

#UT2

URBANITY & URBAN PLANNING

Comparative Investigations of Urban Transformation in Aachen

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COURSE DESCRIPTION

Urban Transformation II studies ongoing processes of transformation in Aachen through themes of regenerative urbanism, healthy environments and circular thinking. Coursework looks at how historical urban structures, morphology and socio-economic dynamics shape life today and future development potential. Projects focus on selected locations in Aachen and study qualities of those places, processes of transformation and opportunities for innovative urban interventions. Using analytical and design approaches students develop strategies for environments that are more resilient, inclusive and environmentally responsive.

The course particularly emphasizes:

- **Understanding urban transformation** through historical development, morphology, and spatial structure
- **Identifying opportunities and restrictions** within existing urban environments
- **Exploring regenerative and circular urban systems** beyond conventional sustainability approaches
- **Connecting social, ecological, cultural, and spatial qualities** through multi-scale thinking
- **Developing site-specific interventions** for healthier and more adaptive urban futures

Rather than focusing just on reducing problems, the course aims to explore how environments actively **restore reconnect and regenerate ecological, social and spatial systems** through long strategy and place focus.

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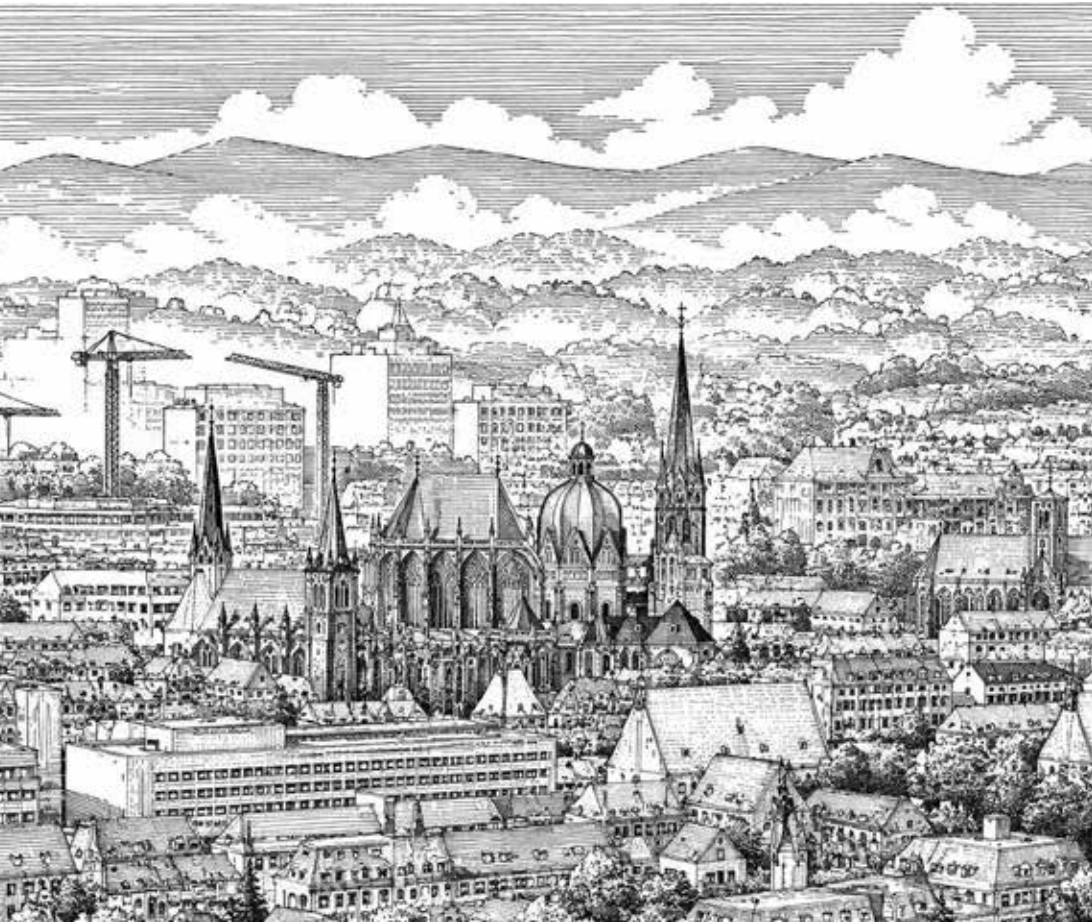
- Editorial notes
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- Spatial Data
- Image & Visual Credits
- Software

+ INTRODUCTION

INTRODUCTION

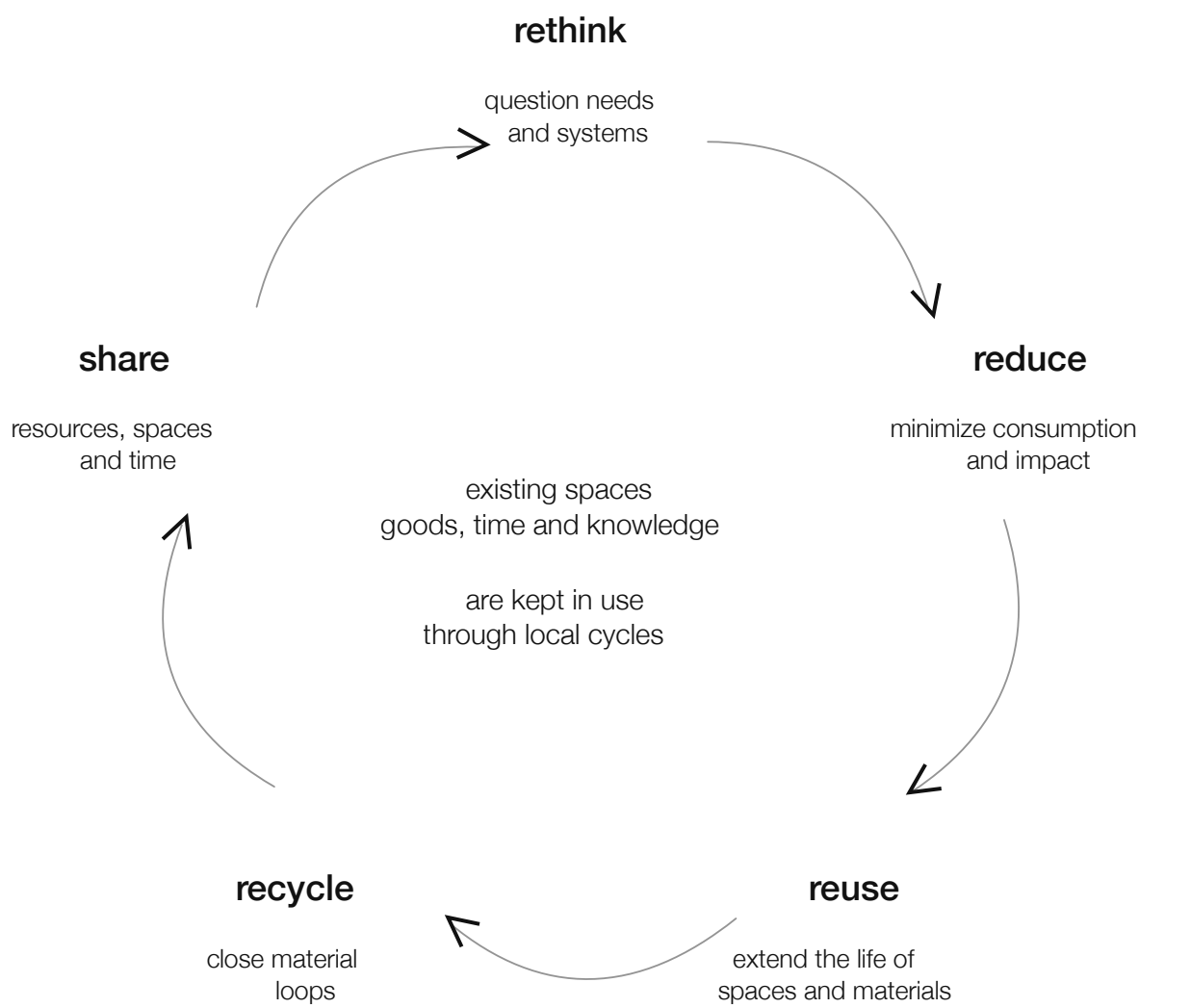
WHY AACHEN?

Aachen offers a context ripe for studying ongoing transformations of cities because the city contains neighborhoods from different stages of urban development. Historic structures, planned social housing areas, neighborhoods from post-war times and later suburban additions coexist within a relatively tight system. Each of these areas reflects different planning principles, housing models and spatial arrangements along with different socio-economic conditions. This diversity allows the course to look at how form has evolved over time and how settlements continue to react to changing environmental, social and economic demands. Selected project areas such as Panneschopp, Hanbruch, Driescher Hof and Steppenbergr occupy different positions within the broader structure of Aachen. Relationships to the downtown core, surrounding landscapes, transport routes and neighboring districts vary greatly. By studying these places together, the course allows comparison of different morphologies while also recognizing the distinct conditions of each neighborhood. Aachen is used not just as the geographical backdrop of the course but also as a case study to understand how planning can guide the transformation of cities.



URBAN TRANSFORMATION AND CIRCULAR ECONOMY

This course studies transformation of cities by combining perspectives on regenerative development and circular economy. Rather than focusing only on tearing down and replacing things, projects start by looking at the qualities and resources that each neighborhood already has. Buildings, open spaces, infrastructure, ecological systems and community structures are studied to understand how they can be preserved, adapted, reused or planned for future use.



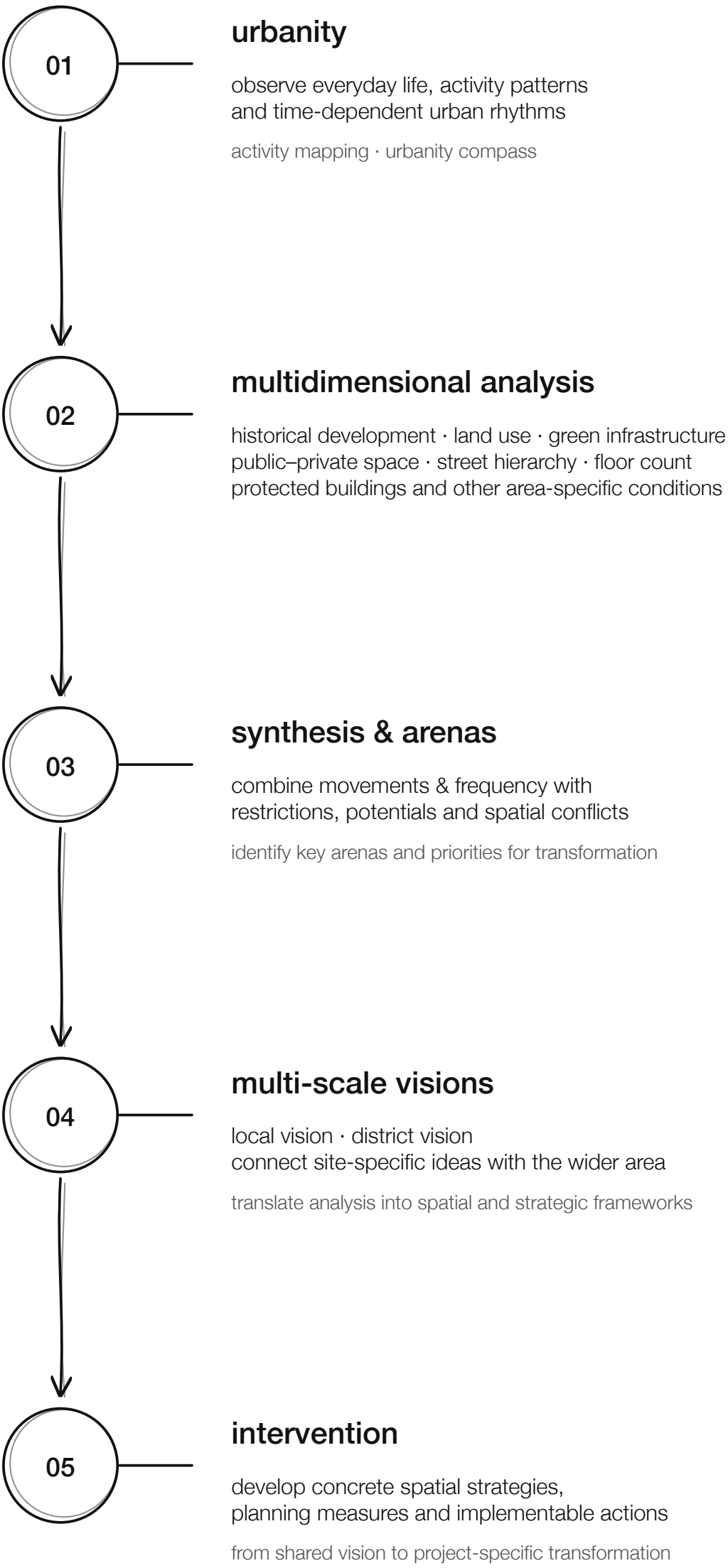
Within the course, circular economy is not just about recycling materials. Sharing and reusing spaces, goods, time, knowledge and local resources are also included. Existing neighborhood structures can support circular activities through community facilities, shared spaces, repair workshops, local production, ecological systems and temporary uses. Opportunities are identified in relation to the idea of a healthy city that considers environmental quality, interaction among people and efficient use of resources. The goal is not to propose circularity as an abstract idea but to look at how it can become spatial and practical within existing urban areas.

READING THE CITY

Urban transformation begins with careful study of the city as it already exists. Everyday life is the first thing observed: gathering, movement, communication, shared activities and the exchange of services, goods and time. These qualities cannot be understood solely through structural or statistical data. They also need to be identified through site visits, field observations and the localization of activities within neighborhoods. The physical and spatial conditions of each project area are then studied at the scales of space, area and town. Historical development, urban morphology, building types, land use, public and private open spaces, accessibility, environmental conditions and connections to surrounding areas are considered together. Reading at multiple levels helps explain how settlements were originally planned and how they have changed over time. It also shows the relationship between physical form and current use. Based on these observations, projects identify existing values, limitations and unused potentials that can guide future planning decisions.

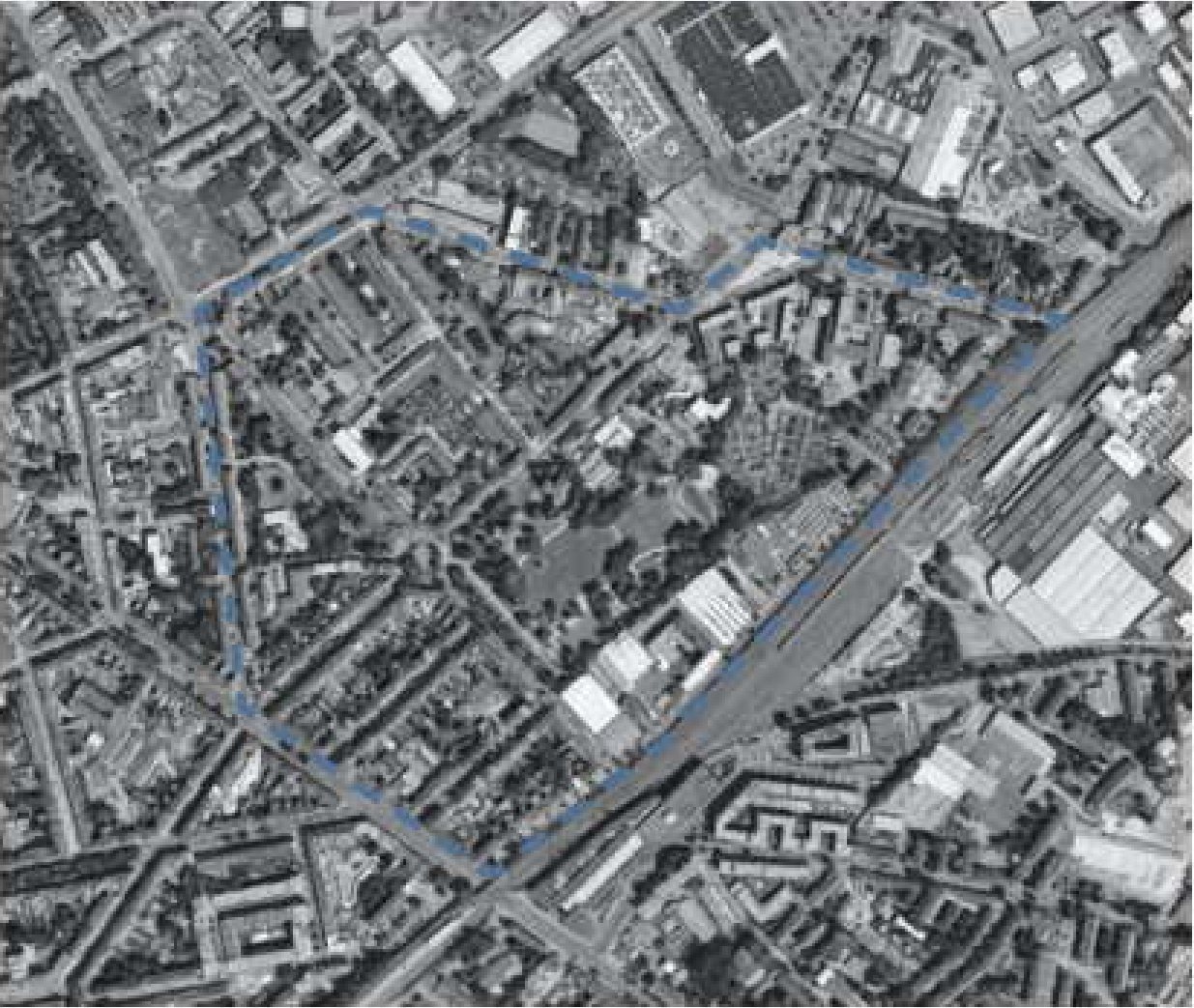
FROM ANALYSIS TO INTERVENTION

The booklet follows the methodology developed throughout the course. Each step builds on the findings from the previous step, moving from observation and analysis to vision and intervention. Step 1 locates different kinds of urbanity in each neighborhood and its immediate surroundings. Step 2 looks at the conditions of space, area and town, including historical development and the current spatial organization of the settlement. Step 3 looks at opportunities and restrictions for innovation and identifies arenas that might support activities related to healthy cities and the circular economy. Public spaces, community facilities, edges, streets and unused areas where sharing, exchange and collective activities might happen are among these arenas. Step 4 translates previous analyses into visions at different scales that connect local conditions to the wider neighborhood and urban context. Finally, Step 5 defines planning interventions based on the arguments developed in the previous steps. The methodology therefore establishes a continuous connection between observation, spatial analysis, evaluation, strategic vision and site-specific intervention.



+ PROJECT AREAS

SITE: PANNESCHOP

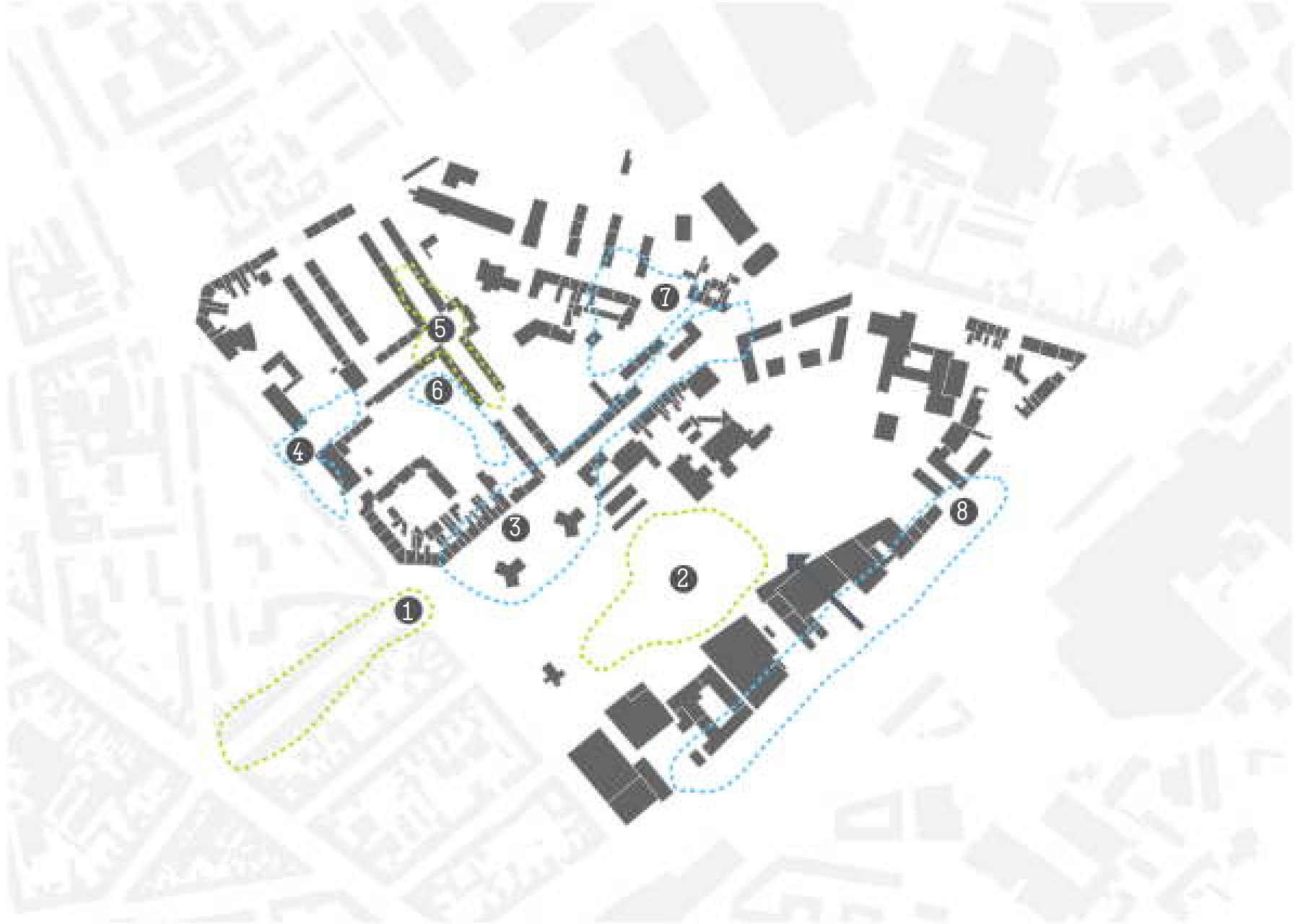


Panneschopp is a relatively isolated settlement area with limited diverse activity. The neighbourhood is dominated by long residential blocks, complemented by a mix of older and newer buildings, industrial uses, and community and sports facilities. Urbanity is expressed less through commercial or cultural functions and more through everyday social interactions.

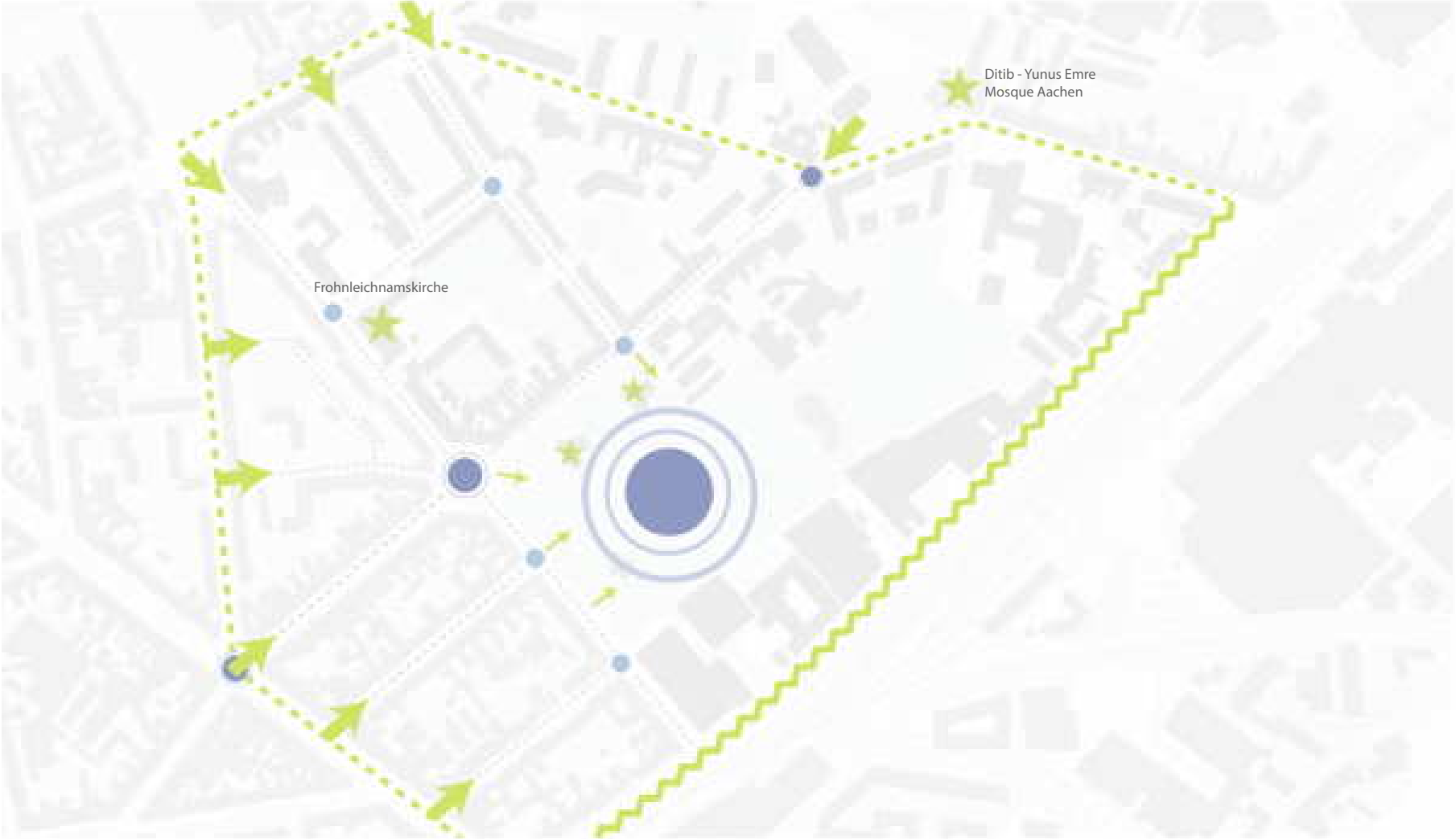
Key observations include:

- In the morning, many children create unexpected liveliness and neighbourhood activity.
-
- Kennedypark functions as an important social space, remaining active during the day but often becoming empty in the morning and evening.
-
- Elsasplatz and Elsasstraße strongly shape the identity and social life of the neighbourhood.
-
- The entrances of Panneschopp act as the most urban and active spaces due to movement and everyday interaction.

Overall, urbanity in Panneschopp is fragmented, time-dependent, and influenced by the neighbourhood's negative reputation.



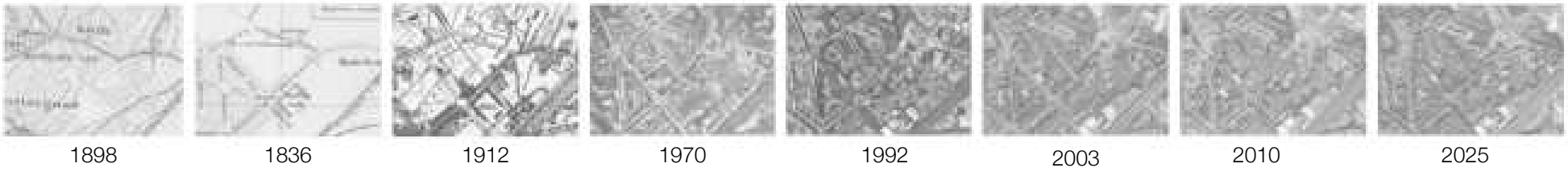
DEFINITION OF PANNESCHOP



URBAN ACTIVITIES AND SOCIAL STRUCTURE



HISTORICAL DEVELOPMENT



The “Panneschopp” district was developed as an area for low-cost housing for Aachen residents in the 1920s when there was a very significant lack of available housing. The area is located near a former roof tile works which is still present today and while it has retained much of its original layout in terms of blocks (of houses) and large private outdoor space, the relationship between different types of land use (residential areas, public open spaces, courtyard, etc.) are now clearer than they were at the time of initial construction. As such, the long-term impact on the physical design of this neighborhood from recent changes to the local zoning ordinance; new development applications; and other evolving community needs will likely be significant.



Legend

- Before 1919
- 1919-1944
- 1945-1960
- 1961-1980
- 1981-1990
- 1991-2000
- after 2009
- after 2010

LAND USE



Legend

- Residential
- Courtyard/ Garden
- Allotment
- Park
- Education
- Industrial

PUBLIC-PRIVATE SPACE



Legend

- Public
- Semi Public
- Semi Private
- Private

PROTECTED BUILDINGS

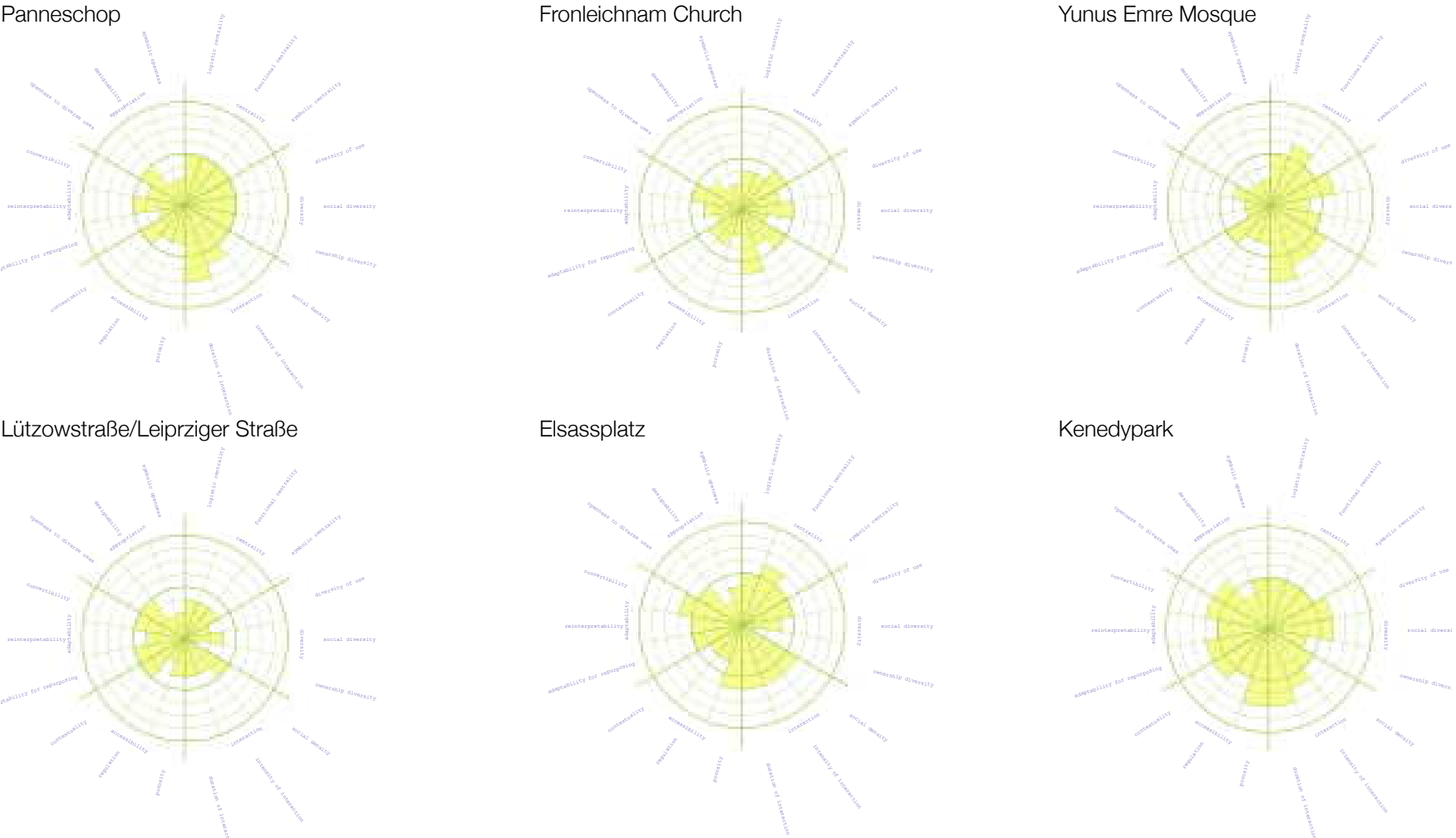


Legend

- Protected Buildings
- Buildings

STEP_III OPPORTUNITIES/ RESTRICTIONS - INNOVATION

URBAN COMPASS



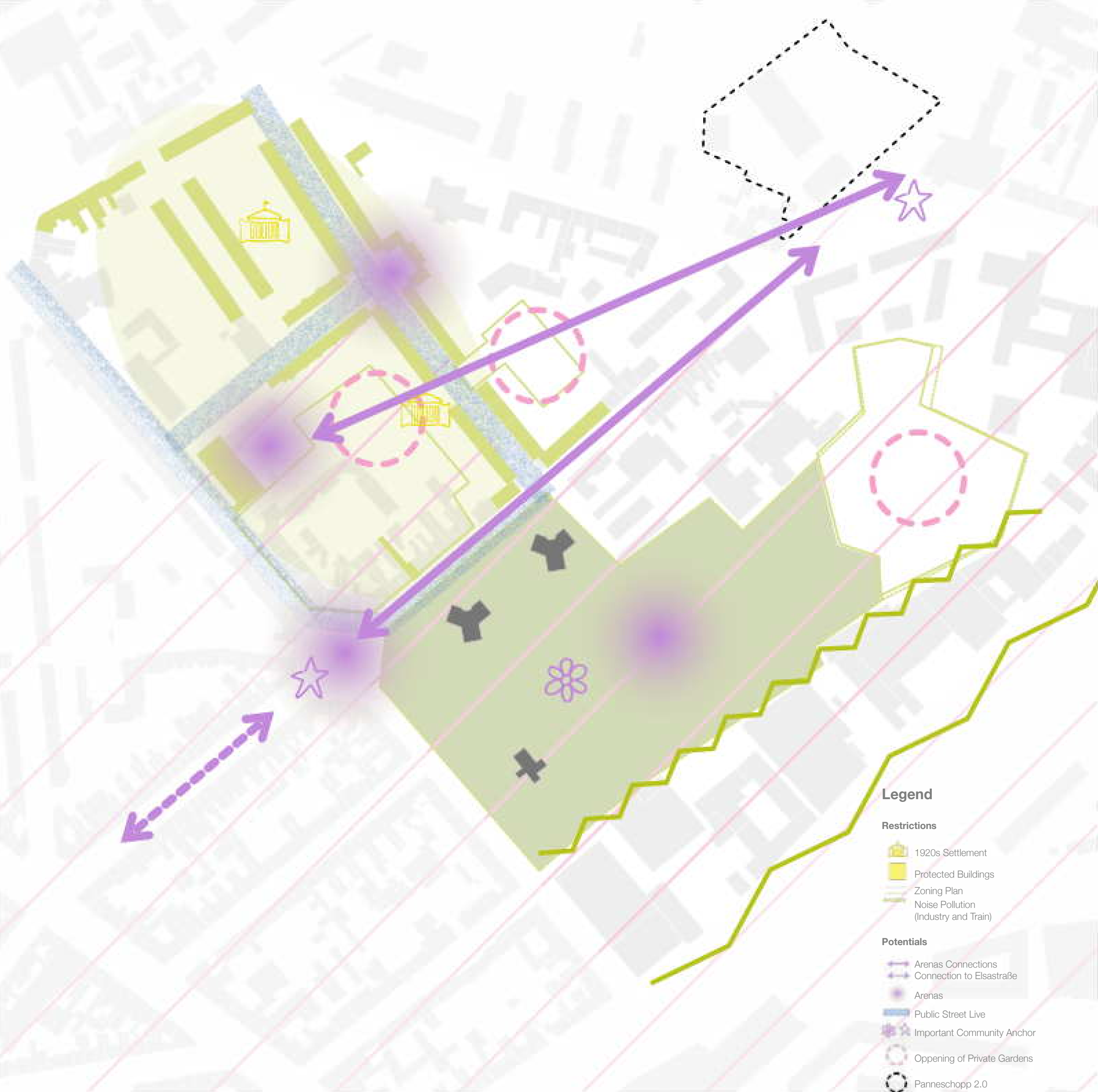
ACTIVITY MAP



The analysis has defined a number of potential arenas that differ from each other in terms of their level of centrality, accessibility, and social interaction. Already, both Kennedypark and Elsassplatz act as important public spaces; however, the residential areas continue to be quiet and for the most part serve as a space for daily neighborhood routines. Both the potential opportunities (e.g., existing community anchors, active public spaces) and obstacles (e.g., heritage protection, industrial noise pollution, disjointed connectivity) have been identified and they all together will form the basis for defining criteria for future actions and for developing the multiscaling approach outlined in the next step.

- Legend**
- No People or Few people
The space remains empty most of the time. Sometimes the space becomes a transit zone between more active areas.
 - Family Recreation Area
Large groups of families or friends are often found on the territory. The main activities are barbecues, picnics, or family games that are not very active.
 - Children's Areas
The zones have playgrounds, but games take place both on them and in the surrounding area. Parents are present with the children, and the further they are from the territory, the larger the children's play area becomes.
 - Teenagers and sportsmen
The area is actively used for training, but is also used as a games and meeting place.
 - Active Sports Area
A diverse range of sports activities were observed during the observation: volleyball, football, frisbee, badminton.
 - Quiet Areas
In such places, families with small children, elderly people, or sometimes teenagers who do not have noisy activities meet.
 - Meeting Areas
In such places, there are usually benches around which various groups gather. Most often, these are men, sometimes families.
 - Route for People With Dogs
People with dogs only appear early in the morning and in the evening. They often play alone or in groups.

RESTRICTIONS AND POTENTIALS



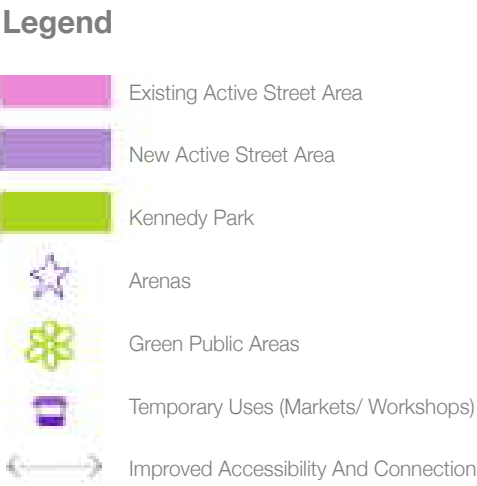
STEP_IV

MULTI SCALE VISIONS

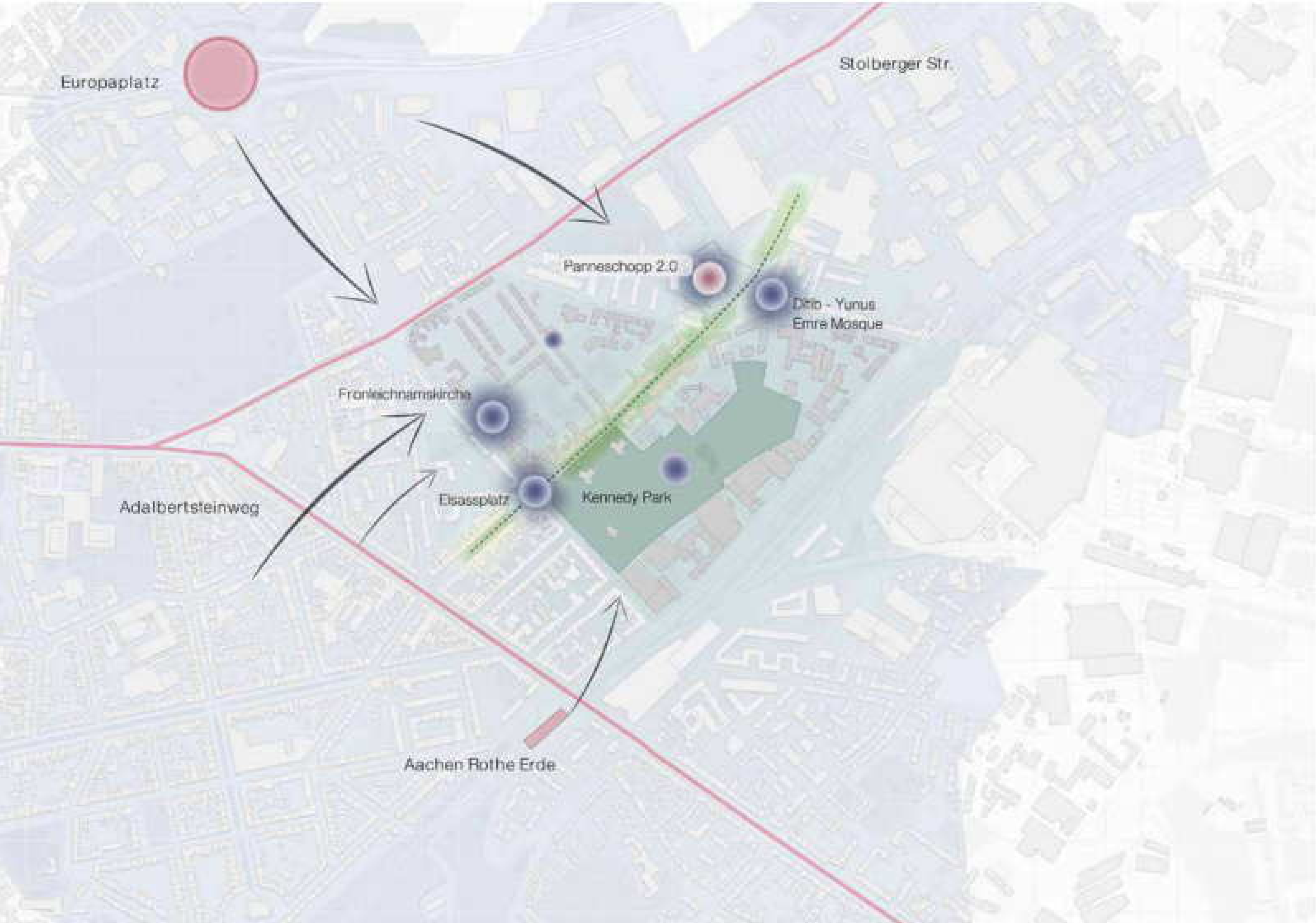
LOCAL VISION



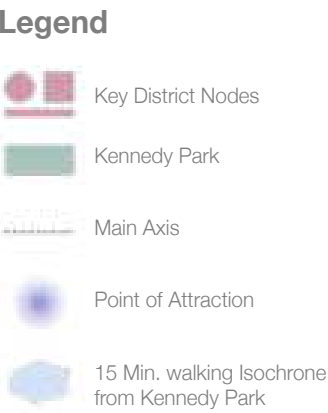
At the neighborhood scale, the five arenas identified in the previous step are spatially connected and form a network of public spaces. Elsassstraße is extended as an active street connecting Elsassplatz to the Ditim – Yunus Emre Mosque, improving movement and strengthening the relationship between existing public spaces. The space in front of the mosque is enhanced with green elements and seating areas to create a more welcoming environment. Markets for local shops and initiatives, together with workshops on the circular economy, activate the street and encourage everyday social interaction. Kennedypark continues to serve as the main gathering place, providing space for exhibitions and community events using recycled materials. The former Fronleichnam Church is reused as a place for open workshops, collective activities and knowledge sharing, supporting the neighbourhood as a shared community space.



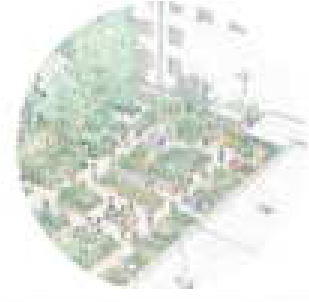
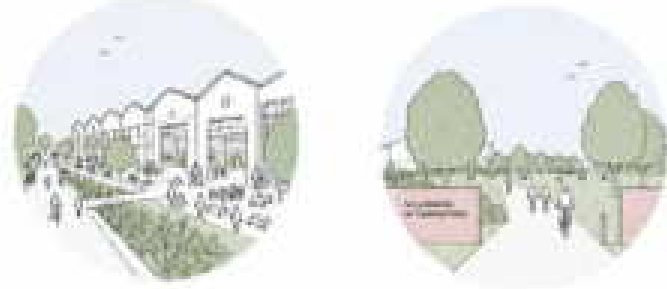
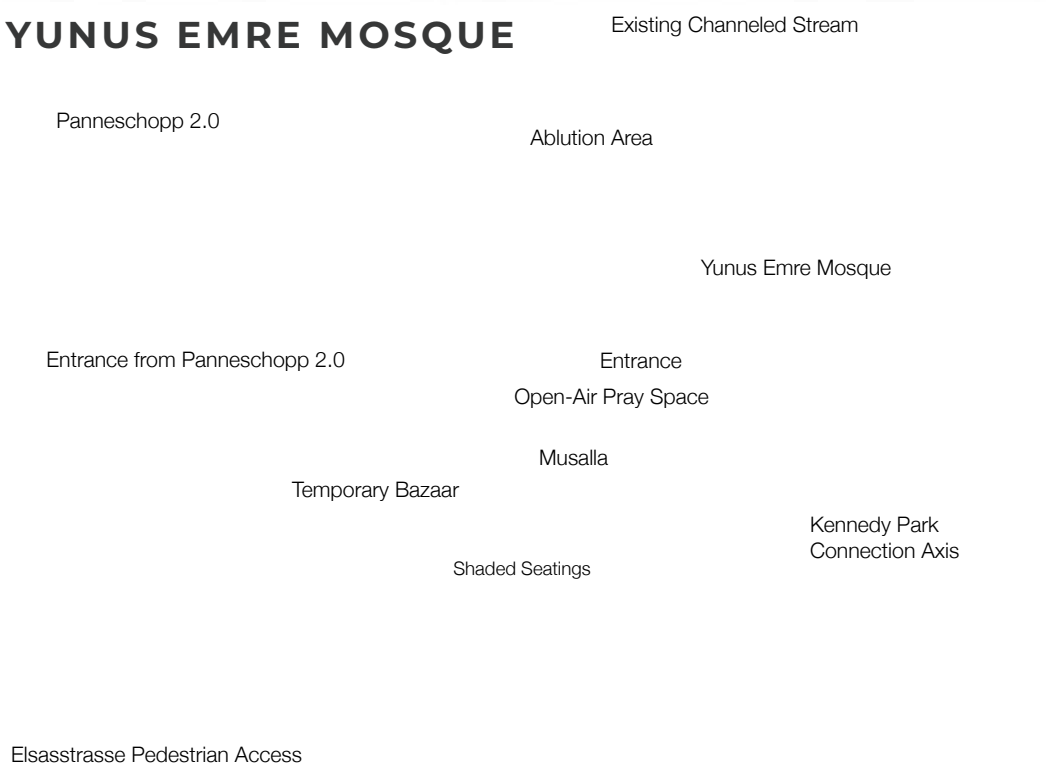
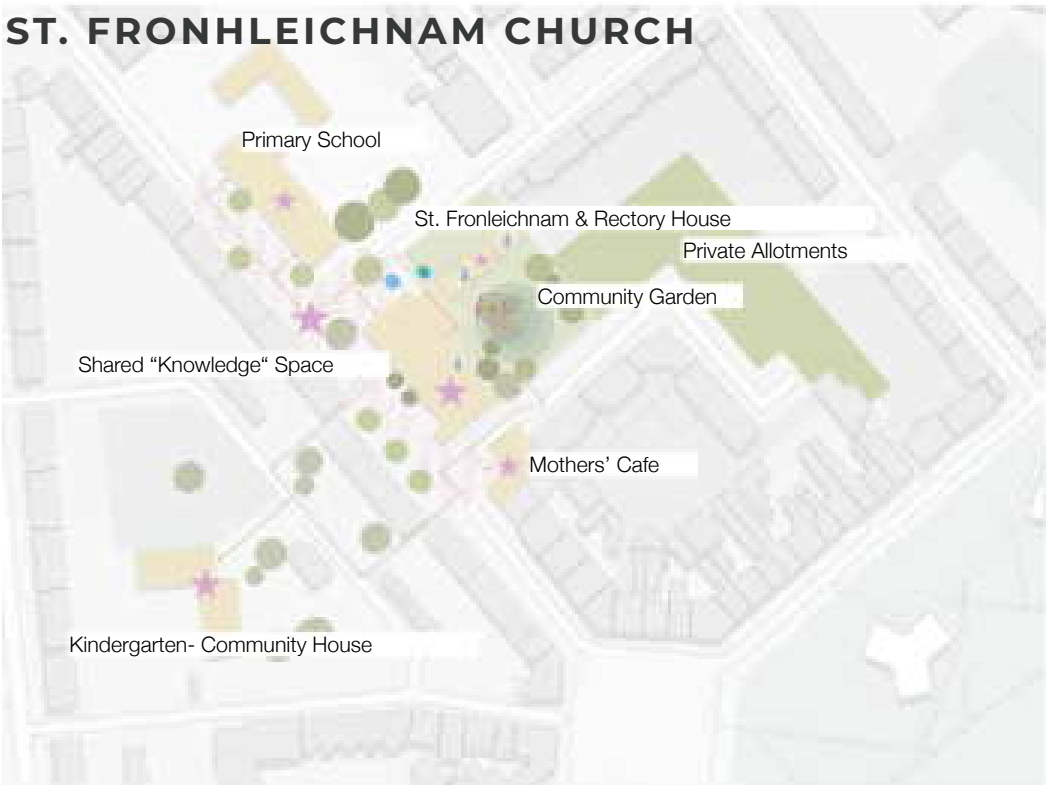
DISTRICT VISION



At district scale, Panneschopp benefits greatly from the new Panneschopp 2.0 development, which acts as a key catalyst for future growth in the neighbourhood. The project includes a site of 10,000 square meters with 80% subsidized public housing and introduces 171 new apartments ranging from single to five rooms. Five daycare centers contribute to creating a friendly environment for families and support the growing residential community. Together with existing public spaces, the development increases movement towards northern Panneschopp and strengthens connections to the surrounding city through existing urban streets and public transport axes. This strengthens the relationship between new and old structures while supporting future residential growth at the same time. The proposal preserves the residential and recreational character of Panneschopp and reinforces its role in eastern Aachen.



IMPLEMENTING CIRCULAR ECONOMY: ARENAS





+ STEPPENBERG

FROM SUBURBAN LANDSCAPE TO AN ECOLOGICAL NEIGHBORHOOD

The initial approach to the Steppenbergl area is to regard it as a low-density, post-war urban district with the potential to be transformed by utilizing its existing ecological conditions. Rather than initiating a comprehensive redevelopment project, the focus is on restoring and enhancing the natural systems that already shape the district.

This will occur through ecotechnologies such as blue-green corridors (to remove pollutants and create wetlands), phytoremediation (using plants to clean pollutants from soil and water), and the restoration of the Dorbach Stream. Together, these interventions improve water quality, biodiversity and the local microclimate while reconnecting fragmented open spaces.

The existing allotments and garden plots, together with the historic NABU Garden and adjacent green spaces, become part of a continuous ecological network that supports environmental education, food production and long-term stewardship. A new community hub and elevated pedestrian boardwalks increase social interaction and accessibility while encouraging daily engagement with the restored landscape and protecting sensitive riparian habitats.

Circular economy thinking relates not only to ecological restoration but also to local resources, community involvement and shared responsibilities. Productive landscapes, water management, environmental education and collective maintenance work together as interconnected systems rather than isolated interventions. As a result, the proposal demonstrates how an existing suburban residential district can evolve into a sustainable, environmentally conscious and community-centered neighborhood where ecological processes and everyday life reinforce one another.

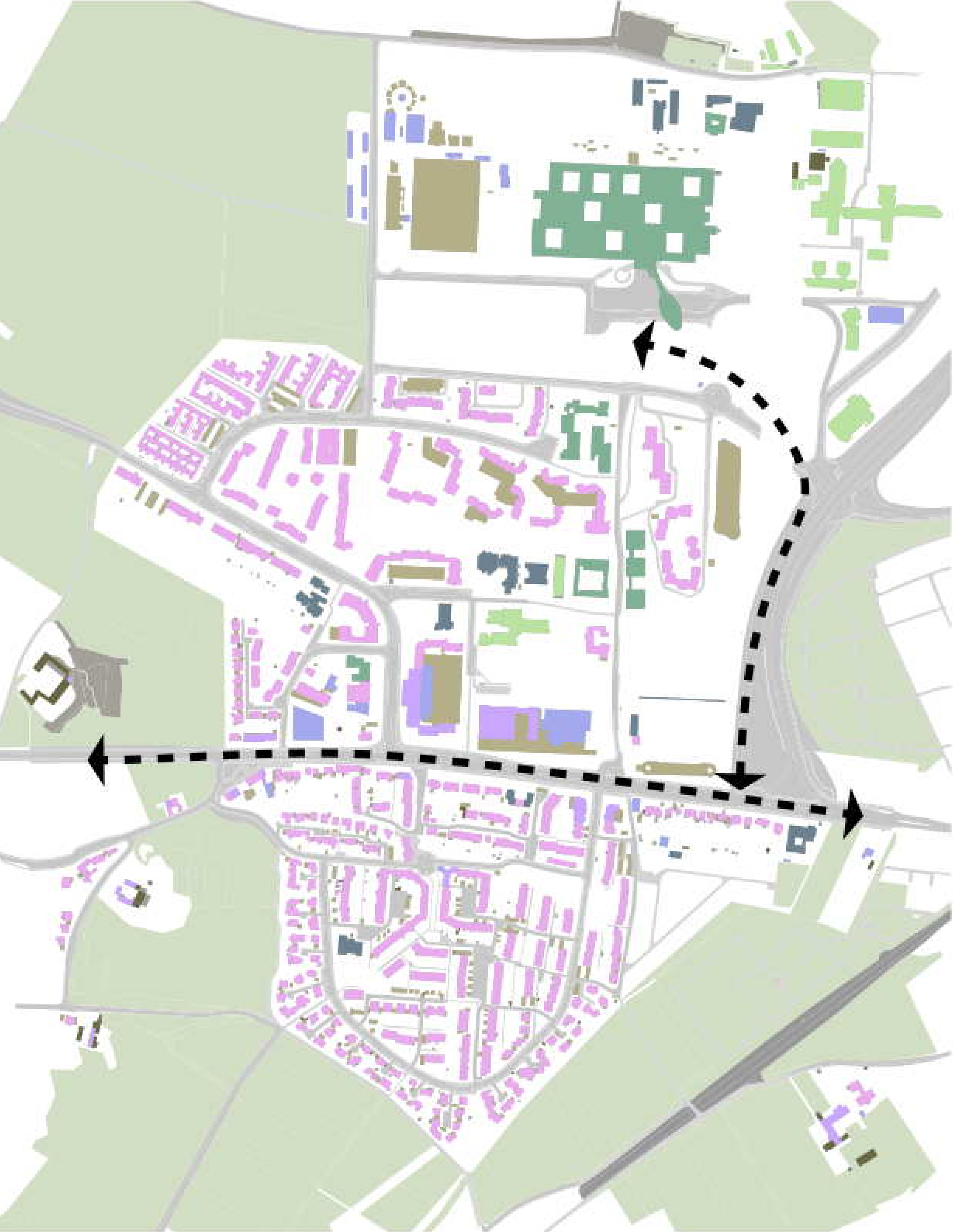
SITE: STEPPENBERG



- 1. Early Rural Development**
 - toponym
 - “Mons Stepponis”
 - dates back to ca. 1230 and 1330
 - rural location
 - part of Vaalserquartier / Laurensberg
 - agricultural use
- 2. 20th-Century Infrastructure / Military Traces**
 - southern edge: “Westwall” during WW II due to proximity to the border
 - today: former military installations are overgrown and serve as a protected biotope
- 3. Integration into Aachen (1972)**
 - major regional reorganization
 - Laurensberg (& Steppenbergl) were incorporated into Aachen
 - part of Vaalserquartier district
- 4. Planned Housing Construction (1970s)**
 - 1971: start of construction of Aachen University Hospital (located north)
 - development of outskirts/local neighbourhood
 - 1984: plan of the city of Aachen
 - high demand for single-family housing
- 5. Today**
 - densely populated residential area
 - ring street and green spaces still form the settlement edges
 - construction starts in 1982



LANDUSE ANALYSIS



- Legend
- Residential
 - Education and Research
 - Healthcare
 - Commercial
 - Mixed-Use
 - Public and Community
 - Car Parking and Utility
 - Agriculture Use
 - Others
 - Mobility Axis

STEP_II

SPACE|TOWN|AREA

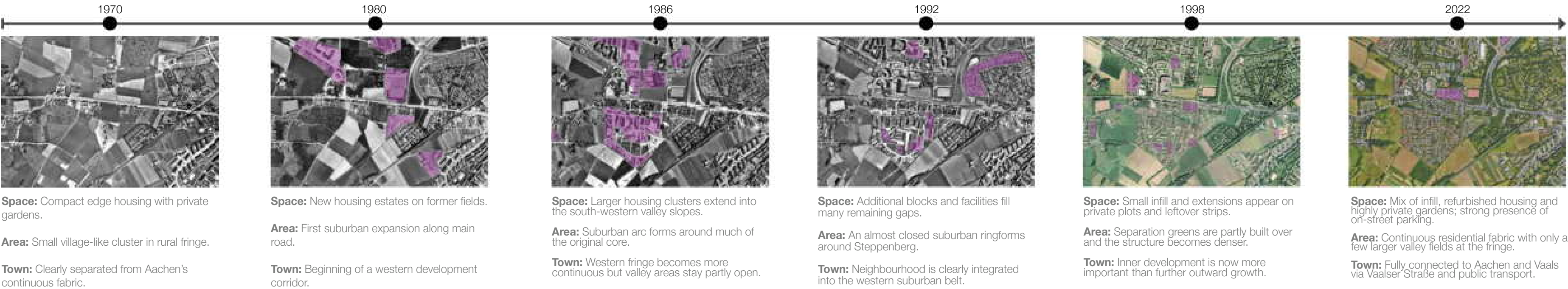
Mapping Steppenbergs shows how a young edge neighborhood has evolved over time through land markets at spatial scales: space, area and town. Originally Steppenbergs was a compact residential settlement surrounded by fields. It grew through infill housing along main roads and towards southwest valleys and became part of Aachen's belt to the west. Southern valleys slow development and preserve open spaces and this creates clear contrast between built edges and open spaces. Most of Steppenbergs consists of single family houses with private gardens which results in high privacy but limited public open space. Surfaces are sealed around larger buildings and parking lots while streets continue to dominate with on street parking even though there are private parking spots present.

At town level Steppenbergs is well connected via Vaalser StraÙe and nearby bus stops and shops. This links the neighbourhood directly to Aachen city center and Vaals. Accessibility is high but the area remains mainly residential and peaceful and quiet.

TOPOGRAPHY-CLIMATE-CONNECTIONS



PUBLIC-PRIVATE SPACE



STEP_III OPPORTUNITIES/ RESTRICTIONS - INNOVATION

Steppenbergr embodies post war models of cities that are structured yet loose. Characterized by rows of low density housing with generous green buffers between buildings and clear separation of functions. These loose green structures provide strong ecological reserves and create a peaceful residential environment. However, transformation into healthy circular neighborhoods faces some limitations too. Heritage buildings and protected parcels to the north and east limit physical interventions. Protected natural areas to the south also limit future development. Fragmented ownership and underused buffers slow coordinated renewal. Along arterial roads close by, persistent noise and air pollution reduce environmental quality and fragmented entrances weaken connections to the neighborhood and its surroundings as well.

Thus Steppenbergr remains a place strongly oriented towards cars. Public spaces are underutilized and daily activity mostly happens around the supermarket right next door. There already is a community garden at the bottom of the neighborhood but it is surrounded by rows of houses and is only weakly connected to routes that pedestrians regularly use. Similarly, the sports field and cemetery are across the street and this limits their integration into residents' daily lives. Large green spaces therefore serve mainly as buffers rather than vibrant public spaces.

Despite these limitations Steppenbergr still offers big future opportunities. Unused green buffers and leftover open spaces along internal streets can be reactivated for retention of rainwater and for biodiversity as well as community activities. Rooftop solar panels already show potential for expanding decentralized production of energy. Shared intersections could also become small social spaces that encourage interaction within the neighborhood. Low density structure also allows sensitive retrofit and roof extensions rather than demolition which helps to preserve existing resources. By reconnecting inner green spaces, community garden and surrounding parkland Steppenbergr has potential to evolve into a healthier and circular neighborhood that also retains its residential character.

Legend

Opportunities

 Activation of underused open space

 Playground

 Community garden

 Active recreation / sports use

 Local supply / supermarket

 Activity concentration

Restrictions

 Entrance

 Noise pollution

 Brook

 Nature protection areas

 Listed building / cultural heritage

 Heritage parcel area



STEP_IV

MULTI SCALE VISIONS

VISION

“Transforming existing open spaces into connected, circular and community-oriented infrastructure could transform Steppenber

TRADITIONAL VALUES

- Compactness
- Density
- Private Gardens
- Parks, squares, open spaces as mere transition spaces, not places to stay
- Individualism
- Separation of Functions
- Private Transport / Mobility

INNOVATIVE VALUES

- Community spaces
- Mixed-use places
- Shared open spaces to stay
- Public and community gardens
- Renewable energy use
- Electric mobility
- Public transportation

REDUCING POLLUTION OF DORBACH

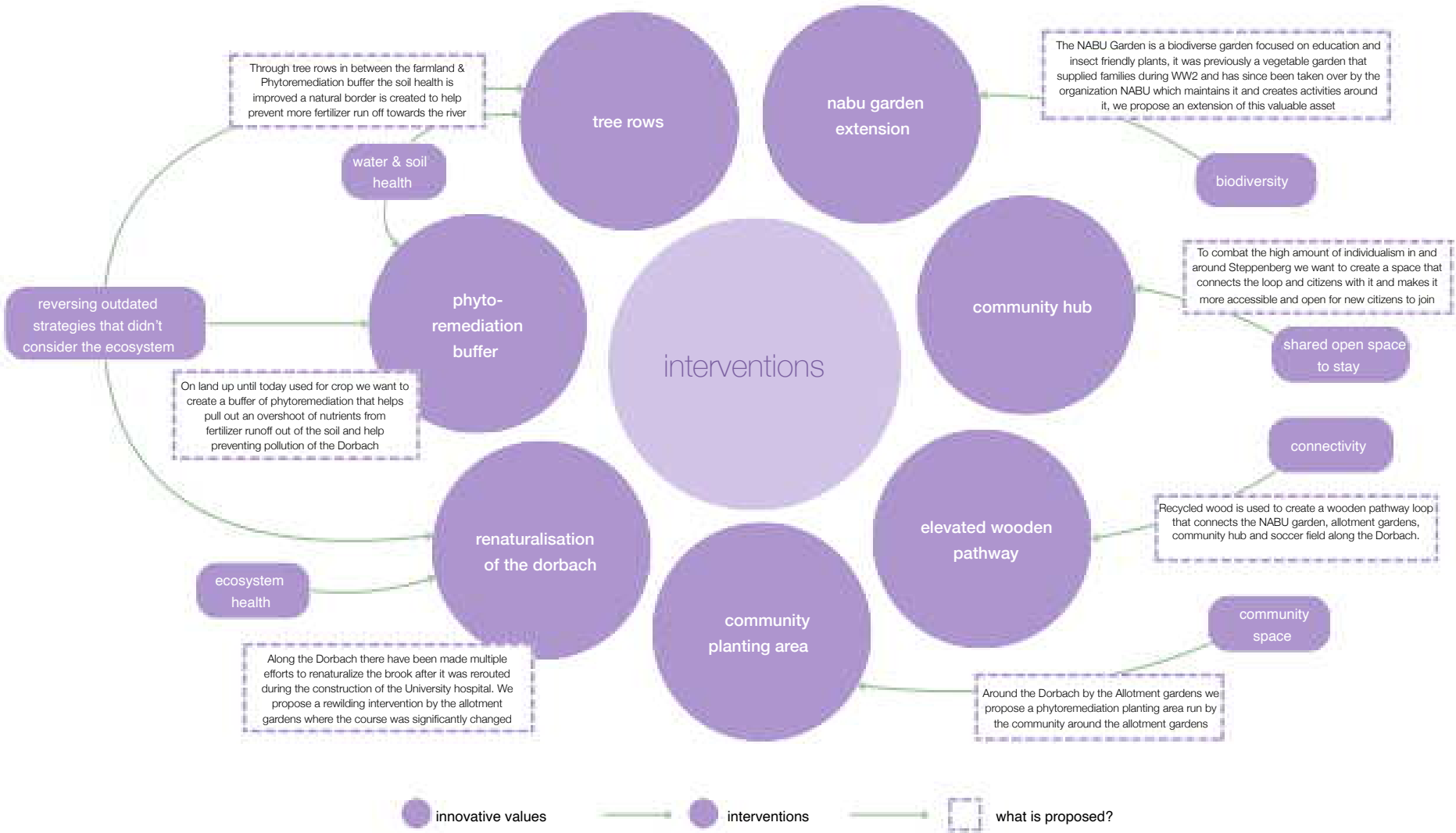


ISSUES:

- The Dorbach was repositioned due to new buildings
- Because of agricultural fertilizer runoff and rainwater the Dorbach is polluted
- It flows into the Wildbach, polluting the water of that brook too

INTERVENTION:

- Renaturing Dorbach and integrating it into community life
- Cleaning the polluted water with phytoremediation
- Create activities around the Dorbach to encourage care for the environment and promote actions to keep it clean in the future



INTERVENTION STEP_V



MACRO SCALE



Hanbruch has a more urban character on the north-eastern side, while the south-western part is more landscape-oriented with forests and open green spaces.

MESO SCALE



At the micro scale, the strongest urbanity appears around everyday facilities. These small nodes have a stronger social function and local vitality than the surrounding residential green spaces.

MICRO SCALE

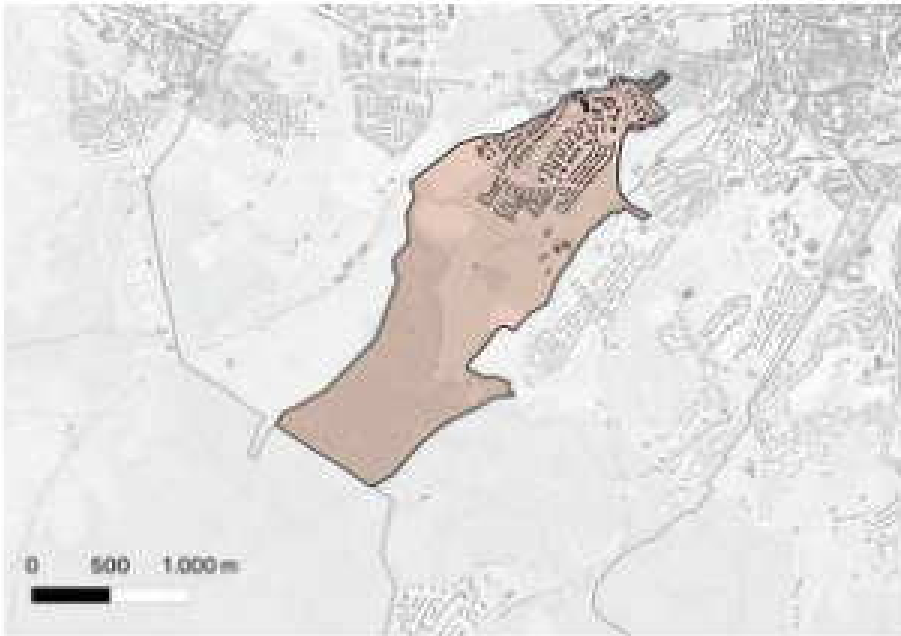
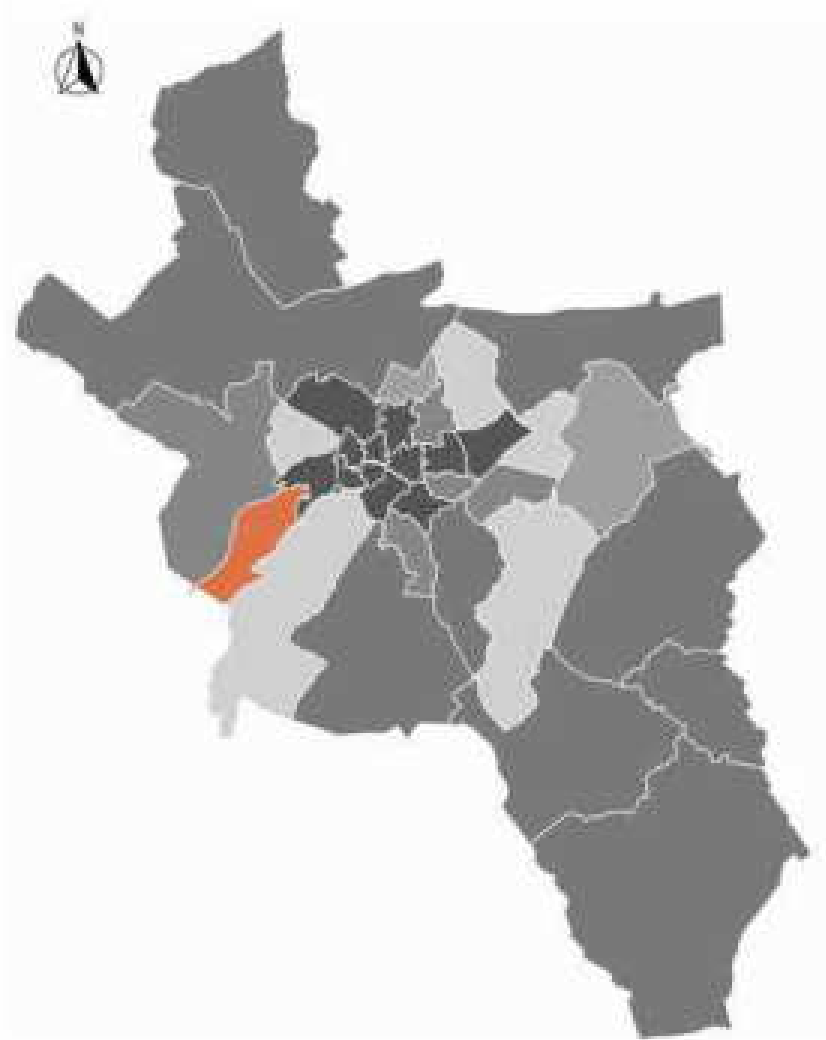


At the neighbourhood scale, Hanbruch is structured by its road network and main green spaces. While these form the framework of everyday life, the roads mainly serve movement and the green spaces remain underused. Their potential for social interaction has not yet been fully activated.

STEP_II

SPACE|TOWN|AREA

HANBRUCH IN THE URBAN EXPANSION OF AACHEN



- The western edge of Aachen
- Developed during post-war period
- Reflects modernist urban planning principles
- Separated housing blocks, open green spaces, and low urban density

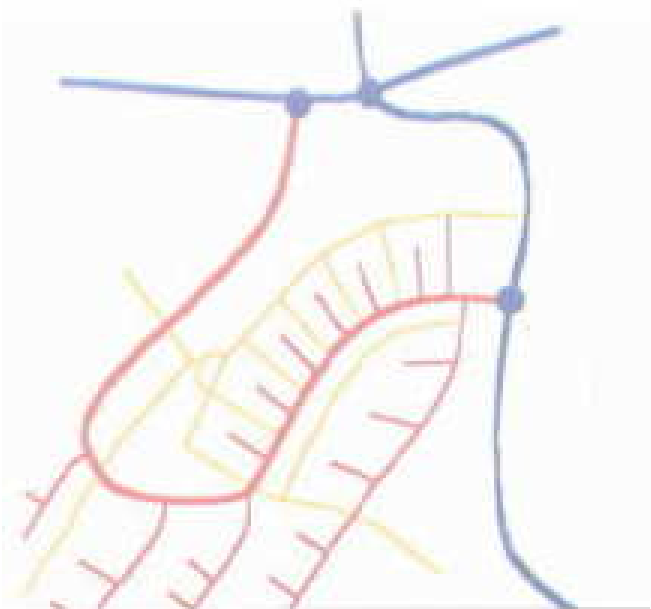
Roman City → Industrial Expansion → Post-WWII Expansion → Hanbruch

BUILT FORM & URBAN MORPHOLOGY



Philosophy: Physical manifestation of the modernist “Gegliederte und aufgelockerte Stadt” (structured and loosened city).

Structural Effect: Replaces dense historical perimeter blocks with low urban density to maximize light, air, and open landscape access.



Movement: Car-oriented peripheral loops and surface parking that keep the interior quiet but create passive, underutilized pedestrian spaces.

BUILDING TYPES



Facade Characteristics
Pragmatic, functional, and repetitive window rhythms. Zero historicist ornaments, which reflects the post-war philosophy of democratic, egalitarian, and cost-effective living.

Socio-Spatial Effect
Large balconies facing south/west to maximize light and connection to the open landscape matrix, prioritizing human health over street aesthetics.

SPATIAL COMPONENTS & OWNERSHIP GROUND



- Public Ground
- Semi Public Ground
- Private/ Semi-Private



- Environmental Effects**

 - large green areas
 - fresh-air corridor
 - low building density
 - good daylight
- Social Effects**

 - quiet neighbourhood
 - weak street activity
 - limited gathering spaces
 - car dependence

SPATIAL COMPONENTS & OWNERSHIP GROUND



STEP_III OPPORTUNITIES/ RESTRICTIONS - INNOVATION

INNOVATION DIRECTION

Opportunities  Restrictions  Innovation



1-Protect
Protect fresh air corridors and unsealed soil. Green and open spaces should remain part of Hanbruch's climate function.



2-Reuse
Reuse garage yards and underused paved spaces. Existing hard surfaces can become more flexible and climate-adaptive.

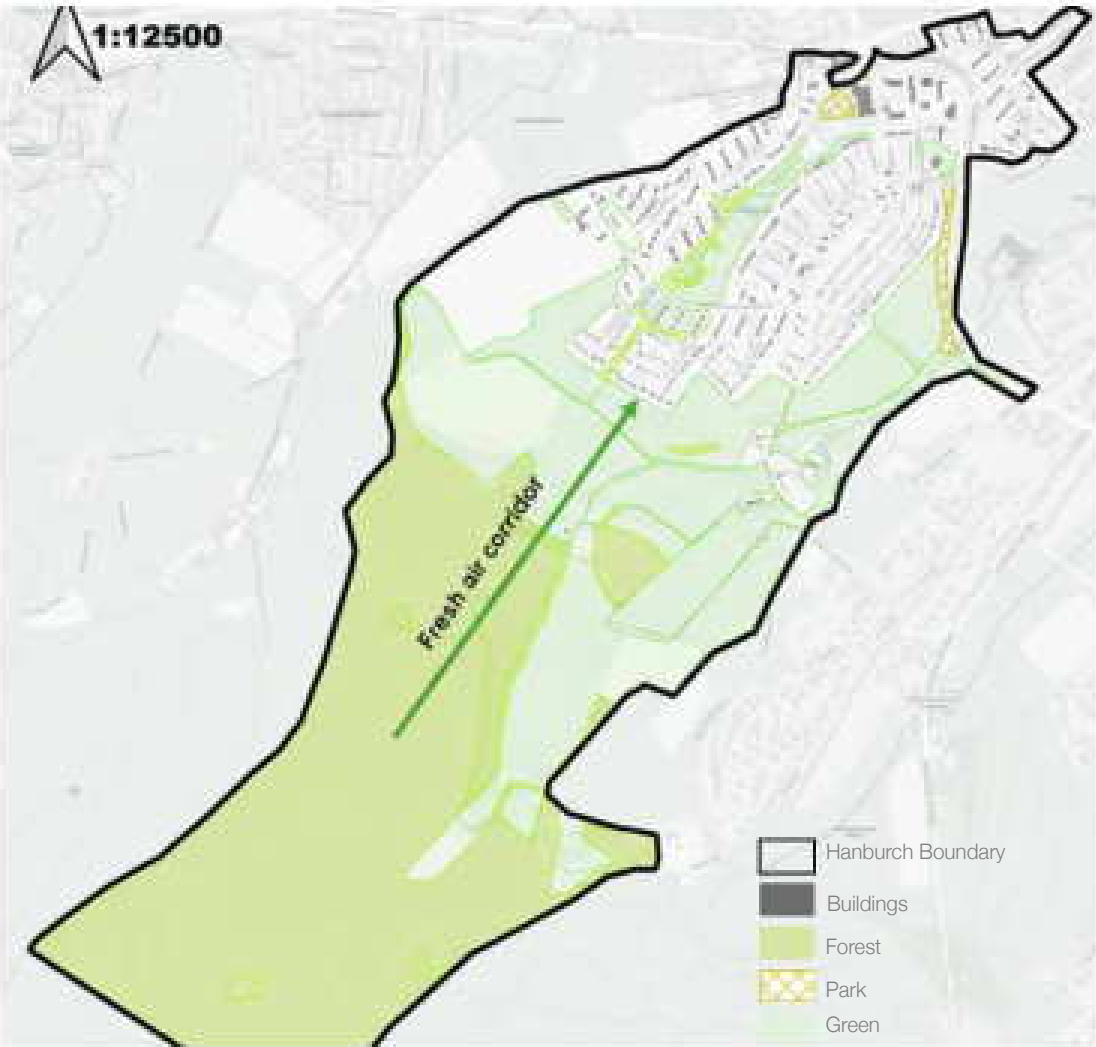


3-Upgrade
Upgrade post-war residential buildings. Roofs and building structures can support energy retrofits and shared solar use.

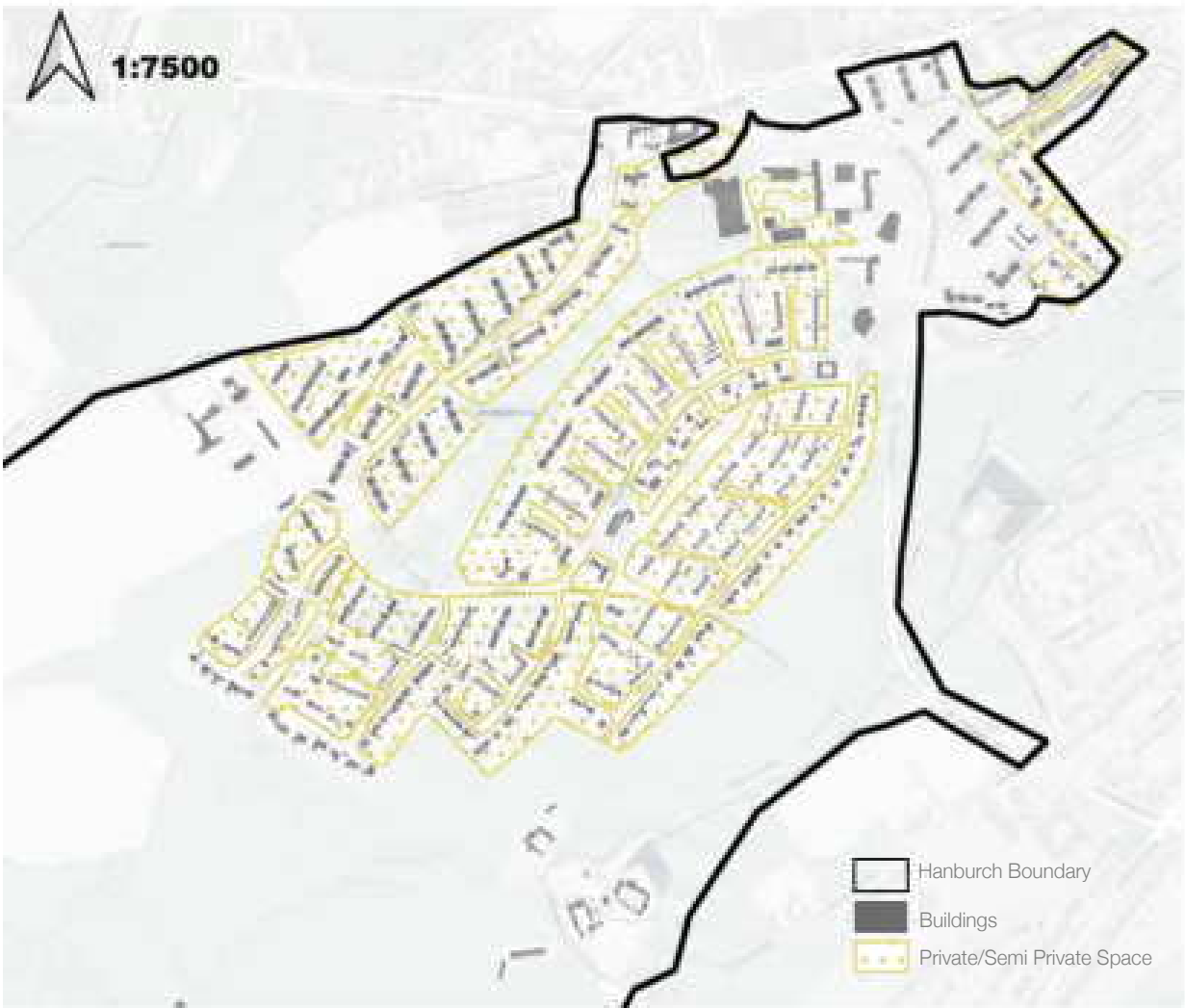


4-Share
Support sharing, repair and local exchange. Small community spaces can encourage circular use of goods, tools and services.

RESTRICTIONS

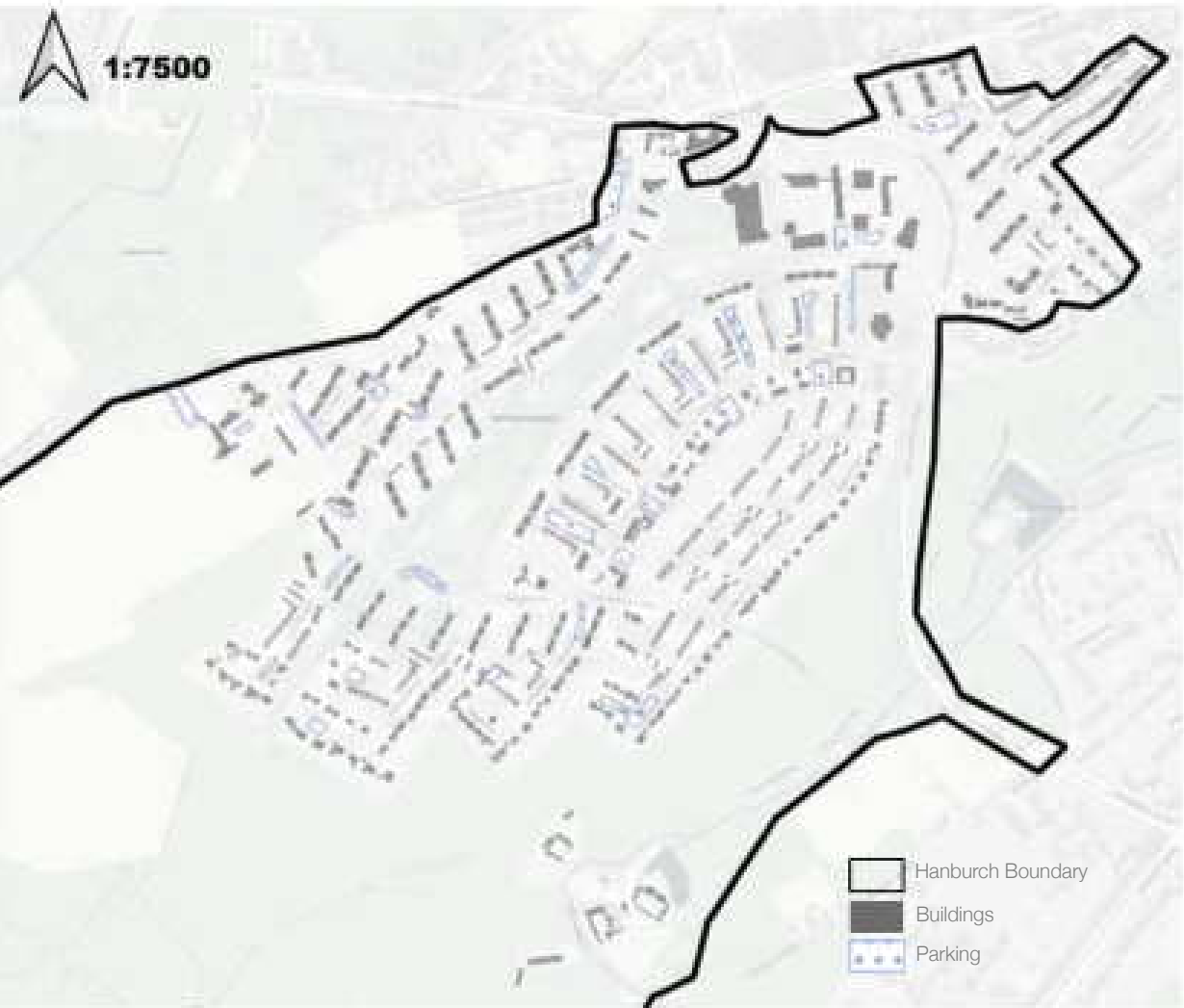
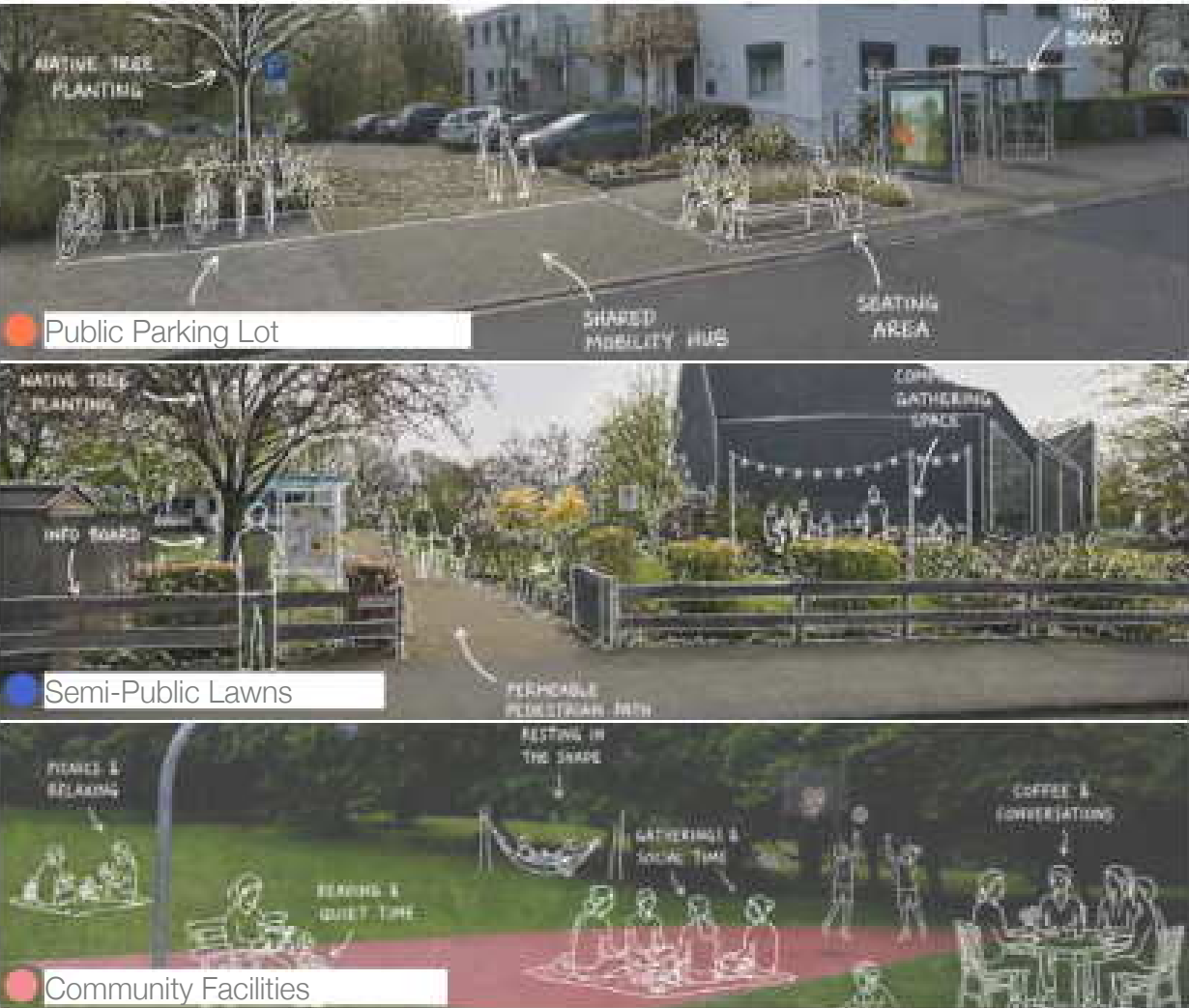


Climate Protection Area
Green and open spaces play an important role in cooling and fresh air movement. Large scale infill and additional soil sealing should therefore be limited.



Private/ Semi- Private Space
Many gardens, courtyards and in-between green spaces are privately or semi-privately owned. This makes collective transformation difficult.

OPPORTUNITIES



Car Dependent Space
Garage courtyards and parking areas are potential transformation spaces, but they can not be completely removed because residents still rely on cars.



Sensitive Quiet Residential Area
Hanbruch's calm residential character limits intensive public, commercial or noisy activities. Future interventions should remain low-intensity.

STEP_IV

MULTI SCALE VISIONS

MACRO SCALE



The land-use analysis reveals **underutilized green spaces** within Hanbruch that have **strong potential for productive landscape** interventions. These productive landscapes **contribute to a circular urban system** by supporting **local food production**, **reducing food transportation distances**, and **creating opportunities for community participation**.



These **open and green spaces are fragmented and weakly connected**. The proposed public space network strengthens spatial continuity by establishing a **continuous green corridor**. The intervention builds upon existing green assets and follows prevailing wind directions, **enhancing ecological connectivity, microclimatic performance, and pedestrian accessibility**.

MESO SCALE



Satellite imagery indicates that Hanbruch is characterized by a dominant green infrastructure. This extensive green network provides a restorative environment that promotes public health, encourages community engagement, and supports a wide range of outdoor activities. Activating the Public Open Field
Cultivating Semi-Public Spaces



Short Term

Activate underused open spaces as flexible community places.



Long Term

Gradually establish a community farm through shared management and land coordination.



ACTIVATE THE OPEN SPACE AS A COMMUNITY MARKET FOR LOCAL EXCHANGE. FOOD, AND EVENTS: FLEXIBLE SPACE, COMMUNITY GATHERING, LOCAL ECONOMY MARKET



Transform the lawn into a productive community farm to promote sustainability and education : Flower Garden, Food Production, Education

MICRO SCALE



For the micro-scale intervention, a representative block was selected. It reflects Hanbruch's typical low-density residential fabric, characterized by detached and semi-detached houses, private gardens, and tree-lined streets.



A typical low-density housing block with high resource consumption and limited ecological infrastructure.



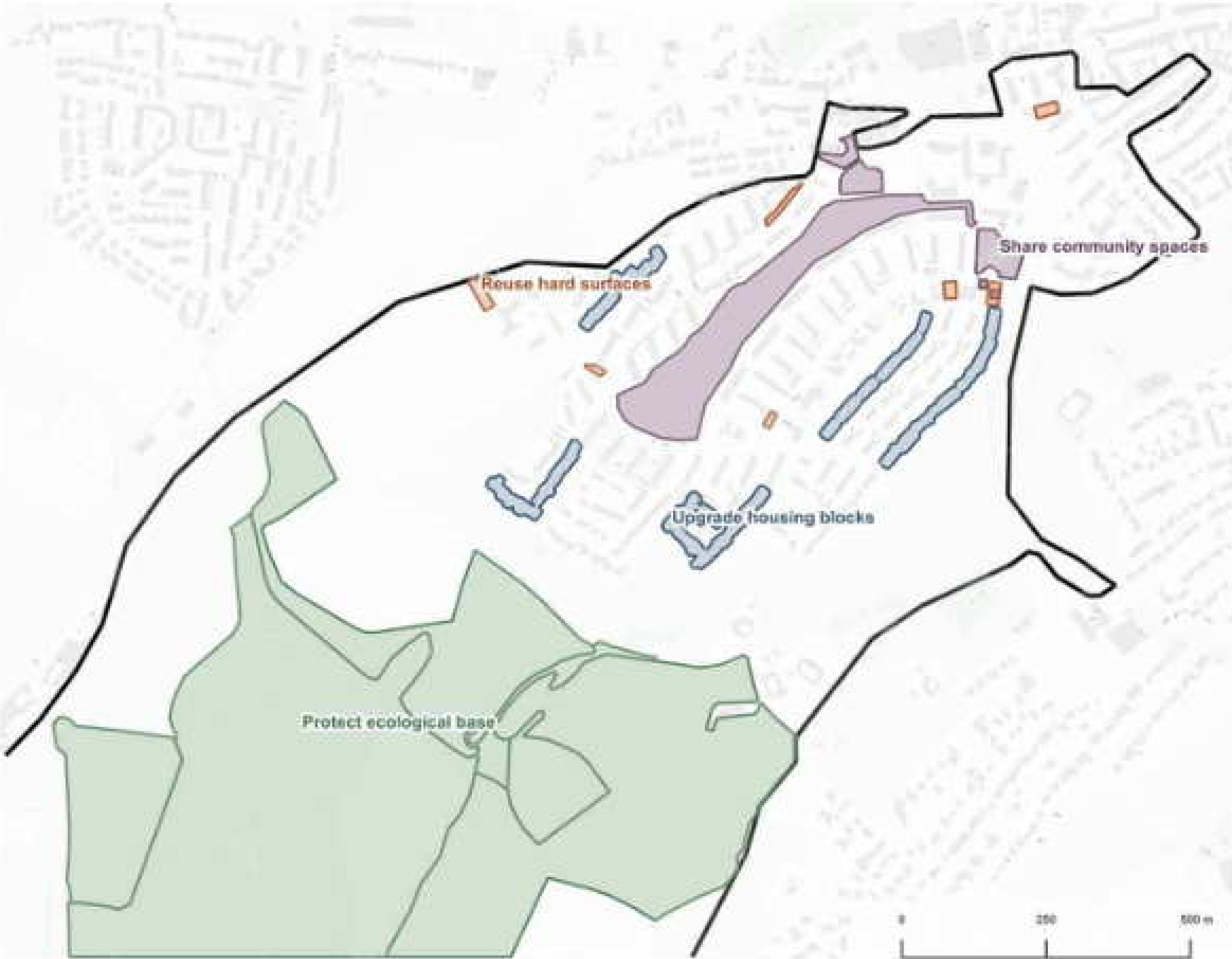
A resilient and resource-efficient neighborhood powered by local loops and nature-based solutions.

- High Energy Dependence
- Rainwater Runoff
- Organic Waste
- Car Oriented Space
- Private Green Only

- Renewable Energy
- Water Cycle
- Organic Loop
- Shared Space
- Green and Biodiversity

STEP_V INTERVENTIONS

MASTERPLAN



- 1

Play Cube
- 2

Nature Play Ground
- 3

Family Seating
- 4

Green Walking Path
- 5

Street Games
- 6

Pop Market
- 7

Event Lawn
- 8

Micro Mobil Cafe
- 9

Quiet Garden
- 10

Herbs Garden
- 11

Pavilion
- 12

Protected Ecological Core
- 13

Forest-Edge Enhancement
- 14

Landscape Entrance & Soft Path
- 15

Shared Hub
- 16

Permeable Surface
- 17

Modular Paving
- 18

Productive Landscape
- 19

Community Pavilion
- 20

Pocket Plaza
- 21

Flexible Activity Space
- 22

Slow Mobility Link
- 23

Reuse Building as Semi Public Space
- Protect

Ecological Base
- Re-Use

Hard Surfaces
- Upgrade

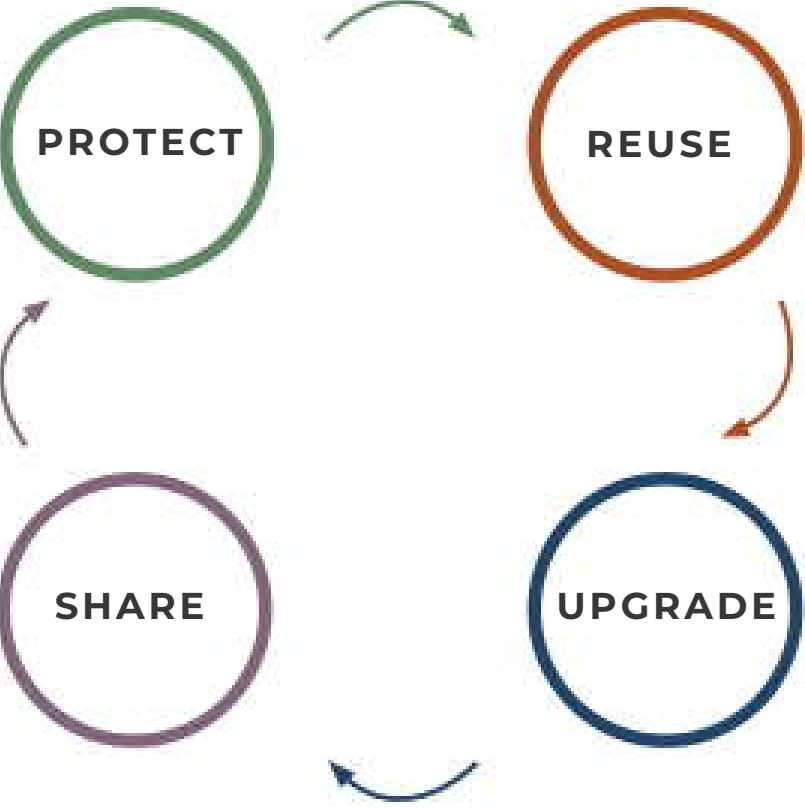
Housing Blocks
- Share

Community Space

CONCEPT

Purpose
Support social interaction and local resource exchange.

- Spatial Focus
- Forest edge
 - Open green space
 - Landscape entrance



Purpose
Transform hard surfaces into flexible community and mobility spaces.

- Spatial Focus
- Public parking lots
 - Garage yards
 - Underused paved spaces

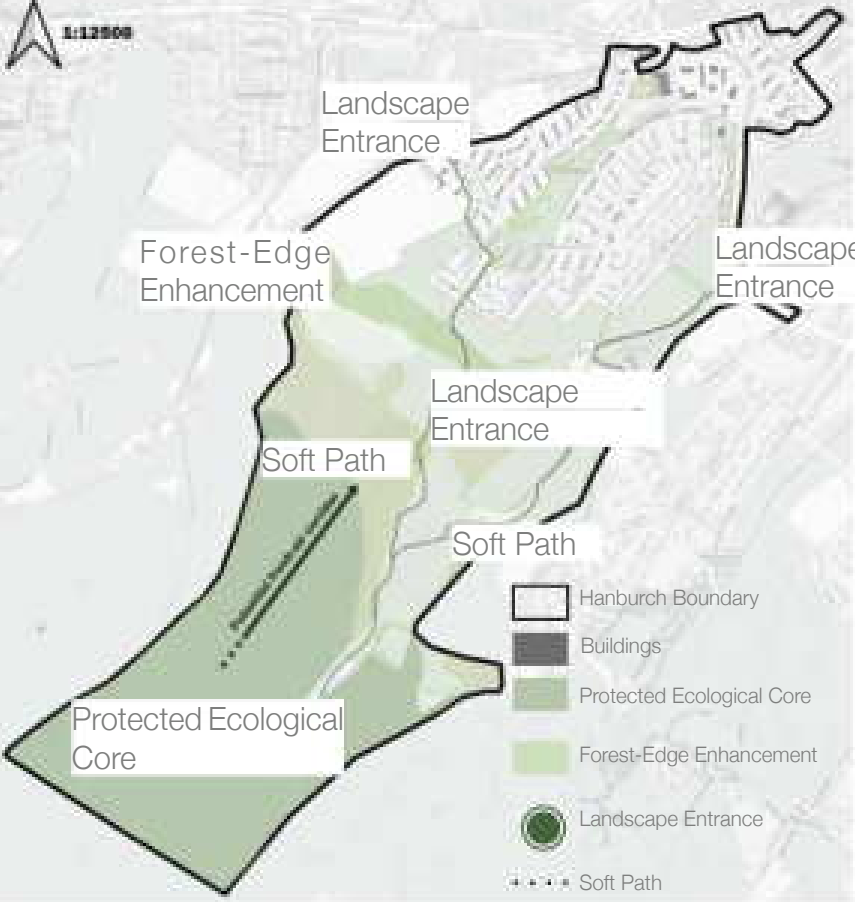
Purpose
Improve building performance and resource efficiency.

- Spatial Focus
- Residential blocks
 - Roofs
 - Facades
 - Semi-private edges

Purpose
Support social interaction and local resource exchange.

- Spatial Focus
- Common lawns
 - Community facilities
 - Everyday activity nodes
 - Shared open spaces

PROTECT



REUSE



UPGRADE



SHARE

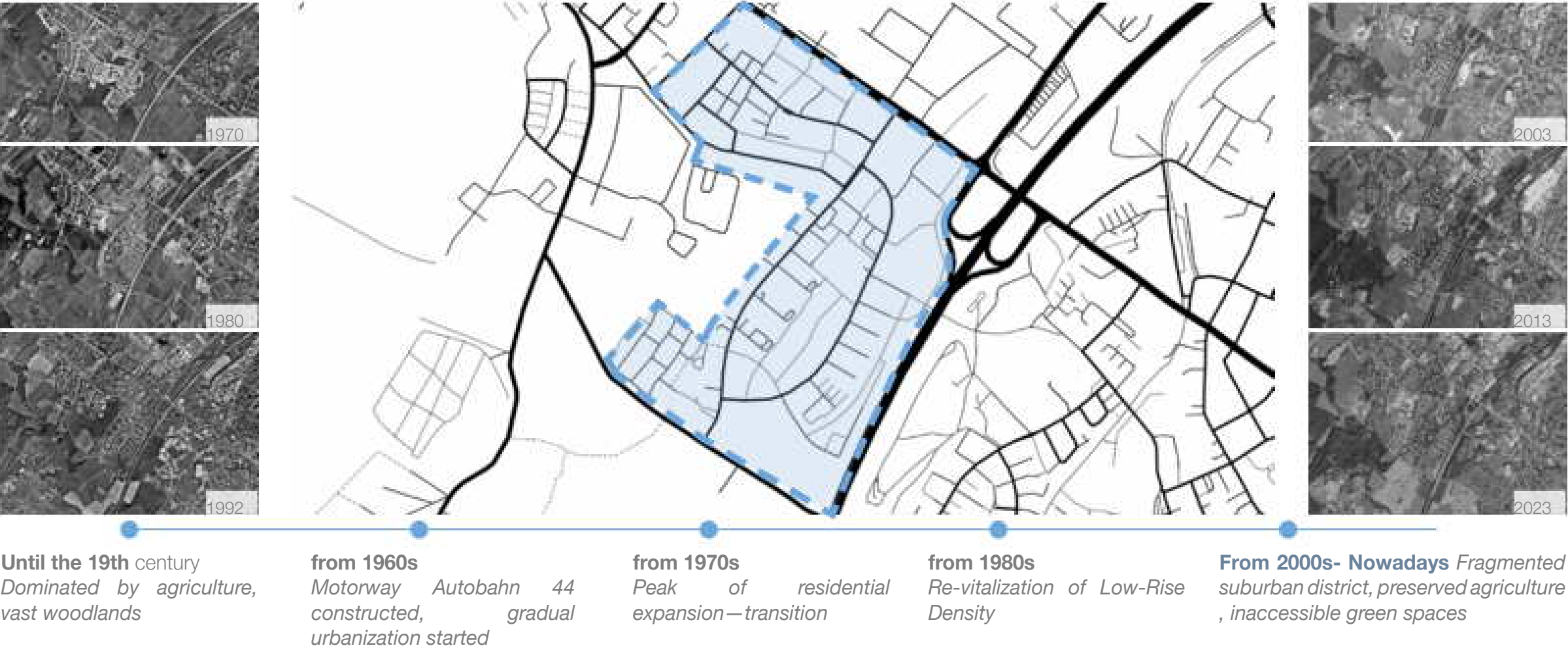




DRIESCHER HOF

FROM MODERNIST HOUSING ESTATE TO A CONNECTED NEIGHBORHOOD

The Driescher Hof is treated as a post-war modernist housing development with a spatially structured design and an extended network of green spaces which provides the basis for future transformation. The proposed approach does not call for widespread redevelopment; instead, it seeks to build on the current residential fabric, community facilities, and landscape systems in order to enhance the quality of daily life for residents while protecting the character of the neighborhood. The long, unbroken green corridor traversing the district forms the principal spatial framework, enhancing ecological connectivity, pedestrian circulation, and connections between residential areas, schools, park and recreational spaces, and community facilities. Additionally, existing local focal points (such as the former Ladenzeile, educational institutions, and the deconsecrated church) are revitalized via new public uses designed to foster social exchange and shared community activities. Furthermore, the project also aims to address the fragmentation caused by Trierer Straße and the A44 highway by creating improved access to formerly separated areas within the district. In place of demolition of the modernist residential development, this approach seeks to adapt existing spaces, underused public open spaces, and emerging residential projects to create a more connected, resilient neighborhood. Circular economy is reflected through the adaptive reuse of buildings, shared community facilities and infrastructure, shared landscape management, and collective stewardship, allowing Driescher Hof to evolve while retaining the characteristics that define its original urban form.



URBAN MORPHOLOGY



CORE AND EDGES

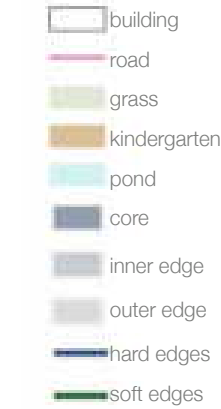


Driescher Hof is characterized by an internal core, transitional, and outer edges.

The central area: Educational facilities, open spaces, and community services, serves as the social and spatial core of the neighborhood.

The inner edge: Surrounding residential blocks, which consist mainly of residential blocks surrounding the centre and ensuring the transition between collective facilities and peripheral housing areas.

The outer edge: Peripheral green areas. The A44 motorway and Trier Straße serve as a strong physical barrier, defining the district's eastern boundary and limiting connectivity to adjacent urban areas.



URBAN MORPHOLOGY-HISTORICAL FORMATION



Driescher Hof is a post-war suburban housing estate shaped by modernist planning, later influenced by fragmentation, social challenges, and ongoing regeneration.

Spatial Structure & Urban Grain

Car oriented, hierarchical street network.

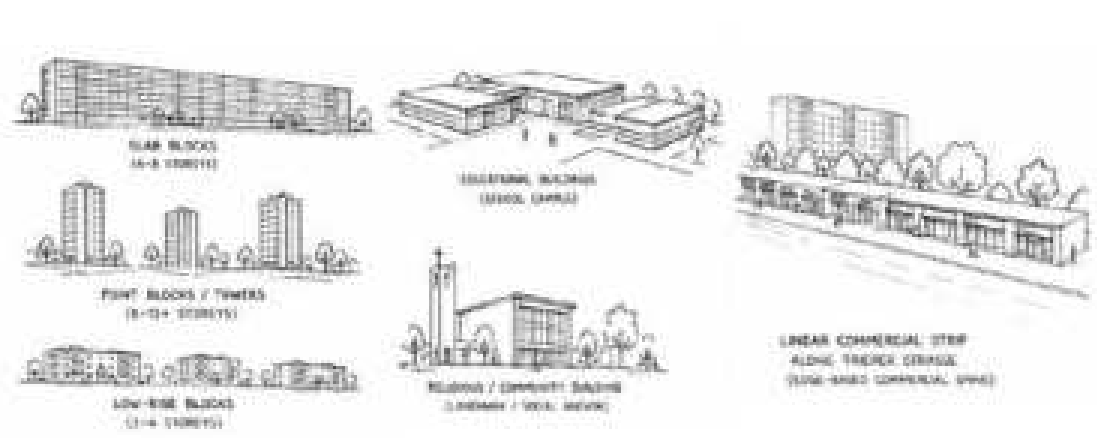
Plot& Building Pattern

Coarse urban grain with low spatial definition, weak street enclosure, and unclear public-private boundaries.

Morphologically, Driescher Hof belongs to the modernist housing estate typology and is characterized by an incomplete urban condition resulting from its fragmented development.

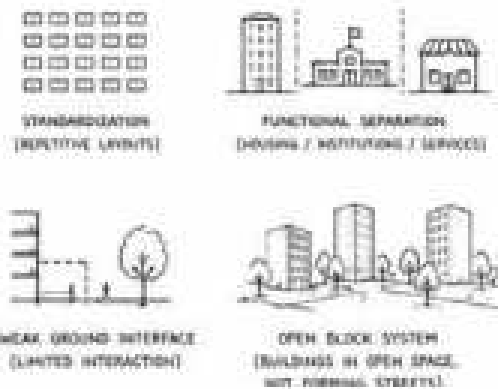
URBAN MORPHOLOGY-BUILDING TYPOLOGY

The urban form of Driescher Hof is dominated by modernist residential typologies,characterized by repetition, openness, and functional clarity:



Emerging Typologies: Represents a shift toward more compact, socially interactive urban form.

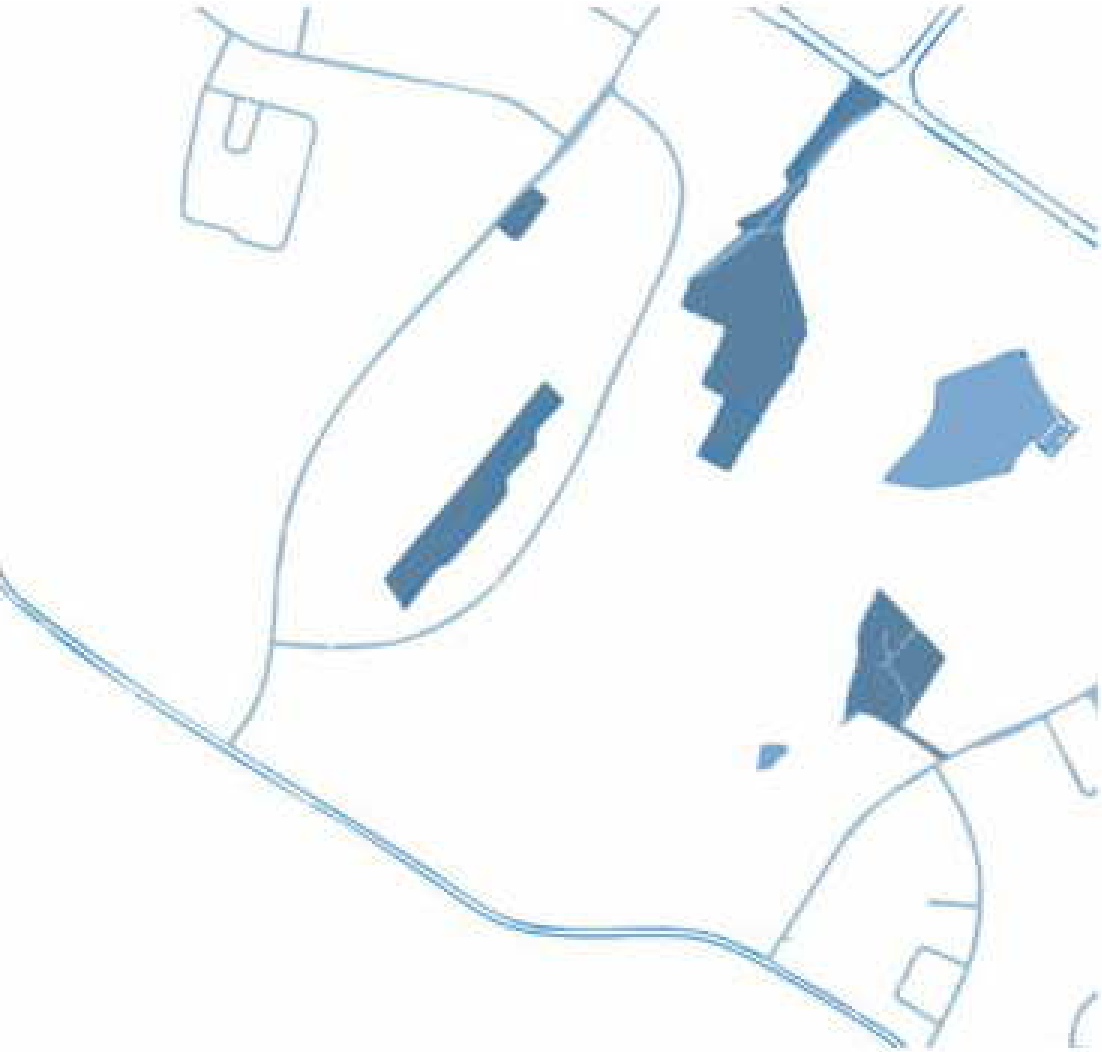
Typological Characteristics



Typological Problems

STEP_II

SPACE|TOWN|AREA



Driescher Hof
Aachen Forst's southernmost and most densely populated sub-district.

 6,646 residents  0.82 km²

Developed during the 1970s as a planned settlement of 3–5 storey apartment blocks and two-storey row houses.

The district is **bounded by Trierer Straße** to the north and the **A44 motorway** to the south, creating barriers to pedestrian connectivity and exposing the area to persistent traffic noise.

The greenest sub-district, characterized by a continuous green corridor, semi-public green spaces, and a direct connection to the surrounding agricultural landscape.

Main Connection -> the Grauenhofer Weg in the south
the Trierer Straße in the north

Driescher Hof is connected by an oval road network to Trierer Straße and Grauenhofe Weg.

Residential buildings are accessed via dead-end streets, while **Johannstraße and Sittarder Straße provide additional connections to western Aachen Forst**. Pedestrian paths link the apartment blocks, the central park, and the southwestern residential area.

CONNECTIVITY



LEVEL OF URBANITY



PUBLIC-PRIVATE DISTINCTION



MEETING POINTS



-  Bundesautobahn A44

 Trierer Straße

 Königsberger Straße
-  Stettiner Straße

 Ladenzeile

 7-8 Storey Blocks
-  Three and five storeys

 Two-storey row houses

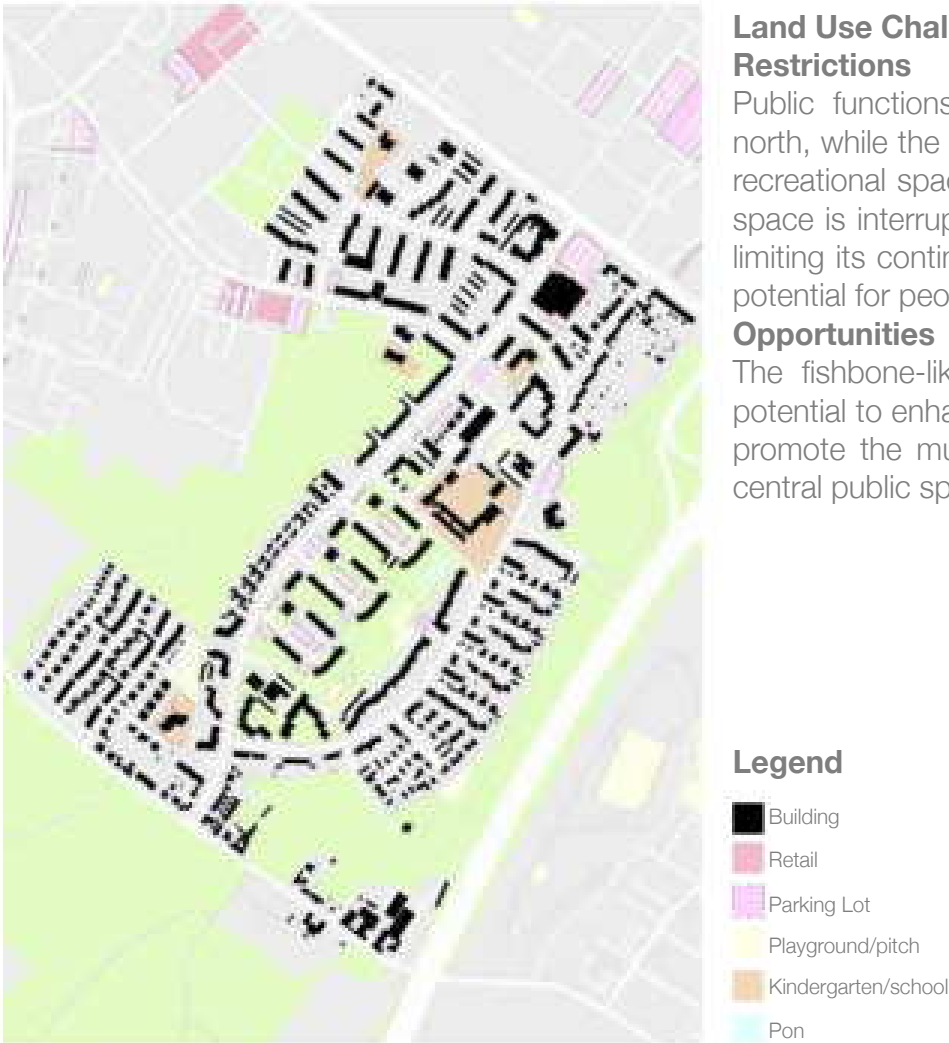
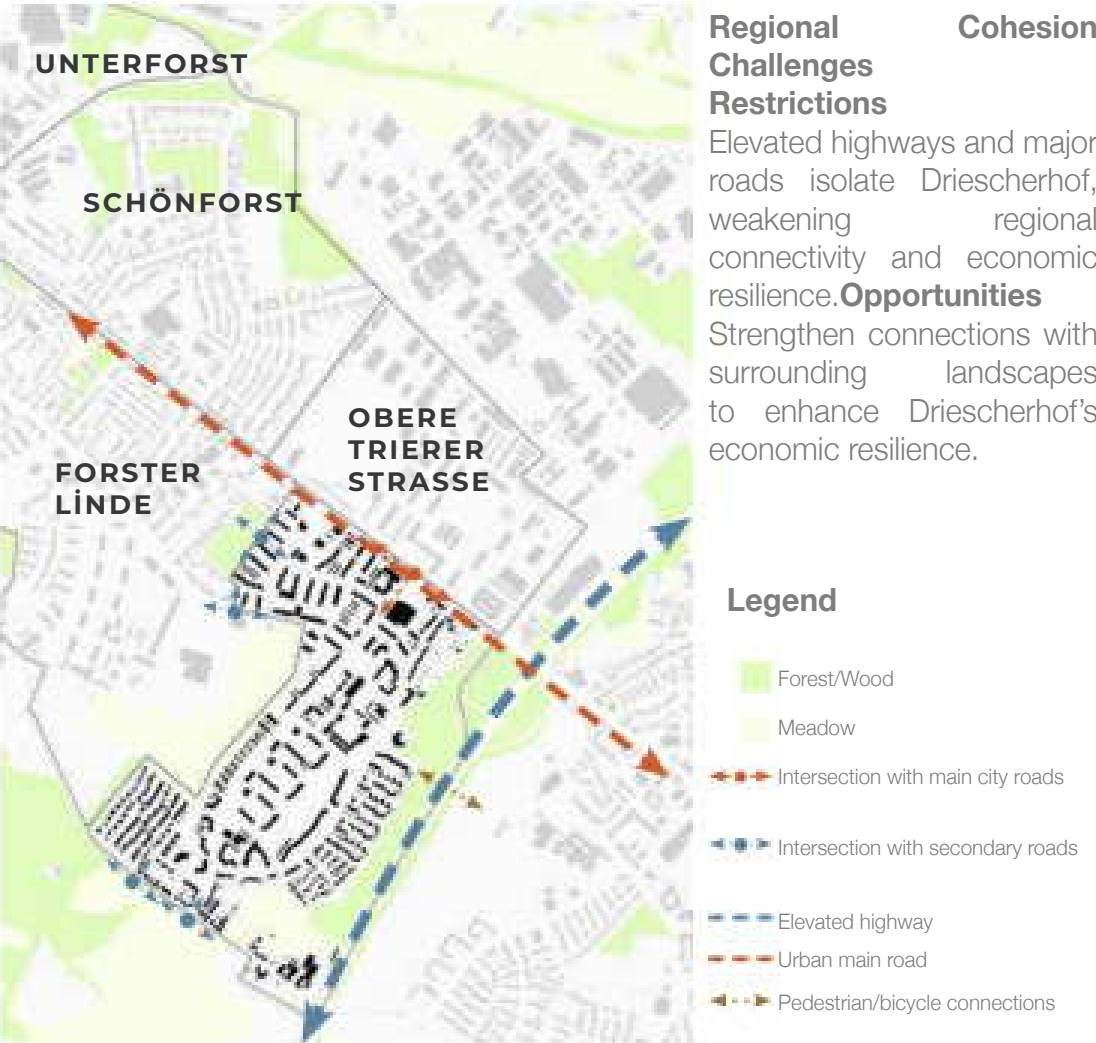
 Rewe
-  Christus unser Friede

 Green Areas

 Agricultural Landscape

STEP_III

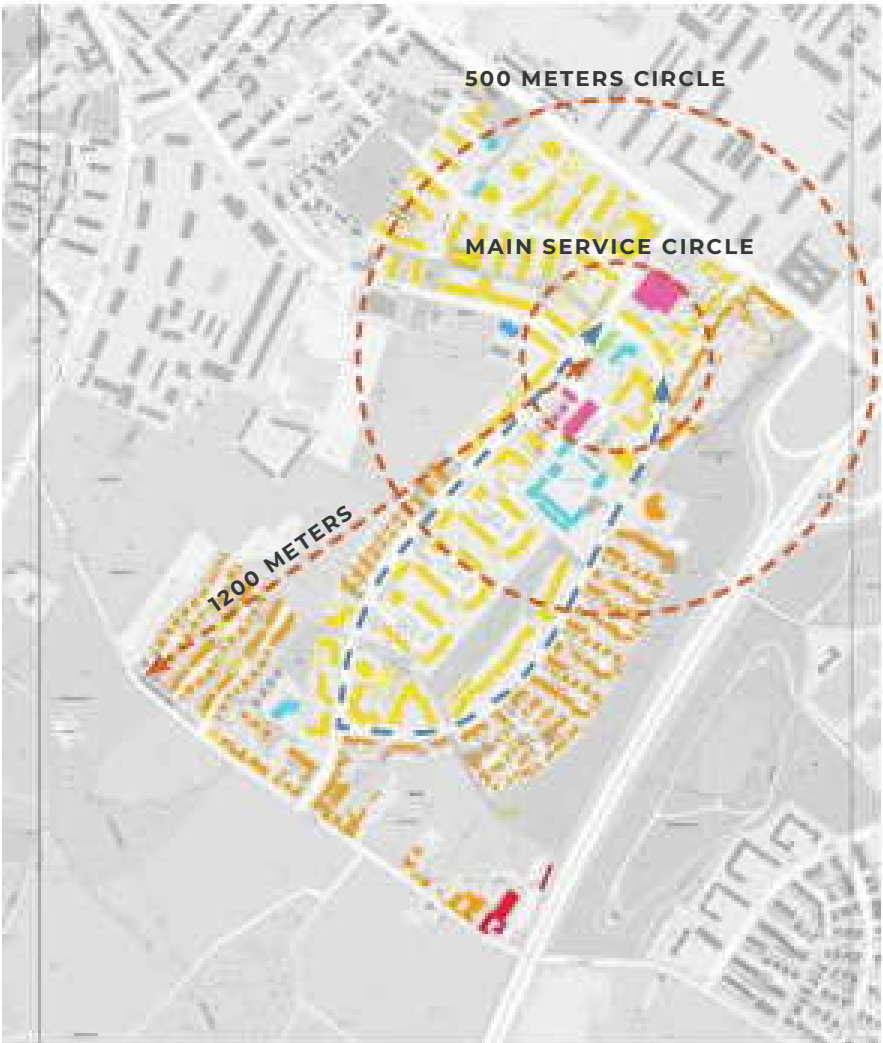
OPPORTUNITIES/ RESTRICTIONS - INNOVATION



LAND PARCEL - RESTRICTION & OPPORTUNITY



BUILDING FUNCTION - RESTRICTION



Restrictions

Imbalanced Distribution of Services

Commercial and public amenities are concentrated along the northern edge, limiting access for the rest of the neighborhood.

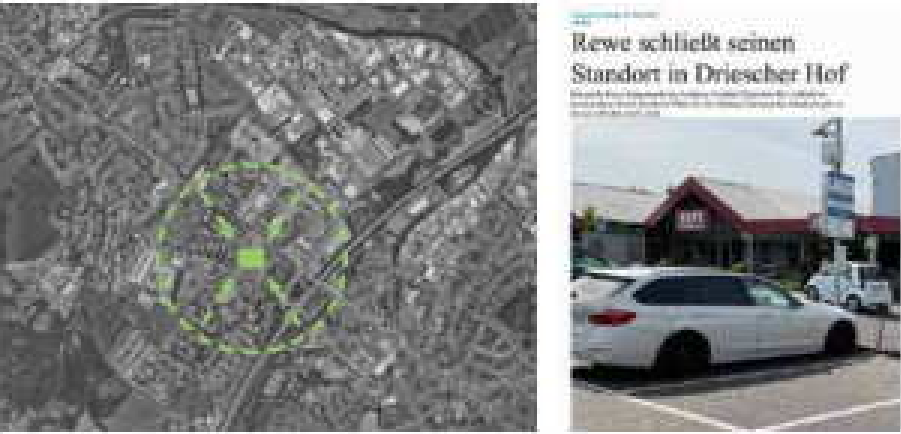
Car-Dominated Public Spaces

Potential community hubs are currently used as parking lots and lack the basic amenities needed to support social interaction.

Major Roads as Physical Barriers

Arterial traffic routes slice directly through the district, acting as severe physical barriers.

BUILDING FUNCTION - OPPORTUNITY



Opportunity

Adaptive Re-use of the Macro-Anchor

The REWE building can be adaptively reused as a hybrid civic center, providing shared community spaces

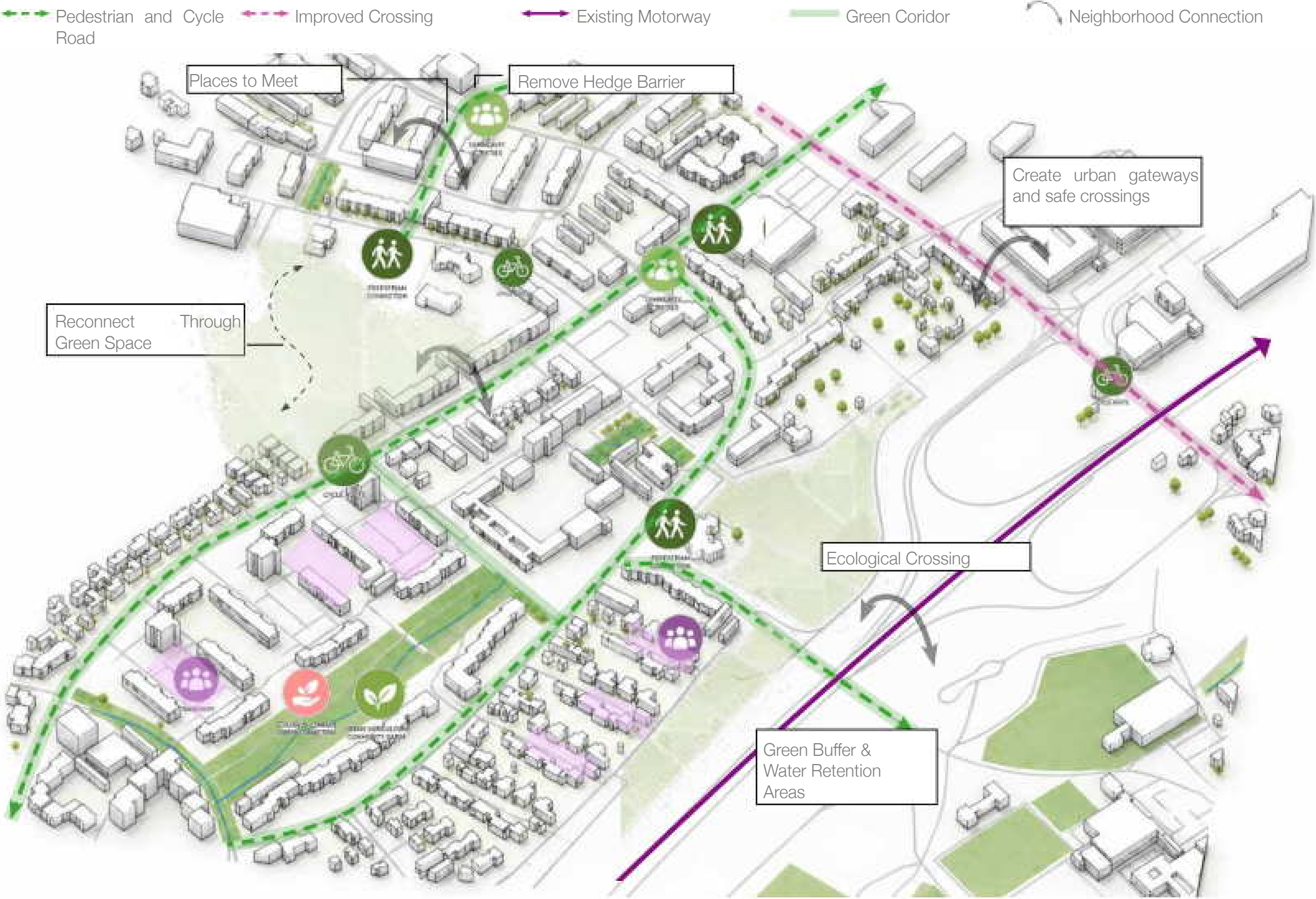
Decentralized Micro-Hubs (Urban Acupuncture)

The closure of REWE creates an opportunity to redistribute retail into vacant ground-floor spaces, promoting mixed use and improving daily accessibility.

STEP_IV

MULTI SCALE VISIONS

LOCAL VISION



Vision
Local Vision
Driescher Hof becomes a green connector between Forst, Schönforst, and Brand.

District Vision
Transform the central green strip into a multifunctional community spine that connects people, activities, and public spaces.

Neighborhood Vision
Create everyday arenas for social interaction, community engagement, and local production.

Strategy
Local Vision
Strengthen ecological corridors
Improve pedestrian and cycling connections

District Vision
Strengthen green and public spaces as the social and ecological backbone.
Enhance accessibility through continuous pedestrian and cycling connections.

Neighborhood Vision
Promote urban agriculture productive landscapes.
Enhance inclusive public life with outdoor learning, recreation, and community spaces.

LOCAL VISION



DISTRICT VISION



The following areas were analyzed and strategies were developed at the neighborhood scale.

- Quartiersmitte Driescher Hof
- Ladenzeile Driescher Hof
- Grauenhofer Weg Connection
- Königsberger Straße Crossing Improvement
- Grillwiese Development
- Wohnumfeldgestaltung Königsberger Straße
- Aufwertung des Spiel- und Bolzplatzes Königsberger Straße
- Gestaltung der Autobahnunterführung

STEP_V INTERVENTIONS

MASTERPLAN

Driescher Hof's strategy has four core dimensions:
Protect – Reuse – Upgrade – Share

The design objectives focus on three main areas:
Ecological Protection & Utilization
Axis Strengthening & Connectivity
Resilience & Productivity



Grillwiese
By adding pathways through the grass, movement can be guided. Partial semi-hardening of the ground can support diverse activities.



Agricultural Education and Trade Center
As the Rewe store is expected to close soon, it will be transformed into a regional public hub for agricultural research, education, and local product promotion.



Rainwater Restoring and Green Roofs
In these areas, residents are encouraged to modify their houses by adding green roofs to enhance rainwater retention and ecological resilience.



Summary of the Driescher Hof Intervention Proposals

Protect Ecological Preservation	Reuse Activating Existing Spaces	Upgrade Infrastructure & Resilience	Share Community Spaces
Strengthens the transition between urban and natural landscapes by protecting green edges, reducing highway impacts, and enhancing ecological continuity.	Activates underused spaces by improving accessibility, strengthening public life, and creating new opportunities for learning, social interaction, and the local economy.	Enhances green infrastructure by improving active mobility, upgrading public spaces, and strengthening climate resilience through sustainable water management.	Strengthens social cohesion by promoting shared spaces, inclusive public use, and interaction across diverse communities.

+ REFLECTION

CONCLUSION

COMPARATIVE OUTCOMES ACROSS THE FOUR STUDY AREAS

COMPARATIVE FINDINGS ACROSS THE FOUR STUDY AREAS

Although each of the project districts presents a distinct urban type, the comparative analysis shows that the potential of these types to support the circular economy is determined by less the availability of space than by the respective social and spatial frameworks. The analyses carried out for the study showed that successful circular interventions take place at locations with community infrastructure, every day public use and flexible, or adaptable urban spaces (Panneschopp, Driescher Hof, Hanbruch and Steppenberg).

The district of Panneschopp provides the best basis to implement circular economy. Due to its physical conditions and historical preservation restrictions, Panneschopp has a number of active public spaces, strong community institutions and numerous social networks, which allow for immediate forms of exchange, repair and local production. Therefore, the planned interventions focus above all on activating existing places and not creating additional ones.

For Driescher Hof a very different potential exists. Its existing green corridor and public facilities offer possibilities to link again fragmented urban spaces through the means of adaptive re-use, shared landscape management and new neighborhood functions. In contrast to Panneschopp however, this large-scale district requires more robust governance structures and longer term implementation strategies than presented in the current plan.

	STUDY AREA 01 hanbruch	STUDY AREA 02 steppenberg	STUDY AREA 03 driescher hof	STUDY AREA 04 panneschopp
01	character	• modernist urban planning typology; quiet residential character with separated residential blocks; low-density urban fabric and underused open green spaces • stronger urbanity in the north-east, concentrated around schools, supermarkets and local services; roads dominate movement and daily activity	• densely populated residential area with suburban character and low-density row housing • mixed-use functions concentrated in the north, especially around the supermarket • clearly separated land uses and a settlement-edge character with green spaces	• 1970s post-war modernist housing estate with functional zoning and no historic centre • predominantly residential, suburban and high-density apartment blocks with row houses and extensive green and agricultural areas • internal spatial hierarchy from central core to transitional residential ring and peripheral green edge
02	restrictions	• climate protection area and sensitive quiet residential environment • high share of private and semi-private land • car-dependent urban structure • limited opportunities for large-scale transformation	• listed buildings and heritage parcel protection • nature protection areas, brook and watercourse constraints, and unmaintained green buffers • noise and air pollution along arterial roads; strong car orientation and weak connections to surrounding neighbourhoods	• A44 and Trierer Straße act as barriers; car-oriented structure and parking interrupt public-space continuity • fragmented public spaces, underused green areas and lack of meeting places • public services concentrated in the north; weak mixed use and inactive ground floors
03	opportunities	• strengthen urban connections in the north-east and improve accessibility • activate passive green spaces and central green areas as multifunctional community spaces • improve social interaction through public spaces, adaptive reuse of parking areas and shared functions	• activate underused open spaces, the existing community garden, recreation and sports facilities • use the local supermarket and playgrounds as activity anchors • improve connectivity and entrances while intensifying activity nodes	• regional green connections, urban agriculture and multifunctional green spaces • repurpose parking areas and strengthen continuous pedestrian and cycling networks • develop a denser central area with stronger social activity and potential neighbourhood-centre functions • large-scale top-down redevelopment potential on corporate-owned land
04	possible circular interventions	• community facilities as local circular hubs and everyday destinations • circular food systems: community gardens, local food production and compost hubs • borrow, repair and reuse systems with shared-resource infrastructure • rainwater management and solar-roof networks	• reuse underused open spaces through neighbourhood-scale sharing initiatives and community-based interventions • expand community gardening, local food production and shared green infrastructure • community-led management of green spaces, recreation and ecological functions	• community gardens, urban agriculture, local food production, shared greenhouses and local food markets • shared green infrastructure and parking-to-green conversion • adaptive reuse of vacant buildings, maker spaces and community facilities • shared mobility hubs and private solar

TOWARDS REGENERATIVE URBAN THINKING

REFLECTION

LESSONS FROM A COMPARATIVE DESIGN STUDIO

Looking back at four investigations, the studio's most valuable result is not any single proposal or intervention but the chance to compare different interpretations of the same methodology. Each project followed the same analytical sequence: starting with urbanity and morphology and then moving on to opportunities, visions and interventions. Yet final proposals vary quite a lot. This shows that a shared design framework does not produce solutions that are all alike. Instead, it provides a structured way of understanding local conditions and leaves each neighborhood free to respond based on its own history, spatial organization and everyday realities. Bringing together the four projects in one publication makes these differences much more apparent than by evaluating them separately. Side by side, proposals start to form a broader discussion about transformation of Aachen rather than four separate design exercises.

Comparisons also show how neighborhoods react differently to the same questions. All groups study regenerative urbanism and circular economy but each investigation starts transformation from a different place. Sometimes social infrastructure and existing community life turn out to be strongest resources; in other cases landscape structure or ecological systems or public space networks direct proposal direction. Projects show that rather than applying the same strategy to each district, transformation emerges by understanding qualities that already define each place. Existing conditions therefore become primary resource for design rather than something that must first be overcome.

Throughout the booklet another recurring pattern gradually becomes clear. Initial studies focused on describing urban form, land use and spatial organization but later stages increasingly focused more on relationships. Connections among buildings and open spaces, among institutions and residents, among ecological systems and public life and among historical development and future opportunities became more important than the individual physical elements themselves. This progression suggests that successful transformation of cities depends less on introducing new things and more on strengthening relationships that already exist within the environment of the city. In this sense proposals go beyond physical planning and start to address everyday functioning of neighborhoods.

The understanding of circular economy also evolved throughout the studio. It went beyond recycling materials or efficiency with resources and became a way of reading urban environments that already exist. Across four neighborhoods circularity showed up through adaptive reuse of buildings, activation of public spaces, restoration of

ecological systems, productive landscapes, sharing of knowledge, community facilities and collective stewardship. Projects interpreted these principles differently but they all used existing spatial and social resources as the base for future development. Broadening this interpretation reflects one of strongest shared results of the studio: circular economy is not represented by single intervention but by organizing relationships among people, space, ecology and local resources over time.

Working across different scales reinforced this understanding. Looking simultaneously at neighborhoods through spatial, area and town allowed continuous connection between local observations and larger urban systems. Decisions proposed during intervention stage were consistently based on results developed in earlier analytical phases rather than as separate design ideas. This continuity strengthened internal logic of each proposal and also allowed comparison using a common structure despite different contexts. As a result, the booklet documents not just four design results but also a shared analytical process that is visible from initial observations right through to final interventions.

Comparison also underscores the importance of preserving diversity during urban transformation. No neighborhood emerged as a model that works universally for regeneration either; that was not studio goal. Instead each district offers a different view on how existing urban environments can develop differently. Housing that is historic, estates that are modernist, residential areas that are suburban and landscapes driven by ecology each require different priorities, different implementation strategies and different readings of circular economy. Taken together they show resilience does not result from applying the same solutions but from adapting common principles to local conditions.

Finally assembling the booklet underscores the value of collaborative work in urban design education. Looking at projects together brings out recurring themes, complementary strategies and consistency of methods that become less clear when proposals are considered individually. Publication therefore goes beyond just collecting student projects. It documents a shared investigation into regeneration, circular economy and sensitive planning of different urban environments while firmly grounded in existing spatial, ecological and social conditions. Taken together, four investigations suggest that future transformation of cities does not depend on replacing what already exists but understanding, connecting and carefully developing resources embedded within the fabric of the city.

+ REFERENCES & CREDITS

REFERENCES & CREDITS

SOURCES & RELATIVE LINKS

EDITORIAL NOTE

This booklet is an editorial compilation of the original student submissions prepared within the Urban Transformation II studio at RWTH Aachen University (SS2026). During the editorial process, layouts, typography, colour palettes, diagrams, maps and graphic compositions were reformatted, visually standardised and, where necessary, graphically refined to establish a coherent publication identity across all project chapters. These editorial adjustments were undertaken exclusively for publication purposes and did not alter the original analytical content, design concepts or authorship of the respective student groups. Every reasonable effort has been made to acknowledge the original references and visual sources provided by the respective project teams. Due to the editorial consolidation of multiple independently developed submissions, some visual materials were reformatted, redrawn, recoloured or integrated into a unified graphic language. Any unintentional omissions or inaccuracies in attribution remain subject to correction in future editions.

LITERATURE & REPORTS

Angélli, M. et al. (2016). Urbane Qualitäten – Ein Handbuch am Beispiel der Metropolregion Zürich. ETH Zürich Research Collection.
Baukunst NRW. Siedlung Panneschopp.
Curdes, G. Die räumliche Entwicklung der Stadt Aachen.
Dieters Seite. Panneschopp und Kennedypark.
Institut für Landes- und Stadtentwicklungsforschung (ILS).
Stadt Aachen. Stadtteilperspektive Zukunft Forst.
Additional literature and reports as referenced in the original student submissions.

SPATIAL DATA

City of Aachen Geoportal
City of Aachen Open Data
OpenStreetMap Contributors
Overpass Turbo
QGIS
Google Maps
Google Street View
NRW Umgebungslärm
Bezirksregierung Köln – Geobasis NRW
Historical aerial imagery and cadastral datasets (where applicable)

IMAGE & VISUAL CREDITS

Analytical maps, diagrams, drawings and graphic compositions were prepared by the respective student groups and editorially adapted for publication. Architectural visualisations were developed by the respective student groups using original site analyses, field observations, reference photographs and, where indicated, AI-assisted image generation. Selected precedent images and publicly available reference material were used exclusively as conceptual references for academic and educational purposes. Unless otherwise stated, the intellectual ownership of all analytical work, design proposals, visualisations and project content remains with the respective student authors.

SOFTWARE

Adobe InDesign
Adobe Illustrator
Adobe Photoshop
QGIS
OpenStreetMap
Overpass Turbo
ChatGPT (OpenAI)
AI-assisted image generation tools (where applicable)