St Gallen

Abbey in *RE* major

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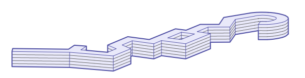
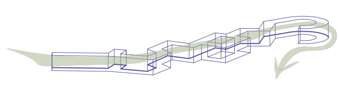


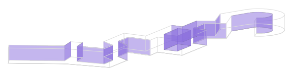
MONASTIC TYPOLOGY

This project revisits the foundational origins of St. Gallen by adopting a typology that supports high residential density, encourages social interaction among neighbors, ensures minimal footprint on the terrain, and achieves maximum spatial efficiency.



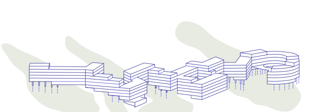
FOLLOWING HISTORIC ROUTE

The volumes are arranged to follow the green path, successor of the railway line, highlighting the site's defining features, and reaching the upper part of Ruckhalde with the gentlest possible slope, while maintaining a linear progression.



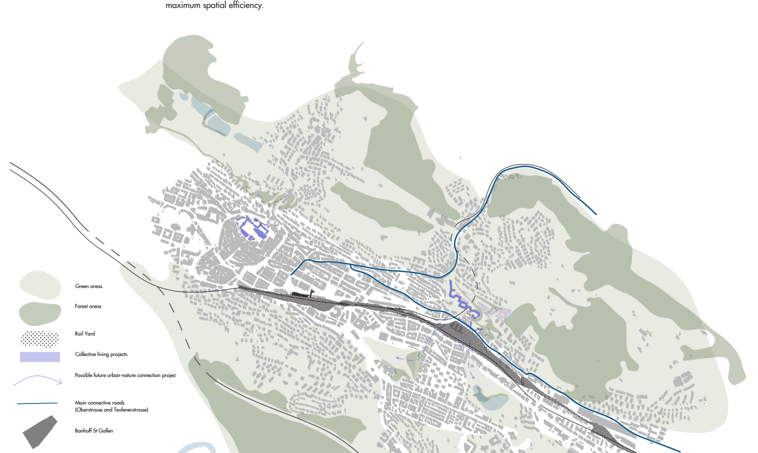
LINKED SEQUENTIAL SPACES

By folding the building along the green path, its linearity is disrupt to generate identifiable spaces at multiple scales, linking a coherent and balanced urban system composed of public spaces with varied atmospheres and sizes.



ELEVATION FROM TERRAIN

Elevating the majority of the constructions seeks to preserve the natural flows of the soil and minimize disturbance to the original topography. This strategy enables high residential density while ensuring the least possible impact on the existing landscape and ecosystems by also adapting the heights to the terrain.


Green areas
Forest areas
Rail Yard
Collective living projects
Possible future urban-nature connection projec
Main connective roads (Oberstrasse and Teufenerstrasse)
Banhoff St Gallen

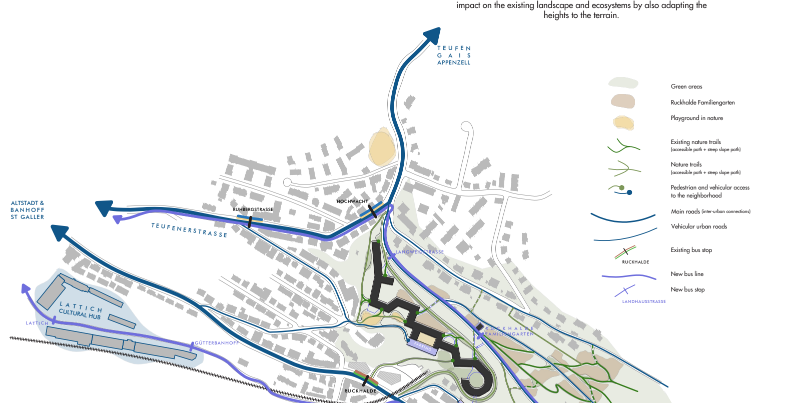
ST GALLEN

The form of the city originates from a dense urban core surrounding the Abbey of St. Gallen (719), which later expanded linearly along the valley between the mountains, parallel to the railway tracks that divide the city into two.

Over time, the growing demand for housing has led to the spread of low-density single-family homes climbing up the hillside. Our project proposes to reconnect the concept of dwelling with the city's foundational origins, now physically and symbolically linked to nature, with minimal impact on the soil. The creation of a new hub of urban and programmatic diversity will ease the current centrality of the city and forge a connection between the citizens daily life and the natural landscape.

At the entrance of our plot from Oberstrasse, we are faced with a large rail yard, making no connection to the green spaces on the opposite side. In a future phase of the project, a partial covering of the tracks could be considered, allowing nature to re-connect the splitted city, using the existing water network as a conective force sewing the city through the existing green corridors of Ruckhalde.

1:20000 — 0 200 500 1000 2000


TEUFEN GAIS APPENZELL
ALTSTADT & BANHOFF ST GALLEN
TEUFENERSTRASSE
RUHBERGSTRASSE
HOCHWACHT
LANGWEIDSTRASSE
LATTICH CULTURAL HUB
LATTICH
GÜTTERBANHOFF
RUCKHALDE
FRIEDBERG
LANDHAUSSTRASSE
OBERSTRASSE
AUTOBAHN 1 St. Margrethen - Genève
Green areas
Ruckhalde Familiengarten
Playground in nature
Existing nature trails (accessible path + steep slope path)
Nature trails (accessible path + steep slope path)
Pedestrian and vehicular access to the neighborhood
Main roads (inter-urban connections)
Vehicular urban roads
Existing bus stop
New bus line
New bus stop

RUCKHALDE

The Ruckhalde hill is located at the junction of two of St. Gallen's main connective arteries: Oberstrasse and Teufenerstrasse. The lack of connectivity of Langweidstrasse is resolved in this project by extending it across the site in the least invasive way possible, non affecting the historic railway line, now repurposed as an important natural hiking trail.

LANGWEIDSTRASSE
New road extension providing direct entry to the Familiengarten, also enabling acces linking the road to the neighbourhood via a system of 'follies' structures equipped with lifts and staircases to provide accessible connections also to the greenway and the project site.

NEW BUS LINE
New urban bus line running along Langweidstrasse, envisioned to extend the site, connecting the 'new abbey' to the vibrant Lattich cultural hub and to the historic centre of St. Gallen.

NATURAL ENVIRONMENT
The presence of wild nature is welcomed through a network of new paths. These paths will also be more human-friendly with urban furniture, small plazas, common grills, exterior sport spots, and local vegetation that offers shade and shelter.

NEW PARKING LOTS
Although the project is conceived with a car-less city approach, mobility considerations require the inclusion of aprox. 700 new parking lots. Some are located beneath the project's AGORA, directly accessible from the main entrance plaza, and another at the Oberstrasse access point, connected to the rest of the project by a panoramic lift.

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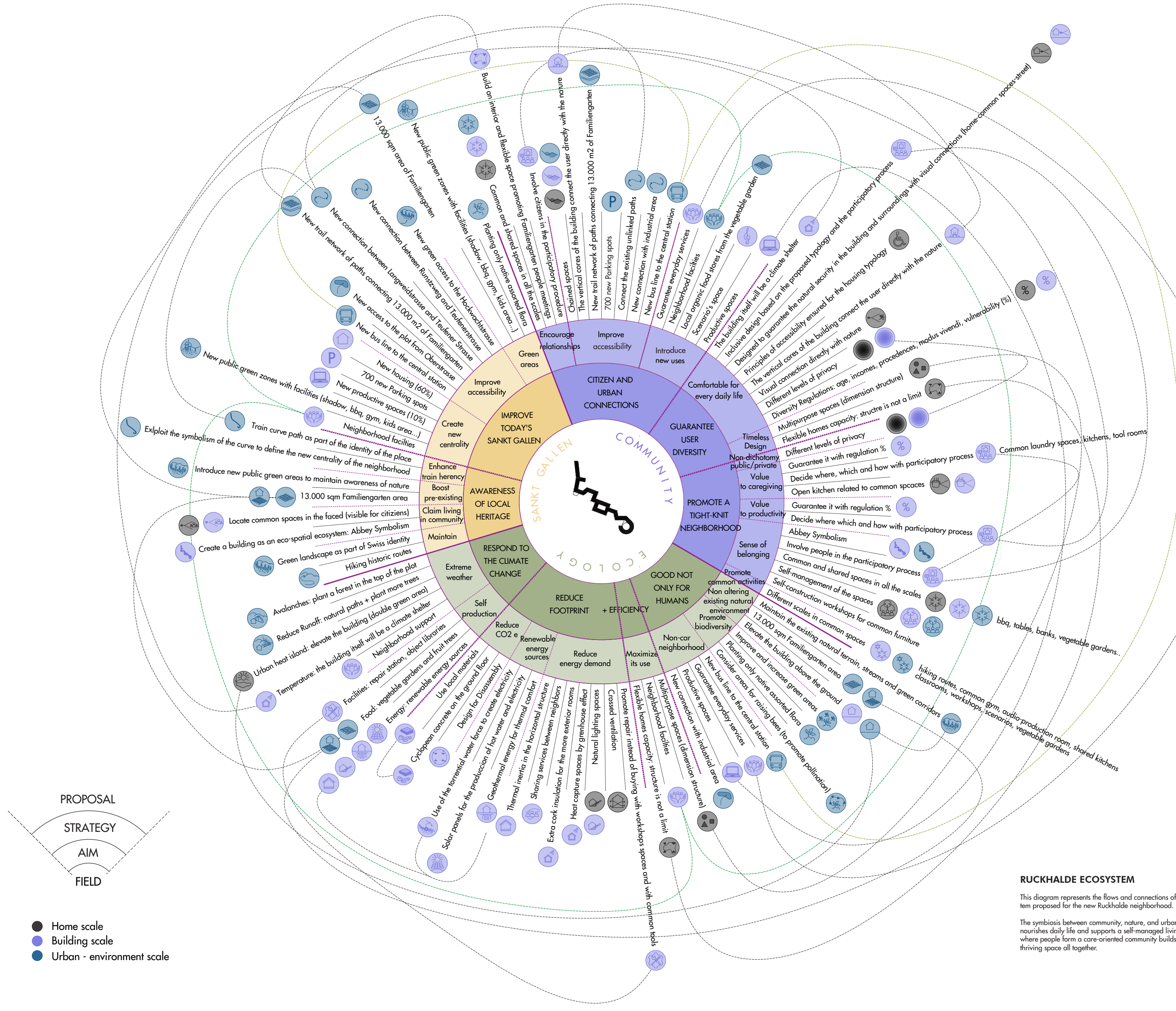
SANKT GALLEN
COMMUNITY
ECOLOGY
IMPROVE TODAY'S SANKT GALLEN
AWARENESS OF LOCAL HERITAGE
CITIZEN AND URBAN CONNECTIONS
GUARANTEE USER DIVERSITY
PROMOTE A TIGHT-KNIT NEIGHBORHOOD
GOOD NOT ONLY FOR HUMANS
REDUCE FOOTPRINT + EFFICIENCY
RESPOND TO THE CLIMATE CHANGE
Green areas
Improve accessibility
Create new centrality
Enhance train herency
Boost pre-existing
Claim living in community
Maintain
Encourage relationships
Improve accessibility
Introduce new uses
Comfortable for every daily life
Timeless Design
Non dichotomy public/private
Value to caregiving
Value to productivity
Sense of belonging
Promote common activities
Non altering existing natural environment
Promote biodiversity
Non-car neighborhood
Maximize its use
Reduce energy demand
Renewable energy sources
Reduce CO2 e
Self production
Extreme weather

Exploit the symbolism of the curve to define the new centrality of the neighborhood
Train curve path as part of the identity of the place
Neighborhood facilities
New public green zones with facilities (shadow, bbq, gym, kids area...)
New productive spaces (10%)
700 new Parking spots
New housing (60%)
New bus line to the central station
New access to the plot from Oberstrasse
New trail network of paths connecting 13.000 m2 of Familiengarten
New connection between Langweidstrasse and Teufener Strasse
New connection between Runsitzweg and Teufenerstrasse
New green access to the Hochwachtstrasse
New public green zones with facilities (shadow, bbq, gym, kids area...)
13.000 sqm area of Familiengarten
Planting only native assorted flora
Common and shared spaces in all the scales
Build an interior and flexible space promoting Familiengarten people meetings
Involve citizens in the participatory procedure
Chained spaces
The vertical cores of the building connect the user directly with the nature
New trail network of paths connecting 13.000 m2 of Familiengarten
700 new Parking spots
Connect the existing unlinked paths
New connection with industrial area
New bus line to the central station
Guarantee everyday services
Neighborhood facilities
Local organic food stores from the vegetable garden
Scenario's space
Productive spaces
The building itself will be a climate shelter
Inclusive design based on the proposed typology and the participatory process
Designed to guarantee the natural security in the building and surroundings with visual connections (home-common spaces-street)
Principles of accessibility ensured for the housing typology
The vertical cores of the building connect the user directly with the nature
Visual connection directly with nature
Different levels of privacy
Diversity Regulations: age, incomes, procedences, modus vivendi, vulnerability (%)
Multipurpose spaces (dimension structure)
Flexible homes capacity: structre is not a limit
Different levels of privacy
Guarantee it with regulation %
Decide where, which and how with participatory process
Common laundry spaces, kitchens, tool rooms
Open kitchen related to common spcaces
Guarantee it with regulation %
Decide where which and how with participatory process
Abbey Symbolism
Involve people in the participatory process
Common and shared spaces in all the scales
Self-management of the spaces
Self-construction workshops for common furniture
Different scales in common spaces
bbq, tables, banks, vegetable gardens..
hiking routes, common gym, audio-production room, shared kitchens classrooms, workshops, scenarios, vegetable gardens
Maintain the existing natural terrain, streams and green corridors
13.000 sqm Familiengarten area
Elevate the building above the ground
Improve and increase green areas
Planting only native assorted flora
Consider areas for raising bees (to promote pollination)
New bus line to the central station
Guarantee everyday services
Productive spaces
New connection with industrial area
Multipurpose spaces (dimension structure)
Neighborhood facilities
Flexible homes capacity: structure is not a limit
Promote repair instead of buying with workshops spaces and with common tools
Crossed ventilation
Natural lighting spaces
Heat capture spaces by greenhouse effect
Extra cork insulation for the more exterior rooms
Sharing services between neighbors
Thermal inertia in the horizontal structure
Geothermal energy for thermal comfort
Solar panels for the producction of hot water and electricity
Use of the torrential water force to create electricity
Design for Disassembly
Cyclopean concrete on the ground floor
Use local materials
Energy: renewable energy sources
Food: vegetable gardens and fruit trees
Facilities: repair station, objet libraries
Neighborhood support
Temperature: the building itself will be a climate shelter
Urban heat island: elevate the building (double green area)
Reduce Runoff: natural paths + plant more trees
Avalanches: plant a forest in the top of the plot
Hiking historic routes
Green landscape as part of Swiss identity
Create a building as an eco-spatial ecosystem: Abbey Symbolism
Locate common spaces in the faced (visible for citizens)
13.000 sqm Familiengarten area
Introduce new public green areas to maintain awareness of nature

PROPOSAL
STRATEGY
AIM
FIELD

● Home scale
● Building scale
● Urban - environment scale

RUCKHALDE ECOSYSTEM

This diagram represents the flows and connections of the ecosystem proposed for the new Ruckhalde neighborhood.

The symbiosis between community, nature, and urban impact nourishes daily life and supports a self-managed living system, where people form a care-oriented community builds a common thriving space all together.

St Gallen

Abbey in *RE* major

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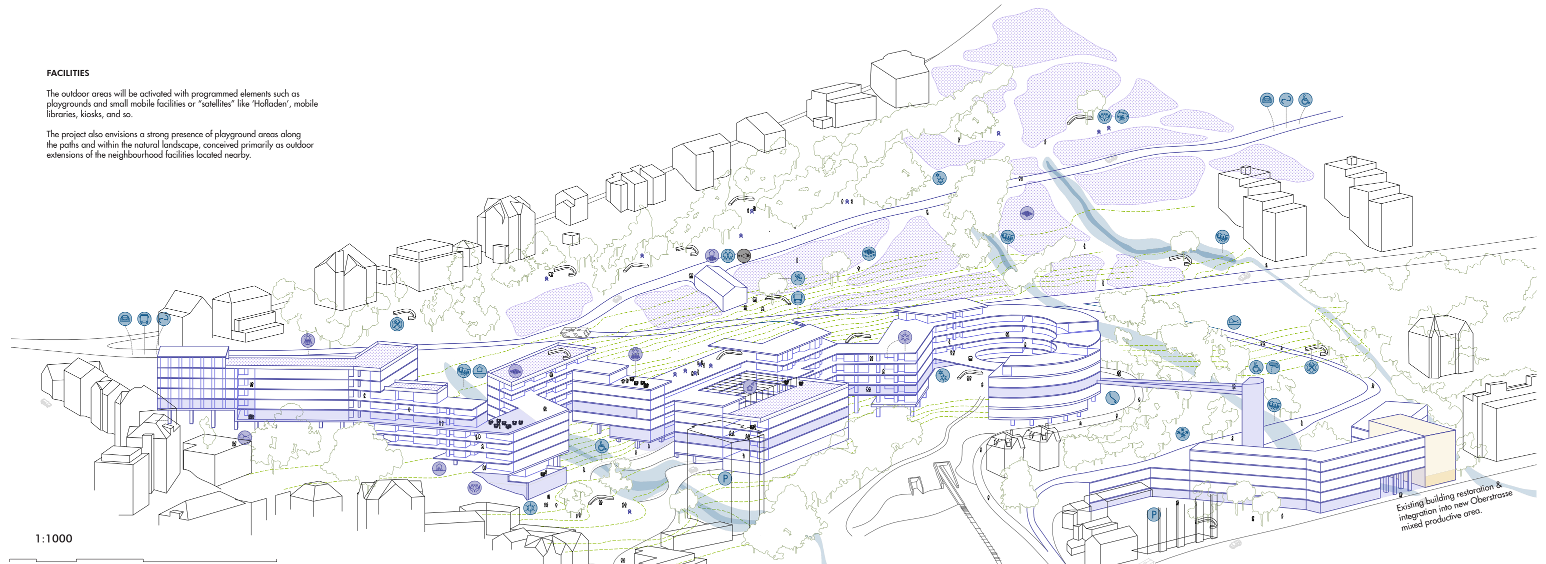
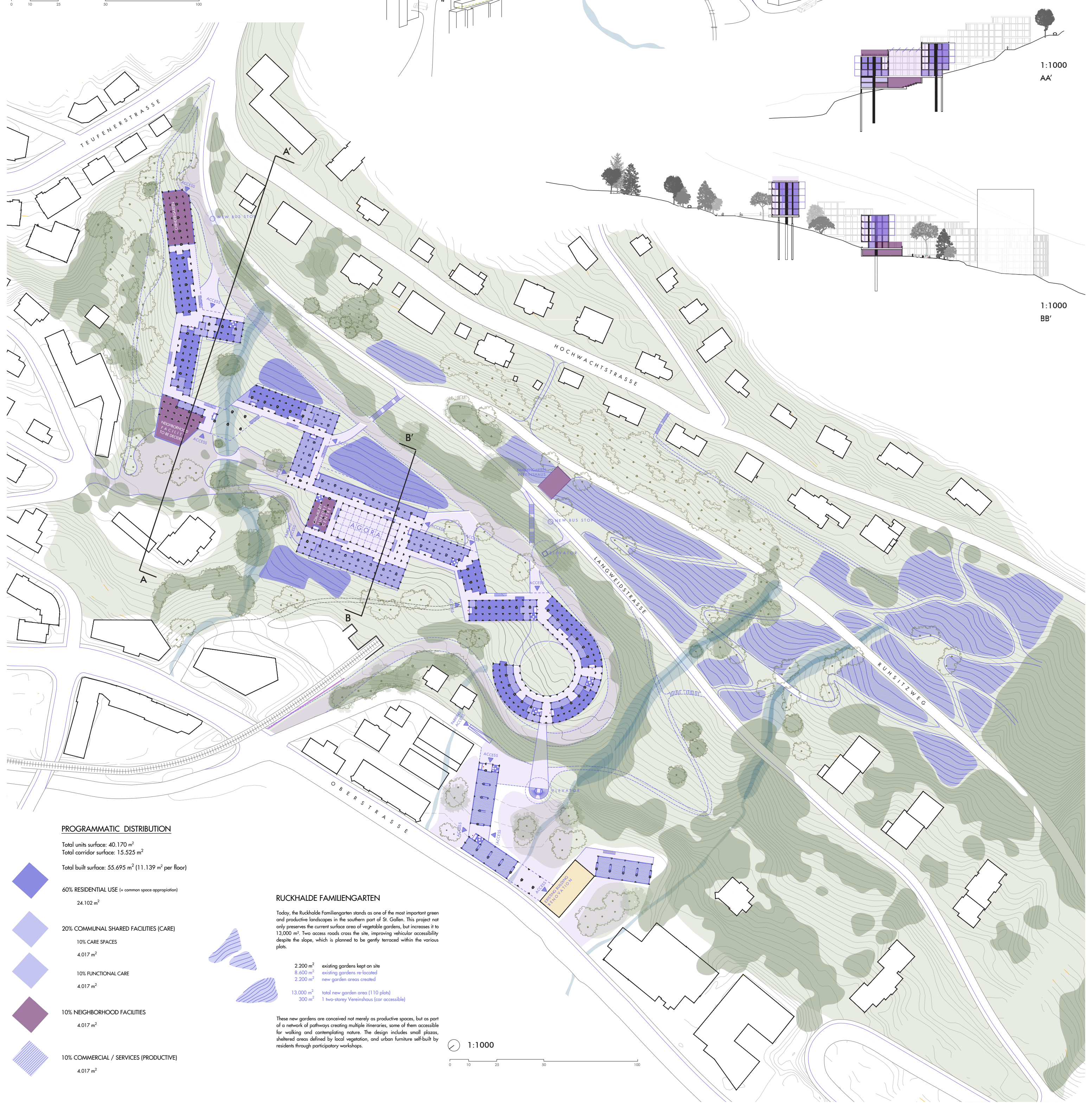
FACILITIES

The outdoor areas will be activated with programmed elements such as playgrounds and small mobile facilities or "satellites" like 'Hofladen', mobile libraries, kiosks, and so.

The project also envisions a strong presence of playground areas along the paths and within the natural landscape, conceived primarily as outdoor extensions of the neighbourhood facilities located nearby.


Existing building restoration & integration into new Oberstrasse mixed productive area.

1:1000 — 0 10 25 50 100


1:1000
AA'
1:1000
BB'
TEUFENERSTRASSE
HOCHWACHTSTRASSE
LANGWEIDSTRASSE
RUHSITZWEG
OBERSTRASSE
ACCESS
NEW BUS STOP
NEIGHBORHOOD FACILITIES TO BE DECIDED
AGORA
FAMILIENGARTEN VEREINSHAUS
ELEVATOR
PARKING ACCESS
EXISTING BUILDING RENOVATION
A
A'
B
B'

PROGRAMMATIC DISTRIBUTION

Total units surface: 40.170 m²
Total corridor surface: 15.525 m²

Total built surface: 55.695 m² (11.139 m² per floor)

60% RESIDENTIAL USE (+ common space appropiation)
24.102 m²

20% COMMUNAL SHARED FACILITIES (CARE)

10% CARE SPACES
4.017 m²

10% FUNCTIONAL CARE
4.017 m²

10% NEIGHBORHOOD FACILITIES
4.017 m²

10% COMMERCIAL / SERVICES (PRODUCTIVE)
4.017 m²

RUCKHALDE FAMILIENGARTEN

Today, the Ruckhalde Familiengarten stands as one of the most important green and productive landscapes in the southern part of St. Gallen. This project not only preserves the current surface area of vegetable gardens, but increases it to 13,000 m². Two access roads cross the site, improving vehicular accessibility despite the slope, which is planned to be gently terraced within the various plots.

2.200 m²	existing gardens kept on site
8.600 m²	existing gardens re-located
2.200 m²	new garden areas created
13.000 m²	total new garden area (110 plots)
300 m²	1 two-storey Vereinshaus (car accessible)

These new gardens are conceived not merely as productive spaces, but as part of a network of pathways creating multiple itineraries, some of them accessible for walking and contemplating nature. The design includes small plazas, sheltered areas defined by local vegetation, and urban furniture self-built by residents through participatory workshops.

1:1000 — 0 10 25 50 100

St Gallen

Abbey in *RE* major

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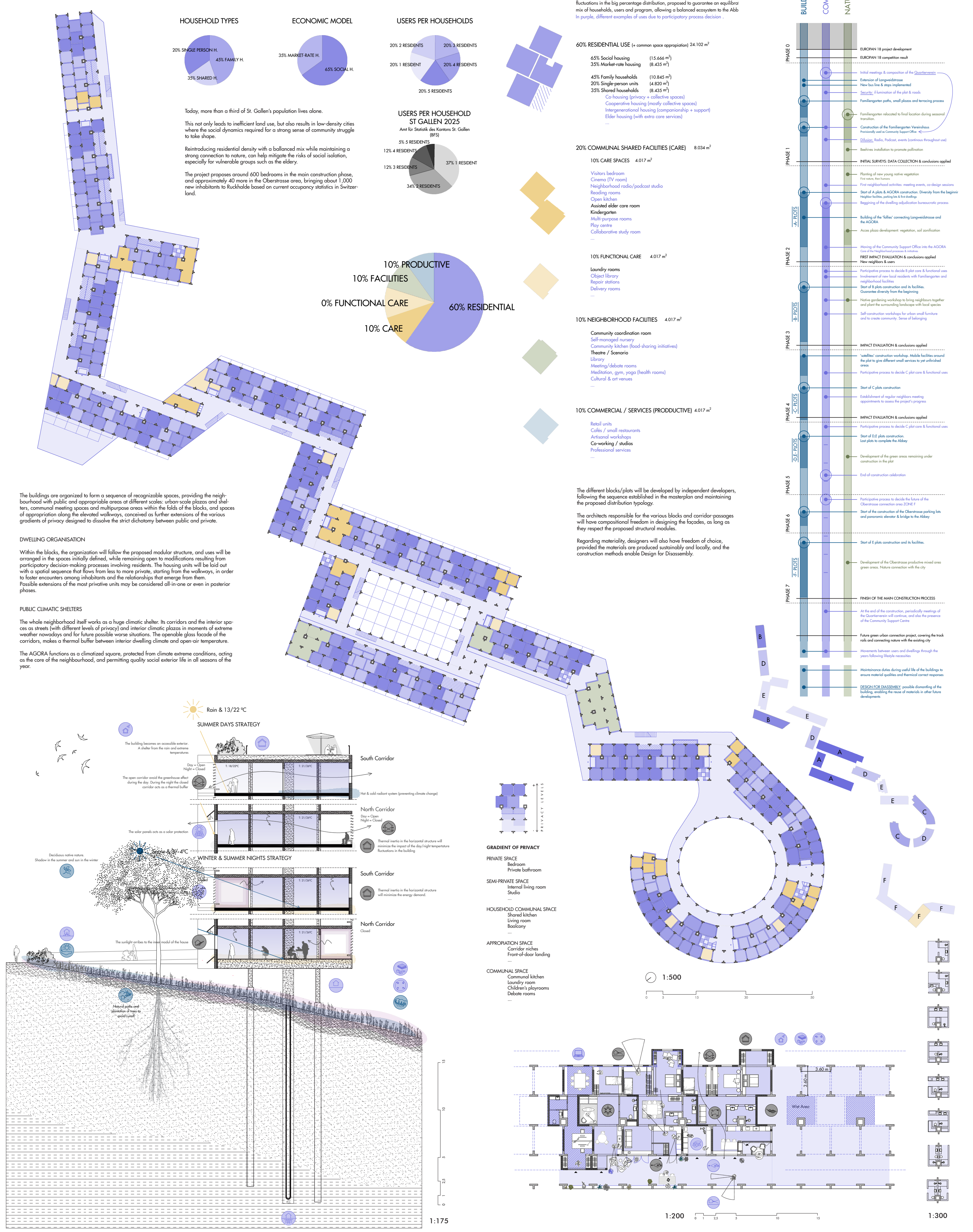
HOUSEHOLD TYPES
20% SINGLE PERSON H.
45% FAMILY H.
35% SHARED H.
ECONOMIC MODEL
35% MARKET-RATE H.
65% SOCIAL H.
USERS PER HOUSEHOLDS
20% 2 RESIDENTS
20% 3 RESIDENTS
20% 1 RESIDENT
20% 4 RESIDENTS
20% 5 RESIDENTS
USERS PER HOUSEHOLD ST GALLEN 2025
Amt für Statistik des Kantons St. Gallen (BFS)
5% 5 RESIDENTS
12% 4 RESIDENTS
12% 3 RESIDENTS
37% 1 RESIDENT
34% 2 RESIDENTS
10% PRODUCTIVE
10% FACILITIES
0% FUNCTIONAL CARE
10% CARE
60% RESIDENTIAL
A
B
C
D
E
F
1:500
0 5 15 30 50

HOUSING TYPOLOGIES

Today, more than a third of St. Gallen's population lives alone.

This not only leads to inefficient land use, but also results in low-density cities where the social dynamics required for a strong sense of community struggle to take shape.

Reintroducing residential density with a ballanced mix while maintaining a strong connection to nature, can help mitigate the risks of social isolation, especially for vulnerable groups such as the eldery.

The project proposes around 600 bedrooms in the main construction phase, and approximately 40 more in the Oberstrasse area, bringing about 1,000 new inhabitants to Ruckhalde based on current occupancy statistics in Switzerland.

The buildings are organized to form a sequence of recognizable spaces, providing the neighbourhood with public and appropriable areas at different scales: urban-scale plazas and shelters, communal meeting spaces and multipurpose areas within the folds of the blocks, and spaces of appropriation along the elevated walkways, conceived as further extensions of the various gradients of privacy designed to dissolve the strict dichotomy between public and private.

DWELLING ORGANISATION

Within the blocks, the organization will follow the proposed modular structure, and uses will be arranged in the spaces initially defined, while remaining open to modifications resulting from participatory decision-making processes involving residents. The housing units will be laid out with a spatial sequence that flows from less to more private, starting from the walkways, in order to foster encounters among inhabitants and the relationships that emerge from them.
Possible extensions of the most privative units may be considered all-in-one or even in posterior phases.

PUBLIC CLIMATIC SHELTERS

The whole neighborhood itself works as a huge climatic shelter. Its corridors and the interior spaces as streets (with different levels of privacy) and interior climatic plazas in moments of extreme weather nowadays and for future possible worse situations. The openable glass facade of the corridors, makes a thermal buffer between interior dwelling climate and open-air temperature.

The AGORA functions as a climatized square, protected from climate extreme conditions, acting as the core of the neighbourhood, and permitting quality social exterior life in all seasons of the year.

PROGRAMMATIC DISTRIBUTION

Some of the spaces are open to be defined by its inhabitants, permitting some fluctuations in the big percentage distribution, proposed to guarantee an equilibrat mix of households, users and program, allowing a balanced ecosystem to the Abb
In purple, different examples of uses due to participatory process decision .

60% RESIDENTIAL USE (+ common space appropiation) 24.102 m²

65% Social housing	(15.666 m²)
35% Market-rate housing	(8.435 m²)
45% Family households	(10.845 m²)
20% Single-person units	(4.820 m²)
35% Shared households	(8.435 m²)

Co-housing (privacy + collective spaces)
Cooperative housing (mostly collective spaces)
Intergenerational housing (companionship + support)
Elder housing (with extra care services)
...

20% COMMUNAL SHARED FACILITIES (CARE) 8.034 m²

10% CARE SPACES 4.017 m²

Visitors bedroom
Cinema (TV room)
Neighborhood radio/podcast studio
Reading rooms
Open kitchen
Assisted elder care room
Kindergarten
Multi-purpose rooms
Play centre
Collaborative study room
...

10% FUNCTIONAL CARE 4.017 m²

Laundry rooms
Object library
Repair stations
Delivery rooms
...

10% NEIGHBORHOOD FACILITIES 4.017 m²

Community coordination room
Self-managed nursery
Community kitchen (food-sharing initiatives)
Theatre / Scenario
Library
Meeting/debate rooms
Meditation, gym, yoga (health rooms)
Cultural & art venues
...

10% COMMERCIAL / SERVICES (PRODDUCTIVE) 4.017 m²

Retail units
Cafés / small restaurants
Artisanal workshops
Co-working / studios
Professional services
...

The different blocks/plots will be developed by independent developers, following the sequence established in the masterplan and maintaining the proposed distribution typology.

The architects responsible for the various blocks and corridor-passages will have compositional freedom in designing the façades, as long as they respect the proposed structural modules.

Regarding materiality, designers will also have freedom of choice, provided the materials are produced sustainably and locally, and the construction methods enable Design for Disassembly.

BUILDING PROCESS — COMMUNITY — NATURE DEVELOPMENT

PHASE 0
EUROPAN 18 project development
EUROPAN 18 competition result
Initial meetings & composition of the Quartierverein
Extension of Langweidstrasse
New bus line & stops implemented
Security: il-lumination of the plot & roads
Familiengarten paths, small plazas and terracing process
Familiengarten relocated to final location during seasonal transition.
Construction of the Familiengarten Vereinshaus
Provisionally used as Community Support Office
Difusion: Radio, Podcast, events (continous throughout use)
Beehives installation to promote pollination

PHASE 1
INITIAL SURVEYS: DATA COLLECTION & conclusions applied
Planting of new young native vegetation
First nature, then humans
First neighborhood activities: meeting events, co-design sessions
Start of A plots & AGORA construction. Diversity from the beginning
Neighbor facilities, parking lots & first dwellings
Beggining of the dwelling adjudication bureaucratic process
-A- PLOTS
Building of the 'follies' connecting Langweidstrasse and the AGORA
Acces plaza development: vegetation, soil zonification

PHASE 2
Moving of the Community Support Office into the AGORA
Care of the Neighborhood processes & initiatives
FIRST IMPACT EVALUATION & conclusions applied
New neighbors & users
Participative process to decide B plot care & functional uses
Involvement of new local residents with Familiengarten and neighborhood facilities
Start of B plots construction and its facilities.
Guarantee diversity from the beginning
-B- PLOTS
Native gardening workshop to bring neighbours together and plant the surrounding landscape with local species
Self-construction workshops for urban small furniture and to create community. Sense of belonging

PHASE 3
IMPACT EVALUATION & conclusions applied
'satellites' construction workshop. Mobile facilities around the plot to give different small services to yet unfinished areas
Participative process to decide C plot care & functional uses
Start of C plots construction
-C- PLOTS
Establishment of regular neighbors meeting appointments to assess the project's progress

PHASE 4
IMPACT EVALUATION & conclusions applied
Participative process to decide C plot care & functional uses
Start of D,E plots construction.
Last plots to complete the Abbey
-D,E- PLOTS
Development of the green areas remaining under construction in the plot

PHASE 5
End-of-construction celebration
Participative process to decide the future of the Oberstrasse connection area ZONE F
Start of the construction of the Oberstrasse parking lots and panoramic elevator & bridge to the Abbey

PHASE 6
Start of E plots construction and its facilities.
-F- PLOTS
Development of the Oberstrasse productive mixed area green areas. Nature connection with the city

PHASE 7
FINISH OF THE MAIN CONSTRUCTION PROCESS
At the end of the construction, periodically meetings of the Quartierverein will continue, and also the presence of the Community Support Centre
Future green urban connection project, covering the track rails and connecting nature with the existing city
Movements between users and dwellings through the years following lifestyle necessities
Maintainance duties during useful life of the buildings to ensure material qualities and thermical correct responses
DESIGN FOR DISASSEMBLY: possible dismantling of the building, enabling the reuse of materials in other future developments

Rain & 13/22 °C
SUMMER DAYS STRATEGY
The building becomes an accessible exterior. A shelter from the rain and extreme temperatures
Day = Open
Night = Closed
The open corridor avoid the greenhouse effect during the day. During the night the closed corridor acts as a thermal buffer
South Corridor
T: 18/22°C
T: 21/26°C
Hot & cold radiant system (preventing climate change)
North Corridor
Day = Open
Night = Closed
The solar panels acts as a solar protection
Thermal inertia in the horizontal structure will minimize the impact of the day/night temperature fluctuations in the building
-4°C
WINTER & SUMMER NIGHTS STRATEGY
Deciduous native nature. Shadow in the summer and sun in the winter
South Corridor
Thermal inertia in the horizontal structure will minimize the energy demand.
North Corridor
Closed
The sunlight arribes to the inner modul of the house
Natural paths and plantation of trees to avoid runoff
1:175

PRIVACY LEVELS

GRADIENT OF PRIVACY

PRIVATE SPACE
Bedroom
Private bathroom

SEMI-PRIVATE SPACE
Internal living room
Studio
...

HOUSEHOLD COMMUNAL SPACE
Shared kitchen
Living room
Baalcony
...

APPROPIATION SPACE
Corridor niches
Front-of-door landing
...

COMMUNAL SPACE
Communal kitchen
Laundry room
Children's playrooms
Debate rooms
...

3.60 m
3.60 m
Wet Area
1:200
0 1 2,5 5 10 15