Housing - and affordable housing - shortages have plagued many major US cities over the last several decades. In these cities, underprivileged neighborhoods and blighted housing estates are the first areas to be redeveloped, displacing residents and tearing apart vulnerable communities. Meanwhile, affluent urban and inner-ring suburban neighborhoods fervently resist development, remaining low-density despite their close proximities to existing resource networks. Consequently, decades-old patterns of segregation and socioeconomic inequality persist.

This project explores the redevelopment of American University Park, an affluent single family residential neighborhood in Northwest Washington, D.C. Through investigations into the densification and diversification of the housing stock and the addition of new programs to the suburban landscape, the project searches for strategies by which we might one day convert sprawling cookie-cutter suburbs into dense, sustainable, and inclusive neighborhoods which support expanded, diverse populations while contributing additional resources to the broader community.

reprogramming the suburbs:

Imagining an inclusive and sustainable future for the cookie-cutter neighborhood.
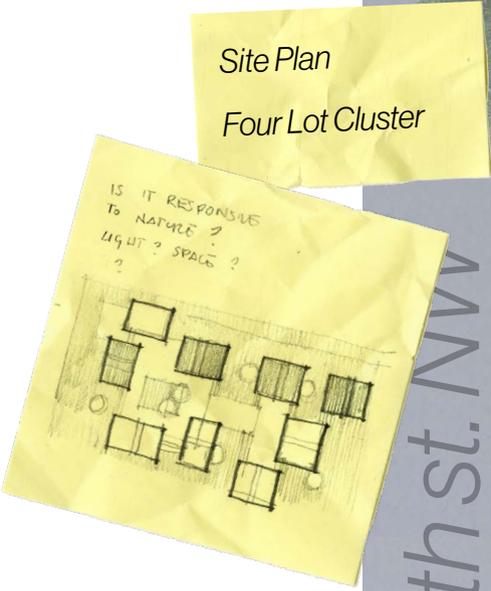
Site Plan

Four Lot Cluster

IS IT RESPONSIVE TO NATURE? LIGHT? SPACE? ?

shared

streetscape

5 bed / 3 bath
3 bed / 2 bath
1 bed / 1 bath
8 bed collective
3 or 4 bed / 3 bath
5 bed / 3 bath

47th st. Nw

original footprint of former single-family houses

alley

original lot lines

linear courtyard
2 bed / 1 bath
2 bed / 1 bath
linear courtyard
shared yard
2 bed / 1 bath
2 bed / 1 bath
1 bed / 1 bath
3 bed / 2 bath
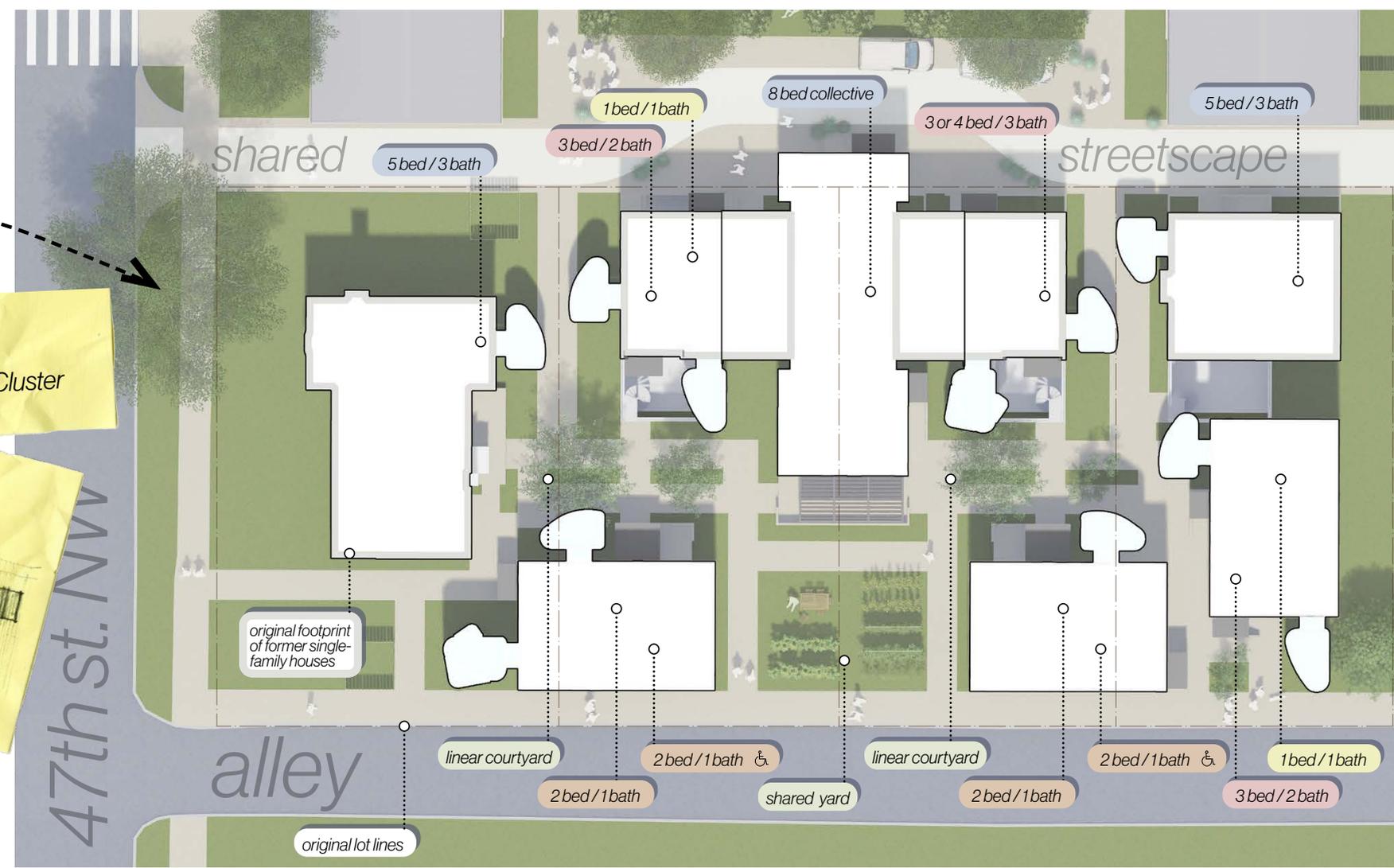
Left: Existing (greyed) &
Proposed Neighborhood Plan

Transformations occur at several scales. Existing houses are subdivided into apartments and conjoined into coliving facilities. "Clusters" of new and renovated multifamily residential buildings reclaim overgrown backyards. Public roads are redeveloped into woonerf-like shared streetscapes. Community resource hubs are embedded centrally in these new streetscapes, and work in tandem with the orderly rows of existing structures to create well defined public squares. These squares house formally-programmed outdoor gathering spaces, like, plazas, community gardens, public lawns, and private workshops.

Above: Four Lot Cluster Plan: The front yards of the former houses have been eliminated, and a new shared streetscape - a lane for both pedestrian and automobile use, reminiscent of the Dutch woonerf - has been installed at the front of the complex. The lane shifts regularly, encouraging drivers to progress slowly down the street. The new lane is built on the edge of the public domain.

5 bed / 3 bath
1 bed / 1 bath
3 bed / 2 bath
5 bed / 3 bath
block yard
2 bed / 1 bath
2 bed / 1 bath

5 bed / 3 bath
studio
3 bed / 2 bath
5 bed / 3 bath
studio
1 bed / 1 bath
block yard
2 bed / 1 bath
2 bed / 1 bath
3 bed / 2 bath

8 bed shared house
5 bed / 3 bath
1 bed / 1 bath
3 bed / 2 bath
3 bed / 3 bath
1 bed / 1 bath
3 bed / 2 bath
5 bed / 3 bath
2 bed / 1 bath
2 bed / 1 bath
block yard
2 bed / 1 bath
2 bed / 1 bath

Above: Cluster Diagrams: 2-lot, 3-lot, and 4-lot developments
Interventions will inevitably vary depending on how much land is available, or to what degree the owners of the existing lots have agreed to participate in the reprogramming of their neighborhood. "Clusters" of varying sizes are proposed. Each proposed cluster is centered on a linear, semi-enclosed courtyard situated between the new and old developments on the lot. These courts can be extended to permit the growth of the cluster over time.

Lower Unit
3 bed, 2 bath

Townhouse Unit
3-4 bed, 3 bath

V.01

Basement

Lower Unit
3 bed, 2 bath

Townhouse Unit
3-4 bed, 3 bath

V.02

V.03

Co-living Apartment
6-8 bed, 2 bath
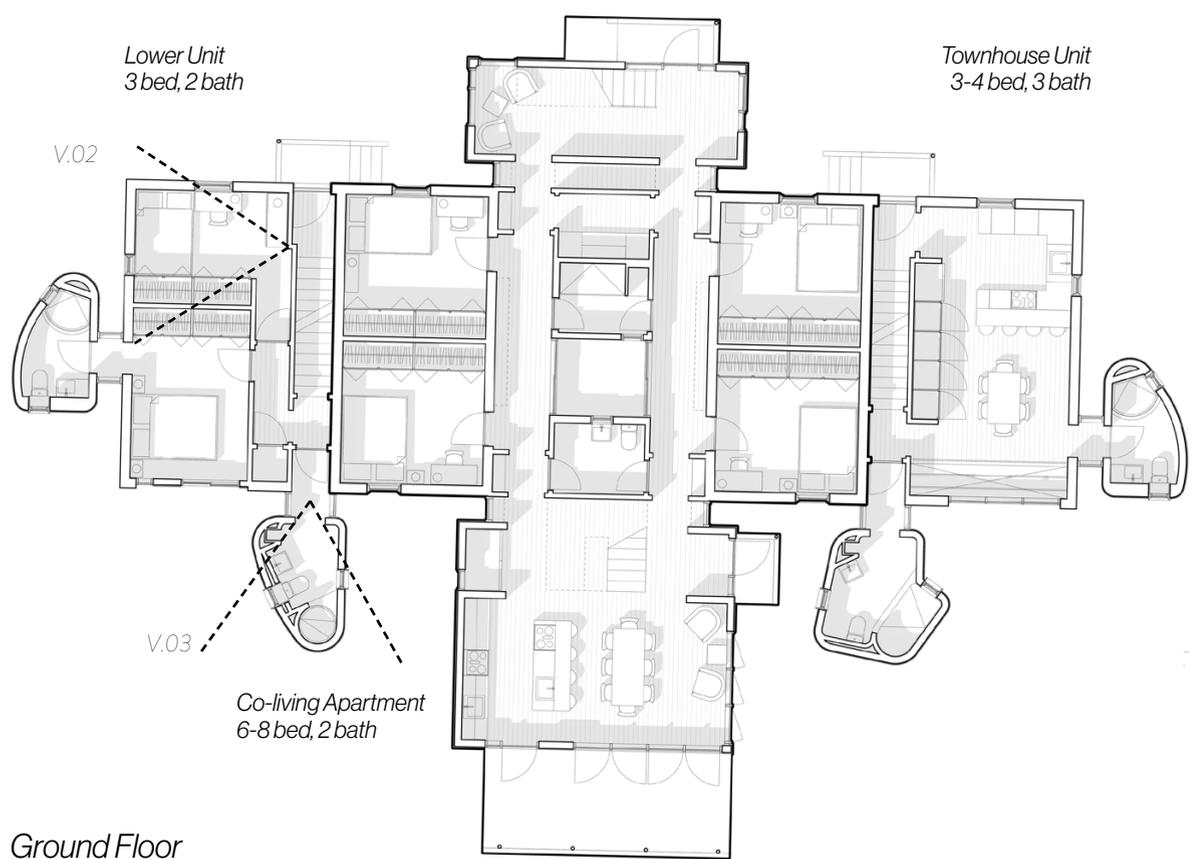
Ground Floor

Converted Co-Living /
Apartment House Plans

V.01

V.02

V.03

V.01: Living Room, Lower Unit: Light spills into one of the renovated basement apartments via windows looking out into the enlarged access/egress well.
V.02: Secondary Bedroom: This small bedroom is 7' wide and 12.5' deep. Storage has been programmed carefully: the inside wall features a floor to ceiling standard closet, and partial - height panels accommodating additional long term storage behind the foot of the bed. The bed itself is raised to accommodate additional storage below.
V.03: Modular Bathroom: View toward the shower in one of the modular bathroom units. The bathroom is fairly minimal, designed only for one person to use at a time. A built - in floor to ceiling storage cabinet (out of frame) accommodates toiletries and clean towels eliminating the need for clutter on the exposed surfaces in the bathroom.

Below: Early section sketch through a four lot cluster

Upper Unit
1 bed, 1 bath

Townhouse Unit
3-4 bed, 3 bath

V.04

V.06

Co-living Apartment
6-8 bed, 2 bath

Second Floor

Upper Unit
1 bed, 1 bath

Townhouse Unit
3-4 bed, 3 bath

V.05
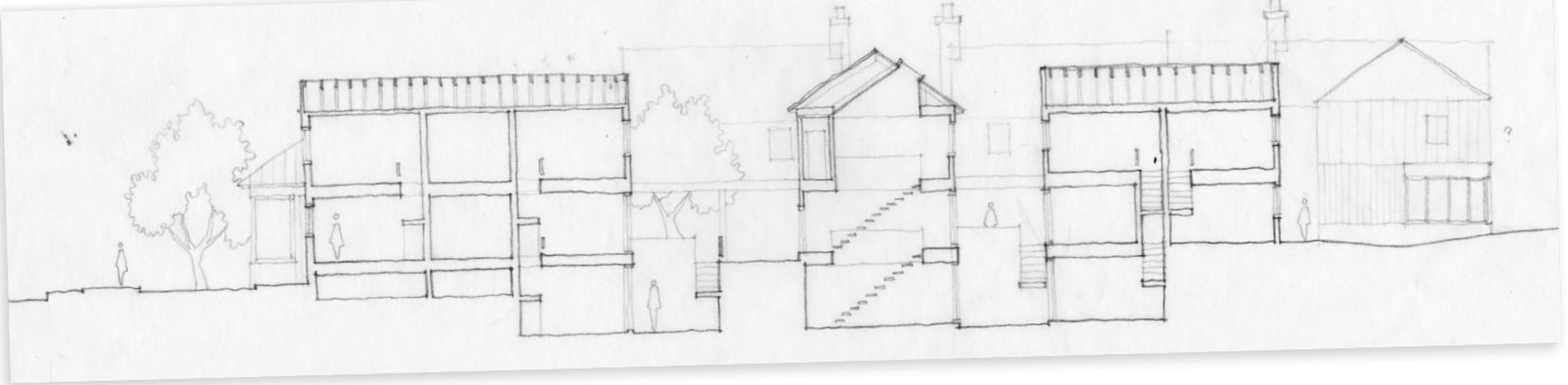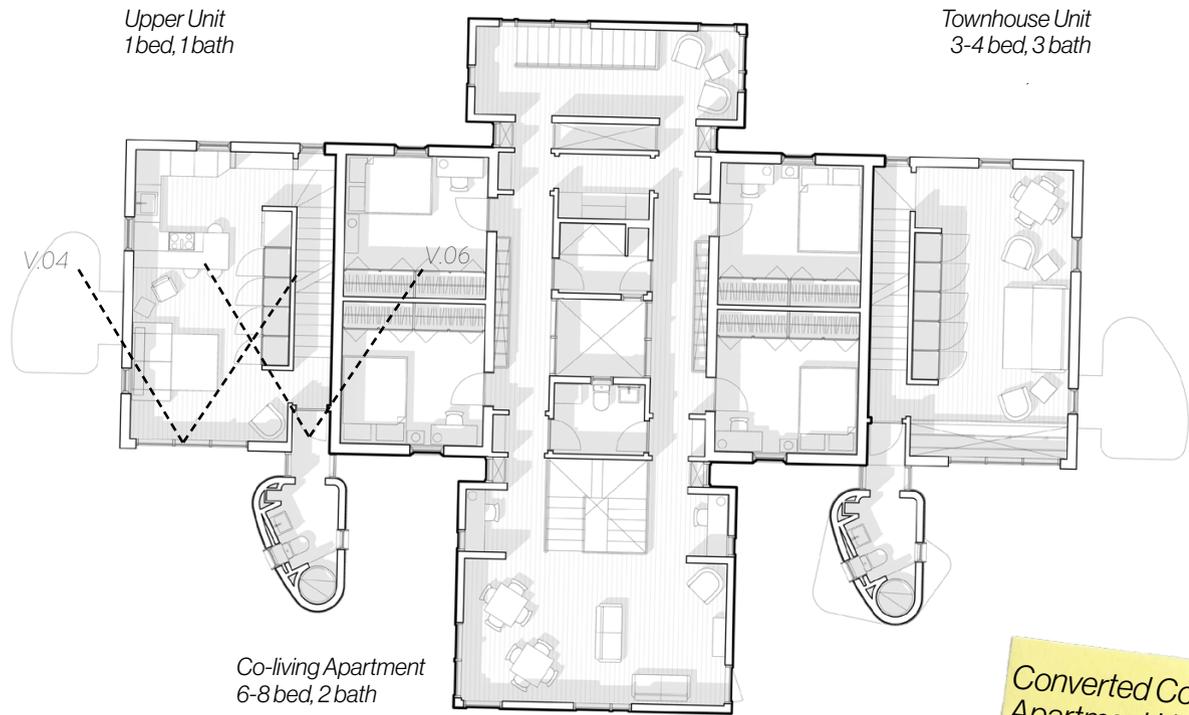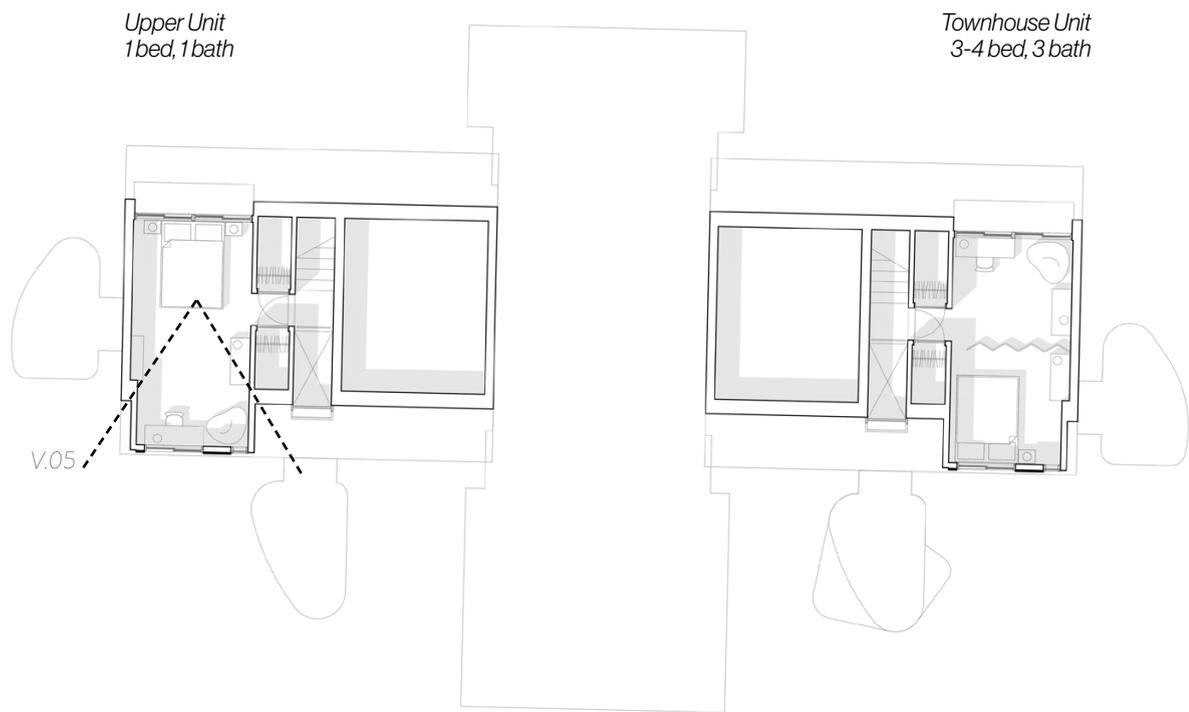
Attic Floor

Converted Co-Living /
Apartment House Plans, cont'd.

V.04

V.05

V.06
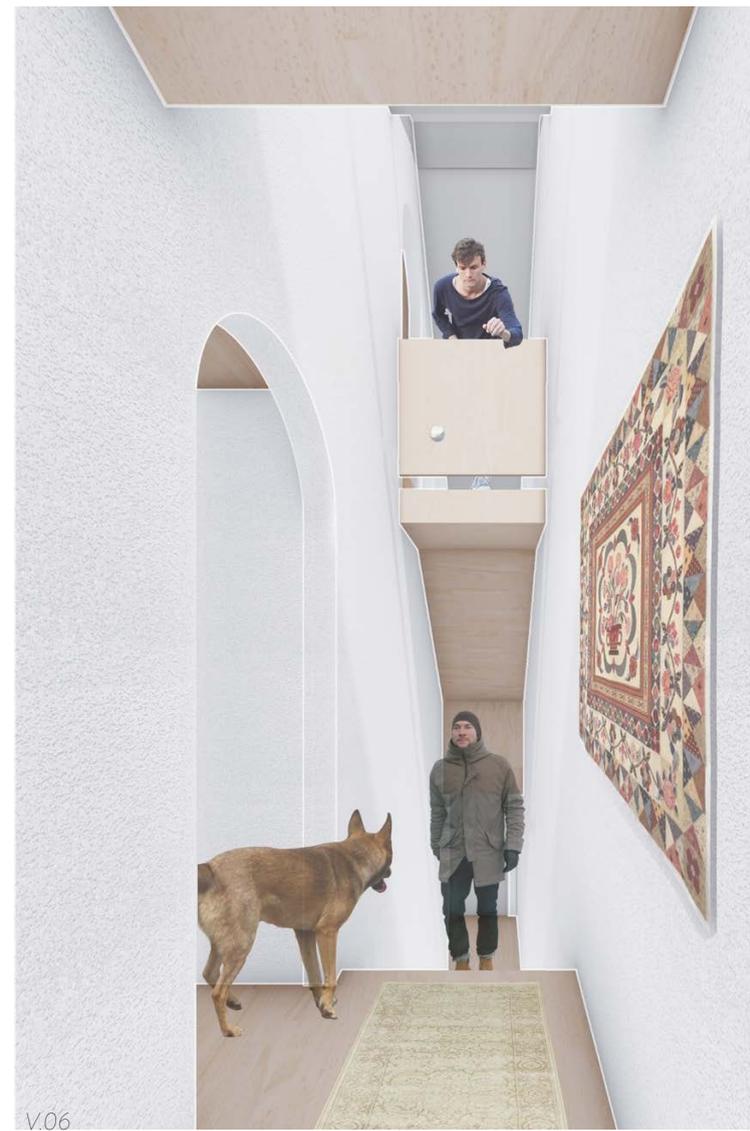
V.04: Living Room & Kitchen: The kitchen, dining, and living spaces are consolidated into one room, saving space while creating a more 'open' plan.
V.05: Primary Bedroom: The bedroom below is designed to accommodate the needs of a couple with more conventional expectations regarding the size of their bedroom.
V.06: Entryway: The entryway to one of the upstairs units. The upstairs units occupy the 2nd and attic floors of the former house. The front door opens directly onto a set of stairs
                                leading up to the main floor of the upper unit. The stair well is opened to above, and daylight spills in to the space from a skylight in the roof far above, elevating the
                                experience of coming and going from the apartment.

Below: early section sketch of linear courtyard & co-living common space

3
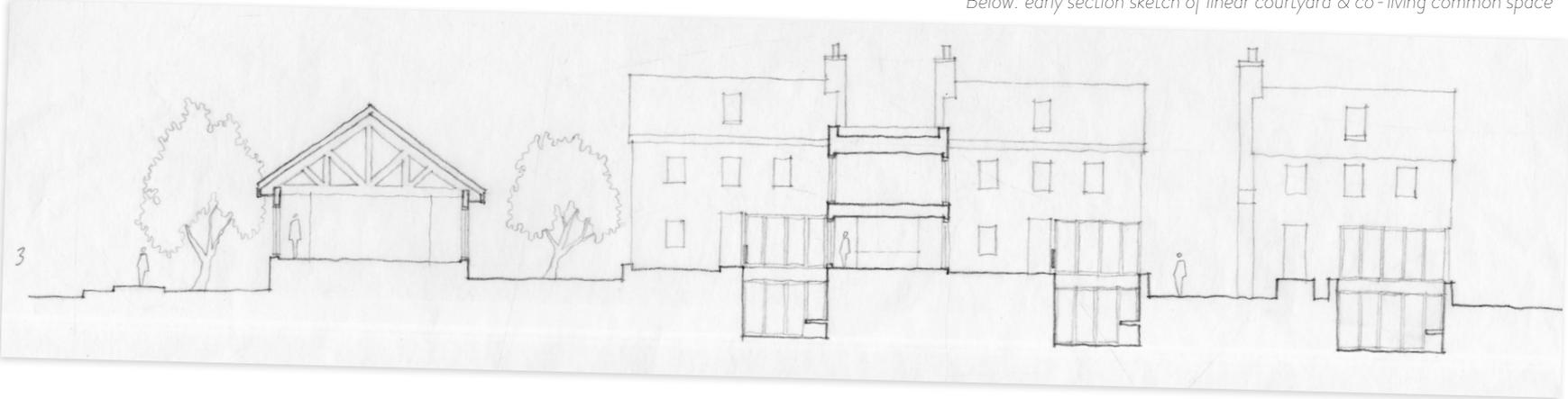
Above: Community Farm.

Two residents who've volunteered to maintain the community farm part-time water the crops and remove weeds from the plots. The center-block resource, removed from the street, is better suited to hold dedicated resident-based services.

Perimeter Hub - Cafe 1

The perimeter community resource hubs invites residents of the block and members of the general public into its doors. It is well suited to accommodate local businesses

Verandah - Community Kitchen

Perimeter Hub - Cafe 2

Community Garden

Cluster from alleyway

Individual entrances to units are marked by sheltered stoops; no units share entrances, so each resident has their own dedicated front door. These stoops are set back from the primary sidewalk and the alley in a small paved court.

Above: Section cut through the porches and breezeways of two community resource hubs on the former Yuma Street. The dogtrot form of the community resource hub permits pedestrian travel along the centerline of the public space, carrying visitors to the heart of the reprogrammed street.
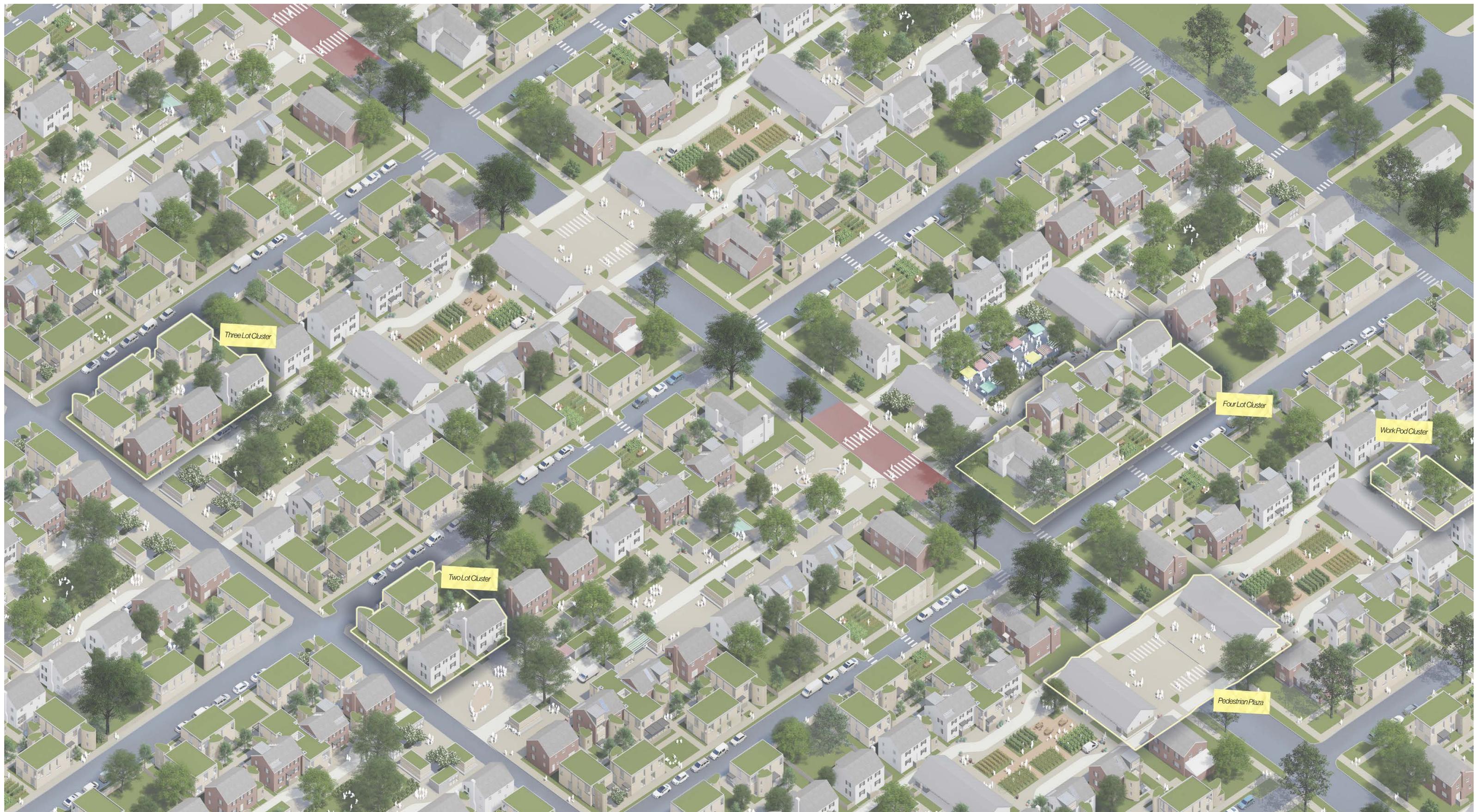
Three Lot Cluster

Work Pod Cluster

Four Lot Cluster

Work Pod Cluster

Two Lot Cluster

Pedestrian Plaza