



**HEARING BOARD**  
**Wednesday, April 1, 2026 @ 6:30pm**  
**Tillsonburg Headoffice**

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**AGENDA**

	<u><b>Agenda Page</b></u>
1. Roll Call and Call to Order	
2. Declaration of Conflicts of Interest	
3. Hearing Procedures Policy	1-20
4. Chair's Opening Remarks: LPRCA-18/26 – Brookshaw.	
5. Presentation by Long Point Region Conservation Authority Staff (L. Mauthe)	
a) Staff Report – Re: Brookshaw	21-121
b) Staff Presentation – Re: Brookshaw	122-144
6. Presentation by the Applicant	
a) Applicant/Agent Presentation	
7. Closed Session	
8. Reconvene in Public Forum	
9. Chair to advise of Hearing Board decision	
10. Hearing Adjournment	



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<b>Policy Title:</b> <b>Hearing Procedures Policy</b> <b>Conservation Authorities Act, Section 28</b>	<b>Policy Number:</b> 014-24	<b>Pages</b> 20
<b>Date:</b> <b>June 5, 2024</b>	<b>Supersedes:</b> <b>Hearing Procedures Policy</b> <b>Conservation Authorities Act, Section 28</b>	
<b>Cross Reference:</b>	<b>Issuing Authority:</b> <b>Board of Directors by Resolution A-79/24</b>	

**Approved July 5, 2017 by Res. A-171/17**

**Amendments**

Amended July 3, 2019 by Res. A-100/19 re. MLT

Amended January 13, 2021 by Res. A-12/21 re. Electronic Hearings

Amended April 6, 2022 by Res. A-44/22 re OLT and hearings under Section 28.0.1

Amended June 5, 2024 by Res.A-79/24 re New Regulation O. Reg 41/24

**Long Point Region Conservation Authority  
Hearing Procedures Policy,  
Conservation Authorities Act, Section 28**

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# Hearing Procedures Policy

## Ontario Regulation 41/24

### 1.0 INTRODUCTION AND PURPOSE

The purpose of the Hearing Procedures Policy is to guide the Long Point Region Conservation Authority (LPRCA) Hearing Board in conducting hearings under Section 28 of the *Conservation Authorities Act*.

The *Conservation Authorities Act* under section 28.1 (1) allows the Long Point Region Conservation Authority to permit development in regulated areas where, in the opinion of the Authority,

- (a) The activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;
- (b) The activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; and
- (c) Any other requirements that may be prescribed by the regulations are met.

For an application for a permit to be refused or approved with contentious conditions, the *Conservation Authorities Act* requires that the applicant be provided with an opportunity for a hearing by the local Conservation Authority Board. Further, where staff is recommending that a permit be cancelled under *Ontario Regulation 41/24*, a hearing will be held to provide the applicant with the opportunity to show cause why the permit should not be cancelled. In the case of hearings related to applications submitted pursuant to s. 28.1.2 of the *Conservation Authorities Act*, where a Minister's Zoning Order has been approved, the Authority must grant permission to the applicant and a hearing will only be held to determine conditions which will be attached to a permission.

The Hearing Board, which is comprised of the members of the Long Point Region Conservation Authority Board of Directors, is empowered by law to make a decision, governed by the *Statutory Powers Procedures Act*. It is the purpose of the Hearing Board to evaluate the information presented at the hearing by both the Conservation Authority staff and the applicant and to decide whether the application will be approved with or without conditions, or refused. In the case of hearings related to applications submitted pursuant to Section 28.1.2, the Hearing Board shall determine what conditions, if any, will be attached to the permission.

These procedures are intended to provide a step-by-step process to conducting hearings required under Sections 28.1 (5), 28.3 (3) or 28.1.2 (7) of the *Conservation Authorities Act*. The procedures ensure that hearings meet the legal requirements of the *Statutory Powers Procedures Act* without being unduly legalistic or intimidating to the participants.

## 2.0 PREHEARING PROCEDURES

### 2.1 Apprehension of Bias

In considering the application, the Hearing Board is acting as a decision-making tribunal. The tribunal is to act fairly. Under general principles of administrative law relating to the duty of fairness, the tribunal is obliged not only to avoid any bias but also to avoid the appearance or reasonable apprehension of bias. The following are three examples of steps to be taken to avoid apprehension of bias where it is likely to arise:

- (a) No member of the Authority taking part in the hearing should have prior involvement with the application that could lead to a reasonable apprehension of bias on the part of the member. Where a member has a personal interest, the test is whether a reasonably well-informed person would consider that the interest might have an influence on the exercise of the official's public duty. Where a member is a municipal councilor, the *Municipal Conflict of Interest Act* applies. In the case of a previously expressed opinion, the test is that of an open mind, i.e. is the member capable of persuasion in participating in the decision making.
- (b) If material relating to the merits of an application that is the subject of a hearing is distributed to Board members before the hearing, the material shall be distributed to the applicant at the same time. The applicant may be afforded an opportunity to distribute similar pre-hearing material. These materials can be distributed electronically.
- (c) The applicant will be given an opportunity to attend the hearing before a decision is made; however, the applicant does not have to be present for a decision to be made.
- (d) Where a hearing is required for applications submitted pursuant to s. 28.1.2 of the *Conservation Authorities Act* (e.g. to determine the conditions of the permission), final decisions on the conditions shall not be made until such time as the applicant has been given the opportunity to attend a hearing.

### 2.2 Application

The right to a hearing arises where staff is recommending refusal of an application or is recommending conditions to the approval of an application or has given notice of intent to cancel a permit.

Additionally, in the case of applications submitted pursuant to s.28.1.2 of the CA Act, the authority shall not attach conditions to a permission unless the applicant has been given an opportunity to be heard by the authority.

The applicant is entitled to reasonable notice of the hearing pursuant to the *Statutory Powers Procedures Act*.

### 2.3 Notice of Hearing

The Notice of Hearing shall be sent to the applicant within sufficient time to allow the applicant to prepare for the hearing. To ensure that reasonable notice is given, it is recommended that prior

to sending the Notice of Hearing, the applicant be consulted to determine an agreeable date and time based on the local Conservation Authority's regular meeting schedule.

The Notice of Hearing will contain or append the following:

(a) Reference to the applicable legislation under which the hearing is to be held (i.e., the *Conservation Authorities Act*).

(b) The time, place and the purpose of the hearing. For electronic hearings: The time, purpose of the hearing, and details about the manner in which the hearing will be held.

For electronic hearings: The applicant should notify the Authority if they believe holding the hearing electronically is likely to cause them significant prejudice. The Authority shall assume the applicant has no objection to the electronic hearing if no such notification is received.

(c) Particulars to identify the applicant, property and the nature of the application which are the subject of the hearing.

Note: If the applicant is not the property owner but the prospective owner, the applicant must have written authorization from the registered property owner.

(d) The reasons for the proposed refusal or conditions of approval shall be specifically stated. This should contain sufficient detail to enable the applicant to understand the issues so he or she can be adequately prepared for the hearing.

It is sufficient to reference in the Notice of Hearing that the recommendation for refusal or conditions of approval is based on the reasons outlined in a hearing report that is attached or will follow.

(e) A statement notifying the applicant that the hearing may proceed in the applicant's absence and that the applicant will not be entitled to any further notice of the proceedings.

Except in extreme circumstances, it is recommended that the hearing not proceed in the absence of the applicant.

(f) Reminder that the applicant is entitled to be represented at the hearing by a representative such as legal counsel, if desired. The conservation authority may be represented at the hearing by counsel or staff.

(g) A copy of LPRCA's Hearing Procedures Policy.

It is recommended that the Notice of Hearing be directed to the applicant and/or property owner by registered mail. An example Notice of Hearing is included in **Appendix A**. An example Notice of Hearing for hearings under Section 28.1.2 (7) of the CA Act is included in **Appendix B**. The Notice of Hearing is normally also sent to the applicant and the agent (if any) by email.

## 2.4 Pre-submission of Reports

It is LPRCA's practice to submit reports to the Board members in advance of the hearing as part of the Authority Board agenda; the applicant will be provided with the same opportunity. The applicant will be given two weeks to prepare a report once the reasons for the staff recommendations have been received.

The applicant's time to prepare a submission may affect the timing and scheduling of the staff hearing reports. The two weeks preparation time may be shortened at the applicant's request.

## 2.5 Hearing Information

Prior to the hearing, the applicant will be advised of the Conservation Authority's hearing procedures.

## 3.0 HEARING

### 3.1 Public Hearing

Pursuant to the *Statutory Powers Procedure Act*, hearings, including electronic hearings, are required to be held in public. For electronic hearings, public attendance should be synchronous with the hearing. The exception is in very rare cases where public interest in public hearings is outweighed by the fact that intimate financial, personal or other matters would be disclosed at hearings.

### 3.2 Hearing Participants

The *Conservation Authorities Act* does not provide for third party status at the local hearing. The hearing however is open to the public. Any information provided by third parties should be incorporated within the presentation of information by, or on behalf of, the applicant or Authority staff as appropriate.

### 3.3 Attendance of Hearing Board Members

In accordance with case law relating to the conduct of hearings, those members of the Authority who will decide whether to grant or refuse the application must be present during the full course of the hearing. If it is necessary for a member to leave, the remaining members can continue with the hearing and render a decision.

### 3.4 Adjournments

The Board may adjourn a hearing on its own motion or that of the applicant or Authority staff where it is satisfied that an adjournment is necessary for an adequate hearing to be held.

Any adjournments form part of the hearing record.

### 3.5 Orders and Directions

The Authority is entitled to make orders or directions to maintain order and prevent the abuse of its hearing processes. A hearing procedures example has been included as **Appendix C**.

### 3.6 Information Presented at Hearings

- (a) The *Statutory Powers Procedure Act* requires that a witness be informed of their right to object pursuant to the *Canada Evidence Act*. The *Canada Evidence Act* indicates that a witness shall be excused from answering questions on the basis that the answer may be incriminating. Further, answers provided during the hearing are not admissible against the

witness in any criminal trial or proceeding. This information should be provided to the applicant as part of the Notice of Hearing.

- (b) It is the decision of the hearing members as to whether information is presented under oath or affirmation. It is not a legal requirement. The applicant must be informed of the above, prior to or at the start of the hearing.
- (c) The Board may authorize receiving a copy rather than the original document. However, the Board can request certified copies of the document if required.
- (d) Privileged information, such as solicitor/client correspondence, cannot be heard. Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.
- (e) The Board may take into account matters of common knowledge such as geographic or historic facts, times, measures, weights, etc., or generally recognized scientific or technical facts, information or opinions within its specialized knowledge without hearing specific information to establish their truth.

### 3.7 **Conduct of Hearing**

#### 3.7.1 **Record of Attending Hearing Board Members**

A record will be made of the members of the Hearing Board.

#### 3.7.2 **Opening Remarks**

The Chair will convene the hearing with opening remarks which, generally, identify the applicant, the nature of the application, and the property location; outline the hearing procedures; and advise on requirements of the *Canada Evidence Act*. An example Opening Remarks is included in **Appendix D**. An example Opening Remarks for hearings under Section 28.1.2 (7) of the CA Act is included in **Appendix E**.

In an electronic hearing, all the parties and the members of the Hearing Board must be able to clearly hear one another and any witnesses throughout the hearing.

#### 3.7.3 **Presentation of Authority Staff Information**

Staff of the Authority presents the reasons supporting the recommendation for the refusal or conditions of approval of the application. Any reports, documents or plans that form part of the presentation shall be properly indexed and received.

Staff of the Authority should not submit new technical information at the hearing as the applicant will not have had time to review and provide a professional opinion to the Hearing Board.

Consideration should be given to the designation of one staff member or legal counsel who coordinates the presentation of information on behalf of Authority staff and who asks questions on behalf of Authority staff.

#### 3.7.4 **Presentation of Applicant Information**

The applicant has the opportunity to present information at the conclusion of the Authority staff presentation. Any reports, documents or plans which form part of the submission should be properly indexed and received.

The applicant shall present information as it applies to the permit application in question. For instance, does the requested activity affect the control of flooding, erosion, dynamic beach or conservation of land or pollution? The hearing does not address the merits of the activity or appropriateness of such a use in terms of planning.

- The applicant may be represented by legal counsel or agent, if desired.
- The applicant may present information to the Board and/or have invited advisors to present information to the Board
- The applicant(s) presentation may include technical witnesses, such as an engineer, ecologist, hydrogeologist, etc.

The applicant should not submit new technical information at the hearing as the Authority staff will not have had time to review and provide a professional opinion to the Hearing Board.

#### 3.7.5 **Questions**

Members of the Hearing Board may direct questions to each speaker as the information is being heard. The applicant and/or agent can make any comments or questions on the staff report.

Pursuant to the *Statutory Powers Procedure Act*, the Board can limit questioning where it is satisfied that there has been full and fair disclosure of the facts presented. Please note that the courts have been particularly sensitive to the issue of limiting questions and there is a tendency to allow limiting of questions only where it has clearly gone beyond reasonable or proper bounds.

#### 3.7.6 **Deliberation**

After all the information is presented, the Board may adjourn the hearing and retire in private to confer. The Board may reconvene on the same date or at some later date to advise of the Board's decision. The Board members shall not discuss the hearing with others prior to the decision of the Board being finalized.

### 4.0 **DECISION**

The applicant must receive written notice of the decision. The applicant shall be informed of the right to ask for a Minister's review within 15 days of receiving the written decision, or appeal the decision within 90 days of receiving the written decision to the Ontario Land Tribunal.

It is important that the hearing participants have a clear understanding of why the application was refused or approved. The Board shall itemize and record information of particular significance which led to their decision.

#### 4.1 **Notice of Decision**

The decision notice should include the following information:

- (a) The identification of the applicant, property and the nature of the application that was the subject of the hearing.
- (b) The decision to refuse or approve the application, and in the case of applications under s. 28.1 of the CA Act, the decision to approve the application with or without conditions. A copy of the Hearing Board resolution should be attached.

It is recommended that the written Notice of Decision be forwarded to the applicant by registered mail. A sample Notice of Decision and cover letter has been included as **Appendix F**. A sample Notice of Decision and cover letter for hearings under Section 28.1.2 (7) of the CA Act is included in **Appendix G**.

#### 4.2 **Adoption**

A resolution advising of the Board's decision and particulars of the decision should be adopted.

### 5.0 **RECORD**

The Authority shall compile a record of the hearing. In the event of an appeal, a copy of the record should be forwarded to the Ontario Land Tribunal. The record must include the following:

- (a) The application for the permit.
- (b) The Notice of Hearing.
- (c) Any orders made by the Board (e.g., for adjournments).
- (d) All information received by the Board.
- (e) Attendance of Hearing Board members.
- (f) The decision and reasons for decision of the Board.
- (g) The Notice of Decision sent to the applicant

# APPENDIX A

## Notice of Hearing

### IN THE MATTER OF

The Conservation Authorities Act,  
R.S.O. 1990, Chapter 27

AND IN THE MATTER OF an application by

### FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under  
Section 28, Subsection 5 of the said Act

**TAKE NOTICE THAT** a Hearing before the Hearing Board of the Long Point Region Conservation Authority (LPRCA) will be held under Section 28.1, Subsection 5 of the Conservation Authorities Act at the office of the LPRCA (4 Elm Street, Tillsonburg ON), at the hour of , **on the day of , 202x**, *[for electronic hearings: Details about the manner in which the hearing will be held are to be provided]* with respect to the application by (**NAME**) to permit development within an area regulated by the Authority in order to ensure no adverse effect on **(the control of flooding, erosion, dynamic beaches or unstable soil or bedrock / alter or interfere with a watercourse or wetland)** on Lot , Plan/Lot , Concession , (**Street**) in the **City of , Regional Municipality of , River Watershed.**

**TAKE NOTICE THAT** you are invited to make a delegation and submit supporting written material to the Hearing Board for the meeting of (**meeting number/date**). If you intend to appear [For electronic hearings: or if you believe that holding the hearing electronically is likely to cause significant prejudice], please contact (**name**). Written material will be required by (**date**), to enable the Hearing Board members to review the material prior to the meeting.

**TAKE NOTICE THAT** this hearing is governed by the provisions of the Statutory Powers Procedure Act. Under the Act, a witness is automatically afforded a protection that is similar to the protection of the Ontario Evidence Act. This means that the evidence that a witness gives may not be used in subsequent civil proceedings or in prosecutions against the witness under a Provincial Statute. It does not relieve the witness of the obligation of this oath since matters of perjury are not affected by the automatic affording of the protection. The significance is that the legislation is Provincial and cannot affect Federal matters. If a witness requires the protection of the Canada Evidence Act that protection must be obtained in the usual manner. The Ontario Statute requires the tribunal to draw this matter to the attention of the witness, as this tribunal has no knowledge of the effect of any evidence that a witness may give.

**AND FURTHER TAKE NOTICE** that if you do not attend at this Hearing, the Hearing Board may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

**DATED** the \_\_\_ day of \_\_\_\_\_ 202X

## APPENDIX B NOTICE OF HEARING

**(Subsection 28.1.2 (7) of the *Conservation Authorities Act*)**

### IN THE MATTER OF

The Conservation Authorities Act,  
R.S.O. 1990, Chapter 27

**AND IN THE MATTER OF** an application by

### FOR THE PERMISSION OF THE LONG POINT REGION CONSERVATION AUTHORITY

Pursuant to Regulations made under  
Section 28.1.2, Subsection 7 of the said Act

**TAKE NOTICE THAT** a Hearing before the Hearing Board of the Long Point Region Conservation Authority will be held under Section 28.1.2, Subsection 7 of the *Conservation Authorities Act* at the offices of the LPRCA (4 Elm Street, Tillsonburg, ON), at the hour of , **on the day of , 2020**, [*for electronic hearings, include details about the manner in which the hearing will be held*] with respect to the application by (**NAME**) to permit development within an area regulated by the Authority **in association with a Minister's Zoning Order (REGULATION NUMBER)** on Lot , Plan/Lot , Concession , (**Street**) in the City of , Regional Municipality of , River Watershed.

**TAKE NOTICE THAT** you are invited to make a delegation and submit supporting written material to the Hearing Board for the meeting of (**meeting number**). If you intend to appear [*For electronic hearings: or if you believe that holding the hearing electronically is likely to cause significant prejudice*], please contact (**name**). Written material will be required by (**date**), to enable the Committee members to review the material prior to the meeting.

**TAKE NOTICE THAT** pursuant to Section 28.1.2 of the *Conservation Authorities Act*, a conservation authority is required to grant the permission applied for and may only impose conditions to the permission. The Hearing will therefore focus on the conditions to be imposed to the granting of the permission.

**TAKE NOTICE THAT** this hearing is governed by the provisions of the *Statutory Powers Procedure Act*. Under the Act, a witness is automatically afforded a protection that is similar to the protection of the *Ontario Evidence Act*. This means that the evidence that a witness gives may not be used in subsequent civil proceedings or in prosecutions against the witness under a Provincial Statute. It does not relieve the witness of the obligation of this oath since matters of perjury are not affected by the automatic affording of the protection. The significance is that the legislation is Provincial and cannot affect Federal matters. If a witness requires the protection of the *Canada Evidence Act* that protection must be obtained in the usual manner.

The Ontario Statute requires the tribunal to draw this matter to the attention of the witness, as this tribunal has no knowledge of the effect of any evidence that a witness may give.

**DATED** the \_\_\_\_ day of \_\_\_\_\_ 202X

Long Point Region Conservation Authority

Per:

\_\_\_\_\_  
General Manager/Secretary Treasurer

## **APPENDIX C**

### **HEARING PROCEDURES**

1. **Motion** to sit as Hearing Board.
2. Roll Call
3. **Chair's opening remarks.** For electronic hearings, the Chair shall ensure that all parties and the Hearing Board are able to clearly hear one another and any witnesses throughout the hearing.

#### **Presentations and Questions**

4. **Staff** will:
  - a. introduce to the Hearing Board the applicant/owner, his/her agent and others wishing to speak;
  - b. indicate the nature and location of the subject application and the conclusions;
  - c. present the staff report included in the Authority agenda.
5. **The Applicant** and/or their agent will speak to the application.
6. Staff and/or the LPRCA's agent may question the applicant and/or their agent if reasonably required for a full and fair disclosure of matters presented at the Hearing.
7. The applicant and/or their agent may question the conservation authority staff and/or their agent if reasonably required for full and fair disclosure of matters presented at the Hearing.
8. The Hearing Board will question both the LPRCA staff/agent and the applicant/agent.

#### **Deliberation and Decision**

9. The Hearing Board **will move into deliberation.** For electronic meetings, the Hearing Board will separate from other participants for deliberation.
10. Reasons for the decision of the Board must be provided.
11. Members of the Hearing Board will move and second **a motion.**
12. A motion will be carried which will culminate in **the decision.**
13. The Hearing Board will move out of deliberation. For electronic meetings, the Hearing Board will reconvene with other participants.

#### **Communicate Decision**

14. The Chair will **advise the owner/applicant** of the Hearing Board **decision.**

15. **If decision is "to refuse" or "approve with conditions", the Chair or Acting Chair shall notify the owner/applicant of his/her right to request a Minister's review within 15 days of receipt of the reasons for the decision or, alternatively, appeal the decision to the Ontario Land Tribunal within 90 days of receipt of the reasons for the decision.**

16. **Motion** to move out of Hearing Board.

## APPENDIX D

### CHAIR'S OPENING REMARKS

when dealing with Hearings (Section 7 of the *Conservation Authorities Act*)  
with respect to Ontario Regulation 41/24

We are now going to conduct a Hearing under Section 28 of the *Conservation Authorities Act* in respect of an application by **(applicant)** for permission to **(nature of the application)** at **(location, address)**.

The Authority administers Ontario Regulation 41/24 under Section 28 of the *Conservation Authorities Act* which requires the permission of the Authority for development within an area regulated by the Authority in order to ensure no adverse effect on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock or to permit alteration to a watercourse or interference with a wetland.

The Staff has reviewed this proposed work and a copy of the staff report has been given to the applicant and the Board. The applicant was invited to file material in response to the staff report, a copy of which has also been provided to the Board.

The Conservation Authorities Act (Section 28 [5]) provides that:

*"An authority shall not refuse an application for a permit or attach conditions to a permit unless the applicant for the permit has been given an opportunity to be heard by the authority."*

In holding this hearing, the Authority Board is to determine whether or not a permit is to be issued, with or without conditions. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given, and the submissions to be made on behalf of the applicant. Only information disclosed prior to the hearing is to be presented at the hearing.

The proceedings will be conducted according to the *Statutory Powers Procedure Act*.

Under Section 5 of the *Canada Evidence Act*, a witness may refuse to answer any question on the ground that the answer may tend to criminate the person, or may tend to establish his/her liability to a civil proceeding at the instance of the Crown or of any person.

The procedure in general shall be informal without the evidence before it being given under oath or affirmation.

As the Hearing proceeds, the procedures listed in the Hearing Procedure summary provided may be relaxed or abbreviated for efficiency.

The Authority may ask questions of witnesses for clarification at any time.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chair of the Board.

## APPENDIX E

### CHAIR'S OPENING REMARKS

When dealing with Hearings (Section 28.1.2 (7) of the *Conservation Authorities Act*) with respect to Ontario Regulation 41/24

We are now going to conduct a hearing under section 28.1.2 of the *Conservation Authorities Act* in respect of an application by **(applicant)** for permission to **(nature of the application)** at **(location, address)**.

Under Section 28.1.2 of the *Conservation Authorities Act*, an Authority is required to grant permission for any application submitted under a regulation made under subsection 28(1) for permission to carry out all or part of a development project, in an area regulated by the Authority, associated with a Minister's Zoning Order, provided the criteria listed under subsection 28.1.2 (1) are met. A permission is subject to any conditions as may be prescribed by the Authority.

The Staff has reviewed this proposed work and prepared a staff report, including the proposed conditions of approval for the proposed work, which has been given to the applicant and the Board. The applicant was invited to file material in response to the staff report, a copy of which has also been provided to the Board.

Under Section 28.1.2 (7) of the *Conservation Authorities Act*, the person requesting permission has the right to a hearing before the Authority.

In holding this hearing, the Authority Board is to determine the prescribed conditions to be attached to the approved permission. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given and the submissions to be made on behalf of the applicant. Only information disclosed prior to the hearing is to be presented at the hearing.

The proceedings will be conducted according to the *Statutory Powers Procedure Act*. Under Section 5 of the *Canada Evidence Act*, a witness may refuse to answer any question on the ground that the answer may tend to incriminate the person, or may tend to establish his/her liability to a civil proceeding at the instance of the Crown or of any person.

The procedure in general shall be informal without the evidence before it being given under oath or affirmation unless decided by the hearing members.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chairperson of the board.

## APPENDIX F

### Notice of Decision

(Date)

**BY COURIER**

(name)

(address)

Dear:

**RE: NOTICE OF DECISION**

**Hearing Pursuant to Section 28.1 (5) of the Conservation Authorities Act**

**To (Nature of application) at (location, address). (Application #LPRCA-###/###)**

In accordance with the requirements of the *Conservation Authorities Act*, the Long Point Region Conservation Authority (LPRCA) provides the following Notice of Decision:

On (**meeting date**), a Hearing pursuant to Section 28.1 (5) of the *Conservation Authorities Act* to permit development within an area regulated by LPRCA within (**location, address**) was conducted. Following presentations by LPRCA staff and yourself, questions and deliberation, the LPRCA's Board of Directors (**approved, approved with conditions, refused**) your application to (nature of application) (Resolution No. A-xx/xx). The Resolution reads as follows:

On (**meeting date and number**), the Hearing Board refused/approved your application/approved your application with conditions. A copy the resolution # has been attached for your records. Please note that this decision is based on the following reasons:

- a. *Example: The proposed development/alteration to a watercourse adversely affects the control of flooding, erosion, dynamic beaches or unstable soil or bedrock or interferes with a wetland.*
- b.
- c.

In accordance with Section 28.1 (8) of the *Conservation Authorities Act*, an applicant who has been refused permission or who objects to conditions imposed on a permit may, within 15 days of receiving the reasons for the Authority's decision under Section 28.1 (7), request a review by the Minister who may refuse the permission; or grant permission, with or without conditions.

Alternatively, in accordance with Section 28.1 (20) the applicant may, within 90 days of receiving the reasons for the Authority's decision under Section 28.1 (7), appeal the Authority's decision to the Ontario Land Tribunal.

For your information, should you wish to exercise your right to appeal the decision **to either the Minister or the Ontario Land Tribunal**, a letter by you or your agent/counsel setting out your appeal must be sent within 15 or 90 days respectively of receiving this decision addressed to:

Minister of Natural Resources and Forestry Whitney Block, 99 Wellesley St W, Toronto, ON M7A 1W3	Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5
--	---

A carbon copy of this letter should also be sent to this conservation authority. Should you require any further information, please do not hesitate to contact (**staff contact**) or the undersigned.

Yours truly,

---

General Manager/Secretary Treasurer

# APPENDIX G

## NOTICE OF DECISION

(Subsection 28.1.2 (7) of the *Conservation Authorities Act*)

(Date)

**BY COURIER**

(name)

(address)

Dear:

**RE: NOTICE OF DECISION**

**Hearing Pursuant to **Section 28.1.2 (7)** of the Conservation Authorities Act**

**Proposed Residential Development**

**Lot , Plan ; ?? Drive City of**

**(Application #)**

In accordance with the requirements of the Conservation Authorities Act, the Long Point Region Conservation Authority provides the following Notice of Decision:

On (**meeting date and number**), the Hearing Board of the Long Point Region Conservation Authority approved your application/approved your application with conditions. A copy the Board's resolution # has been attached for your records. Please note that this decision is based on the following reasons: (**conditions are required to mitigate the effects of the development project on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock; or conditions or circumstances created by the development project that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property**).

In accordance with **Section 28.1.2 (9)** of the Conservation Authorities Act, an applicant who objects to conditions imposed on a permission may, within **15 days** of receiving the reasons under subsection (8), submit a request to the Minister for the Minister to review the conditions. The Minister may confirm or vary the conditions as proposed by the authority. Alternatively, in accordance with **Section 28.1.2 (15)** of the Conservation Authorities Act, the holder of a permission who objects to the conditions proposed by an authority may, within 90 days of the reasons under subsection (8) being issued, appeal to the Ontario Land Tribunal to review the conditions.

For your information, should you wish to exercise your right to appeal the decision **to either the Minister or the Ontario Land Tribunal**, a letter by you or your agent/counsel setting out your appeal must be sent within 15 or 90 days respectively of receiving this decision addressed to:

Minister of Natural Resources and Forestry Whitney Block, 99 Wellesley St W, Toronto, ON M7A 1W3	Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5
--	---

A carbon copy of this letter should also be sent to this conservation authority. Should you require any further information, please do not hesitate to contact (**staff contact**) or the undersigned.

Yours truly,

---

General Manager/Secretary Treasurer

Enclosure



## LONG POINT REGION CONSERVATION AUTHORITY STAFF REPORT

**Date:** March 13, 2026

**File:** 3.3.1

**To:** Chair and Members,  
LPRCA Board of Directors

**From:** General Manager, LPRCA

**Re:** Long Point Region Conservation Authority Application LPRCA#18/26  
(Brookshaw) Pursuant to Ontario Regulation 41/24, Proposed Re-  
development of a single-family dwelling 7 Douglas Street, Port Dover.

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### **Recommendation:**

**THAT the LPRCA Board of Directors refuse to grant a “Prohibited Activities, Exemptions and Permits” Permit for Permit Application LPRCA #18/26 (Brookshaw) for the following reasons:**

- 1. The construction of the proposed structure is contrary to Long Point Region Conservation Authority riverine one-zone policies for development in the flood hazard. These policies have been implemented to reduce or eliminate preventable risk to life and property damage from flooding,**
- 2. The control of flooding is affected by the development as the overall risk of property damage is increased,**
- 3. The control of flooding is affected by the development as the encroachment of the proposed structure and associated fill material into the floodplain and the resulting loss of flood storage capacity cumulatively increases flood flows and flood levels downstream, and**
- 4. Therefore, the development activity will likely create conditions or circumstance that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.**

### **Background:**

The subject land is located at 7 Douglas Street in Port Dover (Attachment 1). The subject land contains a single-storey, detached dwelling (Attachment 2). The footprint of the existing structure is 80m<sup>2</sup>, and usable floor area is 125m<sup>2</sup>. The site is generally surrounded by other dwellings, among some vacant lots. In this location, the property and associated development is subject to flood and erosion related hazards from Black Creek and flood hazards from Lake Erie and is fully regulated under Long Point Region Conservation Authority’s Ontario Regulation 41/24 (Attachment 3).

On April 1, 2024, O. Reg. 41/24, *Prohibited Activities, Exemptions and Permits*, came into effect. Through this regulation, LPRCA may permit, restrict or refuse development and development activities in or adjacent to river or stream valleys, Great Lakes shorelines, watercourses, hazardous lands and wetlands.

More specifically, as it relates to this application, the *Conservation Authorities Act* states that:

***Prohibited activities re watercourses, wetlands, etc.***

**28 (1)** No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority:

2. Development activities in areas that are within the authority's area of jurisdiction and are,

iii. river or stream valleys the limits of which shall be determined in accordance with the regulations,

iv. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations

As they relate to this application, LPRCA's objectives in administering the Regulation are to:

- ❖ Prevent loss of life
- ❖ Minimize property damage and social disruption
- ❖ Reduce public and private expenditure for emergency operations, evacuation, restoration and protection measures.

**The Application:**

A section 28 permit application has been deemed complete for development activity within an area entirely regulated by the Long Point Region Conservation Authority (LPRCA). Specifically, the proposed activities include development within the floodway of Black Creek and within the backwater area of Lake Erie at 7 Douglas Street in Port Dover, Norfolk County.

The applicant proposes to demolish the existing 125m<sup>2</sup> (1,345ft<sup>2</sup>) dwelling and replace with a new two-storey structure with a walkout basement.

The proposed structure includes a 262m<sup>2</sup> (2,820ft<sup>2</sup>) dwelling, which includes a single car garage, a covered front porch and two covered rear decks. The application also includes filling of the existing boat well.

LPRCA staff received the site plan and construction details which are attached as Attachment 4.

In addition, the applicants are also requesting a period of validity for 48 months, instead of the standard 24 months.

**Site Description and Information**

The property is located in the town of Port Dover along Black Creek. The property is entirely regulated under Ontario Regulation 41/24 as it is located entirely within the flood and erosion hazard associated with Black Creek and within the flood hazard associated with Lake Erie.

## **Applicable Policy and Analysis**

### **Riverine Floodplain – One Zone Policy**

The riverine flooding hazard is based on the 100-year return period flood plus a 15 metre (50 foot) allowance that defines the Regulation Area.

For this area of Black Creek, the entire floodplain is considered to be the floodway. The most updated and accurate floodplain mapping for this reach of Black Creek was completed for LPRCA in 2020 by Wood Environmental and adopted by the Board of Directors in August of 2020.

This property is within the 25-year flood event and as such is considered to be frequently flooded. A 25-year flood has a 4% statistical probability of being equalled or exceeded in any given year. This translates to a 64% chance in 25-years and a 87% chance in the 50-year life of the structure.

### **Lake Erie – Flooding Hazard**

This area of Black Creek is impacted during Lake Erie storm events that raise floodwater within Black Creek.

### **LPRCA Policies for the Prohibited Activities, Exemption and Permits Regulation (Attachment 5)**

The LPRCA's Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation currently stand as the LPRCA's guide for decision-making related to applications for permission.

Applicable general policies for development for areas defined as regulated are as follows:

<b>Applicable LPRCA policy</b>	<b>Planning Comments</b>
<p>Section 7.1.2 Development, interference or alteration within a Regulated Area may be permitted where it can be demonstrated through appropriate technical studies and/or assessments, site plans and/or other plans as regulated by the LPRCA that:</p> <ul style="list-style-type: none"><li>a) the risk to public safety is not increased,</li><li>b) susceptibility to natural hazards is not increased or new hazards created</li><li>c) there are no adverse hydraulic or fluvial impacts on rivers, creeks, streams, or watercourses,</li><li>k) the control of flooding, erosion, dynamic beaches or unstable soil or bedrock is not adversely affected during and post development, interference or</li></ul>	<p>The proposed redevelopment increases susceptibility to natural hazards and can create adverse hydraulic impacts by filling a portion of the 100-year floodplain. This reduction in storage capacity displaces water onto neighbouring properties and cumulatively increases flood depths and velocities downstream, thereby failing to ensure that risk to public safety is not increased. The cumulative effect of allowing redevelopment within the 25-year flood hazard will exacerbate this effect.</p>

alteration.	
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Applicable policies for development associated with existing uses within lands subject to the Riverine Flooding Hazard are as follows:

Applicable LPRCA policy	Planning Comments
<p>Existing Uses 8.1.2</p> <p>Development activities associated with existing uses located within a Riverine Flooding Hazard may be permitted in accordance with the policies in Sections 7.1.2-7.1.3 – General Policies, and where it can be demonstrated that:</p> <ul style="list-style-type: none"> <li>a) there is no feasible alternative site outside the Riverine Flooding Hazard,</li> <li>b) the site is not subject to frequent flooding<sup>9</sup>,</li> <li>c) ingress and egress is “dry” where this standard can be practically achieved, but no less than “safe”,</li> <li>d) floodproofing is undertaken to the extent practical, where floodproofing to the elevation of the Regulatory Flood is not technically feasible, and</li> <li>e) there is no risk of structural failure due to potential hydrostatic/dynamic pressures.</li> </ul> <p><sup>9</sup> Frequent flooding means that a site is subject to the 1:25 year flood event or a more frequent flood event</p>	<p>A portion of the property is located within the 25-year floodplain and is therefore considered to be frequently flooded.</p> <p>The proposed development activity does not meet the criteria in this policy section to allow for further development on site through the residential use policies 8.1.3 – 8.1.7.</p>

Applicable policies for Redevelopment associated with existing uses within lands subject to the Lake Erie Shoreline Flooding Hazard are as follows:

Applicable LPRCA policy	Planning Comments
<p>8.4.9 Redevelopment of existing buildings or structures, other than those destroyed by flooding or erosion, within lands subject to the Lake Erie Shoreline Flooding Hazard, may be permitted in accordance with the current Shoreline Management Plan and the policies in Section 8.4.2, and where it can be demonstrated that:</p> <ul style="list-style-type: none"> <li>a) the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding, erosion and/or property damage is reduced to the greatest extent, wherever possible,</li> <li>b) the use is the same,</li> <li>c) the number of dwelling units is the same</li> </ul>	<p>The proposed development activities meet the requirements for redevelopment within the Lake Erie floodplain but fail to meet all relevant policies within the riverine flood hazard.</p>

<p>or less,</p> <p>d) the building or structure is floodproofed to the elevation of the Shoreline Flooding Hazard using dry, passive floodproofing measures,</p> <p>e) the top of foundation elevation of the building or structure is at or exceeds the elevation of the Shoreline Flooding Hazard,</p> <p>f) electrical, mechanical and heating services are located above the level of the Shoreline Flooding Hazard,</p> <p>g) no basement is proposed and any crawl space is non-habitable and designed to facilitate services only,</p> <p>h) there is no risk of structural failure due to potential hydrostatic/dynamic pressures, and</p> <p>i) Safe access for people and vehicles is available.</p>	
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**Permit Validity Period:**

The applicants are requesting a 48-month permit. As per LPRCA’s Administration and Delegation of Powers related to Permit Issuance, Extension and Hearings, permits will be issued for a period of validity of 24 months. Large-scale projects may be considered for a longer period, where the applicant may have to obtain approvals from other regulatory agencies and/or the project is of such a scale that the construction period will extend beyond the 24 months.

Historically, LPRCA staff have only recommended approval for greater than the standard 24 months for large-scale infrastructure projects such as bridge replacements or extensive fiberoptic installation and not for single-family dwellings.

**Staff Recommendation:**

The proposed development does not conform to the LPRCA’s policies for development within the riverine flood hazard of Black Creek and is contrary to LPRCA’s objectives for the administration of Ontario Regulation 41/24. In LPRCA staff’s opinion, the control of flooding will be affected by the proposed development and, therefore, staff recommend that the application be refused for the following reasons:

- 1. The construction of the proposed structure is contrary to Long Point Region Conservation Authority riverine one-zone policies for development in the flood hazard. These policies have been implemented to reduce or eliminate preventable risk to life and property damage from flooding,**
- 2. The control of flooding is affected by the development as the overall risk of property damage is increased,**
- 3. The control of flooding is affected by the development as the encroachment of the proposed structure and associated fill material into the floodplain and the resulting loss of flood storage capacity cumulatively increases flood flows and flood levels**

downstream, and

4. Therefore, the development activity will likely create conditions or circumstance that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.

Prepared by:

Approved and submitted by:

*Leigh-Anne Mauthe*

*Judy Maxwell*

Leigh-Anne Mauthe, BES, MCIP, RPP  
Manager of Watershed Services

Judy Maxwell, CGA, CPA  
General Manager

# Attachment 1:



7 Douglas Street  
Port Dover, Norfolk County

Legend

 Subject Property



# Attachment 2:



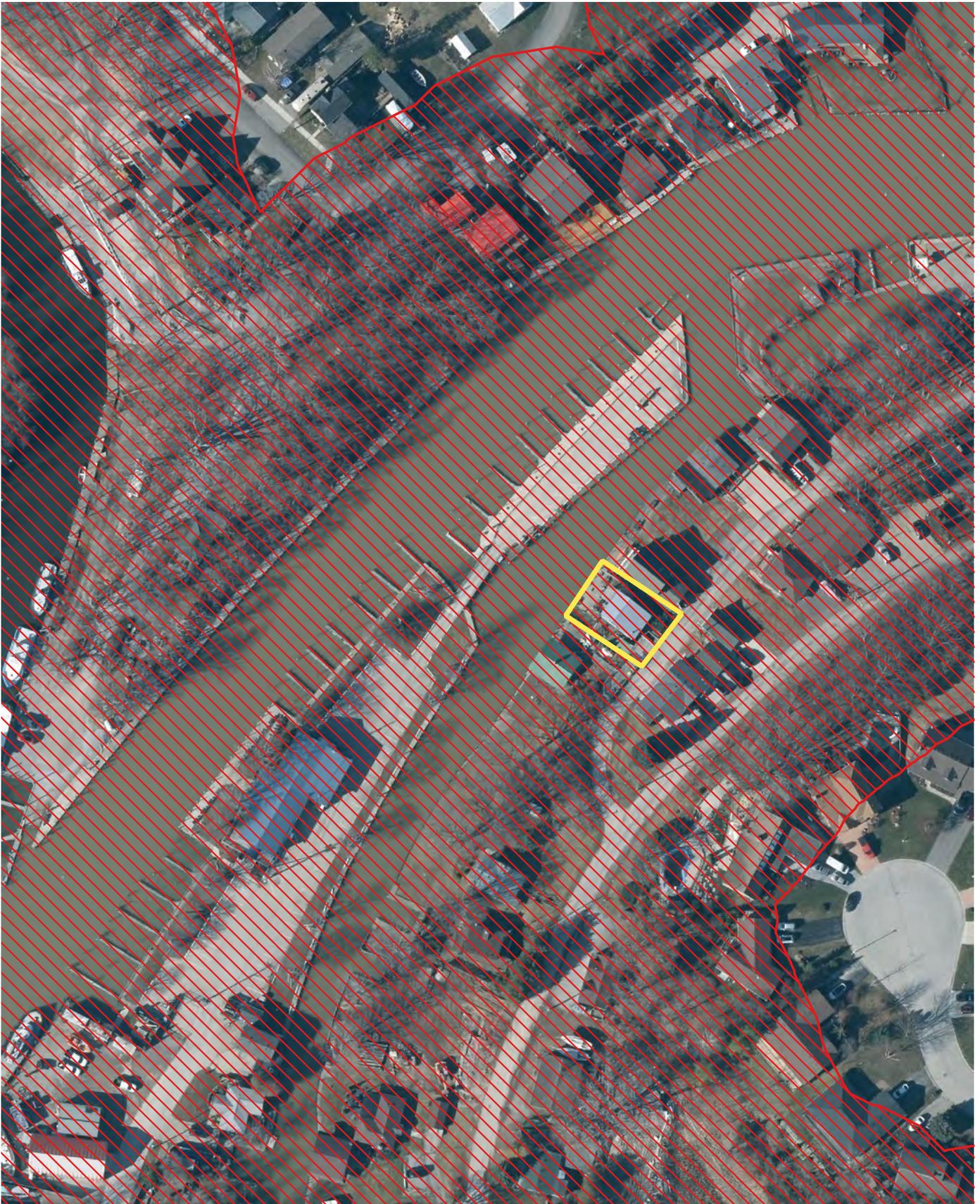
7 Douglas Street  
Port Dover, Norfolk County

Legend

 Subject Property



# Attachment 3:



7 Douglas Street  
Port Dover, Norfolk County

Legend

 Subject Property



# Attachment 4:

**DRAWING LIST**

ARCHITECTURAL	DWG. LIST, ABBR.'S, KEY MAP, SITE MAP, SITE PLAN
A001	OBC MATRIX, AREA PLANS
A002	FDTN / WALL / FLR / ROOF TYPES 1 TYP. NOTES
A003	FOUNDATION WALL & FLOOR TYPES 4 DIMENSIONS
A004	LEVEL 0 WALL & FLOOR TYPES 4 DIMENSIONS
A005	LEVEL 1 WALL & FLOOR TYPES 4 DIMENSIONS
A006	LEVEL 2 WALL & FLOOR TYPES 4 DIMENSIONS
A007	ROOF PLAN
A008	EXTERIOR ELEVATIONS
A009	BLDG. SECTIONS
A010	WALL SECTION 4 DETAILS
A011	WALL SECTION 4 DETAILS
A012	WALL SECTION 4 DETAILS
A013	WALL SECTION 4 DETAILS
A014	STAIR & RAMP PLANS, SECTIONS, DETAILS
A015	LEVEL 0, 1 & 2 RCP
A016	DOOR & WINDOW SCHEDULES, TYP. DOOR DETAILS 4 NOTES
A017	STRUCTURAL GENERAL NOTES

**ABBREVIATIONS & SHORT FORMS**

**GENERAL ABBREVIATIONS**

A/F/F & AFF	- ABOVE FINISHED FLOOR
AF	- ABOVE FINISHED
ADJ.	- ADJUSTABLE
ALT.	- ALTERNATE
APP.	- VAPOUR
ARCH.	- ARCHITECTURAL
ACDA	- ACCESSIBILITY FOR ONTARIANS /V/ DISABILITIES ACT
BD	- BOARD
BF	- BARRIER FREE
BFF	- BACK FLOW PREVENTER
BNG	- BULL NOSE CORNER
BOL	- BOLLARD
BP	- BEARING POCKET
BPF	- BEARING PLATE POCKET
BR	- BICYCLE RACK
CANT.	- CANTILEVERED
CBS	- CALL BUTTON STATION
CCJ	- COMPARTMENT CONTROL JOINT
CH	- CHALK BOARD
CH.TBL.	- CHANGE TABLE
CI	- CONTINUOUS INSULATION
CJ	- CONTROL JOINT
CM	- CONTROL MODULE
CH / CCH	- COAT HOOK
CMO	- CARBON MONOXIDE DETECTOR
COMP.	- COMPRESSIBLE / COMPRESSOR
CONT.	- CONTINUOUS
CONN.	- CONNECTION
CP	- CONTROL PANEL
CJ	- CONDENSING UNIT
CV	- CONTROL VALVE
CV	- CENTRAL VAC
CVP	- CENTRAL VAC PORT
C/N	- COMPLETE WITH
DBL.	- DOUBLE
DC	- DROPPED CURB
DF	- DRINKING FOUNTAIN
DN	- DOWNWASHER
DWG.	- DRAWING
DIST.	- DISTANCE
DISP.	- DISPLAY CASE
DOR	- DESIGNATED SUBSTANCE REPORT
EA	- EACH
ECS	- EMERGENCY CALL SWITCH
E.F.	- EACH FACE
ELEV.	- ELEVATION
ENG. D.	- ENGINEERED
ENG.	- ENGINEER
EPB	- EMERGENCY PUSH BUTTON
EV	- EXHAUST VENT
EX	- EXISTING
EX	- EXISTING
EXP.	- EXPOSED
FB	- FIRE BLOCK
FD	- FLOOR DRAIN
FDTN.	- FOUNDATION
FE	- FIRE EXTINGUISHER CABINET
FE	- FIRE EXTINGUISHER
FDS	- FOLD DOWN GRAB BAR
FLEX.	- FLEXIBLE
FLR.	- FLOOR
FLRNS.	- FLOORING
FR	- REFRIGERATOR
FRE	- FREEZER
F/R/R	- FIRE RESISTANCE RATING
FS	- FIRE STOP
FSS	- FOLD DOWN SHOWER SEAT
FTS	- FOOTINGS
F/V	- FIELD VERIFY
FX	- FOUNDATION WALL
GALV.	- GALVANIZED
GAZ.	- GAZEBO
GB & GB	- GRAB BAR
GD	- GARBAGE DISPOSAL
GEN.	- GENERATOR
GL	- GRID LINE
GM	- GAS METER
HB	- HOSE BIB
HD	- HAND DRYER
H/D	- HEAVY DUTY
HO	- HOLD OPEN
HORIZ.	- HORIZONTAL
HWH	- HOT WATER HEATER
INSUL.	- INSULATION
ICB	- INTEGRAL COVE BASE
KP	- KEY PAD
L	- LOCK
M	- MIRROR
MANUF.	- MANUFACTURED
MAX	- MAXIMUM
MECH.	- MECHANICAL
MIN.	- MINIMUM
M/O/L & M/O.L	- MINISTRY OF LABOUR
M/O/T & M/O.T	- MINISTRY OF TRANSPORTATION
MS	- MOP SINK
MTP	- MOUNTED
MN	- MICROWAVE
NADG	- NORFOLK ACCESSIBILITY DESIGN GUIDELINES
N/V/G & NIG	- NOT IN CONTRACT
N	- NUMBER
NTS	- NOT TO SCALE
OBC	- ONTARIO BUILDING CODE
O/D	- OUTSIDE DIAMETER
O/H	- OVERHEAD
O/N	- ONE WAY
PER. S	- PERIMETER / PERIMETERS PER (S)
PO	- POWER OPERATOR PUSH BUTTON
POD	- POWER DOOR CONTROL BUTTON
PDO	- POWER DOOR OPERATOR
POS	- PROTECTION OF SOFFITS
PTD	- PAPER TOWEL DISPENSER/DISPOSAL
P/V/P & P/P	- POURED IN PLACE
PRE-FIN.	- PRE-FINISHED
PROF. ENG.	- PROFESSIONAL ENGINEER
P/T	- PRESERVATIVE TREATED
RCH	- RECESSED CABINET HEATER
REQ'D	- REQUIRED
RCP	- REFLECTED CEILING PLAN
REN.	- REINFORCED
REIN.F	- REINFORCING
REF.	- REFERENCE
REL.	- RELOCATED
RD	- ROOF DRAIN
RM	- ROOM
R/O	- ROUGH OPENING
R/W	- RAIN WATER LEADER
SA	- SMOKE ALARM
SC	- SAN OUT
SCD	- TOILET SEAT COVER DISPENSER
SCH.S	- SCHEDULES
SD	- SCUPPER DRAIN
SD	- SOAP DISPENSER
SH	- SOAP HOLDER
SHC	- SHOWER CURTAIN & RINGS
SHH	- SHOWER HEAD & MIXING VALVE / MAND
SHF	- SHELF
SHR	- SHOWER ROD
SND	- SANITARY NAPKIN DISPOSAL
SNV	- SANITARY NAPKIN VENDING DISPENSER
S/O/S & S/O.S	- SLAB ON GRADE
SP	- SUMP PUMP
SPAD	- SPLASH PAD
SPEC.	- SPECIFICATION
SPEC.D	- SPECIFIED
SFMDD	- STD. PROCTOR MAX. DRY DENSITY
ST	- STOVE
STRUCT.	- STRUCTURAL
TB	- TACK BOARD
TBD	- TO BE DETERMINED
TC	- TEACHER'S CABINET/GLOSET
TH	- THERMOSTAT
THERM.	- THERMAL
TM	- TILTED MIRROR
TOB	- TOWEL BAR
TPO	- TOWEL PAPER DISPENSER
TYP	- THRU WALL FLASHING
TYP.	- TYPICAL

ULC	- UNDERWRITERS LABORATORIES OF CANADA
U/G	- UNDER GUT
U/S	- UNDER SIDE
U/W/O	- UNLESS NOTED OTHERWISE
VAP.	- VAPOUR
VAR.	- VARIES
VERT.	- VERTICAL
V/V	- WITH
WB	- WHITE BOARD/MARKER BOARD
WBF	- WATER BOTTLE FILL UP STATION
W/C	- WATER COOLER
WM	- WATER METER
WR	- WASTE RECEPTACLE
WS	- WATER SOFTENER
%	- PERCENT
@	- AT
O/C	- ON CENTER

**MATERIAL ABBREVIATIONS**

AB	- ARCHITECTURAL BLOCK
ACT	- ACOUSTIC CEILING TILE
ASPH.	- ASPHALT
AVP	- ACOUSTIC WALL PANEL
CH / CCH	- COAT HOOK
AL	- ALUMINUM
AN(C)	- ANODIZED COLOURED
B	- BRICK
BB	- BOARD & BATTEN
BFS	- BACK PTD. GLASS
CAR	- CARPET
CPT	- CARPET TILE
CB	- CONCRETE BLOCK
CEM	- CEMENT BOARD
CT	- CERAMIC TILE
CONC.	- CONCRETE
C(S)	- CONC. SEALED
CTF	- CORK TILE FLOORING
EM	- EXPANDED METAL
EP	- EPOXY PAINT & PRIMER
ESF	- EPOXY SEALED FLOORING
ET	- EPOXY TERRAZZO
F	- FIRE/LITE GLAZING
FS	- FIBREGLASS
FT	- FLOCKED TILE (CARPETING)
GB / GBD / GYP.BD.	- GYPSUM BOARD
GLB	- GLASS BLOCK
GLBL	- GLAZED BLOCK
GL	- GLAZING / GLASS
GN	- GEORGIAN WIRE GLAZING
GMT	- GLASS MOSAIC TILE
HM	- HOLLOW METAL
HARDW.	- HARDWOOD
H/D/S	- HOT DIPPED GALV.
IMP	- INSULATED METAL PANELS
LCG	- LEAD COATED COPPER
LE	- LINOLEUM
LSG	- LAMINATED SAFETY GLAZING
LVT	- LUXURY VINYL TILE
LVP	- LUXURY VINYL PLANK
LXS	- LEXAN GLAZING
MAR	- MARMOLEUM
MAB	- MASONITE
MS	- METAL SIDING
MTL	- METAL
MX	- MOVEABLE WALL SYSTEM
NAT.	- NATURAL
NB	- PARTICLE BOARD
PC	- PRECAST CONG.
P / PTD.	- PAINTED
PF	- PREFIN.
PL	- PLASTER
PLAM	- PLASTIC LAMINATE
PLYND.	- PLYWOOD
PMF	- PREFORMED METAL PANEL
PSP	- PIERCED STEEL PLANKING
PT	- PORCELAIN TILE
PGF	- PARQUET FLOORING
QT	- QUARTZ TILE
QVT	- QUARTZ VINYL TILE
R	- RUBBER
RB	- RUBBER BASE
RSF	- RESILIENT SHEET FLOORING
S	- STONE
SAFF	- SAFETY FLOORING
SG	- SPECIAL COATING
SF	- SPORTS FLOORING
SG	- LAMINATED SAFETY GLASS
SSL	- SPANDREL GLAZING
SHV	- SHEET VINYL FLOORING
S.S.	- SOLID SURFACE
ST	- STUCCO
ST / STL	- STEEL
S/S	- STAINLESS STEEL
SV	- STAINED & VARNISHED
SWC	- SOLID WOOD CORE
T	- TEMPERED GLAZING / GLASS
TDG	- TEMPERED DOUBLE GLAZING / GLASS
TBB	- TILE BACKER BOARD
TEGTM	- TECTUM ACOUSTIC PANEL
TERR	- TERRAZZO
TGL	- TRANSLUCENT GLAZING
TURF	- ARTIFICIAL TURF
U	- URETHANE
V	- VINYL
VCGB	- VINYL COATED GYPSUM BOARD
VCP	- VENEER CORE PLYWOOD
VCT	- VINYL COMPOSITE TILE
VFP	- VINYL PLANK FLOORING
VR	- VENTED RUBBER BASE
WD	- WOOD
WP	- WATER PROOFING

**SITE STATISTIC & ZONING REQ.'S**

<b>PROPERTY/LEGAL DESCRIPTION:</b>				
PDOV PLAN 286 LOT 34, ROLL 9340303700				
IN THE TOWN OF PORT DOVER, IN THE DISTRICT OF NORFOLK COUNTY				
<b>ZONING:</b>				
IN ACCORDANCE W/ ZONING BY-LAW 1-2-2014 NORFOLK COUNTY, CONSOLIDATED JANUARY 1, 2021				
<b>PROVISION</b>	<b>LAND USE, EXISTING</b>	<b>R1A</b>	<b>R1B</b>	<b>PROVIDED</b>
5.1.2(a)	MIN. LOT AREA: I) INTERIOR LOT	450m <sup>2</sup>	360m <sup>2</sup>	246m <sup>2</sup> (existing)
5.1.2(b)	MIN. LOT FRONTAGE: I) INTERIOR LOT	15	12	14.5 (existing)
5.1.2(c)	MIN. FRONT YARD:	6	6	5.51 MIN. PER 3.25
5.1.2(d)	MIN. EXTERIOR SIDE YARD:	6	6	N/A
5.1.2(e)	MIN. INTERIOR SIDE YARD: I) DETACHED GARAGE WITH A REAR LANE, ATTACHED GARAGE	3.112 12 EACH SIDE	3.112 12 EACH SIDE	12 MIN.
5.1.2(f)	MIN. REAR YARD :	7.5	7.5	4.97 MIN. PER 3.25
5.1.2(g)	MAX. BLDG. HEIGHT	11	11	11 MAX.
5.1.3	Projection of an Attached Garage: The wall of an attached garage facing the street in an R1-B Zone shall project no more than 3.5 metres from the main front wall of the dwelling. This projection shall be measured from the wall of the garage facing the front lot line to the nearest structural element of the front wall of the dwelling facing the front lot line, including any covered porch which extends along the entire front wall of the dwelling, but excluding eaves, stairs or gutters. This provision shall not apply where: a) the front wall of the dwelling and the wall of the attached garage containing the opening for vehicular access do not face the same lot line; or b) the width of the attached garage is less than 60 percent of the width of the dwelling.	9.5	9.5	0

[GRAY HIGHLIGHTED APPLICABLE]  
COORD. W/ ZONING BY-LAW FOR ALL OTHER ZONING REQ.'S

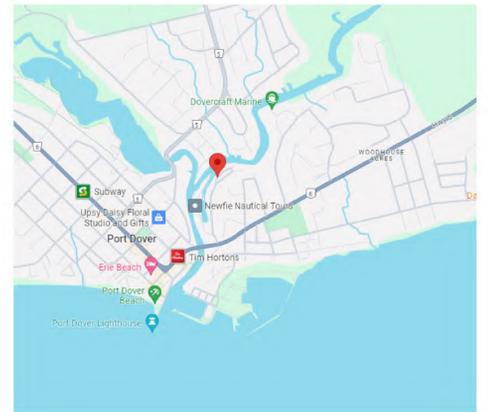
**3.25 NON-COMPLYING**  
Nothing in this By-Law shall prevent a non-complying building or structure from being enlarged, extended, reconstructed, repaired, renovated or used provided that the enlargement, extension, reconstruction, repair or renovation does not further reduce the compliance of the building or structure with any provision of this By-Law.

**SITE PLAN LEGEND**

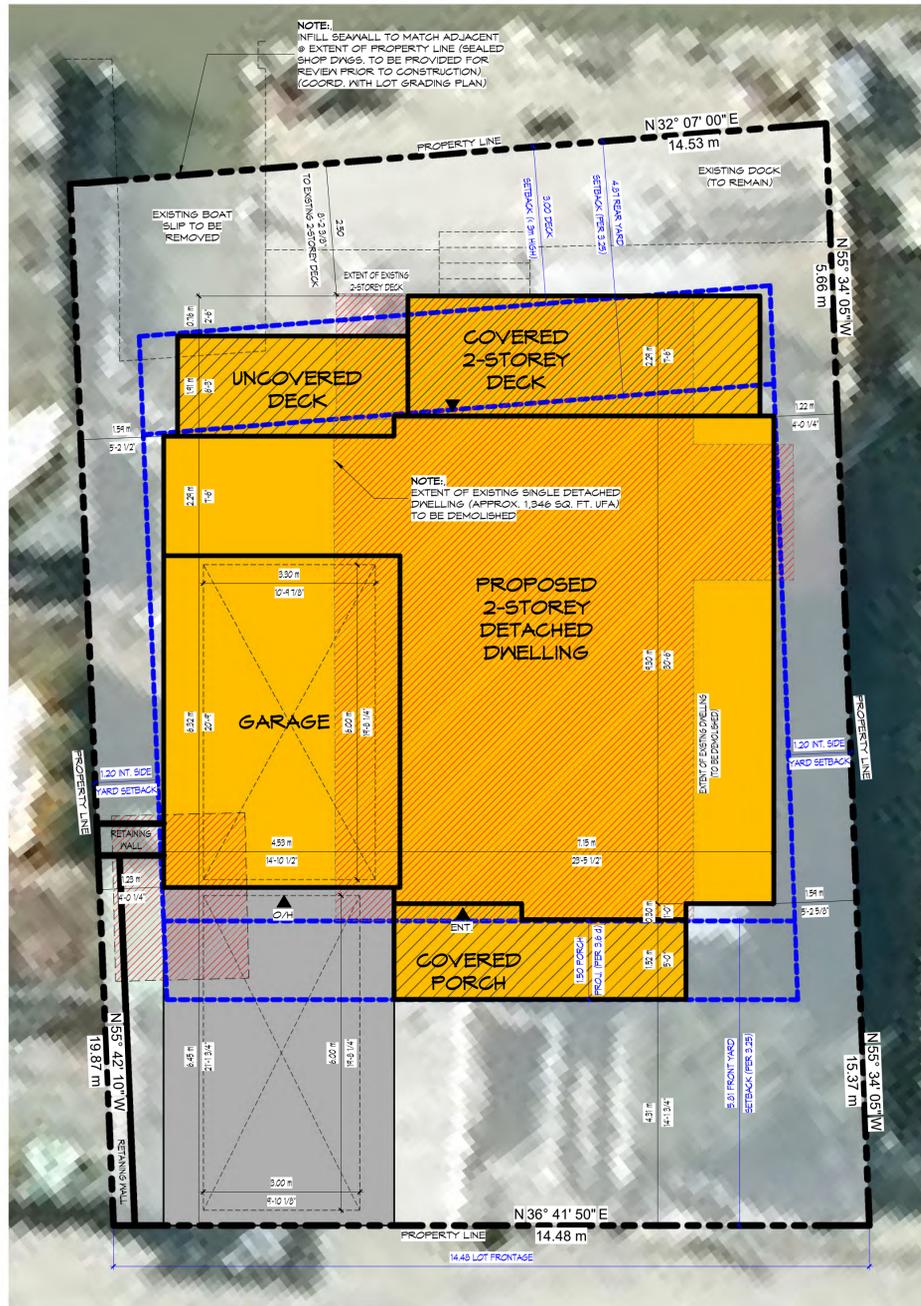
▲	ENTRANCE / EXIT DOOR
▲	MAN ENTRANCE / EXIT DOOR
▲	ENTRANCE / EXIT DOOR (FLUSH W/ GRADE & LEVEL 1 DATUM)
▲	ENTRANCE / EXIT DOOR (OVERHEAD DOOR W/ OPERATOR)
---	PROPERTY LINE
CE	COVERED ENTRANCE
P	PATIO (ON GRADE)
CP	COVERED PATIO (ON GRADE)
B	BALCONY
CD	COVERED DECK / UNENCLOSED PORCH
D	DECK / UNENCLOSED PORCH
□	PARKING SPACE
□	3.0m x 6.0m (DRIVEWAY)
□	3.9m x 6.0m (GARAGE)
□	CONG. SIDEWALK / PAD / CROSSWALK / SIDEWALK / LANDSCAPE / STAIRS / ETC.
■	AREA OF ASPHALT
■	NEW BLDG.

**HATCH IDENTIFICATION LEGEND**

□	CONG. SIDEWALK / PAD / CROSSWALK / SIDEWALK / LANDSCAPE / STAIRS / ETC.
■	AREA OF ASPHALT
■	NEW BLDG.

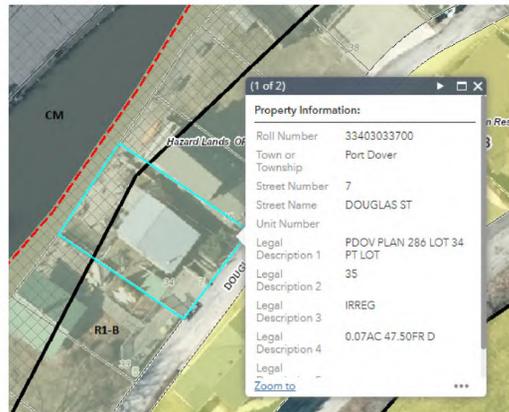


KEY MAP

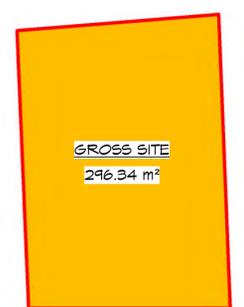


**2 SITE PLAN**

A001 SCALE 3/16" = 1'-0"



SITE MAP



1 GROSS SITE AREA

A001 SCALE 1" = 20'-0"

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRCA SUBMISSION

**PRELIMINARY NOT FOR CONSTRUCTION**

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**vallee**  
Consulting Engineers, Architects & Planners

**G. DOUGLAS VALLEE LIMITED**  
2 TALBOT STREET NORTH  
SIMCO ONTARIO N3Y 3W4  
(519) 426-6270

STAMP ARCH. STAMP STRUCT.

(NOT APPLICABLE)

Licensed Professional Engineer  
Dec 24/2025  
B.D. RICHMOND  
241113  
Province of Ontario

Ontario Ministry of Municipal Affairs & Housing

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

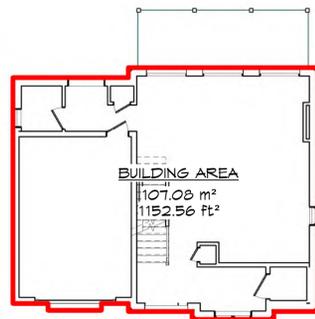
REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C, SECTION 3.2 OF THE O.B.C.

Lesley Hutton-Rhora  
LESLEY HUTTON-RHORA  
G. DOUGLAS VALLEE LTD.

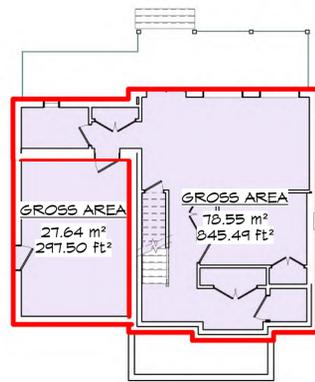
PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

DRAWING TITLE:  
DWG. LIST, ABBR.'S, KEY MAP, SITE MAP, SITE PLAN

CHECKED BY:	DRAWN BY:
MS/BB	LHR
DRAWING SCALE:	DRAWING NO.:
As indicated	<b>A001</b>
PROJECT NO.:	
<b>24-113</b>	



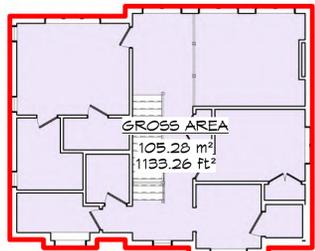
1 BUILDING AREA  
SCALE 3/32" = 1'-0"



2 LEVEL 0 AREA  
SCALE 3/32" = 1'-0"



3 LEVEL 1 AREA  
SCALE 3/32" = 1'-0"



4 LEVEL 2 AREA  
SCALE 3/32" = 1'-0"

**OBC DATA MATRIX PART 9**

Firm Name: G. DOUGLAS VALLEE LIMITED  
 Firm BCIN No.: 1242394  
 Address: 2 TALBOT STREET NORTH, SIMCOE, ONTARIO N3Y 3W4  
 Contact Information: LESLEY HUTTON-RHORA (BCIN 33161)  
 Name of Project: BROOKSHAW RESIDENCE  
 Location of Project: 1 DOUGLAS STREET, PORT DOVER, ONTARIO

Stamp: B.D. BUCHWALD, 10094175, 24-113, PROFESSIONAL ENGINEER, PROVINCE OF ONTARIO

Project Code: O.Reg. 183/24, Last Amendment: O.Reg. 5/25, OBC Section Reference: DIV. A - 1.1.2

Project Type: New Addition, Two-storey Detached Dwelling w/ Walk-Out BSMT

Major Occupancy Classification: Residential

Superimposed Major Occupancies: No

Description	Existing	New	Total
Building Area (m²) (Footprint)	N/A	107.1	107.1
Gross Area (m²) (total all floors above grade)	N/A	106.5	106.5
Level 0	N/A	106.2	106.2
Level 1	N/A	106.5	106.5
Level 2	N/A	105.3	105.3
Total	N/A	318.0	318.0

Building Height: 2 Storeys above grade, 1 Storey below grade

Number of Streets / Firefighter Access: 1 Street

Sprinkler System Proposed: No

Fire Alarm System: No

Water Service / Supply is Adequate: Yes

Permitted Const. Actual Const. Heavy Timber Const. Importance Category: Low

Occupant Load: Level 0: 2, Level 1: 0, Level 2: 4, Total: 6

Plumbing Fixture Requirements (Water Closets): Level 0: 2, Level 1: 0, Level 2: 4

Barrier Free Design: No

Hazardous Substances: No

Travel Distance to Egress & Exit Doors: 9.90, 1.7

Fire Extinguishers: Yes

Required Fire Resistance Rating (FRR): Horizontal Assemblies, Fire resistance Rating, Listed Design No. or Description (SB-2)

Spatial Separation - Construction of Exterior Walls: 1.4.1.2. Defined Terms

1.10.15.2. Area and Location of Exposing Building Face

Wall	Area of EBF (m²)	L/D (m)	L/H or H/L	Permitted % of Openings	Proposed % of Openings	FRR (Min.'s)	Listed or Description	Type of Const.	Type of Cladding
Front	10.75	0.75	N/A	5%	26.9%	N/A	N/A	COMBUSTIBLE	COMBUSTIBLE
Rear	11.02	1.4	N/A	15.5% (p)	30.1%	N/A	N/A	COMBUSTIBLE	COMBUSTIBLE
Left	77.02	1.23	N/A	7%	6.8%	N/A	N/A	COMBUSTIBLE	COMBUSTIBLE
Right	75.36	1.22	N/A	7%	5.3%	N/A	N/A	COMBUSTIBLE	COMBUSTIBLE

Energy Efficiency Category: Non-Residential Compliance Option: SB-10 Prescriptive (Div. 5)

Residential Compliance Option: SB-12 Prescriptive Packages, SB-12 Performance, Energy Star for New Homes, EnerGuide for New Homes

Project Design Conditions: Climatic Zone (SB-1): Zone 1 (<5000 degree days), Zone 2 (>5000 degree days)

Description	Gross Above Grade Wall or Roof Area (m²)	Gross Fenestration Area (m²)	Fenestration Ratio
Vertical (W+D)	324.3	47.7	14.7
Skylights	n/a	n/a	n/a

OBC - SB-12 - Gross Area of Peripheral Walls: 99.12, 3.11.1(1)-(4)

OBC - SB-12 - Fenestration: 99.12, 1.3.1.2(2)

Space Heating Fuel: Electricity

Heating Equipment Efficiency: N/A

Other Conditions: ICF Basement, Walk-Out Basement, Log/Post & Beam, Spray Applied Foam Insulation Above Grade Wall, Drain Water Heat Recovery Unit

INFERIAL UNITS SHOWN IN CHARTS BELOW  
 U-VALUE IMPERIAL TO U-VALUE METRIC - TIMES BY 5.678  
 U-VALUE METRIC TO U-VALUE IMPERIAL - TIMES BY 0.1761

SB-12 - Chapter 3 Energy Efficiency for Housing Table 3.1.1.2.C (IP) ZONE 1 - Compliance Packages for Electric Space Heating Equipment Forming Part of Sentence 3.1.1.2.(3)

Component	Thermal Values	Compliance Package			
		C1	C2	C3	C4
Ceiling with Attic Space	Min. Nominal R <sup>(1)</sup>	60 + HH	60 + HH	50	50
	Max. U <sup>(2)</sup>	0.016	0.016	0.020	0.020
Ceiling without Attic Space	Min. Nominal R <sup>(1)</sup>	31	31	31	31
	Max. U <sup>(2)</sup>	0.036	0.036	0.036	0.036
Exposed Floor	Min. Nominal R <sup>(1)</sup>	31	31	35	35
	Max. U <sup>(2)</sup>	0.034	0.034	0.031	0.031
Walls Above Grade	Min. Nominal R <sup>(1)</sup>	19 + 10 ci	22 + 10 ci	22 + 10 ci	22 + 7.5 ci
	Max. U <sup>(2)</sup>	0.040	0.038	0.038	0.042
Basement Walls <sup>(3)</sup>	Min. Nominal R <sup>(1)</sup>	20 + 8 ci	20 ci	20 ci	20 ci
	Max. U <sup>(2)</sup>	0.044	0.047	0.047	0.047
Below Grade Slab Entire Surface > 600mm Below Grade	Min. Nominal R <sup>(1)</sup>	7.5	-	-	-
	Max. U <sup>(2)</sup>	0.116	-	-	-
Heated Slab or Slab < 600mm Below Grade	Min. Nominal R <sup>(1)</sup>	10	10	10	10
	Max. U <sup>(2)</sup>	0.090	0.090	0.090	0.090
Edge of Below Grade Slab < 600mm Below Grade	Min. Nominal R <sup>(1)</sup>	11.13	11.13	11.13	11.13
	Max. U <sup>(2)</sup>	0.080	0.080	0.080	0.080
Windows and Sliding Glass Doors	Min. U <sup>(4)</sup>	0.25	0.21	0.21	0.28
	Energy Rating	29	34	34	25
Skylights	Min. U <sup>(4)</sup>	0.49	0.49	0.49	0.49
	Energy Rating	-	-	-	ASHP: 7.1 HSPF
Space Heating Equipment	Min. SRE	81%	75%	81%	55%
	Min. EF	-	-	-	-
Domestic Water Heater <sup>(7)</sup>	Column 1	2	4	5	6
	Column 1	2	4	5	6

Notes to Table 3.1.1.2.A (IP):  
 (1) The values listed are minimum Nominal R-Values for the thermal insulation component only.  
 (2) U-Value and effective R-Value shall include entire ceiling assembly components, from interior air film to vented space air film above insulation.  
 (3) U-Value and effective R-Value shall include entire exposed floor or above grade wall assembly components, from interior air film to exterior air film.  
 (4) U-Value and effective R-Value shall include entire basement wall or slab assembly components and interior air film.  
 (5) U-Value is the overall coefficient of heat transfer for a window assembly, sliding glass door assembly or skylight assembly expressed in Btu(h·ft²) / (h·ft²·°F). In the case of basement wall assemblies, where R12 + 10 ci is permitted to be used or vice versa; or where R12 + 5 ci is required, R15 ci is permitted to be used or vice versa.  
 (6) If an EF of a water tank is not indicated in a compliance package, there is no EF requirement for water tank for that specific compliance package.  
 (7) Nominal and effective R-values are expressed in (h·ft²·°F)/Btu. U-Values are expressed in Btu(h·ft²·°F).

**DRAIN WATER HEAT RECOVERY**

OBC - SB-12 - 3.11.1.2  
 (1) Except as provided in Sentence (2), a drain water heat recovery unit shall be installed in each dwelling unit to receive drain water from all showers or from at least two showers where there are two or more showers in the dwelling unit. (See Appendix A.)  
 (2) Sentence (1) does not apply to dwelling units in which:  
 (a) there are no showers; or  
 (b) there are no storages or crawl spaces beneath any of the showers in the dwelling unit.  
 (3) Drain water heat recovery units shall conform to CSA B55-2, "Drain Water Heat Recovery Units".  
 (4) The minimum efficiency of a drain water heat recovery unit shall be determined in accordance with CSA B55.1, "Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units".  
 (5) The efficiency of a drain water heat recovery unit, when tested in accordance with Sentence (4), shall be not less than 42%.  
 (6) A drain water heat recovery unit shall be installed:  
 (a) in an upright position that does not diverge more than 9 degrees from the vertical;  
 (b) in a position such that the cold water inlet connection is at the bottom of the unit;  
 (c) downstream of a water softener where a water softener is installed; and  
 (d) in a conditioned space or on the warm side of the dewpoint of the wall assembly.



5 FRONT ELEVATION SPATIAL SEPARATION  
SCALE 1:200  
EBF: 10.75m², UPO: 14.03m² (26.9%)



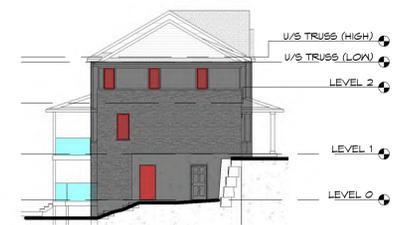
7 REAR ELEVATION SPATIAL SEPARATION  
SCALE 1:200  
EBF: 111.02m², UPO: 30.70m² (27.65%)



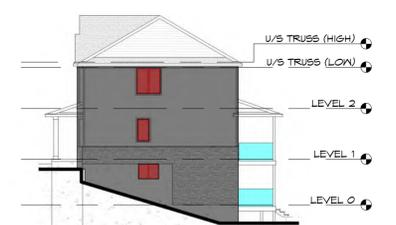
9 FRONT ELEVATION - SB-12  
SCALE 1:200  
GROSS WALL: 10.75m², FENESTRATION: 4.48m²



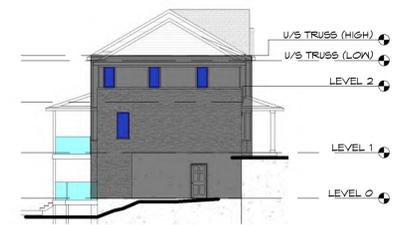
11 REAR ELEVATION - SB-12  
SCALE 1:200  
GROSS WALL: 48.15m², FENESTRATION: 30.70m²



6 LEFT ELEVATION SPATIAL SEPARATION  
SCALE 1:200  
EBF: 77.02m², UPO: 9.20m² (6.8%)



8 RIGHT ELEVATION SPATIAL SEPARATION  
SCALE 1:200  
EBF: 75.36m², UPO: 4.71m² (5.3%)



10 LEFT ELEVATION - SB-12  
SCALE 1:200  
GROSS WALL: 80.25m², FENESTRATION: 3.31m²



12 RIGHT ELEVATION - SB-12  
SCALE 1:200  
GROSS WALL: 75.13m², FENESTRATION: 4.71m²

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRCA SUBMISSION

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 SIMCOE ONTARIO N3Y 3W4  
 (519) 426-6270

STAMP ARCH. (NOT APPLICABLE)  
 STAMP STRUCT. (NOT APPLICABLE)  
 Stamp: B.D. BUCHWALD, 10094175, 24-113, PROFESSIONAL ENGINEER, PROVINCE OF ONTARIO

Ontario Ministry of Municipal Affairs & Housing  
 THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.  
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C SECTION 3.2 OF THE O.B.C.  
 Lesley Hutton-Rhora, BCIN 33161, G. DOUGLAS VALLEE LTD. (1242394)

PROJECT TITLE: BROOKSHAW SINGLE DETACHED  
 7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7  
 DRAWING TITLE: OBC MATRIX, AREA PLANS  
 CHECKED BY: MS/BB, DRAWN BY: LHR  
 DRAWING SCALE: As indicated, DRAWING NO.: A002  
 PROJECT NO.: 24-113

FDTN. WALL TYPE SCHEDULE		
TYPE	DESIGN:	DESCRIPTION:
FX1		<p><b>EXTERIOR FDTN. WALL:</b>            CONT. DELTA-MS BELOW-GRADE DIMPLED MEMBRANE (OR AFFD ALT.)            CONT. FLUID / SHEET APPLIED DAMPROOFING            9" (229mm) P/P REIN. CONC. FDTN. WALL (COORD. IV A200).            MOISTURE PROTECTION (OPTIONAL)            (ASPHALT IMPREGNATED SHEET OR AFFD ALT.)            1" (25mm) AIR SPACE            2" (50mm) MIN. R-8 SEMI-RIGID STONE WOOL INSUL. (SEE NOTE BELOW).            2"x4" (38x99mm) KD. STUD @ 24" (610mm) O/C MAX.            3-1/2" (91mm) MIN. R-14 BATT INSUL.,            6 MIL. AIR/VAP. BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p><b>NOTE:</b>            WHERE FOAMED PLASTIC RIGID INSULATION IS SUBSTITUTED FOR SEMI-RIGID STONE WOOL INSULATION, IT MUST BE PROTECTED IN ACCORDANCE WITH OBC CLAUSE 9.10.11.10.</p> <p><b>EFFECTIVE R-VALUE CALCULATION:</b>            CONC. FDTN. WALL R-0.81            AIR SPACE R-1.02            SEMI-RIGID INSUL. R-8.00            WOOD STUDS /V BATT INSUL. R-10.74            AIR/VAP. BARRIER NIL            GYP. BD. R-0.45            INT. AIR FILM R-0.68  <b>TOTAL R-21.45</b></p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
FX2		<p><b>EXTERIOR FDTN. WALL:</b>            12" (305mm) P/P REIN. CONC. FDTN. WALL (COORD. IV A200).            1" (25mm) AIR SPACE            2" (50mm) MIN. R-8 SEMI-RIGID STONE WOOL INSUL. (SEE NOTE BELOW).            2"x4" (38x99mm) KD. STUD @ 24" (610mm) O/C MAX.            3-1/2" (91mm) MIN. R-14 BATT INSUL.,            6 MIL. AIR/VAP. BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p><b>NOTE:</b>            WHERE FOAMED PLASTIC RIGID INSULATION IS SUBSTITUTED FOR SEMI-RIGID STONE WOOL INSULATION, IT MUST BE PROTECTED IN ACCORDANCE WITH OBC CLAUSE 9.10.11.10.</p> <p><b>EFFECTIVE R-VALUE CALCULATION:</b>            CONC. FDTN. WALL R-0.88            AIR SPACE R-1.02            SEMI-RIGID INSUL. R-8.00            WOOD STUDS /V BATT INSUL. R-10.74            AIR/VAP. BARRIER NIL            GYP. BD. R-0.45            INT. AIR FILM R-0.68  <b>TOTAL R-21.62</b></p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
FX3		<p><b>EXTERIOR &amp; INT. FDTN. / PARTITION WALL:</b>            EXT. FIN. (WHERE APPLICABLE)            12" (305mm) P/P REIN. CONC. FDTN. WALL (COORD. IV A200).            INT. FIN. (WHERE APPLICABLE)</p>
FX4		<p><b>EXTERIOR &amp; INT. FDTN. / PARTITION WALL:</b>            INT. FIN. (WHERE APPLICABLE)            9" (229mm) P/P REIN. CONC. FDTN. WALL (COORD. IV A200).            INT. FIN. (WHERE APPLICABLE)</p>

FLOOR TYPE SCHEDULE		
TYPE	DESIGN:	DESCRIPTION:
CS1		<p><b>INTERIOR FLR. - BASEMENT SLAB (TYP.):</b>            FIN. FLR.            4" (100mm) P/P REIN. CONC. SLAB            (152x152- M18/10.7M18/10.7 FLAT SHEETS),            15 MIL. VAP. BARRIER (LAPPED 300mm (12") MIN. @ ALL SEAMS),            2" (50mm) R-10 XPS RIGID INSUL. (OPTIONAL),            6" (150mm) COMPACTED GRANULAR 'A' FILL (100% SFMDD),            ENG. D FILL / UNDISTURBED SOIL</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
CS2		<p><b>INTERIOR FLR. - ELEVATOR SHAFT SLAB:</b>            CONT. FLUID APPLIED WATERPROOFING (OPTIONAL)            (CRYSTALLINE SEALTIGHT CEM-KOTE CN PLUS BY W.R.MEADOWS OR AFFD ALT.)            4" (100mm) P/P REIN. CONC. SLAB            (10M REBAR @ 12" (300mm) O/C E/W),            15 MIL. VAP. BARRIER (LAPPED 300mm (12") MIN. @ ALL SEAMS),            COMPACTED GRANULAR 'A' FILL,            ENG. D FILL / UNDISTURBED SOIL</p>
CS3		<p><b>EXTERIOR FLR. - PORCH SLAB:</b>            BROOM FIN.            150mm (6") P/P REIN. CONC. SLAB            (10M REBAR @ 8" (200mm) O/C E/W),            ENSURE SLAB SLOPES AWAY FROM BLDG, PER 5/8" 2% IV 5"            (125mm) MIN. THICKNESS @ OUTER EDGE,            (GALV. 3" (76mm) x 0.011mm) METAL DECK MAY BE USED AS            FORMWORK IV 3.5" (90mm) BEARING ON ENDS)</p> <p><b>4.9.3.1</b>  <b>4.9.3.1.4. Slab Construction</b>            (1) Concrete shall be cast against form work in accordance with CSA A23.1, "Concrete Materials and Methods of Concrete Construction".            (2) The slab shall be not less than 125 mm thick.            (3) The slab shall be reinforced with 10M bars spaced not more than 200 mm o.c. in each direction, with 30 mm clear cover from the bottom of the slab to the first layer of bars, and the second layer of bars laid directly on top of the lower layer in the opposite direction.            (4) The slab shall bear not less than 15 mm on the supporting foundation walls and be anchored to the walls with 600 mm x 600 mm 10M bent dowels spaced at not more than 600 mm o.c.            (5) Exposed slabs shall be sloped to effectively shed water away from the exterior wall.</p>
CS4		<p><b>EXTERIOR FLR. - SUSPENDED GARAGE SLAB (TYP.):</b>            FIN. FLOOR            TAPERED P/P REIN. CONC. SLAB (1" @ REAR &amp; 6" @ FRONT),            (15M REBAR @ 12" (300mm) O/C E/W),            ENSURE SLAB SLOPES 2% TOWARDS O/H DOOR O/W            GALV. 3" (76mm) x 0.011mm) METAL DECK IV MIN. 3.5" (90mm)            BEARING ON BOTH ENDS</p>
F1		<p><b>INTERIOR FLR. - LEVEL 1 &amp; 2 (TYP.):</b>            INT. FIN.            5/8" (16mm) T45 FLYND. SUBFLR. SCREWED &amp; G/LIED,            2"x10" (38x259mm) FLR. _ST_ @ 16" (406mm) O/C MAX.            SOUND ATTENUATION BATTS (OPTIONAL),            1/2" (13mm) RESILIENT CHANNEL @ 16" (406mm) O/C MAX. (OPTIONAL),            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>

FLOOR TYPE SCHEDULE (CONT'D)		
TYPE	DESIGN:	DESCRIPTION:
F2		<p><b>EXTERIOR FLR. - DECK (TYP.):</b>            EXT. FIN.            5/8" (16mm) x 5-1/2" (140mm) P/T DECK BD'S SCREWED,            2"x8" (38x104mm) P/T FLR. _ST_ @ 16" (406mm) O/C MAX.</p>

WALL TYPE SCHEDULE		
TYPE	DESIGN:	DESCRIPTION:
W1		<p><b>EXTERIOR WALL (IND. FRAMED WALL):</b>            3-1/2" (91mm) STONE MASONRY VENEER            (COORD. IV ELEVATIONS FOR LOCATION &amp; HEIGHT),            1" (25mm) AIR SPACE,            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,            2"x6" (38x140mm) KD. STUD @ 406mm (16") O/C MAX.            5-1/2" (140mm) MIN. R-22 BATT INSUL.,            6 MIL. VAP. BARRIER,            1/2" (13mm) GYP. BD.</p>
W1A		<p><b>EXTERIOR WALL - TALL WALL (IND. FRAMED WALL):</b>            3-1/2" (91mm) STONE MASONRY VENEER            (COORD. IV ELEVATIONS FOR LOCATION &amp; HEIGHT),            1" (25mm) AIR SPACE,            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,  <b>DOUBLE 2"x6" (38x140mm) KD. STUD @ 12" (305mm) O/C MAX.</b>            5-1/2" (140mm) MIN. R-22 BATT INSUL.,            6 MIL. VAP. BARRIER,            1/2" (13mm) GYP. BD.</p>
W1B		<p><b>EXTERIOR WALL - GARAGE (IND. FRAMED WALL):</b>            3-1/2" (91mm) STONE MASONRY VENEER            (COORD. IV ELEVATIONS FOR LOCATION &amp; HEIGHT),            1" (25mm) AIR SPACE,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,            2"x4" (38x99mm) KD. STUD @ 16" (406mm) O/C MAX.            5-1/2" (140mm) MIN. R-22 BATT INSUL. (OPTIONAL),            6 MIL. VAP. BARRIER (OPTIONAL),            1/2" (13mm) GYP. BD.</p>
W1C		<p><b>EXTERIOR WALL (IND. FRAMED WALL):</b>            APPROX. 1/2" (13mm) JAMES HARDIE HORIZ. SIDING (OR AFFD ALT.)            3/4"x4" (25x100mm) VERT. STRAPPING (OPTIONAL),            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,            2"x6" (38x140mm) KD. STUD @ 16" (406mm) O/C MAX.,            5-1/2" (140mm) R-22 BATT INSUL.,            6 MIL. VAP. BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
W1D		<p><b>EXTERIOR WALL - TALL WALL (IND. FRAMED WALL):</b>            APPROX. 1/2" (13mm) JAMES HARDIE HORIZ. SIDING (OR AFFD ALT.)            3/4"x4" (25x100mm) VERT. STRAPPING (OPTIONAL),            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,  <b>DOUBLE 2"x6" (38x140mm) KD. STUD @ 12" (305mm) O/C MAX.</b>            5-1/2" (140mm) R-22 BATT INSUL.,            6 MIL. VAP. BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
W1E		<p><b>EXTERIOR WALL (IND. FRAMED WALL):</b>            APPROX. 1/2" (13mm) JAMES HARDIE SHAKE SIDING (OR AFFD ALT.)            1"x4" (25x100mm) VERT. STRAPPING (OPTIONAL),            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            AIR BARRIER,            1/2" (13mm) FLYND. SHEATHING,            2"x6" (38x140mm) KD. STUD @ 16" (406mm) O/C MAX.,            5-1/2" (140mm) R-22 BATT INSUL.,            6 MIL. VAP. BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
W1F		<p><b>GARAGE INTERIOR WALL (IND. FRAMED WALL):</b>            EXT. FIN. (NOT REQ'D 4.9.3.4.1(1)),            1/2" (13mm) GYP. BD.,            1-1/2" (38mm) R-15 XPS OR POLYISO RIGID INSUL.,            2"x6" (38x140mm) KD. STUD @ 16" (406mm) O/C MAX.,            5-1/2" (140mm) R-22 BATT INSUL.,            6 MIL. AIR/VAPOUR BARRIER,            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p><b>9.10.9.10. Separation of Storage Garages (OBC 2024)</b>            (4) Where a storage garage is attached to or built into a building of residential occupancy,            (a) an air barrier system conforming to subsection 4.25.3, shall be installed between the garage and the remainder of the building to provide an effective barrier to gas and exhaust fumes, and            (b) every door between the garage and the remainder of the building shall conform to Article 9.10.13.15.            (5) Where membrane materials are used to provide the required airtightness in the air barrier system, all joints shall be sealed and structurally supported.  <b>SB-2, 3.1.1.1.</b>            (9) A building envelope assembly that separates a conditioned space from an adjoining storage garage shall be treated as an assembly separating heated space from the exterior, even if the storage garage is intended to be heated.            (12) For a conditioned space, the exterior building envelope or envelope that separates conditioned space from unconditioned space shall conform to the applicable values specified in Articles 3.1.1.2. and 3.1.1.3.</p>
W1G		<p><b>INTERIOR WALL (IND. FRAMED):</b>            INT. FIN.,            1/2" (13mm) GYP. BD.,            2"x4" (38x99mm) KD. STUD @ 16" (406mm) O/C MAX.,            3-1/2" (91mm) SOUND ATTENUATION BATTS (OPTIONAL),            1/2" (13mm) GYP. BD.,            INT. FIN.</p>
W1H		<p><b>INTERIOR WALL (IND. FRAMED):</b>            INT. FIN.,            1/2" (13mm) GYP. BD.,            2"x6" (38x140mm) KD. STUD @ 16" (406mm) O/C MAX.,            5-1/2" (140mm) SOUND ATTENUATION BATTS (OPTIONAL),            1/2" (13mm) GYP. BD.,            INT. FIN.</p>

ROOF TYPE SCHEDULE		
TYPE	DESIGN:	DESCRIPTION:
R1		<p>LIMITED LIFETIME ASPHALT SHINGLES IV CONT. RIDGE VENTING,            CONT. BREATHABLE UNDERLAYMENT,            ICE &amp; WATER SHIELD @ ALL VALLEYS,            CONT. GALV. EAVE DRIP,            1/2" (13mm) FLYND. ROOF SHEATHING IV 'H' CLIPS,            ENG. D KD. TRUSS SYSTEM @ 24" (610mm) O/C MAX.,            BLOWN N INSUL. MIN. R-60,            CONT. 6 MIL. AIR/VAP. BARRIER,            1/2" (13mm) RESILIENT CHANNEL @ 16" (406mm) O/C MAX. (OPTIONAL),            1/2" (13mm) GYP. BD.,            INT. FIN.</p> <p>(CONTRACTOR TO CONFIRM OPTIONAL ITEMS. OPTIONAL ITEMS ARE NOT REQUIRED BY DESIGN FOR OBC COMPLIANCE)</p>
R2		<p>LIMITED LIFETIME ASPHALT SHINGLES IV CONT. RIDGE VENTING,            CONT. BREATHABLE ICE &amp; WATER SHIELD,            CONT. GALV. EAVE DRIP,            1/2" (13mm) FLYND. ROOF SHEATHING IV 'H' CLIPS,            ENG. D KD. TRUSS SYSTEM @ 24" (610mm) O/C MAX.,            1" (25mm) STRAPPING @ 16" (406mm) O/C MAX. AS REQ'D            (DEPENDING ON SOFFIT DIRECTION),            1/2" (13mm) PRE-FIN. PTD. ALUM. PERFORATED VENTED SOFFIT</p>

**TYPICAL NOTES:**  
**GENERAL NOTES / FRAMING:**  
 • COORD. IV FLOOR PLANS FOR PARTITION WYTHE DIMENSIONS - DIM'S ARE TO OUTSIDE OF WALL SYSTEMS TYP.  
 • COORD. IV OWNER FOR FINISHES  
 • ALL PARTITIONS / WALL TYPES SHALL EXTEND FROM TOP OF FLOOR TO UNDERSIDE OF FLOOR / ROOF SYSTEM ABOVE UNLS  
 • PROVIDE REIN.'S & LATERAL BRACINGS @ TOP OF ALL WALLS & AT TOP OF ALL WALLS IV LARGE OPENINGS IN THEM (MATH & HEIGHT)  
 STEEL & KD. WALLS TO BE FASTENED TO STRUCT.  
 • ALL OPENINGS IN INT. & EXT. WALL SYSTEMS TO HAVE RESPECTIVE WALL SYSTEM ABOVE THE OPENING O/W O (PROVIDE REIN.'G, BRACINGS, LINTELS & LATERAL BRACINGS WHERE REQ'D)  
**BLOCKING / BRACING / BRIDGINGS / LATERAL SUPPORT:**  
 • PROVIDE BLOCKING AS REQ'D FOR INSTALLATION OF WALL / ROOF / FLOOR MOUNTED ITEMS ALL CONFORMING TO OBC FORCES  
 • ENSURE BLOCKING IN WALLS ARE NOT STUD DEPTH (OR TOUCHING GYP. BD. ON ONE SIDE TO THE OTHER SIDE) FOR NOISE / VIBRATION TRANSFER TYP.  
 • BRACING & LATERAL SUPPORT TO BE INSTALLED IN ALL WALL SYSTEMS WHERE REQ'D & AS NOTED, OBC 9.23.10.2  
 • STRAPPING & BRIDGING TO BE INSTALLED IN ALL FLR. JOISTS WHERE REQ'D & AS NOTED, OBC 9.23.14  
**RESILIENT CHANNEL:**  
 • RESILIENT CHANNELING TO BE INSTALLED ON RM. / BOTTOM CEILING SIDE 1/2" OR IV IV STG RATING (UNLESS WALL TYPE CALLS FOR BOTH SIDES) (CONFIRM IV ARCHITECT)  
 BAILEY RC PLUS RESILIENT CHANNELING  
**IND. FRAMING:**  
 • EXT. & INT. WALL SILL PLATES IV D. FRAMING MEMBERS ARE P/T NO.1 OR NO.2 SPF MIN. TYP.  
 • EXT. & INT. KD. FRAMING MEMBERS ARE NO.1 OR NO.2 SPF MIN. TYP.  
**ACOUSTICAL**  
 • ACOUSTICAL CAULK & SOUND SEAL ALL WALLS FULL HEIGHT OF ASSEMBLY  
**GYP. BOARD / TILE BACKER BD.:**  
 • ALL GYP. BD. ASSEMBLIES TO BE 1/2" GYP. BD. UNLESS NOTED OTHERWISE  
 • THERE ARE TO BE NO HOLES / VOIDS IN ANY FINISHED / UNFINISHED WALL SYSTEMS INCLUDING AROUND ALL PENETRATIONS, ETC., FULL HEIGHT OF ASSEMBLY, ABOVE OR BELOW FINISHED CEILING  
 • TILE BACKER BD. WALL SUBSTRATE @ ALL TILE FINISH LOCATIONS UNLESS OTHERWISE INDICATED  
**MASONRY**  
 • ALL EXT. MASONRY LINTELS ARE TO BE H/D/G THEN PTD. FINISH COAT TYP.  
 • ALL INT. MASONRY LINTELS ARE TO BE PRIMED & PTD. FINISH COAT TYP.  
**BATT INSUL.**  
 • THERMAL BATT INSUL. & SOUND ATTENUATION:  
 TO BE INSTALLED IV MANUFACTURER RECOMMENDED FASTENERS & FASTENING PATTERNS. THICKNESS AS SHOWN ON WALL TYPES OR OTHERWISE INDICATED ON DWG'S.  
**THRU WALL FLASHING / AIR/VAP. BARRIER / AIR/VAP. BARRIER TRANSITION MEMBRANE**  
 • ALL TYP (THRU WALL FLASHING) & CMU DAMPROOFING COURSES TO BE HENRY BAKOR BLUESKIN TYP 5A (SELF-ADHERING)  
 • ALL AIR/VAP. BARRIER MEMBRANE & AIR/VAP. BARRIER TRANSITION MEMBRANE TO BE HENRY BAKOR BLUESKIN 5A (SELF-ADHERING)  
**AIR BARRIER**  
 • ALL AIR BARRIERS TO BE DUPONT TYVEK HOUSE WRAP  
**VAPOUR BARRIER**  
 • ALL VAP. BARRIERS ABOVE GRADE TO BE 6 MIL. POLY MN.  
 • ALL VAP. BARRIER TRANSITION PIECES TO BE 6 MIL. POLY MN.  
 • ALL VAP. BARRIERS / RETARDERS IN CONTACT IV THE GROUND OR UNDER SLABS TO BE 15 MIL. POLY MN.  
**SILL DAMP PROOFING**  
 • ALL KD. STUD INT. WALL DAMP PROOFING (1/3 SILL PLATES) TO INCLUDE A 6 MIL. VAP. BARRIER SEPARATION SHEET TYP. (COORD. IV WALL DETAILS)  
 • ALL KD. STUD EXT. WALL DAMP PROOFING (1/3 SILL PLATES) TO INCLUDE A COMPRESSIBLE SILL GASKET BASE & 6 MIL. VAP. BARRIER SEPARATION SHEET ABOVE TYP.  
**STRUCTURAL**  
**CONG. COMPRESSIVE STRENGTH, EXPOSURE CLASSIFICATION & REIN.**  
 • 28 DAY COMPRESSIVE STRENGTH TYP.  
 • EXPOSURE CLASSIFICATIONS:  
 • C-1 REINFORCED WALLS  
 • C-2 EXTERIOR SIDEWALKS & GARAGE / CARPORT SLABS  
 • F-2 FOUNDATIONS & FTG'S  
 • N INTERIOR FLOOR SLABS 20MPa, NO AIR  
 • REIN. SLABS IV 152x152- M18/10.7M18/10.7 FLAT SHEETS WHERE NOTED - COORD. IV FLR. TYPES  
 • COORD. IV CSA A23.1 - TABLE 2  
**CONG. COVER OF REIN. REBAR**  
 • 75mm (3") WHERE EXP'D TO WEATHER,  
 • 50mm (2") ALL OTHER CONDITIONS

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRCA SUBMISSION

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

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 ORIGINAL PAGE SIZE ARCH 'D' - 24" x 36"

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STAMP ARCH. STAMP STRUCT.  
 (NOT APPLICABLE)

Ontario Ministry of Municipal Affairs & Housing

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C, SECTION 3.2 OF THE O.B.C.

LESLEY HUTTON-RHODES  
 G. DOUGLAS VALLEE LTD. 3188 124289

PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**

7 DOUGLAS STREET,  
 PORT DOVER, ONTARIO,  
 NOA 1N7

DRAWING TITLE:  
**FDTN. / WALL / FLR. / ROOF TYPES & TYP. NOTES**

CHECKED BY: MS/BB	DRAWN BY: LHR
DRAWING SCALE:	DRAWING NO.:
1 : 20	<b>A003</b>
PROJECT NO.: 24-113	

**GRADE BEAM SCHEDULE**

MARK	DESCRIPTION
GB1	10" (450mm) WIDE x 48" (1200mm) DEEP GRADE BEAM C/W REBAR AS DETAILED (2 & 3/A200)
GB2	21" (525mm) WIDE x 48" (1200mm) DEEP GRADE BEAM C/W REBAR AS DETAILED (2 & 3/A200)
GB3	12" (300mm) WIDE x 32" (800mm) DEEP GRADE BEAM C/W REBAR AS DETAILED (2/A403)
GB4	48" (1200mm) WIDE x 32" (800mm) DEEP GRADE BEAM C/W REBAR AS DETAILED (1/A403)

**NOTES:**

- TYP. VERT. DOVELLS ARE 15M @ 150mm LEG @ 18" (450mm) LONG @ 24" (610mm) O/C MAX. U/V/O
- ALL GRADE BEAMS SHALL BE CENTERED UNDER CONC. FDN. WALLS & INT. LOADBEARING STUD WALLS. CONTRACTOR SHALL COORD. DIM'S ON PLANS & REPORT ANY DISCREPANCIES TO THE DESIGNER PRIOR TO CONST.
- WHERE REINFORCING OF THE FOUNDATION WALLS IS REQUIRED, ALL RE-BAR SHALL BE DOVELED INTO GRADE BEAMS MIN. 600mm (2') EMBEDMENT (2'-0" LAP LENGTH FOR TIE-IN DOVELLS)

**FILE SCHEDULE**

P1	M12x53 (M310x14) STEEL PILE (DRIVEN TO REFUSAL AT BEDROCK)
----	--

**FILE CAP SCHEDULE**

PC1	24" (610mm) x 24" (610mm) x 24" (610mm) HIGH IV 4-20M RE-BAR E/W TOP & BOTTOM
PC2	24" (610mm) x 56" (1400mm) x 24" (610mm) HIGH IV 20M RE-BAR @ 6" (150mm) O/C E/W TOP & BOTTOM

**CONCRETE STEM WALL REINFORCING SCHEDULE**

WALL TYPE	HORIZONTAL	VERTICAL
224mm (9") - 505mm (12") CONCRETE STEM WALL	15M @ 12" (300mm) O/C E/W	15M @ 12" (300mm) O/C (AT CENTER)

**NOTES:**

- APPLIES ONLY TO WALLS OR PORTIONS OF WALLS RETAINING EARTH ON ONE SIDE (WALLS THAT ARE BACKFILLED BOTH SIDES OR ABOVE GRADE ON BOTH SIDES NEED ONLY HAVE (2) 15M BARS TOP & BOTTOM)
- 15mm (3/8") COVER @ EXTERIOR CONDITIONS, 50mm (2") COVER @ INTERIOR CONDITIONS

**BEAM SCHEDULE - WOOD**

MARK	DESCRIPTION
WB1	3-PLY 2"x8" (38x194mm)
WB2	3-PLY 2"x10" (38x259mm)
WB3	2-PLY 2"x10" (38mm x 259mm) FLR. JST. RIM / HEADER / TRIMMER
WB4	3-PLY 1-3/4"x14" (44x356mm) 2x2E LVL
WB5	3-PLY 2"x8" (38x194mm) P/T

**NOTES:**

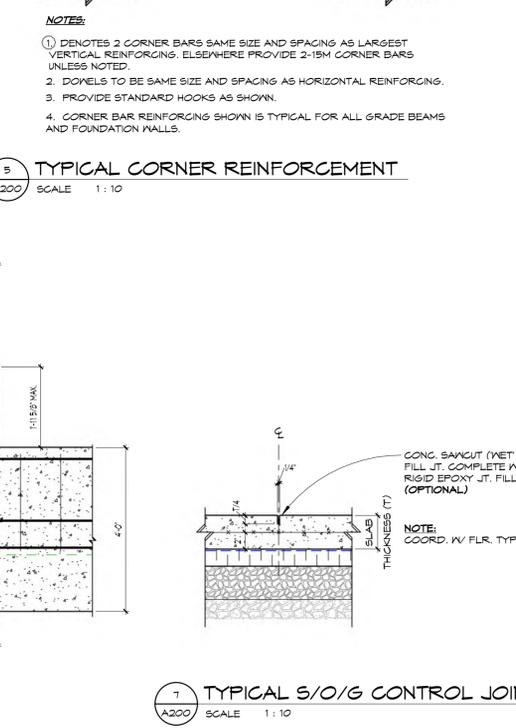
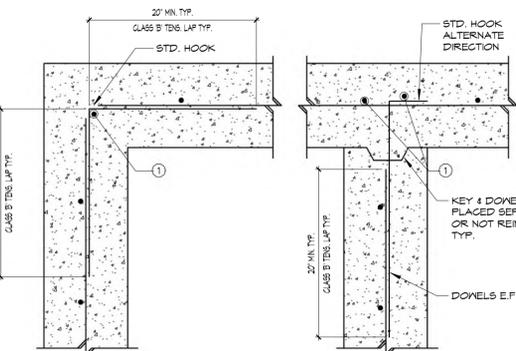
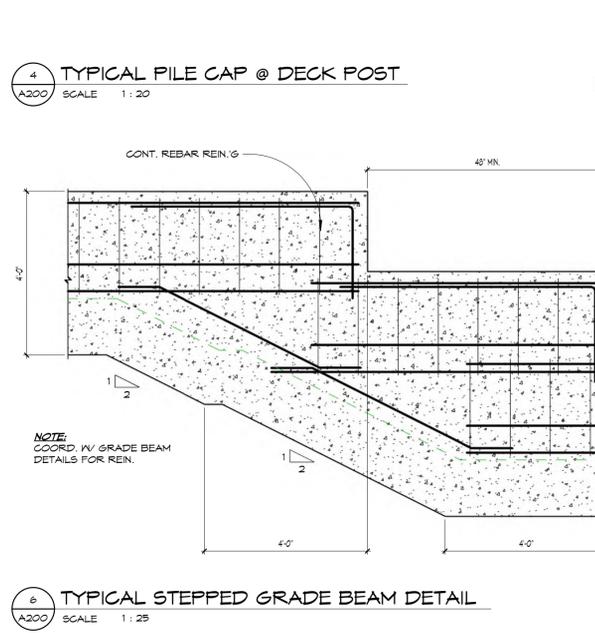
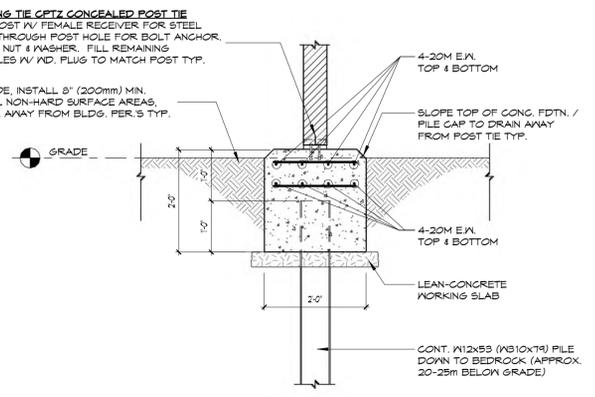
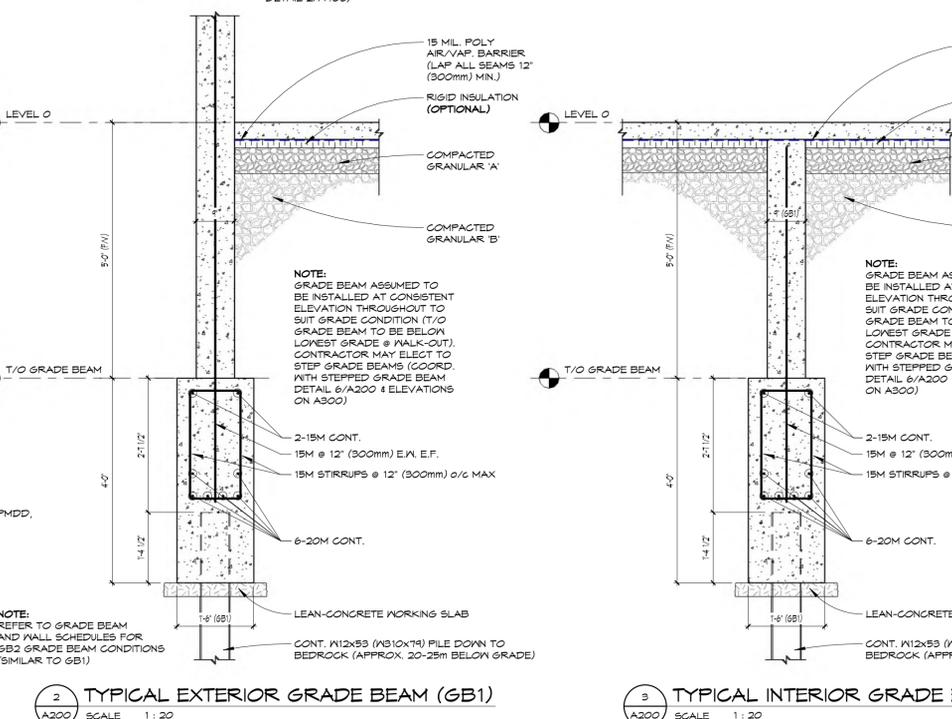
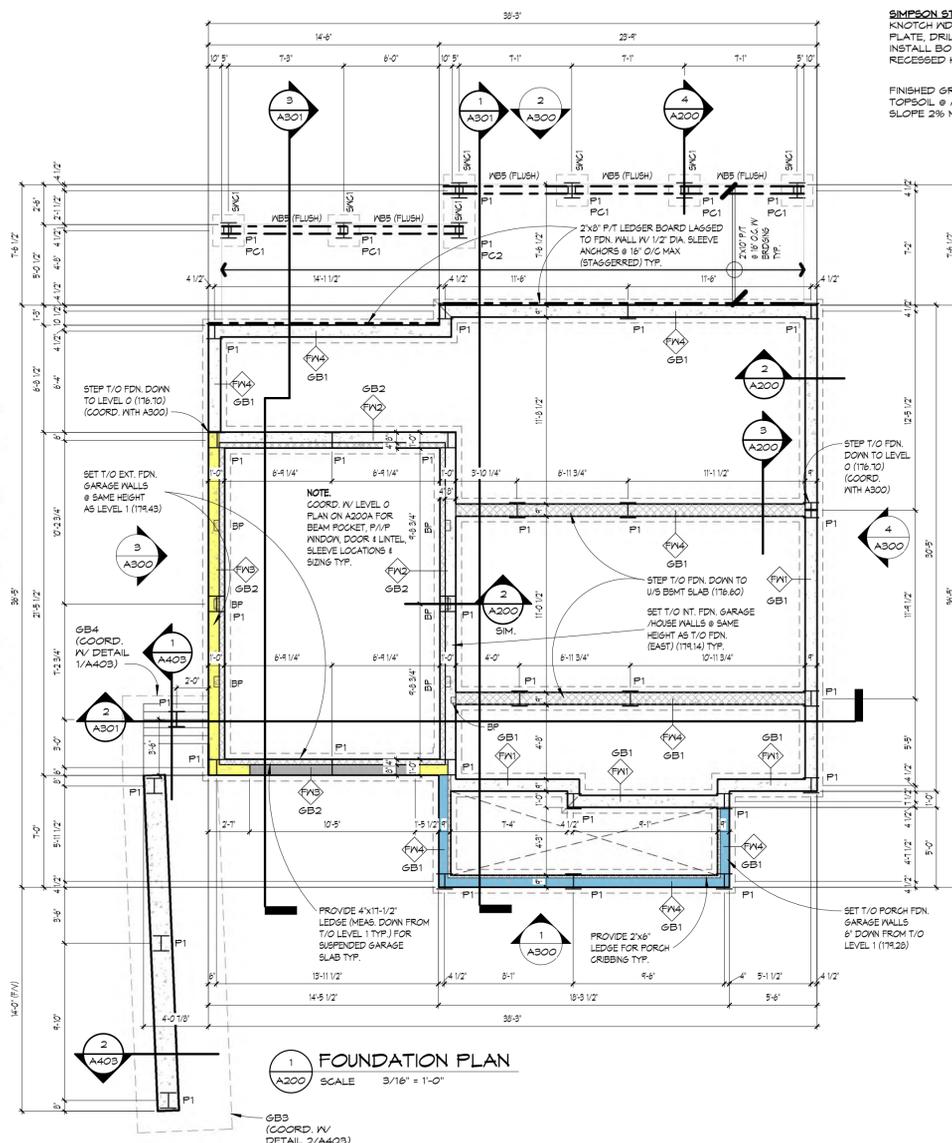
- WB = WOOD BEAM
- 3-PLY BEAMS REQUIRE MIN. BEARING LENGTH OF 114mm. ALL OTHER BEAMS REQUIRE MIN. BEARING LENGTH OF 90mm (3-1/2") UNLESS FASTENED TO EACH SIDE OF V.D. POST
- 2-PLY FLR. JST. HEADER / TRIMMER FRAMING MIN. AROUND ALL FLR. OPENINGS U/V/O
- ALL EXT. EXP. D BEAMS TO BE PRESSURE TREATED LUMBER (P/T)
- INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.

**FOOTING, FOUNDATION LEGEND**

GB#	GRADE BEAM TAG & IDENTIFICATION (COORD. IV GRADE BEAM SCH.)
PH	STEEL H-PILE TAG & IDENTIFICATION (COORD. IV PILE SCH.)
PC#	CONC. PILE CAP TAG & IDENTIFICATION (COORD. IV PILE CAP SCH.)
FYN#	FOUNDATION WALL TAG & IDENTIFICATION (COORD. IV FDN. SCH.)
RF	CONC. FDN. OPENING VOID LOCATION FOR FLR. SLAB TO BE POURED INTO
RV	RADON PIT CONNECTED TO FUTURE OPTION OF INLINE FAN WITH DRAIN LINES
VR	RADON VENT ROUGH-IN
EP	PERFORATED BIG O PIPE (RADON)
EP	SEWAGE EJECTOR PIT & PUMP (TO FORCE MAIN)

**GENERAL NOTES:**

- GRADE BEAM THICKNESS(ES) SHOWN ARE MIN. ALL SIDES OF FTG.'S ARE TO BE PROPERLY FORMED TO PREVENT OUTWARD FLOW OF CONC. BELOW FORMWORK
- ALL SLABS ON GRADE SHALL BE AS PER. FLR. TYPES ON GRANULAR 'A' 150mm THICK COMPACTED TO 100% SPHDD, GRANULAR 'B' BACKFILL AT ALL HARD SURFACES COMPACTED TO 100% SPHDD, ON UNDISTURBED NATIVE SOIL / ENG. D FILL
- INSTALL SAWCUT CONTROL JOINTS IN CONC. S/O/S @ 4500mm MAX. SPACINGS U/V/O. COORD. IV TYP. SAW CUT CONTROL JOINT DETAIL; SAW CUTS TO BE PROVIDED @ ALL DOOR OPENINGS
- INSTALL SLEEVES IN ALL WALLS FOR STORM & SANITARY LINES
- CORNER & INTERSECTION SPLICE BARS SHALL BE PROVIDED IN CONC. WALLS & GRADE BEAMS IN ACCORDANCE IV MANUAL OF STD. PRACTICE FOR REIN. STEEL. DETAILS TO BE SUBMITTED IV SHOP DNG.'S
- ALL PILES SHALL BEAR ON BEDROCK @ AN ASSUMED ELEV. OF 65' +/- 5' BELOW GRADE LEVEL. (COORD. WITH GEOTECHNICAL ASSESSMENT PREPARED BY PML DATED OCTOBER 24, 2025)
- DEEP FDN. DESIGN IS SUBJECT TO CHANGE ON ENGINEERING REVIEW AND CONFIRMATION OF SITE CONDITIONS



2 TYPICAL EXTERIOR GRADE BEAM (GB1) SCALE 1:20

3 TYPICAL INTERIOR GRADE BEAM (GB1) SCALE 1:20

4 TYPICAL FILE CAP @ DECK POST SCALE 1:20

5 TYPICAL CORNER REINFORCEMENT SCALE 1:10

6 TYPICAL STEPPED GRADE BEAM DETAIL SCALE 1:25

7 TYPICAL S/O/S CONTROL JOINT SCALE 1:10

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B.D. RICHMOND  
24-113

Ontario Ministry of Municipal Affairs & Housing  
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PROJECT TITLE:  
BROOKSHAW SINGLE DETACHED  
7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

DRAWING TITLE:  
FOUNDATION WALL & FLOOR TYPES & DIMENSIONS  
CHECKED BY: MS/BB  
DRAWING SCALE: As indicated  
PROJECT NO.: 24-113  
DRAWN BY: LHR  
DRAWING NO.: A200

NO. DATE ISSUANCE  
1 2025.12.24 ISSUED FOR LPRCA SUBMISSION  
NO. DATE ISSUANCE

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ORIGINAL PAGE SIZE ARCH 'D' - 24" x 36"

**LEVEL FLR. FRAMING & LINTEL LEGEND**

BP	BEAM POCKET
---	STRUCT. LINTEL (L)
---	STRUCT. BEAM
---	FLR. STRUCTURE SPAN INDICATOR

[Pattern]	LOAD BEARING WOOD-FRAMED WALLS
[Pattern]	RAISED T/O FOUNDATION (179.43)
[Pattern]	RAISED T/O FOUNDATION (179.28)
[Pattern]	DROPPED FOUNDATION/POCKET (COORD. IV PLAN)

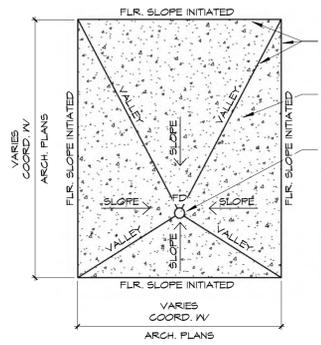
**LEVEL FRAMING & LINTEL NOTES:**

- ALL DIM'S ARE OUTSIDE OF WALL SYSTEMS U/V/O
- GENERAL CONTRACTOR TO COORD. MECH. / ELEC. OPENINGS SO NO OPENING IS LOCATED DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS
- PRE-ENGINEERED FLR. TRUSSES/LINTELS, BEAMS & GIRDERS TO BE DESIGNED / ENG. D / CONFIRMED BY THE TRUSSES/LINTELS MANUFACTURER & SUBMITTED IN SHOP DNG.'S TO THE ARCHITECT & STRUCT. ENG. FOR REVIEW
- TRUSSES/LINTELS SHOP DRAWINGS MUST BE SEALED BY P.ENG (PEO) AND SUBMITTED TO ARCHITECT & STRUCT. ENG. FOR REVIEW OF ANY POINT LOADS / LOADING ON STRUCT. PRIOR TO CONSTRUCTION
- COORD. WITH STRUCTURAL GENERAL NOTES ON 5000

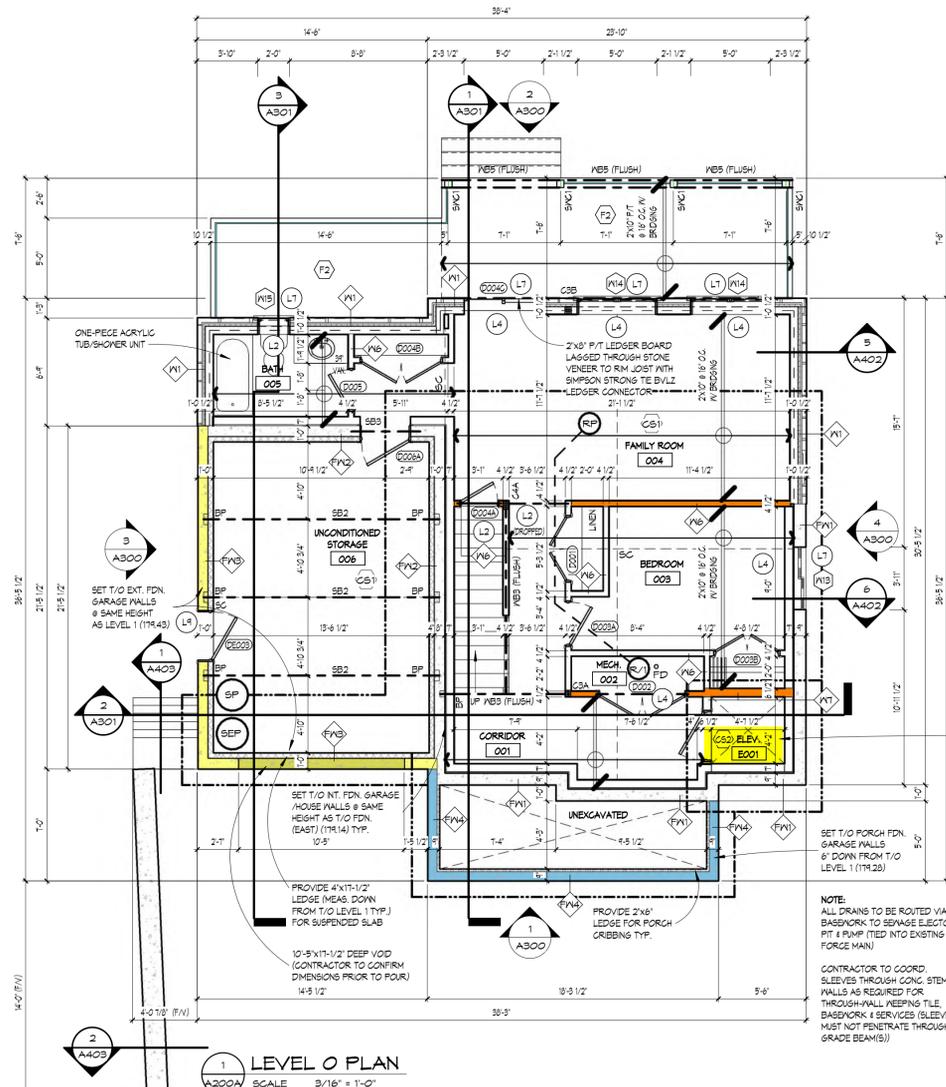


**LEVEL PLAN LEGEND**

- ROOM TAG # IDENTIFICATION (COORD. IN RM. FIN. SCH.)
- DOOR TAG # IDENTIFICATION (COORD. IN SCH.)
- WALL TAG # IDENTIFICATION
- WINDOW TAG # IDENTIFICATION
- FLOOR TAG # IDENTIFICATION
- HYDRO METER (OWNER TO CONFIRM ABOVE / BELOW GRADE)
- RAIN WATER LEADER
- HOSE BIB
- FLR. DRAIN / FUNNEL FLR. DRAIN
- SLOPE FLR. 2% TO DRAIN, SEAL DRAIN TO FLR. SYSTEM
- WATER METER
- KITCHEN LAVATORY
- LAVATORY (IN VANITY)
- BIDET / WATER CLOSET / URINAL
- WATER SOFTENER (OPTIONAL)
- HOT WATER HEATER
- GAS METER (4 ENCLOSURE WHERE APPLICABLE)



**2 FLR. DRAIN SLOPE (TYP.)**  
SCALE 1:25

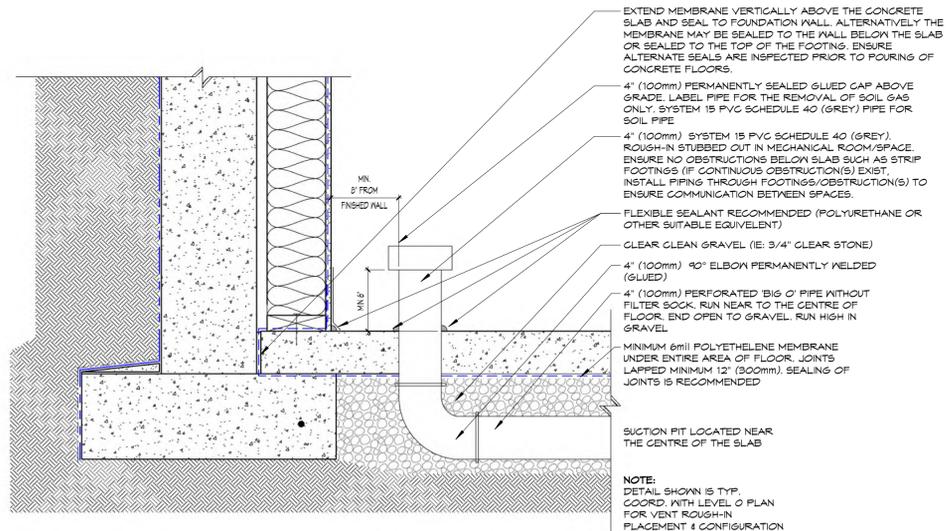


**1 LEVEL 0 PLAN**  
SCALE 3/16" = 1'-0"

**FOOTING, FOUNDATION LEGEND**

- GB# GRADE BEAM TAG # IDENTIFICATION (COORD. IN GRADE BEAM SCH.)
- PH STEEL H-PILE TAG # IDENTIFICATION (COORD. IN PILE SCH.)
- PC# CONC. PILE CAP TAG # IDENTIFICATION (COORD. IN PILE CAP SCH.)
- FNM FOUNDATION WALL TAG # IDENTIFICATION (COORD. IN FDN. SCH.)
- CONC. FDN. OPENING VOID LOCATION FOR FLR. SLAB TO BE POURED INTO
- RADON PIT CONNECTED TO FUTURE OPTION OF INLINE FAN WITH DRAIN LINES
- RADON VENT ROUGH-IN
- PERFORATED BIG O PIPE (RADON)
- SEWAGE EJECTOR PIT 4 PUMP (TO FORCE MAIN)

- GENERAL NOTES:**
- GRADE BEAM THICKNESS(ES) SHOWN ARE MIN. ALL SIDES OF FTG.'S ARE TO BE PROPERLY FORMED TO PREVENT OUTSIDE FLOW OF CONC. BELOW FORMWORK.
  - ALL SLABS ON GRADE SHALL BE AS PER FLR. TYPES ON GRANULAR 'A' 150mm THICK COMPACTED TO 100% SPMPD, GRANULAR 'B' BACKFILL AT ALL HARD SURFACES COMPACTED TO 100% SPMPD, ON UNDISTURBED NATIVE SOIL / ENG.'D FILL.
  - INSTALL SAWCUT CONTROL JOINTS IN CONC. 5.0/5 @ 4500mm MAX. SPACING U/V/O. COORD. IN TYP. SAW CUT CONTROL JOINT DETAIL; SAW CUTS TO BE PROVIDED @ ALL DOOR OPENINGS.
  - INSTALL SLEEVES IN ALL WALLS FOR STORM & SANITARY LINES.
  - CORNER & INTERSECTION SPLICE BARS SHALL BE PROVIDED IN CONC. WALLS & GRADE BEAMS IN ACCORDANCE W/ MANUAL OF STD. PRACTICE FOR REIN. STEEL. DETAILS TO BE SUBMITTED W/ SHOP DNG.'S.
  - ALL PILES SHALL BEAR ON BEDROCK @ AN ASSUMED ELEV. OF 65' +/- 5' BELOW GROUND LEVEL. (COORD. WITH GEOTECHNICAL ASSESSMENT PREPARED BY PML DATED OCTOBER 24, 2025)
  - DEEP FDN. DESIGN IS SUBJECT TO CHANGE ON ENGINEERING REVIEW AND CONFIRMATION OF SITE CONDITIONS.



**3 RESIDENTIAL RADON SOIL GAS ROUGH-IN (TYP.)**  
SCALE 1/2" = 1'-0"

**BEAM SCHEDULE - WOOD**

MARK	DESCRIPTION
WB1	3-PLY 2'x8" (38x184mm)
WB2	3-PLY 2'x10" (38x255mm)
WB3	2-PLY 2'x10" (38mm x 255mm) FLR. JST. RM. / HEADERS / TRIMMER
WB4	3-PLY 1-3/4"x14" (44x356mm) 2.OE LVL
WB5	3-PLY 2'x8" (38x184mm) P/T

- NOTES:**
- WB - WOOD BEAM
  - 3-PLY BEAMS REQUIRE MIN. BEARING LENGTH OF 114mm. ALL OTHER BEAMS REQUIRE MIN. BEARING LENGTH OF 90mm (3-1/2") UNLESS FASTENED TO EACH SIDE OF MD. POST AROUND ALL FLR. OPENINGS U/V/O.
  - 2-PLY FLR. JST. HEADER / TRIMMER FRAMING MIN. AROUND ALL FLR. OPENINGS U/V/O.
  - ALL EXT. EXP'D BEAMS TO BE PRESSURE TREATED LUMBER (P/T)
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.

**BEAM SCHEDULE - STEEL**

MARK	DESCRIPTION
SB1	WBx18 (W200x21)
SB2	W10x22 (W250x33) H.D.S.
SB3	WBx16 (W150x24) H.D.S.

- NOTES:**
- SB - STEEL BEAM
  - ALL BEAMS TO HAVE MINIMUM 3-1/2" (90mm) BEARING AT EACH END
  - ALL BEAMS BEARING ON CONC. TO HAVE BEAM BRACKET (BP) FORMED IN FDTN. WHERE NOTED
  - INSTALL 1-1/2" (38mm) THICK MD. NAILER CARRIAGE BOLTED TO TOP FLANGE OF STEEL BEAMS FULL LENGTH FOR SUPPORT OF WOOD FRAMED FLOORS

**COLUMN / POST SCHEDULE - WOOD**

MARK	DESCRIPTION
C1A	1-PLY 2'x4" (38x89mm)
C2A	2-PLY 2'x4" (38x89mm)
C3A	3-PLY 2'x4" (38x89mm)
C4A	4-PLY 2'x4" (38x89mm)
C5A	5-PLY 2'x4" (38x89mm)
C1B	1-PLY 2'x6" (38x140mm)
C2B	2-PLY 2'x6" (38x140mm)
C3B	3-PLY 2'x6" (38x140mm)
C4B	4-PLY 2'x6" (38x140mm)
C5B	5-PLY 2'x6" (38x140mm)
SWC1	6'x6" (140x140mm) P/T

- NOTES:**
- CB - BUILT UP COLUMN
  - SWC - SOLID WOOD COLUMN
  - WHERE COLUMNS ARE NOT LOCATED IN A LOADBEARING WALL THEY SHALL BE CENTERED ON PAD FTG.'S BELOW
  - ALL EXT. EXP'D COLUMNS TO BE PRESSURE TREATED LUMBER (P/T)
  - ALL EXT. COLUMNS TO BE ANCHORED TO FDTN. SYSTEM, WALL BELOW OR CONC. ENT. SLAB TYP.
  - VERIFY ANY GIRDER TRUSS PLY W/ TRUSS MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF GIRDER PLYS
  - VERIFY ANY FLR. / ROOF FRAMING POINT LOADS W/ FLR. / ROOF MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF FRAMING PLYS
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.
  - ALL BUILT UP COLUMNS TO BE TRANSFERRED TO FDTN. SYSTEMS. INSTALL BUILT UP COLUMNS IN WALL / FLR. SYSTEM(S) SO LOADS ARE TRANSFERRED TO FDTN. SYSTEM BELOW WHETHER SHOWN OR NOT TYP.

**LINTEL SCHEDULE**

MARK	DESCRIPTION	DETAIL	WALL TYPE
L1	2-PLY 2'x4" (38mm x 89mm) MD. STUD	[Detail]	4" x 6" (89mm x 140mm) MD. STUD
L2	2-PLY 2'x6" (38mm x 140mm) MD. STUD	[Detail]	4" x 6" (89mm x 140mm) MD. STUD
L3	2-PLY 2'x8" (38mm x 184mm) MD. STUD	[Detail]	6" (140mm) MD. STUD
L4	2-PLY 2'x10" (38mm x 255mm) MD. STUD	[Detail]	6" (140mm) MD. STUD
L5	2-PLY 2'x12" (38mm x 285mm) MD. STUD	[Detail]	6" (140mm) MD. STUD
L6	2-PLY 1-3/4"x11-7/8" (44mm x 302mm) LVL 2.OE	[Detail]	6" (140mm) MD. STUD
L7	1L-8x8x8x6.4 (LLV)(HDS) 8'-1" (2410mm) MAX. SPAN	[Detail]	3-1/2" (90mm) BRICK
L8	1L-12x8x8x7.9 (LLV)(HDS) 10'-10" (3300mm) MAX. SPAN	[Detail]	3-1/2" (90mm) BRICK
L9	9" (229mm) x 24" (610mm) DEEP CONCRETE LINTEL REINFORCED W/ 2-15M REBAR @ BOTTOM	[Detail]	9" CONCRETE

- NOTES:**
- STRUCT. LINTEL (L#)
  - 2-PLY MD. LINTELS W/ SPANS LESS THAN 3m (9'-10") REQ. 38mm (1.5") MIN. BEARING LENGTH @ EACH END. SPANS GREATER THAN 3m (9'-10") REQ. 76mm (3") MIN. BEARING LENGTH. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D.
  - 3-PLY MD. LINTELS / BEAMS W/ SUPPORTED LENGTHS GREATER THAN 4.2m REQ. MIN. BEARING LENGTH OF 114mm (4.5"). ALL OTHER BEAMS REQ. MIN. BEARING LENGTH OF 76mm (3"). INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D.
  - 4 & 5-PLY MD. LINTELS / BEAMS W/ SUPPORTED LENGTHS GREATER THAN 3m REQ. BEARING LENGTH OF 114mm (4.5") MIN. ALL OTHER BEAMS REQ. BEARING LENGTH OF 76mm (3") MIN. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D.
  - WHERE NOTED, LINTELS MUST BEAR UPON ENTIRE WIDTH OF BUILT UP COLUMNS INDICATED W/ ADDITIONAL TRIMMER STUD FASTENED TO COLUMN AS PER TYP. ROUGH OPENING FRAMING.
  - ALL EXT. METAL LINTELS TO BE HOT DIPPED GALVANIZED (H/D/G) W/ PTD. FIN. TOP COAT ALT. - ALL EXT. METAL LINTELS TO BE PRIMERED & PTD.
  - ALL EXT. MASONRY VENEER LINTELS ARE TO HAVE EVEN # LEVEL BEARING & SHALL HAVE NOT LESS THAN 150mm (6") MIN. LENGTH OF BEARING @ END SUPPORTS & BEAR ON MASONRY, CONC. OR STEEL U/V/O.
  - ALL LINTELS THAT REQ. SPACERS ARE TO BE SPACED THE SAME AS THE WALL TYPE THEY ARE LOCATED IN. SPACERS ARE TO BE INSTALLED BETWEEN THE PLYS

**SOG / SAWCUT LEGEND**

- S/O/S SAW CUT LINES (5C) (4.5m (14'-6") O/C MAX.)
- NOTES:**
- INSTALL SAWCUT CONTROL JOINTS IN CONC. 5.0/5 @ 4500mm MAX. SPACING U/V/O. COORD. IN TYP. SAW CUT CONTROL JOINT DETAIL; SAW CUTS TO BE PROVIDED @ ALL DOOR OPENINGS

**KEEPING TILE LEGEND**

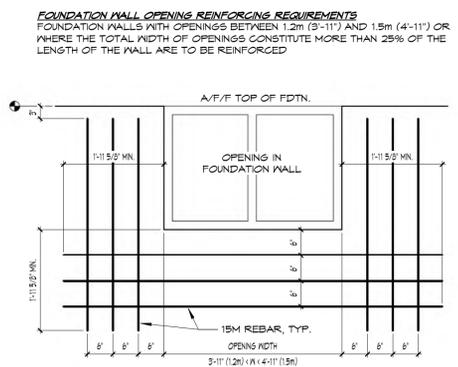
- BP BELOW GRADE PERFORATED KEEPINGS TILE SYSTEM C/W FILTER FABRIC IN FREE DRAINING GRANULAR FILL CONNECTED TO SUMP PIT W/ PUMP & DRAIN LINES (PROVIDE LOOP AROUND ELEVATOR PIT)
- RISER VERT. SOLID KEEPINGS TILE RISER FROM WINDOW WELL, TIE INTO KEEPINGS TILE @ FTG.'S
- BELOW GRADE SOLID KEEPING TILE
- BELOW GRADE PERFORATED KEEPING TILE

**LEVEL FLR. FRAMING & LINTEL LEGEND**

- BP BEAM POCKET
- STRUCT. LINTEL (L#)
- STRUCT. BEAM
- FLR. STRUCTURE SPAN INDICATOR

- HATCH LEGEND**
- LOAD BEARING WOOD-FRAMED WALLS
  - RAISED T/O FOUNDATION (179.43)
  - RAISED T/O FOUNDATION (178.28)
  - DROPPED FOUNDATION/POCKET (COORD. IN PLAN)

- LEVEL FRAMING & LINTEL NOTES:**
- ALL DIM.'S ARE OUTSIDE OF WALL SYSTEMS U/V/O
  - GENERAL CONTRACTOR TO COORD. MECH. / ELEC. OPENINGS SO NO OPENING IS LOCATED DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS
  - PRE-ENGINEERED FLR. TRUSSES/LINTELS, BEAMS & GIRDERS TO BE DESIGNED / ENG'D / CONFIRMED BY THE TRUSSES/LINTELS MANUFACTURER & SUBMITTED IN SHOP DNG.'S TO THE ARCHITECT & STRUCT. ENG. FOR REVIEW
  - TRUSSES/LINTELS SHOP DRAWINGS MUST BE SEALED BY P.ENG (PEO) AND SUBMITTED TO ARCHITECT & STRUCT. ENG. FOR REVIEW OF ANY POINT LOADS / LOADING ON STRUCT. PRIOR TO CONSTRUCTION
  - COORD. WITH STRUCTURAL GENERAL NOTES ON 5000



**4 CONC. WALL / FDTN. REIN. - OPENINGS**  
SCALE 1:20

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRGA SUBMISSION

**PRELIMINARY NOT FOR CONSTRUCTION**

DO NOT SCALE DRAWINGS. CALL FOR ANY CLARIFICATIONS THAT ARE REQUIRED. FIELD VERIFY AT ALL BUILT CONDITIONS. ALL DWG.'S ARE TO BE READ IN COLOUR. ORIGINAL PAGE SIZE ARCH 'D' - 24" x 36"

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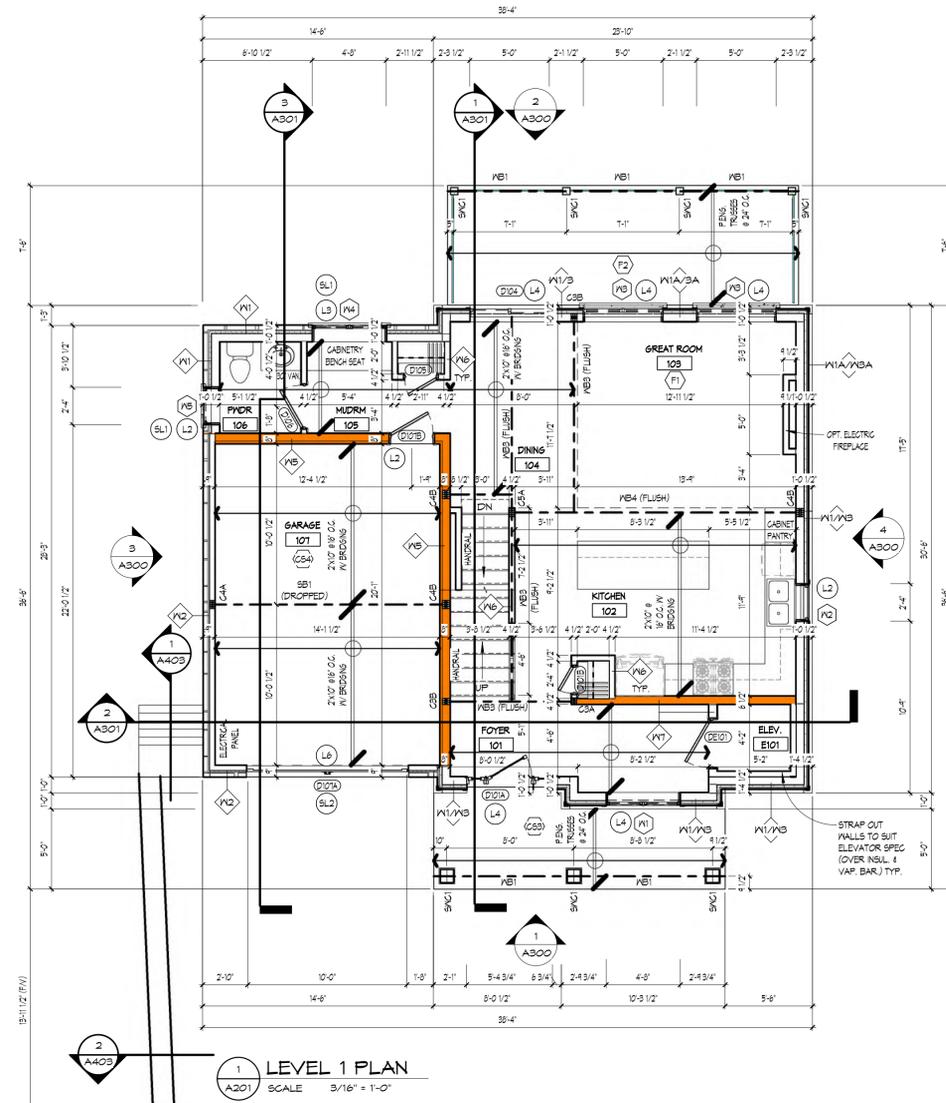
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(NOT APPLICABLE)

Ontario Ministry of Municipal Affairs & Housing  
THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.  
REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C, SECTION 3.2 OF THE O.B.C.  
Lesley Hutton-Rhoads  
PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7  
DRAWING TITLE:  
**LEVEL 0 WALL & FLOOR TYPES & DIMENSIONS**  
CHECKED BY: MS/BB  
DRAWING SCALE: As indicated  
PROJECT NO.: 24-113  
DRAWN BY: LHR  
DRAWING NO.: A200A

FILE PATH: H:\Projects\2024\24-113 Brookshaw Single Detached\Drawings\Arch\24-113 Brookshaw Single Detached.dwg 7 Douglas Street Detached\Drawings\Arch\24-113 Brookshaw Single Detached.dwg - Detailed Design NEW.rvt  
PROJECT NUMBER & NAME: 24-113 BROOKSHAW SINGLE DETACHED  
DATE PLOTTED: 12/20/2025 9:57:57 PM  
Agenda Page 25

**LEVEL PLAN LEGEND**

- ROOM TAG # IDENTIFICATION (COORD. IN RM. FIN. SCH.)
- DOOR TAG # IDENTIFICATION (COORD. IN SCH. S)
- WALL TAG # IDENTIFICATION
- WINDOW TAG # IDENTIFICATION
- FLOOR TAG # IDENTIFICATION
- HYDRO METER (OWNER TO CONFIRM ABOVE / BELOW GRADE)
- RAIN WATER LEADER
- HOSE BIB
- FLR. DRAIN / FUNNEL FLR. DRAIN
- SLOPE FLR. 2% TO DRAIN, SEAL DRAIN TO FLR. SYSTEM
- WATER METER
- KITCHEN LAVATORY
- LAVATORY (IN VANITY)
- BIDET / WATER CLOSET / URINAL
- WATER SOFTENER (OPTIONAL)
- HOT WATER HEATER
- GAS METER (4 ENCLOSURE WHERE APPLICABLE)



1 LEVEL 1 PLAN  
SCALE 3/16" = 1'-0"

**BEAM SCHEDULE - WOOD**

MARK	DESCRIPTION
KB1	3-PLY 2"x8" (38x184mm)
KB2	3-PLY 2"x10" (38x255mm)
KB3	2-PLY 2"x10" (38mm x 255mm) FLR. JST. RIM / HEADER / TRIMMER
KB4	3-PLY 1-3/4"x14" (44x356mm) 2.OE LVL
KB5	3-PLY 2"x8" (38x184mm) P/T

- NOTES:**
- KB - WOOD BEAM
  - 3-PLY BEAMS REQUIRE MIN. BEARING LENGTH OF 114mm. ALL OTHER BEAMS REQUIRE MIN. BEARING LENGTH OF 90mm (3-1/2") UNLESS FASTENED TO EACH SIDE OF KD. POST
  - 2-PLY FLR. JST. HEADER / TRIMMER FRAMING MIN. AROUND ALL FLR. OPENINGS U/N/O.
  - ALL EXT. EXP'D BEAMS TO BE PRESSURE TREATED LUMBER (P/T)
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.

**BEAM SCHEDULE - STEEL**

MARK	DESCRIPTION
SB1	WBx18 (W200x21)
SB2	W10x22 (W250x33) H.D.G.
SB3	WBx16 (W150x24) H.D.G.

- NOTES:**
- SB - STEEL BEAM
  - ALL BEAMS TO HAVE MINIMUM 3-1/2" (90mm) BEARING AT EACH END
  - ALL BEAMS BEARING ON CONC. TO HAVE BEAM BROCKET (BP) FORMED IN FDTN. WHERE NOTED
  - INSTALL 1-1/2" (38mm) THICK KD. NAILER CARRIAGE BOLTED TO TOP FLANGE OF STEEL BEAMS FULL LENGTH FOR SUPPORT OF WOOD FRAMED FLOORS

**COLUMN / POST SCHEDULE - WOOD**

MARK	DESCRIPTION
C1A	1-PLY 2"x4" (38x89mm)
C2A	2-PLY 2"x4" (38x89mm)
C3A	3-PLY 2"x4" (38x89mm)
C4A	4-PLY 2"x4" (38x89mm)
C5A	5-PLY 2"x4" (38x89mm)
C1B	1-PLY 2"x6" (38x140mm)
C2B	2-PLY 2"x6" (38x140mm)
C3B	3-PLY 2"x6" (38x140mm)
C4B	4-PLY 2"x6" (38x140mm)
C5B	5-PLY 2"x6" (38x140mm)
SN1	6"x6" (140x140mm) P/T

- NOTES:**
- CP - BUILT UP COLUMN
  - SN1 - SOLID WOOD COLUMN
  - WHERE COLUMNS ARE NOT LOCATED IN A LOADBEARING WALL THEY SHALL BE CENTERED ON PAD FTG. S BELOW
  - ALL EXT. EXP'D COLUMNS TO BE PRESSURE TREATED LUMBER (P/T)
  - ALL EXT. COLUMNS TO BE ANCHORED TO FDTN. SYSTEM, WALL BELOW OR CONC. ENT. SLAB TYP.
  - VERIFY ANY GIRDER TRUSS PLY IV TRUSS MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF GIRDER PLYS
  - VERIFY ANY FLR. / ROOF FRAMING POINT LOADS IV FLR. / ROOF MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF FRAMING PLYS
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.
  - ALL BUILT UP COLUMNS TO BE TRANSFERRED TO FDTN. SYSTEMS. INSTALL BUILT UP COLUMNS IN WALL / FLR. SYSTEM(S) SO LOADS ARE TRANSFERRED TO FDTN. SYSTEM BELOW WHETHER SHOWN OR NOT TYP.

**LINTEL SCHEDULE**

MARK	DESCRIPTION	DETAIL	WALL TYPE
L1	2-PLY 2"x4" (38mm x 89mm) KD. STUD		4" x 6" (89mm x 140mm) KD. STUD
L2	2-PLY 2"x6" (38mm x 140mm) KD. STUD		4" x 6" (89mm x 140mm) KD. STUD
L3	2-PLY 2"x8" (38mm x 184mm) KD. STUD		6" (140mm) KD. STUD
L4	2-PLY 2"x10" (38mm x 255mm) KD. STUD		6" (140mm) KD. STUD
L5	2-PLY 2"x12" (38mm x 285mm) KD. STUD		6" (140mm) KD. STUD
L6	2-PLY 1-3/4"x11-7/8" (44mm x 302mm) LVL 2.OE		6" (140mm) KD. STUD
L7	1L-8x8x8x6.4 (LLV/HDS) 8'-1" (2410mm) MAX. SPAN		3-1/2" (90mm) BRICK
L8	1L-12x8x8x1.9 (LLV/HDS) 10'-10" (3310mm) MAX. SPAN		3-1/2" (90mm) BRICK
L9	9" (229mm) x 24" (610mm) DEEP CONCRETE LINTEL REINFORCED IV 2-15M REBAR @ BOTTOM		9" CONCRETE

- NOTES:**
- STRUCT. LINTEL (L1)
  - 2-PLY KD. LINTELS IV SPANS LESS THAN 3m (9'-10") REQ. 38mm (1.5") MIN. BEARING LENGTH @ EACH END. SPANS GREATER THAN 3m (9'-10") REQ. 76mm (3") MIN. BEARING LENGTH. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - 3-PLY KD. LINTELS / BEAMS IV SUPPORTED LENGTHS GREATER THAN 4.2m REQ. MIN. BEARING LENGTH OF 114mm (4.5"). ALL OTHER BEAMS REQ. MIN. BEARING LENGTH OF 76mm (3"). INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - 4 & 5-PLY KD. LINTELS / BEAMS IV SUPPORTED LENGTHS GREATER THAN 3m REQ. BEARING LENGTH OF 114mm (4.5") MIN. ALL OTHER BEAMS REQ. BEARING LENGTH OF 76mm (3") MIN. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - WHERE NOTED, LINTELS MUST BEAR UPON ENTIRE WIDTH OF BUILT-UP COLUMNS INDICATED IV ADDITIONAL TRIMMER STUD FASTENED TO COLUMN AS PER TYP. ROUGH OPENING FRAMING
  - ALL EXT. METAL LINTELS TO BE HOT DIPPED GALVANIZED (H/D/G) IV PTD. FIN. TOP COAT ALT. - ALL EXT. METAL LINTELS TO BE PRIMERED & PTD.
  - ALL EXT. MASONRY VENEER LINTELS ARE TO HAVE EVEN # LEVEL BEARING & SHALL HAVE NOT LESS THAN 150mm (6") MIN. LENGTH OF BEARING @ END SUPPORTS & BEAR ON MASONRY, CONC. OR STEEL U/N/O
  - ALL LINTELS THAT REQ. SPACERS ARE TO BE SPACED THE SAME AS THE WALL TYPE THEY ARE LOCATED IN. SPACERS ARE TO BE INSTALLED BETWEEN THE PLYS

**LEVEL FLR. FRAMING & LINTEL LEGEND**

- BP BEAM BROCKET
  - STRUCT. LINTEL (L)
  - STRUCT. BEAM
  - FLR. STRUCTURE SPAN INDICATOR
- HATCH LEGEND**
- LOAD BEARING WOOD-FRAMED WALLS
  - RAISED T/O FOUNDATION (179.43)
  - RAISED T/O FOUNDATION (179.28)
  - DROPPED FOUNDATION/POCKET (COORD. IV PLAN)

**LEVEL FRAMING & LINTEL NOTES:**

- ALL DIM.'S ARE OUTSIDE OF WALL SYSTEMS U/N/O
- GENERAL CONTRACTOR TO COORD. MECH. / ELEC. OPENINGS SO NO OPENING IS LOCATED DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS
- PRE-ENGINEERED FLR. TRUSSES, LISTS LINTELS, BEAMS & GIRDERS TO BE DESIGNED / ENG'D / CONFIRMED BY THE TRUSSES, LISTS MANUFACTURER & SUBMITTED IN SHOP DWS. S TO THE ARCHITECT & STRUCT. ENG. FOR REVIEW
- TRUSSES, LISTS SHOP DRAWINGS MUST BE SEALED BY P.ENG. (PEO) AND SUBMITTED TO ARCHITECT & STRUCT. ENG. FOR REVIEW OF ANY POINT LOADS / LOADING ON STRUCT. PRIOR TO CONSTRUCTION
- COORD. WITH STRUCTURAL GENERAL NOTES ON 5000

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRCA SUBMISSION

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

DO NOT SCALE DRAWINGS. CALL FOR ANY CLARIFICATIONS THAT ARE REQUIRED. FIELD VERIFY AT ALL BUILT CONDITIONS  
ALL DWG.'S ARE TO BE READ IN COLOUR  
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Ontario Ministry of Municipal Affairs & Housing

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C SECTION 3.2 OF THE O.B.C.

Lesley Hutton-Rhoads  
LESLEY HUTTON / G. DOUGLAS VALLEE LTD.

PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

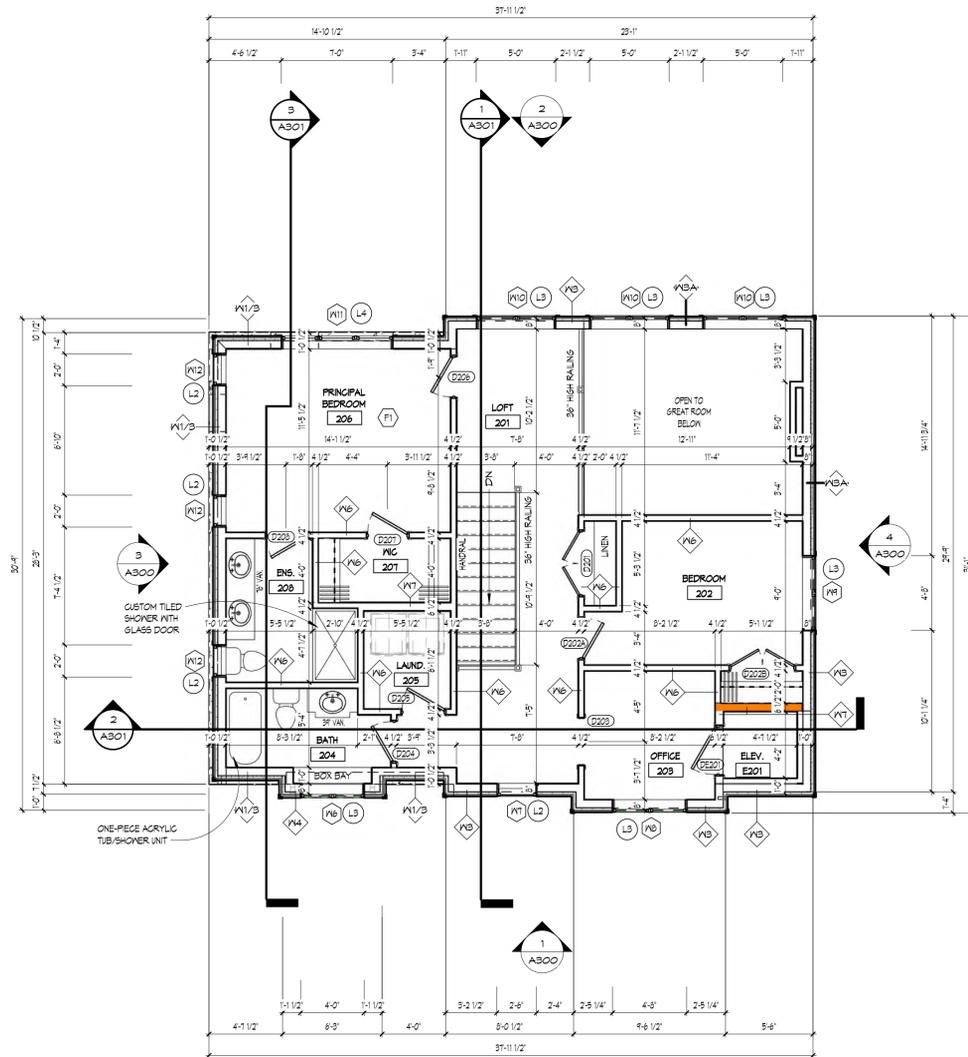
DRAWING TITLE:  
**LEVEL 1 WALL & FLOOR TYPES & DIMENSIONS**

CHECKED BY: MS/BB  
DRAWING SCALE: As indicated  
PROJECT NO.: 24-113

DRAWN BY: LHR  
DRAWING NO.: A201

**LEVEL PLAN LEGEND**

- ROOM NAME ROOM TAG, NUMBERING & IDENTIFICATION (COORD. W/ RM. FIN. SCH.)
- DOOR TAG & IDENTIFICATION (COORD. W/ SCH. S)
- WALL TAG & IDENTIFICATION
- WINDOW TAG & IDENTIFICATION
- FLOOR TAG & IDENTIFICATION
- HYDRO METER (OWNER TO CONFIRM ABOVE / BELOW GRADE)
- RAIN WATER LEADER
- HOSE BIB
- FLR. DRAIN / FUNNEL FLR. DRAIN
- SLOPE FLR. 2% TO DRAIN, SEAL DRAIN TO FLR. SYSTEM
- WATER METER
- KITCHEN LAVATORY
- LAVATORY (IN VANITY)
- BIDET / WATER CLOSET / URINAL
- WATER SOFTENER (OPTIONAL)
- HOT WATER HEATER
- GAS METER (& ENCLOSURE WHERE APPLICABLE)



1 LEVEL 2 PLAN  
SCALE 3/16" = 1'-0"

**BEAM SCHEDULE - WOOD**

MARK	DESCRIPTION
NB1	3-PLY 2"x8" (38x184mm)
NB2	3-PLY 2"x10" (38x255mm)
NB3	2-PLY 2"x10" (38mm x 255mm) FLR. JST. RIM / HEADER / TRIMMER
NB4	3-PLY 1-3/4"x14" (44x356mm) 2.OE LVL
NB5	3-PLY 2"x8" (38x184mm) P/T

- NOTES:**
- NB - WOOD BEAM
  - 3-PLY BEAMS REQUIRE MIN. BEARING LENGTH OF 114mm. ALL OTHER BEAMS REQUIRE MIN. BEARING LENGTH OF 90mm (3-1/2") UNLESS FASTENED TO EACH SIDE OF KD. POST
  - 2-PLY FLR. JST. HEADER / TRIMMER FRAMING MIN. AROUND ALL FLR. OPENINGS U/N/O.
  - ALL EXT. EXP'D BEAMS TO BE PRESSURE TREATED LUMBER (P/T)
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.

**BEAM SCHEDULE - STEEL**

MARK	DESCRIPTION
SB1	NBx18 (N200x21)
SB2	W10x22 (N250x33) H.D.S.
SB3	N6x16 (N150x24) H.D.S.

- NOTES:**
- SB - STEEL BEAM
  - ALL BEAMS TO HAVE MINIMUM 3-1/2" (90mm) BEARING AT EACH END
  - ALL BEAMS BEARING ON CONG. TO HAVE BEAM BROCKET (BP) FORMED IN FDTN. WHERE NOTED
  - INSTALL 1-1/2" (38mm) THICK KD. NAILER CARRIAGE BOLTED TO TOP FLANGE OF STEEL BEAMS FULL LENGTH FOR SUPPORT OF WOOD FRAMED FLOORS

**COLUMN / POST SCHEDULE - WOOD**

MARK	DESCRIPTION
C1A	1-PLY 2"x4" (38x89mm)
C2A	2-PLY 2"x4" (38x89mm)
C3A	3-PLY 2"x4" (38x89mm)
C4A	4-PLY 2"x4" (38x89mm)
C5A	5-PLY 2"x4" (38x89mm)
C1B	1-PLY 2"x6" (38x140mm)
C2B	2-PLY 2"x6" (38x140mm)
C3B	3-PLY 2"x6" (38x140mm)
C4B	4-PLY 2"x6" (38x140mm)
C5B	5-PLY 2"x6" (38x140mm)
SN01	6"x6" (140x140mm) P/T

- NOTES:**
- CR - BUILT UP COLUMN
  - SN01 - SOLID WOOD COLUMN
  - WHERE COLUMNS ARE NOT LOCATED IN A LOADBEARING WALL THEY SHALL BE CENTERED ON PAD FTG.'S BELOW
  - ALL EXT. EXP'D COLUMNS TO BE PRESSURE TREATED LUMBER (P/T)
  - ALL EXT. COLUMNS TO BE ANCHORED TO FDTN. SYSTEM, WALL BELOW OR CONG. ENT. SLAB TYP.
  - VERIFY ANY GIRDER TRUSS PLY W/ TRUSS MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF GIRDER PLYS
  - VERIFY ANY FLR. / ROOF FRAMING POINT LOADS W/ FLR. / ROOF MANUF. & INSTALL BUILT UP COLUMNS TO MATCH THE NUMBER OF FRAMING PLYS
  - INSTALL BUILT UP COLUMNS TO MATCH WIDTH OF BEAM OR NUMBER OF PLYS OF BUILT UP BEAM FOR BEARING TRANSFER TO BELOW TYP.
  - ALL BUILT UP COLUMNS TO BE TRANSFERRED TO FDTN. SYSTEMS. INSTALL BUILT UP COLUMNS IN WALL / FLR. SYSTEM(S) SO LOADS ARE TRANSFERRED TO FDTN. SYSTEM BELOW WHETHER SHOWN OR NOT TYP.

**LINTEL SCHEDULE**

MARK	DESCRIPTION	DETAIL	WALL TYPE
L1	2-PLY 2"x4" (38mm x 89mm) KD. STUD		4" x 6" (89mm x 140mm) KD. STUD
L2	2-PLY 2"x6" (38mm x 140mm) KD. STUD		4" x 6" (89mm x 140mm) KD. STUD
L3	2-PLY 2"x8" (38mm x 184mm) KD. STUD		6" (140mm) KD. STUD
L4	2-PLY 2"x10" (38mm x 255mm) KD. STUD		6" (140mm) KD. STUD
L5	2-PLY 2"x12" (38mm x 285mm) KD. STUD		6" (140mm) KD. STUD
L6	2-PLY 1-3/4"x11-7/8" (44mm x 302mm) LVL 2.OE		6" (140mm) KD. STUD
L7	1L-8x8x8x6.4 (LLV)(HDS) 8'-1" (2410mm) MAX. SPAN		3-1/2" (90mm) BRICK
L8	1L-12x8x8x7.9 (LLV)(HDS) 10'-10" (330mm) MAX. SPAN		3-1/2" (90mm) BRICK
L9	9" (229mm) x 24" (610mm) DEEP CONCRETE LINTEL REINFORCED W/ 2-18# REBAR @ BOTTOM		9" CONCRETE

- NOTES:**
- STRUCT. LINTEL (L#)
  - 2-PLY KD. LINTELS W/ SPANS LESS THAN 3m (9'-10") REQ. 38mm (1.5") MIN. BEARING LENGTH @ EACH END. SPANS GREATER THAN 3m (9'-10") REQ. 76mm (3") MIN. BEARING LENGTH. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - 3-PLY KD. LINTELS / BEAMS W/ SUPPORTED LENGTHS GREATER THAN 4.2m REQ. MIN. BEARING LENGTH OF 114mm (4.5"). ALL OTHER BEAMS REQ. MIN. BEARING LENGTH OF 76mm (3"). INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - 4 & 5-PLY KD. LINTELS / BEAMS W/ SUPPORTED LENGTHS GREATER THAN 3m REQ. BEARING LENGTH OF 114mm (4.5") MIN. ALL OTHER BEAMS REQ. BEARING LENGTH OF 76mm (3") MIN. INSTALL BUILT UP COLUMNS TO MATCH WALL STUD WIDTH AS REQ'D
  - WHERE NOTED, LINTELS MUST BEAR UPON ENTIRE WIDTH OF BUILT-UP COLUMNS INDICATED W/ ADDITIONAL TRIMMER STUD FASTENED TO COLUMN AS PER TYP. ROUGH OPENING FRAMING
  - ALL EXT. METAL LINTELS TO BE HOT DIPPED GALVANIZED (H/D/G) W/ PTD. FIN. TOP COAT ALT. - ALL EXT. METAL LINTELS TO BE PRIMERED & PTD.
  - ALL EXT. MASONRY VENEER LINTELS ARE TO HAVE EVEN # LEVEL BEARING & SHALL HAVE NOT LESS THAN 150mm (6") MIN. LENGTH OF BEARING @ END SUPPORTS & BEAR ON MASONRY, CONG. OR STEEL U/N/O
  - ALL LINTELS THAT REQ. SPACERS ARE TO BE SPACED THE SAME AS THE WALL TYPE THEY ARE LOCATED IN. SPACERS ARE TO BE INSTALLED BETWEEN THE PLYS

**LEVEL FLR. FRAMING & LINTEL LEGEND**

- BP BEAM BROCKET
- STRUCT. LINTEL (L#)
- STRUCT. BEAM
- FLR. STRUCTURE SPAN INDICATOR
- LOAD BEARING WOOD-FRAMED WALLS
- RAISED T/O FOUNDATION (179.43)
- RAISED T/O FOUNDATION (179.28)
- DROPPED FOUNDATION/POCKET (COORD. W/ PLAN)

**LEVEL FRAMING & LINTEL NOTES:**

- ALL DIM.'S ARE OUTSIDE OF WALL SYSTEMS U/N/O
- GENERAL CONTRACTOR TO COORD. MECH. / ELEC. OPENINGS SO NO OPENING IS LOCATED DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS
- PRE-ENGINEERED FLR. TRUSSES/JOISTS LINTELS, BEAMS & GIRDERS TO BE DESIGNED / ENG'D / CONFIRMED BY THE TRUSSES/JOISTS MANUFACTURER & SUBMITTED IN SHOP DWS.'S TO THE ARCHITECT & STRUCT. ENG. FOR REVIEW
- TRUSSES/JOISTS SHOP DRAWINGS MUST BE SEALED BY P.ENG. (PEO) AND SUBMITTED TO ARCHITECT & STRUCT. ENG. FOR REVIEW OF ANY POINT LOADS / LOADING ON STRUCT. PRIOR TO CONSTRUCTION
- COORD. WITH STRUCTURAL GENERAL NOTES ON 5000

NO.	DATE	ISSUANCE
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PROFESSIONAL ENGINEER  
ONTARIO

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Lesley Hutton-Rhoads  
PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
7 DOUGLAS STREET, PORT DOVER, ONTARIO, N0A 1N7  
DRAWING TITLE:  
**LEVEL 2 WALL & FLOOR TYPES & DIMENSIONS**

CHECKED BY: MS/BB  
DRAWING SCALE: As indicated  
PROJECT NO.: 24-113  
DRAWN BY: LHR  
DRAWING NO.: A202

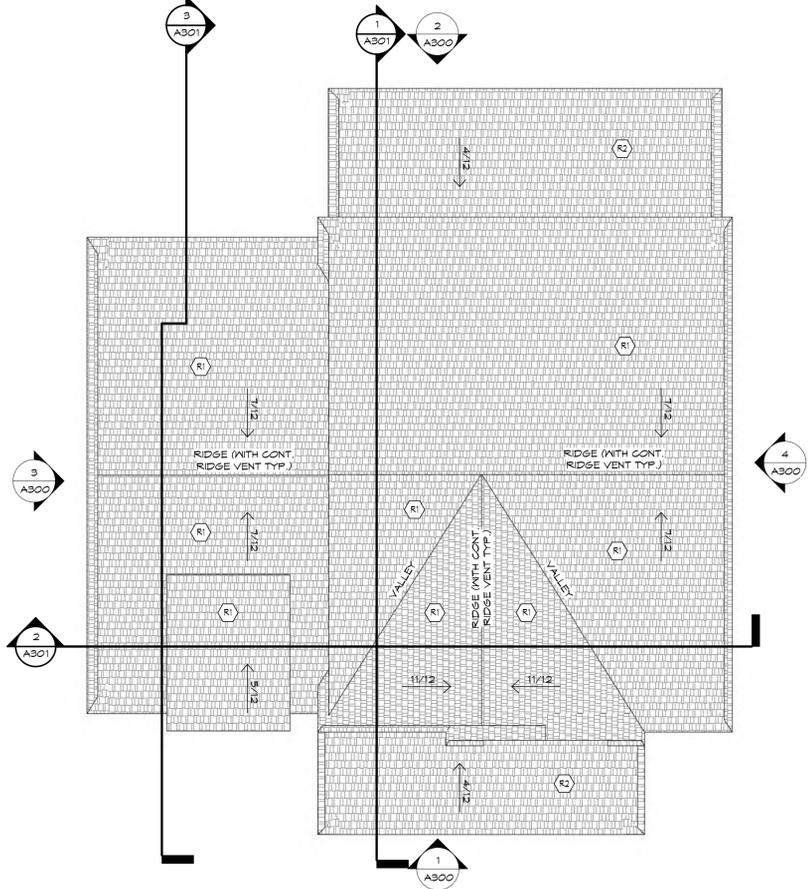
**ROOF VENTING LEGEND**

(Updated January 1, 2024)  
**6.3.1.2. Crawl Spaces and Attic or Roof Spaces**  
 (1) Unconditioned and unoccupied crawl spaces and attic or roof spaces shall be ventilated by natural or mechanical means as required by Part 5 (See Note A-6.3.1.2.(1)).  
 (Updated January 1, 2024)  
**9.14.1. Venting**  
**9.14.1.1. Required Venting**  
 (1) Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the movement of air from the space to the exterior. (See Note A-9.14.1.1.(1)).

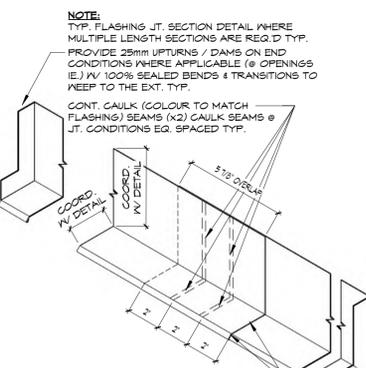
**9.14.1.2. Vent Requirements**  
 (1) Except as provided in sentence (2), the unobstructed vent area shall be not less than 1/300 of the insulated ceiling area.  
 (2) Where the roof slope is less than 1 in 6 or in roofs that are constructed with roof joists, the unobstructed vent area shall be not less than 1/150 of the insulated ceiling area.  
 (3) Required vents are permitted to be roof type, eave type, gable-end type or any combination of them, and shall be distributed:  
 (a) uniformly on opposite sides of the building.  
 (b) with not less than 25% of the required openings located at the top of the space, and  
 (c) with not less than 25% of the required openings located at the bottom of the space.  
 (4) Except where each roof joist space referred to in sentence (2) is separately vented, roof joist spaces shall be interconnected by installing purins not less than 30 mm by 30 mm on the top of the roof joists.  
 (5) Vents shall comply with CAN5-A19-M, "Natural Airflow Ventilators for Buildings".

**9.14.1.3. Clearances**  
 (1) Except as provided in sentence (2), where venting is provided to a roof joist space, not less than 63 mm of space shall be provided between the top of the insulation and the underside of the roof sheathing.  
 (2) Where venting is provided at the junction of sloped roofs and exterior walls and where preformed baffles are used to contain the insulation, the baffles shall:  
 (a) provide an unobstructed air space between the insulation and the underside of the roof sheathing, that is,  
 (i) not less than 25 mm in dimension, and  
 (ii) of sufficient cross area to meet the attic or roof space venting requirements of Article 9.14.1.2, and  
 (b) extend vertically not less than 50 mm above the top of the insulation.  
 (3) Ceiling insulation shall be installed in a manner that will not restrict a free flow of air through roof vents or through any portion of the attic or roof space.

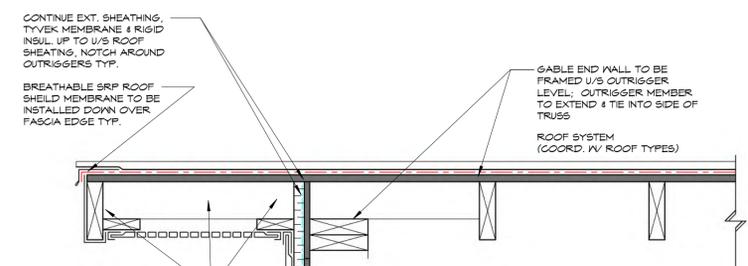
**9.14.1.4. Mansard or Gambrel Roof**  
 (1) The lower portion of a mansard or gambrel style roof need not be ventilated.  
 (2) The upper portion of roofs described in sentence (1) shall be ventilated in conformance with the requirements in Articles 9.14.1.1 to 9.14.1.3.



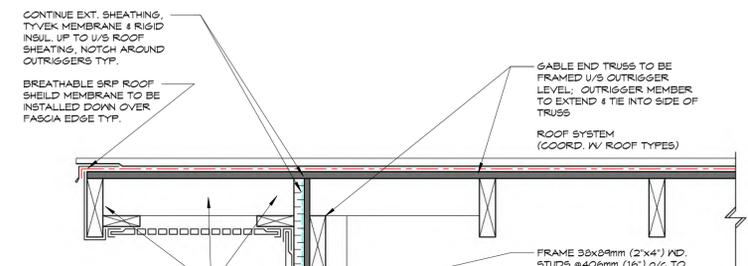
**1 ROOF PLAN**  
 A203 SCALE 3/16" = 1'-0"



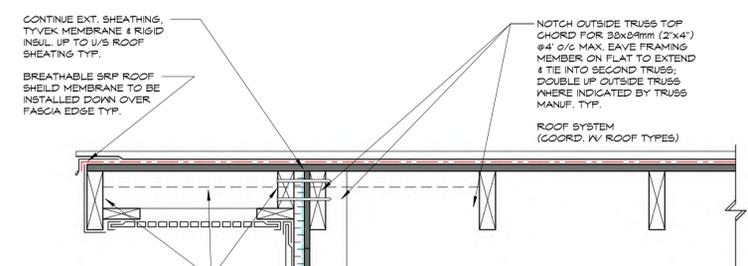
**2 FLASHING JT. DETAIL**  
 A203 SCALE 1:5



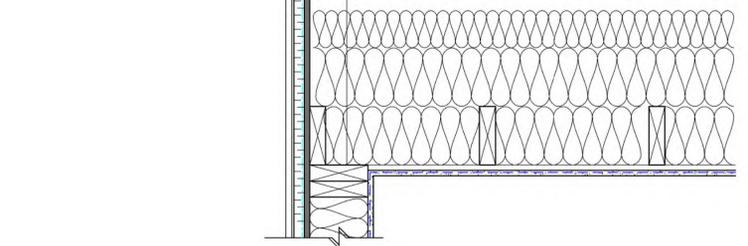
**OPTION 1**



**OPTION 2**



**OPTION 3**



**TYP. U/S TRUSS BOTTOM CHORD**

**4 EXT. WALL EAVE SECTION DETAIL**  
 A203 SCALE 1:8

**ROOF PLAN LEGEND**

- (R) ROOF TYPE (COORD. IV ROOF TYPE SCH.)
- SLOPE → DIRECTION OF ROOF DRAINAGE / SLOPES PROVIDE POSITIVE ROOF SLOPES TOWARD ROOF DRAIN. SLOPE TO BE MIN. 1:5-2%
- RVL RAIN WATER LEADERS & LEAVESTROUGHS (GUTTER) & PROVIDE OUT TURNS TO SPILL ONTO GRADE IV SPLASH PADS
- RIDGE CONT. RIDGE CAPPING IV ROOF SHINGLE FIN. ENSURE THE GAP SHINGLES ARE INSTALLED STARTING ON THE WEST FOR THE WESTERLY PREVAILING WINDS WHERE APPLICABLE TYP.
- VALLEY PRE-FIN. PTD. CONT. METAL ROOF W VALLEY TO MATCH COLOUR OF NEW ROOF

**HATCH IDENTIFICATION LEGEND**

- [Hatch] ASPHALT SHINGLES ROOFING SYSTEM

**ROOF FRAMING LEGEND**

- [Line] STRUCT. LINTEL (L)
- [Line] STRUCT. BEAM
- [Line] ROOF STRUCTURE SPAN INDICATOR

**HATCH LEGEND**

- [Hatch] LOAD BEARING WALLS

**ROOF FRAMING & LINTEL NOTES:**

- GENERAL CONTRACTOR TO COORD. MECH. / ELEG. OPENINGS SO NO OPENING IS LOCATED DIRECTLY BELOW BEAM OR JOIST BEARING LOCATIONS
- PRE-ENGINEERED ROOF TRUSSES/LOISTS LINTELS, BEAMS & GIRDERS TO BE DESIGNED / ENG'D / CONFIRMED BY THE TRUSSES/LOISTS MANUFACTURER. I SUBMITTED IN SHOP DWG'S TO THE DESIGNER FOR REVIEW.
- TRUSSES/LOISTS SHOP DRAWINGS MUST BE SEALED BY P.ENG (PECO) AND SUBMITTED TO ARCHITECT & STRUCT. ENG. FOR REVIEW OF ANY POINT LOADING / LOADING ON STRUCT. PRIOR TO CONSTRUCTION

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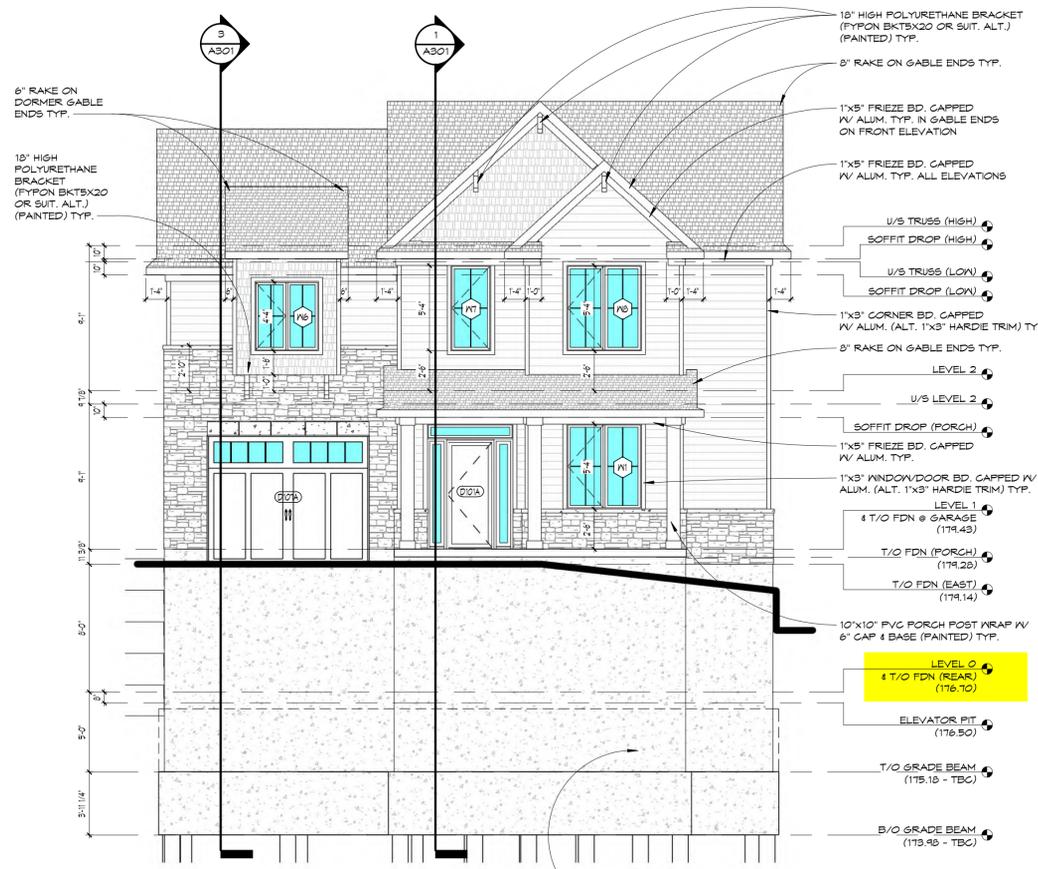
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PROJECT TITLE:  
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 NOA 1N7  
 DRAWING TITLE:  
**ROOF PLAN**

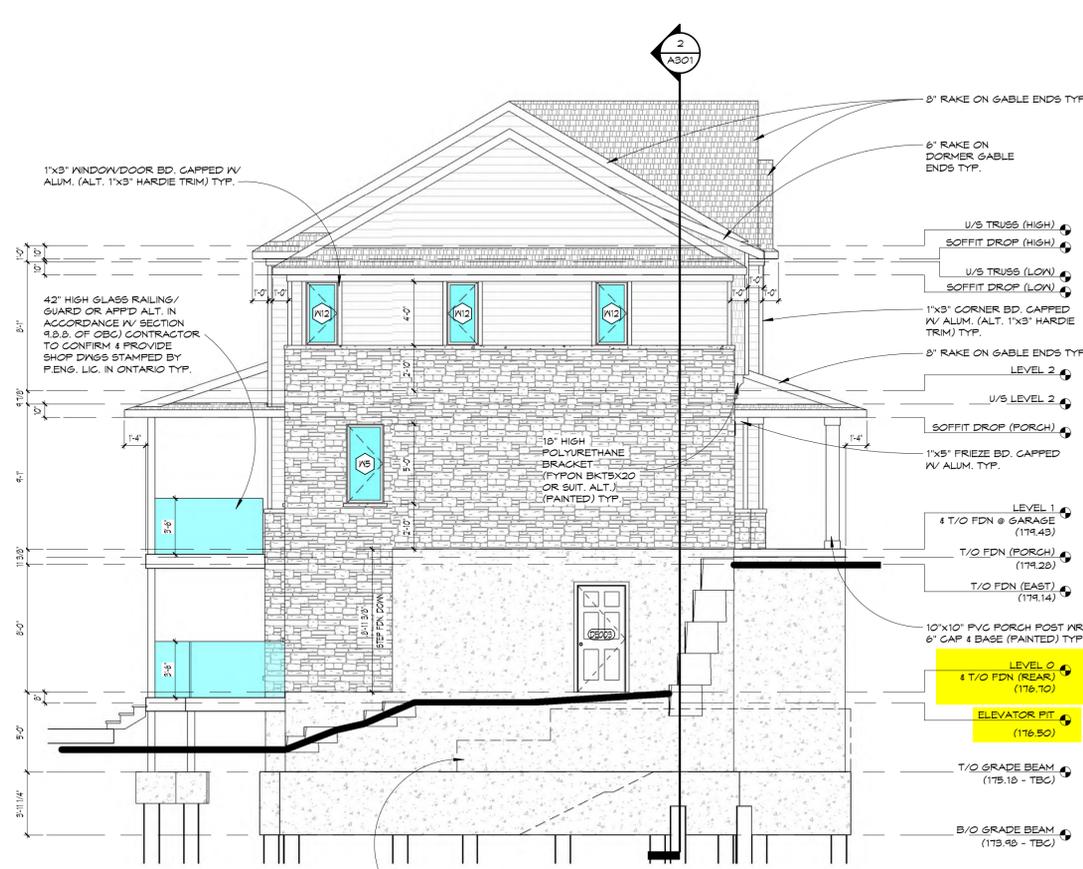
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 DRAWING SCALE: As indicated  
 PROJECT NO.: 24-113  
 DRAWN BY: LHR  
 DRAWING NO.: A203

FILE PATH: H:\Projects\2024\24-113 Brookshaw Single Detached\Drawings\Arch\24-113 Brookshaw Single Detached - Detailed Design NEW.rvt  
 PROJECT NUMBER & NAME: 24-113 BROOKSHAW SINGLE DETACHED  
 DATE PLOTTED: 12/20/2025 9:58:20 PM



1 FRONT ELEVATION  
 A300 SCALE 3/16" = 1'-0"

NOTE: GRADE BEAM ASSUMED TO BE INSTALLED AT CONSISTENT ELEVATION THROUGHOUT TO SUIT GRADE CONDITION (T/O GRADE BEAM TO BE BELOW LOWEST GRADE @ WALK-OUT). CONTRACTOR MAY ELECT TO STEP GRADE BEAMS (COORD. WITH STEPPED GRADE BEAM DETAIL 6/A200 4 ELEVATIONS ON A300)

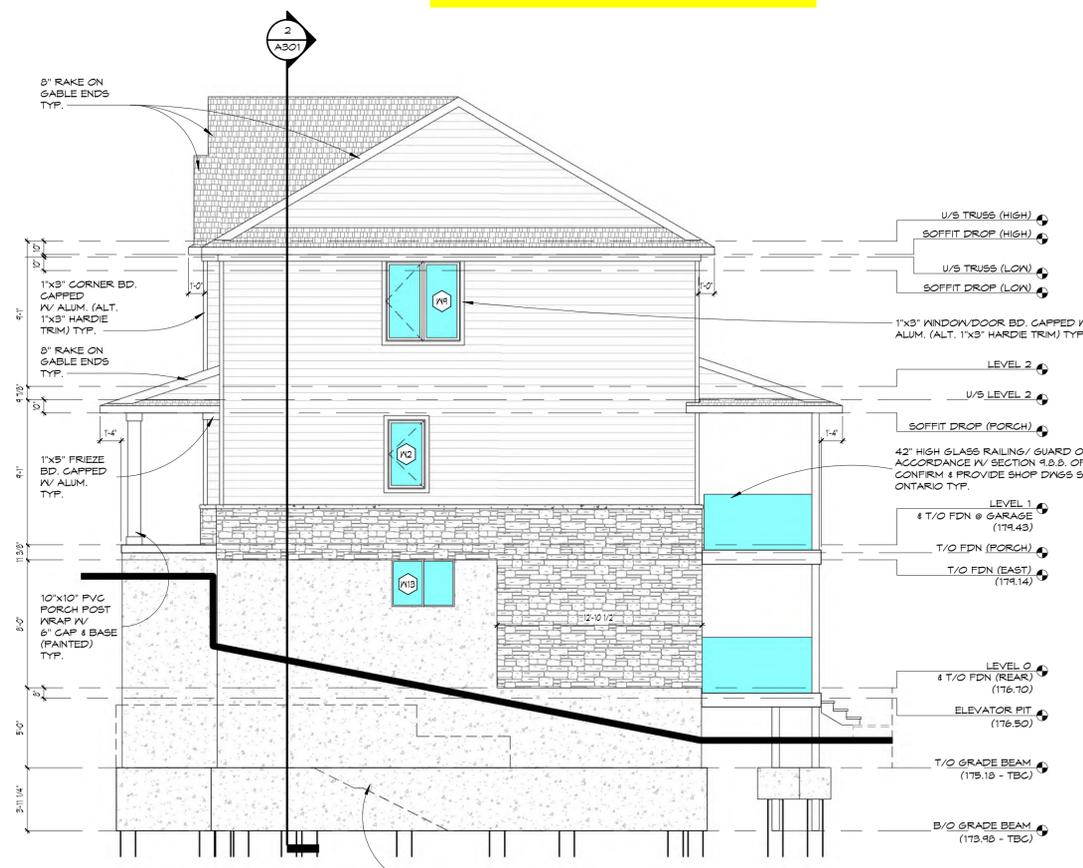


3 LEFT ELEVATION  
 A300 SCALE 3/16" = 1'-0"

NOTE: GRADE BEAM ASSUMED TO BE INSTALLED AT CONSISTENT ELEVATION THROUGHOUT TO SUIT GRADE CONDITION (T/O GRADE BEAM TO BE BELOW LOWEST GRADE @ WALK-OUT). CONTRACTOR MAY ELECT TO STEP GRADE BEAMS (COORD. WITH STEPPED GRADE BEAM DETAIL 6/A200 4 ELEVATIONS ON A300)



2 REAR ELEVATION  
 A300 SCALE 3/16" = 1'-0"



4 RIGHT ELEVATION  
 A300 SCALE 3/16" = 1'-0"

NOTE: GRADE BEAM ASSUMED TO BE INSTALLED AT CONSISTENT ELEVATION THROUGHOUT TO SUIT GRADE CONDITION (T/O GRADE BEAM TO BE BELOW LOWEST GRADE @ WALK-OUT). CONTRACTOR MAY ELECT TO STEP GRADE BEAMS (COORD. WITH STEPPED GRADE BEAM DETAIL 6/A200 4 ELEVATIONS ON A300)

**EGRESS WINDOWS OR DOORS FOR BEDROOMS LEGEND**

(Updated January 1, 2024)  
 9.9.10.1. Egress Windows or Doors for Bedrooms  
 (1) Except where a door on the same floor level as the bedroom provides direct access to the exterior, every floor level containing a bedroom in a suite shall be provided with at least one outside window that:  
 (a) is openable from the inside without the use of tools,  
 (b) provides an individual, unobstructed open portion having a minimum area of 0.35m<sup>2</sup> with no dimension less than 380mm, and  
 (c) maintains the required opening described in Clause (b) without the need for additional support. (See Note A-9.9.10.1(1))  
 (2) Except for basement areas, the window required in Sentence (1) shall have a maximum sill height of 1000mm above the floor. (See Note A-9.9.10.1(2))  
 (3) Where a window required in Sentence (1) opens in to a window well, a clearance of not less than 550mm shall be provided in front of the window. (See Note A-9.9.10.1(3))  
 (4) Where the sash of a window referred to in Sentence (3) swings towards the window well, the operation of the sash shall not reduce the clearance in a manner that would restrict escape in an emergency.  
 (5) Where a protective enclosure is installed over the window well referred to in Sentence (3), the enclosure shall be openable from the inside without the use of keys, tools or special knowledge of the opening mechanism.  
 (6) When sliding windows are used, the minimum dimension described in Sentence (1) shall apply to the openable portion of the window.  
 (7) Where the sleeping area within a live/work unit is on a mezzanine with no obstructions more than 100mm above the floor, the window required in Sentence (1) may be provided on the main level of the live/work unit provided the mezzanine is not more than 25% of the area of the live/work unit or 20m<sup>2</sup>, whichever is less, and an unobstructed direct path of travel is provided from the mezzanine to this window.

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PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
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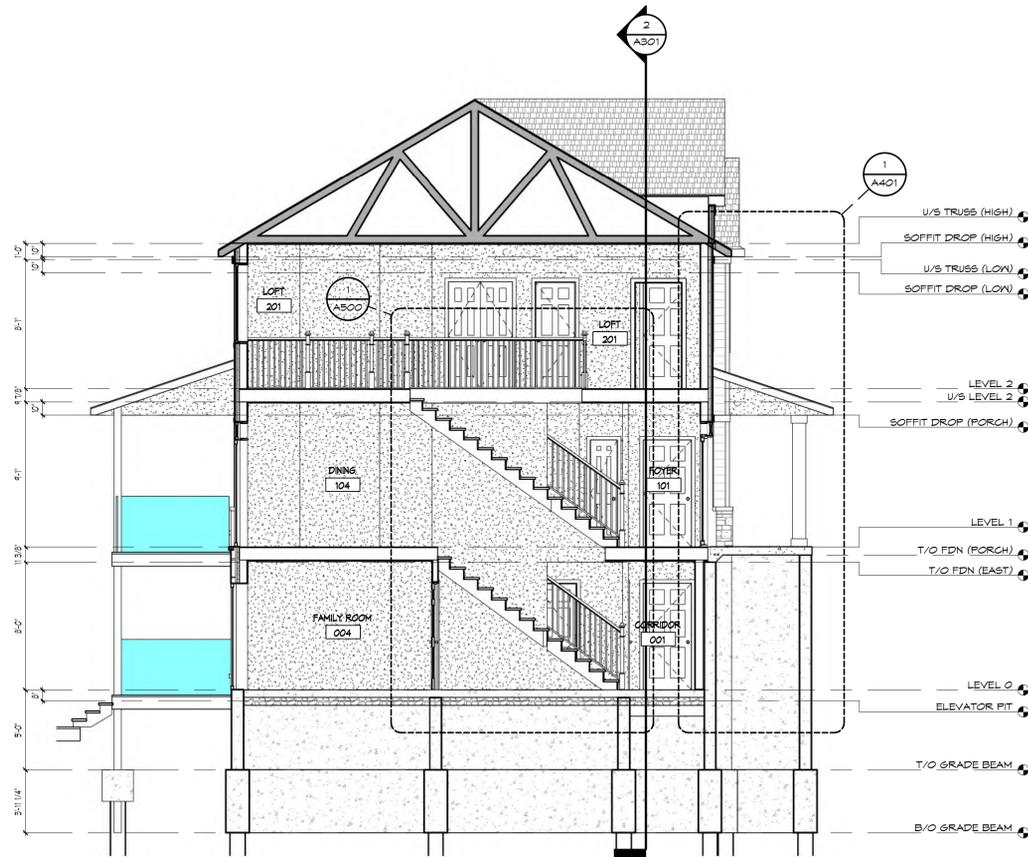
DRAWING TITLE:  
**EXTERIOR ELEVATIONS**

CHECKED BY: MS/BB	DRAWN BY: LHR
DRAWING SCALE: As indicated	DRAWING NO.:
PROJECT NO.:	<b>A300</b>

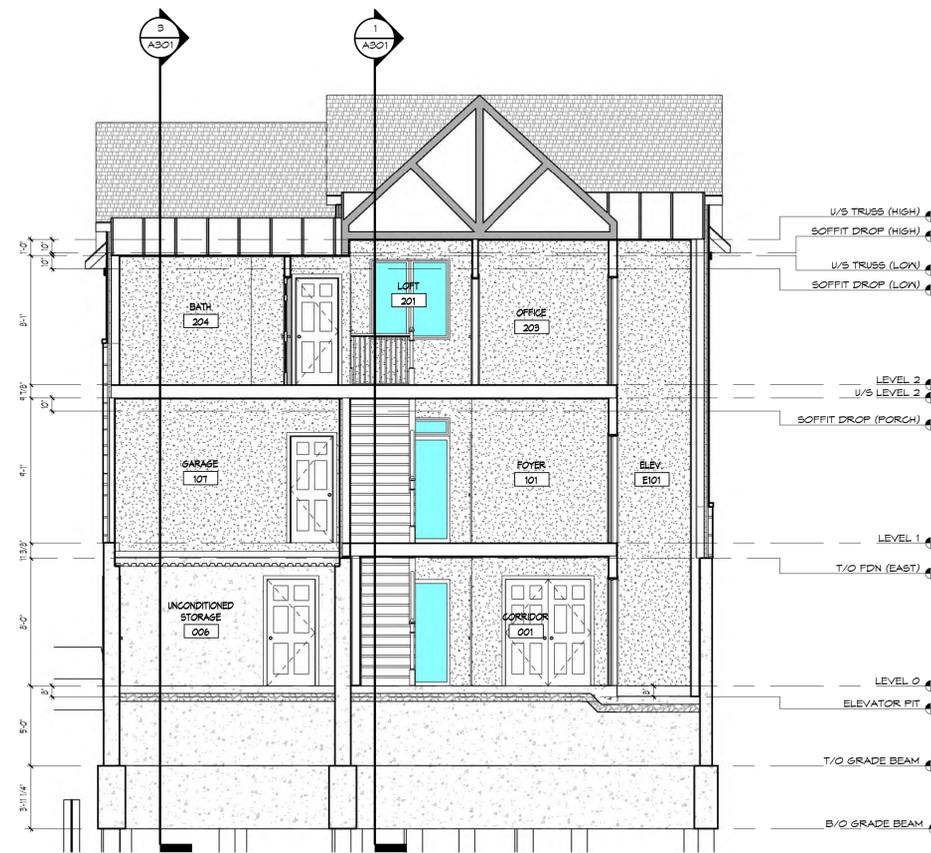
**ELEVATION LEGEND - EXTERIOR**

- LF FM LIGHT FIXTURE (FM - WALL MTD.)
- HB HOSE BIB

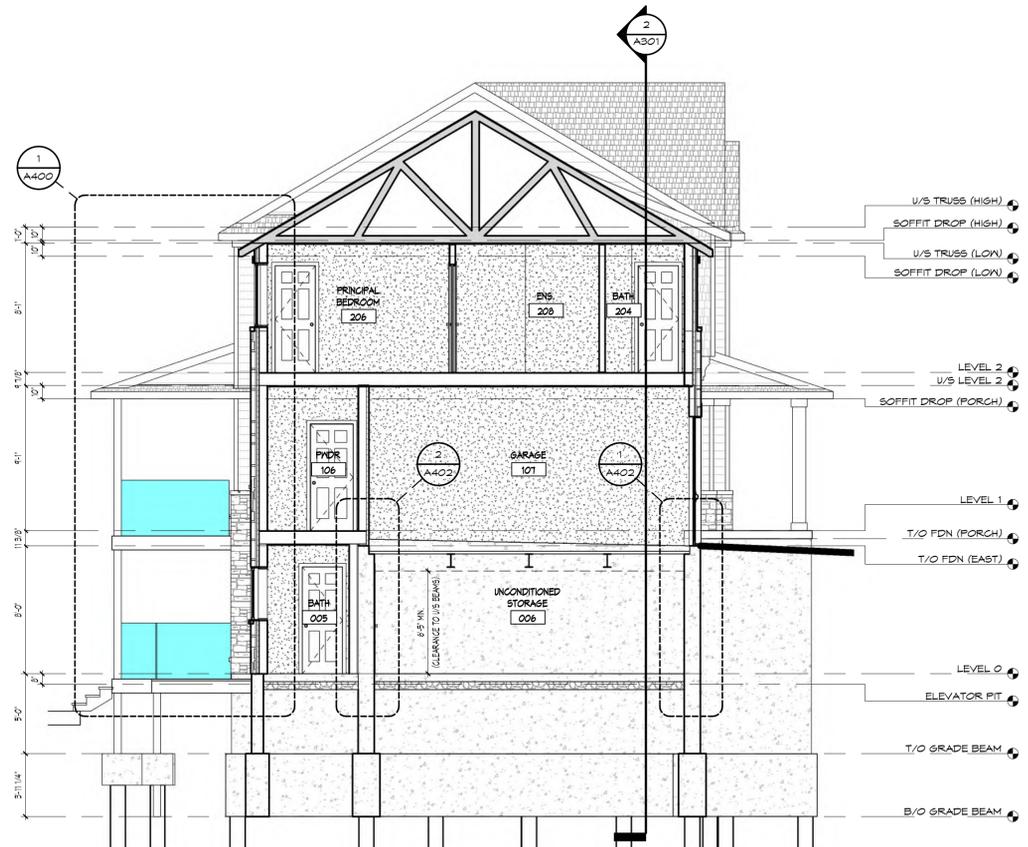
GENERAL NOTES:  
 • SHOP DNSS ARE TO BE DIMENSIONED IN METRIC UNITS (IMPERIAL & METRIC BOTH SHOWN IS ACCEPTABLE)



1 BUILDING SECTION A  
A301 SCALE 3/16" = 1'-0"



2 BUILDING SECTION B  
A301 SCALE 3/16" = 1'-0"



3 BUILDING SECTION C  
A301 SCALE 3/16" = 1'-0"

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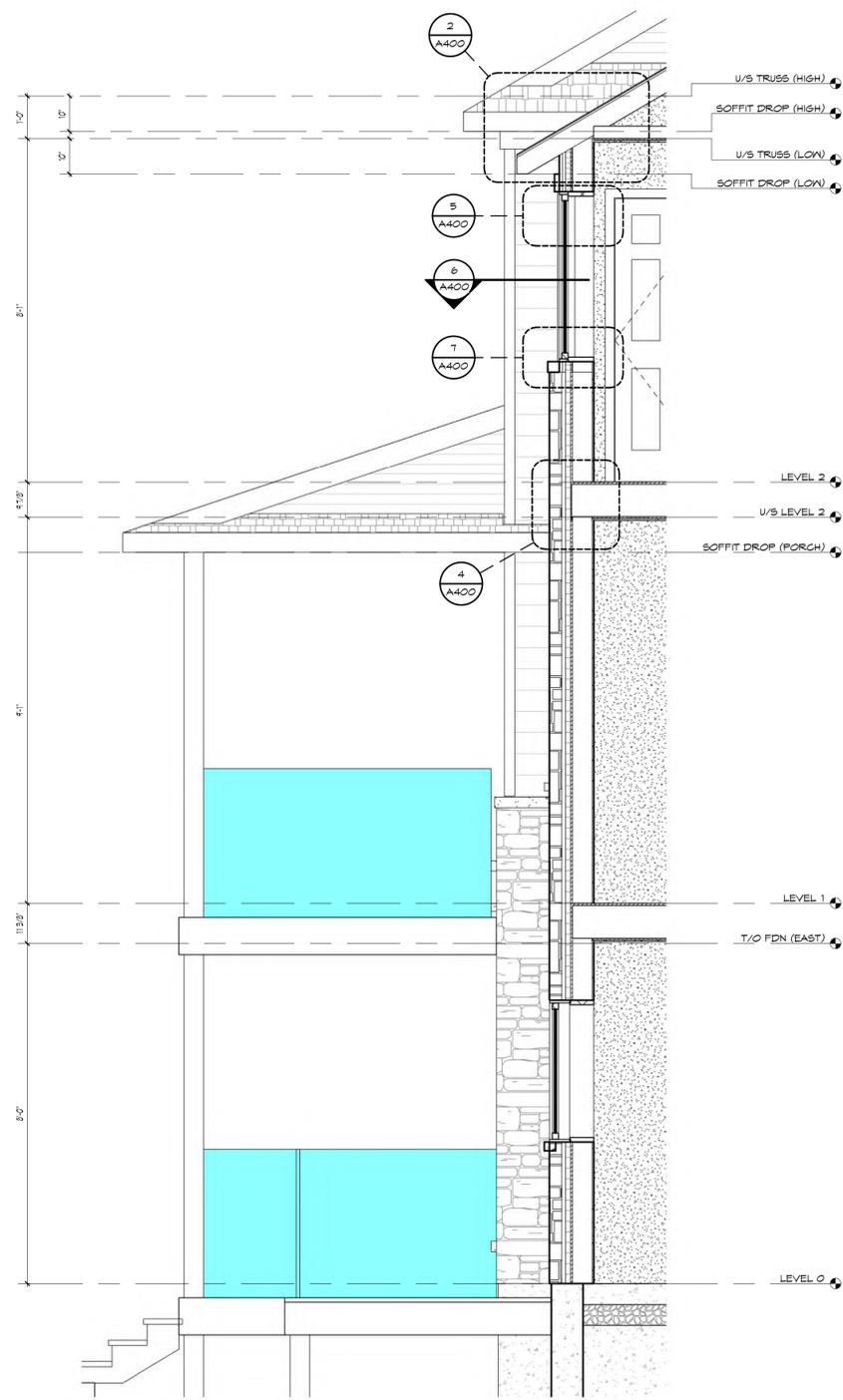
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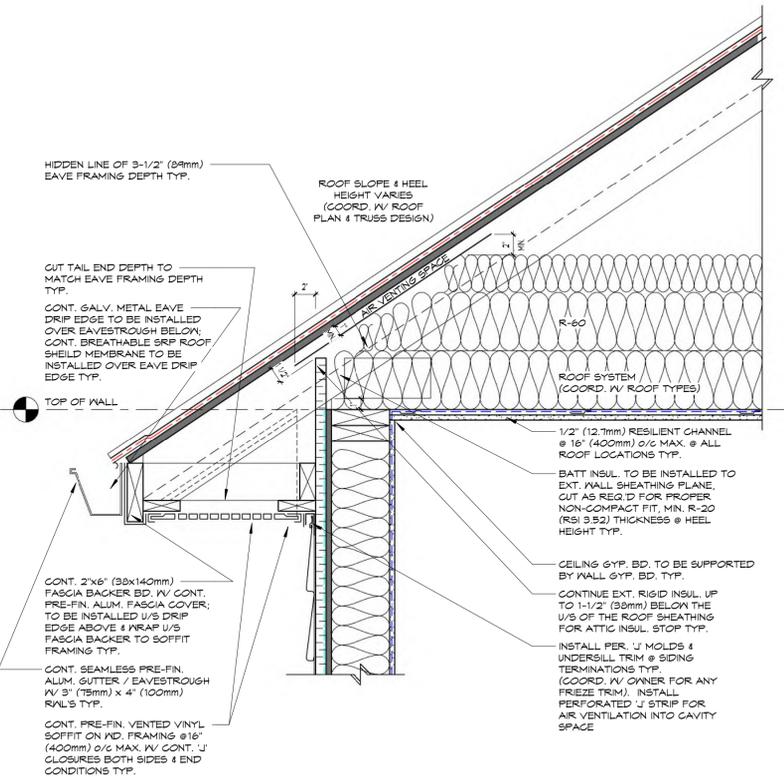
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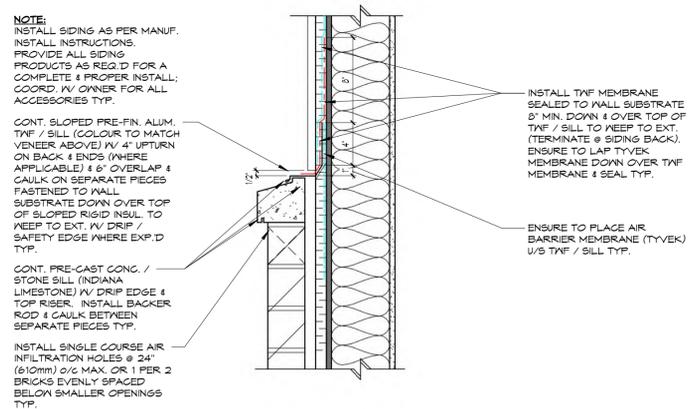
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 Agenda Page 45



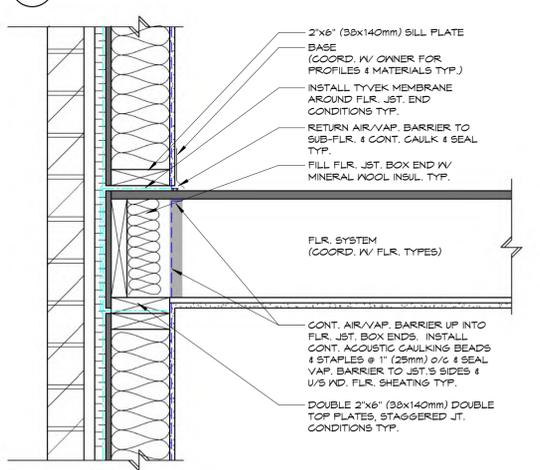
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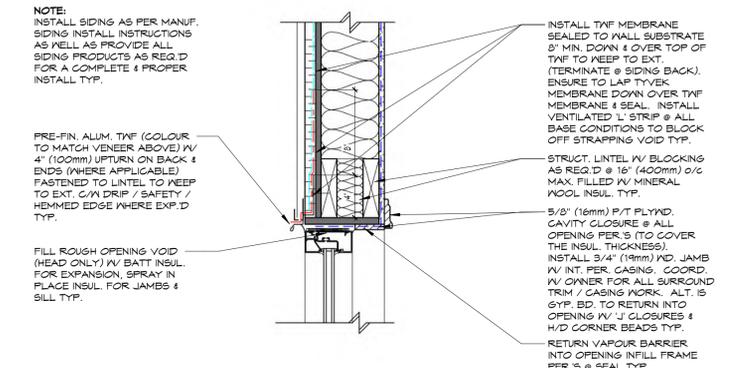
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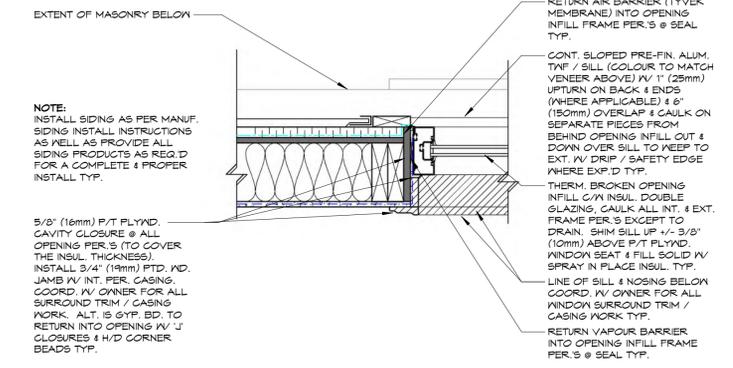
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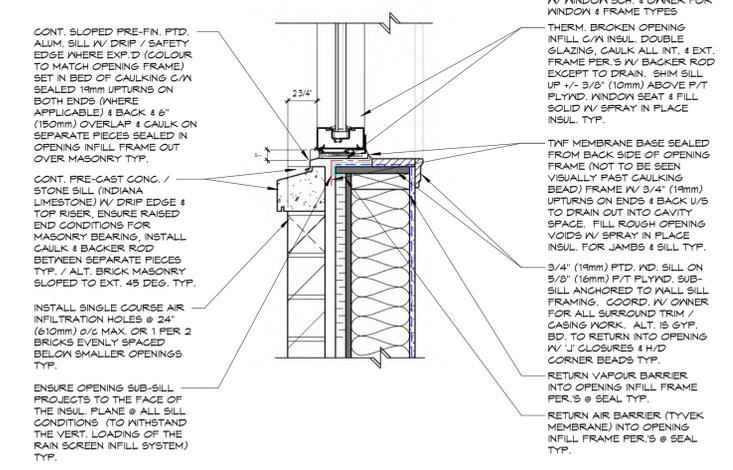
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**5 EXT. OPENING HEAD SECTION DETAIL (TYP.)**  
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**6 EXT. OPENING JAMB PLAN DETAIL (TYP.)**  
 A400 SCALE 1:0



**7 EXT. OPENING SILL SECTION DETAIL W/ STONE SILL (TYP.)**  
 A400 SCALE 1 1/2" = 1'-0"

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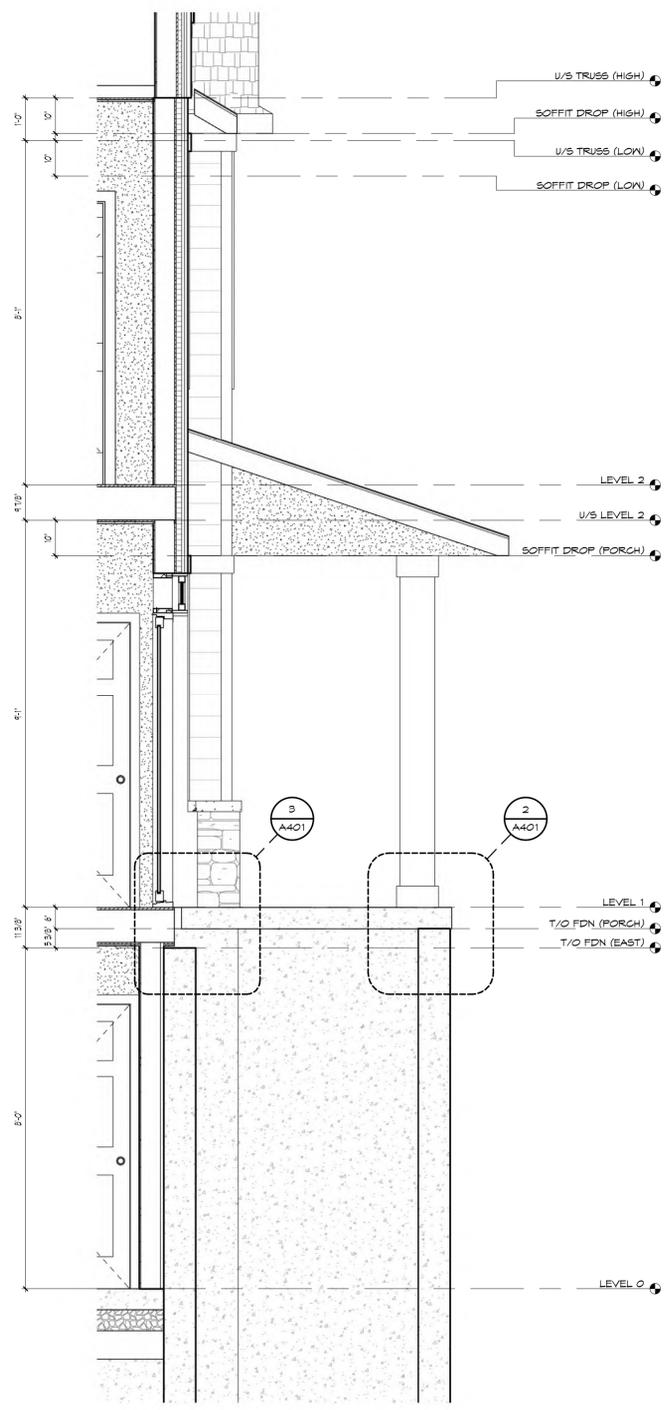
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 DRAWING TITLE:  
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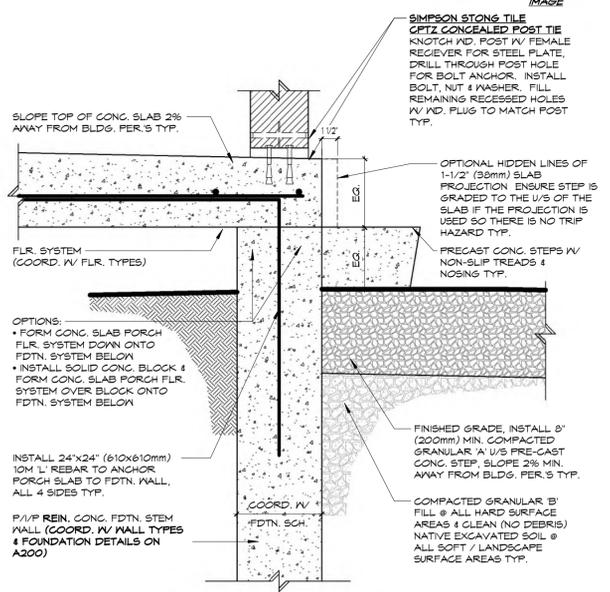
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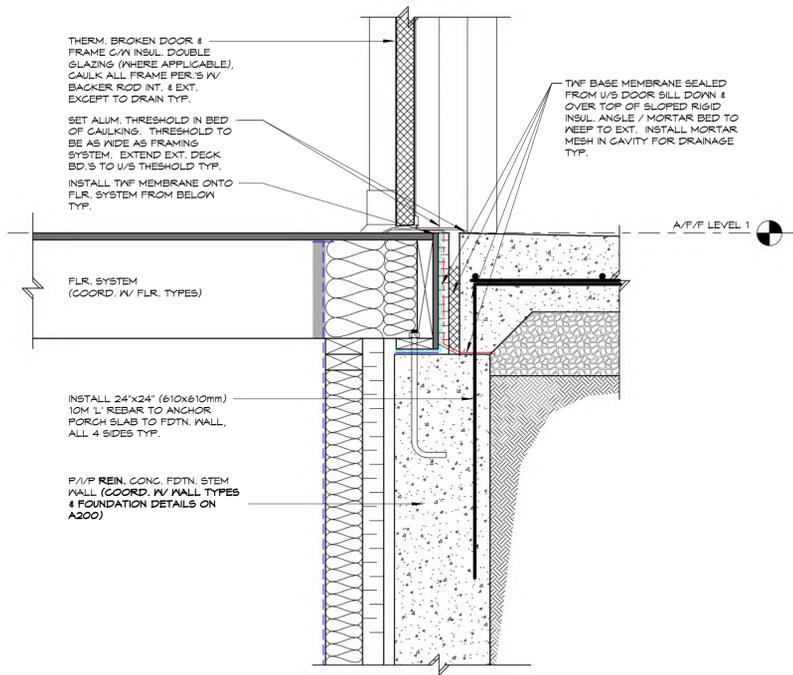
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1 WALL SECTION B  
A401 SCALE 1/2" = 1'-0"



2 EXT PORCH SECTION DETAIL  
A401 SCALE 1 1/2" = 1'-0"



3 EXT. DOOR SILL SECTION DETAIL @ PORCH  
A401 SCALE 1 1/2" = 1'-0"

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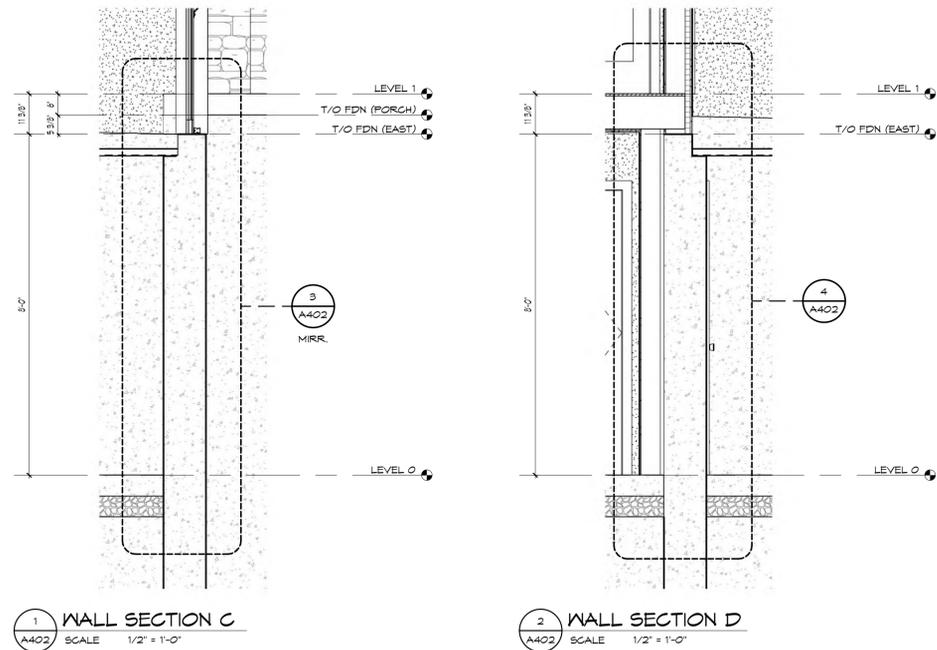
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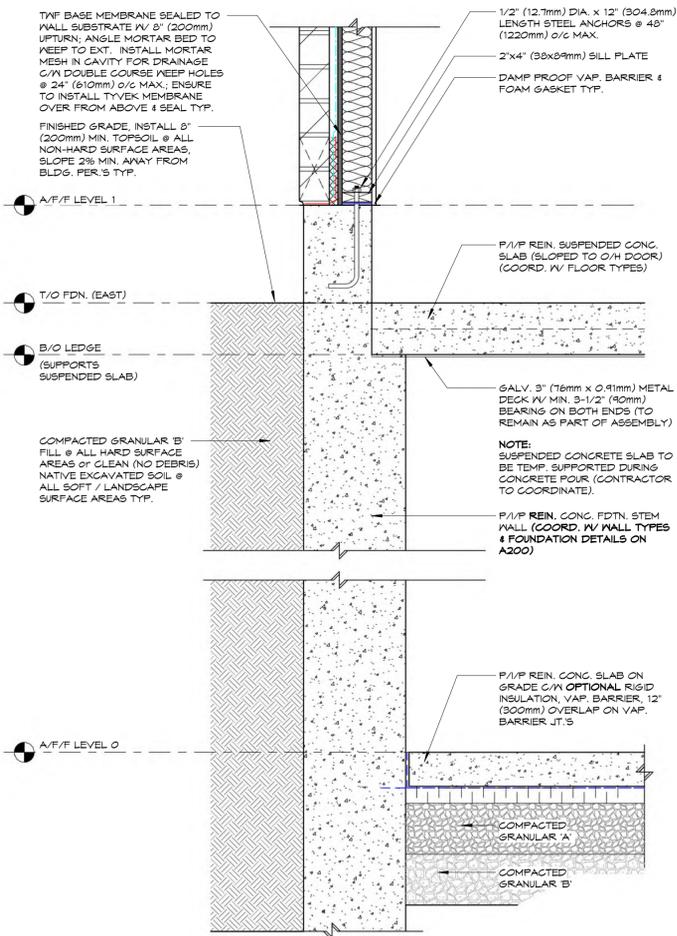
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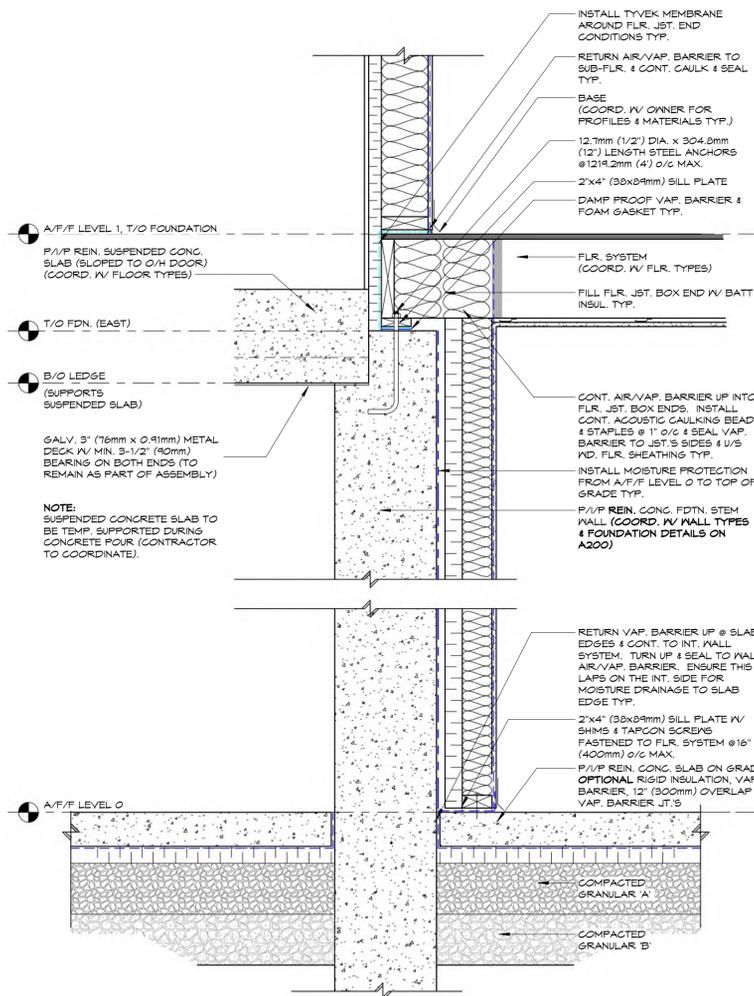


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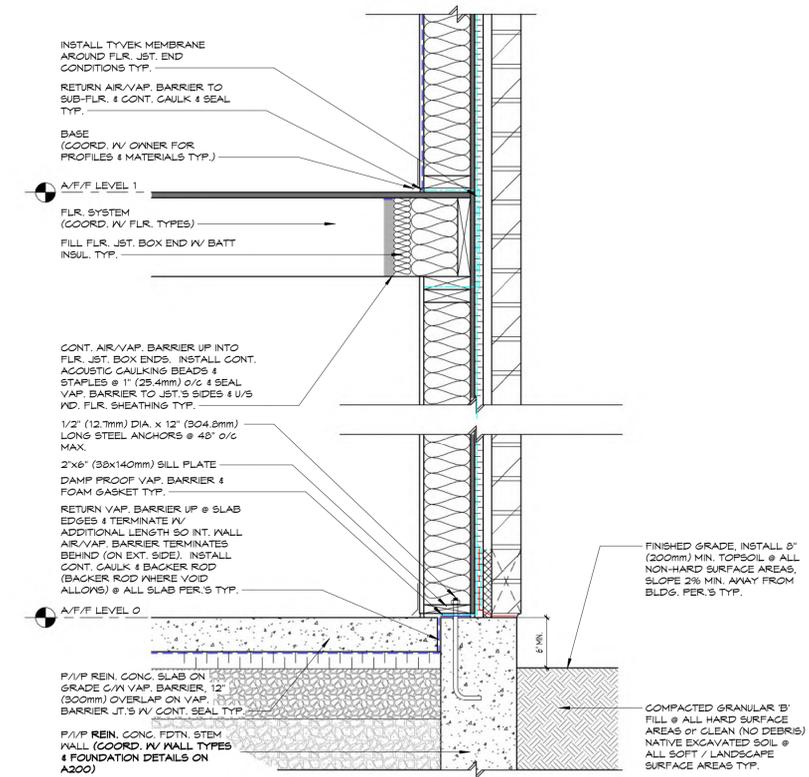
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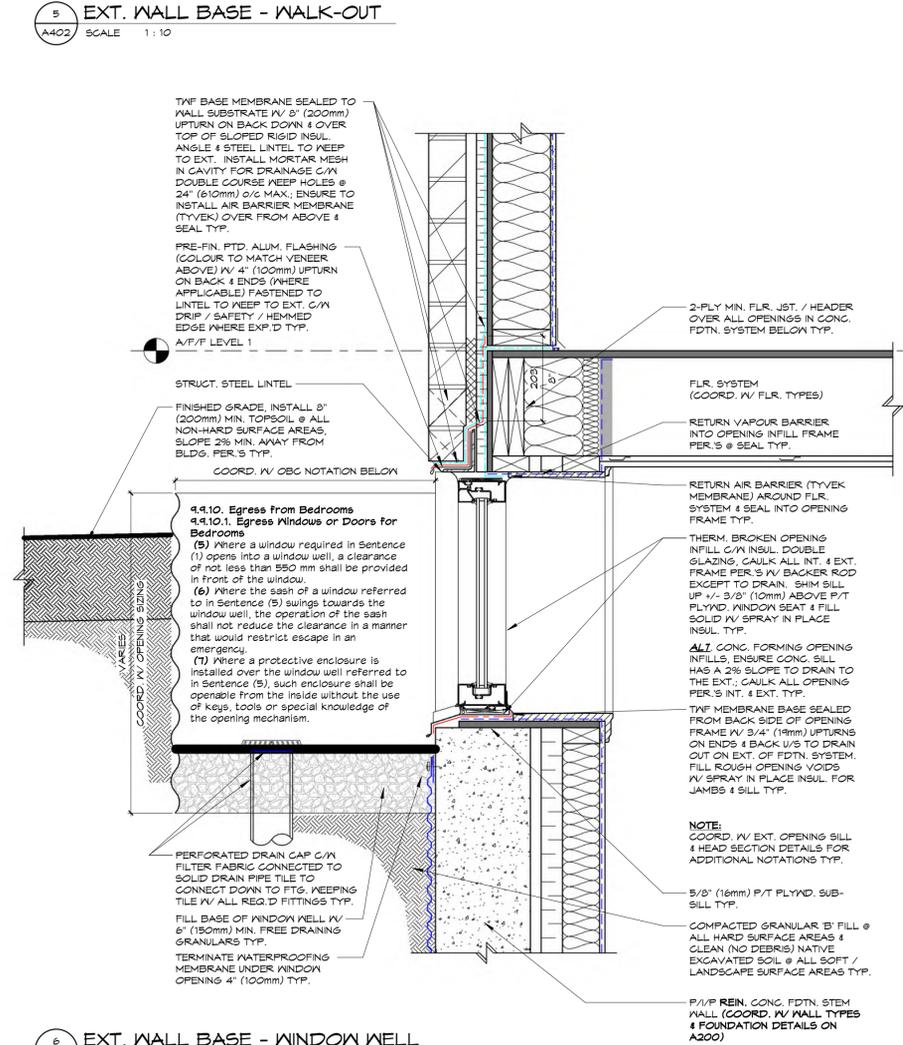
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A402 SCALE 1:10



4 EXT. WALL BASE - GARAGE @ HOUSE  
A402 SCALE 1:10



5 EXT. WALL BASE - WALK-OUT  
A402 SCALE 1:10



6 EXT. WALL BASE - WINDOW WELL  
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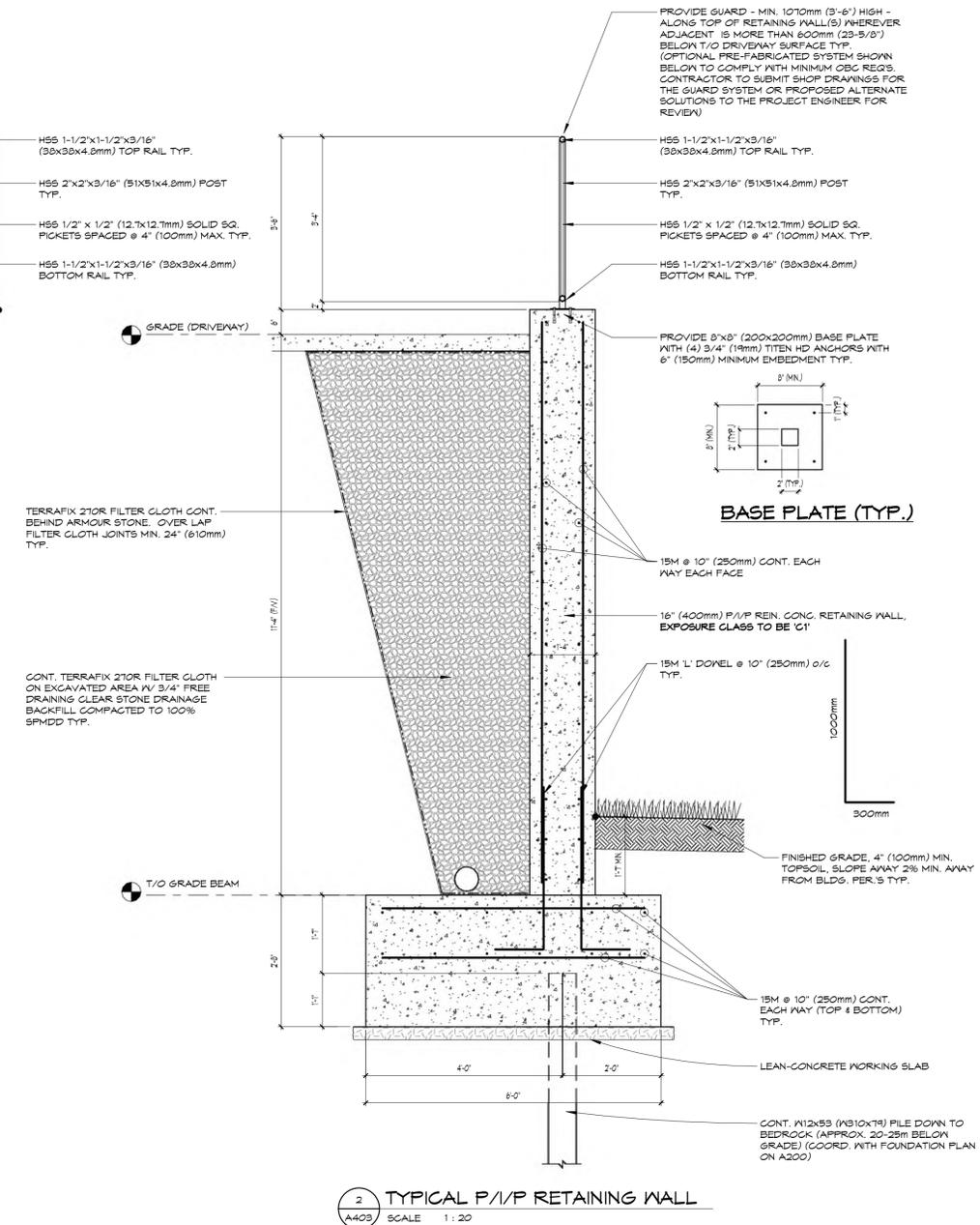
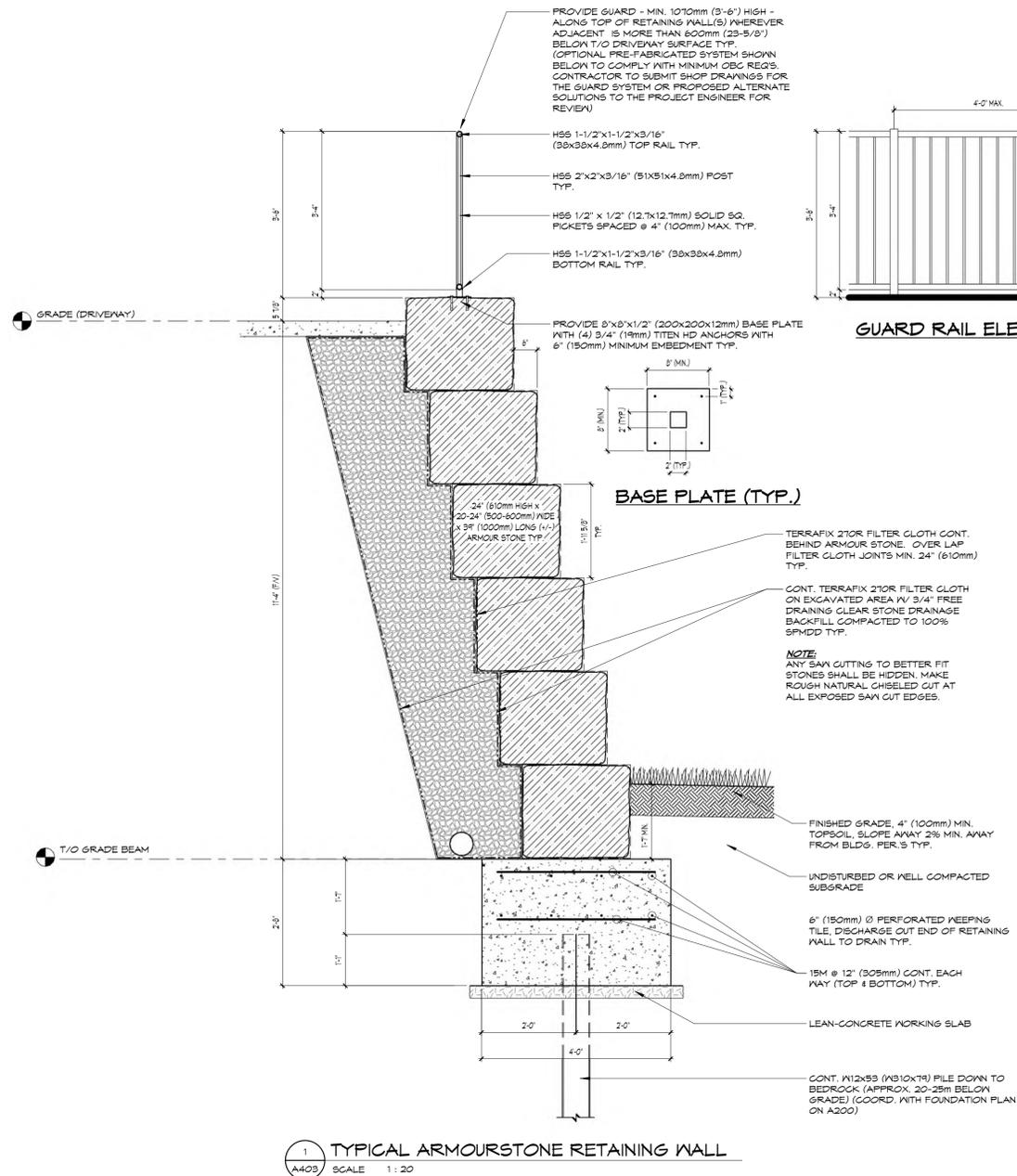
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DRAWING NO.:  
**A403**

**STAIR, GUARD & HANDRAIL LEGEND**

**NOTE**  
VERIFY ALL HEIGHTS IN FLR. LEVEL DATUMS GRADES TO VERIFY RISE, RUN, THE STAIR SHOWN INDICATES STD. RISE & RUN DIM'S - F.V. TO BE AS CLOSE AS POSSIBLE TYP.

**NOTE**  
DUE TO THE ARCHITECT NOT DETAILING THE STAIRS / LANDINGS / HANDRAILS / GUARDS - THESE NOTES ACT AS GUIDANCE FOR THE CONST. & INSTALL FOR THE CONTRACTOR

**(Updated January 1, 2024)**  
**Section 4.0. Stairs, Ramps, Landings and Guards**

**4.0.1.1. General**  
(1) This section applies to the design and construction of interior and exterior stairs, steps, ramps, landings, handrails and guards.  
**4.0.1.2. Stairs, Ramps, Landings, Handrails and Guards in Garages**  
(1) Except as provided in Sentence 4.0.1.2.(3), stairs, ramps, landings, handrails and guards in a garage that serve a single dwelling unit or a house with a secondary suite shall conform to the requirements for stairs, ramps, landings, handrails and guards within a dwelling unit.  
**4.0.1.3. Exit Stairs, Ramps and Landings**  
(1) Where a stair, ramp or landing forms part of an exit, the appropriate requirements in Sections 4.8 and 4.10 shall also apply.

**4.0.2. Stair Dimensions**  
**4.0.2.1. Stair Width**  
(1) Except as provided in Sentence (2) and Article 4.0.4.1, required exit stairs and public stairs serving buildings of residential occupancy shall have a width of not less than 900 mm.  
(2) Exit stairs serving a single dwelling unit or a house with a secondary suite including their common spaces shall have a width of not less than 900 mm.  
(3) Except as provided in Article 4.0.4.1, required exit stairs and public stairs serving buildings of other than residential occupancy shall have a width of not less than the greater of:  
(a) 900 mm, or  
(b) 2 mm per person based on the occupant load limits specified in Table 3.1.11.1.  
(4) Except as provided in Article 4.0.4.1, at least one stair between each floor level within a dwelling unit and exterior stairs serving a single dwelling unit, except required exit stairs, shall have a width of not less than 800 mm.

**4.0.2.2. Height over Stairs**  
(1) The clear height over stairs shall be measured vertically, over the clear width of the stair, from a straight line tangent to the tread and landing nosings to the lowest point above.  
(2) Except as provided in Sentence (3) and (4) and Article 4.0.4.1, the clear height over stairs shall not be less than 2 050 mm.  
(3) Except as provided in Article 4.0.4.1, the clear height over stairs serving a single dwelling unit or a house with a secondary suite including their common spaces shall not be less than 1 950 mm.  
(4) The clear height over the stairs that are located under beams and ducting in secondary suites shall not be less than 1950 mm.

**4.0.3. Stair Configurations**  
**4.0.3.1. Straight and Curved Runs in Stairs**  
(1) Except as permitted in Sentence (2), stairs shall consist of:  
(a) straight flights,  
(b) curved flights, or  
(c) spiral stairs.  
(2) Stairs within dwelling units and houses with a secondary suite, including their common spaces, shall consist of:  
(a) straight flights,  
(b) as provided in Sentence (4), curved flights,  
(c) except as provided in Sentence 4.0.4.1(2), spiral stairs,  
(d) flights with rectangular treads and winders, or  
(e) flights with a mix of rectangular and tapered treads.  
(3) Curved flights in exits shall comply with Sentence 4.0.4.1(2).  
(4) Spiral stairs shall comply with Article 4.0.4.1.

**4.0.3.2. Minimum Number of Risers**  
(1) Except for stairs within a dwelling unit, at least three risers shall be provided in interior flights.  
**4.0.3.3. Maximum Height of Stairs**  
(1) The vertical height of a flight of stairs shall not exceed 3.1 m.

**4.0.4. Step Dimensions**  
**4.0.4.1. Dimensions for Risers**  
(1) Except as provided in Article 4.0.4.1, the rise, which is measured as the vertical nosing-to-nosing distance, shall conform to Table 4.0.4.1.

**Table 4.0.4.1**  
**Rise for Rectangular Treads, Tapered Treads and Winders and Run for Rectangular Treads**  
Forming Part of Sentences 4.0.4.1(1) and 4.0.4.1(2)

Stair Type	Max. Rise, mm, for All Steps	Min. Rise, mm, for All Steps	Max. Run, mm, for Rectangular Treads	Min. Run, mm, for Rectangular Treads
Private stairs <sup>(1)</sup>	200	125	395	295
Public stairs <sup>(2)</sup>	180	125	no limit	280
Service stairs <sup>(3)</sup>	no limit	125	395	no limit
Stairs to unoccupied attics	no limit	125	395	no limit
Stairs that serve mezzanines not exceeding 20m <sup>2</sup> within live/work units	no limit	125	395	no limit
Column 1	2	3	4	5

**Notes to Table 4.0.4.1:**  
<sup>(1)</sup> Private stairs are:  
(a) interior stairs within a house with a secondary suite or an individual dwelling unit,  
(b) exterior stairs serving a house with a secondary suite or an individual dwelling unit, and  
(c) exterior stairs serving a garage that serves a house with a secondary suite or an individual dwelling unit.  
<sup>(2)</sup> Public stairs are all stairs not described as service stairs or private stairs.  
<sup>(3)</sup> Service stairs are stairs that serve areas used only as service rooms or service spaces.  
<sup>(4)</sup> Stairs to unoccupied attic space are stairs that serve attics containing no storage or living space.

**4.0.4.2. Dimensions for Rectangular Treads**  
(1) The run for rectangular treads shall conform to Table 4.0.4.1.  
(2) The depth of a rectangular tread shall be not less than its run and not more than its run plus 25 mm.

**4.0.4.4. Uniformity and Tolerances for Risers, Runs and Treads**  
(1) Except as provided in Sentence (2), risers shall be of uniform height in any one flight with a maximum tolerance of:  
(a) 5 mm between adjacent treads or landings, and  
(b) 10 mm between the tallest and shortest risers in a flight.  
(2) Except for required exit stairs, where the top or bottom riser in a stair adjoins a sloping finished walking surface such as a garage floor, driveway or sidewalk, the height of the riser across the stair shall vary by not more than 1 in 12.  
(3) Rectangular treads shall have uniform run with a maximum tolerance of:  
(a) 5 mm between adjacent treads, and  
(b) 10 mm between the deepest and shallowest treads in a flight.  
(4) Tapered treads in a flight shall have a uniform run in accordance with the construction tolerances stipulated in Sentence (3) when measured at a point 300 mm from the centre line of the handrail as described in Sentence 4.0.11.1(9).  
(5) The slope of treads shall not exceed 1 in 50.

**4.0.4.5. Uniformity of Runs in Flights with Mixed Treads within Dwelling Units**  
(1) Except as provided in Sentence (2) and Article 4.0.4.6, where a flight of stairs consists of both tapered treads and rectangular treads, all the treads shall have a uniform run when measured at a point 300 mm from the centre line of the inside handrail.  
(2) Where tapered treads are located at the bottom of a mixed-tread flight, the run of the tapered treads when measured at a point 300 mm from the centre line of the inside handrail is permitted to exceed the run of the rectangular treads.

**4.0.6. Landings**  
**4.0.6.1. Application**  
(1) This subsection applies to landings, except landings for ramps in a barrier-free path of travel.  
(2) Landings for ramps in a barrier-free path of travel shall conform to the requirements in Article 3.3.3.4.  
(3) Finished floors, and ground surfaces with a slope not exceeding 1 in 50, at the top and bottom of stairs or ramps shall be considered as landings.

**4.0.6.2. Required Landings**  
(1) Except as provided in Sentences (2) to (4) and Sentence 4.0.6.6(2), a landing shall be provided:  
(a) at the top and bottom of each flight of interior and exterior stairs, including stairs in garages,  
(b) at the top and bottom of every ramp with a slope greater than 1 in 50, and  
(c) where a doorway opens onto a stair or ramp.  
(2) Where a door at the top of a stair within a dwelling unit swings away from the stair, no landing is required between the doorway and the stair.  
(3) A landing may be omitted at the top of an exterior flight serving a secondary entrance to a single dwelling unit or a house with a secondary suite, provided:  
(a) the stair does not contain more than three risers,  
(b) the principal door is a sliding door or swings away from the stair, and  
(c) only a storm or screen door, if any, swings over the stair and is equipped with hardware to hold it open.  
(4) Sentence (3) does not apply to an exterior stair serving a secondary entrance to a house with a secondary suite that is also a main entrance to a dwelling unit in the house.  
(5) A landing may be omitted at the bottom of an exterior stair or ramp provided there is no obstruction, such as a gate or door, within the lesser of the width of the stair or ramp, or:  
(a) 900 mm for stairs or ramps serving a single dwelling unit, and  
(b) 1 000 mm for stairs or ramps not serving a single dwelling unit.

**4.0.6.3. Dimensions of Landings**  
(1) Except as provided in Sentences (2) to (7), landings shall be at least as wide and as long as the width of the stair or ramp in which they occur.  
(2) Where the landing in a stair or ramp does not turn or turns less than 90°, the length of the landing need not be more than the lesser of:  
(a) the required width of the stair or ramp, or  
(b) 1 000 mm.  
(3) The length of a landing shall be measured perpendicular to the nosings of adjacent steps or to the end of the ramp, at a distance equal to half the length required in Sentence (2) from the narrow edge of the landing.  
(4) Where stair flights or ramps of different widths adjoin a single landing, the minimum width of the landing shall be:  
(a) where one or more of the stair or ramp widths do not exceed their respective required widths, not less than the greater required stair or ramp width, or  
(b) where all of the widths of the stairs or ramps exceed their respective required widths, not less than the lesser actual stair or ramp width.  
(5) Where a door swings toward a stair, the full arc of the swing shall be over the landing.  
(6) The slope of landings shall not exceed 1 in 50.  
(7) Where a doorway or stairway opens onto the side of a ramp, the landing shall extend for a distance of not less than 300 mm on either side of the doorway or stair, except on a side abutting an end wall.

**4.0.6.4. Height over Landings**  
(1) Except as permitted by Sentence (2), the clear height over landings shall be not less than 2 050 mm.  
(2) The clear height over landings serving a single dwelling unit or a house with a secondary suite including their common spaces shall be not less than 1 950 mm.

**4.0.7. Handrails**  
**4.0.7.1. Required Handrails**  
(1) Except as provided in Sentences (2) to (4), a handrail shall be installed on stairs and ramps in conformance with Table 4.0.7.1.

**Table 4.0.7.1**  
**Handrails for Stairs and Ramps**  
Forming Part of Sentence 4.0.7.1(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Location of Stair or Ramp	Handrails Serving Stairs	Handrails Serving Ramps			
		Stairs <100mm Wide	Stairs >100 mm Wide	Ramps <100 mm Wide	Ramps >100mm Wide	
		Straight	Curved	All	Straight or Curved	All
		Number of Sides Required to have a Handrail				
1.	Within a dwelling unit or a house with a secondary suite	1	1	1	1	2
2.	All other locations	1	2	2	2	2

(2) Where a stair or a ramp is required to be at least 2 300 mm wide due to the occupant load, a handrail shall be installed such that no position on the stair or ramp is more than 825 mm from a handrail.  
(3) Handrails are not required for stairs and ramps serving a single dwelling unit, where:  
(a) interior stairs have not more than 2 risers, and  
(b) exterior stairs have not more than 3 risers, or  
(c) ramps rise not more than 400 mm.  
(4) Only one handrail is required on exterior stairs having more than 3 risers, provided such stairs serve not more than one dwelling unit or a house with a secondary suite.  
(5) Except for stairs with winders, where a flight of stairs within a dwelling unit consists of tapered treads, or a mix of tapered treads and rectangular treads, one handrail shall be installed along the narrow end of the treads.

**4.0.7.2. Continuity of Handrails**  
(1) Except as provided in Sentence (3), required handrails shall be continuously graspable throughout the length of:  
(a) ramps, and  
(b) flights of stairs, from the bottom riser to the top riser.  
(2) Except for stairs or ramps serving a single dwelling unit or a house with a secondary suite including their common spaces, at least one required handrail shall be continuous throughout the length of the stair or ramp, including at the landing except where interrupted by doorways.  
(3) For stairs or ramps serving a single dwelling unit or a house with a secondary suite including their common spaces, a handrail is permitted to start from a newel post or volute installed on the bottom tread.

**4.0.7.3. Termination of Handrails**  
(1) Handrails shall be terminated in a manner that will not obstruct pedestrian travel or create a hazard.  
(2) Except for stairs and ramps serving only one dwelling unit or a house with a secondary suite including their common spaces, at least one handrail at the sides of a stair or ramp shall extend horizontally not less than 300 mm beyond the top and bottom of each flight or ramp.  
**4.0.7.4. Height of Handrails**  
(1) The height of handrails on stairs and ramps shall be measured vertically from the top of the handrail to:  
(a) a straight line drawn tangent to the tread nosings of the stair served by the handrail, or  
(b) the surface of the ramp floor or landing served by the handrail.  
(2) Except as provided in Sentence (3), clause 3.0.3.4.1(e) and Sentence 4.0.4.7(1), handrails shall be 865 mm to 1 070 mm high.  
(3) Handrails installed in addition to required handrails need not comply with Sentence (2).  
**4.0.7.5. Ergonomic Design**  
(1) The clearance between a handrail and any surface behind it shall be not less than:  
(a) 60 mm, if the surface behind the handrail is rough or abrasive, or  
(b) 50 mm, in all other cases.  
(2) All handrails shall be constructed so as to be continually graspable along their entire length with no obstruction on or above them to break a handhold.

**4.0.7.6. Projections into Stairs and Ramps**  
(1) Handrails and projections below handrails, including handrail supports and stair stringers, shall not project more than 100 mm into the required width of a stair or ramp.  
**4.0.7.7. Design and Attachment of Handrails**  
(1) Handrails and their supports shall be designed and constructed to withstand the following loads, which need not be considered to act simultaneously:  
(a) concentrated load of not less than 0.4 kN applied at any point and in any direction for all handrails, and  
(b) for handrails other than those serving a single dwelling unit, a uniform load of not less than 0.1 kN/m.  
(2) Where exterior or interior handrails serving a single dwelling unit or a house with a secondary suite including their common spaces are attached to wood studs or blocking, the attachments shall be designed to comply with Sentence (1), where:  
(a) the attachment points are spaced not more than 1.2 m apart measured on the horizontal plane,  
(b) the first attachment point at either end is located not more than 300 mm from the end of the railing, and  
(c) the fasteners consist of no fewer than two No. 8 wood screws at each point, penetrating not less than 32 mm into solid wood.

**4.0.8. Guards**  
**4.0.8.1. Required Guards**  
(1) Except as provided in Sentence (2), and except at the leading edge at the top of a flight, every surface to which access is provided, including but not limited to flights of steps and ramps, exterior landings, porches, balconies, mezzanines, galleries and raised walkways, shall be protected by a guard on each side that is not protected by a wall for the length, where the difference in elevation is more than 800 mm between the walking surface and the adjacent surface within 1.2 m.  
(2) Guards are not required:  
(a) at loading docks,  
(b) at floor pits in repair garages, or  
(c) where access is provided for maintenance purposes only.  
(3) Doors in buildings of residential occupancy where the finished floor on one side of the door is more than 600 mm above the floor or other constructed surface or ground level on the other side of the door, shall be protected by:  
(a) a guard or  
(b) a mechanism capable of controlling the free swinging or sliding of the door so as to limit any clear unobstructed opening to not more than 100 mm.  
(4) Except as provided in Sentence (5), operable windows in buildings of residential occupancy shall be protected by:  
(a) a guard, or  
(b) a mechanism that can only be released with the use of tools or special knowledge to hold it open.  
(5) Sliding operable windows in buildings of residential occupancy shall be limited to a clear unobstructed opening to not more than 100 mm measured vertically, or horizontally.  
(6) Windows need not be protected in accordance with Sentence (4), where the bottom edge of the operable portion of the window is located:  
(a) more than 400mm above the finished floor, or  
(b) less than 1300mm above the floor or ground on the other side of the window.  
(7) Except as provided in Sentence (7), glazing installed over stairs, ramps and landings that extends to less than 1 070 mm above the surface of the treads, ramp or landing shall be:  
(a) protected by guards in accordance with this Subsection, or  
(b) non-operable and designed to withstand the specified lateral loads for guards as provided in Article 4.15.14.  
(8) Glazing installed in public areas that extends to less than 1m from the floor and is located above the second storey in buildings of residential occupancy shall be:  
(a) protected by guards in accordance with this Subsection, or  
(b) non-operable and designed to withstand the specified lateral loads for guards as provided in Article 4.15.14.  
**4.0.8.2. Loads on Guards**  
(1) Except as provided in Sentences (2), (3), (5) and (6), guards shall be designed to resist the specified loads prescribed in Table 4.0.8.2.

**Table 4.0.8.2**  
**Specified Loads for Guards**  
Forming Part of Sentence 4.0.8.2(1)

Item	Column 1	Column 2	Column 3	Column 4
	Location of Guard	Minimum Specified Loads	Horizontal Load Applied Inward or Outward at any Point at the Minimum Required Height of the Guard	Evenly Distributed Vertical Load Applied at the Top of the Guard

1. Guards within dwelling units and exterior stairs serving not more than 2 dwelling units:  
0.5 kN/m or concentrated load of 1.0 kN applied at any point<sup>(1)</sup>

2. Guards serving access ways to equipment platforms and similar areas where the gathering of many people is impractical:  
Concentrated load of 1.0 kN applied at any point

3. All other guards:  
0.75 kN/m or concentrated load of 1.0 kN applied at any point<sup>(1)</sup>

Concentrated load of 0.5 kN applied over a maximum width of 300 mm and a height of 300 mm<sup>(1)</sup>

Concentrated load of 0.5 kN applied over any area of 100 mm by 100 mm located at any point on the element or elements so as to produce the most critical effect.

Concentrated load of 0.5 kN applied over any area of 100 mm by 100 mm located at any point on the element or elements so as to produce the most critical effect.

15 kN/m

(2) Guards are not required:  
(a) at loading docks,  
(b) at floor pits in repair garages, or  
(c) where access is provided for maintenance purposes only.  
(3) Doors in buildings of residential occupancy where the finished floor on one side of the door is more than 600 mm above the floor or other constructed surface or ground level on the other side of the door, shall be protected by:  
(a) a guard or  
(b) a mechanism capable of controlling the free swinging or sliding of the door so as to limit any clear unobstructed opening to not more than 100 mm.  
(4) Except as provided in Sentence (5), operable windows in buildings of residential occupancy shall be protected by:  
(a) a guard, or  
(b) a mechanism that can only be released with the use of tools or special knowledge to hold it open.  
(5) Sliding operable windows in buildings of residential occupancy shall be limited to a clear unobstructed opening to not more than 100 mm measured vertically, or horizontally.  
(6) Windows need not be protected in accordance with Sentence (4), where the bottom edge of the operable portion of the window is located:  
(a) more than 400mm above the finished floor, or  
(b) less than 1300mm above the floor or ground on the other side of the window.  
(7) Except as provided in Sentence (7), glazing installed over stairs, ramps and landings that extends to less than 1 070 mm above the surface of the treads, ramp or landing shall be:  
(a) protected by guards in accordance with this Subsection, or  
(b) non-operable and designed to withstand the specified lateral loads for guards as provided in Article 4.15.14.  
(8) Glazing installed in public areas that extends to less than 1m from the floor and is located above the second storey in buildings of residential occupancy shall be:  
(a) protected by guards in accordance with this Subsection, or  
(b) non-operable and designed to withstand the specified lateral loads for guards as provided in Article 4.15.14.  
**4.0.8.2. Loads on Guards**  
(1) Except as provided in Sentences (2), (3), (5) and (6), guards shall be designed to resist the specified loads prescribed in Table 4.0.8.2.

**Table 4.0.8.2**  
**Specified Loads for Guards**  
Forming Part of Sentence 4.0.8.2(1)

Item	Column 1	Column 2	Column 3	Column 4
	Location of Guard	Minimum Specified Loads	Horizontal Load Applied Inward or Outward at any Point at the Minimum Required Height of the Guard	Evenly Distributed Vertical Load Applied at the Top of the Guard

1. Guards within dwelling units and exterior stairs serving not more than 2 dwelling units:  
0.5 kN/m or concentrated load of 1.0 kN applied at any point<sup>(1)</sup>

2. Guards serving access ways to equipment platforms and similar areas where the gathering of many people is impractical:  
Concentrated load of 1.0 kN applied at any point

3. All other guards:  
0.75 kN/m or concentrated load of 1.0 kN applied at any point<sup>(1)</sup>

Concentrated load of 0.5 kN applied over a maximum width of 300 mm and a height of 300 mm<sup>(1)</sup>

Concentrated load of 0.5 kN applied over any area of 100 mm by 100 mm located at any point on the element or elements so as to produce the most critical effect.

Concentrated load of 0.5 kN applied over any area of 100 mm by 100 mm located at any point on the element or elements so as to produce the most critical effect.

15 kN/m

**4.0.9. Construction**  
**4.0.9.1. Loads on Stairs and Ramps**  
(1) Except as specified in Articles 4.0.4.4 and 4.0.4.5, stairs and ramps shall be designed for strength and rigidity under uniform loading or loads to support specified loads of:  
(a) 15 kPa for stairs and ramps serving not more than one dwelling unit or a house with a secondary suite including their common spaces, and  
(b) 4.5 kPa for other stairs and ramps.  
**4.0.9.2. Exterior Concrete Stairs**  
(1) Exterior concrete stairs with more than 2 risers and 2 treads shall be:  
(a) supported on unit masonry or concrete walls or piers not less than 150 mm in cross-section, or  
(b) cantilevered from the main foundation wall.  
(2) Stairs described in Sentence (1) when cantilevered from the foundation wall, shall be constructed and installed in conformance with Subsection 4.0.10.  
(3) The depth below ground level for foundations for exterior steps shall conform to the requirements in Section 4.12.  
**4.0.9.3. Exterior Wood Steps**  
(1) Exterior wood steps shall not be in direct contact with the ground unless suitably treated with a wood preservative.  
**4.0.9.4. Wooden Stair Stringers**  
(1) Wooden stair stringers shall:  
(a) have a minimum effective depth of 40 mm, measured perpendicularly to the bottom of the stringer at the point of minimum cross-section, and an overall depth of not less than 259 mm,  
(b) be supported and secured top and bottom,  
(c) be not less than 25 mm actual thickness if supported along their length and 30 mm actual thickness if unsupported along their length, and  
(d) except as permitted in Sentence (2), be spaced not more than 900 mm o.c. in stairs serving not more than one dwelling unit or a house with a secondary suite including their common spaces, and 600 mm o.c. in other stairs.  
(2) For stairs serving not more than one dwelling unit or a house with a secondary suite including their common spaces, where risers support the front portion of the tread, the space between stringers shall be not more than 1 200 mm.  
**4.0.9.5. Treads**  
(1) Stair treads of lumber, plywood or O-2 grade OSB within dwelling units shall be not less than 25 mm actual thickness, except that, if open risers are used and the distance between stringers exceeds 750 mm, the treads shall be not less than 30 mm actual thickness.  
(2) Stair treads of plywood or

**ACCESS HATCH LEGEND  
(ROOF / CEILING / ATTIC)**

(Updated January 1, 2024)  
**9.19.2. Access**  
**9.19.2.1. Access**  
 (1) Every *attic or roof space* shall be provided with an access hatch where the *attic or roof space*,  
 (a) measures not less than,  
 (i) 10 m<sup>2</sup> in area,  
 (ii) 600 mm in length or width, and  
 (iii) 600 mm in height over at least the area described in Subclauses (i) and (ii), or  
 (b) contains a fuel-fired appliance.  
 (2) The hatch required in Sentence (1) shall be not less than 590 mm by 900 mm except that, where the hatch serves not more than one *dwelling unit*, the hatch may be reduced to 0.32 m<sup>2</sup> in area with no dimension less than 500 mm.  
 (3) Hatches to *attic or roof spaces* shall be fitted with doors or covers.

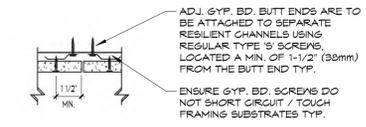
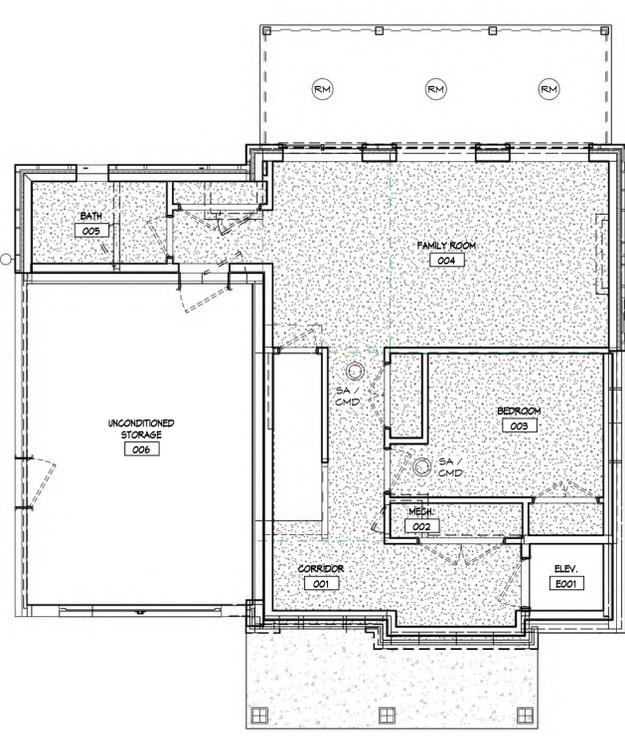


FIGURE 1  
 SECTION - HORIZ.  
 RESILIENT CHANNEL SCREEN INSTALL.  
 (SINGLE LAYER BUTT JOINT DETAIL)

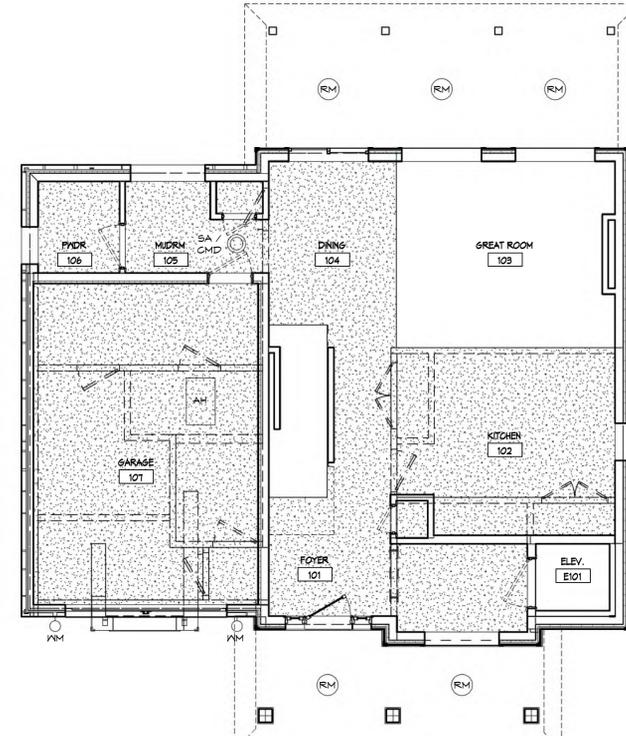
RESILIENT CHANNEL SCREEN  
 INSTALL. (HORIZ.)  
 1  
 A600 SCALE 1:5

**CARBON MONOXIDE DETECTOR LEGEND**

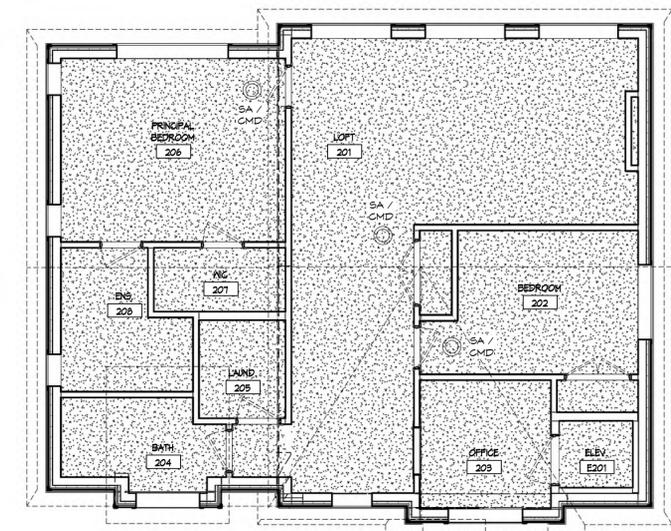
(Updated January 1, 2024)  
**4.92.9.4A. Location of Carbon Monoxide Alarms**  
 (1) A *carbon monoxide alarm* shall be installed in a *suite of residential occupancy* where  
 (a) a fuel-burning appliance is installed in the *suite*,  
 (b) a forced-air fuel-burning appliance provides heated air directly to the *suite*,  
 (c) a fuel-burning appliance or a *flue* is located in a room, *suite* or area that shares a common wall or floor or ceiling assembly within the *suite*,  
 (d) a storage garage shares a common wall or floor or ceiling assembly within the *suite*,  
 (2) Where a *carbon monoxide alarm* is required by Sentence (1) to be installed in a *suite of residential occupancy*, other than a *suite* that consists of a combined living and sleeping area, a *carbon monoxide alarm* shall be installed  
 (a) adjacent to each sleeping room in the *suite*, and  
 (b) on each *storey* without a sleeping room in the *suite*.  
 (3) Where a *carbon monoxide alarm* is required by Sentence (1) to be installed in a *suite of residential occupancy* that consists of a combined living and sleeping area, a *carbon monoxide alarm* shall be installed in the combined living and sleeping area.  
 (4) In addition to the *carbon monoxide alarms* required to be installed in a *suite of residential occupancy* in accordance with Sentence (2), a *carbon monoxide alarm* shall be installed in each sleeping room within the *suite* where the sleeping room  
 (a) contains a fuel-burning appliance or *flue*, or  
 (b) shares a common wall or floor or ceiling assembly  
 (i) with a room, *suite* or area that is located outside the *suite* and contains a fuel-burning appliance or *flue*,  
 (ii) with a storage garage, or  
 (iii) that is adjacent to an attic or crawl space to which the storage garage is also adjacent.  
 (5) *Carbon monoxide alarms* shall be installed in public corridors serving *suites of residential occupancy* where the corridor is directly heated by a forced-air fuel-burning appliance.  
 (6) Where *carbon monoxide alarms* are required by Sentence (5) to be installed in a public corridor, the *carbon monoxide alarms* shall be installed such that  
 (a) there is at least one *carbon monoxide alarm* in each portion of a divided corridor, and  
 (b) each *carbon monoxide alarm* in an undivided portion of a corridor is spaced not more than 25m apart.  
**4.92.9.4C. Installation and Conformance to Standards**  
**GENERAL NOTES:**  
 • LOCATION SHOWN IS FOR CONTEXT ONLY. CONTRACTOR TO CONFIRM EXACT LOCATIONS.



2 LEVEL 0 RCP  
 A600 SCALE 3/16" = 1'-0"



3 LEVEL 1 RCP  
 A600 SCALE 3/16" = 1'-0"



4 LEVEL 2 RCP  
 A600 SCALE 3/16" = 1'-0"

**SMOKE ALARM LEGEND**

(Updated January 1, 2024)  
**4.10.14. Smoke Alarms**  
**4.10.14.1. Required Smoke Alarms**  
 (1) Except as permitted in Article 4.10.14.2., *smoke alarms* conforming to CAN/ULC-5531, "Standard for Smoke Alarms", shall be installed in,  
 (a) each *dwelling unit*,  
 (b) each sleeping room not within a *dwelling unit*, and  
 (c) ancillary spaces and common spaces not in *dwelling units* in a house with a *secondary suite*.  
 (2) *Smoke alarms* required in Sentence (1) shall have a visual signalling component conforming to the requirements in 10.9.3. (Light, Color and Pulse Characteristics) of NFPA 72, "National Fire Alarm and Signaling Code".  
 (3) The visual signalling component required in Sentence (2) need not,  
 (a) be integrated with the *smoke alarm* provided it is interconnected to it,  
 (b) be on battery backup, or  
 (c) have synchronized flash rates, when installed in a house with a *secondary suite* or an individual *dwelling unit*.  
 (4) The luminous intensity for visual signalling components required in Sentence (2) that are installed in sleeping rooms shall be a minimum of 175 cd.  
**4.10.14.2. Sound Patterns of Smoke Alarms**  
 (1) The sound patterns of *smoke alarms* shall  
 (a) meet the temporal patterns of alarms signals, or  
 (b) be a combination of temporal pattern and voice relay.  
**4.10.14.3. Location of Smoke Alarms**  
 (1) Except as permitted in Article 4.10.14.2., within *dwelling units*, sufficient *smoke alarms* shall be installed so that,  
 (a) there is at least one *smoke alarm* installed on each *storey*, including basements, and  
 (b) on any *storey* of a *dwelling unit* containing sleeping rooms, a *smoke alarm* is installed,  
 (i) in each sleeping room, and  
 (ii) in a location between the sleeping rooms and the remainder of the *storey*, and if the sleeping rooms are served by a hallway, the *smoke alarm* shall be located in the hallway.  
 (1.1) Except as permitted in Article 4.10.14.3., within a house with a *secondary suite* that contains an interior shared means of egress or common area, a *smoke alarm* shall be installed in each shared means of egress and common area.  
 (2) A *smoke alarm* required in Sentences (1) and (1.1) shall be installed in conformance with CAN/ULC-5553, "Standard for Installation of Smoke Alarms".  
 (3) *Smoke alarms* required in Sentences (1) and (1.1) shall be installed on or near the ceiling.  
 (4) A *smoke alarm* required in Sentences (1) and (1.1) shall have a visual signalling component conforming to the requirements in 10.9.3. (Light, Color and Pulse Characteristics) of NFPA 72, "National Fire Alarm and Signaling Code".  
 (5) The visual signalling component required in Sentence (4) need not,  
 (a) be integrated with the *smoke alarm* provided it is interconnected to it,  
 (b) be on battery backup, or  
 (c) have synchronized flash rates, when installed in a house with a *secondary suite* or an individual *dwelling unit*.  
 (6) The luminous intensity for visual signalling components required in Sentence (4) that are installed in sleeping rooms shall be a minimum of 175 cd.  
**4.10.14.4. Power Supply**  
**4.10.14.5. Interconnection of Smoke Alarms**  
 (1) Where more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be wired so that the activation of one alarm will cause all alarms within the *dwelling unit* to sound.  
 (2) *Smoke alarms* in a house with a *secondary suite* shall be wirelessly interconnected or interconnected by hard-wiring so that the activation of any *smoke alarm* causes all *smoke alarms* within the house with a *secondary suite* to sound.

**REFLECTED CEILING LEGEND**

WALL MOUNTED LIGHT FIXTURES  
 RECESSED / PENDANT / SURFACE MOUNTED LIGHT FIXTURES  
 CEILING HEIGHT & COMMENT (MEASURED FROM A/F/F IN SPECIFIC SPACE NOTED)  
 ACCESS HATCH  
 NON FIRE RATED, INSULATED;  
 RSI 3.52 / R-20 RIGID INSUL. (5B-12 3.1.1.2.(1)(a)(b)),  
 6 MIL AIR/VAP. BARRIER,  
 19mm FLYND,  
 13mm GYP. BD.,  
 INT. FIN.,  
 CONT. WEATHER SEAL.

HATCH IDENTIFICATION LEGEND  
 1/2" (13mm) GYP. BD. CEILING SYSTEM ON 1/2" (13mm) RESILIENT CHANNELLING @ 16" (406mm) o/c MAX. AS REQ'D; ALL GYP. BD. FACES TO BE FTD.  
 PRE-FIN. ALUM. VENTED SCREEN SOFFIT W/ CONT. U. GLOSURES @ EDGE PER S ON WD. / METAL FRAMING @ 16" (406mm) o/c MAX. AS REQ'D TYP.

GENERAL NOTES:  
 • COORD. W/ OWNER FOR ALL ELEC. FIXTURES & ADDITIONAL FIXTURES & LOCATIONS NOT SHOWN  
 • ALL NEW GYP. BD. CEILINGS ARE TO RECEIVE 13mm RESILIENT CHANNELLING @ 406mm (16") o/c MAX. & ANY ASSOCIATED BLOCKING TO ACHIEVE A UNIFORM / FLAT CEILING SURFACE ON NEW FRAMING SUBSTRATES TYP.

NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRCA SUBMISSION

**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**

DO NOT SCALE DRAWINGS. CALL FOR ANY CLARIFICATIONS THAT ARE REQUIRED. FIELD VERIFY AT ALL BUILT CONDITIONS.  
 ALL DWG.'S ARE TO BE READ IN 24" x 36" ORIGINAL PAGE SIZE ARCH 'D' - 24" x 36"

**vallee**  
 Consulting Engineers,  
 Architects & Planners  
 G. DOUGLAS VALLEE LIMITED  
 2 TALBOT STREET NORTH  
 SIMCOE ONTARIO N3Y 3W4  
 (519) 426-6270

STAMP ARCH. (NOT APPLICABLE)  
 STAMP STRUCT. (NOT APPLICABLE)  
 LICENSED PROFESSIONAL ENGINEER  
 DEC 24/2025  
 B.D. BUCHHELD  
 2441123  
 1000 HURON ST.  
 TORONTO, ONT.  
 M5G 1B5  
 PROVINCE OF ONTARIO

Ontario Ministry of Municipal Affairs & Housing  
 THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.  
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C, SECTION 3.2 OF THE O.B.C.  
 LESLEY HUTTON RHEA  
 LESLEY HUTTON  
 G. DOUGLAS VALLEE LTD.  
 BCN 3181  
 124289

PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**  
 7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

DRAWING TITLE:  
**LEVEL 0, 1 & 2 RCP**

CHECKED BY: MS/BB  
 DRAWING SCALE: As indicated  
 PROJECT NO.: 24-113  
 DRAWN BY: LHR  
 DRAWING NO.: A600

**DOOR SCHEDULE**

LEVEL	DOOR INFORMATION			DOOR LEAF SIZE		COMMENTS
	DOOR IDENTIFICATION	LOCATION	TO RM.	WIDTH	HEIGHT	
LEVEL 0	D001		001	4'-0"	6'-8"	
LEVEL 0	D002	002	001	5'-4"	6'-8"	
LEVEL 0	D003A	001	003	2'-8"	6'-8"	
LEVEL 0	D003B		003	4'-0"	6'-8"	
LEVEL 0	D004A	001	004	2'-4"	6'-8"	
LEVEL 0	D004B		004	5'-0"	6'-8"	
LEVEL 0	D004C	004		5'-0"	6'-8"	
LEVEL 0	D005	004	005	2'-6"	6'-8"	
LEVEL 0	D006A	004	006	3'-0"	6'-8"	
LEVEL 0	D007	001	001	3'-0"	6'-8"	
LEVEL 0	D008	006	006	3'-0"	6'-8"	
LEVEL 1	D101A		101	3'-0"	6'-11"	(2) 12" SIDELIGHTS + 14" TRANSOM
LEVEL 1	D101B		102	1'-8"	6'-8"	
LEVEL 1	D104	104		5'-0"	6'-8"	14" TRANSOM
LEVEL 1	D105		105	2'-0"	6'-8"	
LEVEL 1	D106	105		2'-8"	6'-8"	
LEVEL 1	D107A		107	10'-0"	8'-0"	
LEVEL 1	D107B		105	2'-8"	6'-8"	
LEVEL 1	DE101	E101		3'-0"	6'-8"	
LEVEL 2	D201		201	4'-0"	6'-8"	
LEVEL 2	D202A	201	202	2'-6"	6'-8"	
LEVEL 2	D202B		202	4'-0"	6'-8"	
LEVEL 2	D203	201	203	3'-0"	6'-8"	
LEVEL 2	D204	201	204	2'-6"	6'-8"	
LEVEL 2	D205	201	205	2'-8"	6'-8"	
LEVEL 2	D206	201	206	2'-6"	6'-8"	
LEVEL 2	D207	206	207	2'-6"	6'-8"	
LEVEL 2	D208	206	208	2'-6"	6'-8"	
LEVEL 2	D209	E201	209	3'-0"	6'-8"	

**WINDOW SCHEDULE**

LEVEL	TYPE MARK	ROOM	WIDTH	HEIGHT	SILL HEIGHT	COMMENTS
LEVEL 1	W1	FOYER	4'-8"	5'-4"	2'-6"	
LEVEL 1	W2	KITCHEN	2'-4"	4'-4"	3'-6"	
LEVEL 1	W3	GREAT ROOM	5'-0"	5'-8"	1'-0"	14" TRANSOM
LEVEL 1	W4	GREAT ROOM	5'-0"	5'-8"	1'-0"	14" TRANSOM
LEVEL 1	W4	MUDROOM	4'-8"	5'-0"	2'-10"	
LEVEL 1	W5	PYDR	2'-4"	5'-0"	2'-10"	
LEVEL 2	W6	BATH	4'-0"	4'-4"	2'-6"	
LEVEL 2	W7	LOFT	2'-8"	5'-4"	2'-6"	
LEVEL 2	W8	OFFICE	4'-0"	5'-4"	2'-6"	
LEVEL 2	W9	BEDROOM	4'-8"	5'-0"	2'-10"	
LEVEL 2	W10	GREAT ROOM	5'-0"	5'-0"	2'-10"	
LEVEL 2	W10	GREAT ROOM	5'-0"	5'-0"	2'-10"	
LEVEL 2	W10	LOFT	5'-0"	5'-0"	2'-10"	
LEVEL 2	W11	PRIMARY BED	7'-0"	4'-0"	2'-10"	
LEVEL 2	W12	PRIMARY BED	2'-0"	4'-0"	2'-10"	
LEVEL 2	W12	PRIMARY BED	2'-0"	4'-0"	2'-10"	
LEVEL 2	W12	ENSUITE	2'-0"	4'-0"	2'-10"	
LEVEL 0	W13	BEDROOM	3'-11"	2'-11"	5'-1"	
LEVEL 0	W14	FAMILY ROOM	5'-0"	5'-8"	1'-0"	
LEVEL 0	W14	FAMILY ROOM	5'-0"	5'-8"	1'-0"	
LEVEL 0	W15	BATH	2'-0"	3'-4"	3'-4"	

**DOOR LEAF & FRAME NOTES**

- COORD.:**
- COORD. W/ FLR. PLANS, ELEVATIONS & SCHEDULES FOR LOCATIONS, REQ'D FRAME WIDTH, DOOR SWINGS & QUANTITY
- DOOR HARDWARE:**
- HARDWARE:**
- ALL DOOR HARDWARE & HARDWARE REQ.'S TO BE COORDINATED & VERIFIED W/ THE MANUFACTURER, CONTRACTOR & OWNER
- DOOR LEAFS & FRAMES:**
- ALL EXT. DOORS TO BE INSULATED WITH CONT. PER. WEATHER STRIPPING & ALUM. THRESHOLD (THRESHOLD TO EXTEND U/S EACH JAMB & BE THE WIDTH OF THE DOOR FRAME)
- GLAZING:**
- GLAZING - COORD. W/ OWNER
- FINISH:**
- FINISH - COORD. W/ OWNER
- SIZING:**
- DN'S INDICATED ARE FOR DOOR LEAF U/N/O. VERIFY ALL OPENING DIM'S & R/O SIZING PRIOR TO FABRICATION & ORDERING. (COORD. W/ TYP. DOOR FRAME DETAILS)
- GARAGE:**
- ALL GARAGE TO DWELLING UNIT DOORS TO BE INSULATED G/N CONT. PER. WEATHERSTRIPPING, ALUM. THRESHOLD & CLOSER FOR FUME CONTROL

(Updated January 1, 2024)

**9.10.15.15. Doors Between Garages and Houses or Dwelling Units**

(1) A door between an attached or built-in garage and a dwelling unit shall be tight-fitting and weather-stripped to provide an effective barrier against the passage of gases and exhaust fumes and shall be fitted with a self-closing device.

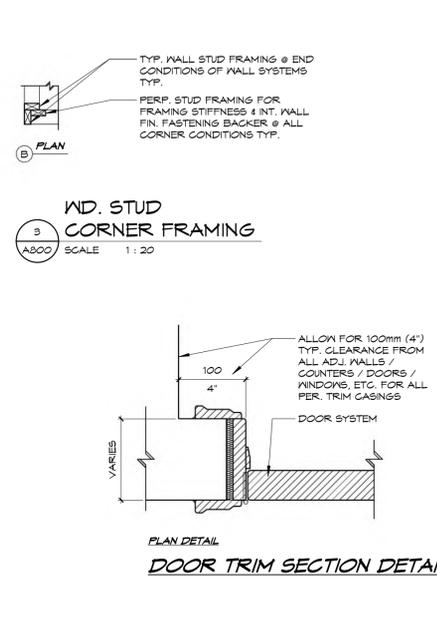
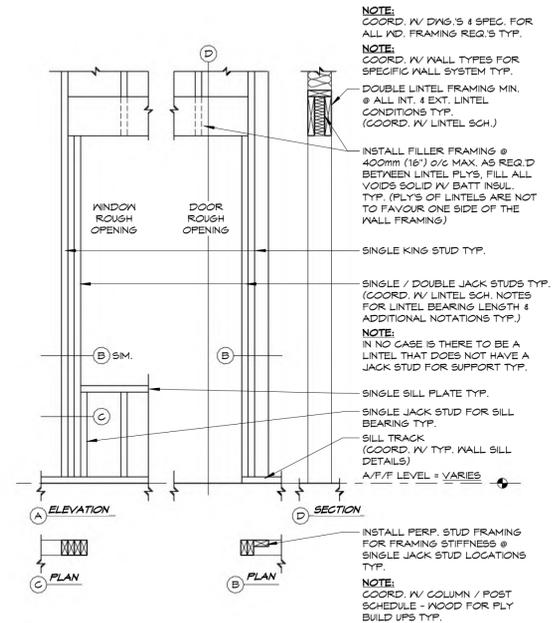
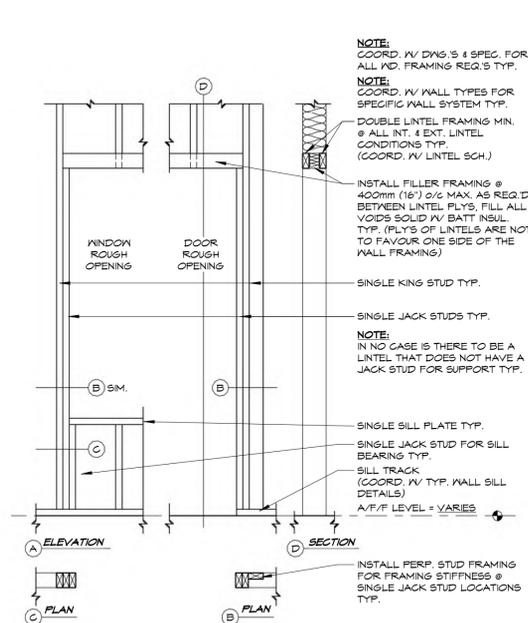
(2) A doorway between an attached or built-in garage and a dwelling unit shall not be located in a room intended for sleeping.

- OH VEHICULAR:**
- ALL EXT. OH DOORS TO BE INSULATED (INSUL. IN SOLID PANELS OR DOUBLE INSUL. GLAZING @ VISION LOCATIONS), CONT. PER. WEATHER STRIPPING SEALS, AUTOMATIC OPENER W/ OPEN/CLOSE MOTION SENSORS / MANUAL OPERATOR HANDLE W/ LOCK LEVER, GALV. ROLLER FRAMES (INSTALL VIBRATION SEPARATOR ON MTG. TO FLR. ABOVE WHERE APPLICABLE), BOTTOM SEAL & ALL OTHER ASSOCIATED COMPONENTS FOR A COMPLETE & PROPER SYSTEM

- ENERGY EFFICIENCY:**
- ENERGY EFFICIENCY OF OPENING INFILLS IN CONDITIONED SPACES TO MEET OR EXCEED THE CBC MATRIX ENERGY EFFICIENCY REQ.'S

**WINDOW NOTES**

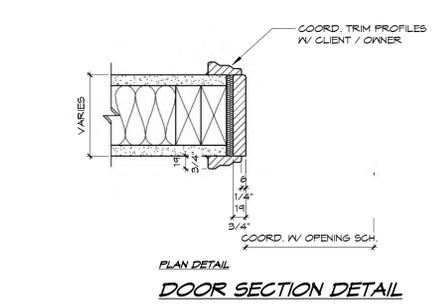
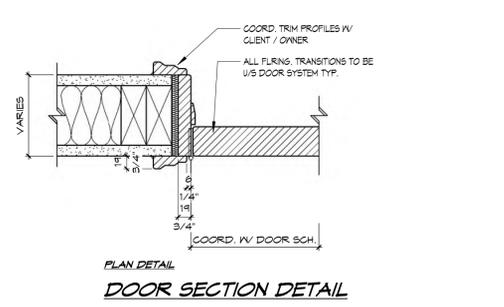
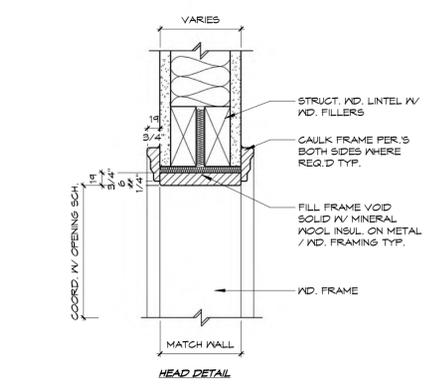
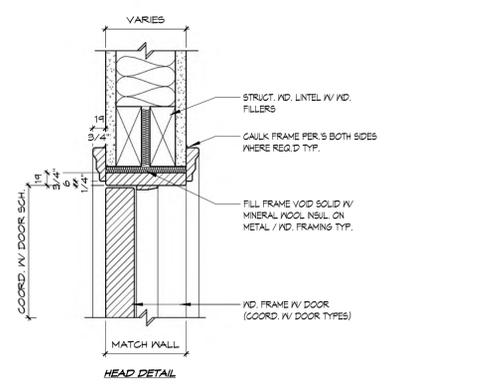
- COORD.:**
- COORD. W/ FLR. PLANS, ELEVATIONS & SCHEDULES FOR LOCATIONS & QUANTITY OF ALL WINDOWS
- HARDWARE:**
- ALL FINISH HARDWARE & HARDWARE REQ.'S SHOWN / NOT SHOWN TO BE COORDINATED & VERIFIED W/ THE MANUF. / CONTRACTOR & OWNER
- FRAMING:**
- FRAMING - COORD. W/ OWNER
- GLAZING:**
- GLAZING - COORD. W/ OWNER
- FINISH:**
- FINISH - COORD. W/ OWNER
- SIZINGS:**
- OPENINGS - DIM'S INDICATED ARE R/O OF STD. SIZING MANUF. U/N/O - VERIFY ALL OPENING DIM'S & R/O SIZING PRIOR TO FABRICATION & ORDERING.
- ENERGY EFFICIENCY:**
- ENERGY EFFICIENCY OF OPENING INFILLS IN CONDITIONED / SEMI-HEATED SPACES TO MEET OR EXCEED THE CBC MATRIX ENERGY EFFICIENCY REQ.'S



**1** W/D. FRAMING - NON-LOADBEARING FRAMING  
SCALE 1:20

**2** W/D. FRAMING - LOADBEARING FRAMING  
SCALE 1:20

**4** DOOR FRAME DETAILS - STD. ADJ. WALL SPACING  
SCALE 1:5



NO.	DATE	ISSUANCE
1	2025.12.24	ISSUED FOR LPRGA SUBMISSION

**PRELIMINARY NOT FOR CONSTRUCTION**

DO NOT SCALE DRAWINGS. CALL FOR ANY CLARIFICATIONS THAT ARE REQUIRED. FIELD VERIFY AT ALL BUILT CONDITIONS

ALL DWG.'S ARE TO BE READ IN COLOUR

ORIGINAL PAGE SIZE ARCH 'D' - 24" x 36"

**vallee**  
Consulting Engineers, Architects & Planners

**G. DOUGLAS VALLEE LIMITED**  
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SIMCOE ONTARIO N3Y 3W4  
(519) 426-6270

STAMP ARCH. (NOT APPLICABLE)

STAMP STRUCT. (Professional Engineer Seal)

Ontario Ministry of Municipal Affairs & Housing

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN AND HAS THE QUALIFICATIONS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION 'C' SECTION 3.2 OF THE O.B.C.

*Lesley Hutton-Rhwa*

LESLEY HUTTON / G. DOUGLAS VALLEE LTD. (Professional Engineer Seal)

PROJECT TITLE:  
**BROOKSHAW SINGLE DETACHED**

7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

DRAWING TITLE:  
**DOOR & WINDOW SCHEDULES, TYP. DOOR DETAILS & NOTES**

CHECKED BY: MS/BB  
DRAWING SCALE: As indicated  
PROJECT NO.: 24-113

DRAWN BY: LHR  
DRAWING NO.: **A800**

GENERAL STRUCTURAL NOTES

- 1. THIS DESIGN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE LATEST EDITION.
2. ALL PRE-ENGINEERED, PREFABRICATED BUILDING SYSTEMS AND COMPONENTS SHALL BE DESIGNED BY P.ENG. (PEO) AND CONFIRMED ON SEALED SHOP DRAWINGS TO BE SUBMITTED TO CONSULTANT FOR REVIEW.
3. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISIONS HAVE BEEN MADE IN THE DESIGN FOR TEMPORARY CONDITIONS OCCURRING DURING CONSTRUCTION.
4. DIMENSIONS PROVIDED ON DRAWINGS MUST BE CHECKED AND VERIFIED WITH ALL OTHER DRAWINGS.
5. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS - O REG.213.
6. WHERE THERE IS A CONFLICT IN THE SPECIFICATIONS AND/OR DRAWINGS THE MORE STRINGENT SHALL APPLY UNLESS APPROVED OTHERWISE IN WRITING BY THE PROJECT ENGINEER.
1. DO NOT SCALE THE DRAWINGS.

DESIGN LOADS

- 1. LOCATION
NANTICOKE (PORT DOVER), ONTARIO
2. ROOF DEAD LOAD = 1.0 kPa
3. FLOOR DEAD LOADS:
MAIN FLOOR DEAD LOAD = 1.0 kPa
SECOND FLOOR DEAD LOAD = 1.0 kPa
GARAGE SUSPENDED SLAB = xx kPa
4. LIVE (OCCUPANCY-OBC TABLE 4.1.5.3):
LOCATION SPECIFIED LOAD (kPa)
ROOF 1.0
BASEMENT (RESIDENTIAL) 1.4
MAIN FLOOR (RESIDENTIAL) 1.4
SECOND FLOOR (RESIDENTIAL) 1.4
5. SNOW (OBC CL. 4.1.6):
Sk = 0.4kPa
Ss = 1.2kPa
Is = 1.00 (NORMAL)
Cd = 0.9
Cw = 1.0
Cs = 1.0
Ca = 1.0 FOR FLAT ROOF
S = Is [ Ss (CbcwCsCa) + Sr ] = 1.36 kPa

FOUNDATIONS

- 1. DEEP FOUNDATION PILES BEARING ON BEDROCK. REFER TO GEOTECHNICAL REPORT PREPARED BY PETO MACGILLUM LTD. (25H101) OCTOBER 2025) PROVIDED.
2. ENGINEER TO BE PRESENT DURING PILE INSTALLATION TO CONFIRM LOCATION AND BEARING ON BEDROCK.
3. ALL FOUNDATION DESIGNS MAY BE SUBJECT TO CHANGE BASED ON UNFORSEEN SOIL CONDITIONS. ALL FOUNDING SOILS SHALL BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION INSTALLATION.
4. GEOTECHNICAL ENGINEER MUST BE PRESENT DURING EXCAVATION AND ENGINEERED FILL CONSTRUCTION IN ORDER TO VERIFY COMPACTION AND SOIL BEARING CAPACITY.
5. REFER TO GEOTECHNICAL REPORT FOR CONSTRUCTION GUIDANCE REGARDING ENGINEERED FILL AND DEWATERING.
6. ALL DEWATERING TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
7. SOIL CONDITIONS, REINFORCING STEEL AND FORMWORK SHALL BE INSPECTED BY THE ENGINEER BEFORE POURING CONCRETE. CONTRACTOR SHALL GIVE ENGINEER A MINIMUM 24 HOURS NOTICE TO CARRY OUT INSPECTION.
8. THE LINE OF SLOPE BETWEEN ADJACENT FOOTING OR EXCAVATIONS SHALL NOT EXCEED A RISE OF 1 IN A RUN OF 10 UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.
9. DO NOT BACKFILL AGAINST FOUNDATION WALLS UNTIL LATERAL SUPPORTING FLOORS HAVE BEEN CONSTRUCTED, UNLESS BRACING DETAILS ARE SUBMITTED, WHERE POSSIBLE BACKFILL BOTH SIDES OF WALLS SIMULTANEOUSLY FOR BURIED FOUNDATIONS.
10. FOOTINGS SUBJECT TO FROST ACTION SHOULD BE PROVIDED WITH 1200mm OF EARTH COVER OR EQUIVALENT THERMAL INSULATION. A 25mm THICK LAYER OF POLYESTERENE INSULATION IS THERMALLY EQUIVALENT TO 600mm OF SOIL COVER.

STRUCTURAL STEEL

- 1. DESIGN & CONSTRUCTION CODES/STANDARDS:
CAN/CSA S16-01 LIMIT STATES DESIGN OF STEEL STRUCTURES
CAN/CSA S40.20/S40.21 STRUCTURAL QUALITY STEEL
CAN/CSA G30.19 BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT
CAN/CSA M186 WELDING OF REINFORCING BARS IN CONCRETE CONSTRUCTION
CAN/CSA M58 WELDED STEEL CONSTRUCTION
2. STRUCTURAL STEEL SHALL CONFORM TO CSA S40.21 GRADE 350M (CLASS H FOR HOLLOW STRUCTURAL SECTION-HSS) WITH ONE SHOP COAT AND FIELD TOUCH-UP OF ZINC CHROMATE PRIMER, CONFORMING TO GISC/CPMA STANDARD 1-13A OR 2-15; IT SHALL BE PAINTED TO OWNERS SPECIFICATION.
3. E480XX (E10XX) ELECTRODES TO BE USED FOR ALL WELDING.
4. ALL STEEL CONNECTIONS TO BE DESIGNED BY THE STEEL FABRICATOR USING THE SUPPLIED FACTORED DESIGN LOADS. WHEN DESIGN LOADS ARE NOT PROVIDED, THE MEMBER SHALL BE ASSUMED TO BE SIMPLY SUPPORTED WITH ALL CONNECTIONS DESIGNED AS PER THE STANDARD GISC MANUAL PRACTICES.
5. SUBMIT SHOP DRAWINGS, INCLUDING CONNECTIONS DETAILS AND LOCATIONS OF ALL SPLICES FOR REVIEW BEFORE PROCEEDING WITH FABRICATION. ALL SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.

CONCRETE

- 1. DESIGN & CONSTRUCTION CODES/STANDARDS
CAN/CSA A23.1 CONCRETE MATERIALS & METHODS OF CONCRETE CONSTRUCTION
CAN/CSA A23.2 METHODS OF TEST & STANDARD PRACTICES FOR CONCRETE
CAN/CSA A23.3 DESIGN OF CONCRETE STRUCTURES
CAN/CSA A23.4 PRE-CAST CONCRETE
2. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 25 MPa MINIMUM AND EXPOSURE CLASS OF TYPE 'N' UNLESS OTHERWISE SPECIFIED. CONCRETE MIX DESIGNS SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.
3. THE CONCRETE EXPOSURE CLASS AND 28-DAY COMPRESSIVE STRENGTH FOR EACH STRUCTURAL ELEMENT SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
EXPOSURE CLASS 28-DAY COMPRESSIVE STRENGTH
FOOTINGS N 25 MPa
FOUNDATION WALLS AND COLUMNS (EXTERIOR) F-2 25 MPa
FOUNDATION WALLS AND COLUMNS (INTERIOR) N 25 MPa
INTERIOR FLOOR SLABS (EXCL. STORAGE ROOM) N 25 MPa
REINFORCED WALLS AND SLABS C-1 35 MPa
EXTERIOR SLABS (INCL. STORAGE ROOM) C-2 32 MPa
4. REINFORCEMENT SHALL BE DEFORMED BARS AND CONFORM TO CAN/CSA 630.10, GRADE 400MPa.
5. REINFORCING STEEL SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI STANDARDS 318 AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF ONTARIO.
6. WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED.
7. MINIMUM REINFORCEMENT LAP LENGTHS:
BAR SIZE MIN. SPLICE LAP LENGTH
10M 400mm
15M 600mm
20M 900mm
25M 1300mm
8. ALL REINFORCEMENT LAPS TO BE 'CLASS B' UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
9. CONCRETE SLABS-ON-GRADE TO BE REINFORCED WITH WELDED WIRE MESH REINFORCING IN ADDITION TO THE SPECIFIED REINFORCEMENT, UNLESS OTHERWISE NOTED.
10. REINFORCEMENT SPACING SHOWN ON DRAWINGS TO BE A MAXIMUM, ENSURE MINIMUM 1-15M TOP AND BOTTOM CONTINUOUS AT ALL SLAB EDGES BY ADJUSTING BAR LENGTH OR PROVIDING ADDITIONAL TOP/BOTTOM EDGE BARS AS REQUIRED.
11. PROVIDE CHAIRS, SPACER BARS, SUPPORT BARS AND OTHER ACCESSORIES TO SUPPORT REINFORCING IN ACCORDANCE WITH THE LATEST EDITIONS OF CSA A23.1 AND A23.3. CHAIRS TO BE PLASTIC, PLASTIC TIPPED OR CONCRETE. ALL TIE WIRE CHAIRS AND BARS SUPPORTS USED FOR COATED REINFORCING SHALL BE NON-METALLIC OR PROTECTED WITH AN ACCEPTABLE COATING. CHAIRS SHALL BE SPACED AT 1200mm O.C. MAXIMUM.
12. ALL REINFORCING STEEL FABRICATION AND PLACEMENT DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE FABRICATION.
13. CONCRETE COVER FOR REINFORCEMENT SHALL CONFORM TO CSA STANDARD A23.1, AS FOLLOWS, UNLESS OTHERWISE NOTED.
EXPOSED TO WEATHER NOT EXPOSED TO WEATHER
CAST AGAINST EARTH 75 mm +/- 12mm (3" +/- 1/2") 75 mm +/- 12mm (3" +/- 1/2")
BEAMS, SLABS, WALLS, 50 mm +/- 12mm (2" +/- 1/2") 40 mm +/- 12mm (1-1/2" +/- 1/2")
AND COLUMNS
14. SLAB-ON-GRADE TO BE PLACED ON COMPACT GRANULAR MATERIAL. COMPACTION TESTS ON FILL MATERIAL TO BE CARRIED OUT PRIOR TO SLAB-ON-GRADE PLACEMENT.
15. PROVIDE 10mm ASPHALT IMPREGNATED FIBRE BOARD AND CAULKING AROUND ALL COLUMNS AND ALONG ALL WALLS.
16. PROVIDE CHAMFERS, REGLETS, RIVETS, REVEALS, RECESSES AND THE LIKE AS SHOWN ON THE ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS.
17. ALL CONCRETE FORMS TO BE NETTED THOROUGHLY BEFORE POURING CONCRETE.
18. MAINTAIN MINIMUM SPECIFIED THICKNESS AT ALL DEPRESSIONS AND CHANGES IN ELEVATIONS, REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXTENT AND LOCATIONS OF ALL FINISHES AND DEPRESSIONS.
19. DO NOT ADD WATER TO CONCRETE ON SITE UNLESS WRITTEN APPROVAL IS GIVEN BY THE ENGINEER. IF HIGHER SLUMP CONCRETE IS DESIRED, CONCRETE SUPPLIER SHALL DESIGN AND SUPPLY ACCORDINGLY.
20. SLOPE ALL FLOORS AS SHOWN ON ARCHITECTURAL OR MECHANICAL DRAWINGS. FLOOR DRAINS TO SLOPE 1% MIN. IN THE DIRECTION OF ALL FLOOR DRAINS TYP.
21. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE. FLOOR FINISHES SHALL CONFORM TO CSA STANDARD A23.1 CLASS A FINISH UNLESS OTHERWISE NOTED.
22. ALL REQUIRED OPENINGS SHALL BE SLEEVED OR FORMED PRIOR TO PLACING CONCRETE. CORING OR SAW CUTTING FOR OPENINGS AFTER CASTING SHALL NOT BE PERMITTED AS AN ALTERNATE METHOD OF PROVIDING OPENINGS. ALL DRAINS SHALL BE SET PRIOR TO CONCRETE PLACING.
23. FOR OPENINGS GREATER THAN 300mmX300mm (12"X12") REINFORCE AROUND THE OPENING IN ACCORDANCE WITH THE TYPICAL DETAILS UNLESS OTHERWISE NOTED.
24. CURING
REINFORCED CONCRETE ELEMENTS TO BE MET-CURED AS PER ACI 308 AND THE DURATIONS SPECIFIED BELOW UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
CONCRETE SLABS: 7 DAYS MINIMUM
EXPOSED CONCRETE WALLS: 4 DAYS MINIMUM
25. ALL HONEYCOMBS SHALL BE CUT OUT AND FILLED TO THE SATISFACTION OF THE ENGINEER.
26. PROVIDE SAWCUTS WITHIN 24 HOURS OF FINISHING AT LOCATIONS SHOWN ON DRAWINGS. SAWCUT DEPTH TO BE 1/4 OF SLAB THICKNESS. SAWCUT AS CLOSE TO COLUMNS OR WALLS AS PRACTICAL. FILL SAWCUTS WITH NON-METALLIC JOINT FILLER (STERNSON LOADFLEX OR EQUAL).
27. SPACING OF SAW-CUT CONTROL JOINTS IN CONCRETE SLABS SHALL NOT EXCEED 4.5m (14'-6") O.C.
28. SUBMIT PROPOSED SAW-CUT CONTROL JOINT LOCATION TO THE ENGINEER FOR APPROVAL UNLESS SHOWN ON DRAWINGS.
29. OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED, SHALL BE APPROVED BY THE ENGINEER BEFORE PROCEEDING.
30. NON-SHRINK GROUT SHALL BE AN APPROVED PREMIXED PROPRIETARY PRODUCT.
31. DRY-PACKED GROUT SHALL BE 1 PART PORTLAND CEMENT TO 1.5 PARTS OF SAND TO 2 PARTS OF 4mm PEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN THE MIXTURE. COMPRESSIVE STRENGTH SHALL BE 50MPa AT 28 DAYS.

WOOD

- 1. DESIGN & CONSTRUCTION CODES/STANDARDS
CAN/CSA Q36 ENGINEERING DESIGN IN WOOD
2. MIN. GRADE REQUIREMENTS
3. SAWN LUMBER:
ALL STANDARD SIZE SOLID SAWN WOOD LUMBER SHALL BE A MINIMUM GRADE S.P.F. #2 UNLESS OTHERWISE NOTED.
4. ENGINEERED LUMBER:
ALL ENGINEERED WOOD PRODUCTS MANUFACTURED BY ILEVEL (MEYERHAUSER) AS FOLLOWS:
TIMBERSTRAND LSL: 1.95E GRADE
MICROLLAM LVL: 2.0E GRADE
PARALLAM PSL: 2.0E GRADE
TRUS JOIST T.J: AS SPECIFIED ON DRAWINGS
5. EQUIVALENT ENGINEERED LUMBER PRODUCTS ONLY TO BE USED IF APPROVED IN WRITING BY THE ENGINEER.
6. ALL WOOD MEMBER SIZES & DIMENSIONS SHALL BE AS INDICATED ON THE DRAWINGS.
7. INSTALLATION SHALL COMPLY WITH MANUFACTURERS GUIDELINES AND REQUIREMENTS.
8. PRE-ENGINEERED WOOD ROOF TRUSSES & GIRDERS SHALL BE DESIGNED BY P.ENG. (PEO) AND CONFIRMED ON SEALED SHOP DRAWINGS TO BE SUBMITTED TO CONSULTANT FOR REVIEW. THE CONSULTANT SHALL NOT ASSUME RESPONSIBILITY FOR SUCH COMPONENTS OR SYSTEMS THAT ARE DESIGNED BY OTHERS.
9. ALL ROOF TRUSS CONNECTORS ARE ASSUMED TO BE DESIGNED BY ROOF TRUSS DESIGNER. OTHERWISE, ROOF SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER FOR REVIEW AND TRUSS CONNECTOR DESIGN PRIOR TO FABRICATION.
10. LATERAL WOOD BRACING TO BE DESIGNED AND SPECIFIED BY THE ROOF TRUSS DESIGNER AND CONFIRMED BY SHOP DRAWINGS.
11. ALL BUILT-UP ENGINEERED WOOD LINTELS TO BE FASTENED TOGETHER AS PER MANUFACTURERS SPECIFICATIONS.
12. ALL MASS TIMBER AND GLULAM TIMBER CONNECTIONS ARE SHOWN ON STRUCTURAL DRAWINGS FOR CONCEPT ONLY. ALL MASS TIMBER AND GLULAM TIMBER CONNECTIONS TO BE DESIGNED BY THE MASS TIMBER FABRICATOR AND SHOWN ON SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER (PEO). THE CONSULTANT SHALL NOT ASSUME RESPONSIBILITY FOR SUCH COMPONENTS OR SYSTEMS THAT ARE DESIGNED BY OTHERS.

ABBREVIATIONS

- Ø - AT (SPACING C/C)
AB - ANCHOR BOLT
ADDL - ADDITIONAL
ARCH. - ARCHITECTURAL
BOT - BOTTOM
BLDG. - BUILDING
BLL - BOTTOM LOWER LEVEL
BP - BEARING PLATE
BBP - BEAM / COLUMN BEARING PLATE
BRG - BEARING
BUL - BOTTOM UPPER LEVEL
C - CHANNEL SECT
C/P - CAST IN PLACE
CJ - CONTROL JOINT
CHK. - CHECKER
C/C - CENTER TO CENTER
CL - CENTERLINE
C/M - COMPLETE WITH CONC. - CONCRETE
CONT. - CONTINUOUS
DL - DEAD LOAD
DIAG. - DIAGONAL
DIA. OF Ø - DIAMETER
DIM. - DIMENSION
EA - EACH
EE - EACH END
EF - EACH FACE
ELEC. - ELECTRICAL
ENG. D. - ENGINEERED
ES - EACH SIDE
EW - EACH WAY
ELEV. - ELEVATION
EQ. - EQUAL(LY)
EX. or EXIST. - EXISTING
EXT. - EXTERIOR
FF - FRONT FACE
FDTN. - FOUNDATION
FIN. - FINISHED
FTG. - FOOTING
FLR. - FLOOR
F/V - FIELD VERIFY
GALV. - GALVANIZED
HCGS - HOLLOW-CORE CONCRETE SLAB
HORIZ. - HORIZONTAL
H/D/S & HDS - HOT DIPPED GALVANIZED
HDWR. - HEAVY-DUTY GALV. MASONRY REINF.
HSS - HOLLOW STRUCTURAL SECTION
IF - INSIDE FACE
INT. - INTERIOR
INCL. - INCLUDING
L - STEEL ANGLE
LL - LIVE LOAD
LLH - LONG LEG HORIZONTAL
LLV - LONG LEG VERTICAL
LNG - LONG
M - METER
mm - MILLIMETER
ML - MIDDLE LAYER
MECH. - MECHANICAL
MAX. - MAXIMUM
MIN. - MINIMUM
MISC. - MISCELLANEOUS
NF - NEAR FACE
NTS - NOT TO SCALE
OF - OUTSIDE FACE
PTT - PRESSURE TREATED
PTD. - PAINTED
P - PLATE
REIN. - REINFORCED, REINFORCING or REINFORCEMENT
REQ. D. - REQUIRED
REV. - REVISION or REVISED
SG - SAW CUT SECT. SECTION
SF / S.F. - STEP FOOTING
SMR - STANDARD GALV MASONRY REINF
SOS - S/O/G - SLAB ON GRADE
STD. - STANDARD
STRUCT. - STRUCTURAL
SIM. - SIMILAR
SYM - SYMMETRICAL
SP - SPACED or SPACING
SPMDD - STD. PROCTOR MAX. DRY DENSITY
TCX - TOP CHORD EXTENSION
TEMP. - TEMPERATURE
TLL - TOP UPPER LEVEL
TJ - TIE JOIST
T/O - TOP OF
TLL - TOP LOWER LEVEL
TYP - TYPICAL
UNO / UN/O - UNLESS NOTED OTHERWISE
U/N - UNDERNEATH
U/S - UNDERSIDE
VERT. - VERTICAL
VOS - VERIFY ON SITE
W - ROLLED STEEL BEAM
WB - WOOD BEAM
WD - WOOD
W/W - WELDED WIDE FLANGE
W/M - WELDED WIRE MESH

Table with 3 columns: NO., DATE, ISSUANCE. Row 1: 1, 2025.12.24, ISSUED FOR LPRCA SUBMISSION.

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STAMP ARCH. (NOT APPLICABLE) STAMP STRUCT. (LICENSED PROFESSIONAL ENGINEER B.D. RICHMOND 24-113)

Ontario Ministry of Municipal Affairs & Housing. LESLEY HUTTON RHOE, G. DOUGLAS VALLEE LTD.

PROJECT TITLE: BROOKSHAW SINGLE DETACHED. 7 DOUGLAS STREET, PORT DOVER, ONTARIO, NOA 1N7

DRAWING TITLE: STRUCTURAL GENERAL NOTES

CHECKED BY: MS/BB DRAWING SCALE: 1:50 PROJECT NO.: 24-113. DRAWN BY: LHR DRAWING NO.: S000

# Attachment 5:



Long Point Region Conservation Authority  
 4 Elm Street  
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<b>Policy Title:</b> <b>Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation, Ontario Regulation 41/24</b>	<b>Policy Number:</b> <b>012-24</b>	<b>Pages</b> <b>68</b>
<b>Date:</b> <b>April 3, 2024</b>	<b>Supersedes:</b> <b>Policy to Implement Long Point Region Conservation Authority's amended O. Reg. 178/06 "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations"</b>	
<b>Cross Reference:</b>	<b>Issuing Authority:</b> <b>Board of Directors by Resolution A-50/24</b>	

## **Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation**

### **Ontario Regulation 41/24**

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# Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation

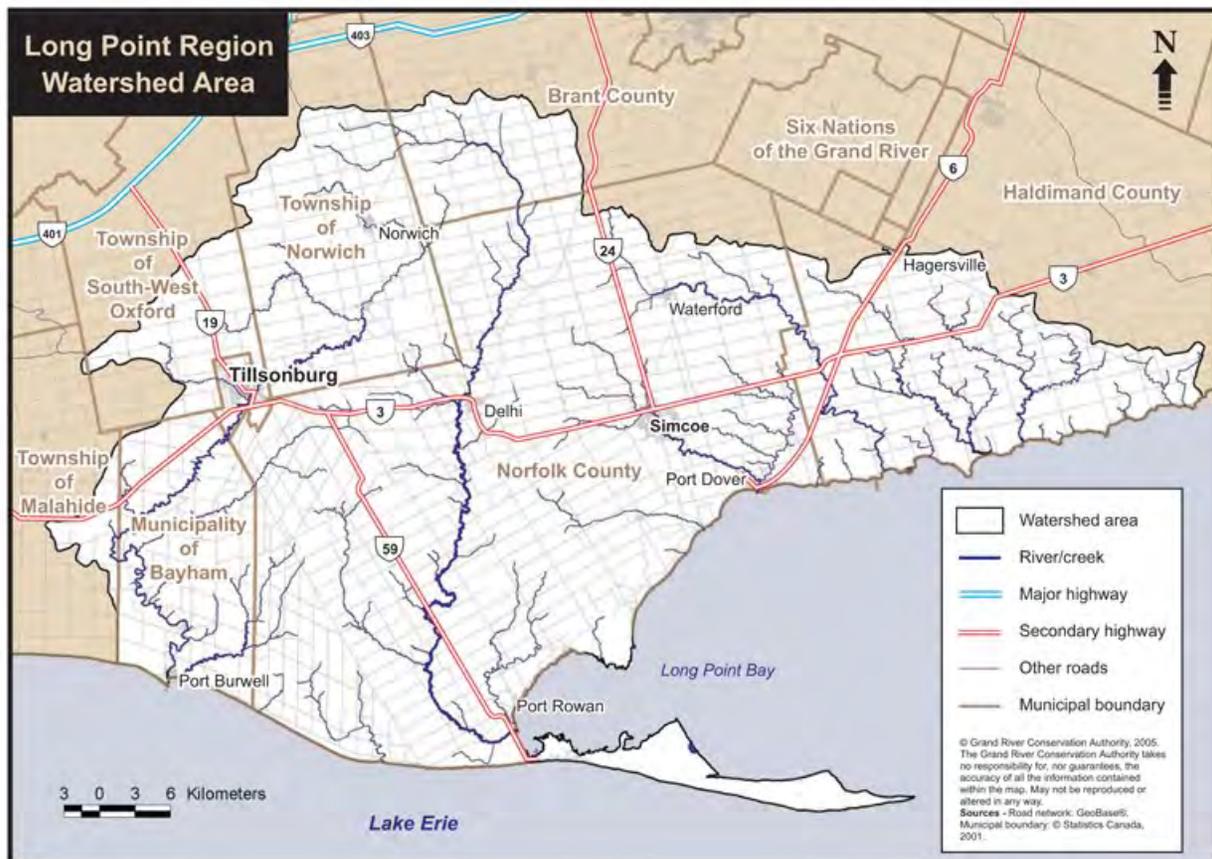
## Ontario Regulation 41/24

### 1 Introduction

#### 1.1 The Long Point Region watershed

The Long Point Region *watershed* takes in an area drained by more than 30 creeks and tributaries. These creeks drain an area of 2,782 sq. km (1,080 sq miles) in portions of Brant, Elgin, Haldimand, Norfolk and Oxford counties.

Major communities include Port Burwell and Straffordville in Elgin County; Norwich and Tillsonburg in Oxford County; Delhi, Waterford, Simcoe and Port Dover in Norfolk County; and Jarvis and Hagersville in Haldimand County.



The watershed has been divided into six main subwatershed areas: Big Otter Creek, South Otter/Clear Creek, Big Creek, Dedrick/Young/Hay Creek, Lynn River/Black Creek and Nanticoke/Sandusk/Stoney Creek. All of the subwatersheds drain directly into Lake Erie. Each subwatershed has unique features relative to their land base and land use that affect the health of the overall Long Point Region *watershed*.

The *watershed* includes approximately 200 km of Lake Erie shoreline, including the internationally renowned Long Point sand spit. The Long Point wetland complex, which includes the wetlands at the mouth of Big Creek, is internationally recognized under the Ramsar Convention and as the Long Point Biosphere Reserve.

The wise management of our natural resources is essential to ensure a sustainable and healthy watershed which continues to meet the ongoing needs of a growing population.

## 1.2 Role of the Long Point Region Conservation Authority

The *Conservation Authorities Act* was passed in 1946 by the Ontario government in response to severe flooding and erosion problems experienced throughout the province. This legislation provided terms of reference and guidelines for *watershed* municipalities to voluntarily establish *watershed* partnerships for managing land and water resources.

The Long Point Region Conservation Authority (LPRCA) has a long history.<sup>1</sup> Formed in 1970 as an amalgamation of the Big Creek Region Conservation Authority (1948) and the Otter Creek Conservation Authority (1954), its governing body is comprised of 11 representatives appointed by 8 member municipalities. This board approves the LPRCA budget and policies and guides its activities.

***The purpose of the Conservation Authorities Act is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals (Conservation Authorities Act, RSO 1990, c. 27, s. 0.1).***

To fulfill this purpose, the LPRCA works closely with all levels of government to enhance *watershed* health by coordinating and implementing a variety of programs and services with the goals to:

- improve water quality,
- protect natural areas and biodiversity,
- ensure adequate water supplies,
- reduce flood damages,
- facilitate watershed planning,
- provide environmental and heritage education, and
- supply outdoor recreation opportunities.

## 1.3 Prohibited Activities, Exemptions and Permits Regulation

The *Conservation Authorities Act* first empowered conservation authorities to make regulations to prohibit filling in floodplains below the high water mark in 1956. These powers were broadened in 1960 to prohibit or regulate the placing or dumping of fill in defined areas where, in the opinion of the

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<sup>1</sup> Under the terms of the Conservation Authorities Act, the Big Creek Region Conservation Authority was formed in 1948 as the Big Creek Conservation Authority, extended in area and renamed in 1954 and extended again in 1969. The Otter Creek Conservation Authority was formed in 1954. The Long Point Region Conservation Authority, as it exists today, was established in 1970 through the amalgamation of the Big Creek Region and Otter Creek Conservation Authorities.

Approved April 3, 2024

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conservation authority, the control of flooding, pollution or the conservation of land may be affected (R.S.O. 1960, c. 62, s. 20 (1)). In 1968, an amendment to the *Conservation Authorities Act* (Statutes of Ontario, 1968, c. 15) further extended the power of Conservation Authorities to prohibit or control construction and alteration to waterways, in addition to filling.

In 1998, the *Conservation Authorities Act* was changed as part of the *Red Tape Reduction Act* (Bill 25), to ensure that regulations under the Act were consistent across the province and complementary with contemporary provincial policies.<sup>2</sup> To better reflect provincial direction and to strengthen protection of public safety and the environment, the *Conservation Authorities Act* was modified to enable conservation authorities to enact the *Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation* (Ontario Regulation 97/04) to replace the *Fill, Construction and Alteration to Waterways Regulation* (R.R.O. 1990, Regulation 154).

In April 2024, changes to the *Conservation Authorities Act* made as part of the *Building Better Communities and Conserving Watersheds Act, 2017* came into force, consolidating the individual conservation authority *Development, Interference with Wetlands and Alteration to Shorelines and Watercourses* regulations made in 2006 into one regulation, the *Prohibited Activities, Exemptions and Permits Regulation* (Ontario Regulation 41/24).

*Ontario Regulation 41/24* allows conservation authorities to prevent or restrict development activities in areas where the control of flooding, erosion, dynamic beaches or unstable soil or bedrock may be affected by the activity, in order to prevent the creation of new hazards or the aggravation of existing ones.

***The Conservation Authority can:***

- ***prohibit or regulate development activities in river or stream valleys, wetlands, shorelines and hazardous lands,***
- and***
- ***prohibit or regulate the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, watercourse or for changing or interfering in any way with a wetland.***

If it can be demonstrated to the satisfaction of the conservation authority that the proposed work is unlikely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock, a conservation authority may grant permission for the proposed work.

Permission from the LPRCA is required to develop in river or stream valleys, wetlands, shorelines or hazardous lands; alter a river, creek, stream or watercourse; or change or interfere with a wetland. All applications for permission received after April 1, 2024 are processed subject to the provisions of the *Prohibited Activities, Exemptions and Permits Regulation*.

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<sup>2</sup> The policies for administering the *Prohibited Activities, Exemptions and Permits Regulation* complement the Ontario Provincial Policy Statement, 2020 - Section 3.0, Protecting Public Health and Safety.

## 2 Policy Objectives

Policy objectives related to the administration of the *Regulation* include, but are not limited to:

- ❖ Prevent loss of life
- ❖ Minimize property damage and social disruption
- ❖ Reduce public and private expenditure for emergency operation, evacuation, restoration and protection measures
- ❖ Minimize the hazards and unnecessary development of riverine floodplains and flood and erosion susceptible shoreline areas which in future years may require expensive protection measures
- ❖ Regulate development activities which, singularly or collectively, impact upon existing flood levels and increase potential risks to upstream and downstream landowners
- ❖ Control interference with natural storage areas such as wetlands
- ❖ Encourage the conservation of land through the control of construction and placement of fill on existing or potentially unstable valley slopes or shoreline bluffs
- ❖ Reduce soil erosion and sedimentation from development activity.

## 3 Intent

This document outlines the policies followed by the LPRCA in making decisions regarding the outcome of all applications made under the *Regulation*. This will ensure a consistent, timely and fair approach to the review of applications, staff recommendations and LPRCA decisions, and efficient and effective use and allocation of available resources.

## 4 Areas Regulated

The *Regulation* pertains to areas that are river or stream valleys, wetlands and other areas where development activities could interfere with the hydrologic function of a wetland, adjacent or close to the shoreline of Lake Erie and inland lakes, and hazardous lands. The *Regulated Area* represents the greatest extent of the combined hazards plus a prescribed allowance as set out in the *Regulation*.

Areas regulated under *Ontario Regulation 41/24* have been mapped according to the criteria and standards outlined in the *Long Point Region Conservation Authority Reference Manual Determination of Regulation Limits* (November 2005) as approved by the Ontario Ministry of Natural Resources and Conservation Ontario.

Existing mapping is accurate to the scale at which the mapping was undertaken. Modifications to the extent of the *Regulated Area* may be made where more detailed studies determine a more precise boundary.

***The Regulation applies to all areas described by the Regulation, whether mapped or not.***

It is important to note that existing mapping *does not* delimit the extent of all of the areas regulated by the *Regulation*. Mapping will be updated by the LPRCA as more detailed information becomes available.

Works for which permission is required under this *Regulation* may also be subject to other legislation, policies and standards that are administered by other agencies and municipalities such as the provincial *Planning Act*, *Drainage Act*, *Environmental Assessment Act* and *Endangered Species Act* or the federal *Fisheries Act* and *Species at Risk Act*, among others. It is the responsibility of the applicant to ensure that all other necessary approvals are obtained prior to undertaking any works for which a permit under this *Regulation* has been obtained.

## 5 Activities Regulated

The *Regulation* gives the LPRCA the mandate to prohibit or regulate development activities<sup>3</sup> in river or stream valleys, wetlands, Lake Erie shorelines, inland lakes and hazardous lands within the Long Point Region watershed.

***Development activity means:***

- **the construction, reconstruction, erection or placing of a building or structure of any kind,**
- **any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,**
- **site grading, or**
- **the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere (O.Reg. 41/24 s. 1).**

The *Regulation* also gives the LPRCA the authority to prohibit or regulate activities to straighten, change, divert or interfere in any way with the existing channel of a *river, creek, stream, watercourse* or change or interfere in any way with a *wetland*.

The Conservation Authorities Act provides for the following activities to be exempt from the prohibition. A permit is not required for:

1. an activity approved under the *Aggregate Resources Act* after December 18, 1998 (Conservation Authorities Act, R.S.O. 1990, c. 27, s. 28, ss. 2)

The *Regulation* provides for the following activities to be exempt from the prohibitions (O.Reg. 41/24 s. 5). A permit is not required for the following activities provided that the activity is undertaken in accordance with the conditions specified in the regulation:

- the construction, reconstruction, erection or placement of,
  - a seasonal or floating dock that is 10 square metres or less, does not require permanent support structures, and can be removed in the event of flooding,
  - a rail, chain-link or paneled fence with a minimum of 75 millimetres of width between panels, that is not within a wetland or watercourse,
  - agricultural in-field erosion control structures that are not within and do not have any outlet of water directed or connected to a watercourse, wetland or river or stream valley,
  - a non-habitable accessory building or structure that is incidental or subordinate to the principal building or structure, is 15 square metres or less, and is not within a wetland or watercourse, or

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<sup>3</sup> Note that the definition of “development activity” under the *Conservation Authorities Act* and O.Reg. 41/24 is different from the definition of development under the *Planning Act* used in municipal land use planning matters.

Approved April 3, 2024

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- an unenclosed detached deck or patio that is 15 square metres or less, is not placed within a watercourse or wetland and does not utilize any method of cantilevering;
- the installation of new tile drains that are not within a wetland or watercourse, within 30 metres of a wetland or within 15 metres of a watercourse, and that have an outlet of water that is not directed or connected to a watercourse, wetland or river or stream valley, or the maintenance or repair of existing tile drains;
- the installation, maintenance or repair of a pond for watering livestock that is not connected to or within a watercourse or wetland, within 15 metres of a wetland or a watercourse, and where no excavated material is deposited within an area where subsection 28 (1) of the Act applies;
- the maintenance or repair of a driveway or private lane that is outside of a wetland or the maintenance or repair of a public road, provided that the driveway or road is not extended or widened and the elevation, bedding materials and existing culverts are not altered;
- the maintenance or repair of municipal drains as described in, and conducted in accordance with the mitigation requirements set out in the Drainage Act and the Conservation Authorities Act Protocol, approved by the Minister and available on a government of Ontario website, as it may be amended from time to time; and
- the reconstruction of a non-habitable garage with no basement, if the reconstruction does not exceed the existing footprint of the garage and does not allow for a change in the potential use of the garage to create a habitable space.

In addition, with the *exception of activities within wetlands*, the LPRCA will generally not require permission for the following activities:

- above ground maintenance and upkeep of existing buildings and structures which do not change the existing footprint (e.g. replacement of windows, siding, roofs, stairs, etc.),
- replacement of existing service connections (e.g. telephone, cable, water, sewer),
- non-structural agricultural uses such as cropping, pasturing, and woodlot management,
- minor alterations and on-going maintenance to existing dams in watercourses that would not affect the control of flooding, erosion or unstable soil or bedrock and that would not result in changes in the capacity to pass river flows or impacts on integrity of the structure or in-water works,
- on-going maintenance to stormwater management facilities that would not affect the control of flooding, erosion or unstable soil or bedrock,
- on-going operations associated with existing commercial/industrial uses that have been previously approved by the LPRCA,
- municipal water monitoring wells that would not affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock, *or*
- other non-structural uses such as gardens, nurseries, open arboretums and forestry/wildlife management.<sup>4</sup>

In addition, *with the exception of activities within wetlands and along the Lake Erie shoreline*, the LPRCA will generally not require permission for the following activities, including but not limited to:

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**4 It is recommended that any person undertaking work in areas defined by the Regulation contact the LPRCA prior to the activity being carried out in order to determine whether or not the work requires permission from the LPRCA.**

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- non-habitable accessory buildings, unenclosed decks and patios associated with existing uses and less than 15 square metres (160 ft<sup>2</sup>) in size,
- minor works such as landscaping or grading (excavation or filling) in an area less than 1 hectare (2.5 acres) to a depth of less than (6 inches) or a volume of less than 10 cubic metres (one standard dump truck load).<sup>5</sup>

*Development activities* in areas defined in the *Regulation*, *interference* with wetlands or *alterations* to river, creek, stream or watercourse channels requires permission from the LPRCA. Each application will be evaluated on its own merits, on a case-by-case basis, consistent with the policies outlined in *Sections 7, 8 and 9*.

*Development activities, alterations and/or interference* which is undertaken in *Regulated Areas* without permission of the LPRCA are in violation of the *Conservation Authorities Act*. The landowner may be subject to a fine of not more than \$50,000 or to a term of imprisonment of not more than three months (*Conservation Authorities Act*, R.S.O. 1990, c. 27, s. 30.5, ss. 2). In addition, if convicted, the development/interference may be required to be removed at the expense of the landowner. The landowner may also be required to rehabilitate the impacted area in a manner prescribed by the courts (*Conservation Authorities Act*, R.S.O. 1990, c. 27, s. 30.7).

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<sup>5</sup> This policy does not apply to the filling or excavation of a site on multiple occasions over an extended period of time. The cumulative impacts of such works may have measurable impacts on flooding, erosion, dynamic beaches or unstable soil or bedrock, and will require permission from the LPRCA.

## 6 The Permitting Process

### 6.1 Pre-submission Consultation

LPRCA encourages applicants to request a pre-submission consultation for the purposes of confirming the requirements of a complete application to obtain a permit for the activity in question. LPRCA staff may request:

- initial information on the proposed activity such as a description of the project and any associated plans, and/or
- details about the property including copies of plans, maps or surveys, and/or
- a site visit.

LPRCA encourages applicants to insist that their contractors and consultants contact LPRCA staff before completing detailed drawings or technical studies in connection to their application to avoid delays and unnecessary costs.

### 6.2 Application Submission and Review

The application form for a permit from LPRCA is available on the LPRCA website at [www.lprca.on.ca](http://www.lprca.on.ca), on request by email or in person at the LPRCA administration office.

The application must include those items discussed at the pre-consultation meeting and, at a minimum:

- (a) a plan of the area showing the type and location of the proposed development activity or a plan of the area showing plan view and cross-section details of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- (b) the proposed use of any buildings and structures following completion of the development activity or a statement of the purpose of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or to change or interfere with a wetland;
- (c) the start and completion dates of the development activity or other activity;
- (d) a description of the methods to be used in carrying out an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- (e) the elevations of existing buildings, if any, and grades and the proposed elevations of any buildings and grades after the development activity or other activity;
- (f) drainage details before and after the development activity or other activity;
- (g) a complete description of any type of fill proposed to be placed or dumped;
- (h) a confirmation of authorization for the proposed development activity or other activity given by the owner of the subject property, if the applicant is not the owner; and
- (i) any other technical information, studies or plans that the authority requests including information requested during pre-submission consultations between the authority and the applicant. (O.Reg. 41/24 s.7)

The application may be submitted in digital form by email to [planning@lprca.on.ca](mailto:planning@lprca.on.ca) or in hardcopy by fax, mail or in person at the LPRCA administration office.

Within 21 days of receipt of the application and payment of the fee, LPRCA will notify the applicant whether or not the application is deemed a complete application and what additional studies, technical information, plans, or plan modifications are required to complete the application.

If a permit is issued within 21 days of receipt of the application, a notification of complete application may not be sent if it is not needed.

Once the applicant has been notified that the application is complete, LPRCA will not require new studies, technical information or plans from the applicant to complete the review and make a determination on the application unless agreed to by the authority and the applicant. However, the authority may ask the applicant for clarification or further details regarding any matter related to the application (O.Reg. 41/24 s.7 ss.3)

Most permits will be issued by LPRCA staff, with or without conditions, in accordance with the Board's approved delegation policy.

LPRCA will not refuse an application for a permit or attach conditions to a permit unless the applicant has been given an opportunity to be heard by the LPRCA Board of Directors. (*Conservation Authorities Act*, RSO 1990, c. 27, s. 28.1, ss. 5). The process to request a hearing and appear before the LPRCA Board of Directors as a Hearing Board is set out in the *LPRCA Hearing Procedures Policy*.

## 6.3 Fees

The applicable service fee is due as part of a complete application. In no case will LPRCA issue a permit if the fee has not been paid.

The fee schedule is included in the *LPRCA Fee Policy and Fee Schedules* and is also attached to the permit application form. LPRCA staff will confirm the applicable fee.

Any person who considers that LPRCA has charged a fee that is contrary to the fees set out in the Fee Schedule, or that the fee set out in the Fee Schedule is excessive in relation to the service for which it is charged, may request that LPRCA reconsider the fee that was charged. The process for reconsideration of fees for permit applications is described in the *LPRCA Fee Policy and Fee Schedules* and in the *Conservation Authorities Act*, s. 21.2 ss. 11-21.

## 6.4 Request for review

An applicant may request a review by the authority if,

- (a) the applicant has not been notified by the authority whether or not the application is complete within 21 days;
- (b) the applicant disagrees with the authority's determination that the application is incomplete; or
- (c) the applicant is of the view that a request by the authority for other information, studies or plans under clause 7 (1) (i) is not reasonable.

LPRCA shall complete the review within 30 days and shall, as the case may be,

- (a) confirm that the application is complete or provide reasons why the application is incomplete; or

- (b) provide reasons why a request for other information, studies or plans is reasonable or withdraw the request for all or some of the information, studies or plans.

## 6.5 LPRCA's Regulatory vs. Plan Review Function

In addition to its regulatory role under the *Conservation Authorities Act*, the LPRCA has a significant advisory role to watershed municipalities under the *Planning Act*. In 1995, the Ministry of Natural Resources delegated the responsibility for municipal plan input and review for natural hazards to the LPRCA. This means that LPRCA staff review and comment on municipal policy documents and development proposals to ensure that they are consistent with the *Ontario Provincial Policy Statement, 2020 - Section 3.0, Protecting Public Health and Safety*.

The LPRCA also reviews and comments on municipal policy and planning documents, development proposals under the *Planning Act* and other provincial legislation (e.g. *Aggregate Resources Act, Drainage Act, Environmental Assessment Act*) from a watershed perspective.

The policies contained in *Sections 7, 8 and 9* apply specifically to the LPRCA's regulatory role under the *Conservation Authorities Act*. These policies must be considered in their entirety, since activities that fall within the mandate of the *Regulation* may influence river or stream valleys, wetlands, shorelines and hazardous lands and alteration to watercourses, either singly or in combination. Where more than one hazard exists in an area subject to a proposed activity that falls within the scope of the *Regulation*, the relevant policies will be applied jointly.

## 7 General Policies to Prohibit or Regulate Development Activities

### 7.1 General Policies

Within areas defined by the *Regulation (Regulated Area)* including river or stream valleys and an allowance; wetlands or other areas where development could interfere with the hydrologic function of a wetland (areas of interference); lands adjacent or close to the shoreline of Lake Erie and inland lakes and an allowance; watercourses, or hazardous lands, the following general policies will apply:

- 7.1.1 **Development activities, interference or alteration** will not be permitted *within a Regulated Area*, except in accordance with the policies in *Sections 7, 8 and 9*.
- 7.1.2 **Development activities, interference or alteration within a Regulated Area** may be permitted where it can be demonstrated through appropriate technical studies and/or assessments, site plans and/or other plans as required by the LPRCA that:
- a) the risk to public safety or property is not increased,
  - b) susceptibility to natural hazards is not increased or new hazards created,
  - c) there are no adverse *hydraulic or fluvial impacts* on rivers, creeks, streams, or watercourses,
  - d) there are no adverse impacts on the natural shoreline processes of Lake Erie,
  - e) grading (e.g. placing and removing fill) is minimized and maintains stage-storage discharge relationships and floodplain flow regimes for a range of rainfall events, including the *Regulatory Flood*,
  - f) there are no negative or *adverse hydrologic impacts* on wetlands,
  - g) sedimentation and erosion during construction and post construction is minimized using *best management practices* including site, landscape, infrastructure and/or facility design (whichever is applicable based on the scale and scope of the project), construction controls, and appropriate remedial measures,
  - h) where unavoidable, intrusions on significant natural features or *hydrologic or ecological functions* are minimized and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions,
  - i) access for emergency works and maintenance of flood or erosion control works is available,
  - j) works are constructed, repaired and/or maintained according to *accepted engineering principles* and approved engineering standards or to the satisfactions of the LPRCA, whichever is applicable based on the scale and scope of the project, *and*
  - k) the control of flooding, erosion, dynamic beaches or unstable soil or bedrock is not adversely affected during and post development, interference or alteration.
- 7.1.3 Notwithstanding *Section 7.1.2*, **development activities, interference or alteration** in a *Regulated Area* may be permitted subject to supplementary policies or stand-alone policies as specified in *Sections 8 and 9*.
- 7.1.4 Applications for permission to undertake **development activities, interference or alteration** in *Regulated Areas* must be accompanied by appropriate technical studies and/or assessments, site plans and/or other plans as required by the LPRCA. These studies/plans will demonstrate to the satisfaction of the LPRCA, how the applicable policies in *Sections 7, 8 and 9* will be met.

- 7.1.5 Technical studies and/or assessments, site plans and/or other plans submitted as part of an application for permit to undertake **development activities, interference or alteration** in *Regulated Areas* must be completed by a *qualified professional* to the satisfaction of the LPRCA in conformance with the most current technical guidelines approved by the LPRCA.

## 7.2 Prohibited Activities

- 7.2.1 Notwithstanding *Sections 7.1.2-7.1.3 – General Policies*, **development** activities will not be permitted within a *Riverine Flooding or Erosion Hazard or Lake Erie Flooding or Erosion Hazard or Wetland* where the activity is associated with:
- a) an institutional use associated with hospitals, nursing homes, pre-school, nurseries, day care or schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities or the young,
  - b) an *assisted living facility*,
  - c) an essential emergency service such as fire, police, ambulance or electrical substation,
  - d) the disposal, manufacture, treatment, transfer or storage of hazardous substances, *or*
  - e) the outdoor storage of any materials, either temporary or permanent.

## 7.3 Validity of Permits

- 7.3.1 A permit issued by the Long Point Region Conservation Authority will be valid for a period up to and including 60 months (five years).

## 8 Specific Policies to Prohibit or Regulate Development Activities

### 8.1 River or Stream Valleys - Riverine Flooding Hazards

#### Defining the Riverine Flooding Hazard

Flooding of river or stream systems typically occurs following the spring freshet and may occur again as a result of extreme rainfall events in the summer or fall. Rivers naturally accommodate flooding within their valleys.

Historically, development occurred in floodplain areas because of the availability of water for power, transportation, energy, waste assimilation, and domestic and industrial consumption. However, floodplain development is susceptible to flooding which can result in property damage and/or loss of life.

For the Long Point Region watershed, the *Riverine Flooding Hazard* is based on the 100-Year return period flood<sup>6</sup>. The flood produced through these calculations is called the *Regulatory Flood*, the limits of which define the extent of the *Riverine Flooding Hazard*.

The *Riverine Flooding Hazard* plus a 15 metre (50 foot) allowance defines the *Regulated Area*. In headwater areas, an allowance of 15 metres (50 feet) from the channel bank defines the *Regulated Area*.

The allowance is included to address limitations in base mapping scale and accuracy and consider activities directly adjacent to the *Riverine Flooding Hazard* that could aggravate or increase the hazard risk.

The *Regulated Area* includes the *Riverine Flooding Hazard* (also referred to as the *Regulatory Floodplain*) and the *allowance* (Figure 3).

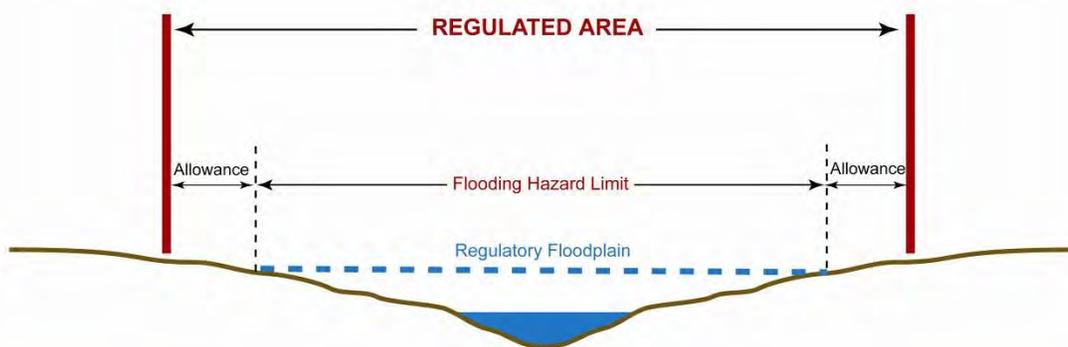


Figure 3. Riverine Flooding Hazard – Regulated Area for One-Zone Policy Areas

<sup>6</sup> The 100 Year return period flood means rainfall or snowmelt, or a combination of rainfall and snowmelt producing at any location in a river, creek, stream or watercourse, a peak flow, that has a probability of occurrence of one percent during any given year.

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Most regulated areas within the Long Point Region associated with the *Riverine Flooding Hazard* are *One-Zone Policy Areas*. In a *One-Zone Policy Area*, the entire *Regulatory Floodplain* is considered the *floodway*.

Exceptions to the *One-Zone Policy Area* may exist in urban areas where a *Two-Zone* or *Special Policy Area* may be selectively applied. Both approaches allow for limited development in the *flood fringe*. The *flood fringe* is the outer portion of the floodplain between the *floodway* and the *Riverine Flooding Hazard* limit where the depths and velocities of flooding are less severe than those experienced in the *floodway* (**Figure 4**).

A *Two-Zone Policy Area*<sup>7</sup> permits new development or redevelopment in the *flood fringe* provided that it is protected to the level of the *Regulatory Flood*. A *Two-Zone Policy Area* may be considered where the LPRCA in cooperation with the municipality, after due consideration of local circumstances, agrees that application of the concept is suitable. The feasibility of a *Two-Zone Policy Area* requires the examination of a number of factors and implementation requires the assurance that various conditions will be complied with.

The application of a *Two-Zone Policy Area* is not intended to be on a lot-by-lot basis, but on a subwatershed or major reach basis. Where the LPRCA and the municipality agree to the use of a *Two-Zone Policy Area*, appropriate official plan designations and zoning must be put into place. The regional engineer of the Ministry of Natural Resources and Forestry must also be involved in decision making regarding the potential application of a *Two-Zone Policy Area*.

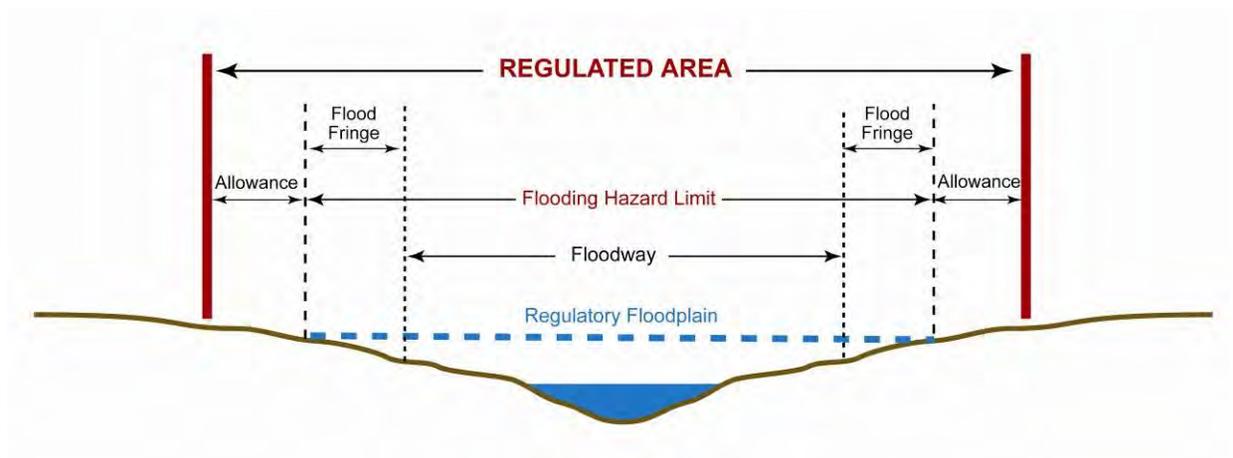
Application of a *Special Policy Area*<sup>8</sup> permits new development or redevelopment in the *flood fringe* and *floodway* where strict adherence to the *One-Zone* or *Two-Zone* approach would not provide sufficient development capability to maintain community viability. Where a *Special Policy Area* is applied, the municipality, LPRCA and the Province of Ontario agree to relax provincial flood proofing and technical standards and accept a higher level of risk.

*Special Policy Area* application is limited to areas of historic development that qualify on the basis of community and technical criteria. Application of a *Special Policy Area* requires the approval of the Province of Ontario (Ministry of Municipal Affairs and Housing and Ministry of Natural Resources and Forestry) and suitable policies and standards must be incorporated into the municipality's official plan and zoning regulations. Procedures for approval as specified by the Province must be adhered to.

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<sup>7</sup> In a *Two-Zone Policy Area*, the *floodplain* is divided into two distinct sections – the *floodway* and the *flood fringe*. The *floodway* is that area of the *floodplain* that is required to pass the flows of greatest depth and velocity. The *flood fringe* lies between the *floodway* and the edge of the *floodplain*. Depths and velocities of flooding in the *flood fringe* are much less than those in the *floodway*. The technical considerations used to determine the *floodway-flood fringe* delineation and the suitability of applying a *Two-Zone* policy are described in the Ministry of Natural Resources *Technical Guide River and Stream Systems Flooding Hazard Limit (2002)*. There is currently a designated *Two-Zone Policy Area* in Vienna.

<sup>8</sup> Designated *Special Policy Areas (SPAs)* allow for new development that would not be otherwise permitted. Each *SPA* has its own development criteria. Considerations for development in *SPAs* include structural flood proofing, safe access and egress, and the nature of land use. The constraints to development are outlined in each *SPA* agreement. There are currently no designated *SPAs* in the LPRCA watershed.



**Figure 4.** Riverine Flooding Hazard – Two Zone Policy Area

Regardless of the approach applied, *development* within the *Riverine Flooding Hazard* and related *allowances* connected with all watercourses in the Long Point Region watershed requires permission from the LPRCA.

## **Policies for One-Zone Policy Areas (excluding allowances)**

The following policies apply to development proposed in a *One-Zone Policy Area* subject to a *Riverine Flooding Hazard*, excluding *allowances*.

- 8.1.1 **Development** activities will not be permitted within the *Riverine Flooding Hazard* except in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and *Sections 8.1.2-8.1.23 – Policies for One-Zone Policy Areas*.

### **Existing Uses**

- 8.1.2 **Development** activities associated with *existing uses* located within a *Riverine Flooding Hazard* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:
- there is no feasible alternative site outside the *Riverine Flooding Hazard*,
  - the site is not subject to *frequent flooding*,<sup>9</sup>
  - ingress and egress is “dry” where this standard can be practically achieved, but no less than “safe”,
  - floodproofing* is undertaken to the extent practical, where *floodproofing* to the elevation of the *Regulatory Flood* is not technically feasible, and
  - there is no risk of structural failure due to potential hydrostatic/dynamic pressures.

### **Residential**

- 8.1.3 **Minor Additions** to existing residential buildings or structures may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that:
- the addition is 50 percent or less of the original<sup>10</sup> habitable floor area to a maximum footprint of 50 m<sup>2</sup> (540 ft<sup>2</sup>) or in the case of multiple additions, all additions combined are equal to or less than 50 per cent of the original habitable floor area to a maximum footprint of 50 m<sup>2</sup> (500 ft<sup>2</sup>).
  - the number of dwelling units is the same,
  - all *habitable floor space* is at or above the existing ground floor elevation, and
  - no basement is proposed and any *crawl space* is non-habitable and designed to facilitate servicing only.
- 8.1.4 **Replacement**<sup>11</sup> of residential buildings or structures other than those damaged or destroyed by flooding may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:
- the building or structure to be replaced is relocated outside the *Riverine Flooding Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing

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<sup>9</sup> Frequent flooding means that a site is subject to the 1:25 year flood event or a more frequent flood event.

<sup>10</sup> The habitable ground floor area existing in 1984 will be considered the “original” ground floor area for the purpose of this calculation. The year 1984 is used because it was the first year that the *Fill, Construction and Alteration to Waterways Regulation* was administered by the LPRCA (Ontario Regulation 545/84).

<sup>11</sup> Replacement does not include reconstruction on remnant foundations or derelict or abandoned buildings or structures.

- lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible,
- b) the number of dwelling units is the same or less,
  - c) the new building or structure is the same size or larger to a maximum of 50 percent of the original habitable floor area or a of 50 m<sup>2</sup> (540 ft<sup>2</sup>), whichever is the lesser, and the use is the same,
  - d) the building or structure is *floodproofed* to the elevation of the *Regulatory Flood* using dry, passive *floodproofing* measures<sup>12</sup>,
  - e) ingress and egress is “dry” where this standard can be practically achieved and no less than safe,
  - f) no basement is proposed and any *crawl space* is non-habitable and designed to facilitate services only,
  - g) electrical, mechanical and heating services are located above the level of the *Regulatory Flood*, and
  - h) there is no risk of structural failure due to potential hydrostatic/dynamic pressures.
- 8.1.5 **Relocation** of existing residential buildings and structures may be permitted in accordance with the policies in *Section 8.1.4 – Policies for One-Zone Policy Areas*, provided that the risk of flooding and property damage is reduced to the greatest extent wherever possible, through relocation.
- 8.1.6 **Non-Habitable Accessory Buildings or Structures** associated with an existing residential use such as detached garages, tool sheds, gazebos and other similar structures, may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:
- a) there is no feasible alternative site outside the *Riverine Flooding Hazard*,
  - b) the site is not subject to *frequent flooding*,
  - c) the building or structure is less than or equal to 100 m<sup>2</sup> (1,076 ft<sup>2</sup>) or in the case of additions, the combined area of the existing building or structure and any proposed addition is equal to or less than 100 m<sup>2</sup> (1,076 ft<sup>2</sup>),
  - d) the building or structure is securely anchored such that it does not obstruct downstream culverts during a flood event where applicable,
  - e) there is not increased risk of flooding or erosion upstream or downstream,
  - f) *floodproofing* is undertaken to the extent practical, where *floodproofing* to the elevation of the *Regulatory Flood* is not technically feasible, and
  - g) there is no opportunity for conversion into habitable space in the future.
- 8.1.7 **Above or Below Ground Swimming Pools** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and provided that:
- a) electrical facilities are *floodproofed* to the elevation of the *Regulatory Flood* is undertaken, and
  - b) all fill, except that approved for landscaping, is removed from the *Riverine Flooding Hazard*.

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<sup>12</sup> ***Dry, passive floodproofing* measures are measures in place to keep a development and its contents completely dry without the need to take action in anticipation of flooding.**

### **Commercial/Industrial/Institutional**

- 8.1.8 **Additions** to existing commercial/industrial/institutional buildings or structures may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that:
- the addition is 50 percent or less of the original floor area of the building or structure to a maximum of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), or in the case of multiple additions, all additions combined are equal to or less than 50 per cent of the original floor area of the building or structure to a maximum of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), and
  - no basement is proposed and any *crawl space* is designed to facilitate services only,
- 8.1.9 **Accessory Buildings or Structures** associated with commercial/industrial/institutional uses may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that:
- the building or structure is less than or equal to 100 m<sup>2</sup> (1,076 ft<sup>2</sup>) or in the case of additions, the combined area of the existing building or structure and any proposed addition is equal to or less than 100 m<sup>2</sup> (1,076 ft<sup>2</sup>),
  - the building or structure is securely anchored such that it does not obstruct downstream culverts during a flood event where applicable,
  - there is not increased risk of flooding or erosion upstream or downstream,
  - the cumulative impact of multiple accessory buildings or structures on the subject property is negligible, and
  - no basement is proposed and any *crawl space* is designed to facilitate services only.
- 8.1.10 **Parking Lots** associated with existing *non-residential uses* located wholly or partially within the *Riverine Flooding Hazard* may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that the risk of property damage is minimized through site design and flood emergency plans.

### **Internal Renovations**

- 8.1.11 **Internal Renovations** to existing buildings or structures which change the use or potential use of the building or structure but provide for no additional dwelling units may be permitted provided that:
- the risks associated with flooding are low,
  - the internal renovation does not result in a new use prohibited by *Section 7.2 – General Policies – Prohibited Activities*
  - electrical, mechanical and heating services are located above the level of the *Regulatory Flood*, wherever possible, and
  - there is no risk of structural failure due to potential hydrostatic/dynamic pressures.

### **Public Infrastructure**

- 8.1.12 **Public Infrastructure** including but not limited to roads, sanitary sewers, utilities, water and sewage treatment plants, water supply wells, well houses, and pipelines may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, provided that there is no feasible alternative site outside the *Riverine Flooding Hazard* as determined through an *Environmental Assessment* or other *comprehensive plan* supported by the LPRCA, and where it can be demonstrated that:
- adverse hydraulic or fluvial impacts are limited,

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- b) the risk of flood damage to upstream or downstream properties is not increased or is minimized through site design and the affected landowner(s) is informed of the increased risk,
- c) there is no loss of flood storage wherever possible.

8.1.13 The maintenance and repair of **Public Infrastructure** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies.*

#### **Recreational Uses**

8.1.14 **Recreational Uses** such as passive parks, trails and river access points and other uses deemed appropriate by the LPRCA, but not including new campgrounds, new golf courses or expansions to existing golf courses, marinas or permanent docks may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:

- a) there is no feasible alternative site outside the *Riverine Flooding Hazard*,
- b) there is no loss of flood storage, *and*
- c) the risk of property damage is minimized through site and facility design and flood emergency plans.

8.1.15 **Marinas** and **permanent docks** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:

- a) there is no measurable loss of flood storage,
- b) there is no increased risk of flooding or erosion upstream and downstream,
- c) facilities are designed to take advantage of existing impacted or open areas on the channel bank, wherever possible, *and*
- d) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site, facility and/or landscape design and appropriate remedial measure will adequately restore and enhance features and functions, *and*
- e) the risk of property damage is minimized through site and facility design and flood emergency plans.

8.1.16 **Golf Courses** or **Golf Course Expansions** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:

- a) all associated permanent, closed structures including clubhouses, washrooms with septic systems and maintenance buildings are located outside of the *Riverine Flooding Hazard*,
- b) there is no loss of flood storage,
- c) watercourse crossings are minimized and designed in accordance with the policies in *Section 9.1.2*,
- d) the risk of property damage is minimized through site and facility design and flood emergency plans.

#### **Dug-Out/Isolated Ponds**

8.1.17 **Dredging** of an existing **dug-out or isolated pond** may be permitted where it can be demonstrated that:

- a) all dredged material, except that approved for landscaping, is removed from the *Riverine Flooding Hazard* and the *Riverine Erosion Hazard*,

- b) dredging does not enlarge the pond in area or volume beyond what was previously constructed,
- c) finished side slopes are stable,
- d) hydrologic and ecological functions are restored and enhanced to the extent possible, *and*
- e) the risk of sedimentation during dredging operations is minimized.

8.1.18 A new **Dug-Out or Isolated Pond** or a **Redesign of an Existing Dug-Out or Isolated Pond** may be permitted in the *Riverine Flooding Hazard* in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:

- a) the pond is located outside of the *Riverine Erosion Hazard*, *and*
- b) the policies in Section 8.1.17, except 8.1.7 b), are met.

### **Agricultural Structures**

8.1.19 **Additions** to existing agricultural buildings or structures may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that:

- a) the addition is 50 percent or less of the original floor area of the building or structure to a maximum of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), or in the case of multiple additions, all additions combined are equal to or less than 50 per cent of the original floor area of the building or structure to a maximum footprint of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), *and*
- b) no basement is proposed and any *crawl space* is designed to facilitate services only.

8.1.20 **Non-habitable Accessory Buildings or Structures** associated with agricultural uses may be permitted in accordance with the policies in *Section 8.1.2 – Policies for One-Zone Policy Areas*, and where it can be demonstrated that:

- a) the building or structure is less than or equal to 100 m<sup>2</sup> (1,076 ft<sup>2</sup>) or in the case of additions, the combined area of the existing building or structure and any proposed addition is equal to or less than 100 m<sup>2</sup> (1,076 ft<sup>2</sup>),
- b) electrical, mechanical and heating services are located above the level of the *Regulatory Flood*, wherever possible,
- c) the building or structure is securely anchored such that it does not obstruct downstream culverts during a flood event where applicable,
- d) there is no increased risk of flooding or erosion upstream or downstream,
- e) the cumulative impact of multiple *accessory buildings or structures* on the subject property is negligible, *and*
- f) no basement is proposed.

8.1.21 **Replacement** of non-habitable agricultural buildings or structures damaged or destroyed by causes other than flooding may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:

- a) the building or structure to be replaced is relocated outside the *Riverine Flooding Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible,
- b) the new building or structure is the same size or larger to a maximum of 50 percent of the original floor area or a footprint of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), whichever is the lesser;
- c) no basement is proposed and any *crawl space* is designed to facilitate services only,

- d) electrical, mechanical and heating services are located above the level of the *Regulatory Flood*, wherever possible, *and*
  - e) there is no risk of structural failure due to potential hydrostatic/dynamic pressures.
- 8.1.22 **Relocation** of existing agricultural buildings and structures may be permitted in accordance with the policies in *Section 8.1.25 – Policies for One-Zone Policy Areas*, provided that the risk of flooding and property damage is reduced to the greatest extent wherever possible through relocation
- 8.1.23 **Agricultural Structures** which reduce risks associated with erosion or pollution or promote the conservation of land may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:
- b) there is no feasible alternative site outside the *Riverine Flooding Hazard*,
  - c) the risk of property damage is minimized through site design and flood emergency plans, *and*
  - d) *floodproofing* is undertaken to the extent practical, where *floodproofing* to the elevation of the *Regulatory Flood* is not technically feasible.

### **Policies for Two-Zone Policy Areas (excluding allowances)**

- 8.1.24 A **Two-Zone Policy Area** may be applied in urban areas where:
- a) the application of a *One-Zone Policy* will affect community viability in existing serviced built-up areas or where major channel enhancements or major dyke works have been carried out,
  - b) the application of a *Two-Zone Policy Area* is supported by the LPRCA and the municipality after due consideration of a number of community-related and technical factors,
  - c) a higher level of risk is accepted by the municipality and the LPRCA,
  - d) a hydraulic study is undertaken which determines the extent of the *floodway* and *flood fringe*, *and*
  - e) the municipality incorporates appropriate policies and standards into its official plan and zoning by-laws.
- 8.1.25 **Development** activities in the floodway of a *Two-Zone Policy Area* will not be permitted except in accordance with the policies in *Sections 8.1.12 - 8.1.16 – Policies for One-Zone Policy Areas* (public infrastructure and recreational uses).
- 8.1.26 **Buildings or Structures** may be permitted within the *flood fringe* of a *Two-Zone Policy Area* provided that:
- a) the building or structure is *floodproofed* to the elevation of the *Regulatory Flood* using dry, passive *floodproofing* measures,
  - b) all new dwelling units are above the elevation of the *Regulatory Flood*,
  - c) all *habitable floor space* and electrical, mechanical and heating services are above the elevation of the *Regulatory Flood*,
  - d) no basement is proposed, *and*
  - e) ingress and egress to the building or structure is “dry” where this standard can be practically achieved, or floodproofed to an elevation which is practical and feasible, but no less than “safe”.
- 8.1.27 **Development** activities in the *flood fringe* of a *Two-Zone Policy Area* may be permitted in accordance with the policies and standards approved by the municipality and the LPRCA.

### **Policies for Special Policy Areas (excluding allowances)**

- 8.1.28 A **Special Policy Area** (SPA) may be allowed in urban areas where:
- a) it can be demonstrated by the municipality through detailed studies and appropriate documentation that the application of a *One-Zone Policy* or a *Two-Zone Policy* is not adequate to maintain a community's social and economic viability,
  - b) the application of a *Special Policy Area* is supported by the LPRCA, the municipality and the Ministry of Natural Resources after due consideration of a number of community-related and technical factors,
  - c) a higher level of risk is accepted by the municipality, the Province of Ontario (Ministry of Municipal Affairs and Housing and Ministry of Natural Resources) and the LPRCA,
  - d) a hydraulic study is undertaken to determine the extent of the *floodway* and *flood fringe*,  
*and*
  - e) the municipality incorporates appropriate policies and standards into its official plan and zoning by-laws.
- 8.1.29 Development activities within a *Special Policy Area* may be permitted in accordance with the policies and standards approved by the municipality, Province of Ontario and the LPRCA.

### **Prohibited Activities within the Riverine Flooding Hazard**

- 8.1.30 Notwithstanding *Sections 8.1.2-8.1.29*, **development** activities will not be permitted within the *Riverine Flooding Hazard* as specified in *Section 7.2 - General Policies*, or where the activity is associated with :
- a) a new campground or the expansion of an existing campground,
  - b) underground parking associated with any use,
  - c) flood protection works and bank stabilization works to allow for future/proposed development.
- 8.1.31 Development activities, excluding non-habitable accessory buildings or structures associated with an existing use, will not be permitted within 15 metres (49.2 feet) of either bank of the watercourse with the exception of works permitted under the provisions of *Section 9*.

### **Policies for Riverine Flooding Hazard Allowances**

- 8.1.32 **Development activities within Allowances** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, provided that it can be demonstrated that:
- a) there is no risk of structural failure due to potential hydrostatic/dynamic pressures, and
  - b) there is no *habitable floor space* below the elevation of the *Regulatory flood*.

## 8.2 River or Stream Valleys – Riverine Erosion Hazards

Erosion is a natural process of soil loss due to human or natural processes. The *Riverine Erosion Hazard* within river or stream valleys is that area of river bank and lands adjacent to watercourses where erosion is actively occurring and/or where development could create slope stability issues.

The *Riverine Erosion Hazard* applies to those portions of the *river or stream valleys* that are both apparent (confined) and not apparent (unconfined). The extent of the hazard varies and is dependent on the characteristics of the bedrock and soils which comprise the valley slope, the degree to which the valley slope is stable or unstable, and whether or not the valley slope is subject to active erosion. River and stream valleys are considered to be apparent or confined where valley walls are greater than 3 metres (10 feet), with or without a floodplain.

*Apparent Valleys* can exhibit three different conditions within which erosion hazards exist or may develop: valley slopes which are steep but stable, valley slopes which are over steepened and potentially unstable, and valley slopes which are subject to active stream bank erosion.

Where a watercourse is not contained within a clearly visible valley, valleys are *not apparent* (unconfined).

### **Defining the Regulated Area for Apparent Valleys (Confined Systems)**

In *Apparent Valleys*, the limit of the *Regulated Area* is the *top of slope* plus an allowance of 15 metres (49.2 feet).

Where the valley slopes in *Apparent Valleys* have a slope inclination of  $33\frac{1}{3}$  per cent (3H:1V) or greater, the limit of the *Regulated Area* includes two components: the *Stable Slope Allowance* plus an *allowance* of 15 metres (49.2 feet). Where active toe erosion is present in a *Confined System*, an additional *Toe Erosion Allowance* is included, regardless of the steepness of the valley wall.

The 15-metre *allowance* helps to buffer development from the hazards of slope instability and to prevent the influence of development on the rate of slope movement. Development adjacent to valley slopes can cause increased loading forces on the *top of slope*, compromise slope stability or worsen erosion of the slope face, and result in the loss of stabilizing vegetation. *Allowances* also provide access for emergencies, maintenance and construction activities.

### **Defining the Riverine Erosion Hazard -Apparent Valley (Confined System) – Steep But Stable (no toe erosion)**

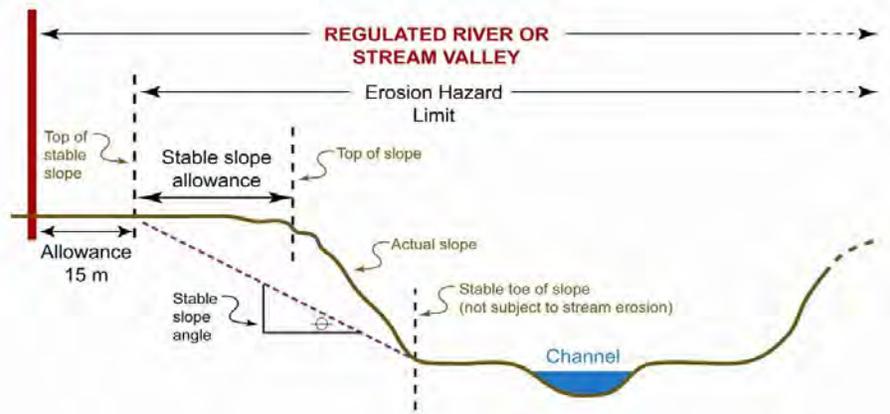
For the purpose of the *Regulation*, valley slopes are identified as a *Riverine Erosion Hazard*. Where the gradient is  $33\frac{1}{3}$  per cent (3H:1V) or less, the valley slopes typically resist slumping and rotational slippage but may become unstable as a consequence of the increased loading forces of development, depending on the soil structure and underlying geology.

### **Defining the Riverine Erosion Hazard - Apparent Valley (Confined System) – Oversteepened (no toe erosion)**

Slopes are considered over steepened when the gradient is 3H:1V (18 degree slope) or greater. These slopes can be unstable.

On over steepened slopes, where the toe of the slope is stable, the *Riverine Erosion Hazard* is defined using a *Stable Slope Angle*. The *Stable Slope Angle* is based on a stable slope gradient determined from a geotechnical study or engineering assessment.

The *Stable Slope Allowance* is the distance between the actual valley *top of slope* and the point at which a stable slope gradient, rising from the same toe position, intersects the ground surface and includes an appropriate *factor of safety*. This is the distance required for the slope to reach a stable slope inclination. **Figure 5** shows the two components used to establish the *Regulated Area* where slopes are oversteepened and no erosion is occurring at the toe of the valley slope.

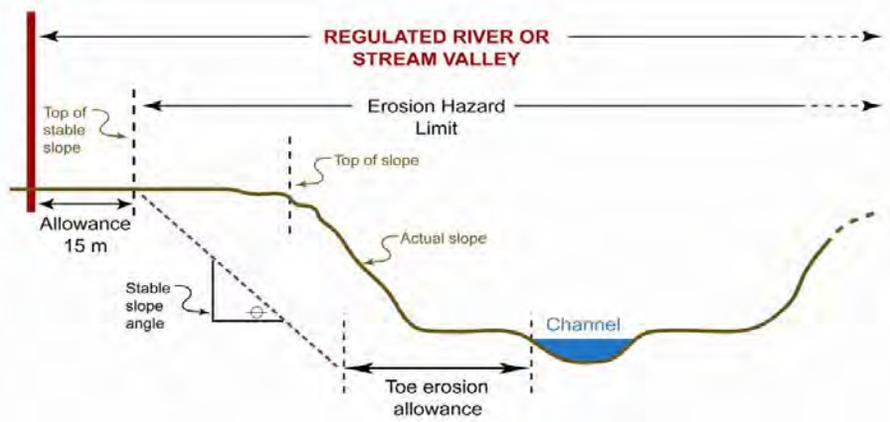


**Figure 5.** Riverine Erosion Hazard – Regulated Area for Apparent Oversteepened Valleys with Stable Toe

### **Defining the Riverine Erosion Hazard - Apparent Valley (Confined System) – Active Toe Erosion**

Where the toe of the slope in an Apparent Valley is unstable due to active toe erosion, a *Toe Erosion Allowance* is added into the *Riverine Erosion Hazard*. The *Toe Erosion Allowance* is the distance calculated from the toe of the slope by multiplying the average annual recession rate (as determined by an engineered study based on observation of twenty-five years or longer) over a 100-year planning horizon. This method estimates the amount of erosion that would occur over the next 100 years. In the absence of an engineering study or where the toe of the slope is less than 15 metres (49.2 feet) from the watercourse, a *Toe Erosion Allowance* of 15 metres (49.2 feet) from the bank of the stream is used.

**Figure 6** illustrates the three components used to establish the *Regulated Area* where slopes are oversteepened and active toe erosion is occurring.

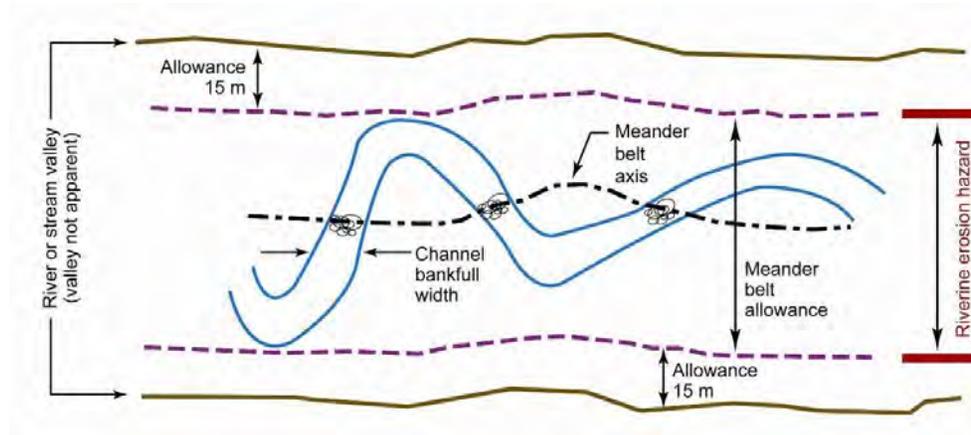


**Figure 6.** Riverine Erosion Hazard – Regulated Area for Apparent Oversteepened Valleys with Active Toe Erosion

## **Defining the Regulated Area for No Apparent Valley (Unconfined Systems)**

Where the river or stream valley is not apparent, the flow of water is free to shift across the shallower land. Although toe erosion and slope stability are not deemed potential hazards, consideration for the meandering tendencies of the system must be provided. In these valley sections, the *Regulated Area* is the greater of the extent of the *Riverine Flooding Hazard* plus the prescribed allowance or the *Meander Belt Allowance* plus an allowance of 15 metres (49.2 feet).

The *Meander Belt Allowance* provides a limit to development within the areas where the river system is likely to shift. This allowance is based on twenty (20) times the bankfull channel width, where the bankfull channel width is measured at the widest riffle section of the reach. A riffle is a section of shallow rapids where the water surface is broken by small waves. The meander belt is centered over the channel (**Figure 7**).



**Figure 7.** Riverine Erosion Hazard – Regulated Area – No Apparent Valley

*Development* within the *Regulated Area* of any river or stream valley in the Long Point Region watershed requires permission from the LPRCA.

## **Policies for Riverine Erosion Hazards and the Associated Allowance**

8.2.1 **Development** will not be permitted within the *Riverine Erosion Hazard and the associated allowance* except in accordance with the policies in *Sections 8.2.2–8.2.20*.

### ***Development in the Riverine Erosion Hazard Allowance – Apparent Valleys***

8.2.2 **Development** within the *Riverine Erosion Hazard Allowance* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where a site-specific geotechnical or engineering assessment, carried out by a qualified professional based on established provincial guidelines and an appropriate *factor of safety* against slope failure or slipping, establishes a more precise *Riverine Erosion Hazard* limit, and where it can be demonstrated that:

- a) there is no feasible alternative site outside the *Regulated Area*,
- b) the proposed development is not subject to a *Riverine Erosion Hazard* or a *Riverine Flooding Hazard*,
- c) there is no impact on existing and future slope stability,
- d) the risk of creating new *Riverine Erosion Hazards* or aggravating existing *Riverine Erosion Hazards* as a result of the development is negligible,
- e) the potential of increased loading forces on the top of the slope is addressed through appropriate structural design,
- f) the potential for surficial erosion is addressed by a drainage plan,
- g) *access* into and through the valley for preventative actions or maintenance or during an emergency will not be prevented, *and*
- h) an appropriate setback from the *Riverine Erosion Hazard*, as established in *Sections 8.2.3-8.2.10*, is proposed.

8.2.3 **Non-Habitable Accessory Buildings or Structures** associated with an existing residential use such as tool sheds, gazebos and other similar structures, may be permitted within the *Riverine Erosion Hazard Allowance* in accordance with the policies in *Section 8.2.2*, provided that a development setback of not less than 6 metres (20 feet) is maintained from the *Riverine Erosion Hazard*, where practical.

8.2.4 **Accessory Buildings or Structures** associated with an existing industrial/commercial/institutional uses may be permitted within the *Riverine Erosion Hazard Allowance* in accordance with the policies in *Section 8.2.2*, provided that a development setback of not less than 6 metres (20 feet) is maintained from the *Riverine Erosion Hazard*.

8.2.5 **Ground Floor Additions** to existing buildings or structures may be permitted within the *Riverine Erosion Hazard Allowance* in accordance with the policies in *Section 8.2.2* provided that a development setback of not less than 6 metres (20 feet) is maintained from the *Riverine Erosion Hazard*.

8.2.6 **An Additional Storey** to existing buildings or structures within the *Riverine Erosion Hazard Allowance* may be permitted in accordance with the policies in *Section 8.2.2* provided that the existing development setback is maintained.

8.2.7 **Buildings or Structures** associated with new multi-lot or multi-unit uses (residential/industrial/commercial/institutional), large-scale uses such as golf courses or commercial/institutional complexes may be permitted within the *Riverine Erosion Hazard Allowance* in accordance with the policies in *Section 8.2.2*, provided that all building lots or

greens and fairways (in the case of golf courses) are set back, in their entirety, a minimum of 6 metres (20 feet) from the *Riverine Erosion Hazard*.

- 8.2.8 **Buildings or Structures** on single lots not associated with new multi-lot or multi-unit uses (residential/industrial/commercial/institutional), large-scale uses or commercial/institutional complexes may be permitted within the *Riverine Erosion Hazard Allowance* in accordance with the policies in *Section 8.2.2*, provided that a development setback of not less than 6 metres (20 feet) is maintained from the *Riverine Erosion Hazard*.
- 8.2.9 **Replacement or relocation** of existing buildings or structures located within the *Riverine Erosion Hazard Allowance* may be permitted in accordance with the policies in *Section 8.2.8*.

**Development Associated with Existing Uses in the Riverine Erosion Hazard – Apparent Valleys**

- 8.2.10 **Development** associated with existing uses located within the *Riverine Erosion Hazard* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated through a site-specific geotechnical or engineering assessment, carried out by a qualified professional based on established provincial guidelines, that:
- a) there is no feasible alternative site outside the *Riverine Erosion Hazard*,
  - b) the proposed development or building or structure is located in the area of least risk,
  - c) the site is setback from the *top of slope* and is located in an area where the *factor of safety* is not less than 1.3-1.5 depending on the type of use and size of the building or structure,
  - d) there is no impact on existing and future slope stability and bank stabilization or erosion protection works are not required,
  - e) the risk of creating new *Riverine Erosion Hazards* or aggravating existing *Riverine Erosion Hazards* as a result of the development is negligible,
  - f) the potential of increased loading forces on the *top of slope* is addressed through appropriate structural design,
  - g) the potential for surficial erosion is addressed by a drainage plan, where applicable, and
  - h) access into and through the valley for preventative actions or maintenance or during an emergency will not be prevented.
- 8.2.11 **Minor Additions** to existing residential uses may be permitted in accordance with the policies in *Section 8.2.10* provided that the addition is less than 50 per cent of the original floor area of the building or structure to a maximum of 50 m<sup>2</sup> (500 ft<sup>2</sup>).
- 8.2.12 **Minor Additions** to existing industrial/commercial/institutional uses may be permitted in accordance with the policies in *Section 8.2.10* provided that the addition is less than 50 per cent of the original floor area of the building or structure to a maximum of 100 m<sup>2</sup> (1,076 ft<sup>2</sup>).
- 8.2.13 **Replacement or relocation** of existing buildings or structures may be permitted in accordance with policies in *Section 8.2.10* and where it can be demonstrated that:
- a) the building or structure to be replaced or relocated is relocated outside the *Riverine Erosion Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing lot where the risk is reduced to the greatest extent, wherever possible,
  - b) the new building or structure is the same size or larger to a maximum of 50 percent of the original habitable floor area or a footprint of 50 m<sup>2</sup> (500 ft<sup>2</sup>), whichever is the lesser and the use is the same.
- 8.2.14 **Non-Habitable Accessory Buildings or Structures** less than or equal to 100 m<sup>2</sup> (1,076 ft<sup>2</sup>) may be permitted within the *Riverine Erosion Hazard* in accordance with the policies in *Section 8.2.10*.

Additions may be permitted provided that the combined area of the existing *accessory building or structure* and the addition is equal to or less than 100 m<sup>2</sup> (1,070 ft<sup>2</sup>).

8.2.15 **Septic Systems** and septic system replacement associated with *existing uses* may be permitted in accordance with the policies in Section 8.2.10 – *Policies for Riverine Erosion Hazards*, and where it can be demonstrated that:

- a) the septic system is located landward of the buildings or structures, where possible, or
- b) the septic system is set back from the *top of stable slope* and is sited under the supervision of a qualified geotechnical engineer.

8.2.16 **Development** in the *Riverine Erosion Hazard* and *Riverine Erosion Hazard Allowance* associated with stable, gently sloping valley walls (slope inclination less than 20% (5H:1V)) and pockets of gently sloping land terraced between valley slopes outside of the *Riverine Flooding Hazard* may be permitted without a site-specific geotechnical study, where, in the opinion of the LPRCA, the impact of the development on slope stability is negligible and the policies in *Sections 7.1.2-7.1.3 General Policies* are met.

#### **Development – No Apparent Valley**

8.2.17 **Development** will not be permitted within the *Riverine Erosion Hazard* where there is no apparent valley. A site-specific geotechnical, hydraulic or engineering assessment may be undertaken at the proponent's expense to establish more precise limits for the *Riverine Flooding Hazard* and the *Riverine Erosion Hazard*.

8.2.18 **Development** proposed in an area subject to the *Riverine Flooding Hazard* but beyond the limits of the *Riverine Erosion Hazard*, may be permitted in accordance with the policies in *Section 8.1 – River or Stream Valleys – Riverine Flooding Hazards*.

#### **Public Infrastructure**

8.2.19 **Public Infrastructure** including but not limited to roads, sanitary sewers, utilities, water supply wells, well houses, and pipelines, may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and provided that: (a) there is no feasible alternative site outside the *Regulated Area* as determined by an *Environmental Assessment* or other *comprehensive plan* supported by the LPRCA, and (b) a site-specific geotechnical or engineering assessment based on established provincial guidelines and an appropriate *factor of safety* establishes a more precise *Riverine Erosion Hazard*, and (c) where it can be demonstrated that:

- a) there are no impacts on existing and future slope stability,
- b) the risk of creating new *Riverine Erosion Hazards* or aggravating existing *Riverine Erosion Hazards* is minimized through site and infrastructure design and appropriate remedial measures,
- c) the potential of increased loading forces on the top of the slope is addressed through appropriate structural design,
- d) the potential for surficial erosion is addressed by a drainage plan.

#### **Recreational Infrastructure**

8.2.20 **Recreational Infrastructure** which by its nature must locate in river valleys such as fencing, stairways, and access points, and other recreational uses deemed appropriate by the LPRCA may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated through a site-specific geotechnical or engineering assessment based on established provincial guidelines and appropriate *factor of safety* that:

- a) there is no impact on existing and future slope stability,
- b) the risk of creating new *Riverine Erosion Hazards* or aggravating existing *Riverine Erosion Hazards* is minimized through site and infrastructure design and appropriate remedial measures,
- c) the proposed works do not create new hazards or aggravate existing hazards on adjacent/flanking properties within the river reach,
- d) facilities are designed and constructed to minimize the risk of structural failure and/or property damage,
- e) the potential for surficial erosion is addressed by a drainage plan.

### **Prohibited Uses within the Riverine Erosion Hazard**

8.2.21 Notwithstanding Sections 8.2.2-8.2.14, **development** will not be permitted within the *Riverine Erosion Hazard* as specified in Section 7.2 – *General Policies*, or where the use is:

- a) a bank stabilization project intended to protect new development, with the exception of public infrastructure,
- b) placement or dumping of fill not associated with works approved by the LPRCA,
- c) a Stormwater Management Facility, *or*
- d) excavation works at the toe of a valley slope, with the exception of works which may be permitted in accordance with the policies in Section 9.1.

## 8.3 Inland Lakes

Lands that are adjacent or close to the shorelines of inland lakes that have a surface area of greater than 2 hectares (5 acres) and less than 100 km<sup>2</sup> (39 mi<sup>2</sup>) and/or that respond to a single runoff event could be affected by flooding or erosion. These lands are within the jurisdiction of the LPRCA. Any development proposed adjacent to an inland lake will require permission from the LPRCA.

### **Policies for Inland Lakes**

- 8.3.1 **Development** along inland lake shorelines that are impacted by flooding or erosion hazards or within 15 m of the average annual high water mark of the lake will not be permitted except in accordance with the policies in *Sections 8.1 and 8.2*, where applicable.

## 8.4 Lake Erie Shoreline – Flooding and Dynamic Beach Hazards

About 200 kilometres of Lake Erie shoreline is within the jurisdiction of the LPRCA. For the purposes of defining the extent of the *Regulated Area*, a 15 metre (50 foot) allowance is added to the furthest landward extent of the *flooding hazard*, *erosion hazard* or *dynamic beach hazard*.

A *Shoreline Management Plan (SMP)* was completed by Philpott Associates Coastal Engineers Limited in December 1989 and subsequently adopted by the LPRCA. The plan lays out the technical basis and recommended management plan for the lakeshore. The *Lake Erie Shoreline Erosion Hazard* and *Lake Erie Dynamic Beach Hazard* are determined based on information from the *Shoreline Management Plan* and updated shoreline hazard mapping.

### Defining the Lake Erie Shoreline Flooding Hazard

Flooding from Lake Erie affects the entire shoreline area, backshore areas, and also extends up the lower portions of the creeks and streams in the Long Point Region watershed that flow into Lake Erie. The *Lake Erie Flooding Hazard* limit is based on the 100-year flood limit including allowances for wave uprush and other water-related hazards (**Figure 9**).

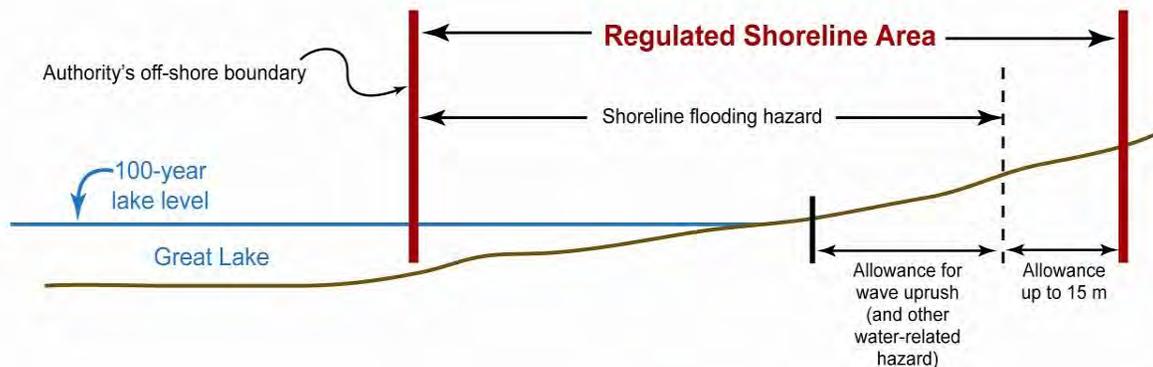


Figure 9. Lake Erie Shoreline Flooding Hazard - Regulated Area

### Defining the Lake Erie Dynamic Beach Hazard

The *Lake Erie Dynamic Beach Hazard* is that portion of a shoreline where accumulated unconsolidated sediment continuously moves as a result of naturally occurring processes associated with wind and water and changes in the rate of sediment supply. The extent of the *dynamic beach hazard* is defined as the extent of the *flooding hazard* plus a dynamic beach allowance as identified in the *Lake Erie Shoreline Management Plan*. The *Lake Erie Shoreline Management Plan* identifies six reaches containing dynamic beaches at Port Burwell, Long Point, toe of the bluffs between Port Rowan and St. Williams, Turkey Point, between Turkey Point and Port Dover at Port Ryerse, Fishers Glen and Normandale, and at Port Dover. (**Figure 11**).

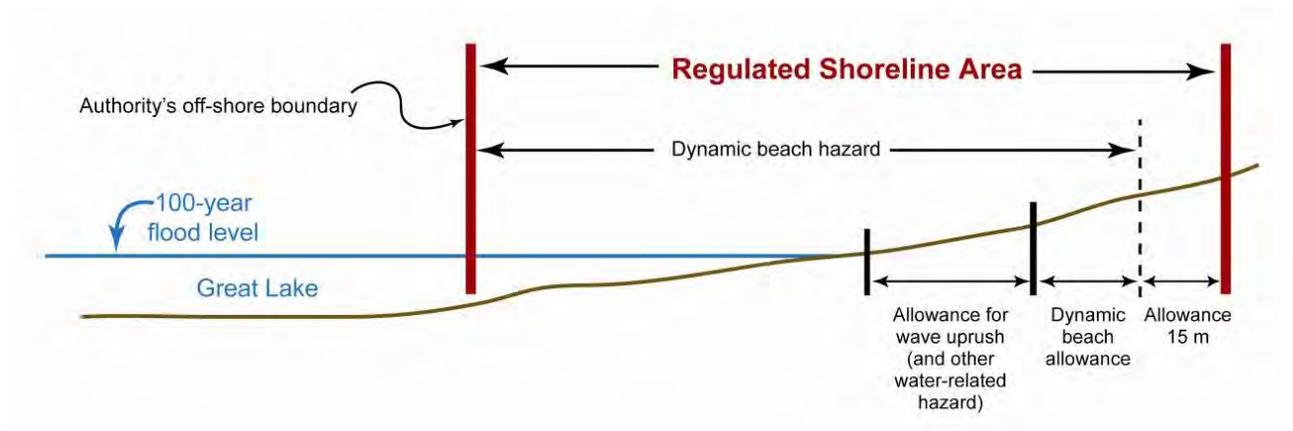


Figure 11. Lake Erie Dynamic Beach Hazard - Regulated Area

Any development adjacent or close to the shoreline of Lake Erie within the *Regulated Area* requires permission from the LPRCA.

## **General Policies for Lake Erie Shoreline Flooding and Dynamic Beach Hazards**

The following policies apply to development proposed in a Regulated Area subject to a Shoreline Flooding or Dynamic Beach Hazard.

- 8.4.1 **Development** within the *Regulated Area* associated with the Lake Erie shoreline will not be permitted except in accordance with the recommendations of the currently-approved Shoreline Management Plan for the applicable shoreline reach and the policies in *Sections 8.4.2-8.4.12*.

### **Existing Uses**

- 8.4.2 **Development** associated with existing uses located within *Lake Erie Shoreline Flooding Hazards* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where there is no feasible alternative site outside the *flooding or erosion hazard*, provided that it can be demonstrated that:

- a) the proposed development is located in an area of least (and acceptable) risk<sup>13</sup>,
  - b) *floodproofing* standards, protection works standards and safe *access* standards as determined by the LPRCA are met,
  - c) no basement is proposed in the *flooding hazard* and any *crawl space* is non-habitable and designed to facilitate services only,
  - d) there is no risk of structural failure due to potential hydrostatic/dynamic pressures, *and*
  - e) a maintenance access of at least 5 metres (16 feet) is retained to and along existing shoreline protection works.
- 8.4.3 **Minor Additions** to existing buildings or structures may be permitted in accordance with the policies in *Section 8.4.2 – Policies for Lake Erie Shoreline Flooding Hazard*, and where it can be demonstrated that:
- a) the addition is 50 percent or less of the original<sup>14</sup> habitable floor area to a maximum of 50 m<sup>2</sup> (540 ft<sup>2</sup>) or in the case of multiple additions, all additions combined are equal to or less than 50 per cent of the original habitable floor area to a maximum of 50 m<sup>2</sup> (540 ft<sup>2</sup>),
  - b) the addition is no closer to the lake than the existing building or structure,
  - c) the number of dwelling units is the same,
  - d) all *habitable floor space* is at or above the existing ground floor elevation,
  - e) the elevation for ingress and egress is the same or higher than that which was available with the original building or structures, *and*
  - f) no basement is proposed in the *flooding hazard* and foundations are designed to withstand potential hydrostatic/dynamic pressures.

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<sup>13</sup> High risk areas are identified in the currently-approved Shoreline Management Plan and include, but are not limited to, areas within Long Point Village, the toe of the bluff between Port Rowan and St. Williams, and the area south of the roadway on Rainham Lots 1-4, 7-9 and 11-12.

<sup>14</sup> The habitable ground floor area existing on May 8, 2006 will be considered the “original” ground floor area for the purpose of this calculation. May 8, 2006 was the approval date for the *Development, Interference with Wetlands and Alteration to Shorelines and Watercourses, Ontario Regulation 178/06* that broadened the regulatory mandate of the Long Point Region Conservation Authority to include the Lake Erie shoreline. The mandate continues under Ontario Regulation 41/24.

- 8.4.4 **Replacement** of buildings or structures other than those damaged or destroyed by flooding or erosion within lands subject to the *Lake Erie Shoreline Flooding Hazard* may be permitted in accordance with the policies in *Section 8.4.2*, and where it can be demonstrated that:
- a) the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding, erosion and/or property damage is reduced to the greatest extent, wherever possible,
  - b) the replacement building or structure is no closer to the lake than the former building or structure,
  - c) the new building or structure is the same size or larger to a maximum of 50 percent of the original habitable floor area or 50 m<sup>2</sup> (540 ft<sup>2</sup>), whichever is the lesser, and the use is the same,
  - d) the number of dwelling units is the same or less,
  - e) the top of foundation elevation is at or exceeds the elevation of the *Shoreline Flooding Hazard*,
  - f) electrical, mechanical and heating services are located above the elevation of the *Shoreline Flooding Hazard*,
  - g) heating fuel tanks (oil or propane) are anchored to prevent movement and flotation due to flooding,
  - h) the elevation for ingress and egress is the same or higher than that which was available with the original building or structures, *and*
  - i) no basement is proposed in the *flooding hazard* and the foundation and any crawl space is designed to withstand potential hydrostatic/dynamic pressures due to flooding without significant structural damage.
- 8.4.5 **Relocation** of existing buildings and structures within lands subject to *Lake Erie Shoreline Flooding Hazard* may be permitted in accordance with the policies in *Section 8.4.4* provided that the risk of flooding, erosion and/or property damage is reduced through relocation.
- 8.4.6 **Septic Systems** and septic system replacement associated with *existing uses* may be permitted in accordance with the policies in *Section 8.4.2 – Policies for Lake Erie Shoreline Flood Hazards*, and where it can be demonstrated that:
- a) the septic system is located landward of the buildings or structures, where possible,
  - b) in addition to the Ontario Building Code requirements, a new or replacement filtration beds is designed to be effective when the water table reflects the maximum monthly Lake Erie water level (175.14 m IGLD), *and*
  - c) a maintenance access of at least 5 metres (16 feet) is retained to and along existing shoreline protection works.
- 8.4.7 **Non-Habitable Accessory Buildings or Structures** associated with *existing uses* such as detached garages, tool sheds, gazebos and other similar structures within lands subject to the *Lake Erie Shoreline Flooding Hazard* may be permitted in accordance with the policies in *Sections 8.4.2 - Policies for Lake Erie Shoreline Flooding Hazard*, and where it can be demonstrated that:
- d) there is no feasible alternative site outside the *Lake Erie Shoreline Flooding or Erosion Hazard*,
  - e) the site is not subject to *frequent flooding*,
  - f) the floor area of the building or structure is less than or equal to 100 m<sup>2</sup> (1,080 ft<sup>2</sup>), *and*
  - g) there is no opportunity for conversion into habitable space in the future.

- 8.4.8 **Internal Renovations** to existing buildings and structures within the *Lake Erie Shoreline Regulated Area* which change the use or potential use of the building or structure may be permitted provided that:
- a) no new or additional dwelling units are created, *and*
  - b) the internal renovation does not result in a new use prohibited by Section 7.2.
- 8.4.9 **Redevelopment**<sup>15</sup> of existing buildings or structures, other than those destroyed by flooding or erosion, within lands subject to the *Lake Erie Shoreline Flooding Hazard*, may be permitted in accordance with the current *Shoreline Management Plan* and the policies in *Section 8.4.2*, and where it can be demonstrated that:
- a) the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding, erosion and/or property damage is reduced to the greatest extent, wherever possible,
  - b) the use is the same,
  - c) the number of dwelling units is the same or less,
  - d) the building or structure is *floodproofed* to the elevation of the *Shoreline Flooding Hazard* using dry, passive *floodproofing* measures<sup>16</sup>,
  - e) the top of foundation elevation of the building or structure is at or exceeds the elevation of the *Shoreline Flooding Hazard*,
  - f) electrical, mechanical and heating services are located above the level of the *Shoreline Flooding Hazard*,
  - g) heating fuel tanks (oil or propane) are floodproofed to prevent movement and flotation due to flooding,
  - h) no basement is proposed and any *crawl space* is non-habitable and designed to facilitate services only,
  - i) there is no risk of structural failure due to potential hydrostatic/dynamic pressures, *and*
  - j) *Safe access* for people and vehicles is available.
- 8.4.10 **Development** associated with non-habitable uses within *Lake Erie Shoreline Flooding or Erosion Hazards*, including marinas and recreational facilities, may be permitted in accordance with the policies in *Section 7.1.2-7.1.3 – General Policies* and *Section 8.4.2 – Policies for Lake Erie Shoreline*, provided that it can be demonstrated that:
- a) there is no feasible alternative site outside of the *flooding or erosion hazard*, *and*
  - b) buildings and structures including electrical, mechanical and heating services, are *floodproofed* to the elevation of the *Shoreline Flooding Hazard*, *and*
  - c) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies,

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<sup>15</sup> **Redevelopment** policies apply to proposals where the proposed addition to or replacement of an existing building or structure exceed the size limitations for a *minor addition or replacement*; floodproofing and *safe access* are required.

<sup>16</sup> **Dry, passive floodproofing** measures are measures in place to keep a development and its contents completely dry without the need to take action in anticipation of flooding.

### **Public Infrastructure**

- 8.4.11 **Public Infrastructure** including but not limited to roads, sanitary sewers, utilities, water and sewage treatment plants, water supply wells, well houses, and pipelines may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, provided that there is no feasible alternative site outside the *Shoreline Flooding or Erosion Hazards* as determined through an *Environmental Assessment* or other *comprehensive plan* supported by the LPRCA, and where it can be demonstrated that adverse impacts on shoreline processes are limited and any risk of flood or erosion damage to neighbouring properties is not increased.
- 8.4.12 The maintenance and repair of **Public Infrastructure** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policy*.

### **Shoreline Protection Works**

- 8.4.13 **Shoreline Protection Works** to protect existing development in defined settlement areas, and other uses deemed appropriate by the Long Point Region Conservation Authority, may be permitted in accordance with the recommendations of the currently-approved Shoreline Management Plan for the applicable shoreline reach and the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:
- a) all feasible alignments have been considered through an Environmental Assessment supported by the LPRCA or other site specific technical studies, whichever is applicable based on the scale and scope of the project,
  - b) the proposed works do not create new hazards or aggravate existing hazards on the subject properties or adjacent/flanking properties within the shoreline reach,
  - c) the works are designed and stamped by a professional engineer, licensed in the Province of Ontario, with competencies in shoreline coastal processes,
  - d) floodproofing standards, protection works standards and access standards as determined by the LPRCA are met,
  - e) maintenance requirements are minimized,
  - f) a maintenance access of at least 5 metres (16 feet) is retained to and along existing and proposed shoreline protection works for appropriate equipment and machinery for regular maintenance purposes and repair should failure occur.
- 8.4.14 The maintenance and repair of **Shoreline Protection Works** that protect existing development and infrastructure may be permitted in accordance with the recommendations of the currently-approved *Shoreline Management Plan* for the applicable shoreline reach and the policies in *Sections 7.1.2-7.1.3 - General Policies*.

### **Prohibited Uses with the Lake Erie Flooding or Dynamic Beach Hazards**

- 8.4.15 Notwithstanding *Sections 8.5.2-8.5.8*, **development** will not be permitted in accordance with the policies in *Section 7.2 – General Policies*, or where the proposed development is:
- a) new and/or the expansion of existing campgrounds or trailer parks,
  - b) underground parking,
  - c) a flood protection or bank stabilization project intended to protect new development, with the exception of public infrastructure.

**Development – Lake Erie Shoreline Flooding Hazard Allowance**

8.4.16 **Development** within the *Lake Erie Shoreline Flooding Hazard Allowance* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:

- a) there is no risk of structural failure due to potential hydrostatic/dynamic pressures,
- b) all potentially *habitable floor space* including any basement is elevated above the elevation of the *Shoreline Flood Hazard*,
- c) a maintenance access of at least 5 metres (16 feet) is retained to and along existing and proposed shoreline protection works.

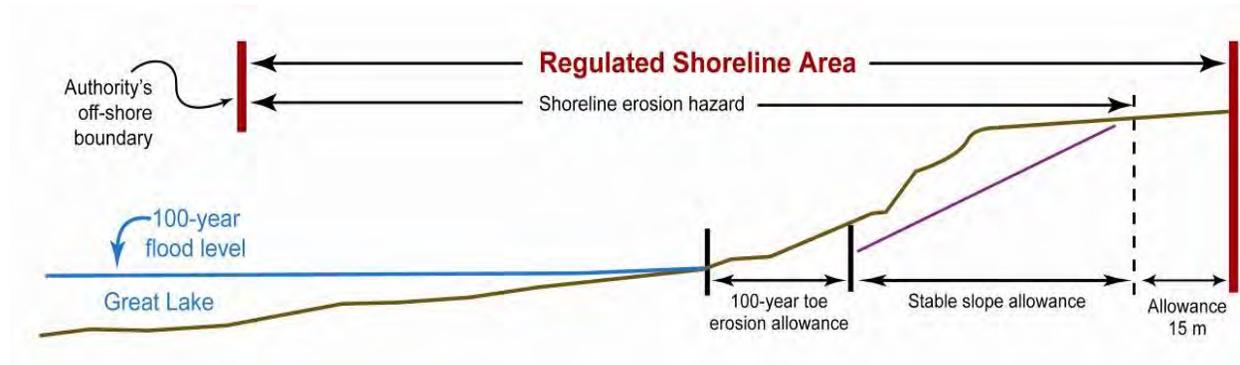
## 8.5 Lake Erie Shoreline – Shoreline Erosion Hazards

About 200 kilometres of Lake Erie shoreline is within the jurisdiction of the LPRCA. For the purposes of defining the extent of the *Regulated Area*, a 15 metre (50 foot) allowance is added to the furthest landward extent of the *flooding hazard*, *erosion hazard* or *dynamic beach hazard*.

A *Shoreline Management Plan (SMP)* was completed by Philpott Associates Coastal Engineers Limited in December 1989 and subsequently adopted by the LPRCA. The plan lays out the technical basis and recommended management plan for the lakeshore. The *Lake Erie Shoreline Erosion Hazard* and *Lake Erie Dynamic Beach Hazard* are determined based on information from the *Shoreline Management Plan* and updated shoreline mapping.

### Defining the Lake Erie Shoreline Erosion Hazard

The *Lake Erie Shoreline Erosion Hazard* is defined as the average annual rate of recession extended over a 100 year period. The erosion hazard is determined using an erosion allowance (equal to 100 times the average annual recession rate) and a stable slope allowance (equal to the horizontal distance measured landward from the predicted toe of the slope equal to 3 times the height of the cliff, bluff or bank) (**Figure 10**). Where there is insufficient data to estimate an average annual recession rate, an erosion allowance equal to 30 metres (100 feet) is used.



**Figure 10.** Lake Erie Shoreline Erosion Hazard - Regulated Area

Any development activity adjacent or close to the shoreline of Lake Erie within the *Regulated Area* requires permission from the LPRCA.

## **General Policies for Lake Erie Shoreline Erosion Hazard**

The following policies apply to development proposed in a Regulated Area subject to a *Shoreline Erosion Hazard*.

8.5.1 **Development activities** within the *Regulated Area* associated with the Lake Erie shoreline will not be permitted except in accordance with the recommendations of the currently-approved Shoreline Management Plan for the applicable shoreline reach and the policies in *Sections 8.5.2-8.5.12*.

### **Existing Uses**

8.5.2 **Development activities associated with existing uses** located within *Lake Erie Shoreline Flooding or Erosion Hazards* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where there is no feasible alternative site outside the *flooding or erosion hazard*, provided that it can be demonstrated that:

- a) the proposed development is located in an area of least (and acceptable) risk
- b) the proposed development is set back from the *top of slope* and is located in an area where the slope stability *factor of safety* is not less than 1.3-1.5 depending on the site conditions, type of use and size of the building or structure,
- c) the setback from the *top of stable slope* includes an erosion hazard component that recognizes the effectiveness, integrity, residual design life and maintainability of any existing erosion protection works; *and*
- d) a maintenance access of at least 5 metres (16 feet) is retained to and along existing shoreline protection works.

8.5.3 **Minor Additions** to existing buildings or structures may be permitted in accordance with the policies in *Section 8.5.2 – Policies for Lake Erie Shoreline Erosion Hazard*, and where it can be demonstrated that:

- a) the addition is 50 percent or less of the original<sup>17</sup> habitable floor area to a maximum of 50 m<sup>2</sup> (540 ft<sup>2</sup>) or in the case of multiple additions, all additions combined are equal to or less than 50 per cent of the original habitable floor area to a maximum of 50 m<sup>2</sup> (540 ft<sup>2</sup>), and
- b) the addition is no closer to the lake than the existing building or structure.

8.5.4 **Non-Habitable Accessory Buildings or Structures** associated with *existing uses* such as detached garages, tool sheds, gazebos and other similar structures within lands subject to the *Lake Erie Shoreline Flooding or Erosion Hazard* may be permitted in accordance with the policies in *Sections 8.5.2 - Policies for Lake Erie Shoreline Erosion Hazard*, and where it can be demonstrated that:

- a) there is no feasible alternative site outside the *Lake Erie Shoreline Erosion Hazard*,
- b) the building or structure is no closer to the lake than the existing building or structure and is set back a minimum of 6 metres from the *top of stable slope*,
- c) the floor area of the building or structure is less than or equal to 100 m<sup>2</sup> (1,076 ft<sup>2</sup>), and

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<sup>17</sup> The habitable ground floor area existing on May 8, 2006 will be considered the “original” ground floor area for the purpose of this calculation. May 8, 2006 was the approval date for the *Development, Interference with Wetlands and Alteration to Shorelines and Watercourses, Ontario Regulation 178/06* that broadened the regulatory mandate of the Long Point Region Conservation Authority to include the Lake Erie shoreline.

- d) a maintenance access of at least 5 metres (16 feet) is retained to and along existing shoreline protection works.
- 8.5.5 **Replacement** of buildings or structures other than those damaged or destroyed by flooding or erosion within lands subject to the *Lake Erie Shoreline Erosion Hazard* may be permitted in accordance with the policies in *Section 8.5.2*, and where it can be demonstrated that:
- a) the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding, erosion and/or property damage is reduced to the greatest extent, wherever possible,
  - b) the replacement building or structure is set back from the *top of stable slope*, is located no closer to the lake than the former building or structure, and is located in an area where the slope stability *factor of safety* is not less than 1.3, and
  - c) the new building or structure is the same size or larger to a maximum of 50 percent of the original habitable floor area or 50 m<sup>2</sup> (540 ft<sup>2</sup>), whichever is the lesser, and the use is the same.
- 8.5.6 **Relocation** of existing buildings and structures within lands subject to *Lake Erie Shoreline Erosion Hazard* may be permitted in accordance with the policies in *Section 8.5.5* provided that the risk of flooding, erosion and/or property damage is reduced through relocation.
- 8.5.7 **Septic Systems** and septic system replacement associated with *existing uses* may be permitted in accordance with the policies in *Section 8.5.2 – Policies for Lake Erie Shoreline Erosion Hazards*, and where it can be demonstrated that:
- a) the septic system is located landward of the buildings or structures, where possible, or
  - b) the septic system is set back from the *top of stable slope* and is sited under the supervision of a qualified geotechnical engineer.
- 8.5.8 **Internal Renovations** to existing buildings and structures within the *Lake Erie Shoreline Regulated Area* which change the use or potential use of the building or structure may be permitted provided that:
- a) no new or additional dwelling units are created, and
  - b) the internal renovation does not result in a new use prohibited by *Section 7.2*.
- 8.5.9 **Redevelopment**<sup>18</sup> of existing buildings or structures, other than those destroyed by flooding or erosion, within lands subject to the *Lake Erie Shoreline Erosion Hazard*, may be permitted in accordance with the current *Shoreline Management Plan* and the policies in *Section 8.5.2*, and where it can be demonstrated that:
- a) the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding, erosion and/or property damage is reduced to the greatest extent, wherever possible,
  - b) the number of dwelling units is the same or less,
  - c) the site is set back from the *top of slope* and is located in an area where the *slope stability factor of safety* is not less than 1.3-1.5 depending on the site conditions, type of use and size of the building or structure, and

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<sup>18</sup> **Redevelopment policies apply to proposals where the proposed addition to or replacement of an existing building or structure exceed the size limitations for a *minor addition or replacement*; an erosion hazard setback is required.**

- d) the setback from the *top of stable slope* includes an erosion hazard component that recognizes the effectiveness, integrity, residual design life and maintainability of any existing erosion protection works.

8.5.10 **Development activities** associated with non-habitable uses within *Lake Erie Shoreline Erosion Hazards*, including marinas and recreational facilities, may be permitted in accordance with the policies in *Section 7.1.2-7.1.3 – General Policies* and *Section 8.5.2 – Policies for Lake Erie Shoreline Erosion Hazard*, provided that it can be demonstrated that:

- a) there is no feasible alternative site outside of the flooding or erosion hazard, and
- b) the site is set back from the *top of slope* and is located in an area where the slope stability *factor of safety* is not less than 1.3-1.5 depending on the site conditions, type of use and size of the building or structure, and
- c) the setback from the *top of stable slope* includes an erosion hazard component that recognizes the effectiveness, integrity, residual design life and maintainability of any existing erosion protection works.

#### **Public Infrastructure**

8.5.11 **Public Infrastructure** including but not limited to roads, sanitary sewers, utilities, water and sewage treatment plants, water supply wells, well houses, and pipelines may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, provided that there is no feasible alternative site outside the *Shoreline Erosion Hazards* as determined through an *Environmental Assessment* or other *comprehensive plan* supported by the LPRCA, and where it can be demonstrated that adverse impacts on shoreline processes are limited and any risk of flood or erosion damage to neighbouring properties is not increased.

8.5.12 The maintenance and repair of **Public Infrastructure** may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*.

#### **Recreational Infrastructure**

8.5.13 **Recreational Infrastructure** which by its nature must locate along shorelines such as fencing, stairways, and access points, and other recreational uses deemed appropriate by the LPRCA may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated through a site-specific geotechnical or engineering assessment based on established provincial guidelines and appropriate *factor of safety* that:

- f) there is no impact on existing and future slope stability,
- g) the risk of creating new *Shoreline Erosion Hazards* or aggravating existing *Shoreline Erosion Hazards* is minimized through site and infrastructure design and appropriate remedial measures,
- h) the proposed works do not create new hazards or aggravate existing hazards on adjacent/flanking properties within the river reach,
- i) facilities are designed and constructed to minimize the risk of structural failure and/or property damage,
- j) the potential for surficial erosion is addressed by a drainage plan.

#### **Shoreline Protection Works**

8.5.14 **Shoreline Protection Works** to protect existing development in settlement areas, and other uses deemed appropriate by the Long Point Region Conservation Authority, may be permitted in accordance with the recommendations of the currently-approved Shoreline Management Plan

for the applicable shoreline reach and the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:

- a) all feasible alignments have been considered through an Environmental Assessment supported by the LPRCA or other site specific technical studies, whichever is applicable based on the scale and scope of the project,
- b) the proposed works do not create new hazards or aggravate existing hazards on the subject properties or adjacent/flanking properties within the shoreline reach,
- c) the works are designed and stamped by a professional engineer, licensed in the Province of Ontario, with competencies in shoreline coastal processes,
- d) *floodproofing* standards, protection works standards and *access* standards as determined by the LPRCA are met. ,
- e) maintenance requirements are minimized,
- f) a maintenance access of at least 5 metres (16 feet) is retained to and along existing and proposed shoreline protection works for appropriate equipment and machinery for regular maintenance purposes and repair should failure occur.

8.5.15 The maintenance and repair of ***Shoreline Protection Works*** that protect existing development and infrastructure may be permitted in accordance with the recommendations of the currently-approved *Shoreline Management Plan* for the applicable shoreline reach and the policies in *Sections 7.1.2-7.1.3 - General Policies*.

***Development – Lake Erie Shoreline Erosion Hazard Allowance***

8.5.16 ***Development*** within the *Lake Erie Shoreline Flooding or Erosion Hazard Allowance* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:

- a) the potential for surficial erosion is addressed by a drainage plan, and
- b) a maintenance access of at least 5 metres (16 feet) is retained to and along existing and proposed shoreline protection works.

***Prohibited Uses with the Lake Erie Erosion Hazards***

8.5.17 Notwithstanding *Sections 8.5.2-8.5.8*, ***development*** will not be permitted in accordance with the policies in *Section 7.2 – General Policies*, or where the proposed development is:

- a) located within the *stable slope allowance*;
- b) a structural shoreline protection project intended to facilitate new development, with the exception of public infrastructure.

## 8.6 Wetlands and Areas of Interference

### Defining Wetlands<sup>19</sup>

***Wetlands are defined in the Conservation Authorities Act and means land that:***

- ***is seasonally or permanently covered by shallow water or have a water table close or at the surface,***
- ***directly contributes to the hydrological function of a watershed through connection with a surface watercourse,***
- ***has hydric soils, the formation of which have been caused by the presence of abundant water, and***
- ***has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water***

***but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits wetland characteristics*** (Ontario Regulation 41/24, s. 1).

Wetlands are important natural features on the landscape, whether permanently or seasonally wet. Wetlands moderate water flow by absorbing much of the surface water runoff from the land and then slowly releasing it. This helps to reduce flooding and to sustain stream flows during dry spells. Many wetlands recharge groundwater by moving surface water into the groundwater system.

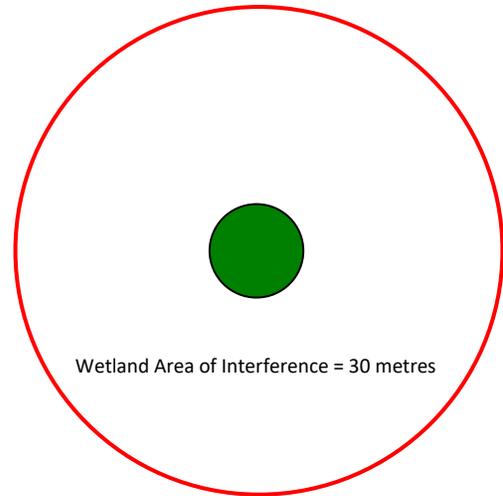
Other benefits include protecting and improving water quality, providing habitat for fish and wildlife, and providing recreational opportunities. The lands which surround wetlands are also important to sustaining their essential hydrologic and ecological functions.

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<sup>19</sup> Note that the definition of “wetland” in the *Conservation Authorities Act* differs from the definition of wetland in the Provincial Policy Statement under the *Planning Act* that is used for municipal land use planning matters.

## **Defining Areas of Interference**

The areas surrounding wetlands where development activities could interfere with the hydrologic function of the wetland are called “areas of interference”. These areas include lands that are 30 metres (100 feet) from wetlands as shown in **Figure 8**. These areas may be adjusted where detailed hydrologic studies define a more accurate “area of interference”.



**Figure 8.** Wetlands and Associated Areas of Interference

All wetlands and their associated areas of interference are regulated under the *Prohibited Activities, Exemptions and Permits Regulation*.

Any *development activities* or *interference* within wetlands or *development activities* in areas of interference requires permission from the LPRCA.

## **Policies for Wetlands and Areas of Interference**

- 8.6.1 **Development activities or Interference** within a *wetland* or **development activities** within an *area of interference* will not be permitted except in accordance with the policies in *Sections 8.6.3-8.6.12*.
- 8.6.2 **Peat Extraction** within a wetland will not be permitted except in accordance with the policies in *Sections 8.6.3-8.6.4*.

### ***Development/Interference within Wetlands***

- 8.6.3 **Development** within a naturally-occurring wetland may be permitted where the wetland is *less than 0.5 hectares (1.25 acres)*, and it can be demonstrated that the wetland is not:
- part of a Provincially Significant Wetland,
  - located within a floodplain or riparian community,
  - part of a Provincially or municipally designated natural heritage feature, a significant woodland, or hazard land,
  - a bog, fen,
  - fish habitat,
  - confirmed habitat for a Provincially or regionally significant species as determined by the Ministry of Natural Resources and Forestry or as determined by the municipality,
  - part of an ecologically functional corridor or linkage between larger wetlands or natural areas,
  - part of a groundwater recharge area, *or*
  - a groundwater discharge area associated with any of the above.
- 8.6.4 **Development** within *or interference* with an *anthropogenic wetland less than 2 hectares (5 acres)* may be permitted where it can be demonstrated that the wetland functions can be maintained or enhanced elsewhere within the subwatershed or planning area and the wetland is not:
- part of a Provincially Significant Wetland,
  - located within a floodplain or riparian community,
  - part of a Provincially or municipally designated natural heritage feature, a significant woodland, or hazard land,
  - fish habitat,
  - confirmed habitat for a Provincially or regionally significant species as determined by the Ministry of Natural Resources and Forestry or determined by the municipality,
  - part of an ecologically functional corridor or linkage between larger wetlands or natural areas,
  - part of a groundwater recharge area, *or*
  - a groundwater discharge area associated with any of the above.
- 8.6.5 **Public Infrastructure** including but not limited to roads, sanitary sewers, utilities, water supply wells, well houses, and pipelines, **within a wetland** larger than specified in *Sections 8.6.3-8.6.4* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, provided that it can be demonstrated that:

- a) an *Environmental Assessment* or other *comprehensive plan* supported by the LPRCA, demonstrates that all alternatives to avoid wetland loss or interference have been considered and that the proposed alignment *minimizes* wetland loss or interference to the greatest extent possible, *and*
  - b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions.
- 8.6.6 Where an *Environmental Assessment* or other *comprehensive plan* is available and supported by the LPRCA as specified in *Section 8.6.5*, the LPRCA will request a more detailed site-specific study (i.e. a *Scoped Environmental Impact Study*) consistent with the *comprehensive plan*. This study will determine a more precise area wetland boundary in accordance with the current Provincial Wetland Evaluation System, and demonstrate how the hydrologic and ecological functions of the wetland will be restored and enhanced.
- 8.6.7 **Dredging** of existing ponds within a wetland may be permitted in accordance with the policies in *Section 7.1.2* and *Section 8.1.17*, and provided that all dredged material is placed at a suitable distance from the wetland.

#### **Municipal Drains**

- 8.6.8 Permission is not required under O.Reg. 41/42 for the **maintenance and repair of a Municipal Drain** as required by the *Drainage Act* that is conducted in accordance with the *Drainage Act and Conservation Authorities Act Protocol – Protocol for Municipalities and Conservation Authorities in Drain Maintenance and Repair Activities*, 2012 (The DART Protocol).
- 8.6.9 Permission is required under O.Reg. 178/06 for a **new or improved Municipal Drain** under the *Drainage Act* that proposes *drainage works*<sup>20</sup> in a wetland or proposes to realign, channelize, straighten or enclose a river, creek, stream or watercourse. In accordance with the *Drainage Act*, permission should be obtained during the preparation of the final engineer's report. To avoid legislative complications, permission must be obtained before the municipality adopts the engineer's report.
- 8.6.10 **Realignment, channelization, straightening or enclosure** of a river, creek, stream or watercourse or *drainage works* within in a wetland that are or are proposed to be part of a new drain or an improved drain under the *Drainage Act* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and where a draft final Engineer's Report demonstrates that:
- a) all feasible alternative alignments and options have been considered,
  - b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site design and appropriate remedial measures will adequately restore and enhance features and functions,
  - c) there is no increased risk of flooding or erosion upstream and downstream,
  - d) sedimentation and erosion during construction and post construction is minimized using best management practices including site and infrastructure design, construction controls, and appropriate remedial measures, *and*

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<sup>20</sup> As defined in the *Drainage Act, 2009*

- e) works are constructed, repaired and/or maintained according to *accepted engineering principles* and approved engineering standards.

**Development within Areas of Interference**

8.6.11 **Development** within an area of interference less than 30 metres (100 feet) from a wetland may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where an *Environmental Impact Study* demonstrates that:

- a) there are no negative or adverse hydrological or ecological impacts on the wetland,
- b) all development is located outside of the wetland and maintains as much setback as feasible,
- c) development is located above the water table, except as specified in *Section 8.6.10*, and
- d) septic systems are located a minimum of 15 metres from the wetland and 0.9 metres above the annual maximum water table<sup>21</sup>.

8.6.12 **Peat Extraction** within an area of interference may be permitted where an *Environmental Impact Study* demonstrates that policies in *Sections 7.1.2-7.1.3 – General Policies* are met and the affected area is rehabilitated to restore and enhance natural features and functions.

**Conservation Projects within Wetlands and Areas of Interference**

8.6.13 **Wetland Conservation Projects** within *wetlands* and *areas of interference* may be permitted where an *Environmental Impact Study* demonstrates how the hydrologic and ecological functions will be protected, created, restored and/or enhanced.

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<sup>21</sup> This standard is prescribed by the Ontario Building Code.

## 8.7 Unstable Soil or Bedrock

### Defining Hazardous Lands

***Hazardous land is defined as land that could be unsafe for development because of naturally-occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock (O.Reg. 41/24 s. 1).***

The Long Point Region watershed contains other hazardous lands including areas with organic soils and unstable bedrock such as the karst formations. Organic and peat soils, formed by the decomposition of vegetative and organic materials into humus can release humic acids to the ground water system and create highly combustible methane gas. Peat and other organic soils also lack soil structure making them susceptible to erosion and unable to support structures because they compress easily.

Any development within hazardous lands requires permission from the LPRCA.

### Policies for Unstable Soil or Bedrock

- 8.7.1 ***Development activities*** within hazardous lands associated with unstable soil or bedrock will not be permitted except in accordance with the policies in *Section 8.7.2*.
- 8.7.2 ***Development activities*** may be permitted within hazardous lands associated with unstable soil or bedrock in accordance with the policies in *Section 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:
- a) there is no feasible alternative site outside the *Regulated Area*, and
  - b) the risk of instability which would result in structural failure or property damage is minimized.

## **9 Policies for the Straightening, Changing, Diverting or Interfering With the Existing Channel of a River, Creek, Stream, Watercourse**

### **9.1 Straightening, Changing, Diverting or Interfering with an Existing Channel**

The area along both sides of any river, creek, stream or watercourse, called the riparian zone, not only provides habitat for a wide range of flora and fauna, it also filters surface runoff before it reaches open waterways. As runoff passes through, the riparian zone retains excess nutrients, some pollutants and reduces the sediment flow. A healthy zone can also keep stream flow going even during the dry seasons, by holding and releasing groundwater back into the stream. This interface between terrestrial and aquatic environments acts as a sponge for storing water, which in turn helps to reduce flooding and shelters the banks against shoreline erosion. Alterations to the channel of a watercourse can negatively impact the hydrologic and ecological features and functions provided by riparian zones.

Any alteration to the channel of a river, creek, stream or watercourse requires permission from the LPRCA. This includes activities such as, but not limited to, culvert placement or replacement, bridge construction, bed level crossings, piping of watercourses, installation or maintenance of pipeline crossings, cable crossings, construction or maintenance of by-pass, connected or online ponds, straightening and diversions as well as any work on the bed or the banks of the watercourse such as bank protection projects.

## **Policies for the Straightening, Changing, Diverting or Interfering With the Existing Channel of a River, Creek, Stream, or Watercourse**

9.1.1 ***Straightening, changing, diverting or interfering*** with existing river, creek, stream or watercourse channel is not permitted except as specified in *Sections 9.1.2-9.1.20*.

### ***Crossings***

9.1.2 ***Crossings*** including but not limited to bridges, culverts, pipelines, channel enclosures of less than 20 metres (66 feet) and causeways may be permitted to be constructed, replaced or upgraded in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and *Sections 8.1.12-8.1.13* and/or *Section 8.2.19* where appropriate, and provided that all feasible alternative sites and alignments have been considered through an *Environmental Assessment* supported by the LPRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project,<sup>22</sup> and where it can be demonstrated that:

- a) crossings avoid any bends in the watercourse to the extent practical,
- b) crossings are located to take advantage of existing impacted or open areas on the channel bank or valley slope, wherever possible,
- c) crossing structures avoid the *Riverine Erosion Hazard* in order to accommodate natural watercourse movement, wherever possible,
- d) the risk of flood damage to upstream or downstream properties is reduced through site and infrastructure design, wherever possible,
- e) fish passage is not inhibited,
- f) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions.
- g) physical realignments or alterations to the river, creek, stream or watercourse channel associated with a new crossing are avoided or are in accordance with the policies in *Section 9.1.16*, and
- h) maintenance requirements are minimized.

### ***Water Control Structures***

9.1.3 ***Water Control Structures*** to protect existing development or other uses deemed appropriate by the LPRCA from the *Riverine Flooding Hazard* including dykes and berms, but excluding stormwater management facilities and dams, may be permitted to be constructed, maintained or repaired in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where it can be demonstrated that:

- a) all feasible alignments have been considered through an *Environmental Assessment* supported by the LPRCA or other site specific technical studies, whichever is applicable based on the scale and scope of the project, and

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<sup>22</sup> A study to address all feasible sites and alignments may not be required for the replacement, maintenance or upgrading of existing crossings.

- b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions.

### **Dams**

9.1.4 **Dams** which by their nature must be located within or directly adjacent to a river, stream, creek or watercourse may be permitted where it can be demonstrated that:

- a) all feasible alternative sites and alignments have been considered through an *Environmental Assessment* supported by the LPRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project,
- b) the water management benefits of the dam are demonstrated to the satisfaction of the LPRCA,
- c) sedimentation and erosion during construction and post construction are minimized using best management practices including site, landscape, infrastructure design, construction controls, and appropriate remedial measures,
- d) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized, and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions, *and*
- e) works are constructed according to *accepted engineering principles* and approved engineering standards.

9.1.5 **Alterations**<sup>23</sup> to existing **Dams** may be permitted where it can be demonstrated that:

- a) sedimentation and erosion during construction and post construction are minimized using best management practices including site, landscape, infrastructure design, construction controls, and appropriate remedial measures,
- b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized, and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions,
- c) there are no adverse impacts on the capacity of the structure to pass flows,
- d) the integrity of the original structure is maintained or improved, and
- e) works are altered according to *accepted engineering principles* and approved engineering standards..

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<sup>23</sup> **Alterations to existing dams in watercourses that, in the opinion of the LPRCA, would not affect the control of flooding, erosion or unstable soil or bedrock, and that would not result in changes in the capacity to pass river flows or impacts on integrity of the structure or in-water works, do not require a permit under Regulation 41/24.**

9.1.6 The **Retirement of Dams**<sup>24</sup> or the **Removal of Dams** which are structurally unsound or no longer serve their intended purpose, located within a river, stream, creek or watercourse may be permitted where an *Environmental Assessment* or a detailed decommissioning plan supported by the LPRCA demonstrates that:

- a) all potential hydrologic and ecological impacts have been identified and considered,
- b) significant natural features and hydrologic and ecological functions within or adjacent to the river, creek, stream or watercourse are restored and enhanced through the retirement or removal of the structure and a site restoration plan supported by the LPRCA,
- c) the risk of sedimentation during and after retirement or removal is addressed through a draw down plan supported by the LPRCA, *and*
- d) susceptibility to natural hazards is not increased or new hazards created.

**Conservation Projects within or Adjacent to a River, Creek Stream or Watercourse**

9.1.7 **Conservation Projects** such as stream rehabilitation works, small impoundments and realignments which restore or enhance watercourse morphology or aquatic health and habitat may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and provided that:

- a) the hydrologic and ecological benefits of the project are demonstrated to the satisfaction of the LPRCA,
- b) stream bank stability is enhanced,
- c) significant natural features and hydrologic and ecological functions are restored and enhanced using best management practices including site and/or infrastructure design and appropriate remedial measures,
- d) natural channel design principles are followed to the extent possible, and
- e) maintenance requirements are minimized.

**Erosion and Sediment Control Structures**

9.1.8 **Erosion and Sediment Control Structures** to protect existing development and other uses deemed appropriate by the LPRCA may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 - General Policies*, and where it can be demonstrated that:

- a) erosion risk on adjacent, upstream and/or downstream properties is reduced or erosion and sedimentation processes are controlled to reduce existing or potential impacts from adjacent land uses, whichever is appropriate,
- b) natural channel design principles are followed to the extent possible,
- c) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized, and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions, *and*
- d) maintenance requirements are minimized.

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<sup>24</sup> Retirement of a dam refers to a situation in which its original purpose or use is no longer necessary and its operation is cancelled. Some retirement activities may involve the demolition of a structure or a change in the purpose, use, capacity or location of a structure.

### **Maintenance of Dams or Erosion and Sediment Control Structures**

- 9.1.9 The maintenance and repair of **Dams**<sup>25</sup> or **Erosion and Sediment Control Structures** may be permitted where it can be demonstrated that:
- a) sedimentation during maintenance and repair activities is minimized using best management practices including site and infrastructure design, construction controls and appropriate remedial measures,
  - b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized, and it can be demonstrated that best management practices including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions,
  - c) susceptibility to natural hazards is not increased or new hazards created, *and*
  - d) works are maintained or repaired according to accepted engineering principles and approved engineering standards or to the satisfaction of the LPRCA based on the scale and scope of the project.

### **Ponds**<sup>26</sup>

- 9.1.10 **Connected Ponds** with no water intakes from the watercourse but which outflow into the watercourse may be permitted provided that the provisions of *Sections 7.1.2-7.1.3 – General Policies* are met and a site plan and/or other site-specific study demonstrates that:
- a) there is no negative impact on the downstream water quality or thermal regime, *and*
  - b) maximum berm heights above existing grades do not exceed 0.3 metres (1 foot) within the *Riverine Flooding or Erosion Hazard* and all remaining fill is removed from the hazard area.
- 9.1.11 **Bypass Ponds**<sup>27</sup> connected to watercourses created as part of site restoration plan or a conservation project may be permitted subject to the provisions of *Section 9.1.10*, and where it can be demonstrated that the water intake is set above the elevation that permits continuous flow (i.e., refreshing of the pond will depend on increased stream flows from snow melt and rainfall events).
- 9.1.12 **On-Line Ponds**<sup>28</sup> in a river, creek, stream or watercourse are not permitted except as specified in *Sections 9.1.4 and 9.1.11*.

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<sup>25</sup> A permit is not required for minor alterations and on-going maintenance to existing dams in watercourses that would not affect the control of flooding, erosion or unstable soil or bedrock, and that would not result in changes in the capacity to pass river flows or impacts on integrity of the structure or in-water works,

<sup>26</sup> A permit is not required for the installation, maintenance or repair of a pond for watering livestock that is not connected to or within a watercourse or wetland, within 15 metres of a wetland or a watercourse, and where no excavated material is deposited within the *Hazardous Lands*.

<sup>27</sup> A bypass pond is created by diverting some of the flow from a natural watercourse into an adjacent pond. The outlet of this type of pond usually returns water to a natural watercourse.

<sup>28</sup> An on-line pond is built by digging-out or dredging an area within an existing watercourse or by damming a watercourse.

9.1.13 **On-Line Ponds** at the very upstream end of watercourses may be permitted for *wetland restoration and fish and wildlife habitat enhancement* in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and where a site plan and/or other site-specific study demonstrates that:

- a) there is no negative impact on the downstream thermal regime,
- b) there is no inhibition of fish passage, *and*
- c) there are no negative impacts on areas of groundwater recharge/discharge.

9.1.14 **Dredging** of an existing connected, bypass or on-line pond may be permitted in accordance with the policies in *Section 8.1.15*.

***Dredging of a River, Creek, Stream or Watercourse***

9.1.15 **Dredging** of a river, creek, stream or watercourse may be permitted to improve hydraulic characteristics and fluvial processes or to improve aquatic habitat or water quality in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies*, and where a dredging plan and/or other site-specific study demonstrates that:

- a) stream bank stability is enhanced,
- b) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site design and appropriate remedial measures will adequately restore and enhance features and functions, *and*
- c) all dredged material is removed from the *Riverine Flooding and Erosion Hazard* and safely disposed of in accordance with the policies in provincial guidelines.

***Realignment, Channelization or Straightening***

9.1.16 **Realignment, channelization or straightening** of a river, creek, stream or watercourse may be permitted to improve hydraulic characteristics and fluvial processes or to improve aquatic habitat or water quality in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and where a site plan and/or other site-specific study demonstrates that:

- a) all feasible alternative alignments have been considered through an *Environmental Assessment* supported by the LPRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project,
- b) stream bank stability is enhanced,
- c) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site design and appropriate remedial measures will adequately restore and enhance features and functions, *and*
- d) natural channel design principles are followed to the extent possible.

***Municipal Drains***

9.1.17 Permission is not required under O.Reg. 41/42 for the **maintenance and repair of a *Municipal Drain*** as required by the *Drainage Act* that is conducted in accordance with the *Drainage Act and Conservation Authorities Act Protocol – Protocol for Municipalities and Conservation Authorities in Drain Maintenance and Repair Activities, 2012* (The DART Protocol).

- 9.1.18 Permission is required under O.Reg. 178/06 for a **new or improved Municipal Drain** under the *Drainage Act* that proposes drainage works in a wetland or proposes to realign, channelize, straighten or enclose a river, creek, stream or watercourse. In accordance with the *Drainage Act*, permission should be obtained during the preparation of the final engineer's report. To avoid legislative complications, permission must be obtained before the municipality adopts the engineer's report.
- 9.1.19 **Realignment, channelization, straightening or enclosure** of a river, creek, stream or watercourse that is or is proposed to be a new drain or an improved drain under the *Drainage Act* may be permitted in accordance with the policies in *Sections 7.1.2-7.1.3 – General Policies* and where a draft final Engineer's Report demonstrates that:
- a) all feasible alternative alignments and options have been considered,
  - b) natural channel design principles are followed to the extent possible,
  - c) where unavoidable, intrusions on significant natural features or hydrologic or ecological functions are minimized and it can be demonstrated that best management practices including site design and appropriate remedial measures will adequately restore and enhance features and functions,
  - d) there is no increased risk of flooding or erosion upstream and downstream,
  - e) sedimentation and erosion during construction and post construction is minimized using best management practices including site and infrastructure design, construction controls, and appropriate remedial measures, *and*
  - f) works are constructed, repaired and/or maintained according to *accepted engineering principles* and approved engineering standards.

#### **Enclosures**

- 9.1.20 **Enclosures** of creeks, streams or watercourses may be permitted where there is a risk to public safety and/or potential property damage and where a site specific study demonstrates that:
- a) all feasible options and methods have been explored to address the hazard (s) and the enclosure is supported by the LPRCA,
  - b) the risk to public safety is reduced,
  - c) susceptibility to natural hazards is reduced and no new hazards are created,
  - d) there are no negative or adverse hydrologic impacts on wetlands,
  - e) sedimentation and erosion during construction and post construction is minimized using best management practices including site and infrastructure design, construction controls, and appropriate remedial measures,
  - f) intrusions within or adjacent to the river, creek, stream or watercourse are minimized and it can be demonstrated that best management practices including site design and appropriate remedial measures will adequately restore and enhance features and functions to the extent possible,
  - g) there is no negative impact on the downstream thermal regime,
  - h) there is no inhibition of fish passage, *and*
  - i) works are constructed, repaired and/or maintained according to accepted engineering principles and approved engineering standards or to the satisfaction of the LPRCA, whichever is applicable based on the scale and scope of the project.

## 10 Definitions

**Accepted Engineering Principles** means those current coastal, hydraulic and geotechnical engineering principles, methods and procedures that would be judged by a peer group of qualified engineers (by virtue of their qualifications, training and experience), as being reasonable for the scale and type of project being considered, the sensitivity of the locations, and the potential threats to life and property.

**Accepted Scientific Principles** means those current principles, methods and procedures which are used and applied in disciplines including but not limited to geology, geomorphology, hydrology, botany, and zoology, and that would be judged by a peer group of qualified specialists and practitioners (by virtue of their qualifications, training and experience), as being reasonable for the scale and type of project being considered, the sensitivity of the locations, and the potential threats to life and property.

**Access (Ingress/Egress)** means standards and procedures applied in engineering practice associated with providing safe passage for vehicles and people to and from a shoreline or river-side property during an emergency situation as a result of flooding, other water related hazards, the failure of *floodproofing*, and/or protection works, and/or erosion that have been reviewed and approved by the Long Point Region Conservation Authority and/or the Ontario Ministry of Natural Resources.

**Accessory Building or Structure** means a use or a building or structure that is subordinate and exclusively devoted to a main use, building or structure and located on the same lot.

**Adverse Hydraulic and Fluvial Impacts** means flood elevations are not increased, flood and ice flows are not impeded and the risk of flooding to and erosion on adjacent upstream and/or downstream properties is not increased.

**Apparent Valley or Confined Valley** means that part of the *valleyland* system where the valley walls are greater than 3 metres (10 feet), with or without a floodplain.

**Anthropogenic** means created by a human.

**Assisted Living Facility** means a multiple residential unit that is constructed with limited kitchen facilities in the unit(s) or a group home, where individuals who require full or partial assistance with activities of daily living (e.g. bathing, toileting, ambulating, self administration of medications, etc.) reside.

**Aquifer** means an underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, silt or clay).

**Areas of Interference** means those lands where development could interfere with the *hydrologic function* of a wetland.

**Backwater Area** means a section of watercourse with an elevation that is increased above normal because of a downstream human-made obstruction such as a narrow bridge opening or culvert that restricts natural water flow.

**Bankfull Width** means the formative flow of water that characterizes the morphology of a fluvial channel. In a single channel stream, “bankfull” is the discharge, which just fills the channel without flowing onto the floodplain.

**Best Management Practices (BMPs)** means methods, facilities and structures which are designed to protect or improve the environment and natural features and functions from the effects of development or interference.

**Comprehensive Plan** means a study or plan undertaken at a landscape scale such as a watershed/subwatershed plan, an *Environmental Assessment*, a detailed *Environmental Implementation Report (EIR)* that has been prepared to address and document various alternatives and is part of a joint and harmonized planning or *Environmental Assessment* process, or a community plan that includes a comprehensive *Environmental Impact Statement*.

**Create** in the context of wetlands means the development of a wetland through the manipulation of physical, chemical, or biological characteristics where a wetland did not previously exist.

**Creek** means a natural stream of water normally smaller than and often tributary to a river.

**Cumulative Effects** means the combined effects of all activities in an area over time and the incremental effects associated with individual project in an area over time.

**Cut and Fill Balance** means all fill placed at or below the flood elevation is balanced with an equal amount of soil material removal within a defined reach of a watercourse.

**Dam** means a structure or work holding back or diverting water and includes a dam, tailings dam, dyke, diversion, channel, artificial channel, culvert or causeway (Lakes and Rivers Improvement Act, R.S.O. 1990 c. L3, s. 1)

**Development activity** means:

- the construction, reconstruction, erection or placing of a building or structure of any kind,
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- site grading, or
- the temporary or permanent placing, dumping or removal of material, originating on the site or elsewhere (Ontario Regulation 41/24 s. 1).

**Drainage Area** means, for a point, the area that contributes runoff to that point.

**Dug-out or Isolated Ponds** mean anthropogenic waterbodies that are created by excavating basins with no inlet or outlet channels and in which surface and ground water collect.

**Dwelling unit** means a *suite* operated as a housekeeping unit, used or intended to be used as a domicile by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

**Ecological Function** means the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions.

**Ecosystem** means systems of plants, animals and micro-organisms together with non-living components of their environment, related ecological processes and humans.

**Effective Flow Area** means that part of a river, stream, creek or watercourse where there are significant flow velocities and most of the flow discharge is conveyed.

**Enclosure** means a pipe or other conduit for carrying a creek, stream or watercourse underground.

**Endangered Species** means any indigenous species of fauna or flora which on the basis of the available scientific evidence is facing imminent extinction or extirpation.

**Enhance** in the context of wetlands means the altering of an existing functional wetland to increase or improve selected functions and benefits.

**Environmental Assessment** means a process that is used to predict the environmental, social and economic effects of proposed initiatives before they are carried out. It is used to identify measure to mitigate adverse effects on the environment and can predict whether there will be significant adverse environmental effects, even after the mitigation is implemented.

**Environmental Impact Statement (EIS)** means a report prepared to address the potential impacts of *development* or *interference* on natural features and ecological functions. There are three types:

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- a *Comprehensive EIS* is a landscape scale, watershed or subwatershed study which sets the width of setbacks and offers guidance for the investigation, establishment and maintenance of buffers.
- a *Scoped EIS* is an area or site-specific study that addresses the potential negative impacts to features described previously in a comprehensive study.
- a *Full EIS* is an area or site-specific study prepared, in the absence of a comprehensive study to address possible impacts from a development. Due to the lack of guidance from a comprehensive study, the full EIS is typically much more detailed than a scoped study, and will also include statements to address possible negative impacts at a regional scale.

**Existing Use** means the type of activity associated with an existing building or structure or site on the date of a permit application.

**Factor of Safety** means the ratio of average available strength of the soil along the critical slip surface to that required to maintain equilibrium. The design minimum factors of safety are provided by the Ministry of Natural Resources Technical Guide for River and Stream Systems (2002). The higher factor of safety is used in complex geotechnical conditions or where there are *geologically metastable materials*.

Land-Uses	Design Range in Factor of Safety
<b>Passive:</b> no buildings near slope: farm field; bush; forest; timberland; and woods.	<b>1.10</b>
<b>Light:</b> no habitable structures near slope: recreational parks; golf courses; buried small utilities; tile beds; barns; garages; swimming pool; sheds; satellite dishes; and dog houses.	<b>1.20 to 1.30</b>
<b>Active:</b> habitable or occupied structures near slope: residential, commercial and industrial buildings; retaining walls; decks; stormwater management facilities; and, storage/warehousing of non-hazardous substances.	<b>1.30 to 1.50</b>
<b>Infrastructure and Public Use:</b> public use structures or buildings (i.e. hospitals, schools, stadiums); cemeteries; bridges; high voltage power transmission lines; towers; storage/warehousing of hazardous materials; and, waste management areas.	<b>1.40 to 1.50</b>

**Fill** means any material used or capable of being used to raise, lower or in any way affect the contours of the ground, whether on a permanent or temporary basis, and whether it originates on the site or elsewhere.

**Flood Fringe** means the outer portion of the *floodplain* between the *floodway* and the *Riverine Flooding Hazard* limit where the depths and velocities of flooding are less severe than those experienced in the *floodway*.

**Floodproofing** means structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures or properties to protect them from flood damage.

**Floodway** for river, stream, creek, watercourse or inland lake systems means the portion of the floodplain where development would cause a danger to public health and safety or property damage.

- where the one-zone concept is applied, the floodway is the entire contiguous floodplain.
- where the two-zone concept or special policy area concept is applied, the floodway is the contiguous inner portion of the floodplain, representing that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage. Where the two-zone concept or special policy area applies, the outer portion of the *floodplain* is called the *flood fringe*.

**Frequent Flooding** means that a site is subject to the 1:25 year flood event or a more frequent flood event.

**Geologically Metastable Material** means a material susceptible to earth flow or where low safety factors may lead to creep movements and progressive softening.

**Groundwater Discharge** means the flow of water from an aquifer. Discharge areas are locations at which ground water leaves the aquifer and flows to the surface. Ground water discharge occurs where the water table or *potentiometric surface* intersects the land surface. Where this happens, **springs** or **seeps** are found. Springs and seeps may flow into fresh water bodies, such as lakes or streams, or they may flow into saltwater bodies.

**Groundwater Recharge** means downward movement of water through the soil to the groundwater or the process by which external water is added to the zone of saturation of an aquifer, either directly into a formation or indirectly by way of another formation. Most areas, unless composed of solid rock or covered by development, allow a certain percentage of total precipitation to reach the water table. The sustainable yield of an aquifer is mainly controlled by the amount of recharge it receives. If total discharges (natural discharge plus water use from human activities) exceed recharge, water levels in an aquifer will decline. This decline will continue until a new balance is reached between total discharge and recharge, or the aquifer becomes depleted to the point where further withdrawals are no longer feasible.

Quantifying recharge is not easy, because it depends on a number of variables including:

- soil type
- geology and hydrogeology
- precipitation (including amount, type, and melt rate for snow)
- prior soil moisture conditions
- runoff
- topography
- evapotranspiration.

For a given climatic condition, recharge is much higher in areas of coarse sands and gravels than in areas of low-permeability clays.

**Habitable Floor Space** means any area that has the potential to be used as or converted to residential living space, including basements.

**Hazardous Land** means land that could be unsafe for development because of naturally-occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock (O.Reg. 41/24 s.1).

**Hazardous Substances** means substances which individually or in combination with other substances, are normally considered to pose a danger to or threat to public health, safety and the environment. These substances generally include a wide range of materials that are toxic, ignitable, corrosive, reactive, radioactive or pathological.

**Headwater** means the source and extreme upper reaches of a river, creek, stream or watercourse.

**Hydrologic Function** means the functions of the hydrologic cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.

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**Hydrologic Study** means a report prepared to address the potential impacts of development and interference on the hydrologic functions of a wetland or other natural feature.

**Karst** means an area of irregular limestone in which erosion has produced fissures, sinkholes, underground streams, and caverns.

**Lake Erie Dynamic Beach Hazard** means that portion of the Lake Erie shoreline where accumulated unconsolidated sediment continuously moves as a result of naturally occurring processes associated with wind and water and changes in the rate of sediment supply. The extent of the *dynamic beach hazard* is defined as the extent of the *flooding hazard* plus an allowance as identified in the *Lake Erie Shoreline Management Plan*.

**Lake Erie Erosion Hazard** means the loss of land, due to human or natural processes, that poses a threat to life and property. The *erosion hazard* limit is determined using considerations that include the 100 year erosion rate (the average annual rate of recession extended over a one hundred year time span), an allowance for slope stability, plus a 15 metre allowance.

**Lake Erie Flooding Hazard** means the inundation, under the 100 year flood including *wave uprush* and *other water-related hazards*.

**Meander Belt Allowance** means a limit for development within the areas where the river system is likely to shift. It is based on twenty (20) times the bankfull channel width where the bankfull channel width is measured at the widest *riffle* section of the reach. A *riffle* is a section of shallow rapids where the water surface is broken by small waves. The meander belt is centred over a meander belt axis that connects the riffle section of the stream.

**Meander Belt Axis** means the line or “axis” that the meander belt is centred over which connects all the *riffle* sections of a stream.

**Meander Belt** means the area of land in which a watercourse channel moves or is likely to move over a period of time.

**Multi-lot** means four lots or more.

**Multi-unit** means any building or structure or portion thereof that contains more than one unit for any use (e.g. a residential dwelling unit, an industrial/commercial/institutional space designed or intended to be occupied or used for business, commercial, industrial or institutional purposes).

**Negligible** means not measurable or too small or unimportant to be worth considering.

**Non-Apparent Valley or Unconfined Valley** means that part of the valleyland system where a river, creek, stream or watercourse is not contained within a clearly visible valley section.

**One Hundred Year Erosion Rate** means the predicted lateral movement of a river, creek, stream or watercourse or inland lake over a period of one hundred years.

**Other Water-Related Hazards** means water-associated phenomena other than *flooding hazards* and *wave uprush* which act on shorelines. This includes, but is not limited to ship-generated waves, ice piling and ice jamming.

**Oversteepened Slope** means a slope which has a slope inclination equal to or greater than 33 per cent (3H:1V).

**Potentiometric Surface** means the potential level to which water will rise above the water level in an aquifer in a tightly cased well that penetrates a confined aquifer; if the potential level is higher than the land surface, the well will overflow.

**Protect** in the context of wetlands, means the preservation of wetlands in perpetuity through implementation of appropriate physical and/or legal mechanisms (e.g. ecological buffers, development setbacks, zoning, fencing, conservation easements, etc.).

**Protection Works** means structural or non-structural works which are intended to appropriately address damages caused by flooding, erosion and/or other water-related hazards.

**Qualified Professional** means a person with specific qualifications, training, and experience authorized to undertake work in accordance with the policies in accepted engineering or scientific principles, provincial standards, criteria and guidelines, and/or to the satisfaction of the LPRCA.

**Regulated Area** means the area encompassed by all hazards and wetlands, plus any allowances.

**Regulatory Flood** means the inundation under a 100 year return period flood, the limits of which define the *riverine flooding hazard*.

**Replacement** means the removal of an existing building or structure and the construction of a new building or structure. Replacement does not include reconstruction on remnant foundations or derelict or abandoned buildings or structures.

**Riffle** means a section of shallow rapids where the water surface is broken by small waves.

**River** means a large natural stream of water emptying into an ocean, lake, or other body of water and usually fed along its course by converging tributaries.

**Restore** in the context of wetlands means the re-establishment or rehabilitation of a former or degraded wetland with goal of returning natural or historic functions and characteristics that have been partially or completely lost by such actions as filling or draining.

**Riparian Vegetation** means the plant communities in the riparian zone, typically characterized by hydrophilic plants.

**Riparian Zone** means the interface between land and a flowing surface water body. Riparian is derived from Latin *ripa* meaning river bank.

**Riverine Erosion Hazard** means the loss of land, due to human or natural processes, that poses a threat to life and property. The *riverine erosion hazard* limit is determined using considerations that include the 100 year erosion rate (the average annual rate of recession extended over a one hundred year time span), an allowance for slope stability, plus a 15 metre allowance or, in unconfined systems, the meander belt allowance plus a 15 metre allowance.

**Riverine Flooding Hazard** means the inundation, under a flood resulting from the rainfall experienced during the Hurricane Hazel storm (1954) or in limited situations in headwater streams, the 100 year flood, wherever it is greater.

**Riverine Hazard Limit** means the limit which encompasses the *flooding* and *erosion hazards* and the river, creek, stream or watercourse.

**Safe Access** means locations where, during the *Regulatory Flood*, the flow velocity does not exceed 1.7 m/s, the product of depth and velocity does not exceed 0.4 m<sup>2</sup>/s, the depth of flooding along *access* routes to residential units does not exceed 0.8 metres or 1.2 metres along *access* routes to commercial or industrial buildings or structures, and the depth of flooding adjacent to residential units does not exceed 1.2 metres or 2.0 metres adjacent to commercial or industrial buildings or structures.

**Settlement Area** means urban areas and rural settlement areas within municipalities (such as cities, towns, villages and hamlets) that are:

- built up areas where development is concentrated and which have a mix of land uses; and,
- lands which have been designated in an official plan for development over the long term planning horizon.

**Significant Natural Features** means features and areas including all wetlands, fish habitat, valleylands, habitat of endangered species, significant wildlife habitat, confirmed habitat for provincially or regionally significant species, part of an ecologically functional corridor or linkage between natural areas, or any other features or areas that are considered ecologically important in terms of contributing to the quality and diversity of an identifiable geographic area or natural heritage system.

**Special Policy Area** means an area within a community that has historically existed in the floodplain and where site-specific policies, approved by the Ministers of Natural Resources, Municipal Affairs and Housing, LPRCA and the municipality are intended to provide for the continued viability of *existing uses* (which are generally on a small scale) and address the significant social and economic hardships to the community that would result from strict adherence to the provincial policies concerning development. The Province establishes the criteria and procedures for approval.

A *Special Policy Area* is not intended to allow for new or intensified development, if a community has feasible opportunities for development outside the floodplain.

**Stage-Storage Discharge Relationship** means the relationship of flood storage and flood elevation values at various flood flow rates within a particular watercourse/floodplain reach. This relationship is used as a factor to determine whether the hydraulic function of the floodplain is preserved.

**Stream** means a flow of water in a channel or bed, as a brook, rivulet, or small river.

**Thermal Impact** means the impairment of water quality through temperature increase or decrease. Changes in temperature can also effect species composition of plants, insects and fish in a water body.

**Toe of Slope** means the lowest point on a slope, where the surface gradient changes from relatively shallow to relatively steep.

**Top of Slope** means the point of the slope where the downward inclination of the land begins, or the upward inclination of the land levels off. This point is situated at a higher topographic elevation of land than the remainder of the slope.

**Top of stable slope** means the point on the ground surface above an oversteepened slope where the stable slope inclination, with appropriate *factor of safety*, meets the ground surface. The stable slope inclination is taken to be 18 degrees (3H:1V) unless a site-specific geotechnical investigation determines a different value.

**Valleyland** means land that has depressional features associated with a river or stream, whether or not it contains a watercourse.

**Watercourse** means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs (O.Reg. 41/24 s.1).

**Watershed** means an area that is drained by a river and its tributaries.

**Wave Uprush** means the rush of water up onto a shoreline or structure following the breaking of a wave; the limit of wave uprush is the point of furthest landward rush of water onto the shoreline.

**Wetland** means land that:

- is seasonally or permanently covered by shallow water or has a water table close or at the surface
- directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
- has hydric soils, the formation of which have been caused by the presence of abundant water, and
- has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water

but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits hydrid soils and vegetation dominated by hydrophytic plants (O.Reg. 41/24 s.1 ss.2).

## 11 Links to Key References

Provincial Legislation and Regulations – [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca)

Federal Legislation and Regulations - <http://laws.justice.gc.ca/en/>

Conservation Authorities Act – [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90c27\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90c27_e.htm)

Ontario Regulation 41/24 - [O. Reg. 41/24: PROHIBITED ACTIVITIES, EXEMPTIONS AND PERMITS \(ontario.ca\)](http://www.ontario.ca)

Provincial Policy Statement, 2020 - [Provincial Policy Statement, 2020 | ontario.ca](http://www.ontario.ca)

1989 LPRCA Shoreline Management Plan – [LPRCA\\_1989\\_ShorelineManagementPlan\\_Complete.pdf](#)

DART Protocol, 2012 – [Drainage Act and Conservation Authorities Act protocol | ontario.ca](#)

LPRCA Hearing Procedures Policy - [Policies & Guidelines - Long Point Region Conservation Authority \(lprca.on.ca\)](http://www.lprca.on.ca)

LPRCA Fee Policy and Fee Schedules - [Fees - Long Point Region Conservation Authority \(lprca.on.ca\)](http://www.lprca.on.ca)

### Amendments

Amendment	Board Resolution	Date



# Board Hearing

## For Application LPRCA-18/26 (Brookshaw)

Pursuant to Ontario Regulation 41/24 under Section 28  
of the Conservation Authorities Act

Wednesday, April 1, 2026



# The Application

## Scope of proposed work:

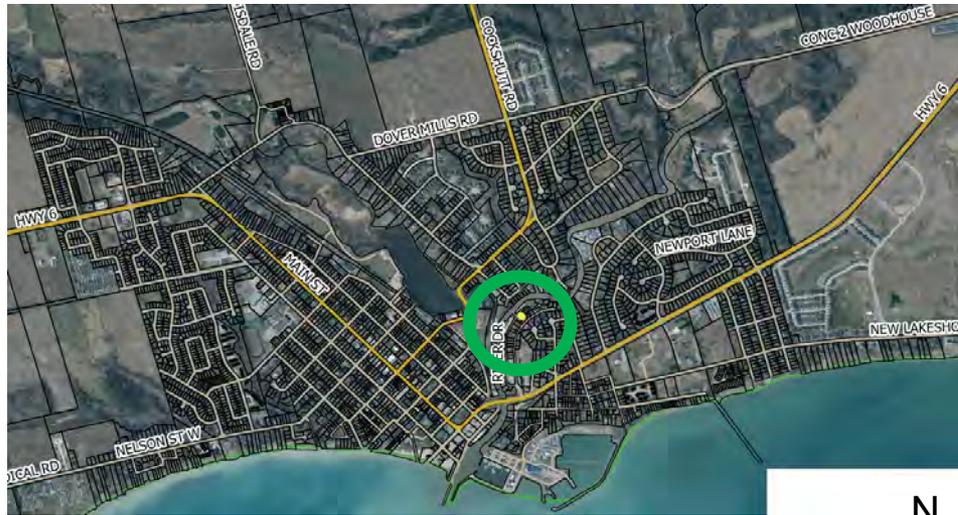
- To redevelop an existing by demolishing an existing dwelling and constructing a new dwelling.

LPRCA staff are unable to recommend approval of this application.



# Subject Lands

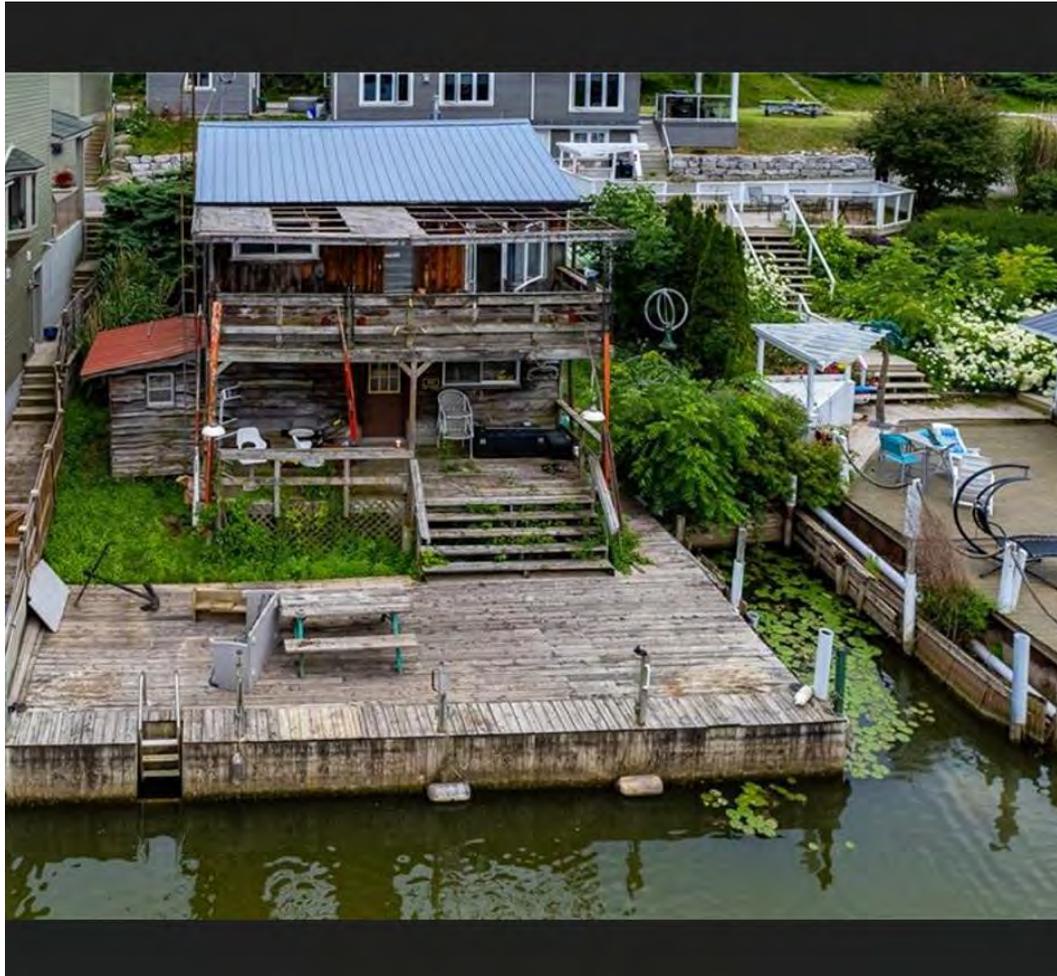
## Key Map



7 Douglas Street, Port Dover



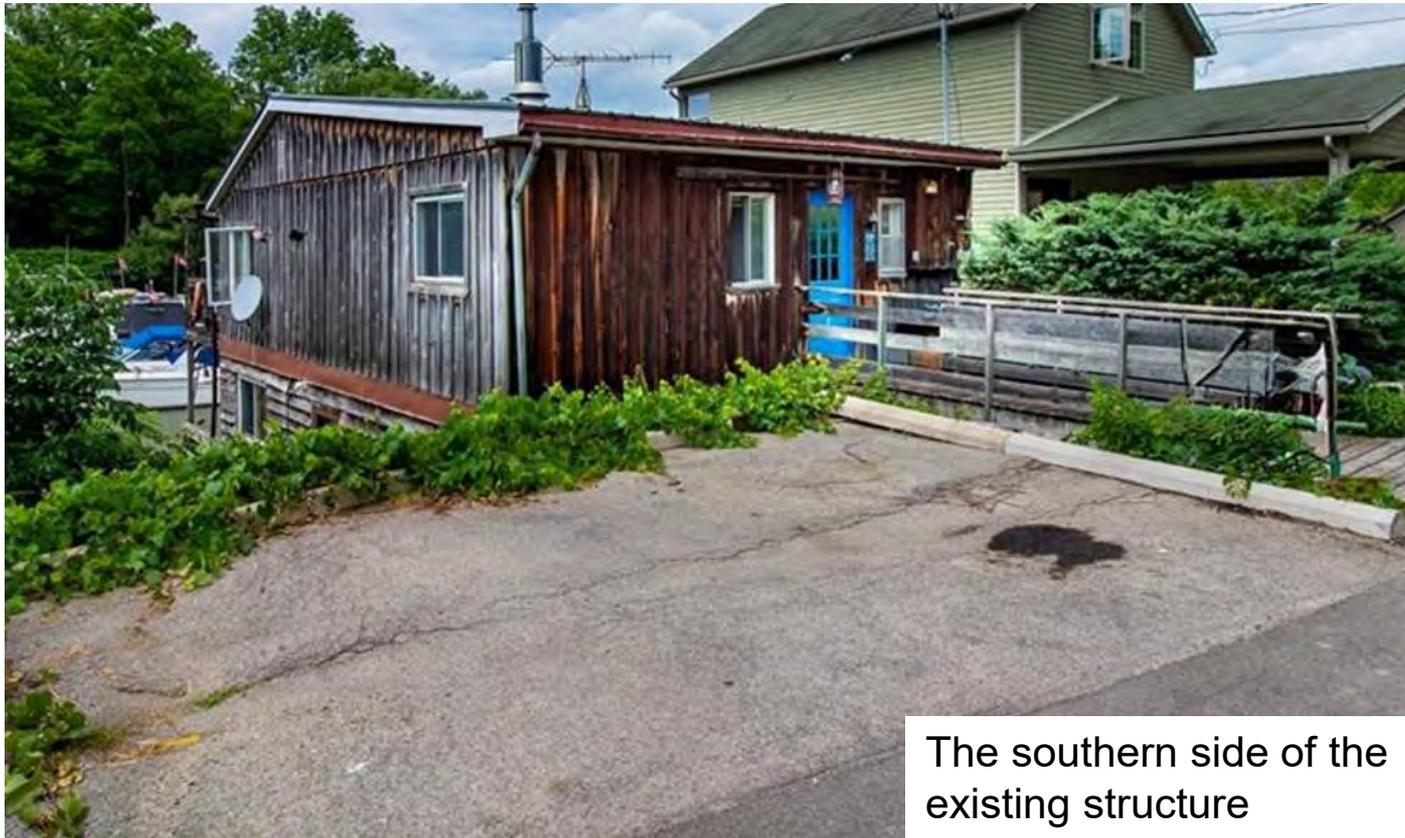
# Photos of the Existing Structure



The northern side of the existing structure

Photo from realtor.ca

# Photos of the Existing Structure



The southern side of the existing structure

Photo from realtor.ca

# Photos of the Existing Structure

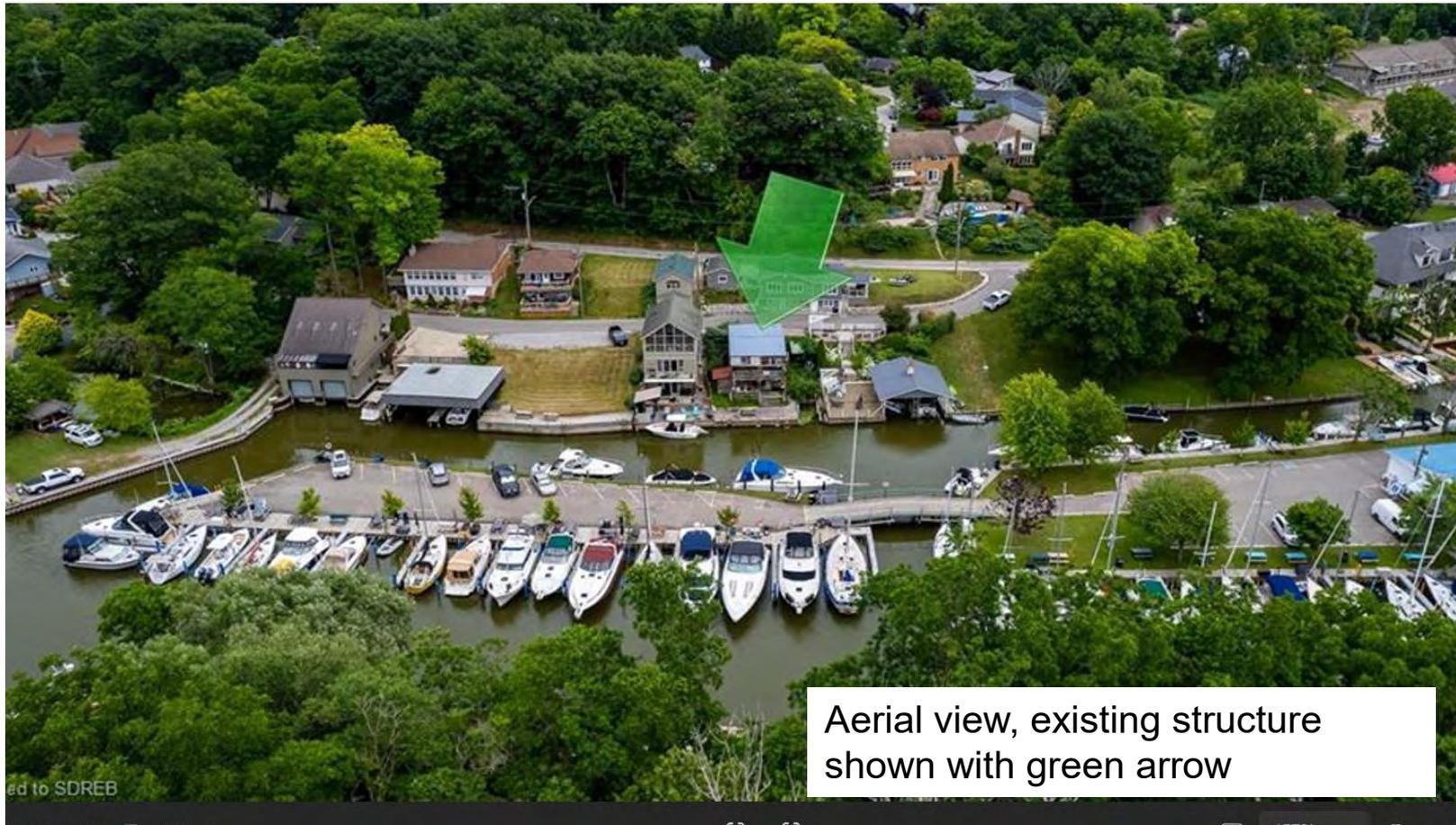


Photo from realtor.ca

# Photos of the Existing Structure

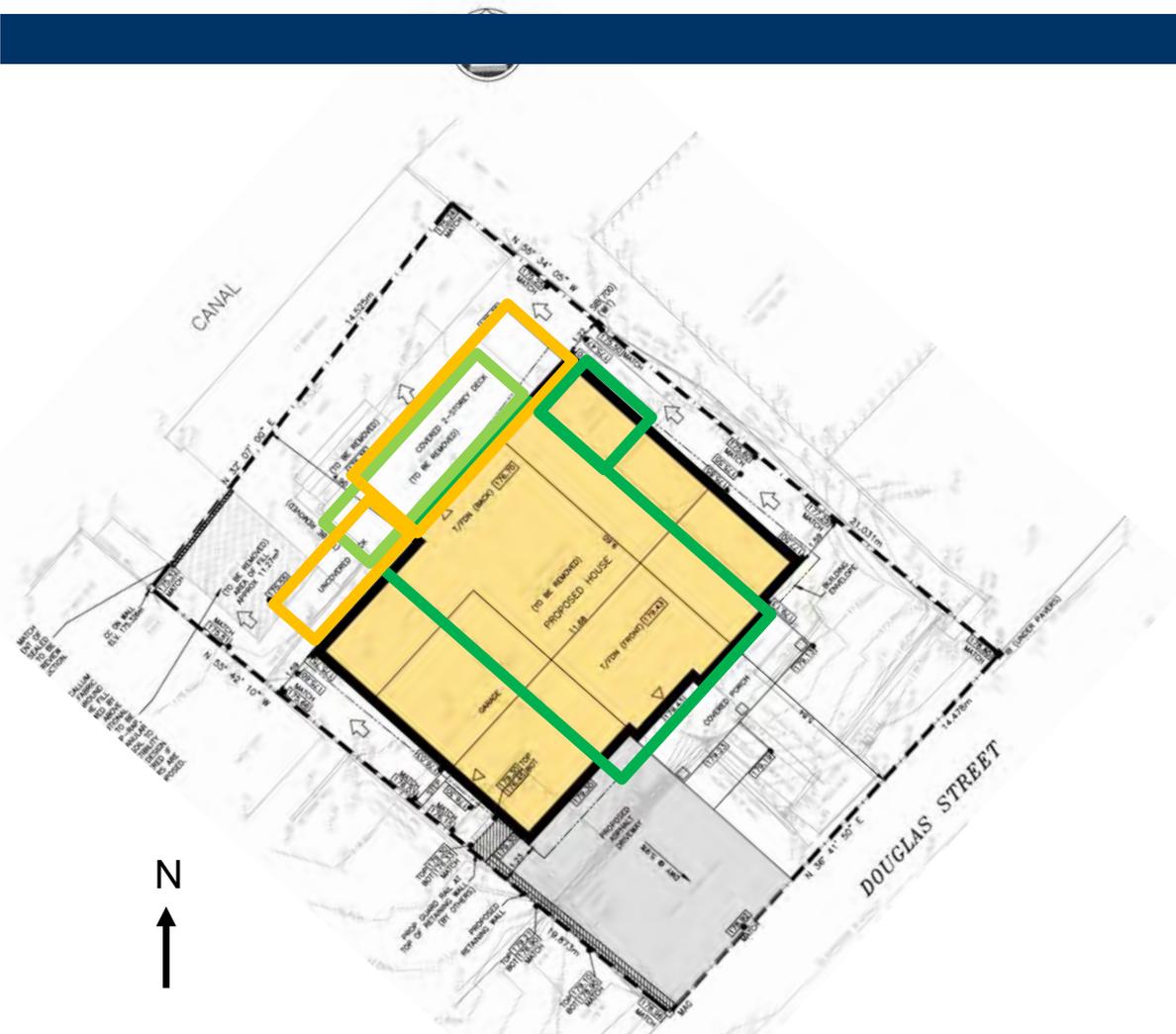


Aerial view, existing structure shown with green arrow adjacent to the canal and Black Creek

Photo from realtor.ca



# Proposed Site Plan



Site Plan

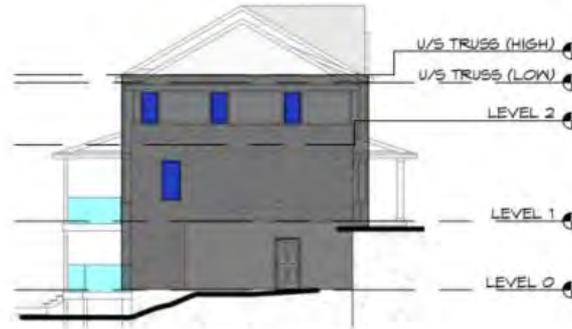
-  Existing Dwelling
-  Existing Deck
-  Proposed Decks
-  Proposed Dwelling

# Proposed Structure



GROSS WALL: 70.75m<sup>2</sup>  
FENESTRATION: 9.42m<sup>2</sup>

South Side



GROSS WALL: 80.25m<sup>2</sup>  
FENESTRATION: 3.31m<sup>2</sup>

East Side

9 FRONT ELEVATION - SB-12  
A002 SCALE 1:200

10 LEFT ELEVATION - SB-12  
A002 SCALE 1:200



GROSS WALL: 98.15m<sup>2</sup>  
FENESTRATION: 30.70m<sup>2</sup>

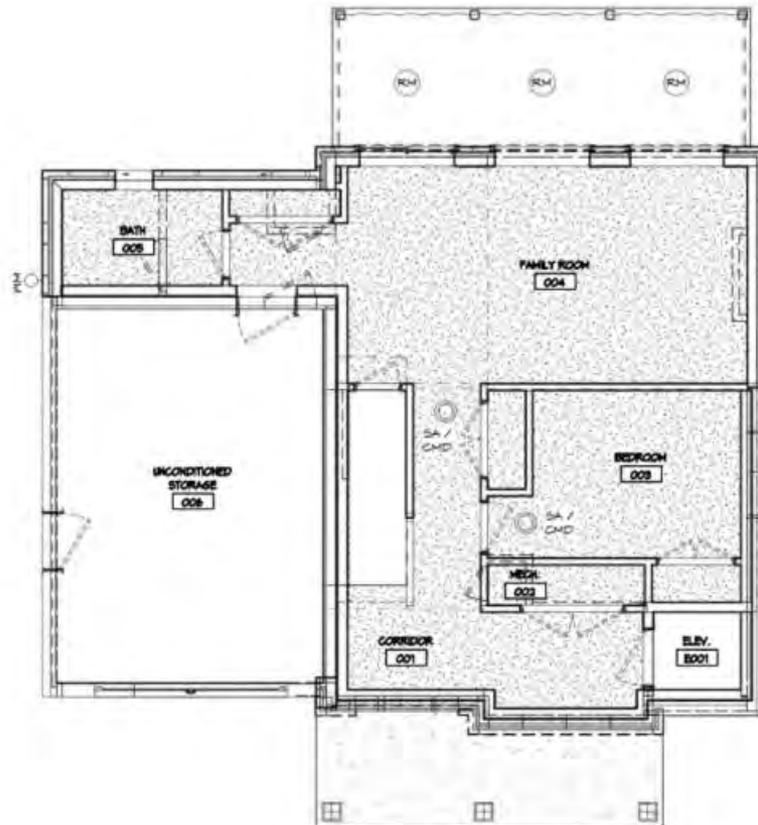
North Side



GROSS WALL: 75.13m<sup>2</sup>  
FENESTRATION: 4.17m<sup>2</sup>

West Side

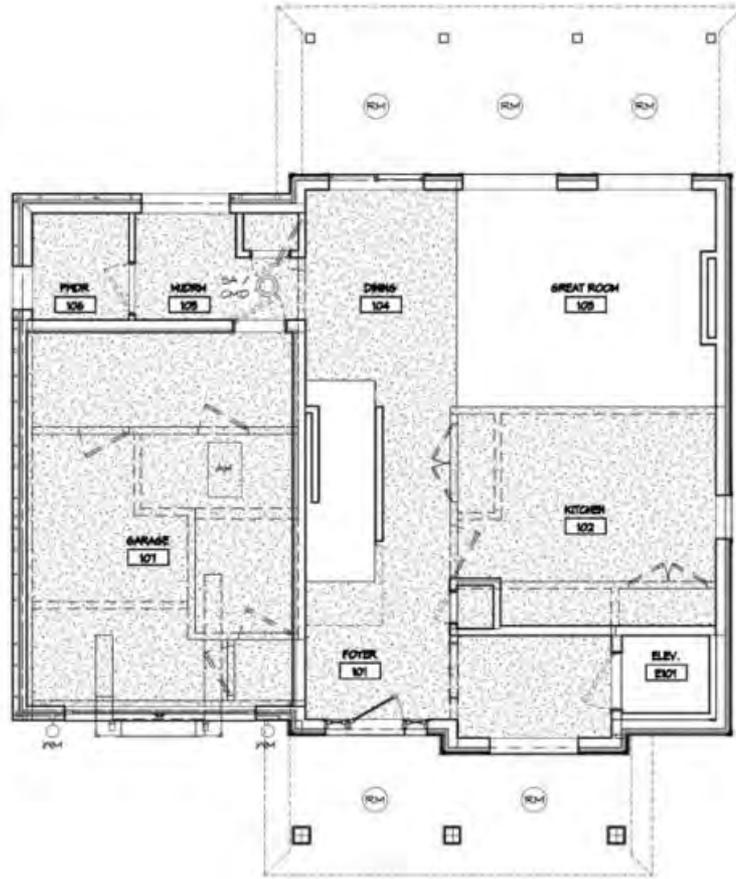
# Proposed Structure



Lower Level – Storage, Bedroom, Elevator, Bathroom



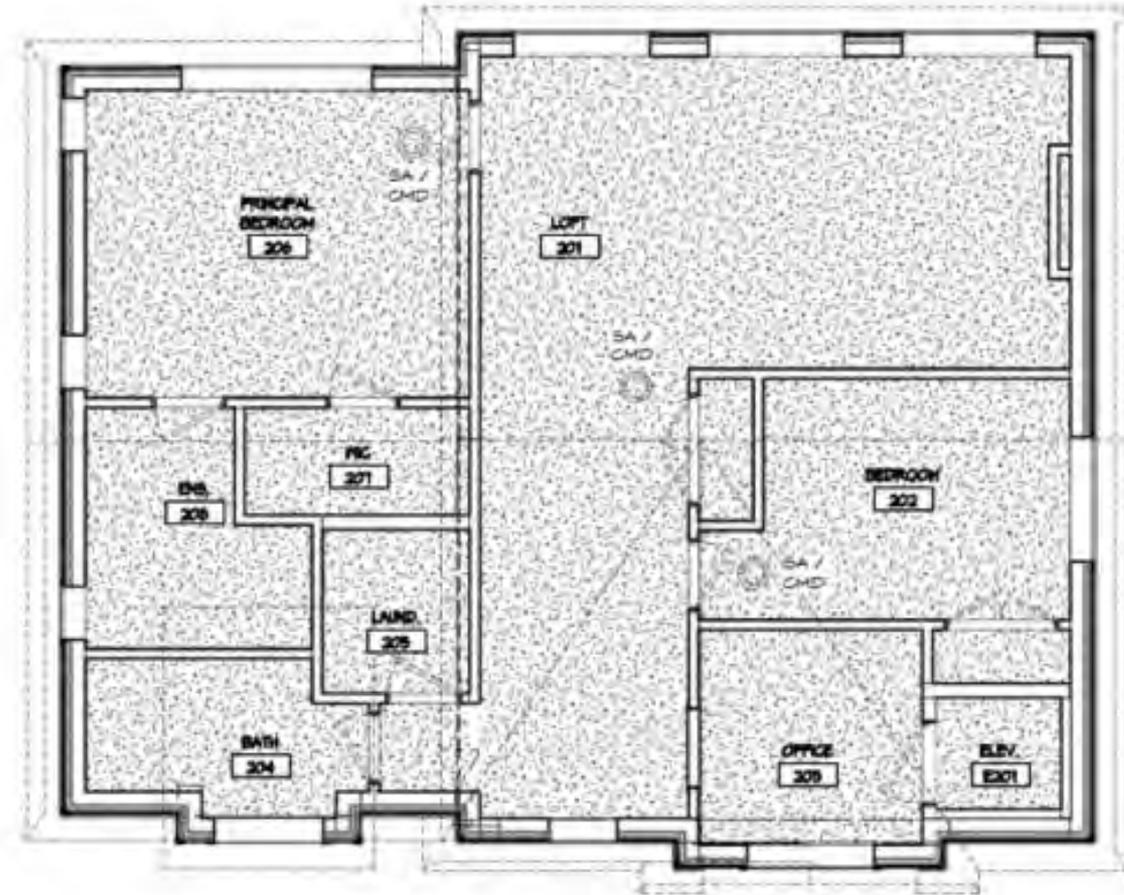
# Proposed Structure



Main Level – Garage, Kitchen, Foyer, Great Room, Elevator



# Proposed Structure



Upper Level – 2 Bedrooms, Office, Elevator, Bathroom, Loft

# O.Reg 41/24 Regulated Area

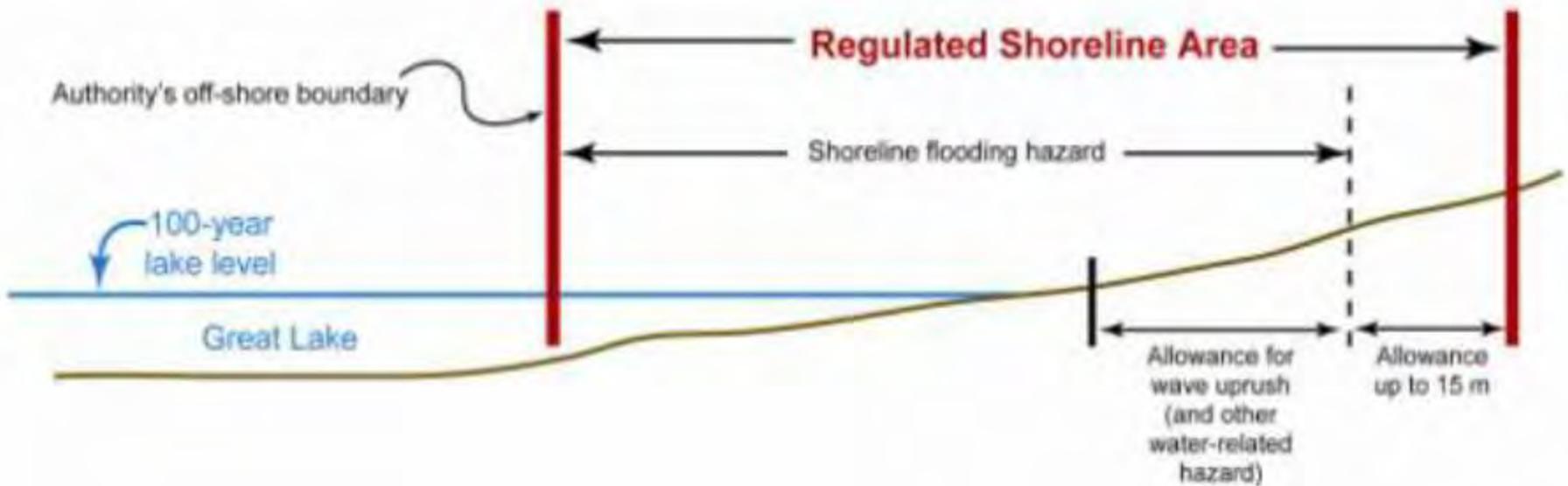


Legend

- Subject Property
- Regulation Limit

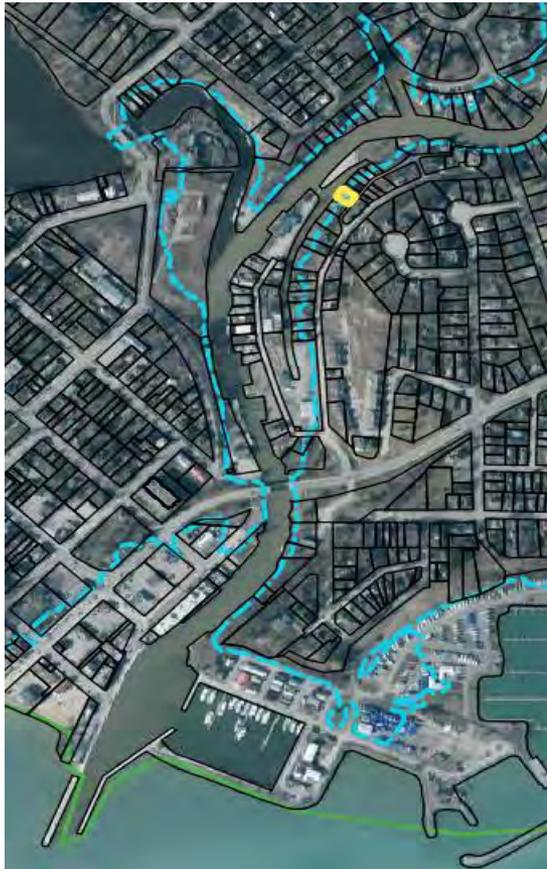


# Shoreline Flooding Hazard



For Illustration Purposes

# Shoreline Flooding Hazard

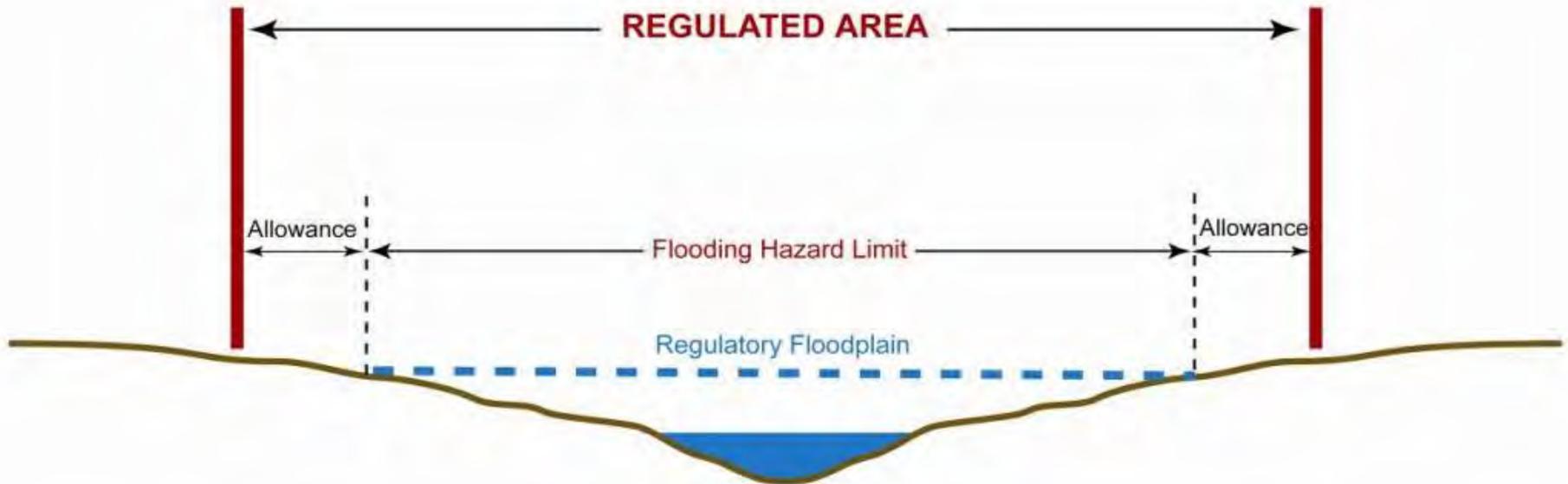


The property is located 1.1km upstream from the mouth of Black Creek where it enters into Lake Erie



- Subject Property
- 100-year Lake Erie Floodline

# Riverine Flooding Hazard



**Figure 3.** Riverine Flooding Hazard – Regulated Area for One-Zone Policy Areas

For Illustration Purposes

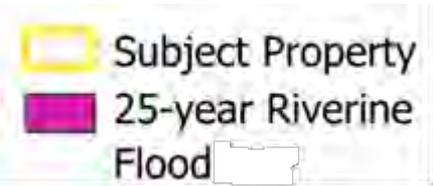
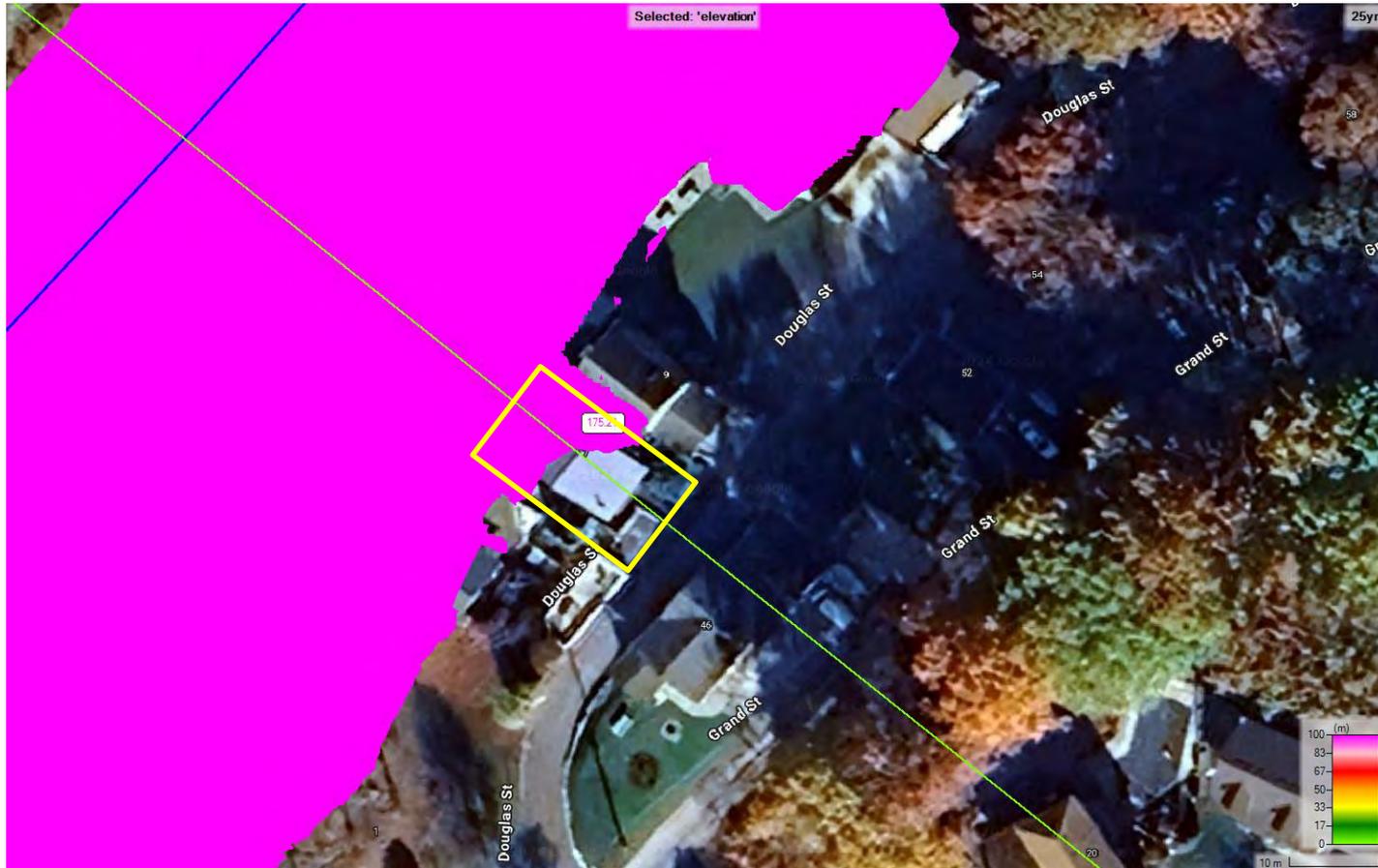
# Riverine Flooding Hazard



-  Subject Property
- Riverine Floodplain Mapping
-  100-year Floodline



# Riverine Flooding Hazard



As per LPRCA policy, the site is considered frequently flooded



# Site Summary

## The subject property is:

- Within the 100-year riverine floodplain
- Within the 25-year riverine floodplain
- Within the 100-year Lake Erie floodplain

## The development activity is:

- Redevelopment of the property with a 137m<sup>2</sup> increase in usable floor area, and an expanded footprint



# Applicable LPRCA Policy

LPRCA Policies for the Prohibited Activities, Exemption and Permits Regulation O. Reg 41/24

Policy Section	Analysis	Policy met
<p>7.1.2</p> <ul style="list-style-type: none"> <li>a) The risk to public safety is not increased</li> <li>b) Susceptibility to natural hazards is not increased or new hazards are created</li> <li>c) there are no adverse hydraulic or fluvial impacts on rivers, creeks, streams, or watercourses,</li> <li>d) the control of flooding, erosion, dynamic beaches or unstable soil or bedrock is not adversely affected during and post development, interference or alteration.</li> </ul>	<p>Increases <b>susceptibility to natural hazards</b> and can create <b>adverse hydraulic impacts</b> by filling a portion of the 100-year floodplain. This reduction in storage capacity displaces water onto neighbouring properties and cumulatively increases flood depths and velocities downstream, thereby failing to ensure that <b>risk to public safety</b> is not increased. The cumulative effect of allowing redevelopment within the 25-year flood hazard will exacerbate this effect.</p>	



# Applicable LPRCA Policy

LPRCA Policies for the Prohibited Activities, Exemption and Permits Regulation O. Reg 41/24

Policy Section	Analysis	Policy met
8.4.9  Outlined on Page 4 & 5 of the Hearing Report	The proposed development activities meet the requirements for redevelopment within the Lake Erie Floodplain as it has been demonstrated that: <ul style="list-style-type: none"><li>- The use is the same</li><li>- No additional units are being added</li><li>- The building is floodproofed to the higher floodproofing elevation</li><li>- All electrical, mechanical and heating services are above the shoreline flood hazard</li><li>- No habitable space is proposed below the shoreline flooding hazard</li><li>- There is no risk of structural failure</li></ul>	



# Applicable LPRCA Policy

LPRCA Policies for the Prohibited Activities, Exemption and Permits Regulation O. Reg 41/24

Policy Section	Analysis	Policy met
<p><b>8.1.2</b></p> <ul style="list-style-type: none"> <li>a) there is no feasible alternative site outside the Riverine Flooding Hazard,</li> <li>b) the site is not subject to frequent flooding,</li> <li>c) Ingress and egress is “dry” where this standard can be practically achieved, but no less than “safe”,</li> <li>d) floodproofing is undertaken to the extent practical, where floodproofing to the elevation of the Regulatory Flood is not technically feasible, and</li> <li>e) there is no risk of structural failure due to potential</li> </ul>	<p>A portion of the property is located within the 25-year floodplain and is therefore considered to be frequently flooded as per the policy.</p> <p>The proposed development activity does not fully meet the criteria in this policy section (8.1.2b) to allow for further development on site through the residential use policies 8.1.3 – 8.1.7.</p>	



# Recommendation

**THAT the LPRCA Board of Directors refuse to grant a “Prohibited Activities, Exemptions and Permits” Permit for Permit Application LPRCA #18/26 for the following reasons:**

- The construction of the proposed structure is contrary to Long Point Region Conservation Authority riverine one-zone policies for development in the flood hazard. These policies have been implemented to reduce or eliminate preventable risk to life and property damage from flooding,
- The control of flooding is affected by the development as the overall risk of property damage is increased,
- The control of flooding is affected by the development as the encroachment of the proposed structure and associated fill material into the floodplain and the resulting loss of flood storage capacity cumulatively increases flood flows and flood levels downstream, and
- Therefore, the development activity will likely create conditions or circumstance that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.

