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# DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)

Contiguous Commercial Buildings 518 and 532 Roosevelt Avenue Central Falls, Rhode Island 02863

# **Prepared For:**

Pawtucket Central Falls Development Attn: Mr. Andrew Pierson 204 Broad Street Pawtucket, RI 02860

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#### 1.0 Introduction

NV5 has prepared this Analysis of Brownfields Cleanup Alternatives (ABCA) for the two contiguous properties and buildings located at 518 and 532 Roosevelt Avenue, in Central Falls, Providence County, Rhode Island (the Site) on behalf of:

Pawtucket Central Falls Development 204 Broad Street Pawtucket, RI 02860

This document was prepared using funding from the Pawtucket Redevelopment Agency EPA Brownfield Revolving Loan Fund. The following report provides a technical evaluation of remedial alternatives for addressing the identified environmental conditions at the Sites and presents a work plan for the selected remedial alternative.

# 1.1 Purpose and Scope

The purpose of this report is to evaluate appropriate cleanup alternatives to mitigate identified environmental conditions at the Sites. Information on known conditions is based on the results of an Asbestos Survey completed by Brian Piccolo of AltTech Services in September 2024, who is a Rhode Island licensed Asbestos Inspector (Al00657).

As summarized in these surveys, environmental conditions that need to be addressed at the Sites as part of redevelopment include the following:

Asbestos containing materials (ACM) in and on the Site buildings;

Each remedial alternative that was considered was evaluated based on the following criteria:

- Effectiveness and Reliability;
- Feasibility and Ease of Implementation;
- Risk reduction and Associated Benefits;
- Cost Effectiveness: and
- Estimated Time to Reach No Further Action.

Consideration was given to the following items in the development of these remedial alternatives:

 Potential exposure to human receptors including future residents (child occupied uses), outdoor commercial workers, excavation and construction workers, and/or visitors (which includes trespassers) from residual contamination existing prior to any remedial action and remaining after the remedial action; and

 Compatibility of any remedial alternative with the planned future reuse of the Sites.

With these criteria in mind, the overall objectives of this report included the following:

- Evaluating the remedial alternatives against the evaluation criteria presented above;
- Selecting the remedial alternative that best meets the objectives and considerations of the project; and
- Presenting a general work plan for implementing the selected remedial alternative.

# 2.0 Background Information

The Sites consists of two irregular shaped contiguous parcels of land that total 0.257 acres (0.127 and 0.13 acres of land) located on the western side of Roosevelt Avenue and the southern side of Central Street in Central Falls. The building at 518 Roosevelt Avenue is a one-story wood-framed commercial building that was constructed around 1900 and comprises a total of approximately 5,720 gross square feet or 2,860 net square feet of building space, with an unfinished basement. The building at 532 Roosevelt Avenue is a two-story wood-framed mixed-use commercial/residential building that was constructed around 1890 and comprises a total of approximately 4,888 gross/net square feet of building space, with an unfinished basement.

Public utilities available to the Site include potable water through the City of Pawtucket, public wastewater discharge sewer system through the Narragansett Bay Commission, as well as electric, natural gas and communications.

**Figure 1** locates the Sites on the Attleboro, MA, East Providence, RI; Pawtucket, RI and Providence, RI Quadrangles prepared by the United States Geological Survey (USGS). A plan of the Sites depicting the buildings and adjoining properties is presented as **Figure 2**.

### 2.1 Surrounding Land Use

Based on previous reports and investigations, The Sites are in a commercial area in the southeastern portion of Central Falls, Rhode Island. The properties are adjoined to the north with vacant commercial buildings; to the south with Alaska Auto and Costa Del Sol restaurant; a vacant commercial building to the west; and mixed use commercial/residential converted mill buildings, across Roosevelt Avenue.

### 2.2 Future Site Use

Redevelopment plans are currently being established. The owner plans to demolish the two existing buildings and erect a residential apartment building with office space.

# 3.0 Summary of Previous Investigations

Phase I Environmental Site Assessment (ESA), Pulaski Club, 518 Roosevelt Avenue Central Falls, RI, prepared by NV5 for Pawtucket Central Falls Development, dated August 2, 2023

The Findings/Conclusions of this report were written as follows:

NV5 did not identify activities at the subject property or at neighboring properties (potential offsite sources) that would indicate a significant potential for RECs, based on the information contained in the databases reviewed, the research conducted, and/or the site reconnaissance completed.

No Historical Recognized Environmental Conditions (HRECs) or Controlled Recognized Environmental Conditions (CRECs), as defined by ASTM 1527-21, were found to be associated with the subject property.

It should be noted that NV5 observed two 275-gallon ASTs situated in the basement of the building, as the building was previously heated by oil. According to the escort, the oil boiler and the ASTs are no longer utilized and the building is heated and cooled with electric and gas fired systems. NV5 also observed a fill port situated near the frontage sidewalk for these ASTs. No evidence of a release or threatened release was observed in the area of the ASTs or the fill port.

As these ASTs are no longer utilized, they should be appropriately decommissioned, along with the remote fill port.

Phase I ESA, Vacant Building, 532 Roosevelt Avenue, Central Falls, RI, prepared by NV5 for Pawtucket Central Falls Development, dated July 23, 2024

The Findings/Conclusions of this report were written as follows:

NV5 did not identify activities at the subject property or at neighboring properties (potential offsite sources) that would indicate a significant potential for RECs, based on the information contained in the databases reviewed, the research conducted, and/or the site reconnaissance completed.

No Historical Recognized Environmental Conditions (HRECs) or Controlled Recognized Environmental Conditions (CRECs), as defined by ASTM 1527-21, were found to be associated with the subject property.

It should be noted that the building has been vacant since this past winter and the residential spaces are filled with trash and debris, which has also caused a rodent problem. NV5 recommends that all trash and debris be removed from the building and rodent control be adopted, if not already.

It should also be noted that a fill port for ASTs that are located in the basement of the southern adjoining property was observed. No evidence of a release was observed in the area of the fill port. NV5 also observed a fill and vent pipe on the adjoining property to the west. However, a previous ground penetrating radar (GPR) survey in this area, completed by NV5 also for the User of this report, did not reveal any abandoned USTs.

Lastly, it should be noted that a groundwater monitoring well was observed in the middle of Roosevelt Street in front of the subject property. NV5 was unable to determine the specific purpose of the well bit assumes it is or was associated with a nearby property investigation or an overall groundwater quality investigation being performed by the City of State.

<u>Asbestos Building Survey, Commercial Building, 518 Roosevelt Avenue, Central Falls, RI, completed by AltTech Services, dated October 8, 2024</u>

This survey report documents the activities and results of an asbestos building survey conducted throughout the building on Tuesday, September 17 and Thursday, September 19, 2024, which was completed by Brian A. Piccolo (RI Asbestos Inspector Al00657).

The report indicates that the appended results reveal that the following materials to be positive for asbestos:

- The TSI associated with the heating system pipping located throughout the basement.
- The hard packed fitting/elbow TSI associated with the heating system pipping located throughout the basement.
- The boiler TSI associated with the original boiler system.
- The grey floor tile and associated mastic located below a layer of plywood behind the bar in the bar area.
- The bottom layer black floor tile, located below the grey floor tile behind the bar in the bar area.
- The stone pattern linoleum located in the storage room and coat room of the hall area. It should be noted that the stone pattern linoleum located in the coat room is located below a layer of clay tile.

- The red/blue floor tile located below the 12" x 12" floor tile/plywood in the hall area.
- The green 9" x 9" floor tile located below the roofing system of the building.

AltTech recommended that the ACMs identified above be appropriately abated by a licensed asbestos abatement contractor in accordance with all local, state and federal regulations prior to any potential disturbance associated with any future demolition activities, which are proposed for the commercial building located at the above referenced property.

Asbestos Building Survey, Commercial Building, 532 Roosevelt Avenue, Central Falls, RI, completed by AltTech Services, dated October 8, 2024

This survey report documents the activities and results of an asbestos building survey conducted throughout the building on Wednesday, September 25 and Thursday, September 26, 2024, which was completed by Brian A. Piccolo (RI Asbestos Inspector Al00657).

The report indicates that the appended results reveal that the following materials to be positive for asbestos:

- The remnant beige 12" x 12" floor tile; located within the 1st floor northwestern unit.
- The linoleum; located within the former bathroom of the 1st floor northwestern unit.
- The ceramic wall tile glue; located within the 2nd floor northeastern unit along Central Street, specifically the bathroom and kitchen areas.
- The joint compound associated with the gypsum board walls located within the two, 2nd floor eastern units along Roosevelt Avenue, specifically the bathrooms, kitchens and the northwestern bedroom.
- The bottom layer tar & gravel roofing materials located on the flat roof portions of the building.
- The black sealant associated with the chimneys, vents and protrusions associated with the pitched roof portions of the building.

The report notes the attached results reveal that the floor paper located below the plywood flooring in the northeastern 1st floor area was found to contain less than 1% asbestos after using the PLM Method. As such, the floor paper material is not considered to be an asbestos containing material, by the RIDOH and U.S. EPA, which is defined as any material containing greater than 1% asbestos.

However, the floor paper located below the plywood flooring in the northeastern 1st floor area will need to be handled in accordance with the US Occupational Safety & Health Administration (OSHA) construction standard for asbestos (29 CFR 1926.1101), for any material with detectable asbestos.

AltTech recommended that the ACMs identified above be appropriately abated by a licensed asbestos abatement contractor in accordance with all local, state and federal regulations prior to any potential disturbance associated with any future demolition activities, which are proposed for the commercial buildings located at the above referenced properties.

# 4.0 Conceptual Site Model

A conceptual site model (CSM) was developed using the findings of the Phase I ESAs and subsequent Asbestos Surveys. The CSM includes a description of the physical setting of the Site, contaminants of concern (COCs), exposure pathways and potential human and environmental receptors.

# 4.1 Physical Setting

# Site Topography and Drainage

The United States Geological Survey (USGS), Attleboro, MA; East Providence, RI; Pawtucket, RI and Providence, RI Quadrangles 7.5-Minute series topographic maps were reviewed during a recent Phase I ESA. These maps were published by the USGS in 2021. According to the contour lines on the topographic map, the elevation of the subject property is approximately 56 feet above mean sea level. The contour lines in the area of the subject property indicate that the area slopes to the east.

#### Site Groundwater and Hydrogeology

There are no surface water bodies located on the property and the depth to groundwater is estimated to be 10-25 feet below ground level.

According to the Rhode Island Department of Environmental Management (RIDEM) Groundwater Classification Map, the Site overlays a "GB" groundwater area. "GB" areas are defined as groundwater resources "known or presumed unsuitable for drinking water use without treatment."

Based on area topography, regional groundwater is inferred to flow east towards the Seekonk River. The direction of flow is based on the USEPA Ground Water Handbook, Vol.1 Ground Water and Contamination, September 1990, the water table typically conforms to surface topography. This means the direction of flow for shallow groundwater is generally from higher elevations to lower elevations. Localized flow direction may vary as a result of tide, rainfall,

development, geologic characteristics, nearby surface water bodies, underground utilities such as storm drains, septic systems and sewers, or other influences such as the presence of high-volume wells.

# **Geological Characteristics**

#### Bedrock

The subject property is underlain by Narragansett Bay Group - Rhode Island Formation bedrock from the Pennsylvanian Age, with the Primary Rock Type being arenite and the Secondary Rock Type being shale.

Narragansett Bay Group - Rhode Island Formation - In northern Rhode Island, consists of gray to black, fine- to coarse-grained quartz arenite, litharenite, shale, and conglomerate, with minor beds of anthracite and meta-anthracite. In southern Rhode Island, consists of meta-sandstone, meta-conglomerate, schist, carbonaceous schist, and graphite. Plant fossils are common.

# Surficial Geology

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Urban Land. Urban Land has been altered from original soils and are areas covered by buildings, pavement and concrete and have variable characteristics.

### **Changing Climate Concerns**

To ensure that cleanups remain effective as the climate changes, EPA has added a new term and condition to Cleanup and Revolving Loan Fund (RLF) grants that requires recipients to "evaluate the resilience of the remedial options in light of reasonably foreseeable changing climate conditions (e.g., sea level rise, increased frequency and intensity of flooding and/or extreme weather events, etc.)."

Based on the National Oceanic and Atmospheric Administration (NOAA) interactive map of Sea Level Rise and Coastal Flooding Impacts (http:/coast.noaa.gov/slr), sea level rise of up to 6 feet and increased flooding is not expected to impact the Sites.

Future increased frequency of extreme weather events is not perceived to impact evaluation and selection of the cleanup alternatives as all of the cleanup scope will be executed on and within the buildings and long-term efficacy of the cleanup not likely to be negatively impacted by increasing extreme weather events.

# 4.2 Current Contaminants of Concern (COCs)

Asbestos is the current COC for the Sites.

# 4.3 Exposure Pathways and Potential Receptors

Exposure Pathways describe how a human or environmental receptor meets contaminants which may be present at the Sites. Exposure pathways presented in the CSM include the following:

Dermal Exposure via dermal absorption occurs when Absorption: receptors are exposed to chemical concentrations

present in soil, groundwater, surface water, or hazardous building materials through direct contact

with the skin.

Active Ingestion: The active ingestion pathway represents exposure

which may occur through the active ingestion of contaminant concentrations via an ingestion of impacted media, drinking water supply well or

through agricultural products.

Incidental This pathway is applicable when receptors may

Uptake/Inhalation: incidentally ingest impacted media in the form of

dust or airborne particulates.

Potential Receptors are categorized by duration of exposure and intensity of use at the Sites. The receptor categories described in the CSM include the following:

Resident: The residential receptor is defined by high durational

exposure and high intensity usage which may occur through gardening, digging, and recreational sports. This group includes the occupants of a residential property or a residential neighborhood, or a daycare.

Outdoor Commercial Worker: Outdoor commercial receptors are those which are present at the Sites for long durations but with low intensity exposure such as groundskeepers, parking lot attendants, and mechanics. This category is also conservatively applied for indoor office workers at the

Sites.

Excavation or Construction Worker

Excavation or construction workers are present at the Site for short durations though intensity of use is high, such as during non-routine activities including construction or utility work. Examples include utility

and construction contractors and landscapers.

Visitor or Visitors or trespassers are characterized by low Trespasser: duration, i.e. less than two hours per day, and low

intensity usage such as that which would occur during

activities such as walking, shopping, etc.

# 4.4 Conceptual Site Model Summary

ACM building components have been identified at the Sites. If these materials are not properly addressed during redevelopment, primary impacted media would include indoor and outdoor air, as well as interior and exterior surfaces. The COCs associated with these items have the potential to impact potential future residents and occupants, outdoor commercial workers, excavation and construction workers, and/or visitors/users (which would include trespassers) within and in the vicinity of the Site buildings. The potential exposure pathways are dermal absorption, active ingestion, and incidental uptake.

# 5.0 Estimate of Impacted Media and Cleanup Goals

# **5.1 Estimate of Impacted Media**

# Asbestos Containing Materials

# 518 Roosevelt Avenue

**Basement** - Approximately 90 linear feet of small diameter thermal system insulation (TSI) associated with the heating system piping, approximately 9 hard packed elbows/fittings associated with the small diameter heating system piping, approximately 80 linear feet of large diameter TSI associated with the heating system piping, approximately 15 hard packed elbows/fittings associated with the large diameter heating system piping, and approximately 56 square feet of boiler TSI associated with the original boiler system.

1st Floor - Approximately 100 square feet of grey floor tile and associated mastic (glue) covering the bottom layer black floor tile, each of which is covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI associated with pipping located with the wall cavity of the bar room, approximately 40 square feet of stone linoleum located in the storage room, approximately 40 square feet of stone linoleum located below ceramic floor tile in the coat room, and approximately 615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in the hall area. Please note that if the asbestos containing flooring materials are disturbed while the non-asbestos flooring materials/plywood are being removed to access the asbestos containing floor materials, then the non-asbestos flooring

material/plywood would need to be treated and disposed of as an asbestos contaminated material.

**Roof Area** - Approximately 350 square feet of green floor tile. Please note that floor tile is located below the EPDM roofing system on the roof deck, which is the original 2nd floor of the building, that was previously fire damaged. As such, the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck.

#### 532 Roosevelt Avenue

**Northwestern 1st Floor Area** - Approximately 10 square feet of remnant beige 12" x 12" floor tile and approximately 20 square feet of linoleum located within the former bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to be located within the exposed wall chases within this area.

**Northwestern 2nd Floor Unit** - Approximately 160 square feet of ceramic wall tile glue located behind the kitchen sink and throughout the bathroom area (tub/shower and walls). It should be noted that the ceramic wall tile has been contaminated with the asbestos containing glue and will be treated as an asbestos containing material.

**Eastern 2nd Floor Units** - Approximately 2,300 square feet of gypsum board walls/ceilings contaminated with the asbestos containing joint compound.

Roof Area - Approximately 1,000 square feet of the bottom layer tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing and approximately 60 square feet of black sealant located around/on the chimneys, skylight, and other vents/protrusions associated with the pitched portions of the building. Please note that if the asbestos containing tar & gravel roofing felts are disturbed while the non-asbestos rolled roofing material is being removed to access the asbestos containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will need to be treated and disposed of as am asbestos contaminated material.

# 5.2 Cleanup Goals and Applicable Guidelines

To determine necessary remedial actions at the site, the sampling results were compared to applicable state and federal standards/guidelines and/or background concentrations. These standards and/or guidelines for each sampled media are described below.

The goal relative to the identified COCs is to eliminate or manage the risks to human health and to the environment through proper management, mitigation, and/or disposal of identified COCs.

# <u>Asbestos Containing Materials</u>

Asbestos will be managed in accordance with the Rhode Island Department of Health's Rules and Regulations for Asbestos Control (216-RICR-50-15-1), as amended January 1, 2019.

#### 6.0 Descriptive of Remedial Alternatives

The remedial actions selected for the Site should accomplish the following objectives:

- 1. Minimize the potential for exposure to and/or improper disposal of asbestos.
- 2. Maintain compatibility with the potential future reuse of the Sites.

Multiple remedial alternatives are available to address the identified COCs at the Sites. However, based on past experience at sites with similar contaminants and conditions, we have pre- screened general advantages and disadvantages of various treatment options and have selected three remedial alternatives for further evaluation and comparison:

- 1. No Action Alternative
- 2. Management in Place of Asbestos Building Materials,
- 3. Abatement and Proper Disposal of Asbestos Building Materials

These remedial alternatives were evaluated for implementation at the Sites and are further discussed in the following sections.

#### 6.1 "No Action" Alternative

A "No Action" alternative would not involve the implementation of remediation activities at the Site. The "No Action" alternative does not include a means for mitigating or eliminating potential exposure to building materials both during and following redevelopment. Therefore, the potential for human exposure continues for current and future receptors. This alternative is presented and discussed through the subsequent portions of this report as a baseline comparison and represents the existing conditions at the Sites.

# 6.2 Management In Place of All Hazardous Building Materials

This alternative would utilize standard techniques to continue to use the ACM. These techniques would consist of encapsulation, enclosure, repair or a combination thereof. An Asbestos Operations and Maintenance Plan (O&M) would then be developed and implemented to ensure that the asbestos building materials are managed properly in the future.

# 6.3 Abatement and Proper Disposal of Asbestos Building Materials

This alternative would utilize standard techniques to remove the ACM building components and transport these materials off-site for proper disposal.

# 7.0 Comparison of Alternatives

As discussed in the previous section, three (3) remedial alternatives were evaluated to address the identified COCs at the Site. These remedial alternatives are evaluated and compared to one another in this section. The comparisons of the remedial alternatives have been conducted using the five criteria listed below:

- 1. effectiveness and reliability
- 2. feasibility and ease of implementation
- 3. risk reduction & green/sustainable remediation
- 4. cost effectiveness
- 5. estimated time to reach "No Further Action"

A brief summary of these five criteria and a discussion as to how they pertain to the available selected remedial alternatives is presented below. A comparison of remedial alternatives with respect to the above-listed criteria for each selected alternative is presented on **Table 1** at the end of this Section.

# 7.1 Description of Evaluation Criteria

### Effectiveness and Reliability

This criterion addresses the ability of the alternative to meet the cleanup standards and the long- term reliability of the alternative.

# Feasibility and Ease of Implementation

This criterion analyzes technical feasibility and the availability of services and materials. Availability of services and materials evaluates the need for off-site treatment, storage, or disposal services and the availability of such services. Necessary equipment, specialists, and additional resources are also evaluated.

### Risk Reduction and Green/Sustainable Remediation

Risk reduction is categorized as a threshold criterion. Alternatives must pass this criterion to be considered for implementation as the recommended alternative. It addresses whether or not a remedy provides adequate protection and describes how the risks posed by the Site are eliminated, reduced, or controlled. Protection of human health is assessed by evaluating how risk from each exposure route is eliminated, reduced, or controlled through each specific alternative.

This criterion also evaluates the extent of green remediation techniques to be employed as part of the project and their associated benefits. This criterion will be evaluated based on its consistency with EPA's Principle for Greener Cleanup policy. Alternatives will also be evaluated relative to their reliability in a changing climate.

### Cost Effectiveness

Cost information presented for the alternatives evaluates the estimated capital, operational and maintenance costs of each alternative. Capital costs include direct capital costs such as materials and equipment. Costs are presented as a balancing criterion such that if a number of remedial alternatives are comparable for the previously discussed criteria, cost may be used as a distinguishing factor in the selection of the remedial action. Estimated costs were developed based on prior project and contractor experience, and current estimates received from contractors. Remediation is scheduled to take place in 2025, and as such, costs presented are in year 2025 dollars.

# **Estimated Time to Reach No Further Action**

This criterion is defined as the time it will take to achieve "No Further Action" in accordance with RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1). "No Further Action" will be achieved once asbestos final clearances are completed. It should be noted that the RIDOH does not issue No Further Action letters, although a Final Clearance Letter will be produced by AltTech Services, once completed. Please note this criterion does not take into account redevelopment and other time for non- environmental tasks.

#### 7.2 Evaluation of Alternatives

#### 1 - "No Action Alternative"

The "No Action" alternative involves no remedial activities at the Sites. This alternative does not include a means for mitigating or eliminating potential exposure to contaminated soil or hazardous building materials both during and following redevelopment. Therefore, the potential for human exposure continues to exist for current and future receptors. As such, the "No Action" response is not wholly protective of human health and/or the environment. Additionally, without action, the toxicity, mobility, and volume of contaminants will not be reduced. Therefore, this alternative is ineffective as a permanent remedial solution. As a result, this alternative cannot be considered as a final alternative for this issue and will not be evaluated further in this ABCA.

# 2 - Management In Place of All Asbestos Building Materials

### Effectiveness and Reliability

This method would prevent exposure to asbestos building materials; however, this alternative would not reduce the volume of COCs at the Sites. This alternative is effective and is also reliable, but long-term maintenance will be required to manage the encapsulated, enclosed, repaired asbestos building materials in order to ensure reliability.

# Feasibility and Ease of Implementation

This method would use standard and proven construction and management techniques to maintain the asbestos building materials in-place. However, if the future renovations plans consist of a significant reconfiguration of the Site buildings, the ACM may become substantially disturbed during the demolition process. Therefore, this alternative is technically feasible, but not easily implementable because it would be very difficult to work around all the ACM while managing potential risk of exposure to the various construction workers. In summary, this alternative is considered to be feasible, but not easily implementable.

#### Risk Reduction and Green Sustainable Remediation

This alternative fulfills the overall protection of human health and the environmental requirement by mitigating exposure to ACM. This is not a permanent solution as it requires long term management. In addition, throughout the redevelopment, health and safety practices would have to be employed to protect workers.

An associated benefit would be that much of the hazardous building materials would be able to be left in place, thereby lowering the energy cost for offsite disposal of waste.

#### Cost Effectiveness

Based on prior project and contractor experience and current estimates contained in previous reports, the estimated cost to manage hazardous building materials in-place is as follows:

Remedial Planning/Engineering	\$5,000
SSQAPP/CRP/Community Outreach/VRAP	\$5,000
Waste Characterization	\$5,000
Management & Long-Term Maintenance of ACM	\$40,000
Site Restoration	\$15,000
Asbestos Operations and Maintenance Plan	\$1,500
Implementation of Asbestos O&M	\$60,000 <sup>1</sup>
Cleanup Oversight Reporting	\$5,000

<sup>(1)</sup> Assumes \$2,000 net present value for annual maintenance and operations cost over 30 years with 3%

Total \$136,500

annual inflation

#### Estimated Time to Reach "No Further Action"

Following the installation of controls and repair of asbestos building materials, and the implementation of the O&M, the Sites would meet the requirements for "No Further Action" and could attain final clearance. "No Further Action" could be attained within approximately three to six months of implementation. This assumes that the O&M continues to be implemented into the future.

# 3 - Abatement and Proper Disposal of Asbestos Building Materials

#### Effectiveness and Reliability

This alternative relies on proper engineering controls and industry proven techniques to effectively abate and dispose of most of the asbestos building materials. Once the remediation is complete, this method would permanently eliminate the majority of potential exposure to asbestos building materials. Based on these considerations, this alternative is highly effective and reliable.

### Feasibility and Ease of Implementation

This method would use standard and proven construction, remedial, and abatement techniques to remove asbestos building materials. Therefore, this alternative is technically feasible and is easily implementable, as the project can be phased such that the asbestos building materials can be removed prior to redevelopment, thereby eliminating the exposure risk to construction workers.

### Risk Reduction and Green/Sustainable Remediation

This alternative fulfills the overall protection of human health and the environmental requirement by eliminating the risk of exposure to asbestos building materials and eliminating or reducing the toxicity, mobility, and volume of the COCs. The associated benefits will be very little construction restrictions for future construction activities or future users.

#### Cost Effectiveness

Based on prior project and contractor experience and current estimated received from local contractors, the estimated cost to implement this alternative is as follows:

Remedial Planning/Engineering	\$5,000
SSQAPP/CRP/Community Outreach/VRAP	\$5,000
Waste Characterization	\$7,500
Abatement and Removal of ACM	\$50,000
Cleanup Oversight/Reporting	\$5,000

Total \$72,500

#### Estimated Time to Reach "No Further Action

Immediately following the abatement and disposal of the ACMs and the receipt of any clearance sample results, the Sites would meet the requirements for a determination of "No Further Action". Using this alternative, "No Further Action" could be attained within three months of implementing this alternative.

### 7.3 Justification For The Selected Remedial Alternatives

Each of the alternatives and the comparison criteria are summarized in Table 1, which can be found in Appendix 1. Based on the evaluation of the remedial alternatives presented above, the recommended alternative is "abatement and proper disposal of asbestos building materials" (Alternative 3). The abatement alternative was selected because it eliminates most exposure, allows for more unrestricted demolition of the buildings, is a more permanent solution and will be more efficient to implement.

# 8.0 Proposed Asbestos Abatement Plan

As indicated above, abatement and proper disposal is the recommended alternative to address the COCs at the Sites. Pawtucket Central Falls Development will coordinate and direct the performance of the selected remedial activities. This section describes activities that will be completed as part of the Sites remediation. In addition, the proposed remediation activities have already been reviewed and approved by the Rhode Island Department of Health (RIDOH), as evidenced by the appended approval letters.

#### **Asbestos Abatement**

Prior to with the Site buildings demolition, a Rhode Island licensed Asbestos Abatement Contractor will remove and dispose of identified ACM pursuant to RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1), as amended January 2019, as well as in accordance with the Asbestos Abatement Plan designed by a Rhode Island licensed Asbestos Project Designer contained in Appendix C, which has been submitted an approved by the RIDOH. Following the completion of asbestos abatement activities and once successful clearance results are obtained, all documentation required by RIDOH's Rules and Regulations for Asbestos Control will be submitted to the RIDOH for their records.

#### State and Federal Permits Required

An Asbestos Abatement Plan designed by a Rhode Island licensed Asbestos Project Designer, has been submitted and approved by the RIDOH. Depending on timing, this approval may require extension, which has already been discussed with officials at the RIDOH.

# Remedial Action Reporting

Following the completion or remedial activities, the Owner shall obtain confirmation of final clearances (visual and air) and proper asbestos disposal from the contractor(s) and and provide copies to the RI Department of Health in accordance with Section 1.17.3(B) of the RI Rules and Regulations for Asbestos Control.

# 9.0 Summary

NV5/ developed this ABCA for the commercial buildings situated on the Sites located at 518 and 532 Roosevelt Avenue in Central Falls, RI. The purpose of this study was to evaluate potential remedial action alternatives to mitigate identified environmental conditions at the Site. Based on the findings of this study, a summary of the ABCA/RAP process is presented below:

- 1. Remedial action is necessary to address the asbestos building materials identified at the Site. In consideration of the Conceptual Site Model, applicable regulations and guidelines, and the nature of the specific contaminants detected; NV5 evaluated three (3) alternatives to identify the most appropriate cleanup. The three (3) evaluated remedial alternatives were compared for effectiveness and reliability, feasibility, and ease of implementation, risk reduction, and associated benefits, cost effectiveness, and estimated time to reach No Further Action.
- 2. The abatement and proper disposal of asbestos building materials alternative has been selected as the recommended alternative because it meets all the evaluation criteria and is the best alternative for the Sites.
- 3. Asbestos Abatement Plans that detail the execution of the removal, abatement, and proper disposal of building COCs at both Sites is included in this document in Appendix C. Appendix D contains the RIDOH approval letters.

10.0 Signature(s) of Environmental Professional

July 31, 2025

Vincent L. Jacques, P.E. Date

Table 1 – Summary of Remedial Alternatives							
Evaluation Criteria	No Action	Management In Place of Asbestos Building Materials	Abatement and Proper Disposal of Asbestos Building Materials				
Effectiveness & Reliability	Not Effective or Reliable.	Management in place of the hazardous building materials has been proven to be an effective and reliable form of remediation. Long-term maintenance is required.	Abatement and disposal has been proven to be an effective and reliable form of remediation. Long-term maintenance is not required.				
Feasibility & Ease of Implementation	Not feasible but easily implementable.	Utilizes standard construction, management, and maintenance techniques. Therefore this alternative is feasible. However, it will require the implementation of health and safety practices during redevelopment so it is not easy to implement.	Utilizes standard construction, remedial, and abatement techniques to remove hazardous building materials and therefore, this alternative is technically practical, easily implementable, and feasible.				
Risk Reduction and Green/Sustainable Remediation	No reduction in risks to human health and the environment. No reduction in contaminant mobility or toxicity.	Risk to human health by exposure to hazardous building components reduced, but not permanently eliminated. Risks to construction workers during redevelopment would be increased. Lower energy cost for less offsite disposal of waste	Risk to human health by exposure to hazardous building materials are permanently eliminated by abatement/removal. Greater energy cost for offsite disposal of waste				
Lifecycle Cost	No Cost	\$136,500	\$72,500				
Time to Reach "No Further Action"	Will not be achieved.	3-6 months	3-6 months				
Comments	Does not address risk to human health and the environment.	Feasible but does not allow for unrestricted modifications to the building and will require long-term management. Also will increase risks to construction workers during redevelopment.	Selected Alternative				

# APPENDIX A

Photographs



Property overview



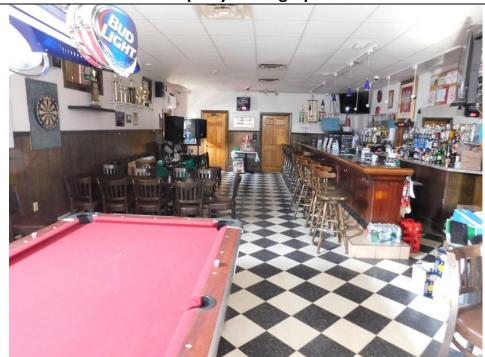
Property overview



Property overview



Property overview



Property overview



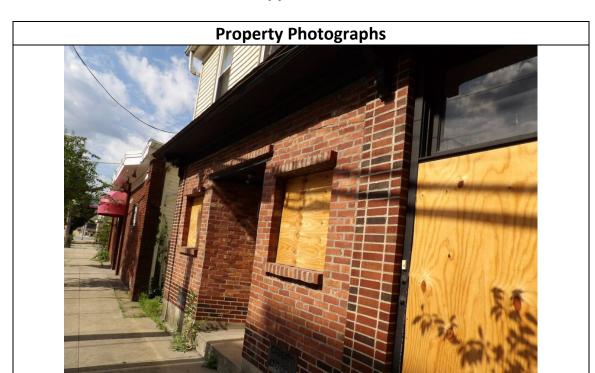
Property overview



Property overview – TSI along piping in the 518 basement



Property overview – TSI on boiler in 518 basement



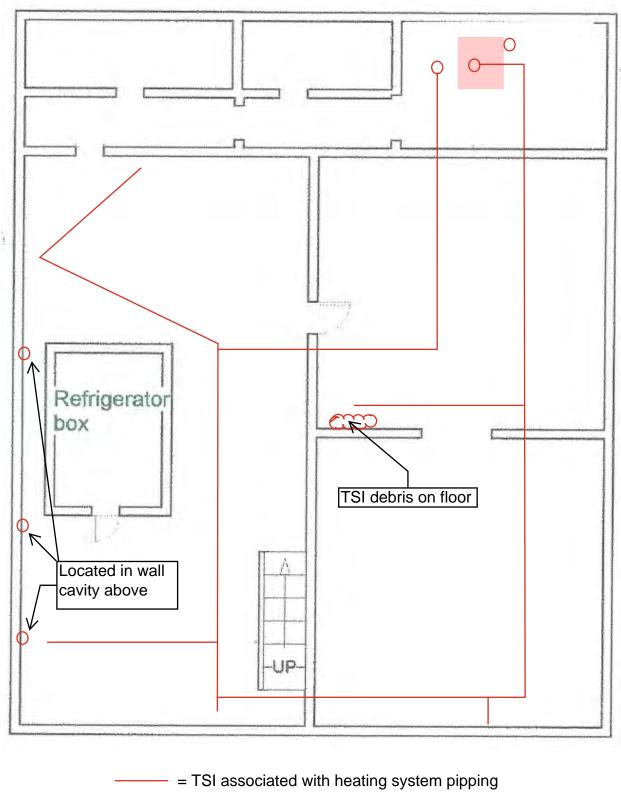
Property overview



Property overview

# APPENDIX B

Figures



= Boiler TSI

Figure 1 Area 1 - Basement 518 Roosevelt Avenue Central Falls, RI

<sup>\*</sup>Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

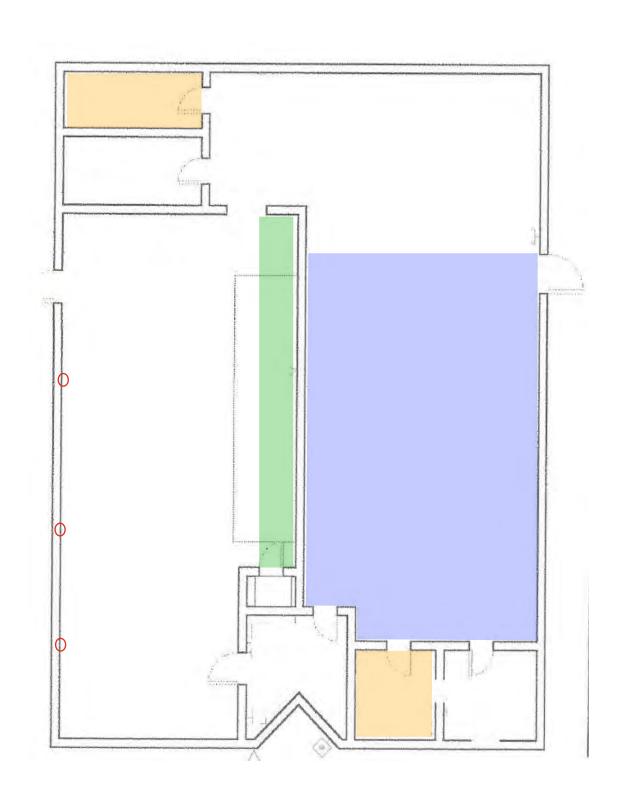
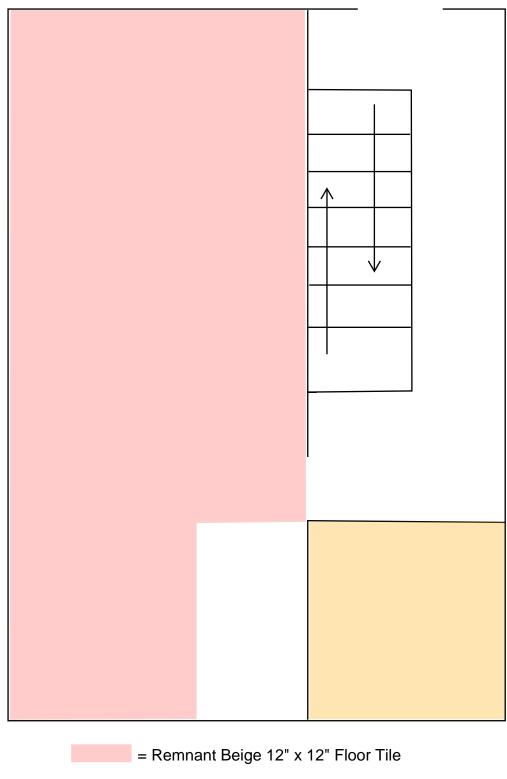


Figure 2
Area 2 - First Floor
518 Roosevelt Avenue
Central Falls, RI



Please note that the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck and and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 3
Area 3 – Roof Area
518 Roosevelt Avenue
Central Falls, RI

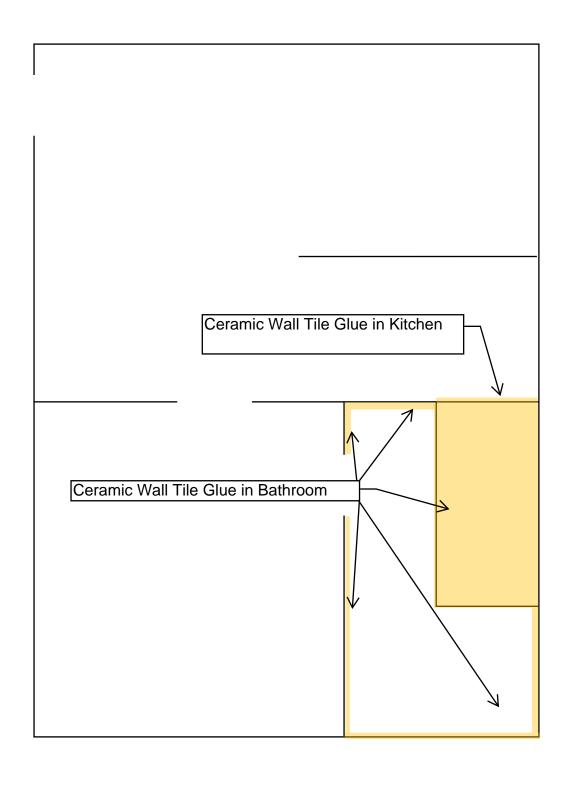


= Linoleum

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

# Figure 1

Area 1 - Northwestern 1st Floor 532 Roosevelt Avenue Central Falls, RI

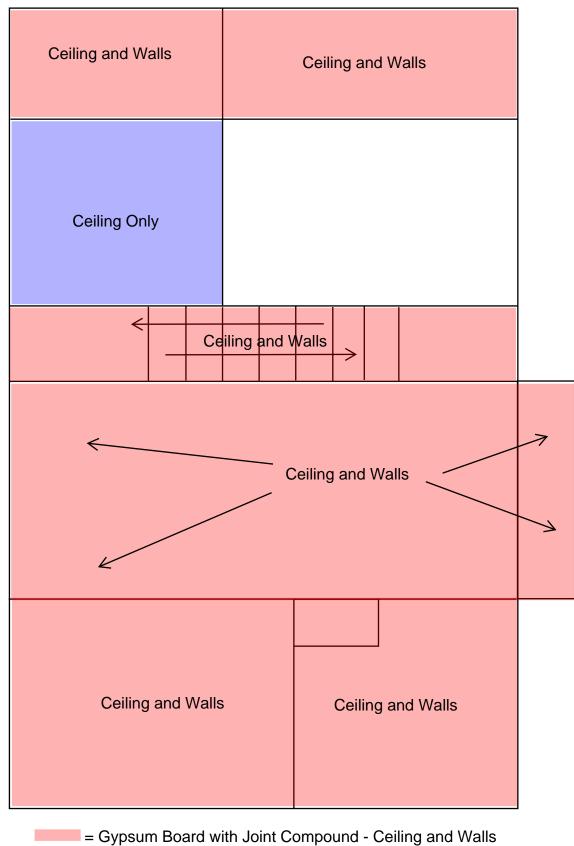


= Ceramic Wall Tile Glue

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 2

Area 2 - Northwestern 2nd Floor 532 Roosevelt Avenue Central Falls, RI



= Gypsum Board with Joint Compound - Ceiling and Walls= Gypsum Board with Joint Compound - Ceiling Only

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 3

Area 3 - Eastern 2nd Floor 532 Roosevelt Avenue Central Falls, RI



= Tar & Gravel Roofing Felts

= Black Sealant

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 4
Area 4 – Roof Area
532 Roosevelt Avenue
Central Falls, RI

# APPENDIX C

# **Asbestos Abatement Plans**

# ASBESTOS ABATEMENT PLAN COMMERCIAL BUILDING 518 ROOSEVELT AVENUE CENTRAL FALLS, RHODE ISLAND PROJECT NO. 20240917.01

### Prepared for

Pawtucket Central Falls Development Attention: Ms. Linda Weisinger, Executive Director 204 Broad Street, Pawtucket, RI 02860

Prepared by

AltTech Services 44 Pole Bridge Road North Scituate, RI 02857 TEL: 401-556-2746

October 22, 2024

#### Index

#### I RI State Asbestos Abatement Form ASB-16

#### II RI State Asbestos Abatement Forms ASB-16A

**Abatement Area 1 – Basement** - Approximately 90 linear feet of small diameter thermal system insulation (TSI) associated with the heating system piping, approximately 9 hard packed elbows/fittings associated with the small diameter heating system piping, approximately 80 linear feet of large diameter TSI associated with the heating system piping, approximately 15 hard packed elbows/fittings associated with the large diameter heating system piping, and approximately 56 square feet of boiler TSI associated with the original boiler system.

**Abatement Area 2 – 1<sup>st</sup> Floor** - Approximately 100 square feet of grey floor tile and associated mastic (glue) covering the bottom layer black floor tile, each of which is covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI associated with pipping located with the wall cavity of the bar room, approximately 40 square feet of stone linoleum located in the storage room, approximately 40 square feet of stone linoleum located below ceramic floor tile in the coat room, and approximately 615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in the hall area. Please note that if the asbestos containing flooring materials are disturbed while the non-asbestos flooring materials/plywood are being removed to access the asbestos containing floor materials, then the non-asbestos flooring material/plywood would need to be treated and disposed of as an asbestos contaminated material.

**Abatement Area 3 – Rood Area** - Approximately 350 square feet of green floor tile. Please note that floor tile is located below the EPDM roofing system on the roof deck, which is the original 2<sup>nd</sup> floor of the building, that was previously fire damaged. As such, the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck.

\* Please note that the quantities and locations of asbestos containing materials included in this abatement plan are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

#### III RI State Asbestos Abatement Form ASB-16B

#### IV Attachments:

"Asbestos Abatement Plan" for Commercial Building, 518 Roosevelt Avenue, Central Falls, RI dated October 22, 2024



# ABATEMENT PLAN APPLICATION

1.	Owner/Contact Name: <u>Pawtucket Central Falls Development Corporation/Ms. Linda Weisinger</u> Title: <u>Executive Director</u>		
	If owned by an organization, organization name: Pa		
	City/State: Pawtucket	ZIP: <u>02860</u>	
	Phone: 401-726-1163 Ema	il: kpereira@pcfdevelopment.org	
2.	Application prepared by: Name: Brian A. Piccolo	RIDOH License No.: <u>AD00657</u>	
	Phone: 401 556-2746 Ema	il: <u>bpiccolo@alttechri.com</u>	
4.	Location of abatement work:  Facility/Building Name: Commercial Building  Street Address: 518 Roosevelt Avenue		
	City/Town: Central Falls		
5.	Reason for Application: (Check all that apply)  ( ) Emergency Plan No		
6.	Asbestos contractor (if known):		
	Name: To Be Determined	RIDOH License No.:	

1.	Start Date: As soon as the plan is approved, and all notifications have been made.  Completion Date: Expected to take two weeks to complete.			
8.	Abatement Method: (Check all tha	t apply)		
	(X) Removal	( ) Glovebag		
	( ) Encapsulation	(X) Asphalt Roofing		
	( ) Enclosure	( ) Operations & Maintenance Only		
	(X) Demolition			
	Other (Specify):			
9.	Facility Type: (Check one)			
	( ) Child Care Facility	( ) Private Residential Dwelling		
	( ) College/University	( ) Public Housing		
	( ) Hospital	( ) School/School Building		
	(X) Other (Specify): Commerce	cial Building		
10.	. Building Access: (Check one)			
	( ) Public Access	(X) No Public Access		
	( ) Limited Public Access	( ) Other (specify)		
11.	. Bulk Sampling:			
	A. Samples collected by:	DIDOU License No.: A100657		
	Name: Brian A Piccolo	RIDOH License No.: AI00657		
	B. Sampling Methodology: (Check	k one)		
	( ) EPA AHERA Sampling req			
	(X) Other (Specify): Represen			
	C. Analytical Service:			
	•	Laboratory RIDOH License No.: PLM00121		
	D. Analytical Method: (Check one)			
	(X) PLM (Phase Light Microscopy)			
	( ) TEM (Transmission Electro	on Microscopy)		
	( ) Other (Specify):			

<ul><li>12. Pre-Abatement Air Sampling:</li><li>A. Samples collected by:</li></ul>	
Name: Not Applicable	_ RIDOH License No.:
Affiliation:	
B. Analytical Service:	
Name: Not Applicable	RIDOH License No.:
C. Analytical Method: (Check one)	
( ) PCM (Phase Contrast Microscopy)	
( ) TEM (Transmission Electron Microscopy	)
( ) Other (Specify):	
13. Removal and Disposal of Asbestos-Containing Ma A. How will ACM be removed from the abatement	* /
transport the ACM to a disposal site, they mus	t also be identified.
To be determined by contractor	
B. Provide the name and location of the authorize will be transferred for disposal (if known).  To be determined by contractor	·
14. Project Monitor: (not required)	
Name:	RIDOH License No.:
Affiliation:	
15. In-Process & Clearance Air Sampling:  A. Describe in an attachment the type, number an collected outside the work area during the abate See Asbestos Abate.	tement project.
B. Describe in an attachment the plan of action to Occupational Air Exposure Standard for Asberexceeded outside the work area during the abare See Asbestos Abate	stos (0.01 fibers per cubic centimeter) is tement project.
C. Describe in an attachment the type, number an collected as part of the final clearance testing.  See Asbestos Abate	<u>-</u>
D. Describe in an attachment the plan of action to Occupational Air Exposure Standard for Asbest exceeded during final clearance testing.	stos (0.01 fiber per cubic centimeter) is

16. A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. List below the entry in Item 1 from each attached ASB-16A.

Abatement Area 1 – Basement - Approximately 90 linear feet of small diameter thermal system insulation (TSI) associated with the heating system piping, approximately 9 hard packed elbows/fittings associated with the small diameter heating system piping, approximately 80 linear feet of large diameter TSI associated with the heating system piping, approximately 15 hard packed elbows/fittings associated with the large diameter heating system piping, and approximately 56 square feet of boiler TSI associated with the original boiler system.

Abatement Area 2 – 1st Floor - Approximately 100 square feet of grey floor tile and associated mastic (glue) covering the bottom layer black floor tile, each of which is covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI associated with pipping located with the wall cavity of the bar room, approximately 40 square feet of stone linoleum located in the storage room, approximately 40 square feet of stone linoleum located below ceramic floor tile in the coat room, and approximately 615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in the hall area. Please note that if the asbestos containing flooring materials are disturbed while the non-asbestos flooring materials/plywood are being removed to access the asbestos containing floor materials, then the non-asbestos flooring material/plywood would need to be treated and disposed of as an asbestos contaminated material.

Abatement Area 3 – Rood Area - Approximately 350 square feet of green floor tile. Please note that floor tile is located below the EPDM roofing system on the roof deck, which is the original 2nd floor of the building, that was previously fire damaged. As such, the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck.

17. Asbestos Abatement Plan Application Fee:	
( ) State Agency, fee waived	\$0
( ) Operation & Maintenance Program Onl	y \$75
( ) Up to One (1) NESHAP Unit	\$75
(X) Between One (1) & Ten (10) NESHAL	P Units \$300
( ) Between Ten (10) & Fifty (50) NESHA	P Units \$600
( ) Over Fifty (50) NESHAP Units	\$900
( ) Annual Plan	\$900
( ) Asbestos Abatement Plan Amendment	Fee \$150*
*If the amendment increases the scope of work the difference between the two fee categories.	
One (1) NESHAP Unit = 260 linear feet or 160	square feet or 35 cubic meters
18. I certify that this plan was prepared by me,	and I am responsible for its content.
Name: Brian A. Piccolo	RIDOH License No.: <u>APD00657</u>
Signature: Brian A Piccolo	Date: October 22, 2024
Affiliation: AltTech Services	
Email: bpiccolo@alttechri.com	Phone: <u>401-556-2746</u>



#### ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental Information: Area Description and Proposed Plan	Suppl	lemental	Information:	Area Do	escription	and Pro	posed Plan
--	-------	----------	--------------	---------	------------	---------	------------

Facility/Building:	Commercial	Ruilding
racinty/Dunuing.	Committee	Duname

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):

Abatement Area 1 - Basement

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 90 linear feet of small diameter thermal system insulation (TSI) associated with the heating system piping, approximately 9 hard packed elbows/fittings associated with the small diameter heating system piping, approximately 80 linear feet of large diameter TSI associated with the heating system piping, approximately 15 hard packed elbows/fittings associated with the large diameter heating system piping, and approximately 56 square feet of boiler TSI associated with the original boiler system.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

#### 4. Proposed Plan:

A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ()No

If yes, indicate below which ACM in this area will be abated by use of the following 1.14

	work procedures: (Check all that apply) ( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	(X) 1.14.6 Demolition <u>Approximately 90 linear feet of small diameter TSI</u>
	associated with the heating system piping, approximately 9 hard packed elbows/fittings
	associated with the small diameter heating system piping, approximately 80 linear feet
	of large diameter TSI associated with the heating system piping, approximately 15 hard
	packed elbows/fittings associated with the large diameter heating system piping, and
	approximately 56 square feet of boiler TSI associated with the original boiler system.
	( ) 1.14.7Glovebag
	( ) 1.14.8Asphalt Roofing
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E.	Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



#### ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental Information: Area Description and Proposed Plan

Facility/Building: Commercial Building

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification

(Room Name/No., etc.):

Abatement Area 2 – 1<sup>st</sup> Floor

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 100 square feet of grey floor tile and associated mastic (glue) covering the bottom layer black floor tile, each of which is covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI associated with pipping located with the wall cavity of the bar room, approximately 40 square feet of stone linoleum located in the storage room, approximately 40 square feet of stone linoleum located below ceramic floor tile in the coat room, and approximately 615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in the hall area. Please note that if the asbestos containing flooring materials are disturbed while the non-asbestos flooring materials/plywood are being removed to access the asbestos containing floor materials, then the non-asbestos flooring material/plywood would need to be treated and disposed of as an asbestos contaminated material.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

#### 4. Proposed Plan:

A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B.	Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ( )No
	If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)  ( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	(X) 1.14.6 Demolition <u>Approximately 100 square feet of grey floor tile and</u>
	associated mastic (glue) covering the bottom layer black floor tile, each of which is
	covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI
	associated with pipping located with the wall cavity of the bar room, approximately 40
	square feet of stone linoleum located in the storage room, approximately 40 square feet
	of stone linoleum located below ceramic floor tile in the coat room, and approximately
	615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in
	the hall area. Please note that if the asbestos containing flooring materials are disturbed
	while the non-asbestos flooring materials/plywood are being removed to access the
	asbestos containing floor materials, then the non-asbestos flooring material/plywood
	would need to be treated and disposed of as an asbestos contaminated material.
	( ) 1.14.7Glovebag
	( ) 1.14.8Asphalt Roofing
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
	( ) Yes ( X ) No If yes, attach a detailed description of the waivers requested you are proposing to
	utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E.	Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



### ASBESTOS ABATEMENT PLAN APPLICATION

Sı	Supplemental Information: Area Description and Proposed Plan			
Fa	Facility/Building: Commercial Building			
A ite	separate and fully completed Form ASB-16A must be submitted for <i>each area</i> to be abated. All ems on this form must be addressed. All references to attachments must be clearly identified. All eachments must be marked with the specific item numbers on this form to which they pertain.			
1.	Area Location/Identification (Room Name/No., etc.):			
	Abatement Area 3 – Roof Area			
2.	Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).			
	Remove – Approximately 350 square feet of green floor tile. Please note that floor tile is located below the EPDM roofing system on the roof deck, which is the original 2nd floor of the building, that was previously fire damaged. As such, the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck.			
3.	Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).  See Figure			
4.	Proposed Plan:  A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).  See Asbestos Abatement Plan			
	B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ()No			
	If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)			

( ) 1.14.2 & 1.14.3 Removal

( ) 1.14.2 & 1.14.4 Encapsulation
( ) 1.14.2 & 1.14.5 Enclosure
( ) 1.14.6 Demolition
( ) 1.14.7Glovebag
(X) 1.14.8Asphalt Roofing <u>Approximately 350 square feet of green floor tile.</u>
Please note that floor tile is located below the EPDM roofing system on the roof deck,
which is the original 2nd floor of the building, that was previously fire damaged. As
such, the actual locations of the green floor tile will be determined once the roofing
system has been removed to access the roof deck.
( ) Other (Specify)
C. Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
( ) Yes ( X ) No
If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D. Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
( ) Yes ( X ) No
If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E. Will any ACM remain in this area after abatement?
( ) Yes ( X ) No ( ) Beyond scope of inspection
If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



#### RHODE ISLAND DEPARTMENT OF HEALTH

### NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility/Building: Commercial Building	
Address: 518 Roosevelt Avenue	
City/Town: Central Falls ZIP: 02860	OAmendment Phase No:
Abatement Plan Prepared By: Brian Piccolo	RIDOH License No.: <u>APD00657</u>
Summary of specific waivers/variances being reque	ested:
<b>Abatement Information</b>	
Abatement Method: (Check all that apply)	
(X) Removal	X ) Demolition
( ) Elicapsulation	) Glovebag
( ) Enclosure	X ) Asphalt Roofing
Other (specify):	
Asbestos Contractor: To be Determined	RIDOH License No.:
Estimated Starting Date: As soon as the plan is app	proved, and all notifications have been made.
<b>Pre-Abatement Sampling Information</b>	
Bulk samples collected by: Brian A Piccolo	RIDOH License No.: AI00657
Bulk samples analyzed by: <u>Asbestos Identification</u>	<u>Laboratory</u> RIDOH License No.: <u>PLM00121</u>
Air samples collected by: Not Applicable	RIDOH License No.:
Air samples analyzed by: Not Applicable	RIDOH License No.:
<b>Clearance Air Sampling Information</b>	
Air samples to be collected by: Not Applicable	
Air samples to be analyzed by: Not Applicable	RIDOH License No.:
CERTIFIC	ATION
I certify that: this asbestos abatement plan is prepared and su Laws Chapter 23-24.5 and the Rules and Regulations for A management activities performed in conjunction with this prescribed in this plan (when approved) and the most current and the asbestos abatement/management activities described in asbestos abatement contractor.	Asbestos Control (216-RICR-50-15-1); all abatement/s plan will be in compliance with the specifications revision of all applicable federal and state regulations;
State of Rhode Island, County of On the me, the undersigned notary public, personally appeared of document signer), and proved to me through satisfactory exists signed on the preceding or attached document, and acknowledges.	day of,20, before
Signature of Building Owner or Agent	Printed Name of Building Owner or Agent
(official signature and stamp of notary)	
	My Commission expires:
Printed Name, ID Number Notary Public	

# **Table of Contents**

Section 1.0	Introduction
Section 2.0	Bulk Sampling Information
Section 3.0	Pre-Abatement Sampling
Section 4.0	Description of Abatement Area
Section 5.0	Interim Operations and Maintenance Program
Section 6.0	Specific Abatement Proposal
Section 7.0	Criteria for Selection of Contractor
Section 8.0	Authorized Disposal Facility
Section 9.0	Methods for Insuring Compliance
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Appendix B	Figures
Appendix C	Rhode Island Rules and Regulations for Asbestos Control – 1.14.2-1.14.3, 1.14.6 and 1.14.8: Work Practice Requirements

#### 1.0 Introduction

This asbestos abatement plan is being submitted on behalf of:

Pawtucket Central Falls Development Attention: Ms. Linda Weisinger, Executive Director 204 Broad Street, Pawtucket, RI 02860

to address the requirements of Part 1.17 of the Rhode Island Department of Health's *Rules and Regulations for Asbestos Control (216-RICR-50-15-1)* effective January 2022. This asbestos abatement plan has been developed for the removal of the asbestos containing materials (ACMs) from three (3) abatement areas associated with the commercial building located at 518 Roosevelt Avenue in Central Falls, RI. The approximate quantities of the ACMs are summarized in Section 4.0 of this asbestos abatement plan.

The proposed abatement project must be performed in accordance with all applicable local, state and federal regulations concerning asbestos removal, transportation and disposal, with the possible exception of waivers being requested under this abatement plan. These waivers have been identified in a separate letter from the owner's representative, which has been submitted with this plan.

# **2.0 Bulk Sampling Information** (see Section 11 of Form ASB-16)

The ACMs to be abated were characterized by bulk samples collected by Brian Piccolo (Rhode Island Department of Health (RIDOH) Certification No Al00657) during a survey at the subject property on Tuesday, September 17 and Thursday, September 19, 2024.

Samples collected during the surveys were submitted to and analyzed by Asbestos Identification Laboratory (AIL) in Woburn, Massachusetts. AIL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP# 200919-0) and with the RIDOH (PLM00121). All samples were analyzed in accordance with U.S. Environmental Protection Agency (EPA) recommended protocol ("Follow-up to the Interim Method for Determination of Asbestos in Bulk Insulation Samples" - EPA 600/R-93/116 method "Visual Estimate") using polarized light microscopy (PLM) supplemented by dispersion staining techniques.

A total of seventy-one (71) samples were collected and submitted for analysis. **Appendix A** contains copies of the analytical results by AIL, indicating the asbestos content of the material targeted for abatement.

# 3.0 Air Sampling

# **3.1 Pre-abatement Air Sampling** (refer to Section 12, Form ASB-16)

The proposed abatement is for the commercial building located at 518 Roosevelt Avenue in Central Falls, RI, which is currently vacant and is scheduled to be immediately demolished following the asbestos abatement. As such, no preabatement air sampling was conducted.

#### 3.2 Contiguous Area Sampling During Abatement

The proposed abatement is for the commercial building located at 518 Roosevelt Avenue in Central Falls RI, which is currently vacant and is scheduled to be immediately demolished following the asbestos abatement. As such, AltTech recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of work-area while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

### 3.3 Clearance Air Testing

The proposed project consists of three (3) abatement areas associated with the commercial building located at 518 Roosevelt Avenue in Central Falls, RI, which is currently vacant is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph 1.14.2(p) of the RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1).

AltTech recommends that a final visual clearance inspection within the containment areas after the abatements have been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

# 4.0 Description of Abatement Area

The proposed project consists of three (3) abatement area associated with the commercial building located at 518 Roosevelt Avenue in Central Falls, RI.

- Abatement Area 1 Basement Approximately 90 linear feet of small diameter thermal system insulation (TSI) associated with the heating system piping, approximately 9 hard packed elbows/fittings associated with the small diameter heating system piping, approximately 80 linear feet of large diameter TSI associated with the heating system piping, approximately 15 hard packed elbows/fittings associated with the large diameter heating system piping, and approximately 56 square feet of boiler TSI associated with the original boiler system (see Figures).
- Abatement Area 2 1<sup>st</sup> Floor Approximately 100 square feet of grey floor tile and associated mastic (glue) covering the bottom layer black floor tile, each of which is covered by plywood behind the bar in the bar room; approximately 30 linear feet of TSI associated with pipping located with the wall cavity of the bar room, approximately 40 square feet of stone linoleum located in the storage

room, approximately 40 square feet of stone linoleum located below ceramic floor tile in the coat room, and approximately 615 square feet of red/blue floor tile located below plywood and 12" x 12" floor tile in the hall area. Please note that if the asbestos containing flooring materials are disturbed while the non-asbestos flooring materials/plywood are being removed to access the asbestos containing floor materials, then the non-asbestos flooring material/plywood would need to be treated and disposed of as an asbestos contaminated material (see Figures).

Abatement Area 3 – Rood Area - Approximately 350 square feet of green floor tile. Please note that floor tile is located below the EPDM roofing system on the roof deck, which is the original 2<sup>nd</sup> floor of the building, that was previously fire damaged. As such, the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck (see Figures).

### 5.0 Interim Operations and Maintenance Program

The O&M Program is designed to (1) clean up asbestos fibers previously released, (2) prevent future release by minimizing ACM disturbance or damage, and (3) monitor the condition of the ACM. The program should be implemented if the building is to be occupied or utilized and it should continue until all ACM is removed or the building is demolished. The program should be implemented as soon as possible.

An Asbestos O&M Program Coordinator should be first appointed and trained. The Asbestos Program Manager shall have overall responsibility for implementing and documenting the program. He/she is directly responsible to upper management and must be knowledgeable about the medical and control aspects of asbestos. He or she may serve as coordinator or delegate that responsibility to the facilities manager or other appropriate employee. The manager of building maintenance and the custodial staff supervisor are the other key participants for an effective program.

An effective O & M program for these types of materials should have the following sections:

#### Documentation, Education, and Training

The O & M Program coordinator should:

- Record the exact location of all asbestos containing materials on building documents (plans, specifications, and drawings).
- Educate building staff & occupants, as well as maintenance and custodial workers, about the location of ACMs, and caution them about disturbing it.
- Educate building staff & occupants, as well as maintenance and custodial workers, on the procedures for alerting outside service personnel and others to the presence and location of ACMs, including the Warning Label provisions of 40 CFR 763.95; and caution them about disturbing it.
- Train maintenance and custodial workers to handle ACM safely.

<sup>\*</sup> Please note that the quantities and locations of asbestos containing materials included in this abatement plan are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

 The training program shall be in compliance with OSHA regulation 29 CFR 1926.1101 and shall meet the maintenance employee training requirements of the Asbestos Hazard Emergency Response Act (AHERA). The training program shall be presented and include the following;

#### Level 1 - Awareness Training

This level is for maintenance personnel involved in cleaning and simple maintenance tasks where ACBM may be accidentally disturbed. Such training may range from two to eight hours and include topics such as:

- Background information on asbestos
- Health effects of asbestos
- Worker protection programs
- Location of ACBM in the building
- Recognition of ACBM damage and deterioration
- Review of the buildings O&M plan/program
- Proper response to fiber release episodes

#### Level 2 - Special O&M Training

Level 2 is for maintenance personnel involved in regular maintenance and asbestos material repair tasks. Such activities will be outsourced to a licensed asbestos contractor.

#### Level 3 - Abatement Worker Training

Level 3 is for workers who may conduct asbestos abatement. No on-site personnel will perform asbestos abatement.

Under this asbestos O&M program, all activities that are likely to or knowingly will disturb ACBM will be outsourced to a qualified and licensed abatement firm. If an independent contractor such as an electrician or plumber performs activities that may impact ACBM the independent contractor must be trained in dealing with ACBM or must arrange for a licensed asbestos contractor to handle any ACBM disturbed.

#### Maintenance

The O & M Program coordinator should:

 Ensure that recommended procedures and safety precautions will be followed before authorizing construction and maintenance work involving asbestos containing materials. Specifically, containment barriers should be erected around the construction and maintenance work area and workers should wear coveralls as well as respirators. All tools should be equipped with HEPA-filtered vacuum devices.

#### The maintenance staff should:

 Clear all construction, renovation, maintenance, or equipment repair work with the O & M Program coordinator in advance.  Avoid removing, sanding, or stripping floor tile and associated mastics containing asbestos. If tiles are removed, do not sand asbestos mastic (tile glue) remaining on the floor.

#### Periodic Inspection

Building inspectors should:

• Each area known to contain ACBM should be visually inspected by the Asbestos Program Manager trained designee, him or herself, or a Consultant semi-annually. The results of this inspection shall be recorded on an ACBM Condition Form. All forms shall be transmitted to the Asbestos Program Manager. The purpose of the inspection is to ensure that ACBM condition has not deteriorated significantly during the preceding six-month period. If the condition of any ACBM has deteriorated since the last inspection, the Asbestos Program Manager shall be notified as soon as possible. The Asbestos Program Manager shall then investigate to determine if remedial action is required to prevent a health hazard.

Custodial and maintenance staff should:

Report any ACM damage to the O & M Program manager immediately.

#### Record Keeping

The Asbestos Program Manager shall maintain the following documents and records;

- A. medical exam records, if required, (in accordance with 29 CFR 1910.1001(m)(3) and 1926.1101 or other applicable OSHA regulations) for all employees engaged in asbestos work or who may have been exposed to asbestos fibers in excess of the permissible exposure limit of 0.1 f/cc at the facility,
- B. all sampling results, including the dates, analytical methods used, number, duration, and results from the samples taken,
- C. Asbestos Job Notifications, the identity of employees and other parties who are or were involved in those jobs, and all other records relating to asbestos work at the facility,
- D. Asbestos Condition forms and all other records of inspections of asbestos locations.
- E. all Waste Origin Waste Disposal forms for the disposal of asbestos material,
- F. the names of all contractors and sub-contractors performing asbestos work, the date and duration of such work and all documents and records relating to such work,
- G. all documents relating to the HEPA vacuum, HEPA vacuum filter replacement dates, and HEPA vacuum waste disposal dates,
- H. all correspondence regarding ACBM,
- I. all correspondence with any federal, state or local agencies regarding asbestos,
- J. all asbestos related employee training records, and,
- K. all other documents and records relating to asbestos.

Copies of each document and record shall be maintained for at least 30 years. These copies shall be retained even if the facility is sold.

Records shall be made available to appropriate OSHA representatives in accordance with 29 CFR 1910.1001 (m)(5) and 1926.1101 (n)(5) or other applicable federal, state or local laws. Sampling results and medical records shall be made available to appropriate affected employees, former employees and designated representatives in accordance with 29 CFR 1910.1001 (m)(5) and 1926.1101 or other applicable federal, state or local laws.

# 6.0 Specific Abatement Proposal

This abatement plan has been prepared for the removal of the ACMs specified in Section 4.0 of this abatement plan, which has been developed for the commercial building located at 518 Roosevelt Avenue in Central Falls, RI. The ACM location(s) are depicted in the Figure associated with this plan.

An asbestos contractor licensed in the State of Rhode Island must perform all asbestos abatement work, and all work must be performed in accordance with all applicable local, state, and federal regulations.

Asbestos removal will be performed following the appropriate approval of this plan by the RIDOH. The contractor, provided with the appropriate notifications, will then perform the asbestos abatement. It is anticipated that the removal project will take approximately two weeks to complete.

The ACMs to be abated in Areas 1 and 2 will be completed in accordance with Section 1.14.6 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

The ACMs to be abated in Area 3 will be completed in accordance with 1.14.8 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

#### 7.0 Criteria for Selection of Contractor

A licensed asbestos abatement contractor by the State of Rhode Island in accordance with Section 1.7 of the RI Rules and Regulations for Asbestos Control, will be responsible to implement this plan.

# 8.0 Authorized Disposal Facility

The contractor will select the authorized asbestos waste facility. The chosen contractor will forward the name of the approved disposal site to the RI Department of Health.

# 9.0 Methods for Insuring Compliance

See Sections 4 B and 4 D of Form ASB-16A

# **10.0 Monitoring Compliance**

The property owner representative will monitor compliance with the asbestos abatement plan.

### **11.0 Monitoring Requirements** (see Section 15 A-D of Form ASB-16)

#### 11.1 In-Process Air Sampling During Abatement

The proposed abatement is for the commercial building located at 518 Roosevelt Avenue in Central Falls RI, which is currently vacant and is scheduled to be immediately demolished following the asbestos abatement. As such, AltTech recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of work-area while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

### 11.2 Clearance Inspection

The proposed project consists of three (3) abatement area associated with the commercial building located at 518 Roosevelt Avenue in Central Falls, RI, which is currently vacant is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph 1.14.2(p) of the RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1).

AltTech recommends that a final visual clearance inspection within the containment areas after the abatements have been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

# 12.0 Confirmation of Proper Asbestos Disposal

The property owner representative shall obtain confirmation of proper asbestos disposal from the contractor and provide copies to the RI Department of Health in accordance with Section 1.17.3 (b) of the RI Rules and Regulations for Asbestos Control.

# APPENDIX A

# **Bulk Sampling Analytical Results**

Field	dID	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
1A		Metal-Lath Plaster-Base Coat	Throughout	gray	Non-Fibrous 10	00 None Detected
	1370882					
1B		Metal-Lath Plaster-Base	Throughout g	gray	Non-Fibrous 10	00 None Detected
	1370883	Coat				
2A		Metal-Lath Plaster-Skim Coat	Throughout	white	Non-Fibrous 10	00 None Detected
	1370884					
2B	10,000,1	Metal-Lath Plaster-Skim	Throughout	white	Non-Fibrous 10	00 None Detected
	1370885	Coat				
3A	1370865	Gypsum Board	Throughout	gray	Cellulose 1	.0 None Detected
					Non-Fibrous 9	0
3B	1370886	Gypsum Board	Throughout	gray	Cellulose 1	.0 None Detected
	and a second second	- Oypsum Bourd			Non-Fibrous	
1A	1370887	Joint Compound	Throughout	white	Non-Fibrous 10	0 None Detected
		— John Compound			Non Tibious It	None Becere
4B	1370888	Joint Compound	Throughout w	white	Non-Fibrous 10	00 None Detected
+0			moughout	write	Non-Fibrous 10	None Detected
20	1370889					
5A		Gypsum Board Behind Wood Panel	Throughout	gray		0 None Detected
	1370890					
5B		Gypsum Board Behind Wood Panel	Throughout	gray		0 None Detected
	1370891				1011111010	
6A		Panel Glue	Throughout	brown	Non-Fibrous 10	00 None Detected
	1370892					
6B		Panel Glue	Throughout	brown	Non-Fibrous 10	00 None Detected
	1370893					
7A		Worm Pattern Ceiling Tile	Bar Room Basement Office	multi		O None Detected
	1370894					0
7B	20.0002	Worm Pattern Ceiling Tile	Bar Room Basement Office	multi		0 None Detected
						0
BA	1370895	Smooth Ceiling Tile	Hall Area	multi		0 None Detected
					Cellulose 4	0
0.00	1370896					0
8B		Smooth Ceiling Tile	Hall Area	multi		O None Detected
	1370897					10

Sampled:

September 19, 2024

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September 23, 2024

Batch:

Analyzed:

September 25, 2024

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Analyzed by:

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FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
9A	Hard-Packed Fittings/Elbows	Basement	multi	Non-Fibrous 10	Detected Chrysotile 90
1370898					
9B	Hard-Packed Fittings/Elbows	Basement			Not Analyzed
1370899 9C	Hard-Packed Fittings/Elbows	Basement			Not Analyzed
1370900	Fittings/Elbows				
10A	Arc-Cell TSI	Basement	multi	Cellulose 10 Non-Fibrous 10	Detected Chrysotile 80
1370901					
10B	Arc-Cell TSI	Basement			Not Analyzed
1370902	The part of the same				
10C	Arc-Cell TSI	Basement			Not Analyzed
1370903	0 111 0 0 0				
11A	Ceiling Gypsum Board	Bar Room	gray	Cellulose 10 Nor Non-Fibrous 90	None Detected
1370904	Delles TOI	Parament multi Nas Bibasas		20 Detected	
12A	Boiler TSI	Basement	multi	Non-Fibrous 20	Chrysotile 80
1370905 12B	Boiler TSI	Basement			N. 1. 2. 2
	Boller 151	Basement	4.1		Not Analyzed
1370906 12C	Boiler TSI	Basement	+	*	Not Analysed
120	Boller 131				Not Analyzed
1370907	41-7-				
13A	Boiler Brick	Boiler	multi	Non-Fibrous 100	None Detected
1370908	A STATE OF THE STA				
13B	Boiler Brick	Boiler	multi	Non-Fibrous 100	0 None Detected
1370909					
13C	Boiler Brick	Boiler	tan	Non-Fibrous 100	None Detected
1370910					
14A	Wood-Lath Plaster Skim Coat	Throughout	white	Non-Fibrous 100	None Detected
1370911			Data Sit	1 200 1 200 1 200	
14B	Wood-Lath Plaster Skim Coat	Throughout	white	Non-Fibrous 100	None Detected
1370912					
15A	Wood-Lath Plaster-Base Coat	Throughout	gray	Non-Fibrous 100	None Detected
1370913			4.		

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FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID	44				
15B	Wood-Lath Plaster-Base Coat	Throughout	gray	Non-Fibrous 100	None Detected
1370914					
16A	Black/White Floor Tile	Bar Room	multi	Non-Fibrous 100	None Detected
1370915		D D		5 - 24 - 34	
16AM	Mastic	Bar Room	yellow	Non-Fibrous 100	None Detected
1370916 16B	Black/White Floor Tile	Bar Room	multi	Non Bibwaya 100	Mana Dahashid
7.3	Biack/white Floor Tile	Bar Room	muiti	Non-Fibrous 100	None Detected
1370917	14	D D	List Harri		
16BM	Mastic	Bar Room	yellow	Non-Fibrous 100	None Detected
1370918		£12.00 a.e.			2000000
17A	Gray Tile Below Plywood	Bar Room	gray	Non-Fibrous 9	Detected Chrysotile 3
1370919 17AM	Mostic	Bar Room	black	Non Bilingur Of	Detected
	Mastic	Bar Room	black	Non-Fibrous 95	Chrysotile 5
1370920 18A	Disak Tila Balaw Cample	Par Page manufi	New Pilesens 05	Detected	
	Black Tile Below Sample 17A	Bar Room	multi	Non-Fibrous 97	Chrysotile 3
1370921		D D	100	11.77(2).77(2).	
18AM	Mastic	Bar Room	multi	Non-Fibrous 100	None Detected
1370922					
19A	Flooring Tar Paper	Throughout	black	Cellulose 90 Non-Fibrous 10	None Detected
1370923	F	<b>*</b> 1	L to st	0.11.1	
19B	Flooring Tar Paper	Throughout	black	Cellulose 90 Non-Fibrous 10	None Detected
1370924					
20A	Red Flooring Paper	Bar Room	pink	Cellulose 95 Non-Fibrous 5	None Detected
1370925	Action to the second		100	1	
20B	Red Flooring Paper	Bar Room	pink		None Detected
1370926		i v w i v			Control of the Contro
21A	Hall Area Floor Tile	Hall Area	tan	Non-Fibrous 100	None Detected
1370927		111 W 21 T21			
21AM	Mastic	Hall Area	multi	Non-Fibrous 100	None Detected
1370928		11.			
21B	Hall Area Floor Tile	Hall Area	tan	Non-Fibrous 100	None Detected
1370929			4		

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FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
21BM	Mastic	Hall Area	multi	Non-Fibrous 100	None Detected
1370930					
22A	Stone Linoleum	Throughout	multi	Non-Fibrous 70	Detected Chrysotile 30
1370931 22AM	Montin	Throughout	hanin	N Files	0 None Detected
ZZAW	Mastic		brown	Non-Fibrous 100	
1370932					
22B	Stone Linoleum	Throughout		Not Analyzed	
1370933	14				
22BM	Mastic	Throughout	brown	Non-Fibrous 100	None Detected
1370934	<u> </u>			The state of the s	
23A	Red/Blue Floor Tile Below Plywood	Hall Area	red	Non-Fibrous 9	Detected Chrysotile 3
1370935			1.10-1		
23AM	Mastic	Hall Area	black	Cellulose 5 Non-Fibrous 95	None Detected
1370936	D-WDI - Flage Tile Deless	Hall Area		Not Analyzed	
23B	Red/Blue Floor Tile Below Plywood				
1370937					
23BM	Mastic	Hall Area	black	Cellulose 9	None Detected
1370938 <b>24A</b>	Gypsum Board	Basement Office	gray	Cellulose 10	None Detected
	- Sypsum Bourd			Non-Fibrous 90	
1370939			0.00		
25A	Joint Compound	Basement Office	white	Non-Fibrous 100	None Detected
1370940					
26A	12x12 Floor Tile	Basement Office	white	Non-Fibrous 100	None Detected
1370941					
26AM	Mastic	Basement Office	yellow	Non-Fibrous 100	None Detected
1370942					
27A	Gypsum BOard <del>Behind</del> Plaster	Hall Area	gray	Cellulose 10 Non-Fibrous 90	None Detected
1370943					
28A	Plaster Base Coat on Gypsum Board	Hall Area	multi	Non-Fibrous 100	None Detected
1370944	Sypouni Board	14			
29A	Plaster - Skim Coat on Gypsum Board	Hall Area	multi	Non-Fibrous 100	None Detected
1370945	Sypodin Board		11 1		

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September 19, 2024

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

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1A	Building Paper	Exterior	black	Cellulose 70 Non-Fibrous 30	None Detected
1376055					
1B	Building Paper	Exterior	black Cellulose	Cellulose 70 Non-Fibrous 30	None Detected
1376056					
2A	Top White Asphalt Shingle	Side Entrance Awning Roof		Cellulose 60 Non-Fibrous 40	None Detected
1376057				1,50,000,000	
3A	Bottom Red Asphalt Shingle	Side Entrance Awning Roof	black	Cellulose 60 Nor Non-Fibrous 40	None Detected
1376058	og.o			1011 1121000 10	
4A	Green 9x9 Floor Tile	Roof	green	Non-Fibrous 95	Detected Chrysotile 5
1376059					
4AM	Mastic	Roof	black	Non-Fibrous 100	00 None Detected
1376060					
5A	Black Tar Paper	Roof	black	Cellulose 70 Non-Fibrous 30	None Detected
1376061					

Sampled:

September 25, 2024

Received:

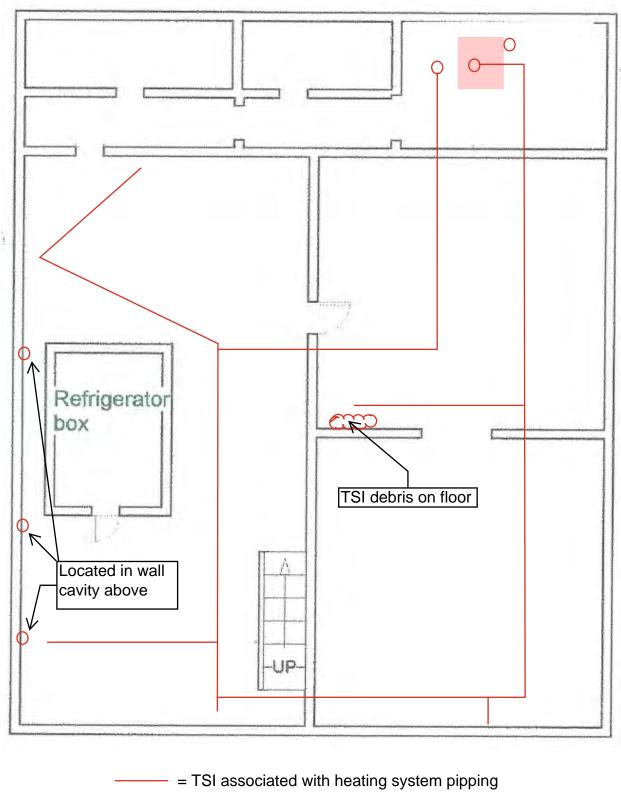
September 27, 2024

Analyzed:

October 01, 2024

# APPENDIX B

# Figures



= Boiler TSI

Figure 1 Area 1 - Basement 518 Roosevelt Avenue Central Falls, RI

<sup>\*</sup>Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

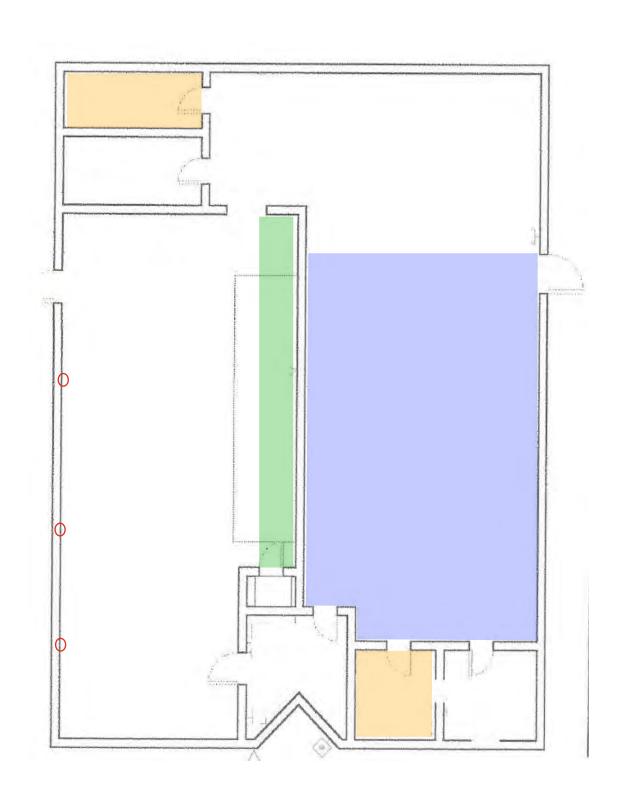


Figure 2
Area 2 - First Floor
518 Roosevelt Avenue
Central Falls, RI



Please note that the actual locations of the green floor tile will be determined once the roofing system has been removed to access the roof deck and and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 3
Area 3 – Roof Area
518 Roosevelt Avenue
Central Falls, RI

# **APPENDIX C**

Rhode Island Rules and Regulations for Asbestos Control – 1.14.2-1.14.3, 1.14.6 and 1.14.8: Work Practice Requirements

# 1.14.2 General Requirements for Removal, Encapsulation and/or Enclosure of Regulated Asbestos Containing Material (RACM)

- A. Barriers to isolate contaminated from uncontaminated areas shall be constructed of polyethylene sheeting attached securely in place.
- B. All surfaces shall be wet cleaned of dust or debris. Wet cleaning of contaminated items shall be performed if necessary. All movable objects shall be removed from the work area. All nonmovable objects in the work area shall be covered with 6- mil polyethylene sheeting secured in place. All openings or penetrations between the work area and uncontaminated areas shall be sealed, including windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers and skylights.
- C. Floor sheeting shall consist of two (2) layers of 6-mil polyethylene sheeting. Floor sheeting shall extend up sidewalls at least twelve (12) inches and be sized to minimize seams. No seams shall be located at wall/floor joints. Floors being abated of resilient floor coverings and associated mastics/adhesives shall be exempt from this requirement.
- D. Wall sheeting shall consist of two (2) layers of 4-mil polyethylene sheeting. It shall be installed to minimize joints and shall extend beyond wall/floor joint at least twelve (12) inches. No seams shall be located at wall/wall joints.
- E. A worker decontamination enclosure system, consisting of a clean room, shower room and equipment room, each separated from each other and from the work area by airlocks and accessible through doorways protected with two (2) overlapping polyethylene sheets, shall be provided in accordance with OSHA 29 C.F.R. § 1926.1101(j) incorporated by reference at § 1.2(A) of this Part. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the work area.
- F. All HVAC equipment in or passing through the work area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape. All system filters shall be replaced after the abatement and disposed of as asbestos waste. The ventilation system ductwork interiors shall be decontaminated whenever necessary.

#### G. Posting

- 1. Warning signs in accordance with OSHA 29 C.F.R. § 1926.1101(k)(7) incorporated by reference at § 1.2(A) of this Part shall be displayed at all approaches to any location where airborne fiber levels can be expected to exceed the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part.
- 2. Warning signs to advise the public of the location(s) within the building where any asbestos abatement activity is in progress shall be posted at all building entrances and at least one other conspicuous place per floor. These signs shall be of the same dimensions as the Warning/Danger signs required in § 1.14.2(G)(1) of this Part.
- 3. Warning signs shall be posted on vehicles used to transport Asbestos Containing Waste Materials during loading and unloading of the waste.
- H. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement. Wet cleaning shall be followed by HEPA vacuuming after surfaces have been allowed to dry. The sequence of wet cleaning and vacuuming shall be repeated at twenty-four (24) hour intervals until no visible residue is observed in the work area.
- I. Negative pressure ventilation units with HEPA filtration, in sufficient number to provide two (2) workplace air change every fifteen (15) minutes, shall be operated continuously from the time of barrier construction through the time acceptable final clearance air-monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.

- J. All Asbestos Containing Waste Materials shall be adequately wetted before being placed into containers for disposal.
- K. Asbestos Containing Waste Materials shall be placed in impermeable containers for disposal. Metal or fiber drums with locking-ring tops shall be used when asbestos waste contains sharp edged components. Double polyethylene bags of at least 6-mil thickness and which can be securely sealed may be used for waste. Large components or structural members may be removed intact and contained in leak-tight wrapping, equivalent to at least two (2) layers of 6-mil polyethylene sheeting, secured with tape for disposal.
- L. All containers, bags, drums and wrapped components shall be labeled so that labels have the appearance of or are constructed in accordance with USDOT 49 C.F.R. 172, Subpart E incorporated by reference at § 1.2(D) of this Part and OSHA 29 C.F.R. § 1926.1101(k)(8) incorporated by reference at § 1.2(A) of this Part. Each container, bag, drum or wrapped component shall also be labeled or tagged with the name and license number of the asbestos contractor generating the waste, as well as the asbestos abatement project number and location at which the waste was generated.
- M. Storage of asbestos waste containers awaiting transport to an authorized disposal facility shall be in a secured location to prevent access by unauthorized personnel.
- N. Transport and disposal of asbestos waste shall be in accordance with the provisions of Appendix D to 40 C.F.R. 763, Subpart E incorporated by reference at § 1.2(E) of this Part and USDOT 49 C.F.R. § 173.1300 incorporated by reference at § 1.2(F) of this Part.
- O. Disposal of Asbestos Containing Waste Materials. All Asbestos Containing Waste Materials shall be deposited as soon as is practical by the waste generator at:
  - 1. A waste disposal site operated in accordance with the provisions of 40 C.F.R. § 61.154, or equivalent regulations promulgated by a state or local NESHAP designee; or
  - An EPA-approved site that converts RACM and Asbestos Containing Waste Materials into nonasbestos (asbestos-free) material according to the provisions of 40 C.F.R. § 61.155.
- P. Access to work areas shall be controlled and posting requirements shall remain in effect until compliance with the air exposure standard has been verified by procedures outlined below:
  - 1. Samples shall be collected and analyzed in accordance with the procedures specified by NIOSH Method 7400 (most current Revision) for asbestos fibers in air or equivalent method;
  - 2. Air volumes shall be sufficient to accurately determine fiber concentrations to 0.01 fibers/cubic centimeter of air (f/cc) for fibers greater than five (5) microns in length or 300 nanograms per cubic meter. A minimum air volume of 1000 liters shall be sampled;
  - 3. Air sampling shall be conducted in representative locations with portable fans circulating air to simulate actual use conditions;
  - 4. An acceptable airborne fiber concentration, as established by clearance air monitoring shall not exceed 0.01 f/cc for fibers greater than five (5) microns in length or 300 nanograms per cubic meter; and
  - 5. Air sampling shall be conducted by a representative of the building owner who is not subject to the control or supervision of the Asbestos Contractor for the asbestos abatement plan.
  - 6. Notwithstanding the requirements contained in § 1.14.2(P) of this Part above, control of access and posting requirements for buildings subject to the AHERA regulations shall remain in effect until compliance with §§ 1.17.3(A)(5) through (8) of this Part has been demonstrated.

# 1.14.3 Specific Requirements for Removal of Regulated Asbestos Containing Material (RACM)

- A. All RACM shall be adequately wetted prior to removal. In addition, all RACM exposed during cutting and disjoining operations shall be adequately wet and all RACM shall be kept adequately wet during stripping operations.
- B. Components shall be removed intact or in large sections whenever possible and carefully lowered to the floor.
- C. RACM shall be removed in small sections and containerized when adequately wet. At no time shall material be allowed to accumulate or become dry. Structural components shall be adequately wetted prior to being contained in leak-tight wrapping for disposal.
- D. Material shall not be dropped or thrown to the floor level. For materials located at heights greater than fifty (50) feet above the floor, a dust-tight, enclosed chute shall be constructed to transport removed material to containers on the floor. RACM may be dropped to a raised scaffold or containerized at elevated levels for disposal. Materials greater than fifteen (15) feet above the floor shall be dropped onto inclined chutes or scaffolding or containerized at elevated levels for eventual disposal.
- E. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of RACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
- F. RACM is not required to be stripped from large facility components such as reactor vessels, large tanks, and steam generators if the following requirements are met:
  - 1. The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - 2. The component is encased in a leak-tight wrapping.
  - 3. The leak-tight wrapping is labeled during all loading and unloading operations and during storage.
- G. When the temperature at the point of wetting is below 0°C (32°F):
  - 1. The Asbestos Contractor need not comply with the wetting provisions of §§ 1.14.3(A) and (C) of this Part.
  - 2. The Asbestos Contractor shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.
  - 3. During periods when wetting operations are suspended due to freezing temperatures, the Asbestos Contractor must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Department during normal business hours at the asbestos abatement project site. The Asbestos Contractor shall retain temperature records for at least two years.

#### 1.14.6 Specific Requirements for Demolition of Structures Containing Asbestos

A. Any demolition of a structure or portion of a structure which contains structural members, building materials or structural components composed of or covered by RACM shall be preceded by a removal of all such materials in accordance with §§ 1.14.2 and 1.14.3 of this Part. Said removal must be completed before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. Notwithstanding the foregoing, RACM need not be removed before demolition if:

- 1. It is Category I nonfriable ACM that is not in poor condition and is not friable; or
- 2. It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
- 3. It was not accessible for testing and was, therefore, not discovered until after demolition began and, because of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as Asbestos Containing Waste Material and adequately wet at all times until disposed of; or
- 4. It is Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- B. For Emergency Asbestos Abatement Projects described in § 1.6.2(C) of this Part, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- C. If a facility is demolished by intentional burning, all RACM, including Category I and Category II nonfriable ACM, must be removed in accordance with this Part before burning.
- D. In lieu of the requirements specified in §§ 1.14.2(B), (C), (D), (F) and 1.14.3(E) of this Part, Asbestos Contractors engaging in demolition activities shall comply with the following:
  - 1. Prior to beginning a demolition project, all doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Department.
  - 2. If a structure is to be partially demolished, HVAC equipment in the demolition area or passing through it but servicing areas of the building which will remain, shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  - 3. If the building owner proposes not to conduct clearance air sampling following asbestos abatement activities conducted for demolition purposes, the building owner must submit written justification to the Department which describes how personnel who must occupy the building prior to demolition will be protected.
  - 4. All other requirements of §§ 1.14.2 and 1.14.3 of this Part, unless specified in § 1.14.6(D) of this Part, shall apply to demolition abatement activities.

# 1.14.8 Specific Requirements for Removal of Category I Nonfriable ACM – Asphalt Roofing Products

A. All surfaces shall be wet cleaned of dust or debris. All movable objects shall be removed from the roof area. All openings or penetrations on the roof area and at least one level below the roof area shall be sealed, including windows, doorways, drains, ducts, grills, grates, diffusers and skylights.

- B. Floor/ground sheeting shall consist of at least two (2) layers of 6-mil polyethylene sheeting and shall be utilized as follows:
  - 1. If the roof is pitched, sheeting shall be applied to the first horizontal surface below the work area and shall extend from the edge of the building to at least ten (10) feet away from the building. All material being abated shall be confined to the roof area.
  - 2. If the roof is flat, sheeting shall extend at least ten (10) feet away from the perimeter of the work area. When the edge of the roof is less than ten (10) feet from the perimeter of the work area, sheeting shall be applied such that the outer edge of the sheeting is at least ten (10) feet from the perimeter of the work area.
- C. All HVAC intake or exhaust vents on the roof area and at least one level below the roof area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape.
- D. A minimum of a two-chambered worker decontamination enclosure system shall be provided on site. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the roof area.
- E. Warning signs shall be posted in accordance with § 1.14.2(G) of this Part.
- F. Category I Nonfriable ACM shall be removed in small sections and containerized when wet. At no time shall material be allowed to accumulate or become dry.
- G. Category I Nonfriable ACM shall not be dropped or thrown to the floor/ground level. For roofs at heights greater than fifty (50) feet above the floor/ground, a dust-tight, enclosed chute shall be constructed to transport removed Category I Nonfriable ACM to containers on the floor/ground. Category I Nonfriable ACM may be dropped to a raised scaffold or containerized at elevated levels for disposal.
- H. All Category I Nonfriable ACM shall be adequately wetted before being placed into containers for disposal. Disposal shall be in accordance with §§ 1.14.2(K) through (O) of this Part.
- I. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of Category I Nonfriable ACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
- J. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement.
- K. Personnel air monitoring of Asbestos Supervisors and Asbestos Workers, which demonstrates compliance with the provisions of OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part, may be used in lieu of the clearance air sampling requirements contained in § 1.14.2(P) of this Part.

# ASBESTOS ABATEMENT PLAN COMMERCIAL BUILDING 532 ROOSEVELT AVENUE CENTRAL FALLS, RHODE ISLAND PROJECT NO. 20240917.01

#### Prepared for

Pawtucket Central Falls Development Attention: Ms. Linda Weisinger, Executive Director 204 Broad Street, Pawtucket, RI 02860

Prepared by

AltTech Services 44 Pole Bridge Road North Scituate, RI 02857 TEL: 401-556-2746

October 22, 2024

#### Index

#### I RI State Asbestos Abatement Form ASB-16

#### II RI State Asbestos Abatement Forms ASB-16A

**Abatement Area 1 – Northwestern 1<sup>st</sup> Floor Area** - Approximately 10 square feet of remnant beige 12" x 12" floor tile and approximately 20 square feet of linoleum located within the former bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to be located within the exposed wall chases within this area.

**Abatement Area 2 – Northwestern 2<sup>nd</sup> Floor Unit** - Approximately 160 square feet of ceramic wall tile glue located behind the kitchen sink and throughout the bathroom area (tub/shower and walls). It should be noted that the ceramic wall tile has been contaminated with the asbestos containing glue and will be treated as an asbestos containing material.

**Abatement Area 3 – Eastern 2<sup>nd</sup> Floor Units** - Approximately 2,300 square feet of gypsum board walls/ceilings contaminated with the asbestos containing joint compound.

**Abatement Area 4 – Rood Area** - Approximately 1,000 square feet of the bottom layer tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing and approximately 60 square feet of black sealant located around/on the chimneys, skylight, and other vents/protrusions associated with the pitched portions of the building. Please note that if the asbestos containing tar & gravel roofing felts are disturbed while the non-asbestos rolled roofing material is being removed to access the asbestos containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will need to be treated and disposed of as am asbestos contaminated material.

#### III RI State Asbestos Abatement Form ASB-16B

#### IV Attachments:

"Asbestos Abatement Plan" for Commercial Building, 532 Roosevelt Avenue, Central Falls, RI dated October 22, 2024

<sup>\*</sup> Please note that the quantities and locations of asbestos containing materials included in this abatement plan are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.



### ABATEMENT PLAN APPLICATION

1.	Owner/Contact Name: <u>Pawtucket Central Falls Development Corporation/Ms. Linda Weisinger</u> Title: <u>Executive Director</u>				
	If owned by an organization, organization name: Pa				
	City/State: Pawtucket	ZIP: <u>02860</u>			
	Phone: 401-726-1163 Ema	il: kpereira@pcfdevelopment.org			
2.	Application prepared by: Name: Brian A. Piccolo	RIDOH License No.: <u>AD00657</u>			
	Phone: 401 556-2746 Ema	il: <u>bpiccolo@alttechri.com</u>			
4.	Location of abatement work:  Facility/Building Name: Commercial Building  Street Address: 518 Roosevelt Avenue				
	City/Town: Central Falls	<del>-</del>			
5.	Reason for Application: (Check all that apply)  ( ) Emergency Plan No				
6.	Asbestos contractor (if known):				
	Name: To Be Determined	RIDOH License No.:			

7.	Estimated Abatement Work Dates  Start Date: As soon as the plan is approved, and all notifications have been made.				
	Completion Date: Expected to take two weeks to complete.				
8.	Abatement Method: (Check all that apply)				
	(X) Removal () Glovebag				
	( ) Encapsulation ( ) Asphalt Roofing				
	( ) Enclosure ( ) Operations & Maintenance Only				
	(X) Demolition				
	Other (Specify):				
9.	Facility Type: (Check one)				
	( ) Child Care Facility ( ) Private Residential Dwelling				
	( ) College/University ( ) Public Housing				
	( ) Hospital ( ) School/School Building				
	(X) Other (Specify): Commercial Building				
10	. Building Access: (Check one)				
	( ) Public Access ( X ) No Public Access				
	( ) Limited Public Access ( ) Other (specify)				
11	. Bulk Sampling:				
	A. Samples collected by:				
	Name: Brian A Piccolo RIDOH License No.: AI00657				
	B. Sampling Methodology: (Check one)  ( ) EPA AHERA Sampling requirements [40 CFR 763.86].  ( X ) Other (Specify): Representative Sampling				
	C. Analytical Service:				
	•				
	Name: <u>Asbestos Identification Laboratory</u> RIDOH License No.: <u>PLM00121</u>				
	D. Analytical Method: (Check one)				
	(X) PLM (Phase Light Microscopy)				
	( ) TEM (Transmission Electron Microscopy)				
	(X) Other (Specify): <u>EPA 600/R-93/116 - PLM NOB and Point Count Methods</u>				

<ul><li>12. Pre-Abatement Air Sampling:</li><li>A. Samples collected by:</li></ul>	
Name: Not Applicable	_ RIDOH License No.:
Affiliation:	
B. Analytical Service:	
Name: Not Applicable	RIDOH License No.:
C. Analytical Method: (Check one)	
( ) PCM (Phase Contrast Microscopy)	
( ) TEM (Transmission Electron Microscopy	)
( ) Other (Specify):	
13. Removal and Disposal of Asbestos-Containing Ma A. How will ACM be removed from the abatement	* /
transport the ACM to a disposal site, they mus	t also be identified.
To be determined by contractor	
B. Provide the name and location of the authorize will be transferred for disposal (if known).  To be determined by contractor	·
14. Project Monitor: (not required)	
Name:	RIDOH License No.:
Affiliation:	
15. In-Process & Clearance Air Sampling:  A. Describe in an attachment the type, number an collected outside the work area during the abate See Asbestos Abate.	tement project.
B. Describe in an attachment the plan of action to Occupational Air Exposure Standard for Asberexceeded outside the work area during the abare See Asbestos Abate	stos (0.01 fibers per cubic centimeter) is tement project.
C. Describe in an attachment the type, number an collected as part of the final clearance testing.  See Asbestos Abate	<u>-</u>
D. Describe in an attachment the plan of action to Occupational Air Exposure Standard for Asbest exceeded during final clearance testing.	stos (0.01 fiber per cubic centimeter) is

16. A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. List below the entry in Item 1 from each attached ASB-16A.

Abatement Area 1 – Northwestern 1st Floor Area - Approximately 10 square feet of remnant beige 12" x 12" floor tile and approximately 20 square feet of linoleum located within the former bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to be located within the exposed wall chases within this area.

Abatement Area 2 – Northwestern 2nd Floor Unit - Approximately 160 square feet of ceramic wall tile glue located behind the kitchen sink and throughout the bathroom area (tub/shower and walls). It should be noted that the ceramic wall tile has been contaminated with the asbestos containing glue and will be treated as an asbestos containing material.

Abatement Area 3 – Eastern 2nd Floor Units - Approximately 2,300 square feet of gypsum board walls/ceilings contaminated with the asbestos containing joint compound. Abatement Area 4 – Rood Area - Approximately 1,000 square feet of the bottom layer tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing and approximately 60 square feet of black sealant located around/on the chimneys, skylight, and other vents/protrusions associated with the pitched portions of the building. Please note that if the asbestos containing tar & gravel roofing felts are disturbed while the non-asbestos rolled roofing material is being removed to access the asbestos containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will need to be treated and disposed of as am asbestos contaminated material.

17. Asbestos Abatement Plan Application Fee:	
( ) State Agency, fee waived	\$0
( ) Operation & Maintenance Program Only	\$75
( ) Up to One (1) NESHAP Unit	\$75
( ) Between One (1) & Ten (10) NESHAP Units	\$300
(X) Between Ten (10) & Fifty (50) NESHAP Units	\$600
( ) Over Fifty (50) NESHAP Units	\$900
( ) Annual Plan	\$900
( ) Asbestos Abatement Plan Amendment Fee	\$150*
*If the amendment increases the scope of work to a higher fee the difference between the two fee categories. The amendment One (1) NESHAP Unit = 260 linear feet or 160 square feet or	fee is waived.
18. I certify that this plan was prepared by me, and I am respon	
Name: Brian A. Piccolo RIDOH Licen	se No.: <u>APD00657</u>
Signature: Brian A Piccolo Date	e: October 22, 2024
Affiliation: AltTech Services	
Email: <u>bpiccolo@alttechri.com</u> P	Phone: 401-556-2746



#### ASBESTOS ABATEMENT PLAN APPLICATION

<b>Supplemental Information</b>	Area Description an	d Proposed Plan
1 1	1	1

Facility/Building:	Commercial Building
racility/Dullullig.	Commercial Dunumg

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):

Abatement Area 1 - Northwestern 1st Floor Area

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 10 square feet of remnant beige 12" x 12" floor tile and approximately 20 square feet of linoleum located within the former bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to be located within the exposed wall chases within this area.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

4.	Pro	posed	<b>P</b>	lan:

A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ( )No

If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)

	( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	(X) 1.14.6 Demolition <u>Approximately 10 square feet of remnant beige 12"</u>
	x 12" floor tile and approximately 20 square feet of linoleum located within the former
	bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to
	be located within the exposed wall chases within this area.
	( ) 1.14.7Glovebag
	( ) 1.14.8Asphalt Roofing
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes (X) No
	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E.	Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



#### ASBESTOS ABATEMENT PLAN APPLICATION

Supplemental	Information: Area	Description and	Proposed Plan	

Facility/Building:	Commercial Building	Ţ

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification (Room Name/No., etc.):

Abatement Area 2 – Northwestern 2nd Floor Unit

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 160 square feet of ceramic wall tile glue located behind the kitchen sink and throughout the bathroom area (tub/shower and walls). It should be noted that the ceramic wall tile has been contaminated with the asbestos containing glue and will be treated as an asbestos containing material.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

4	. '	Pro	nc	osed	$\mathbf{P}$	lan:

A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ( )No

If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)

	( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	(X) 1.14.6 Demolition Approximately 160 square feet of ceramic wall tile
	glue located behind the kitchen sink and throughout the bathroom area (tub/shower and
	walls). It should be noted that the ceramic wall tile has been contaminated with the
	asbestos containing glue and will be treated as an asbestos containing material.
	( ) 1.14.7Glovebag
	( ) 1.14.8Asphalt Roofing
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?  ( ) Yes ( X ) No
	If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E.	Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



#### ASBESTOS ABATEMENT PLAN APPLICATION

Facility/Building:	Commercial	Building
i aciiity/Daiiaiiig.	Committee	Dunama

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification

(Room Name/No., etc.):

Abatement Area 2 – Eastern 2nd Floor Units

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 2,300 square feet of gypsum board walls/ceilings contaminated with the asbestos containing joint compound.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

- 4. Proposed Plan:
  - A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ( )No

If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)

	( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	(X) 1.14.6 Demolition Approximately 2,300 square feet of gypsum board
	walls/ceilings contaminated with the asbestos containing joint compound.
	( ) 1.14.7Glovebag
	( ) 1.14.8Asphalt Roofing
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes (X) No
	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.
E.	Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).
_	



#### ASBESTOS ABATEMENT PLAN APPLICATION

S	upplemental	<b>Information:</b>	Area	<b>Description</b>	and Prop	osed Plan

Facility/Building	Commercial Building	
raciiity/Dullulli2.	Commercial Dunumg	

#### **INSTRUCTIONS:**

A separate and fully completed Form ASB-16A must be submitted for *each area* to be abated. All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

1. Area Location/Identification

(Room Name/No., etc.):

Abatement Area 3 – Roof Area

2. Attach a description of each type (e.g., pipe, ceiling, etc.) of asbestos-containing material (ACM) in this area, including condition, location, quantity, and asbestos content. Attach a copy of the laboratory report(s) for all samples. All laboratory reports must include the name of the building(s) and the location(s) of the sample(s).

Remove – Approximately 1,000 square feet of the bottom layer tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing and approximately 60 square feet of black sealant located around/on the chimneys, skylight, and other vents/protrusions associated with the pitched portions of the building. Please note that if the asbestos containing tar & gravel roofing felts are disturbed while the non-asbestos rolled roofing material is being removed to access the asbestos containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will need to be treated and disposed of as am asbestos contaminated material.

3. Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location, and quantity of all ACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

See Figure

4	Proposed	<b>P</b> 1	an'
4	FIODOSEC	_ r i	an

A. Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).

See Asbestos Abatement Plan

B. Will any portion of this area be abated by use of 1.14 work procedures? (X)Yes ( )No

	If yes, indicate below which ACM in this area will be abated by use of the following 1.14 work procedures: (Check all that apply)
	( ) 1.14.2 & 1.14.3 Removal
	( ) 1.14.2 & 1.14.4 Encapsulation
	( ) 1.14.2 & 1.14.5 Enclosure
	( ) 1.14.6 Demolition
	( ) 1.14.7Glovebag
	(X) 1.14.8Asphalt Roofing  Approximately 1,000 square feet of the bottom layer
	tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing
	and approximately 60 square feet of black sealant located around/on the chimneys.
	skylight, and other vents/protrusions associated with the pitched portions of the building.
	Please note that if the asbestos containing tar & gravel roofing felts are disturbed while
	the non-asbestos rolled roofing material is being removed to access the asbestos
	containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will
	need to be treated and disposed of as am asbestos contaminated material.
	( ) Other (Specify)
C.	Are you requesting any waivers to the above selected 1.14 procedure for any of the abatement activities in this area?
	( ) Yes ( X ) No
	If yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.
D.	Are you proposing alternative procedures under 1.16 for any of the abatement activities in this area?
	( ) Yes ( X ) No
E.	If yes, attach a detailed description of the alternate procedures requested you are proposing to utilize. <i>Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.</i> Will any ACM remain in this area after abatement?
	( ) Yes ( X ) No ( ) Beyond scope of inspection
	If yes, attach a description of the ACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with 1.17.2(B).



#### RHODE ISLAND DEPARTMENT OF HEALTH

#### NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility/Building: Commercial Building	
Address: 532 Roosevelt Avenue	
City/Town: Central Falls ZIP: 02860	Amendment Phase No:
Abatement Plan Prepared By: Brian Piccolo	RIDOH License No.: <u>APD00657</u>
Summary of specific waivers/variances being reque	ested:
<b>Abatement Information</b>	
Abatement Method: (Check all that apply)	
(X) Removal	X ) Demolition
( ) Elicapsulation	) Glovebag
( ) Enclosure (	X ) Asphalt Roofing
Other (specify):	
Asbestos Contractor: To be Determined	RIDOH License No.:
Estimated Starting Date: As soon as the plan is app	proved, and all notifications have been made.
Pre-Abatement Sampling Information	
Bulk samples collected by: Brian A Piccolo	RIDOH License No.: AI00657
Bulk samples analyzed by: <u>Asbestos Identification</u>	<u>Laboratory</u> RIDOH License No.: <u>PLM00121</u>
Air samples collected by: Not Applicable	RIDOH License No.:
Air samples analyzed by: Not Applicable	RIDOH License No.:
<b>Clearance Air Sampling Information</b>	
Air samples to be collected by: Not Applicable	
Air samples to be analyzed by: Not Applicable	RIDOH License No.:
CERTIFIC.	ATION
I certify that: this asbestos abatement plan is prepared and su Laws Chapter 23-24.5 and the Rules and Regulations for A management activities performed in conjunction with this prescribed in this plan (when approved) and the most current and the asbestos abatement/management activities described in asbestos abatement contractor.	Asbestos Control (216-RICR-50-15-1); all abatement/plan will be in compliance with the specifications revision of all applicable federal and state regulations;
State of Rhode Island, County of On the me, the undersigned notary public, personally appeared of document signer), and proved to me through satisfactory e is signed on the preceding or attached document, and acknown purpose.	day of
Signature of Building Owner or Agent	Printed Name of Building Owner or Agent
(official signature and stamp of notary)	
	My Commission expires:
Printed Name, ID Number Notary Public	

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Section 7.0	Criteria for Selection of Contractor
Section 8.0	Authorized Disposal Facility
Section 9.0	Methods for Insuring Compliance
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Section 12.0	Confirmation of Proper Asbestos Disposal
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#### 1.0 Introduction

This asbestos abatement plan is being submitted on behalf of:

Pawtucket Central Falls Development Attention: Ms. Linda Weisinger, Executive Director 204 Broad Street, Pawtucket, RI 02860

to address the requirements of Part 1.17 of the Rhode Island Department of Health's *Rules and Regulations for Asbestos Control (216-RICR-50-15-1)* effective January 2022. This asbestos abatement plan has been developed for the removal of the asbestos containing materials (ACMs) from four (4) abatement areas associated with the commercial building located at 532 Roosevelt Avenue in Central Falls, RI. The approximate quantities of the ACMs are summarized in Section 4.0 of this asbestos abatement plan.

The proposed abatement project must be performed in accordance with all applicable local, state and federal regulations concerning asbestos removal, transportation and disposal, with the possible exception of waivers being requested under this abatement plan. These waivers have been identified in a separate letter from the owner's representative, which has been submitted with this plan.

#### **2.0 Bulk Sampling Information** (see Section 11 of Form ASB-16)

The ACMs to be abated were characterized by bulk samples collected by Brian Piccolo (Rhode Island Department of Health (RIDOH) Certification No Al00657) during a survey at the subject property on Wednesday, September 25 and Thursday, September 26, 2024.

Samples collected during the surveys were submitted to and analyzed by Asbestos Identification Laboratory (AIL) in Woburn, Massachusetts. AIL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP# 200919-0) and with the RIDOH (PLM00121). All samples were analyzed in accordance with U.S. Environmental Protection Agency (EPA) recommended protocol ("Follow-up to the Interim Method for Determination of Asbestos in Bulk Insulation Samples" - EPA 600/R-93/116 method "Visual Estimate") using polarized light microscopy (PLM) supplemented by dispersion staining techniques. Additionally, the ceramic wall tile glue in the northwestern 2<sup>nd</sup> floor unit and the joint compound in the eastern 2<sup>nd</sup> floor units were further analyzed in accordance with the PLM non-friable organically bound materials (NOB)-EPA 600/R-93/116 gravimetric preparation method and PLM analysis by EPA 600/R-93/116 Point Count Method.

A total of seventy-one (61) samples were collected and submitted for analysis. **Appendix A** contains copies of the analytical results by AIL, indicating the asbestos content of the material targeted for abatement.

## 3.0 Air Sampling

#### **3.1 Pre-abatement Air Sampling** (refer to Section 12, Form ASB-16)

The proposed abatement is for the commercial building located at 532 Roosevelt Avenue in Central Falls, RI, which is currently vacant and is scheduled to be

immediately demolished following the asbestos abatement. As such, no preabatement air sampling was conducted.

#### 3.2 Contiguous Area Sampling During Abatement

The proposed abatement is for the commercial building located at 532 Roosevelt Avenue in Central Falls RI, which is currently vacant and is scheduled to be immediately demolished following the asbestos abatement. As such, AltTech recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of work-area while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

#### 3.3 Clearance Air Testing

The proposed project consists of four (4) abatement areas associated with the commercial building located at 532 Roosevelt Avenue in Central Falls, RI, which is currently vacant is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph 1.14.2(p) of the RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1).

AltTech recommends that a final visual clearance inspection within the containment areas after the abatements have been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

## 4.0 Description of Abatement Area

The proposed project consists of four (4) abatement area associated with the commercial building located at 532 Roosevelt Avenue in Central Falls, RI.

- Abatement Area 1 Northwestern 1<sup>st</sup> Floor Area Approximately 10 square feet of remnant beige 12" x 12" floor tile and approximately 20 square feet of linoleum located within the former bathroom. Please note pieces of the remnant beige 12" x 12" floor tile was observed to be located within the exposed wall chases within this area (see Figures).
- Abatement Area 2 Northwestern 2<sup>nd</sup> Floor Unit Approximately 160 square feet of ceramic wall tile glue located behind the kitchen sink and throughout the bathroom area (tub/shower and walls). It should be noted that the ceramic wall tile has been contaminated with the asbestos containing glue and will be treated as an asbestos containing material (see Figures).

- Abatement Area 3 Eastern 2<sup>nd</sup> Floor Units Approximately 2,300 square feet of gypsum board walls/ceilings contaminated with the asbestos containing joint compound (see Figures).
- Abatement Area 4 Rood Area Approximately 1,000 square feet of the bottom layer tar & gravel roofing felts that are located below a layer of non-asbestos rolled roofing and approximately 60 square feet of black sealant located around/on the chimneys, skylight, and other vents/protrusions associated with the pitched portions of the building. Please note that if the asbestos containing tar & gravel roofing felts are disturbed while the non-asbestos rolled roofing material is being removed to access the asbestos containing tar & gravel roofing felts, then the non-asbestos rolled roofing material will need to be treated and disposed of as am asbestos contaminated material (see Figures).

#### 5.0 Interim Operations and Maintenance Program

The O&M Program is designed to (1) clean up asbestos fibers previously released, (2) prevent future release by minimizing ACM disturbance or damage, and (3) monitor the condition of the ACM. The program should be implemented if the building is to be occupied or utilized and it should continue until all ACM is removed or the building is demolished. The program should be implemented as soon as possible.

An Asbestos O&M Program Coordinator should be first appointed and trained. The Asbestos Program Manager shall have overall responsibility for implementing and documenting the program. He/she is directly responsible to upper management and must be knowledgeable about the medical and control aspects of asbestos. He or she may serve as coordinator or delegate that responsibility to the facilities manager or other appropriate employee. The manager of building maintenance and the custodial staff supervisor are the other key participants for an effective program.

An effective O & M program for these types of materials should have the following sections:

#### Documentation, Education, and Training

The O & M Program coordinator should:

- Record the exact location of all asbestos containing materials on building documents (plans, specifications, and drawings).
- Educate building staff & occupants, as well as maintenance and custodial workers, about the location of ACMs, and caution them about disturbing it.
- Educate building staff & occupants, as well as maintenance and custodial workers, on the procedures for alerting outside service personnel and others to the presence and location of ACMs, including the Warning Label provisions of 40 CFR 763.95; and caution them about disturbing it.
- Train maintenance and custodial workers to handle ACM safely.

<sup>\*</sup> Please note that the quantities and locations of asbestos containing materials included in this abatement plan are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

 The training program shall be in compliance with OSHA regulation 29 CFR 1926.1101 and shall meet the maintenance employee training requirements of the Asbestos Hazard Emergency Response Act (AHERA). The training program shall be presented and include the following;

#### Level 1 - Awareness Training

This level is for maintenance personnel involved in cleaning and simple maintenance tasks where ACBM may be accidentally disturbed. Such training may range from two to eight hours and include topics such as:

- Background information on asbestos
- Health effects of asbestos
- Worker protection programs
- Location of ACBM in the building
- Recognition of ACBM damage and deterioration
- Review of the buildings O&M plan/program
- Proper response to fiber release episodes

#### Level 2 - Special O&M Training

Level 2 is for maintenance personnel involved in regular maintenance and asbestos material repair tasks. Such activities will be outsourced to a licensed asbestos contractor.

#### Level 3 - Abatement Worker Training

Level 3 is for workers who may conduct asbestos abatement. No on-site personnel will perform asbestos abatement.

Under this asbestos O&M program, all activities that are likely to or knowingly will disturb ACBM will be outsourced to a qualified and licensed abatement firm. If an independent contractor such as an electrician or plumber performs activities that may impact ACBM the independent contractor must be trained in dealing with ACBM or must arrange for a licensed asbestos contractor to handle any ACBM disturbed.

#### Maintenance

The O & M Program coordinator should:

 Ensure that recommended procedures and safety precautions will be followed before authorizing construction and maintenance work involving asbestos containing materials. Specifically, containment barriers should be erected around the construction and maintenance work area and workers should wear coveralls as well as respirators. All tools should be equipped with HEPA-filtered vacuum devices.

#### The maintenance staff should:

 Clear all construction, renovation, maintenance, or equipment repair work with the O & M Program coordinator in advance.  Avoid removing, sanding, or stripping floor tile and associated mastics containing asbestos. If tiles are removed, do not sand asbestos mastic (tile glue) remaining on the floor.

#### Periodic Inspection

Building inspectors should:

• Each area known to contain ACBM should be visually inspected by the Asbestos Program Manager trained designee, him or herself, or a Consultant semi-annually. The results of this inspection shall be recorded on an ACBM Condition Form. All forms shall be transmitted to the Asbestos Program Manager. The purpose of the inspection is to ensure that ACBM condition has not deteriorated significantly during the preceding six-month period. If the condition of any ACBM has deteriorated since the last inspection, the Asbestos Program Manager shall be notified as soon as possible. The Asbestos Program Manager shall then investigate to determine if remedial action is required to prevent a health hazard.

Custodial and maintenance staff should:

Report any ACM damage to the O & M Program manager immediately.

#### Record Keeping

The Asbestos Program Manager shall maintain the following documents and records;

- A. medical exam records, if required, (in accordance with 29 CFR 1910.1001(m)(3) and 1926.1101 or other applicable OSHA regulations) for all employees engaged in asbestos work or who may have been exposed to asbestos fibers in excess of the permissible exposure limit of 0.1 f/cc at the facility,
- B. all sampling results, including the dates, analytical methods used, number, duration, and results from the samples taken,
- C. Asbestos Job Notifications, the identity of employees and other parties who are or were involved in those jobs, and all other records relating to asbestos work at the facility,
- D. Asbestos Condition forms and all other records of inspections of asbestos locations.
- E. all Waste Origin Waste Disposal forms for the disposal of asbestos material,
- F. the names of all contractors and sub-contractors performing asbestos work, the date and duration of such work and all documents and records relating to such work,
- G. all documents relating to the HEPA vacuum, HEPA vacuum filter replacement dates, and HEPA vacuum waste disposal dates,
- H. all correspondence regarding ACBM,
- I. all correspondence with any federal, state or local agencies regarding asbestos,
- J. all asbestos related employee training records, and,
- K. all other documents and records relating to asbestos.

Copies of each document and record shall be maintained for at least 30 years. These copies shall be retained even if the facility is sold.

Records shall be made available to appropriate OSHA representatives in accordance with 29 CFR 1910.1001 (m)(5) and 1926.1101 (n)(5) or other applicable federal, state or local laws. Sampling results and medical records shall be made available to appropriate affected employees, former employees and designated representatives in accordance with 29 CFR 1910.1001 (m)(5) and 1926.1101 or other applicable federal, state or local laws.

#### 6.0 Specific Abatement Proposal

This abatement plan has been prepared for the removal of the ACMs specified in Section 4.0 of this abatement plan, which has been developed for the commercial building located at 532 Roosevelt Avenue in Central Falls, RI. The ACM location(s) are depicted in the Figure associated with this plan.

An asbestos contractor licensed in the State of Rhode Island must perform all asbestos abatement work, and all work must be performed in accordance with all applicable local, state, and federal regulations.

Asbestos removal will be performed following the appropriate approval of this plan by the RIDOH. The contractor, provided with the appropriate notifications, will then perform the asbestos abatement. It is anticipated that the removal project will take approximately two weeks to complete.

The ACMs to be abated in Areas 1 - 3 will be completed in accordance with Section 1.14.6 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

The ACMs to be abated in Area 4 will be completed in accordance with 1.14.8 of the RI Rules and Regulations for Asbestos Control, a copy of which has been attached to this plan.

#### 7.0 Criteria for Selection of Contractor

A licensed asbestos abatement contractor by the State of Rhode Island in accordance with Section 1.7 of the RI Rules and Regulations for Asbestos Control, will be responsible to implement this plan.

## 8.0 Authorized Disposal Facility

The contractor will select the authorized asbestos waste facility. The chosen contractor will forward the name of the approved disposal site to the RI Department of Health.

## 9.0 Methods for Insuring Compliance

See Sections 4 B and 4 D of Form ASB-16A

#### 10.0 Monitoring Compliance

The property owner representative will monitor compliance with the asbestos abatement plan.

#### **11.0 Monitoring Requirements** (see Section 15 A-D of Form ASB-16)

#### 11.1 In-Process Air Sampling During Abatement

The proposed abatement is for the commercial building located at 532 Roosevelt Avenue in Central Falls RI, which is currently vacant and is scheduled to be immediately demolished following the asbestos abatement. As such, AltTech recommends that there be no continuous in-process air sampling conducted in the immediate vicinity of work-area while the abatement is taking place, and that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), shall be conducted throughout the entirety of the asbestos abatement project by the chosen contractor.

#### 11.2 Clearance Inspection

The proposed project consists of four (4) abatement area associated with the commercial building located at 532 Roosevelt Avenue in Central Falls, RI, which is currently vacant is scheduled to be immediately demolished following the asbestos abatement. According to the property owner representative, no one will be entering the building following the asbestos abatement. As such, it is proposed that personnel air monitoring of Asbestos Abatement Workers, which demonstrates compliance with the provisions of OSHA 29 CFR 1926.1101 (formerly OSHA 29 CFR 1926.58(f)), be used in lieu of the clearance air sampling requirements contained in Paragraph 1.14.2(p) of the RIDOH's Rules and Regulations for Asbestos Control (216-RICR-50-15-1).

AltTech recommends that a final visual clearance inspection within the containment areas after the abatements have been completed and prior to the building demolition, to ensure that the ACMs associated with this plan have been properly abated. After a final visual inspection has been completed, the building shall be closed to prevent access pending demolition and warning signs shall remain in place until demolition begins.

## 12.0 Confirmation of Proper Asbestos Disposal

The property owner representative shall obtain confirmation of proper asbestos disposal from the contractor and provide copies to the RI Department of Health in accordance with Section 1.17.3 (b) of the RI Rules and Regulations for Asbestos Control.

## APPENDIX A

# **Bulk Sampling Analytical Results**

**Project Information** 20240917 532 Roosevelt Ave., Central Falls,

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1A	Plaster	Throughout	gray	Hair 3 Non-Fibrous 97	None Detected
1373781 1B	Plaster	Throughout	gray	Hair 3 Non-Fibrous 97	None Detected
1373782 1C	Plaster	Throughout	gray	Hair 3 Non-Fibrous 97	None Detected
1373783 2A	Gypsum Board	1st FI	white	Cellulose 5	None Detected
1373784 2B	Gypsum Board	1st FI	white	Non-Fibrous 95 Cellulose 5	None Detected
1373785		Link		Non-Fibrous 95	
3A 1373786	Black Flooring	South East 1st FI	multi	Cellulose 40 Non-Fibrous 60	None Detected
4A 1373787	Floor Paper Below 3A	South East 1st FI	brown	Cellulose 80 Non-Fibrous 20	None Detected
5A	Black Mastic	North East 1st FI	black	Non-Fibrous 100	None Detected
1373788 <b>6A</b>	Black Tar Paper	1st FI Wall Cavities	black	Cellulose 70 Non-Fibrous 30	None Detected
1373789 7A	Beige 12x12 Floor Tile	North West 1st FI	gray	Non-Fibrous 97	Detected Chrysotile 3
1373790 7AM	Mastic	North West 1st Fl	tan	Non-Fibrous 100	None Detected
1373791 8A	Linoleum	1st Fl Bathroom	multi	Non-Fibrous 70	Detected Chrysotile 30
1373792 9A	Floor Paper Below Plywood	North East 1st FI	black		Detected Chrysotile < 1
1373793 10A	Asphaltic Floor Paper	2nd FI NW Unit	multi	Cellulose 70 Non-Fibrous 30	None Detected
1373794 11A	Ceramic Wall Tile Grout	2nd FI NW Unit	white	Non-Fibrous 100	None Detected
1373795 12A	Ceramic Wall Tile Glue	2nd FI NW Unit	tan	Non-Fibrous 100	None Detected
1373796			A PE		

Sampled:

September 26, 2024

Received:

September 27, 2024

Analyzed:

October 01, 2024

Wednesday 02 October

Analyzed by: Mathan Chann

Batch:

124044

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**Project Information** 20240917 532 Roosevelt Ave., Central Falls, RI

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
13A	Linoleum	Kitchen 2nd FI NW Unit	multi	Cellulose 30 Non-Fibrous 70	None Detected
1373797 14A	Ceramic Wall Tile Grout	2nd Fl Northern Middle Unit	white	Non-Fibrous 100	None Detected
1373798					
15A	Ceramic Wall Tile Glue	2nd Fl Northern Middle Unit	tan	Non-Fibrous 98	Detected Chrysotile 2
1373799 16A	Brown Press-on Floor Tile	2nd FI Northern Middle Unit	multi	Non-Fibrous 100	None Detected
1373800					
16AM	Mastic	2nd FI Northern Middle Unit	clear	Non-Fibrous 100	None Detected
1373801					
17A	Top Layer Asphaltic Floor Paper	Attic	multi	Cellulose 70 Non-Fibrous 30	None Detected
1373802	D # 1 A 1 W	Aus	100		
18A	Bottom Layer Asphaltic Floor Paper	Attic	multi	Cellulose 70 Non-Fibrous 30	None Detected
1373803 19A	White Press-on Floor Tile	2nd FI NE Unit Bathroom	multi	Non-Fibrous 100	None Detected
1373804					
19AM	Mastic	2nd FI NE Unit Bathroom	clear	Non-Fibrous 100	None Detected
1373805					
20A	Textured Wall Material	2nd FI NE Unit Bathroom	white	Non-Fibrous 100	None Detected
1373806 <b>21A</b>	Textured Ceiling Material	2nd FI NE Unit	white	Non-Fibrous 100	None Detected
1373807					
21B	Textured Ceiling Material	2nd FI NE Unit	white	Non-Fibrous 100	None Detected
1373808					
22A	Top Layer Press-on Floor Tile	2nd FI NE Unit Kitchen	multi	Non-Fibrous 100	None Detected
1373809					
22AM	Mastic	2nd FI NE Unit Kitchen	clear	Non-Fibrous 100	None Detected
1373810 23A	Black Floor Ppaer	2nd FI NE Unit Kitchen	black	Cellulose 70	None Detected
1373811				Non-Fibrous 30	
24A	Burlap Backed Flooring	2nd FI NE Unit Kitchen	multi	Cellulose 40 Non-Fibrous 60	None Detected
1373812					

Sampled:

September 26, 2024

Received:

September 27, 2024

Analyzed:

October 01, 2024

Wednesday 02 October

Analyzed by: Mathan Chann

Batch:

124044

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**Project Information** 20240917 532 Roosevelt Ave., Central Falls, RI

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
25A	Gypsum Board	2nd FI NE Unit Bedroom	white	Cellulose 5 Non-Fibrous 95	None Detected
1373813					
26A	Joint Compound	2nd FI NE Unit Bedroom	white	Non-Fibrous 100	None Detected
1373814					
27A	Ceramic Wall Tile Grout	2nd FI SE Unit w	white	Non-Fibrous 100	None Detected
1373815					
28A	Ceramic Wall Tile Glue	2nd FI SE Unit	brown	Non-Fibrous 100	None Detected
1373816					
29A	Gypsum Board	2nd FI SE Unit Bedroom gr	gray	Cellulose 5 Non-Fibrous 95	None Detected
1373817					
30A	Joint Compound	2nd FI SE Unit Bedroom	white	Non-Fibrous 100	None Detected
1373818					
31A	Gypsum Board	2nd Fl Northern Units	white	Cellulose 5 Non-Fibrous 95	None Detected
1373819					
31B	Gypsum Board	2nd FI Northern Units	white	Cellulose 5 Non-Fibrous 95	None Detected
1373820					
32A	Joint Compound	2nd Fl Northern Units	tan	Non-Fibrous 97	Detected Chrysotile
1373821					
32B	Joint Compound	2nd FI Northern Units			Not Analyzed
1373822					

Sampled:

September 26, 2024

Received:

September 27, 2024

124044

Analyzed:

October 01, 2024

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Wednesday 02 October

Analyzed by: Mathan Chann

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1A	Top Layer Roofing	Roof	black	Cellulose 65 Non-Fibrous 35	None Detected
1375720					
1B	Top Layer Roofing	Roof black	black	Cellulose 65 No Non-Fibrous 35	None Detected
1375721					
2A	Bottom Layer Tar/Gravel	Roof	black	The state of the s	Detected Chrysotile 10
1375722	Roofing			Non-Fibrous 35	
2B	Bottom Layer Tar/Gravel	Roof		Not Analyzed	
	Roofing				
1375723 3A	Red Asphalt Shingle	Roof	multi	Fiberglass 35	None Detected
5-3/12/-		Troop India	Non-Fibrous 65		
1375724 3B	Red Asphalt Shingle	Roof	multi	Fiberglass 35	None Detected
	Trea Aspirait Shirigie	Roof			
1375725 4A	Pottom Lover Apphalt	Roof	black	Cellulose 65	Name Datastad
1/1	Bottom Layer Asphalt Shingle	Rooi	DIACK	Non-Fibrous 35	None Detected
1375726					
4B	Bottom Layer Asphalt Shingle	Roof	black	Cellulose 65 Non-Fibrous 35	None Detected
1375727					
5A	Black Rolled Asphalt Patch	Roof	black	Cellulose 65 Non-Fibrous 35	None Detected
1375728	, distri			Non Tibrous 33	
6A	Black Rolled Roofing Patch	Roof black	black	Cellulose 65 Non-Fibrous 35	None Detected
1375729	rateri		Non-Fibrous 35		
7A	Black Seam Sealant	Flat Roof	black		None Detected
1375730				Non-Fibrous 40	
8A	Black Sealant	Pitched Roof black		Detected Chrysotile	
1375731					
9A	Roof Paper	Roof	brown		None Detected
1375732		1.0		Non-Fibrous 5	
9B	Roof PAper	Roof	brown		None Detected
1375733				Non-Fibrous 5	
13/5/33 10A	Black Asphalt Shingle	Awning Roof black	black	Fiberglass 35	None Detected
- C.2222				Non-Fibrous 65	
1375734 11A	Exterior Siding Shingle	Exterior	black	Cellulose 65	None Detected
-		31111167	1,200	Non-Fibrous 35	and the same of th
1375735		4 -			

Sampled:

September 25, 2024

ouren () aus

Received:

September 27, 2024

Analyzed:

October 01, 2024

Brian Piccolo AltTech Services 44 Pole Bridge Road North Scituate, RI 02857 Project Information 20240917 532 Roosevelt Avenue, Central Falls, RI Method: BULK PLM ANALYSIS, EPA/600/R-93/116

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
11B	Exterior Siding Shingle	Exterior	black	Cellulose 65 Non-Fibrous 35	None Detected
1375736					
12A	Building Paper	Exterior black		None Detected	
1375737				Non-Fibrous 20	
12B	Building Paper	Exterior bla	black		None Detected
1375738				Non-Fibrous 20	
				$\Psi$	
				$\downarrow$	
				<u> </u>	
				<u> </u>	
				<u> </u>	
				<u> </u>	
				<u> </u>	
				<u> </u>	
				<u> </u>	

Sampled:

September 25, 2024

Received:

September 27, 2024

Analyzed:

October 01, 2024

Jouren () aus

Batch:

ch: 124220

Brian Piccolo AltTech Services 44 Pole Bridge Road North Scituate, RI 02857 **Project Information** 

Method: PLM POINT COUNT

532 Roosevelt Ave., Central Falls, RI

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
32A	Joint Compound	2nd Fl. Northern Units	tan	Non-Fibrous 97	Detected Chrysotile 3
1378445					
32B	Joint Compound	2nd Fl. Northern Units	tan	Non-Fibrous 98	Detected Chrysotile 2
1378446			1. 10		chrysocite 2

Sampled:

October 03, 2024

Received:

October 03, 2024

Analyzed:

October 04, 2024

Monday 07 October 2024
Analyzed by: Muthan Chann Analyzed by:

Batch:

124479

Brian Piccolo AltTech Services 44 Pole Bridge Road North Scituate, RI 02857 Project Information

Method: PLM NOB

532 Roosevelt Ave., Central Falls, RI

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1378444					

Sampled:

October 03, 2024

Received: October 03, 2024

Analyzed:

October 04, 2024

Monday 07 October 2024

Analyzed by:

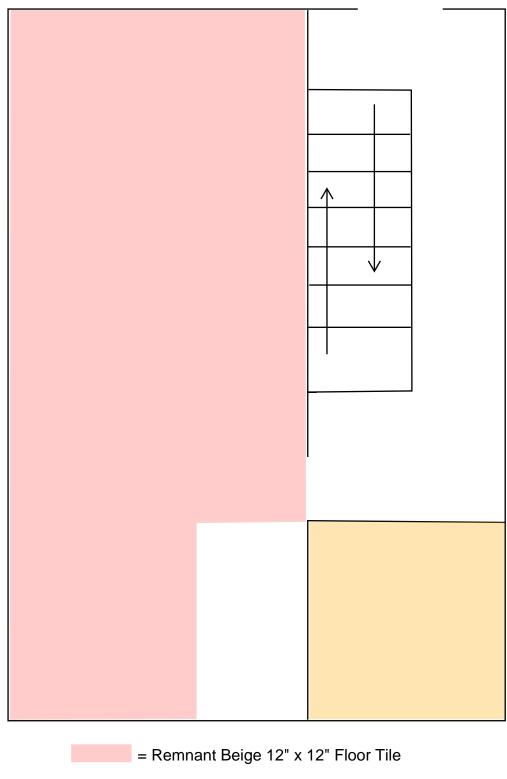
Joursen James

Batch:

124478

# APPENDIX B

# Figures

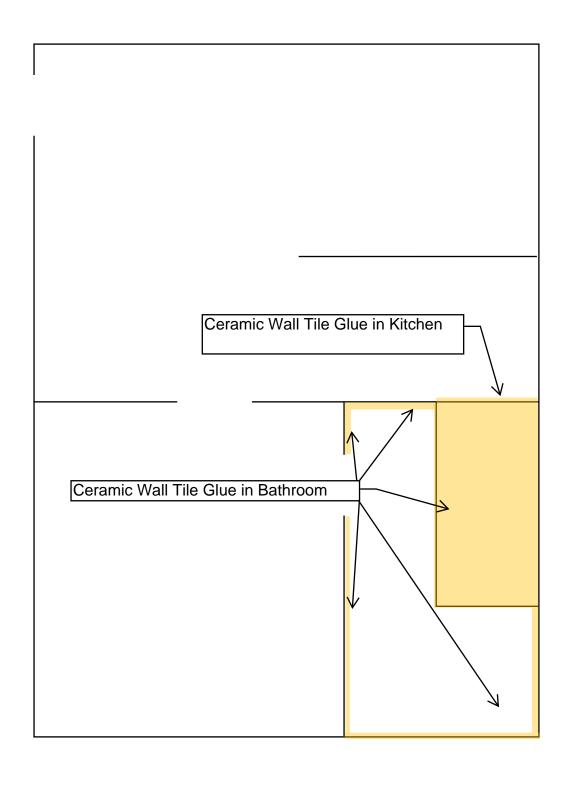


= Linoleum

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

# Figure 1

Area 1 - Northwestern 1st Floor 532 Roosevelt Avenue Central Falls, RI

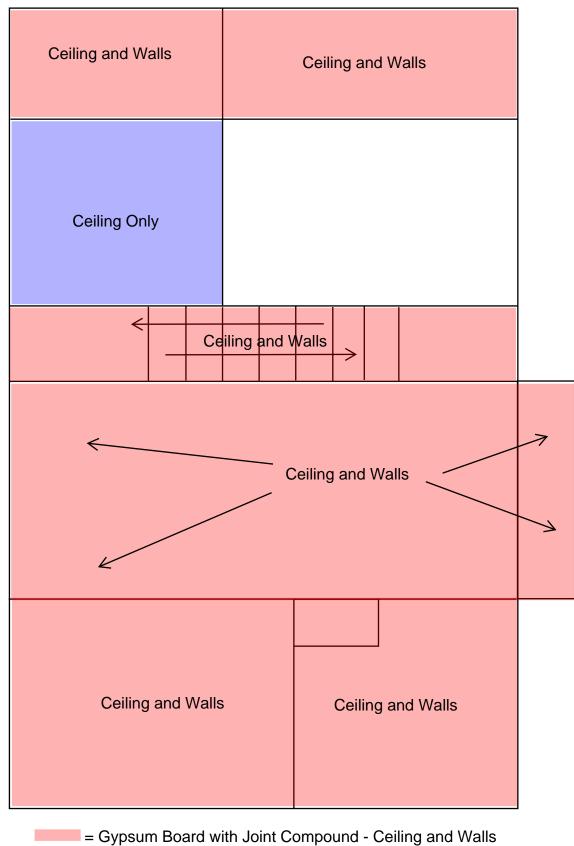


= Ceramic Wall Tile Glue

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 2

Area 2 - Northwestern 2nd Floor 532 Roosevelt Avenue Central Falls, RI



= Gypsum Board with Joint Compound - Ceiling and Walls= Gypsum Board with Joint Compound - Ceiling Only

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 3

Area 3 - Eastern 2nd Floor 532 Roosevelt Avenue Central Falls, RI



= Tar & Gravel Roofing Felts

= Black Sealant

\*Please note that the locations of asbestos containing materials depicted are for reference purposes only and should be field verified by contractors if they are to be utilized for bidding purposes.

Figure 4
Area 4 – Roof Area
532 Roosevelt Avenue
Central Falls, RI

## **APPENDIX C**

Rhode Island Rules and Regulations for Asbestos Control – 1.14.2-1.14.3, 1.14.6 and 1.14.8: Work Practice Requirements

# 1.14.2 General Requirements for Removal, Encapsulation and/or Enclosure of Regulated Asbestos Containing Material (RACM)

- A. Barriers to isolate contaminated from uncontaminated areas shall be constructed of polyethylene sheeting attached securely in place.
- B. All surfaces shall be wet cleaned of dust or debris. Wet cleaning of contaminated items shall be performed if necessary. All movable objects shall be removed from the work area. All nonmovable objects in the work area shall be covered with 6- mil polyethylene sheeting secured in place. All openings or penetrations between the work area and uncontaminated areas shall be sealed, including windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers and skylights.
- C. Floor sheeting shall consist of two (2) layers of 6-mil polyethylene sheeting. Floor sheeting shall extend up sidewalls at least twelve (12) inches and be sized to minimize seams. No seams shall be located at wall/floor joints. Floors being abated of resilient floor coverings and associated mastics/adhesives shall be exempt from this requirement.
- D. Wall sheeting shall consist of two (2) layers of 4-mil polyethylene sheeting. It shall be installed to minimize joints and shall extend beyond wall/floor joint at least twelve (12) inches. No seams shall be located at wall/wall joints.
- E. A worker decontamination enclosure system, consisting of a clean room, shower room and equipment room, each separated from each other and from the work area by airlocks and accessible through doorways protected with two (2) overlapping polyethylene sheets, shall be provided in accordance with OSHA 29 C.F.R. § 1926.1101(j) incorporated by reference at § 1.2(A) of this Part. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the work area.
- F. All HVAC equipment in or passing through the work area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape. All system filters shall be replaced after the abatement and disposed of as asbestos waste. The ventilation system ductwork interiors shall be decontaminated whenever necessary.

#### G. Posting

- 1. Warning signs in accordance with OSHA 29 C.F.R. § 1926.1101(k)(7) incorporated by reference at § 1.2(A) of this Part shall be displayed at all approaches to any location where airborne fiber levels can be expected to exceed the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part.
- 2. Warning signs to advise the public of the location(s) within the building where any asbestos abatement activity is in progress shall be posted at all building entrances and at least one other conspicuous place per floor. These signs shall be of the same dimensions as the Warning/Danger signs required in § 1.14.2(G)(1) of this Part.
- 3. Warning signs shall be posted on vehicles used to transport Asbestos Containing Waste Materials during loading and unloading of the waste.
- H. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement. Wet cleaning shall be followed by HEPA vacuuming after surfaces have been allowed to dry. The sequence of wet cleaning and vacuuming shall be repeated at twenty-four (24) hour intervals until no visible residue is observed in the work area.
- I. Negative pressure ventilation units with HEPA filtration, in sufficient number to provide two (2) workplace air change every fifteen (15) minutes, shall be operated continuously from the time of barrier construction through the time acceptable final clearance air-monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.

- J. All Asbestos Containing Waste Materials shall be adequately wetted before being placed into containers for disposal.
- K. Asbestos Containing Waste Materials shall be placed in impermeable containers for disposal. Metal or fiber drums with locking-ring tops shall be used when asbestos waste contains sharp edged components. Double polyethylene bags of at least 6-mil thickness and which can be securely sealed may be used for waste. Large components or structural members may be removed intact and contained in leak-tight wrapping, equivalent to at least two (2) layers of 6-mil polyethylene sheeting, secured with tape for disposal.
- L. All containers, bags, drums and wrapped components shall be labeled so that labels have the appearance of or are constructed in accordance with USDOT 49 C.F.R. 172, Subpart E incorporated by reference at § 1.2(D) of this Part and OSHA 29 C.F.R. § 1926.1101(k)(8) incorporated by reference at § 1.2(A) of this Part. Each container, bag, drum or wrapped component shall also be labeled or tagged with the name and license number of the asbestos contractor generating the waste, as well as the asbestos abatement project number and location at which the waste was generated.
- M. Storage of asbestos waste containers awaiting transport to an authorized disposal facility shall be in a secured location to prevent access by unauthorized personnel.
- N. Transport and disposal of asbestos waste shall be in accordance with the provisions of Appendix D to 40 C.F.R. 763, Subpart E incorporated by reference at § 1.2(E) of this Part and USDOT 49 C.F.R. § 173.1300 incorporated by reference at § 1.2(F) of this Part.
- O. Disposal of Asbestos Containing Waste Materials. All Asbestos Containing Waste Materials shall be deposited as soon as is practical by the waste generator at:
  - 1. A waste disposal site operated in accordance with the provisions of 40 C.F.R. § 61.154, or equivalent regulations promulgated by a state or local NESHAP designee; or
  - 2. An EPA-approved site that converts RACM and Asbestos Containing Waste Materials into nonasbestos (asbestos-free) material according to the provisions of 40 C.F.R. § 61.155.
- P. Access to work areas shall be controlled and posting requirements shall remain in effect until compliance with the air exposure standard has been verified by procedures outlined below:
  - 1. Samples shall be collected and analyzed in accordance with the procedures specified by NIOSH Method 7400 (most current Revision) for asbestos fibers in air or equivalent method;
  - 2. Air volumes shall be sufficient to accurately determine fiber concentrations to 0.01 fibers/ cubic centimeter of air (f/cc) for fibers greater than five (5) microns in length or 300 nanograms per cubic meter. A minimum air volume of 1000 liters shall be sampled;
  - 3. Air sampling shall be conducted in representative locations with portable fans circulating air to simulate actual use conditions;
  - 4. An acceptable airborne fiber concentration, as established by clearance air monitoring shall not exceed 0.01 f/cc for fibers greater than five (5) microns in length or 300 nanograms per cubic meter; and
  - 5. Air sampling shall be conducted by a representative of the building owner who is not subject to the control or supervision of the Asbestos Contractor for the asbestos abatement plan.
  - 6. Notwithstanding the requirements contained in § 1.14.2(P) of this Part above, control of access and posting requirements for buildings subject to the AHERA regulations shall remain in effect until compliance with §§ 1.17.3(A)(5) through (8) of this Part has been demonstrated.

# 1.14.3 Specific Requirements for Removal of Regulated Asbestos Containing Material (RACM)

- A. All RACM shall be adequately wetted prior to removal. In addition, all RACM exposed during cutting and disjoining operations shall be adequately wet and all RACM shall be kept adequately wet during stripping operations.
- B. Components shall be removed intact or in large sections whenever possible and carefully lowered to the floor.
- C. RACM shall be removed in small sections and containerized when adequately wet. At no time shall material be allowed to accumulate or become dry. Structural components shall be adequately wetted prior to being contained in leak-tight wrapping for disposal.
- D. Material shall not be dropped or thrown to the floor level. For materials located at heights greater than fifty (50) feet above the floor, a dust-tight, enclosed chute shall be constructed to transport removed material to containers on the floor. RACM may be dropped to a raised scaffold or containerized at elevated levels for disposal. Materials greater than fifteen (15) feet above the floor shall be dropped onto inclined chutes or scaffolding or containerized at elevated levels for eventual disposal.
- E. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of RACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
- F. RACM is not required to be stripped from large facility components such as reactor vessels, large tanks, and steam generators if the following requirements are met:
  - 1. The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - 2. The component is encased in a leak-tight wrapping.
  - 3. The leak-tight wrapping is labeled during all loading and unloading operations and during storage.
- G. When the temperature at the point of wetting is below 0°C (32°F):
  - 1. The Asbestos Contractor need not comply with the wetting provisions of §§ 1.14.3(A) and (C) of this Part.
  - 2. The Asbestos Contractor shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.
  - 3. During periods when wetting operations are suspended due to freezing temperatures, the Asbestos Contractor must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Department during normal business hours at the asbestos abatement project site. The Asbestos Contractor shall retain temperature records for at least two years.

#### 1.14.6 Specific Requirements for Demolition of Structures Containing Asbestos

A. Any demolition of a structure or portion of a structure which contains structural members, building materials or structural components composed of or covered by RACM shall be preceded by a removal of all such materials in accordance with §§ 1.14.2 and 1.14.3 of this Part. Said removal must be completed before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. Notwithstanding the foregoing, RACM need not be removed before demolition if:

- 1. It is Category I nonfriable ACM that is not in poor condition and is not friable; or
- 2. It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
- 3. It was not accessible for testing and was, therefore, not discovered until after demolition began and, because of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as Asbestos Containing Waste Material and adequately wet at all times until disposed of; or
- 4. It is Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- B. For Emergency Asbestos Abatement Projects described in § 1.6.2(C) of this Part, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- C. If a facility is demolished by intentional burning, all RACM, including Category I and Category II nonfriable ACM, must be removed in accordance with this Part before burning.
- D. In lieu of the requirements specified in §§ 1.14.2(B), (C), (D), (F) and 1.14.3(E) of this Part, Asbestos Contractors engaging in demolition activities shall comply with the following:
  - 1. Prior to beginning a demolition project, all doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Department.
  - 2. If a structure is to be partially demolished, HVAC equipment in the demolition area or passing through it but servicing areas of the building which will remain, shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  - If the building owner proposes not to conduct clearance air sampling following asbestos
    abatement activities conducted for demolition purposes, the building owner must submit
    written justification to the Department which describes how personnel who must occupy
    the building prior to demolition will be protected.
  - 4. All other requirements of §§ 1.14.2 and 1.14.3 of this Part, unless specified in § 1.14.6(D) of this Part, shall apply to demolition abatement activities.

# 1.14.8 Specific Requirements for Removal of Category I Nonfriable ACM – Asphalt Roofing Products

A. All surfaces shall be wet cleaned of dust or debris. All movable objects shall be removed from the roof area. All openings or penetrations on the roof area and at least one level below the roof area shall be sealed, including windows, doorways, drains, ducts, grills, grates, diffusers and skylights.

- B. Floor/ground sheeting shall consist of at least two (2) layers of 6-mil polyethylene sheeting and shall be utilized as follows:
  - 1. If the roof is pitched, sheeting shall be applied to the first horizontal surface below the work area and shall extend from the edge of the building to at least ten (10) feet away from the building. All material being abated shall be confined to the roof area.
  - 2. If the roof is flat, sheeting shall extend at least ten (10) feet away from the perimeter of the work area. When the edge of the roof is less than ten (10) feet from the perimeter of the work area, sheeting shall be applied such that the outer edge of the sheeting is at least ten (10) feet from the perimeter of the work area.
- C. All HVAC intake or exhaust vents on the roof area and at least one level below the roof area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape.
- D. A minimum of a two-chambered worker decontamination enclosure system shall be provided on site. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the roof area.
- E. Warning signs shall be posted in accordance with § 1.14.2(G) of this Part.
- F. Category I Nonfriable ACM shall be removed in small sections and containerized when wet. At no time shall material be allowed to accumulate or become dry.
- G. Category I Nonfriable ACM shall not be dropped or thrown to the floor/ground level. For roofs at heights greater than fifty (50) feet above the floor/ground, a dust-tight, enclosed chute shall be constructed to transport removed Category I Nonfriable ACM to containers on the floor/ground. Category I Nonfriable ACM may be dropped to a raised scaffold or containerized at elevated levels for disposal.
- H. All Category I Nonfriable ACM shall be adequately wetted before being placed into containers for disposal. Disposal shall be in accordance with §§ 1.14.2(K) through (O) of this Part.
- I. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of Category I Nonfriable ACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
- J. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement.
- K. Personnel air monitoring of Asbestos Supervisors and Asbestos Workers, which demonstrates compliance with the provisions of OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part, may be used in lieu of the clearance air sampling requirements contained in § 1.14.2(P) of this Part.

## APPENDIX D

RIDOH Asbestos Abatement Plan Approval Letters



#### Rhode Island Department of Health

3 Capitol Hill Providence, RI 02908-5097

TTY: 711 www.health.ri.gov

November 27, 2024

Pawtucket CF Development Corporation Linda Weisinger 204 Broad St Pawtucket, RI 02860

Plan No.: 222860

Dear Owner/Agent:

The Rhode Island Department of Health (RIDOH) reviewed and approved the Asbestos Abatement Plan you submitted for the demolition of Commercial Building - 518 Roosevelt AVE, 518 Roosevelt Ave Central Falls. The plan will expire 12 months from the date of this letter and the work must begin within 6 months of this approval date

The asbestos abatement work must be performed by a RIDOH-licensed Asbestos Contractor in accordance with all other requirements of the Rules and Regulations for Asbestos Control (216-RICR-50-15-1). A Start Work Notification (ASB-22) must be submitted to RIDOH at least 10 business days before the work begins. In addition, the Asbestos Supervisor must notify RIDOH at 401-222-7796 when site preparation begins. Personal air sample results and confirmation of disposal of asbestos must also be submitted to RIDOH in accordance with 216-RICR-50-15-1.

Please contact Alexander Yelle, 401-222-7777 or <u>doh.asbestos@health.ri.gov</u> if you have any questions regarding these requirements.

Sincerely,

Bonnie Cassani-Brandt Asbestos & Radon Program Manager Center for Healthy Homes & Environment Division of Environmental Health

Cc: Asbestos Consultant





Rhode Island Department of Health

3 Capitol Hill Providence, RI 02908-5097

TTY: 711 www.health.ri.gov

November 27, 2024

Pawtucket CF Development Corporation Linda Weisinger 204 Broad St Pawtucket, RI 02860

Plan No.: 222861

Dear Owner/Agent:

The Rhode Island Department of Health (RIDOH) reviewed and approved the Asbestos Abatement Plan you submitted for the demolition of Commercial Building - 532 Roosevelt Ave, 532 Roosevelt Ave Central Falls. The plan will expire 12 months from the date of this letter and the work must begin within 6 months of this approval date

The asbestos abatement work must be performed by a RIDOH-licensed Asbestos Contractor in accordance with all other requirements of the Rules and Regulations for Asbestos Control (216-RICR-50-15-1). A Start Work Notification (ASB-22) must be submitted to RIDOH at least 10 business days before the work begins. In addition, the Asbestos Supervisor must notify RIDOH at 401-222-7796 when site preparation begins. Personal air sample results and confirmation of disposal of asbestos must also be submitted to RIDOH in accordance with 216-RICR-50-15-1.

Please contact Alexander Yelle, 401-222-7777 or <u>doh.asbestos@health.ri.gov</u> if you have any questions regarding these requirements.

Sincerely,

Bonnie Cassani-Brandt Asbestos & Radon Program Manager Center for Healthy Homes & Environment Division of Environmental Health

Cc: Asbestos Consultant

