

GROW-RISE

HOUSING IDEAS FOR LOS ANGELES

Welcome to Eureka and Ponderosa, an imagined intersection, growing and nourishing a new community and existing neighborhood in the contested flatlands of suburban Los Angeles.

At the heart of our proposal for eight homes and retail space sits a productive communal garden from which all eight homes are accessed. On the street corner, an adaptive public outdoor space, managed by the resident group and equipped with stands for exchange and enterprise, allows the social, physical and wellbeing benefits derived from the growing and sharing of produce within our new community to be extended to the neighborhood beyond.

Grow-Rise evolves the arrangement of the popular ‘bungalow court’ typology to create larger and more varied accommodation over two storeys, with clear design principles permitting reconfigured responses to specific site conditions, resident groups and localities. Orientation, the size and mix of homes, degrees of privacy and parking requirements are easily adjusted using these principles.

A holistic approach to landscape integrates productivity, social connection and play with careful water management. Stormwater, collected in bioswales and porous pavements at the perimeter of the site, supports the evaporative and shade-giving planting which maintain a cooler climate in the shared garden and ground level of the homes.

On the ground storey, but raised a little above the public realm, entrances and sleeping spaces are located in the cooler shade of the upper decks and vegetation. Upstairs, double-height living spaces, with openings at high level to allow for the escape of warm air when appropriate, open onto a private outdoor decks for every household. Generous hallways allow for easy movement from the perimeter of the site to its interior garden, and for the installation of an elevator should residents choose to ‘age in place’ or face mobility challenges.

An external steel frame performs multiple functions – on the corner, cover is provided to the shared entrance and to public and commercial activity; and where homes meet the street, it becomes a veranda. Elsewhere on the ground floor, vehicles, refuse, cycle storage and the infrastructure required to charge electric vehicles are all contained within the structure. Most importantly, the frame further shades the ground story to assist in keeping those spaces cool.

On the upper level, a more slender frame fulfils numerous requirements – supporting more planting, shading louvers and perimeter guardrails. It also allows for more personalised or improvised uses, which might include swings and exercise equipment, or facilities for the drying of clothes or produce. At this level, privacy between homes is managed through the configuration of fixed elements, but can also be adjusted to suit through the addition of canopies, curtains and planting. Over time, the frame becomes what the residents need it to be.

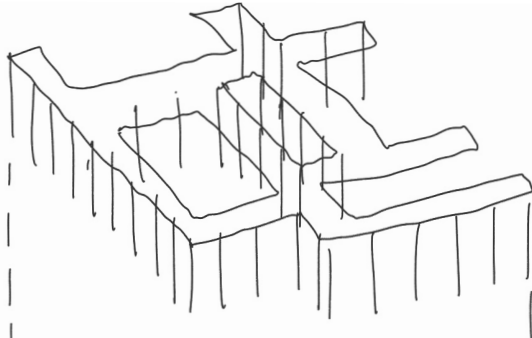
Looking to a decarbonised future, we aim to use as many materials as possible which come from the biosphere or which can be reused beyond the life of the building, with future deconstruction and reuse considered at the outset. Homes will be constructed from heavy rammed earth to provide thermal mass at the cooler lower level, with hemp-filled cassettes and timber and corrugated natural-fibre cladding used for the upper storey. Natural internal finishes will promote healthy air quality. Heating and cooling will be provided by air-source heat pumps combined with a heat recovery system, with electricity collected by photovoltaic panels on roofs organised for solar orientation. Beneath the internal garden, a comprehensive water management system will collect rainwater for domestic use, and stormwater and graywater for growing.

As embodied by the highly visible ‘lemonade stand’ at the corner, this proposal seeks to make connections and build relationships; between new residents, and with the surrounding neighborhood. An electric cargo bike is used by residents and volunteers to distribute produce to those who are busy or less mobile. Social media and web-based technologies are harnessed to build a local customer base who can contribute towards defining the offer and are alerted when the pomegranates are harvested or a volunteer is required. Through collective cultivation and opportunities for public interaction, the activity of the corner becomes both the connective tissue of the new community within, and a place for the wider neighborhood to coincide.

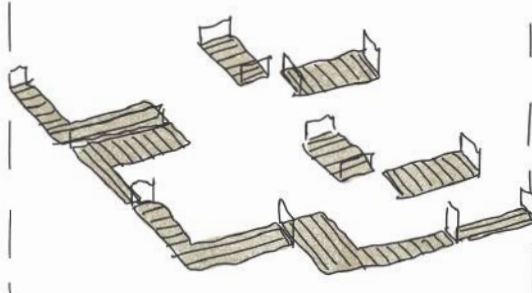
GROW-RISE
Concept



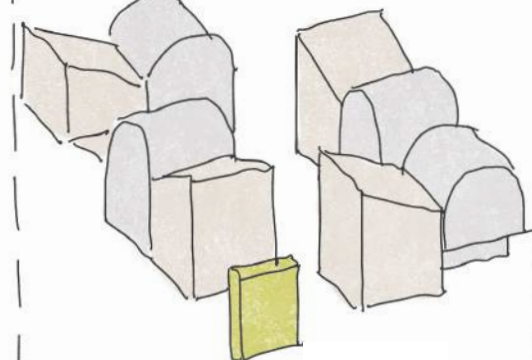
Site Diagram



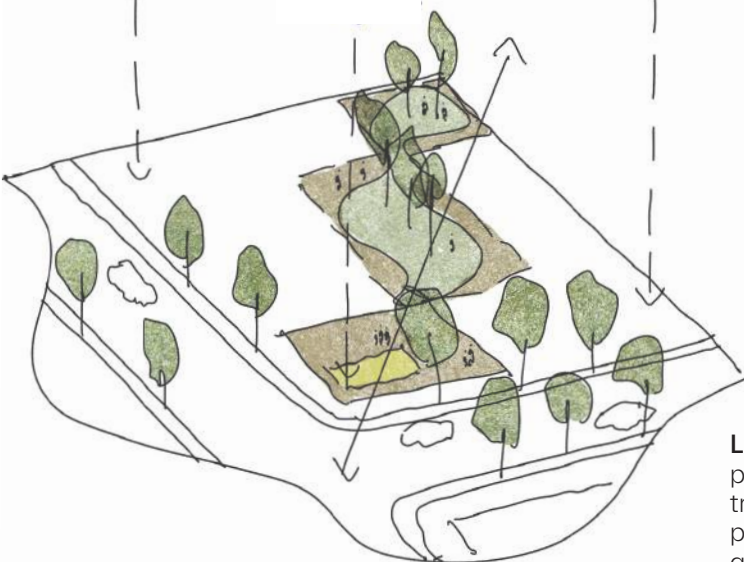
Frame: Supporting, amenity spaces, planting, shading and forming carports and other enclosures



Deck: External amenity spaces and veranda for shading



Homes+Retail: 8 reconfiguration homes to respond to specific site conditions, as well as retail and community spaces



Landscape: Adaptive public outdoor space transitioning to productive communal garden



Landscape



Homes



Deck



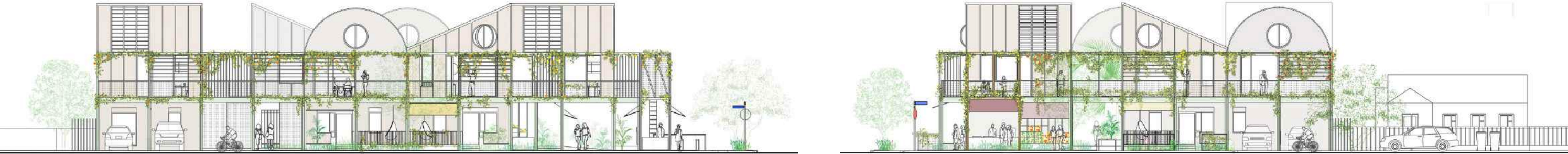
Frame

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Themes: A Corner Neighbourhood



Axonometric



Elevations



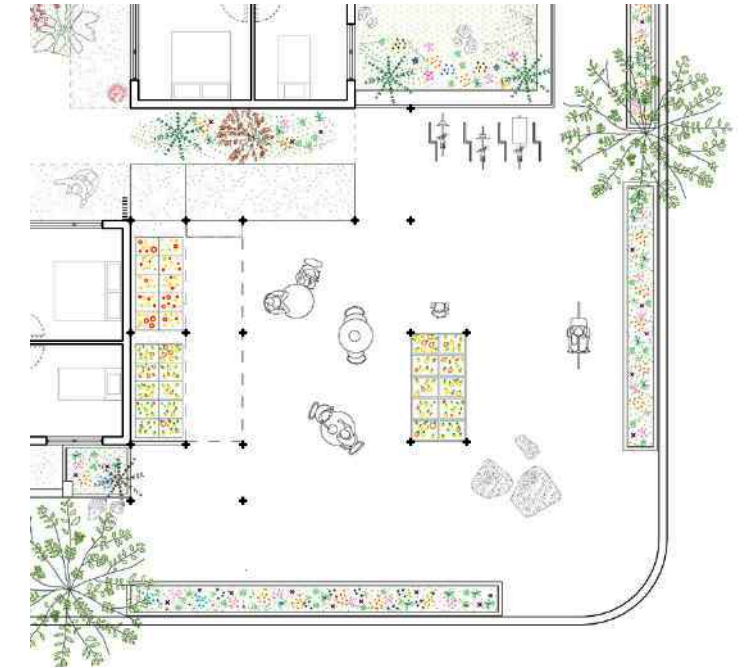
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Themes: Community

Left: View of adaptive public outdoor space being used during the evening for a residence led open mic event

Right: Plan of an adaptive public outdoor space, managed by the resident group, with stands for enterprise

Below: View of the residents communal garden, integrates edible productivity, social connection and play with careful water management





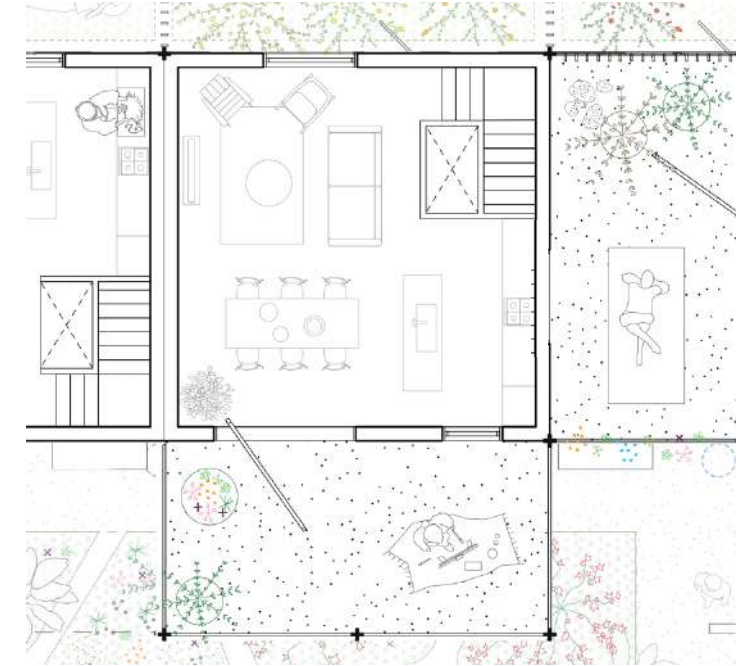
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Themes: Home

Left: View of adaptive public outdoor space being used during the day for exchanging produce from the garden with the extended neighbourhood

Right: Plan of first floor living, all electric kitchen, dining and external amenity area

Below: Internal view of first floor living, kitchen and dining area



GROW-RISE

Technical+Environmental



First floor plan



Ground floor plan

We are contributing to making our planet regenerative through a combination of passive & active systems to achieve carbon positive development over time. We also believe this will contribute to a sustainable and happy community that are connected to the land, whilst living in the city.

Passive

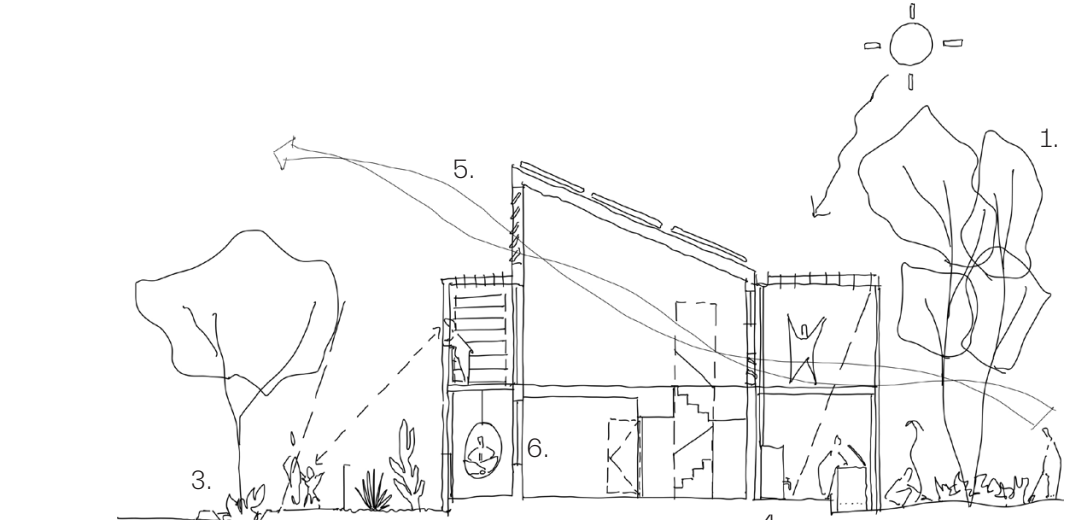
1. Trees and planting providing provide shade to buildings and people and transpiration cooling
2. Communal composting enables all green waste to be managed on site - which in turn feeds the plants
3. Rainwater is captured in swales on the street to reduce the risk of flash flooding and excess water.
4. Rainwater on site is initially captured in water butts (where it is easy for residents to see and use) with excess going into the below ground water tanks.
5. The built form is designed to encourage natural ventilation and be open in good weather encouraging a connection to the natural world and others
6. The building are predominantly made from natural (regenerative) materials such as wood, rammed earth and hemp based products which

have very low embodied carbon

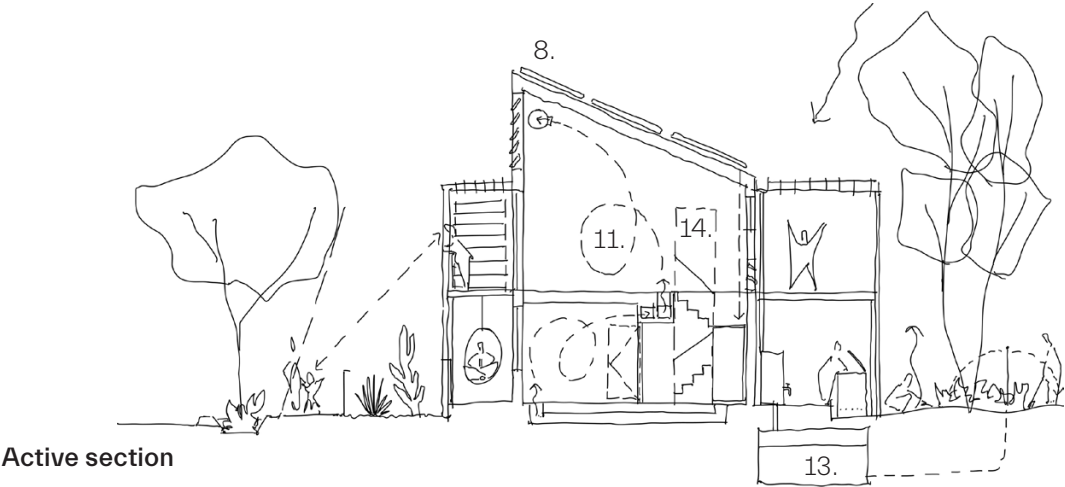
7. Where man made materials are used they are designed in such a way as to be reused in different ways across the scheme or elsewhere, such as the framework for growing (plants and people) which keeps the material active and the carbon locked in

Active

8. PV panels on roofs of all homes
9. Battery storage in all the homes
10. Smart Meters in each home allowing for buying and selling electricity
11. Air Source Heat Pump (ASHP) linked Domestic Hot Water Tank (excess battery energy can be dumped in the tank which is another form of battery)
12. Whole house Mechanical Ventilation and Heat Recovery (MVHR) use to keep the home comfortable at time when the windows are closed. Air can be heated the ASHP or chilled with its exhaust coolth.
13. Underground water tanks storing and managing rain water and grey water for use in the productive landscape and for toilet flushing
14. Space is designed to be adaptable and flexible, such as providing space for an elevator to ensure that the residents can age in their home and community



Passive section



Active section