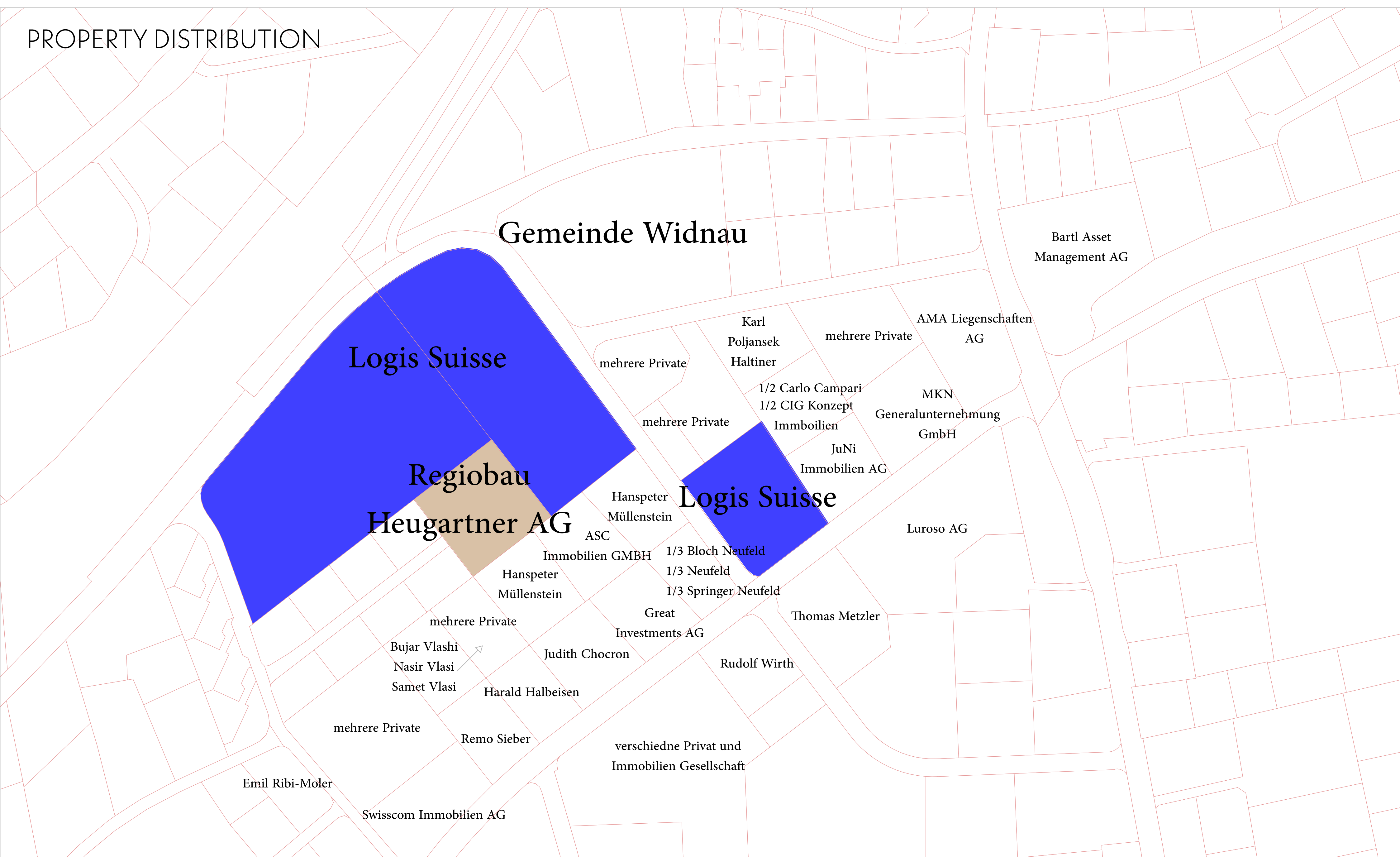


# SUSTAIN IT

## PROPERTY DISTRIBUTION



Embark on a transformative urban design project in Nefenfeld, situated between Widnau and Au. This initiative aims to achieve net-zero goals at the neighborhood level while envisioning a socially prosperous post-fossil future. Our approach includes a comprehensive analysis of the neighborhood's density, revealing that property and parcel borders may hinder further development. Additionally, we identified challenges in the existing street system, where cars take precedence, leaving limited spaces dedicated to pedestrians and cyclists—underutilized areas that could enhance community life.

Furthermore, our analysis shed light on the underused green spaces within the community. Despite their potential for public activities and community engagement, these spaces lack diversity and are largely homogeneous.

REIMAGINING NEFENFELD AS A **SUSTAINABLE, WELL-CONNECTED COMMUNITY** THAT ADDRESSES DENSITY CONCERNS, REDEFINES STREET PRIORITIES, AND TRANSFORMS GREEN SPACES INTO **VIBRANT HUBS OF DIVERSITY AND COMMUNAL ACTIVITY**

A NEIGHBORHOOD THAT NOT ONLY MEETS NET-ZERO GOALS BUT ALSO FOSTERS A SOCIALLY ENRICHED AND ECOLOGICALLY RESPONSIBLE FUTURE



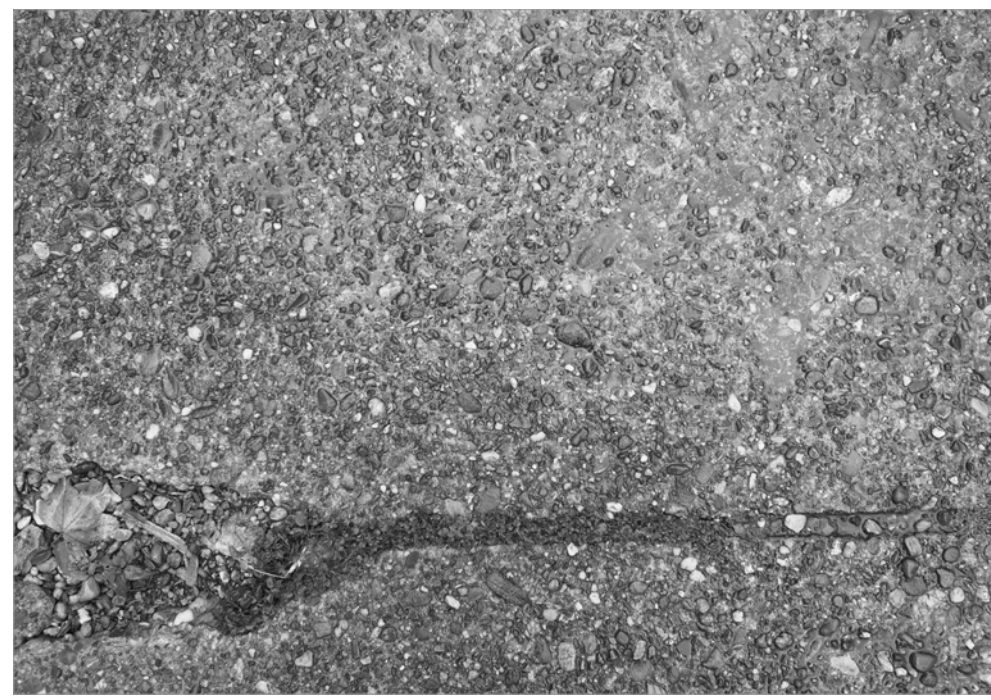
DECONSTRUCTION



EXISTING MOBILITY



EXISTING GREENSPACES



## SUSTAINABLE WELL CONNECTED COMMUNITY

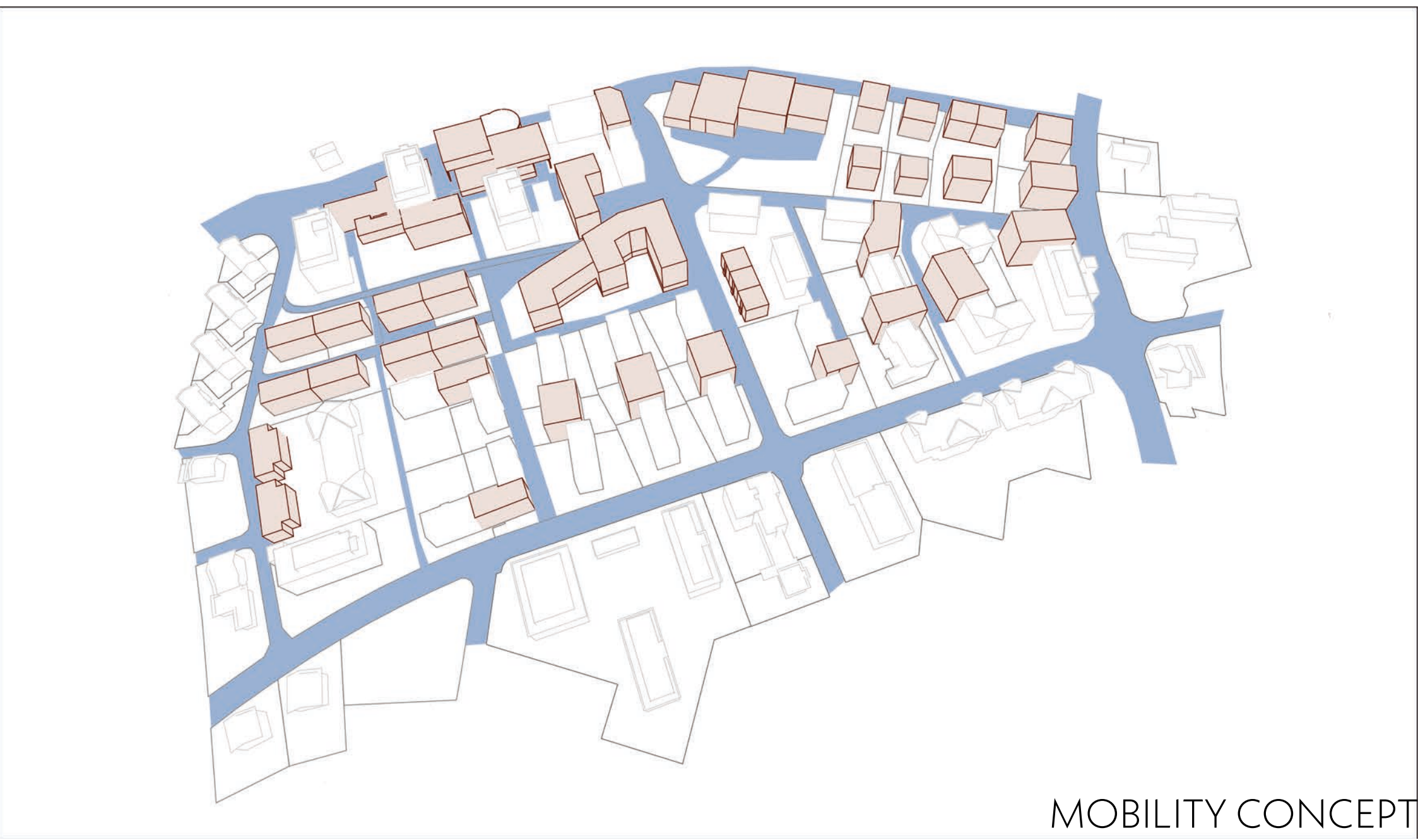
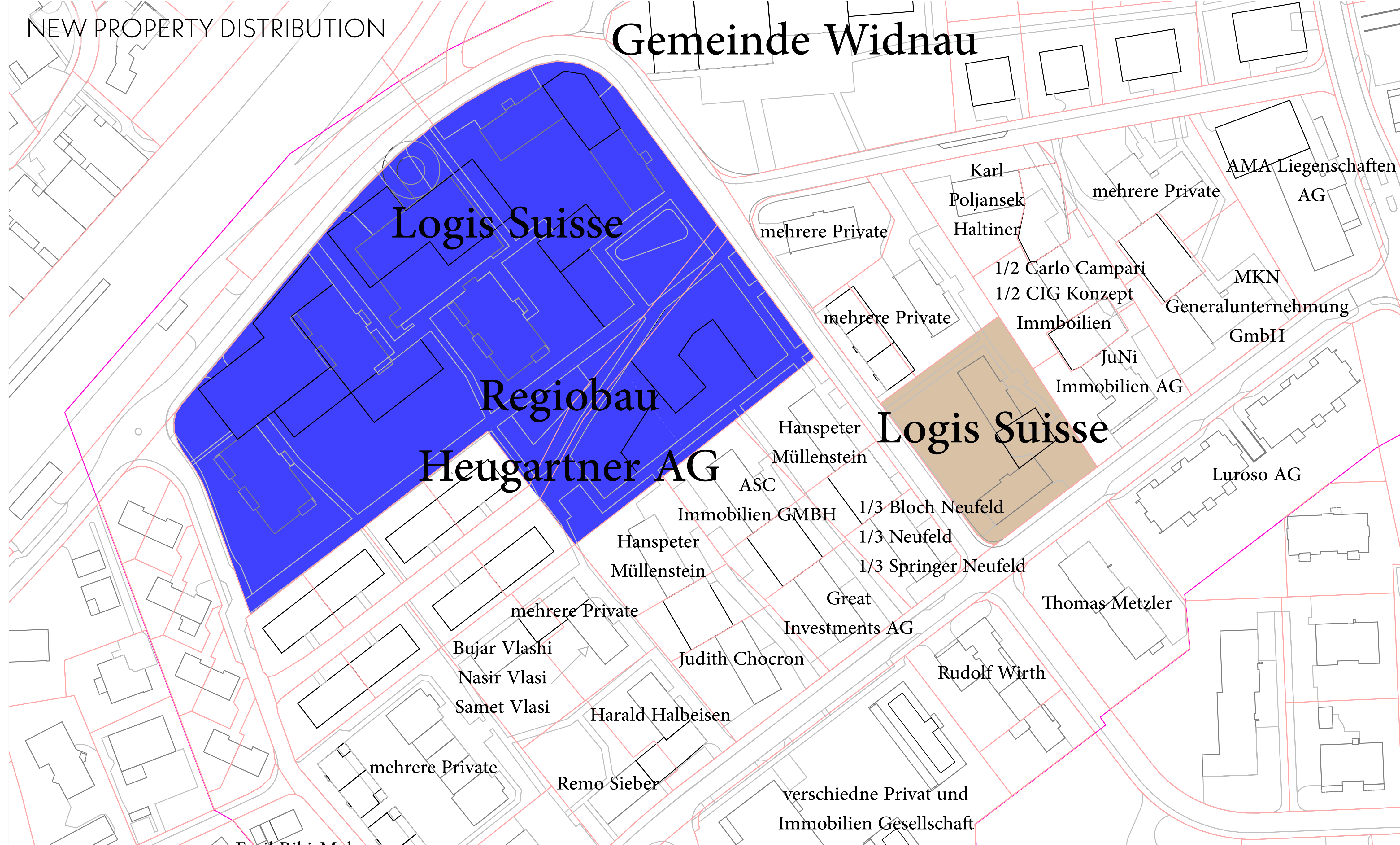
## DIVERSITY AND COMMUNAL ACTIVITIES

## POSTFOSSIL NEIGHBORHOOD: SOCIALLY ENRICHED AND ECOLOGICAL RESPONSIBLE



# SUSTAIN IT

OUR PRIMARY OBJECTIVE IS TO OPTIMIZE THE UTILIZATION OF EVERY PROPERTY AND PARCEL IN NEFENFELD. THIS INVOLVES STRATEGIC ADJUSTMENTS TO PROPERTY BORDERS, ENSURING THAT EACH OWNER BENEFITS FROM THE TRANSFORMATIVE CHANGES TAKING PLACE. IN RESPONSE TO OUR FINDINGS, WE PROPOSE SIGNIFICANT CHANGES TO THE STREET INFRASTRUCTURE, NARROWING ROADS FOR CARS AND ENFORCING SPEED LIMITS OF 20 KM/H, WITH A REDUCED SPEED OF 10 KM/H ON THE MAIN STREET ADJACENT TO THE COMMUNITY SPACE. THE MAIN STREET WILL ALSO TRANSFORM INTO A ONE-WAY ROAD, ACCOMMODATING TWO-WAY CYCLING. CRUCIALLY, PEDESTRIANS TAKE CENTER STAGE IN OUR DESIGN APPROACH. WE ARE INTRODUCING A CENTRAL AXIS THAT CONNECTS ONE END OF THE NEIGHBORHOOD (NEAR THE MAIN TRAIN STATION) TO QUIETER SPACES. THIS PEDESTRIAN PATHWAY MEANDERS THROUGH GREEN SPACES, CREATING A SERENE AND ENJOYABLE ENVIRONMENT FOR INDIVIDUALS STROLLING THROUGH THE NEIGHBORHOOD



REPLACEMENT DEVELOPMENTS

URBAN VILLAS



ANNEX DEVELOPMENTS

SOLITARY DEVELOPMENTS

# SUSTAIN IT

SECTION 1: 100



THE DESIGN OF THE OUTDOOR SPACE IS BASED ON THE SAME PRINCIPLES AS THE DENSIFICATION OF THE NEIGHBORHOOD. OUR AIM IS TO PRESERVE AS MUCH OF THE EXISTING VEGETATION AS POSSIBLE AND TO INCREASE THE VIBRANCY OF THE SURROUNDINGS WITH A VARIETY OF GREENERY. IN TERMS OF GROUND SURFACES, WE ARE FOCUSING ON MINIMIZING SEALING, PARTICULARLY ALONG THE MAIN ROAD, WHERE THE LONG-TERM AIM IS TO CONVERT PARKING AREAS. IN ORDER TO MAKE THESE AREAS MORE FLEXIBLE, THEY SHOULD NOT HAVE TO BE USED EXCLUSIVELY AS PARKING SPACES.

WE ARE ALSO AIMING TO CREATE A BARRIER-FREE MEETING ZONE. HERE WE ARE CHOOSING A SOLID BUT WATER-PERMEABLE GROUND MATERIAL. NEW TREES WILL ALSO BE PLANTED ALONG THE TRAFFIC-CALMED MAIN STREET OF THE NEW QUARTER TO PROVIDE SHADE IN SUMMER AND THUS ENRICH THE EXPERIENCE OF WALKING ALONG THIS STREET. THESE DESIGN MEASURES IN THE OUTDOOR SPACE ARE AIMED AT PROMOTING SUSTAINABILITY AND QUALITY OF LIFE IN THE NEIGHBORHOOD BY TAKING BOTH ECOLOGICAL AND SOCIAL ASPECTS INTO ACCOUNT.

GROUND FLOOR ZOOM-IN 1: 200



# SUSTAIN IT



REFERENCE FOR THE MAIN SQUARE IN THE NEIGHBORHOOD:  
HUNZIGER AREAL IN ZÜRICH



THE SELECTION OF MATERIALS FOR OUTDOOR FLOOR SPACES PLAYS A PIVOTAL ROLE IN CREATING ENVIRONMENTS THAT ARE BOTH SUSTAINABLE AND ACCESSIBLE. STRIKING THE RIGHT BALANCE BETWEEN WATER PERMEABILITY AND ACCESSIBILITY IS KEY TO ACCOMMODATING DIVERSE NEEDS WHILE PRESERVING EXISTING INFRASTRUCTURE. ONE OF THE PRIMARY CONSIDERATIONS IN TODAY'S LANDSCAPE DESIGN IS THE INTEGRATION OF WATER-PERMEABLE MATERIALS. THE IMPORTANCE OF THIS FEATURE LIES IN ITS ABILITY TO MITIGATE WATER RUNOFF, REDUCE FLOODING, AND PROMOTE GROUNDWATER RECHARGE. WATER-PERMEABLE SURFACES ALLOW RAINWATER TO INFILTRATE THE GROUND, PREVENTING PUDDLES AND CONTRIBUTING TO THE OVERALL HEALTH OF THE LOCAL ECOSYSTEM. THIS ECOLOGICAL APPROACH ALIGNS WITH THE GROWING EMPHASIS ON SUSTAINABLE PRACTICES IN URBAN DEVELOPMENT.

SIMULTANEOUSLY, ACHIEVING BARRIER-FREE ACCESSIBILITY IS CRUCIAL TO ENSURING THAT OUTDOOR SPACES CATER TO THE NEEDS OF ALL COMMUNITY MEMBERS, INCLUDING CYCLISTS AND INDIVIDUALS USING WHEELCHAIRS. THE TERM "BARRIEREFREI" ENCOMPASSES A DESIGN PHILOSOPHY THAT REMOVES OBSTACLES FOR EVERYONE, PROMOTING INCLUSIVITY AND EQUAL ACCESS TO PUBLIC SPACES. THE CHOICE OF MATERIALS SHOULD FACILITATE SMOOTH NAVIGATION FOR PEDESTRIANS, CYCLISTS, AND WHEELCHAIR USERS ALIKE, FOSTERING A SENSE OF COMMUNITY AND INTEGRATION.

IT'S WORTH NOTING THAT WHILE EMBRACING NEW MATERIALS IS ESSENTIAL FOR PROGRESS, PRESERVING EXISTING MATERIALS THAT ARE STILL IN GOOD CONDITION IS EQUALLY IMPORTANT. THIS NOT ONLY CONTRIBUTES TO SUSTAINABLE RESOURCE MANAGEMENT BUT ALSO RESPECTS THE HISTORY AND CHARACTER OF A PLACE. INTEGRATING MODERN WATER-PERMEABLE TECHNOLOGIES INTO EXISTING MATERIALS, WHERE FEASIBLE, ALLOWS FOR A HARMONIOUS BLEND OF INNOVATION AND PRESERVATION.

IN CONCLUSION, THE CAREFUL SELECTION OF OUTDOOR FLOOR MATERIALS THAT ARE BOTH WATER PERMEABLE AND ACCESSIBLE IS A CORNERSTONE OF CONTEMPORARY URBAN PLANNING. THIS APPROACH PROMOTES ENVIRONMENTAL SUSTAINABILITY, INCLUSIVITY, AND THE SEAMLESS INTEGRATION OF MODERN DESIGN WITH EXISTING INFRASTRUCTURE.

# SUSTAIN IT

MASTERPLAN 1:500



# SUSTAIN IT



# SUSTAIN IT

## OPEN SPACES IN EXISTING AEAS

DESPITE HIGH DENSIFICATION, THE NEFENFELD DISTRICT WILL CONTINUE TO HAVE LARGE AREAS THAT REQUIRE RESTRUCTURING. LARGE PARTS OF THE EXISTING ASPHALT AND GRASS AREAS WILL BE REPURPOSED AND ASSIGNED NEW FUNCTIONS. THE NEW ALLOCATION WILL CREATE THE BASIC PREREQUISITES FOR A FUTURE-ORIENTED DISTRICT, WORKING WITH THE POTENTIAL OF THE SITE AND CREATING A LIVELY AND LIVEABLE DISTRICT WITH FUTURE-ORIENTED MEASURES TO IMPROVE THE QUALITY OF LIFE. THE MEANS TO REUSE THE OPEN SPACE ARE WELL ZONED SPACES, SPONGE CITY ELEMENTS AND INTENSIVE GREENING.

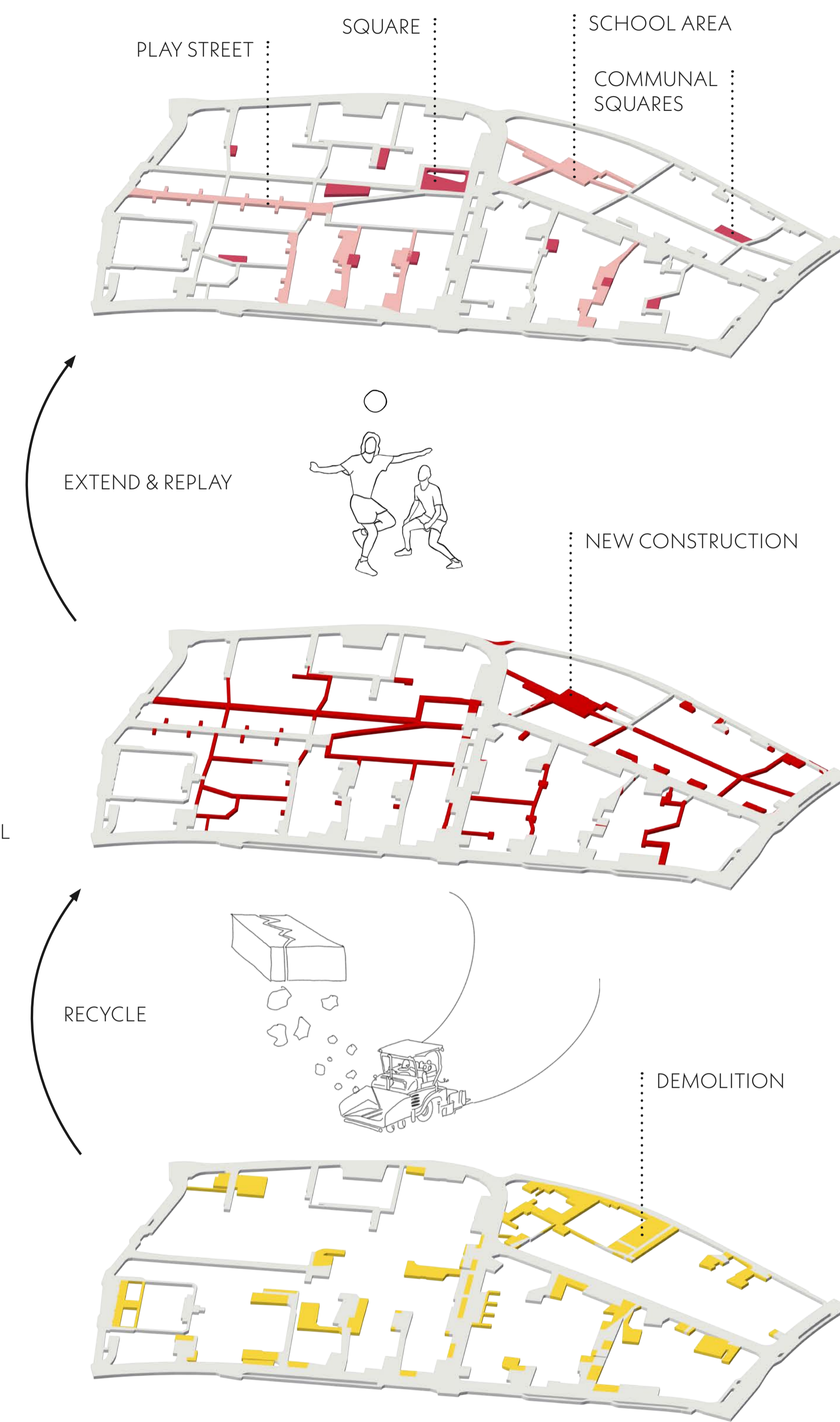


## LEVELS OF PUBLICITY

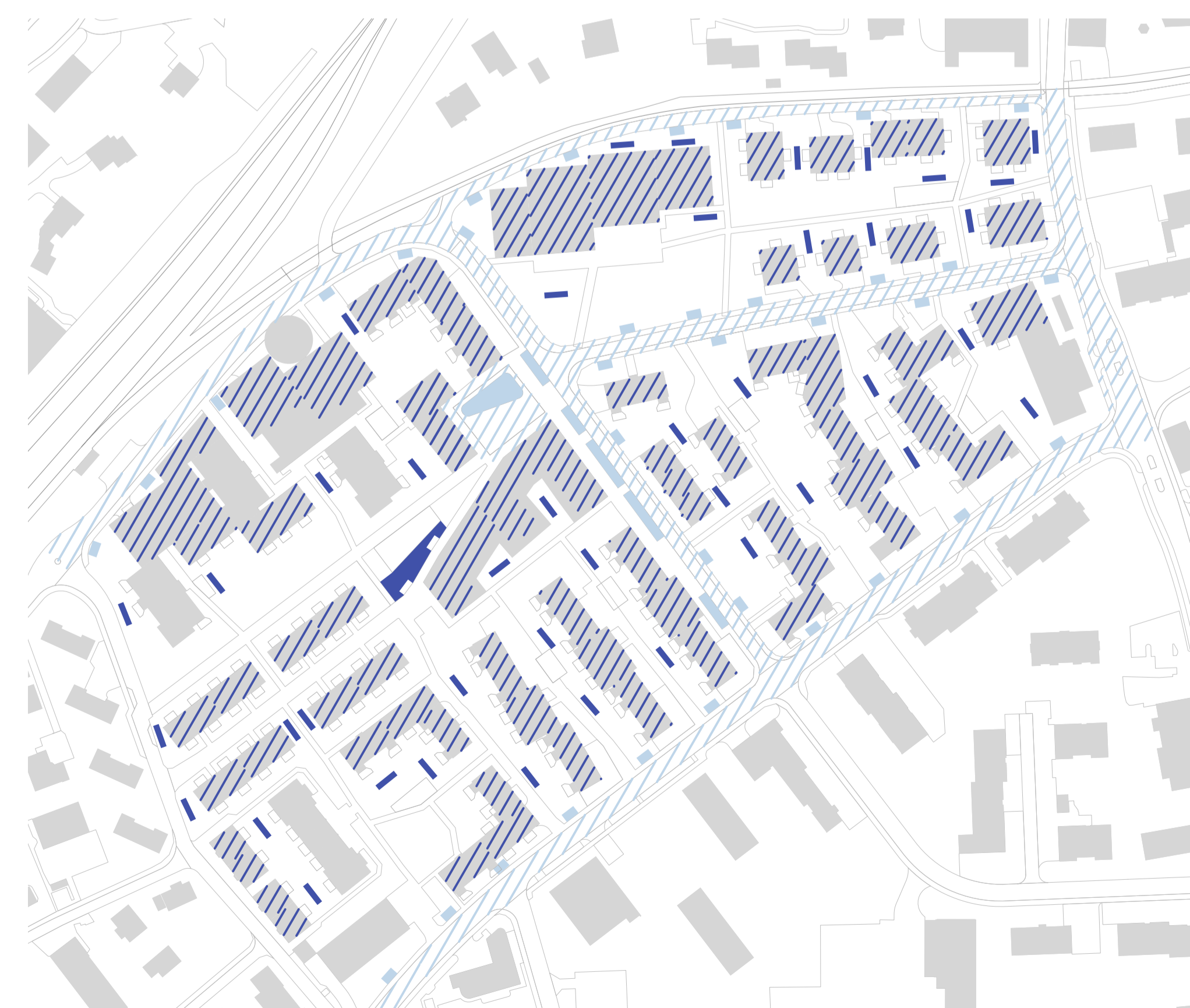


- PRIVATE
- COMMUNAL
- SEMI-PRIVATE
- PUBLIC
- INSTITUTIONAL

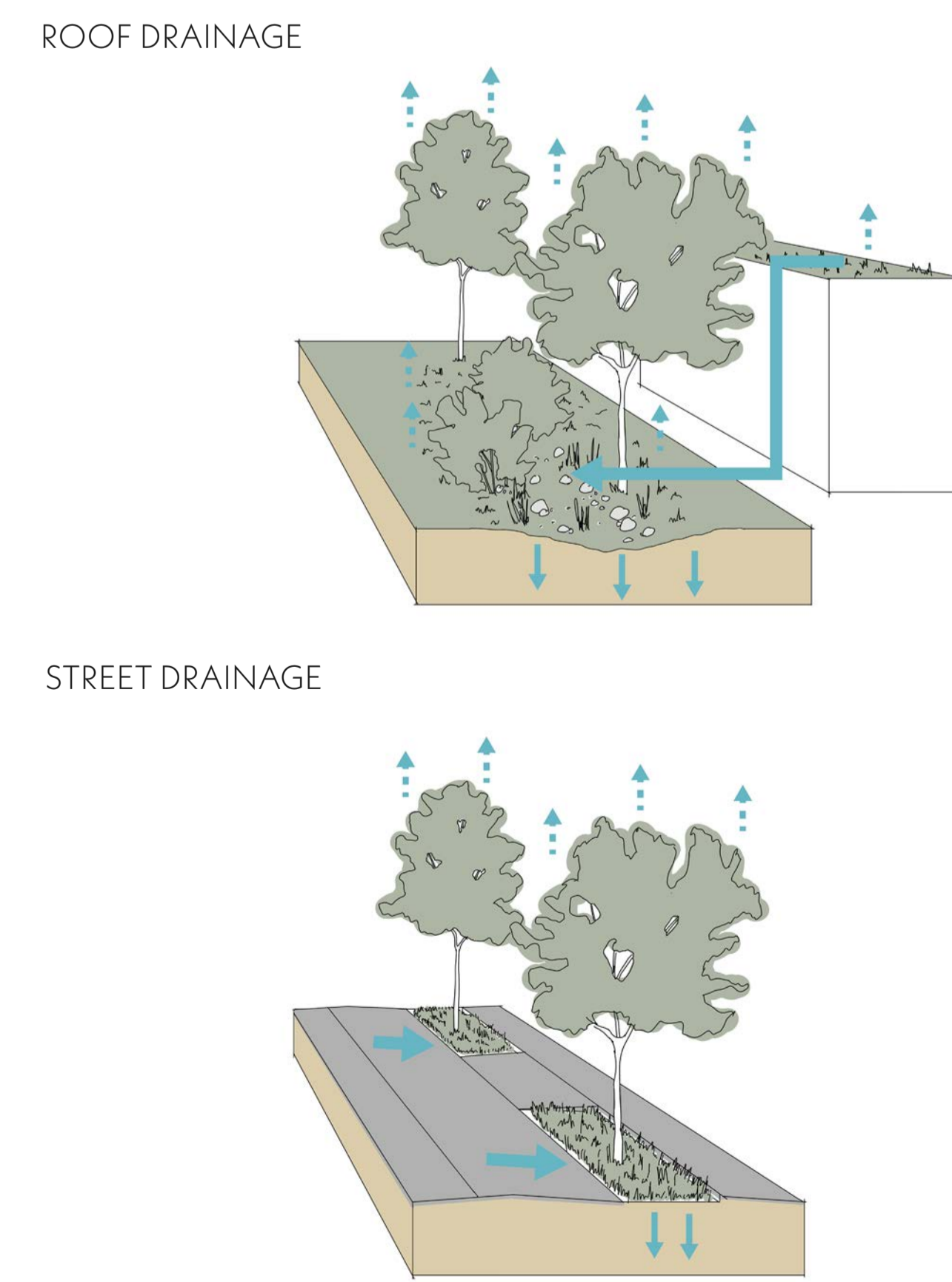
## REUSE OF ASPHALT SURFACE



## DRAINAGE AND RETENTION



- RETENTION PIT
- SEEPAGE PIT
- ROOF WATER
- STREET WATER



## TREE CONCEPT



- EXISTING
- NEIGHBOURHOOD
- INNER PARC
- SQUARE
- MEETING ZONE
- ROAD

<b>EXISTING</b> <ul style="list-style-type: none"> <li>• CARPINUS BETULUS</li> <li>• BETULA PENDULA</li> <li>• PICEA ABIES</li> <li>• ACER PSEUDOPLATANUS</li> <li>• ACER CAMPESTRE</li> <li>• PINUS SYLVESTRIS</li> </ul>	<b>NEIGHBOURHOOD</b> <ul style="list-style-type: none"> <li>• OSTRYA CARPINIFOLIA</li> <li>• ACER OPALUS</li> <li>• FRAXINUS ORNUS</li> <li>• QUERCUS CERRIS</li> <li>• TILIA TOMENTOSA</li> <li>• SORBUS ARIA</li> <li>• ALNUS INCANA</li> <li>• SALIX ALBA 'LIMPIEDE'</li> <li>• PRUNUS PADUS</li> <li>• POPULUS TREMULA</li> </ul>
<b>INNER PARC</b> <ul style="list-style-type: none"> <li>• PSEUDOTSUGA MENZIESII</li> <li>• BETULA PENDULA</li> </ul>	<b>SQUARE</b> <ul style="list-style-type: none"> <li>• QUERCUS FRAINETTO</li> </ul>
<b>MEETING ZONE</b> <ul style="list-style-type: none"> <li>• ACER PLATANOIDES</li> <li>• ACER CAMPESTRE, ELGANT</li> <li>• CARPINUS BETULUS 'FRANS FONTAINE'</li> <li>• ULMUS REBONA</li> </ul>	<b>ROAD</b> <ul style="list-style-type: none"> <li>• ALNUS X SPAETHII</li> <li>• ALNUS CORDATA</li> <li>• ULMUS REBONA</li> </ul>

# SUSTAIN IT

PER-PROJECT 1:200



HUNZIKER-AREAL, ZÜRICH



HOUSING SCHEME OBSTHALDE, ZÜRICH

SECTIONAL VIEW B-B' 1:100



SECTIONAL VIEW A-A' 1:100

