GRAND ERIE DISTRICT SCHOOL BOARD

Head Office: 349 Erie Avenue, Brantford, Ontario N3T 5V3
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Cover Page

BID DOCUMENT

REFERENCE NO. 2024-18-T

LEARNING COMMONS RENOVATIONS AT WOODMAN-CAINSVILLE SCHOOL, AGNES G. HODGE PUBLIC SCHOOL AND SIMCOE COMPOSITE SCHOOL FOR THE GRAND ERIE DISTRICT SCHOOL BOARD

INVITATIONAL DATE: **March 18, 2024**

CLOSING DATE: **April 17, 2024**

CLOSING TIME: **NOT LATER THAN 2:00:00 o'clock p.m. LOCAL TIME IN BRANTFORD, ONTARIO**

BIDS RECEIVED AFTER THE CLOSING DATE AND TIME WILL BE REJECTED.

Note: Bids MUST be submitted ELECTRONICALLY.

A pre-bid meeting is scheduled for March 26, 2024 at 8:00 AM, starting at Woodman-Cainsville School – 51 Woodman Drive, Brantford ON**.**

Please refer to Section 18 Pre-Bid Meeting.

Questions related to the Bid Call are required to be directed in writing to the following Designated Contact:

Jennifer Moffatt
Buyer
jennifer.moffatt@granderie.ca

TABLE CONTENTS

SECTION 00200 – INSTRUCTIONS TO BIDDERS

1. DEFINITIONS

1.1. In addition to the definitions found in the CCDC 2-2020, the following definitions shall apply to all Tender/Contract Documents:

a. “Bid” means the Tender submission by a Bidder

b. “Bid Form” means the Grand Erie District School Board’s Price Bid Form as issued by the Board.

c. “Bidder” means the organization/contractor submitting a Bid for General Contractor Services in response to this Request for Tender. Bidder is the term mainly used in the Instruction to Bidders, Owners Conditions and Price Bid Form.

d. “Board” means the Grand Erie District School Board. Board is the term mainly used in the Instruction to Bidders, Owners Conditions and Price Bid Form.

e. “Changes in the Work” means additions, deletions, or other revisions to the Work approved in advance in writing by the Consultant or the Board and relate to the general scope of the Contract as determined by the Board.

f. “Closing Date” means the deadline for Tender submissions, being the date indicated in this Request for Tender.

g. “Mandatory” means an item that is required, obligatory, or compulsory.

h. “Successful Bidder” means the Bidder with the lowest compliant Bid who is awarded the Contract by the Board and accepts the Contract within the required timelines as indicated in the Contract Documents. The term Successful Bidder is used mainly in the Instructions to Bidders, Owners Conditions and Price Bid Form.

i. “Tender” means a response from a supplier, Contractor or service provider to a solicitation request that, if recommended for award, would bind the supplier, Contractor or service provider to perform in accordance with the Contract.

j. “Total Performance of the Work/Completion of the Contract” means when the entire Work, expect those items arising from the provisions of GC 24 – WARRANTY, has been performed to the requirements of the Contract

Documents and is so certified by the Consultant by issuance of a “Statement of Completion of the Contract”.

2. DESCRIPTION OF PROJET AND TENDER NUMBER

2.1. The Board invites qualified Bidders for Contractor Services to Bid for the supply of all labour, materials, equipment and services required for the completion of **Learning Commons Renovations** at **Woodman-Cainsville School** – 51 Woodman Drive, Brantford ON**, Agnes G. Hodge Public School** – 52 Clench Avenue, Brantford ON and **Simcoe Composite School** – 40 Wilson Drive, Simcoe ON. for the Grand Erie District School Board in accordance with the drawings and specifications prepared by GEDSB.

2.2. The Tender Number for this Project is 2024-18-T.

3. TENDER FOR STIPULATED PRICE BID INSTRUCTIONS

3.1. Prior to the submission of the Stipulated Price Bid, all Bidders shall carefully examine the Bid Form, the Contract Documents and fully inform themselves of the existing conditions and limitations of the Work.

3.2. If there exists doubt in the Bidders mind as to the intent of any information shown on the Bid Form or Contract Documents, the Bidder must request clarification from the Owner prior to submission of the Bid.

3.3. Submitted Stipulated Price Bid shall cover the cost of all items contemplated by the Contract and no allowance shall be made subsequently in this regard on behalf of the Bidder for any error or negligence on the Bidder’s part.

3.4. The Bidder, by submitting a Stipulated Price Bid, acknowledges and accepts the terms set out herein ad in any other documents included in this Request for Tender.

3.5. Bids submitted must be completed in full and must be legible and written in ink or by mechanical device. The Bid must not be restricted by any conditions, or qualifications added to the Bid in the form of a covering letter or alterations to the Bid Form provided; any such conditions or qualifications will render the Bid non-compliant and ineligible for acceptance.

3.6. Adjustments by telephone to a Bid already submitted will not be considered. A Bidder desiring to make adjustments to a Bid must withdraw the Bid and/or supersede it with a later Bid prior to the specified closing deadline.

3.7. Each instance of erasures, overwriting, strike-outs or white-outs must be initialled by an authorized company representative of the bidding firm.

3.8. Any costs incurred in the preparation and submission of a Bid Form are solely the responsibility of the Bidder.

3.9. No Oral, Hardcopy, Facsimile or Telegraphic Bids will be accepted.

3.10. Failure to comply with the requirements of these Instructions to Bidders may cause a Bid to be declared invalid and such Bid may be rejected, in the sole and unfettered discretion of the Board.

4. GENERAL BID SUBMISSIONS

4.1. Bids for Bid Number 2024-18-T must be submitted electronically through the Biddingo portal. Physical/paper copies of bids will NOT be accepted.

Submissions MUST be made through the following public portal: www.biddingo.com. Grand Erie relies on Biddingo.com's electronic advertisement to provide public notice of this business opportunity and is not obligated to notify past or present Proponents in any other manner.

To access the bid form and start your submission, click the Bid Documents / Online Submission. For technical support, please contact Biddingo.com directly at 1-416-756-0955 or via email at ebidding@biddingo.com. Biddingo.com offers free eBidding training sessions. Sign up today at www.biddingo.com/training. Proposals cannot be submitted after the Bid Submission Deadline. Each Proponent is responsible for ensuring its Bid is submitted prior to the Bid closing date and time.

A Proponent should allow sufficient time in the preparation of its Bid to ensure its Bid has been uploaded and completed the submission process on Biddingo.com by the Submission Deadline. Uploading large documents may take significant time, depending on the size of the file(s) and Internet connection speed. Bid's that are uploaded onto Biddingo.com but not submitted before the closing deadline will be deemed late, and thus rejected.

A Proponent may withdraw its Bid by providing written notice to the Bid Coordinator before the Bid Submission Deadline, and by selecting the "Withdraw my eBid Response" button provided within the Bid on Biddingo.com.

4.2. Bidders are solely responsible for the delivery of their Bids in the manner and by the date and time prescribed by Owner. Each Bidder is responsible for the actual

delivery of its Bid to the address and location above and Bids will not be considered unless actually received at that location prior to the Closing Time on the Closing Date regardless of whether the Bids have been given to couriers, delivery services, Canada Post or employees or agents of the Owner.

4.3. Bids must be received **NOT LATER THAN 2:00:00 o'clock p.m. LOCAL TIME IN BRANTFORD, ONTARIO (the "Closing Time") on April 17, 2024 (the "Closing Date").**

4.4. Bidders are required to complete and submit section 00410 with the Bid prior to Bid Closing, together with Addenda, if any, unless the No.(s) of all Addenda issued are identified in the Bidder's Declaration.

4.5. Bids received after the Closing Time on the Closing Date will be rejected. Bids shall not be submitted by fax or email. Bids submitted by fax or email will be rejected.

5. BID SECURITY

5.1. As per Article GC 11.2 Sub-section 11.2.1 and 11.2.2 of the General Conditions and 11.2.3 of the Amended General Conditions and as hereinafter set out:

a. AGREEMENT TO BOND

i. Submit an Agreement to Bond from a licensed Canadian Surety Company authorize to do business in the Province of Ontario.

ii. The Agreement to Bond shall remain in force for the complete Tender acceptance as noted above.

6. CONTRACT SECURITY

6.1. For Construction Services greater than $500,000, the Contractor shall, prior to the execution of the Contract and within (10) business days of being notified that's its Bid has been accepted, provide to the Board the below noted bonds. The bonds shall be issued by a duly licenced surety company authorized to transact a business of suretyship in the Province of Ontario and shall be maintained in good standing until the fulfillment of the contract. The expense of preparing the bond and executing is to be solely the responsibility of the Contractor.

a. PERFORMANCE BOND

i. Performance security will be required to be submitted by the Successful Bidder before execution of the Contract. Performance security must be in the form of Form 32 Performance Bond and Form 31 Labour & Material payment Bond for the sum of fifty percent (50%) of the Contract Price. See Section 12 of the Construction Act. https://www.ontario.ca/laws/regulation/180304

ii. The Bidder shall include the cost of such Bond in the Bid Submission.

b. LABOUR AND MATERIAL PAYMENT BOND

i. Labour and Material Payment Bond, in accordance to the Construction Act of Ontario (Form 31), in an amount equal to fifty percent (50%) of the Contract Price covering payment for labour, products, or both.

ii. The Bidder shall include the cost of such Bond in the Bid Submission.

6.2. The Successful Bidder shall furnish the performance security to the Board, prior to the execution of the Contract, within ten (10) business days of being notified that its Quotation has been accepted.

6.3. In the event of default or failure of the Successful Bidder to execute the Contract as prescribed, or to deliver the performance and other required submittals under the Quotation documents, the Board shall declare the bid security forfeited and the Bidder will be held responsible for any increased costs or damages incurred by the Board.

7. WORKER'S COMPENSATION

7.1. The Successful Bidder must provide a copy of their Workplace Safety and Insurance Board Clearance Certificate of good standing, "Section 748" of the Workplace Safety and Insurance Act to the Board prior to commencing Work and in the event within ten (10) Working Days of acceptance of the Bid by the Board.

8. INDEMNITY AND INSURANCE

8.1. As per the CCDC 2-2020 and Amended General Conditions.

9. ELECTRONIC NOTICE OF PROJECT

9.1. The Successful Bidder must submit Form 1000: Registration of Constructors and Employers Engaged in Construction to the Ontario Ministry of Labour and provide the Board with a copy of the completed and submitted form.

10. SUBMISSION REQUIREMENTS

10.1. Bids will automatically be rejected under the following circumstances:

a. Bid is late (by any amount of time).

b. Bid security

i. Agreement to Bond is missing at least one (1) of the following: corporate seal to bind the bonding company or signature of bonding company.

c. Bid is not signed.

d. Stipulated Price Bid is illegible or not entered.

11. SALES TAX

11.1. The Bid and separate prices submitted for this Contract shall exclude the Harmonized Sales Tax (HST).

11.2. For purposes of calculating costs of extra Work performed, any HST paid by the Successful Bidder to Suppliers or Subcontractors shall be deducted prior to any mark-up profit or overhead by the Successful Bidder.

11.3. The Successful Bidder will not be permitted to add any mark-up for overhead or profit to the HST amount or to claim for any time involved in processing or collecting the HST and for its remittance to Canada Revenue Agency.

12. ACCEPTANCE OR REJECTION

12.1. Bids shall remain open to acceptance for a period of forty-five (45) calendar days commencing on and including the date set for receipt of Bids, and the Board may at any time within this period accept any of the Bids received.

12.2. The Board reserves the right to accept or reject any and all Bids and to accept any part of any one Bid. The Board may request further clarification of a Bid from the Bidder. While the Board is not obligated to consider Bids which do not

strictly comply with its requirements, it nevertheless reserves the right to do so, and specifically reserves the right to waive formalities and accept Bids that the Board deems to be substantially compliant.

12.3. Notwithstanding anything herein to the contrary, if any Bid contains technical errors or omissions which the Board, in its sole and unfettered discretion deems to be minor, the said Bidder may be asked by the Board to acknowledge and/or clarify those minor technical errors or omissions prior to the award of the Contract.

12.4. The Board and the Consultant shall not be responsible for any liabilities, cost, expenses, loss or damage incurred, sustained or suffered by any Bidder prior or subsequent to or by reason of the acceptance or the non-acceptance by the Board of any Bid or by reason of delay in the acceptance of a Bid. Bids are subject to a formal Contract being prepared and executed.

12.5. The Board will award the Contract based on the total value of the base bid plus accepted separate prices.

13. BIDDER QUALIFICATIONS

13.1. Bidders interested in performance of specified Work must:

a. Have a minimum of ten (10) year work experience with materials specified or similar comparable products,

b. And be licensed and insured for Place of Work.

c. Bidder’s installers must be certified and carded for installation of the specified materials.

d. Bidders employees must WHMIS certified.

13.2. Bidder’s Subtrades:

a. Must have a minimum of ten (10) years work experience with materials specified or similar comparable products,

b. Must be licensed and insured for Place of Work.

c. Must be certified and carded for installation of the specified materials.

d. Employees must be WHMIS certified.

e. Owner reserves the right to reject any proposed Subcontractor for reasonable cause

13.3. Roofing Subcontractor:

a. Must be pre-approved and certified by Membrane Manufacturer for specified materials and installation type.

b. Must be a member in good standing with Ontario Industrial Roofing Contractors Association (OIRCA)

c. Owner reserves the right to reject any proposed Subcontractor for reasonable cause.

14. TENDER DOCUMENT AVAILABILITY

14.1. Bid Documents are to be obtained at www.biddingo.com

15. QUERIES/ADDENDA

15.1. Upon receipt of Bid Documents verify that documents are complete; notify the Board representative should the documents be incomplete.

15.2. Should a Bidder find discrepancies in, or omissions from the Drawings, Specifications or other Documents, or should there be doubt as to their meaning, the Bidder shall notify the Board representative before the Tender Closing Date.

15.3. Direct all inquires in writing only to Purchasing at email: jennifer.moffatt@granderie.ca no later than **one (1) week prior to the Closing Date**. Identify the reference number and project name in the subject line.

15.4. The Board, in consultation with the Consultant will review all questions and issue written instructions in the form of an Addendum, which will become part of the Contract Documents.

15.5. The Closing Date of the Request for Tender may be extended as deemed appropriate by the Board. Include costs of any changes in the Bid and separate prices.

15.6. Replies to questions will be made in the form of written addenda, a copy of which will be forwarded to all Bidders.

15.7. Bidders shall ask all required questions prior to submitting their Bid.

16. EXAMINATION OF DRAWINGS, SPECIFICATIONS AND WORK SITE

16.1. Carefully examine and study all Bid Requirements together the existing site conditions and any other necessary data or conditions that may affect performance of Work in order to determine full extent of the Work.

a. Under no circumstances will any claims be allowed against Owner resulting from failure to ascertain full extent of the Work herein described, specified or implied.

16.2. Contractor to verify to own satisfaction that existing site conditions, roof components, and measurements are accurately reported in the Bid Requirements. Obtain or check all measurements and dimensions at worksite as may be necessary and require for performance of Work.

16.3. Promptly report in writing any discrepancies, errors, conflicts, or omissions to Consultant when discovered and prior to Bid Closing.

a. Drawings, specifications and schedules are complementary to each other, what is called for by one to be binding is called for by all.

b. Should any discrepancy appear between documents leaving doubt as to intent or meaning, most stringent requirement to govern unless directed otherwise in writing by the Consultant.

16.4. Bid submission to be based on products, equipment, and/or suppliers named and identified as approved or accepted in technical specifications and drawings.

a. Bid Documents constitute acceptable roofing installations.

b. No deviation from specifications, drawings or approved shop drawings are allowed without prior written approval by Consultant, and if applicable by Manufacturer,

16.5. Unless specifically identified in the Bid Requirements, any hazardous materials encountered during Work that requires specialized handling and incurs additional cost is to be added to the Contract Price

16.6. Weather conditions are considered incidental to Work and will not be considered additional to Bid Price.

17. ALTERNATES – PRODUCTION/SYSTEM OPTIONS

17.1. Where the Bid Documents stipulate a particular Product and/or service, the Bid Sum will be based upon the specified Product/service. Bidders must quote as specified.

17.2. If a Bidder has an alternate product and/or service that they wish to propose for the Board's consideration, they may suggest alternates in the Alternative Pieces section of the Price Bid Form.

17.3. Bidders who suggest alternates shall also include complete details about the alternates including specifications, modifications, and revisions to other work for each alternative to enable the Consultant and the Board to determine the acceptability of such alternates.

17.4. If quoting an alternate, Bidders shall include the dollar amount of additions to or reductions from the Bid Price, including all costs of revisions/modifications to other work.

17.5. The Board in its sole and unfettered discretion reserves the right to accept or reject alternates.

18. PRE-BID MEETING

18.1. Bidders are strongly encouraged attend the site visitation scheduled on **March 26, 2024 at 8:00 a.m**. starting at **Woodman-Cainsville School** – 51 Woodman Drive, Brantford ON N3S 4K3 followed by **Agnes G. Hodge Public School** – 52 Clench Avenue, Brantford ON N3T 1B6 and finishing at **Simcoe Composite School** – 40 Wilson Drive, Simcoe ON N3Y 2E5.

Bidders are to meet at the front entrance of the School. Bidders are to register their presence with the Board's on-site representative of the site tour.

18.2. When planning to enter a Board building strict adherence to the Grand Erie Protocols and the Health Unit's measures are expected

18.3. Do not enter if you or your staff have been identified for self-isolation as per the Federal and Provincial Public Health Leaders recommendations

18.4. All site visit attendees Must sign in upon entering the building

18.5. If you or your staff feel sick or experience flu like symptoms after the site visit, contact the Designated Contact

19. SUBCONTRACTORS

19.1. Prior to the award of the Contract to a Bidder, should objection be raised by either the Board or Consultant to any proposed Subcontractor, the names of other Subcontractors shall be obtained by that said Bidder until same are approved. Once final approval of Subcontractors is obtained no change will be permitted by the Successful Bidder without prior written approval by the Board and Consultant.

20. PROJECT SCHEDULE

20.1. Outline for Project Schedule

Event	Date
Request for Tenders Available to Bidders	March 18, 2024
Site Meeting	March 26, 2024 at 8:00 a.m.
Bids Due	April 17, 2024 by 2:00:00 p.m.
Work Start Date	April 22, 2024
Substantial Performance of the Work	June 24, 2024
Deficiency List Walk Through	June 24, 2024
Total Performance of the Work	June 28, 2024

21. TIME OF COMPLETION

21.1. Successful Bidder shall meet the Board’s substantial completion date as stated in the Price Bid Form.

22. CONSTRUCTION DRAWINGS

22.1. The Board will provide the Successful Bidder up to five (5) sets of drawings for construction and as-built purposes. If the Contractor requires additional sets, the Contractor shall obtain the prints at their own expense.

23. EXISTING BUILDING SERVICES

23.1. The Successful Bidder shall assess the existing building services and determine that they are in proper working order prior to construction. Existing building services shall include but not limited to, fire alarm system, security system, PA system, Telephone and Data systems. If the Successful Bidder has any

concerns they must be reported in writing to the Consultant and the Board prior to commencement of Work.

23.2. On or before the completion of the Project, if the existing building services are not operating as they were prior to the Successful Bidder commencing Work, the Successful Bidder being aware that an existing building services is not in operation, they shall immediately notify the Board and take the necessary actions to repair the system.

24. NO SMOKING POLICY

24.1. All Bidders are advised that there is no smoking permitted within the school or within 20m or 60ft of Board property, and this must be strictly adhered to by all parties. The Successful Bidder shall be responsible for advising their employees or any other persons doing or contracting to do the whole or any part of the Work contemplated by the Contract, or the foregoing.

25. COVID PROCEDURE WHEN IN PLACE

25.1. When planning to enter a Board building strict adherence to the Grand Erie Protocols and the Health Unit's measures are expected.

25.2. Any Bidder/Contractor employees who enter a Board building MUST complete the COVID Self Assessment form before entering any Owner site. If you or your staff are feeling sick do not enter (see your local Health Unit's website). https://covid-19.ontario.ca/school-screening/

25.3. Do not enter if you or your staff have been identified for self-isolation as per the Federal and Provincial Public Health Leaders recommendations.

25.4. All Bidder/Contractor employees Must sign in upon entering the building.

25.5. If you or your staff feel sick or experience flu like symptoms after the site visit, contact the Designated Contact.

25.6. Wash your hands often with soap and water, or use hand sanitizer, before/during/after entry into any Owner building.

25.7. Entry into and Owner site requires the wearing of an ASTM level 1 mask when COVID Procedure in place. If you do not have one, then you must wear a face covering to enter the building and an ASTM mask will be provided to you.

25.8. Practice physical distancing – stay 2m (6ft) apart from all other persons.

25.9. Contractor must be in compliance with Procedure HR106 – Covid-19 Immunization Disclosure: https://granderie.ca/application/files/7016/3284/4671/HR106_COVID-19_Immunization_Disclosure.pdf

26. EXECUTION OF A CONTRACT AND BOARD'S PURCHASE ORDER

26.1. The Successful Bidder shall execute a CCDC 2-2020 Stipulated Price Contract in writing with the Board within ten (10) days after being notified in writing by the Board of the acceptance of the Bid. In the event that the Successful Bidder fails to execute a Contract within the said period, the Board in its sole unfettered discretion may rescind the selection of that Bidder, and make an offer to next lowest compliant Bidder or reject all Tenders.

26.2. A purchase order accepting a Bid will be issued by the Board to the Successful Bidder following the execution of the Contract.

27. RESERVED RIGHTS TO THE BOARD – GENERAL

27.1. In addition to any other express rights or any other rights which may be implied in the circumstances, the Board reserves the right to;

a. Make public the names of any and all Bidders;

b. Request written clarification or the submission of supplementary written information from any Bidder and incorporate such clarification or supplementary written information into the Bidder's Bid, at the Board's discretion, provided that clarification or submission of supplementary written information shall not be an opportunity for the Bidder to correct errors in its Bid or to change or enhance the Bidder's Bid in any material manner;

c. Waive formalities and accept Bids that substantially comply with the requirements of this Request for Tender, in the Board's sole discretion;

d. Verify with any Bidder or with a third party any information set out in a Bid;

e. Disqualify any Bidder whose Bid contains misrepresentations or any other inaccurate or misleading information, or whose Bid is determined to be non-compliant with the requirements of the Request for Tender.

f. Disqualify any Bid of an Bidder who has breached any Applicable Laws or who has engaged in conduct prohibited by this Request for Tender,

including where there is any evidence that the Bidder or any of its employees or agents colluded with any other Bidder, its employees or agents in the preparation of the Bid;

g. Disqualify a Bid where the Bidder has or the principals of a Bidder have previously breached a contract with the Board, or has otherwise failed to perform such contract to the reasonable satisfaction of the Board the Bidder has been charged or convicted of an offence in respect of a contract with the Board, or the Bidder reveals a Conflict of Interest or Unfair Advantage in its Bid or a Conflict of Interest or evidence of any Unfair Advantage is brought to the attention of the Board;

h. Make changes, including substantial changes, to this Request for Tender provided that those changes are issued by way of addenda in the manner set out in this Request for Tender;

i. Accept or reject a Bid if only one Bid is submitted;

j. Reject a subcontractor proposed by a Bidder;

k. Select any Bidder other than the Bidder whose Bid reflects the lowest cost to the Board;

l. Cancel this Request for Tender process at any stage and issue a new Request for Tender for the same or similar requirements, including where;
   i. the Board determines it would be in the best interest of the Board not to award a Contract;

   ii. the Bid prices exceed the Bid prices received by the Board for previously supplied similar Work;

   iii. the Bid prices exceed the funds available for the Work; or

   iv. the funding for Work has been revoked, modified, or has not been approved;

   and where the Board cancels this Tender, the Board may do so without providing reasons, and the Board may thereafter issue a new Request for Tender, Request for Qualifications, Sole Source or do nothing;

m. Discuss with any Bidder different or additional terms to those contained in this Request for Tender or in any Bidder's Bid.

27.2. By submitting a Bid, the Bidder authorizes the collection by the Board of the information identified in this Request for Tender, which the Board may request from any third party.

28. RECORD AND REPUTATION

28.1. Without limiting or restricting any other right or privilege of the Board and regardless of whether or not a Tender or Bidder otherwise satisfies the requirements of an RFT, the Board may reject summarily a Tender from any person where:

a. The commercial relationship between the Board and the Bidder has been impaired by the prior and/or current act(s), or omission(s) of such Bidder,

b. The Bidder is or has been engaged, either directly or indirectly, in a legal action against the Board, its elected or appointed officials and/or employees in relation to:

i. any contract or service; or

ii. any matter arising from the Board's exercise of its powers, duties or functions.

28.2. In determining whether or not to reject

a. In determining whether or not to reject a Tender under this section, the Board may consider whether the litigation is likely to affect the Bidder's ability to work with the Board, and/or whether the Board's experience with the Bidder indicates that the Board is likely to incur increased staff and legal costs in the administration of the Contract if it is awarded to the Bidder.

b. For the purpose of 26.1, the prior acts or omissions of a Bidder shall also include the prior acts or omissions of; an officer, a director, a majority or controlling shareholder, or a member of the Bidder, if a corporation; a partner of the Bidder, if a partnership; any corporation to which the Bidder is an affiliate of or successor to, or an officer, a director or a majority or controlling shareholder of such corporation and any person with whom that the Bidder is not at arm's length within the meaning of the Income Tax Act (Canada).

29. CONFIDENTIALITY

29.1. Any information or documentation provided by a Bidder in connection with a Request for Tender is subject to the provisions of the Freedom of Information and Protection or Privacy Act. R.S.O., 1990, C.m.56. As a consequence, the Grand Erie District School Board cannot guarantee the confidentiality of the documentation and information provided during the course of the Request for Tender.

29.2. Subject to the provisions of the Freedom of Information and Protection of Privacy Act, the Owner will make reasonable efforts to protect the confidentiality of information and documentation submitted by a supplier as part of the Bidder's Bid. All Bidders are encouraged to designate and identify to the Owner all information and/or documentation it regards as being confidential in nature. Please note: neither the entire Bid, nor the identity of the Bidder can be designated as confidential.

30. IDENTICAL BIDS

30.1. If more than one (1) substantially complaint Bid is received where the Stipulated Price Bids are identical, the Owner, in the presence of the identical Bidders will flip a coin to determine the award.

31. CONFIDENTIAL INFORMATION OF THE BOARD

31.1. All information provided by or obtained from the Board is any form in connection with this Request for Tender either before or after the issuance of this Request for Tender:

a. is the sole property of the Board and must be treated as confidential;

b. is not to be used for any purpose other than replying to this Request for Tender and the performance of the Contract;

c. must not be disclosed without prior written authorization from the Board; and

d. shall be returned by the Bidder to the Board immediately upon the request of the Board.

32. BID PROTEST PROCEDURE

32.1. In the event that a Bidder wishes to review the decision of the Board in respect of any material aspect of the Request for Tender Process, the Bidder shall submit a protest in writing to the Board within ten (10) days of the closing date of the Tender.

32.2. Any 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;

e. the Bidder's arguments and supporting documentation; and

f. the Bidder's requested remedy.

33. ENTITLEMENT TO A DEBRIEFING

33.1. In accordance with the Broader Public Sector Procurement Directive Unsuccessful Bidders are entitled to a debriefing, during which they will be provided with feedback regarding their submission. In order to be debriefed, Unsuccessful Bidders must contact the Board Buyer or their designate to request a debriefing within sixty (60) days from the date of the notification of award.

34. ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA)

34.1. Pursuant to Section 6 of Ontario Regulation 429/07 ("Regulation"), Accessibility Standards for Customer Services made under the Accessibility for Ontarians with Disabilities Act, 2005, the Successful Bidder shall ensure that all of its employees, agents, volunteers, or others for whom it is at law responsible, receive training about the provisions of the good and services contemplated herein to persons with disabilities. Such training shall be provided in accordance with Section 6 of the Regulation and shall include, without limitation, a review of the purposes of the Act and the requirements of the Regulation, as well as instruction regarding all matters set up in Section 6 of the Regulation. Where

requested by the Board, the Successful Bidder shall provide written proof that all employees have been trained as required under the Act as well as any documentation regarding training policies, practices and procedures.

END OF SECTION 00200 – INSTRUCTION TO BIDDERS

SECTION 00300 – INFORMATION AVAILABLE

1. SOIL INVESTIGATION DATA

1.1. Intentionally deleted – Not applicable

2. ASBESTOS SURVEY

2.1. Detailed asbestos survey report is included herein, titled as follows:

a. Asbestos Survey - TO BE PROVIDED

2.2. The asbestos survey examined for both friable and non-friable asbestos building materials. The recommendations given shall be reviewed by the Contractor and considered a requirement of the Contract Documents. Refer to specifications and reports for removal requirements and procedures.

2.3. Neither the Owner nor the Consultant guarantees the accuracy or completeness of the asbestos survey. The Contractor shall satisfy themselves, with regard to all matters relating to asbestos materials, conditions and phasing of the Work, which may affect methods or costs of construction before commencing Work.

END OF SECTION 00300 – INFORMATION AVAILABLE

SECTION 00410 – STIPULATED PRICE BID FORM

Submit Stipulated Price Bid and price breakdowns where applicable, on this official form.

All blank items indicated must be filled out and delivered on or before the official Bid closing time as stated in the Instructions to Bidders.

From:

Legal Name of Bidder: _____

Business Address of Bidder: _____

Telephone Number: _____ Fax Number: _____

Email Address: _____

To: Jennifer Moffatt
Buyer
Grand Erie District School Board
349 Erie Avenue, Brantford, Ont. N3T 5V3

1. BASIS OF TENDER

1.1. DOCUMENTS

a. We have examined all the official Contract Documents issued by the Owner, including specifications and drawings as applicable.

1.2. SITE CONDITIONS

a. We have inspected and visited the site of proposed work and fully familiarized ourselves of the existing conditions and limitations of the Work.

1.3. UNDERSTANDING

a. No oral, fax, electronic, telephone or telegraphic proposals will be considered.

b. The requirements of these Official Request for Tender Documents govern all phases of the Work and the Tender proposal unit prices shall include all costs that arise from compliance with such documents. It must be clearly understood that the Board will not accept any price variation in the supply or installation of products or labour or materials from those submitted and carried by the Bidder hereunder. During the Contract period, the Board will not be responsible for, or entertain any price increase in the cost of materials or labour carried in the Bid amount for any reason, including acts of war or world events.

c. Bidders are responsible for acquainting all Subcontractors or suppliers with the requirements of the Tender Documents.

d. No allowance will be made after Bid closing or award of Contract for errors or missions due to Subcontractors or suppliers not being familiar with such requirements.

e. The award of this Contract is subject to budget allotment and availability and approval by the Board of Trustees.

2. COST PROPOSAL

2.1. BASE BID SUM

a. We, the undersigned, hereby offer to furnish all materials, installation, labour and equipment necessary to complete the entire Work (Project) in strict accordance with all requirements of the official Contract Documents.

2.2. Bidders **MUST** submit their Bid on the Excel Pricing Table included in the Bid Package

2.3. Harmonized Sales Tax (HST)

a. The Stipulated Price Bid and price breakdown where applicable submitted for this Contract shall exclude the HST.

b. For purposes of calculating costs of extra work performed, any HST paid by the Contractor to suppliers or Subcontractors shall be deducted prior to any mark-up, profit or overhead by the Contractor.

c. The Contractor will not be permitted to add any mark-up for overhead or profit to the HST amount or to claim for any time involved in processing or collecting the HST and for its remittance to the Canada Revenue Agency.

2.4. We confirm that the Stipulated Price Bid indicated in COST PROPOSAL – BASE BID SUM 2.1.a, includes the cost of all labour, materials, equipment, freight, mileage, fuel surcharges, all other applicable taxes (if any), royalties, custom duties, overhead and profit, insurance premiums, and all other charges at the date of this Tender, and not subject to revisions due to changes in cost of labour, materials or other items. No allowance shall be made subsequently in this connection on behalf of the Contractor for any error or negligence on their part.

3. ADDENDA

3.1. We acknowledge the receipt of the following addenda issued during the Request for Tender period.

ADDENDUM NO. _____ TO ADDENDUM NO. _____

4. NO COLLUSION

4.1. We declare that this Tender is made without collusion, knowledge, comparison of figures or arrangement with any other company, firm or person submitting a Tender for the same Work and is in all respect fair and without collusion or fraud.

5. CONFLICT OF INTEREST

5.1. We declare that to our knowledge no member of the Board of Trustees, and no officer or employee of the Board is, will be, or has become interested, directly or indirectly, as a contracting party, partner, or in the supplies; work or business in connection with the said Contract, or in any portion thereof, or of any supplies to be used therein, or in any monies derived therefrom.

6. INTERPRETATION

6.1. We further acknowledge and agree that all statements, schedules and other information provided in the Tender are true, complete and accurate in all respects. We have read, understand and agree to abide by all terms and conditions contained in this document and confirm that the party executing this Form of Tender is authorized to sign the same.

7. COMPLETION OF THE WORK

7.1. We undertake to complete the Work in _____ weeks after the award of the Contract by the Owner in the form of an executed Contract and/or Purchase Order.

7.2. It is the intention of the Owner to award the Contract within ten (10) days and Work is commence upon the approval and be substantially performed no later than **June 24th, 2024**

7.3. Dated at _____ this _____ day of _____, 2024.

7.4. The undersigned Bidder, understands the circumstances and requirements applicable to this Contract as specified in these official Request for Tender documents and will complete the entire Work (Project) on or before the completion deadline date as specified above.

_____
Legal Name of Bidder

_____ _____
Telephone Number Fax Number

_____
Authorized Signature of Bidder with the Authority to Bind the Corporation

_____
Print Name and Title of Authorized Signature

8. STATEMENT A – PROJECT EXPERIENCE

Bidders shall include at least three (3) current references (other than the Board or its Consultants) for Work of a similar nature (i.e. – size and scope) to this Tender. The Board may verify references and may choose to visit previous project sites. A negative or poor reference or job completion may, at the Board's sole discretion, be sufficient reasons for not awarding this Contract to a Bidder.

SUMMARY OF BIDDER'S EXPERIENCE IN SUCCESSFULLY COMPLETED SIMILAR WORK

Year	Description of Project Scope/Cost	Company Name & Address	Contact Person & Email	Phone #

9. STATEMENT B – QUALIFICATIONS OF SENIOR SUPERVISORY STAFF

Qualifications of senior supervisory staff to be employed on this Contract.

Name	Appointment	Qualifications and Experience

10. STATEMENT C – LIST OF SUBCONTRACTORS

The Bidder shall make an entry against each possible sub trade listed either by naming the proposed Subcontractor or by entering “by own forces’, whichever applies. No blank spaces are to be left.

If, in addition, the Bidder proposes to sublet a part of the Work which is not listed below, he shall add the sub trade and the proposed Subcontractor’s name to the list.

Division of Section of Work	Name of Subcontractor or Supplier	Product

END OF SECTION 00410 – STIPULATED PRICE BID FORM

SECTION 00800 – SUPPLEMENTARY ARTICLES AND CONDITIONS

1. AGREEMENT BETWEEN OWNER AND CONTRACTOR

1.1. ARTICLE A-1 – THE WORK

a. Add the following words at the end of paragraph 1.3. “and attain *Completion* of the *Work* as soon as reasonably possible thereafter and in any event by the date which is 30 days following *Substantial Performance* of the *Work*.

1.2. ARTICLE A-3 – CONTRACT DOCUMENTS

a. Add the following to the list of *Contract Documents* in paragraph 3.1:

- CCDC 2-2020 Supplementary Articles and Conditions
- General Specifications
- Technical Specifications
- Drawings
- Tender Addenda
- Tender
- Performance Bond (as required)
- Labour and Material Payment Bond (as required)

1.3. ARTICLE A-5 – PAYMENT

a. Amend the preamble of paragraph 5.1, so that it reads as follows:

Subject to the provisions of the *Contract Documents*, and in accordance with legislation and statutory regulations respecting holdback percentages and where such legislation or regulations do not exist or apply subject to a holdback of ten percent (10%), and subject to a separate and additional two percent (2%) *Warranty/Deficiency Holdback* to the *Owner*, the owner shall…”

b. Amend paragraph 5.1.3 so that it reads as follows:

“upon receipt of the *Consultant*’s final certificate of payment, pay to the *Contractor* the unpaid balance of the *Contract Price* Less the two percent (2%) *Warranty/Deficiency Holdback* accumulated from pervious progress draws on the *Contract*.”

c. Delete paragraph 5.2.1 in its entirety and replace it with the following:

“Should either party fail to make payments as they become due under the terms of the *Contract,* or in an award by arbitration or court, interest shall also become due payable on such unpaid amount at zero percent (0%) above the prime rate. Such interest shall be compounded on a monthly basis. The prime rate shall be the rate

of interest quoted by the Bank of Canada for prime business loans, as it may change from time to time."

1.4. **ARTICLE A-6 RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING**

a. ADD new paragraph 6.6 as follows:

"6.6 In addition to the addresses, requirements and timelines set out in Article 6, the following applies:

.1 for the purposes of prompt payment provisions of the *Construction Act*, if applicable, and Part 5 – PAYMENT,

(i) applications for payment and proper invoices will be considered given or delivered by the *Contractor* to the *Owner* when they have been delivered by the *Contractor*; and

(ii) notices of non-payment will be considered to have been given or delivered by the *Owner* to the *Contractor* when they have been delivered to the *Contractor*, and

.2 for the purposes of the adjudication provisions of the *Construction Act*, if applicable, and other dispute notices, communications or delivery of documents to be given under the applicable *Construction Act* may be given by electronic mail, to the email address for the Owner and Contractor set out on page 4 of the CCDC 2 – 2020 Agreement to which these Supplementary Conditions are attached.

1.5. **ARTICLE A-9 – CONFLICT OF INTEREST**

a. Add new Article A-9 – Conflict of Interest and add the following paragraphs as follows:

9.1 The *Contractor*, all the *Subcontractors* and *Suppliers,* and any of their respective advisors, partners, directors, officers, employees, agents, and volunteers shall not be engaged in any activity or provide any services where such activity or the provision of such services creates a Conflict of Interest (actually or potentially, in the sole opinion of the *Owner*) with the provision of the *Work* pursuant to the *Contract*. The *Contractor* acknowledges and agrees that a Conflict of Interest, as described in this Article A-9, includes, but is not limited to, the use of Confidential Information where the *Owner* has not specifically authorized such use.

9.2 The *Contractor* covenants and agrees that it will not hire or retain the services of any employee or previous employee of the *Owner* to complete the *Work* where to do so constitutes a breach by such employee or previously employee of the *Owner*'s conflict of interest policy (in the sole opinion of the *Owner*) as it may be amended from time to time, until after the completion of the *Work* under the *Contract*.

9.3 It is the essence of the *Contract* that the *Owner* shall not have direct or indirect liability to any *Subcontractor* or *Supplier* and that the *Owner* relies on the maintenance of an arm's-length relationship between the *Contractor* and its *Subcontractors* and *Suppliers*. Consistent with the fundamental term of the *Contract* the *Contractor* will not enter into any agreement or understanding with any *Subcontractor* or *Supplier*, whether as part of any contract or any written or oral collateral agreement, pursuant to which the parties thereto agree to cooperate in the presentation of a claim for payment against the *Owner*, directly or through the *Contractor*, where such claim is, in whole or in part, in respect of a disputed claim by the *Subcontractor* or *Supplier* against the *Contractor*, where the payment to the *Subcontractor* or *Supplier* by the *Contractor* is agreed to be condition or contingent on the ability to recover those amounts or portion thereof from the *Owner*, failing which the *Contractor* shall be saved harmless from all or a portion of the claims. The *Contractor* acknowledges that any such agreement would undermine the required arm's-length relationship and constitute a Conflict of Interest. For greater certainty, the *Contractor* shall only be entitled to advance claims against the *Owner* for amounts pertaining to the *Subcontractor* or *Supplier* claims where the *Contractor* has actually paid or unconditionally acknowledged liability for those claims or where those claims are the subject or litigation or binding arbitration between the *Subcontractor* or *Supplier* and the *Contractor* has been found liable for those claims.

9.4 Notwithstanding paragraph 7.1.2 or GC 7.1 – OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK, SUSPEND THE WORK OR TERMINATE THE CONTRACT, a breach of this Article by the *Contractor*, any of the *Subcontractors*, or any of their respective advisors, partners, directors, officers, employees, agents and volunteers shall entitle the *Owner* to terminate the *Contract*, in addition to any other rights and remedies that the *Owner* has in the *Contract*, in law, or in equity.

1.6. **DEFINITIONS**

Definitions of the *Stipulated Price Contract* of the Standard Construction Document, CCDC 2-2008, *Stipulated Price Contract* for the above named Project are amended as follows:

a. Amend definitions as follows:

- ***Contract* Documents** – Add the words "in writing" in the last line after the words "agreed upon".

- ***Contractor*** – Add the following sentence to the definition of *Contractor*. "The *Contractor* is the CONSTRUCTOR for the purpose of the OHSA."

- **Notice in Writing** – Add the following sentence to the definition of *Notice in Writing*: The *Consultant* will distribute a *Notice in Writing* to any and all sub-*Consultant*s as deemed necessary."

b. Add new definitions as follows, which shall apply to terms used in the *Contract Documents* whether or not such terms are capitalized therein:

- Asbestos – Asbestos is a generic term describing a number of naturally occurring fibrous, hydrated mineral silicates that differ in chemical composition and are suitable for use as non-combustible, nonconducting and chemically resistant materials. Different types of asbestos which may be found in buildings are chrysotile, crocidolite, amosite, tremolite, actinolite or anthophyllite

- *Completion* – *Completion* means when all of the following have occurred:

  (a) *Substantial Performance* of the *Work* has been achieved; and

  (b) the *Consultant* has certified that:

    (i) the *Contract* is deemed to have been fully completed within the meaning of the *Construction Act*; or

    (ii) if any such legislation is not in force or does not contain such definition, the price of completion, correction of a known defect or last supply is not more than the lesser of 1 per cent of the *Contract* Price and $5,000."

- ***Construction Act*** – *Construction Act* means the *Construction Act*, R.S.O. 1990, c.C.30 and Regulations enacted thereunder, all as amended from time to time and subject to the application of the transition provisions in s. 87.3 of the *Construction Act*. *Payment Legislation* shall be deemed a reference to the *Construction Act*.

- **Construction Schedule** – *Construction Schedule* means the schedule of *Work* to be performed by the *Contractor*, in accordance with the *Owner*'s requirements, and as revised and/or updated pursuant to the *Owner*'s written approval.

- **Excusable Delay** – *Excusable Delay* means any bona fide delay or state of affairs reasonably beyond the control of a party (other than as a result of financial incapacity of such party) which shall cause any party to be unable to fulfil or to be delayed or restricted in the fulfilment of such party's obligations arising as a result of:

  (i) *Labour Disputes*, fire, unusual delay by common carriers or unavoidable casualties;

(ii) enemy or hostile actions, sabotage, war, blockades, insurrections, riots, washouts, nuclear and radiation activity or fall-out, civil disturbances, explosions, fire or other casualty, and acts of God (provided specifically that adverse weather conditions shall not be considered acts of God, even if such conditions are unusually adverse);

(iii) any injunction ordered by a court of competent jurisdiction other than if such occurrence is caused by the *Owner* or the *Contractor* failing to adhere to this *Contract*;

(iv) disease, epidemics, pandemics (including COVID-19), power shortages or outages; or

(v) inability to obtain any required material, goods, equipment, service or labour, as a direct result of the circumstances described in (i)-(iv) above, unless they are/were readily available, or reasonable substitutes were readily available (including at a greater cost), or could have been previously acquired by the party had it completed reasonable efforts to anticipate the requirements of the *Work* or foreseeable labour or supply related circumstances.

Notwithstanding the forgoing, the following potential causes for delay are not considered to be an *Excusable Delay*:

.1 failure of a *Supplier* to deliver *Products* in accordance with the *Construction Schedule,* if such *Products* were readily available, or reasonable substitutes were readily available (including at a greater cost), or could have been previously acquired by the party had it completed reasonable efforts to anticipate the requirements of the *Work* or foreseeable labour or supply related circumstances;

.2 weather and climate related delays;

.3 delays caused by economic conditions, including supply chain shortages or delays, or labour shortages, or price increases;

.4 delays caused by the failure of the *Contractor* to take customary precautions and protections of the *Work* and the *Construction Schedule* in accordance with *Contract*; and

.5 public orders, guidelines, directives and laws in existence prior to the date the Agreement was signed, including in relation to the COVID-19 pandemic.

- **Install** – *Install* or *Installation* means completion of the following activities, including the associated labour, services, plant, construction machinery and equipment required to:

  i. Position and adjust *Products* to final placement;
  ii. Affix and anchor *Products* in final placement, in accordance with manufacturers' instructions and *Contract* Documents;

iii. Commission and adjust *Products* for proper operation.

- **Labour Dispute** – *Labour Dispute* means any lawful or unlawful work stoppage, labour disruption, strike, job action, lock-outs, picketing, or other labour controversy which does affect the *Work*, but does not include market difficulties or slow-downs in retaining workers/employees (whether due to wage demands or otherwise) or a general refusal to work or supply materials.

- **Make Good** – *Make* Good means to restore to at least the quality of, and leave in no worse condition than, the original.

- **OHSA** – The *OHSA* is the Occupational Health and Safety Act (Ontario), and all other applicable health and safety acts or regulations.

- **Overhead** – *Overhead* means all site and head office operations and facilities, all site and head office administration and supervision, including project manager costs; all duties and taxes for permits and licenses required by the authorities having jurisdiction at the Place of the *Work*; all requirements of Division 1 of the Specifications, including but not limited to submittals, warranty, quality control, insurance and bonding; calculations, testing and inspections; meals and accommodations; and, tools, expendables and clean-up costs."

- **Proposed Change** – *Proposed Change* or Contemplated Change Order is a written instruction by the *Consultant* directing the *Contractor* to provide the following:

  i. Amount of an adjustment in the *Contract* Price or Cash Allowance; and/or

  ii. The extent of the adjustment in the *Contract* Time if any.

- **Submittals** – *Submittals* are documents or items required by the *Contract Documents* to be provided by the *Contractor*, such as:

  i. Shop Drawings, samples, models, mock-ups to indicate details or characteristics, before the portion of the *Work* that they represent can be incorporated into the *Work*; and

  ii. Record drawings and manuals to provide instructions for the operation and maintenance of the *Work*.

- **Warranty/Deficiency Holdback** – *Warranty/Deficiency Holdback* means a holdback and reserve of two per cent (2%) of the *Contract Price* to be held by the *Owner,* and applied or released in accordance with paragraph 12.3.7.

1.7. **GC 1.1 CONTRACT DOCUMENTS**

a. Add 1.1.9.1 as follows:

1.1.9.1 “The *Contractor* is the sole coordinator of the *Work* and neither the organization of the *Specifications* into the divisions, sections and parts, nor the arrangement of the drawings shall oblige the *Consultant* or the *Owner* to act as arbiter to establish limits or responsibility between the *Contractor* and its *Subcontractors*.”

b. Delete paragraph 1.1.5.1 in its entirety and replace it with the following

.1 “the order of priority of documents, from highest to lowest, shall be:

- Supplementary Conditions,
- the Agreement between the *Owner* and the Contractor,
- the Definitions,
- the General Conditions,
- Division 01 of the Specifications,
- technical Specifications,
- material and finishing schedules,
- the Drawings.”

c. Add the following to the end of 1.1.9:

“The Specifications are divided into divisions and sections for convenience but shall be read as a whole and neither such division nor anything else contained in the *Contract* Documents will be construed to place responsibility on the *Owner* or the *Consultant* to settle disputes among the *Subcontractors* and *Suppliers* with respect to such divisions. The Drawings are, in part, diagrammatic and are intended to convey the scope of the *Work* and indicate general and appropriate locations, arrangements and sizes of fixtures, equipment and outlets. The *Contractor* shall obtain more accurate information about the locations, arrangements and sizes from study and coordination of the Drawings, including Shop Drawings and shall become familiar with conditions and spaces affecting those matters before proceedings with the *Work*. Where site conditions require reasonable minor changes in indicated locations and arrangements, the *Contractor* shall make such changes at no additional cost to the *Owner*. Similarly, where known conditions or existing conditions interfere with new installation and require relocation, the *Contractor* shall include such relocation in the *Work*. The *Contractor* shall arrange and install fixtures and equipment in such a way as to conserve as much headroom and space as possible. The schedules are those portions of the Contact Documents, wherever located and whenever issued, which compile information of similar content and may consist of drawings, tables and/or lists.”

d. Add new paragraph 1.1.12 as follows:

1.1.12 Syntax

i. Where the words ‘accepted’, ‘reviewed’, ‘designated’, ‘directed’, ‘inspected’, ‘instructed’, ‘permitted’, ‘required’, and ‘selected’ are sued in the *Contract* Documents, they are deemed to be followed by the words ‘by the *Consultant*’, unless the context provides otherwise.

ii. Where the words ‘acceptable’, ‘submit’ and ‘satisfactory’ are used in the *Contract* Documents, they are deemed to be followed by the words ‘to the *Consultant*’, unless the context provides otherwise.

e. Add new paragraph 1.1.13 as follows:

“1.1.13 The *Consultant*, on behalf of the *Owner*, shall provide the *Contractor* without charge, an electronic PDF/CAD drawings and version of the *Contract Documents*, exclusive of those required by jurisdictional authorities and the *Contractor* is responsible to print as many copies as it requires at no cost to the *Owner*. The *Consultant* shall issue Issued for Construction set of *Contract Documents* in an electronic format to the *Contractor*. Additional copies can be purchased by the *Contractor* at the *Consultant*’s cost of reproduction, handling and sales tax. The *Contract Documents* shall be signed in triplicate (3) by the *Owner* and the *Contractor*, and each of the *Contractor*, the *Owner* and the *Consultant* shall retain one set of signed and sealed (if required by the governing law of the *Contract*) *Contract* Documents.”

f. Add new paragraph 1.1.14 as follows:

“1.1.14 If, at any time, the *Contractor* finds errors, inconsistencies, or omissions in the *Contract Documents* or has any doubt as to the meaning or intent of any part thereof, including laying out of the *Work*, the *Contractor* shall immediately notify the *Consultant*, and request instructions, a Supplemental Instruction, Change Order, or Change Directive, as the case may require, and the *Contractor* shall not proceed with the work affected until the *Contractor* has received such instructions, a Supplemental Instruction, Change Order or Change Directive. Neither the *Owner* nor the *Consultant* will be responsible for the consequences of any action of the *Contractor* based on oral instructions. Errors, inconsistencies and/or omissions in the Drawings and/or Specifications which do not allow completion of the *Work* of the *Contract* shall be brought to the *Consultant*’s attention prior to the execution of the *Contract* by means of a request for information. Notwithstanding the foregoing, errors, inconsistencies, discrepancies and/or omissions shall not include lack of reference on the Drawings or in the Specifications to labour and/or Products that are required or normally recognized within respective trade practices as being necessary for the complete execution of the *Work*. The Contactor shall not use subsequent requests for information,

issued during execution of the *Work* to establish a change and/or changes in the *Work* pursuant to Part 6 – CHANGES IN THE WORK"

1.8. **ADD NEW ARTICLE "GC 1.5 PROJECT REQUIREMENTS" AS FOLLOWS:**

"1.5.1: The *Contractor* represents covenants and warrants to the *Owner* that:

a. It has the necessary high degree of expertise and experience d to enable it to perform the services required by the *Contract Documents*;

b. The personnel it assigns to the *Project* are highly experienced;

c. It has a sufficient staff of qualified and competent personnel to replace its designated supervisor and project manager, subject to the *Owner*'s approval, in the event of death, incapacity or resignation;

d. There are no pending, threatened or anticipated claims that would have a material effect on the financial ability of the *Contractor* to perform its *Work* under the *Contract*;

e. If the *Contractor* is not maintaining the *Contract Schedule*, consistent with its obligations under the *Contract*, then at the request of the *Owner*, or the *Consultant*, it shall increase its efforts to the *Project* including the addition of more personnel to the *Project* during regular times and during periods of time for which overtime may be required, all of which is to be done promptly at the *Contractor*'s own cost and expense; and

f. In tendering for the *Work* and in entering into this *Contract*, other than any survey or geotechnical report furnished by the *Owner*, the *Contractor* did not and does not rely upon information furnished by the *Owner* or any of its agents or servants respecting the nature or confirmation of the ground at the site of the *Work*, or the location, character, quality or quantity of the materials to be removed or to be employed in the construction of *Work*, or the character of the construction machinery and equipment or facilities needed to perform the *Work*, or the general and local performance of the work under the *Contract* and expressly waives and releases the *Owner* from all claims with respect to the said information with respect to the *Work*."

1.9. **GC2.2 ROLE OF THE *CONSULTANT***

a. Add 2.2.7.1 as follows:
2.2.7.1 "Questions shall be submitted by the *Contractor* in the form of a "Request for Information" in relation to a "Proposed Change" or "change directive" or "Contemplated change order"."

b. Amend paragraph 2.2.12 by the addition of the following to the end of that paragraph:

"If, in the opinion of the *Contractor*, the *Supplemental Instruction* involves an adjustment in the *Contract* Price or in the *Contract Time*, it shall, within ten (10)

Working Days of receipt of a *Supplemental Instruction*, provide the *Consultant* with a notice in writing to that effect. Failure to provide written notification within the time stipulated in this paragraph 2.2.12 shall be deemed an acceptance of the *Supplemental Instruction* by the *Contractor*, without any adjustment in the *Contract Price* or *Contract Time*.

c. Add at the end of paragraph 2.2.15 the words “as well as a review to determine the date of *Completion* of the *Work* as provided herein.”

d. In paragraph 2.2.18 delete from line two (2) “against whom the *Contractor* makes no reasonable objection and”.

e. Add new paragraph 2.2.19 as follows”

2.2.19 “The *Consultant* or the *Owner*, acting reasonably, may from time to time require the *Contractor* to remove from the project any personnel of the *Contractor*, including project managers, superintendents or *Subcontractors*, such persons shall be replaced by the *Contractor* in a timely fashion to the satisfaction of the *Consultant* or the *Owner*, as the case may be, at no cost to the *Owner*.”

1.10. GC 2.3 Review and Inspection of the Work

a. ADD new paragraph 2.3.8 as follows:

2.3.8 “The *Contractor* shall arrange for inspections by all applicable authorities, if and when required, and shall give the *Consultant* and the *Owner* timely notice of the date and time.”

1.11. **GC 2.4 DEFECTIVE WORK**

a. To paragraph 2.4.1 add 2.4.1.1 and 2.4.1.2 as follows:

2.4.1.1 “The *Contractor* shall rectify in an acceptable manner all other defective *Work* and like deficiencies throughout the *Work* whether or not they are specifically identified by the *Consultant*”.

2.4.1.2 “The *Contractor* shall prioritize the correction of any defective work, which, in the sole discretion of the *Owner*, adversely affects the day to day operations of the *Owner* or which, in the sole discretion of the *Consultant*, adversely affects the progress of the *Work*”.

b. Delete 2.4.2 in its entirety and substitute new paragraph 2.4.2:
2.4.2 “The *Contractor* shall promptly pay the *Owner* for costs incurred by the *Owner*, the *Owner*’s own forces or the *Owner*’s *Other Contractors*, for work destroyed or damaged or any alterations necessitated by the *Contractor*’s removal, replacement or re-execution of defective work. The *Owner* may appoint the

Contractor to rectify any such deficiencies to other contractor's work, at the *Contractor*'s expense.

c. Delete 2.4.3 in its entirety and substitute new paragraph 2.4.3:
2.4.3 "If in the opinion of the *Consultant* it is not expedient to correct defective *Work* or *Work* not performed as provided in the *Contract Documents*, the *Owner* may deduct from the amount otherwise due to the *Contractor* the lesser of (i) the difference in value between the *Work* as performed and that called for by the *Contract Documents* and (ii) the cost to rectify the defective or substandard Work. If the *Owner* and the *Contractor* do not agree on the difference in value or the cost to rectify the *Work*, they shall refer the matter to the *Consultant* for determination."

1.12. **GC 3.1 CONTROL OF THE WORK**

a. Add new paragraphs 3.1.3. 3.1.4 and 3.1.5 as follows:

3.1.3 "Prior to commencing procurement, fabrication and construction activities, the *Contractor* shall verify, at the *Place of Work*, all relevant measurements and levels necessary for proper and complete fabrication, assembly and installation of the *Work* and shall further carefully compare such field measurements and conditions with the requirements of the *Contract Documents*. Where dimensions are not included or exact locations are not apparent, the *Contractor* shall immediately notify the *Consultant* in writing and obtain written instructions from the *Consultant* before proceeding with any part of the *Work* affected thereby.

3.1.4 "The *Contractor* shall perform the *Work* in accordance with the *Contract Documents* and all laws, code and industry standards, and shall employ only good workmanship subject to specific requirements of the *Contract Documents*, and in accordance with applicable laws, ordinances, rules, regulations, or codes relating to the performance of the *Work*. In performing its services and obligations under the *Contract*, the *Contractor* shall exercise the standard of care, skill and diligence that would normally be provided by an experienced and prudent contractor supplying similar services for similar projects. The *Contractor* acknowledges and agrees that throughout the *Contract*, the performance of the *Contractor*'s obligations, duties and responsibilities shall be judged against this standard. The *Contractor* shall exercise the same standard of care, skill and diligence in respect of any Products, personnel or procedures which it may recommend to the *Owner*.

3.1.5 "Without limiting the generality of the foregoing, the *Contractor* is responsible for the intermeshing of the various parts of the *Work* so that no part shall be left in an unfinished or incomplete condition owing to any disagreement between the various *Subcontractors* and *Suppliers*, or between any of the *Subcontractors* and *Suppliers* and the *Contractor* as to where the *Work* of one begins or ends with relation to the *Work* of the other."

1.13. **GC 3.2 CONSTRUCTION BY OWNER OR OTHER CONTRACTORS**

a. Add new paragraphs 3.2.7, 3.2.8 and 3.2.9 as follows:

3.2.7 “Placing, installing, application and connection of the *Work* by the *Owner*’s own forces or by other contractors, on and to the *Contractor’s Work*, will not relieve the *Contractor*’s responsibility to provide and maintain the specified warranties.”

3.2.8 “Entry by the *Owner’s* own forces and by other contractors does not indicate acceptance of the *Work* and does not relieve the *Contractor* of any responsibility under the *Contract* including the responsibility to complete the *Work*.”

3.2.9 “The *Contractor* shall act as “prime contractor” under the *OHSA* for all *Other Contractors*. The *Owner* shall ensure that its own forces and *Other Contractors* comply with all health and safety precautions and programs established by the *Contractor* as constructor at the *Place of the Work*.”

1.14. **GC 3.4 CONSTRUCTION SCHEDULE**

a. In paragraph 3.4.1.1 add the following “the commencement of the *Work* and prior to” before “the first application for payment”.

b. In paragraph 3.4.1.2 delete “monthly” and substitute “every two (2) weeks”.

c. Add a new paragraph 3.4.1.4 as follows:

3.4.1.4 “subject to the provisions of GC 6.5 DELAYS, provide overtime work without change to the *Contract Price* if such work is deemed necessary to meet the schedule, and all extensions to the *Contract Time* must be made in accordance with the *Contract Documents*.”

1.15. **GC 3.6 SUBCONTRACTORS AND SUPPLIERS**

a. Add at the end of paragraph 3.6.1.1 “including any warranties and service agreements which extend beyond the term of the *Contract*, and”.

b. In subparagraph 3.6.1.2 after the words “the *Contract Documents*” insert the words “including any required surety bonding”.

c. Add new paragraph 3.6.7, 3.6.8, 3.6.9 and 3.6.10 as follows:

3.6.7 “The *Contractor* agrees not to change *Subcontractors* without the *Owner*’s and/or *Consultant*s prior written authorization.”

3.6.8 “The *Contractor* confirms that any *Subcontractor* it employs to carry out any part of the *Work* covered by the collective agreement between the Brick Layers and

Allied Craft Union of Canada ("BACU") and the Masonry Industry Employer Council of Ontario/Ontario Masonry *Contractor*'s Association/BACU Bargaining Committee in the Industrial, Commercial and Institutional (ICI) sector (the "BACU Collective Agreement") is a party to and is bound by the BACU Collective Agreement (the "BACU *Subcontractor* Covenant").

3.6.9 "The *Contractor* shall, in the case of its *Subcontractors*, be held responsible for and shall ensure that they obtain all necessary permits, fees, licenses, certification of inspections and all insurance in connection with the *Work* as may be required by the laws, ordinances, rules, regulations and codes relating to the *Work* and as may be required by this *Contract*."

3.6.10 "Subcontracting by the *Contractor*, including where specifically approved by the *Owner,* shall not be construed as relieving the *Contractor* from any obligations under the *Contract* or imposing any liability upon the *Owner*."

1.16. **GC 3.7 LABOUR AND PRODUCTS**

a. Amend paragraph 3.7.3 by adding the words "…agents, subcontractors and suppliers" after the word "employees" in the first (1st) line.

b. Add new paragraph 3.7.1.1 as follows:

3.7.3.1 "The *Contractor* confirms that it is bound by the BACU Collective Agreement and shall indemnify and save the *Owner* harmless with respect to claims that arise out of, or are attributable in any respect to, the *Contractor*'s failure to comply with any of its obligations pursuant to the BACU Collective Agreement (the "BACU Compliance Covenant")

c. Add new paragraphs 3.7.4, 3.7.5, 3.7.6, 3.7.7 and 3.7.8 as follows:

3.7.4 "The *Contractor* shall use and Install all manufactured materials, equipment, appliances and *Products* strictly in accordance with the manufacturer's specifications unless otherwise indicated in the *Contract* Documents."

3.7.5 "The *Contractor* shall not substitute any materials, equipment or products for those specified or use any method other than the specified without first obtaining the prior consent in writing of the *Consultant*.

Each application for consent to use a substituted material, equipment, product or method shall be made in writing to the *Owner*, and shall:

.1 Identify the material, equipment, product or method to be substituted;
.2 Identify the substitute;
.3 Provide the name of the manufacturer of the substitute and his address;
.4 Provide the name of the supplier or the substitute and his address;
.5 Provide a reason for proposing the substitute;

.6 Provide details and description of alternatives.

The *Contractor* shall assume responsibility to determine that the substituted material, equipment or product meets the space requirements shown in the drawings and described in the specifications. The *Contractor* shall also be responsible for any additional costs incurred in the connection with the Install of any such substituted material, equipment or product."

3.7.6 "The *Contractor* shall cooperate with the *Owner* and its representatives and shall take all reasonable and necessary actions to maintain stable and harmonious labour relations with respect to the *Work* at the Place of *Work*, including cooperation to attempt to avoid work stoppages, trade union jurisdictional disputes and other labour disputes. Any costs arising from labour disputes shall be at the sole expense of the *Contractor*."

3.7.7 "All *Products* and materials paid for by the *Owner* as part of the *Contract Price* are deemed to be the property of the *Owner*; however, the *Owner* shall be under no liability for loss thereof or damage thereto arising from any cause whatsoever. The *Contractor* is responsible for the safe on-site storage of *Products* and for their protection (including *Products* which may be supplied by the *Owner*). Such storage shall be managed so as to avoid dangerous conditions or contamination to the *Products* or endanger persons or property. The *Contractor* shall ensure that the price agreed to with a *Subcontractor* or *Supplier* includes the cost of delivery and storage of all *Products*." The Contractor shall remove all surplus or rejected materials as its property when notified in writing to do so by the Consultant. Notwithstanding that ownership of the Work and Products may vest in the Owner, the risk of all Work and Products shall remain with the Contractor until the Work and Products are accepted and assumed by the Owner as otherwise set out in the Contract.

3.7.8 "Notwithstanding any other term of this *Contract*, fluctuations in the price and cost of *Products,* materials and labour for the *Work* shall be at the risk of the *Contactor*, and shall not form the basis for any change in the *Contract Price*."

1.17.**GC 3.8 SHOP DRAWINGS**

a. Delete 3.8.7 and substitute as follows:

3.8.7 "The *Consultant* is permitted ten (10) Workings Days to review shop drawings from date of receipt, to the date of issuance, for return by post, courier, etc.

Should the *Consultant* review and require the resubmission of shop drawings, then (10) Working Days is again permitted for review.

Should the *Contractor* submit a large number of show drawings the *Consultant* will notify the *Contractor* within three (3) days of receipt, an estimated time for processing."

b. And new paragraphs 3.8.9 and 3.8.10 as follows:

3.8.9 “The review of shop drawings by the *Consultant* does not authorize a change in quantity, *Contract* Price or *Contract* Time.”

3.8.10 “The *Contractor* shall maintain a copy of all *Construction Documents* on site and red line all changes or modifications, with revised dimensions, that will serve as the basis for the preparation of as-built drawings, including for all construction trades.”

1.18.**ADDITIONAL GENERAL CONDITIONS 3.9 AND 3.10**

a. Add new General Conditions 3.9 and 3.10 as follows

GC 3.9 RIGHT OF ENTRY

3.9.1 The *Owner* shall have the right to enter upon and occupy the *Work*, in whole or in part for the purpose of placing fittings and equipment or for such other uses as it may wish. Both the *Owner* and the *Contractor* shall cooperate with the other, so as to permit the *Contractor* to complete the *Work* and the *Owner* to place fittings and equipment in the most efficient manner possible. Such entry and occupancy shall not be interpreted as acceptance of the *Work*, nor in any way relieve the *Contractor* from its responsibilities under the *Contract*.

GC 3.10 CONSTRUCTION SAFETY

3.10.1 The *Contractor* shall be solely responsible for construction safety at the Place of the *Work* and for compliance with the rules, regulations and practices required by the OHSA and shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the *Work*.

1.19.**GC 4.1 CASH ALLOWANCES**

a. Add new paragraph 4.1.3.1 as follows:

4.1.3.1 The *Consultant* will issue a Cash Allowance Disbursement Authorization (CADA) signed by the *Owner*, *Contractor* and *Consultant*.

b. Add new paragraph 4.1.8:

4.1.8 The *Owner* reserves the right to call, or to have the *Contractor* call, competitive tenders for portions of the *Work*, to be paid for, out of cash allowances, pursuant to GC 6.2 change order.

1.20. **GC 4.2 CONTINGENCY ALLOWANCE**

a. Delete GC 4.2 Contingency Allowance in its entirety.

1.21. **Add a new GC 5.0 – PROPER INVOICES as follows:**

"GC 5.0 PROPER INVOICES

5.0.1 On the 25th day of each month during the *Contract* Time, the *Contractor* will deliver to the *Consultant* a draft invoice of the *Contractor*'s proposed application for payment for all of the *Work* performed by the *Contractor* in that month, including an estimate of the *Work* to be performed and Products to be delivered at the date of such application for payment but before the end of that month, in order to facilitate and expedite payments under GC 5.2 – APPLICATIONS FOR PAYMENT, GC 5.3 – PAYMENT and GC 5.5 – FINAL PAYMENT.

5.0.2 The *Contractor* shall review with the *Consultant* and the *Owner*, at a scheduled time, the draft invoice and application for payment and the percentage of the *Work* completed for each item indicated in the schedule of values. This procedure shall be complied with for each draft invoice and application for payment.

5.0.3 All invoices and applications for payment submitted by the *Contractor* shall comply in all ways with the *Construction Act*.

5.0.4 Nothing in paragraphs 5.0.1 or 5.0.2 is intended to condition, pre-condition, prevent or delay the *Contractor*'s right to submit its applications for payment in accordance with this *Contract* and the *Construction Act*."

1.22. **GC 5.1 FINANCING INFORMATION REQUIRED BY THE OWNER**

a. Revise the heading "GC 5.1 FINANCING INFORMATION REQUIRED OF THE OWNER" to read "GC 5.1 FINANCING INFORMATION REQUIRED"

b. In paragraph 5.1.1 delete from line one (1), "before signing the *Contract*"

c. In paragraph 5.1.1 delete from line one (1), "thereafter"

d. In paragraph 5.1.1 add new sentence as follows:

"The *Contractor* shall, at the request of the *Owner*, promptly from time to time furnish to the *Owner* reasonable evidence that the financial arrangements have been made to fulfill the *Contractor*'s obligations under the *Contract*. "

e. Delete 5.1.2 in its entirety and substitute new paragraph 5.1.2 as follows:

5.1.2 The *Owner* and *Contractor* shall notify each other in writing of any material change in its financial arrangements during the performance of the *Contract*.

1.23.**GC 5.2 APPLICATIONS FOR PROGRESS PAYMENT**

a. Add new paragraphs 5.2.9, 5.2.10 and 5.2.11 as follows:

5.2.9 “Prior to each application for payment, the *Contractor* and *Consultant* shall jointly check the progress of the *Work*.”

5.2.10 “The *Contractor* shall submit to the *Consultant*, with each application, the following documentation:

.1 a Statutory Declaration CCDC 9A certifying that all accounts of the *Contractor* and all *Subcontractors* and *Suppliers* relative to the *Project* have been paid in full, less only the amounts of holdback due to them;

.2 the documents required under GC 10.4 demonstrating compliance by the *Contractor* and all *Subcontractors* with workers compensation legislation, including a certificate from the applicable authority;

.3 all information and documents required to be included for a proper invoice under applicable *Payment Legislation*; and

.4 such additional documents as the *Owner* or the *Consultant* may reasonably require.”

5.2.11 “The *Owner* may, in its discretion, reject any application for payment that does not comply with this *Contract* and the applicable *Payment Legislation*, or the *Owner* may withhold up to 10% of the amounts otherwise payable in relation to that application for payment until such application for payment includes all of the documents and information required of a proper invoice and by this *Contract* and the applicable *Payment Legislation*.”:

1.24.**GC 5.3 PAYMENT**

a. Delete from line 5.3.1.1, “calendar” and substitute “*Work*ing Days”.

b. Delete paragraph 5.3.1.2 in its entirety and substitute new paragraph 5.3.1.2:

5.3.1.2 “The *Owner* shall make payment to the *Contractor* on account as provided for in Article A5 of the *Contract*, payment no later than twenty-eight (28) calendar days after the date of a complete certificate of payment is issued by the *Consultant*, and in any event, in compliance with *Payment Legislation*.”

c. Add new paragraph 5.3.2 as follows:

5.3.2 "The *Owner* shall be entitled to deduct from or set off against any payment of the *Contract* Price and any other amounts payable by the *Owner* to the *Contractor* under this Agreement:

.1 any amount expended by the *Owner* in exercising the *Owner*'s rights under this Agreement to perform any of the *Contractor*'s obligations that the *Contractor* has failed to perform;

.2 any amount paid by the *Owner* directly to *Subcontractors* in respect of *Work* for which the *Owner* previously paid the *Contractor*;

.3 any damages, costs or expenses (including, without limitation, reasonable legal fees and expenses) incurred by the *Owner* as a result of the failure of the *Contractor* to perform any of its obligations under this Agreement;

.4 a reasonable amount on account of any outstanding *Work* or any outstanding deficiencies; and,

.5 any other amount owing from the *Contractor* to the *Owner* under this Agreement."

1.25. **GC 5.4 *SUBSTANTIAL PERFORMANCE* OF THE WORK AND PAYMENT OF HOLDBACK**

a. DELETE paragraph 5.4.1 and replace with the following:

5.4.1 The *Consultant* will review the *Work* to verify the validity of the application and shall promptly, and in any event, no later than 20 calendar days after receipt of the *Contractor*'s complete deficiency list and application, the *Consultant* shall:

.1 prepare a final deficiency list incorporating all items to be completed or corrected. Each item is to have an indicated value for correction or completion, for the purposes of the Warranty/Deficiency Holdback. The final deficiency list complete with values is to be included with the *Consultant*'s draft verification and shall be reviewed with the *Owner* prior to 5.4.1.2.

.2 having completed 5.4.1.1, the *Consultant* shall:

.1 advise the *Contractor* in writing that the *Work* or the designated portion of the *Work* is not substantially performed and give reasons why, or

.2 state the date of *Substantial Performance* of the *Work* in a certificate and issue a copy of that certificate to each the *Owner* and the *Contractor*.

b. Add new paragraph 5.4.2 as follows:

"5.4.2 The *Contractor* shall submit, with the application for *Substantial Performance* of the *Work*, all guarantees, warranties, certificates, testing and balancing reports, distribution system diagrams, as-built drawings, and specifications, spare parts,

maintenance materials and any other materials or documentation required to be submitted under the *Contract*, together with written proof, acceptable to the *Owner* and the *Consultant*, that the *Work* has been substantially performed in conformance with the requirements of municipal, governmental and utility authorities having jurisdiction. Failure to submit all of the foregoing materials and documentation in conformance with the *Contract* Documents shall be grounds for the *Consultant* to reject the *Contractor*'s application for *Substantial Performance* of the *Work*."

c. Delete in its entirety paragraph 5.4.5 and substitute new paragraph 5.4.5 as follows:

5.4.5 "Applications for progressive release of holdback will not be considered."

d. Delete in its entirety paragraph 5.4.6

e. Add new paragraphs 5.4.6 and 5.4.7 as follows:

5.4.6 "Immediately following the issuance by the *Consultant* of a certificate in accordance with paragraph 5.4.1.2, the *Contractor* shall, as applicable to the Place of the *Work*:

.1 submit written request for release of holdback including a declaration that no written notices of lien have been received by it;

.2 submit a Worker's Compensation Board Certificate of Clearance;

.3 submit a written confirmation from the bonding company that it has been notified of the intent to claim release of holdback money;

.4 publish a copy of the certificate in a construction trade newspaper in the Province of the Place of the *Work* (upon publication, the *Contractor* shall provide the *Consultant* and the *Owner* with a certificate of publication from the construction trade newspaper);

.5 do such other act as is required by the lien legislation for the Place of the *Work* to initiate the requisite time period prior to the expiration of the holdback period;

.6 complete the *Work* within sixty (60) calendar days and no payments will be processed between *Substantial Performance* of the *Work* and the completion of the *Work* as deemed by subsection 2(3) of the *Construction Act*

5.4.7 "The publication by the *Contractor* of the Certificate of *Substantial Performance* of the *Work* shall constitute a waiver by the *Contractor* of all claims whatsoever against the *Owner* under this *Contract* whether for a change in the *Contract* Price, extension of *Contract* Time, or otherwise, except those made in writing prior to the *Contractor*'s application for payment upon *Substantial Performance* of the *Work*, and still unsettled."

1.26. **GC 5.5 FINAL PAYMENT**

a. In paragraph 5.5.2 delete the words “10 calendar days after the issuance of a final certificate for payment” and replace with “the earlier of 20 calendar days after the issuance of a final certificate for payment and 28 calendar days after the receipt by the *Owner* of the *Contractor*’s application for final payment that includes all of the documents and information required for a proper invoice and by this *Contract*.”

b. In paragraph 5.5.4 delete from line 2, "calendar" and substitute "*Work*ing Days".

c. Add new paragraph 5.5.5 as follows:

5.5.5 As additional requirements for release of finishing construction lien holdback, the *Contractor* shall submit the following documentation:

.1 *Contractor*’s written request for release of holdback, including a declaration that no written notices of lien have been received by it.
.2 *Contractor*’s Statutory Declaration CCDC 9A
.3 *Contractor*’s Workers’ Compensation Board Certificate of Clearance.
.4 Written confirmation from the bonding company that it has been notified of the intent to claim release of holdback money.
.5 Certificate of Search of Title from a solicitor testifying there are no liens registered relative to the *Work*.
.6 Written statement that the *Work* has been performed to the requirements of the *Contract Documents*, itemizing approved Changes in the *Work*, *Consultant*’s written instructions and modifications required by authorities having jurisdiction.

1.27. **GC 6.1 CHANGES IN THE WORK**

a. Add new paragraphs 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.7, 6.1.8, 6.1.9, 6.1.10, 6.1.11 and 6.1.12 as follows:

6.1.3 “Unit prices included in the *Contract*, or prices pro rata thereto, will be used in the first instance in pricing changes.”

6.1.4 “Where work is added, the *Contract Price* shall be increased only by the net actual value of the work added including taxes, but excluding Value Added Taxes, plus the following, identified separately:

i. *Contractor*’s mark-up on its own work:
- Overhead and Profit: ten percent (10%)

ii. *Contractor*’s mark-up on *Subcontractor*’s work:
- Overhead and Profit: ten percent (10%)

iii. *Subcontractor*'s mark-up on its own work
- Overhead and Profit: ten percent (10%)

iv. *Subcontractor*'s mark-up on *Subcontractors* work:
- Overhead and profit: five percent (5%)"

6.1.5 "Overhead includes all site and head office overheads not including insurance and bonding."

6.1.6 "Labour costs shall be the actual, prevailing rates at the Place of *Work* paid to the workers, plus statutory charges on labour including *Work*ers' Compensation, Unemployment Insurance, Canada Pension, Vacation Pay, Hospitalization and Medical Insurance."

6.1.7 "Quotations for changes to the *Work* shall be accompanied by itemized breakdowns together detailed, substantiating quotations or cost vouchers from *Subcontractors* and *Suppliers*, submitted in a format acceptable to the *Consultant*."

6.1.8 "Unit and Alternative Prices included in the *Contract* include Supply, Installation, Products, equipment, services, materials, labour, overhead, profit and taxes, but exclude Value Added Taxes."

6.1.9 "*Owner*, through the *Consultant*, reserves the right to authorize payment for Changes in the *Work* by means of Cash Allowance Disbursement Authorizations."

6.1.10 "When both additions and deletions covering related work or substitutions are involved in Changes in the *Work*, payment including overhead and profit, shall be calculated on the basis of the net difference, if any, with respect to that change in the *Work*."

6.1.11 "If any change or deviation in, or omission from the *Work* is made by, which the amount of *Work* to be performed is decreased, or if the whole or a portion of the *Work* is dispensed with, no compensation is claimable by the *Contractor* for any loss of anticipated profit in respect thereof."

6.1.12 "It will be the *Contractor*'s responsibility to notify each applicable bonding company of all changes in the *Work* so that the any applicable performance bond will not be invalidated. Any change to the *Contract Price* or construction cost by more than 10% (or such lesser threshold if a bonding company's terms require it) shall obligate the *Contractor* to update all Bonds with the change in value and the cost of the same shall be included in the *Contractor*'s cost for overhead. *Contractor* shall provide evidence of any such amended bonds to reflect this change in value from time to time."

1.28. **GC 6.2 CHANGE ORDER**

a. In paragraph 6.2.1 add at the end of the first sentence "…in the form of a completed Change Order."

b. In paragraph 6.2.1, immediately following the words "*Contract Price*, if any," in the third line, add the words "in accordance with paragraphs 6.1.3 to 6.1.11,".

1.29. **GC 6.3 CHANGE DIRECTIVE**

a. Delete paragraph 6.3.2 in its entirety.

b. Delete paragraph 6.3.3 in its entirety.

c. In paragraph 6.3.6, add the words "in accordance with paragraphs 6.1.3 to 6.1.11" immediately following the word "determined" in the first line.

d. Delete the words "contributions, assessments or taxes" from paragraph 6.3.7.1.

e. Delete paragraph 6.3.7.7 in its entirety.

f. Delete paragraph 6.3.11 in its entirety.

1.30. **GC 6.4 CONCEALED OR UNKNOWN CONDITIONS**

a. Delete paragraph 6.4.1 and replace with the following:

6.4.1.1 Prior to the submission of the bid on which the *Contract* was awarded, the *Contractor* confirms that it investigated the Place of the *Work* and, in doing so, applied to that investigation the degree of care and skill required by paragraph 3.1.4.

6.4.1.2 The *Contractor* is deemed to assume all risk of conditions or circumstances now existing or arising in the course of the *Work* which could make the work more expensive or more difficult to perform than was contemplated at the time the *Contract* was executed, including the risk of the presence of Asbestos. Notwithstanding any other term of the *Contract Documents*, no claim or change request by the *Contractor* will be valid or considered by the *Owner* or the *Consultant* in connection with the presence of Asbestos, or in connection with conditions which could reasonably have been ascertained by an investigation or other due diligence undertaken prior to the execution of the *Contract*.

b. Amend paragraph 6.4.2 by adding a new first sentence as follows:

"Having regard to paragraph 6.4.1, if the *Contractor* believes that the conditions of the *Place of the Work* differ materially from those reasonably anticipated, differ materially from those indicated in the *Contract Documents* or were concealed from

discovery notwithstanding the conduct of the investigation described in paragraph 6.4.1, it shall provide the *Owner* and the *Consultant* with Notice in Writing no later than five (5) *Work*ing Days after the first observation of such conditions."

c. Add new paragraph 6.4.5 as follows:

6.4.5 "No claims for additional compensation or for an extension of *Contract* Time shall be allowed if the *Contractor* fails to give Notice in Writing to the *Owner* or *Consultant*, as required by paragraph 6.4.2."

d. Add new paragraph 6.4.6 as follows:

6.4.6 "The *Contractor* acknowledges and declares its understanding and awareness that any information furnished by the *Owner* is approximate and speculative only and is not in any manner guaranteed by the *Owner*."

1.31. **GC 6.5 DELAYS**

a. 6.5.1: Delete the words after the word "for" in the fourth line of paragraph 6.5.1, and add the words "…reasonable direct costs directly flowing from the delay, but excluding any consequential, indirect or special damages (including, without limitation, loss of profits, loss of opportunity or loss of productivity)."

b. 6.5.2: Delete the words after the word "for" in the last sentence of paragraph 6.5.2, and add the words "…reasonable direct costs directly flowing from the delay, but excluding any consequential, indirect or special damages (including, without limitation, loss of profits, loss of opportunity or loss of productivity)."

c. 6.5.3: Delete paragraph 6.5.3 in its entirety and REPLACE it with the following:

"6.5.3 If the *Contractor* is delayed in the performance of the *Work* by *Excusable Delay*, then the *Contract Time* shall be extended, and the *Construction Schedule* adjusted, for such reasonable time as the *Consultant* may recommend in consultation with the *Contractor*. The extension of time shall not be less than the time lost as a result of the event causing the delay, unless the *Contractor* agrees to a shorter extension. The *Contractor* shall not be entitled to payment for costs incurred by such delays unless such delays result from the actions of the *Owner*."

d. Add new paragraphs 6.5.6, 6.5.7 and 6.5.8 as follows:

6.5.6 If the *Contractor* is delayed in the performance of the *Work* by an act or omission of the *Contractor* or anyone directly or indirectly employed or engaged by the *Contractor*, or by any cause within the *Contractor*'s control, then the *Contract Time* may be extended for such reasonable time as the *Owner* may decide in consultation with the *Consultant* and the *Contractor*. The *Contractor* acknowledges that the *Contract Time* is a material component to the *Contract*. The *Owner* shall be

reimbursed by the *Contractor* for all reasonable costs incurred by the *Owner* as the result of such delay, including, but not limited to,

.1 the cost of all additional services required by the *Owner* from the *Consultant* or any project managers, or others employed or engaged by the *Owner*, and in particular, the costs of the *Consultant*'s services during the period between the date of *Substantial Performance* of the *Work* stated in Article A-1 herein, as the same may be extended through the provision of these General Conditions, and any later or actual date of *Substantial Performance* of the *Work* achieved by the *Contractor*; and

.2 all costs and expenses relegating to the relocation and of students and staff members, including the rental or leasing related costs of alternative space for students and staff.

6.5.7 Without limiting the obligations of the *Contractor* described in GC 3.2 – CONSTRUCTION BY OWNER OR OTHER CONTRACTORS or GC 9.4 – CONSTRUCTION SAFETY, the *Owner* or *Consultant* may, by notice in writing, direct the *Contractor* to stop the *Work* where the *Owner* or *Consultant* determines that there is an imminent risk to the safety of persons or property at the *Place of the Work*. In the event that the *Contractor* receives such notice, it shall immediately stop the *Work* and secure the site. The *Contractor* shall not be entitled to an extension of the *Contract* Time or to an increase in the *Contract* Price unless the resulting delay, if any, would entitle the *Contractor* to an extension of the Contact Time or the reimbursement of the *Contractor*'s costs as provided in paragraphs 6.5.1, 6.5.2 or 6.5.3.

6.5.8 Notwithstanding any of the foregoing terms, the *Contractor* shall not be entitled to be reimbursed for costs relating to any delay if and to the extent that there was a concurrent delay caused by the *Contractor*.

1.32. **GC 7.1 OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK OR TERMINATE THE CONTRACT**

a. In paragraph 7.1.2 add after "substantial degree" the following words "… , or the *Contractor* fails to conform to any relevant federal, provincial, or municipal law, regulation, by-law or other requirement, including, without limitation, any applicable health and safety act or regulation."

b. Add a new subparagraph 7.1.3.4 as follows:

"An "acceptable schedule" as referred to in subparagraph 7.1.3.2. means a schedule approved by the *Consultant* and the *Owner* wherein the default can be corrected within the balance of the *Contract* Time and shall not cause delay to any other aspect of the *Work* or the work of other contractors, and in no event shall it be deemed to give a right to extend the *Contract* Time."

c. Delete 7.1.4.1 and replace it with the following:

7.1.4.1 “Correct such default and deduct the cost, including *Owner*’s expenses, thereof from any payment then or thereafter due the *Contractor*.”

d. In subparagraph 7.1.5.3 delete the words: “however, if such cost of finishing the *Work* is less than the unpaid balance of the *Contract* Price, the *Owner* shall pay the *Contractor* the difference;”

e. Add new paragraphs 7.1.7, 7.1.8, 7.1.9., 7.1.10, 7.1.11 and 7.1.12 as follows:

7.1.7 In addition to its right to terminate the *Contract* set out herein, the *Owner* may terminate this *Contract* at any time for any other reason and without cause upon giving the *Contractor* fifteen (15) *Work*ing Days Notice in Writing to that effect. In such event, the *Contractor* shall be entitled to be paid for all *Work* performed including reasonable profit, for loss sustained upon Products and Construction Equipment, and such other damages as the *Contractor* may have sustained as a result of the termination of the *Contract*, but in no event shall the *Contractor* be entitled to be compensated for any loss of profit on unperformed portions of the *Work*, or indirect, special, or consequential damages incurred.

7.1.8 The *Owner* may suspend *Work* under this *Contract* at any time for any reason and without cause upon giving the *Contractor* Notice in Writing to that effect. In such event, the *Contractor* shall be entitled to be paid for all *Work* performed to the date of suspension and be compensated for all actual costs incurred arising from the suspension, including reasonable profit, for loss sustained upon Products and Construction Equipment, and such other damages as the *Contractor* may have sustained as a result of the suspension of the *Work*, but in no event shall the *Contractor* be entitled to be compensated for any indirect, special, or consequential damages incurred. In the event that the suspension continues for more than sixty (60) calendar days, the *Contract* shall be deemed to be terminated and the provisions of paragraph 7.1.6 shall apply.

7.1.9 In the case of either a termination of the *Contract* or a suspension of the *Work* under GC 7.1 - OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK, SUSPEND THE WORK, OR TERMINATE THE CONTRACT or GC
7.2 - CONTRACTOR’S RIGHT TO SUSPEND THE WORK OR TERMINATE THE CONTRACT, the *Contractor* shall use its best commercial efforts to mitigate the financial consequences to the *Owner* arising out of the termination or suspension, as the case may be.

7.1.10 Upon the resumption of the *Work* following a suspension under GC 7.1 - OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK, SUSPEND THE WORK OR TERMINATE THE CONTRACT or GC 7.2 - CONTRACTOR’S RIGHT TO SUSPEND THE WORK OR TERMINATE THE CONTRACT, the *Contractor* will

endeavour to minimize the delay and financial consequences arising out of the suspension.

7.1.11 The *Contractor*'s obligations under the *Contract* as to quality, correction, and warranty of the *Work* performed by the *Contractor* up to the time of termination or suspension shall continue after such termination of the *Contract* or suspension of the *Work*.

7.1.12 Upon a termination of the *Contract*, the *Owner* may, but is not obliged to, publish a notice of termination in the form and manner prescribed in the *Construction Act*, if applicable. For greater certainty, a termination in accordance with this GC 7.1 will be effective whether or not a notice of termination is published."

1.33. **GC 7.2 CONTRACTOR'S RIGHT TO STOP THE WORK OR TERMINATE THE CONTRACT**

a. Delete "20 *Working Days*" in paragraph 7.2.2, and substitute with "60 days".

b. Delete paragraph 7.2.3.1 in its entirety.

c. Delete paragraph 7.2.3.2 in its entirety.

d. In paragraph 7.2.3 delete from line two (2) of clause 7.2.3.4 "OF THE OWNER".

e. Delete in paragraph 7.2.4 the words "5 *Work*ing Days" and substitute "30 *Work*ing Days" thereafter.

f. Delete paragraph 7.2.5 and replace it with the following:

7.2.5 If the default cannot be corrected within the 5 *Work*ing Days specified in paragraph 7.2.4, the *Owner* shall be deemed to have cured the default if it:

.1 commences correction of the default within the specified time;

.2 provides the *Contractor* with an acceptable schedule for such correction; and,

.3 completes the correction in accordance with such schedule.

g. Add a new paragraph 7.2.6 as follows:

7.2.6 "If the *Contractor* terminates the *Contract* under the conditions described in GC 7.2 – CONTRACTOR'S RIGHT TO SUSPEND THE WORK OR TERMINATE THE CONTRACT, the *Contractor* shall be entitled to be paid for all *Work* performed to the date of termination, as determined by the *Consultant*. The *Contractor* shall also be entitled to recover the direct costs associated with termination, including the costs of demobilization and losses sustained on Products and Construction Equipment. The *Contractor* shall not be entitled to any recovery for any special, indirect or consequential losses, including loss of profit."

1.34. GC 8.1 AUTHORITY OF THE *CONSULTANT*

a. In paragraph 8.1.1 add to line three (3), prior to “findings”, the words “interpretation and”.

b. Delete paragraph 8.1.2 in its entirety.

c. Delete paragraph 8.1.3 in its entirety.

d. Add new paragraphs 8.1.2, 8.1.3, 8.1.4, 8.1.5, 8.1.6 and 8.1.7 as follows:

8.1.2 “The claimant shall give written notice of such dispute to the other party no later than twenty (20) *Work*ing Days after the receipt of the *Consultant*’s interpretations or findings given under GC 2.2 – ROLE OF THE *CONSULTANT*. Such notice shall set forth particulars of the matters in dispute, the probable extent and value of the damage and the relevant provisions of the *Contract* Documents. The other party shall reply to such notice no later than ten (10) *Work*ings Days after it receives or is considered to have received it, setting out in such reply its grounds and other relevant provisions of the *Contract* Documents.”

8.1.3 “If the matter in dispute is not resolved promptly, the *Consultant* will give such instructions as, in its opinion, are necessary for the proper performance of the *Work* and to minimize delays pending settlement dispute. The parties shall act immediately according to such instruction; it being understood that by so doing neither party will jeopardize any claim it may have. If it is subsequently determined that such instructions were in error or at variance with the *Contract* Documents, the *Owner* shall pay the *Contractor* reasonable costs incurred by the *Contractor* in carrying out such instructions which it was required to do beyond those which the *Contract* Document correctly understood and interpreted would have required it to do, including costs resulting from interruption of the *Work*.”

8.1.4 “It is agreed that no act by either party shall be construed as a renunciation or waiver of any of its rights or resources, provided it has given notices in accordance with paragraph 8.1.2 and has carried out the instructions as provided in paragraph 8.1.3.”

8.1.5 “If the parties have agreed in writing in this Agreement or by subsequent agreement to submit disputes to arbitration, then the dispute shall be submitted to arbitration in accordance with the provisions of the arbitration legislation applicable to the Place of *Work*.”

8.1.6 “If no provision or agreement is made for arbitration or the use of any mediation or adjudication mechanisms hereunder, then either party may submit the dispute to such juridical court or tribunal as the circumstances may require.”

8.1.7 “In recognition of the obligation by the *Contract* to perform the disputed work as provided in paragraph 8.1.3, it is agreed that settlement of dispute proceedings may be commenced immediately following the dispute in accordance with the foregoing settlement of dispute procedures.”

1.35. **GC 8.2 Adjudication**

a. Add new paragraph 8.2.2 as follows:

8.2.2 “The commencement of an adjudication under applicable *Payment Legislation* will not be deemed to be a stay, suspension, termination or bar of any other dispute resolution process.”

1.36. **GC 8.3 NEGOTIATION, MEDIATION AND ARBITRATION**

a. Delete GC 8.3 NEGOTIATION, MEDIATION AND ARBITRATION in its entirety.

1.37. **GC 8.4 RETENTION OF RIGHTS**

a. Delete GC 8.4 RETENTION OF RIGHTS in its entirety.

1.38. **GC 9.1 PROTECTION OF PERSONS AND PROPERTY**

a. In paragraph 9.1.1 delete “except damage which occurs as the result of:

.1 errors in the *Contract* Documents;

.2 acts or omissions by the *Owner*, the *Consultant* other contractors, their agents and employees.”

Add new paragraphs 9.1.5 and 9.1.6 as follows;

9.1.5 “The *Contractor* shall not undertake to repair and/or replace any damage whatsoever to adjoining property or acknowledge the same was caused by the *Contractor*, without first consulting the *Owner* and receiving written instructions as to the course of action to be followed. ”

9.1.6 “Notwithstanding paragraph 9.1.5, where there is danger to the life or property, the *Contractor* may take such emergency action as is necessary to remove the danger and shall indemnify and hold harmless the *Owner* and the *Consultant*, their agents and employees from and against claims, demands, losses, costs, damages, actions, suits or proceedings by third parties that arise out of, or are attributable to such action.

1.39. **GC 9.4 CONSTRUCTION SAFETY**

a. Delete paragraph 9.4.1 in its entirety and substitute new paragraph 9.4.1 as follows:

9.4.1 “The *Contractor* shall, at its sole cost, be solely responsible for:
.1 construction safety at the Place of *Work* and for compliance with the rules. Regulations and practices required by the applicable construction health and safety legislation and shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Performance of the *Work*;
.2 registering the notice of project for the Project under the OHSA; and
.3 acting as, and carrying out the responsibilities of, “prime contractor” under the OHSA.

b. Add new paragraph 9.4.6 as follows::

9.4.6 “The *Contractor* acknowledges and is aware of the *Contractor*'s responsibilities under the OHSA having jurisdiction in the Place of the *Work* and that such responsibilities have been brought to the *Contractor*'s attention by the *Owner*, and the *Contractor* shall indemnify and save harmless the *Owner*, its agents, trustees, officers, directors, employees, *Consultant*s, successors, appointees, and assigns from and against the consequences of any and all safety infractions committed by the *Contractor* under the occupational health and safety legislation in force at the Place of the *Work* including the payment of legal fees and disbursements on a substantial indemnity basis.”

1.40. GC 10.2 LAWS, NOTICES, PERMITS AND FEES

a. In paragraph 10.2.2 change “The *Owner*” to read “The *Contractor*”, in the first line, and add the following second sentence:

“The *Contractor* shall pay for, post, deliver and provide all required security deposits, development charges or similar levies required by the municipality, school boards or other public authorities having jurisdiction that are required to be paid at the same time as the issuance of any required permit, consent, approval or similar authorization to proceed with the *Work*”.

b. Add new paragraph 10.2.8 as follows:

10.2.8 “The *Contractor* shall furnish all certificates that are required or given by the appropriate governmental authorities as evidence that the *Work* as installed conforms with the laws and regulations of authorities having jurisdiction, including certificates of compliance for the *Owner*’s occupancy or partial occupancy. The certificates are to be final certificates giving complete clearance of the *Work*, in the event that such governmental authorities furnish such certificates.”

1.41. GC 11.1 INSURANCE

a. In paragraph 11.1.1.1 add the following to the bottom of the paragraph:

“General Liability Insurance shall be in the name of the *Contractor* with the *Owner* and *Consultant*s named as additional insured with a limit of no less than

$5,000,000.00 (5 million dollars) per occurrence and with a property damage deductible not exceeding $10,000.00."

b. In paragraph 11.1.1.2 Motor Vehicle Public Liability and Property Insurance add the following to the bottom of the paragraph:

"Motor Vehicle Public Liability and Property Insurance shall be in the name of the *Contractor* with the *Owner* and *Consultant* named as the additional insured on all owned and rented equipment with a limit of no less than $2,000,000.00 (2 million dollars) inclusive prior to commencing the *Work*."

c. Add paragraph 11.1.1.8: *Owner* and *Consultant*(s) are as follows:

i. *Owner*:
Grand Erie District School Board
349 Erie Avenue
Brantford, ON N3T 5V3

d. Add new paragraph 11.1.1.9 as follows:

11.1.1.9 "The insurance shall preclude subrogation claims by the insurer against anyone insured thereunder."

1.42. **ADD NEW GC 11.2 Contract Security**

a. Add new paragraphs 11.2.1 and 11.2.2 as follows:

11.2.1 "The *Contractor* shall, prior to commencement of the *Work* or within the specified time, provide to the *Owner* any *Contract* security specified in the *Contract* Documents or required by the *Construction Act*, including required bonds relating to public contracts, if applicable."

11.2.2 "All required bonds shall be issued by a duly licensed surety company, which is permitted under the *Construction Act*, authorized to transact a business of suretyship in the Province of Ontario and shall be maintained in good standing until the fulfillment of the *Contract*. The form of the labour and material bond, and the performance bond, if required under this *Contract* or under the *Construction Act*, shall be in accordance with, and in the for set out in, the *Construction Act*."

1.43. **GC 12.1 READY-FOR-TAKEOVER**

a. Add the following subparagraphs 12.1.1.9 and 12.1.1.10:

.9 the *Consultant* has provided a punchlist of deficiencies and incomplete items of the *Work*, and a plan for correcting or completing all punchlist item, to the *Consultant* and the *Owner*, and such list has been approved by the *Consultant* and the *Owner*, acting reasonably.

.10 the *Consultant* has provided a search of title to the relevant properties from a solicitor certifying that there are no liens registered relative to the *Work*.

1.44. GC 12.2 EARLY OCCUPANCY BY THE OWNER

a. Delete paragraph 12.2.1, and substitute with the following:

"12.2.1 The *Owner* reserves the right to take possession of and use for any intended purpose any portion or all of the undelivered portion of the Project even though the *Work* may not be substantially performed, provided that such taking possession and use will not interfere, in any material way, with the progress of the *Work*. The taking of possession or use of any such portion of the Project shall not be deemed to be the *Owner*'s acknowledgement or acceptance of the *Work* or the Project, nor shall it relieve the *Contractor* of any of its obligations under the *Contract*."

b. Delete paragraph 12.2.3.2, and substitute with the following:

".2 The *Contractor* shall cease to be responsible as prime contractor under the OHSA for such part as from this date, provided that: (1) the *Owner* shall not be considered or deemed to become prime contractor or employer for the remaining parts; (2) the *Contractor* remains responsible and liable to perform, complete, and if necessary correct all of the *Work* for such part, including all items identified in the punchlist of incomplete and deficient *Work* approved by the *Consultant*; and (3) the *Contractor* shall remain responsible for securing the perimeter of such part.

c. Add new paragraphs 12.2.5 and 12.2.6 as follows:

12.2.5 Whether the Project contemplates *Work* by way of renovations in buildings which will be in use or be occupied during the course of the *Work* or where the Project involves *Work* that is adjacent to a structure which is in use or is occupied, the *Contractor*, without in any way limiting its responsibilities under the *Contract*, shall take all reasonable steps to avoid interference with fire exits, building access and egress, continuity of electric power and all other utilities, to suppress dust and noise and to avoid conditions likely to propagate mould or fungus of any kind and all other steps reasonably necessary to promote and maintain the safety and comfort of the users and occupants of such structures or adjacent structures.

12.2.6 The *Owner* shall have the right to enter or, if compliant with the Ontario Building Code, occupy the *Work* in whole or in part for the purpose of placing fittings and equipment, or for other use before *Substantial Performance* of the *Work*, if, in the opinion of the *Consultant*, such entry and occupation does not prevent or substantially interfere with the *Contractor* in the performance of the *Contract* within the *Contract* Time. Such entry or occupation shall neither be

considered as acceptance of the *Work*, nor in any way relieve the *Contractor* from its responsibility to complete the *Contract*.

1.45. **GC 12.3 WARRANTY**

a. Add new clauses 12.3.7, 12.3.8, 12.3.9, 12.3.10, 12.3.11 and 12.3.12 as follows:

12.3.7 “Where required by the *Contract* Documents, the *Contractor* shall provide a Warranty/Maintenance Holdback of two percent (2%) as security for the performance of the *Contractor*’s obligations as set out in GC 12.3 WARRANTY. The Warranty/Deficiency Holdback shall remain in place for a period of one (1) year from date that the *Work* is *Ready-for-Takeover*. If the *Contractor* fails to comply or correct deficiencies, or satisfy warranties and maintenance obligations, to the reasonable satisfaction of the *Consultant* or the *Owner*, the *Owner* may use the *Warranty/Deficiency Holdback* monies to use its own forces or employ other contractors to complete or correct the deficiencies or satisfy warranty or maintenance requirements under the *Contractor Documents*. The Warranty/Deficiency Holdback shall not limit the *Contractor*’s obligation to correct any deficiencies to the *Work* or honour any warranty or maintenance obligations under the *Contract Documents*.”

12.3.8 “The *Contractor* shall provide fully and properly completed and signed copies of all warranties and guarantees required by the *Contract Documents*, containing:

.1 the proper name of the *Owner*;
.2 the proper name and address of the Project;
.3 the date the warranty commences, which shall be at the “date of *Substantial Performance* of the *Work*” unless otherwise agreed upon by the *Consultant* in writing;
.4 a clear definition of what is being warranted and/or guaranteed as required by the *Contract* Documents; and
.5 the signature and seal (if required by the governing law of the *Contract*) of the company issuing the warranty, countersigned by the *Contractor*.”

12.3.9 “Should any *Work* be repaired or replaced during the time period for which it is covered by the specified warranty, a new warranty shall be provided under the same conditions and for the same period as specified herein before. The new warranty shall commence at the completion of the repair or replacement.”

12.3.10 “The *Contractor* shall ensure that its *Subcontractors* are bound to the requirements of GC 12.3 WARRANTY for the *Subcontractor*’s portion of the *Work*.”

12.3.11 “The *Contractor* shall ensure that all warranties, guarantees or other obligations for *Work*, services or Products performed or supplied by any *Subcontractor*, *Supplier* or other person in connection with the *Work* and such assignment shall be with the consent of the assigning party, where required by law,

or by the terms of the party's contract. Such assignment shall be in addition to, and shall in no way limit, the warranty rights of the *Owner* under the *Contract* Documents."

12.3.12 "The *Contractor* shall commence or correct any deficiency within two (2) *Work*ing Days after receiving a notice from the *Owner* or the *Consultant*, and shall complete the *Work* as expeditiously as possible, except in the case where the deficiency prevents maintaining security or where basic systems essential to the ongoing business of the *Owner* and/or its tenants cannot be maintained operational as designed. In those circumstances all necessary corrections and/or installations of temporary replacements shall be carried out immediately as an emergency service. Should the *Contractor* fail to provide this emergency service within eight (8) hours of a request being made during normal business hours of the *Contractor*, the *Owner* is authorized, notwithstanding GC 3.1, to carry out all necessary repairs or replacements at the *Contractor*'s expense."

1.46.**GC 13.1 INDEMNIFICATION**

a. Delete paragraph 13.1 in its entirety and substitute with new paragraphs as follows:

13.1.1 "The *Contractor* shall indemnify and hold harmless the *Owner*, the *Consultant* and their respective partners, trustees, officers, directors, agents and employees from and against any and all claims, liabilities, expenses, demands, losses, damages, actions, costs, suits or proceedings (hereinafter called "Claims"), whether in respect of Claims suffered by the *Owner* or in respect of Claims by third parties, that directly or indirectly arise out of, or are attributable to the acts or omissions of the *Contractor*, its employees, agents, subcontractors, suppliers or any other persons for whom it is in law responsible (including, without limitation, claims that directly or indirectly arise out of, or are attributable to, loss to use or damage to the *Work*, the *Owner*'s property adjacent to the Place of *Work* or death or injury to the *Contractor*'s personnel.)."

13.1.2 "The provisions of GC 13.1 INDEMNIFICATION shall survive the termination of the *Contract*, however caused and no payment or partial payment, no issuance of a final certificate of payment and no occupancy in whole or in part of the *Work* shall constitute a waiver or release of any provisions of GC 13.1."

1.47. **GC 13.2 WAIVER OF CLAIMS**

a. In the third line of paragraph 13.2.1, add the words "claims for delay pursuant to GC 6.5 DELAYS and" after the word "limitation". Add the words "(collectively "Claims")" after "Ready-for-Takeover" in the fourth line.

b. In paragraph 13.2.1.1, change the word "claims" to "Claims" and change the word "claim" to "Claim".

c. In paragraph 13.2.1.2, change the word “claims” to “Claims”.

d. Delete paragraph 13.2.1.3 in its entirety.

e. In paragraph 13.2.1.4, change the word “claims” to “Claims”.

f. In paragraph 13.2.2, change the words “in paragraphs 13.2.1.2 and 13.2.1.3” to “in paragraph 13.2.1.2”. Change the word “claims” to “Claims” in both instances and change the word “claim” to “Claim”.

g. Delete paragraph 13.2.3 in its entirety.

h. Delete paragraph 13.2.4 in its entirety.

i. Delete paragraph 13.2.5 in its entirety.

j. In paragraph 13.2.6, change the word “claim” to “Claim” in all instances in the paragraph.

k. Delete paragraph 13.2.8 in its entirety and substitute new paragraph 13.2.8 as follows:

13.2.8 “The *Contractor* giving notice in writing of Claim as provided for in GC 13.2 – Wavier of Claims, shall submit within a reasonable time a detailed account of the amount claimed.

l. Delete paragraph 13.2.9 in its entirety and substitute new paragraph 13.2.9 as follows:

13.2.9 “Where the even or series of events giving rise to a claim made under paragraph 13.2.1 has a continuing effect, the detailed account submitted under paragraph 13.2.8 shall be considered to be an interim account, and the *Contractor* shall submit further interim accounts, at reasonable intervals, giving the accumulated amount of the Claim and any further grounds upon which it is based. The *Contractor* shall submit a final account after the end of the effects resulting from the event or series of events.”

1.48. **GC 14.1 Other Provisions**

Add new **Part 14 OTHER PROVISIONS** as follows:

GC 14.1 CONSTRUCTION LIENS

14.1.1 In the event that a claim for lien is registered against the Project by a Subcontractor, Sub-subcontractor or Supplier, and provided the Owner has paid all amounts properly owing under the Contract, the Contractor shall, at its own expense:

.1 within 20 calendar days, ensure that any and all claims for lien and certificates of action are discharged, released, or vacated by the posting of security or otherwise; and

.2 in the case of written notices of lien, ensure that such notices are withdrawn, in writing.

14.1.2 In the event that the Contractor fails to conform with the requirements of paragraph 14.2.1, the Owner may fulfil those requirements without Notice in Writing to the Contractor and set off and deduct from any amount owing to the Contractor, all costs and associated expenses, including the costs of posting security and all legal fees and disbursements associated with discharging or vacating the claim for lien or certificate of action and defending the action. If there is no amount owing by the Owner to the Contractor, then the Contractor shall reimburse the Owner for all of the said costs and associated expenses.

14.1.3 Notwithstanding any other provision in the Contract, the Consultant shall not be obligated to issue a certificate and the Owner shall not be obligated to make payment to the Contractor if, at the time such certificate or payment was otherwise due:

.1 a claim for lien has been registered against the Project lands, or

.2 if the Owner has received written notice of a lien, or

.3 the Owner or Consultant reasonably believe that any party has purported to retain title to Products or materials in respect of which an application for payment has been made.

14.1.4 Without limiting the foregoing, the Contractor shall, if requested by the Owner, defend, indemnify and save the Owner harmless from the amount of all such claims and the costs of defending any and all actions commenced against the Owner pursuant to the construction/builder's lien legislation in force at the Place of the Work, including the legal costs of the Owner, unless the lien was a direct result of a breach of the Contract by the Owner or the non-payment by the Owner of a valid charge or claim under the Contract.

14.1.5 GC 14.1 CONSTRUCTION LIENS, does not apply to construction liens claimed by the *Contractor*.

GC 14.2 ASBESTOS

14.2.1 The Contractor acknowledges and confirms that it:

.1 has been notified that every Grand Erie District School Board building may contain asbestos in the form of floor tile, pipe wrap, transite pipe or wall panels, acoustic or texture plaster, any ceiling tile this can include 2x2 and 2x4 suspended tile in grid, drywall compound and possibly in other building materials;

.2 understands that the *Work*, including the *Contractor*'s cost and timing for completing the *Work*, may be impacted by the presence of *Asbestos*, and confirms that the *Contractor* has taken the potential presence of asbestos into account in tendering for the *Work*;

.3 has received access to and has reviewed *Owner*'s current online Asbestos Survey Report (which is a record of the location of all Asbestos-containing materials present within a building, or those suspected of containing Asbestos), which is available at:

http://gedsb.ebasefm.com/login

Account Name/Email: Asbestos
Password: report

.4 has received the *Owner*'s Asbestos Procedure document FT107, which is available at:

https://www.granderie.ca/application/files/6015/8265/4747/FT107_Asbestos.pdf

and will comply with all requirements thereof, and the requirements of any separate Asbestos Management Plan, including but not limited to the following requirements:

External Contractors will:

a. Review the current Asbestos Survey Report before starting any work.

b. Provide written acknowledgement that they have read and will comply with the requirements of the "Asbestos on Construction Projects and in Buildings and Repair Operations Ont. Reg. 278/05" and the Grand Erie District School Board Asbestos Procedure

c. Ensure that all employees under their control are trained in asbestos hazards and control procedures prior to conducting any work which may disturb asbestos, and provide documentation of training to the department which is contracting the work.

d. In the event that ANY asbestos removal (Type 1, 2 or 3) needs to occur, external contractors conducting or supervising such work will provide documentation of training for all employees, supervisors and trades under their control. The training must meet the requirements of "Asbestos on Construction Projects and in Buildings and Repair Operations Ont. Reg. 278/05" under the Occupational Health and Safety Act and be approved by the Ministry of Training, Colleges and Universities (MTCU) effective November 1, 2007.

e. Ensure that all employees, supervisors and trades under their control are informed about the location of asbestos-containing materials that may be disturbed.

f. In the event that previously unidentified asbestos-containing material is discovered in the course of work, ensure that employees immediately stop all work and notify the department contracting the work.

g. Only perform Type 2 and Type 3 Asbestos work as authorized under approved contract.

h. Ensure that all asbestos waste is safely packaged and properly disposed of in accordance with legislative requirements

END OF SECTION 00800 – SUPPLEMENTARY ARTICLES AND CONDITIONS

SECTION 01005 – GENERAL INSTRUCTIONS

GENERAL

1.1. GENERAL REQUIREMENTS

a. Conform to provisions of SECTION 01005 – GENERAL INSTRUCTIONS
b. As the Majority of the Construction scope of work, (except for Power, Heating and Water service interruptions), will be performed during regular school operation hours, the following items are required.
   1.1.b.1. Contractor to have performed interior renovation work in occupied schools within the last 2 years. (Provide References).
   1.1.b.2. Contractor to have performed exterior, window, door, and/or roofing penetration work in an occupied school within the last 2 years. (Provide References).
   1.1.b.3. All Material Deliveries will be scheduled outside of the Hours of 8am and 3:30pm, Monday to Friday unless otherwise approved.
   1.1.b.4. All Roofing Work will be performed by an OIRCA Certified Roofing Contractor.
   1.1.b.5. Contractor is responsible for all necessary permits, ESA, TSSA and Notice of Project as required.
   1.1.b.6. Contractor to provide a schedule per project at the Project Kick-off Meeting onsite.
   1.1.b.7. Wall Types to be as follows:
      1.1.b.7.1. W1 - 1/2” Type-x Gypsum Board, Tape and Seal all Joints laminated onto existing block walls with Lepage PL Premium Max Construction Adhesive
      1.1.b.7.2. W2 - 2 x 4 Metal Stud Construction (Baily Non-Load Bearing Studs), 1/2” Type-x Gypsum Board, Tape and Seal all Joints. 350S 162-43 Metal Studs @ 16” OC.

1.2. SCOPE OF WORK

Woodman-Cainsville School Scope of Work

Scope to include Room 23.

i. Walls
   a. Remove all blackboards where applicable.
   b. Construct all new walls as per attached drawing.
   c. W1 Wall type. See specifications for details.

d. W2 Wall type. Block walls to be laminated 1/2" Type-x Gypsum Board, Tape and Seal all Joints laminated onto existing block walls with Lepage PL Premium Max Construction Adhesive.
e. Remove and dispose of existing closet in Southeast corner of room.
f. Remove and dispose of existing counter and millwork on North wall.
g. Rads to be boxed in by wall type W1 and vented on the bottom and top to allow for heat to escape. 4" vent details to be approved prior to installation and ordering by GEDSB. Interior of void to be lined with galvanized sheet metal.
h. Include for the supply and installation of a green 5-foot radius drywall visual wall. Drywall to be ¼" fire rated, on top and bottom curved steel stud tracking with 16 vertical studs reinforced by wood studs for strength full height throughout the curved wall area. Location to be confirmed onsite by GEDSB Representative.
i. Supply and install a minimum of 3 ft. of 2x4 backing in the metal studs for GEDSB issued projector and bar top counter locations for additional support. Include for 30 linear ft.
j. Paint all walls as per specifications.
k. Abatement (If Required) – McGowan Insulations

ii. Millwork
a. Remove and dispose of existing cabinets, shelving, countertops etc.
b. Include for the supply and installation of 2700 Blackened Legno from Belanger Laminates countertop for all window ledges and counters.
c. Supply and install new cabinetry with counter tops
i. Counters to be 2700 Blackened Legno from the Top Shop. Layout to be approved by GEDSB before installation.
ii. All cabinets supplied must be the "Eklipse" model type from Lowes / Rona +. These are too be installed with brushed nickel square cabinet pulls from Lowes / Rona +. Cabinet layouts to match existing unless otherwise instructed. Layout must be approved by GEDSB before ordering.

iii. Doors / Windows / Hardware
a. Remove and dispose of existing window drapes / curtains that are not our standard as per specification.
b. Supply and install new roller blinds on all windows and door windows as per specification. Colour of new roller blinds to match existing unless otherwise specified.
c. Replace door between Corridor 22 and Learning Commons 23 in same location as old door with an accessible, 38" hollow metal, 1-hour fire rated door with a half light tempered glass window.
d. Old door hardware to be salvaged and handed over to GEDSB.

e. Supply and install Marks 195RAB/26D Survivor Entry Lock - Satin Chrome, or GEDSB approved equivalent, handles for Library Entrance Door.
f. All doors to be fitted with 8” x 34.5” stainless steel kickplates.

iv. Flooring
a. Remove and dispose of existing Flooring Materials.
b. Supply and install new Flooring as per specification to be installed.
c. Transition strips to be applied where applicable.

v. Ceilings
a. Supply and Install New Drop Ceiling System and Lights as per Specifications & Appendix A. Lighting layout as per “BJ Take Inc” Room 1 Layout dated November 27, 2023 in Appendix A. All lights to be chained.
b. Supply and Install New Drop Ceiling System and Lights as per Specifications. Include for 1 light per 64 sq. ft. Lighting layout to be reviewed and approved onsite prior to install. All lights to be chained.

vi. Mechanical
a. Supply and Install one (1) new Ductless Split AC Unit. Complete with BAS controls. Coordinate location with GEDSB representative.

vii. Plumbing
a. Remove and dispose of existing sinks
b. Any sinks are too be replaced with similarly sized Model: LBS stainless steel kitchen sinks from EMCO unless otherwise specified.
c. Faucets to be replaced with Moen Commercial Two-handle / Pantry gooseneck faucet model: 8279

viii. Electrical / Life Safety / Controls
a. Make safe all existing electrical.
b. Remove and salvage Light fixtures, bulbs, and all components to be handed over to GEDSB.
c. Allow for the installation of fifteen (15) new duplex receptacles utilizing existing room circuits. As per specifications. Include one (1) dedicated circuit for tablet charging cart.
d. Replace existing emergency lighting if applicable. Shop drawings and specifications to be approved by GEDSB prior to purchase and installation.
e. Supply and Install new Emergency Exit Combination Signs/Lights (Green Running Man)

f. Install one new Interspec Classroom control panel, supplied by GEDSB see specifications for more information. Location to be confirmed onsite by GEDSB Representative.
g. Coordinate Fire Alarm, PA, BAS Controls and Electrical Sub Trades to install their respective services in the Control Panel.
    i. PA System – KR Communications
    ii. Controls / Building Automation – Brantworth/Convergint
    iii. Security – Convergint
    iv. Fire and Life Safety Systems – Hamilton Fire

Agnes G. Hodge Public School Scope of Work

Scope to include Rooms 147 & 148.

i. Walls
    a. Remove all blackboards where applicable.
    b. Construct all new walls as per attached drawing.
    c. W1 Wall type. See specifications for details.
    d. W2 Wall type. Block walls to be laminated 1/2" Type-x Gypsum Board, Tape and Seal all Joints laminated onto existing block walls with Lepage PL Premium Max Construction Adhesive.
    e. Rads to be boxed in by wall type W1 and vented on the bottom and top to allow for heat to escape. 4" vent details to be approved prior to installation and ordering by GEDSB. Interior of void to be lined with galvanized sheet metal.
    f. Include for the supply and installation of a green drywall visual wall. Drywall to be ¼" fire rated, on top and bottom curved steel stud tracking with 16 vertical studs reinforced by wood studs for strength full height throughout the curved wall area. Location to be confirmed onsite by GEDSB Representative.
    g. Supply and install a minimum of 3 ft. of 2x4 backing in the metal studs for GEDSB issued projector and bar top counter locations for additional support. Include for 30 linear ft.
    h. Paint all walls as per specifications.
    i. Abatement (If Required) – McGowan Insulations

ii. Millwork
    a. Remove and dispose of existing cabinets, desk, shelving, countertops etc.
    b. Include for the supply and installation of 2700 Blackened Legno from Belanger Laminates countertop for all window ledges and counters.
    c. Supply and install new cabinetry with counter tops
        i. Counters to be 2700 Blackened Legno from the Top Shop. Layout to be approved by GEDSB before installation.

ii. All cabinets supplied must be the “Eklipse” model type from Lowes / Rona +. These are too be installed with brushed nickel square cabinet pulls from Lowes / Rona +. Cabinet layouts to match existing unless otherwise instructed. Layout must be approved by GEDSB before ordering.

iii. Doors / Windows / Hardware
   a. All roller blinds to removed and re-installed after renovation work.
   b. Remove door and frame between Library 147 & Gymnasium 137. Infill existing opening with block to match Gymnasium 137 wall. Old door hardware to be salvaged and handed over to GEDSB.
   c. Remove double door and frame between Library 147 & Vestibule 123. Old door hardware to be salvaged and handed over to GEDSB.
   d. Supply and install new door and frame with an accessible, 38” hollow metal, 1-hour fire rated door with a half light tempered glass window complete with CO-ED8200 Corbin Exit device or GEDSB approved equivalent, Horton automatic door opener and associated required electronics. Infill existing remaining opening with block to match Vestibule 123 wall.
   e. All doors to be fitted with 8” x 34.5” stainless steel kickplates.
   f. Paint all doors, including existing, as per specification. GEDSB to advise on colour.

iv. Flooring
   a. Remove and dispose of existing Flooring Materials.
   b. Supply and install new Flooring as per specification.
   c. Transition strips to be applied where applicable.

v. Ceilings
   a. Supply and Install New Drop Ceiling System and Lights as per Specifications. Include for 1 light per 64 sq. ft. Lighting layout to be reviewed and approved onsite prior to install. All lights to be chained

vi. Electrical / Life Safety / Controls
   a. Make safe all existing electrical.
   b. Remove and salvage Light fixtures, bulbs, and all components to be handed over to GEDSB.
   c. Allow for the installation of sixteen (16) new duplex receptacles utilizing existing room circuits. As per specifications. Include one (1) dedicated circuit for tablet/laptop charging cart.
   d. Replace existing emergency lighting if applicable. Shop drawings and specifications to be approved by GEDSB prior to purchase and installation.

e. Supply and Install new Emergency Exit Combination Signs/Lights (Green Running Man)
f. Coordinate Fire Alarm, PA, BAS Controls and Electrical Sub Trades to install their respective services in the Control Panel.
    i. PA System – KR Communications
    ii. Controls / Building Automation – Brantworth/Convergint
    iii. Security – Convergint
    iv. Fire and Life Safety Systems – Hamilton Fire

Simcoe Composite School Scope of Work

Scope to include Rooms 1031, 1032, 1033, 1034, 1035, 1036, and 1037.

i. Millwork / Finishes
    a. Remove and dispose of existing cabinets, shelving, countertops etc.
    b. Include for the supply and installation of 2700 Blackened Legno from Belanger Laminates countertop for all required counters.
    c. Supply and install new cabinetry with counter tops 2700 Blackened Legno from The Top Shop. Layout to be approved by GEDSB prior to installation.
        i. All cabinets supplied must be the “Eklipse” model type from Lowes / Rona +. These are too be installed with brushed nickel square cabinet pulls from Lowes / Rona +. Cabinet layouts to match existing unless otherwise instructed. Layout must be verified by GEDSB before ordering.
    d. Upper and lower cabinets must be included.

ii. Plumbing
    a. Remove and dispose of existing sinks.
    b. Any sinks in millwork are to be replaced with Model: LBS stainless steel kitchen sinks from EMCO.
    c. Faucets to be replaced with Moen Commercial Two-handle / Pantry gooseneck faucet model: 8279.
    d. Faucet in Washroom 1035 to be replaced with appropriately sized Moen gooseneck faucet with AODA compliant paddle style handles. Board to approve spec prior to installation.

iii. Ceilings
    a. Remove and dispose of existing ceiling materials.
    b. Supply and Install New Drop Ceiling System and Lighting as per Specifications. Please include for 1 light per 64 sq. ft. Layout to be reviewed and approved onsite prior to install. All lights to be chained to an appropriate fixed point.

iv. Electrical / Life Safety / Controls
    a. Make safe all existing electrical.
    b. Remove and dispose of any existing power poles if applicable.
    c. Remove and Salvage existing ceiling fans if present.
    d. Remove and salvage Light fixtures, bulbs, and all components to be handed over to GEDSB.
    e. Remove and dispose of existing emergency lighting.
    f. Remove and dispose of existing exit signage.
    g. Remove and dispose of existing light switched.
    h. Hamilton Fire to remove devices affected by renovation and reinstall / recertify when complete.
    i. Allow for the installation of 50 new duplex receptacles utilizing existing room circuits. As per specifications. GEDSB to approve receptacle locations.
    j. Install one new Interspec Classroom control panel and utilities listed in specification, supplied by GEDSB see specifications for more information. Location to be confirmed onsite by GEDSB Representative.
    k. Supply and install new light switches as per specification.
    l. Supply and install replacement emergency lighting in same locations as old. Shop drawings and specs to be approved by GEDSB prior to installation.
    m. Supply and Install 2 new Emergency Exit Combination Signs/Lights with the green “Running Man” as per OHSA guidelines.
    n. Coordinate Fire Alarm, PA, BAS Controls and Electrical Sub Trades to install their respective services in the Control Panel.
        i. PA System – KR Communications
        ii. Controls / Building Automation / Security – Convergint
        iii. Fire and Life Safety Systems - Hamilton Fire

v. Walls
    a. Remove all blackboards where applicable.
    b. All interior walls and columns to be covered / infilled with W1 Wall type unless existing walls are finished drywall otherwise specified. See Appendix for details.
        i. Room 1032 and 1035 are exceptions and are to remain as exposed block.
    c. Include for the supply and installation of a green 8-foot radius drywall visual wall. Drywall to be ¼” fire rated, on top and bottom curved steel stud tracking with 16 vertical studs reinforced by wood studs for strength full height throughout the curved wall area. Location to be confirmed onsite by GEDSB Representative.
    d. Paint all walls as per specifications.
        i. Room 1032 is the only exception, will remain existing colour.

e. Supply and install a minimum of 3 ft. of 2x4 backing in the metal studs for GEDSB issued projector and bar top counter locations for additional support. Allow for 20 linear ft.

vi. Doors / Windows / Hardware
   a. Remove and dispose of existing window drapes / curtains that are not GEDSB standard as per specification.
   b. Old door hardware to be salvaged and handed over to GEDSB.
   c. Supply an install new roller blind as per specification. Colour to be Anodized Aluminum.
   d. Supply and install Sargent 28-10G37-LL Heavy Duty Classroom Lever Lockset handles for all interior doors.
   e. All exit doors to be fitted with CO-ED8200 Corbin Exit device if not already installed.
   f. All windowsills to be replaced with 2700 Blackened Legno from Belanger Laminates.
   g. Existing interior windows to remain.

vii. Mechanical
   a. Reuse existing ceiling diffuser and replace in the exact locations as existing.

viii. Flooring
   a. Remove and dispose of existing Flooring Materials.
   b. Supply and install new Flooring as per specification.

1.3 SPECIFICATIONS

(c) Flooring

(i) Mohawk Luxury Vinyl Plank – Rowan 124, Base to be Black 4” vinyl. Samples to be approved by GEDSB Rep.

(ii) Include the supply and installation of a 10ft x 10ft area of Mannington Magneto Green Vinyl sheet flooring with welded seams and floors embossed. Flooring available from local Vendor (Nufloors Simcoe 456 Queensway West Simcoe Ont N3Y 2N3 519-426-2619, garnatfloor@eastlink.ca).

(iii) Include the supply and installation of bevel bars as required at all doorway transitions.

(iv) Corner Guards – All exposed outside corners require 16ga Type 304 Stainless Steel brushed finish 84” in height.

(d) Classroom Panel

(i) Interspec Systems Class Mate Classroom Control Panel (See Appendix A)

(e) Electrical Receptacles

(i) Are to be Leviton Duplex USB Charger 3.6A and tamper resistant receptacle 15A or equivalent. All electrical receptacles are required to have a stainless steel cover plate.

(f) Lights

(i) 2ft x 4ft LR2J-LED T-bar Luminaire LR2J-2x4-LED-8-40k-040-UNV by Visioneering, are to be installed with Decora Dimmable switches. (See Appendix B for Cutsheets.)

(g) Ceiling

(i) 2ft x 2ft drop Ceiling by Armstrong – Tiles to be Cortega 824 Square edge lay in Fire rated tiles. (See Appendix C)

(h) Painting

(i) All wall paint to be primed and three coats of Natural White 50YY83/029 by ICI with Eggshell Finish.

(ii) All door and window trim and door interiors to be primed and three coats of Castle Rock 10YY41/600 by ICI - Semi-Gloss Finish.

(iii) Green Wall Paint Colour – Irish Acres 10GY41/600 by ICI, Finish to be Flat 3 coats of paint.

(i) All Interior Partition Walls to be Wall Type W1

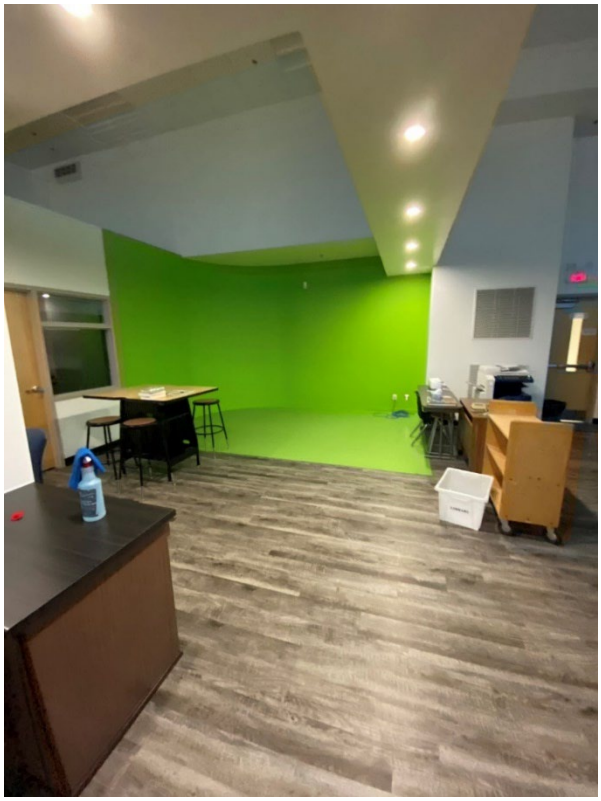
(i) 2 x 4 Metal Stud Construction, 1/2" Type-x Gypsum Board, Tape and Seal all Joints. 300S 162-43 Metal Studs @ 16" OC, 1/2" Type-X Gypsum Board, Tape and Seal all Joints. Studs Continuous to the underside of Existing Roof Deck complete with top slotted expansion track.

(j) Blinds

(i) All blinds SW4800 1% openness colour to be V-16 Grey with Cassette and Hembar colour V-16 Grey. All blinds are to come with a chain retainer.

(ii) Blinds are to be supplied and installed by GEDSB approved Vendor Stevans Sales & Marketing 1-519-756-8613 ext. 23

(k) Example of Complete Green Wall and Floor:



REFERENCE STANDARDS

The latest applicable edition of the following reference standards and codes shall govern all work specified herein as appropriate:

(i) CAN/CSA A23.4-00 – Precast Concrete – Materials and Construction (for precast concrete headers and sills, etc.).

(ii) CSA A82-06 – Fired Masonry Brick made from Clay and Shale.

(iii) CAN/CSA-A165 Series 04 (R2014) – CSA Standards on Concrete Masonry Units

(iv) CSA A179-04 – Mortar and Grout for Unit Masonry

(v) CSA A370-04 – Masonry Connectors

(vi) CAN/CSA G40.20 – General Requirements for Rolled or Welded Structural Quality Steel

(vii) CSA W59 – Welded Steel Construction (Metal Arc Welding)

(viii) ASTM A615/A615M – Deformed and Plain Carbon-Steel Bard for Concrete Reinforcement

(ix) Ontario Building Code S4A-OBC SB-3

1.4 PRODUCTS

Interspec Systems (School Control Panel)	Appendix A
Visioneering (High Efficient LED T-Bar Luminaire Type J)	Appendix B
Cortega (Ceiling Panel)	Appendix C

1.5 EXECUTION

(a) CLEAN UP

(i) Remove all containers, surplus materials and debris. Dispose of materials in accordance with local, provincial and federal regulations.

(ii) Leave site in a clean and orderly condition daily.

END OF SECTION 04521 – LEARNING COMMONS RENOVATIONS

TENDER DRAWINGS

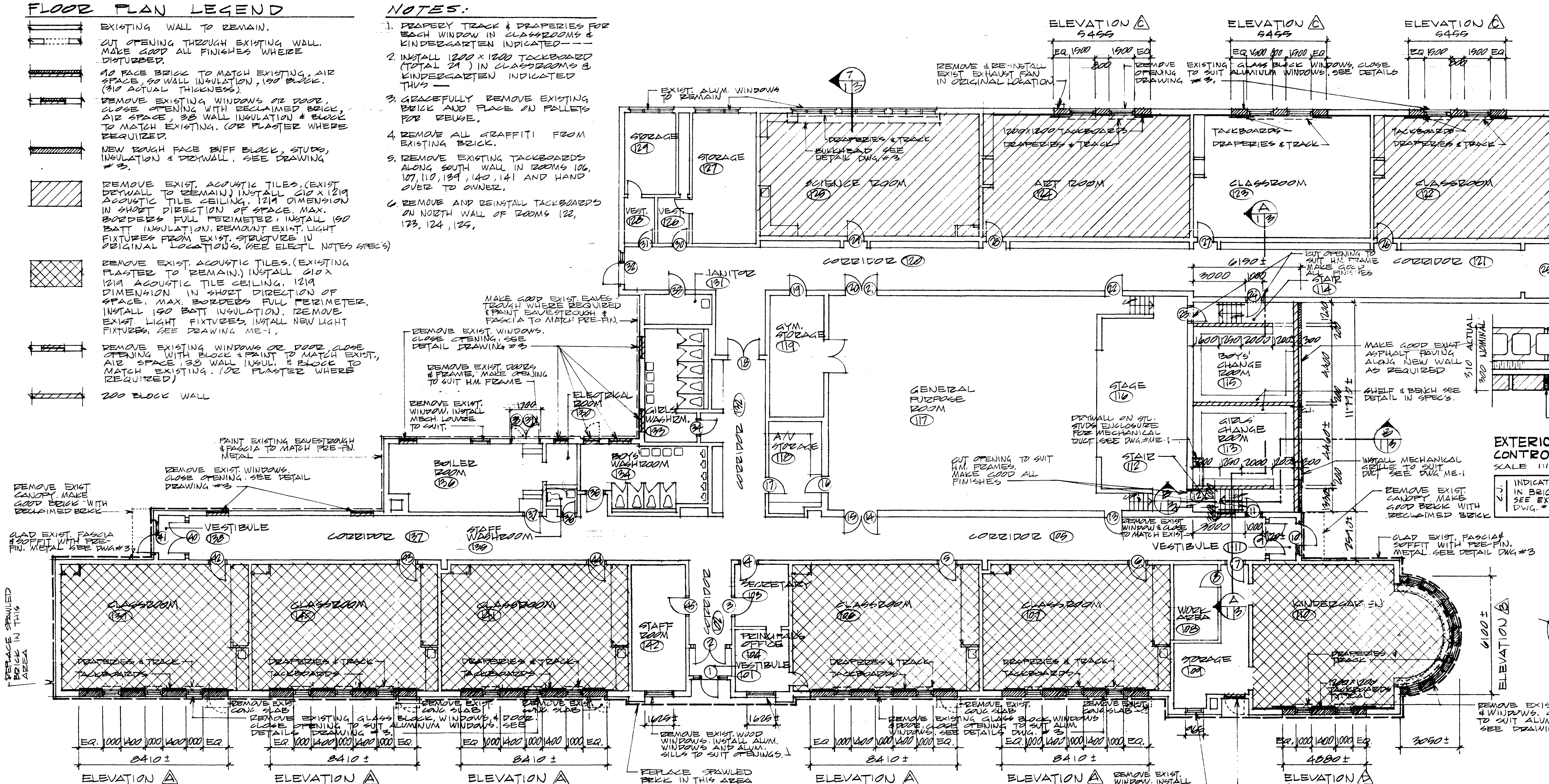
Refer to next page.

FLOOR PLAN LEGEND

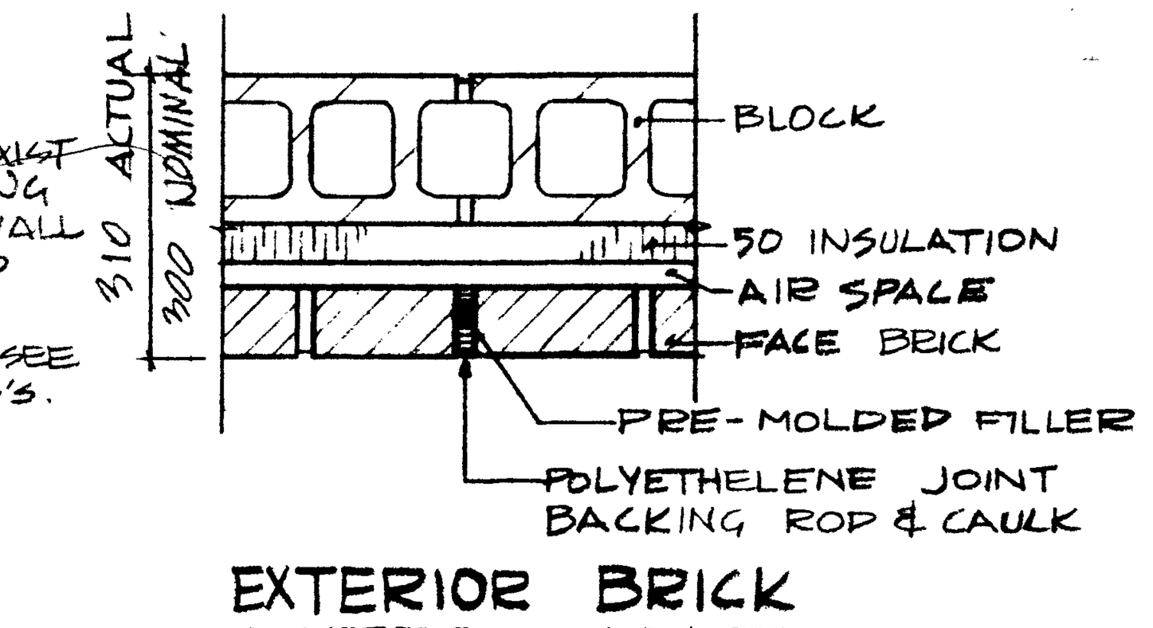
- EXISTING WALL TO REMAIN.
- CUT OPENING THROUGH EXISTING WALL. MAKE GOOD ALL FINISHES WHERE DISTURBED.
- 90 FACE BRICK TO MATCH EXISTING, AIR SPACE, 50 WALL INSULATION, 190 BLOCK. (310 ACTUAL THICKNESS).
- REMOVE EXISTING WINDOWS OR DOOR. CLOSE OPENING WITH RECLAIMED BRICK, AIR SPACE, 38 WALL INSULATION & BLOCK TO MATCH EXISTING. (OR PLASTER WHERE REQUIRED.
- NEW ROUGH FACE BUFF BLOCK, STUDS, INSULATION & DRYWALL. SEE DRAWING #3.
- REMOVE EXIST. ACOUSTIC TILES. (EXIST DRYWALL TO REMAIN.) INSTALL 610 x 1219 ACOUSTIC TILE CEILING. 1219 DIMENSION IN SHORT DIRECTION OF SPACE. MAX. BORDERS FULL PERIMETER. INSTALL 150 BATT INSULATION. REMOUNT EXIST. LIGHT FIXTURES FROM EXIST. STRUCTURE IN ORIGINAL LOCATIONS. (SEE ELECT'L NOTES SPEC'S)
- REMOVE EXIST. ACOUSTIC TILES. (EXISTING PLASTER TO REMAIN.) INSTALL 610 x 1219 ACOUSTIC TILE CEILING. 1219 DIMENSION IN SHORT DIRECTION OF SPACE. MAX. BORDERS FULL PERIMETER. INSTALL 150 BATT INSULATION. REMOVE EXIST. LIGHT FIXTURES. INSTALL NEW LIGHT FIXTURES. SEE DRAWING ME-1.
- REMOVE EXISTING WINDOWS OR DOOR. CLOSE OPENING WITH BLOCK & PAINT TO MATCH EXIST. AIR SPACE, 38 WALL INSUL. & BLOCK TO MATCH EXISTING. (OR PLASTER WHERE REQUIRED)
- 200 BLOCK WALL

NOTES:

1. DRAPERY TRACK & DRAPERIES FOR EACH WINDOW IN CLASSROOMS & KINDERGARTEN INDICATED ---
2. INSTALL 1200 x 1200 TACKBOARD (TOTAL 21) IN CLASSROOMS & KINDERGARTEN INDICATED THUS ---
3. GRACEFULLY REMOVE EXISTING BRICK AND PLACE ON PALLETS FOR REUSE.
4. REMOVE ALL GRAFFITI FROM EXISTING BRICK.
5. REMOVE EXISTING TACKBOARDS ALONG SOUTH WALL IN ROOMS 106, 107, 110, 139, 140, 141 AND HAND OVER TO OWNER.
6. REMOVE AND REINSTALL TACKBOARDS ON NORTH WALL OF ROOMS 122, 123, 124, 125.

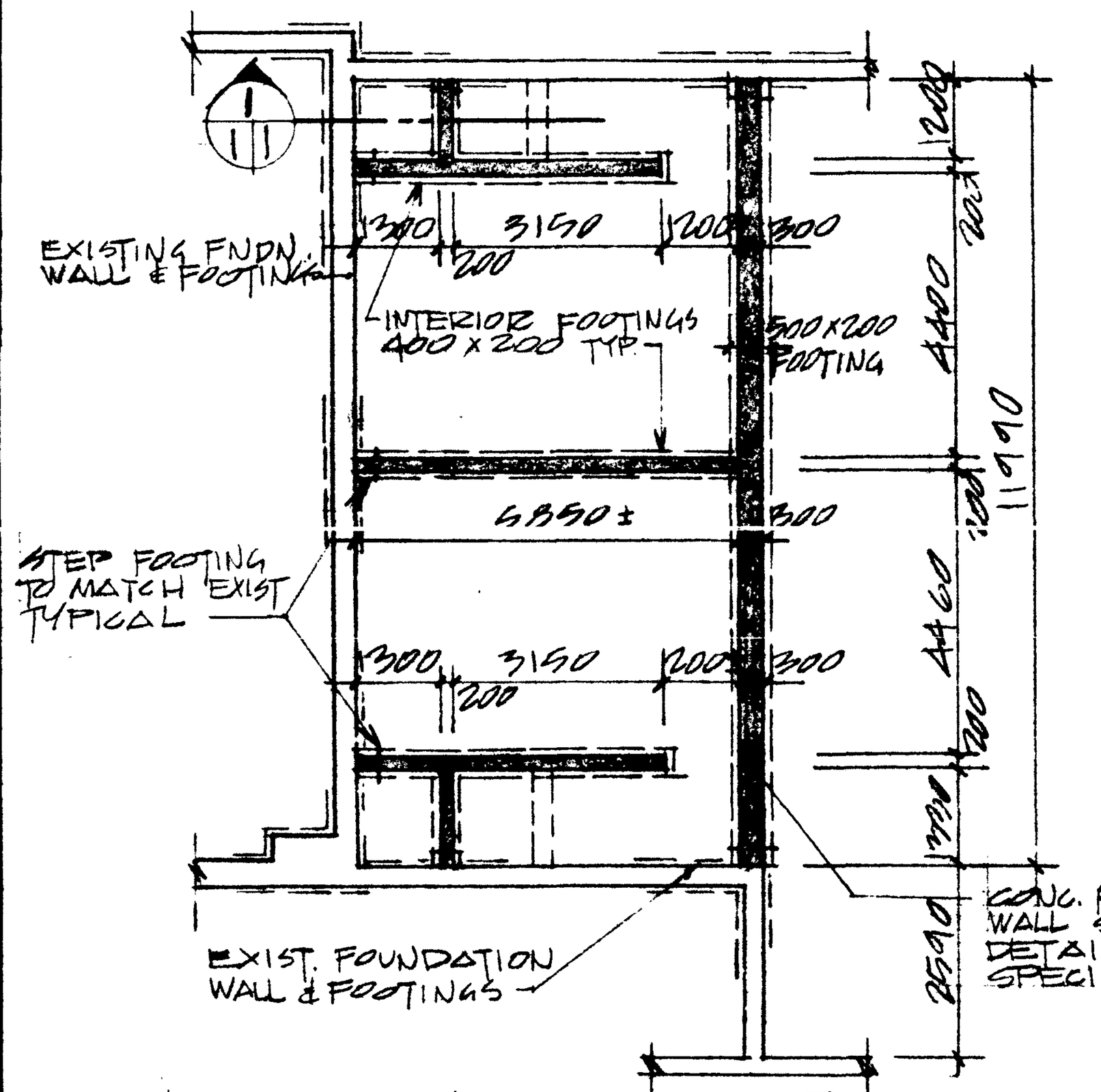


GROUND FLOOR PLAN
SCALE 1:100 (1/8"=1'-0")



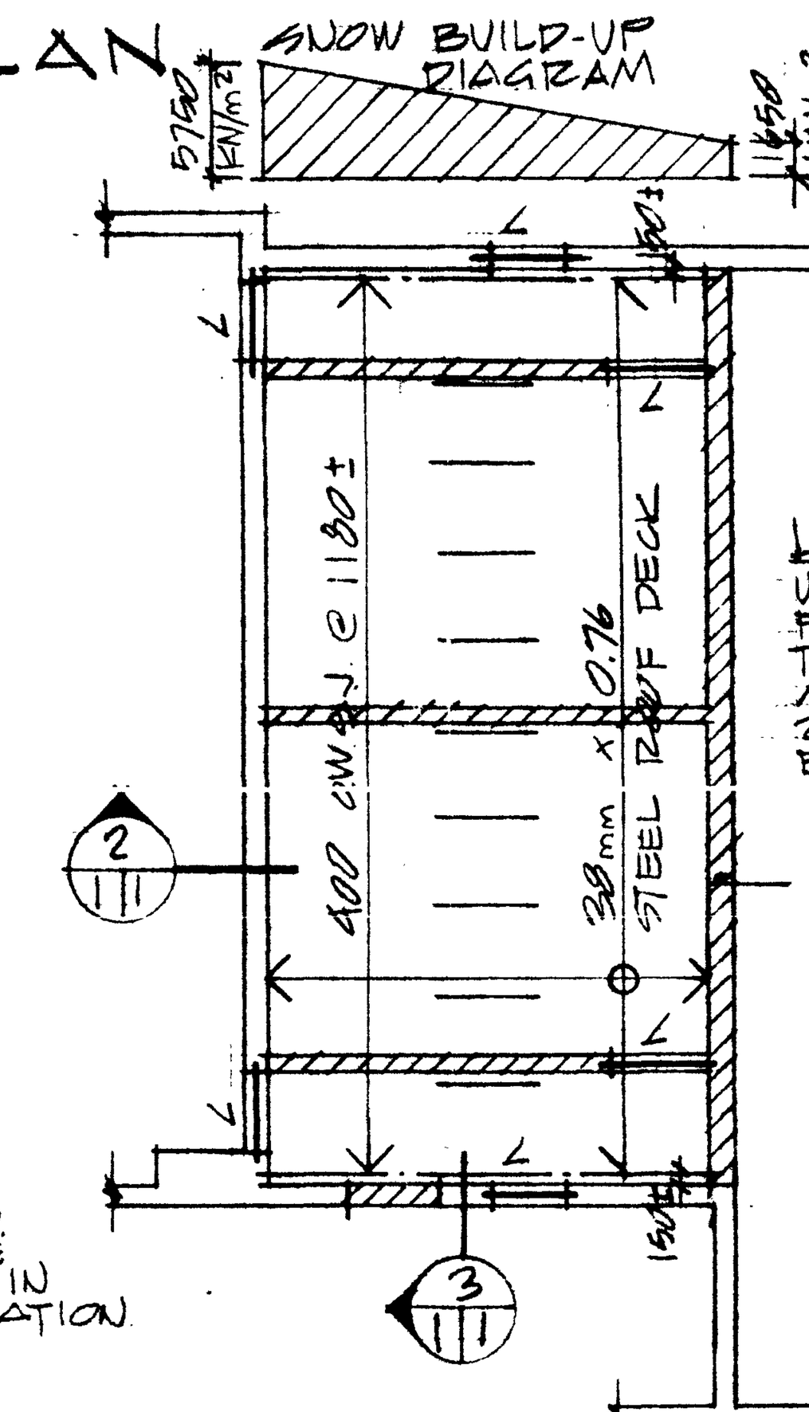
EXTERIOR BRICK CONTROL JOINT
SCALE 1:10

C.J.	INDICATES CONTROL JOINT IN BRICK ONLY. SEE EXTERIOR ELEVATION DWG. #2 FOR LOCATION.



100 SLAB ON GRADE REINF WITH 152 x 152 MW18.7 x MW18.7 WWM.

PARTIAL FOUNDATION PLAN
SCALE 1:100



- TOP OF ROOF DECK ELEV. = 13.648 m
- ROOF DEAD LOAD = 1.000 kN/m²
- FOR SNOW LOAD SEE ABOVE
- MIN. JOIST TOP CHORD SIZE 2-'T' 38 x 38 x 4.76

PARTIAL ROOF FRAMING PLAN
SCALE 1:100

STRUCTURAL NOTES:

FOUNDATIONS

All footings are designed for maximum soil bearing capacity of 150 [illegible]
All footing excavations are to be inspected by the Soils Engineer prior to placing of concrete.
Excavate first for those footings shown at the deepest elevations, working up to the highest elevations.
Protect existing foundation from loss of support during construction of new footings.
All footings subject to frost action shall be carried down a minimum of 1200mm below finished grade.
If soil conditions on site or special job conditions require lowering of footings, advise the Soils Engineer before proceeding.
Soil supporting footings and slabs shall be protected from freezing before and after concrete is poured.
Backfill and compact walls below grade in such a way that the level on one side is never more than 500mm above the other side.

METAL ROOF DECK

Design, materials, fabrication and erection shall be in accordance with "Standards for Steel Roof Deck" prepared by the Canadian Sheet Steel Building Institute.
Deck shall be supplied with a "wiped coat" zinc coating conforming to A.S.T.M. Specification A525M-80, unless otherwise specified.
Deck gauges shall be as noted on the drawings.
All welding is to be done in accordance with CSA W59-1984.
All welding is to be done by a company certified in accordance with CSA W47.1-1983, for structural steel welding in Division 1 or 2 and for roof deck welding.
Roof deck welding shall be:
a) 20mm puddle weld at not more than 400mm c/c, with a weld on each side of side lap joints.
b) side lap joints shall be button punched at not more than 600mm c.c.
c) roof edge ribs shall be welded at each flute at the ends of panels, and at 300mm c.c. to trimmer angles.

CONCRETE

All concrete work has been designed in accordance with C.S.A. Standard CAN3 A23.3-M77.
Concrete requirements are as follows:

Mix Location	Min. Strength @ 28 Days	Slump (mm)	Air Content
Footings	20 MPa	80 +/- 10	
Foundation Walls	20 MPa	100 +/- 20	4% to 6%
Slab on Grade *	20 MPa	100 +/- 20	
Exterior Concrete	25 MPa	100 +/- 20	5% to 8%

* See Specifications for Concrete Hardener.

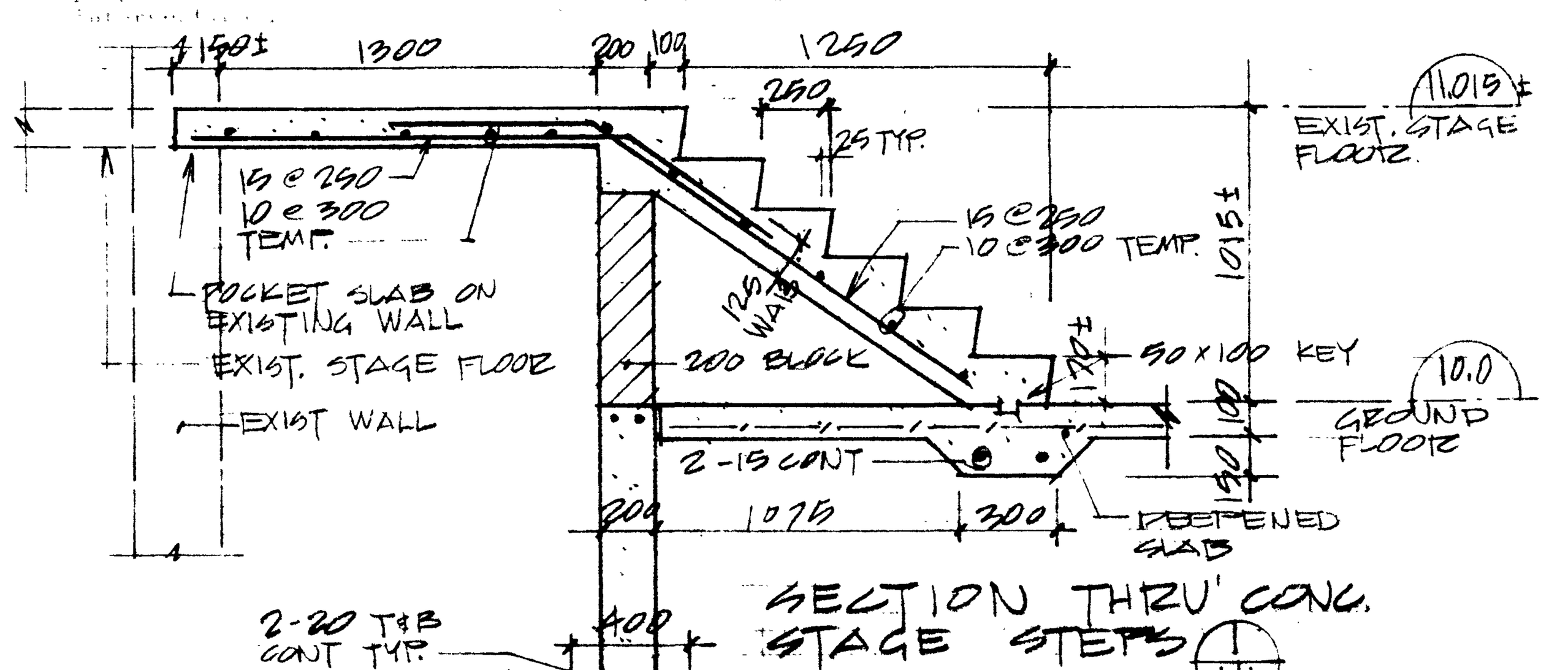
Reinforcing steel requirements are as follows:

Location or Size	Min. Yield Strength	Lap Length	Remarks
All	400 MPa	36 dia.	
W.W.M	400 MPa	150mm	flat sheets only

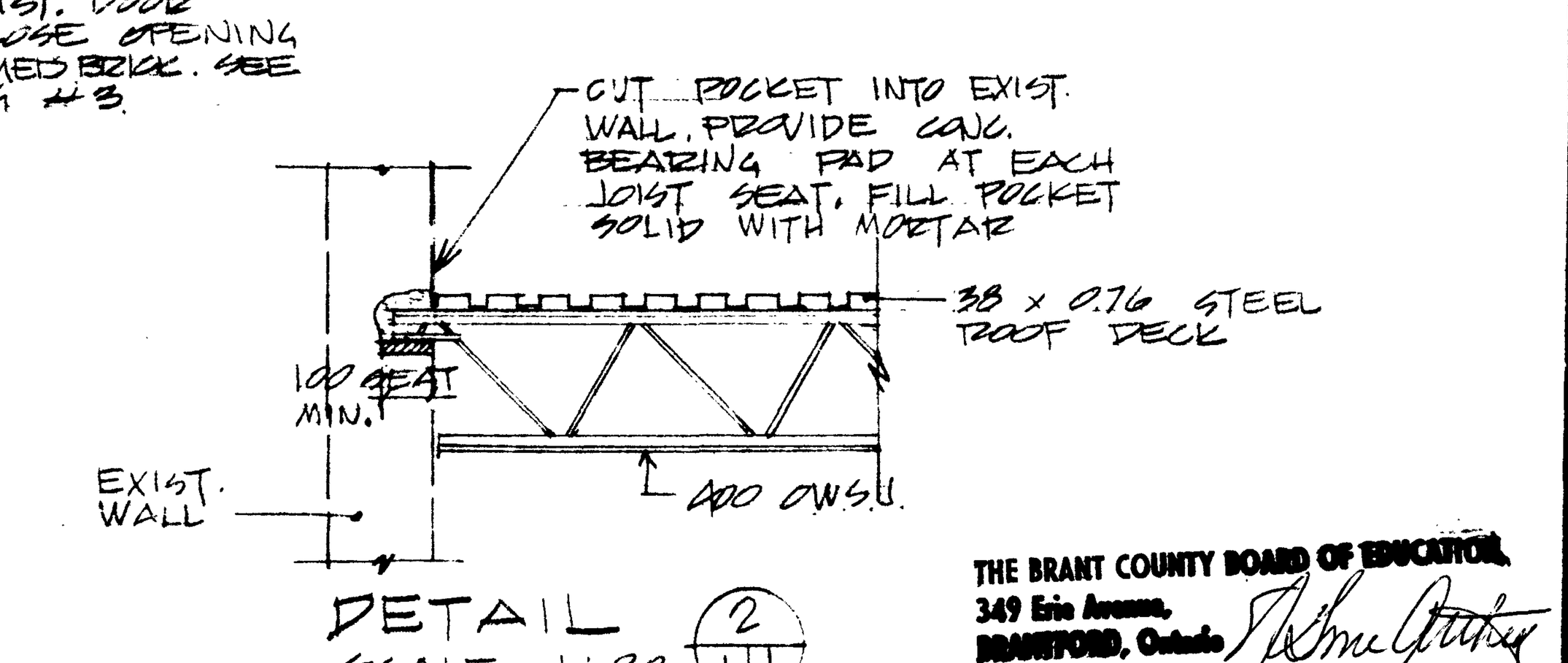
STRUCTURAL NOTES: (CONT'D)

CONCRETE (CONT'D)

[illegible] placing of all reinforcing steel shall [illegible] with the [illegible] Steel Institute of Ontario "Manual of Standard Practice".
[illegible] reinforcing 20 bar diameter.
[illegible] reinforcement unless noted otherwise [illegible]:
[illegible] deposited against earth [illegible] 75
[illegible] exposed to weather or in contact with earth [illegible] bars larger than 15 [illegible] 50
15 bars or smaller [illegible] 40
[illegible] concrete not exposed to weather nor in contact with earth: slabs and walls 20
beams and girders 40
columns ties and spirals 40
[illegible] sufficient support bars on high chairs, slab bolsters and other accessories to maintain the reinforcing steel in the required position with proper clearances before and during placing of concrete. [illegible]



SECTION THRU' CONC. STAGE STEPS
SCALE 1:20



DETAIL 2
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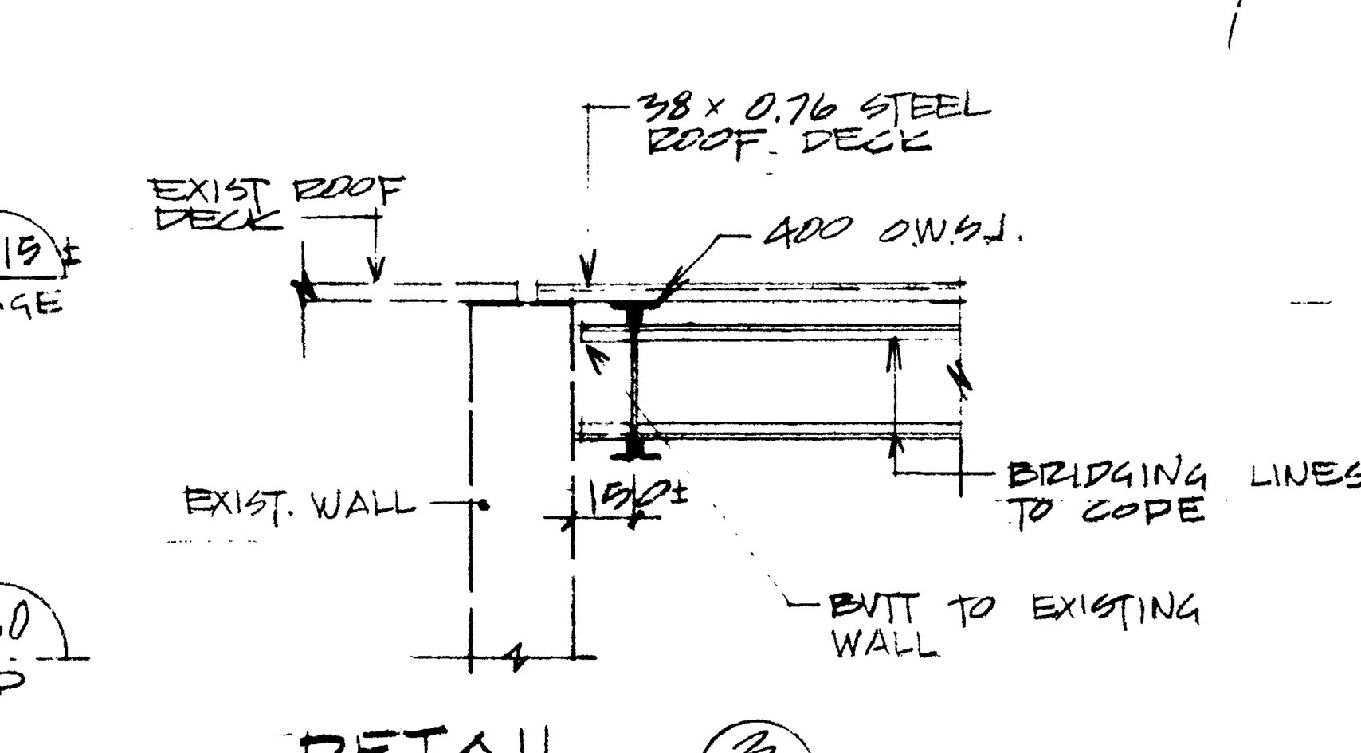


DETAIL 3
SCALE 1:20

FOR ADDITIONAL STRUCTURAL DETAILS SEE SPECIFICATIONS.

THE BRANT COUNTY BOARD OF EDUCATION, 349 Erie Avenue, BRANTFORD, Ontario

PARKER CONSULTANTS

ONTARIO ASSOCIATION OF ARCHITECTS — LEONARD W. DICKSON

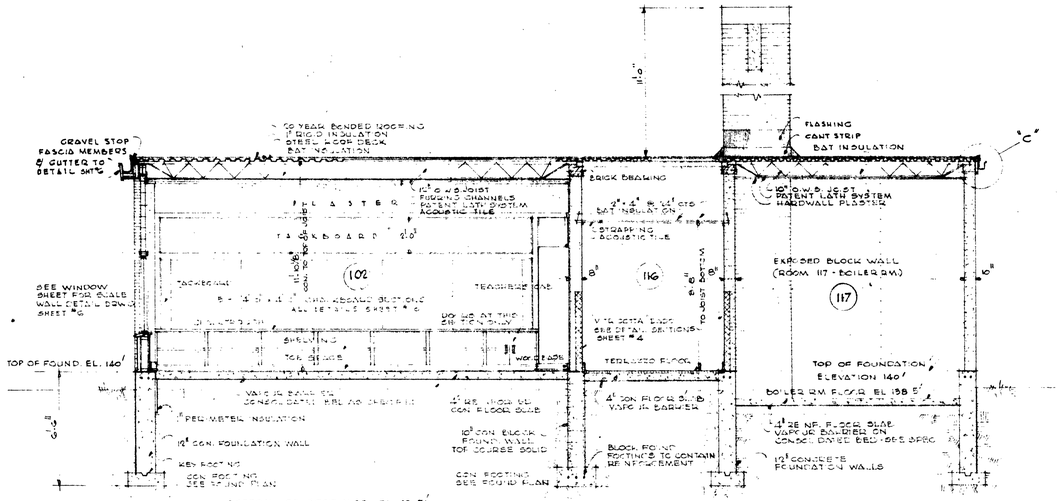
LEONARD DICKSON ARCHITECT INC.
Box 720 / 575 Peel Street
Woodstock, Ontario, N4S 8A2
519 539-7881

WOODMAN DRIVE SCHOOL RENOVATIONS
BRANTFORD, ONTARIO

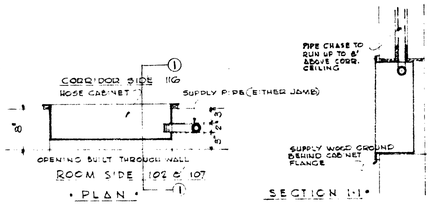
PROJECT No 8276
DATE MAY 6, 1987

1 GROUND FLOOR PLAN

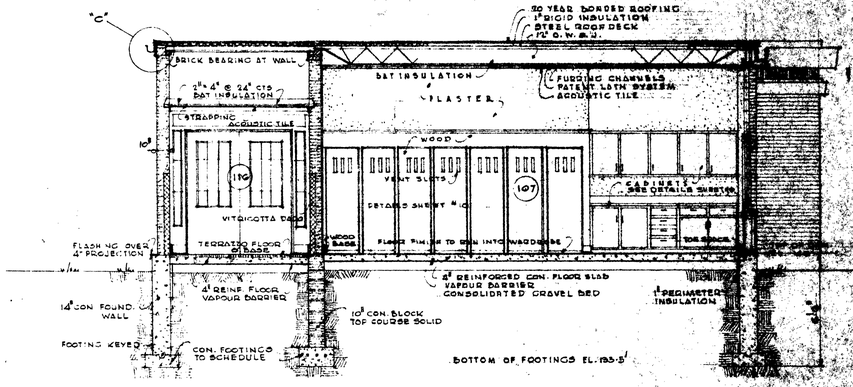
17



• BUILDING SECTION "A A" •
SCALE 1/4" = 1'-0"



• CHASE DETAIL FOR FIRE HOSE PIPING •



• BUILDING SECTION "C C" •
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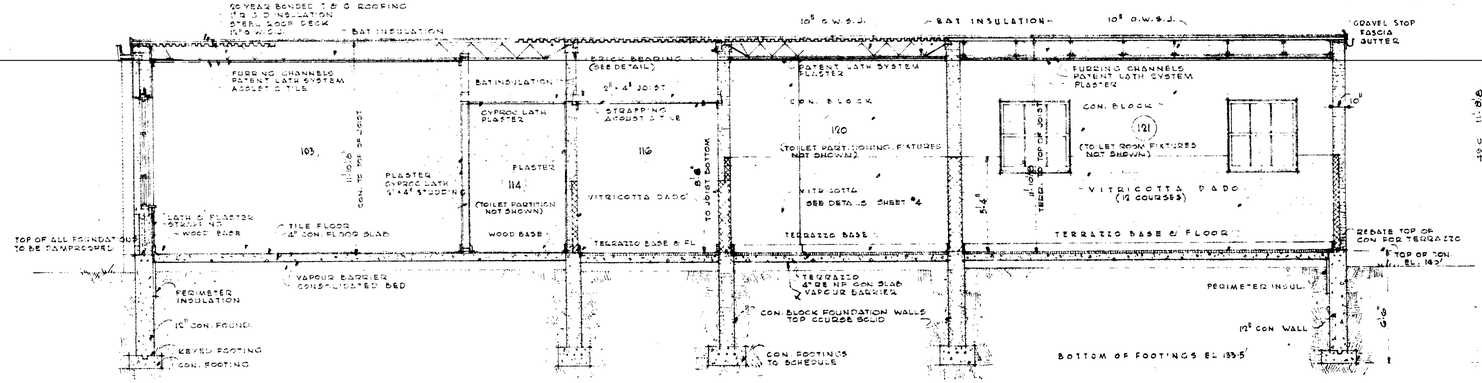
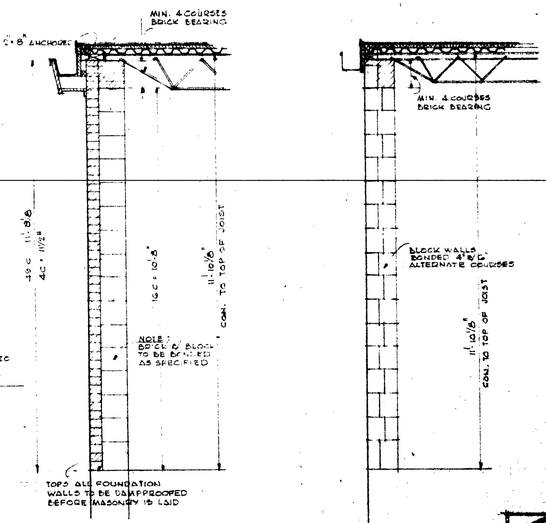
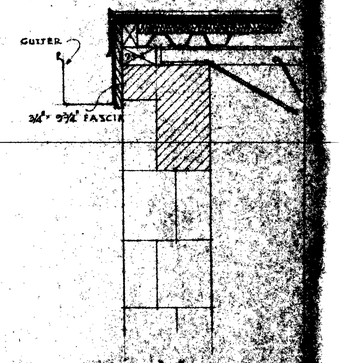


• BUILDING SECTION "B B" •
SCALE 1/4" = 1'-0"





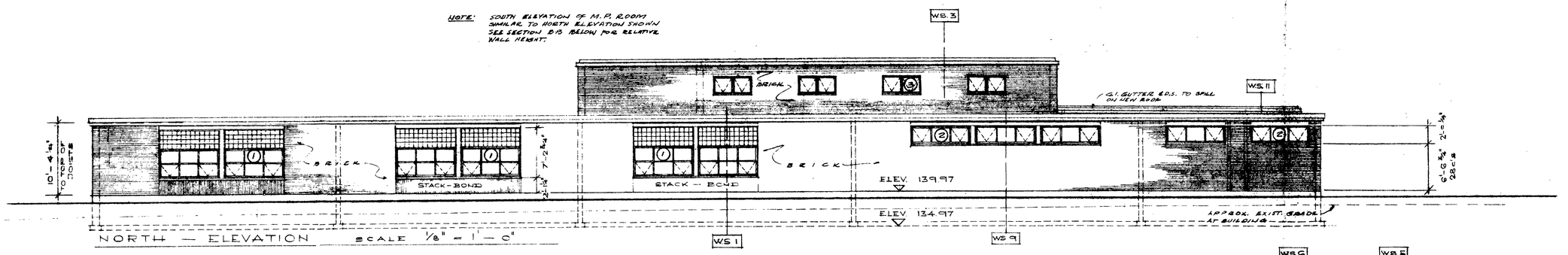
• DETAIL C •

FREDERICK C. SODLEY ASSOCIATION OF ONTARIO ARCHITECTS

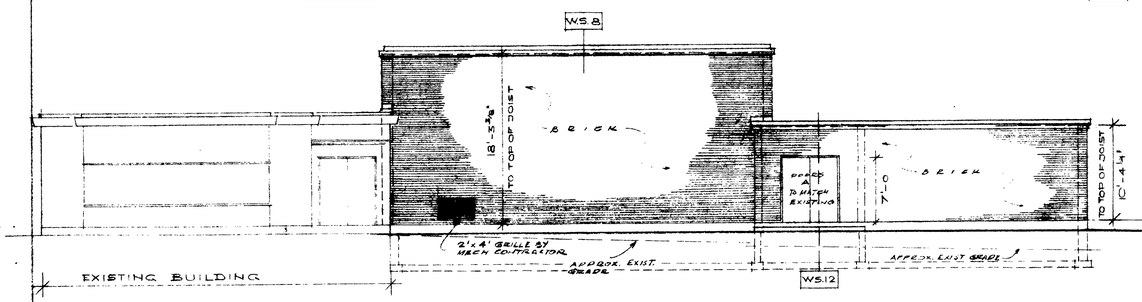
PROPOSED [illegible]
BRANTFORD [illegible]
WOODMAN [illegible]
BRANTFORD

F. C. SODLEY F.R.A.I.C. [illegible]
BRANTFORD

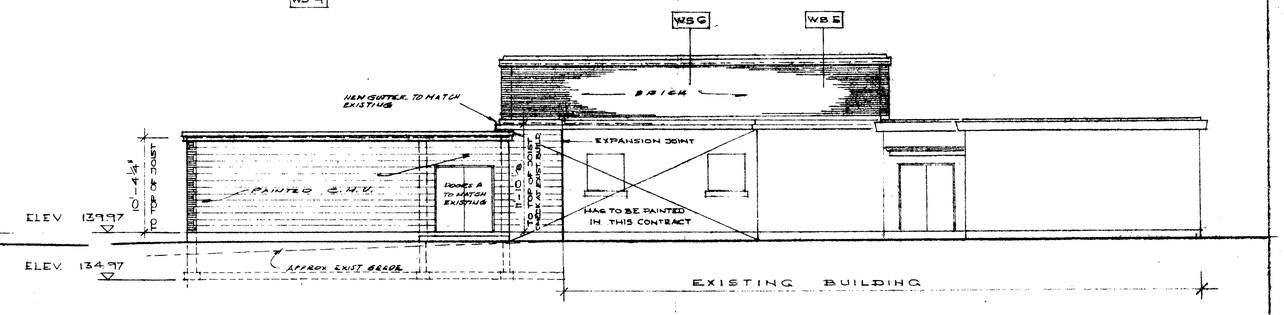
NOTE: SOUTH ELEVATION OF M.P. ROOM SIMILAR TO NORTH ELEVATION SHOWN SEE SECTION B-B BELOW FOR RELATIVE WALL HEIGHT.



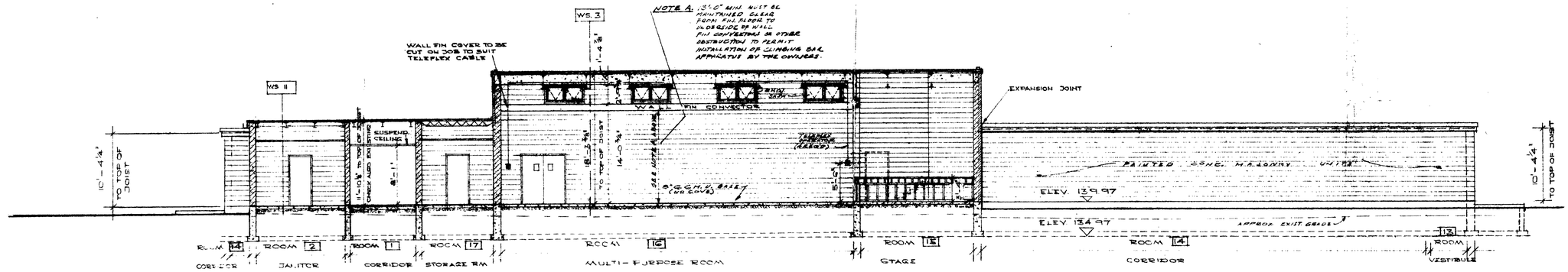
NORTH — ELEVATION SCALE ⅛" = 1'-0"



EAST — ELEVATION SCALE ⅛" = 1'-0"

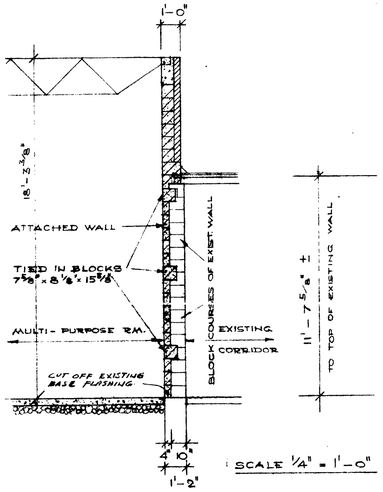


WEST — ELEVATION SCALE ⅛" = 1'-0"



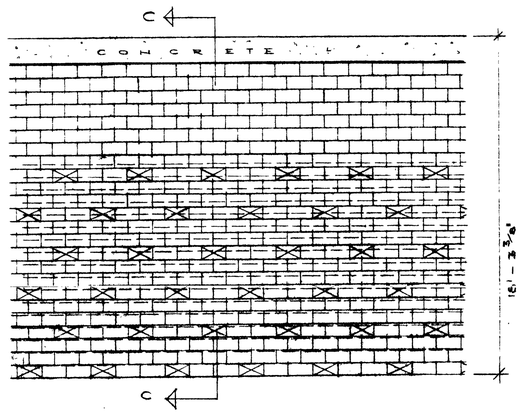
SOUTH — ELEVATION SCALE ⅛" = 1'-0" & SECTION A-A

SEE STRUCTURAL DWGS FOR FOOTINGS & FOUNDATIONS.



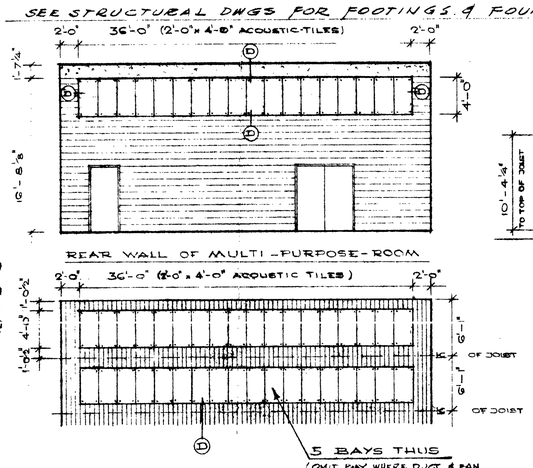
SCALE ¼" = 1'-0"

SECTION C — C

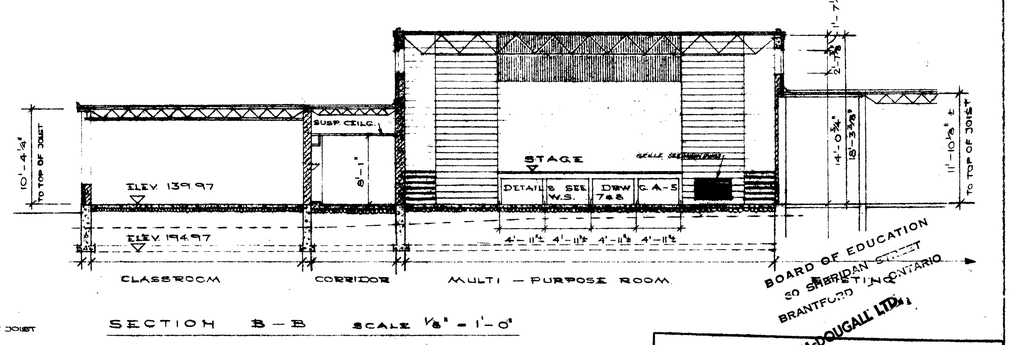


TYPICAL WALL - ELEVATION OF NEW WALL ATTACHED TO EXISTING CORRIDOR-WALL

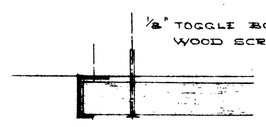
▨ CONCRETE BLOCKS 7⅝" x 8⅛" x 15⅝" HAVE TO BE TIED IN EXISTING WALL



PART REFLECTED CEILING PLAN



SECTION B — B SCALE ⅛" = 1'-0"



DETAIL D

BOARD OF EDUCATION
20 SHERIDAN STREET
BRANTFORD, ONTARIO

E. T. McDOUGALL LTD.

ELEVATIONS

DRAWN BY M.L.	ADDITION & ALTERATIONS WOODMAN D.S. SCHOOL WOODMAN DRIVE BRANTFORD ONTARIO	JOB NO. 6504
DATE MAY 1965		DRAWING NO. A-4
SCALE ⅛" = 1'-0"		

OFFICE OF
BROOKS & VAN POORTEN - ARCHITECTS
14 GREY ST. — BRANTFORD, ONT.

ROOM FINISH SCHEDULE

C.M.U. = CONC. MASONRY UNITS
G.C.M.U. = GLAZED CONC. MASONRY UNITS
V.A.T. = VINYL ASBESTOS TILE

NO.	NAME	FLOOR	BASE	DADO	WALLS MAT'L	WALLS FIN.	CEILING MAT'L	CEILING FIN	CEIL. HTS	REMARKS
1	CORRIDOR	TERR.	GCMU	6'-4" GCMU	C.M.U.	PAINTED	AC. TILE	#2	8'-1"	TERR. BASE AT COAT RECESSES. STACKBOND GCMU & CMU.
2	JANITOR	V.A.T.			C.M.U.	PAINTED	PLASTER	PAINTED	9'-2"±	
3	VESTIBULE	TERR.	GCMU	6'-4" GCMU	C.M.U.	PAINTED	PLASTER	PAINTED	8'-1"	STACKBOND G.C.M.U. & C.M.U.
4	MEDICAL ROOM	V.A.T.	RESILIENT		C.M.U.	PAINTED	AC. TILE	#1	9'-2±	
5	STORAGE	CONC.	G.C.M.U.		G.C.M.U.		PLASTER	PAINTED	9'-2±	LEAVE CONC FL. DOWN 1½" FOR FUTURE TERR.
6	VESTIBULE	TERR.	G.C.M.U.		G.C.M.U.		PLASTER	PAINTED	8'-1"	
7	VESTIBULE	TERR.	G.C.M.U.		G.C.M.U.		PLASTER	PAINTED	8'-1"	
8	GIRLS	TERR.	G.C.M.U.		G.C.M.U.		PLASTER	PAINTED	9'-2±	
9	LIBRARY-CLASSROOM	V.A.T.	RESILIENT		C.M.U.	PAINTED	AC. TILE	#1	9'-2±	
10	ART CLASSROOM	V.A.T.	RESILIENT		C.M.U.	PAINTED	AC. TILE	#1	9'-2±	
11	CLASSROOM	V.A.T.	RESILIENT		C.M.U.	PAINTED	AC. TILE	#1	9'-2±	
12	CLASSROOM	V.A.T.	RESILIENT		C.M.U.	PAINTED	AC. TILE	#1	9'-2±	
13	VESTIBULE	TERR.	GCMU	6'-4" GCMU	C.M.U.	PAINTED	AC. TILE	#1	8'-1"	
14	CORRIDOR	TERR.	GCMU	6'-4" GCMU	C.M.U.	PAINTED	AC. TILE	#1	8'-1"	STACKBOND G.C.M.U. & C.M.U.
15	STAGE	PINE	PINE [illegible]		C.M.U.	PAINTED	T&G WOOD STL. JOISTS	PAINTED	14'-1¼"	
16	MULTI-PURPOSE ROOM	V.A.T.	G.C.M.U.		C.M.U.	PAINTED	T&G WOOD STL. JOISTS	PAINTED	18'-3⅛"	V.A.T. COURT LAYOUT SEE DIAGRAM AT RIGHT
17	STORAGE	V.A.T.	G.C.M.U.		C.M.U.	PAINTED	PLASTER	PAINTED	9'-2±	

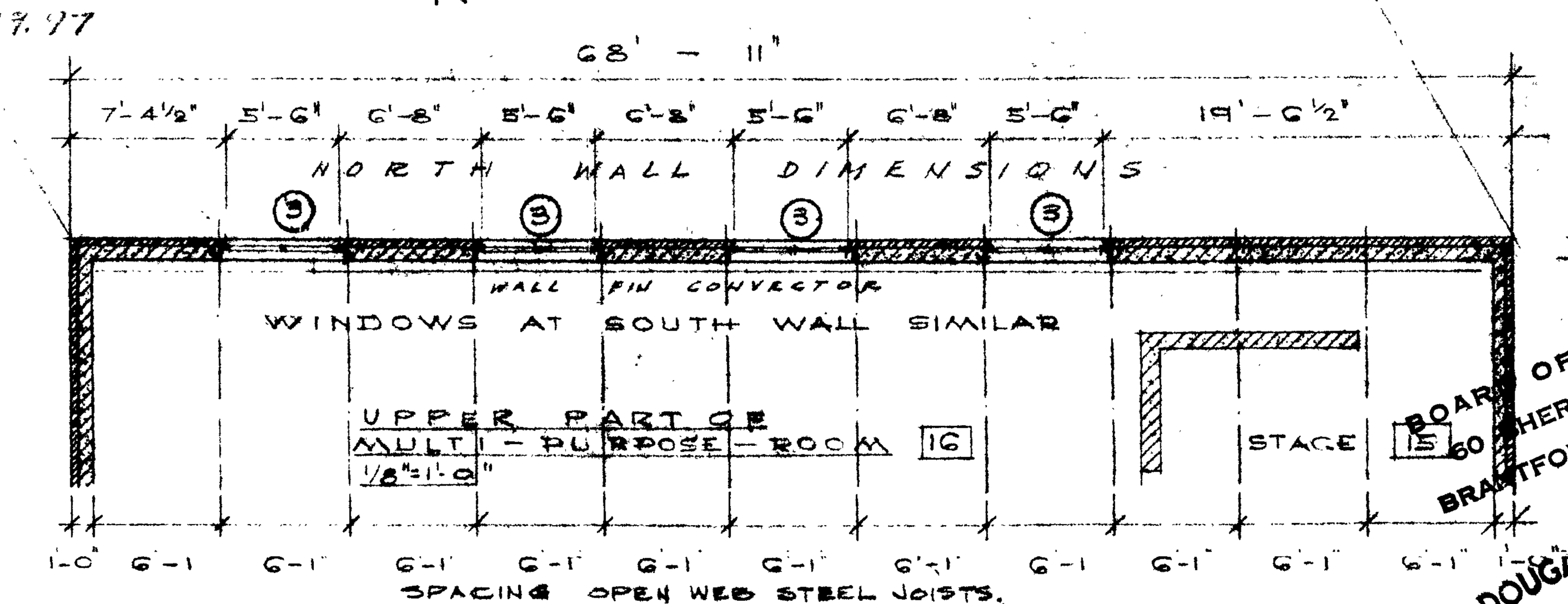
THESE ROOMS OMITTED

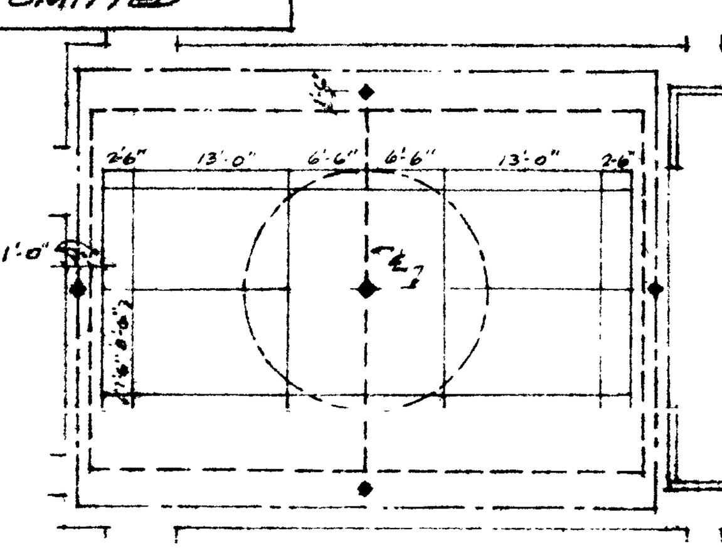
A.C. #1 WOOD FIBRE TILE WITH FIRE RET. FIN. ON 3/8" GYP. BD. } SEE SPECS.
A.C. #2 LAYIN ¾" MINERAL TILE WITH FIRE RESIST. RATING. 2'x2' ON EXPOSED TEE SYSTEM. }

FIRST FLOOR PLAN

1/8"=1'-0" FIN. FL. ELEV. 137.77
EXCEPT RM 5 ELEV. 139.845 (-1½")

PLAN NORTH





COURT LAYOUT

1/16" = 1'-0"

BADMINTON COURT
20'x44' - 1½" WIDE LINES - BLUE

VOLLEYBALL COURT
30'x46' 2" WIDE LINES - RED

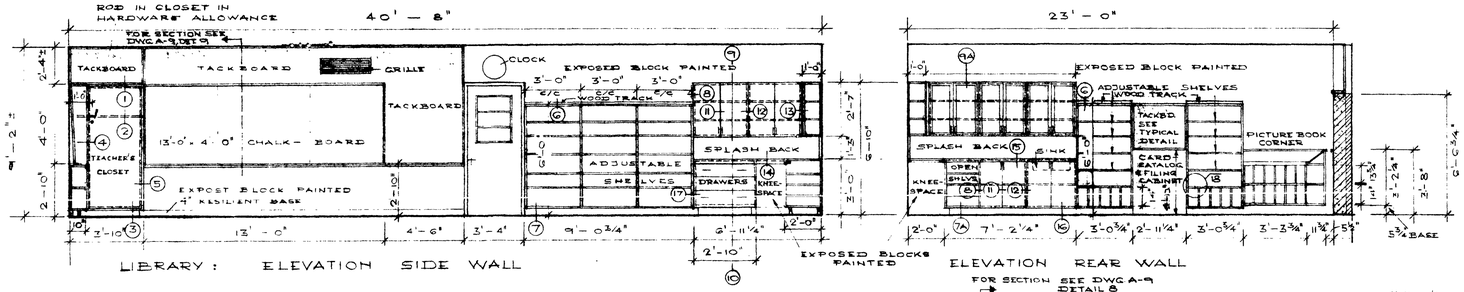
PLAY CIRCLE & RECTANGLE
RECTANGLE 36'x48' 2" LINES BLACK
CIRCLE 10' RADIUS 1½" LINES BLACK

NOTES

1. FLOOR SOCKETS (FOR NETS) - 4 (5 REQD.) - SUPPLIED & INSTALLED UNDER MISC. METALS DIVISION.
2. ALL COURT LINES ARE TO BE CUT FROM SOLID COLOUR VINYL ASBESTOS TILE

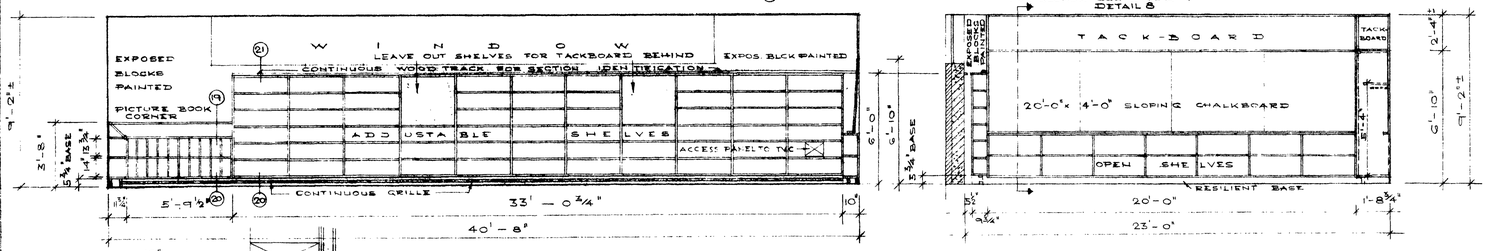
BOARD OF EDUCATION 60 SHERIDAN STREET BRANTFORD - ONTARIO
McDOUGALL LTD.

FIRST FLOOR PLAN		
DRAWN BY: I.T.G.	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL WOODMAN DRIVE BRANTFORD ONTARIO	JOB NO. 6504
DATE: MAY 1965		DRAWING NO. A3
SCALE: AS NOTED		
OFFICE OF BROOKS & VAN POORTEN - ARCHITECTS 14 GREY ST. - BRANTFORD, ONT.		



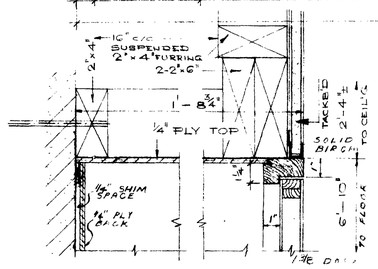
LIBRARY : ELEVATION SIDE WALL

ELEVATION REAR WALL

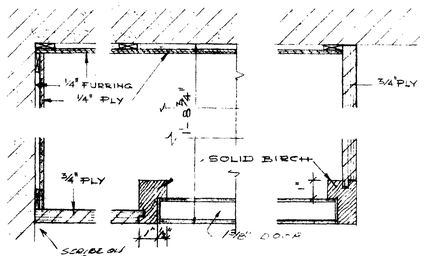


WINDOW WALL

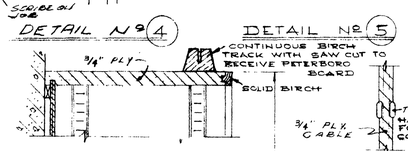
ELEVATION FRONT WALL



DETAIL Nº 1



DETAIL Nº 4



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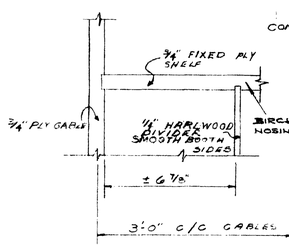
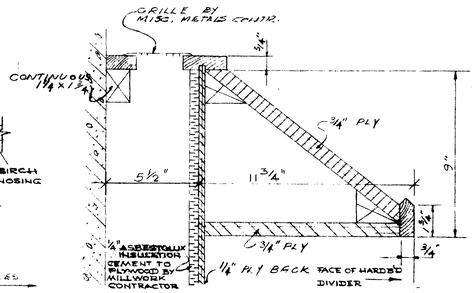
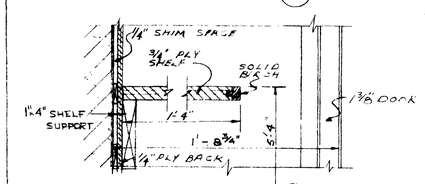
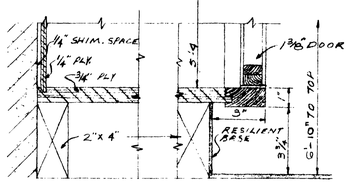


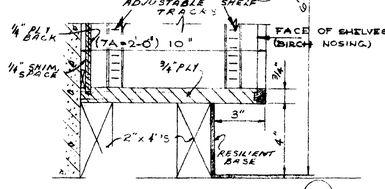




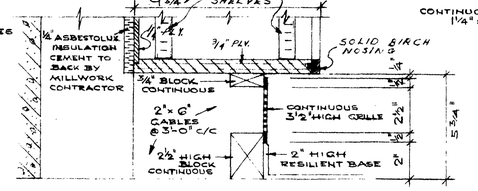
DETAIL Nº 2



DETAIL Nº 3



DETAIL Nº 6 & 7A



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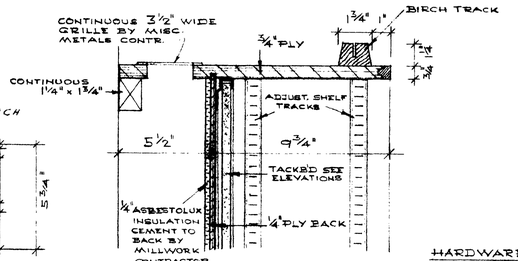
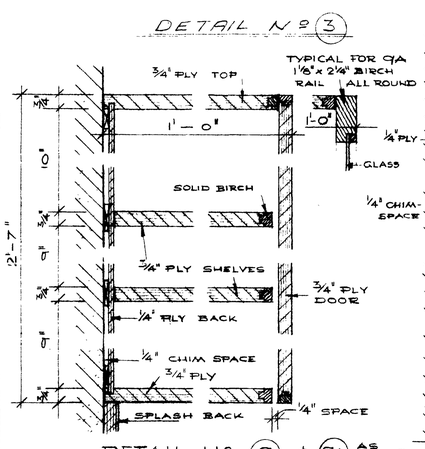
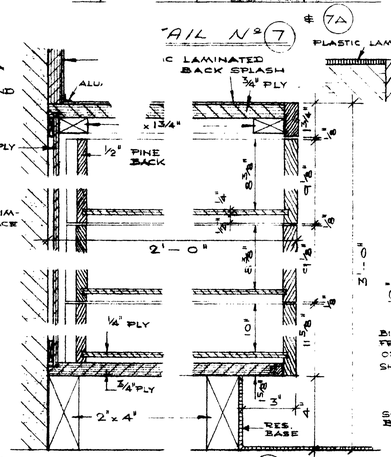


DETAIL Nº 19

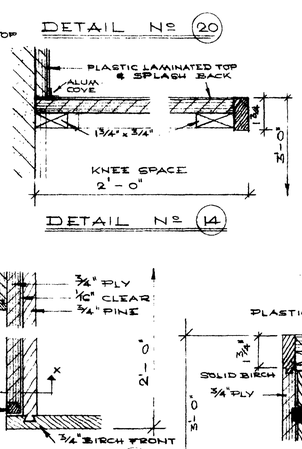
DETAIL Nº 21



DETAIL Nº 9 & 9A AS NOTED



DETAIL Nº 10



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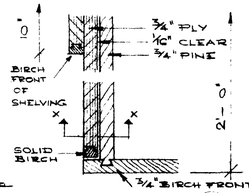
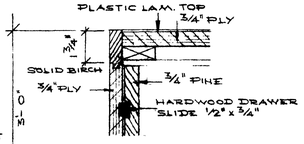
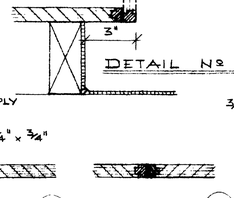


DETAIL Nº 17



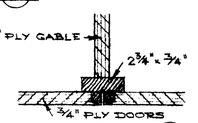
SECTION X-X



DETAIL Nº 15

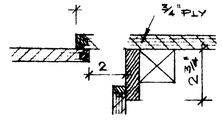
DETAIL Nº 16

DETAIL Nº 8



DETAIL Nº 11

DETAIL Nº 12



DETAIL Nº 13

HARDWARE NO
ALL HARDWARE
CABINETWORK &
IN HARDWARE ALL
TION WITH
BE INCLUDED

BOARD OF EDUCATION
60 SHERIDAN STREET
BRANTFORD - ONTARIO

W. A. McDOUGALL LTD.

LIBRARY DETAILS

DRAWN BY M.L.	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL	JOB NO. 6504
DATE MAY 1965	WOODMAN DRIVE	DRAWING NO. A-8
SCALE AS NOTED	BRANTFORD ONTARIO	

OFFICE OF
BROOKS & VAN POORTEN - ARCHITECTS
14 GREY ST. — BRANTFORD, ONT.

BROOKS AND VAN POORTEN ARCHITECTS ASSOCIATION

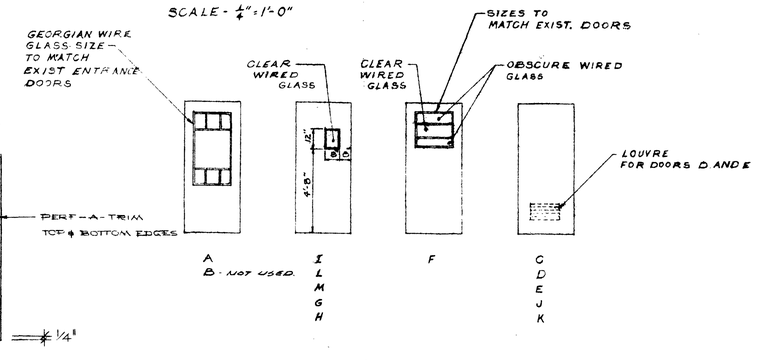
DOOR SCHEDULE

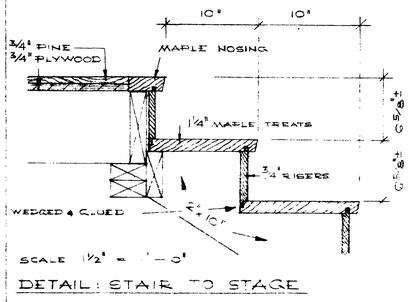
MARK	SINGLE OR PAIR	DOOR SIZE WIDTH	HEIGHT	THICKNESS	MATERIAL DOOR	FRAME	THRESHOLD	MULLION	GRILLE	GLAZING	REMARKS
A	FOUR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.	4" ALUM.	REMOVABLE		G.W.G.	GLASS SIZE TO MATCH EXIST. ENTRANCE DOOR
B	FOUR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.	4" ALUM.			B.W.G.	GLASS SIZE TO MATCH EXIST. VEST. DOORS
C	THREE	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.					
D	PAIR	2'-8"	7'-0"	1¾"	S.C. WOOD	H.M.			SEE SPEC.		
E	PAIR	2'-8"	7'-0"	1¾"	S.C. WOOD	H.M.			SEE SPEC.		
F	FOUR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.				SEE REM.	FOR GLASS SEE ELEVATION
G	SINGLE	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.				SEE ELEV.	
H	PAIR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.				SEE ELEV.	
I	PAIR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.		SEE REM.		SEE ELEV.	APPROVED ASTRAGAL FOR 1½ HR. LABEL DOOR
J	PAIR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.					
K	SINGLE	2'-8"	7'-0"	1¾"	S.C. WOOD	H.M.					
L	PAIR	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.		SEE REM.		SEE ELEV.	APPROVED ASTRAGAL FOR 1½ HR. LABEL DOOR
M	SINGLE	3'-0"	7'-0"	1¾"	S.C. WOOD	H.M.				SEE ELEV.	1½ HR. LABEL DOOR

NOT USED

DOOR ELEVATIONS

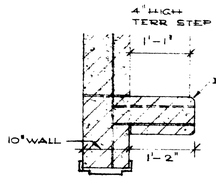
SCALE - ¼" = 1'-0"





SCALE 1½" = 1'-0"

DETAIL: STAIR TO STAGE

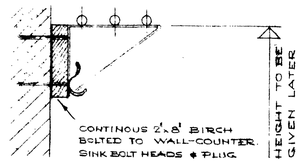


DETAIL OF NIB AT COAT SPACE

SCALE ¾" = 1'-0"

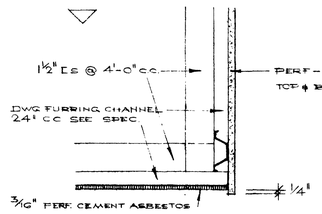
BRACKET-DETAIL

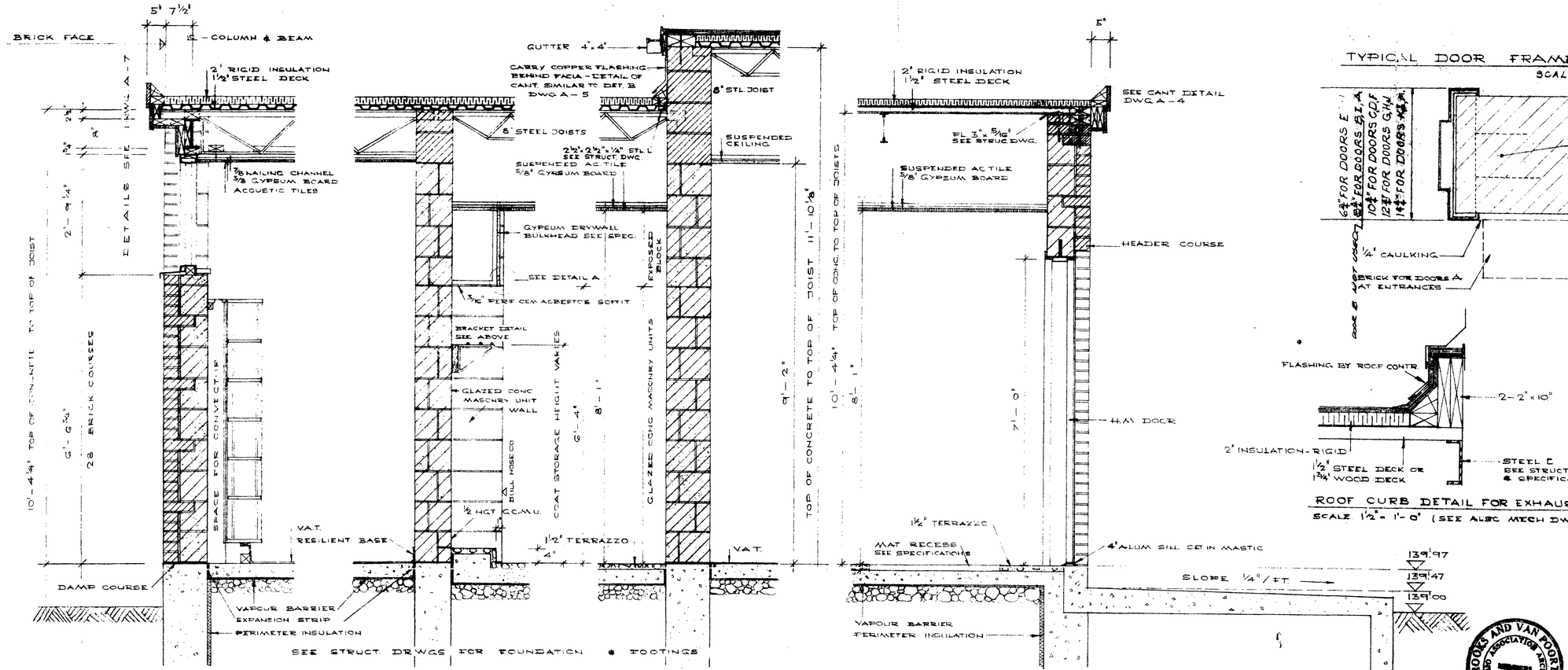
SCALE 1½" = 1'-0"



DETAIL-A

HEAD OF COAT SPACES IN CORRIDOR



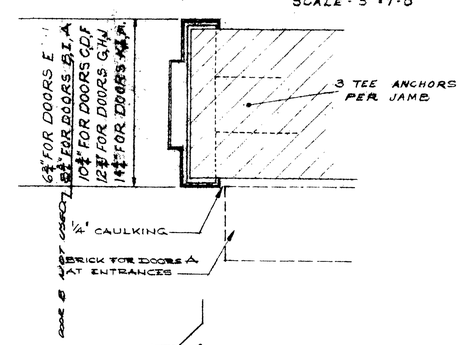


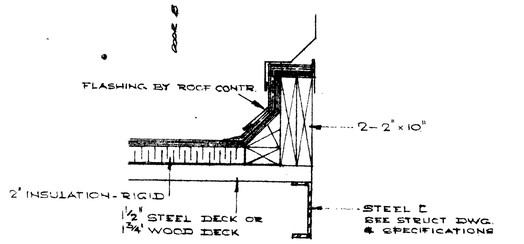
WS. 9 WS. 10 WS. 11 WS. 12

WALLSECTIONS SCALE ¾" = 1'-0"

TYPICAL DOOR FRAME

SCALE - 3" = 1'-0"





ROOF CURB DETAIL FOR EXHAUST FANS

SCALE 1½" = 1'-0" (SEE ALSO MECH DWG.)

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WALL SECTIONS
DOOR DETAILS AND SCHEDULE

DRAWN BY: M.L.	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL	JOB NO. 6504
DATE: MAY 1965	WOODMAN DRIVE	DRAWING NO. A-6
SCALE: AS NOTED	BRANTFORD ONTARIO	

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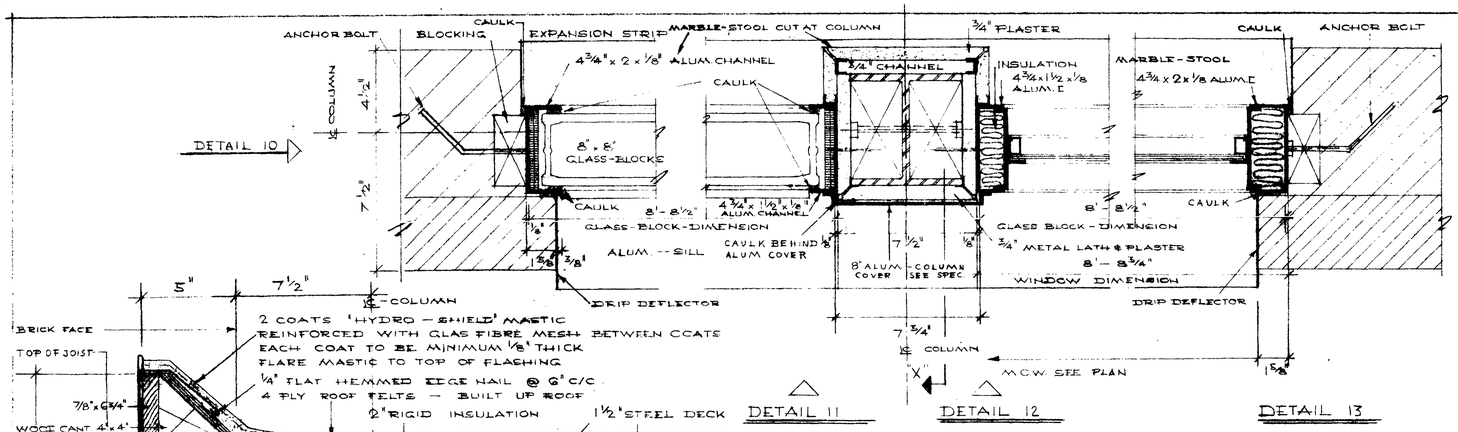

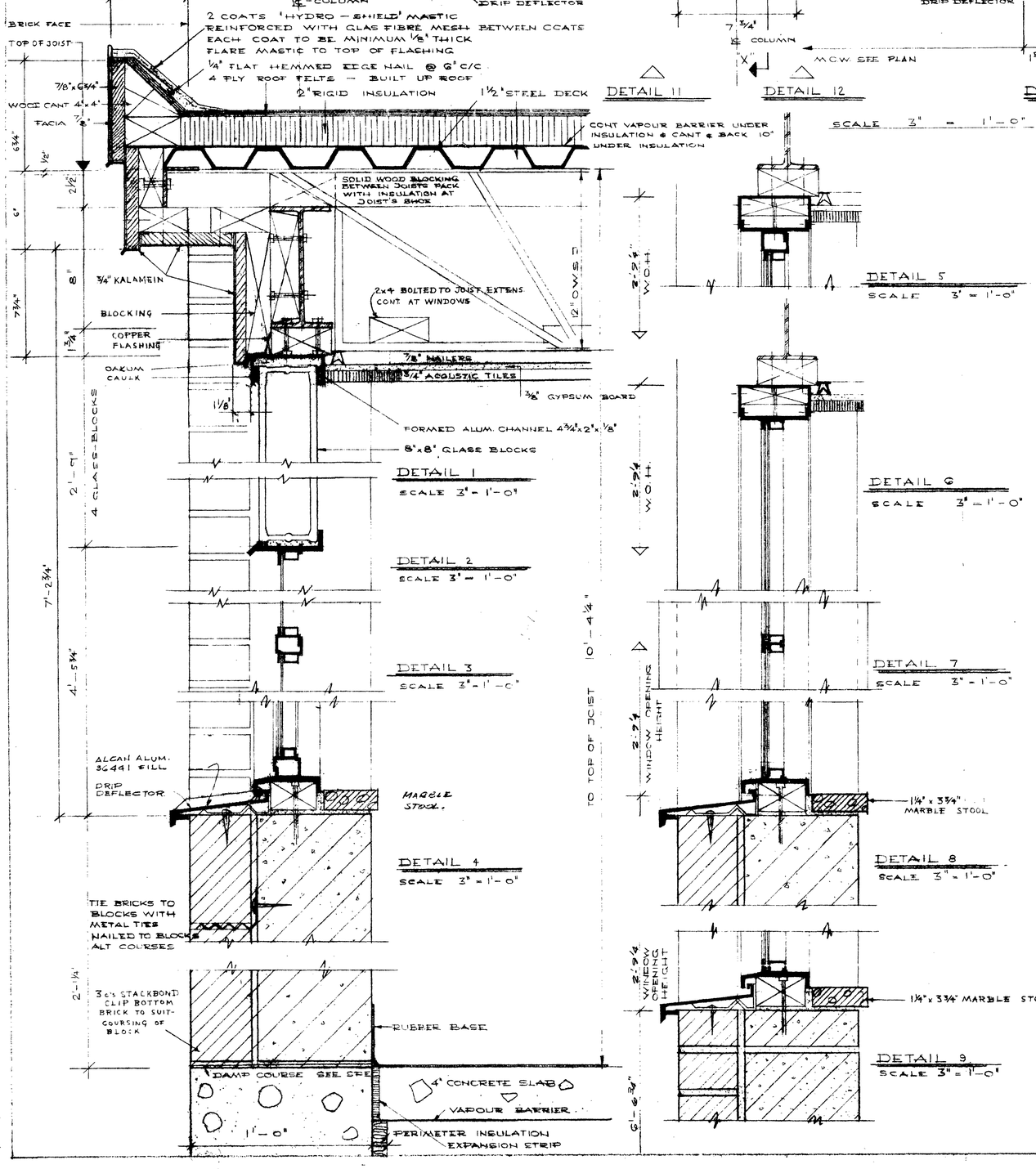

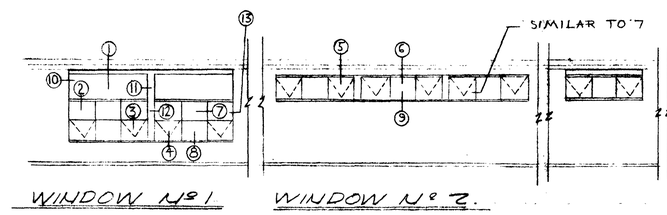

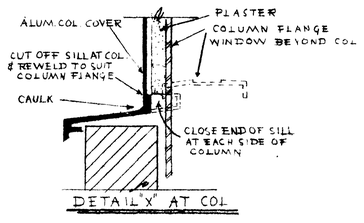

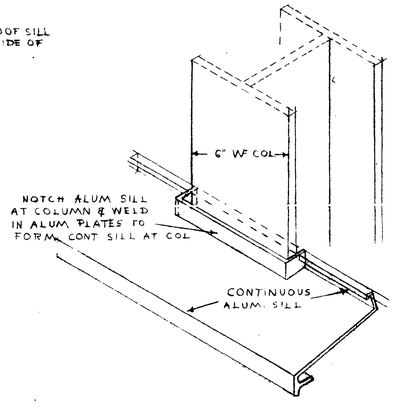

ISOMETRIC SHOWING SILL AT COL
SCALE 3" = 1'-0"
(PLASTER-UNITED ON INSIDE DRAWING TO STOP ON TOP OF FORMED ALUM. SILL)

BROOKS AND VAN POORTEN ASSOCIATION ARCHITECTES ONTARIO MEMBERS ARCHITECTS

WINDOW DETAILS

DRAWN BY MC & T-J	ADDITION & ALTERATIONS TO WOODMAN D.R. SCHOOL	JOB NO. 6504
DATE MAY 1965	WOODMAN DRIVE	DRAWING NO. A-7
SCALE 3"/1'-0"	BRANTFORD ONTARIO	

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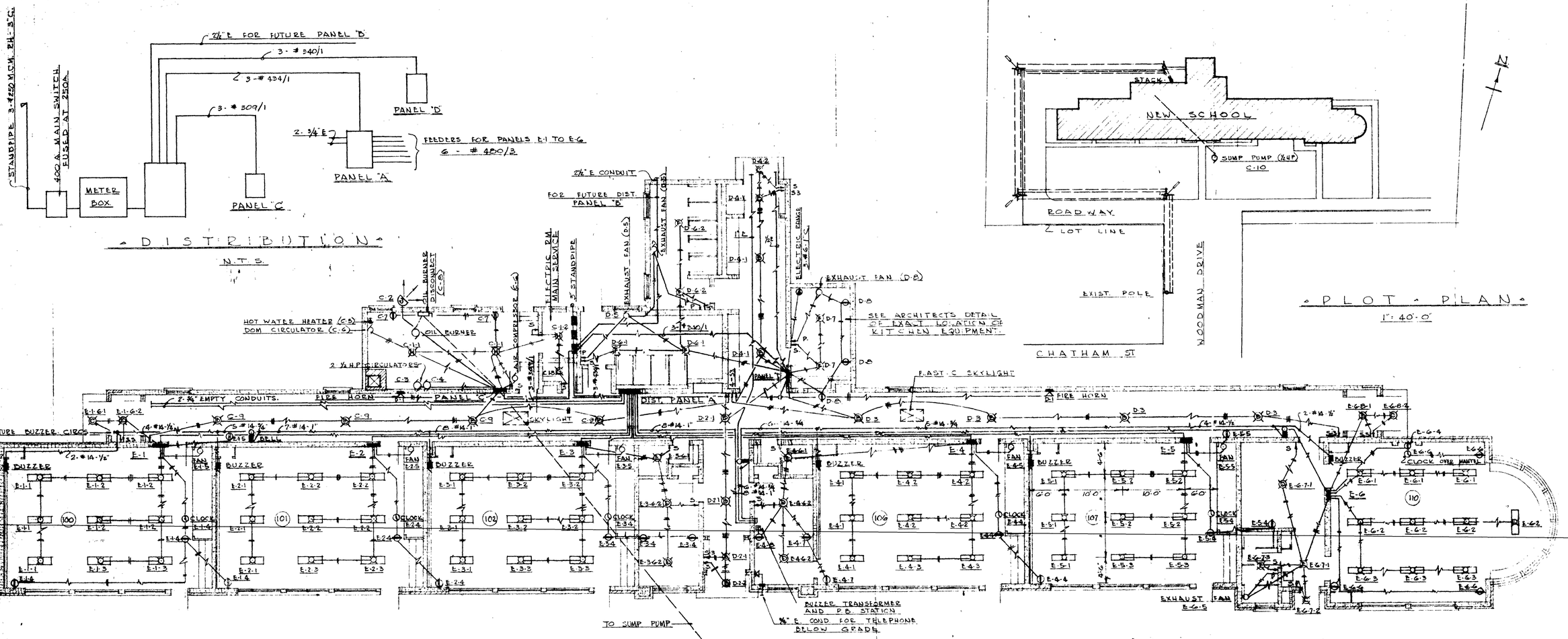

• DISTRIBUTION •

N.T.S.

• PLOT • PLAN •

1" = 40'-0"

• LEGEND •

- INCANDESCENT FIXTURE
- FLUORESCENT FIXTURE
- DUPLEX RECEPTACLE
- ELECTRIC MOTOR
- SPECIAL OUTLET (AS NOTED)
- ELECTRIC CLOCK
- BUZZER (TEACHER'S CALL)
- ELECTRIC BELL
- FIRE HORN & PUSH BUTTON
- S — SINGLE POLE SWITCH
- S3 — THREE-WAY SWITCH

• FLOOR • PLAN • ELECTRICAL •

1/8" = 1'-0"

NOTE

- ALL FLUORESCENT FIXTURES ARE TYPE 'A' (SEE SPECS.)
- FEEDERS FROM PANEL 'A' TO E1-E6 #400/3 PYROTENAX CABLES.
- DIMENSIONS ON ROOM 107 ARE TYPICAL FOR ALL CLASSROOMS.
- EXACT LOCATION OF BOILER ROOM EQUIPMENT TO SUIT LATER LARGE SCALE BOILER ROOM DRAWING BY ENGINEER.

• ELECTRICAL • E1/1

FREDERICK C. BODLEY ONTARIO ASSOCIATION OF ARCHITECTS MEMBER ARCHITECT

• DRAWINGS • FOR • PROPOSED • NEW • SCHOOL • BUILDING

WOODMAN SITE

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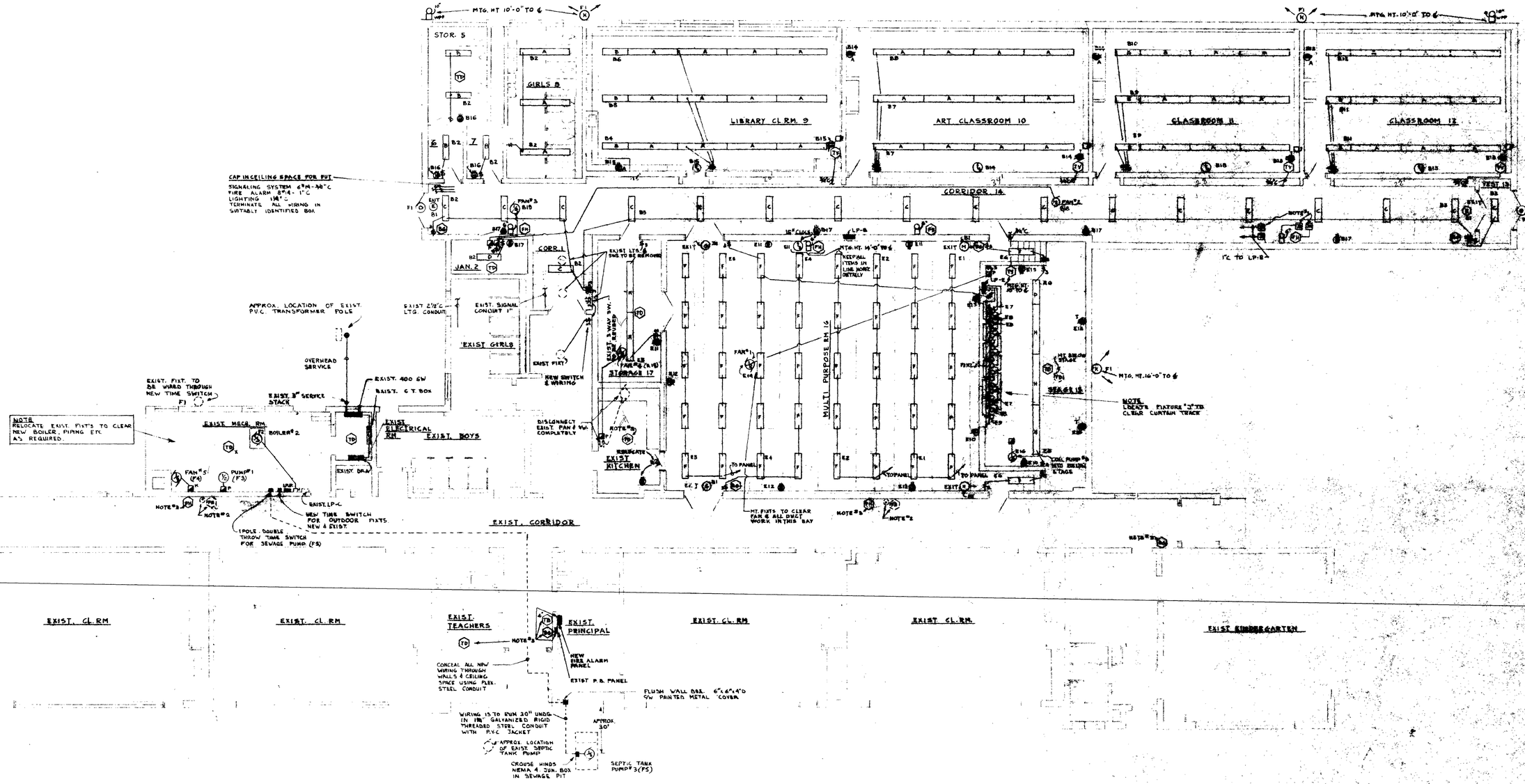
F. C. BODLEY F.R.A.I.C. ARCHITECT 68 NELSON ST. BRANTFORD

REGISTERED PROFESSIONAL ENGINEER A. R. MacGREGOR PROVINCE OF ONTARIO



FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

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FIRST FLOOR ELECTRICAL PLAN

ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL
WOODMAN DRIVE
BRANTFORD ONT.

JOB NO. 6504
DRAWING NO. E-2

OFFICE OF
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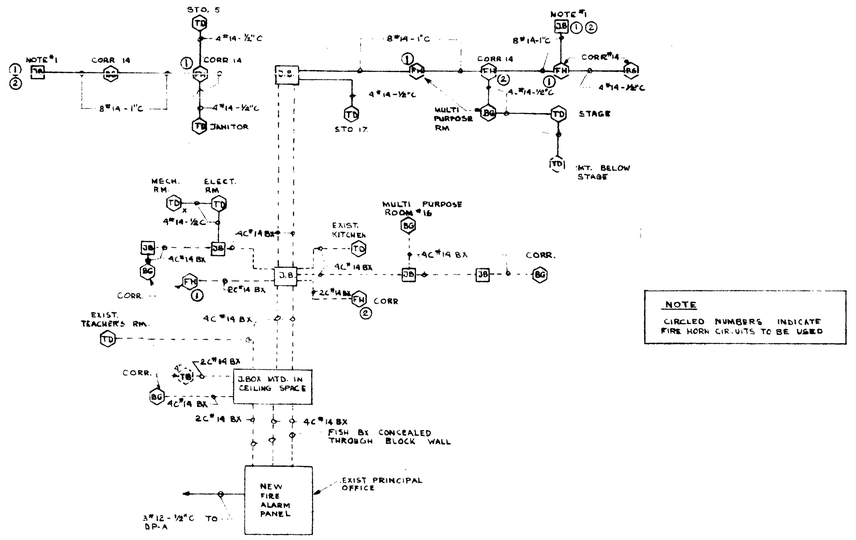


NOTE

CIRCLED NUMBERS INDICATE FIRE HORN CIRCUITS TO BE USED

FIRE ALARM RISER

GENERAL LEGEND

- SINGLE POLE SWITCH SMITH & STONE 4-4801
- THREE WAY " " " " 4-4803
- FOUR WAY " " " " 4-4804
- MULTI GANG STAINLESS STEEL SWITCH PLATE AS REQ'D
- DUPLEX RECEPT. 3 WIRE GRD'G TYPE SMITH & STONE 4-5262
- " " " " " " " " " 4-5262 MTD ABOVE COUNTER
- " " " " " " " " " 4-5262 MTD. IN TOE SPACE
- SINGLE RECEPT. 3 WIRE GRD'G TYPE SMITH & STONE 4-5261
- THERMOSTAT SUPPLIED BY OTHERS INSTALLED & WIRED BY THIS CONTRACTOR
- FLUSH MTD. MANUAL MOTOR STARTER
- " " " " " WITH PILOT
- BUZZER CENTER IN SPACE ABOVE CHALKBOARD
- T.V. OUTLET FLUSH MTD 11G4 BOX S/W BLANK STAINLESS STEEL PLATE MTD IN TOE SPACE TERMINATE CONDUIT IN CEILING SPACE
- 12" CLOCK MTG. HT. 8'-3" TO ℄ (SEE SPEC)
- 18" MULTI PURPOSE RM. CLOCK S/W PLASTIC PROTECTIVE BUBBLE MTG. HT. 14'-0" TO ℄
- 6" PROGRAM BELL MTG. HT. 7'-3" TO ℄ (SEE SPEC.)
- JUNCTION BOX
- 10" WPP EDWARDS 546-10" 24 VOLT BELL S/W. 349 WPP BOX ℄ 1906 YARD HOOD
- KEY OPERATED MANUAL MOTOR STARTER
- SPEED SWITCH SUPPLIED BY MECHANICAL CONTRACTOR, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.

F. A. LEGEND

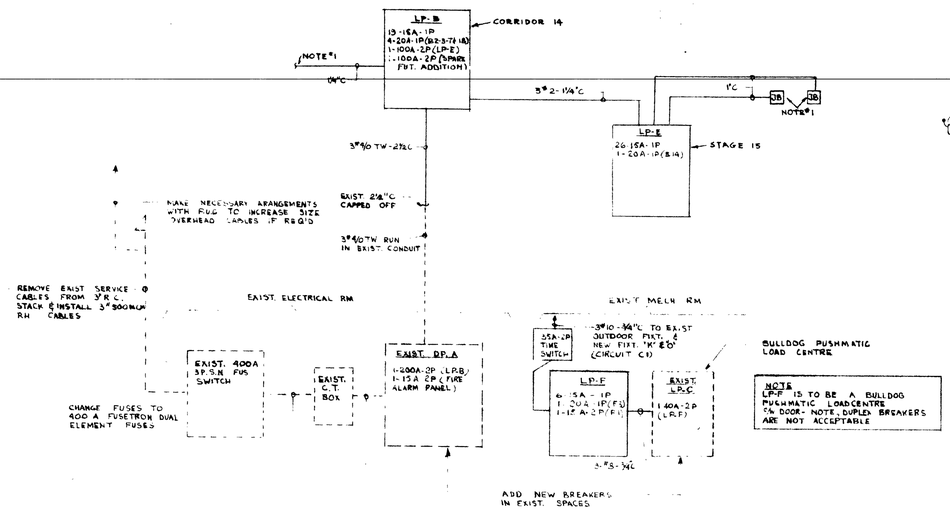
- BREAK GLASS STATION MTG. HT. 4'-6" TO ℄
- FIRE HORN MTG. HT. 7'-3" TO ℄
- THERMAL DETECTOR 136° TYPE
- THERMAL DETECTOR 190° TYPE
- 4" TROUBLE BELL MTG. HT. 7'-3" TO ℄

NOTES

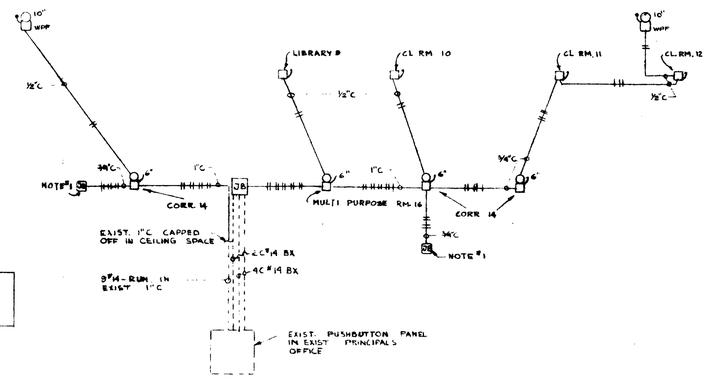
1 — CAP CONDUITS IN JUNCTION BOX IN CEILING SPACE FOR FUT. ADDITION.

2 — REMOVE EXIST PUSHBUTTON ℄ "FM" & COVER OPENING WITH BLANK PLATE - PAINT PLATE TO MATCH WALL.

3 — WIRING TO THESE ITEMS TO BE RUN CONCEALED IN CEILING SPACE AND FISHED THROUGH EXIST WALLS - ELECTRICAL CONTRACTOR TO ENGAGE SUITABLE TRADES FOR ALL CUTTING, PATCHING & PAINTING. ALL CHARGES TO BE PAID BY THIS CONTRACTOR



RISER DIAGRAM 115/230V-1φ-3W



SIGNAL SYSTEM RISER

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BRANTFORD ONTARIO
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ELECT RISER DIAGRAMS.

DRAWN BY	ADD'N & ALTERATIONS WOODMAN DR. SCH. WOODMAN DR. BRANTFORD	JOB NO. 6504.
DATE MAY. 1965		DRAWING NO. E-1
SCALE AS NOTED		

C. F. EULL

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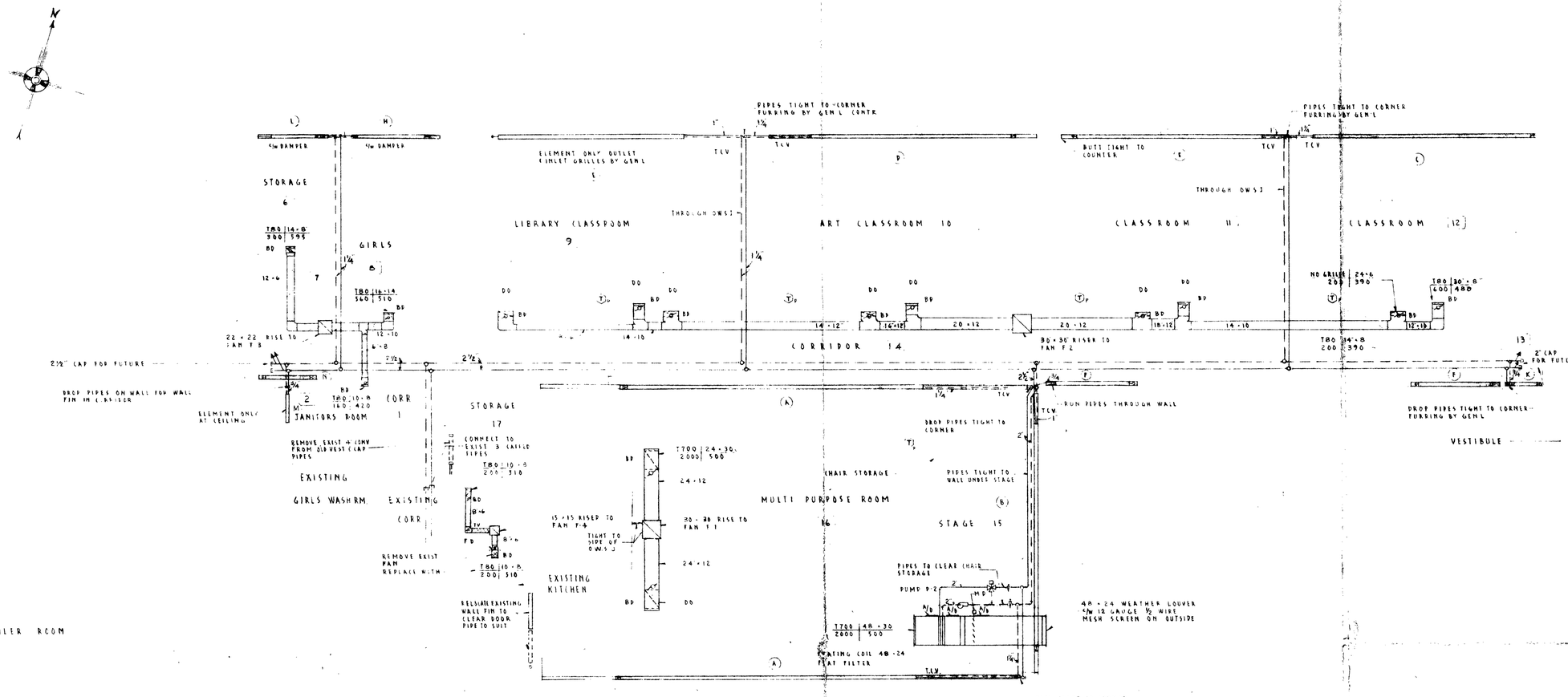


GROUND FLOOR HEATING & VENTILATING

SCALE ⅛" = 1'-0"

HEATING LEGEND

- SUPPLY MAIN
- RETURN MAIN
- GLOBE VALVE
- GATE VALVE
- BALANCING VALVE
- TCV TEMPERATURE CONTROL VALVE
- MIXING VALVE
- PRESSURE RELIEF VALVE
- THERMOSTAT (PNEUMATIC)
- THERMOSTAT (ELECTRIC)
- THERMOMETER
- AIR VENT
- UNION
- PRESSURE GAUGE
- AD ACCESS DOOR
- STRAINER

VENTILATING LEGEND

- MD MOTORIZED DAMPER
- FD FIRE DAMPER
- BD BALANCING DAMPER
- TV TURNING VANES
- SOUND INSULATION
- FLEXIBLE CONNECTION
- MODEL SIZE / CFM / FPM — GRILLE SCHEDULE

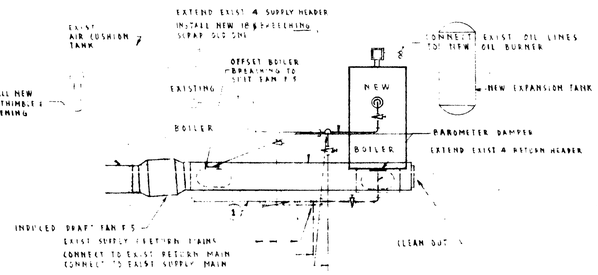
RADIATION SCHEDULE

A	23	50'-0"	1T-NF — 47.9 MBH
B	12.9	50'-0"	1T-NF — 47.9 MBH
C	18.5	28'-6"	2T-NF — 65.0 MBH
D	18.5	27'-0"	2T-NF — 93.2 MBH
E	18.5	25'-0"	2T-NF — 35.0 MBH
F	18.5	12'-0"	2T-NF-¼"D — 21.9 MBH
H	18.5	9'-0"	2T-NF — 13.4 MBH
K	18.5	3'-0"	2T-NF-¼"D — 4.4 MBH
L	18.5	6'-0"	1T-NF — 10.4 MBH
M	18.5	4'-0"	1T-NF — 6.9 MBH
N	18.5	6'-0"	2T-NF — 13.0 MBH

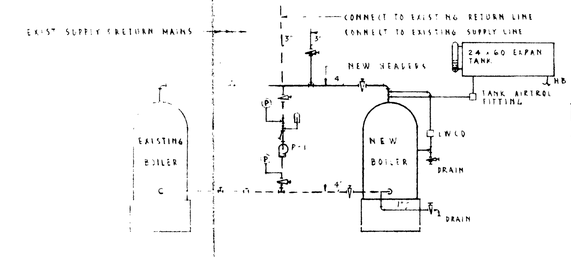
16 × 32 LOUVER IN WALL BELOW WINDOW 12 GA. SCREEN OUTSIDE DUCT TO 24" FROM FLOOR

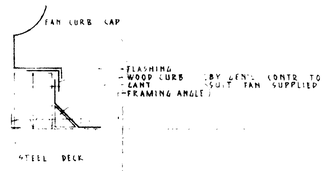
BOILER ROOM LAYOUT

SCALE ¼" = 1'-0"



BOILER PIPING SCHEMATIC





TYPICAL ROOF FAN CURB DETAIL

SCALE 1½" = 1'-0"

NOTES

1) REMOVE EXIST THERMOMETERS & INSTALL ANGLE TYPE THERMOMETERS FACING DOWN. USE EXIST. THERMOMETERS WELLS

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GROUND FLOOR HEATING & VENTILATION

DRAWN BY	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL	JOB NO. 6504
DATE MAY 1965	WOODMAN DRIVE BRANTFORD ONT.	DRAWING NO. M-2
SCALE AS NOTED		

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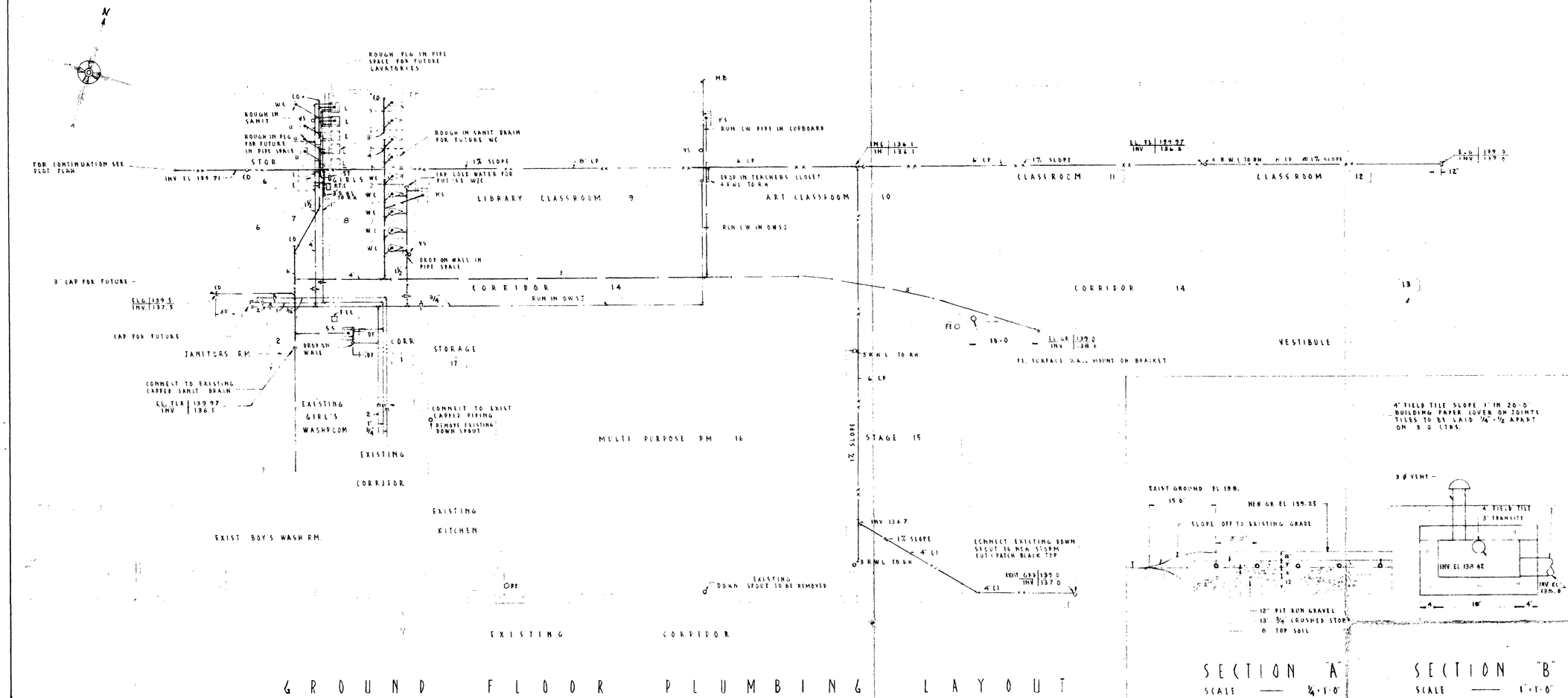


GROUND FLOOR PLUMBING LAYOUT

SCALE 1/8 - 1-0

PLUMBING LEGEND

S	SANITARY DRAIN
S S	STORM DRAIN
C	COLD WATER
H	HOT WATER
H C	RECIRCULATING HOT WATER
	GATE VALVE
RH	ROOF HOOPER
RWL	RAIN WATER LEADER
CI	CAST IRON
VT	VITREOUS TILE
WC	WATER CLOSET
L	LAVATORY
U	URINAL
DF	DRINKING FOUTAIN
FD	FLOOR DRAIN
HD	HUB DRAIN
HB	HOSE BIBB
CO	CLEAN OUT
VS	VENT STACK
FEC	FIRE EXTINGUISSHER CABINET
PET	PLAIN END TILE
CP	CONCRETE PIPE
KS	KITCHEN SINK
SS	SERVICE SINK
FE	FIRE EXTINGUISHER
RTC	RECESSED TOWEL CABINET
ST	SOAP TANK

FIXTURE SCHEDULE

FIXTURE	DRAIN	VENT	CW	HW
WATER CLOSET	3"	1 1/2"	1/2"	
URINAL	2"	1 1/2"	1/2"	
FLOOR DRAIN	2"	1 1/2"		
HOSE BIBB			3/4"	
SERVICE SINK	3"	1 1/2"	1/2"	1/2"
KITCHEN SINK	1 1/2"	1 1/4"	1/2"	
LAVATORY	1 1/4"	1 1/4"	1/2"	1/2"
DRINKING FOUNTAIN	1/4"	1 1/4"	1/2"	

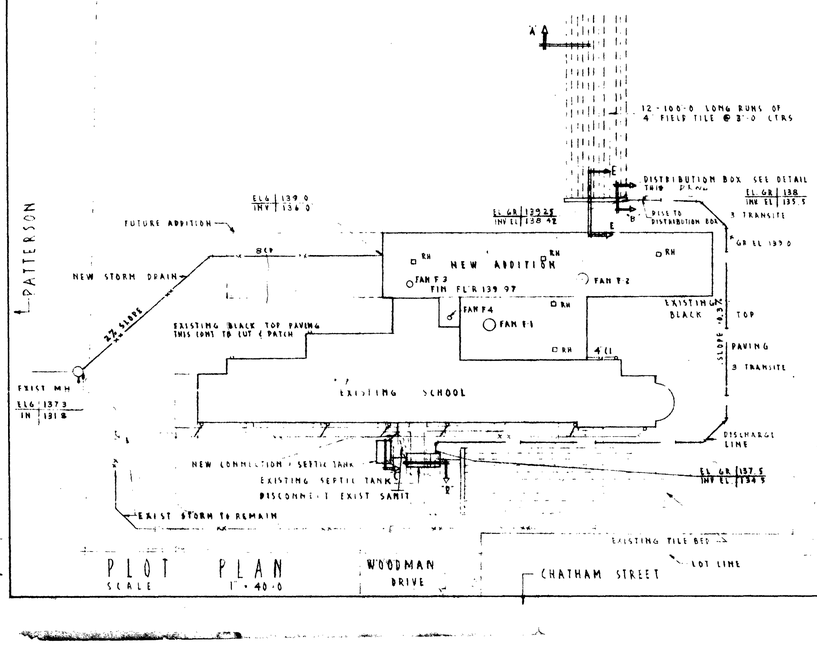
4" FIELD TILE SLOPE 1" IN 20-0 BUILDING PAPER COVER ON JOINTS TILES TO BE LAID 1/4"-1/2" APART ON 3 0 CTRS.

SECTION "A"

SCALE — 1/4-1-0

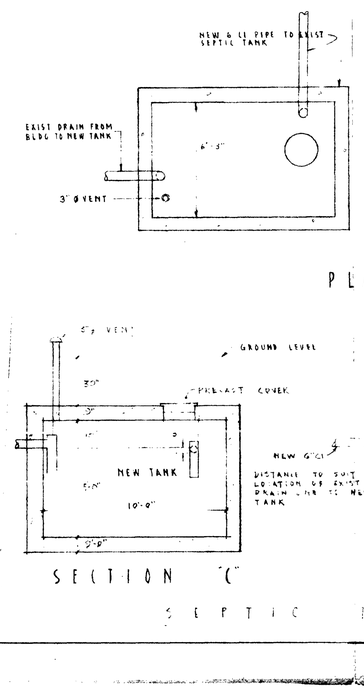
SECTION "B"

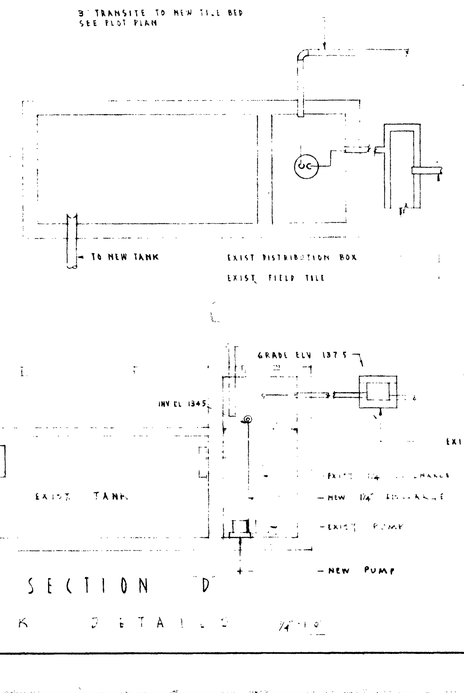
SCALE — 1"-1-0

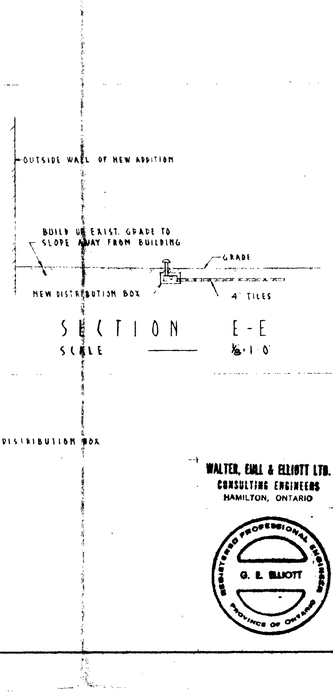


PLOT PLAN

SCALE 1"-40-0







SECTION E-E

SCALE — 1/8-1-0

SEPTIC TANK DETAILS 1/4-1-0

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GR. FL. PLUMBING LAYOUT

DRAWN BY	ADD'N & ALTERATIONS WOODMAN DR. SCH. WOODMAN DR. BRANTFORD	JOB NO. 6504.
DATE MAY 1965		DRAWING NO. NO-1.
SCALE AS NOTED		

OFFICE OF
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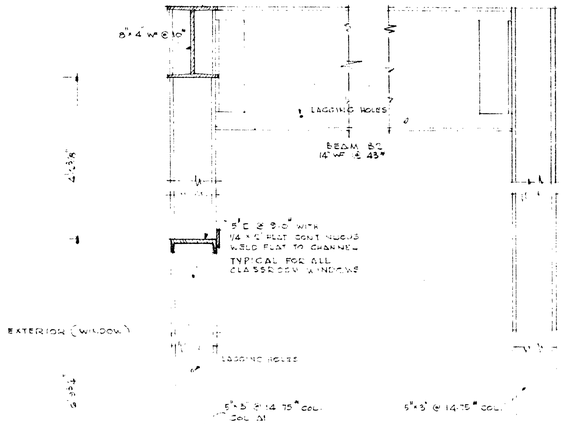
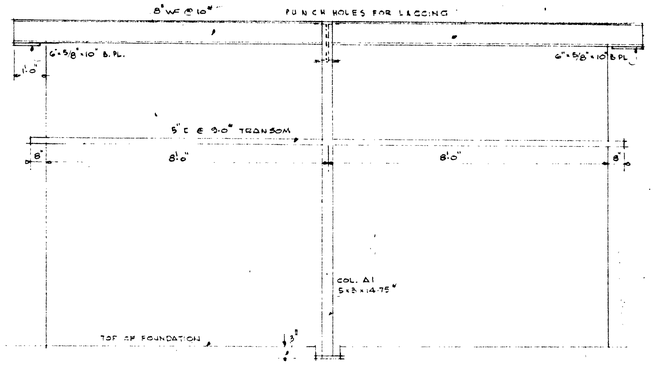
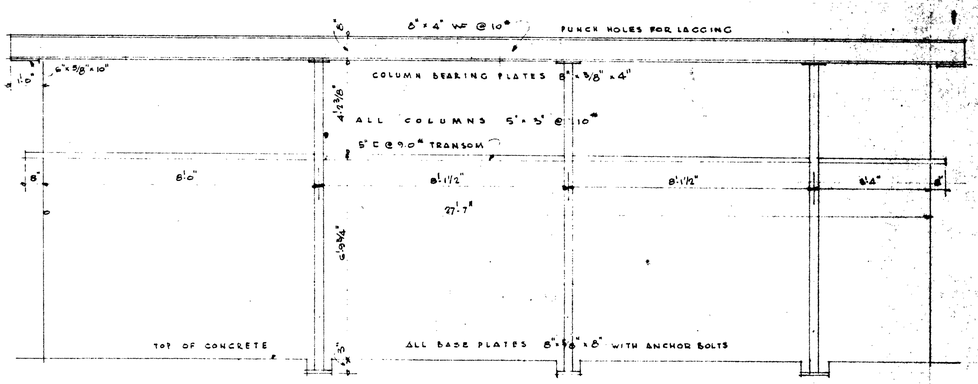


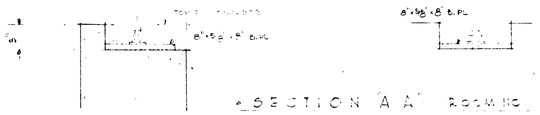




• EXTERIOR ELEVATION • W2 • (ONE REQ'D)

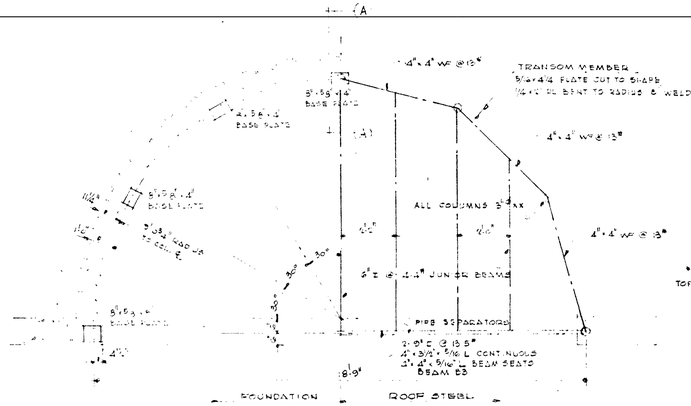
• EXTERIOR ELEVATION • W1 • (FIVE REQ'D).

REFER TO ARCHITECTURAL SHEET #6 FOR COMPLETE WINDOW DETAILS



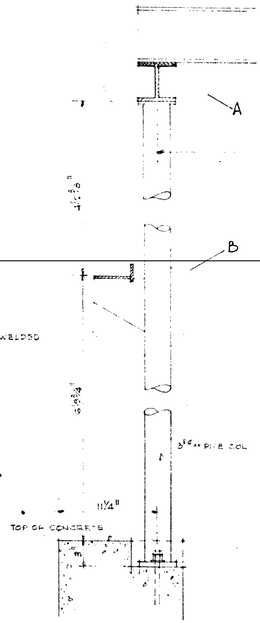
• SECTION "AA" ROOM 110

SHEET #1

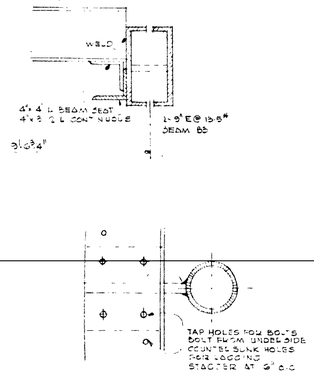


• BAY WINDOW STEEL PLAN •

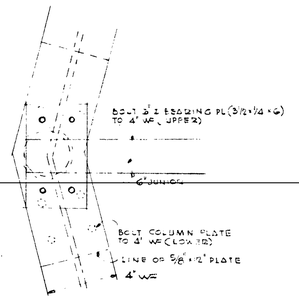
ROOM 110 (KINDERGARTEN)



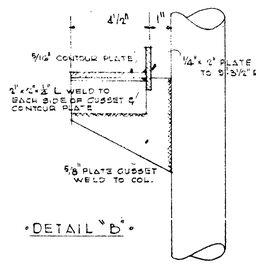
• COLUMN SECTION "AA" •



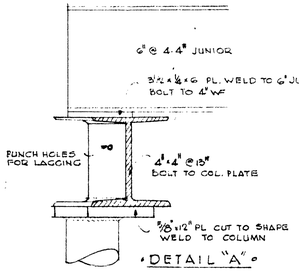
• PLAN AT "B" •



• PLAN AT "A" •



• DETAIL "B" •

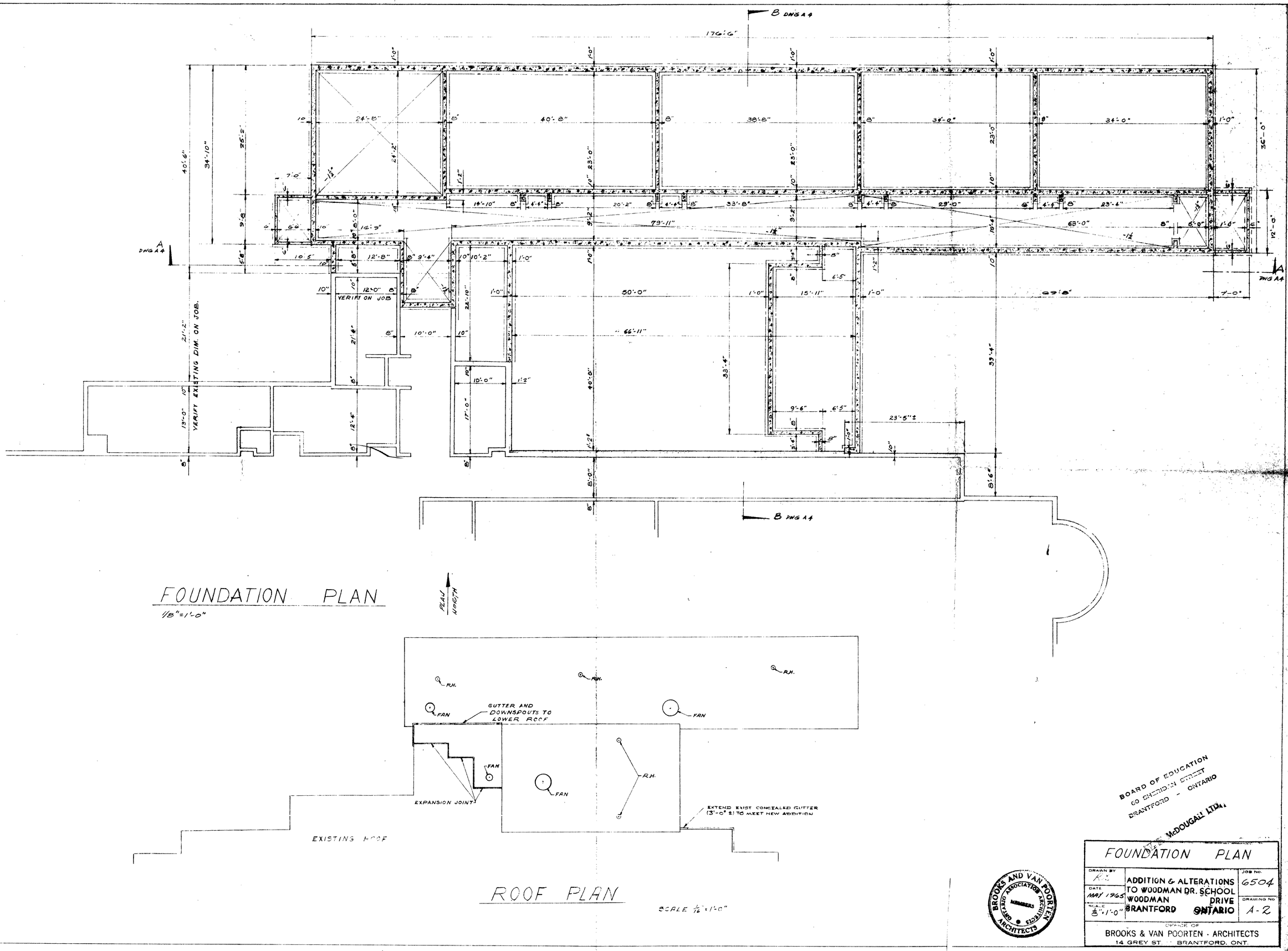


• DETAIL "A" •

PROPOSED NEW SCHOOL BUILDING FOR BRANTFORD BOARD OF EDUCATION TO BE BUILT ON WOODMAN DRIVE BRANTFORD ONTARIO

F. C. DODLEY F.R.A.I.C. ARCHITECT BRANTFORD ONTARIO

S3/2



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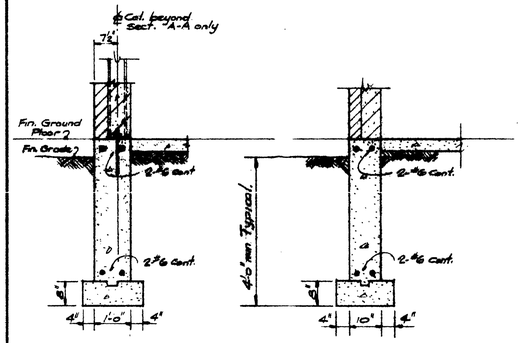
BROOKS AND VAN POORTEN ARCHITECTS ASSOCIATION MEMBERS

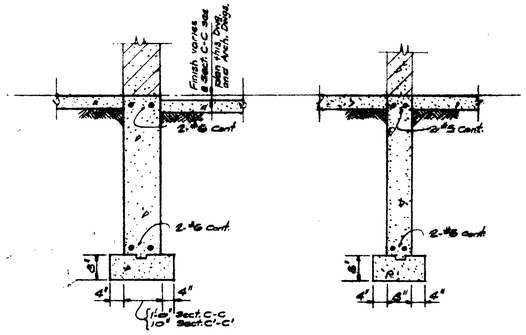
FOUNDATION PLAN		
DRAWN BY: K.S.	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL	JOB No. 6504
DATE: MAY 1965	WOODMAN DRIVE BRANTFORD ONTARIO	DRAWING No. A-2
SCALE: 1/8"=1'-0"		

OFFICE OF
BROOKS & VAN POORTEN - ARCHITECTS
14 GREY ST. - BRANTFORD, ONT.



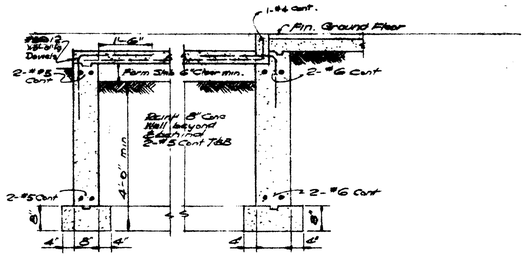
SECTION A-A
Scale ½" = 1'-0"
SECT. A'-A' SIMILAR EXCEPT AS NOTED

SECTION B-B
Scale ½" = 1'-0"

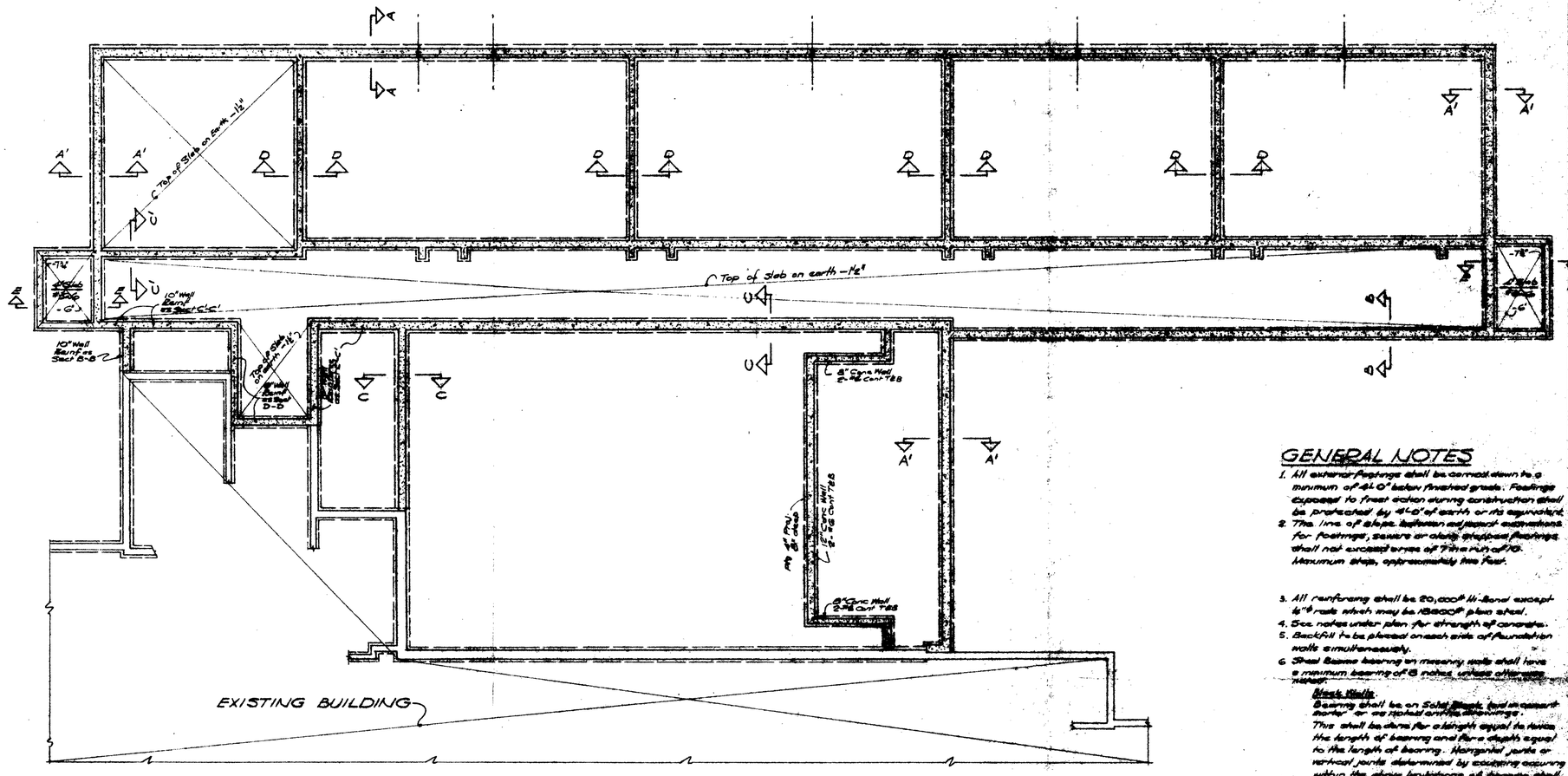


SECTION C-C
Scale ½"=1'-0"
SECT. C'-C' SIMILAR EXCEPT AS NOTED

SECTION D-D
Scale ½"=1'-0"



SECTION E-E
Scale ½":1'-0"



FOUNDATION PLAN. Scale ⅛" : 1'-0"

1. Footings shall be carried down to natural undisturbed soil capable of sustaining 2 tons (4000 pounds) per square foot, and in all cases at least 4'-0" below existing (original) grade.
2. Slab on earth shall be placed on soil capable of sustaining 600 pounds per square foot, and of sufficient compaction that no differential settlement shall take place between the slab and the building footings.
   Information relating to the value of soil under footings and floors on earth and the elevation given for footings is based on information available at the time drawings are issued. The Contractor shall place footings and floors on earth on soil capable of supporting the pressures given on these drawings. Any adjustment considered necessary shall be reported to the Architect before proceeding with the work.
3. Finished Ground Floor is at Elevation 185.67' except as crossed and noted.
4. Bottom of Wall Footings to be at Elevation 184.37'
5. Concrete shall be 3000#
6. See also General Notes on this Drawing.
7. Temperature Reinforcing for 4" Formed Slab is #3@12.

ALL WALL FOOTINGS 4" PROJECTION : 8" DEEP

GENERAL NOTES

1. All exterior footings shall be carried down to a minimum of 4'-0" below finished grade. Footings exposed to frost action during construction shall be protected by 4'-0" of earth or its equivalent.
2. The line of slope between adjacent excavations for footings, pasers or other stepped footings shall not exceed a rise of 7 in a run of 10. Maximum step, approximately two feet.
3. All reinforcing shall be 20,000# Hi-Bond except ½"ϕ rods which may be 18000# plain steel.
4. See notes under plan for strength of concrete.
5. Backfill to be placed on each side of foundation walls simultaneously.
6. Steel Beams bearing on masonry walls shall have a minimum bearing of 8 inches, unless otherwise noted.

   Block Walls
   Bearing shall be on Solid Block, laid in cement mortar or as noted on the drawings.
   This shall be done for a length equal to twice the length of bearing and for a depth equal to the length of bearing. Horizontal joints or vertical joints determined by coursing occurring within the above limitations of bearing shall be made with cement mortar.
7. See Specification for Typical Details covering one way slabs, beams, footings, walls, temperature reinforcing for slabs, open web steel joists.

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THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AGAINST ARCHITECTURAL DRAWINGS AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

C. D. CAMPBELL & WALLACE CONSULTANTS LIMITED
C. D. CAMPBELL

BROOKS AND VAN POORTEN ASSOCIATE ARCHITECTS

FOUNDATION PLAN

DRAWN BY	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL	JOB NO. 6504
DATE MAY 1965	WOODMAN DRIVE BRANTFORD ONTARIO	DRAWING S.1.
SCALE AS NOTED		

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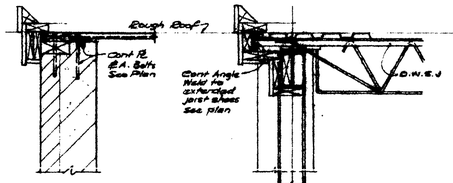
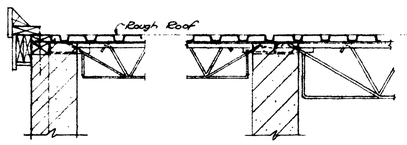


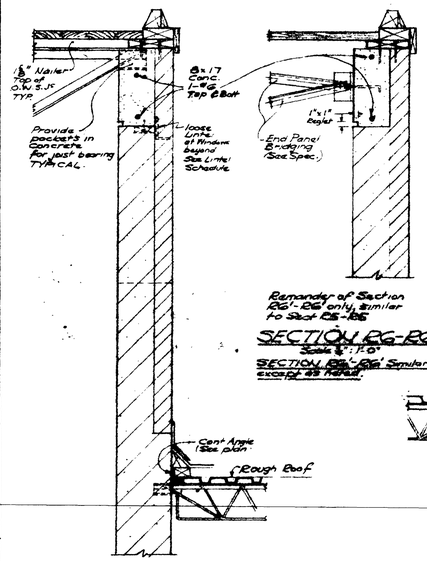
SECTION R1-R1
Scale 3/4" : 1'-0"

SECTION R2-R2
Scale 3/4" : 1'-0"



SECTION R3-R3
Scale 3/4" : 1'-0"

SECTION R4-R4
Scale 3/4" : 1'-0"

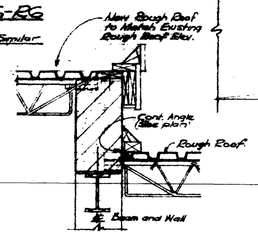


SECTION R5-R5
Scale 3/4" : 1'-0"

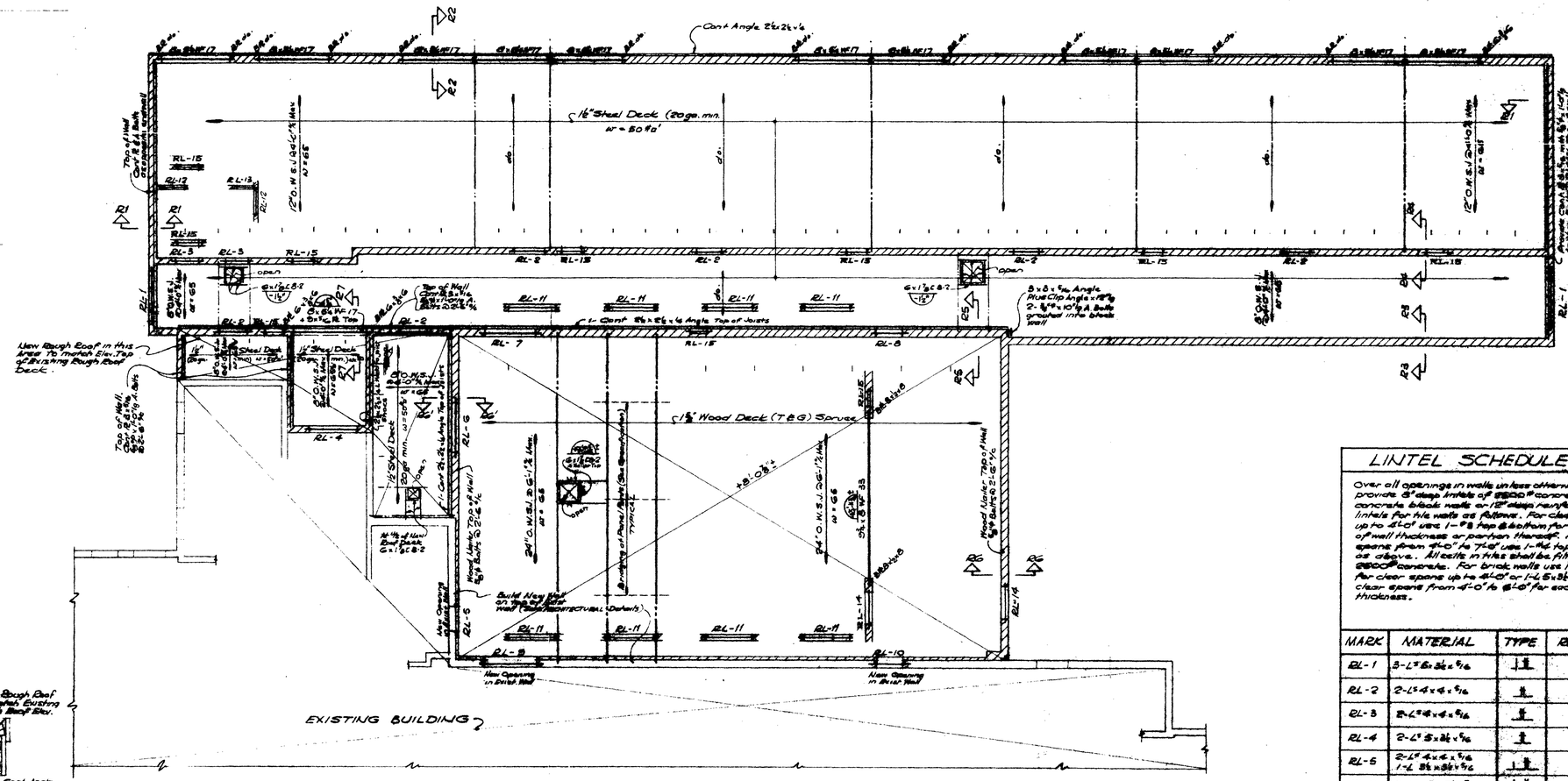
Remainder of Section R6'-R6' only similar to Sect R5-R5

SECTION R6-R6
Scale 3/4" : 1'-0"

SECTION R8'-R8' Similar except as noted.



SECTION R7-R7
Scale 3/4" : 1'-0"



ROOF FRAMING PLAN
Scale 1/8" : 1'-0"

1. Top of Structural Deck 0" below Rough Roof except as crossed and noted.
2. Top of Steel Beams -4" below Rough Roof unless otherwise shown thus (4")
3. Live Load is 40#/s.f. per square foot except as crossed and noted.
4. 'S' for O.W.S.J. includes live plus dead load in pounds per square foot.
5. See also General Notes on Dwg S.1.

LINTEL SCHEDULE

Over all openings in walls unless otherwise shown provide 8" deep lintels of 3500# concrete for concrete block walls or 12" deep reinforced brick lintels for brick walls as follows. For clear spans up to 4'-0" use 1-#8 top & bottom for each 4" of wall thickness as per plan thereof. For clear spans from 4'-0" to 7'-6" use 1-#8 top & bottom as above. All cells in this shall be filled with 3500# concrete. For brick walls use 1-L 3½x3½x5/16 for clear spans up to 4'-0" or 1-L 5x3½x5/16 for clear spans from 4'-0" to 6'-0" for each 4" of wall thickness.

MARK	MATERIAL	TYPE	REMARKS
RL-1	3-L 6x3½x5/16		
RL-2	2-L 4x4x5/16		
RL-3	3-L 4x4x5/16		
RL-4	2-L 5x3½x5/16		
RL-5	2-L 4x4x5/16 1-L 3½x3½x5/16		
RL-6	3-L 5x3½x5/16		
RL-7	3-L 6x3½x5/16		
RL-8	3-L 3½x3½x5/16		
RL-9	2-L 3½x3½x5/16 1-L 3½x3½x5/16		
RL-10	2-L 4x4x5/16 1-L 3½x3½x5/16		
RL-11	1-L 5x3½x5/16		
RL-12	2-L 3x3x¼		
RL-13	2-L 3x3x¼		
RL-14	3-L 3½x3½x5/16		
RL-15	2-L 4x4x5/16		

NOTE
All Columns 6"x6" WF 15.5
Cap Plates 6"x½"x6"
Base Plates 9"x⅝"x8"
Provide 2-¾"ø x 1'-4½" lg Anchor Bolts for each column (except where otherwise noted).
Base Plates to bear on smooth level finished concrete.
See Sections for dimension from Finished Ground Floor to bottom of Base Plate.

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DRAWINGS MUST NOT BE SCALED
THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AGAINST ARCHITECTURAL DRAWINGS AND MUST REPORT ANY INCONSISTENCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK

G. D. CASSERMAN & WALLACE CONSULTANTS LIMITED
G5088
C. D. CASSERMAN
PROFESSIONAL ENGINEERS
PROVINCE OF ONTARIO

BROOKS AND VAN POORTEN
ONTARIO ASSOCIATION OF ARCHITECTS
MEMBERS

ROOF FRAMING PLAN

DRAWN BY	ADDITIONS & ALTERATIONS TO WOODMAN DR. SCHOOL WOODMAN DRIVE BRANTFORD ONTARIO	JOB NO. 6504
DATE MAY 1965		DRAWING NO. S.2.
SCALE AS NOTED		

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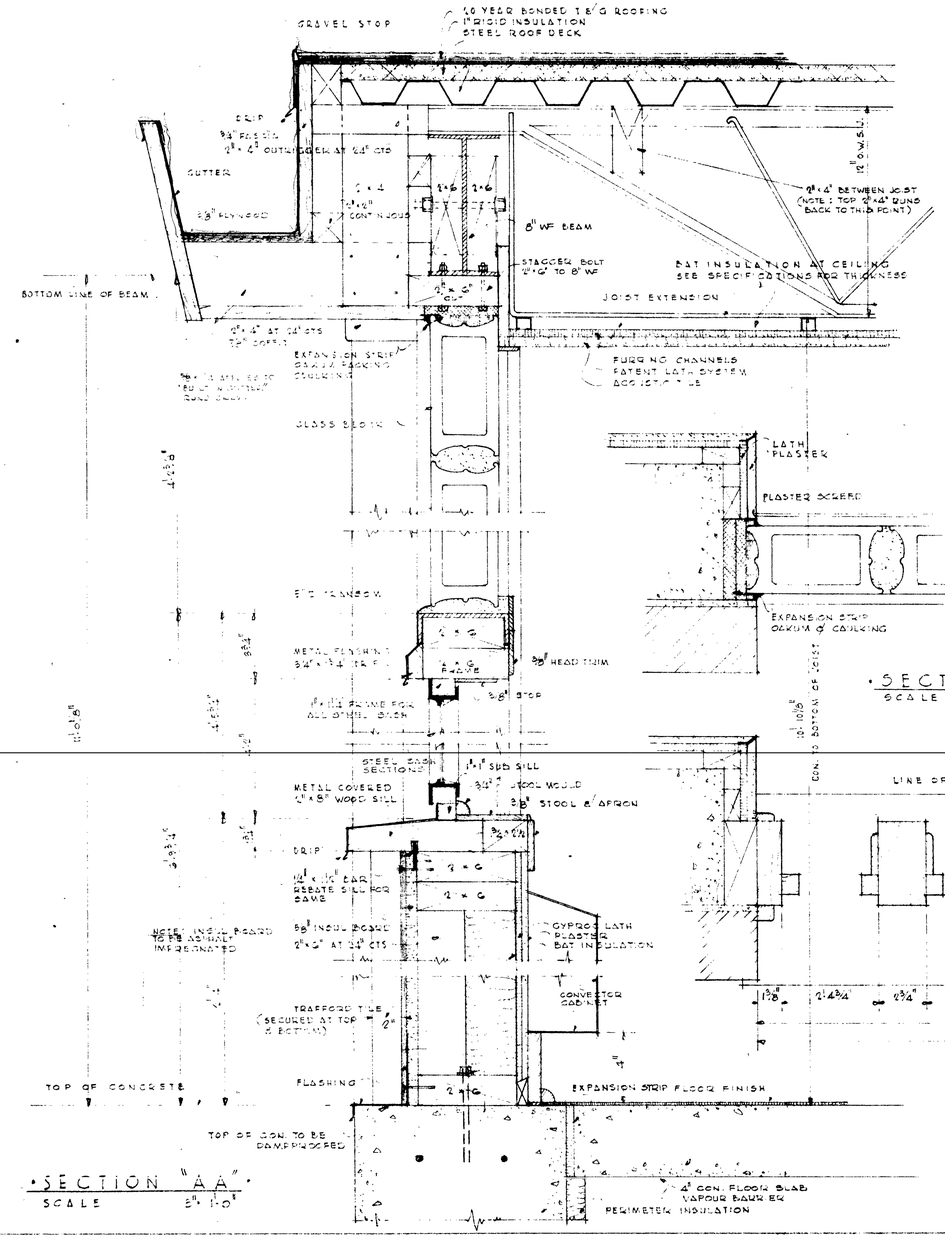
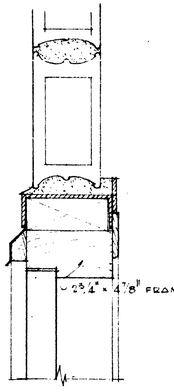
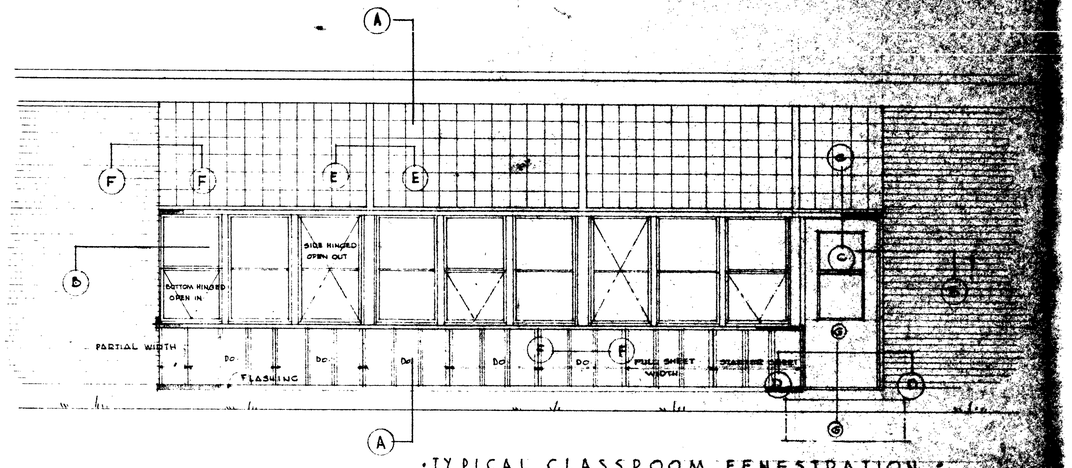


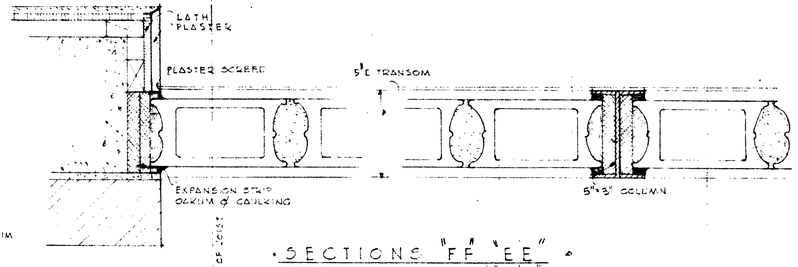
• SECTION "AA" •
SCALE 3" = 1'-0"



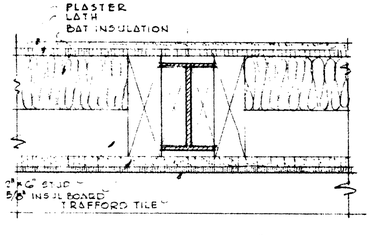
• SECTION "CC" •
SCALE 3" = 1'-0"



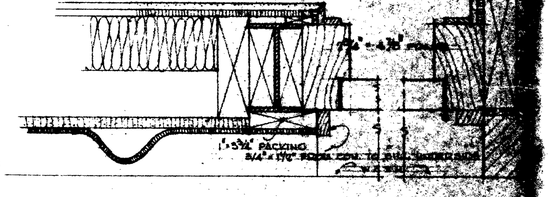
• TYPICAL CLASSROOM FENESTRATION •
SCALE 3/16" = 1'-0"



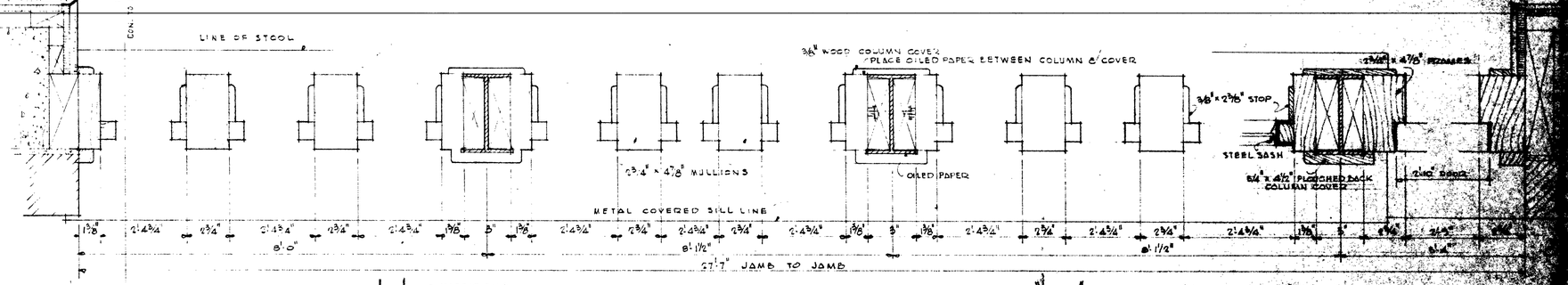
• SECTIONS "FF" "EE" •
SCALE 3" = 1'-0"



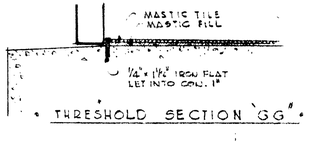
• SECTION "FF" •
SCALE 3" = 1'-0"



• SECTION "DD" •
SCALE 3" = 1'-0"



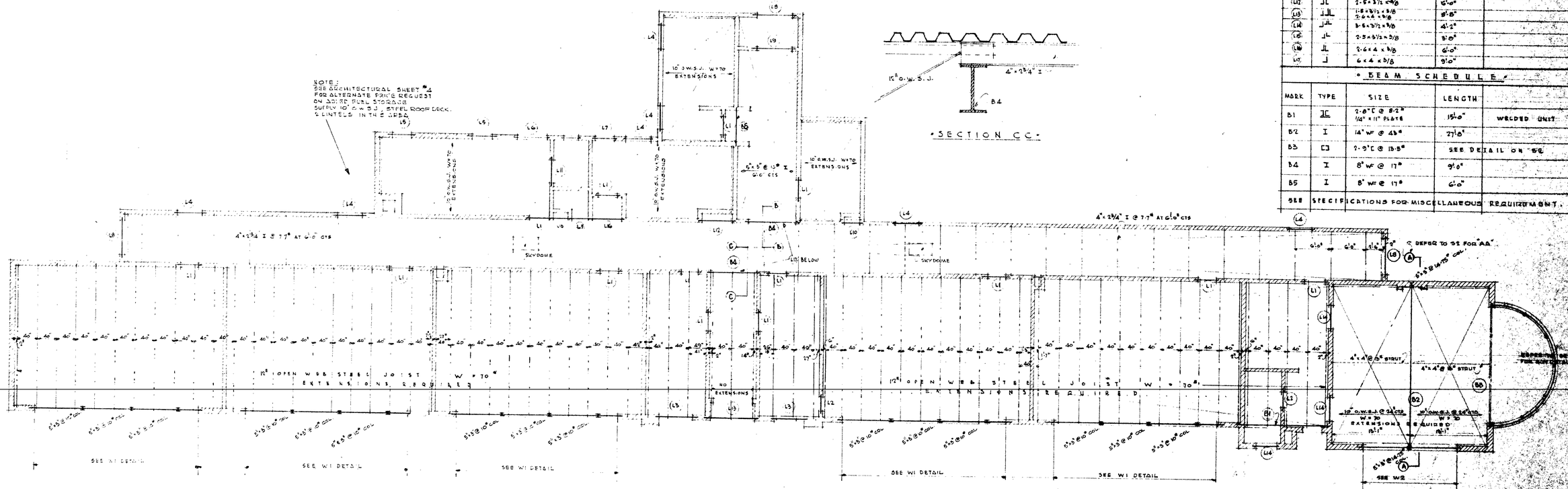
• SECTION "BB" •
SCALE 3" = 1'-0"



• THRESHOLD SECTION "GG" •

PROPOSED SCHOOL BUILDING
FOR
BRANTFORD BOARD OF EDUCATION
TO BE KNOWN AS
WOODMAN SCHOOL
BRANTFORD

F. C. BODLEY F.R.A.I.C. ARCHITECT
BRANTFORD



LINTEL SCHEDULE

MARK	TYPE	SIZE	LENGTH	REMARKS
(L1)	JL	2-5x3½x5/8	6'-4"	
(L2)	J			
(L3)	JL	3-5x5½x5/8	21-4"	
(L4)	JL	1-5x5½x5/8 1-6x4x5/8	8'-0"	
(L5)	JL	3-5x5½x5/8 1-6x4x5/8	14'-0"	
(L6)	JL	1-5x5½x5/8 1-6x4x5/8	6'-3"	
(L7)	JL	1-5x5½x5/8 1-6x4x5/8	21'-4"	
(L8)	JL	1-5x5½x5/8 1-6x4 A5/8	14'-4"	
(L9)	JL	1-5x5½x5/8 1-6x4 A5/8	7'-11"	
(L10)	JL	2-5x5½x5/8	7'-11"	
(L11)	JL	2-5x5½x5/8	5'-0"	
(L12)	JL	2-5x5½x5/8	4'-8"	
(L13)	JL	2-5x3½x5/8	6'-0"	
(L14)	JJL	1-8x8½x5/8 2-6x4x5/8	9'-8"	
(L15)	JJL	3-6x5½x5/8	41'-2"	
(L16)	JL	2-5x5½x5/8	5'-0"	
(L17)	JL	2-6x4x5/8	6'-0"	
(L18)	J	6x4x5/8	9'-0"	

BEAM SCHEDULE

MARK	TYPE	SIZE	LENGTH	
B1	JL	2-6"C @ 8'-2" 1/4" x 11" PLATE	15'-0"	WELDED UNIT
B2	I	14" WF @ 43#	27'-6"	
B3	[]	2-9"C @ 13.5#	SEE DETAIL ON S2	
B4	I	8" WF @ 17#	9'-0"	
B5	I	8" WF @ 17#	6'-0"	
SEE	SPECIFICATIONS FOR MISCELLANEOUS REQUIREMENT.			

NOTE:
ENTIRE ROOF AREA TO BE COVERED
WITH STEEL ROOF DECK AS SPECIFIED

SUPPLY FOR HEAT TRENCHES (ARCHITECTURAL SHEET "3) THE FOLLOWING STOCK

1	8½ x 8 x ½" L	15'-0" LONG
1	" " "	8'-0
4	" " "	9'-0"
5	" " "	8'-0"
1	" " "	6'-0"
1	" " "	5'-0"

ALL TO BE PUNCHED 1¼" CTS BOLT HOLES

4 LINTELS 8½" x 8½" x ½" JL x 5'-0"
FOR WALLS PASSING OVER HEAT TRENCHES

FLOOR PLAN

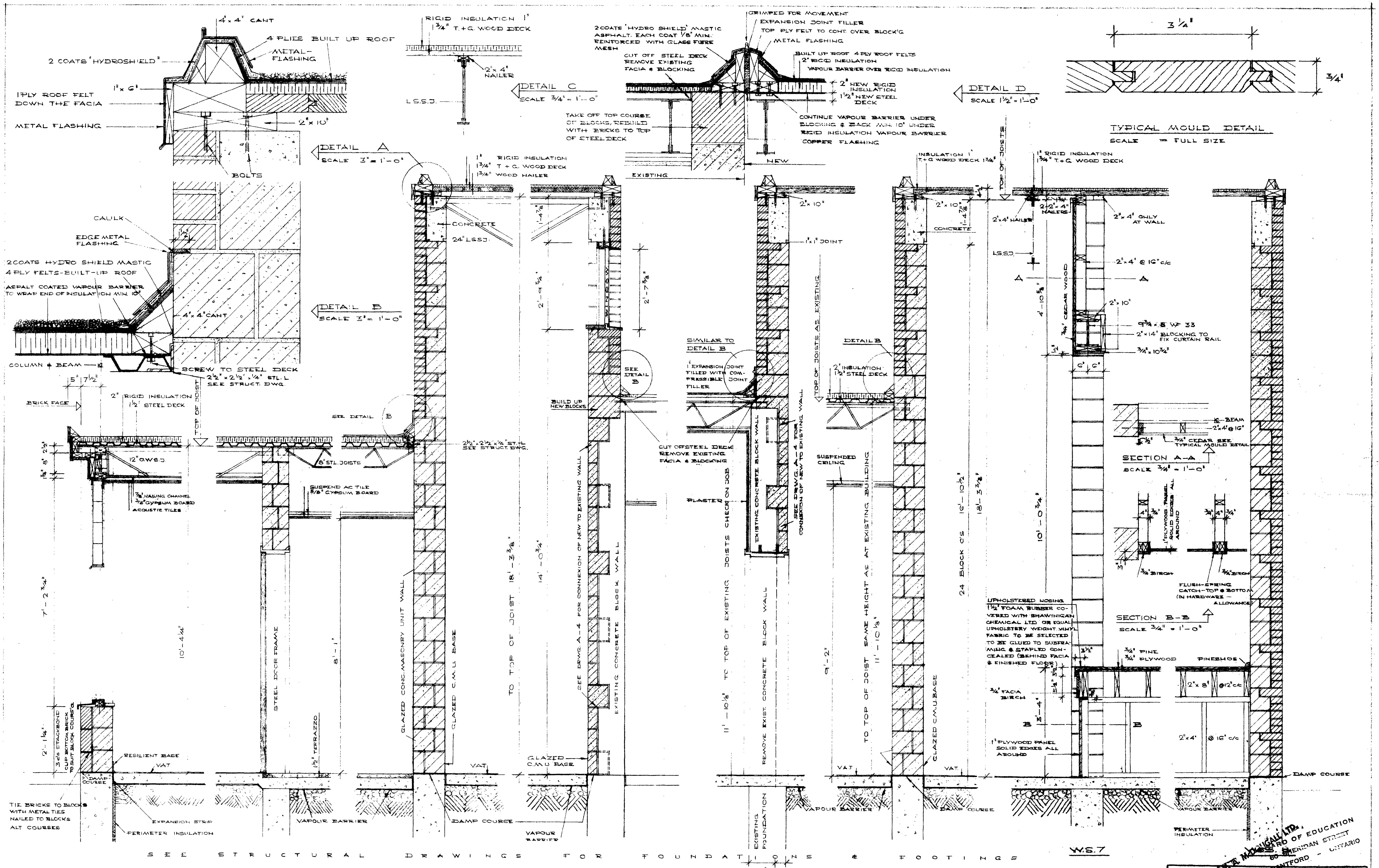
SCALE 1/8" = 1'-0"

FREDERICK C. DOBLEY ONTARIO ASSOCIATION OF ARCHITECTS MEMBER ARCHITECT

PROPOSED NEW SCHOOL BUILDING FOR BRANTFORD BOARD OF EDUCATION TO BE BUILT ON WOODMAN SITE BRANTFORD ONTARIO

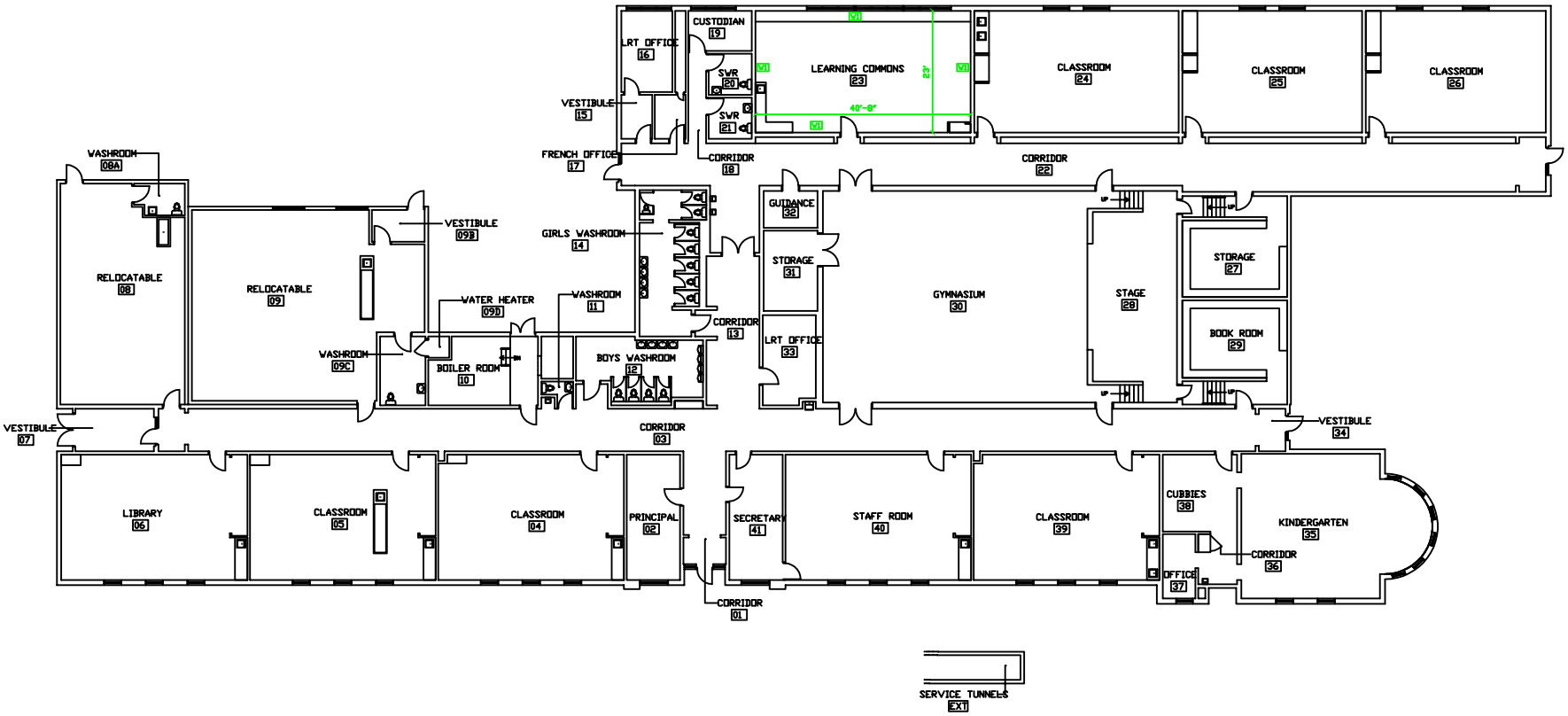
F.C. DOBLEY F.R.A.I.C. ARCHITECT BRANTFORD ONTARIO

S1


4" x 4" CANT
4 PLIES BUILT UP ROOF
METAL FLASHING
2 COATS 'HYDROSHIELD'
1" x 6"
1 PLY ROOF FELT DOWN THE FACIA
METAL FLASHING
2" x 10"
BOLTS
DETAIL A
SCALE 3" = 1'-0"
RIGID INSULATION 1"
1 3/4" T.+G. WOOD DECK
2" x 4" NAILER
L.S.S.J.
DETAIL C
SCALE 3/4" = 1'-0"
2 COATS 'HYDRO SHIELD' MASTIC ASPHALT. EACH COAT 1/8" MIN. REINFORCED WITH GLASS FIBRE MESH
CUT OFF STEEL DECK REMOVE EXISTING FACIA & BLOCKING
CRIMPED FOR MOVEMENT
EXPANSION JOINT FILLER
TOP PLY FELT TO CONT. OVER BLOCK'G
METAL FLASHING
BUILT UP ROOF 4 PLY ROOF FELTS
2" RIGID INSULATION
VAPOUR BARRIER OVER RIGID INSULATION
2" NEW RIGID INSULATION
1 1/2" NEW STEEL DECK
TAKE OFF TOP COURSE OF BLOCKS, REBUILD WITH BRICKS TO TOP OF STEEL DECK
CONTINUE VAPOUR BARRIER UNDER BLOCKING & BACK MIN. 10" UNDER RIGID INSULATION VAPOUR BARRIER
COPPER FLASHING
NEW
EXISTING
DETAIL D
SCALE 1 1/2" = 1'-0"
3 1/4"
3/4"
TYPICAL MOULD DETAIL
SCALE = FULL SIZE
CAULK
EDGE METAL FLASHING
2 COATS HYDRO SHIELD MASTIC
4 PLY FELTS-BUILT-UP ROOF
ASPHALT COATED VAPOUR BARRIER TO WRAP END OF INSULATION MIN. 10"
4" x 4" CANT
DETAIL B
SCALE 3" = 1'-0"
COLUMN & BEAM
SCREW TO STEEL DECK
2 1/2" x 2 1/2" x 1/4" STL. L
SEE STRUCT. DWG.
1" RIGID INSULATION
1 3/4" T + G. WOOD DECK
1 3/4" WOOD NAILER
CONCRETE
24" L.S.S.J.
BRICK FACE
2" RIGID INSULATION
1 1/2" STEEL DECK
TOP OF JOIST
12" O.W.S.J.
7/8" NAILING CHANNEL
3/8" GYPSUM BOARD
ACOUSTIC TILES
SEE DETAIL B
2 1/2" x 2 1/2" x 1/4" STL. L SEE STRUCT. DWG.
8" STL. JOISTS
SUSPEND AC TILE 3/8" GYPSUM BOARD
SEE DETAIL B
BUILD UP NEW BLOCKS
CUT OFF STEEL DECK REMOVE EXISTING FACIA & BLOCKING
SIMILAR TO DETAIL B
1" EXPANSION JOINT FILLED WITH COMPRESSIBLE JOINT FILLER
PLASTER
EXISTING CONCRETE BLOCK WALL
SEE DRWG. A-4 FOR CONNEXION OF NEW TO EXISTING WALL
2" x 10"
1" x 1" JOINT
TOP OF JOISTS AS EXISTING
DETAIL B
2" INSULATION
1 1/2" STEEL DECK
SUSPENDED CEILING
INSULATION 1"
T + G WOOD DECK 1 3/4"
CONCRETE
TOP OF JOISTS
1" RIGID INSULATION
1 3/4" T + G WOOD DECK
2" x 4" NAILER
2 - 2" x 4" NAILERS
2" x 4" ONLY AT WALL
L.S.S.J.
2" x 4" @ 16" c/c
A — A
3/4" CEDAR WOOD
2" x 10"
9 3/4 x 8 WF 33
2" x 14" BLOCKING TO FIX CURTAIN RAIL
3/4 x 10 3/4"
BEAM
2" x 4" @ 16"
3/4" CEDAR SEE TYPICAL MOULD DETAIL
SECTION A-A
SCALE 3/4" = 1'-0"
1" PLYWOOD PANEL SOLID EDGES ALL AROUND
3/4" BIRCH
FLUSH-SPRING CATCH-TOP & BOTTOM (IN HARDWARE — ALLOWANCE)
SECTION B-B
SCALE 3/4" = 1'-0"
UPHOLSTERED NOSING 1 1/2" FOAM RUBBER COVERED WITH SHAWINIGAN CHEMICAL LTD OR EQUAL UPHOLSTERY WEIGHT VINYL FABRIC TO BE SELECTED TO BE GLUED TO SUBFRAMING & STAPLED CONCEALED (BEHIND FACIA & FINISHED FLOOR)
3/4" PINE
3/4" PLYWOOD
PINESHOE
3/4" FACIA BIRCH
2" x 8" @ 12" c/c
2" x 4" @ 16" c/c
1" PLYWOOD PANEL SOLID EDGES ALL AROUND
B — B
24 BLOCK C'S
STEEL DOOR FRAME
GLAZED CONC. MASONRY UNIT WALL
GLAZED C.M.U. BASE
TO TOP OF JOIST
SEE DRWG. A-4 FOR CONNEXION OF NEW TO EXISTING WALL
EXISTING CONCRETE BLOCK WALL
TO TOP OF EXISTING JOISTS CHECK ON JOB
REMOVE EXIST. CONCRETE BLOCK WALL
TO TOP OF JOIST SAME HEIGHT AS AT EXISTING BUILDING
GLAZED C.M.U. BASE
3" x 8 STACKBOND CUT BOTTOM BRICK TO SUIT BLOCK COURSE
RESILIENT BASE
VAT
DAMP COURSE
1 1/2" TERRAZZO
GLAZED C.M.U. BASE
EXISTING FOUNDATION
TIE BRICKS TO BLOCKS WITH METAL TIES NAILED TO BLOCKS ALT. COURSES
EXPANSION STRIP
PERIMETER INSULATION
VAPOUR BARRIER
DAMP COURSE
VAPOUR BARRIER
PERIMETER INSULATION
SEE STRUCTURAL DRAWINGS FOR FOUNDATIONS & FOOTINGS
W.S. 1
W.S. 2
W.S. 3
W.S. 4
W.S. 5
W.S. 6
W.S. 7
SCALE OF WALLSECTIONS 3/4" = 1' — 0"
BROOKS AND VAN POORTEN ARCHITECTS ONTARIO ASSOCIATION OF ARCHITECTS
W. A. McDOUGALL LTD.
BOARD OF EDUCATION
60 SHERIDAN STREET
BRANTFORD - ONTARIO

WALL - SECTIONS		
DRAWN BY M.L.	ADDITION & ALTERATIONS TO WOODMAN DR. SCHOOL WOODMAN DRIVE BRANTFORD ONTARIO	JOB No. 6504
DATE MAY 1966		DRAWING No. A-5
SCALE 3/4" = 1'-0"		

OFFICE OF
BROOKS & VAN POORTEN - ARCHITECTS
14 GREY ST. — BRANTFORD, ONT.



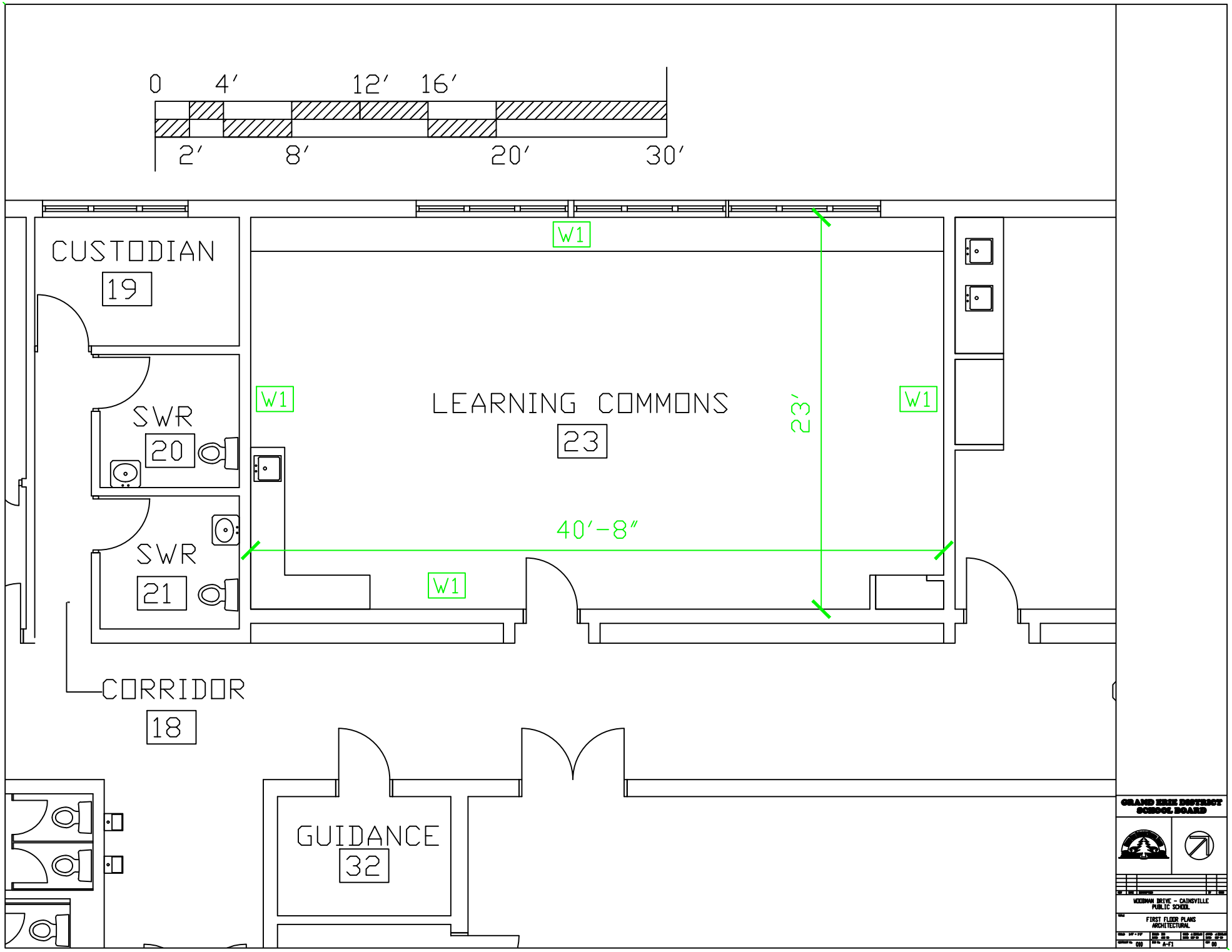
0 4' 12' 16'
2' 8' 20' 30'

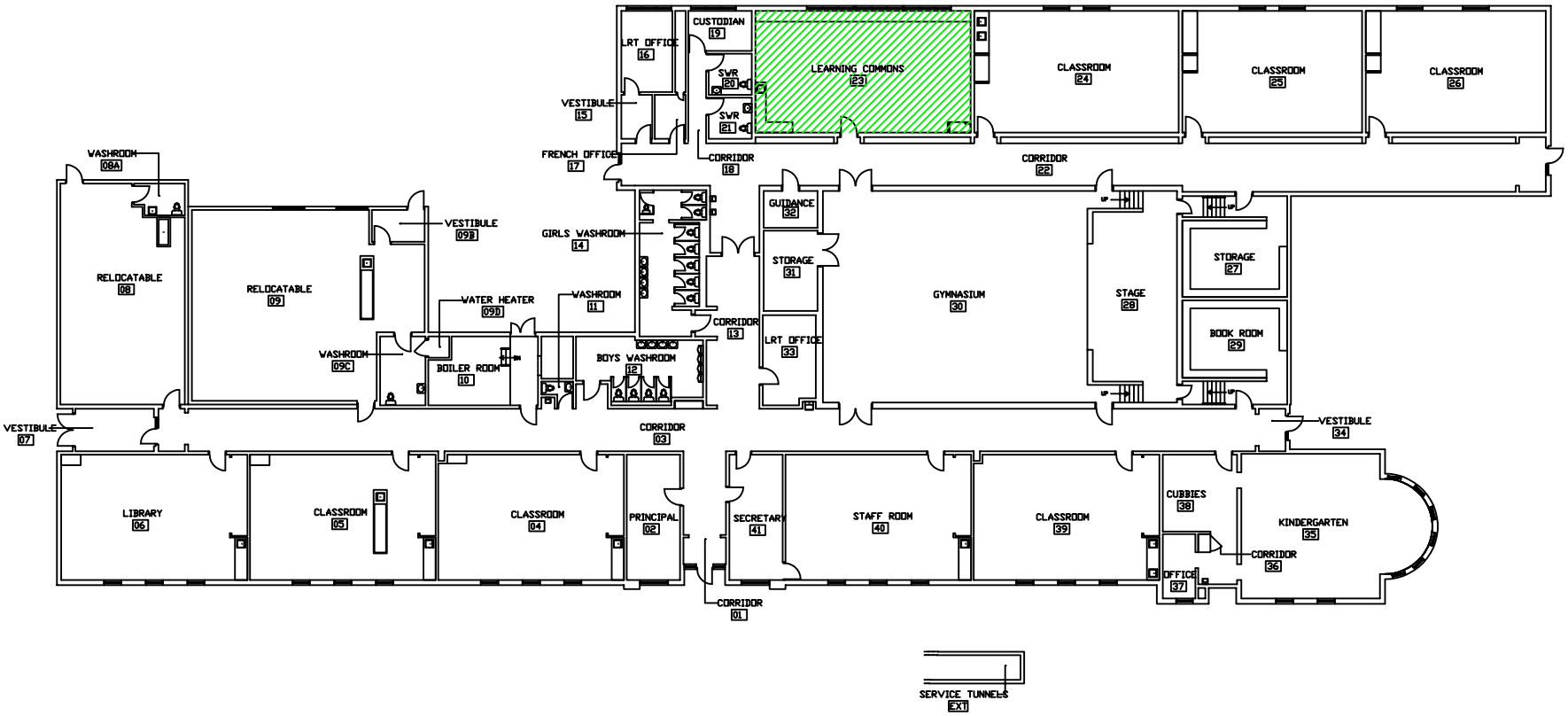
GRAND ERIE DISTRICT SCHOOL BOARD

WOODMAN DRIVE - CAINSVILLE PUBLIC SCHOOL

FIRST FLOOR PLANS ARCHITECTURAL

010 A-F1 00


0
4′
12′
16′
2′
8′
20′
30′
CUSTODIAN
19
W1
SWR
20
W1
LEARNING COMMONS
23
23′
W1
SWR
21
40′-8″
W1
CORRIDOR
18
GUIDANCE
32
GRAND ERIE DISTRICT SCHOOL BOARD
WOODMAN DRIVE - CAINSVILLE PUBLIC SCHOOL
FIRST FLOOR PLANS ARCHITECTURAL
A-F1



AREA OF WORK

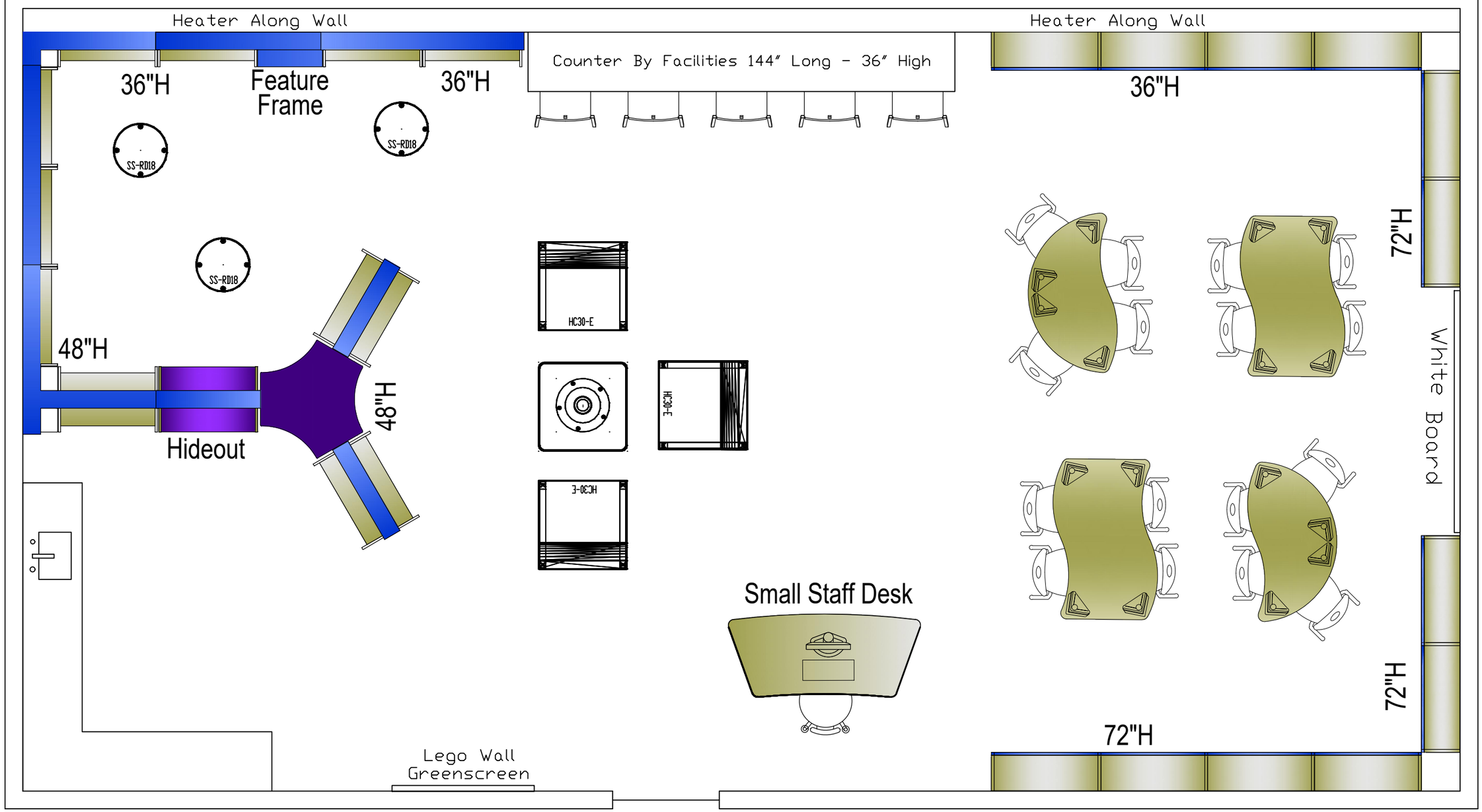
0 4' 12' 16'
2' 8' 20' 30'

GRAND ERIE DISTRICT SCHOOL BOARD

WOODMAN DRIVE - CAINSVILLE PUBLIC SCHOOL

FIRST FLOOR PLANS ARCHITECTURAL

010 A-F1 00



Option 1

V1 02.19.2024 ..... Drawing based on CAD supplied by Schoolhouse Products Inc.

opening the book
North America

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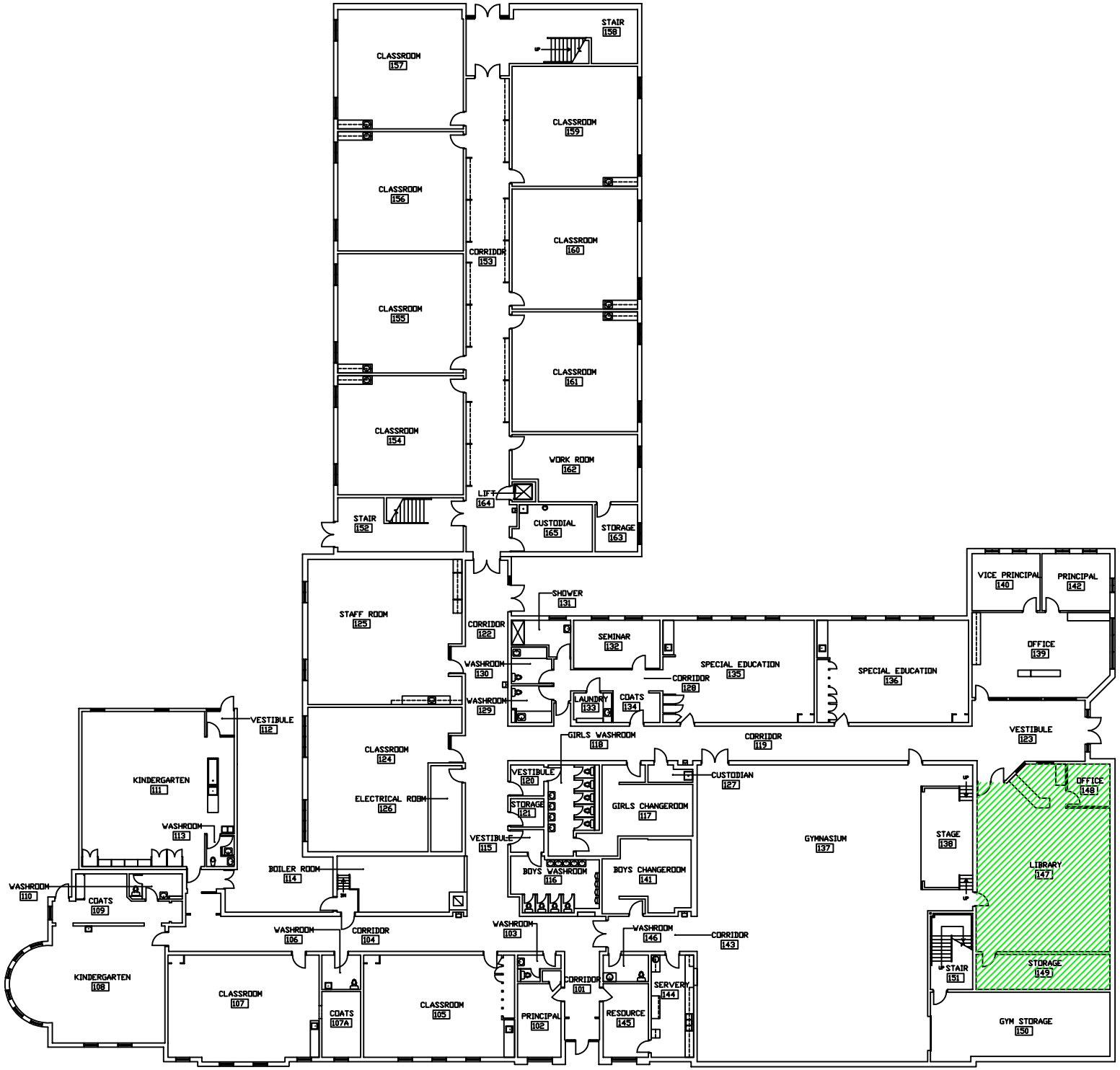


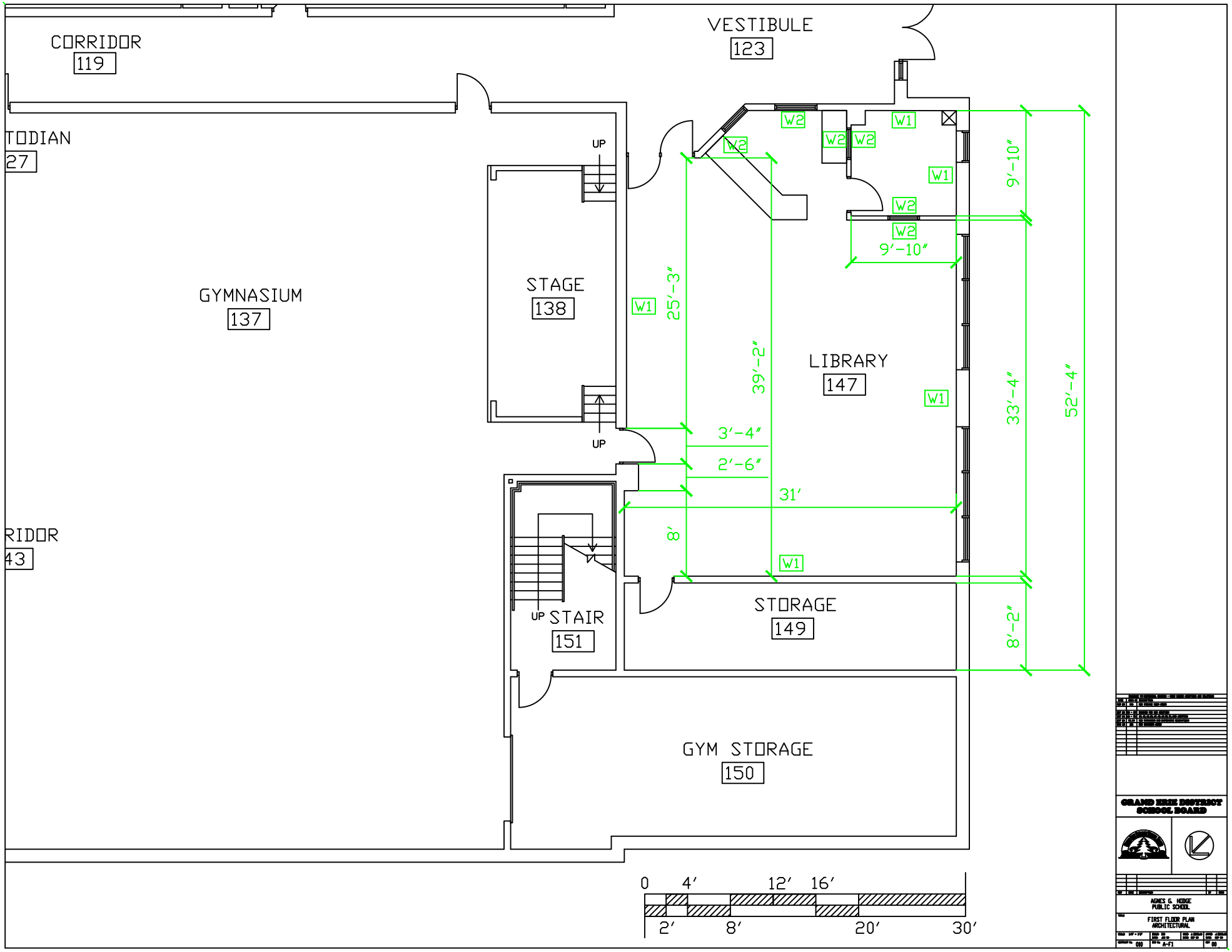
AREA OF WORK

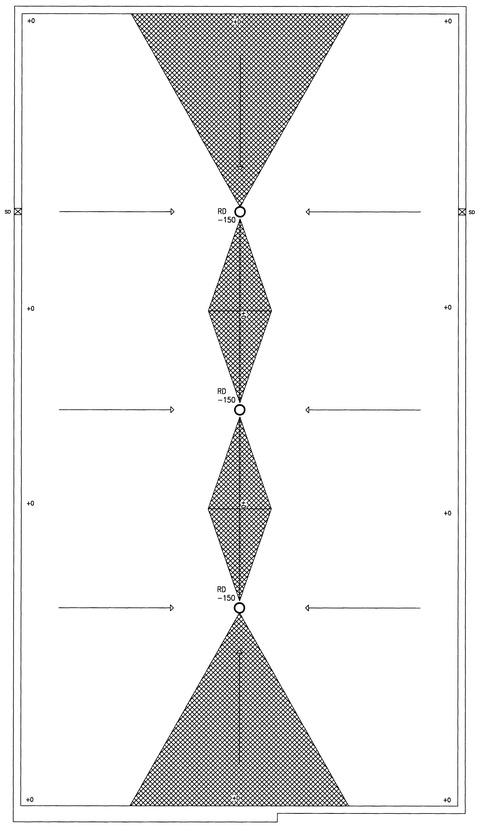
GRAND ERIE DISTRICT SCHOOL BOARD

AGNES G. HODGE PUBLIC SCHOOL

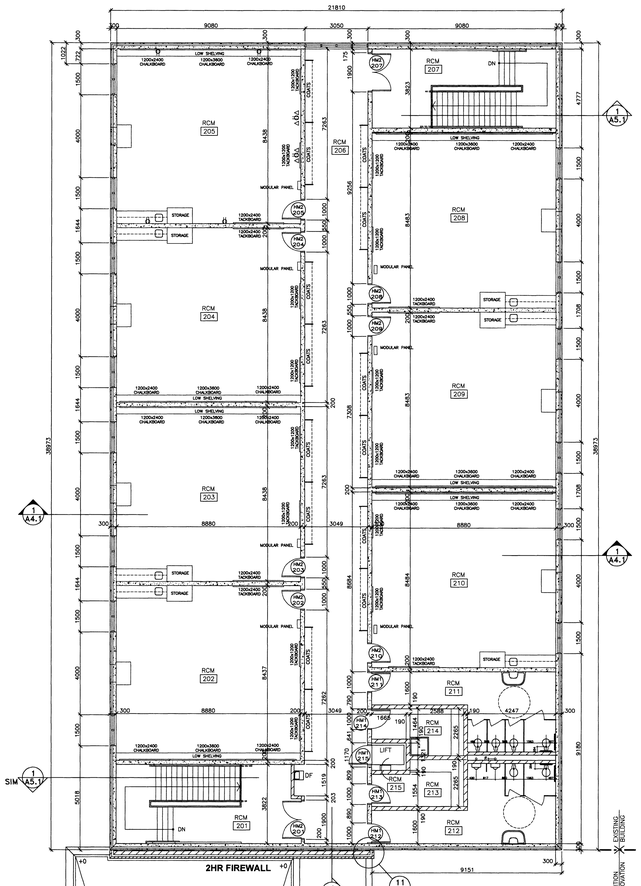
FIRST FLOOR PLAN ARCHITECTURAL

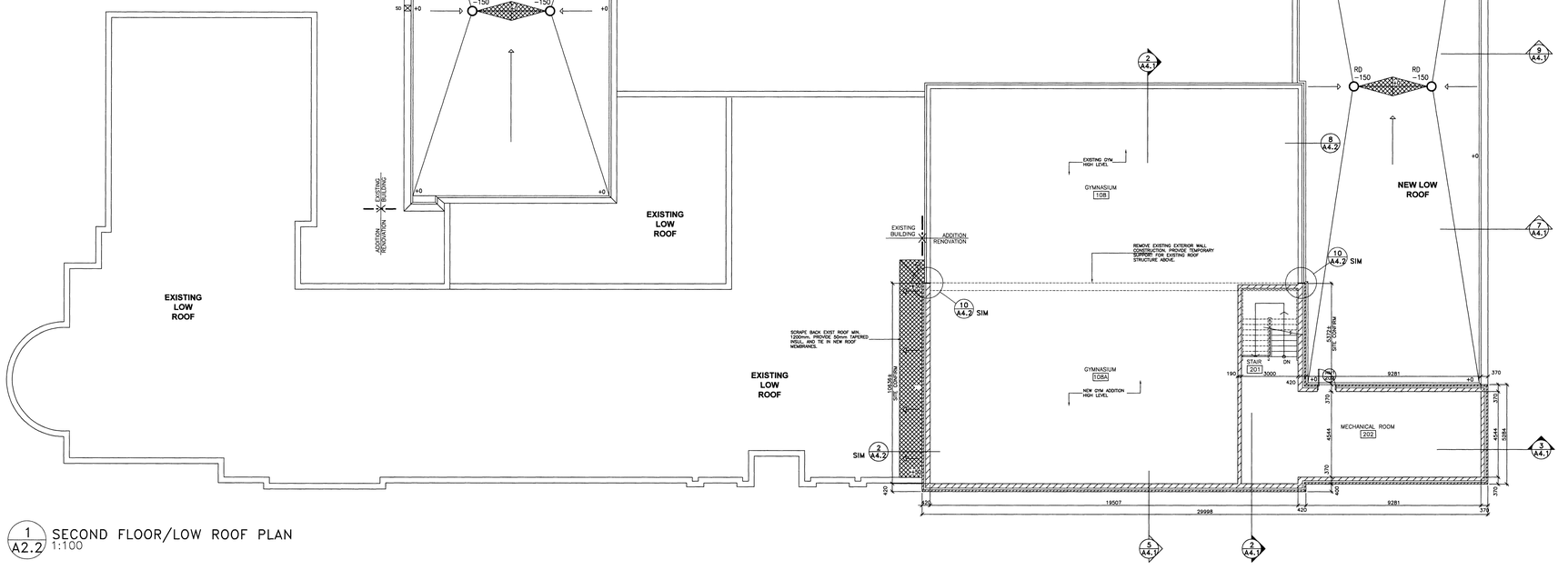
A-F1


CORRIDOR
119
VESTIBULE
123
TODIAN
27
GYMNASIUM
137
STAGE
138
UP
UP
LIBRARY
147
RIDOR
43
UP STAIR
151
STORAGE
149
GYM STORAGE
150
W1
W2
25'-3"
39'-2"
3'-4"
2'-6"
31'
8'
9'-10"
9'-10"
33'-4"
52'-4"
8'-2"
0
4'
12'
16'
2'
8'
20'
30'
GRAND ERIE DISTRICT SCHOOL BOARD
AGNES G. HODGE PUBLIC SCHOOL
FIRST FLOOR PLAN ARCHITECTURAL

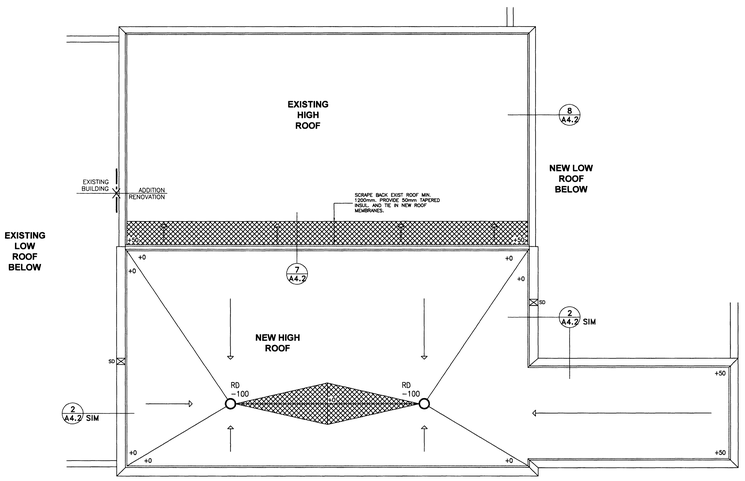


3 A2.2 PART HIGH ROOF PLAN
1:100





1 A2.2 SECOND FLOOR/LOW ROOF PLAN
1:100



2 A2.2 PART HIGH ROOF PLAN
1:100

ROOF PLAN NOTES

REFER TO RIC GROUP INC. DETAILS UNDER DIVISION 7 SPECIFICATION FOR SPECIFIC ROOFING AND ROOFING RELATED DETAILS

COORDINATE ALL ROOF SLOPES, ROOF DRAIN LOCATIONS, & TAPERED INSULATION SLOPES ETC. FOR PROPER DRAINAGE PRIOR TO CONSTRUCTION.

REFER TO MECHANICAL DRAWINGS FOR EXACT NUMBER & LOCATION OF MECHANICAL ROOF TOP EQUIPMENT & DETAILS. COORDINATE CURBS, SUPPORTS AND ROOF OPENINGS WHERE INDICATED ON DRAWINGS AND/OR AS REQUIRED. COORDINATE WITH MECHANICAL.

ROOF PLAN LEGEND

SD — SCUPPER DRAIN LOCATION
SCUPPER DRAINS ARE LOCATED IN THE GENERAL LOCATION ON THE ROOF PLAN, REFER TO ELEVATION DRAWINGS FOR EXACT SCUPPER DRAIN LOCATION.

RD — ROOF DRAIN LOCATION
ROOF DRAINS ARE LOCATED IN THE GENERAL LOCATION ON THE ROOF PLAN, REFER TO STRUCTURAL DRAWINGS AND COORDINATE WITH THE STEEL SHOP DRAWINGS FOR EXACT ROOF DRAIN LOCATIONS.
PROVIDE POSITIVE ROOF SLOPES TOWARD ROOF DRAIN, SLOPE TO BE MIN. 1-2%

ROOF SLOPE DIRECTION
PROVIDE POSITIVE ROOF SLOPES TOWARD ROOF DRAIN, SLOPE TO BE MIN. 1-2%
COORDINATE ROOF SLOPES WITH STRUCTURAL DRAWINGS

TAPERED ROOF INSULATION TO PROVIDE ROOF SLOPE IN AREA WHERE STRUCT. STEEL DECK CAN NOT BE SLOPED.
PROVIDE POSITIVE ROOF SLOPES TOWARD ROOF DRAIN, SLOPE TO BE MIN. 1-2%

-100 — RELATIVE ROOF SLOPE HEIGHT DIFFERENCES OF TOP OF ROOF SURFACE NOT INCLUDING TAPERED INSUL. WITHIN THE ROOF PERIMETER INDICATED.

+150 — RELATIVE ROOF SLOPE HEIGHT DIFFERENCES OF TOP OF ROOF SURFACE INCLUDING THE TAPERED INSUL. LAYER WITHIN THE ROOF PERIMETER INDICATED.

600mm x 600mm x50mm PRECAST CONCRETE PAVERS ON RIGID INSULATION PADS AS SPEC'D. AT ALL ROOF ACCESS LOCATIONS AND AROUND ALL ROOF TOP EQUIPMENT REQUIRING MAINTENANCE. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS PLUS LOCATIONS INDICATED ON ROOF PLAN.

ROOF LADDER - REFER TO DETAILS. VERIFY ROOF LEVEL DIFFERENCES INCLUDING THE ROOF CURB HEIGHT FOR LADDER HEIGHT SELECTION.
600mm x 600mm x50mm PRECAST CONCRETE PAVERS ON RIGID INSULATION PADS AS SPEC'S. AT THE TOP AND BOTTOM OF THE LADDER.

FLOOR PLAN LEGEND

- 0 HR. FIRE SEPARATION RATING
- 1/2 HR. FIRE SEPARATION RATING
- 1 HR. FIRE SEPARATION RATING
- 2 HR FIRE SEPARATION RATING
- MASONRY - CONCRETE BLOCK WALL TYPICAL, ALL OPENINGS IN CONCRETE BLOCK PARTITIONS TO HAVE CONCRETE BLOCK JAMBS AND HEAD OPENING OR NOTED OTHERWISE
  ALL BLOCK PARTITIONS TO EXTEND TO U/S FLOOR OR ROOF DECK ABOVE OR NOTED OTHERWISE
- MASONRY VENEER
  AIR SPACE
  SPRAY INSUL./AIR-VAPOUR BARRIER
  CONCRETE BLOCK
- PRE-CAST INSULATED CONCRETE EXTERIOR WALL
- PRE-CAST CONCRETE INTERIOR WALL
- GYPSUM BOARD PARTITION
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE REMOVED
- BF — BARRIER FREE DOOR OPERATOR LOCATION
  REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATIONS.

Revisions		
No.	Date	Particular
1	MAR 11/05	SITE PLAN APPLICATION
2	MAR 18/05	FOUNDATION PERMIT / PRECAST TENDER
3	APR 06/05	MASONRY/STEEL TENDER
4	APR 12/05	MASONRY ADDENDUM
5	APR 15/05	TENDER
6	APR 18/05	BUILDING PERMIT
7	APR 29/05	FINISHES/ROOFING TENDER
8	MAY 31/05	CONSTRUCTION

PROJECT NORTH
True North

Key to detail location:
A — A=Detail No.
B — B=Detail No. where detailed

THE VENTIN GROUP
The Ventin Group Ltd., Architects
45 Peel Street
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F: 519-426-3064
E: ventinsimcoe@ventingroup.com
W:www.ventingroup.com
Affiliated Offices:
Toronto Cambridge

Client:
Grand Erie
District School Board

Project:
Agnes Hodge Elementary School

Brantford, Ontario
--

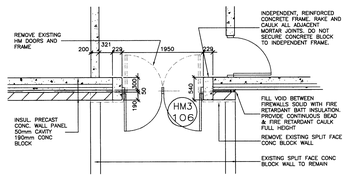
Project number :
20515

Date : MARCH 2005
Scale as noted or : 1:100
Cad file : 20515-2-2.dwg
Drawn by : .
Checked by : .

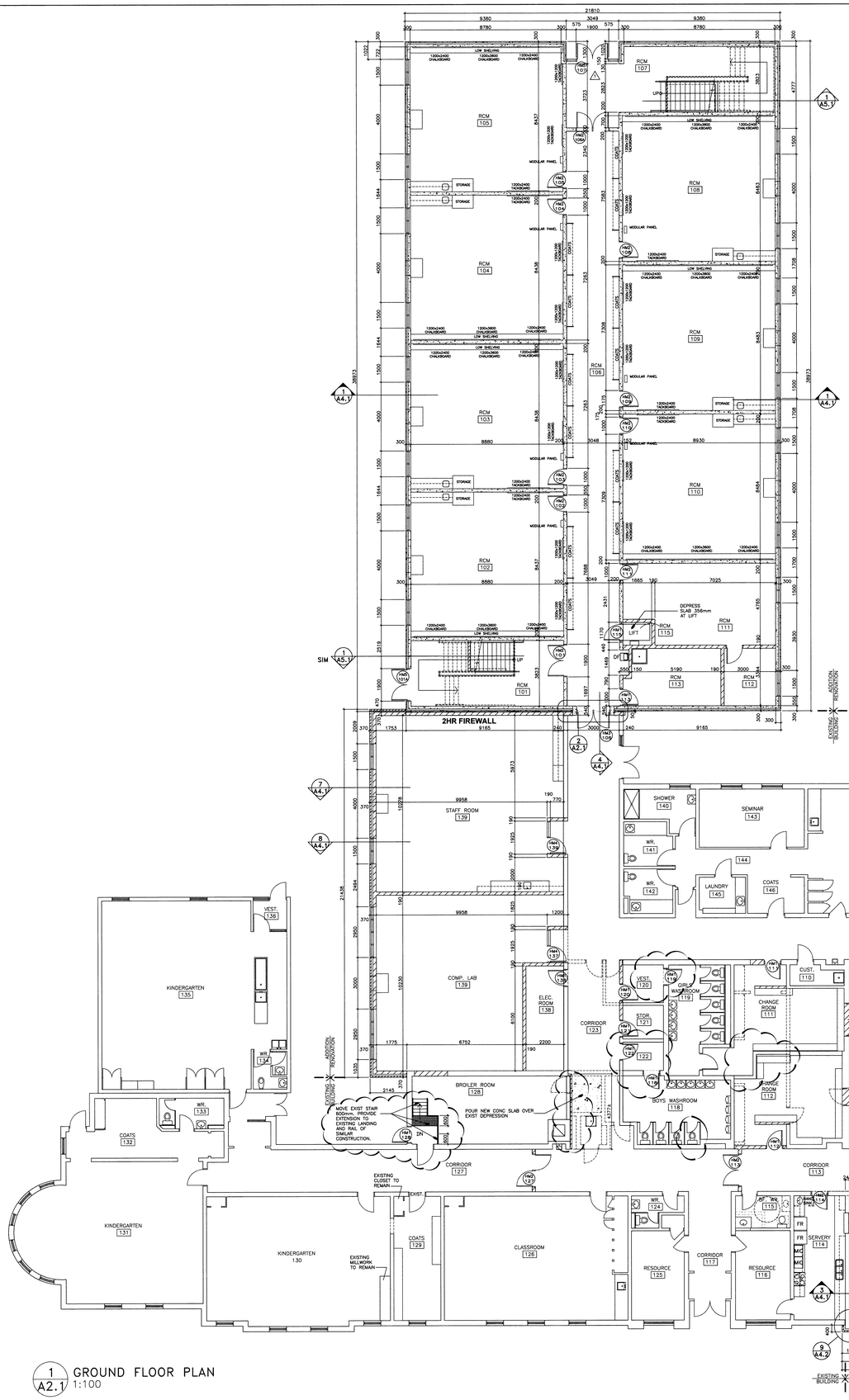
Drawing title :
SECOND FLOOR / ROOF PLAN

A2.2

Plot Date : . MAY 30, 2005



2 / A2.1 PART PLAN AT 2HR FIREWALL
1:50



1 / A2.1 GROUND FLOOR PLAN
1:100

LEGEND

- 0 HR. FIRE SEPARATION RATING
- 1/2 HR. FIRE SEPARATION RATING
- 1 HR. FIRE SEPARATION RATING
- 2 HR. FIRE SEPARATION RATING
- MASONRY – CONCRETE BLOCK WALL TYPICAL; ALL OPENINGS IN CONCRETE BLOCK PARTITIONS TO HAVE CONCRETE BLOCK ABOVE THE OPENING OR NOTED OTHERWISE. ALL BLOCK PARTITIONS TO EXTEND TO U/S FLOOR OR ROOF DECK ABOVE OR NOTED OTHERWISE
- MASONRY VENEER / AIR SPACE / SPRAY INSUL./AIR-VAPOUR BARRIER / CONCRETE BLOCK
- PRE-CAST INSULATED CONCRETE EXTERIOR WALL
- PRE-CAST CONCRETE INTERIOR WALL
- GYPSUM BOARD PARTITION
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE REMOVED
- BF — BARRIER FREE DOOR OPERATOR LOCATIONS. REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATIONS.
- HM — DOOR IDENTIFICATION TAG – REFER TO DOOR SCHEDULE FOR SPECIFICS
- DF — DRINKING FOUNTAIN LOCATION. REFER TO MECHANICAL DWGS FOR SPECIFICS
- 1 — HOLLOW METAL SCREEN TAG – REFER TO SCHEDULE

Revisions

No.	Date	Particular
1	MAR 11/05	SITE PLAN APPLICATION
2	MAR 18/05	FOUNDATION PERMIT / PRECAST TENDER
3	APR 06/05	MASONRY/STEEL TENDER
4	APR 12/05	MASONRY ADDENDUM
5	APR 15/05	TENDER
6	APR 18/05	BUILDING PERMIT
7	APR 29/05	FINISHES TENDER
8	MAY 31/05	CONSTRUCTION

PROJECT NORTH
True North

Key to detail location:
A – A-Detail No.
B – B-Detail No. where detailed

THE VENTIN GROUP
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W: www.ventingroup.com

Affiliated Offices:
Toronto Cambridge

Client:
Grand Erie
District School Board

Project:
Agnes Hodge Elementary School

Brantford, Ontario
–

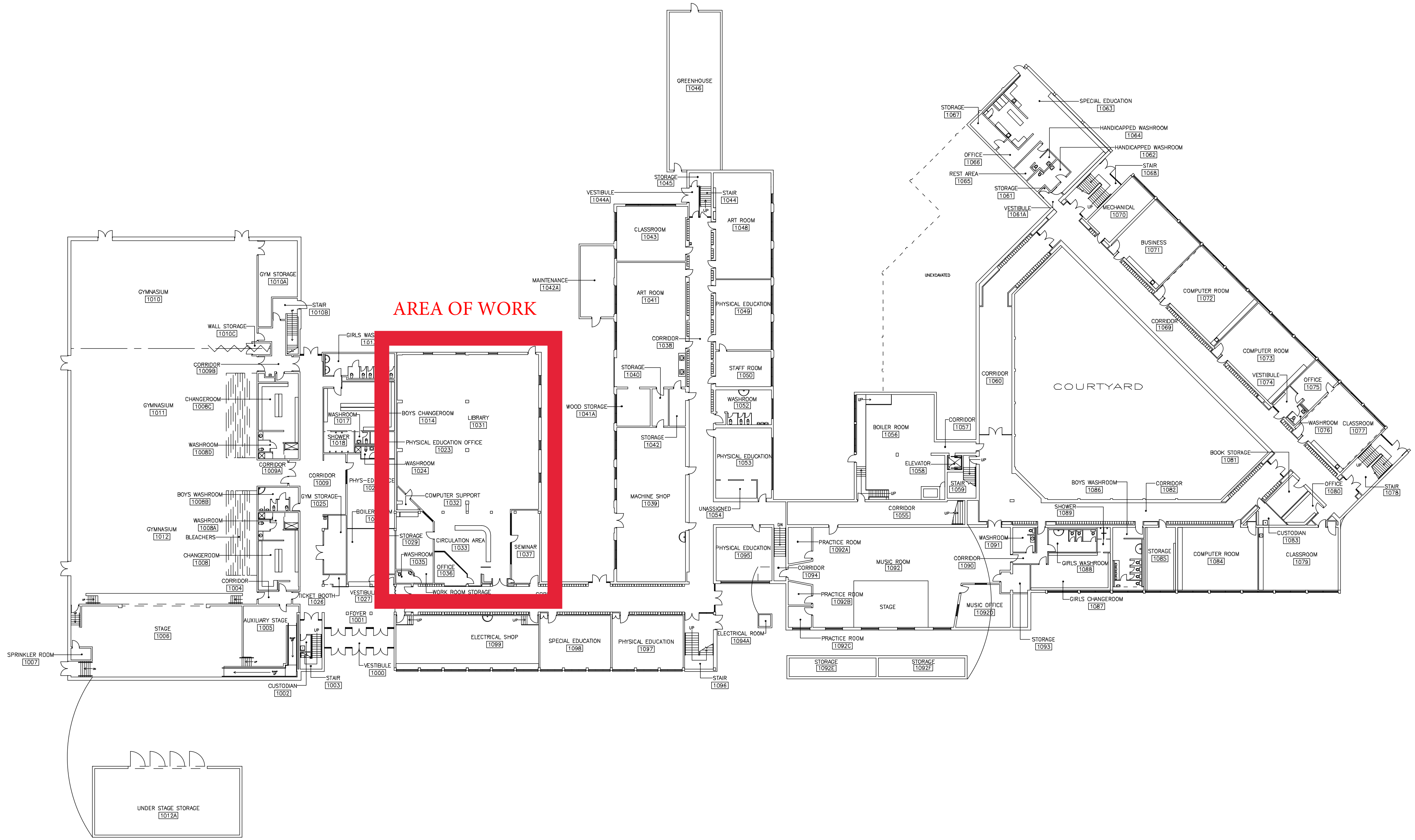
Project number :
20515

Date : MARCH 2005
Scale as noted or : 1:100
Cad file : 20515-2-1.dwg
Drawn by : -
Checked by : -

Drawing title :
GROUND FLOOR PLAN
-
-
-

A2.1

Plot Date: , MAY 30, 2005



FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

DRAWBASE FM HISTORICAL RECORDS – ROOM NUMBER ADDITIONS AND DELETIONS		
DATE	ROOM #	DESCRIPTION
MAY 03	1061A	ADDED VESTIBULE
MAY 03	1065	REST AREA FORMERLY CORRIDOR
MAY 03	1094A	ADDED ELECTRICAL ROOM
MAY 03	1000	ADDED VESTIBULE
MAY 03	1012A	ADDED UNDER STAGE STORAGE
MAY 03	1041A	ADDED WOOD STORAGE
MAY 03	1043	ADDED CLASSROOM 1043 FORMERLY MAINTENANCE
MAY 03	1042A	MAINTENANCE FORMERLY ROOM 2043
MAY 03	1044A	ADDED VESTIBULE
MAY 03	1092A	ADDED GYM STORAGE UNDER CORRIDOR
MAY 03	1092B	ADDED GYM STORAGE UNDER CORRIDOR
MAY 04	1015	REMOVED NOW PART OF 1013 GIRLS WASHROOM
MAY 04	1016	REMOVED NOW PART OF 1013 GIRLS WASHROOM
MAY 04	1014	REMOVED NOW PART OF 1013 GIRLS WASHROOM
MAY 04	1019	REMOVED VESTIBULE
MAY 04	1022	REMOVE WASHROOM
MAY 04	1021	REMOVE GIRLS SHOWER
MAY 04	1005 10C	NEW GYMNSAIUM WING ADDED
MAY 07	1091	NEW SPECIAL NEEDS WASHROOM ADDED
MAR 09	1092	GYMNASIUM HAS BEEN RENOVATED FOR MUSIC ROOM
MAR 09	1092A	NEW PRACTICE ROOM FORMERLY PART OF GYMNASIUM
MAR 09	1092B	NEW PRACTICE ROOM FORMERLY PART OF GYMNASIUM
MAR 09	1092C	NEW PRACTICE ROOM FORMERLY PART OF GYMNASIUM
MAR 09	1092D	NEW MUSIC OFFICE FORMERLY PART OF GYMNASIUM
MAR 09	1093	STORAGE HAS BEEN MODIFIED TO SUIT NEW MUSIC ROOM
MAR 09	1092E,F	GYM STORAGES CHANGED TO STORAGE ONLY
MAR 09	1092C	NEW STORAGE ROOM FORMERLY PART OF CORRIDOR 1055
MAR 09	1048	SCIENCE ROOM NOW ART ROOM
MAR 09	1047	NEW DARK ROOM WAS FORMERLY A STORAGE ROOM

ARCHITECTURAL RENOVATIONS & ADDITIONS INCLUDED		
YEAR	ARCHITECT	PROJECT DESCRIPTION
2005	THE VENTIN GROUP LTD. ARCHITECTS	ADDITION AND RENOVATIONS
2001	LENNIS TROTTER ARCHITECT	MULITPLE ROOM RENOVATIONS

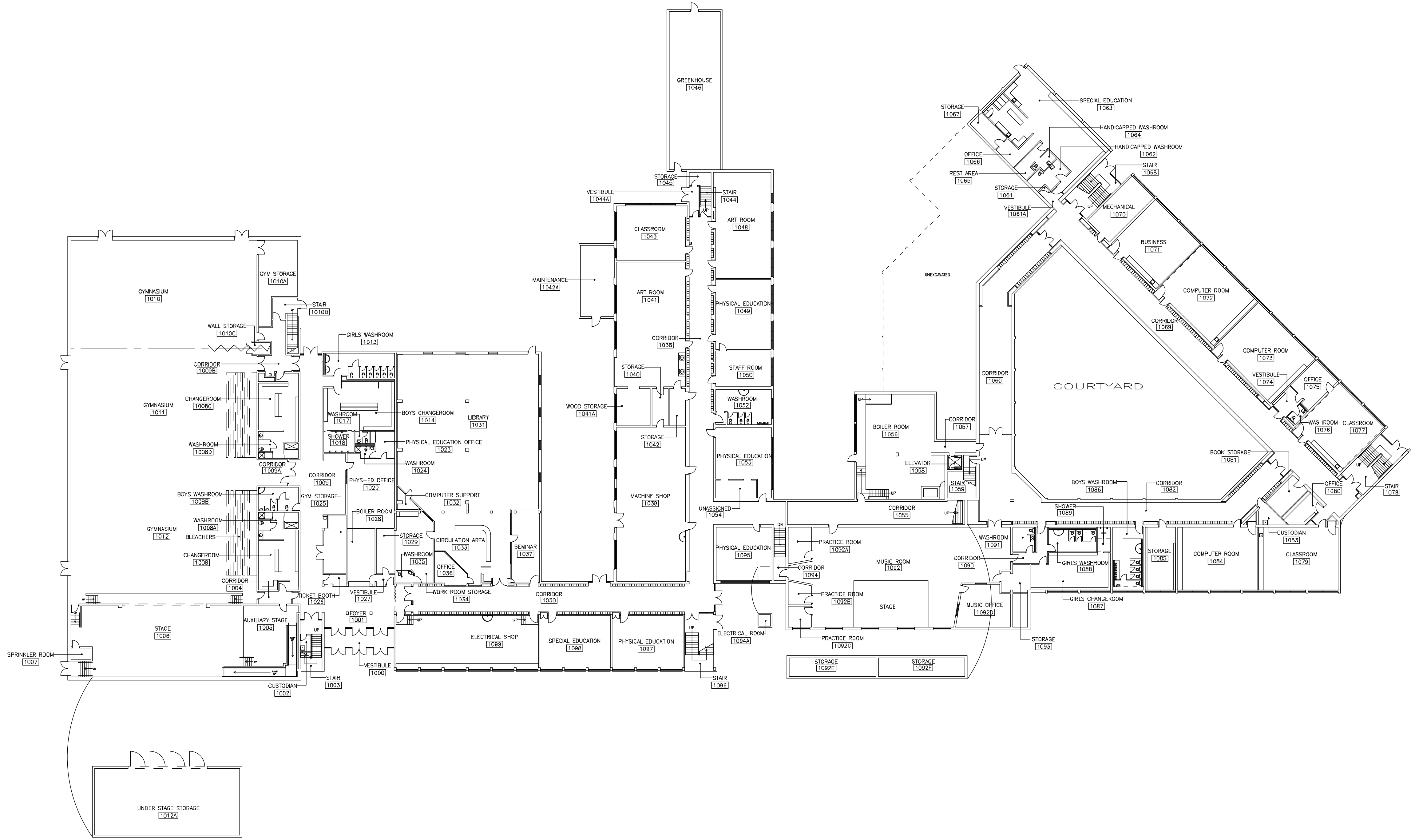
GRAND ERIE DISTRICT SCHOOL BOARD

REV	DATE	DESCRIPTION	BY	CHKD

SIMCOE COMPOSITE SECONDARY SCHOOL

TITLE: FIRST FLOOR PLANS ARCHITECTURAL

SCALE: 1/16" = 1'0"	DRAWN: DNS DATE. DECEMBER 99	CHKD. J.DOUGLAS DATE. DEC 99	APPVD. J.DOUGLAS DATE. DEC 99
CONTRACT No 010	DWG No A-F1		REV 00



FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

0 4' 8' 16' 24' 32' 40' 60'

DRAWBASE FM HISTORICAL RECORDS - ROOM NUMBER ADDITIONS AND DELETIONS		
DATE	ROOM #	DESCRIPTION
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YEAR	ARCHITECT	PROJECT DESCRIPTION
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GRAND ERIE DISTRICT SCHOOL BOARD

REV	DATE	DESCRIPTION	BY	CHKD

SIMCOE COMPOSITE SECONDARY SCHOOL

TITLE

FIRST FLOOR PLANS ARCHITECTURAL

SCALE: 1/16" = 1'0"	DRAWN: DNS DATE. DECEMBER 99	CHKD. J.DOUGLAS DATE. DEC 99	APPVD. J.DOUGLAS DATE. DEC 99
CONTRACT No 010	DWG No A-F1		REV 00

GENERAL NOTES

- 'ER' INDICATES EXISTING ITEM TO REMAIN.
- 'R' INDICATES EXISTING ITEM IN RELOCATED POSITION.
- ALL DEVICES SHOWN ARE NEW UNLESS OTHERWISE NOTED.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).

SPECIFIC NOTES

1 EXISTING PANEL IS TO BE REPLACED. MAINTAIN EXISTING MAINS AND BRANCH CIRCUIT WIRING FOR RECONNECTION TO NEW PANEL. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.

2 EXISTING PANELS ARE TO BE REPLACED. EXISTING CONTACTOR AND CONTROLS ARE TO REMAIN. SUB-PANEL FEED IS TO BE RE-WORKED THROUGH EXISTING CONTACTOR TO SUIT NEW PANELS. MAINTAIN OTHER MAINS AND BRANCH CIRCUIT WIRING FOR RECONNECTION TO NEW PANEL. REFER TO PANEL SCHEDULE AND RISER DIAGRAM FOR ADDITIONAL INFORMATION.

3 EXISTING FUSED DISCONNECT IS TO BE REMOVED COMPLETE. REWORK EXISTING WIRING TO SUIT NEW BREAKER WITHIN PANEL. NEW BREAKER SIZE IS TO BE COORDINATED WITH EXISTING FUSE SIZES PRIOR TO RELEASE INTO PRODUCTION.

4 EXISTING PANEL IS TO BE RETROFIT. VERIFY SIZING PRIOR TO SHOP DRAWING SUBMITTALS. PROVIDE PAINTED WOOD TRIM AROUND PANEL TRIM IF REQUIRED TO ENSURE PANEL TRIM SITS FLUSH.

5 PROVIDE NEW 120VAC 20A-3P CONTACTOR C/W 120VAC COIL AND RED PILOT LIGHT. REWORK EXISTING LIGHTING CIRCUITS THROUGH NEW CONTACTOR. PROVIDE 120VAC LIGHT SWITCH FOR CONTROL OF CONTACTOR. FEED DEVICE USING SURFACE METALLIC RACEWAY EQUAL TO WIREMOLD SERIES 500.

NOTES

- CONTRACTOR SHALL INCLUDE IN TENDER PRICING TO SUPPLY AND INSTALL AN ADDITIONAL 3x 20A-6P CONTACTORS C/W 120VAC COIL, 3 120VAC LIGHT SWITCHES, AND LABOUR TO INSTALL AND REWORK LIGHTING CIRCUITS. UNUSED CONTACTORS SHALL BE TURNED OVER TO THE BOARD MAINTENANCE DEPARTMENT. OBTAIN RECEIPT AND INCLUDE IN MAINTENANCE MANUAL.

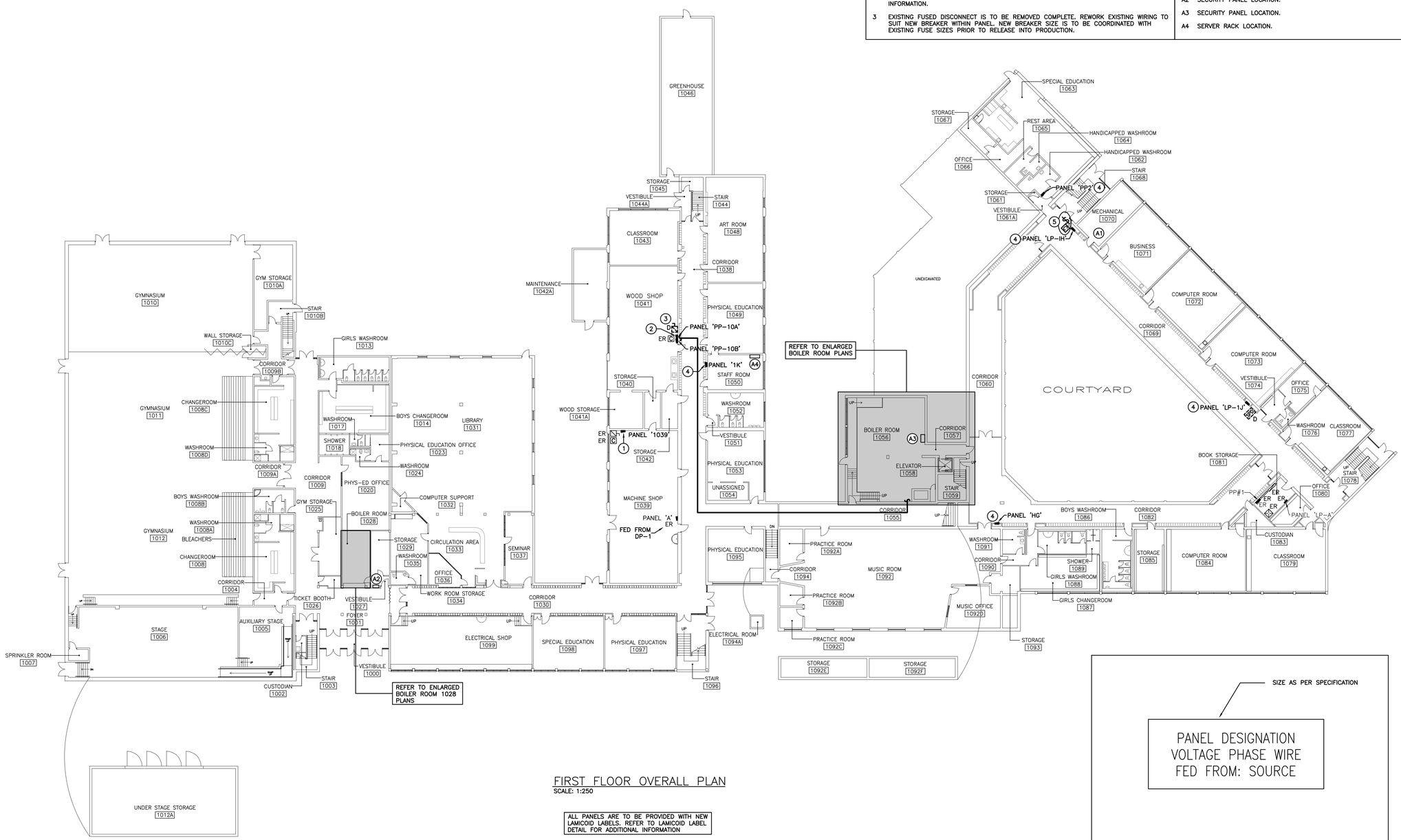
AS BUILT NOTES

A1 PP1 ACTUAL LOCATION – FEED SERVER ROOM PANEL.

A2 SECURITY PANEL LOCATION.

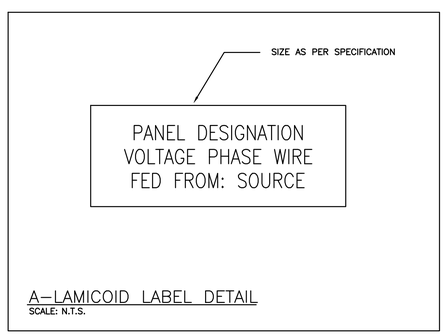
A3 SECURITY PANEL LOCATION.

A4 SERVER RACK LOCATION.



FIRST FLOOR OVERALL PLAN
SCALE: 1:250

ALL PANELS ARE TO BE PROVIDED WITH NEW LAMICOID LABELS. REFER TO LAMICOID LABEL DETAIL FOR ADDITIONAL INFORMATION



A-LAMICOID LABEL DETAIL
SCALE: N.T.S.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
B	21.05.19	ISSUED FOR CONSTRUCTION	JJ
C	21.06.15	ISSUED FOR REVISED LAYOUT	JJ
D	21.12.14	ISSUED FOR AS BUILT	JJ

AS-BUILT DRAWINGS
The revisions to these contract documents reflecting the significant change in the Work made during construction are based on data furnished by the Contractor to the Engineer. The Engineer shall not be held responsible for the accuracy of the information provided by the Contractor.

Seal

Project North
True North

Project

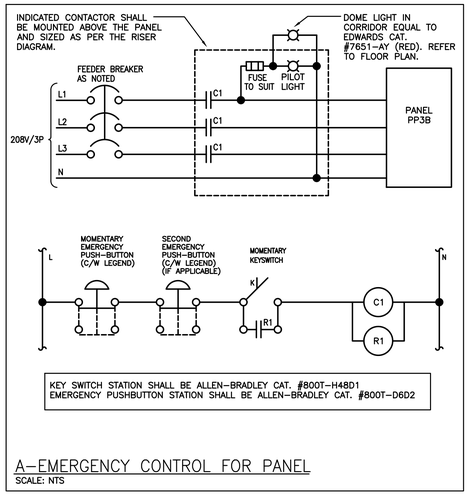
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

FIRST FLOOR OVERALL PLAN

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	
Project No.	Drawing No.	
20343	E101	



A-EMERGENCY CONTROL FOR PANEL
SCALE: NTS

GENERAL NOTES

- 'ER' INDICATES EXISTING ITEM TO REMAIN.
- 'R' INDICATES EXISTING ITEM IN RELOCATED POSITION.
- ALL DEVICES SHOWN ARE NEW UNLESS OTHERWISE NOTED.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).

SPECIFIC NOTES

1 EXISTING PANEL IS TO BE REPLACED. PROVIDE NEW SURFACE MOUNTED PANEL OVER EXISTING PANEL TUB. REWORK EXISTING SURFACE MOUNTED CONDUIT AND JUNCTION BOXES TO SUIT NEW PANEL. PROVIDE CUSTOM TRIM TO SUIT EXISTING OPENING IF REQUIRED.

2 THIS CONTRACTOR IS RESPONSIBLE TO REMOVE AND RE-INSTALL CEILING TILE TO SUIT REQUIRED INSTALLATION. ANY DAMAGED OR FINGERPRINTED TILE MUST BE REPLACED.

3 ALL PENETRATIONS MUST BE FIRESTOPPED TO MAINTAIN RATINGS.

4 EXISTING PANEL 'K' IS TO BE REMOVED. REMOVE EXISTING MAIN WIRING AND CONDUIT BACK TO SOURCE. MAINTAIN EXISTING BRANCH CIRCUIT WIRING FOR RECONNECTION TO NEW PANEL. LABEL SOURCE BREAKER AS SPARE. REFER TO DISTRIBUTION RISER DIAGRAM FOR NEW FEEDER INFORMATION.

5 EXISTING FUSE BOX AND MOULDED CASE CIRCUIT BREAKER IS TO BE REMOVED COMPLETE. REMOVE EXISTING MAINS BACK TO SOURCE. PROVIDE JUNCTION BOX C/W TERMINAL STRIPS AND PROVIDE NEW WIRING AND CONDUIT BETWEEN JUNCTION BOX AND NEW PANEL 'K'. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.

6 PROVIDE 2-27mmC FROM PANEL 'K' TO JUNCTION BOX WITHIN CORRIDOR CEILING SPACE FOR FUTURE ADDITIONAL BRANCH CIRCUITS. FIRESTOP ALL PENETRATIONS TO MAINTAIN RATINGS.

7 EXISTING SHOP PANEL IS TO BE REPLACED. ONE PANEL TUB IS CONTROLLED VIA SHUNT TRIP BREAKER. EXISTING COMMON AREA CIRCUITS ARE TO BE RELOCATED TO NEW PANEL 'PP3A'. SHUNT-TRIP CONTROLLED CIRCUITS ARE TO BE RELOCATED TO NEW PANEL 'PP3B'. PROVIDE NEW FEED FROM BREAKER WITHIN NEW PANEL 'PP3A' TO FEED PANEL 'PP3B'. REFER TO PANEL SCHEDULES AND DISTRIBUTION RISER DIAGRAM FOR ADDITIONAL INFORMATION. REMOVE SHUNT TRIP CONTROLS. PROVIDE NEW CONTROLS AS PER DETAIL.

8 PROVIDE NEW 120VAC 20A-9P CONTACTOR C/W 120VAC COIL AND RED PILOT LIGHT. REWORK EXISTING LIGHTING CIRCUITS THROUGH NEW CONTACTOR. PROVIDE 120VAC LIGHT SWITCH FOR CONTROL OF CONTACTOR. FEED DEVICE USING 19mmC AND PROVIDE SURFACE FS TYPE BOX.

9 PROVIDE NEW 120VAC 20A-3P CONTACTOR C/W 120VAC COIL AND RED PILOT LIGHT. REWORK EXISTING LIGHTING CIRCUITS THROUGH NEW CONTACTOR. PROVIDE 120VAC LIGHT SWITCH FOR CONTROL OF CONTACTOR. FEED SWITCH USING SURFACE METALLIC RACEWAY EQUAL TO WIREMOLD SERIES 500.

10 EXISTING PANEL IS TO BE RETROFIT. MAINTAIN MAIN AND BRANCH CIRCUIT WIRING FOR RECONNECTION TO RETROFIT PANEL. PROVIDE PAINTED WOOD TRIM IF REQUIRED TO ENSURE PANEL TRIM SITS FLUSH.

11 UTILIZE SPARE BREAKERS FROM DEMOLISHED PANEL WITHIN HOME ECON ROOM. MOUNT SPARE BREAKERS IN EXISTING PANEL. REMOVE EXISTING FUSED PANEL AND PROVIDE NEW CONDUIT AND JUNCTION BOX TO SUIT BACKFEED OF EXISTING CIRCUITS.

AS BUILT NOTES

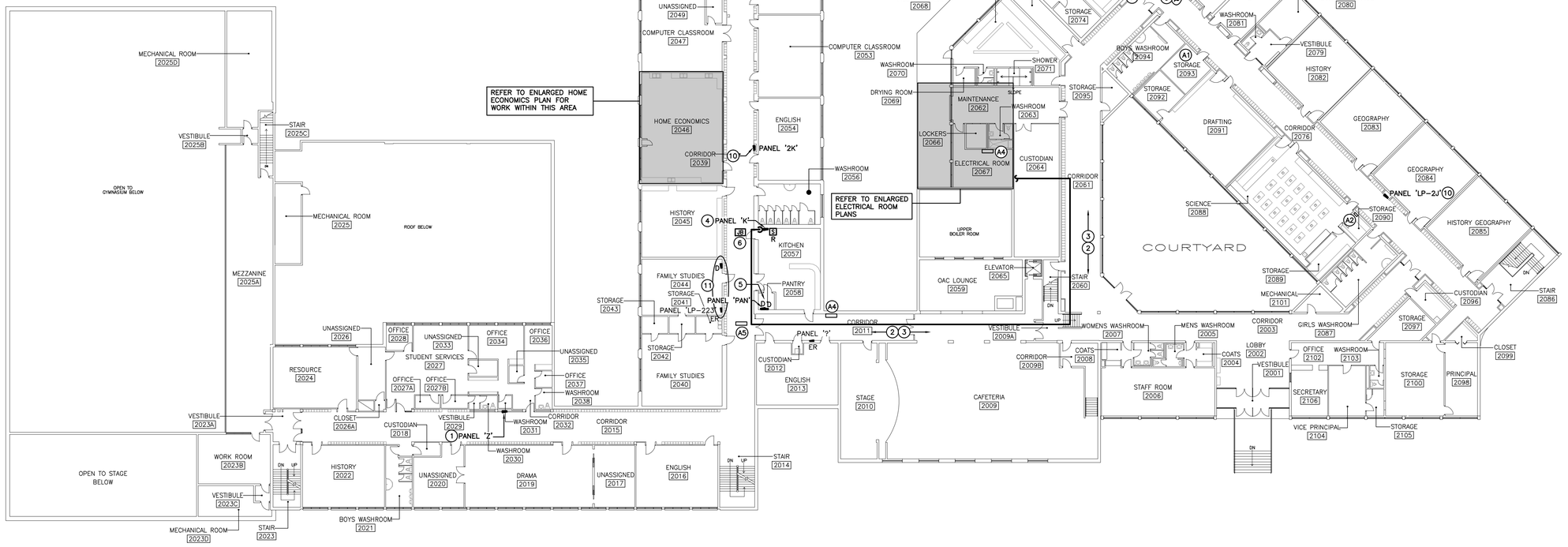
A1 MAIN DATA RACK + SERVER FOR SCHOOL BOARD FED FROM DP-1.

A2 SECURITY PANEL LOCATION.

A3 SECURITY PANEL LOCATION.

A4 SECURITY PANEL LOCATION.

A5 POWER TRANSFORMER FOR SECURITY PANEL.



SECOND FLOOR OVERALL PLAN
SCALE: 1:250

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
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Do not scale this drawing.

ISSUANCES

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AS-BUILT DRAWINGS
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Seal

Project North / True North

Project
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title
SECOND FLOOR OVERALL PLAN

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

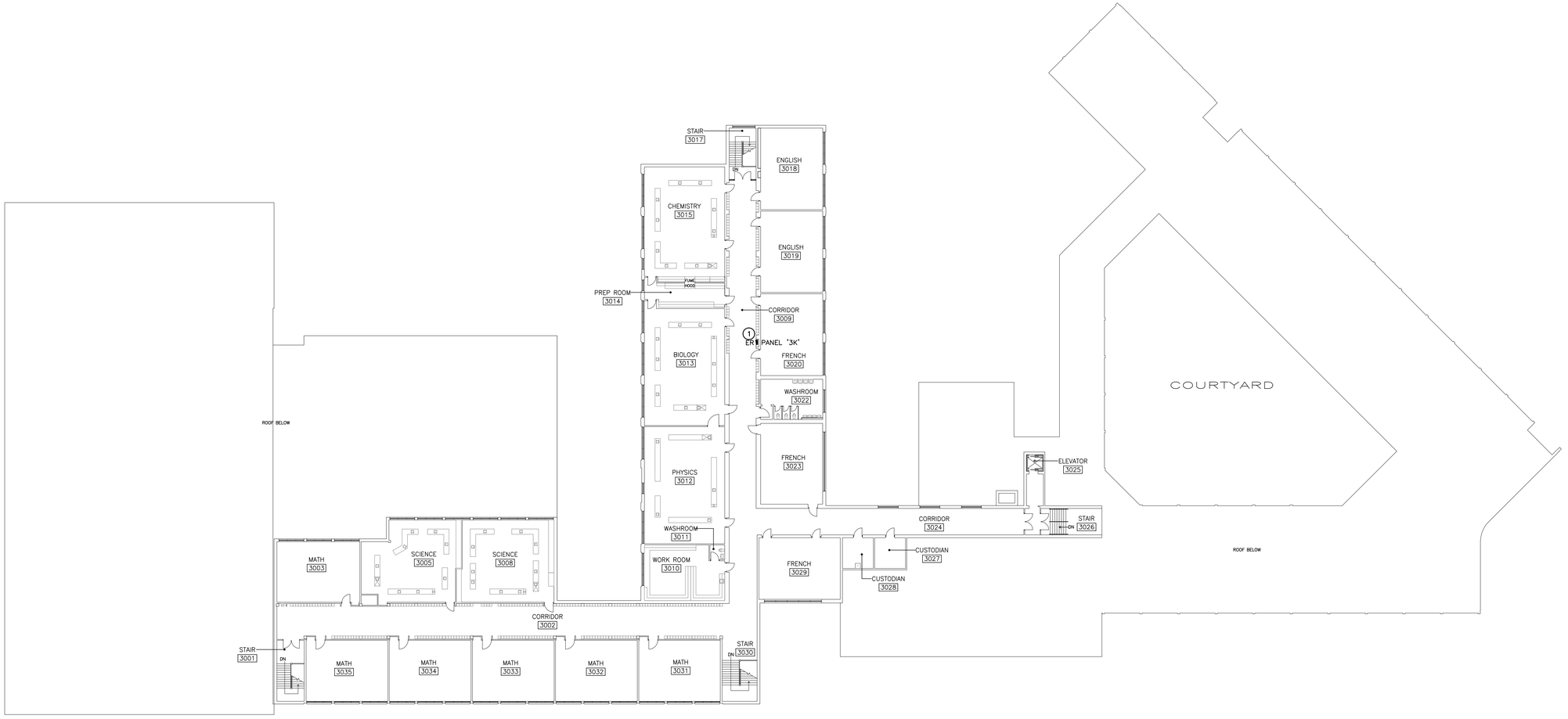
Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	
Project No.	Drawing No.	
20343	E102	

GENERAL NOTES

- 'ER' INDICATES EXISTING ITEM TO REMAIN.
- 'R' INDICATES EXISTING ITEM IN RELOCATED POSITION.
- ALL DEVICES SHOWN ARE NEW UNLESS OTHERWISE NOTED.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).

SPECIFIC NOTES

1 CONNECT PANEL TO NEW BREAKER WITHIN PANEL '2K'.



THIRD FLOOR OVERALL PLAN
SCALE: 1:250

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Project North
True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

THIRD FLOOR OVERALL PLAN

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Drawn by	Checked by	Approved by
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Scale	Project Date	Print Date
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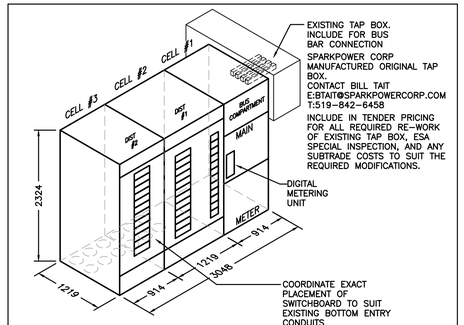
Project No.	Drawing No.
20343	E103



A–SERVICE ENTRANCE SWITCHBOARD ELEVATION

SCALE: NTS

GENERAL NOTES

- 'ER' DENOTES EXISTING ITEM TO REMAIN.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
- ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.

SPECIFIC NOTES

1 EXISTING SPLITTER, PANELS, CONTACTOR AND ASSOCIATED POWER DISTRIBUTION EQUIPMENT IS TO BE REMOVED AND REPLACED WITH NEW DOUBLE TUB PANEL. REMOVE MAINS WIRING BACK TO SOURCE. PROVIDE NEW MAIN WIRING AS PER DISTRIBUTION RISER DIAGRAM. EXISTING BRANCH WIRING IS TO BE RECONNECTED TO NEW PANEL AND NEW CONTACTOR AS NOTED. REFER TO DISTRIBUTION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

2 REWORK EXISTING SECURITY AND ULC MONITORING PANEL TO SUIT NEW DISTRIBUTION PANEL FOOTPRINT.

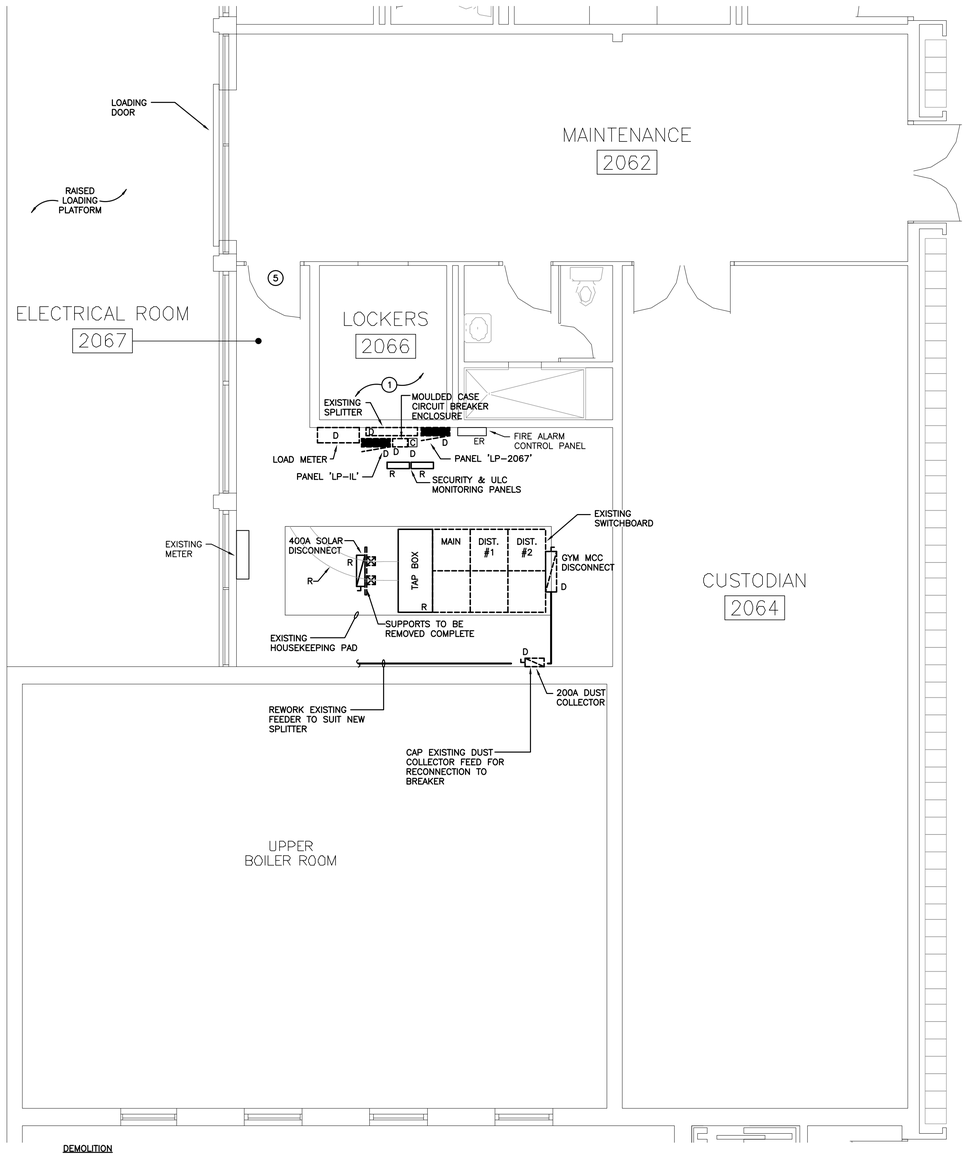
3 PROVIDE TWO 20A–6P CONTACTORS C/W H–O–A SELECTOR SWITCH, RED PILOT LIGHT, INTEGRAL CONTROLS TRANSFORMER, AND COIL VOLTAGE TO SUIT CONVERGINT BAS CONTROLS SYSTEMS. COORDINATE WITH BOARD REPRESENTATIVE FOR CIRCUITS TO BE RUN THROUGH CONTACTOR.

4 COORDINATE EXACT LOCATION OF SWITCHBOARD ON SITE TO SUIT EXISTING BOTTOM ENTRY FEEDS.

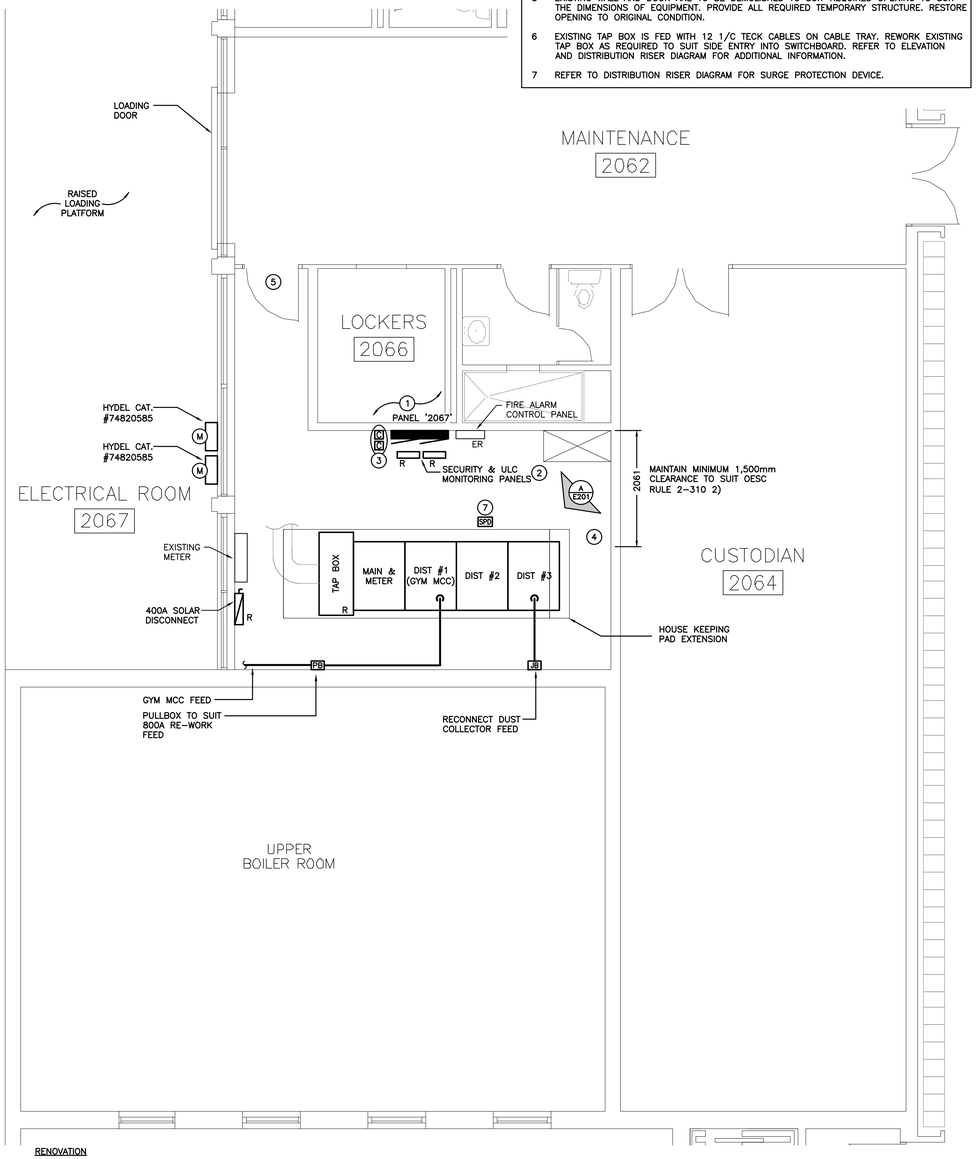
5 EXISTING WALL AND DOOR ARE TO BE DEMOLISHED TO SUIT REQUIRED OPENING TO SUIT THE DIMENSIONS OF EQUIPMENT. PROVIDE ALL REQUIRED TEMPORARY STRUCTURE. RESTORE OPENING TO ORIGINAL CONDITION.

6 EXISTING TAP BOX IS FED WITH 12 1/C TECK CABLES ON CABLE TRAY. REWORK EXISTING TAP BOX AS REQUIRED TO SUIT SIDE ENTRY INTO SWITCHBOARD. REFER TO ELEVATION AND DISTRIBUTION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

7 REFER TO DISTRIBUTION RISER DIAGRAM FOR SURGE PROTECTION DEVICE.



DEMOLITION



RENOVATION

ENLARGED ELECTRICAL ROOM 2067

SCALE: 1:50

ISSUANCES

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AS–BUILT DRAWINGS
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Seal

Project North / True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES

40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

MAIN ELECTRICAL ROOM ENLARGED PLANS

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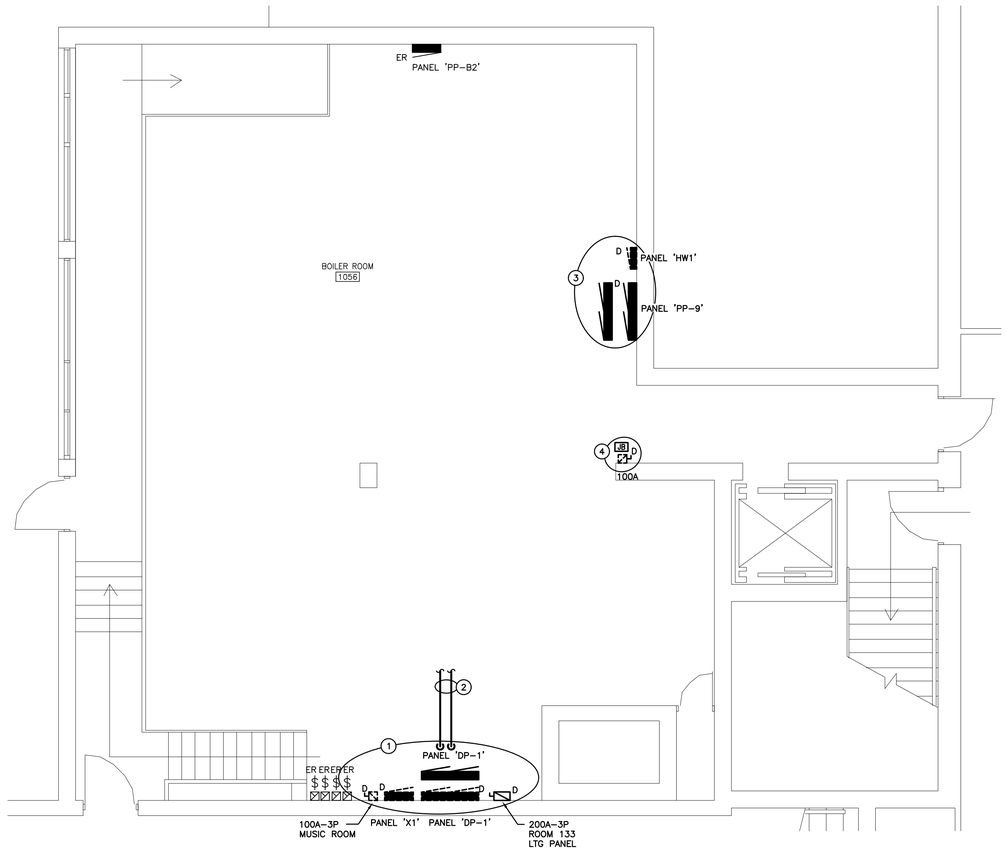
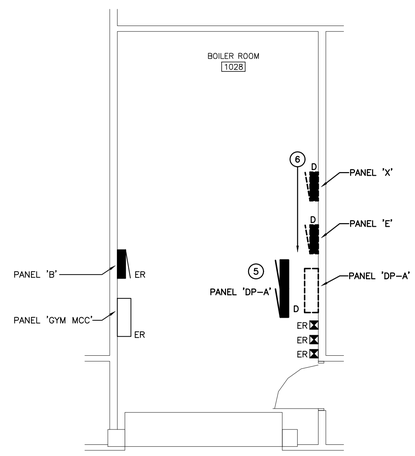
Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No.	Drawing No.
20343	E201



ENLARGED BOILER ROOM 1056 – DEMOLITION / RENOVATION

SCALE: 1:50



GENERAL NOTES

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- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
- ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.

SPECIFIC NOTES

1 EXISTING PANEL 'DP1' IS TO BE REMOVED COMPLETE. PANEL 'X1', MUSIC ROOM DISCONNECT, AND ROOM 133 LIGHTING PANEL DISCONNECTS ARE TAPPED OF MAIN BUS BARS. PANEL 'X1' MAINS AND MAIN FEEDER WIRING IS TO BE REMOVED COMPLETE. PROVIDE TERMINAL STRIPS WITHIN PANEL TUB AND PROVIDE NEW WIRING AND CONDUIT TO RECONNECT BRANCH CIRCUITS. PROVIDE CUSTOM COVERPLATE FOR EXISTING PANEL TUB. EXISTING FUSED DISCONNECTS ARE TO BE REMOVED COMPLETE. PROVIDE JUNCTION BOX UPSTREAM OF EXISTING FEED. PROVIDE SUITABLE LUGS OR SPLICE KITS FOR RE-CONNECTION TO NEW BREAKERS WITHIN PANEL 'DP1'. RECONNECT EXISTING DP1 MAIN WIRING AND BRANCH CIRCUIT WIRING TO SUIT NEW PANEL. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

2 NEW PANEL FEEDER TO RUN AT HIGH LEVEL ACROSS BOILER ROOM. INSTALL SERVICES TO MAINTAIN MAXIMUM HEAD ROOM. COORDINATE EXACT LOCATION / RUN PATH ON SITE. INCLUDE FOR SCAFFOLDING ASSEMBLY AND DISASSEMBLY TO SUIT INSTALLATION. FIRESTOP ALL PENETRATIONS TO MAINTAIN RATINGS.

3 EXISTING PANEL 'PP9' IS TO BE REMOVED COMPLETE. PANEL 'HW1' MAINS AND MAIN FEEDER WIRING IS TO BE REMOVED COMPLETE. PROVIDE TERMINAL STRIPS WITHIN PANEL TUB AND PROVIDE NEW WIRING AND CONDUIT TO RECONNECT BRANCH CIRCUITS. PROVIDE CUSTOM COVERPLATE FOR EXISTING PANEL TUB. RECONNECT EXISTING PP9 MAIN WIRING AND BRANCH CIRCUIT WIRING TO SUIT NEW PANEL. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

4 REMOVE EXISTING DISCONNECT. PROVIDE NEW COVER PLATE AND REMOVE GUTS TO SUIT NEW FEED. EXISTING FEED IS TO BE CONNECTED TO NEW BREAKER WITHIN PANEL PP9.

5 PANEL 'A' IS TO BE REPLACED. EXISTING PANEL 'A' HAS MINERAL INSULATED CABLE ENTERING THROUGH SLAB INTO THE BOTTOM OF PANEL. PROVIDE NEW WIRE TROUGH BELOW PANEL 'A'. REWORK EXISTING MINERAL INSULATED CABLING AND TERMINATE WITHIN WIRING TROUGH. PROVIDE NEW CONDUIT AND WIRING FOR CIRCUIT EXTENSIONS INTO NEW PANEL 'A'. MAINTAIN THE REST OF THE MAIN AND BRANCH CIRCUIT WIRING AND RECONNECT TO NEW PANEL 'A'.

6 PANELS 'X' AND 'E' ARE TO BE DEMOLISHED. REMOVE EXISTING PANEL MAINS AND BUS BARS. MAINTAIN EXISTING PANEL TUBS. PROVIDE TERMINAL STRIPS WITHIN PANELS AND RECONNECT EXISTING BRANCH CIRCUIT WIRING. PROVIDE NEW CONDUIT AND WIRING TO NEW PANEL 'DP-A' FOR RECONNECTION.

ISSUANCES

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Project North
True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES

40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

BOILER ROOM ENLARGED PLANS

DEI
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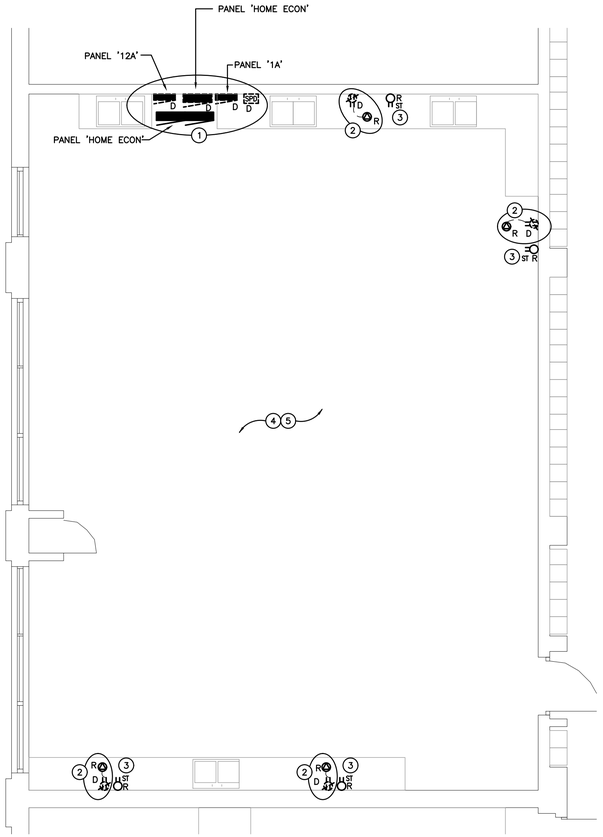
Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	
Project No.	Drawing No.	
20343	E202	



HOME ECONOMICS DEMOLITION & RENOVATION PLAN
SCALE: 1:50

GENERAL NOTES

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- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
- ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.

SPECIFIC NOTES

1 EXISTING HOME ECONOMICS PANEL AND 2 SUB PANELS ARE TO BE REMOVED COMPLETELY. MAINTAIN EXISTING BRANCH WIRING AND MAIN WIRING FOR RECONNECTION TO NEW PANEL. EXISTING PLYWOOD BACKBOARDS ARE TO BE REMOVED COMPLETE. EXISTING SURGE PROTECTION DEVICE IS TO BE REMOVED COMPLETE. REWORK BRANCH CIRCUIT WIRING INTO NEW PANEL. PROVIDE TERMINAL STRIPS AND JUNCTION BOXES ABOVE CEILING SPACE. EXTEND NEW CONDUIT TO NEW PANEL.

2 EXISTING KITCHEN HOOD IS PLUGGED INTO RECEPTACLE. REMOVE EXISTING RECEPTACLE, BACK BOX, AND WIRING BACK TO CEILING SPACE. FISH WALL TO SUIT NEW HARDWIRED FEED INTO KITCHEN HOOD. PATCH EXISTING DRYWALL AND EXTEND WIRING TO SUIT.

3 EXISTING STOVE IS FED WITH TECK CABLING. REMOVE EXISTING TECK CABLING COMPLETELY. PROVIDE NEW FEED IN CONDUIT TO CEILING SPACE. FISH EXISTING WALL AND CUT NEW BACKBOX INTO EXISTING WALL TO SUIT NEW STOVE RECEPTACLE.

4 WHERE NECESSARY THIS TRADE SHALL CUT DRYWALL AND PATCH FOR THE INSTALLATION OF ALL SERVICES. NO SERVICES ARE TO BE INSTALLED SURFACE MOUNTED WITHIN THIS ROOM.

5 THIS CONTRACTOR IS RESPONSIBLE TO REMOVE AND RE-INSTALL CEILING TILE TO SUIT REQUIRED INSTALLATION. ANY DAMAGED OR FINGERPRINTED TILE MUST BE REPLACED.

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Project North
True North

Project
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title
SECOND FLOOR ENLARGED PLANS

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Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
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Project No.	Drawing No.
20343	E203

NOTES

1 MAINTAIN EXISTING FEEDS FOR RECONNECTION TO NEW DEVICE.

2 EXISTING DISCONNECT IS TO BE REMOVED. MAINTAIN EXISTING GYM 'MCC' FEED FOR RECONNECTION TO NEW SPLITTER. REFER TO RENOVATION PLANS FOR ADDITIONAL INFORMATION.

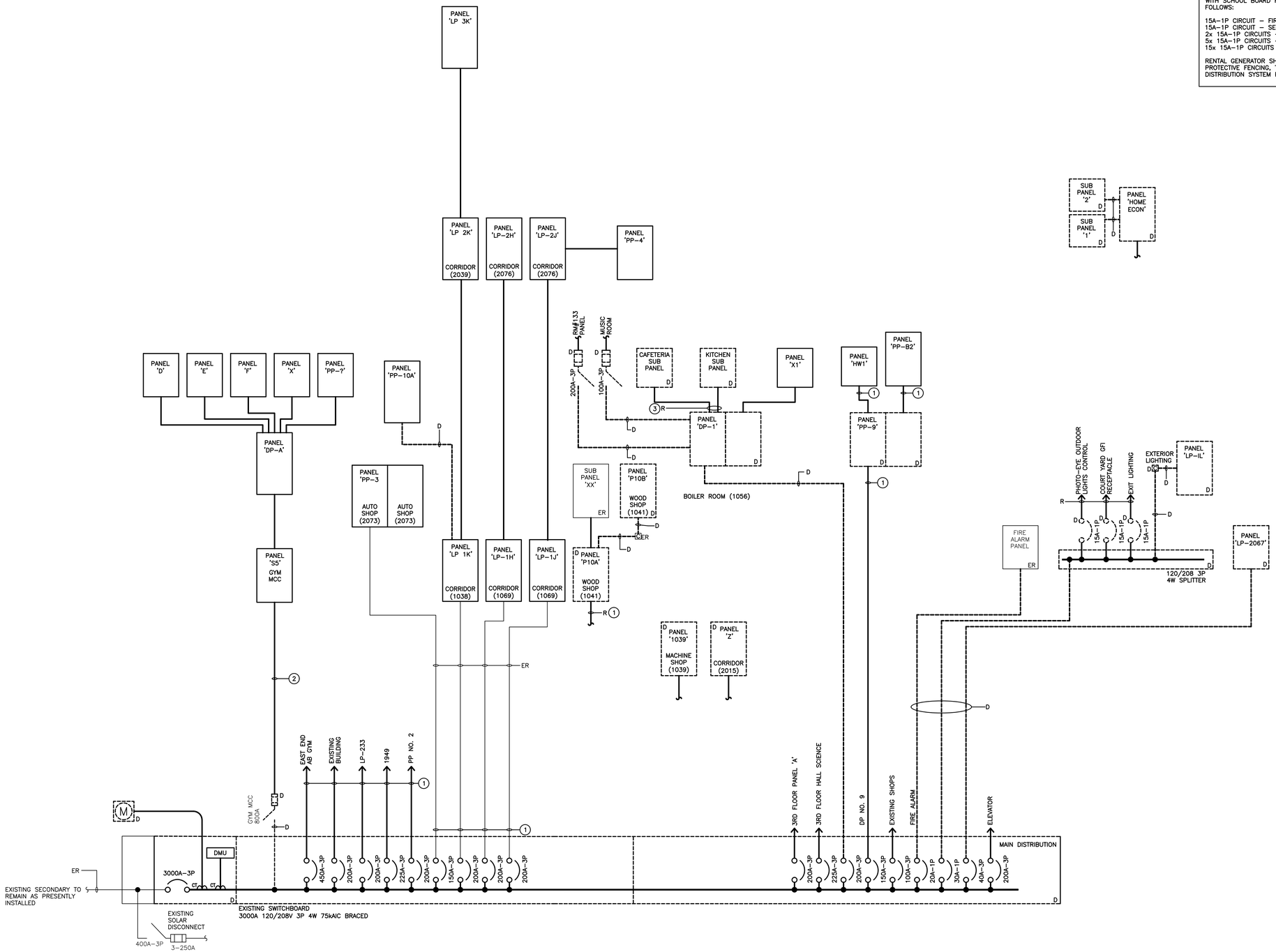
3 THIS CONTRACTOR IS TO CONFIRM IF THESE PANELS ARE THE PANELS LOCATED WITHIN KITCHEN 2057. LABEL FEEDS AS ABANDONED.

TEMPORARY GENERATOR

CONTRACTOR TO PROVIDE TEMPORARY POWER DURING POWER OUTAGES. PROVIDE TEMPORARY PANEL AND BRACH CIRCUIT CONNECTIONS TO SUIT. COORDINATE ADDITIONAL REQUIREMENTS WITH SCHOOL BOARD REPRESENTATIVE. TEMPORARY POWER TO BE PROVIDED FOR LOADS AS FOLLOWS:

15A–1P CIRCUIT – FIRE ALARM CONTROL PANEL
15A–1P CIRCUIT – SECURITY PANEL
2x 15A–1P CIRCUITS – EXTERIOR LIGHTING
5x 15A–1P CIRCUITS – CORRIDOR LIGHTING
15x 15A–1P CIRCUITS SPARE

RENTAL GENERATOR SHALL INCLUDE ALL FUEL, POWER CABLE SETS, GROUNDING PLATE, PROTECTIVE FENCING, TEMPORARY OUTPUT DISTRIBUTION PANEL AND CONNECTIONS TO DISTRIBUTION SYSTEM POINTS FOR SERVICES NOTED.



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Seal

Project North
True North

Project
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title
DISTRIBUTION RISER DIAGRAM – DEMOLITION

DEI
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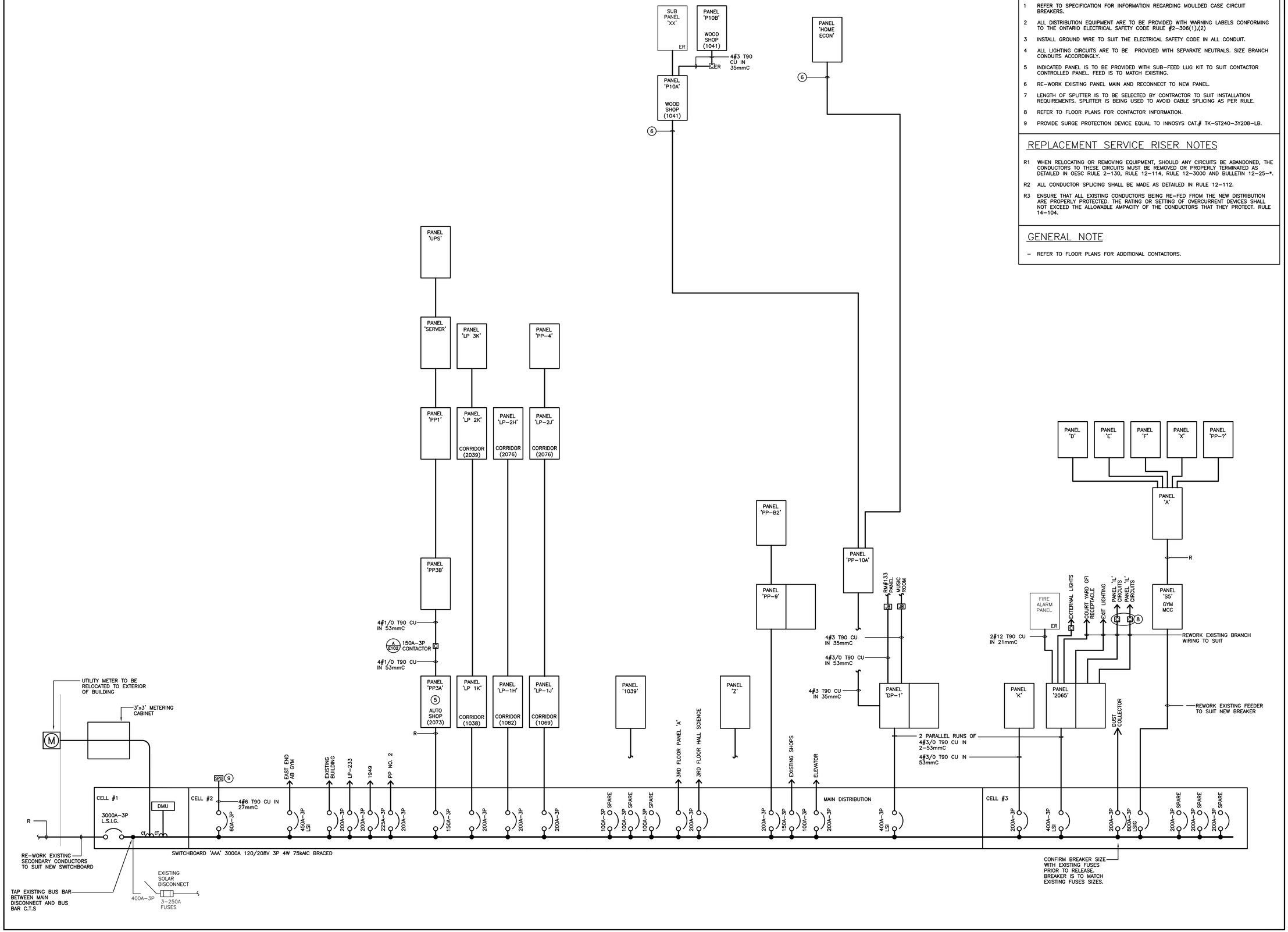
Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No. 20343
Drawing No. E301



DISTRIBUTION RISER NOTES

1 REFER TO SPECIFICATION FOR INFORMATION REGARDING MOULDED CASE CIRCUIT BREAKERS.

2 ALL DISTRIBUTION EQUIPMENT ARE TO BE PROVIDED WITH WARNING LABELS CONFORMING TO THE ONTARIO ELECTRICAL SAFETY CODE RULE #2-306(1),(2)

3 INSTALL GROUND WIRE TO SUIT THE ELECTRICAL SAFETY CODE IN ALL CONDUIT.

4 ALL LIGHTING CIRCUITS ARE TO BE PROVIDED WITH SEPARATE NEUTRALS. SIZE BRANCH CONDUITS ACCORDINGLY.

5 INDICATED PANEL IS TO BE PROVIDED WITH SUB-FEED LUG KIT TO SUIT CONTACTOR CONTROLLED PANEL. FEED IS TO MATCH EXISTING.

6 RE-WORK EXISTING PANEL MAIN AND RECONNECT TO NEW PANEL.

7 LENGTH OF SPLITTER IS TO BE SELECTED BY CONTRACTOR TO SUIT INSTALLATION REQUIREMENTS. SPLITTER IS BEING USED TO AVOID CABLE SPLICING AS PER RULE.

8 REFER TO FLOOR PLANS FOR CONTACTOR INFORMATION.

9 PROVIDE SURGE PROTECTION DEVICE EQUAL TO INNOSYS CAT.# TK-ST240-3Y208-LB.

REPLACEMENT SERVICE RISER NOTES

R1 WHEN RELOCATING OR REMOVING EQUIPMENT, SHOULD ANY CIRCUITS BE ABANDONED, THE CONDUCTORS TO THESE CIRCUITS MUST BE REMOVED OR PROPERLY TERMINATED AS DETAILED IN OESC RULE 2-130, RULE 12-114, RULE 12-3000 AND BULLETIN 12-25-*.

R2 ALL CONDUCTOR SPLICING SHALL BE MADE AS DETAILED IN RULE 12-112.

R3 ENSURE THAT ALL EXISTING CONDUCTORS BEING RE-FED FROM THE NEW DISTRIBUTION ARE PROPERLY PROTECTED. THE RATING OR SETTING OF OVERCURRENT DEVICES SHALL NOT EXCEED THE ALLOWABLE AMPACITY OF THE CONDUCTORS THAT THEY PROTECT. RULE 14-104.

GENERAL NOTE

- REFER TO FLOOR PLANS FOR ADDITIONAL CONTACTORS.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
B	21.05.19	ISSUED FOR CONSTRUCTION	JJ
C	21.06.15	ISSUED FOR REVISED LAYOUT	JJ
D	21.12.14	ISSUED FOR AS BUILT	JJ

AS-BUILT DRAWINGS
The revisions to these contract documents reflecting the significant change in the Work made during construction are based on data furnished by the Contractor to the Engineer. The Engineer shall not be held responsible for the accuracy of the information provided by the Contractor.

Seal

Project North
True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES

40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

DISTRIBUTION RISER DIAGRAM – RENOVATION

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

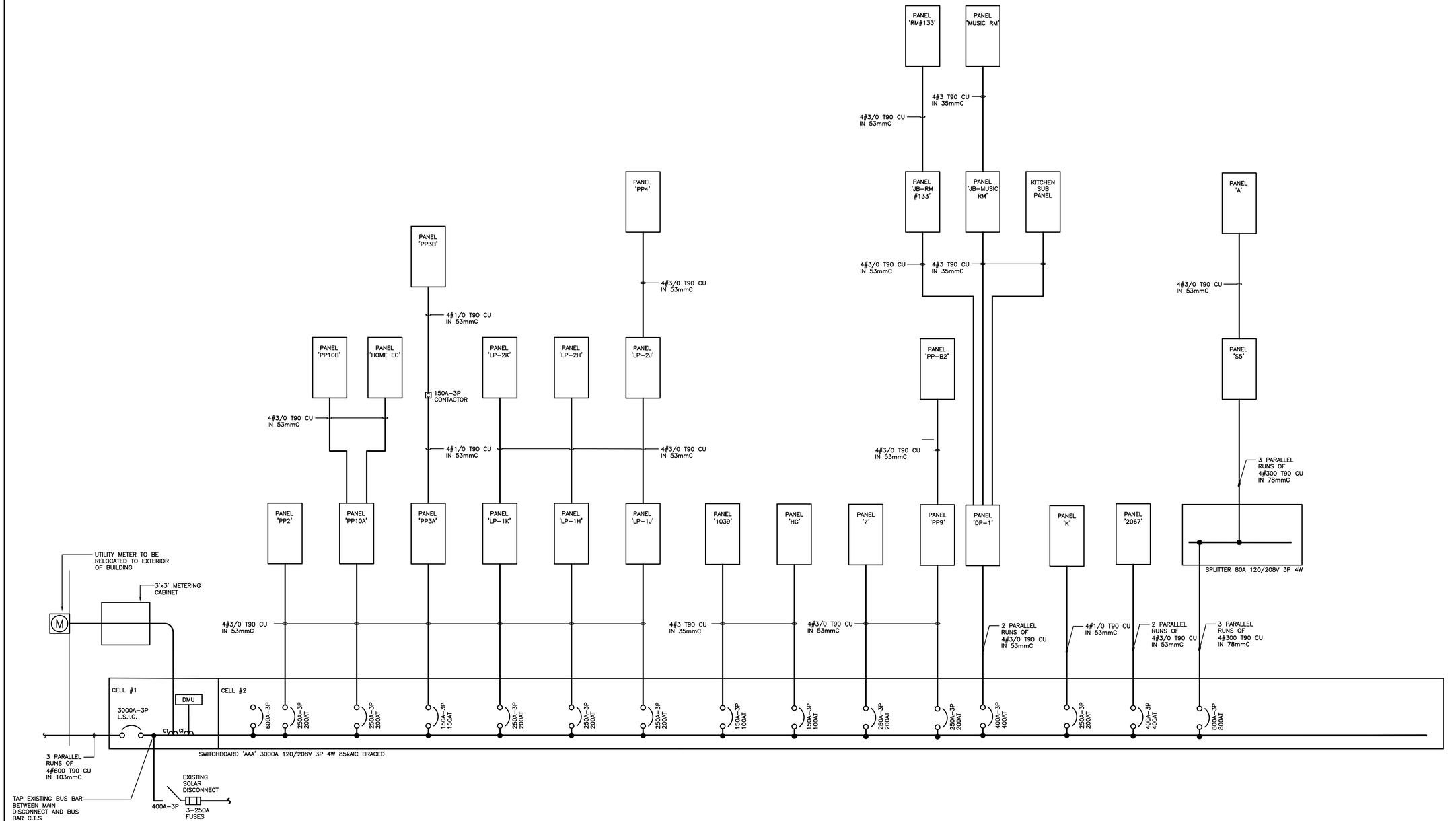
Project No.	Drawing No.
20343	E302

DISTRIBUTION RISER NOTES

1

GENERAL NOTE

– REFER TO FLOOR PLANS FOR ADDITIONAL CONTACTORS.



ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
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AS-BUILT DRAWINGS
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Seal

Project North / True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES

40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

DISTRIBUTION RISER DIAGRAM

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
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Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No.	Drawing No.
20343	E303

RETROFIT PANEL 'K2'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

CORRIDOR LTG.	15A	1	2	15A	EXISTING LOAD
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	15A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
EXISTING LOAD	15A	11	12	25A	EXISTING LOAD
EXISTING LOAD	15A	13	14	15A	EXISTING LOAD
EXISTING LOAD	15A	15	16	15A	EXISTING LOAD
EXISTING LOAD	20A	17	18	15A	EXISTING LOAD
RM 238 LTG.	20A	19	20	20A	EXISTING LOAD
EXISTING LOAD	20A	21	22	20A	EXISTING LOAD
EXISTING LOAD	20A	23	24	20A	EXISTING LOAD
EXISTING LOAD	20A	25	26	20A	EXISTING LOAD
EXISTING LOAD	100A	27	28	20A	EXISTING LOAD
		29	30	20A	EXISTING LOAD
	3P	31	32	20A	EXISTING LOAD
PANEL 'K2'	100A	33	34		SPACE
		35	36		SPACE
	3P	37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'K1'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

ENTRY/AGRI. RM UNIT HEATERS	15A	1	2	15A	STAIRWELL LIGHTS
SPARE	15A	3	4	15A	BOYS WOOD SHOP VENT.
WOOD SHOP UNIT HEATER	15A	5	6	15A	RM 108 PLUGS
CORRIDOR LIGHTS	15A	7	8	15A	RM 108 PLUGS
RM 109 CHALK BOARD LIGHTS	15A	9	10	15A	EXISTING LOAD
RM 102 CHALK BOARD LIGHTS	15A	11	12	15A	RM 103/106
RM 103 BOARD LIGHTS	15A	13	14	15A	RM 101 CHALK BOARD LIGHTS
RM 102 LIGHTS	20A	15	16	20A	RM 103 LIGHTS
RM 102/103 LIGHTS	20A	17	18	20A	EXISTING LOAD
RM 102 LIGHTS	20A	19	20	20A	RM 103 LIGHTS
RM 104 LIGHTS	20A	21	22	20A	RM 101 LIGHTS
RM 104 LIGHTS	20A	23	24	20A	RM 101 LIGHTS
RM 104 LIGHTS	20A	25	26	20A	RM 101 LIGHTS
ROOFTOP LARGE FAN	15A	27	28	40A	CARP. SHOP PANEL 'D'
		29	30		
	3P	31	32	3P	
EXISTING LOAD	15A	33	34	15A	EXISTING LOAD
	2P	35	36	15A	EXISTING LOAD
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'LP-2H'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

AUTO LIGHTS	15A	1	2	15A	AUTO LIGHTS
AUTO LIGHTS	15A	3	4	20A	AUTO LIGHTS
AUTO LIGHTS	15A	5	6	20A	AUTO LIGHTS
AUTO LIGHTS	15A	7	8	15A	AUTO LIGHTS
AUTO LIGHTS	15A	9	10	15A	AUTO LIGHTS
AUTO LIGHTS	15A	11	12	15A	EXISTING LOAD
BOYS LIGHTING	15A	13	14	15A	B34 LIGHTS
CORRIDOR LIGHTING	15A	15	16	15A	CORRIDOR LIGHTS
EXISTING LOAD	15A	17	18	15A	CORRIDOR LIGHTS
EXISTING LOAD	15A	19	20	30A	EXISTING LOAD
EXISTING LOAD	15A	21	22	15A	EXISTING LOAD
DRILL PRESS	15A	23	24	15A	B33 LIGHTS
B-33 LIGHTS	15A	25	26	30A	EXISTING LOAD
EXISTING LOAD	15A	27	28	15A	AUTO HEAT
AUTO PLUGS	15A	29	30	15A	EXISTING LOAD
EXISTING LOAD	15A	31	32	40A	EXISTING LOAD
WATER FOUNTAIN	15A	33	34	2P	
AUTO DRYER	20A	35	36	20A	HAND DRYER
SPACE		37	38	15A	HANDICAP DOOR
SPACE		39	40		SPACE
SPACE		41	42		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL 'HOME EC'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: XXXA
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

SW KITCHEN WEST WALL PLUG	15A	1	2	15A	WEST WALL 238 COMPUTER PLUG
	2P	3	4	15A	NORTH WALL 238 COMPUTER PLUG
SW KITCHEN SOUTH WALL PLUG	15A	5	6	15A	EAST WALL 238 COMPUTER PLUG
	2P	7	8	15A	SOUTH WALL 238 COMPUTER PLUG
SUB PANEL '1'	60A	9	10	15A	A/C EVAPORATOR UNIT
	2P	11	12	30A	STOVE
STOVE	40A	13	14	2P	
	2P	15	16	15A	ROOM 231 PLUG
DISHWASHER	15A	17	18	2P	
STOVE OUTLETS	15A	19	20	15A	NORTH WALL 239 COMPUTER PLUG
DRYER	30A	21	22	2P	
	2P	23	24	15A	WEST WALL 239 COMPUTER PLUG
FREEZER UNIT	20A	25	26	15A	EXISTING LOAD
	2P	27	28	15A	EXISTING LOAD
1ST FLOOR BOYS HAND DRYER	15A	29	30	15A	EXISTING LOAD
	2P	31	32	15A	EXISTING LOAD
2ND FLOOR GIRLS HAND DRYER	15A	33	34	15A	ROOM 239 COMPUTER PLUG
	2P	35	36	20A	3RD FLOOR BRADLEY BASIN
SUB PANEL '2'	60A	37	38	15A	SURGE PROTECTION DEVICE
	2P	39	40		
EXISTING LOAD	15A	41	42	3P	

DEMOLISHED SUB PANEL '1'

STOVE REC.	40A	1	2	40A	STOVE REC.
	2P	3	4	2P	
SPACE		5	6		SPACE
SPACE		7	8		SPACE

DEMOLISHED SUB PANEL '2'

SPLIT REC.	15A*	1	2	15A*	SPLIT REC.
	2P	3	4	2P	
SPLIT REC.	15A*	5	6	15A*	SPLIT REC.
	2P	7	8	2P	
SPLIT REC.	15A*	9	10	15A*	SPLIT REC.
	2P	11	12	2P	
SPLIT REC.	15A*	13	14	15A*	SPLIT REC.
	2P	15	16	2P	
SPLIT REC.	15A*	17	18	15A*	SPLIT REC.
	2P	19	20	2P	
SPLIT REC.	15A*	21	22	15A*	SPLIT REC.
	2P	23	24	2P	
SPLIT REC.	15A*	25	26	15A*	SPLIT REC.
	2P	27	28	2P	
SPLIT REC.	15A*	29	30	15A*	SPLIT REC.
	2P	31	32	2P	

DEMOLISHED PANEL 'PAN'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

EXISTING LOAD	15A	1	2	15A	EXISTING LOAD
COMPUTER STORAGE LIGHT	15A	3	4	2P	
FREEZER	15A	5	6	15A	RANGE UNIT MAIN FRIDGE
FREEZER	15A	7	8	2P	

DEMOLISHED PANEL 'K' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 125A
NEUTRAL BUS:
MOUNTING: SURFACE
NOTES: EXISTING

SPACE		1	2A	15A	WARMER REC
			2B	15A	WARMER REC
PROCER REC	20A	3	4A	15A	GFI REC
			4B	15A	COOLER REC
FAN REC	15A	5A	6A	2P	
FOOD WARMER	30A	5B	6B	15A	WALL ROOM HEATER
	2P	7A	8		SPACE
SPARE	15A	7B			
WINDOW REC	15A	9A	10		SPACE
ON THE GO COOLER	15A	9B			
	2P	11A	12		SPACE
	2P	11B			
SPACE		13	14		SPACE
SPACE		15	16		SPACE
SPACE		17	18		SPACE

PANEL 'HOME EC'

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

SW KITCHEN WEST WALL PLUG	15A*	1	2	15A	WEST WALL 238 COMPUTER PLUG
	2P	3	4	15A	NORTH WALL 238 COMPUTER PLUG
SW KITCHEN SOUTH WALL PLUG	15A*	5	6	15A	EAST WALL 238 COMPUTER PLUG
	2P	7	8	15A	SOUTH WALL 238 COMPUTER PLUG
SPACE		9	10	15A	A/C EVAPORATOR UNIT
SPACE		11	12	30A	STOVE
STOVE	40A	13	14	2P	
	2P	15	16	15A	ROOM 231 PLUG
DISHWASHER	15A	17	18	2P	
STOVE OUTLETS	15A	19	20	15A	NORTH WALL 239 COMPUTER PLUG
DRYER	30A	21	22	2P	
	2P	23	24	15A	WEST WALL 239 COMPUTER PLUG
FREEZER UNIT	20A	25	26	15A	EXISTING LOAD
	2P	27	28	15A	EXISTING LOAD
1ST FLOOR BOYS HAND DRYER	15A	29	30	15A	EXISTING LOAD
	2P	31	32	15A	EXISTING LOAD
2ND FLOOR GIRLS HAND DRYER	15A	33	34	15A	ROOM 239 COMPUTER PLUG
	2P	35	36	20A	3RD FLOOR BRADLEY BASIN
SPACE		37	38		SPACE
SPACE		39	40		SPACE
EXISTING LOAD	15A	41	42		SPACE
STOVE REC.	40A	43	44	40A	STOVE REC.
	2P	45	46	2P	
SPLIT REC.	15A*	47	48	15A*	SPLIT REC.
	2P	49	50	2P	
SPLIT REC.	15A*	51	52	15A*	SPLIT REC.
	2P	53	54	2P	
SPLIT REC.	15A*	55	56	15A*	SPLIT REC.
	2P	57	58	2P	
SPLIT REC.	15A*	59	60	15A*	SPLIT REC.
	2P	61	62	2P	
SPLIT REC.	15A*	63	64	15A*	SPLIT REC.
	2P	65	66	2P	
SPLIT REC.	15A*	67	68	15A*	SPLIT REC.
	2P	69	70	2P	
SPLIT REC.	15A*	71	72	15A*	SPLIT REC.
	2P	73	74	2P	
SPLIT REC.	15A*	75	76	15A*	SPLIT REC.
	2P	77	78	2P	
SPACE		79	80		SPACE
SPACE		81	82		SPACE
SPACE		83	84		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF _____ A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL 'K'

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD
SINGLE TUB

PROCER REC	20A	1	2	15A	WARMER REC
FAN REC	15A	3	4	15A	WARMER REC
FOOD WARMER	30A	5	6	15A	GFI REC
	2P	7	8	15A	COOLER REC
SPARE	15A	9	10	2P	
WINDOW REC	15A	11	12	15A	WALL ROOM HEATER
	2P	13	14	15A	EXISTING LOAD
ON THE GO COOLER	15A	15	16	2P	
	2P	17	18	15A	RANGE UNIT MAIN FRIDGE
EXISTING LOAD	15A	19	20	2P	
COMPUTER STORAGE LIGHT	15A	21	22		SPACE
FREEZER	15A	23	24		SPACE
FREEZER	15A	25	26		SPACE
SPACE		27	28		SPACE
SPACE		29	30		SPACE
SPACE		31	32		SPACE
SPACE		33	34		SPACE
SPACE		35	36		SPACE
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE
SPACE		43	44		SPACE
SPACE		45	46		SPACE
SPACE		47	48		SPACE
SPACE		49	50		SPACE
SPACE		51	52		SPACE
SPACE		53	54		SPACE
SPACE		55	56		SPACE
SPACE		57	58		SPACE
SPACE		59	60		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL '1039'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

PANEL CONTACTOR	15A	1	2	15A	MILLING MACHINE REC
NORTH EAST WALL REC	15A	3	4	15A	WALL REC
EXISTING LOAD	15A	5	6	15A	DISCONNECTED LOAD
	2P	7	8	2P	
LATHE MILLING MACHINE	15A	9	10	15A	DISCONNECTED LOAD
		11	12		
	3P	13	14	3P	
BAND SAW	15A	15	16	15A	GRINDER LATHE
		17	18		
	3P	19	20	3P	
LATHE	15A	21	22	15A	3 WALL OUTLET
		23	24		
	3P	25	26	3P	
LATHE	15A	27	28	15A	DRILL PRESS
		29	30		
	3P	31	32	3P	
LATHE	15A	33	34	15A	3 WALL OUTLET
		35	36		
	3P	37	38	3P	
NORTH EAST WELDER PLUG	40A	39	40	40A	WELDER PLUG
	2P	41	42		
SPACE		43	44	3P	
SPACE		45	46		SPACE
SPACE		47	48		SPACE
SPACE		49	50		SPACE
SPACE		51	52		SPACE
SPACE		53	54		SPACE
SPACE		55	56		SPACE
SPACE		57	58		SPACE
SPACE		59	60		SPACE

PANEL '1039'

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: XXXA
NEUTRAL BUS: FULL
MOUNTING: RECESSED SURFACE
NOTES: C/W SPRINKLER HOOD
SINGLE TUB

PANEL CONTACTOR	15A	1	2	15A	MILLING MACHINE REC
NORTH EAST WALL REC	15A	3	4	15A	WALL REC
EXISTING LOAD	15A	5	6		SPACE
	2P	7	8		SPACE
LATHE MILLING MACHINE	15A	9	10		SPACE
		11	12		SPACE
	3P	13	14		SPACE
BAND SAW	15A	15	16	15A	GRINDER LATHE
		17	18		
	3P	19	20	3P	
LATHE	15A	21	22	15A	3 WALL OUTLET
		23	24		
	3P	25	26	3P	
LATHE	15A	27	28	15A	DRILL PRESS
		29	30		
	3P	31	32	3P	
LATHE	15A	33	34	15A	3 WALL OUTLET
		35	36		
	3P	37	38	3P	
NORTH EAST WELDER PLUG	40A	39	40	40A	WELDER PLUG
	2P	41	42		
SPACE		43	44	3P	
SPACE		45	46		SPACE
SPACE		47	48		SPACE
SPACE		49	50		SPACE
SPACE		51	52		SPACE
SPACE		53	54		SPACE
SPACE		55	56		SPACE
SPACE		57	58		SPACE
SPACE		59	60		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'LP-1J'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

EXISTING LOAD	15A	1	2	15A	EXISTING LOAD
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	15A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
A16 WALL OUTLETS	15A	11	12	15A	EXISTING LOAD
A30 WALL OUTLETS	15A	13	14A	15A	EXISTING LOAD
			14B	40A	EXISTING LOAD
A26 WALL OUTLETS	15A	15	16A	2P	
			16B	15A	FAN A-26
A30 WALL OUTLETS	15A	17	18	15A	A20 COMPUTER PLUGS
A30 WALL OUTLETS	15A	19	20	40A	EXISTING LOAD
A30 WALL OUTLETS	15A	21	22	2P	
A30 WALL OUTLETS	15A	23	24A	15A	EXISTING LOAD
			24B	15A	EXISTING LOAD
A30 WALL OUTLETS	15A	25	26A	2P	
			26B	15A	EXISTING LOAD
A30 WALL OUTLETS	15A	27	28	15A	EXISTING LOAD
A16 WALL OUTLETS	15A	29	30	15A	EXISTING LOAD
A16 WALL OUTLETS	15A	31	32	15A	HEATER
A16 WALL OUTLETS	15A	33	34		SPACE
A16 WALL OUTLETS	15A	35	36		SPACE
A16 WALL OUTLETS	15A	37	38		SPACE
A16 WALL OUTLETS	15A	39	40	15A	A16 WALL PLUGS
A20 WALL OUTLETS	15A	41	42	2P	

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the consultant are the property of the consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
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Project North
True North

Project
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title
PANEL SCHEDULES 1 OF 5

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No. 20343
Drawing No. E401

RETROFIT PANEL 'LP-2J'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXISTING LOAD	15A	1	2	15A	EXISTING LOAD
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	15A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
EXISTING LOAD	15A	11	12	15A	EXISTING LOAD
EXISTING LOAD	15A	13	14	15A	EXISTING LOAD
EXISTING LOAD	15A	15	16	15A	EXISTING LOAD
EXISTING LOAD	15A	17	18	15A	EXISTING LOAD
EXISTING LOAD	15A	19	20	20A	EXISTING LOAD
EXISTING LOAD	15A	21	22	20A	EXISTING LOAD
EXISTING LOAD	15A	23	24	15A	EXISTING LOAD
B-30 FRONT PLUG	20A	25	26	2P	
B-28 FRONT PLUG	15A	27	28	15A	EXISTING LOAD
OFFICE PA REC	15A	29	30	15A	EXISTING LOAD
OFFICE REC VP	15A	31	32	15A	FILE SERVER
OFFICE REC VP	15A	33	34	70A	PANEL 'PP4'
		35	36		
		37	38	3P	
		39	40		
		41	42		

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'LP-1H'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

EXISTING LOAD	15A	1	2	15A	STAIRWELL
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	20A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	CORRIDOR LIGHT
CORRIDOR LIGHT	15A	11	12	15A	CORRIDOR LIGHT
CLOSET B REC	15A	13	14	15A	EXISTING LOAD
NW	15A	15	16	15A	EXISTING LOAD
X	15A	17	18	15A	A32 COMPUTERS
A32 COMPUTERS	15A	19	20	15A	EXISTING LOAD
HEAT BLOWER	15A	21	22	15A	A34 COMPUTER REC
A-40 FRIDGE	15A	23	24	15A	DRYER
HALL REC	15A	25	26	2P	
HOT WATER HEATER	20A	27	28	15A	WASHER
	2P	29	30		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL 'Z' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS:
MOUNTING: RECESSED
NOTES: EXISTING

EXISTING LOAD	30A	1	2	30A	EXISTING LOAD
		3	4		
	3P	5	6	3P	
EXISTING LOAD	15A	7	8	15A	LIGHTING
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
KITCHEN DISHWASHER	15A	11A	12	15A	EXISTING LOAD
EXISTING LOAD	15A	11B			
EXISTING LOAD	15A	13	14A	20A	LIGHTING
			14B	20A	EXISTING LOAD
EXISTING LOAD	15A	15	16	15A	RM 2031 CHEMICAL PUMP REC
	2P	17	18A	20A	EMERGENCY LIGHTING
			18B	15A	STUDENT SERVICES BB HEATER
EXISTING LOAD	60A	19	20A	2P	
			20B	20A	AHU OFFICE
	2P	21	22A	2P	
			22B	15A	H/C 110 VOLT CONTROL
EXISTING LOAD	15A	23A	24A	2P	
EXISTING LOAD	15A	23B	24B	15A	ZONE CONTACTOR
AC ROOFTOP REC	15A	25A	26	70A	EXISTING LOAD
AC ROOFTOP GFCI REC	20A	25B			
KITCHEN LIGHTS	15A	27A	28		
KITCHEN GFCI REC	15A	27B			
RM 213 AC ROOFTOP UNIT	40A	29	30	3P	
	2P	31	32	70A	EXISTING LOAD
EXISTING LOAD	60A	33	34		
	2P	35	36	3P	
SPACE		37	38	100A	EXISTING LOAD
SPACE		39	40		
SPACE		41	42	3P	

PANEL 'Z'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD
SINGLE TUB

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXISTING LOAD	30A	1	2	30A	EXISTING LOAD
		3	4		
	3P	5	6	3P	
EXISTING LOAD	15A	7	8	15A	LIGHTING
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
KITCHEN DISHWASHER	15A	11	12	15A	EXISTING LOAD
EXISTING LOAD	15A	13	14	20A	EMERGENCY LIGHTING
EXISTING LOAD	15A	15	16	15A	STUDENT SERVICES BB HEATER
EXISTING LOAD	15A	17	18	2P	
	2P	19	20	20A	AHU OFFICE
EXISTING LOAD	60A	21	22	2P	
	2P	23	24	15A	H/C 110 VOLT CONTROL
EXISTING LOAD	15A	25	26	2P	
EXISTING LOAD	15A	27	28	15A	ZONE CONTACTOR
AC ROOFTOP REC	15A	29	30	70A	EXISTING LOAD
AC ROOFTOP GFCI REC	20A	31	32		
KITCHEN LIGHTS	15A	33	34	3P	
KITCHEN GFCI REC	15A	35	36	70A	EXISTING LOAD
RM 213 AC ROOFTOP UNIT	40A	37	38		
	2P	39	40	3P	
EXISTING LOAD	60A	41	42	100A	EXISTING LOAD
	2P	43	44		
SPACE		45	46	3P	
SPACE		47	48		SPACE
SPACE		49	50		SPACE
SPACE		51	52		SPACE
SPACE		53	54		SPACE
SPACE		55	56		SPACE
SPACE		57	58		SPACE
SPACE		59	60		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL 'PP-10A'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NBLP

SPARE	15A	1	2	15A	FRONT REC SPLIT
RM 139 ISOLATED GROUND REC	15A	3	4	2P	
RM 133 ISOLATED GROUND REC	15A	5	6	40A	TRACTOR SHED
RM 132 ISOLATED GROUND REC	15A	7	8	2P	
RM 118 ISOLATED GROUND REC	15A	9	10	40A	COMPUTER RM AIR CONDITIONER
RM 136 ISOLATED GROUND REC	15A	11	12		
RM 116 ISOLATED GROUND REC	15A	13	14	3P	
SUB PANEL IN FAMILY STUDIES ROOM	100A	15	16	20A	COMP. RM. AIR CIRC. FAN UNIT
		17	18	15A	RM 138 ISOLATED GROUND REC
	3P	19	20	30A	AIR SERV. R004
RM 140 ISOLATED GROUND REC	15A	21	22	2P	
EXISTING LOAD	15A	23	24	20A	RM 139 REC
	2P	25	26	15A	RM 139 REC
EXISTING LOAD	20A	27	28	15A	HALL EMER. LTG
	2P	29	30	15A	COMPUTER AC
SPACE		31	32	15A	RM 139 REC
SPACE		33	34	15A	HEATER SOUTH ENTRANCE
SPACE		35	36		
SPACE		37	38	3P	
SPACE		39	40	40A	KILN ART ROOM
SPACE		41	42	2P	

DEMOLISHED PANEL 'PP-10B'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NBLP

EASTWALL REC	20A	1	2		SPACE
SPACE		3	4		SPACE
UNKNOWN LOAD	15A	5	6	15A	PLUGS BY WASH BASIN
EMER. LTG HALL/BATHRM SINK REC	15A	7	8	20A	HAND DRYER
LATHES	20A	9	10	40A	WOOD SHOP SUB PANEL
UNKNOWN LOAD	20A	11	12	2P	
UNKNOWN LOAD	20A	13	14	15A	UNKNOWN LOAD
UNKNOWN LOAD	20A	15	16	20A	UNKNOWN LOAD
	2P	17	18	15A	UNKNOWN LOAD
SPACE		19	20		SPACE
SPACE		21	22	15A	JOINER
SPACE		23	24	2P	
SPACE		25	26	15A	PLANNER
SPACE		27	28	2P	
SPACE		29	30	15A	DUST COLLECTOR
SPACE		31	32	2P	
SPACE		33	34	15A	TABLE SAW
SPACE		35	36	2P	
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

PANEL 'PP-10A'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

SPARE	15A	1	2	15A	FRONT REC SPLIT
RM 139 ISOLATED GROUND REC	15A	3	4	2P	
RM 133 ISOLATED GROUND REC	15A	5	6	40A	TRACTOR SHED
RM 132 ISOLATED GROUND REC	15A	7	8	2P	
RM 118 ISOLATED GROUND REC	15A	9	10	40A	COMPUTER RM AIR CONDITIONER
RM 136 ISOLATED GROUND REC	15A	11	12		
RM 116 ISOLATED GROUND REC	15A	13	14	3P	
SUB PANEL IN FAMILY STUDIES ROOM	100A	15	16	20A	COMP. RM. AIR CIRC. FAN UNIT
		17	18	15A	RM 138 ISOLATED GROUND REC
	3P	19	20	30A	AIR SERV. R004
RM 140 ISOLATED GROUND REC	15A	21	22	2P	
EXISTING LOAD	15A	23	24	20A	RM 139 REC
	2P	25	26	15A	RM 139 REC
EXISTING LOAD	20A	27	28	15A	HALL EMER. LTG
	2P	29	30	15A	COMPUTER AC
SPACE		31	32	15A	RM 139 REC
SPACE		33	34	15A	HEATER SOUTH ENTRANCE
SPACE		35	36		
PANEL '10B'	100A	37	38	3P	
		39	40	40A	KILN ART ROOM
	3P	41	42	2P	

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL 'PP-10B'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EASTWALL REC	20A	1	2		SPACE
SPACE		3	4		SPACE
UNKNOWN LOAD	15A	5	6	15A	PLUGS BY WASH BASIN
EMER. LTG HALL/BATHRM SINK REC	15A	7	8	20A	HAND DRYER
LATHES	20A	9	10	40A	WOOD SHOP SUB PANEL
UNKNOWN LOAD	20A	11	12	2P	
UNKNOWN LOAD	20A	13	14	15A	UNKNOWN LOAD
UNKNOWN LOAD	20A	15	16	20A	UNKNOWN LOAD
	2P	17	18	15A	UNKNOWN LOAD
SPACE		19	20		SPACE
SPACE		21	22	15A	JOINER
SPACE		23	24	2P	
SPACE		25	26	15A	PLANNER
SPACE		27	28	2P	
SPACE		29	30	15A	DUST COLLECTOR
SPACE		31	32	2P	
SPACE		33	34	15A	TABLE SAW
SPACE		35	36	2P	
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 10000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'HG'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES: MAIN BREAKER, BOTTOM ENTRY

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXIT EMERGENCY	15A	1	2	15A	HEAT & CT-3
EXISTING LOAD	15A	3	4	15A	CORRIDOR
CT-1	15A	5	6	15A	GIRLS WASHROOM HAND DRYER
EXISTING LOAD	15A	7	8	2P	
CORRIDOR LIGHTS	15A	9	10	15A	LIGHTS
EXISTING LOAD	15A	11	12	15A	LIGHTS
EXISTING LOAD	15A	13	14	15A	BOYS WASHROOM HAND DRYER
B-FLOOR ELEVATOR ELCOVE	15A	15	16	2P	
EXISTING LOAD	20A	17	18	15A	FOUNTAIN
EXISTING LOAD	15A	19	20	15A	EXISTING LOAD
SECURITY SWITCH	15A	21	22	15A	LIGHTS
SPACE		23	24	15A	EXISTING LOAD
SPACE		25	26	15A	EXISTING LOAD
SPACE		27	28	2P	
SPACE		29	30		SPACE
SPACE		31	32		SPACE
SPACE		33	34		SPACE
SPACE		35	36		SPACE
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

100A-3P

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
B	21.05.19	ISSUED FOR CONSTRUCTION	JJ
C	21.06.15	ISSUED FOR REVISED LAYOUT	JJ
D	21.12.14	ISSUED FOR AS BUILT	JJ

AS-BUILT DRAWINGS
The revisions to these contract documents reflecting the significant change in the Work made during construction are based on data furnished by the Contractor to the Engineer. The Engineer shall not be held responsible for the accuracy of the information provided by the Contractor.

Seal

Project North / True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

PANEL SCHEDULES 2 OF 5

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	
Project No.	Drawing No.	
20343	E402	

DEMOLISHED PANEL 'LP-IL'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NPLB

EXISTING LOAD	15A	1		2	15A	EXISTING LOAD
EXISTING LOAD	15A	3		4	15A	EXISTING LOAD
EXISTING LOAD	15A	5		6	2P	
EXISTING LOAD	15A	7		8	15A	H/W
SPACE		9		10	15A	SPARE
SPACE		11		12	20A	SPARE

DEMOLISHED PANEL 'LP-2067' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS:
MOUNTING: SURFACE
NOTES: EXISTING

MAINTENANCE SHOP LIGHTING	15A	1					
BASEBORD CUSTODIAL OFFICE	15A	2					
	2P	3					
MAINTENANCE SHOP REC.	15A	4					
SUB PANL 2069	40A	5					
	2P	6					

PANEL '2067'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 400A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

* INDICATES 33mA GROUND FAULT STYLE BREAKER
** PAINT INDICATED BREAKER RED TO SUIT OESC.

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXISTING LOAD	15A	1		2	15A	EXISTING LOAD
EXISTING LOAD	15A	3		4	15A	EXISTING LOAD
EXISTING LOAD	15A	5		6	2P	
EXISTING LOAD	15A	7		8	15A	H/W
SPACE		9		10		SPACE
SPACE		11		12		SPACE
SPACE		13		14		SPACE
SPACE		15		16		SPACE
SPACE		17		18		SPACE
SPACE		19		20		SPACE
SPACE		21		22		SPACE
SPACE		23		24		SPACE
SPACE		25		26		SPACE
SPACE		27		28		SPACE
SPACE		29		30		SPACE
SPACE		31		32		SPACE
SPACE		33		34		SPACE
SPACE		35		36		SPACE
SPACE		37		38		SPACE
SPACE		39		40		SPACE
SPACE		41		42		SPACE
SPACE		43		44		SPACE
SPACE		45		46		SPACE
SPACE		47		48		SPACE
SPACE		49		50		SPACE
SPACE		51		52		SPACE
SPACE		53		54		SPACE
SPACE		55		56		SPACE
SPACE		57		58		SPACE
SPACE		59		60		SPACE
MAINTENANCE SHOP LIGHTING	15A	61		62	15A	PHOTOCELL LIGHTS CONTROL
BASEBORD CUSTODIAL OFFICE	15A	63		64	15A	COURT YARD GFI RECEPTACLE
	2P	65		66	15A	EXIT LIGHTING
MAINTENANCE SHOP REC.	15A	67		68	15A**	FIRE ALARM CONTROL PANEL
SUB PANL 2069	40A	69		70	15A	SECURITY PANEL
	2P	71		72	15A**	ULC MONITORING PANEL
SPACE		73		74		SPACE
SPACE		75		76		SPACE
SPACE		77		78		SPACE
SPACE		79		80		SPACE
SPACE		81		82		SPACE
SPACE		83		84		SPACE
SPACE		85		86		SPACE
SPACE		87		88		SPACE
SPACE		89		90		SPACE
SPACE		91		92		SPACE
SPACE		93		94		SPACE
SPACE		95		96		SPACE
SPACE		97		98		SPACE
SPACE		99		100		SPACE
SPACE		101		102		SPACE
SPACE		103		104		SPACE
SPACE		105		106		SPACE
SPACE		107		108		SPACE
SPARE	15A	109		110	20A	SPARE
SPARE	15A	111		112	20A	SPARE
SPARE	15A	113		114	20A	SPARE
SPARE	15A	115		116	20A	SPARE
SPARE	15A	117		118	20A	SPARE
SPARE	15A	119		120	20A	SPARE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 60,000 A PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

RETROFIT PANEL 'PP-2'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: RECESSED
NOTES:

UNKNOWN CIRCUIT	15A	1		2	20A	UNKNOWN CIRCUIT
RECEPTACLE	15A	3		4	15A	UNKNOWN CIRCUIT
AIR HANDLER	15A	5		6	15A	UNKNOWN CIRCUIT
	2P	7		8	15A	UNKNOWN CIRCUIT
EXHAUSTER	15A	9		10	15A	UNKNOWN CIRCUIT
AIR CONDITIONER	40A	11		12	15A	UNKNOWN CIRCUIT
	2P	13		14	15A	UNKNOWN CIRCUIT
UNKNOWN CIRCUIT	15A	15		16	15A	UNKNOWN CIRCUIT
UNKNOWN CIRCUIT	15A	17		18	15A	UNKNOWN CIRCUIT
UNKNOWN CIRCUIT	15A	19		20	30A	UNKNOWN CIRCUIT
UNKNOWN CIRCUIT	15A	21		22	2P	
EMERGENCY EXIT	15A	23		24	15A	
COPY MACHINE	15A	25		26	30A	UNKNOWN CIRCUIT
UNKNOWN CIRCUIT	15A	27		28	2P	
STOVE	40A	29		30	15A	UNKNOWN CIRCUIT
	2P	31		32	20A	UNKNOWN CIRCUIT
LIGHT T.M.R. CORRIDORS	20A	33		34	2P	
UNKNOWN CIRCUIT	20A	35		36	15A	SPARE
STOVE#2	40A	37		38	15A	SPARE
	2P	39		40		SPACE
SPACE		41		42		SPACE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL 'PP-3'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NPLB

PLUGIN STRIP NW	20A	1		2	20A	PLUGIN STRIP N
PLUGIN STRIP NW	15A	3		4	15A	PLUGIN STRIP N
PLUGIN STRIP NW	20A	5		6	15A	PLUGIN STRIP N
PLUGIN STRIP S	15A	7		8	15A	PLUGIN STRIP N
PLUGIN STRIP S	15A	9		10	15A	LIGHTS UNDER HOIST
PLUGIN STRIP S	15A	11		12	15A	PANEL PILOT LIGHT
PLUGIN STRIP S	15A	13		14	20A	PLUGS AT BENCHES
PLUGS NORTH WALL	15A	15		16	20A	PLUGS AT BENCHES
PLUGS NORTH WALL	15A	17		18	20A	DRILL PRESS
PLUGS NORTH WALL	15A	19		20	20A	GRINDER
WHEEL BALANCER	15A	21		22	15A	DRILL PRESS
EXHAUST FAN EF #9	20A	23		24	15A	GREASE LOCK
AUTO SHOP OFFICE COMPUTER PLUG	15A	25		26	15A	JANITOR ROOM BATTERY CHARGERS
JANITOR OFFICE COMPUTER PLUG	15A	27		28	2P	
ROOM COMPUTER PLUGS	15A	29		30		SPACE
200A-3P						
GRINDER	15A	1		2	15A	SOUTH WALL 3 PHASE PLUG
		3		4		
	3P	5		6	3P	
SPACE		7		8	20A	AIR COMPRESSOR
SPACE		9		10		
SPACE		11		12	3P	
EXISTING LOAD	15A	13		14	50A	WELDER
IGNITION TESTER/DRILL PRESS	15A	15		16	2P	
	15A	17		18	50A	NORTH WALL HEATER
HAND DRYER	20A	19		20	2P	
HAND DRYER	20A	21		22	20A	HOIST
EXISTING LOAD	15A	23		24	2P	
EXISTING LOAD	20A	25		26		SPACE
EXISTING LOAD	30A	27		28		SPACE
	2P	29		30		SPACE
SPACE		31		32		SPACE
SPACE		33		34		SPACE
SPACE		35		36		SPACE

PANEL 'PP3A'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: XXXA
NEUTRAL BUS: FULL
MOUNTING: RECESSED SURFACE
NOTES: C/W SPRINKLER HOOD

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXISTING LOAD	15A	1		2	15A	JANITOR ROOM BATTERY CHARGERS
HAND DRYER	20A	3		4	2P	
HAND DRYER	20A	5		6	20A	AIR COMPRESSOR
EXISTING LOAD	15A	7		8		
EXISTING LOAD	20A	9		10	3P	
EXISTING LOAD	30A	11		12		
	2P	13		14		
EXHAUST FAN EF #9	20A	15		16		
AUTO SHOP OFFICE COMPUTER PLUG	15A	17		18		
JANITOR OFFICE COMPUTER PLUG	15A	19		20		
ROOM COMPUTER PLUGS	15A	21		22		
EXISTING LOAD	15A	23		24		
		25		26		
		27		28		
		29		30		
		31		32		
		33		34		
		35		36		
		37		38		
		39		40		
		41		42		

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

PANEL 'PP3B'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: XXXA
NEUTRAL BUS: FULL
MOUNTING: RECESSED SURFACE
NOTES: C/W SPRINKLER HOOD

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

PLUGIN STRIP NW	20A	1		2	20A	PLUGIN STRIP N
PLUGIN STRIP NW	15A	3		4	15A	PLUGIN STRIP N
PLUGIN STRIP NW	20A	5		6	15A	PLUGIN STRIP N
PLUGIN STRIP S	15A	7		8	15A	PLUGIN STRIP N
PLUGIN STRIP S	15A	9		10	15A	LIGHTS UNDER HOIST
PLUGIN STRIP S	15A	11		12	15A	PANEL PILOT LIGHT
PLUGIN STRIP S	15A	13		14	20A	PLUGS AT BENCHES
PLUGS NORTH WALL	15A	15		16	20A	PLUGS AT BENCHES
PLUGS NORTH WALL	15A	17		18	20A	DRILL PRESS
PLUGS NORTH WALL	15A	19		20	20A	GRINDER
WHEEL BALANCER	15A	21		22	15A	DRILL PRESS
GRINDER	15A	23		24	15A	GREASE LOCK
		25		26	15A	SOUTH WALL 3 PHASE PLUG
	3P	27		28		
IGNITION TESTER/DRILL PRESS	15A	29		30	3P	
		31		32	50A	WELDER
		33		34	2P	
		35		36	20A	HOIST
		37		38	2P	
		39		40		
		41		42		

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
B	21.05.19	ISSUED FOR CONSTRUCTION	JJ
C	21.06.15	ISSUED FOR REVISED LAYOUT	JJ
D	21.12.14	ISSUED FOR AS BUILT	JJ

AS-BUILT DRAWINGS
The revisions to these contract documents reflecting the significant change in the Work made during construction are based on data furnished by the Contractor to the Engineer. The Engineer shall not be held responsible for the accuracy of the information provided by the Contractor.

Seal

Project North / True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

PANEL SCHEDULES 3 OF 5

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No.	Drawing No.
20343	E403

DEMOLISHED PANEL 'DP-1'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 400A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NDP

EXISTING LOAD	15A	1	2	15A	EXISTING LOAD
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	15A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
EXISTING LOAD	15A	11	12	15A	EXISTING LOAD
EXISTING LOAD	15A	13	14	15A	EXISTING LOAD
EXISTING LOAD	15A	15	16	15A	EXISTING LOAD
EXISTING LOAD	15A	17	18	15A	EXISTING LOAD
SPACE		19	20		SPACE
SPACE		21	22		SPACE
SPACE		23	24		
DOMESTIC BOILER	15A	25	26		
	2P	27	28		
SPACE		29	30		
SPACE		31	32		
EXISTING LOAD	15A	33	34		
	2P	35	36		
EXISTING LOAD	70A	37	38		
	2P	39	40		
SPACE		41	42		

KITCHEN MAIN SWITCH	100A	43	44	100A	KITCHEN SUB PANEL
	2P	45	46		
SPACE		47	48	3P	
SPACE		49	50		SPACE
SPACE		51	52		SPACE
SPACE		53	54		SPACE
SPACE		55	56		SPACE
SPACE		57	58		SPACE
GYM	90A	59	60	30A	WELDER
	2P	61	62	2P	
SPACE		63	64	70A	STAGE SWITCH
SPACE		65	66		
SPACE		67	68	3P	
SPACE		69	70	60A	CAFETERIA SUB PANEL
SPACE		71	72		
SPACE		73	74	3P	
SPACE		75	76		
SPACE		77	78		
SPACE		79	80		
SPACE		81	82		
SPACE		83	84		

DEMOLISHED PANEL 'X1' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 1P, 3W
MAINS: 100A
NEUTRAL BUS:
MOUNTING: SURFACE
NOTES: EXISTING

100A-2P

SPARE	15A	1A	2		
P2	15A	1B			
	2P	3A	4		
B2	15A	3B			
SPARE	15A	5A	6		
P3	15A	5B			
	2P	7A	8A		
B3	15A	7B	8B		
SPARE	15A	9A	10A		
P4	15A	9B	10B		
	2P	11A	12		
B4	15A	11B			

EXISTING PANEL 'PP-B2'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

SPACE	15A	1	2	15A	SPACE
SPACE	15A	3	4	15A	SPACE
SPACE	15A	5	6	15A	SPACE
MECH P2	15A	7	8	15A	OW P1
		9	10		
	3P	11	12	3P	
MECH P1	15A	13	14	15A	OW P2
		15	16		
	3P	17	18	3P	
FAN COIL PUMP	15A	19	20	15A	X
		21	22	40A	LAN ROOM SECURITY
	3P	23	24	2P	
CONTROL	15A	25	26	15A	SPACE
MAIN ELECTRICAL ROOM HEATER	30	27	28	15A	SPACE
	2P	29	30	15A	SPACE
SPACE	15A	31	32	15A	SPACE
SPACE	15A	33	34	15A	SPACE
SPACE	15A	35	36	15A	SPACE

PANEL 'DP-1'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 400A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

EXISTING LOAD	15A	1	2	15A	EXISTING LOAD
EXISTING LOAD	15A	3	4	15A	EXISTING LOAD
EXISTING LOAD	15A	5	6	15A	EXISTING LOAD
EXISTING LOAD	15A	7	8	15A	EXISTING LOAD
EXISTING LOAD	15A	9	10	15A	EXISTING LOAD
EXISTING LOAD	15A	11	12	15A	EXISTING LOAD
EXISTING LOAD	15A	13	14	15A	EXISTING LOAD
EXISTING LOAD	15A	15	16	15A	EXISTING LOAD
EXISTING LOAD	15A	17	18	15A	EXISTING LOAD
SPACE		19	20		SPACE
SPACE		21	22		SPACE
SPACE		23	24		SPACE
DOMESTIC BOILER	15A	25	26		SPACE
	2P	27	28		SPACE
SPACE		29	30		SPACE
SPACE		31	32	200A	PANEL '133 LIGHTS'
EXISTING LOAD	15A	33	34		
	2P	35	36	3P	
EXISTING LOAD	70A	37	38	100A	PANEL 'MUSIC ROOM'
	2P	39	40		
SPACE		41	42	3P	

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 35000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

KITCHEN MAIN SWITCH	100A	43	44	100A	KITCHEN SUB PANEL
	2P	45	46		
GYM	90A	47	48	3P	
	2P	49	50	30A	WELDER
P2	15A	51	52	2P	
	2P	53	54	70A	STAGE SWITCH
B2	15A	55	56		
P3	15A	57	58	3P	
	2P	59	60	60A	CAFETERIA SUB PANEL
B3	15A	61	62		
P4	15A	63	64	3P	
	2P	65	66	15A	EXISTING LOAD
B4	15A	67	68	15A	EXISTING LOAD
P1	15A	69	70	15A	EMER. LIGHTS
	2P	71	72		SPACE
B1	15A	73	74	100A	PANEL PP-10A
EXISTING LOAD	15A	75	76		
SPACE		77	78	3P	
SPARE	15A	79	80	20A	SPARE
SPARE	15A	81	82	20A	SPARE
SPARE	15A	83	84	20A	SPARE

PANEL 'PP9'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 200A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

TIMER	15A	1	2	15A	PLUGS
H.W. CIURC. PUMP	15A	3	4	15A	PLUGS
EXH. FAN #1	15A	5	6	15A	GAS HEATER & PUMP
SPARE	15A	7	8	15A	S.B.
OIL HEAT TRANS	20A	9	10	15A	FEED PUMP #1
	2P	11	12		
FEED PUMP #2	15A	13	14	3P	
		15	16	15A	H.W. HEAT CIRC. PUMP
	3P	17	18		
GIRLS CHANGEROOM HAIR DRYER	20A	19	20	3P	
	2P	21	22		SPACE
HONEYWELL PANEL	15A	23	24		SPACE
UNIT HEATER	15A	25	26		SPACE
MUSIC ROOM RECEPTACLES	15A	27	28		SPACE
	2P	29	30		SPACE
SPACE		31	32		SPACE
SPACE		33	34		SPACE
SPACE		35	36		SPACE
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

HEATING CIRC. PUMP	15A	43	44	20A	VACUUM PUMP-2
		45	46		
	3P	47	48	3P	
SEWAGE PUMP	20A	49	50	15A	VACUUM PUMP-1
	3P	51	52		
	3P	53	54	3P	
BELL PHONE	15A	55	56	70A	BOILER ROOM PANEL 'PP-B2'
		57	58		
	3P	59	60	3P	
BOILER DISCONNECT	100A	61	62	15A	ELEV. ROOM
		63	64	15A	ELEV. CAB
	3P	65	66	15A	ELEV. SHAFT
SPACE		67	68		SPACE
SPACE		69	70		SPACE
SPACE		71	72		SPACE
SPACE		73	74		SPACE
SPACE		75	76		SPACE
SPACE		77	78		SPACE
SPARE	20A	79	80	15A	SPARE
SPARE	20A	81	82	15A	SPARE
SPARE	20A	83	84	15A	SPARE

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

DEMOLISHED PANEL 'HW1' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS:
MOUNTING: SURFACE
NOTES: EXISTING

BOILER ROOM
1056

SPACE	15A	1			
		2			
		3			
		4			
		5			
		6			
		7			
	15A	8			

DEMOLISHED PANEL 'PP-9'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 400A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: TYPE NDP

BOILER ROOM
1056

		1	2		
		3	4		
		5	6		
		7	8		
		9	10	15A	SPACE
SPACE	15A	11	12	15A	SPACE
SPACE	15A	13	14	15A	SPACE
SPARE	15A	15	16		
	3P				
		17	18		

HEATING CIRC. PUMP	15A	1	2	20A	VACUUM PUMP-2
	3P			3P	
SEWAGE PUMP	20A	3	4	15A	VACUUM PUMP-1
	3P			3P	
BELL PHONE	15A	5	6	70A	BOILER ROOM PANEL 'PP-B2'
	3P			3P	
SPARE	15A	7	8	15A	ELEV. ROOM
			10	15A	ELEV. CAB
	3P		12	15A	ELEV. SHAFT
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE
SPACE	15A				SPACE

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
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AS-BUILT DRAWINGS
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Seal

Project North
True North

Project

SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title

PANEL SCHEDULES
4 OF 5

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
55 Northland Road, Waterloo, ON N2V 1Y8
Phone: 519-725-3555
Website: deiassociates.ca

Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	
Project No.	Drawing No.	
20343	E404	

DEMOLISHED PANEL 'A'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

EXISTING LOAD	15A	1	2	15A	CORRIDOR LIGHTS
HALL PLUG UNDER PAY PHONES	15A	3	4	15A	WEST ENTRANCE STAIRS
EXISTING LOAD	15A	5	6	15A	WEST STAIRS W. ROOM
EXISTING LOAD	15A	7	8	15A	CORRIDOR LIGHTS
EXISTING LOAD	15A	9	10	15A	CORRIDOR REC
EXISTING LOAD	15A	11	12	15A	CORRIDOR CABINET HEATERS
EXISTING LOAD	15A	13	14	15A	CABINET HEATER, EAST STAIRS
EXISTING LOAD	15A	15	16	15A	EQUIP RM TROPHY CASE LIGHTS
EXISTING LOAD	15A	17	18	15A	PHYS ED OFFICE LIGHTS
WALL PLUG	15A	19	20	15A	SHOWER HEATER
EXISTING LOAD	15A	21	22	2P	
EXISTING LOAD	15A	23	24	15A	SHOWCASE HALLWAYS LIGHTS
	3P			3P	
EXISTING LOAD	XXA	25	26	XXA	SPACE
				3P	
		27	28	XXA	EXISTING LOAD
				3P	
	6P	29	30	XXA	AUTO SHOP PANEL 'F'
				3P	
PANEL 'X'	XXA	31	32	15A	ELECTRICAL ROOM PANEL 'PP-??'
	3P			3P	
		33	34	100A	2ND FLOOR PANEL 'D'
				3P	
		35	36	100A	ELECTRICAL ROOM PANEL 'E'
				3P	

DEMOLISHED PANEL 'E'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

AUDITORIUM CURTAIN	15A	1	2	15A	PENTHOUSE FANS
		3	4		
	3P	5	6	3P	
CLASSROOM FANS	15A	7	8	15A	AUTO SHOP TOILET FANS
		9	10		
	3P	11	12	3P	
RETURN PUMPS	20A	13	14	15A	VACUUM PUMP
		15	16		
	3P	17	18	3P	EXISTING LOAD
COMPRESSOR	40A	19	20		
		21	22		
	3P	23	24		
		25	26		
		27	28		
		29	30		
		31	32		
		33	34		
		35	36		

DEMOLISHED PANEL 'X'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 100A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES:

EXISTING LOAD	20A	2	1	15A	SPARE
EXISTING LOAD	20A	4	3	20A	TUCK SHOP
EXISTING LOAD	15A	6	5	20A	TUCK SHOP
CLASSROOM FANS	20A	8	7	20A	TUCK SHOP
EXISTING LOAD	20A	10	9	15A	GYMNASIUM UNIT HEATER
PHY. OFFICE	15A	12	11	15A	RM 1014 REC
PUMP712	15A	14	13	15A	RM 1014 REC
		16	15	15A	EXISTING LOAD
	3P	18	17	15A	EXISTING LOAD
		20	19	15A	EXISTING LOAD
		22	21	15A	EXISTING LOAD
		24	23	15A	EXISTING LOAD

PANEL 'A'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: C/W SPRINKLER HOOD

EXISTING LOAD	15A	1	2	15A	CORRIDOR LIGHTS
HALL PLUG UNDER PAY PHONES	15A	3	4	15A	WEST ENTRANCE STAIRS
EXISTING LOAD	15A	5	6	15A	WEST STAIRS W. ROOM
EXISTING LOAD	15A	7	8	15A	CORRIDOR LIGHTS
EXISTING LOAD	15A	9	10	15A	CORRIDOR REC
EXISTING LOAD	15A	11	12	15A	CORRIDOR CABINET HEATERS
EXISTING LOAD	15A	13	14	15A	CABINET HEATER, EAST STAIRS
EXISTING LOAD	15A	15	16	15A	EQUIP RM TROPHY CASE LIGHTS
EXISTING LOAD	15A	17	18	15A	PHYS ED OFFICE LIGHTS
WALL PLUG	15A	19	20	15A	SHOWER HEATER
EXISTING LOAD	15A	21	22	2P	
EXISTING LOAD	15A	23	24	15A	SHOWCASE HALLWAYS LIGHTS
		25	26		
	3P	27	28	3P	
EXISTING LOAD	XXA	29	30	XXA	AUTO SHOP PANEL 'F'
		31	32		
	3P	33	34	3P	
EXISTING LOAD	XXA	35	36	15A	ELECTRICAL ROOM PANEL 'PP-??'
		37	38		
	3P	39	40	3P	
		41	42		
		43	44		
		45	46		
		47	48		
		49	50		
		51	52		
		53	54		
		55	56		
		57	58		
		59	60		

* INDICATES 33mA GROUND FAULT STYLE BREAKER

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X	XXP	61	62	100A	2ND FLOOR PANEL 'D'
		63	64		
	3P	65	66	3P	
AUDITORIUM CURTAIN	15A	67	68	15A	PENTHOUSE FANS
		69	70		
	3P	71	72	3P	
CLASSROOM FANS	15A	73	74	15A	AUTO SHOP TOILET FANS
		75	76		
	3P	77	78	3P	
RETURN PUMPS	20A	79	80	15A	VACUUM PUMP
		81	82		
	3P	83	84	3P	EXISTING LOAD
COMPRESSOR	40A	85	86	15A	SPARE
		87	88	20A	TUCK SHOP
	3P	89	90	20A	TUCK SHOP
EXISTING LOAD	20A	91	92	20A	TUCK SHOP
EXISTING LOAD	20A	93	94	15A	GYMNASIUM UNIT HEATER
EXISTING LOAD	15A	95	96	15A	RM 1014 REC
CLASSROOM FANS	20A	97	98	15A	RM 1014 REC
EXISTING LOAD	20A	99	100	15A	EXISTING LOAD
PHY. OFFICE	15A	101	102	15A	EXISTING LOAD
PUMP712	15A	103	104	15A	EXISTING LOAD
		105	106	15A	EXISTING LOAD
	3P	107	108	15A	EXISTING LOAD
		109	110		
		111	112		
		113	114		
		115	116		
		117	118		
		119	120		

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 22000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
A	21.03.25	ISSUED FOR TENDER	JJ
B	21.05.19	ISSUED FOR CONSTRUCTION	JJ
C	21.06.15	ISSUED FOR REVISED LAYOUT	JJ
D	21.12.14	ISSUED FOR AS BUILT	JJ

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Seal

Project North
True North

Project
SIMCOE COMPOSITE SECONDARY SCHOOL ELECTRICAL UPGRADES
40 WILSON DRIVE, SIMCOE, ON N3Y 2E5

Sheet Title
PANEL SCHEDULES 5 OF 5

DEI Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC
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Phone: 519-725-3555
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Drawn by	Checked by	Approved by
CP	SD	JJ
Scale	Project Date	Print Date
AS NOTED	DEC 2020	

Project No.	Drawing No.
20343	E405

LIMITED DESIGNATED SUBSTANCE SURVEY REPORT

Refer to next page.

MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS

LIMITED DESIGNATED SUBSTANCE SURVEY REPORT (LIBRARY COMMONS RENOVATION)

Woodman-Cainsville School
51 Woodman Drive
Brantford Ontario

Presented to:
Grand Erie District School Board
349 Erie Avenue
Brantford, Ontario
N3T 5V3

Attention: Tyler Bender

Via: tyler.bender@granderie.ca

January 10, 2024

Maple Project No. 21468

EXECUTIVE SUMMARY

Maple Environmental Inc. ('Maple') was retained by the Grand Erie District School Board (GEDSB) to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the selected areas of Woodman-Cainsville School located at 51 Woodman Drive, Brantford, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed renovations of the library commons.

The survey was limited to: Ebase 16 (LRT Office), Ebase 19 (Custodian), Ebase 20 (Boy's Washroom), Ebase 21 (Girl's Washroom), Ebase 22 (Corridor), Ebase 23 (Classroom), and Ebase 32 (Guidance). The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

Asbestos

Asbestos-containing materials (ACM) identified within the surveyed area at the time of the assessment are as follows:

- Off-white primer (applied to the masonry block walls)
- Transite Panels
- Drywall joint compound

It should be noted that due to the presence of solid walls and ceilings (i.e. cinder block walls and above solid ceilings) throughout the survey area, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

Lead

Based on the Laboratory Analysis Report for lead samples and visual observations made during the fieldwork:

- One (1) bulk sample was collected of the predominant paint colour and the results indicated that the painted surface is not to be considered lead-containing.
- It should be noted that lead may also be present in wiring connectors, electric cable sheathing, solder joints on copper piping, ceramic glazes, lead sheeting, masonry mortar, and as sub-surface layers to the most recent paint layers currently applied, where present at the Site.

Mercury

- Mercury vapour is present in all fluorescent light tubes.

Silica

- Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present within the surveyed areas.

Mould

- No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

- It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

PCBs

- The fluorescent lamp fixtures observed contained T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

Recommendations

Based on the Laboratory Analytical Results and observations made on Site, Maple provides the following recommendations.

- Remove all asbestos-containing materials that may be disturbed during the planned renovation using the appropriate asbestos abatement procedures as outlined in Section 5.0 of the Report.
- Low Level Lead paints (0.1% or less) are considered virtually safe provided that;
    - airborne lead concentrations are kept below 0.05 mg/m^3
    - general dust suppression and worker hygiene procedures are utilized
    - torching or other activities that create fumes are not completed
- Remove all mercury containing components (including fluorescent light tubes) prior to renovations if the materials are being removed. These components should be removed intact and disposed of appropriately.
- Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the surveyed area should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

Appropriate procedures for asbestos, mercury, and silica, must be observed if these materials are likely to be disturbed by scheduled renovations. Please refer to Section 5.0 of the report to review the required procedures.

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1.0 INTRODUCTION

Maple Environmental Inc. ('Maple') was retained by the Grand Erie District School Board (GEDSB) to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the selected areas of Woodman-Cainsville School located at 51 Woodman Drive, Brantford, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed renovations of the library commons.

The survey was limited to: Ebase 16 (LRT Office), Ebase 19 (Custodian), Ebase 20 (Boy's Washroom), Ebase 21 (Girl's Washroom, Ebase 22 (Corridor), Ebase 23 (Classroom), and Ebase 32 (Guidance).

Section 30 of the Ontario Occupational Health and Safety Act requires that the following Designated Substances be included in a Designated Substance Survey:

Asbestos	***Benzene***
Lead	***Acrylonitrile***
Mercury	***Coke Oven Emissions***
Silica	***Arsenic***
Isocyanates	***Ethylene Oxide***
Vinyl Chloride Monomer	

Additional detailed information with respect to asbestos was collected at the time of the survey to ensure compliance with Ontario Regulation 278/05.

The assessment was performed by Walker Davidson of Maple on December 18, 2023.

2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

2.1 Designated Substances and Other Hazardous Materials

Section 30 of the Occupational Health and Safety Act requires building owners or their agents (architects, general contractors, etc.) to prepare or have prepared a Designated Substance report for specified potentially hazardous materials possibly present in a facility. The owner must ensure that a prospective constructor has received a Designated Substance report before entering into a binding contract with the contractor. The owner is liable to the contractor for damages and costs arising from unreported materials (of which the owner should reasonably have been aware), and could also be subject to orders and fines from the Ministry of Labour.

In addition to the requirements under the Occupational Health and Safety Act, Section 6 of the Ministry of Labour Regulations for Construction Projects requires the contractor, when submitting the Notice of Project form, report any Designated Substances likely to be used, handled or disturbed during the project.

The disturbance of asbestos materials on construction projects is controlled by Ministry of Labour Regulation R.R.O. 2005/278. The disposal of asbestos waste is controlled by Ministry of Environment Regulation, R.R.O. 1990/347.

There are no specific Ministry of Labour regulations for control of the other Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Health and Safety Act which protects workers and provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc. for all Designated Substances.

Although Regulations exist for many of the Designated Substances, they apply to industry settings using Designated Substances in manufacturing processes, and do not apply to general property management, renovation or maintenance of buildings.

Polychlorinated Biphenyls ("PCBs") and mould were also included in the investigation, which are not specifically named as Designated Substances. No specific regulations are attached to these materials, but are generally governed by the due diligence section of the Health and Safety Act for employers to protect their workers.

2.3 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

2.4 Ontario Regulation 362

Ontario Regulation 362, made under the Ontario Environmental Protection Act applies to the waste management and transport of PCB waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

3.0 SURVEY SCOPE AND METHODOLOGY

The survey was limited to: Ebase 16 (LRT Office), Ebase 19 (Custodian), Ebase 20 (Boy's Washroom), Ebase 21 (Girl's Washroom, Ebase 22 (Corridor), Ebase 23 (Classroom), and Ebase 32 (Guidance).

The methodology included the assessment for hazardous materials and how the assessment was performed is outlined below.

In order to determine the location of materials included in the assessment, the project technologist entered the room where practical (i.e. where access was possible without the demolition of walls, roof or ceilings or destruction of flooring). Representative views were made above accessible suspended ceiling systems. Cavities within solid ceiling and wall systems were accessed via existing access panels only. The inventory did not include demolition of building systems or finishes to check on possible hidden conditions.

3.1 Asbestos-Containing Building Materials (ACM)

The scope of the survey included all friable asbestos products and all major non-friable asbestos materials. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include: sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles, drywall joint compounds and vinyl sheet flooring are classified as non-friable, but because of their ability to release dust when disturbed are considered as "potentially friable" for the purpose of this report.

Bulk samples of materials suspected to contain asbestos were collected for analysis during the survey. Specifically, a small volume of material was removed either from a damaged section of suspect material, or taken from intact material. In these latter cases, the material from which the sample was collected was sealed with tape to temporarily prevent fibre release. Samples were placed in plastic bags and sealed until receipt by an independent laboratory. To ensure quality results, the independent laboratory chosen successfully participates in an "Asbestos Proficiency Analytical Testing Program". As such, these independent laboratories are responsible for their findings.

Bulk samples were collected in accordance with regulatory sampling requirements and with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire Site. It is important to note that without sampling each individual wall, pipe section, ceiling tile etc. it is not possible to identify the asbestos content of every material present in the selected areas. For this reason, visually similar materials are considered to be homogenous with those already sampled elsewhere in the building without additional analysis.

O. Reg. 278/05 prescribes that a minimum number of samples be collected of materials suspected to contain asbestos. These minimum sampling requirements are summarized in Table 1, below.

Table 1 - Suspect ACM Bulk Sampling Requirements

Type of Material	Quantity of Material Present	Minimum # of Bulk Samples Required
Surfacing Materials (i.e. sprayed fireproofing, drywall joint compound, texture coat, and plaster)	Up to 90 sq. m. (1000 sq. ft.)	3
	From 90 sq. m. (1000 sq. ft.) to 450 sq. m. (5000 sq. ft.)	5
	Greater than 450 sq. m. (5000 sq. ft.)	7
All other potential ACM	Any	3

Excluding surfacing materials, the laboratory was instructed to cease analysis within Sample Groups of homogenous materials when one of the samples in the group is found to contain asbestos. For example, if three samples of a type of vinyl floor tile are collected (as required by O. Reg. 278/05) and submitted for analysis and the first sample is positively identified as containing asbestos, the balance of the sample group is not analysed.

EMC Scientific (EMC) an independent laboratory, was selected to analyse the collected bulk suspect asbestos samples. EMC successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, is responsible for its findings. EMC followed the Code of Practice for the identification of asbestos in bulk material, as detailed in O. Reg. 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

The recommendations made as part of this report with respect to asbestos have taken into consideration: the condition and accessibility of the material, vibration, air movement, and general activities likely to occur within the vicinity of the ACM.

In each area or room inventoried, the technician recorded the quantity, condition (GOOD, FAIR, or POOR) of each suspect asbestos-containing material.

The definitions for condition and accessibility of the asbestos-containing items are as follows:

GOOD Material is intact with no visible signs of damage.

FAIR Material is visibly damaged but can be repaired.

POOR Material is damaged beyond repair and likely needs to be removed.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation would be to re-evaluate the condition of the material on an annual basis (required by O. Reg. 278/05). This recommendation can be subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where ACM is found to be damaged (i.e. FAIR or POOR condition), a recommendation to have the material cleaned-up, repaired, removed, enclosed, or encapsulated is offered. The recommendation will also indicate which asbestos procedure should be used to perform the remedial work (i.e. Type 1, Type 2, Type 3, or Glove Bag Removal Methods).

3.2 Lead

The investigation included the collection and analysis of all major paint colour applications for the presence of lead in the paint. Other materials that possibly contain lead were identified by known historic use, where relevant. The lead in paint samples were analysed by EMSL, using atomic absorption spectrophotometry. EMSL is AIHA (American Industrial Hygiene Association) and NIOSH (National Institute of Occupational Safety and Health) accredited for this type of analysis. The Laboratory Analysis Report for lead in paint samples is included with this Report as Appendix II.

3.3 Mercury

The assessment included a visual identification of fluorescent light tubes, switches, electrical controls, heating system thermostats, thermometers, and other components historically known to contain mercury.

3.4 Other Designated Substances

Other materials listed in Section 1.0 of this Report were identified on a visual basis where present, as part of the current assessment. It should be noted that no manufacturing or heavy industrial activities are known by Maple to occur at the Site. Therefore, Designated Substances associated with these activities (i.e. those other than Asbestos, Lead, Mercury, and Silica) would not be expected to be present in the selected areas.

3.5 Mould

The assessment for mould was conducted in accordance with standard industry practice as set out in the Canadian Construction Association (CCA) "Mould Guidelines for the Canadian Construction Industry" for a visual assessment. Although there are no regulatory requirements in Ontario for such an assessment, the CCA Guidelines, and similar guidelines from other agencies have been accepted as the industry standard by most experts, consultants, the Ontario Ministry of Labour, and the Canadian Construction Association.

All guidelines and protocols for mould investigations indicate that investigations should be performed largely on a visual basis with limited collection of bulk and/or air samples. The Ontario Ministry of Labour has consistently enforced the removal of all mould from buildings regardless of mould genus or species, and therefore bulk samples or air samples for confirmation of mould are not typically collected for investigative purposes where mould is visible.

3.6 Polychlorinated Biphenyls

Manufacturers labels/codes collected from fluorescent lamp ballasts suspected of containing Polychlorinated Biphenyls ("PCBs") are compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs", which identifies PCB-containing ballasts.

3.7 Limitations and Omissions from Scope

Due to the nature of building construction some limitations exist as to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the Site investigation. Maple believes that the information collected during the investigation concerning the property is reliable. No other warranties are implied or expressed.

During a standard ACM inventory performed for the purposes of regulatory compliance, it is industry practice to exclude certain suspect asbestos-containing materials from sampling. These materials are often excluded from sampling due to the risk of compromising the health and safety of the technician, other building occupants, or the integrity of the systems with which these materials are associated. Examples of such materials include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking and levelling compound. Where observed, these materials were presumed to be ACM.

3.8 Drawings

Drawings included in Appendix III will indicate the locations of any major applications of an asbestos-containing material with the exception of mechanical insulations, drywall, plaster finishes and transite (which cannot be accurately depicted on drawings). The information depicted on the drawings is not to scale and is only meant to provide a general representation of the locations of asbestos-containing materials.

4.0 INVENTORY FINDINGS

The findings of the survey are presented separately below for each of the eleven Designated Substances as well as microbial growth (mould), and polychlorinated biphenyls. Asbestos is further detailed by typical applications of asbestos.

4.1 Asbestos

The following is a brief discussion of the extent to which ACM was identified in the surveyed area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. The sample numbers refer to the laboratory analysis report presented as Appendix I and summarised in Table 2 below. Twenty-four (24) bulk samples were collected for the determination of asbestos content and submitted to the lab to be analysed. Due to the presence of more than one phase of material in some of the original samples the laboratory may have performed multiple analyses for some samples. In addition, some of the samples may not have been analysed due to the positive confirmation of asbestos in a previous sample of the same material during analysis. As a result, a total of thirty (30) samples were analyzed.

Table 2 - Summary of Analysis of Asbestos Bulk Samples

Sample No.	Room Name	Sample Description	Result
S01A	**Ebase 23 (Classroom)**	**Off White Primer**	**1% Chrysotile**
		Masonry Block Mortar	<0.5% Chrysotile
S01B	**Ebase 32 (Guidence)**	**Off White Primer**	**1% Chrysotile**
		Masonry Block Mortar	None Detected
S01C	**Ebase 22 (Corridor)**	**Off White Primer**	**1% Chrysotile**
		Masonry Block Mortar	None Detected
S02A	Ebase 32 (Guidence)	Drywall Joint Compound	None Detected
S02B	Ebase 32 (Guidence)	Drywall Joint Compound	None Detected
S02C	Ebase 32 (Guidence)	Drywall Joint Compound	None Detected
S03A	Ebase 20 (Boy's Washroom)	Drywall Joint Compound	None Detected
S03B	Ebase 20 (Boy's Washroom)	Drywall Joint Compound	None Detected
S03C	Ebase 20 (Boy's Washroom)	Drywall Joint Compound	None Detected
S04A	Ebase 20 (Boy's Washroom)	2x2 Acoustic Ceiling Tile	None Detected
S04B	Ebase 21 (Girl's Washroom)	2x2 Acoustic Ceiling Tile	None Detected
S04C	Ebase 22 (Corridor)	2x2 Acoustic Ceiling Tile	None Detected
S05A	Ebase 16 (LRT Office)	Drywall Joint Compound	None Detected
S05B	Ebase 16 (LRT Office)	Drywall Joint Compound	None Detected
S05C	Ebase 16 (LRT Office)	Drywall Joint Compound	None Detected
S06A	Ebase 16 (LRT Office)	12x12 Grey Vinyl Floor Tile	None Detected
		Yellow Mastic	None Detected
S06B	Ebase 16 (LRT Office)	12x12 Grey Vinyl Floor Tile	None Detected
		Yellow Mastic	None Detected
S06C	Ebase 16 (LRT Office)	12x12 Grey Vinyl Floor Tile	None Detected
		Yellow Mastic	None Detected
S07A	Ebase 19 (Custodian)	Drywall Joint Compound	None Detected
S07B	Ebase 19 (Custodian)	Drywall Joint Compound	None Detected
S07C	Ebase 19 (Custodian)	Drywall Joint Compound	None Detected
S08A	Ebase 21 (Girl's Washroom)	Drywall Joint Compound	None Detected
S08B	Ebase 21 (Girl's Washroom)	Drywall Joint Compound	None Detected
S08C	Ebase 21 (Girl's Washroom)	Drywall Joint Compound	None Detected

Asbestos-containing materials (ACM) are present in the form of off-white primer (associated with masonry block walls), transite panels and drywall joint compound. Details for all confirmed and suspect asbestos-containing materials are presented below under the headings of the most typical asbestos applications in buildings.

It should be noted that due to the presence of solid walls and ceilings (i.e. cinder block walls and above solid ceilings) throughout the survey area, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing

materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

4.1.1 Sprayed Fireproofing

No sprayed fireproofing was identified within the surveyed area at the time of the assessment.

4.1.2 Thermal Mechanical Insulation (Friable)

No asbestos-containing mechanical insulations are present in the surveyed area.

Piping Systems:

Pipe systems observed within the surveyed area were either not insulated or were insulated with fibreglass, which is not suspected to contain asbestos.

Duct Systems

Duct systems observed within the surveyed area were observed to be either un-insulated or were insulated with foil-face fibreglass insulation which is not suspected to contain asbestos.

Mechanical Equipment

Radiators, and heaters were observed to be externally un-insulated.

4.1.3 Texture Finish (Friable)

No textured finishes were identified within the surveyed area at the time of the assessment.

4.1.4 Acoustic Ceiling Tiles (Potentially Friable)

No asbestos-containing acoustic ceiling tile systems were identified within the surveyed area at the time of the assessment.

Two (2) visually distinct types of ceiling tile systems were observed in the surveyed area. A brief description of each type of ceiling tile is outlined below.

- AT-01 (2x4 Width-wise Fissures and Random Pinholes):

  AT-01 was observed to be present in Ebase 23 (Classroom).

  No bulk samples of AT-01 were collected as a date stamp manufacture code (05/06/01) was present on the backside of the tile indicating that the tiles were recently manufactured and therefore not suspected to contain asbestos.

- AT-02 (2x2 Horizontal Fissures and Pinholes):

  AT-02 was observed to be present in Ebase 20 (Boy's Washroom), Ebase 21 (Girl's Washroom), and Ebase 22 (Corridor).

  Three (3) representative samples (Sample Set S-04) of AT-02 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-04 found that the samples do not contain asbestos.

4.1.5 Vinyl Sheet Flooring (Potentially Friable)

No vinyl sheet flooring finishes were identified within the surveyed area at the time of the assessment.

4.1.6 Vinyl Floor Tile (Non-Friable)

Two (2) visually distinct types of vinyl floor tiles systems were observed in the surveyed area. A brief description of each type of vinyl floor tile is outlined below.

- VFT-01 (12x12 Grey with White and Grey Chunks)

  VFT-01 was observed to be present in Ebase 16 (LRT Office)

  Three (3) representative samples (Sample Set S-06) of VFT-01 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-06 found that the samples do not contain asbestos. Yellow mastic associated with the tile were also analyzed and were found not to contain asbestos.

- VFT-02 (2'x2' Beige with light beige streaks)

  VFT-02 was observed to be present in Ebase 23 (Classroom)

  No representative samples of VFT-02 were collected as the size of the tile is known to be newer and is not asbestos containing.

4.1.7 Asbestos Cement Products "Transite" (Non-Friable)

Transite cement products in the form of transite panels were identified on the underside of the coat racks within Ebase 22 (Corridor) at the time of the assessment.

No representative bulk samples of transite were collected. Transite cement products are historically known to contain Chrysotile, Amosite and/or Crocidolite Asbestos. Visual identification of this material is usually reliable although a non-asbestos equivalent is also available. The material is assumed to contain asbestos until sampling proves otherwise.

4.1.8 Drywall Joint Compound (DJC) (Potentially Friable)

Drywall joint compound was identified within the surveyed area at the time of the assessment.

Interior drywall finishes were present in the form of wall and ceiling finishes within the majority of the surveyed area.

Fifteen (15) representative samples of drywall joint compound were collected and analyzed for determination of asbestos content.

Three samples were collected from each unique Ebase location as five (5) separate sample sets (S02A-C, S03A-C, S05A-C, S07A-C, and S08A-C).

Analysis of Sample of the drywall joint compound found that the samples do not contain asbestos.

While current sample results for drywall joint compound within the surveyed area was found to not contain asbestos, previous sampling conducted by Maple (Project No. 20736 S01A-C) found that drywall joint compound within Ebase 22 (Corridor) above Coat Area contains **0.5% Chrysotile Asbestos.** Drywall joint compound within Ebase 22 (Corridor) should be considered as asbestos-containing until further sampling proves otherwise.

4.1.9 Plaster (Potentially Friable)

No plaster finishes were identified within the surveyed area at the time of the assessment.

4.1.10 Vermiculite (Friable)

No vermiculite insulation was observed to be present within the surveyed area at the time of the assessment. It should be noted that loose fill vermiculite insulation can often be present within voids of masonry and possibly some pre-manufactured surveyed area components that would not be identified during the course of this assessment.

4.1.11 Other

- **Masonry Block Mortar**

  Three (3) representative samples of masonry block mortar were collected (Sample Set S-01) and analyzed for asbestos. Analysis of Sample Set S-01 found that the samples do not contain asbestos, however the associated off-white primer analyzed with Sample Set S-01 was found to contain **1% Chrysotile Asbestos**

4.2 Lead

One (1) bulk paint sample was collected for determination of lead content and submitted to EMSL for analysis during the assessment. The sample number refers to the Certificate of Analysis Report presented as Appendix II and summarised in Table 3 below.

Table 3 - Summary of Analysis of Lead-in-Paint Samples

Sample No.	Locations	Sample Description	Result (%)
Lp-01	Ebase 32 (Guidence)	Off-White Wall Paint	<0.0080

No regulations currently exist in Ontario defining the lower limit of lead-containing material. The Ontario Ministry of Labour (MOL) has issued a guideline for lead abatement, entitled Guideline – Lead on Construction Projects (2004) which is considered enforceable. The Guideline does not specify what constitutes a material as "lead-containing". Instead, it outlines procedures based on the concentration of airborne lead encountered during removal, as well as provides procedures and/or specific operations for lead-containing material removal. However, the Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair document classifies paint as either Low-Level, Lead-Containing, or Lead-Based as follows:

TABLE 4 EACC Classification of Lead Paint	
Concentration of Lead (%)	**Definition**
0.1 or less	Low Level Lead (Virtually Safe)
Greater than 0.1 but less than 0.5	Lead-Containing
0.5 or greater	Lead-Based

Based on these criteria and the results of the sample analysis, off-white wall paint sampled is considered to be Low-Level Lead (virtually safe).

4.3 Mercury

Mercury vapour is present in all fluorescent light tubes.

4.4 Silica

Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present in the Select areas surveyed.

4.5 Isocyanates

Free isocyanate compounds would not be expected to be found in a non-manufacturing facility.

4.6 Vinyl Chloride Monomer

Vinyl chloride monomer would not be expected to be found in a non-manufacturing facility.

4.7 Benzene

Benzene would not be expected to be found in a non-manufacturing facility.

4.8 Acrylonitrile

Acrylonitrile would not be expected to be found in a non-manufacturing facility.

4.9 Coke Oven Emissions

Coke oven emissions would not be expected to be found in a non-manufacturing facility.

4.10 Arsenic

Arsenic would not be expected to be found in a non-manufacturing facility.

4.11 Ethylene Oxide

Ethylene oxide would not be expected to be found in a non-manufacturing facility.

4.12 Mould

No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

4.13 Polychlorinated Biphenyls (PCBs)

The fluorescent lamp fixtures observed contained T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

All transformers observed on site were new and not suspected to contain PCBs.

5.0 RECOMMENDATIONS

5.1 Asbestos

Asbestos-containing materials within the surveyed area include:

- Off-White Primer (associated with masonry block walls)
- Drywall Joint Compound limited to Ebase 22 (Corridor)
- Transite Ceiling Panels

General recommendations for each of the confirmed asbestos-containing materials are as follows.

- Removal or disturbance of primer-coated masonry block wall finish requires Type 2 asbestos procedures.
- Removal or disturbance of **1m^2 or less** of drywall with asbestos-containing drywall joint compound requires the use of Type 1 Asbestos Procedures. Removal or disturbance of **more than 1m^2** of the subject material(s) requires the use of Type 2 Asbestos Procedures.
- Removal or disturbance of non-friable asbestos-containing transite ceiling panels requires the use of Type 1 Asbestos Procedures provided that no power tools are utilized. In the event that power tools are needed, the use of Type 3 Asbestos Procedures are required the remove the subject material.

It is important to note that due to the presence of solid wall and ceiling systems, the assessment was not able to confirm or deny the presence of ACM within wall and ceiling cavities. The presence of concealed ACM should be assumed as well as within rooms that were not accessible during the assessment. It is possible that ACM is present that was not identified in this report.

5.2 Lead

No paint finishes sampled were found to be lead-containing.

Low Level Lead paints (0.1% or less) are considered virtually safe provided that;

- airborne lead concentrations are kept below 0.05 mg/m^3
- general dust suppression and worker hygiene procedures are utilized
- torching or other activities that create fumes are not completed

5.3 Mercury

Mercury vapour is present in all fluorescent light tubes. All fluorescent light tubes should be handled and disposed of appropriately.

5.4 Silica

Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the building should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

6.0 LIMITATIONS

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. Maple believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

Information provided by Maple is intended for Client use ONLY. Any use by a third party, of reports or documents authored by Maple, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Maple accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

The liability of Maple or its staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Maple will not be responsible for any consequential or indirect damages. Maple will only be liable for damages resulting from negligence of Maple; all claims by the Client shall be deemed relinquished if not made within two years after last date of services provided.

Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

End of Report

Sincerely,

MAPLE ENVIRONMENTAL INC.
Environment, Health and Safety Consultants

Prepared By:	**Reviewed By:**
	
Walker Davidson ***Project Technologist***	**Mark Pollock** ***Project Manager***

G:\Shared drives\Projects 21000 - 21999\21400 - 21499\21468 GEDSB, Woodman-Cainsville, Library DSUB\Report\21468 GEDSB, Woodman-Cainsville Library DSUB Report.doc

APPENDIX I

LABORATORY ANALYSIS REPORT - ASBESTOS

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Walker Davidson
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A99014
Job/Project Name: Woodman-Cainsville
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Dec 20/23 **Date Analyzed:** Dec 27/23
Analyst: Elizabeth Mierzynski
Reviewed By: Malgorzata Sybydlo

Job No: 21468
Number of Samples: 24
Date Reported: Dec 27/23

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S01A	A99014-1[6]	Masonry block mortar/ ebase 23	2 Phases: a) Off white, primer b) Grey, cementitious material	**Chrysotile** **Chrysotile**	**1** **<0.5**		99 100
S01B	A99014-2[6]	Masonry block mortar/ ebase 32	2 Phases: a) Off white, primer b) Grey, cementitious material	**Chrysotile** **ND**	**1**		99 100
S01C	A99014-3[6]	Masonry block mortar/ ebase 22	2 Phases: a) Off white, primer b) Grey, cementitious material	**Chrysotile** **ND**	**1**		99 100
S02A	A99014-4	Drywall joint compound/ ebase 32	White, joint compound	**ND**			100
S02B	A99014-5	Drywall joint compound/ ebase 32	White, joint compound	**ND**			100
S02C	A99014-6	Drywall joint compound/ ebase 32	White, joint compound	**ND**			100
S03A	A99014-7	Drywall joint compound/ ebase 20	White, joint compound	**ND**			100
S03B	A99014-8	Drywall joint compound/ ebase 20	White, joint compound	**ND**			100
S03C	A99014-9	Drywall joint compound/ ebase 20	White, joint compound	**ND**			100
S04A	A99014-10	2x2 acoustic ceiling tile/ ebase 20	Grey, ceiling tile	**ND**		75	25
S04B	A99014-11	2x2 acoustic ceiling tile/ ebase 21	Grey, ceiling tile	**ND**		75	25

EMC LAB REPORT NUMBER: A99014
Client's Job/Project Name/No.: 21468
Analyst: Elizabeth Mierzynski

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S04C	A99014-12	2x2 acoustic ceiling tile/ ebase 22	Grey, ceiling tile	**ND**		75	25
S05A	A99014-13	Drywall joint compound/ ebase 16	Off white, joint compound	**ND**			100
S05B	A99014-14[7]	Drywall joint compound/ ebase 16	Off white, joint compound	**ND**			100
S05C	A99014-15	Drywall joint compound/ ebase 16	Off white, joint compound	**ND**			100
S06A	A99014-16	12x12 grey VFT/ ebase 16	2 Phases: a) Grey, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S06B	A99014-17	12x12 grey VFT/ ebase 16	2 Phases: a) Grey, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S06C	A99014-18	12x12 grey VFT/ ebase 16	2 Phases: a) Grey, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S07A	A99014-19	Drywall joint compound/ ebase 19	White, joint compound	**ND**			100
S07B	A99014-20	Drywall joint compound/ ebase 19	White, joint compound	**ND**			100
S07C	A99014-21	Drywall joint compound/ ebase 19	White, joint compound	**ND**			100
S08A	A99014-22	Drywall joint compound/ ebase 21	White, joint compound	**ND**			100
S08B	A99014-23	Drywall joint compound/ ebase 21	White, joint compound	**ND**			100
S08C	A99014-24	Drywall joint compound/ ebase 21	White, joint compound	**ND**			100

Note:

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A99014
Client's Job/Project Name/No.: 21468
Analyst: Elizabeth Mierzynski

1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos.
6. Phase b) is small in size.
7. Sample is small in size

APPENDIX II

LABORATORY ANALYSIS REPORT – LEAD

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 Or	552319775
CustomerID:	55MAPL78
CustomerPO:	21468
ProjectID:	

Attn: **Walker Davidson**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 01:23 PM
Collected:	12/18/2023

Project: **21468 Woodman-Cainsville**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
Pb-01	12/18/2023	12/21/2023	0.2533 g	0.0080 % wt	<0.0080 % wt
552319775-0001	Site: Room 32				

Rowena Fanto, Lead Supervisor
or other approved signatory

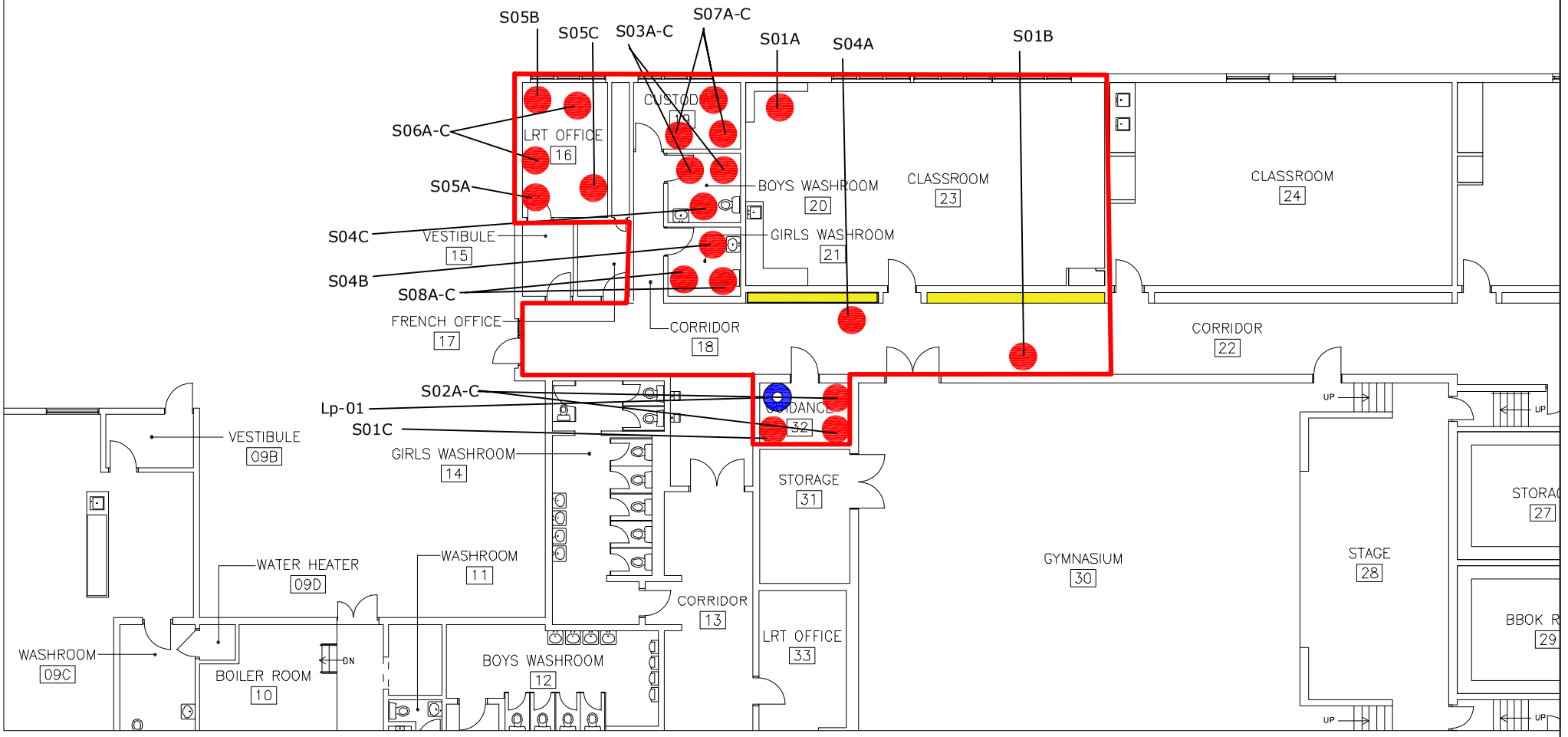
EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample 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 Accredited #196142

Initial report from 12/29/2023 08:23:50

APPENDIX III

DRAWINGS

NOTE:
1. ACM primer applied to masonry block walls is present within the surveyed area.
2. ACM drywall joint compound is present within the surveyed areas.
Refer to Main Report



MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS

482 South Service Rd. E. - Suite 116
Oakville - Ontario - L6J-2X6
Tel: (905) 257 4408 - Fax: (905) 257 8865
www.MapleEnvironmental.com

PROJECT NO.: 21468

Drawn By: W.Davidson

Checked By: M.Pollock

LEGEND	
SYMBOL	DESCRIPTION
	ASBESTOS BULK SAMPLE: S##
	LEAD BULK SAMPLE: LBP##
	SURVEYED AREA

CONFIRMED ACM	
SYMBOL	DESCRIPTION
NOTE	MASONRY BLOCK PRIMER
NOTE	DRYWALL JOINT COMPOUND
	TRANSITE

Limited Designated Substance Survey

Grand Erie District School Board
Woodman-Cainsville School
51 Woodman Drive
Brantford, Otario

Partial First Floor Plan

SCALE: NTS

SHEET: DS-01

DATE: January 2024

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 Or	552319775
CustomerID:	55MAPL78
CustomerPO:	21468
ProjectID:	

Attn: **Walker Davidson**
Maple Environmental, Inc.
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Initial report from 12/29/2023 08:23:50

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Walker Davidson
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A99014
Job/Project Name: Woodman-Cainsville
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Dec 20/23 **Date Analyzed:** Dec 27/23
Analyst: Elizabeth Mierzynski
Reviewed By: Malgorzata Sybydlo

Job No: 21468
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Client's Job/Project Name/No.: 21468
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Note:

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A99014
Client's Job/Project Name/No.: 21468
Analyst: Elizabeth Mierzynski

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4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos.
6. Phase b) is small in size.
7. Sample is small in size

MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS

LIMITED DESIGNATED SUBSTANCE SURVEY REPORT (LEARNING COMMONS RENOVATIONS)

Agnes G Hodge Public School
52 Clench Avenue
Brantford, Ontario

Presented to:

Grand Erie District School Board
349 Erie Avenue
Brantford, Ontario
N3T 5V3

Attention: Tyler Bender

January 12, 2024

Maple Project No. 21469

EXECUTIVE SUMMARY

Maple Environmental Inc. ('Maple') was retained by Grand Erie District School Board ("GEDSB") to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Agnes G Hodge Public School located at 52 Clench Avenue, Brantford, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed library commons renovation project.

The survey was limited to the Library and the adjacent areas to facilitate the Learning Common renovations as directed by GEDSB. The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

Asbestos

No known sources of asbestos-containing materials were identified within the surveyed areas at the time of the assessment.

AT-01 (2x4 with Dense Pinholes) present as a ceiling finish within Ebase 38 (Stage) was not accessible due to height restrictions at the time of the assessment. It is recommended that the material be considered suspect asbestos until sampling proves otherwise.

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

Lead

Based on the findings, the following general conclusions are made:

- Representative bulk samples of the predominant paint colours were collected which indicated the presence of low-level lead paints (i.e. "virtually safe") in the surveyed area.
- Representative bulk sample of mortar was collected which indicated the presence of l low level lead mortar (i.e. "virtually safe") in the surveyed area.
- It should be noted that lead may also be present in wiring connectors, electric cable sheathing, solder joints on copper piping, ceramic glazes, lead sheeting, and as sub-surface layers to the most recent paint layers currently applied, where present at the Site.

Mercury

- Mercury vapour is present in all fluorescent light tubes.

Silica

- Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present within the surveyed areas.

Mould

- No visible mould growth was observed to be present within the surveyed area at the time of the assessment.
- It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

Polychlorinated Biphenyls (PCBs)

- The fluorescent lamp fixtures observed contained of T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

Recommendations

Based on the Laboratory Analytical Results and observations made on Site, Maple provides the following recommendations.

- Remove all asbestos-containing materials that may be disturbed during the planned renovation using the appropriate asbestos abatement procedures as outlined in Section 5.0 of the Report.
- Low Level Lead paints and mortar (0.1% or less or 1000 mg/Kg or less) are considered virtually safe provided that;
    - airborne lead concentrations are kept below 0.05 mg/m^3
    - general dust suppression and worker hygiene procedures are utilized
    - torching or other activities that create fumes are not completed
- Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.
- Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the surveyed area should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

Appropriate procedures for asbestos, lead, mercury, and silica must be utilized if these materials are likely to be disturbed by scheduled renovations. Please refer to Section 5.0 of the report to review the required procedures.

TABLE OF CONTENTS

1.0 INTRODUCTION

Maple Environmental Inc. ('Maple') was retained by Grand Erie District School Board ("GEDSB") to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Agnes G Hodge Public School located at 52 Clench Avenue, Brantford, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed library commons renovation project.

The survey was limited to the Library and the adjacent areas to facilitate the Learning Common renovations as directed by GEDSB.

Section 30 of the Ontario Occupational Health and Safety Act requires that the following Designated Substances be included in a Designated Substance Survey:

Asbestos
Lead
Mercury
Silica
Isocyanates
Vinyl Chloride Monomer
Benzene
Acrylonitrile
Coke Oven Emissions
Arsenic
Ethylene Oxide

Additional detailed information with respect to asbestos was collected at the time of the survey to ensure compliance with Ontario Regulation 278/05.

The assessment was performed by Yug Shah of Maple on December 19, 2023.

2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

2.1 Designated Substances and Other Hazardous Materials

Section 30 of the Occupational Health and Safety Act requires building owners or their agents (architects, general contractors, etc.) to prepare or have prepared a Designated Substance report for specified potentially hazardous materials possibly present in a facility. The owner must ensure that a prospective constructor has received a Designated Substance report before entering into a binding contract with the contractor. The owner is liable to the contractor for damages and costs arising from unreported materials (of which the owner should reasonably have been aware), and could also be subject to orders and fines from the Ministry of Labour.

In addition to the requirements under the Occupational Health and Safety Act, Section 6 of the Ministry of Labour Regulations for Construction Projects requires the contractor, when submitting the Notice of Project form, report any Designated Substances likely to be used, handled or disturbed during the project.

The disturbance of asbestos materials on construction projects is controlled by Ministry of Labour Regulation R.R.O. 2005/278. The disposal of asbestos waste is controlled by Ministry of Environment Regulation, R.R.O. 1990/347.

There are no specific Ministry of Labour regulations for control of the other Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Health and Safety Act which protects workers and provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc. for all Designated Substances.

Although Regulations exist for many of the Designated Substances, they apply to industry settings using Designated Substances in manufacturing processes, and do not apply to general property management, renovation or maintenance of buildings.

Polychlorinated Biphenyls ("PCBs") and mould were also included in the investigation, which are not specifically named as Designated Substances. No specific regulations are attached to these materials, but are generally governed by the due diligence section of the Health and Safety Act for employers to protect their workers.

2.2 Ontario Regulation 278/05 (Asbestos)

Ontario Regulation 278/05 applies to buildings with regards to maintenance, renovations or demolition work where asbestos-containing materials (ACM) is present and may be disturbed. The Regulation requires that a detailed asbestos inventory be performed in all buildings where friable and non-friable asbestos materials are present. The inventory must be available at the work place and must identify the type of asbestos, and location of asbestos on a room-by-room basis. The following report does not necessarily meet the requirements for an asbestos survey under Ontario Regulation 278/05.

2.3 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

2.4 Ontario Regulation 362

Ontario Regulation 362, made under the Ontario Environmental Protection Act applies to the waste management and transport of PCB waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

3.0 SURVEY SCOPE AND METHODOLOGY

The methodology for the assessment for hazardous materials is outlined below.

In order to determine the location of materials included in the assessment, the project technologist entered the room where practical (i.e. where access was possible without the demolition of walls, roof or ceilings or destruction of flooring). Representative views were made above accessible suspended ceiling systems. Cavities within solid ceiling and wall systems were accessed via existing access panels only. The inventory did not include demolition of building systems or finishes to check on possible hidden conditions.

3.1 Asbestos-Containing Building Materials (ACM)

The scope of the survey included all friable asbestos products and all major non-friable asbestos materials. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include: sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles, drywall joint compounds and vinyl sheet flooring are classified as non-friable, but because of their ability to release dust when disturbed are considered as “potentially friable” for the purpose of this report.

Bulk samples of materials suspected to contain asbestos were collected for analysis during the survey. Specifically, a small volume of material was removed either from a damaged section of suspect material, or taken from intact material. In these latter cases, the material from which the sample was collected was sealed with tape to temporarily prevent fibre release. Samples were placed in plastic bags and sealed until receipt by an independent laboratory. To ensure quality results, the independent laboratory chosen successfully participates in an "Asbestos Proficiency Analytical Testing Program". As such, these independent laboratories are responsible for their findings.

Bulk samples were collected in accordance with regulatory sampling requirements and with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire Site. It is important to note that without sampling each individual wall, pipe section, ceiling tile etc. it is not possible to identify the asbestos content of every material present in the selected areas. For this reason, visually similar materials are considered to be homogenous with those already sampled elsewhere in the building without additional analysis.

O. Reg. 278/05 prescribes that a minimum number of samples be collected of materials suspected to contain asbestos. These minimum sampling requirements are summarized in Table 1, below.

Table 1- Suspect ACM Bulk Sampling Requirements		
Type of Material	**Quantity of Material Present**	**Minimum # of Bulk Samples Required**
Surfacing Materials (i.e. sprayed fireproofing, drywall joint compound, texture coat, and plaster)	Up to 90 sq/m (1000 sq/ft)	3
	From 90 sq/m (1000 sq/ft) to 450 sq/m (5000 sqft)	5
	Greater than 450 sq/m (5000 sq/ft)	7
All other potential ACM	Any	3

Excluding surfacing materials, the laboratory was instructed to cease analysis within Sample Groups of homogenous materials when one of the samples in the group is found to contain asbestos. For example, if three samples of a type of vinyl floor tile are collected (as required by O. Reg. 278/05) and submitted for analysis and the first sample is positively identified as containing asbestos, the balance of the sample group is not analysed.

EMC Scientific ("EMC"), an independent laboratory, was selected to analyse the collected bulk suspect asbestos samples. EMC successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, is responsible for its findings. EMC followed the Code of Practice for the identification of asbestos in bulk material, as detailed in O. Reg. 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

The recommendations made as part of this report with respect to asbestos have taken into consideration: the condition and accessibility of the material, vibration, air movement, and general activities likely to occur within the vicinity of the ACM.

In each area or room inventoried, the technician recorded the quantity, condition (GOOD, FAIR, or POOR) of each suspect asbestos-containing material.

The definitions for condition and accessibility of the asbestos-containing items are as follows:

GOOD Material is intact with no visible signs of damage.

FAIR Material is visibly damaged but can be repaired.

POOR Material is damaged beyond repair and likely needs to be removed.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation would be to re-evaluate the condition of the material on an annual basis (required by O. Reg. 278/05). This recommendation can be subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where ACM is found to be damaged (i.e. FAIR or POOR condition), a recommendation to have the material cleaned-up, repaired, removed, enclosed, or encapsulated is offered. The recommendation will also indicate which asbestos procedure should be used to perform the remedial work (i.e. Type 1, Type 2, Type 3, or Glove Bag Removal Methods).

3.2 Lead

The investigation included the collection and analysis of all major paint colour applications for the presence of lead in the paint. Other materials that possibly contain lead were identified by known historic use, where relevant. For the purpose of this report, sampling for lead in mortar was also performed. The lead samples were analysed by EMSL Canada ("EMSL"), using atomic absorption spectrophotometry. EMSL is AIHA (American Industrial Hygiene Association) and NIOSH (National Institute of Occupational Safety and Health) accredited for this type of analysis. The Laboratory Analysis Report for lead in paint samples is included with this Report as Appendix II.

3.3 Mercury

The assessment included a visual identification of fluorescent light tubes, switches, electrical controls, heating system thermostats, thermometers, and other components historically known to contain mercury.

3.4 Other Designated Substances

Other materials listed in Section 1.0 of this Report were identified on a visual basis where present, as part of the current assessment. It should be noted that no manufacturing or heavy industrial activities are known by Maple to occur at the Site. Therefore, Designated Substances associated with these activities (i.e. those other than Asbestos, Lead, Mercury, and Silica) would not be expected to be present in the selected areas.

3.5 Mould

The assessment for mould was conducted in accordance with standard industry practice as set out in the Canadian Construction Association (CCA) "Mould Guidelines for the Canadian Construction Industry" for a visual assessment. Although there are no regulatory requirements in Ontario for such an assessment, the CCA Guidelines, and similar guidelines from other agencies have been accepted as the industry standard by most experts, consultants, the Ontario Ministry of Labour, and the Canadian Construction Association.

All guidelines and protocols for mould investigations indicate that investigations should be performed largely on a visual basis with limited collection of bulk and/or air samples. The Ontario Ministry of Labour has consistently enforced the removal of all mould from buildings regardless of mould genus or species, and therefore bulk samples or air samples for confirmation of mould are not typically collected for investigative purposes where mould is visible.

3.6 Polychlorinated Biphenyls

Manufacturers labels/codes collected from fluorescent lamp ballasts suspected of containing Polychlorinated Biphenyls ("PCBs") are compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs", which identifies PCB-containing ballasts.

3.7 Limitations and Omissions from Scope

Due to the nature of building construction some limitations exist as to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the Site investigation. Maple believes that the information collected during the investigation concerning the property is reliable. No other warranties are implied or expressed.

During a standard ACM inventory performed for the purposes of regulatory compliance, it is industry practice to exclude certain suspect asbestos-containing materials from sampling. These materials are often excluded from sampling due to the risk of compromising the health and safety of the technician, other building occupants, or the integrity of the systems with which these materials are associated. Examples of such materials include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking and levelling compound. Where observed, these materials were presumed to be ACM.

3.8 Drawings

Drawings included in Appendix III will indicate the locations of any major applications of an asbestos-containing material with the exception of mechanical insulations, drywall, plaster finishes and transite (which cannot be accurately depicted on drawings). The information depicted on the drawings is not to scale and is only meant to provide a general representation of the locations of asbestos-containing materials.

4.0 INVENTORY FINDINGS

The findings of the survey are presented separately below for each of the eleven Designated Substances as well as microbial growth (mould), and polychlorinated biphenyls. Asbestos is further detailed by typical applications of asbestos.

4.1 Asbestos

The following is a brief discussion of the extent to which ACM was identified in the surveyed area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. The sample numbers refer to the laboratory analysis report presented as Appendix I and summarised in Table 2 below. Twenty-four (24) bulk samples were collected for the determination of asbestos content and submitted to the lab to be analysed. Due to the presence of more than one phase of material in some of the original samples the laboratory may have performed multiple analyses for some samples. As a result, a total of twenty-seven (27) samples were analyzed.

Table 2- Analysis Summary of Asbestos Bulk Samples

Sample No.	Room Name	Sample Description	Result
S01A	Ebase 138	Masonry Block Mortar	None Detected
S01B	Ebase 137	Masonry Block Mortar	None Detected
S01C	Ebase 147	Masonry Block Mortar	None Detected
S02A	Ebase 138	Brick Mortar	None Detected
S02B	Ebase 147	Brick Mortar	None Detected
S02C	Ebase 147	Brick Mortar	None Detected
S03A	Ebase 137	VFT-01 Beige w/ light brown flecks	None Detected
		Yellow Mastic	None Detected
S03B	Ebase 147	VFT-01 Beige w/ light brown flecks	None Detected
		Yellow Mastic	None Detected
S03C	Ebase 149	VFT-01 Beige w/ light brown flecks	None Detected
		Yellow Mastic	None Detected
S04A	Ebase 138	Drywall Joint Compound	None Detected
S04B	Ebase 138	Drywall Joint Compound	None Detected
S04C	Ebase 138	Drywall Joint Compound	None Detected
S05A	Ebase 147	Light Brown Caulking	None Detected
S05B	Ebase 147	Light Brown Caulking	None Detected
S05C	Ebase 147	Light Brown Caulking	None Detected
S06A	Ebase 147	Black Caulking/ Int Door Frame	None Detected
S06B	Ebase 147	Black Caulking /Int Door Frame	None Detected
S06C	Ebase 148	Black Caulking /Int Door Frame	None Detected
S07A	Ebase 148	Black Putty /Int Window Glazing	None Detected
S07B	Ebase 147	Black Putty /Int Window Glazing	None Detected

Table 2- Analysis Summary of Asbestos Bulk Samples			
Sample No.	**Room Name**	**Sample Description**	**Result**
S07C	Ebase 147	Black Putty /Int Window Glazing	None Detected
S08A	Ebase 147	Light grey caulking/ Int Door Frame	None Detected
S08B	Ebase 147	Light grey caulking/ Int Door Frame	None Detected
S08C	Ebase 147	Light grey caulking/ Int Door Frame	None Detected

No known sources of asbestos-containing materials were identified within the surveyed areas at the time of the assessment.

AT-01 (2x4 with Dense Pinholes) present as a ceiling finish within Ebase 38 (Stage) was not accessible due to height restrictions at the time of the assessment. It is recommended that the material be considered suspect asbestos until sampling proves otherwise.

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

4.1.1 Sprayed Fireproofing (Friable)

No sprayed fireproofing was identified within the surveyed area at the time of the assessment.

4.1.2 Thermal Mechanical Insulation (Friable)

No asbestos-containing mechanical insulations were identified within the surveyed area at the time of the assessment.

Piping Systems:

No asbestos-containing pipe systems were identified within the surveyed area at the time of the assessment.

Pipe systems observed within the surveyed area were either not insulated or were insulated with armaflex, fibreglass and PVC which is not suspected to contain asbestos.

Duct Systems:

Duct systems observed within the surveyed area were observed to be externally non-insulated at the time of the assessment.

Mechanical Equipment:

Air handling units and heaters were observed to be externally un-insulated.

4.1.3 Texture Finish (Friable)

No textured finishes were identified within the surveyed area at the time of the assessment.

4.1.4 Acoustic Ceiling Tiles (Potentially Friable)

No asbestos-containing acoustic ceiling tile systems were identified within the surveyed area at the time of the assessment.

Two (2) visually distinct types of ceiling tile systems were observed in the surveyed area. A brief description of each type of ceiling tile is outlined below.

- **AT-01 (2'x4' with Dense Pinholes):**

  AT-01 was observed to be present in the Ebase 138 (Stage) in form of ceiling finish.

  It should be noted that no bulk samples of AT-01 were collected as access was limited due to height restrictions at the time of the assessment. AT-01 should be considered as suspect asbestos-containing until further sampling confirms otherwise.

- AT-02 (2'x2' Length-wise Fissures and Pinholes):

  AT-02 was observed to be present in form of ceiling finishes within the majority of the surveyed area.

  No bulk samples of AT-02 were collected as a date stamp manufacture code (07/10/05) was present on the backside of the tile indicating that the tiles were recently manufactured and therefore not suspected to contain asbestos.

4.1.5 Vinyl Sheet Flooring (Potentially Friable)

No vinyl sheet flooring finishes were identified within the surveyed area at the time of the assessment.

4.1.6 Vinyl Floor Tile (Non-Friable)

No asbestos-containing vinyl floor tile systems were identified within the surveyed area at the time of the assessment.

One (1) visually distinct type of vinyl floor tile system was observed within the surveyed area at the time of the assessment. A brief description of the vinyl floor tile is outlined below.

- VFT-01 (12x12 Beige with light brown flecks):

  Three (3) representative samples (Sample Set S-03 A-C) of VFT-01 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-03 found that the samples do not contain asbestos.

  Yellow mastic associated with VFT-01 was also analyzed as part of the analysis process which confirmed that the material does not contain asbestos.

4.1.7 Asbestos Cement Products "Transite" (Non-Friable)

No transite cement products were observed to be present within the surveyed area at the time of the assessment.

4.1.8 Drywall Joint Compound (DJC) (Potentially Friable)

No asbestos-containing drywall joint compound was identified within the surveyed area at the time of the assessment.

Interior drywall finishes were present in the form of wall finishes within Ebase 138.

Three (3) representative samples (Sample Set S-04 A-C) of drywall joint compound were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-04 found that the material does not contain asbestos.

4.1.9 Plaster (Potentially Friable)

No plaster finishes were identified within the surveyed area at the time of the assessment.

4.1.10 Vermiculite (Friable)

No vermiculite insulation was observed to be present within the surveyed area at the time of the assessment. It should be noted that loose fill vermiculite insulation can often be present within voids of masonry and possibly some pre-manufactured surveyed area components that would not be identified during the course of this assessment.

4.1.11 Other

- Brick Mortar

  Brick mortar was observed to be present in form of interior and exterior wall finishes within surveyed area.

  Three (3) representative samples (Sample Set S-02 A-C) of brick mortar were collected and analyzed for asbestos. Analysis of Sample S-02 found that the material does not contain asbestos.

- Masonry Block Mortar:

  Masonry block mortar was observed to be present in form of interior wall finishes within the surveyed area.

  Three (3) representative samples (Sample Set S-01 A-C) of masonry block mortar were collected and analyzed for asbestos content. Analysis of Sample Set S-01 found that the material does not contain asbestos.

- Interior Door Frame Light Brown Caulking:

  Light Brown Caulking was observed to be applied to the select interior door frame within the surveyed area at the time of the assessment.

  Three (3) representative samples (Sample Set S-05 A-C) of light brown caulking were collected and analyzed for asbestos. Analysis of Sample S-05 found that the material does not contain asbestos.

- Interior Window Frame Black Caulking:

  Black Caulking was observed to be applied to the select interior window frame within the surveyed area at the time of the assessment.

Three (3) representative samples (Sample Set S-06 A-C) of black caulking were collected and analyzed for asbestos. Analysis of Sample S-06 found that the material does not contain asbestos.

- Interior Window Glazing Caulking:

  Black Putty was observed to be applied in form of interior window glazing caulking within the surveyed area at the time of the assessment.

  Three (3) representative samples (Sample Set S-07 A-C) of black putty were collected and analyzed for asbestos. Analysis of Sample S-07 found that the material does not contain asbestos.

- Interior Door Frame Light Grey Caulking:

  Light grey caulking was observed to be applied to the select interior door frame within the surveyed area at the time of the assessment.

  Three (3) representative samples (Sample Set S-08 A-C) of light grey caulking were collected and analyzed for asbestos. Analysis of Sample S-08 found that the material does not contain asbestos.

4.2 Lead

Two (2) bulk paint samples and one (1) bulk mortar samples were collected for determination of lead content and submitted to EMSL for analysis during the assessment. The sample number refers to the Certificate of Analysis Report presented as Appendix II and summarised in Table 3 below.

Table 3– Analysis Summary of Lead Samples

Sample No.	Locations	Sample Description	Result
Pb-01	Ebase 138 (Stage)	White Paint	<0.0081%
Pb-02	Ebase 147 (Library)	Yellow Paint	<0.0080%
Pb-03	Ebase 149 (Storage)	Masonry Block Mortar	<40mg/kg

No regulations currently exist in Ontario defining the lower limit of lead-containing material. The Ontario Ministry of Labour (MOL) has issued a guideline for lead abatement, entitled Guideline – Lead on Construction Projects (2004) which is considered enforceable. The Guideline does not specify what constitutes a material as "lead-containing". Instead, it outlines procedures based on the concentration of airborne lead encountered during removal, as well as provides procedures and/or specific operations for lead-containing material removal. However, the Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair document classifies paint as either Low-Level, Lead-Containing, or Lead-Based as follows

Table 4- EACC Classification of Lead

Concentration of Lead	Definition
0.1% or less OR 1000 mg/Kg or less	Low Level Lead

Table 4- EACC Classification of Lead	
Concentration of Lead	**Definition**
	("Virtually Safe")
Greater than 0.1% but less than 0.5% OR Greater than 1000 mg/Kg but less than 5000 mg/Kg	Lead-Containing
Greater than 0.5% OR Greater than 5000 mg/Kg	Lead-Based

Based on these criteria and the results of the sample analysis, All paints and mortar sampled are considered to be Low-Level Lead ("virtually safe").

4.3 Mercury

Mercury vapour is present in all fluorescent light tubes.

4.4 Silica

Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present in the Select areas surveyed.

4.5 Isocyanates

Free isocyanate compounds would not be expected to be found in a non-manufacturing facility.

4.6 Vinyl Chloride Monomer

Vinyl chloride monomer would not be expected to be found in a non-manufacturing facility.

4.7 Benzene

Benzene would not be expected to be found in a non-manufacturing facility.

4.8 Acrylonitrile

Acrylonitrile would not be expected to be found in a non-manufacturing facility.

4.9 Coke Oven Emissions

Coke oven emissions would not be expected to be found in a non-manufacturing facility.

4.10 Arsenic

Arsenic would not be expected to be found in a non-manufacturing facility.

4.11 Ethylene Oxide

Ethylene oxide would not be expected to be found in a non-manufacturing facility.

4.12 Mould

No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

4.13 Polychlorinated Biphenyls (PCBs)

The fluorescent lamp fixtures observed contained of T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

5.0 RECOMMENDATIONS

5.1 Asbestos

No known sources of asbestos-containing materials were identified within the surveyed areas at the time of the assessment.

AT -01 present within Ebase 38 (Stage) was not accessible due to height restrictions at the time of the assessment. It is recommended that this material be sampled prior to disturbance. Without sampling, this material should be considered as suspect asbestos.

- Removal or disturbance of less than 7.5 m^2 of suspect asbestos-containing ceiling tiles requires the use of Type-1 asbestos procedures ; Removal of more than 7.5 m^2 requires Type-2 asbestos procedures.

It is important to note that due to the presence of solid wall and ceiling systems, the assessment was not able to confirm or deny the presence of ACM within wall and ceiling cavities. The presence of concealed ACM should be assumed as well as within rooms that were not accessible during the assessment. It is possible that ACM is present that was not identified in this report.

This report should not be read or interpreted as a "scope of work". Detailed abatement specifications should be prepared for asbestos removal that will impact the scope of any future renovations.

5.2 Lead

Paints and mortar (0.1% or less and/or 1000 mg/Kg or less) sampled were found to be low level lead ("virtually safe").

Low Level Lead paints and mortar are considered virtually safe provided that;

- airborne lead concentrations are kept below 0.05 mg/m^3
- general dust suppression and worker hygiene procedures are utilized
- torching or other activities that create fumes are not completed

5.3 Mercury

Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

5.4 Silica

Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the building should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

6.0 LIMITATIONS

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. Maple believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

Information provided by Maple is intended for Client use ONLY. Any use by a third party, of reports or documents authored by Maple, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Maple accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

The liability of Maple or its staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Maple will not be responsible for any consequential or indirect damages. Maple will only be liable for damages resulting from negligence of Maple; all claims by the Client shall be deemed relinquished if not made within two years after last date of services provided.

Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

End of Report

Sincerely,

MAPLE ENVIRONMENTAL INC.
Environment, Health and Safety Consultants

Prepared By:

Yug Shah
Project Technologist

Reviewed By:

Mark Pollock
Project Manager

APPENDIX I

LABORATORY ANALYSIS REPORT - ASBESTOS

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Yug Shah
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A98989
Job/Project Name: Agnes G Modge P.S
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Dec 20/23 **Date Analyzed:** Dec 28/23
Analyst: Ameerah Ngai
Reviewed By: Malgorzata Sybydlo

Job No: 21469
Number of Samples: 24
Date Reported: Dec 28/23

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S01A	A98989-1	Masonry block mortar/ ebase 138	Grey, cementitious material	**ND**			100
S01B	A98989-2	Masonry block mortar/ ebase 137 (gym storage)	Grey, cementitious material	**ND**			100
S01C	A98989-3	Masonry block mortar/ ebase 147	Grey, cementitious material	**ND**			100
S02A	A98989-4	Brick mortar/ ebase 138	Grey, cementitious material	**ND**			100
S02B	A98989-5	Brick mortar/ ebase 147	Grey, cementitious material	**ND**			100
S02C	A98989-6	Brick mortar/ ebase 147	Grey, cementitious material	**ND**			100
S03A	A98989-7	VFT-01 beige w/ light brown flecks /ebase 137 (gym storage)	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03B	A98989-8	VFT-01 beige w/ light brown flecks /ebase 147	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03C	A98989-9	VFT-01 beige w/ light brown flecks /ebase 149	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S04A	A98989-10	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99
S04B	A98989-11	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A98989
Client's Job/Project Name/No.: 21469
Analyst: Ameerah Ngai `

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S04C	A98989-12	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99
S05A	A98989-13	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S05B	A98989-14	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S05C	A98989-15	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S06A	A98989-16	Black caulking/ int door frame ebase 147	Black, caulking	**ND**			100
S06B	A98989-17	Black caulking/ int door frame ebase 147	Black, caulking	**ND**			100
S06C	A98989-18	Black caulking/ int door frame ebase 148	Black, caulking	**ND**			100
S07A	A98989-19	Black putty, int window glazing, ebase 148	Black, caulking	**ND**			100
S07B	A98989-20	Black putty, int window glazing, ebase 147	Black, caulking	**ND**			100
S07C	A98989-21	Black putty, int window glazing, ebase 147	Black, caulking	**ND**			100
S08A	A98989-22	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100
S08B	A98989-23	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100
S08C	A98989-24	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100

Note:

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A98989
Client's Job/Project Name/No.: 21469
Analyst: Ameerah Ngai `

1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos.

APPENDIX II

LABORATORY ANALYSIS REPORT – LEAD

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 Or	552319723
CustomerID:	55MAPL78
CustomerPO:	21469
ProjectID:	

Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/19/2023

Project: **Agnes G. Hodge P.S. / 21469**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
Pb-01	12/19/2023	12/20/2023	0.2471 g	0.0081 % wt	<0.0081 % wt
552319723-0001	Site: White Paint / Ebase 138				
Pb-02	12/19/2023	12/20/2023	0.2534 g	0.0080 % wt	<0.0080 % wt
552319723-0002	Site: Yellow Paint / Ebase 147				

Rowena Fanto, Lead Supervisor
or other approved signatory

Initial report from 12/28/2023 15:43:03

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 Or	552319723
CustomerID:	55MAPL78
CustomerPO:	21469
ProjectID:	

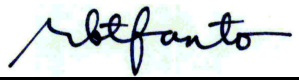
Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/19/2023

Project: **Agnes G. Hodge P.S. / 21469**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight (g)*	*RDL*	*Lead Concentration*
Pb-03	12/19/2023	12/21/2023	0.5011 g	40 mg/Kg	<40 mg/Kg
552319723-0003	Site: Masonry Block Mortar / Ebase 149				



Rowena Fanto, Lead Supervisor
or other approved signatory

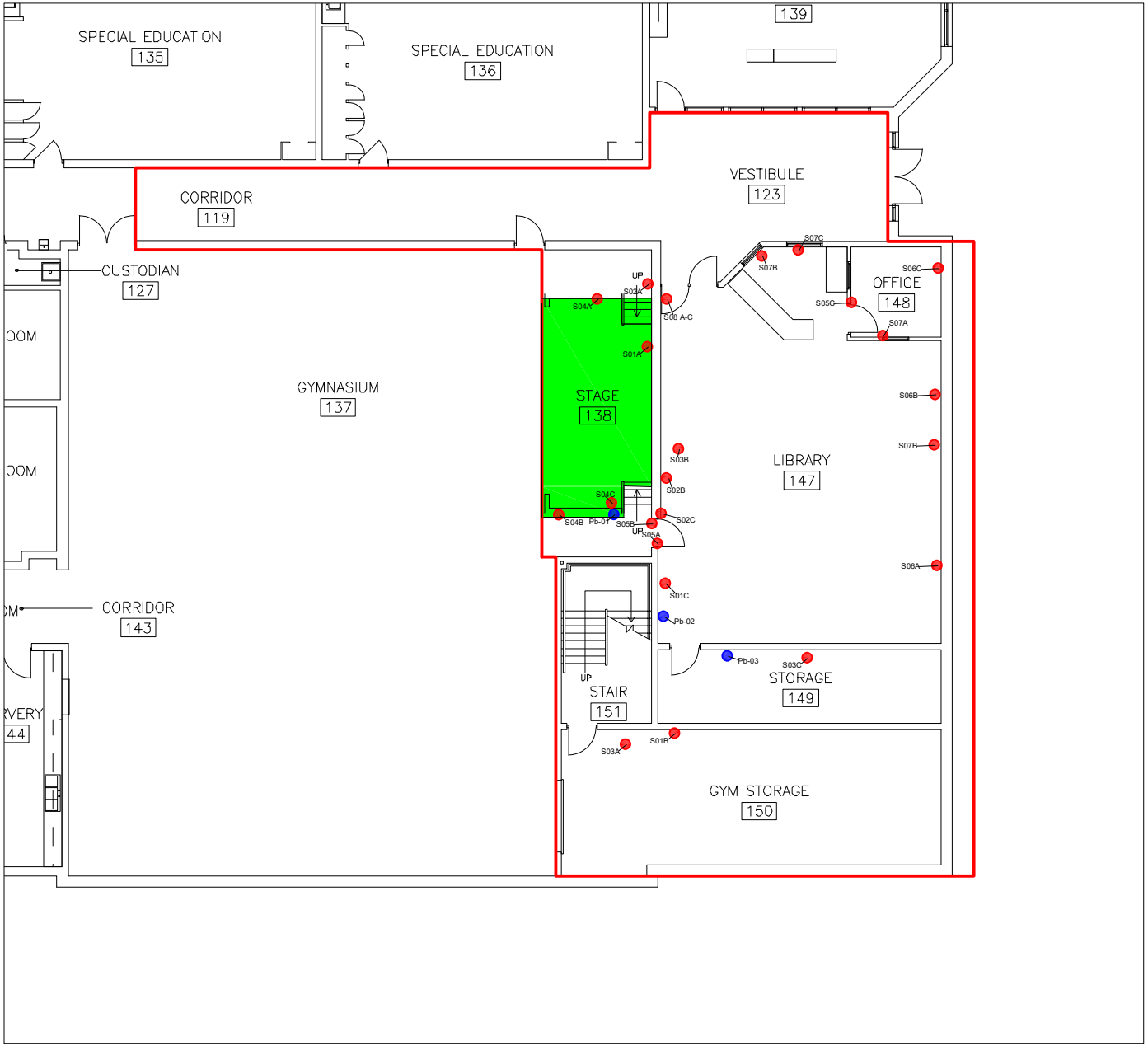
* Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

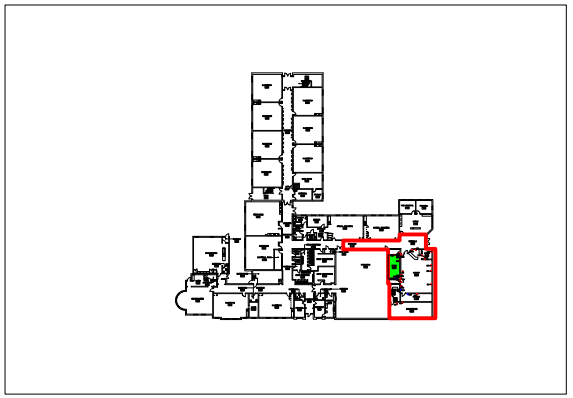
Samples analyzed by EMSL Canada Inc. Mississauga, ON

Initial report from 12/28/2023 15:43:03

APPENDIX III

DRAWINGS





NOTE:

1. AT-01 should be sampled prior to disturbance to confirm or deny the presence of asbestos.

Refer to Main Report

MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS
482 South Service Rd. E. - Suite 116
Oakville - Ontario - L6J-2X6
Tel: (905) 257 4408 - Fax: (905) 257 8865
www.MapleEnvironmental.com

PROJECT NO.: 21469

Drawn By: Y. Shah

Checked By: M. Pollock

LEGENDS	
SYMBOL	DESCRIPTION
	ASBESTOS BULK SAMPLE: S-##
	LEAD BULK SAMPLE: Pb-##
	SURVEYED AREA

SUSPECTED ACM	
SYMBOL	DESCRIPTION
	SUSPECT AT-01
NOTE	SUSPECT AT-01

Limited Designated Substance Survey

Grand Erie District School Board

Agnes G. Hodge School
52 Clench Avenue
Brantford, Ontario

First Floor Plan - Layout

SCALE: NTS

SHEET: DS-01

DATE: January 2024

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 Or	552319723
CustomerID:	55MAPL78
CustomerPO:	21469
ProjectID:	

Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/19/2023

Project: **Agnes G. Hodge P.S. / 21469**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
Pb-01	12/19/2023	12/20/2023	0.2471 g	0.0081 % wt	<0.0081 % wt
552319723-0001	Site: White Paint / Ebase 138				
Pb-02	12/19/2023	12/20/2023	0.2534 g	0.0080 % wt	<0.0080 % wt
552319723-0002	Site: Yellow Paint / Ebase 147				

Rowena Fanto, Lead Supervisor
or other approved signatory

Initial report from 12/28/2023 15:43:03

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 Or	552319723
CustomerID:	55MAPL78
CustomerPO:	21469
ProjectID:	

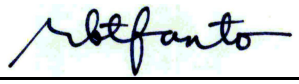
Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/19/2023

Project: **Agnes G. Hodge P.S. / 21469**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight (g)*	*RDL*	*Lead Concentration*
Pb-03	12/19/2023	12/21/2023	0.5011 g	40 mg/Kg	<40 mg/Kg
552319723-0003	Site: Masonry Block Mortar / Ebase 149				



Rowena Fanto, Lead Supervisor
or other approved signatory

* Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. "<" (less than) result signifies that 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

Initial report from 12/28/2023 15:43:03

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Yug Shah
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A98989
Job/Project Name: Agnes G Modge P.S
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Dec 20/23 **Date Analyzed:** Dec 28/23
Analyst: Ameerah Ngai
Reviewed By: Malgorzata Sybydlo

Job No: 21469
Number of Samples: 24
Date Reported: Dec 28/23

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S01A	A98989-1	Masonry block mortar/ ebase 138	Grey, cementitious material	**ND**			100
S01B	A98989-2	Masonry block mortar/ ebase 137 (gym storage)	Grey, cementitious material	**ND**			100
S01C	A98989-3	Masonry block mortar/ ebase 147	Grey, cementitious material	**ND**			100
S02A	A98989-4	Brick mortar/ ebase 138	Grey, cementitious material	**ND**			100
S02B	A98989-5	Brick mortar/ ebase 147	Grey, cementitious material	**ND**			100
S02C	A98989-6	Brick mortar/ ebase 147	Grey, cementitious material	**ND**			100
S03A	A98989-7	VFT-01 beige w/ light brown flecks /ebase 137 (gym storage)	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03B	A98989-8	VFT-01 beige w/ light brown flecks /ebase 147	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03C	A98989-9	VFT-01 beige w/ light brown flecks /ebase 149	2 Phases: a) Off white, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S04A	A98989-10	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99
S04B	A98989-11	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A98989
Client's Job/Project Name/No.: 21469
Analyst: Ameerah Ngai `

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S04C	A98989-12	DJC/ ebase 138	Grey and off white, drywall	**ND**		1	99
S05A	A98989-13	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S05B	A98989-14	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S05C	A98989-15	Light brown caulking/ int door frame ebase 147	Brown, caulking	**ND**			100
S06A	A98989-16	Black caulking/ int door frame ebase 147	Black, caulking	**ND**			100
S06B	A98989-17	Black caulking/ int door frame ebase 147	Black, caulking	**ND**			100
S06C	A98989-18	Black caulking/ int door frame ebase 148	Black, caulking	**ND**			100
S07A	A98989-19	Black putty, int window glazing, ebase 148	Black, caulking	**ND**			100
S07B	A98989-20	Black putty, int window glazing, ebase 147	Black, caulking	**ND**			100
S07C	A98989-21	Black putty, int window glazing, ebase 147	Black, caulking	**ND**			100
S08A	A98989-22	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100
S08B	A98989-23	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100
S08C	A98989-24	Light grey caulking/ int door frame ebase 147	Grey, caulking	**ND**			100

Note:

emcscientific
INCORPORATED

Laboratory Analysis Report

EMC LAB REPORT NUMBER: A98989
Client's Job/Project Name/No.: 21469
Analyst: Ameerah Ngai `

1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos.

MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS

LIMITED DESIGNATED SUBSTANCE SURVEY REPORT (LEARNING COMMONS RENOVATION)

Simcoe Composite Secondary School
40 Wilson Drive
Simcoe, Ontario

Presented to:

Grand Erie District School Board
349 Erie Avenue
Brantford, Ontario
N3T 5V3

Attention: Tyler Bender

January 12, 2023

Maple Project No. 21471

EXECUTIVE SUMMARY

Maple Environmental Inc. ('Maple') was retained by Grand Erie District School Board ("GEDSB")to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Simcoe Composite Secondary School located at 40 Wilson Dr, Simcoe, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed library commons renovation project.

The survey was limited to the Library and the adjacent areas to facilitate the Learning Common renovations as directed by GEDSB. The findings of the current survey are summarized below. Please refer to the main body of this report for details on all materials.

Asbestos

Asbestos-containing materials (ACM's) identified within the surveyed area at the time of the assessment are as follows:

- Parging Cement
- Transite Cement Panels

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

Lead

Based on the findings, the following general conclusions are made:

- Representative bulk samples of the predominant paint colours were collected which indicated the presence of low-level lead paints (i.e. "virtually safe") in the surveyed area.
- Representative bulk samples of mortar were collected which indicated the presence of low-level lead mortar (i.e. "virtually safe") in the surveyed area.
- It should be noted that lead may also be present in wiring connectors, electric cable sheathing, solder joints on copper piping, ceramic glazes, lead sheeting, and as sub-surface layers to the most recent paint layers currently applied, where present at the Site.

Mercury

- Mercury vapour is present in all fluorescent light tubes.

Silica

- Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present within the surveyed areas.

Mould

- No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

  It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

Polychlorinated Biphenyls (PCBs)

- The fluorescent lamp fixtures observed contained of T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

Recommendations

Based on the Laboratory Analytical Results and observations made on Site, Maple provides the following recommendations.

- Remove all asbestos-containing materials that may be disturbed during the planned renovation using the appropriate asbestos abatement procedures as outlined in Section 5.0 of the Report.
- Low Level Lead paints and mortar (0.1% or less or 1000 mg/Kg or less) are considered virtually safe provided that;
  - airborne lead concentrations are kept below 0.05 mg/m^3
  - general dust suppression and worker hygiene procedures are utilized
  - torching or other activities that create fumes are not completed
- Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.
- Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the surveyed area should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

Appropriate procedures for asbestos, lead, mercury, and silica must be utilized if these materials are likely to be disturbed by scheduled renovations. Please refer to Section 5.0 of the report to review the required procedures.

TABLE OF CONTENTS

1.0 INTRODUCTION

Maple Environmental Inc. ('Maple') was retained by Grand Erie District School Board ("GEDSB") to perform a survey for Designated Substances as well as polychlorinated biphenyls (PCBs) and mould within the specified areas of Simcoe Composite Secondary School located at 40 Wilson Dr, Simcoe, Ontario (the 'Site'). It is our understanding that the building requires a survey to identify possible hazardous building materials that may be disturbed during the proposed library commons renovation project.

The survey was limited to the Library and the adjacent areas to facilitate the Learning Common renovations as directed by GEDSB.

Section 30 of the Ontario Occupational Health and Safety Act requires that the following Designated Substances be included in a Designated Substance Survey:

Asbestos
Lead
Mercury
Silica
Isocyanates
Vinyl Chloride Monomer
Benzene
Acrylonitrile
Coke Oven Emissions
Arsenic
Ethylene Oxide

Additional detailed information with respect to asbestos was collected at the time of the survey to ensure compliance with Ontario Regulation 278/05.

The assessment was performed by Yug Shah of Maple on December 18, 2023.

2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

2.1 Designated Substances and Other Hazardous Materials

Section 30 of the Occupational Health and Safety Act requires building owners or their agents (architects, general contractors, etc.) to prepare or have prepared a Designated Substance report for specified potentially hazardous materials possibly present in a facility. The owner must ensure that a prospective constructor has received a Designated Substance report before entering into a binding contract with the contractor. The owner is liable to the contractor for damages and costs arising from unreported materials (of which the owner should reasonably have been aware), and could also be subject to orders and fines from the Ministry of Labour.

In addition to the requirements under the Occupational Health and Safety Act, Section 6 of the Ministry of Labour Regulations for Construction Projects requires the contractor, when submitting the Notice of Project form, report any Designated Substances likely to be used, handled or disturbed during the project.

The disturbance of asbestos materials on construction projects is controlled by Ministry of Labour Regulation R.R.O. 2005/278. The disposal of asbestos waste is controlled by Ministry of Environment Regulation, R.R.O. 1990/347.

There are no specific Ministry of Labour regulations for control of the other Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Health and Safety Act which protects workers and provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc. for all Designated Substances.

Although Regulations exist for many of the Designated Substances, they apply to industry settings using Designated Substances in manufacturing processes, and do not apply to general property management, renovation or maintenance of buildings.

Polychlorinated Biphenyls ("PCBs") and mould were also included in the investigation, which are not specifically named as Designated Substances. No specific regulations are attached to these materials, but are generally governed by the due diligence section of the Health and Safety Act for employers to protect their workers.

2.2 Ontario Regulation 278/05 (Asbestos)

Ontario Regulation 278/05 applies to buildings with regards to maintenance, renovations or demolition work where asbestos-containing materials (ACM) is present and may be disturbed. The Regulation requires that a detailed asbestos inventory be performed in all buildings where friable and non-friable asbestos materials are present. The inventory must be available at the work place and must identify the type of asbestos, and location of asbestos on a room-by-room basis. The following report does not necessarily meet the requirements for an asbestos survey under Ontario Regulation 278/05.

2.3 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

2.4 Ontario Regulation 362

Ontario Regulation 362, made under the Ontario Environmental Protection Act applies to the waste management and transport of PCB waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

3.0 SURVEY SCOPE AND METHODOLOGY

The methodology for the assessment for hazardous materials is outlined below.

In order to determine the location of materials included in the assessment, the project technologist entered the room where practical (i.e. where access was possible without the demolition of walls, roof or ceilings or destruction of flooring). Representative views were made above accessible suspended ceiling systems. Cavities within solid ceiling and wall systems were accessed via existing access panels only. The inventory did not include demolition of building systems or finishes to check on possible hidden conditions.

3.1 Asbestos-Containing Building Materials (ACM)

The scope of the survey included all friable asbestos products and all major non-friable asbestos materials. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include: sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles, drywall joint compounds and vinyl sheet flooring are classified as non-friable, but because of their ability to release dust when disturbed are considered as “potentially friable” for the purpose of this report.

Bulk samples of materials suspected to contain asbestos were collected for analysis during the survey. Specifically, a small volume of material was removed either from a damaged section of suspect material, or taken from intact material. In these latter cases, the material from which the sample was collected was sealed with tape to temporarily prevent fibre release. Samples were placed in plastic bags and sealed until receipt by an independent laboratory. To ensure quality results, the independent laboratory chosen successfully participates in an "Asbestos Proficiency Analytical Testing Program". As such, these independent laboratories are responsible for their findings.

Bulk samples were collected in accordance with regulatory sampling requirements and with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire Site. It is important to note that without sampling each individual wall, pipe section, ceiling tile etc. it is not possible to identify the asbestos content of every material present in the selected areas. For this reason, visually similar materials are considered to be homogenous with those already sampled elsewhere in the building without additional analysis.

O. Reg. 278/05 prescribes that a minimum number of samples be collected of materials suspected to contain asbestos. These minimum sampling requirements are summarized in Table 1, below.

Table 1- Suspect ACM Bulk Sampling Requirements		
Type of Material	**Quantity of Material Present**	**Minimum # of Bulk Samples Required**
Surfacing Materials (i.e. sprayed fireproofing, drywall joint compound, texture coat, and plaster)	Up to 90 sq/m (1000 sq/ft)	3
	From 90 sq/m (1000 sq/ft) to 450 sq/m (5000 sqft)	5
	Greater than 450 sq/m (5000 sq/ft)	7
All other potential ACM	Any	3

Excluding surfacing materials, the laboratory was instructed to cease analysis within Sample Groups of homogenous materials when one of the samples in the group is found to contain asbestos. For example, if three samples of a type of vinyl floor tile are collected (as required by O. Reg. 278/05) and submitted for analysis and the first sample is positively identified as containing asbestos, the balance of the sample group is not analysed.

EMC Scientific ("EMC"), an independent laboratory, was selected to analyse the collected bulk suspect asbestos samples. EMC successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, is responsible for its findings. EMC followed the Code of Practice for the identification of asbestos in bulk material, as detailed in O. Reg. 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

The recommendations made as part of this report with respect to asbestos have taken into consideration: the condition and accessibility of the material, vibration, air movement, and general activities likely to occur within the vicinity of the ACM.

In each area or room inventoried, the technician recorded the quantity, condition (GOOD, FAIR, or POOR) of each suspect asbestos-containing material.

The definitions for condition and accessibility of the asbestos-containing items are as follows:

GOOD Material is intact with no visible signs of damage.

FAIR Material is visibly damaged but can be repaired.

POOR Material is damaged beyond repair and likely needs to be removed.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation would be to re-evaluate the condition of the material on an annual basis (required by O. Reg. 278/05). This recommendation can be subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where ACM is found to be damaged (i.e. FAIR or POOR condition), a recommendation to have the material cleaned-up, repaired, removed, enclosed, or encapsulated is offered. The recommendation will also indicate which asbestos procedure should be used to perform the remedial work (i.e. Type 1, Type 2, Type 3, or Glove Bag Removal Methods).

3.2 Lead

The investigation included the collection and analysis of all major paint colour applications for the presence of lead in the paint. Other materials that possibly contain lead were identified by known historic use, where relevant. For the purpose of this report, sampling for lead in mortar was also performed. The lead samples were analysed by EMSL Canada ("EMSL"), using atomic absorption spectrophotometry. EMSL is AIHA (American Industrial Hygiene Association) and NIOSH (National Institute of Occupational Safety and Health) accredited for this type of analysis. The Laboratory Analysis Report for lead in paint samples is included with this Report as Appendix II.

3.3 Mercury

The assessment included a visual identification of fluorescent light tubes, switches, electrical controls, heating system thermostats, thermometers, and other components historically known to contain mercury.

3.4 Other Designated Substances

Other materials listed in Section 1.0 of this Report were identified on a visual basis where present, as part of the current assessment. It should be noted that no manufacturing or heavy industrial activities are known by Maple to occur at the Site. Therefore, Designated Substances associated with these activities (i.e. those other than Asbestos, Lead, Mercury, and Silica) would not be expected to be present in the selected areas.

3.5 Mould

The assessment for mould was conducted in accordance with standard industry practice as set out in the Canadian Construction Association (CCA) "Mould Guidelines for the Canadian Construction Industry" for a visual assessment. Although there are no regulatory requirements in Ontario for such an assessment, the CCA Guidelines, and similar guidelines from other agencies have been accepted as the industry standard by most experts, consultants, the Ontario Ministry of Labour, and the Canadian Construction Association.

All guidelines and protocols for mould investigations indicate that investigations should be performed largely on a visual basis with limited collection of bulk and/or air samples. The Ontario Ministry of Labour has consistently enforced the removal of all mould from buildings regardless of mould genus or species, and therefore bulk samples or air samples for confirmation of mould are not typically collected for investigative purposes where mould is visible.

3.6 Polychlorinated Biphenyls

Manufacturers labels/codes collected from fluorescent lamp ballasts suspected of containing Polychlorinated Biphenyls ("PCBs") are compared with Environment Canada's document titled "Identification of Lamp Ballasts Containing PCBs", which identifies PCB-containing ballasts.

3.7 Limitations and Omissions from Scope

Due to the nature of building construction some limitations exist as to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the Site investigation. Maple believes that the information collected during the investigation concerning the property is reliable. No other warranties are implied or expressed.

During a standard ACM inventory performed for the purposes of regulatory compliance, it is industry practice to exclude certain suspect asbestos-containing materials from sampling. These materials are often excluded from sampling due to the risk of compromising the health and safety of the technician, other building occupants, or the integrity of the systems with which these materials are associated. Examples of such materials include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking and levelling compound. Where observed, these materials were presumed to be ACM.

3.8 Drawings

Drawings included in Appendix III will indicate the locations of any major applications of an asbestos-containing material with the exception of mechanical insulations, drywall, plaster finishes and transite (which cannot be accurately depicted on drawings). The information depicted on the drawings is not to scale and is only meant to provide a general representation of the locations of asbestos-containing materials.

4.0 INVENTORY FINDINGS

The findings of the survey are presented separately below for each of the eleven Designated Substances as well as microbial growth (mould), and polychlorinated biphenyls. Asbestos is further detailed by typical applications of asbestos.

4.1 Asbestos

The following is a brief discussion of the extent to which ACM was identified in the surveyed area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. The sample numbers refer to the laboratory analysis report presented as Appendix I and summarised in Table 2 below. Thirty-four (34) bulk samples were collected for the determination of asbestos content and submitted to the lab to be analysed. Due to the presence of more than one phase

of material in some of the original samples the laboratory may have performed multiple analyses for some samples. As a result, a total of forty-five (45) samples were analyzed.

Table 2- Analysis Summary of Asbestos Bulk Samples

Sample No.	Room Name	Sample Description	Result
S01A	Ebase 1036	Masonry Block Mortar	None Detected
		White Primer	None Detected
S01B	Ebase 1034	Masonry Block Mortar	None Detected
		White Primer	None Detected
S01C	Ebase 1035	Masonry Block Mortar	None Detected
		White Primer	None Detected
S01D	Ebase 1031	Masonry Block Mortar	None Detected
		White Primer	None Detected
S01E	Ebase 1037	Masonry Block Mortar	None Detected
		White Primer	None Detected
S01F	Ebase 1029	Masonry Block Mortar	None Detected
S01G	Ebase 1023	Masonry Block Mortar	None Detected
S02A	Ebase 1021	Acoustic Ceiling Tile (ACT-01)	None Detected
S02B	Ebase 1034	Acoustic Ceiling Tile (ACT-01)	None Detected
S02C	Ebase 1037	Acoustic Ceiling Tile (ACT-01)	None Detected
S03A	Ebase 1035	Vinyl Floor Tile (VFT-01)	None Detected
		Yellow Mastic	None Detected
S03B	Ebase 1035	Vinyl Floor Tile (VFT-01)	None Detected
		Yellow Mastic	None Detected
S03C	Ebase 1023	Vinyl Floor Tile (VFT-01)	None Detected
		Yellow Mastic	None Detected
S04A	Ebase1034	Vinyl Sheet Flooring (VSF-01)	None Detected
		Yellow Mastic	None Detected
S04B	Ebase 1034	Vinyl Sheet Flooring (VSF-01)	None Detected
		Yellow Mastic	None Detected
S04C	Ebase 1034	Vinyl Sheet Flooring (VSF-01)	None Detected
		Yellow Mastic	None Detected
S05A	Ebase 1031	Light grey caulking	None Detected
S05B	Ebase 1031	Light grey caulking	None Detected
S05C	Ebase 1031	Light grey caulking	None Detected
S06A	Ebase 1031	White Caulking	None Detected
S06B	Ebase 1034	White Caulking	None Detected
S06C	Ebase 1035	White Caulking	None Detected
S07A	Ebase 1036	Drywall Joint Compound	None Detected
S07B	Ebase 1037	Drywall Joint Compound	None Detected
S07C	Ebase 1031	Drywall Joint Compound	None Detected
S08A	**Ebase 1029**	**Parging Cement**	**30% Chrysotile**
S08B	**Ebase 1029**	**Parging Cement**	**30% Chrysotile**
S08C	**Ebase 1029**	**Parging Cement**	**30% Chrysotile**
S09A	Ebase 1014	Acoustic Ceiling Tile (ACT-02)	None Detected

Table 2- Analysis Summary of Asbestos Bulk Samples			
Sample No.	**Room Name**	**Sample Description**	**Result**
S09B	Ebase 1014	Acoustic Ceiling Tile (ACT-02)	None Detected
S09C	Ebase 1014	Acoustic Ceiling Tile (ACT-02)	None Detected
S10A	Ebase 1030	Acoustic Ceiling Tile (ACT-03)	None Detected
S10B	Ebase 1030	Acoustic Ceiling Tile (ACT-03)	None Detected
S10C	Ebase 1030	Acoustic Ceiling Tile (ACT-03)	None Detected

Asbestos-containing materials (ACM) are present in the form of parging cement (mechanical insulation) and transite cement panels. Details for all confirmed and suspect asbestos-containing materials are presented below under the headings of the most typical asbestos applications in buildings.

It should be noted that due to the presence of solid walls and ceilings in the surveyed areas, access for viewing within the wall and ceiling cavities was not always possible. Suspect asbestos-containing materials may be present within wall and ceiling cavities that were not identified but are suspected to be present in this report. Caution should be taken when demolishing solid walls and ceilings within the areas being surveyed.

4.1.1 Sprayed Fireproofing (Friable)

No sprayed fireproofing was identified within the surveyed area at the time of the assessment.

4.1.2 Thermal Mechanical Insulation (Friable)

Asbestos and non-asbestos mechanical insulations were identified in the surveyed area. The various types of mechanical insulations and the system to which they are applied are summarised below.

Pipe Fittings:

Parging cement insulation on pipe fittings (which include elbows, valves, tees, hangers, etc.) was observed on pipe systems in the surveyed area.

Three (3) representative samples (Sample Set S-08 A-C) of parging cement were collected and analysed for determination of asbestos content. Analysis of Sample Set S-08 found that the material contains **30% Chrysotile asbestos.**

Pipe Straights:

No asbestos-containing straight sections of pipe insulation were observed within the surveyed area at the time of the assessment.

All pipe straights observed were either insulated with non-asbestos fibreglass and PVC or were un-insulated.

Duct Systems:

Duct systems observed within the surveyed area were observed to be externally non-insulated.

4.1.3 Texture Finish (Friable)

No textured finishes were identified within the surveyed area at the time of the assessment.

4.1.4 Acoustic Ceiling Tiles (Potentially Friable)

No asbestos-containing acoustic ceiling tile systems were identified within the surveyed area at the time of the assessment.

Three (3) visually distinct types of ceiling tile systems were observed in the surveyed area. A brief description of each type of ceiling tile is outlined below.

- AT-01 (2'x4' with 12"x12" square pattern):

  AT-01 was observed to be present within Ebase 1031, 1033, 1034, 1035, 1036, 1037.

  Three (3) representative samples (Sample Set S-02 A-C) of AT-01 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-02 found that the material does not contain asbestos.

- AT-02 (2'x4' with Dense Fissures):

  AT-02 was observed to be present within Ebase 1014.

  Three (3) representative samples (Sample Set S-09 A-C) of AT-02 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-09 found that the material does not contain asbestos.

- AT-03 (2'x4' with Dense Fissures and pinholes):

  AT-03 was observed to be present within Ebase 1030.

  Three (3) representative samples (Sample Set S-10 A-C) of AT-03 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-10 found that the material does not contain asbestos.

4.1.5 Vinyl Sheet Flooring (Potentially Friable)

No asbestos-containing vinyl sheet flooring finishes were identified within the surveyed area at the time of the assessment.

One (1) visually distinct type of vinyl sheet flooring finish was observed within the surveyed area. A brief description of flooring is outlined below.

- VSF-01 (Blue):

  VSF-01 was observed to be present in the Ebase 1034.

  Three (3) representative samples (Sample Set S-04 A-C) of VSF-01 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-04 found that the material does not contain asbestos.

  Yellow mastic associated with VSF-01 was also analyzed as part of the analysis process which confirmed that the material does not contain asbestos.

4.1.6 Vinyl Floor Tile (Non-Friable)

No asbestos-containing vinyl floor tile systems were identified within the surveyed area at the time of the assessment.

One (1) visually distinct type of vinyl floor tile system was observed within the surveyed area. A brief description of each type of vinyl floor tile is outlined below.

- VFT-01 (12x12 Beige with light brown flecks)

  VFT-01 was observed to be present within Ebase 1035 and 1025.

  Three (3) representative samples (Sample Set S-03 A-C) of VFT-01 were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-03 found that the material does not contain asbestos

  Yellow mastic associated with VFT-01 was also analyzed as part of the analysis process which confirmed that the material does not contain asbestos.

4.1.7 Asbestos Cement Products "Transite" (Non-Friable)

Asbestos-containing transite cement products were identified within the surveyed area in the form of transite cement panels at the time of the assessment.

Two (2) visually distinct types of transite cement products were observed within the surveyed area. A brief description of each type of transite cement product is outlined below.

- **Transite Wall Panels**

  Transite cement panels were observed to be present in form of wall panels within Ebase 1030 (Corridor) above lockers.

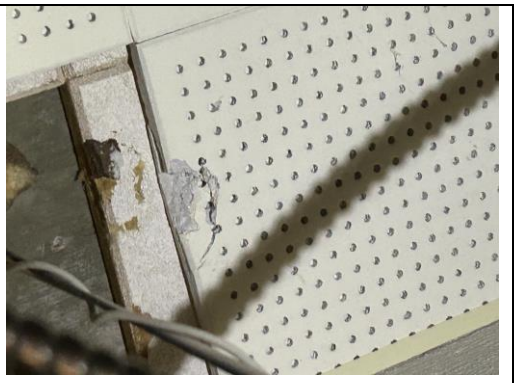
  No bulk of transite wall panels were collected as previous samples by Others confirmed that the material contains **Chrysotile asbestos.**

- **Transite Ceiling Panels**

  Transite cement panels were observed to be present in form of ceiling finishes within Ebase 1031 (Library).

  No bulk samples were collected of the transite cement panels as transite cement products are historically known to contain Chrysotile, Amosite and/or Crocidolite Asbestos. Visual identification of this material is usually reliable although a non-asbestos equivalent is also available. The material is assumed to contain asbestos until sampling proves otherwise.

  Refer to figure 1 and 2 below for representative views of transite ceiling finishes.

	
Figure 1: View of transite panels in form of ceiling finish	Figure 2: Close view of transite panels.

4.1.8 Drywall Joint Compound (DJC) (Potentially Friable)

No asbestos-containing drywall joint compound was identified within the surveyed area at the time of the assessment.

Interior drywall finishes were present in the form of wall and ceiling finishes within the surveyed area at the time of the assessment.

Three (3) representative samples (Sample Set S-07 A-C) of drywall joint compound were collected and analyzed for determination of asbestos content. Analysis of Sample Set S-07 found that the material does not contain asbestos.

4.1.9 Plaster (Potentially Friable)

No plaster finishes were identified within the surveyed area at the time of the assessment.

4.1.10 Vermiculite (Friable)

No vermiculite insulation was observed to be present within the surveyed area at the time of the assessment. It should be noted that loose fill vermiculite insulation can often be present within voids of masonry and possibly some pre-manufactured surveyed area components that would not be identified during the course of this assessment.

4.1.11 Other

- Masonry Block Mortar:

  Masonry block mortar was observed to be present in form of interior wall finishes within the majority of surveyed area.

  Seven (7) representative samples (Sample Set S-01 A-G) of masonry block mortar were collected and analyzed for asbestos content. Analysis of Sample Set S-01 found that the material does not contain asbestos.

  White associated with masonry block mortar was also analyzed as part of the analysis process which confirmed that the material does not contain asbestos

- Light grey interior window frame caulking:

  Light grey caulking was observed to be applied to the interior window frames within the surveyed area.

  Three (3) representative samples (Sample Set S-05 A-C) of light grey caulking were collected and analyzed for asbestos. Analysis of Sample S-05 found that the material does not contain asbestos.

- White interior door frame caulking:

  White caulking was observed to be applied to the interior door frames within the surveyed area.

  Three (3) representative samples (Sample Set S-06 A-C) of light grey caulking were collected and analyzed for asbestos. Analysis of Sample S-06 found that the material does not contain asbestos.

4.2 Lead

Three (3) bulk paint samples and one (1) bulk mortar samples were collected for determination of lead content and submitted to EMSL for analysis during the assessment. The sample number refers to the Certificate of Analysis Report presented as Appendix II and summarised in Table 3 below.

Table 3– Analysis Summary of Lead Samples

Sample No.	Locations	Sample Description	Result
Pb-01	Ebase 1031	Light green paint	<0.0088%
Pb-02	Ebase 1034	Blue Paint	<0.020%
Pb-03	Ebase 1037	Yellow Paint	<0.0080%
Pb-04	Ebase 1036	Masonry Block Mortar	<40mg/Kg

No regulations currently exist in Ontario defining the lower limit of lead-containing material. The Ontario Ministry of Labour (MOL) has issued a guideline for lead abatement, entitled Guideline – Lead on Construction Projects (2004) which is considered enforceable. The Guideline does not specify what constitutes a material as "lead-containing". Instead, it outlines procedures based on the concentration of airborne lead encountered during removal, as well as provides procedures and/or specific operations for lead-containing material removal. However, the Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair document classifies paint as either Low-Level, Lead-Containing, or Lead-Based as follows:

Table 4- EACC Classification of Lead

Concentration of Lead	Definition
0.1% or less OR 1000 mg/Kg or less	Low Level Lead ("Virtually Safe")

Table 4- EACC Classification of Lead	
Concentration of Lead	**Definition**
Greater than 0.1% but less than 0.5% OR Greater than 1000 mg/Kg but less than 5000 mg/Kg	Lead-Containing
Greater than 0.5% OR Greater than 5000 mg/Kg	Lead-Based

Based on these criteria and the results of the sample analysis, all paints and mortar sampled are considered to be Low-Level Lead ("virtually safe").

4.3 Mercury

Mercury vapour is present in all fluorescent light tubes.

4.4 Silica

Free crystalline silica, present as common construction sand, is present in all concrete and masonry products where present in the Select areas surveyed.

4.5 Isocyanates

Free isocyanate compounds would not be expected to be found in a non-manufacturing facility.

4.6 Vinyl Chloride Monomer

Vinyl chloride monomer would not be expected to be found in a non-manufacturing facility.

4.7 Benzene

Benzene would not be expected to be found in a non-manufacturing facility.

4.8 Acrylonitrile

Acrylonitrile would not be expected to be found in a non-manufacturing facility.

4.9 Coke Oven Emissions

Coke oven emissions would not be expected to be found in a non-manufacturing facility.

4.10 Arsenic

Arsenic would not be expected to be found in a non-manufacturing facility.

4.11 Ethylene Oxide

Ethylene oxide would not be expected to be found in a non-manufacturing facility.

4.12 Mould

No visible mould growth was observed to be present within the surveyed area at the time of the assessment.

It is possible that mould growth is present in concealed areas such as wall or ceiling cavities, pipe chases, etc. or in areas not currently assessed by Maple. The client should notify Maple should any water damage or suspect mould growth be discovered.

4.13 Polychlorinated Biphenyls (PCBs)

The fluorescent lamp fixtures observed contained of T8 fluorescent light tubes. T8 fixtures have electronic ballast and are considered as not containing PCB.

5.0 RECOMMENDATIONS

5.1 Asbestos

Asbestos-containing material identified within the surveyed areas include the following:

- Parging Cement (mechanical insulation)
- Transite Cement Panels

General recommendations for each of the confirmed asbestos-containing materials are as follows:

- Removal or disturbance of asbestos-containing mechanical insulations requires the use of Type 2, Type 3, or Glove Bag Asbestos Procedures as appropriate for the work being performed.
- Removal or disturbance of non-friable asbestos-containing transite cement products requires the use of Type 1 Asbestos Procedures provided that no power tools are utilized. In the event that power tools are needed, the use of Type 3 Asbestos Procedures are required the remove the subject material(s).

It is important to note that due to the presence of solid wall and ceiling systems, the assessment was not able to confirm or deny the presence of ACM within wall and ceiling cavities. The presence of concealed ACM should be assumed as well as within rooms that were not accessible during the assessment. It is possible that ACM is present that was not identified in this report.

This report should not be read or interpreted as a "scope of work". Detailed abatement specifications should be prepared for asbestos removal that will impact the scope of any future renovations.

5.2 Lead

Paints and mortar (0.1% or less and/or 1000 mg/Kg or less) sampled were found to be low level lead ("virtually safe").

Low Level Lead paints and mortar are considered virtually safe provided that;

- airborne lead concentrations are kept below 0.05 mg/m^3
- general dust suppression and worker hygiene procedures are utilized
- torching or other activities that create fumes are not completed

5.3 Mercury

Recycle and reclaim mercury from fluorescent light tubes when taken out of service. Do not break lamps or separate liquid mercury from components. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

5.4 Silica

Proper dust suppression techniques and other safety precautions to control possible generation of silica dust from the demolition of concrete and masonry products present in the building should follow those outlined in the Ministry of Labour Guideline- Silica on Construction Projects, 2004.

6.0 LIMITATIONS

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. Maple warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. Maple believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

Information provided by Maple is intended for Client use ONLY. Any use by a third party, of reports or documents authored by Maple, or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Maple accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

The liability of Maple or its staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Maple will not be responsible for any consequential or indirect damages. Maple will only be liable for damages resulting from negligence of Maple; all claims by the Client shall be deemed relinquished if not made within two years after last date of services provided.

Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

End of Report

Sincerely,

MAPLE ENVIRONMENTAL INC.
Environment, Health and Safety Consultants

Prepared By:

Yug Shah
Project Technologist

Reviewed By:

Mark Pollock
Project Manager

APPENDIX I

LABORATORY ANALYSIS REPORT - ASBESTOS

emcscientific
INCORPORATED

Laboratory Analysis Report

To:

Yug Shah
Maple Environmental Inc.
482 South Service Road East, Suite 116
Oakville, Ontario
L6J 2X6

EMC LAB REPORT NUMBER: A98988
Job/Project Name: Simcoe Composite S.S
Analysis Method: Polarized Light Microscopy – EPA 600
Date Received: Dec 20/23 **Date Analyzed:** Dec 29/23
Analysts: Chengming Li & Rahul Patel
Reviewed By: Malgorzata Sybydlo

Job No: 21471
Number of Samples: 34
Date Reported: Dec 29/23

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S01A	A98988-1	Masonry block mortar/ ebase 1036	2 Phases: a) White, primer b) Grey, cementitious material	 **ND** **ND**			 100 100
S01B	A98988-2	Masonry block mortar/ ebase 1034	2 Phases: a) White, primer b) Grey, cementitious material	 **ND** **ND**			 100 100
S01C	A98988-3	Masonry block mortar/ ebase 1035	2 Phases: a) White, primer b) Grey, cementitious material	 **ND** **ND**			 100 100
S01D	A98988-4	Masonry block mortar/ ebase 1031	2 Phases: a) White, primer b) Grey, cementitious material	 **ND** **ND**			 100 100
S01E	A98988-5	Masonry block mortar/ ebase 1037	2 Phases: a) White, primer b) Grey, cementitious material	 **ND** **ND**			 100 100
S01F	A98988-6	Masonry block mortar/ ebase 1029	Grey, cementitious material	**ND**			100
S01G	A98988-7	Masonry block mortar/ ebase 1023	Grey, cementitious material	**ND**			100
S02A	A98988-8	ACT-01 (2'x4' w/ 12"x12" square pattern/ ebase 1021)	Grey, ceiling tile	**ND**		75	25
S02B	A98988-9	ACT-01 (2'x4' w/ 12"x12" square pattern/ ebase 1034)	Grey, ceiling tile	**ND**		75	25

EMC LAB REPORT NUMBER: A89047
Client's Job/Project Name/No.: 20866
Analysts: Chengming Li / Rahul Patel

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S02C	A98988-10	ACT-01 (2'x4' w/ 12"x12" square pattern/ ebase 1037)	Grey, ceiling tile	**ND**		75	25
S03A	A98988-11	VFT-01 (beige w/ light brown flecks) /ebase 1035	2 Phases: a) Beige, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03B	A98988-12	VFT-01 (beige w/ light brown flecks) /ebase 1035	2 Phases: a) Beige, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S03C	A98988-13	VFT-01 (beige w/ light brown flecks) /ebase 1023	2 Phases: a) Beige, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S04A	A98988-14	VFT-01 (blue)/ ebase 1034	2 Phases: a) Blue, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S04B	A98988-15	VFT-01 (blue)/ ebase 1034	2 Phases: a) Blue, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S04C	A98988-16	VFT-01 (blue)/ ebase 1034	2 Phases: a) Blue, vinyl floor tile b) Yellow, mastic	 **ND** **ND**			 100 100
S05A	A98988-17	Light grey caulking/ Int windows ebase 1031	Light grey, caulking	**ND**			100
S05B	A98988-18	Light grey caulking/ Int windows ebase 1031	Light grey, caulking	**ND**			100
S05C	A98988-19	Light grey caulking/ Int windows ebase 1031	Light grey, caulking	**ND**			100

EMC LAB REPORT NUMBER: A89047
Client's Job/Project Name/No.: 20866
Analysts: Chengming Li / Rahul Patel

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
S06A	A98988-20	White Int door frame caulking/ ebase 1031	White, caulking	**ND**			100
S06B	A98988-21	White caulking/ interior door frame, ebase 1034	White, caulking	**ND**			100
S06C	A98988-22	White caulking/ interior door frame, ebase 1035	White, caulking	**ND**			100
S07A	A98988-23	DJC/ ebase 1036	Grey, drywall	**ND**		1	99
S07B	A98988-24	DJC/ ebase 1037	Grey, drywall	**ND**		1	99
S07C	A98988-25	DJC/ ebase 1031	White and off white, joint compound	**ND**			100
S08A	A98988-26	Parging cement, pipe fitting/ ebase 1029	Grey, cementitious material with fibres	**Chrysotile**	**30**		70
S08B	A98988-27	Parging cement, pipe fitting/ ebase 1029	Grey, cementitious material with fibres	**Chrysotile**	**30**		70
S08C	A98988-28	Parging cement, pipe fitting/ ebase 1029	Grey, cementitious material with fibres	**Chrysotile**	**30**		70
S09A	A98988-29	ACT-02 (2'x4' w/ dense fissure) ebase 1014	Grey, ceiling tile	**ND**		75	25
S09B	A98988-30	ACT-02 (2'x4' w/ dense fissure) ebase 1014	Grey, ceiling tile	**ND**		75	25
S09C	A98988-31	(2'x4' ACT-02 w/ dense fissure/ ebase 1014)	Grey, ceiling tile	**ND**		75	25
S10A	A98988-32	ACT-03 (2'x4' w/ dense fissure and pinholes)/ ebase 1030	Grey, ceiling tile	**ND**		75	25
S10B	A98988-33	ACT-03 (2'x4' w/ dense fissure and	Grey, ceiling tile	**ND**		75	25

EMC LAB REPORT NUMBER: A89047
Client's Job/Project Name/No.: 20866
Analysts: Chengming Li / Rahul Patel

Client's Sample ID	Lab Sample No.	Description/Location	Sample Appearance	SAMPLE COMPONENTS (%)			
				Asbestos Fibres		Non-asbestos Fibres	Non-fibrous Material
		pinholes)/ ebase 1030					
S10C	A98988-34	ACT-03 (2'x4' w/ dense fissure and pinholes)/ ebase 1030	Grey, ceiling tile	**ND**		75	25

Note:
1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.
5. Vinyl floor tiles may contain very fine asbestos fibres which the PLM method cannot detect. TEM analysis may be necessary to confirm the absence of asbestos

APPENDIX II

LABORATORY ANALYSIS REPORT – LEAD

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 Or	552319722
CustomerID:	55MAPL78
CustomerPO:	21471
ProjectID:	

Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/18/2023

Project: **Simcoe Composite SS / 21471**

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

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
Pb-01	12/18/2023	12/20/2023	0.2265 g	0.0088 % wt	<0.0088 % wt
552319722-0001	Site: Light Green Paint / Ebase 1031				
Pb-02	12/18/2023	12/20/2023	0.1024 g	0.020 % wt	<0.020 % wt
552319722-0002	Site: Blue Paint / Ebase 1034 Insufficient sample to reach reporting limit				
Pb-03	12/18/2023	12/20/2023	0.2521 g	0.0080 % wt	<0.0080 % wt
552319722-0003	Site: Yellow Paint / Ebase 1037				

Rowena Fanto, Lead Supervisor
or other approved signatory

* 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 Accredited #196142

Initial report from 12/28/2023 15:41:01

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 Or	552319722
CustomerID:	55MAPL78
CustomerPO:	21471
ProjectID:	

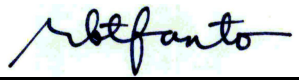
Attn: **Yug Shah**
Maple Environmental, Inc.
482 South Service Road East
Suite 116
Oakville, ON L6J 2X6

Phone:	(905) 257-4408
Fax:	(905) 257-8865
Received:	12/20/2023 09:00 AM
Collected:	12/18/2023

Project: **Simcoe Composite SS / 21471**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight (g)*	*RDL*	*Lead Concentration*
Pb-04	12/18/2023	12/21/2023	0.5020 g	40 mg/Kg	<40 mg/Kg
552319722-0004	Site: Masonry Block Mortar / Ebase 1036				



Rowena Fanto, Lead Supervisor
or other approved signatory

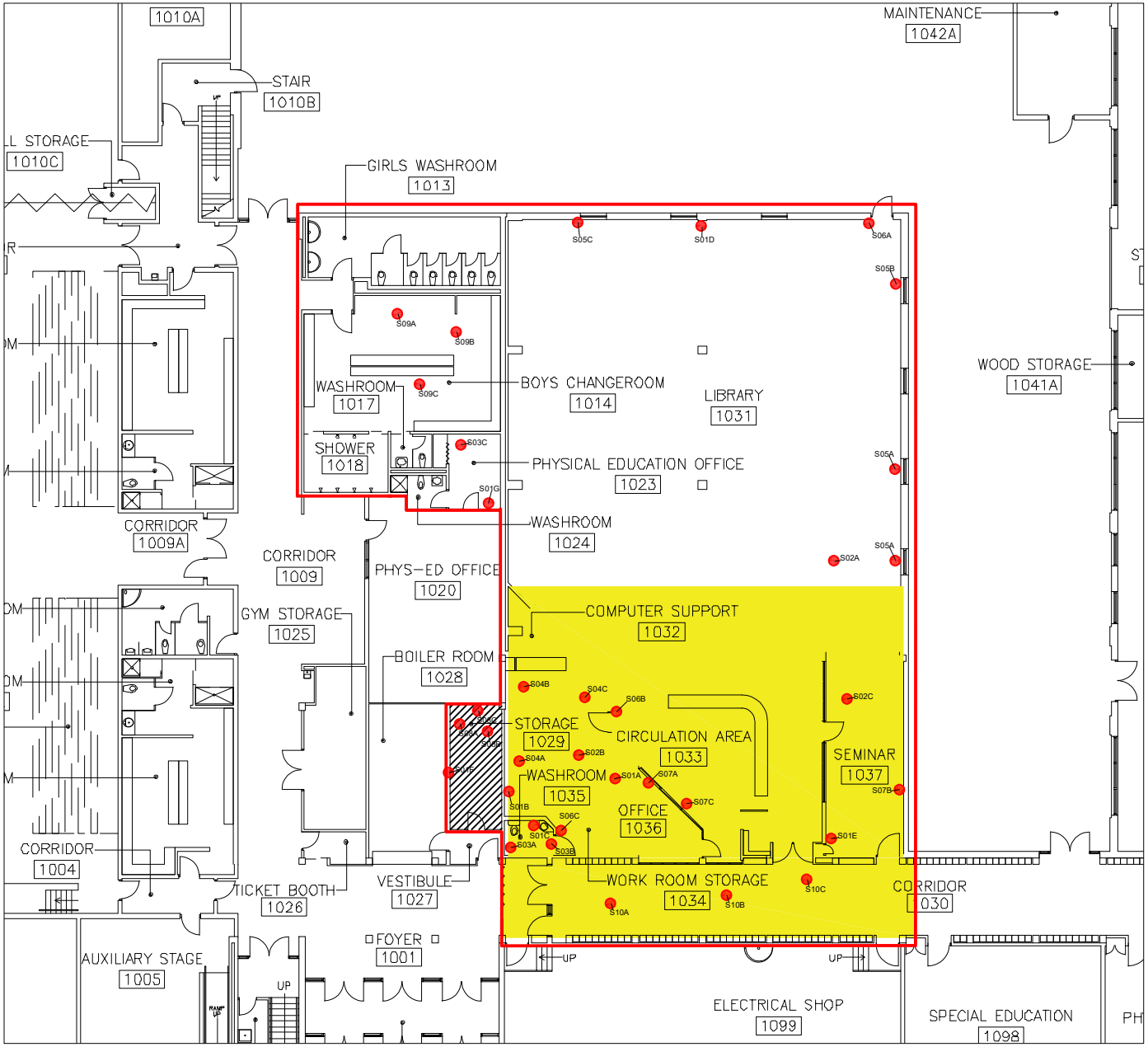
* Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

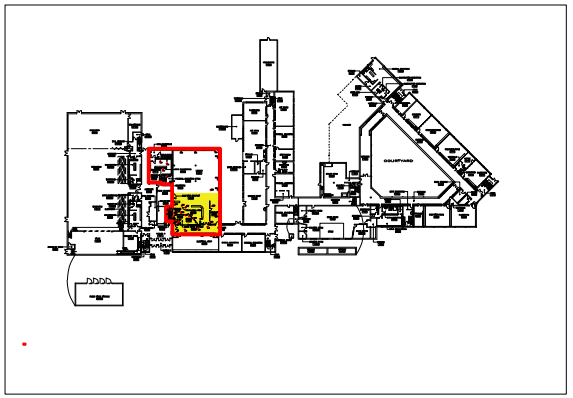
Samples analyzed by EMSL Canada Inc. Mississauga, ON

Initial report from 12/28/2023 15:41:01

APPENDIX III

DRAWINGS





MAPLE ENVIRONMENTAL INC.
ENVIRONMENT, HEALTH & SAFETY CONSULTANTS
482 South Service Rd. E. - Suite 116
Oakville - Ontario - L6J-2X6
Tel: (905) 257 4408 - Fax: (905) 257 8865
www.MapleEnvironmental.com

PROJECT NO.: 21471

Drawn By: Y. Shah

Checked By: M. Pollock

LEGENDS	
SYMBOL	DESCRIPTION
	ASBESTOS BULK SAMPLE: S-##
	LEAD BULK SAMPLE: Pb-##
	SURVEYED AREA

CONFIRMED & SUSPECTED ACM	
SYMBOL	DESCRIPTION
	PARGING CEMENT
	TRANSITE ASBESTOS PANELS

Limited Designated Substance Survey

Grand Erie District School Board

Simcoe Composite Secondary School
40 Wilson Drive
Simcoe, Ontario

First Floor Plan - Layout

SCALE: NTS

SHEET: DS-01

DATE: January 2024

APPENDIX A

Refer to next page.

Project:	
Type:	
Date:	
Product Code:	
Approval:	

BLRT

The BLRT is a recessed lay-in fixture designed for use in T-bar ceilings and is well suited for use in office spaces where a clean, professional appearance is required.

FEATURES

- L70 of over 125,000 hours
- 0 - 10V dimming standard

OPTIONS

- Available in 2700K, 3000K, 3500K, 4000K, 5000K, and 6500K
- Lumen packages from 2,000 to 10,000 lm
- 1x4, 2x2, 2x4, and custom dimensions
- Housing available with passive air handling
- 90 CRI available
- Bluetooth and Wireless mesh networks controls

APPLICATIONS

- Hospitals
- Offices
- Schools

WARRANTY

- Standard 5 year system, and 10 year LED warranty

OPTICS

Powder coated body in high-reflectance white. High-efficiency extruded lens maximizes light distribution while providing diffusion of LED point sources.

ELECTRICAL

All components are UL recognized. The fixture is available in 120 - 277V and 347V.

MOUNTING

Holes provided for chain or hanger wire mounting support for T-Bar ceilings. Surface mount kits are also available (consult factory for details).

CONSTRUCTION

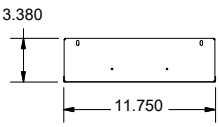
- Fixture materials are precision bent for added strength and rigidity
- Cold rolled steel body powder coated in high reflectance white.
- Access panel provided for easy wiring.
- Shallow fixture design for easy of installation and a clean, professional look.

APPROVALS

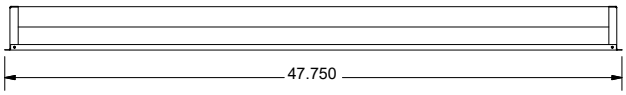
- ETL Listed
- DLC Certified

PRODUCT DIMENSIONS

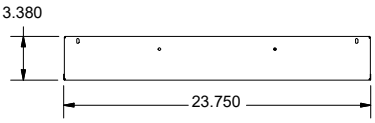
14 End View



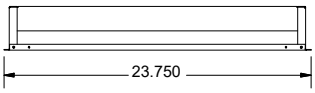
14 Side View



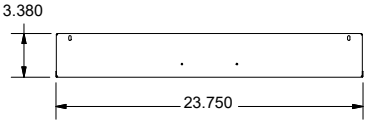
22 End View



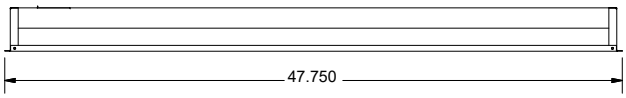
22 Side View



24 End View



24 Side View



PRODUCT KEY

Fixture Type	Fixture Size	Lumen Output	CRI	Color Temp	Driver Voltage	Options
BLRT -		-	L -		-	-

Fixture Size	Lumen Output
14, 22	2
	2.5
	3
	3.5
	4
	4.5
	5
24	3
	3.5
	4
	4.5
	5
	6
	7
	8
	9
	10

CRI	Color Temp	Driver Voltage
8 - 80 CRI	30 - 3000 K	UNV - 120-277V
9 - 90 CRI	35 - 3500 K	347 - 347V
	40 - 4000 K	UN3 - 120-347V
	50 - 5000 K	
	65 - 6500 K	

Lenses
Blank - Frosted Acrylic Lens

Controls
B11 0-10V Dimming Leads
WC10 Encelium Controls - ZigBee
WC22 JDRF - Bluetooth
WC** - Other Options Available

Emergency Driver
B17 - Emergency Driver

Air Handling
H20 - Housing with Passive Air Handing

Colours
Blank - White Low-Gloss, Matte Finish
C5 - Black Low-Gloss, Matte Finish
C** - Other Options Available

Packaging
P0 - Bulk Packaging
P** - Other Options Available

** - Consult BJ Take for more fixture options

Surface Mount Kits	
M15	BLRT24-Surface Mount Kit
	BLRT22-Surface Mount Kit
	BLRT14-Surface Mount Kit

WATTAGE CHART

BLRT Wattage Chart

Size	Lumen Output	Fixture Wattage	Size	Lumen Output	Fixture Wattage	Size	Lumen Output	Fixture Wattage
14	2	14.8	22	2	14.8	24	3	21.7
	2.5	18.4		2.5	18.4		3.5	25.3
	3	22.1		3	22.1		4	29.0
	3.5	25.8		3.5	25.8		4.5	32.7
	4	29.5		4	29.5		5	36.3
	4.5	33.2		4.5	33.2		6	43.7
	5	36.8		5	36.8		7	51.0
							8	58.4
							9	65.7
							10	73.0

Based on 4000K 80 CRI

NATIONAL ACCOUNTS
180 NEW HUNTINGTON
Vaughan, ON., L4H 0P5
Ph. 289-556-6855
Toll 1-877-856-9311x219

No. **BD 112923**

QUOTE

BURNABY LANGLEY WINNIPEG VAUGHAN BARRIE HAMILTON KITCHENER LONDON OAKVILLE OSHAWA SCARBOROUGH

Customer

Name	Grand Erie District School Board
Attn	Frank Mesicek
Address	349 Erie Avenue,
	Brantford, ON,
Phone	(519) 770-2948 Fax

Misc

Job Name	WOODMAN CAINSVILLE PUBLIC SCHOOL LIBRARY
Date	4-Dec-23
Terms	Net 30 Days O.A.C.
FOB	TORONTO

Qty	Description	Type	Unit Price	TOTAL
15	BLRT-24-5L-840-UNV-WC22			
	2X4 RECESSED LED BASKET,5000 LUMENS,80CRI			
	4000K,120-277 FROSTED ACRYLIC LENS JDFR AUTONOMY SENSOR			
2	**JDRF-AWS-01-W (WALL SWITCH WHITE)**			
	AUTONOMY WALL SWITCH-WHITE			
	**VOLTAGE TO BE VERIFIED			
				Lot Price

	SubTotal	**$**	**5,343.00**
	Shipping	$	-
HST	5.00%	$	267.15
Pst	8.00%	$	427.44
	TOTAL	**$**	**6,037.59**

Notes:

NET 30 DAYS OAC
ALL TAXES EXTRA

FOR MORE INFORMATION CALL BRUNO DI LEO @ 289-556-6855

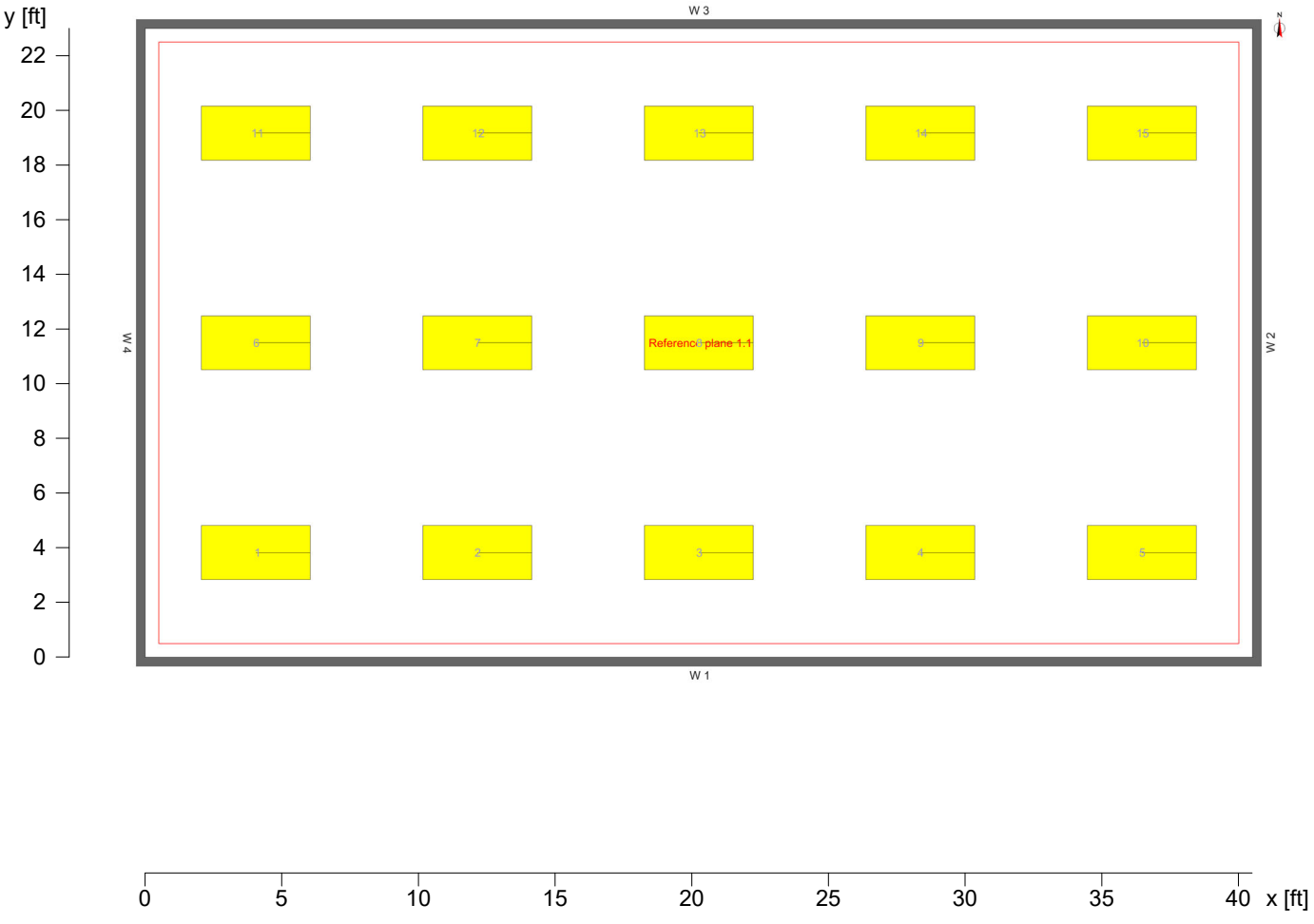
Object :
Installation :
Project number : Woodman Public School Library
Date : 27.11.2023

BJ TAKE INC.

Room 1

Description, Room 1

Floor plan



Room data:

W1	:	40.50
W2	:	23.00
W3	:	40.50
W4	:	23.00
W5	:	-----
W6	:	-----
Floor:		-----
Ceiling:		-----
Room height [ft]:		
Height of ref. plane [ft]:		
Height of luminaire plane [ft]:		

Reflectance:

50.0 %
50.0 %
50.0 %
50.0 %

20.0 %
70.0 %
8.17
2.50
8.17

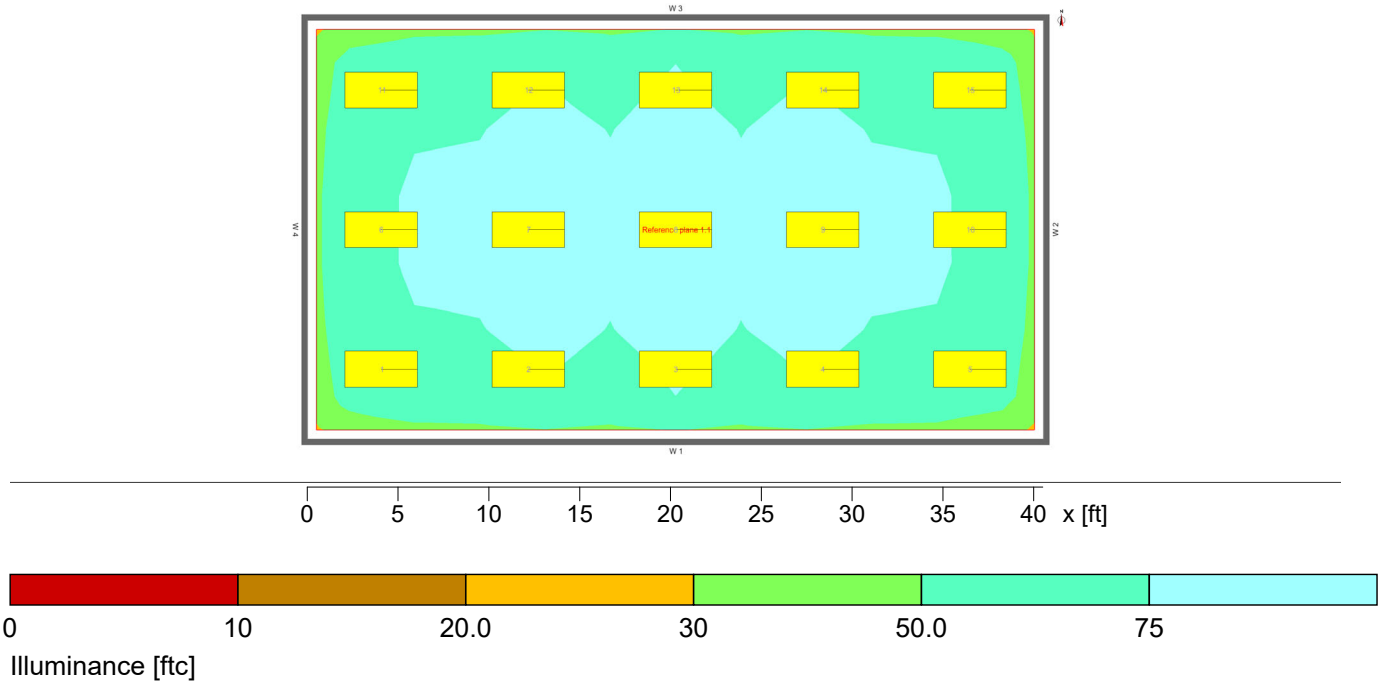
Object :
Installation :
Project number : Woodman Public School Library
Date : 27.11.2023

BJ TAKE INC.

Room 1

Summary, Room 1

Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	8.17 ft
Maintenance factor	0.95
Total luminous flux	87004.80 lm
Total power	556.5 W
Total power per area (931.50 sqft)	0.60 W/sqft (0.08 W/sqft/100ftc)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	73 ftc	39.1 ftc
E_{min}	58 ftc	31.6 ftc
$E_{min}/\bar{E}_m$ (U_o)	0.79	0.81
E_{min}/E_{max} (U_d)	0.67	
E_z/E_h		0.49
Position	2.50 ft	3.94 ft

Type No.\Make

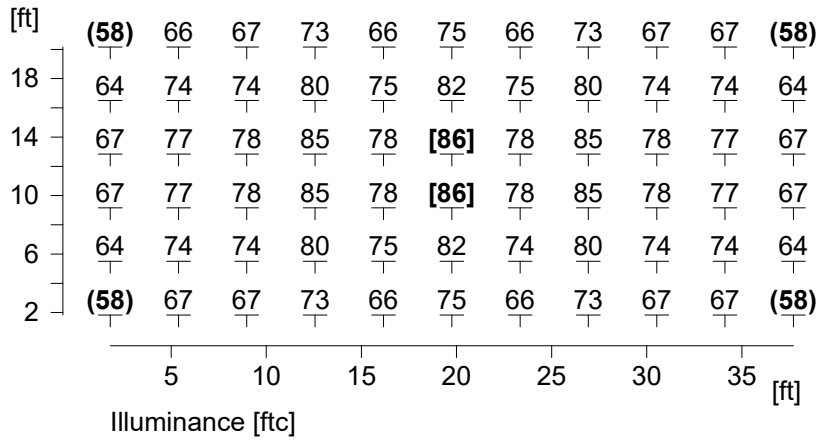
1 15 x Order No. : !BLRT-24-5L-840-UNV
Luminaire name : BLRT-24-5L-840-UNV
Equipment : 96 x LED 0.1885W MID POWER 3030 (65MA) / 60.42 lm

BJ TAKE INC.

Room 1

Calculation results, Room 1

Table, Reference plane 1.1 (E)



Height reference plane		: 2.50 ft
Average illuminance	$\bar{E}_m$	: 73 ftc
Minimum illuminance	E_{min}	: 58 ftc
Maximum illuminance	E_{max}	: 86.4 ftc
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.26 (0.79)
Diversity U_d	E_{min}/E_{max}	: 1 : 1.49 (0.67)