

# Missing Middle Housing Fundamentals

RL Mace Universal Design Institute

# Defining Missing Middle Housing

*Missing Middle is a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living.*

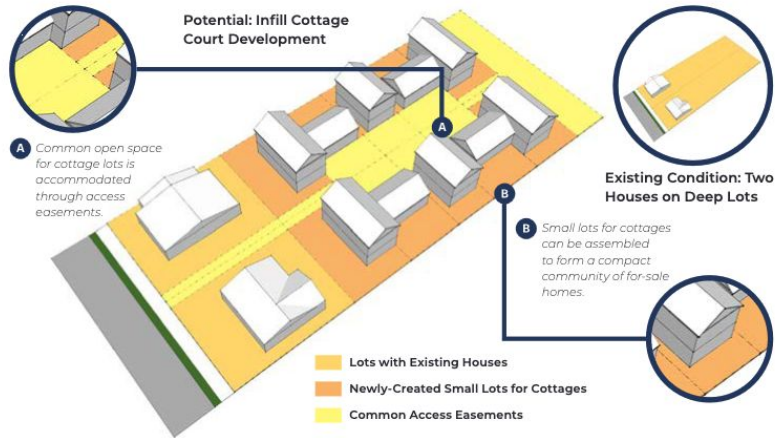
-Daniel Parolek, Founder of Opticos

A group of different housing types that...

- Have multiple units on 1 lot
- Are more similar in scale to single-detached homes than to apartment buildings
- Courtyard housing, duplexes, triplexes, fourplexes, ADUs etc.

# MMH Types: Cottage Court

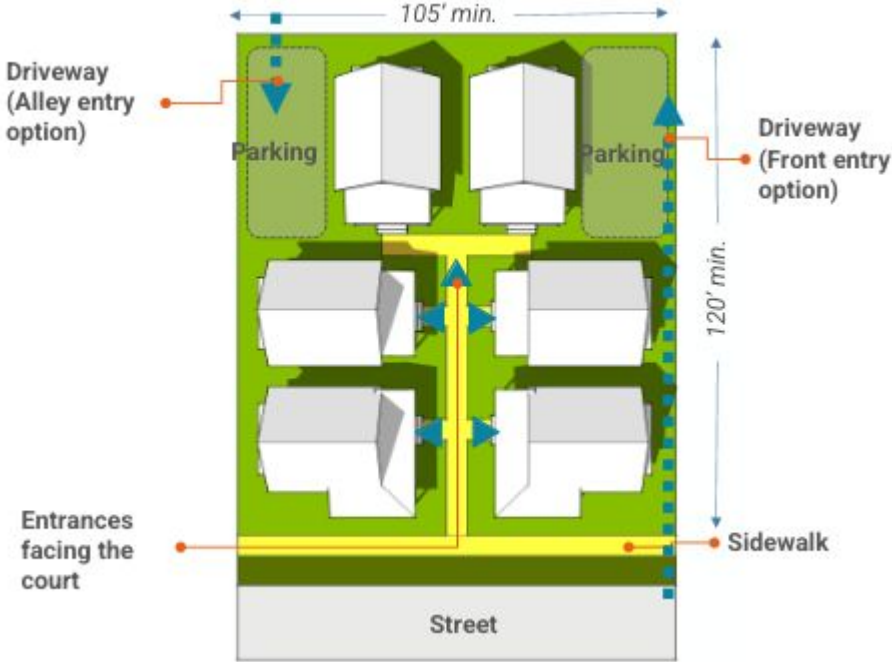
## INFILL EXAMPLE



- Typically 1 to 1½ stories tall.
- Can include single detached, duplex, triplex, multiple attached units, or any combination.
- Oriented around a courtyard that serves as an outdoor community space in lieu of rear yards
- A group of three to 16 detached dwelling units on one lot with a footprint of less than 900 square feet each.
- Shared parking areas
- Often have a common building used for community gatherings or reserved for private parties
- May offer shared laundry facilities, storage spaces and secondary housing units that can accommodate guests.

Sources- above: Opticos, Sacramento MMH Study; right: AARP  
Discovering and Developing MMH

# Cottage Court Examples



Source: Washington State Dept. of Commerce

# Cottage Court

Credit: Washington State  
Dept. of Commerce



Credit: Katherine Austin, AIA



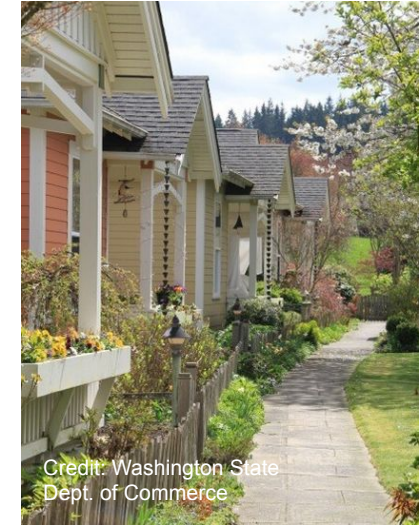
Cully Grove, Northeast Portland  
Credit: Communitecture



Riverhouse, Healdsburg, CA  
Credit: jzmkpartners.com

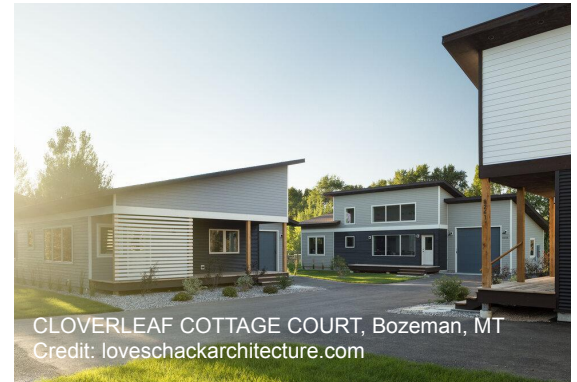
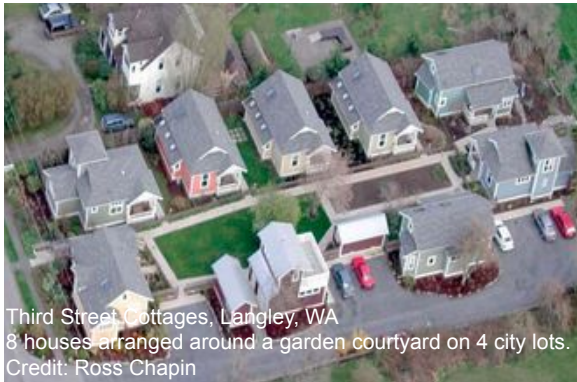
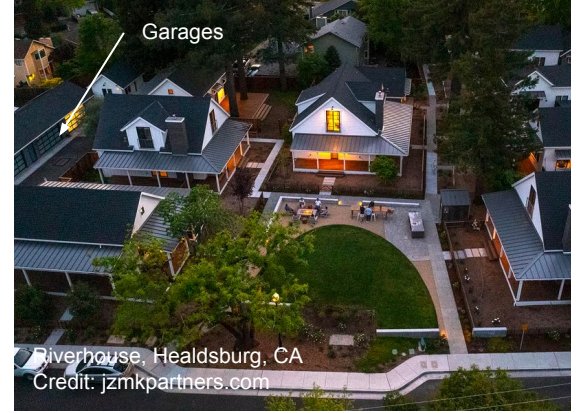


Credit: Katherine Austin, AIA



Credit: Washington State  
Dept. of Commerce

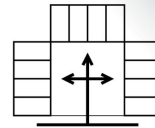
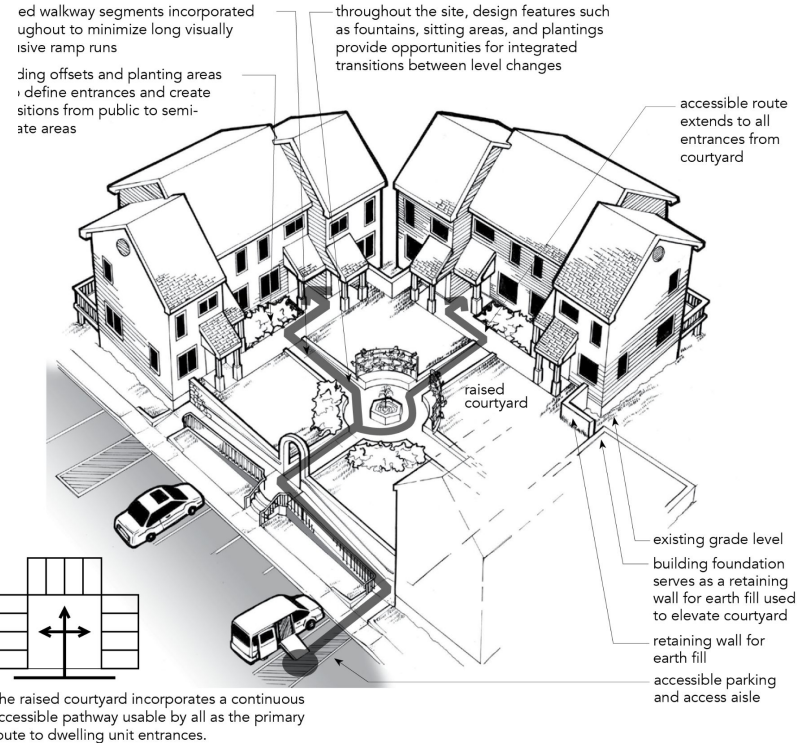
# Cottage Court



# Cottage Court



◀ In this site plan, five cottage-style homes (of about 650 square-feet each) fit on a 14,976-square-foot (or .34 acre) lot.



The raised courtyard incorporates a continuous accessible pathway usable by all as the primary route to dwelling unit entrances.

## RAISED CENTRAL COURTYARD

# MMH Types: Cottage Court Additional Resources

[NAHB on Cottage Courts: Case Studies](#)  
[Sacramento MMH Study/Recommendations](#)



above: AARP MMH



# MMH Types: Duplex

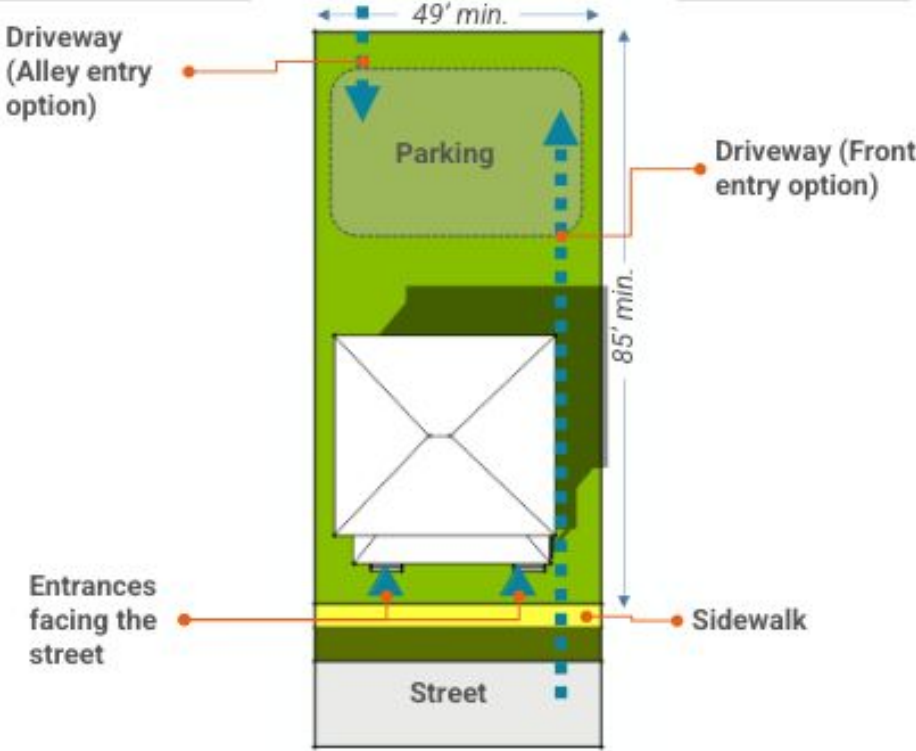
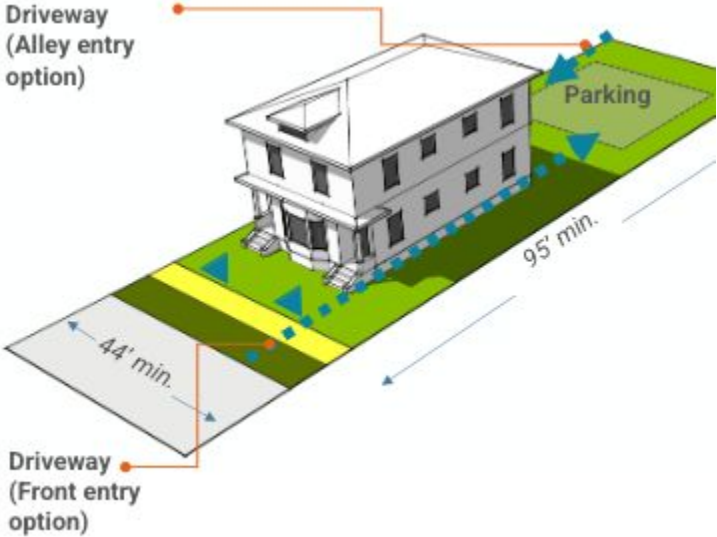
- Two units within a building that is of similar size and scale to a single-family house.
- Units may be side by side w/shared common wall or stacked
- Entrances to both units face the street
- Ground floor units are age-friendly

# Duplex



Source Clockwise from Top Left: Family Housing Fund , Zillow, Opticos, <https://libertyhouseplans.com>

# Duplex Example



# MMH Types: Triplex

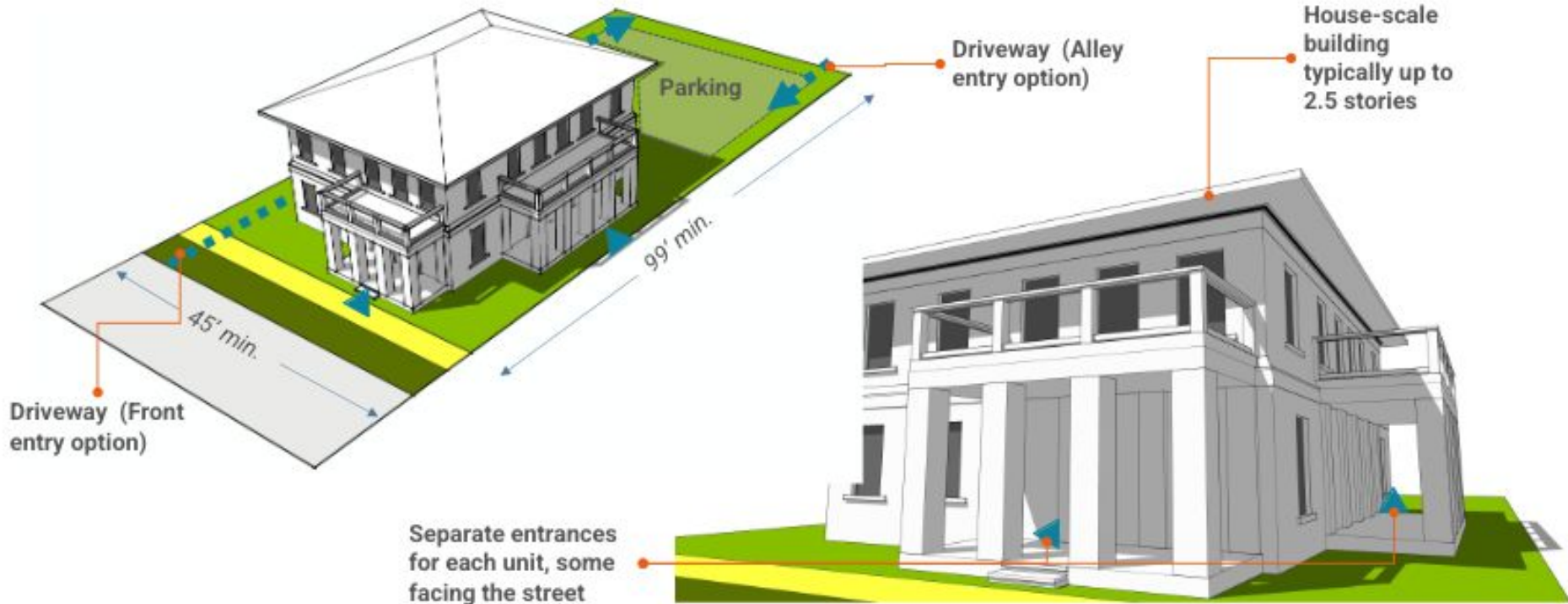
- Three units within a building that is of similar size and scale to a single-family house.
- Units may be side by side w/shared common wall or stacked
- Each unit has a separate entrance. Some face the street.

# Triplex



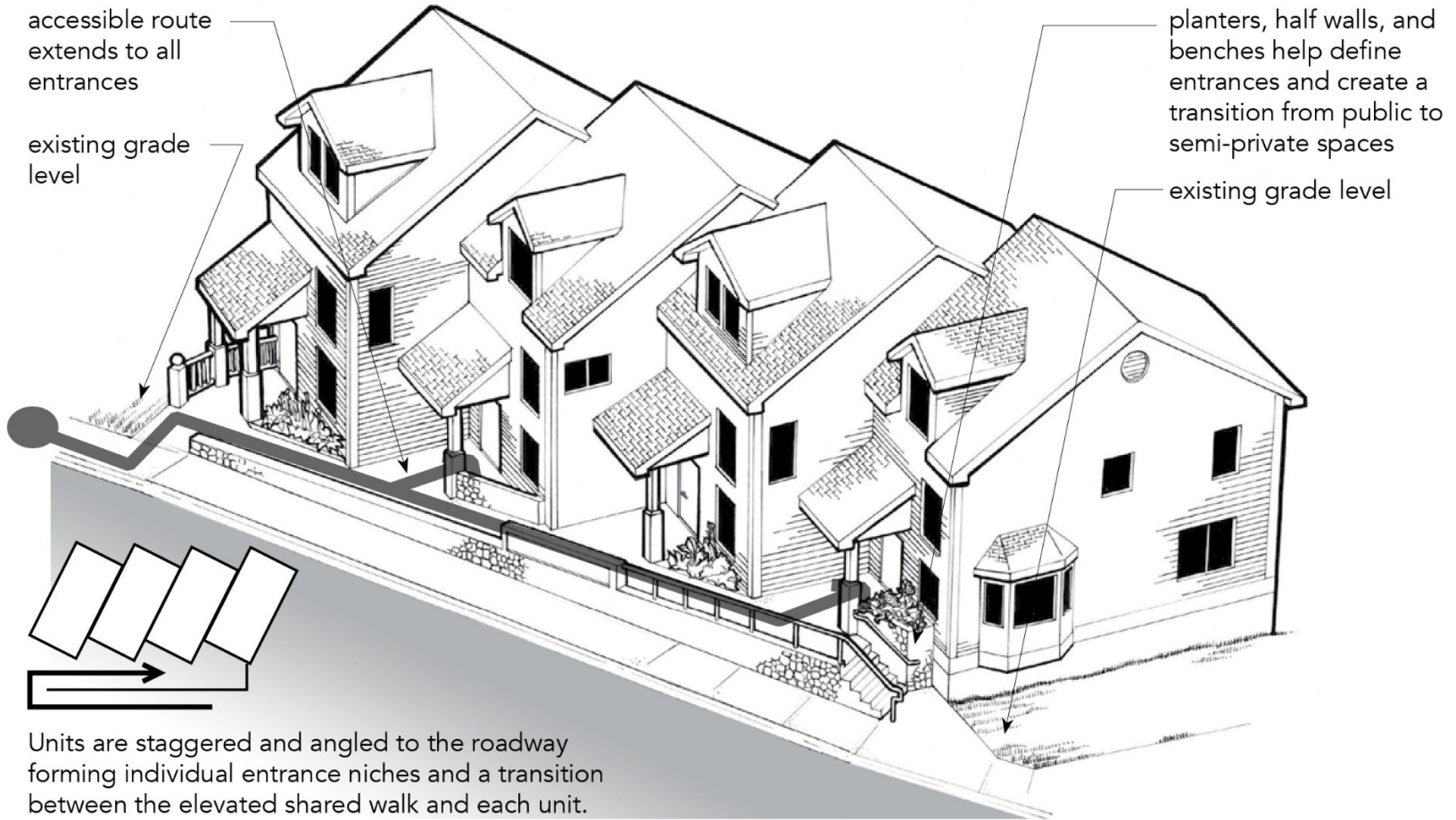
Source Clockwise from Top Left: Opticos, Zillow, Opticos, Realtor.com

# Triplex Example



# Home Access

- Graded to shared walkways
- Graded parking pad to level entrance
- Graded shared alleyway



## SHARED WALKWAY

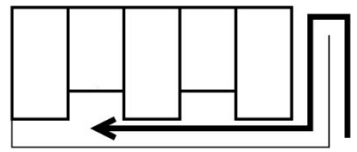


shared raised boardwalk is aesthetically and functionally integrated into the building design

sloped walkway combined with conventional ramp minimizes steep slopes and visually intrusive railings

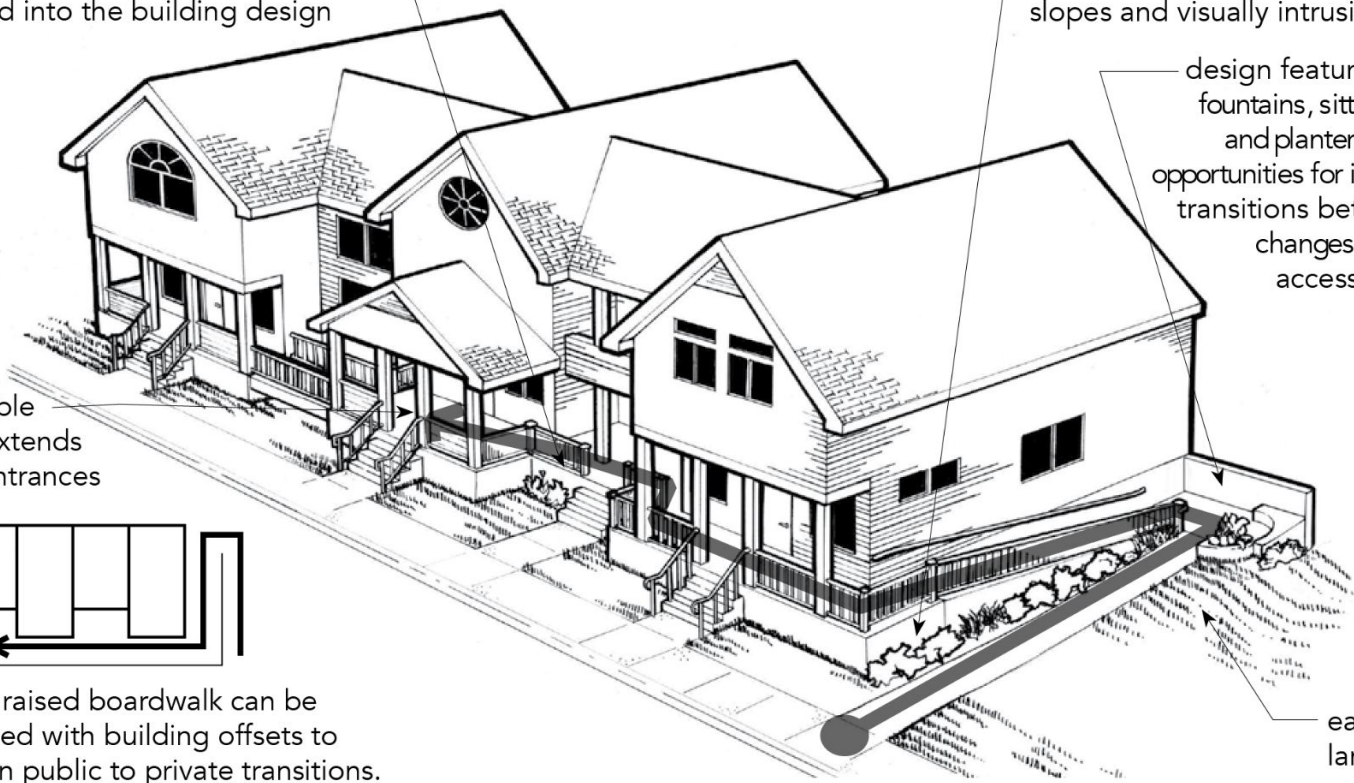
design features, such as fountains, sitting areas, and planters, provide opportunities for integrated transitions between level changes along the accessible route

accessible route extends to all entrances

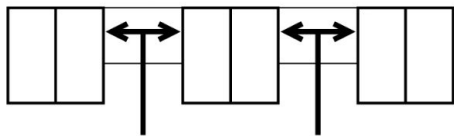
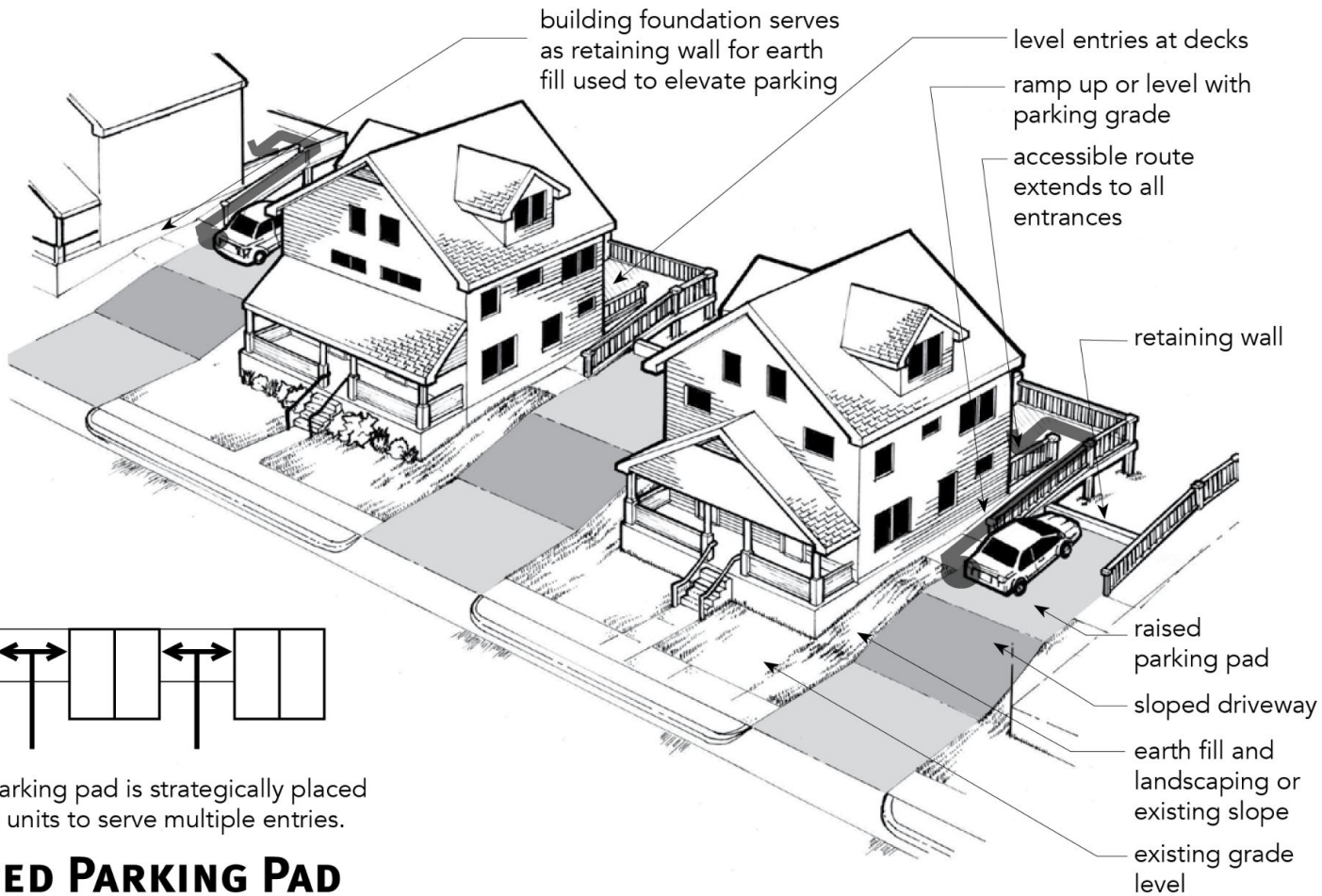


Shared raised boardwalk can be combined with building offsets to maintain public to private transitions.

earth fill and landscaping

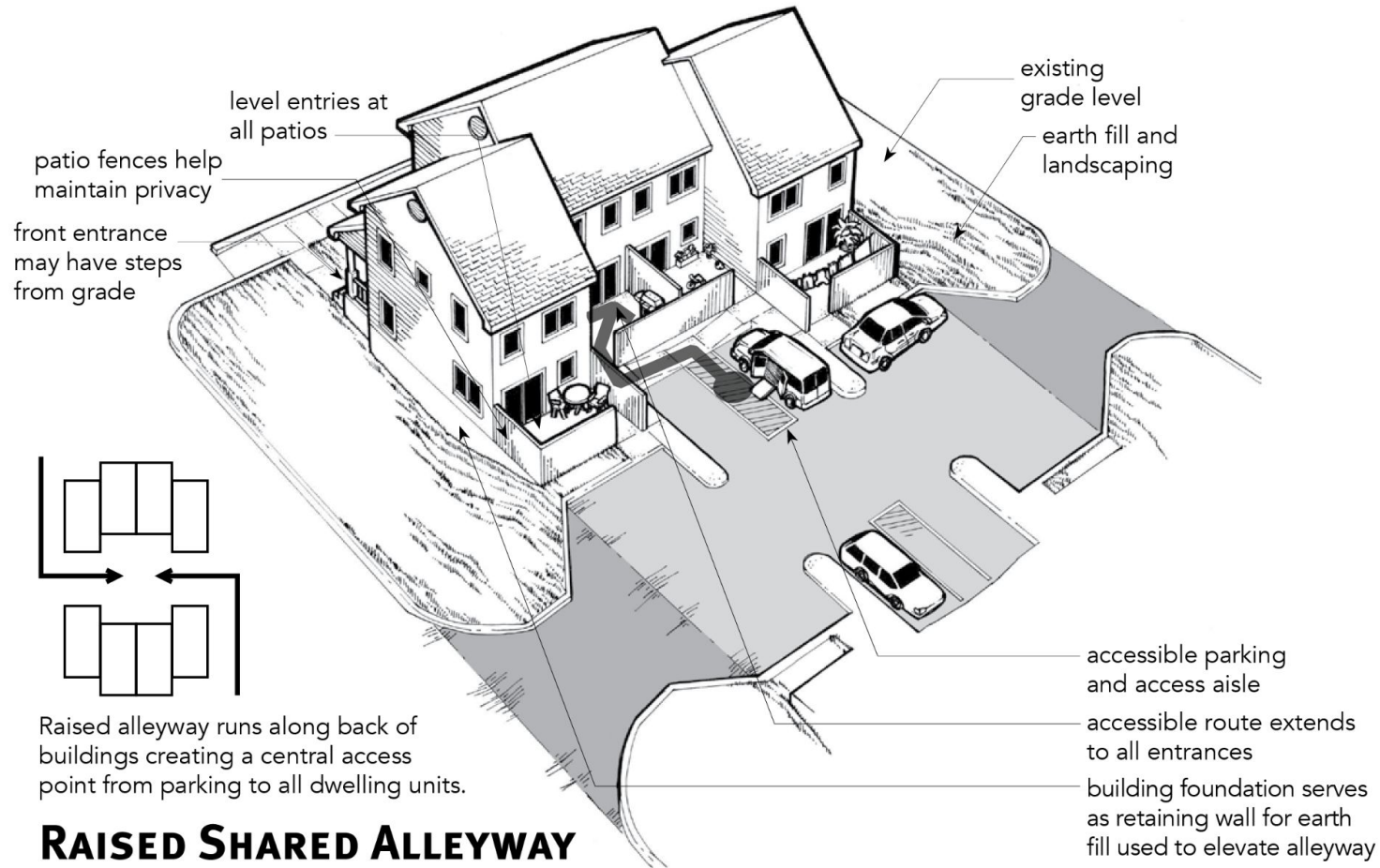


# SHARED BOARDWALK



Raised parking pad is strategically placed between units to serve multiple entries.

## RAISED PARKING PAD



## RAISED SHARED ALLEYWAY

# Resources

Opticos

<https://missingmiddlehousing.com/types>

<https://opticosdesign.com/work/?tag=missing-middle-housing>

Washington State Dept. of Commerce

<https://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/planning-for-middle-housing/>

AARP

<https://www.aarp.org/livable-communities/housing/info-2022/missing-middle-housing-download.html>

Family Housing Fund, Minneapolis, MN

<https://www.fhfund.org/report/duplex-designs/>

Fargo 2023 Materials

[https://drive.google.com/file/d/1gkFXGUgFFCdSLAbgv0XstFutuSC7QFnF/view?usp=drive\\_link](https://drive.google.com/file/d/1gkFXGUgFFCdSLAbgv0XstFutuSC7QFnF/view?usp=drive_link)