

# Part of the Solution:

---

**YES<sup>T</sup>  
TO  
ADU**

---

TABLE OF CONTENTS:

<b>Introduction</b>	<b>1</b>
<b>First Place</b> Lilliana Castro, Alan Guillen, Cheuk Nam Chapman Yu	<b>3</b>
<b>Talleres Públicos and Exhibition</b>	<b>6</b>
<b>Second Place</b> Esther Ho	<b>7</b>
<b>Second Place</b> Simon Storey	<b>10</b>
<b>Honorable Mention</b> Jones, Partners: Architecture	<b>13</b>
<b>Honorable Mention</b> Bureau Spectacular	<b>16</b>
<b>Sharing the American Dream</b>	<b>19</b>
<b>Panel Discussion and Exhibition</b>	<b>27</b>
<b>Double Down Density</b>	<b>34</b>
<b>Project Highlights and References</b>	<b>36</b>
<b>Moving Forward</b>	<b>37</b>

Part of the Solution: YES to ADU is structured in three phases:

Phase 1: Design Competition

The competition was open to architects, engineers, designers, artists, and students where at least one key member was required to reside, work, study, or teach in Los Angeles County. The competition was free of charge.

Undergraduate architecture studios at East LA College, Woodbury University and University of Southern California incorporated the design competition into their curricula.

A diverse jury of housing experts anonymously reviewed design competition entries and made anonymous selections for a \$12K First Prize, two \$6K Second Prizes, and two Honorable Mentions. The jury also made recommendations for competition boards to be included in an exhibition.

Phase 2: Events and Exhibition

With proposals submitted by architects and designers throughout LA County, the competition assembled a tangible index of possibilities that can help policy makers, architects, and home owners implement ADUs in their neighborhoods.

Community events and exhibitions were held at the Community Development Commission, East Los Angeles College, A.C. Bilbrew Library, and the Institute of Contemporary Art, Los Angeles.

Phase 3: Publication

This publication provides access to the design competition exhibition and events as a resource to generate solutions for affordable housing. View it at [www.lacountyarts.org/ADU](http://www.lacountyarts.org/ADU) or print it on a standard copier in an 11x17 format.

The Los Angeles County Arts Commission Civic Art Program provides leadership in the development of high quality civic spaces by integrating artists into the planning and design process at the earliest possible opportunity, encouraging innovative approaches to civic art, and providing access to artistic experiences of the highest caliber for the residents of Los Angeles County. Working with leading artists, emerging public artists, County departments and communities, the Civic Art Program creates artwork, design, public engagement activities, exhibitions, temporary art and event based programming for new and renovated facilities throughout Los Angeles County.

Director, Civic Art Program:  
**Grace Ramirez Gaston**

Part of the Solution:  
YES to ADU Civic Art Senior Project Managers:  
**Iris Anna Regn, Mayen Alcantara**



# Part of the Solution:

---

## INTRODUCTION

AS LOS ANGELES COUNTY WORKS TO FIND sustainable solutions to the humanitarian crisis of homelessness, the Los Angeles County Arts Commission has been called upon to join this effort.

We know the arts have intrinsic benefits at the human level. Arts and culture also have the power to advance social change and are an integral part of thriving communities. The unique talents of artists and cultural organizations can develop, guide and amplify innovative solutions to social and civic issues.

It was through this lens that the Arts Commission joined as a partner in the Los Angeles County Homeless Initiative's Second Dwelling Units Pilot Program. Our goal is to promote the development of Accessory Dwelling Units (ADUs) and gather ideas as a resource for affordable housing solutions.

To this end we worked in collaboration with the Los Angeles County Department of Regional Planning and Community Development Commission to conceive and launch an architectural design competition called Part of the Solution: YES to ADU.

By leveraging creativity, we catalyze the community of architects, designers, planners and creative strategists to reimagine the potential of Accessory Dwelling Units as a typology that works in conjunction with other strategies to help alleviate LA County's housing pressure. Using the transformative power of art and design to inspire innovation, the YES to ADU design competition made literal and figurative space for possibility.

Proposals were submitted from across LA County, representing a range of backgrounds from students to established practitioners. The competition yielded a tangible index of possibilities and concepts—a juried selection of design proposals, along with documentation of corresponding community events, are exhibited in this publication.

Many of the proposals on the pages that follow are more than a design for a single project, expanding our notion of home and exploring strategies to strengthen communities and sustain neighborhoods for generations to come. Our hope is that access to these ideas will increase awareness of ADUs, stimulate constructive dialogue, and serve as a resource for planners, policy-makers, homeowners, advocates and communities.

From arts education to environmental stewardship, self-expression and community planning, the arts support projects that enhance regional vitality. We are grateful to the Board of Supervisors and our County and community partners for this project, and continue to explore how LA County's creative sector can offer a fresh point of view on social and civic issues across sectors.

We are proud to be part of the solution.

— Kristin Sakoda, Executive Director,  
Los Angeles County Arts Commission

Design competition participants range from students to young professionals to mid-career practitioners. Congratulations to all who contributed submissions, in particular to the following awardees:

**First Place:**  
**Lilliana Castro, Alan Guillen, Cheuk Nam Chapman Yu**

**Second Place:**  
**Esther Ho**

**Second Place:**  
**Simon Storey**

**Honorable Mention:**  
**Jones, Partners: Architecture**

**Honorable Mention:**  
**Bureau Spectacular**

**Design Competition Jury:**

- Dana Cuff**, Director, CityLab, UCLA Department of Architecture and Urban Design
- Milton Curry**, Dean, USC School of Architecture
- Renee Dake Wilson**, Principal, Dake Wilson Architects; VP, City of Los Angeles Planning Commission
- Hsinming Fung**, Principal, Hodgetts + Fung; Director of International Programs, SCI-Arc
- Bettina Korek**, Founder, ForYourArt; Arts Commissioner
- Christoph Korner**, Cofounder GRAFT; Chair Interior Architecture, Woodbury University
- Brenda Levin**, Principal, Levin & Associates Architects
- Jon Sanabria**, Deputy Director, LA County Department of Regional Planning
- Geoffrey Siebens**, Assistant Director, LA County Community Development Commission

**PHASE 1: DESIGN COMPETITION**



**Accessory Dwelling Units**

Call them in-law units, granny flats, or backyard cottages, **Accessory Dwelling Units (ADUs) are secondary units built on single-family lots.** While ADUs have been a small part of our neighborhoods for decades, they have the capacity to be so much more.

In 2017, **new state laws went into effect that encourage accessory unit construction.** Los Angeles County has updated its ADU Ordinance towards the same goal. In a place like Los Angeles County, which faces a housing shortage and rising costs for renting and owning a home, **the ADU offers a tangible solution to the County’s precarious housing conditions.**

**Affordable to build because of their modest size and the elimination of additional land cost,** ADUs hold the potential to catalyze into a new building typology and **change the way we think about our urban fabric.** Imagine **neighborhoods enriched with housing and new architecture** replacing garden gnomes in backyards. It’s an image of a denser city, for sure, but one that awaits **a future Los Angeles that ensures greater equity for all residents, homeowners and renters alike.**

**The Part of the Solution: Yes to ADU design competition asked LA’s creative community to envision freestanding ADUs** across four standard sites in Los Angeles County. Participants were asked to follow the guidelines of the County’s Accessory Dwelling Unit Interim Policy Summary. Each proposed unit also had to accommodate two or more occupants, include a kitchen, a bathroom, and sleeping and living areas. Other requirements ensured that the ADU would be compatible with single-family neighborhoods; these included a 25-foot height limit, setbacks around the property, and separations between new and existing buildings.

A jury of architects, policy makers, educators and arts professionals gathered to review competition entries and debate the wide range of issues that ADUs provoke: from livability and sustainability to design aesthetics and urban impact. **With inspired approaches that include graphically-charged modular construction, barcode-like indoor-outdoor living, and sustainable backyard urbanism, the project boards you will see in the following pages not only represent the best of the submissions, they also suggest exciting new ways that this building type will have long-lasting impact on Angeleno families, communities, and civic spaces.**





1.0

# Introduction

Re-Imagine Living in Los Angeles

Designing a community in which we can help alleviate the housing crisis would mean a paradigm shift as we know single-family living today.

Our proposal is aimed at maximizing single family plots to allow for ADUs to successfully integrate into the existing city grid.

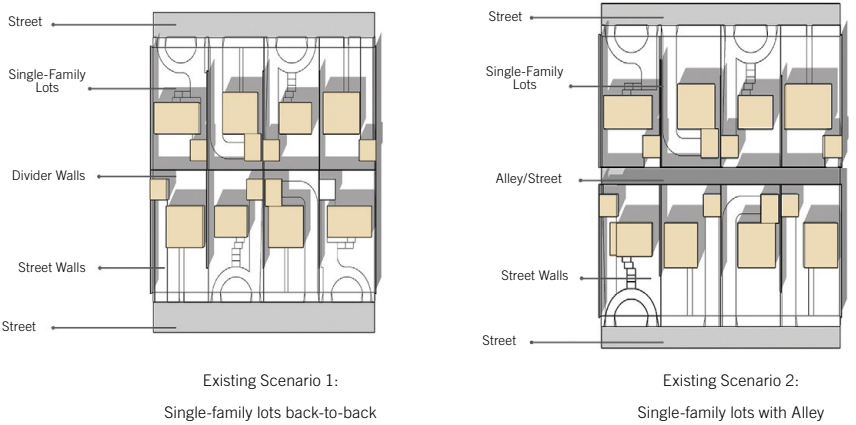
2.0

# Concept

A Shared and Sustainable Community

Single-family living as we know it today is one house per plot. We propose to break down this barrier and create openness to a communal block. Most of these sites have fences surrounding the single-family lot, resulting in isolation of properties among owners and their neighbors.

Our idea is rooted in creating a borderless community which can be achieved by the elimination of border fences and/or walls, in such a way that openness of shared land and space form the foundation for a sustainable community hub. ADUs can integrate into the existing city grid, resulting in a more diverse and unified block.

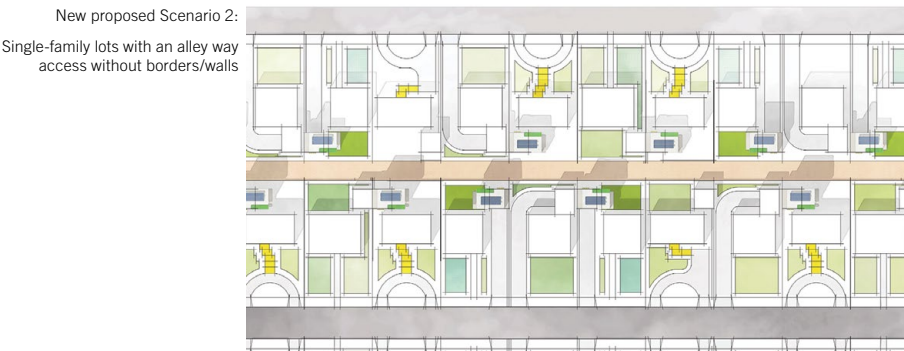
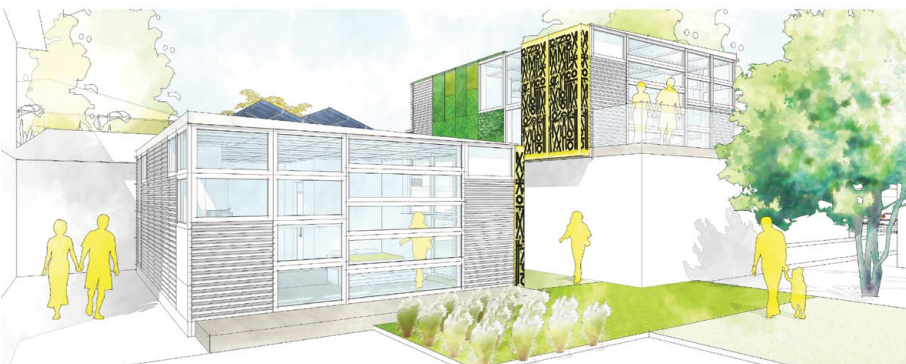


3.0

# Design

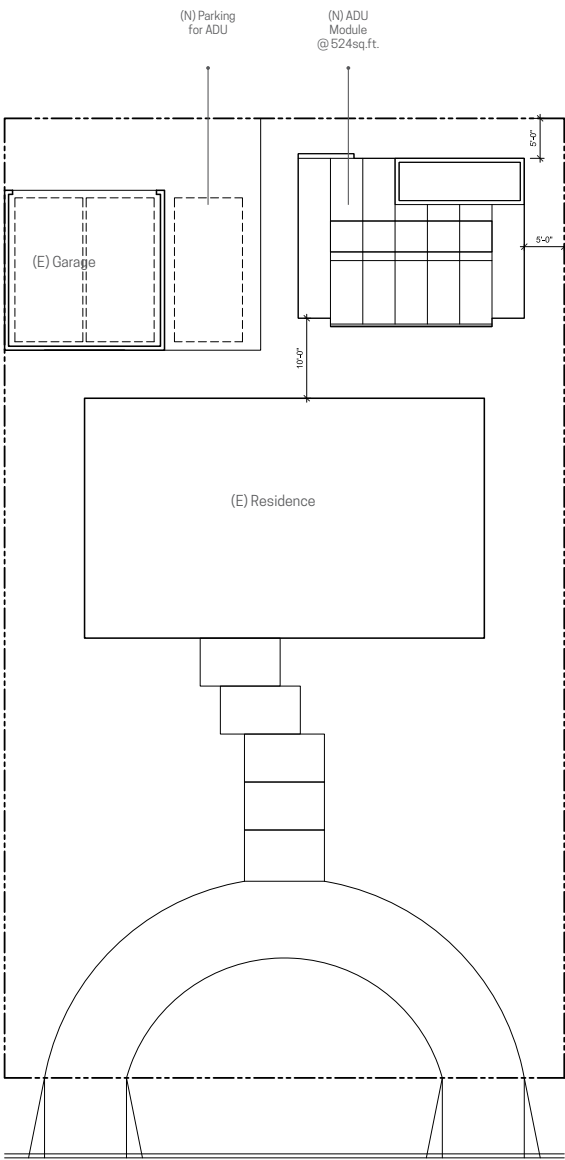
Our ADUs have been designed using a modular system. With this modular system, we are able to prefabricate the units instead of building on-site, keeping labor and material costs low. Once the units have been prefabricated, we are able to deploy rapidly and customize the units with art and technology paneling systems to increase energy efficiencies and the user experience throughout Los Angeles.

Shown below are two ADUs built on borderless lots. The openness and shared land system allows for a new community to form and grow.



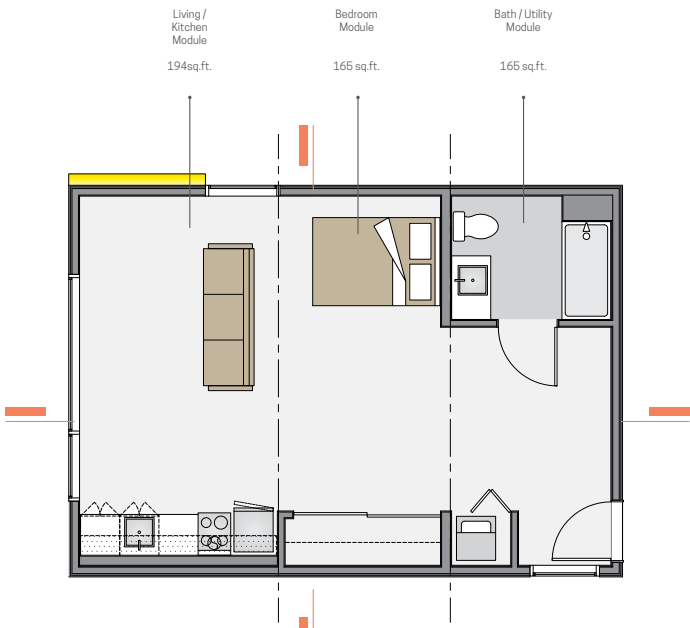


3.9 Drawings of the modular living system

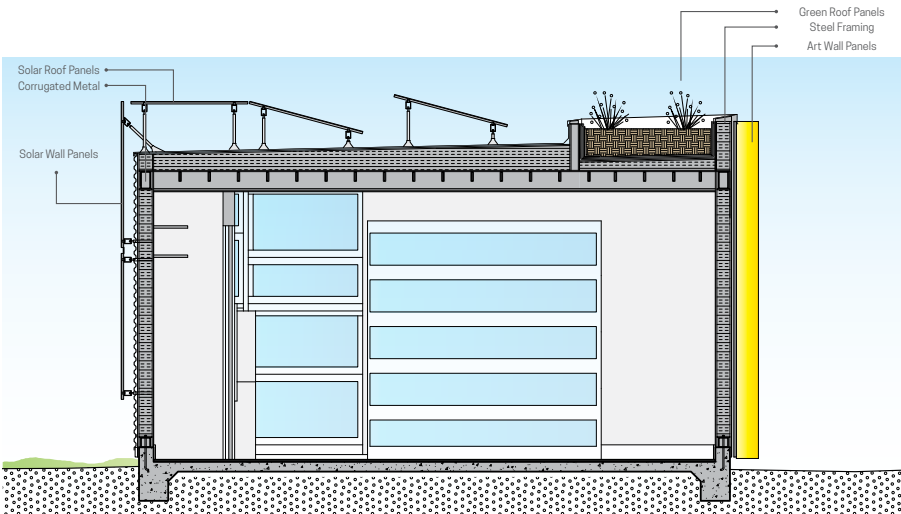
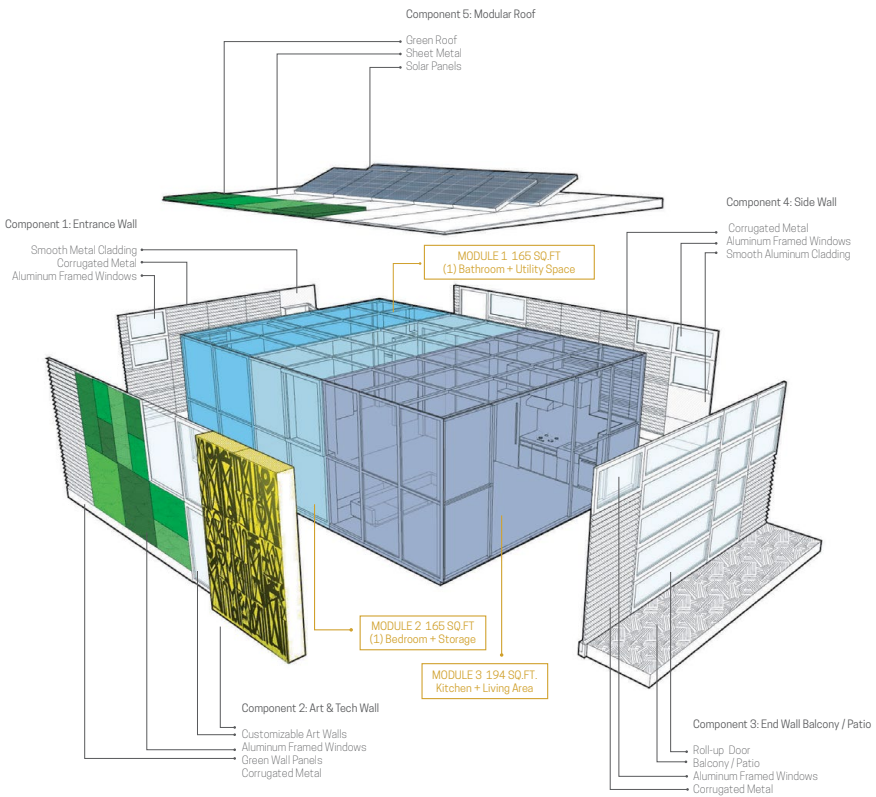


The site plan above was extracted from Attachment A as Site Plan #1.

Diagrammatic site plan  
Scale = 3/32"



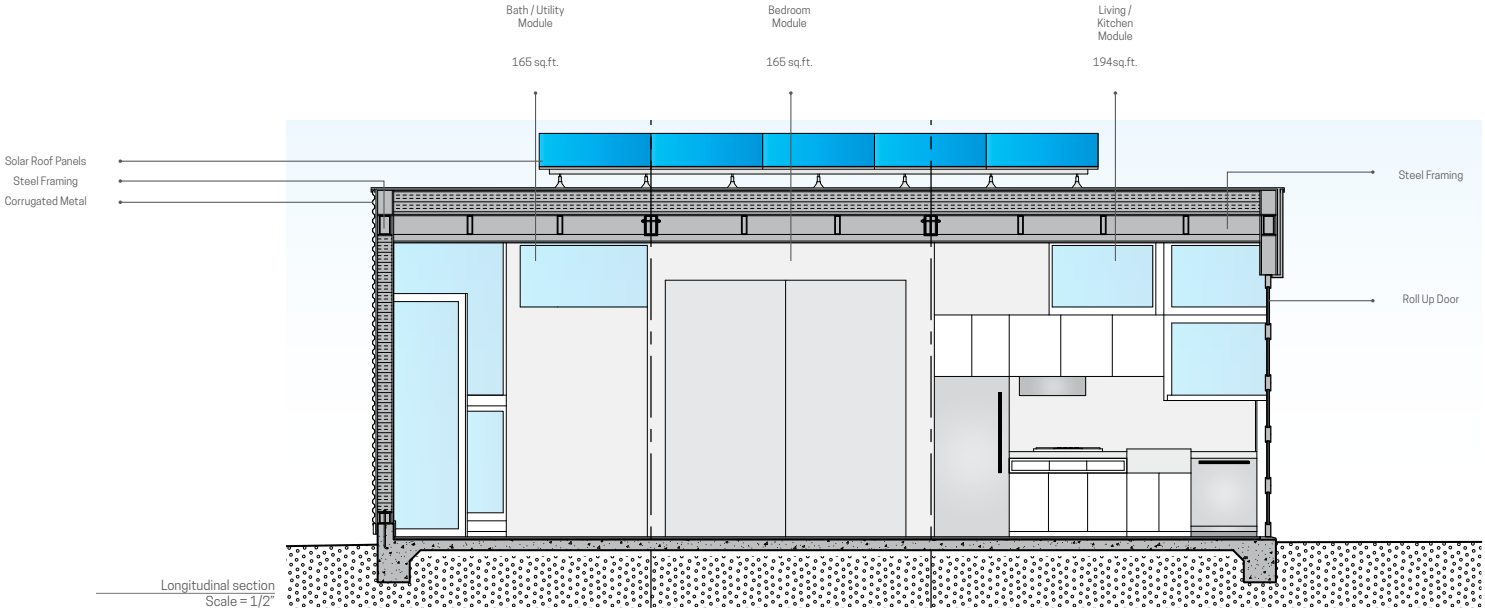
Floor plan  
Scale = 1/4"



Cross section  
Scale = 1/2"



Exterior Elevation  
Scale = 1/2"



The prototypes we have developed to start with a base unit, able to accommodate 2 people in 524sq.ft. The base unit can be quickly expanded to accommodate a family of 3 to 4 people by adding modules as needed.



# Our Users

Homelessness looks different today than a few years ago. It is no longer the stereotype of a homeless person on the street pushing a street cart. It looks like a professional losing their job, at-risk youth living in a car, a mom getting injured and going on disability, losing a loved one and not being able to pay the mortgage.

Our mission is to work with policy makers, county officials and/or any other architects and designers required by the County to help our county thrive. We hope these benefits and incentives can be a start to a sustainable Los Angeles for years to come.

## The Home Owner

We hope our initiative will provide owners a passive income by renting the ADU and help prevent homelessness by financially aiding those who are faced with foreclosure and need the additional income.

The homeowner could be entitled to certain property tax breaks and be allowed to participate in a cleaner energy program, which the ADUs help facilitate with their smart panels and artistic capabilities.



## The Individual or Couple

ADUs can be made to accommodate 1-2 people in 524sq.ft.

These inhabitants can range from artists to students, at risk-youth to homeless men and women. Each unit is equipped with essentials of living a healthy lifestyle in Los Angeles. By providing the ADUs, we hope to free-up other resources that may be available for those who do not qualify for ADUs.



## Families and Seniors

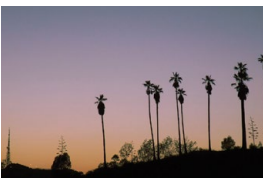
Our ADUs have been designed with the International Building Code and ADA in mind. By adding additional modules to the base unit, we can deploy a 700sq.ft. unit, up to 1,000sq.ft.. By deploying these ADUs, we can help prevent seniors within the community who cannot afford their homes any longer to have an affordable housing option.



## The Metropolis

Los Angeles is experiencing an increase of inhabitants over the last few years, with very low housing availability.

Our proposal integrates into the existing grid system, with possibilities to relieve the strain on existing resources and promote clean energy. With a modification to city blocks to go borderless, we hope to build a communal and more unified city.



# A Smart Community

Our prototypes integrate both art and technology to enhance the Los Angeles County. With our technology and art wall paneling systems, the ADUs form hubs for art walks and cultural exchange crafts and design, meanwhile providing a unique neighborhood identity.



With neighborhood blocks that have alleys, the ADUs could showcase monthly exhibits for a local neighborhood and community exchange.



With neighborhood blocks with back to back lots, the ADUs can create pockets of greenery, art, and clean energy within the existing city grid.



COLLABORATIVE VOCABULARY

COMMUNITY

church  
school  
diversity  
market  
library  
laundromat  
restaurant  
housing  
parks  
green

HOUSE

walls  
backyard  
furniture  
kitchen  
garage  
energy  
roof  
driveway  
restroom  
storage  
garden

HOME

love  
safety  
garden  
cooking  
entertainment  
comfort  
friends

privacy  
fence  
dog  
birdhouse  
pets  
art

COLLABORATIVE POEM

House is home and comfort.  
House is walls & roof.  
Home is cooking and comfort.  
The roof above, makes me feel warm  
and loved.  
The love is the foundation of a home,  
Just like the wall of the house.  
Gardens grow food,  
just as housing builds communities.  
Transport to our favorite parks and restaurants  
is safe and easy.  
The comfort of friends going from the kitchen  
to the roof –  
family and friends enjoying an evening under  
the stars in the backyard,  
enjoying your neighbors of multicultural  
backgrounds.  
Dogs used fencing, but cats don't; this  
Makes for good safety.  
Fences aren't walls, you can see and connect  
through them.  
You can decorate them with plants and flowers,  
like passion fruit and jasmine.  
Watch the fruits and plants grow,  
With the family and community that you know.  
With growth comes opportunity,  
the children grow, in time, through  
the community  
our trees flourish, just fine, like families  
in unity  
all for seasons, our community  
reflects inclusivity.  
our trees flourish, just fine, like families  
in unity  
all for seasons, our community  
reflects inclusivity.

PHASE 2: EVENTS & EXHIBITION



Workshop participants designed their ideal neighborhoods on site plans based on the design competition First Place drawings.

YES to ADU:  
Talleres Públicos  
and Exhibition

FACILITATED BY BIG CITY FORUM  
A. C. BILBREW LIBRARY, ATHENS, LOS ANGELES

After the Department of Regional Planning summarized the Accessory Dwelling Units Ordinance, the community development financial institution (CDFI) Genesis LA introduced non-traditional financing through direct loans and investments to households and businesses that struggle to access traditional lending sources. Since 2002, Genesis LA has deployed over \$250 million across nearly 90 projects, creating 1,200 housing units and serving 46,000 clients.

A participatory event, facilitated by Big City Forum, an art project which explores design-based creative disciplines within the context of public space, featured workshops with Jessica Ceballos y Campbell's storytelling and poetry and Maria del Carmen LaMadrid's collaborative design methods. Ceballos and LaMadrid each led participants to actively reimagine neighborhoods with Accessory Dwelling Units.

**Looking towards Preservation and Sustainability:  
communication + unity = poetry (community)**

As a way to invite participants to arrive at their true notion of home, Ceballos introduced the theory of Maslow's hierarchy of needs, which begins with the primary needs for food and shelter and progresses into the desire for belonging and community. She then invited participants to share words and phrases that describe their personal ideas of home in the classic game of exquisite corpse, which assembled the descriptions into a community poem.

Ceballos asks: what makes a community, what makes a house, what makes a home, and how do we sustain these things?

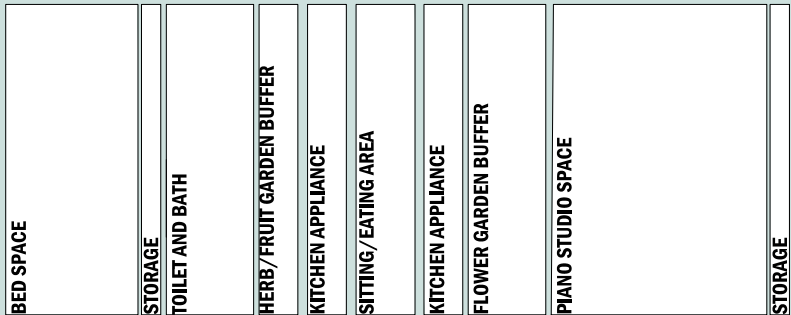
**Green Space Builds Community**

Based on the needs identified in Ceballos' workshop, LaMadrid led a discussion about what someone new to the community would need to feel at home in a neighborhood. Using the site plan based on the YES to ADU First Place design competition submission, which featured backyards activated by ADUs, participants drew in social amenities that they would like to see foster community.

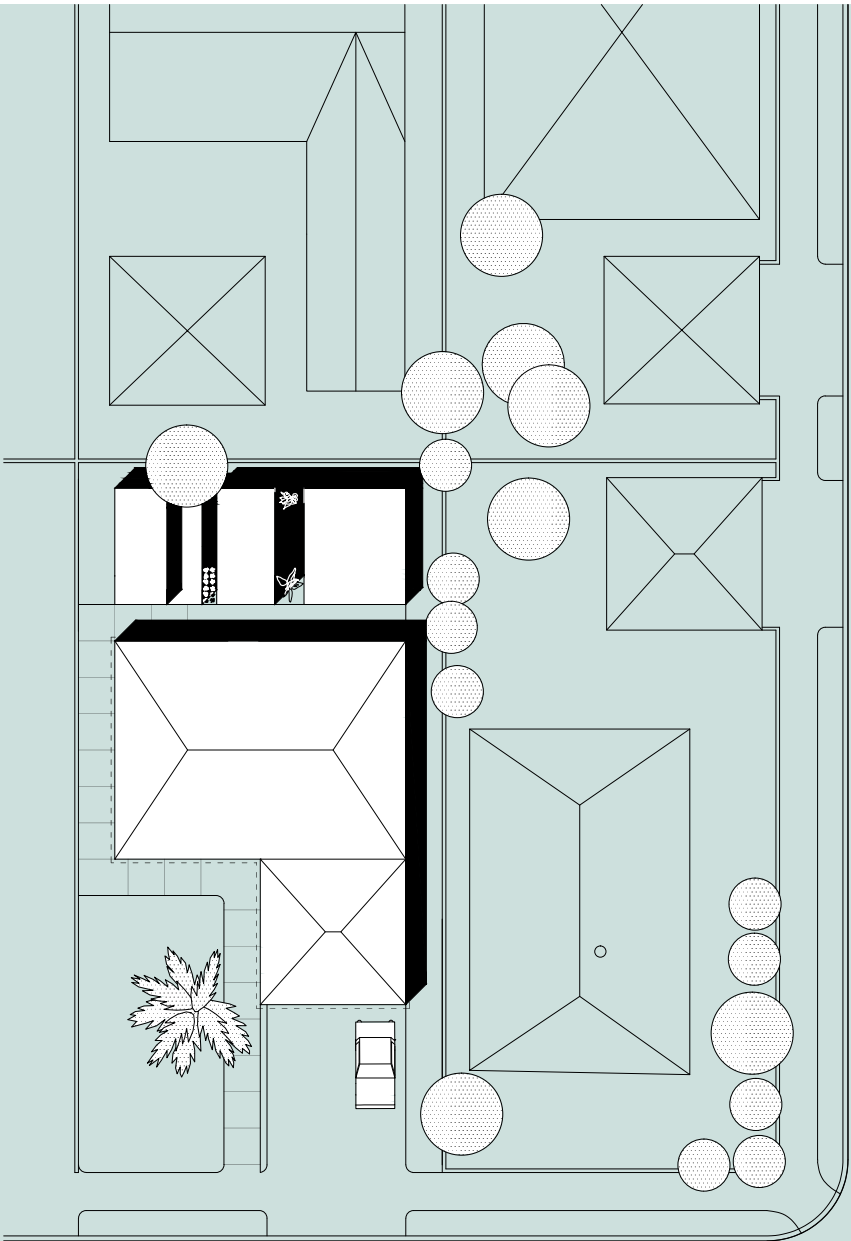
# BARCODE HOUSE

Barcode House is an ADU prototype for modular and adaptable live-work environments. This project proposes a strategy for programmatic flexibility that is easily adaptable to different live-work scenarios. It consists of a series of prefabricated base modules necessary for living and working. These modules can be arranged in any manner that is best suited for a particular use, and are connected by courtyard-garden spaces. Like a binary barcode containing bars and spaces of two different widths, the base modules can be arranged in many different ways to reflect a particular user's needs, including live-work spaces for small businesses or creative industries to a dormitory for students studying a particular art. In the latter scenario, and in the scenario depicted, a piano teacher lives in the existing house while two of her students dorm in the ADU.

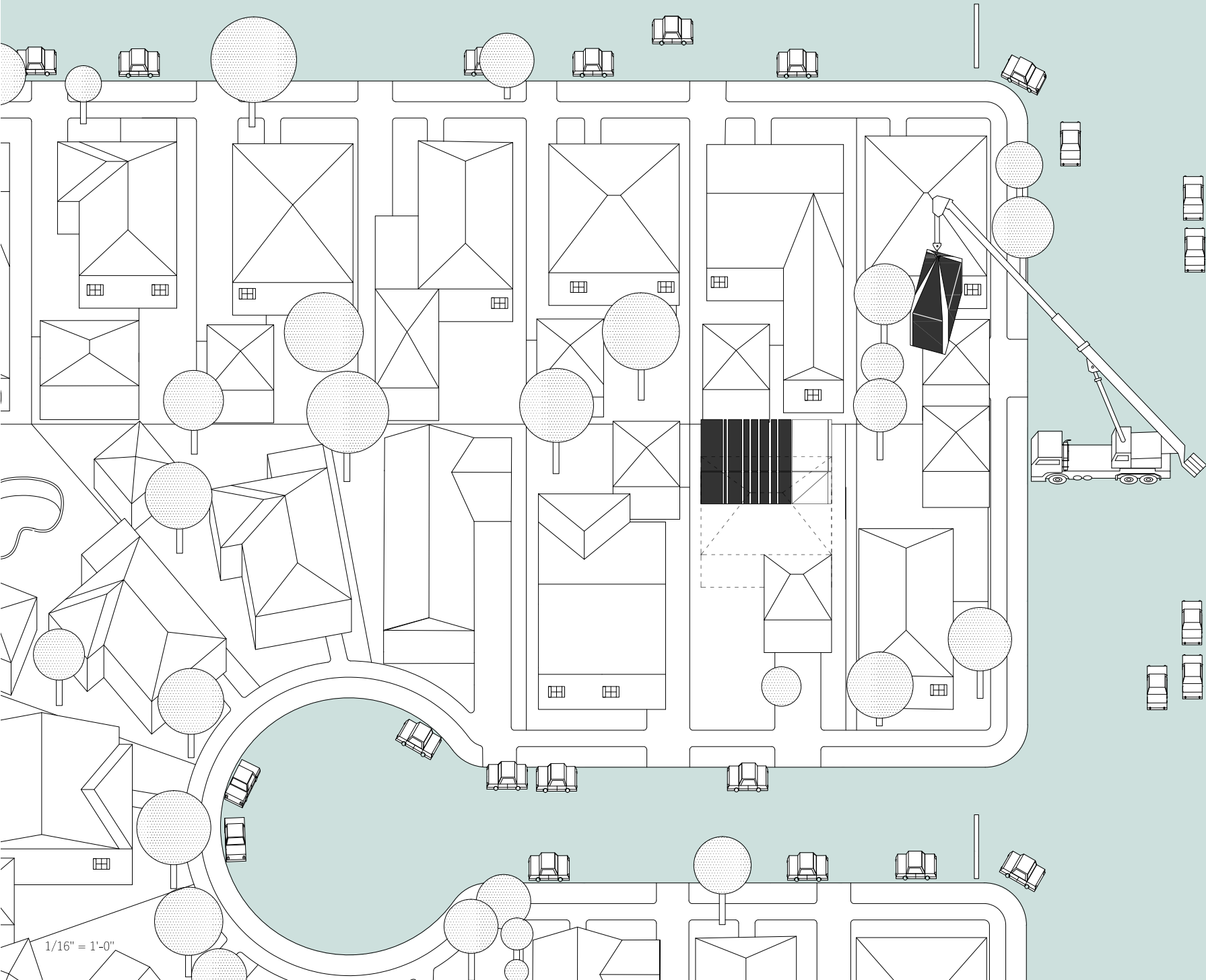
The base modules are fabricated off-site using a simple steel tube framework with a wooden platform frame infill, creating opportunity for varied openings which layer the space visually and physically. Slices of natural light are admitted either from clerestory windows or from the garden zones between the base modules. The ADU achieves spatial variety that is both introverted and extroverted, providing privacy, and at the same time, connects interior volumes with outdoor garden spaces.

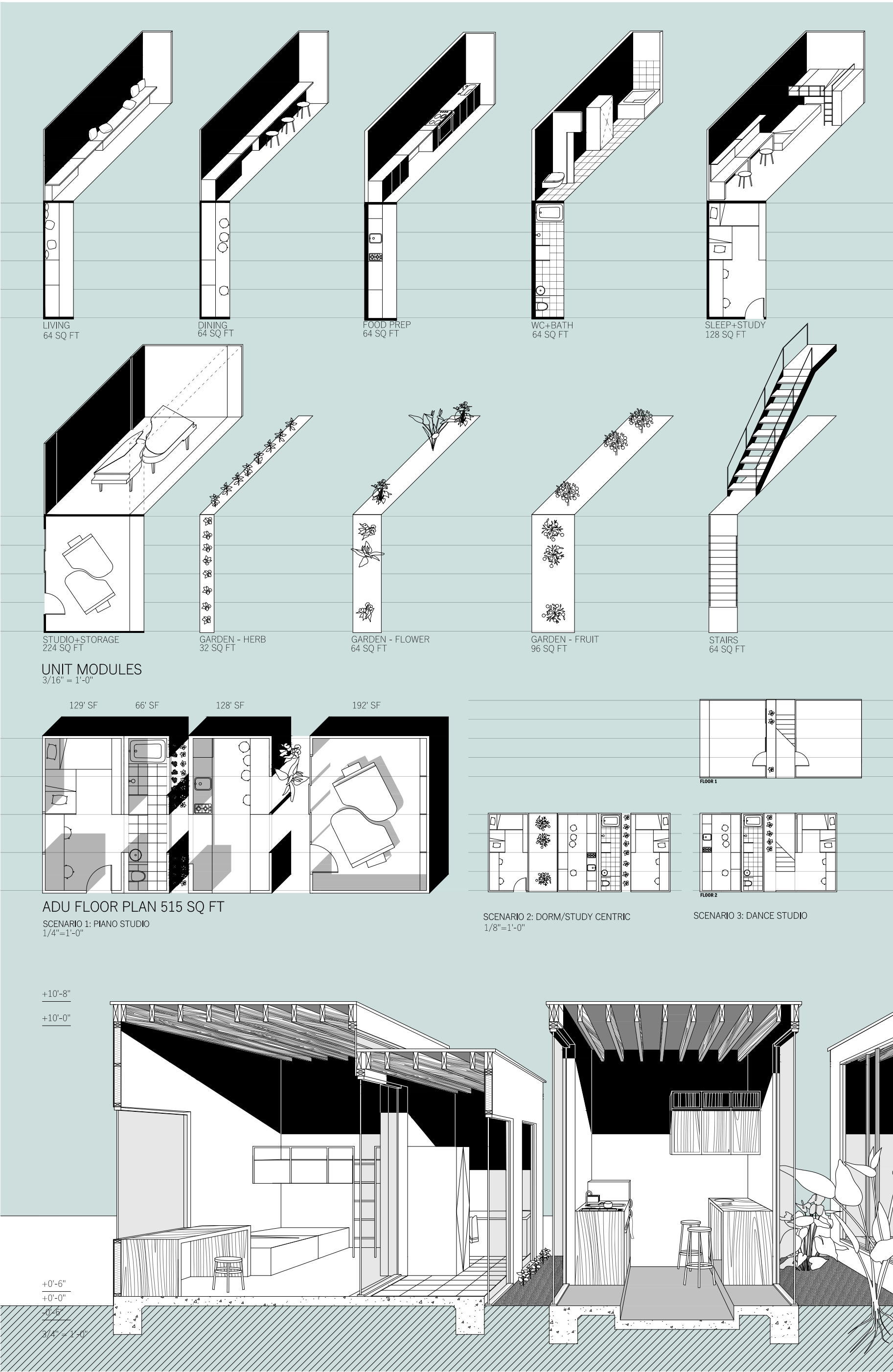


HORIZONTAL "BAR CODE" PLAN DIAGRAM

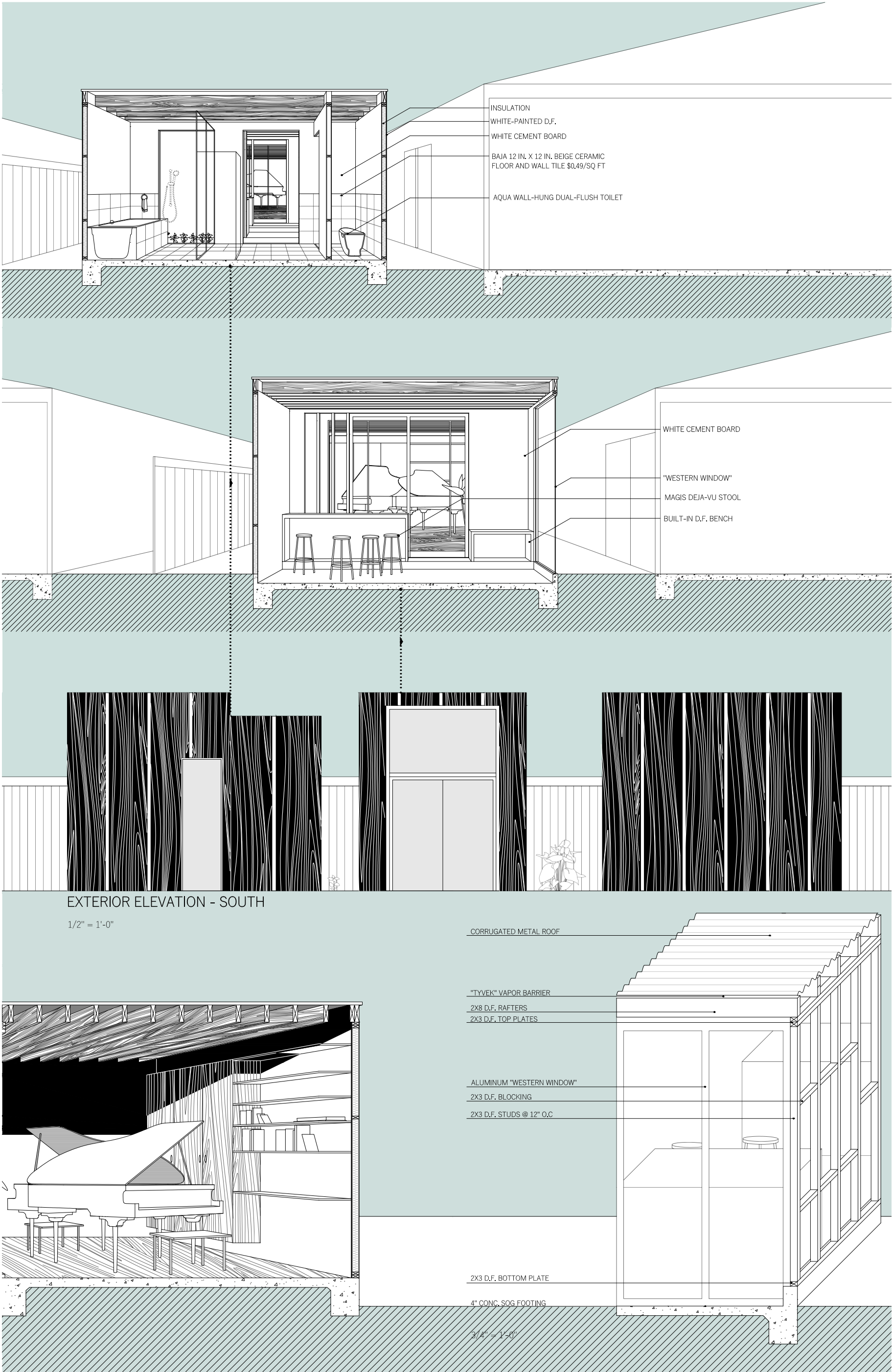


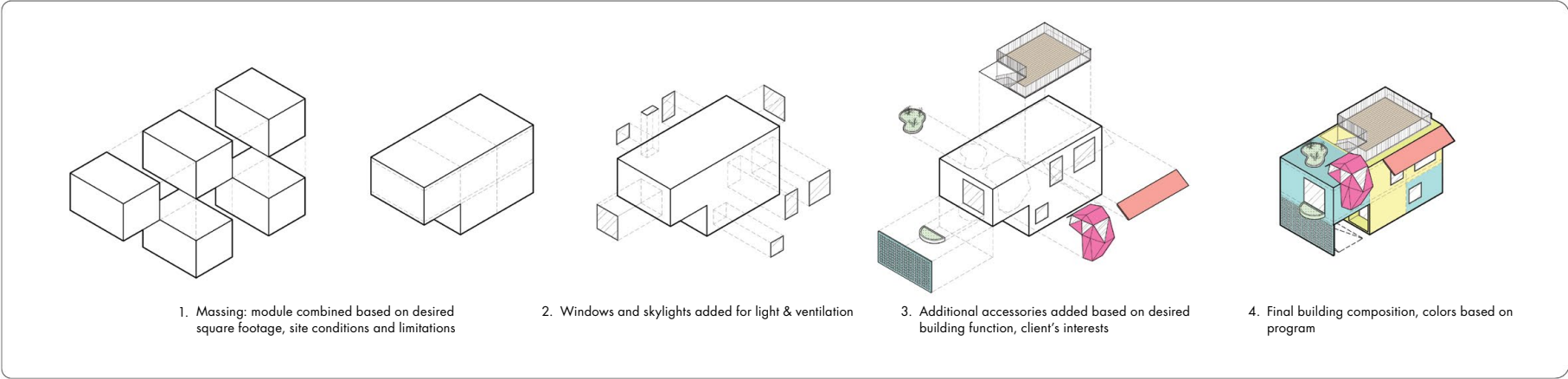
SITE PLAN: #2 ADU: 515 SF  
3/32" = 1'-0"







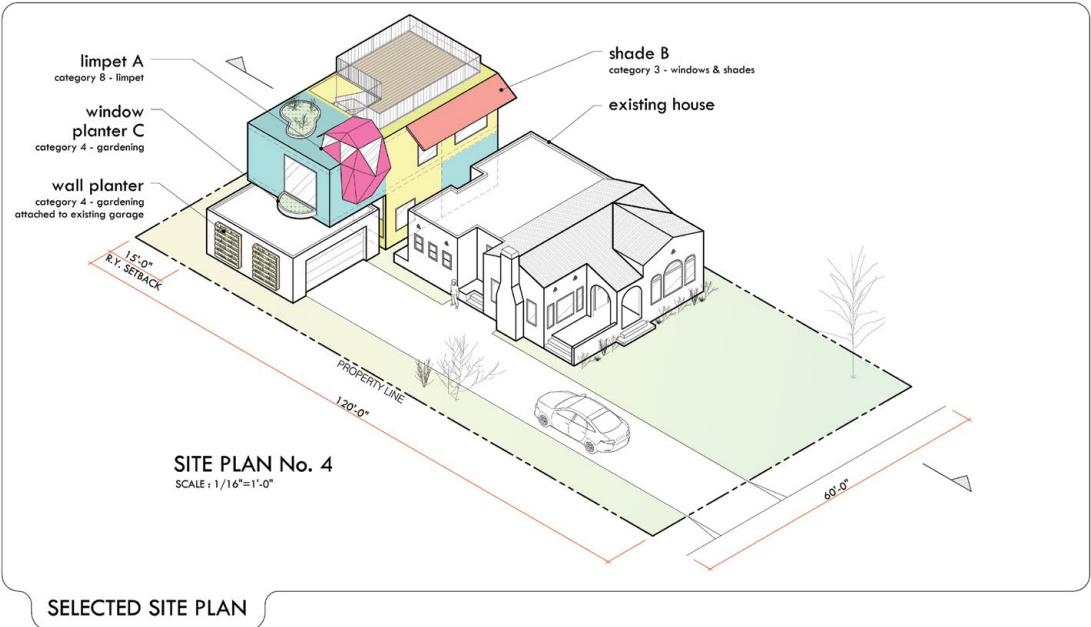
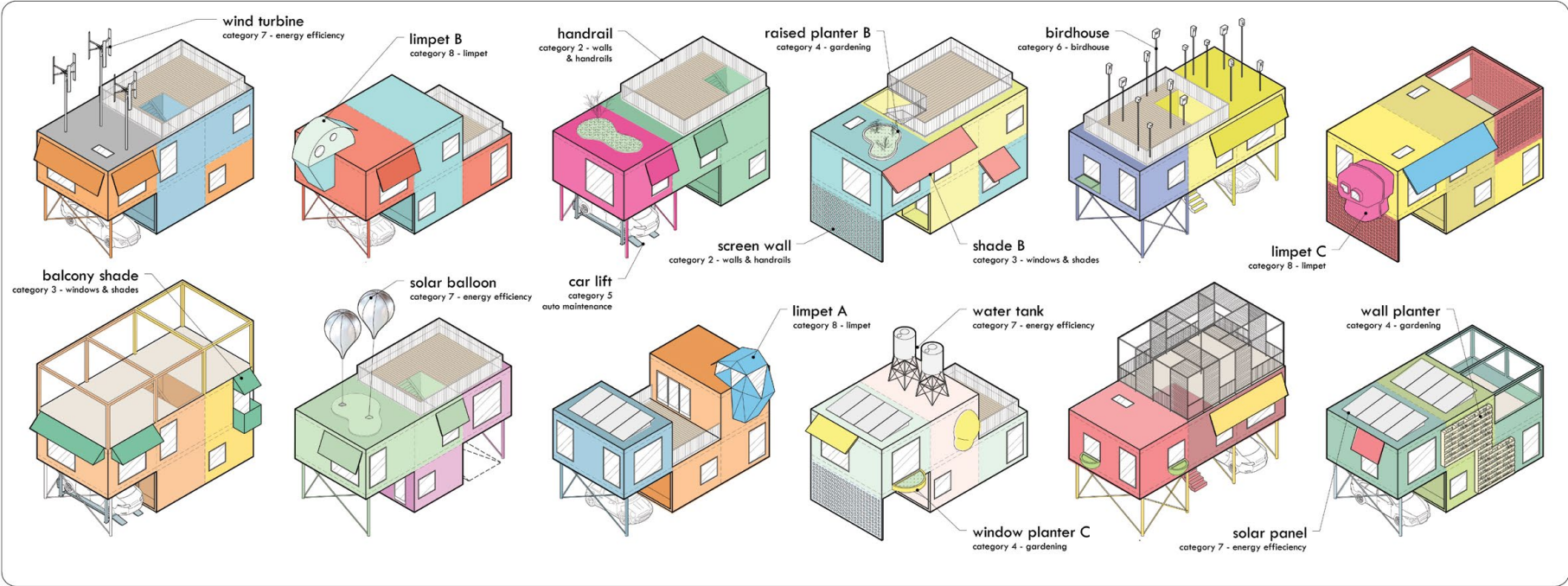
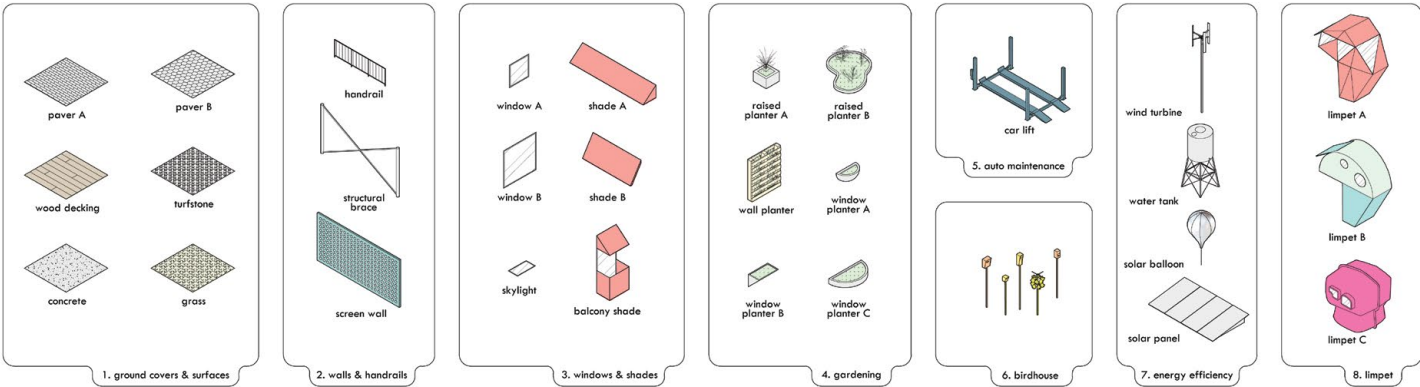




**BUILDING BLOCKS ▲**  
The basic unit of space is the massing module. These are conceptual blocks which are tailored to individual need with the addition of accessories.

**CATALOG OF ACCESSORIES ►**  
Accessories are picked according to individual tastes and needs. They give personality and usefulness to the basic modules.

**EXAMPLE COMBINATIONS ▼**  
There really are an infinite variety of combinations. Here are just twelve possibilities out of a possible 320 trillion ways to combine accessories, and make a unique statement.



**OCCUPANTS**  
With little information given about the type of occupant, it became important to design a system instead of design a dwelling—a system whereby any occupant can be accommodated according to their own unique needs and wishes.

So, we start with a basic building block and then add accessories. Accessorize according to individual taste and lifestyle, instead of sacrificing one's own lifestyle to fit into the pre-existing parameters of a fully designed unit.

The combination of basic building blocks and accessories can produce a building that is useful to a diverse range of people and their interests. From bird watchers to the energy conscious—or both.

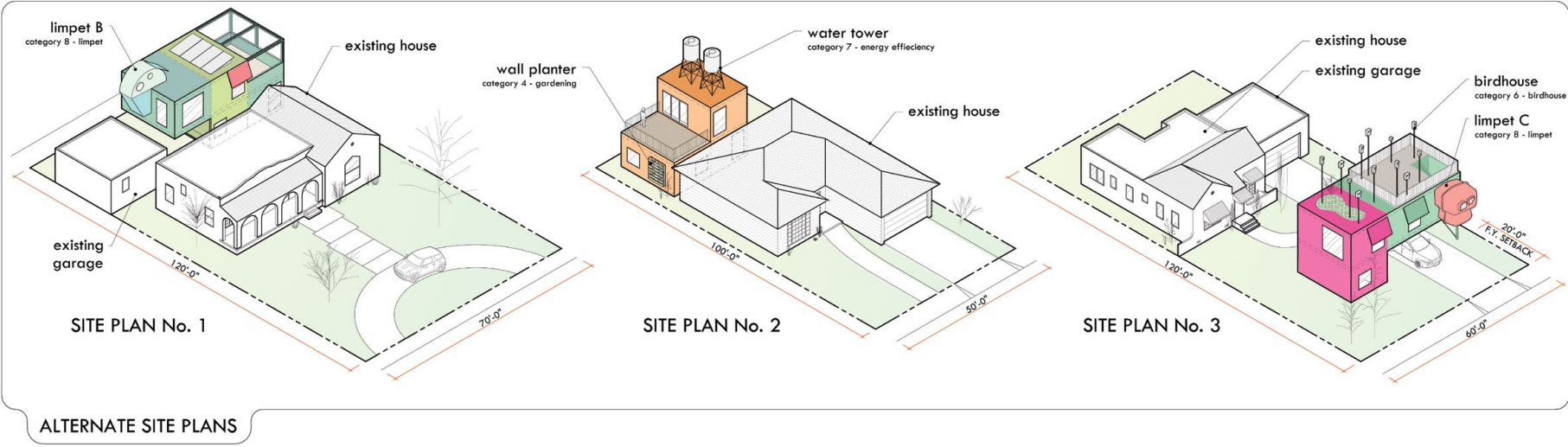
**ELEVATED UP**  
One of the accessories that slots into the basic building volumes consists of structural posts that allow the dwelling unit to be lifted off the ground. The advantage of elevating the dwelling is to free up valuable yard space under the dwelling, so this space can be used for parking, gardening or outdoor living space.

Providing vertical access also improves the views and the amount of natural light, and lets the dwelling adapt to unpredictable existing conditions. To demonstrate this adaptability, we have shown the dwelling in each of the four competition site plans.

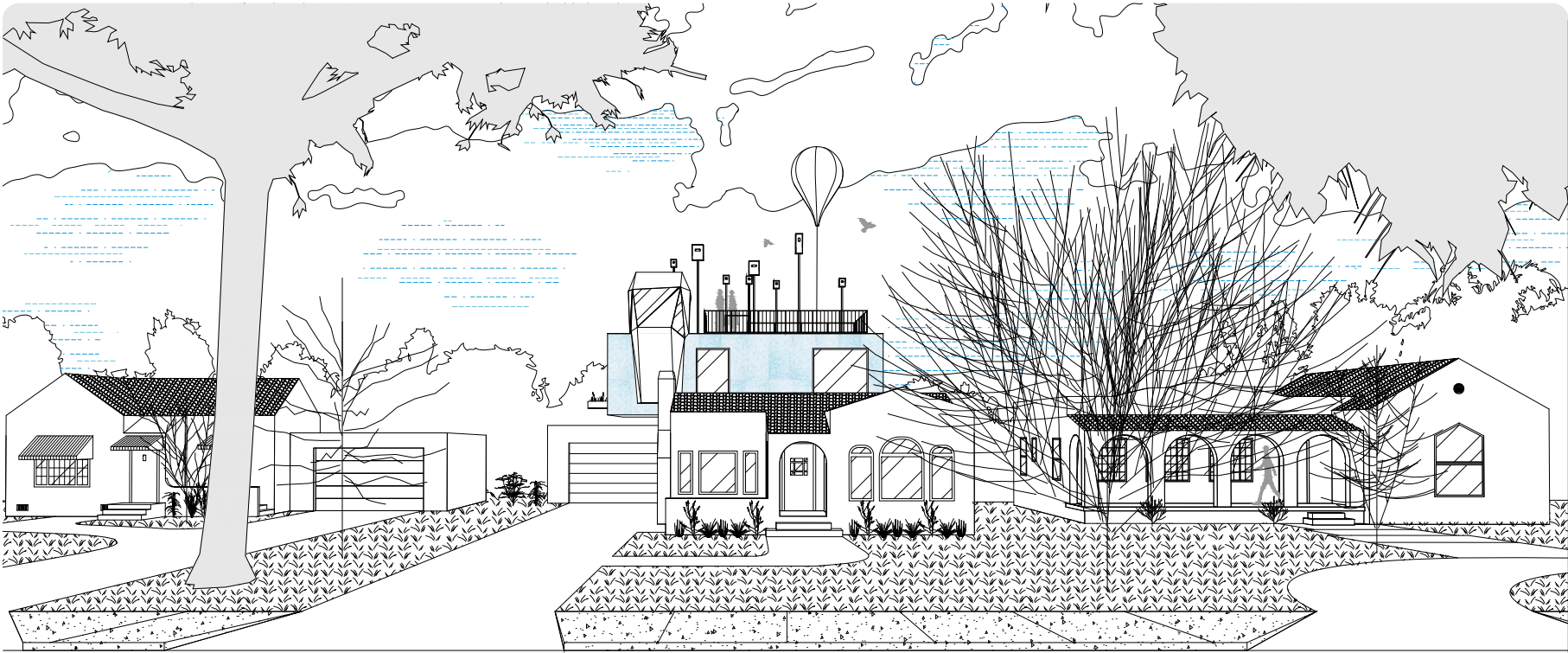
While the adaptability is an excellent attribute, it is the elevated living experience that really adds to the quality of life.

**MATERIALS & CONSTRUCTION**  
The facade material is 100% recycled plastic packaging from Smile Plastics and comes in a handful of colors and textures. We are showing this material in blue and black color options.

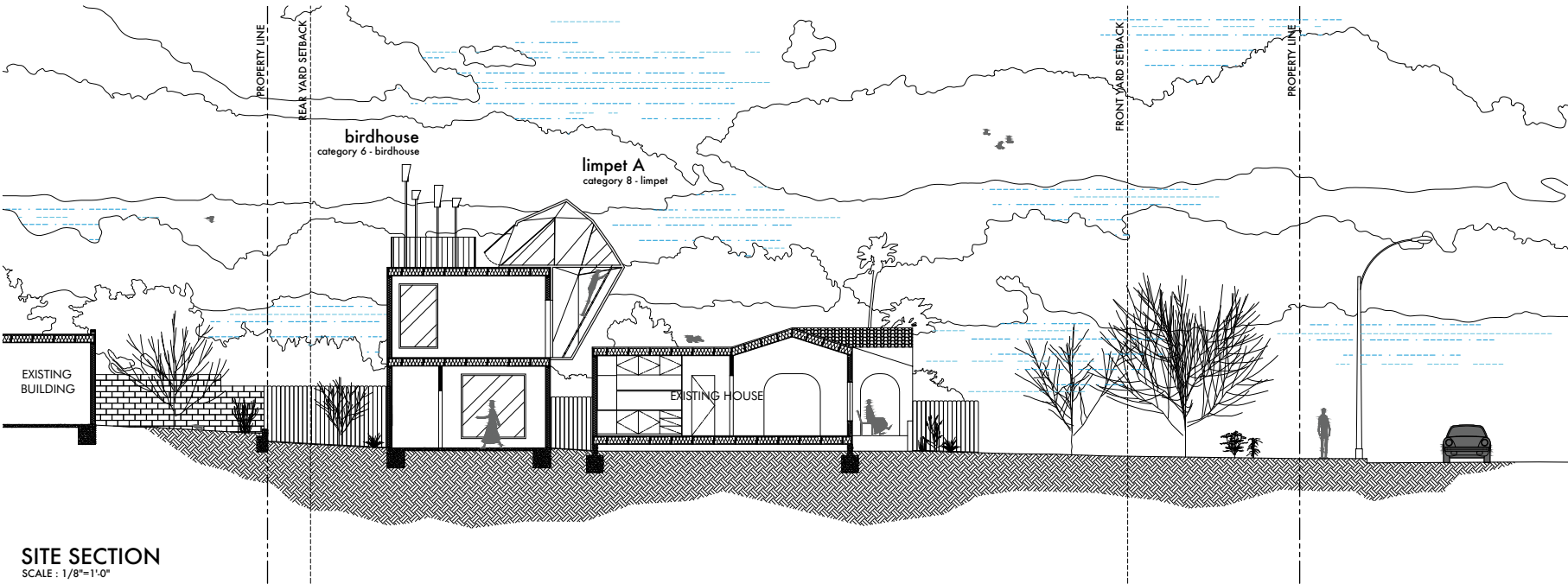
On the interior, the structural, insulation and finish materials are combined into one system which works similar to a Structural Insulated Panel. These panels can be factory assembled and then erected and attached on-site.







EXTERIOR VIEW



SITE SECTION  
SCALE : 1/8"=1'-0"

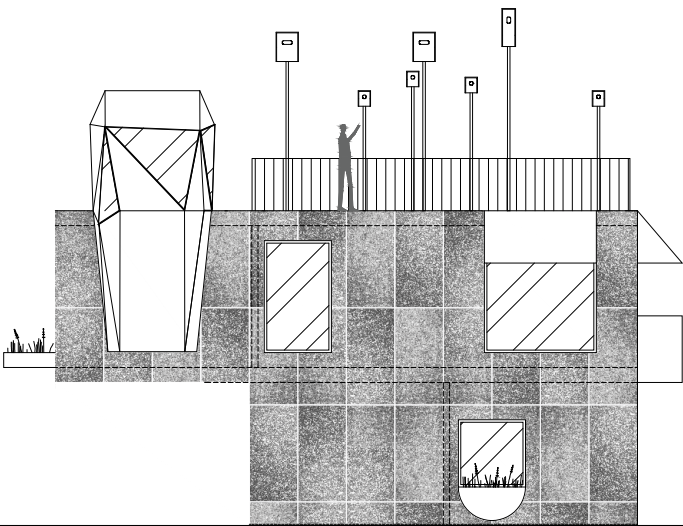
LIMPET

Temporarily Attached Space

When extra space is needed for a brief time, why not attach a Limpet for as long as you need it?

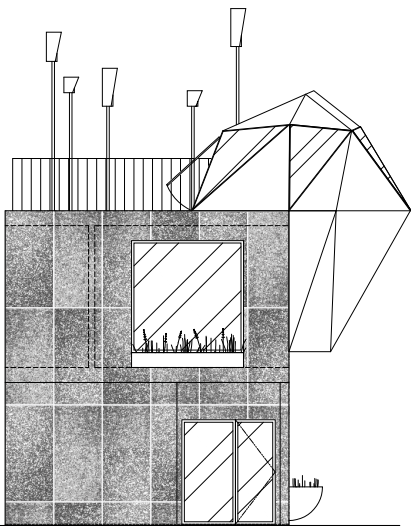
The limpet attaches to the outside of the building and has enough space for sleeping in, or just hanging out in. It can be accessed by simply stepping out the window in the living room and directly into the Limpet, or from the roof.

The Limpet is a very simple shell of FRP (fiberglass) that is lightweight and tough. Since it is a mobile unit (the only mobile accessory) it needs to be easy to transport.

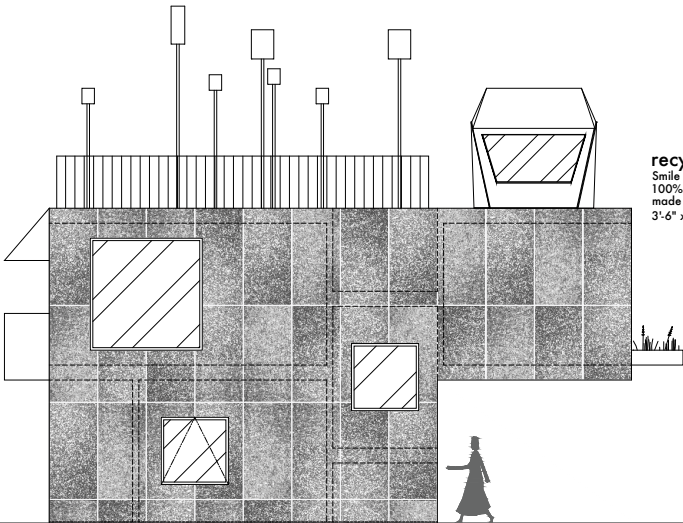


window planter C  
category 4 - gardening

window planter A  
category 4 - gardening

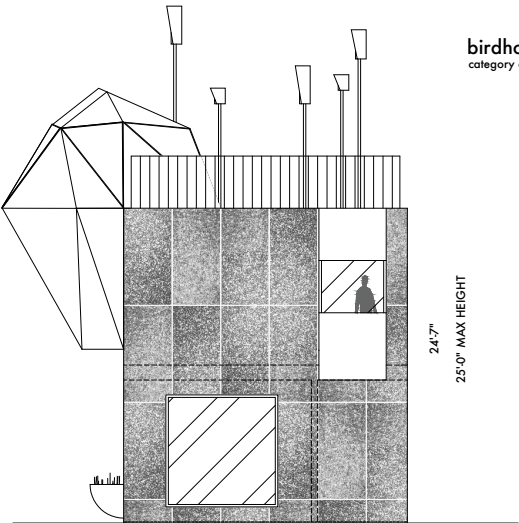


balcony shade  
category 3 - windows & shades



recycled plastic panel  
Smile Plastics "charcoal" panel  
100% recycled and 100% recyclable  
made from plastic packaging  
3'-6" x 6'-0" x 1/2" panel size

birdhouse  
category 6 - birdhouse



ELEVATIONS  
SCALE : 1/4"=1'-0"

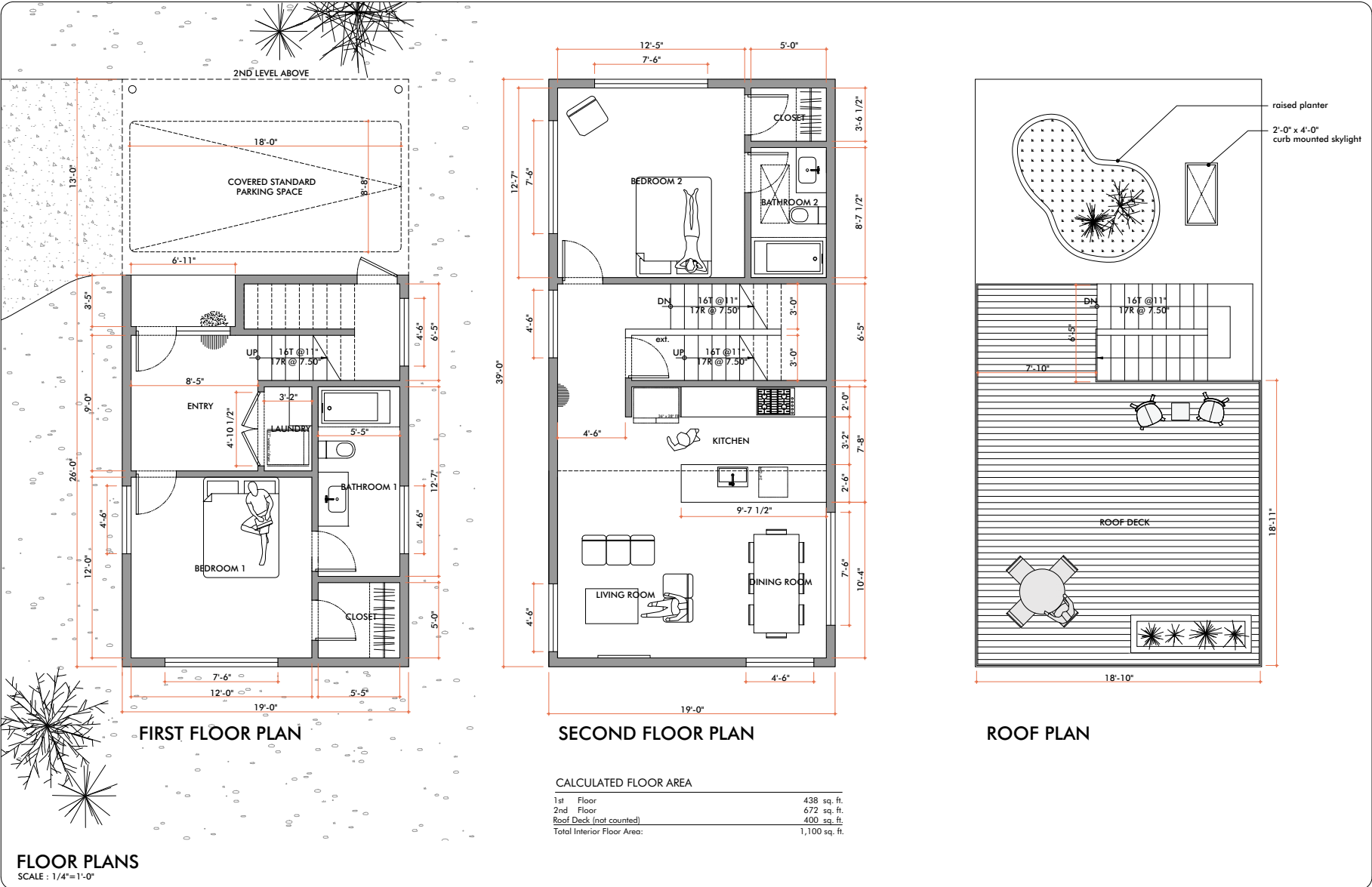




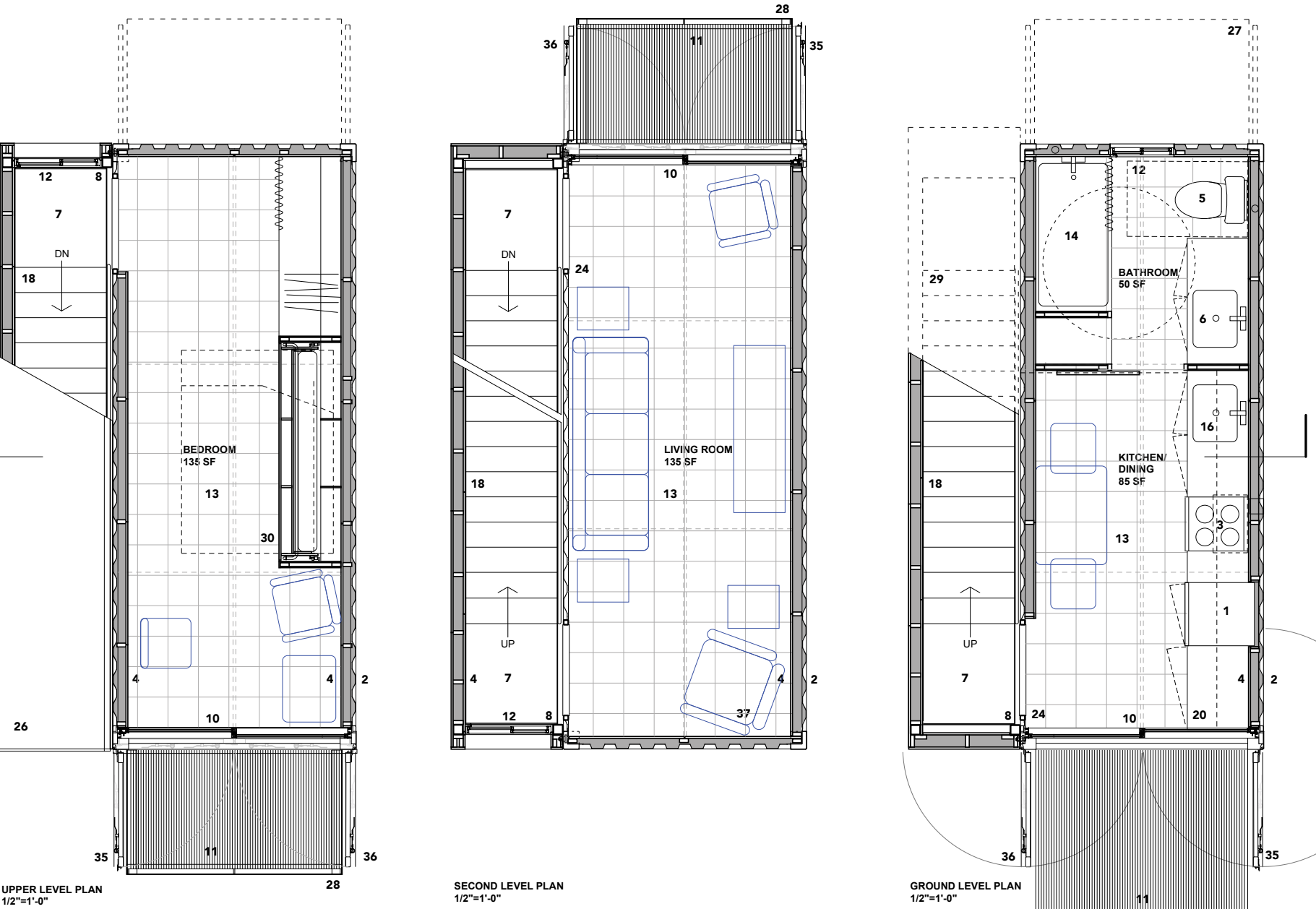
KITCHEN / DINING ROOM VIEW



ROOF DECK VIEW







- 1 AVANTI FFBM102DOW  
10.2 CU. FT. REF/FREEZ

2 POLYISOCYANURATE  
INSULATION AND  
SPRAY POLYURETHANE  
FOAM IN CORR.  
FLUTES, TYP

3 HOTPOINT RA720KWH  
2.4 CU. FT. 20" ELECTRIC  
RANGE ACME-  
MICROWAVE OVEN
- 4 PRE-FINISHED  
3/4" PLYWOOD ALL  
INTERIOR SURFACES  
ON MIN.2X FRAMING

5 AMERICAN STANDARD  
CADET TOILET

6 AMERICAN STANDARD  
DROP IN LAVATORY
- 7 RUBBER TILES 1/8"

8 HSS4X MOMENT FRAME,  
ATTACH TO CONTAINER  
AT CORNER FITTINGS W/  
PROPRIETARY  
WASHER/LOCK

9 GRAVEL FILL TO  
FITTINGS
- 10 ARCADIA 5520  
SERIES SLIDERS

11 MCNICHOLS 1.5"  
GALV. SWAGE  
LOCKED BAR  
GRATING OVER  
L4X4 FRAME

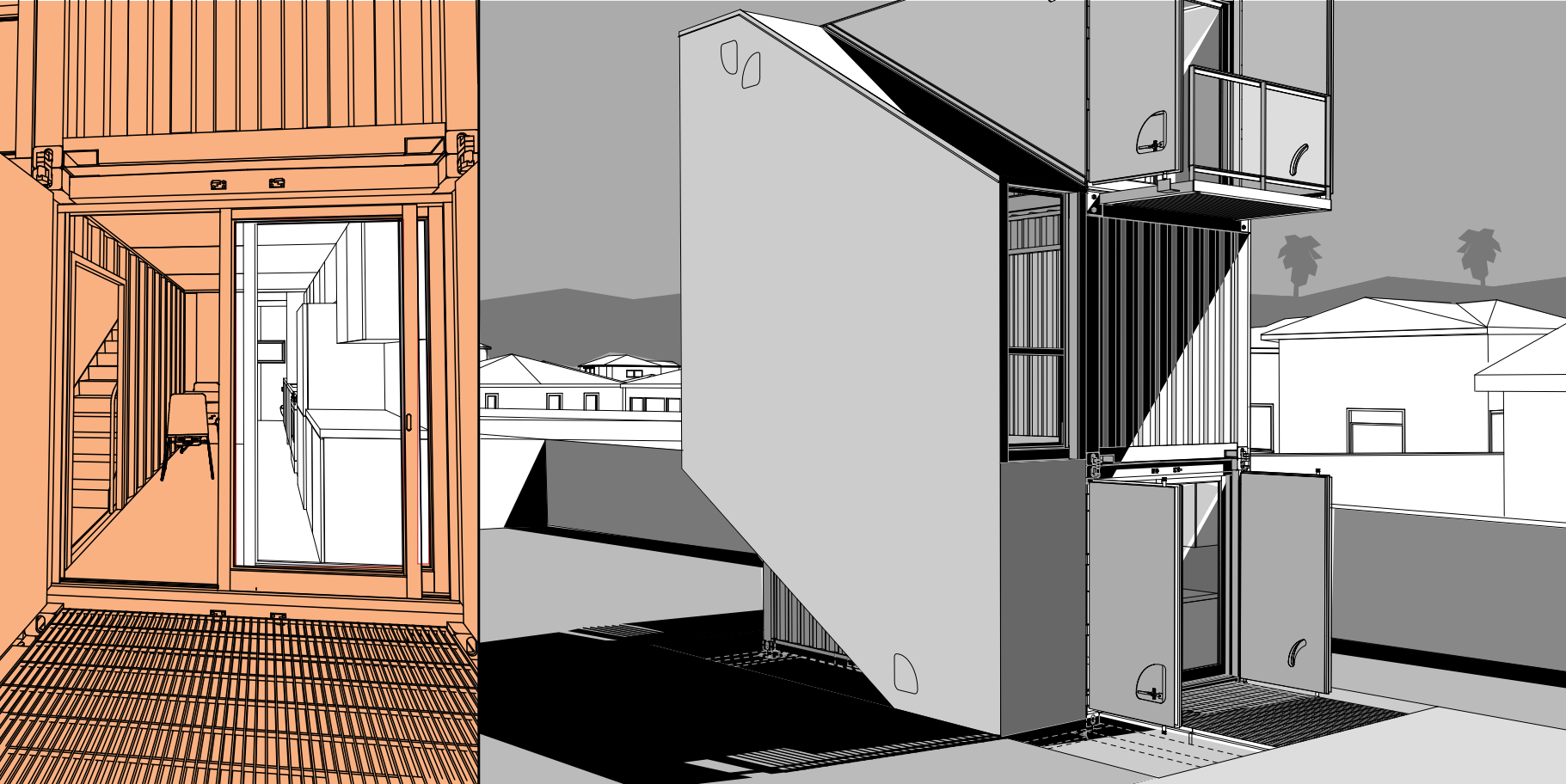
12 ARCADIA 2080  
SERIES SLDRS
- 13 VCT FLOORING OVER (E)  
CONTAINER FLOOR

14 AQUATIC EVERYDAY  
BATH/SHOWER

15 LATERAL REINFORCING:  
WELDED HSS2X2 BRACE  
AT UPPER CORNERS OF  
(E) OPG
- 16 SWAN COMPOSITE DROP  
IN KITCHEN SINK

17 CLADDING: 6ML ARCH  
SHT VINYL OVER PLYWD  
OVER 2X FRAMING

18 1/8" RUBBER TREADS W/  
INTEGRAL NOSING



# Adu Iso 20



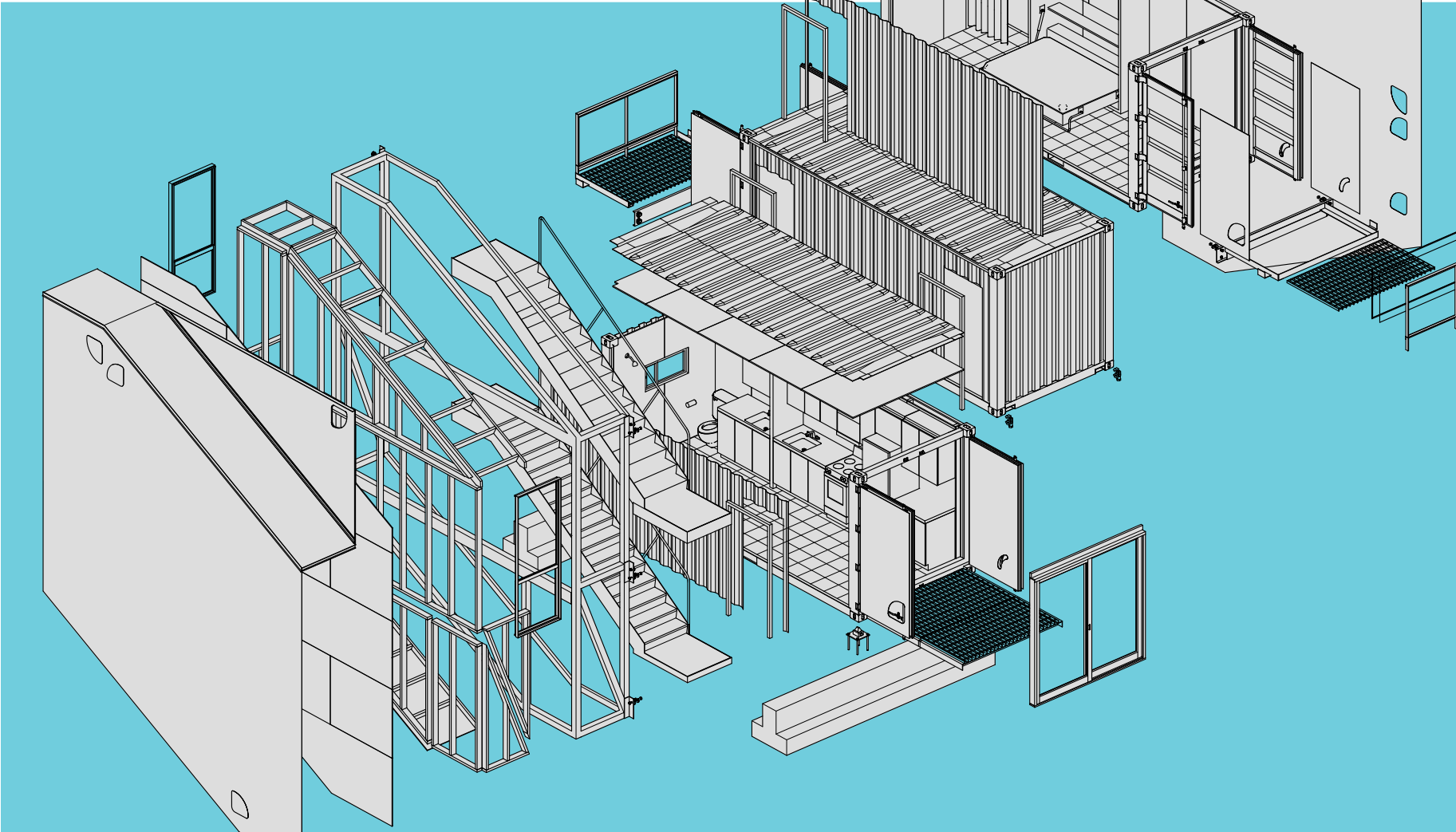
- 19 CIP CONCRETE FOOTINGS AND FOUNDATIONS

20 PREFAB MOD.CABINETS OVER (DOTTED) AND UNDER LAMINATE COUNTERTOP
- 21 WELDED 1/4" STL. PL. STAIR ASSBLY W/1/8" FOLDED STL. PL. TREAD/RISERS AND 1.25" OD STL PIPE HANDRAIL

22 TANDEMLOC VERTICAL CLAMP CONNECTOR ANCHORED INTO CIP CONCRETE FOOTING

23 18 GA. GSM JOIST ENCLOSURE
- 24 DOOR MOD: WELDED HSS2X2 FRAME AROUND OPG CUT THROUGH CORR. SIDEWALL

25 BATT INSULATION BETWEEN (E) JOISTS

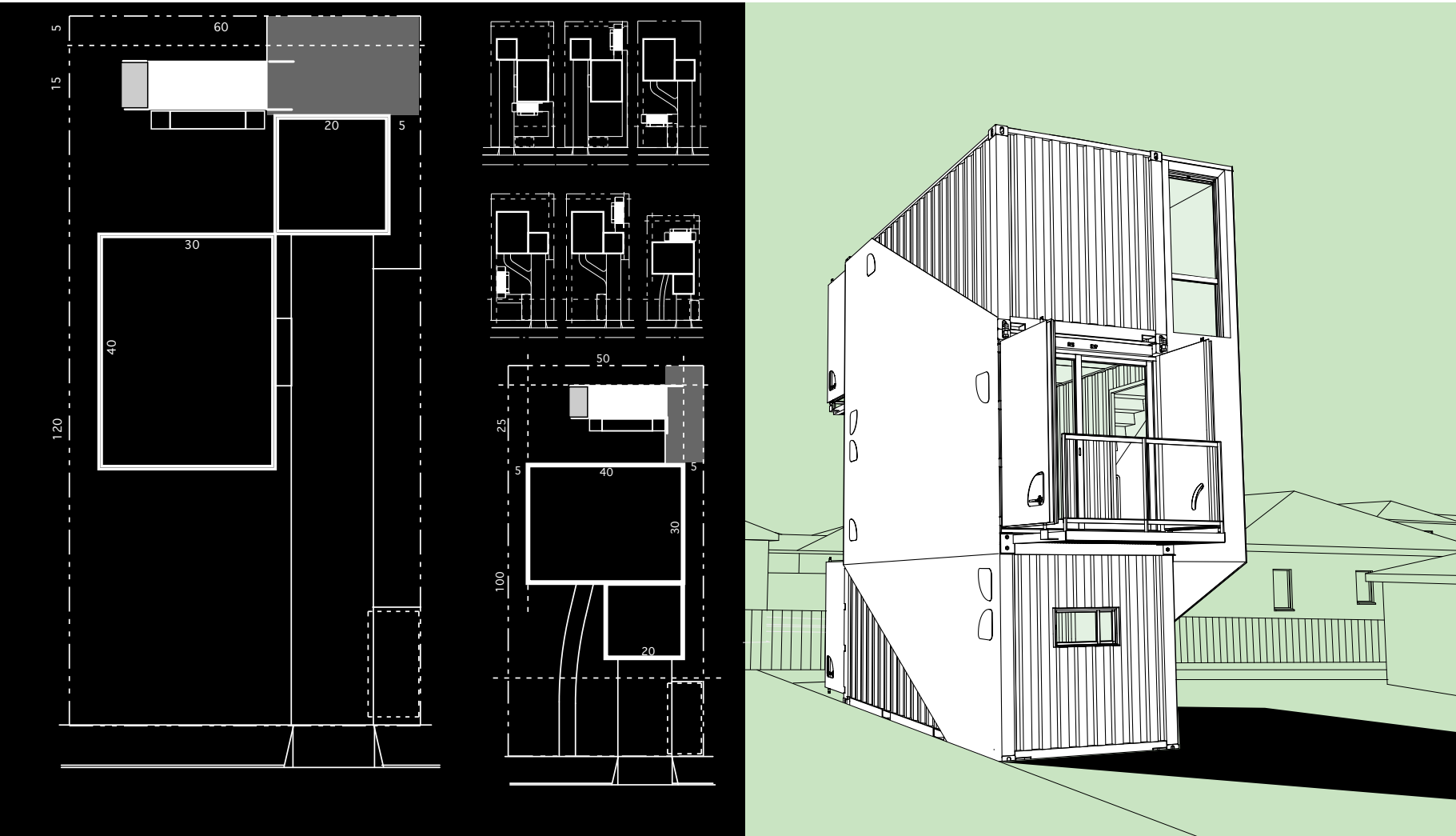
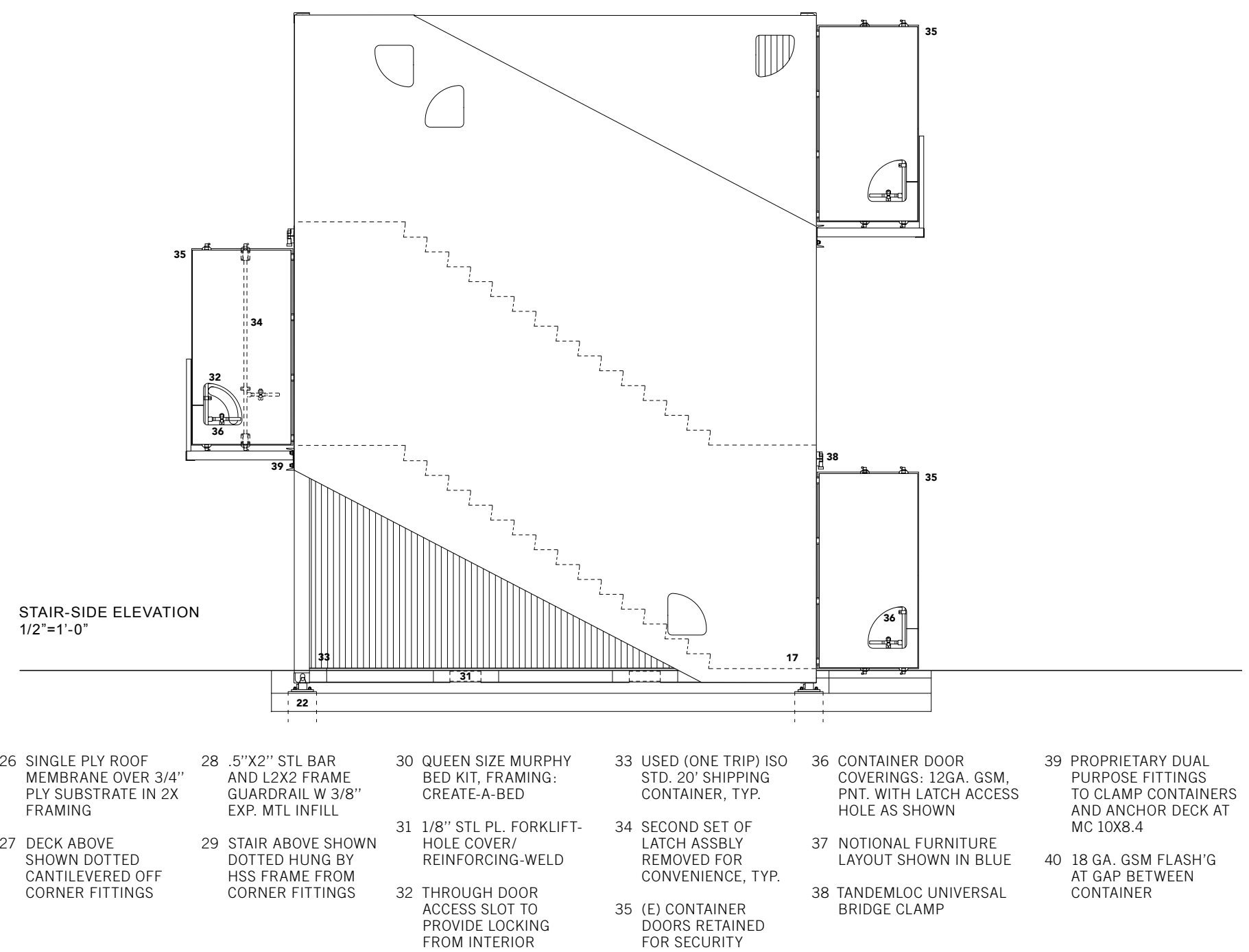


X3V

“Homelessness” is only superficially a problem of shelter. When Architecture takes this challenge on, however, it can sometimes result in well-intentioned but misguided flights of personal expression. The issue of homelessness goes far beyond the problem that it names and architecture should be uniquely situated—both pragmatically and expressively—to access not only the myriad problems of the homeless individuals themselves, but also the larger perceptual and ideological problems that have confounded society’s response to date.

Still, architecture is stymied because the homeless problem confounds contemporary “go-to” strategies of critique and celebration. In this context, the critical attitude’s inherent censure is socially insensitive, and its negativity is regressive, and celebration doesn’t work if there are neither heroes to praise nor exemplars to promote.

What remains for architecture are cleverness and economy, and the disciplinary trust built up over millennia that these are enough and worthy.



The container’s simple form and noble proportions are the natural end product of years of refinement in the harshest physical and economic environments. They ask only for thoughtful arrangement, according to their own modular logic (relying only on minimal internal modification and corner fittings for connection and anchoring, for example), to guarantee a dignified and respectful result.

By avoiding extensive modification and sticking with the natural dimensions, systems and fittings already established for the container and its extensive infrastructural support system, the design takes maximum advantage of the container’s inherent economy, strength and durability.

Needless to say, this is crucial to the ADUs ability to successfully address the homeless problem, considering the unique challenge this population presents. Furthermore, the design’s architectural “neutrality” makes it more likely to be able to “fit in” to the greatest variety of neighborhood settings, from the expected urban infill scenario to the more surprising suburban scenario, with its likely NIMBY reactions.

Finally, the container’s modular logic, extensive infrastructure support system (transportation and procurement), and minimal costs make it ideal for quick deployment in this ongoing crisis.

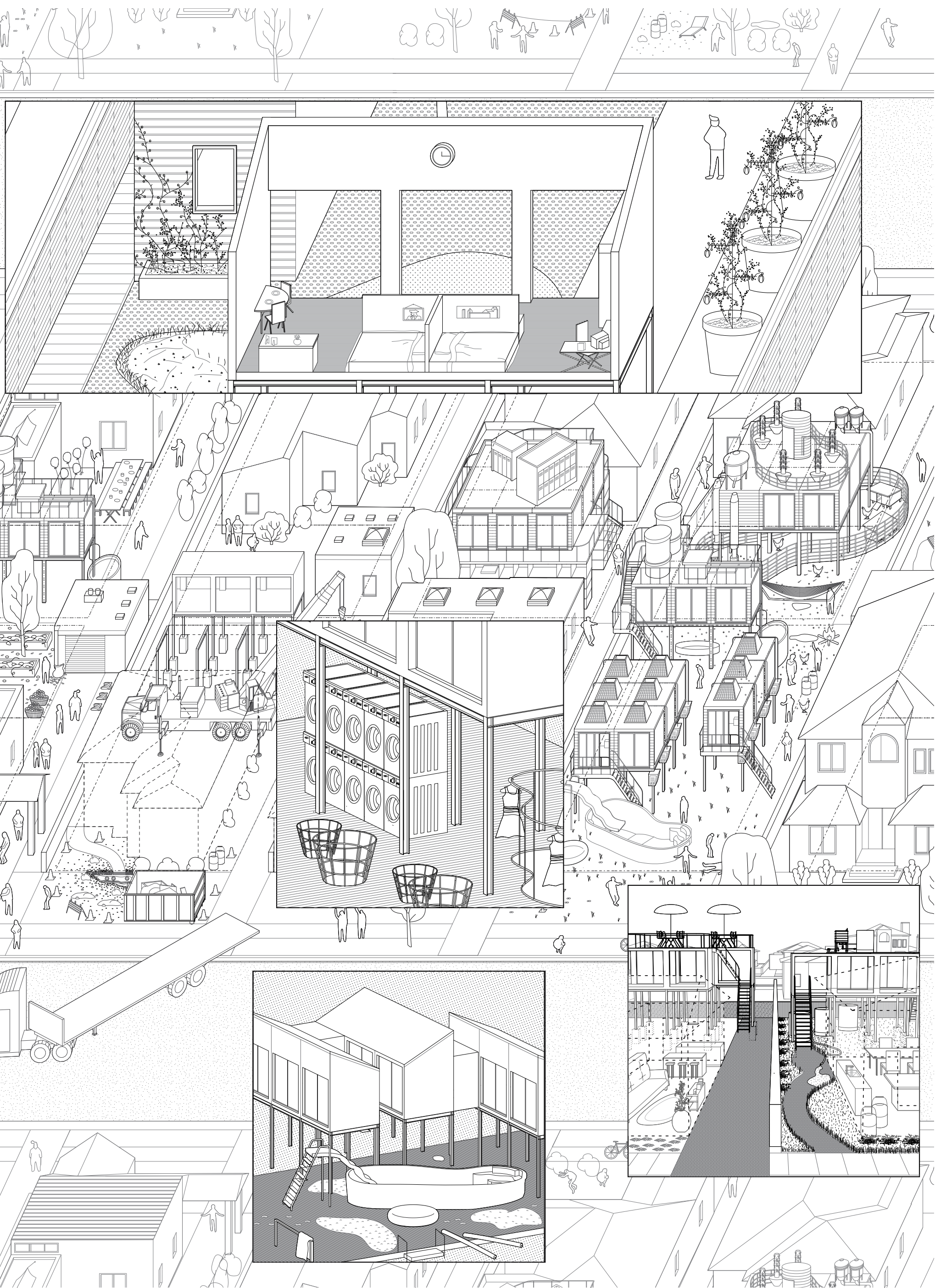


By encouraging neighbors to share resources generated by their ADUs, we begin the process of blurring the notions of hard property lines. In a sociopolitical way, the infrastructural ADUs will begin to suggest new implied boundaries.

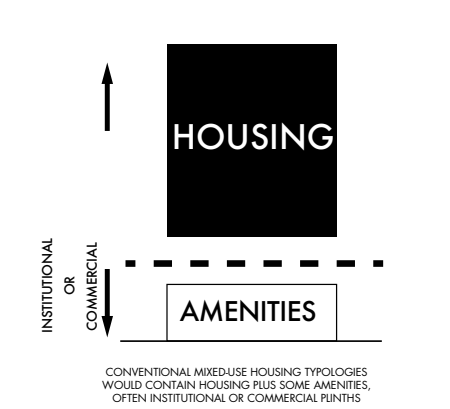
Somewhere between an urban plan of a small city, or an oversized superblock full of rooms, this proposal is more than just a housing solution—it sets the stage for a semi-public landscape.



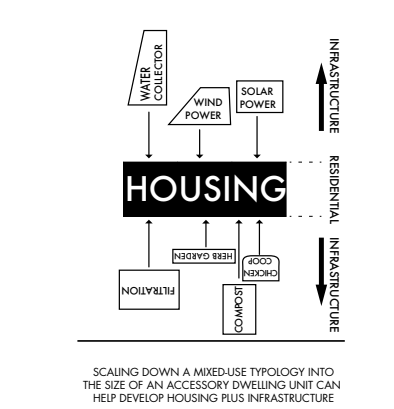




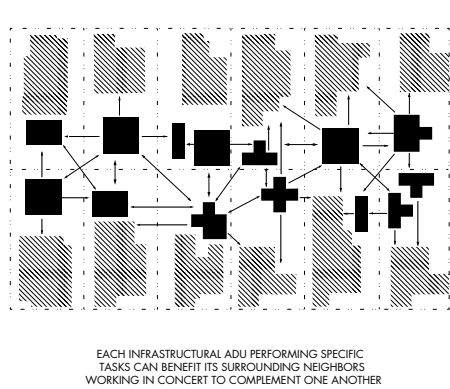
TYPICAL MIXED-USE



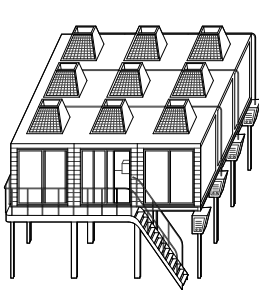
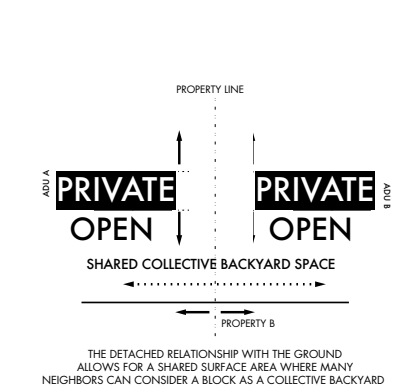
MICRO MIXED-USE (ADU)



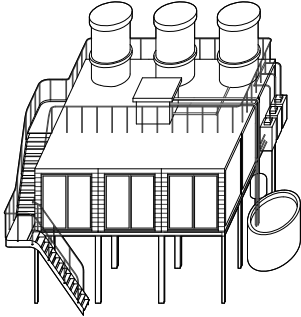
NETWORK OF ADUs



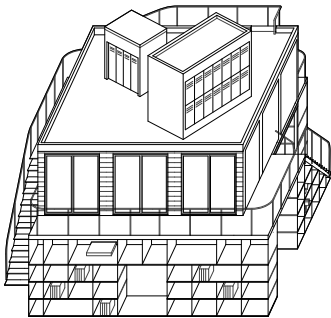
COLLECTIVE BACKYARD



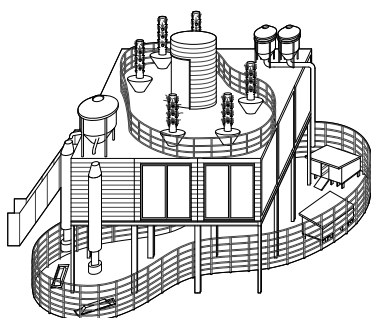
HOUSING PLUS SOLAR



HOUSING PLUS WATER

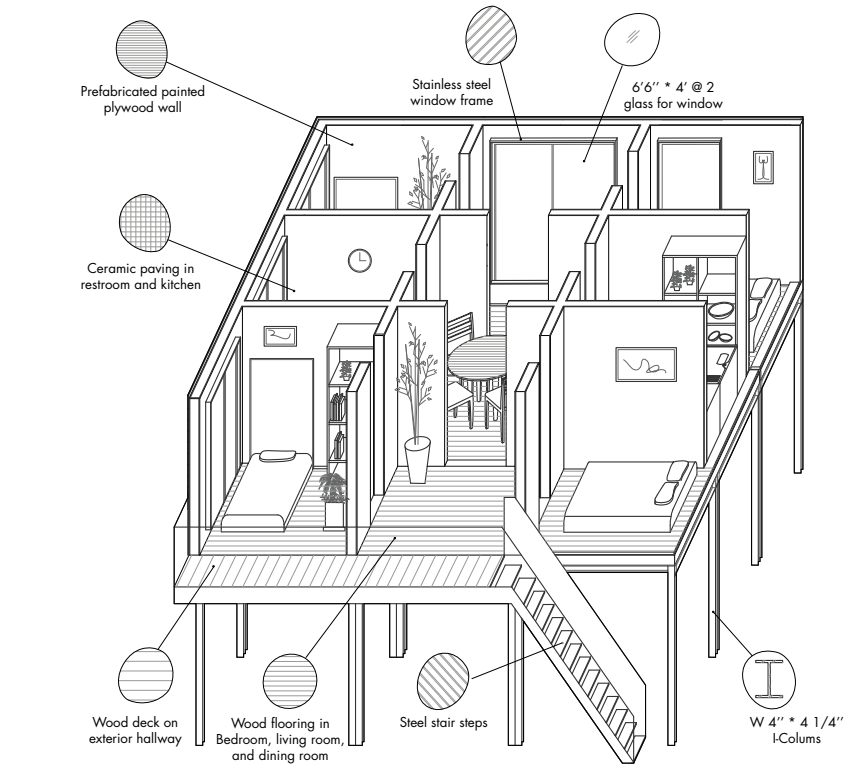


HOUSING PLUS STORAGE

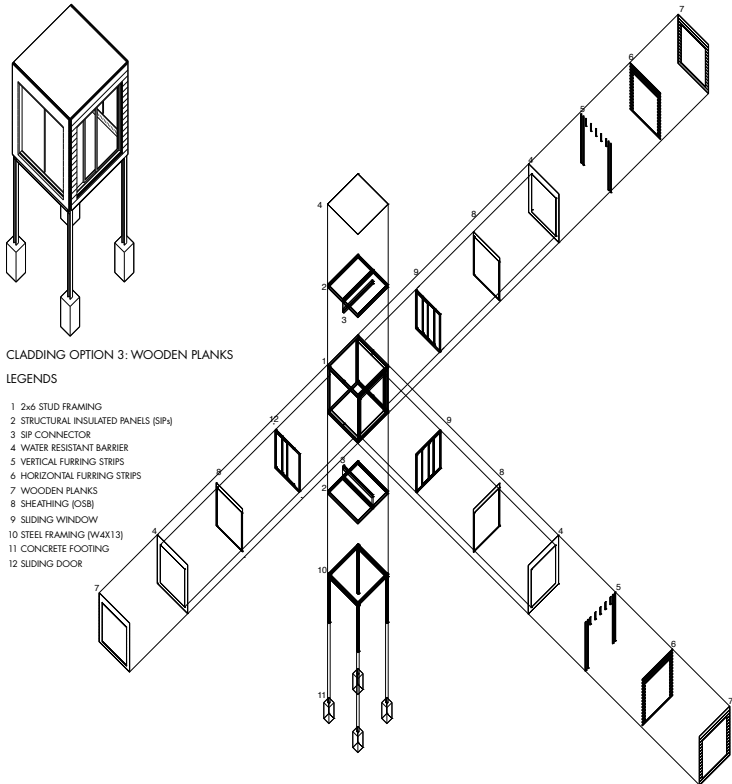


HOUSING PLUS FARMING

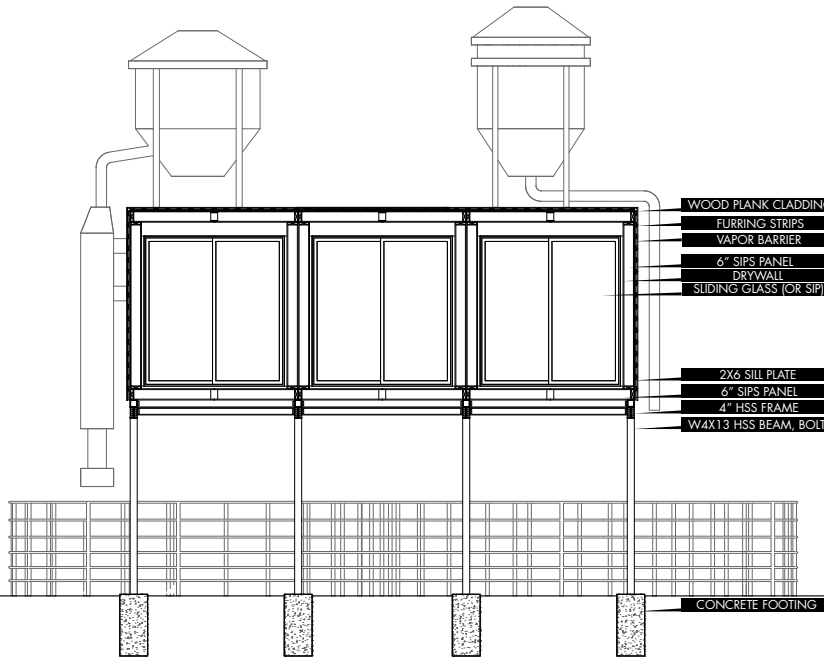
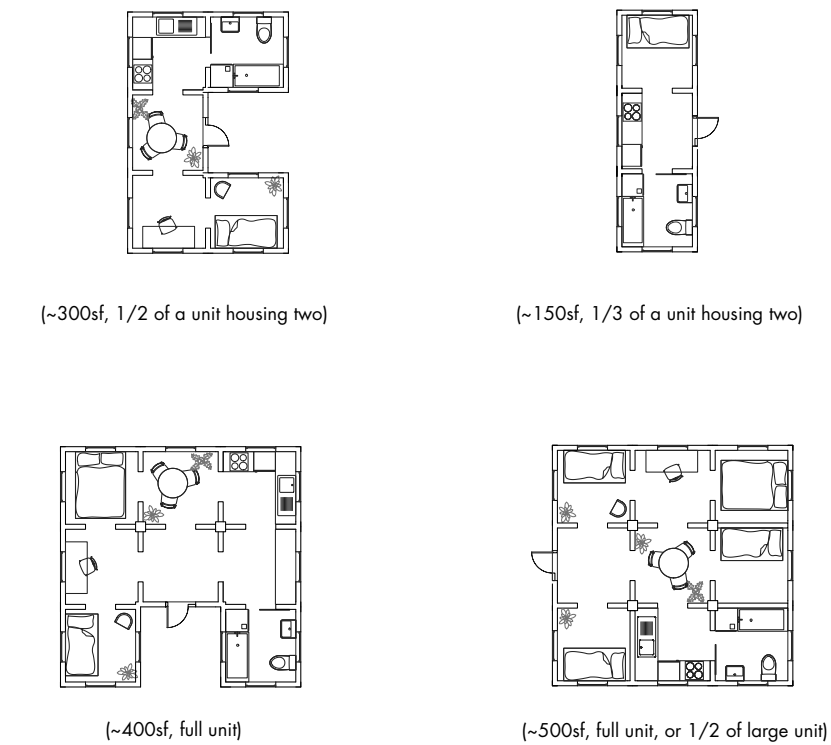
Each Accessory Dwelling Unit would perform its own distinct infrastructural role to support the entire neighborhood, giving the architecture some extra character both formally and functionally.



The exterior and interior elevations rely on materiality that is readily available from typical hardware stores. This DIY spirit allows for more degrees of flexibility.



We chose a steel frame modular system for three reasons. This system allows for the majority of the construction to be off-site, limiting actual on-site work to a minimum. By reducing on-site work hours, we not only curtail the labor cost, but also drastically lower noise levels that often result in official complaints.



The modular system allows for floor plans to differ in size, shape, and function depending on the demands or needs of plot owners. The repeatability of this modular system will make the project budgets very manageable, allowing for extra infrastructural components to be simply clipped onto the existing grid system.

The cross-section of the prefabricated structural insulated panels with bolted framing and foundation indicates that this set of ADUs are very economical to construct.



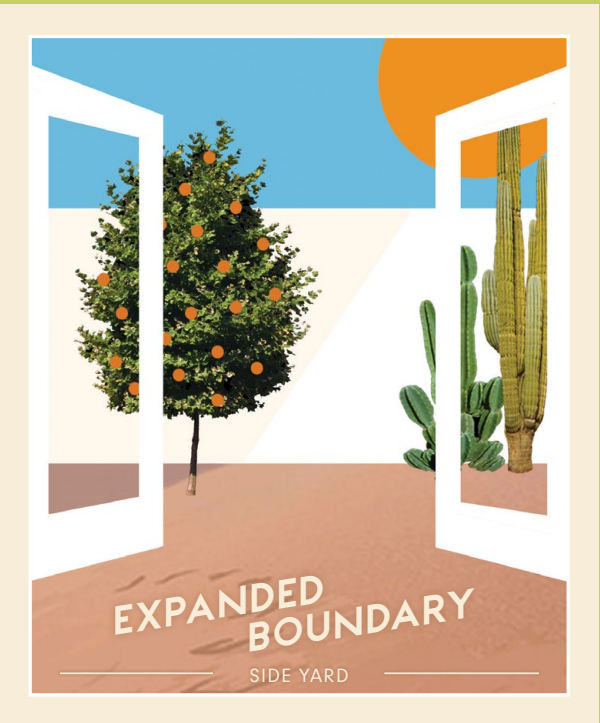
# Sharing the American Dream

In 1945, when Arts and Architecture magazine launched the famous Case Study House program, Los Angeles, like now, was facing a housing shortage and in need of efficient, affordable homes that integrated modern ways of living and new building technologies. But in the more than seven decades since LA’s postwar expansion, the dream of single-family housing has not only changed, but increasingly moved out of reach for many Southern California residents. **ADUs represent an opportunity to recapture the optimism of those early architectural experiments and reconsider how we live in a 21st century metropolis** that is increasingly crowded, and whose population is more richly diverse than ever before.

ADUs ask us to redefine the traditional American Dream’s promise of a nuclear family, single-family house, and grassy backyard. Architecture needs to adapt to and reflect changing lifestyles at all phases of life. **Examples of ADUs have a communal feeling: empty nesters renting out an ADU; adult children returning home to care for aging-in-place parents; extended, multigenerational families; non-traditional tribes of friends and partners; or simply folks looking for an affordable place to call home.** At a moment when topics of gentrification and displacement are at the fore, **ADUs may even help preserve neighborhoods, since existing homeowners could remain in their communities and receive rental income from a small unit.**

**These new situations suggest rebuilding our social boundaries and adjusting privacy needs.** ADU designs might respond by repurposing the backyard into common areas for group meals or in-between outdoor spaces to buffer the proximity to an existing structure. The business of so-called “share economy”—AirBnB, WeWork, or Uber—has primed us for this new normal. Our cars and spare rooms are now public, our workspaces collaborative.

While this shared American Dream might seem contemporary, it is actually a return to older ways of habitation that challenge conventional ownership and land use. In pre-suburban working class neighborhoods, an individual’s property was used for many things in addition to housing, including work and agriculture. Pre-settlement, the place now known as Los Angeles was home to indigenous peoples who lived communally and shared the land. As modest additions to single-family lots, ADUs tie us to our past, even as they predict a more collective future for Los Angeles dreamers.



## Urban Living in the New California

These posters are taken from the design competition submission by Bunch Design, Colleen Corcoran, and Jason Neville, illustrating design rules for ADUs:

1. **Welcome residents home with an entry pathway**
2. **Expand the boundary with a side yard**
3. **Borrow the view with high windows**

The “starter home” movement originated in post-World War II America, responding to returning veterans and a sharp rise in young families looking for affordable homes as an avenue to realizing the American Dream. Around four million housing units, both single and multi-family, were built in Southern California in the four decades following the end of the War. At an annual rate, this breaks down to roughly 100,000 units a year. The California Accessory Dwelling Unit Ordinance has facilitated the approval of secondary dwelling units and has, coincidentally, made available the under utilized backyard space of this aging housing stock.

The Re: Starter HOME is efficient and adaptable, comprised of a standard SERVICE/PRIVATE core combined with a flexible COMMON space. The design centers around the idea of creating a practical and harmonious relationship between the public and private spaces of the home through a central structure that emphasizes a balance between the two. The SERVICE/PRIVATE core is consistent in all Re: Starter HOMES; it contains the kitchen, bathroom, bedrooms, all utilities and

is efficient in its construction, primarily utilizing Structural Insulated Panels (SIP) which are prefabricated off-site and easily assembled on-site. The COMMON space is then designed around the core and is customizable to the needs of the inhabitant; as well as adaptable to varying site conditions. This model allows the RE: Starter HOME to be financially viable, while still prioritizing the living experience of the tenant and anchoring the dwelling to its site — successfully integrating it into the fabric of any diverse Los Angeles neighborhood.

The proposed Re: Starter HOME is designed for homeowners Monica & Trevor in Alhambra. They own a 1940’s style Rustic Ranch “starter home”. The proposed RE: Starter HOME uses the characteristic Mansard roof to relate to their existing dwelling. Monica & Trevor have leased the two bedrooms to Travis & Caroline. Travis is a handicapped Iraqi war veteran and Caroline has just moved in following a successful 6 months in transitional housing.



BASE RE:Starter HOME

**SERVICE/PRIVATE core**

Consistent on every Site  
500 Gross Square Feet  
ADA Accessible  
(2) Bedrooms  
(1) Full Bathroom  
Utilities Embedded  
Furniture + Storage Embedded

**COMMON space**

Flexible to Site Conditions  
250-700 Gross Square Feet  
ADA Accessible  
Flexible Space Arrangement (Living, Dining, Work)  
Cladding to match Existing House  
Roof Pitch to match Existing House

**Program Organization**

The SERVICE/PRIVATE core is consistent in all RE:Starter HOMES; it contains the kitchen, bathroom, and bedroom programs all consolidated into one mass.

The COMMON space attaches to the SERVICE/PRIVATE core and is customizable to the needs of the inhabitant; as well as adaptable to varying site conditions.

MATERIALS & CONSTRUCTION

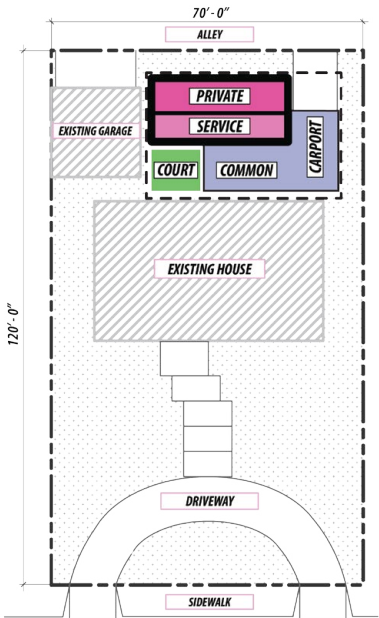
- 01

  - Minor excavation and concrete foundation footings poured on site.
  - 4x4 posts span concrete footings
  - Typical floor construction
- 02

  - Structurally Insulated Wall and Ceiling Panels (SIP) pre-cut, off-site, by manufacturer
  - SIP panels shipped to site and assembled on top of floor assembly
  - Typically assembled in less than 2 weeks.
- 03

  - Windows and doors installed in pre-cut rough openings.
  - Cladding of SERVICE volume with standing seam metal panel, typical.
  - Cladding of COMMON volume with material to match Existing Home
- 04

  - Landscape buffer between Re:Starter Unit and Existing House
  - Gravel path for entry and tenant driveway
  - Sustainable ground cover and drought-tolerant grasses planted

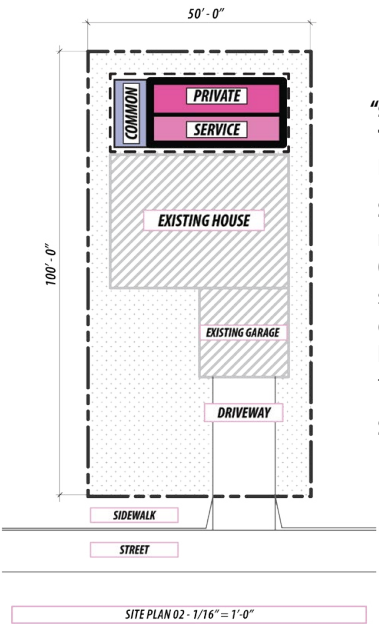


SITE 01 (Proposed)

“starter home” Type: Rustic Ranch  
Typical Year Built: 1940’s  
Roof Type: Mansard

**Site Adaptability:** The COMMON space shifts to create a shared courtyard between tenant and homeowner. Mansard roof of COMMON space also wraps around SERVICE/PRIVATE core to create covered carport over tenant’s parking spot.

**Square Footage:** 750 SF

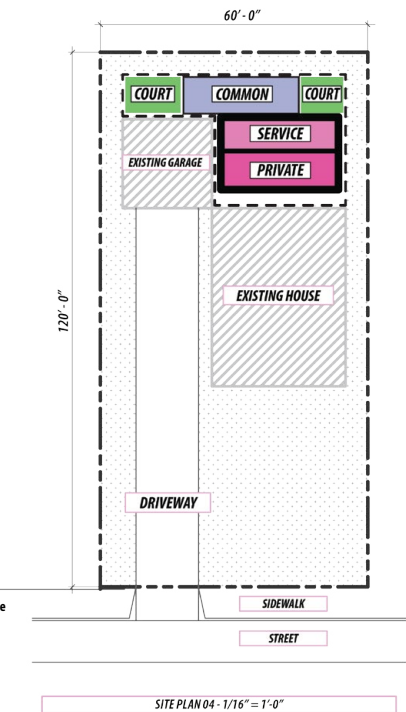


SITE 02

“starter home” Type: Ranch  
Typical Year Built: 1950’s  
Roof Type: Gable

**Site Adaptability:** Due to restrained site conditions, the COMMON space rotates to the short end of the SERVICE/PRIVATE core. Gable roof on COMMON space helps relate to attached garage at the front of the Existing House.

**Square Footage:** 650 SF

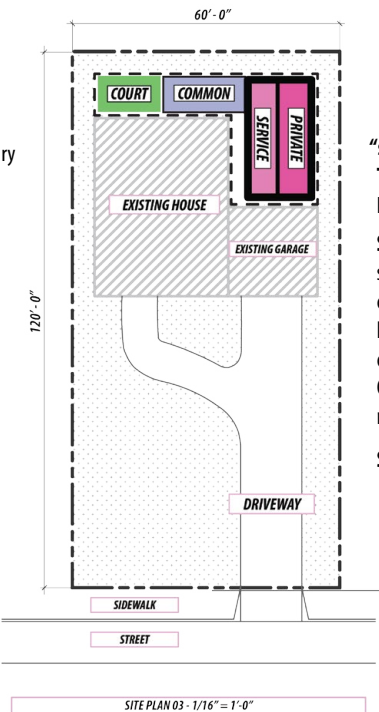


SITE 03

“starter home” Type: Contemporary  
Typical Year Built: 1950’s  
Roof Type: Gable

**Site Adaptability:** Orientation of RE:Starter HOME allows for shared courtyard between tenant and homeowner. Flat roof on COMMON space relates to low sloped roof of Existing House and Garage.

**Square Footage:** 800 SF

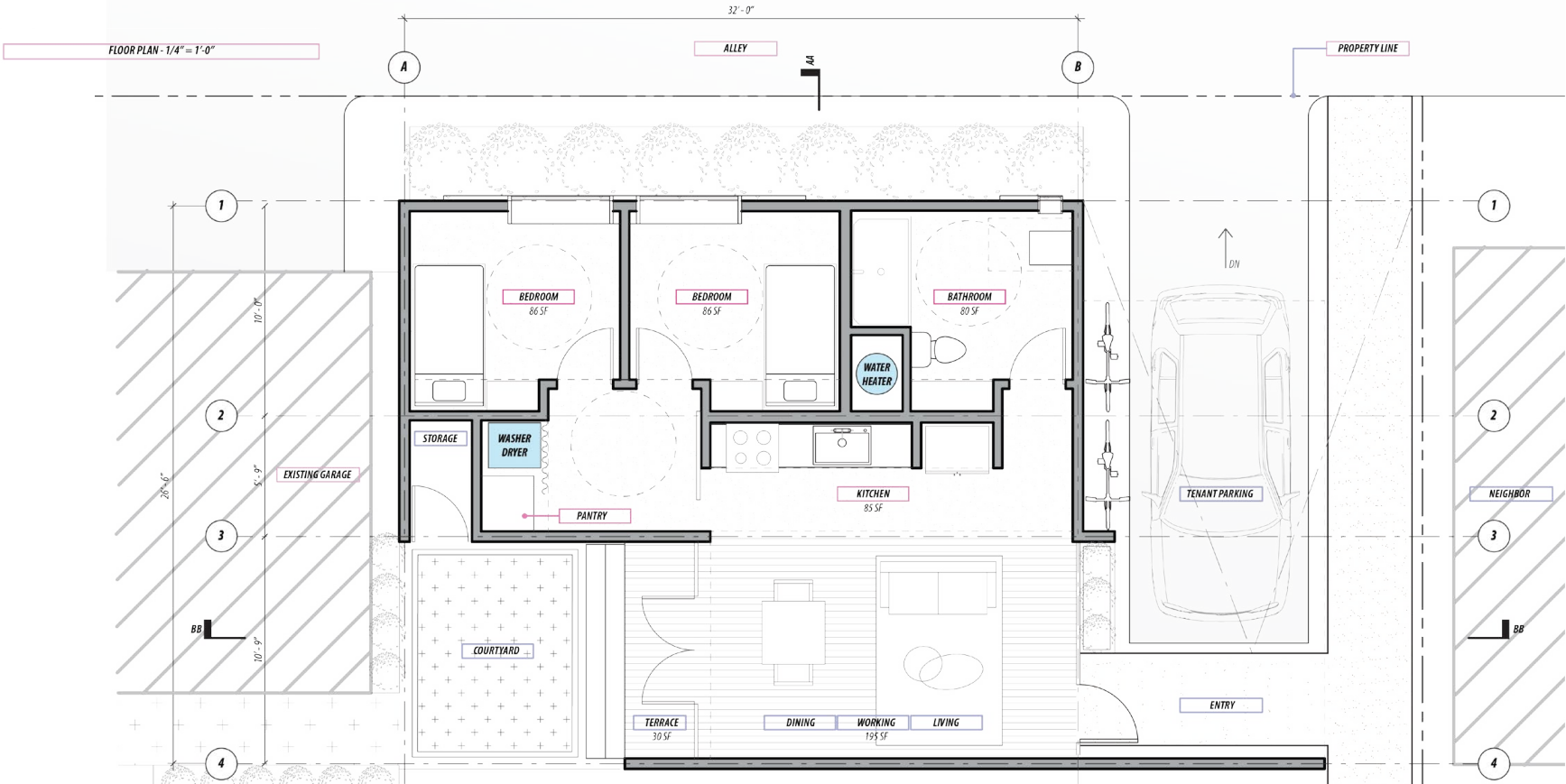


SITE 04

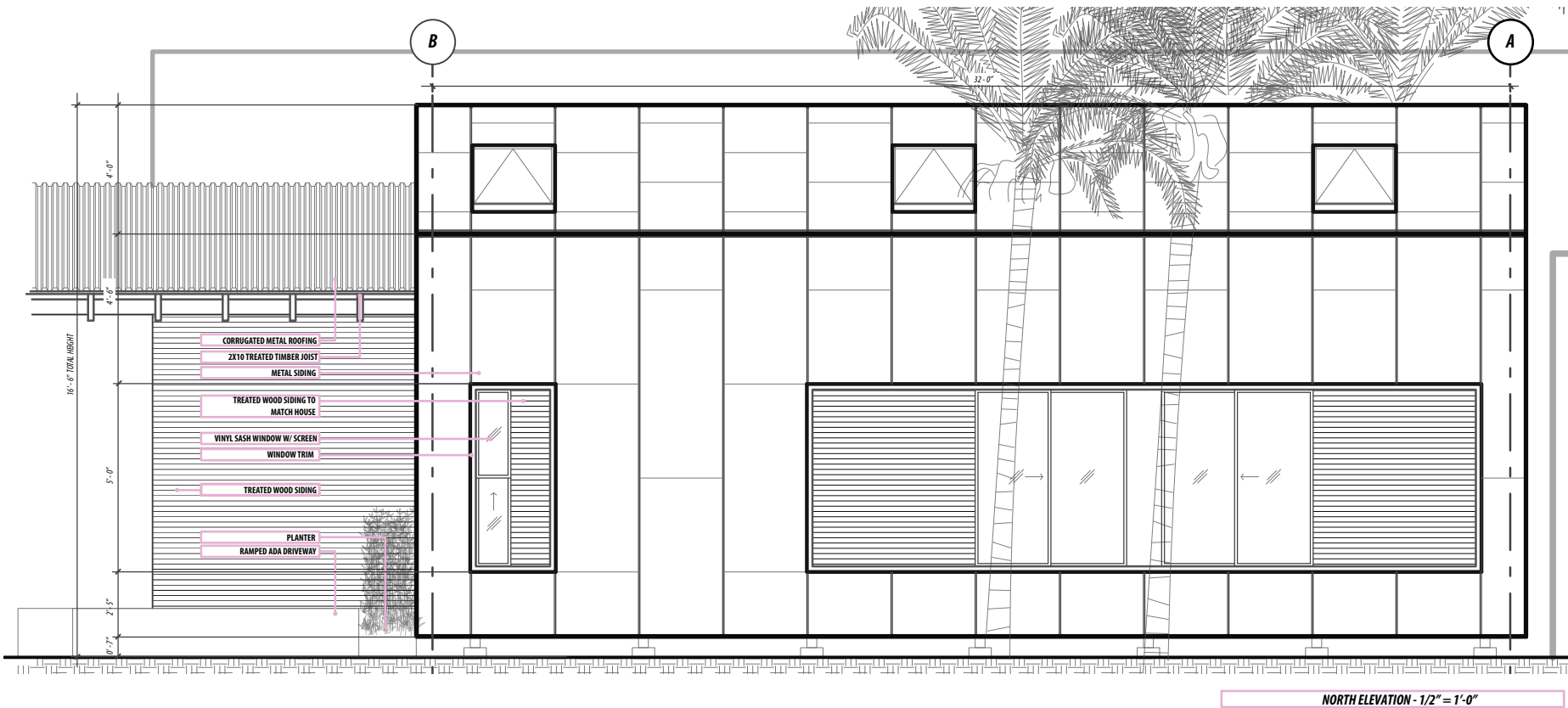
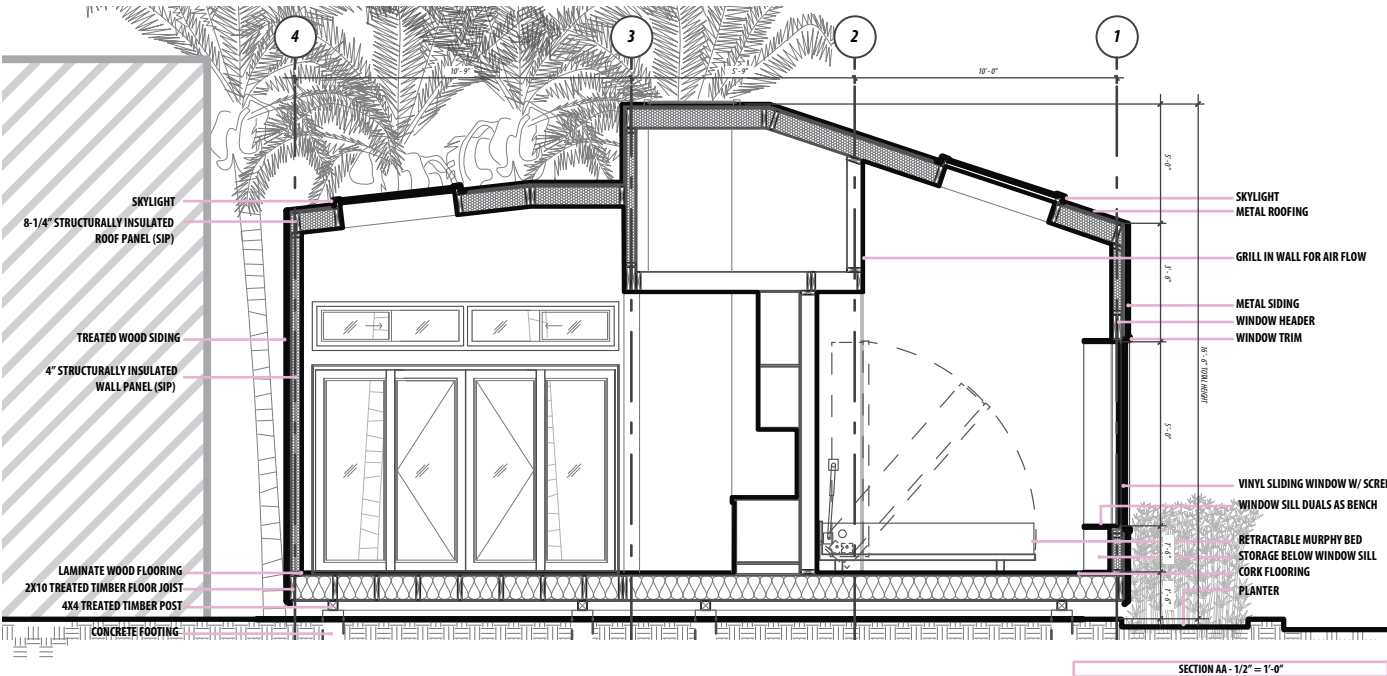
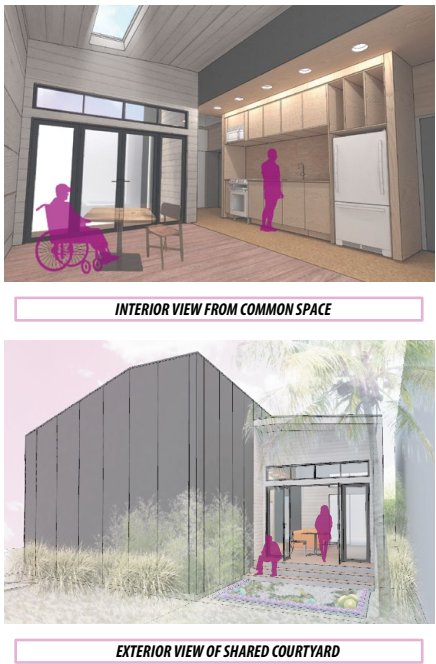
“starter home” Type: G.I. House  
Typical Year Built: 1940’s  
Roof Type: Gable

**Site Adaptability:** COMMON space shifts to allow for a shared courtyard between tenant and homeowner plus a private courtyard for tenant. Pitch of COMMON space relates to Gable roof of typical G.I. House.

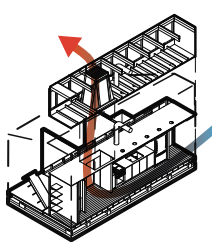
**Square Footage:** 900 SF



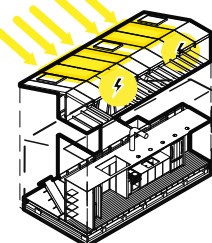




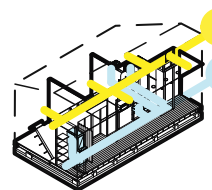
PERFORMANCE & SUSTAINABILITY



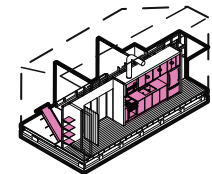
- 01
- Fresh air enters the Re:Starter HOME through operable windows in bedrooms, bathroom, and COMMON space.
  - Vents in skylight of SERVICE/PRIVATE core allow warm air to escape and passively cool the HOME through the stack effect.



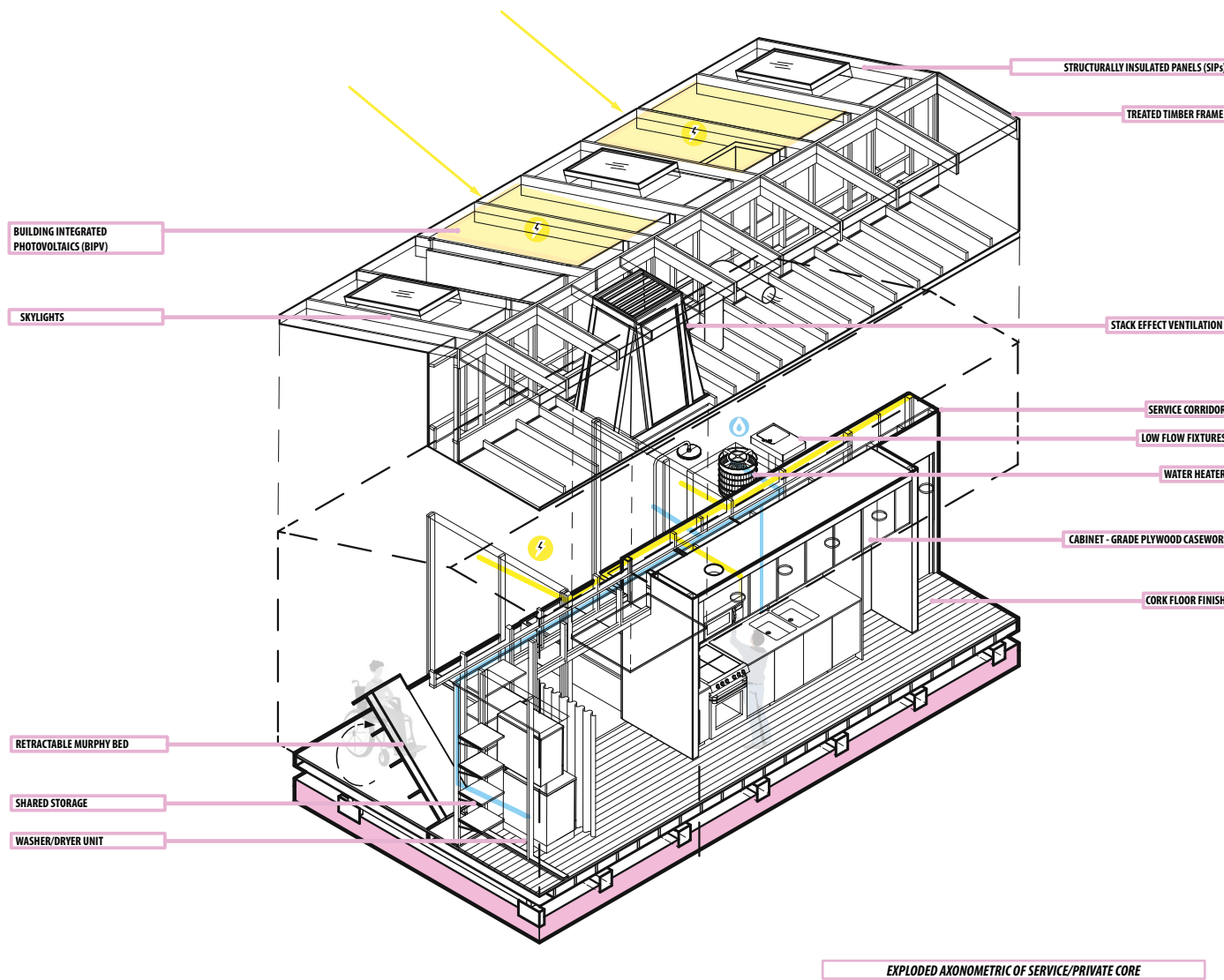
- 02
- Roof assembly relies on building integrated photovoltaics (BIPV) to supply energy to the Re:Starter HOME.
  - Thin films of PV become an essential building component and eliminate the need for heavy structure supporting traditional solar panels



- 03
- All utilities supplying the RE:Starter HOME are efficiently embedded in the SERVICE/PRIVATE core.
  - One main plumbing wall runs through the middle of the Re:Starter HOME and supplies all low-flow fixtures with minimal piping.



- 04
- Essential furniture, storage, and casework is embedded in the SERVICE/PRIVATE core of the RE:Starter HOME eliminating the need to buy furniture.
  - Included: beds, storage, kitchen casework & utilities, pantry, washer/dryer,





+ONE ADU LIVING FOR THE MODERN FAMILY

As the cost of housing skyrockets throughout Los Angeles forcing multiple generations to live under the same roof, there is an extreme need for more living space on the typical lot. These multi-generational or multi-family housing scenarios happen for many reasons: prohibitive senior/child care costs, unemployed family members, or simply young adults saving for a future home.

+ONE caters to the modern “plus one household” living situations, targeting simple construction techniques with a site layout to emphasize both communal and private gathering space. The single slope roof, open plan layout, and standard construction highlight the concept that ADUs can belong anywhere, built by anyone. The exterior focuses on cost-effective, readily available materials: corrugated metal roof, large fiber cement sheets, standard wood lumber, and concrete block for the exterior fireplace. The goal was to create a design that is tasteful, yet constructible by the common person for any +ONE household.



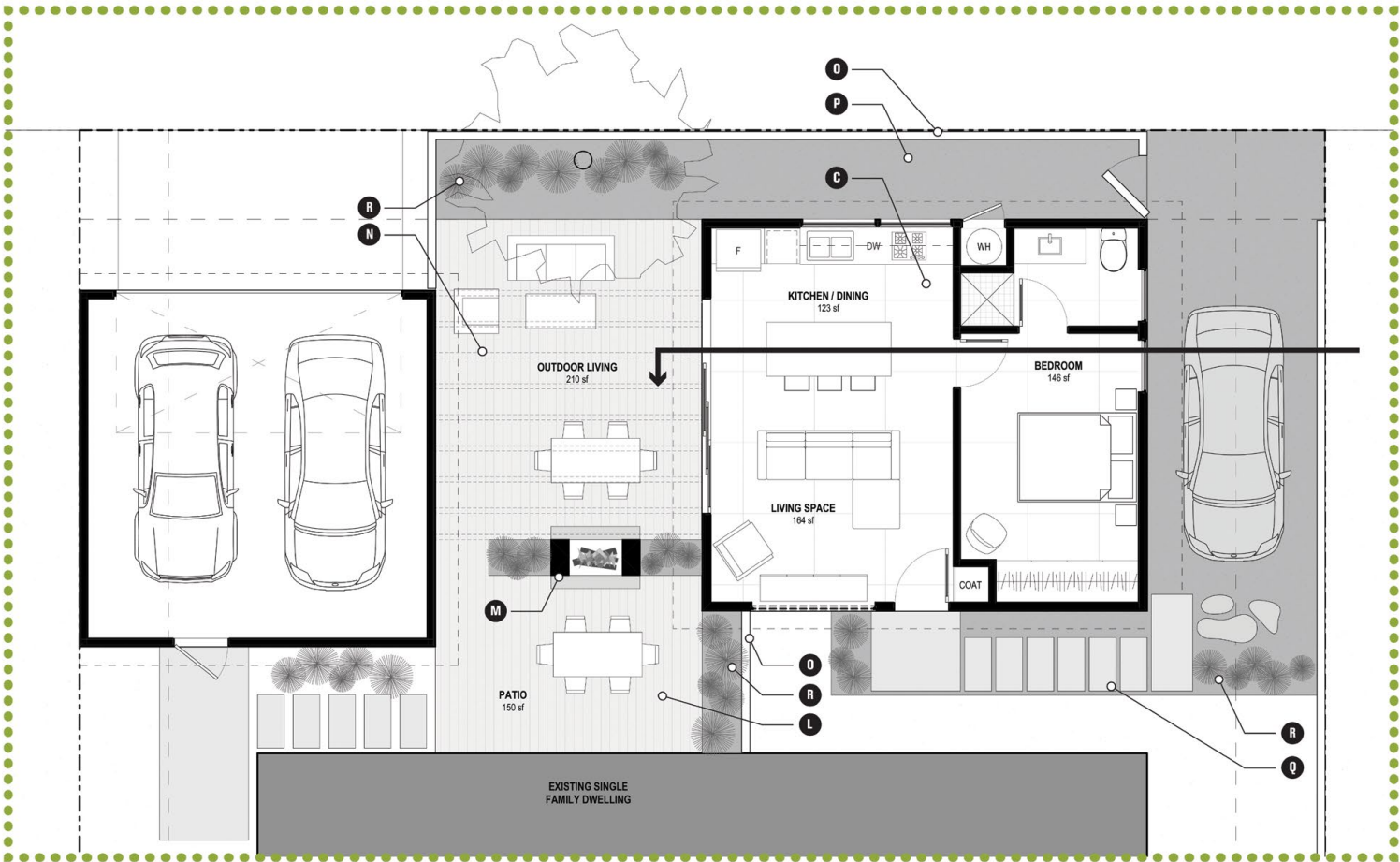
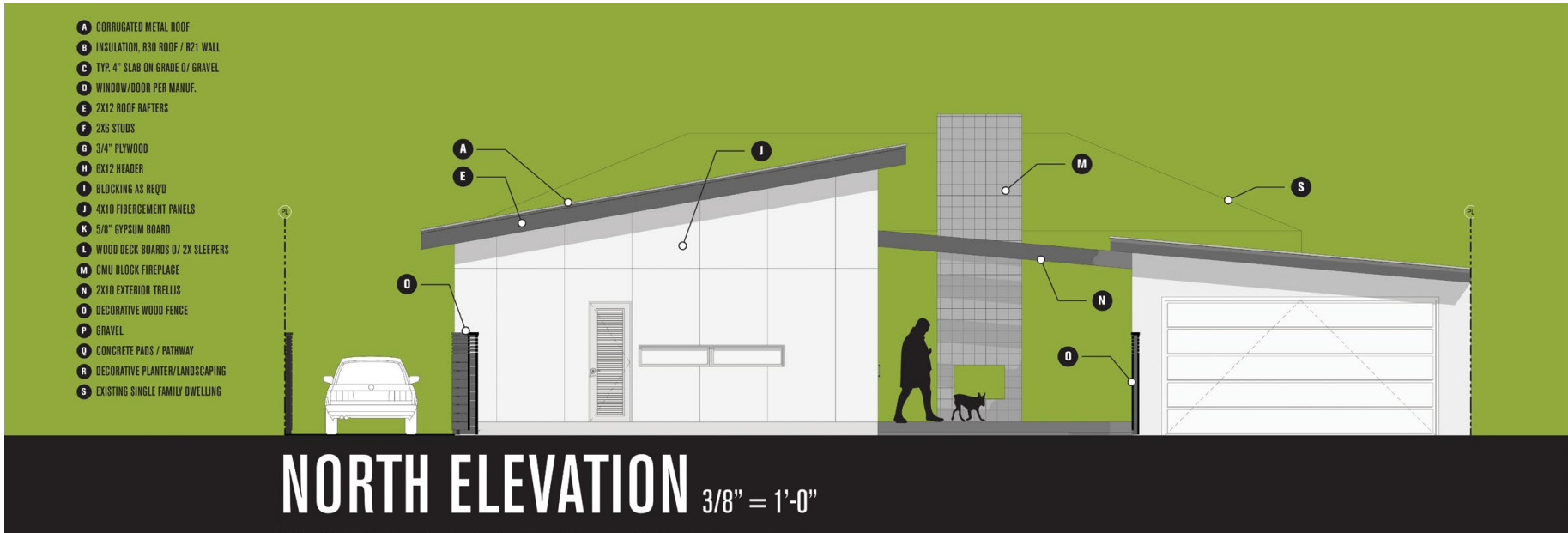
COURTYARD

Communal exterior spaces create a connected complex

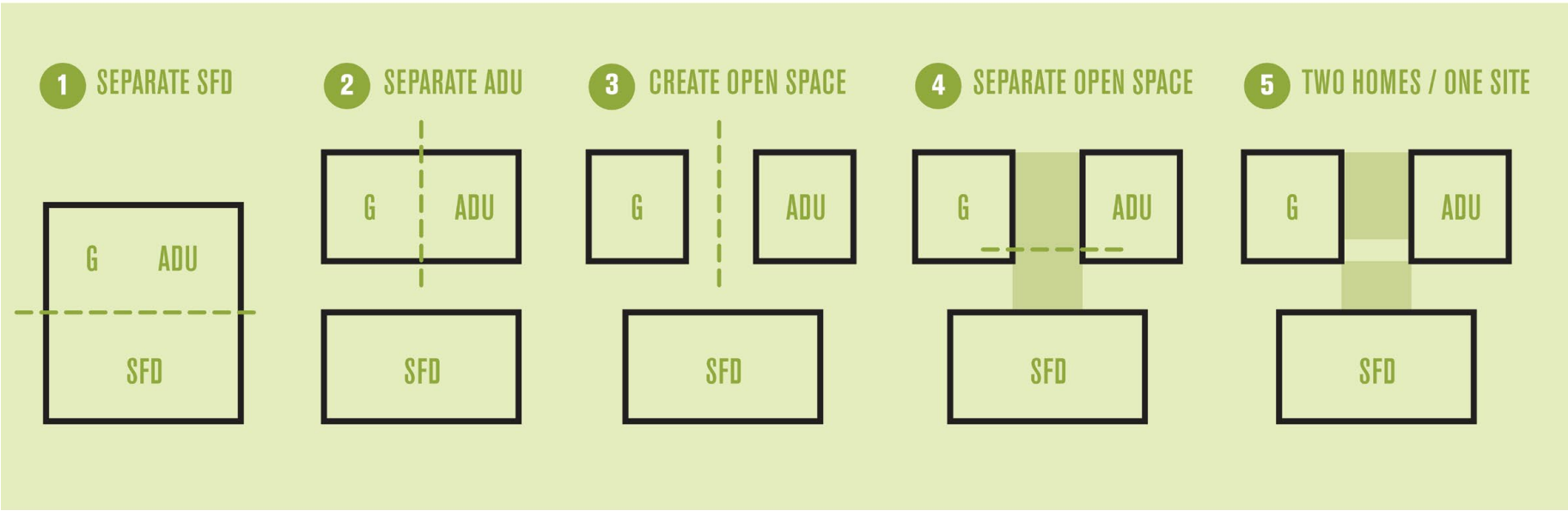
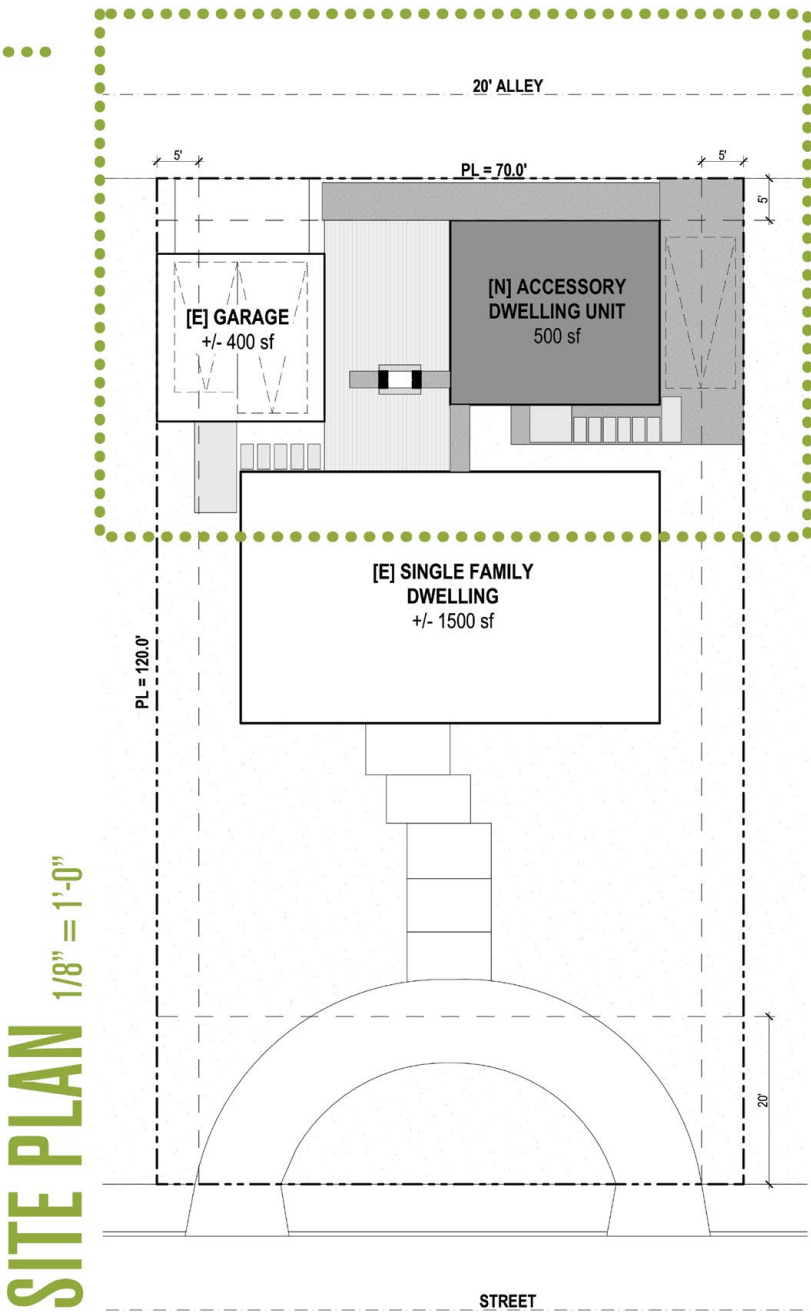


INTERIOR

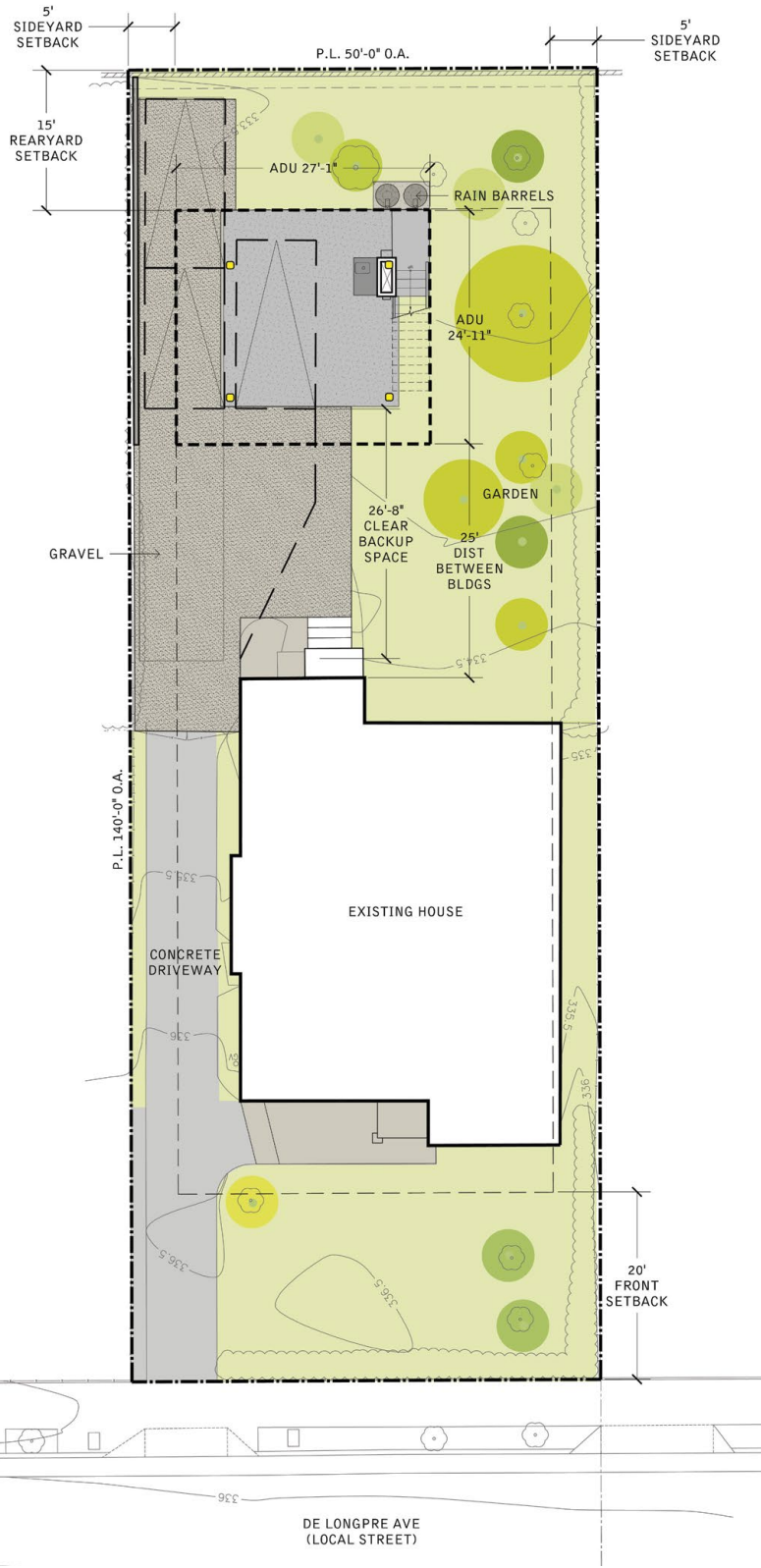
Spacious interiors open up to semi-private courtyard











The front home is typical of the neighborhood, a 1922 two-bedroom, one-bath bungalow type. The proposed ADU is scale-appropriate and by being elevated, it takes advantage of its large garden and views towards the Hollywood center.

## GAMBOGE HOUSE

### An Elevated ADU

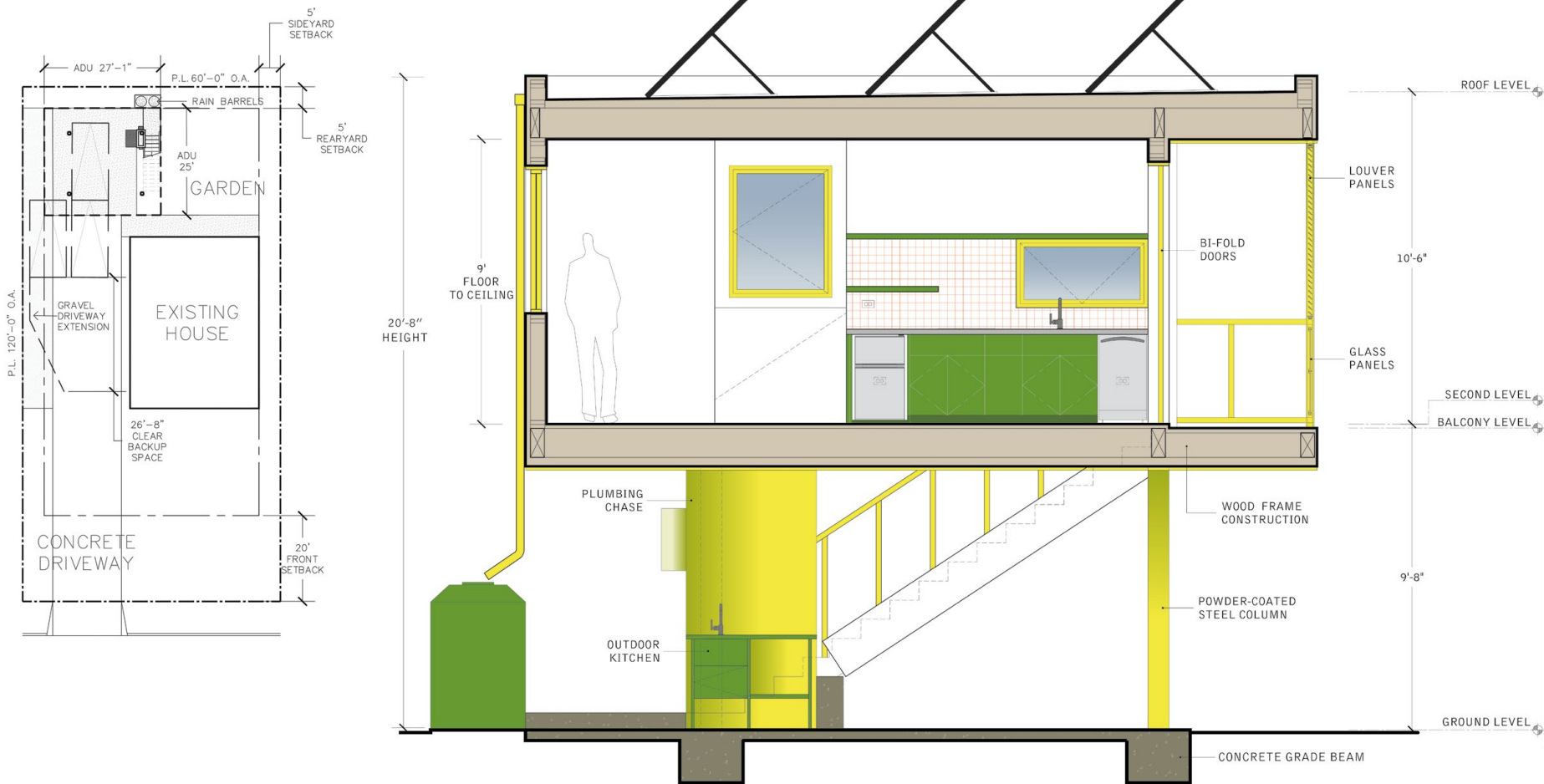
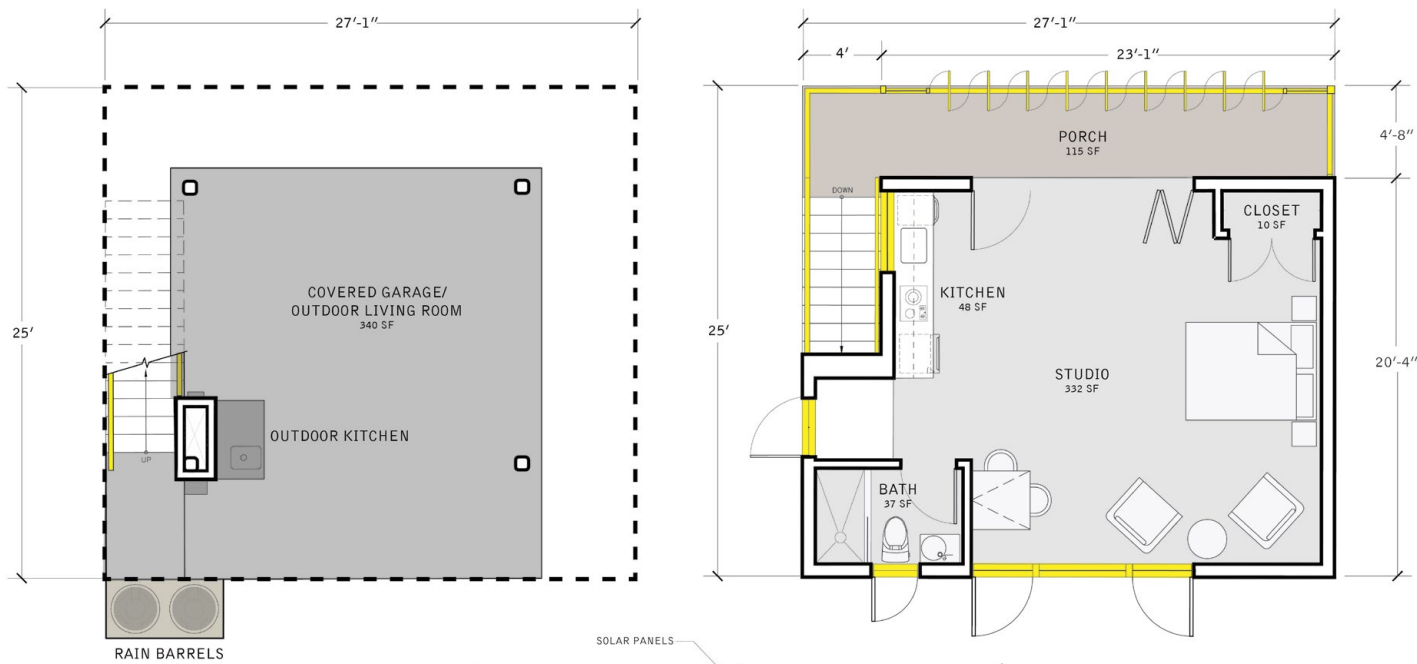
The Gamboe House is an all new, ground-up, detached and elevated studio apartment behind an existing single-family residence in Hollywood, California. It is proposed as one model for how accessory dwelling units (ADUs) might be added to single-family residential lots throughout the Southern California region. Elevating the unit enables the project to provide covered off-street parking, while preserving the type's often large rear gardens. Ground floor parking area will be covered with an inexpensive stabilized gravel allowing for storm water to percolate into the ground (meeting Low-Impact Development best practices), and doubling, when not parked, as a covered outdoor living room. In this instance the existing, now shared, garden includes several large fruit trees including a persimmon, of which the owners are very fond.

The gamboge fruit of southeast Asia, a nod to one of the owners' family origin, inspires a strong yellow and green color palette that accents the prefab painted aluminum storefront glazing, the vivid ceramic tile exterior and the prefab painted steel guardrails. Bi-fold doors provide an easy indoor/outdoor transition to the porch, featuring additional privacy by opening and closing rotating louver panels. Ribbed glass and mesh panels fill in the guardrail assembly for a breezy feel. Exposed structural steel with concealed grade beams provide lateral rigidity. Wood stud framing and rough catface stucco underscore the strong forms of the exterior. Graphic porcelain tile floors in several sizes and vibrant green kitchenette casework with exposed shelving finish out an interior space that is both relaxed and whimsical.





TOTAL SQUARE FOOTAGE	
<u>Exterior</u>	
Covered Garage/	340 SF
Outdoor Living Room	115 SF
Porch	
<u>Interior</u>	
Studio	332 SF
Bath	37 SF
Kitchenette	48 SF
Closet	10 SF
<hr/>	
TOTAL	882 SF



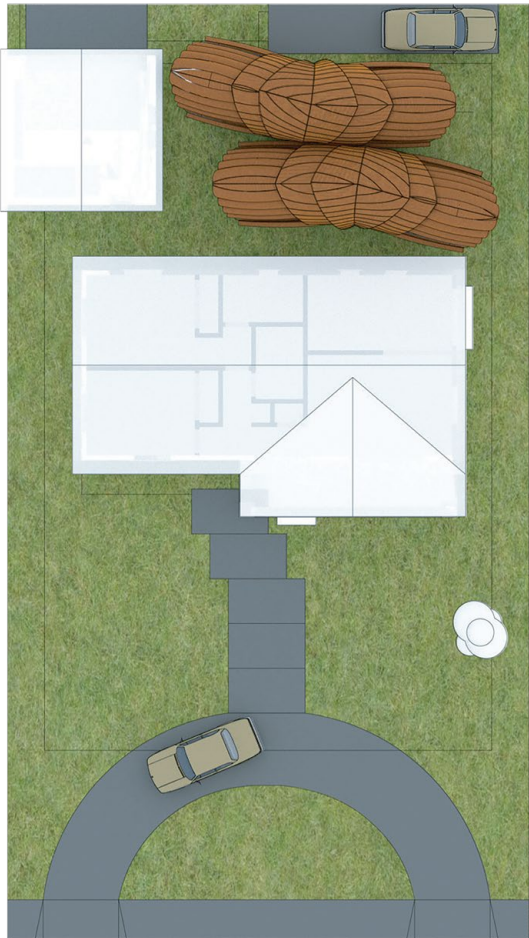
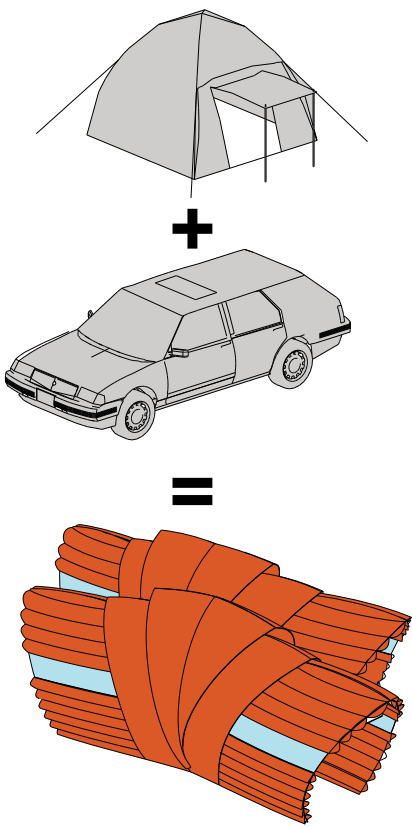


# ENCARPMENT

Los Angeles has seen an increase of homeless encampments over the past several years. Rise in housing costs has forced many lower income individuals in the city to seek shelter within tents and vehicles. These makeshift encampments fill the void spaces of the city. Freeway overpasses and open parking lots have now become the new neighborhoods where homeless individuals reside.

In response to the proposal to use Accessory Dwelling Units as a means to mitigate the rise in homelessness, ENCARPMENT pulls influence from these two typical dwelling types associated with the homeless community. By providing a temporary and modulated structure, users can customize each unit's location, allowing the dwelling to conform to multiple sites and conditions. This flexibility in placement mirrors the conditions this community is familiar with, allowing each user a sense of ownership. These more substantial structures provide the user stability by improving living conditions and providing basic amenities.

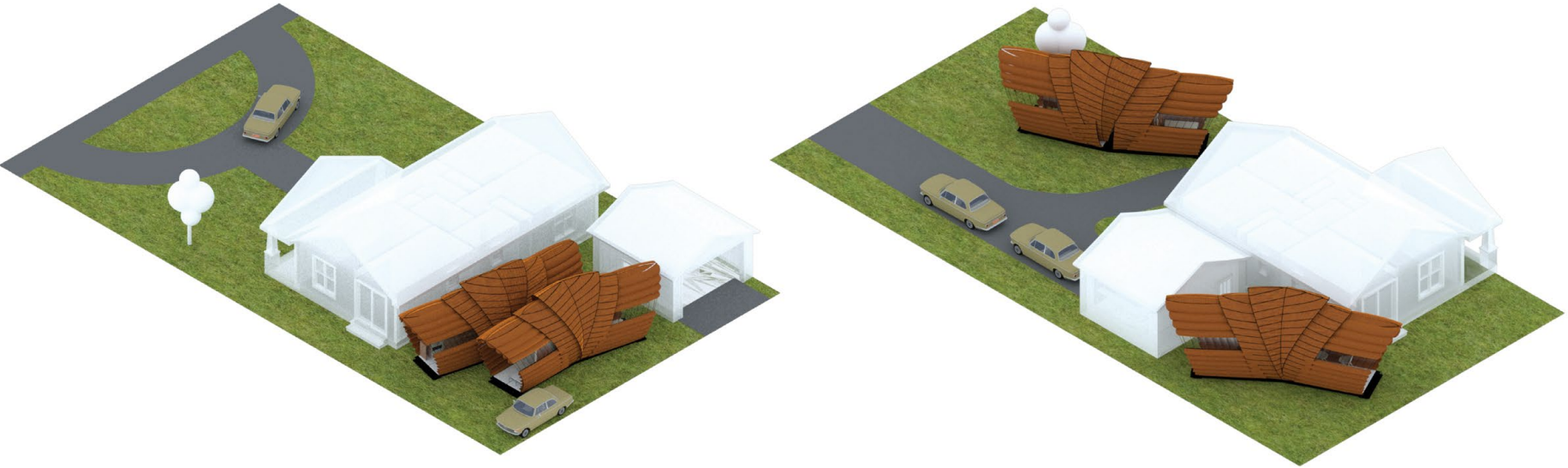
ENCARPMENT uses common materials associated with temporary facilities. Weatherproof canvas, filled with thick insulation makes up most of the dwelling's skin. For the entry and window elements, thick translucent vinyl is used, allowing for maximum openings at both ends of the unit. Formed steel tubes allow the canvas to vault similar to that of a camping tent. The modulated base, set on the proportions of a single individual, is an elevated steel platform allowing utilities to run underneath.



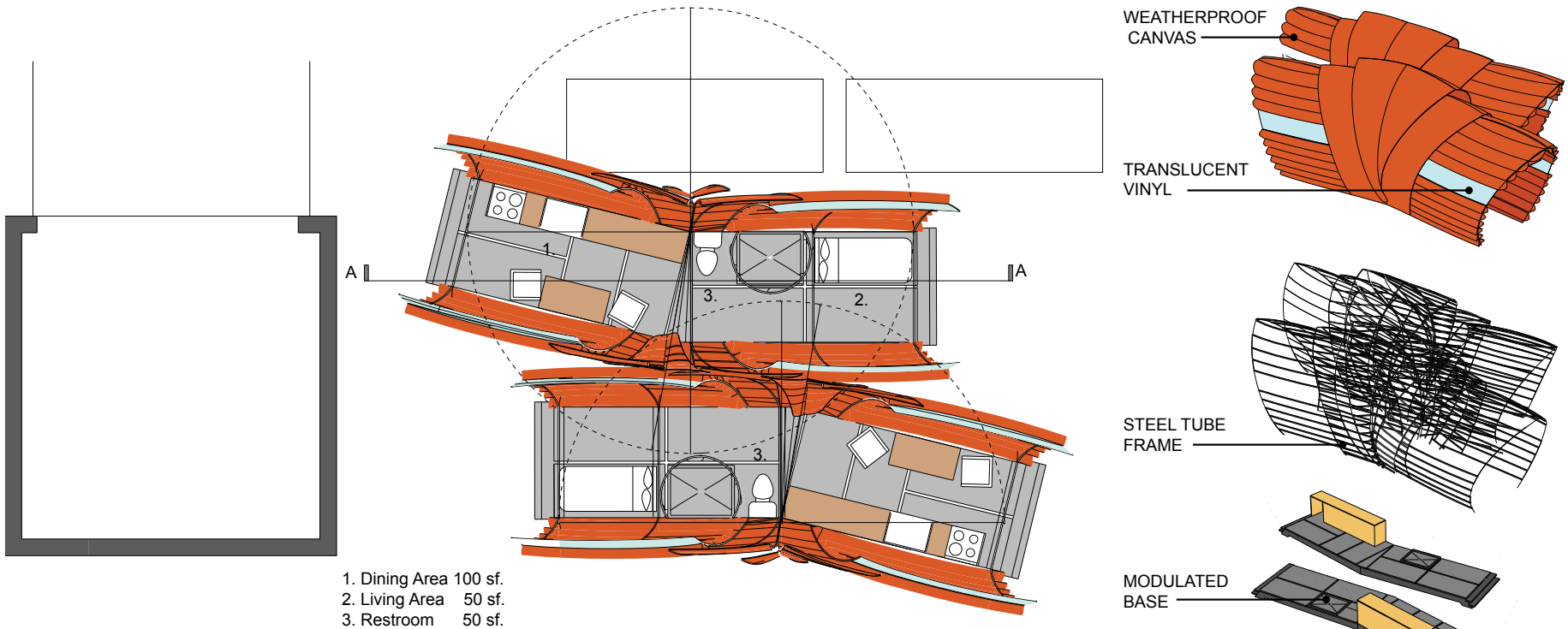
SITE PLAN  
1/16" = 1'-0"

## MODULAR ADAPTABILITY

The modularity of the living pods allows the structure to conform to the different sites throughout Los Angeles, allowing for multiple occupants.



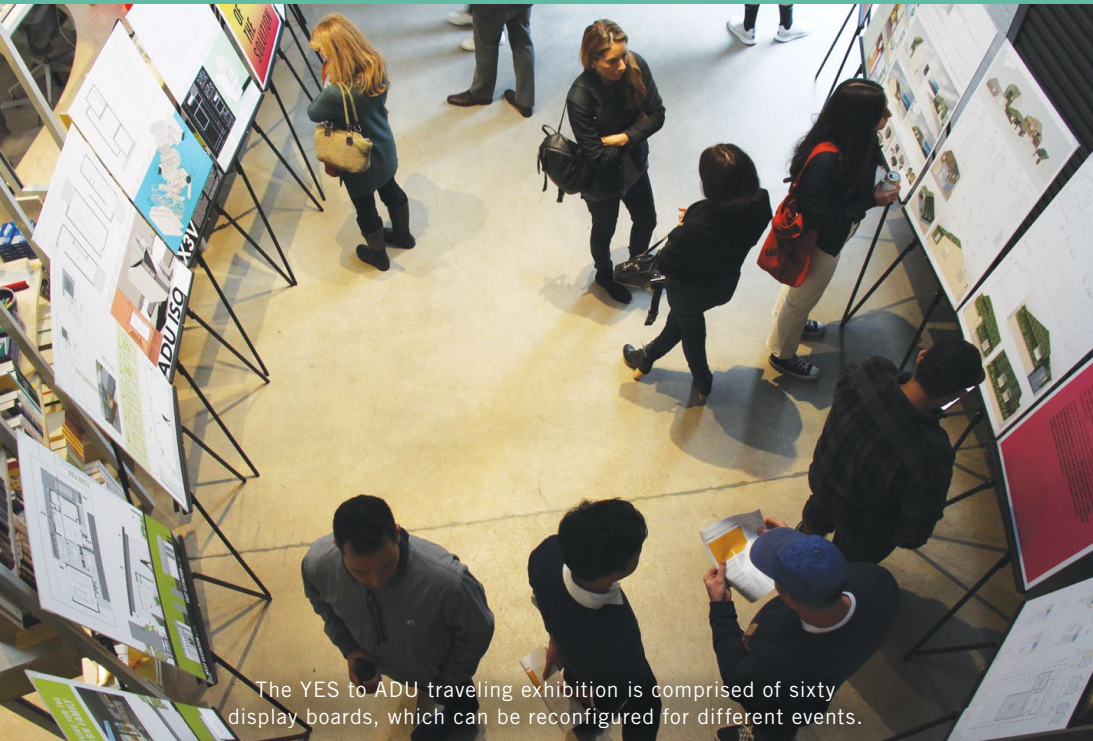
THE INTERIOR SPACE OF THE POD IS SET UP IN TWO SECTIONS: FIRST SECTION IS THE LIVING SPACE, THE SECOND IS THE SLEEPING SPACE. BOTH SETIONS ARE ACCESSIBLE TO THE EXTERIOR LANDSCAPE.



FLOOR PLAN  
1/4" = 1'-0"



PHASE 2: EVENTS AND EXHIBITION



The YES to ADU traveling exhibition is comprised of sixty display boards, which can be reconfigured for different events.

YES to ADU:  
Panel Discussion  
and Exhibition

INNOVATIVE SOLUTIONS TO BUILDING AN ADU FACILITATED  
BY THE LA FORUM FOR ARCHITECTURE AND URBAN DESIGN  
INSTITUTE FOR CONTEMPORARY ART, LOS ANGELES

A diverse panel of specialists in the field of architecture, urban planning, and construction discussed Accessory Dwelling Units and their role in increasing affordable housing in Los Angeles County. In collaboration with the Arts Commission, the Los Angeles Forum for Architecture and Urban Design, an independent organization which instigates dialogues on design and the built environment, facilitated topics including: emerging themes in ADU design that address the provision of affordable high-quality living environments; innovative approaches and opportunities in engineering ADUs; and early design considerations to optimize efficiency and economy of construction.

FACILITATORS:

Iris Anna Regn,  
LA County Arts Commission

Aaron Vaden Youmans,  
LA Forum for Architecture and  
Urban Design

PANELISTS:

Elizabeth Timme,  
Cofounder, LA-Mas,  
ADU Consultant for Community  
Development Commission

Roger Sherman,  
Design Director, Gensler Los Angeles

John Sanabria,  
Deputy Director, Los Angeles County  
Department of Regional Planning

Liz Mahlow,  
Principal, NOUS Engineering

Derek Leavitt,  
Cofounder, Modative Design Build

ADUs in Unincorporated  
Los Angeles County

An ADU is a dwelling unit with a kitchen and bathroom, which is an accessory use to a single family residence. The ADU can be rented, but cannot be sold separately from the primary single family residence.

How to apply for an ADU building permit?

An Accessory Dwelling Unit shall be permitted with a site plan review if:

- The zoning of the property is R-A, R-1, R-2, R-3, R-4, A-1 or A-2 (or any other zone that allows single-family residences)
- One single family residence (legal) exists on site
- The ADU complies with the development standards of the provided summary.
- In addition to submitting a site plan application to the Department of Regional Planning, you will need to submit the following additional documentation:
- Copies of Building Description Blank/Slip from LA County Assessor's office
- Copies of building permits from LA County Building & Safety office

To learn more about ADU requirements in the unincorporated areas of Los Angeles County, please visit [www.planning.lacounty.gov/adu](http://www.planning.lacounty.gov/adu) or call (213) 974-6411.

To learn about specific ADU requirements in your city, please contact your local planning or building department.

### The New Greenfields

“We believe in ADUs because we believe in Los Angeles. That this region—its kinetic energy, its diversity, its entrepreneurial spirit—is its people. And to call this place home, those Angelenos, both old and new, first need homes.

How will Los Angeles County absorb the estimated increase of 1,750,000 residents by 2030? Denser development along corridors and near rail stations is essential but expensive, and the barrier to entry is high for builders.

With over a million single family zoned lots in the County, ADUs provide the potential for new housing units built in existing open spaces of homeowners’ backyards. Adding ADUs to these ‘greenfields’ is environmentally sustainable because it adds housing within the existing infrastructure of the County. And it is unique among housing typologies because its economic benefits accrue to everyday homeowners, a powerful tool for equity-building among homeowners of all income levels.”

*The New Greenfields* illustration and text taken from the design competition submission *Urban Living in the New California*, by Bunch Design, Colleen Corcoran, and Jason Neville.

By 2030, Los Angeles County will have an estimated increase of 1.75 million residents

Source: SCAG

## PHASE 2: EVENTS AND EXHIBITION



# Double Down Density

While ADUs offer **new ways for us to envision our backyards as spaces for new construction, they also provide an important reevaluation of Los Angeles’ urban fabric.** At over 4,000 square miles with more than 10 million inhabitants, Los Angeles County is the most populated county in the United States. While the population continues to grow, the amount of undeveloped land is limited. The cliché of LA as a sprawling nightmare is at odds with the reality that it is a dense—and increasingly denser—place.

With few blank sites for construction, we must pursue infill development in existing neighborhoods. **ADUs harness the excess capacity of LA’s backyards. There are some 500,000 lots in the city of Los Angeles that meet the requirements for ADU construction and some 1.4 million single family lots Countywide.** These figures tell us that we are primed to double down on density—we are ready to take on the stereotypes of endless sprawl. If ADUs are built within one-half mile of transit, such as a bus stop or rail line, they are exempt from requiring an extra parking place.

Several of the Part of the Solution: YES to ADU design competition entries give clues to how a denser city might evolve. One entry suggests that by placing secondary units in backyards along alleyways, a network of green walk streets could replace asphalt and trashcans in existing neighborhoods. Another submission illustrates a speculative condition in which living units are raised up one story, leaving the ground free for shared resources and amenities like pools, parks, and patios.

These projects embrace different scaled infrastructures as new ecologies. **Urbanism is seen as a holistic system, with ADUs part of that system.** It’s an ideal much needed in a place looking towards our resilient and sustainable future.





GOOD COMPANY UNIT (GCU)

Good Company Unit offers a friendly addition to the residential lot. We appreciate the personal and highly specific nature of one's property. Critical aspects, such as the function of the unit, the size of the lot, the sensibility of the owner, and the context of the neighborhood will always vary, and will always matter. The design of the GCU provides a catalogue of specific variations which give homeowners throughout the city ways to imagine new qualities and uses for their backyards. Fundamental to the GCU catalogue is a set of four guiding principles, all of which value specificity and familiarity over cool generality. Like a pet or a plant, the project believes that a little building could also be good company.

**Principle 1: Size matters.** Our design privileges a tight footprint and a compact volume. We use derivations on a common hip roof to bring down the overall size of the unit.

**Principle 2: Shape matters.** A simple fold in plan makes a small exterior pocket of space. We call this the "garden entry." Depending on the orientation of the unit, this micro zone may be a private patio or communal outdoor living space shared by the ADU and the main house.

**Principle 3: Height matters.** Increasing density on residential lots means more elements are jostling for space, light, air and privacy. Key windows are pushed up just past the typical six foot fence in order to catch views and breezes. The calibrated height of windows, along with deep roof eaves, produce a natural privacy from the surrounding context.

**Principle 4: Character matters.** GCU explores the use of custom printed corrugated metal, based on the wildly diverse landscape of Los Angeles. Each Good Company Unit is dipped in contextual imagery, giving it character and a quality of delight.

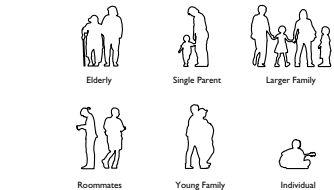


Fig. 1  
The GCU catalogue is designed to meet the needs of a diverse set of occupants. Two level units offer space for families of 3 or 4, as well as roommates. A medium size, single level unit provides accessibility for occupants that cannot comfortably negotiate stairs. Single level micro units have a minimal footprint, and offer a quiet studio for a single individual to live or work.

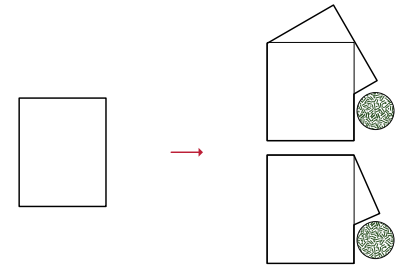


Fig. 2  
A simple fold in plan makes a small exterior pocket of space. We call this the "garden entry."



Fig. 3  
Key windows are pushed up to catch views and air along the property line. This move, along with the deep eaves, provides privacy from the surrounding context.

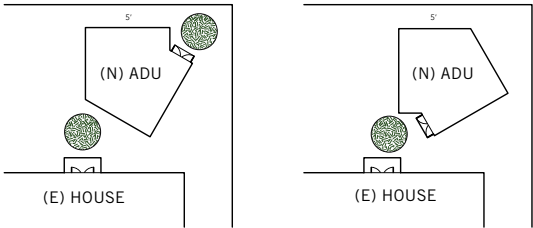


Fig. 4  
Depending on the orientation of the unit, this micro zone may be a private patio for the ADU or shared outdoor living space to be enjoyed by both the ADU and the main house.

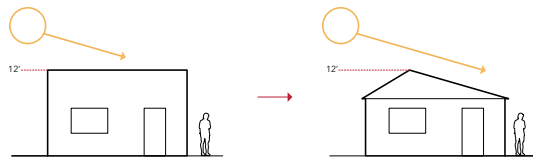


Fig. 5  
Derivations on a common hip roof help bring down the overall size of the unit. A less imposing volume means more light and air for your surroundings.

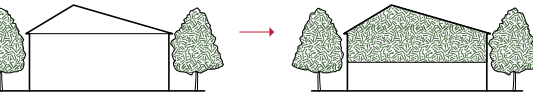
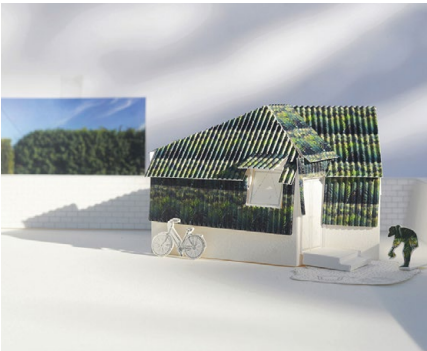
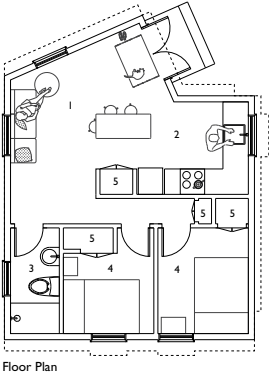


Fig. 6  
In the construction of an ADU there is disruption on the site. Trees and plantings are pulled up to make room for the new unit. With the use of printed corrugated roofing and siding, Good Company Unit is dipped in contextual imagery, giving it a character which both stands out and fits in.



Unit Type | A-1  
420 SF  
1 Level

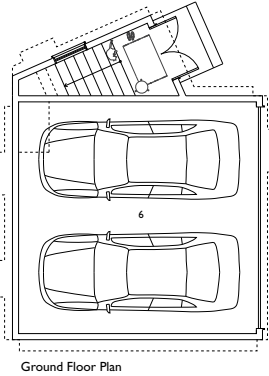


Floor Plan

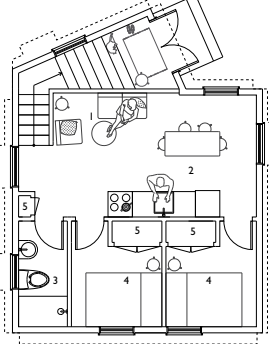
- 1 Living
- 2 Kitchen
- 3 Bathroom
- 4 Bedroom
- 5 Closet
- 6 Garage

Plans NTS

Unit Type | A-2  
840 SF (420 living, 400 garage)  
2 Levels

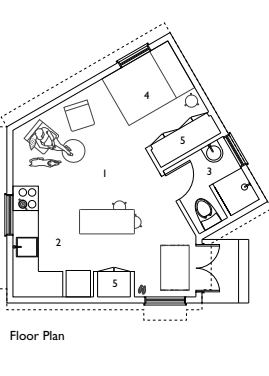


Ground Floor Plan  
note - alt. plan with garage entry on side



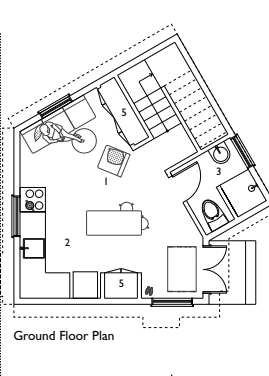
Second Floor Plan

Unit Type | B-1  
295 SF  
1 Level

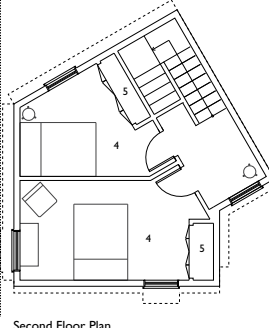


Floor Plan

Unit Type | B-2  
549 SF  
2 Levels

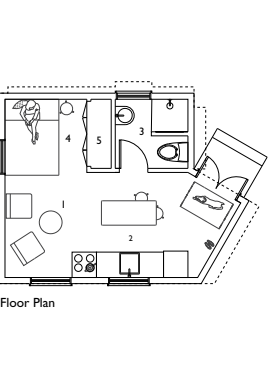


Ground Floor Plan



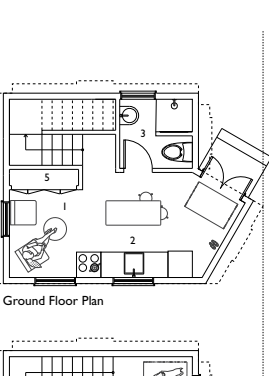
Second Floor Plan

Unit Type | C-1  
240 SF  
1 Level

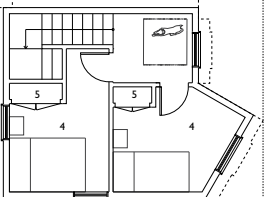


Floor Plan

Unit Type | C-2  
440 SF  
2 Levels

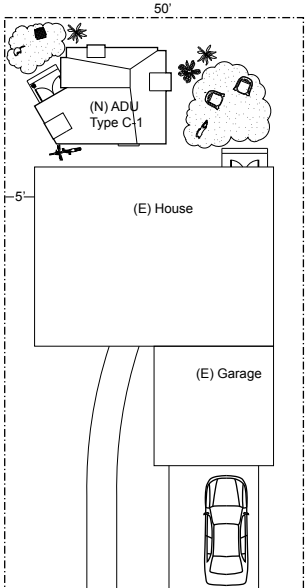


Ground Floor Plan

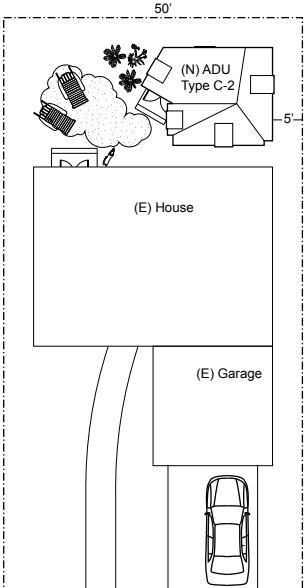


Second Floor Plan

For lots that have no space to spare, unit type A-2 offers a two bedroom dwelling above and two car garage below.



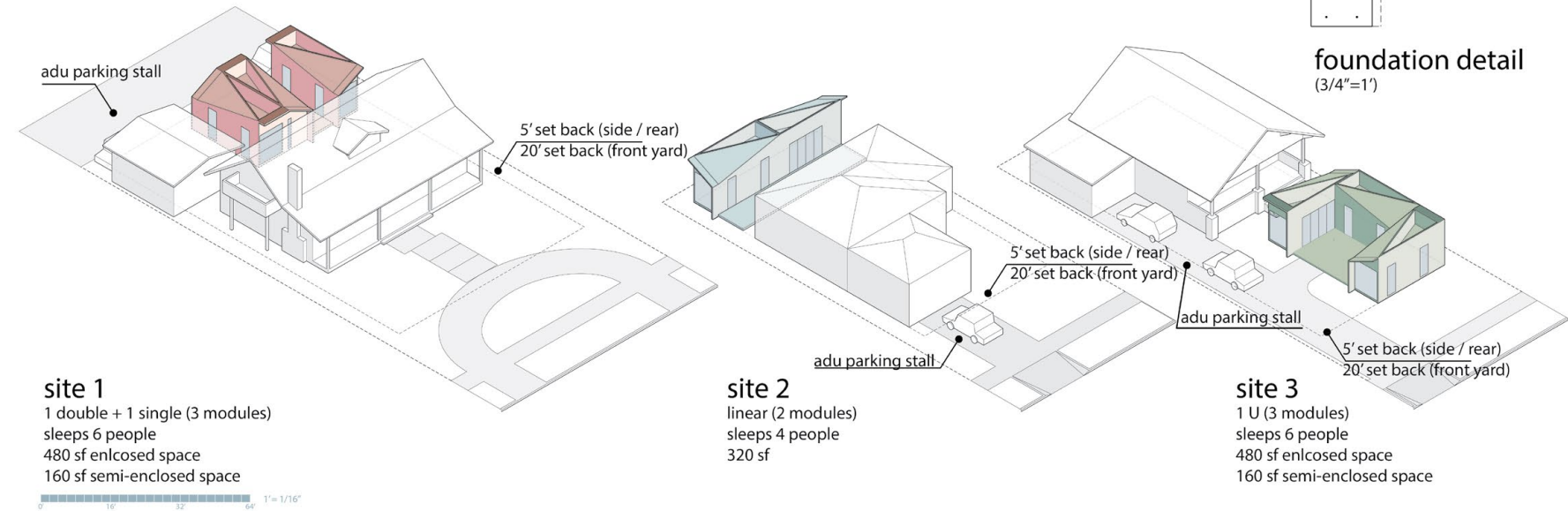
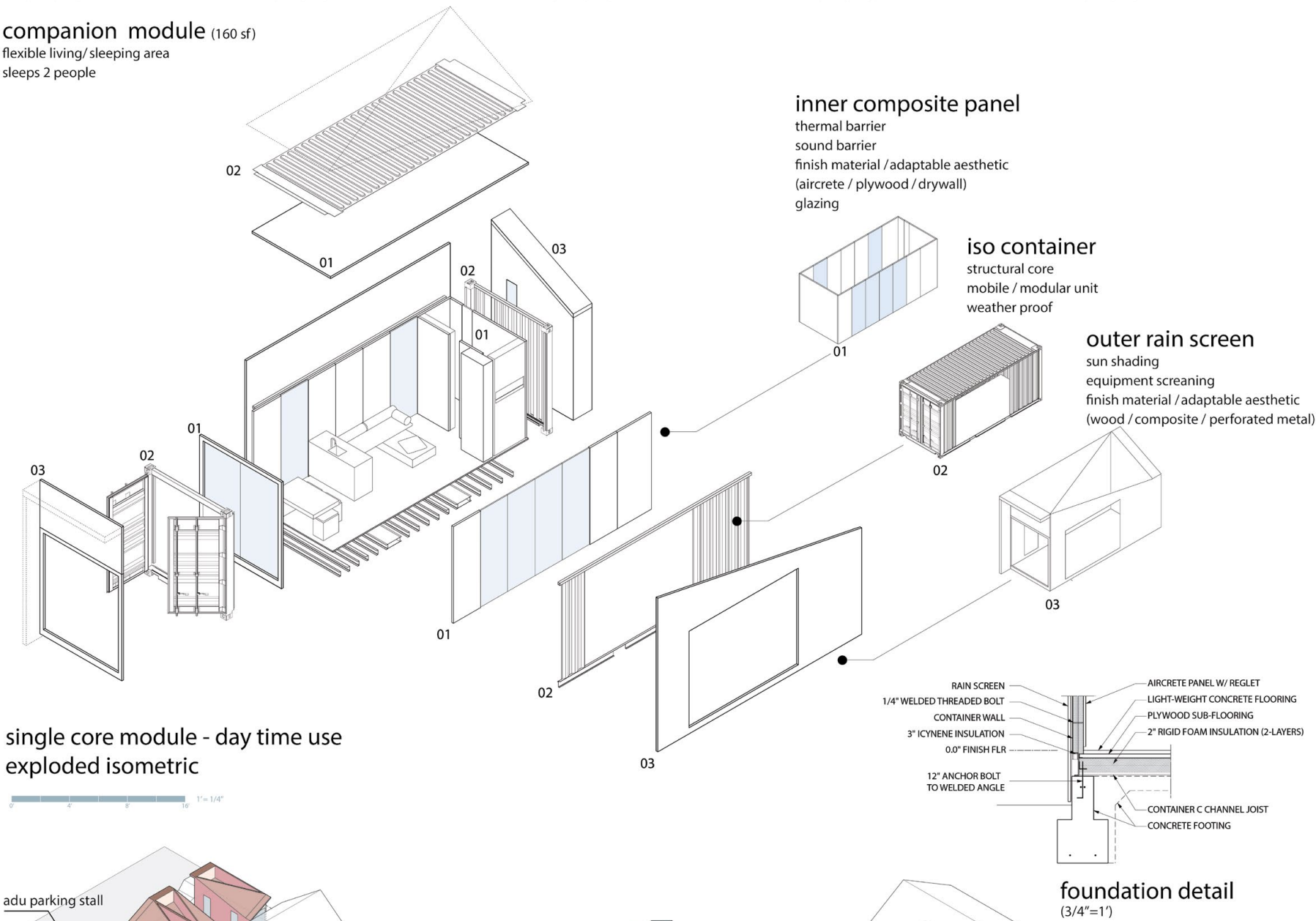
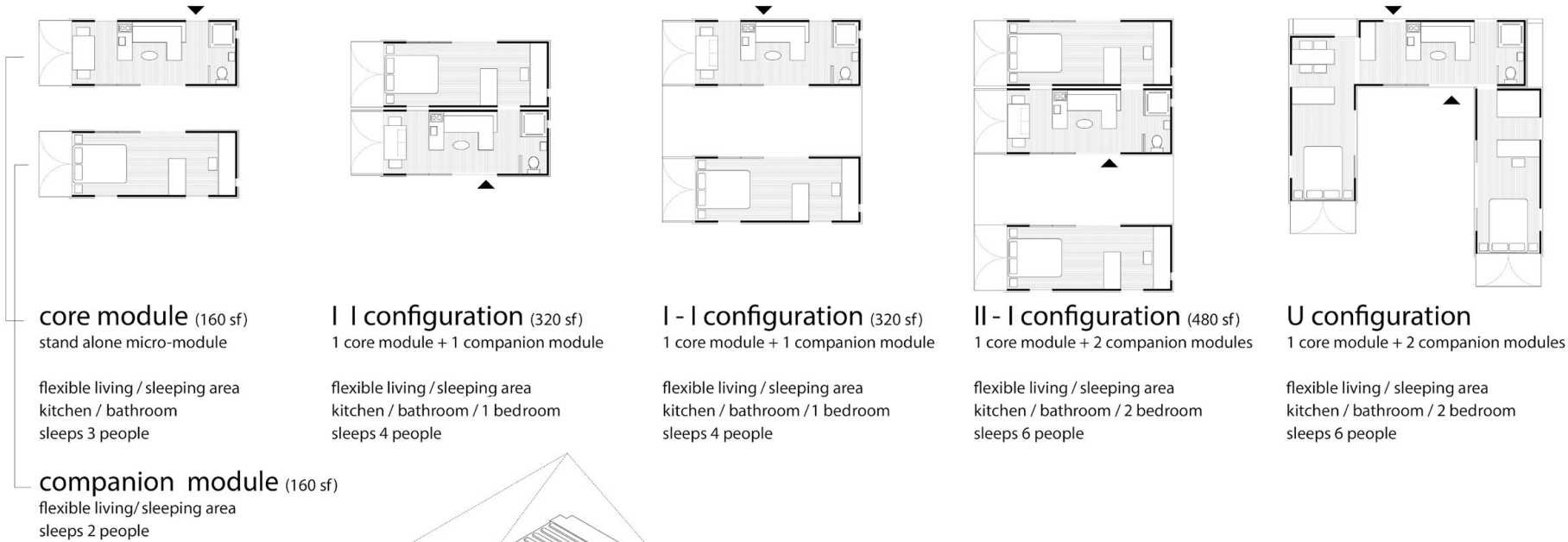
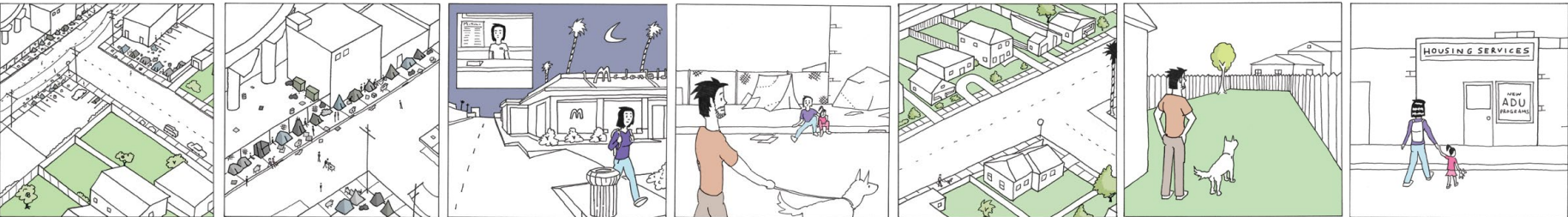
Typical Site Plan #2  
Unit Type B-1  
Private garden entry



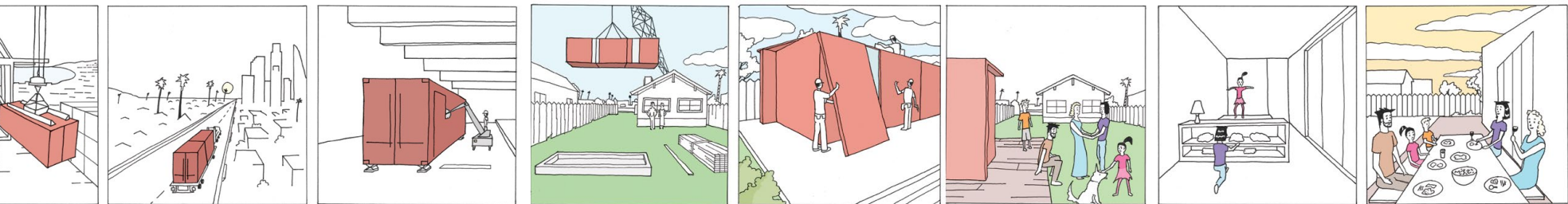
Typical Site Plan #2  
Unit Type B-2  
Communal garden entry

Fig. 9  
The catalogue of Good Company Units offers flexibility to homeowners looking for the right fit for their particular lot. Each unit privileges a tight footprint to optimize the use of the site and can be oriented to fit the privacy needs of the dwelling. Site plan alternatives are shown here at 1/320 scale.

LA CASA NOMADE

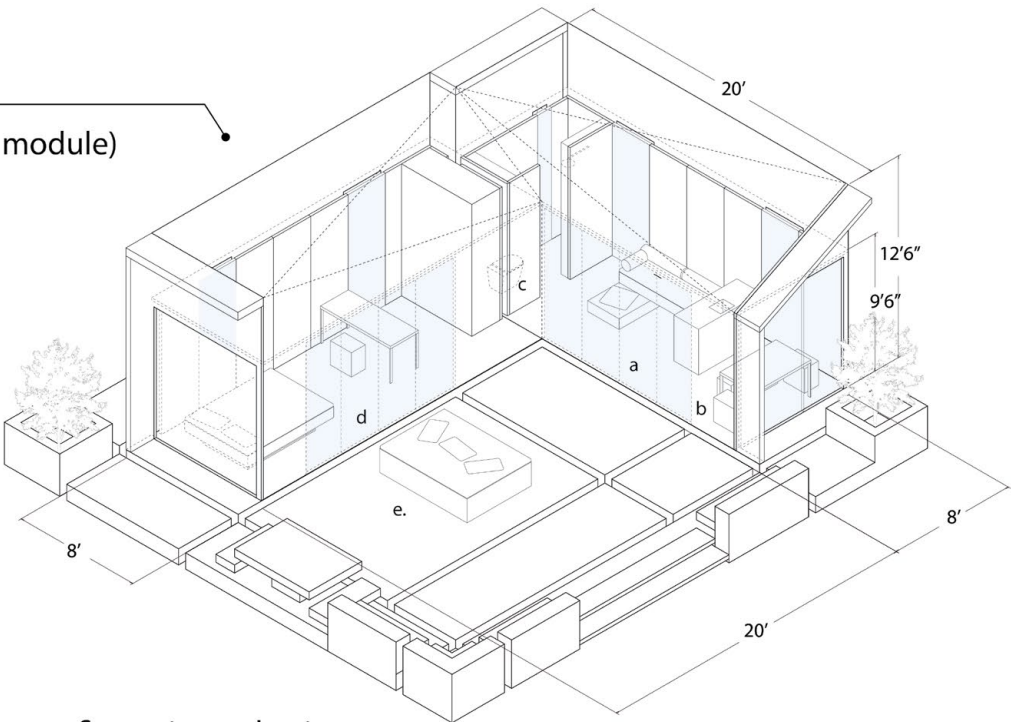






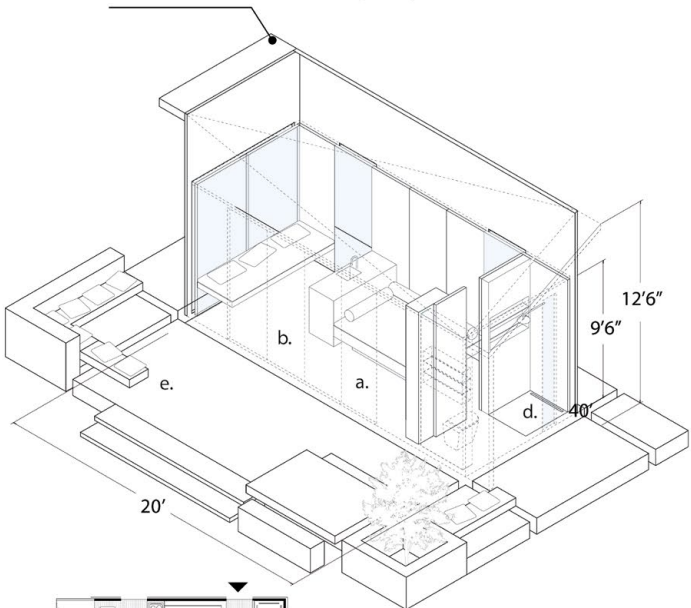
L - configuration - plan iso  
(core module +1 companion module)  
sleeps 4 people  
320 sf

- a. living area (70sf)
- b. dining area / kitchen (60 sf)
- c. bedroom (160 sf)
- d. bathroom (30sf)
- e. semi-enclosed outdoor area (320sf)



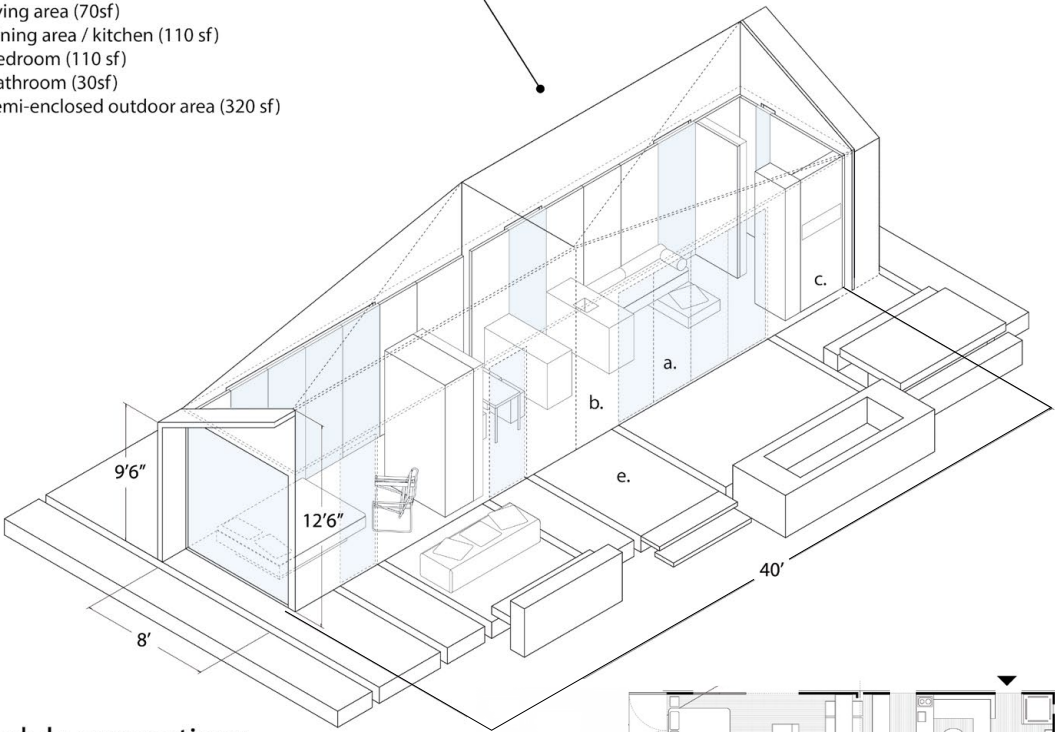
Single configuration  
(1 core module) night time use  
sleeps 3 people  
160 sf

- a. living area day time / bedroom night time (70sf)
- b. dining area / kitchen (60 sf)
- d. bathroom (30sf)
- e. semi-enclosed outdoor area (320sf)



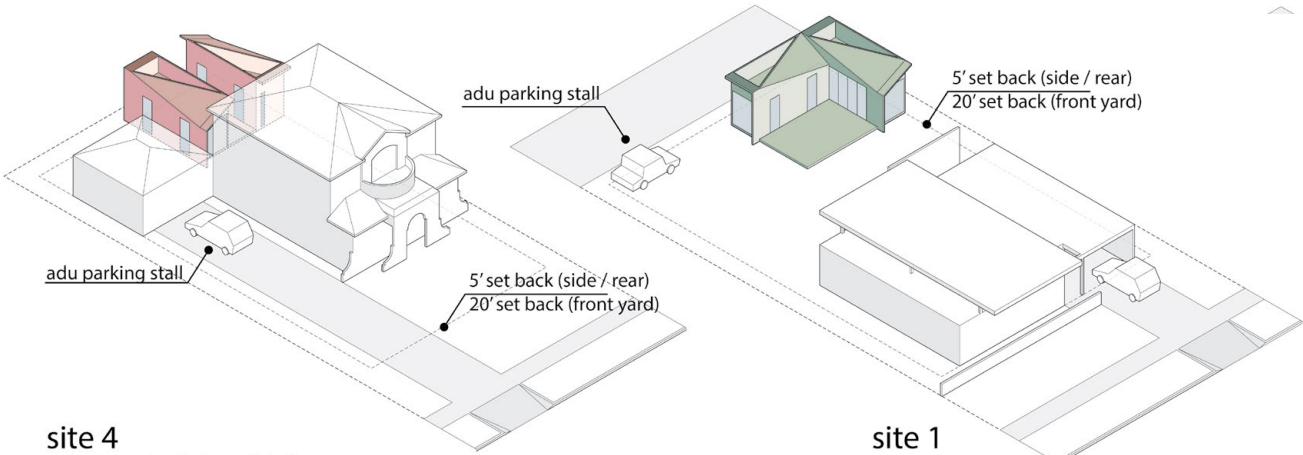
Linear configuration - plan iso  
(1 core module + 1 companion module)  
sleeps 4 people  
320 sf

- a. living area (70sf)
- b. dining area / kitchen (110 sf)
- c. bedroom (110 sf)
- d. bathroom (30sf)
- e. semi-enclosed outdoor area (320 sf)



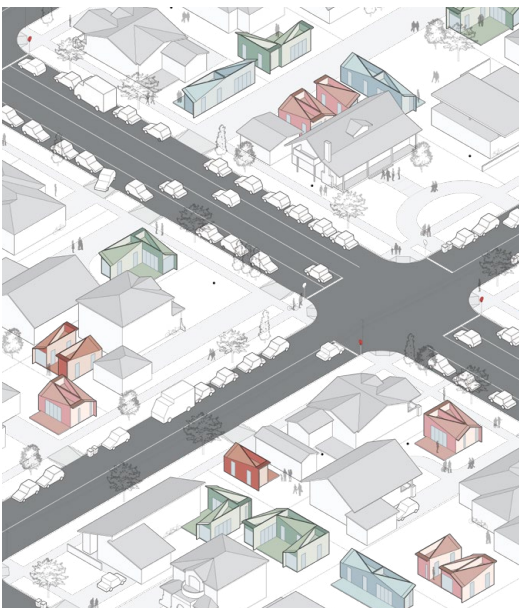
module connections  
isometric plan

0' 4' 8' 16' 1"=1/4"



site 4  
1 single + 1 single (2 modules)  
sleeps 4 people  
320 sf enclosed space  
160 sf semi-enclosed space

site 1  
L-shape (2 modules)  
sleeps 4 people  
320 sf enclosed space  
160 sf semi-enclosed space





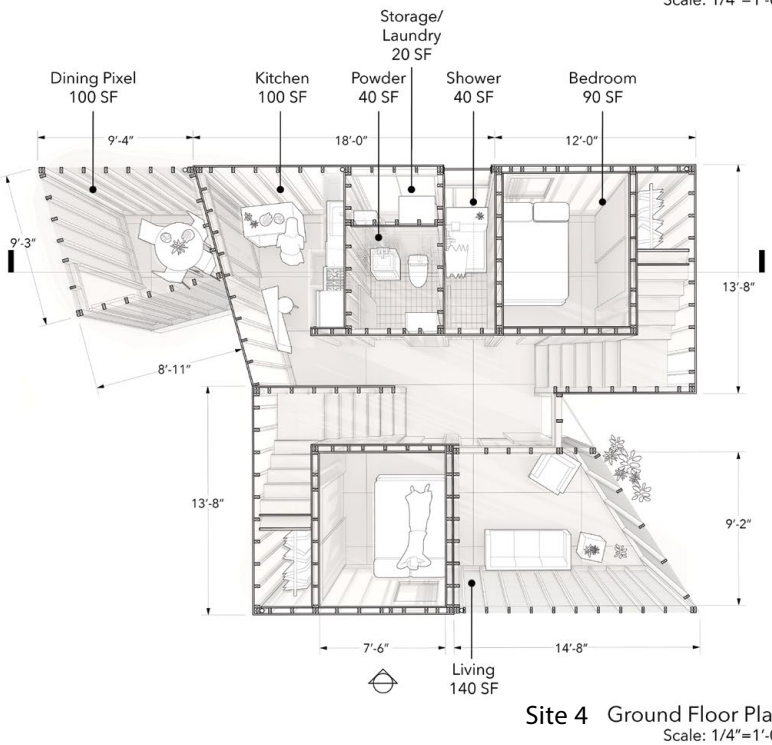
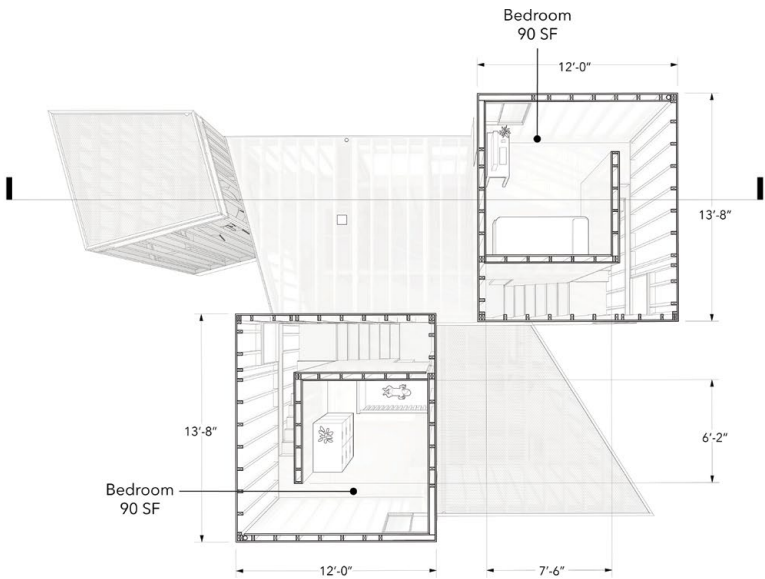
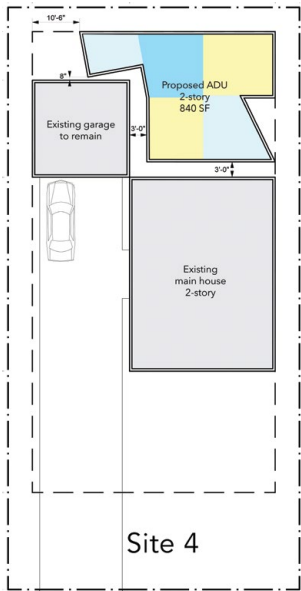
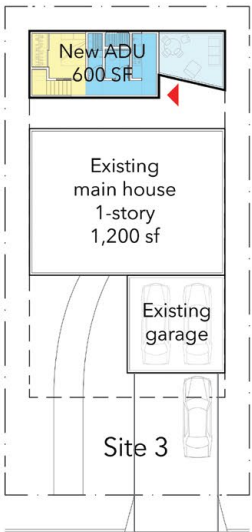
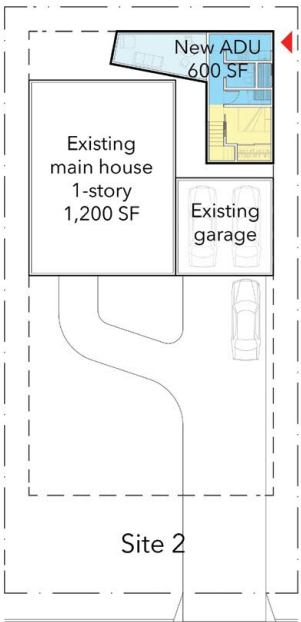
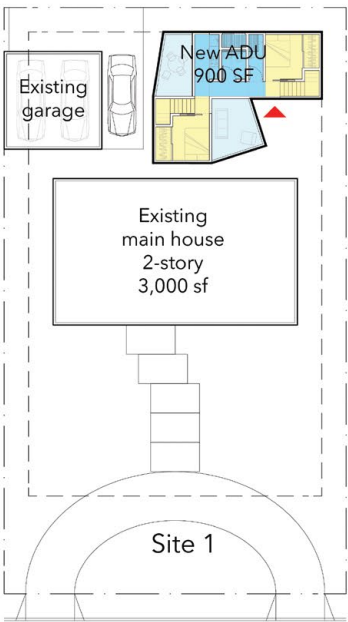
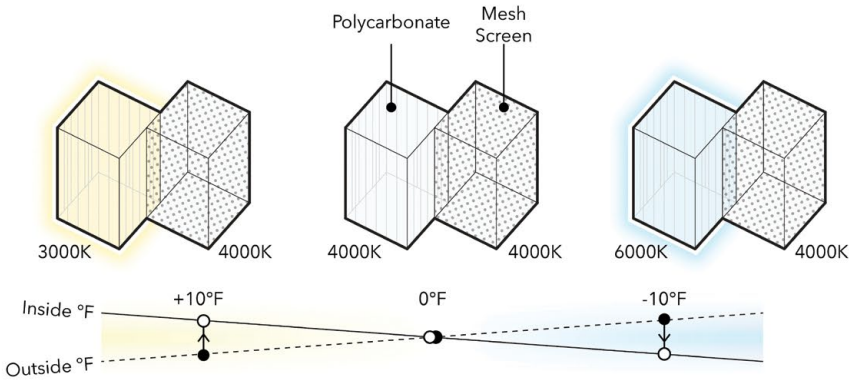
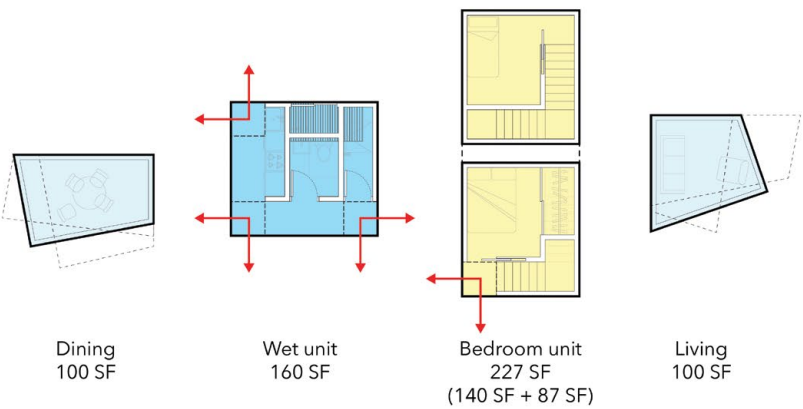
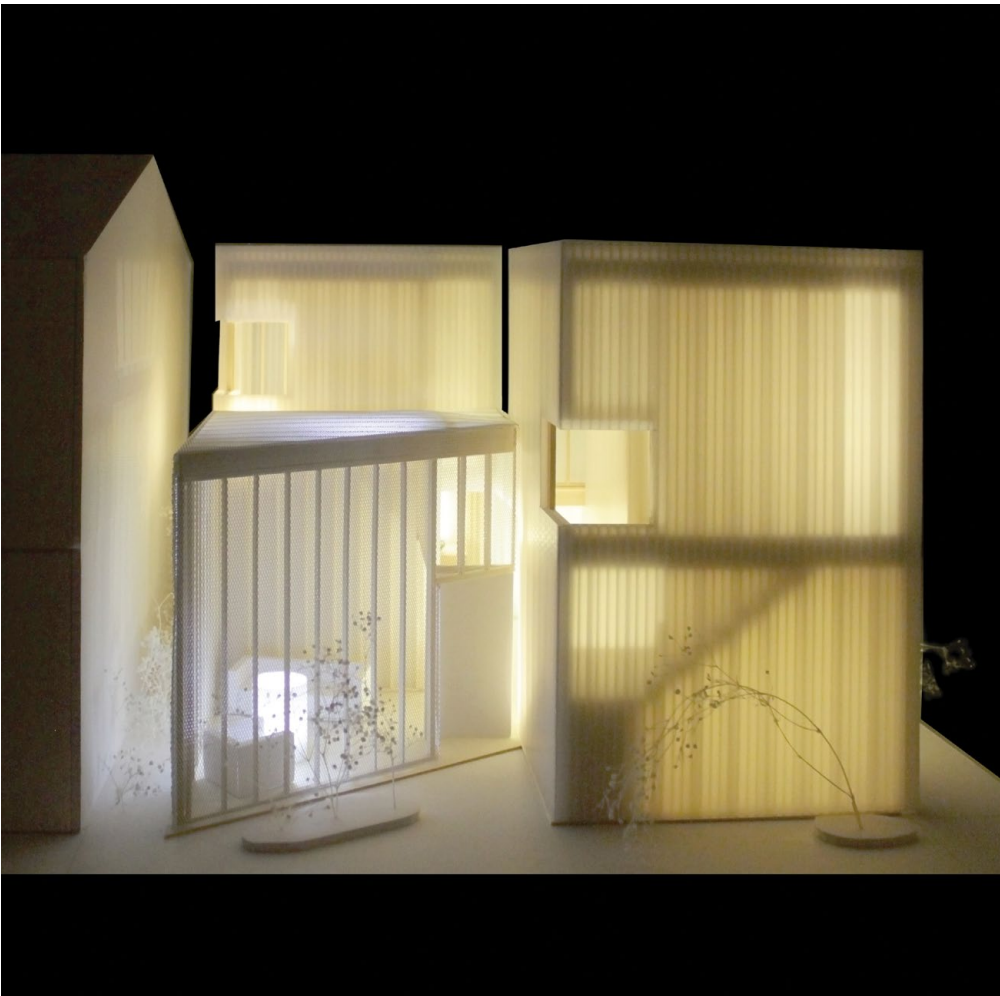
# Better Together

Designed for single mothers and their children, Better Together is a dwelling that postulates the future of domestic living as a series of thermal episodes. The coupling of program and thermal considerations frames the home as distinct ‘pixels,’ forming a gradation of spaces that respond to the rhythms of daily living and the climate of Los Angeles.

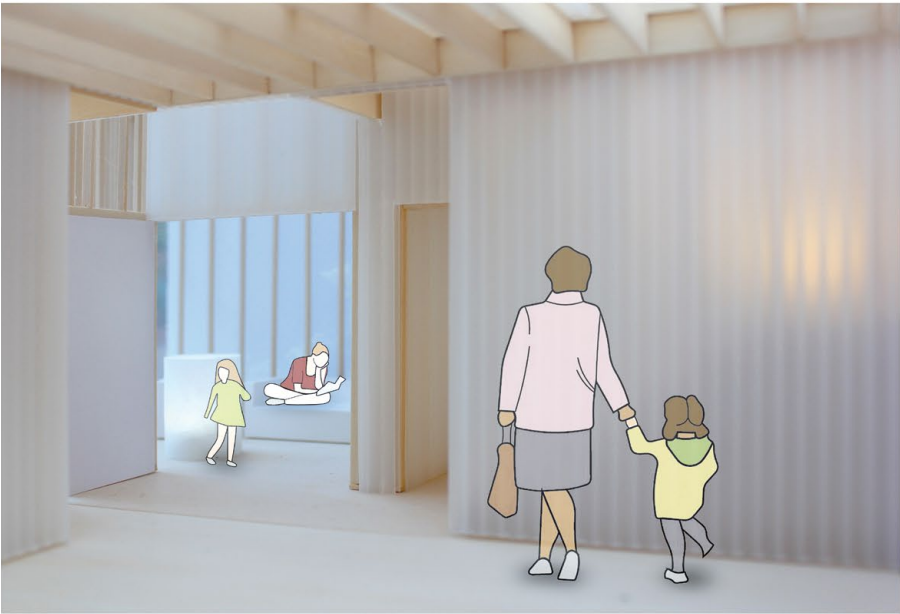
As a long-term residence, Better Together serves two constituents: first-time homeowners looking for alternative financing methods, and expectant mothers participating in Harvest Home, an LA-based non-profit program serving homeless pregnant women. The pixels’ organization allows for a variety of configurations adaptable to LA’s varied single family lots to provide a network of spaces for Harvest Home mothers to nurture and raise a child over a prolonged period of time.

Different atmospheres are created by varying each pixel’s wall section. These atmospheres are conveyed using varying light temperatures, showcasing the difference between local weather data and thermal sensor readings from each pixel. The integration of real-time information via addressable LED lights creates a feedback loop to inform mothers and their children of their surrounding environment, enabling them to script their own experiences at home while rethinking the binary relationship between inside and outside.

The walls consist of wood studs, polycarbonate panels, and galvanized steel wire, providing spaces with differing light and airflow conditions through varying degrees of opacity. The construction schedule and cost are optimized by applying locally available, lightweight finish materials to conventional framing, and by locating all the plumbing fixture to low-wet walls and flooring on a 4' x 8' plywood sheet, making it feasible for off-site fabrication and two-person installation. Microcontrollers connected to thermal sensors and OpenWeatherMap calculate the difference between interior and exterior temperature and drive addressable LED lights to communicate relative temperature readings to the occupants.



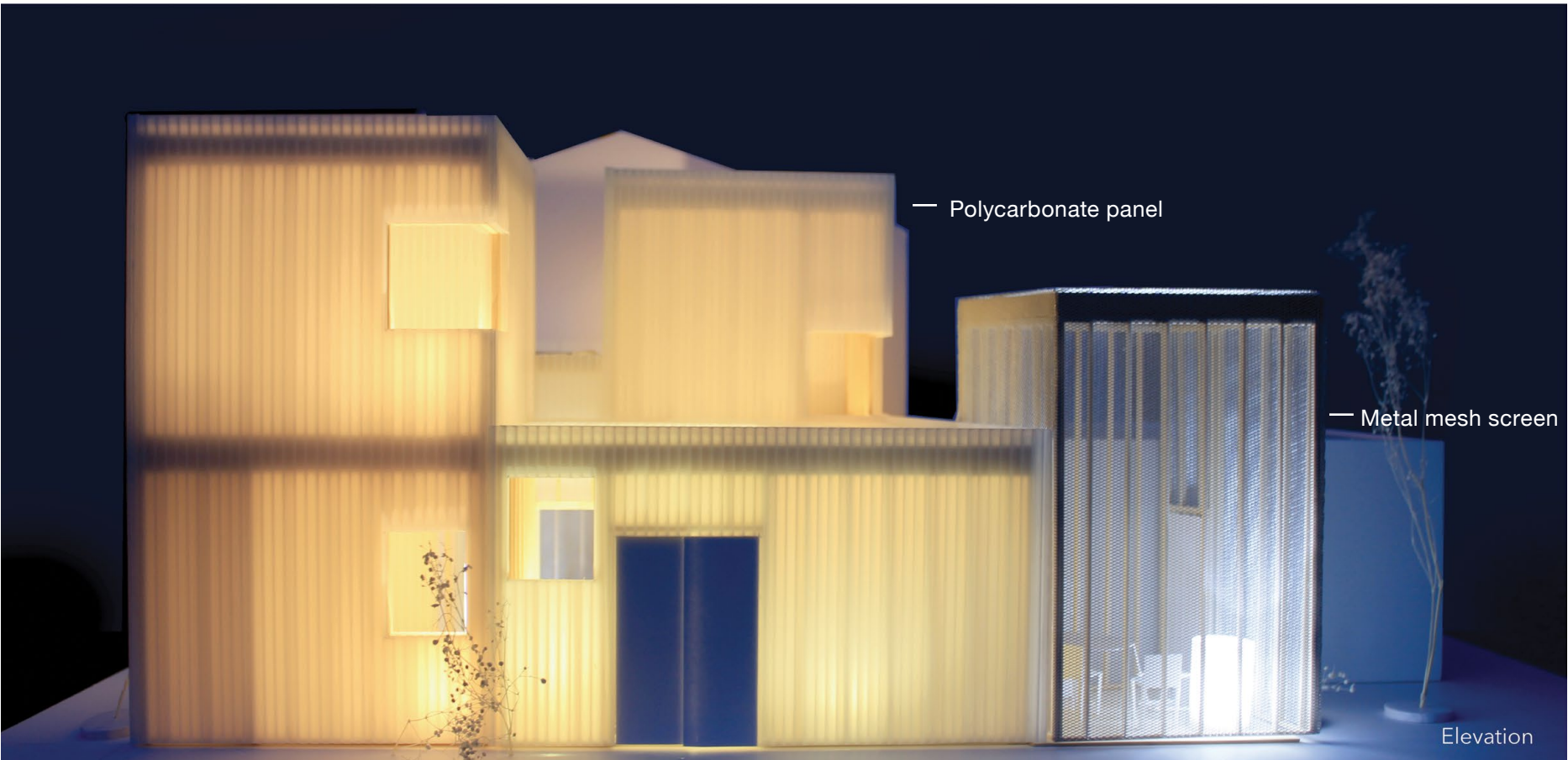
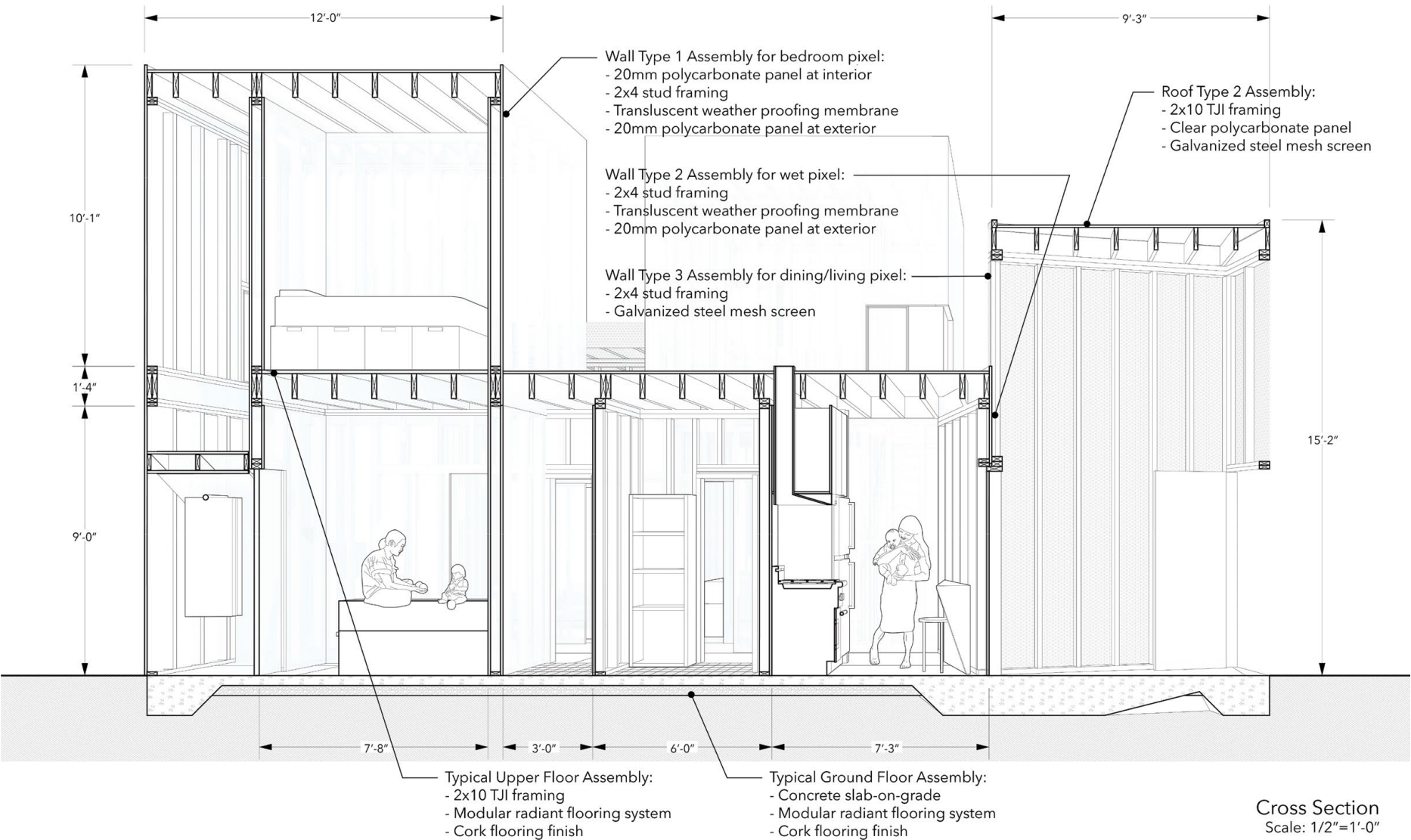




Interior View



Interior View





# YES TO ADU

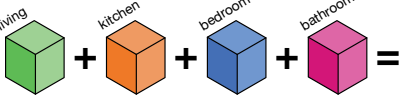
Accessory Dwelling Units (ADUs) should undertake the affordable housing and homelessness crisis in Los Angeles by acknowledging that every individual has unique considerations in their life and their home—a reality that current affordable housing solutions fail to address. We focused on designing an ADU that is not only attractive to tenants and homeowners, but also offers the flexibility to appeal to the community at large.

The proposed ADU is a framework of 'pods': spacious square living units filled with customizable elements to form kitchens, living rooms, bathrooms, and bedrooms that, when composed together, make up the ADU. Each ADU contextually responds to the site, the needs of the owner, and the needs of the tenant. Within each pod, various configurations of modular furniture, fixtures, and other equipment were explored to showcase how they can be further maximized to match the lifestyle of various user groups. This flexible and modular design allows the ADU to grow and change with the evolving needs of the user by expanding, shrinking, or swapping pod

configurations as needed. This system is more efficient and flexible than a unit in an affordable housing apartment complex, more customizable than a mobile home, and easier to permit and construct than a custom house.

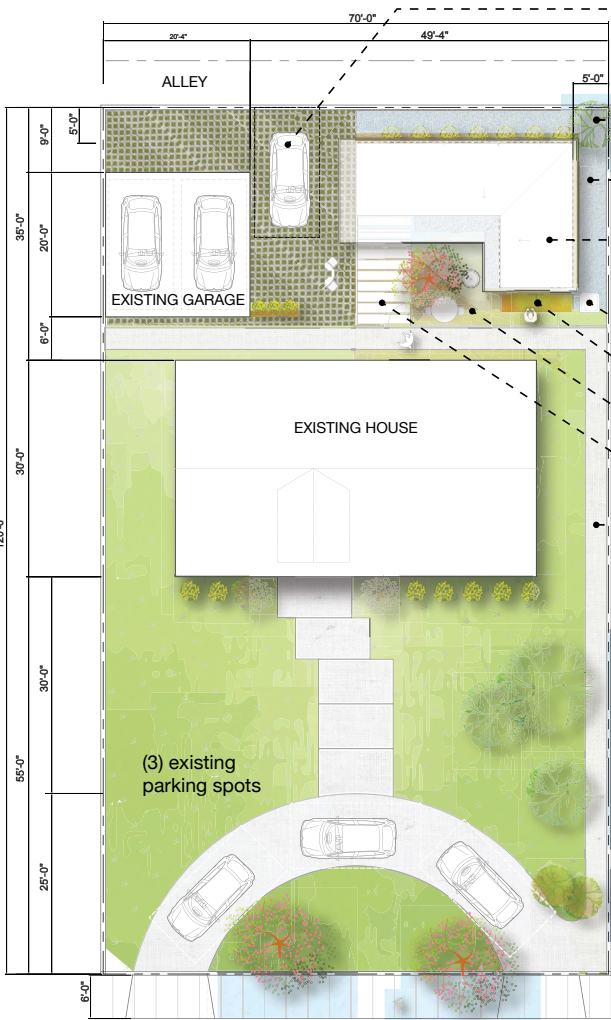
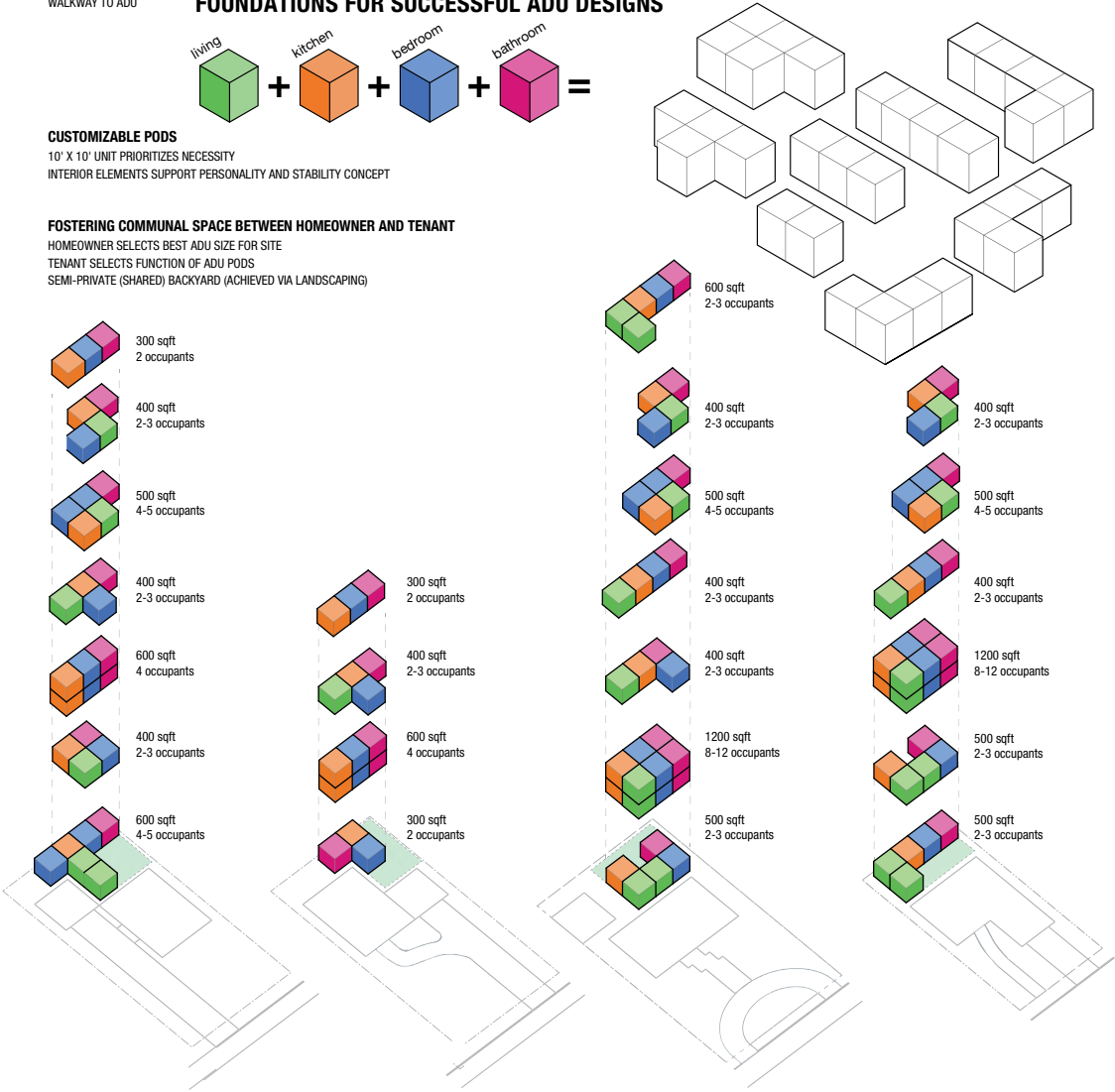
The adaptable framework accommodates budgets, available lot space, and personalization. Options include custom-detailed dwelling units to increase housing supply at market value, prefabricated units that are focused on elderly family members, to more economical units that—leveraged by the modularity of the design—provide a large strata of price points at which to construct new housing. This ADU begins to address affordable, efficient, and sustainable housing in the short-term and furthermore, offers a glimpse into potential long-term solutions for the myriad of disadvantaged persons in need of a place to call home.

## FOUNDATIONS FOR SUCCESSFUL ADU DESIGNS



**CUSTOMIZABLE PODS**  
10' X 10' UNIT PRIORITIZES NECESSITY  
INTERIOR ELEMENTS SUPPORT PERSONALITY AND STABILITY CONCEPT

**FOSTERING COMMUNAL SPACE BETWEEN HOMEOWNER AND TENANT**  
HOMEOWNER SELECTS BEST ADU SIZE FOR SITE  
TENANT SELECTS FUNCTION OF ADU PODS  
SEMI-PRIVATE (SHARED) BACKYARD (ACHIEVED VIA LANDSCAPING)



## SITE PLAN SITE DATA

SITE AREA: 8,400 SF  
EXISTING HOUSE: 1,500 SF  
EXISTING GARAGE: 400 SF  
EXISTING PARKING SPACES: 5

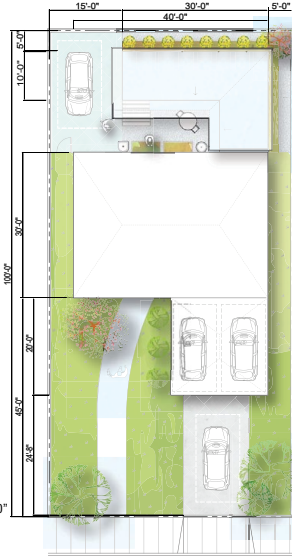
ADU AREA: 400 SF  
ADU HEIGHT: 10'-8"  
ADU OCCUPANTS: 2-3  
ADDITIONAL PARKING SPACES: 1

NEW TOTAL BUILDING AREA: 2,300 SF  
NEW FAR: 3.6  
NEW TOTAL PARKING SPACES: 6

## ALTERNATE SITE PLAN

SCALE: 1/16"=1'-0"

SCALE: 3/32"=1'-0"



## WHAT WOULD THEY CHOOSE?

While each person is unique, the proposal recognizes that there are also commonalities to struggling with homelessness. After extensive interviews, we addressed some of the common concerns of those who have recently experienced homelessness such as security, ability to host more than one person as a single tenant, access to larger appliances, and storage space. This means having separate rooms with locks on the doors, full-size appliances such as refrigerators, and the option to add sleeping setups. All of these are addressed by a customizable kit of available options, which benefits both the tenant and homeowner. Tenants that are chosen prior to construction are able to customize their living space by selecting the elements that best fit their lifestyle as seen on the chart below, while homeowners have the ability to select the size, shape, and finishes of the ADU, configuring pods on their lots like Tetris. Additionally, the customization aspect of our design provides tenants the opportunity to create a space that can feel like a home, not just a temporary shelter.



## RECONFIGURABLE





CUSTOMIZABLE

A

LIVING

B

KITCHEN

C

BEDROOM

D

BATH

1

2

3

4

5

6

7

8

9

1

2

3

4

5

6

7

8

9

1

2

3

4

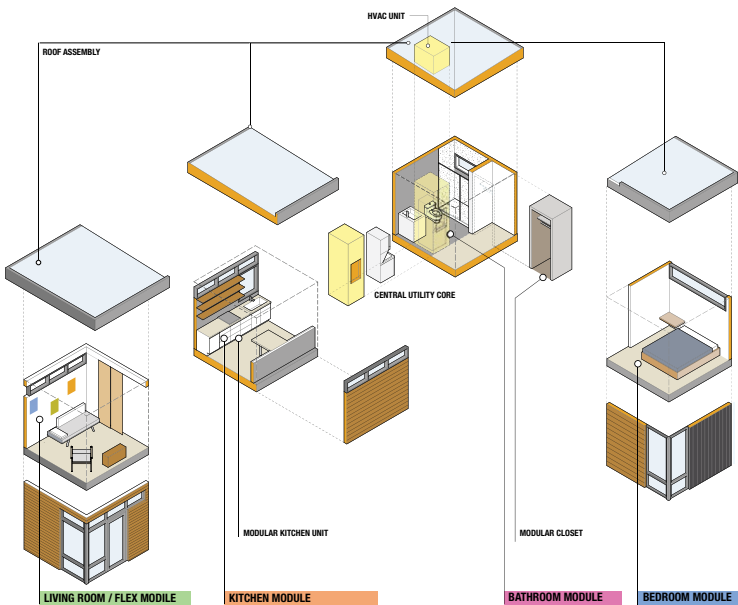
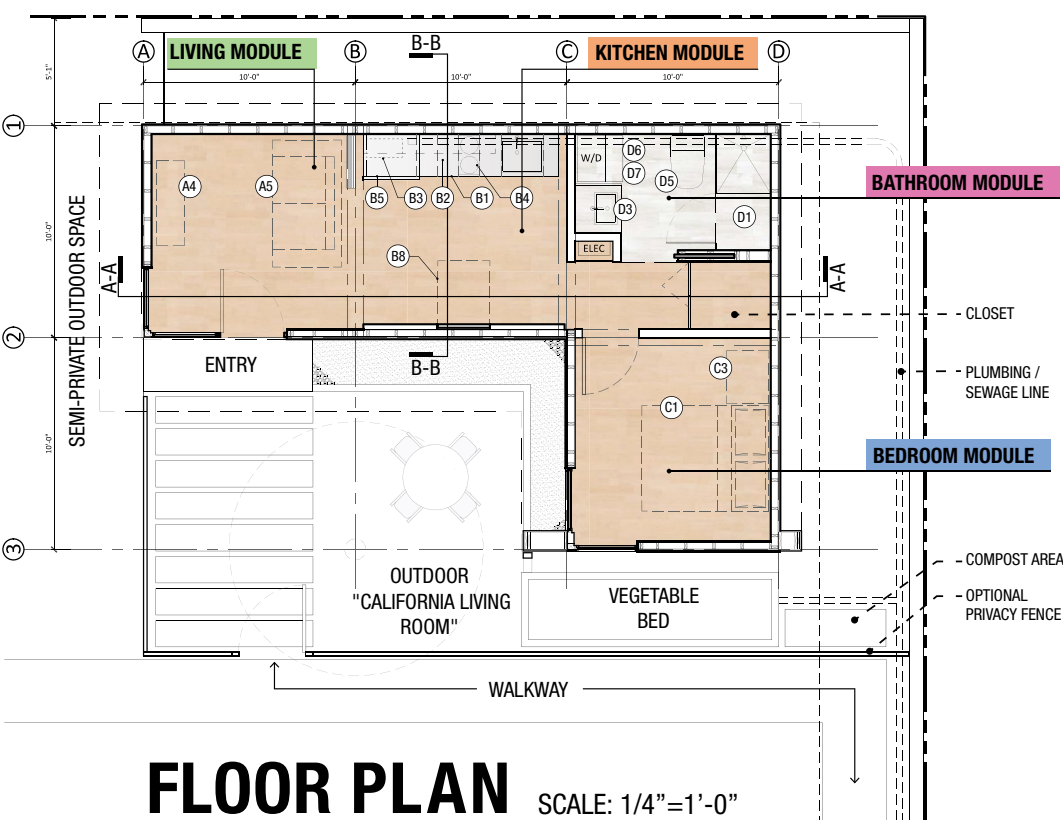
5

6

7

8

9



SUSTAINABILITY

**RAIN WATER HARVESTING**

CONTINUOUS GUTTER PROVIDES AN OPPORTUNITY TO EFFICIENTLY DIRECT RAIN WATER TO DESIGNATED STORAGE TANKS ABLE TO BE LOCATED IN VARIOUS LOCATIONS DEPENDING ON DESIGN CONFIGURATION.

**SOLAR ENERGY HARVESTING**

MODULAR FLAT ROOF ALLOWS FOR FUTURE INSTALLATION OF SOLAR PANELS FOR SOLAR ENERGY HARVESTING PER HOME OWNERS PREFERENCE AND BUDGET.

**LIGHT**

CLERESTORY WINDOWS ALONG NORTH FACE OF ADU MAXIMIZES ACCESS TO NATURAL LIGHT.

**ALLEY RUN OFF MITIGATION**

AVOLON ALLEY GREEN NETWORK PROJECT - INTEGRATION OF PERMEABLE PAVERS AND BIOSWALES AS INFRASTRUCTURE TO AID IN RETAINING AND FILTERING EXCESS WATER DURING HEAVY RAINS.

**VENTILATION**

LOW SOUTH FACING OPERABLE WINDOWS COMBINED WITH NORTH FACING OPERABLE WINDOWS ALLOW FOR MORE EFFECTIVE NATURAL CROSS VENTILATION THEREBY BY REDUCING RELIANCE ON HVAC SYSTEM.

**PERMEABLE GROUND COVER**

THE USE OF PERMEABLE MATERIALS LIKE GRAVEL, D3, SAND, AND GRASS/CONCRETE PAVERS ALLOWS FOR MORE EFFICIENT RAIN WATER MITIGATION, INCLUDING FILTRATION AND RETENTION.

**LANDSCAPING**

INTEGRATION OF DROUGHT TOLERANT LANDSCAPING (LA COUNTY ZONE 3) MINIMIZES POTABLE WATER WASTE AND DEMAND WHILE ENHANCING OUTDOOR COMMUNAL SPACE.

**RAIN WATER STORAGE**

A WATER PUMP WOULD HELP FILTER AND DIRECT WATER COLLECTED FROM ROOF FOR USE IN SITE IRRIGATION.

**COOL ROOF**

DUE TO CALIFORNIA'S TEMPERATE AND SUNNY WEATHER, A COOL ROOF HELPS MITIGATE HEAT GAIN AND CONSEQUENTLY REDUCE RADIATED HEAT INTO LIVING SPACES BELOW.

**FOOD HARVESTING**

PLANTERS ALLOW FOR FOOD SECURITY AND POTENTIAL INTEGRATION OF COLLECTIVE FOOD HARVESTING (OWNER AND TENANT). ADDITIONALLY THEY CONTRIBUTE TO AN ENHANCED OUTDOOR SPACE EXPERIENCE.

**SOIL REGENERATION**

COMPOST BIN REDUCES THE LANDFILL IMPACT WHILE CREATING A REGENERATIVE SYSTEM FOR USE IN VEGETABLE BEDS.

INTERIOR ELEMENTS

- A4

ENTERTAINMENT CENTER
- A5

COUCH
- B1

QUARTZ COUNTERTOP
- B2

WALL SHELVEING + BASE CABINETS
- B3

MICROWAVE
- B4

HOT PLATE
- B5

UNDER-COUNTER REFRIGERATOR
- B8

BUILT-IN FOLDING TABLE
- C1

QUEEN BED
- C3

DRESSER
- D1

SHOWER
- D3

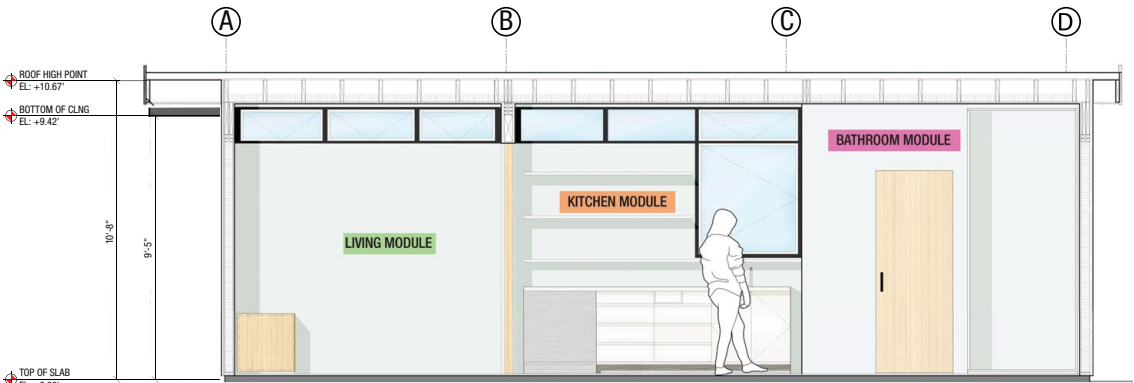
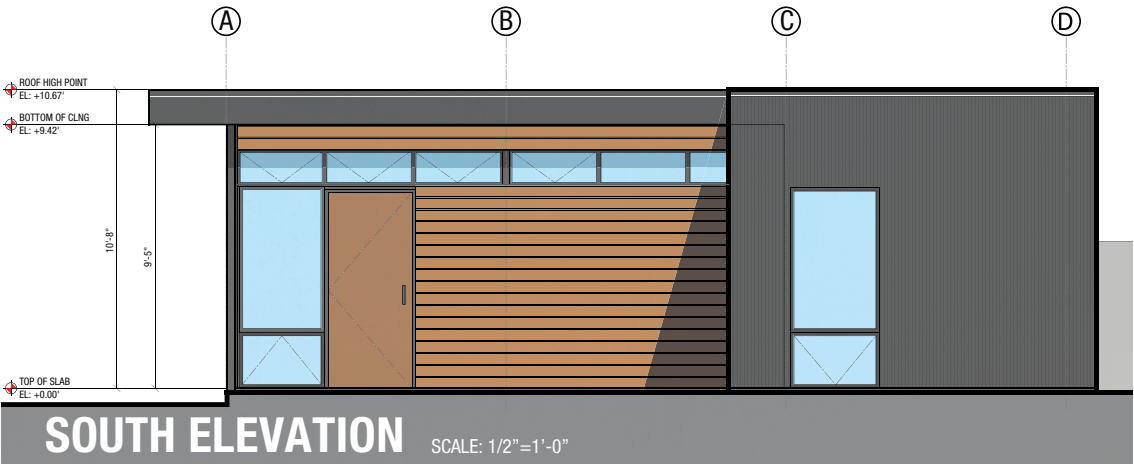
SINK
- D5

TOILET
- D6

WASHER
- D7

DRYER

IT IS IMPERATIVE TO PROVIDE A SENSE OF COMMUNITY AND BELONGING FOR THE TENANT. THIS IS ACHIEVED THROUGH THE USE OF SHARED OUTDOOR SPACE BETWEEN THE HOMEOWNER AND TENANT; A BRIDGE BETWEEN THE TWO HOMES. COMMUNAL OUTDOOR SPACE PROMOTES SOCIAL INTERACTION BETWEEN TENANTS AND HOMEOWNERS, WITHOUT FORCING A SHARED ENVIRONMENT. THIS LAYOUT SUPPORTS THE IDEA THAT THE TENANT AND THE HOMEOWNERS ARE NEIGHBORS AND EQUALS IN A WELCOMING ENVIRONMENT. IT ALSO PROVIDES THE OPPORTUNITY FOR THE TENANT TO TAKE OWNERSHIP OF A SPACE IN A MORE PERMANENT WAY THROUGH PERSONALIZATION, SUCH AS PLANTING A GARDEN.



PROJECT HIGHLIGHTS

PHASE 1: DESIGN COMPETITION

June 23–25, 2017

Competition Announcement at Dwell on Design, Los Angeles Convention Center

July 14, 2017

YES to ADU presentation at Design for Dignity Conference, AIA LA at McCarty Memorial Christian Church, West Adams, Los Angeles

Fall 2017–18

Three undergraduate architecture studios incorporated the design competition into their curricula at East Los Angeles College, University of Southern California, and Woodbury University

September 10, 2017

YES to ADU presentation at AWA+D (Association for Women in Architecture and Design) at Judson Studios, Highland Park, Los Angeles

September 18, 2017

Launch of Call for Entries on competition at [www.bustler.com](http://www.bustler.com)

November 2017

Launch of SCI-Arc (Southern California Institute of Architecture) Channel video promoting design competition

Dec 14, 2017

YES to ADU Design Competition Round Table for Prospective Applicants facilitated in collaboration with the Community Development Commission and SCANPH (Southern California Association of Non-Profit Housing)

September 18, 2018

Design Competition submissions deadline

January 17, 2018

Convening of Jury

PHASE 2: EVENTS AND EXHIBITION

February 21–24, 2018

Panel Presentation at College Art Association (CAA) annual conference at the Los Angeles Convention Center

April 27, 2018

Awards Event and Exhibition at East Los Angeles College in collaboration with Homeless Initiative and the East Los Angeles College Architecture Department

May 13, 2018

YES to ADU presentation at Open Engagement Conference at Queens Museum in New York City

May 5, 2018

YES to ADU: Talleres Públicos and Exhibition at A.C. Bilbrew Library, facilitated by community partner Big City Forum.

May 24, 2018

YES to ADU: Panel Discussion and Exhibition, facilitated in collaboration with Los Angeles forum for Architecture and Urban Design at Institute for Contemporary Art, Los Angeles

PHASE 3: PUBLICATION

October 19, 2018

YES to ADU exhibition and announcement of publication at Inner City Law Center Weekend to End Homelessness, Bassett Park, La Puente

October 26, 2018

Announcement of publication at IDEC (Interior Design Educators Council) Regional Conference Homeless Panel, Woodbury University, Los Angeles

Nov 8, 2018

YES to ADU presentation and announcement of publication at Utah Housing Coalition Housing Matters Conference, Salt Lake City, Utah

Winter, 2018–19

YES to ADU: Publication Launch Event and Exhibition

REFERENCES

Los Angeles County Arts Commission:

[www.lacountyarts.org/ADU](http://www.lacountyarts.org/ADU)

Homeless Initiative Approved Strategies to Combat Homelessness:

[www.homeless.lacounty.gov/wp-content/uploads/2017/01/HI-Report-Approved2.pdf](http://www.homeless.lacounty.gov/wp-content/uploads/2017/01/HI-Report-Approved2.pdf)

Department of Regional Planning:

[www.planning.lacounty.gov/adu](http://www.planning.lacounty.gov/adu)

Guidebook to Accessory Dwelling Units in the City of Los Angeles:

[www.ladbs.org/docs/default-source/publications/misc-publications/adu-guidebook.pdf?sfvrsn=12](http://www.ladbs.org/docs/default-source/publications/misc-publications/adu-guidebook.pdf?sfvrsn=12)

SCI-Arc Channel YES to ADU:

[www.youtube.com/watch?v=5mn8TInUGc](http://www.youtube.com/watch?v=5mn8TInUGc)

Winners of LA County’s Accessory Dwelling Units Competition Propose Creative Approaches to Affordable Housing:

[www.archpaper.com/2018/05/winners-of-la-countys-accessible-dwelling-unit-competition-propose-creative-approaches-to-affordable-housing/#gallery-0-slide-0](http://www.archpaper.com/2018/05/winners-of-la-countys-accessible-dwelling-unit-competition-propose-creative-approaches-to-affordable-housing/#gallery-0-slide-0)

Genesis LA for Non-Traditional Loans:

[www.genesisla.org](http://www.genesisla.org)

A Portrait of Los Angeles County:

[www.measureofamerica.org/los-angeles-county/](http://www.measureofamerica.org/los-angeles-county/)

People in Los Angeles Are Offering to Shelter the Homeless in Tiny Backyard Homes:

[www.businessinsider.in/people-in-los-angeles-are-offering-to-shelter-the-homeless-in-tiny-backyard-homes-it-could-be-solution-to-a-spiraling-homelessness-crisis-/articleshow/65831668.cms](http://www.businessinsider.in/people-in-los-angeles-are-offering-to-shelter-the-homeless-in-tiny-backyard-homes-it-could-be-solution-to-a-spiraling-homelessness-crisis-/articleshow/65831668.cms)



# Part of the Solution:

---

## MOVING FORWARD

WITH THE CREATION OF THE LOS ANGELES COUNTY HOMELESS INITIATIVE and the passage by voters of the landmark Measure H sales tax, we are accelerating the County's strategies to combat and prevent homelessness. Our community has made a strong statement. It has affirmed that we care about our neighbors, and that we are willing to invest in an effort aimed at building a sustainable future that will improve the lives of thousands of men, women, and children experiencing homelessness.

The Part of the Solution: YES to ADU architectural design competition and our robust partnership with the Los Angeles County Arts Commission, Department of Regional Planning and the Los Angeles County Community Development Commission is an exemplary example of cross-sector collaboration in confronting our pressing civic challenge of homelessness. The arts and design community bring new perspectives on what is possible and achievable when we harness our collective, creative vision to become a part of the solution.

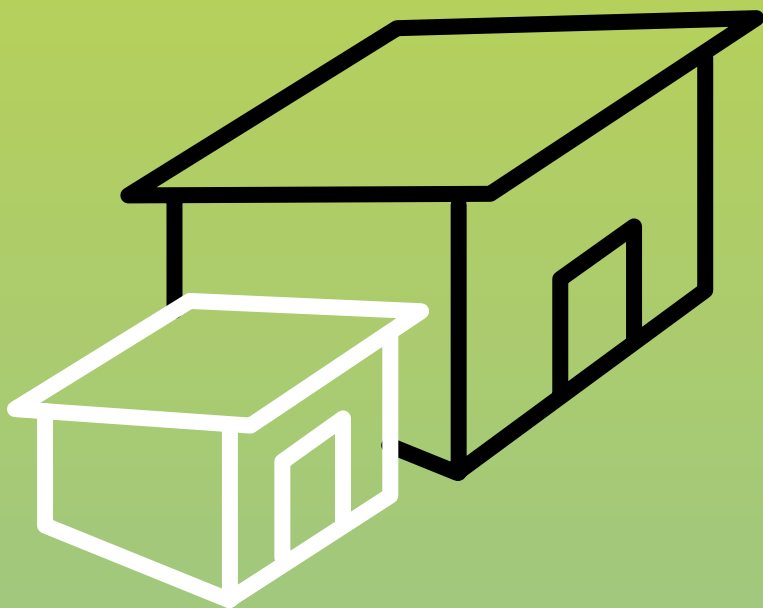
Through the Homeless Initiative, an unprecedented countywide movement, thousands of individuals and families have already been helped through a major expansion of outreach, emergency shelter, rapid rehousing and supportive housing, as well as benefits advocacy for homeless disabled adults—in all parts of the County. While the numbers of those directly served are encouraging, a humanitarian crisis of such complexity requires sustained focus and collaboration.

This is a community-wide undertaking made possible only with the support of dedicated service providers, County departments, civic leaders, cities, business, labor, faith-based institutions and community coalitions—and a galvanized public—who share the mission to prevent and combat homelessness in LA County. Passion, partnership and innovation will ensure we have a profound impact on the lives of our most vulnerable.

There is a powerful sense of community and hope across Los Angeles. Together we can advance our efforts to help individuals and families move from homelessness to housing, and enable them to improve the quality of their lives.

— Phil Ansell, Director  
Los Angeles County Homeless Initiative

# Part of the Solution:



**The Los Angeles County Arts Commission fosters excellence, diversity, vitality, understanding and accessibility of the arts in Los Angeles County, encompassing 88 municipalities and 137 unincorporated areas, and provides leadership in cultural services. The Arts Commission funds 364 nonprofit arts organizations through a two-year \$9 million grant program, runs the largest arts internship program in the country, coordinates the LA County Arts Education Collective, manages the County’s civic art policy, and produces free community programs.**  
[www.lacountyarts.org](http://www.lacountyarts.org)

The Arts Commission gratefully acknowledges the Los Angeles County Board of Supervisors and our Community Partners in their unwavering support of this project.

Board of Supervisors:  
**Hilda L. Solis / Mark Ridley-Thomas / Sheila Kuehl / Janice Hahn / Kathryn Barger**

Community Partners:  
**AIA Los Angeles / Big City Forum / Bustler / East Los Angeles College / Institute of Contemporary Art, Los Angeles / Los Angeles Forum for Architecture and Urban Design / SCI-Arc / University of Southern California, School of Architecture / Woodbury University, School of Architecture**

Publication Design:  
**Place and Page, Colleen Corcoran and Guanyan Wu**

Generous support for printing this publication provided by:  
**HMC Architects Designing Futures Foundation**