SANTA CRUZ COUNTY PLANNING DEPARTMENT POLICY/ORDINANCE INTERPRETATION

Interpretation No.: HT-01 (Building Height)

Effective Date: 10/04/04

Originally Issued: Supercedes interpretation "Measuring Height (HT-01)" by Alvin

James, dated 06/01/03

Revised: February 4, 2010

Question:

How is the height of a building measured?

Applicable Ordinance Section(s)

§13.10.510(d) §13.10.700-H

INTERPRETATION:

Application and Inspection Building Height Requirements

All building permit applications for a structure, an addition to a structure, or modification to the exterior of a structure are required to include information to confirm that the structure will not exceed the allowed height in the zone district. The definition of height, found in Section 13.10.700-H of the County Code, is as follows:

The height of a structure is the vertical distance between the existing or finish grade, whichever is lower, to the uppermost point of the structure.

In addition, General Plan Policy 8.6.2 states that all unnecessary grading for the purpose of meeting height restrictions is prohibited.

- 1) Two sets of measurements are needed to determine the height of a structure (please refer to the attached figures):
 - a) Within the footprint of the structure, inside of the perimeter of the foundation, measurements are taken from the <u>original (natural) grade</u> to the highest points of the structure above;
 - b) At the perimeter of the foundation and beyond, measurements are taken from the <u>original (natural) grade or finished grade, whichever is lower</u>, to the highest points of the structure directly above;
 - c) The measurements from a) and b) must both not exceed the maximum height for the zone district.

Certain architectural features may exceed the height limit, such as chimneys, spires and the like, as provided in Section 13.10.510(d)2 of the County Code.

2) The following information will be required to document the structure's height as a part of the building permit review:

a) Elevations, cross sections, and topography (See Illustration H-1): Required for all building permit applications. May be adequate to determine height for those structures where the proposed height can be clearly shown using only these plans. This would apply to most one-story structures, one-story additions, and multistory structures on flat sites (less than 2–foot elevation differential for the building pad). The cross section should include the location that has the greatest differential between the ground surface and the structure height above.

Additional documentation may be required for any building site, at the discretion of Planning staff.

b) Roof plan with surveyed contour mapping (See Illustration H-2): Required for all structures where the height of the structure will be within 2 feet of the height limit for the zone district and there is 2-foot or greater elevation differential for the building pad; or where the slope(s) of the property could make determining the height of the structure difficult.

The roof plan with surveyed contour mapping consists of two components:

- A) A surveyed contour mapping of the ground surface. The survey shall include both the original/natural grade, and the finished/ post-development grade. Preapplication grading may affect these determinations. The surveyed contour map must be stamped by a surveyor or civil engineer licensed by the State of California.
- B) The roof plan with surveyed contour mapping. This plan consists of a roof plan, and surveyed contour mapping of the ground surface described above, superimposed and extended, as needed, to allow height measurement of all features. As noted in Section 1 of this interpretation, height measurements within the structure's footprint are taken from the pre-development survey of the original/natural grade. Height measurements at the exterior of the foundation are taken from is the lower of either the post-development ground surface (finished grade) or the original (or natural) grade.

Spot elevations must be provided at points on the structure that have the greatest differences between the ground surface and the highest portion of the structure above. Building or planning officials may require additional spot elevations and additional surveying on submitted plans for complex sites or complex structures.

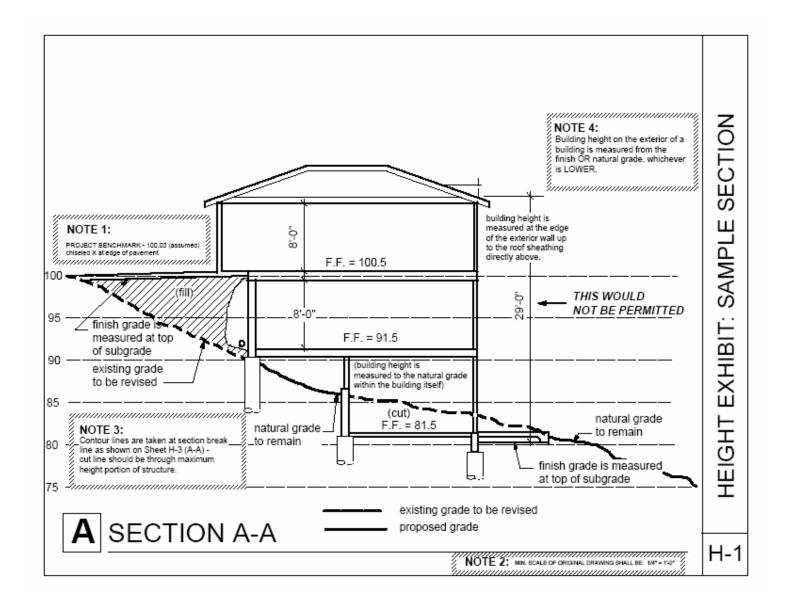
The roof plan exhibit may be prepared by a designer, architect, or civil engineer. However, the roof plan exhibit must be stamped by an architect, land surveyor or civil engineer licensed by the State of California verifying that the contours and height measurements shown on the plan are accurate.

- 3) After the foundation forms have been constructed and prior to foundation inspection and concrete placement, the Building Official or their designated representative may require that a surveyor or civil engineer licensed by the State of California verify, in writing, that the spot elevation(s) of the foundation forms are generally consistent with the approved plans. At the roof sheathing inspection and prior to rough frame inspection, the Building Official may require that a surveyor or civil engineer licensed by the State of California verify in writing that the structure complies with the County of Santa Cruz height ordinance. The Building Inspector may require additional verification by a licensed professional at other stages of the project, if necessary.
- 4) On sites where surveyed contour mapping has been prepared, the surveyor or civil engineer shall establish a benchmark in a convenient location for the use of field personnel.

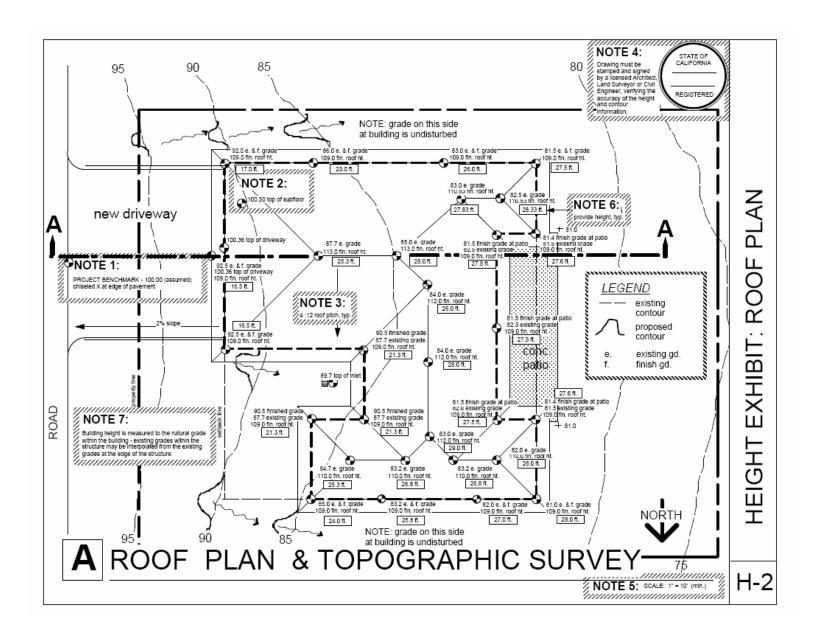
Reason

The previous method for measuring height did not, in fact, coincide with the definition of height in the Zoning Ordinance. This proposed methodology utilizes the definition and establishes a mechanism to allow both plan checkers and building inspectors to determine if the proposed structure will meet the height limit specified in the Zoning Ordinance. The interpretation also recognizes that some proposed structures would not be near the height limitation for the zone district and, therefore, do not require as extensive a review. The interpretation has been clarified to state that a civil engineer may prepare the ground survey. Additionally, a designer may prepare the roof plan, but the plan must be stamped by a licensed surveyor or civil engineer verifying that the contours and height measurements are accurate.

Tom Burns, Planning Director	Date	



13.10.510(d)



5

13.10.510(d)