
# Reviving the Rural
## manifesto

THE CHALLENGE

Events of recent years highlighted the need and the urgency for increased local and regional resilience.

There is a desperate need for alternatives in three crucial areas: energy, waste management and food production - and the 93% of Polish teritorry considered 'rural' will play a key role in this challanging transition.

Monocultural farming is causing a rapid degradation of vast areas of soil and global ecosystem while fragility of global supply chains often affects the rural areas the most. They are trapped in exploitative relationships extracting the value from coutryside to metropolitan centres - which is needed but should not be done at a cost of slowly degrading those crucial ecosystems while giving in return insufficient and often only monetary compensation.

There is a need to rethink those relationships and strive for a healthier social end economic models and a shift towards circular economy in Europe presents a great opportunity.

THE OPPORTUNITY

With the shift towards circular economy and advancements in increasingly low-cost and subsidised local energy production systems there seems to be a right moment for revival of resilient and more self-reliant neighbourhoods.

European rural areas not only present massive opportunity in produciton of biobased circular materials for new economy but also offer a rich body of knowledge and unique cultural experience accessible to many.

The identified resource and manufacturing potential hidden in sustainable management of Polish forestry presents an opportunity to translate those aspirations into architectural interventions through smarter supply chain of prefabricated engineered timber components.

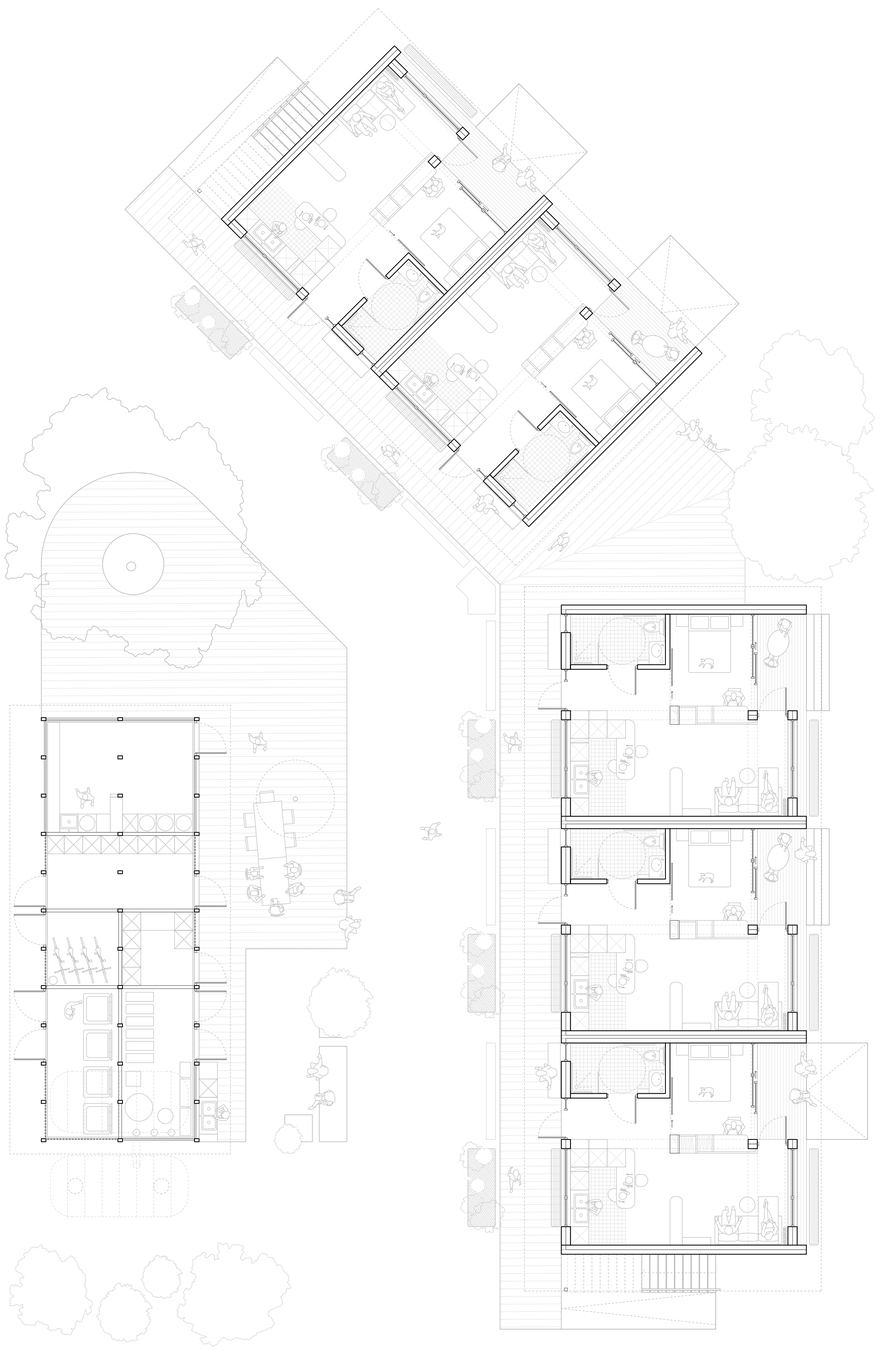
THE SOLUTION

Instead of looking at empty farmlands the project recognises the opportunity laying in currently mostly abandoned former State Owned Farms scattered across Germany and Western Poland. Often occupying prime locations within existing villages those estates present and interesting opportunity to adapt existing agricultural buildings and reimagine those historically difficult areas while serving an already established communities and networks.

While dealing with matter and environment the project also explores social aspects by imagining new models of communal living combining housing for seniors permanently occupying the place with housing for visitors who mix and engage with vibrant everyday programme focused on education in permacultural practices and celebration of local cousine.

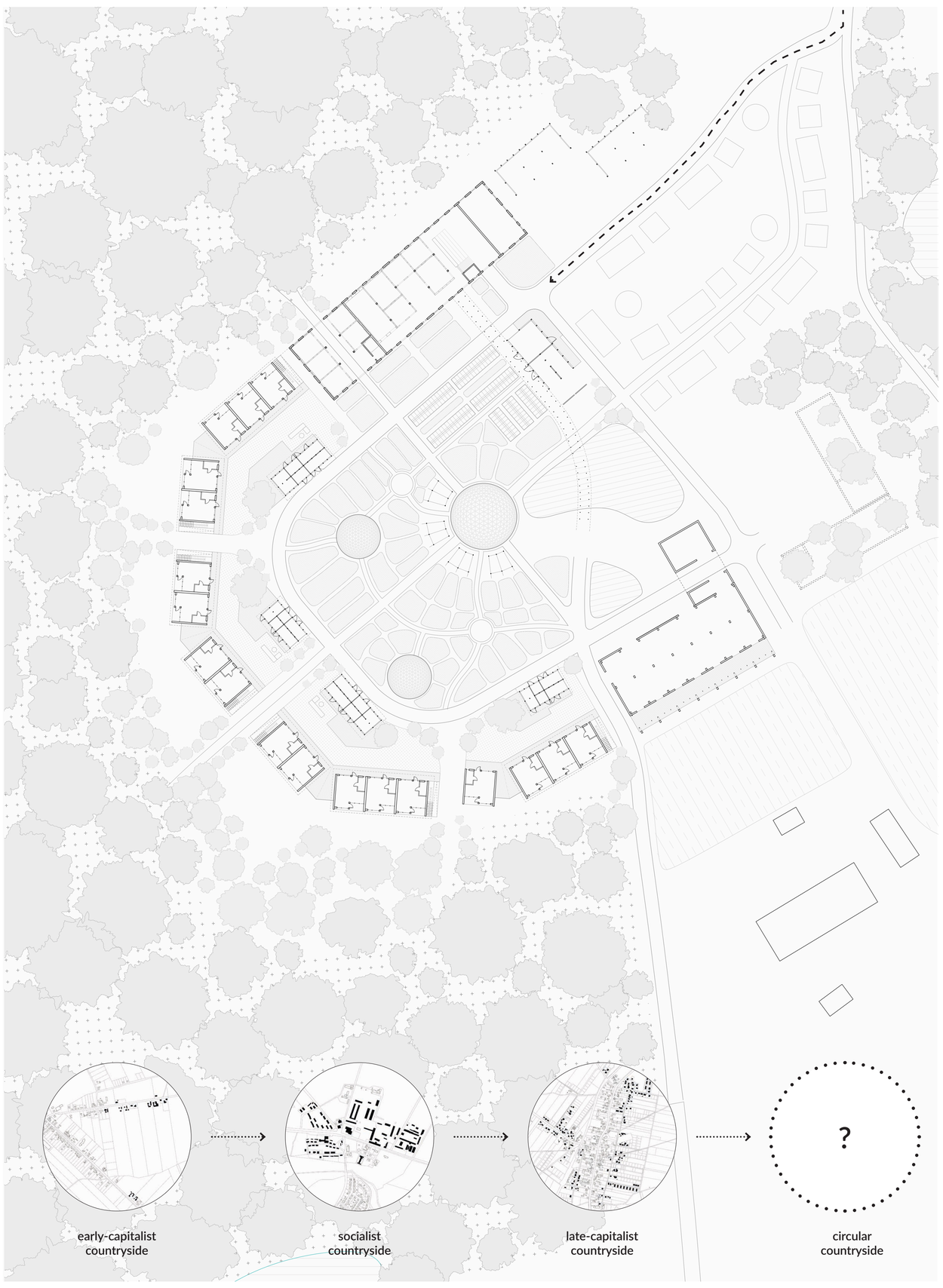
This particular response serves as a model which could be adapted to multiple different locations recognising their unique values and opportunities. I believe that if applied at scale, by strengthening the countryside in multiple areas at once we can have a significant positive impact and ultimately increase the resilience of our cities and entire regions.

*"The inevitability of Total Urbanisation must be questioned, and the countryside must be rediscovered as a place to resettle, to stay alive; enthusiastic human presence must reanimate it with new imagination."* - RK

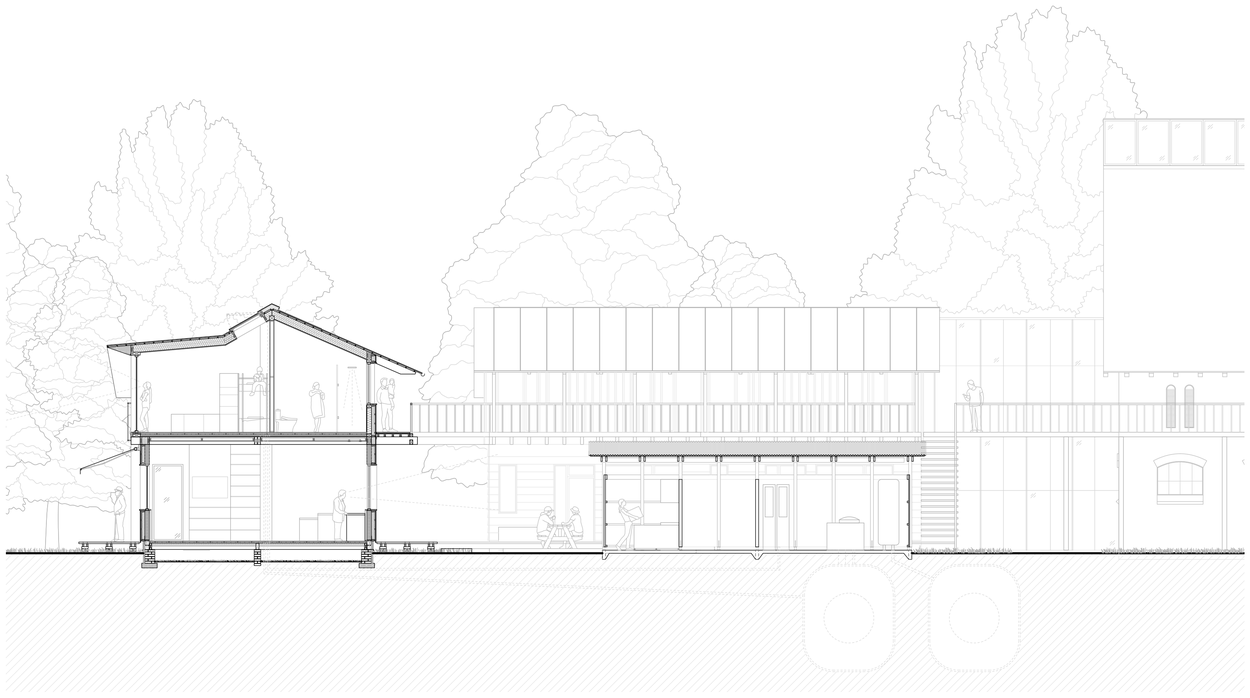


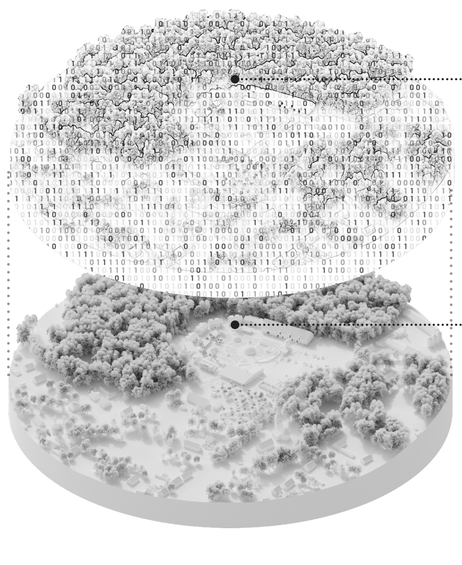
LIVING CLUSTER GROUND FLOOR PLAN. SCALE 1:100

MASTERPLAN. SCALE 1:1000




SECTION THROUGH HOUSING CLUSTER. SCALE 1:100





DIGITAL TWIN MODELLING RESOURCE CONSUMPTION AND PRODUCTION

| x mld/ha | 2 810 m² | 4 915 m² | 12 000 l/day | 3000 l/day |
|---|---|---|---|---|
| microbial biomass factor | solar energy potential | rainfall capture area | gray water capture & reuse | black water anaerobic digester |

HOLISTICALLY DESIGNED NEIGHBOURHOOD ECOSYSTEM

| 34 | 65 | 5 500 m² | 10 500 m² | 800 m² | 2 500 m² |
|---|---|---|---|---|---|
| seniors | visitors | of permacultural garden | of food forest and orchards | of all-year-round greenhouses | for biodiversity & rewilding |

By capturing data about neighbourhood environment and incorporating state of the art data processing methods and prediction models - not only we will optimise the neighbourhood's eveyday functioning but crucially we will be able to learn and adapt to improve wider network of smart villages.

early indication of soil and local environment health

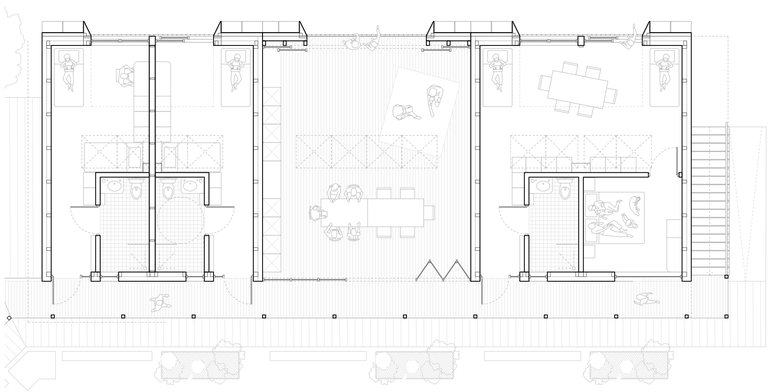
On the other hand, by introducing easily applicable and understandable permacultural principles in the physical environment village will stimulate participation at all levels and encourage visitors to apply some of the methods in their own neighbourhoods.

Over time such model could serve as a proof of concept or a template for improvements to justify not only environmental but also economical validity of simmilar interventions.

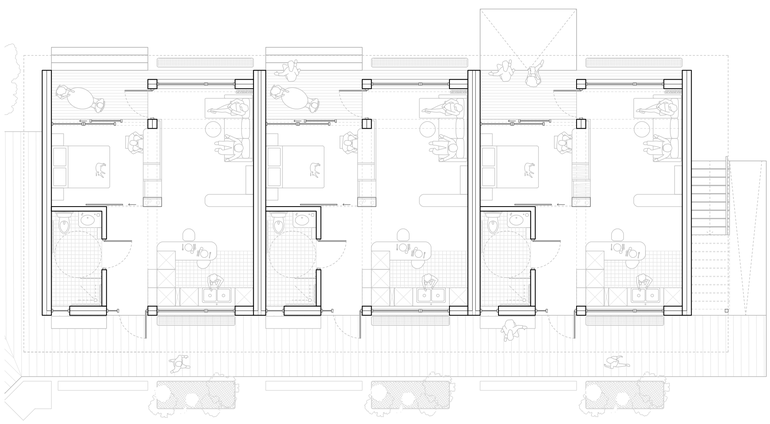
SAYING GOODBYE TO VISITING FAMILY MEMBERS. VIEW FROM MAIN PEDESTRIAN ENTRANCE. EARLY MOIST MORNING

EARLY SATURDAY MORNING. FARMER'S MARKET OPENS UP IN FRONT OF CIRCLE VILLAGE.

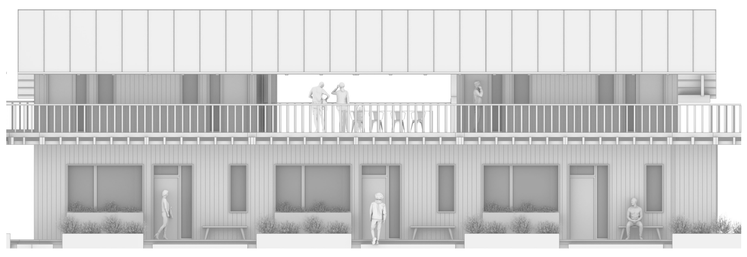
FIRST FLOOR. GUEST SUITES. SCALE 1:100



GROUND FLOOR. SENIOR SUITES. SCALE 1:100

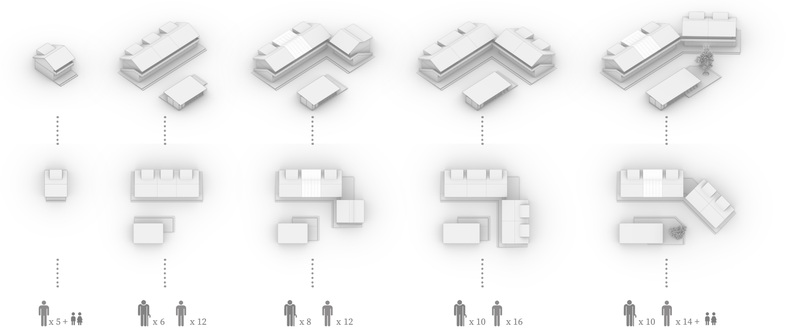


FRONT ELEVATION. FACING COURTYARD. SCALE 1:100



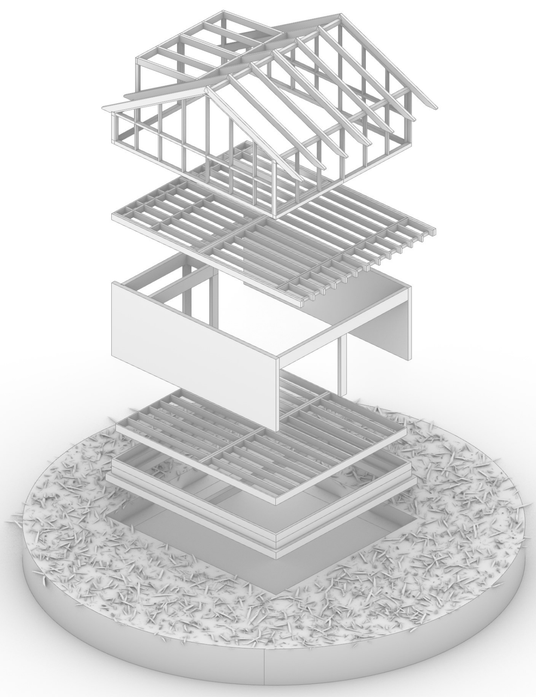
BACK ELEVATION. FACING FOREST. SCALE 1:100

DIAGRAMS OF POSSIBLE CLUSTER CONFIGURATIONS.

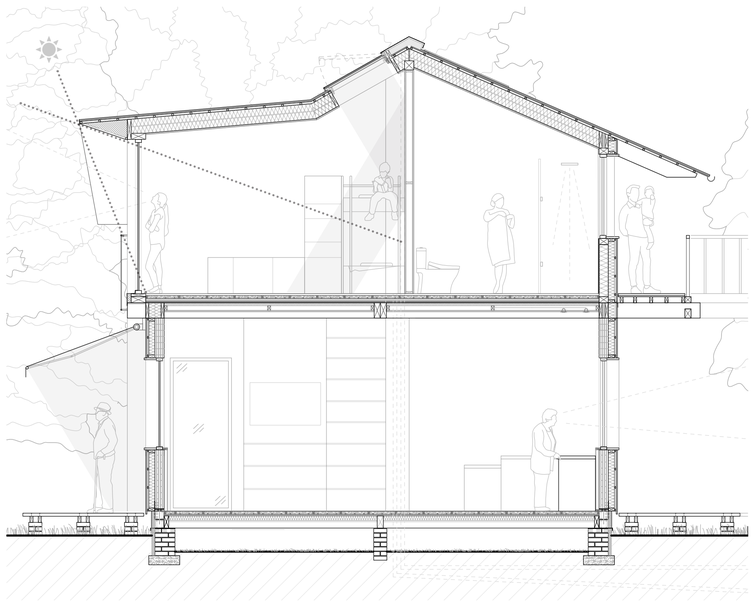



traditional 'hybrid' construction utilising
solid timber logs and overhang timber canopy

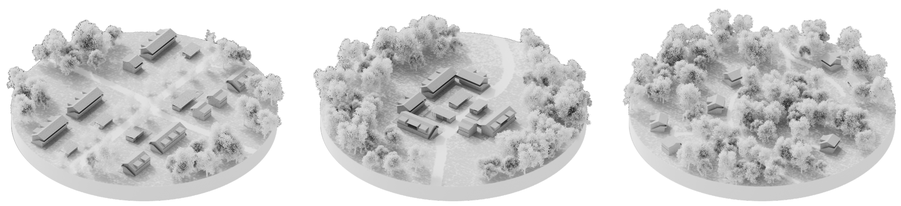
contemporary prefabricated interpretation using
solid timber CLT panels and prefab timber frame canopy



EXPLODED AXONOMETRIC showing key structural elements of a single housing unit.
Inspired by traditional timber construciton combining solid timber walls with overhanging timber frame attic.



HOUSING UNIT SECTION, SCALE 1:50

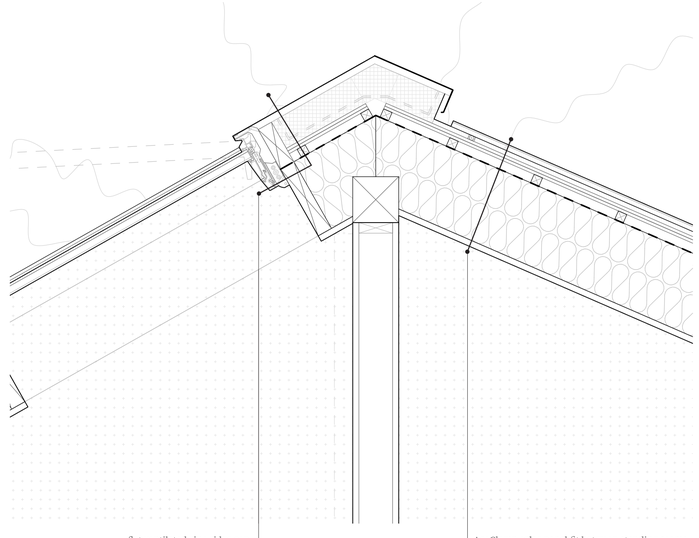


OPTION A. LINEAR LANE

OPTION B. COURTYARD CLUSTER

OPTION C. SCATTERED CABINS

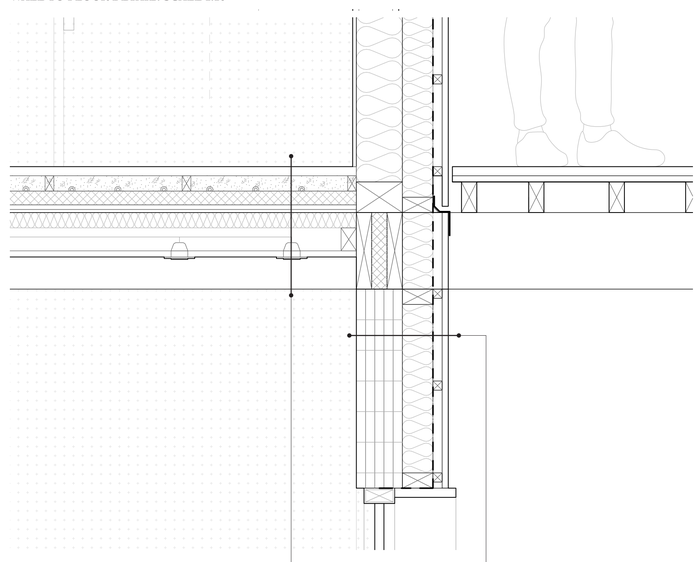
STANDING SEAM ZINC ROOF DETAIL. SCALE 1:10



flat ventilated zinc ridge cap
perforated insect foam
perforated metal clamp
timber boarding
30x30 mm batten
damp control course
triple glazed openable skylight

AceClamp solar panel fit between standing seams
standing seam zinc roof cladding
30x30 mm batten
damp proof membrane
250mm deep rafter with
250mm wood fibre insulation
softwood plywood interior board

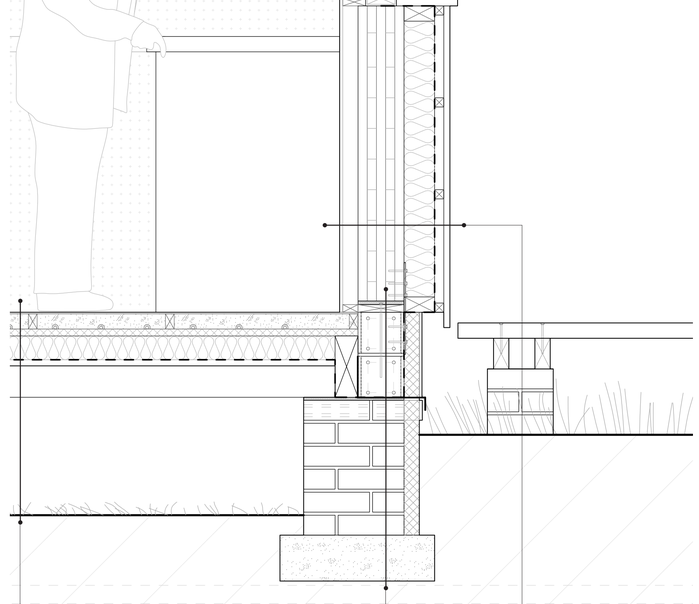
WALL TO FLOOR DETAIL. SCALE 1:10



structural joists at 500mm centres
50x50mm suspension battens
ceiling timber board with shadow gap to fit between joists
service gap with integrated spotlights
50mm sound insulation board
12.5mm OSB board
50mm floor insulation panel
UFH heating pipes + sand:cement dry mix 1:8
22mm timber flooring

150mm 5-layer glulam beam exposed internally
100mm mineral wall insulation
damp proof membrane
30x30 mm horizontal timber counter batten
vertical timber cladding

FOUNDATION TO FLOOR DETAIL. SCALE 1:10



ventilated underfloor cavity
structural joists at 500mm centres
30x30 mm suspension battens
damp proof membrane
100mm soft insulation
12.5mm OSB board
25mm hard floor insulation panel
UFH heating pipes
sand:cement dry mix 1:8
22mm timber flooring

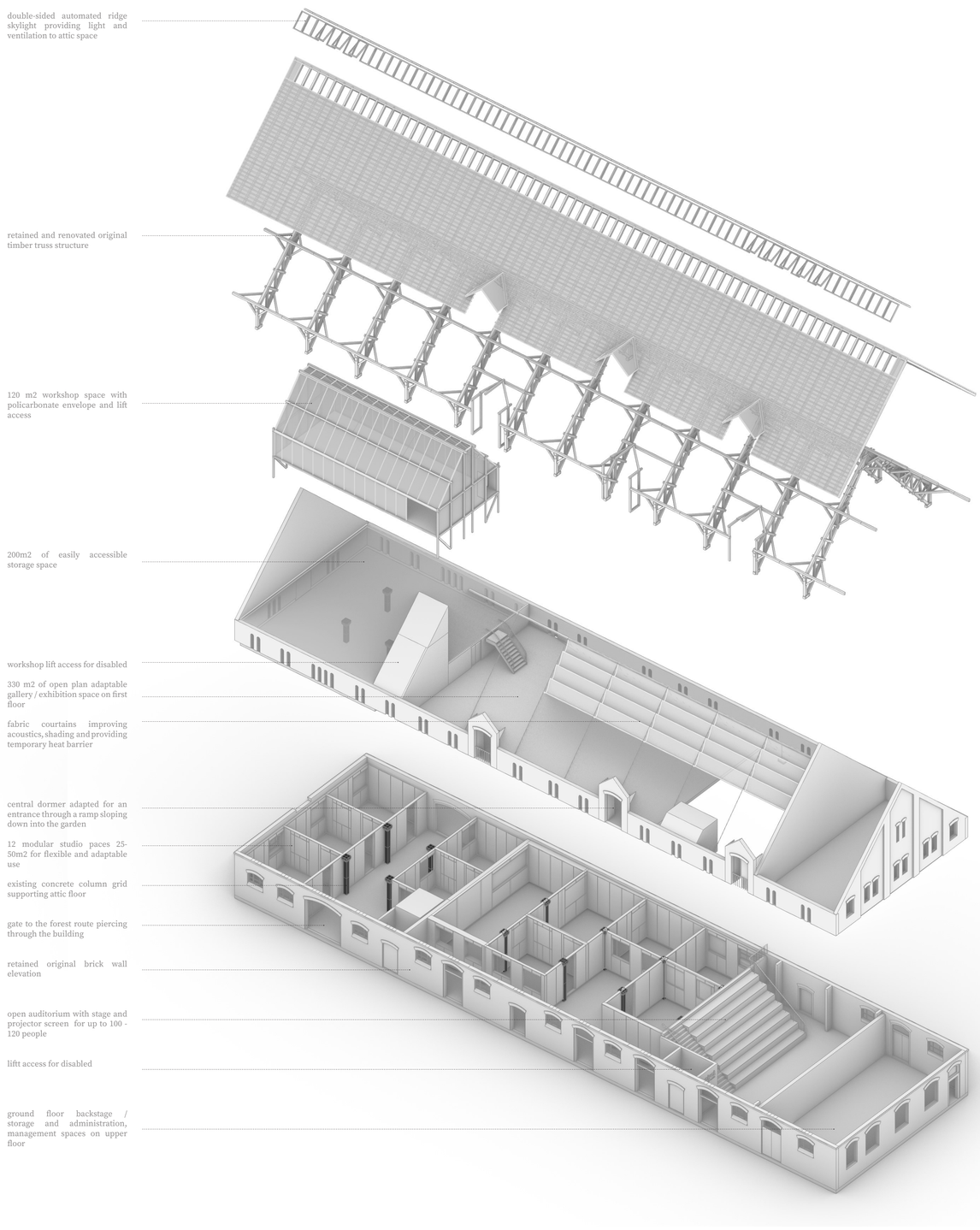
5-layer CLT panel
rigid sealant
pressure-treated sill plate
anchor bolt
metal plate with lag screws
250mm reinforced hollow blocks
flashing beyond insulation
450mm brick elevated foundation wall
with weepholes for ventilation
150mm concrete footing

vertical timber cladding
30x30mm horizontal timber batten
damp proof membrane
100mm mineral wool insulation
150mm 5-layer glulam panel
50mm service gap
plywood panelling up to 900mm from FFL

COMMUNAL FRONTYARD. WARM AFTERNOON IN MAY.

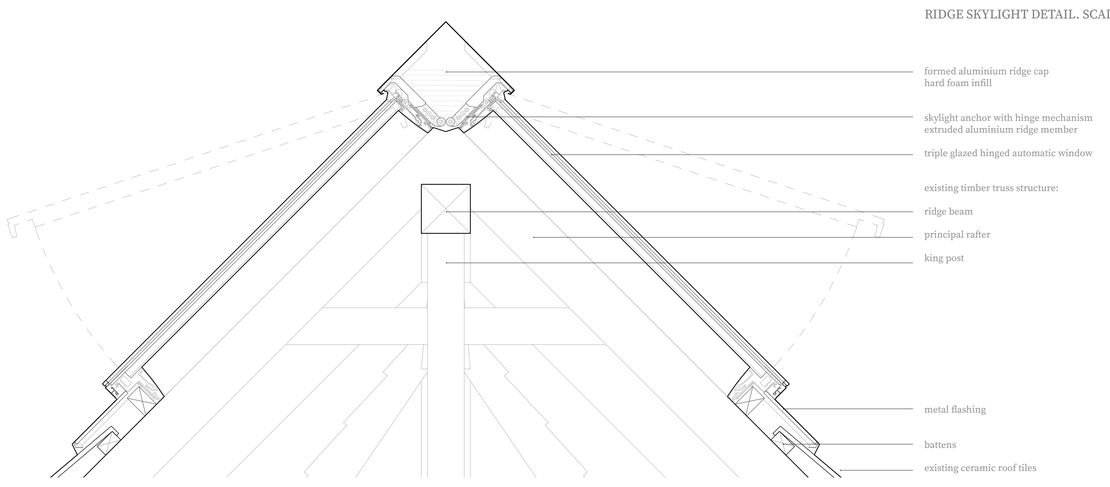
PRIVATE BACKYARD FACING FOREST. HOT SUMMER DAY.

EXPLOADED AXONOMETRIC VIEW OF PROPOSED GRANARY BARN ADAPTATION

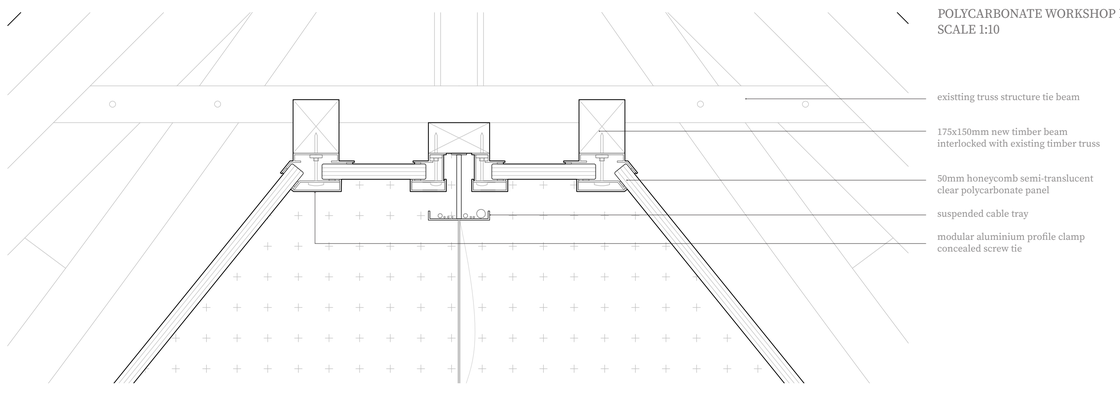



CROSS-SECTION THROUGH PROPOSED WORKSHOP SPACES. SCALE 1:100

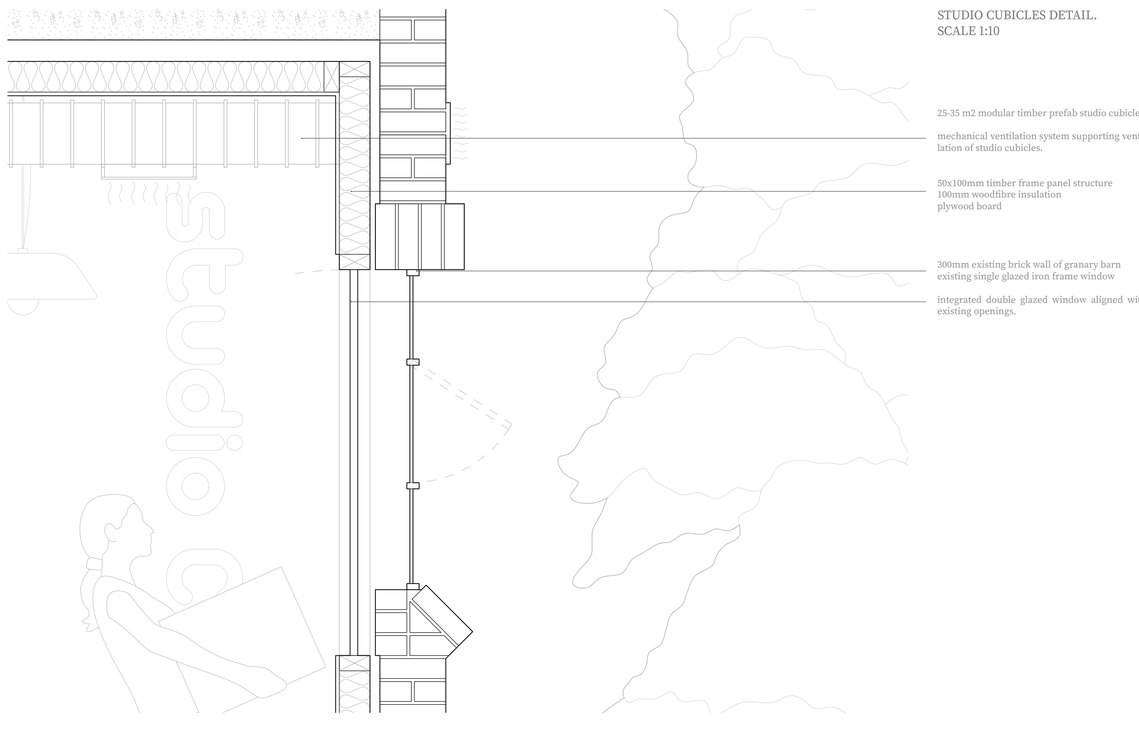
RIDGE SKYLIGHT DETAIL. SCALE 1:10




POLYCARBONATE WORKSHOP DETAIL. SCALE 1:10



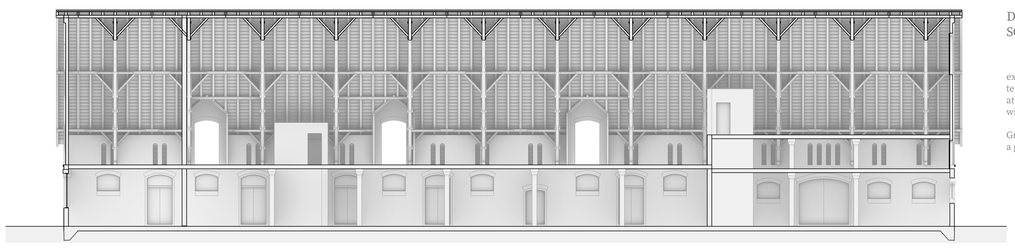

STUDIO CUBICLES DETAIL. SCALE 1:10




DIAGRAMATIC SECTION: BEFORE. SCALE 1:200

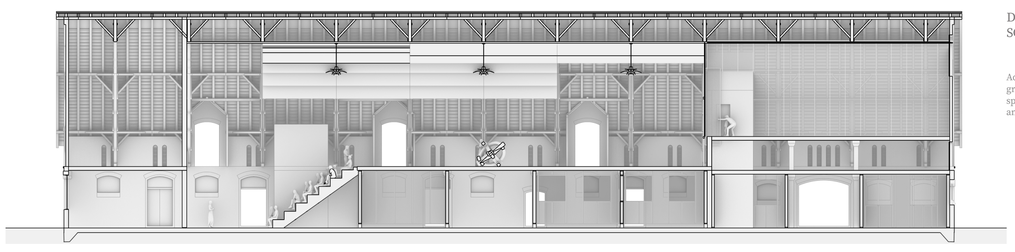
existing building is a XIX century granary barn characterised by load bearing brick masonry ground floor and attic supported by a grid of concrete columns topped with an impressive 9m high timber truss.

Ground floor areas were used as stables and an attice as a grain storage.



DIAGRAMATIC SECTION: AFTER. SCALE 1:200

Adaptation proposed an open connection between ground floor and attic through sheltered auditorium space and series of studio spaces on the ground floor and main workshop space on the attic podium.



APPLIED PERMACULTURE WORKSHOP IS ABOUT TO RESUME AS GUESTS GATHER IN THE AUDITORIUM AFTER A BREAK.




PLANNING AN UPCOMING EVENT FOR VISITING STUDENTS AT MAIN WORKSHOP. LATE EVENING.