

Site & Height Guidelines

Residential

OVERVIEW

Building Officials review applications to ensure that siting and height of buildings meet the City of Nanaimo Zoning Bylaw requirements. As a supplement to the information contained within the Zoning Bylaw, the following information is compiled to assist you in the drafting of your plans.

SITE & HEIGHT SURVEY INFORMATION REQUIREMENTS

A site/height plan prepared by a British Columbia Land Surveyor is required for all new freestanding structures on a residential lot that require a building permit. The site/height plan must include the following information:

- The bearing and dimensions of the parcel taken from the registered subdivision plan;
- The legal description and civil address of the parcel;
- The location and dimensions of all statutory rights-of-ways, easements and setback requirements (no roof overhangs, decks, stairs or building projections are permitted over an easement or right-of-way);
- The location and dimensions of all existing and proposed buildings or structures on the parcel (including accessory buildings over and under 10m² (107' squared));
- Front, rear, and side yard dimensions from the property line to the foundation wall of the dwelling unit and accessory buildings, as well as distance between dwelling unit and accessory building foundations;
- Locations and dimensions of open decks, covered decks and porches, cantilevered projections, and chimneys;
- Location of two off-street parking spaces or three spaces for dwellings with secondary suites;
- The dimension and gradient of parking and driveway access (maximum allowable width of access at street is 6m (20'));
- Setbacks to the natural boundary of any lake, river, creek, spring, or wetland where the municipality's land use regulations establish siting requirements related to flooding;
- The existing and finished ground levels to an established datum, at or adjacent to the site and geodetic elevation of the underside of the floor system, of a building or structure where the municipality's land use regulations establish siting requirements related to minimum floor elevation;
- The natural grade or subdivision grading plan grade (whichever is applicable), finished grade, centre of the curb (height of sidewalk/road), proposed garage slab, main floor elevation, and the proposed and maximum height.

A site/height plan prepared by a British Columbia Land Surveyor may be waived by a Building Official in whole or in part where a building permit is for a repair or alteration of an existing building or structure. In some situations, such as a mobile home in a mobile home park or a freestanding accessory building on a residential lot, a site plan prepared by a BC Land Surveyor may be waived by a Building Official.

Site & Height Guidelines - Residential

Where a new legal survey is not required by the Building Official:

- A scaled site plan is required, complete with lot and building dimensions and all applicable setbacks as described previously under “Site & Height Survey Information Requirements”. Minimum scale required is 1:250 or 1/16” = 1’.
- Where an existing site plan prepared by a British Columbia Land Surveyor is available, it should also be submitted with the building permit application.

A new site plan prepared by a British Columbia Land Surveyor will always be required where:

- Building front and rear setbacks and/or side-yard setbacks are within 150mm (6”) of the minimum setback permitted by the Zoning Bylaw;
- The lot is within the Old City (roughly the area bounded by Comox Road, Wallace Street, Victoria Road and Pine Street) or in other areas where no property pins are known to exist;
- The lot is steep or has an unusual configuration and in the opinion of the Building Official it is necessary to confirm the required setbacks and height restrictions can be met;
- The building is more than one storey or close to the maximum height permitted (check zoning and development variance permit requirements for maximum heights for specific lots); or
- A Board of Variance application is submitted for a site or height variance.

BUILDING PERMIT REQUIREMENTS

Survey

Where a site/height survey by a British Columbia Land Surveyor is required at application for a building permit, a follow-up survey is required when the roof cap has been installed and prior to frame inspection to confirm compliance with setback, height and any other zoning requirements.

Height Information on Building Permit Drawings

Scaled elevation drawings are always required as part of residential permit applications. The natural grade*/subdivision grading plan grade (whichever is applicable), finished grade**, height of sidewalk/road, proposed garage slab/main floor elevation, and the proposed and maximum height as identified on the plan prepared by the BC Land Surveyor are to be drawn on the elevations.

HEIGHT REGULATIONS AND CALCULATIONS

For principal use buildings in residential zones, height is typically measured one of two ways:

Method 1

- Vertically from the subdivision grading plan where a grading plan exists or average **finished grade****, **whichever is lower** to the highest part of the building **or**
- Vertically from the average natural grade* level (where no grading plan exists) or average **finished grade****, whichever is lower to the highest part of the building.

Where there is an approved development permit (typically for more than 4 dwelling units, or where there is a variance), the subdivision grading plan is replaced by the grade as shown on an approved development permit.

Method 2

- Vertically from the **curb level****** at midpoint of the property frontage to the highest part of the building, where lots are <1666.66m² and within R1, R2, R9, & R10 zones.

Site & Height Guidelines - Residential

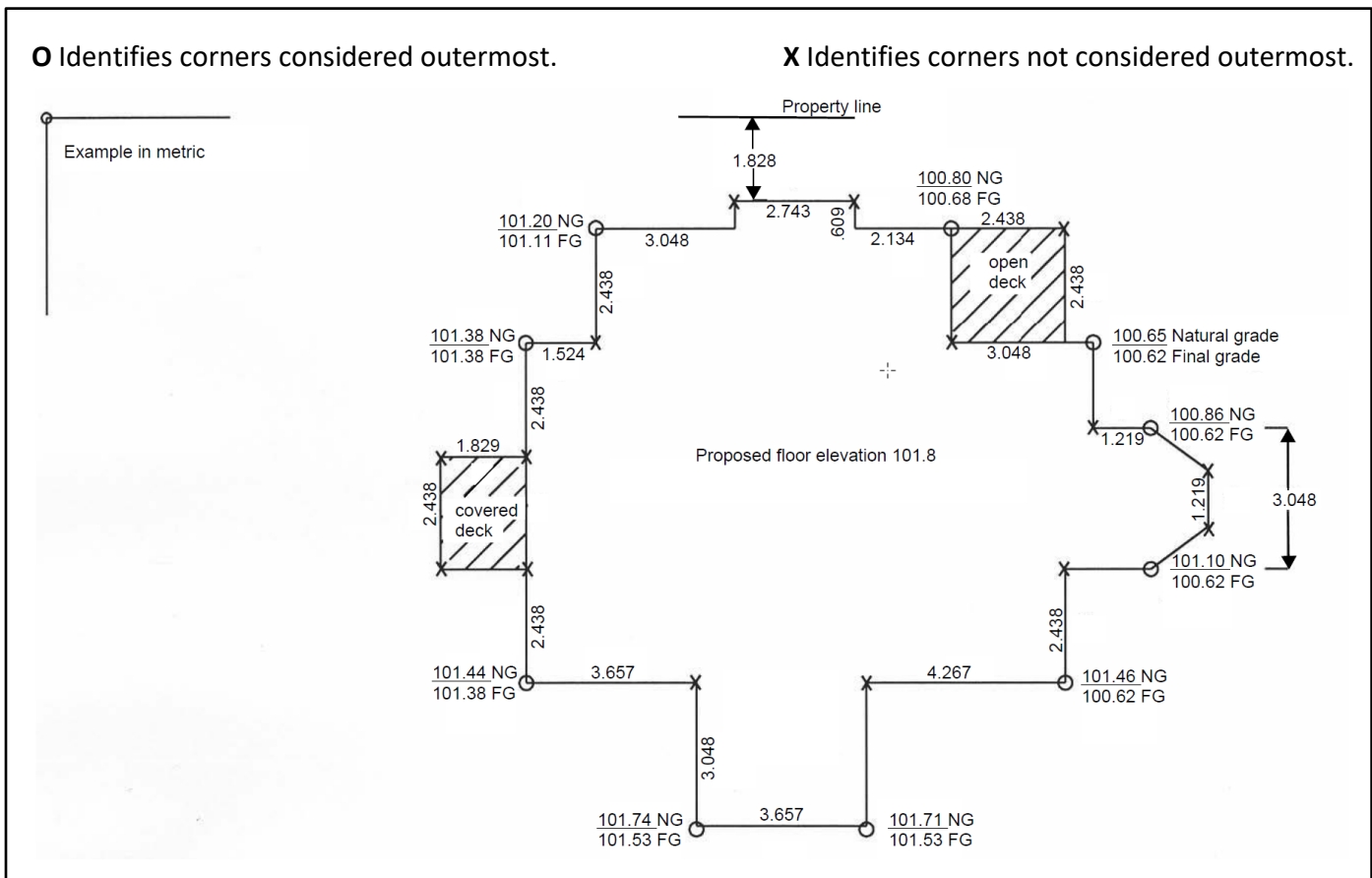
Where the principal use is a single residential dwelling in the R5 or R8 zone, the maximum height of a principal building, and maximum allowable perimeter wall height, shall be as specified within the R1 zone.

Within the R14 and R15 zones, height shall be measured vertically from the average natural grade level recorded at the outermost corners of the building or at the curb level, whichever is greater, as determined by a survey to the highest part of the roof surface for a flat roof, the deck line of a mansard roof, and the mean height level between the eaves and ridge of a gable, hip, or gambrel of a sloped roof.

Method 1 Calculations

If height from a grading plan/natural grade or finish grade Method 1 is used:

- The grade calculation uses all outermost corners of the building, including covered decks and entries, but does not include cantilevered projections and *open decks**** supported on posts. To be included as an outermost corner, projections (including covered decks and entries) must be both larger than 0.6m (1.97') in depth and 3m (9.84') in width.
- To calculate the maximum building height, the subdivision grading plan grade elevations at the outermost corners are added together and divided by the number of corners used in the calculation. The same process is followed with the final grades. The permitted building height is added to the lower of the two averages to determine the maximum ridge height permitted. Where a subdivision grading plan does not exist, the same process is followed with both the natural grades and final grades. Check the Zoning Bylaw and development variance permits for your specific lot to determine the maximum allowable building height.
- The following illustration demonstrates which corners of a building foundation are considered "outermost" and which are not.



Site & Height Guidelines - Residential

Method 2 Calculations

If height above the curb Method 2 is used:

- A British Columbia Land Surveyor must establish the height of the curb to determine the maximum height of the building. The maximum height above curb is 5.5m (18') for sloped roofs $\geq 4:12$ and 3m (9.84') for flat roofs $< 4:12$.

PERIMETER WALL HEIGHT

Perimeter wall height is the maximum vertical distance measured at the outermost building face, excluding open decks, from finish grade (typically 8" below top of foundation) to the top of the wall plate. Maximum height for exterior walls in R1, R2, R4, R10 zones is 7.32m (24'). In R10 zone, the perimeter wall height applies only to single residential dwelling and duplex buildings.

Exemptions and exceptions are as follows:

- Exemptions from the calculation are allowed for gable ends, dormers to a maximum of 25% of the wall length, and localized depressions. Covered decks or additional height above the maximum perimeter wall height must be set back a minimum of 2.44m from the perimeter wall.
- The rear and internal side yard perimeter wall height can be increased to 9.14m (30') if the following conditions are met:
 - The rear wall face is a minimum 10m (32.8') from the rear property line;
 - If the wall face is 7.32m (24') or less in width and offset by a minimum of 0.61m (2') from any adjacent wall face over 7.32m height; and
 - If any eave or gable end associated with a wall face over 7.32m in height does not exceed 8.53m (28') in width and is offset a minimum 0.61m (2') from any adjacent eave or gable end associated with an adjacent wall face over 7.32m in height.

The most restrictive of either maximum building height or maximum perimeter wall height limit the overall height of your building.

NOTES

* **Natural grade** means the elevation of the surface of the undisturbed natural ground as of 2004-JAN-01 as determined by a BC Land Surveyor.

** **Finished grade** means the elevation of the surface of the ground at any point on the site of a completed development.

*** **Open deck** means a structure connected to the principal residential building which:

- Is elevated a minimum of 0.6m (1.97') from ground level;
- Is supported on a foundation or cantilevered;
- May be covered by a canopy or trellis, which is not structurally, nor in appearance, part of the roof system of the principal building;
- Does not cover a carport or garage;
- May have a railing system, but no solid walls.

This includes structures forming a border or walking area surrounding a hot tub, unless the hot tub is at ground level.

**** **Curb level** means the elevation at the top of curb or edge of pavement at the midpoint of the property frontage.

If you have any questions or require clarification, please contact Building Inspections at 250-755-4429.

This guide should not be used as a substitute for existing building codes and other regulations.

The building owner is responsible for compliance with all codes, bylaws, and other regulations.