

## Executive Summary

This proposal for a community land trust on the Mackie's site offers a gentle density of predominantly 4-storey housing arranged in large blocks around courtyard commons, either side of a pedestrian high street and greenway. The premise of development is that the more we all share, the more we all have.

Houses are built sustainably from hempcrete, some of which will be grown on the site. Pitched roofs are oriented southwards for photovoltaic solar panels, and rainwater is collected for storage and reuse.

Shared courtyard commons will be shaped and adapted before, during and after the build by the residents of each block - to facilitate food production, play and leisure. Each house gets a garden shed, before their house is built, that can be personalised and used for storage, work or play.

This car-free development will have only a peripheral route for vehicular traffic. All internal tree-lined streets will have shared surfaces for pedestrians and bicycles, with a bus route along the high street. An electric car-pool will provide residents with shared cars when needed.

A civic square and adjoining community hub will provide a focal point on entrance to the development. The hub will provide flexible community facilities such as a computer library for, space for worship, bookable rooms for meetings and parties, and co-work spaces.

The high street will have cafes, gyms, laundrette, shops for clothes and household items, charity shops, bakery, butcher, greengrocers and other independent businesses and services with duplex housing above.

Other facilities on the site include an integrated primary school and childcare next to the greenway, along which a foragable forest will be left to grow wild and plentiful.

## Mackie's Commons

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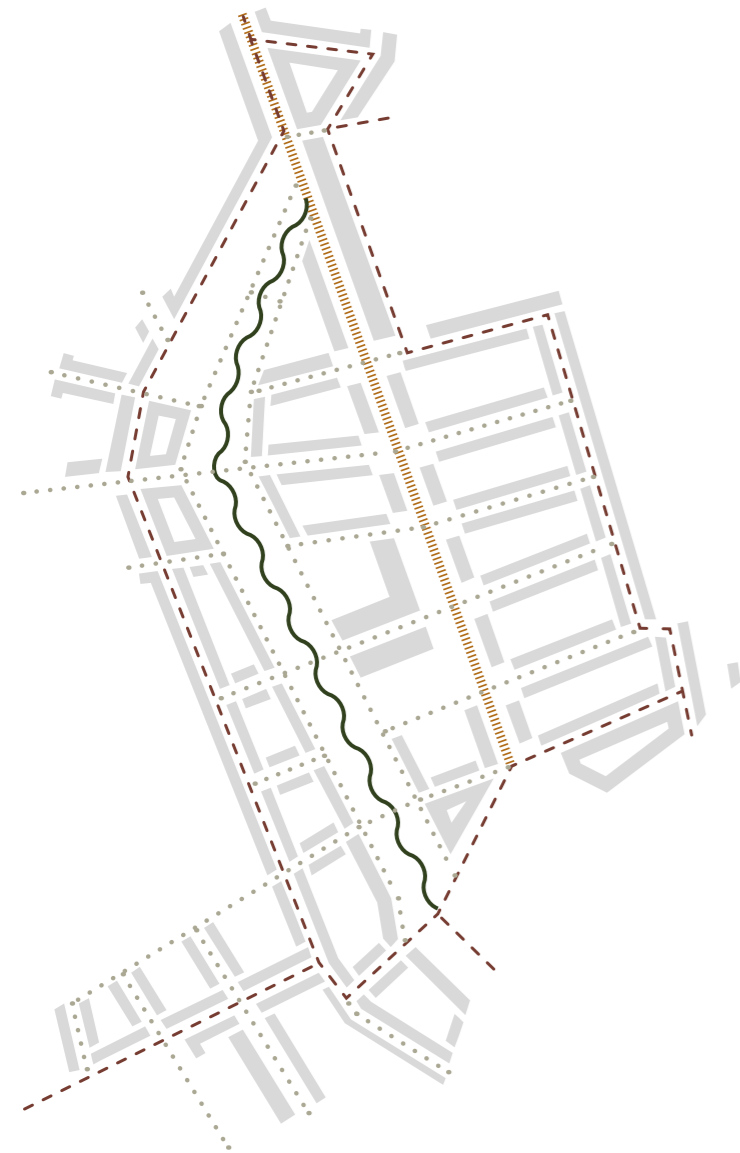
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# Studio idir



Routes



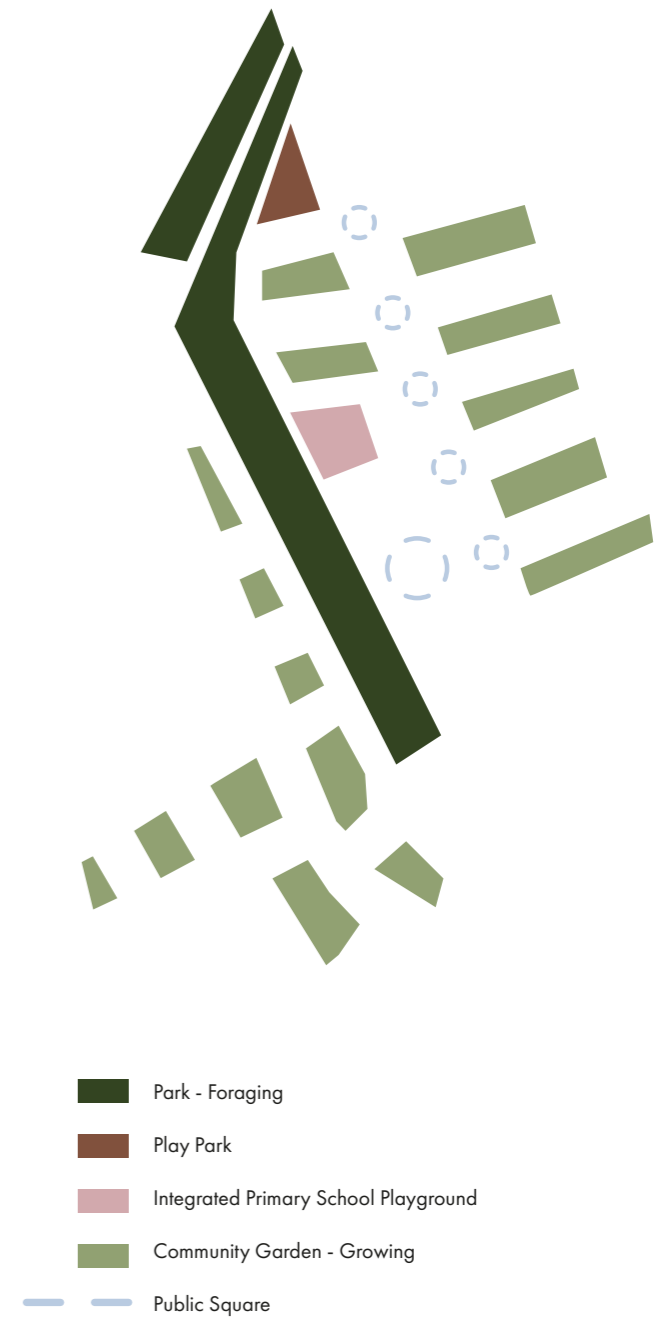
Uses



Heights



Outdoor Spaces



- High Street
- Linear Park
- Pedestrian / Cycle Routes
- Two-Way Traffic

- Residential
- Commercial Ground Floor with Residential Above
- Workspaces / Services
- Integrated Primary School
- Community Hub

- 1 Storey
- 2 Storey
- 4 Storey
- 6 Storey

- Park - Foraging
- Play Park
- Integrated Primary School Playground
- Community Garden - Growing
- Public Square

# Courtyard Commons

A shared and co-designed external space for each block of housing: a space to play, grow, and build community.

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# Siobhan's Day in Mackie's Commons

# Studio idir



7am: Get up early to gather eggs for breakfast from the courtyard commons

1



3pm: Take kids for a play in the playpark

7



8:45am Drop kids to school on way to...

2



4pm: Visit granda on the way home and give him some blackberries

8



9am: Admin job at computer lab in community hub

3



7pm: Put kids to bed

9



12pm: Meet a friend for lunch in a square along the high street

4



7:50pm: Hop on the bike to make it on time for...

10



1pm: Borrow an e-car from the car-pool to collect a parcel

5



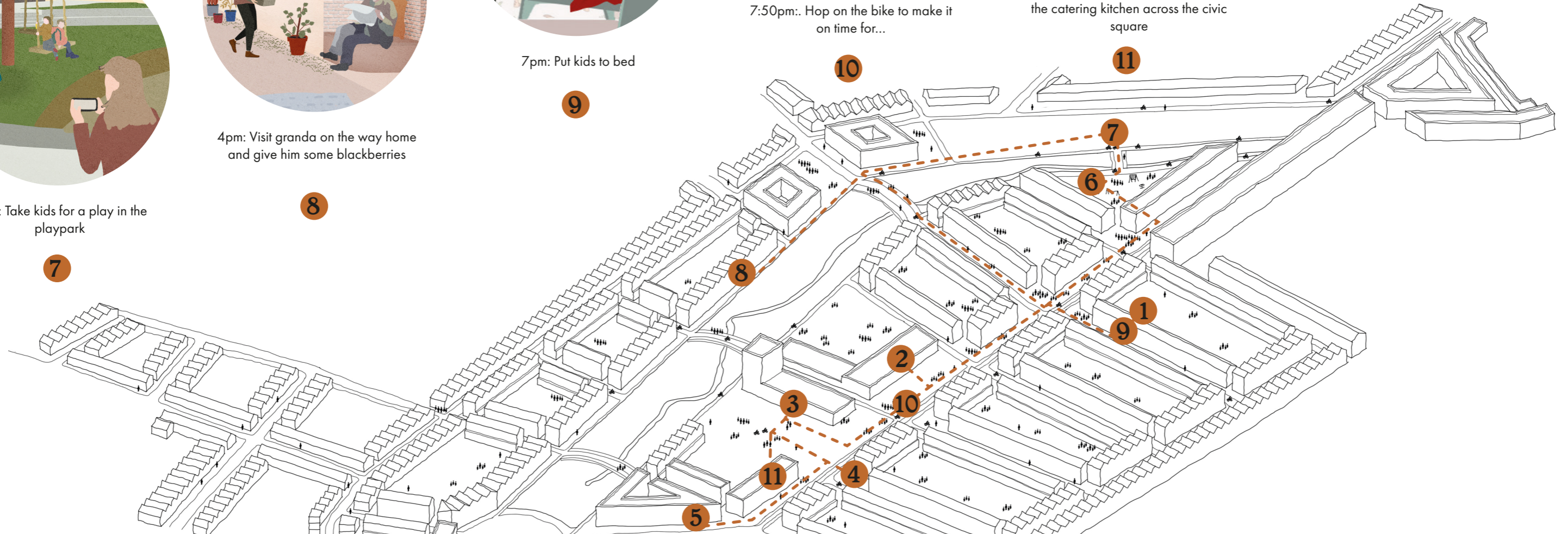
8.00pm Community cookery class at the catering kitchen across the civic square

11



2pm: Collect kids and forage for blackberries along the greenway

6

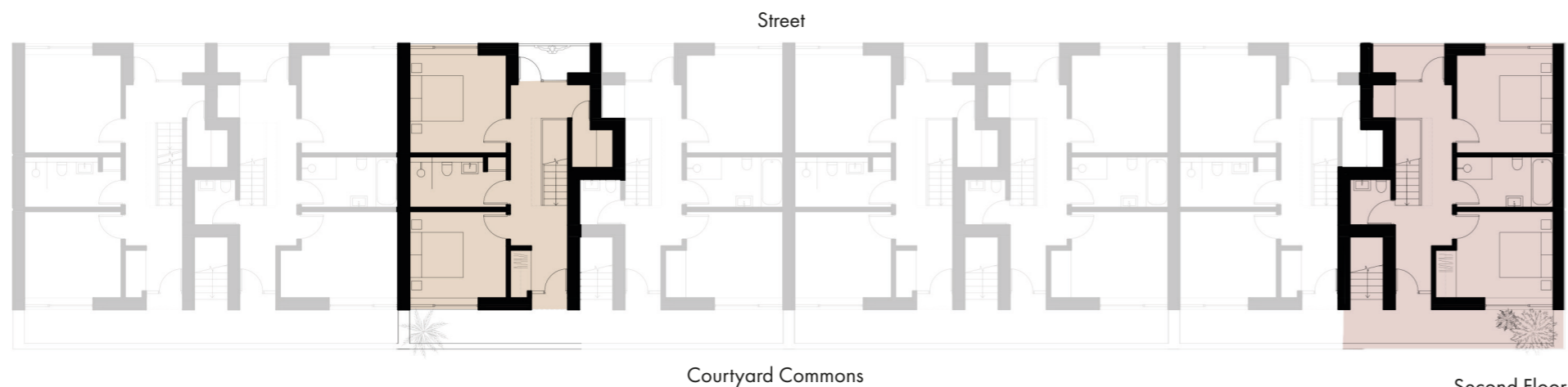






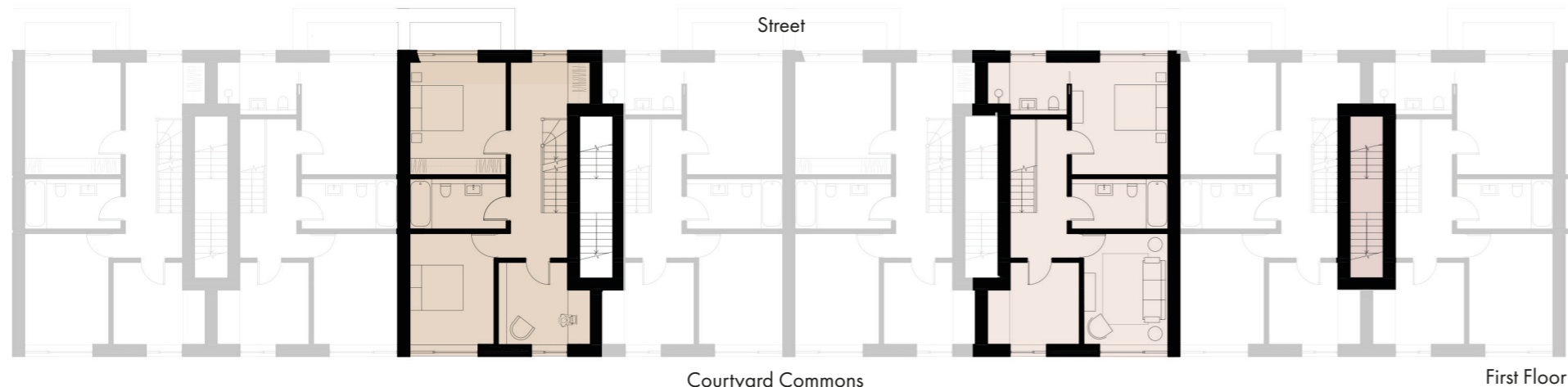
Courtyard Commons

Third Floor



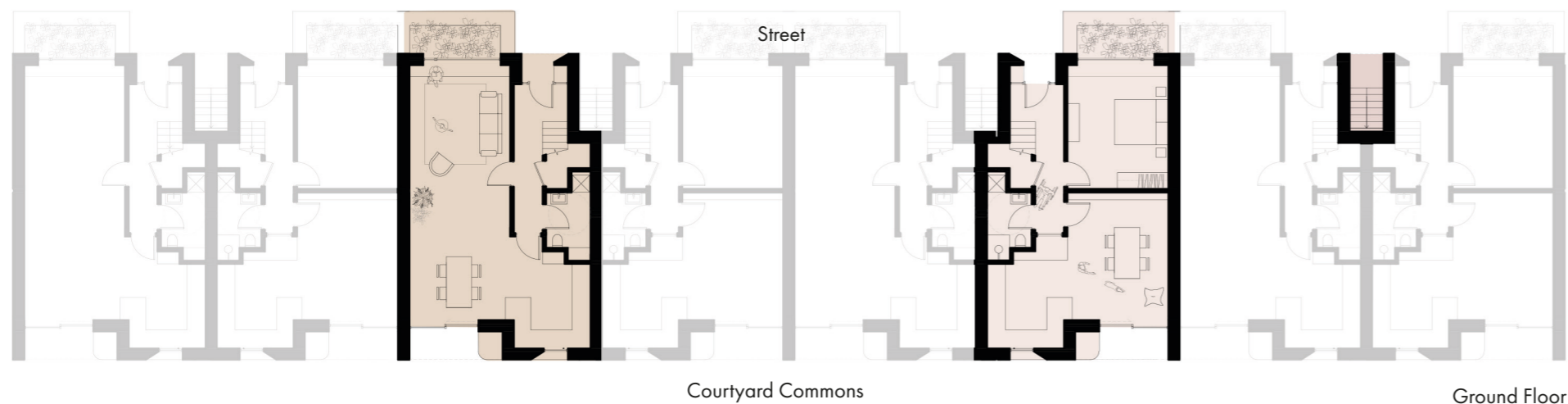
Courtyard Commons

Second Floor



Courtyard Commons

First Floor



Courtyard Commons

Ground Floor

## Four/Five Bedroom, Four-Storey Townhouse

Siobhan has 4 kids so she chose a combined 4-storey townhouse. The open plan living space on the ground floor never feels too crowded, especially when they throw the sliding doors open to the commons at the rear. The lucky kids each have their own bedroom now, for the first time, and a games room at the top for when they have friends over or want to play noisy computer games. It's a tough call, but Siobhan's favorite bit of the house might just have to be her handy laundry room on the third floor, from which she can pop the clothes out on the rear balcony to dry (if it isn't raining!) and not have to look at kids' clothes drying all over the rest of the house. She got really into willow weaving during the build phase of the development, and now grows different-coloured willows in the courtyard commons, from which she weaves ever more ambitious baskets for friends and neighbours.

## Three/Four Bedroom, Two-Storey Ground Floor Duplex

Billy lives in a ground floor duplex with his wife Sandra and their two daughters. Since he lost his leg in a work accident, they have converted their front room into a bedroom, so Billy doesn't have to manage the stairs. They'll eventually move to an apartment on their block, but in the meantime the girls have taken over upstairs, with their own playroom (that is rarely tidy!). Billy and Sandra love to grow vegetables in their allotment in the commons, and the level access and raised beds mean Billy can still keep this up from his wheelchair, while the girls search for chicken eggs and clamber about in the natural play area that the community have created together. Billy is getting weekly physiotherapy at the health centre on the site, which is thankfully only a short jaunt away across the greenway. His arms are getting muscly!

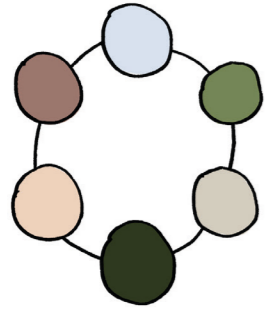
## Two Bedroom, Two-Storey Upper Floor Duplex

Asif and his wife Salma, moved to Northern Ireland last year and are delighted to have got a house in such a lovely community. Their upper duplex with its views over the common below and the Belfast hills beyond reminds them of the apartment they left behind in Aleppo. The stairs to their front door keep them fit! They like to wrap up warm and sit out on the internal balcony and watch the street life below. Asif uses his shed as a bicycle workshop, like he had back at home, and has fixed up second hand bikes for himself and Salma. The kids in the block know his is the shed to go to if their bike chain comes off! This weekend, his neighbour is planning to paint a bicycle on the side of his shed in the colours of the Syrian flag, in exchange for some of Salma's flatbreads. The mouth-watering smell of Salma's baking spills out over the commons every afternoon.

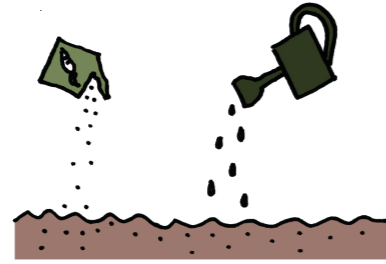
## Density

The scheme has an average of 1050no. houses and 156no. apartments, with a density of 44 dwellings per hectare.

## DESIGN



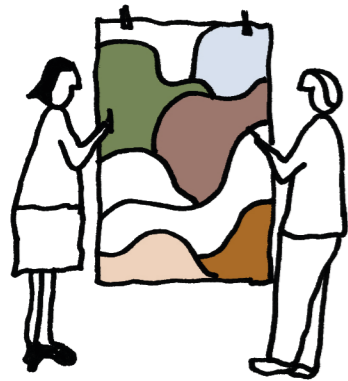
A community land trust is set up.



Hemp, willow and trees are planted.



Community co-design workshops on public spaces, courtyard commons and house types.



Community co-design of public art.



A test house is built.

## BUILD



The community hub will be built first to create a centre for the community to gather.



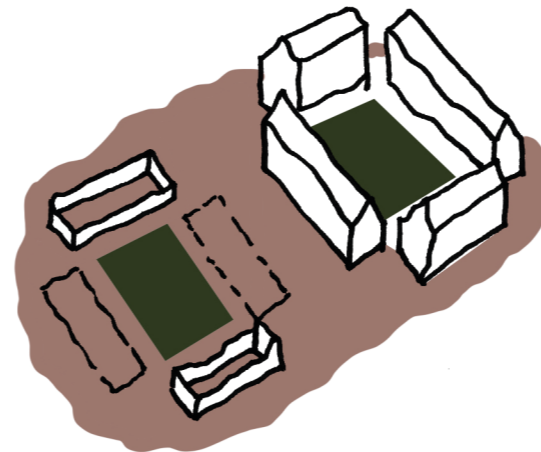
The hemp is harvested for the production of hempcrete.



Claiming the commons. The grown willow is used by the community to work out the layout and uses of the courtyard commons.



Everyone gets a shed in the courtyard commons to begin using the land before their house is built.

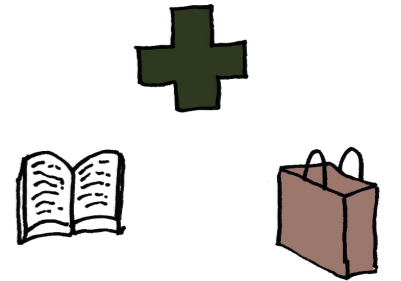


The masterplan is built block-by-block. Training for resident volunteers in building trades as they go.

## LIVE



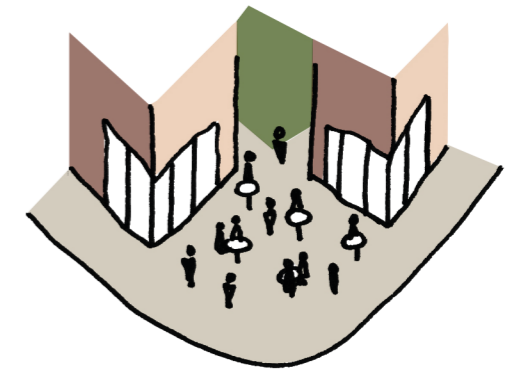
Accessible design is better for everyone.



Integrated services for a vibrant community.



Spaces to grow.



Spaces to gather.



A hub for learning and sharing.



Spaces for connection.



People before cars. An active community.



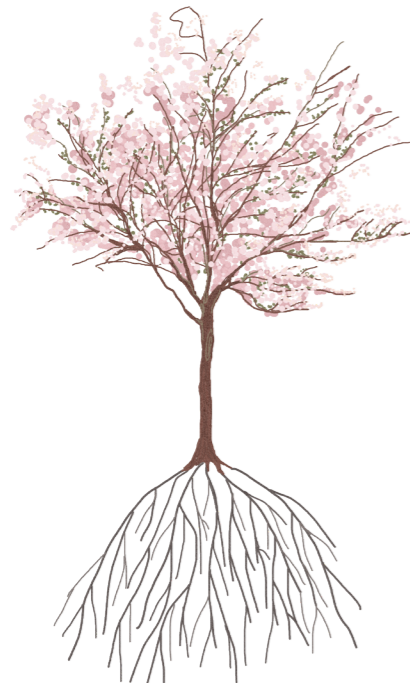
Spaces for play.



## Summary

This proposal sets gentle density housing and associated facilities across the Mackie's Site. Future residents will be able to play a pivotal role throughout the design and build process, and live on the site in a variety of ways.

- **Community Land Trust** - all of the land, including the courtyard commons, is owned by a CLT. All residents become members of the CLT and therefore co-owners of the land, for as long as they live there. The houses that are built can then be privately owned or rented (privately or as social housing). There will be at least one cooperative housing block and several rows across the scheme that will be allocated for private plot-based development by residents, who can design their own bespoke units in accordance with a design guide.
- **Car-free site.** Vehicles can only navigate around the periphery of the site, connecting into the roads infrastructure of the surrounding area. There is only car access within the site for blue badge holders, removals and emergency services. Residents and visitors can access all areas by means of the shared, pedestrian- and bicycle-friendly network of streets.
- **Electric carpool, bus routes and Belfast bikes.** Limited roadside car parking will be available around the peripheral route, but alternative sustainable and affordable modes of transport will be made available and encouraged. Furthermore, the range of work, retail and leisure facilities in the proposal should reduce the number of people that have to travel, especially in this newly flexi-working world.



- **Highly adaptable homes.** Residents will be able to choose from apartments, two-storey ground floor or upper level duplexes and larger four-storey townhouses. At the design stage, they will be able to tailor their chosen home to suit their needs (en-suite or box room/office, ground floor shower/bedroom, open plan or separate reception rooms, balcony or office, guest WC or utility room, etc.) The houses can also be vertically connected or separated to accommodate future changes in household sizes without the need to move.
- **A mix of privately owned and social housing.** There will be no perceivable difference between the two - everyone gets access to the same high quality, adaptable housing.
- **Courtyard commons** means more space for everyone. Instead of individual gardens, the courtyards are shared spaces that can be shaped and personalised over time by the residents of each block. Courtyard commons will be made safely available to future residents as soon as the site has been set out, and remain safely accessible throughout construction, to allow a sense of place and taking of ownership to begin.
- **A garden shed for each unit** will be installed before the houses - a low cost investment that gives each future resident their own stake on the land. Paints will be provided and future residents encouraged to personalise their sheds. The sheds can be used for bike storage, workshop, gardening tools, garden(ing) room, or be adapted into an office space. It gives all residents a base within the shared courtyards.
- All buildings will be built from **hempcrete construction**, using hemp grown on the site with and by future residents, clad with lime render in a variety of gentle pastel shades.
- **Community involvement in the build**, following the Habitat for Humanity model, where volunteers can help to build, but also train in traditional/natural building techniques (hempcrete, lime render, carpentry) as they do so. The learning is passed on to the resident-builders from one block to the next.
- A site for **food production** - as well as allotments and chickens within the courtyard commons, the greenway and park will be planted with fruit and sweet chestnut trees. Bushes such as blackberries and wild garlic will be encouraged to grow around them, providing year-round food for the picking. Foraging workshops will help introduce all interested residents into the foods available at each season.
- **Willow** will also be grown on the site, with input from interested residents, before construction begins. Some of this willow will be chipped to provide a small amount of biomass for the heating system - more as part of education and in the spirit of living off the earth than providing a significant/lasting volume of fuel. The willow will also be used to run weaving workshops for residents, in which they can weave screens to create edging for planters and garden furniture within their future shared courtyards. Living willow installations can also be created.
- **Heated by biomass** - we propose a shared biomass plant that will generate heat from woodchip to heat water for the houses.
- All roofs oriented to the south for optimum **solar panel** placement. The photovoltaic panels will generate electricity to power the houses, including providing hot water for underfloor heating, so supplement the biomass plant.
- **Stormwater recovery** - rainwater will be stored in large, concealed underground tanks and used to irrigate the green spaces and vegetables grown on-site.