



COTTAGE HOUSING: MODELING THE DRAFT CODE

December 2016



Planning and Development Services

COTTAGE HOUSING MODELING THE DRAFT CODE

Overview Summary: This document provides three illustrations to visually present possible cottage housing developments based the draft code amendments before the Snohomish County Council which could serve to increase density from that which would be allowed with the underlying zoning. The developments were modeled using a software program called SketchUp which allows the creation of 3-D illustrations.

For consistency, each model uses the same general site characteristics (e.g., road layout and lot size) and proposed development standards (e.g., setbacks, lot coverage, pedestrian facilities, and amount of open space) from the draft ordinance (see Appendix A for the complete list of assumptions). Each of the three models assumes a different underlying zoning. Model 1 is based on Low Density Multiple Residential (LDMR) zoning, Model 2 on R-7,200 zoning, and Model 3 on R-9,600 zoning.

For each of the models, a range of dwelling sizes was used to compare and contrast the recommendation of the Planning Commission and Amendment Sheet 1 submitted by the Executive. The Planning Commission recommended a maximum cottage dwelling size of up to 2,000 square feet. Amendment Sheet 1 would increase the maximum size up to 2,400 square feet. By comparison the currently adopted maximum cottage size is 1,200 square feet.

These illustrations are not intended to depict all of the regulations which may be required under county code for a cottage housing development. An actual cottage housing development would be required to meet a submittal checklist including but not limited to: preparation of a site plan, landscaping plan, drainage report and transportation analysis.

MODEL 1: LDMR ZONING

Aerial View



This view presents an aerial view of the proposed cottage housing development. The hallmark of cottage housing developments is the orientation of a majority of the dwellings around a common open space. The development is connected together by several pedestrian paths. Model 1 represents a balance between smaller and larger units. Smaller units are less than 1,000 square feet and larger units are up to 2,400 square as would be allowed under Amendment Sheet 1. It places an emphasis on maximizing use of garages located to the rear of the cottage or in separate shared parking areas. The average unit size in Model 1 is 1,111 square feet. The development is served by a road accessed off of a public road. Two additional views are presented on the following page to give different perspectives.

Street View



Side View



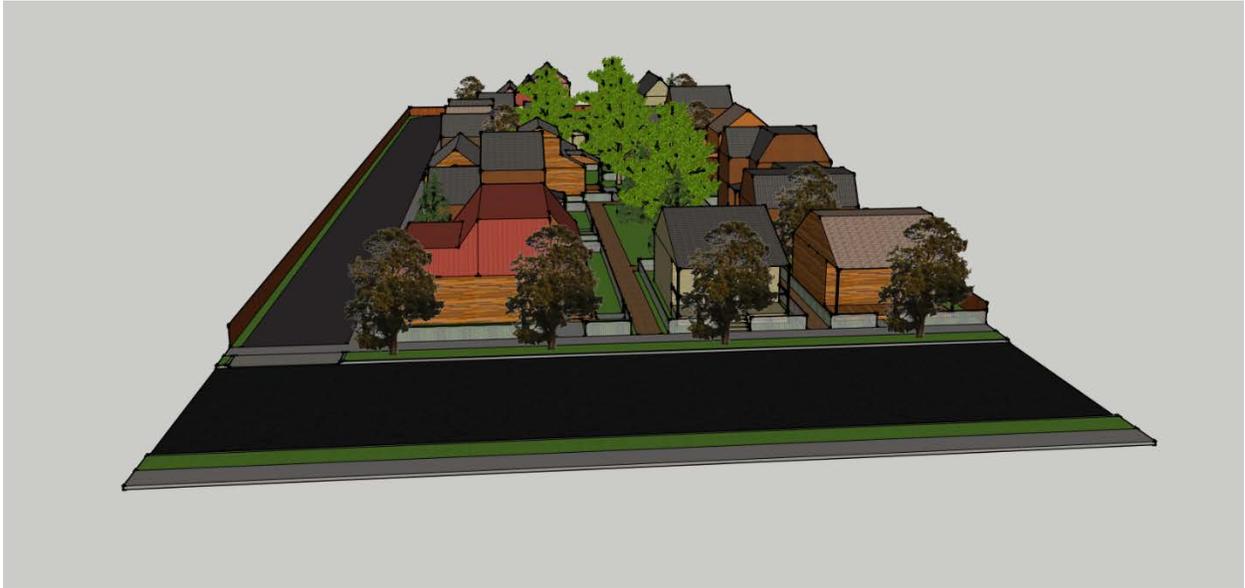
MODEL 2: R-7,200 ZONING

Aerial View



Model 2 is similar in design to Model 1 including the design of parking. The average unit size of 1,366 square feet reflects a mix of larger cottages including dwellings sizes up 2,400 square feet. The proposed number of units (14 cottages) is lower than Model 1 to reflect the underlying zoning of R-7,200. Like Model 1 two additional views are presented on the following page.

Street View



Side View



MODEL 3: R-9,600 ZONING

Aerial View



Like Models 1 and 2, Model 3 retains the principle design of the cottage housing development. The underlying zoning of R-9,600 reduces maximum number of dwellings to nine. Model 3 is different than Model 1 in that the mix of dwelling units is assumes a greater number of larger units reflective of Amendment Sheet 1. This results in an average dwelling size of 1,861 square feet. Two additional views of Model 3 are presented on the following page.

Street View



Side View



APPENDIX A

Modeling Background: In an effort to provide a range of examples, three different zones which allow cottage dwellings were chosen: R-9,600, R-7,200, and LDMR. The draft cottage housing regulations propose a bonus density of twice the underlying zoning. As an example, under R-7200 zoning which is approximately six dwelling units per acre, a doubling of the density would mean a cottage dwelling could be based on 12 units per acre. All three models include different unit counts depending on the underlying zoning.

It should be noted that when all of the proposed and existing development regulations (including bulk requirements, open space, critical areas, parking, roads, and drainage requirements) are considered in laying out a cottage housing development the actual density or unit count may not reach the maximum allowed. The market may also play a role in the number of units in a cottage housing development and the resultant density. Some developers may choose to maximize their ability to develop units on a site, which may result in smaller units. Others may choose to focus their efforts on lifestyle communities that exceed the minimum requirements for recreation space and may include community facilities. And still yet, others may choose to construct larger but fewer dwelling units.

Base Assumptions Common to All Models

Site Characteristics	
Site Area	60,000 square feet (1.377 acres)
Site Depth and Length	400 feet by 150 feet
Site Constraints	
Maximum Lot Coverage	40%
Setbacks from Exterior Site Property Lines	5 feet
Open Space Requirements	
Private Open Space	200 square feet per unit
Common Open Space	400 square feet per unit
Dwelling Unit Design	
Maximum Unit Size ¹	800 to 2,400 square feet per unit
Maximum Height	30 feet
Maximum Ground Floor Size	1,600 square feet per unit
Porches	60 square feet per unit, except when a dwelling unit is constructed over a shared garage
Parking Requirements	
Maximum Garage Size	200 square feet per unit, maximum of 6 stalls in shared parking structures otherwise cottage-specific detached and attached garages are limited to 1 parking stall
Resident Parking Spaces	1 per dwelling unit
Guest Parking Spaces	1 per 4 dwelling units
Surface Parking Clusters	6 parking spaces maximum

¹ Proposed Amendment Sheet 1 would effectively allow 2,400 square foot cottage housing dwelling units. The maximum gross ground floor area would be limited to 1,600 square feet and up to an additional 800 square feet could be located on another floor of a cottage housing structure, depending upon the size of the ground floor. The total maximum square footage of a cottage housing unit is determined by calculating 1.5 times the gross ground floor area. If 1,000 square feet were proposed on the ground floor, a further 500 square feet could be located on another floor.

Model 1: LDMR Zoning Assumptions

	Maximum Allowed	Proposed
Dwelling Units	30	20
Gross Density	21.78	14.52
Lot Coverage	40%	31.5%
Average Unit Size ²	2,400 square feet	1,111 square feet
Average Lot Size	2,000 square feet	3,000 square feet
	Required	Proposed
Resident Parking	20 spaces	20 spaces
Guest Parking	5 spaces	5 spaces
Total Parking	25 spaces	25 spaces
Common Open Space	8,000 square feet	9,200+ square feet

Model 2: R-7,200 Zoning Assumptions

	Maximum Allowed	Proposed
Dwelling Units	17	14
Gross Density	12.10	10.16
Lot Coverage	40%	30%
Average Unit Size ³	2,400 square feet	1,366 square feet
Average Lot Size	3,529 square feet	4,286 square feet
	Required	Proposed
Resident Parking	14 spaces	14 spaces
Guest Parking	4 spaces	4 spaces
Total Parking	18 spaces	18 spaces
Common Open Space	5,600 square feet	9,300+ square feet

² This model takes into account the maximum square footage requirements of the proposed ordinance and proposed Amendment Sheet 1.

³ This model takes into account the maximum square footage requirements of the proposed ordinance and proposed Amendment Sheet 1.

Model 3: R-9,600 Zoning Assumptions

	Maximum Allowed	Proposed
Dwelling Units	13	9
Gross Density	9.08	6.53
Lot Coverage	40%	25%
Average Unit Size ⁴	2,400 square feet	1,861 square feet
Average Lot Size	4,615 square feet	6,667 square feet
	Required	Proposed
Resident Parking	9 spaces	10 spaces
Guest Parking	2 spaces	2 spaces
Total Parking	11 spaces	12 spaces
Common Open Space	3,600 square feet	13,000+ square feet

⁴ This model takes into account the maximum square footage requirements of the proposed ordinance and proposed Amendment Sheet 1.