

SOCJO DEWELOPERKA

RESISTENCE THROUGH INCLUSIVITY

VYSOKÉ UČENÍ TECHNICKÉ
Faculty of Architecture
Department of Design
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INCLUSIVE HOUSING STUDIO

SOCJO-DEWELOPERKA
- RESISTENCE THROUGH INCLUSIVITY

DIPLOMA THESIS
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FAKULTA ARCHITEKTURY

FACULTY OF ARCHITECTURE

SOCJO-DEWELOPERKA: ODBOJ PROSTŘEDNICTVÍM SPOLEČENSKÉ INKLUZE

SOCJO-DEWELOPERKA: RESISTENCE THROUGH INCLUSIVITY

DIPLOMOVÁ PRÁCE
MASTER'S THESIS

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Assignment Master's Thesis

Project no.:	FA-DIP0001/2024
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Socjo–deweloperka: Resistence through inclusivity

Master's Thesis:

Since the establishment of the new republic in 1989, Poland has experienced multiple shifts and transformations in its housing policies. Warsaw, the capital, is perhaps the most extreme and complex market–driven example of this evolution, with many of its districts displaying a disorganized, randomly birthed, almost haphazard collage–like urban landscape. Decades of insufficient regulation, legal instability, frequent changes in laws and unchecked developer activity have led to rampant gentrification and the emergence of housing forms where human living conditions take a back seat to investor profits.

The thesis builds upon the theoretical foundation laid in pre–diploma semester research, “Pathologies of modern Polish housing: inclusivity and regulations against developers’ trends”. Said research explored the historical and political factors contributing to the current criseridden state of housing.

This thesis, however, will push the research further by not only diagnosing the existing issues but also proposing tangible solutions. The core of the project will be the revision of local development plans, aiming to establish an alternative regulatory framework that challenges the current pro–developer policies. These new regulations would prioritize affordability, inclusivity, its right placement into the surrounding urban fabric and sustainable urban growth. In conjunction with these regulatory changes, it will try to test them through an experimental design of new architectural forms in the context of the Wola district, specifically in the area of Kercelak, where new high–rise development meets old residential complexes. Thus, the goal of the project is to test whether these revised regulations could translate into practical, on–the–ground solutions, while also preserving the remains of pre–war heritage found in the area.

Graphics scope :

Aim of the project: architectural study.

The goal of the project is to present a model for a more inclusive housing strategy on a specific site in the district of Wola, situated at the frontier between an older residential area and an aggressively expanding gentrified part of Warsaw. Through an urban master plan and an

architectural design proposal for the aforementioned district, I will test whether these revised regulations can be effectively translated into practical, on–the–ground solutions, while preserving the remnants of pre–war heritage found in the area.

I. Introductory data, analysis
– Theoretical analysis of the problem;
– Analysis of current proposals for housing projects in Warsaw, Poland;
– Analysis of the specific site, architecture, demographics;
– Theoretical analysis of current local development plans in Warsaw, Poland;
– Description of proposed changes to local development plans;
– Definition and basic principles of affordable housing, models of housing in Poland;

II. Documentation of the designed area
– Urban analysis (1:1000/1:5000) of the site/surrounding areas in relation to existing programs, traffic, public space
– Site plans (1:1000): basic space organization, public space organization, functional specification, traffic – operational specification;
– Floor plans (1:100, 1:200,…) documenting the functional and operational layout;
– Section drawings (1:100, 1:200,…);
– Axonometric drawing (exterior and interior);
– 3D visualizations / collages/ sketches representing key design parts;
– Text description of the design/project principles

III. Physical models
– Urban layout model (1:500/1:1000).
– Model of the proposal design in scale 1:100/ 1:200

The documentation of the project will be assembled in the printed booklet and presentation poster(s). The documentation will also be available in digital form. Scales are given as assumed values, they can be changed as needed.

List of literature:

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the deadline for submission for the Master's Thesis: 3.1.2025

Master's Thesis is submitted in the scope determined by the project supervisor; in addition, one B1 exhibition panel and Master's Thesis in electronic form are submitted.

Bc. Matteo Marchese student	Zuzanna Irena Mielczarek, MSc project supervisor	head of the institute

In Brno dated 23.9.2024

Ing. arch. Radek Suchánek, Ph.D.
Dean

prohlášení o původnosti práce

Prohlašuji, že jsem předloženou diplomovou práci zpracoval samostatně a že jsem uvedl veškeré použité informační
zdroje.

declaration of origin of the work

I declare that I have prepared the submitted thesis independently and that I have provided all the information used
sources.

Matteo Marchese
V Brně dne 20.12.2024

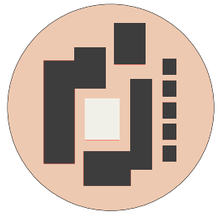
AKNOWLEDGEMENT

I would like to thank my darling supervisors, Zuzanna Mielczarek and Kacper Kępiński for folowing me and my thesis along the whole long and winding road , for all the incredible advice, their care, their time and most of all for all the infinite patience even in my most critical situations.
My thanks belong as well to my parents, my therapist and my psychiatrist, my closest friends and Phoebe for immense support.

ANOTATION

Poland. Warsaw. Wola. Kercelak. Chlodna Street. A location once full of vibrant life, markets, artists, bars, clubs, crime, drama. Now a spatious empty, anonymous street which barely remembers its pre-war glory. These days it is a dysfuctional, yet interesting crossroad between an old residential area on the north and an agressively spreading gentrified, luxury-driven world on the south. Thus not only ideal for land-grabing local developers, but also for me to try-out an alternative set of rules, a regulatory framework, that would counter the current polish pro-developer policies. A system based upon a list of possible rewards for a deweloper in case they give back to the community in various given forms.

Afterwards, I tested this system by designing a variety of possible outcomes, out of which I focused on one of them and proceeded to develop it into a new architectural form on a spatious plot of nearby desolate parking lots to create a more affordable and inclusive structure, integration with the surrounding urban environment, and sustainable urban growth. Since I had to assume more roles for this task (urban planner/developer/architect), I also incorporated the new graphic system created for the new local spatial development plan into the actual final design as an architectural detail.

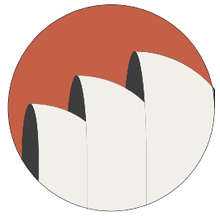


URBAN SOLUTION

The main objective of the urban design is to create an urban block in a different manner than what the location of Karcelak and Chlodna Street is used to. The design proposal tries to densify a forgotten parking area while still being modest and breatheable with a focus on nature, public spaces, community throught human connections and respect to the remains of pre-wararchitecture in the area. I was trying to achieve all that on a theoretical legislative approach first, by creating alternative regulations and rules for the area. However, before creating my local development plan, masterplan and ultimately the final design, I also studied the existing local spatial development plans that are in action at this very moment. As well as reading norms and counting percentages, I tested them as well by proposing a few variations of a „negative design“ - the most extreme scenarious permatable by existing regulations.

My hopefully „positive design“ of a new urban block consists of narrower forms referencing older tenement buildings, surrounding two inner courtyards. These open spaces are much larger then usual as they are not enclosed into complete privacy, they function more as public or semi-public areas for the benefit of a future forming community of the block as well as inhabitants from neighbouring residential areas. This desired effect is a counterpoint to a tendency of new disconnected urbanism created by nearby skyscrapers and other commercial/office masses.

Furthermore, part of the design is also landscape design in the form of an artificial hill, which serves not only as a diversification of the area, but also as a an insurance for more succesful plant growth in an environment poluted by cars for decades. The design takes alo into consideration a much needed reconstruction of parallel streets Chlodna and Kotlarska.



ARCHITECTURAL SOLUTION

The proposed urban block has different forms varying in height, volume and function. The functions have been pre-planned as part of the new regulatory plan and masterplan for the area. However the apartment themselves originally come from my list of possible typologies for a more comfortable, sustainable, humane way of living. These dispositions were then adapted according to the specific needs of its concrete location. There are three main types of apartment connections in the block - classic staircase type, the corridor type and on the south a gallery type. This divides the block into different „sectors“ that i chose to separate and show as examples of typologies of flats in my design proposal.

All three sectors are either partially or completely connected by a five-floor-heigh outdoor gallery, which enters and exits and penetrates most of the buildings of the plot. The language of the shells is kept simple with a few added details such as a few tilted walls with metal sheeting in top floors, different-coloured and different-shaped windows, doors and balconies for a more vibranty diversified easthetic. As well as colours, this project gives the new tenents a possibility using ceramic tiles with graphics I was working on for the regulatory framework.

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1] INTRODUCTION

HOUSING CRISES IN POLAND

Poland‘s housing crisis is deeply rooted in the neoliberal policies that have favored developers. Over the past decade, there has been a rapid expansion of gated communities, particularly in large cities like Warsaw, Krakow, Wroclaw, Poznań and Lodz. This development trend has been driven by urban policies that lack the regulatory capacity to control urban planning and land use. The focus on private investment, rather than comprehensive spatial planning, has resulted in a housing market that heavily benefits developers at the expense of affordable housing. This is particularly evident in the high density of luxury housing units, which cater to wealthier buyers while neglecting the need for more affordable options.

National Housing Statistics

According to the Central Statistical Office of Poland (GUS), the country has faced a 5.2% decline in the number of new housing units delivered in 2023 compared to the previous year. Developers handed over the keys to approximately 136.5 thousand properties in 2023, with Warsaw contributing a significant portion of the total supply. However, this was still insufficient to meet the high demand, especially considering the high influx of refugees and the general housing shortage, which exacerbates the crisis in Warsaw.

Warsaw-Specific Figures

Warsaw is at the heart of Poland‘s housing crisis, with average property prices increasing significantly. As of 2023, the average price per square meter for an apartment in Warsaw increased by 23%, making the city one of the most expensive in the country. This increase is not isolated to Warsaw but is reflective of broader trends across Poland‘s other major cities, with Krakow seeing a 24% rise and Tricity area (Gdansk, Sopot, and Gdynia) recording a staggering 27% increase in the price per square meter

The Role of Developers

Developers have played a central role in driving up property prices. In Warsaw, developers focus on luxury apartments, which yields higher profits, while overlooking the middle- and low-income housing segments. As of 2023, developers in Warsaw started around 115,000 new residential units, which represented only a slight decrease from the previous year, but still left a gap between supply and demand. Despite the number of units under construction, most of these properties are aimed at high-income buyers, exacerbating the affordability gap.

Moreover, developers often benefit from the lack of comprehensive local zoning regulations. This allows them to build without paying attention to the urban planning needs, such as necessary infrastructure and public spaces. The speculative nature of the real estate market, coupled with the absence of restrictions on urban development, enables developers to price properties well above what average citizens can afford.

Lack of Local Regulation

As of 2023, only about 35% of Poland‘s municipalities have adopted comprehensive spatial development plans. This means that more than 60% of land development is essentially unregulated, leaving the planning and development in the hands of private investors and developers. The absence of state-enforced regulations creates chaotic urban environments with poorly planned infrastructure, reducing the quality of life for residents. This is particularly apparent in Warsaw, where the haphazard development has created significant social and economic inequalities.

Rising Rental Prices

In Warsaw, rental prices have surged due to high demand and insufficient supply. By mid-2023, the average rental price for a two-room apartment reached 3,300 PLN (€735) per month, a significant amount when compared to the average gross monthly salary of around 7,000 PLN in the city. The rising cost of rent is largely driven by the increase in housing prices, combined with a growing number of people, such as refugees and economic migrants, moving into the city.

ALTERNATIVES AND THEIR FAILURES

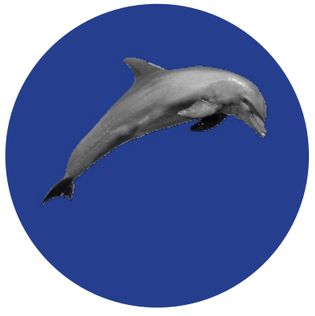
Housing has always been more than just a roof over our heads; it represents values that are integral to our well-being, from community and creativity to freedom and security. Yet, in recent years, housing has become increasingly commodified, with trends like coliving, micro-apartments, and subscription-based housing shifting the focus from homes as places to live, to housing as a product to be marketed, sold, and resold. These trends, though promoted as innovative solutions to urban housing crises, often exacerbate the very problems they claim to solve, turning a basic human need into a vehicle for profit.

So what are these „money-making Potemkin-village-like strategies? And who are the actors using them?



Developers

A real estate developer is an individual or a company that undertakes real estate development projects. The role of a real estate developer involves acquiring land or existing properties, financing, planning, designing, and overseeing the construction or renovation of buildings and infrastructure. The ultimate goal is to enhance the value of the property for



„Flippers“ (flipperow)

Flippers are speculators who make money by reselling real estate as quickly as possible (with as high a premium as possible over the price obtained in a previous transaction). preying on the gullibility of homeowners (f.e. elderly people) trying to play on the sensitivity or kindness, buying flats at bailiff auctions, whose precarious legal situation discourages many potential buyers. Buying less attractive premises, quickly refreshed in order to charm customers as effectively as possible. They have inflated prices with cash so that they do not have to wait for a bank‘s credit decision.

architects



politicians // lawmakers



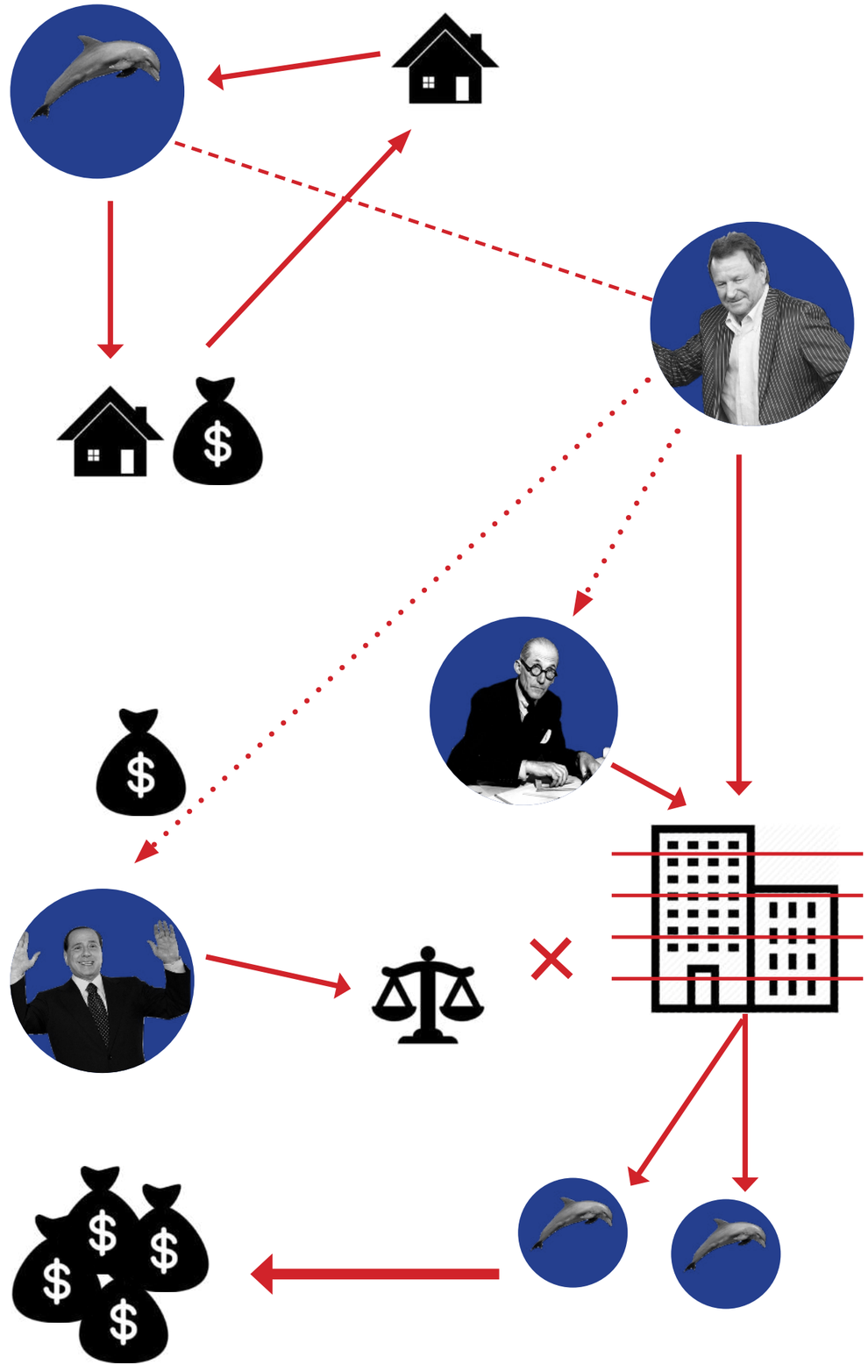


Image 1: actors on the housing market

Micro-apartments: Efficiency Over Affordability

The rise of micro-apartments (mikroapartamenty) has been heralded as a solution to the housing shortage „tailored for the modern youth's lifestyle". These ultra-compact units, designed to make the most of every inch, are marketed to young professionals who are told they should embrace a minimalist lifestyle in exchange for urban living. Yet, these tiny spaces are anything but affordable. In cities like Poznań, rents for rooms in coliving or micro-apartments are barely cheaper than those for entire flats. Despite being marketed as a response to housing scarcity, micro-apartments represent a cynical use of the housing crisis, where developers are able to charge exorbitant prices for ever-smaller spaces under the guise of trendy, efficient living.

Coliving: A Commercialized Community

Coliving has emerged as a trendy model of shared living, marketed to young, urban professionals who cannot afford to rent or buy on their own. On the surface, it seems to promote community, with shared spaces and values such as creativity, tolerance, and collaboration. But in reality, coliving is a commodified version of grassroots communal living (also often confused with „cohousing"), like the Baugruppen and cooperatives that once genuinely fostered community.

Developers have capitalized on the concept, presenting coliving as a fast-growing investment trend. Projects like Smartti Mokotów in Warsaw, with hundreds of micro-apartments and communal spaces, mimic the aesthetics of community while serving primarily to maximize returns for investors. These spaces are designed with a „cool" aesthetic—plywood, industrial accents, and shared lounge areas—all meant to evoke an atmosphere of informal freedom. However, this carefully crafted image masks the reality: tenants in these developments often pay a premium for minimal space, while the promise of community fades under the weight of short-term leases and transient lifestyles.

Subscription Housing // The Illusion of Freedom

Another manifestation of this trend is subscription housing, where tenants pay for housing as a service, akin to subscribing to Netflix or Spotify. Subscription housing is marketed as a liberating alternative to the traditional rental market, offering flexibility and freedom from long-term commitments. However, this model shares many of the same pitfalls as coliving and micro-apartments. Tenants are still bound by fixed-term leases, with limited security and the looming threat of eviction without adequate legal recourse. In essence, subscription housing provides the illusion of freedom while deepening the precariousness of tenants' lives.

Real Estate Value Laundering

A troubling byproduct of this commodification is what I call „real estate value laundering," where developers co-opt progressive values—such as environmental sustainability or LGBTQ+ rights—purely for marketing purposes. While these campaigns are meant to align the developer with progressive social causes, they do little to address the underlying issues of housing inequality or precarious tenancies. Greenwashing and pinkwashing have become common in the housing sector, where developers signal inclusivity without enacting any meaningful change in their business practices.

SO WHAT IS “REAL INCLUSIVITY”

The Challenge of Inclusivity in Housing

While developers have been quick to capitalize on the commodification of housing, genuine efforts to create inclusive, community-oriented housing remain rare. One model that has shown potential is the housing cooperative, where residents work together to plan and manage their living spaces. In cities like Berlin and Vienna, housing cooperatives, like Baugruppen Gleis 21, offer an alternative to the profit-driven housing market by integrating marginalized groups, such as refugees, into their communities. These cooperative models prioritize long-term stability, social responsibility, and inclusivity.

In Poland, the cooperative model is still in its infancy, though there are signs of progress. The 2022 Government Draft Law on Housing Cooperatives represents a significant step toward formalizing the cooperative housing sector. If properly implemented, cooperatives could provide an alternative to both the unaffordable private market and the inadequate public housing system. By facilitating the creation of inclusive communities—where people of different ages, incomes, and backgrounds can live together—cooperatives offer a promising path toward more democratic and equitable housing.

Avoiding Gentrification Through Real Inclusivity

However, even in well-intentioned projects, the risk of gentrification is ever-present. Developers often frame their projects as inclusive, but these claims can mask the displacement of long-term residents and the creation of homogeneous, wealthy enclaves. In Poznań, for example, developers organized cultural events to engage the local community before breaking ground on a premium residential district. While these efforts temporarily enlivened the neighborhood, they also laid the groundwork for the eventual displacement of lower-income residents, as rising property values pushed them out.

True inclusivity in housing requires more than token efforts or superficial nods to diversity. It demands a commitment to creating communities that are not only economically diverse but also socially integrated. Housing cooperatives, if designed with inclusivity in mind from the start, offer a potential solution to the deepening inequalities in the housing market. The challenge is to ensure that these projects do not become exclusive enclaves for the privileged but instead foster genuine social integration across all demographics.

A Call for Democratic Housing Policies

The commodification of housing has distorted the very purpose of homes, turning them into speculative assets rather than spaces for living. In response, we need more democratic housing policies that prioritize long-term stability, affordability, and inclusivity. Cooperatives, public housing programs, and stronger tenant protections can help restore housing to its rightful place as a public good, not just a commodity to be bought and sold.

At the same time, the housing sector must move beyond performative inclusivity. Developers, policymakers, and communities need to collaborate in building spaces that genuinely reflect the values of diversity and social responsibility. Housing must be more than a product—it should be the foundation for thriving, inclusive communities where everyone has a place to belong.

2] AREA EXPLORATION

HISTORICAL CONTEXT

Wola‘s history traces back to medieval times when it was a rural area outside the walls of Old Warsaw. Over time, it became a crucial part of the city’s expansion, known for its fertile land and serving as a place for the election of Polish kings, a practice that continued until the 18th century.

The 19th century saw the industrialization of Wola, transforming it from a rural suburb into a vibrant, working-class district. Factories, workshops, and railroads sprang up, attracting workers from across Poland. This industrial character made Wola a bustling area, but also a place where poverty and inequality were pronounced.

Kercelak and the black market

One of the most iconic areas in Wola was Kercelak, Warsaw’s largest open-air market, located at the intersection of Wolska and Chłodna Streets. Established in the late 19th century, Kercelak became synonymous with Warsaw’s street life, commerce, and black market activity.

But it was more than simply just a market; it was a social hub where people of all backgrounds mingled. It offered everything from food and household items to contraband goods, and became infamous for the presence of smugglers, gangsters, and thieves. By the early 20th century, Kercelak had garnered a reputation as a somewhat dangerous but lively place, where the underbelly of Warsaw’s economy thrived.

Despite its rough reputation, Kercelak played a vital role in the daily life of many Warsaw residents, particularly the working class. It was a microcosm of pre-war Warsaw, a place where different ethnicities, including Poles, Jews, and Russians, coexisted and conducted business.

The market was eventually destroyed during World War II, as Wola was heavily bombed, and after the war, the area was rebuilt, but Kercelak never regained its former prominence.

Chłodna Street

Chłodna Street holds a significant place in Wola's history, particularly due to its role during the Holocaust. Before the war, Chłodna Street was an important thoroughfare, connecting various parts of the city and lined with residential buildings, shops, and cultural venues. It was a lively street reflecting the diversity of Warsaw's population, including a large Jewish community.

Chłodna Street in Warsaw has a rich history that spans several centuries. Originally a farm road, it became a part of the Saxon Axis in 1713, a project designed by Matthäus Pöppelmann. By the late 18th century, Chłodna had begun its transformation into an attractive investment area, leading to the construction of several early tenement buildings. During the 19th century, Chłodna Street experienced rapid growth, with the establishment of breweries, factories, and several key industrial enterprises, including Wincenty Norblin's metal factory. The construction of monumental buildings like the Church of St. Charles Borromeo and various high-quality tenements further enhanced the street's urban landscape. Over time, it evolved into a key urban street with significant architectural developments, including structures designed by notable architects like Antonio Corazzi, Henryk Marconi, and Stefan Szyller.

The 20th century saw further developments, including the introduction of electric trams in 1908 and the construction of a large cinema theater, "Kometa," among other significant urban improvements. However, during the Nazi occupation of Warsaw, Chłodna Street became a symbol of the city's suffering and division. When the Warsaw Ghetto was established in 1940, Chłodna Street ran along its southern border. For a time, it acted as a border between the „small" and „large" ghettos, creating a tragic and surreal division between the Jewish and non-Jewish parts of the city. A wooden footbridge was constructed over Chłodna Street to allow Jews to move between the two parts of the ghetto, while non-Jewish Warsaw residents continued their daily lives below, unaware or indifferent to the horrors unfolding around them.

The Warsaw Uprising in 1944 brought severe destruction to the area. German forces, trying to suppress the uprising, destroyed buildings and massacred local residents during the Wola Massacre. After the war, many of the buildings along Chłodna were demolished, and the street lost much of its former significance, particularly after the tram system was restructured and the broader urban focus shifted elsewhere.

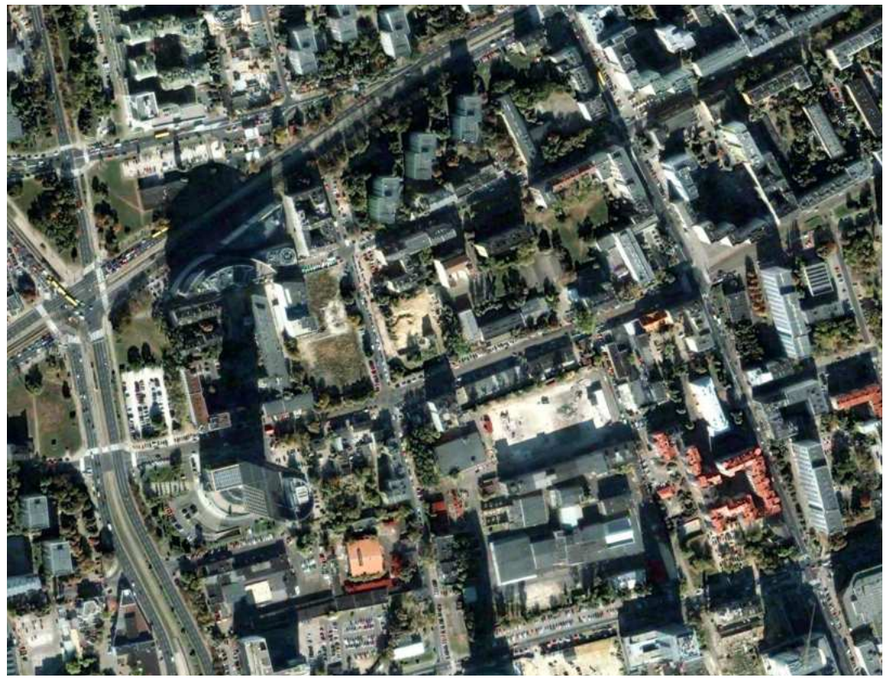
In the postwar period, significant portions of Chłodna were rebuilt as part of the Mirów housing estate. However, the street's historical significance was recognized, and in 1965, its urban layout was registered as a historical monument. In 2010–2011, a renovation was carried out, preserving its cobblestone surface and tram tracks, and a memorial known as the „Footbridge of Memory" was erected to commemorate the ghetto footbridge that once spanned the street.

Today, Chłodna Street stands as a reminder of Warsaw's complex past, with its pre-war infrastructure and post-war redevelopment reflecting the city's resilience and transformation through time.

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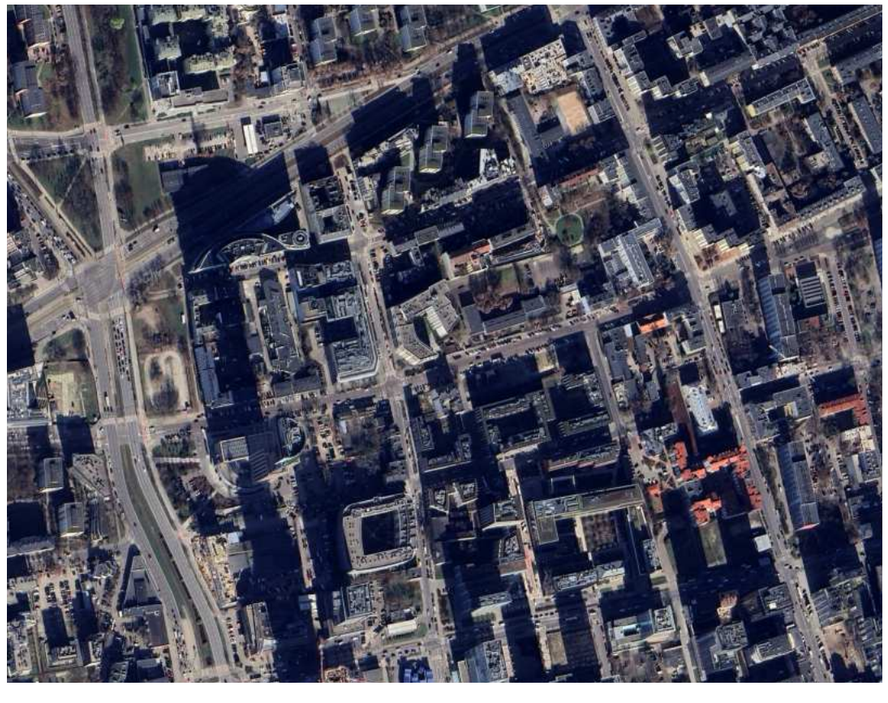
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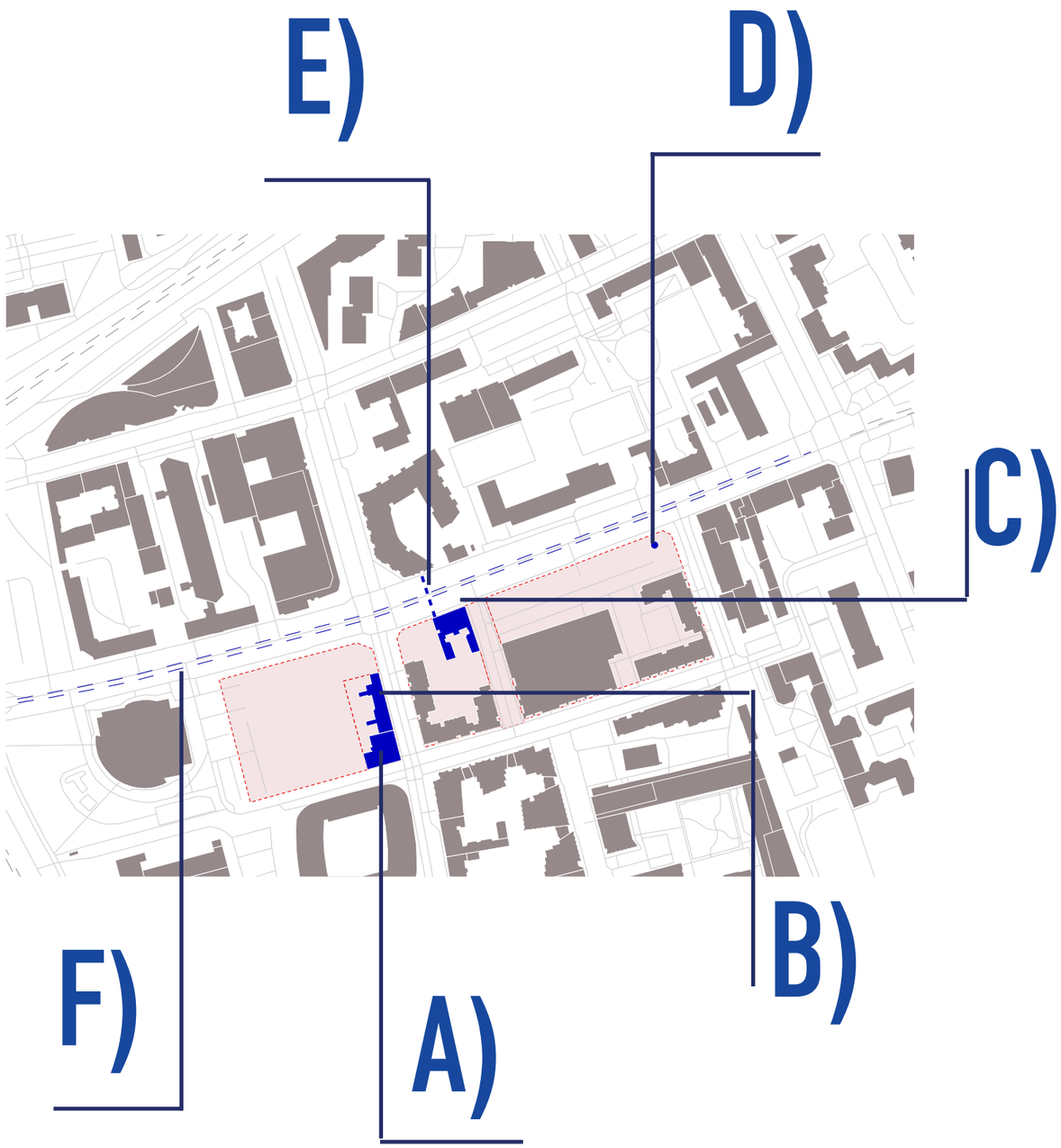
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MAP OF GHOSTS



THE REMAINING TRACES

















CHLODNA 41



The building at 41 Chłodna Street in Mirów, Warsaw, was originally erected by M. Gurewicz and sold to the Joint Stock Company of the Lamp Factory – Brothers Brunner Schneider and R. Ditmar, founded in 1879. The factory produced various types of lamps, stoves, and metal products, employing several hundred workers. The factory later moved to Praga. After World War I, the factory‘s equipment was taken to Russia, and in 1929 it became part of the Metallamp company. During the interwar period, it primarily supplied service lamps to the police, army, and railways.

On the property at 43 Chłodna Street, the first two-story tenement was built in the mid-19th century, followed by additional development, including a factory and another tenement at 41 Chłodna. The front building at Chłodna 41, built in 1912-1913, originally had seven stories and a semi-open courtyard. Its façade featured decorative stucco, bay windows, and a grand design, with rusticated stonework on the lower floors and intricate details on the upper floors.

During World War II, it was located within the Warsaw Ghetto, and a plaque now commemorates this history. In 1944, the building was heavily damaged during the Warsaw Uprising but was deemed eligible for reconstruction. After the war, it was reduced by one floor, losing its original decorative elements.

Today, some original features remain, including terracotta tiles in the gate passage and wrought-iron balustrades in the staircase. Before the war, the ground floor housed businesses such as a confectionery, a bicycle shop, and the Przedświt Workers‘ Sports Club.









WRONIA 45A AND 47

These buildings were designed by architect Wladyslaw Dudziński and they were erected in 1936 by the „Nasze Mieszkanie“ company on the site of the Machleida brewery buildings .

Karol Machlejd's brewery was established as a result of the expansion of Karol Sommer's brewery, which had existed on this site since the 1840s. In the years 1880-81, a tenement house was erected on the brewery premises . In 1921, it became part of the company "Zjednoczone Browary Warszawskie". Beer production was soon discontinued, and the buildings were rented to various companies.

Like all the buildings on the street, they were burned down during World War II. The tenement houses served as a council house, though they are empty now. The tenants were evicted due to the poor technical condition of the building. Claims have been filed against the tenement house by the heirs. Until the reprivatization issues are resolved, the district will not do anything with this building.

The preserved houses do not have great architectural value, but they are a memento of the first development of post-industrial areas in history. The tenement house at Wronia 45A is one of the tenement house remnants of the "Wild West"

UNUSED TRAM TRACKS ON CHLODNA STREET



THE ROESLER'S SCHOOL MEMORIAL STONE

In 1940, the Korczak Orphanage moved to the building of the famous, pre-war Roesler grammar school and high school. It was a move forced by the Germans, who began to create a ghetto in the autumn of 1940. The Roesler school building at Chłodna 33 between Żelazna and Wronia was located within the closed Jewish district, the Orphanage at the end of Krochmalna Street - already within the Aryan district. In 1941, after the borders of the ghetto were changed, the Orphanage was moved from Chłodna Street to the building of the Trade Employees Association at 16 Sienna Street (currently Plac Defilad). The junior high school and high school buildings were demolished in 1944 during the Warsaw Uprising.





BORDERS OF THE GHETTO



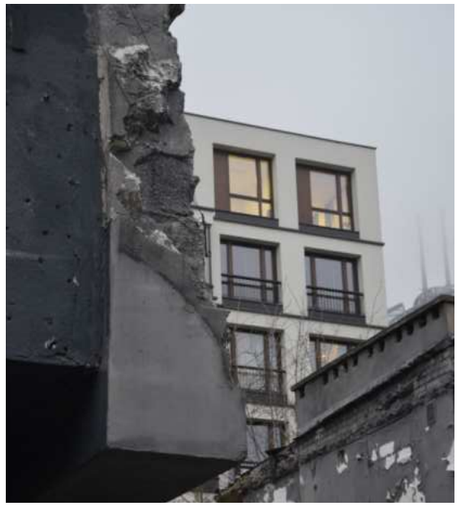
The Warsaw Ghetto was established by the German authorities on October 2, 1940, to segregate the Jewish population. It became the largest ghetto in occupied Europe, with around 450,000 people living within its walls by April 1941. On November 16, 1940, it was sealed off from the rest of the city.Between July and September 1942, around 75% of the residents were deported to the Treblinka extermination camp. In August 1942, the southern part of the ghetto was incorporated into the „Aryan“ part of Warsaw, while about 60,000 Jews remained in the northern section, most working in German-operated factories.

The ghetto was effectively destroyed following the 1943 uprising. The remaining residents were deported to Treblinka and other camps, and the area was demolished. Around 400,000 people from the ghetto perished, with most killed in Treblinka and some in Warsaw due to hunger, disease, and massacres like the „Erntefest“ in 1943.

While most of the ghetto was destroyed, some buildings survived in the southern section, which had been incorporated into the Aryan city. In 2008 and 2010, boundary markers were placed around the former ghetto to commemorate its history.









PAWILONY OF CHLODNA STREET

Even though much younger then the others aforementioned, these little structures have become an important symbol of a more recent era. However, these days they are slowly being demolished.

For some residents, the pavilions were an eyesore and a nuisance due to the noise from nightclubs and other activities. Many locals had long petitioned for their removal, and the dismantling is seen as a positive step toward improving the area. However, there are those who will miss it. The clubs, the pool table shop, the computer games arcade, the Chinese food and the “agency,” as the well-informed regulars call escort agencies. No one really knows what other secrets the pavilions on Chłodna Street held, because they were not talked about openly. On one of the walls was a telling inscription spray-painted: “Broken in the forest, this is what will happen to the one who informs.”

The pavilions are being cleared to make way for new apartment blocks, with permits already granted for residential buildings with commercial services. These new developments are part of a larger revitalization project in the area, including the construction of the Browary Warszawskie complex, which features office spaces, restaurants, and apartments.

NEW DEVELOPMENT - BROWARY WARSZAWSKE

The Browary Warszawskie project, undertaken by JEMS Architekci, is a pivotal urban redevelopment in Warsaw that has transformed a historic industrial site into a vibrant, multi-functional district. Located in the Wola district, the former site of the Haberbusch and Schiele breweries has been reimagined as a modern, mixed-use development that combines residential, office, retail, and cultural spaces. This ambitious project has garnered both praise and critique for its design, impact on the local community, and approach to balancing history with modernity.

Project‘s Vision
At its core, Browary Warszawskie reflects a sophisticated blend of historical preservation and modern architectural principles. JEMS Architekci’s design preserved important fragments of the original brewery, including brick facades and industrial structures, incorporating them into a contemporary urban district. The juxtaposition of old and new is central to the project’s identity: while some buildings showcase minimalist glass-and-steel designs, others maintain the gritty industrial character of the historic brewery. This balance of preservation and progress allows the development to stand as both a tribute to Warsaw’s industrial past and a symbol of its modern aspirations.

Public spaces are a key feature of the project. Brewery Square, a central public plaza surrounded by both modern buildings and remnants of the brewery, serves as the heart of the development. The district’s layout prioritizes pedestrians, with new streets and green spaces designed to encourage social interaction and accessibility. These public spaces are intended to bring life to the area, inviting both residents and visitors to engage with the district in a meaningful way.

In addition to its architectural and spatial planning, the project emphasizes sustainability. Green roofs, energy-efficient buildings, and eco-friendly materials were integral to the design, aligning with modern urban standards and responding to environmental concerns. The focus on sustainability adds to the positive impact of the project by reducing its environmental footprint and creating a more livable, resilient urban environment.

Project‘s Reality
Browary Warszawskie has faced several critiques, particularly regarding the commercialization of its public spaces. While the development features open plazas and green areas intended for public use, critics argue that the ground floors of many buildings are dominated by commercial interests—such as cafes, restaurants, and retail stores—which may prioritize consumer activity over genuine public engagement. This raises concerns about the balance between creating lively public spaces and catering to commercial demands, with some suggesting that the development leans too heavily toward serving commercial interests.

Another significant critique centers around gentrification. As with many urban renewal projects, Browary Warszawskie has contributed to rising property values in the Wola district, potentially displacing long-time residents. The area, once affordable and industrial, has seen a marked increase in property prices and the cost of living, attracting a wealthier demographic while making it difficult for lower-income residents to remain. This gentrification process is not unique to Warsaw but is part of a broader pattern seen in urban regeneration projects across Poland and Europe.

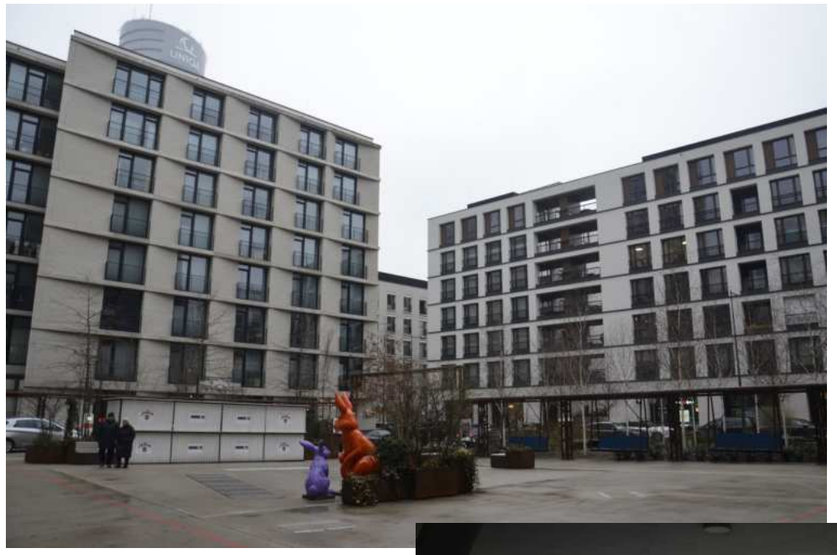
In the case of Browary Warszawskie, the influx of affluent residents and businesses may lead to social exclusivity, which undermines the inclusivity that urban public spaces should promote. Moreover, critics point to the fact that while the development has brought significant economic growth to the area, the benefits are not distributed equally across all social groups.

Concerns have been raised regarding the preservation of historical authenticity. While JEMS Architekci preserved certain elements of the old brewery, critics argue that much of the original industrial character has been lost in favor of sleek, modern designs. This has sparked a debate over how much of the site’s historical identity should have been preserved versus how much should have been modernized to meet contemporary urban needs. Some conservationists believe that the development could have done more to maintain the integrity of the original site, rather than focusing primarily on aesthetic preservation.

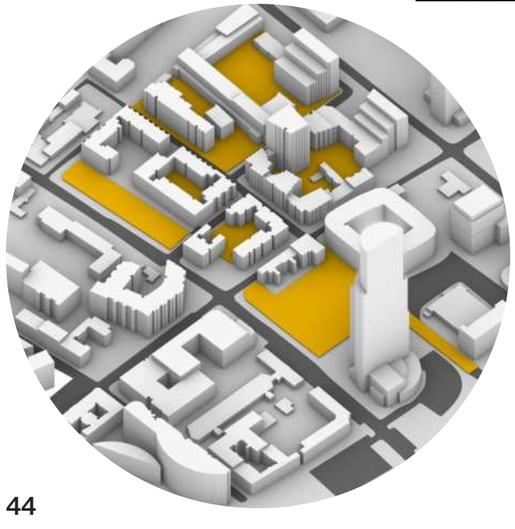
Overdevelopment in the Wola district is also a valid point to discuss. As large-scale projects like Browary Warszawskie continue to attract investment, the district has become one of the most densely developed areas in Warsaw. While this transformation has undoubtedly brought economic benefits, critics warn of the potential strain on infrastructure, including traffic congestion and public services. Such a apid pace of development in the area will make it hard for the district to sustain such growth over the long term without compromising livability.

SHORTCOMINGS OF THE AREA

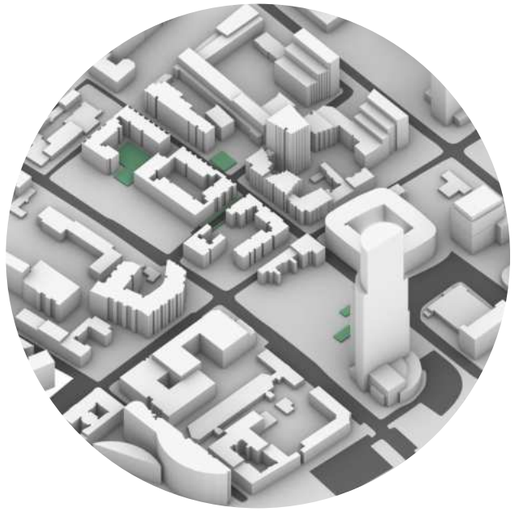
PRIVATISED PUBLIC SPACES







COURTS AND GREENARY AS AN AFTERTHOUGHT

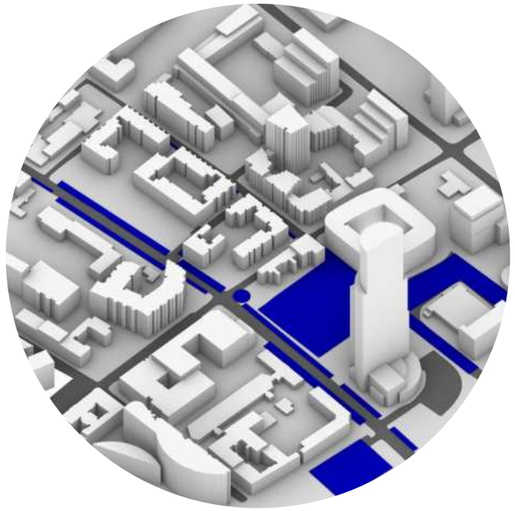








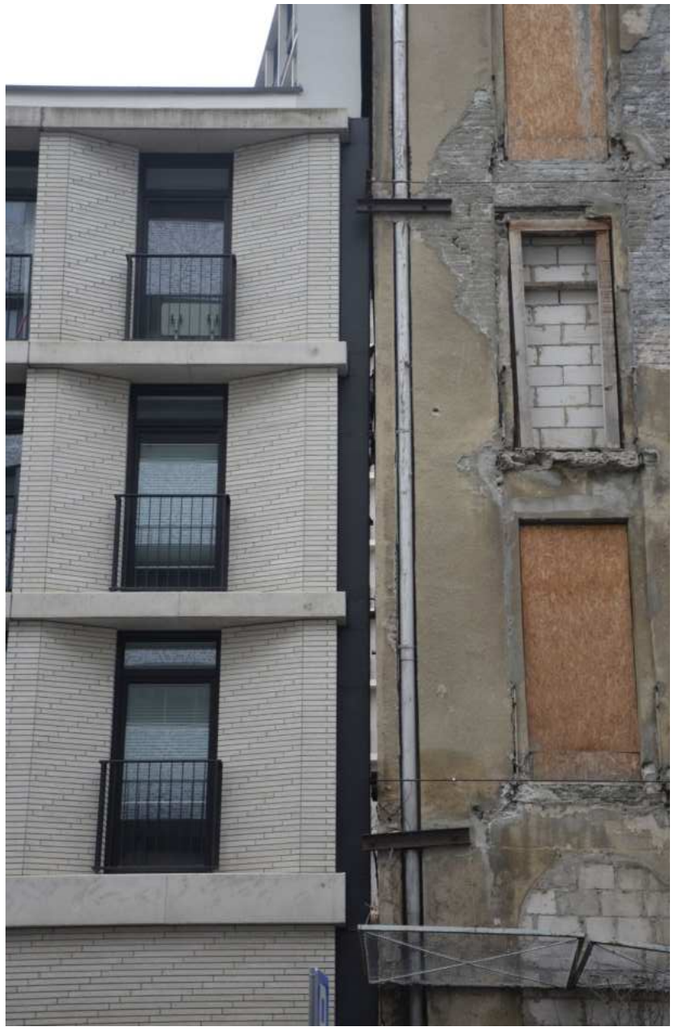
ANARCHIC PARKING AGAINST PEDESTRIANS







PRE-PLANNED ORGANIC DEMOLITION











DETACHED UNPLANNED URBANISM









GENTRIFICATION // DYING LOCAL BUSINESS











GENTRIFYING COMMERCE TYPOLOGIES

Gentrification in Warsaw, particularly in districts like Wola and Śródmieście, is transforming the city's social, economic, and cultural landscape. These districts, known for their historical and cultural significance, have experienced an influx of upscale commerce, chain stores, and luxury residential developments, bringing both opportunities and challenges to local residents and businesses. This in-depth examination covers the types of commerce that drive gentrification, the socioeconomic and environmental impacts, and alternative models that can sustain local economies while preserving neighborhood identities.

Convenience Stores – Żabka and Carrefour Express

Żabka and Carrefour Express represent a shift toward standardized, 24-hour convenience, replacing traditional small grocers and specialty shops. Żabka, in particular, has a strong presence in Wola and Śródmieście, offering a limited but standardized selection of products that target both the working population and tourists. The chain's standardized model provides convenience but often lacks the diversity and cultural specificity of independent stores.
According to the Warsaw Municipal Office's report on commercial patterns in Wola, the number of independent grocery stores declined by 18% from 2015 to 2021, with a parallel increase in Żabka and Carrefour Express stores. In Wola, these chains have saturated the market, with over 200 Żabka stores now operating in Warsaw, about half of which are concentrated in gentrifying areas.

Apparel Chains – H&M, Zara, TK Maxx, and Local Designers

The rapid expansion of international apparel brands like H&M, Zara, and TK Maxx in Śródmieście signals an alignment with global retail trends. These stores target middle-class and affluent consumers, but they also contribute to rising rents, pushing out local designers and independent boutiques. In Wola, upscale fashion stores are increasingly favored in new retail developments, which are marketed as lifestyle centers rather than traditional shopping areas.
A 2020 Central Statistical Office of Poland (GUS) report found that over 20% of independent fashion retailers in Śródmieście had closed since 2016, largely due to rental increases driven by high-end fashion chains.

Coffee Chains – Starbucks, Green Caffè Nero, Costa Coffee

Coffee chains have become cultural staples in gentrifying areas, symbolizing the shift toward a cosmopolitan urban identity. In Śródmieście, particularly around Nowy Świat and Marszałkowska streets, chains like Starbucks and Costa Coffee outnumber local cafes. These international brands attract professionals, tourists, and students, contributing to increased commercial rents that challenge small, local coffee shops.
According to a 2019 Statista survey, Warsaw has one of the highest densities of coffee chains in Poland, with Śródmieście alone seeing a 30% increase in coffee chain locations from 2017 to 2021. This shift has led to a 12% reduction in local cafes in central areas, as they struggle with rising operational costs.
areas.

Fast-Casual Dining Chains – McDonald's, Vapiano, Pizza Hut:

Fast-casual brands are common in Wola and Śródmieście, catering to a younger, professional demographic and families. These chains are especially concentrated around transport hubs and shopping centers, including Złote Tarasy and other commercial complexes. Fast-casual chains like Vapiano and Pizza Hut replace traditional Polish eateries, contributing to the homogenization of the dining scene.
A 2021 study from the University of Warsaw's Faculty of Sociology found that independent restaurants in Śródmieście saw a 15% decline over five years, with chain restaurants making up over 70% of new food establishments in Wola and Śródmieście during this period.

Fitness Chains – Zdrofit, CityFit, Fitness World

Fitness chains are increasingly popular in Wola and Śródmieście, reflecting an urban, health-conscious lifestyle. They attract middle- and upper-income residents, particularly in luxury apartment complexes. However, their requirement for large commercial spaces displaces cultural venues or smaller retailers that historically occupied these areas.
The Warsaw Urban Planning Report in 2020 showed that fitness centers occupied nearly 35% of new commercial developments in Wola and Śródmieście. These developments contributed to a shift in community spaces, with former social and cultural venues now being used for fitness centers that target specific consumer segments.

ADITIONAL ANALYSIS

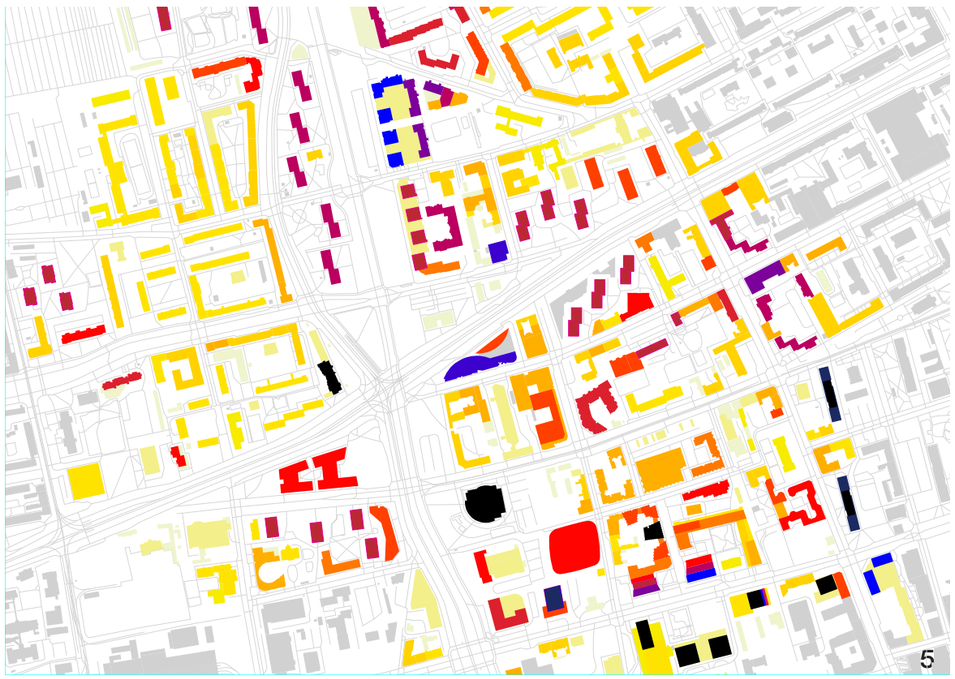
FUNCTION ANALYSIS



TRANSPORTATION ANALYSIS



HEIGHT ANALYSIS



3] LOCAL SPATIAL DEVELOPMENT PLANS

THE BIRTH

The Local Development Plan (in Polish „Miejscowy Plan Zagospodarowania“ or MPZP) is a resolution of the municipal (or city) council defining the principles of investment in a given area. The local development plan does not have to cover the entire municipality, often plans are adopted for part of the municipality or even for a small area: several plots or even one plot.

Creating an local spatial development plans (later only “LSDP”) is a lengthy and complex procedure, often taking years to complete. It involves navigating legal regulations, public consultations, and institutional reviews, all while ensuring that the plan meets the needs of the community and respects environmental constraints. The duration depends on the size of the area being planned, the complexity of local development needs, and the level of public and institutional input.

The procedure in Poland involves several intricate stages aimed at regulating land use and urban planning:

1. Submission of Requests
The process begins with submitting proposals for the creation of an LSDP. These can come from residents, landowners, investors, or public authorities. The requests typically outline the need for spatial planning in specific areas, whether for development, infrastructure projects, or environmental protection.

2. Decision to Proceed
The local municipal council evaluates the requests and makes a formal decision on whether to start the LSDP process. If approved, the council passes a resolution to begin the preparation of the plan. This decision is based on the needs for structured development, the existing local strategy, and the feasibility of the project.

3. Public Announcement
Once the resolution is adopted, the municipality publishes an announcement in the local media and official bulletins. This serves as a formal call for stakeholders, including residents, property owners, investors, and public institutions, to submit their suggestions, concerns, or additional requests for the LSDP. This phase is crucial for gathering diverse inputs from the community and stakeholders.

4. Collection of Input and Initial Draft
The municipality collects all submitted feedback and input from the public and relevant stakeholders, including government agencies, environmental groups, and infrastructure authorities. This data informs the drafting of the initial version of the plan. During this drafting phase, urban planners and experts create a framework for land use that balances development goals with environmental, social, and legal requirements.

5. Institutional Reviews
The draft LSDP undergoes reviews by various institutions. These include government bodies responsible for transport, environment, historical preservation, public utilities, and other relevant sectors. The institutions assess whether the proposed plan aligns with legal standards, environmental protection laws, and public policies. Feedback from these institutions is incorporated into the draft for further refinement.

6. Public Consultation
Once the plan is reviewed, it enters a public consultation phase. During this time, the local community can examine the draft and raise objections or suggest revisions. This is often a period of intense debate, as local residents or businesses might challenge certain zoning decisions, proposed infrastructure, or environmental protections. Public consultations can take place through meetings, forums, or written submissions.

7. Plan Adjustments and Finalization
After the consultation period, the draft is adjusted to reflect the input received from both the public and institutions. The municipality then finalizes the LSDP, making any necessary revisions to ensure the plan meets all legal, social, and environmental standards. This phase often involves legal reviews to guarantee the plan complies with national and regional regulations.

8. Final Approval and Adoption
Once the LSDP is finalized, it is presented to the municipal council for approval. The council votes to adopt the plan, and upon approval, it becomes legally binding. This means that all future development, land use, and construction within the designated area must adhere to the guidelines set forth in the LSDP.

9. Implementation
After adoption, the LSDP provides the legal basis for issuing building permits, zoning changes, and other development-related actions. The plan is usually implemented over several years, with periodic reviews to adjust for changing circumstances, such as population growth, economic shifts, or environmental concerns.

THE IMPORTANCE OF THE PUBLIC‘S VOICE

Public consultations are a vital part of the LSDP process, ensuring transparency and allowing the community to have a voice in the planning and development of their area. This process helps to balance the interests of different stakeholders, including residents, investors, and environmental groups. By integrating public feedback, the plan is more likely to reflect the actual needs and concerns of the local population, improving its legitimacy and acceptance.

Challenges in Public Consultation
While public consultations are essential, they can be time-consuming and sometimes lead to conflicts between different interest groups. For example, local residents may oppose certain developments due to concerns about increased traffic or changes in the neighborhood’s character, while investors may push for more relaxed zoning laws to maximize their returns. Balancing these conflicting interests can be challenging for planners and local authorities.

1. Public Notification
After a draft of the MPZP is prepared, the public is formally notified. The local government publishes announcements in local bulletins, on websites, and in municipal offices. This notification marks the beginning of a crucial phase where community members are invited to review the proposed development plan.

2. Plan Display and Review
The draft plan is made publicly available for a minimum period of 21 days. During this time, anyone can review the proposed changes, zoning regulations, land use designations, and planned developments outlined in the LSDP. The goal is to give the public full access to the details, allowing them to understand how the plan might impact their neighborhoods and properties.

3. Public Hearing
In addition to the public display, a public discussion or hearing is organized, providing a forum for residents, stakeholders, and interested parties to express their opinions, ask questions, and raise concerns directly to the planning authorities. This hearing ensures transparency and public participation in the planning process.

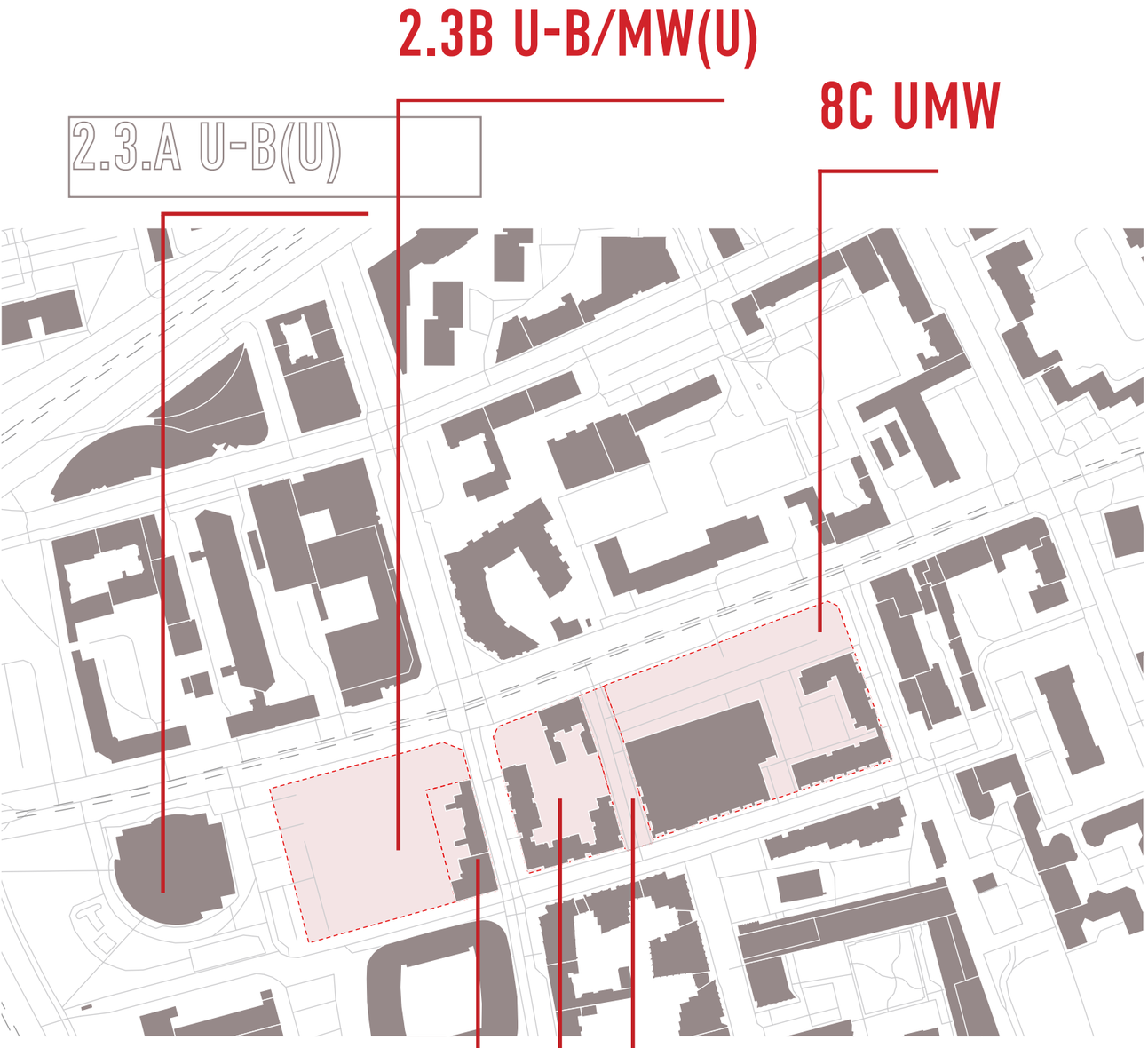
4. Submission of Objections
Individuals and organizations can submit formal objections or suggestions regarding the draft plan. These written objections must be submitted within a specific timeframe, typically no later than two weeks after the end of the public review period. Objections can range from environmental concerns to disagreements over zoning or the impact on local infrastructure.

5. Review and Response to Public Input
Once the consultation period closes, the municipal authorities must review all submitted objections and comments. Each objection is considered, and the local planning authority must provide a formal response. If valid concerns are raised, modifications to the draft plan may be made to address these issues.

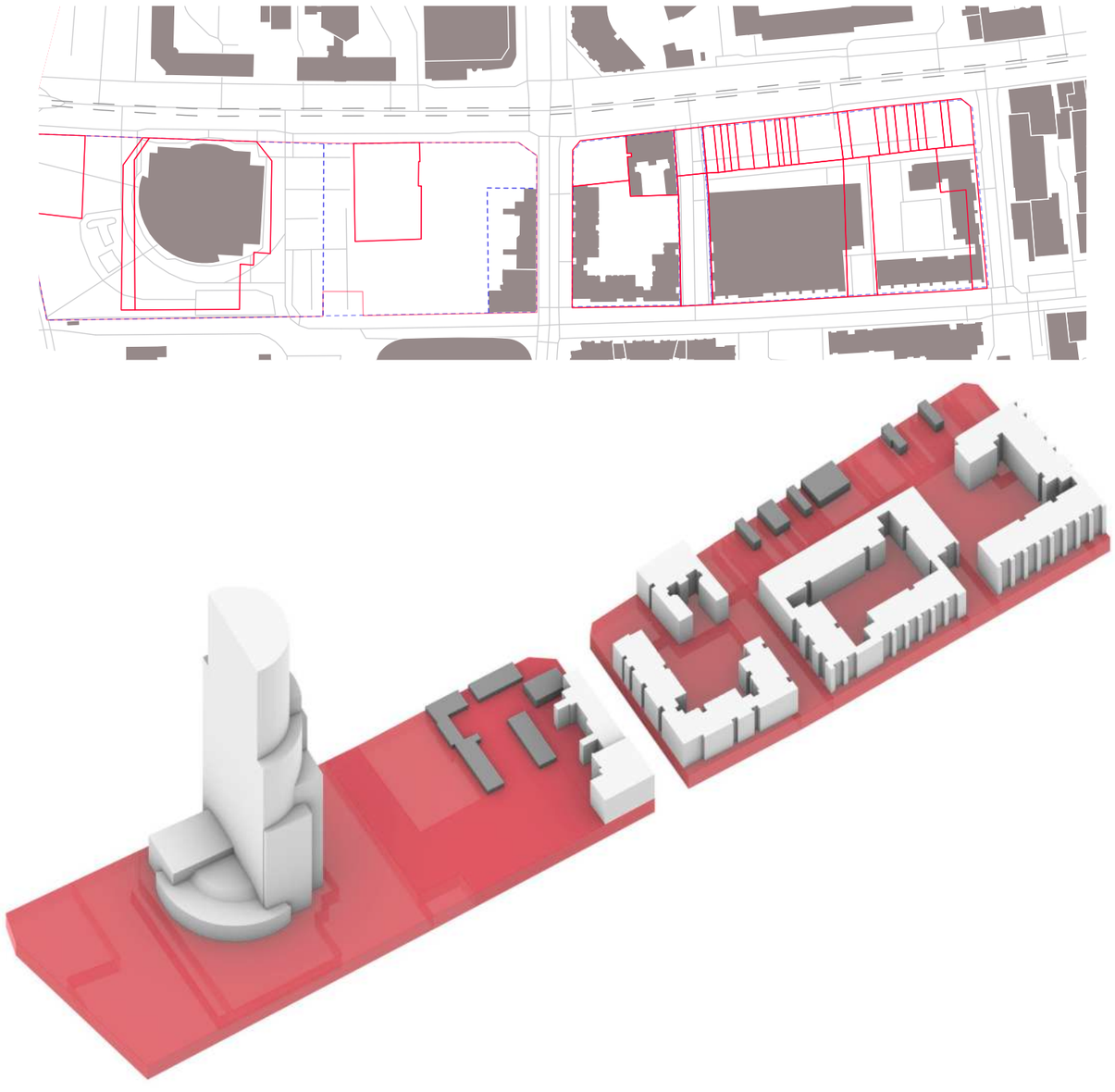
6. Incorporating Changes
If the public consultation reveals significant issues with the draft LSDP, revisions are made before final approval. This phase can be iterative, with multiple rounds of revisions and feedback before the plan is finalized.

7. Approval by Municipal Council
After incorporating changes based on public feedback, the final version of the LSDP is submitted to the municipal council for approval. The council’s decision takes into account the input from the public consultations and institutional reviews. Once approved, the LSDP becomes a binding document, guiding future development and land use within the municipality.

DIVISON OF LAND ACCORDING TO EXISTING LSDP

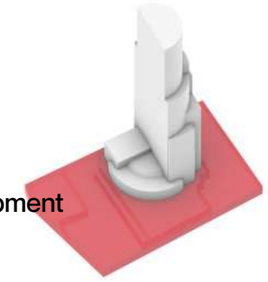


DIVISON OF LAND ACCORDING TO PROPERTY POSESSION



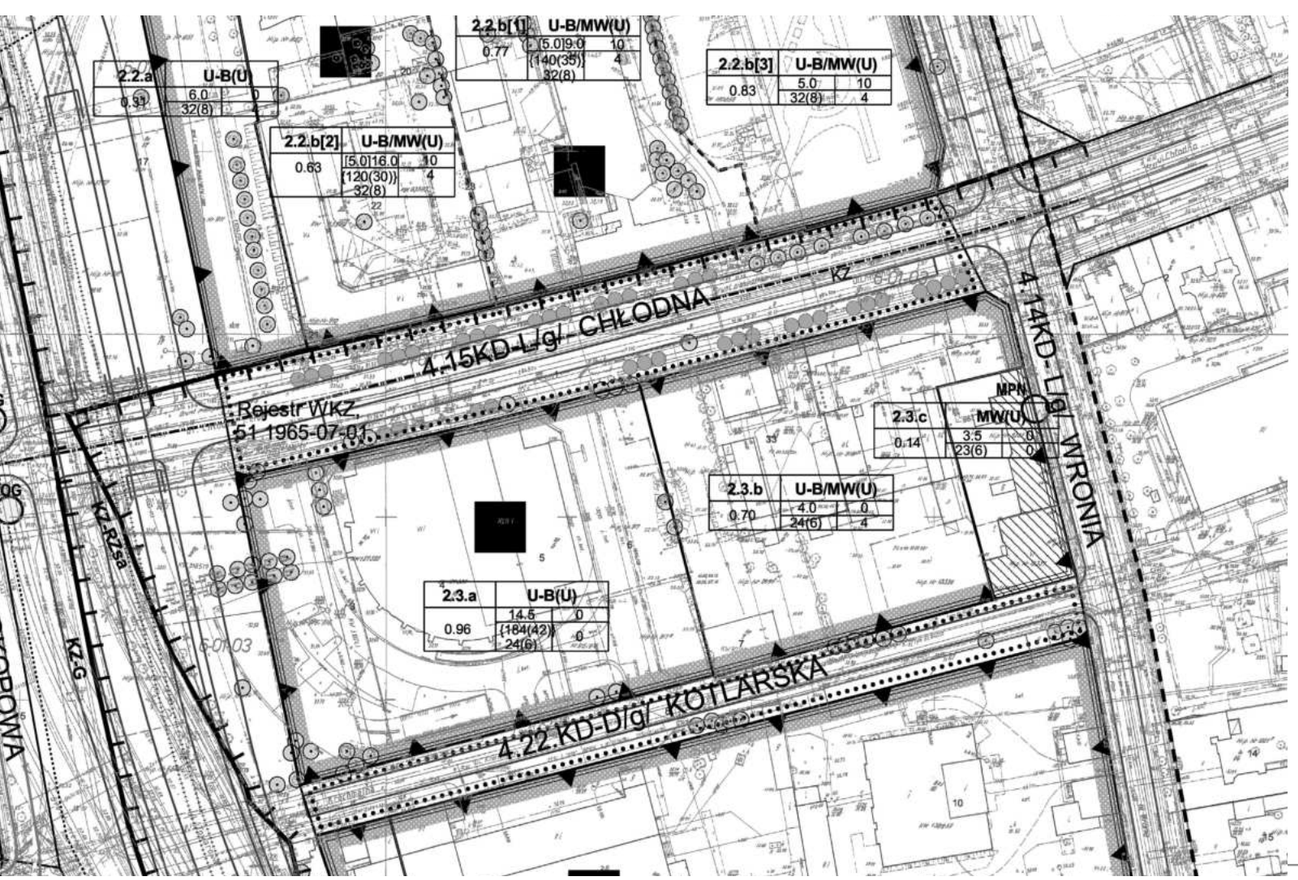
PLAN 17.12

2.3.A U-B(U)

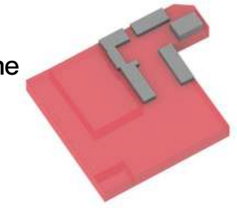


1. land use: basic: office and service buildings.
Terms of development and land use, principles of protection and development
spatial order:
- minimum biologically active area: 0%;
- maximum building intensity ratio: 14,5;
- existing height dominant - in accordance with the provisions of § 5 subsection 1 item 3
- height: 184 m, 42 storeys (with consent to maintain the existing height of
- antenna equipment, constituting 12.5% of the building height);
- maximum height of buildings outside the dominant: 24 metres, 6 storeys;
- building plots - for the dominant not less than 8000 m2; amalgamation and division
- in accordance with the provisions of § 16 paragraph 2;
- binding building lines and forming continuous frontages - according to the drawing of the plan;
- services in ground floors of buildings in street frontages - as per the plan drawing;

5. principles of land services - transport:
- entry to the site from Chłodna and Kotlarska Streets;
- 2) parking space ratio - for offices - 10-14 places / 1000 m2 p. usable,
  for trade and services - 15-20 spaces / 1000 m2 p. usable;



2.3B U-B/MW(U)



1. land use: basic: office-service and residential-service buildings.
Terms of development and land use, principles of protection and shaping of the
spatial order:
- minimum biologically active area - 0%;
- maximum building intensity ratio: 4,0;
- height of buildings: min. 4 storeys - max. 24 m, 6 storeys;
- obligatory building lines and formation of continuous frontage - according to the drawing of the plan;
- services in ground floors of buildings in street frontages - according to the plan drawing;
- flat roofs or roofs with a slope not exceeding 20%;

3. special conditions of land development and restrictions on use:
- conservation protection zone of the elements of the layout from before September 1939.

5. Principles of land services - transport:
- 1) entry to the site from Kotlarska, Wronia and Chłodna Streets;

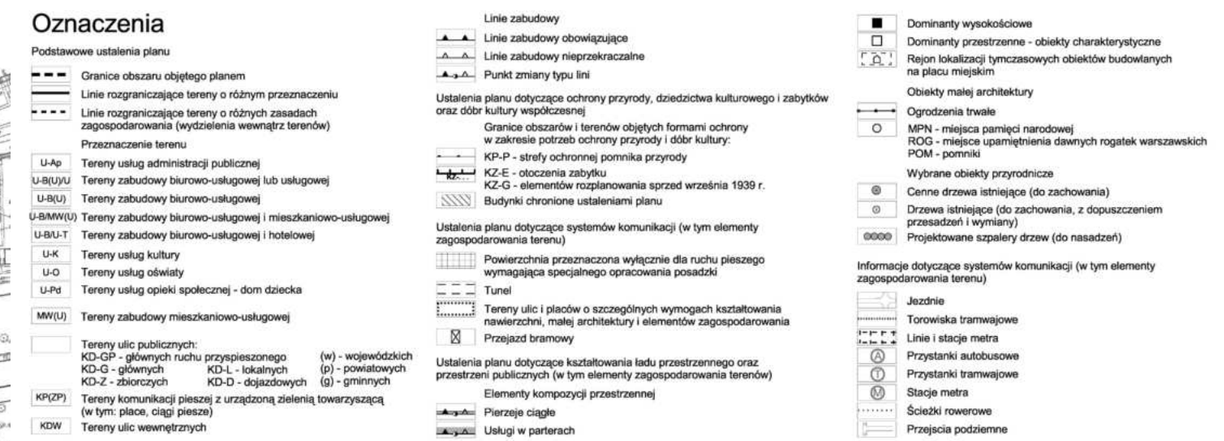
2.3C MW(U)



1. land use: basic: residential and service development.
- minimum biologically active area - 0%;
- maximum building intensity ratio: 3,5;
- maximum height of buildings: 23 m, 6 storeys;
- obligatory building lines and continuous frontage formation - according to the drawing of the plan;
- flat roofs or roofs with a slope not exceeding 20%;

3. special conditions of land development and restrictions on use:
- zone of conservation protection of elements of planning from before September 1939.
- archaeological area - KZ-RZsa: order to conduct archaeological works
- according to guidelines of appropriate conservation services;
- protection of objects listed in § 8, sections 3 and 4, marked on the plan drawing as
- „buildings protected by the provisions of the plan“ - scope of protection as for the objects in the register of monuments

5. Principles of land services - transport:
- 1) entry to the site from Kotlarska, Wronia and Chłodna Streets;



PLAN 17.11

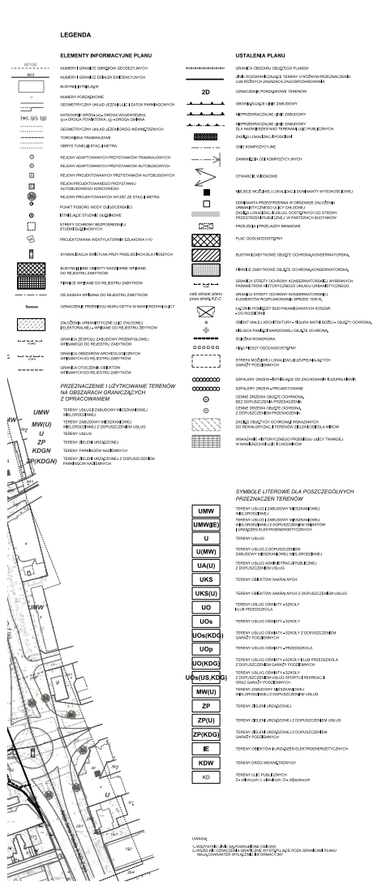
8A UMW

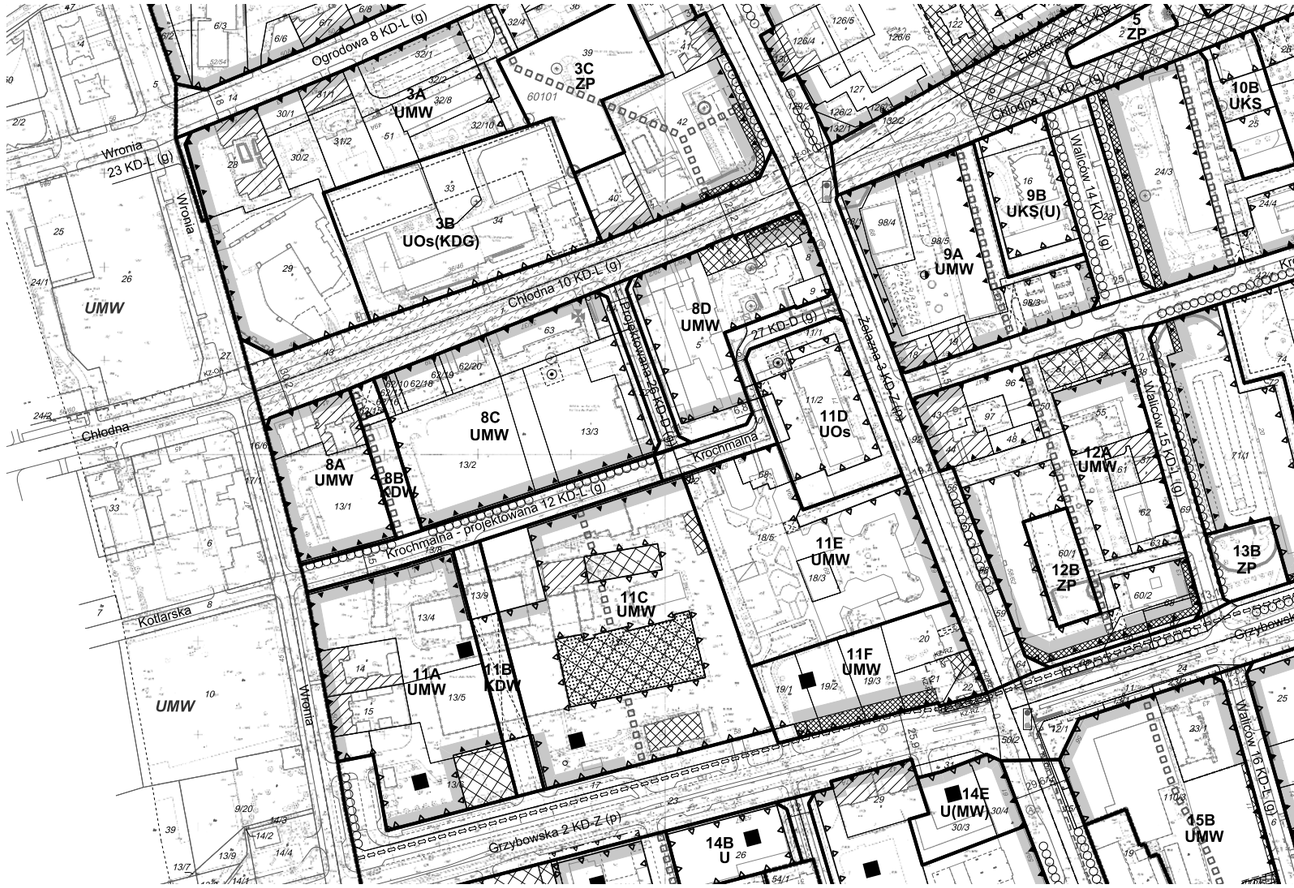
1) land use: area for services and multi-family residential development;
2) conditions of development and land use and principles of protection and shaping of spatial order:



a) minimum indicator of biologically active area - 25%,
b) maximum built-up area ratio - 0.45,
c) maximum building intensity ratio - 2.8,
d) maximum building height - 30 m,
e) Building lines - according to the plan drawing,
f) belonging to the inner city development area,
g) Location of services, accessible from the public space, in the ground floors of buildings - range according to the plan drawing,
h) flat roofs allowed:
- retention of existing pitched roofs,
- the use of pitched roofs in the case mentioned in § 7 pt. 5 lit. i,

3) special conditions of land use and restrictions on use:
a) location is prohibited:
- nuisance services, nuisance facilities and nuisance equipment,
- free-standing petrol and gas distribution stations and free-standing car washes,
b) it is allowed to locate technical infrastructure devices, internal roads, free-standing, roofed trash bins of a size adjusted to the requirements of waste segregation and its removal to disposal or recovery sites, necessary for the functioning of the area without the necessity of making land divisions for their location,
c) buildings are permitted to be located directly at the boundary of the neighbouring building plot pursuant to § 10(3),
d) buildings are permitted to be located directly on the boundary of site 8B KDW, with the possibility of windows being located in the walls adjacent to it;
5) principles of communication service of the area:
a) Communication service from Chłodna 10 KD-L, Krochmalna 12 KD-L and Wronia Streets, located outside the plan boundaries, and through an internal road in area 8B KDW,
7) principles of protection of cultural heritage and historical monuments:
a) the area is part of an urban establishment entered in the register of immovable monuments mentioned in § 7 item 1 letter m, indicated on the drawing of the plan, subject to protection under the provisions on the protection of monuments, for which all activities require a permit of the competent conservator of monuments,
b) zone and principles of conservation protection as per § 7 item 4 and 5 letter d, e,
c) in the case of realisation of a permitted in § 7 point 5 letter e first indent superstructure of the building located at 41 Chłodna Street for a part of the plot of land no. 2 from the precinct 60104, located to the east of the face of the west wall of the said building, the indicators set out in para. 2(a, b, c),
d) an order, in the case of new developments adjacent to the gable walls of the buildings under conservation protection dating from before 1939, to adapt, in consultation with the appropriate conservator of monuments, its dimensions, façade and roof slope inclination angles to the dimensions, façade and roof slope inclination angles of the buildings under protection, taking into account the admissible in § 7 item 5 letter e, first indent, superstructure of the building located at 41 Chłodna Street,
e) the whole area is located in the archaeological area, marked with symbol KZ- OA, with boundaries indicated on the drawing of the plan, subject to protection pursuant to provisions on the protection of historic monuments; during construction investments connected with earthworks, it is obligatory to conduct archaeological research, the scope of which shall be determined in each case by the competent conservator of historic monuments;

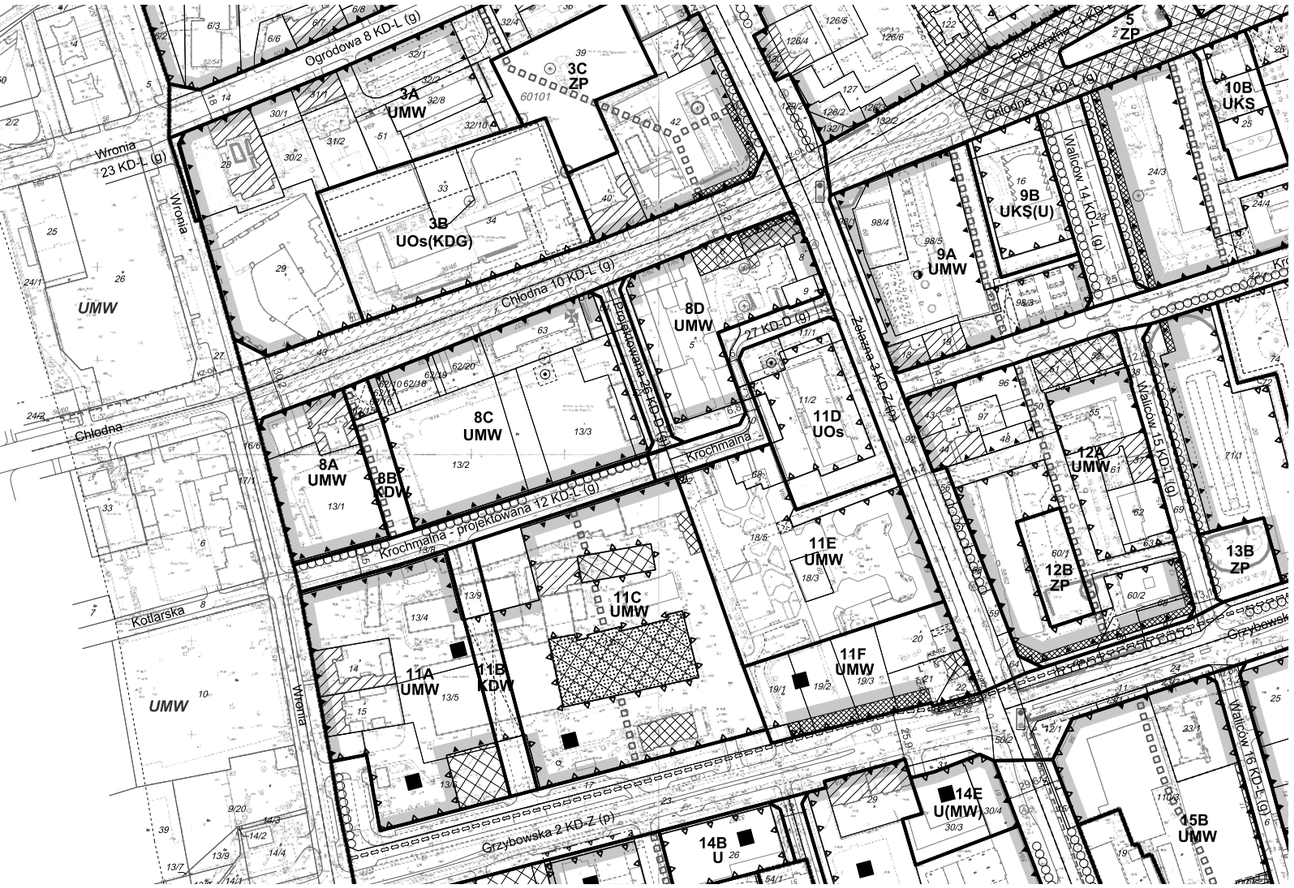


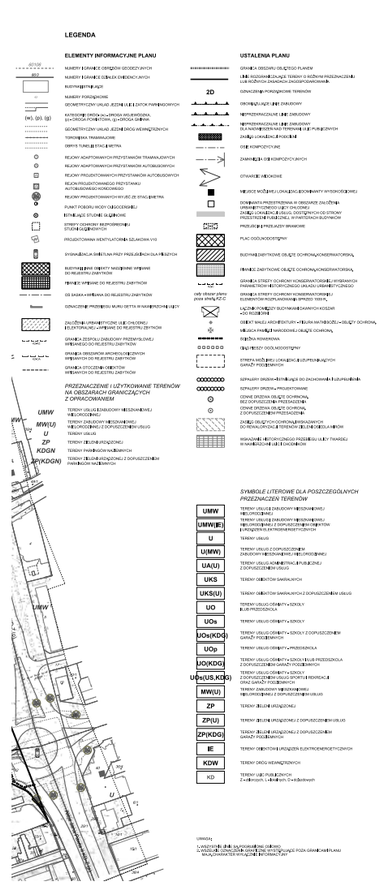


8B KDW

1) land use: internal road area;
2) conditions of development and land use and principles of protection and shaping of spatial order:
    a) number of carriageways on the internal road -1,
    b) pavements on both sides,
    c) A ban on the location of parking spaces,
    d) the possibility of locating a drive and gated crossing at a location designated on the plan drawing, with development above it meeting the following conditions:
        - function in accordance with the designation UMW,
        - maximum building height - 24 m,
        - Building lines - according to the plan drawing,
        - flat roofs with a permissible use of pitched roofs in the case listed in § 7 pt. 5 lit.
3) special conditions of land use and restrictions on use:
    b) development shall be permitted to be located over the driveway and gated passage designated on the plan drawing directly adjacent to the boundaries of neighbouring building plots;
5) principles of communication service of the area:
    a) incorporation of the internal road into public streets Chłodna 10 KD-L and Krochmalna 12 KD-L,
    b) location of public pedestrian route - according to the plan drawing;

6) principles of protection of cultural heritage and historical monuments:
    a) the area is part of an urban establishment entered in the register of immovable monuments mentioned in § 7 item 1 letter m, indicated on the drawing of the plan, subject to protection under the provisions on the protection of monuments, for which all activities require a permit of the competent conservator of monuments,
    b) an order, in the case of new development adjacent to the gable walls of the pre-1939 buildings under conservation protection, to adapt, in consultation with the appropriate conservation officer, its dimensions, elevations and roof slope angles to the dimensions, elevations and roof slope angles of the protected buildings,

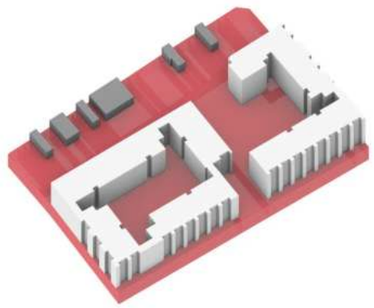


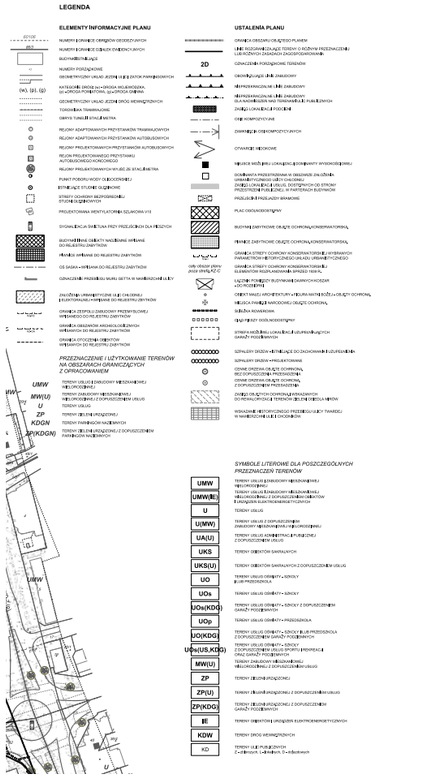


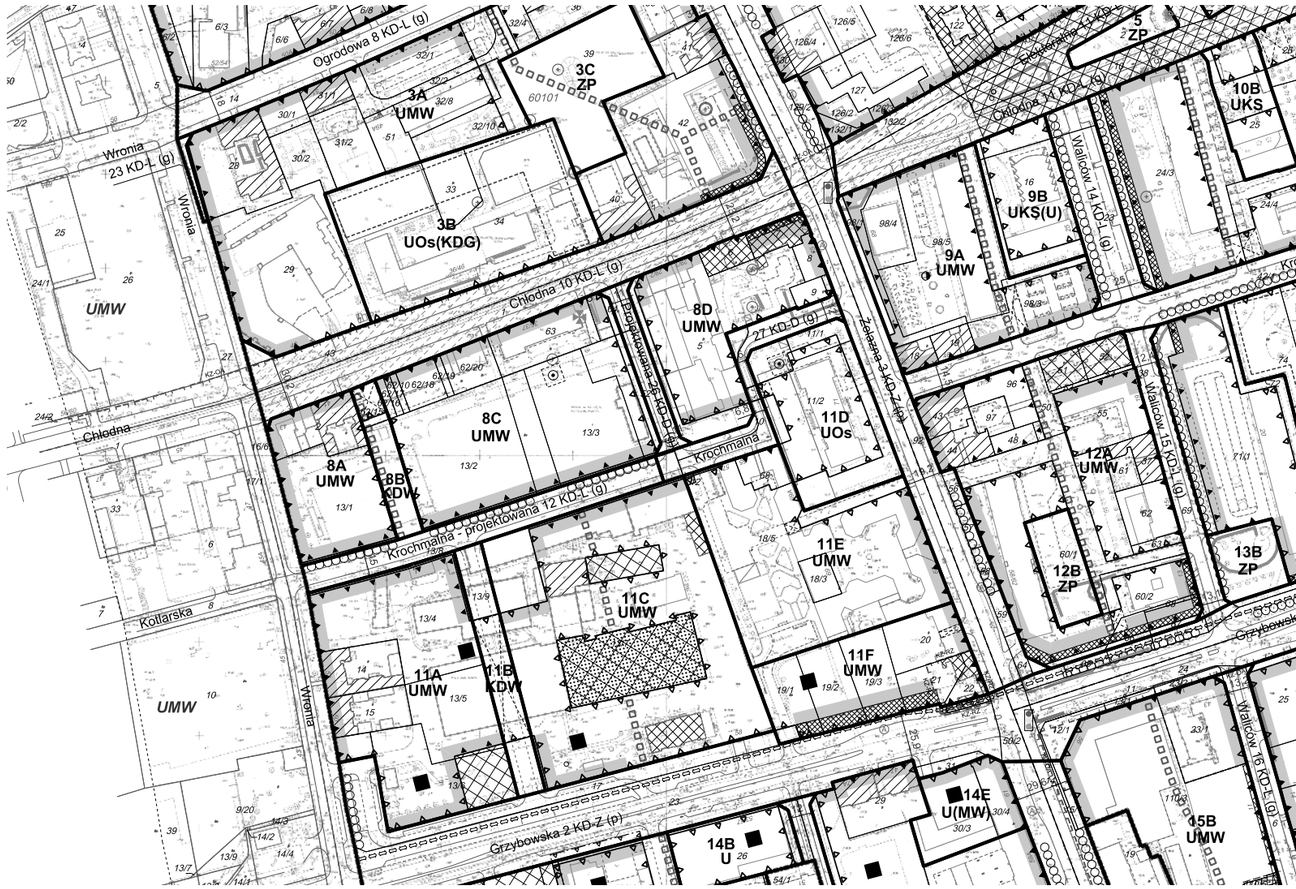
8C UMW

1) land use: area for services and multi-family residential development;
2) conditions of development and land use and principles of protection and shaping of spatial order:
    a) minimum indicator of biologically active area - 25%
    b)maximum built-up area ratio - 0.45,
    c) maximum building intensity ratio - 3.0,
    d) maximum building height - 30 m,
    e) Building lines - according to the plan drawing,
    f) the site belongs to the inner city development area,
    g) Location of services, accessible from the public space, in the ground floors of buildings - range according to the plan drawing,
    h) flat roofs,
3) special conditions of land use and restrictions on use:
    a) location is prohibited:
    - free-standing petrol and gas distribution stations and free-standing car washes,
    c) Direct well protection zone - according to the plan drawing,
    d) buildings are permitted to be located directly at the boundary of the neighbouring building plot pursuant to § 10(3),
    e) buildings are permitted to be located directly on the boundary of site 8B KDW and the boundary of plot of land No. 13/8 in block 60104, with the possibility of situating windows in the walls adjacent to these boundaries;
    5) principles of communication service of the area:
    a) transport service from Chłodna 10 KD-L, Krochmalna 12 KD-L, Projektowana 26 KD-D and through an internal road in area 8B KDW,

7) principles of protection of cultural heritage and historical monuments:
    a) the area is part of an urban establishment entered in the register of immovable monuments mentioned in § 7 item 1 letter m, indicated on the drawing of the plan, subject to protection under the provisions on the protection of monuments, for which all activities require a permit of the competent conservator of monuments,
    b) The preservation and prominence of the national memorial as indicated on the plan drawing,
    c) the whole area is located in the archaeological area, marked with symbol KZ- OA, with boundaries indicated on the drawing of the plan, subject to protection pursuant to provisions on the protection of historic monuments; during construction investments connected with earthworks, it is obligatory to conduct archaeological research, the scope of which shall be determined in each case by the competent conservator of historic monuments;
8) principles of merging and dividing land property according to § 11, para. 2;
10) the percentage rate for the calculation of the fee on the increase in the value of the property - 30%





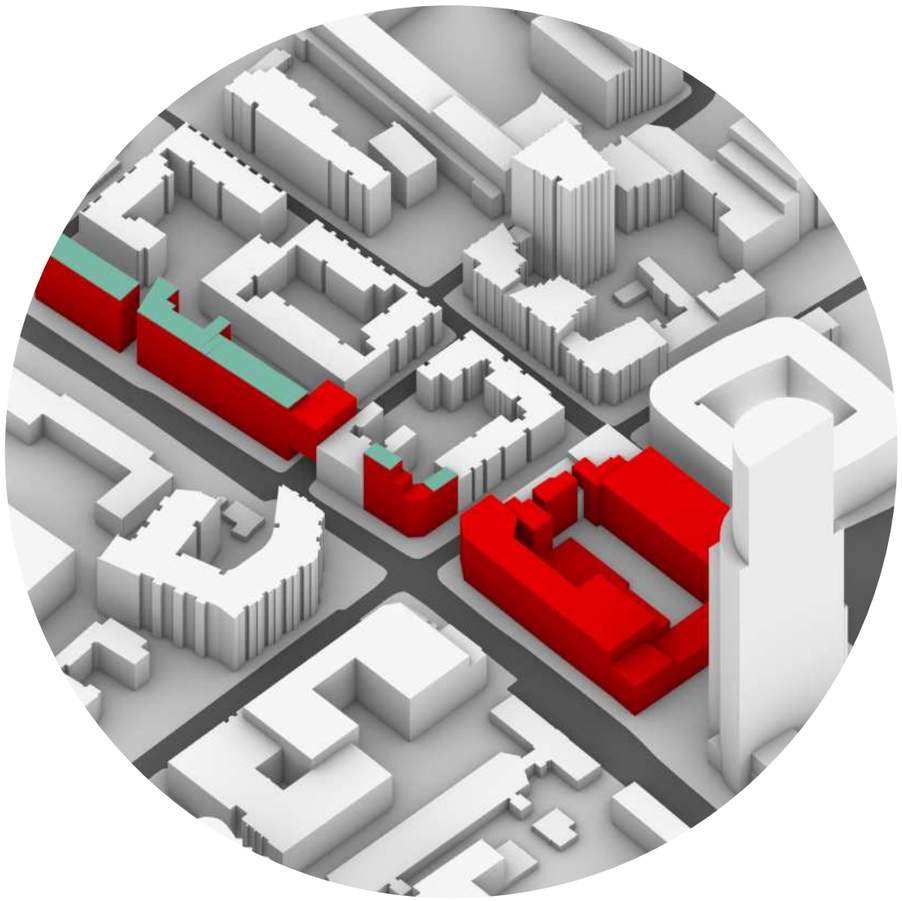


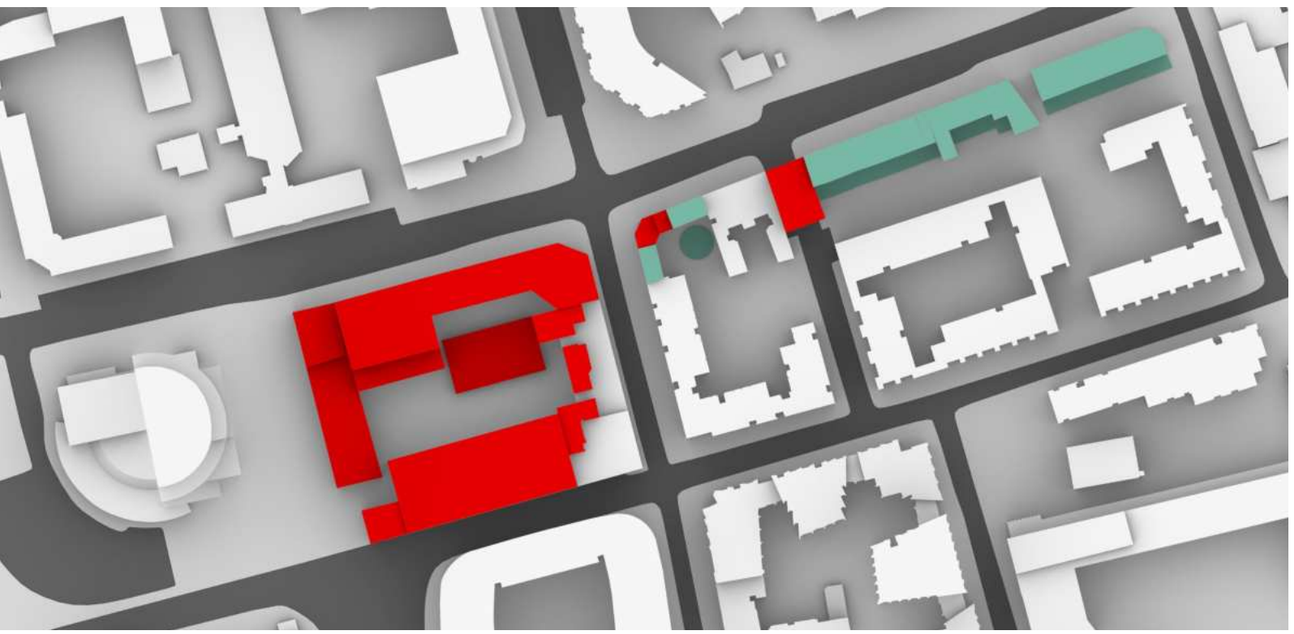
4] PATO-DEWELOPERKA SPECULATIVE DESIGN

THE POSSIBILITIES IN NUMBERS

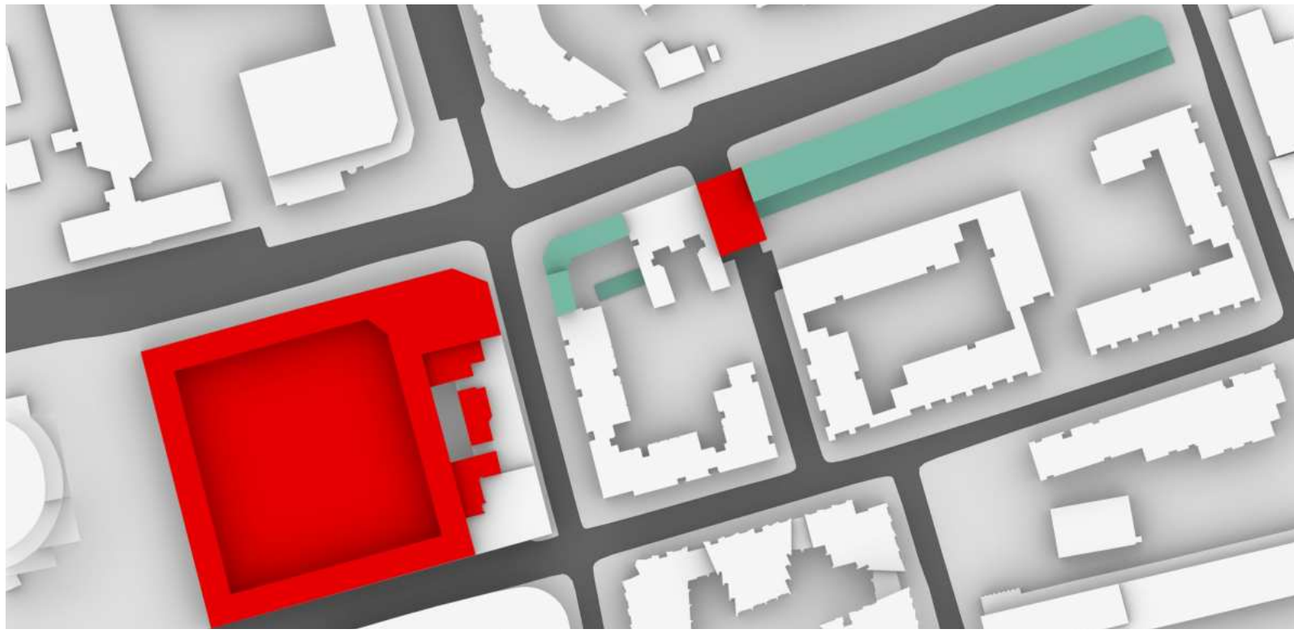
PLAN	PART	PLOT	area (m2)	max built-up area ratio	max building intensity ratio	total area	min biologically active area	max floors	max height	existing building floor area	existing building floors	existing building intensity
17.12	2.3.a U-B(U)											
	2.3.b U-B/MW(U)	1	5347	0	4	21388	0	6	24			
		2	1482	0	4	5928	0	6	24			
		3	227	0	4	908	0	6	24			
	2.3.c MW(U)	1	1409	0	4	5636	0	6	23	816	varies	4495
17.11	8A UMW	1	568	255.6	2.8	1590.4	142		30			
		2	698	314.1	2.8	1954.4	174.5		30	511	6	3066
		3	2933	1319.85	2.8	8212.4	733.25		30	1359	varies	8440
	8B KDW	1	317	142.65		0	79.25		24			
		2	931	418.95		0	232.75					
	8C UMW	1	121	54.45	3	363	30.25		30			
		2	74	33.3	3	222	18.5		30			
		3	75	33.75	3	225	18.75		30			
		4	81	36.45	3	243	20.25		30			
		5	166	74.7	3	498	41.5		30			
		6	163	73.35	3	489	40.75		30			
		7	113	50.85	3	339	28.25		30			
		8	55	24.75	3	165	13.75		30			
		9	80	36	3	240	20		30			
		10	82	36.9	3	246	20.5		30			
		11	482	216.9	3	1446	120.5		30			
		12	108	48.6	3	324	27		30			
		13	300	135	3	900	75		30			
		14	116	52.2	3	348	29		30			
		15	98	44.1	3	294	24.5		30			
		16	133	59.85	3	399	33.25		30			
		17	89	40.05	3	267	22.25		30			
		18	92	41.4	3	276	23		30			
		19	192	86.4	3	576	48		30			
		20	82	36.9	3	246	20.5		30			
		21	231	103.95	3	693	57.75		30			
		22	4217	1897.65	3	12651	1054.25		30	2040	7	14280
		23	889	400.05	3	2667	222.25		30	298	7	2086
		24	2852	1283.4	3	8556	713		30	1002	7	7014
		25	695	312.75	3	2085	173.75		30	524	7	3668

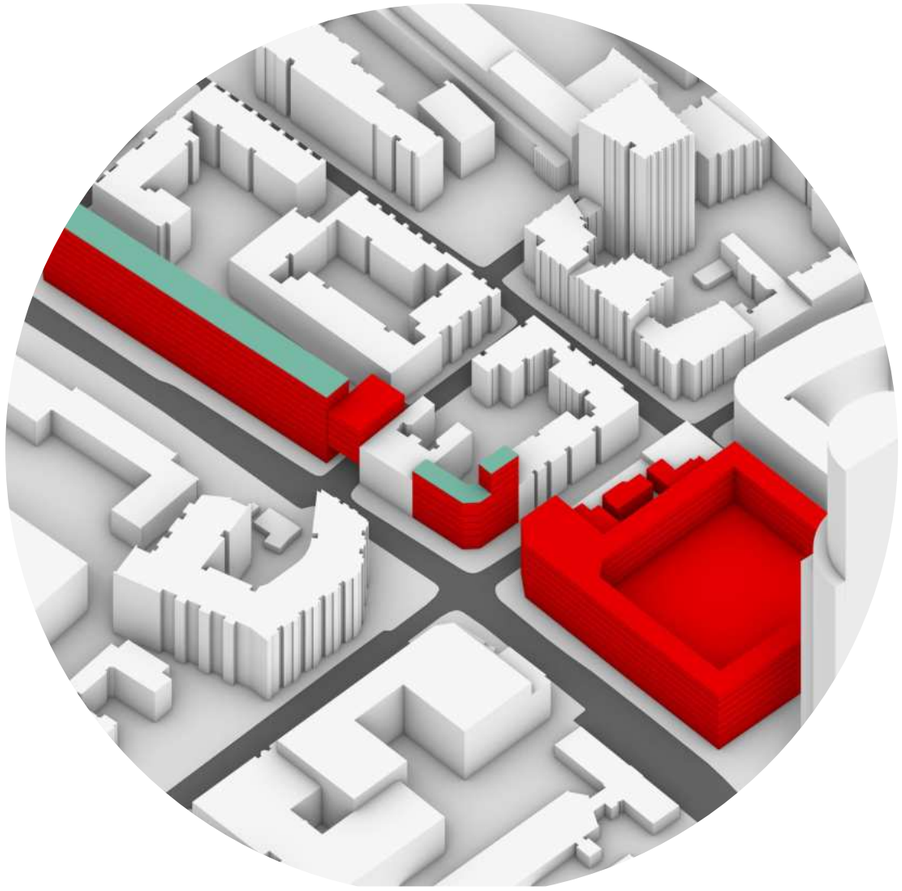
VERSION 1



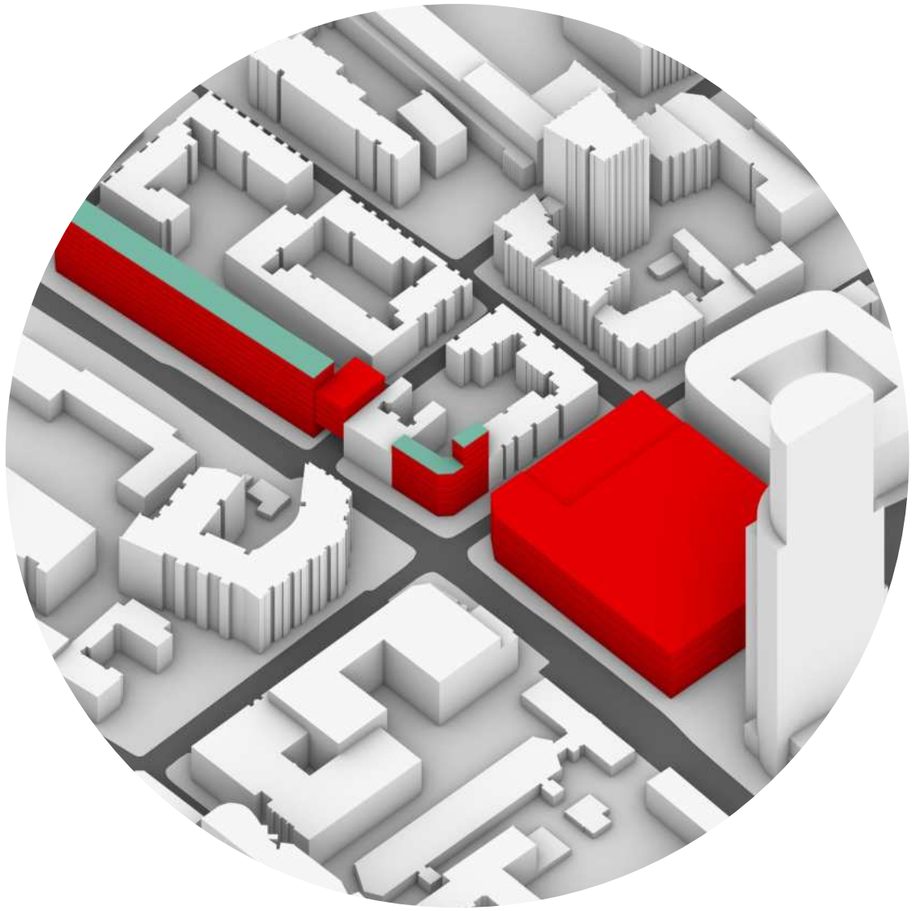


VERSION 2





VERSION 3





5] CASE-STUDIES OF AFFORDABLE HOUSING

NOWE ZERNIKI (WROCLAW)

Nowe Żerniki, also known as WUWA 2, is a flagship urban development project in Wrocław, Poland, initiated to create a sustainable and innovative residential district that reflects modern housing needs while learning from historical architectural experiments. The project serves as a living model for integrating affordable housing, smart urban design, and sustainable practices. It draws inspiration from the original WUWA (Wohnungs- und Werkraumausstellung), a modernist housing estate built in 1929, which was part of the Werkbund Exhibition and one of the key examples of modernist architecture in Europe.

The idea behind Nowe Żerniki was to create a model housing estate that would demonstrate innovative solutions for urban living in the 21st century. The project was conceived by the Wrocław City Council in collaboration with the Lower Silesian Chamber of Architects and a number of Polish architectural studios. It was planned as part of Wrocław's preparation for the role of European Capital of Culture in 2016, symbolizing Wrocław's ambition to become a leader in modern urban development.

Mixed-Use Urban Planning
Nowe Żerniki is designed as a mixed-use neighborhood, combining residential, commercial, and public services to foster a self-sufficient community. This means that residents do not have to travel far for everyday needs, as schools, healthcare facilities, cultural centers, shops, and recreational areas are integrated into the urban fabric. However some aspects of the project seem to show a continuing, although lighter, dependency on cars.

Sustainable Architecture and Green Spaces
Sustainability is a central theme in Nowe Żerniki. Buildings are designed with energy efficiency in mind, incorporating renewable energy sources such as solar panels and advanced insulation materials. Many buildings feature green roofs, which help manage stormwater, provide insulation, and create green spaces in dense urban environments. Pedestrian zones, cycling paths, and public parks are key elements of the neighborhood, promoting sustainable modes of transportation and enhancing the overall livability of the area.

Water management also plays a significant role, with rainwater harvesting systems implemented across the estate. This ensures that water is conserved and reused for irrigation of public green areas, reducing the strain on municipal water systems.

Affordable housing as reality
Nowe Żerniki is designed to accommodate a wide range of residents, promoting social diversity. The housing units include affordable apartments for lower-income families, mid-range housing, and high-end properties, allowing for a mixed-income community. This is in contrast to many recent developments in Poland, which often cater only to higher-income buyers, contributing to social segregation. In Nowe Żerniki, the variety of housing types helps to foster social integration and a sense of community.

In addition to residential buildings, the development also includes cooperative housing schemes where residents have a greater say in the design and management of their homes. This is part of the broader trend of encouraging participatory urban development, ensuring that the needs of residents are considered at every stage of the planning process.

The Creators and Key Contributors
Nowe Żerniki is a collaborative effort involving a variety of architectural studios, urban planners, and experts. The project was initially driven by the Lower Silesian Chamber of Architects and was heavily supported by the city of Wrocław. Several prominent architectural firms have been involved, bringing a range of design perspectives and expertise.

Major architectural contributors include local firms such as Zbigniew Maćków Architects and Major Architekci, which have been involved in the overall urban planning and design of individual buildings. These firms are known for their focus on sustainable design and modern architecture.
Maćków Pracownia Projektowa, led by Zbigniew Maćków, is one of the leading architectural firms involved in Nowe Żerniki. Maćków‘s firm has been a key player in shaping the architectural landscape of Wrocław.
The involvement of multiple architects ensured a diversity of architectural styles and approaches within the estate, contributing to the variety of housing types, from single-family homes to larger apartment complexes.

Owners and Development
The development of Nowe Żerniki is overseen by the City of Wrocław, which owns much of the land. Private developers are also involved in constructing specific buildings or sections of the estate. The project was conceived as a public-private partnership, with the local government providing land and strategic oversight, while private firms handle much of the construction and development of individual units.

By maintaining a strong public sector role, the project has been able to prioritize affordable housing and community-oriented design, rather than simply maximizing profit, which has been a common issue in other Polish cities facing gentrification.

SEESTADT ASPERN (VIENNA)

Seestadt Aspern in Vienna is a pioneering urban development project that aims to redefine sustainable living and city planning in Europe. Located in the northeastern district of Donaustadt, Seestadt spans 240 hectares and is designed to balance environmental stewardship, social inclusivity, and economic resilience. Initiated in 2009 and planned in phases, this project envisions housing for approximately 20,000 residents and employment opportunities for an equal number, reflecting a comprehensive approach to creating a self-sustaining urban ecosystem.

Central to Seestadt Aspern's design philosophy is its dedication to sustainable urbanism. The project integrates eco-friendly building materials and renewable energy solutions, particularly through a district heating system supplemented by solar power and energy-efficient building standards. Its innovative smart grid technology monitors and adjusts energy consumption in real time, optimizing usage and minimizing carbon emissions. Studies have estimated that these combined measures reduce emissions by about 30% compared to traditional city districts, setting a new standard for low-carbon urban developments.

Transportation planning at Seestadt Aspern prioritizes public and active transit over car dependency, an unusual approach for suburban developments. The neighborhood is well-connected to Vienna's public transit system, including subway, tram, and bus services, with convenient links to the city center. The area also promotes walking and cycling through extensive pedestrian and bike-friendly infrastructure. These strategies have contributed to a mode-share where more than half of residents' daily commutes rely on public transport, a considerable feat for a suburb. This transportation model aligns with Vienna's commitment to reducing car dependency and improving air quality citywide.

Seestadt Aspern's design emphasizes social inclusivity, striving to create a community that accommodates diverse populations through a mix of housing options, from market-rate apartments to subsidized housing. Communal spaces, including green parks, lakeside areas, and community centers, are thoughtfully incorporated to foster a sense of community. The planning process itself has involved residents in decision-making through participatory platforms, building a socially cohesive environment and encouraging long-term engagement in community upkeep and development.

From an economic standpoint, Seestadt Aspern has succeeded in attracting significant investment, with its mixed-use zoning bringing together residential, commercial, and office spaces. The area has become home to numerous businesses, research institutions, and tech start-ups, benefiting from Vienna's supportive policies and the high connectivity of the district. Research indicates that the project is poised to contribute an estimated €3 billion to Vienna's economy by 2030, establishing Seestadt not only as a residential hub but as a vital economic zone.

Yet, Seestadt Aspern faces ongoing challenges. Rising construction costs have created affordability concerns, which could restrict access to lower-income residents, potentially undercutting the inclusive vision of the project. Furthermore, as the population grows, maintaining the balance between high-density development and environmental sustainability will be critical to its continued success. The project remains under close study by urban planners and environmental scientists, serving as a valuable model for understanding the complexities and challenges inherent in building large-scale, sustainable city extensions. Seestadt Aspern stands as a forward-thinking experiment in urban development, offering valuable insights into the feasibility of creating modern, ecologically responsible, and socially integrated urban spaces in Europe.

6] PROPOSED REGULATORY FRAMEWORK

WHAT IS NECESSARY LEGALLY SPEAKING?

1. Institutional Frameworks and Governance

Strong institutions are essential to regulate and manage affordable housing. Cities like Vienna, for instance, benefit from a resilient institutional structure that supports long-term, subsidized housing policies. Local governance should align housing policies with broader urban planning objectives to ensure that affordable housing is a permanent feature, rather than a temporary solution (Kadi & Lilius, 2022).

2. Public-Private Partnerships

Collaborations between government and private developers enhance funding availability and incentivize the creation of affordable units within market-driven projects. Amsterdam, for example, leverages public-private partnerships to ensure that around 30% of its housing market is dedicated to social housing. This approach helps balance private development with public goals (Wijburg, 2021).

3. Land Use Regulations and Inclusionary Zoning

Policies like inclusionary zoning require developers to include a certain percentage of affordable units in new projects. This is a common approach in cities like Berlin, which has implemented zoning laws to address the housing affordability crisis. Land allocation practices, such as reserving public land for affordable housing, can further strengthen urban plans (Granath Hansson, 2019).

4. Financing and Subsidies

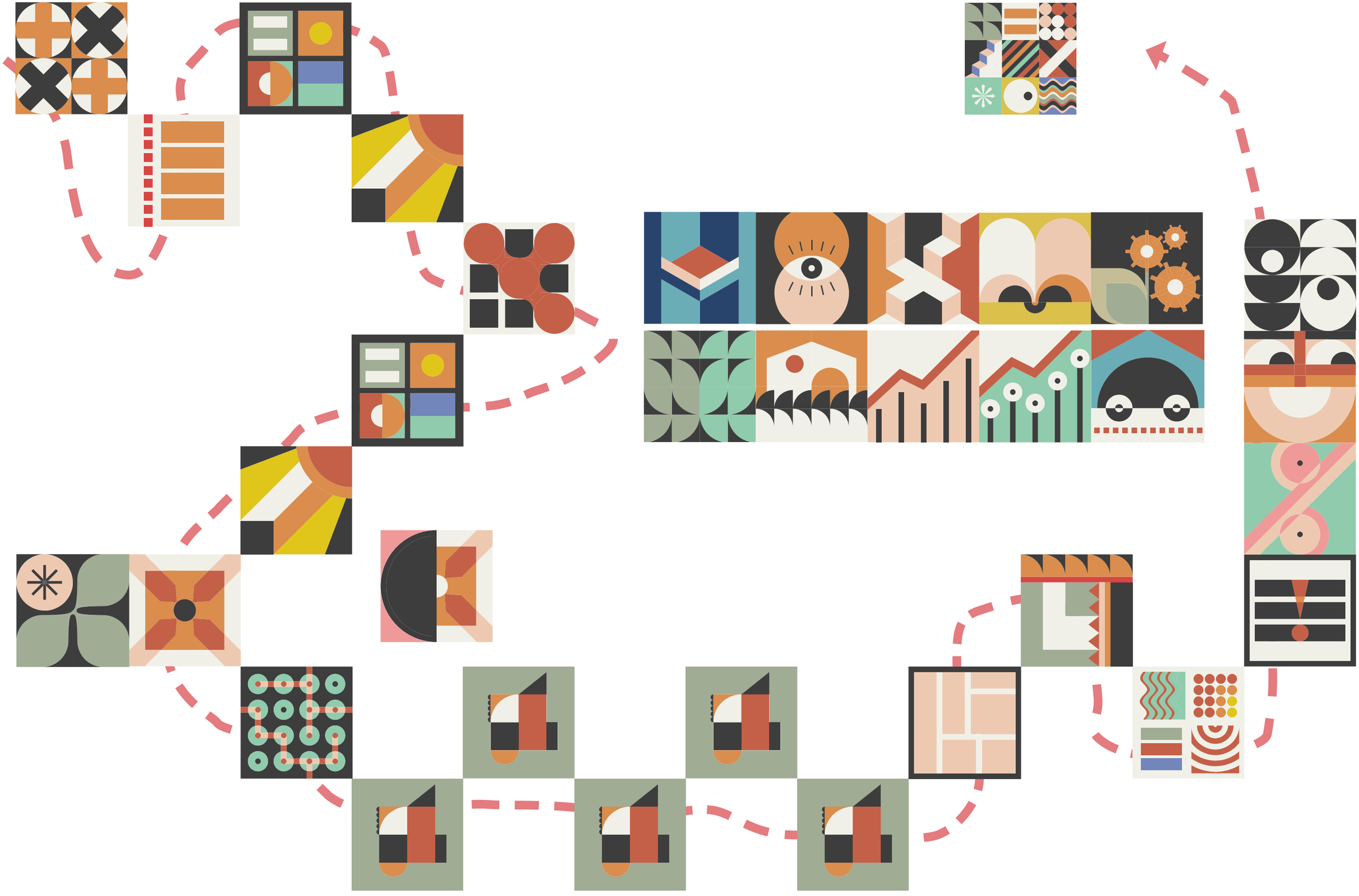
Effective financing mechanisms, such as direct subsidies, tax incentives, and low-interest loans, are crucial for funding affordable housing projects. In Zurich, local authorities offer financial incentives to non-profit housing providers to develop affordable units, ensuring that a significant share of the housing market remains accessible to low-income residents (Streit, 2018).

5. Long-Term Affordability Guarantees

Policies that ensure affordability over the long term are key to preventing units from transitioning to market-rate housing. In Vienna, social housing policies are designed to maintain affordability over several decades, which prevents displacement and maintains socio-economic diversity (Tsenkova, 2021).

6. Tenant Protections and Rent Controls

Tenant protections, including rent control and eviction safeguards, help stabilize the rental market and prevent exploitation. Rent control policies in cities like Berlin are enforced to cap rent increases, providing low-income tenants with more stability and predictability (Marquardt & Glaser, 2020).

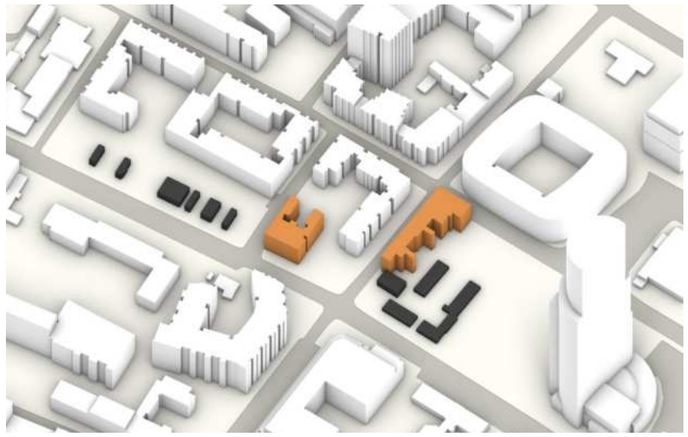


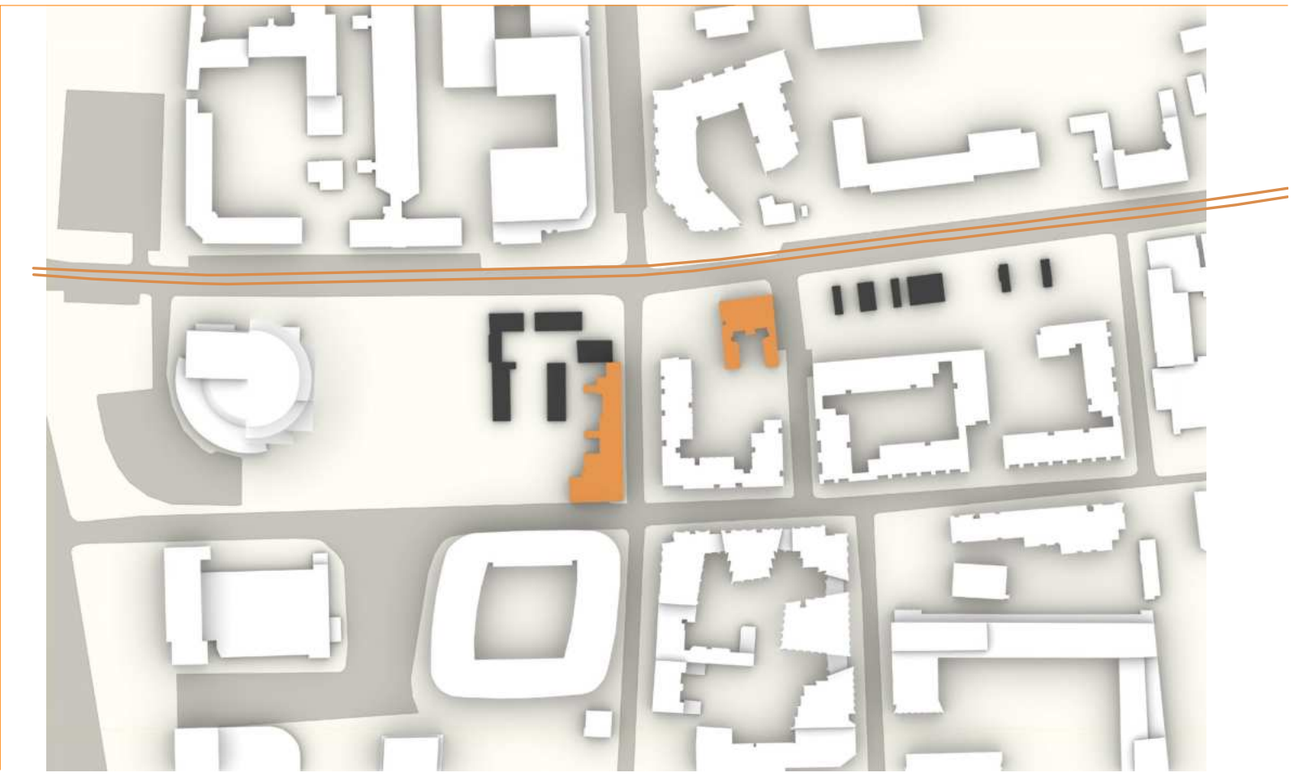
1) CONSERVATION // DEMOLITION



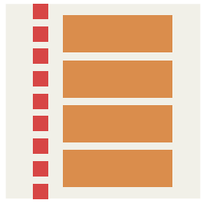
buildings and spaces for conservation / restauration

buildings for demolition





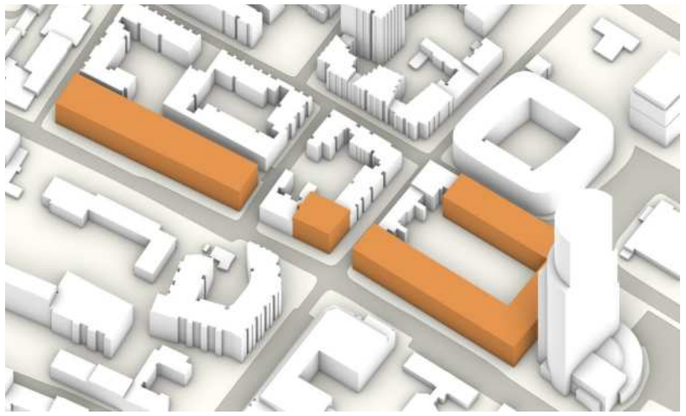
2) RESPECTING URBAN LINES

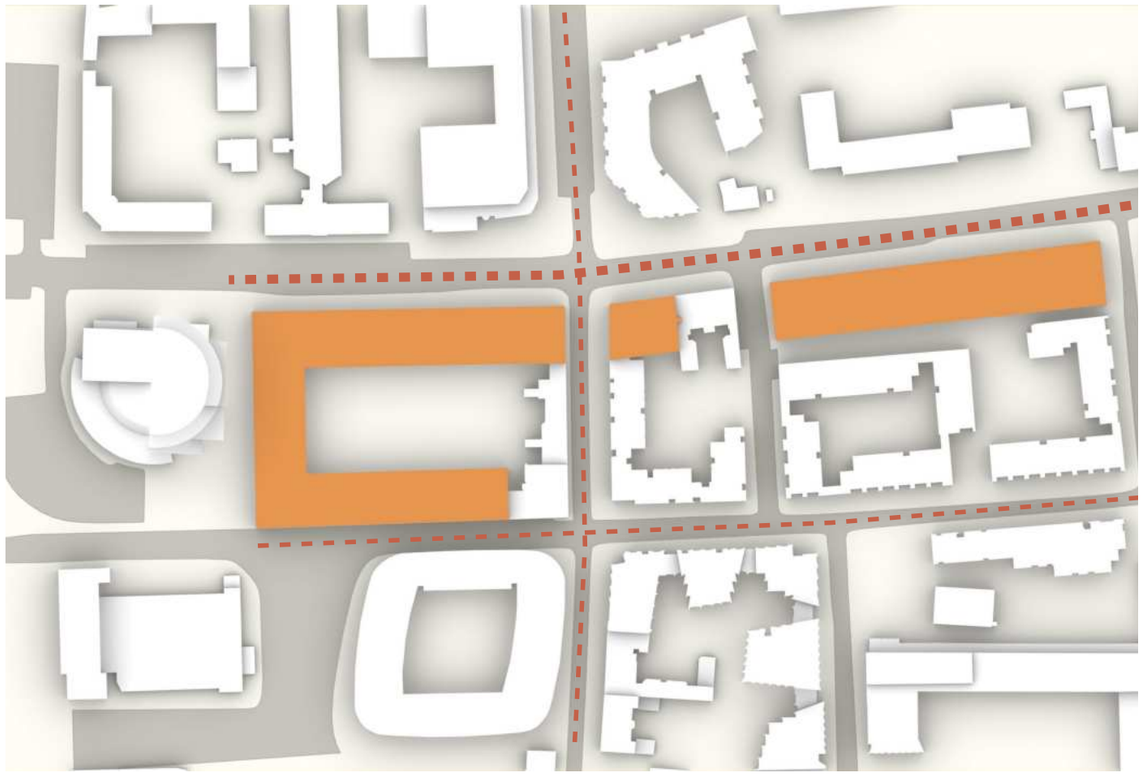


new added building mass (basic)

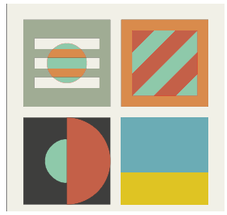
main street lines

secondary street lines

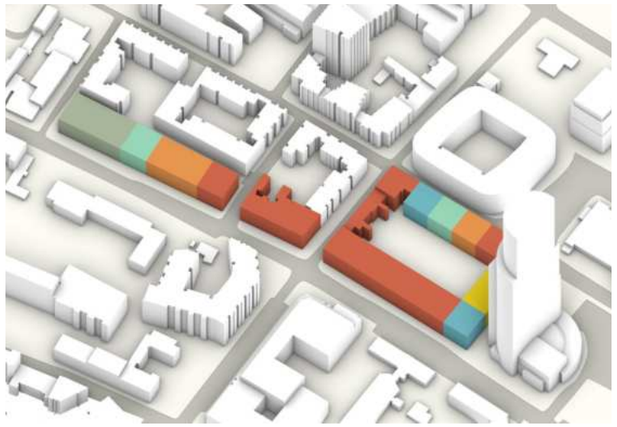


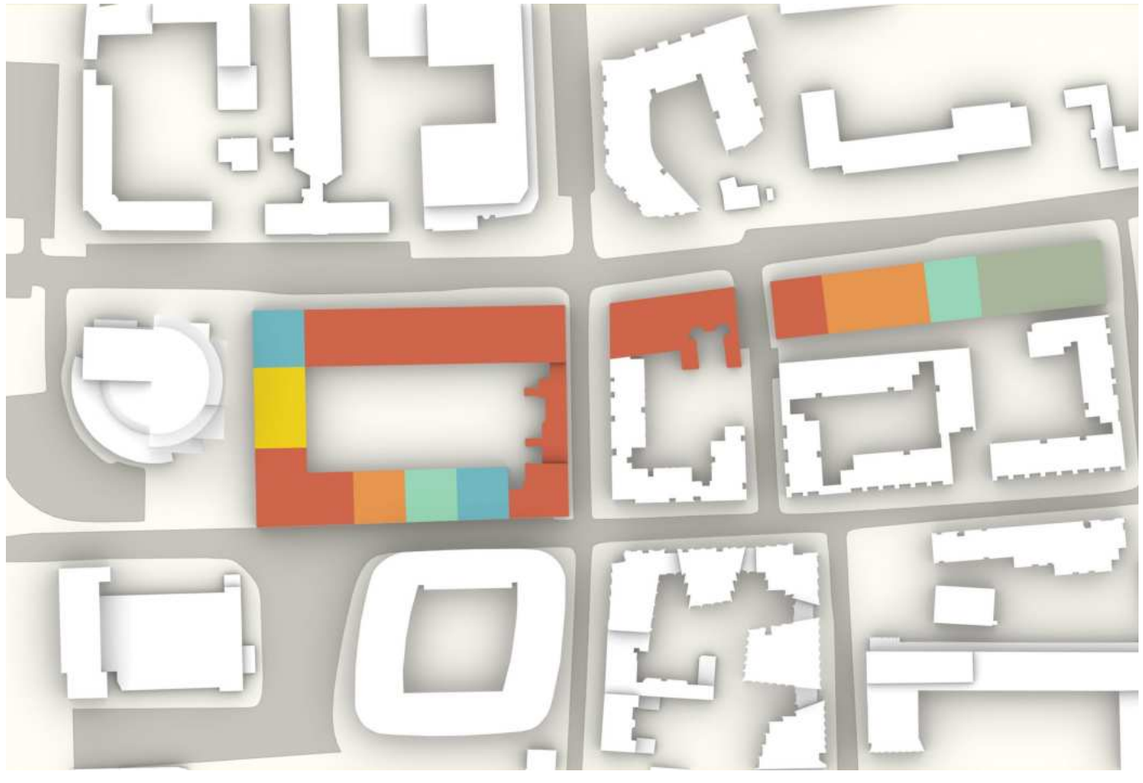


3) GENERAL PROGRAMME



- residential (with possibility of commerce and services on groundfloor)
- mixed residential with commercial spaces
- commerce
- special commerce (open-air)
- mixed-use parking houses
- services-focused (with possibility of residential spaces in upper floors)

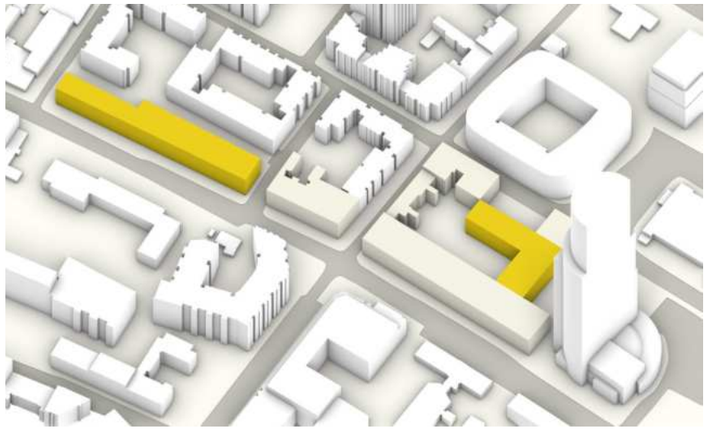


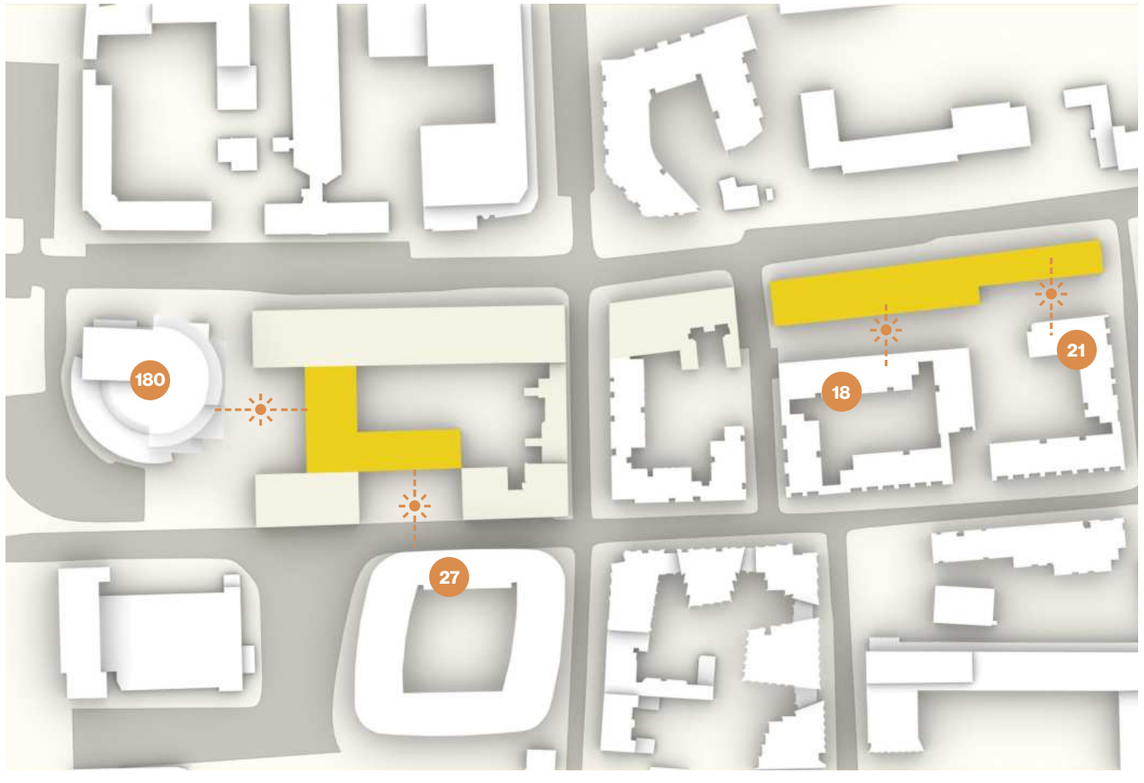


4) SOLAR ACCESS



- moved building masses
- need of distance for solar access
- 0 building height (in meters)

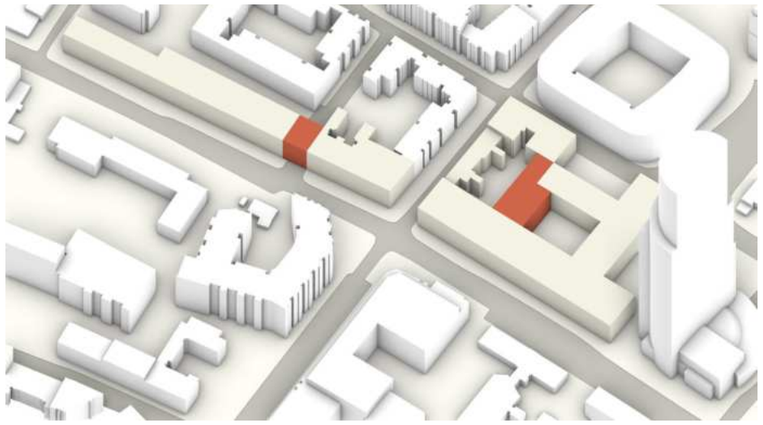


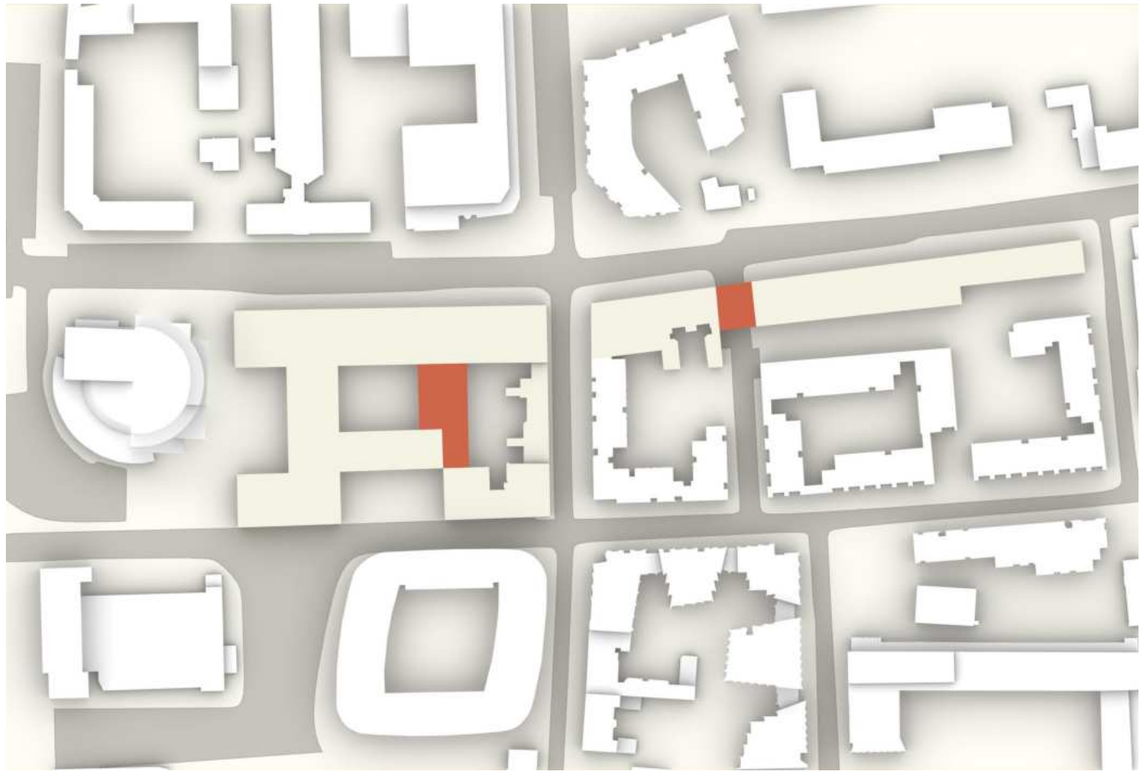


5) Ddensification

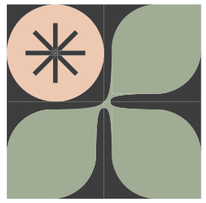


added building mass





6) NATURE



public space attractors

semi-public space attractors

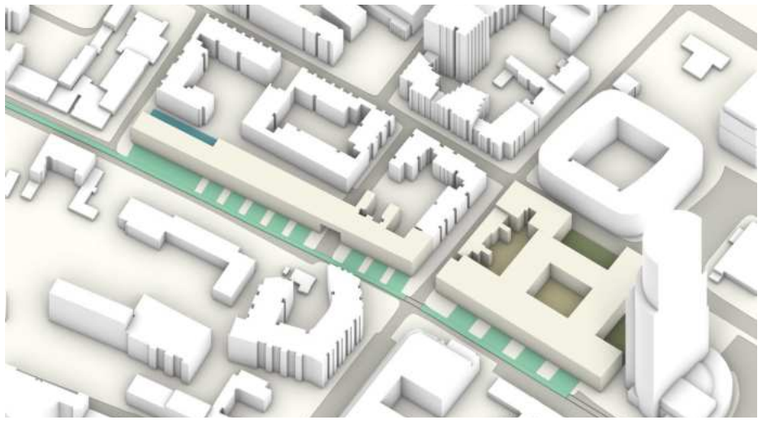
potential of quality public life along street

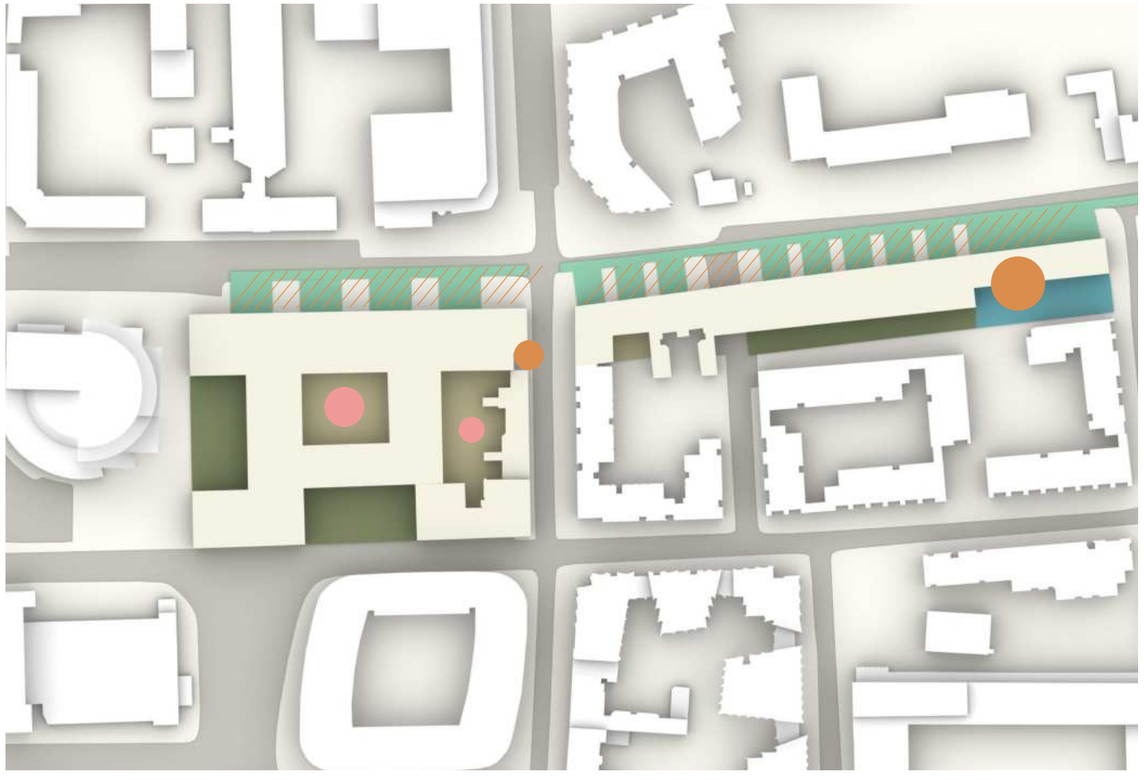
courtyards with intense nature

inner courtyards with moderate nature

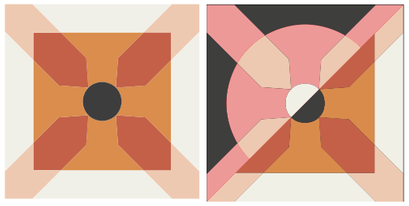
street nature with commercial use

nature connected to outdoor commercial use

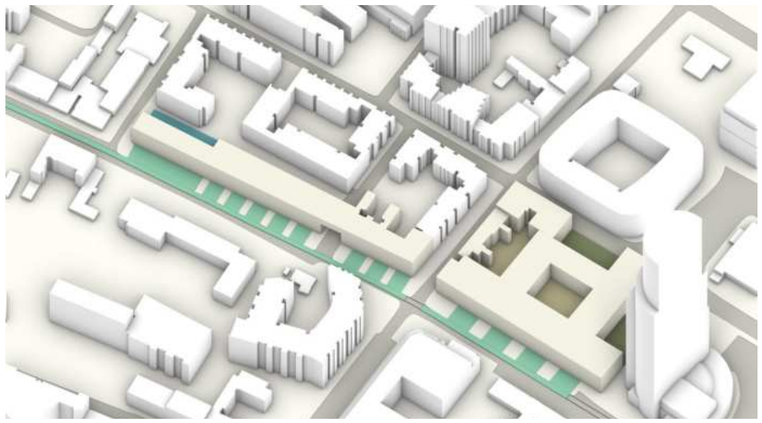


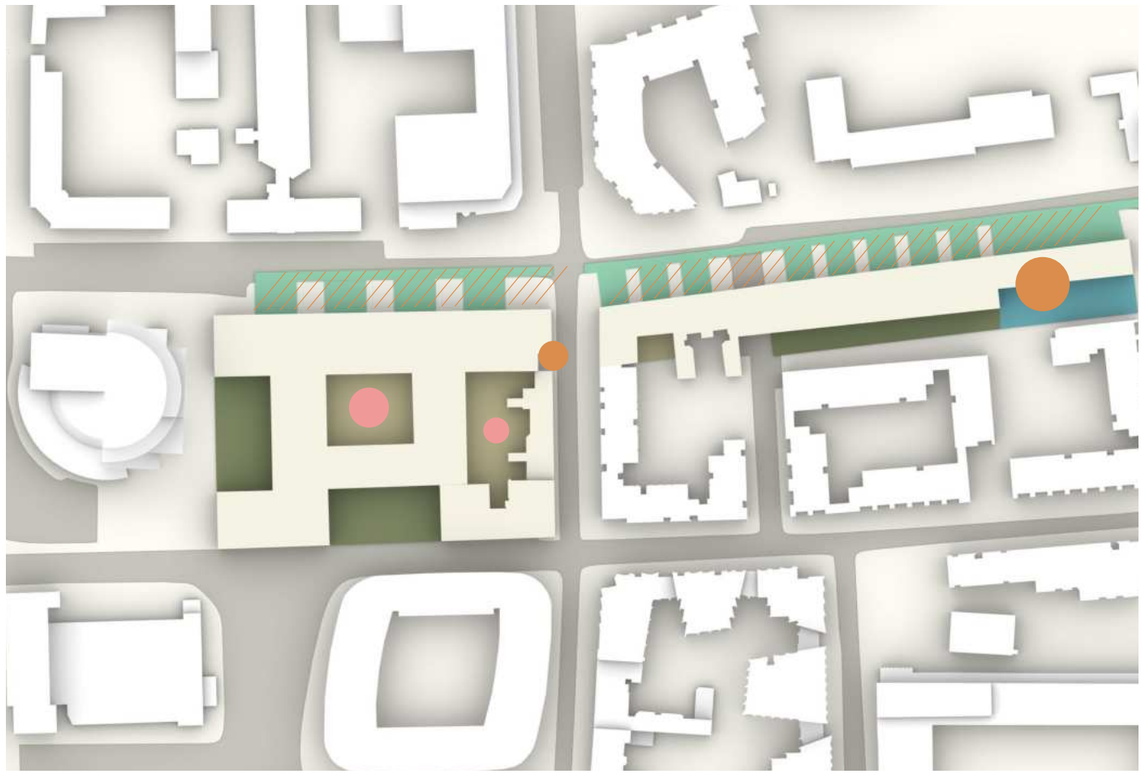


7) SEMI/PUBLIC SPACES

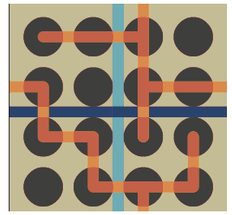


- public space attractors
- semi-public space attractors
- potential of quality public life along street
- courtyards with intense nature
- inner courtyards with moderate nature
- street nature with commercial use
- nature connected to outdoor commercial use

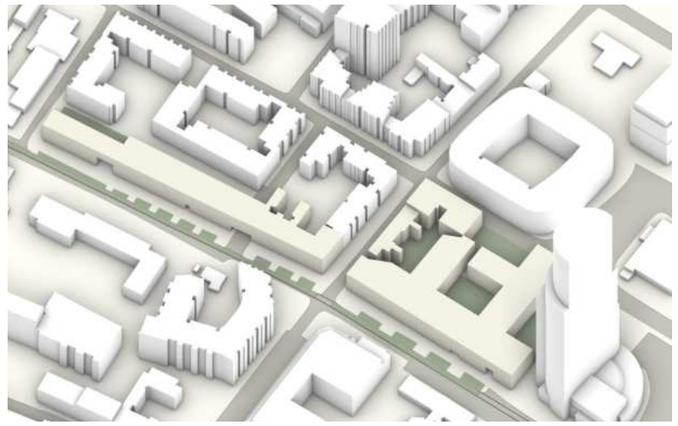


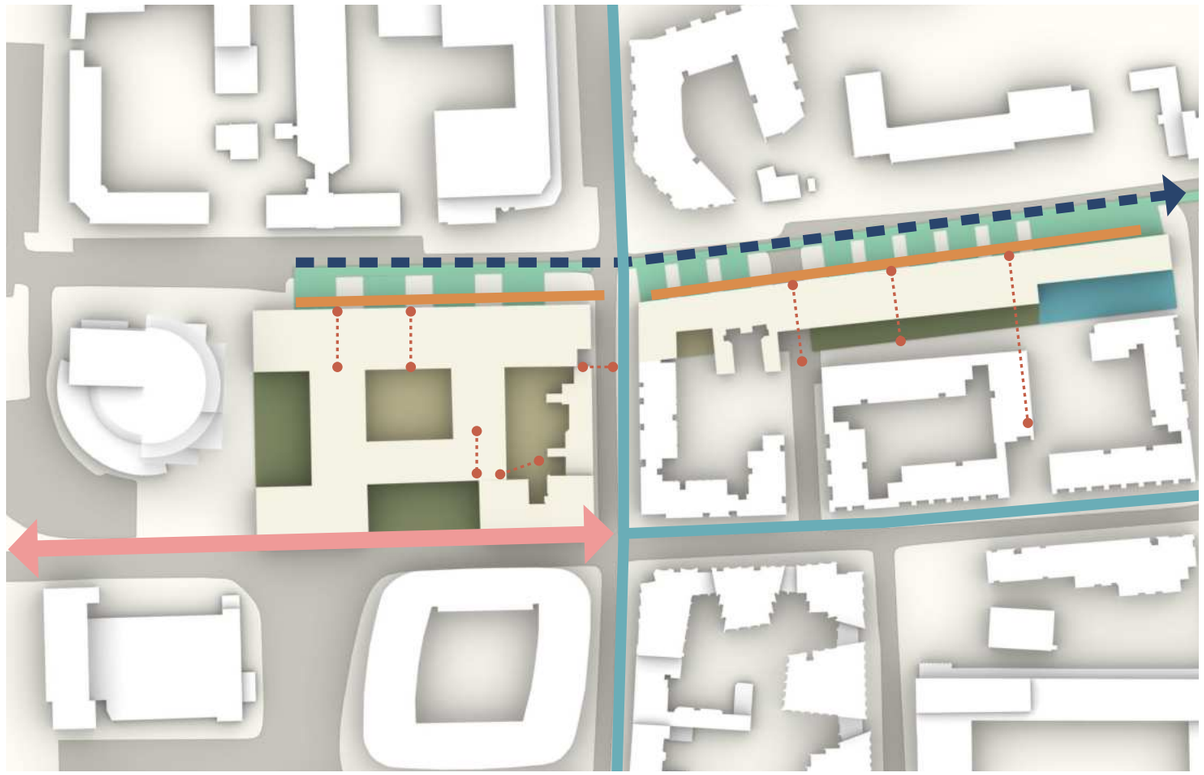


8) CONNECTION



- pre/existing roads (traffic in both directions)
- Chlodna street with traffic limited to one direction
- renovation of Kotlarska street (traffic in both directio
- main public bolevard, min. 5m, nature mixed with con
- mandatory footwalk connection, min 2,5m

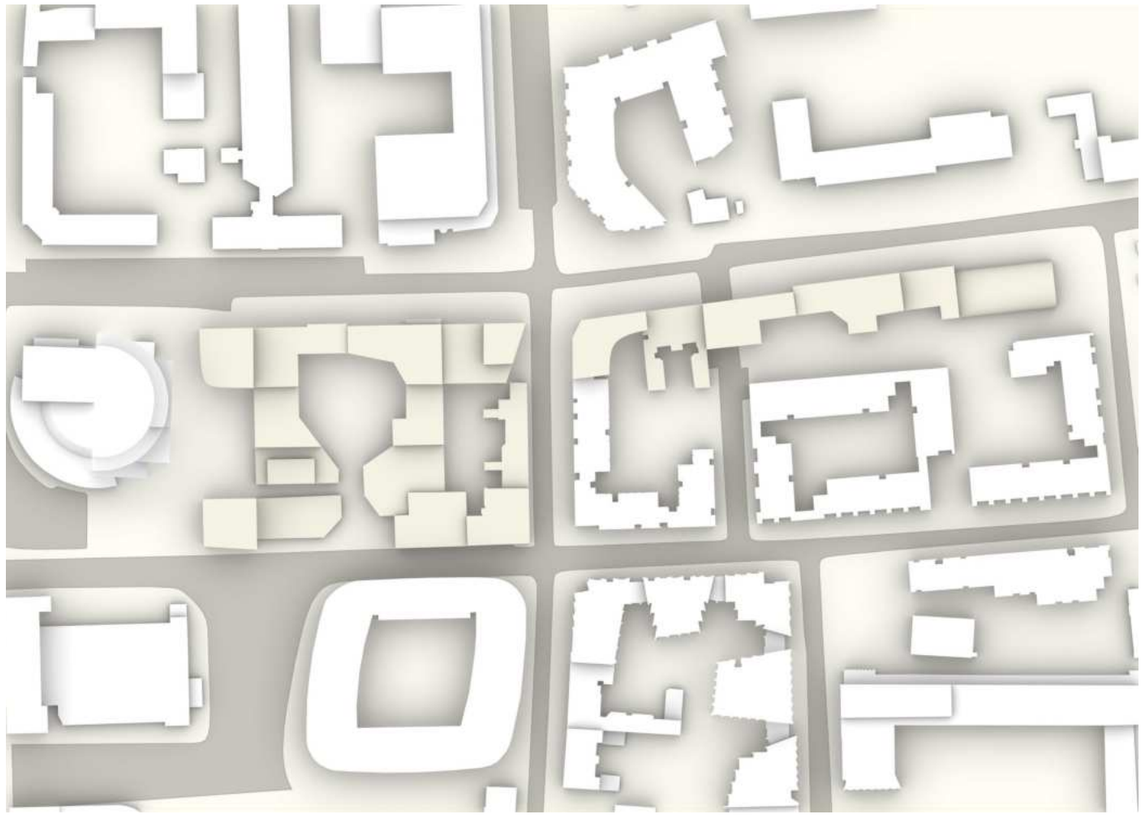




9) MASS DIVERSIFICATION - SIMULATIONS

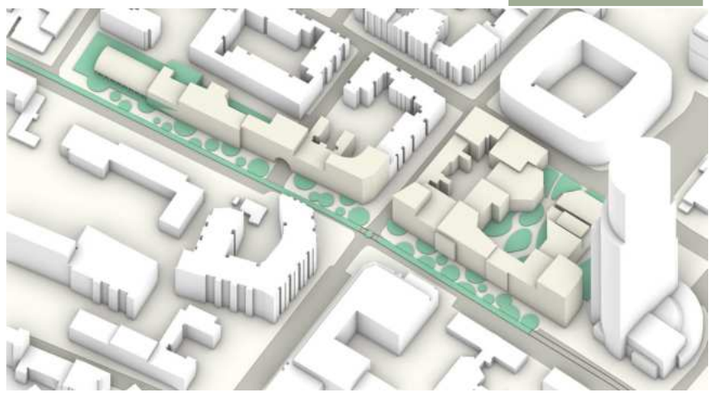
VERSION 1

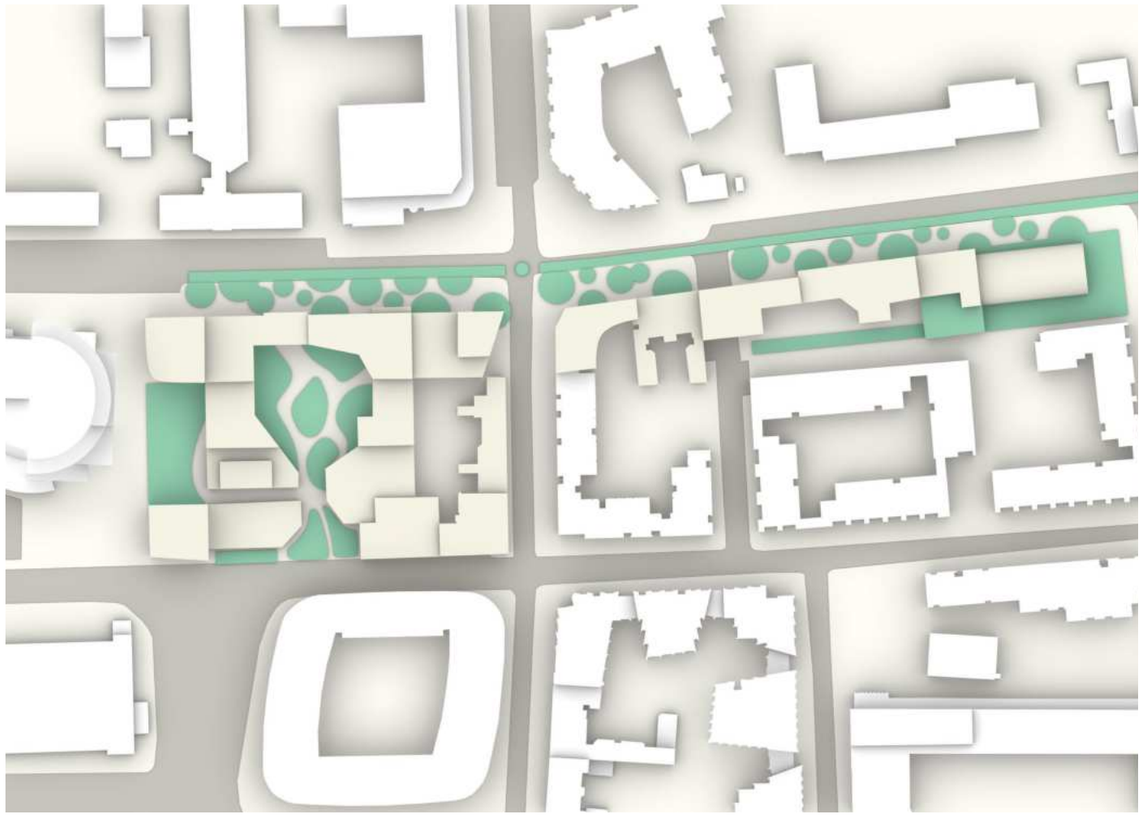




8) MASS DIVERSIFICATION - SIMULATIONS

VERSION 1 WITH GREENARY

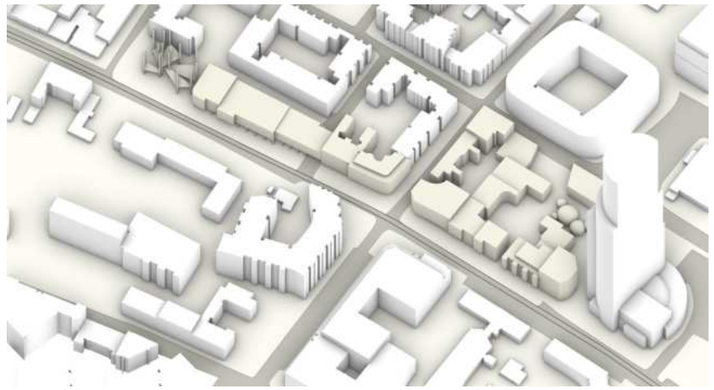




8) MASS DIVERSIFICATION - SIMULATIONS

VERSION 2



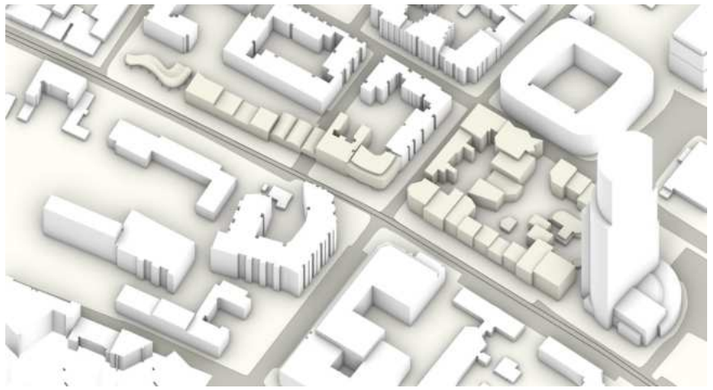


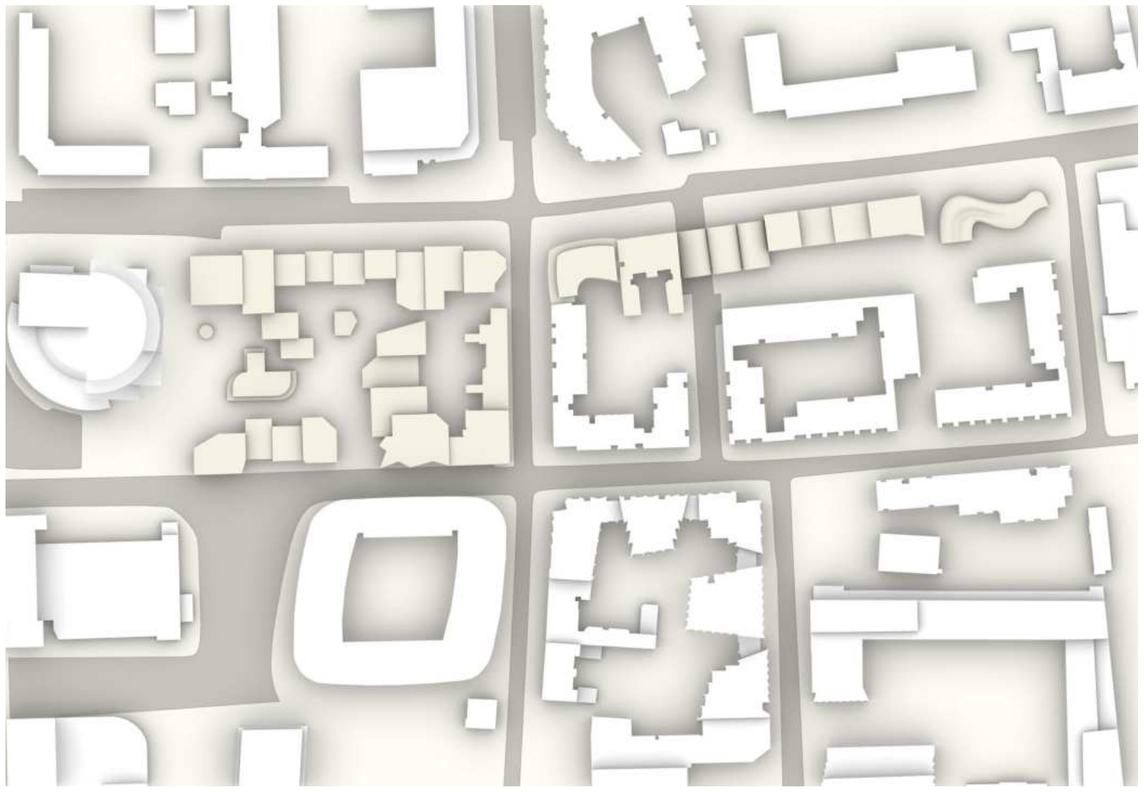


8) MASS DIVERSIFICATION - SIMULATIONS

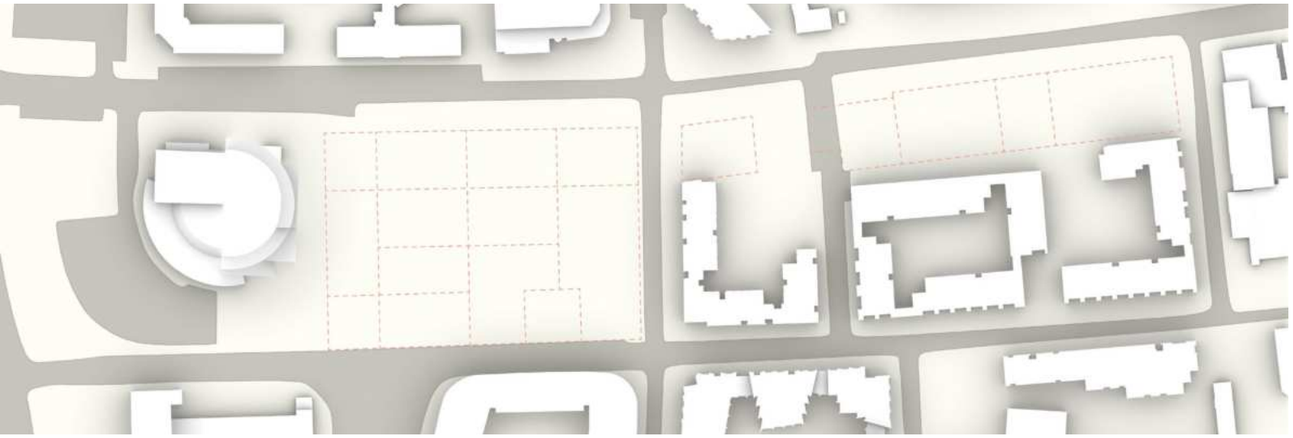
VERSION 3

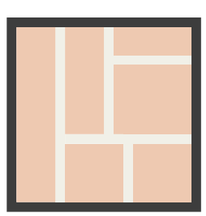






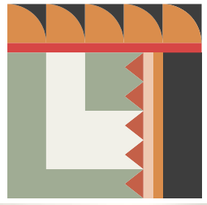
A) PLOT DIVISION



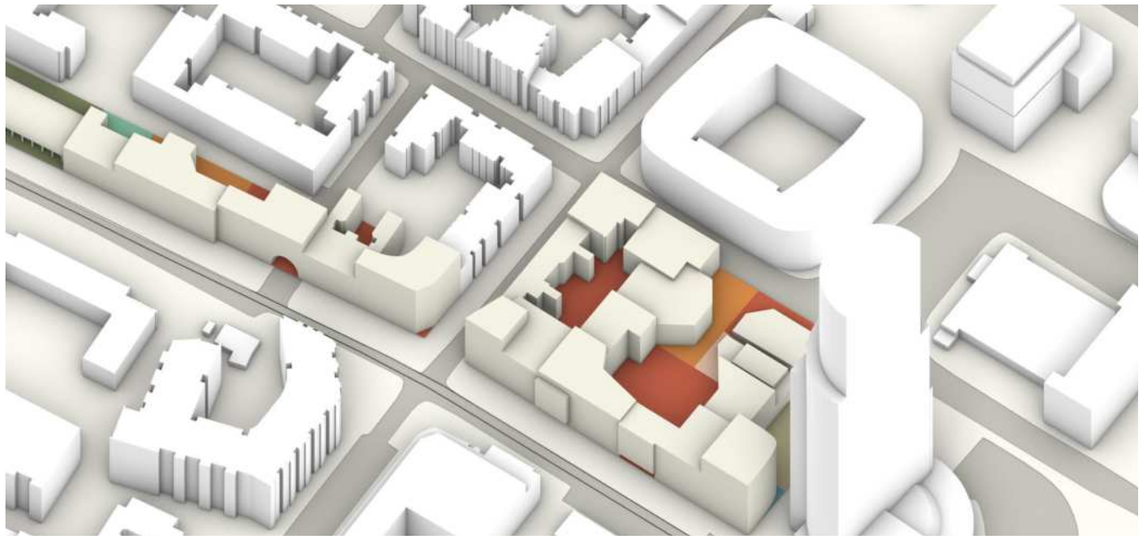


B) NEW STREET FRONTAGES



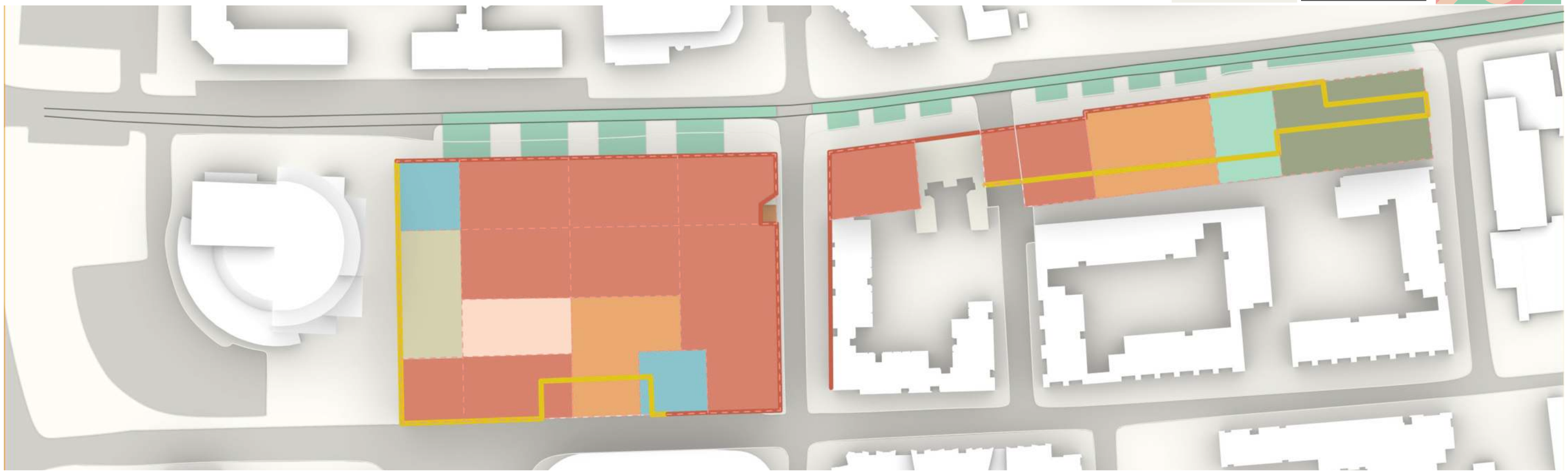








C) SPECIFIC PROGRAMME



SECTOR	TYPE	PLOT	area (m2)	max built-up area ratio	max built-up area	min biologically active %	min biologically active area	min floors	max height	designated social housing
A	PARKING	1	448	0.9	403.2	0.2	89.6	8	30	
	RES	2	782	0.6	469.2	0.5	391	5	24	Charity-driven housing
	RES	3	779	0.6	467.4	0.5	389.5	5	24	Charity-driven housing
	RES	4	674	0.6	404.4	0.5	337			Charity-driven housing
	GREEN	5	821	0.1	82.1	1	821			
	RES	6	778	0.4	311.2	0.6	466.8	5	23	Charity-driven housing
	SERV	7	640	0.8	512	0.3	192	1	15	
	RES	8	783	0.4	313.2	0.5	391.5			Charity-driven housing
	RES / COM	9	1066	0.5	533	0.6	639.6			
	RES	10	1717	existing		0.4	686.8			Charity-driven housing
	RES	11	412	0.8	329.6	0.3	123.6	5	30	Supportive housing
	RES	12	720	0.5	360	0.5	360	5	30	Supportive housing
	PARKING	13	440	0.9	396	0.2	88	6	30	
					0		0			
B	RES	1	614	0.7	429.8	0.4	245.6	5	26	Charity-driven housing
	RES	2	822	existing		0.2	164.4			Charity-driven housing
					0		0			
C	RES	1	788	0.6	472.8	0.3	236.4	5	30	Charity-driven housing
	RES / COM	2	1122	0.5	561	0.5	561	4	24	
	COM	3	576	0.7	403.2	0.4	230.4	4	20	
	SPEC COM	4	1398	0.2	279.6	0.8	1118.4	1	15	














	housing	housing types	percentage	commerce	commerce types	percentage	services	service types (optional)	communal spaces
RES	90% above groundfloor	Private Ownership (Cooperative housing)	30%	designated groundfloor	chain stores	x	designated groundfloor	school	10%
		Municipal Housing	25%		private local/coop retail	50%		kindergarten	
		Affordable Housing	40%		private local/coop gastro	30%		medical centers	
		Social Housing	5%		coop offices	10%		worshop areas	
					artinasal craft shops	10%		gallery	
					markets	x		library	
RES / COM	50%	Private Ownership (Cooperative housing)	40%	30%	chain stores	20%	15%	school	5%
		Municipal Housing	30%		private local/coop retail	30%		kindergarten	
		Affordable Housing	30%		private local/coop gastro	40%		medical centers	
					coop offices	10%		worshop areas	
					artinasal craft shops	10%		gallery	
					markets	optional		library	
COM	x	x	x	80%	chain stores	30%	20%		x
					private local/coop retail	30%			
					private local/coop gastro	40%			
					coop offices	x			
					artinasal craft shops	optional			
					markets	optional			
SPEC COM	x	x	x	100% (-bioactive area)			optional		x
PARKING	x	x	x	10%			90%	parking	x
								kindergarten	
								worshop areas	
								worshop areas	
								gallery	
								library	
SERV	x	x	x	x			100%	kindergarten	x
								medical centers	
								worshop areas	
GREEN	x	x	x	max 10%	private local/coop gastro	optional	optional (part of commerce)		optional
					markets	optional			

D) TRY ME BONUSES



DEWELOPER BONUSES			CITIZEN BONUSES			
repeatable max 2x						
Larger built-up area	built up area +0.1		**public space (base 3%)**	cost + 5%		



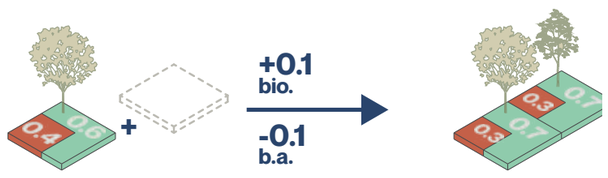
higher building height	height +3.5 m		**soc. Housing / public housing**	soc./pub. + 10%		



more commercial spaces	com. Spaces +10%		**public services**	cost + 10%		



larger plot (base 2 plots)	plot +1		**natural area**	n.a. +0.1	built up area	b.a. -0.1



TYPES OF HOUSING



Municipal Housing (Mieszkania Komunalne)

Municipal housing is owned and managed by local governments (gminy). It is aimed at low-income residents who cannot afford market rents or private homeownership.

Social Housing Associations (TBS - Towarzystwa Budownictwa Społecznego)

TBS associations build and manage housing for middle-income families, where tenants pay lower-than-market rents. TBS tenants usually contribute an initial deposit, which may be refundable after moving out.

Cooperative Housing (Spółdzielnie Mieszkaniowe)

Housing cooperatives are a legacy of the communist era but continue to play a role in Poland‘s housing landscape. Cooperative members collectively own and manage their properties.

Subsidized Housing Initiatives

Government programs and subsidized housing developments have gained traction, especially with initiatives like the „Mieszkanie Plus“ program. It aims to provide affordable rental housing with an option to purchase after a set period. These modern apartments are usually offered to families with stable but low incomes.

Supportive and Sheltered Housing

Supportive housing provides long-term housing with services for vulnerable groups, including seniors, individuals with disabilities, and those requiring assisted living.

Non-Governmental and Charity-Driven Housing

Non-profit organizations and charities contribute to social housing through independent initiatives. f.e. Habitat for Humanity Poland - they design innovative solutions to respond to the housing problems. They also facilitate the repurposing of empty spaces, bringing together various stakeholders to increase the affordable housing stock in Poland.

TYPES OF COMMERCE



Alternative local commerce refers to systems and methods of economic exchange that operate outside of traditional or mainstream commerce structures, focusing on community-oriented, often sustainable and ethical approaches. Here are some types:

Farmers‘ Markets and Local Artisans
Local markets where farmers and artisans sell directly to consumers, reducing supply chain lengths and supporting local economies. This often includes sustainable products like organic produce, handmade crafts, or eco-friendly items.

Buy Nothing Groups
Community groups where members can give away items they no longer need or ask for items they need, without any money involved. These groups are typically organized on social media platforms and help reduce waste while strengthening community ties.

Local Investment Groups
Community-driven investment funds where members pool resources to invest in local businesses or community projects. These groups may operate through platforms like crowdfunding or cooperative investment models.

Mutual Aid Networks
Community-based networks where individuals support each other through resource-sharing, skill-sharing, or other means of support. These networks became particularly popular during crises, offering a way for communities to address collective needs.

Cooperatives
Business organizations owned and operated by a group of individuals for their mutual benefit. Cooperatives exist across industries, including retail, finance, and agriculture, and emphasize democratic decision-making and equitable distribution of profits.

Digital and Sharing Economies
Platforms enabling sharing of goods and services, like tool libraries, car-sharing programs, or skill-sharing networks. These systems reduce the need for individual ownership by facilitating community access to shared resources.

Local Currencies
Community-created currencies are used within a specific region or locality to encourage spending at local businesses. Examples include the Bristol Pound in the UK or BerkShares in Massachusetts, USA.

1. Cooperatives

Cooperatives are business entities owned and managed by their members, aiming to meet shared economic, social, or cultural needs. They operate on democratic principles, where members typically have equal voting power. Cooperatives can vary widely in purpose, structure, and industry.

Poland has a long tradition of cooperatives, especially in agriculture, retail, and housing. Cooperatives remain significant in providing affordable goods and services and supporting local economies.

Społem (Powszechna Spółdzielnia Spożywców)

Type: Consumer Cooperative
Społem is one of Poland‘s oldest and largest consumer cooperative networks, with roots dating back to the late 19th century. It operates a network of grocery stores that aim to provide affordable, high-quality goods while supporting local suppliers. Społem cooperatives are known for their historical role in Polish communities and remain popular for fair pricing and local products. Społem operates throughout Poland and has over 350 cooperative members, collectively managing over 1,200 stores.

Okręgowa Spółdzielnia Mleczarska (OSM) Piątnica

Type: Producer Cooperative (Dairy)
Description: OSM Piątnica is a dairy cooperative that pools the resources of local dairy farmers to produce high-quality dairy products like yogurt, kefir, and cottage cheese. By giving farmers a collective bargaining advantage, it secures fair prices and offers a stable income for local producers. It is known for its innovation and quality in dairy products, popular throughout Poland. OSM Piątnica collaborates with over 2,000 dairy farms and is recognized as a pioneer in eco-friendly and innovative dairy solutions, such as its transparent cup packaging.

Kooperatywa Dobrze

Type: Food Cooperative
Kooperatywa Dobrze is a consumer cooperative based in Warsaw that offers affordable access to organic, locally sourced food. Members participate in the operations of the store, contributing time and resources in exchange for discounted products. The cooperative promotes sustainable farming and connects consumers directly with Polish farmers.
Founded in 2014, Kooperatywa Dobrze has around 800 members and operates two stores in Warsaw. Its mission is to make organic, sustainable food accessible to more people while supporting local agriculture.

Bank Spółdzielczy w Krakowie

Type: Financial Cooperative (Credit Union)
Description: One of Poland’s major cooperative banks, Bank Spółdzielczy w Krakowie provides financial services to local residents and small businesses, emphasizing community support and economic resilience. As a cooperative bank, it reinvests profits into the local economy and offers more favorable loan conditions for community projects.

2. Local Investment Groups

Local investment groups focus on mobilizing resources from community members to invest in local businesses, fostering community development and economic resilience. Unlike traditional investment vehicles, these groups prioritize community impact over profit.

Fundusz TISE (Towarzystwo Inwestycji Społeczno-Ekonomicznych)

Type: Social Investment Fund
TISE is a social investment fund based in Warsaw that provides loans and financial support for social enterprises and cooperatives across Poland. TISE aims to support projects with social impact, particularly those that offer community benefits, such as job creation and services for underserved groups.
TISE has supported hundreds of projects throughout Poland, helping finance businesses and nonprofits that contribute to social and economic development, especially in rural and underprivileged areas.

Fundacja Pracownia Badań i Innowacji Społecznych “Stocznia”

Type: Community Development and Investment
Based in Warsaw, Stocznia is a foundation that conducts research and promotes social innovations in Poland. While not a traditional investment group, it supports local initiatives through research funding and community project investments. Their work includes promoting and funding community-centered projects that have tangible local benefits.
Stocznia’s focus on participatory projects and social innovations supports a wide array of community-driven initiatives, from public space revitalization to community organizing.

Winnica Turnau

Type: Community-Supported Enterprise
Winnica Turnau, a Polish vineyard, has successfully engaged community members in supporting its expansion through investments. Located in the West Pomeranian region, it has used community financing to grow its wine production and become a key player in Poland’s emerging wine industry.

3. Buy Nothing Groups

Buy Nothing groups are hyper-local networks where members give and receive goods without money changing hands. These groups, typically organized on platforms like Facebook, aim to reduce waste, strengthen community bonds, and increase access to needed items.

Warsaw Buy Nothing Facebook Group

Type: Online Buy Nothing Group
This Facebook-based group allows Warsaw residents to give away, share, or request items from each other. Members offer items ranging from clothes and furniture to food and toys, all free of charge, fostering a community of sharing and mutual support.
The group has thousands of members who actively participate in item exchanges, strengthening social connections and promoting a circular economy in the city.

Olio App in Poland

Type: Food Sharing Platform
Olio is an app used in cities across Poland, including Warsaw and Kraków, to share surplus food among neighbors. Users can offer excess food items that would otherwise go to waste, thus promoting sustainability and food security within the community.
Olio has become increasingly popular in Poland as more people look to reduce food waste. It aligns with Poland‘s growing zero-waste movement, allowing users to save money while helping the environment.

Freecycle Poland (Darmowy Recynkling)

Type: Online Reuse Network
Part of the global Freecycle network, the Polish chapter facilitates the free exchange of items online. Polish users can post items they want to give away, or request items they need, encouraging a culture of reuse and reducing the environmental impact of waste.
Freecycle has local groups in cities like Warsaw and Gdańsk, supporting the circular economy by helping people find new homes for unwanted items.

Napraw Sobie (Repair it Yourself)

Type: Repair and Sharing Platform
Napraw Sobie is an initiative that promotes self-repair and DIY culture in Poland. It provides resources and community support for repairing household items, offering workshops and guides to reduce waste and save money.

TYPES OF NATURE



Norway maple (Acer platanoides)
– broad and deep root system, resilient

Scots pine (Pinus sylvestris)
– deep taproot, thrives on poor soils

Black alder (Alnus glutinosa)
– tolerates wet soils well,
– root system stabilizes soil

Wild cherry (_Prunus avium_)
– deep roots, suitable for slope stabilization

Large-leaved lime (Tilia platyphyllos)
– extensive root system, resilient and stable

Sessile oak (Quercus petraea)
– deep taproot, stabilizes soil, drought-tolerant

European beech (Fagus sylvatica)
– deep roots, efficient in water management

European hornbeam (Carpinus betulus)
– root system supports stability
– withstands wet and dry conditions

Ash (Fraxinus excelsior)
– adaptable to various soils, deep roots



TYPES OF NATURE



Cornelian cherry (Cornus mas)
– deep roots, drought-resistant

Common hazel (Corylus avellana)
– dense root system, resilient on slopes

Elder (Sambucus nigra)
– deep root system, suitable for moist soils



Sea buckthorn (Hippophae rhamnoides)
– stabilizes soil, resilient shrub

Privet (Ligustrum vulgare)
– dense root system, good erosion protection



Alder buckthorn (Frangula alnus)
– shrub for wetter habitats, roots prevent erosion



Rowan (_Sorbus aucuparia_)
– shallow but widely spread roots



TYPES OF NATURE



Shepherd‘s purse (Capsella bursa-pastoris)
– deep roots, adaptable plant

Great mullein (Verbascum densiflorum)
– deep roots, grows on dry soil

Meadow buttercup (Ranunculus acris)
– deeper roots, stabilizes moist soil

Meadow knapweed (Centaurea jacea)
– deep roots, suitable for sunny spots

Ribwort plantain (Plantago lanceolata)
– deep root system, resistant to trampling

Yarrow (Achillea millefolium)
– deep roots, grows well on dry soils

Red fescue (Festuca rubra)
– dense, deep root system, ideal for erosion prevention

Pimpinella saxifraga
– deep root, suitable for dry soils

Oxeye daisy (Leucanthemum vulgare)
– deep root, contributes to soil aeration

Wild thyme (Thymus serpyllum)
– deep roots, grows on dry sites



TYPES OF NATURE



Canadian goldenrod (Solidago canadensis)
– deep roots, resilient plant



Red clover (Trifolium pratense)
– deep root system, helps fix nitrogen levels



Lady‘s mantle (Alchemilla vulgaris)
– deep roots, resilient herb

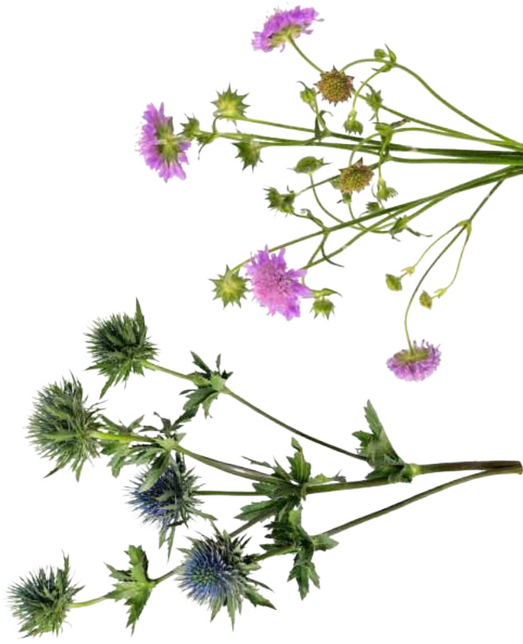


White dead-nettle (Lamium album)
– deep roots, grows on damp habitats

Wood violet (Viola reichenbachiana)
– small plant, helps stabilize soil



St. John‘s wort (Hypericum perforatum)
– deep roots, drought-tolerant



Field scabious (Knautia arvensis)
– deep root, thrives on dry sites

Field eryngo (Eryngium campestre)
– deep root, grows on dry soils



Honesty (Lunaria annua)
– deep roots, grows even on less fertile soils



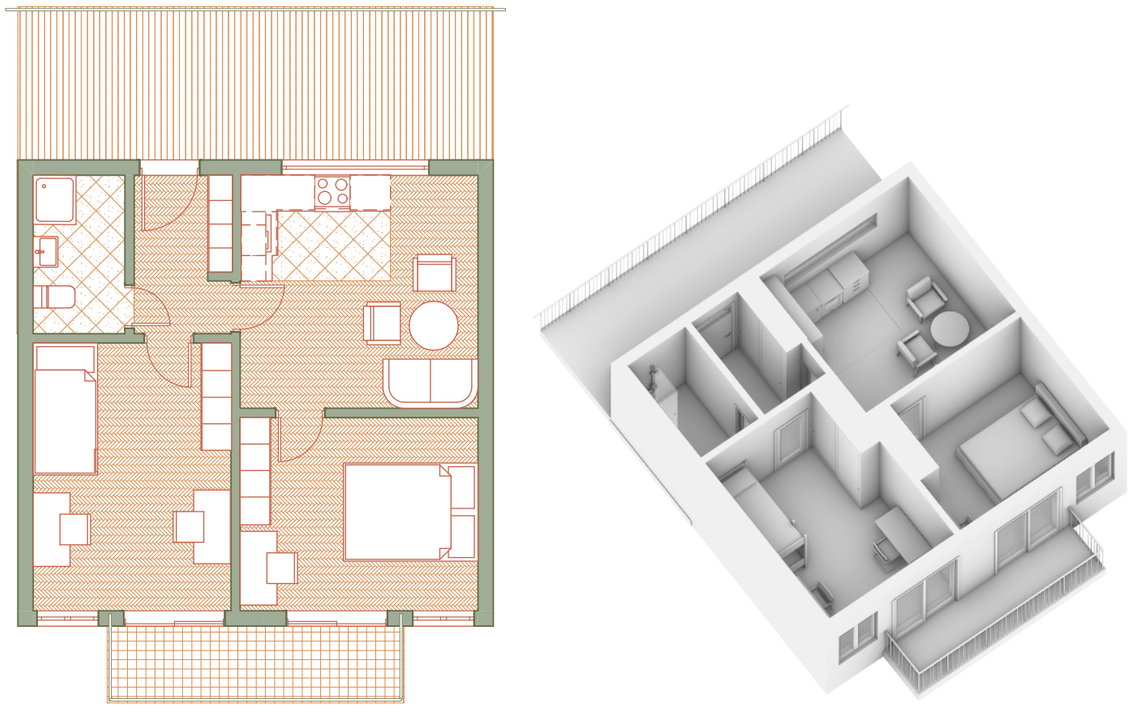
Sickle medick (Medicago falcata)
– deep roots, improves soil quality

E) QUALITY OF LIFE // PRINCIPLES

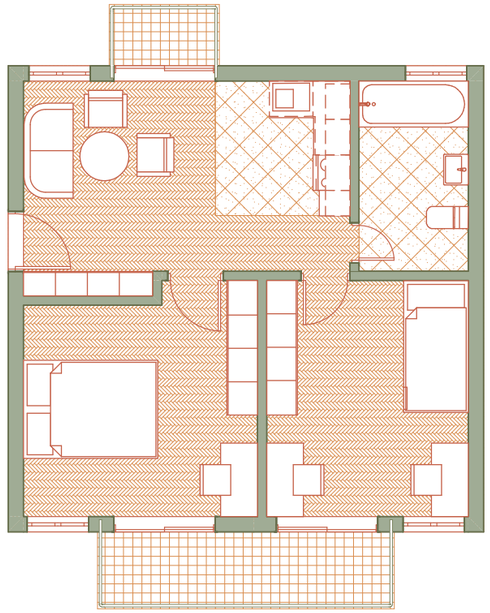
1) SPACE NEEEDS

Variety of flat typologies of flats for better urban mixing and diversity:

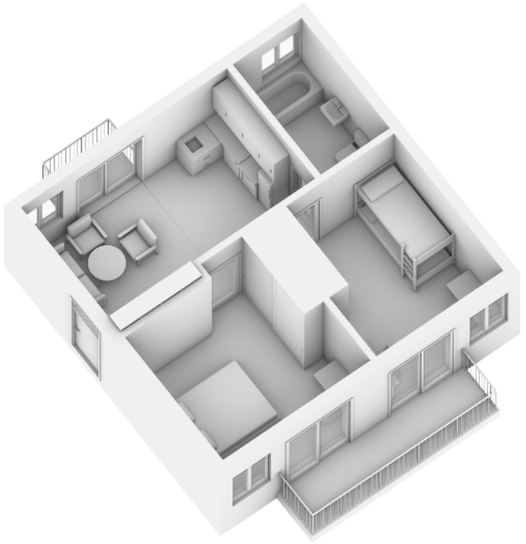
a) STANDARD FAMILY FLAT (50 m)

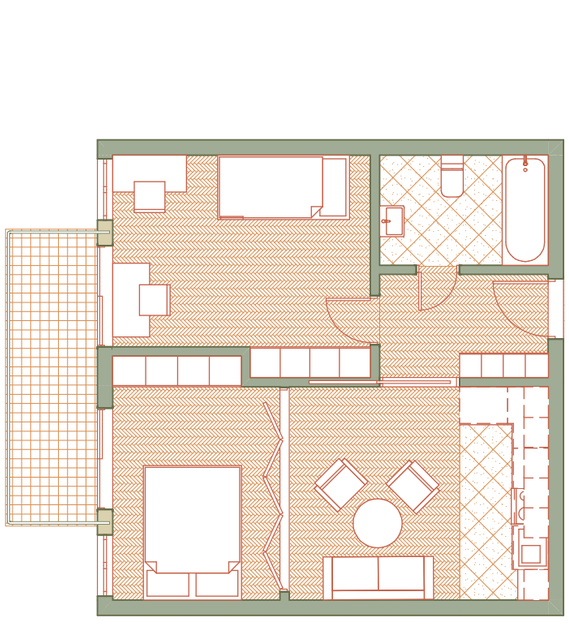


ver. 1 basic - gallery arrangement

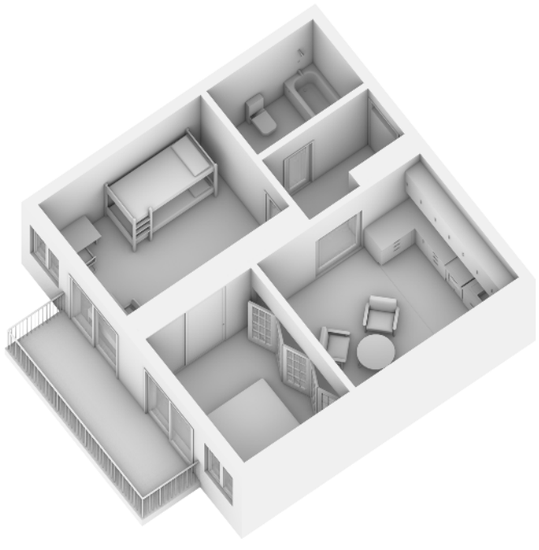


ver. 2 basic - classic arrangement

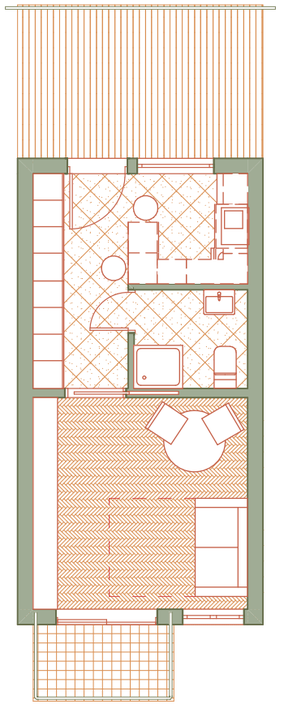


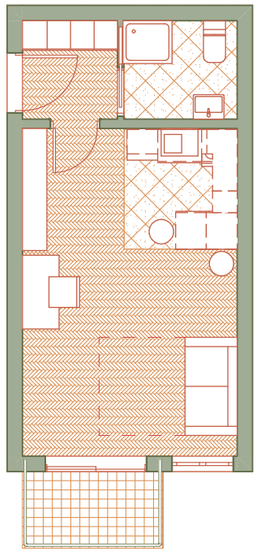


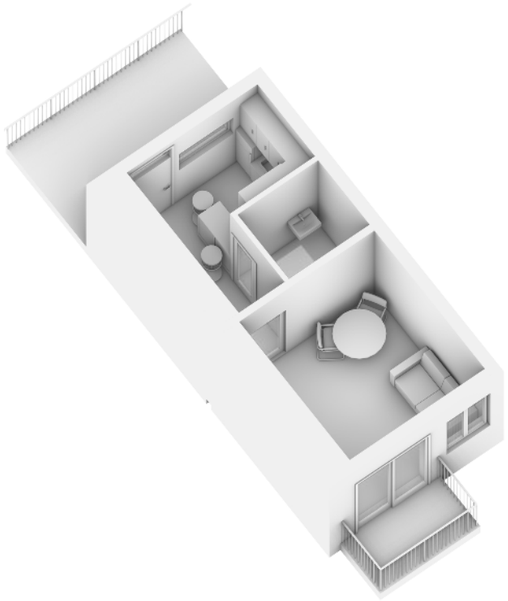
ver. 3 basic - corridor arrangement



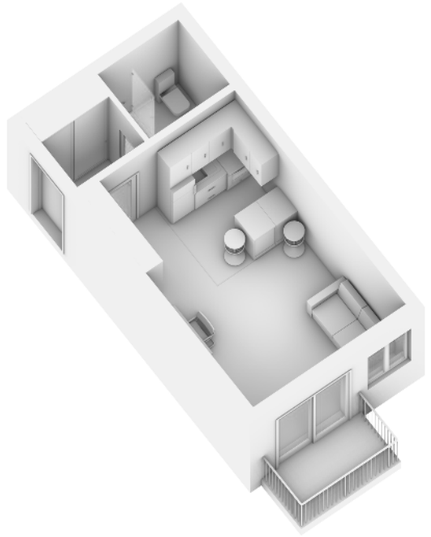
b) SINGLE LIVING FLAT (25m2)





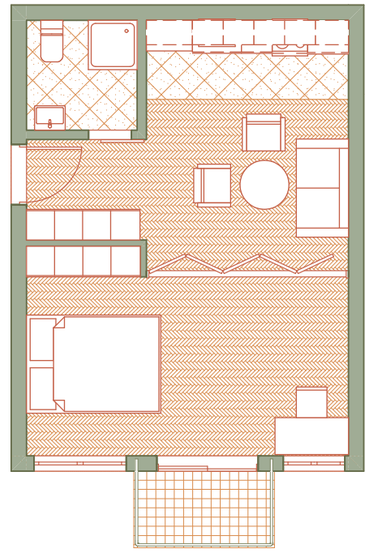


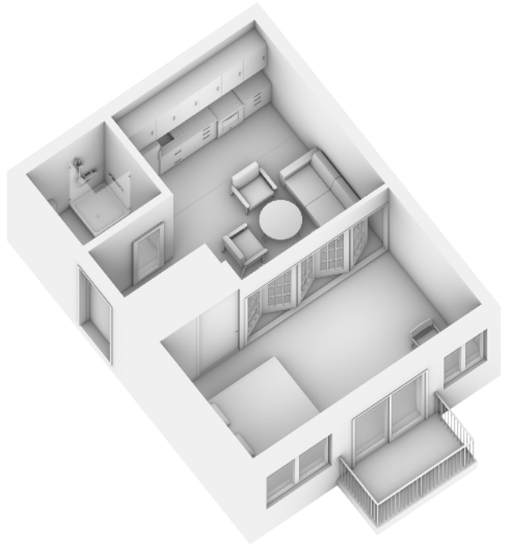
ver. 1 basic - gallery arrangement,
separate kitchen



ver. 2 basic - classic arrangement,
room with kitchenette

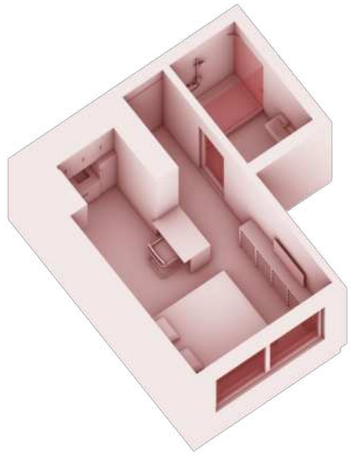
c) FLAT FOR A COUPLE (35m2)





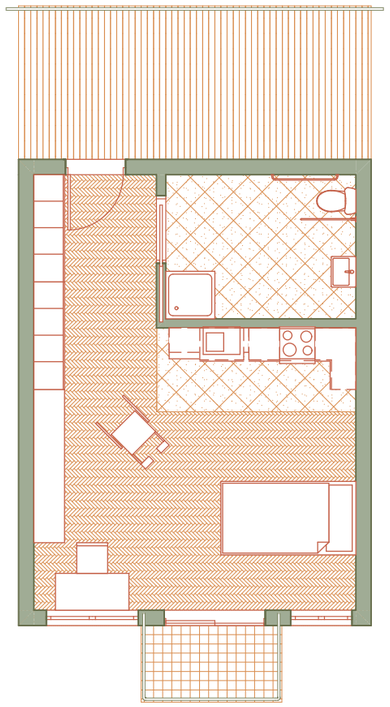
FLAT FOR A COUPLE
- PATODEWELOPERKA (21m2)

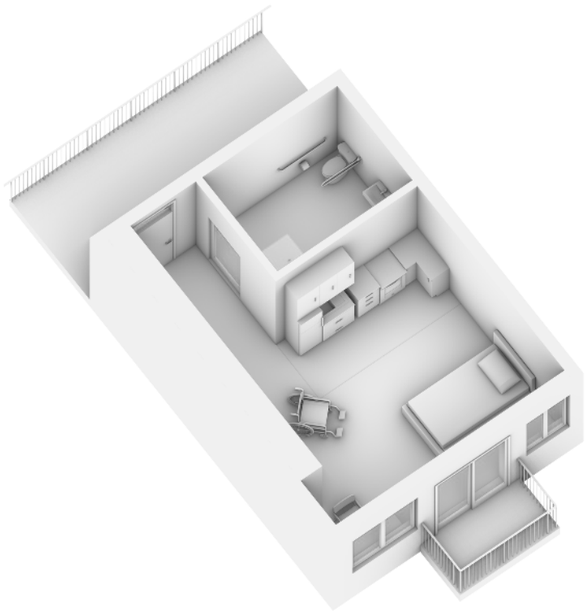




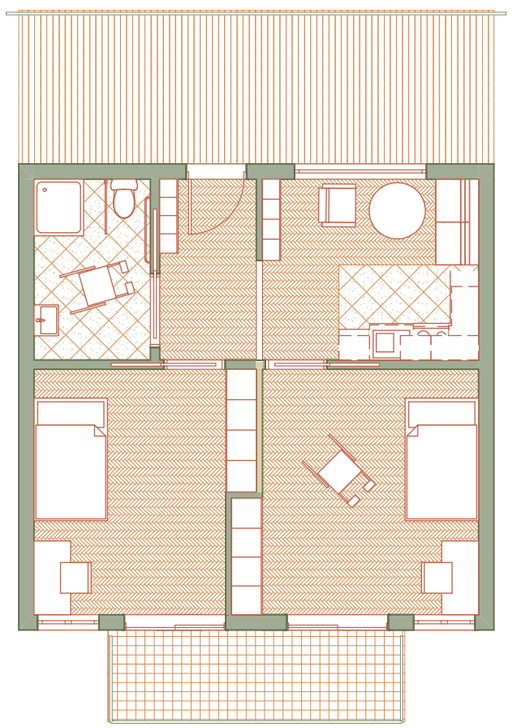
case study of an existing flat -
Rezidence Mozart (Prague)

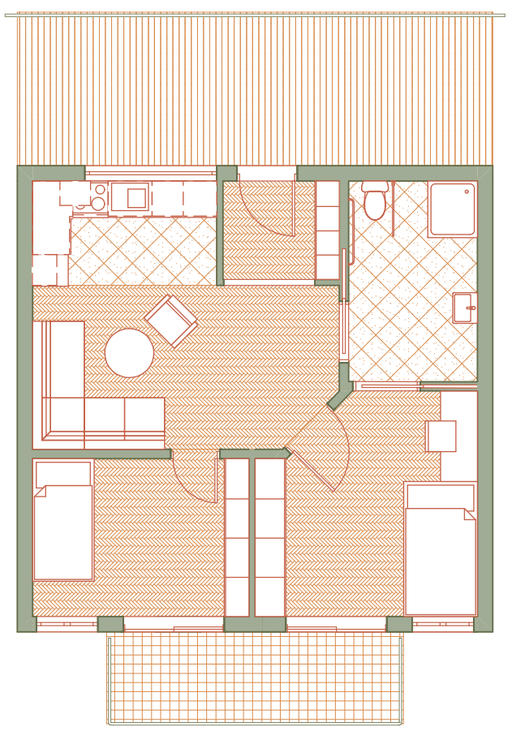
d) SINGLE LIVING FLAT (DISABLED)



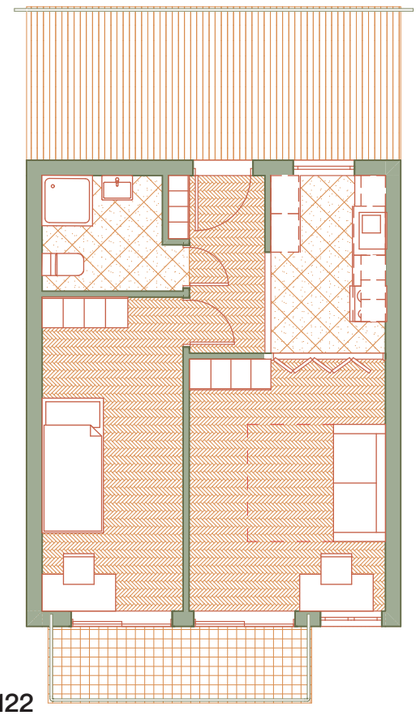


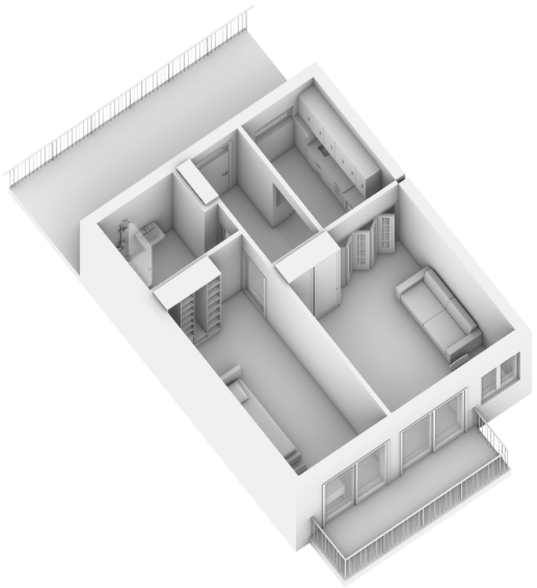
e) STANDARD FLAT (DISABLED) (50 m)

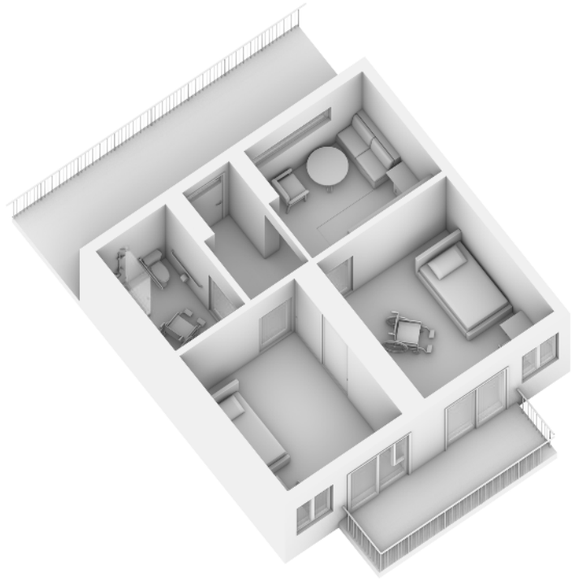




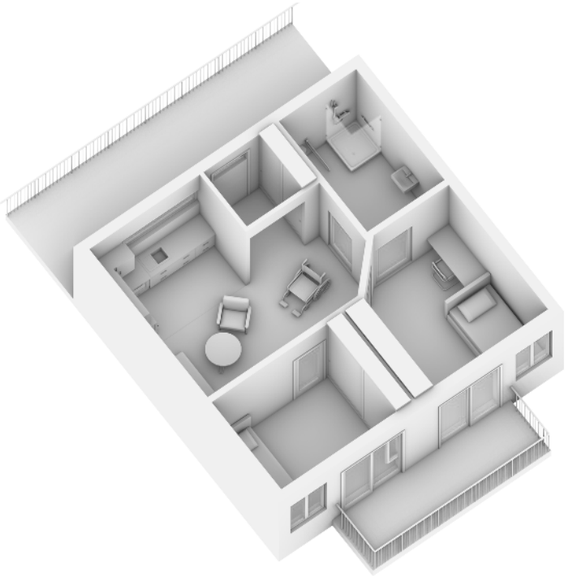
e) SMALL FAMILY FLAT (40 m)





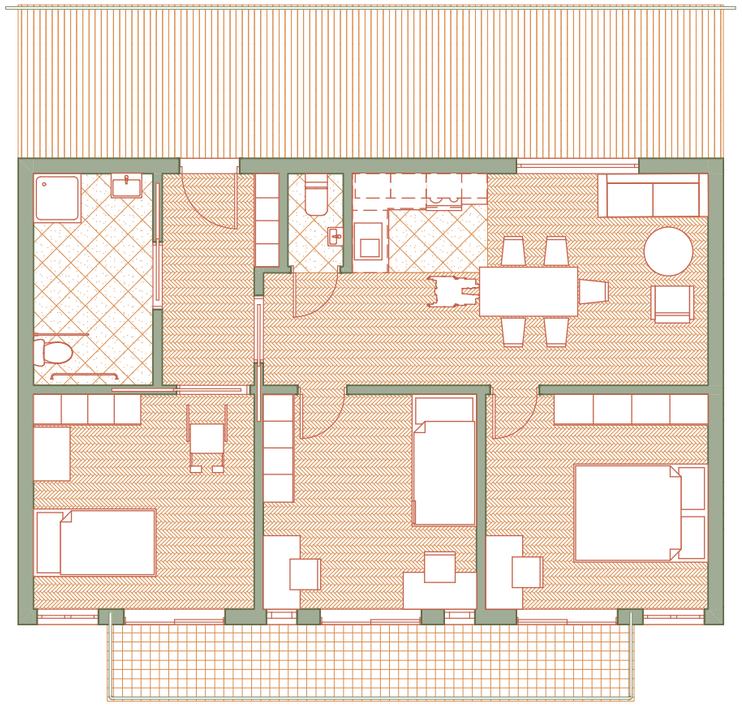


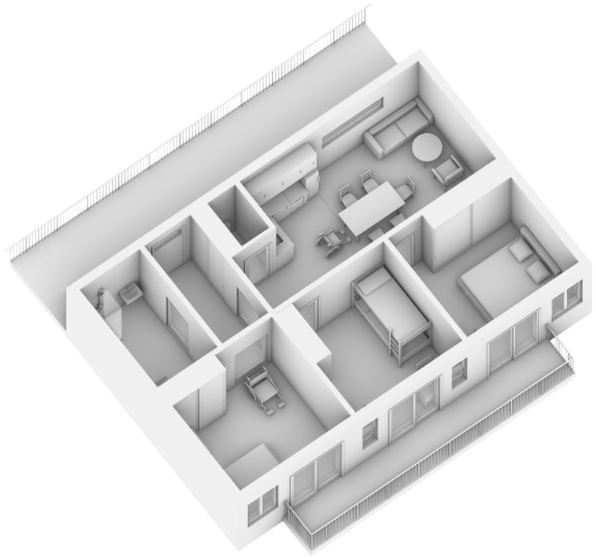
ver. 1 - flat for 2 disabled people (coliving)



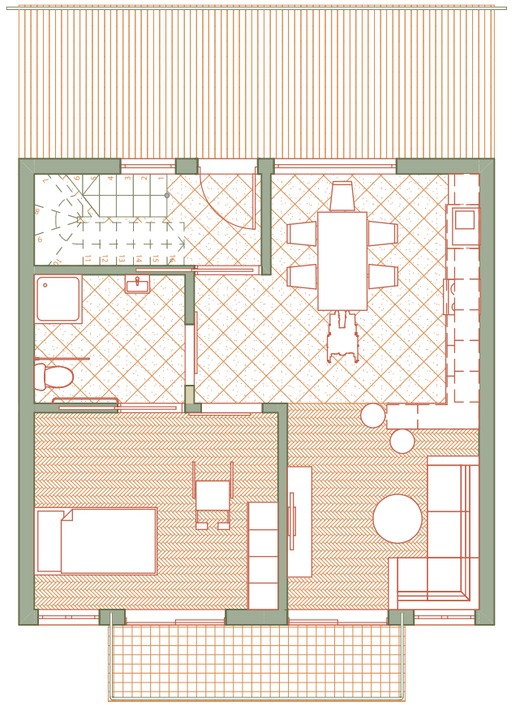
ver. 2 - flat for 1 disabled person with room for medical assistant

f) **LARGE FAMILY** FLAT (80 m)

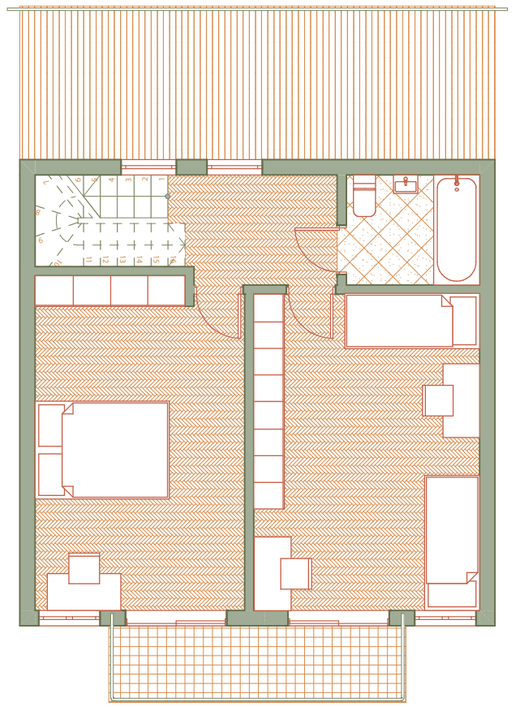




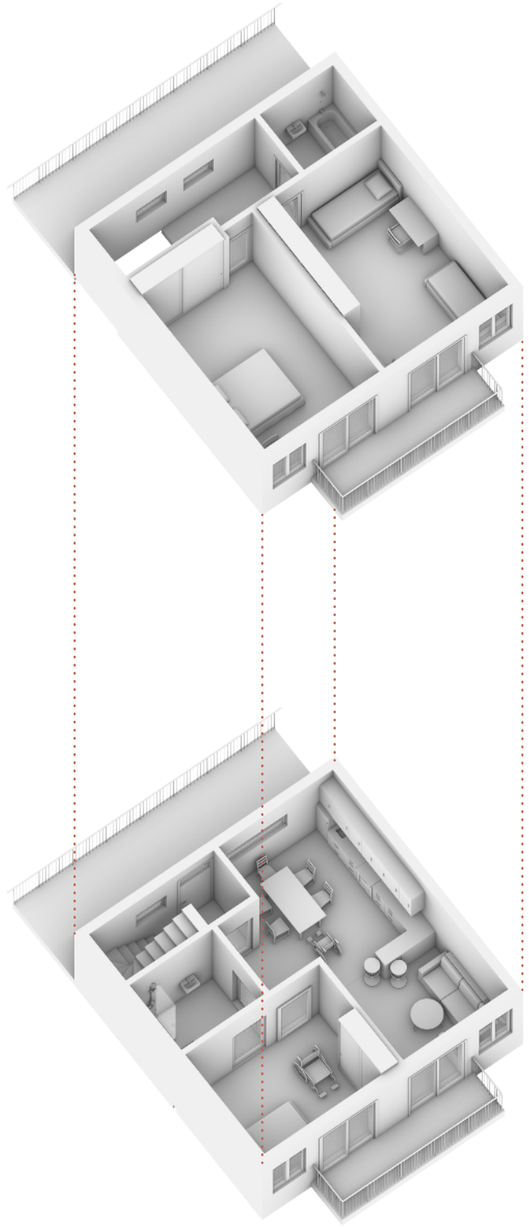
g) **LARGE FAMILY FLAT - MEZZANINE** (100 m)



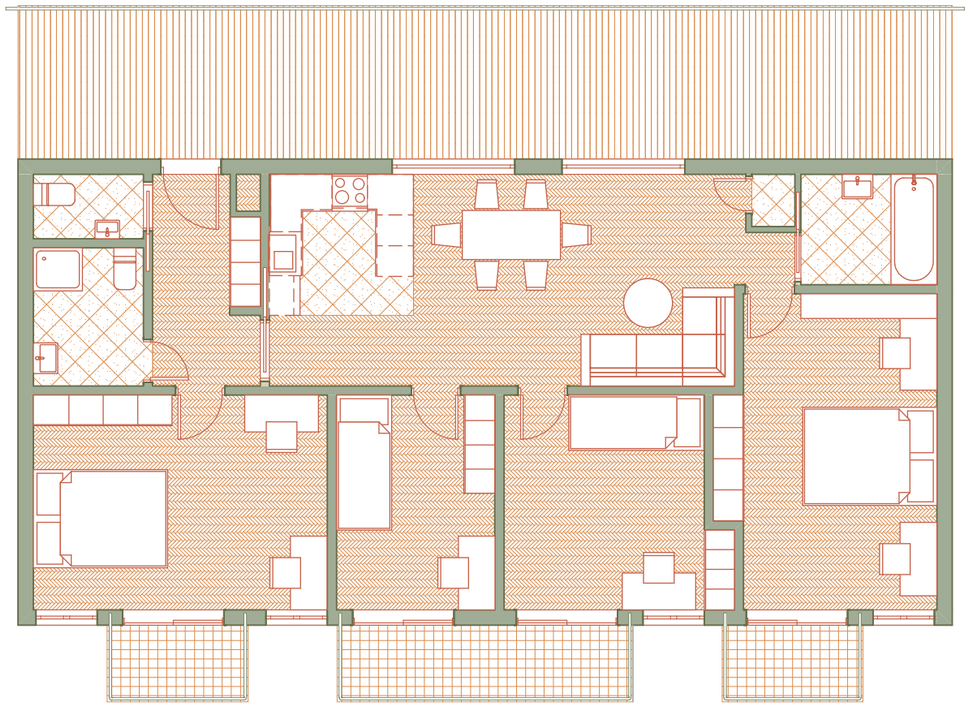
1st floor

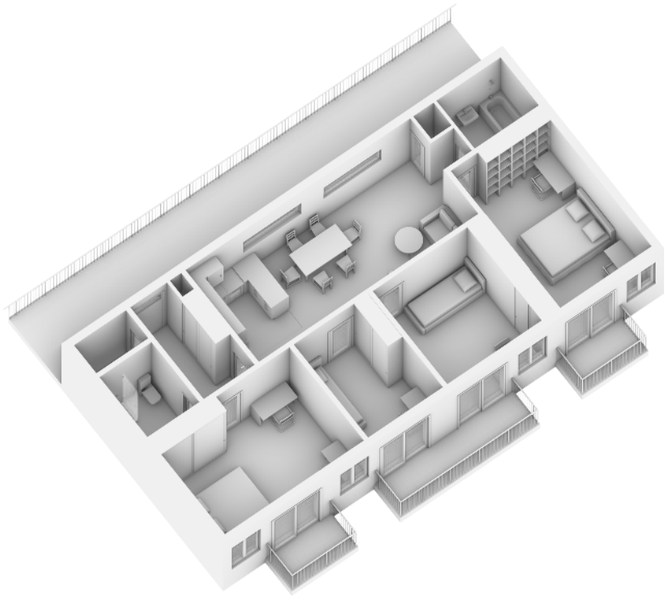


2nd floor

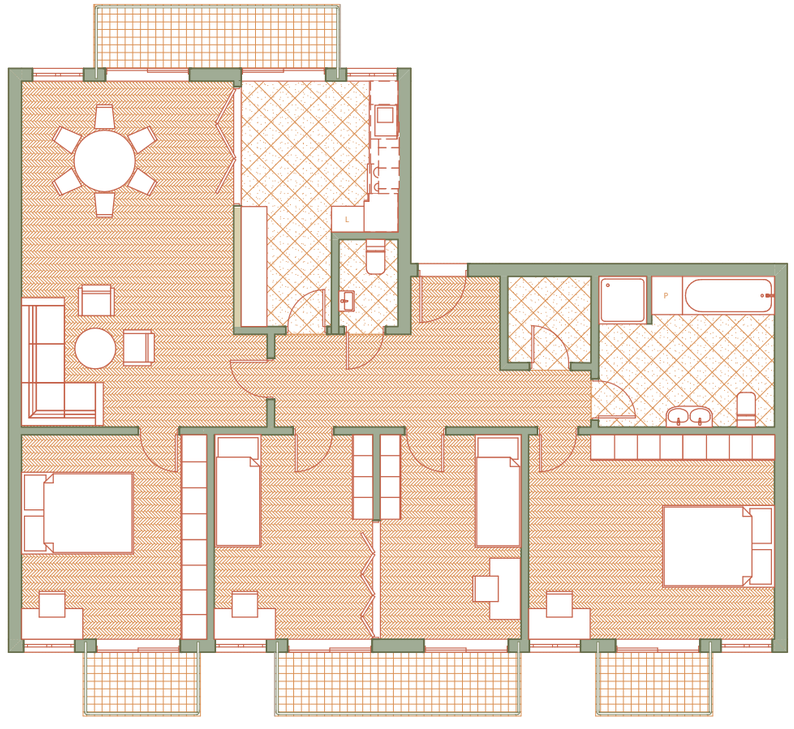


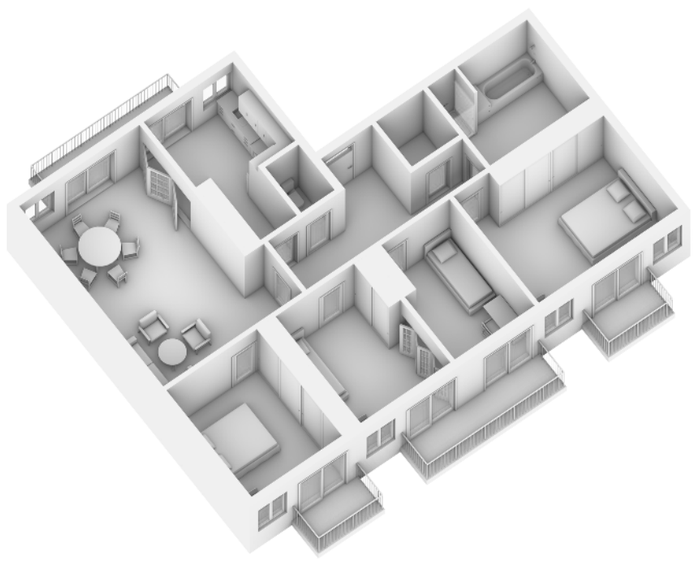
h) YOUNG CO-LIVING FLAT (105 m)
- for young people starting to live alone /



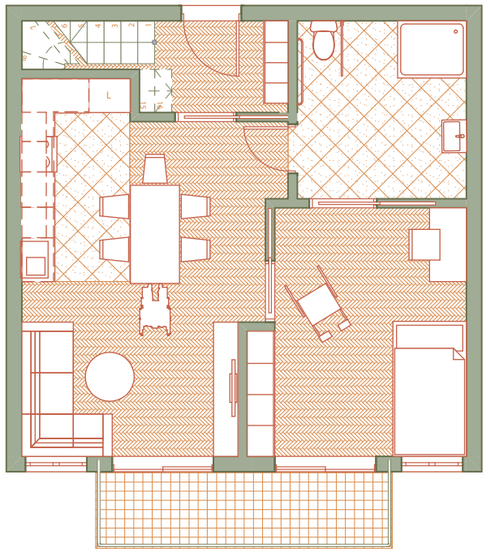


i) EXTRA-LARGE FAMILY FLAT - M5 (125m2)

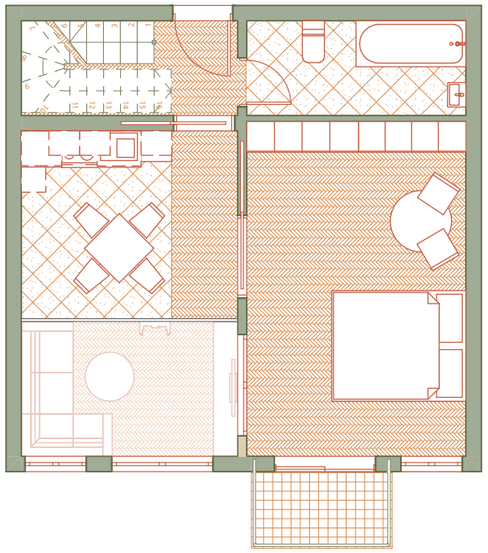




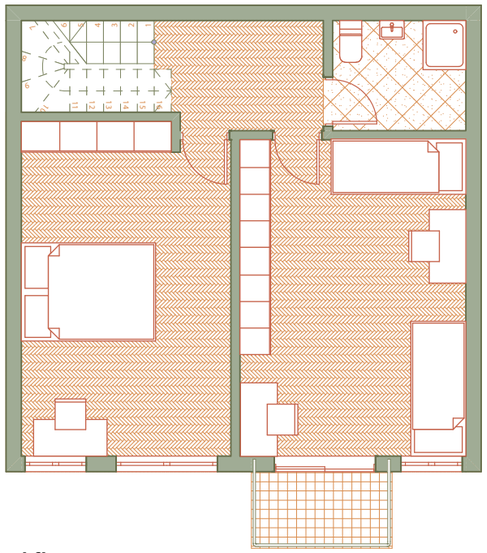
j) EXTRA-LARGE FAMILY FLAT - M5 MEZZANINE (125m2)



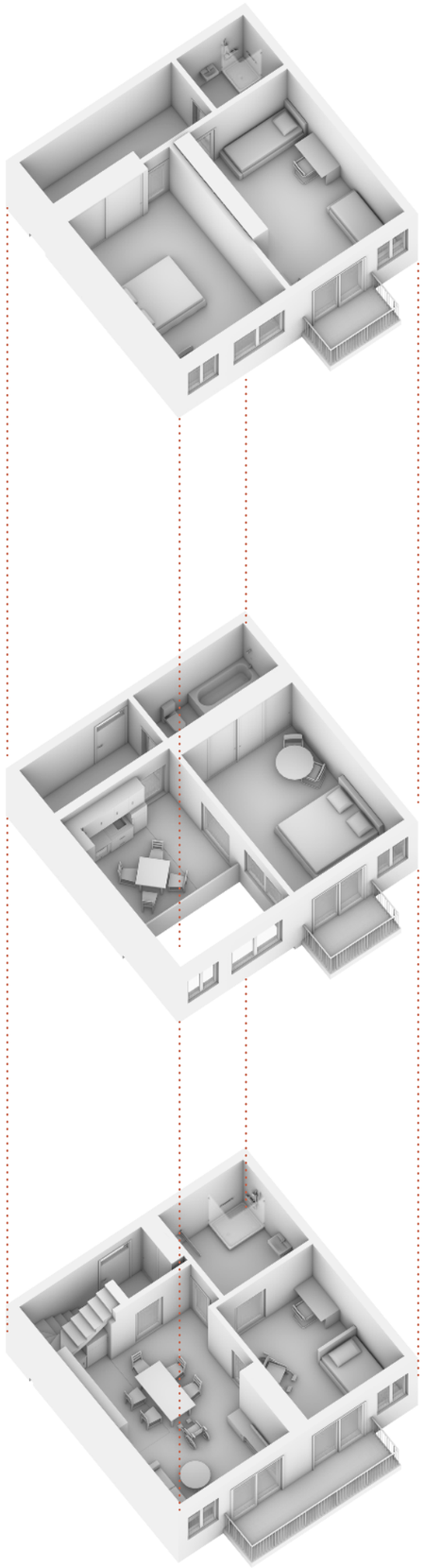
1st floor



2nd floor



3rd floor



Flat spaces rules:

- o Living Room: minimum: 15 m2
  Preferable shape: Rectangular

- o Bedroom:
  Master Bedroom: 12–15 m2
  Additional Bedrooms: 10–12 m2
  Ceiling height: Minimum 2.6 m

- o Kitchen:
  - minimum: 6 m2
  - separate (ideal) or open kitchen
  - shall allow for enough storage, food prep, and cooking zones
  - ventilation: Window + chimney or exhaust fan for airflow

- o Bathroom and Toilet
  - combined: 4.5–6 m2
  - separate WC (ideal): minimum 1.5 m2
  - include proper waterproofing and ventilation

- o Hallways and Corridors:
  - minimum width: 1.2 m for comfortable circulation
  - shall avoid excessive corridor length for better space efficiency.
- o Storage:
  - built-in wardrobes or cupboards at least 2 m2 per person

Flats in any case of ownership shall be revitalised or reconstructed if needed, however new permanent wall separations are not allowed (the number of rooms shall remain the same).

Room space shall account for stable furniture and not „dynamic substitutes“ (e.g. fold-away wall-beds).

Every flat shall be ariented to at least 2 cardinal directions (ideal: N/S or E/W for cross-ventilation).

Every new flat shall have superior sound-insulation – min. 70dB.

Min. Door-space = 0.9m for wheelchair accessibility.

Every level of a mezzanine flat counts as 1 floor.



Balconies:
- compulsory for each flat – balconies / loggia balconies
- possibility of substituting with terrace on higher floors
- ideal: 1.2m large
- possibility of substituting with galleries (min. 2.5m wide)



2) COMMUNAL NEEEDS

Cellar spaces compulsory for each flat (possibility of substituting with attic storage spaces for higher flats) – min. 3 m2

Every building shall have an outer communal space for waste (mixed / paper / plastic / glass)
- IDEAL: community outer space for natural waste (each zone)

Internal staircases shall be lit by natural daylight as well as artificial light

Every aparment building higher then 3 above ground floors shall have an elevator (size accounts for wheelchair dimensions)

Internal corridors longer than 10m shall have access to natural light

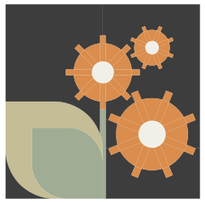
Children playgrounds:
- max proximity from facades: 3m
- min. Area: 20m2
- all outer areas and common inner spaces shall be accessible by wheelchair

Parking is secured by carpark buildings and specialised parking spaces by the pavement.

(however in special cases, if needed, an underground floor might be added, it shall not surpass the building area of the apartment building)

Parking buildings can have larger underground space for parking, however the ground terrain above shall be min. 3m deep for deep rooted flora

85% of bio. area – consists of flora specified in the list on page 20.



3) ECO TECHNOLOGIES

Solar Photovoltaic (PV) Systems
- Only rooftop solar panels for electricity generation allowed (no facade-mounted panels)
- IDEAL: BIPV (Building-Integrated Photovoltaics) incorporates PV directly into building materials (e.g., solar windows, roofing)

Energy-Efficient HVAC Systems
- Necessity: floor heating
- IDEAL: Variable Refrigerant Flow (VRF): Optimizes heating and cooling loads across building zones
- Smart Thermostats: Control and monitor energy usage in real time

LED Lighting Systems for communal spaces

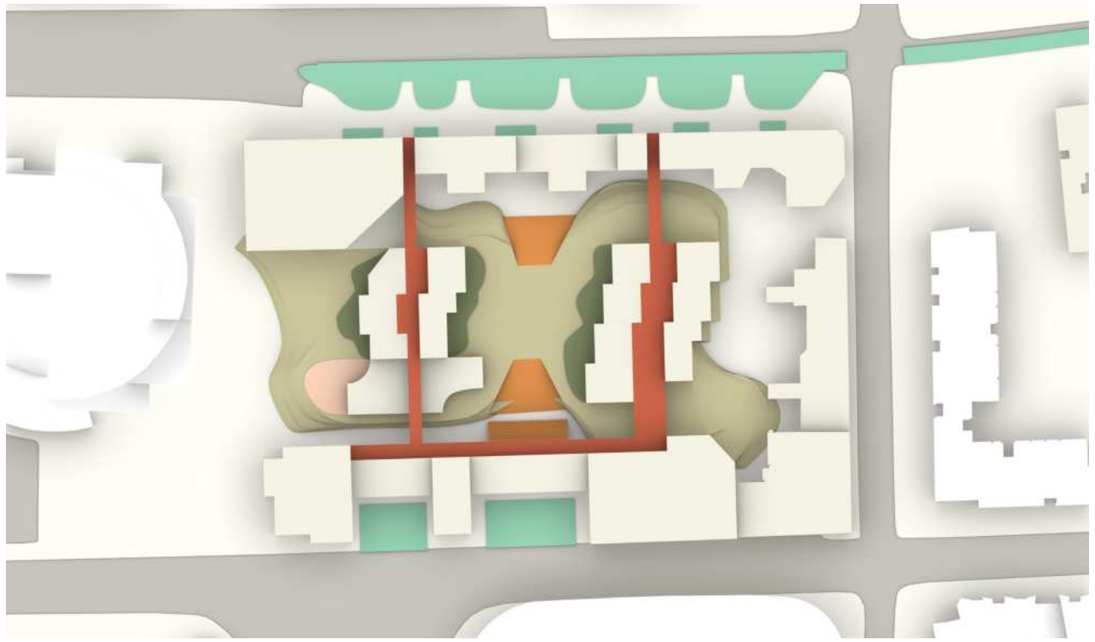
High-Performance Building Envelope
- Insulated walls, triple-glazed windows and airtight construction.
- Reflective or green roofing to minimize heat absorption
- Extensive green roof areas count as 0.3
- intensive green roof areas count as 0.6

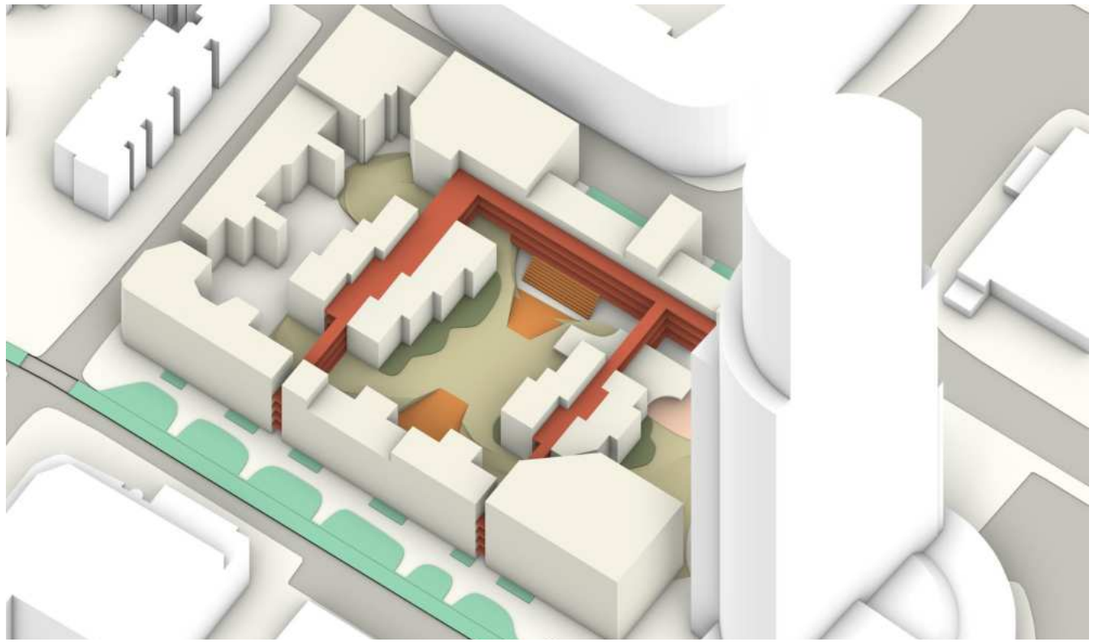
Water collection
- IDEAL: Greywater Recycling Systems - reuses water from sinks, showers, and laundry for irrigation or flushing

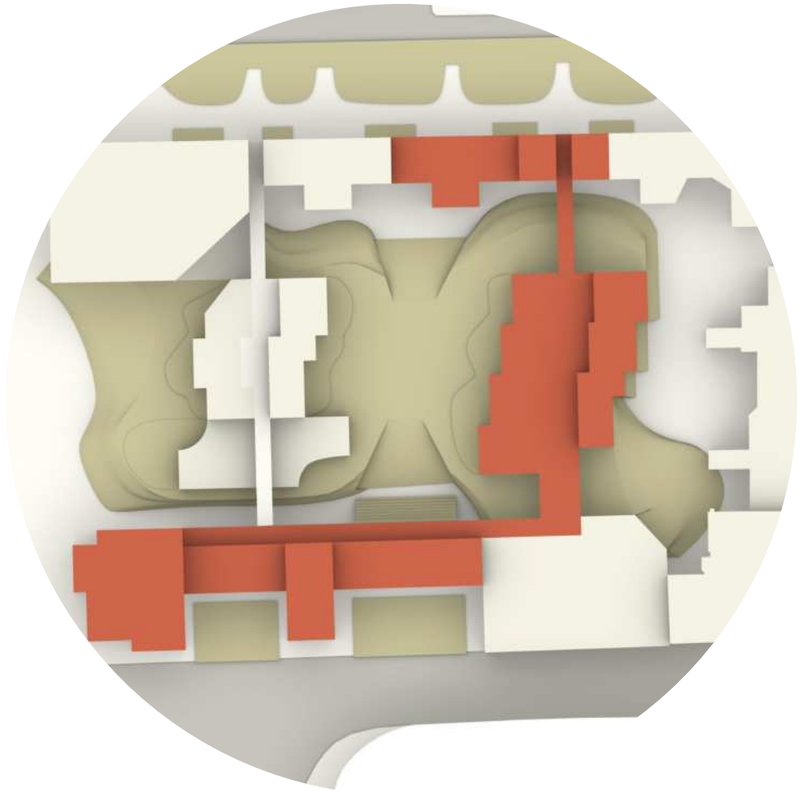
Material ecology:
- IDEAL: material RE-USE
- Analysis of near proximity (local) building material producers
- Every zone – specific colour/material palette with specification before design
- IDEAL: collaboration with local artisans/artists

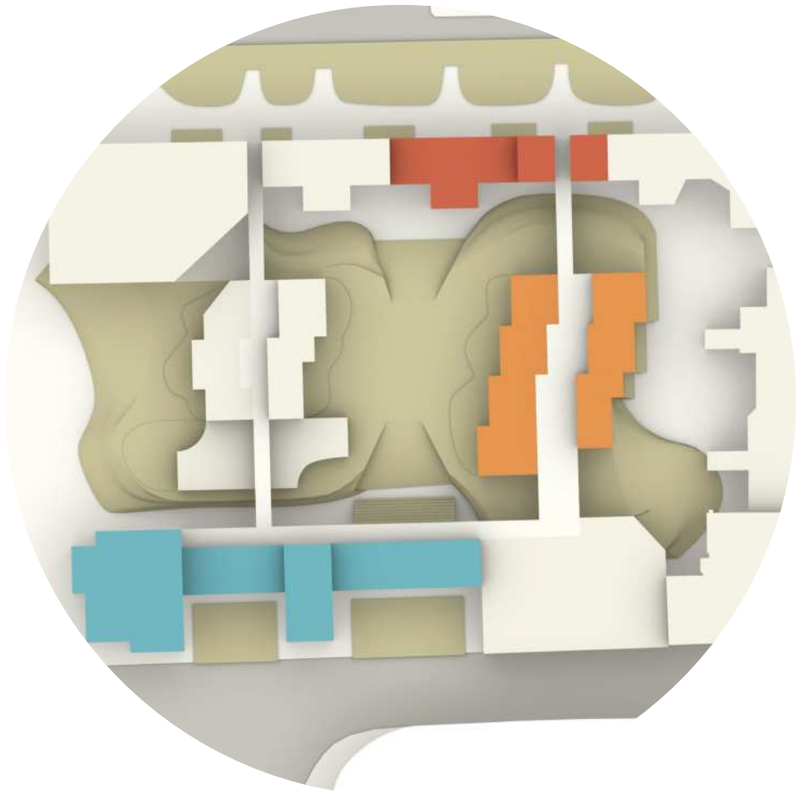
7] SOCJO -DEWELOPERKA EXPERIMENTAL DESIGN



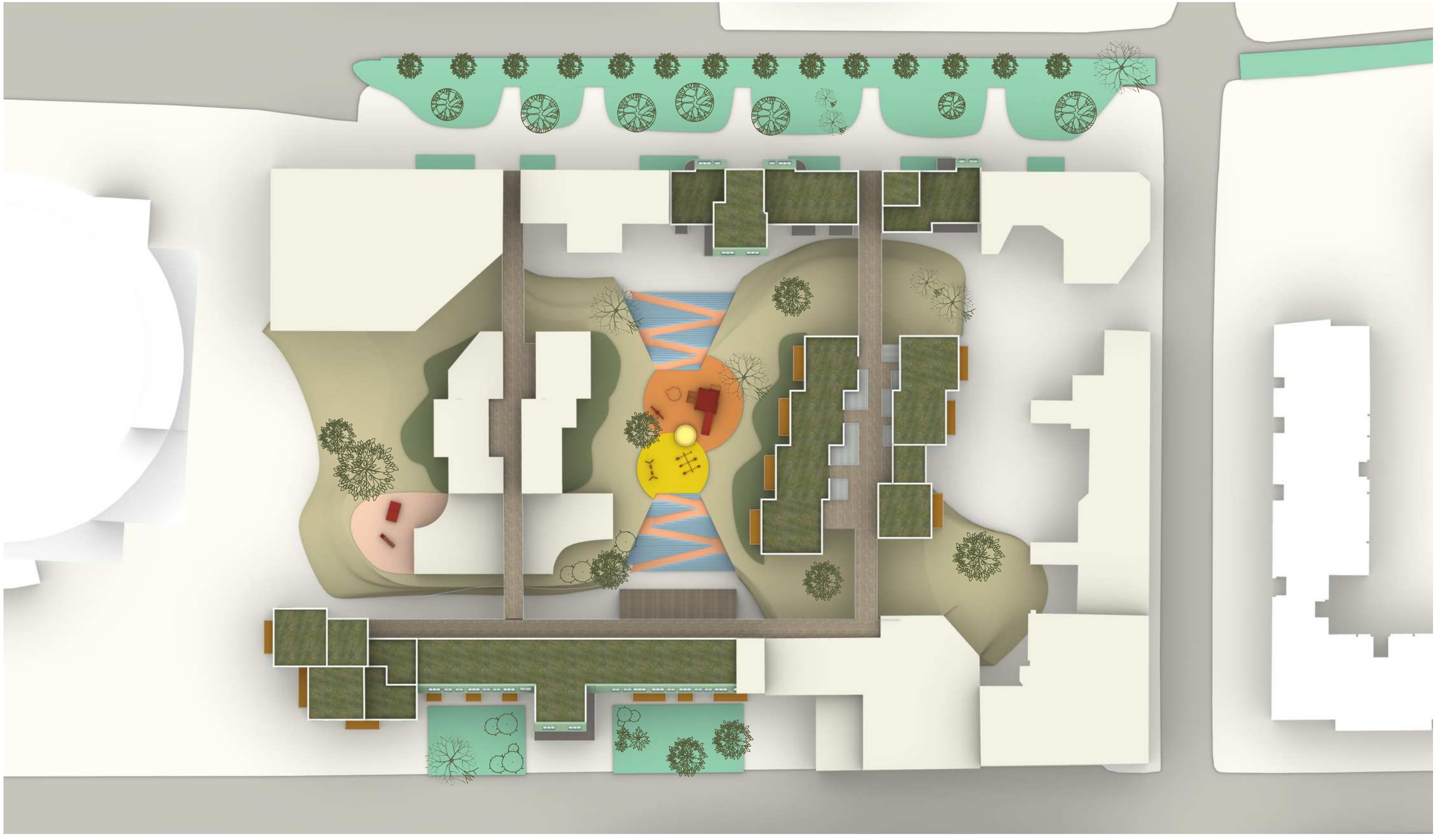


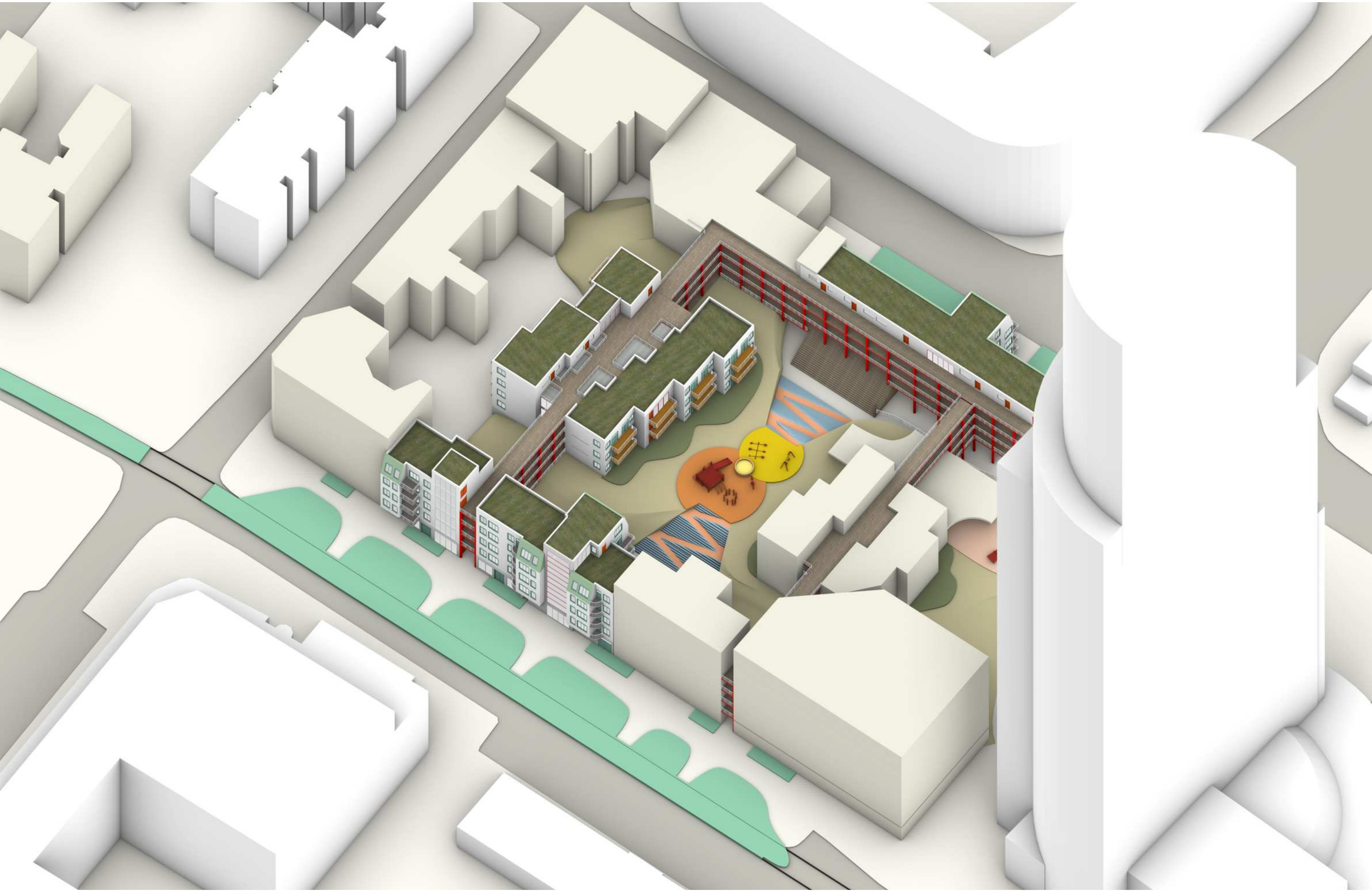




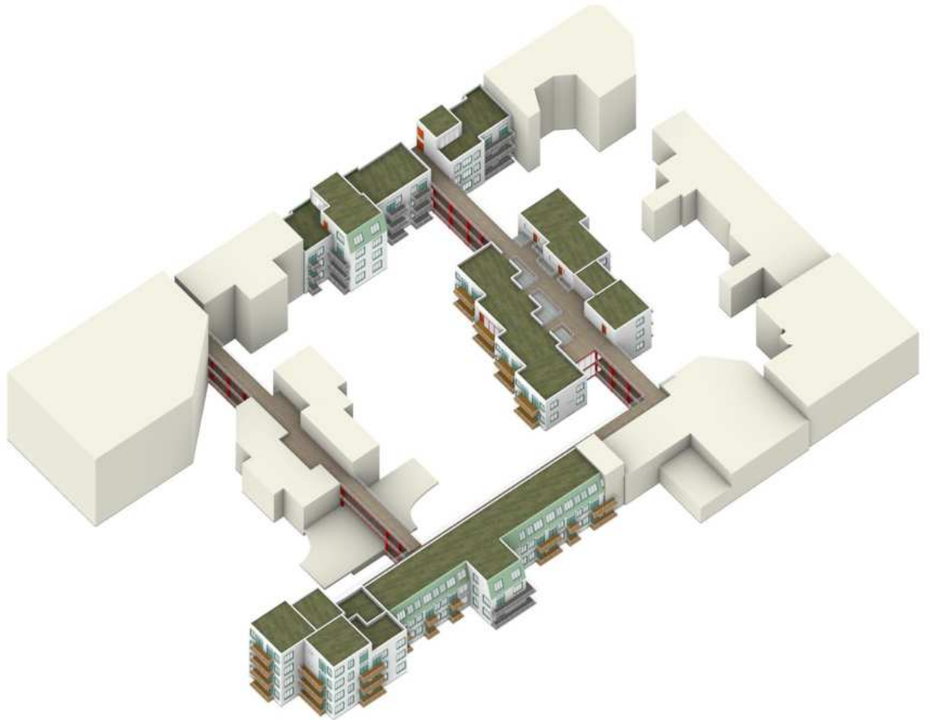


first draft of the final proposal and an urban section

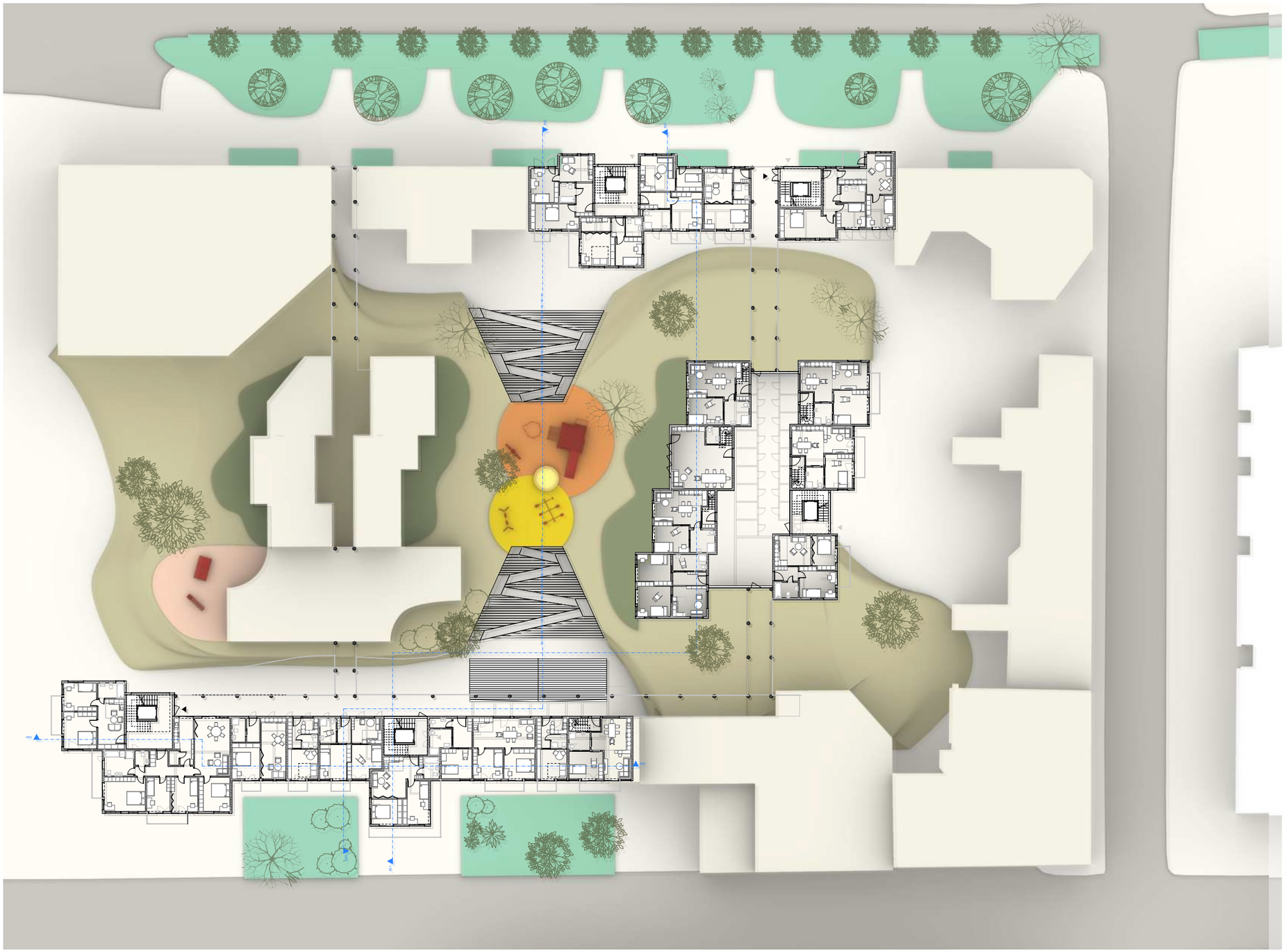


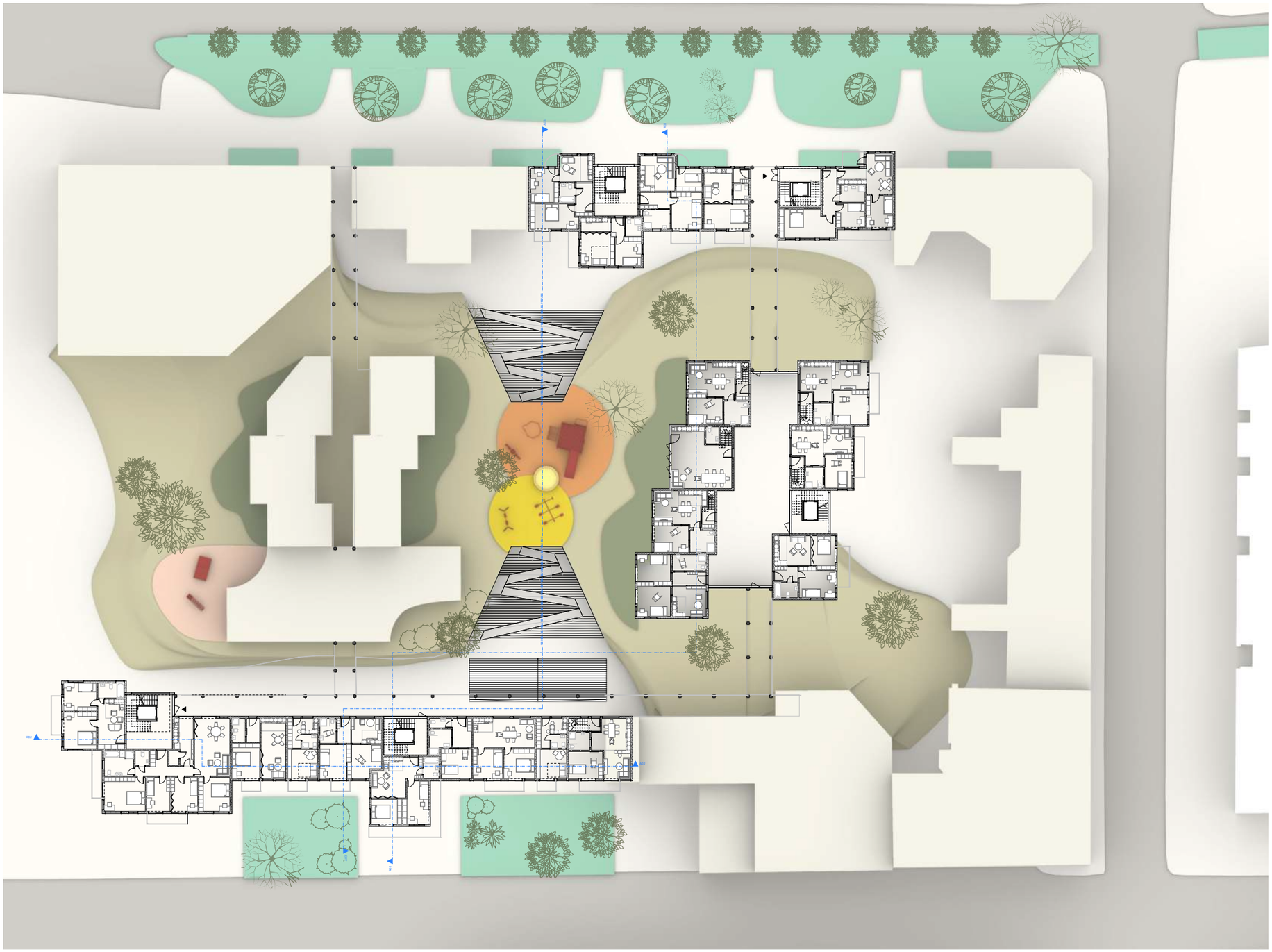


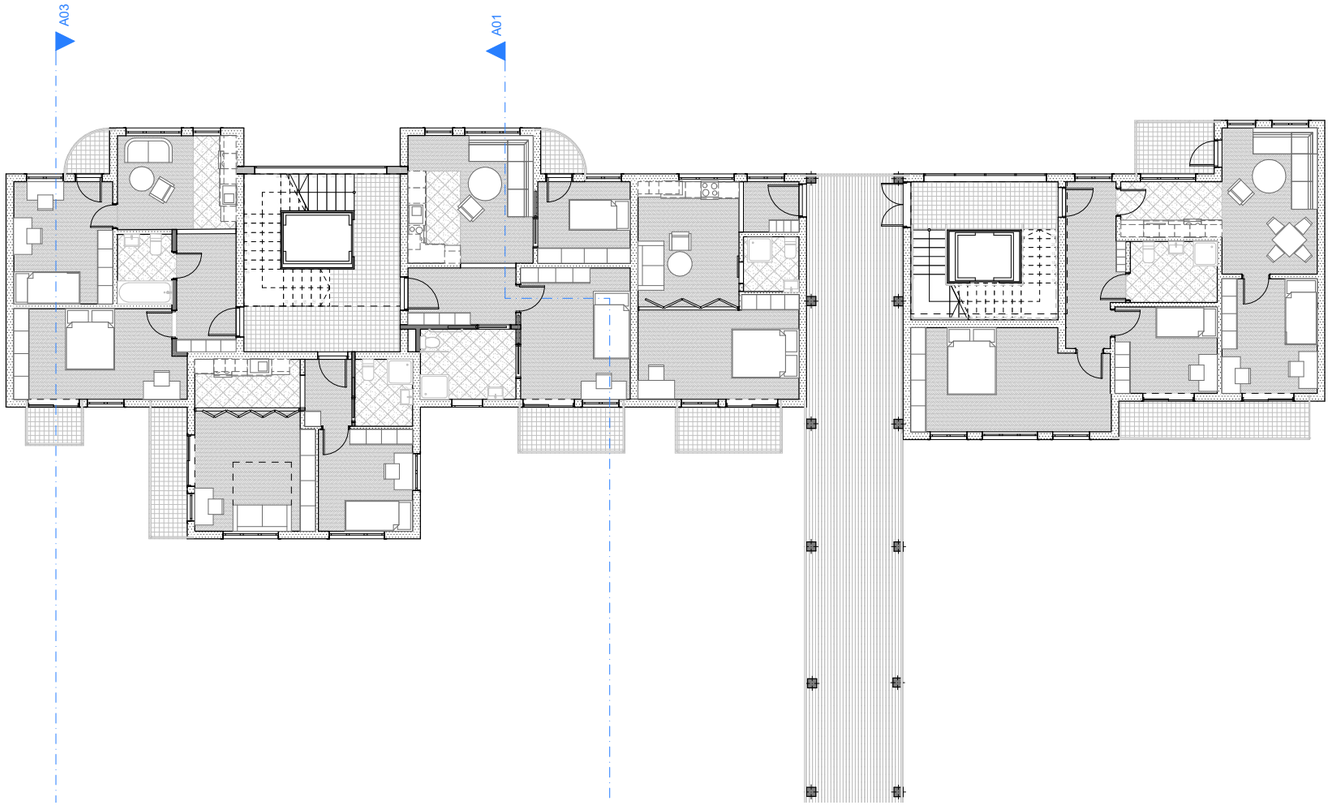


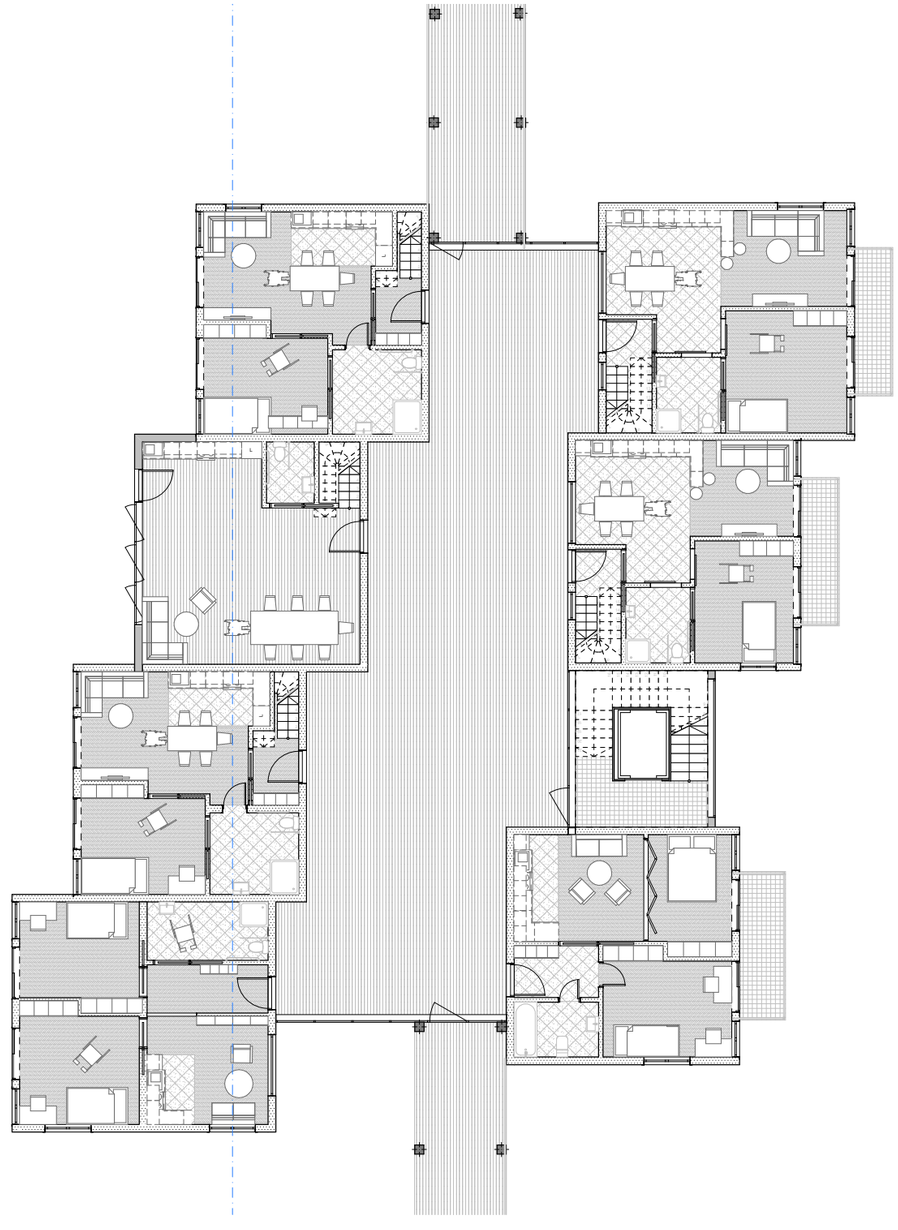


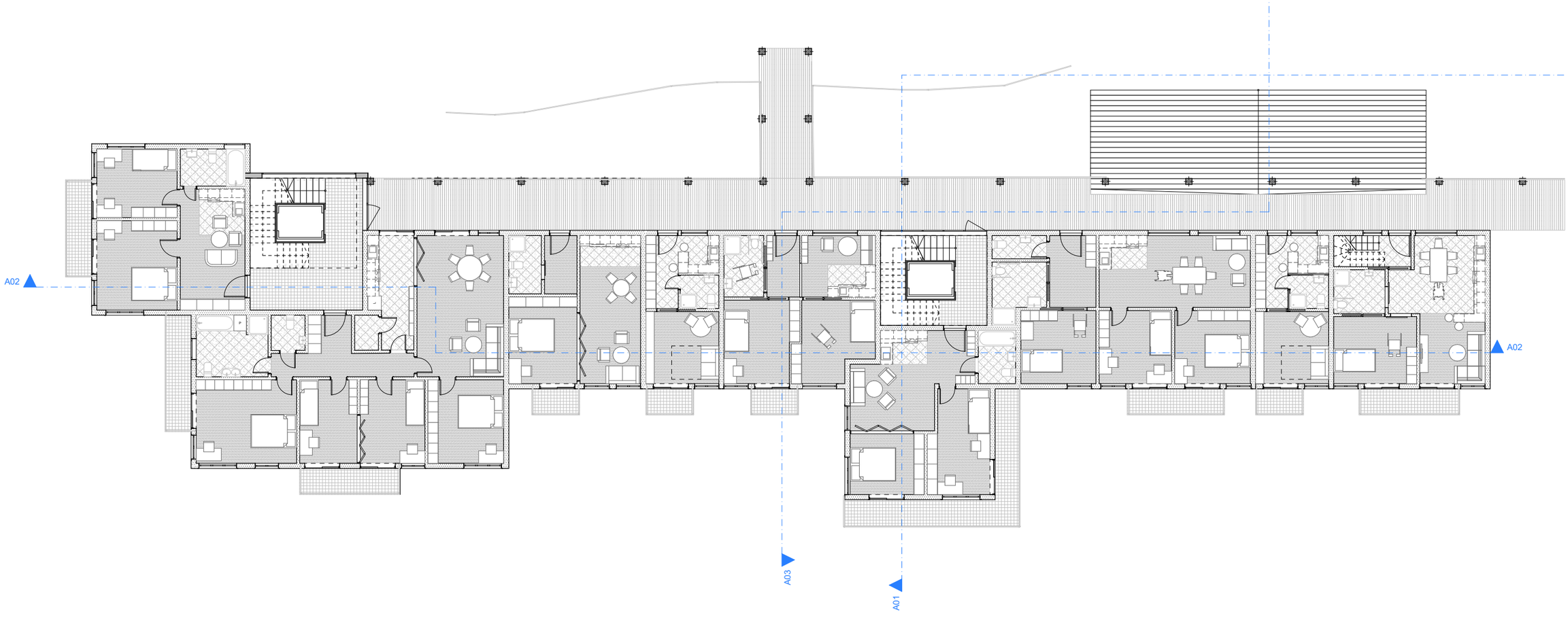




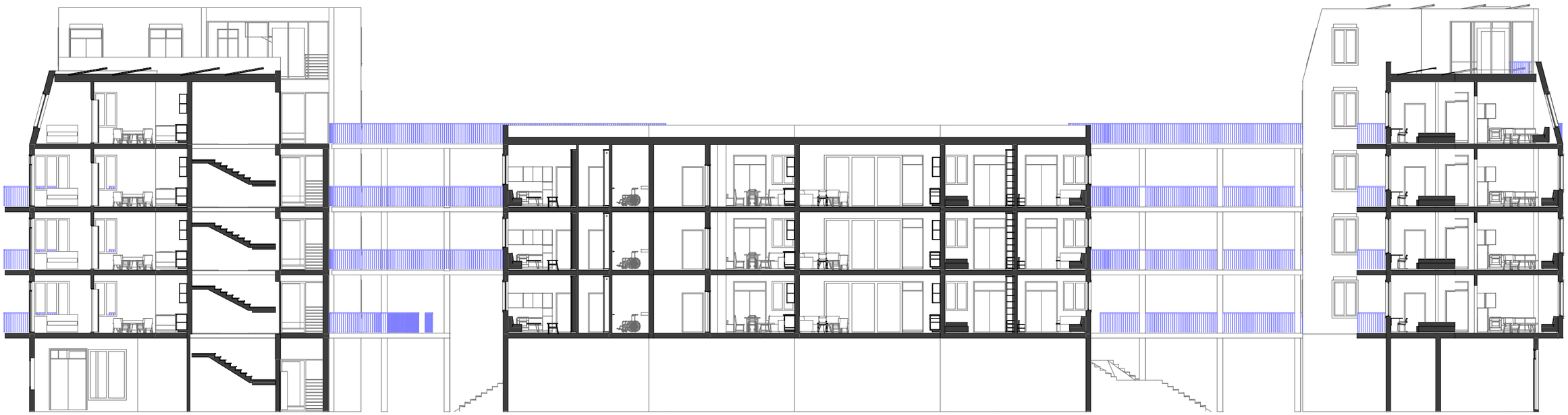



A03
A01




A02
A02
A03
A01



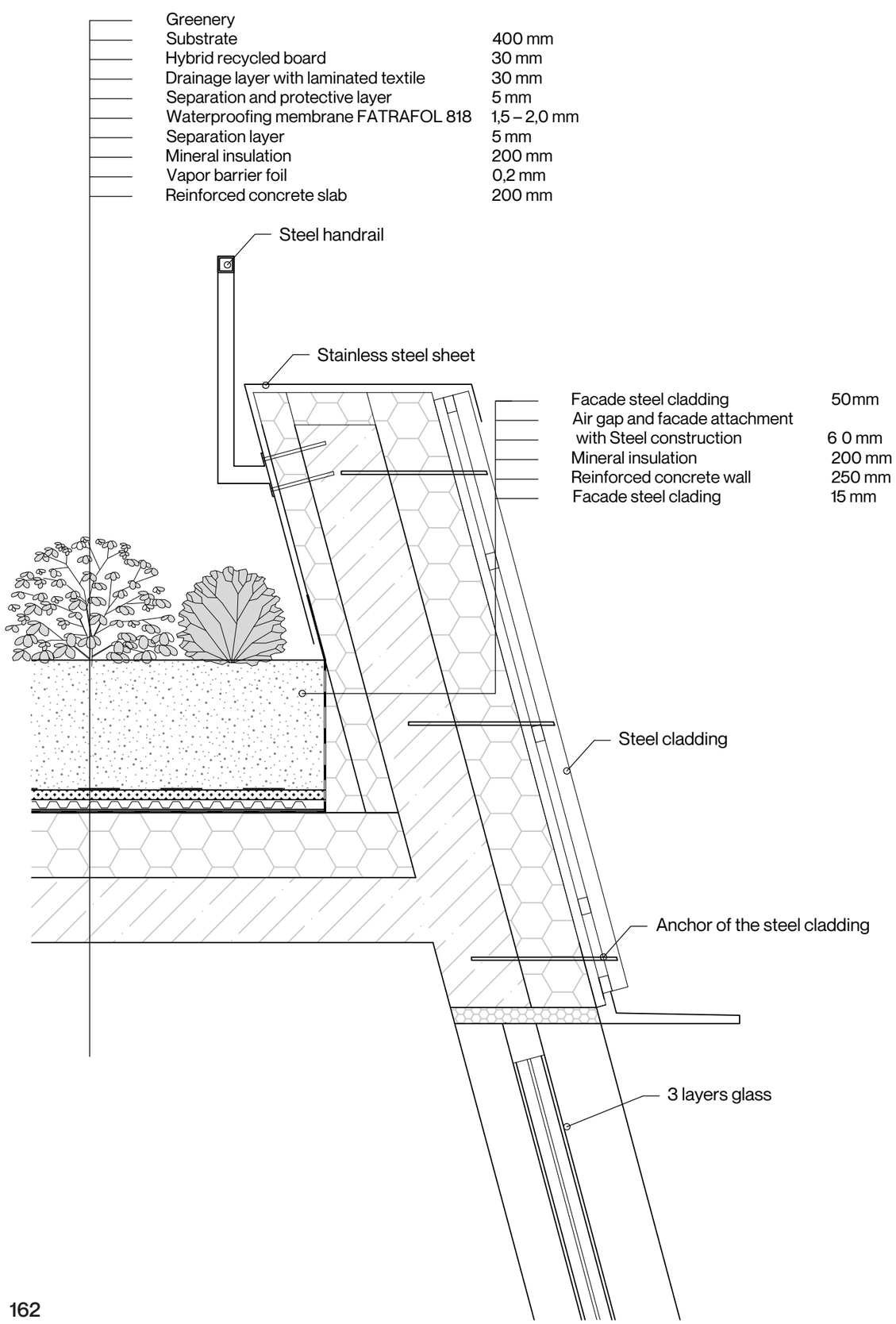






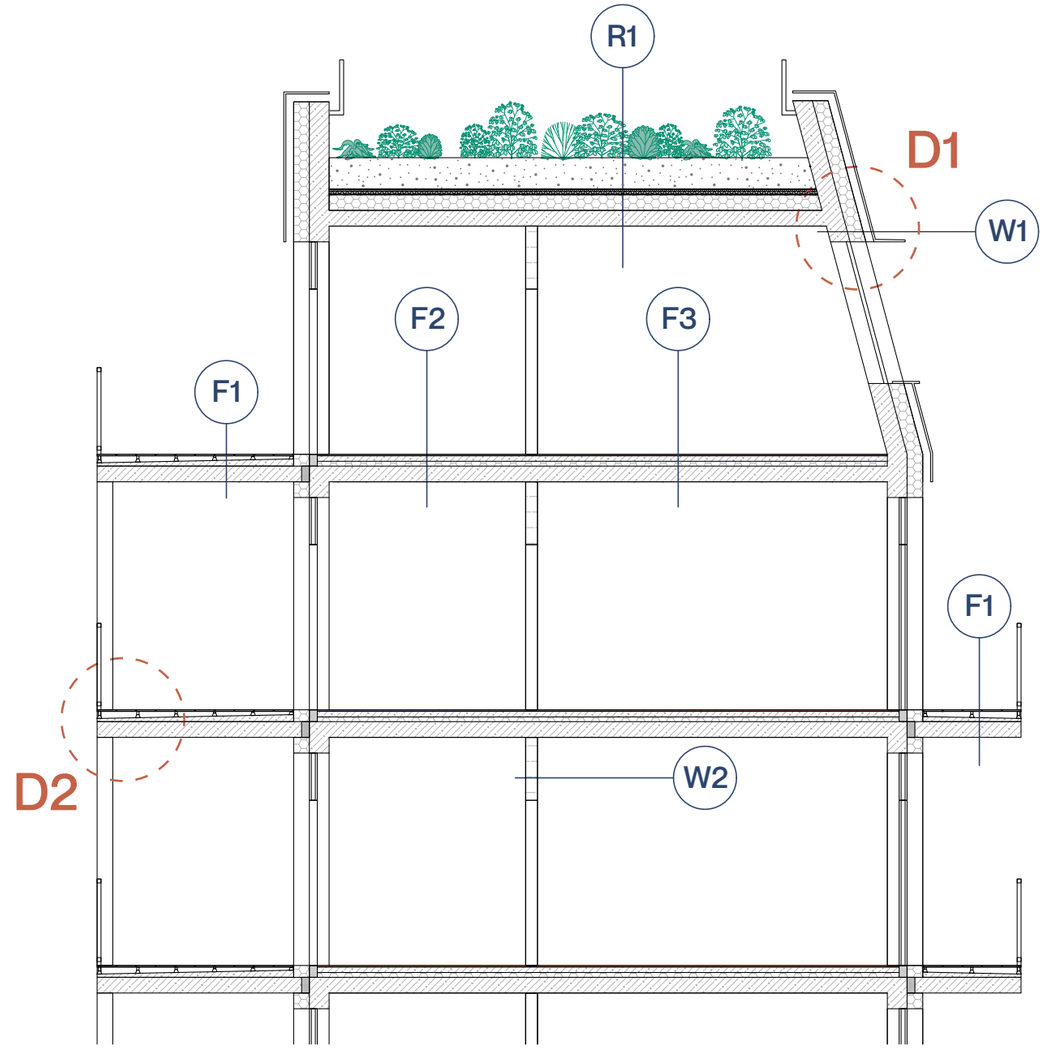






Greenery	
Substrate	400 mm
Hybrid recycled board	30 mm
Drainage layer with laminated textile	30 mm
Separation and protective layer	5 mm
Waterproofing membrane FATRAFOL 818	1,5 – 2,0 mm
Separation layer	5 mm
Mineral insulation	200 mm
Vapor barrier foil	0,2 mm
Reinforced concrete slab	200 mm

Facade steel cladding	50mm
Air gap and facade attachment with Steel construction	6 0 mm
Mineral insulation	200 mm
Reinforced concrete wall	250 mm
Facade steel clading	15 mm



W1

Facade steel cladding	25 mm
Air gap and facade attachment	100 mm
Mineral insulation	200 mm
Reinforced concrete wall	250 mm
Plaster	15 mm

W2

Plaster	15 mm
Non-load bearing ceramic partition wall	115 mm
Plaster	15 mm

F1

Terrace paving	20 mm
Rectification adjustable targets	40-90 mm
PVC foil	-
Separation geotextile	-
Cement screed (2%)	40-90 mm
Reinforced concrete slab	200 mm

F2

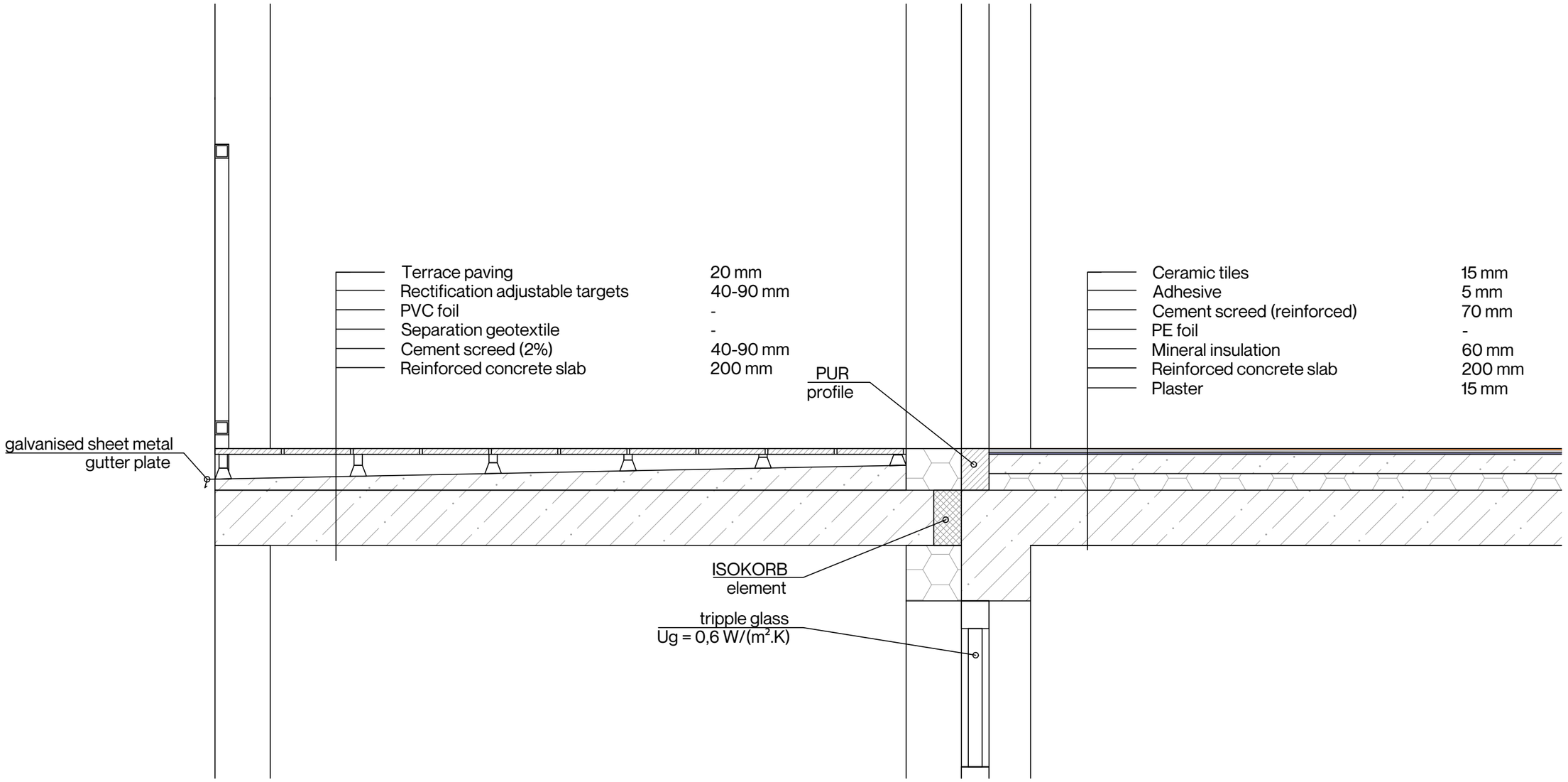
Ceramic tiles	15 mm
Adhesive	5 mm
Cement screed (reinforced)	70 mm
PE foil	-
Mineral insulation	60 mm
Reinforced concrete slab	200 mm
Plaster	15 mm

F3

Parquet floor	15 mm
Adhesive	5 mm
Cement screed (reinforced)	70 mm
PE foil	-
Mineral insulation	60 mm
Reinforced concrete slab	200 mm
Plaster	15 mm

R1

Greenery	
Substrate	400 mm
Hybrid recycled board	30 mm
Drainage layer with laminated textile	30 mm
Separation and protective layer	5 mm
Waterproofing membrane FATRAFOL 818	1,5 – 2,0 mm
Separation layer	5 mm
Mineral insulation	200 mm
Vapor barrier foil	0,2 mm
Reinforced concrete slab	200 mm


Terrace paving 20 mm
Rectification adjustable targets 40-90 mm
PVC foil -
Separation geotextile -
Cement screed (2%) 40-90 mm
Reinforced concrete slab 200 mm
PUR profile
galvanised sheet metal gutter plate
ISOKORB element
tripple glass Ug = 0,6 W/(m².K)
Ceramic tiles 15 mm
Adhesive 5 mm
Cement screed (reinforced) 70 mm
PE foil -
Mineral insulation 60 mm
Reinforced concrete slab 200 mm
Plaster 15 mm





















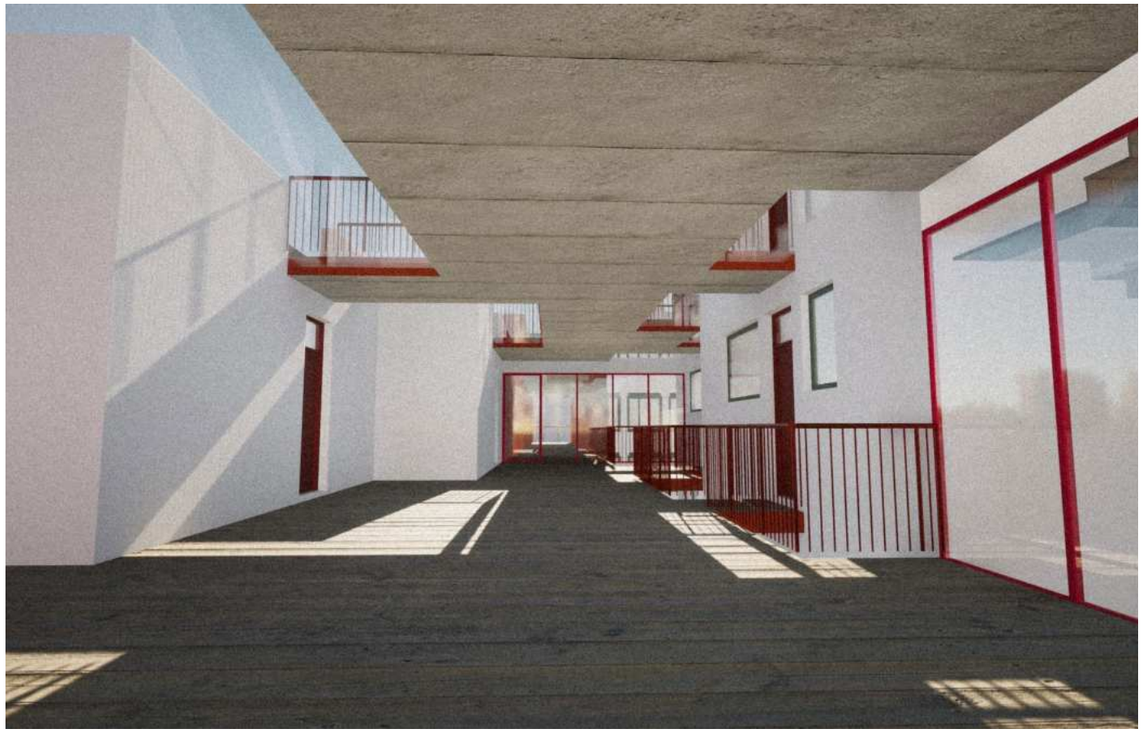




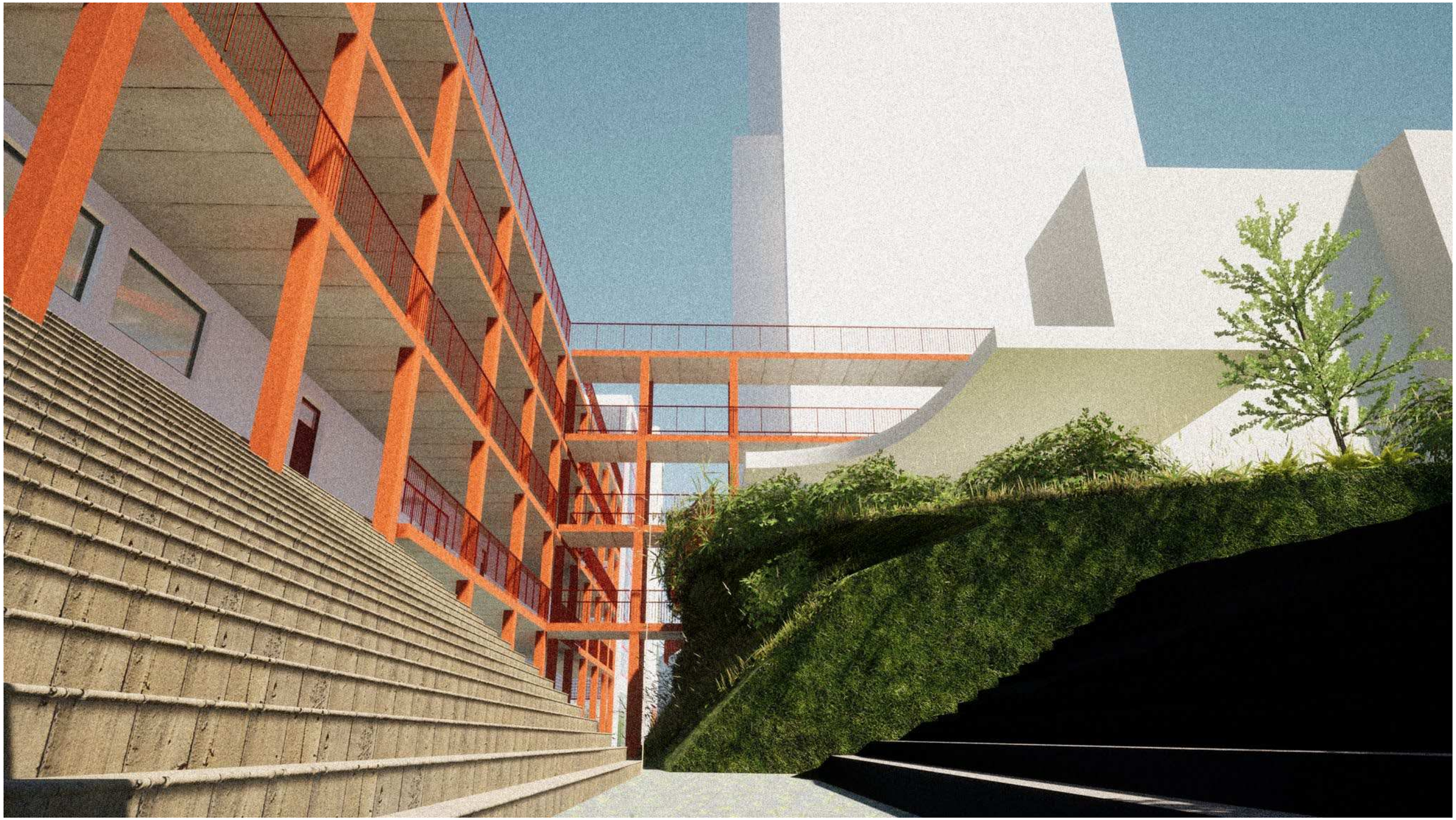










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