LOWER TRENT
CONSERVATION
714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1
Tel: 613-394-4829 Fax: 613-394-5226 Website: www.ltc.on.ca Email: information@ltc.on.ca
Registered Charitable Organization No. 107646598RR0001

NOTICE OF HEARING BOARD MEETING
LOWER TRENT CONSERVATION

TO BE HELD AT

Administration Office, 714 Murray Street, Trenton, ON / Virtually Join the Meeting

Wednesday, November 20, 2024, at 1:00 PM

FOR

O. Reg. 41/24 Permit Application #RP-24-242

APPLICANT: **Lorrie Powers and Corey Brooks**

LOCATION: Vacant property on Saskatoon Ave., Part of Lot 9-10, Concession 6, Municipality of Trent Hills, Geographic Township of Seymour, Northumberland County,

AGENDA

1. Meeting called to order by the Chair
2. Motion for the Board of Directors to sit as the Hearing Board
3. Opening Remarks by Chair for **RP-24-242**
4. Disclosure of pecuniary interests
5. Staff Report and Presentation Page # 2
6. Applicant Presentation
7. Additional Information Sharing
    a. Additional Questions from the Board
    b. Comments or Questions from the Applicant
    c. Comments or Questions from Staff
8. Deliberation (In-Camera if required)
9. Motion on the Hearing Board Decision for RP-24-242
10. Motion to adjourn the Hearing Board

PLEASE CONTACT THE OFFICE IF YOU WILL BE UNABLE TO ATTEND THIS MEETING
Chitra Gowda 613-394-3915 ext. #215 | chitra.gowda@ltc.on.ca

STAFF REPORT

Date: November 13, 2024
To: Lower Trent Conservation Hearing Board
Re: Ontario Regulation 41/24 application for permission RP-24-242 to develop within the Trent River floodplain
Prepared by: Gage Comeau, Manager, Watershed Management, Planning and Regulations

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DATE

November 13, 2024

DATE RECEIVED

Permit application received November 4, 2024
Permit application submission deemed complete – November 7, 2024
Request for Hearing received November 7, 2024

APPLICANT

Lorrie Powers and Corey Brooks (Property Owner)

(Copy of application, building plans, site plan with elevations, control of flooding – engineering opinion Letter from WSE Consulting Inc. by Adam Wilson, P. Eng. ***Appendices 1-4***)

LOCATION

Vacant lot of Saskatoon Ave (ARN: 1435100030022000000)
Town of Campbellford, Municipality of Trent Hills, Northumberland County
Geographic Township of Seymour, Concession 6, Part of Lot 9-10
(Map(s) attached, see **Appendix 5**)

OVERVIEW

Lower Trent Region Conservation Authority (LTC) received an application to construct a single-family dwelling. The proposed development activities will involve the approximate placement of 50-75 m^3 fill material (i.e., gravel) within the regulated area associated with the Trent River floodplain. The proposed development is considered major development within the floodplain and does not comply with LTC's Ontario Regulation 41/24 Policy Document (June 2024) and therefore, a permit cannot be issued by staff.

PROPOSAL

The proponent is seeking approval from LTC to construct a single-family dwelling in the Trent River floodplain on the subject property. The proposed dwelling structure is in the Trent River floodplain (145.73 metres CGVD2013 or 146.08 metres CGVD1928) as identified in their submitted plans, engineering report and LTC map (see **Appendix 3-5**).

SUMMARY

LTC is responsible for the administration of the Conservation Authorities Act and Ontario Regulation 41/24. In order to guide the implementation of Ontario Regulation 41/24 made pursuant to Section 28.5 of the *Conservation Authorities Act*, the LTC Board of Directors has approved policies, most recently updated in June 2024. Where a proposal for development or alteration follows the approved policies or is not a significant deviation from the approved policies, designated authority staff may grant permission.

The vacant property is located within the Trent River floodplain and the current proposal is to construct a single-family dwelling. The proposed development will involve the placement of approximately 50-75 m^3 of fill material for site preparation and floodproofing.

The proposed development activities trigger the below noted policies with respect to development in the One Zone Regulatory Floodplain. Designated staff are not in a position to grant approval of the Ontario Regulation 41/24 permit application as it does not conform with the policies.

Key issue: A permit from LTC is required for the proposed development as they are to take place within a regulated area as described in subparagraph 2 i of subsection 28 (1) of the *Conservation Authorities Act*, specifically, hazardous lands (i.e., floodplain).

Pursuant to Ontario Regulation 41/24, "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.

Lower Trent Region Conservation Authority
Ontario Regulation 41/24 Policy Document (June 2024)

Below are the applicable policies that are relevant to this permit application:

5.3.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)

1) Development within the Regulatory floodplain shall not be permitted.

2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.

4) Major development within the Regulatory floodplain shall not be permitted.

(LTC's 2024 Policies attached, see ***Appendix 6***– Relevant sections only).

The applicant was notified that staff could not approve the permit application and of their right to a Hearing before the Authority's Board of Directors (see LTC Permit Status Letter, November 7, 2024– ***Appendix 7***).

The proponent requested LTC staff to proceed with the necessary arrangements for a Hearing (November 8, 2024 Notice of Hearing scheduled for November 20, 2024 – ***Appendix 8***).

The proponent was provided the Hearing Guidelines.
(LTC's 2024 Hearing Guidelines attached, see ***Appendix 9***).

FLOODPLAIN MAPPING

In March 2024, the Board of Directors approved the updated one-zone regulatory floodplain mapping for the Trent River. The approved mapping was completed by KGS Engineering and the analyses for the project were conducted in accordance with the requirements outlined in the Ministry of Natural Resources technical guidelines (MNR Technical Guide – River & Stream Systems: Flooding Hazard Limit (2002)) and Natural Resources Canada Federal Flood Mapping Guidelines Series.

Due to the complexity of the Trent River, 5 separate hydraulic models were constructed to prepare the regulatory flood maps. The subject property is within Model 3, which is a 1-D hydraulic model. The final mapping product created by KGS Engineering illustrates the old and new floodplain mapping to illustrate any large changes that were present. **Appendix 10** provides an excerpt of the Trent River Floodplain Mapping report, which identifies the floodplain in the vicinity of the subject property and provides reasoning for the change in the mapping compared to the 1983 mapping by CCL. Prior to the floodplain mapping update in 2024, the subject property was not located within the regulatory floodplain for the Trent River; however, with the new floodplain mapping, the subject lands have been identified to be within the Trent River floodplain.

The primary reason why the subject property has been identified within the Trent River floodplain mapping is in part due to the MNR's Technical Guidelines, which provides guidance on how to determine the floodplain hazard limit (i.e., identify the regulatory floodplain limit). Pursuant to the Technical guidelines, dykes and flood walls are not regarded as permanent flood control structures and the lands behind the dyke and flood walls are to be considered in the floodplain and require protection to the regulatory flood standard (e.g., require dry floodproofing). Additionally, there is a section of the concrete retaining wall that was identified to be overtopped during the regulatory flood event. The full extent of the overtopping and overflow was not determined as part of the mapping update.

BACKGROUND

On October 7, 2024, an online inquiry from Lorrie Powers was received regarding the subject property. On the 17th of October, 2024, staff called the proponent to discuss the regulated features and the permitting process. An email summary of the phone call was provided on the date of the call. A follow-up response was received by staff on the same date requesting the complete permit checklist requirements. A staff response was provided with the requested information for a complete permit application on October 23, 2024.

On November 4, 2024, staff met with Lorrie Powers and Corey Brooks to go over the permit application and all the requested supplementary information. Following a thorough review of the submission, the permit was deemed complete on November 7, 2024. As noted above, a letter providing notice regarding staff's inability to issue the permit was issued and possible options were provided for next steps (see **Appendix 7**).

On the same date the permit status notice was delivered, LTC staff received a request for a hearing before the Hearing Board. Following receipt of this request, the hearing was registered and a Notice of Hearing letter was issued for a hearing on November 8, 2024 (see **Appendix 8**).

Following the registration of the Hearing, a meeting with Parks Canada was attended by LTC staff on November 13, 2024 to discuss the permit application, the floodplain mapping and their infrastructure as part of the preparation for the Hearing. Parks Canada staff provided information related to their Dam and Asset Management plan and confirmed that the infrastructure is regularly inspected. Additionally, it was confirmed that concrete wall and berm structures that are present is part of their infrastructure, which assists in the water management of the Trent River system.

DEVELOPMENT WITHIN HAZARD LANDS

The proposed works would involve construction of a single-family dwelling and the placement of fill within hazard lands, specifically the Trent River floodplain. This development activity is considered as a "development activity" pursuant to Ontario Regulation 41/24: Prohibited Activities,

Exemptions and Permits made under the *Conservation Authorities Act*. Subsection 28 (1) of *Conservation Authorities Act* states that no person shall undertake development or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are hazard lands. Pursuant to subsection 28.1 (1), the Authority may grant permission for development in or on the areas that would otherwise be prohibited by section 28, if, 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.

The applicant has submitted the requested documentation for a complete application and the submission has been deemed complete. As noted previously, this development proposal shows a single-family dwelling structure and the placement of fill within the Trent River floodplain. Based on a review of the relevant policies that are applicable to this proposal, staff are not in a position to support the application as it does not conform with the policies.

STAFF CONCLUSION

Hazard land management was delegated by the Province to LTC through the administration of the *Conservation Authorities Act* and Ontario Regulation 41/24. Through the administration of the Act and Regulation, LTC staff review development proposals in an effort to limit development and protect people and property in flood susceptible areas. Overall, it is the goal of the Regulation Policy document and staff to minimize or prevent the impact of flooding. Deviation from the policies represents a risk that requires careful consideration.

The proposal requires a permit from LTC pursuant to the Conservation Authorities Act and O.Reg. 41/24, and does not conform to LTC's Ontario Regulation 41/24 Regulation Policy Document (see ***Appendix 6***). Limiting development proposals such as this is intended to minimize the risk of property damage/loss and investment in an area that is susceptible to natural hazards. As such, staff are not in a position to issue the permit as presented.

LOWER TRENT CONSERVATION

FOR OFFICE USE ONLY			
FILE #		PERMIT #:	
Watershed:		Fee Received:	
Date Received:		Date Deemed Complete:	
Expiry Date:		Pre-consultation Date:	

714 Murray Street
Trenton, Ontario
K8V0N1
(613) 394-4829
permits@ltc.on.ca

APPLICATION

FOR DEVELOPMENT ACTIVITIES / INTERFERENCE WITH A WATERCOURSE / WETLAND (CONSERVATION AUTHORITIES ACT, PART VI AND ONTARIO REGULATION 41/24)

Owner's Name:	* Lorrie Powers / Corey Brooks	Telephone:	* [redacted]	Cell:	
Address:	[redacted]	Postal Code:	* [redacted]		
		Email	* [redacted]		
Applicant's Name:	* Lorrie Powers	Telephone:		Cell:	
Address:	* [redacted]	Postal Code:			
		Email			
Contractor & Site Contact:	* Supreme Homes	Telephone:		Cell:	

Pre-Consultation: Please indicate if you have conducted any pre-application consultation with a LTC Staff Member.

NO	YES (check method below)								
☐	by phone	☐	by meeting	☑	by email	☐	by site visit	☐	by other method ☐

Location/Address where Development Activity / Interference with a Watercourse or Wetland is proposed (provide Registered Plan and lot number, if known):

Lot:	Concession:	Municipality:	ARN:
5		Trent Hills	Roll # 1435100030 02200

Description of Proposed Works:	* modular home (16' x 69') Construction of single family dwelling.
Type and Approximate Quantity of Fill:	* 50 - 75 cubic meters A/B Gravel.
Existing Site Conditions or Use:	* empty lot
Previous Applications to LTC for this Property:	* none

Are there any violations on this Property under Ontario Regulation 163/06 or 41/24?	☐ **No**	☐ **Yes** (provide details)	☑ **Unknown**
Are Planning Act approvals in place? (e.g. Zoning, Minor Variance, Site Plan, etc.)	☑ **No**	☐ **Yes** (provide details and attach confirmation documents)	☐ **Unknown**
Has this project been through an Environmental Assessment review?	☑ **No**	☐ **Yes** (provide details)	☐ **Unknown**
Are there any other required approvals? (e.g. MNRF, Fisheries and Oceans Canada, Health Unit)	☑ **No**	☐ **Yes** (provide details)	☐ **Unknown**

Dates when work is to be carried out:	**Proposed commencement of work:**	*	**Proposed completion of work:** *

Application is hereby made, to (check appropriate boxes):

☐ Site Grading, Place, Dump or Remove Fill	☐ Place, Dump or Remove Fill in Flood Plain	☐ Interference with Wetland
☐ Alter, Add to, Reconstruct, Renovate Building	☑ Development within Hazardous Land	☐ Alteration to Shorelines
☑ Demolish, Erect, Place, Construct a New Building/Structure	☐ Alter an Existing Watercourse	☐ Large Fill Site

I * Lorrie Powers declare that the above information is correct to the best of my knowledge, and I agree to abide by the provisions of the *Conservation Authorities Act* and *Ontario Regulation 41/24*. By signing this application, I agree to allow Lower Trent Region Conservation Authority (LTC) staff to enter onto the subject property as part of the review process. I also acknowledge and agree to abide by conditions of any permit issued pursuant to this application. Further, any permit issued pursuant to this application may be cancelled if it is issued on the basis of false, inaccurate or misleading information. The personal information on this form is collected under the authority of the *Conservation Authorities Act*, R.S.O. 1990, c 27, as amended. The personal information will be used for the purposes of administering Parts VI and VII of the *Conservation Authorities Act* and *Ontario Regulation 41/24*. Specifically, the information will be used to:

- Evaluate the development proposal
- Liaise with other regulatory agencies having jurisdiction
- Make a decision on the application or report to the LTC Board of Directors for a decision

I understand that this information is part of the public record and is available to the general public.

Date: * Mon. Nov 4, 2024 **Signature:** * [redacted]

☑ **Owner** ☐ **Authorized Applicant Agent**

FOR OFFICE USE ONLY	
Application File Number:	Permit File Number:
Subwatershed:	Regulated Feature:
Permit application rec'd:	Application complete:
Deposit Required: Ontario Land Surveyor ($500) ☐ Yes ☐ No	Coastal Engineer ($1,000) ☐ Yes ☐ No
Amendment request rec'd:	Amended application complete:

Fee Required:

☐ Routine	$100
☐ Minor	$220
☒ Standard	$550
☐ Complex (require review of 1 technical study)	$825
☐ Complex (require review of 2 or more technical studies)	$1,100
☐ Permit amendment (administrative)	$100
☐ Permit amendment (significant) - 1/2 original application fee	_____
☐ Compliance permit - double the application fee	_____
☐ Restoration agreement - double the application Fee	_____
☐ Deposit	_____

Amount Received: _____ Date Received: _____

Method of Payment: ☐ Cheque ☐ Credit Card ☐ Cash

Deposit Returned: _____ Date Returned: _____

☐ **Permission for Minor Works:**

☐ Undertake minor landscaping involving the placement, removal or re-grading of material up to $20m^3$ (minor fill)

☐ Minor shoreline protection up to $20m^3$

☐ Undertake watercourse or shoreline alteration involving less than $20m^2$ (minor alteration)

☐ Construct a non-habitable accessory structure up to $10m^2$

☐ Construct a habitable addition up to $10m^2$

☐ Construct a deck up to $23m^2$

☐ Install a pool up to $10m^2$

☐ **Permission for Standard or Complex Permit:**

☐ Construct, reconstruct, erect or place a building or structure (greater than $10m^2$)

☐ Change building/structure so that it increases its size by $10m^2$ or more, or increases the number of dwelling units

☐ Temporary or permanent placing, dumping or removal of any material originating on the site or elsewhere greater than $20m^3$

☐ Change or interfere with a wetland

☐ Change or interfere with a watercourse

☐ Shoreline protection work

☐ Construct a deck greater than $23m^2$

☐ Install a pool greater than $10m^2$

Permit Approval:

Amendment:

LANDOWNER AUTHORIZATION

Subject Property	**Lot:**		**Concession:**	
	Street Address:			
	Municipality:			

If this application is to be submitted by a solicitor or agent on behalf of the owner(s), this Landowner Authorization must be completed and signed by the owner(s). If the owner is a corporation acting without agent or solicitor, the application must be signed by an officer of the corporation and the corporation's seal (if any) must be affixed.

NOTE TO THE OWNER(S):

If the application is to be prepared by a solicitor or agent, authorization should not be given until the application and its attachments have been examined and approved by you, the owner(s).

I/WE _____ HEREBY AUTHORIZE _____ TO PROVIDE AS MY AGENT ANY REQUIRED AUTHORIZATIONS, TO SUBMIT THE ENCLOSED APPLICATION TO THE LOWER TRENT REGION CONSERVATION AUTHORITY, AND TO APPEAR ON MY BEHALF AT ANY HEARING(S) OF THE APPLICATION AND TO PROVIDE ANY INFORMATION OR MATERIAL REQUIRED BY THE BOARD RELEVANT TO THE APPLICATION FOR PURPOSES OF OBTAINING A PERMIT FOR DEVELOPMENT ACTIVITY/INTERFERE WITH A WATERCOURSE/WETLAND, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSERVATION AUTHORITIES ACT AND ONTARIO REGULATION 41/24.

SIGNATURE OF OWNER _____ **DATE** _____

COMPLETE APPLICATION REQUIREMENTS *(pursuant to subsection 7(1) of* Ontario Regulation 41/24*)*

Following the required pre-submission consultation process with LTC staff, in order for the application to be deemed complete, the application must be completely filled out, the required fee must be submitted and all technical information requirements must be submitted. *The owner/applicant must contact LTC prior to making an application* so that detailed information requirements can be determined. *This application must be accompanied by detailed plans for the proposed works and the LTC-determined fee.* The detailed plans must include the following, where applicable:

- ☐ A **Plan of the Area** showing the **Type** and **Location** of the *Development Activity*
- ☐ 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 Watercourse or Change or Interfere with a Wetland*
- ☐ A **Description** of the **Proposed Use of Any Buildings and Structures** following completion of the *Development Activity*
- ☐ A **Statement of Purpose** of an *Activity to Straighten, Change, Divert or Interfere with the Existing Channel of a Watercourse or Change or Interfere with a Wetland*
- ☐ The **Start and Completion Dates** of the *Development Activity* or *Activity to Straighten, Change, Divert or Interfere with the Existing Channel of a Watercourse or Change or Interfere with a Wetland*
- ☐ 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 Watercourse or Change or Interfere with a Wetland*
- ☐ The **Elevations of Existing Buildings**, if any, and **Existing Grades and Proposed Elevations of Any Buildings** and **Post-Activity Grades** after the *Development Activity* or *Activity to Straighten, Change, Divert or Interfere with the Existing Channel of a Watercourse or Change or Interfere with a Wetland*
- ☐ ***Pre- and Post-Drainage Details*** *for the Development Activity or Activity to Straighten, Change, Divert or Interfere with the Existing Channel of a Watercourse or Change or Interfere with a Wetland*
- ☐ A **Complete Description of Any Type of Fill** proposed to be placed or dumped
- ☐ A **Confirmation of Authorization** (see previous section) for the proposed activity given by the Owner if the applicant is not the Owner
- ☐ Any **Other Technical Information, Studies or Plans** (see below)

Drawings/Plans:

- ☐ Legal Survey showing the property boundary(ies) and the parcel(s) within the work(s) are to take place
- ☐ Geodetic elevations of the lowest opening(s) in any new building or additions to buildings
- ☐ Structural Elevations and Construction Details
- ☐ Erosion and Sediment Control Plans
- ☐ Grading Plans
- ☐ Landscaping/Site Rehabilitation Plan
- ☐ Topsoil Stripping Details
- ☐ Wetlands/Hydrologic Features Plan

Reports/Studies (including corresponding Plans):

- ☐ Functional Servicing Report
- ☐ Geotechnical/Slope Stability Study
- ☐ Coastal Hazards Assessment/Coastal Engineering Report
- ☐ Hydrogeological Assessment
- ☐ Karst Evaluation Phase 1
- ☐ Karst Evaluation Phase 2
- ☐ Hydrologic Features Assessment (Headwater Feature/Watercourse Evaluation)
- ☐ Hydraulic Assessment/Flood Line Mapping Study
- ☐ Hydrostatic Pressure Engineering Assessment Report
- ☐ Scoped or Full Environmental Impact and Enhancement Study
- ☐ Stormwater Management Study/Facility Design Report
- ☐ Fluvial Geomorphological Assessment/Watercourse Erosion Assessment
- ☐ Channel Crossing Assessment

- ☐ Water Balance Analysis
- ☐ Soil Quality Report
- ☐ **Other reports/studies/plans identified** through pre-submissionconsultation process

Please note that an incomplete application will delay the processing of an application.

NOTICE OF DISCLOSURE OF APPLICATION INFORMATION

This application and supporting documents and any other documentation received relating to this application, may be released, in whole or in part, to other persons in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990 c. M.56, as amended.

Refer to Part VI of the *Conservation Authorities Act* and *Ontario Regulation 41/24* for complete statutory requirements:
ontario.ca/laws/statute/90c27#BK48
ontario.ca/laws/regulation/240041

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name	Unit no.	Lot/con.
116 Saskatoon Avenue		

Municipality	Postal code	Plan number/ other description
Campbellford		SSH 6590 Supreme 212639

B. Individual who reviews and takes responsibility for design activities

Name	Firm
Robert Jonkman, P.Eng.	2291680 Ontario Limited Robert Jonkman, P.Eng

Street address	Unit no.	Lot/con.

Municipality	Postal code	Province	E-mail
		ON	

Telephone number	Fax number	Cell number

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

☑ House	☐ HVAC – House	☑ Building Structural
☑ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of designer's work: To ensure drawings comply with the Ontario Building Code 2012 Part 9, and/or compliance to CSA Standard Z240.10.1-16, "Site preparation, foundation, and anchorage of buildings".

Site grading or any site planning is not within my scope. Inspection of the building or the foundation is not included as part of my activities.

D. Declaration of Designer

I Robert Jonkman, P.Eng. declare that (choose one as appropriate):

(print name)

I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: _____

Firm BCIN: _____

I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: I am a professional engineer

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

June 8 2024 _____

Date Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Engineer: ROBERT J. JONKMAN, P.ENG. 2291680 ONTARIO LIMITED 613-853-0052
Scope of Engineer's work on these drawings:

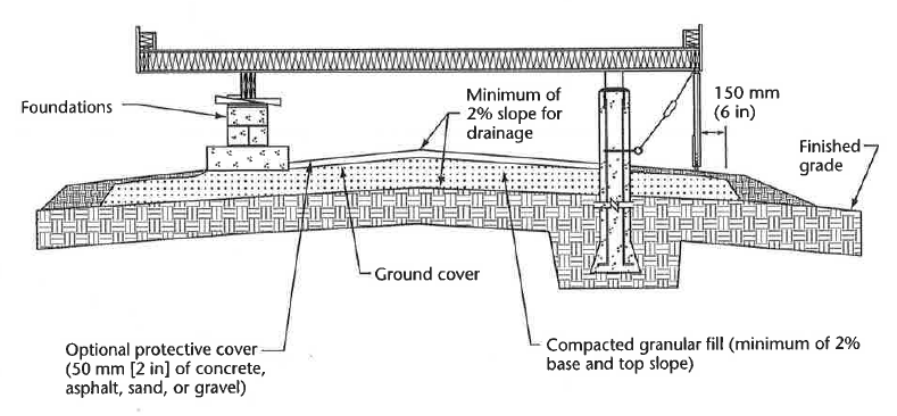
To ensure drawings comply with the Ontario Building Code 2012 Part 9, and/or compliance to CSA Standard Z240.10.1-16, "Site preparation, foundation, and installation of buildings". **Inspection of the building or the foundation is not included as part of my activities.**

For full foundation with footings below frost: Foundation design VALID ONLY IF: Min soil bearing capacity = 75 kPa, Soil is non-expansive, with no abnormal conditions, no hydrostatic pressure is likely to occur (ie base of footing is higher than the water table by at least the width of the largest footing), not within a flood zone, no significant surcharge load (example heavy vehicle traffic) occurs close to the foundation, and backfill height to basement slab distance is less than 7'6".

For surface pier foundation: For Deformation Resistant homes only, which are constructed upon longitudinal steel or wood beam, and have been permanently marked in accordance with CSA Standard A277 clause 7.4.1 indicating compliance to the deformation resistance test.

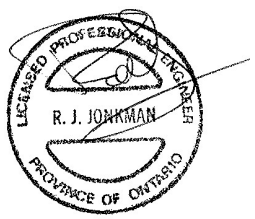
In addition to 'full foundation' soil requirements and restrictions... surface pier foundation must comply with the CSA Z240.10.1 (as referenced in OBC 9.15.1.3) in its entirety, including but not limited to, the site preparation, pier, footing, ventilated / slip skirting, multiple section connections, and anchorage provisions. Pier heights are not to exceed pier width unless specifically identified on the drawings and approved by this engineer. Skirting, if used, must be installed to accommodate at least 2 inches of vertical movement as per section 9.1 of the standard.

It is imperative that the ground surface is well drained with a minimum slope of 2%, and prepared as per Z240.10.1 section 5.1.2 and Figure A-1 (copied below). The surrounding finish grade must slope away from the home.



Notes:
(1) *The ground cover extends at least 150 mm (6 in) past the sides of the manufactured home.*
(2) *The backfill base and ground cover are graded centre to outside or from side to side with a minimum slope of 2%.*
(3) *The surrounding finished grade slopes away from the home.*

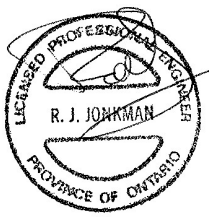
Figure A.1
Site preparation
(See Clauses 5.1.2 and A.1.)



Jun 8 '24

Below-grade footing sizes where loads are specified on drawings to be sized according to NBC/OBC:

soil type	soil bearing capacity (based on NBC / OBC Table 9.4.4.1)		footing load	footing size	footing thickness*
	kPa	psf	lbs	in x in	in
Firm clay	75	1566	5000	21	9
	75	1566	10000	30	13
	75	1566	15000	37	17
	75	1566	20000	43	19
Dense or compact silt	100	2089	5000	19	7
	100	2089	10000	26	11
	100	2089	15000	32	14
	100	2089	20000	37	17
	120	2506	5000	17	6
	120	2506	10000	24	10
	120	2506	15000	29	13
	120	2506	20000	34	15
Stiff clay, dense or compact sand or gravel	150	3133	5000	15	6
	150	3133	10000	21	9
	150	3133	15000	26	11
	150	3133	20000	30	13
Firm clay	200	4177	5000	13	5
	200	4177	10000	19	7
	200	4177	15000	23	9
	200	4177	20000	26	11
Clay shale	300	6266	5000	11	3
	300	6266	10000	15	6
	300	6266	15000	19	7
	300	6266	20000	21	9



Jun 8 '24

Table 9.4.4.1.
Allowable Bearing Pressure for Soil or Rock
Forming Part of Sentence 9.4.4.1.(1)

Type and Condition of *Soil* or *Rock*	Maximum Allowable Bearing Pressure, kPa
Dense or compact sand or gravel(1)	150
Loose sand or gravel(1)	50
Dense or compact silt(1)	100
Stiff clay(1)	150
Firm clay(1)	75
Soft clay(1)	40
Till	200
Clay shale	300
Sound *rock*	500

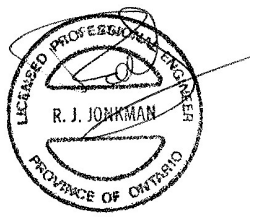
A-Table 9.4.4.1. Classification of Soils.
Sand or gravel may be classified by means of a **picket test** in which a 38 mm by 38 mm picket beveled at the end at 45° to a point is pushed into the soil. Such material is classified as "**dense or compact**" if a man of average weight cannot push the picket more than 200mm into the soil and "**loose**" if the picket penetrates 200 mm or more.

Clay and silt may be classified as "**stiff**" if it is difficult to indent by **thumb pressure**, "**firm**" if it can be indented by moderate thumb pressure, "**soft**" if it can be easily penetrated by thumb pressure, where this test is carried out on undisturbed soil in the wall of a test pit.

Footing sizes for surface foundations supporting single storey deformation resistant buildings may conform with the following table from CSA Z240.10.1 instead of the above table.

Table 1
Minimum footing areas (concrete and wood footings), m^2 (ft^2)
(See Clause 6.2.1.)

	Pier spacing, m (ft)			
Type of soil	1.8 (6)	2.4 (8)	3.0 (10)	3.6 (12)
Soft clay, loose sand, or loose gravel	0.32 (3.3)	0.41 (4.4)	0.51 (5.5)	0.61 (6.6)
Firm clay or compact silt	0.16 (1.8)	0.22 (2.4)	0.27 (2.9)	0.33 (3.5)
Compact sand, compact gravel, stiff clay, or till	0.08 (0.9)	0.11 (1.2)	0.14 (1.5)	0.16 (1.8)
Shale or rock	0.04 (0.5)	0.05 (0.6)	0.07 (0.8)	0.08 (0.9)



Jun 8 '24

Below-grade footing sizes for buildings other than described above, based on NBC 9.15.3.4, with maximum 10 ft o.c. column spacing:

24” x 24” x 12”	Supporting one storey
34” x 34” x 12”	Supporting two storeys
40” x 40” x 12”	Supporting three storeys

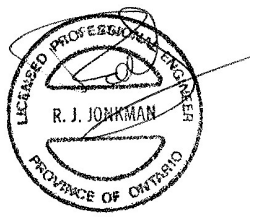
In no case is the thickness of the footing to be less than the width of the projection of the footing beyond the supported element.

Ground anchorages

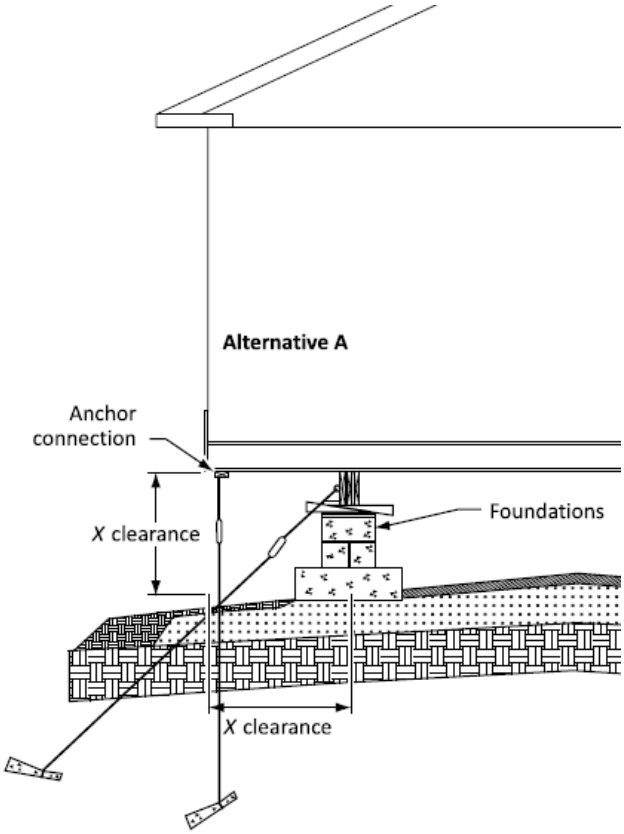
Unless drawings are accompanied by building-specific calculations demonstrating that ground anchorages are not needed, **ground anchorages are required** for all homes without basements where any one of the following occurs:

- the building is installed on a site that is not flat,
- the height from the ground to the eave exceeds 10’-6”
- the total width of the buildings is narrower than 12’-8”,
- the outside edge of the building extends past the outside of the longitudinal beam by more than 2’-0” (ie the building wall cantilevers past the longitudinal beam by more than 2’-0”, see image below)
- the weight of the building is less than 34 psf (166 kg/m^2)
- the exposure condition is considered “escarpment” (C_eC_t=1.0) or “open terrain” (C_eC_t = 0.90), or
- the pier height exceeds the pier width.

Experience has shown that unanchored buildings without basements can be life threatening during tornadoes or high wind storms, particularly when unanchored buildings are located close to one another. Damage as a result of a tornado or high wind storm can be greatly reduced when walls are effectively anchored to the ground.



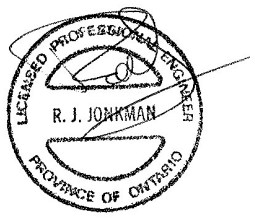
Jun 8 '24



Where provided, anchorages shall be installed in accordance with Z240.10.1-16 clause 7, and shall incorporate 3-4 inches of slack in order to accommodate frost movement.

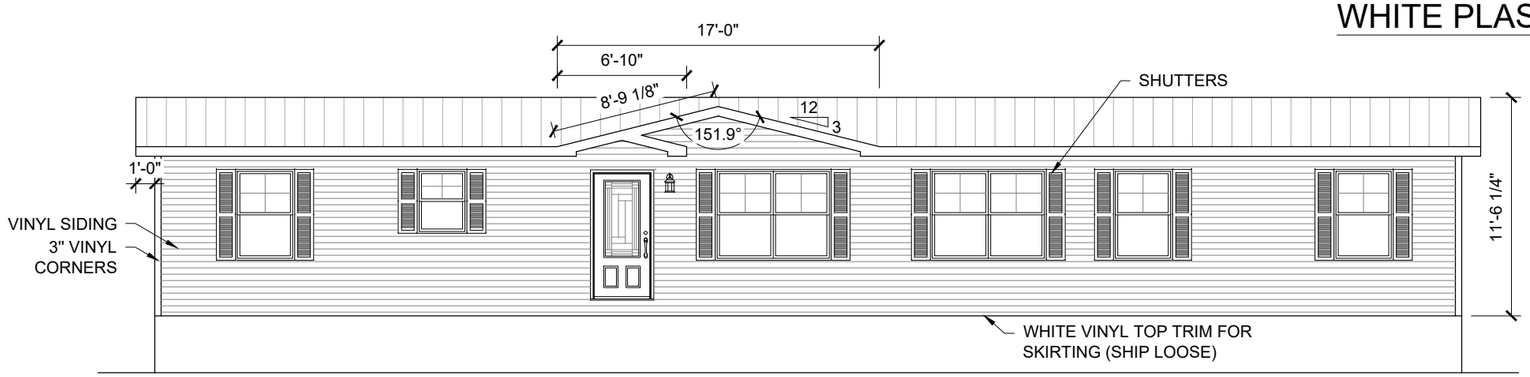
Table 4
Wind exposure factor, C_eC_t
(See Clause 7.1.2.)

Exposure condition	C_eC_t
Escarpment — building is located on a hill or escarpment located within twice the hill or escarpment height from the edge of the hill or escarpment	1.0
Open terrain — building is located on open, level terrain with only scattered trees, buildings or other obstructions, open water or shorelines thereof	0.90
Intermediate terrain — where the terrain falls between the exposures described above and below	See *NBC*, Clause 4.1.7.1.(5)(c)
Rough terrain — which is suburban, urban or wooded terrain extending upwind from the building uninterrupted for at least 1 km	0.70

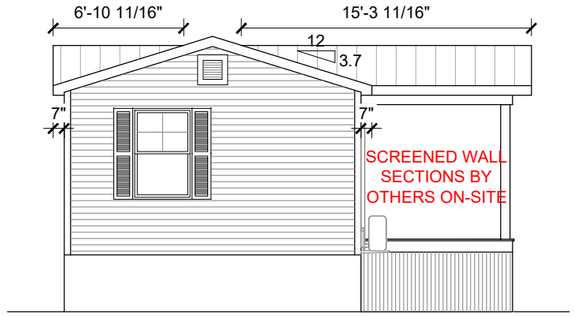


Jun 8 '24

FULL WRAP WITH WHITE PLASTIC



FRONT ELEVATION



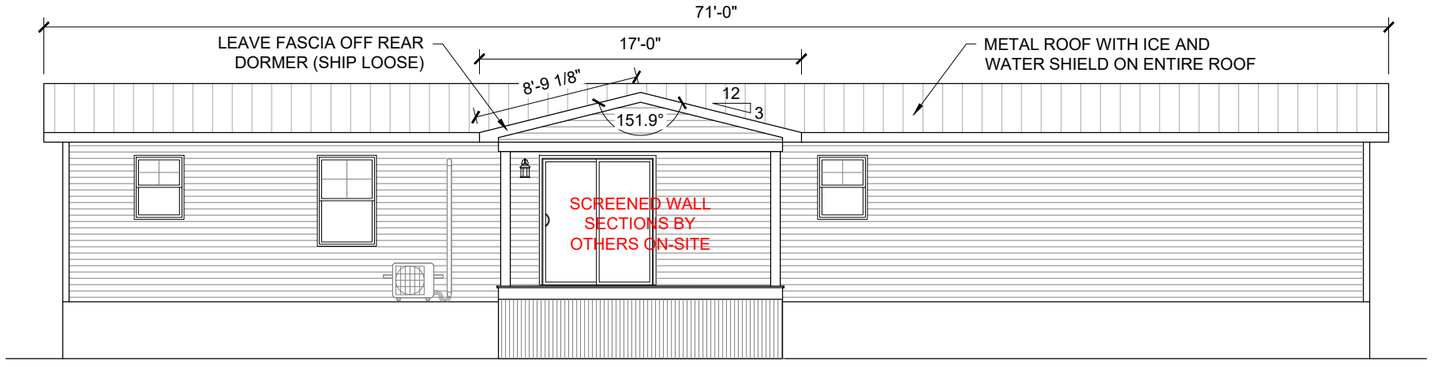
RIGHT ELEVATION

COVERED DECK MATERIAL TYPE (SHIP LOOSE):

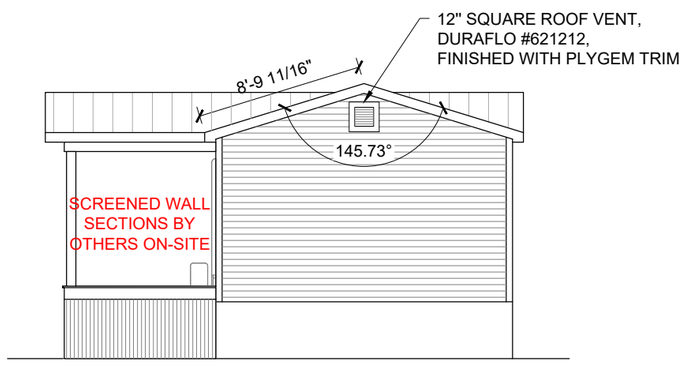
• SOFFIT	VINYL
• BEAM	CAPPED WITH ALUMINIUM
• POSTS	BY OTHERS ON-SITE
• RAILING	BY OTHERS ON-SITE
• DECKING	BY OTHERS ON-SITE

SIDING AREAS:

• VINYL SIDING	1250 S.F. + 20% = 1500 S.F.



REAR ELEVATION



LEFT ELEVATION

2024-06-06 - 14:48:33

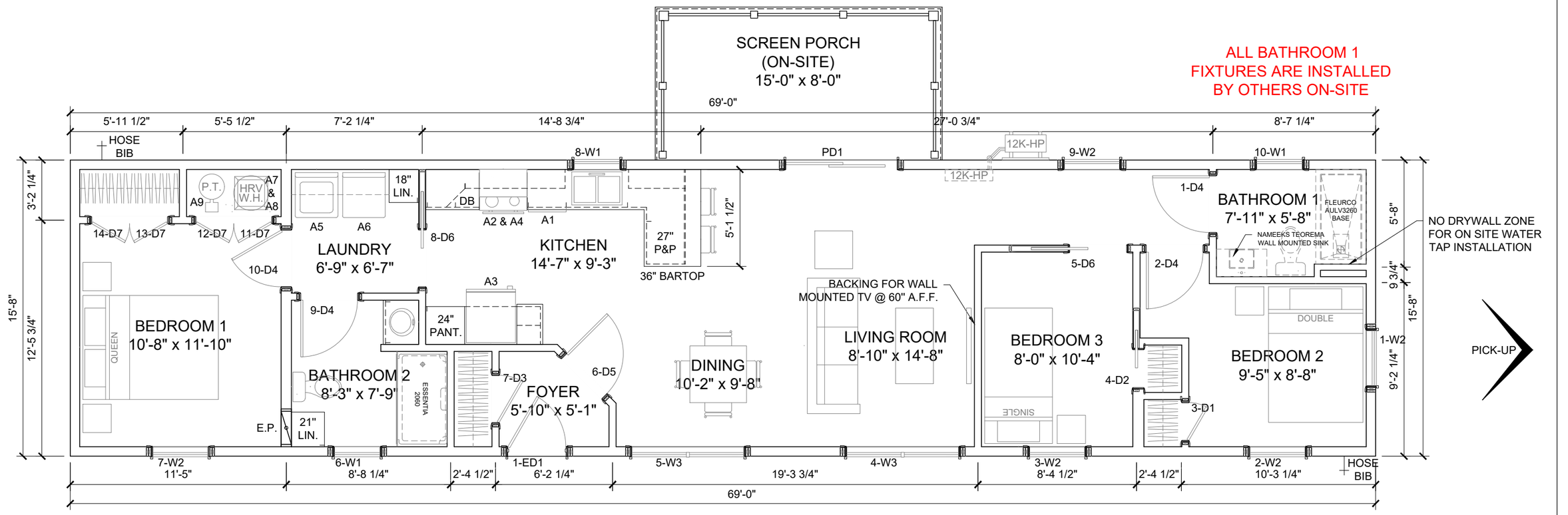
I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT: CLIENT: RETAILER: SIGNATURE DATE:

LICENSED PROFESSIONAL ENGINEER R. J. JONKMAN Jun 8 '24 PROVINCE OF ONTARIO

1/8" = 1'-0" (11x17 FORMAT)

MSH #: 6590	RETAILER: SOUTH SHORE HOMES	QUOTE# / CLIENT NAME(S): LORRIE POWERS		PRELIMINARY DRAWINGS: KIRSTEN AVERY	SIZE: 1081 S.F.	DATE OF FIRST DRAWINGS: 2024/04/01	ELEVATIONS
SHEET#: A1.1	PURCHASING DRAWINGS: KIRSTEN AVERY	KITCHEN DRAWINGS: MICHAEL BREAU	PRODUCTION DRAWINGS: -	PARTITIONS DRAWING: -	SERIAL#: 212882	CSA#: 88611	SUPREME



APPLIANCE SCHEDULE

TAG	TYPE
A1	DISHWASHER
A2	RANGE
A3	REFRIGERATOR (33")
A4	MICROWAVE/RANGE HOOD
A5	WASHER
A6	DRYER
A7	FLEW 100H HRV
A8	WATER HEATER
A9	PRESSURE TANK

EXTERIOR DOOR SCHEDULE

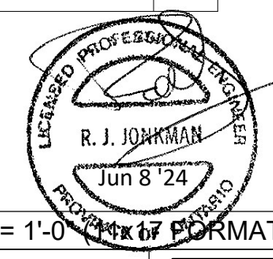
TAG	WIDTH	S L	TYPE	MODEL	COLORS	B.M.	GLASS	
ED1	36	-	IN SWING	2 PANEL	WHITE	1 1/4"	LOUISBOURG	3/4
PD1	72	-	PATIO	-	WHITE	1 1/4"	CLEAR	-

WINDOW SCHEDULE

TAG	W	H	PANELS	TYPE	COLORS	B.M.	GRILLS
W1	30	39	1	SINGLE HUNG	WHITE	1 1/4"	2x2 TOP SASH
W2	36	56	1	SINGLE HUNG	WHITE	1 1/4"	2x2 TOP SASH
W3	72	56	2	SINGLE HUNG	WHITE	1 1/4"	2x2 TOP SASH

INTERIOR DOOR SCHEDULE

TAG	WIDTH	PANELS	TYPE	QTY.
D1	24	1	PASSAGE	1
D2	24	1	POCKET	1
D3	30	1	PASSAGE	1
D4	36	1	PASSAGE	4
D5	36	1	4 LITE PASSAGE	1
D6	36	1	POCKET	2
D7	48	2	PASSAGE	4



2024-06-06 - 14:48:33

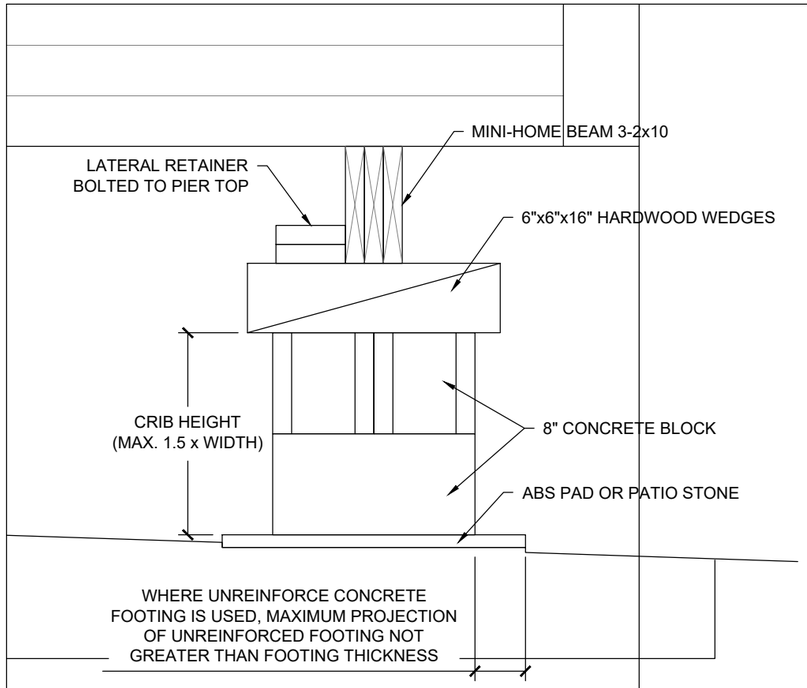
I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT: CLIENT: RETAILER: SIGNATURE DATE:

3/16" = 1'-0" (11 x 17 FORMAT)

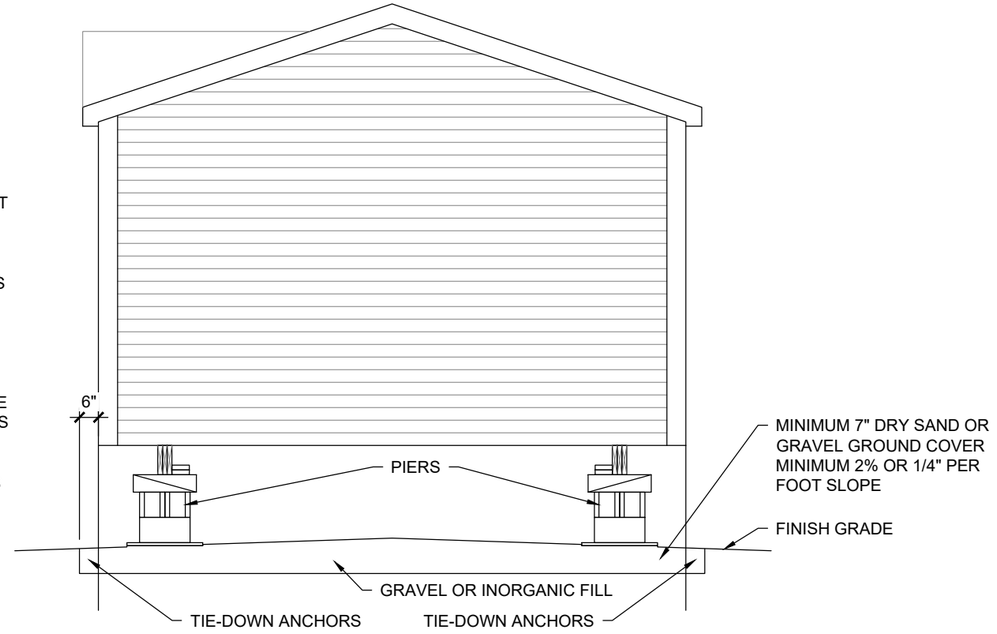
MSH #:	RETAILER:	QUOTE# / CLIENT NAME(S):		PRELIMINARY DRAWINGS:	SIZE:	DATE OF FIRST DRAWINGS:	
6590	SOUTH SHORE HOMES	LORRIE POWERS		KIRSTEN AVERY	1081 S.F.	2024/04/01	FLOOR PLAN
SHEET#:	PURCHASING DRAWINGS:	KITCHEN DRAWINGS:	PRODUCTION DRAWINGS:	PARTITIONS DRAWING:	SERIAL#:	CSA#:	
A 2.1	KIRSTEN AVERY	MICHAEL BREAU	-	-	212882	88611	

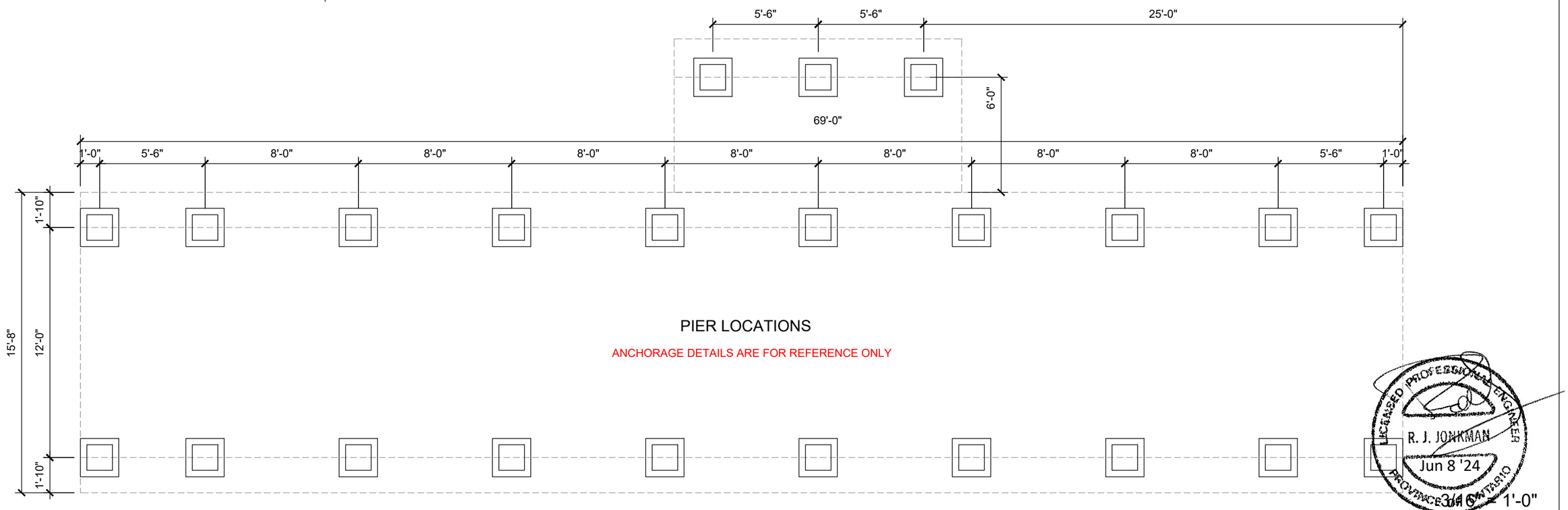
SUPREME



DESIGN PARAMETERS:

1. LOADS:
   GROUND SNOW - 2.3 kPa
   ROOF SNOW - 1.7 kPa
   ROOF RAIN - 0.4 kPa
   WIND - 0.41 kPa
   FLOOR LIVE - 1.92 kPa
   FLOOR DEAD - 0.77 kPa
2. CODES:
   2012 ONTARIO BUILDING CODE
   2015 ONTARIO ELECTRICAL SAFETY CODE
   CAN/CAS A277
3. SOIL BEARING CAPACITY IS REQUIRED TO BE 150 kPa WHICH IS SUFFICIENT FOR THE HIGHEST LOADS REQUIRED BY THIS DESIGN PACKAGE.
4. SOIL BEARING CAPACITY OF SITE PAD TO BE CONFIRMED BY OTHERS.
5. SITE PAD TO BE DESIGNED BY OTHER AND TO MEET THE REQUIREMENTS OF CSA-Z240.10.1 AND/OR THIS PACKAGE. AREA AROUND SITE PAD THAT IS TO BE USED FOR TRUCKS, CRANES AND EQUIPMENT IS TO BE FREE OF MUD & DEBRIS WITH COMPACTABLE, FREE DRAINING MATERIAL.
6. THE EFFECTS OF WIND ON OVER-TURNING AND SLIDING HAVE BEEN REVIEWED BY THE ENGINEER. NO TIE DOWNS ARE REQUIRED AND PIER CONNECTIONS ARE TO BE AS IN PIER DESIGNS
7. WHERE UNREINFORCED CONCRETE FOOTING IS USED, PATIO STONES ARE TO BE PLACED LEVEL AND WITHIN 1/4" OF EACH OTHER IN ELEVATION. THIS CAN BE CHECKED WITH A LASER LEVEL OR BUILDERS LEVEL.
8. WHERE UNREINFORCED CONCRETE FOOTING IS USED, PATIO STONES TO BE PLACED ON A ~ 2" LAYER OF COMPACTED FINE MATERIAL SUCH AS 3/4" MINUS MATERIAL
9. OVERALL HEIGHT OF PIER SHOULD BE CALCULATED SO THAT THE CORRECT NUMBER OF BLOCKING LAYERS WILL RESULT IN A 1/4" OR LESS SHIM BEING REQUIRED.
10. CEDAR SHIMS SHOULD ONLY BE USED IN SHIM DEPTH IS 1/4" OR LESS, SHIMS SHOULD BE INSERTED FROM BOTH DIRECTION FOR EVEN BEARING AND BE WIDTH OF THE BLOCK IT IS RESTING ON.
11. ADDITIONAL 2X4 SPACERS MAY BE USED FOR THE LEVELING





PIER LOCATIONS

ANCHORAGE DETAILS ARE FOR REFERENCE ONLY

3/16" = 1'-0"

2024-06-06 - 14:44:54

MSH #:	RETAILER:	QUOTE# / CLIENT NAME(S):		PRELIMINARY DRAWINGS:	SIZE:	DATE OF FIRST DRAWINGS:	
-	SOUTH SHORE HOMES	-		-	-	-	MINI-HOME INSTALATION
PAGE #:	PURCHASING DRAWINGS:	KITCHEN DRAWINGS:	PRODUCTION DRAWINGS:	DETAIL DRAWING:	SERIAL#:	CSA#:	
2	-	-	-	-	-	-	

TYPICAL ROOF

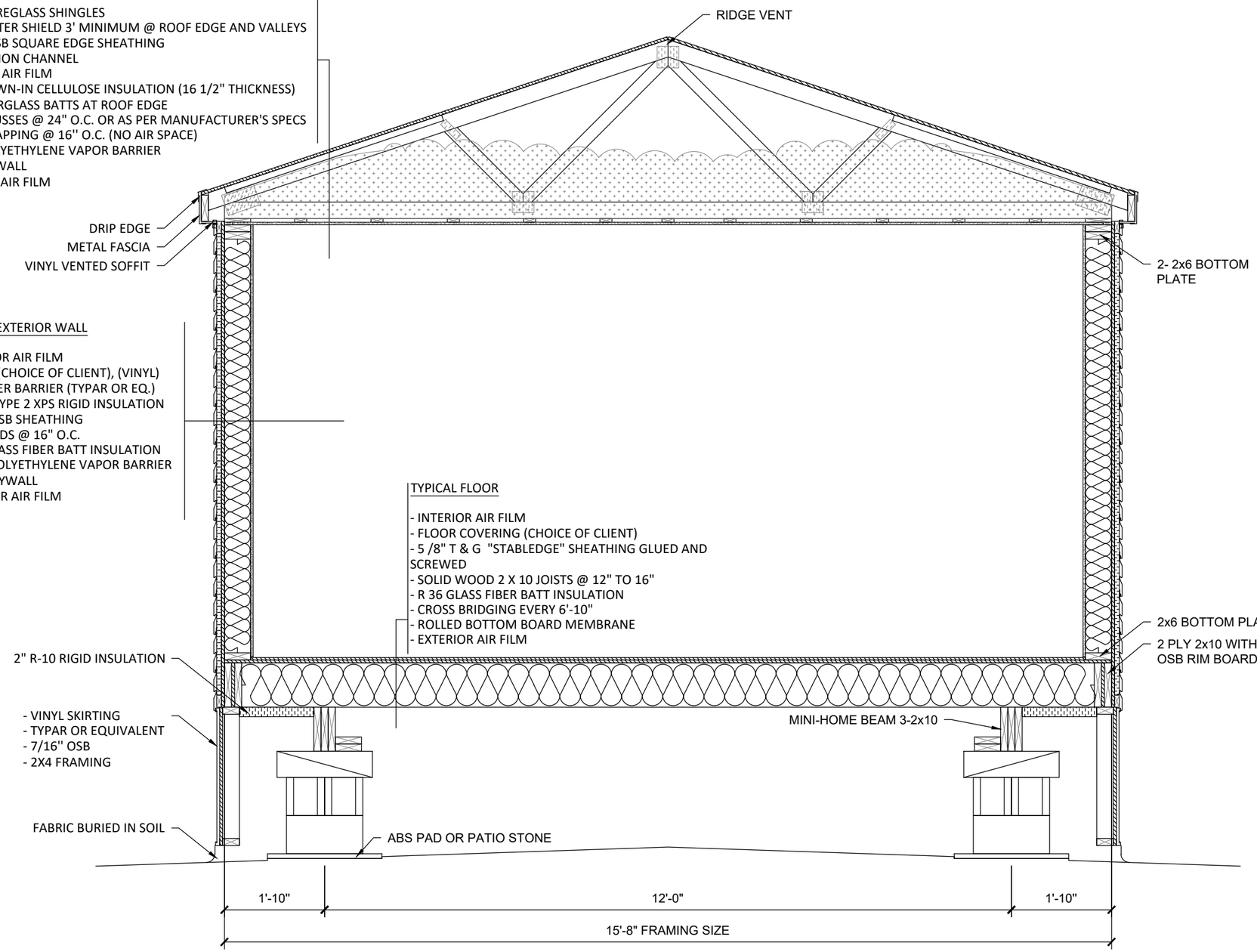
- 30 YR FIBREGLASS SHINGLES
- ICE & WATER SHIELD 3' MINIMUM @ ROOF EDGE AND VALLEYS
- 19/32" OSB SQUARE EDGE SHEATHING
- VENTILATION CHANNEL
- EXTERIOR AIR FILM
- R-60 BLOWN-IN CELLULOSE INSULATION (16 1/2" THICKNESS)
- R-24 FIBERGLASS BATTS AT ROOF EDGE
- ROOF TRUSSES @ 24" O.C. OR AS PER MANUFACTURER'S SPECS
- 1 X 3 STRAPPING @ 16'' O.C. (NO AIR SPACE)
- 6 MIL POLYETHYLENE VAPOR BARRIER
- 1/2" DRYWALL
- INTERIOR AIR FILM

TYPICAL EXTERIOR WALL

- EXTERIOR AIR FILM
- SIDING (CHOICE OF CLIENT), (VINYL)
- WEATHER BARRIER (TYPAR OR EQ.)
- 1'' R-5 TYPE 2 XPS RIGID INSULATION
- 7/16" OSB SHEATHING
- 2x6 STUDS @ 16" O.C.
- R-24 GLASS FIBER BATT INSULATION
- 6 MIL POLYETHYLENE VAPOR BARRIER
- 1/2" DRYWALL
- INTERIOR AIR FILM

TYPICAL FLOOR

- INTERIOR AIR FILM
- FLOOR COVERING (CHOICE OF CLIENT)
- 5 /8" T & G "STABLEDGE" SHEATHING GLUED AND SCREWED
- SOLID WOOD 2 X 10 JOISTS @ 12" TO 16"
- R 36 GLASS FIBER BATT INSULATION
- CROSS BRIDGING EVERY 6'-10"
- ROLLED BOTTOM BOARD MEMBRANE
- EXTERIOR AIR FILM



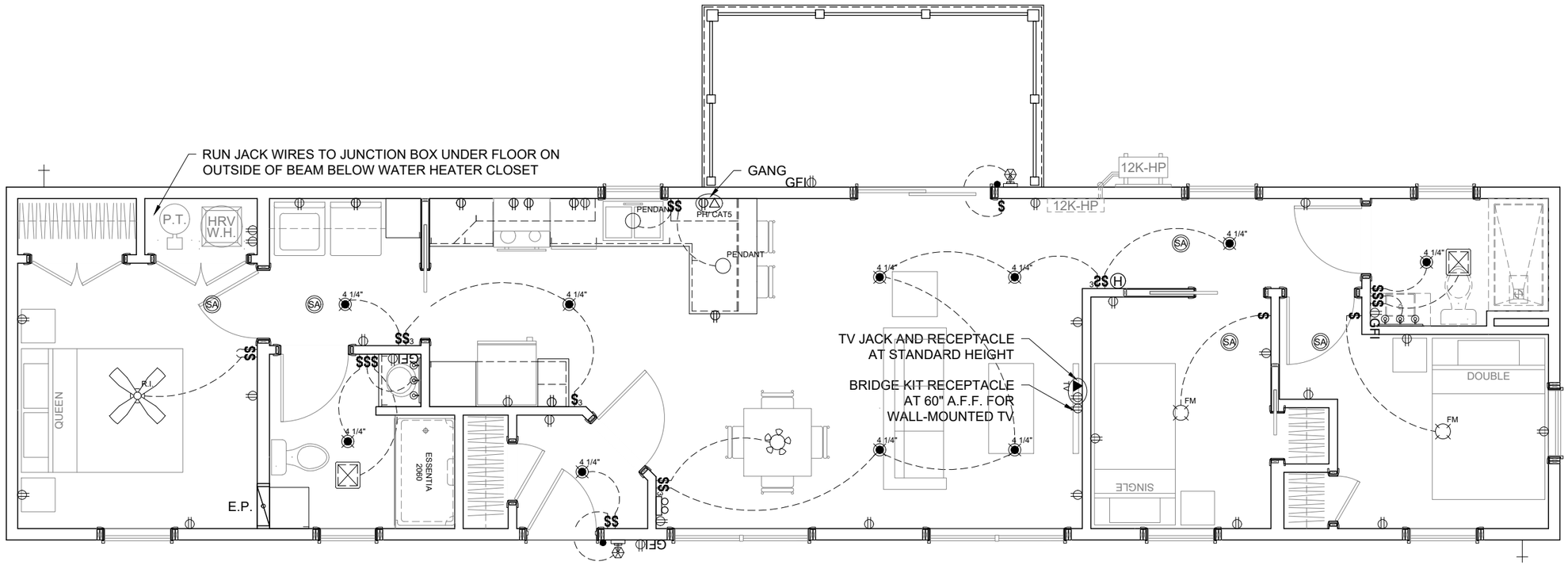
2023-06-26 - 10:07:34

LICENSED PROFESSIONAL ENGINEER
R. J. JONKMAN
Jun 8 '24
PROVINCE OF ONTARIO

I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT: CLIENT: RETAILER: SIGNATURE DATE:

MSH #:	RETAILER:	QUOTE# / CLIENT NAME(S):		PRELIMINARY DRAWINGS:	SIZE:	DATE OF FIRST DRAWINGS:	3/16" = 1'-0"
-	SOUTH SHORE HOMES	-		-	-	-	MINI-HOME CROSS SECTION
PAGE #:	PURCHASING DRAWINGS:	KITCHEN DRAWINGS:	PRODUCTION DRAWINGS:	DETAIL DRAWING:	SERIAL#:	CSA#:	SUPREME
2	-	-	-	-	-	-	



BOTTOM OF LIGHT SWITCH STITCH
PLATE TO BE AT 32" A.F.F.

STROBE LIGHTS ON ALL
SMOKE DETECTORS

2024-06-06 - 14:48:33

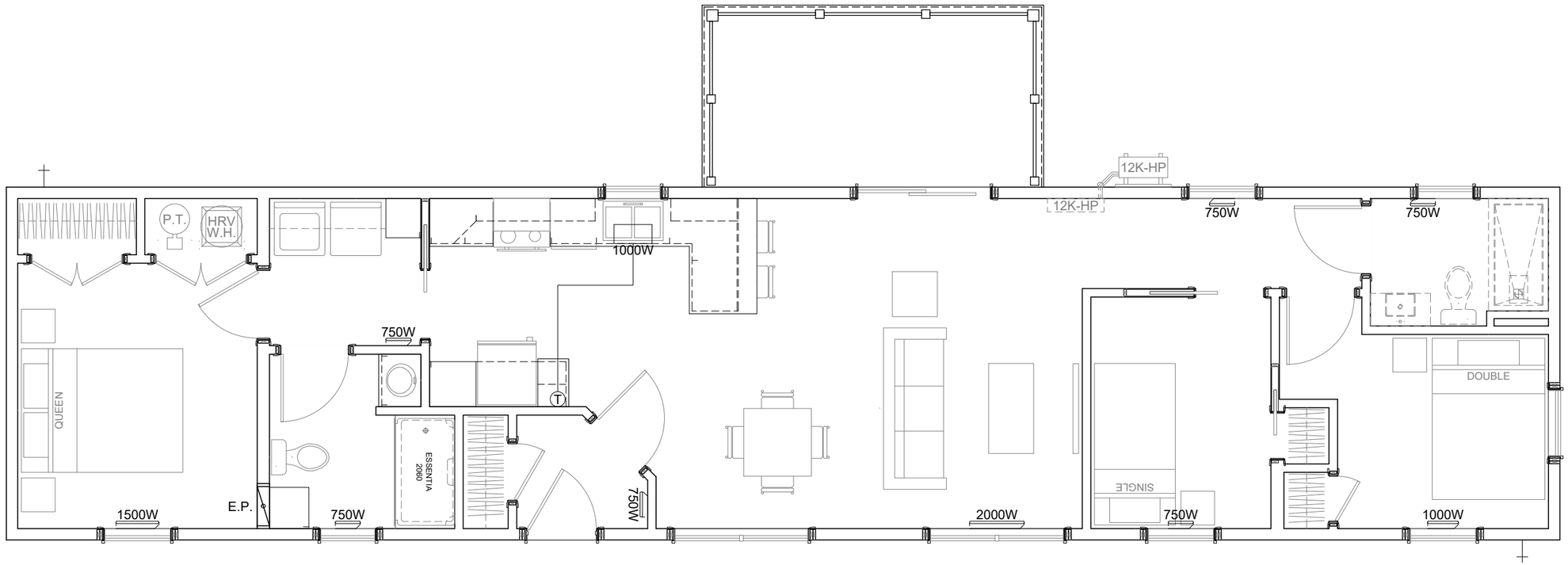
I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT: CLIENT: RETAILER: SIGNATURE DATE:

3/16" = 1'-0" (11x17 FORMAT)

MSH #:	RETAILER:	QUOTE# / CLIENT NAME(S):		PRELIMINARY DRAWINGS:	SIZE:	DATE OF FIRST DRAWINGS:	
6590	SOUTH SHORE HOMES	LORRIE POWERS		KIRSTEN AVERY	1081 S.F.	2024/04/01	LIGHTS & RECEPTACLES
SHEET#:	PURCHASING DRAWINGS:	KITCHEN DRAWINGS:	PRODUCTION DRAWINGS:	PARTITIONS DRAWING:	SERIAL#:	CSA#:	
A4.1	KIRSTEN AVERY	MICHAEL BREAU	-	-	212882	88611	

SUPREME



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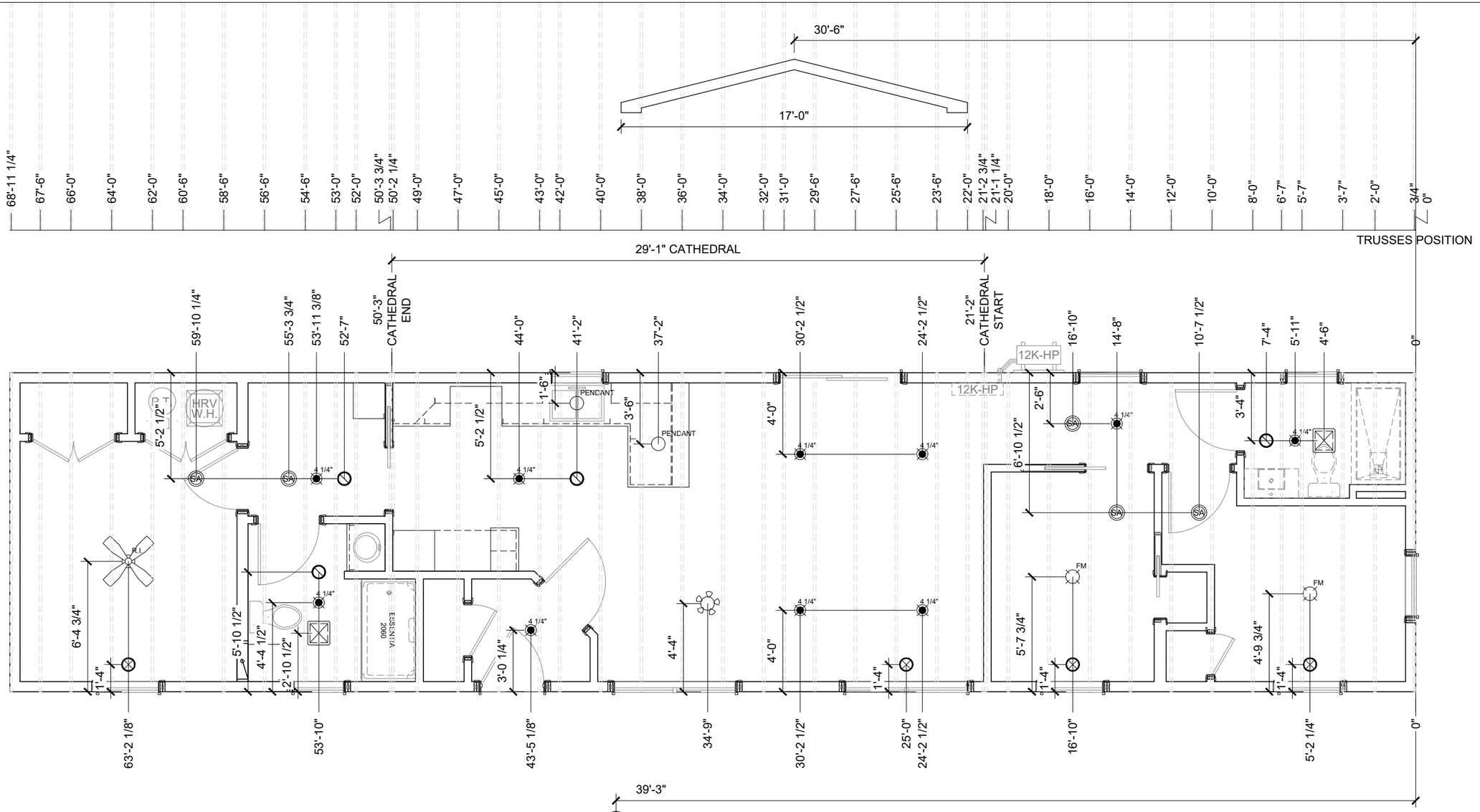
I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT: CLIENT: RETAILER: SIGNATURE DATE:

3/16" = 1'-0" (11x17 FORMAT)

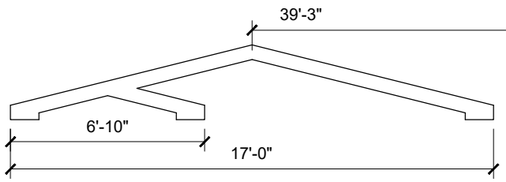
MSH #:	RETAILER:	QUOTE# / CLIENT NAME(S):		PRELIMINARY DRAWINGS:	SIZE:	DATE OF FIRST DRAWINGS:	
6590	SOUTH SHORE HOMES	LORRIE POWERS		KIRSTEN AVERY	1081 S.F.	2024/04/01	HEATING
SHEET#:	PURCHASING DRAWINGS:	KITCHEN DRAWINGS:	PRODUCTION DRAWINGS:	PARTITIONS DRAWING:	SERIAL#:	CSA#:	
A5.1	KIRSTEN AVERY	MICHAEL BREAU	-	-	212882	88611	

SUPREME

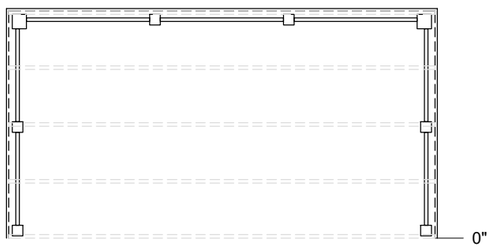


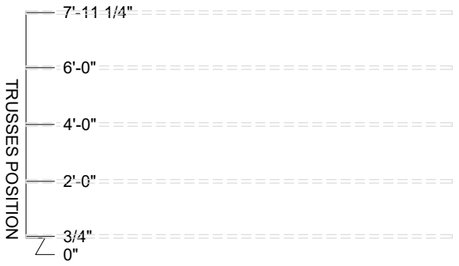
HRV SYSTEM		
HRV	FRESH AIR CEILING GRILLE	⊗
	EXHAUST AIR CEILING GRILLE	⊘

CFM CALCULATION			
FLOOR	FLOOR S.F.	AVG. CEILING HEIGHT	CFM
1ST FLOOR	1081	8	50.4
BASEMENT	0	8	0
2ND FLOOR	0	0	0
		TOTAL CFM REQUIRED	50.4
		HRV SYSTEM PIPE SIZE (5" < 135 CFM < 6")	5"



TRUSSES FOR SCREEN PORCH SUPPLIED BY CHOUINARD IN PLAN (SHIP LOOSE ON SITE)





3/16" = 1'-0" (11x17 FORMAT)

2024-06-06 - 14:48:34

MSH #: 6590	RETAILER: SOUTH SHORE HOMES	QUOTE# / CLIENT NAME(S): LORRIE POWERS		PRELIMINARY DRAWINGS: KIRSTEN AVERY	SIZE: 1081 S.F.	DATE OF FIRST DRAWINGS: 2024/04/01
SHEET#: M1.1	PURCHASING DRAWINGS: KIRSTEN AVERY	KITCHEN DRAWINGS: MICHAEL BREAU	PRODUCTION DRAWINGS: -	PARTITIONS DRAWING: -	SERIAL#: 212882	CSA#: 88611

CEILING LAYOUT

SUPREME

Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority	
Application No:	Model/Certification Number

A. Project Information

Building number, street name	Unit number	Lot/Con
116 Saskatoon Ave	-	-/-

Municipality	Postal code	Reg. Plan number / other description
Campbellford	-	

B. Prescriptive Compliance [indicate the building code compliance package being employed in this house design]

SB-12 Prescriptive (input design package): Package: C4 Table: 3.1.1.2.C

C. Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source		
▣ Zone 1 (< 5000 degree days)	□ ≥ 92% AFUE	□ Gas	□ Propane	□ Solid Fuel
□ Zone 2 (≥ 5000 degree days)	□ ≥ 84% < 92% AFUE	□ Oil	▣ Electric	□ Earth Energy

Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of walls = _____ m^2 **or** 1322 ft^2	W, S & G % = 12.2%	□ Log/Post&Beam □ ICF Above Grade □ ICF Basement □ Slab-on-ground □ Walkout Basement □ Air Conditioning □ Combo Unit ▣ Air Sourced Heat Pump (ASHP) □ Ground Sourced Heat Pump (GSHP)
Area of W, S & G = _____ m^2 **or** 161 ft^2	Utilize window averaging: □Yes ▣No	

D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions

□ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6))

□ Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))

▣ Airtightness substitution(s)

Airtightness test required (Refer to Design Guide Attached)

□ Table 3.1.1.4.B Required: _____ Permitted Substitution: _____

▣ Table 3.1.1.4.C Required: R 7.5 c.i. above grade wall Permitted Substitution: R 5.0 c.i. above grade wall

Required: R60 HH ceiling insulation Permitted Substitution: R50 ceiling insulation

Building Component	Minimum RSI / R values or Maximum U-Value(1)		Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	**Windows & Doors** Provide U-Value(1) or ER rating	
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors	0.28
Ceiling without Attic Space	NA		Skylights/Glazed Roofs	
Exposed Floor	R36		**Mechanicals**	
Walls Above Grade	R24+R5		Heating Equip.(AFUE)	8.7 HSPF 20 SEER
Basement Walls	NA		HRV Efficiency (SRE% at 0° C)	75%
Slab (all >600mm below grade)	NA		DHW Heater (EF)	ELECTRIC
Slab (edge only ≤600mm below grade)	NA		DWHR (CSA B55.1 (min. 42% efficiency))	# Showers___
Slab (all ≤600mm below grade, or heated)	NA		Combined Heating System	

(1) U value to be provided in either W/(m^2•K) or Btu/(h•ft^2•F) but not both.

E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.

Name	BCIN	Signature
Robert Jonkman	P.Eng.	

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

for design and performance of residential ventilation systems to OBC 2012 Div. B 9.32

RESET

LOCATION

1. Location — Township: Campbellford; Civic Address: 116 Saskatoon Ave

BUILDER

2. Builder — Name: Robert Jonkman; Address: 2650 MAIN STREET; City: TRACADIE-SHEILA; Postal Code: E1X 1GA; Ph: 506-395-6997; Fax: 506-395-7622

DESIGNER

3. Designer — Name:; Address:; Postal Code:; City:; Ph:; Fax:; Firm BCIN:; Designer BCIN:; HRAI#:

HEATING SYSTEM

4. a) Heating Systems

- [ ] Forced air
- [x] Non Forced Air
- [ ] Gas
- [ ] Propane
- [ ] Other
- [ ] Oil
- [x] Electricity

4. b) House Style

- [x] One Dwelling Unit
- [ ] House with two dwelling units
  - [ ] Dedicated
  - [ ] Shared

HEATING SYSTEM COMBUSTION APPLIANCES

5. Combustion Appliances 9.32.3.1.(1)

- [ ] a) Direct Vent
- [ ] b) Induced Draft
- [ ] c) Natural Draft
- [ ] d) Solid Fuel Appliances
- [x] e) No combustion appliances

HOUSE TYPE

6. Type of House 9.32.3.1.(2)

- [ ] Type 1 a) or b) type appliances only
- [ ] Type 2 a) or b) type appliances with a d) type appliance
- [ ] Type 3 any type c) appliance = part 6 design
- [x] Type 4 electric space heat

SYSTEM DESIGN OPTION

7. System Design Option

- [ ] Exhaust only forced air system/coupled
- [ ] HRV with extended exhaust or simplified coupled
- [x] HRV full ducting/not coupled to forced air
- [ ] Part 6 design

TOTAL VENTILATION CAPACITY (TVC)

8. TVC Capacity OBC 9.32.3.3

Bsmt & Master bedroom	1	@ 20 CFM (10 L/S)	20	CFM
Other Bedrooms		@ 10 CFM (5 L/S)	20	CFM
Bathrooms & Kitchen	3	@ 10 CFM (5 L/S)	30	CFM
Other Habitable Rooms	1	@ 10 CFM (5 L/S)	10	CFM
Total Ventilation Capacity (TVC)			80	CFM

TVC SYSTEM

8. TVC System

- [x] HRV
- [ ] Central Exhaust
- [ ] Multiple Fans

PRINCIPAL EXH. FAN CAPACITY

9. Principal Exhaust Fan Capacity (PEF)

Master Bedroom	1	@ 30 CFM(15L/S)	30	CFM
Other Bedrooms	2	@ 15 CFM(7.5L/S)	30	CFM
Total			60	CFM

PRINCIPAL EXHAUST FAN

10. Principal Exhaust Fan

Fan 1

Location: BEDROOM 1; HVI rated: [x]

Manufacturer: FANTECH; Model:

Design Airflow High: 110 CFM; Low: 70 CFM; Sones:

If Using HRV/ERV:

60 % Sensible Efficiency @ 0°C — 62 CFM

56 % Sensible Efficiency @ -25°C — 66 CFM

SUPPLEMENTAL EXHAUST CAPACITY

11. Supplemental Exhaust Fan Capacity (SEF)

Total Ventilation Capacity	CFM
Less Principal Ventilation Capacity	CFM
Required Supplemental Ventilation Capacity	CFM

ADDITIONAL EXHAUST EQUIPMENT

12. Additional Equipment

Fan 2

Location: BATH 1; 1.2 Sones

Manufacturer/Model: NAUTIKA BOREAS; [ ] TVC

Design airflow: 130 CFM

Fan 3

Location: KITCHEN; 3.5 Sones

Manufacturer/Model: NUTONE; [ ] TVC

Design airflow: 250 CFM

Fan 4

Location: BATH 2; 1.2 Sones

Manufacturer/Model: NAUTIKA BOREAS; [ ] TVC

Design airflow: 130 CFM

DESIGNER CONSENT

13. Designer Consent

I, _____

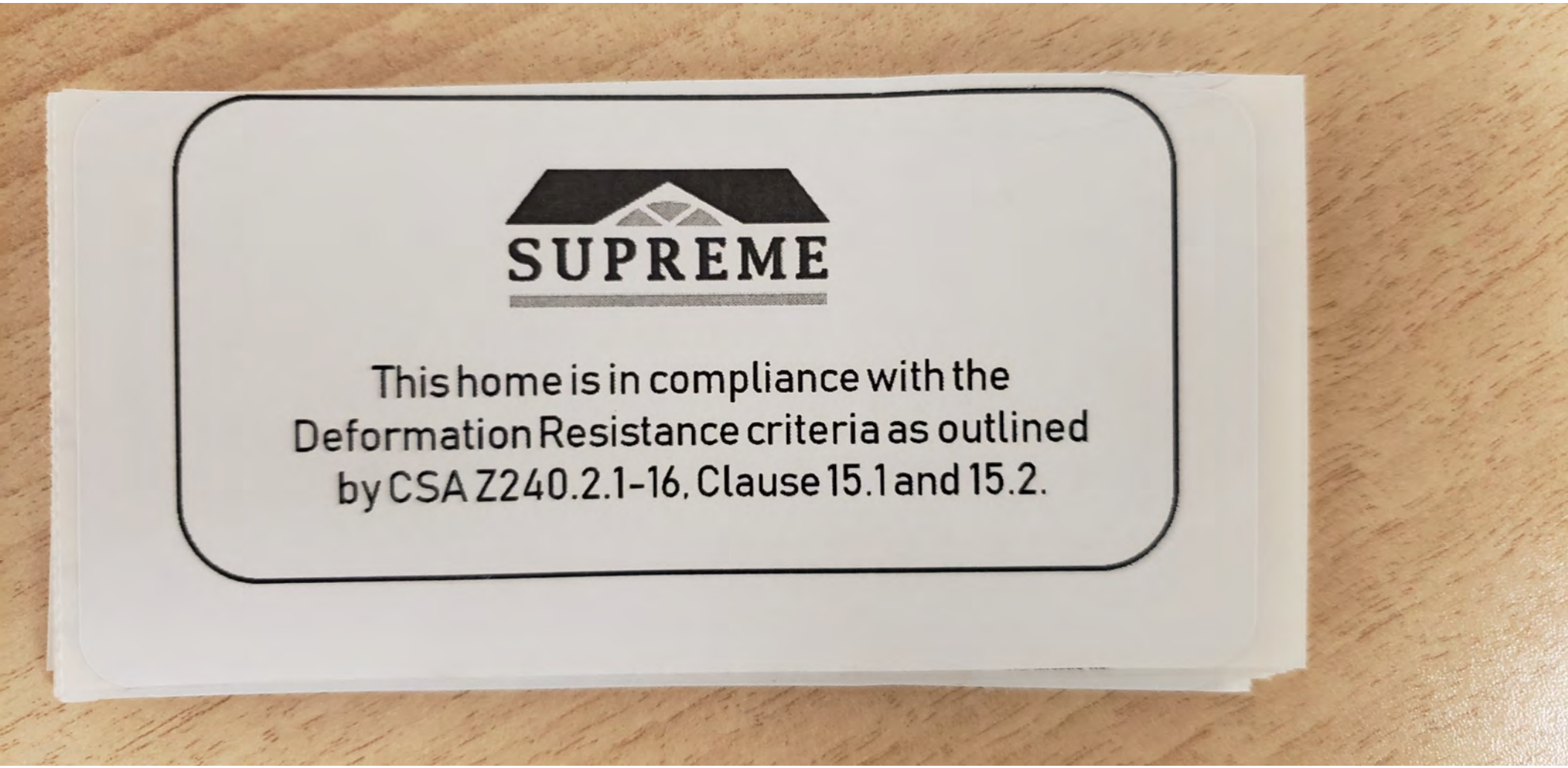
have reviewed and take responsibility for the design work described In this document and I am qualified in the appropriate categories.

Date: 06 / 06 / 2024

Signature: *oliver moreau gallant*

Conversion Note: 1 L/S = 2 CFM (For hard conversion, use 1 L/S = 2.118 CFM)

The heating ventilation was installed following CSA A277 requirements under Supremes CSA certification #88611


SUPREME
This home is in compliance with the
Deformation Resistance criteria as outlined
by CSA Z240.2.1-16, Clause 15.1 and 15.2.

Certificate of Compliance

Certificate: 2507736 **Master Contract:** 163572

Project: 80065796 **Date Issued:** 2022-01-18

Issued To: **Supreme Homes, A Div of Les Entreprises A.R. Savoie & Fils Ltee**
2650 Rue Principale
Tracadie-Sheila, New Brunswick, E1X 1G4
Canada

Attention: Steven Léger

The products listed below are eligible to bear the CSA Mark shown

Issued by: *Mohammad Budeiri*
Mohammad Budeiri

PRODUCTS

CLASS - C813101 - FACTORY CONSTRUCTED BUILDINGS AND STRUCTURES - Prefabricated Homes

Certification of Prefabricated Homes under the CSA - A277 Program in compliance with Part 9 of the 2010 Quebec Construction Code, 2012 Ontario Building Code, and the 2015 National Building Code of Canada as provincially amended, by New Brunswick, Nova Scotia, PEI, Newfoundland and Labrador. This certification service applies to the construction of detached, semi-detached and row houses, together with their ancillary private storage garages, provided such houses:

a) have no shared egress facilities;
b) have no dwelling unit above or below them;
c) have no shared service spaces such as attics, crawl spaces, service shafts or service rooms;
d) are self-contained with respect to heating and ventilation; and
e) have a building area not greater than 600 m^2, and building height of not more than 3 storeys.

NOTES:

1. This certification service does not include day care facilities, commercial/industrial units, apartment buildings, hotels, motels or detention occupancy buildings.
2. This certification service does not include panelized homes or buildings.

Supplement to Certificate of Compliance

Certificate: 2507736 **Master Contract:** 163572

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

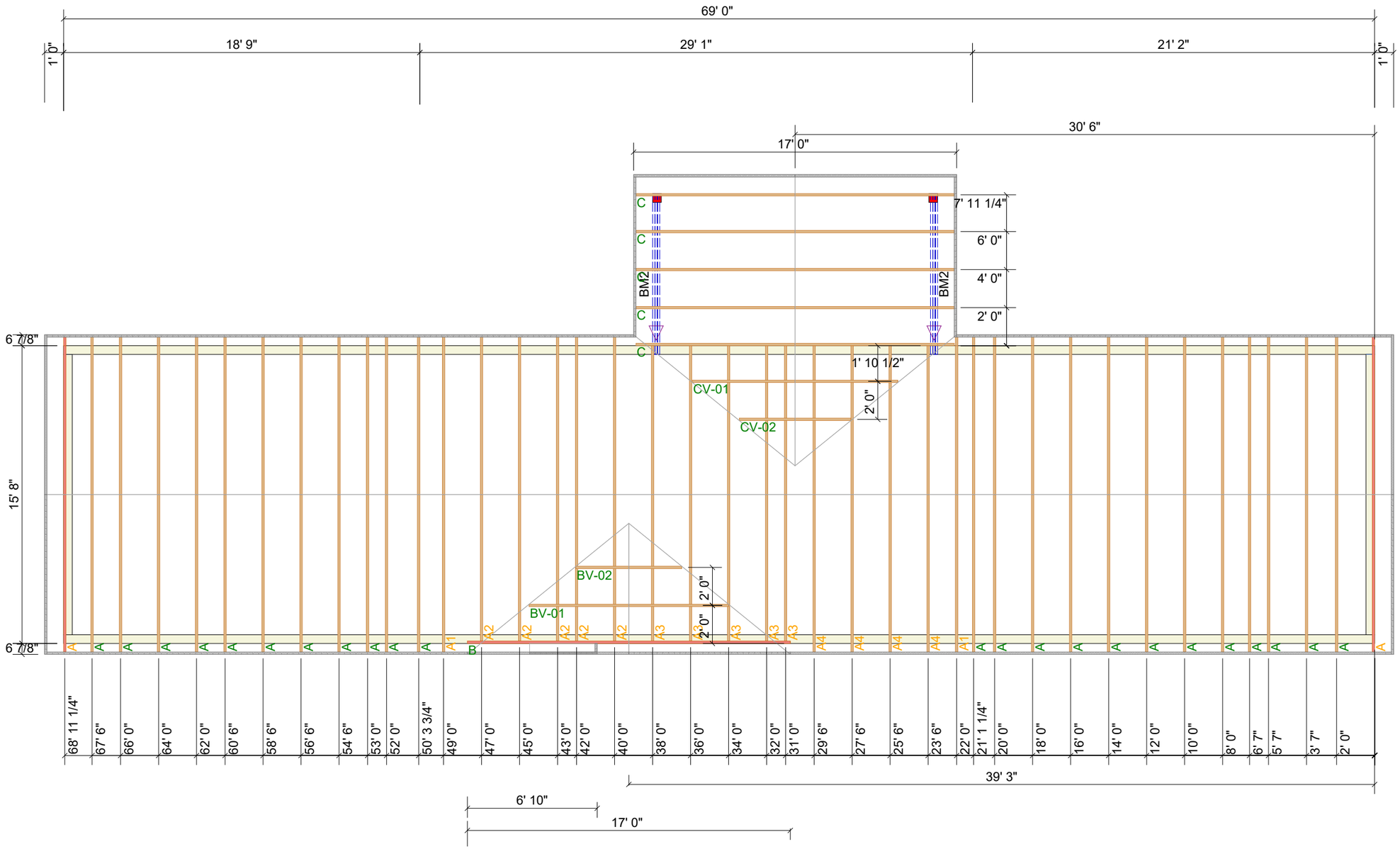
Project	Date	Description
80065796	2022-01-18	Validation audit and scope expansion to the province of Ontario. Report updated to Notice 22 to the requirements of CSA Standard A277-16 for Class 8131-01.
70015203	2014-12-29	Factory validation project. Takes the place of one quarterly factory inspection
2718959	2014-07-08	Factory validation project. Takes the place of one quartly factory inspection.
2566219	2012-11-21	Validation project. Updated report and Quality Manual

PROJECT # 241289

J2401576-R

199 rue l'Anse
Eel River Dundee, NB E8E 1R2
1-800-667-8787
www.leonchouinard.com

Client:	MAISONS SUPREMES
Job Name:	MSH 6590 Truss Mini
Date:	5/23/2024
Designer:	Phillippe Diotte
Loadings:	**Ss**=35.505 lb/ft² / **Sr**=8.354 lb/ft²
Level:	**MAIN FLOOR**



GENERAL NOTES:

THIS LAYOUT IS INTENDED FOR THE INSTALLATION OF THE ROOF TRUSSES ONLY.

- All trusses have been designed as individual components, therefore, they are to be incorporated to the building's design as per building designer's specifications.
- See shop drawing of identified trusses for further relative details of the truss.
- All temporary and permanent bracing is the building designer's responsibility.
- All bearing designs such as: walls, opening headers, beams and columns are as well, the building designer's responsibility.
- See enclosed brochure entitled as: Continuous lateral bracing, Erection and General bracing of wood trusses published by the Quebec Wood Structures Manufacturers Association (QWSMA) for further general information for that matter.

TOTAL ROOF AREA: 1397 ft²
FACTORY ROOF AREA: 1250 ft²

ROOF TRUSS LAYOUT

SCALE: NTS

MiTek Canada, Inc.
240 Stirling Crescent
Bradford, ON.Canada L3Z 4L5
Phone (905) 952-2900
Toll Free (800) 268-3434
Fax (905) 952-2901

May 27,2024

Re: J2401576
MSH 6590 Truss Mini

The truss drawing(s) referenced below have been prepared by or for MiTek Canada, Inc. under my direct supervision based on the parameters provided by Leon Chouinard & Fils Cie (CA).

Pages or sheets covered by this seal: P8163583 thru P8163589

The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with TPIC. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek's customer's file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design. Engineering Services provided by MiTek Canada, Inc

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
J2401576	A	25	1	MSH 6590 Truss Mini TRUSS DESC.	P8163583

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

Version 8.730 S Apr 4 2024 MiTek Industries, Inc. Thu May 23 15:01:58 2024 Page 1

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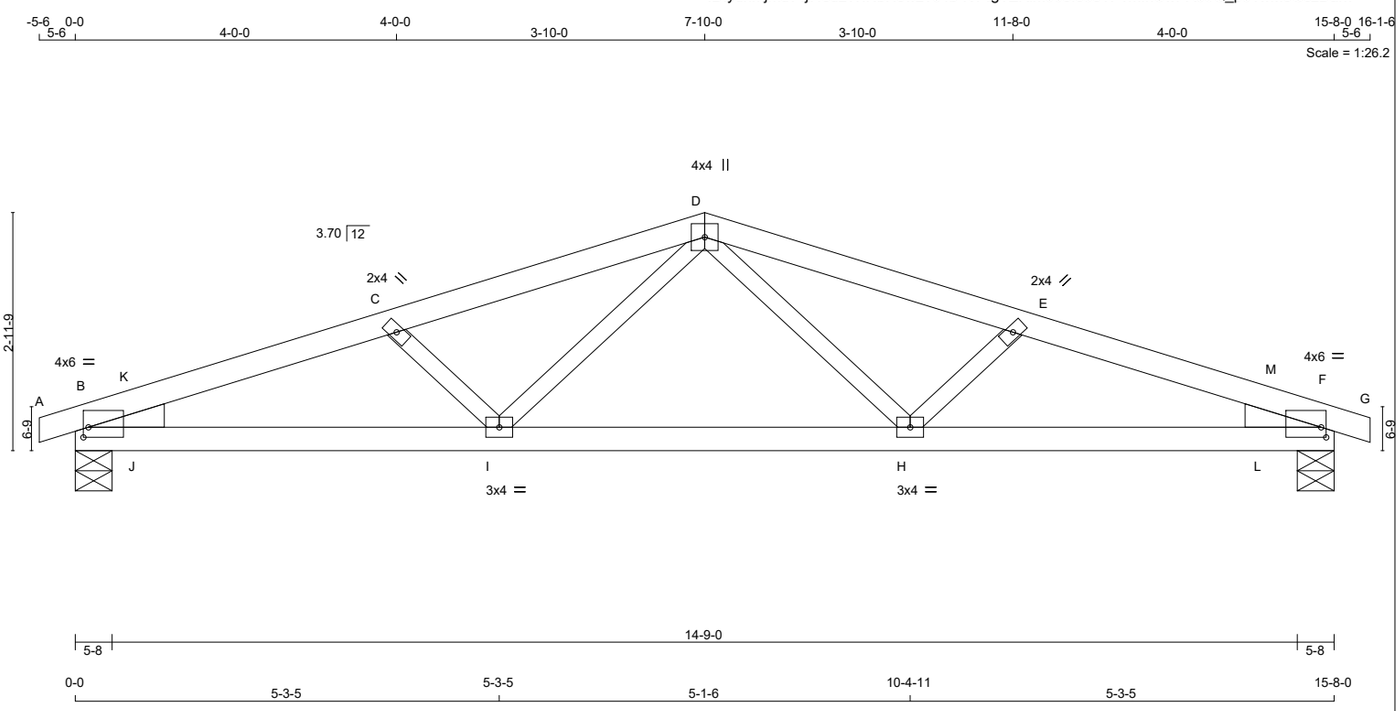

TOTAL WEIGHT = 25 X 49 = 1215 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	4.0	6.0	1.50	0.75
C	TMW+w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TMBH1-I	MT20	4.0	6.0	1.50	0.75
H	BMWW-t	MT20	3.0	4.0		
I	BMWW-t	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	896	0	896	0	0	5-8	5-8	2x4 L
F	896	0	896	0	0	5-8	5-8	2x4 R

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	624	464 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
F	624	464 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-4 / 0	-91.1	-91.1	0.01 (1)	10.00
B- K	-1949 / 0	-91.1	-91.1	0.18 (1)	4.67
K- C	-1828 / 0	-91.1	-91.1	0.18 (1)	4.80
C- D	-1599 / 0	-91.1	-91.1	0.21 (1)	5.02
D- E	-1599 / 0	-91.1	-91.1	0.21 (1)	5.02
E- M	-1828 / 0	-91.1	-91.1	0.18 (1)	4.80
M- F	-1949 / 0	-91.1	-91.1	0.18 (1)	4.67
F- G	-4 / 0	-91.1	-91.1	0.01 (1)	10.00
B- J	0 / 1740	-17.5	-17.5	0.38 (1)	10.00
J- I	0 / 1740	-17.5	-17.5	0.38 (1)	10.00
I- H	0 / 1229	-17.5	-17.5	0.28 (1)	10.00
H- L	0 / 1740	-17.5	-17.5	0.38 (1)	10.00
L- F	0 / 1740	-17.5	-17.5	0.38 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	0 / 426	0.10 (1)
H- E	-323 / 0	0.05 (1)
I- D	0 / 426	0.10 (1)
C- I	-323 / 0	0.05 (1)
J- K	0 / 148	0.00 (1)
L- M	0 / 148	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.52")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.21/1.00 (C-D:1) , BC=0.38/1.00 (B-J:1) , WB=0.10/1.00 (D-I:1) , SSI=0.14/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.40 (B) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	MSH 6590 Truss Mini	DRWG NO.
J2401576	A1	2	1	TRUSS DESC.		P8163584

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

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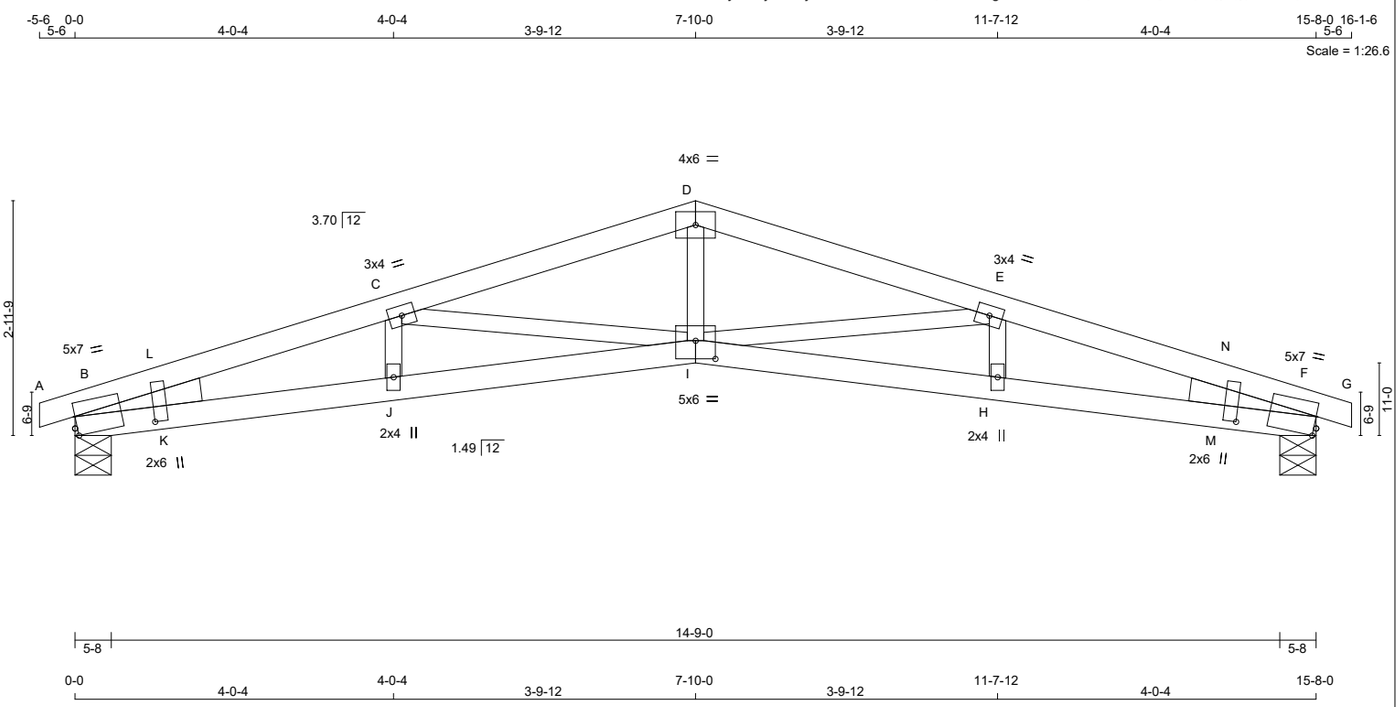

TOTAL WEIGHT = 2 X 50 = 100 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBM1-m	MT20	5.0	7.0	Edge	0.25
B	WP+I	MT20	2.0	6.0	0.50	12.25
C	TMWW-t	MT20	3.0	4.0		
D	TTW-p	MT20	4.0	6.0		
E	TMWW-t	MT20	3.0	4.0		
F	TMBM1-m	MT20	5.0	7.0	Edge	0.25
F	WP+I	MT20	2.0	6.0	0.50	12.25
H	BMW+w	MT20	2.0	4.0		
I	BBWWW-p	MT20	5.0	6.0	2.75	3.00
J	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG	HEEL
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	WEDGE
B	896	0	896	0	0	5-8	5-8	2x4 L
F	896	0	896	0	0	5-8	5-8	2x4 R

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	624	464 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
F	624	464 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.11 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-7 / 0	-91.1	-91.1	0.01 (1)	10.00
B- L	-2589 / 0	-91.1	-91.1	0.22 (1)	4.11
L- C	-2430 / 0	-91.1	-91.1	0.22 (1)	4.24
C- D	-1996 / 0	-91.1	-91.1	0.27 (1)	4.53
D- E	-1996 / 0	-91.1	-91.1	0.27 (1)	4.53
E- N	-2430 / 0	-91.1	-91.1	0.22 (1)	4.24
N- F	-2589 / 0	-91.1	-91.1	0.22 (1)	4.11
F- G	-7 / 0	-91.1	-91.1	0.01 (1)	10.00
B- K	0 / 2337	-17.5	-17.5	0.55 (1)	10.00
K- J	0 / 2313	-17.5	-17.5	0.55 (1)	10.00
J- I	0 / 2327	-17.5	-17.5	0.54 (1)	10.00
I- H	0 / 2327	-17.5	-17.5	0.54 (1)	10.00
H- M	0 / 2313	-17.5	-17.5	0.55 (1)	10.00
M- F	0 / 2337	-17.5	-17.5	0.55 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- D	0 / 822	0.18 (1)
I- E	-401 / 0	0.11 (1)
H- E	-61 / 46	0.02 (4)
C- I	-401 / 0	0.11 (1)
J- C	-61 / 46	0.02 (4)
K- L	0 / 232	0.00 (1)
M- N	0 / 232	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.52")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 721 (0.26")

CSI: TC=0.27/1.00 (C-D:1) , BC=0.55/1.00 (B-K:1) , WB=0.18/1.00 (D-I:1) , SSI=0.14/1.00 (E-N:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (I) (INPUT = 0.90)
JSI METAL= 0.49 (F) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	MSH 6590 Truss Mini	DRWG NO.
J2401576	A2	5	1	TRUSS DESC.		P8163585

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

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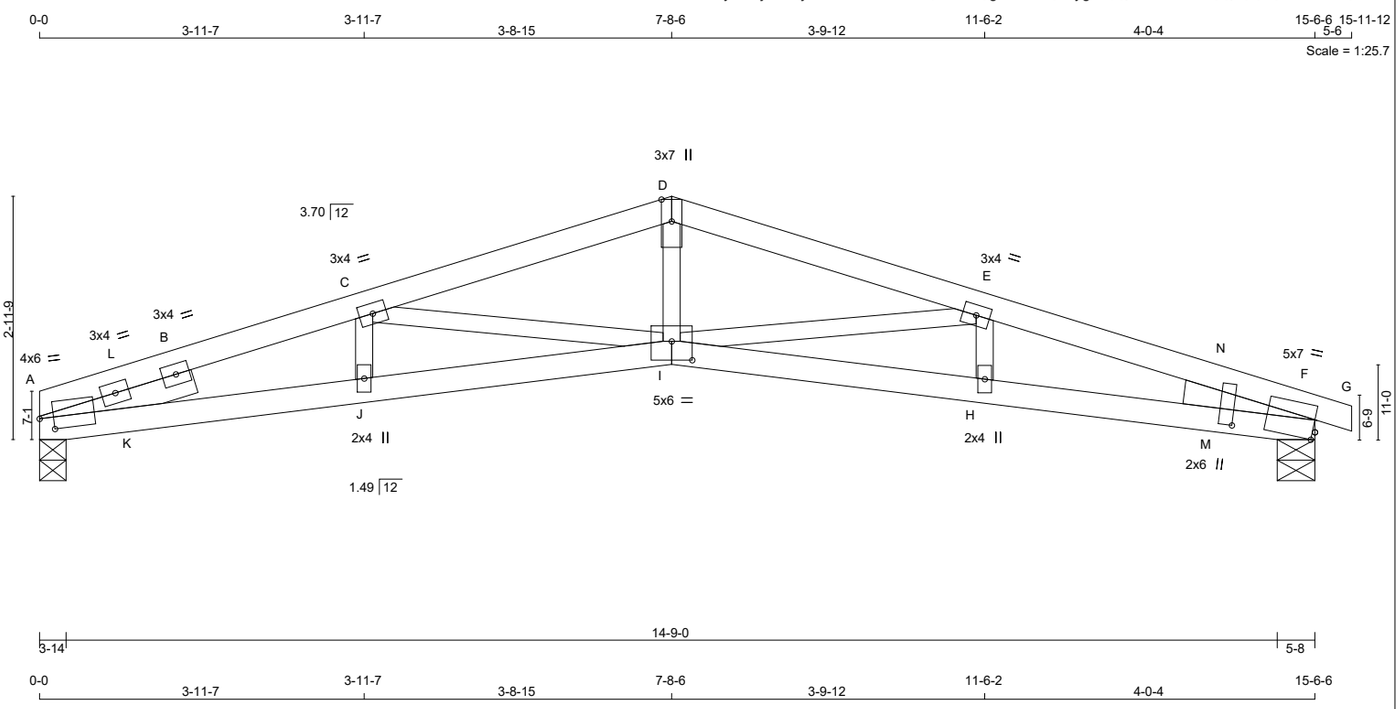

TOTAL WEIGHT = 5 X 50 = 248 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
A - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMR1-I	MT20	4.0	6.0	1.75	2.00
A	RT-t	MT20	3.0	4.0		
A	RT-t	MT20	3.0	4.0		
C	TMWW-t	MT20	3.0	4.0		
D	TTW+p	MT20	3.0	7.0	Edge	
E	TMWW-t	MT20	3.0	4.0		
F	TMBM1-m	MT20	5.0	7.0	Edge	0.25
F	WP+I	MT20	2.0	6.0	0.50	12.25
H	BMW+w	MT20	2.0	4.0		
I	BBWWW-p	MT20	5.0	6.0	2.75	3.00
J	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG	HEEL
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	WEDGE
A	844	0	844	0	0	3-14	3-14	
F	888	0	888	0	0	5-8	5-8	2x4 R

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	588	433 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
F	619	460 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS		
MEMB. FR-TO	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- L	-1910 / 0		-91.1	-91.1	0.12 (1)	4.78	J- C	-15 / 56	0.02 (4)
L- B	-1955 / 0		-91.1	-91.1	0.23 (1)	4.61	C- I	-387 / 0	0.10 (1)
B- C	-1955 / 0		-91.1	-91.1	0.23 (1)	4.61	I- D	0 / 804	0.18 (1)
C- D	-1961 / 0		-91.1	-91.1	0.26 (1)	4.58	I- E	-409 / 0	0.11 (1)
D- E	-1961 / 0		-91.1	-91.1	0.26 (1)	4.57	H- E	-59 / 46	0.02 (4)
E- N	-2403 / 0		-91.1	-91.1	0.21 (1)	4.26	K- L	0 / 909	0.00 (1)
N- F	-2562 / 0		-91.1	-91.1	0.22 (1)	4.14	K- B	-1071 / 0	0.11 (1)
F- G	-7 / 0		-91.1	-91.1	0.01 (1)	10.00	M- N	0 / 229	0.00 (1)
A- K	0 / 1624		-17.5	-17.5	0.35 (1)	10.00			
K- J	0 / 2269		-17.5	-17.5	0.48 (1)	10.00			
J- I	0 / 2278		-17.5	-17.5	0.48 (1)	10.00			
I- H	0 / 2302		-17.5	-17.5	0.53 (1)	10.00			
H- M	0 / 2288		-17.5	-17.5	0.54 (1)	10.00			
M- F	0 / 2312		-17.5	-17.5	0.54 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.52")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 762 (0.24")

CSI: TC=0.26/1.00 (D-E:1) , BC=0.54/1.00 (F-M:1) , WB=0.18/1.00 (D-I:1) , SSI=0.35/1.00 (C-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.54 (A) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	MSH 6590 Truss Mini	DRWG NO.
J2401576	A3	5	1	TRUSS DESC.		P8163586

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

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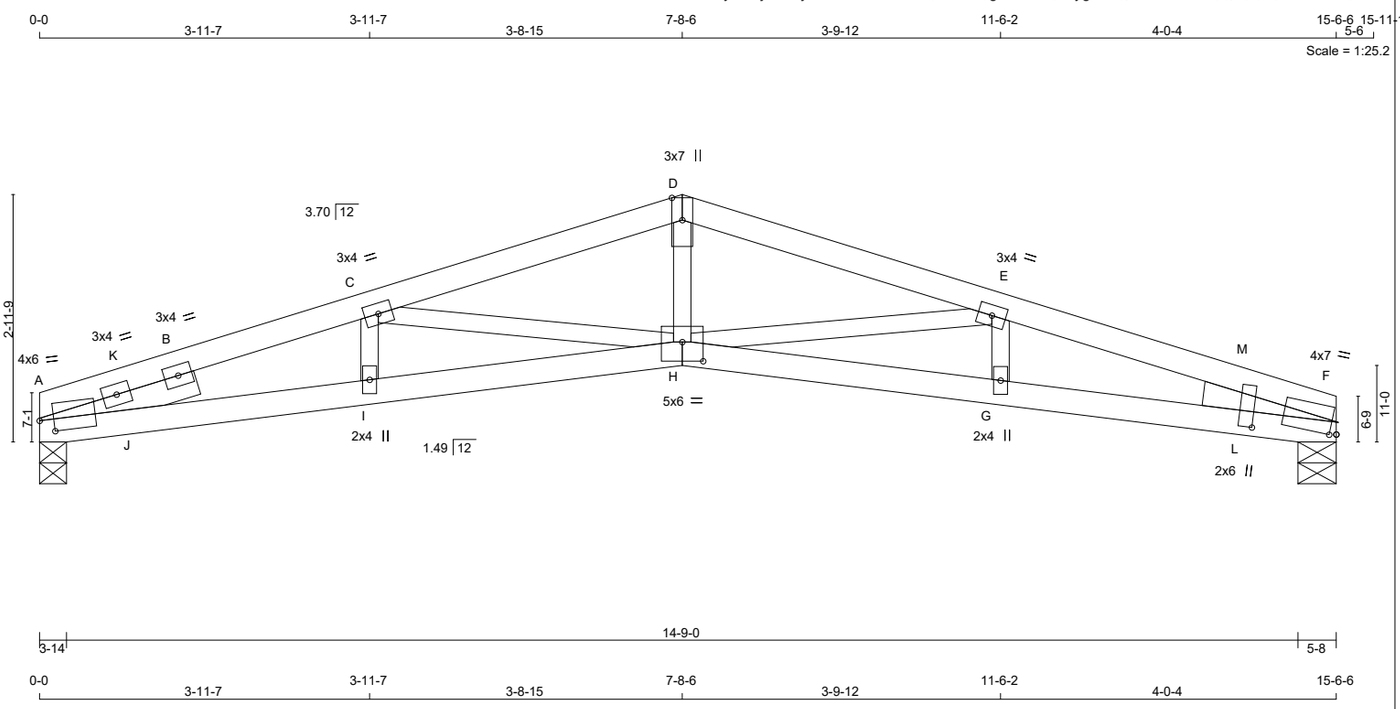

TOTAL WEIGHT = 5 X 49 = 245 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
A - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMR1-I	MT20	4.0	6.0	1.75	2.00
A	RT-t	MT20	3.0	4.0		
A	RT-t	MT20	3.0	4.0		
C	TMWW-t	MT20	3.0	4.0		
D	TTW+p	MT20	3.0	7.0	Edge	
E	TMWW-t	MT20	3.0	4.0		
F	TMBM1-m	MT20	4.0	7.0	0.25	1.00
F	WP+I	MT20	2.0	6.0	0.50	12.25
G	BMW+w	MT20	2.0	4.0		
H	BBWWW-p	MT20	5.0	6.0	2.75	3.00
I	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
A	844	0	844	0	0	3-14	3-14	
F	844	0	844	0	0	5-8	5-8	2x4 R

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	588	433 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
F	588	433 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- K	-1910 / 0		-91.1	-91.1	0.12 (1)	4.78
K- B	-1955 / 0		-91.1	-91.1	0.23 (1)	4.61
B- C	-1955 / 0		-91.1	-91.1	0.23 (1)	4.61
C- D	-1961 / 0		-91.1	-91.1	0.26 (1)	4.58
D- E	-1961 / 0		-91.1	-91.1	0.26 (1)	4.57
E- M	-2403 / 0		-91.1	-91.1	0.21 (1)	4.26
M- F	-2562 / 0		-91.1	-91.1	0.22 (1)	4.14
A- J	0 / 1624		-17.5	-17.5	0.35 (1)	10.00
J- I	0 / 2269		-17.5	-17.5	0.48 (1)	10.00
I- H	0 / 2278		-17.5	-17.5	0.48 (1)	10.00
H- G	0 / 2302		-17.5	-17.5	0.53 (1)	10.00
G- L	0 / 2288		-17.5	-17.5	0.54 (1)	10.00
L- F	0 / 2312		-17.5	-17.5	0.54 (1)	10.00

WEBS MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO	MAX CSI (LC)
I- C	-15 / 56		0.02 (4)
C- H	-387 / 0		0.10 (1)
H- D	0 / 804		0.18 (1)
H- E	-409 / 0		0.11 (1)
G- E	-59 / 46		0.02 (4)
J- K	0 / 909		0.00 (1)
J- B	-1071 / 0		0.11 (1)
L- M	0 / 229		0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.52")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 762 (0.24")

CSI: TC=0.26/1.00 (D-E:1) , BC=0.54/1.00 (F-L:1) , WB=0.18/1.00 (D-H:1) , SSI=0.35/1.00 (C-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.54 (A) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
J2401576	A4	4	1	MSH 6590 Truss Mini TRUSS DESC.	P8163587

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

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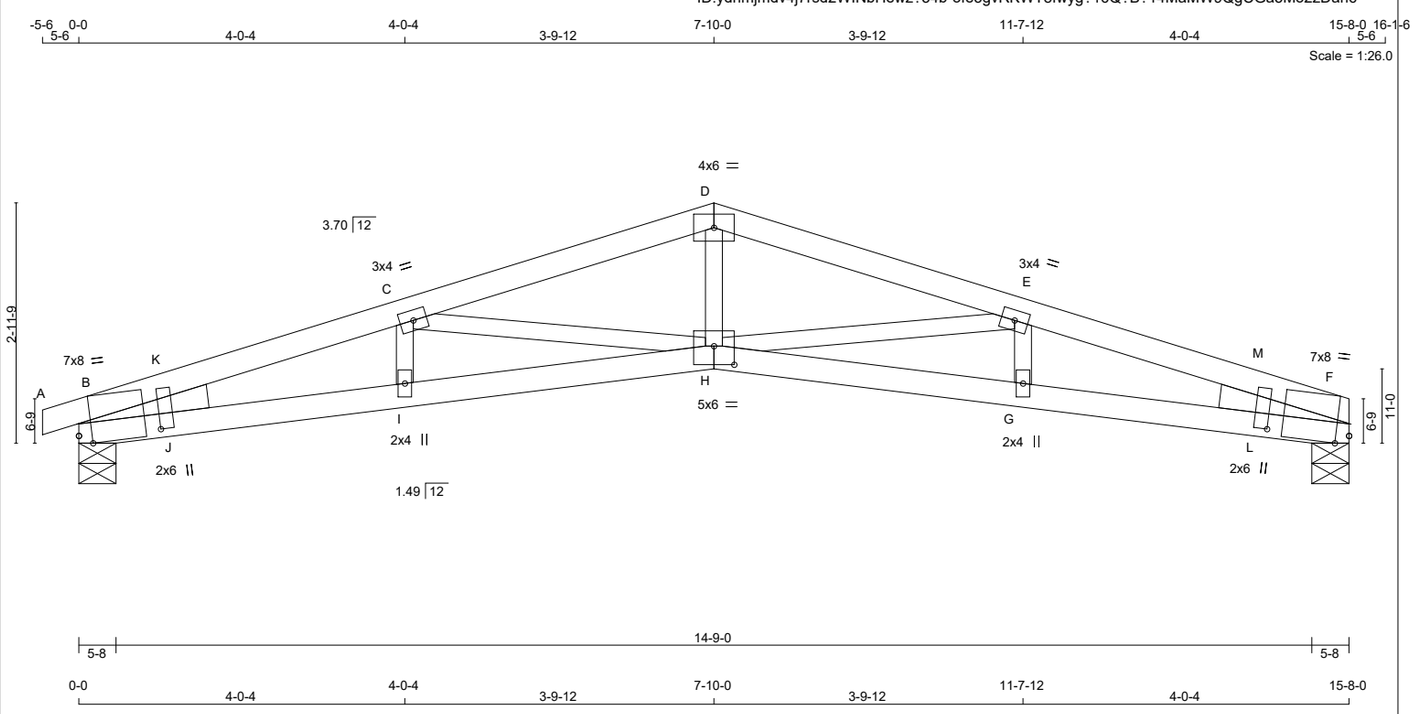

TOTAL WEIGHT = 4 X 50 = 198 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBM1-I	MT20	7.0	8.0	Edge	2.00
B	WP+I	MT20	2.0	6.0	0.50	12.25
C	TMWW-t	MT20	3.0	4.0		
D	TTW-p	MT20	4.0	6.0		
E	TMWW-t	MT20	3.0	4.0		
F	TMBM1-I	MT20	7.0	8.0	Edge	2.00
F	WP+I	MT20	2.0	6.0	0.50	12.25
G	BMW+w	MT20	2.0	4.0		
H	BBWWW-p	MT20	5.0	6.0	2.75	3.00
I	BMW+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	HEEL
B	896	0	896	0	0	5-8	5-8	2x4 L
F	851	0	851	0	0	5-8	5-8	2x4 R

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	624	464 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
F	593	437 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.11 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-7 / 0	-91.1	-91.1	0.01 (1)	10.00
B- K	-2589 / 0	-91.1	-91.1	0.22 (1)	4.11
K- C	-2430 / 0	-91.1	-91.1	0.22 (1)	4.24
C- D	-1996 / 0	-91.1	-91.1	0.27 (1)	4.53
D- E	-1996 / 0	-91.1	-91.1	0.27 (1)	4.53
E- M	-2430 / 0	-91.1	-91.1	0.22 (1)	4.24
M- F	-2589 / 0	-91.1	-91.1	0.22 (1)	4.11
B- J	0 / 2337	-17.5	-17.5	0.55 (1)	10.00
J- I	0 / 2313	-17.5	-17.5	0.55 (1)	10.00
I- H	0 / 2327	-17.5	-17.5	0.54 (1)	10.00
H- G	0 / 2327	-17.5	-17.5	0.54 (1)	10.00
G- L	0 / 2313	-17.5	-17.5	0.55 (1)	10.00
L- F	0 / 2337	-17.5	-17.5	0.55 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- D	0 / 822	0.18 (1)
H- E	-401 / 0	0.11 (1)
G- E	-61 / 46	0.02 (4)
C- H	-401 / 0	0.11 (1)
I- C	-61 / 46	0.02 (4)
J- K	0 / 232	0.00 (1)
L- M	0 / 232	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.52")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 721 (0.26")

CSI: TC=0.27/1.00 (C-D:1) , BC=0.55/1.00 (B-J:1) , WB=0.18/1.00 (D-H:1) , SSI=0.14/1.00 (E-M:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (H) (INPUT = 0.90)
JSI METAL= 0.46 (F) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
J2401576	B	1	1	MSH 6590 Truss Mini TRUSS DESC.	P8163588

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

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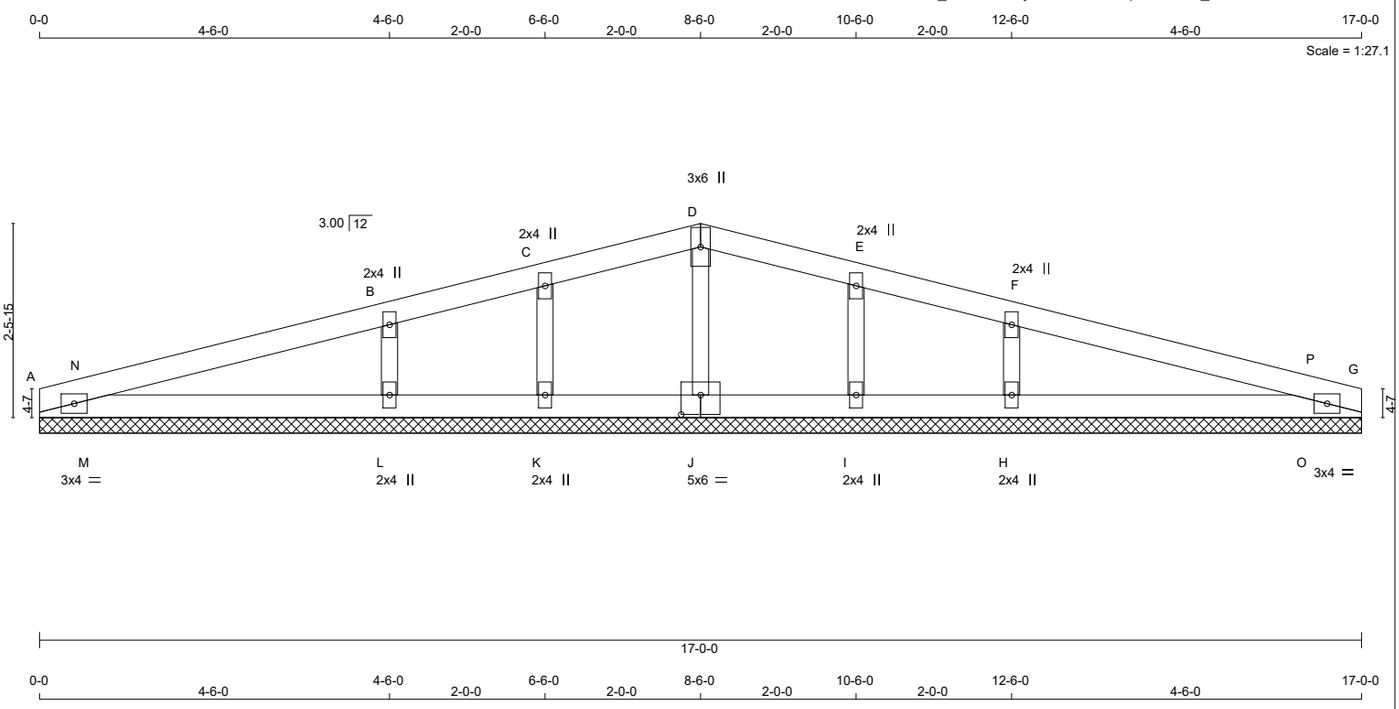

TOTAL WEIGHT = 45 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
A - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMB1-I	MT20	3.0	4.0		
B, C, E, F						
B	TMW+w	MT20	2.0	4.0		
D	TTW+p	MT20	3.0	6.0		
G	TMB1-I	MT20	3.0	4.0		
H, I, K, L						
H	BMW1+w	MT20	2.0	4.0		
J	BSW1-I	MT20	5.0	6.0	3.00	3.00

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- N	-91 / 0	-91.1	-91.1	0.04 (4)		6.25
N- B	-76 / 0	-91.1	-91.1	0.18 (1)		6.25
B- C	-88 / 0	-91.1	-91.1	0.18 (1)		6.25
C- D	-72 / 0	-91.1	-91.1	0.05 (1)		6.25
D- E	-72 / 0	-91.1	-91.1	0.05 (1)		6.25
E- F	-88 / 0	-91.1	-91.1	0.18 (1)		6.25
F- P	-76 / 0	-91.1	-91.1	0.18 (1)		6.25
P- G	-91 / 0	-91.1	-91.1	0.04 (4)		6.25
A- M	0 / 82	-17.5	-17.5	0.14 (1)		10.00
M- L	0 / 82	-17.5	-17.5	0.14 (1)		10.00
L- K	0 / 71	-17.5	-17.5	0.10 (1)		10.00
K- J	0 / 69	-17.5	-17.5	0.03 (1)		10.00
J- I	0 / 69	-17.5	-17.5	0.03 (1)		10.00
I- H	0 / 71	-17.5	-17.5	0.10 (1)		10.00
H- O	0 / 82	-17.5	-17.5	0.14 (1)		10.00
O- G	0 / 82	-17.5	-17.5	0.14 (1)		10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- D	-137 / 0	0.02 (1)
K- C	-131 / 0	0.02 (1)
L- B	-358 / 0	0.05 (1)
I- E	-131 / 0	0.02 (1)
H- F	-358 / 0	0.05 (1)
M- N	-146 / 23	0.00 (1)
O- P	-146 / 23	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.18/1.00 (B-N:1) , BC=0.14/1.00 (G-O:1) , WB=0.05/1.00 (B-L:1) , SSI=0.16/1.00 (B-N:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (D) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

PEO
Certificate No. 10889485

MiTek®
240 Stirling Crescent
Bradford, ON. L3Z 4L5

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
J2401576	C	5	1	MSH 6590 Truss Mini TRUSS DESC.	P8163589

Leon Chouinard & Fils Cie (CA), Eel River Crossing, NB - E8E 1R2,

Version 8.730 S Apr 4 2024 MiTek Industries, Inc. Thu May 23 15:02:00 2024 Page 1

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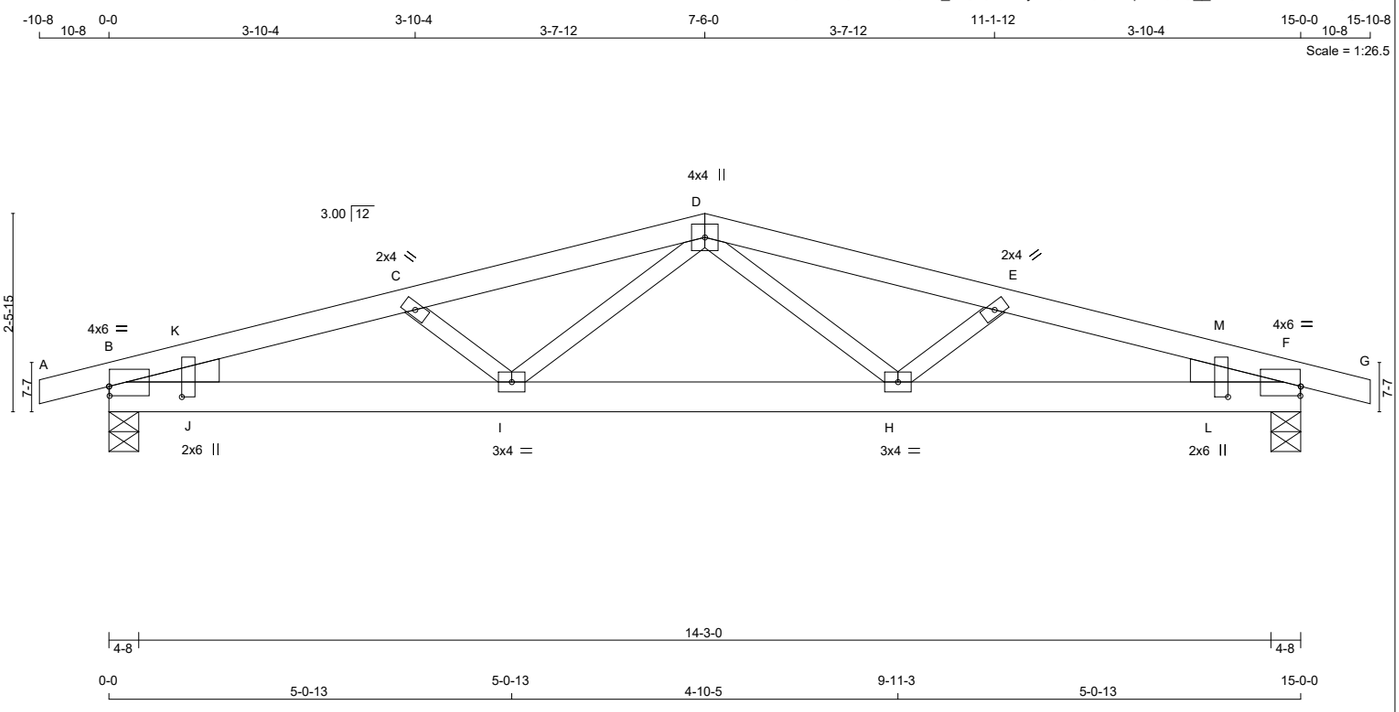

TOTAL WEIGHT = 5 X 52 = 260 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - F	2x5	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	4.0	6.0	1.50	
B	WP+I	MT20	2.0	6.0	1.50	11.00
C	TMW+w	MT20	2.0	4.0		
D	TTWW+p	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TMB1-I	MT20	4.0	6.0	1.50	
F	WP+I	MT20	2.0	6.0	1.50	11.00
H	BMWW-t	MT20	3.0	4.0		
I	BMWW-t	MT20	3.0	4.0		

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	898	0	898	0	0	4-8	4-8	2x4 L
F	898	0	898	0	0	4-8	4-8	2x4 R

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	624	469 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
F	624	469 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.59 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-2 / 0	-91.1	-91.1	0.04 (1)	10.00
B- K	-2053 / 0	-91.1	-91.1	0.17 (1)	4.59
K- C	-1934 / 0	-91.1	-91.1	0.17 (1)	4.71
C- D	-1704 / 0	-91.1	-91.1	0.21 (1)	4.90
D- E	-1704 / 0	-91.1	-91.1	0.21 (1)	4.90
E- M	-1934 / 0	-91.1	-91.1	0.17 (1)	4.71
M- F	-2053 / 0	-91.1	-91.1	0.17 (1)	4.59
F- G	-2 / 0	-91.1	-91.1	0.04 (1)	10.00
B- J	0 / 1868	-17.5	-17.5	0.35 (1)	10.00
J- I	0 / 1868	-17.5	-17.5	0.35 (1)	10.00
I- H	0 / 1366	-17.5	-17.5	0.28 (1)	10.00
H- L	0 / 1868	-17.5	-17.5	0.35 (1)	10.00
L- F	0 / 1868	-17.5	-17.5	0.35 (1)	10.00

WEBS MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
D- H	0 / 381	0.09 (1)
H- E	-305 / 0	0.05 (1)
I- D	0 / 381	0.09 (1)
C- I	-305 / 0	0.05 (1)
J- K	0 / 183	0.00 (1)
L- M	0 / 183	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	27.9	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	37.9	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 35.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 27.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.50")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.21/1.00 (D-E:1) , BC=0.35/1.00 (B-J:1) , WB=0.09/1.00 (D-H:1) , SSI=0.13/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.42 (B) (INPUT = 1.00)

PEO
Certificate No. 10889485

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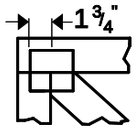
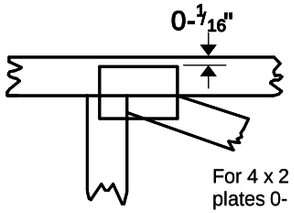
240 Stirling Crescent
Bradford, ON. L3Z 4L5

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths or mm.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

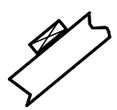
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

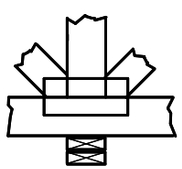
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING

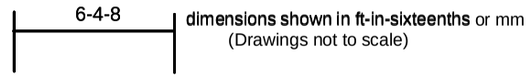


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min. size shown is for crushing only.

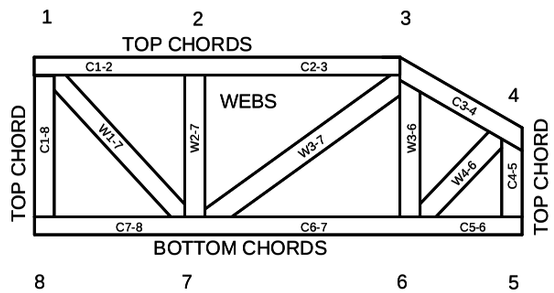
Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI1: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



dimensions shown in ft-in-sixteenths or mm
(Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

MiTek

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

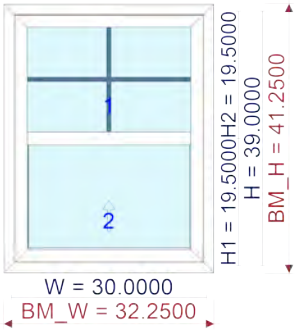
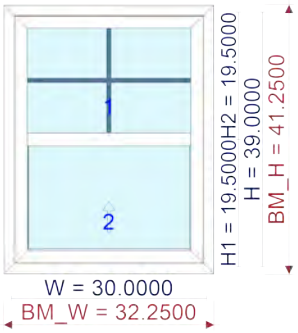
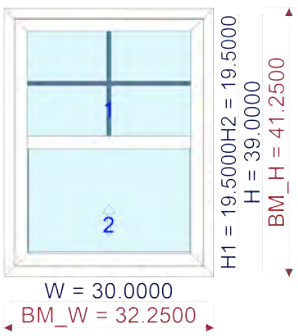
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI1.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

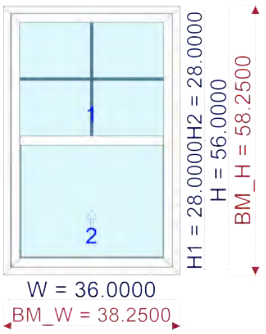
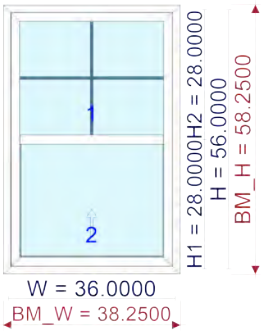
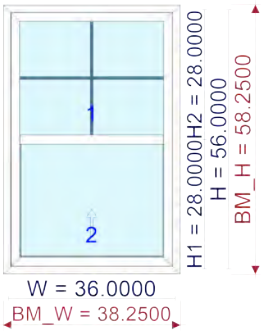
Order: 1064441

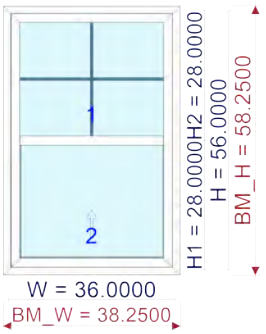
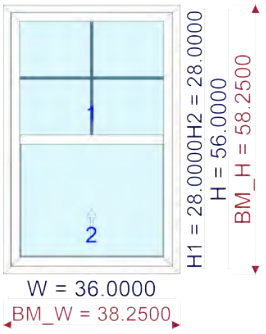
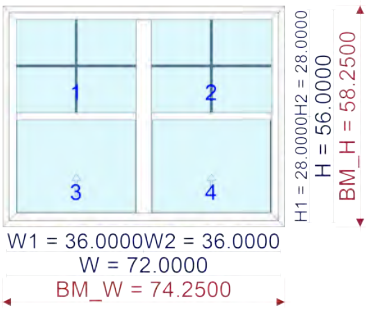
SUPREME HOMES		Project	SUPREME HOMES	PrefWeb#: 1000164321
CP 4029 SUCC B		Delivery Addres	CP 4029 SUCC B	
TRACADIE SHEILA, NB		City	TRACADIE SHEILA, NB	
E1X 1G4		Postal Code	E1X 1G4	
506-395-6997		Telephone	506-395-6997	
506-395-7622 fax		Fax	506-395-7622	
Customer PO#	73754	Payment Terms	2%15DAYS/NET30	
Delivery Date	June 11, 2024	Quotation Date	May 16, 2024	

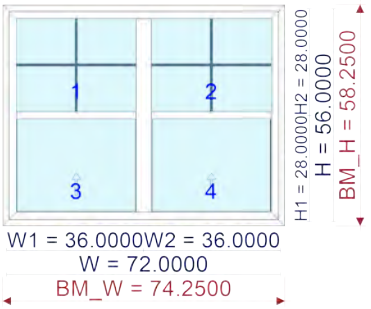
Attention: Daniel Dugas

Entered by: Tammy Robichaud

Description	Diagram
Line # 1 **Room: 6-W1** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **Size 30.0000 X 39.0000 (30 X 39) RSO 31.0000 X 40.0000** ***(Metric Size 762.0 X 990.6 RSO 787.4 X 1016.0)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 2 **Room: 10-W1** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **Size 30.0000 X 39.0000 (30 X 39) RSO 31.0000 X 40.0000** ***(Metric Size 762.0 X 990.6 RSO 787.4 X 1016.0)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 3 **Room: 8-W1** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **Size 30.0000 X 39.0000 (30 X 39) RSO 31.0000 X 40.0000** ***(Metric Size 762.0 X 990.6 RSO 787.4 X 1016.0)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**

Description	Diagram
Line # 4 **Room: 2-W2** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **MEETS NBCC EGRESS** **Size 36.0000 X 56.0000 (36 X 56) RSO 37.0000 X 57.0000** ***(Metric Size 914.4 X 1422.4 RSO 939.8 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 5 **Room: 3-W2** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **MEETS NBCC EGRESS** **Size 36.0000 X 56.0000 (36 X 56) RSO 37.0000 X 57.0000** ***(Metric Size 914.4 X 1422.4 RSO 939.8 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 6 **Room: 7-W2** **Qty 1** **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon** **White** **MEETS NBCC EGRESS** **Size 36.0000 X 56.0000 (36 X 56) RSO 37.0000 X 57.0000** ***(Metric Size 914.4 X 1422.4 RSO 939.8 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**

Description	Diagram
Line # 7 Room: 9-W2 Qty 1 **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon White** **MEETS NBCC EGRESS** **Size 36.0000 X 56.0000 (36 X 56) RSO 37.0000 X 57.0000** ***(Metric Size 914.4 X 1422.4 RSO 939.8 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 8 Room: 1-W2 Qty 1 **1300 Series - Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon White** **MEETS NBCC EGRESS** **Size 36.0000 X 56.0000 (36 X 56) RSO 37.0000 X 57.0000** ***(Metric Size 914.4 X 1422.4 RSO 939.8 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG50-H PDP=2400 Pa NDP=-2400 Pa WP=720 Pa CAI=A3*	 **Exterior View**
Line # 9 Room: 4-W3 Qty 1 **1300 Series - Double Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon White** **MEETS NBCC EGRESS** **Size 72.0000 X 56.0000 (72 X 56) RSO 73.0000 X 57.0000** ***(Metric Size 1828.8 X 1422.4 RSO 1854.2 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *LC-PG50-H-FW PDP=2400 Pa NDP=-2400 Pa WP=440 Pa CAI=A3*	 **Exterior View**

Description	Diagram
Line # 10 **Room: 5-W3** **Qty 1** **1300 Series - Double Single Hung** **3 1/4 Frame 1 1/2 Incorp J-Trim, 7/8 Low-E Argon White** **MEETS NBCC EGRESS** **Size 72.0000 X 56.0000 (72 X 56) RSO 73.0000 X 57.0000** ***(Metric Size 1828.8 X 1422.4 RSO 1854.2 X 1447.8)*** *Color: 01 WHITE* **ENERGY DATA:** | *U=(1.65); SHGC=(0.50); ER=32 EEVR=KCPL-01329-0007-0001.1 *MEETS NBC ENERGY CODE** **NAFS:** | *LC-PG50-H-FW PDP=2400 Pa NDP=-2400 Pa WP=440 Pa CAI=A3*	 **Exterior View**

10 **TOTAL NUMBER OF ITEMS**

Changes to order must be emailed within 48

Order: 1064441

SUPREME HOMES		**Project**	**SUPREME HOMES**	**PrefWeb#: 1000164321**
CP 4029 SUCC B TRACADIE SHEILA, NB E1X 1G4 506-395-6997 506-395-7622 fax		**Delivery Addres** **City** **Postal Code** **Telephone** **Fax**	CP 4029 SUCC B TRACADIE SHEILA, NB E1X 1G4 506-395-6997 506-395-7622	GLOBAL WINDOWS AND DOORS
Customer PO#	73754	**Payment Terms**	2%15DAYS/NET30	
Delivery Date	**June 11, 2024**	**Quotation Date**	May 16, 2024	

Attention: Daniel Dugas

Entered by: Tammy Robichaud

Description	Diagram
Line # 1 **Room: 1-ED1** **Qty 1** **SINGLE DOOR** **22x48, 1 1/2in J- Trim Storm Door Prep Contemporary, 3-0, Left Hand In-Swing, 6 5/8 Frame, Vinyl Clad, Double Bore 2 1/8", 22x48, 3 Panel** **HP Sill, Mill** **Contemporary Style Lite Kit Frame** **Adjustable Stainless Steel Hinges , Vinyl Clad** **Louisbourg 2248 LEA** **Size 37.4375 X 82.1250 (37 7/16 X 82 1/8) RSO 38.4375 X 82.6250** ***(Metric Size 950.9 X 2086.0 RSO 976.3 X 2098.7)*** **ENERGY DATA:** | *U=(1.25); SHGC=(0.25); ER=24 EEVR=KCPL-01329-0015-0188.0 *MEETS NBC ENERGY CODE** **NAFS:** | *R-PG35-SHD PDP=1680 Pa NDP=-1680 Pa WP=540 Pa CAI=A3*	 **Exterior View**

1 TOTAL NUMBER OF ITEMS

Changes to order must be emailed within 48

Order: 1064441

SUPREME HOMES		**Project**	**SUPREME HOMES**	**PrefWeb#: 1000164321**
CP 4029 SUCC B		**Delivery Addres**	CP 4029 SUCC B	
TRACADIE SHEILA, NB		**City**	TRACADIE SHEILA, NB	
E1X 1G4		**Postal Code**	E1X 1G4	
506-395-6997		**Telephone**	506-395-6997	
506-395-7622 fax		**Fax**	506-395-7622	
Customer PO#	73754	**Payment Terms**	2%15DAYS/NET30	
Delivery Date	**June 11, 2024**	**Quotation Date**	May 16, 2024	

Attention: Daniel Dugas

Entered by: Tammy Robichaud

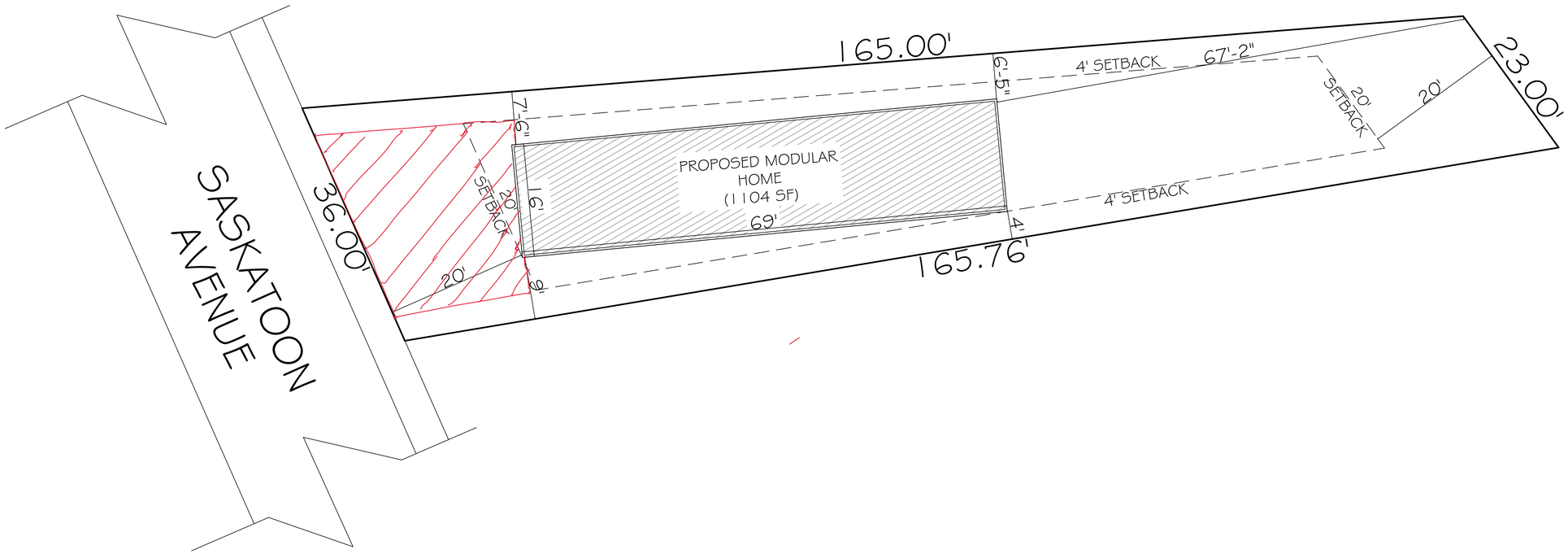
Description	Diagram
Line # 1 **Qty 1** **Infinity 2 Lite XO Patio Door** **70.5" x 81", Single Point - Pull Handle with Key Lock** **1 1/2in J- Trim Contemporary** **1" LOW-E ARG TMP** **Aluminum Threshold** **Size 70.5000 X 81.0000 (70 1/2 X 81) RSO 71.5000 X 82.0000** ***(Metric Size 1790.7 X 2057.4 RSO 1816.1 X 2082.8)***	 **Exterior View**

1 TOTAL NUMBER OF ITEMS

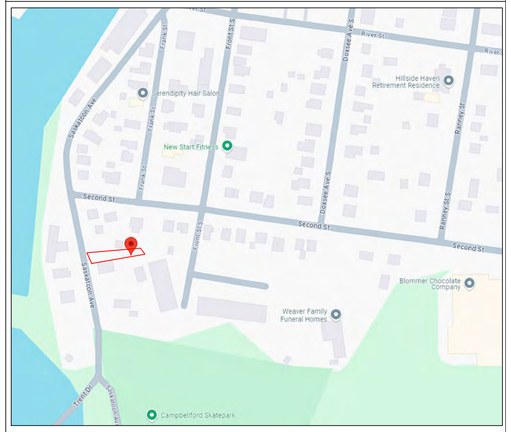
Changes to order must be emailed within 48

SITE PLAN

LOCATION: Saskatoon Ave, Campbellford, ON K0L 1L0, Canada
LEGAL DESCR.,: BLOCK K, LOT 5



VICINITY MAP



SCOPE OF WORK

-SITE PLAN OF THE PROPERTY UNDER REVIEW SHOWING THE PROPOSED MODULAR HOME DEVELOPMENT.

LOT SIZE

0.1035 Acres
=
4,508 SF

SHEET TITLE

SITE PLAN

CLIENT:

LORRIE_P

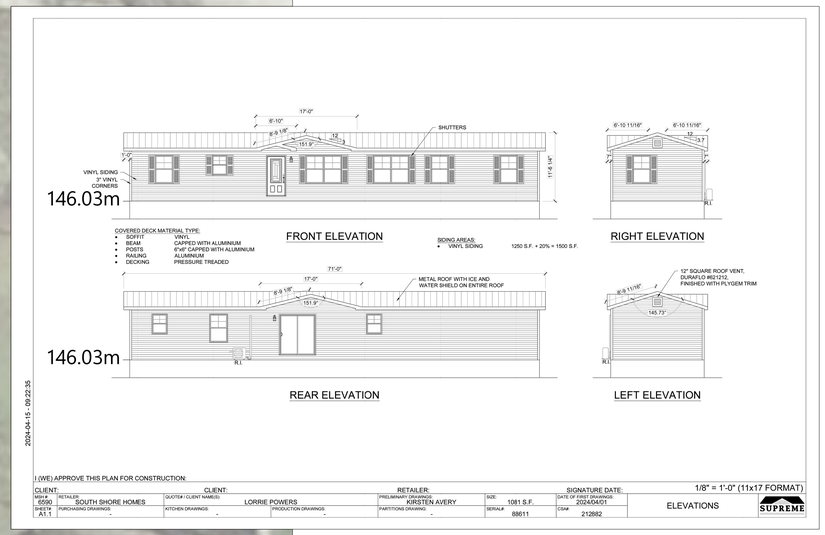
DEEN'S CONSULTS
Architects , Planners & Project Managers
ISMAILAOTU@GMAIL.COM

ARCHITECT	Deen's consult		
DRAWN	Deen's consult		
CHECKED BY	Deen's consult		
SCALE:	1":4'	DATE	10-08-2024

SHEET NO.

001

1:250 5 0 5 10 15 m



2024-04-15 - 09:22:35

I (WE) APPROVE THIS PLAN FOR CONSTRUCTION:

CLIENT:	CLIENT:	RETAILER:	SIGNATURE DATE:	1/8" = 1'-0" (11x17 FORMAT)
MSI # 6590	RETAILER: SOUTH SHORE HOMES	QUOTE# / CLIENT NAME(S): LORRIE POWERS	PRELIMINARY DRAWINGS: KIRSTEN AVERY	SIZE: 1081 S.F.
SHEET # A1.1	PURCHASING DRAWINGS: -	KITCHEN DRAWINGS: -	PRODUCTION DRAWINGS: -	PARTITIONS DRAWING: -

DATE OF FIRST DRAWINGS: 2024/04/01
SERIAL#: 88611
CS#: 212882
ELEVATIONS
SUPREME

PROJECT BENCHMARK

BENCHMARK:
BM #1- LOCATED ON THE NORTH EAST QUADRANT OF SASKATOON AVENUE & SECOND STREET. TOP NUT OF FIRE HYDRANT #5.
PROJECT ELEVATION = 145.480

BM #2 - LOCATED ON THE WEST SIDE OF SASKATOON AVENUE NEAR ENTRANCE TO PICNIC ISLAND PARK. TOP NUT OF FIRE HYDRANT #6 .
PROJECT ELEVATION = 145.201

PROJECT ELEVATIONS DERIVED FROM GEODETIC BENCHMARK 001196U512. CGVD2013 ELEVATION = 150.105

THIS BENCHMARK ELEVATION IS ONLY TO BE USED FOR THIS SITE. CONTRACTOR TO CONFIRM BENCHMARK PRIOR TO PROCEEDING WITH CONSTRUCTION. ALWAYS CROSS-CHECK BETWEEN A MINIMUM OF TWO BENCHMARKS BEFORE SETTING GRADES FOR CONSTRUCTION PURPOSES

LEGEND

100.00 PROPOSED GRADE

100.00 EXISTING ELEVATION

REV.#	REVISIONS	DATE	INITIAL
0	PRELIMINARY DESIGN	28/10/24	JK

Not Valid Unless Signed And Dated

LICENSED PROFESSIONAL ENGINEER
Oct 28/24
A. J. WILSON
100121258
PROVINCE OF ONTARIO

SCALE: 1:250
DESIGN:
DRAWN: JVK
CHECKED: AJW
DATE: OCT 2024

SASKATOON AVE.
CITY OF CAMPBELLFORD

SITE PLAN

WSE

PROJECT # 057 | DWG SP

WSE Consulting Inc.
205 Dundas Street E, Belleville, ON, K8N 5A2
Tel: (613) 743-7511
E-mail WSEconsulting@outlook.com

Nov 5, 2024

Lower Trent Conservation
714 Murray St.
Trenton, Ontario
K8V 5P4

Attn: **Gage Comeau, M. Sc., Provincial Offences Officer**
Manager, Watershed Management, Planning and Regulations

Ref: Saskatoon Ave, Campbellford
Roll# 143510003002200
Flood Review

Dear Sir;

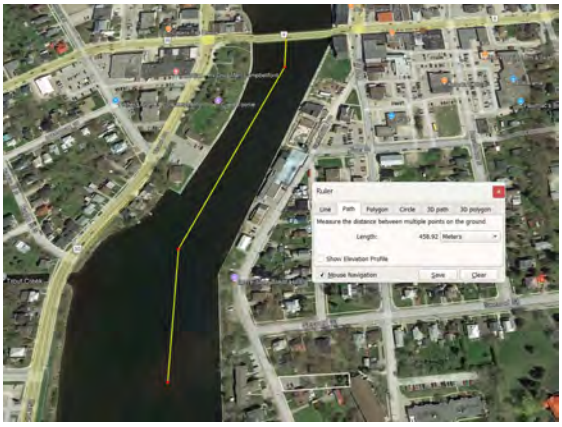
WSE has completed a review of the proposed development for the subject property. The landowner is seeking to construct a new single detached residential modular dwelling.

Through consultation with Lower Trent staff it has been advised that the subject property is entirely within the 100 year regulated flood plain. This review has been completed to assess options to safely permit construction of the building and access.

Control of Flooding

The HEC-RAS modelling for the flooding condition was provided by Lower Trent and the following outlines our assessment for the subject property.

- The property is located approximately 460m downstream of the bridge at County Rd. 8, as outlined below.



WSE Consulting Inc.
205 Dundas Street E, Belleville, ON, K8N 5A2
Tel: (613) 743-7511
E-mail WSEconsulting@outlook.com

- Reviewing the distance from the known modeling point (the bridge) it has been determined that the subject property lies between stations 1971 and 2024
- 2 conditions were reviewed
    - Existing
    - Existing, with no levee
- Both resulted in the same estimated 100 year water levels, but under the existing condition the site does not experience any flooding.
    - Station 1971 – 145.72m
    - Station 2024 – 145.73m
- It can be seen in the below excerpt from HEC-RAS that the site is fully inundated during the 100 year flows in the event the levee fails.
    - The relative grades within the property are 144.05m to 144.60m
    - The proposed structure will be in an area of the site with a grade around 144.15m and will experience a depth of flooding of 1.58m

- Proposed works to include construction of a raised single detached modular home, with stairs, and a porch.
    - There will be no habitable space below the finished floor grade
        - Finished floor grade, all openings, and any electrical or mechanical (heating) to be a minimum of 0.3m above the 100 year water level
        - FFE = 146.03m (minimum)
    - There is no grade/import expected around the structure.
- The proposed structure will displace approximately 152m^3 of flood storage (96m^2 @ a depth of 1.58m)
    - Large bodies of water, such as wide portions of the Trent River, are not susceptible to small areas of filling,

WSE Consulting Inc.
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- Considering just the area east of the levee of approximately 1,500,000 m^2 the depth increase is 0.0001m
  - This potential rise in flood elevation is negligible

Access

- The property is accessible from Saskatoon Ave which connects to multiple other municipal roads to the north and south.
- During the existing regulated flood event there is a levee along the eastern bank of the river that contains all flood flows, and the site would not experience any flooding or access issues.
- In the event the levee fails the site and surrounding area would be inundated with approximately 1.6m of flooding.
  - This depth would create accessibility issues for vehicular and pedestrian access
    - In general a residential vehicle can handle 0.3m of water, and emergency vehicles can handle 0.5m
      - Vehicular access will be limited during the 100 year flood
    - Adults can generally traverse depths of 1.37m before becoming boyant, while depth acceptable for younger children can range from 0.98m to 1.1m
      - Adult ingress/egress will at the upper limits of acceptable depth during the 100 year event, while younger children would need to rely on assistance.
    - The velocity is expected to be slow as noted in other sections of this review.
- While access will be impacted during the 100 year flood, this would be the case for the surrounding area and several hundred other existing buildings.
  - It is understood that Lower Trent Conservation has a very active flood warning program and in the event the levee is expected to fail there would be lots of warning for the impacted residents allowing time for evacuations.

Erosion

- Based on site review we are of the opinion there is no erosion hazard associated with the property.
- Any flooding will be in an area considered 'ineffective flow' and would experience significantly lower flow velocities than the main channel of the river.

Pollution

- The proposed dwelling will be connected to municipal services and as such would not create any new pollution potential

Dynamic Beaches

- None present

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205 Dundas Street E, Belleville, ON, K8N 5A2
Tel: (613) 743-7511
E-mail WSEconsulting@outlook.com

Conservation of Land & Unstable soils or Bedrock

The subject lands is located within the built urban boundary of Campbellford and would be considered an infill lot. The below picture shows the general condition of the site. Development of the property with a single family dwelling will not have any impacts.

Based on WSE's review of the property, elevations, HEC RAS flood modelling, and proposed modular home plans we are of the opinion that the proposed dwelling could be constructed within the flood plain without causing any adverse impacts to surrounding properties.

It is expected that there would be limited access to the property during the flood condition, but there would be sufficient warning prior to the peak levels allowing for safe preparations of removal of vehicles and residents.

I trust the above satisfies your requirements at this time. Please do not hesitate to contact the undersigned if you have any questions or concerns.

Respectfully,

Adam Wilson, P.Eng
Senior Engineer

RP-24-242

Saskatoon Avenue
TH Campbellford
Con 6, Lot 9-10

Legend

- O.Reg. 41/24 Screening Area
- Parcels

Water

- Stream
- Virtual Flow Connector

Wetlands (MNRF)

- Unevaluated wetland
- Evaluated wetland (PSW)
- Evaluated wetland (non-PSW)

Field Verified Wetland

- Yes (Present)
- No (Not Present)
- Potential (Desktop ID)

Flood & Erosion Lines

- Floodlines

0 5 10 20
Metres

N

Map produced by Lower Trent Conservation

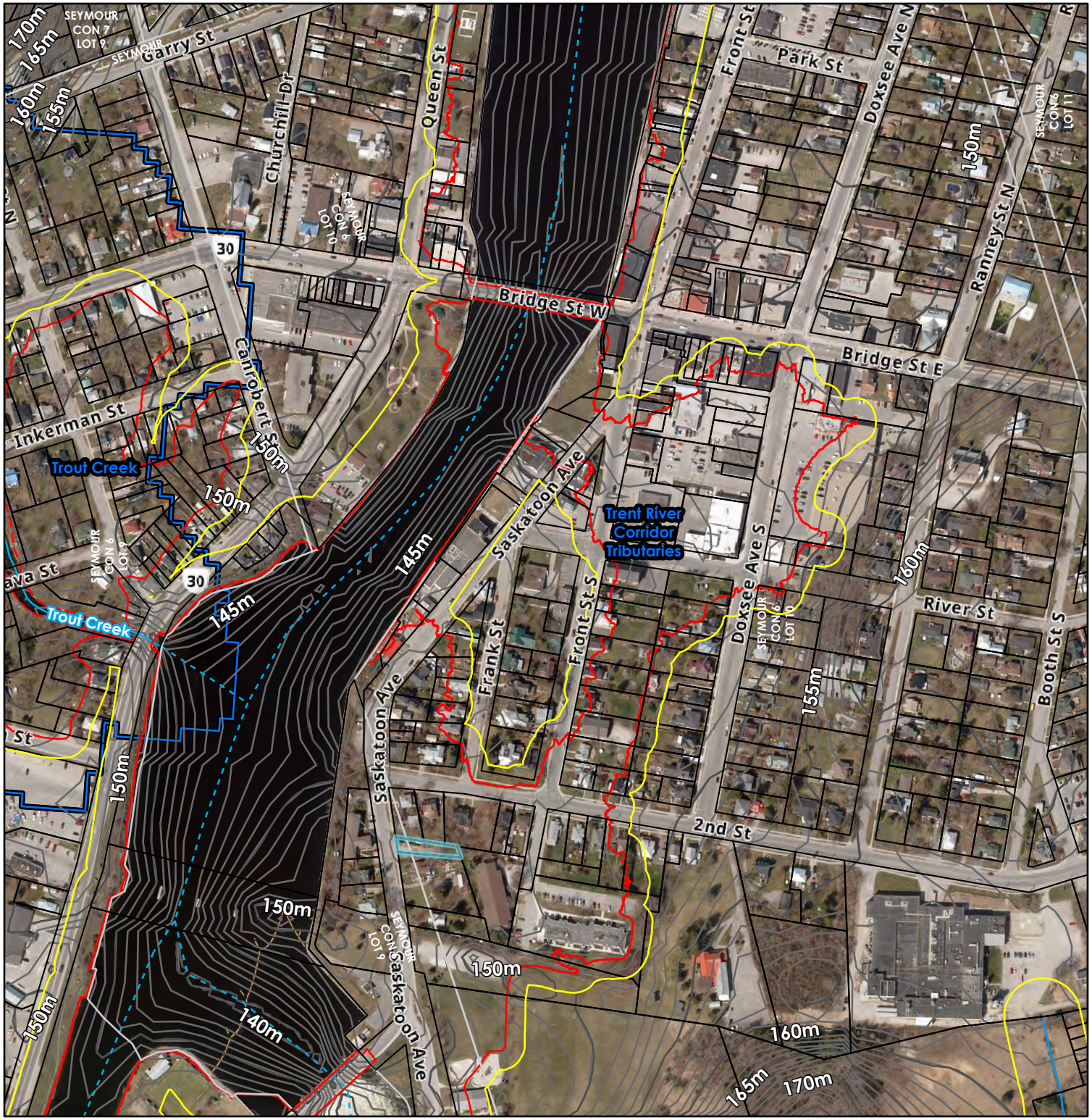
Note: Property lines shown on this map are approximate only and may be an inaccurate representation of the legal property limits. A legal survey is required to define the legal property limits.

LOWER TRENT CONSERVATION

User: technicaladmin November 12, 2024 4:45 PM

RP-24-242

Saskatoon Avenue
TH Campbellford
Con 6, Lot 9-10



Legend

- O.Reg. 41/24 Screening Area
- Parcels

Water

- Stream
- Virtual Flow Connector

Wetlands (MNRF)

- Unevaluated wetland
- Evaluated wetland (PSW)
- Evaluated wetland (non-PSW)

Field Verified Wetland

- Yes (Present)
- No (Not Present)
- Potential (Desktop ID)

Flood & Erosion Lines

- Floodlines

0 62.5 125 250
Metres

Map produced by Lower Trent Conservation

Note: Property lines shown on this map are approximate only and may be an inaccurate representation of the legal property limits. A legal survey is required to define the legal property limits.

LOWER TRENT CONSERVATION

User: technicaladmin November 12, 2024 4:47 PM

Lower Trent Region

Conservation Authority

Ontario Regulation 41/24

Policy Document

Approved by

Lower Trent Region Conservation Authority

Board of Directors

June 13, 2024

2 GENERAL POLICIES

Background:

Lower Trent Region Conservation Authority (LTC) will be guided by the following general administrative guidance with respect to the implementation of its regulatory responsibilities:

- Development, interference and/or alteration activities shall not be undertaken in a regulated area without written permission from LTC.
- Where a regulated area pertains to more than one water-related hazard (e.g., lands susceptible to flooding that are part of a wetland), policies will be applied jointly, and where applicable, the more restrictive policies will apply.
- Technical studies and/or assessments, site plans and/or other plans submitted as part of an application for permission to undertake development, interference and/or alteration in a regulated area must be completed by a qualified professional to the satisfaction of LTC in conformity with the most current provincial technical guidelines or guidelines accepted by LTC through a Board Resolution.

Note: Information regarding technical standards and guidelines is contained within the Appendices.

Similar to the MNR recommended 6-metre erosion access allowance (Section 3.4, Technical Guide for River and Stream Systems: Erosion Hazard Limit, MNR), LTC recommends that a 6-metre access allowance is applied to all hazard lands. Note that emergency access is required along the hazard as well as between the buildings and the lot line to allow for heavy equipment access to the hazard area.

The guidelines for development within the 15 metre adjacent lands to a hazard include an access setback. Three main principles support the inclusion of an access setback:

- providing for emergency access to hazard areas;
- providing for construction access for regular maintenance and access to the site in the event of a natural hazard or failure of a structure; and
- providing protection against unforeseen or predicted external conditions which could have an adverse effect on the natural conditions or processes acting on or within a hazard prone area.

Activities in regulated areas that are carried out by other provincial ministries or the federal government do not require a permit. Activities conducted on provincial crown land by third-party proponents in a regulated area may require a permit, unless acting as an agent of the Crown.

Works for which permission is required under the Regulation may also be subject to other legislation, policies and standards that are administered by other agencies and municipalities, such as the *Planning Act*, *Public Lands Act*, *Nutrient Management Act*, *Drainage Act*, *Environmental Assessment Act* (EA Act) or the federal *Fisheries Act,* etc. It is the responsibility of the applicant (or applicant's agent) to ensure that all necessary approvals are obtained prior to undertaking any works for which a permit under this Regulation has been obtained.

LTC Policies – General Policies:

Within areas defined by the regulation (i.e., regulated areas), including Lake Ontario shoreline hazard lands and an allowance, 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), watercourses, or hazardous lands, the following general policies will apply:

1) Development, interference and/or alteration will not be permitted within a regulated area, except in accordance with the policies contained in this document.
2) Notwithstanding Policy 2 (1), the LTC Board of Directors, sitting as the Hearing Board, may grant permission for development, interference and/or alteration where the applicant provides evidence acceptable to the Board that documents that the development and/or activity will have no adverse effect on the control of flooding, erosion, dynamic beaches and unstable soils and bedrock with respect to Lake Ontario shoreline, river or stream valleys, hazardous land, wetlands, and areas of interference or will not result in an unacceptable interference with a watercourse or wetland.
3) In addition to specific conditions outlined through this document, development activities, interference and/or alteration within a regulated area may be permitted only where:
   a) risk to public safety is not increased;
   b) there is no increase in habitation in the hazard area with the exception of allowable flood fringes or wave uprush hazard areas;
   c) susceptibility to natural hazards is not increased nor new hazards created (e.g., there will be no impacts on adjacent properties with respect to natural hazards);
   d) safe ingress/egress is available for proposed development that increases habitation outside of hazard lands;
   e) sedimentation and erosion during construction and post construction is minimized using best management practices including site, landscape, infrastructure and/or facility design, construction controls, and appropriate remedial measures;
   f) access for emergency works and maintenance of flood or erosion control works is available;
   g) proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards or to the satisfaction of LTC, whichever is applicable based on the structural scale and scope, and purpose of the project;
   h) there are no adverse hydraulic or fluvial effects on rivers, creeks, streams, or watercourses;
   i) there are no adverse sedimentation or littoral effects on the Lake Ontario shoreline;
   j) there are no adverse effects on the hydrologic function of wetlands; and,
   k) the control of flooding, erosion, dynamic beaches and unstable soils and bedrock is not adversely affected during and post development.

Prohibited Uses:

4) Notwithstanding the General Policies referenced above, in accordance with Section 3.1 of the Provincial Policy Statement, development will not be permitted within hazardous lands as defined in the *Conservation Authorities Act*, where the use is:

- an institutional use associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities or the young during an emergency as a result of flooding, failure of floodproofing and/or protection works, and/or erosion;
- an essential emergency service such as that provided by fire, police and ambulance stations and electrical substations, which would be impaired during an emergency as result of flooding, failure of flood-proofing measures and/or protection works, and/or erosion; or,
- uses associated with the disposal, manufacture, treatment or storage of hazardous substances.

5 HAZARDOUS LANDS

5.1 Conservation Authorities Act

The *Conservation Authorities Act* contains the following sections dealing with hazardous lands:

Activities prohibited (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,

i. hazardous lands, …

Permits

28.1 (1) An Authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by s. 28, if, 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; and

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; …

The permit shall be given in writing, with or without conditions.

5.2 Ontario Regulation 41/24

The following section indicates the extent of hazardous lands for the purpose of administering the Regulations. The Authority may grant a permit for development activity in or on Hazardous Lands subject to the tests or criteria in the *Conservation Authorities Act.* The Regulation contains the following definition for hazardous lands.

"**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.

Therefore, the following policies have been developed to deal with flooding, erosion, unstable soil and unstable bedrock. The dynamic beach hazards were identified in the Great Lakes section along with the flooding and erosion hazards for Great Lakes and Large Inland Lakes.

5.3 Policy Standards

The following sections outline the policy standards for LTC's implementation of the *Conservation Authorities Act* and O. Reg. 41/24 with respect to hazardous lands including flood hazard lands, erosion hazard lands, unstable soil, and unstable bedrock. LTC, in their role through the planning process, should review planning applications to ensure that, in general, all development occurs outside the unstable soil and bedrock boundaries.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies should be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and should be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

5.3.1 Development within Flood Hazard Lands

5.3.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)

Background

The following policies are focused on development within the One-Zone Regulatory floodplain. These policies do not apply to development within the allowance adjacent to the One-Zone Regulatory floodplain and the reader should refer to Section 4.2.2 for policies that apply to these areas.

LTC Policies

1) Development within the Regulatory floodplain shall not be permitted.
2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.
3) Development associated with new and/or the expansion of existing trailer parks / campgrounds in the Regulatory floodplain shall not be permitted.
4) *Major development* within the Regulatory floodplain shall not be permitted.
5) Redevelopment of derelict and abandoned buildings within the Regulatory floodplain shall not be permitted.
6) Stormwater management facilities within the 100-year floodplain shall not be permitted.
7) Basements within the Regulatory floodplain shall not be permitted.
8) Underground parking within the Regulatory floodplain shall not be permitted.
9) Cut and fill operations will not be permitted within the One-Zone Regulatory floodplain.
10) Notwithstanding Section 5.3.1.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.
11) Notwithstanding Section 5.3.1.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

12) Notwithstanding Section 5.3.1.1 1), stream bank slope and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

13) Notwithstanding Section 5.3.1.1 1), *moderate development and* structural repairs may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

    a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;

    b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;

    c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques. Habitable development must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and non-habitable development must be floodproofed to the Regulatory flood elevation;

    d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;

    e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;

    f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,

    g) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

14) Notwithstanding Section 5.3.1.1 4), detached non-habitable accessory structures greater than 46 m2 (500 ft2) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. The submitted plans must demonstrate that:

    a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;

b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;

c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques;

d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;

e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;

f) the control of flooding, erosion and dynamic beach hazards, and unstable soil and bedrock have been adequately addressed; and,

g) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

15) Notwithstanding Section 5.3.1.1 4), construction of a second storey addition to a habitable building greater than 46 m2 (500 ft2) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected. Subsequent moderate development proposals as in Section 5.2.1.1 13) which increase the footprint of the structure would not be supported. The submitted plans must demonstrate that:

a) The original footprint of the building is not increased;

b) Habitation is not increased for the entire building;

c) the entire building is protected from the flood hazard in accordance with established floodproofing and protection techniques with dry floodproofing to 0.3 metres above the Regulatory flood elevation;

d) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;

e) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

16) Notwithstanding Section 5.3.1.1 1), development associated with existing uses located within the Regulatory floodplain such as marine facilities, in-ground (at existing grade) pools, *minor development*, landscaping retaining walls, grading, etc., may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

17) Notwithstanding Section 5.3.1.1 1), development may be permitted for the reconstruction or relocation of a building within the Regulatory floodplain, provided that it has not been damaged or destroyed by flooding and if it has been demonstrated to the satisfaction of LTC

that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock land will not be affected. The submitted plans must demonstrate that:

a) the building or structure meets the criteria described in Policy 13) above;

b) the building or structure must not be located closer to the hazard than the original building; and,

c) the building or structure does not exceed the original floor space plus the allowable floor space for a *minor addition*. If the building or structure is enlarged, a future *minor addition* to the building or structure will not be considered.

18) Notwithstanding Section 5.3.1.1 1), development associated with the construction of a driveway or access way through the Regulatory floodplain in order to provide access to lands outside of the Regulatory floodplain may be permitted subject to the provision of safe access as identified in Section 1.8.3 and if it has been demonstrated to the satisfaction of LTC that there is no viable alternative outside of the regulated area and that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

19) Notwithstanding Section 5.3.1.1 1), removal or placement of *minor fill* and associated site grading may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected.

20) Notwithstanding Section 5.3.1.1 1), the replacement of sewage disposal systems may be permitted within the Regulatory floodplain if it does not require greater than 1 metre depth of *fill* and has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected. The replacement system should be located outside of the floodplain where possible, and only permitted within the floodplain subject to being located in the area of lowest risk.

21) Notwithstanding Section 5.3.1.1 1), parking areas may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected, and that safe pedestrian and vehicular access is achieved.

22) Notwithstanding Section 5.3.1.1 1), boathouses may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soils or bedrock will not be affected, and an engineered design may be required for wet flood proofing.

[redacted]

[redacted]

[redacted]

9 GLOSSARY

100 Year Flood Event Standard: That flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

Alteration to a Waterway: the act whereby the channel of a watercourse is altered in some manner. Examples of an alteration include, but are not limited to, the following: channelization, full or partial diversions, retaining walls, revetments, bridges, culverts, pipeline crossings erosion protection measures, construction of storm sewer outlets and agricultural tile drain outlets.

Apparent (confined) river and stream valley: Ones in which the physical presence of a valley corridor containing a river or stream channel, which may or may not contain flowing water, is visibly discernible (i.e., valley walls are clearly definable) from the surrounding landscape by either field investigations, aerial photography and/or map interpretation. The location of the river or stream channel may be located at the base of the valley slope, in close proximity to the toe of the valley slope (i.e., within 15 metres), or removed from the toe of the valley slope (i.e., greater than 15 metres)."

Area of interference: Those lands where development could interfere with the hydrologic function of a wetland.

Armour: Artificial surfacing of bed, banks, shores, or embankments to resist scour or erosion.

Authority: The Lower Trent Region Conservation Authority, a corporate body established under the *Conservation Authorities Act* (RSO 1990).

Basement: One or more storeys of a building located below the first storey (Building Code).

Breakwall/Breakwater: An object (especially a groyne or pier) resisting force of waves.

Boathouse: Structure meant for storage of water craft and associated boating equipment located on or within 6 metres of a navigable waterway. The boathouse must be anchored and is to be constructed as a single storey with no habitable space. The boathouse is considered a detached accessory structure and it must be wet floodproofed with openings on two sides to allow the flow of water through and no electrical services to be located less than 0.3 metres above the flood elevation.

Channel: The area of a watercourse carrying normal flows within the banks.

Crawl Space: A Crawl space must be:

(a) less than 1500 mm high between the lowest part of the floor assembly and the ground or other surface below, and

(b) not used for any occupancy.

Development activity: a) the construction, reconstruction, erection or placing of a building or structure of any kind, b) 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, c) site grading, or d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Diversion: The process whereby streamflow is directed from the original channel of the watercourse and returned to the original channel at another point on the watercourse. Diversions may be full or partial re-direction of the streamflow. A diversion may also be the redirecting of flow from the channel of one watercourse to the channel of another watercourse.

Dwelling unit: One or more habitable rooms, occupied or capable of being occupied as an independent and separate housekeeping establishment, in which separate kitchen and sanitary facilities are provided for the exclusive use of the occupants.

Dyke (dike): An embankment or wall, usually along a watercourse or floodplain, to prevent overflow on to adjacent land.

Dynamic Beach: That portion of the 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.

Dynamic Beach Hazard: Areas of inherently unstable accumulations of shoreline sediments along the Great Lakes – St. Lawrence River System and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the flooding hazard limit plus a dynamic beach allowance.

Erosion: Continual loss of earth material (i.e., soil or sediment) over time as a result of the influence of water or wind.

Erosion Hazard: 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) and an allowance for slope stability and an erosion/erosion access allowance.

Fill: Earth, sand, gravel, topsoil, building materials, rubble, rubbish, garbage, or any other material whether similar to or different from any of the aforementioned materials, whether originating on the site or elsewhere, used or capable of being used to raise, lower or in any way affect or alter the contours of the ground.

Flooding Hazard: The inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

a) along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one-hundred-year flood level plus an allowance for wave uprush and other water related hazards;
b) along river, stream and small inland lake systems, the flooding hazard limit is the greater of:
    a. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
    b. the one-hundred-year flood; and

c. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry;

except where the use of the one-hundred-year flood or the actually experienced event has been approved by the Minister of Natural Resources and Forestry as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard).

Flood Line: An engineered line delineating the potential extent of flooding.

Floodplain: The area, usually low lands, adjoining a watercourse which has been or may be covered by water.

Floodproofing: A combination of structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures, or properties subject to flooding so as to reduce or eliminate flood damages.

Floodway: The channel of a watercourse and the inner portion of the floodplain where flood depths and velocities are generally higher than those experienced in the flood fringe. The floodway represents 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.

Groyne: A structure extending from the shore to prevent erosion and arrest sand movement along a shoreline.

Habitable: Suitable to live in or on; that can be inhabited. Inhabit means to dwell in, occupy.

Habitation: is measured by the number of bedrooms within a dwelling unit**.**

Hazardous Land: Property or lands that could be unsafe for development due to naturally occurring processes associated with flooding, erosion dynamic beaches or unstable soil or bedrock.

Hydric Soil: Soil that, in its undrained condition, is saturated, flooded, or ponded long enough during the growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation.

Hydrologic Function: The functions of the hydrological 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.

Inert Fill: Earth or rock fill, or material of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances.

Ingress/egress: The ability to access a property or residence by land.

Interference in any way (CO Interpretation)**:** Any anthropogenic act or instance which hinders, disrupts, degrades, or impedes in any way the natural features or hydrologic and ecologic functions of a wetland or watercourse.

Jetty: A structure that projects from the land out into water.

Large Inland Lakes: Waterbody that has a surface area equal to or greater than 100 square kilometers where there is no measurable or predictable response to a single runoff event.

Major Development: New structures, additions, or restorations greater than 46 square metres (500 square feet).

Major Stabilization Work: stabilization works that have been approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC through a detailed engineering design that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

Minor Addition: An addition to an existing structure that does not exceed 46 square metres (500 square feet) and shall not result in an increase in the number of dwelling units. Attached covered structures including decks and garages will be considered habitable space. All new floor space shall be considered when determining the additional floor space including all storeys.

Minor Alteration: Alteration of a watercourse not exceeding 20 square metres (215 square feet).

Minor Development: A small addition to an existing building or accessory building that does not exceed 15 square metres (160 square feet) and does not increase number of dwelling units in a hazard land. Uncovered decks less than 23 square metres (250 square feet) are also considered minor development.

Minor Fill: A volumetric amount of fill not exceeding 20 cubic metres (26 cubic yards).

Moderate Development: *Minor additions*, detached accessory buildings and above ground pools that do not exceed 46 square metres (500 square feet). Uncovered decks larger than 23 square metres (250 square feet) are also considered moderate development. All moderate development (excluding uncovered decks) will be considered cumulative and will not exceed the 46 square metres (500 square feet). If cumulative moderate development exceeds 46 square metres (500 square feet) *major development* definitions apply.

Moderate Stabilization Work: stabilization works for banks/bluffs two metres or less in height and placement of appropriately sized stone a volumetric amount equivalent of up to one cubic metre per one linear metre of shoreline or stream bank if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, dynamic beaches or unstable soil or bedrock will not be affected.

Non-Habitable: Detached structure not intended for dwelling in (i.e. garage, uncovered deck, picnic shelter, sun shelter, gazebo, pergola, boathouse)

Not Apparent (unconfined) river and stream valleys: Valleys in which a river or stream is present but there is no discernible valley slope or bank that can be detected from the surrounding landscape. For the most part, unconfined systems are found in fairly flat or gently rolling landscapes and may be located within the headwater areas of drainage basins. The river or stream channels contain either perennial (i.e., year round) or ephemeral (i.e., seasonal or intermittent) flow and range in channel configuration from seepage and natural channels to detectable channels.

Offsetting: Measures that are undertaken to counterbalance unavoidable impacts to the ecosystem. Offsetting should be identified through an Environmental Impact Study and considered only when all other options have been deemed not feasible.

One Zone Concept: An approach whereby the entire floodplain, as defined by the regulatory flood, is treated a one unit, and all development is prohibited or restricted.

Regulated Lands: The area within which development, interference and alteration activities are regulated by the Conservation Authority.

Regulatory floodplain: See definition of flooding hazard

Retaining Wall: A vertical structure designed to resist the lateral pressure of soil and water behind it.

Revetment: A vertical or inclined facing of rip-rap or other material protecting a soil surface from erosion.

Rip-rap: A layer of stone to prevent the erosion of soil.

Routine permit applications: are activities that are documented through another approval process (DART Protocol) or are determined to have limited impacts on the control of flooding, erosion, dynamic beaches, or unstable soil or bedrock (i.e. non-habitable buildings and structures that are less than 10 m2 in size).

Rubble: Waste fragments of stone, brick etc. from old houses; pieces of undressed stone used especially as backfill for walls; loose angular stones; water worn stones.

Scour: Local lowering of a streambed by the erosive action of flowing water.

Sedimentation: The deposition of detached soil particles.

Sewage Disposal System: A system which contains the entire sewage envelope, including both primary and secondary beds, mantle, septic tanks, and reserve areas, as per the requirements of the Ontario *Building Code Act* or the Ministry of the Environment and Climate Change.

Significant Wetland: An area identified as provincially significant by the Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

Static water level: The 100 year peak or flood level with a one chance in one hundred of occurring in any given year, without the influences of wave uprush, seche, ship-generated waves, ice-piling, or other water-related hazards

Storey: The portion of a building;

a) that is situated between the top of any floor and the top of the floor next above it, or

a) that is situated between the top of the floor and the ceiling above the floor, if there is no floor above it.

Surficial erosion: The physical removal, detachment, and movement of soil at the ground surface due to water or wind.

Structure: Any material, object or work erected either as a unit or constructed or assembled of connected or dependant parts or elements, whether located under, on, and/or above the surface of the ground.

Top-of-bank: The point at which the slope of a valley or shoreline meets the horizontal plain of the adjacent table-land.

Two Zone Floodway-Flood Fringe Concept: An approach whereby certain areas of the floodplain are considered to be less hazardous than others such that development potentially could occur. The flood fringe defines that portion of the floodplain where development may be permitted, subject to appropriate floodproofing. The floodway defines that portion of the floodplain wherein development is limited. This concept is only implemented after a comprehensive study to evaluate implications has been completed.

Watercourse: means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs.

Watershed: An area that is drained by a river and its tributaries.

Wetland: Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Periodically soaked or wet lands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands for the purposes of this definition.

Note: Additional definitions may be found in the MNRF Technical Guidelines, Natural Heritage Guidelines and the Provincial Policy Statement under the Planning Act.

LOWER TRENT CONSERVATION
714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1
Tel: 613-394-4829 Fax: 613-394-5226 Website: www.ltc.on.ca Email: information@ltc.on.ca
Registered Charitable Organization No. 107646598RR0001

November 7, 2024 LTC File: **RP-24-242**

Property Owner: Lorrie Powers and Corey Brooks
Email to: [redacted]

Re: Vacant lot on Saskatoon Ave (ARN: 1435100030022000000), Town of Campbellford, Municipality of Trent Hills, Northumberland County
Concession 6, Lot 9-10, Geographic Township of Seymour

Application for permission to undertake development pursuant to Part VI of the *Conservation Authorities Act* and Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits

LTC Staff Cannot Grant Approval

Dear Applicants,

Lower Trent Region Conservation Authority (LTRCA) received the above noted application to undergo the placement of a modular dwelling structure on a constructed, engineered foundation on the subject lands within an area that is regulated by LTRCA under Ontario Regulation 41/24 and Part VI of the *Conservation Authorities Act*. Staff have reviewed the applications and the property information available on record including, but not limited to provincial mapping, aerial and satellite imagery and supplementary documents provided as part of the permit submission (i.e., engineering report completed by WSE Consulting Inc., dated November 5, 2024).

In 2024, LTRCA updated the Regulation Policy Document with respect to Ontario Regulation 41/24. The full Ontario Regulation 41/24 Policy Document, with all appendices, can be viewed on the LTRCA website at this link: https://ltc.on.ca/planning-permits/policies-guidelines/. Please note that Sections *5.3.1 Development within Flood* Hazards is the applicable section of the Policy Document for the proposed development on this property.

According to our review of the development proposal with consideration for the policies contained within the applicable sections noted above, we can confirm that the proposed development is in direct conflict with the following policies:

5.3.1 Development within Flood Hazard Lands

5.3.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)

1) Development within the Regulatory floodplain shall not be permitted.

2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.

4) Major development within the Regulatory floodplain shall not be permitted.

The policies contained in the document represent thresholds and guidelines that have been approved by the LTRCA Board of Directors to enable designated staff to approve permit applications. It is our opinion that the proposed development does not comply with the above noted policies and therefore, staff approval cannot be granted.

Based on the above noted information, there are two options available for you to proceed with your application:

- You may review the information above and withdraw your application for permission under Ontario Regulation 41/24; or,
- You may request a Hearing before the Board as you have a right to a hearing where staff are recommending refusal of the application.

If you intend to proceed with the second bulleted option above the next available date for a Hearing is **November 20, 2024**. Please confirm **in writing** by **November 12, 2024** which of the above-noted options you would prefer so that the necessary arrangements can be made. Please note that the LTC Hearing Guidelines have been attached with this letter for your information.

We look forward to hearing back from you on your chosen option. If you require further assistance, please do not hesitate to contact me at 613-394-3915 ext. 224.

Sincerely,

Gage Comeau

Gage Comeau, M. Sc. Provincial Offences Officer
Manager, Watershed Management, Planning and Regulations
Lower Trent Conservation

Encl: Appendix F – Hearing Guidelines

LOWER TRENT CONSERVATION

714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1
Tel: 613-394-4829 Fax: 613-394-5226 Website: www.ltc.on.ca Email: information@ltc.on.ca
Registered Charitable Organization No. 107646598RR0001

November 8, 2024

LTC File No.: **RP-24-242**

Property Owner: Lorrie Powers and Corey Brooks
Email to: [redacted]

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 **BROOKS and POWERS**

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under Section 28.1, Subsection 5 of the said Act

TAKE NOTICE THAT a Hearing before the Full Board of the Lower Trent Region Conservation Authority will be held under Section 28.1, Subsection 5 of the Conservation Authorities Act at the offices of the said Authority located at 714 Murray Street, RR #1 Trenton, Ontario K8V 0N1 at the hour of **1:00 p.m., on the 20th day of November, 2024** with respect to the application by **BROOKS and POWERS** to permit development activities within an area regulated by the Authority in order to ensure there are no adverse effects on ***the control of flooding as a result of development in the Trent River floodplain.*** Specifically, this hearing is to request permission to undergo the placement of a modular dwelling structure on a constructed, engineered foundation in the Municipality of Trent Hills, Northumberland County, Geographic Township of Seymour, Part of Lot 9-10, Concession 6, on a vacant property on Saskatoon Ave (ARN: 1435100030022000000).

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Hearing Board for the meeting of **November 20, 2024**. If you intend to appear, please contact Gage Comeau, Manager, Watershed Management, Planning and Regulations with notice and confirmation. Written material will be required by **November 13, 2024**, 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 of the Conservation Authority may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

DATED the 8th day of November, 2024.

The Board of Directors of the Lower Trent Region Conservation Authority

Per: Rhonda Bateman

CAO/ Secretary-Treasurer (Signing Authority):

Rhonda T. Bat

LOWER TRENT
CONSERVATION

APPENDIX F

HEARING GUIDELINES

May 31, 2024

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Appendices:

Appendix F-1: Notice of Hearing – Section 28.1 (5)

Appendix F-2: Hearing Procedures

Appendix F-3: Chair's Remarks When Dealing with Hearing with respect to Part VI of the Conservation Authorities Act and Ontario Regulation 41/24.

Appendix F-4: Notice of Decision – Hearing Pursuant to Section 28.1 (7))

Appendix F-5: Notice of Decision – Hearing Pursuant to Section 28.1 (7)) (with permit)

Appendix F-6: Notice of Hearing - Section 28.1.2 (7)

Appendix F-7: Chair's Remarks When Dealing with Section 28.1.2 (7)

Revision Notes:

May 12, 2016 – Original Hearing Guidelines – Approved by Board (Resolution G67/16)

Revision 1: April 13, 2017 – Clarifications and Consistency Updates (Resolution G44/17)

Revision 2: November 16, 2018 – Admin Updates

Revision 3: March 26, 2021 – Include Electronic Hearings (Resolution G51/21)

Revision 4: February 10, 2022 – MZO Hearings and OLT Reference (Resolution G20/22)

Revision 5: May 31, 2024 Update to reflect changes to the Act and addition of Ontario Regulation 41/24

F-1. PURPOSE OF HEARING GUIDELINES:

The Conservation Authorities Act requires that the applicant be provided with an opportunity for a hearing by the local Conservation Authority Board, or Executive Committee (sitting as a Hearing Board) as the case may be, for an application to be refused or approved with contentious conditions. Further, a permit may be refused if, in the opinion of the Authority, the proposal adversely affects the control of flooding, erosion, dynamic beaches, unstable soils or bedrock. The Hearing Board is empowered by law to make a decision, governed by the *Statutory Powers Procedures Act (SPPA*).

The Hearing Rules are adopted under the authority of Section 25.1 of the *Statutory Powers Procedures Act (SPPA)*. The SPPA applies to the exercise of a statutory power of decision where there is a requirement to hold or to afford the parties to the proceeding an opportunity for a hearing before making a decision. The SPPA sets out minimum procedural requirements governing such hearings and provides rule-making authority for to establish rules to govern such proceedings.

The Hearing Board shall hear and decide whether the application will be approved with or without conditions or refused. In the case of hearings related to applications submitted purposed to Section 28.1.2, the Hearing Board shall determine what conditions, if any, will be attached to the permission. See Section F-6 for further details.

These guidelines have been prepared as an update to previous hearing guidelines and are intended to provide a step-by-step process to conducting hearings required under Section 28.1 (5), (7)of the Conservation Authorities Act. It is expected that hearings meet the legal requirements of the *Statutory Powers Procedures Act* without being unduly legalistic or intimidating to the participants. Additional considerations have been included related to hearings under Section 28.1.2 (7) in Section F-6 of this document.

F-1.1 Hearing Guideline Updates

Note that these Guidelines have been revised based on changes in legislation to incorporate various considerations as noted below:

- Revised in May 2018 - Housekeeping amendments made reflecting changes to appeal process as a result of the *Building Better Communities and Conserving Watersheds Act, 2017* and subsequent *Order in Council*. Note: changes to appeal process are no longer valid.
- Revised in March 2021 - Amendments made to incorporate the use of electronic hearings.
- Revised in February 2022 - Amendments made to incorporate hearings under 28.0.1 (now changed to 28.1.2 as of April 1, 2024) and update references to the Ontario Land Tribunal (OLT).
- Revised in May 2024 – Amendments made to incorporate changes to the Conservation Authorities Act, removal of O.Reg. 163/06 and implementation of O.Reg. 41/24

F-1.2 Additional Hearing Considerations – 2021

With the passage of *Bill 229, Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*, a new section of the Conservation Authorities Act came into force. Section 28.0.1 (Permission for development, zoning order) applies to applications for permission submitted to an Authority where a zoning order has been made by the Minister of Municipal Affairs and Housing authorizing the proposed

development project. While the Act outlines that the Authority must issue these permissions, an Authority has the ability to attach conditions to the permission. In the case of these applications for permission, applicants must be given the opportunity for a hearing before the Authority, prior to conditions being attached. As noted above, Section 28.0.1 has been changed to 28.1.2 within the updated Conservation Authorities Act as of April 1, 2024.

As such, hearings under section 28.1.2 of the Act differ from those under section 28, in that the intent of the hearing is not to determine whether or not to issue a permission, but rather, to finalize the conditions of a permission. The purpose of the interim update to the Hearing Guidelines is to incorporate direction for hearings under section 28.1.2 of the Conservation Authorities Act in Section G-6 of this document.

Further, with the passage of Bill 245, Accelerating Access to Justice Act, 2021, on June 1st, 2021 the Local Planning Appeal Tribunal, Environmental Review Tribunal, Board of Negotiation, Conservation Review Board and Mining and Lands Tribunal were merged into a new single tribunal called the Ontario Land Tribunal (OLT). Amendments have been throughout the Hearing Guidelines to update references to the Mining and Lands Tribunal to now reference the Ontario Land Tribunal.

F-2. PRE-HEARING PROCEDURES

F-2.1 Role of the Hearing Board

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 that member. Where a member has a personal interest, the test is whether a reasonable 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 councillor, the *Municipal Conflict of Interest Act* applies. In the case of preciously 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 should be distributed to the applicant. The applicant may be afforded an opportunity to distribute similar pre-hearing material. These materials can be distributed to the applicable parties 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.

F-2.2 Application

An applicant has the right to a hearing when:

- staff are recommending refusal of a permit application because it doesn't comply with the

approved policies;
- or
- the applicant objects to the conditions of approval.

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

F-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 must contain the following:

a) Reference to the applicable legislation under which the hearing is to be held (i.e., the Conservation Authorities Act)
b) The date, time, place and the purpose of the hearing, or for electronic hearings: the time, purpose of the hearing, and details about the manner in which the hearing will be held. Note: for electronic hearings the Notice must also contain a statement that 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 landowner but the prospective owner, the applicant must have written authorization from the registered landowner.
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 they 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 previous correspondence or a hearing report that 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 and/or staff.
g) A copy of the Authority's Hearing Guidelines.

It is recommended that the Notice of Hearing be directed to the applicant and/or landowner by registered mail or other method where confirmation of delivery can be verified.

Refer to **Appendix F-1** for an example **Notice of Hearing**.

F-2.4 Pre-submission of Reports

It is the practice of the Lower Trent Region Conservation Authority to submit reports to the Board

members in advance of the hearing (i.e., inclusion on an Authority Agenda) and the applicant will be provided with the same opportunity. The applicant will be given reasonable time to prepare a report once the reasons for the staff recommendations have been received. Subsequently, this may affect the timing and scheduling of the staff hearing reports. The applicant will be required to provide sufficient copies of this report for inclusion in the Agenda.

F-2.5 Hearing Information

Prior to the hearing, the applicant should be advised of the local Conservation Authority's hearing procedures. (a copy of this document should be provided with the staff report).

F-3. HEARING

F-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.

F-3.2 Hearing Participants

The Conservation Authorities Act does not provide for third party status at the 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.

F-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.

F-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.

F-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 F-2.**

F-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 not 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.
e) Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.
f) 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.

F-3.7 Conduct of Hearing

F-3.7.1 Record of Attending Hearing Board Members

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

F-3.7.2 Opening Remarks

The Hearing Board Chair should convene the hearing with opening remarks which; 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*. Please reference **Appendix G-3** for the Opening Remarks Template. In an electronic hearing, all the parties and members of the Hearing Board must be able to clearly hear one another and any witnesses throughout the hearing.

F-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 should 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.

F-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 beaches, unstable soils or bedrock? 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, hydro-geologist etc.

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

F-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. Staff will be given an opportunity to respond to questions posed by either the Board or the applicant. Staff may also rebut comments or pose questions to the applicant at this time.

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.

F-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 the applicant of the Board's decision. The Board members should not discuss the hearing with others prior to the decision of the Board being finalized.

F-4. DECISION

The applicant must receive written notice of the decision. The applicant should be informed of the right to appeal the decision within 15 days to the Minister and/or 90 days upon receipt of 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 should itemize and record information of particular significance which led to their decision.

F-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. 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 or other method where confirmation of delivery can be verified.

A sample Notice of Decision and cover letter has been included as **Appendix F-4**. Note that if the decision of the Board is to approve the application, the written notice of decision can be included as part of the Permit Cover Letter. An example of Permission Granted through Hearing has been included as **Appendix F-5**.

F-4.2 Adoption

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

F-5. 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 transcript/minutes, if one exists, of the oral presentations made at the hearing.
g) The decision and reasons for decision of the Board.
h) The Notice of Decision sent to the applicant.

F-6. HEARINGS UNDER SECTION 28.0.1 CAA

Section 28.1.2 of the Conservation Authorities Act came into force with the Royal Assent of *Bill 229*, *Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*. This section applies to any application submitted to an authority under a regulation made under Section 28 of the Act for permission to carry out all or part of a development project associated with an approved Minister's Zoning Order (MZO). For such applications, an Authority must grant permission to the applicant to carry out the activity, provided an MZO has been made by the Minister of Municipal Affairs and Housing, and provided that the authority's regulated area in which the development activity is proposed to take place

is not located in the Greenbelt Area designated under section 2 of the Greenbelt Act. A permission which is granted under s.28.1.2 may be subject to conditions as prescribed by the issuing Authority.

Understanding that an Authority must grant permission for applications submitted pursuant to an approved MZO (pending the above-noted conditions are met), hearings for these applications differ from those under Section 28(12) of the Act, in that a hearing cannot be held to determine if a permission should be refused. The Authority may refuse to grant a permit only if i) a zoning order has not been made to authorize the development project, ii) the project is proposed to be carried out in the Greenbelt Area, and iii) if all other prescribed requirements have not been satisfied. Per s.28.1.2 (7) of the Act, the applicant for a permission will be given the opportunity to be heard by the Authority prior to any conditions being attached to the granted permission.

The following table is intended to provide a step-by-step process to conducting hearings required under Section 28.1.2 (7) of the Conservation Authorities Act. It is recognized that much of the guidance provided in the body of the Section 28 Hearing Guidelines will be applicable to the s. 28.1.2 (7) hearing process. Where processes differ, the table outlines the necessary considerations for the s. 28.1.2(7) processes. Where the processes are the same, the table refers to the appropriate sections of the Section 28(5) hearing guidelines.

Sections of the *Section 28 Conservation Authorities Act Hearing Guidelines*	**Specific Guidance and/or Processes for S. 28.1.2 (7) Hearings**
1.0 Purpose of Hearing Guidelines	The *Conservation Authorities Act* requires that the applicant be provided with an opportunity for a hearing by the local Conservation Authority Board, or Executive Committee (sitting as a Hearing Board) as the case may be, for an application to be refused or approved with contentious conditions. In the case of hearings related to applications submitted pursuant to s. 28.1.2 of the *Conservation Authorities Act*, the Authority must grant permission to the applicant, provided the requirements set out under this section are met. In this scenario, a hearing will only be held to determine conditions which will be attached to a permission. Further, a permit may be refused if in the opinion of the Authority the proposal adversely affects the control of flooding, unstable soils or bedrock, and additional erosion and dynamic beaches. In the case of applications submitted pursuant to s. 28.1.2 of the *Conservation Authorities Act*, the Authority may refuse to grant a permit only if i) a zoning order has not been made to authorize the development project, ii) the project is proposed to be carried out in the Greenbelt Area, and iii) if all other prescribed requirements have not been satisfied. The Hearing Board is empowered by law to make a decision, governed by the *Statutory Powers Procedures Act*.

	The Hearing Rules are adopted under the authority of Section 25.1 of the *Statutory Powers Procedures Act* (SPPA). The SPPA applies to the exercise of a statutory power of decision where there is a requirement to hold or to afford the parties to the proceeding an opportunity for a hearing before making a decision. The SPPA sets out minimum procedural requirements governing such hearings and provides rule-making authority for to establish rules to govern such proceedings. The Hearing Board shall hear and decide whether the application will be approved with or without conditions or refused. In the case of hearings related to applications submitted purposed to Section 28.1.2, the Hearing Board shall determine what conditions, if any, will be attached to the permission. See Section G-6 for further details. These guidelines have been prepared as an update to the October 1992 hearing guidelines and are intended to provide a step-by-step process to conducting hearings required under Section 28.1 (5), (7) of the *Conservation Authorities Act*. It is hoped that the guidelines will ensure that hearings meet the legal requirements of the *Statutory Powers Procedures Act* without being unduly legalistic or intimidating to the participants. Additional considerations have been included related to hearings under Section 28.1.2 (7) in Section G-6
2.0 Prehearing Procedures	Not applicable to S.28.1.2(7) hearings
2.1 Role of the Hearing Board	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 that 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 councillor, 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 a 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. 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	*Refer to Section 2.3*
2.4 Presubmission of Reports	*Refer to Section 2.4*
3.0 Hearing	Not applicable to S.28.1.2(7) hearings
3.1 Public Hearing	*Refer to Section 3.1*
3.2 Hearing participants	*Refer to Section 3.2*
3.3 Attendance of Hearing Board Members	*Refer to Section 3.3*
3.4 Adjournments	*Refer to Section 3.4*
3.5 Orders and Directions	*Refer to Section 3.5*
3.6 Information Presented at Hearings	*Refer to Section 3.6*
3.7 Conduct of Hearing	N/A
3.7.1 Record of Attending Hearing Board Members	*Refer to Section 3.7.1*
3.7.2 Opening Remarks	*Refer to Section 3.7.2*
3.7.3 Presentation of Authority Staff Information	*Refer to Section 3.7.3*
3.7.4 Presentation of Applicant Information	*Refer to Section 3.7.4*
3.7.5 Questions	*Refer to Section 3.7.5*

3.7.6 Deliberation	*Refer to Section 3.7.6*
4.0 Decision	*Refer to Section 4.0*
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. 28.1.2 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-4**.
4.2 Adoption	*Refer to section 4.2*
5.0 Record	*Refer to Section 5.0*
Appendix G-6	A new Appendix F-6 has been prepared which provides an example "Notice of Hearing" for hearings under Section 28.1.2 (7) of the *Conservation Authorities Act*
Appendix G-7	A new Appendix F-7 has been prepared which provides an example "Notice of Decision" for hearings under Section 28.1.2 (7) of the *Conservation Authorities Act*

Appendix F-1

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 **XXXXXX**

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under Section 28.1, Subsection 5 of the said Act

TAKE NOTICE THAT a Hearing before the Full Board of the Lower Trent Region Conservation Authority will be held under Section 28.1, Subsection 5 of the Conservation Authorities Act at the offices of the said Authority located at 714 Murray Street, RR #1 Trenton, Ontario K8V 0N1 at the hour of **, on the day of , 20**___, [for electronic hearings, include details about the manner in which the hearing will be held] with respect to the application by ***(NAM*E)** 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 soils or bedrock/alter or interfere with a watercourse or wetland*)** on Lot , Plan/Lot , Concession, ***(Stree*t) 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 numbe*r)**. If you intend to appear, [for electronic hearings: or if you believe holding the hearing 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 of the Conservation Authority may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

DATED the ___ day of , _____20__.

APPENDIX F – HEARING GUIDELINES

The Board of Directors of the Lower Trent Region Conservation Authority

Per:

Staff Member, Title: _____

Chief Administration Officer/ Secretary Treasurer: _____

Appendix F-2

HEARING PROCEDURES

1. Motion to sit as Hearing Board.
2. Roll Call followed by the 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.
3. Staff will introduce to the Hearing Board the applicant/owner, his agent and others wishing to speak.
4. Staff will indicate the nature and location of the subject application and the conclusions.
5. Staff will present the staff report included in the Authority agenda.
6. The applicant and/or his agent will speak and also make any comments on the staff report, if he so desires.
7. The Hearing Board will allow others to speak, and, if necessary, the applicant in rebuttal.
8. The Hearing Board will question, if necessary, both the staff and the applicant/agent.
9. The Hearing Board will move into camera. For electronic hearings, the Hearing Board will separate from the other participants.
10. Members of the Hearing Board will move and second a motion.
11. A motion will be carried which will culminate in the decision.
12. The Hearing Board will move out of camera. For electronic meeting, the Hearing Board will reconvene with other participants.
13. The Chair or Acting Chair will advise the owner/applicant of the Hearing Board decision.
14. If decision is "to refuse" or "approve with conditions", the Chair or Acting Chair shall notify the owner/applicant of his/her right to appeal the decision to the Minister within 15-days of receiving the decision and/or the Ontario Land Tribunal within 90 days of receipt of the reasons for the decision.
15. Motion to move out of Hearing Board and sit as the Board of Directors.

Appendix F-3

CHAIR'S REMARKS WHEN DEALING WITH HEARINGS WITH RESPECT TO Part VI of the Conservation Authorities Act and ONTARIO REGULATION 41/24.

Date: Month XX, XXXX
O.Reg. 41/24: Permit Application # RP-XX-XXX
Applicant: Name

We are now going to conduct a hearing under Section 28.1 of the Conservation Authorities Act in respect of an application by _____: , for permission to:_____

The Authority has adopted regulations under section 28.1 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, unstable soils or bedrock, or to permit alteration to a shoreline or watercourse or interference with a wetland. This Hearing is about granting permission to develop under the Authority regulations; a separate matter from approvals under the *Planning Act*.

The Staff has reviewed this proposed work and a copy of the staff report has been given to the applicant.

The Conservation Authorities Act (Section 28.1 [5]) provides that:

"(5) 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."

While holding this hearing, the Hearing 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. It is not our place to suggest alternative development methods.

It is to be noted that if the Hearing Board decision is "to refuse" or not support the proposed work within the permit submission, the Chair or Acting Chair shall notify the owner/applicant of his/her right to appeal the decision to the Ontario Land Tribunals.

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

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.

At this time, if any member of this Board has intervened on behalf of the Applicant with regards to this matter, they should recuse themselves so there is no apprehension of bias and that a fair and impartial Hearing may be conducted.

Appendix F-4

(Date) **BY REGISTERED MAIL/ EMAIL**

(name) , (address)

Dear:

RE: NOTICE OF DECISION
Hearing Pursuant to Section 28.1(5) 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 Lower Trent Region Conservation Authority provides the following Notice of Decision:

On ***(meeting date and numbe***r), the Hearing Board of the Lower Trent Region Conservation Authority refused/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: ***(the proposed development/alteration to a watercourse adversely affects the control of flooding, erosion, dynamic beaches, unstable soils or bedrock***.)

In accordance with Section 28.1 (7) of the Conservation Authorities Act, an applicant who has been refused permission or who objects to conditions imposed on a permission may, within 15 days of receiving the reasons under subsection (7), appeal to the Minister who may refuse the permission; or grant permission, with or without conditions. Additionally, if a decision is not made by the Minister within 30-days after receiving the request, an applicant may appeal the decision to the Ontario Land Tribunal Through Order in Council 332/2018 the responsibility for hearing the appeal has been transferred to the Ontario Land Tribunal. For your information, should you wish to exercise your right to appeal the decision, a letter by you or your agent/counsel setting out your appeal must be sent within 90 days of receiving this decision addressed to:

Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario M5G 2K4

A carbon copy of this letter should also be sent to Lower Trent Region Conservation Authority. Should you require any further information, please do not hesitate to contact ***(staff contac***t) or the undersigned.

Yours truly,

Chief Administration Officer/ Secretary Treasurer

Enclosure

Appendix F-5

Date

FILE #: RP-XX-XXX
PERMIT#: P-XX-XXX

Name of Applicant
Address of Applicant

ATTENTION: **It is important that you read and understand the contents of this letter and ensure that all necessary parties (i.e., landowner(s) and anyone conducting site works) are aware of any special mitigation requirements contained herein.**

RE: Location where Permission Applies

Application for permission to (development, interference and/or alteration) pursuant to Part VI of the Conservation Authorities Act and Ontario Regulation 41/24 – *Prohibited Activities, Exemptions and Permits*

As you are aware, your application to allow for (Proposed development/interference/alteration) on the property noted above was heard and approved by the Lower Trent Region Conservation Authority's (LTC) Hearing Board on Hearing Date. The following resolution was passed (draft resolution for final approval at the upcoming LTC's Board of Directors' meeting – Next Meeting Date):

RES: HC2/17 **Moved by: Board Member** **Seconded by: Board Member**
THAT the permit application RP-XX-XXX by Applicant for permission (development/interference/alteration) in the (Regulated Area) be approved.
Carried

Please accept this letter as formal notice of the decision of the Hearing Board.

The proposed (development/alteration/interference) is situated within regulated areas associated with (Regulated Area). Attached you will find a copy of Permit No. P-XX-XXX issued for the works noted above in accordance with Ontario Regulation 41/24. The permit has been issued based on the information, plans and specifications submitted with the application as well as your acceptance of the general conditions of approval detailed in the application. The plans and specifications are attached as part of the approved documentation.

The following mitigation measures are expected to be implemented as part of the approval from LTC:

1) *Listed Conditions of Permission;*

Should you require any further information, please do not hesitate to contact ***(staff contac***t) or the undersigned.

Appendix F-6

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 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 Conservation Authority will be held under Section 28.1.2, Subsection 7 of the Conservation Authorities Act at the offices of the said Authority (located at 714 Murray Street, RR #1 Trenton, Ontario K8V 0N1), at the hour of XX:XX, on the XX day of XXX , 20XX, [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 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 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 affect of any evidence that a witness may give.

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

notice in the proceedings.

DATED the ___ day of , _____202X

The Hearing Board of the Conservation Authority

Per:

Chief Administrative Officer/Secretary-Treasurer

Appendix F-7

HEARING BOARD CHAIR'S REMARKS WHEN DEALING WITH HEARINGS

(Section 28.1.2, Subsection 7 of the Conservation Authorities Act)

WITH RESPECT TO Part VI of the Conservation Authorities Act and 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 _____: , for permission to:_____

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 28.1.2 (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/ Hearing Board.

In holding this hearing, the Authority Board/ Hearing 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 Chair of the board.

LOWER TRENT REGION CONSERVATION AUTHORITY

Trent River Floodplain Mapping Update

Floodplain Mapping Report

Revision:
Final/Rev 0

KGS Group Project:
23-4153-001

Date:
February 27, 2024

Client Project:
LTC FHIMP ON22-026

PREPARED BY:

Amber Brasher, EIT
Water Resources Engineer-In-Training

APPROVED BY:

Fuad Curi, M.ASc, P.Eng., PMP
Water Resources Department Head

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STATEMENT OF LIMITATIONS AND CONDITIONS

Limitations

This report has been prepared for the Lower Trent Region Conservation Authority in accordance with the agreement between KGS Group and Lower Trent Region Conservation Authority (the "Agreement"). This report represents KGS Group's professional judgment and exercising due care consistent with the preparation of similar reports. The information, data, recommendations, and conclusions in this report are subject to the constraints and limitations in the Agreement and the qualifications in this report. This report must be read as a whole, and sections or parts should not be read out of context.

This report is based on information made available to KGS Group by Lower Trent Region Conservation Authority and unless stated otherwise, KGS Group has not verified the accuracy, completeness, or validity of such information, makes no representation regarding its accuracy, and hereby disclaims any liability in connection therewith. KGS Group shall not be responsible for conditions/issues it was not authorized or able to investigate or which were beyond the scope of its work. The information and conclusions provided in this report apply only as they existed at the time of KGS Group's work.

Third Party Use of Report

Any use a third party makes of this report or any reliance on or decisions made based on it, are the responsibility of such third parties. KGS Group accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions undertaken based on this report.

1.0 INTRODUCTION

1.1 Objective

KGS Group was retained by the Lower Trent Region Conservation Authority (LTRCA) to update the existing One-Zone regulatory floodplain mapping for the Trent River, the most downstream portion of the Trent River system, from Rice Lake to the Bay of Quinte, through the Municipality of Trent Hills and the City of Quinte West. The project includes several milestones including hydrologic modeling and hydraulic modeling to generate the regulatory flood line for approximately 95 kilometers of the Trent River.

This report contains the results of the hydraulic modelling conducted as part of the study.

The analyses for this project were conducted in accordance with the requirements outlined in the Ontario Ministry of Natural Resources and Forestry (MNRF), and Flood Hazard Identification and Mapping Program (FHIMP)– Project Eligibility and Requirements, for which the following technical guidelines were used:

- The MNRF Technical Guide – River & Stream Systems: Flooding Hazard Limit
- The Technical Bulletins associated with the Lakes and Rivers Improvement Act Administrative Guide (Ministry of Natural Resources and Forestry, 2017)
- Natural Resources Canada Federal Flood Mapping Guidelines Series:
    - Federal Flood Mapping Framework (Natural Resources Canada, 2018)
    - Federal Hydrologic and Hydraulic Procedures for Flood Hazard Delineation (Natural Resources Canada, 2019)
    - Federal Geomatics Guidelines for Flood Mapping (Natural Resources Canada, 2019)

1.2 Flood Hazard Limit Criteria

1.2.1 REGULATORY FLOOD

The study area is located within Zone 3, in Ontario. Based on the “Technical Guide – River and Stream Systems: Flood Hazard Limit” (MNRF, 2002), the greater of the 100-year Flood or the flood resulting from the Timmins Storm is considered the Regulatory Flood for this area.

In a previous study by Cumming- Cockburn & Associates Limited (Cumming Cockburn Ltd, 1983), it was determined that the 100-year Flood was the Regulatory Flood. In this study, the 100-year flood and the flood generated by the Timmins Storm events were evaluated and it was confirmed that the 100-year flood governs (KGS Group, 2024a) and constitutes the Regulatory Flood. The 100-year spring flood was, therefore, used to define the flood hazard along the lower Trent River.

1.3 Study Area

The Trent River drains approximately 12,584 km2 of central Ontario, as part of the Trent Severn Waterway (TSW), that includes three major rivers: the Trent, Otonabee and Severn. The study focuses on the downstream end of the TSW from Bay of Quinte to Rice Lake. This portion of the river contains 15 dams and 17 navigational locks. A description of the watershed is provided in the "Trent River Floodplain Mapping Update – Hydrologic Report" prepared by KGS Group (KGS Group, 2024a).

1.4 Previous Studies

Floodplain mapping for a portion of the Lower Trent River was first completed in 1975 by Dillon Limited for the reach downstream of Hwy 401. Then, in 1983, the floodplain mapping for the area upstream of Hwy 401 (from Rice Lake) was completed by CCL using hydrologic and hydraulic analyses. CCL (1983) employed statistical approaches for flow estimation along the Trent River in the Lower Trent Watershed, to assess the recurrent floods. For estimation of the flood resulting from the Timmins Storm, CCL (1983) prepared a hydrologic model with the HYMO program to simulate the response of the watershed at the outlet. CCL (1983) determined that the 100-year Flood was the Regulatory Flood.

Those studies were subsequently updated, in 1988 by Totten Sims, through the "Trent River Flood Damage Centres Study", which identified nine flood damage centres along the Trent River. In addition, in 2011, AECOM conducted meteorological and hydrological analyses to support dam safety review studies for the structures in the TSW. As part of that study, AECOM performed statistical flood frequency analysis on various Water Survey of Canada (WSC) stations along the Trent River. AECOM (2011) developed a hydrologic model using the program Streamflow Synthesis and Reservoir Regulation (SSARR) to estimate the Probable Maximum Flood at different locations.

3.0 FLOODPLAIN MAPPING

The results obtained from the hydraulic analysis (KGS, 2024b) were used to delineate the floodplain hazard (regulatory flood line) as well as the flood level for the two scenarios (50-year and 200-year) adopted for sensitivity analysis and climate change considerations.

The regulatory flood line was defined based on the water levels obtained from the simulation of the 100-year flood peak flows (1% AEP) with the HEC-RAS model. Additionally, flood lines were prepared based on simulations for the 50-yr and 200-yr flood. The model results for each of the model cross sections were extracted and the surface generated with those levels was transferred into a GIS model, for preparation of the floodplain maps.

It must be noted that, in some areas, the results of the model were adjusted (locally) using engineering judgment, acknowledging the limitation of any modelling exercise, and considering the intended use of the floodplain maps. For example:

- If the water level obtained for a given cross section (1D model) was lower than that of the cross section located downstream, the level was raised to match that of the downstream cross section. While the energy grade line in HECRAS is always decreasing from upstream to downstream, the model could show the water level as locally increasing at points where the flow accelerates. This is to balance the energy conservation. This adjustment provides conservative results while recognizing that the 1D model only represents average velocities in the cross section that might not be fully precise.
- At the approach to dams and even some crossings (1D model) the water level for the first cross section upstream of the structure was raised to match the overall still water level for the forebay. This adjustment provides conservative results while recognizing that the acceleration of the flow in front of the structure might not be fully precise in the model.

It must be noted that some of the dams in the system would be overtopped or close to overtopped during the 100-year (Regulatory Flood). In this case, the potential for a dam failure, causing the incremental flooding of populated areas, must be considered. However, these dams are regularly monitored and operated. They have been assessed for dam break consequences (at least those under the jurisdiction of Parks Canada Agency). The conclusions of that assessment (KGS Group, 2015) require that those dams are made capable of surviving floods that are greater than the Regulatory Flood. It seems excessive, then, to extend the floodplain to the areas that could be flooded due to a dam failure. Therefore, the results of the hydraulic model without considering dam failure for definition of the floodplain in the Lower Trent were used for definition of the floodplain.

According to the Ontario guidelines, “Dykes and flood walls are not regarded as permanent flood control structure sand the land behind the dykes and flood walls should continue to require protection to the revised (increased) flood standard.” (MNRF, 2002). Therefore, for definition of the floodplain, areas that would be protected by those types of structures were included for each storm event.

The resulting floodplain maps are provided in Appendix A and Appendix B.

3.1 Comparison to Previous Flood Line

In general the floodline obtained in this study was consistent with the previous floodline for the regulatory flood. However, there were areas in which they differed. Those are discussed in this section along with figures illustrating specific areas. For use of these figures it should be noted that:

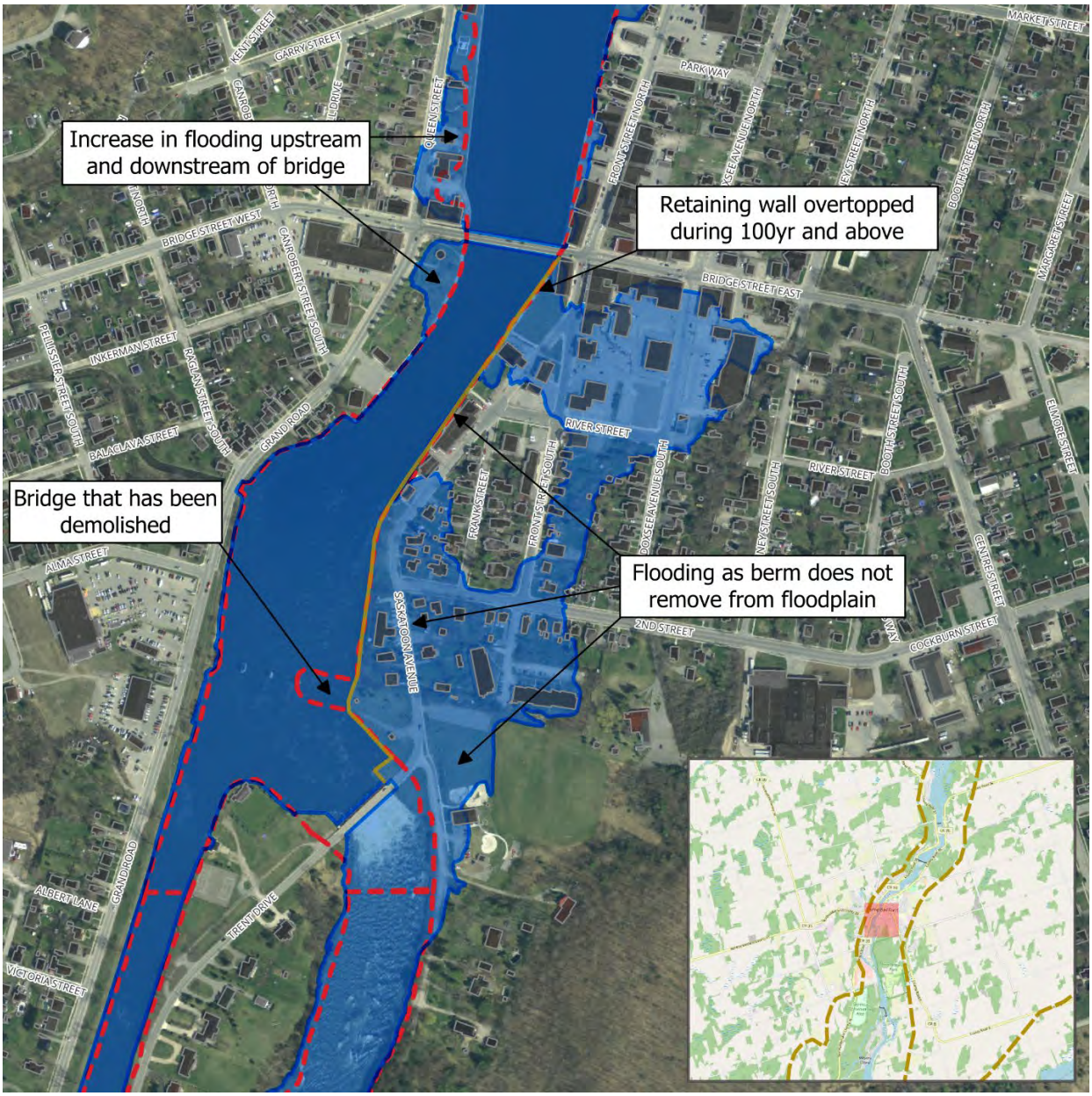
- The enveloping of the red dashed lines represents the previous floodline. The lines are shown as provided to KGS Group. There are zones in which multiple lines appear, either where mapping tiles ended or where additional cleaning was needed.
- The area shaded in blue represents the new regulatory floodplain, and its boundaries are the new regulatory floodlines, as obtained in this study.
- Additional cleaning of the newly defined floodlines will be carried out to eliminate areas that are not connected to the river, as appropriate. See the provided floodline maps in Appendix A and Appendix B for the cleaned floodlines.

In Town of South Campbellford Upstream of Dam 10 – Ranney Falls

In the southern part of Campbellford, there is a retaining wall (shown in orange in Figure 3-13) along the river. However, the areas protected by this structure are still considered part of the floodplain. Therefore, the floodline was delineated using results of a hydraulic model with the retaining wall removed.

Additionally, the model indicates that the retaining wall will be overtopped directly downstream of the Bridge St Bridge. Since this area was simulated with a 1D model, the extent of the overflow areas was not determined in detail. It is recommended a small 2D model be created in this area with more accurate surveying of the structures and river bottom.

FIGURE 3-13: FLOODLINES FOR SOUTH CAMPBELLFORD



LOWER TRENT CONSERVATION

HEARING

Ontario Regulation 41/24 Permit Application: RP-24-242

Property Owner: Lorrie Powers & Corey Brooks

Vacant Lot on Saskatoon Ave (ARN:1435100030022000000)
TH, Seymour Con 6, Lot 9-10

Presented to: Lower Trent Region Conservation Authority Hearing Board
Presented by: Gage Comeau, Manager, Watershed Management, Planning & Regulations

Date: November 20, 2024

Contents

- File Timelines
- Subject Property
- Floodplain Mapping
  - Technical Guidelines for Floodplain mapping
  - Two Zone Concept
- Development Proposal
- O.Reg. 41/24 LTC Policies
- Staff Conclusion

Permit Application: RP-24-242

- Pre-consultation meeting: October 23, 2024
- Permit Application received: November 4, 2024
- Complete Application: November 7, 2024
- Permit Status Letter: November 7, 2024
- Request for Hearing: November 7, 2024
- Notice of Hearing: November 8, 2024
- Hearing Date: November 20, 2024

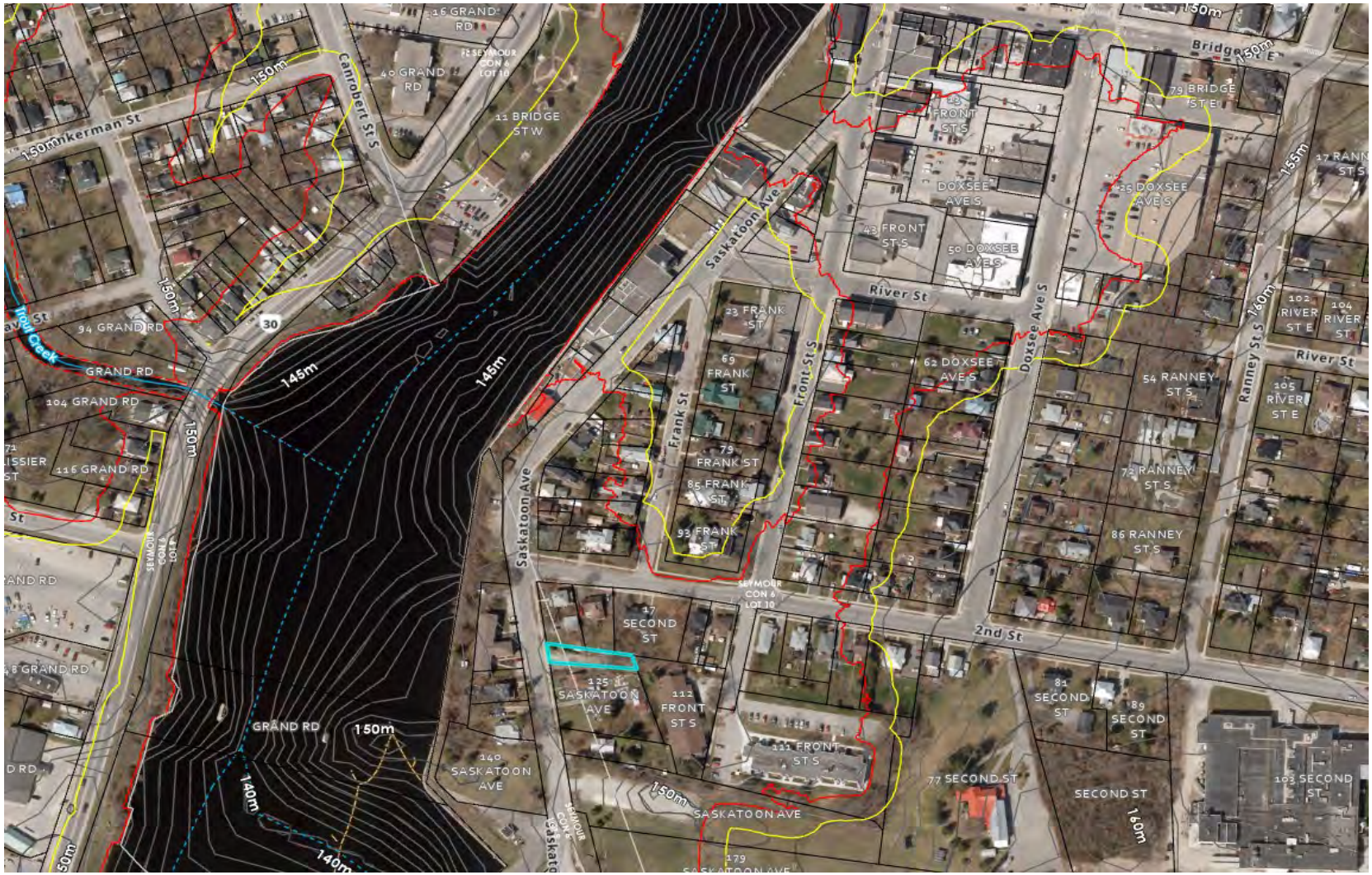
Subject lands

- Vacant property located to the East of Saskatoon Ave
- Entirety of the property located within the Trent River floodplain
  - Floodplain delineated by KGS Engineering and approved by the Board in March 2024

Subject Property

Subject Property

Floodplain Mapping



Floodplain Mapping

- MNR Response on Jan 25, 2024 following a request for direction by Janet Noyes and KGS Consulting during the FHMIP Projects

Dykes & Flood Walls:

Where a dyke has been properly designed and constructed to the flood standard, and a suitable maintenance program is in place, the area behind the dyke can be considered as flood fringe. As such, new development would still be required to be floodproofed to the flood standard. The floodway would be considered to be contained within the dyke area....

Dykes and flood walls are not regarded as permanent flood control structures and the land behind the dykes and flood walls should continue to require protection to the revised (increased) flood standard.

Should the modelling be completed with the dykes removed to assess the flood hazard??

A: As per our Technical Guides, the area behind the dyke is considered in the floodplain, as they are not considered permanent flood control structures.

We are aware of the hydraulic modelling relating to berms, dykes, and flood walls being undertaken in a few different ways to address the backwater effect related to these structures, while still addressing water elevations behind them.

Typically to address the content in the final paragraph of section 4.1.2 Dykes and Flood Walls in the *Technical Guide* (pg. 17), outlining that:

"Dykes and flood walls are not regarded as permanent flood control structures and the land behind the dykes and flood walls should continue to require protection to the revised (increased) flood standard".

Typically, hydraulic modelling is undertaken to determine the increased water surface elevation under the flooding standard as affected by the dyke structure. This elevation is then used to map the extent of the flooding hazard behind the dyke. In the quote referenced above, the reference to 'protection to the revised (increased) flood standard", refers to, the higher water surface elevations that would exist on the wet side of the dyke/flood wall, under the flooding hazard (i.e. regional flood standard).

Technical Guidelines

Ontario

Technical Guide

River & Stream Systems:
Flooding Hazard Limit

Ontario Ministry of Natural Resources
Water Resources Section
300 W ater Street, 5 th Floor, South Tower, P.O. Box 7000
Peterborough, Ontario K9J 8M5

B. POLICIES AND PERFORMANCE STANDARDS

4.1 Flood Hazard Standards Downstream of a Control Structure

4.1.2 Dykes and Flood Walls

Where a dyke has been properly designed and constructed to the flood standard, and a suitable maintenance program is in place, the area behind the dyke can be considered as flood fringe. As such, new development would still be required to be floodproofed to the flood standard. The floodway would be considered to be contained within the dyke area. If new development in the flood fringe cannot be floodproofed to the flood standard, then special policy area status may be requested, subject to the appropriate requirements.

As a precaution, certain areas immediately behind a dyke may be considered too hazardous for any use or certain types of uses if failure of the dyke was ever to occur. Also, the area immediately behind the dyke may be required for maintenance purposes.

The establishment of no development or limited development zones behind a dyke will be dependent on local conditions (i.e., flood depth and velocity) and local approaches to flood plain management. Construction of these flood control structures may result in an increase in flood levels at the site and along downstream reaches of the river. Dykes and flood walls protect existing areas located behind, but do not provide additional flood benefits.

Dykes and flood walls are not regarded as permanent flood control structures and the land behind the dykes and flood walls should continue to require protection to the revised (increased) flood standard.

Technical Guidelines

C - HYDROLOGIC AND HYDRAULIC PROCEDURES

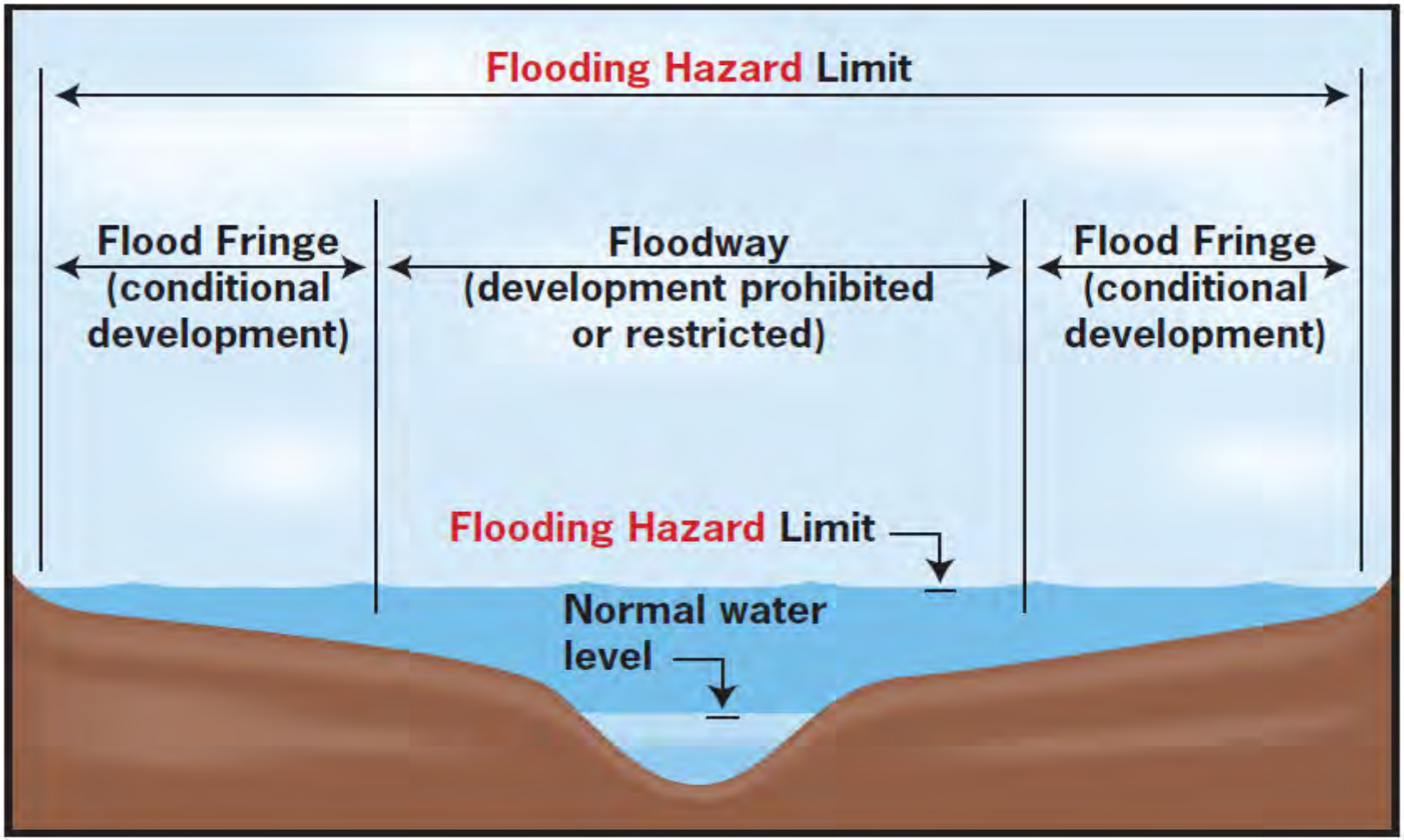
4. HYDRAULIC ANALYSIS

4.12 Dykes

Area behind a dyke is regarded as fringe area if dykes are high enough to provide protection against the flood standard for the area and development in this area is subject to flood proofing requirements to flood standard, unless designated as a Special Policy Area. A special problem arises where dykes have been constructed in the flood plain for protective purposes. If the dykes are too low and would be overtopped by the flood standard selected for flood plain definition, the land behind the dykes would be in the flood plain and, therefore, within the flood risk area. If the dykes are of sufficient height to contain the flood standard, the dykes would normally delineate the extent of inundation. This does not apply in cases where the dykes are not structurally inadequate and would fail under large floods.

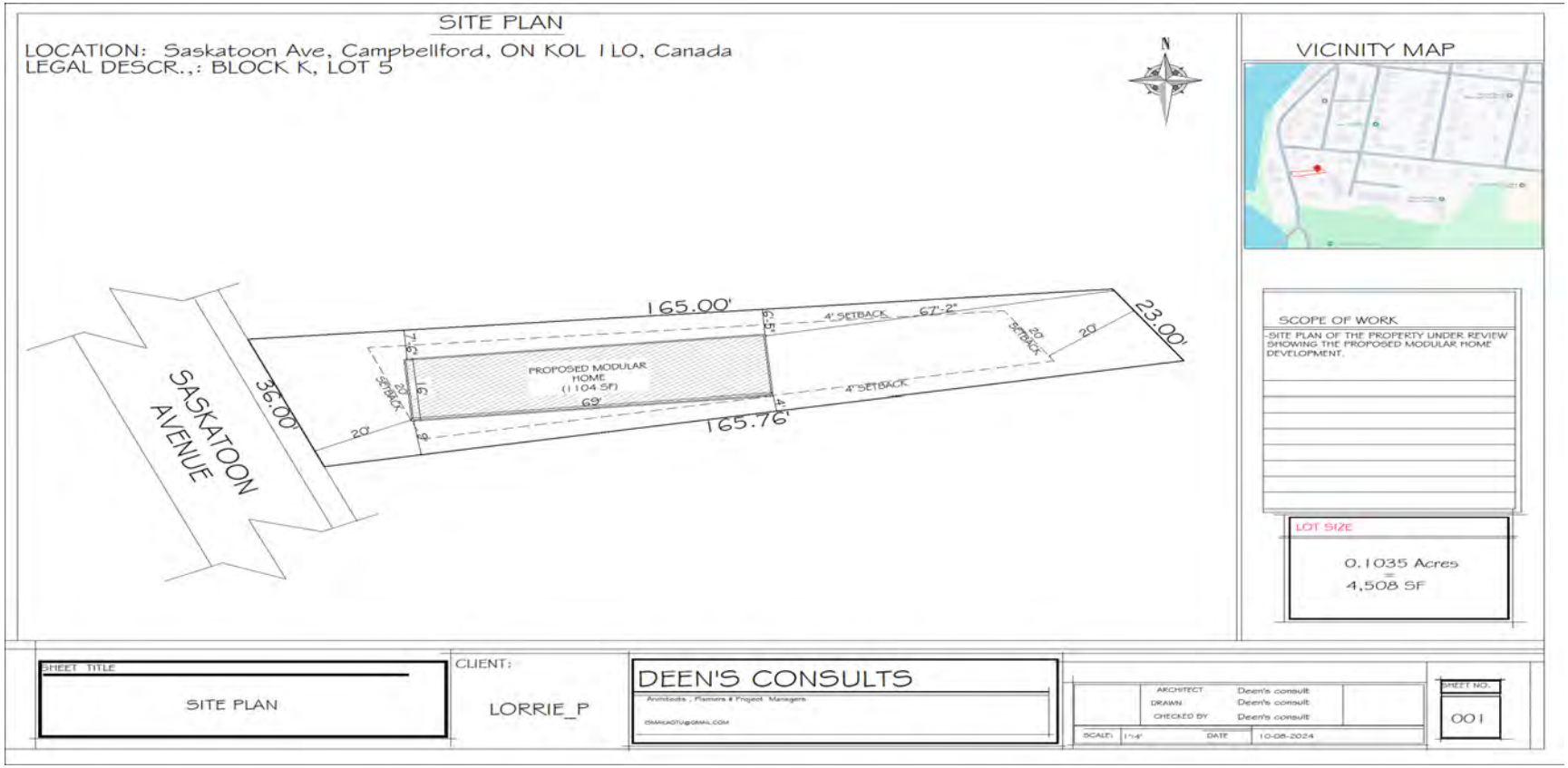
A structural assessment of dykes would not normally be considered as part of the investigation but would probably be specified prior to the commencement of any hydraulic analysis.

Two-Zone Concept

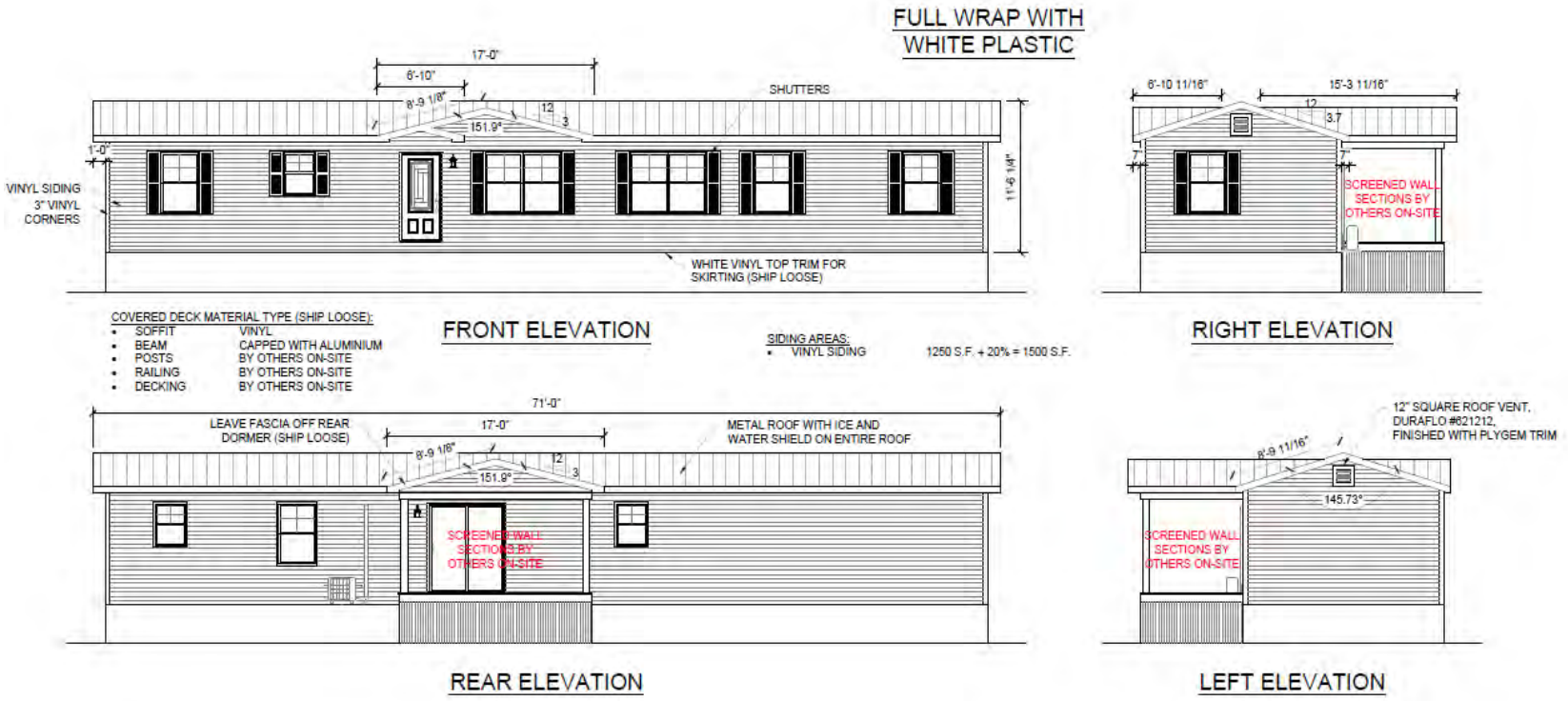


Development Proposal

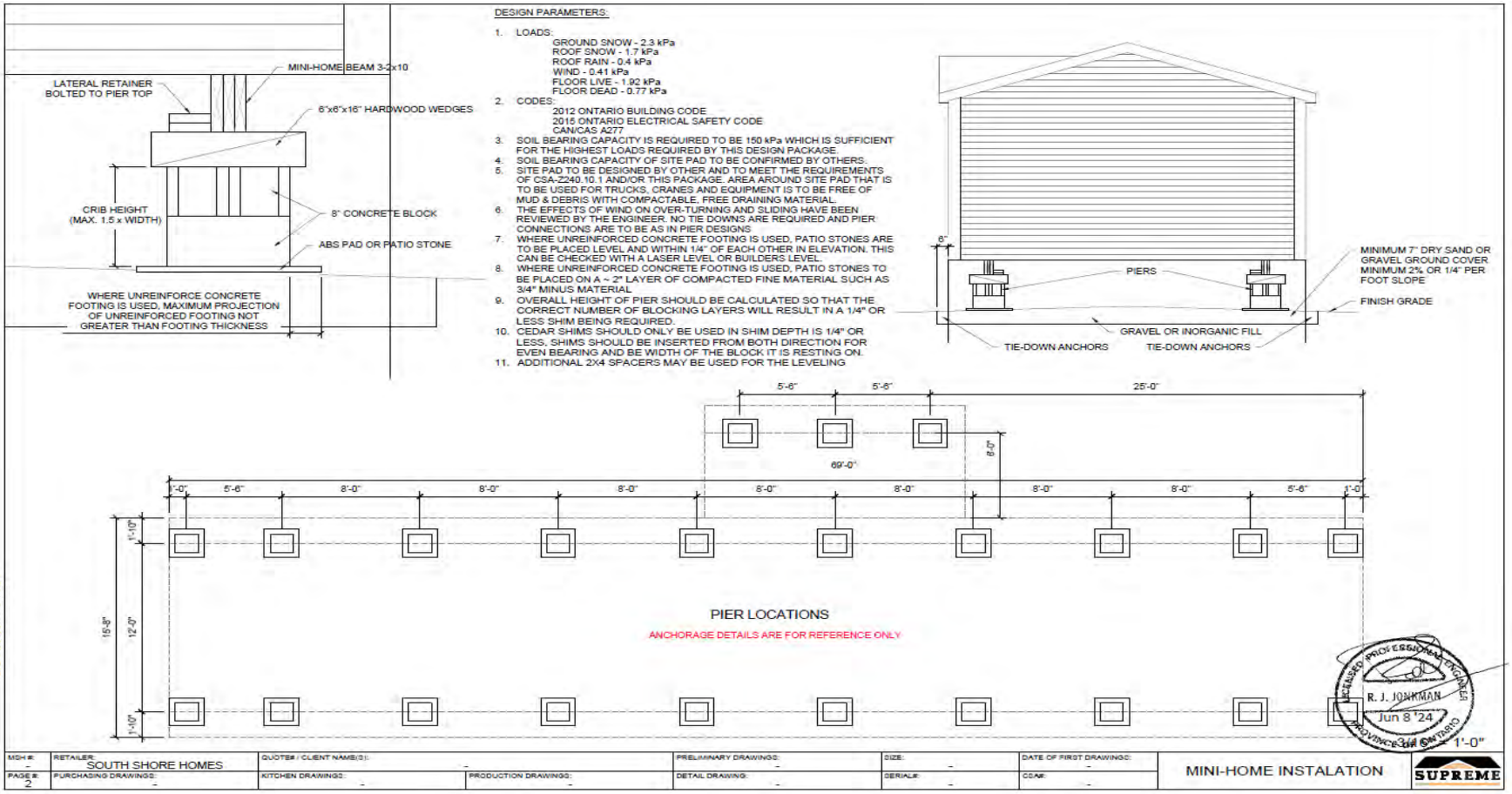
- Permit Application received: November 4, 2024
  - To undergo the placement of a modular dwelling structure on a constructed, engineered foundation



Development Proposal



Development Proposal



Development Proposal

- Floodplain area – 145.73 metres CGVD2013
- Depth of flooding for property ~1.58 metres
- Recommended floodproofing to 146.03 metres CGVD2013
- No impact on the control of flooding
- Safe access an issue only in the event that the area is inundated due to the failure of the dyke/berm structure

WSE Consulting Inc.
205 Dundas Street E, Belleville, ON, K8N 5A2
Tel: (613) 743-7511
E-mail WSEconsulting@outlook.com

Nov 5, 2024

Lower Trent Conservation
714 Murray St.
Trenton, Ontario
K8V 5P4

Attn: **Gage Comeau, M. Sc., Provincial Offences Officer**
Manager, Watershed Management, Planning and Regulations

Ref: **Saskatoon Ave, Campbellford**
Roll# 143510003002200
Flood Review

Dear Sir;

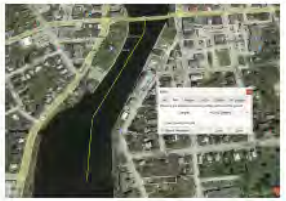
WSE has completed a review of the proposed development for the subject property. The landowner is seeking to construct a new single detached residential modular dwelling.

Through consultation with Lower Trent staff it has been advised that the subject property is entirely within the 100 year regulated flood plain. This review has been completed to assess options to safely permit construction of the building and access.

Control of Flooding

The HEC-RAS modelling for the flooding condition was provided by Lower Trent and the following outlines our assessment for the subject property.

- The property is located approximately 46om downstream of the bridge at County Rd. 8, as outlined below.



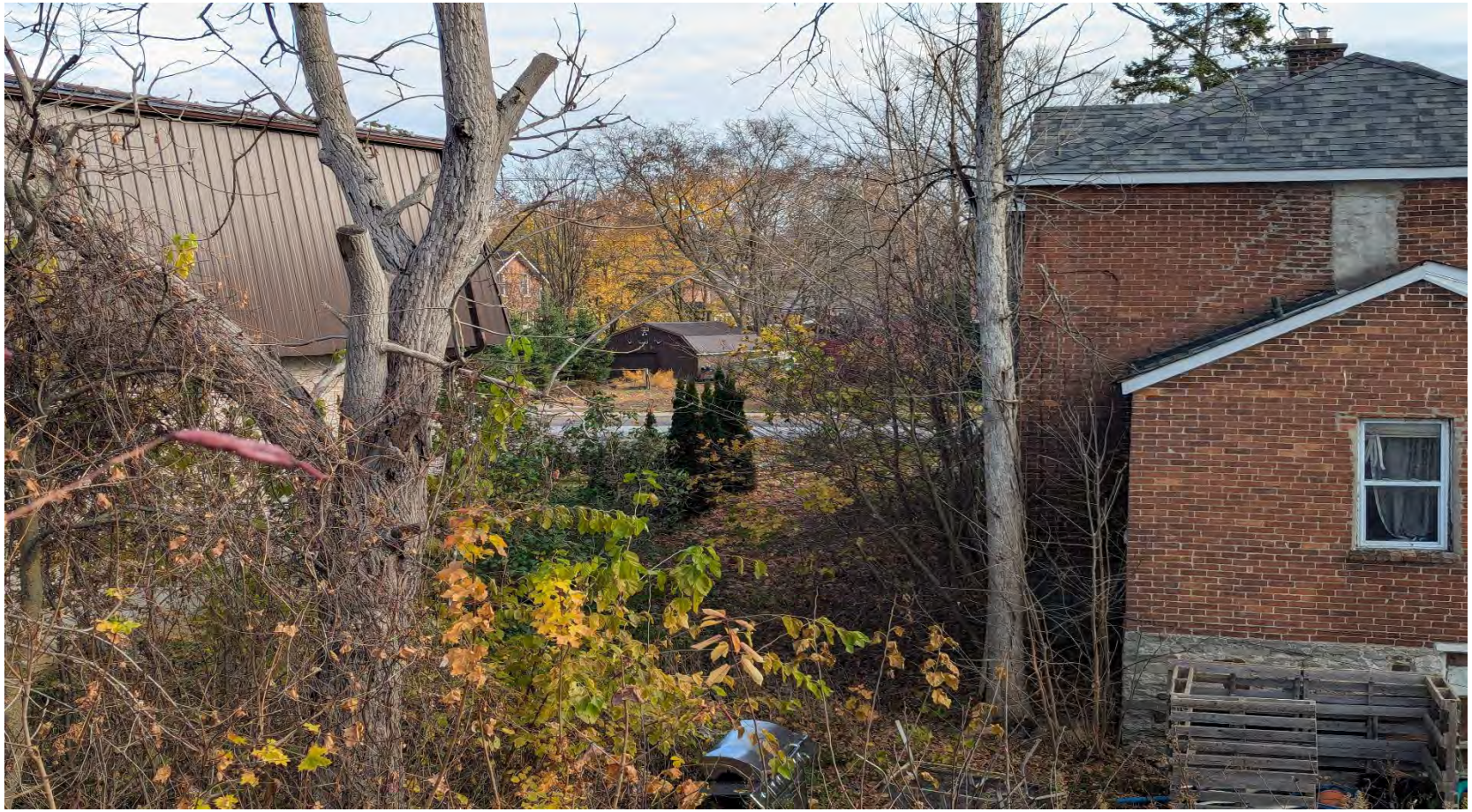
Development Proposal

Development Proposal

Pre-development Inspection

Pre-development Inspection

Pre-development Inspection



Ontario Regulation 41/24 Policy Document

- **General Policies**
- a) risk to public safety is not increased.
- c) susceptibility to natural hazards is not increased nor new hazards created (e.g., there will be no impacts on adjacent properties with respect to natural hazards).
- f) safe ingress/egress is available for proposed development.
- k) the control of flooding, erosion, dynamic beaches, pollution and/or the conservation of land is not adversely affected during and post development.

- **5.3.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys**

1. Development within the Regulatory floodplain shall not be permitted.
2. Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.
4. Major development within the Regulatory floodplain shall not be permitted.

Staff Conclusion

Based on a review of the relevant policies that are applicable to this proposal, staff are not in a position to support the application as it does not conform with the policies.