

THE ROOST

Three Units, One Plan, One 50' x 100' Lot

Project Overview

The Roost is a compact, repeatable home that brings family-sized middle housing to established neighborhoods. The proposal uses Option 1, the 50' x 100' small lot (5,000 sf) common in the Lettered Streets, Columbia, Cornwall Park, and West Happy Valley. Three homes share a lot: a mirrored duplex and one detached unit, all built from a single 23' x 30' plan. The site design can be implemented on a corner or mid-block lot.

Key site figures:

- **Units:** 3 (each 1,489 sf, three bedrooms, two and a half baths)
- **Floor area:** 3,597 sf, a 0.72 FAR against the 1.0 allowed
- **Open space:** 2,990 sf unbuilt, or 59.8% of the lot (30% required)
- **Height:** 34'-7" (35' maximum)
- **Usable space:** a 153-sf private covered deck per home, plus a covered patio at grade
- **Parking:** none provided
- **Street trees:** planted along both street frontages

Affordability and Constructability

The Roost's core cost strategy is repetition. One plan, detailed once, is built three times, so framing, window orders, and trade sequences repeat across the site. The rear facade has few windows, letting the duplex mirror the plan along that wall without revising the layout.

Every major system favors what local builders already know:

- **Standard wood framing:** conventional lumber offers maximum material availability, lower labor costs, and faster build times.
- **Slab-on-grade foundation:** eliminates the need for footing drains in most applications.
- **Composition roofing:** the shed roof pitch is optimized for standard, cost-effective composition shingles.
- **Flexible cladding:** the design supports any exterior finish or siding, so owners can match budget and preference.
- **Residential code permitting:** as one- and two-family dwellings, the homes are permitted under the residential code, avoiding fire sprinklers in most applications.
- **No garage or driveway:** land and budget go to homes and open space rather than car storage.

Each home uses a rectangular footprint and a single centralized stair. At 1,489 sf, the unit provides three bedrooms while holding size, and therefore cost, in check. For universal design, the kitchen, living, dining, half bath, and patio all sit on the ground floor, so the full main living level works without stairs depending on site grade.

Sustainability and Resilience

The Roost is built with standard systems for affordability and constructability, but was also designed with sustainability and resilience in mind.

- **Envelope:** a fully insulated slab, R-23 high-density batt walls, and R-49 hybrid roof and deck assemblies. Simple wood trusses with batt insulation are topped with rigid poly-iso insulation that keeps the dew point outside the framing for roof longevity.
- **All-electric systems:** a ductless mini-split heat pump provides zoned heating and cooling without ductwork energy loss, and a hybrid heat pump water heater drastically lowers water heating energy.
- **Solar-ready roofs:** each single-slope roof provides an ideal, continuous surface for a solar array, shown installed on the upper roofs.
- **Stormwater:** rainwater is collected centrally and directed to an integrated bioretention planter for on-site filtering.
- **Open space:** nearly 60% of the lot stays unbuilt, with room for planting and street trees.
- **Outdoor living:** covered patios and decks remain usable through the rainy season without adding conditioned floor area.

Innovation and Creativity

The Roost works as a kit of parts rather than a single building.

- **Size adaptability:** the stair core allows each home to be built at two or three stories, depending on the owner's needs and budget.
- **Privacy-oriented layout:** the unit turns its back on one side to block neighboring structures or unfavorable views, or to locate the shared duplex wall.
- **Adaptable entry:** the main entry can shift to the patio side, and the duplex and detached unit can swap positions to suit a given lot.
- **Multi-functional rear entry:** the space beside the rear door works as a mud room for shoes, bags, and daily clutter, or as storage for bikes and tools, opening directly to the yard.
- **Celebrated rainwater:** the duplex's mirrored shed roofs form a dynamic butterfly roof, with an expressed downspout carrying rain to the bioretention planter.
- **Upper-level outdoor room:** the third-floor bedroom opens to a private covered deck.

The architecture introduces an intriguing modern massing, balanced by traditional elements such as awnings, patios, and siding material that allow it to effortlessly respect and complement any existing neighborhood character. The Roost demonstrates how one plan can add homes, lot by lot, across Whatcom County.