat	Hall by 220	None Detected
9F	Plaster Wall Base Coat	Room 228	None Detected
9G	Plaster Wall Base Coat	Hall by 239	None Detected

**Scituate High School
 August 2013 Sample Locations and Results
 Table I (Continued)**

Sample Number	Sample Description	Sample Location	Asbestos Content
10A	Plaster Wall Skim Coat	Room 137	None Detected
10B	Plaster Wall Skim Coat	Room 150	None Detected
10C	Plaster Wall Skim Coat	Kitchen	None Detected
10D	Plaster Wall Skim Coat	Hall by 244	None Detected
10E	Plaster Wall Skim Coat	Hall by 220	None Detected
10F	Plaster Wall Skim Coat	Room 228	None Detected
10G	Plaster Wall Skim Coat	Hall by 239	None Detected
11A	Plaster Ceiling Base Coat	Room 137	None Detected
11B	Plaster Ceiling Base Coat	Room 137	None Detected
11C	Plaster Ceiling Base Coat	Room 166E	None Detected
11D	Plaster Ceiling Base Coat	Room 166E	None Detected
11E	Plaster Ceiling Base Coat	Room 166E	None Detected
12A	Plaster Ceiling Skim Coat	Room 137	None Detected
12B	Plaster Ceiling Skim Coat	Room 137	None Detected
12C	Plaster Ceiling Skim Coat	Room 166E	None Detected
12D	Plaster Ceiling Skim Coat	Room 166E	None Detected
12E	Plaster Ceiling Skim Coat	Room 166E	None Detected
13A	Gypsum Wall Board	Room 135, Bath	None Detected
13B	Gypsum Wall Board	Auditorium	None Detected
13C	Gypsum Wall Board	Hall by 234	None Detected
14A	Joint Compound	Room 135, Bath	None Detected
14B	Joint Compound	Auditorium	None Detected
14C	Joint Compound	Room 150	None Detected
14D	Joint Compound	Library	None Detected
14E	Joint Compound	Principal Office	None Detected
14F	Joint Compound	Room 273	None Detected
14G	Joint Compound	Hall by 234	None Detected
15A	Gray Sink Undercoating	Room 133	None Detected
15B	Gray Sink Undercoating	Room 130	None Detected
15C	Gray Sink Undercoating	Room 152	None Detected
16A	Black Glue Daub on Wall	Room 133	None Detected
16B	Black Glue Daub on Wall	Room 133	None Detected
17A	Brown Glue Daub on Wall	Room 133	None Detected
17B	Brown Glue Daub on Wall	Room 150	None Detected
18A	Pipe Fitting Insulation	Hall by 129	60 % Chrysotile
18B	Pipe Fitting Insulation	Hall by 129	Positive Stop
19A	Lab Table Tops	Room 129	None Detected
19B	Lab Table Tops	Room 129	None Detected
19C	Lab Table Tops	Room 127	None Detected

Scituate High School
August 2013 Sample Locations and Results
Table I (Continued)

Sample Number	Sample Description	Sample Location	Asbestos Content
20A	Gray Duct Mastic	Room 125	None Detected
20B	Gray Duct Mastic	Room 152	None Detected
20C	Gray Duct Mastic	Room 183	None Detected
21A	Black Sink Undercoating	Room 121	None Detected
21B	Black Sink Undercoating	Room 120A	None Detected
22A	Stage Curtain	Auditorium	None Detected
22B	Stage Curtain	Auditorium	None Detected
22C	Stage Curtain	Auditorium	None Detected
23A	Gypsum Ceiling Board	Auditorium	None Detected
23B	Gypsum Ceiling Board	Room 157	None Detected
23C	Gypsum Ceiling Board	Room 112	None Detected
24A	Joint Compound	Auditorium	None Detected
24B	Joint Compound	Room 157	None Detected
24C	Joint Compound	Room 112	None Detected
24D	Joint Compound	Room 249	None Detected
24E	Joint Compound	Room 204	None Detected
24F	Joint Compound	Room 262	None Detected
24G	Joint Compound	Hall by 221	None Detected
25A	4" Black Covebase	Room 152	None Detected
25B	4" Black Covebase	Room 226	None Detected
25C	4" Black Covebase	Room 239	None Detected
26A	4" Black Covebase Adhesive	Room 152	None Detected
26B	4" Black Covebase Adhesive	Room 226	None Detected
26C	4" Black Covebase Adhesive	Room 239	None Detected
27A	12" Brown Floor Tile	TV Studio	4 % Chrysotile
27B	12" Brown Floor Tile	TV Studio	Positive Stop
28A	12" Brown Floor Tile Mastic	TV Studio	10 % Chrysotile
28B	12" Brown Floor Tile Mastic	TV Studio	Positive Stop
29A	2' x 4' Flat Ceiling Tile	Kitchen	None Detected
29B	2' x 4' Flat Ceiling Tile	Kitchen	None Detected
29C	2' x 4' Flat Ceiling Tile	Kitchen	None Detected
30A	Stone Window Sill	Room 225	None Detected
30B	Stone Window Sill	Room 225	None Detected
30C	Stone Window Sill	Room 225	None Detected
31A	Tectum Wall Board	Room 141	None Detected
31B	Tectum Wall Board	Room 141	None Detected
31C	Tectum Wall Board	Room 141	None Detected
32A	2' x 2' Flat Ceiling Tile	Room 141	None Detected
32B	2' x 2' Flat Ceiling Tile	Room 141	None Detected

**Scituate High School
August 2013 Sample Locations and Results
Table I (Continued)**

Sample Number	Sample Description	Sample Location	Asbestos Content
33A	Tan Squared Sheet Flooring	Room 143C	None Detected
33B	Tan Squared Sheet Flooring	Room 143C	None Detected
33C	Tan Squared Sheet Flooring	Room 143C	None Detected
34A	Tan Squared Sheet Flooring Adhesive	Room 143C	None Detected
34B	Tan Squared Sheet Flooring Adhesive	Room 143C	None Detected
34C	Tan Squared Sheet Flooring Adhesive	Room 143C	None Detected
35A	Vault Cementitious Wall	Room 143C	None Detected
35B	Vault Cementitious Wall	Room 143C	None Detected
36A	Vault Wall Insulation	Room 143C	None Detected
36A	Vault Wall Insulation	Room 143C	None Detected
37A	Kiln Brick	Room 151	None Detected
37A	Kiln Brick	Room 151	None Detected
38A	White Boiler Head Insulation	Boiler Room	None Detected
38B	White Boiler Head Insulation	Boiler Room	None Detected
38C	White Boiler Head Insulation	Boiler Room	None Detected
39A	Gray Boiler Head Insulation	Boiler Room	None Detected
39B	Gray Boiler Head Insulation	Boiler Room	None Detected
39C	Gray Boiler Head Insulation	Boiler Room	None Detected
40A	Boiler Head Gasket	Boiler Room	None Detected
40B	Boiler Head Gasket	Boiler Room	None Detected
41A	Blue Sheet Flooring	Room 180B	None Detected
41B	Blue Sheet Flooring	Room 180B	None Detected
41C	Blue Sheet Flooring	Room 180B	None Detected
42A	Blue Sheet Flooring Adhesive	Room 180B	None Detected
42B	Blue Sheet Flooring Adhesive	Room 180B	None Detected
42C	Blue Sheet Flooring Adhesive	Room 180B	None Detected
43A	Rough Ceiling Plaster Base Coat	Stairs by 134	None Detected
43B	Rough Ceiling Plaster Base Coat	Room 242	None Detected
43C	Rough Ceiling Plaster Base Coat	Room 242	None Detected
43D	Rough Ceiling Plaster Base Coat	Room 228	None Detected
43E	Rough Ceiling Plaster Base Coat	Room 235	None Detected
43F	Rough Ceiling Plaster Base Coat	Room 232	None Detected
43G	Rough Ceiling Plaster Base Coat	Room 239	None Detected
44A	Rough Ceiling Plaster Skim Coat	Stairs by 134	None Detected
44B	Rough Ceiling Plaster Skim Coat	Room 242	None Detected
44C	Rough Ceiling Plaster Skim Coat	Room 242	None Detected
44D	Rough Ceiling Plaster Skim Coat	Room 228	None Detected
44E	Rough Ceiling Plaster Skim Coat	Room 235	None Detected
44F	Rough Ceiling Plaster Skim Coat	Room 232	None Detected
44G	Rough Ceiling Plaster Skim Coat	Room 239	None Detected

**Scituate High School
 August 2013 Sample Locations and Results
 Table I (Continued)**

Sample Number	Sample Description	Sample Location	Asbestos Content
45A	Fire Sprinkler Thread Sealant	Room 245	None Detected
45B	Fire Sprinkler Thread Sealant	Hall by 222	None Detected
45C	Fire Sprinkler Thread Sealant	Hall by 281	None Detected
46A	Pinhole Acoustical Wall Board	Room 249	None Detected
46B	Pinhole Acoustical Wall Board	Room 249	None Detected
47A	9" Tan Floor Tile	Room 213	4 % Chrysotile
47B	9" Tan Floor Tile	Room 213	Positive Stop
48A	9" Tan Floor Tile Mastic	Room 213	10 % Chrysotile
48B	9" Tan Floor Tile Mastic	Room 213	Positive Stop
49A	3' x 3' Panel Inserts Under Windows	Room 281	40 % Chrysotile
49B	3' x 3' Panel Inserts Under Windows	Room 281	Positive Stop
49C	3' x 3' Panel Inserts Under Windows	Room 281	Positive Stop
50A	3' x 3' Interior Window Glazing	Room 279	5 % Chrysotile
50B	3' x 3' Interior Window Glazing	Room 281	Positive Stop
50C	3' x 3' Interior Window Glazing	Room 281	Positive Stop

Bold indicates bulk sample analyzed positive for Asbestos (>1% asbestos containing)

Positive Stop indicates representative bulk sample analyzed positive for Asbestos.

Section 1
Inspection Report (continued)

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

9" Tan Floor Tile	9" Tan Floor Tile Mastic (Black)
9" Gray Floor Tile	9" Gray Floor Tile Mastic (Black)
12" Brown Floor Tile	12" Brown Floor Tile Mastic (Black)
3' x 3' Panel under Window	3' x 3' Interior Window Glazing
Pipe Fitting Insulation	Vibration Dampeners

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

12" Blue Floor Tile	12" Blue Floor Tile Mastic
12" White Floor Tile	12" White Floor Tile Mastic
Tan Squared Sheet Flooring	Tan Squared Sheet Flooring Adhesive
Blue Sheet Flooring	Blue Sheet Flooring Adhesive
Gold Carpet Adhesive	
4" Black Covebase	4" Black Covebase Adhesive
Vault Cementitious Wall	Vault Wall Insulation
2' x 4' Ceiling Tile w/2' Squares	2' x 4' Flat Ceiling Tile
2' x 2' Flat Ceiling Tile	Gypsum Ceiling Board
Plaster Wall Base Coat	Plaster Wall Skim Coat
Plaster Ceiling Base Coat	Plaster Ceiling Skim Coat
Rough Ceiling Plaster Base Coat	Rough Ceiling Plaster Skim Coat
Drywall	Joint Compound
Pinhole Acoustical Wall Board	Tectum Wall Board
White Boiler Head Insulation	Gray Boiler Head Insulation
Boiler Head Gasket	Stone Window Sill
Gray Sink Undercoating	Black Sink Undercoating
Black Glue Daub on Wall	Brown Glue Daub on Wall
Lab Tabletops	Fire Sprinkler Thread Sealant
Gray Duct Mastic	
Stage Curtain	

VERTEX recommends an ACMs Survey be conducted prior to any renovation activities to comply with the EPA Title 40 CFR Part 61, NESHAPs and the Massachusetts Department of Environmental Protection Regulations.

Section 1
Inspection Report (continued)
Hazard Assessment

Each ACM homogeneous area is assessed to determine the asbestos hazard. Factors considered when assessing homogeneous area hazard include: the friability of the material, the condition of material including type, severity, and extent of damage, the material's potential for disturbance (including accessibility and air flow) and the material's potential for damage. From this classification, a decision tree is used to determine the appropriate response action sufficient to protect human health and environment.

The location, estimated quantities, condition and Homogenous Area Hazard Assessment Category for the identified ACMs are presented in Appendix A. The following is homogenous area assessment for each ACM identified.

Homogeneous Area Assessment

Homogeneous Area #1-Pipe Fitting Insulation

Classification: Friable Thermal System Insulation

The Designated Person should assume that potential asbestos-containing pipe fitting insulation may be located behind walls and ceilings not accessible.

Homogeneous Area #2- 9"x 9" Gray Floor Tile

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing 9" x 9" Gray Floor Tile is generally located several areas at the school. Please refer to Appendix A for the locations and estimated quantities. The 9" Gray Floor Tile generally is covered by Carpet, non-friable and presents a potential for damage.

Homogeneous Area #3- 9"x 9" Tan Floor Tile

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing 9" x 9" Tan Floor Tile is generally located several areas at the school. Please refer to Appendix A for the locations and estimated quantities. The 9" Tan Floor Tile generally is covered by Carpet, non-friable and presents a potential for damage.

Section 1
Inspection Report (continued)
Hazard Assessment

Homogeneous Area #3- Black Floor Tile Mastic

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing Black Floor Tile Mastic is generally located in several areas of the school. Please refer to Appendix A for the locations and estimated quantities. The Black Floor Tile Mastic generally is associated with the gray and tan colored 9" Floor Tile which are covered by Carpet, non-friable and presents a potential for damage.

Homogeneous Area #4 12" x 12" Brown Floor Tile

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing 12" x 12" Brown Floor Tile is located within the TV Studio at the school The 12" x 12" Brown Floor Tile is observed in generally good condition, non-friable and presents a potential for damage.

Homogeneous Area #5 12" x 12" Brown Floor Tile Mastic (Black)

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing 12" x 12" Brown Floor Tile Mastic is located within the TV Studio at the school The 12" x 12" Brown Floor Tile Mastic is covered, non-friable and presents a potential for damage.

Homogeneous Area #6-3' x 3' Interior Window Glazing

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing Interior Window Glazing is located on the Interior Partition Windows within the Rooms 275, 276, 278, 279, 281 and Hallway overlooking the Library at the school. The Interior Window Caulking was observed in generally good condition, non-friable and presents a potential for damage.

Homogeneous Area #7-3' x 3' Panels Under Interior Windows

Classification: Non-Friable Miscellaneous ACM

Asbestos-containing Panels Under Interior Windows are located on the Interior Partition Windows within the Rooms 275, 276, 278, 279, 281 and Hallway overlooking the Library at the school. The Interior Window Caulking was observed in generally good condition, non-friable and presents a potential for damage.

Section 1
Inspection Report (continued)
Hazard Assessment

Homogeneous Area #8-Vibration Dampeners

Classification: Non-Friable Miscellaneous ACM

Assumed asbestos-containing vibration dampeners are located within the Small and Large Gyms at the school. The Vibration Dampeners were observed in generally good condition, non-friable and presents a potential for damage. Prior to any activity that may disturb the vibration dampeners proper sampling and analysis is required to be conducted.

SECTION 2

RESPONSE ACTION DETERMINATION

Section 2

Response Action Determination

The following is based on the Decision Tree for Thermal System Insulation Type ACM. The recommended response actions are determined utilizing the “decision tree” approach for Response Action Determination as outlined in EPA’s “Asbestos Hazard Emergency Response Act,” (AHERA) 40 CFR 763. Because of defined friability factors associated with surfacing and miscellaneous materials versus thermal system insulation, separate decision trees are utilized for each group of materials.

Decision Trees are used to estimate the risk associated with exposure to asbestos in a given homogeneous area, and to recommend certain response actions, which are consistent with regulatory requirements. Eight response actions are recommended for both thermal system insulation and for surfacing/miscellaneous insulation. The response section number given to each homogeneous area indicates a priority for action, the lower the number, the more serious the hazard. Most response actions call for an operations and maintenance program, assuming that this is the least burdensome method which still protects human health and environment. This does not prohibit the building owner from removal of ACM at any time, if that is the preferred response action.

Recommended response actions are based upon the material condition, disturbance, air-flow and the potential for damage. Potential response actions include the following:

1. Significantly Damaged Thermal System Insulation: **Response Action 1.** Isolate the area and restrict access to the area. ACM should be removed as soon as possible.
2. Damaged Thermal System Insulation with High Disturbance: **Response Action 2.** Continue O&M program and remove the ACM as soon as possible or reduce the potential for disturbance.
3. Damaged Thermal System Insulation with Moderate Disturbance and in the Presence of an Air Stream: **Response Action 2.** Continue with O&M Program and remove the ACM as soon as possible or reduce the potential for disturbance.
4. Damaged Thermal System Insulation with Moderate Disturbance: **Response Action 3.** Repair ACM, continue with O&M Program.
5. Damaged Thermal System Insulation with Low Disturbance and in the Presence of an Air Stream: **Response Action 4.** Repair ACM, continue with O&M Program.
6. Damaged Thermal System Insulation with Low Disturbance: **Response Action 5.** Repair ACM, continue with O&M Program.
7. Undamaged Thermal System Insulation with High Disturbance: **Response Action 6.** Continue with O&M Program and take preventative measures to reduce disturbance.
8. Undamaged Thermal System Insulation with Moderate Disturbance: **Response Action 7.** Continue with O&M Program and take preventative measure to reduce disturbance.
9. Undamaged Thermal System Insulation with Low Disturbance: **Response Action 7.** Continue with O&M Program and take preventative measure to reduce disturbance.

Section 2 Response Action Determination

The following is based on the Decision Tree for Surfacing and Miscellaneous ACM. Recommended response actions are based upon friability, material condition, disturbance, air flow and the potential for damage. Potential response actions include the following:

1. Friable Surfacing or Miscellaneous ACM with Significant Damage: **Response Action 1:** Isolate the area and restrict access to the area. Remove the ACM as soon as possible.
2. Friable Surfacing or Miscellaneous ACM with Damage and a High Disturbance: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
3. Friable Surfacing or Miscellaneous ACM with Damage, Moderate Disturbance and in the Presence of an Air Stream: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
4. Friable Surfacing or Miscellaneous ACM with Damage and Moderate Disturbance: **Response Action 3:** Continue with O&M Program and schedule removal when practical and cost-effective
5. Friable Surfacing or Miscellaneous ACM with Damage, Low Disturbance and in the Presence of an Air Stream: **Response Action 4:** Continue with O&M Program and schedule removal when practical and cost-effective
6. Friable Surfacing or Miscellaneous ACM with Damage and Low Disturbance: **Response Action 5.** Continue with O&M Program and schedule removal when practical and cost-effective
7. Friable Surfacing or Miscellaneous ACM with No Damage and High Disturbance: **Response Action 6.** Take preventative measures to reduce the disturbance.
8. Friable Surfacing or Miscellaneous ACM with No Damage and Moderate Disturbance: **Response Action 7.** Take preventative measure to reduce the disturbance.
9. Friable Surfacing or Miscellaneous ACM with No Damage and Low Disturbance: **Response Action 8.** Take preventative measure to reduce the disturbance.
10. Non-Friable Surfacing or Miscellaneous ACM: **Response Action 8:** Continue with O&M until major renovation or demolition requires removal under the EPA NESHAPS, or until hazard assessment factors change.

Section 2
Response Action Determination (continued)

Advantages and Disadvantage to Abatement Alternatives

The decision trees outlined in AHERA 40 CFR 763 are used to provide the “best” alternative for the specific conditions in each homogeneous area.

Below is a discussion of the alternative approaches to asbestos management in a building.

Long Term Operation & Maintenance Program

Advantages:

- *Low initial cost for implementation
- *Good interim plan
- *An O&M program may be implemented and carried out by in house trained personnel.

Disadvantages:

- *Asbestos remains in the building
- *Condition of the asbestos must be monitored
- *Cost of training and special work procedures may be significant
- *Effectiveness may be limited where control of the building occupants is difficult

Encapsulation

Advantages:

- *Reduces the risk of release of asbestos fibers
- *Initial cost is lower than the cost of asbestos removal
- *Asbestos-containing material may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in the building and encapsulant makes removal more difficult
- *Improper encapsulation may cause the material to delaminate or pull away from substrate
- *Asbestos-containing material must have an O&M program
- *Similar preparation for asbestos removal is required for encapsulation
- *Long term cost may be greater than asbestos removal is periodic reapplication of the encapsulant is required

Section 2
Response Action Determination (continued)

Enclosure

Advantages:

- *Enclosure reduces immediate exposure
- *Initial cost of enclosure is lower than the cost of asbestos removal
- *Asbestos-containing material may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in place and later removal is more difficult
- *If maintenance is required of the systems insulated with asbestos, the asbestos will be exposed
- *An O&M program will have to be implemented for the asbestos-containing material
- *Similar preparation for asbestos removal is required for enclosure

Removal

Advantages

- *Asbestos-containing material is eliminated from the building
- *There is no need for an O&M plan
- *Initial cost is great, but the future costs are eliminated

Disadvantages:

- *Re-insulating, re-fireproofing, or replacement of materials may be required
- *Improper removal may raise levels of airborne fibers higher than background levels
- *The initial cost of removal is very high
- *Areas of the building involved in asbestos removal may not be occupied during removal

SECTION 3

UPDATED RECOMMENDED RESPONSE ACTIONS

Section 3 **Recommended Response Actions**

The recommended response actions are for all the homogenous areas found within the school. The response actions are determined utilizing the decision tree approach for Response Action Determination as described in Section 2.

Homogeneous Area #2- 9"x 9" Gray Floor Tile

Response Action 8: The 9" x 9" Gray Floor Tile identified within the Cafeteria and Teachers Lounge displayed minor damage. Retain an Asbestos Project Designer to prepare a Work Plan for the removal and replacement of the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: August 2024.

Response Action 8: The remaining 9" x 9" Gray Floor Tile is generally located in several areas of the school is covered by Carpet. Please refer to Appendix A which includes the locations and estimated quantities of the 9" x 9" Gray Floor Tile. Continue the Operations and Maintenance (O& M) Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #3- 9"x 9" Tan Floor Tile

Response Action 8: The 9" x 9" Tan Floor Tile is generally located in several areas of the school is covered by Carpet. Please refer to Appendix A which includes the locations and estimated quantities of the 9" x 9" Tan Floor Tile. Continue the O& M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #4- Black Floor Tile Mastic

Response Action 8: The Black Floor Tile Mastic located within the addition section of the school is covered by various colored 9" Floor Tile and Carpet. Continue the O & M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #4 12" x 12" Brown Floor Tile

Response Action 8: The 12" x 12" Brown Floor Tile located in the TV Studio is in generally good condition. Continue the O& M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Section 3
Recommended Response Actions (Continued)

Homogeneous Area #5 12" x 12" Brown Floor Tile Mastic (Black)

Response Action 8: The 12" x 12" Brown Floor Tile Mastic located in the TV Studio is in generally good condition. Continue the O& M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #6-3' x 3' Interior Window Glazing

Response Action 8: The 3' x 3' Interior Window Glazing located in Rooms 275, 276, 278, 279, 281 and Hallway overlooking the Library is in generally good condition. Continue the O& M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #7-3' x 3' Panels Under Interior Windows

Response Action 8: The 3' x 3' Panels Under the Interior Windows located in Rooms 275, 276, 278, 279, 281 and Hallway overlooking the Library is in generally good condition. Continue the O& M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change.

Homogeneous Area #8-Vibration Dampeners

Response Action 8: The Vibration Dampeners located within the Small and Large Gyms are in generally good condition. Continue the O & M Program and manage the material in place until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. The Vibration Dampers are assumed asbestos-containing. Sampling and analysis of the Vibration Dampeners is required to be conducted prior to disturbance.

SECTION 4

RECORDKEEPING REQUIREMENTS AND RECOMMENDATIONS

Section 4

Recordkeeping Requirements and Recommendations

The AHERA regulations have very specific requirement for the maintenance of records associated with the management of the identified ACMs in the school. The following is a list of some of the key items that the LEA Designated Person must maintain as part of the package:

- Initial AHERA inspection report and Asbestos Management Plan
- Subsequent 3-year reinspection reports.
- 6-month surveillance reports.
- Documentation for minor and major fiber release episodes. This includes abatement work performed by outside contractors as well as work performed by 16 hour trained maintenance personnel no matter how small.
- Documentation for completion of response actions (i.e. clearance testing, waste shipment records, etc.). This should always include applicable training and certification documentation for the parties involved performing the work activities.
- Labeling of ACM (friable)
- Yearly notice to parents, teachers and staff.
- Training and medical exams for 16-hour trained personnel. Although training does not require renewal. Medicals are to be performed every year. In addition, 16-hour personnel should be fit tested every six months.
- Two-hour awareness training for staff. Any new workers are required to receive this training at start of employment. Training should include specific review of ACMs in the building their working in.

The above items are some of the key items, which need to be incorporated into the plan. The following are some recommendations are how best to maintain for easy access and review by outside parties:

- Maintain an update the three- ring binder for the school. Have a duplicated copy, one for administration office and one for the facilities office.
- Create tab sections in the binder. Each section should contain the information above. This will allow for easy review and update.
- Ensure that for every major and minor fiber release episode, that all documentation is received.
- As you updated your file, ensure the school's is updated.

Section 4

Recordkeeping Requirements and Recommendations (continued)

Also, it is also required that if outside contractors enter building perform work that they review areas where asbestos may be present that will be near their work. Have a log at the school for them to sign that they have read and understand. This will protect the school from liability and ensure outside contactors will not disturb asbestos. Finally, periodically review program internally and with your 16-hour persons to ensure compliance.

The 9" x 9" Gray Floor Tile identified within the Cafeteria and Teachers' Lounge displayed minor damage. Retain an Asbestos Project Designer to prepare a Work Plan for the removal and replacement of the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: August 2024.

VERTEX recommends continuing periodic cleaning schedule with properly trained staff (i.e. 2-Hour Asbestos Awareness) utilizing HEPA-vacuums.

A required six-month periodic surveillance inspection should be scheduled for November 2024.

VERTEX recommends an ACMs Survey be conducted prior to any renovation activities to comply with the EPA Title 40 CFR Part 61, NESHAPs and the Massachusetts Department of Environmental Protection Regulations.

SECTION 5

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Section 5
Estimated Resources Required to Complete the Response Actions

This section contains the estimated resources required to complete the abatement activities of the identified damaged ACMs. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. The cost estimate below does not include abatement contractor mobilization, abatement design and/or project monitoring services.

Estimated Cost to complete the Response Actions at the Scituate High School in Scituate, Massachusetts:

\$1,000.00*

Cost Estimate Worksheet can be found in Appendix B.

* The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
Abatement Contactor Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$760.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

**The estimated cost provided above does not include costs that may be associated with two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training, and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs that may be associated with the mentioned above:

2-Hour Asbestos Awareness Training = \$75/person
OSHA 16-hr Operations and Maintenance Training = \$300/person
Six-Month Periodic Surveillance Inspection = \$400/inspection

SECTION 6

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACBMs

Section 6
Estimated Resources Required For Abatement of the Identified ACMs

This section contains the estimated resources required to perform the removal of identified ACMs, however EPA recommends the ACMs to be managed in place if they are not damaged. Alternative abatement costs are estimated using current Abatement Contractor Estimates. These estimates will vary per competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. The cost estimate below is a worst-case scenario if all identified ACMs were to be removed. The cost estimate below does not include abatement contractor mobilization, abatement design and/or project monitoring services.

Estimated Cost for the Removal of ACMs from the Scituate High School in Scituate, Massachusetts:

\$420,000.00*

Cost Estimate Worksheet can be found in Appendix C.

*The estimated cost above does not include removal of potentially concealed ACMs within the interior of the school. In addition, the estimated cost provided above does not include abatement of potential ACMs on the exterior of the site building and/or beyond the AHERA inspection.

** The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
Abatement Contactor Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$760.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

SECTION 7

OPERATIONS AND MAINTENANCE

Section 7 **Operations and Maintenance Program**

INTRODUCTION

The Scituate Public School District has established an overall asbestos control program that is designed to minimize exposure of all occupants of the school to asbestos fibers located at the Scituate High School. This Operations and Maintenance (O&M) Plan is an integral part of the overall program. It sets guidelines for the proper in-place management of all assumed and identified ACMs located in the building.

This O&M plan contains the following sections:

- A. A description of the **duties of the LEA Designated Person (DP)**.
- B. A procedure for **notifying** workers, tenants, and other visitors where ACM are located, and stressing the importance of avoiding disturbing the ACM in any way.
- C. The detailed description of **O&M Activities**, including:
 - 1. **Emergency procedures** for both major and minor episodes of fiber release;
 - 2. **Periodic surveillance** of ACM, so that any changes in the condition of ACM can be noted, assessed, and documented; and
 - 3. Detailed descriptions of **work procedures** for both general maintenance and Asbestos Associated Project Workers, which must be used so that workers can avoid or minimize fiber release when performing activities that may disturb ACM.
- D. A list of **records** that must be kept to document O&M and abatement activities.
- E. **Training requirements** for the DP, and custodial and maintenance staff.

In general, asbestos represents a health hazard **only** if fibers are breathed into the lungs or, in rare cases, are swallowed. Asbestos-containing materials that are non-friable (i.e. cannot be easily broken or crumbled by hand pressure) are not hazardous as long as they are intact and in good condition. Because friable materials can be easily crumbled or crushed, they are more susceptible to airborne fiber release than are non-friable materials.

It is a policy of the Scituate Public School District that untrained employees and outside contractors **DO NOT** handle, touch or otherwise disturb any material that is asbestos or suspected of containing asbestos. A properly qualified and trained individual must handle any material that is, or may contain asbestos. Non-asbestos materials have been and may be identified by the asbestos coordinator using one or more of the following criteria: (1) lab analysis, (2) results of previous lab analysis, (3) product composition labels, (4) receipts, and so forth. At no time will any employee, student, or outside contractor assume a material to be asbestos-free. An inventory of ACMs identified from the inspection are presented in Appendix A.

Section 7
Operations and Maintenance Program (Continued)

1. DUTIES OF THE ASBESTOS MANAGEMENT PLAN DESIGNATED PERSON

The DP oversees the implementation and management of the O&M plan. Duties of the DP include (1) notifying building staff, workers, and outside contractors where ACM is located in the building, (2) assigning workers to tasks involving work that may disturb ACM, (3) ensuring that abatement and O&M activities are conducted by trained qualified personnel, and (4) keeping records of all asbestos-related activities at the property.

The DP must receive training related to asbestos issues (see “Training Requirements” of this plan).

2. NOTIFICATION

The DP shall ensure that building workers, outside contractors, and tenants are notified of the location, quantity, and physical condition of identified and assumed ACM that they might disturb. Such notification shall be accomplished by written notice, by personal communication, by posting signs at entrances to mechanical areas, and/or by labeling ACM. By informing occupants of potential hazards in their vicinity, the notification reduces the possibility that occupants will accidentally disturb ACM. The notification must stress that persons who disturb ACM may accidentally release asbestos fibers into the air, and that therefore everyone must avoid disturbing ACM. This notification will assure compliance with Occupational Health and Safety Administration (OSHA) Regulation 29 CFR Part 1926.1101, which regulates asbestos exposure as it relates to construction work (including building maintenance) and with 29 CFR 1910.1001, which regulates asbestos exposure in general industry (including normal housekeeping).

If asbestos-related construction, abatement, or O&M activities is conducted, the DP shall also notify the following persons about the presence, location, and quantity of ACM:

- A. Employees of the building, such as maintenance and custodial personnel who will work in or adjacent to areas containing ACM:
- B. Staff who will occupy areas containing ACM.
- C. Prospective employers applying for or bidding for work if their employees will be expected to work in or adjacent to areas containing ACM.
- D. Multiple employers occupying a work-site in the building, any of whose employees will be performing work within or adjacent to areas containing ACM.

Section 7
Operations and Maintenance Program (Continued)

Before conducting any work in the building that has the potential to impact ACM, contractors will be required to sign the Contractor's Asbestos Notification and Acknowledgment Form. In addition, all contractors and contractor's employees who work on the site will be required to notify the DP of the presence, location, and quantity of newly discovered ACM within 24 hours (or sooner if ACM is disturbed) of the discovery. If any building materials are discovered, the asbestos content of which is unknown, the material shall be presumed to contain asbestos, until the results of sampling and analysis prove otherwise. Appropriate sampling of the material shall be conducted by a Massachusetts Department of Labor and Work Force Development Division of Labor Standards accredited asbestos inspector and analyzed at an appropriately licensed asbestos analytical laboratory.

The DP shall ensure that all required warning signs are posted during abatement and O&M activities during which the release of asbestos fibers into the air is possible. Warning signs shall demarcate all regulated areas and shall bear the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED IN THIS AREA

Contractors and in-house personnel who remove ACM within the site shall label all waste containers that contain ACM waste in accordance with OSHA and EPA guidelines.

The Massachusetts Department of Environmental Protection (DEP) and the Massachusetts Division of Labor Standards (DLS) will be notified anytime work will impact any quantity of ACM at the school.

The DP shall ensure that all previously installed ACM that have been identified in the facility are labeled or identified by signs, as feasible. All ACM that are friable and accessible, such as TSI located in mechanical areas or below suspended ceilings, will be labeled. Labels shall be attached to or posted in areas where employees, residents, and outside contractors who are likely to be exposed will clearly notice (such as at the entrance to mechanical rooms).

The labels shall bear the following information:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

Posted signs may be used in lieu of labels to indicate the type and location of each ACM.



Section 7
Operations and Maintenance Program (Continued)

3. OPERATIONS AND MAINTENANCE ACTIVITIES

Operations and maintenance activities include:

- Emergency procedures to be followed in the event of a major or minor episode of fiber release;
- Periodic surveillance of ACM within at the school building;
- Work procedures associated with planned maintenance activities that may disturb ACM. Only properly trained personnel under the control and direction of the DP shall conduct operations and maintenance activities.
- Periodic Cleaning Activities

A. Emergency Procedures for Fiber Release Episodes

Fiber release episodes are categorized as *major* (the falling or dislodging of more than 3 square feet or 3 linear feet of friable ACM), or *minor* (the falling or dislodging of fewer than 3 square feet or 3 linear feet of friable ACM)

PROCEDURE FOR MAJOR EPISODE

1. Restrict entry into the area.
2. Immediately contact the DP
3. Post sign to prevent anyone from entering the area except persons necessary to perform the response action.
4. Shut off or temporarily modify the air-handling system to prevent the fibers from being distributed to other areas in the building.
5. The DP shall contact an accredited designer of abatement to prepare an abatement plan that specifies the appropriate response actions.
6. The DP shall ensure that only a Massachusetts Certified Asbestos Abatement Contractor conducts the response actions.

Section 7
Operations and Maintenance Program (Continued)

PROCEDURE FOR MINOR EPISODE

1. Thoroughly saturate the debris using all wetting methods necessary.
2. Clean the area using wet wiping techniques followed by vacuuming with a specially equipped High Efficiency Particulate Air (HEPA) vacuum.
3. Place all debris and all contaminated cleaning supplies (mop heads, rags, etc.) into a leak tight container, such as a 6-mil thick polyethylene waste bag, and seal the container. Place the sealed container into a second 6-mil thick polyethylene bag. If labeled waste bags are not used, apply warning label to outside of each bag used.
4. Repair the area of damaged ACM, as follows:
 - a. Use materials such as asbestos-free spackling, plaster, cement, or insulation; or
 - b. Seal the area with latex paint or an encapsulate; or
 - c. Immediately implement other appropriate response action.

B. Periodic Surveillance

Periodic surveillance of all known and assumed ACM shall be conducted once every six months. The purpose of the regularly scheduled surveillance is to ensure that any ACM that are damaged or that have deteriorated are detected in a timely manner. The DP shall use the information from the periodic surveillance in conjunction with ongoing reports from the periodic surveillance in conjunction with ongoing reports from service workers of changes in the condition of the ACM to take corrective action.

The periodic surveillance consists of a visual inspection of all known and assumed ACM. Periodic surveillance shall also include a visual and physical evaluation of ACM in order to determine the degree of damage and to assess the likelihood of future fiber release. The area in the immediate vicinity shall also be examined for potential loose ACM debris. The DP shall record the cause of the damage.

Only persons who have received at least the minimum asbestos-awareness training (see "Training Requirements", of this plan) shall conduct the periodic surveillance. The results of the surveillance shall be recorded on the periodic surveillance inspection form.

Section 7
Operations and Maintenance Program (Continued)

C. Work Procedures for General Maintenance Personnel

The following work practices shall be prohibited in all circumstances:

- Drilling holes in ACM;
- Damaging ACM while moving furniture or other objects;
- Sweeping or dusting floors, ceilings, moldings, or other surfaces in asbestos-contaminated environments;
- Using an ordinary vacuum to clean up asbestos-containing or asbestos contaminated debris (only vacuums equipped with a HEPA filter should be used);
- Removing potentially contaminated ventilation system filters without thoroughly wetting them; and
- Shaking potentially contaminated ventilation system filters.

D. Periodic Cleaning

The following is a general outline to be utilized for the properly trained personnel to conduct the periodic cleaning activities:

- Utilization of disposable rags to wet wipe of all non-porous horizontal surfaces followed by the use of a HEPA-equipped vacuum. Dry sweeping and/or dusting is not permitted to be used to clean the surfaces.
- The collected debris within the lined HEPA-equipped vacuum and disposal rags should be properly disposed of in a labeled asbestos-waste bag accompanied by a Waste Shipment Record for future disposal at a permitted facility that accepts asbestos waste.
- Document the Name of the individual conducting the work activities, location date and time of cleaning for proper recordkeeping. These records should be included within the AMP for the school.

Floor Tile Maintenance

Pursuant to the Occupational Safety and Health Administration (OSHA) Asbestos Standard 29 CFR 1910.1001, properly trained staff (i.e. 2-Hour Asbestos Awareness) should adhere to the OSHA's guidance for care of asbestos-containing flooring materials outlined below:

- Do not sand asbestos-containing flooring material;
- Use only low-abrasion buffing pads;
- Operate buffers only at speeds lower than 300 rpm;
- Use wet methods;
- Document the Name of the individual conducting the work activities, location date and time of cleaning for proper recordkeeping. These records should be included within the AMP for the school.

Section 7
Operations and Maintenance Program (Continued)

4. RECORDKEEPING REQUIREMENTS

The building owner shall maintain the following documentation pertaining to ACM in the facility:

- All data that are relied upon to demonstrate that suspect ACM do not in fact contain asbestos.
- All data communicated and received that identify the locations and quantities of ACM.
- All records associated with abatement projects and O&M activities. These documents shall be maintained during the term of ownership. They shall then be transferred to successive owners, in accordance with OSHA Regulation 1926.1101 (n).
- If the owner's employees conduct activities that may potentially cause them to be exposed to asbestos fibers, the owner shall keep the following additional records:
 - All employee exposure-monitoring records pursuant to OSHA Regulation 1926.1101(f).
 - All information relative to medical surveillance of employees pursuant to OSHA Regulation 1926.1101(m). Medical surveillance shall be required only if:
 1. Employees are required to conduct tasks that would result in their exposure to airborne concentrations of asbestos above the OSHA permissible exposure limit (PEL); or
 2. If employees conduct asbestos abatement tasks for more than 30 days per year.
- The owner shall maintain all employee-training records for one year beyond the employee's last date of employment.

5. TRAINING REQUIREMENTS

The extent of asbestos training for facility employees depends on the type of asbestos-related activities they will conduct. For most employees who will require training, a two-hour awareness course will be sufficient but necessary. For employees who are involved in activities where exposure to airborne asbestos fibers is likely, a more comprehensive 16-hour training course is necessary.

Section 7
Operations and Maintenance Program (Continued)

AWARENESS TRAINING

The curriculum shall include instruction in the following:

- The location, quantity, and physical condition of all ACM located in the facility.
- Recognition of damage, deterioration, and delaminating of ACM.
- The health effects associated with asbestos exposure, including the relationship between smoking and asbestos in producing lung cancer.
- Procedures to be implemented in the event of a minor or major episode of fiber release.
- The requirements for posting signs and affixing labels, and the meaning of the required legends for such signs and labels.

COMPREHENSIVE WORKER TRAINING

The curriculum shall include instruction in the following:

- All awareness training information described above.
- The nature of operations that could result in exposure to asbestos, and the importance of necessary protective controls and of procedures for minimizing exposure, including:
 - engineering controls
 - work practices,
 - respirators,
 - housekeeping procedures,
 - hygiene facilities,
 - protective clothing,
 - decontamination procedures,
 - emergency procedures,
 - waste disposal procedures and any necessary instruction in the use of these controls and procedures.

Section 7

Operations and Maintenance Program (Continued)

- The purpose, proper use, fitting instructions, and limitations of respirators.
- Medical surveillance program requirements
- The contents of the OSHA standard (1926.1101) regarding asbestos in construction.
- Hands-on-training in the use of respiratory protection, other personal protection measures, and work practices.

Detailed procedures for conducting small-scale, short duration abatement activities, as defined in Appendix A to Subpart E to EPA Regulation 40 CFR Part 763.

APPENDIX A

**LOCATIONS OF THE ASBESTOS CONTAINING MATERIALS AND
UPDATED CONDITONS**

Appendix A AHERA Inspection June 2024 Locations of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway						
Location	ACM Description	Estimated Quantity	VERTEX 2021 Cond.	VERTEX 2024 Updated Cond.	Fri.	HA #
First Floor						
Kitchen Office (Room 166E)	9" x 9" Brown Floor Tile	120 ft ²	G	G	N	6
	Black Floor Tile Mastic	120 ft ²	C	C	N	5
Cafeteria	9" x 9" Gray Floor Tile	5900 ft ²	MD (60 ft ²)	MD (120 ft ²)	N	6
	Black Floor Tile Mastic	5900 ft ²	C	C	N	5
Teachers Lounge	9" x 9" Gray Floor Tile	1034 ft ²	G	MD (6 ft ²)	N	6
	Black Floor Tile Mastic	1034 ft ²	C	C	N	5
Guidance Office (165)	9" x 9" Brown Floor Tile (Under Carpet)	1,300 ft ²	C	C	N	5
	Black Floor Tile Mastic	1,300 ft ²	C	C	N	5
Principal Office (Rooms 160 and 162)	9" x 9" Brown Floor Tile (Under Carpet)	1,900 ft ²	C	C	N	5
	Black Floor Tile Mastic	1,900 ft ²	C	C	N	5
Hallway by Room 129	Pipe Fitting Insulation (Above Drop Ceiling)	2 Units	D (2)	Abated 2022	Y	1
T.V. Studio	12" x 12" Brown Floor Tile	800 ft ²	G	G	N	6
	Black Floor Tile Mastic	800 ft ²	C	C	N	5
Small and Large Gym	Vibration Dampeners	8 Units	G	G	N	5
Second Floor						
Room 201	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 203	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 205	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 207	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 209	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5



Appendix A AHERA Inspection June 2024 Locations of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway						
Location	ACM Description	Estimated Quantity	VERTEX 2021 Cond.	VERTEX 2024 Updated Cond.	Fri.	HA #
<i>Second Floor (Continued)</i>						
Room 211	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 213	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 220	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	C	C	N	5
	Black Floor Tile Mastic	912 ft ²	C	C	N	5
Room 221	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	C	C	N	5
	Black Floor Tile Mastic	800 ft ²	C	C	N	5
Room 222	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	C	C	N	5
	Black Floor Tile Mastic	912 ft ²	C	C	N	5
Room 223	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	C	C	N	5
	Black Floor Tile Mastic	800 ft ²	C	C	N	5
Room 224	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C	C	N	5
	Black Floor Tile Mastic	840 ft ²	C	C	N	5
Room 225	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	C	C	N	5
	Black Floor Tile Mastic	960 ft ²	C	C	N	5
Math Room	9" x 9" Tan Floor Tile (Under Carpet)	1080 ft ²	C	C	N	5
	Black Floor Tile Mastic	1080 ft ²	C	C	N	5
Social Studies Room 226	9" x 9" Tan Floor Tile (Under Carpet)	646 ft ²	C	C	N	5
	Black Floor Tile Mastic	646 ft ²	C	C	N	5
Room 227	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	C	C	N	5
	Black Floor Tile Mastic	960 ft ²	C	C	N	5
Room 229	9" x 9" Tan Floor Tile (Under Carpet)	1440 ft ²	C	C	N	5
	Black Floor Tile Mastic	1440 ft ²	C	C	N	5



Appendix A AHERA Inspection June 2024 Locations of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway						
Location	ACM Description	Estimated Quantity	VERTEX 2021 Cond.	VERTEX 2024 Updated Cond.	Fri.	HA #
Second Floor (Continued)						
Room 230	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 232	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 233	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 234	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 235	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 237	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 239	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 241	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 260	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C	C	N	5
	Black Floor Tile Mastic	768 ft ²	C	C	N	5
Room 262	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C	C	N	5
	Black Floor Tile Mastic	840 ft ²	C	C	N	5
Room 266	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C	C	N	5
	Black Floor Tile Mastic	840 ft ²	C	C	N	5
Room 267	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C	C	N	5
	Black Floor Tile Mastic	840 ft ²	C	C	N	5



Appendix A AHERA Inspection June 2024 Locations of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway						
Location	ACM Description	Estimated Quantity	VERTEX 2021 Cond.	VERTEX 2024 Updated Cond.	Fri.	HA #
Second Floor (Continued)						
Room 268	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C	C	N	5
	Black Floor Tile Mastic	840 ft ²	C	C	N	5
Room 271	9" x 9" Tan Floor Tile (Under Carpet)	546 ft ²	C	C	N	5
	Black Floor Tile Mastic	546 ft ²	C	C	N	5
Room 273	9" x 9" Tan Floor Tile (Under Carpet)	368 ft ²	C	C	N	5
	Black Floor Tile Mastic	368 ft ²	C	C	N	5
Room 274	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
Room 275	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
	Glazing Compound Associated w/Panels	30 lf	G	G	N	5
	Cementitious Panels Under Windows	27 ft ²	G	G	N	5
Room 276	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
	Glazing Compound Associated w/Panels	30 lf	G	G	N	5
	Cementitious Panels Under Windows	27 ft ²	G	G	N	5
Room 277	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
	Glazing Compound Associated w/Panels	30 lf	G	G	N	5
	Cementitious Panels Under Windows	27 ft ²	G	G	N	5
Room 278	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
	Glazing Compound Associated w/Panels	30 lf	G	G	N	5
	Cementitious Panels Under Windows	27 ft ²	G	G	N	5



Appendix A AHERA Inspection June 2024 Locations of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway						
Location	ACM Description	Estimated Quantity	VERTEX 2021 Cond.	VERTEX 2024 Updated Cond.	Fri.	HA #
<i>Second Floor (Continued)</i>						
Room 279	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
	Glazing Compound Associated w/Panels	30 lf	G	G	N	5
	Cementitious Panels Under Windows	27 ft ²	G	G	N	5
Room 281	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C	C	N	5
	Black Floor Tile Mastic	624 ft ²	C	C	N	5
Hallway Overlooking Library	Glazing Compound Associated w/Panels	372 lf	G	G	N	5
	Cementitious Panels Under Windows	186 ft ²	G	G	N	5

Notes:

ft² = Square Foot
 lf = Linear Foot
 Unit = Each
 Y= Yes
 N = No

Cond. = Condition
 G = Good
 MD = Minor Damage
 D = Damaged
 Fri. = Friable

U = Unknown
 C = Covered
 M = Miscellaneous
 S= Surfacing
 TSI = Thermal System Insulation

NA = Not Accessible



HA # = Homogenous Area Hazard Assessment Category

- 1 = Damaged/Significantly Damaged Thermal System Insulation
- 2 = Damaged Friable Surfacing ACBM
- 3 = Significantly Damaged Friable Surfacing ACBM
- 4 = Damaged or Significantly Damaged Friable Miscellaneous ACBM
- 5 = ACBM with Potential for Damage
- 6 = ACBM with Potential for Significant Damage
- 7 = Any Remaining Friable ACBM or Friable Suspected ACBM
- NA = Not Applicable

APPENDIX B

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Appendix B
AHERA Inspection June 2024
Estimated Resources to Complete Response Actions
Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	Recommended Response Action	Estimated Cost	Recommended Completion Date of Response Action	Date of Completed Response Action
<i>First Floor</i>						
Cafeteria	9" x 9" Gray Floor Tile	120 ft ²	Remove/Repair	\$1,100.00	August 2024	
Techers Lounge	9" x 9" Gray Floor Tile	6 ft ²	Remove/Repair	\$100.00	August 2024	

Notes:

ft² = Square Foot

Unit = Each

* The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00

Abatement Contactor Mobilization = \$1,500.00-\$2,500.00

Project Monitoring/Clearance Testing = \$520.00-\$760.00/per shift

Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample

Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample

Clearance Report Preparation = \$350.00-\$800.00

**The estimated cost provided above does not include costs that may be associated with two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training, and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs that may be associated with the mentioned above:

2-Hour Asbestos Awareness Training = \$75/person

OSHA 16-hr Operations and Maintenance Training = \$300/person

Six-Month Periodic Surveillance Inspection = \$400/inspection



APPENDIX C

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACMs

Appendix C			
AHERA Inspection June 2024			
Estimated Costs for the Removal of the Identified Asbestos-Containing Materials			
Scituate High School-606 Chief Justice Cushing Highway			
Location	ACM Description	Estimated Quantity	Estimated Cost
<i>First Floor</i>			
Kitchen Office (Room 166E)	9" x 9" Brown Floor Tile	120 ft ²	\$1,080.00
	Black Floor Tile Mastic	120 ft ²	
Cafeteria	9" x 9" Gray Floor Tile	5900 ft ²	\$53,100.00
	Black Floor Tile Mastic	5900 ft ²	
Teachers Lounge	9" x 9" Gray Floor Tile	1034 ft ²	\$9,306.00
	Black Floor Tile Mastic	1034 ft ²	
Guidance Office (165)	9" x 9" Brown Floor Tile (Under Carpet)	1,300 ft ²	\$11,700.00
	Black Floor Tile Mastic	1,300 ft ²	
Principal Office (Rooms 160 and 162)	9" x 9" Brown Floor Tile (Under Carpet)	1,900 ft ²	\$17,100.00
	Black Floor Tile Mastic	1,900 ft ²	
T.V. Studio	12" x 12" Brown Floor Tile	800 ft ²	\$7,200.00
	Black Floor Tile Mastic	800 ft ²	
Small and Large Gym	Vibration Dampeners	8 Units	\$1,200.00
<i>Second Floor</i>			
Room 201	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 203	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 205	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 207	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 209	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	



Appendix C			
AHERA Inspection June 2024			
Estimated Costs for the Removal of the Identified Asbestos-Containing Materials			
Scituate High School-606 Chief Justice Cushing Highway			
Location	ACBM Description	Estimated Quantity	Estimated Cost
<i>Second Floor (Continued)</i>			
Room 211	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 213	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 220	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	\$8,208.00
	Black Floor Tile Mastic	912 ft ²	
Room 221	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	\$7,200.00
	Black Floor Tile Mastic	800 ft ²	
Room 222	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	\$8,208.00
	Black Floor Tile Mastic	912 ft ²	
Room 223	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	\$7,200.00
	Black Floor Tile Mastic	800 ft ²	
Room 224	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	\$7,560.00
	Black Floor Tile Mastic	840 ft ²	
Room 225	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	\$8,640.00
	Black Floor Tile Mastic	960 ft ²	
Math Room	9" x 9" Tan Floor Tile (Under Carpet)	1080 ft ²	\$9,720.00
	Black Floor Tile Mastic	1080 ft ²	
Social Studies Room 226	9" x 9" Tan Floor Tile (Under Carpet)	646 ft ²	\$5,814.00
	Black Floor Tile Mastic	646 ft ²	
Room 227	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	\$8,640.00
	Black Floor Tile Mastic	960 ft ²	
Room 229	9" x 9" Tan Floor Tile (Under Carpet)	1440 ft ²	\$12,960.00
	Black Floor Tile Mastic	1440 ft ²	
Room 230	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	



Appendix C			
AHERA Inspection June 2024			
Estimated Costs for the Removal of the Identified Asbestos-Containing Materials			
Scituate High School-606 Chief Justice Cushing Highway			
Location	ACM Description	Estimated Quantity	Estimated Cost
<i>Second Floor (Continued)</i>			
Room 232	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$14,400.00
	Black Floor Tile Mastic	768 ft ²	
Room 233	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 234	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 235	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 237	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 239	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 241	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 260	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	\$6,912.00
	Black Floor Tile Mastic	768 ft ²	
Room 262	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	\$6,912.00
	Black Floor Tile Mastic	840 ft ²	
Room 266	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	\$7,560.00
	Black Floor Tile Mastic	840 ft ²	
Room 267	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	\$7,560.00
	Black Floor Tile Mastic	840 ft ²	
Room 268	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	\$7,560.00
	Black Floor Tile Mastic	840 ft ²	
Room 271	9" x 9" Tan Floor Tile (Under Carpet)	546 ft ²	\$7,560.00
	Black Floor Tile Mastic	546 ft ²	



Appendix C			
AHERA Inspection June 2024			
Estimated Costs for the Removal of the Identified Asbestos-Containing Materials			
Scituate High School-606 Chief Justice Cushing Highway			
Location	ACM Description	Estimated Quantity	Estimated Cost
<i>Second Floor (Continued)</i>			
Room 273	9" x 9" Tan Floor Tile (Under Carpet)	368 ft ²	\$3,312.00
	Black Floor Tile Mastic	368 ft ²	
Room 274	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
Room 275	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
	Glazing Compound Associated w/Panels	30 lf	\$300.00
	Cementitious Panels Under Windows	27 ft ²	\$270.00
Room 276	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
	Glazing Compound Associated w/Panels	30 lf	\$300.00
	Cementitious Panels Under Windows	27 ft ²	\$270.00
Room 277	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
	Glazing Compound Associated w/Panels	30 lf	\$300.00
	Cementitious Panels Under Windows	27 ft ²	\$270.00
Room 278	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
	Glazing Compound Associated w/Panels	30 lf	\$300.00
	Cementitious Panels Under Windows	27 ft ²	\$270.00
Room 279	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
	Glazing Compound Associated w/Panels	30 lf	\$300.00
	Cementitious Panels Under Windows	27 ft ²	\$270.00



Appendix C AHERA Inspection June 2024 Estimated Costs for the Removal of the Identified Asbestos-Containing Materials Scituate High School-606 Chief Justice Cushing Highway			
Location	ACM Description	Estimated Quantity	Estimated Cost
<i>Second Floor (Continued)</i>			
Room 281	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	\$5,616.00
	Black Floor Tile Mastic	624 ft ²	
Hallway Overlooking Library	Glazing Compound Associated w/Panels	372 lf	\$3,720.00
	Cementitious Panels Under Windows	186 ft ²	\$1,860.00

Notes:

ft² = Square Foot
 lf = Linear Foot
 Unit = Each

* The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. The estimated cost for floor tile mastic removal is included within the total cost for the removal of the associated floor tile. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
 Abatement Contactor Mobilization = \$1,500.00-\$2,500.00
 Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift
 Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
 Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
 Clearance Report Preparation = \$350.00-\$800.00



APPENDIX D
PERSONNEL CERTIFICATIONS

THE VERTEX COMPANIES, LLC

ACCREDITATION PAGE

Accredited Inspector

Name: Jason Mohre

Accreditation Number: AI000262



Signature: _____

Date: 6/14/2024

Accredited Management Planner

Name: Jason Mohre

Accreditation Number: AP000080



Signature: _____

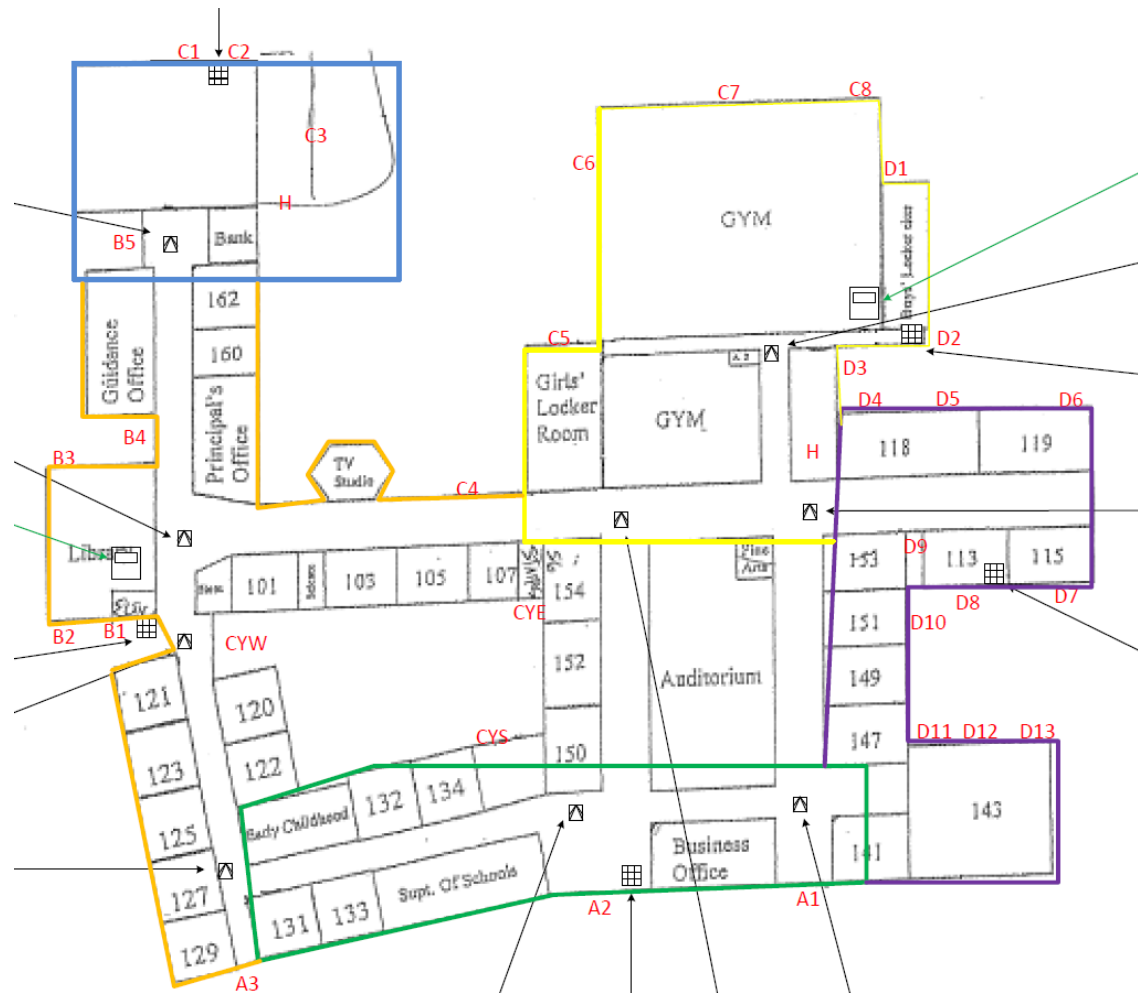
Date: 6/14/2024

APPENDIX E

SCHEMATIC

Scituate High School
606 Chief Justice Cushing Hwy
Scituate, MA

FIRST FLOOR



Scituate High School
606 Chief Justice Cushing Hwy
Scituate, MA

SECOND FLOOR



APPENDIX F

SIX-MONTH SURVEILLANCE FORMS

AHERA Six-Month Surveillance Inspection Date: _____

(Print Name): _____

Signature: _____

Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	June 2024 Cond.	Nov. 2024 Cond.	May 2025 Cond.	Nov. 2025 Cond.	May 2026 Cond.	Nov. 2026 Cond.
<i>First Floor</i>								
Kitchen Office (Room 166E)	9" x 9" Brown Floor Tile	120 ft ²	G					
	Black Floor Tile Mastic	120 ft ²	C					
Cafeteria	9" x 9" Gray Floor Tile	5900 ft ²	MD (120 ft ²)					
	Black Floor Tile Mastic	5900 ft ²	C					
Teachers Lounge	9" x 9" Gray Floor Tile	1034 ft ²	MD (6 ft ²)					
	Black Floor Tile Mastic	1034 ft ²	C					
Guidance Office (165)	9" x 9" Brown Floor Tile (Under Carpet)	1,300 ft ²	C					
	Black Floor Tile Mastic	1,300 ft ²	C					
Principal Office (Rooms 160 and 162)	9" x 9" Brown Floor Tile (Under Carpet)	1,900 ft ²	C					
	Black Floor Tile Mastic	1,900 ft ²	C					
T.V. Studio	12" x 12" Brown Floor Tile	800 ft ²	G					
	Black Floor Tile Mastic	800 ft ²	C					
Small and Large Gym	Vibration Dampeners	8 Units	G					
<i>Second Floor</i>								
Room 201	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 203	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 205	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 207	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 209	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					

AHERA Six-Month Surveillance Inspection Date: _____

(Print Name): _____

Signature: _____

Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	June 2024 Cond.	Nov. 2024 Cond.	May 2025 Cond.	Nov. 2025 Cond.	May 2026 Cond.	Nov. 2026 Cond.
Second Floor (Continued)								
Room 211	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 213	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 220	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	C					
	Black Floor Tile Mastic	912 ft ²	C					
Room 221	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	C					
	Black Floor Tile Mastic	800 ft ²	C					
Room 222	9" x 9" Tan Floor Tile (Under Carpet)	912 ft ²	C					
	Black Floor Tile Mastic	912 ft ²	C					
Room 223	9" x 9" Tan Floor Tile (Under Carpet)	800 ft ²	C					
	Black Floor Tile Mastic	800 ft ²	C					
Room 224	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C					
	Black Floor Tile Mastic	840 ft ²	C					
Room 225	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	C					
	Black Floor Tile Mastic	960 ft ²	C					
Math Room	9" x 9" Tan Floor Tile (Under Carpet)	1080 ft ²	C					
	Black Floor Tile Mastic	1080 ft ²	C					
Social Studies Room 226	9" x 9" Tan Floor Tile (Under Carpet)	646 ft ²	C					
	Black Floor Tile Mastic	646 ft ²	C					
Room 227	9" x 9" Tan Floor Tile (Under Carpet)	960 ft ²	C					
	Black Floor Tile Mastic	960 ft ²	C					
Room 229	9" x 9" Tan Floor Tile (Under Carpet)	1440 ft ²	C					
	Black Floor Tile Mastic	1440 ft ²	C					
Room 230	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					

AHERA Six-Month Surveillance Inspection Date: _____

(Print Name): _____

Signature: _____

Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	June 2024 Cond.	Nov. 2024 Cond.	May 2025 Cond.	Nov. 2025 Cond.	May 2026 Cond.	Nov. 2026 Cond.
Second Floor (Continued)								
Room 232	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 233	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 234	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 235	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 237	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 239	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 241	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 260	9" x 9" Tan Floor Tile (Under Carpet)	768 ft ²	C					
	Black Floor Tile Mastic	768 ft ²	C					
Room 262	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C					
	Black Floor Tile Mastic	840 ft ²	C					
Room 266	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C					
	Black Floor Tile Mastic	840 ft ²	C					
Room 267	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C					
	Black Floor Tile Mastic	840 ft ²	C					
Room 268	9" x 9" Tan Floor Tile (Under Carpet)	840 ft ²	C					
	Black Floor Tile Mastic	840 ft ²	C					
Room 271	9" x 9" Tan Floor Tile (Under Carpet)	546 ft ²	C					
	Black Floor Tile Mastic	546 ft ²	C					

AHERA Six-Month Surveillance Inspection Date: _____

(Print Name): _____

Signature: _____

Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	June 2024 Cond.	Nov. 2024 Cond.	May 2025 Cond.	Nov. 2025 Cond.	May 2026 Cond.	Nov. 2026 Cond.
Second Floor (Continued)								
Room 273	9" x 9" Tan Floor Tile (Under Carpet)	368 ft ²	C					
	Black Floor Tile Mastic	368 ft ²	C					
Room 274	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
Room 275	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
	Glazing Compound Associated w/Panels	30 lf	G					
	Cementitious Panels Under Windows	27 ft ²	G					
Room 276	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
	Glazing Compound Associated w/Panels	30 lf	G					
	Cementitious Panels Under Windows	27 ft ²	G					
Room 277	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
	Glazing Compound Associated w/Panels	30 lf	G					
	Cementitious Panels Under Windows	27 ft ²	G					
Room 278	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
	Glazing Compound Associated w/Panels	30 lf	G					
	Cementitious Panels Under Windows	27 ft ²	G					
Room 279	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
	Glazing Compound Associated w/Panels	30 lf	G					
	Cementitious Panels Under Windows	27 ft ²	G					

AHERA Six-Month Surveillance Inspection Date: _____

(Print Name): _____

Signature: _____

Scituate High School-606 Chief Justice Cushing Highway

Location	ACM Description	Estimated Quantity	June 2024 Cond.	Nov. 2024 Cond.	May 2025 Cond.	Nov. 2025 Cond.	May 2026 Cond.	Nov. 2026 Cond.
<i>Second Floor (Continued)</i>								
Room 281	9" x 9" Tan Floor Tile (Under Carpet)	624 ft ²	C					
	Black Floor Tile Mastic	624 ft ²	C					
Hallway Overlooking Library	Glazing Compound Associated w/Panels	372 lf	G					
	Cementitious Panels Under Windows	186 ft ²	G					

Notes:

- | | | | |
|-------------------------------|-------------------|---------------------------------|---------------------|
| ft ² = Square Foot | Cond. = Condition | U = Unknown | NA = Not Accessible |
| lf = Linear Foot | G = Good | C = Covered | |
| Unit = Each | MD = Minor Damage | M = Miscellaneous | |
| Y= Yes | D = Damaged | S= Surfacing | |
| N = No | Fri. = Friable | TSI = Thermal System Insulation | |

APPENDIX G

DESIGNATED PERSON ASSURANCES

DESIGNATED PERSON ASSURANCES

In accordance with 40 CFR ' 763.93(i) of the Environmental Protection Agency Asbestos-Containing Material in Schools regulation, the undersigned Local Education Agency (LEA) Designated Person (DP) hereby certifies that the following general responsibilities of the LEA under 40 CFR ' 763.84 have been or will be met:

1. Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
2. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
3. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.
4. Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations for Asbestos-Containing Building Materials (ACBM) and suspected ACBM assumed to be Asbestos-Containing Materials (ACM).
5. Ensure that warning labels are posted in accordance with ' 40 CFR 763.95.
6. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under ' 40 CFR 763.93(g).
7. Designate a person to ensure that requirements under ' 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under ' 763.84. Such training shall provide, as necessary, basic knowledge of: health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACBM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Transportation and the U.S. Environmental Protection Agency.
8. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763, Subpart E.

Name of Designated Person:

Christopher Cataldo

Designated Person's Signature:



Date:

8-01-2024