Asbestos-Containing Materials Reassessment - 2021

Formerly Keys Public School – Deep River, ON

cm3 environmental

5710 Akins Road,
Stittsville, ON, K2S 1B8

ASBESTOS-CONTAINING MATERIAL REASSESSMENT – 2021

FORMERLY KEYS PUBLIC SCHOOL
BROCKHOUSE WAY
DEEP RIVER, ON

Prepared For:

RCDSB
Renfrew County District School Board

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CM3 Project # RM3128
November 2021

EXECUTIVE SUMMARY

CM3 Environmental Inc. (CM3) was retained by the Renfrew County District School Board (RCDSB) to complete asbestos-containing materials (ACMs) reassessment of the former Keys Public School located at Brockhouse Way in Deep River and owned and operated by the RCDSB.

The field work was completed during the month of October in 2021. The following is a summary of the action required: i.e. specific locations, actions required ACMs present, condition, and abatement requirements are presented in the Inventory Table in **Appendix A**.

High Priority (Short Term Action):

1) No immediate 'High Priority Abatement Action" is required at this time.
2) Maintain updated asbestos management records. **Routine surveillance of ACMs**.

Medium Priority:

1) Remove ACMs in GOOD condition from easily accessible locations.
2) Complete asbestos assessment of roof membrane. Collect core samples prior to roof repair projects.

Low Priority (Long Term Action)

1) Remove ACMs in GOOD condition from areas of the facility that are not accessible during day-to-day operations.

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1.0 INTRODUCTION

CM3 Environmental Inc. (CM3) was commissioned by the Renfrew County District School Board (RCDSB) the user of this report, to conduct a reassessment of asbestos-containing materials (ACMs) at the former Keys Pubic School located at Brockhouse Way in Deep River, Ontario.

The asbestos containing materials (ACM) survey/reassessment has been prepared in order to assess the overall type, location, quantity, condition and hazard extent (priority) of the materials within the subject buildings.

The ACM reassessment ws conducted and prepared by Mr. Robert McGrath, B.E.S. of CM3 during October of 2021. The conclusions presented in this report are professional opinions based on data described herein. Furthermore, all building information and data described in this report may be reviewed with the original Designated Substance Survey Report Dated 2006 and all subsequent asbestos abatement reports on record, for projects completed since 2006.

2.0 PROJECT METHODOLOGY AND SCOPE

These reassessment was performed in accordance with the requirements of RCDSB existing inventory and current industry standards in asbestos control. This reassessment report is based on the ACMs identified in previous Designated Substance Surveys and also on information specific to asbestos abatement projects completed since the original surveys. The reassessment was conducted in order to meet the criteria outlined in *Ontario Regulation 278/05 "Regulation Respecting Asbestos on Construction Projects and in Buildings and Repair Operations."*

2.1 Survey Procedure

Asbestos-containing materials identified in the previous reports and/or inspections were visually inspected to determine their condition. Our evaluation criteria in determining the condition of the friable ACMs is based on the information outlined in the Public Works and Government Services Canada policy 057 on Asbestos Management, as well as the standards of the industry recognized by the Ontario Ministry of Labour Industrial Hygienists and is outlined in Section 2.3 of this report.

The previously completed ACM/DSS survey was prepared in a detailed room-by-room format in order to assess the overall type, location, quantity, and condition, and hazard extent of the materials within the subject building. The survey included both friable and non-friable ACMs. The term friable is associated with any material that can be reduced to powder by moderate hand pressure.

2.2 Reporting

The reporting requirement for this project is presented in two sections. This General Report includes information on the scope, methodologies, and specific building findings. The information collected from the field investigation was used to update the existing information (not on the e-Base System). It is still pending whether or not this information will be inputted into the e-base system and therefore for the time being the Board will rely on the annual paper copies of this assessment.

Priority of deficient findings was classified based on the following system which incorporated the evaluation of access and condition of ACMs. As a function of access and condition a

matrix table (presented in the following section) provides priority response for each issue. The action items are discussed below.

EVALUATION OF CONDITION

GOOD - Surface of material shows no significant signs of damage, deterioration or delamination. Up to 1 percent visible damage to surface is allowed within range of **GOOD**. Evaluation of sprayed fireproofing requires the surveyor to be familiar with the irregular surface texture typical of sprayed asbestos products. **GOOD** condition includes un-encapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

POOR - Sprayed materials show signs of damage, delamination or deterioration. More than 1 percent damage to surface of ACM spray.

In observation areas where damage exists in isolated locations both **GOOD** and **POOR** condition may be reported. The extent or percentage of each condition will be recorded on the survey or re-assessment form.

FAIR - Condition is not utilized in the evaluation of the sprayed fireproofing, sprayed insulation, or texture coat finishes.

The evaluation of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes which are present above ceilings, may be limited by the number of observations made, and by building components such as ducts or full height walls that obstruct the above ceiling observations. Persons entering the ceiling are advised to be watchful for ACM **DEBRIS** prior to accessing or working above ceilings in areas of buildings with ACM regardless of the reported condition.

Mechanical Insulation

The evaluation of the condition of mechanical insulation (on boilers, breaching, ductwork, piping, tanks, equipment etc.) utilizes the following criteria:

GOOD - Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor surface damage (i.e., scuffs or stains), but the jacketing is not penetrated.

FAIR - Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges should be minor to none.

POOR - Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is not possible to observe each foot of mechanical insulation from all angles.

Non-friable and Potentially Friable Materials

Non-friable materials generally have little potential to release airborne fibres, even when damaged by mechanical breakage. However, some non-friable materials, i.e., exterior asbestos cement products, may have deteriorated so that the binder no longer effectively contains the asbestos fibres. In such cases of significantly deteriorated non-friable material, the material should be treated as a friable product.

EVALUATION OF ACCESSIBILITY

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

ACCESS (A) - Areas of the building within reach (from floor level) of all building users. Includes areas such as gymnasiums, workshops, and storage areas where activities of the building users may result in disturbance of ACM not normally within reach from floor level.

ACCESS (B) - Frequently entered maintenance areas within reach of maintenance staff, without the need for a ladder. Includes:

a) areas within reach from a fixed ladder or catwalk, i.e., tops of equipment, mezzanines.
b) frequently entered pipe chases, tunnels and service areas.

ACCESS (C) EXPOSED - Areas of the building above 8'-0" where use of a ladder is required to reach the ACM. Only refers to ACM that is exposed to view, from the floor or ladder, without the removal or opening of other building components such as ceiling tiles, or service access door or hatch. Does not include infrequently accessed service areas of the building.

ACCESS (D) - Areas of the building behind inaccessible solid ceiling systems, walls or mechanical equipment, etc. where demolition of the ceiling, wall or equipment, etc. is required to reach the ACM. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in ACCESS D.

EVALUATION OF PRIORITY/ACTION

FRIABLE ACM

	CONDITION			
ACCESS	**GOOD**	**FAIR**	**POOR**	**DEBRIS**
(A)	ACTION 4	ACTION 3	ACTION 2	ACTION 1
(B)	ACTION 4	ACTION 3	ACTION 2	ACTION 1
(C)	ACTION 4	ACTION 3	ACTION 2	ACTION 1
(D)	ACTION 4	ACTION 4	ACTION 4	ACTION 4

ACTION 1 - Immediate Clean-Up of DEBRIS that is Likely to Be Disturbed
Restrict access that is likely to cause a disturbance of the ACM **DEBRIS** and clean up ACM **DEBRIS** immediately. Utilize correct asbestos procedures. This action is required for

compliance with regulatory requirements. The surveyor should immediately notify the Asbestos Coordinator of this condition.

ACTION 2 - ACM Removal Required for Compliance
Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.

ACTION 3 - ACM Repair
Repair ACM found in **FAIR** condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work treat ACM as material in **GOOD** condition and implement **ACTION 4**. If ACM is likely to be damaged or disturbed, during normal use of the area or room, implement **ACTION 2**.

ACTION 4 - Routine Surveillance
Institute routine surveillance of the ACM. Trained workers or contractors must use appropriate asbestos precautions (Type 1, Type 2 or Type 3) during disturbance of the remaining ACM.

2.3 Drawings
Drawings were prepared as part of this documentation. However, they are not linked to the e-Base System.

3.0 SURVEY FINDINGS
All survey findings are presented within the Reassessment Inventory Summary Table in **Appendix A**.

4.0 CONCLUSION AND RECOMMENDATIONS
Disturbance of friable and non-friable asbestos is regulated by Ontario Regulation 278/05.
A table outlining the finding's requiring action is presented in **Appendix A** of this report. Any information pertaining to asbestos in this facility may be reviewed with any or all existing and previous data.

No Immediate abatement action is required at this time.

Prior to renovation or demolition, the project owner must ensure that any ACMs that have the potential to be disturbed are removed or enclosed. Workers conducting this activity must be adequately trained and supplied with sufficient personal protective equipment. In addition, the maximum allowable airborne fibre concentration for asbestos should not be approached or exceeded.

5.0 CLOSURE

This Report has been prepared and the work referred to in this Report has been undertaken by CM3 Environmental Inc (CM3) for **Renfrew County District School Board**. It is intended for the sole and exclusive use of **Renfrew County District School Board** and **Renfrew County District School Board's** authorized agents for the purpose(s) set out in this Report. Any use of, reliance on, or decision made based on the Report by any person other than **Renfrew County District School Board**, or by **Renfrew County District School Board** itself for a purpose other than the purpose(s) set out in this Report, is the sole responsibility of such other person or **Renfrew County District School Board** respectively. CM3 makes no representation or warranty to any other person with regard to this Report and the work referred to in it. CM3 accepts no duty of care to any other person or any liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties, or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made based on, or any action taken based on this Report or the work referred to in it.

This Report has been prepared for specific application to this site and is based on the interpretation of data collected from field investigations, which were limited to non-destructive testing, and the results of laboratory analyses, which were limited to the quantification in select samples of those substances specifically identified in the Report. Quantities stated in the Report are based on visual estimates only. Unless otherwise stated, the findings set out in this Report cannot be extended to: previous or future site conditions; portions of the site, which were unavailable for direct investigation (including wall, floor and ceiling cavities); or chemical parameters, materials or analysis which were not addressed.

Sampling may not take into account building materials that have been modified through renovations or maintenance. Substances other than those addressed by the investigation described in this Report may exist within the site; substances addressed by the investigation may exist in areas of the site not investigated, and concentrations of substances addressed which are different than those reported may exist in areas other than the locations from which samples were taken. CM3 expresses no warranty with respect to the accuracy of the laboratory analyses, methodologies used, or presentation of analytical results by the laboratory. Actual concentrations of the substances identified in the samples submitted may vary according to the extraction and testing procedures used.

As the evaluation and conclusions reported herein do not preclude the existence of other chemical compounds and/or variations of conditions within the site, this Report should be used for informational purposes only and should absolutely not be construed as a comprehensive chemical characterization of the site. If site conditions change or if any additional information becomes available at a future date, modifications to the findings, conclusions, and recommendations in this Report may be necessary.

Where information obtained from reference sources or from **Renfrew County District School Board** is included in the Report, no attempt to verify the information was made. CM3 expresses no warranty with respect to the toxicity data presented in various references or the validity of the toxicity studies on which it was based. Scientific models employed in the evaluations were selected based on accepted scientific methodologies and practices in common use at the time and are subject to the uncertainties on which they are based.
Nothing in this Report is intended to constitute or provide a legal opinion. CM3 makes no representation as to the requirements of or compliance with environmental laws, rules,

regulations or policies established by federal, provincial or local government bodies. Revisions to the regulatory standards referred to in this Report may be expected over time, necessitating modifications to the findings, conclusions, and recommendations in this Report.

Other than by **Renfrew County District School Board** and as set out herein, copying or distribution of this Report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of CM3. **Renfrew County District School Board** may distribute this Report to its employees engaged in the course of their employment or to its authorized agents.

Renfrew County District School Board may submit this Report to environmental regulatory authorities for review and comment purposes provided that CM3 receives a copy of all correspondence between **Renfrew County District School Board** and the regulatory authorities pertaining to the Report or project in question.

APPENDIX A
ACM Reassessment Summary Table

2021 Asbestos-Containing Materials Re-assessment
Former Keys Public School
Deep River, ON

ASBESTOS INVENTORY TABLE

Asbestos Containing Material	Phase of Construction	LOCATION	Access	Condition			Action	Analytical Results	Friable or Non-Friable	**Quantity** and Comments
i				Good	Fair	Poor			(F/NF)	
Formerly Keys Public School, Brockhouse Way, Deep River, ON										
24"x48" Ceiling Tile (Pinholes with Fissures)	1967	Annex Corridor between 1965 & 1967 Phases	C				4	5% Amosite Asbestos	NF	**120 sq. ft** / Routine surveillance of ACMs.
12"x12" Ceiling Tiles and Mastic	1957	Classroom 117	C				4	2% Chrysotile Asbestos	NF	**1,500 sq. ft** / Routine surveillance of ACMs.
12"x12" Ceiling Tiles and Mastic	1967	Gymnasium, Gym Storage Room, Room 153 Room 157, Room 158, Room 159, 159A, B, C, D, E, F	C				4	2% Chrysotile Asbestos	NF	**5,200 sq. ft.** / Routine surveillance of ACMs.
9"x9" Vinyl Floor Tiles	1967	Gymnasium beneath carpet and Gymnasium Storage Room	A					3% Chrysotile Asbestos	NF	**2,800 sq. ft.** / Routine surveillance of ACMs.
Texture Finish on Plasture or Drywall	1965	Room 150 & Room 150A-H, Room 151	C				4	3% Amosite Asbestos	F	**2,500 sq. ft** / Routine surveillance of ACMs.
Ceiling Plaster	1967	Ceiling Beneath Stairs	C				4	5% Amosite Asbestos	NF	**250 sq. ft** / Routine surveillance of ACMs.
Exterior Transite Panels	1957 and 1967	Overhang Outside Exit Doors	C				2	20% Chrysotile Asbestos	NF	**160 sq. ft.** / Routine surveillance of ACMs.
Interior Transite Panels (Mechanical Room)	1957	Rooms 124, 125 (Mech/Elect. Room)	B				4	20% Chrysotile Asbestos	NF	**80 sq. ft**. / Routine surveillance of ACMs.
Aircell Pipe Insulation	1957, 1965, 1967	Rooms 124, 125 (Mech/Elect. Room), Basement Room 016 (Mech. Rm), Gym Storage Rm & Rooms 150, 151, 154	B				4	50% Chrysotile Asbestos	F	**380 L.ft.** / Routine surveillance of ACMs.
Parging Cement on Fittings	1957, 1965, 1967	Rooms 124, 125 (Mech/Elect. Room), Basement Room 016 (Mech. Rm), Gym Storage Rm & Rooms 150, 151, 154	B				4	20% Chrysotile Asbestos	F	**120 each** / Routine surveillance of ACMs.
Hot Water Heating Tank	1967	Basement Room 016 (Mechanical Rm)	B				4	20% Chrysotile Asbestos	F	**40 sq. ft**. / Routine surveillance of ACMs.
Drywall Joint Compound	1954, 1957, 1964	Walls and Bulkheads throughout Homogenous Areas 1954, 1957 & 1964	A & C				4	2% Chrysotile Asbestos	NF	**10,290 sq. ft.** / Routine surveillance of ACMs.

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Access (A)

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Frequently entered maintenance areas within reach of maintenance staff, without the need for a ladder. Includes:
-areas within reach from a fixed ladder or catwalk, i.e., tops of equipment, mezzanines.
-frequently entered pipe chases, tunnels and service areas

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APPENDIX B
Drawings

2021 Asbestos-Containing Materials Re-assessment
Former Keys Public School
Deep River, ON

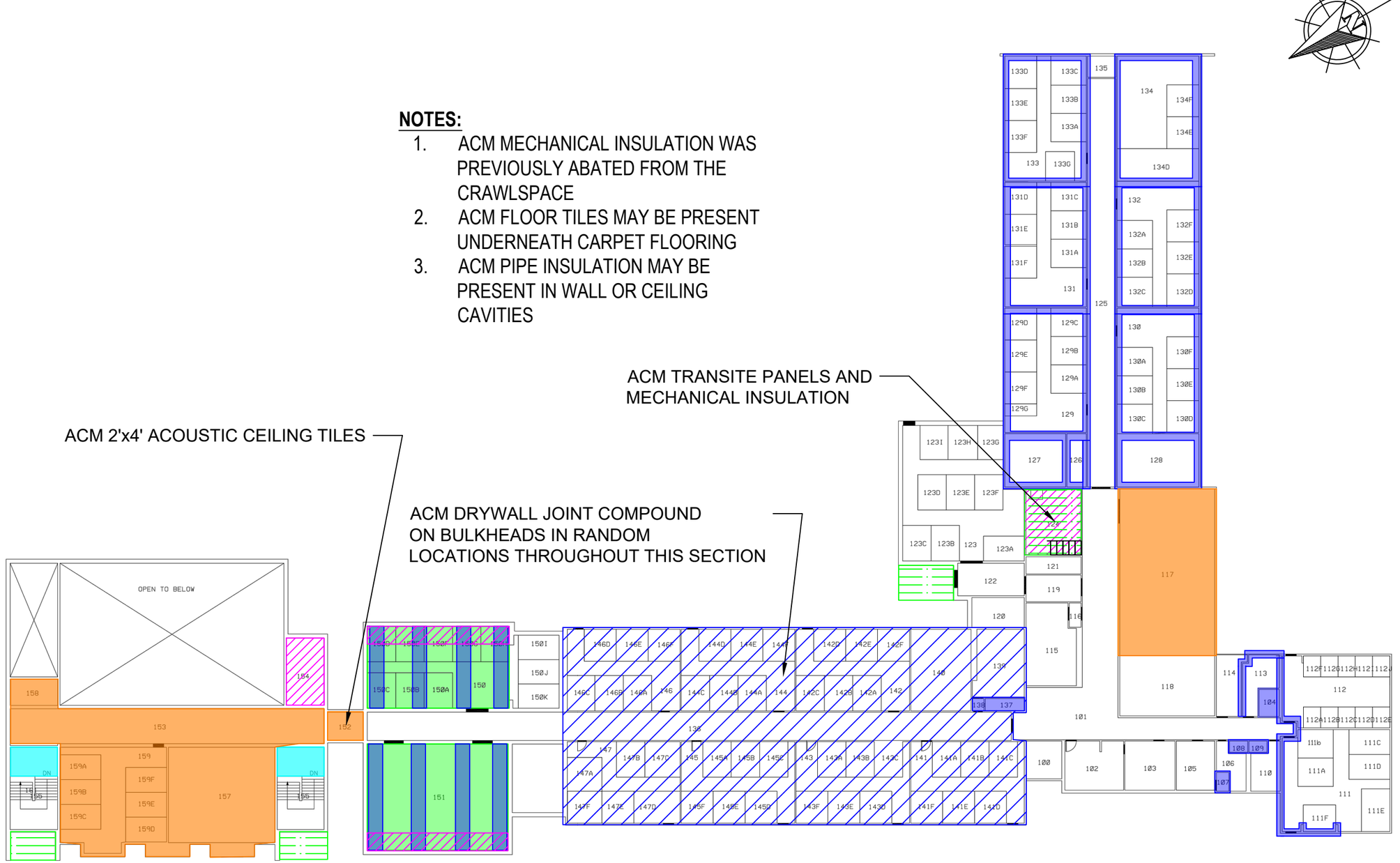
NOTES:

1. ACM MECHANICAL INSULATION WAS PREVIOUSLY ABATED FROM THE CRAWLSPACE
2. ACM FLOOR TILES MAY BE PRESENT UNDERNEATH CARPET FLOORING
3. ACM PIPE INSULATION MAY BE PRESENT IN WALL OR CEILING CAVITIES

ACM TRANSITE PANELS AND MECHANICAL INSULATION

ACM 2'x4' ACOUSTIC CEILING TILES

ACM DRYWALL JOINT COMPOUND ON BULKHEADS IN RANDOM LOCATIONS THROUGHOUT THIS SECTION



B889
FIRST FLOOR

LEGEND

- ASBESTOS-CONTAINING TEXTURE FINISH
- ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND
- ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND AND BULKHEADS
- ASBESTOS-CONTAINING 1'x1' CEILING TILES AND MASTIC
- ASBESTOS-CONTAINING PLASTER CEILINGS
- ASBESTOS-CONTAINING MECHANICAL PIPE INSULATION
- ASBESTOS-CONTAINING TRANSITE PANELS
- ASBESTOS-CONTAINING VINYL FLOOR TILES

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5710 AKINS ROAD, OTTAWA, ON
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RCDSB

2021 ASBESTOS-CONTAINING MATERIALS REASSESSMENT

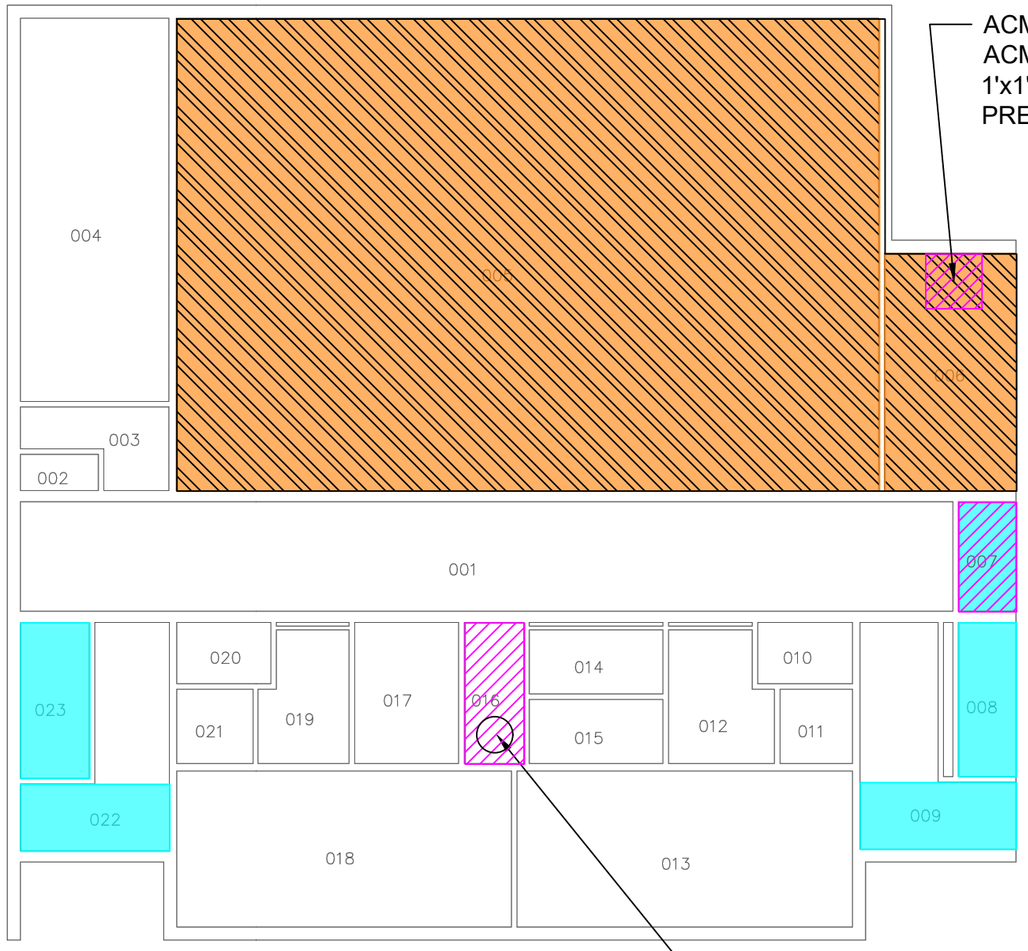
FORMER KEYS PUBLIC SCHOOL
87 BROCKHOUSE WAY
DEEP RIVER, ON

FIRST FLOOR PLAN

Project:	Drawn By:
RM3128	CL
Date:	Reviewed By:
NOV 2021	RM
Scale:	Figure:
N.T.S	1

NOTES:

1. ACM MECHANICAL INSULATION WAS PREVIOUSLY ABATED FROM THE CRAWLSPACE
2. ACM FLOOR TILES MAY BE PRESENT UNDERNEATH CARPET FLOORING
3. ACM PIPE INSULATION MAY BE PRESENT IN WALL OR CEILING CAVITIES



B889 Keys Campus

Basement

LEGEND

- ASBESTOS-CONTAINING TEXTURE FINISH
- ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND
- ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND AND BULKHEADS
- ASBESTOS-CONTAINING 1'x1' CEILING TILES AND MASTIC
- ASBESTOS-CONTAINING PLASTER CEILINGS
- ASBESTOS-CONTAINING MECHANICAL PIPE INSULATION
- ASBESTOS-CONTAINING TRANSITE PANELS
- ASBESTOS-CONTAINING VINYL FLOOR TILES

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RCDSB

2021 ASBESTOS-CONTAINING MATERIALS REASSESSMENT

FORMER KEYS PUBLIC SCHOOL
87 BROCKHOUSE WAY
DEEP RIVER, ON

BASEMENT FLOOR PLAN

Project: RM3128	Drawn By: CL
Date: NOV 2021	Reviewed By: RM
Scale: N.T.S	Figure: 2