



**Request for Tender
RFT 22-155**

**Library Renovations at
Aldershot High School**

Closing Date: June 17, 2022

Closing Time: 2:00 p.m.

Sealed RFTs will be received **via email to chatelaina@hdsb.ca**
on or before 2:00 p.m., Eastern Daylight Time

Late or Facsimile Bids will not be considered

June 1, 2022

Amanda Chatelain, CPPB
Senior Officer – Purchasing

Communications Notice

To obtain documents online please visit: <https://hdsb.bidsandtenders.ca>

If you subscribe to bids & tenders you can login to your account to download the document(s) without the preview watermark. You may also opt to purchase a one-time download for this opportunity. Documents are not provided in any other manner.

All proponents shall be registered as a Plan Taker for this opportunity, which will enable the proponent to download the Request for Proposal (RFP) without the watermark preview, to receive addenda email notifications, and to download addenda.

Should the HDSB receive a proposal that is subsequently found to be from a bidder that is not registered with bids & tenders and the bidder did not obtain the proposal document from <https://hdsb.bidsandtenders.ca> the HDSB reserves the right to remove the proposal from further consideration.

To ensure receipt of the latest information and updates via email regarding this opportunity, the onus is on the proponent to register as a Plan Taker for this opportunity at <https://hdsb.bidsandtenders.ca>.

The following documents form part of all HDSB competitive proposal documents:

HDSB Procurement Administrative Procedure:

<https://www.hdsb.ca/our-board/Policy/Procurement.pdf>

HDSB Asbestos Management in Facilities Administrative Procedure:

<https://www.hdsb.ca/our-board/Policy/AsbestosManagementInFacilities.pdf>

HDSB Vendor Performance Management Administrative Procedure:

<https://www.hdsb.ca/our-board/Policy/VendorPerformanceManagement.pdf>

Broader Public Sector Procurement Directive

[https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/Attachments/001-BPS_Procurement_Directive/\\$FILE/BPS_Procurement_Directive.pdf](https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/Attachments/001-BPS_Procurement_Directive/$FILE/BPS_Procurement_Directive.pdf)

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Part A – Outline and Instructions

1. Introduction and Board Profile

The Halton District School Board is composed of approximately 104 school locations (86 elementary and 18 secondary schools). These locations service approximately 65,000 regular day school students (Junior Kindergarten to Grade 12). The Board employs approximately 10,860 employees. Please visit our website <http://www.hdsb.ca> for additional information.

2. General Terms of the RFT

The Halton District School Board, hereinafter referred to as HDSB, is seeking qualified Contractors to complete a library renovation at Aldershot High School located at 50 Fairwood PI W, Burlington, ON L7T 1E5, as outlined herein. Specific details of the RFT are to be found in the attached scope of work, specifications and drawings.

3. Bid Security and Bonding Requirements

Any bid submission equal to or greater than \$500,000, must be submitted with a Bid Bond in the value of ten percent (10%) of the Total Cost and a Surety Consent in favour of the Halton District School Board. The Surety Consent shall cover a Performance Bond and a Labour & Materials Payment bond, each in the amount of fifty percent (50%) of the contract price as a guarantee that the Bidder shall execute the contract upon award.

The Bid Security so submitted shall be irrevocable and valid for 90 from closing date set for the submission of tender.

In order to be considered for award of a contract equal to or over \$500,000, the Bidder shall submit as part of their Submission, a Surety Consent, completed by a Bonding Company. Any others will not be accepted.

Upon receipt of written notice from the Halton District School Board that it has been awarded the Contract, the successful Bidder shall provide, within five (5) working days of such notice, an original Performance Bond and a Labour and Material Payment Bond, each for the amount of fifty per cent (50%) of the total lump sum price, to guarantee the performance of all obligations of the Contract.

4. RFT Closing Information

Bidders must submit their Submission **via email** on or before 2:00 p.m., Eastern Daylight Time on **June 17, 2022** (the “Closing Time”) to the following address:

chatelaina@hdsb.ca
Attention: Amanda Chatelain

Submissions will be deemed to be officially received by the time stamp issued by the HDSB’s email server. Submissions received after the official closing time will be declared non-compliant and shall not be considered during the selection process. Electronic

submission shall be no larger than 25MB. Proponents are responsible for confirming that their submission has been successfully received.

5. Accuracy of Information/Liability for Errors or Omissions

While the HDSB has used considerable efforts to ensure an accurate representation of information in this document, the information contained in it is supplied solely as a guideline for Bidders. Any data contained in this RFT or provided by way of Addenda are estimates only and are for the sole purpose of indicating to the Bidder the general size of what is being requested hereunder. The information is not guaranteed or warranted to be accurate by the HDSB, nor is it necessarily comprehensive or exhaustive. Nothing in this document is intended to relieve Bidders from forming their own opinions and conclusions with respect to the matters addressed in this RFT. It is the Bidder's responsibility to avail itself of all the necessary information to prepare a Submission in response to this RFT.

6. Communication After RFT Issuance

All Communications regarding any aspect of this RFT must be submitted via Bids and Tenders.

Bidders that fail to comply with the requirement to direct all communications to the RFT Authority via Bids and Tenders may be disqualified from this RFT process. Without limiting the generality of this provision, Bidders shall not communicate with or attempt to communicate with the following as it relates to this RFT:

- any employee or agent of the HDSB, other than the RFT Purchasing contact;
- any member of the HDSB governing body including, without limitation, the director, officers, trustees, superintendents, and any advisors thereto;

Bidders shall promptly examine this RFT and all Appendices, including the Form of Tender, and:

- shall report any errors, omissions or ambiguities; and
- may direct questions or seek additional information on or before the Deadline for Questions to the RFT Purchasing contact.

It is the responsibility of the Bidder to seek clarification, by submitting questions to the RFT Authority via Bids and Tenders, on any matter it considers to be unclear. The HDSB shall not be responsible for any misunderstanding on the part of the Bidder concerning this RFT or its process.

In the event a Bidder has any reason to believe that an error, omission or ambiguity exists, the Bidder must notify the RFT Authority via Bids and Tenders prior to submitting a Proposal.

If appropriate, the RFT Authority will then clarify the matter for the benefit of all Bidders by publication on the same public platform, its website or by notice to Bidders who have requested a copy of this RFT in the same manner as set out in section 6 below.

In answering a Bidder's questions, the HDSB will set out the question, without identifying the Bidder that submitted the question, and the HDSB may in its sole discretion:

- edit the question for clarity;
- answer similar questions from various Bidders only once.

Where an answer results in any change to the RFT, such answer will be formally evidenced through the issue of a separate addendum for this purpose.

7. Addenda

If the HDSB for any reason, determines that it is necessary to provide additional information relating to this RFT, such information will be communicated to all Bidders by addendum in the same manner the RFT was communicated. Each Addendum shall form an integral part of this RFT. This RFT may only be amended in accordance with this section.

All questions related to this Tender must be submitted in writing via bids and tenders prior to 2 p.m. on June 8, 2022. Any addendum will be posted no later than June 10, 2022.

Any amendment or supplement to this RFT made in any other manner will not be binding on the HDSB. All Addenda shall become an integral part of this RFT and shall be incorporated into any content. Each Bidder shall be responsible for verifying before depositing its Proposal that it has received all Addenda that have been issued.

8. Planned Schedule of Events – Project Schedule

Event	Date
Release of RFT	June 1, 2022
Non-Mandatory Site Meeting	June 6, 2022
Question Deadline	June 8, 2022
Issuance of Final Addendum	June 10, 2022
RFT Closing	June 17, 2022
Project Timelines	July 1, 2022 – August 31, 2022

9. Bidder's Costs

Bidders shall bear all costs and expenses incurred relating to any aspect of its participation in this RFT process, including all costs and expenses relating to the Bidder's participation in:

- the preparation, presentation and receipt of its Submission;
- the Bidders attendance at any meeting in relation to the RFT process, including any presentation or interview;
- the conduct of any due diligence on its part, including any information-gathering activity;
- the preparation of the Bidder's own questions prior to the Deadline for Questions; and
- any discussion and/or finalization, if any, in respect of the Form of Agreement.

10. Bidding Format

Unless otherwise specified in these RFT documents or the final contract entered into between the HDSB and the successful Bidder, responses shall be for a stipulated sum without escalator clauses or other qualifications (when applicable). Bidders submitting a bid with escalator clauses or other qualifications that are not in accordance with the terms and conditions of this RFT may have their bid rejected.

All information entered on this RFT document must be type written or entered in ink. No pencil entries will be accepted.

Erasure(s), overwriting or strike-out(s) must be initialed in ink by the person signing this Submission.

Respondents will use the following format for their submission:

- Form of Tender (complete form must be included with your submission, including bonds and any other information as may be required herein)
- Appendix A - Signed Declaration Sheet (must be included with your submission)
- Bid Security and Bonding Requirements as required

11. Pricing

Please do not add tax to base (unit) price. (when applicable). Early payment discounts may be considered part of the Submission. Credit Card payment acceptance may be considered part of the Submission.

12. Subcontractors

The General Contractor must select a subcontractor from the HDSB pre-qualified list of sub-contractors attached in Appendix B.

The Contractor agrees to preserve and protect the rights of the parties under the contract with respect to work performed under subcontract, and shall:

- enter into contracts or written agreements with their subcontractors to require them to perform their work in accordance with and subject to the terms and conditions of the contract. Further, the Contractor shall be fully responsible to the Owner for acts and omissions of their subcontractors and of any persons directly or indirectly employed by them as for acts and omissions of persons directly employed by them.
- therefore, agree that they will incorporate the terms and conditions of the Contract Documents into all Subcontractor Agreements they enter into with their subcontractors.

The HDSB reserves the right, at its discretion to waive the requirement to utilize the mandatory list of pre-qualified sub-trades at any time during the tendering process based on market conditions.

14. Non-Mandatory Site Meeting

There will be a Non-Mandatory Site Meeting on June 6, 2022 at the main office of Aldershot High School located at 50 Fairwood PI W, Burlington, ON L7T 1E5. The Non-Mandatory Site Meeting will start at 3:30 p.m.

Bidders shall follow Public Health and HDSB Covid-19 protocols while on site.

Part B – Standard Terms and Conditions

14. Scope

Unless otherwise expressly stated these Standard Terms and Conditions form a part of this document and apply in like force to contracts for the purchase of commodities as stated in this document. All Bidders will be bound by the terms and conditions set forth, except as specifically qualified in Special Terms and Conditions issued in connection with this document or any Addenda issued relating to this document.

15. Definitions

As used herein as well as in all RFSQ, RFQ, RFP, RFI, Tender or contract documents issued by the Halton District School Board, the following definitions will apply.

Addenda/Addendum	an addition/change made to this document, subsequent to its printing or publication.
Applicable Law and Applicable Laws	means any common law requirement and all applicable and enforceable statutes, regulations, directives, policies, administrative interpretations, orders, by-laws, rules, guidelines, approvals and other legal requirements of any government and/or regulatory authority in effect from time to time.
Bid/Submission/Proposal	an offer from a Bidder in response to a Proposal/Tender which is subject to acceptance or rejection.
Proponent	a legal entity, being a company, partnership or individual who submits a Bid, Proposal, or Submission in response to a formal request for Bid, Proposal, or Submission.
Board/HDSB	means the Halton District School Board.
Contract	means the agreement, in writing, governing the performance of the Work and/or the purchase and sale of commodities and includes, without limitation, the document (including standard terms and conditions), Bidder Submission and the written document accepting the Bidder Submission (including any notice of acceptance or award).
Document	means the document describing the Goods and/or Services to be purchased and the terms upon which the Goods and/or Services are to be purchased and

	includes, without limitation, those documents referenced on the index of the document and such Addenda as may be issued by the HDSB.
Goods or Services	product and/or any and all labour, vehicles or equipment used by a Bidder in fulfilling a Contract.
HST	means Harmonized Sales Tax.
Intellectual Property	means any trademark, copyright, moral right, patent, industrial design, trade name, domain name, trade secret, know how, integrated circuit topography or other intellectual property, industrial property or proprietary right owned by, licensed to, or used by any third person.
Mandatory Requirement	a minimum requirement – where the words “mandatory”, “must”, “required”, “shall” and/or “will” are referenced in this document and such requirement is identified as a Mandatory Requirement. Failure to comply will deem the submission non-compliant and the bid/submission will be disqualified.
Proposal/RFP	a sealed written offer to supply Goods and/or Services of any value, acceptance of which may be subject to negotiation.
Quotation/RFQ	a written offer to supply Goods and/or Services with a value that is less than \$100,000.
Response	the package submitted by a Bidder in response to an RFP or RFT.
Specifications	those stated requirements for the Goods and/or Services set out in the document.
Subcontractor	a person, firm or corporation having a direct contract with the contractor to perform a part or parts of the Work, or to supply Goods worked to a special design according to the contract documents, but does not include one who merely supplies Goods not so worked.
Tender/RFT	a sealed written offer to supply Goods and/or Services with a value that is greater than \$100,000.
Bidder Submission	means the document as completed by the Bidder for the purpose of offering to sell to the HDSB the services

	and/or goods specified in the document, and includes but is not limited to Quotations, Tenders and Proposals.
Work	means the Work to be undertaken by the Bidder pursuant to the provisions of the Contract.

16. Reserved Rights of the HDSB

The HDSB reserves the right to:

- (a) make public the names of any or all Bidders;
- (b) request written clarification or the submission of supplementary written information in relation to the clarification request from any Bidder and incorporate a Bidder's response to that request for clarification into the Bidder's Submission;
- (c) assess a Bidder's Submission on the basis of:
 - (i) a financial analysis determining the actual cost of the Submission when considering factors including quality, service, price and transition costs arising from the replacement of existing goods, services, practices, methodologies and infrastructure (howsoever originally established);
 - (ii) information provided by references;
 - (iii) the Bidder's past performance on previous contracts awarded by the HDSB;
 - (iv) the information provided by a Bidder pursuant to the HDSB exercising its clarification rights under this RFT process; or
 - (v) other relevant information that arises during this RFT process;
- (d) waive formalities and accept Submissions that substantially comply with the requirements of this RFT;
- (e) verify with any Bidder or with a third party any information set out in a Submission;
- (f) check references other than those provided by any Bidder;
- (g) disqualify any Bidder whose Submission contains misrepresentations or any other inaccurate or misleading information;
- (h) disqualify any Bidder or the Submission of any Bidder who has engaged in conduct prohibited by this RFT;

- (i) disqualify a Bidder for any conduct, situation or circumstance that constitutes a Conflict of Interest, as solely determined by the HDSB and at any time.
- (j) make changes, including substantial changes, to this RFT, provided that those changes are issued by way of addenda in the manner set out in this RFT;
- (k) select any Bidder other than the Bidder whose bid reflects the lowest cost to the HDSB;
- (l) review all Bidders utilizing the HDSB Vendor Performance Management Administrative Procedure, which can include suspension of Bidders who fail to meet the HDSB's expectations or who are involved in litigation or threatened litigation against HDSB. The HDSB Vendor Performance Management Administrative Procedure is found at the attached link

(www.hdsb.ca/our-board/Policy/VendorPerformanceManagement.pdf)
- (m) award to one or more bidders according to their requirements;
- (n) cancel this RFT process at any time and for any or no reason;
- (o) cancel this RFT process at any stage and issue a new RFT for the same or similar deliverables;
- (p) accept any Submission in whole or in part; or
- (q) award to multiple bidders if circumstances are warranted;
- (r) reject any or all Submissions;
- (s) to limit the number of pre-qualified Bidders eligible to submit proposals for any future projects. HDSB shall not be obligated to provide all pre-qualified Bidders with the same opportunity to bid on all future projects within each stated category. By participating in this RFT, Bidders acknowledge that there is no guarantee that a Bidder will receive any assignments, work or projects and that there is no expectation that any specified number of projects will be made available during the pre-qualification term;

and these reserved rights are in addition to any other express rights or any other rights that may be implied in the circumstances.

In addition, the HDSB reserves the right at any time during normal business hours, and as often as the HDSB may deem necessary, to examine, the successful Bidder's records with respect to the successful Bidder's services under the Bidder's purchase order and/or Submission and any Contract. The successful Bidder shall permit the HDSB to audit, examine, and make copies, excerpts or transcripts from such records, and to make audits

of data relating to matters covered by a Submission, any purchase order and/or any Contract. The successful Bidder shall maintain and retain all records and other documents related to a Submission, any purchase order, and/or any Contract for a period of seven (7) years from the date of final payment, except in cases where unresolved audit questions require a longer period of time for resolution, as determined by the HDSB.

17. *Litigation with the HDSB*

The HDSB may, in its absolute discretion, reject a Submission submitted by a Bidder **prior to or after a Submission opening, if the Bidder:**

- (a) is or has in the past 10 years been a party to litigation with the HDSB; or
- (b) directly or indirectly, including by common ownership or control or otherwise, is related to a party currently in litigation with the HDSB or a party that has in the past 10 years been in litigation with the HDSB; or
- (c) intends to use a subcontractor in respect of a specific project who is, or has in the past 10 years been a party to litigation with the HDSB, or who is related to a party currently in litigation with the HDSB or a party that has in the past 10 years been in litigation with the HDSB.

For the purposes hereof, the phrase “litigation with the HDSB” includes cases in which the Bidder or prospective Bidder or any of the parties named above, has advised the HDSB in writing of their intention to commence litigation, or have commenced or have advised the HDSB of their intention to commence an arbitral proceeding against the HDSB (excepting only construction lien demands, notices or proceedings or arbitrations under O. Reg 444/98 of the Education Act).

In determining whether or not to exercise its discretion as set out herein, the HDSB will consider whether the litigation (past or current) is likely to affect a Bidder’s ability to work with the HDSB, its consultants and representatives, and whether the HDSB’s experience with the Bidder, the related party or subcontractor, as the case may be, in the matter giving rise to the litigation, indicates that the HDSB is likely to incur increased staff and legal costs in the administration of the Contract if it is awarded to the Bidder.

18. *Accessibility for Ontarians with Disabilities (AODA)*

The HDSB is committed to accessibility and preventing and removing barriers for persons with disabilities. Where practicable, the HDSB will incorporate accessibility features and criteria when procuring or acquiring goods, services and facilities, in which case, a Bidder must be capable of recommending and delivering same in an inclusive and accessible manner, consistent with the Ontario Human Rights Code (“OHRC”), the Ontarians with Disabilities Act, 2005 (“AODA”) and its Regulations, in order to achieve accessibility for Ontarians with disabilities. If the HDSB determines that it is impractical to do so an explanation will be provided upon request.

In accordance with Ontario Regulation 429-07 made under the AODA, the HDSB has established policies, practices and procedures governing the provisions of its services to persons with disabilities, which may be found at:

<https://www.hdsb.ca/our-board/Pages/Accessibility.aspx>

19. Ability to Negotiate/Contract Negotiations

The HDSB reserves the right to enter into negotiations with any Bidder as it sees fit, or with another Bidder concurrently. The HDSB will not incur liability to any Bidder as a result of these negotiations.

The HDSB may, prior to and after Contract award, negotiate changes to the specifications, the type of materials or any conditions with the successful or preferred Bidder or one or more of the Bidders without having any duty or obligation to advise any other Bidder or to allow them to vary their bid prices as a result of such changes, and the HDSB shall have no liability to any other Bidder as a result of such negotiations or modifications.

20. Agree to Abide by the Established Process

It is vital to the HDSB that the process leading to the recommendation of a bidder(s) and the conclusion of an agreement for the provision of these services be, and be seen to be, open and fair and that each of the respondents is treated equally.

No respondent can be seen to be deriving, intentionally or otherwise, an advantage or information, which is not equally available to all other respondents. Nor is it acceptable that any advantage or information be sought or obtained from any unauthorized staff or representative of the HDSB, or any benefit derived from any special or personal relationships or contacts.

All communications, including requests for information, between respondents to this RFT and the HDSB should be between only the representative(s) of the HDSB who has been authorized and designated for that particular purpose. Bidders must not rely on information from any other source.

21. Assignment

Unless otherwise stated in this document, it is mutually agreed and understood that the successful Bidder will not assign, transfer, convey, sublet or otherwise dispose of the Contract (in whole or in part) or the right, title or interest therein, or the Bidder's power to execute such contract to any other person, firm, company or corporation without the previous written consent of the HDSB. Any act in derogation of the foregoing shall be null and void. For the purposes hereof, the transfer or issuance of shares by a Bidder of more than fifty (50%) percent of the voting securities of a Bidder to any third party other than to an affiliate (as such term is defined in the Business Corporations Act (Ontario)) or the

shareholder or shareholders of the Bidder as of the Closing Date, whether or not such transfer or issuance of voting securities takes place in one or more transactions, shall, for the purposes of this Agreement, be deemed to be an assignment of the Contract requiring the consent of the HDSB, unless such transfer or issuance of shares is made pursuant to an initial public offering of common shares under the Securities Act (Ontario).

22. Award

The final award will be based on (but not limited to) the best value for money and quality service delivery from a Bidder who complies with the provisions of this Submission solicitation, including specifications, contractual terms and conditions, who can reasonably be expected to provide satisfactory performance on the proposed Contract based on reputation, references, performance on previous contracts, and sufficiency of financial and other resources, and provides a solution that is a fit with the HDSB's requirements. The lowest price or bid shall not be the sole, determinative factor.

23. Breaking a Tie

In the event of a tie score, the HDSB will resolve same based on the earlier date/time stamp of when the bid was received by HDSB in accordance with this RFT.

24. Change Orders

A change order results when unforeseen conditions are identified from the original scope of work (Contract or Purchase Order) and is inextricably tied to the original scope.

The following steps should occur prior to issuance of a change order that does not originate from HDSB senior management:

- appropriate HDSB approval must be acquired prior to modifying any Contract or Purchase Order
- appropriate written HDSB approval must be obtained prior to commencing the work.

All requests or recommendations for Change Orders shall include the impact to both price and schedule for the work to be performed. HDSB shall have the right to retain consultants or experts to help identify the need or to verify the impact of the change order on the project.

No change in the work shall proceed without the written approval of the Owner. Any change shall be initiated by Owners "WORK ORDERS" which shall bear the change cost and the Contractor's and Owner's representative's signatures as an instruction to proceed. All changes shall be restricted to five percent (5%) overhead and five percent (5%) profit applied to the labour and material cost.

25. Conflict of Interest

For the purposes hereof, "Conflict of Interest" includes:

- (a) in relation to the Submission process, the Bidder has an unfair advantage or engaged in conduct, directly or indirectly, that may give the Bidder an unfair advantage, including:
 - (i) having or having access to information in the preparation of the Submission that is confidential to the HDSB and not available to other Bidders;
 - (ii) communicating with any person with a view to influencing preferred treatment in the Submission process; or
 - (iii) engaging in conduct that compromises or could be seen to compromise the integrity of the open and competitive process and render that process non-competitive and unfair; or
- (b) in relation to the performance of the Work, services or contractual obligations, the Bidder's other commitments, relationships or financial interests:
 - (i) could or could be perceived to exercise an improper influence over the objective, unbiased and impartial exercise of the Bidder's independent judgments; or
 - (ii) could or could be perceived to compromise or impair or be incompatible with the effective performance of the Bidder's work, services or contractual obligations.

The Bidder shall:

- (a) avoid any Conflict of Interest in the Submission process and in the performance of its contractual obligations;
- (b) disclose to the HDSB without delay any actual or potential Conflict of Interest that arises during the Submission process or during the performance of its contractual obligations; and
- (c) comply with any requirements prescribed by the HDSB to resolve any Conflict of Interest.

In addition to all other contractual rights or rights available at law or in equity, the HDSB may immediately disqualify a Submission or terminate the Contract upon giving notice to the Bidder where:

- i. the Bidder fails to disclose an actual or potential Conflict of Interest;
- ii. the Bidder fails to comply with any requirements prescribed by the HDSB to resolve a Conflict of Interest; or
- iii. the Bidder's Conflict of Interest cannot be resolved.

This paragraph shall survive any termination or expiry of the Contract.

26. HDSB Confidential Information

For the purposes hereof, "HDSB Confidential Information" means all information of the HDSB that is of a confidential nature, including all confidential information in the custody or control of the HDSB, regardless of whether it is identified as confidential or not, and whether recorded or not, and however fixed, stored, expressed or embodied, which comes into the knowledge, possession or control of the Bidder in connection with the Contract. For greater certainty, HDSB Confidential Information shall:

- (a) include:
 - (i) all new information derived at any time from any such information whether created by the HDSB, the Bidder or any third party;
 - (ii) all information (including Personal Information) that the HDSB is obliged or has the discretion not to disclose under provincial or federal legislation or otherwise at law; but
- (b) not include information that:
 - (i) is or becomes generally available to the public without fault or breach on the part of the Bidder of any duty of confidentiality owed by the Bidder to the HDSB or to any third party;
 - (ii) the Bidder can demonstrate to have been rightfully obtained by Bidder without any obligation of confidence, from a third party who had the right to transfer or disclose it to the Bidder free of any obligation of confidence;
 - (iii) the Bidder can demonstrate to have been rightfully known to or in the possession of the Bidder at the time of disclosure, free of any obligation of confidence when disclosed; or
 - (iv) is independently developed by the Bidder;

but the exclusions in this subparagraph shall in no way limit the meaning of Personal Information or the obligations attaching thereto under the Contract or at law.

During and following the term of the Contract, the Bidder shall:

- (a) keep all HDSB Confidential Information confidential and secure;
- (b) limit the disclosure of HDSB Confidential Information to only those of its directors, officer, employees, agents, partners, affiliates, volunteers or subcontractors who have a need to know it for the purpose of carrying out its obligations under the Contract and who have been specifically authorized to have such disclosure;
- (c) not directly or indirectly disclose, destroy, exploit or use any HDSB Confidential Information (except for the purpose of carrying out its obligations under the Contract or except if required by order of a court or tribunal), without first obtaining:
 - (i) the written consent of the HDSB; and
 - (ii) in respect of any HDSB Confidential Information about any third party, the written consent of such third party;
- (d) provide HDSB Confidential Information to the HDSB on demand; and
- (e) return all HDSB Confidential Information to the HDSB before the end of the Term, with no copy or portion kept by the Bidder.

27. Criminal Background Checks

The Bidder acknowledges that the HDSB must be in compliance with Regulation 521/01 of the Education Act (Ontario) - Collection of Personal Information with respect to criminal background checks and offence declarations. The Bidder covenants and agrees to assist the HDSB in complying with same by providing the HDSB, or such other entity as the HDSB may designate, with a criminal background check covering offences under the Criminal Code, the Narcotics Control Act, and any other offences which would be revealed by a search of the automated Criminal Records Retrieval System maintained by the RCMP or, in instances where the Bidder will have access to or is responsible for minors or vulnerable persons, a Vulnerable Persons Clearance certificate in addition to the above ("Criminal Background Check"), together with an Offence Declaration in HDSB approved form, for every individual or employee of the Bidder who may come into direct contact with students on a regular basis at a school site of the HDSB, or who may have access to student information.

For the purposes of this document, the HDSB shall determine in its sole and unfettered discretion whether an individual or employee of the Bidder may come into direct contact with students on a regular basis or may have access to student information. The Bidder agrees to indemnify and save harmless the HDSB from all claims, liabilities, expenses, and penalties to which it may be subjected on account of the Bidder's failure to provide a Criminal Background Check and an Offence Declaration, as aforesaid. This indemnity shall survive the expiration or sooner termination of the Contract. In addition, and

notwithstanding anything else herein contained, if the Bidder fails to provide a Criminal Background Check and an Offence Declaration for an individual or employee of the Bidder who may come into direct contact with students on a regular basis at a school site of the HDSB or who may have access to student information, then the HDSB shall have the right to forthwith terminate the Contract without prejudice to any other rights which it may have in the Contract, in law or in equity.

28. Debrief

The HDSB, at the written request of a Bidder will conduct a debriefing. Bidders must submit their request within sixty (60) days of Contract award notification. The HDSB will only identify any weaknesses or strengths in the Bidder's submission. No information regarding other Bidders' submissions will be disclosed. The intent of the debriefing information session is to assist a Bidder in presenting a better Submission in subsequent procurement opportunities. Any debriefing provided is not for the purpose of providing any opportunity to challenge the procurement process.

29. Dispute Resolution

In the event that a Bidder wishes to review the decision of the HDSB in respect of any material aspect of the RFT process, and subject to having attended a debriefing, the Bidder shall submit a protest in writing to the RFT Authority within ten (10) days from such a debriefing.

Any request that is not received in a timely manner will not be considered, and the Bidder will be notified in writing.

A protest in writing shall include the following:

- (a) a specific identification of the provision and/or procurement procedure that is alleged to have been breached;
- (b) a specific description of each act alleged to have breached the procurement process;
- (c) a precise statement of the relevant facts;
- (d) an identification of the issues to be resolved; and
- (e) the Bidder's requested remedy.

For the purpose of a protest, the HDSB will review and address any protest in a timely and appropriate manner. HDSB's decision in this regard is final.

30. Environmental Statement

The HDSB, when practically and financially feasible, will consider the acquisition of goods and services that will reduce the environmental footprint of the Board.

31. Force Majeure

Delays in or failure of performance by either party under the Contract shall not constitute default thereunder or give rise to any claim for damages if caused by occurrences beyond the control of the party affected, including but not limited to, decrees of Governments, acts of God, fires, floods, riots, wars, rebellion, sabotage, and atomic or nuclear incidents. Lack of finances, strikes, lockouts or other concerted acts by workers shall not be deemed to be a cause beyond a party's control.

In the event that performance of the Contract in the reasonable opinion of either party is made impossible by an occurrence beyond the control of the party affected, then either party shall notify the other in writing. The HDSB shall either terminate the Contract forthwith and without any further payments being made, or authorize the Bidder to continue the performance of the Contract with such adjustments as may be required by the occurrence in question and agreed upon by both parties. In the event that the parties cannot agree upon the aforementioned adjustment, it is agreed by the parties that the Contract shall be terminated.

32. Guarantees and Warranties

All Work shall be done in a good and workmanship like manner. All materials, goods and services must meet the applicable specifications, either by the HDSB, its consultant on the project or the manufacturer. The Bidder warrants and guarantees that all materials, Goods; Services and workmanship will be free from defects and fit for the purpose intended by the HDSB. All Goods delivered by the Bidder must be new, in good working order and of the latest model possessing all accessories standard to the manufacturer's stock model. The Goods and/or Services must be covered by written guarantees and warranties acceptable to the HDSB.

33. Health & Safety / WHMIS

Bidders and/or contractors must comply with the Occupational Health and Safety Act and its regulations. All Bidder's contractors and sub-contractors and their respective employees will have received health and safety training appropriate to their trade, and will be able to provide proof thereof to the HDSB upon request. Contractors shall be held responsible for any sub-contractors where such are permissible by the HDSB. The HDSB may request and suppliers/contractors/sub-contractors will provide evidence of such training at any time.

Suppliers/contractors/sub-contractors shall comply with the HDSB policies, programs and procedures at all times while on site. All suppliers/contractors/sub-contractors are required to sign in upon arrival/exit at a HDSB location prior to beginning and at completion of Work.

Suppliers and/or contractors/sub-contractors shall be held responsible for all fines and/or contraventions of legislation which have been incurred by the HDSB.

As per Ontario regulation 278/05 section 10 (5) the HDSB will provide contractors/sub-contractors performing work in HDSB buildings access to the site-specific asbestos inventory. Site specific asbestos inventories are available at each HDSB site. Contractors/sub-contractors shall review the site-specific asbestos inventory in relation to the scope of work they are undertaking, prior to the commencement of work. The requirements of the HDSB's Asbestos Management Administrative Procedure are to be adhered to at all times. A copy of the HDSB's Asbestos Management Administrative Procedure can be found at:

<http://www.hdsb.ca/our-board/Policy/AsbestosManagementInFacilities.pdf>.

All Work is subject to prior approval by the appropriate HDSB department.

Contractors shall examine carefully the HDSB's Asbestos Register for the Work site, in addition to examining existing conditions for suspected Asbestos Containing Materials (ACM), on which completion of Work is dependent.

Upon discovery of unforeseen suspected ACM affecting completion of the Work, the Contractor shall cease any operations that may disturb said materials and notify the Owner immediately.

The Contractor shall arrange for removal of ACM affecting completion of Work through a HDSB-approved ACM abatement contractor, and arrange for coordination of testing through HDSB Facility Services, if required.

Contractors shall be responsible for any sub-contractors in their employ with respect to the aforementioned requirements.

34. Indemnification and Liability

The Bidder hereby agrees to indemnify and hold harmless the HDSB, its directors, officers, trustees, employees and agents from and against all liability, loss, costs, damages and expenses (including legal, expert and consultant fees), causes of actions, actions, claims, demands, lawsuits or other proceedings, by whomever made, sustained, incurred, brought or prosecuted if:

- (a) resulting from the Bidder's failure to observe and conform to the standards established by law or by any other association which has established standards recognized by the Province of Ontario;
- (b) relating to labour and equipment furnished for the Work; and
- (c) involving inventions, copyrights, trademarks or patents, and rights thereto, used in doing the Work and in the subsequent use and operation of the Work or any part thereof upon completion.

35. Insurance and Liability

The successful bidder must indemnify the HDSB from any and all manner of damage or injury, risk, claims, demands, actions, penalties, causes of action, damages and any and all costs arising out of, or incurred by reason of provision of goods and/or services by the bidder. The cost of such insurance will be the responsibility of the Bidder.

The successful bidder(s) will obtain and provide current proof of insurance upon the award, that the successful Bidder will be covered by:

at least Two Million Canadian Dollars (C\$2,000,000.00) of comprehensive commercial general liability insurance for bodily injury, property damage, operations liability, contractual liability and tenant's legal liability, including umbrella liability insurance covering liability arising from premises, operations, independent contractors, products-completed operations, personal injury and liability assumed under the Contract;

at least One Million Canadian Dollars (C\$1,000,000.00) of business automobile liability insurance and, if necessary, umbrella liability insurance for owned, hired and non-owned vehicles covering bodily injury and property damage: and with an insurer licensed to carry on business in the Province of Ontario.

In the case of multi-year contracts, a copy of a valid certificate must be provided to the Halton District School HDSB annually thereafter, at least thirty (30) days prior to the anniversary date of the contract commencement date. At commencement of the Contract and throughout the Contract duration, certification shall be submitted on a Certificate of Insurance form with the above-mentioned coverage, thereby protecting the Halton District School Board against claims for property damage and bodily injuries, including accidental death, caused by the successful Bidder(s) or its employees and/or Sub-contractors during the performance of its obligations under the Contract.

The Halton District School Board must be named as additional insured, and the policy must contain a cross liability clause, and thirty (30) day prior notice clause of any cancellation, non-renewal or product change in coverage, terms or conditions.

As a condition precedent to contract award, Certificates of all such insurance policies shall be filed with the HDSB by the successful Bidder and shall be subject to the HDSB's approval as to the adequacy of protection.

All the above-mentioned insurance shall be maintained until the HDSB certifies that the work is complete.

36. Invoicing/Payment/EFT

To ensure that payment is not deferred, the following information shall be on all invoices:

- Bidder's Name or Business Number, Address, Telephone Number and HST registration number
- Invoice Date
- Invoice Number
- Purchase Order Number, Name of Requester, Shipment Destination
- Name of Halton District School Board staff that issued this order
- Complete Good/Service Description (including hourly rates, service/delivery dates, service location)
- Attach Copy of Service Report/Work Order Completed
- Terms of payment
- Total of HST where applicable
- Total Amount Payable

The HDSB's method of payment is by Electronic Funds Transfer (EFT). If the Bidder is a new vendor or current vendor who has not previously utilized the EFT payment service or has banking information which has changed, then an "Application of Vendor Direct Deposit" form is required to be completed, which is available through the Purchasing contact for this document. This form along with a voided cheque or letter from the Bidder's bank should be sent to:

Halton District School Board
 Attention: Accounts Payable Department
 J.W. Singleton Centre,
 PO Box 5005 Stn LCD 1,
 Burlington ON L7R 3Z2 or

electronically to: apeft@hdsb.ca before any invoices are submitted to the HDSB for payment. Payment terms are Net 28. Early payment discounts may be considered.

37. Irrevocability

The Submission will be open for acceptance by the HDSB and irrevocable by the Bidder for a period of ninety (90) calendar days from the Closing Date.

38. Municipal Freedom of Information and Protection of Privacy Act ("MFIPPA")

- (a) The Bidder acknowledges and agrees that the HDSB is subject to MFIPPA. The Bidder further expressly acknowledges and agrees that, upon the acceptance of a successful Submission and conclusion of this process (including execution and delivery of the Contract between the HDSB and the successful Bidder), subject to subsection (b) below, the Submission shall not be considered confidential for the purposes of Section 10 of MFIPPA and, in the event of an access request or at the discretion of HDSB, shall be subject to release in its entirety without redaction.

- (b) Notwithstanding paragraph (a) above, the Bidder and the HDSB acknowledge and agree that the information listed below is considered to be supplied by the Bidder to the HDSB in confidence:
1. For Services: Hourly rates/fees and information from which such rates/fees could be reasonably deduced.
 2. For Goods: Unit costs and information from which such unit costs could be reasonably deduced.
- (c) Notwithstanding the foregoing, the Bidder acknowledges and agrees that, because the HDSB is subject to MFIPPA, all or part of any Submission, including information supplied in confidence, may be subject to release in response to an access request submitted pursuant to MFIPPA. In the event that the HDSB receives a request for access to all or part of a Submission supplied in confidence, the HDSB shall deliver the relevant notice to the Bidder, who shall bare all costs, legal or otherwise, with respect to any objection the Bidder may have in respect of the release of any or all parts of the Submission pursuant to MFIPPA.

39. No Guarantee of Work or Exclusivity of Contract

The HDSB makes no guarantee of the value or quality of goods or services or volume of work to be assigned to the successful Bidder. Any Contract executed with a successful Bidder may not be an exclusive Contract for the provision of the requested Goods or Services. Quantity where specified more or less, are estimates of previous consumption and are furnished without liability to the HDSB.

40. Non-Performance/Termination of Contract

If the Bidder delivers substandard, unapproved or defective items, which are rejected by the HDSB, the Bidder agrees to replace these items at the Bidder's expense with items of a quality deemed acceptable to the HDSB within a 48-hour period of the mutual satisfactory agreement being reached. If the Bidder fails to replace the items within this 48-hour period, the parties agree that the HDSB may purchase substitutes for the rejected items in the open market at no additional cost or liability to the HDSB.

Where at any time the quality of the Goods or Service supplied by the successful Bidder is not of a satisfactory standard, the HDSB may issue a verbal warning outlining the deficiency in supply or other aspects of performance and requiring the successful Bidder to correct those deficiencies within such period of time as stated. If the deficiency is not corrected within the time specified, or having been corrected, there is a further instance of deficient performance, the HDSB may issue a written notice to the successful Bidder, identifying the deficiency in performance and setting a final date or time period for its correction, and advising that if corrective steps are not taken by that date or within that time, the HDSB may terminate the Contract and take corrective action itself.

Until the HDSB is satisfied that the unsatisfactory performance has been corrected, the HDSB may hold back from any payment an amount sufficient to rectify the unsatisfactory performance until its requirements have been met.

The HDSB reserves the right, in its absolute discretion, to terminate a Contract immediately without penalty, costs or damages of any kind whatsoever, where the Bidder has violated any laws or performed any of the following acts while performing work with the HDSB and further reserves the right to take that failure into account with respect to the award of any future contract.

- a) over-billing or duplicate billing;
- b) splitting of invoices;
- c) charging for items not supplied;
- d) charging for items not approved prior to invoicing;
- e) charging for items of one grade, while supplying items of an inferior grade;
- f) Misrepresentation as to the quality or origin of goods, their functionality or suitability for a purpose, or their performance characteristics;
- g) not responding to the HDSB or, failure to complete contract.

41. Ownership

The Submission, along with all correspondence, documentation and information provided to the HDSB by any Bidder in connection with or arising out of the Submission, once received by the HDSB, shall become the property of the HDSB and may be appended to any Contract and/or purchase order with the successful Bidder.

42. Permits, Licenses and Approvals

Bidders shall obtain all permits, licences and approvals required in connection with the supply of the Goods and/or Services. The costs of obtaining such permits, licences and approvals shall be the responsibility of, and shall be paid for by the Bidder.

Where a Bidder is required by any Applicable Law to hold or obtain any such licence, permit, or approval to carry on an activity contemplated in its Submission or in the Contract, neither the acceptance of the Submission nor the execution of the Contract by the HDSB shall be considered an approval by the HDSB for the Bidder to carry on such activity without the requisite licence, permit, consent or authorization.

Without in any way limiting the generality of the foregoing, any electrical Goods being proposed for consideration pursuant to this RFT must be authorized or approved in accordance with the Electrical Safety Code or by a certification organization accredited

with the Standards Council of Canada Act (Canada), and shall bear the certification organization's mark identifying the Goods certified for use in Canada. Certification shall be to the standard that is appropriate for the intended use of the electrical Goods at any of the HDSB's schools or facilities.

43. Co-operative Purchasing Provisions

This document is being issued by the HDSB to meet the HDSB's requirements. The successful Bidder acknowledges that the Provincial Government encourages cooperative procurement initiatives by School HDSBs. Bidders shall indicate on the Form of Quotation if they are willing to extend pricing and submission terms to other District School Boards in the province of Ontario where the scope of work is deemed similar or the same and where both parties are in agreement, in which case they shall be deemed to have granted consent to the HDSB to share the Submission with such HDSBs, subject to such HDSBs agreeing to receive the Submission in confidence on the understanding that the Submission contains financial, commercial, technical and other sensitive information of the Bidder. The Bidder will not be penalized if it does not agree to this provision. The HDSB will not incur any financial responsibility in connection with any purchase by another School Board. Each School Board shall accept sole responsibility for its own contract management such as placing orders and making payments to the successful Bidder.

44. Proof of WSIB Coverage

If the Bidder is subject to the Workplace Safety and Insurance Act ("WSIA") or the Workplace Safety and Insurance Amendment Act, 2008 ("WSIAA"), the Bidder shall submit a valid clearance certificate of Workplace Safety and Insurance Board ("WSIB") coverage to the HDSB before commencing the performance of any work or services. In addition, the Bidder shall, from time to time during the term of the Contract and at the request of the HDSB, provide additional WSIB clearance certificates. The Bidder covenants and agrees to pay when due, and to ensure that each of its subcontractors pays when due, all amounts required to be paid by it or its subcontractors, from time to time during the term of the Contract, under the WSIA and/or the WSIAA, failing which the HDSB shall have the right, in addition to and not in substitution for any other right it may have pursuant to the Contract or otherwise at law or in equity, to pay to the WSIB any amount due pursuant to the WSIA or the WSIAA unpaid by the Bidder or its subcontractors and to deduct such amount from any amount due and owing from time to time to the Bidder pursuant to the Contract together with all costs incurred by the HDSB in connection therewith.

45. Right to Withdraw

Submissions may be withdrawn prior to the Closing Time. Following Closing, no Submission may be withdrawn. Any Bidder who attempts to do so may have a negative Performance Evaluation placed on record with the HDSB in accordance with the Vendor Performance Management Administrative Procedure

46. Smoking on HDSB Property

Smoking of any substance and in any manner is prohibited in all HDSB buildings and on all HDSB property. This includes, without limitation, tobacco, cannabis in any form and vaping.

47. Vehicle Operation on HDSB Property

The successful Bidder shall use due care and caution when motorized vehicles are in operation on school property while students are expected to enter or exit the school building and/or are visible outside the school building on school property or adjacent property, particularly during recess, lunch period and preceding and following the end of the school day. Vehicles operated in parking lot and driveway areas shall not be driven at a speed in excess of 8-kilometers/per hour.

Further, on school property drivers must turn off vehicles and remove the keys during any stop. At no time are vehicles to be left running while unattended. It is recommended that the vehicle be locked when left unsupervised. The HDSB will not be responsible for any theft of, or any theft from, vehicles operated by the successful Bidder.

Asphalt play areas around the exterior of the school building are not constructed to handle heavy vehicles. Bidders will be held responsible for any damage to HDSB property including but not limited to asphalt or natural surfaces as a result of using them for access of heavy vehicles. Making good of natural surfaces or asphalt areas that are damaged in the course of the work shall be to the original (new) condition irrespective of their condition prior to commencement of the work, or the condition of the adjacent unaffected areas. Vehicles are only permitted to access, stand or be parked in areas designated by administrative staff of HDSB, which for the purposes of this provision does not include principals of schools.

48. Bidder Conduct

When on HDSB property, the Bidder and its employees must:

- have proper identification (name badge, uniform with logo, photo I.D. etc.).
- be dressed appropriately (the following are not appropriate: clothing that fails to contain the anatomy when the person is carrying out normal duties; clothing with printed slogans, advertising or designs that are obscene or could have a double meaning).
- use appropriate language.

- refrain from wearing scented products or fragrances such as perfume, cologne, after shave, shampoos (as required).
- work with dignity, courtesy and respect for self and others.
- not make noise or move in corridors during morning announcements, and playing of the national anthem.
- observe procedures during fire evacuation and lockdowns, whether they are actual or test (drills).
- park in spots designated by the Principal.

The Bidder must observe all HDSB policies and procedures including but not limited to: Smoke-Free Environment; Sexual, Racial and Ethno Cultural Harassment, etc.

The Bidder will ensure that the education program is not interrupted and that the health and safety of the students and staff is not compromised.

No person who is impaired by alcohol or drugs will enter and/or remain on HDSB property.

The Bidder agrees that its employees and sub-contractors will observe and comply with all standards, procedures, policies, rules and regulations of the HDSB, including but not limited to privacy, use of facilities, equipment, building security and computer technology.



FORM OF TENDER

Project: Library Renovations – Aldershot High School
Project Reference #: RFT 22-155

From (Bidder): _____
Company Name

Street Address

City, Province and postal code

Phone Number Email Address

To (Owner): Halton District School Board
 2050 Guelph Line
 Burlington, Ontario L7P 5A8

We, the undersigned, having examined the Tender Documents for the above-named Project, including Addenda, hereby offer to perform the Work in accordance with the Tender Documents, for the Stipulated Price of:

Base Bid Amount	\$
Cash Allowance (Building review, inspection/testing, unforeseen)	\$ 10,000
Cash Allowance (Cafeteria Flooring Replacement)	\$ 35,000
Cash Allowance (Site Work Accessibility Pathway and Accessories)	\$125,000
Contingency Allowance	\$ 5,000
Total Amount (Excluding HST)	\$

Form of Tender Continued
RFT 22-155 Library Renovation – Aldershot High School
Page 2 of 2

<u>Separate Pricing</u>	
Provide unit price for LVT flooring (supply and install) per ft2	\$

Proposed Sub-Contractor

Asbestos _____

Electrical _____

Mechanical _____

NOTE: Bidders must submit **Appendix C – Asbestos Acknowledgement Form** with their bid submission.

We, the undersigned, declare that:

- a. We agree to perform the Work within the required completion time specified in the Tender Documents,
- b. We have arrived at the Tender without collusion with any competitor,
- c. This Tender is open to acceptance by the Owner for a period of 90 days from the date of Tender Closing,
- d. All Form of Tender supplements called for by the Tender Documents from an integral part of this Tender.

Signature: _____ DATE

LEGAL NAME OF BIDDER

 AUTHORIZED SIGNATURE OF BIDDER & TITLE PRINTED NAME

I have the authority to bind the Bidder



APPENDIX A - DECLARATION SIGNATURE SHEET

1. I/WE DECLARE that this Submission is made without collusion, knowledge, and comparison of figures or arrangement with any other company, firm or person submitting a Submission for the same work.
2. I/WE DECLARE that to our knowledge no member of Halton District School Board is, will be or has become financially interested, directly or indirectly, in any aspect of the Contract other than in the appropriate discharge of his/her obligations as an employee/officer of Halton District School Board.
3. I/WE HAVE READ, Understood and agree to abide by the Agreement to Abide by the Established Process.
4. I/WE HAVE CAREFULLY examined the RFT documents, and have a clear and comprehensive knowledge of what is being requested hereunder. By submitting the Submission, the Bidder agrees and consents to the administrative procedures of the Board, as well as the procedures, terms, conditions and provisions of the RFT, including the Form of Tender.
5. I/WE have carefully examined all of the Proposal Documents, and that we have thoroughly reviewed all proposal documentation and addenda number ____ to ____, and hereby accept and agree to same as forming part and parcel of the proposed Contract.
6. I/WE ARE AUTHORIZED BY and have the authority to bind the Bidder.

DATE: _____

NAME: _____

Please Print

SIGNATURE: _____

TITLE: _____

COMPANY NAME: _____

ADDRESS: _____

PHONE NUMBER: _____

E-MAIL ADDRESS: _____

E-MAIL to Send PO: _____



APPENDIX B – HDSB PRE-QUALIFIED SUB-CONTRACTORS

ASBESTOS

Vendor Name	Contact Name	Email Address	Telephone Number
A&O Contracting Inc.	Nikhil Thilakan	anthony@aandocontracting.com	905 828 6868
All Clear Environmental	Sidnei Casimiro	sidnei@allclearenvironmental.casusa	(519) 577-0013
Alliance Environmental & Abatement Contractors	Robert Lewis	info@allianceenvironmental.com	416-298-4500
Caliber Environmental Construction Services Inc.	James Ball	jball@caliberenv.commball@caliber	905 884 5500
Environmental Response Team	David Bremner	info@erthazmat.com	416-255-6745
FPR Environmental	Nelson Multari	info@asbestosmouldexperts.comnls	1-855-868-8222
Furcon Environmental Inc.	Sherry-Lynn Proulx	sherry@furconenviro.com	905-569-8311
Healthy Environmental & Insulation	Henry Kwasniak	henry@healthyenvironmental.ca	289-837-0444
Highpoint Environmental Services Inc.	Wei Xu	info@highpointenv.ca	416-279-0363
I&I Construction Services Limited	Jason Ward	jward@iandi.ca	905-884-1290
McGowan Insulations Ltd.	Robert McGowan	info@mcgowan.on.cadfoley@mcgow	905 549 1844
QM Environmental	Mark Reinhardt	mark.reinhardt@QMenv.com	800.251.7773
Schouten Environmental	Brant Nicolson	Brant@schouten.ca	226.678.4715
Zero Environmental	Joel Van Es	info@zeroenvironmental.com	519-772-5500

MECHANICAL

Vendor Name	Contact Name	Email Address	Telephone Number
Ainsworth Inc.	Michael Karmazyn	Kari.Cordeau@ainsworth.com	416-751-4420
BAS Mechanical Inc.	Riaz Ahmad	estimator@basmechanical.ca	905-669-1126
Black & McDonald Limited	Jordan Anderson	swatson@blackandmcdonald.com	289-919-1166
Black Creek Mechanical Ltd.	Nelson Pedreira	estimating@blackcreekmechanical.c	416-604-7558
Brenner Mechanical Inc.	Michael Brenner	mbrenner@brenner.ca	519-746-0439
Canadian Air Tech Systems Inc.	Joan Blakeley	mail@ctas.ca	416-291-1296
Canem Systems Ltd.	Scott Carnegie	scarnegie@canem.com	226-566-9652
CEC Mechanical Ltd.	Devin Brown	dbrown@beswickgroup.com	905-266-1500
Chamberlain Building Systems Inc.	Alex Skaljac	a.skaljac@chbs.ca	905-664-1914
CJ's Express Plumbing & Electrical Ltd.	Nelson Oliveira	noliveira@cjsexpress.ca	519-621-3111
Glenn Richardson Plumbing & Heating Ltd.	Kyle Richardson	kyle@glennrichardsonplumbing.com	905-335-2945
Kirk Mechanical Limited	Robert Kirk	kirkmech@bellnet.ca	905-681-0140
LJ Barton Mechanical Inc.	Bruce Hunter	estimating@ljbarton.com	905-304-1976
Mattina Mechanical Limited	Domenic Mattina	dmattina@mattina.ca	905-544-6380
Mechfield Canada Inc.	Kaleem Ahmad Bhatti	salman@mechfield.com	289-597-7555
Mekcon Ltd.	Inaam Cheema	info@mekcon.ca	905-918-1899
Modern Niagara Southwestern Ontario Inc.	Rachel McGowan	rmcgowan@modernniagara.comrfs	289-768-1951
SFB Plumbgin and Heating Inc.	Stan Bliszcuk	stan@sfbplumbing.com	289-527-1499
SE Canada Inc. o/a Service Experts Commerica	Saadia Ashraf	saadia.ashraf@serviceexperts.com	905-453-6700
Superior Boiler Works & Welding Ltd.	Domenic Settimi	info@sbww.com	(905) 643-6628
VCI Controls Inc.	Jeff Morneau	jmorneau@vcicontrols.ca	905-850-4464
Velocity Mechanical Inc.	Peter Linseman	quotes@velocitymechanical.com	519-896-1119

ELECTRICAL

Vendor Name	Contact Name	Email Address	Telephone Number
Arc Electrical	Brian Leiper	estimating@arcelectrical.ca	905-816-0234
Atlas Electric Corp.	Emre Ates	atlaselectricgta@gmail.com	289-386-3601
B-Safe Electric	Dan More	dan@b-safe.cabrian@b-safe.ca	905-872-7233
Best Electric	Gurmukh Sehmbi	gsehmbi@bestelectric.ca	416-677-3851
Black & McDonald Limited	Brian Mino	swatson@blackandmcdonald.c	905-560-3100
Brant Electric Limited	John Phelps	johnphelps@brantelectriclimit	905-634-5577
Cahill Electr Inc.	Chris Cahill	chris@cahillelectric.ca	905-388-0515
CEC Services Ltd.	Kyle Feinstein	estimating@beswickgroup.com	905-716-3711
Current Technologies Ltd.	Don Frederickson	donfred@currenttechnologies.	416-240-7691
Dorval Electric Inc.	Pat Folino	dorvalelectric@bellnet.ca	905-845-4341
EEL Line Corporation	Majeed Wraich	majeed@eeline.ca	416-540-8894
Electrobauer Systems Limited	Michael Bauer	michaelbauer@rogers.com	416-389-6804
Elite Electrical Solutions	Amar Taneja	estimate@eliteelectrical.ca	905-789-5511
Gremer Electric Ltd.	Gennaro Di Gregor	gennaro@gremer.ca	905-652-2641
Indcon Inc.	Nitesh Patel	indcon74@gmail.com	416-677-3303
JD Electrical Services	Dave De CiantisMa	dave@jdelectric.com	416-803-7689416-
LJ Barton Mechanical Inc.	Mike Van den Heu	estimating@ljbarton.com	905-304-1976
McCleary Electric Limited	Ron Vandermeular	mcclearyelectric@bellnet.ca	905-634-7634
Nadelec Contracting Inc.	John Nadalin	john.nadelec@gmail.com	905-875-5239
North Star Electric	Greg Harris	gharris@northstarelectric.ca	905-845-9063
Ozz Electric	Dave Burlo	estimating@ozzelectric.com	416-637-7237
PRL - Guite Electric Ltd.	Kyle Leaker	estimating@prlguite.ca	905-549-6711
R.A. Hillmer Electric Corp.	Robert Hillmer	rahillmerelectric@outlook.com	289-736-1000
Smith & Long	Vince Ambrico	vambrico@smithandlong.com	416-391-0443
Star Electrical Services Inc.	Harvinder Kahlon	info@starelectrical.ca	905-799-3883

Appendix C

Halton District School Board – Asbestos Management Plan

HALTON DISTRICT SCHOOL BOARD

ASBESTOS ACKNOWLEDGEMENT FORM

I/We hereby acknowledge that the Halton District School Board has provided us with information on the locations of asbestos-containing material in _____

(name of building)

and that I have read and understand this information.

If asbestos-containing materials may be disturbed during the course of our work, we will ensure that the Board is advised of the proposed schedule and procedures for performing the work, that any and all of our workers who will perform the work have received training as required by Ontario Regulation 278/05 (*Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations*) and that the work will be conducted in accordance with the measures and procedures prescribed in O.Reg. 278/05.

Furthermore, if any work is subcontracted, we will ensure that all of the above requirements are complied with by our subcontractor.

Name (Print): _____

Company: _____

Signature: _____

Date: _____

Aldershot High School – Library renovations

Scope of Work:

Provide all necessary labour, material and equipment required to provide library renovations as specified herein.

Contractor shall refer to Grguric Architects Specifications and drawings including all mechanical, electrical and structural for Aldershot High School Library renovations.

HDSB is including the cafeteria floor replacement, approximately 6,000 ft² area, as part of the project and has included a \$35,000 cash allowance. Contractor will be instructed by the owner with product details and scope to be tender upon award of contract.

General Contractor shall complete work from July1, 2022 to August 31, 2022.

All work after September 1, 2022 shall be completed after school hours, generally 3:30 pm or on weekends. Contractors shall include all costs. It is the contractor's responsibilities to ensure that labour, material and equipment requirements if work extends after September 1, 2022 is included in their respective construction schedules.

General Contractor shall use HDSB pre-qualified subcontractors and list the mechanical, electrical and asbestos subcontractors on bid form.

Contractor shall include cash allowance 1- \$10,000 Library cash allowance 2 - Cafeteria floor replacement - \$35,000 and contingency of \$5,000. Refer to bid form.

Contractor shall carry cash allowance #3 of \$125,000 for new project to be tendered separately for site work. The new site work scope shall include an accessible pathway from door 10 to track and accessible ramp and door accessories at doorway # 25. Owner to provide details for quotes at future date.

SPECIFICATIONS

SECTION NUMBER		# PAGES
	DIVISION 1 - GENERAL REQUIREMENTS	
00010	List of Contract Documents	1-1
01575	Environmental Protection	1-2
01710	Cleaning	1-2
01721	Sample Guarantee Warranty Form	1-2
	DIVISION 2 - SITE WORK	
02050	Demolition	1-3
	DIVISION 9 - FINISHES	
09111	Metal Stud System	1-2
09250	Gypsum Board	1-3
09515	Ceiling Accent Canopies	1-4
09660	Resilient Tile Flooring and Rubber Base	1-3
09680	Carpet Tile	1-3
09900	Painting	1-4

DRAWINGS

NO.	DESCRIPTION
	ARCHITECTURAL / ELECTRICAL
A1.00	Floor Plans, Reflected Ceiling Plans, Section, Schedule and Electrical Layout

End of Section

PART 1 - GENERAL

1.1 Fires

1. Fires and burning of rubbish on site is not permitted.

1.2 Disposal of Wastes

1. Do not bury rubbish and waste materials on site.
2. Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.3 Drainage

1. Provide temporary drainage and pumping, as necessary to keep excavations and site free from water.
2. Do not pump water containing suspended materials into waterways, sewer or drainage systems.
3. Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.4 Site Clearing and Plant Protection

1. Protect trees and plants on site and adjacent properties, which are to be retained.
2. Wrap in burlap trees and shrubs adjacent to construction work, storage areas and trucking lanes, and encase with protective wood framework from grade level to height of 2 m.
3. Protect roots of trees to drip line during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.

1.5 Pollution Control

1. Install and maintain temporary erosion and pollution control features as requested by local Municipal and Regional Authorities.
2. Install, maintain, restore, replace sediment control fence as required by Municipal and Regional authorities. The fence shall be in accordance with Municipal standards.
3. Install, maintain, restore, replace roadside catchbasin sediment protection at all street catchbasin in accordance with Municipal standards.

4. Install, maintain, restore, replace catchbasin sediment barrier immediately after installation of catch basins on the property in accordance with Municipal Standards.
5. Install and maintain a mud mat at the construction access made consisting of 30m x 5m x 0.45m clear stone.
6. Control emissions from equipment and plant to local authorities' emission requirements.
7. Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

End of Section

1. General

1. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
2. Store volatile wastes in covered metal containers, and remove from premises daily.
3. Prevent accumulation of wastes which create hazardous conditions.
4. Provide adequate ventilation during use of volatile or noxious substances.

2. Materials

1. Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
2. Provide on-site dump containers for collection of waste materials, and rubbish.

3. Cleaning During Construction

1. Maintain project grounds, and public properties free from accumulations of waste materials and rubbish. Clean streets as often as required by the local authorities.
2. Remove waste materials, and rubbish from site.
3. Vacuum clean interior building areas when ready to receive finish painting, and continue vacuum cleaning on an as-needed basis until building is ready for substantial completion or occupancy.
4. Schedule cleaning operations so that resulting dust and other contaminants will not fall on wet, newly painted surfaces.

4. Final Cleaning

1. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery, and surplus materials, and clean all surfaces exposed to view; leave project clean and ready for occupancy.
2. Employ experienced workers, or professional cleaners, for final cleaning.
3. In preparation for Substantial Performance or Fitness for Occupancy status, whichever occurs first, conduct final inspection of interior and exterior surfaces exposed to view, and of concealed spaces.
4. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from all sight-exposed interior and exterior finished surfaces; polish resilient and ceramic surfaces so designated to shine finish. Vacuum carpet.

5. Clean and polish glass and mirrors.
6. Repair, patch and touch-up marred surfaces to specified finish, to match adjacent surfaces.
7. Broom-clean paved surfaces; rake clean other surfaces of grounds.
8. Clean exposed ductwork and structure.
9. Replace filters.
10. Clean bulbs and lamps and replace those burned out.
11. Clean diffusers and grilles.
12. Clean sinks, faucets, and water closets and controls.
13. Remove snow and ice from access to building, if applicable.
14. Maintain cleaning until project, or portion thereof, is occupied by Owner.

5. Removal of Temporary Facilities

1. Completely remove temporary facilities from site, including signs and foundations, making good any damage when no longer required.

End of Section

1.1 Notes

1. To be made out on the letterhead of Guarantor or Warrantor which usually is a Subcontractor.
2. This format is to be used only when standard preprinted trade or manufacturer's forms are not available. Preprinted forms are to include all elements of information shown on this sample or as a minimum.

To: Halton District School Board
2500 Guelph Line, Burlington, ON L7P 5A8

Date: _____

SECTION _____

TITLE _____

GUARANTEE/WARRANTY TO:

OWNER Halton District School Board

PROJECT Aldershot High School Learning Commons Flooring and Lighting
Renovations
50 Fairwood Place West, Burlington, ON L7T 1E5

ARCHITECT Grguric Architects Incorporated

REFERENCE (to specifications or drawings)

TIME Period of Guarantee/Warranty: _____ years

GUARANTEE/
WARRANTY Starting Date: Substantial Performance as certified by Architect

Date: _____

(Description of Guarantee/Warranty)

Upon written notification from the Owner or the Consultant that the above work is defective any repair or replacement work required shall be to the Consultant's satisfaction at no cost to the Owner.

This guarantee shall not apply to defects caused by the work of others, maltreatment of materials, negligence or Acts of God.

SUBCONTRACTOR

Signature

Date

Authorized Signing
Officer:

(Name Printed)

Title

Name of Firm:

Address:

Telephone Number

CONTRACTOR

Signature

Date

Authorized Signing
Officer:

(Name Printed)

Title

Name of Firm:

SEAL

Address:

Telephone Number

End of Section

PART 1 - GENERAL

1.1 Related Work Specified Elsewhere

1. Not applicable.

1.2 Existing Conditions

1. Take over structures to be demolished based on their conditions (on date that tender is accepted).

1.3 Demolition Drawings

1. Where required by authorities having jurisdiction, submit for approval drawings, diagrams or details clearly showing sequence of disassembly work or supporting structures.

1.4 Protection

1. Prevent movement, settlement or damage of adjacent grades. Provide bracing, shoring as required.
2. Prevent debris from blocking surface drainage inlets which must remain in operation.
3. Protect existing items designated to remain and materials designated for salvage. In the event of damage to such items, immediately replace or make repairs to approval of Owner and at not cost to Owner.

PART 2 - PRODUCTS

1. Not applicable.

PART 3 - EXECUTION

3.1 Work

1. Dispose of demolished materials except where noted otherwise.

3.2 Safety Code

1. Unless otherwise specified, carry out demolition work in accordance with Canadian Construction Safety Code 1980.
2. Should material resembling spray or trowel-applied asbestos be encountered, notify Architect. Any asbestos encountered will be removed by the Owner's Contractor.

3.3 Preparation

1. Disconnect electrical and telephone service lines entering areas to be demolished as per rules and regulations of authorities having jurisdiction. Post warning signs on electrical lines and equipment which must remain energized to serve other areas during period of demolition.
2. Inspect site and rectify with Architect items designated for removal and items to remain.
3. Disconnect and cap mechanical services in accordance with requirements of local authority having jurisdiction.
4. Natural gas supply lines to be removed by gas company or by qualified tradesman in accordance with gas company instructions.
5. All concrete slab areas must be ground down with concrete grinder to remove all glue from surface and prepare for new flooring.

3.4 Demolition & Field Work

1. Demolish areas as indicated on the drawings.
2. Remove existing equipment, services and obstacles, where required, for refinishing or making good of existing surfaces, and replace same as work progresses.
3. At end of each day's work, leave work in safe condition so that no part is in danger of toppling or falling. Protect interiors of parts not to be demolished from exterior elements at all times).
4. Demolish in a manner to minimize dusting. Keep dusty materials wetted.
5. Demolish masonry and concrete walls in small sections. Carefully remove and lower structural framing and other heavy or large objects.
6. Burning materials on site is not permitted.
7. Remove contaminated or dangerous materials from site and dispose of in safe manner.
8. Employ rodent and vermin exterminators to comply with health regulations.

3.5 Salvage

1. Carefully dismantle items containing materials for salvage and stock pile salvaged materials at locations as directed by Architect.

3.6 Restoration

1. Upon completion of work, remove debris, trim services and leave work site clean.
2. Reinstall areas and existing works outside areas of demolition to match condition of adjacent, undisturbed areas.

3.7 Scheduling

1. Demolition of areas adjacent to occupied spaces may not occur during occupancy of these spaces. Contractor to schedule the demolition of these areas to occur after school hours or weekends.

End of Section

PART 1 - GENERAL

1.1 Related Work

- | | |
|--------------------|---------------|
| 1. Gypsum Board: | Section 09250 |
| 2. Rough Carpentry | Section 06100 |

1.2 Reference Standards

1. Do work to CSA A82.31-1977, except where specified otherwise.

PART 2 - PRODUCTS

2.1 Materials

1. Metal Studs: non-load bearing channel stud framing to ASTM C645-09a, roll formed from 0.59 mm thickness electro-galvanized steel sheet for screw attachment of gypsum lath and metal lath, and with service access holes.
2. Structural Metal Studs: CSA-S13-01 and hot-dipped galvanized to ASTM A525M-87, minimum 1.22 (18ga.) use thicker materials where required to suit structural requirements. Framing shall be designed by a licensed professional engineer registered in the province of Ontario. Follow fabrication standards ASTM C955.
3. Floor and ceiling tracks: to ASTM C645-09a in width to suit stud sizes, 30 mm legs for floor track, 50 mm for ceiling track.
4. Metal channel stiffener: 38 mm size, 2 mm thick cold rolled galvanized steel.
5. Furring channels (channels, hangers, tie wire, insert, anchor): CGSB 7.1-98-CAN/CGSB.
6. Touch-up Zinc Rich Paint: CAN/CGSB-1.181-92.

PART 3 - EXECUTION

3.1 Stud Partitions

1. Align partition tracks at floor and underside of structure above and secure at 24" o.c. maximum. All partitions to extend to underside of structure above.
2. Place studs vertically at 16" o.c. and not more than 2" from abutting walls and at each side of openings and corners. Position studs in tracks at floor and ceiling. Cross brace steel studs, as required, to provide rigid installation to manufacturer's instructions.
3. Erect metal studding to tolerance 1:1000.
4. Attach studs to bottom track using screws.

5. Coordinate simultaneous erection of studs with installation of service lines. When erecting studs, ensure web openings are aligned.
6. Install steel frames and anchor frames securely to studs using minimum of three (3) anchors per jamb for jambs up to 84" high and a minimum of four (4) anchors per jambs for jambs over 84" high.
7. Provide two (2) studs at each side of openings wider than stud centre specified.
8. Install, cut to length, piece of runner horizontally over door frames.
9. Provide 38 mm x 89 mm vertical and horizontal wood studs secured between metal studs for attachments of bathroom fixtures, accessories, cabinet work, and other fixtures, including grab bars, towel rails, attached to steel stud partitions.
10. Install steel stud or furring channel between studs for attaching electrical and other boxes.
11. Extend all partitions to underside of structure above for sound and fire separation.
12. Maintain clearance under beams and structural slabs to avoid transmission of structural loads to studs.

3.2 Ceiling Furring

1. Install runners level to tolerance of 1/8" over 11'-8". Provide runners at interruptions of continuity and change in direction.
2. Frame with furring channels, perimeter of openings to accommodate access panels, light fixtures, diffusers, grilles, etc.
3. Furring for bulkheads within or at termination or ceilings.
4. Install furring channels at 16" o.c. maximum.

3.3 Wall Furring

1. Install steel furring, as indicated.
2. Frame opening and around built-in equipment on four (4) sides with channels.
3. Box-in beads, columns, pipes, and around exposed services.

3.4 Fire-rated Assemblies

1. Where required, install Metal Stud System and Furring in accordance with appropriate ULC Design and with supplement to the National Building Code of Canada 1985.

End of Section

PART 1 - GENERAL

1.1 Related Work

1. Ceiling Accent Canopies Section 09515
2. Painting Section 09900

1.2 Reference Standards

1. ASTM C36/C36M-01: Standard specification for gypsum wallboard.

PART 2 - PRODUCTS

2.1 Gypsum Board

1. Gypsum Board: to ASTM C36; tapered edges, thickness as noted on Drawings.
2. Fire Rated Gypsum Board: to ASTM C36, Type X; tapered edges, ULC labeled, thickness as noted on Drawings.
3. Impact Resistant Gypsum Sheathing Board: to ASTM C1177/C1177M; silicone treated gypsum core, glass fiber mesh facers both sides; eg. DensGlass Gold by G-P Gypsum Corporation or equivalent by CGC Inc.
4. Cement Board: to ASTM C1325; polymer modified concrete core, dual layer of alkali-resistant fibre mesh reinforced faces and edges, tapered rolled edges; thicknesses as indicated on Drawings.

2.2 Fastenings and Adhesives

1. Screws: to CSA A82.31-1977.
2. Adhesive: to CGSB 71 GP 25M.
3. Laminating Compound: to CSA A82.31-1077.
4. Concrete Anchors: Phillips Red Head TW-614 or equivalent. Do not use powder activated fasteners for ceiling support.
5. Tie Wire: #16 ga. galvanized soft annealed steel wire.

2.3 Accessories

1. Casing Beads and Corner Beads: 0.5 mm base thickness commercial sheet steel with G90 zinc finish to ASTM A 525-78 A.
2. Joint compound and tape: Compound to CSA A82.31-1977, asbestos-free. Perforated 50 mm gypsum board joint tape.

3. Caulking: Acoustical sealant.

2.4 Insulation Blanket

1. 38 mm thick mineral wool batts ULC labelled, if indicated on drawings.

PART 3 - EXECUTION

3.1 Gypsum Board Application

1. Do not apply gypsum board until bucks, anchors, blocking, electrical and mechanical work are approved.
2. Install metal studs plumb and true to sizes and locations indicated on drawings.
3. Apply single and double layers gypsum board to metal furring or framing, using screw fasteners and laminating adhesive. Maximum spacing of screw 300 mm oc.
4. Apply gypsum board to concrete block surfaces, where indicated, using laminating adhesive.
5. Apply type X gypsum board where indicated, in accordance with U.L.C. requirements and with supplement to the National Building Code of Canada to obtain the required fire protection, fire rating and fire separation.

3.2 Insulation and Blanket Application

1. Where indicated on drawings, staple blanket to wallboard in accordance with ULC design requirements. Blanket shall be continuous and tightly fitted between studs and at perimeter.

3.3 Accessories

1. Erect accessories straight, plumb or level, rigid and at proper plane. Use full length pieces, where practical. Make joints tight, accurately aligned and rigidly secure. Mitre and fit corners accurately, free from rough edges.
2. Install casing beads around perimeter of suspended ceilings.
3. Install casing beads where gypsum board butts against surfaces having no trim concealing junction and where indicated.

3.4 Access Doors

1. Install access doors to electrical and mechanical fixtures specified in respective Sections.
2. Rigidly secure frames to furring or framing systems.

3.5 Taping and Filling and Sound Seal

1. Seal with acoustical sealant at ceilings, floors, wall intersections and all penetrations such as electrical outlets.
2. Above partitions fill flutes of steel deck with rock wool and cover with non-sagging sealant on at least one side of the partition.
3. Finish face panel joint and internal angles with joint system consisting of joint compound, joint tape and taping compound installed according to manufacturer's directions and feathered out onto panel faces.
4. Finish corner beads, control joints and trim as required with two (2) coats of joint compound and one (1) coat of taping compound, feathered out onto panel faces.
5. Fill screw head depressions with joint and taping compounds to bring flush with adjacent surface of gypsum board so as to be invisible after painting is completed.
6. Sand lightly to remove burred edges and other imperfections. Avoid sanding adjacent surface of board.
7. Completed installation to be smooth, level or plumb, free from waves and other defects and ready for painting.

End of Section

PART 1 - GENERAL

1.1 Related Work

1. Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions 1 Specifications sections apply to work of this section.

1.2 References

1. American Society for Testing and Materials (ASTM):
 - .1 ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
 - .2 ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - .3 ASTM E 1477 Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers.

1.3 Product Summary

1. Section Includes:
 - .1 Ceiling Accent Canopies
 - .2 Attachment hangers and fasteners
2. Alternates: Submittals which do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to: Panel design, size, composition, colour, and finish; suspension system component profiles and sizes; all by the same manufacturer and in compliance with the referenced standards.

1.4 Submittals

1. Product Data: Submit manufacturer's technical data for each type of cloud system required.
2. Installation Instructions: Submit manufacturer's installation instructions.
3. Shop Drawings: Layout and details of acoustical canopies. Show locations of items which are to be coordinated with acoustical canopies.
4. Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards.

1.5 Quality Assurance

1. Coordination of Work: Coordinate acoustical cloud work with installers of related work including, but not limited to suspended ceilings, building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.6 Delivery, Storage, and Handling

1. Deliver acoustical canopies to project site in original, unopened packages and store them in a fully enclosed space between 4° C and 49° C where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes. All wet work (plastering, concrete, etc.) must be complete and dry.
2. Before installing acoustical canopies, permit them to reach room temperature and stabilized moisture content.
3. Handle acoustical canopies carefully to avoid damaging the surface and edges in any way.

1.7 Project Conditions

1. Space Enclosure: Building areas to receive acoustical canopies shall be free of construction dust and debris. Products can be installed in temperatures between 4° C and 49° C. Cannot be used in exterior applications, where standing water is present, or where moisture will come in direct contact with the acoustical cloud.

1.8 Warranty

1. Acoustical Canopies: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical canopies that fail within the warranty period. Failures include, but are not limited to:
 - .1 Acoustical Canopies: Manufacturing defects
 - .2 Attachment devices: Rusting and manufacturing defects.
2. Warranty Period:
 - .1 Acoustical Canopies: One (1) year from date of substantial completion.
 - .2 Attachment devices: One (1) year from date of substantial completion.
3. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 Manufacturers

1. Ceiling Accent Canopies: Armstrong World Industries, Inc.
2. Attachment devices: Armstrong World Industries, Inc.

2.2 Acoustical Cloud Units - Accent Canopy 1 & Accent Canopy 2 (sim)

1. Infusions
 - .1 Surface Texture: Smooth
 - .2 Composition: Polycarbonate
 - .3 Color: Channeled Mist
 - .4 Size: 48IN x 120IN
 - .5 Thickness: dimension3Value + ' ' + dimension3UnitId
 - .6 Edge Detail: Square
 - .7 Arc Radius:
 - i. Items 54051 & 54052 - 2' X 5' (60 degrees) & (90 degrees)
 - ii. Items 54061 & 54062 - 2' X 6' (60 degrees) & (90 degrees)
 - iii. Items 54101 & 54102 - 4' X 10' (30 degrees) & (50 degrees)
 - .8 Fire Properties: (Aluminum - Noncombustible); (Infusion Canopies have been tested according to NFPA 286 and are equivalent to Class A interior finish as defined in Chapter 8 of the International Building Code).
 - .9 Acceptable Product: INFUSIONS, 54102 as manufactured by Armstrong World Industries

2. Manufacturer

- .1 Installation Hardware Accessories:
 - .1 Armstrong World Industries, Inc.

- .2 Attachment Systems:
 - .1 Infusion Canopies Accessories:

Hanging Kits

- | | |
|------|-----------------------------|
| 7004 | Standard 8' Hanging Kit N/A |
| 7005 | Extended Hanging Kit - 16' |
| 7010 | Extended Hanging Kit - 30' |

Wall and Ceiling Kits

- | | |
|------|---|
| 7041 | Dual Canopy Hanging Kit |
| 7006 | Escutcheon Kit Used when hanging canopy below an existing ceiling |
| 7008 | Wall Attachment Kit Anchors canopies side-by-side to a wall |
| 7009 | Wall End Attachment Kit Used at ends when linking single or multiple canopies |

Linking Kits

- 7042 Flush Spacing Kit Links two canopies side-by-side with flush spacing
- 7043 1/2" Spacing Kit Links two canopies side-by-side with 1/2" spacing
- 7007 3" Spacing Kit Links two canopies side-by-side with 3" spacing
- 7044 Single Hinge Linking Kit Links two canopies end-to-end, two kits typically needed
- 7045 Dual Hinge Flush Linking Kit Links four canopies together end-to-end and flush side-to-side
- 7046 Dual Hinge 1/2" Linking Kit Links four canopies together end-to-end and with 1/2" spacing side-to-side
- 7047 Dual Hinge 3" Linking Kit Links four canopies together end-to-end and with 3" spacing side-to-side]

PART 3 – EXECUTION

3.1 Preparation

1. Measure each ceiling area and establish layout of canopies. Comply with reflected ceiling plans. Coordinate panel layout with mechanical, electrical and sprinkler fixtures.

3.2 Installation

1. Install Infusion products as directed in the manufacturer's installation instructions and in compliance with the authorities having jurisdiction.

3.3 Adjusting and Cleaning

1. Replace damaged and broken panels.
2. Clean exposed surfaces of canopies per installation instructions.

End of Section

PART 1 - GENERAL

1.1 Related Work

1. Demolition

Section 02050

1.2 Maintenance Data

1. Provide data for maintenance of resilient flooring for incorporation into Maintenance Manual.

1.3 Environmental Requirements

1. Maintain minimum 20 deg. C air temperature at flooring installation area for three (3) days before, during and for seven (7) days after installation.

PART 2 - PRODUCTS

2.1 Materials

1. **Luxury Vinyl composition tile (LVT):** wear layer: urethane aluminum oxide topcoat cured by UV process, 0.76 mm wear layer thickness. Tile size: 305 mm x 610mm, 2.5 mm overall thickness. ASTM F1700, Class III, Type B. To meet ASTM F-1514 and ASTM F-925. 15 Year Commercial Warranty. Basis of Design: Mannington Commercial, DIVERGENT LVT series, full selection. Allow for two (2) colour selections for each group.
Acceptable equal: Interface – Studio Set Collection
 Polyflor – Bevel Line – Stone Collection
 Gerflor – Creation 55 Collection
2. **Resilient rubber base (RB):** top set coved, 3 mm thick, rubber, 100 mm high minimum 1200 mm long, including premoulded end stops and external corners. Acceptable materials: non-shrink Rubber Wall Base with toe as manufactured by Johnsonite. Colours: Three (3) from full Johnsonite "Coloright" colour line. Use straight base at carpet flooring.
3. **Base Accessories:** Pre-moulded end stops and external corners, of same material, size, and colour as base.
4. **Transition Strips:** thermoset vulcanized rubber, smooth, purpose made to accommodate wheeled traffic and prevent tripping; tapered designs to suit nature of transition; colour as selected by Consultant.
5. **Primers and adhesives:** waterproof, recommended by flooring manufacturer for specific material on applicable substrate, above, at or below grade. Use Johnsonite 990 Solvent Free Environmentally Safe White Acrylic Cove Base Adhesive for rubber base.

PART 3 - EXECUTION

3.1 Inspection

1. Ensure concrete floors are dry, by using test methods recommended by tile manufacturer, and inspect for negative alkalinity, carbonization or dusting.
2. Commencement of work indicates acceptance of conditions by flooring installer.

3.2 Subfloor Treatment

1. Remove subfloor ridges and bumps. Fill low spots, cracks, joints, holes and other defects with subfloor filler.
2. Clean floor and apply filler; trowel and float to leave smooth, flat hard surface. Prohibit traffic until filler cured.

3.3 Tile

1. Apply adhesive uniformly using recommended notched trowel in accordance with Flooring Manufacturer's instructions. Do not spread more adhesive than can be covered by flooring before initial set takes place.
2. Lay flooring with joints parallel to building lines to produce symmetrical tile pattern. Border tiles - minimum half tile width or as indicated by drawings and Finish Schedule.
3. Cut tile and fit neatly around fixed or excessively heavy objects.
4. Install flooring in pan type floor access covers and all clean out covers, where applicable. Maintain floor pattern.
5. Terminate flooring at center line of door in openings where adjacent floor finish or color is dissimilar.
6. Install metal edge strips at unprotected or exposed edges where flooring terminates.

3.4 Base Application

1. Set base in adhesive tightly against wall and floor surfaces. Use lengths as long as practicable and not less than minimum 500 mm long.
2. Install straight and level to variation of 1:1000.
3. Scribe and fit to door frames and other obstructions. Use premoulded end pieces at flush door frames.
4. Miter internal corners. Use premoulded corner pieces at all external corners and ensure full adhesion through to ends of corner pieces. See detail for termination at door frames.

5. Leave in the building one (1) complete carton of each of two (2) colours of floor tile and twelve (12) tiles of each of the remaining colours. Colours of extra tile to be specified by Architect.

3.5 Initial Maintenance after Installation

1. Broom sweep or vacuum thoroughly.
2. Do not wet mop, wash, scrub, or strip the floor. These procedures will be done by the Owner.

3.6 Protection of Work

1. Following broom sweeping, protect new floors with 0.15 mm thick Polyethylene cover and lay planking in all necessary traffic areas to minimize damage by other trades. Maintain until just before final inspection.

3.7 Preparation for Inspection

1. Only if so notified by Architect, and in the presence of the Owner, scrub the floor using a neutral detergent and a floor machine of 170-250 rpm capability equipped with a scrub brush or a scrubbing pad (3M blue or equal).
2. Lightly rinse and allow to dry. Note: Do not flood the floor with rinse water, scrubbing, or stripping solutions. Final re-washing, if required, and waxing will be done by owner.

End of Section

PART 1 – GENERAL

1.1 Related Work

1. Resilient Tile Flooring and Rubber Base Section 09660
2. Demolition Section 02050

1.2 Samples

1. Submit duplicate 1 m square pieces of each type of carpet specified, duplicate 125 x 75 mm pieces for each color selected, 150 mm lengths of binder bars, in accordance with Section 01340.

1.3 Maintenance Data

1. Provide maintenance data for carpet maintenance for incorporation into Maintenance Manual specified in Section 01730.

1.4 Warranty

1. Carpet manufacturer lifetime warranties: wear, static protection, delamination, tuftbind failure, edge ravel and zippering and dimensional stability. Provide one full box of carpet tile of each colour to Owner.

PART 2 – MATERIALS

2.1 Modular Carpet (CPT)

1. Fibre: 100% solution dyed nylon.
 2. Construction: textured dense pattern loop
 3. Standard Backing System: PVC modular – containing recycled content.
 4. Pile Density: 5300 FHA minimum.
 5. Gauge: 1/12; 47.2 rows/10 cm, minimum.
 6. Stitches: 11.2 spi; 45.3 stitches/10 cm, minimum.
 7. Flammability: Radiant Panel ASTM E648 – Class I
 8. Protections: anti-microbial, anti-zippering, anti-static and stain protection
 9. Modular Size: 610mm x 610mm
 10. Manufacturers: Mohawk Group Carpet Tile - Caliber Series - BT282
Colours: By Architect allow for up to 2 colours
- Acceptable Alternate:** Mannington Googie Collection same size.
Tarkett: Aftermath II Collection same size.
Centura: Venice Collection – same size

2.2 Binder Bars

1. As recommended by carpet manufacturer. Color to match carpet.
2. Use binder bars at exposed carpet edges. Install binder bars at doorways centered under doors.

2.3 Adhesive

1. Full spread premium pressure sensitive adhesive as recommended by carpet manufacturer to suit carpet and subfloor conditions, and allow repositioning.

PART 3 - EXECUTION

3.1 Examination

1. New concrete must be fully cured and free of moisture. New concrete requires a curing period of approximately 90 days. Tests for moisture and alkalinity must be performed as detailed under moisture testing.
2. Work of others in areas where carpet is installed has been completed.

3.2 Preparation

1. Dust, dirt, debris, and noncompatible adhesive must be removed before installation begins. Surfaces must be smooth and level with all holes and cracks filled with latex based Portland cement patching compound.

3.3 Installation

1. Establish measurement and layout per manufacturer's recommendations. Follow manufacturer's pallet and box sequencing.
2. Install starting in the corner of one quadrant and in a pyramid fashion. Install by butting edges together evenly and do not compress modules. Fit carpet neatly around architectural, mechanical, electrical and furniture fitments.
3. Cut carpet modules at perimeters, floor electrical outlets, and door openings. Apply adhesive whenever modules are cut. Loop pile modules may require trimming or clipping of tufts.
4. Finish seams level, flat and inconspicuous.

3.4 Protection of Finished Work

1. Vacuum carpets clean. Protect traffic areas of carpeted floor with polyethylene drop sheets. Tape joints to prevent shifting.

2. After installation, and until project completion, coordinate work to ensure that carpeting is not damaged by traffic or by subsequent work.

End of Section

PART 1 - GENERAL

1.1 Related Work

1. Room Finish Schedule refer to drawings

1.2 Reference Standard

1. CAN/CGSB-85.100-93: Painting.
2. Underwriters Laboratories of Canada: List of Equipment and Materials.
3. Ontario Painting Contractors' Association (OPCA) Architectural Specification Manual.

1.3 Product Data

1. Submit to Architect, for review, product data for all formulas, including manufacturer's trade names.
2. Paint Manufacturer will provide periodic reviews and reports to Architect regarding work in this Section and adherence to manufacturer's product specifications.

1.4 Qualifications

1. Manufacturer: use only paint manufacturers and products listed in the OPCA Architectural Painting Specification Manual – Paint Product Recommendation section.
2. Applicators: company specializing in the work of this Section, and with a minimum of ten years documented experience. Employ only qualified journeymen and apprentices having a provincial Tradesmen Qualification certificate of proficiency.

1.5 Environmental Requirements

1. Do not apply paint finish in areas where dust is being generated.
2. Conform to requirements of OPCA Manual.
3. Comply with the requirements of Section 01570 Health and Environmental Specifications.

1.6 Extent of painting

1. For new construction, for rooms shown in room finish schedule to have painted walls, paint all non prefinished surfaces unless indicated otherwise, and repaint prefinished surfaces where indicated.

1.7 Finishes and Colours

1. Allow for up to 4 colours total from all formulations for this project. Doors, door frames, walls and ceilings will have different colors. Colors may change from room to room.

1.8 Warranty

1. Provide a 2 year warranty on completion stating that the work has been performed with respect to the standards and requirements incorporated in the OPCA specification manual latest edition.

PART 2 - PRODUCTS

2.1 Materials

1. Acceptable products: Per Chapter 5 OPCA Manual as listed.
2. Paint materials for each paint system to be products of a single manufacturer.
3. Use low-VOC and low-odour paints only.
4. Emergency Shower: Enamel or Lacquer paint in all walls around shower.

PART 3 - EXECUTION

3.1 Preparation of Surfaces in new Construction

1. Prepare surfaces to receive paint per Chapter 3 OPCA Manual.
2. Prepare wood surfaces to CGSB 85-GP-1M.
 - .1 Use CGSB 1-GP-126M vinyl sealer over knots resinous areas.
 - .2 Apply wood paste filler to nail holes and cracks.
 - .3 Tint filler to match stains for stained woodwork.
3. Touch up shop paint primer on steel with CGSB 1-GP-40M to CGSB 85-GP-14M.
4. Prepare galvanized steel and zinc coated surface to CGSB 85-GP-16.
5. Prepare wallboard surfaces to CGSB 85-GP-33M. Fill minor cracks with plaster patching compound.

3.2 Application

1. Sand and dust between each coat to remove defects visible from distance up to 1.5 m.

2. Finish closets and alcoves as specified for adjoining rooms.
3. Apply each coat at the proper consistency. Each coat of finish should be fully dry and hard before applying the next coat, unless the manufacturer's instructions state otherwise.

3.3 Mechanical and Electrical Equipment

1. Paint exposed conduits, pipes, hangers and other mechanical and electrical equipment occurring in finished areas as well as inside cupboards and cabinet work. Colour and texture to match adjacent surfaces, except as noted otherwise. Coordinate with mechanical trades applying banding and labeling after pipes have been painted. Do not paint white PVC covers on exposed mechanical water, drain and other lines
2. Paint gas piping standard yellow where visible on roof or in service spaces.
3. Paint surfaces inside of ductwork and elsewhere behind grilles where visible using primer and one coat of matte black paint.
4. Paint both sides and edges of plywood backboards for equipment before installation.
5. Leave equipment in original finish except for touch-up as required, and paint conduits, mounting accessories and other unfinished items.

3.4 Paint Systems

1. System references listed are based on Chapters 4A and 4B of OPCA Manual and are OPCA Premium Grade, unless noted otherwise.

3.5 Interior Finishes

1. Wood, where applicable: INT. 1-A, Alkyd Semi-Gloss Finish, Premium Grade.
2. Wood, where applicable, INT-1E, lacquer finish semi gloss.
3. Gypsum board - Ceilings and bulkheads - INT. 4-B, Latex Flat Finish, Premium Grade.
4. Gypsum board – partitions INT-4B latex semi-gloss, Premium Grade.
5. Gypsum board – partitions where noted GF in room finish schedule. INT 4A, alkyd gloss finish, Premium Grade.
6. Concrete Block: INT. 8-A, Latex Semi-Gloss Finish, Premium Grade.
7. Concrete Block – Where noted GF in room finish schedule: INT.8B, Alkyd Gloss finish, Premium grade.

8. Structural Steel and Miscellaneous Metal:

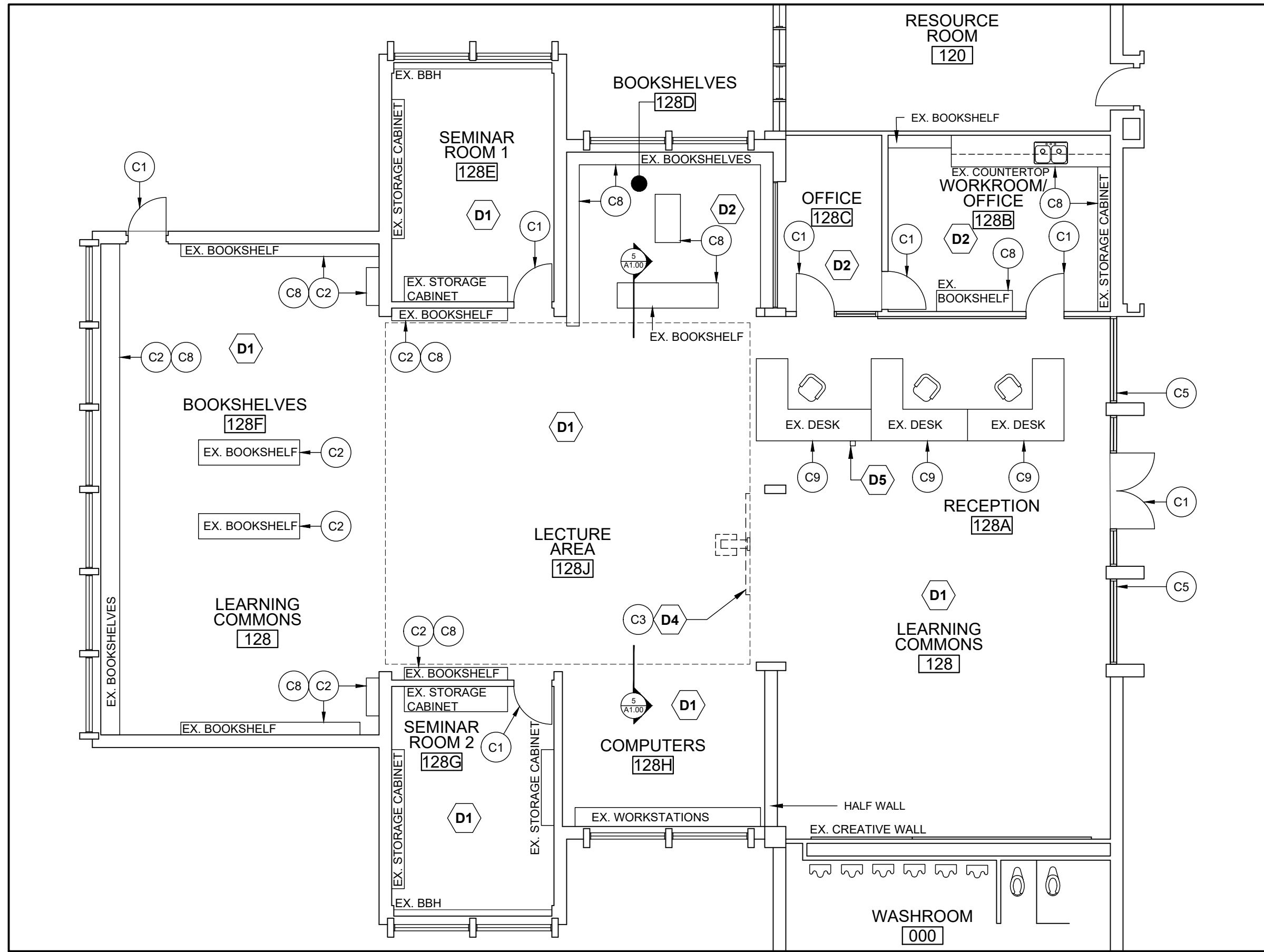
- .1 Primed: INT. 12-A, Alkyd Semi-Gloss Finish, Premium Grade, four coats.
- .2 Galvanized: INT. 13-A, Alkyd Semi-Gloss Finish, Premium Grade, four coats.

9. Galvanized metal: INT. 13-A, Alkyd Semi-Gloss Finish, Premium Grade, four coats.

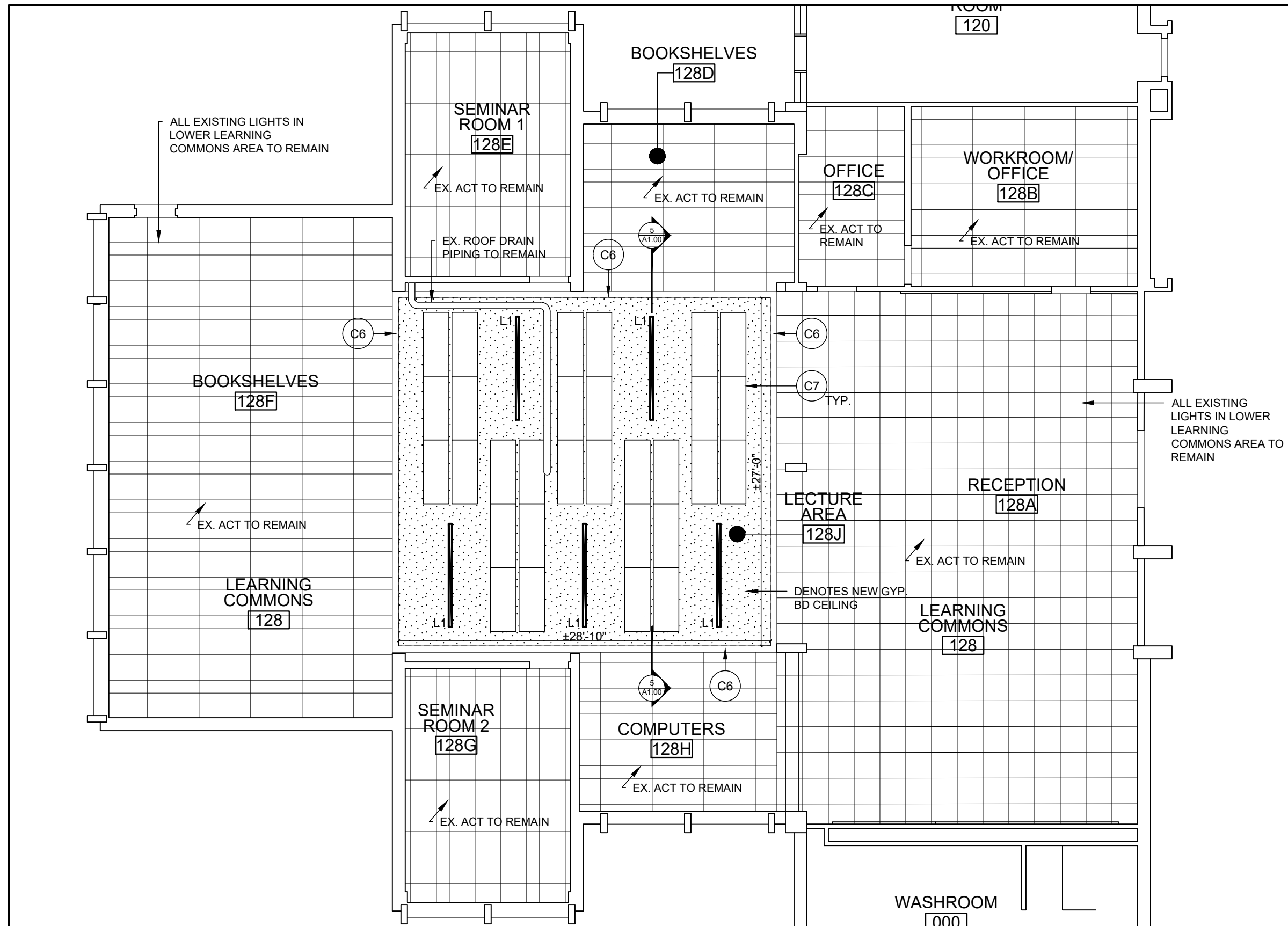
10. Galvanized steel deck: INT 13E, Alkyd dry fall.

End of Section

ROOM FINISH SCHEDULE									
ROOM NAME	ROOM NO.	FLOOR FINISH		WALLS		CEILING			REMARKS
		FINISH	BASE	MATERIAL	FINISH	MATERIAL	FINISH	HEIGHT	
RECEPTION	128A	LVT-1 & LVT-2	RB	EX. BRICK & EX. CONC. BLK	PAINT	EX. ACT	EX.	±9'-0"	REFER TO 4/A1.00 FOR LVT PATTERN
WORKROOM/OFFICE	128B	LVT-1	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
OFFICE	128C	LVT-1	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
BOOKSHELVES	128D	LVT-1	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
SEMINAR ROOM 1	128E	CPT	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
BOOKSHELVES	128F	CPT	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
SEMINAR ROOM 2	128G	CPT	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
COMPUTERS	128H	LVT-2	RB	EX. CONC. BLOCK	PAINT	EX. ACT	EX.	±9'-0"	
LECTURE AREA	128J	CPT	RB	EX. CONC. BLOCK	PAINT	GYP. BD	PAINT	±13'-0"	



1 LEARNING COMMONS FLOOR PLAN
A1.00 SCALE: 1/8" = 1'-0"



2 REFLECTED CEILING PLAN
A1.00 SCALE: 1/8" = 1'-0"

GENERAL NOTES

- CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. TAKE CARE NOT TO ENCRoACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES, ETC. WHICH ARE TO REMAIN. PATCH AND MAKE GOOD ALL EXISTING ADJACENT SURFACE FINISHES & MATERIALS WHERE DISTURBED BY NEW CONSTRUCTION.
- ELECTRICAL ITEMS SHOWN, I.E. LIGHT FIXTURES ARE FOR REFERENCE ONLY.
- TRANSITIONS BETWEEN NEW FLOOR FINISHES TO BE MADE SMOOTH AND CONTINUOUS.

DEMOLITION NOTES

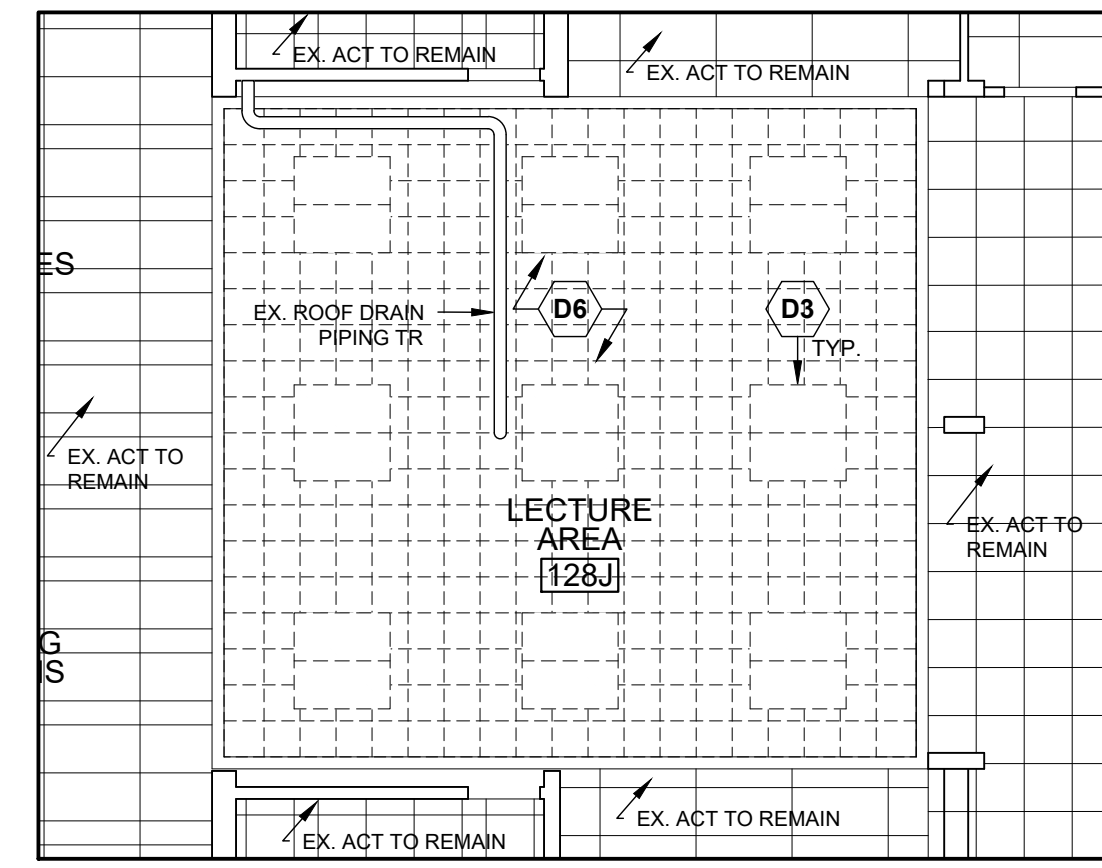
- D1 REMOVE AND DISCARD EXISTING CARPET FLOORING. GRIND CONCRETE FLOORS AND MAKE READY TO RECEIVE NEW FINISH.
- D2 REMOVE AND DISCARD EXISTING VCT. GRIND EXISTING CONCRETE FLOORS AND MAKE READY TO RECEIVE NEW FINISH.
- D3 REMOVE AND DISCARD EXISTING LIGHT FIXTURES. REFER TO ELECTRICAL NOTES.
- D4 REMOVE EXISTING PROJECTOR AND SCREEN. STORE IN A SAFE PLACE AND TO BE REINSTALLED AFTER RENOVATIONS.
- D5 EX. ELECTRICITY SUPPLY POLE TO BE REMOVED FOR NEW FLOORING INSTALLATION. REINSTALL IN THE SAME PLACE AFTER FLOORING IS IN PLACE.
- D6 REMOVE AND DISCARD EXISTING ASBESTOS TILES THROUGHOUT RAISED CEILING AREA. REFER TO ABATEMENT SCOPE.

CONSTRUCTION NOTES

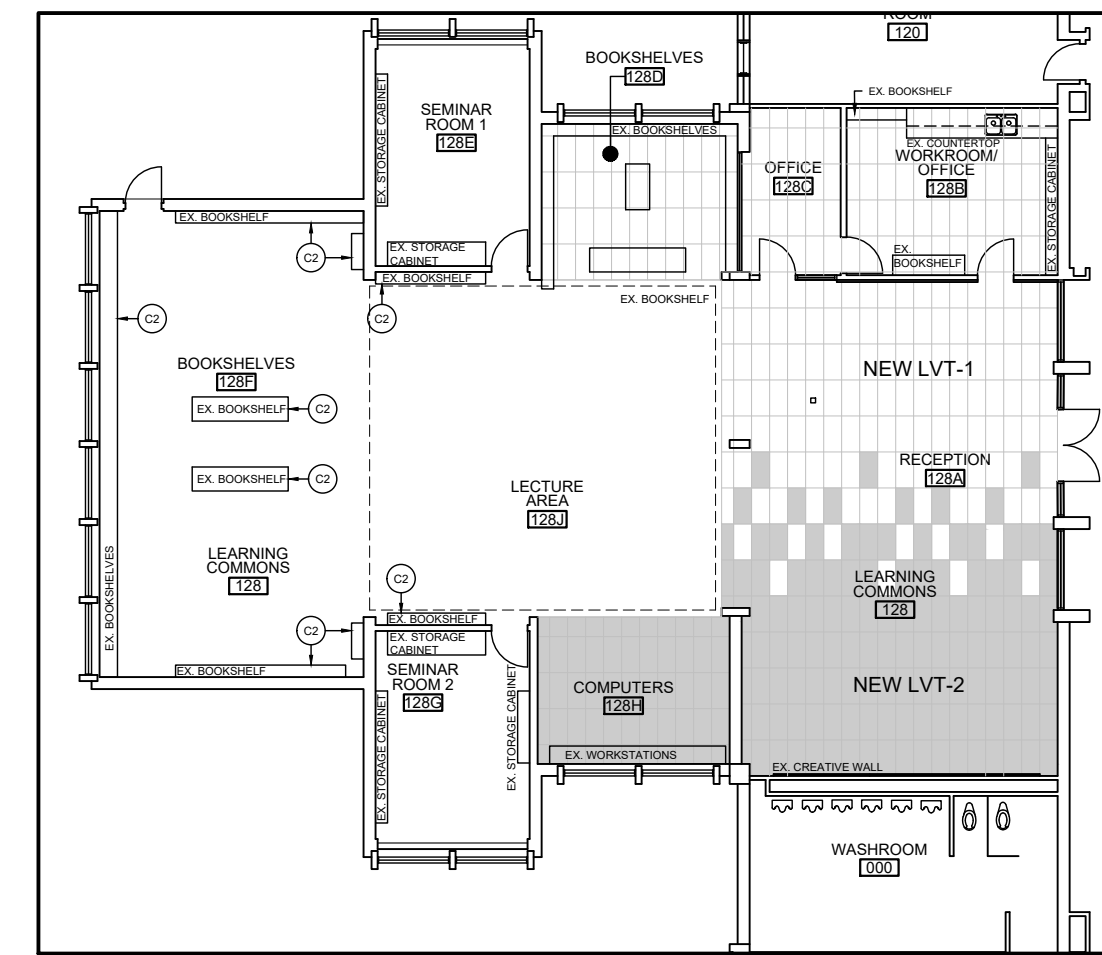
- C1 PAINT EXISTING DOORS AND FRAMES.
- C2 NEW RUBBER BASE TO BE INSTALLED ALONG EXPOSED WOOD BASE OF THE EXISTING BOOKSHELVES
- C3 REINSTALL EXISTING PROJECTOR AND SCREEN.
- C4 INSTALL NEW 1x3 STRAPPING AND 1/2" GYPSUM BOARD FINISH OVER EXISTING WOOD PANELING THROUGHOUT RAISE CEILING AREA.
- C5 PAINT EXISTING WINDOW FRAMES.
- C6 PAINT EXISTING WOOD TRIM AROUND PERIMETER OF RAISED CEILING AREA.
- C7 DENOTES SUSPENDED CEILING ACCENT CANOPIES. QUANTITY: 30 (REFER TO SPECIFICATIONS FOR TYPE AND SIZE.)
- C8 INSTALL PLASTIC PROTECTION AROUND ALL EXISTING BOOKSHELVES AGAINST WALLS. MUST BE SECURED TO AVOID DUST PENETRATION.
- C9 REMOVE AND REINSTALL ALL RECEPTION COUNTER FURNITURE AFTER FLOORING INSTALLATION. ELECTRICAL TO RECONNECT ALL DEVICES AT RECEPTION DESK.

ELECTRICAL NOTES

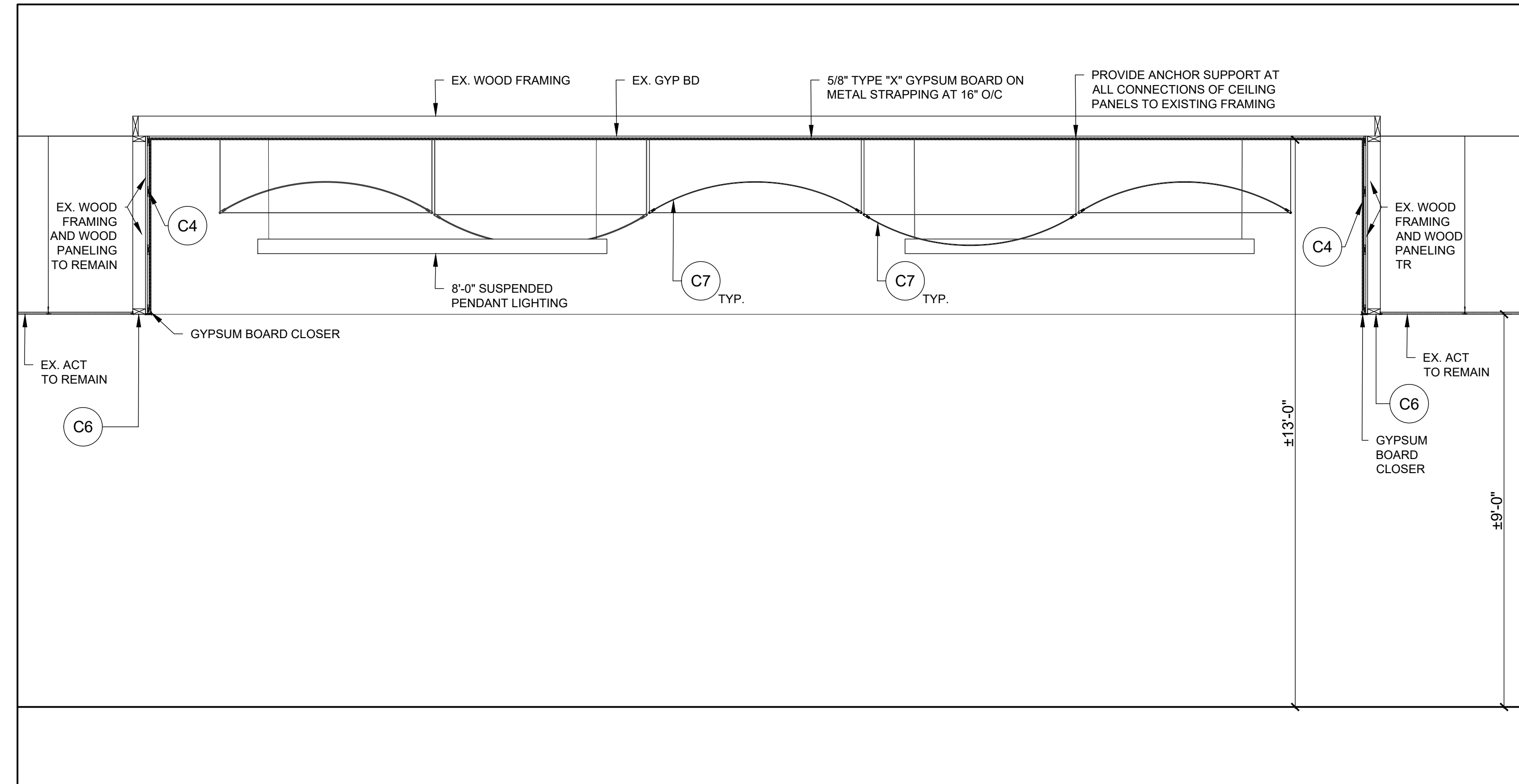
- REMOVE ALL EXISTING LIGHTS AND CONDUIT IN RAISED CEILING SPACE ONLY.
- REFEED NEW LIGHTS FROM CLOSEST CONDUIT IN RAISED CEILING AREA. LIGHTING CONTROLS TO BE MAINTAINED AS IS FOR NEW LIGHTS.
- SEE NOTE D4 FOR REMOVAL OF EXISTING SHORT THROW PROJECT AND REINSTALL BY BOARD APPROVED INSTALLER. EXTEND ALL DATA AND POWER FOR PROJECT TO NEW GYPSUM BOARD SURFACE. REINSTALL EXISTING DEVICES.
- ELECTRICAL TO RECONNECT ALL DEVICES AT RECEPTION COUNTER. REVIEW EXISTING TO DETERMINE LOCATIONS AND DEVICES TO RECONNECT.
- LIGHTING FIXTURE:
L1 - METALUMEN RAIL 2 RMDU - LED, DIRECT INDIRECT UNIT, WHITE LENGTH - 8 FT - 2L35K 3500K COLOUR TEMP
DRIVER LA2 - POWER CORD TO BE WHITE
AIRCRAFT CABLE MOUNTING WITH HANGERS
RISE LENSE UP AND DROP LENSE DOWN



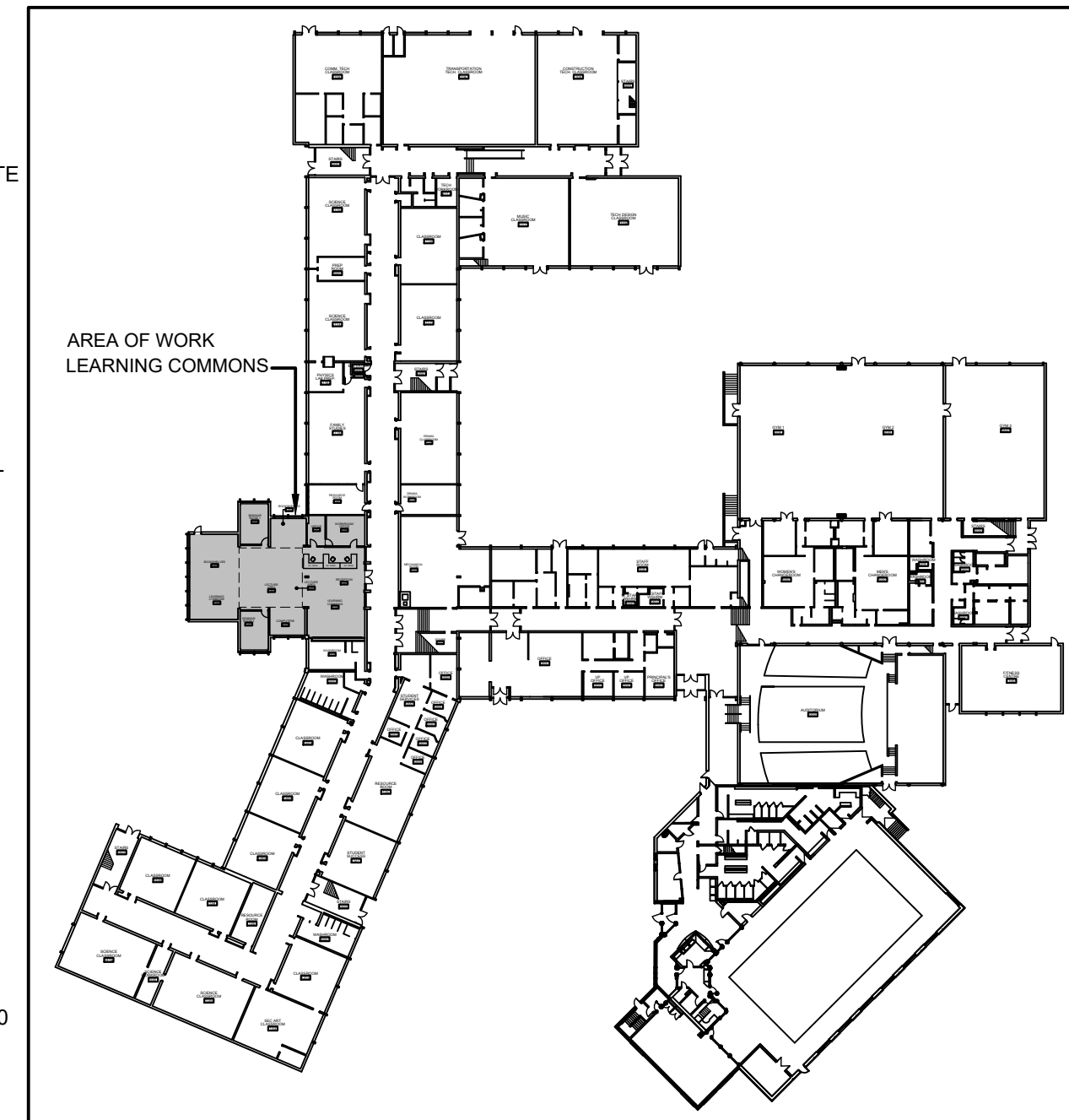
3 PARTIAL DEMOLITION RCP
A1.00 SCALE: 1/8" = 1'-0"



4 FLOOR PATTERN LAYOUT
A1.00 SCALE: 1/16" = 1'-0"



5 RAISED CEILING SECTION
A1.00 SCALE: 1/2" = 1'-0"



KEY PLAN
SCALE: NTS

ABBREVIATIONS LEGEND

ACT	ACQUISITION
BD	BOARD
BLK	BLOCK
C	CENTRE LINE
CONC	CONCRETE
CPT	CARPET TILE
EX	EXISTING
FIN	FINISH
GYP	GYPSUM
LVT	LUXURY VINYL TILE
NTS	NOT TO SCALE
O/C	ON CENTER
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
TYP	TYPICAL
U/S	UNDER SIDE

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2022-05-30
1	ISSUED FOR CLIENT REVIEW	2022-05-19

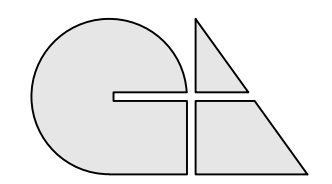
DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT, AND MUST REPORT ANY DISCREPANCIES TO THE ARCHITECTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECTS.

ALDRSHOT HIGH SCHOOL LEARNING COMMONS FLOORING AND LIGHTING

50 FAIRWOOD PLACE W
BURLINGTON, ONTARIO, L7T 1E5

FLOOR PLANS, REFLECTED CEILING PLANS, SECTION, SCHEDULES AND ELECTRICAL LAYOUT.

GRGURIC ARCHITECTS INCORPORATED



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STONE CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED PROJECT: 2022-03
START DATE: MAR 2022

DRAWN: FB DRAWING: A1.00
CHECKED: JG

PRINT DATE: C:\Users\m\OneDrive\AppData\Local\Temp\AcPublish_41296\Aldershot.dwg

HALTON DISTRICT SCHOOL BOARD

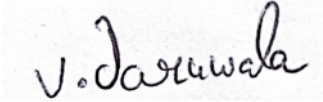
PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY

ALDRESHOT HIGH SCHOOL
50 FAIRWOOD PLACE W., BURLINGTON, ONTARIO

May 31, 2022

30134419

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL



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Occupational Hygiene Specialist



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PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY

Aldershot High School
2150 Samway Road, Oakville, Ontario

Prepared for:

Halton District School Board
J.W. Singleton Education Center
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Attention: Jennifer Norman

Prepared by:

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Our Ref.:
30134419

Date:
May 31, 2022

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PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL

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1 INTRODUCTION

Arcadis Canada Inc. (Arcadis) was retained by the Halton District School Board (HDSB) to conduct a pre-renovation designated substances and hazardous materials survey in designated areas at Aldershot High School located at 50 Fairwood Place W., Burlington, Ontario.

The building was reportedly constructed in 1960 with additions built in 1965, 1968, 1979 and 2005.

The information in this report is to be provided to all bidders on a project in accordance with the requirements of the *Occupational Health and Safety Act*.

It is our understanding that the designated substances and hazardous materials survey was required to facilitate renovations in the *designated study areas*. The survey was limited to inspecting and testing materials in the designated study areas that may be affected by the renovation project based on information provided by HDSB.

The designated study areas and construction eras are shown on the floor plans provided in Appendix A.

The survey was undertaken to report on the presence or suspected presence of readily observable designated substances and hazardous materials.

1.1 Scope of Work

The scope of work for our investigation included:

- review of existing information;
- investigation of readily-accessible areas in the designated study areas for the presence of designated substances and hazardous materials used in building construction materials;
- obtaining representative bulk samples of materials suspected of containing asbestos and paint chip samples;
- laboratory analyses of bulk samples for asbestos content;
- laboratory analysis of paint chip samples for lead content; and
- preparation of a report outlining the findings of the investigation.

Mr. Viraj Daruwala of Arcadis visited the site on May 3, 2022 to conduct the designated substances and hazardous materials survey at Aldershot High School.

2 REGULATORY DISCUSSION AND METHODOLOGY

Ontario Occupational Health and Safety Act (OHSA)

The Ontario *Occupational Health and Safety Act* (OHSA) sets out, in very general terms, the duties of employers and others to protect workers from health and safety hazards on the job. These duties include, but are not limited to:

- taking all reasonable precautions to protect the health and safety of workers [clause 25(2)(h)];
- ensuring that equipment, materials and protective equipment are maintained in good condition [clause 25(1)(b)];
- providing information, instruction and supervision to protect worker health and safety [clause 25(2)(a)]; and
- acquainting a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent [clause 25(2)(d)].

In addition, Section 30 of the OHSA deals with the presence of designated substances on construction projects. Compliance with the OHSA and its regulations requires action to be taken where there is a designated substance hazard on a construction project.

Section 30 of the OHSA requires the owner of a project to determine if designated substances are present on a project and, if so, to inform all potential contractors as part of the bidding process. Contractors who receive this information are to pass it onto other contractors and subcontractors who are bidding for work on the project.

Regulation for Construction Projects, O.Reg. 213/91

The *Regulation for Construction Projects*, O.Reg. 213/91, applies to all construction projects. The following sections of the regulation would apply to situations where there is the potential for workers to be exposed to designated substances:

- Section 14 (5) A competent person shall perform tests and observations necessary for the detection of hazardous conditions on a project.
- Section 21 (1) A worker shall wear such protective clothing and use such personal protective equipment or devices as are necessary to protect the worker against the hazards to which the worker may be exposed.
- (2) A worker's employer shall require the worker to comply with subsection (1).

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDERSHOT HIGH SCHOOL

- (3) A worker required to wear personal protective clothing or use personal protective equipment or devices shall be adequately instructed and trained in the care and use of the clothing, equipment or device before wearing or using it.
- Section 30 Workers who handle or use substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels.
- Section 46 (1) A project shall be adequately ventilated by natural or mechanical means,
- (a) if a worker may be injured by inhaling a noxious...dust or fume;
- (2) If it is not practicable to provide natural or mechanical ventilation in the circumstances described in clause (1)(a), respiratory protective equipment suitable for the hazard shall be provided and be used by the workers.
- Section 59 If the dissemination of dust is a hazard to a worker, the dust shall be adequately controlled or each worker who may be exposed to the hazard shall be provided with adequate personal protective equipment.

Regulation for Designated Substances (O.Reg. 490/09)

The *Designated Substance Regulation* (O.Reg. 490/09) specifies occupational exposure limits (OELs) for designated substances and requires an assessment and a control program to ensure compliance with these OELs.

Although, O.Reg. 490/09 and the OELs do not apply to an employer on a construction project, or to their workers at the project, employers still have a responsibility to protect the health of their workers and to comply with the OHSA and other applicable regulations. Section 25(2)(h) of the OHSA requires that employers take "every precaution reasonable in the circumstances for the protection of a worker".

Other regulatory requirements (and guidelines) which apply to control of exposure to designated substances and hazardous materials are referenced in the sections below.

2.1 Asbestos

Asbestos has been widely used in buildings, both in friable applications (materials which can be crumbled, pulverized or powdered by hand pressure, when dry) such as pipe and tank insulation, sprayed-on fireproofing and acoustic texture material and in non-friable manufactured products such as floor tile, gaskets, cement board and so on. The use of asbestos in friable applications was curtailed around the mid-1970s and, as such, most buildings constructed prior to about 1975 contain some form of friable construction material with an asbestos content. The use of asbestos in certain non-friable materials continued beyond the mid-1970s.

Control of exposure to asbestos is governed in Ontario by Regulation 278/05 – *Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations*. Disposal of asbestos waste

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY ALDRESHOT HIGH SCHOOL

(friable and non-friable materials) is governed by Ontario Regulation 278/05 and by Ontario Regulation 347, *Waste Management – General*. O.Reg. 278/05 classifies asbestos work operations into three types (Type 1, 2 and 3), as shown in Table C-1 in Appendix C, and specifies procedures to be followed in conducting asbestos abatement work.

2.2 Lead

Lead is a heavy metal that can be found in construction materials such as paints, coatings, mortar, concrete, pipes, solder, packings, sheet metal, caulking, glazed ceramic products and cable splices. Lead has been used historically in exterior and interior paints.

The *Surface Coating Materials Regulations* (SOR/2016-193) made pursuant to the Canada Consumer Product Safety Act states that a surface coating material must not contain more than 90 mg/kg total lead. Health Canada defines a lead-containing surface coating as a paint or similar material that dries to a solid film that contains over 90 mg/kg dry weight of lead.

Information from the United States Occupational Health and Safety Administration (OSHA) suggests that the improper removal of lead paint containing 600 mg/kg lead results in airborne lead concentrations that exceed half of the permissible exposure limit. Lead concentrations as low as 90 mg/kg may present a risk to pregnant women and children⁽¹⁾.

The *National Plumbing Code* allowed lead as an acceptable material for pipes until 1975 and in solder until 1986.

The Ministry of Labour *Guideline, Lead on Construction Projects*, dated April 2011, provides guidance in the measures and procedures that should be followed when handling lead containing materials during construction projects. In the guideline, lead-containing construction operations are classified into three groups - Type 1 (low risk), Type 2 (medium risk) and Type 3 (high risk) based on presumed airborne concentrations of lead, as shown in Appendix C, Table C-2. Any operation that may expose a worker to lead that is not a Type 1, Type 2, or Type 3b operation, is classified as a Type 3a operation.

2.3 Mercury

Mercury has been used in electrical equipment such as alkaline batteries, fluorescent light bulbs (lamps), high intensity discharge (HID) lights (mercury vapour, high pressure sodium and metal halide), “silent switches” and in instruments such as thermometers, manometers and barometers, pressure gauges, float and level switches and flow meters. Mercury-containing lamps, the bulk of which are 1.22 m (four foot) fluorescent lamps contain between 7 and 40 mg of mercury each. Mercury compounds have also been

⁽¹⁾ *Lead-Containing Paints and Coatings: Preventing Exposure in the Construction Industry*. WorkSafe BC, 2011.

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used historically as additives in latex paint to protect the paint from mildew and bacteria during production and storage.

The intentional addition of mercury to Canadian-produced consumer paints for interior use was prohibited in 1991. Mercury may have remained in paints after 1991, however, as a result of impurities in the paint ingredients or cross-contamination due to other manufacturing processes. The *Surface Coating Materials Regulations* made under the *Hazardous Products Act* set a maximum total mercury concentration of 10 mg/kg (0.001 percent) for surface coating materials (including paint). This criterion level applies to the sale and importation of new surface coating materials.

Mercury-containing thermostats and silent light switches are mercury tilt switches which are small tubes with electrical contacts at one end of the tube. A mercury tilt switch is usually present when no switch is visible. Mercury switches often have the word "TOP" stamped on the upper end of the switch, which is visible after removing the cover plate. If mercury switches are to be removed, the entire switch should be removed and placed into a suitable container for storage and disposal.

Waste light tubes generated during renovations or building demolition and waste mercury from equipment must either be recycled or disposed of in accordance with the requirements of Ont. Reg. 347 - *Waste Management, General*.

Waste mercury in amounts less than 5 kg (per month) are exempt from the generator registration requirements prescribed by O.Reg. 347 – *Waste Management – General*. Waste mercury from mercury switches or gauges should, however, be properly collected and shipped to a recycling facility or disposed of as a hazardous waste. Removal of mercury-containing equipment (e.g., switches, gauges, controls, etc.) should be carried out in a manner which prevents spillage and exposure to workers.

2.4 Silica

Silica exists in several forms of which crystalline silica is of most concern with respect to potential worker exposures. Quartz is the most abundant type of crystalline silica. Some commonly used construction materials containing silica include brick, refractory brick, concrete, concrete block, cement, mortar, rock and stone, sand, fill dirt, topsoil and asphalt containing rock or stone.

The Ministry of Labour *Guideline, Silica on Construction Projects*, dated April 2011, provides guidance in controlling exposure to silica dust during construction activities. In the guideline, silica-containing construction operations are classified into three groups - Type 1 (low risk), Type 2 (medium risk) and Type 3 (high risk) based on presumed airborne concentrations of respirable crystalline silica in the form of cristobalite, tridymite, quartz and tripoli as shown in Appendix C, Table C-3.

2.5 Vinyl Chloride

Vinyl chloride vapours may be released from polyvinyl chloride (PVC) products in the event of heating or as a result of decomposition during fire. PVC is used in numerous materials that may be found in building construction, including, for example, piping, conduits, siding, window and door frames, plastics, garden hoses, flooring and wire and cable protection.

2.6 Acrylonitrile

Acrylonitrile is used to produce nitrile-butadiene rubber, acrylonitrile-butadiene-styrene (ABS) polymers and styrene-acrylonitrile (SAN) polymers. Products made with ABS resins which may be found in buildings include telephones, bottles, packaging, refrigerator door liners, plastic pipe, building panels and shower stalls. Acrylonitrile can be released into the air by combustion of products containing ABS.

2.7 Other Designated Substances

Isocyanates are a class of chemicals used in the manufacture of certain types of plastics, foams, coatings and other products. Isocyanate-based building construction materials may include rigid foam products such as foam-core panels and spray-on insulation and paints, coatings, sealants and adhesives. Isocyanates may be inhaled if they are present in the air in the form of a vapour, a mist or a dust.

Benzene is a clear, highly flammable liquid used mainly in the manufacture of other chemicals. The commercial use of benzene as a solvent has practically been eliminated, however it continues to be used as a solvent and reactant in laboratories.

Arsenic is a heavy metal used historically in pesticides and herbicides. The primary use in building construction materials was its use in the wood preservative chromated copper arsenate (CCA). CCA was used to pressure treat lumber since the 1940's. Pressure-treated wood containing CCA is no longer being produced for use in most residential settings.

Ethylene oxide is a colourless gas at room temperature. It has been used primarily for the manufacture of other chemicals, as a fumigant and fungicide and for sterilization of hospital equipment.

Coke oven emissions are airborne contaminants emitted from coke ovens and are not a potential hazard associated with building construction materials.

2.8 Polychlorinated Biphenyls (PCBs)

The management of equipment classified as waste and containing Polychlorinated Biphenyls (PCBs) at concentrations of 50 parts per million (mg/kg) or greater is regulated by Ontario Regulation 362, *Waste Management – PCBs*. Under this regulation, PCB waste is defined as any waste material containing PCBs in concentrations of 50 mg/kg or greater. Any equipment containing PCBs at or greater than this level, such as transformers, switchgear, light ballasts and capacitors, which is removed from service due to age, failure or as a result of decommissioning, is considered to constitute a PCB waste. Although current federal legislation (effective 1 July 1980) has prohibited the manufacture and sale of new equipment containing PCBs since that time, continued operation of equipment supplied prior to this date and containing PCBs is still permitted. Handling, storage and disposition of such equipment is, however, tightly regulated and must be managed in accordance with provincial and federal government requirements as soon as it is taken out of service or becomes unserviceable.

In most institutional, commercial facilities and in smaller industrial facilities, the primary source of equipment potentially containing PCBs is fluorescent and H.I.D. light ballasts. Small transformers may also be present.

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In larger industrial facilities, larger transformers and switch gear containing, or potentially containing, PCBs may also be present.

PCBs were also commonly added to industrial paints from the 1940s to the late 1970s. PCBs were added directly to the paint mixture to act as a fungicide, to increase durability and flexibility, to improve resistance to fires and to increase moisture resistance. The use of PCBs in new products was banned in Canada in the 1970s. PCB amended paints were used in specialty industrial/institutional applications prior to the 1970s including government buildings and equipment such as industrial plants, radar sites, ships as well as non-government rail cars, ships, grain bins, automobiles and appliances.

Removal of in-service equipment containing PCBs, such as fluorescent light ballasts, capacitors and transformers, is subject to the requirements of the federal *PCB Regulations* (discussed below).

The *PCB Regulations*, which came into force on 5 September 2008, were made under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) with the objective of addressing the risks posed by the use, storage and release to the environment of PCBs, and to accelerate their destruction. The *PCB Regulations* set different end-of-use deadlines for equipment containing PCBs at various concentration levels.

The Regulations Amending the PCB Regulations and Repealing the Federal Mobile PCB Treatment and Destruction Regulations were published on 23 April 2014, in the Canada Gazette, Part II, and came into force on 1 January 2015. The most notable part of the amendments is the addition of an end-of-use deadline date of 31 December 2025 for specific electrical equipment located at electrical generation, transmission and distribution facilities.

When the PCB materials are classified as waste, jurisdiction falls under the Ontario Ministry of the Environment and Climate Change (MOECC) and O.Reg. 362. All remedial and PCB management work must be carried out under the terms of a Director's Instruction issued by an MOECC District Office (for quantities of PCB fluid greater than 50 litres). The PCB waste stream, regardless of quantity, must be registered with the MOECC, in accordance with O.Reg. 347, *General - Waste Management*. O.Reg. 362 applies to any equipment containing greater than 1 kg of PCBs.

2.9 Ozone-Depleting Substances (ODS) and Other Halocarbons

Ontario Regulation 463/10 – *Ozone Depleting Substances and Other Halocarbons*, applies to the use, handling and disposal of Class 1 ozone-depleting substances, including various chlorofluorocarbons (CFCs), halons and other halocarbons, Class 2 ozone-depleting substances, including various hydrochlorofluorocarbons (HCFCs) and halocarbons, and other halocarbons, including fluorocarbons (FCs) and hydrofluorocarbons (CFCs). The most significant requirements for handling of ozone-depleting substances (ODS) and other Halocarbons, which include, for example, refrigerants used in refrigeration equipment and chillers, include the following:

- certification is required for all persons testing, repairing, filling or emptying equipment containing ODS and other halocarbons;

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- the discharge of a Class 1 ODS or anything that contains a Class 1 ODS to the natural environment or within a building is prohibited;
- the making, use of, selling of or transferring of a Class 1 ODS is restricted to certain conditions;
- the discharge of a solvent or sterilant that contains a Class 2 ODS is prohibited;
- the making, use of, selling of or transferring of a solvent or sterilant that contains a Class 2 ODS is restricted to certain conditions;
- fire extinguishing equipment that contains a halon may be discharged to fight fires, except fires for firefighting training purposes;
- portable fire extinguishing equipment that contains a halon may be used or stored if the extinguisher was sold for use for the first time before 1 January 1996;
- records of the servicing and repair of equipment containing ODS and other halocarbons must be prepared and maintained by the owner of the equipment; and
- equipment no longer containing ODS and other halocarbons must be posted with a notice completed by a certified person.

Ontario Regulation 347, *General – Waste Management*, has also been amended to provide for more strict control of CFCs. The requirements under the amended regulation apply primarily to the keeping of records for the receipt or recycling of CFC waste.

2.10 Mould

Moulds are forms of fungi that are found everywhere both indoors and outdoors all year round. Outdoors, moulds live in the soil, on plants and on dead and decaying matter. More than 1000 different kinds of indoor moulds have been found in buildings. Moulds spread and reproduce by making spores, which are all small and light-weight, able to travel through air, capable of resisting dry, adverse environmental conditions, and hence capable of surviving a long time. Moulds need moisture and nutrients to grow and their growth is stimulated by warm, damp and humid conditions.

Control of exposure to mould is required under Section 25(2)(h) of the Ontario *Occupational Health and Safety Act*, which states that employers shall take every precaution reasonable in the circumstances for the protection of workers. Recommended work practices are outlined in the following documents:

- *Mould Guidelines for the Canadian Construction Industry*. Standard Construction Document CCA 82 2004. Canadian Construction Association.
- *Mould Abatement Guidelines*. Environmental Abatement Council of Ontario. Edition 3. 2015.

3 RESULTS AND DISCUSSION

3.1 Asbestos

Arcadis reviewed a report prepared by Arcadis for the Halton District School Board entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 23, 2020, *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 18, 2019 and *Survey of Asbestos-Containing Materials, Aldershot High School, 50 Fairwood Park W., Burlington, Ontario* dated December 14, 2018. Information and/or bulk sample analysis results obtained from this report was utilized by Arcadis during the course of our investigation and in the preparation of this report.

During the course of our site investigation, representative bulk samples of material were collected by Arcadis staff. The samples were forwarded to EMSL Canada Inc. (EMSL) for asbestos analyses. Results of bulk sample analysis for asbestos content are provided in Table 3.1. Table 3.1 also includes sample results that are outside of the designated study areas. This information is provided for references purposes only. The laboratory report is provided in Appendix B. Locations of accessible asbestos-containing materials are outlined on the floor plan provided in Appendix A.

Table 3.1. Summary of Results of Analyses of Bulk Samples for Asbestos Content

Sample No.	Sample Location	Sample Description	Asbestos Content
1-A	128F	Block filler paint – 1968 era	None detected
1-B	128 I	Block filler paint – 1968 era	None detected
1-C	104	Block filler paint – 1968 era	None detected
2-A	128A	Brick mortar – 1960 era	None detected
2-B	128A	Brick mortar – 1960 era	None detected
2-C	254	Brick mortar – 1960 era	None detected
3-A	128A	Block filler paint – 1960 era	None detected
3-B	128A	Block filler paint – 1960 era	None detected
3-C	128D	Block filler paint – 1960 era	None detected
4-A	128A	Concrete block mortar – 1960 era	None detected
4-B	128A	Concrete block mortar – 1960 era	None detected
4-C	128D	Concrete block mortar – 1960 era	None detected
5-A	128H	Carpet mastic	None detected
5-B	128H	Carpet mastic	None detected
5-C	128H	Carpet mastic	None detected
6-A	128D	Mastic under 12"x12" vinyl floor tile	1% Chrysotile
7-A	128E	Mastic under 12"x12" beige vinyl floor tile with beige and white flecks	None detected
7-B	128E	Mastic under 12"x12" beige vinyl floor tile with beige and white flecks	None detected

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Sample No.	Sample Location	Sample Description	Asbestos Content
7-C	128E	Mastic under 12"x12" beige vinyl floor tile with beige and white flecks	None detected
8-A	128G	Concrete block mortar - 1968 era	<1% Chrysotile <0.25% Chrysotile ⁽⁴⁾
8-B	128I	Concrete block mortar - 1968 era	None detected
8-C	128F	Concrete block mortar - 1968 era	<1% Chrysotile <0.25% Chrysotile ⁽⁴⁾
9-A	254	Mastic under 12" white with yellow and orange flecks floor tiles	1% Chrysotile
10-A	104	Brick mortar	<1% Chrysotile 0.25% Chrysotile ⁽⁴⁾
10-B	104	Brick mortar	<1% Chrysotile 0.25% Chrysotile ⁽⁴⁾
10-C	104	Brick mortar	None detected
1A	Room 109	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
1A	Room 109	Texture/Rough coat on concrete block wall, 1968 Era	0.25% chrysotile ^(1, 4)
1B	Room 109	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
1B	Room 109	Texture/Rough coat on concrete block wall, 1968 Era	0.25% chrysotile ^(1, 4)
1C	Room 111	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
1C	Room 111	Texture/Rough coat on concrete block wall, 1968 Era	0.25% chrysotile ^(1, 4)
2A	109	Mortar, concrete block wall, 1968 Era	None detected ⁽¹⁾
2B	111	Mortar, concrete block wall, 1968 Era	None detected ⁽¹⁾
2C	C13	Mortar, concrete block wall, 1968 Era	None detected ⁽¹⁾
3A	Room 109	Acoustic wall tile, tectum board	None detected ⁽¹⁾
3B	Room 109	Acoustic wall tile, tectum board	None detected ⁽¹⁾
3C	Room 109	Acoustic wall tile, tectum board	None detected ⁽¹⁾
4A	Room 109	Drywall joint compound	None detected ⁽¹⁾
4B	Room 109A	Drywall joint compound	None detected ⁽¹⁾
4C	Room 109C	Drywall joint compound	None detected ⁽¹⁾
5A	Room 109	Beige Baseboard	None detected (PLM) None detected (TEM) ⁽¹⁾
5B	Room 111	Beige Baseboard	None detected ⁽¹⁾
5C	Room 241	Beige Baseboard	None detected ⁽¹⁾
6A	Room 109	Mastic behind beige baseboard	None detected ⁽¹⁾
6B	Room 111	Mastic behind beige baseboard	None detected ⁽¹⁾
6C	Room 241	Mastic behind beige baseboard	None detected ⁽¹⁾
7A	Room 109	Mastic below carpet	None detected ⁽¹⁾
7B	Room 109	Mastic below carpet	None detected ⁽¹⁾

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Sample No.	Sample Location	Sample Description	Asbestos Content
7C	Room 109	Mastic below carpet	None detected ⁽¹⁾
8A	Room 109	Beige coating under sink	None detected ⁽¹⁾
8B	Room 109	Beige coating under sink	None detected ⁽¹⁾
8C	Room 109	Beige coating under sink	None detected ⁽¹⁾
9A	Room 241	Mastic behind 12"x12" acoustic wall tile	None detected ⁽¹⁾
9B	Room 241	Mastic behind 12"x12" acoustic wall tile	None detected ⁽¹⁾
9C	Room 241	Mastic behind 12"x12" acoustic wall tile	None detected ⁽¹⁾
10A	Room 241	White caulking on door frame	1% chrysotile ⁽¹⁾
11A	Room 241	12"x12" vinyl floor tile, beige with beige fleck	None detected (PLM) None detected (TEM) ⁽¹⁾
11B	Room 241	12"x12" vinyl floor tile, beige with beige fleck	None detected ⁽¹⁾
11C	Room 241	12"x12" vinyl floor tile, beige with beige fleck	None detected ⁽¹⁾
12A	Room 241	Mastic below 12"x12" vinyl floor tile, beige with beige fleck	2% chrysotile ⁽¹⁾
13A	Room 241	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
13B	Room 241	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
13C	Room 241	Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
13C	Room 241	Concrete, Paint on concrete block wall, 1968 Era	None detected ⁽¹⁾
14A	C204	Mortar on concrete block wall, 1968	0.25% chrysotile ^(1, 4)
14B	Room 241	Mortar on concrete block wall, 1968	0.25% chrysotile ^(1, 4)
14C	C204	Mortar on concrete block wall, 1968	0.25% chrysotile ^(1, 4)
15A	C204	9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected (PLM) None detected (TEM)
15B	C204	9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected ⁽¹⁾
15C	C204	9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected ⁽¹⁾
16A	C204	Mastic below 9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected ⁽¹⁾
16B	C204	Mastic below 9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected ⁽¹⁾
16C	C204	Mastic below 9"x9" vinyl floor tile, beige with yellow and brown streaks	None detected ⁽¹⁾
1A	Room 116	Interior brick mortar, 1960	None detected ⁽²⁾
1B	Room 116	Interior brick mortar, 1960	None detected ⁽²⁾
1C	Room 116	Interior brick mortar, 1960	None detected ⁽²⁾
2A	Room 116	Concrete block mortar, 1960	None detected ⁽²⁾
2B	Room 119	Concrete block mortar, 1960	None detected ⁽²⁾
2C	Room 219B	Concrete block mortar, 1960	None detected ⁽²⁾

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Sample No.	Sample Location	Sample Description	Asbestos Content
3A	Room 119	Concrete block paint, 1960	<0.25% chrysotile ^(2, 4)
3B	Room 116	Concrete block paint, 1960	<0.25% chrysotile ^(2, 4)
3C	Room 121	Concrete block paint, 1960	<0.25% chrysotile ^(2, 4)
4A	Room 219B	Drywall joint compound, 1960	None detected ⁽²⁾
4B	Room 119	Drywall joint compound, 1960	None detected ⁽²⁾
4C	Room 116	Drywall joint compound, 1960	None detected ⁽²⁾
5A	Room 116	Floor mastic below beige vinyl floor tile	None detected ⁽²⁾
5B	Room 116	Floor mastic below beige vinyl floor tile	None detected ⁽²⁾
5C	Room 116	Floor mastic below beige vinyl floor tile	None detected ⁽²⁾
6A	Room 116	Interior window caulking, silver	None detected (PLM) None detected (TEM) ⁽²⁾
6B	Room 116	Interior window caulking, silver	None detected ⁽²⁾
6C	Room 116	Interior window caulking, silver	None detected ⁽²⁾
7A	Room 116	Exterior window caulking, grey	None detected (PLM) None detected (TEM) ⁽²⁾
7B	Room 116	Exterior window caulking, grey	None detected ⁽²⁾
7C	Room 116	Exterior window caulking, grey	None detected ⁽²⁾
8A	Room 219A	Cement board on wall, uniform holes	18% chrysotile ⁽²⁾
9A	Room 110	Concrete block mortar, 1965	None detected ⁽²⁾
9B	Room 108	Concrete block mortar, 1965	None detected ⁽²⁾
9C	Room 209	Concrete block mortar, 1965	None detected ⁽²⁾
10A	Room 108	Concrete block paint, 1965	None detected ⁽²⁾
10B	Room 108	Concrete block paint, 1965	None detected ⁽²⁾
10C	Room 108	Concrete block paint, 1965	None detected ⁽²⁾
11A	Room 108	Ceramic tile grout, blue tiles	None detected ⁽²⁾
11B	Room 108	Ceramic tile grout, blue tiles	None detected ⁽²⁾
11C	Room 108	Ceramic tile grout, blue tiles	0.25% chrysotile ^(2, 4)
12A	Room 108	Ceramic mortar bed, blue tiles	None detected ⁽²⁾
12B	Room 108	Ceramic mortar bed, blue tiles	None detected ⁽²⁾
12C	Room 108	Ceramic mortar bed, blue tiles	None detected ⁽²⁾
13A	Room 108	Floor mastic	None detected ⁽²⁾
13B	Room 108	Floor mastic	None detected ⁽²⁾
13C	Room 108	Floor mastic	None detected ⁽²⁾
14A	Room 110	Mastic below pink vinyl floor tiles (Analyze mastic only)	None detected ⁽²⁾
14B	Room 110	Mastic below pink vinyl floor tiles (Analyze mastic only)	None detected ⁽²⁾
14C	Room 110	Mastic below pink vinyl floor tiles (Analyze mastic only)	None detected ⁽²⁾
15A	Room 108	12"x12" Beige vinyl floor tile below turquoise vinyl floor tiles	None detected (PLM) None detected (TEM) ⁽²⁾

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Sample No.	Sample Location	Sample Description	Asbestos Content
15B	Room 108	12"x12" Beige vinyl floor tile below turquoise vinyl floor tiles	None detected ⁽²⁾
15C	Room 108	12"x12" Beige vinyl floor tile below turquoise vinyl floor tiles	None detected ⁽²⁾
16A	Room 108	12"x12" Turquoise vinyl floor tiles	None detected (PLM) None detected (TEM) ⁽²⁾
16B	Room 108	12"x12" Turquoise vinyl floor tiles	None detected ⁽²⁾
16C	Room 108	12"x12" Turquoise vinyl floor tiles	None detected ⁽²⁾
17A	Room 110	Drywall joint compound, 1965	None detected ⁽²⁾
17B	Room 110	Drywall joint compound, 1965	None detected ⁽²⁾
17C	Room 110	Drywall joint compound, 1965	None detected ⁽²⁾
18A	Room 110	Black vinyl baseboard	None detected (PLM) None detected (TEM) ⁽²⁾
18B	Room 110	Black vinyl baseboard	None detected ⁽²⁾
18C	Room 110	Black vinyl baseboard	None detected ⁽²⁾
19A	Room 110	Mastic on black vinyl baseboard	None detected ⁽²⁾
19B	Room 110	Mastic on black vinyl baseboard	None detected ⁽²⁾
19C	Room 110	Mastic on black vinyl baseboard	None detected ⁽²⁾
20A	Room 110	Cement fumehood	None detected ⁽²⁾
20B	Room 110	Cement fumehood	None detected ⁽²⁾
21A	Room 110	Cement storage cabinet	None detected ⁽²⁾
21B	Room 110	Cement storage cabinet	None detected ⁽²⁾
21C	Room 110	Cement storage cabinet	None detected ⁽²⁾
22A	Room 110	Cement back splash	None detected ⁽²⁾
22B	Room 110	Cement countertop	None detected ⁽²⁾
22C	Room 110	Cement countertop	None detected ⁽²⁾
23A	Room 108	Pipe fitting insulation	65% chrysotile ⁽²⁾
24A	Room 233B	Interior brick mortar, 1968	None detected ⁽²⁾
24B	Room 233B	Interior brick mortar, 1968	None detected ⁽²⁾
24C	Room 233B	Interior brick mortar, 1968	None detected ⁽²⁾
25A	Room 233B	Concrete block mortar, 1968	<0.25% chrysotile ^(2, 4)
25B	Room 233B	Concrete block mortar, 1968	<0.25% chrysotile ^(2, 4)
25C	Room 233B	Concrete block mortar, 1968	<0.25% chrysotile ^(2, 4)
26A	Room 209	Cement board	15% chrysotile ⁽²⁾
27A	Corridor 5	2'x4' suspended ceiling tiles, deep fissures in 2'	None detected ⁽²⁾
28A	Room 110	2'x4' suspended ceiling tiles, circular pattern	None detected ⁽²⁾
29A	Room 108	Pipe straight insulation, anti-sweat	<0.25% chrysotile ^(2, 4)
1A	Staff Room	9"x 9" Vinyl Floor Tile. Brown with brown and white streaks.	5.1% Chrysotile ⁽³⁾

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Sample No.	Sample Location	Sample Description	Asbestos Content
2A	Staff Room	12"x12" Uniform medium size dot, gray core, 22 holes.	1.3 % Amosite ⁽³⁾
3A	Staff Room	12"x12" Small hole/ Large hole gray core.	None Detected ⁽³⁾
3B	Staff Room	12"x12" Small hole/ Large hole gray core.	None Detected ⁽³⁾
3C	Staff Room	12"x12" Small hole/ Large hole gray core.	None Detected ⁽³⁾
4A	165 B	Black tar paper on glass fiber duct work.	None Detected ⁽³⁾
4B	165 B	Black tar paper on glass fiber duct work.	3.9% Chrysotile ^(3, 5)
5A	165	2'x4' Birds feet with dots, brown back.	None Detected ⁽³⁾
5B	165	2'x4' Birds feet with dots, brown back.	None Detected ⁽³⁾
5C	165	2'x4' Birds feet with dots, brown back.	None Detected ⁽³⁾
6A	C-1	2'x4' USG RADAR; Random fissure.	None Detected ⁽³⁾
6B	C-1	2'x4' USG RADAR; Random fissure.	None Detected ⁽³⁾
6C	C-1	2'x4' USG RADAR; Random fissure.	None Detected ⁽³⁾
7A	148 C	12"x12" Vinyl floor tile, Beige with burgundy streaks.	None Detected ⁽³⁾
7B	148 C	12"x12" Vinyl floor tile, Beige with burgundy streaks.	None Detected ⁽³⁾
7C	148 C	12"x12" Vinyl floor tile, Beige with burgundy streaks.	None Detected ⁽³⁾
8A	148 Office	2'x4' Random Fissure brown back, black lettering.	None Detected ⁽³⁾
8B	148 Office	2'x4' Random Fissure brown back, black lettering.	None Detected ⁽³⁾
8C	148 Office	2'x4' Random Fissure brown back, black lettering.	None Detected ⁽³⁾
9A	148	Drywall joint compound.	None Detected ⁽³⁾
9B	148	Drywall joint compound.	None Detected ⁽³⁾
9C	C-3	Drywall joint compound.	None Detected ⁽³⁾
10A	V-1	Exterior texture coat.	None Detected ⁽³⁾
10B	V-1	Exterior texture coat.	None Detected ⁽³⁾
10C	V-1	Exterior texture coat.	None Detected ⁽³⁾
11A	145 B	12"x12" Vinyl Floor tile; Beige with white and beige streaks.	None Detected ⁽³⁾
11B	145 B	12"x12" Vinyl Floor tile; Beige with white and beige streaks.	None Detected ⁽³⁾
11C	145 B	12"x12" Vinyl Floor tile; Beige with white and beige streaks.	None Detected ⁽³⁾
12A	164	12"x12" Circular pattern.	None Detected ⁽³⁾
12B	164	12"x12" Circular pattern.	None Detected ⁽³⁾
12C	164	12"x12" Circular pattern.	None Detected ⁽³⁾
13A	165B	Duct Insulation.	31% Chrysotile ^(3, 5)

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDERSHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
14A	164	12"x12" Vinyl floor tile; Beige with brown and pink blobs.	None Detected ⁽³⁾
14B	164	12"x12" Vinyl floor tile; Beige with brown and pink blobs.	None Detected ⁽³⁾
14C	164	12"x12" Vinyl floor tile; Beige with brown and pink blobs.	None Detected ⁽³⁾
15A	Mechanical Room 123	Anti-sweat pipe straight insulation.	None Detected ⁽³⁾
15B	Mechanical Room 123	Anti-sweat pipe straight insulation.	None Detected ⁽³⁾
15C	Mechanical Room 123	Anti-sweat pipe straight insulation.	None Detected ⁽³⁾
16A	Mechanical Room 123	"Aircell" pipe straight insulation.	39% Chrysotile ⁽³⁾
17A	Mechanical Room 123	Water Meter insulation.	None Detected ⁽³⁾
17B	Mechanical Room 123	Water Meter insulation.	None Detected ⁽³⁾
17C	Mechanical Room 123	Water Meter insulation.	None Detected ⁽³⁾
18A	Mechanical Room 123	Holding tank insulation.	18% Chrysotile ⁽³⁾
19A	125 G	2'x4' Deep fissure on 2ft; embossed 'F' on back natural back.	None Detected ⁽³⁾
19B	125 G	2'x4' Deep fissure on 2ft; embossed 'F' on back natural back.	None Detected ⁽³⁾
19C	125 G	2'x4' Deep fissure on 2ft; embossed 'F' on back natural back.	None Detected ⁽³⁾
20A	125 F	2'x4' Shallow fissure on 2ft; natural back.	None Detected ⁽³⁾
20B	125 F	2'x4' Shallow fissure on 2ft; natural back.	None Detected ⁽³⁾
20C	125 F	2'x4' Shallow fissure on 2ft; natural back.	None Detected ⁽³⁾
21A	125 C	2'x4' Random fissure brown back black lettering.	None Detected ⁽³⁾
21B	125 C	2'x4' Random fissure brown back black lettering.	None Detected ⁽³⁾
21C	125 C	2'x4' Random fissure brown back black lettering.	None Detected ⁽³⁾
22A	125	Wall plaster.	None Detected ⁽³⁾
22B	125	Wall plaster.	None Detected ⁽³⁾
22C	125	Wall plaster.	None Detected ⁽³⁾
23A	C-4	2'x4' Small dot stippled.	None Detected ⁽³⁾
23B	C-4	2'x4' Small dot stippled.	None Detected ⁽³⁾
23C	C-4	2'x4' Small dot stippled.	None Detected ⁽³⁾
24A	C-4	2'x4' fissure on 2ft, natural back.	None Detected ⁽³⁾

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
24B	C-4	2'x4' fissure on 2ft, natural back.	None Detected ⁽³⁾
24C	C-4	2'x4' fissure on 2ft, natural back.	None Detected ⁽³⁾
25A	V-3	Exterior texture coat; cream.	None Detected ⁽³⁾
25B	V-3	Exterior texture coat; cream.	None Detected ⁽³⁾
25C	V-3	Exterior texture coat; cream.	None Detected ⁽³⁾
26A	V-3	Ceiling plaster texture coat.	None Detected ⁽³⁾
26B	V-3	Ceiling plaster texture coat.	None Detected ⁽³⁾
26C	V-3	Ceiling plaster texture coat.	None Detected ⁽³⁾
27A	V-3	Exterior coat – Acoustic spray.	0.75% Chrysotile ⁽³⁾
28A	116	Interior fume hood.	Sample not analyzed ⁽³⁾ Assumed to be asbestos
29A	116	Heat shield.	68% Chrysotile ⁽³⁾
30A	128	2'x4' Circular pattern; Natural back.	None Detected ⁽³⁾
30B	128	2'x4' Circular pattern; Natural back.	None Detected ⁽³⁾
30C	128	2'x4' Circular pattern; Natural back.	None Detected ⁽³⁾
31A	128 D	12"x12" Vinyl floor tile; White with green streaks.	18% Chrysotile ⁽³⁾
32A	151K	Textured Plaster.	0.3% Chrysotile ^(3, 4)
32B	151 K	Textured Plaster.	0.6% Chrysotile ⁽³⁾
33A	160-1	Textured material on lower ceiling.	0.75% Chrysotile ⁽³⁾
34A	160-1	Textured material on perimeter above lower.	6% Chrysotile ⁽³⁾
35A	160-2	Textured material on upper level ceiling.	0.75% Chrysotile ⁽³⁾
36A	157	12"x12" directional fissure: yellowish body.	None Detected ⁽³⁾
36B	157	12"x12" directional fissure: yellowish body.	None Detected ⁽³⁾
36C	157	12"x12" directional fissure: yellowish body.	None Detected ⁽³⁾
37A	157B	Smooth Ceiling plaster.	None Detected ⁽³⁾
37B	157B	Smooth Ceiling plaster.	None Detected ⁽³⁾
37C	157B	Smooth Ceiling plaster.	None Detected ⁽³⁾
38A	156	12"x12" Vinyl floor tile; White with gray and black fleck.	None Detected ⁽³⁾
38B	156	12"x12" Vinyl floor tile; White with gray and black fleck.	None Detected ⁽³⁾
38C	156	12"x12" Vinyl floor tile; White with gray and black fleck.	None Detected ⁽³⁾
39A	254	12"x12" Vinyl floor tile; Beige with brown and orange streaks.	None Detected ⁽³⁾
39B	254	12"x12" Vinyl floor tile; Beige with brown and orange streaks.	None Detected ⁽³⁾
39C	254	12"x12" Vinyl floor tile; Beige with brown and orange streaks.	None Detected ⁽³⁾
40A	253	Smooth Ceiling Plaster.	None Detected ⁽³⁾

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDERSHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
41A	253	Door soffit cement board.	Sample not analyzed ⁽³⁾ Assumed to be asbestos
42A	229	9"x9" Vinyl floor tiles; Wheat	None Detected ⁽³⁾
42B	229	9"x9" Vinyl floor tiles; Wheat	None Detected ⁽³⁾
42C	229	9"x9" Vinyl floor tiles; Wheat	None Detected ⁽³⁾
43A	229	12"x12" Vinyl floor tiles; Beige with burgundy streaks light.	None Detected ⁽³⁾
43B	229	12"x12" Vinyl floor tiles; Beige with burgundy streaks light.	None Detected ⁽³⁾
43C	229	12"x12" Vinyl floor tiles; Beige with burgundy streaks light.	None Detected ⁽³⁾
44A	234	12"x12" Vinyl floor tiles; beige worn look.	1.4% Chrysotile ⁽³⁾
45A	234	9"x9" Vinyl floor tile; Brown blend, jule back	None Detected ⁽³⁾
45B	234	9"x9" Vinyl floor tile; Brown blend, jule back	None Detected ⁽³⁾
45C	234	9"x9" Vinyl floor tile; Brown blend, jule back	None Detected ⁽³⁾
46A	217	12"x12" Vinyl floor tiles; beige with wine streaks	None Detected ⁽³⁾
46B	217	12"x12" Vinyl floor tiles; beige with wine streaks	None Detected ⁽³⁾
47A	215	9"x9" Vinyl floor tile; aqua with white streaks.	13.4% Chrysotile ⁽³⁾
48A	215	9"x9" Vinyl floor tile; Gray with white streaks	7.7% Chrysotile ⁽³⁾
51A	215	9"x9" Vinyl floor tile; Yellow	11.9% Chrysotile ⁽³⁾
52A	215	9"x9" Vinyl floor tile; Charcoal	14.4% Chrysotile ⁽³⁾
53A	218	9"x9" Vinyl floor tile; Brown/ Gray with white streaks	12.3% Chrysotile ⁽³⁾
54A	216	9"x9" Vinyl floor tile; Red	9.6% Chrysotile ⁽³⁾
55A	216	9"x9" Vinyl floor tile; Light gray	15.4% Chrysotile ⁽³⁾
57A	V-5	Exterior soffit	None Detected ⁽³⁾
58A	111	Fibrous material on top of exterior wall	Sample not analyzed ⁽³⁾ Assumed to be asbestos
59A	106	Anti-sweat from large fitting with black paper	None Detected ⁽³⁾
59B	106	Anti-sweat from large fitting with black paper	None Detected ⁽³⁾
59C	106	Anti-sweat from large fitting with black paper	None Detected ⁽³⁾
60	106 (mezzanine)	Transite board	Sample not analyzed ⁽³⁾ Assumed to be asbestos
61A	108	12"x12" Vinyl floor tiles; white with beige and cream flecks	None Detected ⁽³⁾
61B	108	12"x12" Vinyl floor tiles; white with beige and cream flecks	None Detected ⁽³⁾

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDERSHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
61C	108	12"x12" Vinyl floor tiles; white with beige and cream flecks	None Detected ⁽³⁾
62A	108B	2'x4' random fissure brown back	None Detected ⁽³⁾
62B	108B	2'x4' random fissure brown back	None Detected ⁽³⁾
62C	108B	2'x4' random fissure brown back	None Detected ⁽³⁾
64A	108 (C-10)	Drywall joint compound (several layers)	None Detected ⁽³⁾
64B	136	Drywall joint compound	None Detected ⁽³⁾
64C	239	Drywall joint compound (several layers)	None Detected ⁽³⁾
65A	110	12"x12" Vinyl floor tiles; Aqua with turquoise specks	Sample not analyzed ⁽³⁾ Assumed to be asbestos
66A	110	12"x12" Vinyl floor tiles; Pink	None Detected ⁽³⁾
66B	110	12"x12" Vinyl floor tiles; Pink	None Detected ⁽³⁾
66C	110	12"x12" Vinyl floor tiles; Pink	None Detected ⁽³⁾
68A	110	Transite fume hood	None Detected ⁽³⁾
69A	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
69B	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
69C	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
77A	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
77B	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
77C	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
79A	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
79B	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
79B	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
81A	128G	Ceiling Plaster	None Detected ⁽³⁾
81B	128G	Ceiling Plaster	None Detected ⁽³⁾
81C	128G	Ceiling Plaster	None Detected ⁽³⁾
82A	131	12"x12" Vinyl floor tile; White with gray fleck	8.4% Chrysotile ⁽³⁾
83A	131	12"x12" Vinyl floor tile; green with white and green fleck.	8.6% Chrysotile ⁽³⁾
85A	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
85B	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
85C	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
86A	135	Transite counter top (Black splash)	2.3% Chrysotile ⁽³⁾
87A	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾
87B	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
87C	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾
88A	C-13	Transite pipe straight	7% Crocidolite ⁽³⁾ 4% Chrysotile ⁽³⁾
89A	241	Texture coat on masonry	None Detected ⁽³⁾
89B	241	Texture coat on masonry	None Detected ⁽³⁾
89C	241	Texture coat on masonry	None Detected ⁽³⁾
90	233B	Duct insulation	23% Chrysotile ⁽³⁾
91A	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
91B	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
91C	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
97A	C-15	Cement board – Transite	11% Chrysotile ⁽³⁾
98A	C-15	Drywall joint compound	None Detected ⁽³⁾
98B	C-15	Drywall joint compound	None Detected ⁽³⁾
98C	C-15	Drywall joint compound	None Detected ⁽³⁾
100A	Pool electrical	12"x12" Vinyl floor tile	3.9% Chrysotile ⁽³⁾
101A	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
101B	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
101C	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
102A	Mezzanine	Mechanical, hot water holding tank insulation	None Detected ⁽³⁾
102C	Mezzanine	Mechanical, hot water holding tank insulation	None Detected ⁽³⁾
2A	Room 217	Cement Board	None Detected ⁽³⁾
2B	Room 217	Cement Board	None Detected ⁽³⁾
2C	Room 217	Cement Board	None Detected ⁽³⁾
1-A	Gymnasium 1	Mastic on parquet floor - orange	None Detected (TEM) ⁽³⁾
1-B	Gymnasium 1	Mastic on parquet floor - orange	None Detected ⁽³⁾
1-C	Gymnasium 1	Mastic on parquet floor - orange	None Detected ⁽³⁾
2-A	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected (TEM) ⁽³⁾
2-B	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected ⁽³⁾
2-C	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected ⁽³⁾
3-A	Gymnasium 1	Vinyl baseboards - black	None Detected (TEM) ⁽³⁾
3-B	Gymnasium 1	Vinyl baseboards - black	None Detected ⁽³⁾
3-C	Gymnasium 1	Vinyl baseboards - black	None Detected ⁽³⁾
1A	Room 115	Mastic (Black) - 9" X 9" Vinyl Floor Tiles	3% Chrysotile ^(3,5)
2A	Room 115	Baseboard (Black)	None Detected (PLM) ^(3,5) None Detected (TEM) ^(3,5)
2B	Room 117	Baseboard (Black)	None Detected ^(3,5)

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ALDRESHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
2C	Room 117	Baseboard (Black)	None Detected ^(3, 5)
3A	Room 115	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)
3B	Room 117	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)
3C	Room 117	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)
66C	110	12"x12" Vinyl floor tiles; Pink	None Detected ⁽³⁾
68A	110	Transite fume hood	None Detected ⁽³⁾
69A	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
69B	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
69C	115	12"x12" Vinyl floor tile; green/ aqua	None Detected ⁽³⁾
77A	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
77B	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
77C	128 E	12"x12" Vinyl floor tiles; Beige with brown and black specks.	None Detected ⁽³⁾
79A	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
79B	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
79B	128E	2'x4' white light stippled surface	None Detected ⁽³⁾
81A	128G	Ceiling Plaster	None Detected ⁽³⁾
81B	128G	Ceiling Plaster	None Detected ⁽³⁾
81C	128G	Ceiling Plaster	None Detected ⁽³⁾
82A	131	12"x12" Vinyl floor tile; White with gray fleck	8.4% Chrysotile ⁽³⁾
83A	131	12"x12" Vinyl floor tile; green with white and green fleck.	8.6% Chrysotile ⁽³⁾
85A	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
85B	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
85C	133	12"x12" Vinyl floor tile; Cream with pink streaks.	None Detected ⁽³⁾
86A	135	Transite counter top (Black splash)	2.3% Chrysotile ⁽³⁾
87A	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾
87B	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾
87C	140	12"x12" Vinyl floor tile; beige fleck new look	None Detected ⁽³⁾
88A	C-13	Transite pipe straight	7% Crocidolite ⁽³⁾ 4% Chrysotile ⁽³⁾
89A	241	Texture coat on masonry	None Detected ⁽³⁾
89B	241	Texture coat on masonry	None Detected ⁽³⁾
89C	241	Texture coat on masonry	None Detected ⁽³⁾
90	233B	Duct insulation	23% Chrysotile ⁽³⁾

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL

Sample No.	Sample Location	Sample Description	Asbestos Content
91A	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
91B	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
91C	136A	12"x12" Vinyl floor tile; Beige with beige fleck	None Detected ⁽³⁾
97A	C-15	Cement board – Transite	11% Chrysotile ⁽³⁾
98A	C-15	Drywall joint compound	None Detected ⁽³⁾
98B	C-15	Drywall joint compound	None Detected ⁽³⁾
98C	C-15	Drywall joint compound	None Detected ⁽³⁾
100A	Pool electrical	12"x12" Vinyl floor tile	3.9% Chrysotile ⁽³⁾
101A	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
101B	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
101C	Mezzanine	Mechanical, pipe fitting insulation	None Detected ⁽³⁾
102A	Mezzanine	Mechanical, hot water holding tank insulation	None Detected ⁽³⁾
102C	Mezzanine	Mechanical, hot water holding tank insulation	None Detected ⁽³⁾
2A	Room 217	Cement Board	None Detected ⁽³⁾
2B	Room 217	Cement Board	None Detected ⁽³⁾
2C	Room 217	Cement Board	None Detected ⁽³⁾
1-A	Gymnasium 1	Mastic on parquet floor - orange	None Detected (TEM) ⁽³⁾
1-B	Gymnasium 1	Mastic on parquet floor - orange	None Detected ⁽³⁾
1-C	Gymnasium 1	Mastic on parquet floor - orange	None Detected ⁽³⁾
2-A	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected (TEM) ⁽³⁾
2-B	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected ⁽³⁾
2-C	Gymnasium 1	Mastic on vinyl baseboards - brown	None Detected ⁽³⁾
3-A	Gymnasium 1	Vinyl baseboards - black	None Detected (TEM) ⁽³⁾
3-B	Gymnasium 1	Vinyl baseboards - black	None Detected ⁽³⁾
3-C	Gymnasium 1	Vinyl baseboards - black	None Detected ⁽³⁾
1A	Room 115	Mastic (Black) - 9" X 9" Vinyl Floor Tiles	3% Chrysotile ^(3, 5)
2A	Room 115	Baseboard (Black)	None Detected (PLM) ^(3, 5) None Detected (TEM) ^(3, 5)
2B	Room 117	Baseboard (Black)	None Detected ^(3, 5)
2C	Room 117	Baseboard (Black)	None Detected ^(3, 5)
3A	Room 115	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)
3B	Room 117	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)
3C	Room 117	Mastic (Brown) - Baseboard (Black)	None Detected ^(3, 5)

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NOTES:

- (1) Sample results obtained from a report prepared by Arcadis for the HDSB entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 23, 2020
- (2) Sample results obtained from a report prepared by Arcadis for the HDSB entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 18, 2019.
- (3) Sample results obtained from a report prepared by Arcadis for the HDSB entitled *Survey of Asbestos-Containing Materials, Aldershot High School, 50 Fairwood Park Place W., Burlington, Ontario* dated December 14, 2018.
- (4) Asbestos-containing material is defined as material that contains 0.5% or more asbestos by dry weight.
- (5) Asbestos containing material collected in the area has since been removed. Results here are for reference purposes only.

Bulk samples were analyzed by Polarized Light Microscopy (PLM) analysis, except where "TEM" is noted, in which case Transmission Electron Microscopy analysis was also performed.

< = less than.

Chrysotile = Chrysotile asbestos.

Amosite = Amosite asbestos.

Determination of the locations of asbestos-containing material was made based on the review of existing information, results of bulk sample analysis, visual observations and physical characteristics of the applications as well as our knowledge of the uses of asbestos in building materials.

Based on visual observations and results of laboratory analyses of samples collected by Arcadis Canada Inc., the following asbestos-containing materials were found to be present in the designated study areas:

Visual inspections and laboratory analyses of representative bulk samples of materials confirm that following asbestos-containing materials are present in the Study area:

- Thermal insulation applied to pipe fittings in Rooms 128A, 128C, 128E, 128F, 128G, 128H, 128I, 104, 104A, and 104B;
- Acoustic spray applied to ceiling in Room 128B and 254;
- Vinyl floor tiles (12" x 12") and associated mastic located in Rooms 128C, and 128D;
- Vinyl floor tiles (9"x9") with non-asbestos-containing mastic covering approximately 90% of floor area located in Room 254; and
- Mastic under non-asbestos-containing vinyl floor tiles (12" x 12") covering approximately 10% of floor area in Room 254.

Asbestos-containing thermal insulation applied to pipe fittings is a grey-coloured cementitious material.

Glass fibre insulation is readily visually distinguishable (typically yellow in colour) from asbestos-containing insulation materials and was, therefore, not tested for asbestos content.

Thermal insulation and acoustic spray are friable materials. The removal, alteration and/or disturbance of less than 1 m² of friable asbestos-containing materials is classified as a Type 2 enclosure operation as

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY ALDRESHOT HIGH SCHOOL

specified in O.Reg. 278/05. The removal, alteration and/or disturbance of more than 1 m² of friable asbestos-containing materials is classified as a Type 3 operation.

All thermal insulation, with the exception of glass fibre material, should be assumed to contain asbestos unless a bulk sample analysis indicates otherwise.

Vinyl floor tiles, and mastic are non-friable materials. The removal, alteration and/or disturbance of these non-friable asbestos-containing materials can be performed as a Type 1 operation as specified in O. Reg. 278/05 if the material is wetted and the work is done only using non-powered, hand-held tools (see Table C-1 in Appendix C). If the removal, alteration and/or disturbance work is done using power tools that are attached to dust-collecting devices equipped with HEPA filters, then the work is classified as Type 2. If the power tools do not have HEPA filtered dust collecting devices, then the work is Type 3.

Asbestos may also be present in materials which were not sampled during the course of the asbestos survey carried out by Arcadis, including, but not limited to, areas outside the designated study areas, roofing materials, asphaltic pavement, etc., and/or in locations that are presently inaccessible (e.g., in pipe chases and behind walls). Confirmatory testing of any such materials could be undertaken as the need arises (i.e., at the time of renovations, modifications or demolition) or the materials can be assumed to contain asbestos based on findings in adjacent areas.

If any materials which may contain asbestos and which were not tested during the course of the designated substances and hazardous materials survey are discovered during any construction activities, the work shall not proceed until such time as the required notifications have been made and an appropriate course of action is determined.

3.2 Lead

Arcadis reviewed a report prepared by Arcadis for the Halton District School Board entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 23, 2020, and *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 18, 2019. Paint sample analysis results obtained from this previous report are provided in Table 3.2 was utilized by Arcadis during the course of our investigation and in the preparation of this report.

During the course of our site investigation, bulk samples of the predominant paints observed in the study areas were collected by Arcadis staff. The samples were forwarded to EMSL Canada Inc. (EMSL) for lead analyses. Results of bulk sample analysis for lead content are provided in Table 3.2. The laboratory report is provided in Appendix B

Additional paint samples may be required to confirm lead content. Representative samples of paint were collected at the time of the survey based on, in part, the visual appearances of the paints (i.e., colours). Paints of similar colours may have been applied at different times and have varying amounts of lead.

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDERSHOT HIGH SCHOOL

Table 3.2. Summary of Results of Analysis of Paint Sample for Lead

Sample No.	Sample Location	Sample Description	Lead Content
P-1	Room 128B	Beige paint on BW	20 mg/kg
P01	Room 109	Beige paint on concrete block wall	18 mg/kg ⁽¹⁾
P02	Room 109C	Black paint on drywall	<1.0 mg/kg ⁽¹⁾
P-1	Room 108	Beige paint on concrete wall	1,100 mg/kg⁽²⁾
P-2	Room 110	Grey paint on drywall wall	<80 mg/kg ⁽²⁾

NOTE:

mg/kg = milligrams lead per kilogram paint.

1 mg/kg = 1 part per million (ppm).

- (1) Sample results obtained from a report prepared by Arcadis for the HDSB entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 23, 2020
- (2) Sample results obtained from a report prepared by Arcadis for the HDSB entitled *Pre-Renovation Designated Substances and Hazardous Materials Survey, Aldershot High School, 50 Fairwood Place W., Burlington, Ontario* dated June 18, 2019.

Based on the result of the laboratory analysis, lead was found to be present at a level above the 90 mg/kg criterion value (Surface Coating Materials Regulations) in beige paint on concrete block wall.

Lead may be present in lead pipe, mortar, glazing on ceramic tiles, in the solder on the seals of bell joints of any cast iron drainpipe and in the solder on the sweated-on joints between copper pipe and fittings.

The Ministry of Labour *Guideline – Lead on Construction Projects*, dated April 2011, provides guidance in the measures and procedures that should be followed when handling lead containing materials during construction projects. In the guideline, lead-containing construction operations are classified into three groups - Type 1 (low risk), Type 2 (medium risk) and Type 3 (high risk) based on presumed airborne concentrations of lead, as shown in Appendix C, Table C-2. Any operation that may expose a worker to lead that is not a Type 1, Type 2, or Type 3b operation, is classified as a Type 3a operation.

In addition, the *EACO Lead Abatement Guidelines, 2014 — Edition 1*, Environmental Abatement Council of Ontario, also provides guidance and recommended work practices.

3.3 Mercury

During the course of our site investigation, fluorescent lights were observed in the designated study areas. Mercury should be assumed to be present as a gas in all fluorescent light tubes and in all paint applications, albeit at low levels. The fluorescent light tubes should be recycled for mercury, if the lights are removed.

Proper procedures for removing and handling mercury-containing fluorescent light tubes typically involve:

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY ALDRESHOT HIGH SCHOOL

- ensuring that electrical power to light fixtures has been disconnected and locked out;
- taking all necessary precautions to ensure that fluorescent lamp tubes are removed in a manner that prevents breakage; and
- transporting fluorescent lamp tubes to a licensed processing location for separation and recovery of mercury.

The measures and procedures outlined in the MOL *Guideline, Lead on Construction Projects* for control of potential exposure to lead in paint during construction activities will also serve to control potential exposure to any mercury in paint.

3.4 Silica

Materials observed in the designated study areas which should be considered to contain silica included gypsum board, joint compound, cementitious pipe fitting insulation, concrete, concrete block, brick and mortar.

The Ministry of Labour *Guideline, Silica on Construction Projects*, April 2011, provides guidance in controlling exposure to silica dust during construction activities. In the guideline, silica-containing construction operations are classified into three groups - Type 1 (low risk), Type 2 (medium risk) and Type 3 (high risk) based on presumed airborne concentrations of silica, as shown in Appendix C, Table C-3.

Additional precautionary measures should also be implemented for certain types of materials (e.g., plaster, including non-asbestos applications, concrete block, etc.). For minor disturbances such as drilling, a HEPA-filtered attachment should be used. For removal of more than a minor amount of material, enclosures should be constructed for dust control and separation of the work area from adjacent areas.

3.5 Vinyl Chloride

As mentioned in Section 2.5 above, vinyl chloride would only be a potential exposure concern in the event of combustion of PVC products.

3.6 Acrylonitrile

As mentioned in Section 2.6 above, acrylonitrile would only be a potential exposure concern in the event of combustion of ABS products.

3.7 Other Designated Substances

No other designated substances (benzene, isocyanates, arsenic, ethylene oxide and coke oven emissions) were observed to be present in the designated study areas, and none would be expected to be encountered in any building materials in a form that would represent an exposure concern. Arsenic may be present at low levels in paint applications. The measures and procedures outlined in the MOL *Guideline, Lead on*

PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY
ALDRESHOT HIGH SCHOOL

Construction Projects for control of potential exposure to lead in paint during construction activities will also serve to control potential exposure to any arsenic (or mercury) in paint.

3.8 Polychlorinated Biphenyls (PCBs)

Fluorescent lights (T8 types) were observed in the designated study areas during the course of our site investigation. Light ballasts, such as those associated with some of the type of fluorescent lights (T8s) observed in the designated study areas, are usually an electronic-type which do not contain PCBs, however, this would be confirmed by an electrician at the time of dismantling of the lights.

Inspection of product codes and date codes on the ballasts can be used to determine the likely presence or absence of PCBs.

3.9 Ozone-Depleting Substances (ODS) and Other Halocarbons

No equipment potentially containing ozone-depleting substances was observed in the designated study areas during the course of the site investigation.

3.10 Mould

Readily evident mould was not observed during the course of the site investigation. The inspection of mould was limited to visual observations of readily-accessible surfaces and did not include intrusive inspections of wall cavities. During renovations or interior demolition work, any mould-impacted materials uncovered/discovered should be remediated following the measures and procedures outlined in the *Canadian Construction Association Standard Construction Document CCA-82 2004 - Mould Guidelines for the Canadian Construction Industry*.

4 USE AND LIMITATIONS OF THIS PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY REPORT

This report, prepared for the Halton District School Board, does not provide certification or warranty, expressed or implied, that the investigation conducted by Arcadis Canada Inc. identified all designated substances (as defined in the Ontario *Occupational Health and Safety Act*) in the designated study areas at the subject facility. The work undertaken by Arcadis Canada Inc. was directed to provide information on the presence of designated substances in building construction materials based on review of existing information, visual investigation of readily accessible areas in the designated study areas of the building and on the results of laboratory analysis of a limited number of bulk samples of material for asbestos content and laboratory analysis of one paint sample for lead content. The survey did not include for identification of asbestos in process materials, equipment (including electrical equipment and wiring), furniture (e.g., chairs, table tops, etc.), nor material outside of the building (e.g., asphaltic pavement).

The material in this report reflects Arcadis Canada Inc.'s best judgment in light of the information available at the time of the investigation, which was performed on May 3, 2022.

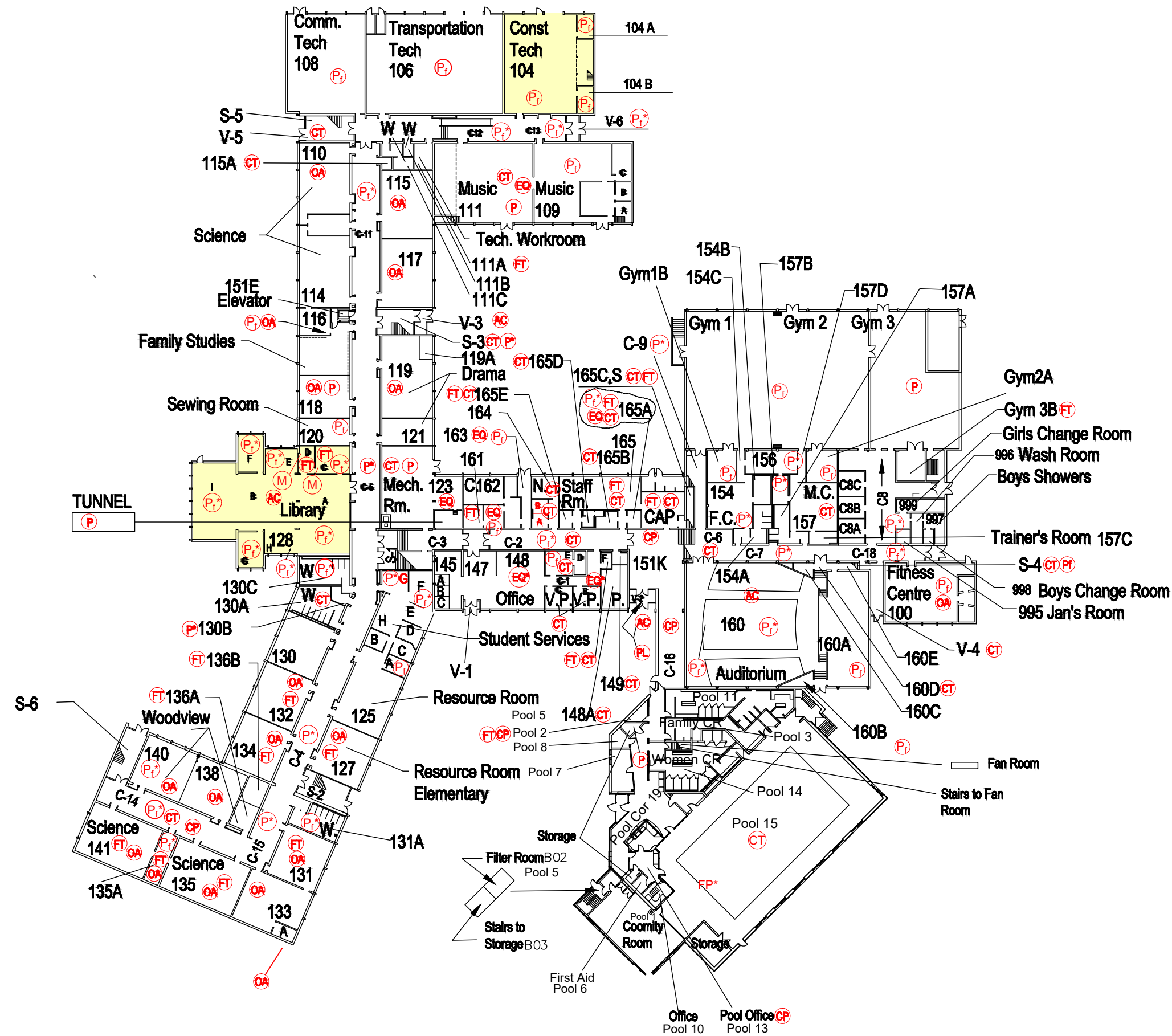
This report is not intended to be used as a scope of work or technical specification for remediation of designated substances or hazardous materials.

This report was prepared by Arcadis Canada Inc. for the Halton District School Board. Any use which any other party makes of the report, or reliance on, or decisions to be based on it, is the responsibility of such parties.

APPENDIX A

Floor Plan





LEGEND:

- 1 FUNCTIONAL SPACE
- THROUGHOUT FUNCTIONAL SPACE
- * ABOVE CEILING ASSEMBLY
- P ASBESTOS ON PIPES (STRAIGHTS AND FITTINGS) (FRIABLE)
- P_f ASBESTOS ON PIPE FITTINGS ONLY (FRIABLE)
- EQ ASBESTOS ON MECHANICAL EQUIPMENT (NON-FRIABLE)
- F/P ASBESTOS FIREPROOFING (FRIABLE)
- AC ASBESTOS ACOUSTIC SPRAY (FRIABLE)
- PL ASBESTOS PLASTER (NON-FRIABLE)
- OA OTHER ASBESTOS MATERIALS (NON-FRIABLE)
- JC ASBESTOS JOINT COMPOUND (NON-FRIABLE)
- CP ASBESTOS CEMENT PRODUCT (NON-FRIABLE)
- CT ASBESTOS CEILING TILES (NON-FRIABLE)
- FT ASBESTOS FLOOR TILES (NON-FRIABLE)
- M ASBESTOS FLOOR TILE MASTIC (NON-FRIABLE)
- STUDY AREA

NOTE:

1. INTERIORS OF ALL FIRE DOORS ARE ASSUMED TO CONTAIN ASBESTOS.



HALTON DISTRICT SCHOOL BOARD
PRE-RENOVATION DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

LOCATIONS OF ASBESTOS CONTAINING MATERIALS AND STUDY AREAS

ALDERSHOT HIGH SCHOOL
 50 FAIRWOOD PLACE W, BURLINGTON, ON

FIRST FLOOR PLAN

Drawn By: B.R	Approved By: V.D	Project No: 30134419
Date: MAY 2022	Scale: N.T.S	Drawing No: 30134419-1



LEGEND:

- 220 FUNCTIONAL SPACE
- THROUGHOUT FUNCTIONAL SPACE
- P ASBESTOS ON PIPES (STRAIGHTS AND FITTINGS) (FRIABLE)
- P_f ASBESTOS ON PIPE FITTINGS ONLY (FRIABLE)
- EQ ASBESTOS ON MECHANICAL EQUIPMENT (NON-FRIABLE)
- AC ASBESTOS ACOUSTIC SPRAY (FRIABLE)
- PL ASBESTOS PLASTER (NON-FRIABLE)
- OA OTHER ASBESTOS MATERIALS (NON-FRIABLE)
- CP ASBESTOS CEMENT PRODUCT (NON-FRIABLE)
- CT ASBESTOS CEILING TILES (NON-FRIABLE)
- FT ASBESTOS FLOOR TILES (NON-FRIABLE)
- M ASBESTOS FLOOR TILE MASTIC (NON-FRIABLE)
- STUDY AREA

NOTE:

1. INTERIORS OF ALL FIRE DOORS ARE ASSUMED TO CONTAIN ASBESTOS.

ARCADIS

HALTON DISTRICT SCHOOL BOARD

PRE-RENOVATION DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS SURVEY

LOCATIONS OF ASBESTOS CONTAINING MATERIALS AND STUDY AREAS

ALDERSHOT HIGH SCHOOL
50 FAIRWOOD PLACE W, BURLINGTON, ON

SECOND FLOOR PLAN

Drawn By: B.R	Approved By: V.D	Project No: 30134419
Date: MAY 2022	Scale: N.T.S	Drawing No: 30134419-2

APPENDIX B

Laboratory Reports





EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
<http://www.EMSL.com> / torontolab@emsl.com

EMSL Canada Order 552207156
Customer ID: 55DCSL97
Customer PO: 30134419
Project ID:

Attn: Viraj Daruwala
ARCADIS Canada Inc.
121 Granton Drive
Unit 12
Richmond Hill, ON L4B 3N4
Phone: (905) 882-5984
Fax: (905) 882-8962
Collected:
Received: 5/06/2022
Analyzed: 5/10/2022
Proj: Aldershot HS - 30134419

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 1-A-Block Fill **Lab Sample ID:** 552207156-0001

Sample Description: 128F/Block filler paint – 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 1-A-Mortar **Lab Sample ID:** 552207156-0001A

Sample Description: 128F/Block filler paint – 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 1-B-Block Fill **Lab Sample ID:** 552207156-0002

Sample Description: 128 I/Block filler paint – 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Beige	0.0%	100.0%	None Detected	

Client Sample ID: 1-B-Mortar **Lab Sample ID:** 552207156-0002A

Sample Description: 128 I/Block filler paint – 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 1-C **Lab Sample ID:** 552207156-0003

Sample Description: 104 /Block filler paint – 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 2-A **Lab Sample ID:** 552207156-0004

Sample Description: 128A/Brick mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 2-B **Lab Sample ID:** 552207156-0005

Sample Description: 128A/Brick mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	



EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
<http://www.EMSL.com> / torontolab@emsl.com

EMSL Canada Order 552207156
Customer ID: 55DCSL97
Customer PO: 30134419
Project ID:

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 2-C **Lab Sample ID:** 552207156-0006
Sample Description: 254/Brick mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 3-A **Lab Sample ID:** 552207156-0007
Sample Description: 128A/Block filler paint – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray/White/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 3-B **Lab Sample ID:** 552207156-0008
Sample Description: 128A/Block filler paint – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 3-C **Lab Sample ID:** 552207156-0009
Sample Description: 128D/Block filler paint – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray/White/Beige	0.0%	100.0%	None Detected	

Client Sample ID: 4-A **Lab Sample ID:** 552207156-0010
Sample Description: 128A/Concrete block mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 4-B **Lab Sample ID:** 552207156-0011
Sample Description: 128A/Concrete block mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 4-C **Lab Sample ID:** 552207156-0012
Sample Description: 128D/Concrete block mortar – 1960 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 5-A **Lab Sample ID:** 552207156-0013
Sample Description: 128H/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Yellow	0.0%	100.0%	None Detected	



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<http://www.EMSL.com> / torontolab@emsl.com

EMSL Canada Order 552207156
Customer ID: 55DCSL97
Customer PO: 30134419
Project ID:

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 5-B **Lab Sample ID:** 552207156-0014
Sample Description: 128H/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 5-C **Lab Sample ID:** 552207156-0015
Sample Description: 128H/Carpet mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: 6-A **Lab Sample ID:** 552207156-0016
Sample Description: 128D/Mastic under 12"x12" vinyl floor tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Black	0.0%	99.0%	1% Chrysotile	

Client Sample ID: 6-B **Lab Sample ID:** 552207156-0017
Sample Description: 128D/Mastic under 12"x12" vinyl floor tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022					Positive Stop (Not Analyzed)

Client Sample ID: 6-C **Lab Sample ID:** 552207156-0018
Sample Description: 128D/Mastic under 12"x12" vinyl floor tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022					Positive Stop (Not Analyzed)

Client Sample ID: 7-A **Lab Sample ID:** 552207156-0019
Sample Description: 128E/Mastic under 12"x12" beige vinyl floor tile with beige and white flecks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Black	0.0%	100.0%	None Detected	

Client Sample ID: 7-B **Lab Sample ID:** 552207156-0020
Sample Description: 128E/Mastic under 12"x12" beige vinyl floor tile with beige and white flecks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Black	0.0%	100.0%	None Detected	

Client Sample ID: 7-C **Lab Sample ID:** 552207156-0021
Sample Description: 128E/Mastic under 12"x12" beige vinyl floor tile with beige and white flecks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Black	0.0%	100.0%	None Detected	



EMSL Canada Inc.

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<http://www.EMSL.com> / torontolab@emsl.com

EMSL Canada Order 552207156
Customer ID: 55DCSL97
Customer PO: 30134419
Project ID:

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 8-A **Lab Sample ID:** 552207156-0022
Sample Description: 128G/Concrete block mortar - 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	<1% Chrysotile	
400 PLM Pt Ct	5/10/2022	Gray	0.0%	100.0%	<0.25% Chrysotile	

Client Sample ID: 8-B-Block Fill **Lab Sample ID:** 552207156-0023
Sample Description: 128I/Concrete block mortar - 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	White	0.0%	100.0%	None Detected	

Client Sample ID: 8-B-Mortar **Lab Sample ID:** 552207156-0023A
Sample Description: 128I/Concrete block mortar - 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	<1% Chrysotile	
400 PLM Pt Ct	5/10/2022	Gray	0.0%	100.0%	<0.25% Chrysotile	

Client Sample ID: 8-C **Lab Sample ID:** 552207156-0024
Sample Description: 128F/Concrete block mortar - 1968 era

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	<1% Chrysotile	
400 PLM Pt Ct	5/10/2022	Gray	0.0%	100.0%	<0.25% Chrysotile	

Client Sample ID: 9-A **Lab Sample ID:** 552207156-0025
Sample Description: 254/Mastic under 12" white with yellow and orange flecks floor tiles

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Black	0.0%	99.0%	1% Chrysotile	

Client Sample ID: 9-B **Lab Sample ID:** 552207156-0026
Sample Description: 254/Mastic under 12" white with yellow and orange flecks floor tiles

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022					Positive Stop (Not Analyzed)

Client Sample ID: 9-C **Lab Sample ID:** 552207156-0027
Sample Description: 254/Mastic under 12" white with yellow and orange flecks floor tiles

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022					Positive Stop (Not Analyzed)



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EMSL Canada Order 552207156
Customer ID: 55DCSL97
Customer PO: 30134419
Project ID:

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 10-A **Lab Sample ID:** 552207156-0028
Sample Description: 104/Brick mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	<1% Chrysotile	
400 PLM Pt Ct	5/10/2022	Gray	0.00%	99.75%	0.25% Chrysotile	

Client Sample ID: 10-B **Lab Sample ID:** 552207156-0029
Sample Description: 104/Brick mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	<1% Chrysotile	
400 PLM Pt Ct	5/10/2022	Gray	0.00%	99.75%	0.25% Chrysotile	

Client Sample ID: 10-C **Lab Sample ID:** 552207156-0030
Sample Description: 104/Brick mortar

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	5/10/2022	Gray	0.0%	100.0%	None Detected	

Analyst(s):

Delaney Breen PLM (8)
400 PLM Pt Ct (1)
Kira Ramphal PLM (21)
400 PLM Pt Ct (4)

Reviewed and approved by:

Matthew Davis or other approved signatory
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Estimation of uncertainty available upon request. This report is a summary of multiple methods of analysis, fully compliant reports are available upon request. A combination of PLM and TEM analysis may be necessary to ensure consistently reliable detection of asbestos. This report must not be used to claim product endorsement by NVLAP of any agency or the U.S. Government.

Samples analyzed by EMSL Canada Inc. Mississauga, ON NVLAP Lab Code 200877-0

Initial report from: 05/10/2022 10:24:47



EMSL Canada Inc.

2756 Slough Street, Mississauga, ON L4T 1G3

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torontolab@emsl.com

EMSL Canada Or 552207120
CustomerID: 55DCSL97
CustomerPO: 30134419
ProjectID:

Attn: **Vraj Daruwala**
ARCADIS Canada Inc.
121 Granton Drive
Unit 12
Richmond Hill, ON L4B 3N4

Phone: (905) 882-5984
Fax: (905) 882-8962
Received: 5/6/2022 09:00 AM
Collected:

Project: **Aldershot HS - 30134419**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>RDL</i>	<i>Lead Concentration</i>
P-1 552207120-0001	Site: Beige paint on BW.	5/6/2022	0.2482 g	0.0081 % wt	0.20 % wt

Rowena Fanto, Lead Supervisor
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 05/10/2022 08:06:57

APPENDIX C

Summary of Asbestos, Lead and Silica Work Classifications



TABLE C-1
SUMMARY OF CLASSIFICATION OF
TYPE 1, 2 AND 3 OPERATIONS
(Ont. Reg. 278/05)

TYPE 1 OPERATIONS

- removing less than 7.5 m² asbestos-containing ceiling tiles;
- removing non-friable asbestos-containing material other than ceiling tiles, if the material is removed without being broken, cut, drilled, abraded, ground, sanded or vibrated;
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the material is wetted and the work is done only using non-powered, hand-held tools; and
- removing less than 1 m² of drywall in which asbestos-containing joint compounds have been used.

TYPE 2 OPERATIONS

- removing all or part of a false ceiling to obtain access to a work area, if asbestos-containing material is likely to be lying on the surface of the false ceiling;
- removal of one square metre or less of friable asbestos-containing material;
- enclosing friable asbestos-containing material;
- applying tape or a sealant or other covering to asbestos-containing pipe or boiler insulation;
- removing 7.5 m² or more asbestos-containing ceiling tiles (if removed without being broken, cut, drilled, abraded, ground, sanded or vibrated);
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the material is not wetted and the work is done only using non-powered, hand-held tools;
- removal of one square metre or more of drywall in which asbestos-containing joint compounds have been used;
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the work is done using power tools that are attached to dust-collecting devices equipped with HEPA filters;
- cleaning or removing filters used in air-handling equipment in a building that has asbestos-containing sprayed fireproofing.

TABLE C-1 (Continued)
SUMMARY OF CLASSIFICATION OF
TYPE 1, 2 AND 3 OPERATIONS
(Ont. Reg. 278/05)

TYPE 3 OPERATIONS

- removal of more than one square metre of friable asbestos-containing material;
- spray application of a sealant to friable asbestos-containing material;
- cleaning or removing air-handling equipment, including rigid ducting but not including filters, in a building that has sprayed asbestos-containing fireproofing;
- repairing or demolishing a kiln, metallurgical furnace or similar structure that is made in part of asbestos-containing refractory materials;
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing materials, if the work is done using power tools that are not attached to dust-collecting devices equipped with HEPA filters.

TABLE C-2
SUMMARY OF CLASSIFICATION OF
LEAD-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE – LEAD ON CONSTRUCTION PROJECTS, APRIL 2011

Type 1 Operations	Type 2 Operations		Type 3 Operations	
	Type 2a	Type 2b	Type 3a	Type 3b
<0.05 mg/m ³	>0.05 to 0.50 mg/m ³	>0.50 to 1.25 mg/m ³	>1.25 to 2.50 mg/m ³	>2.50 mg/m ³

Note: The classification of Type 1, 2 and 3 operations is based on presumed airborne concentrations of lead, as shown above.

TYPE 1 OPERATIONS

- application of lead-containing coatings with a brush or roller;
- removal of lead-containing coatings with a chemical gel or paste and fibrous laminated cloth wrap;
- removal of lead-containing coatings or materials using a power tool that has an effective dust collection system equipped with a HEPA filter;
- installation or removal of lead-containing sheet metal;
- installation or removal of lead-containing packing, babbitt or similar material;
- removal of lead-containing coatings or materials using non-powered hand tools, other than manual scraping or sanding;
- soldering.

TYPE 2 OPERATIONS

Type 2a Operations

- welding or high temperature cutting of lead-containing coatings or materials outdoors. This operation is considered a Type 2a operation only if it is short-term, not repeated, and if the material has been stripped prior to welding or high temperature cutting. Otherwise it will be considered a Type 3a operation;
- removal of lead-containing coatings or materials by scraping or sanding using non-powered hand tools;
- manual demolition of lead-painted plaster walls or building components by striking a wall with a sledgehammer or similar tool.

Type 2b Operations

- spray application of lead-containing coatings.

TABLE C-2 (Continued)
SUMMARY OF CLASSIFICATION OF
LEAD-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE – LEAD ON CONSTRUCTION PROJECTS, APRIL 2011

TYPE 3 OPERATIONS

Type 3a Operations

- welding or high temperature cutting of lead-containing coatings or materials indoors or in a confined space;
- burning of a surface containing lead;
- dry removal of lead-containing mortar using an electric or pneumatic cutting device;
- removal of lead-containing coatings or materials using power tools without an effective dust collection system equipped with a HEPA filter;
- removal or repair of a ventilation system used for controlling lead exposure;
- demolition or cleanup of a facility where lead-containing products were manufactured;
- an operation that may expose a worker to lead dust, fume or mist that is not a Type 1, Type 2, or Type 3b operation

Type 3b Operations

- abrasive blasting of lead-containing coatings or materials;
- removal of lead-containing dust using an air mist extraction system.

TABLE C-3
SUMMARY OF CLASSIFICATION OF SILICA-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE, SILICA ON CONSTRUCTION PROJECTS, APRIL 2011

	Type 1 Operations	Type 2 Operations	Type 3 Operations
Cristobalite and Tridymite	>0.05 to 0.50 mg/m ³	>0.50 to 2.50 mg/m ³	>2.5 mg/m ³
Quartz and Tripoli	>0.10 to 1.0 mg/m ³	>1.0 to 5.0 mg/m ³	>5.0 mg/m ³

Note: The classification of silica-containing construction tasks is based on presumed concentrations of respirable crystalline silica, as shown above.

TYPE 1 OPERATIONS

- The drilling of holes in concrete or rock that is not part of a tunnelling operation or road construction.
- Milling of asphalt from concrete highway pavement.
- Charging mixers and hoppers with silica sand (sand consisting of at least 95 per cent silica) or silica flour (finely ground sand consisting of at least 95 per cent silica).
- Any other operation at a project that requires the handling of silica-containing material in a way that may result in a worker being exposed to airborne silica.
- Entry into a dry mortar removal or abrasive blasting area while airborne dust is visible for less than 15 minutes for inspection and/or sampling.
- Working within 25 metres of an area where compressed air is being used to remove silica-containing dust outdoors.

TYPE 2 OPERATIONS

- Removal of silica containing refractory materials with a jackhammer.
- The drilling of holes in concrete or rock that is part of a tunnelling or road construction.
- The use of a power tool to cut, grind, or polish concrete, masonry, terrazzo or refractory materials.
- The use of a power tool to remove silica containing materials.
- Tunnelling (operation of the tunnel boring machine, tunnel drilling, tunnel mesh installation).
- Tuckpoint and surface grinding.
- Dry mortar removal with an electric or pneumatic cutting device.
- Dry method dust cleanup from abrasive blasting operations.
- The use of compressed air outdoors for removing silica dust.
- Entry into area where abrasive blasting is being carried out for more than 15 minutes.

TABLE C-3 (Continued)
SUMMARY OF CLASSIFICATION OF SILICA-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE, SILICA ON CONSTRUCTION PROJECTS, APRIL 2011

TYPE 3 OPERATIONS

- Abrasive blasting with an abrasive that contains ≥ 1 per cent silica.
- Abrasive blasting of a material that contains ≥ 1 per cent silica.

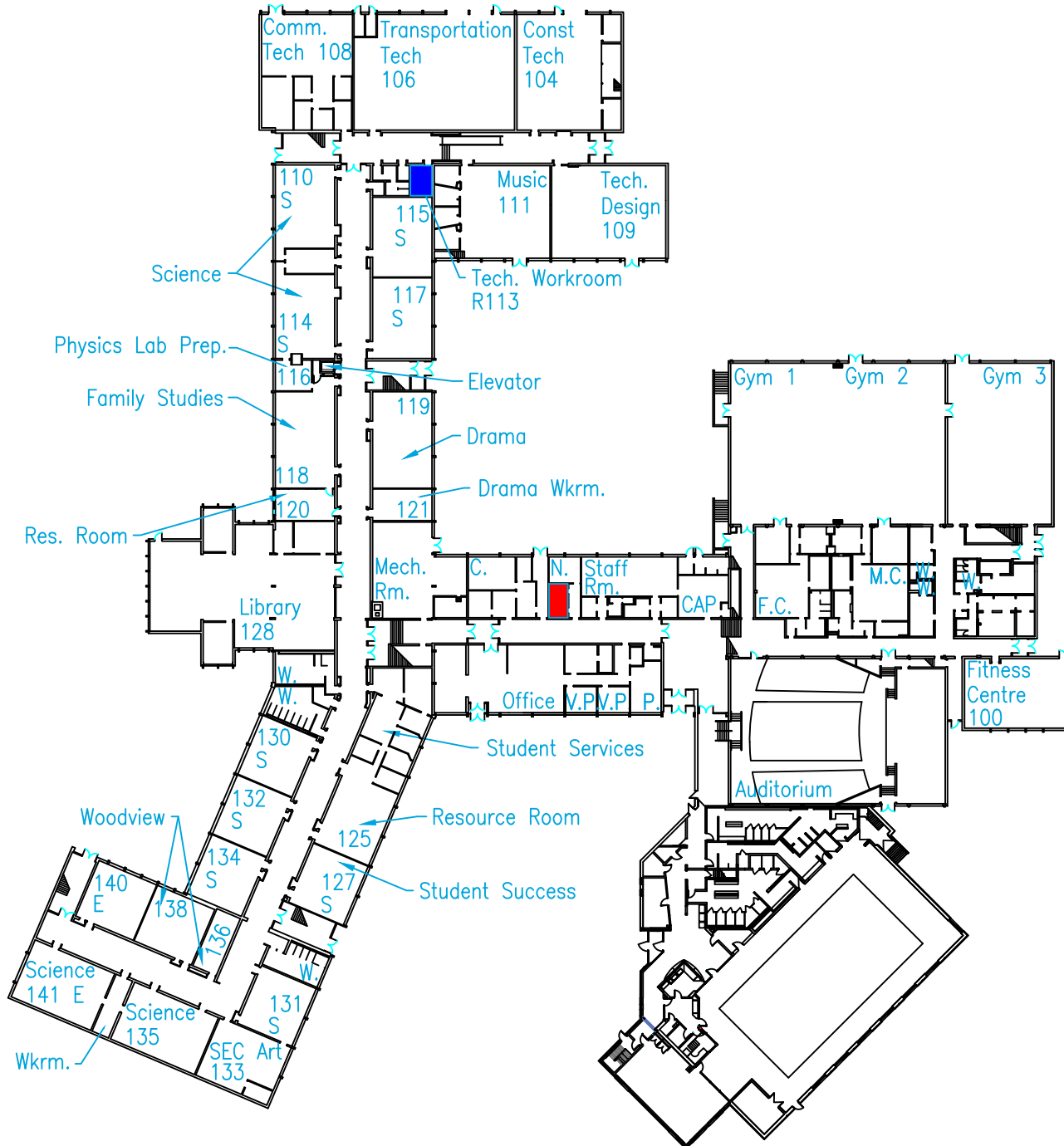
Arcadis Canada Inc.

121 Granton Drive, Suite 12, Richmond Hill, Ontario L4B 3N4

Tel 905 764 9380

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- UNIVERSAL WASHROOM
- ALL GENDER WASHROOM



NO.	DATE

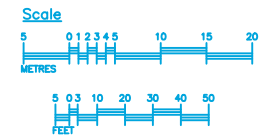
NO.	DATE



Aldershot High School

180 FAIRVIEW PLACE
BURLINGTON, ONTARIO

DATE: 19 MAY 2022
 PREPARED BY: 17 MAR 2021
 PROJECT: 8-12
 SCALE: 1"=60'-0"
 DRAWN: RDZ
 CHECKED: JCF
 YEAR BUILT: 1960
 AHS NO. P1-142584 (1327km²)
 OLD FILE NAME: Aldershot

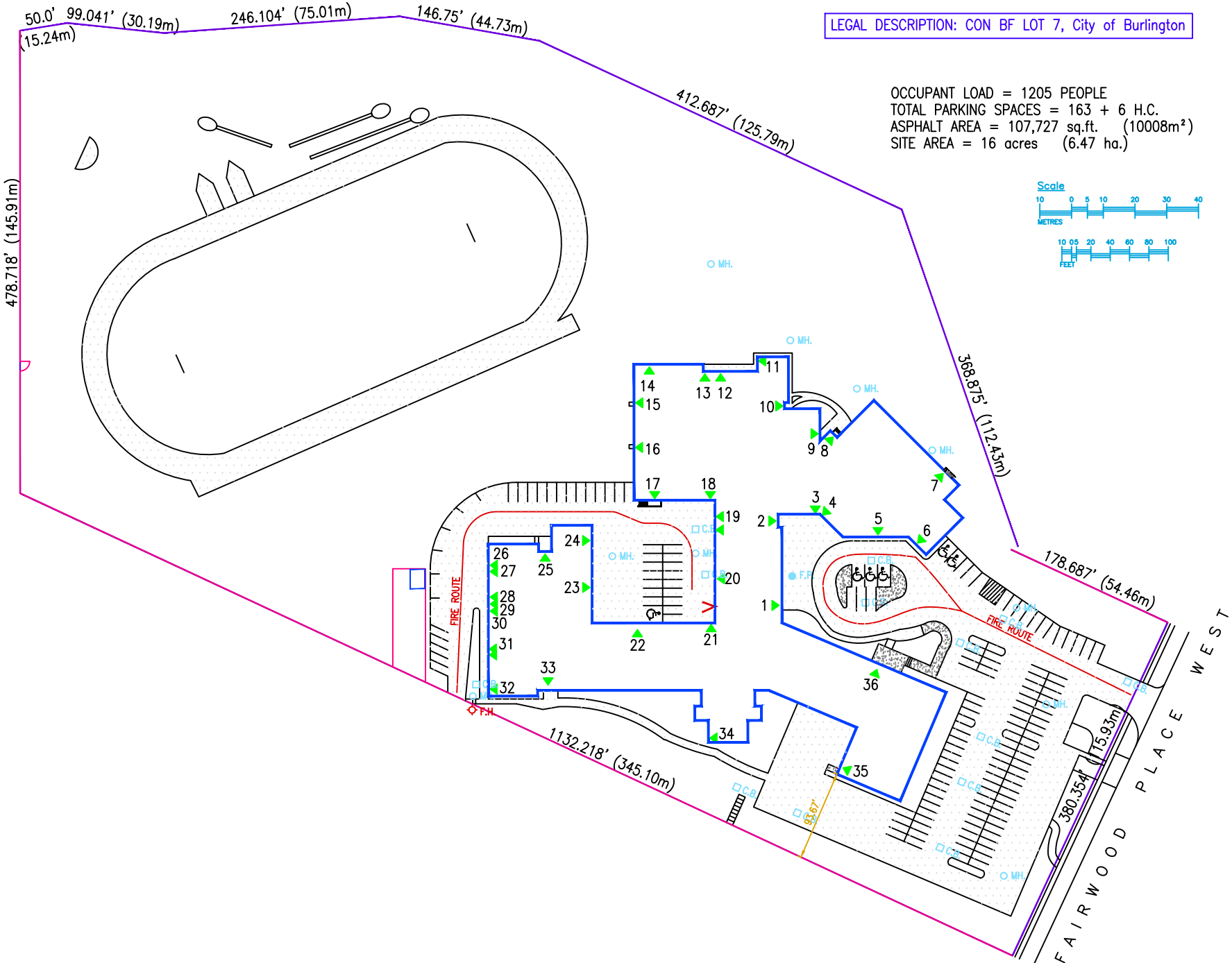
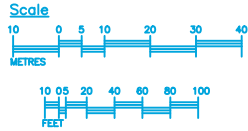


PROJECT TITLE
FIRST FLOOR PLAN

PROJECT SHEET
A | 1

LEGAL DESCRIPTION: CON BF LOT 7, City of Burlington

OCCUPANT LOAD = 1205 PEOPLE
 TOTAL PARKING SPACES = 163 + 6 H.C.
 ASPHALT AREA = 107,727 sq.ft. (10008m²)
 SITE AREA = 16 acres (6.47 ha.)



REVISION	
NO.	DATE

- ▲ EXIT DOORS
- ◊ F.H. FIRE HYDRANT
- F.P. FLAG POLE
- H.P. HYDRO POLE
- [H] HYDRO TRANSFORMER
- L.S. LIGHT STANDARD
- C.B.M. CATCH BASIN MANHOLE
- C.B. CATCH BASIN
- M.H. MANHOLE
- ↔ SIAMESE CONNECTION



Aldershot High School

LOCATION: 99 Fairwood Place Burlington, QVT4R5D

DATE	8 OCTOBER 2019
ISSUE	29 SEP 2016
PROJECT	9-12
SCALE	1"=100'-0"
ZONE	RDZ
DATE	1965
APP. NO.	PL 42286 (13274m ²)
APP. FILE NAME	AldershotSP

SHEET TITLE

SITE PLAN

PROJECT FILE

SP | 1