



BUILDING HEIGHT CALCULATION INSTRUCTIONS

Beginning August 1, 2002, building height will be calculated under the following Land Use Development Ordinance (Bellingham Municipal Code 20.08.020 E. (2) and H. (1)) definitions. The regulations of the applicable zone specify which height definition(s) may be used for a specific site. Height calculations must be provided for new construction and additions or exterior alterations that could affect building height. Buildings that do not have a specific height limit under zoning regulations are exempt from this requirement but will be required to show consistency with any height limit imposed by a land use permit or SEPA environmental review.

Height, Building—(either)

Definition 1:

The vertical distance from the lowest existing grade at the wall of the building to the highest point of the coping of a flat roof or to the average height of the highest gable of a pitch or hip roof;

Definition 2:

The vertical distance measured from the highest existing grade on the building site within 20 feet (measured horizontally) of the building to the highest point on the coping of a flat roof or the average elevation of the highest gable of a pitch or hip roof.

User note: Properties within the jurisdiction of the Shoreline Master Program are also regulated by the height limits as defined in the Shoreline Master Program.

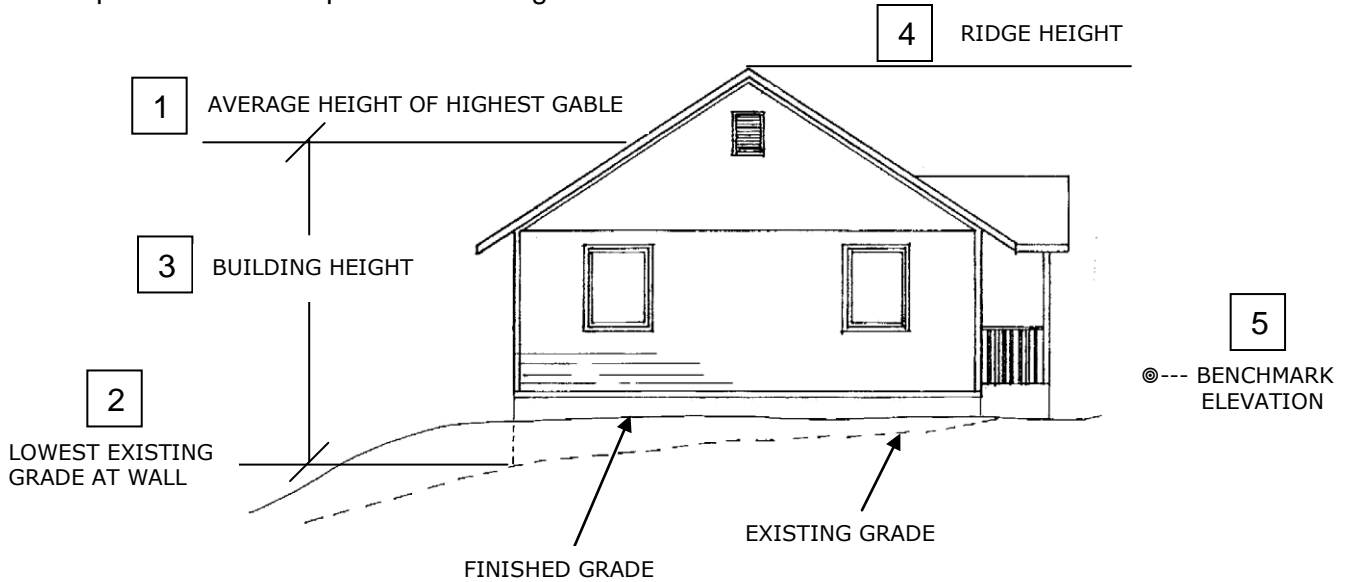
Existing Grade: The natural or legally created grade approved by the City prior to August 1, 2002 or as subsequently approved by a preliminary plat, planned development or binding site plan. If buildings are demolished, the existing grade at their exterior walls shall be construed as the existing grade across the remaining foundation excavation. On any lot exhibiting evidence of fill not authorized, the Building Official or Director may require the applicant to provide a professional soil analysis to determine the existing grade. An approved benchmark shall be used to establish the relative elevation of the natural topography. In Commercial and Industrial General Use Types, if walls are parallel to, and within 5' of a city sidewalk, the mean sidewalk elevation shall be considered the existing grade.

Building Height Calculation Form

Height Definition #1 (see page 3 for Height Definition #2)

Site Address: _____ Prepared by: _____

Complete the following information with elevations and submit it with the building permit application, *even if the proposal is an addition that will result in a height LOWER than the existing structure*. Also label these points on the site plan and building elevations.



List Elevations

- 1** _____ Average height of highest gable OR Highest point of coping on a flat roof
- 2** _____ Lowest existing grade at wall line
- 3** _____ **BUILDING HEIGHT DEFINITION #1**
- 4** _____ Ridge height

*List the elevations of each of these points **relative** to the benchmark. Mark these points and their elevations on the building elevation drawings submitted with the building permit application.*

5 _____ Description of permanent **benchmark** (choose an item that is existing and will not move during construction, for example a survey stake, the top of existing foundation, also mark location on site plan and elevations). You may assign this an elevation that must relate to other heights, for example, you can assign this zero, then measure your building heights in reference to this).

A licensed surveyor's certification of existing grade elevation relative to the benchmark elevation will be required for the following:

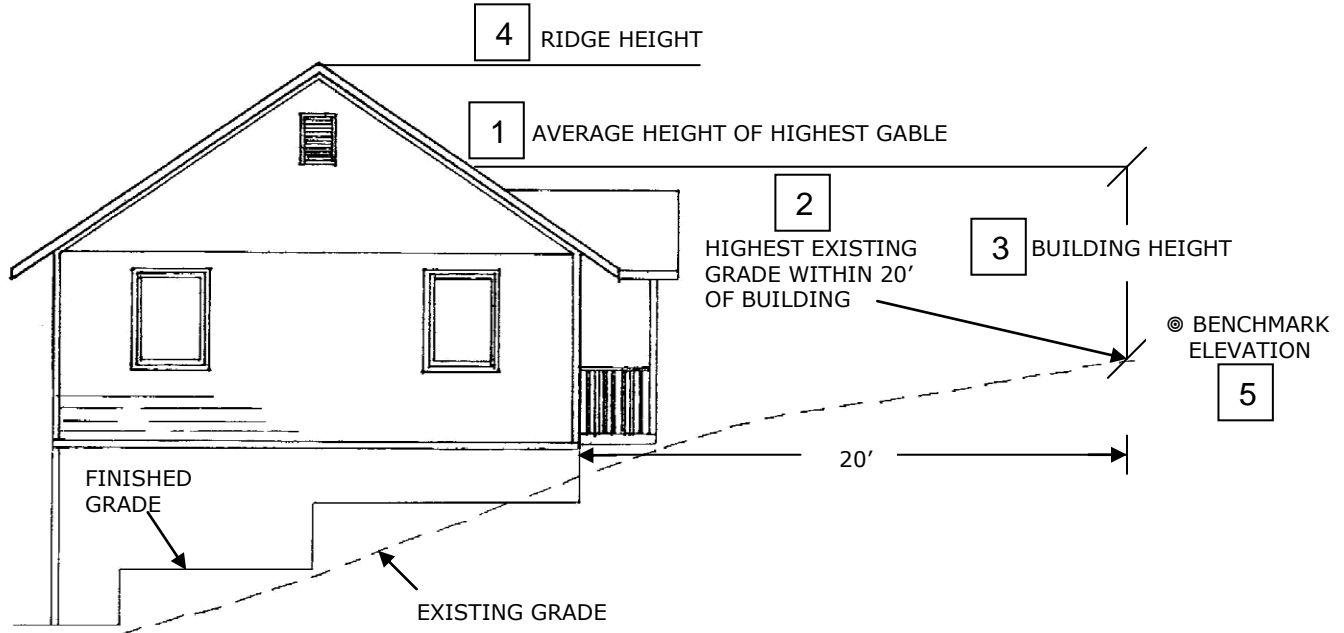
- Buildings within 2 feet of the height limit that are located in a Neighborhood Plan Area that has "view" as a Special Condition.
- Single family homes with over 5500 square feet of gross floor area (requiring a Conditional Use Permit (CUP)) if the proposed structure is within 2 feet of the height limit or if otherwise required by the CUP.

Building Height Calculation Form

Height Definition #2 (see page 2 for Height Definition #1)

Site Address: _____ Prepared by: _____

Complete the following information with elevations and submit it with the building permit application, *even if the proposal is an addition that will result in a height LOWER than the existing structure*. Also label these points on the site plan and building elevations.



List Elevations

- 1 Average height of highest gable OR
 Highest point of coping on a flat roof
- 2 Highest existing grade within 20' of building (on the subject property)
- 3 **BUILDING HEIGHT DEFINITION #2**
- 4 Ridge height

*List the elevations of each of these points **relative** to the benchmark. Mark these points and their elevations on the building elevation drawings submitted with the building permit application.*

- 5 Description of permanent **benchmark** (choose an item that is existing and will not move during construction, for example a survey stake, the top of existing foundation, also mark location on site plan and elevations). You may assign this an elevation that must relate to other heights, for example, you can assign this zero, then measure your building heights in reference to this).

A licensed surveyor's certification of existing grade elevation relative to the benchmark elevation will be required for the following:

- Buildings within 2 feet of the height limit that are located in a Neighborhood Plan Area that has "view" as a Special Condition.
- Single family homes with over 5500 square feet of gross floor area (requiring a Conditional Use Permit (CUP)) if the proposed structure is within 2 feet of the height limit or if otherwise required by the CUP.

Foundation Excavation

The existing grade on the site should not be disturbed until after a grading or building permit has been issued. The applicant must document the existing grade relative to the chosen benchmark on the permit application.

Benchmarks

Building height must be shown relative to the chosen benchmark's elevation. The benchmark and building elevations need not be tied to City elevation datum. The benchmark may be given an assigned elevation such as 100'. Building height calculations and the benchmark location must be submitted with building permit applications for new construction, additions and alterations that affect building height. These points and elevations must be shown on the elevation drawings.

A benchmark can generally be any fixed point on a permanent object near the site that cannot be moved during construction and is accessible to the building inspector. It will most often be something in the abutting street right of way such as a manhole rim, fire hydrant bolt, center pin of street or similar feature. Lines marked on objects will not be accepted. A benchmark must be acceptable to the Building Official.

Grade Survey

A licensed surveyor's certification of existing grade elevation relative to the benchmark elevation will be required for the following:

1. Buildings within 2 feet of the height limit that are located in a Neighborhood Plan Area that has "view" as a Special Condition. A map of these areas is also available at the Planning Dept.
2. Single family homes over 5500 square feet (those requiring a Conditional Use Permit) if the proposed structure is within 2 feet of the height limit.

Survey verification of existing grade and/or building height may also be required for permits with special height limit conditions or to verify a building height in dispute.

When a grade survey is required, provide the surveyor's certification using the attached format for either Height Definition #1 or Height Definition #2, as applicable.

City of Bellingham, Washington
CERTIFICATION OF EXISTING GRADE FOR
DETERMINING BUILDING HEIGHT
UNDER DEFINITION #1

I certify that I have read Chapter 20.08.020 E.(2) and H. (1) (a) of the Bellingham Municipal Code regarding the definition of "Existing Grade" and "Building Height Definition #1." I further certify that consistent with the above referenced definitions, I measured the lowest existing grade at the wall of the proposed building at:

(street address or legal description)

and found the existing grade at this point to be _____ feet above/below
an approved benchmark at _____
(identify benchmark used and location)

as shown on the attached map.

Note: Attach a map showing the benchmark and the relative elevation and location of the existing grade point as defined by Building Height Definition #1.

Signature

Date

Seal/Stamp

Attachment: Map

City of Bellingham, Washington
CERTIFICATION OF EXISTING GRADE FOR
DETERMINING BUILDING HEIGHT
UNDER DEFINITION #2

I certify that I have read Chapter 20.08.020 E.(2) and H. (1) (b) of the Bellingham Municipal Code regarding the definition of "Existing Grade" and "Building Height Definition #2." I further certify that consistent with the above referenced definitions, I measured the highest existing grade on the building site within 20 feet of the proposed building (measured horizontally) at:

(street address or legal description)

and found the existing grade at this point to be _____ feet above/below
an approved benchmark at _____
(identify benchmark used and location)

as shown on the attached map.

Note: Attach a map showing the benchmark and the relative elevation and location of the existing grade point as defined by Building Height Definition #2.

Signature

Date

Seal/Stamp

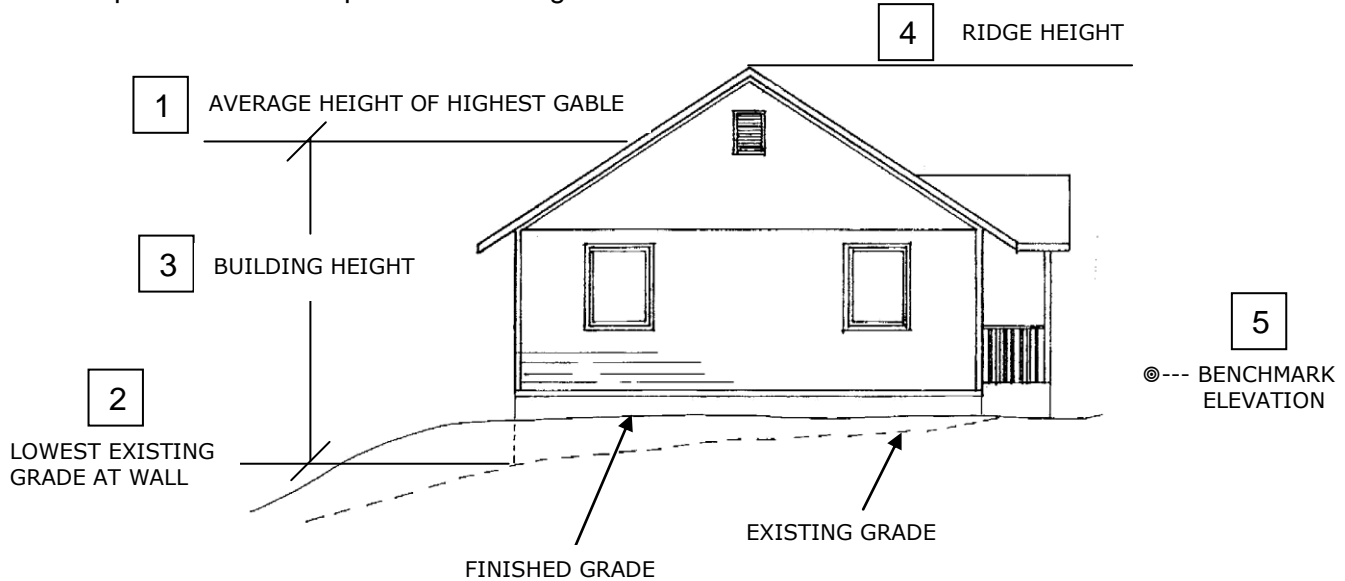
Attachment: Map

EXAMPLE

Building Height Calculation Form – Using Height Definition #1

Site Address: 1205 Sanderson Ave Prepared by: (signature of person)

Complete the following information with elevations and submit it with the building permit application, *even if the proposal is an addition that will result in a height LOWER than the existing structure*. Also label these points on the site plan and building elevations.



List Elevations

- 1 108.2' Average height of highest gable OR Highest point of coping on a flat roof

- 2 91.2' Lowest existing grade at wall line

- 3 17.0' **BUILDING HEIGHT DEFINITION #1**

- 4 112.5' Ridge height
Top bolt of fire hydrant in Sanderson Ave

- 5 100' Description of permanent **benchmark** (choose an item that is existing and will not move during construction, for example a survey stake, the top of existing foundation, also mark location on site plan and elevations). You may assign this an elevation that must relate to other heights, for example, you can assign this zero, then measure your building heights in reference to this).

*List the elevations of each of these points **relative** to the benchmark. Mark these points and their elevations on the building elevation drawings submitted with the building permit application.*

A licensed surveyor's certification of existing grade elevation relative to the benchmark elevation will be required for the following:

- Buildings within 2 feet of the height limit that are located in a Neighborhood Plan Area that has "view" as a Special Condition.
- Single family homes with over 5500 square feet of gross floor area (requiring a Conditional Use Permit (CUP)) if the proposed structure is within 2 feet of the height limit or if otherwise required by the CUP.