## Exhibit G - Building Height Letter

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August 9, 2022

Mr. Scott Reed
12424 Springville Road
Portland, Oregon 97229

Mr. Reed,

I am a licensed architect in the state of Oregon (ARF-11937) operating a residential architecture firm in Portland. I have been practicing architecture since 2013 and have worked within zoning codes and jurisdiction requirements in all of my projects. You have asked that I review Multnomah County's Notice of Decision (Case File: T2-2021-14981) dated June 14, 2022 regarding your proposed home and focus specifically on the question of building height.

On page 9 and 10 of the notice, Multnomah County Code section 39.425 Dimensional Requirements and Development Standards is reviewed by planning staff. The staff's findings are detailed below.

> According to the preliminary building elevations (Exhibit A.7), the building is a stepped design. The definition of Building Height" [MCC 39.2000] states, "The height of a stepped or terraced building is the maximum of any segment of the building or as amended by the State of Oregon Structural Specialty Code and Fire and Life Safety Regulations". The preliminary building elevations show the building has segments of approximately 39ft-45ft that exceed the maximum structure height of 35 ft . Standard no met.

In reviewing the staff findings, I have reviewed the site plans and building elevation plans. Specifically, focused on sheets A-4.1 (North \& South Elevations), A-4.2 (East Elevations), and A-4.3 (West Elevations). The north elevations of the home present to the tallest portion of the proposed structure. The definition for "Building Height" from MCC 39.200 is listed below in italics. My comments are in bold.
(a) The vertical distance above a reference datum measured to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the average height of the highest gable of a pitched or hipped roof. The reference datum shall be selected by either of the following, whichever yields a greater height of building:

## The highest point of the proposed structure is a gable roof with an average height of +141'-1".

1. The elevation of the highest adjoining sidewalk or ground surface within a 5-foot horizontal distance of the exterior wall of the building when such sidewalk or ground surface is not more than 10 feet above the lowest grade.

The eastern basement area garage is at an elevation more than 10' below the adjoining ground surface, therefore this section cannot establish the reference datum.
2. An elevation 10 feet higher than the lowest grade when the sidewalk or ground surface described in Item (1) above is more than 10 feet above the lowest grade.

The lowest grade adjacent to the structure is +99'-8.25". Therefore, the reference datum for determining building height would be $+99^{\prime}-8.25$ " plus 10 ' which equals 109'-8.25". The difference between the highest gable $+141^{\prime}-1$ " and 109 ' $-8.25^{\prime \prime}$ is less than 35 feet.
(b) The height of a stepped or terraced building is the maximum height of any segment of the building, or as amended by the State of Oregon Structural Specialty Code and Fire and Life Safety Regulations.

Given there is no definition or instruction as to how a segment is defined, I would interpret a segment to be a cross section perpendicular to the exterior wall at any given location of the structure. Considering this, the design meets the maximum thirty-five foot height requirement. Although also unclear how the State Building Code can amend the Multnomah County Zoning Code, I reviewed the definitions of Grade Plane and Building Height to determine how the 2019 OSSC would measure the height of the proposed structure.
[from OSSC 2019 Chapter 2: 202] HEIGHT, BUILDING. The vertical distance from grade plane to the average height of the highest roof surface.

The highest point of the proposed structure is a pitched roof along the north elevation. The average height of the highest roof surface is $+141^{\prime}-1$ ".
[from OSSC 2019 Chapter 2: 202] GRADE PLANE. A reference plane representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet ( 1829 mm ) from the building, between the building and a point 6 feet ( 1829 mm ) from the building.

The average finished ground level adjoining the building at exterior walls is approximately +109 ' -6 ". Therefore the grade plane for the proposed structure is +109'-6".

In conclusion, the Multnomah County Zoning Code path yields a maximum building height of 31'-4.75" ( $141^{\prime}-1$ " minus 109 '- 8.25 ") and the 2019 Oregon Structural Specialty Code yields a maximum building height of 31'-7" (141'-1" minus 109'-6") for the proposed structure. In both scenarios, the proposed structure at 12424 NW Springville Road in Portland, Oregon does not exceed the building height limit of 35'. It is my understanding and interpretation that the design reviewed for Springwood Acres meets the zoning requirement for Building Height.


Zach Freund, Architect NCARB Homegrown Architecture LLC

