## Preliminary Steps to Obtain a Building Permit

There are several steps you need to take in order to obtain a building permit in the Village of Lytton. The Zoning and Building Bylaws state the requirements that must be met to be able to build a home or other building or structure.

- Review the Zoning Bylaw 484 for the various Zoning requirements.
  - Check with the **Planning Dept.** at <u>planning@lytton.ca</u> to make sure that your building setbacks meet the Zoning criteria for the property or if you need a Development Permit.
  - Provide a preliminary site plan showing the location of the building on the property and distances from the building to the property lines. Note what the building type is. For example, note if it is a house or a commercial building as the zoning determines what type of building can be built on the property without rezoning it.
  - Zoning, Permitted Uses, Understanding Zoning Setbacks versus Building setbacks, and Zoning Fact Sheets can be found here: <u>https://lytton.ca/zoning/</u>
- Review the Building-Bylaw-710-2022 for the various building requirements and the building application document checklist found here Checklist Building Permit Application .
  - Building Quick Links can be found here: <u>https://lytton.ca/building-permits/quick-links/</u>
  - **Contact** building@lytton.ca for help or to answer your questions. A meeting can be arranged to discuss your project and any requirements.

### Where does my building fit into the BC Building Code?

In general, your building is going to be classified into two areas, either a **Simple Part 9 building** or **a Complex Part 3 building** within the Building Code. To find out where in the code your building fits you should review the following information. If by code you require an Architect your building is a Part 3. If in doubt, contact the Mgr. of Building and Permits building@lytton.ca.

#### Part 9 of Division B of the BC Building Code (most buildings will fall under this Part of the code)

Part 9 of the BC building code is intended for <u>single family and small commercial</u> as well as medium to **low hazard industrial occupancies.** It is a prescriptive path where technologists, contractors, and designers may work.

This Part applies to all buildings of <u>3 storeys or less</u> in building height, having a <u>building area not</u> <u>exceeding 600 m2</u>, and used for <u>major occupancies</u> classified as (when an Architect is not required as per Bulletin 31):

a) Group C, residential occupancies,

b) Group D, business and personal services occupancies,

c) Group E, mercantile occupancies, or

d) Group F, Divisions 2 and 3, medium- and low-hazard industrial occupancies.

For a full list of applications as to when the Building Code applies review Building-Bylaw-710-2022 .

**You may require an architect** if your building fits into one of the categories listed in Bulletin 31 or if it fits the criteria of a Part 3 building.

Read <u>Bulletin 31</u> from the Architectural Institute of BC (AIBC) and **Bulletin 33** regarding Architecture and Engineering – Complimentary Professions found in the same link above to determine if your building will require an Architect.

In order to understand how your building may be classified in the code, we need to explore a bit about how the BC building code is organized.

The code is broken down into three Divisions and further into Parts, Sections, Subsections, Articles, Sentences, Clauses, & Subclauses. You don't need to be acquainted with all of these areas to know when the building code applies. We will be focusing on the application of Division B, the second Division, the acceptable solutions which is further broken down into ten parts.

- Part 1 General
- Part 2 Reserved
- Part 3 Building not in Part 9 (these are considered Complex buildings)
- Part 4 Structural Engineer
- Part 5 Building Envelope
- Part 6 HVAC Mechanical
- Part 7 Plumbing Mechanical
- Part 8 Demolition
- Part 9 Small Buildings (these are considered Simple buildings)
- Part 10 Energy Efficiency

*\*\*\*Please contact* <u>building@lytton.ca</u> if you require further clarification.

Village of

### **STEPS**

Step 1 Zoning: First you will need to determine what Zone your property is located in.

- You can do this by going to the interactive map which can be found on the Lytton website.
- Check the ZONING regulations for the maximum allowable parcel coverage, the maximum height of a building, the setbacks to the front, rear and sides of the building.
- To determine which lot line is Front you will need to read the definitions in the Zoning Bylaw.
  - Planning can help you with these types of questions.
- If you see R1 on your **Property Report** as your property zoning, you can then go to the page in the Zoning Bylaw to determine your setbacks to the property line. See R1 Zoning for permitted uses and regulations.
  - TNRD Interactive Map you can obtain a Property Report here that shows information about your property including the zoning, size in m2, and other legal information.
  - Zoning Map (PDF)
  - Zoning Bylaw

From Zoning Bylaw No. 484

4.1 The area within the boundaries of the *Municipality* shall be divided into the *zones* identified in Column I and described in Column II of Table 4-1.

Designation of Zones				
Column I	Column II			
Zones	Title Description			
RR	Rural Resource			
R1	Low Density Residential			
R2	Multi Family Residential			
C1	General Commercial			
C2	Highway Commercial			
C3	Service Commercial			
M1	Light Industrial			
M2	Heavy Industrial			
P1	Public			
P2	Preservation			

#### TABLE 4-1

Link for TNRD: Interactive Map

Village of on



Village of Lytton

HOMPS	- D	Propert Report Gene	y Information Rep rated on: August 23, 2023 12:01:20 A	ort Th	ompson-Nicola Regional Distri 300 - 465 Victoria Kamloops, BC V2C 2/ T (250) 377-86
GIONA	L DISTRIC		380 Main St		F (250) 372-504 E <u>gisinfo@tnrd</u>
Parcel Desc	ription & Location	n <u>More Details</u>		446	
Legal Descripti LOT 5 BLOCK 1 THE 6TH MERI TOWNSITE OF	ion: 10 SECTION 1 TOWN DIAN YALE KAMLOO LYTTON	ISHIP 15 RANGE 27 WEST OF IPS DIVISION YALE DISTRICT	421	424	437
Plan Number: KAP1LY			FOURYN SY	POURTN BY	421 700
Parcel Type (Cl SUBDIVISION Owner Type:	lass):		141	380	
IUNICIPAL					
ot Size(Calcul iquare Meter: 64.86	lated)(+/-5%):	Acre: Hectare: 0.115 0.046		350	379
community: Ly	rtton			336	339
ocal Authority	y: Village of Lytton		120		h
chool District	: Gold Trail			320	319
Future Deb	ot (Loan Authori nknown - contact Villa	Zation) (For enquiries, contact the l ge of Lytton for any future debt.	.ocal Authority)		More Deta
Planning &	Zoning (For enqui	ries, contact the Local Authority)			More Detai
Zoning Bylaw:	484		Site Specific 2	Coning: 0538	
Coning: P1			Development	Permit Area: N/A	
akeshore Dev	elopment Guideline	s (Intersect): No	Official Comm	unity Plan Name: CONTACT I	LOCAL AUTHORITY
ake Name: N//	Hinn: N/A		Agriculture L	ion: CONTACT LOCAL AUTHO	JRITT
Fringe Area: N	Δ		Riparian Area	(Source: TRIM)(Intersect): No	
loodplain Info	rmation: Refer to Lo	cal Government floodplain regulatio	n. Post-Wildfire	Geohazard Risk Restrictions:	Unknown
Developme	ent Applications	& Permits - from July 2009 to Pr	esent (For enquiries, contact the Loca	al Authority)	More Detai
Folio:	Development Appl	ication Number:	Development Applica	tion Type:	Status:
olio:	File Number:	Application Date:	Issued Date:	Completion Date:	Status:
	Type of Constructi	on:			
BC Assess	ment (For enquiries,	contact BC Assessment Authority)			More Detai
Folio:	Land Title PID:	Assess Year:	Land:	Improvement:	Property Class:
542.00032.000	003-149-668	2023	\$12,700.00	\$0.00	6-Bus/Oth
olio:	Actual Use:		Manua	al class:	
542.00032.000	VACANT IC&I		None	1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	

Disclaimer: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and the Thompson-Nicola Regional District (TNRD) is not responsible for its accuracy, completences or how arrive til may be May full. Displayed and Towns of Los

Village of 4770M

### SECTION 6 - R1 LOW DENSITY RESIDENTIAL

#### Permitted Uses

6.1 The following uses and no others shall be permitted in the R1 Zone:

#### Principal Uses

- 1. single family dwelling;
- 2. two family dwelling.

#### Accessory Uses

- 3. accessory buildings or structures;
- 4. bed and breakfast;
- home business,

#### Regulations

6.2 On a parcel located in an area zoned as R1, no building or structure shall be constructed, located or altered and no plan of subdivision shall be approved which contravenes the regulations set out in the table below in which Column I sets out the matter to be regulated and Column II sets out the regulations.

COLUMN I	COLUMN II
Matter to be regulated	Regulations
1. Minimum Parcel Area	464.4 m <sup>2</sup>
<ol><li>Minimum Parcel Frontage</li></ol>	15.2 m
<ul> <li>if abutting a cul-de-sac; or</li> </ul>	6.2 m
<ul> <li>if a panhandle lot</li> </ul>	6.2 m
3. Maximum number of Principle Buildings per parcel	1
<ol><li>Minimum total floor area per dwelling unit</li></ol>	92.9 m <sup>2</sup>
5. Maximum Height	
<ul> <li>Principle Building</li> </ul>	10 m
<ul> <li>Accessory Building</li> </ul>	6.2 m
<ol><li>Minimum Width of Principle Buildings</li></ol>	6.2 m
<ol><li>Minimum Setback:</li></ol>	
<ul> <li>Principle Buildings</li> </ul>	
Front parcel line	6 m
Interior side parcel line	1.5 m
<ul> <li>Exterior side parcel line</li> </ul>	3 m
<ul> <li>Rear parcel line</li> </ul>	5 m
<ul> <li>Accessory Buildings</li> </ul>	1.5 m
Interior side parcel line	1.5 m
<ul> <li>Exterior side parcel line</li> </ul>	5 m
<ul> <li>Rear parcel line</li> </ul>	1.5 m 35%
<ol> <li>Maximum Parcel Coverage</li> </ol>	33%

The Corporation of the Village of Lytton Page 31 Zoning Bylaw No.484 August 1998





This drawing is an example of a 34'x40' house on a typical residential lot in the Village of

To satisfy the requirements of the BC Building Code to allow windows on your interior side property lines, the walls of the house must be situated a minimum of 4-ft (1.2 m) away from the side property line but to satisfy Zoning requirements you must be a minimum 5-ft (1.5m) away from the property line. Note that exterior lot lines will require a 3m (9.84ft) setback to the property line as per Zoning Bylaw requirements.

### Step 2 Design Your Building

#### Determine Permitted Uses and Regulations from previous Step:

• Once you have determined what you can build on the property, what your maximum allowable parcel coverage is, the minimum and maximum height and width of a building, the setbacks to the front, rear and sides of the building you can then decide what size and type of building you can construct.

#### Design: Now you know the criteria for the building you can decide what you want to build.

- Pick a house design that suits your needs for size, height, style, number of bedrooms, one storey or two storey, construction type, and other features.
- Once you have a design picked out and know what you would like to use for construction type, stud spacing, insulation, air barrier system and location, heating, cooling, ventilation (HRV/Heat Pump), hot water system, windows, doors, and any other features, this would be a good point to engage a Certified Energy Advisor (CEA) to help you with your design so that you will meet the requirement for a minimum of Energy Step Code 3 in Zone 5 (3300 Degree days below 18°C).

A MECHANICAL Contractor should be contacted early on to help with the design of the heating and ventilation systems for your building to maximize energy savings and costs to the final design.

#### From: Guide to working with an energy advisor

1: MODEL YOUR HOME An Energy Advisor (CEA) models your home to show that it is compliant with the current metrics for your region and climate zone. Provide your permit plans to the CEA noting the type of any mechanical systems, window and door packages, and building assemblies that will be used in the building of the home.

**2: OPTIMIZATION** An CEA views your home as a system as opposed to its individual parts and can compare and contrast how each upgrade will change the performance of your home. This information allows balancing options and designing to your context.

**3: MID CONSTRUCTION VERIFICATION** A mid-construction air leakage test determines air tightness of a home while the air barrier is exposed. It highlights any issues while still easily accessed and corrected. Ideally, the air barrier is complete, and windows and doors installed, at time of testing. Subtrades can still be on site working either inside or outside of the home while the mid-construction air tightness test is conducted.

**4: FINAL SITE INSPECTION** Completion of a final site inspection including a final air leakage test. All of the windows, doors and mechanical systems must be installed for verification.

**5: REPORTING & REBATES** A CEA provides final reporting and any required labeling in order to meet local requirements and apply for applicable rebates.

**ENERGY STEP CODE LINKS:** 

'illage of UTTOU

- Energy Step Code
- Download the checklist (BCBC 2018 Rev. 5) (XLSM) Part 9 buildings
- Energy Advisors

### **Modelling Information Requirements**

**PLANS MUST SHOW:** Scale. Ideally the same scale on every page to avoid delay, extra expense, and errors. Window sizes and window operation. All vaults. Ideally with a cross section for each vault. All building assemblies with correct insulation values that you are planning to actually build. Permit offices reject plans that do not match CEA reports. "2.5 inch rigid" is not sufficient information, you must note expected R-value from that insulation. Direction the home faces.

**WINDOWS:** Type of windows, eg. casement or sliders. U value and/or other performance ratings of the windows. Tip: window quotes typically show the performance data needed. If unknown, CEA can assign assumptions.

**HEATING AND COOLING:** System type, eg. heat pump, gas forced air, or boiler. Performance data for those systems. Tip: mechanical quotes typically show the performance data needed. If unknown, a CEA can assign assumptions.

**VENTILATION:** Type of system HRV.

#### PACIFICAN Grants for Fire-resilient, Net Zero Ready and Net Zero Buildings

If applying for grants from PacifiCan, construction will need to meet their Checklist of Requirements for Fire Resilient Homes or Businesses. See links below and continue to check for updates on their website at <a href="https://www.canada.ca/en/pacific-economic-development/services/funding/lytton/homeowner.html">https://www.canada.ca/en/pacific-economic-development/services/funding/lytton/homeowner.html</a>

- PacifiCan Lytton Homeowner Resilient Rebuilding(LHRR) Program grants
- Program overview from July 15, 2023 Community Meeting
- PacifiCan LHRR Fire Resilient Checklist

\*\*Reach out to PacifiCan at <u>lytton@pacifican.gc.ca</u> for a one-on-one consultation to discuss your rebuild plans and receive an application form.

#### EXAMPLE : Pre-Construction Compliance Report page 1 – Part 9 Buildings

Village of Yttou

	BC STEP CODE COMPL PERFORMANCE PAT BUILDIN	IANCE CHECKLIST	STEP	ODE
A: PROJECT INFO				
Building Permit #:		Dra Cara	her i a fi	
Builder:		Pre Cons	truction	on
Project Address: Municipality / District:		Building Type		
Postal Code: PID or Legal Description		# of Dwelling Units	s: 0	
				-
B: CODE COMPLIA	ANCE SUMMARY			
BC Building Code Pe	erformance Compliance Path:			
		_		
Energy Step C	ode	Zero Carbon Step (	Code	1
S Net	tep Required	Level Required	1 41	
NOT	yet selected	Not yet selec	ted	
Propos	ed Step Achieved	Proposed Level Ach	ieved	
Data n	ot vet entered	Data not vet er	tered	
	,			
3	4 5	EL1 EL2 EL 3	EL 4	
Based on informatio	n provided by the builder & the f	ollowing drawings:		
Plan Author	. ,			
Plan Version				
Fian Date				-
C: COMPLETED B	Y			
Full Name (Print):		Date (YYYY-MM-DD	):	
Company Name: Phone:		Service Organisation Energy Advisor ID #	11 E	
Address				
Email:				
Email: P File # D: BUILDING CHAI	RACTERISTICS SUMMARY			
P File #	RACTERISTICS SUMMARY Details (Assembly / System Type	e / Fuel Type / Etc.)	Average R	Effective
P File #	RAC TERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average R	Effective SI
P File #	RAC TERISTICS SUMMARY Details (Assembly / System Type	s / Fuel Type / Etc.)	Average R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings	RACTERISTICS SUMMARY Details (Assembly / System Type	e / Fuel Type / Etc.)	Average R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings	RACTERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls	RACTERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor	RACTERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average   R:	Effective Sl
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels	RACTERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average   R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over	RACTERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average   R:	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space	RAC TERISTICS SUMMARY Details (Assembly / System Type	9 / Fuel Type / Etc.)	Average   R	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade	RAC TERISTICS SUMMARY Details (Assembly / System Type	e / Fuel Type / Etc.)	Average   R:	Effective
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs	RAC TERISTICS SUMMARY Details (Assembly / System Type	2 / Fuel Type / Etc.)	Average   R:	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs	RAC TERISTICS SUMMARY Details (Assembly / System Type	2 / Fuel Type / Etc.)	Average   R:	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floor Over Unheated Space Walls Below Grade Slabs	RACTERISTICS SUMMARY Details (Assembly / System Type	e / Fuel Type / Etc.)	Average R: Performar	Effective SI CC Values SHGC
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors	RAC TERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Deferman	Effective Si
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors	RACTERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performan USI	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors	RACTERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performare USI	Effective SI Cee Values SHGC
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors	RAC TERISTICS SUMMARY Details (Assembly / System Type	Fuel Type / Etc.)	Average R: Performan USI	Effective SI SI SHGC
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barieer System &	RAC TERISTICS SUMMARY Details (Assembly / System Type	2 / Fuel Type / Etc.)	Average R: Performan USI	Effective SI Cee Values SHGC SHGC
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floor Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location	RAC TERISTICS SUMMARY Details (Assembly / System Type	e / Fuel Type / Etc.)	Average R: Performar USI	Effective SI SI SI SI SI SI SI SI SI SI SI SI SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location	RAC TERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performan USI ACH NLA	Effective SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location	RACTERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performan USI ACH NLA	Effective SI CC Values SHGC SHGC SHGC
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location Space Heating/ Cooling	RACTERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performare USI ACH NLA NLR	Effective SI Cee Values SHGC SHGC EDW/01 0.00
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location Space Heating/ Cooling Domestic Hot Water	RAC TERISTICS SUMMARY Details (Assembly / System Type	> / Fuel Type / Etc.)	Average R: Performar USI ACH NLA NLR	Effective SI Cee Values SHGC SHGC EDIV/01 0.00
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joigts / Floor Headers and Lintels Floors Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location Space Heating/ Cooling	RAC TERISTICS SUMMARY Details (Assembly / System Type	Fuel Type / Etc.)	Average R:	Effective SI SI Control Control Contro
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floor Over Unheated Space Walls Below Grade Slabs Windows and glazed doors Doors Air Barrier System & Location Space Heating/ Cooling Domestic Hot Water Ventilation	RAC TERISTICS SUMMARY Details (Assembly / System Type	Fuel Type / Etc.)	Average R: Performan USI ACH NLR	Effective SI SI SI SI SI SI SI SI SI SI SI SI SI
Email: P File # D: BUILDING CHAI Roof / Ceilings Above Grade Walls Rim Joists / Floor Headers and Lintels Floors Over Unheated Stabs Windows and glazed doors Doors Air Barrier System & Location Space Heating/ Cooling Domestic Hot Water Ventilation Other	RAC TERISTICS SUMMARY Details (Assembly / System Type	Fuel Type / Etc.)	Average R: Performan USI ACH NLA NLA NLA NLA	Effective SI Effective SI Effective SHGC Effective SHGC Effective SHGC Effective SHGC Effective SHGC Effective SI Effectiv

Village of on

#### EXAMPLE : Pre-Construction Compliance Report page 1 - Part 3 Buildings

	-		-	-	-	
BC ENERGY STEP COD	F೩	ZERO	CARB	ON	STEP	CODE
DO ENERGI OTEL OOD			UAILD			CODL
		V DEO		100		

#### PART 3 BUILDINGS ENERGY DESIGN CHECKLIST - v3.0

This Energy Design Checklist v3.0 is endorsed by: Architectural Institute of British Columbia, and Engineers and Geoscientists BC

This reporting form is for buildings that contain major occupancies complying with Subsection 10.2.3. and 10.3.1 of Division B of the BC Building Code 2018 Revision 5. This is intended to capture the reporting requirements of Articles 2.2.2.1. and 2.2.9.2. of Division C of the BC Building Code, as well as local government bylaw requirements related to energy and emissions reductions in buildings. Portions of the building that are subject to Clause 10.2.2.1.(1)(a) or (b) of Division B of the BC Building Code should also be included in this report. This form should **not** be used for projects complying exclusively under Clauses 10.2.2.1.(1)(a) and (b) of Division B of the BC Building Code or for earlier revisions of the Code.

All sections of this form are to be completed. Complete all fields that apply to the project, using information that represents the current stage of design or construction. For fields that do not apply or for which there is no information yet, please leave blank, indicate "n/a" or provide comment. Additional explanation or instruction is provided for some cells by hovering over the cell - these are indicated by a red note symbol in the upper right corner of the cell.

SECTION A: Project Information								
Project Name (if applicable)								
Project Address								
Project Stage								
Project Identifier (e.g. Building Permit No.)								
Building Permit Date (YYYY-MM-DD)								
Building Height (storeys)								
Total Modelled Floor Area (m <sup>2</sup> )								
Applicable Version of the BC Building Code								
Jurisdiction								
Heating Degree Days below 18°C								
Climate Zone								
SECTION B: Building Information and Perform	nance Requiremer	nts - Buildings	with a Baseline/	Reference			Only complete	if applicable
Occupancy Classification(s)	Modelled Floor Area (m²)	Performanc	e Requirement	% Bette Requirem	er nent	Optiona Performanc	I: Source of e Requirement	
Total Modelled Floor Area (m <sup>2</sup> )	0							
	-							
Baseline/ Reference Energy Model Performance								
Total Annual Thermal Energy Demand (kWh)								
			Emissions					
	Annual Energy		Factor	Emissions				
	(kWh)		(kgCO <sub>2</sub> e/kWh)	(kgCO <sub>2</sub> e)				
Total Electricity			0.011	0				
Total Natural Gas			0.180	0				
Total District Energy			0.000	0				
Total Other 1			0.000	0		BASELINE P	ERFORMANCE R	EQUIREMENT
Total Other 2			0.000	0		TEUI	TEDI	GHGI
Total Other 3			0.000	0		kWh/m²/year	kWh/m²/vear	kgCO <sub>2</sub> ./m²/year
Total Annual Energy	0	Total A	Annual Emissions	0		0	0	0.0
		1						
SECTION C: Building Information and Perform	nance Requiremer	nts - Steps 2 th	hrough 4				Only complet	e if applicabl
						STEP CODE F	PERFORMANCE	REQUIREMENT
	Modelled Floor	Step	GHG Emissions	Optional: So	urce of	TEUI	TEDI	GHGI
Occupancy Classification(s)	Area (m²)	Required	Level	Step Requir	ement	kWh/m²/year	kWh/m²/year	kgCO <sub>2e</sub> /m²/year
Total Modelled Floor Area (m <sup>2</sup> )	0			Area Weighte	d Totals	0	0	0.0
SECTION D: Total Building Performance Regu	lirements from SE	CTION B and	SECTION C					
Section of rotal building renormance keye	in ements from SE					WHOLE BLD	G PERFORMANC	E REQUIREME
						TEUI	TEDI	GHGI
						kWh/m²/year	kWh/m²/year	kg CO <sub>2</sub> e/m²/vea
						-	-	1.1

ECTION E: Modelled Building Performance

Compliance indicators in Section E are determined using an area weighted average of all entered occupancies and requirements from Sections B and C.

### Step 3 BUILDING PERMIT APPLICATIONS

**PRIOR TO** applying for a building permit in the online permitting system **Cloudpermit**, you must gather all the information you will need for the permit application.

Check that your zoning is correct for the type of building you want to build on your property, and if needed apply for a *Development Permit* or *Development Variance Permit* prior to applying for the building permit.

Once all Zoning requirements are met, engage a Geotechnical and Structural engineer to work with your designer to draw up your set of plans; contact a Certified Energy Advisor to look at the plans to provide input into the design in order to meet the design requirements for *Energy Step Code 3 in Zone 5* for the set of plans, and make any adjustments necessary to meet code requirements.

A MECHANICAL Contractor should also be contacted early on to help with the design of the heating and ventilation systems for your building to maximize energy savings and costs to the final design, and to have the CEA add these criteria to your report as plan drawings and the report details <u>must match</u> <u>exactly</u>.

### Submit the building design and all documents in a digital pdf format.

#### There are new conditions to obtain a building permit in the Village of Lytton.

#### Engineering:

Due to ground disturbance and hazardous slopes, all new structures will need the services of a **Professional Geotechnical Engineer** to determine the bearing capacity and structural considerations of the soil and determine the compaction of engineered fill; as well as a **Professional Structural Engineer** to design the foundation, tall walls and any retaining walls over 1.2 m (4ft) in height.

**The exception** is for detached garages, carports and garden structures less than 55 square metres (592 sf) for simple buildings in accordance with the building code.

- ✓ Geotechnical Engineer: to provide a Letter of Assurance in the form of a Schedule B from the BC Building Code, Confirmation of Professional Liability (Appendix E from Building Bylaw No. 710), and a copy of their current Certificate of Liability Insurance from their insurance provider.
- ✓ Structural Engineer: to provide a Letter of Assurance in the form of a Schedule B from the BC Building Code, Confirmation of Professional Liability (Appendix E from Building Bylaw No. 710), and a copy of their current Certificate of Liability Insurance from their insurance provider. They also need to provide a digitally signed and sealed set of Structural Blueprints for the building permit.

#### Blueprints: Full Set of Plans

A full set of digital plans (in a pdf format) must be provided (both Architectural and Structural).
 The Geotechnical Engineer may need to provide a report.

For a full list of details refer to the Building-Bylaw-710-2022 Section 10.4 for simple buildings such as houses or other Part 9 buildings, or to Section 10.2 for complex buildings that are Part 3 buildings such as those >600m2 or >three storeys in building height or of an Occupancy type that is regulated by Part 3 of the building code.

#### A full set of plans include:

- A Building Code Compliance Summary including the applicable edition of the building code, such as without limitation whether the building is designed under Part 3 or Part 9 of the building code, major occupancy classification(s) of the building, building area and building height, number of streets the building faces, and accessible entrances, work areas, washrooms, firewalls and facilities.
- A copy of a Site plan prepared by a BC Land Surveyor showing the north bearing and dimensions of your lot, legal description and civic address, location and dimensions of any existing Statutory Right of Ways, Easements, or Covenants showing setbacks to the proposed building, and the proposed building and any existing buildings including setbacks to all property lines, and any adjacent street or lane names, setbacks to the natural boundary of any lake, swamp, pond or watercourse, as well as private sewage disposal systems, water supply system or storm drainage system.
- The Architectural site plan shall also show a Zoning Compliance Summary Table and a Parking Plan.
- **Foundation plan** showing the size and construction of strip footings, pad footings; size, height and construction of foundation walls; pad strip footings under point loads; strip footings under bearing walls. The foundation plan needs to include the location and size of radon vent pipes.
- **Floor plans** (as many as needed for as many floors you have including basements) showing the dimensions and uses of all areas, including: the dimensions and height of crawl and roof spaces; the location, size and swing of doors; the location, size and opening of windows; floor, wall, and ceiling finishes; plumbing fixtures; structural elements; and stair dimensions. All floor plans need to include the location and size of radon vent pipes as they progress through the roof. Also, provide the location and type of: hot water system, heating system (eg: integrated forced air, hydronic, electric baseboard, split ductless, heat pump), ventilation system HRV (heat recovery ventilator). BCBC 9.32.4.
- **Roof plan** showing type of construction (truss or joist size, spacing and span); roof outline and the distance to the furthest projection (fascia) from the wall line. A copy of engineered truss plan layouts with any point loads noted on them as well as the individual truss designs including bearing points and their specified loads will need to be supplied.
- Engineered beams, lintels, trusses and floor joists will need to be supplied with the application along with truss, beam, lintel and floor layouts with point loads showing. These don't need to be the sealed copy as those will need to be supplied prior to the Framing Inspection.
- Four Elevation views (label north, south, east, west) include elevations of all sides of the building showing finish details, roof slopes, windows, doors, the grade, the maximum building height line to mid-point of a gable roof (and an average of grades if on a sloped lot), ridge height, spatial

<u>separation calculations</u> table for each building view but in particular the sides (Note that you must <u>half the limiting distance</u> for this calculation if your lots is out of the 10-minute Fire Response Area BCBC 9.10.14.3. and 9.10.15.3.), and natural and finished grade to comply with the building code and to illustrate that the building or structure conforms with the Village zoning;

- **Cross Section(s)** through the building illustrating foundations, drainage, ceiling heights and construction systems; include cross-sectional details drawn at an appropriate scale and at sufficient locations to illustrate that the building or structure substantially conforms to the building code; and as many detail views as needed to show the construction.
- Envelope assemblies shown on Architectural and Structural drawings <u>must exactly match</u> those used in the Energy model. The first page of the Pre-construction Energy Report must be reproduced in the architectural drawings section sheets.
- Air Barrier Strategy: Air barriers control leakage into and out of the building envelope. Uncontrolled air leakage can lead to moisture issues from condensation, excessive heat loss, and poor indoor air quality.
  - The air barrier strategy must be presented in the architectural drawings through a "redline diagram" for <u>each building section</u>, showing how the proposed air barrier will fully encircle the building envelope. See sample diagram next page.
  - **Details at critical junctions** must clearly show the viability and constructability of the proposed air barrier. This includes any location where a horizontal or horizontally inclined element intersects with a vertical or vertically oriented element. As well as windows and doors. Show a detail.
  - The air barrier material and location must be clearly indicated on Section details. The primary air barrier material element must be called out on all assemblies.
- **Details** These pages should include: a diagram of a **complete soil gas (radon) system** from foundation through the roof with piping details (Soil Gas Control BCBC 9.13.4.);
- A complete set of Wall, Floor and Roof/Ceiling assemblies for Above-Grade and Below-Grade as needed to show Insulation requirements when using a HRV or without a HRV, and that shows cladding types being used, RSI (R) values, Roof assemblies, Wall assemblies, Floor assemblies, Foundation wall assemblies and the value of each the components with a Total Effective RSI/R Value of the Entire Assembly shown for each of these for buildings not built to the Step Code as allowed in the BC Building Code for certain buildings.

Village of 4770U

**Red Line Test** 



"One should be able to take any section of a building on paper, put a red pen on the paper, and trace the building's air barrier without lifting the pen. Eventually, the red line of the pen should connect to the starting point."

Source: The Journal of Light Construction (www.jlconline.com/training-the-trades/air-barrier-basics\_o)



- Except for garages, carports and garden structures located on land and < 55m2 (592 sf), include a foundation and excavation design prepared by a registered professional in accordance with the Building Code;
- **Include geotechnical letters of assurance**, in addition to a required geotechnical report, if the building official determines that the site conditions so warrant;

• Include drawings at a suitable scale of design including the information set out in this section.

#### Other: Building Application

(Requirements found in Building-Bylaw-710-2022.

- ✓ The owner must apply for a Development Permit (DP) if the building is in an area designated by the Village's Official Community Plan as a development permit area.
- The owner must ensure that the proposed building or structure complies with all bylaws of the Village, except to the extent a variance of a bylaw is authorized by a development permit, development variance permit or order of the Board of Variance.
- <u>Building Application completed in Cloudpermit</u> where the submission of all the required supporting documents for the application will be requested and will need to be uploaded to the site. These files will need to be in a <u>digital pdf format and each file copied individually</u>.
- ✓ A non-refundable building permit application fee of \$200 is to be paid at time of application submission in Cloud Permit.

#### Supporting Documents Include:

- ✓ A FULL and complete set of digital Building Plans in pdf form as described previously.
- ✓ A Title Search must be done and supporting documents (such as covenants, easements, right of ways, etc.) must be provided. You can get these from <u>BC Land Title & Survey</u>. If Owner is a company or corporation Proof of signing authority is required.
- ✓ An Owner's Undertaking Appendix D found on page 55 of the Building-Bylaw-710-2022 is required to be <u>filled out by the owner</u> to show ownership and take responsibility for the project. This is required for all permits. This can be filled out in Cloudpermit online.
- ✓ A Letter of Authorization Appendix C found on page 54 of the Building-Bylaw-710-2022 is required to be <u>filled out by the owner to authorize a Representative (agent)</u> to apply for and represent the owner in the various requirements and responsibilities for the building permit. This can be filled out in Cloudpermit online.
- ✓ A Confirmation of Professional Liability Insurance Appendix E found on page 59 of the Building-Bylaw-710-2022 is required to be <u>filled out by EACH Registered Professional (Engineer</u> or Architect) PRIOR TO issuance of a building permit along with their Letter of Assurance – Schedule A or Schedule B; and prior to submitting a Schedule C after the completion of the building. Each Registered Professional also needs to submit a copy of their <u>current</u> Certificate of Liability Insurance from their insurance provider.
- ✓ A <u>sealed set</u> of **Structural plans i**<u>n a digital pdf format</u> to be submitted with forms: Appendix E, their Certificate of Liability Insurance and Schedule B.
- ✓ Any required sealed reports or other information deemed necessary to be submitted by a Geotechnical Engineer to be submitted in a digital pdf format.
- ✓ A New Home Registration Form from a <u>builder or an owner builder</u> must be provided. Check with BC Housing for registration information and details.
  - Builders and Developers: <u>https://www.bchousing.org/licensing-consumer-services/builder-licensing</u> (see example below)
  - Owner Builder: <u>https://www.bchousing.org/licensing-consumer-services/owner-builder</u>



ullaer Form			Owner Builder Form	
		BC HOUSING		🚺 BC HOUSIN
New Home Registra	tion Form		New Home Registration Form	
			OWNER BUILDER AUTHORIZATION	
The purpose of this form is to certify, for the covered by home warranty insurance and bu	e purpose of section 30 of the Homeowner Protecti alt by a licensed residential builder.	in Act, that a proposed new home is		
		Form: 476235	The purpose of this form is to certify, for the purpose of section 30 of the H	omeowner Protection Act, that a propos
	Funder: Data: June 30, 2022		New home will be built by an owner builder Or is otherwise exempted by the Or the requirement to be covered by home workanty insurance.	e regulation from licensing requirements
Licence Number.	Expiry Date: June 30, 2023		of the requirement to be control by name working instrumet.	
Lompany Name:			A. BUILDER INFORMATION	
PROPERTY INFORMATION			Name (last,first):	
Civic Address:	12		Owner Builder Authorization No.:	
City/Town: Peachland	Province: British Columbo	Portal Code: V0H LX2		
	Trovince, pritasi courrola	Postal Code: VOH 1/2	B. PROPERTY INFORMATION	
FID:				
Legal Description:			City/Town: Province: British Columbia	Postal Code:
Constant of the Deservation			PID:	
Owner(s) of the Property:			Legal Description:	
			Owner(s) of the Property:	
C. CONSTRUCTION INFORMATION				
Number of Dwelling Units: 1				
Type of New Home: Single			C. CONSTRUCTION INFORMATION	
			Number of Dwelling Units:	
D. PROOF OF HOME WARRANTY IN	ISURANCE		Type of New Home: Single, attached	
Certified and sealed by warranty provider:	s	cal:		
Warranty Provider: Triura Guarant			D. PROOF OF EXEMPTION	
Builder Warranty No : ASPE211		TRISURA	Certified and sealed by the BC Housing Management Commission:	Scal:
			Reason for exemption: Owner Builder Authorization	6
Insurance 140., 30-160647			Owner Builder Authorization No.:	
Warranty Provider Seal Date: Nov	ember 10, 2022		Date:	Constitution
BUILDING PERMIT INFORMATION	4			
To be completed by municipality or regional	I district and returned to the Licensing & Consumer	Services Branch:		
Municipality or Regional District:			To be campleted by municipality or regional district and returned to the Licensing & Consumer Servi Municipality, On Regional Districts	tes Branch:
Permit issued to:			Permit issued to:	
			Date issued: (month/day/year)	
Date issued: (month/day/year)				

- ✓ A BC Land Survey showing the proposed building in relationship to Covenants, Easements, Right of Ways etc., must be provided.
- Copies of truss, lintel, beam, and floor layouts with point loads shown as well as individual truss engineering showing design criteria is also required. These are not required to be sealed for the building application.
- ✓ Energy Step Code 3 for Zone 5: The Village of Lytton is subject to the conditions of the Energy Step Code 3 for both Part 9 and Part 3 buildings. This means that a Certified Energy Advisor will need to be engaged early in the process to get their input to ensure that this standard is met.
  - The CEA must provide a "Pre-Construction Compliance Report" for submission with the permit application.
  - The information in this report MUST match the construction materials and details noted in the building plans. If not, they will need to be revised.
- ✓ A Water and Sewer application request must be submitted in Cloudpermit online.
- ✓ **Driveway application request** if required submitted in Cloudpermit online.
- ✓ **Highway Access** approval permit if required.
  - Not required for the BP Application but you will also need to contact the various Utility Companies for service such as: <u>BC Hydro</u>, <u>Telus</u>, Propane, Internet, Cell provider, etc.

### Questions?

If you have questions or require further information or assistance, please contact the Building Department to set up a time to call or meet online at:

Village of Yttou

For Building Inquires – <u>building@lytton.ca</u>