Planning Department Development Application Form

Complete Application

A complete development application consists of the following:

1. A completed, signed, and notarized application form
2. Supporting information adequate to illustrate your proposal as indicated in **Section H** of this application form
3. Written authorization from the registered owner of the subject lands where the applicant is not the owner as per Section N
4. Cash, debit, credit or cheque payable to Norfolk County in the amount set out in the user fees By-Law that will be accepted and deposited once the application has been deemed complete.

Pre-Submission Consultation:

Norfolk County requires a Pre-Consultation Meeting for all applications; however, minor applications may be exempted depending on the nature of the proposal. The purpose of a Pre-Consultation Meeting is to provide the applicant with an opportunity to present the proposed application, discuss potential issues, and for the Norfolk County and Agency staff to identify the application requirements. Application requirements, as detailed in the Pre-Consultation Meeting Comments, are valid for one year after the meeting date.

Development Application Process

Once an application has been deemed complete by a Planner, Norfolk County staff will circulate the application to adjacent landowners, public agencies, and internal departments for comment. The time involved in application processing varies depending on its complexity, acceptability to the other agencies, and statutory Planning Act decision time-frames.

Payment is required once your application is deemed complete. Pre-payments will not be accepted.

Norfolk County collects personal information submitted through this form under the Municipal Freedom of Information and Protection Act's authority. Norfolk County will use this information for the purposes indicated or implied by this form. You can direct questions about collecting personal information to Norfolk GIS Services at NorfolkGIS@norfolkcounty.ca.

Additional studies required for the complete application shall be at the applicant's sole expense. Sometimes, peer reviews may be necessary to review particular studies at the applicant's expense. In these caseds, Norfolk County staff will select the company to complete the peer review.

Norfolk County will refund the original fee if applicants withdraw their applications before circulation. If Norfolk County must recirculate your drawings, there will be an additional fee. If Norfolk County must do more than three reviews of engineering drawings due to revisions by the owner or failure to revise engineering drawings as requested, Norfolk County will charge an additional fee. Full refunds are only available before Norfolk County has circulated the application.

Notification Sign Requirements

For public notification, Norfolk County will provide you with a sign to indicate the intent and purpose of your development application. It is your responsibility to:

1. Post one sign per frontage in a conspicuous location on the subject lands.
2. Ensure one sign is posted at the front of the subject lands at least three feet above ground level and not on a tree.
3. Notify the Planner when the sign is in place.
4. Maintain the sign until the development application is finalized and, after that, remove it.

Contact Us

For additional information or assistance completing this application, please contact a Planner at 519-426-5870 or 519-875-4485 extension 1842 or planning@norfolkcounty.ca. Please submit the completed application and fees to the attention of the Planning Department at 185 Robinson Street, Suite 200, Simcoe, ON N3Y 5L6.

For Office Use Only:

File Number		Public Notice Sign	
Related File Number		Application Fee	
Pre-consultation Meeting		Conservation Authority Fee	
Application Submitted		Well & Septic Info Provided	
Complete Application		Planner	

Check the type of planning application(s) you are submitting.

- ☐ Official Plan Amendment
- ☐ Zoning By-Law Amendment
- ☐ Temporary Use By-law
- ☐ Draft Plan of Subdivision/Vacant Land Condominium
- ☐ Condominium Exemption
- ☐ Site Plan Application
- ☐ Extension of a Temporary Use By-law
- ☐ Part Lot Control
- ☐ Cash-in-Lieu of Parking
- ☐ Renewable Energy Project or Radio Communication Tower

Please summarize the desired result of this application (for example, a special zoning provision on the subject lands to include additional use(s), changing the zone or official plan designation of the subject lands, creating a certain number of lots, or similar)

This is a minor siteplan that we are looking to get approved for a licensed childcare at the described address of 579 James St, Delhi, Ontario. The zoning allows a licensed childcare use. Required parking already exists at the address. Preliminary site plan review has been completed

Property Assessment Roll Number: 492-009-15200-0000

A. Applicant Information

Name of Owner John Zaffino

Address 77 Talbot Road

Town and Postal Code Delhi, Ontario, N4B 1Z7

Phone Number 905-609-0881

Cell Number 905-609-0881

Email John.Zaffino@Cumis.com

Name of Applicant John Zaffino

Address 77 Talbot Road

Town and Postal Code Delhi, Ontario, N4B 1Z7

Phone Number 905-609-0881

Cell Number 905-609-0881

Email John.Zaffino@Cumis.com

Name of Agent _____

Address _____

Town and Postal Code _____

Phone Number _____

Cell Number _____

Email _____

Unless otherwise directed, Norfolk County will forward all correspondence and notices regarding this application to both owner and agent noted above.

☒ Owner ☒ Agent ☐ Applicant

Names and addresses of any holder of any mortgagees, charges or other encumbrances on the subject lands:

N/A

B. Location, Legal Description and Property Information

1. Legal Description (include Geographic Township, Concession Number, Lot Number, Block Number and Urban Area or Hamlet):
   579 James St. Plan 261 Lot 30 corner

   Municipal Civic Address: 579 James St, Delhi, Ontario, N4B 1Z7

   Present Official Plan Designation(s): _____

   Present Zoning: CS

2. Is there a special provision or site specific zone on the subject lands?

   ☐ Yes ☒ No If yes, please specify corresponding number:

3. Present use of the subject lands:
   Vacant - was a counter top company

4. Please describe **all existing** buildings or structures on the subject lands and whether they will be retained, demolished or removed. If retaining the buildings or structures, please describe the type of buildings or structures, and illustrate the setback, in metric units, from the front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:
   Existing 148.83 meters Sq structure on property wil be retained. Bock sing story structire with metal roof and siding.
   Attached Site plan has all required measurements on drawing

5. If an addition to an existing building is being proposed, please explain what it will be used for (for example: bedroom, kitchen, or bathroom). If new fixtures are proposed, please describe.
   N/A

6. Please describe **all proposed** buildings or structures/additions on the subject lands. Describe the type of buildings or structures/additions, and illustrate the setback, in metric units, from front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:
   N/A

7. Are any existing buildings on the subject lands designated under the *Ontario Heritage Act* as being architecturally and/or historically significant? Yes ☐ No ■

   If yes, identify and provide details of the building:

8. If known, the length of time the existing uses have continued on the subject lands:

   Currently Vacant

9. Existing use of abutting properties:

   Resudential

10. Are there any easements or restrictive covenants affecting the subject lands?

    ☐ Yes ■ No If yes, describe the easement or restrictive covenant and its effect:

C. Purpose of Development Application

Note: Please complete all that apply.

1. Please explain what you propose to do on the subject lands/premises which makes this development application necessary:

   Run a licensed Childcare Facility from the premise

2. Please explain why it is not possible to comply with the provision(s) of the Zoning By-law/and or Official Plan:

   N/A - zoning allows licensed childcare

3. Does the requested amendment alter all or any part of the boundary of an area of settlement in the municipality or implement a new area of settlement in the municipality? ☐ Yes ■ No If yes, describe its effect:

   N/A

4. Does the requested amendment remove the subject land from an area of employment? ☐ Yes ■ No If yes, describe its effect:

   N/A

5. Does the requested amendment alter, replace, or delete a policy of the Official Plan?
☐ Yes ■ No If yes, identify the policy, and also include a proposed text of the policy amendment (if additional space is required, please attach a separate sheet):
N/A

6. Description of land intended to be severed in metric units:
Frontage: N/A
Depth: _____
Width: _____
Lot Area: _____
Present Use: _____
Proposed Use: _____
Proposed final lot size (if boundary adjustment): _____
If a boundary adjustment, identify the assessment roll number and property owner of the lands to which the parcel will be added: _____

Description of land intended to be retained in metric units:
Frontage: N/A
Depth: _____
Width: _____
Lot Area: _____
Present Use: _____
Proposed Use: _____
Buildings on retained land: _____

7. Description of proposed right-of-way/easement:
Frontage: N/A
Depth: _____
Width: _____
Area: _____
Proposed use: _____

8. Name of person(s), if known, to whom lands or interest in lands to be transferred, leased or charged (if known):
_____

9. **Site Information**	**Zoning**	**Proposed**
Please indicate unit of measurement, for example: m, m^2 or %		
Lot frontage	18.29 M	No Change
Lot depth	45.72 M	No Change
Lot width	18.29M	
Lot area	836.22M	
Lot coverage		
Front yard		
Rear yard		
Left Interior side yard		
Right Interior side yard		
Exterior side yard (corner lot)		
Landscaped open space		
Entrance access width		
Exit access width		
Size of fencing or screening		
Type of fencing		

10. Building Size

Number of storeys	1	
Building height	4.57M	
Total ground floor area	148.83M	
Total gross floor area		
Total useable floor area		

11. Off Street Parking and Loading Facilities

Number of off street parking spaces	4	5
Number of visitor parking spaces	0	0
Number of accessible parking spaces	1(Incl in 4)	1 (incl in 5)
Number of off street loading facilities	0	0

12. Residential (if applicable)

Number of buildings existing: N/A

Number of buildings proposed: _____

Is this a conversion or addition to an existing building? ☐ Yes ☒ No

If yes, describe: _____

Type	Number of Units	Floor Area per Unit in m2
Single Detached	NA	
Semi-Detached		
Duplex		
Triplex		
Four-plex		
Street Townhouse		
Stacked Townhouse		
Apartment - Bachelor		
Apartment - One bedroom		
Apartment - Two bedroom		
Apartment - Three bedroom		

Other facilities provided (for example: play facilities, underground parking, games room, or swimming pool):

13. Commercial/Industrial Uses (if applicable)

Number of buildings existing: One

Number of buildings proposed: One

Is this a conversion or addition to an existing building? ☒ Yes ☐ No

If yes, describe:

Small internal renovation for a licensed Childcare

Indicate the gross floor area by the type of use (for example: office, retail, or storage):

_____

_____

_____

Seating Capacity (for assembly halls or similar): N/A

Total number of fixed seats: N/A

Describe the type of business(es) proposed: Licensed Childcare

Total number of staff proposed initially: 2

Total number of staff proposed in five years: 4

Maximum number of staff on the largest shift: 4

Is open storage required: ☐ Yes ☒ No

Is a residential use proposed as part of, or accessory to commercial/industrial use?

☐ Yes ☒ No If yes please describe:

14. Institutional (if applicable)

Describe the type of use proposed: N/A

Seating capacity (if applicable):

Number of beds (if applicable):

Total number of staff proposed initially:

Total number of staff proposed in five years:

Maximum number of staff on the largest shift:

Indicate the gross floor area by the type of use (for example: office, retail, or storage):

15. Describe Recreational or Other Use(s) (if applicable)

N/A

D. Previous Use of the Property

1. Has there been an industrial or commercial use on the subject lands or adjacent lands? ☐ Yes ■ No ☐ Unknown
   If yes, specify the uses (for example: gas station or petroleum storage):

   _____

   _____

2. Is there reason to believe the subject lands may have been contaminated by former uses on the site or adjacent sites? ☐ Yes ■ No ☐ Unknown
3. Provide the information you used to determine the answers to the above questions:
   Residential properties abut this site.

   _____

   _____

4. If you answered yes to any of the above questions in Section D, a previous use inventory showing all known former uses of the subject lands, or if appropriate, the adjacent lands, is needed. Is the previous use inventory attached? ☐ Yes ☐ No

E. Provincial Policy

1. Is the requested amendment consistent with the provincial policy statements issued under subsection 3(1) of the *Planning Act, R.S.O. 1990, c. P. 13*? ■ Yes ☐ No

   If no, please explain:

   _____

   _____

   _____

2. It is owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals, including the Endangered Species Act, 2007. Have the subject lands been screened to ensure that development or site alteration will not have any impact on the habitat for endangered or threatened species further to the provincial policy statement subsection 2.1.7? ■ Yes ☐ No

   If no, please explain:

   _____

   _____

   _____

3. Have the subject lands been screened to ensure that development or site alteration will not have any impact on source water protection? ☐ Yes ■ No

   If no, please explain:

   Municipal City water and sewer- no change in water usage

   Note: If in an area of source water Wellhead Protection Area (WHPA) A, B or C please attach relevant information and approved mitigation measures from the Risk Manager Official.

4. Are any of the following uses or features on the subject lands or within 500 metres of the subject lands, unless otherwise specified? Please check boxes, if applicable.

   Livestock facility or stockyard (submit MDS Calculation with application)
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Wooded area
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Municipal Landfill
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Sewage treatment plant or waste stabilization plant
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Provincially significant wetland (class 1, 2 or 3) or other environmental feature
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Floodplain
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Rehabilitated mine site
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Non-operating mine site within one kilometre
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Active mine site within one kilometre
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Industrial or commercial use (specify the use(s))
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Active railway line
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Seasonal wetness of lands
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Erosion
   ☐ On the subject lands or ☐ within 500 meters – distance No

   Abandoned gas wells
   ☐ On the subject lands or ☐ within 500 meters – distance No

F. Servicing and Access

1. Indicate what services are available or proposed:

Water Supply

- ☒ Municipal piped water
- ☐ Communal wells
- ☐ Individual wells
- ☐ Other (describe below)

Sewage Treatment

- ☒ Municipal sewers
- ☐ Communal system
- ☐ Septic tank and tile bed in good working order
- ☐ Other (describe below)

Storm Drainage

- ☒ Storm sewers
- ☐ Open ditches
- ☐ Other (describe below)

2. Existing or proposed access to subject lands:

- ☒ Municipal road
- ☐ Provincial highway
- ☐ Unopened road
- ☐ Other (describe below)

Name of road/street: James Street & Brock St

G. Other Information

1. Does the application involve a local business? ☒ Yes ☐ No

   If yes, how many people are employed on the subject lands?

   4 people will be employed once childcare open and fully established.

2. Is there any other information that you think may be useful in the review of this application? If so, explain below or attach on a separate page.

   N/A

H. Supporting Material to be submitted by Applicant

In order for your application to be considered complete, **folded** hard copies (number of paper copies as directed by the planner) and an **electronic version (PDF) of the properly named site plan drawings, additional plans, studies and reports** will be required, including but not limited to the following details:

1. Concept/Layout Plan
2. All measurements in metric
3. Key map
4. Scale, legend and north arrow
5. Legal description and municipal address
6. Development name
7. Drawing title, number, original date and revision dates
8. Owner's name, address and telephone number
9. Engineer's name, address and telephone number
10. Professional engineer's stamp
11. Existing and proposed easements and right of ways
12. Zoning compliance table – required versus proposed
13. Parking space totals – required and proposed
14. All entrances to parking areas marked with directional arrows
15. Loading spaces, facilities and routes (for commercial developments)
16. All dimensions of the subject lands
17. Dimensions and setbacks of all buildings and structures
18. Location and setbacks of septic system and well from all existing and proposed lot lines, and all existing and proposed structures
19. Gross, ground and useable floor area
20. Lot coverage
21. Floor area ratio
22. Building entrances, building type, height, grades and extent of overhangs
23. Names, dimensions and location of adjacent streets including daylighting triangles
24. Driveways, curbs, drop curbs, pavement markings, widths, radii and traffic directional signs
25. All exterior stairways and ramps with dimensions and setbacks
26. Retaining walls including materials proposed
27. Fire access and routes
28. Location, dimensions and number of parking spaces (including visitor and accessible) and drive aisles
29. Location of mechanical room, and other building services (e.g. A/C, HRV)
30. Refuse disposal and storage areas including any related screening (if indoors, need notation on site plan)
31. Winter snow storage location

32. Landscape areas with dimensions
33. Natural features, watercourses and trees
34. Fire hydrants and utilities location
35. Fencing, screening and buffering – size, type and location
36. All hard surface materials
37. Light standards and wall mounted lights (plus a note on the site plan that all outdoor lighting is to be dark sky compliant)
38. Business signs (make sure they are not in sight lines)
39. Sidewalks and walkways with dimensions
40. Pedestrian access routes into site and around site
41. Bicycle parking
42. Architectural elevations of all building sides
43. All other requirements as per the pre-consultation meeting

In addition, the following additional plans, studies and reports, including but not limited to, **may** also be required as part of the complete application submission:

☐ Zoning Deficiency Form

☐ On-Site Sewage Disposal System Evaluation Form (to verify location and condition)

☐ Architectural Plan

☐ Buildings Elevation Plan

☐ Cut and Fill Plan

☐ Erosion and Sediment Control Plan

☐ Grading and Drainage Control Plan (around perimeter and within site) (existing and proposed)

☐ Landscape Plan

☐ Photometric (Lighting) Plan

☐ Plan and Profile Drawings

☐ Site Servicing Plan

☐ Storm water Management Plan

☐ Street Sign and Traffic Plan

☐ Street Tree Planting Plan

☐ Tree Preservation Plan

☐ Archaeological Assessment

☐ Environmental Impact Study

☐ Functional Servicing Report

☐ Geotechnical Study / Hydrogeological Review

☐ Minimum Distance Separation Schedule

☐ Noise or Vibration Study

☐ Record of Site Condition

☐ Storm water Management Report

☐ Traffic Impact Study – please contact the Planner to verify the scope required

Site Plan applications will require the following supporting materials:

1. Two (2) complete sets of the site plan drawings folded to 8½ x 11 and an electronic version in PDF format
2. Letter requesting that the Holding be removed (if applicable)
3. A cost estimate prepared by the applicant's engineer
4. An estimate for Parkland dedication by a certified land appraiser
5. Property Identification Number (PIN) printout

Standard condominium exemptions will require the following supporting materials:

☐ Plan of standard condominium (2 paper copies and 1 electronic copy)

☐ Draft condominium declaration

☐ Property Identification Number (PIN) printout

Your development approval might also be dependent on other relevant federal or provincial legislation, municipal by-laws or other agency approvals.

All final plans must include the owner's signature as well as the engineer's signature and seal.

I. Development Agreements

A development agreement may be required prior to site plan approval, subdivision and condominium applications. Should this be necessary for your development, you will be contacted by the agreement administrator with further details of the requirements including but not limited to insurance coverage, professional liability for your engineer, additional fees and securities.

J. Transfers, Easements and Postponement of Interest

The owner acknowledges and agrees that if required, it is their solicitor's responsibility on behalf of the owner, to disclose the registration of all transfer(s) of land and/or easement in favour of the County and/or utilities. Also, the owner further acknowledges and agrees that it is their solicitor's responsibility on behalf of the owner for the registration of postponements of any charges in favour of the County.

K. Permission to Enter Subject Lands

Permission is hereby granted to Norfolk County officers, employees or agents, to enter the premises subject to this application for the purposes of making inspections associated with this application, during normal and reasonable working hours.

L. Freedom of Information

For the purposes of the *Municipal Freedom of Information and Protection of Privacy Act*, I authorize and consent to the use by or the disclosure to any person or public body any information that is collected under the authority of the *Planning Act, R.S.O. 1990, c. P. 13* for the purposes of processing this application.

John Zaffino — April 15,2024

Owner/Applicant Signature — Date

M. Owner's Authorization

If the applicant/agent is not the registered owner of the lands that is the subject of this application, the owner(s) must complete the authorization set out below.

I/We John Zaffino am/are the registered owner(s) of the lands that is the subject of this application.

I/We authorize N/A to make this application on my/our behalf and to provide any of my/our personal information necessary for the processing of this application. Moreover, this shall be your good and sufficient authorization for so doing.

John Zaffino — April 15, 2024

Owner — Date

Owner — Date

N. Declaration

I, John Zaffino of Delhi, Ontario

solemnly declare that:

all of the above statements and the statements contained in all of the exhibits transmitted herewith are true and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of *The Canada Evidence Act.*

Declared before me at:

Simcoe

John Zaffino

Owner/Applicant Signature

In Norfolk County

This 17th day of April

A.D., 20 24

John Andrew Wallace, a Commissioner, etc., Province of Ontario, for the Corporation of Norfolk County. Expires January 16, 2027.

A Commissioner, etc.

Pre-Consultation Meeting Notes

Date: November 22, 2023

Description of Proposal: The applicant proposes to run a Licensed Childcare facility on the subject lands.

Property Location: 579 James Street, Delhi

Roll Number: 3310492009152000000

Please read all the information in this document on the requirements for future development planning applications. As a result of the information shared at the pre-consultation meeting dated November 22, 2023, the following applications and qualified professional documents/reports are required as part of a complete application. Please include all listed items with the application to ensure a complete application. The County reserves the right to change, reduce or add requirements for a complete application, particularly if the submission does not match the proposal as reviewed during the pre-submission consultation meeting.

Please note that various fees are associated with each application, and there are also costs for qualified professionals retained to complete various documents/reports. All requirements identified are minimum and determined as of the date of the pre-consultation meeting, with the information available at that time. As the proposal proceeds, more information is made public, additional applications, studies, reports, etc., may be required. The information in this document is applicable for a maximum of one (1) year from the meeting date.

Before you submit your application, please contact the assigned Planner to confirm submission requirements and the applicable fee. Fees will not be accepted until the submission has been reviewed and confirmed by the Planning Department.

As part of a complete application, a signed version of these meeting notes is required.

Proponent / Agent Name	Signature	Date
John Zaffino		

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Proposal Summary:

The proposal is to run a Licensed Childcare facility on the subject lands. The Childcare will be for 32 children. It will consist of two pre-school rooms. An outdoor playground is proposed to be 1920 square feet. Four parking spaces are proposed, including one accessible parking space. The lot currently has six pre-existing parking lot spaces. The applicant proposes to add windows to the building as well as add a playground fence and a shed.

List of Application Requirements* and General Comments

Planning Department

Planning application(s) required to proceed	Required
Official Plan Amendment Application	
Zoning By-law Amendment Application	

Site Plan Application		X
Draft Plan of Subdivision Application		
Draft Plan of Condominium Application		
Part Lot Control Application		
Consent / Severance Application		
Minor Variance Application		
Removal of Holding Application		
Temporary Use By-Law Application		
Other - Click here to enter text.		
Planning requirements for a complete application The items below are to be submitted as part of the identified Planning Application(s). ** electronic/PDF copies of all plans, studies and reports are required**	**Required at OPA/ Zoning Stage**	**Required at Site Plan Stage**
Agricultural Impact Assessment		
Air Treatment Control Study		
Archeological Assessment		
Contaminated Site Study		
Dust, Noise and Vibration Study		
Elevation Plan/ floor/Section		X
Environmental Impact Study		
Geotechnical Study		
Heritage Impact Assessment		
Hydrogeological Study		
Landscaping Plan		X
Market Impact Analysis		
Minimum Distance Separation Schedule		
MOE D-Series Guidelines Analysis		
Neighbourhood Plan		
Odour Mitigation Plan		
Parking Assessment		X
Planning Justification Report/Impact Analysis		
Photometrics (Lighting) Plan		X
Record of Site Condition		
Restricted Land Use Screening Form		
Site Plan/Drawing		X
Topographical Study		
Other:		
Other:		

Additional Planning Requirements		Required
Development Agreement		
Parkland Dedication/Cash-in-lieu of Parkland		
Other:		

* Any changes to a proposal may necessitate changes to Planning Department submission requirements. Reports and studies are subject to peer review.

Summary of Fees, Forms, and other information pertaining to the Planning process can found by visiting https://www.norfolkcounty.ca/government/planning/

See Appendix A for additional information

Planning Comments

The proposal is to convert an existing commercial building within the CBD Zone of Delhi from a retail outlet to a daycare. This will entail some relatively minor alterations to the existing building, including the installation of increased glazing/windows to meet licensing requirements. It will also likely require the erection of fencing to allow for a secure outdoor play area. Existing parking levels are adequate at this point.

As this change of use, whilst a permitted use under the Zoning for the site, is a significant change from the existing use and the site is under Site Plan Control, it will be necessary to apply for Site Plan approval in this instance. The required documents Planning will need to determine this application are listed in the matrix above. Note that several of the requirements can be combined into a single drawing (ie. Site plan with parking, lighting and landscaping/fencing all shown on the same drawing) so long as all information is legible. Once you have compiled all the information required by Planning and any other information necessary from the other teams (see below), please contact me to arrange for a pre-submission meeting to go through the information. Once we are satisfied that there are the required information/studies, we will invite the submission of the application. Once again, it will be reviewed for completeness and if complete, you will be invited to submit payment. Only once payment has been received does the 60-day statutory determination period commence.

Endangered and threatened species and their habitat are protected under the provinces Endangered Species Act, 2007 (ESA), O. Reg. 242/08 & O. Reg. 830/21. The Act prohibits development or site alteration within areas of significant habitat for endangered or threatened species without demonstrating that no negative impacts will occur. The Ministry of Environment, Conservation and Parks provides the service of responding to species at risk information requests and project screenings. The proponent is responsible for discussing the proposed activity and having their project screened with MECP (Ministry of Environment, Conservation and Parks).

Please be advised that it is the owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws, or other agency approvals.

Assigned Planner:
Andrew Wallace
Planner
519-426-5870 extension 1059

Development Engineering – 579 James St.

Development Engineering requirements to proceed The below requirements are to be submitted as part of the Formal Development Planning application.	**Required at OPA/ Zoning Stage**	**Required at Site Plan Stage**	**Potentially Required (See Notes Section)**
General Requirements			
Concept Plan		X	
Lot Grading Plan		X	
General Plan of Services		X	
Utility Plan			X
Functional Servicing Report		X	
Water Servicing Requirements– Section 10.0 Norfolk County Design Criteria and ISMP Section 4.0			
Water Modelling (County Consultant)			X
Backflow Preventer (RPZ)			X
Sanitary Servicing Requirements – Section 9.0 Norfolk County Design Criteria and ISMP Section 4.0			
Sanitary Modelling (County Consultant)			X
Property Line Inspection Maintenance Hole			X
Storm Water Servicing Requirements – Section 7.0 and Section 8 Norfolk County Design Criteria and ISMP Section 4.0			
Storm Water Management Design Report (including calculations)			X
Establish/Confirm Legal and Adequate Outlet			X
Transportation Requirements – Section 6.0 Norfolk County Design Criteria, ISMP Section 5.0, Section 6.0 and Appendix J			
Traffic Impact Brief		X	

Improvements to Existing Roads & Sidewalk (urbanization, pavement structure, widening sidewalk replacement, upgrades, extension and accessibility)			X

General Notes:

1. If required, Securities are to be provided in the amount of 10% of site works and 100% of works within the right-of-way. This is to be provided in a security schedule. A copy of Norfolk County's template can be provided. This can be provided at time of Site Plan.
2. All reports and drawings are to be signed and stamped by a Professional Engineer (P. Eng) and adhere to Norfolk County's Design Criteria and Integrated Sustainable Master Plan (ISMP). A copy of these criteria is available upon request.
3. Recommendations from all reports (FSR, SWM, TIS, Modelling, etc.) must be incorporated into the design and be constructed at the developer's expense.
4. All applicable permits and inspections to be issued by Public Works
5. Sidewalks are to be installed as per the latest version of the Norfolk County Sidewalk Policy.
6. The paved parking area which connects to the neighbours driveway and overlaps the property line is to be removed as a part of the site plan design.

Required at Site Plan Stage:

7. **Concept Plan**, **Lot Grading Plan and General Plan of Services** drawing can be shown on one engineered plan as long as it's legible for review.

8. **A Functional Servicing Brief will be required.** The FSR will explain the type of sanitary and water services required for this development and explain how each service will meet the Norfolk County Water and Wastewater requirements.

9. **A Traffic Impact Study should be required with every planning application. However, as this development is small in nature, ask that you complete a Traffic Impact Brief**. Hence, as per Norfolk County's ISMP Appendix J - TIS Guidelines, a Traffic Impact Brief can be prepared based on the following sections of the Appendix J - TIS Guidelines:
    a. Section A1.3 – Existing Conditions;
    b. Section A1.4 – Study Area;
    c. Section A1.5 – Development Land Use Type & Site Plan;
    d. Analysis:
        i. Sightlines;
    e. Conclusions and Recommendations

Potentially Required (if Zoning Change is required)

10. **A Stormwater Management Brief (SWM)** is to be completed as per Norfolk County Design Criteria Section 7.0 and comply with Section 4.0 of the ISMP. The overall SWM shall include confirmation of Legal and Adequate outlet.

11. **Sanitary and Water modelling** will be required. This is to be completed by Norfolk County's third-party consultant. The cost to complete the modelling and any recommendations from reports are to be implemented into the design at the applicant's expense. The following information will be required to receive a quote and complete the modelling.
    a. General Plan of Services
    b. Functional Servicing Report;
        i. Total Wastewater Design Flows shown in Sanitary Design Sheets;
        ii. Total Domestic Water and Fire Flows as per Norfolk County Design Criteria Section 10.1.1

The Functional Servicing Report must include water /sanitary servicing and fire flow calculations. Fire Flow calculations are to be completed in accordance with "Water Supply for Public Fire Protection 2020" by Fire Underwriters Survey.

Once the quote has been received, approval from the applicant will be required before proceeding

Stephen Gradish
Development Technologist
Stephen.Gradish@norfolkcounty.ca

Agreements

If performance securities are required, a recommended condition of your planning application approval will be to enter into a development agreement with the County that will be registered on title to the subject lands, at the Owner's expense. The additional requirements for a development agreement could include, but are not limited to the following:

- Engineering drawing review
- Engineer's schedule of costs for the works
- Clearance letter and supporting documentation to support condition clearance
- User fees and performance securities
- Current property identification number (PIN printout) (can be obtained by visiting https://help.onland.ca/en/home/)
- Owner's commercial general liability insurance to be obtained and kept in force during the terms of the agreement
- Postponement of interest. If there are mortgages / charges on your property identifier, your legal representative will be required to obtain a postponement from your bank or financial institution to the terms outlined in your development agreement
- Transfers and / or transfer easements along with registered reference plan

Annette Helmig
Agreement and Development Coordinator
Annette.Helmig@norfolkcounty.ca

Building

Zoning Administrator:
579 James Street Delhi

- Property zoned CS (Service Commerical) A daycare nursery is a permitted use of the zone

See definition of day car nursery
"DAY CARE NURSERY" shall mean a building or part of a building that provides temporary care and supervision to more than five (5) children for a period not exceeding twenty-four hours at any one period of time and is licensed pursuant to the Day Nurseries Act.

- Using existing building, 125sqm being used to operate daycare (useable floor area)
- Parking = 125sqm / 35sqm = 4 parking spots need to be provided on lot. Providing 6, one of which is accessible
- For commercial properties no parking spot can be closer than 4m to a residential zone, in this case there is a residential zone behind the building and the parking is meeting the bylaw.
- For tandem parking spots in front of the building and by the wall of the building they must be 3.3m x 6.0m (parking bylaw section 4.1.3) I believe this can be easily accomplished
-
- **Sight Triangles**
  There is a site triangle at brock ave and james street,
  3.31.1 Any building, structure or use which would obstruct or impair the vision of a motor vehicle operator, or any fence or vegetation exceeding 1 metre in height above finished grade shall be prohibited within any sight triangle. This provision shall not apply to field crops. [8-Z-2017]
  3.31.2 A sight triangle shall be measured back from an intersection a distance of 9 metres along the street lines, No parking area shall be located in any sight triangle
  This being said, A sign may not be permitted in the site triangle if it is over 1m high, and the parking space may have to be removed (parking spot 4) I believe the tree is existing

Roxanne Lambrecht
Zoning Administrator
Extension 1839
Roxanne.Lambrecht@norfolkcounty.ca

Building Inspector:

The proposed construction is considered an A2 Assembly type occupancy as defined by the Ontario Building Code (OBC). You will need to retain the services of an Architect and a Professional Engineer to complete the design documentation for this application. **A building permit will be required** for the change of use from a counter top manufacturer to a daycare. Since the building has been in existence for at least 5 years, Part 11 of the OBC will apply.

The Designer will need to provide a Part 11 Building Code matrix. This matrix represents selected elements from your detailed code analysis and presents a quick overview to the municipal building official of the key OBC factors concerning your design. The matrix will identify OBC review items such as occupant loads, fire separations, project description, building size, building classification, fire alarms, type of construction, barrier free requirements, plumbing fixture requirements and spatial separations.

The Designer will need to review OBC requirements for windows Subsection 3.7.2., washrooms Subsection 3.7.4. and Section 3.2.3. Spatial Separations and Exposure Protection for the interior side yard setback of 0.33m.

Signs proposed due to development will require a permit as part of Norfolk's Sign Bylaw and may need a Building Permit according to the OBC.

For a complete permit application the attached Applicable Law Checklist will need to be completed, this will include contacting the Ministry of Education.

Items for Site Plan

Site plan drawings need to have enough detail, to determine compliance with the code references listed, some may not apply for your project.

1. Indicate location of access route and access route design [OBC 3.2.5.4 to 3.2.5.6]
2. Revised fire water pond design and calculations. [OBC 3.2.5.7]
3. Indicate location of existing and new fire department connections. Dimensions between hydrants and building entrances is required.

[OBC 3.2.5.16]

4. Location and specifications of exterior lighting. Lighting to be included in SB-10 report – energy efficiency
5. Indicate barrier free path of travel from parking area to building entrance. Construction of curb cuts and location of tactile attention indicators is required. [OBC 3.8.1.3, & 3.8.3.2]
6. Location of revised septic system (if required)
7. Provide building elevations and cross section, showing building massing, location of proposed entrances and exits, barrier free controls, exterior lighting locations, and exterior signage. [Planning Act 41(4).2]

Items for Building Permit

"Applicable Law Checklist" Step by Step Guide Building Permit Package has been attached to the minutes herein, this contains information on drawing requirements, designers, forms, contact information for Building Department etc.

If you have any questions on the building permit process or plans required, please contact permits@norfolkcounty.ca or 226-NORFOLK (226-667-3655) ext. 6016

Jonathan Weir
Building Inspector

Extension 1832
jonathan.weir@norfolkcounty.ca

Corporate Support Services – Realty Services

If you are required to enter into a Development Agreement, this Agreement would be registered on title to your property. Therefore, any Lenders who have mortgages registered on title will need to postpone their interest to this Agreement. You may wish to make your Lender(s) aware of this requirement as this may take time on their part.

Alisha O'Brien
Corporate Services Generalist,
Realty Services
realty.services@norfolkcounty.ca

Fire Department

Norfolk County Fire Department has the following comments for this proposal:

- Ensure adequate access for fire department apparatus
- Any required fire separations and fire protection/detection systems are to be designed and installed as specified under the Ontario Building Code and Ontario Fire Code
-

Katie Ballantyne
Community Safety Officer
Katie.Ballantyne@norfolkcounty.ca

Additional Agency Comments & Requirements

Ministry of Transportation

Thank you for providing the MTO with the opportunity to review and provide comments.

The proposed work within Norfolk County is not located adjacent to a provincial highway or within MTO's Permit Control Area, and as such, does not require MTO review, approval or permits.

As a result of this, please be advised that I will not be in attendance for the pre-con meeting being held on November 22, 2023. If you have any question or concerns, please feel free to contact me.

Michael Kilgore
Project Manager
519.851.1212
michael.kilgore@ontario.ca

Appendix A: Planning Reference Materials

Following is a summary of some land use planning reference materials. It is the requirement of the applicant to ensure compliance with applicable legislation, policies and regulations.

Provincial Policy Statement, 2020

https://www.ontario.ca/page/provincial-policy-statement-2020

Norfolk County Official Plan
https://www.norfolkcounty.ca/government/planning/official-plan/

Section 9.6.1 outlines requirements in relation to requests to amend the Official Plan.

Section 9.6.2 outlines requirements in relation to requests to amend the Zoning By-law.

It is the responsibility of the proponent to review and ensure relevant Official Plan policies are addressed in any future development application.

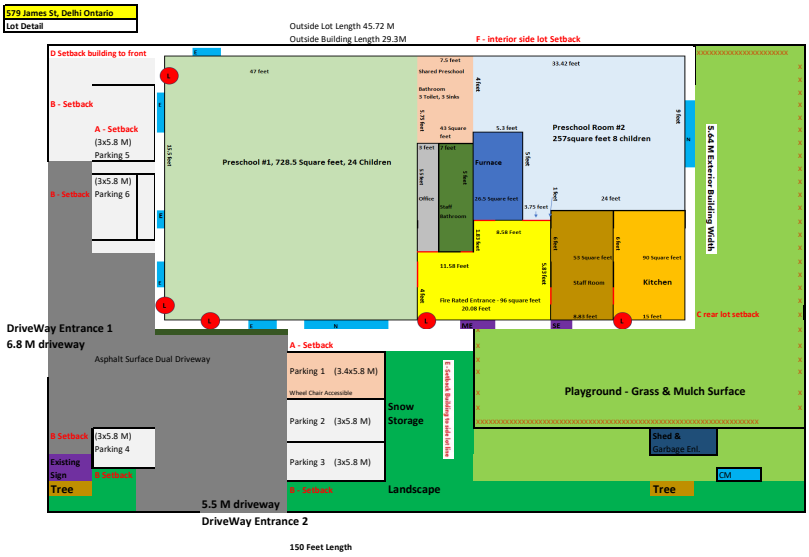
Norfolk County Zoning By-Law 1-Z-2014
https://www.norfolkcounty.ca/government/planning/new-zoning-by-law/

The provisions of the Norfolk County Zoning By-Law shall apply to all lands within the boundaries of Norfolk County. No land, building or structure shall be used, erected, or altered in whole or in part except in conformity with the provisions of this By-Law. No land, building or structure shall be used or occupied except for uses that are specifically identified in the By-Law as permitted uses by the relevant zoning category.

It is the responsibility of the proponent to review and ensure relevant Zoning By-law provisions are addressed in any future development application

579 James St, Delhi Ontario

Lot Detail



Information Legend

Site

** 5 Existing Parking Spaces - Asphalt
** Wheel Chair Accessible Parking (3.4M X 5.8M)
** Asphalt Driveway and Aisle
** Playground - 1920 square feet
** Landscape
** Tree - Existing
** Existing Sign

Setbacks

A - 3 M from Parking to Building
B - 3 M from Parking to Road
C - 7.25 M from building to rear lot line
D - 9.3 M from building to front lot line
E - 17.53 M from side building to exterior side lot line
F - 0.33 M from side building to interior side lot line

Building

Rooms	Square Feet
** Preschool 1 - 720 Square feet - 24 Children	728.5
** Preschool 2 - 240 square feet - 8 Children	257
** 1 Shared Preschool Bathroom. 3 Toilets, 3 Sinks	43
** 1 Kitchen	90
** 1 Staff Room	53
** 1 Small Office	16.5
** 1 Staff Bathroom	35
** 1 Fire Rated Entrance	96
** 1 Furnace Room	26.5
Total Square Footage	**1345.5**

18.3 M Lot Width

579 james

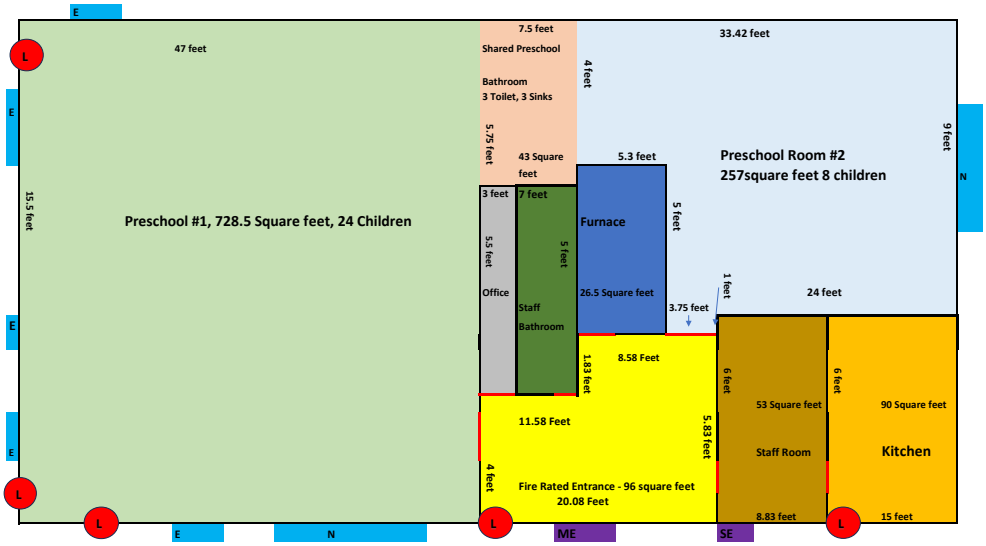
ME - Main Entrance
SE - Staff Entrance

L External existing lights
CM - existing community Mailbox
Shed & Garbage Enclosure
xxxxxxxxxxxxxxx Playground fencing
Landscape perennials

579 James St, Delhi Ontario

Daycare Layout

Information Legend	Square Feet
** 32 Children in total	
** Preschool 1 - 720 Square feet - 24 Children	728.5
** Preschool 2 - 240 square feet - 8 Children	257
** 1 Shared Preschool Bathroom. 3 Toilets, 3 Sinks	43
** 1 Kitchen	90
** 1 Staff Room	53
** 1 Small Office	16.5
** 1 Staff Bathroom	35
** 1 Fire Rated Entrance	96
** 1 Furnace Room	26.5
** Fire Rated Doors - 7	NA
** Windows (E existing) (N - New I need to Add)	NA
** Main Entrance (ME), Staff Entrance (SE)	NA
Total Square Feet	**1345.5**



APPLICABLE LAW CHECKLIST

The Building Code Act prohibits the issuance of a building permit if the proposed construction or demolition will contravene an applicable law as defined by the Building Code. The questions below will help you to determine if an applicable law applies to your project. No timeframe for building permit review can be established until all required applicable law approvals are completed and the approval documents are submitted to the Building Division.

If the answer is **YES** to any question, the relevant approval documents must be submitted with this permit application. Where any required approval has **NOT** been obtained, the agencies listed on the back of this form must be contacted to obtain approval, and the declaration on the bottom of this form must state accordingly.

Property Address: _____ **Permit Number** (office use)_____

Zoning By-Laws – *Norfolk County Planning Department*	YES	NO
Is/was relief required to permit a minor zoning variance in your proposal?		
Is/was rezoning required to permit the proposed building or land use?		
Is a land division or subdivision required and not yet fully completed?		
Are municipal services required but not yet completed or available?		

Planning Approval - *Norfolk County Planning Department*	YES	NO
Is this property regulated by Site Plan Control under Section 41 of the Planning Act?		

Heritage - N*orfolk County Heritage and Culture Department*	YES	NO
Are you demolishing a building that is listed on the County's heritage inventory?		
Is the building designated or in the process of being designated?		
Is the property located in a heritage district or study area?		

Construction and Fill Permits – *Long Point Regional or Grand River Conservation Authority*	YES	NO
Is the property located within a regulated area (i.e. abutting a ravine, watercourse, wetland, or shoreline)?		

Building and Land Use Permits - *Ontario Ministry of Transportation*	YES	NO
Is the property within 45m of a highway or 180 m from any highway intersection?		
Is the property within 395m of a controlled highway intersection? (applies to Sign Permits)		
Is this a major traffic generating project located within 800m of a highway?		

Clean Water Act – *Public Works*	YES	NO
Is the property located within a Source Water Protection regulated area?		
If yes: does a Water Source Protection Plan restrict the land use you are proposing? (s.59 screening form may be required)		

Agriculture and Farms - *Ontario Ministry of Agriculture and Food*	YES	NO
Is this a farm building that will house animals or manure?		
Is this a milk processing plant?		

Crown Lands Work Permit – *Ministry of Natural Resources*	YES	NO
Are you proposing to construct or place a structure or combination of structures that are in physical contact with more than 15 square meters of shore lands?		
Are you proposing to build on Crown Land?		

Electrical Conductor Clearances - *Electrical Safety Authority*	YES	NO
Are any overhead power lines located above or within 5.5 metres of the proposed building?		

Environmental Approvals - *Ministry of Environment, Conservation, Parks*	YES	NO
Is a Record of Site Condition required to be filed because of a change to more sensitive land use? Is the property a former waste disposal site?		
Is this project a major industrial, commercial, or government project?		
Is this a renewable energy project?		
Does this property have a Certificate of Property Use under the Environmental Protection Act?		

Child Care Centres - *Ministry of Education*	YES	NO
Is a daycare proposed in any part of the building?		

Seniors Centres - Ministry of Children, Community and Social Services	YES	NO
Is this a seniors project where Ontario Government funding is being sought?		

Long Term Care Centres – *Ministry of Health & Long Term Care*	YES	NO
Construction, alteration or conversion of building used for a nursing home?		

Education Act - *Ministry of Education*	YES	NO
Is the project being carried out on the property of an educational facility?		
If so, is any or all building on the property being fully or partially demolished?		

DELCARATION – I have considered the list of applicable laws in the Ontario Building Code as described above, and do hereby declare that:

	None of these applicable law approvals apply to this project
	Applicable laws check 'yes' apply to this project, and approval documents are submitted with this application.
	Applicable laws checked 'yes' apply to this project; however, all approval documents have not yet been obtained

The information provided on this form is true to the best of my knowledge. I have authority to act on behalf of the owner, corporation, or partnership with respect to this application (if applicable).

Name: _____ Signature: _____ Date: _____

Approvals from other agencies are required in many instances before a building permit can be processed and issued. These approvals are **NOT** administered by the Building Department. The fastest way to obtain a building permit is to ensure that all other required approvals are completed prior to permit application. The Building Department is required by law to prioritize applications that are fully complete in terms of applicable law approvals and document submissions. Building permit documents must be consistent with applicable law approvals. If you answer yes to any of the following question please reach out to these agencies for approvals.

Zoning and Planning – Community Services Division – Norfolk County

Zoning 519-426-5870 ext. 6064 or zoning@norfolkcounty.ca
Planning 519-426-5870 ext. 1842 or planning@norfolkcounty.ca

Planning Act, s.34, 34(5), 45, and Part VI
Zoning By-laws restrict such things as land use, lot size, building size, and setbacks. If your project does not comply with any part of the Zoning By-law, a minor variance or rezoning must be obtained before any building permit can be issued. Zoning By-laws also restrict the issuance of permits until any associated land division, subdivision, or municipal servicing is complete.
Planning Act, s.41
Site Plan Approval applies to commercial, industrial, institutional, multi-residential and intensive livestock site plans. The site plan agreement must be registered before site plans will be approved.

Conservation Authority Permits

Grand River Conservation Authority (GRCA)1-866-900-4722 or grca@grandriver.ca
Long Point Regional Conservation Authority (LPRCA) 1-888-231-5408 or conservation@lprca.on.ca

Conservation Authorities Act s. 28 (1)(c), regulation 166/06
Development within certain conservation regulated areas requires a construction and fill permit from the conservation authority before any building permit can be issued. GRCA or LPRCA will confirm if your property falls within their jurisdiction.

Highway Corridor Building & Land Use Permits

Ministry of Transportation (MTO) 1-800-268-4686 or
www.mto.gov.on.ca/english/highway-bridges/highway-corridor-management/index.shtml

Public Transportation and Highway Improvement Act, s.34, 38
Ministry authorization is required for construction of all buildings within certain distances of a highway or intersection. The requirement for Ministry authorization extents to 800m from a highway where development will generate major traffic, such as a shopping centre.

Environmental Approvals

Ministry of the Environment, Conservation and Parks (MECP)1-800-461-6290 or www.ontario.ca

Environmental Protection Act s. 46, 47.3, 168 and the Environmental Assessment Act s 5.
Ministry of Environment approvals are required where a property of industrial or commercial use is changed to more sensitive residential or parkland use, for major government, industrial and commercial projects where defined by regulation, properties formerly used for landfill or waste disposal, or renewable energy projects.

Electrical Conductor Clearances

Electrical Safety Authority 1-877-372-7233 or www.esasafe.com

Subsection 3.1.19. of the Ontario Building Code prohibits buildings being located beneath or within a certain minimum distances of overhead electrical conductor wires, other than the power feed to the building.

Source Water Protection – Environmental and Infrastructure Services – Norfolk County

Environmental Services – Stephanie Davis- Manager, Water & Wastewater Compliance- 519-426-5870 ext. 8037 or Stephanie.Davis@norfolkcounty.ca
Cambium Inc. Racheal Doyle – sourcewaterprotection@cambium-inc.com

Clean Water Act s. 59
Special land use restrictions may apply if a water source protection plan is in effect in the area where the building is located. Uses affected by these restrictions require the approval of the designated Risk Management Official

Agriculture and Farms

Ministry of Agriculture Food and Rural Affairs 1-877-424-1300 or www.omafra.gov.on.ca

Nutrient Management Act 2002 s.11 reg 267/03, Milk Act s.14
Buildings or structures that house animals or store manure may trigger a requirement for a nutrient management strategy approved by the Ministry. The Ministry must determine that a milk processing plant is necessary and authorize it before a building permit can be issued.

Child Care Centres

Ministry of Education (905) 895-9192 or www.ontario.ca

Child Care and Early Years Act, s. 14 reg 137/15
Ministry plan approval is required if a new building is proposed to be used as a day nursery, an existing building is proposed to be used, altered or renovated for a day nursery, or if an existing day nursery is altered or renovated.

Seniors Centres

Ministry of Children, Community and Social Services 1-888-789-4199 or www.mcss.gov.on.ca

Elderly Persons Centres Act s. 6 of reg 314
Reports must be submitted to the Minister and approval obtained for all seniors centres to which government funding applies.

Long Term Care Homes

Ministry of Health & Long Term Care 1-800-387-5559 or www.health.gov.on.ca

Nursing Home Act s. 4, 5 reg 832
Homes for the Aged & Rest Homes Act s. 14
The Long Term Heath Care Act is designed to help ensure that residents of long-term care homes receive safe, consistent, high-quality, resident-centred care.

Education

Ministry of Education (905) 895-9192 or www.ontario.ca

Education Act s. 194
The board shall obtain approval from the Minister for the demolition of any buildings located on a school site regulated by the Education Act. App

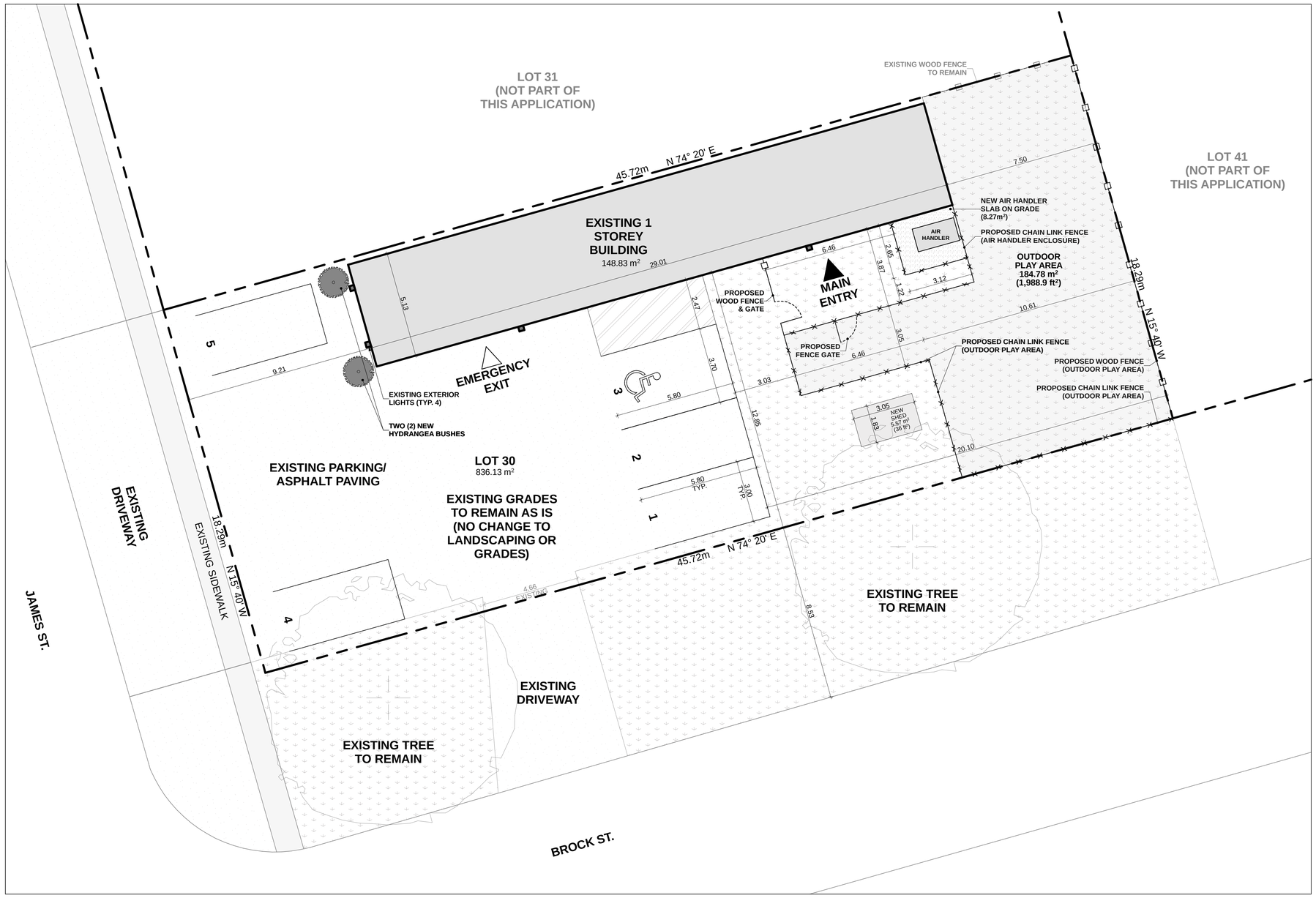
Crown Lands Works Permits

Ministry of Natural Resources www.ontario.ca/page/crown-land-work-permits

Ontario Regulation 239/13 s. 2, s. 5
Ministry approval is required to construct a building on crown lands or to construct or place a structure along shorelines.

SCOPE OF WORK
INTERIOR ALTERATIONS TO EXISTING BUILDING.
PROPOSED DAYCARE.

AREA OF WORK
148.83 m² (1602 ft²)



Parking Assessment

Parking calculation for building operating as a childcare.

- ·Required 1 spot per 35 m²
- ·Building size 125 m²
- ·Calculation (125/35) = 3.57. Round up to 4
- ·Required spots for this site: 4.
- ·Number of parking spots being provided on site plan 5 (includes one HC spot)

·4m setback for Commercial property from residential zone is meet – residential zone backing onto building is 20.1 M from parking area.

1
A.1
SITE PLAN
SCALE: 1:100

Read this drawing in conjunction with all
Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024.03.13
S Patel
90514306
PROVINCE OF ONTARIO

N

REVISIONS

DATE	DESCRIPTION
2024.03.13	ISSUED FOR SITE PLAN APPROVAL

LAKELAND
ENGINEERING
1100 Sutton Dr, Burlington, Unit#1
P:905-332-8888
info@lakelandengineering.ca

Do not scale drawings. Contractor must verify all dimensions and advise the designer of any errors or ommissions. No variations or modifications to work shown shall be implemented without prior written approval. All previous issues of this drawing is superseded by the latest revisions. All drawings and specifications remain the property of Lakeland Engineering.

PROJECT:

579 JAMES ST.
(FIT OUT FOR
PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:

SITE PLAN

DRAWN BY: ---

DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

A.1

ARCHITECTURAL LEGEND

PLAN	DESCRIPTION	NOTES
W1	WALL & FOOTING TAGS	REFER TO FLOOR PLANS & SCHEDULES
D1	DOOR TAGS	REFER TO FLOOR PLANS & DOOR SCHEDULE
F-1	FLOOR TAGS	REFER TO FLOOR PLANS & FLOOR SCHEDULE
C-1	CEILING & ROOF TAGS	REFER TO PLANS & SCHEDULES
WIN-1	WINDOW TAGS	REFER TO FLOOR PLANS & WINDOW SCHEDULE
PB	AUTOMATIC DOOR OPENER PUSH BUTTON	TOUCHLESS DOOR OPENER - NORTON - 700 - WAVE TO SWITCH
LB	DOOR LOCKING PUSH BUTTON	
EM	EMERGENCY PUSH BUTTON	c/w PULL CORD FOR EMERGENCY CALL SYSTEM
	AUDIBLE & VISUAL SIGNAL STATION FOR EMERGENCY CALL SYSTEM	CONNECTED TO EMERGENCY PUSH BUTTON

WALL SCHEDULE

ID	PLAN VIEW	DESCRIPTION	NOTES
W-1		3-1/2" WOOD STUDS @ 16" o.c. c/w 1/2" GWB ON BOTH SIDES	NEW PARTITION WALL TO U/S CEILING
W-DE		EXISTING WALLS TO BE DEMOLISHED	REFER TO DEMO PLAN
W-EX		EXISTING PARTITION & EXTERIOR WALLS TO REMAIN	

FLOOR & CEILING SCHEDULE

ID	DESCRIPTION	NOTES
C-EX	EXISTING CEILING ASSEMBLY TO REMAIN	
F-1	6" CONC. SLAB ON GRADE	FOR NEW AIR HANDLER (AH-1) @ GRADE
F-EX	EXISTING FLOOR ASSEMBLY TO REMAIN	

ROOFING & CEILING SCHEDULE

ID	DESCRIPTION	NOTES
R-EX	EXISTING ROOF ASSEMBLY TO REMAIN AS IS	

WINDOW SCHEDULE

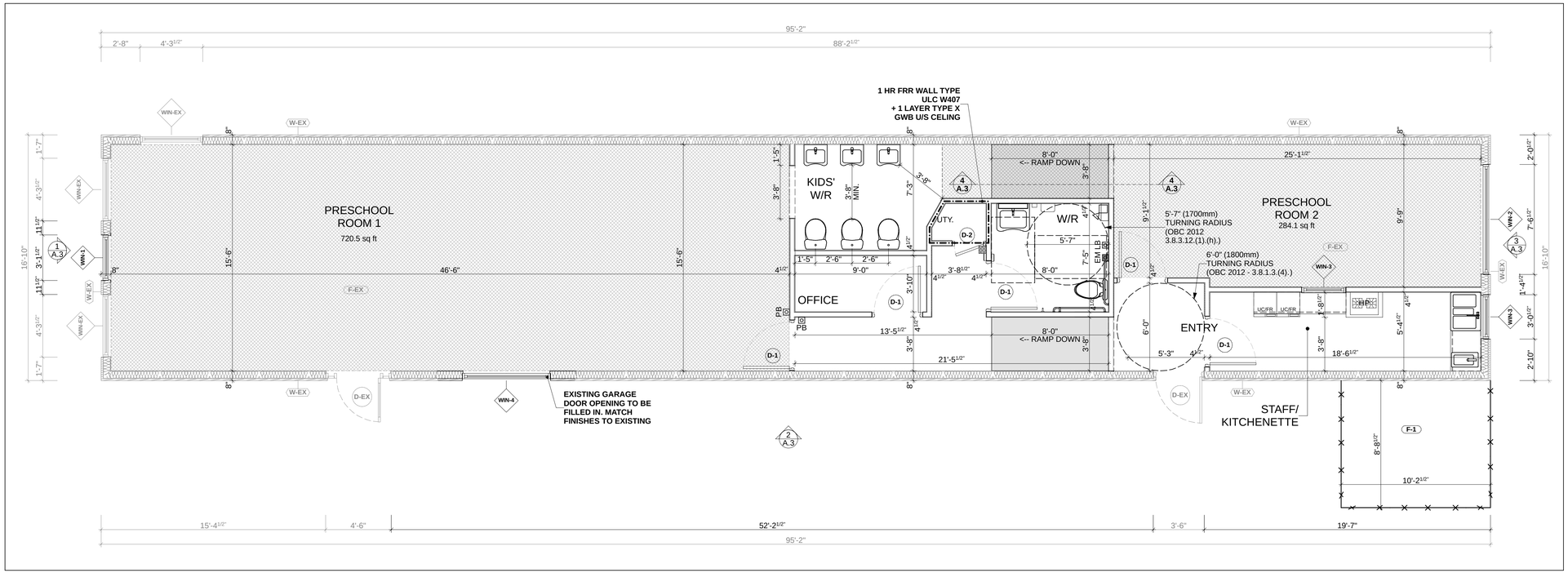
ID	SIZE W	SIZE H	NOTES
WIN-1	3'-1"	4'-5"	NEW FIXED WINDOW
WIN-2	7'-6"	4'-6"	NEW FIXED WINDOW
WIN-3	3'-0"	2'-0"	NEW FIXED WINDOW
WIN-4	6'-0"	4'-6"	NEW FIXED WINDOW
WIN-EX	4'-3"	4'-5"	EXISTING WINDOWS TO REMAIN

DOOR SCHEDULE

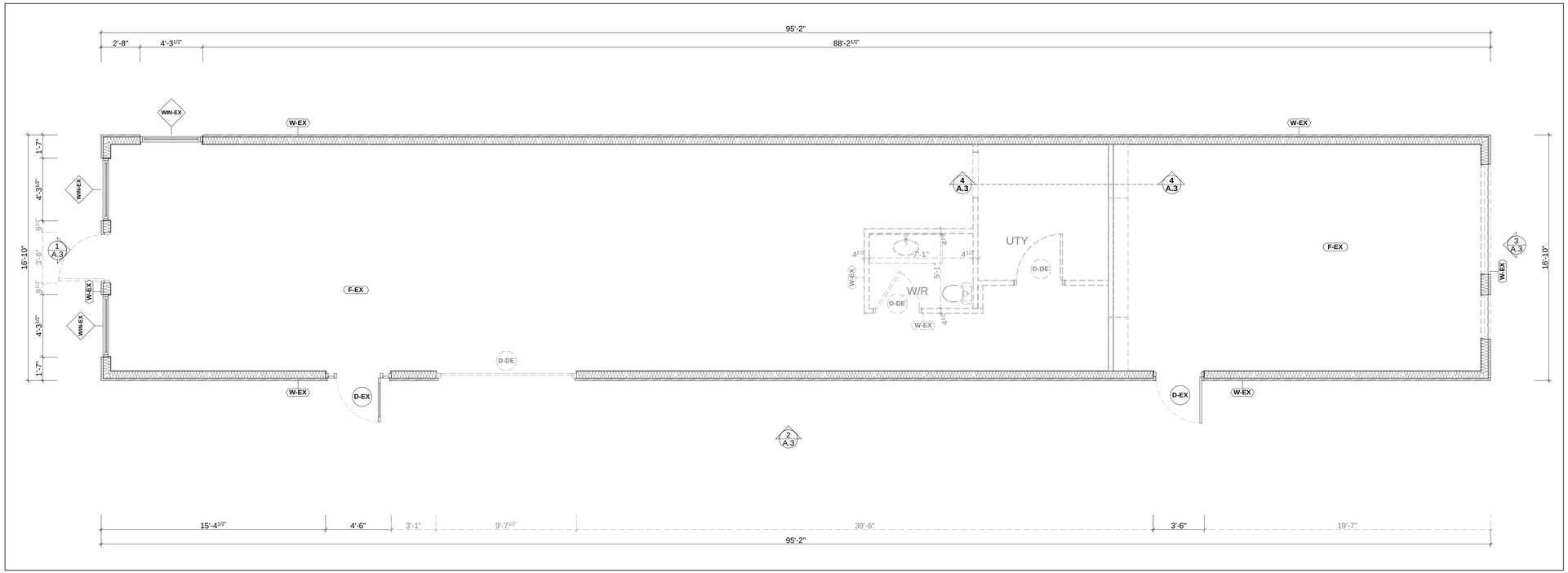
ID	PLAN	ELEV.	LEAF	NOTES
D-1			3'-2"×6'-8"	NEW INTERIOR DOOR. PROVIDE LOCKSET FOR W/Rs. UNDER CUT DOORS BY 1".
D-2			2'-0"×6'-8"	NEW INTERIOR DOOR. 45 MIN FRR + CLOSER
D-DE			3'-0"×6'-8"	EXISTING TO BE DEMOLISHED
D-DE			3'-2"×6'-8"	EXISTING TO BE DEMOLISHED
D-DE			9'-0"×8'-0"	EXISTING TO BE DEMOLISHED
D-EX			3'-0"×6'-8"	EXISTING TO REMAIN
D-EX			3'-2"×6'-8"	EXISTING TO REMAIN

SCOPE OF WORK
INTERIOR ALTERATIONS TO EXISTING BUILDING.
PROPOSED DAYCARE.

AREA OF WORK
148.83 m^2 (1602 ft^2)



2 A.2 PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 A.2 EXISTING/DEMO FLOOR PLAN
SCALE: 1/4" = 1'-0"

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024-03-13
S Patel
90514306
PROVINCE OF ONTARIO

N

REVISIONS

DATE	DESCRIPTION
2024.03.13	ISSUED FOR SITE PLAN APPROVAL

LAKELAND ENGINEERING
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PROJECT:
579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:
PROPOSED FLOOR PLAN

DRAWN BY: ---
DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

A.2

WALL SCHEDULE

ID	PLAN VIEW	DESCRIPTION	NOTES
W-1		3-1/2" WOOD STUDS @ 16" o.c. c/w 1/2" GWB ON BOTH SIDES	NEW PARTITION WALL TO U/S CEILING
W-DE		EXISTING WALLS TO BE DEMOLISHED	REFER TO DEMO PLAN
W-EX		EXISTING PARTITION & EXTERIOR WALLS TO REMAIN	

FLOOR & CEILING SCHEDULE

ID	DESCRIPTION	NOTES
C-EX	EXISTING CEILING ASSEMBLY TO REMAIN	
F-1	6" CONC. SLAB ON GRADE	FOR NEW AIR HANDLER (AH-1) @ GRADE
F-EX	EXISTING FLOOR ASSEMBLY TO REMAIN	

ROOFING & CEILING SCHEDULE

ID	DESCRIPTION	NOTES
R-EX	EXISTING ROOF ASSEMBLY TO REMAIN AS IS	

WINDOW SCHEDULE

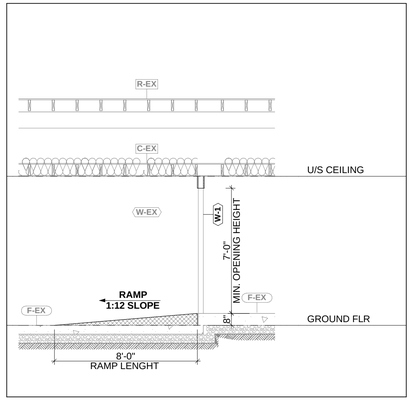
ID	SIZE W	SIZE H	NOTES
WIN-1	3'-1"	4'-5"	NEW FIXED WINDOW
WIN-2	7'-6"	4'-6"	NEW FIXED WINDOW
WIN-3	3'-0"	2'-0"	NEW FIXED WINDOW
WIN-4	6'-0"	4'-6"	NEW FIXED WINDOW
WIN-EX	4'-3"	4'-5"	EXISTING WINDOWS TO REMAIN

DOOR SCHEDULE

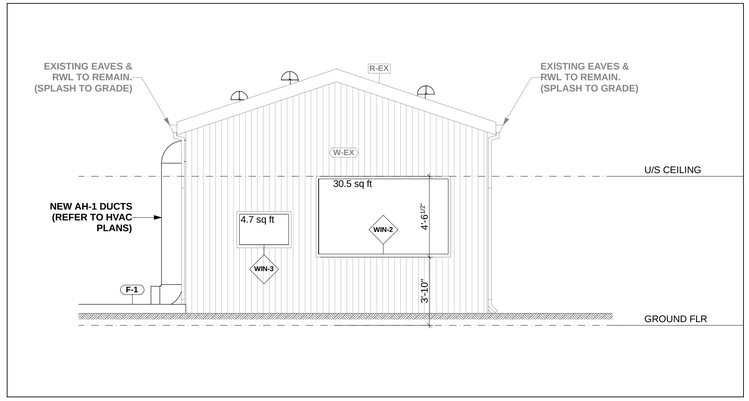
ID	PLAN	ELEV.	LEAF	NOTES
D-1			3'-2"×6'-8"	NEW INTERIOR DOOR. PROVIDE LOCKSET FOR W/Rs. UNDER CUT DOORS BY 1".
D-2			2'-0"×6'-8"	NEW INTERIOR DOOR. 45 MIN FRR + CLOSER
D-DE			3'-0"×6'-8"	EXISTING TO BE DEMOLISHED
D-DE			3'-2"×6'-8"	EXISTING TO BE DEMOLISHED
D-DE			9'-0"×8'-0"	EXISTING TO BE DEMOLISHED
D-EX			3'-0"×6'-8"	EXISTING TO REMAIN
D-EX			3'-2"×6'-8"	EXISTING TO REMAIN

ARCHITECTURAL LEGEND

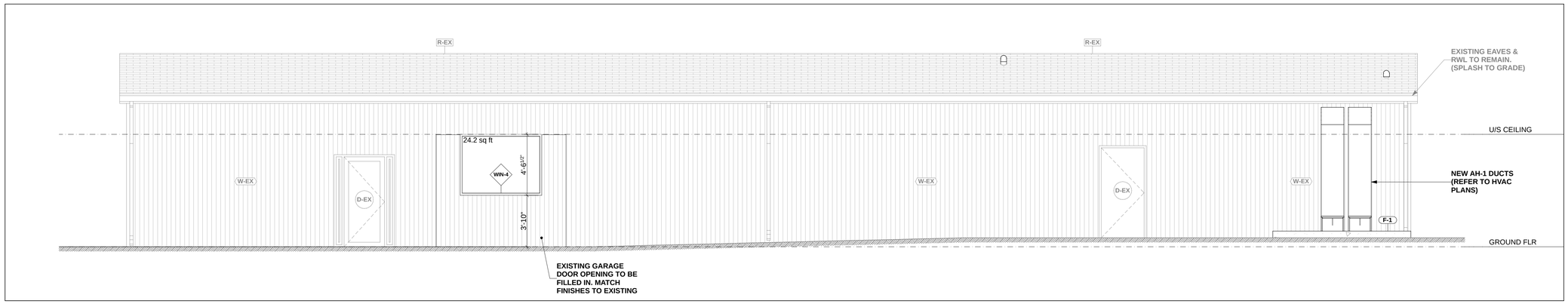
PLAN	DESCRIPTION	NOTES
W1	WALL & FOOTING TAGS	REFER TO FLOOR PLANS & SCHEDULES
D1	DOOR TAGS	REFER TO FLOOR PLANS & DOOR SCHEDULE
F-1	FLOOR TAGS	REFER TO FLOOR PLANS & FLOOR SCHEDULE
C-1	CEILING & ROOF TAGS	REFER TO PLANS & SCHEDULES
WIN-1	WINDOW TAGS	REFER TO FLOOR PLANS & WINDOW SCHEDULE
PB	AUTOMATIC DOOR OPENER PUSH BUTTON	TOUCHLESS DOOR OPENER - NORTON - 700 - WAVE TO SWITCH
LB	DOOR LOCKING PUSH BUTTON	
EM	EMERGENCY PUSH BUTTON	c/w PULL CORD FOR EMERGENCY CALL SYSTEM
	AUDIBLE & VISUAL SIGNAL STATION FOR EMERGENCY CALL SYSTEM	CONNECTED TO EMERGENCY PUSH BUTTON



4 A.3 RAMP SECTION
SCALE: 1/4" = 1'-0"



3 A.3 REAR (EAST) ELEVATION
SCALE: 1/4" = 1'-0"



2 A.3 SIDE (SOUTH) ELEVATION
SCALE: 1/4" = 1'-0"

SPATIAL SEPARATION CALCS
REAR (EAST) ELEVATION

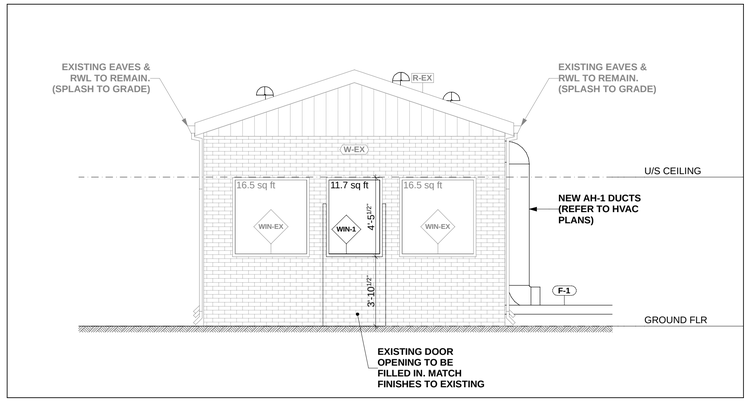
LIMITING DISTANCE:	7.5 m
L:H RATIO:	LESS THAN 3:1
WALL AREA:	13.02 m^2
UNPROTECTED OPENINGS AREA:	3.74 m^2
% UNPROTECTED OPENINGS AREA:	28.7%
ALLOWED % UNPROTECTED OPENINGS:	100%

SPATIAL SEPARATION CALCS
SIDE (SOUTH) ELEVATION

LIMITING DISTANCE:	12.85 m
L:H RATIO:	OVER 10:1
WALL AREA:	70.71 m^2
UNPROTECTED OPENINGS AREA:	76 m^2
% UNPROTECTED OPENINGS AREA:	10.8%
ALLOWED % UNPROTECTED OPENINGS:	100%

SPATIAL SEPARATION CALCS
FRONT (WEST) ELEVATION

LIMITING DISTANCE:	9.21 m
L:H RATIO:	LESS THAN 3:1
WALL AREA:	13.02 m^2
UNPROTECTED OPENINGS AREA:	4.83 m^2
% UNPROTECTED OPENINGS AREA:	37%
ALLOWED % UNPROTECTED OPENINGS:	100%



1 A.3 FRONT (WEST) ELEVATION
SCALE: 1/4" = 1'-0"

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LICENSED PROFESSIONAL ENGINEER
2024.03.13
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90514306
PROVINCE OF ONTARIO

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REVISIONS

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PROJECT:
579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:
PROPOSED ELEVATIONS

DRAWN BY: ---

DATE:	2024-03-13
SCALE:	AS SHOWN
PROJECT:	23-208

A.3

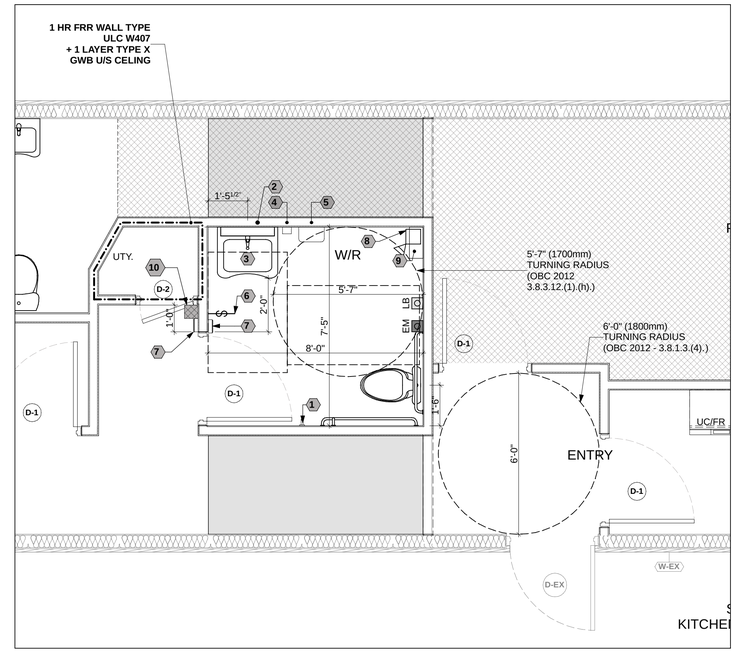
Item	Ontario Building Code Data Matrix Parts 3 & 9		OBC Reference	
1	Project Description: ☐ New ☐ Addition ☐ Change of Use ☒ Alteration	☒ Part 11	☐ Part 3	☒ Part 9
				2.1.1 9.10.1.3
2	Major Occupancy(s) Group D		3.1.2.1.(1)	9.10.2
3	Building Area (m²) Existing 148.83 New 0 Total 148.83		1.1.3.2	1.1.3.2
4	Gross Area Existing 148.83 New 0 Total 148.83		1.1.3.2	1.1.3.2
5	Number of Storeys Above grade 1 Below grade 0		3.2.1.1 & 1.1.3.2	2.1.1.3
6	Height of Building (m) 4.37m			2.1.1.3
7	Number of Streets/Access Routes 2		3.2.2.10 & 3.2.5.5	
	Building Classification		3.2.2.20-.83	9.10.4
9	Sprinkler System Proposed	☐ entire building ☐ basement only ☐ in lieu of roof rating ☒ not required	3.2.2.20-.83 3.2.1.5 3.2.2.17	9.10.8
10	Standpipe required	☐ Yes ☒ No	3.2.9	
11	Fire Alarm required	☐ Yes ☐ No	3.2.4	9.10.7.2
12	Water Service/Supply is Adequate	☒ Yes ☐ No		
13	High Building	☐ Yes ☒ No	3.2.6	
14	Permitted Construction ☐ Combustible ☐ Non-combustible ☒ Both Actual Construction ☐ Combustible ☐ Non-combustible ☒ Both		3.2.2.20-.83	9.10.6
15	Mezzanine(s) Area m² N/A		3.2.1.1.(3)-(8)	9.10.4.1
16	Occupant load based on ☐ m²/person ☒ design of building Basement: Occupancy ____ Load ____ persons 1st Floor Occupancy D Load 20 persons 2nd Floor Occupancy ____ Load ____ persons 3rd Floor Occupancy ____ Load ____ persons **For Additional Floors, go to page 2.**		3.1.1.6	9.9.1.3
17	Barrier-free Design ☒ Yes ☐ No (Explain)		3.8	9.5.2
18	Hazardous Substances ☐ Yes ☒ No		3.3.1.2.(1) & 3.3.1.19(1)	9.10.1.3
19	Required Fire Resistance Rating (FRR) — Horizontal Assemblies FRR (Hours): Floors .75 Hours; Roof 0 Hours; Mezzanine N/A Hours — Listed Design No. or Description (SG-2) FRR of Supporting Members: Floors .75 Hours; Roof 0 Hours; Mezzanine N/A Hours — Listed Design No. Or Description (SG-2)		3.2.2.20-.83 & 3.2.1.4	9.10.8 9.10.9
20	Spatial Separation – Construction of Exterior Walls		3.2.3	9.10.14

Wall	Area of EBF (m²)	L.D. (m)	L/H or H/L	Permitted Max. % of Openings	Proposed % of Openings	FRR (Hours)	Listed Design or Description	Comb Const	Comb. Constr. Nonc. Cladding	Non-comb. Constr.
North	Refer to elevations for new spatial separation calculations.									
South										
East										
West										

For Additional Walls, go to page 2

BARRIER FREE WASHROOM KEY NOTES

1	COAT HOOK AS PER OBC 3.8.3.8.(1)(e). MAX. 3'-8" AFF, MAX 4" LONG
2	INCLINED MIRROR, MOUNTED WITH ITS BOTTOM EDGE NOT MORE THAN 1000mm (39") ABOVE FINISHED FLOOR.
3	INSULATE PIPES WHERE THEY WOULD PRESENT A BURN HAZARD OR HAVE WATER SUPPLY TEMPERATURE LIMITED TO MAX 43° C.
4	SOAP DISPENSER LOCATED NOT MORE THAN 610mm (24") FROM EDGE OF LAVATORY. DISPENSING HEIGHT TO BE NOT MORE THAN 1200mm (47.3") AFF.
5	HAND DRYER LOCATED NOT MORE THAN 610mm (24") FROM EDGE OF LAVATORY. DISPENSING HEIGHT TO BE NOT MORE THAN 1200mm (47.3") AFF.
6	NEW LIGHTING FIXTURES TO BE CONTROLLED USING NEW LUTRON MS-OPS2 OCCUPANCY SENSOR SWITCH. CONTRACTOR TO REWIRE AS REQUIRED.
7	WHEN THE EMERGENCY PUSH BUTTON IS PUSHED, IT WILL ACTIVATE THE AUDIBLE & VISUAL SIGNAL STATION & CUT POWER TO THE ELECTRIC STRIKE. THE WASHROOM DOOR CAN THEN BE OPENED USING A KEY. PROVIDE SIGNAGE ABOVE THE EMERGENCY BUTTON CONTAINING THE WORDS "**IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE.**" LETTERS TO BE 25mm HIGH WITH A 5mm STROKE.
8	PROVIDE NEW EMERGENCY REMOTE HEAD LIGHT FOR UNIVERSAL WASHROOM.
9	NEW WALL MOUNTED GARBAGE BINS. HEIGHT OF TOP OF BIN IS TO BE NO MORE THAN 3'-11" AFF.
10	VACANT/OCCUPIED WASHROOM SIGN, TO BE INTERLOCKED w/ WASHROOM DOOR LOCK BUTTON.



2 A.4 BARRIER FREE WASHROOM DETAILS

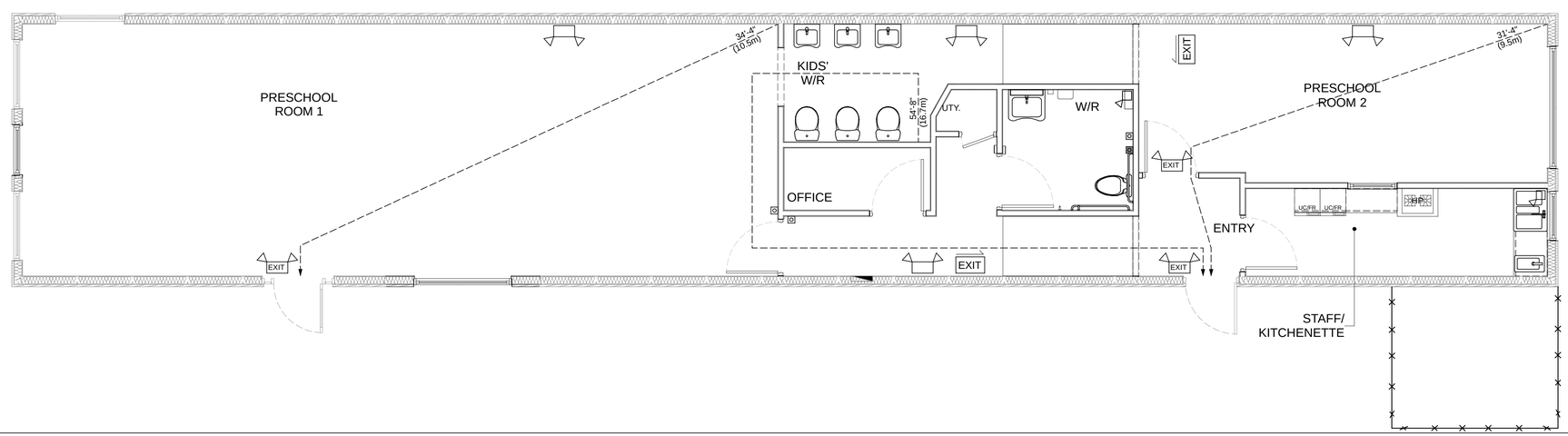
SCALE: 3/8" = 1'-0"

ARCHITECTURAL LEGEND

PLAN	DESCRIPTION	NOTES
W1	WALL & FOOTING TAGS	REFER TO FLOOR PLANS & SCHEDULES
D1	DOOR TAGS	REFER TO FLOOR PLANS & DOOR SCHEDULE
F-1	FLOOR TAGS	REFER TO FLOOR PLANS & FLOOR SCHEDULE
C-1	CEILING & ROOF TAGS	REFER TO PLANS & SCHEDULES
WIN-1	WINDOW TAGS	REFER TO FLOOR PLANS & WINDOW SCHEDULE
PB	AUTOMATIC DOOR OPENER PUSH BUTTON	TOUCHLESS DOOR OPENER - NORTON - 700 - WAVE TO SWITCH
LB	DOOR LOCKING PUSH BUTTON	
EM	EMERGENCY PUSH BUTTON	c/w PULL CORD FOR EMERGENCY CALL SYSTEM
	AUDIBLE & VISUAL SIGNAL STATION FOR EMERGENCY CALL SYSTEM	CONNECTED TO EMERGENCY PUSH BUTTON

EGRESS LEGEND

PLAN	DESCRIPTION	NOTES
EXIT	EMERGENCY LIGHT AND SIGN	LUMACELL LSC SERIES c/w OBC APPROVED GREEN LENSE OR EQUIV.
EXIT	EMERGENCY LIGHT AND SIGN w/ DIRECTION	LUMACELL LSC SERIES c/w OBC APPROVED GREEN LENSE OR EQUIV.
	EMERGENCY LIGHT	LUMACELL RGS SERIES EMERGENCY LIGHT OR EQUIV.
	REMOTE HEAD EMERGENCY LIGHT	LUMACELL RD10 REMOTE EMERGENCY LIGHT OR EQUIV.
	REMOTE HEAD EMERGENCY LIGHT	LUMACELL RS-20 EMERGENCY REMOTE HEADS
EXIT	EMERGENCY SIGN w/ DIRECTION	LUMACELL LA SERIES c/w OBC APPROVED GREEN LENSE OR EQUIV.
	TRAVEL DISTANCE TO EXIT	MAX. TRAVEL DISTANCE 40m (131.2') (OBC 3.4.2.5.(1).(b))



1 A.4 EGRESS PLAN

SCALE: 1/4" = 1'-0"

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024.03.13
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PROVINCE OF ONTARIO

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PROJECT:

579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:

EGRESS PLAN & BARRIER FREE WASHROOM DETAILS

DRAWN BY: ---

DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

A.4

ASHRAE 62.1-2013 – VENTILATION CALCULATION (RTU-1)

Min. Zone Outdoor Air Rate Required	**Voz**		
Outdoor Air Required in Breathing Zone	**Vbz**		
# Persons	**Pz**	36	**Vbz =** (Rp * Pz) + (Ra *
Ventilation Rate (occu	**Rp**	10	**Vbz =** 552.24 CFM
(building)	**Ra**	0.12	
Area (ft²)	**Az**	1602	
Zone Air Distribution Effectiveness	**Ez**	1	**Voz =** Vbz/Ez **Voz = 552.2** CFM

Average Zone Air Distribution Effectiveness

Cycle On			
Time (min.)	1	**1/ Ez,avg =**	(Time On/Time Total) * ((Time On / Ez On) + (Time Off / Ez Off))
Zone Air Distribution Effectiveness (Ez)	1	**Ez,avg =**	**1.00**
Cycle Off			
Time (min.)	3		
Zone Air Distribution Effectiveness (Ez)	1		**Voz =** Vbz / Ez,avg **Voz = 552.2** CFM

SYSTEM HEAT WILL RUN FOR 1 MINUTE UNTIL SPACE REACHES DESIRED SET POINT, FAN WILL RUN CONTINUOUS.

Project Information

For: 579 James St.
579 James St., Delhi, ON

Zone: DAYCARE

COOLING LOAD

1. DESIGN CONDITIONS	at Jul 1700 LDT		Peak load at Jul 1700 LDT	
Inside: 75 °F	Outside: 87 °F		TD: 12 °F	
OutRH: 52 %	MoistDiff: 35.9 gr/lb		Mult: 1.0	Ins.wb 62 °F
			Sensible	Latent
2. SOLAR RADIATION THROUGH GLASS			0	-
3. TRANSMISSION GAINS	Sensible		6563	-
Walls:	3417		-	-
Glass:	0		-	-
Doors:	0		-	-
Partitions:	0		-	-
Floors:	0		-	-
Ceilings:	3146		-	-
4. INTERNAL HEAT GAIN	Sensible	Latent	7908	1550
Occupants:	2450	1550	-	-
Lights:	5458	-	-	-
Motors:	0	-	-	-
Appliances:	0	0	-	-
5. INFILTRATION:	Outside air cfm:	288	3580	6782
6. SUBTOTAL: Space load	Sensible	Latent	18051	8332
Envelope	18051	8332	-	-
Less external	0	-	-	-
Redistribution	0	0	-	-
7. SUPPLY DUCT			0	-
8. SUBTOTAL:	Space load + supply duct		18051	-
Actual cfm:	852 at supply TD:	20	-	-
9. VENTILATION:	Make-up air cfm:	341	4250	8050
10. RETURN AIR LOAD:	Lighting + plenum (net)		0	-
11. RETURN DUCT			0	-
12. TOTAL LOADS ON EQUIPMENT			22301	16382

HEATING LOAD

13. DESIGN CONDITIONS		Mult: 1.0	
Inside: 72 °F	Outside: 3 °F	TD: 69 °F	
14. TRANSMISSION LOSSES			28410
Walls:	9341		-
Glass:	0		-
Doors:	0		-
Partitions:	0		-
Floors:	15297		-
Ceilings:	3772		-
15. INFILTRATION:	Outside air cfm:	353	25919
16. SUBTOTAL: Space load			54329
Envelope	54329		-
Less external	0		-
Less transfer	0		-
Redistribution	0		-
17. SUPPLY DUCT:			0
18. VENTILATION:	Make-up air cfm:	341	25064
19. HUMIDIFICATION			15720
Piping			0
20. RETURN DUCT			0
21. TOTAL HEATING LOAD ON EQUIPMENT			95114

MECHANICAL EQUIPMENT SCHEDULE

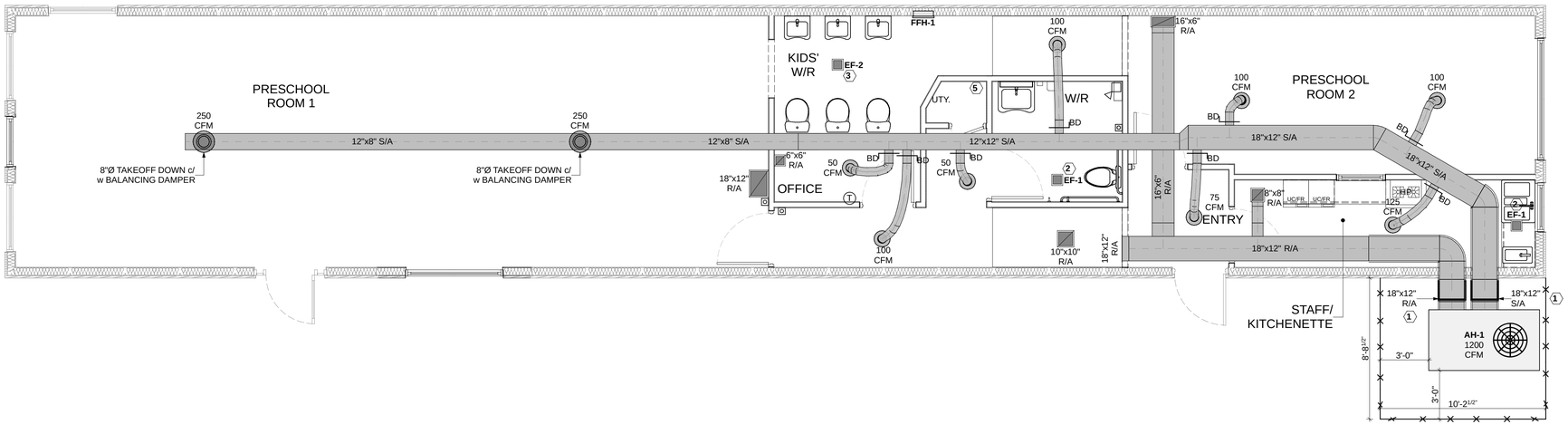
UNIT DESIGNATION	QTY	MAKE & MODEL	DESCRIPTION	ROOM SERVED	CFM	VFD SETTING	S.P(IN)	HEATING CAPACITY (MBTU) IN	HEATING CAPACITY (MBTU) OUT	COOLING CAP (TONS)	SUPPLY SIDE AIR (CFM)	KW	HP	OPERATING WEIGHT (LBS)	VOLTAGE	PH	FREQ	CON	UNIT NOTES	ACCESSORIES
EF-1	2	PANASONIC WHISPER QUIET FV-0511VF1	WASHROOM EXHASUT FAN	WASHROOM & KITCHENETTE	80	X	0.25	X	X	X	X	0.009	X	9.5	120	1	60	HW	NEW	
EF-2	1	PANASONIC WHISPER QUIET FV-30VQ3	WASHROOM EXHASUT FAN	KIDS' WASHROOMS	225	X	0.25	X	X	X	X	0.007	X	18.2	120	1	60	HW	NEW	
AH-1	1	YORK ZE036N11B1C0AAA1A3	AIR HANDLING UNIT	ENTIRE BUILDING	1200	X	0.1	115	92	3	555	2.96	X	470	208	1	60	HW	MOUNTED ON SLAB ON GRADE. SIDE DISCHARGE.	
FFH-1	1	OUELLET OAC01502-T	COMMERCIAL WALL FAN HEATER	PRESCHOOL ROOM 1	X	X	X	X	X	X	X	1	X	24	120	1	60	HW		
HWT-1	1	NAVIEN NPE-180A2	CONDENSING TANKLESS WATER HEATER	ENTIRE BUILDING	X	X	X	X	X	X	X	0.2	X	73	120	1	60	HW	SUSPENDED TO WALL	

HVAC KEY NOTES

1	INSULATE ALL SUPPLY AIR & RETURN AIR DUCTS.
2	5"Ø WASHROOM EXHAUST FAN DUCT. UP THROUGH ROOF, c/w CONE FLASHING, GOOSE NECK, & BIRD SCREEN.
3	8"Ø WASHROOM EXHAUST FAN DUCT. UP THROUGH ROOF, c/w CONE FLASHING, GOOSE NECK, & BIRD SCREEN.
4	EXISTING FURNACE & AIR CONDITIONER TO BE DISCONNECTED & REMOVED. NEW AIR HANDLER (AH-1) TO BE INSTALLED AS SHOWN ON DRAWINGS. REFER TO MECHANICAL EQIPMENT SCHEDULE FOR MODEL INFO.
5	TANKLESS WATER HEATER VENTING: 2" CPVC SYSTEM 636 CONCENTRIC VENT UP THROUGH ROOF.

HVAC LEGEND

PLAN	DESCRIPTION	NOTES
	ROUND CONE DIFFUSERS	
	FLEX DUCT	MAX. LENGTH OF 10' (REFER TO PLANS FOR NECK SIZES)
	EGG CRATE CEILING RETURN GRILLE	PRICE - 80 SERIES (REFER TO PLANS FOR GRILLE SIZES)
	EXHAUST FAN	REFER TO HVAC SCHEDULE
	FORCED FLOW HEATER	REFER TO HVAC SCHEDULE
T	THERMOSTAT	COORDINATE EXACT LOCATION w/ OWNER
BD	BALANCING DAMPERS	
	LOUVERED RETURN WALL TRANSFER GRILLE	PRICE - 500/600 SERIES (REFER TO PLANS FOR GRILLE SIZES)



1
M.1

PROPOSED HVAC PLAN
SCALE: 1/4" = 1'-0"

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024.03.13
S Patel
90514306
PROVINCE OF ONTARIO

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(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:

HVAC PLAN

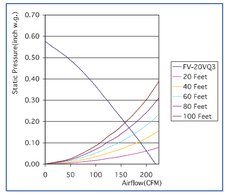
DRAWN BY: ---

DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

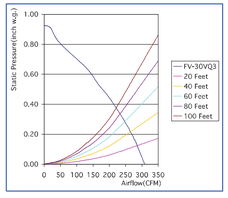
M.1

WhisperCeiling Ventilation Fans

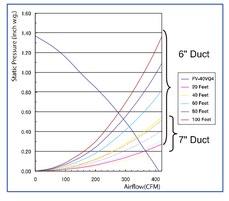
FV-20VQ3
190 CFM 6" Duct 6" duct



FV-30VQ3
290 CFM 6" Duct

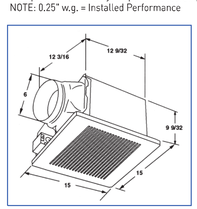


FV-40VQ4
380 CFM 6" Duct 6" duct

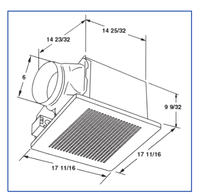


Specifications		WhisperCeiling					
		FV-20VQ3		FV-30VQ3		FV-40VQ4	
Characteristics (HVI Certified Data for 0.1" S.P.)	Static pressure in inches w. g.	0.1	0.25	0.1	0.25	0.1	0.25
	Air Volume (CFM)	190	145	290	257	390	356
	Noise (sones)	0.8	1.4	2	N/A	3	3
	Power Consumption (Watts)	44.5	43.6	64	62	111.4	109.6
	Energy Efficiency (CFMs/Watt)	4.6	3.6	4.5	4.1	3.5	3.3
	Speed	761	949	877	990	793	874
	Current	0.34	0.33	0.53	0.52	0.99	0.98
	MAX Current (amps)	0.41		0.61		1.00	
	Power Rating (V/Hz)	120/60					
Specifications	Motor Type	AC					
	Type of Motor Bearing	Ball					
	Thermal Fuse Protection	Yes					
	Blower Wheel Type	Sirocco					
	ENERGY STAR Qualified	Yes					
Installation	Duct Diameter (inches)	6					
	Mounting Opening (inches sq.)	12-3/16				14-3/4	
	Grille Size (inches sq.)	15				17-11/16	
Light Specifications	Lamp Watts						
	Lumens (lm)						
	Lumens Per Watt (LPW)						
	Color Rendering Index						
	Color Temperature (Kelvin)						
	Rated Life (hours)						
	Lamp Model #						
	Type of Lamp Socket						
Night-Light Specs	Night Light Watts						
Shipping	Gross Weight (lbs.)	16.8		18.2		27.1	
Approved Code/Standard/ Regulation	UL Tub/Shower Enclosure	Yes					
	Washington State VIAQ Code	Yes					
	California Title 24 Compliant	Yes					
	Mfg in ISO 9001 Certified Facility	Yes					

*As tested by an EPA recognized lab
**Lamp contains mercury. Dispose of according to local, state and federal laws.
NOTE: 0.25" w.g. = Installed Performance



FV-20VQ3/FV-30VQ3



FV-40VQ4

KIDS' WASHROOM EXHAUST FAN

OAC
Models

Watts	Volts (ph)	Product #[1]	Price	BTU/hr	Unit	Weight lb	Weight kg
1500	120 (1)	OAC01502-T	789.00	5123	single	24.0	10.9

FORCED FLOW HEATER SPECS

WhisperFit® DC VENTILATION FAN

FV-0511VF1

Specification Submittal Data / Panasonic Ventilation Fan

Description:

Ventilating fan shall be low sone ceiling mount rated for continuous operation. Fan shall be ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by the Underwriters Laboratories and conform to UL standards.

Motor/Blower:

- Four-pole totally enclosed condenser ECM motor rated for continuous use.
- Fan ventilation rates shall be manually adjustable for 50, 80, or 110 CFM.
- Power Rating shall be 120 volts and 60 Hz.
- Fan shall be UL listed for tub/shower enclosure when GFCI protected.
- Motor equipped with thermal cutoff fuse.
- Removable, permanently lubricated, plug-in motor.
- ECM Motor with SmartFlow Technology

Housing:

- Rust proof epoxy and polyester resin coating, 26 gauge galvanized steel body.
- 4" diameter duct with optional 3" adapter included.
- Built in backdraft damper.
- Articulating and expandable extension bracket up to 24".

Ceiling Radiation Damper:

- WhisperFit DC is UL listed for use with the Panasonic Ceiling Radiation Damper (Model #: PC - RD05C5, sold separately).

Grille:

- Attractive design using Poly Pro material.
- Attaches directly to housing with torsion springs.

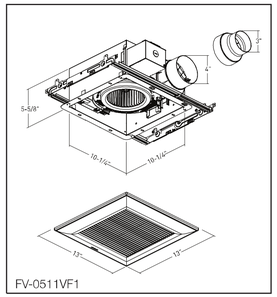
Warranty:

- 6-year warranty ECM motor, 3-year warranty on parts

Architectural Specifications:

Customizable Ventilation fan shall be ceiling mount, ENERGY STAR® rated with built-in speed selector. Select from 50/80/110 CFM with <0.3/<0.3/0.8 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with 50/80/110 CFM and no more than 0.4/0.8/1.2 sones at 0.25 w.g. and 50/84/109 CFM at 0.375 w.g. Power Consumption shall be no greater than 4.0/5.9/10.2 watts at 0.1 w.g. and 7.1/9.4/14.6 watts at 0.25 w.g. and 10.0/13.2/17.9 watts at 0.375 w.g. ENERGY STAR® rated with efficiency of no less than 13.5/13.9/11.0 CFM/watt at 0.1 w.g. and 7.6/8.7/7.7 CFM/watt at 0.25 w.g. and 5.4/6.5/6.2 CFM/watt at 0.375 w.g. Duct diameter shall be no less than 4" (3" if using the included duct adapter). The motor shall be enclosed with brushless ECM motor engineered to run continuously. Power rating shall be 120v/60Hz. Housing material shall be no less than 26-gauge galvanized steel with rust proof epoxy and polyester resin coating. Fan shall be UL listed for tub/shower enclosure when GFCI protected. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR® IAP, Earth Craft, and California Title 24.

3" or 4" Duct



FV-0511VF1

Specifications: **WhisperFit® DC** FV-0511VF1		4" Duct			4" Duct			4" Duct			3" Duct			3" Duct			3" Duct		
Ventilation Fan Characteristics (HVI-Certified Data)	Static Pressure in inches w.g.	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375	0.1	0.25	0.375
	Air Volume (CFM)	110	111	109	80	80	84	50	50	50	110	94	69	80	81	67	50	51	55
	Noise (sones)	0.8	1.2	-	0.3	0.8	-	<0.3	0.4	-	2.0	1.5	-	0.8	1.4	-	<0.3	0.9	-
	Power Consumption (Watts)	10.2	14.6	17.9	5.9	9.4	13.2	4.0	7.1	10.0	17.1	16.4	13.6	8.8	13.0	13.5	4.6	7.7	10.8
	Energy Efficiency (CFM/Watt)	11.0	7.7	6.2	13.9	8.7	6.5	13.5	7.6	5.4	6.6	5.9	5.2	9.4	6.5	5.2	11.5	7.0	5.3
	Speed (RPM)	977	1222	1392	820	1142	1349	795	1152	1374	1341	1429	1476	1094	1357	1476	870	1205	1426
	Current (amps)	0.18	0.24	0.28	0.11	0.16	0.22	0.08	0.13	0.17	0.27	0.26	0.22	0.15	0.21	0.22	0.09	0.14	0.18
	MAX. Current (amps)	0.29																	
	Power Rating (V/Hz)	120/60																	
	ENERGY STAR® Qualified	Yes																	

WASHROOM EXHAUST FAN

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024-03-13
S Patel
90514306
PROVINCE OF ONTARIO

N

REVISIONS

DATE	DESCRIPTION
2024.03.13	ISSUED FOR SITE PLAN APPROVAL

LAKELAND ENGINEERING
1100 Sutton Dr, Burlington, Unit#1
P:905-332-8888
info@lakelandengineering.ca

Do not scale drawings. Contractor must verify all dimensions and advise the designer of any errors or ommissions. No variations or modifications to work shown shall be implemented without prior written approval. All previous issues of this drawing is superseded by the latest revisions. All drawings and specifications remain the property of Lakeland Engineering.

PROJECT:
579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:
MECHANICAL EQUIPMENT SPECS

DRAWN BY: ---
DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

M.2

MECHANICAL SPECIFICATIONS

GENERAL REQUIREMENTS FOR MECHANICAL WORK

1.0 SCOPE OF WORK

1.1 CONFORM TO THE APPLICABLE PROVISIONS OF THE GENERAL CONDITIONS OF THE CONTRACT.

1.2 THE GENERAL MECHANICAL SPECIFICATION SHALL APPLY TO AND BE PART OF EACH OF THE SECTIONS COVERING THE MECHANICAL TRADES WORK.

1.3 COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE O.B.C., ALL OTHER APPLICABLE CODES, REGULATIONS, BY-LAWS, AND OFFICIAL STANDARDS ACCORDING TO THE REQUIREMENTS AND INTERPRETATIONS OF THE AUTHORITIES HAVING JURISDICTION. THESE CODES & STANDARDS CONSTITUTE AN INTEGRAL PART OF THESE SPECIFICATIONS. IN CASE OF CONFLICT, THE CODES TAKE PRECIDENCE OVER THE CONTRACT DOCUMENTS.

2.0 EXAMINATION OF SITE AND INFORMATION

2.1 EACH SUBCONTRACTOR, BEFORE TENDERING, SHALL EXAMINE THE SITE, THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND THEY SHALL FAMILIARIZE THEMSELF WITH THE BUILDING CONSTRUCTION AND FINISH IN ORDER THAT THEIR TENDER MAY INCLUDE EVERYTHING NECESSARY FOR THE PROPER COMPLETION OF THE WORK.

2.2 IT SHALL BE THIS SUBCONTRACTOR'S RESPONSIBILITY THAT MATERIAL AND EQUIPMENT BE BROUGHT INTO THE BUILDING IN SUCH ASSEMBLIES AND SIZES AS TO ENTER INTO THE SPACES WHERE THEY ARE TO BE LOCATED AND TO BE SMALL ENOUGH TO BE HOISTED INTO THE BUILDING WITHOUT DIFFICULTY. ANY CUTTING, PATCHING, ETC., INVOLVED IN GETTING LARGE ASSEMBLIES INTO PLACE SHALL BE THE RESPONSIBILITY OF THIS SUBCONTRACTOR.

3.0 RELATIONSHIP WITH OTHER TRADES

3.1 THIS SUBCONTRACTOR SHALL CONFER WITH ALL OTHER CONTRACTORS INSTALLING EQUIPMENT, PLANT PIPING, OTHER WORK, FOUNDATIONS, ETC., WHICH MAY AFFECT THEIR INSTALLATION, AND THEY SHALL ARRANGE THEIR EQUIPMENT, PIPING, ETC., IN PROPER RELATION WITH OTHER APPARATUS, AND WITH THE BUILDING CONSTRUCTION. THEY SHALL ALSO CONFIRM THE ELECTRICAL CHARACTERISTICS OF THE PROJECT AND ORDER EQUIPMENT ACCORDINGLY.

3.2 SPECIAL CARE SHALL BE TAKEN IN THE INSTALLATION OF ALL WORK, TO SEE THAT THEY ALL COME WITHIN THE LIMITS ESTABLISHED BY THE FINISH LINES OF ALL WALLS, FLOORS, CEILINGS, ETC.

3.3 THIS SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR AND OTHER SUBCONTRACTORS WHO ARE CONCERNED, OF ALL OPENINGS, FOUNDATION WORK, HANGERS, INSERTS, ANCHORS, OR OTHER PROVISIONS NECESSARY IN THEIR WORK FOR THE INSTALLATION OF THIS SUBCONTRACTOR'S WORK. THIS SUBCONTRACTOR SHALL FURNISH ALL INFORMATION AND NECESSARY MATERIALS IN AMPLE TIME SO THAT PROPER PROVISIONS CAN BE MADE FOR SAME, AND SHALL SUPPLY AND CORRECTLY AND ACCURATELY PLACE ALL INSERTS, SLEEVES, ANCHORS, ETC.

3.4 FAILURE TO COMPLY WITH THESE REQUIREMENTS ON THE PART OF THIS SUBCONTRACTOR WILL RENDER THEM RESPONSIBLE FOR THE COST OF CUTTING OPENINGS, INSTALLING HANGERS, INSERTS, ANCHORS, OR OTHER PROVISIONS AT A LATER DATE, AND THE SUBSEQUENT PATCHING, ETC., THEREBY REQUIRED.

3.5 NO CUTTING SHALL BE DONE WITHOUT PERMISSION. ALL SUCH WORK SHALL BE DONE BY SKILLED TRADES IN AND CERTIFIED FOR THIS PARTICULAR TRADE.

4.0 SHOP DRAWINGS

4.1 EACH SUBCONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW OF MATERIAL, EQUIPMENT, AND APPARATUS BEING PROVIDED BY THEM. THESE SHALL SHOW IN DETAIL THE DESIGN AND CONSTRUCTION AND PERFORMANCE OF ALL APPARATUS, ETC.

4.2 THE ENGINEER'S REVIEW OF SHOP DRAWINGS AND MANUFACTURER'S SPECIFICATIONS OF ANY EQUIPMENT IS GENERAL AND IS NOT INTENDED TO SERVE AS FINAL CHECK AND IT SHALL NOT RELIEVE THE SUBCONTRACTOR OF THE RESPONSIBILITY FOR ERRORS OR F THE NECESSITY OF CHECKING THE DRAWING THEMSELF, OR OF FURNISHING ANY OF THE MATERIALS AND PERFORMING THE WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS TO THE FULL INTENT OF THE SPECIFICATION.

4.3 BEFORE SUBMISSION, THIS SUBCONTRACTOR SHALL CHECK ALL SHOP DRAWINGS FOR ACCURACY OF DETAILS, DIMENSIONS, ETC. AND SHALL BE SATISFIED THAT THE DRAWINGS ARE CORRECT AND THAT THE EQUIPMENT WILL FIT PROPERLY IN THE ALLOTTED SPACE. THE SHOP DRAWINGS SHALL BE STAMPED BY THIS SUBCONTRACTOR WITH THE WORD "REVIEWED", THE DATE OF APPROVAL, AND THEIR FIRM'S NAME PRIOR TO SUBMISSION.

5.0 REQUIREMENTS OF INSPECTION DEPARTMENTS

5.1 ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION IN EACH CASE, PARTICULARLY ALL AFFECTED DEPARTMENTS OF THE MUNICIPALITY AND PROVINCE, ELECTRICAL EQUIPMENT SUPPLIED MUST CONFORM TO THE REGULATIONS OF CSA AND THE LOCAL UTILITY. ANYTHING NECESSARY TO MAKE THE WORK COMPLY WITH THESE REQUIREMENTS SHALL BE PROVIDED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL COST TO THE OWNERS IF IT REASONABLY COULD HAVE BEEN FORSEEN WHEN TENDERING.

5.2 EACH SUBCONTRACTOR SHALL PREPARE DRAWINGS IN ADDITION TO ENGINEER'S DRAWINGS AS MAY BE REQUIRED BY VARIOUS INSPECTION DEPARTMENTS HAVING JURISDICTION, AND OBTAIN THEIR APPROVAL BEFORE PROCEEDING WITH THE WORK.

5.3 IN THE EVENT THAT THE INSPECTION DEPARTMENT'S REQUEST DEVIATES FROM THE ENGINEER'S LAYOUT, THIS SUBCONTRACTOR SHALL CONSULT THE ENGINEER BEFORE PROCEEDING WITH SAME. IT SHALL BE NOTED THAT ENGINEER'S DRAWINGS ARE GENERALLY ACCEPTABLE TO INSPECTION DEPARTMENTS AND MINOR SUPPLEMENTS NEED ONLY BE MADE BY SUBCONTRACTORS.

6.0 CERTIFICATES, PERMITS, FEES

6.1 SUBCONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES INCLUDING PAYMENT FOR STREET CONNECTIONS TO STORM, SANITARY, WATER AND GAS IN ORDER THAT THE WORK HEREIN SPECIFIED MAY BE CARRIED OUT AND THEY SHALL FURNISH ANY CERTIFICATES NEEDED AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH THE LAWS AND REGULATIONS OF THE MUNICIPALITY AND PROVINCE.

6.2 SUBCONTRACTOR SHALL CONTACT THE LOCAL GAS COMPANY AS SOON AS POSSIBLE AND VERIFY THAT GAS SERVICE IS AVAILABLE AT PRESSURE AND CAPACITY REQUIRED FOR THE PROJECT. THEY SHALL INFORM THE ENGINEER IMMEDIATELY IF THERE IS ANY PROBLEM WITH GAS SERVICE WHATSOEVER. IT SHALL BE THIS SUBCONTRACTOR'S RESPONSIBLITY TO COORDINATE GAS REQUIREMENTS WITH THE GAS COMPANY BEFORE ANY OF THEIR WORK PROCEEDS.

7.0 GUARANTEE

7.1 THIS SUBCONTRACTOR SJALL GUARANTEE ALL MATERIAL AND WORKMANSHIP USED IN THE WORK TO BE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS, OF BEST QUALITY AND TYPE OBTAINABLE TO GIVE FIRST-CLASS CONSTRUCTION AND PROPER AND EFFICIENT OPERATION, AND FREE FROM ANY DEFECTS. ANY SUCH DEFECTS WHICH MAY APPEAR IN ANY OF THE WORK WITHIN ONE YEAR AFTER WRITTEN ACCEPTANCE OF THEIR WORK SHALL BE REPAIRED AND REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER. WHERE SUCH DEFECTS OCCUR, THIS SUBCONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS INCURRED IN MAKING THE DEFECTIVE WORK GOOD. THIS SHALL NOT OBSOLETE ANY LONGER WARRANTIES ON SPECIFIC ITEMS OF EQUIPMENT.

7.2 ALL INJURIES TO ADJACENT WORK, PARTICULARLY PLASTER, WOOD FINISHES, OR OTHER MATERIALS, OR DAMAGE TO OTHER EQUIPMENT, CAUSED BY SUCH DEFECTS OF THIS SUBCONTRACTOR'S WORK OR BY SUBSEQUENT REPLACEMENTS AND REPAIRS, SHALL BE MADE GOOD AT THE EXPENSE OF THIS SUBCONTRACTOR. ALL REPAIR WORK SHALL BE DONE BY THE TRADES RESPONSIBLE FOR THE ORIGINAL WORK.

8.0 EXCAVATING AND BACKFILLING

8.1 UNLESS OTHERWISE INDICATED, ALL NECESSARY EXCAVATING AND BACKFILLING SHALL BE DONE BY THIS SUBCONTRACTOR.

8.2 BEFORE COMMENCING WITH WORK, CHECK LOCATIONS OF ALL EXISTING SERVICES. THIS SUBCONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES AND SUBSEQUENT EXPENSES RESULTING FROM HIS NEGLIGENCE IN THIS RESPECT.

EXPENSES RESULTING FROM HIS NEGLIGENCE IN THIS RESPECT.

8.3 KEEP EXCAVATION FREE OF WATER.

8.4 PROVIDE ANY NECESSARY SHARING AS MAY BE REQUIRED FOR THE SAFETY OF THE TRADE INSTALLING THE WORK.

8.5 BACKFILL INSIDE BUILDING AND UNDER PAVED AREAS WITH PIT RUN GRAVEL OR SAND PROPERLY TAMPED IN 12" LAYERS.

8.6 IN ALL OTHER AREAS BACKFILL WITH GOOD CLEAN EARTH PROPERLY TAMPED IN 12" LAYERS.

8.7 EXCESS EXCAVATED MATERIAL SHALL BE PILED ON THE SITE WHERE DIRECTED BY THE FIELD SUPERVISOR FOR REMOVAL BY OTHERS.

8.8 LAY ALL PIPING ON A BED OF SOLID UNDISTURBED EARTH OR WHERE THIS IS NOT OBTAINABLE, ON CONCRETE PADS, SUPPORTED BY CONCRETE PIERS EXTENDED DOWN TO THE UNDISTURBED BEARING.

8.9 WHERE ANY EXCAVATING IS NECESSARY IN CLOSE PROXIMITY TO OR BELOW ANY FOOTING LEVEL, BACKFILL WITH 1500LB. CONCRETE TO THE LEVEL OF THE TOP OF THE HIGHEST ADJACENT FOOTING.

8.10 AT THE COMPLETION OF THE PROJECT, FILL IN AND LEVEL OFF EXTERIOR EXCAVATIONS.

9.0 DRAWINGS

9.1 THE DRAWINGS SHOW THE APPROXIMATE LOCATION FOR THE SPECIAL APPARATUS AND THE MATERIALS THROUGHOUT THE BUILDING. THE ARRANGEMENT SHOWN ON THE DRAWINGS IS MORE OR LESS DIAGRAMMATIC AND AS SUCH APPROXIMATE ONLY, AND MAY BE ALTERED, AS APPROVED BY THE ENGINEER. TO MEET THE REQUIREMENTS OF THE APPARATUS, ETC., AND OF THE BUILDING, EACH SUBCONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL MEASUREMENTS FOR HIS WORK THROUGHOUT, AND HE SHALL ARRANGE HIS PIPING, WIRING, AND APPARATUS TO CONFORM TO THE ARCHITECTRAL AND STRUCTURAL DETAILS IN A SATISFACTORY MANNER AND SHALL CO-OPERATE WITH OTHER CONTRACTORS TO ENSURE THAT WORK SHALL MEET ALL REQUIREMENTS OF DIVERSE CONTRACTS.

9.2 THE SUBCONTRACTORS IS PARTICULARLY CAUTIONED THAT SMALL SCALE ENGINEER'S PLANS MUST BE SUPPLEMENTED BY THEIR OWN DETAIL DRAWINGS WHERE NECESSARY FOR PROPER CO-ORDINATION OF THE WORK.

9.3 ITEMS SHOWN ON THE DRAWINGS BUT NOT SPECIFIED, OR SPECIFIED BUT NOT SHOWN, SJALL BE INCLUDED.

9.4 ITEMS OBVIOUSLY REQUIRED TO PROVIDE A COMPLETE WORKING SYSTEM BUT NOT SPECIFIED NOR SHOWN SHALL BE INCLUDED.

10.0 CONTRACTOR'S SHOP

10.1 EACH SUBCONTRACTOR SHALL PROVIDE HIS OWN OFFICE, WORKSHOP, TOOLS AND MATERIALS STORAGE AND BE RESPONSIBLE FOR ANY LOSS OR DAMAGE THERETO. BUILDING SHALL BE ERECTED UNDER THE SUPERVISION OF THE CONTRACTOR.

11.0 RESPONSIBILITY AND LIABILITY

11.1 EACH SUBCONTRACTOR SHALL SUPERVISE THE LAYING OUT OF THEIR WORK AND SJALL ARRANGE IT IN CO-OPERATION WITH OTHERS WHO MAY BE WORKING ON THE PREMISES WHILE THE WORK OF THIS CONTRACT IS IN PROGRESS. THEY SJALL PROTECT FINISHED AND UNFINISHED WORK OF THIS CONTRACT AND/OR WORK OF OTHERS ON THE PREMISES UNTIL THE COMPLETED WORK HAS BEEN ACCEPTED, OF ANY DISCREPANCIES OR INCONSISTENCIES FOUND IN THE DRAWINGS OR SPECIFICATIONS BEFORE SUBMITTING THEIR TENDER. THEY SJALL ABIDE BY THE DISCRESSION FIVEN THEM IN WRITING WITH REGARD TO THE SAME. EACH SUBCONTRACTOR IS CAUTIONED THAT THE WORK AS SHOWN IS INTENDED TO BE COMPLETE IN ALL RESPECTS AND THAT FAILURE ON THEUR PART TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES WILL NOT RELIEVE THEM OF THE RESPONSIBILITY OF COMPLETING THE WORK AS INTENDED AT THE CONTRACT PRICE.

12.0 CLEAN-UP

12.1 DURING THE COURSE OF CONSTRUCTION, EACH SUBCONTRACTOR SHALL KEEP THEIR WORK TIDY AND NOT ALLOW AN ACCUMULATION OF DEBRIS RESULTING FROM THEIR WORK.

12.2 UPON COMPLETION OF THEIR WORK, THEY SHALL LEAVE THE PREMISES IN A BROOM-CLEAN CONDITION.

13.0 PROTECTION

13.1 PROTECT YOUR WORK FROM CONSTRUCTION DIRT OR DAMAGE FROM ANY CAUSE. SECURELY PLUG AND CAP ALL OPENINGS IN PIPE, EQUIPMENT, AND FIXTURES TO PREVENT OBSTRUCTIONS.

14.0 IDENTIFICATION OF EQUIPMENT

14.1 IDENTIFY ALL FANS, PUMPS, MOTOR STARTERS, AND OTHER MECHANICAL EQUIPMENT AS TO SERVICE, BY AN ENGRAVED PLASTIC LAMACOID NAMEPLATE, FIRMLY AFFIXED BY ADHESIVE AND SCREWS TO EACH UNIT. NOTE THAT BOTH UNIT AND ITS REMOTE STARTER SHALL BE TAGGED. PROVIDE PRESSURE SENSITIVE TAPE MARKERS, SHOWING PIPE SERVICE AND ARROWS INDICATING DIRECTION OF FLOW ON EXPOSED PIPE. ON CONCEALED PIPES, PROVIDE MARKERS ADJACENT TO ACCESS DOORS THROUGHOUT THE LENGTH OF PIPES AT INTERVALS NOT EXCEEDING 50 FEET. INSTALL MARKERS AFTER PIPE HAS BEEN PAINTED AND ON BOTH SIDES OF ANY WALL THROUGH WHICH PIPE PASSES.

15.0 TAGS

15.1 AT THE COMPLETION OF THE INSTALLATION, THE MECHANICAL CONTRACTOR SHALL TAG ALL VALVES WITH NUMBERED BRASS DISCS AND SHALL PROVIDE THE OWNER WITH A FRAMED LIST OF THE TAGS TO INDICATE LOCATION AND SERVICE OF ALL VALVES..

16.0 OPERATING INSTRUCTIONS AND RECORD DRAWINGS

16.1 FOR EACH ITEM OF SPECIAL APPARATUS, OPERATING AND MAINTENANCE INSTRUCTIONS SHALL BE PROVIDED IN THREE (3) COPIES FOR THE OWNER'S USE. THESE SHALL INCLUDE:

1. GENERAL ARRANGEMENT SHOP DRAWINGS.
2. COMPLETE EXPLANATION OF OPERATING PRINCIPLES AND SEQUENCES.
3. COMPLETE PART LISTS WITH NUMBERS.
4. RECOMMEND MAINTENANCE PRACTICES AND PRECAUTIONS.
5. COMPLETE WIRING AND CONNECTIONS DIAGRAMS.

16.2 OBTAIN TWO SETS OF MECHANICAL DRAWING WHITE PRINTS FROM THE CONTRACTOR AND KEEP A RECORD IN RED PENCIL OF ANY DEVIATION FROM THE DRAWN LOCATION OF PIPES, DUCTS, ETC.. ONE SET SHALL BE TURNED IN TO THE OWNER WITH THE OPERATING INSTURCTIONS, AND THE OTHER SET SHALL BE HANDED TO THE ENGINEER.

17.0 PAINTING

17.1 ALL EQUIPMENT FABRICATED FROM STEEL AND NOT FACTORY FINISH PAINTED SJALL BE SUPPLIED WITH A PRIME COAT DONE AT THE SUPPIER'S FACTORY. IF DAMAGED IN TRANSIT OR ON THE JOB, THIS CONTRACTOR SHALL TOUCH UP WITH RED LEAD PRIMER BEFORE FINISHING PAINTING.

18.0 ACCESS DOORS

18.1 LOCATE ACCESS DOORS WHERE REQUIRED AND OF SUFFICIENT SIZE FOR SERVICES VALVES, DAMPERS, CLEANOUTS, ETC.

18.2 THESE SHALL BE FLUSH MOUNTING, SCREDRIVER ACCESS, METAL TUPES, 16 GAUGE PRIMED STEEL.

HEATING, VENTILATING, AND AIR CONDITIONING

1.0 GENERAL

1.1 ALL HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT SHALL BE C.S.A. LISTED, BEAR THE C.S.A. SEAL, AND BE INSTALLED IN ACCORDANCE WITH C.S.A. STANDARDS.

1.2 IN ADDITION TO THE PROVISIONS OF SENTENCE (1), ALL FANS SHALL BE LICENSED TO BEAR THE A.M.C.A. SEAL.

1.3 ALL DUCTWORK SHALL BE CONSTRUCTED, INSTALLED, & SUPPORTED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.

1.4 IN ADDITION TO THE PROVISIONS OF SENTENCE (3), ALL RIGID DUCTWORK SHALL BE FABRICATED FROM GALVANIZED STEEL SHEETS IN ACCORDANCE WITH NFPA-90A, ULC-S110, AND ASTM-A525; AND OF THE US SHEET GAUGES AS TABLED BELOW.

SHEET GAUGE	RECTANGULAR DUCT	ROUND DUCT
26	UP TO 12"	UP TO 13"
24	13" TO 30"	14" TO 22"
22	31" TO 54"	23" TO 36"
20	55" TO 84"	37" TO 50"
18	85" & ABOVE	51" TO 60"

FLAT AREAS OF DUCT OVER 18" SJALL BE STIFFENED BY CROSS BREAKING ACROSS THE CORNERS, AND ALL DUCTS SHALL BE SELF SUPPORTING.

1.5 IN ADDITION OT HE PROVISIONS OF SENTENCE (3), ALL FLEXIBLE DUCTWORK SHALL BE SUBJECT TO NFPA-90A ABD ULC-5110 STANDARDS FOR FLAME SPREAD AND SMOKE DEVELOPED, BE ULC LISTED, AND BEAR THE ULC SEAL. ALL CONNECTIONS SHALL USE JOINT TREATMENT TYPE AS DETAILED IN MANUFACTURER'S INSTRUCTIONS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL BE 12'-6", USED ONLY IN HORIZONTAL RUNS, AND SHALL NOT PENETRATE FIRE SEPARATIONS.

1.6 DUCTWORK SHALL BE MADE SUBSTANTIALLY AIR TIGHT THROUGHOUT AND SHALL HAVE NO OPENINGS OTHER THAN THOSE REQUIRED FOR PROPER OPERATION AND MAINTENANCE. THE ALLOWABLE LEAKAGE FACTOR SHALL NOT EXCEED 2% THROUGH THE LONGEST DUCT RUN. ALL DUCT JOINTS SHALL BE SEALED WITH JOINT TAPE MEETING THE FLAME RESISTANCE REQUIREMENTS OF ULC-S109.

1.7 ALL AIR HANDLING SYSTEMS SHALL BE TESTED AND BALANCED BY A QUALIFIED TESTING COMPANY TO WITHIN 5% OF THE DESIGN AIR VOLUMES. THREE (3) COPIES OF THE FINAL TESTING AND BALANCING REPORT SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW BY THE ENGINEER.

1.8 ELBOWS SHALL BE CONSTRUCTED USING A RADIUS OF 1.5 TIMES OF THE DUCT DIAMETER / WIDTH. HOLLOW TURNING VANES IN VANE RAILS SHALL BE USED WHEN THIS IS NOT POSSIBLE.

1.9 BALANCING DAMPERS SHALL BE INSTALLED AT ALL TAKE-OFFS FROM BRANCH DUCTS, AND ALL BRANCH DUCT CONNECTIONS TO MAIN DUCTS. BALANCING DAMPERS SHALL BE MANUALLY OPERATED OPPOSED TO BLADE TYPE, SPLITTER TYPE, OR BUTTERFLY TYPE, COMPLETE WITH LOCKING QUADRANT OPERATOR.

1.10 FIRE DAMPERS SHALL BE INSTALLED IN THE PLANE OF PENETRATION OF FIRESEPARATIONS AND IN ACCORDANCE WITH NFPA-90A AND ULC-S505, AND SHALL BEAR THE ULC SEAL. DAMPERS SHALL BE TYPES A OR B. 1.5 HOUR FIRE RATED AND COMPLETE WITH 160 DEG. F REPLACEABLE LINK. A LIGHTLY FITTED ACCESS DOOR SHALL BE INSTALLED FOR EACH FIRE DAMPER TO PROVIDE ACCESS FOR INSPECTION, AND RESETTING OF DAMPER, AND REPLACING OF FUSIBLE LINK. FIRE DAMPERS SHALL BE SUPPORTED INDEPENDENTLY FROM DUCTWORK.

1.11 VIBRATION ISOLATION FLEXIBLE DUCT CONNECTIONS SHALL BE USED WHERE DUCTWORK CONNECTS DIRECTLY TO AIR HANDLING EQUIPMENT. CONNECTORS SHALL BE NONCOMBUSTIBLE OR OF COMBUSTIBLE FABRIC CONSTRUCTION PROVIDED THEY DO NOT EXCEED 10" IN LENGTH AND COMPLY WITH THE FLAME RESISTANCE REQUIREMENTS OF ULC-S109. COLLARS SHALL BE GALVANIZED IRON AND FASTENED SECURELY TO ENSURE A LEAKPROOF CONNECTION.

1.12 ALL DUCTWORK SHALL BE INSTALLED TO ALLOW FREEDOM FROM VIBRATION DURING OPERATING CONDITIONS. DUCT HANGERS SHALL BE SUPPORTED FROM STRUCTURAL STEEL AND STRUCTURAL CONCRETE SLAB, BUT NOT FROM ROOF DECK. BENT GALVANIZED IRON HANGERS SHALL BE USED. DUCT HANGERS SHALL BE SPACED MAXIMUM 8'-6" APART, WHERE DUCTS PASS THROUGH WALLS AND FLOORS. THE SPACE AROUND THE DUCT SHALL BE PACKED AND SEALED WITH FIRE RESISTANT SEALING COMPOUND.

1.13 KITCHEN EXHAUST DUCTWORK SHALL BE INSTALLED IN COMPLIANCE WITH N.F.P.A. # 96 LATEST EDITION. PROVIDE ALL ACCESS, CLEANOUT, SEPARATIONS AS PER N.F.P.A. #96 WHETHER SHOWN ON PLANS OR NOT. ALL KITCHEN EXHAUST DUCTWORK SHALL BE 16 GAUGE WELDED.

1.14 SPIRAL DUCTWORK SHALL BE SPIRAL HELIX AS MANUFACTURED BY WESBELL HIGH-TEC MANUFACTURING INC.

2.0 INSULATION - GENERAL

2.1 INSULATION SHALL BE APPLIED ON CLEAN, DRY SURFACES AND ONLY AFTER TESTS AND APPROVALS REQUIRED HAVE BEEN COMPLETED.

2.2 ALL PIPE INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND SLEEVES. SUITABLE FIRE STOPS SHALL BE INSTALLED WHERE REQUIRED.

2.3 INSULATION ON ALL COLD SURFACES MUST BE APPLIED WITH A CONTINUOUS UNBROKEN VAPOUR SEAL.

2.4 HANGERS, SUPPORTS, ANCHORS, ETC., THAT ARE SECURED DIRECTLY TO COLD SURFACES, MUST BE ADEQUATELY INSULATED AND VAPOUR SEALED TO PREVENT CONDENSATION.

2.5 ALL SURFACE FINISHES SHALL BE EXTENDED TO PROTECT ALL SURFACES, ENDS, AND RAW EDGES OF INSULATION.

2.6 ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED.

3.0 PLUMBING AND PIPING INSULATION

PIPE INSULATION: GLASS FIBER INSULATION WITH FACTORY APPLIED JACKET; JOHNS-MANVILLE MICRO-LOK 650 OR APPROVED EQUAL.

JACKET EXPOSED: CANVAS FREE - A VAPOUR BARRIER JACKET, CONSISTING OF A WHITE GLASS FIBER SURFACE BONDED TO AN ALUMINIZED FILM.

JACKET CONCEALED: ALL PURPOSE - A VAPOUR BARRIER JACKET, CONSISTING OF A HIGH INTENSITY WHITE KRAFT PAPER SURFACE BONDED TO AN ALIMINIZED FILM AND REINFORCED WITH A GLASS FIBER YARN.

FITTINGS: PRE-MOULDED ONE PIECE PVC INSULATED FITTING COVERS; JOHNS-MANVILLE ZESTON OR APPROVED EQUAL.

A. DOMESTIC COLD WATER:

	AMBIENT TEMPERATURE	*PIPE SIZE*	*THICKNESS*
DOMESTIC HOT WATER SUPPLY:	BELOW 35º	ALL	1-1/2"
DOMESTIC HOT WATER RETURN:	ABOVE 35ºF	ALL	1"

B. AIR CONDITIONING UNIT RUNOUTS AND DRAIN LINES:

ALL RUNOUTS FROM RISER OR MAIN TO THE AIR CONDITIONING UNITS AND AIR CONDITIONING UNIT DRAIN LINES SHALL BE INSTALLED WITH FLEXIBLE FOAM, CLOSED CELL STRUCTURE, PLASTIC INSULATION; JOHNS-MANVILLE AEROTUBE OR APPROVED EQUAL.

PIPE SIZE	*THICKNESS*
UP TO 3"	1/2"
4" AND OVER	3/4"

CUTS AND BUTT JOINTS OF INSULATION SHALL BE JOINED BY SEALING WITH A WATERPROOF VAPOUR BARRIER ADHESIVE.

4.0 DUCTWORK INSULATION

INSULATE ONLY DUCTWORK SHOWN AND/OR NOTED ON THE DRAWINGS.

A. THERMAL:

RECTANGULAR DUCT - RIGID GLASS FIBER 1-1/2" THICK BOARD; JOHNS-MANVILLE SPIN-GLAS 650 BOARD OR APPROVED EQUAL. VAPOUR BARRIER SHALL CONSIST OF A FOIL SCRIM KRAFT PAPER LAMINATE CONSISTING OF ALUMINUM FOIL REINFORCED WITH GLASS FIBER YARN AND LAMINATED TO A CHEMICALLY TREATED FIRE RESISTANT KRAFT.

ROUND DUCT - FLEXIBLE GLASS FIBER 1-1/2" SCRIM KRAFT FACING OR APPROVED EQUAL.

ALL EXHAUST DUCTS SHALL BE INSULATED WITHIN 6'-0" OF COLD OUTLET AT ROOF, ATTIC, OR WALL WITH 1" THICK GLASS FIBER INSULATION WITH FOIL FACED VAPOUR BARRIER (AS ABOVE).

ALL HEATING, A/C, MAKE-UP AIR, AND EXHAUST DUCTWORK WITHIN UNCONDITIONED (ATTIC, ETC.) SHALL BE INSULATED WITH 2" RIGID FIBERGLASS THERMAL INSULATION C/W VAPOUR BARRIER.

INSULATED OUTDOOR OR EXPOSED DUCTWORK SHALL BE FINISHED WITH 6 OZ. FIRE RETARDANT CANVAS LAGGED IN PLACE WITH FIRE RETARDANT LAGGING AHESIVE, OUTDOOR VAPOUR BARRIER MASTIC FINISH WITH A REINFORCING MEMBRANE, ALL JOINTS SHALL HAVE A MINIMUM OVERLAP OF 3".

FLEXIBLE DUCT - CAN-FLEX TYPE C1-IV INSULATED POLYOLEFIN JACKET, CAN-FLEX TYPE C1-IA INSULATED ALUMINIZED JACKET, OR APPROVED EQUAL.

B. ACOUSTIC:

FLEXIBLE GLASS FIBER 1" THICK DUCT LINER; JOHNS-MANVILLE LINACOUSTIC OR APPROVED EQUAL.

PROVIDE ACOUSTIC LINING ON FIRST 12 FEET FROM UNIT OF A/C SUPPLY DUCTS AND RETURN DUCTS. ENLARGE DUCTS TO PROVIDE INSIDE CLEAR DIMENSIONS AS SHOWN ON DRAWINGS.

5.0 EQUIPMENT LIST AND SCHEDULE

5.1 LOUVRE, GRILLE, AND OTHER DIFFUSER SCHEDULE:

TYPE: SEE SCHEDULES
DESCRIPTION: SEE SCHEDULES

NOTE: ALL GRILLES AND DIFFUSERS SHALL BE FINISHED AS PER ARCHITECTURAL SPECIFICATION.

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024.03.13
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REVISIONS

DATE	DESCRIPTION
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PROJECT:

579 JAMES ST.
(FIT OUT FOR
PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:

MECHANICAL GENERAL NOTES

DRAWN BY: ---
DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

M.3

ELECTRICAL SCHEDULE

DESIGNATION	QTY	MAKE & MODEL	DESCRIPTION	ROOMS SERVED	CFM	VFD SETTING	S.P(IN)	HEATING CAPACITY (MBTU) IN	HEATING CAPACITY (MBTU) OUT	COOLING CAP (TONS)	OUTSIDE AIR (CFM)	KW	HP	OPERATING WEIGHT (LBS)	VOLTAGE	PH	FREQ	CONN	UNIT NOTES	ACCESSORIES
L-1	36	CONTRACTOR SUPPLIED	6" RECESSED LIGHT w/ TRIM	ENTIRE BUILDING											120	1	60			
L-2	4	CONTRACTOR SUPPLIED	EXISTING EXTERIOR LIGHTS	ENTIRE BUILDING											120	1	60			
SW-1	7	LUTRON	LIGHT SWITCH	OFFICE, DAY CARE ROOMS, HALL, STAFF RM.											120	1	60			
OSC-1	2	LUTRON	OCCUPANCY SENSOR	WASHROOMS											120	1	60		36" BARRIER FREE	
EF-1	2	PANASONIC WHISPER QUIET FV-0511VF1	WASHROOM EXHASUT FAN	WASHROOM & KITCHENETTE	80	X	0.25	X	X	X	X	0.01	X	9.5	120	1	60	HW	NEW	0
EF-2	1	PANASONIC WHISPER QUIET FV-30VQ3	WASHROOM EXHASUT FAN	KIDS' WASHROOMS	225	X	0.25	X	X	X	X	0.01	X	18.2	120	1	60	HW	NEW	0
AH-1	1	YORK ZE036N1B1C0AAA1A3	AIR HANDLING UNIT	ENTIRE BUILDING	1200	X	0.1	115	92	3	555	2.96	X	470	208	1	60	HW	MOUNTED ON SLAB ON GRADE. SIDE DISCHARGE.	0
FFH-1	1	OUELLET OAC01502-T	COMMERCIAL WALL FAN HEATER	PRESCHOOL ROOM 1	X	X	X	X	X	X	X	1	X	24	120	1	60	HW	0	0

M Electrical load

Step	Rule	Procedure/Calculation	Results	Notes
1	8-210(a), Table 14	Floor area	350	m²
2	Table 14	Basic load per square meter code factor	30	W/m²
3	8-210(a)	Basic load based on square meters	10500	W
4	Table 14	Demand factor for service conductors	100%	
5	Table 14	Actual Basic Load = demand factor x load	10500	W
9				

Load Summary

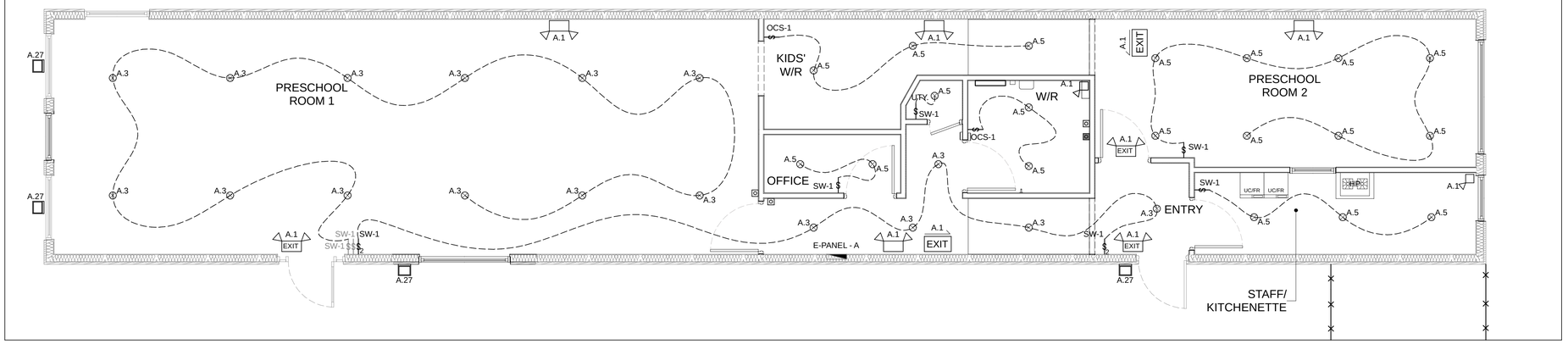
Procedure/ Calculation	Results	Notes
Basic Load (W)	10500	
Special Loads (W)	17650	
Total Load (W)	28150	
Total Load (A)/1.73	78.23	
Feeder Ampacity (A)	98	
Rule 8-104(3)(5) (W)	35188	
Feeder Voltage (V)	208	
Total Loading Summary		
Service Size (W)	28150	
Service Size (A)	400	SEE SINGLE LINE DIAGRAM
Service Conductor @ 125% (A)	**x**	EXISTING
Service Grounding Conductor (10-1141)		#6 CU, #4 AL

PANEL	A	**MOUNTING**	SURFACE
VOLTAGE	120/208	**PHASE**	3Ø 4W
MAINS	200A	**TYPE**	**SIEMENS O**
LOCATION		**NEW or EXISTING**	NEW

AMP	DESCRIPTION	BRKR	PHASE	BRKR	DESCRIPTION	AMP
15	E-LIGHTING	1	A	2	KITCHENETTE GFI	15
15	GENERAL LIGHTING	3	B	4	WASHROOM GFI	15
15	GENERAL LIGHTING	5	C	6	FORCED FLOW HEATER (FFH-1)	15
15	GENERAL RECEPTACLES	7	A	8	HWT-1 (HOT WATER TANK)	15
15	GENERAL RECEPTACLES	9	B	10		20 / 15
20	GENERAL RECEPTACLES	11	C	12		
15	GENERAL RECEPTACLES	13	A	14		3P / 15
15	WASHROOM EXHAUST FAN (EF-1)	15	B	16		
15	KIDS' WASHROOM EXHAUST FAN (EF-2)	17	C	18		
15	HOT PLATE	19	A	20	RTU-1 (ROOF TOP UNIT AIR HANDLE	3P / 15
15	FRIDGE	21	B	22		
15	FRIDGE	23	C	24		
15	KITCHENETTE EXHAUST FAN (EF-1)	25	A	26		3P / 15
15	EXTERIOR LIGHTS	27	B	28		
15		29	C	30		
15		31	A	32		3P / 15
15		33	B	34		
15		35	C	36		
15		37	A	38		15
15		39	B	40		15
15		41	C	42		15
15		43	A	44		15
15		45	B	46		15
15		47	C	48		15

LIGHTING LEGEND

PLAN	DESCRIPTION	NOTES
EXIT	EMERGENCY SIGN	LUMACELL LAC SERIES OR EQUIV.
EXIT	NEW EMERGENCY SIGN w/ DIRECTION	LUMACELL LA SERIES c/w OBC APPROVED GREEN LENSE OR EQUIV.
	REMOTE HEAD EMERGENCY LIGHT	LUMACELL RS-10 EMERGENCY REMOTE HEADS
	NEW REMOTE HEADS EMERGENCY LIGHT	LUMACELL RS-20 EMERGENCY REMOTE HEADS
$	LIGHT SWITCH	
	LED RECESSED POT LIGHTS	MOUNTED IN CEILING, REFER TO CEILING PLAN FOR HEIGHTS.
	EXISTING EXTERIOR LIGHTS	

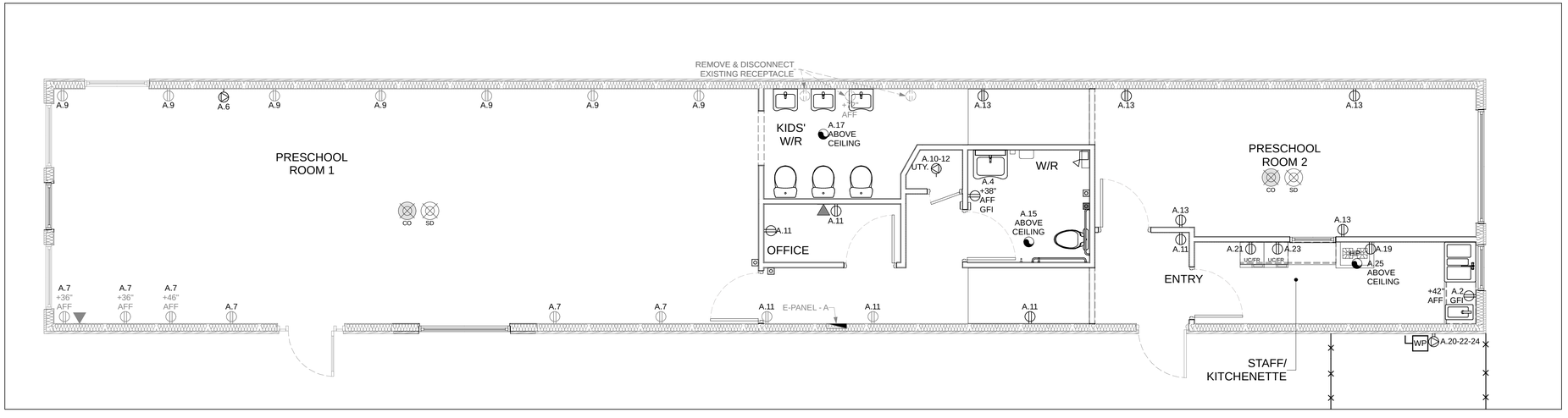


2 E.1 PROPOSED ELECTRICAL LIGHTING PLAN

SCALE: 1/4" = 1'-0"

ELECTRICAL LEGEND

PLAN	DESCRIPTION	NOTES
	ELECTRICAL PANELS	PANEL-A (REFER TO ELECTRICAL SCHEDULES
GFI AFF	GFI DUPLEX RECEPTACLE	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS & LOCATIONS
AFF	DUPLEX RECEPTACLE	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS & LOCATIONS
	120V 1PH HARD WIRED POWER CONNECTION	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS & LOCATIONS
3P	240V 3PH HARD WIRED POWER CONNECTION	REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS & LOCATIONS
	DATA & VOICE CONNECTION	
	DATA CONNECTION	
	VOICE CONNECTION	
WP	WEATHER PROOF DISCONNECT AS NOTED	
	FAN CONNECTION	
SD	SMOKE DETECTORS	MOUNTED TO U/S CEILING
CO	CARBON MONOXIDE DETECTORS	MOUNTED TO U/S CEILING



1 E.1 PROPOSED ELECTRICAL POWER PLAN

SCALE: 1/4" = 1'-0"

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

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SHEET TITLE:

ELECTRICAL PLANS

DRAWN BY: ---

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SCALE: AS SHOWN

PROJECT: 23-208

E.1

ELECTRICAL NOTES

GENERAL REQUIREMENTS FOR ELECTRICAL WORK

1.0 INSTALLATION OF OUTLETS

1.1 THE DRAWINGS SHOW APPROXIMATE LOCATION OF OUTLETS ONLY. THE EXACT LOCATION SHALL BE COORDINATED ON SITES WITH OTHER TRADES, ARCHITECTURAL DRAWINGS ETC. OUTLETS LOCATED INACCURATELY SHALL BE READJUSTED OR RELOCATED AT THE CONTRACTORS EXPENSE. UNLESS OTHERWISE NOTED, REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT LOCATIONS.

1.2 SUPPORT OUTLET BOXES, JUNCTION BOXES, CONDUIT AND THE LIKE, MOUNT TO EXPOSED STEEL DECK ROOFING BY MEANS OF SELF-TAPPING MIN. #10 GAUGE SCREWS SECURED THROUGH BOTTOM MEMBER OF DECK CORRUGATION.

2.0 WIRE AND CABLE

2.1 UNLESS OTHERWISE NOTED, ALL WIRES SHALL BE COPPER T90, RA90, RW90 OR RWU90 RATING AS REQUIRED ON SITE AND AS DICTATED BY ELECTRICAL SAFETY AUTHORITY CODE.

2.2 THE MINIMUM SIZE FOR BRANCH CIRCUIT WIRING SHALL BE AS PER CODE.

2.3 WIRE #10 AWG AND SMALLER SHALL BE SOLID COPPER, #8 AWG AND LARGER SHALL BE COPPER STRANDED.

2.4 ALL WIRING SHALL BE COLOUR CODED AS INDICATED BELOW AND SHALL BE IDENTIFIED SHOWING SIZE, VOLTAGE RATING AND INSULATION TYPE:

2.5 POWER AND LIGHTING CONDUCTORS:

347/600 V,3ph,4w AND
120/208 V,3ph,4w SYSTEM
PHASE A-RED
PHASE B-BLACK
PHASE C-BLUE
NEUTRAL-WHITE
GROUND-GREEN

2.6 NEUTRAL CONDUCTOR SHALL BE WHITE THROUGHOUT, WHERE BLACK WIRES ARE USED, PROVIDE COLOUR TAPE ON EACH TERMINATION.

2.7 WHERE COMMON NEUTRALS ARE USED, ENSURE THAT CIRCUITS ARE FROM DIFFERENT PHASES.

2.8 FINAL CONNECTIONS TO LUMINAIRES SHALL ORIGINATE FROM AN OUTLET BOX.

2.9 CODED APPROVED WIRE SHALL BE FOR FINAL FIXTURE OR APPLIANCE CONNECTIONS.

2.10 NUMBER OF WIRES INDICATED FOR LIGHTING AND POWER, MOTOR AND MOTOR CONTROL, ALARM, SIGNAL, COMMUNICATION AND AUXILIARY SYSTEMS IS INTENDED TO SHOW GENERAL SCHEME ONLY. THE REQUIRED NUMBER OF WIRES SHALL BE INSTALLED IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S DIAGRAMS AND INSTALLATION REQUIREMENTS.

2.11 SIZE CONDUIT UNLESS OTHERWISE STATED ON THE DRAWINGS.

3.0 GROUNDING

3.1 THE ENTIRE ELECTRICAL SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO ELECTRICAL SAFETY AUTHORITY CODE AND LOCAL UTILITY REQUIREMENTS.

3.2 PROVIDE A SEPARATE GREEN GROUND WIRE FROM EACH ISOLATED GROUND RECEPTACLE BACK TO BUILDING GROUND.

3.3 WHERE TRANSFORMERS ARE USED, THE NEUTRAL POINT OF THE TRANSFORMER SHALL BE GROUNDED WITH AN INSULATED WIRE AS WELL AS THE ENCLOSURE.

3.4 PROVIDE A SEPARATE CODE GAUGE SUPPLEMENTARY GROUND CONDUCTOR RUN IN EACH CONDUIT, TERMINATING AT GROUND BLOCK AT PANELBOARD IF REQUIRED BY CODE.

4.0 EXCAVATION, BACKFILL AND CONCRETE WORK

4.1 WHERE REQUIRED FOR UNDERGROUND SERVICE (POWER OR TELEPHONE), THE EXCAVATION, BACKFILL AND CONCRETE WORK SHALL BE DONE BY THE GENERAL CONTRACTOR. THE ELECTRICAL TRADE SHALL SUPERVISE THE PROCESSING OF CONCRETE AROUND THE DUCTBANK TO ENSURE IT IS FREE FROM VOIDS.

5.0 POWER DISTRIBUTION SYSTEM

5.1 THE POWER DISTRIBUTION SYSTEM SHALL BE AS SHOWN ON THE DRAWINGS AND SHALL CONSIST OF PAD MTD TRANSFORMERS PROTECTED BY ENERSOURCE HYDRO , 347/600 3%%C 4W MAIN AND DISTRIBUTION SWITCHBOARDS.

5.2 DISTRIBUTION PANEL BREAKERS SHALL BE MOULDED CASE CIRCUIT BREAKER TO CSA 22.2, BOLT-ON TYPE WITH INSTANTANEOUS TRIP ELEMENT WITH BUILT IN ELECTRONIC SENSOR. BREAKER I.C. RATING TO MATCH AVAILABLE FAULT CURRENT.

5.3 SAFETY SWITCHES:

i) SAFETY SWITCHES SHALL BE HEAVY DUTY, FUSIBLE QUICK-MAKE, QUICK-BREAK, VOIDABLE COVER INTERLOCK LOCKABLE IN THE "OFF" POSITION WITH NEUTRAL BAR WHERE REQUIRED.

ii) FUSE HOLDERS SHALL BE AS REQUIRED TO SUIT RATING AND TYPE OF FUSES SPECIFIED (WITHOUT ADAPTERS).

iii) WITHSTAND RATING SHALL BE 6 TIMES CONTINUOUS CURRENT BREAK AT RATED VOLTAGE.

iv) ENCLOSURES SHALL BE SPRINKLERPROOF TYPE EXCEPT WHERE WEATHERPROOF SWITCHES ARE REQUIRED, THESE SHALL BE EEMAC 3.

v) ALL SWITCHES SHALL BE OF THE SAME MANUFACTURE AND BE EQUAL TO CUTLER HAMMER SQUARE "D" OR FEDERAL PIONEER.

5.4 LIGHTING PANEL

i) LIGHTING PANELS SHALL BE OF THE VOLTAGE INDICATED ON THE DRAWINGS AND SHALL BE COMPLETE WITH CIRCUIT BREAKERS. MAINS SHALL BE 225 AMP (30,36,42 & 84 ccts) AND 100 AMP (UP TO 24 ccts). PROVIDE BREAKERS AS INDICATED OR IMPLIED ON THE DRAWINGS.

ii) FLUSH OF SURFACE AS INDICATED COMPLETE WITH LOCK, LATCH, DIRECTORY AND SPARE KEYS.

iii) CIRCUIT BREAKERS SHALL HAVE THERMAL MAGNETIC TRIP PROTECTION WITH BIMETALLIC ELEMENTS FOR THE DELAY OVERLOAD PROTECTION. 2 AND 3 POLE BREAKERS SHALL HAVE INTERNAL COMMON TRIP. (TIE HANDLES WILL NOT BE ACCEPTED). BREAKERS SHALL BE BOLT-IN FIELD INTERCHANGEABLE AND I.C. OF BREAKERS TO BE MINIMUM OF 10 KA OR AS REQUIRED TO MEET AVAILABLE SHORT CIRCUIT CURRENT IN THE SYSTEM.

iv) SUPPLEMENTARY GROUND TERMINAL BLOCK FOR ISOLATED GROUND SERVICE.

v) BALANCE THE LOADING ON ALL FEEDERS SO THAT THE UNBALANCED LOAD IS LESS THAN 5%. ALL FEEDERS SHALL BE COLOR CODED AT DISTRIBUTION POINTS. VOLTAGE DROP AT THE END OF ALL FEEDERS SHALL NOT EXCEED 2% OF THE RATED LOAD OF THE CIRCUIT. ALL BRANCH CIRCUIT FEEDERS WITHIN THE PANEL ENCLOSURE SHALL BE IDENTIFIED USING BRADY MARKERS.

vi) PROVIDE LOCK-ON DEVICES FOR FIRE ALARM, EMERGENCY, DOOR SUPERVISORY, INTERCOM, STAIRWAY LIGHTING, EXIT LIGHTING AND NIGHT LIGHT CIRCUITS.

vii) CIRCUIT NUMBERS ON DRAWINGS DO NOT NECESSARILY CORRESPOND TO THE NUMBERS ON THE LIGHTING PANELS. CIRCUITS SHARING A COMMON NEUTRAL SHALL NOT BE CONNECTED TO THE SAME MAIN. PANEL CIRCUIT BREAKERS WHICH ARE USED DIRECTLY FOR SWITCHING OF LUMINAIRES, SHALL BE GROUPED IN CONSECUTIVE NUMBERS COMMENCING AT BREAKER NUMBER ONE.

viii) ALL PANELS SHALL BE OF THE SAME MANUFACTURE AND BE EQUAL TO EATON, FEDERAL PIONEER, SQUARE "D", OR SIEMENS.

6.0 MECHANICAL EQUIPMENT

6.1 THIS DIVISION SHALL PROVIDE THE FOLLOWING FOR MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL DIVISION:

- THE NECESSARY POWER DISTRIBUTION EQUIPMENT IN THE ELECTRICAL ROOM.

- THE NECESSARY CONDUIT AND WIRE TO THE MECHANICAL EQUIPMENT LOCATION.

- A TERMINATING DISCONNECT SWITCH.

- ANY MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK AS INDICATED ON THE DRAWINGS.

6.2 VERIFY ON SITE, THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS WITH MECHANICAL CONTRACTOR.

6.3 ALL CONDUIT, WIRING AND LABOR FROM THE TERMINATING DISCONNECT SWITCH TO THE MECHANICAL EQUIPMENT SHALL BE BY THIS CONTRACTOR.

6.4 LINE VOLTAGE STARTERS, THERMOSTATS ETC., SHALL BE SUPPLIED BY MECHANICAL CONTRACTOR, INSTALLED, MOUNTED AND WIRED BY ELECTRICAL CONTRACTOR. POWER WIRING BETWEEN STARTER/MCC TO MOTOR BY DIVISION 15.

6.5 LOW VOLTAGE STARTERS, THERMOSTATS ETC., SHALL BE SUPPLIED INSTALLED, MOUNTED AND WIRED BY MECHANICAL CONTRACTOR.

ALL ELECTRICAL HEATERS (EXCEPT DUCT MOUNTED HEATERS) SHALL BE SUPPLIED, INSTALLED AND WIRED BY THIS CONTRACTOR.

THIS CONTRACTOR SHALL VERIFY ALL MOTOR CONNECTIONS WITH RESPECT TO VOLTAGE, RUNNING LOAD AMPS, FULL LOAD AMPS AND PHASE ROTATION PRIOR TO MAKING FINAL CONNECTIONS.

7.0 WIRING DEVICES

7.1 DUPLEX RECEPTACLES SHALL BE U-GROUND TYPE, RATED AT 15A, 120 VOLT, WHITE LEVITON "DECORA" SERIES UNLESS OTHERWISE NOTED ON DRAWINGS.

7.2 ALL RECEPTACLES SHALL BE SPECIFICATION GRADE.

7.3 LIGHT SWITCHES, SINGLE POLE, 3 WAY, SHALL BE SPECIFICATION GRADE LEVITON "DECORA" SERIES IN WHITE.

7.4 COVERPLATES IN FINISHED AREAS SHALL BE WHITE PLASTIC.

7.5 TELEPHONE, DATA AND ALARM OUTLET COVERPLATES BY SHALL BE AS DESCRIBED ABOVE EXCEPT C/W BUSHING BY COMMUNICATION CONTRACTOR.

7.6 OUTDOOR DEVICES SHALL BE FITTED WITH WEATHERPROOF COVER AND GASKET. EACH DEVICE SHALL BE CONNECTED TO CIRCUIT PROTECTED WITH GROUND FAULT BREAKER.

8.0 LOW VOLTAGE FUSES

8.1 FUSE SIZES AND TYPES SHALL BE AS INDICATED ON THE DRAWINGS AND SPECIFIED IN THIS SECTION. EQUIPMENT HOLDING THE FUSES SHALL BE AS SPECIFIED. ANY VARIANCE TO EQUIPMENT SPECIFIED WILL BE AT THIS CONTRACTORS EXPENSE.

8.2 PROVIDE EQUIPMENT TO HOLD THE SPECIFIED FUSES.

8.3 FUSES SHALL BE CSA APPROVED HRC TYPE, VOLTAGE AS REQUIRED, FORM 1, CLASS "J" NON-RENEWABLE.

8.4 DUAL ELEMENT "FUSETRON" FUSES SHALL BE USED TO PROTECT ALL TRANSFORMER AND MOTOR LOADS.

9.0 LIGHTING FIXTURES AND LAMPS

9.1 PROVIDE LUMINAIRES AND LAMPS AS INDICATED ON LUMINAIRE SCHEDULE AND/OR SPECIFIED HEREIN. LUMINAIRES ARE TO BE COMPLETE WITH ALL NECESSARY FRAMES, HANGERS, LAMPS, LOUVERS, DIFFUSERS, CANOPIES, SUPPORTS ETC. MANUFACTURERS OF FLUORESCENT LUMINAIRES ARE CFI, PEERLESS, THOMAS.

9.2 BALLASTS SHALL BE LONG LIFE, FULL LIGHT OUTPUT, ENERGY SAVING TYPE, HIGH POWER FACTOR, SOUND RATED "A", RAPID START WITH INTERNAL THERMAL PROTECTION OR RAPID START ELECTRONIC TYPE AS SPECIFIED. MANUFACTURERS ARE UNIVERSAL, PHILIPS, AND G.E.

9.3 UNLESS OTHERWISE NOTED ON THE DRAWINGS, FLUORESCENT LAMPS SHALL BE RAPID START "T8" 3500 K, 20,000 HOURS RATED LIFE. PHILIPS OR SYLVANIA.

9.4 COORDINATE THE MOUNTING AND LOCATION OF LUMINAIRES WITH OTHER TRADES TO AVOID CONFLICTS.

9.5 JUNCTION BOXES IN SUSPENDED CEILING SPACE SHALL BE ACCESSIBLE THROUGH THE LUMINAIRES OR BY REMOVABLE CEILING COMPONENT.

9.6 WHERE REQUIRED BY LOCAL AUTHORITIES, PROVIDE SAFETY CHAIN ON LUMINAIRES. DO NOT RELY ON THE CEILING FOR SUPPORT.

9.7 LUMINAIRES SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS.

9.8 REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING LOCATIONS & HEIGHTS.

10.0 FIRE ALARM

10.1 THE EXISTING FIRE ALARM IS TO REMAIN. ALL EXISTING FIRE ALARM DEVICES ARE TO BE RELOCATED AS REQUIRED.

10.2 NEW OR REPLACED FIRE ALARM DEVICES ARE TO MATCH EXISTING.

10.3 TEST AND VERIFY THE OPERATION OF THE SYSTEMS INFRONT OF BUILDING OFFICIAL PRIOR TO OCCUPANCY.

10.4 TEST AND VERIFICATION CERTIFICATE SHALL BE SUBMITED.

10.5 CONTRACTOR TO UPDATE FIRE ALARM PANEL ZONES AS REQUIRED.

ELECTRICAL NOTES

Electric Heaters
All electric heaters thermostats and control wiring shall be supplied and installed by the electrical contractor. All heaters shall be white.

Electrical Lighting System
General:
-The work includes all that is shown on drawing E1 and as described here under. Included are permits fees and inspections.
-All components of the system shall be C.S.A certified and carry a C.S.A certified label.
-All electrical equipment wiring and grounding shall meet the requirements of the Ontario Hydro Electrical Safety Code including all of the appendicies and bulletins issued by the inspection department of the Electrical Safety Authority.
-All control wiring shall be provided by the mechanical contractor, but power wiring by the Electrical Contractor. All wiring to be copper R90 insulated. Branch wiring to be No 12 gage. Route all wiring in EMT conduit.
-All starters required for mechanical equipment shall be provided by the mechanical contractor. The electrical contractor shall provide disconnect switches.

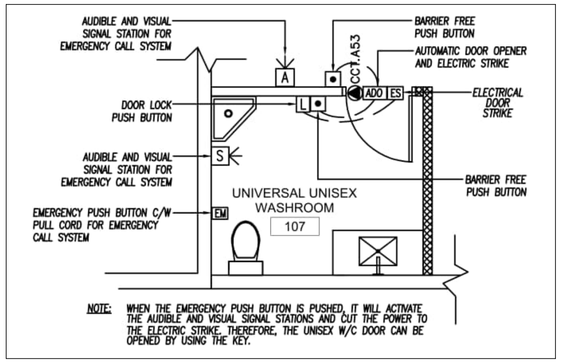
Emergency Exit-Lighting Units
-Emergency exit lighting units shall be battery type with two adjustable light heads. These units shal normally operate on 120V
single phase power supply but revert to rechargeable battery power upon power failure. Provide single receptacle for each unit .
-The units shall be designed for at least 50000 hours of continuous operation without relamping.

Panel Board
-Panel shall be Square "D" or equivalent with bolt-on circuit breakers. Breakers shall be suitable for switching duty.

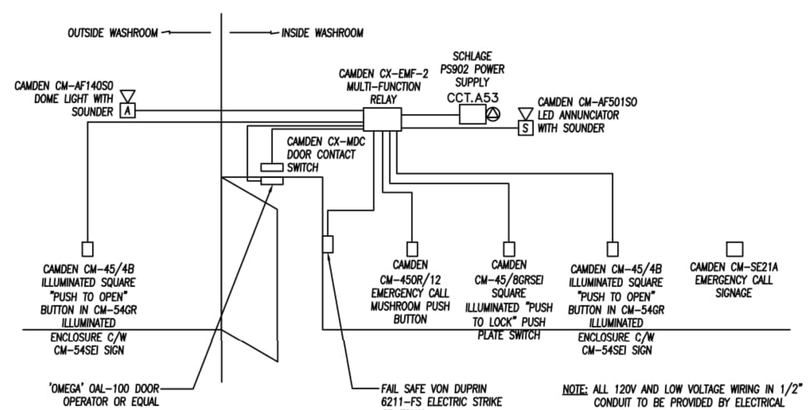
Disconnect Switches
-Disconnect switches shall be horsepower rated, quick make and break type, of Square "D" manufacture. Fuses shall be Bussman "Fusetron" dual element type or equivalent.

Electrical Specifications
-Supply and install all fused or unfused safety disconnect switches as shown on the drawings and as required by code.
-All work shall be executed in strict accordance with the requirements of the canadian electrical code and the local authorities having juristiction including the building code and all handicapped barrier free requirements.
-All electrical equipment shall be C.S.A approved, bear C.S.A stamp and be of high quality.
-Arrange and pay for all permits tests and local hydro charges.
-Visit site to examine site conditions.
-All grounding shall conform to the canadian electrical code and the local authorities having juristiction.
-Claims for extras shall be submitted and approved by the owner with a complete breakdown of material and labour before placement
-Supply and install expansion couplings where conduits cross construction joints

Co-ordinate with other Trades
-All electrical equipment shall operate without objectionable noise or vibration to the owners satisfaction.
-Provide a hydro inspection certificate and a certificate of guarantees of workmanship, materials and equipment for 1 year after the completion of contract.
-Openings in all electrical boxes shall be punched or drilled no burning is permitted
-After completion of work remove all debris and garbage
-Provide and maintain temporary power and wiring during construction
-All electrical equipment shall be labeled with nameplates
-Balance all circuits and feeders within 5%
-The drawings are to be considered diagrammatic and do not show all structural and construction details. Any information involving accurate measurements of the building shall be taken at the site. Any necessary changes or additions to accommodate structural conditions shall be made with cost.
-All wiring shall be new and installed in conduit and concealed. Exposed conduits may be run in unfinished areas. Exposed conduits shall be installed in straight lines parallel or at right angles and arranged to avoid interference with other work.



WASHROOM & DOOR OPENING SYSTEM



AUTOMATIC DOOR OPENING AND EMERGENCY CALL SYSTEMS FOR BARRIER-FREE WASHROOM

OPERATION OF AUTOMATIC DOOR CONTROL SYSTEM
THE WASHROOM DOOR IS NORMALLY CLOSED AND UNLOCKED. THE EXTERIOR 'PUSH TO OPEN' ILLUMINATED PUSH PLATE SWITCH OUTER RING IS GREEN INDICATING THE WASHROOM IS VACANT. PRESSING THE 'PUSH TO OPEN' SWITCH WILL OPEN THE DOOR. ONCE THE DOOR IS CLOSED, PRESSING THE 'PUSH TO LOCK' ILLUMINATED PUSH PLATE SWITCH WILL LOCK THE DOOR. THIS DISABLES THE EXTERIOR PUSH BUTTON, OUTSIDE LEVER IS ALWAYS IN THE LOCKED POSITION. THE 'PUSH TO LOCK' OUTER RING WILL GLOW RED INDICATING THE DOOR IS LOCKED. ALSO, THE EXTERIOR ILLUMINATED PUSH PLATE RING WILL GLOW RED INDICATING THE DOOR IS OCCUPIED. TO EXIT PUSHING THE LEVEL DOWN OR PRESSING INTERIOR PUSH PLATE SWITCH WILL OPEN THE DOORAUTOMATICALLY AND RESET THE SYSTEM. THE ILLUMINATED PUSH PLATE SWITCHES WILL GLOW GREEN INDICATING THE WASHROOM IS VACANT. IF THE DOOR IS OPENED MANUALLY TO EXIT THE WASHROOM THE OVERHEAD MAGNETIC CONTACT SWITCH WILL RESET THE SYSTEM.

OPERATION OF EMERGENCY CALL SYSTEM
WHILE THE WASHROOM IS OCCUPIED, PRESSING THE "PRESS FOR EMERGENCY ASSISTANCE" MUSHROOM PUSH BUTTON WILL DE-ENERGITE THE ELECTRICAL STRIKE AND UNLOCK THE DOOR. IN ADDITION, THIS ENERGIZES THE LED ANNUNCIATOR WITH "ASSISTANCE REQUESTED" MESSAGE TEXT AND SOUNDER WITHIN THE WASHROOM, AS WELL AS THE DOME LIGHT WITH "ASSISTANCE REQUIRED" MESSAGE TEXT AND PIEZO SOUNDER OUTSIDE THE WASHROOM. BOTH ANNUNCIATORS WILL BE ENERGIZED UNTIL THE LATCH OF "PRESS FOR EMERGENCY ASSISTANCE" MUSHROOM PUSH BUTTON IS PULLED OUT. PROVIDE A SIGN INDICATING IN THE EVENT OF AN EMERGENCY, PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE" ABOVE THE MUSHROOM ACTIVATION SWITCH.

AUTO DOOR OPENING & EMERGENCY CALL SYSTEM FOR BARRIER FREE W/R

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
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REVISIONS

DATE	DESCRIPTION
2024.03.13	ISSUED FOR SITE PLAN APPROVAL

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PROJECT:
579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:
ELECTRICAL GENERAL NOTES

DRAWN BY: ---
DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

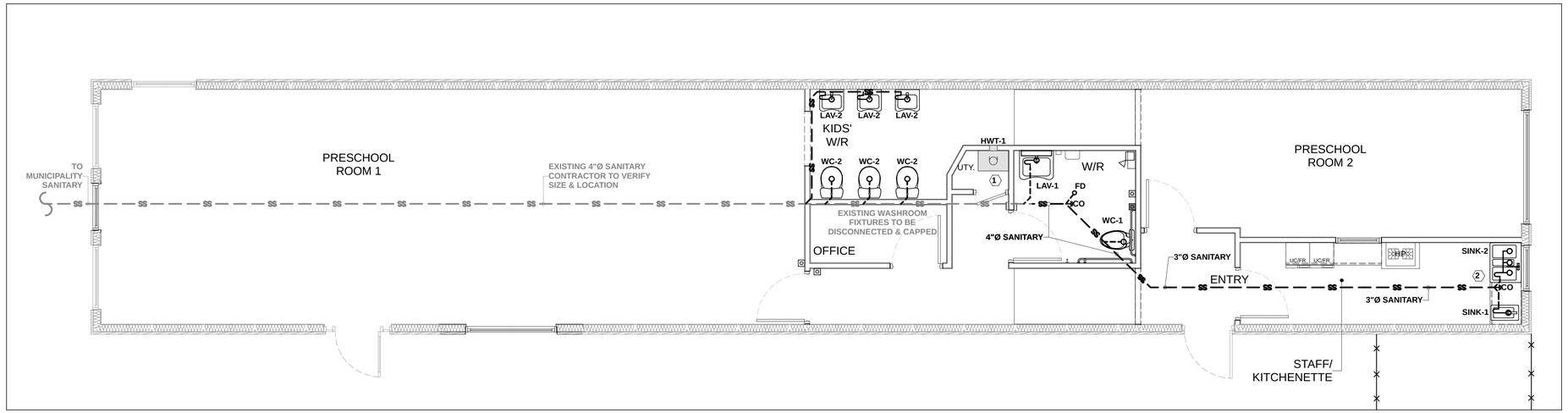
E.2

PLUMBING FIXTURE SCHEDULE

ITEM	QTY	MANUF MAKE AND MODEL	C.W	H.W	VENT	TRAP	S.F.U	D.F.U	NOTES
WC-1	1	AMERICAN STANDARD CADET ELONGATED OPEN SEAT, OR EQUAL	0.5			3		4	BARRIER FREE WASHROOM , PROVIDE SHUT OFF VALVE
WC-2	3	KIDS TOILET	0.5			3		4	PROVIDE SHUT OFF VALVE
LAV-1	1	AMERICAN STANDARD BARRIER FREE,OR EQUAL			1.25	1.5		1.5	PROVIDE SHUT OFF VALVE
LAV-2	3	KIDS LAVATORY	0.5	0.5	1.25	1.5		1.5	PROVIDE SHUT OFF VALVE
SINK-1	1	KITCHEN SINK	0.5	0.5	1.25	1.5		1.5	PROVIDE SHUT OFF VALVE
SINK-2	1	3 COMPARTMENT SINK	0.5	0.5	1.25	1.5		1.5	PROVIDE SHUT OFF VALVE
HWT-1	1	NAVIEN NPE-180A2							PROVIDE CONDENSATE NEUTRALIZER AND RELIEF TO F.D/H.D
F.D	2	GENERIC						3	PROVIDE TRAP SEAL PRIMER

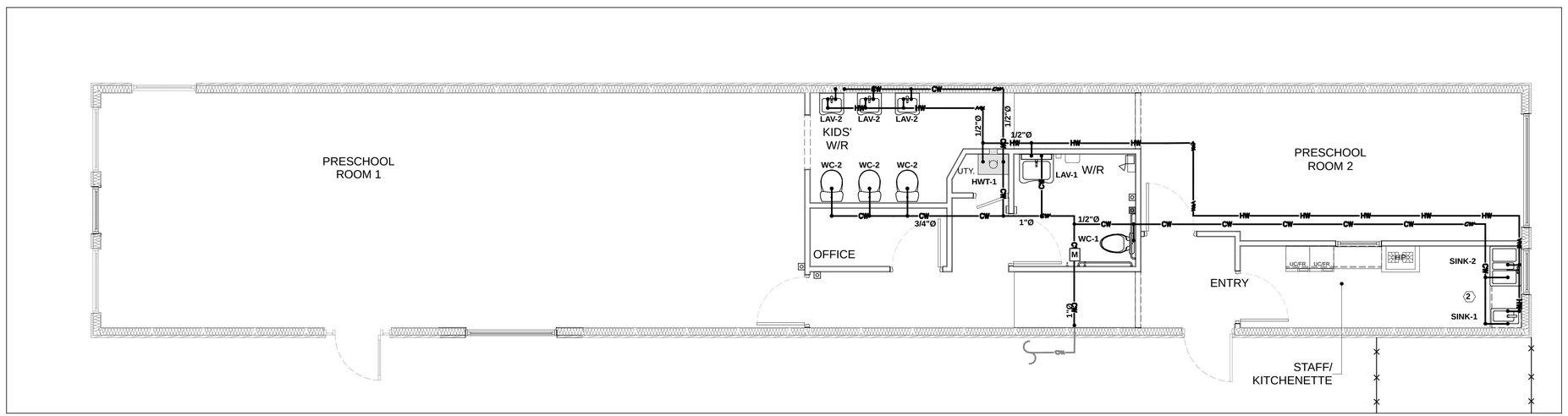
PLUMBING CODE 2018 - TABLE 7.6.3.2.-A

FIXTURES	NUMBER OF FIXTURES	WATER SUPPLY FIXTURE UNITS					DRAINAGE FIXTURE UNITS	
		COLD	TOTAL COLD	HOT	TOTAL HOT	COMBINED	COMBINED TOTAL	DRAINAGE	TOTAL
SINK (LAV)	4	1.5	6	1.5	6	2	8	1.5	6
SINK (WASH UP)	1	1.5	1.5	1.5	1.5	2	2	1.5	1.5
SINK (3 COMPARTMENT SINK)	1	1.5	1.5	1.5	1.5	2	2	1.5	1.5
WATER CLOSET	4	2.2	8.8	0	0	2.2	8.8	4	16
		TOTAL COLD	18	TOTAL HOT	9	TOTAL SUPPLY FU	20.8	TOTAL DRAINAGE FU	25
PIPE SIZING METHODOLOGY: AVERAGE PRESSURE LOSS									



2 P.1 PROPOSED PLUMBING DRAINAGE PLAN

SCALE: 1/4" = 1'-0"



1 P.1 PROPOSED PLUMBING SUPPLY PLAN

SCALE: 1/4" = 1'-0"

PLUMBING KEY NOTES

1	PROVIDE RELIEF VALVE FROM HOT WATER TANK TO FLOOR DRAIN IN WASHROOM.
2	KITCHENETTE IS FOR STAFF USE ONLY (LUNCH BREAKS). THERE WILL BE NO COMMERCIAL COOKING, ONLY PREPARED FOODS.

PLUMBING LEGEND

PLAN	DESCRIPTION	NOTES
FD	FLOOR DRAIN	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
HD	HUB DRAIN	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
SS	SANITARY LINE	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
CO	CLEAN OUT	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
CW	DOMESTIC COLD WATER LINE	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
HW	DOMESTIC HOT WATER LINE	REFER TO PLANS & FIXTURE CONNECTIONS CHART FOR PIPE SIZES
	CONDENSING TANKLESS WATER HEATER	NAVIEN NPE-180A2 (OR EQUIV.)

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

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SHEET TITLE:

PLUMBING PLANS

DRAWN BY: ---

DATE: 2024-03-13

SCALE: AS SHOWN

PROJECT: 23-208

P.1

PLUMBING SPECIFICATIONS

GENERAL REQUIREMENTS FOR PLUMBING WORK

1. PROVIDE AND COMPLETE PLUMBING, DRAINAGE, VENT AND WATER IMER PIPING TO ALL PLUMBING FIXTURES AS INDICATED ON THE DRAWINGS FOR COMPLETE AND PROPER OPERATION OF THE FIXTURES.

2. ALL PIPING SHALL CONFORM TO PART 7 OF THE ONTARIO BUILDING CODE (LATEST EDITION).

3. THE FOLLOWING PIPING SPECIFICATION IS GENERAL AND COVERS VARIOUS TYPES OF SERVICES AND SHALL BE APPLICABLE TO THE SERVICES INDICATED ON THE DRAWINGS. MATERIALS SHALL BE NEW AND FREE FROM DEFECTS.

4. DOMESTIC HOT AND COLD WATER:

(**A**) *ABOVE GROUND* - SIZES UP TO AND INCLUDING 50mm - TYPE "L" (CSA #HC 7.6) HARD COPPER TUBING WITH SOLDERED PRESSURE FITTINGS.

(**B**) *UNDERGROUND* - sIZE 75mm AND LESS SHALL BE TYPE "K" COPPER TUBING, SOFT TEMPER, WITH WROUGHT COPPER SOLDER FITTINGS.

5. SANITARY DRAINS (ABOVE AND UNDERGROUND)

(**A**) SIZE UP TO AND INCLUDING 50mm - TYPE DWV COPPER TYBING WITH CAST BRASS ALLOY DRAINAGE FITTINGS.

(**B**) SIZE 75mm AND OVER - CLASS 4000 CAST IRON MJ PIPES AND FITTINGS, (or HUB & SPIGOT or DWV COPPER TUBING WITH CAST BRASS ALLOY DRAINAGE FITTINGS).

(**C**) WHERE ACCEPTED BY LOCAL AUTHORITIES, PROVIDE AN ALTERNATE PRICE FOR POLYVINYL CHLORIDE (P.V.C) PIPE PER C.S.A B181.2 (SDR 35 AND 28) COMPLETE WITH RING TIGHT JOINTS AND GASKETTED FITTINGS PER C.S.A. B182.1

P.V.C PIPING IS NOT TO BE USED IN RETURN AIR PLENUM CEILING SPACES.

6. VENTS:

(**A**) ABOVE GOUND - GALVANIZED STEEL PIPE SCHEDULE #40, CAS #B-63 (ASTM #A53) WITH 150# STEAM WP GALVANIZED MALLEABLE FITTINGS, COPPER 'DWV' PIPE WITH SOLDER FITTINGS OR 4000# CLASS CAST IRON SOIL PIPE.

(**B**) UNDERGROUND - CLASS 4000# CAST IRON 'MJ' PIPES & FITTINGS OR TYPE 'L' COPPER OR CAST IRON SOIL PIPE.

(**C**) VENT FIXTURES AND TRAPS - INCREASE VENTS SMALLER THAN 75mm DIAMETER TO 75mm BEFORE SAME PASS THOUGH ROOF.

(**D**) CONNECT VENT LINES INTO SOIL AND VENT STACKS ABOVE HIGHEST FIXTURE OR SEPARATELY CARRY THEM THOUGH ROOF. END SOILD STACKS AND VENT PIPING 375mm ABOVE ROOF.

(**E**) WHERE ACCEPTED BY LOCAL AUTHORITIES, PROVIDE AN ALTERNATE PRICE FOR POLYVINYL CHLORIDE (P.V.C) PIPE PER C.S.A B181.2 (SDR 35 AND 28) COMPLETE WITH RING TIGHT JOINTS AND GASKETTED FITTINGS PER C.S.A. B182.1

P.V.C PIPING IS NOT TO BE USED IN RETURN AIR PLENUM CEILING SPACES.

7. VALVES:

(**A**) PROVIDE VALVES OF TYPES NOTED WHERE SHOWN OR DIRECTED. WATER VALVES SHALL BE OF CRANE, MCAVITY, JENKINS, OR TOYO (INDUSTRIAL CLASS) MAUFACTURE (UNLESS OTHERWISE NOTED). ALL BRASS SOLDER JOINTS UP TO AND INCLUDING 75mm SIZE.

(**B**) SHUT-OFF VALVES UP TO AND INCLUDING 75mm SIZE: GATE VALVES TO 200# WATER PATTERN, RISING STEM, WEDGE DISC TYPE.

(**C**) THROTTLING OR BY-PASS VALVES: GLOVE TYPE, RISING STEM WITH RENEWABLE DISC, 200# WATER PATTERN OR BUTTERFLY VALVE AS FOR SHUT-OFF VALVES BUT FITTED WITH MANUAL GEAR OPERATOR.

(**D**) CHECK VALVES: WING CHECK TYPE WITH REGRIND FEATURE, 200# WATER PATTERN, INSTALL IN HORIZONTAL POSITION ONLY.

8. CLEANOUTS:

(**A**) MAKE EACH CLEANOUT FULL SIZE OF DRAIN UP TO AND INCLUDING 100mm AND 100mm SIZE FOR DRAINS OVER 100mm. EXTEND BURIED CLEANOUTS UP TO FLOOR WITH "Y"BEND AND RECESSED BRASS PLUG.

(**B**) MAKE EACH CLEANOUT ACCESSIBLE AND WHENEVER NECESSARY, EXTEND BRANCH CONNECTIONS TO FINISH SURFACES OF WALLS AND FLOORS AND FIT WITH CLEANOUT COVER AND ACCESS DOOR.

(**C**) FIT EACH FLOOR CLEANOUT IN CONCRETE FLOOR WITH ZURN ZN1500 ADJUSTABLE FLOOR CLEANOUT WITH ROUND SCORIATED NICKLE BRONZE COVER; IN TERRAZZO AREAS WITH ZN1510 CLEANOUT COVER; CERAMIC OR QUARRY TILE AREAS, CLEANOUTS SHALL BE AS FOR TERRAZZO EXCEPT WITH SQUARE TOP. ALL CLEANOUTS MUST HAVE INSIDE GASKETTED C.I. PLUG. (ACCEPTABLE ALTERNATE MANUFACTURERS: CURN, ANCON, JOSAM, AND ENPOCO).

9. FLOOR DRAINS:

(**A**) FLOOR DRAINS IN GENERAL SHALL BE CAST IRON WITH ADJUSTABLE STRAINERS, FLANGE AND WEEPHOLES AND SHALL BE INSTALLED WITH SEEP SEAL TRAP AND TRAP PRIMING FITTINGS. FLOOR DRAINS SHALL BE SIMILAR TO MANUFACTURER CATALOGUE NUMBERS LISTED.

DRAIN F.D.
-ZURN Z415 LACQUERED CAST IRON FLOOR DRAIN WITH DEEP SUMP, SEEPAGE FLANGE AND INTEGRAL CLAMPING DEVICE, ADJUSTABLE COLLAR AND GALVANIZED CAST IRON LOCKING GRATE.

HUB DRAIN H.D.
-ZURN Z211-S CAST IRON DRAIN WITH EPOXY POWDER COATING AND HUB FUNNEL.

10. INSULATION:

(**A**) PROVIDE INSULATION OF PIPING AS DESCRIBED OR NOTED. INSULATION, JACKET, ADHESIVES, AND MATERIALS SHALL BE INCOMBUSTABLE, IN COMPLIANCE WITH ONTARIO BUILDING CODE: INSTALLED TO MANUFACTURER'S STANDARDS, AND TO APPROVAL. WHEAT PASTES SHALL NOT BE USED. PROVIDE SUTABLE APPROVED OPENINGS IN INSULATION FOR INSPECTION OUTLETS, EQUIPMENT NAMEPLATES AND OTHER FITTINGS.

(**B**) INSULATE HOT AND COLD WATER PIPING, HOT WATER RECIRCULATION, AND HORIZONTAL CAST-IRON RAIN WATER LEADERS, BOTH EXPOSED AND CONCEALED, WITH 13mm THICK GLASS FIBRE PIPE COVERING (MAXIMUM 0.23 CONDUCTIVITY AT 24°F MEAN) WITH FACTORY APPLIED FIRE RESISTIVE VAPOUR BARRIER OF NOT MORE THAN 0.02 PERM RATING WITH SEALED LAPPED JOINTS.

11. PAINTING:

(**A**) SIZING AND PAINTING OF MECHANICAL WORK WILL BE DONE BY OTHER SECTION UNLESS OTHERWISE NOTED.

12. LINES, GRADES, AND SLOPES:

(**A**) INSTALL ALL PIPIN IN CONFORMITY WITH ELEVATIONS AND GRADES INDICATED. PIPING DRAINS AND SEWERS SHALL SLOPE AS INDICATED. SLOPE BETWEEN ELEVATIONS SHALL BE EVEN AND CONSISTANT. WHEN SLOPE IS NOT INDICATED, THE SLOPE SHALL BE:

-DRAINAGE PIPING, 2% ON 75mm SIZE AND LESS, 1% ON 100mm SIZE AND LARGER
-WATER LINES, PITCH TO LOW POINT FOR COMPLETE DRAINAGE

(**B**) VERIFY ALL FIELD SERVICE CONDITIONS, TO ENSURE THAT DRAINAGE RUNS CAN MEET THE SIZES AND INVERTS OF THE SITE SERVICES, NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPENCY DISCOVERED. IF PIPE INVERT DISCREPANCIES ARE NOT CLARIFIED AT AN EARLY STAGE, NO EXTRA SHALL BE PAID AT A LATER DATE FOR RE-ROUTING OF DRAINS. PROVIDE REQUIRED ADAPTORS TO MAKE CONNECTIONS BETWEEN NEW SANITARY AND SITE SERVICES TERMINATIONS.

13. NATURAL GAS PIPING:

PROVIDE COMPLETE GAS PIPING SYSTEM IN ACCORDANCE WITH CAN 1-B149.1- 00 (LATEST EDITION)

14. ROOF DRAINS:

(**A**) PROVIDE ROOF DRAINS OF TYPES NOTED, WHERE SHOWN OR DIRECTED, COMPLETE WITH STRAINER AND ACCESSORIES NOTED OR REQUIRED TO COMPLETE INSTALLATION. ROOF DRAINS SHALL BE SIMILAR TO MANUFACTURER CATALOGUE NUMBERS LISTED.

(**B**) CONTROL FLOW ROOF DRAINS: ZURN Z1055 DRC, "CONTROL-FLO" ROOF DRAINS OF SIZES NOTED. DRAINS SHALL HAVE CAST IRON BODY, BOTTOM OR SIDE OUTLET AS REQUIRED, MULTI-WEIR BARRIER WITH INTEGRAL CLAMPING DEVICE AND GRAVEL GUARD, LARGE PROTECTED SUMP, WATERPROOFING FLANGE BEARING PAN, CLAMPING BLOTS, UNDERDECK CLAMP, EXTENSION FRAME AND METAL DOME STRAINER. DOME SHALL HAVE MINIMUM FREE AREA OF 2300mm. ROOF DRAINS SHALL BE OF AQUA-WEIR DESIGN (MAX 150mm OVERFLOW HEIGHT).

(**C**) ACCEPTABLE ALTERNATE SUPPLIERS: ANCON, JOSAM AND ENPOCO.

15. STORM DRAINS:

(**A**) ABOVE GROUND:
SIZE 75mm AND OVER - CLASS 4000 CAST IRON "MJ" PIPES AND FITTINGS, (OR HUB & SPIGOT) OR (DWV COPPER TUBING WITH CAST BRASS ALLOY DRAINAGE FITTINGS).

(**B**) BELOW GROUND:
SIZE 50mm AND 75mm - CLASS 4000 CAST IRON "MJ" PIPES AND FITTINGS (OR HUB & SPIGOT).

SIZE 100mm TO 250mm SHALL BE REINFORCED CONCRETE CLASS III PER C.S.A. A257.1 COMPLETE WITH RING TIGHT JOINTS AND GASKETED FITTINGS.

STACK & FIXTURE FOOTINGS SHALL BE CAST IRON OR COPPER AS REQUIRED.

(**C**) WHERE ACCEPTED BY LOCAL AUTHORITIES PROVIDE AN ALTERNATE PRICE FOR POLYVINYL CHLORIDE (P.V.C.) PIPE PER C.S.A. B181.2 (SDR 35 AND 28) COMPLETE WITH RING TIGHT JOINTS AND GASKETED FITTINGS PER C.S.A. B182.1 P.V.C. PIPING IS NOT TO BE USED IN RETURN AIR PLENUM CEILING SPACES.

7.2.2.3 OBC **SHOWERS**

1. EVERY SHOWER RECEPTOR SHALL BE CONSTRUCTED AND ARRANGED SO THAT WATER CANNOT LEAK THROUGH THE WALLS OR FLOOR.

2. EVERY SHOWER RECEPTOR SHALL BE CONSTRUCTED AND ARRANGED SO THAT WATER CANNOT LEAK THROUGH THE WALLS OR FLOOR.

3. NOT MORE THAN SIX SHOWER HEADS SHALL BE SERVICED BY A SINGLE DRAIN WHERE TWO OR MORE SHOWER HEADS ARE SERVICE BY THE SAME DRAIN, THE FLOOR SHALL BE SLOPED AND THE DRAIN LOCATED SO THAT WATER FROM ONE HEAD CANNOT FLOW OVER THE AREA THAT SERVICES ANOTHER HEAD.

4. EXCEPT FOR COLUMN SHOWERS, WHEN A BATTERY OF SHOWER HEADS IS INSTALLED, THE HORIZONTAL DISTANCE BETWEEN TWO ADJACENT SHOWER HEADS SHALL BE AT LEAST 750mm (2ft 6in).

MECHANICAL SYSTEMS EASY SPEC

	COMBUSTIBLE BLDGS					NON-COMBUSTIBLE BLDGS				
	AIR PLENUM	VERTICAL SHAFT	HIGH-RISE BLDG	SANITARY DWV INSIDE BLDG ABOVE GRADE	STORM PIPING INSIDE BLDG ABOVE GRADE	AIR PLENUM	VERTICAL SHAFT	HIGH-RISE BLDG	SANITARY DWV INSIDE BLDG ABOVE GRADE	STORM PIPING INSIDE BLDG ABOVE GRADE
KITEC XPA	P	N	P	N	N	P	N	P	N	N
SYSTEM 15, PVC DWV	N	N	N	P	P	N	N	N	P	P
SYSTEM XFR, DWV	P	N	P	P	P	P	N	P	P	P
ABS DWV	N	N	N	P	P	N	N	N	P+	P+
CPVC	P	N	P	N	N	P	N	P	N	N
XIRTEX 140 PVC PRESSURE PIPE	N	N	N	N	N	N	N	N	N	N
BLASE MASTER	P	N	P	N	N	P	N	P	N	N

P = PERMITTED
N = NOT PERMITTED

ALL PRODUCTS UNDERGROUND COVERED BY NPC.

+ WHEN CONCEALED IN A WALL OR CONCRETE FLOOR

1. COMBUSTIBLE PIPING IN NON-COMBUSTIBLE CONSTRUCTION IS SUBJECT TO THE REQUIREMENTS OF 3.1.5.15.(1) OF THE NBC 1995.

2. COMBUSTIBLE PIPING THAT PENETRATES A FIRE SEPARATION IS SUBJECT TO THE REQUIREMENTS IN ARTICLES 3.1.9.1, 9.10.9.7 OF THE NBC 1995.

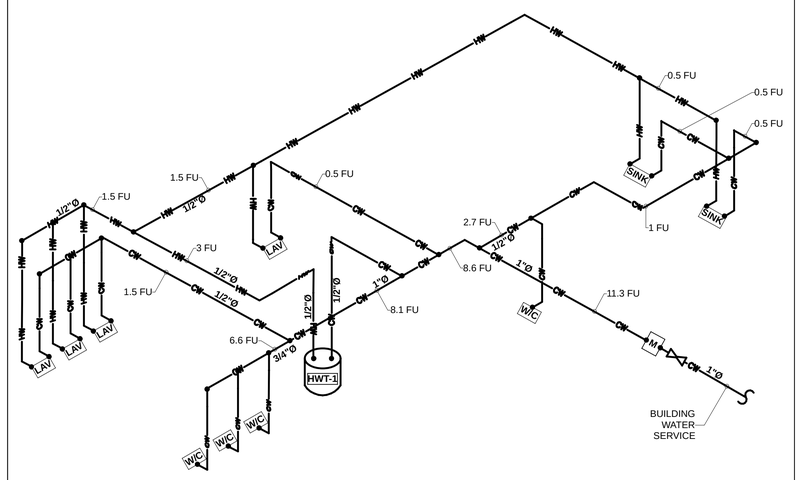
3. PERMITTED ONLY FOR WATER SERVICE PIPE.

4. NOT PERMITTED IN HOT WATER SYSTEMS.

5. NOT SUITABLE OF USE IN A VERTICAL SHAFT

HYDRAULIC LOADS	COLD	HOT	TOTAL
LAVATORIES:	0.5	0.5	0.7 FU
WATER CLOSETS:	2.2	---	2.2 FU
SHOWERS:	1	1	1.4 FU
URINAL:	2	---	2 FU
SINK:	1	1	1.4 FU
DISHWASHER:	---	1.4	1.4 FU
HOSE BIBB:	2.5	---	2.5 FU

CW 3/4"Ø DOMESTIC COLD WATER
HW 3/4"Ø DOMESTIC HOT WATER
30 FU HYDRAULIC LOAD, FIXTURE UNIT

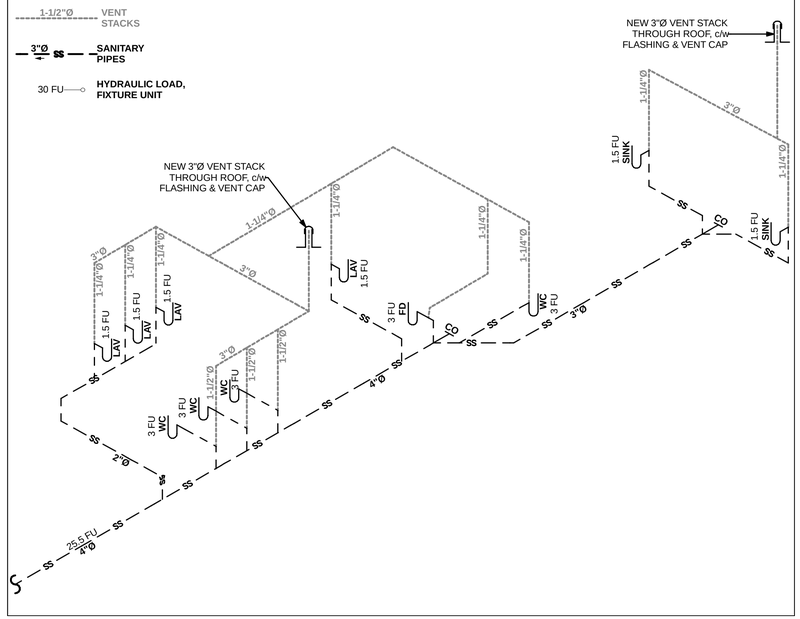


PLUMBING SUPPLY ISO

NOT TO SCALE

HYDRAULIC LOADS
LAVATORIES: 1.5 FU
WATER CLOSETS: 3 FU
SHOWERS: 1.5 FU
URINAL: 2 FU
SINK: 1.5 FU
FLOOR DRAIN: 2 FU

1-1/2"Ø VENT STACKS
3"Ø SS SANITARY PIPES
30 FU HYDRAULIC LOAD, FIXTURE UNIT



PLUMBING DRAINAGE ISO

NOT TO SCALE

Read this drawing in conjunction with all Architectural, Structural and Mechanical Drawings

LICENSED PROFESSIONAL ENGINEER
2024-03-13
S Patel
90514306
PROVINCE OF ONTARIO

N

REVISIONS

DATE	DESCRIPTION
2024.03.13	ISSUED FOR SITE PLAN APPROVAL

LAKELAND ENGINEERING
1100 Sutton Dr, Burlington, Unit#1
P:905-332-8888
info@lakelandengineering.ca

Do not scale drawings. Contractor must verify all dimensions and advise the designer of any errors or ommissions. No variations or modifications to work shown shall be implemented without prior written approval. All previous issues of this drawing is superseded by the latest revisions. All drawings and specifications remain the property of Lakeland Engineering.

PROJECT:

579 JAMES ST.
(FIT OUT FOR PROPOSED DAY-CARE)

579 JAMES ST.
DELHI, ON.
N4B 2C5

SHEET TITLE:

PLUMBING GENERAL NOTES

DRAWN BY: ---
DATE: 2024-03-13
SCALE: AS SHOWN
PROJECT: 23-208

P.2

COMMITMENT TO GENERAL REVIEWS BY ARCHITECT AND ENGINEERS

THIS FORM TO BE COMPLETED BY THE OWNER OR OWNER'S AUTHORIZED AGENT, AND SIGNED BY ALL CONSULTANTS RETAINED FOR GENERAL REVIEWS

Part A - Owner's Undertaking

Permit Application No.

Project Description: Interior Alterations - New Day Care

Address of Project: 579 James St.

Municipality: Norfolk County

WHEREAS the Ontario Building Code requires that the project described above be designed and reviewed during construction by an architect, professional engineer or both that are licensed to practice in Ontario;

NOW THEREFORE the Owner, being the person who intends to construct or have the building constructed hereby warrants that:

1. The undersigned architect and/or professional engineers have been retained to provide general reviews of the construction of the building to determine whether the construction is in general conformity with the plans and other documents that form the basis for the issuance of a building permit, in accordance with the performance standards of the Ontario Association of Architects (OAA) and/or Professional Engineers Ontario (PEO);
2. All general review reports by the architect and/or professional engineers will be forwarded promptly to the Chief Building Official, and
3. Should any retained architect or professional engineer cease to provide general reviews for any reason during construction, the Chief Building Official will be notified in writing immediately, and another architect or engineer will be appointed so that general review continues without interruption during construction.

The undersigned hereby certifies that he/she has read and agrees to the above

Name of Owner: Date:

Address of Owner: Telephone:

Signature of Owner: Print Name: Fax:

(or officer of corporation)

Coordinator of the work of all consultants: Telephone:

Address: Fax:

Part B - Consultants

The undersigned architect and/or professional engineer(s) hereby certify that they have been retained to provide general reviews of the parts of construction of the building indicated, to determine whether the construction is in general conformity with the plans and other documents that form the basis for the issuance of a building permit, in accordance with the performance standards of the OAA and/or PEO.

SHADED PORTION TO BE COMPLETED BY CONSULTANTS

☒ ARCHITECTURAL ❑ STRUCTURAL ☒ MECHANICAL ☒ ELECTRICAL ❑ SITE SERVICES ❑ OTHER (SPECIFY):

Consultant Name: Lakeland Engineering | Signature: | Print Name: Sanjay Patel | Date: 2024.03.13

Telephone: 905-332-8888 | Fax: | Address: Unit 1 - 1100 Sutton Dr. Burlington, ON. L7L 6R6

❑ ARCHITECTURAL ❑ STRUCTURAL ❑ MECHANICAL ❑ ELECTRICAL ❑ SITE SERVICES ❑ OTHER (SPECIFY):

Consultant Name: | Signature: | Print Name: | Date:

Telephone: | Fax: | Address:

❑ ARCHITECTURAL ❑ STRUCTURAL ❑ MECHANICAL ❑ ELECTRICAL ❑ SITE SERVICES ❑ OTHER (SPECIFY):

Consultant Name: | Signature: | Print Name: | Date:

Telephone: | Fax: | Address:

❑ ARCHITECTURAL ❑ STRUCTURAL ❑ MECHANICAL ❑ ELECTRICAL ❑ SITE SERVICES ❑ OTHER (SPECIFY):

Consultant Name: | Signature: | Print Name: | Date:

Telephone: | Fax: | Address:

LAKELAND
ENGINEERING

March 13, 2024

Pre-Consultation Meeting Notes
Norfolk County

Re: 3310492009152000000
579 James St. Delhi, ON.

GENERAL REQUIREMENTS	
Concept Plan	*-Concept Plan has been included.*
Lot Grading Plan	*-No changes to grades, noted on Site Plan.*
General Plan of Services	*-Existing to remain.*
Functional Servicing Report	*-Existing to remain.*
TRANSPORTATION REQUIREMENTS	
Traffic Impact Brief	*- As per examiner comments: "Existing parking levels are adequate at this point."*

Landscaping Plan	Included, sodded Outdoor Play Area (noted on Site Plan)
Elevation Plan/Floor/Section	Plans, Elevations, and Sections will be included as part of the permit application.
Parking Assessment	Meets Zoning, stats provided on Site Plan
Photometrics (Lighting) Plan	Existing to remain, shown on Site Plan
Site Plan/Drawing	Proposed Site Plan will be included as part of the permit application.

Yours truly,

Sanjay Patel, P.Eng.
Lakeland Engineering
Prepared by Rory Pinto

lakeland engineering
1100 sutton drive unit 1
burlington on L7L 6R6

info@lakelandengineering.ca
phone 905.332.8888
fax 905.332.6594

LAKELAND
ENGINEERING

March 13, 2024

Traffic Impact Brief

Information related to traffic for the Licensed Childcare Facility at 579 James Street, Delhi, Ontario is as follows:

Existing Conditions

- Site location is an existing property at 579 James Street
- Site is a corner property located at the corner of James Street and Brock Ave in Delhi as detailed on the Site Plan.
- James Street is a 2 lane road in each direction (Hwy 3) with a speed limit of 50 km in this section.
- Sanitary sewers were just changed along James Street in this section – new curbs and asphalt road surfacing & new sidewalks were completed as part of this work.

Study Area

- Property is a corner property
- Property fronts to the west on James Street (Hwy 3)
- Property sides to the south on Brock Ave.
- Site plan shows property siding on the north to residential lot 31 and backing to the east onto residential lot 41.

Development Land Use Type & Site Plan

- Proposed use is a licensed childcare facility which is an allowable use for the existing zoning.
- Site Plan shows building structure, parking lot, driveway access, road edges
- Operation Days - Monday to Friday, closed weekends and Statutory Holidays.
- Operation Hours – 6:30am to 5:30pm.
- Licensed Capacity – 32 Preschool children
- Drop Off period - 6:30am to 9:30am
- Pick up period – 2:30pm to 5:30pm.

Analysis & Conclusion

- Expected traffic flow to building during drop off & pick up time approximately 10 vehicles per hour.
- Site plan shows Available parking spots 5 vs required by zoning of 4.
- Site has 2 existing driveways off of James Street and Brock Ave to make drop off & pick up traffic flow easy and causing minimal impact.

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