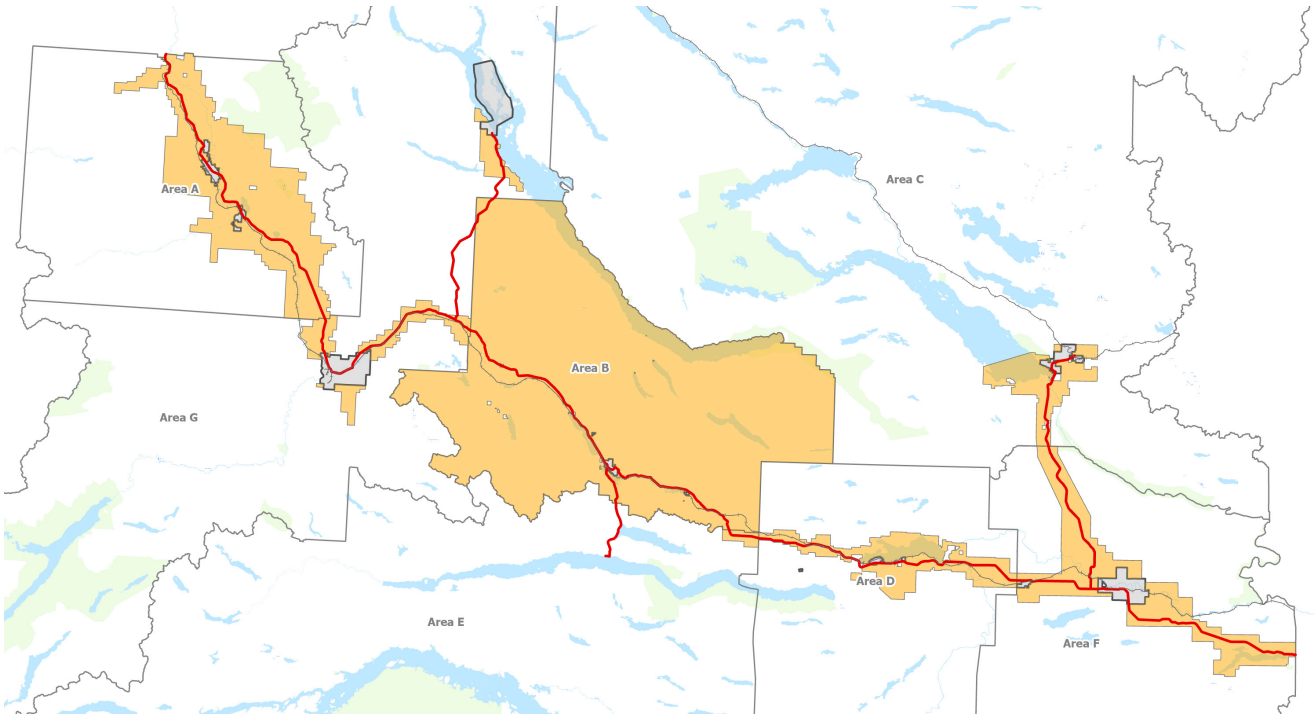
Building Permit Application Guide

The Regional District is authorized by the *Local Government Act* to regulate the construction, alteration, repair or demolition of buildings and structures for the health, safety and protection of persons. Under the Act, the Regional District has adopted Building Bylaw No. 1634, 2012 which provides for the inspection and regulation of building and the requirement for a permit prior to building within the building regulation service area.

Building Inspection Service Area



To find out if your property is within the building regulation area, and if a building permit is required, please contact a Building Inspector or the Planning Department. If you are building outside the service area, as the home owner, you still have a responsibility to ensure all structures are built according to the BC Building Code. To help, the Planning Department has put together a development guide for building outside of the building inspection service area. A copy is on our website or you can contact us at the number below.

This brochure is to help guide you through the Building Permit process. It contains information on when a permit is required and at what stages to schedule inspections. Please call the Regional District at any stage of the process to speak with a Building Inspector.

RDBN Planning Department

37 3rd Ave, PO Box 820
Burns Lake, BC V0J 1E0
planning@rdbn.bc.ca
www.rdbn.bc.ca

Call us at: 250-692-3195
Toll free 1-800-320-3339
Fax 250-692-3305

The Regional District operates the building regulation service in all of the electoral areas within the Regional District. The Regional District also provides building inspection services for the Village of Burns Lake, the Village of Fraser Lake, the Village of Granisle, the Village of Telkwa, the District of Houston and the District of Fort St. James.

A Building Permit is required when you:

- Construct a New Home
- Construct a new accessory building such as a carport, garage or storage shed
- Construct a farm building (some exemptions may exist)
- Construct a temporary building
- Renovate existing buildings
- Undertake any structural work such as interior partitions
- Construct decks having a difference in elevation to grade exceeding 2 feet
- Enclose a porch or roof over a sundeck
- Move a building
- Locate a manufactured home, modular home or other engineered structure as required by the BC Building Code
- Construct an addition
- Demolish a building or structure
- Change the use or occupancy of a building
- Renovate your dwelling to create a secondary suite
- Installation of a wood burning appliance located in a building

A Building Permit is NOT required for:

- A proposed accessory building that is smaller than 25 Square meters (269.1 ft²) in size used for storage
- Renovations like painting or replacing kitchen cupboards
- Installing new roofing material
- Fences

*The information in this brochure is subject to change

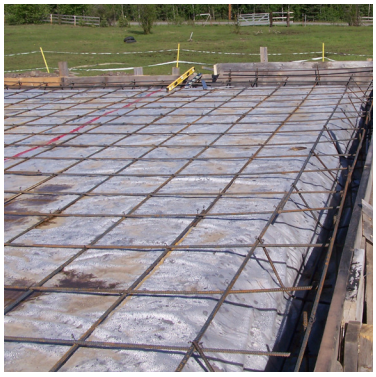


When to Schedule an Inspection

WHEN TO CALL:

- After completion of footings (before placing concrete)
- After completion of the foundation, dampproofing, foundation drain tile/drain rock (prior to backfilling)
- After completion of soil gas control underslab
- Plumbing rough-in
- After the framing, sheathing and roofing are complete (including exterior doors and windows, chimneys, ductwork, gas venting, rough-in plumbing and wiring)
- After insulation and vapour air barrier is installed (before applying interior finishes)
- Chimney rough-in
- When the building is complete and ready for occupancy
- At any stage requested by the Building Inspector to confirm corrections or special circumstances.





Please note that the Building Inspectors make their own appointments for inspections. Usually at least one of the Building Inspectors performs inspections in the eastern part of the Regional District on Tuesdays and in the western part of the Regional District on Thursdays.

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Building Permit Application Form

FOR THE CONSTRUCTION, ALTERATION, DEMOLITION AND RELOCATION OF A BUILDING, INCLUDING MANUFACTURED HOMES, AND ALL WOOD BURNING APPLIANCE INSTALLATIONS

Pursuant to the requirements of the ***Regional District*** of Bulkley-Nechako Building Bylaw No. 1634, 2012, I, being the ***owner*** or acting with the consent of the ***owner***, hereby make application to:

Describe Project: _____

Estimated Construction Value $_____See Schedule A in the application package for Building Permit Fee Calculation

Intended use of new construction: _____

Property Owner(s) : _____

Mailing Address: _____

Email: _____Phone_____

Street Address: _____

Legal Description: _____

Is the property within 200 m a body of water or watercourse? _____If yes, describe_____

List other buildings on this property: _____

Proposed heating system:_____ Will a wood or pellet stove/furnace be installed?_____

Proposed cooling system (for new dwellings):_____

Proposed ventilation system (ie HRV, ERV):_____Total number of bedrooms:_____

Step Code Compliance (If applicable): Performance Approach Prescriptive Approach

Do you intend to install a secondary suite? (if yes, obtain secondary suite regulations)_____

Industrial or Commercial Purposes or Activities (Mandatory)

Has the site been used for any industrial or commercial purposes or activities described in **SCHEDULE 2** of the Contaminated Sites Regulations? (SCHEDULE 2 included in application package)

☐ Yes ☐ No

Agent Name (please fill out agent authorization form if you are using an agent)_____

Email:_____Phone:_____

Contractor name:_____

Email:_____Phone:_____

PLEASE READ THE FOLLOWING CAREFULLY and SIGN

1. Please note that the *Regional District* is not responsible for ensuring correct siting with regard to minimum setbacks. It is the *owner's* responsibility to establish the property lines of the *site* and to maintain all required setbacks. The building inspector may require a surveyor to locate the proposed building on a smaller parcel or where setback compliance is in question.
2. The applicant is responsible for checking the title of the property and verifying that there are no encumbrances, restrictions, or requirements relating to the proposed building.
3. For any building designed outside of the scope of Part 9 "Housing and Small Buildings" of the B.C. Building Code, all applicable design schedules must be received prior to issuance of the building permit.
4. The Building Inspection Department must be given at least **72 hrs** notice of the following inspections:
    a. footing forms (prior to pouring concrete)
    b. foundation (prior to backfill)
    c. plumbing rough-in
    d. soil gas control
    e. framing (prior to insulating)
    f. heating system rough-in
    g. insulation and vapour/air barrier
    h. prior to occupancy
5. In consideration of the granting of this permit, I/we agree to release and indemnify the Regional District of Bulkley-Nechako, its Board members, employees and agents from and against all liability, demand claims, causes or actions, suits, judgments, losses, damages, costs, and expenses of whatever kind which I/we or any other person, partnership, or corporation or our respective heirs, successors, administrators or assignees may have or incur in consequence of or incidental to the granting of this permit or any representation, advice, inspection, failure to inspect, certification, approval, enforcement or failure to enforce the Regional District of Bulkley-Nechako Building Bylaw or the British Columbia Building Code, including negligence, on the part of the Regional District of Bulkley-Nechako, its Board members, employees and agents and I/we agree that the Regional District of Bulkley-Nechako owes me/us no duty of care in respect to these matters.
6. I acknowledge that if I am granted a building permit pursuant to this application I am responsible for compliance with the current edition of the British Columbia Building Code, the Building Bylaw of the Regional District of Bulkley-Nechako, and any other applicable enactment, code, regulation or standard relating to the work in respect of which the permit is issued, whether or not the said work is undertaken by me or by those whom I may retain or employ to provide design and/or construction services.
7. I acknowledge that the issuance of a permit under this bylaw, the acceptance or review of plans, specifications, drawings or supporting documents, or inspections made by or on behalf of the Regional District do not constitute a representation, warranty, assurance or statement that the current edition of the British Columbia Building Code, the Building Bylaw of the Regional District of Bulkley-Nechako or any other applicable enactment, code, regulation or standard has been complied with.
8. I acknowledge that the issuance of a permit under this bylaw, the acceptance or review of plans, specifications, drawings or supporting documents, or inspections made by or on behalf of the Regional District do not constitute a representation, warranty, assurance or statement that the building site is safe for the intended or proposed use, and is not subject to flooding, mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

9. Where the Regional District requires that letters of assurance be provided by a registered professional, I confirm that I will rely only on the said registered professional for the adequacy of the plans, drawings, specifications and supporting documents submitted with this application.
10. I understand that I should seek independent legal advice in respect of the responsibilities I am assuming upon the granting of a building permit by the Regional District of Bulkley-Nechako pursuant to this application and in respect of the execution of this acknowledgement.

I have read the above agreement, release and indemnity and understand it. *If applicable, all owners of the property must sign the Building Permit Application

_____	_____	_____
Owner Signature	Print Name	Date
_____	_____	_____
Owner Signature	Print Name	Date

Contacts:

General email **planning@rdbn.bc.ca**

Jason Berlin Senior Building Inspector	Cell: 250-692-6468	Email: jason.berlin@rdbn.bc.ca
Steve Davis Building Inspector	Cell: 250-251-1071	Email: steve.davis@rdbn.bc.ca
Daryn Larson Building Inspector	Cell: 250-251-7068	Email: daryn.larson@rdbn.bc.ca
Fiona Richardson Development Services Clerk		Email: fiona.richardson@rdbn.bc.ca

Regional District of Bulkley-Nechako

37 3rd Ave, PO Box 820	Phone:	250-692-3195
Burns Lake, BC, V0J1E0	Toll Free:	1-800-320-3339

Required Documents Checklist			
Required	**Submitted**	**N/A**	
☐	☐	☐	Completed and signed application form by all owners
☐	☐	☐	Copy of the Certificate of Title dated within 30 days of the date of the application
☐	☐	☐	Any charges registered on title (covenant, easement, right of way)
☐	☐	☐	Appointment of Agent Authorization Form **(enclosed)**
☐	☐	☐	Building Permit fee (To be calculated by RDBN)
☐	☐	☐	Completed Schedule "C" Owner's Undertaking of Building Foundation **(enclosed)**
☐	☐	☐	Completed Schedule "D" Owner's Undertaking of Building Siting **(enclosed)**
☐	☐	☐	Sewage Disposal System Permit
☐	☐	☐	Site plan with setbacks from all property lines **(example enclosed)** ☐ dimensions of the property and building setbacks from all property lines ☐ location and name of road(s) adjacent to the property ☐ location of well and septic tank and disposal field or lagoon ☐ size and location of all existing and proposed buildings, structures, and uses on the site ☐ water bodies and waterways including measurements from all proposed and existing structures to the natural boundary, stream centre line or top of bank, whichever is applicable ☐ north arrow and scale
☐	☐	☐	Building plans drawn to scale showing the following, if applicable: **(examples enclosed)** ☐ foundation plan ☐ floor plans of each level that includes: ☐ proposed and/or existing uses of all rooms ☐ smoke detectors / carbon monoxide detectors ☐ radon pipe locations / under slab radon rock and poly ☐ insulation values for foundation, walls, ceiling, and joist cavities ☐ exterior elevations for all 4 sides of building ☐ cross sections showing all structural details and finishes ☐ truss and beam specifications ☐ Proposed cooling system to meet BC Building Code 2024 requirement (new residential construction only) ☐ Engineers documentation if required for; tall walls, point of load in excess of 15,000 pounds, slab on grade foundations, timber framing, etc..)
☐	☐	☐	Energy Step code compliance report for new dwellings **(See enclosed brochure for more information)**
☐	☐	☐	For new residential construction, submit completed form from BC Housing "Licensing & Consumer Services". Call 1-800-407-7757 or visit website at https://www.bchousing.org/licensing-consumerservices

***This checklist is a tool to help with providing required documentation. Not all items are required. Please contact the Building Inspectors or Development Services Clerk if you require assistance.**

REGIONAL DISTRICT OF BULKLEY-NECHAKO

BUILDING BYLAW NO. 1634, 2012

SCHEDULE "A"

***BUILDING PERMIT* FEES**

The following fees shall be paid by applicants to the ***Regional District*** of Bulkley-Nechako for a ***building permit*** under this bylaw:

Category	Fee Calculation
(a) Commercial, Industrial and Institutional	0.6% of construction value ($6.00 per $1,000.00)
(b) Residential (including dwellings garages, carports and patios)	0.6% of construction value ($6.00 per $1,000.00)
(c) Manufactured Home (Single Wide)	$100.00
(d) Manufactured Home (Double Wide)	$200.00
(e) Wood Burning Appliance and Chimney	$100.00 (New Installations Only)
(f) Move a Building	0.6% of construction value ($6.00 per $1,000)
(g) Demolition of Buildings and Structures	0.6% of construction value ($6.00 per $1,000)
(h) Other Inspections (including minor alterations, additions and repairs)	0.6% of construction value ($6.00 per $1,000)
(i) Change of Occupancy	$100.00 plus 0.6% of construction value
(j) Cancellation of Note Against Land Title, Pursuant to Section 58 of the *Community Charter*	$200.00
(k) Minimum Building Permit Fee	$50.00

REGIONAL DISTRICT OF BULKLEY-NECHAKO

BUILDING BYLAW NO. 1634, 2012

SCHEDULE "C"

OWNER'S UNDERTAKING OF ***BUILDING*** FOUNDATION

Property ***Owner***: _____

Describe Project: _____

Street Address of Property: _____

Legal Description of Property: _____

Pursuant to Section 11.1.16 of the Regional District of Bulkley-Nechako Building Bylaw No. 1634, I_____being the registered ***owner*** of the above referenced property do hereby acknowledge and accept responsibility for the design and ***construction*** of the foundation for the above referenced project.

Furthermore, I recognize that within the boundaries of the Regional District of Bulkley-Nechako there are areas of "problem soils" and that these are widely distributed as to location. I affirm that it is my responsibility as ***owner*** to identify soil conditions on which the intended ***construction*** is to be placed and take all action required to ensure the adequacy of the foundation.

Owner's Information:	***Agent*** for ***Owner*** Information
_____	_____
Name (print)	Name & Title (print)
_____	_____
Signature	Signature
_____	_____
Mailing Address (print)	Mailing Address (print)
_____	_____
Mailing Address	Mailing Address
_____	_____
Date	Date

Building Permit # (office use only): _____

REGIONAL DISTRICT OF BULKLEY-NECHAKO

BUILDING BYLAW NO. 1634, 2012

SCHEDULE "D"

OWNER'S UNDERTAKING OF ***BUILDING*** SITING

Property ***Owner***: _____

Describe Project: _____

Street Address of Property: _____

Legal Description of Property: _____

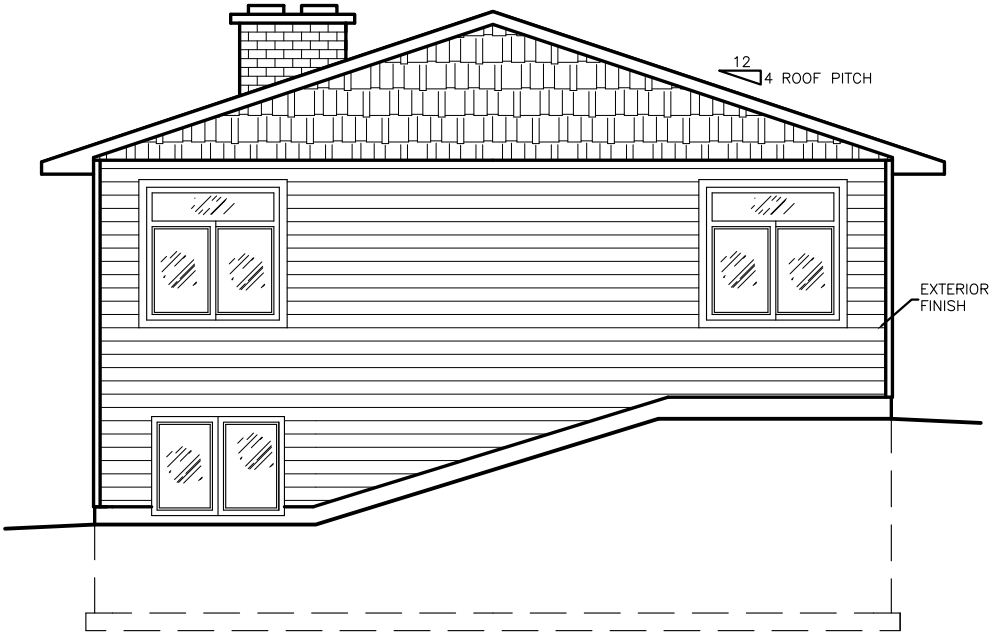
Pursuant to Section 11.1.6 of the ***Regional District*** of Bulkley-Nechako Building Bylaw No. 1634, I_____being the registered ***owner*** of the above referenced property do hereby acknowledge and accept responsibility for the siting of the ***building*** or ***structure*** for the above referenced project on the property.

Owner's Information:	***Agent*** for ***Owner*** Information
_____ Name (print)	_____ Name & Title (print)
_____ Signature	_____ Signature
_____ Mailing Address (print)	_____ Mailing Address (print)
_____ Mailing Address	_____ Mailing Address
_____ Date	_____ Date

Building Permit # (office use only): _____

Regional District of Bulkley-Nechako

SAMPLE OF TYPICAL ELEVATION DRAWING
REQUIRED SUBMISSION FOR BUILDING PERMIT

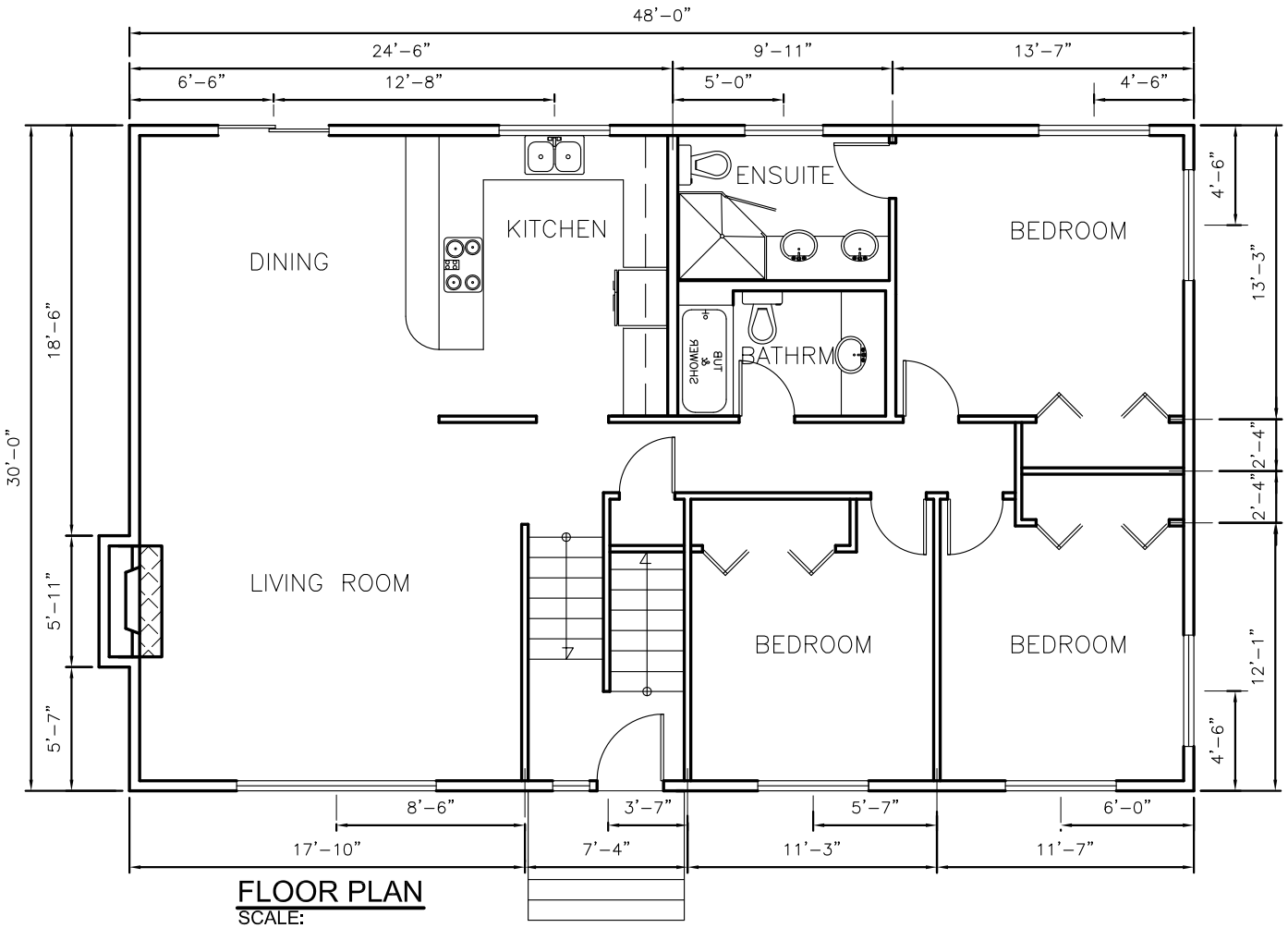


END ELEVATION

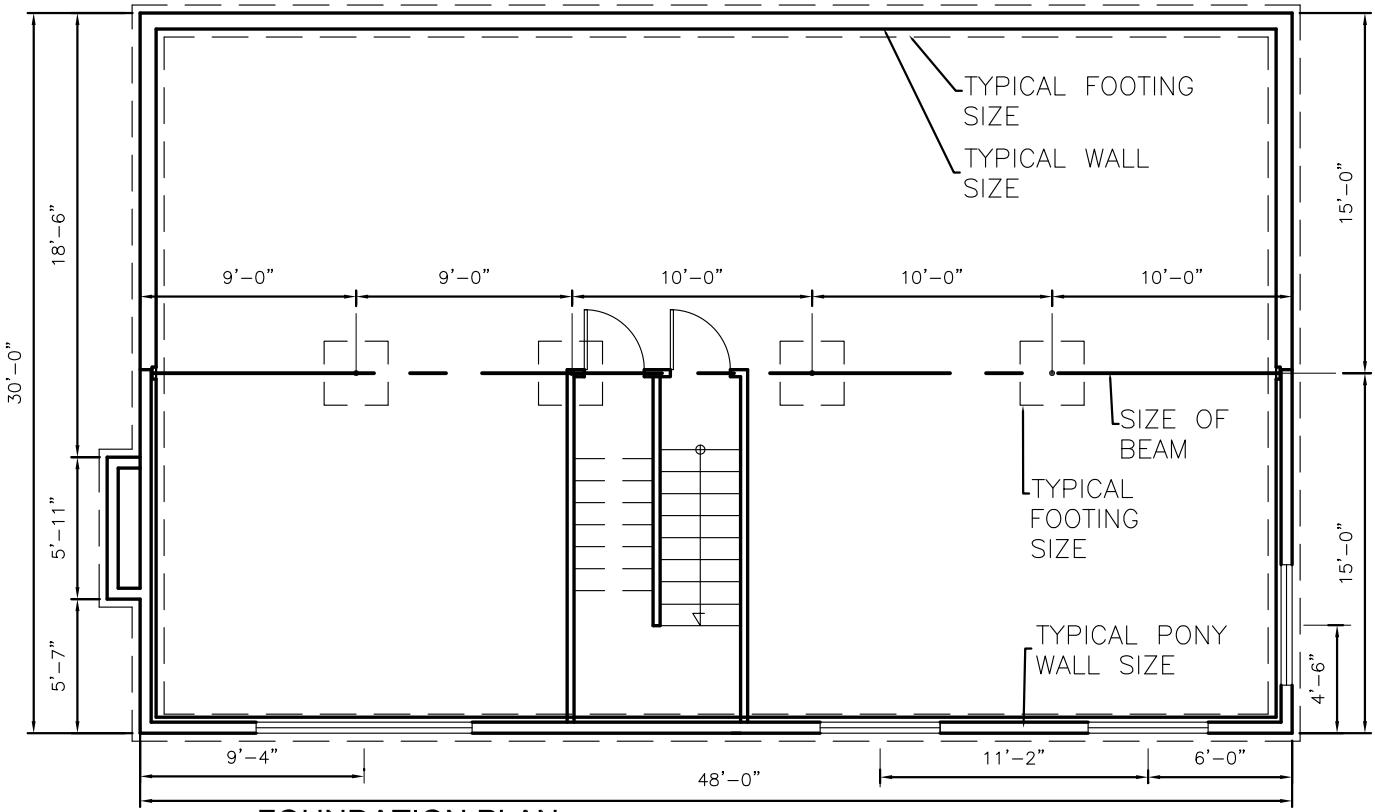
FRONT ELEVATION

Regional District of Bulkley-Nechako

SAMPLE OF TYPICAL PLAN DRAWINGS
REQUIRED SUBMISSION FOR BUILDING PERMIT



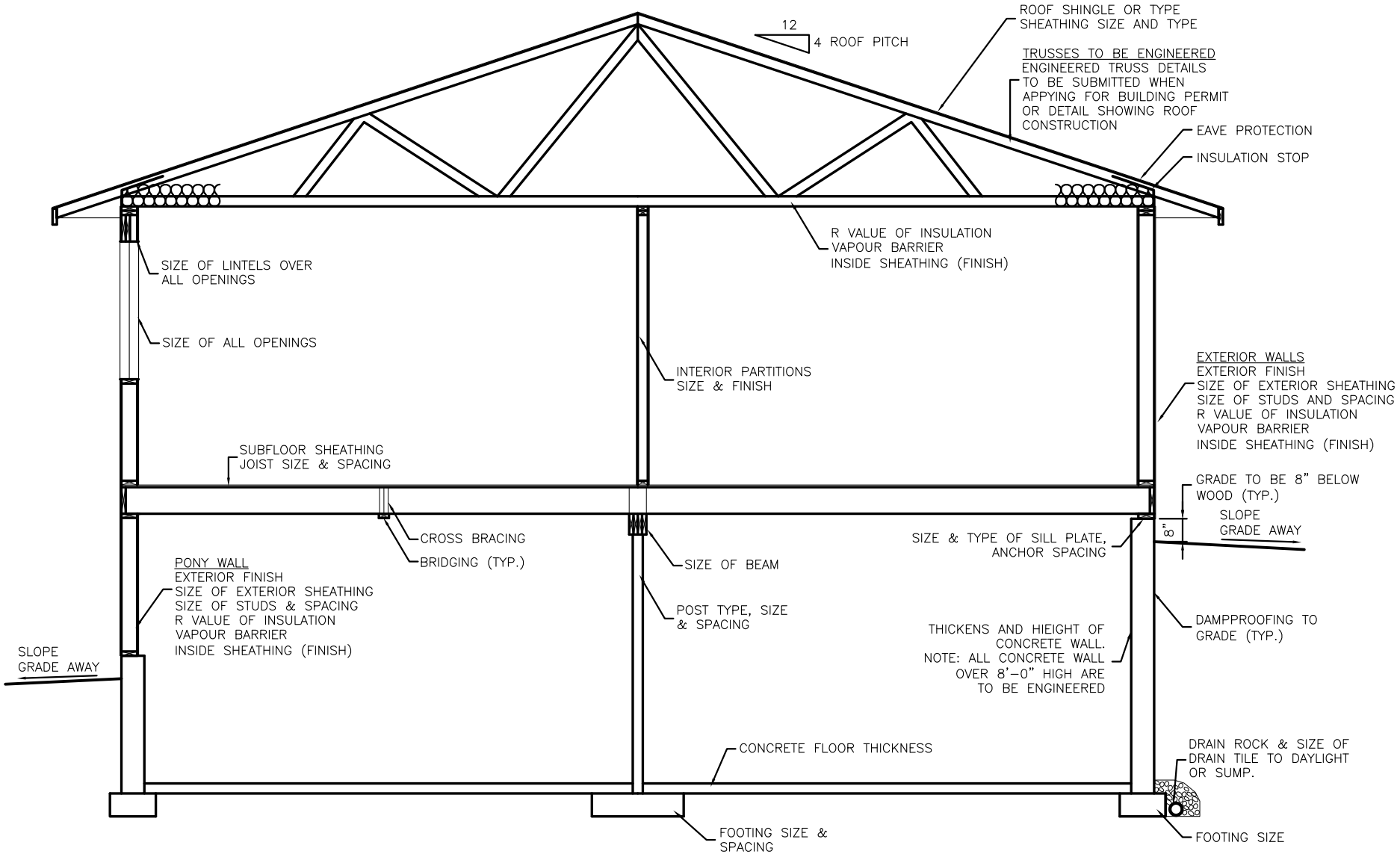
FLOOR PLAN
SCALE:



FOUNDATION PLAN
SCALE:

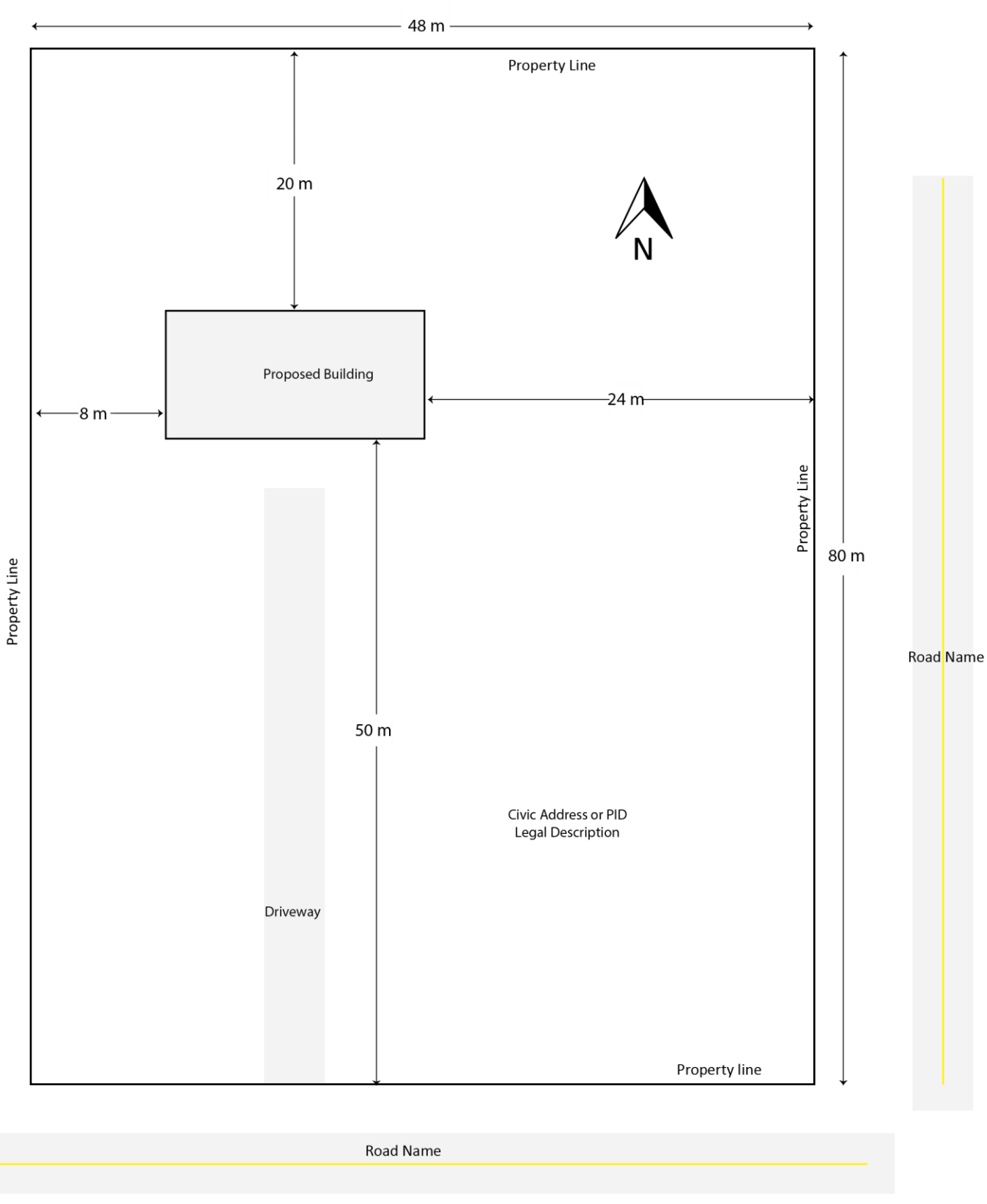
Regional District of Bulkley-Nechako

SAMPLE OF TYPICAL SECTION DRAWING REQUIRED SUBMISSION FOR BUILDING PERMIT

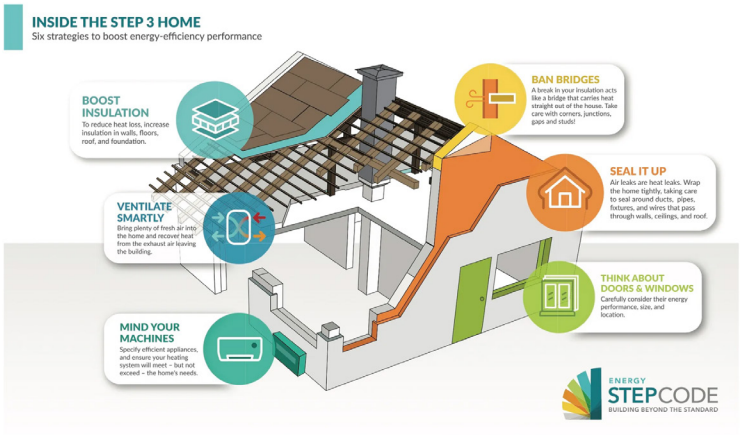


Site Plan Example

The Planning Department can provide a base map of the outline of your property to be used to draw your site plan. Elements shown on example must be included on your site plan.



What is the BC Energy Step Code?



The BC Energy Step Code is an initiative by the provincial government to ensure that new houses are more energy efficient. The BC Building Code has been amended requiring all new homes to meet the more energy efficienct requirements of Step 3 of the Step Code. More information about it can be found here: **www.energystepcode.ca**

In the RDBN, there are two options:

Option 1 (the performance approach) requires new homes to be designed with the assistance of a Certified Energy Advisor, who takes the proposed house design and uses software to model the energy efficiency performance of that design. The Energy Advisor then either submits a report that shows that the proposed design meets Step 3 requirements, or they help you adjust the design to be more energy efficient until the requirements are met. That report is then submitted to the RDBN as the authority having jurisdiction. During the construction of the house, the energy advisor will then do a mid-construction air test (usually at the insulation and vapour air barrier stage) and a final air test (before occupancy) using a blower door to test how much air leakage the house has. If there is too much leakage at the mid-construction phase then the leaks are found and addressed. A final report is then issued to the RDBN showing that the house as built has met the Step 3 requirements. A listing of local energy advisors can be found at **www.betterhomesbc.ca/ea/**. A copy of the compliance report is required before the building permit application can be approved.

Option 2 (the prescriptive approach) involves compliance with Part 9.36 of the BC Building Code which outlines how much insulation is required in the walls, ceiling, floors, etc, and requires more efficient windows (usually triple-paned). These tables call for quite a bit more insulation than may be required in a house modelled by an energy advisor. For example, a house using the prescriptive tables would require R 22.6 on the foundation wall rather than potentially only R 16.9. If you are taking the prescriptive approach, you will need to indicate on your building permit application that you are planning on pursuing this option and indicate on your plans the insulation values and window U-values that meet the prescriptive requirements.

Please let us know if you have any questions.

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WILDFIRE-RESILIENCE BEST-PRACTICE CHECKLIST FOR HOME CONSTRUCTION, RENOVATION AND LANDSCAPING

FireSmart™ Canada

Canada Wildfire

INTACT CENTRE ON CLIMATE ADAPTATION

IntelIi-feu™ Canada

TABLE OF CONTENTS

INTRODUCTION

This checklist was compiled by FireSmart Canada™, the Canadian Home Builders' Association, University of Alberta and the Intact Centre on Climate Adaptation at the University of Waterloo. The goal of the checklist is to encourage the use of wildfire resilience best practices in home construction, renovations and landscaping to reduce the risk of wildfire property damage in wildland urban interface areas of Canada.

The best practices featured in the checklist align with the National Guide for Wildland-Urban Interface Fires: ***Guidance on hazard and exposure assessment, property protection, community resilience and emergency planning to minimize the impact of wildland-urban interface fires*** (National Research Council Canada, 2021). The checklist also includes links to resources that provide more detailed guidance for consideration.

For more information, and for contact information, please visit www.firesmartcanada.ca.

CONFLICT WITH APPLICABLE CODES

This checklist is based on the assumption that the project complies with applicable building codes.

Building code regulations differ among provinces and territories and nationally. It is therefore possible that some code requirements may be in conflict with best practices on this checklist, or that some of the checklist's requirements may result in unintended consequences in regard to other applicable requirements (e.g. higher-tier energy requirements). If this is the case, please contact FireSmart Canada at general@firesmartcanda.ca to connect with science and research organizations to find a design that works. One of the goals of the checklist is to continue to build a practical source of solutions for such technical conflicts.

SHARE YOUR FEEDBACK

The checklist is intended to serve as a regularly updated living document that reflects the most up-to-date information available at the time of publication. Feedback is welcome to help us continually improve the checklist for accuracy, completeness and ease of use. Please email general@firesmartcanada.ca if you would like to make comments or suggestions to improve the checklist.

HOW TO USE THIS CHECKLIST

The checklist can be applied in its entirety (every measure) or partially, for example during renovations. Each improvement has the potential to limit the probability of a home being damaged beyond repair during a wildland fire, and the potential to make the home more resilient. However, applying any or all measures does not guarantee the absence of damage or destruction during a wildland fire.

The checklist contains several voluntary best practices to consider when building or renovating homes for greater wildfire resilience. The simplest application of the list is as a decision-making tool for home builders, renovators, and landscapers in their discussions with homeowner clients.

The technical guidance provided here consists of two complementary parts:

- **Home/property-level** considerations that address fire resilience of roofing, flashing, vents, soffits, wall cladding, windows, doors, skylights, fencing, decks, balconies, patios and porches; and
- **Lot-level landscaping** considerations that address the fire resilience of the types of vegetation/surfaces around the perimeter of the home.

PROPERTY-LEVEL CHECKLIST

NOTE: Please see Appendix A for details and discussion on building-material selection for each consideration. See Appendix B for construction details.

ROOFING, FLASHING AND ROOF PENETRATIONS

1. ☐ Roof covering and underlayment has Class A fire rating.
2. ☐ Roofing does not consist of wood shingles and shakes.
3. ☐ Roof flashing consists of non-combustible material.
4. ☐ Roof ridges (metal roofing products) are sealed at their terminations.
5. ☐ Roofs are fitted with a metal drip-edge along both eaves and rakes (see Appendix B for details).
6. ☐ Roof penetrations are fitted with non-combustible flashing.
7. ☐ Chimneys connected to a solid-fuel burning appliance are fitted with an approved spark arrestor that is securely attached and made of welded or woven wire mesh screens, with mesh no coarser than 12 millimetres.
8. ☐ Chimney outlets have at least three metres of clearance from all vegetation and obstructions.

VENTS IN ROOFS, ATTICs AND WALL-MOUNTED VENTS

9. ☐ Vents are of non-combustible material.
10. ☐ Gable-end vents are not present.
11. ☐ Soffit venting have vent perforations of less than three millimetres in any direction, or follow the details provided in Appendix B.
12. ☐ External vent terminations and service opening connected to internal venting equipment (e.g., kitchen and bathroom exhaust fans, HRV intake and exhaust vents, etc.) are of non-combustible construction and are fitted with three-millimetre non-combustible screens.
13. ☐ All exhaust vents are equipped with non-combustible, self-closing flaps.
14. ☐ All external vents and air intakes are connected to metal ductwork that extends at least one metre from the point of connection.

SOFFITS, FASCIA AND GUTTERS

15. ☐ Eaves are closed. Roof systems that include a built-up roof above rafters do not include venting on the vertical face between rafters. Soffit venting can be used provided it follows item 11 above.

16. ☐ Soffits and fascia are constructed of non-combustible materials and are tight fitting.

17. ☐ Rain gutters and downspouts are of metal construction.

18. ☐ Rain gutters are fitted with non-combustible gutter caps.

EXTERIOR SIDING/CLADDING

19. ☐ Exterior siding is non-combustible or ignition resistant.

20. ☐ There is no vinyl siding and/or wood siding installed.

21. ☐ Exterior siding terminates a minimum of 15 centimetres above grade. The exposed foundation wall between the siding termination and grade is non-combustible. This applies to all homes whether built with a foundation, frost wall, or slab-on-grade.

WINDOWS, DOORS and SKYLIGHTS

22. ☐ Windows are equipped with a tempered exterior pane.

23. ☐ Exterior doors have a fire protection rating of at least 30 minutes.

24. ☐ Door lites are glazed with tempered glass.

25. ☐ Exterior screen doors are of non-combustible construction and have non-combustible screening.

26. ☐ Skylights or daylighting tubes, including flashing, is of non-combustible construction and incorporate tempered glass and not acrylic glazing.

EXTERIOR SEALING AND CAULKING

27. ☐ Where gaps in the exterior siding are incorporated to allow drying of the wall assembly, (e.g. rain screen walls) any gap larger than three millimetres is fitted with three millimetre non-combustible metal screening to prevent ember penetration.

28. ☐ Non-intentional gaps larger than three millimetres anywhere along the exterior of the structure are filled and sealed with a suitable fire-retardant caulking or sealing product.

29. ☐ Only suitable fire-retardant caulking or sealing products is used to seal exterior penetrations, joints and gaps.

FENCING

30. ☐ Where the property includes combustible fencing, a 1.5 metre metal gate or full break exists between a wood fence and the exterior wall of a home.

DECKS, BALCONIES, PATIOS AND PORCHES

31. ☐ Decks, balconies, patios, porches, and similar building extensions attached to, or within 10 metres of a home have a continuous, ignition resistant or non-combustible top surface without slots, openings or spaces, which terminate low to the ground. Decks with gaps or cracks in the deck surface have deck joists capped with corrosion resistant, non-combustible material, or are constructed with non-combustible deck joists.

32. ☐ Where deck, porch or balcony structures intersect with exterior walls, a non-combustible flashing is installed between the underside of the exterior siding and the top surface of the deck.

33. ☐ Where a deck, porch or patio structure sits above a graded surface, this surface is devoid of vegetation and graded with non-combustible materials. Additionally, 12-millimetre sheathing or three-millimetre metal non-combustible screens can be installed to enclose the space under the deck.

34. ☐ Where a deck, balcony, or porch requires a railing, the railing consists of non-combustible material.

35. ☐ Decks that are on, or directly above slopes of 10 per cent or greater are enclosed with 12-millimetre non-combustible sheet or panel-type material to minimize the incursion of radiant and convective heat from below.

LOT-LEVEL LANDSCAPING REQUIREMENTS

NOTE: It is good practice to create a landscaping and vegetation plan. The best practices are listed for information purposes only. See Appendix C for additional details.

PRIORITY ZONE 1a, Non-combustible Zone: (Immediate zone) zero - 1.5 metres from the foundation

36. ☐ The house has a 1.5-metre wide, horizontal, non-combustible surface perimeter along the outer walls of the house and any attachments (e.g., decks).

37. ☐ This critical area adjacent to the home uses only non-combustible materials, such as gravel, brick, paving stones or concrete.

38. ☐ This critical area adjacent to the home does not have any woody shrubs, bark mulch, trees or tree branches.

Priority Zone 1: (Intermediate zone) 1.5 - 10 metres (or lot boundary, whichever comes first) from the foundation

39. ☐ In this zone some fire-resistant plants, trees and shrubs can be planted in low density.

40. ☐ This zone does not have any woody debris and landscaping materials (e.g., bark mulch, hay, etc.).

41. ☐ This zone does not have evergreen or coniferous trees.

Priority Zone 2: (EXTENDED ZONE) beyond 10 metres

For single lot applications where the lot extends beyond 10 metres from the home, and for all multi-home/subdivision applications, additional landscaping considerations may apply for areas beyond 10 metres for any dwelling.

In general, best practices for these applications exclude the presence of dense conifer groupings, or other landscape detail that would provide a fire pathway within the application area. A qualified landscaping assessor can provide specific guidance for the design of Priority Zone 2. Note that homeowners are not responsible for landscaping of adjacent lands over which they do not hold legal title or control.

APPENDIX A: EXAMPLES OF ACCEPTABLE WILDFIRE-RESILIENCE BUILDING

This appendix includes suggestions for acceptable wildfire resilient building materials; it addresses only details relevant to wildfire resilience. The material features and characteristics are meant as guidance, FireSmart Canada does not endorse or rate building materials, products or specific websites.

Component	Material	Testing standards that must be met	Notes and supplier examples
Roof covering	Asphalt fibreglass composition shingles, clay tiles, slate, (non-aluminum) metal roofs, and concrete tiles, Ethylene Propylene Diene Monomer (EPDM) roofing.	ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings ULC S107 Fire Tests of Roof Coverings — "Class A" rating.	Widely available from multiple manufacturers, building suppliers and roofing installers.
Roof, attic and wall-mounted vents	ASTM Tested Ember Resistant Vents.	ASTM E 2886 and ASTM E 2886M.	Vulcan Technologies.
Soffits and fascia	Non-combustible sheetrock, fibre cement board and metal soffit and fascia material, fire retardant pressure treated (rated) wood.	ASTM E2957 Standard Test Method for Resistance to Wildfire Penetration of Eaves, Soffits and Other Projections CAN/ULC-S135, Standard Method of Test for Determination of Degrees of Combustibility of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter).	Non-combustible materials are widely available through manufacturers, building suppliers and installers.
Gutters	Non-combustible aluminum, copper, stainless steel.	CAN/ULC-S135, Standard Method of Test for Determination of Degrees of Combustibility of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter).	Aluminum gutters are widely available from multiple manufacturers, building suppliers and installers. Copper is available for order from many building suppliers; some installers offer copper gutters. Stainless steel gutters are rare. Non-combustible gutter caps are widely available through manufacturers, building suppliers and installers.
	Non- combustible metal three-millimetre screen, including screen frame.	CAN/ULC-S135, Standard Method of Test for Determination of Degrees of Combustibility of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter).	Widely available from multiple manufacturers, building suppliers and installers.

Component	Material	Testing standards that must be met	Notes and supplier examples
Exterior siding/ cladding	Non-combustible cladding systems, such as • metal • fibre cement panels/ boards • cementitious • stucco • stone • rock • concrete block	ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings ULC S107 Fire Tests of Roof Coverings — “Class A” rating.	Widely available from multiple manufacturers, building suppliers and roofing installers.
	Heavy timber or log	No standard	Available primarily through custom log-home builders.
Windows, doors and skylights	Minimum 30-minute fire-rated; non-combustible frame.	CAN/ULC-S104 SFM Standard 12- 7A-2 “Exterior Windows”.	The SFM Standard is a California Referenced Standards Code. Products that meet this standard are unlikely available in Canada.
Exterior sealing and caulking	Fire-retardant or high-temperature sealant and caulking.	No standard.	Products labelled fire-retardant or high-temperature sealant and caulking are available from many building suppliers.
Fencing	Non-combustible concrete, cement fibre and metal fence (aluminum, chain-link, page wire).	CAN/ULC-S135, Standard Method of Test for Determination of Degrees of Combustibility of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter).	James Hardie fibre cement siding is widely available in Canada. Duracrete-Roma fencing is manufactured in Canada. Metal fencing is widely available in Canada.
Decks, balconies, patios and porches	• Fire retardant pressure treated (rated) wood • Fire-rated composite decking • Class A fire-rated vinyl decking (with • Non-combustible, metal, concrete or stone • Foil bitumen tape capped deck joists	ASTM E2632 / E2632M Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials. ASTM E2726 / E2726M Standard Test Method for Evaluating the Fire-Test-Response of Deck Structures to Burning Brands CAN/ULC S107 Fire test of roof covering test method - Class A (vinyl deck).	CRAFT BILT non-combustible aluminum decking is available in Canada. Duradek Class A fire-rated decking is available in Canada. Amera Deck composite Class A fire-rated decking is available for shipping to Canada. Non-combustible concrete or stone decks – multiple Canadian manufactures, suppliers and installers. Exterior fire-retardant treated wood, available through distributors in Canada. Foil-bitumen roofing tape is widely available.

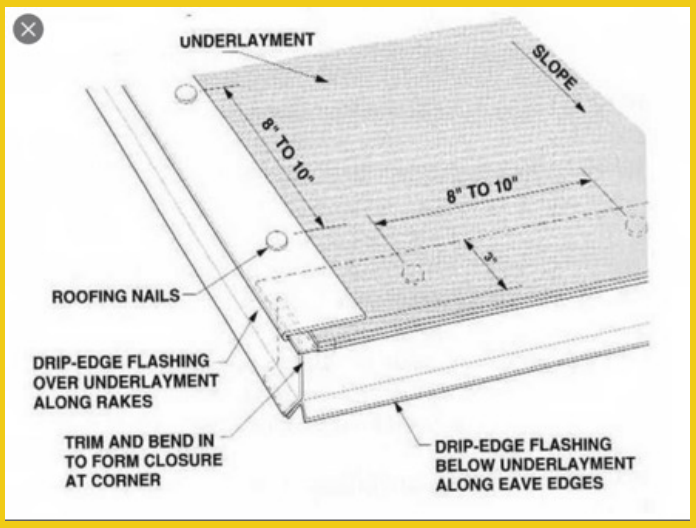
APPENDIX B: EXAMPLES OF WILDFIRE-RESILIENCE CONSTRUCTION BEST PRACTICES AND NOTES

This appendix includes suggestions for acceptable wildfire resilient construction approaches; it addresses only details that differ from conventional practices. The intent of each detail is addressed in the notes. The solutions descriptions and illustrations are meant as examples. FireSmart Canada does not endorse or rate building materials, products or specific websites.

Roof underlayment detail

Non-combustible underlayment is used to reduce the risk of roof deck ignition resulting from ember penetration under the exterior roofing material during the high wind conditions typical of wildfire situations.

Non-combustible roofing underlayment should be installed on all roof edges, including rakes, and must have a minimum width of 75 millimetres.



(Source: Casma.ca, 2021)

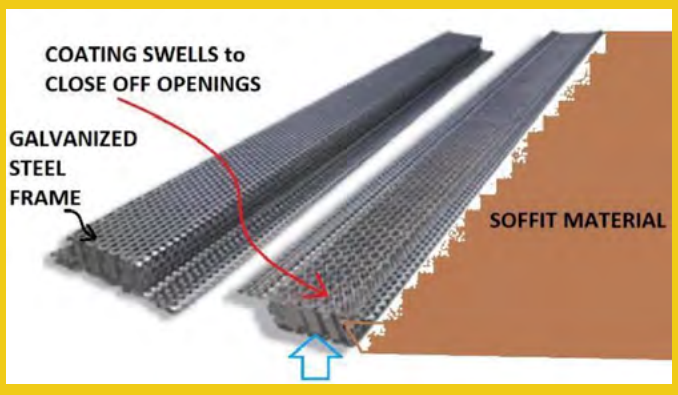
Drip-edge detail

The addition of rake-edge drip edging is intended to reduce the risk of roof deck ignition resulting from ember penetration under the rake exposure of roofing material during the high wind conditions typical of wildfire situations.

Eve-edge drip edging should be installed in the normal manner. Drip edge installed on rakes should be installed above the roofing underlayment to prevent water penetration beneath the underlayment.

Soffit vent detail

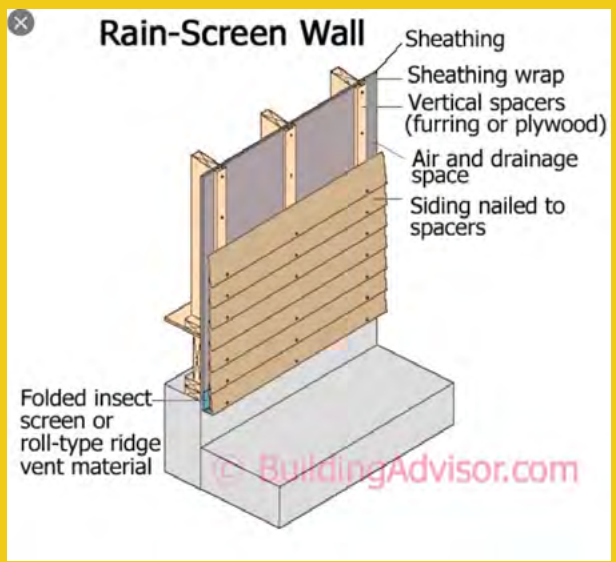
Soffits and ridge vents are particularly prone to allowing ember penetration into the attic space. There are several commercial products available (may require special orders) that reduce this risk.



(Source: Vulcanvents.com, 2021)

Detailing on rain screen and wall assembly voids for drying purposes

Where a rain screen-type wall assembly is utilized, openings to allow drying that are more than three millimetres wide should incorporate non-combustible screening to reduce the risk of ember penetration into the wall cavity.



(Source: BuildingAdvisor.com, 2021)

APPENDIX C: KEY CRITERIA FOR WILDFIRE-RESILIENT LANDSCAPE AND VEGETATION PLAN

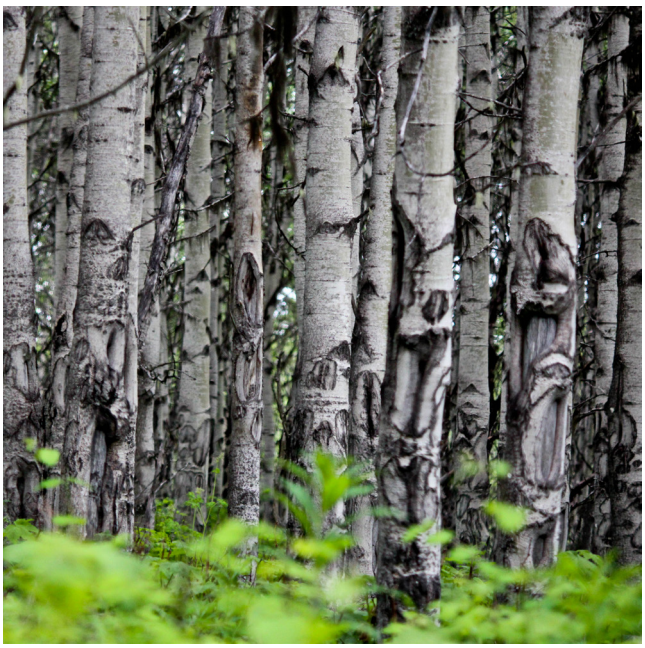
Note: For additional information about nationally recognized FireSmart landscaping best practices and plant selection guidance, please visit the *FireSmart Canada yard and landscaping web page.*

Priority zone	Key principles	Professional guidance
Priority Zone 1A, Non-Combustible Zone: (Immediate Zone) **0-1.5 metres** from perimeter of structure and any extensions, including under projections (balconies, porches, decks, cantilevered floors, pier foundations)	Non-combustible surface of mineral soil, pavement, concrete, concrete pavers, stone/ rock, brick.	Landscape architect, landscaper, horticulturist, contractor with FireSmart Home Partners online module training completion.
Priority Zone 1: (Intermediate Zone) **1.5-10 metres** from perimeter of structure and any extensions, including under projections (balconies, porches, decks, cantilevered floors, pier foundations)	Manage cultivated/natural vegetation to minimize ember ignition, minimize surface fire spread and manage the short distance radiant heat transfer by using appropriate plant selection, creating breaks in vegetation and organic surface continuity, reducing heavy vegetation concentrations and maintaining distance between vegetation and structures. Mitigation of this zone must be appropriate for local topography and surrounding fire environment conditions, including conditions of Priority Zones 2 and 3.	Landscape architect, landscaper, horticulturist, arborist, or forest professional with FireSmart Home Partners Online Module training completion.
Priority Zone 2: (Extended Zone) **10-30 metres** from perimeter of structure and any extensions, including under projections (balconies, porches, decks, cantilevered floors, pier foundations)	Manage natural vegetation to reduce wildfire intensity, crown-fire transition spread and ember production by reducing surface vegetation concentrations and continuity, creating space between tree crowns, pruning, or “lifting” tree crowns and interrupting the vertical continuity of the forest through appropriate spacing of shrubs and trees. Mitigation of this zone must be appropriate for local topography and surrounding fire environment conditions, including conditions of Priority Zones 1 and 3.	Forest professional, arborist, landscape architect qualified with intermediate wildland fire behaviour training, or Home Partners Mitigation Specialist training with basic forest dynamics and forest ecology understanding, experience in wildfire mitigation fuels management and access to forest/environment professional advisors[1].

Priority zone	Key principles	Professional guidance
Priority Zone 3: **30-100 metres** from perimeter of structure and any extensions, including under projections (balconies, porches, decks, cantilevered floors, pier foundations)	Manage natural vegetation to reduce wildfire intensity, crown-fire transition spread and ember production by reducing surface vegetation concentrations and continuity, creating space between tree crowns, pruning, or “lifting” tree crowns and interrupting the vertical continuity of the forest through appropriate spacing of shrubs and trees. Management of this zone is typically at a lesser intensity than Priority Zone 2 and must be appropriate for local topography and surrounding fire environment conditions, including conditions of Priority Zones 1 and 2.	Forest professional with advanced wildland fire behaviour training, advanced forest dynamics and forest ecology knowledge, knowledge of local, provincial, and federal environmental/ forest regulations.

[1] Assumes that this zone will not be intensely landscaped/managed to Priority Zone 1 standards; if managed to Priority Zone 1 standards please refer to qualified professional guidance for Priority Zone 1

Sustainable Rural Land Development Checklist



RDBN Planning Department

37 3rd Ave, PO Box 820
Burns Lake, BC V0J 1E0
planning@rdbn.bc.ca
www.rdbn.bc.ca

Call us at: 250-692-3195
Toll free 1-800-320-3339
Fax 250-692-3305

What is a Sustainable Rural Land Development Checklist?

This Sustainable Rural Land Development Checklist is offered to people applying for any type of development approval from the Regional District of Bulkley-Nechako. The checklist is intended to inform residents of development and building options that:

- support and advance community sustainability objectives;
- can result in long term reductions in energy use and maintenance costs;
- may reduce the risk from natural hazards, and reduce negative impacts on the natural environment.

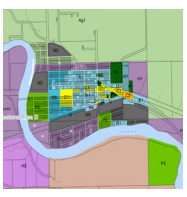
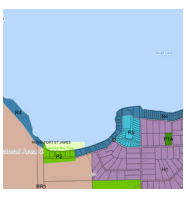
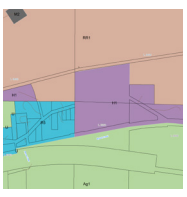
The Regional District's intent is to raise public awareness of important considerations that can improve the quality of development in the region. The goal is to encourage residents to develop their land in the most responsible and effective manner possible, for both their own benefit and the benefit of the greater community.

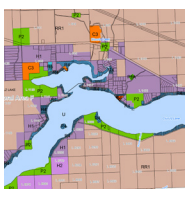
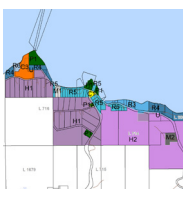
What is Sustainable Development?

Sustainability relates to our ability to maintain or sustain a certain way of living for the long term.

When considered at the local level, increased sustainability requires that we find a way of developing that results in reduced negative social, economic, and environmental impacts on our land and our community.




Why is Sustainable Development Important?

Sustainable development is vital to the continued health of our communities, especially within the context of environmental impact and climate change. There are significant personal benefits such as savings from energy efficiency, improved public health, and reduced threat from natural hazards.

Local governments play an important role in creating more sustainable communities. Land use and development patterns that result in more complete and self-reliant communities are important considerations. However, many sustainable and smart development practices cannot be effectively regulated. It is up to each property owner to voluntarily do what they can to improve their community, reduce their impact on the environment, and protect their property and themselves from hazards.

A sustainable community is a resilient, energy efficient, self sufficient, and healthy community.

It is up to you!

Development Regulations

When considering land development or building construction in the rural area, remember that there are multiple regulations that may apply.

Official Community Plans (OCP) and Zoning

The long term vision or plan for a community's development is contained in the Area's OCP. Zoning is a tool used to implement the goals contained in the OCP. In most areas of the RDBN land use is regulated by a Zoning Bylaw. Zoning regulations control, among other things, use, lot size, density, and setback regulations.

Agricultural Land Reserve (ALR)

Lands within the ALR are subject to strict Provincial land use and subdivision regulations. Certain proposed non-farm use, soil deposit or removal, or subdivision must undergo an application process to ensure that the Electoral Area's agricultural interests are protected. Applications are processed by the RDBN and sent to the Agricultural Land Commission for a decision.

Regulation Checklist

- ☑ Have you checked that the proposed use is consistent with Regional District Zoning and ALR regulations?
- ☑ Have you checked if building permits are required?
- ☑ Have you contacted Northern Health for a list of qualified sewage system designers/installers?
- ☑ Have you checked with the Regional District for identified archaeological sites (if present, follow up with the BC Archaeology Branch)?

Sewage Disposal

Residential on site sewage disposal systems must be designed by a person authorized under the Provincial Sewerage System Regulation. Property owners may install certain types of systems provided that a number of conditions are met. Be sure to contact Northern Health before you proceed.

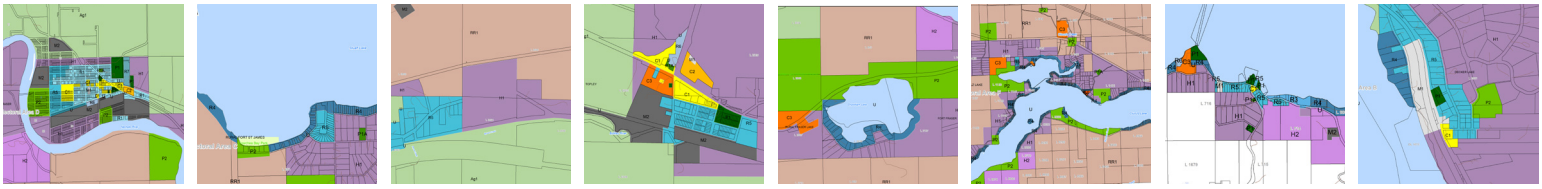
Archaeological Sites

In BC archaeological sites are protected by legislation. The Regional District can check a provincial database to see if there is an identified site on a property. An archaeological site does not automatically mean you can't develop, however, a permit may be required from the Province.

Building Permits

In most areas, new construction or building alteration requires a building permit from the Regional District. Building permits are not required if the property is outside the service area or if a storage building is smaller than 25 square meters (269.1 ft2) in size. To find out if your property is within the building regulation service area, please contact the RDBN Building Inspectors or the Planning Department.

Regional District of Bulkley Nechako



Land Use Considerations

The land use decisions made today will have long lasting consequences and will determine the future shape of the built environment. The mistakes we make today will be paid for by future generations. We need to be smart and strategic. We need to use land efficiently. We need to protect the environment.

Infill development or redevelopment of existing residential areas reduces sprawling land use patterns. Reduced sprawl results in less impact on the environment, and reduces our need to drive longer distances on a daily basis. Infill can help preserve the character of our rural and natural areas, and our quality of life.

Carefully diversifying the uses in existing residential areas can reduce transportation costs and enhance liveability.

Land Use Checklist

- ✓ Is the development consistent with OCP?
- ✓ Does the development fill in or redevelop pre-existing vacant or underutilized parcels of land?
- ✓ Does the development improve the mix of compatible uses within an area?
- ✓ Does the development provide services or an amenity in close proximity to a residential area?
- ✓ Does the development contribute to the positive character and function of a rural area?

Environmental Considerations

Developing property effectively is important to the environment and the long term vitality of the community. By incorporating these suggestions into your development plan you protect your investment and prevent delays.

Farms need to be carefully managed to make sure they do not harm the environment. Domestic animals that use a creek, pond or lake for drinking water can increase sedementation and trample plants that are important to that ecosystem. When possible, try to limit water access to a few small areas. Manure management is also important because manure runoff can contaminate water sources including groundwater. Manure should be collected, stored and composted in a covered place away from drainage or runoff areas.

Identify ecological and archaeological values before starting a land development project. These features may be protected or regulated, which can significantly impact the development proposal. Ecological and wildlife values are identified in an area's OCP. Archaeological values are protected and regulated by the BC Archaeology Branch.

Clustering development to one area of the property can minimize site disturbance and reduce infrastructure costs. Locate the driveway, septic system, house and outbuildings away from riparian areas. Where possible, retain natural buffers between the development and sensitive features such as riparian areas and important wildlife habitats. Runoff from disturbed soil has a significant negative impact on the watershed.

If vegetation near lakes or watercourses is already disturbed, replant native species to improve the habitat and help stabilize the shore. This protects the property from erosion. Removing invasive plant species such as Canada thistle also improves native habitat and the aesthetics of the property.

Environmental Checklist

- Does your site plan cluster development to one area of the property?
- Do you plan to protect vegetation near lakes or watercourses or other designated environmentally sensitive features?
- Do you provide for native species habitat restoration or improvement?
- Do you plan to remove invasive plant species?
- Will your proposal redevelop/ revitalize an environmentally contaminated site?
- Do you plan to use natural, water efficient landscaping with a reduced lawn area?

Regional District of Bulkley Nechako

Renewable Energy Sources

Renewable energy is energy derived from natural sources that are replenished at a higher rate than they are consumed. Sunlight and wind, for example, are sources that are constantly being replenished. Ground and air source heat pumps offer a sustainable source of heat for residences.

Wind

Wind is a clean and plentiful source of energy. Small wind turbines can be installed at homes as a source of backup electricity or to offset utility power and reduce electricity bills. A small wind energy system may be a practical and economical source of electricity for your home. Contact the RDBN to make sure your wind turbine is compliant with zoning.

Ground and Air Source Heat Pumps

Ground and air source heat pumps use the difference in air and ground temperature to heat or cool and then circulate a liquid through pipes. The heat generated is then transferred into the building. This is a clean, renewable energy source that reduces GHG emissions. Heat pump systems cost little to maintain and reduce or eliminate the need for other costly heat sources. In addition, rebates and incentives are often available to help offset installation costs.

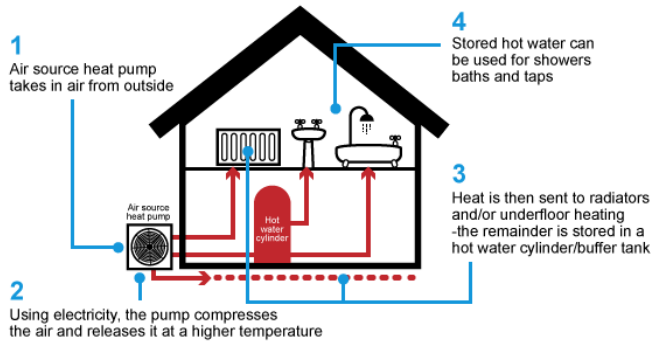
Solar

Solar energy can be used for active heating or electricity production. Solar heating applications include radiant floor heating systems and solar air heating systems. Photovoltaic solar panels convert the sun's energy into electricity, which can then be used to offset dependence on utilities. Modern solar water heaters are well suited for the Canadian climate because they can produce energy when the outside temperature is well below freezing.

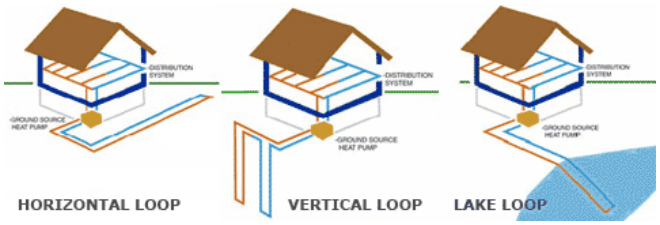
Wood Heating Systems

Ensure that any wood burning appliances, pellet stoves, or gas fireplaces are high efficiency. They use less wood, and don't smoke out your neighbours.

Air Sourced Heat Pump



Ground Sourced Heat Pump



Energy Checklist

- Can you utilize onsite renewable energy generation such as solar or wind power?
- Can you use a ground or air heat pump for heating or cooling?
- Do you have a high efficiency wood burning appliance, pellet stove or efficient gas fireplace?

Natural Hazards

People living in a rural area may be subject to increased risks associated with flooding, wildfire, snowstorms, and loss of access and communications. These risks can be reduced by careful consideration of how land is used and developed.

Floodplains are lowland areas that are susceptible to flooding. The best precaution against flooding is to avoid building in flood prone areas.

Floodplain Managment Bylaw

The Regional District's Floodplain Management Bylaw applies to all areas of the Regional District. This Bylaw specifies both elevation and setback requirements for certain buildings and structures to protect them from flood damage.

Erosion from running water or waves can cause serious property and building damage. Protect shorelines by retaining natural vegetation. If an erosion problem exists, have it evaluated by an expert that can prescribe an appropriate remediation and protection strategy.

Geotechnical Hazards include slope instability, sinking of the ground, and weak soils. Check with the RDBN to determine if your property lies within a known hazard area. If a hazard is suspected, consider hiring a geotechnical engineer to evaluate the site. It is critical to manage these risks through appropriate site investigation, good building practices, and professional input. Protect your investments!

Wildfires

Wildfires pose a significant threat to our homes and livelihoods in this region. We can take actions that will drastically reduce the threat of wildfires to our homes, properties, and communities. FireSmart is a program that promotes building and landscaping designs and materials that reduce fuel availability and increase wildfire resiliency.

The wildfire threat has increased due to dead timber associated with the Mountain Pine Beetle infestation, historic wildfire suppression practices, and climate change. Development standards play a significant role in reducing the potential impact a wildfire will have on a community. The potential for damage intensifies when flammable building, landscaping, and fuel materials around your home are not managed. The following summarizes recommendations from the FireSmart Canada Home Development Guide. The complete guide can be found online at **firesmartcanada.ca**.

ROOFING MATERIAL AND DESIGN

The roof is the most vulnerable component of your home. Sparks and burning embers from a wildfire can travel long distances and quickly ignite flammable roofing material.

SIDING, VENTS AND OPENINGS

With the exception of the roof, siding material is the structural component most vulnerable to wildfire. Combustible debris can accumulate at the vents and openings on your home and be ignited by embers during a wildfire.

GUTTERS AND EAVES

The gutters on your home provide a place for

combustible debris to accumulate and open eaves create an entry point for sparks and embers.

DECKS AND PORCHES

The materials used to build the deck, combustible materials you store under your deck, and the vegetation around it all contribute to how vulnerable your deck will be.

FENCING

Wooden fences and boardwalks create a direct line to your home and can contribute to the spread of wildfire.

LANDSCAPING

A FireSmart yard includes making smart choices for your plants, shrubs, grass and mulch. Selecting fire resistant plants and materials can increase the likelihood of your home surviving a wildfire. Ensure there is a 1.5 metre horizontal noncombustible surface perimeter along the outer walls of the primary structure (house).

FIRESMART HOME PARTNERS PROGRAM

FireSmart Home Partners is a voluntary property assessment program that helps residents identify specific actions they can take on their property to reduce wildfire hazards.

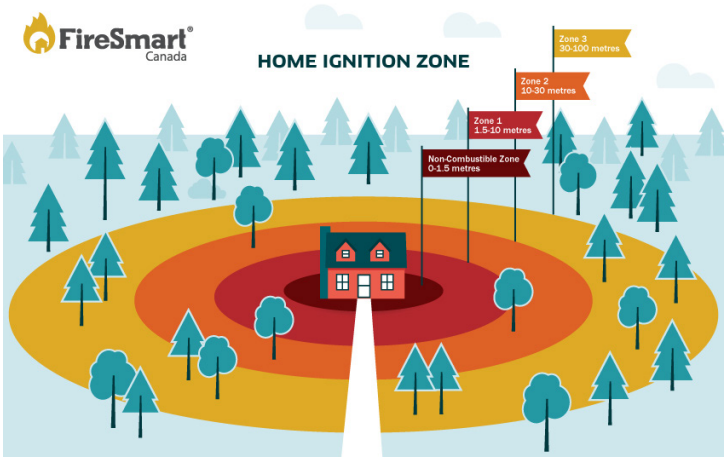
FireSmart Home Partners property assessments provide residents:

• An in-depth, on-site assessment conducted by experienced fire professionals;

• An opportunity for property owners to identify mitigation actions unique to your property;

• A detailed follow up report with customized mitigation actions designed to measurably reduce the wildfire risk to your property;

For more information about the FireSmart Home Partners Program, rebate program, or to request an assessment contact the RDBN at 250-692-3195.



Resources on the Fire Smart Program are available at

firesmartcanada.ca/resources/

Natural Hazard Checklist

- Is the new development designed to provide adequate emergency vehicle access and alternate escape routes?
- Are your house and outbuildings located away from the top of sloped lands?
- Have you removed combustible materials within 10m of your house and outbuildings?
- Are you using non-combustible roofing and siding materials, and are you keeping your roof clear of combustible materials?
- Have you had your property examined for signs of a geotechnical hazard or erosion?
- Have you contacted the Regional District to determine if your building is subject to the Floodplain Management Bylaw regulations?

Building Considerations

The greatest opportunity for energy savings can be realized during the planning and design stages of a construction project. A home constructed with energy efficiency in mind is more comfortable to live in year round. An energy efficient home may have higher initial costs, but over time these costs can be recuperated due to lower energy and maintenance costs.

Building Site Selection

An assessment of a property prior to the commencement of a construction project is critical.

Remember to identify any archaeological sites, riparian areas, environmentally sensitive features, and natural hazards. Also, look for game trails or unique animal habitat that can be left in its natural state.

Leave the natural vegetation adjacent to any water feature undisturbed. The RDBN brochure titled "Responsible Waterfront Development" should be consulted if you have a water feature.

Carefully observe the way that water flows over the property. Be sure to not negatively impact natural drainage patterns or drainage on a neighbour's property.

Consider the location of the sun, prevailing winds, shade and other site features that can be utilized to increase your energy efficiency and your enjoyment of your property.

Site Management

During construction it is important to plan for waste and soil disturbance. Where possible, recycle construction waste, or truck it to a transfer station instead of burning. If treed areas are cleared, avoid outdoor burning in populated areas. Large trees may be suitable for future use as firewood, or wood waste may be chipped and dispersed on your property. Replant any areas of disturbed soil immediately to prevent the establishment of invasive plant species and to reduce erosion and sedimentation. Use erosion control measures such as silt fences to prevent sedimentation of watercourses from disturbed soils. When possible, use local materials and labour to reduce transportation related GHGs.

Building Checklist

- ☑ Do you have a construction waste recycling plan and a no-burn policy on site?
- ☑ Do you have a plan in place to reduce erosion and sedimentation during construction?
- ☑ Do you have a drainage plan for the house and property?
- ☑ Have you avoided environmentally sensitive or high value areas?

Regional District of Bulkley Nechako

Energy Efficient Design

A combination of energy efficient design features including building orientation, thicker walls, reduction in thermal bridging, additional insulation, air tightness and proper ventilation can significantly reduce the energy demands of a home. To let the sun inside the house in winter, most windows should be on the southern side. Windows on the east and west tend to lose more heat than they gain in winter and they can cause overheating in summer since they receive hot morning and afternoon sun. A roof overhang over southern windows shades the windows in summer while allowing sunshine in during the winter.

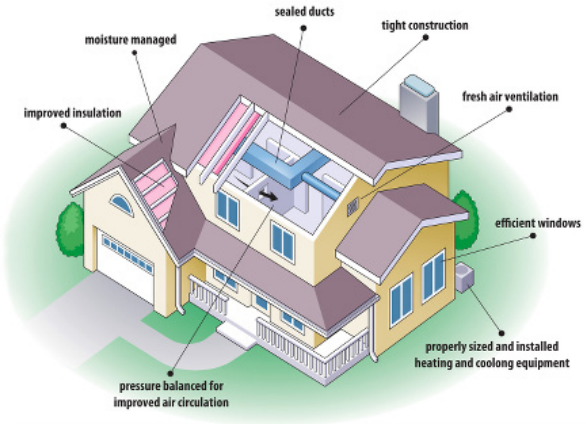
Small and compact buildings are generally better suited for a winter climate. The longer side of the house should be orientated so that it faces south to ensure that the house receives the maximum amount of sunlight throughout the day. Internal rooms should be planned in such a way that the rooms generally used during the day, such as the living room and kitchen are situated on the south side of the house. Also, build on southern slopes to maximize exposure to the sun.

Landscaping can have a significant impact on building energy efficiency. Planting of deciduous trees on the south side of a building allows the sun through in winter and provides shade in the summer. Planting coniferous trees and vegetation on the north side of a building can provide a buffer from the wind in order to reduce heat loss in cold weather.

The BC Energy Step Code requires builders to do an energy model of the building at the design phase and conduct on-site testing to demonstrate that both their design and the constructed building meet the requirements of the standard. The regulation sets performance targets for new construction and groups them into “steps” that apply across various building types and regions of the province.

Better Homes BC is British Columbia’s online hub for homeowners and businesses to access information, incentives and support to reduce energy use and greenhouse gas emissions in new and existing homes and buildings. Better Homes BC incentives are administered by BC Hydro, FortisBC and BC Housing.

Better Homes BC keeps an up to date list of Energy Advisors who can help you with your project. For more information, please visit their website at **betterhomesbc.ca**



Construction Methods and Materials Checklist

- Is your building orientated towards open space, views and/or daylight?
- Have you contacted an Energy Advisor? and will you use materials with recycled content?
- Do you plan to install dual flush toilets, low flow shower heads and faucet aerators?
- Will you install energy efficient windows?