

Mixed Middle - 2924 Eldridge Ave

Mixed Middle is an infill project that includes both permanently affordable and market rate development on an existing double lot in the Birchwood neighborhood. The existing property has already doubled the number of units on its historically single-family lot with the addition of a DADU in 2021. By subdividing the double lot, additional room for housing is made. 6 new units (2 market rate & 4 permanently affordable) are proposed on the newly created 6,700 square foot lot.

The new 2-structure development leverages a market rate single-family (~2,000ft²) house and an attached lower ADU unit (~1,000ft²) at the south of the lot to help offset the development costs of a permanently affordable 4-plex in the rear of the lot. A large (34'x36') common courtyard is created between the two structures. This provides a flexible outdoor space buffered from the street and a natural area for interaction between neighbors.

Both structures utilize the same strategy of placing the lower unit or A-ADU in a partially (42") below grade level to help keep the new development within the existing scale of the 1-1/2 to 2 story neighborhood while providing an additional level of living. The split entry also provides a semi-private patio for the lower units providing additional storage and hangout space.

The front single-family house and A-ADU are oriented with the short dimension to the street to fit between the side yard setbacks and to provide a view of the Bellingham Bay & San Juan Islands. The 4-plex is oriented with the broad side of the building to the south. This maximizes room for solar panels.

Mixed Middle is an innovative infill development model based on unlocking the available equity in existing large lots within Bellingham. By splitting the lot into two and by developing the front of the new lot at market rate, 4 additional permanently affordable homes are created. Everything is within walking and biking distance of BTC & Downtown Bellingham.

Affordability & Constructability:

- Simple rectilinear footprint that's easy to construct
- Common structural materials that contractors can easily find
 - Walls | 2x6 advanced framing
 - Floor & Roof | Trusses
- Mixed Rate Ownership models that allow for varied income demographics (diversity)
 - Permanently affordable individual ownership of 4-plex units
 - Market Rate ownership of SFR & A-ADU/Condo

Built to Zero Energy Ready Home standards

-5,000 tax credit per unit to contractor/developer

Accessibility to public transit provides lower transportation costs

Sustainability & Resilience:

- Building orientation / Massing

- Elongating building in the East and West
(Maximizes south light exposure in the winter and Minimizes over heating in summer)
- gable roof optimized for solar panels
- Open courtyard (between buildings)
(Increases interaction between neighbors & fosters stronger community)
(Open play space for kids and families)

- High quality/ durable Materials- lower long-term costs

- Windows | High performance windows with Passive House u-values
- Roof | Standing seam metal
(Durability, Recyclable, potential for rain catchment)
- Siding | Metal & Durable Local Wood
(Invasive Juniper from Oregon grass lands)

- Continuous Thermal and Air Barrier Strategy

- HVAC located within conditioned areas (increased efficiency)
- No thermal bridging of structure
(increased efficiency of thermal barrier & durability of structure)
- Air tight, Passive House air sealing levels with vapor open assembly
(increased structural durability & HVAC efficiency)
- HRV | Heat Recovery Ventilator
(Whole unit balanced air supply & exhaust system)
(Provides fresh, filtered air during wildfire & pollen season and prevents mold)
- Efficient Heat Pump conditioning units
 - Provides high efficiency heating and cooling
- Continuous Exterior Insulation
(Prevents condensation in wall assembly, & increases HVAC efficiency)
(Preference for low carbon materials like cork or wood fiber)
- Rainscreen cladding - natural ventilation of siding / wall assembly
(Increased durability of wall & cladding)

Innovation & Creativity:

Mix Rate Infill Development / Small Scale Financing Model

- Allows for a phased construction model that moves along as equity is built up
- Leverage equity of existing single-family house & D-ADU + equity of newly subdivided lot for development of front Market Rate house & A-ADU
- Leverage equity of new subdivide lot + Market Rate House & A-ADU for development of Permanently Affordable 4-plex

Shared Outdoor Courtyard

- Flexible community space (garden, playground, parties, sports, outdoor movies)
- Space for community gardening/composting

Sunken Patios

- Individualized outdoor space to each unit while fostering neighborly interactions
- Semi-private space buffers transition from public space to private space
- “Eyes on the street” for increased safety
- additional renter/bike storage