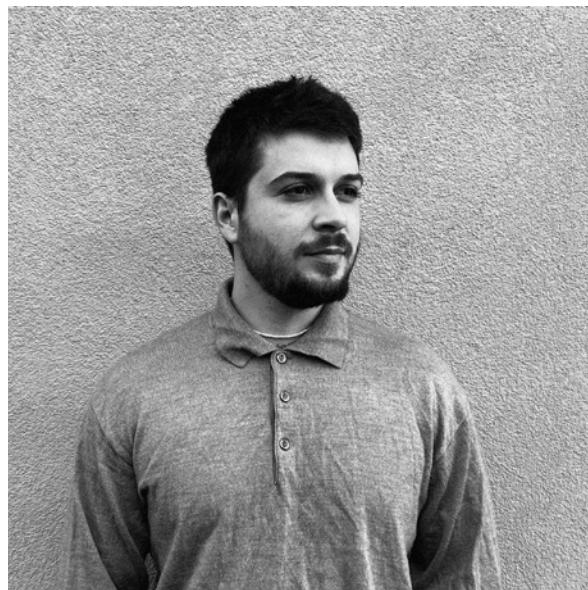




LEART SEJDIU

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EDUCATION

Kantonsschule Obwalden	2010 - 2016
BSc Architecture, ETH Zürich	2017 - 2021
MSc Architecture, ETH Zürich	2021 - today

EXPERIENCE

Internship SGGK Architects, Zürich	2020 - 2021
Help Assistant Prof. Girot, ETH	2022
Teaching Assistant Prof. Dillenburger, ETH	2022 - 2023
Teaching Assistant Prof. Gramazio/Kohler, ETH	2022 - 2024

LANGUAGES

German	Primary
English	Fluent
French	Conversational
Albanian	Native

SKILLS

Rhino/Grasshopper, Blender
ArchiCAD 2D/3D
Python, C#
Adobe Package
Microsoft Office

REDUNDANCY

Initially conceived with a primary focus on engineering efficiency, Bucheggplatz has become an important yet problematic node in the city's transportation network. The historical and ongoing struggles to reconcile the demands of traffic and urban quality underscore a persistent issue: the need to navigate the balance between urban mobility and creating spaces that enhance urban quality.

Bucheggplatz is the only space of the Ypsilon project fully conceptualized with the traffic ideals of the early 20th century. The spatial configuration of Bucheggplatz is strongly inspired by Le Corbusier's ideals on the separation of functions and traffic. Each level was mostly designed independently from the other, while an effort to combine the different modes of traffic was never undertaken. Due to its provisional character, the city never developed a holistic strategy for the area. Even though it is a large and open area, it is extremely rigid in its current composition. Technical constraints, for example, turning radii of vehicles, as well as building regulations, such as zoning and traffic construction lines, make architectural intervention virtually impossible.

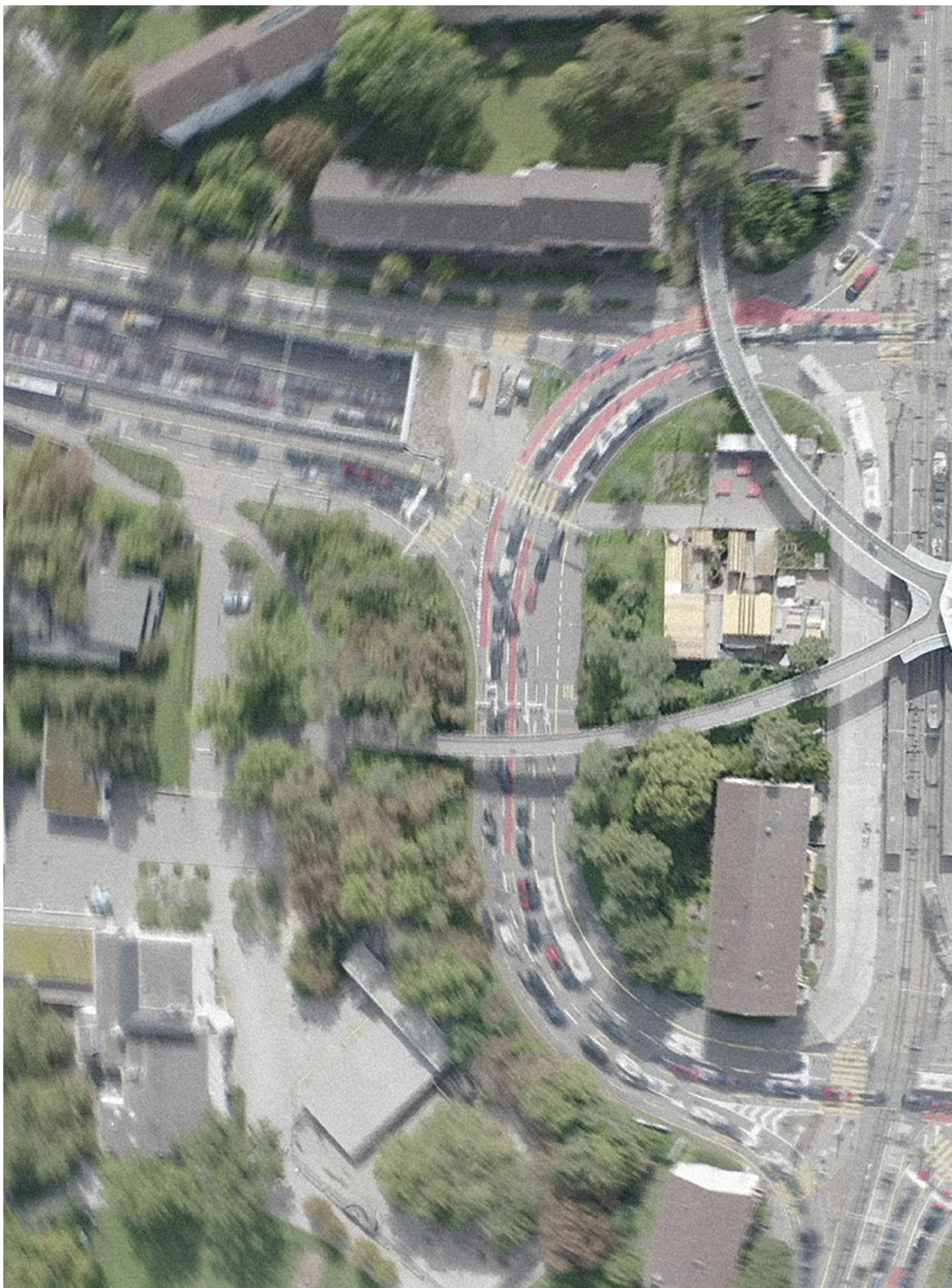
The lack of urban qualities is strikingly apparent on site. The average time spent is three minutes and it is experienced in continuous movement, disrupted by short stops. While some commuters impatiently stare at their cell phones, others run to catch their connection. There is no reason to stay, the objective is to leave as fast as possible. Additionally, the vehicles circling Bucheggplatz create a hermetic barrier. Although permeable, it shields Bucheggplatz from activities within surrounding buildings. The nature of a public square, bringing people and diverse activities together, seems to be negated by the function of transporting. It seems that everything has been done to isolate Bucheggplatz from its surroundings. It is a vast area of empty space, serving only one function: movement, and nothing more.

Bucheggplatz vigorously tries to convey the image of movement, to the point that it becomes seemingly purposeless and excessive: The sweeping pedestrian bridge leading to practically nowhere; the omnipresent noise and stench created by the constant stop-and-go motion of the circling traffic; and the over-dimensioned infrastructure fragmenting Bucheggplatz into small and unusable spaces. These issues have become its identity. They are a result of off-the-shelf engineering solutions during the postwar period. It is an expression from a time when the logic of movement, particularly of the automobile, was the driving force shaping the city.

It is time to view Bucheggplatz not only as a traffic problem.

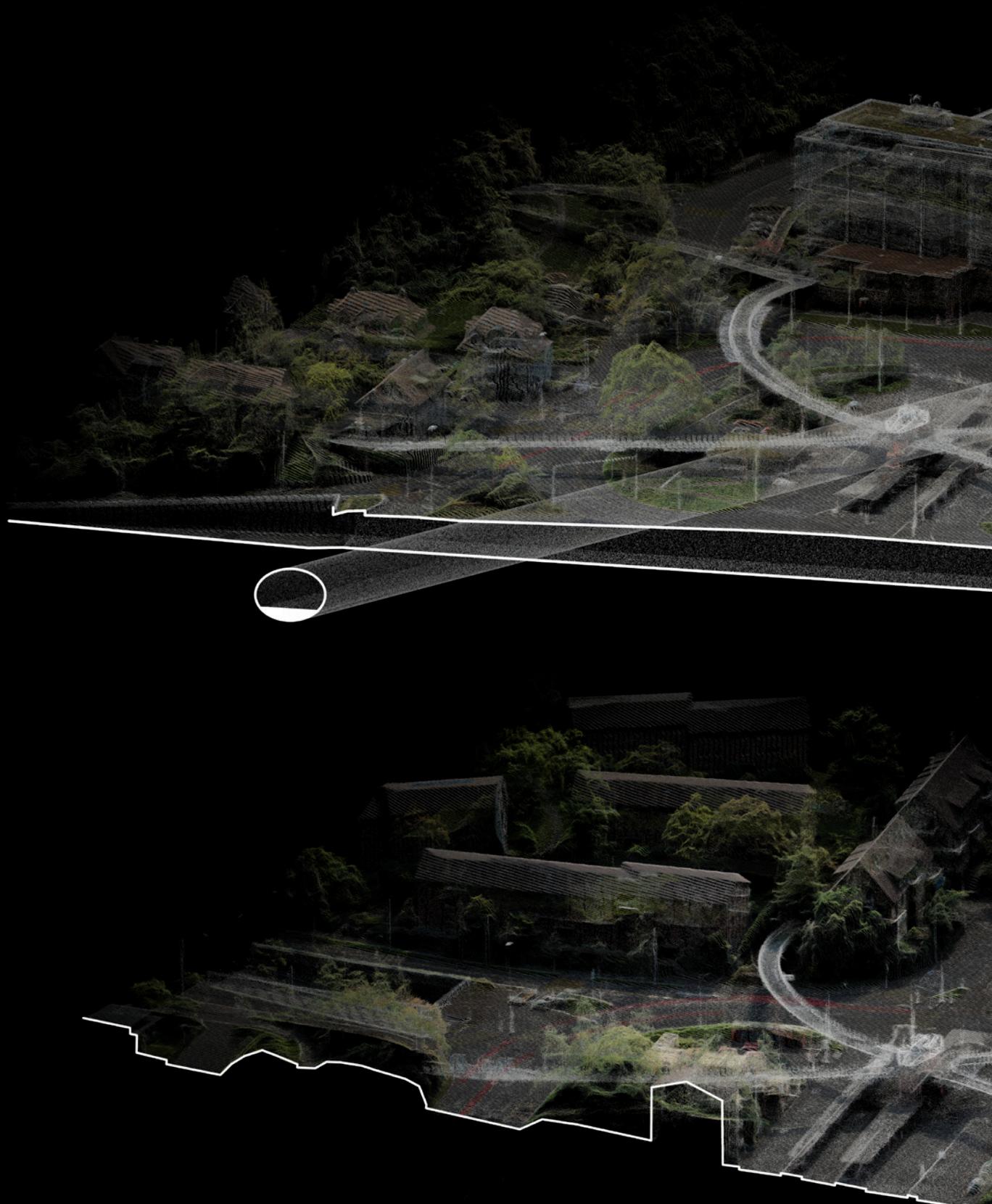


Drone image; Bucheggplatz, Zürich.

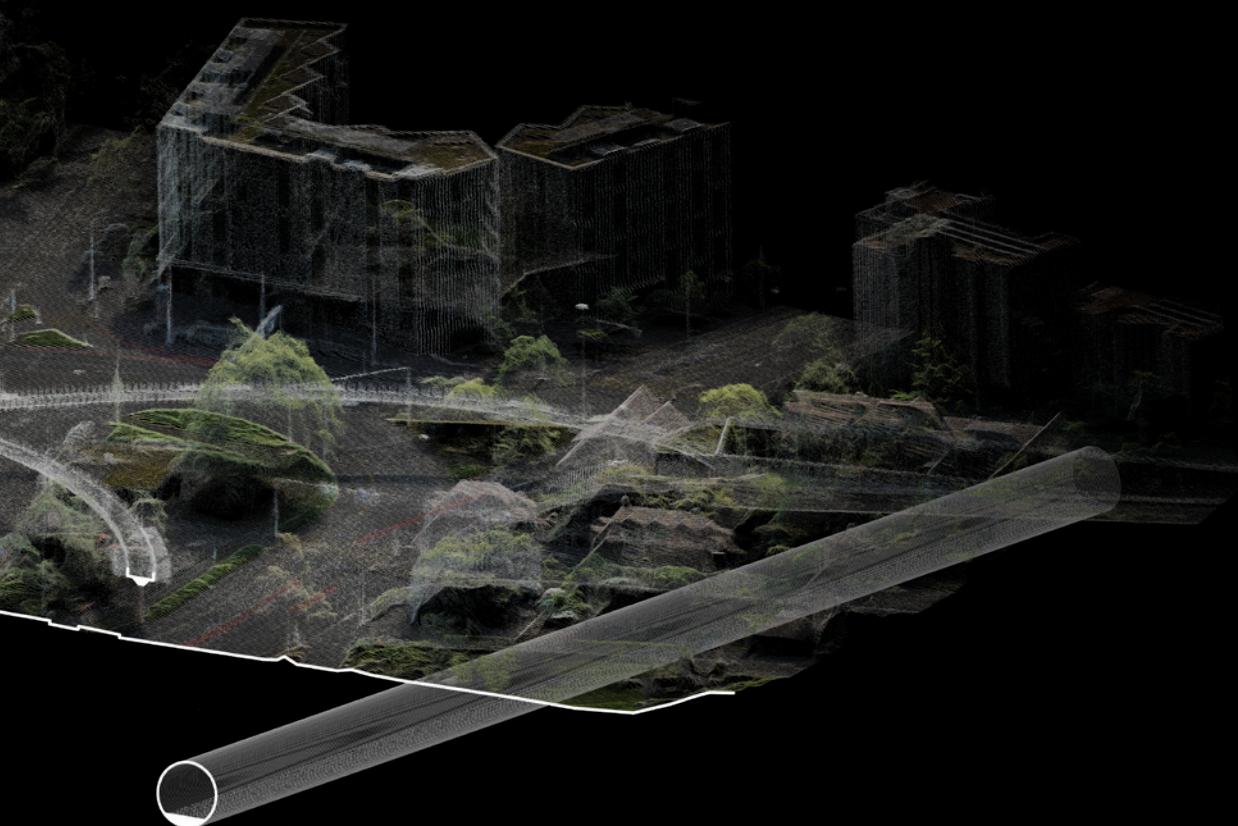
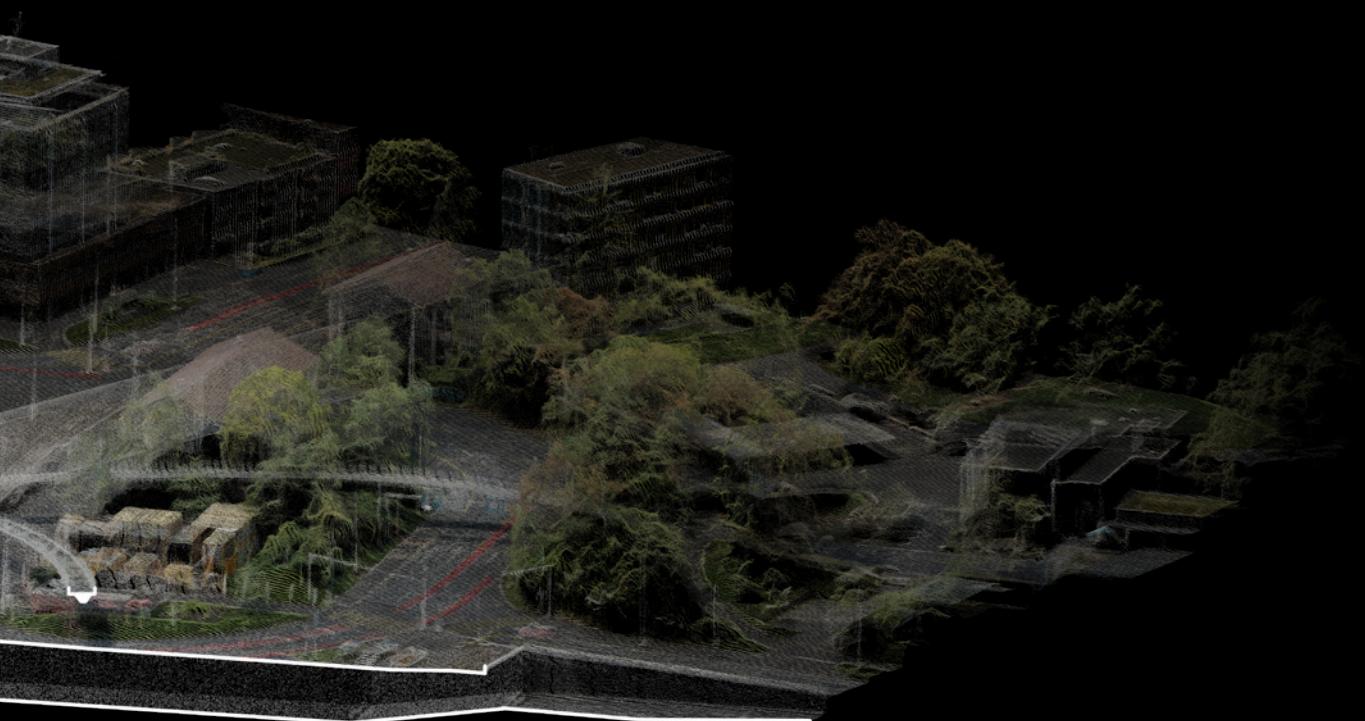


Collage; Three minutes above Bucheggplatz.





Pointcloud; Existing condition.

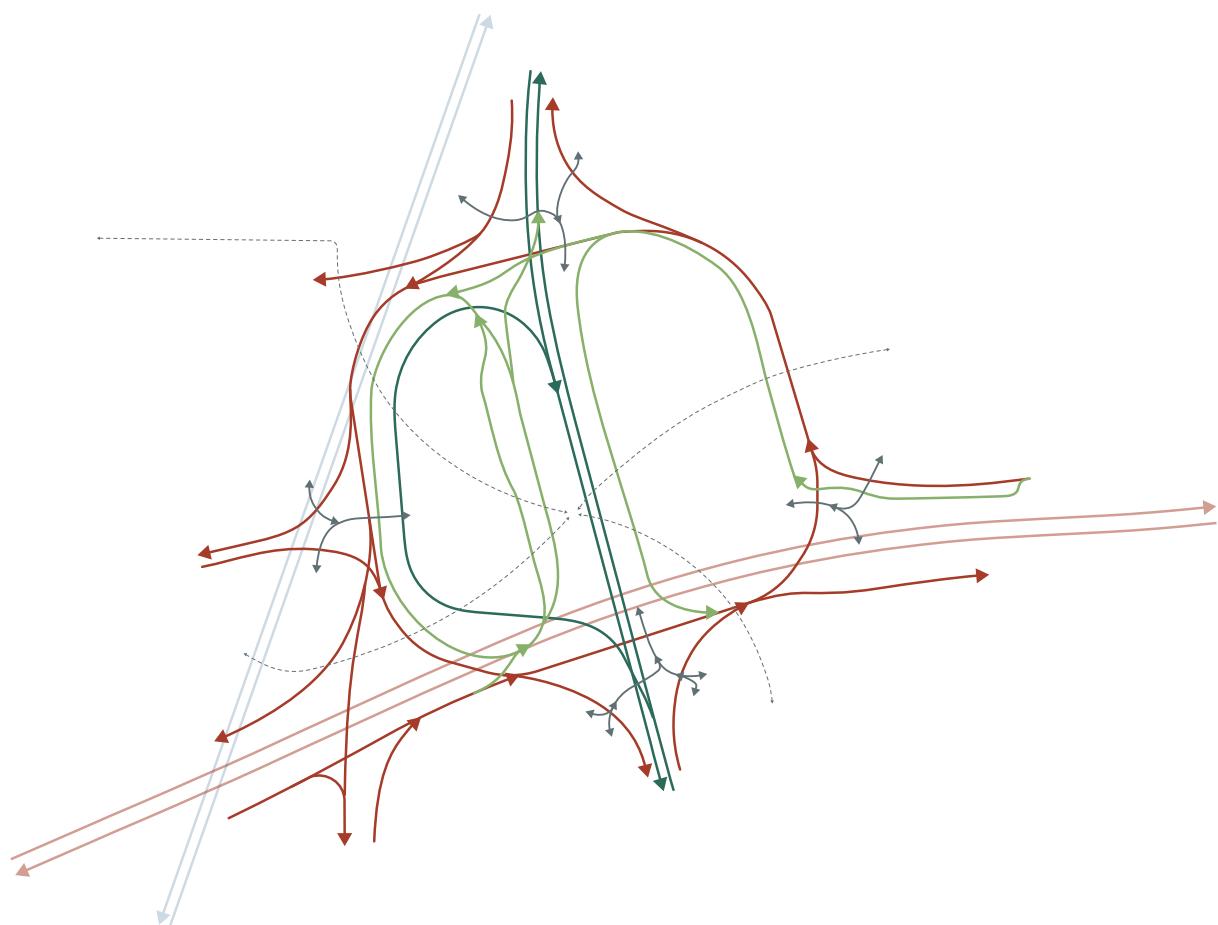




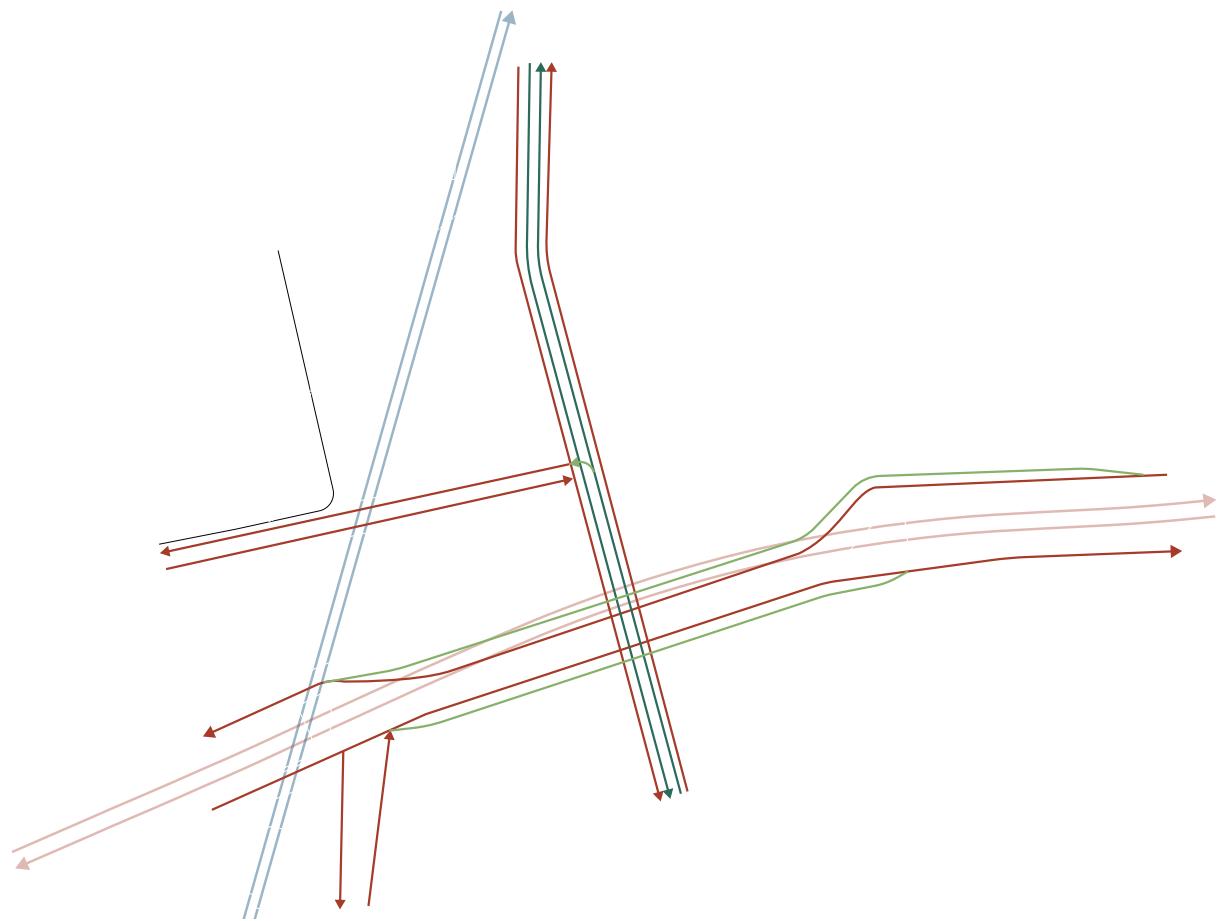
Image; Bucheggplatz during construction (1969-72).



Image; Bucheggplatz before Westtangente (ca. 1945).



Existing fluxes.



Projected fluxes.



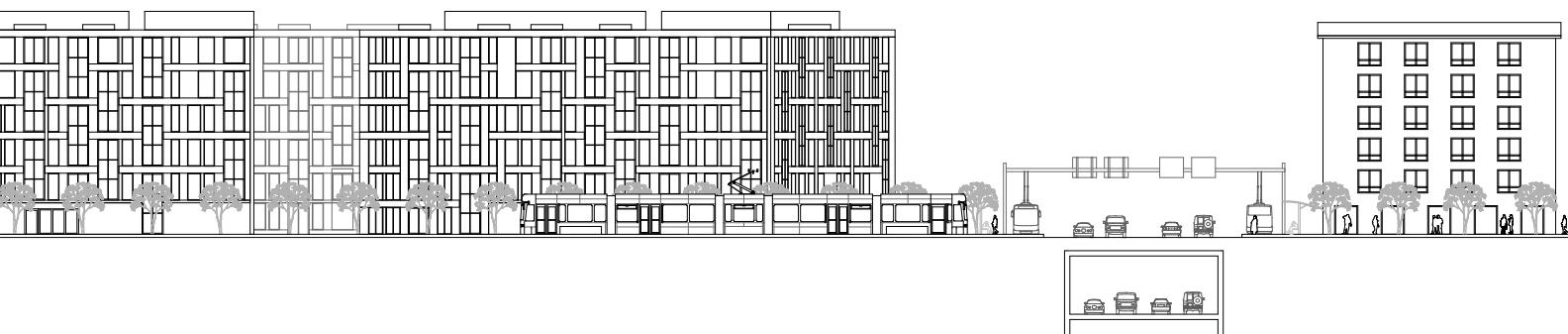
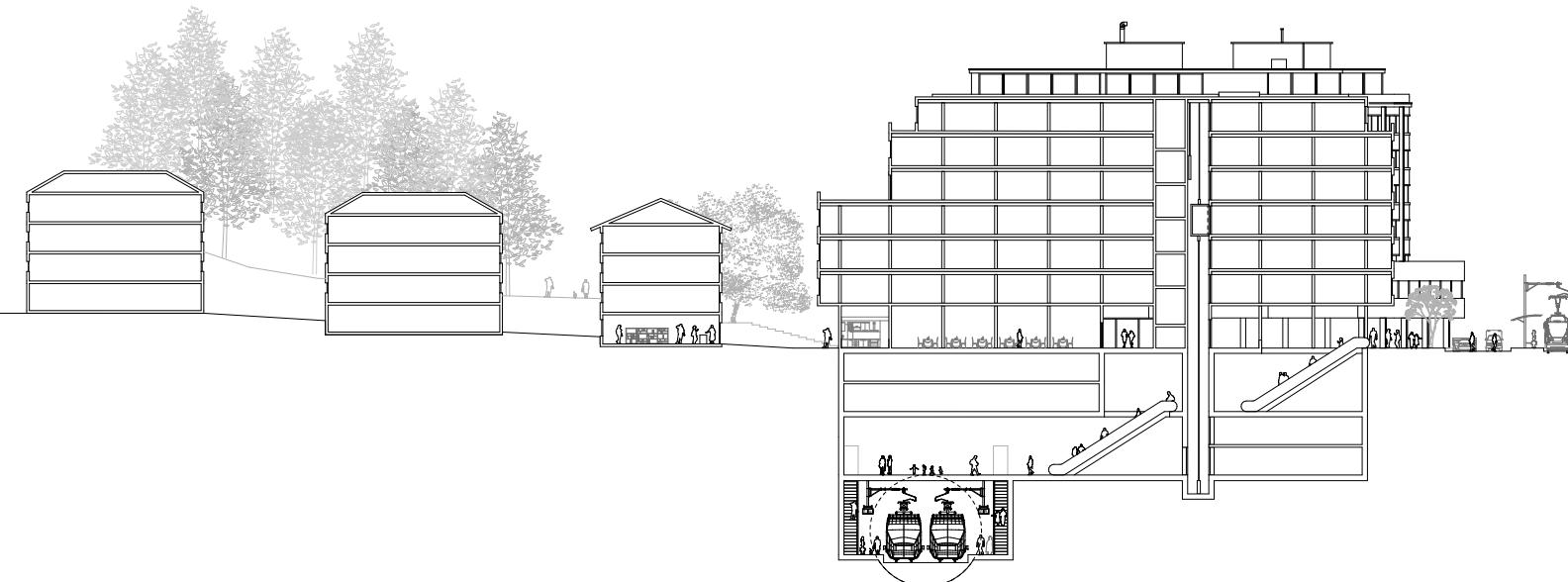
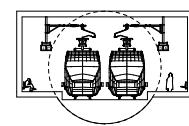
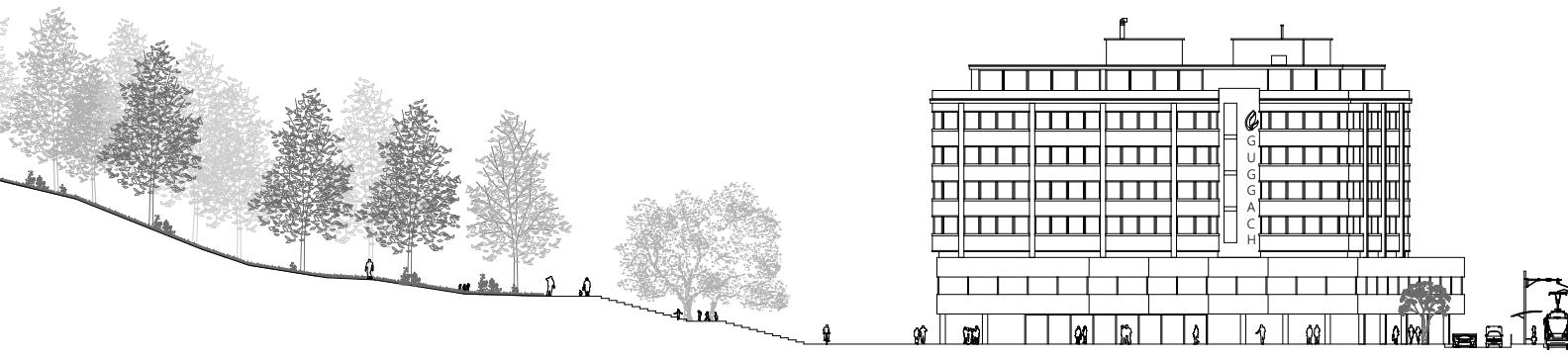
Collage; Site plan projected.



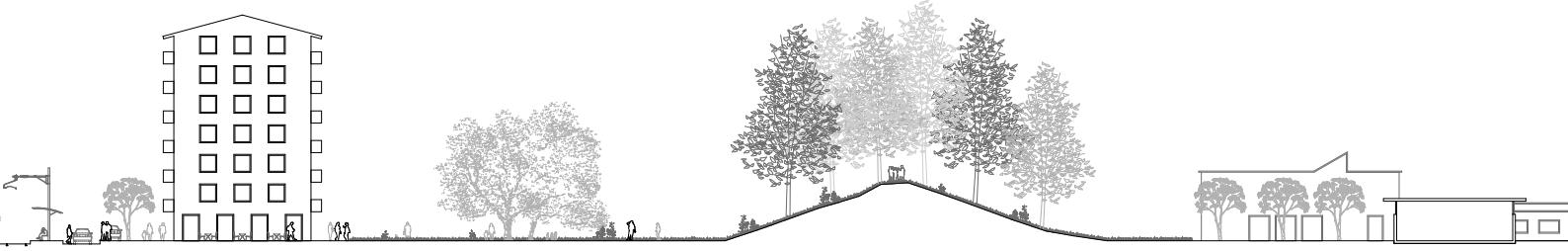
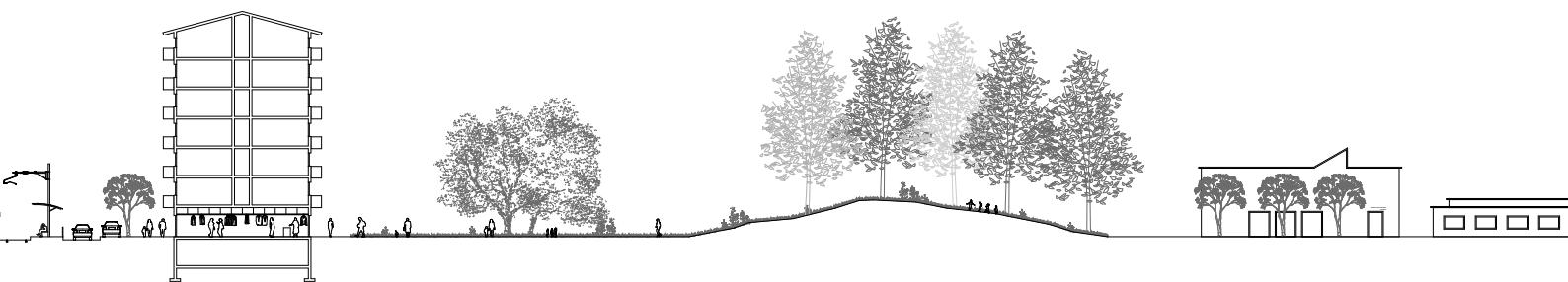


Ground floor plan.





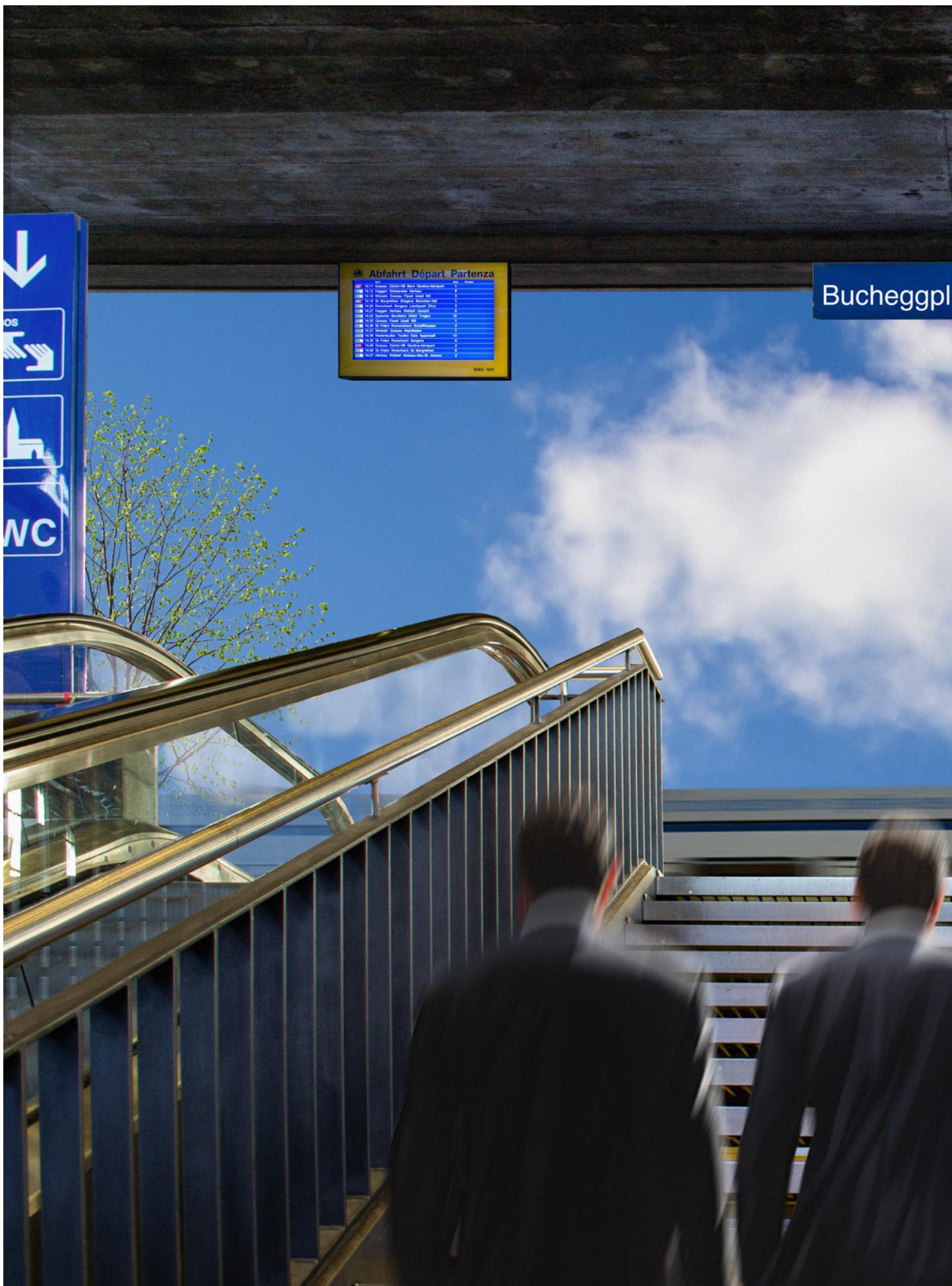
Sections





Collage; Bucheggplatz projected.





Collage; Bahnhof Bucheggplatz.

atz





Collage; Tram station Bucheggplatz.





Collage; Bucheggpark.



FORBIDDEN CITY

Over the years Novartis has spent millions for their architecture. Their master plan was intended for 13'000 workers. What happened and how can the campus move forward?

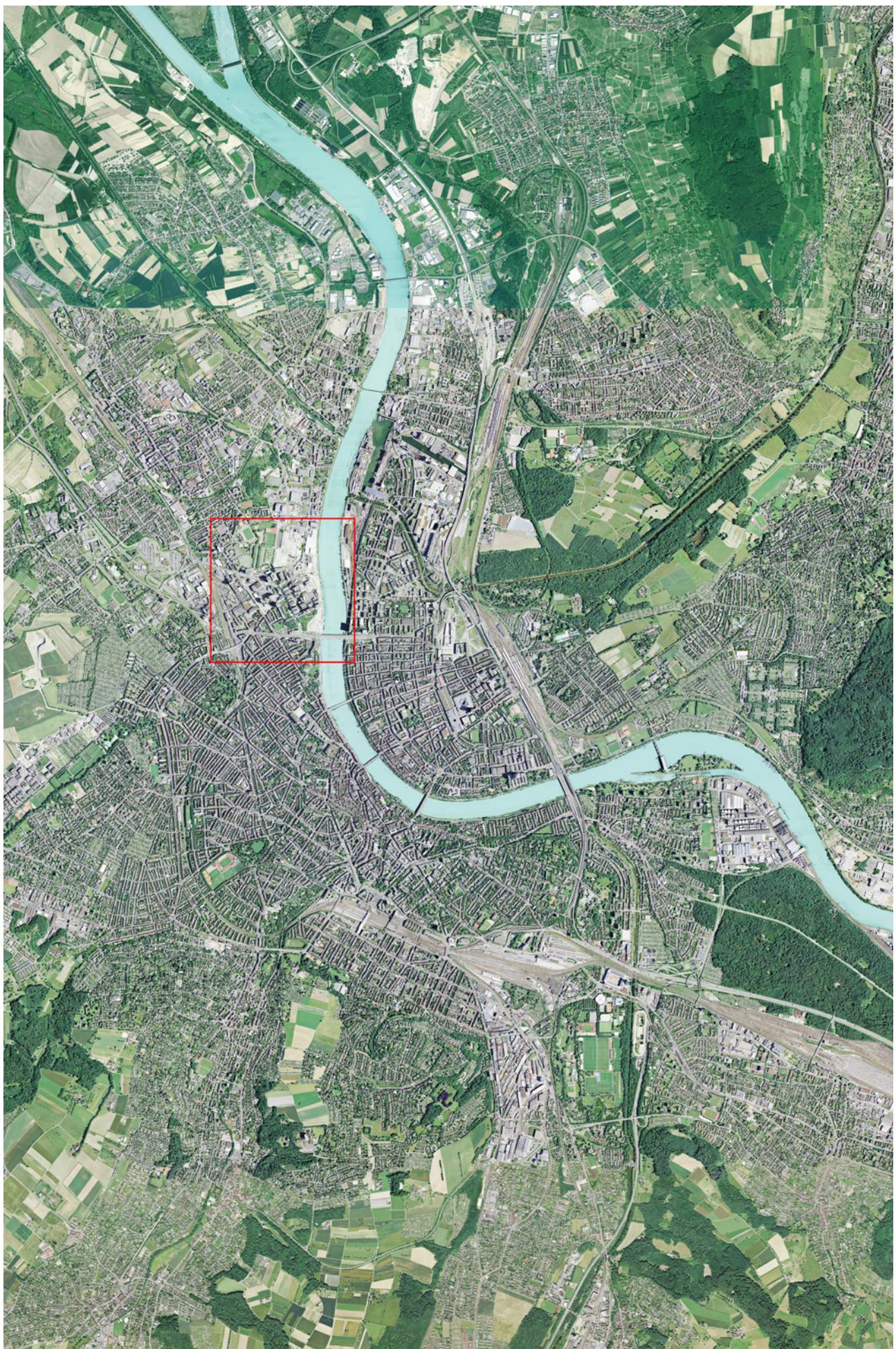
Armin Linke's "Operating Theatre" depicts people working in what seems to be a surgery room. The caption gives clarity: It is a remotely controlled surgery. We extended our natural organs through tools. The human being transcended evolution and created an "exo-evolution". It is not limited to purely physical functions. With the first computer we started to outsource our intellectual functions too. Computers are our exo-brains, our exo-memories and exo-databases. Through the process of exo-evolution the human has created an "info-sphere" that makes it possible to be anywhere at any time. Virtual space becomes an integral part of the physical space or even replaces it to the degree where they are indistinguishable.

These developments also triggers a reaction at the global headquarters of pharmaceutical company Novartis. Before the pandemic 7'500 people worked at the Novartis Campus. In 2021 only roughly 2'500 people worked on site. What is going to happen with the leftover space? To this day the campus is hermetically sealed and not accesible for the public. We see plenty of potential for the campus to get reintegrated to the city. There are cafés, restaurants, parks, convencience stores etc.

The project proposes to repurpose mostly empty office towers from the Sixties to dwelling spaces for cooperative housing programmes. The transformation of an office into an apartment is not only an act of recycling an increasingly underutilized typology, but also a way of giving spatial form to the contemporary condition of work, in which labor, domestic work, socialization, recreation, and exchange are no longer understood as separate spheres, but as part of the same productive stream.



South facade; cooperative housing in Novartis Campus



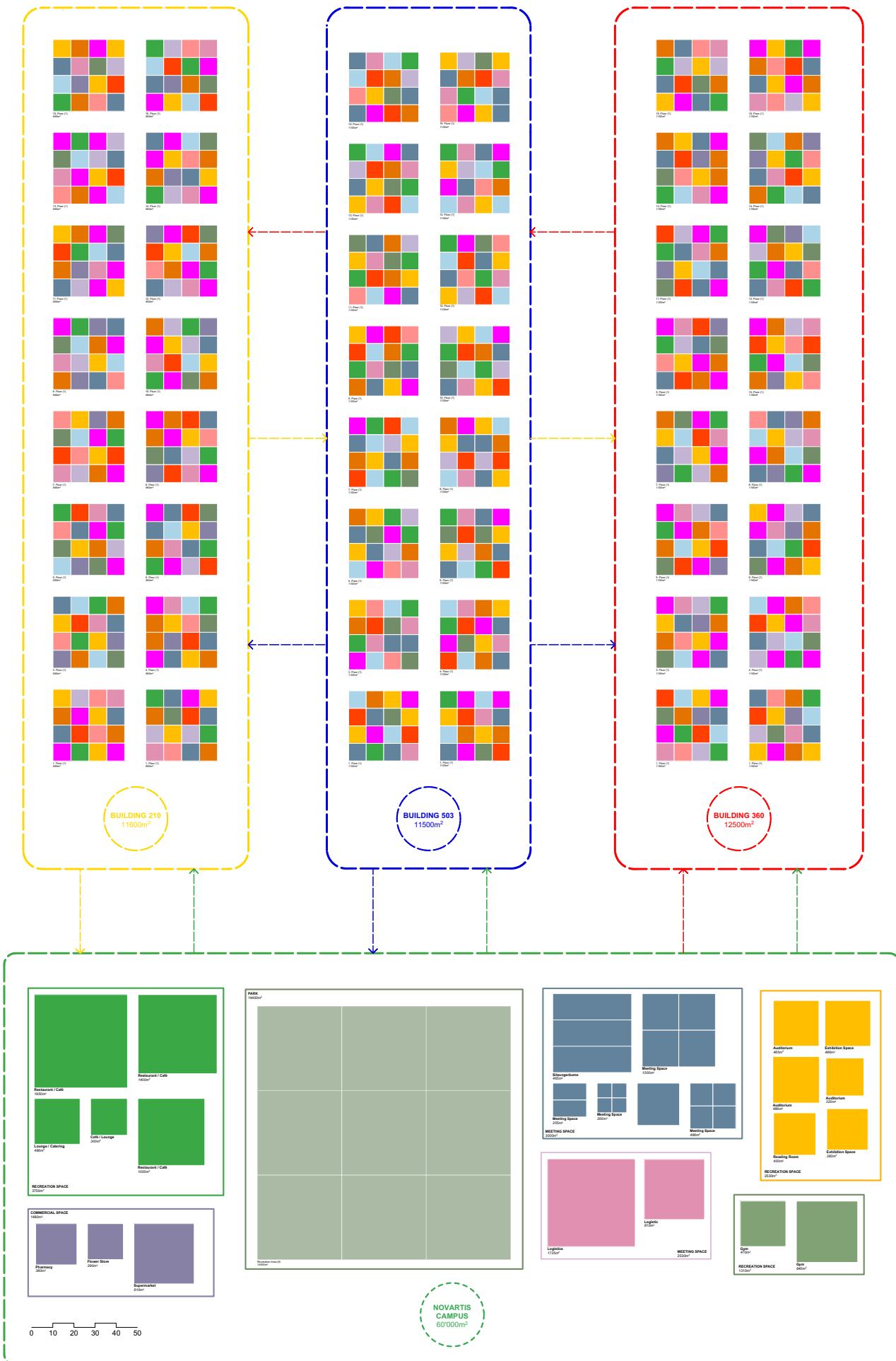
Orthographic image; Basel.



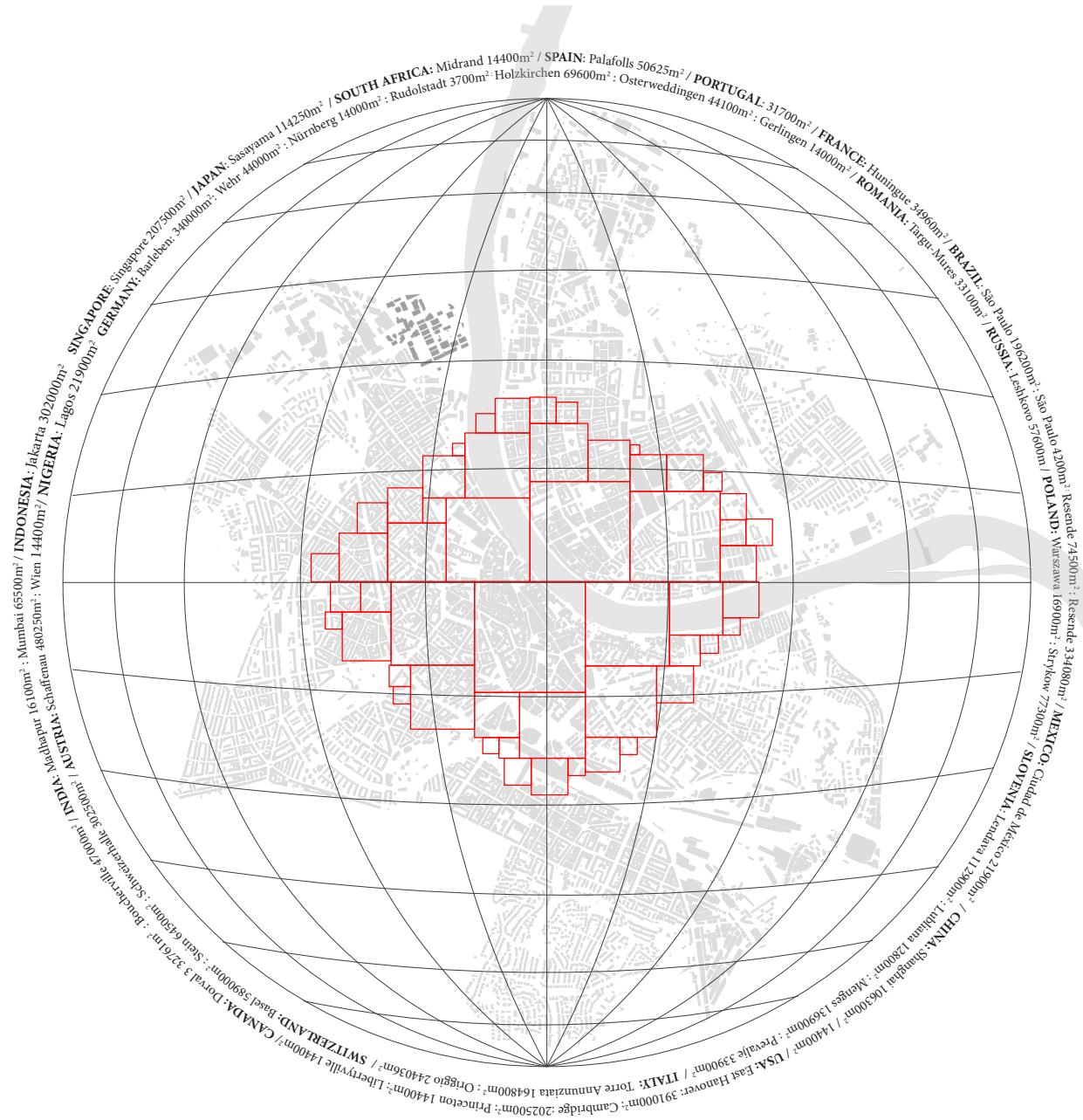
Revised orthographic image; Novartis Campus with interventions.



Aerial Image; Buildings of interest.



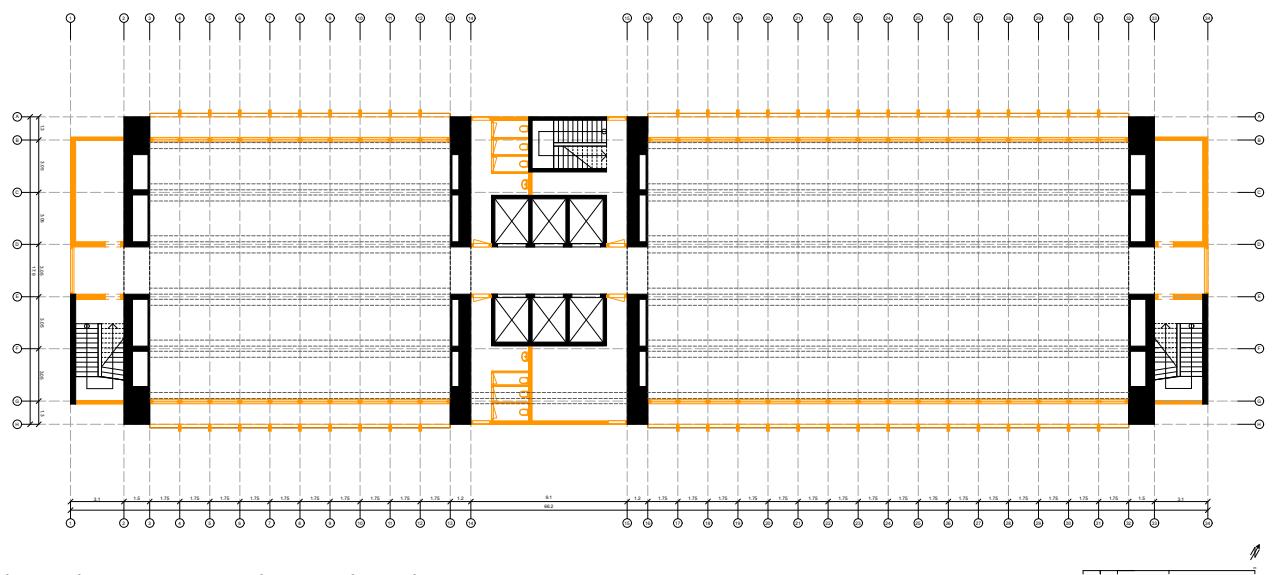
Organigram; Understanding how the housing towers can relate with the campus.



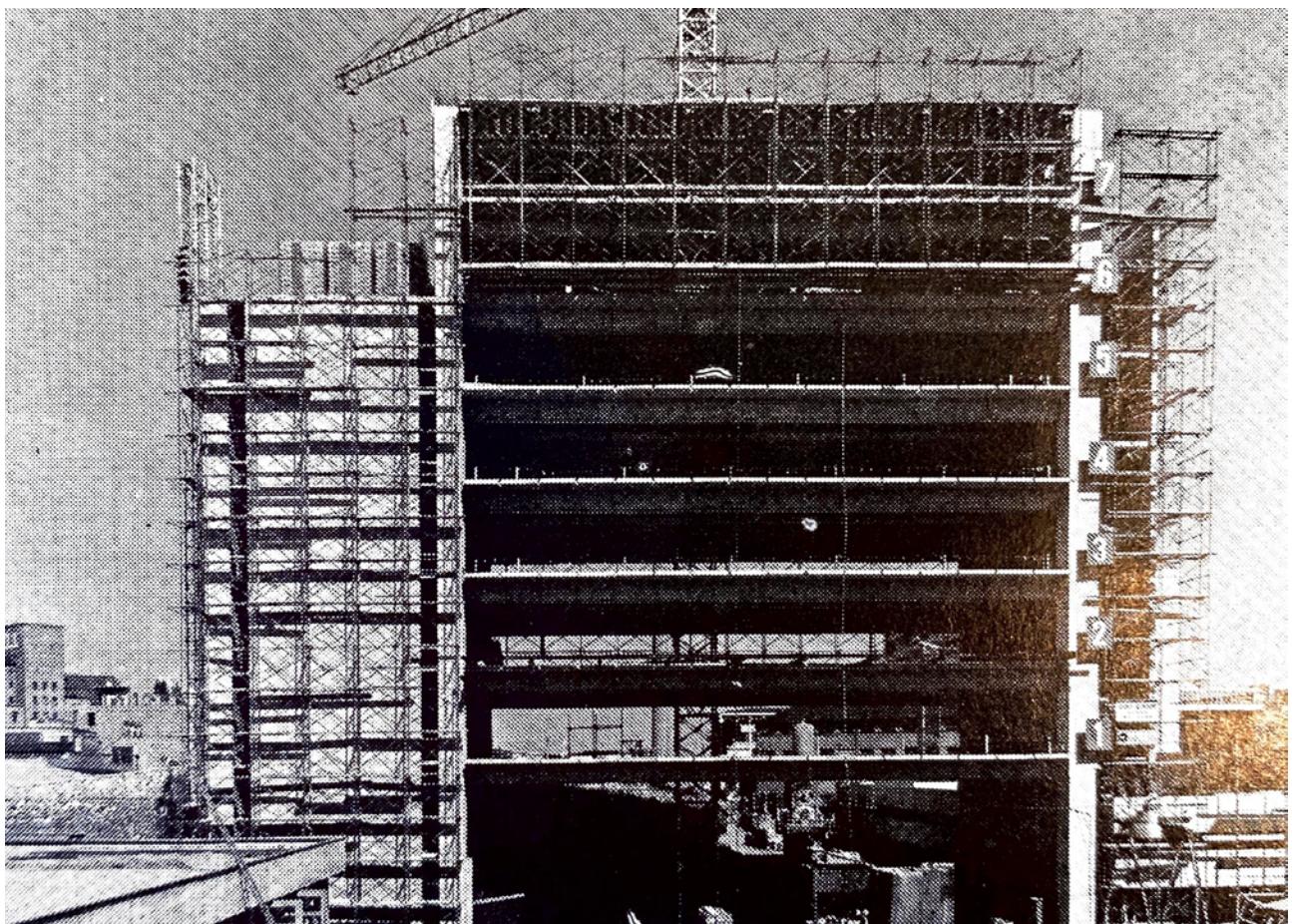
Analytical drawing; Area of all Novartis facilities compared to the city of Basel.



WSJ 503; Case study for the project.



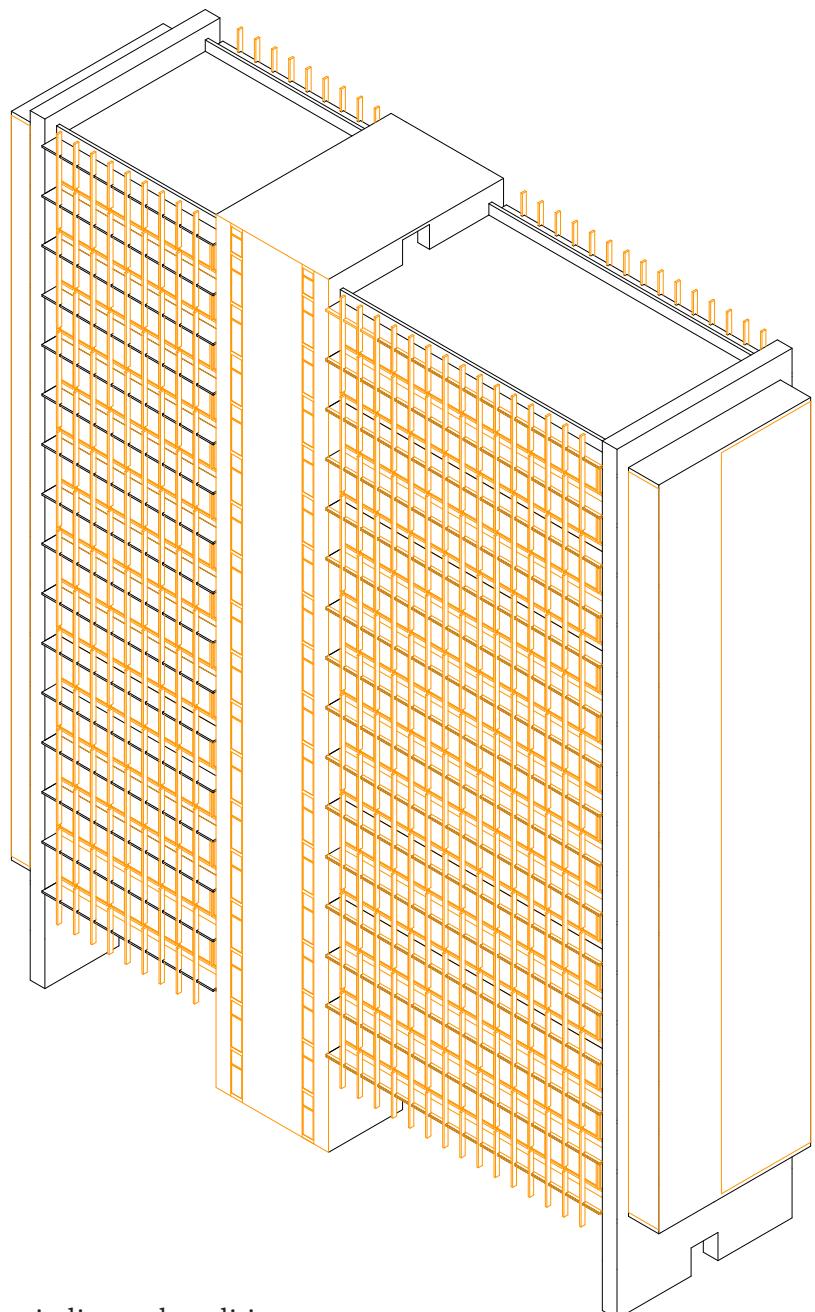
Floor plan; Orange indicates demolition.



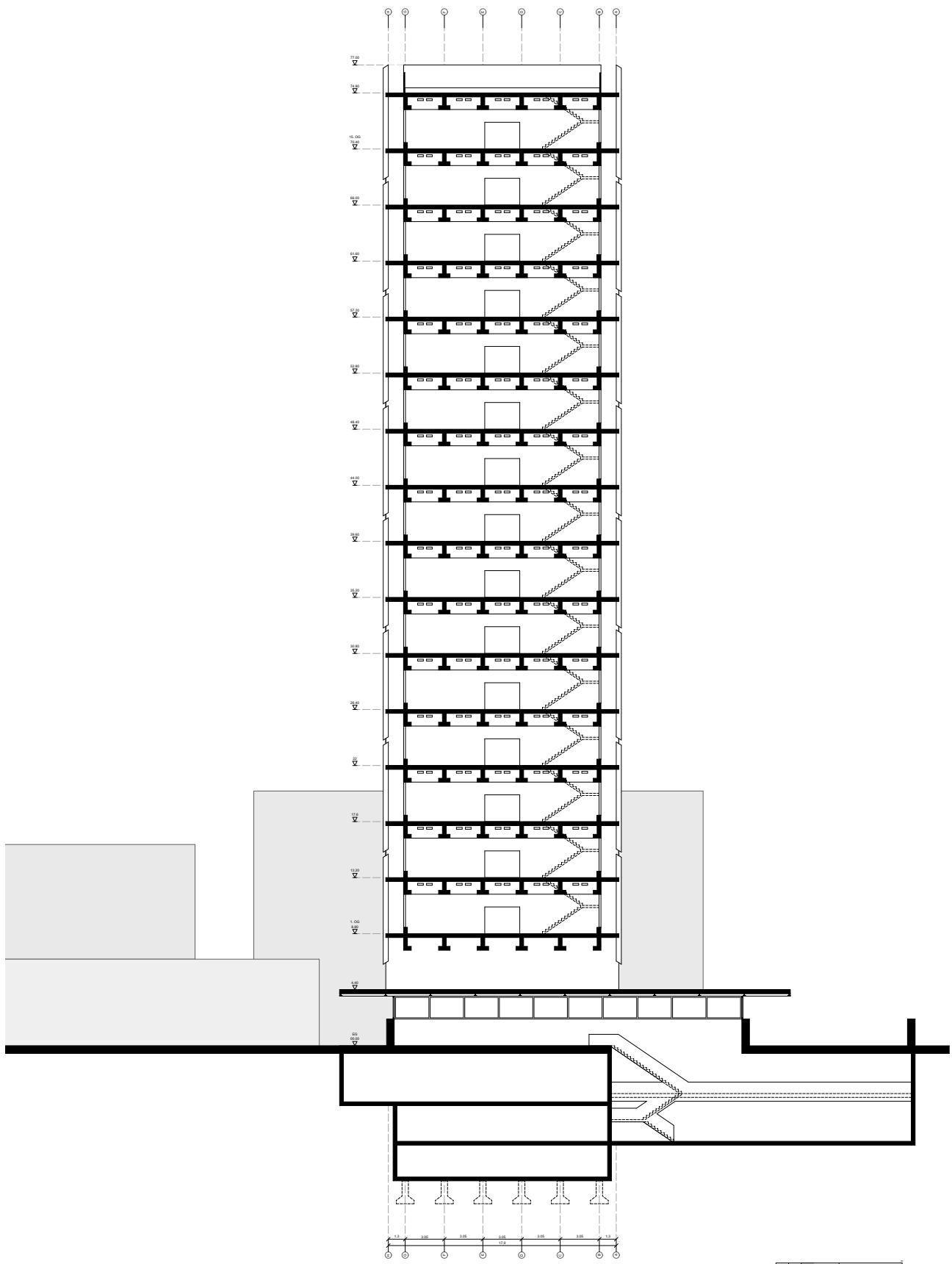
First stage of construction in 1968.



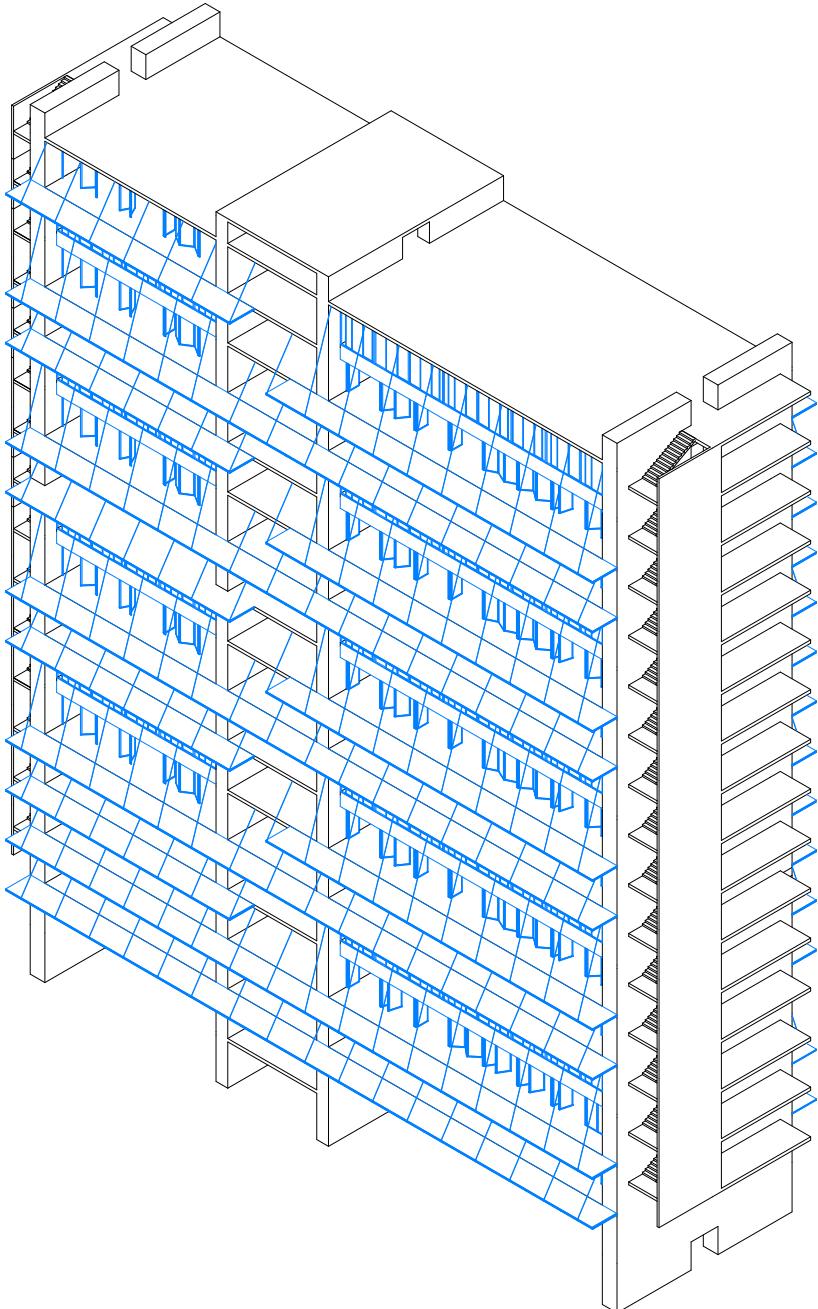
Free spanning construction; Thick and prestressed concrete beams allow maximum flexibility.



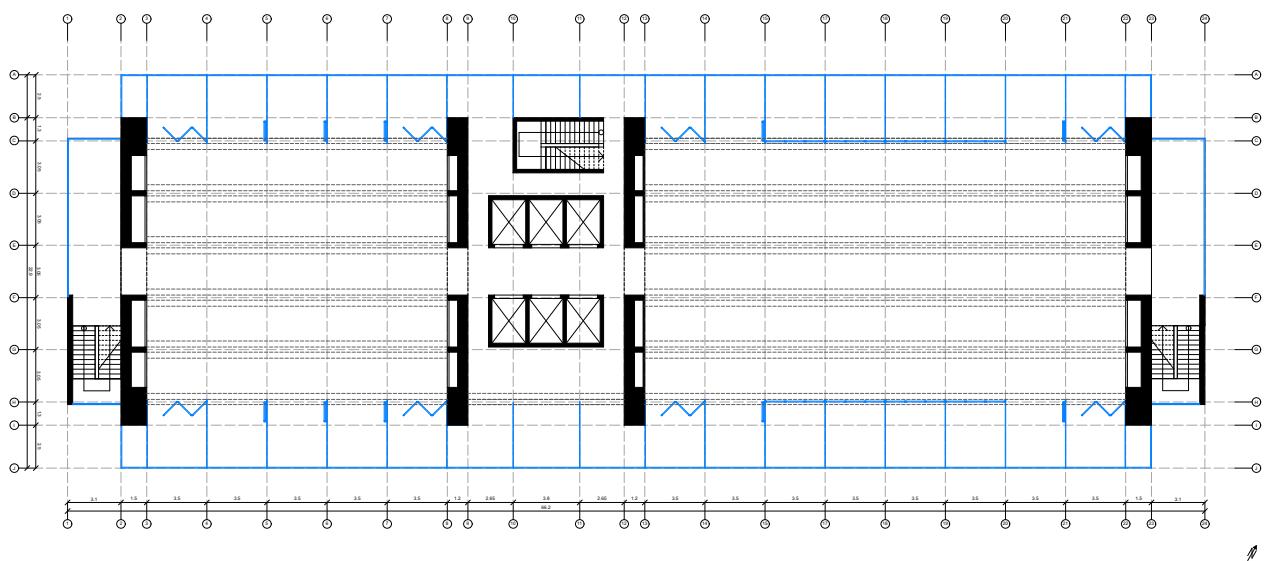
Axonometric; Orange indicates demolition.



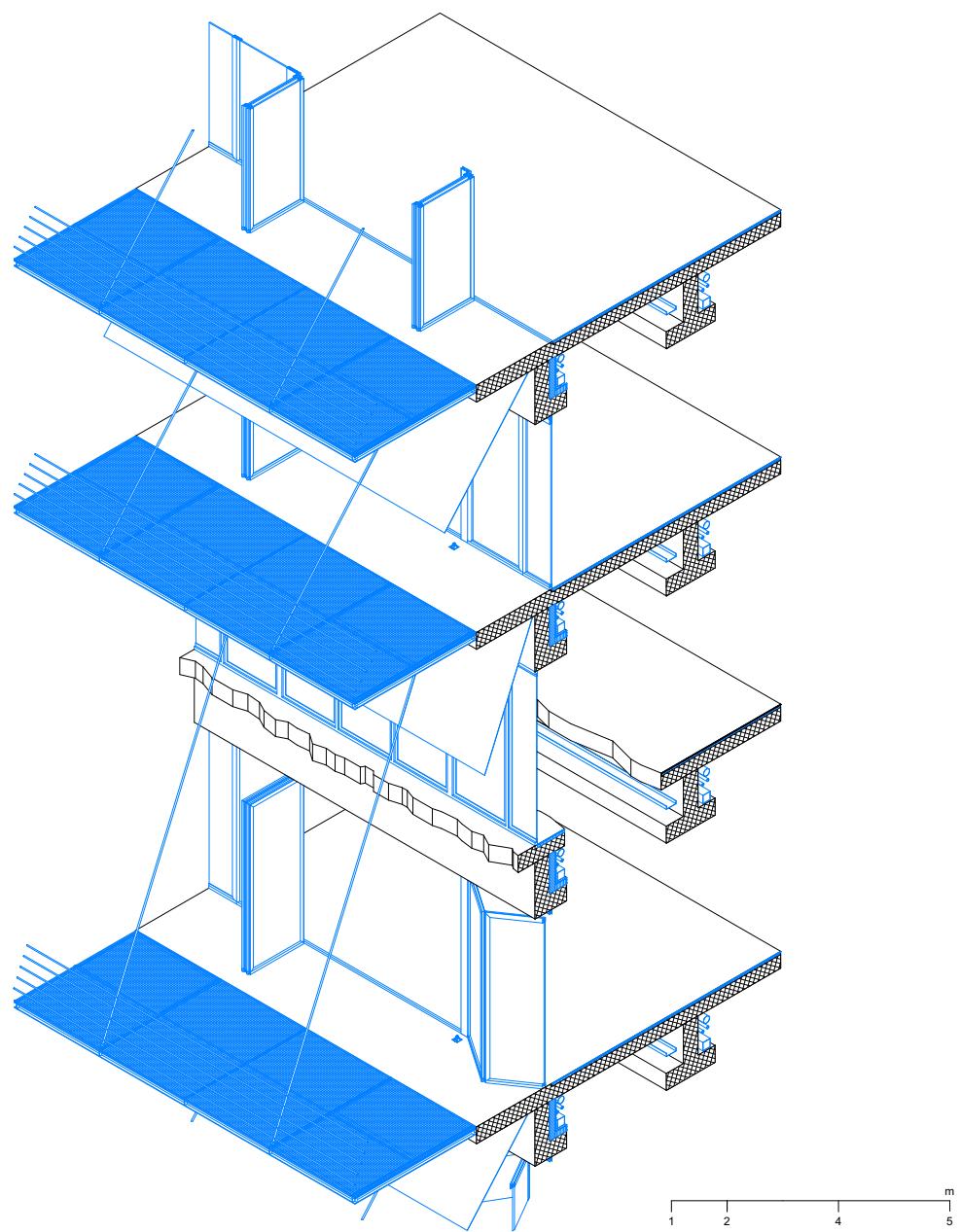
Section; Existing condition.



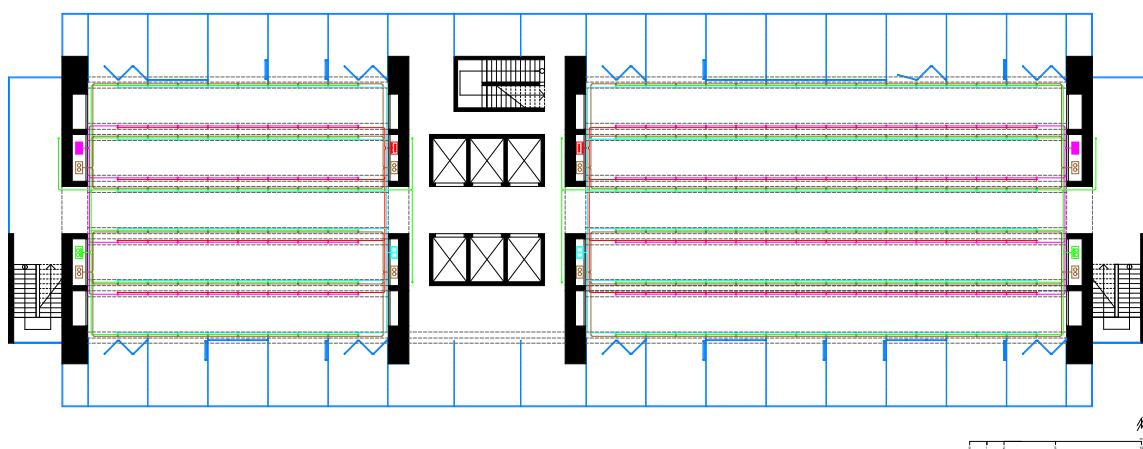
Axonometric; Blue indicates intervention.



Floor plan; Removing all interior walls, changing the facade and adding balconies.



Facade detail.



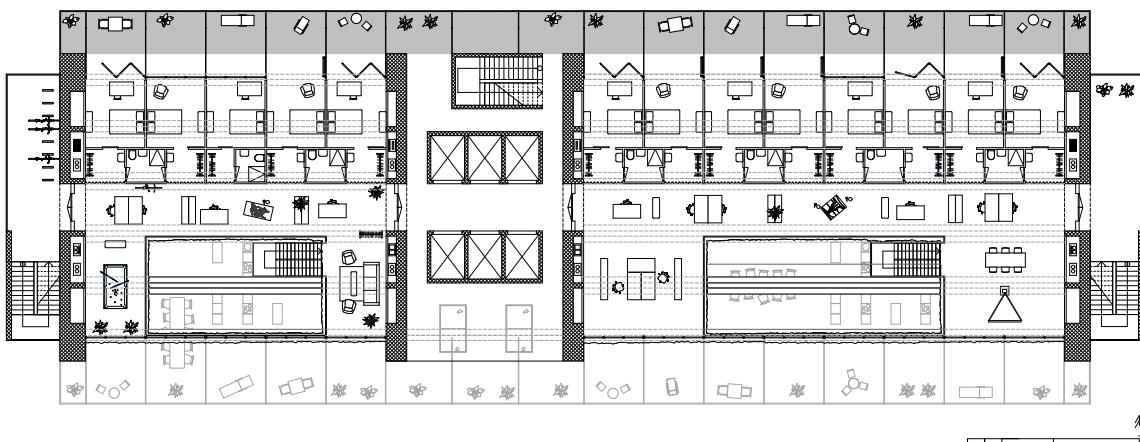
Infrastructure plan; Water, heat and ventilation routed through the ceiling.



Ambiguity; Housing as a process of constant change.



Communal kitchen.



Floor plan; communal kitchen and working spaces.

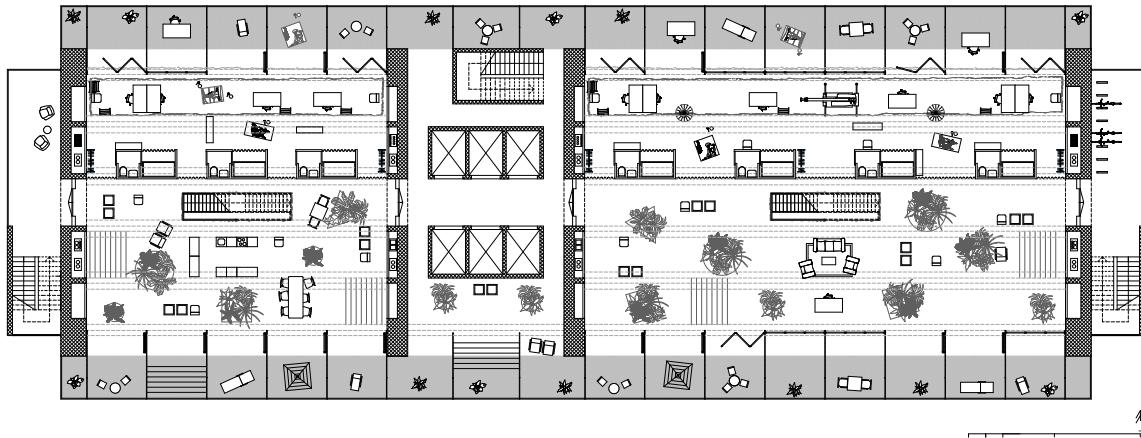


Laundry room.





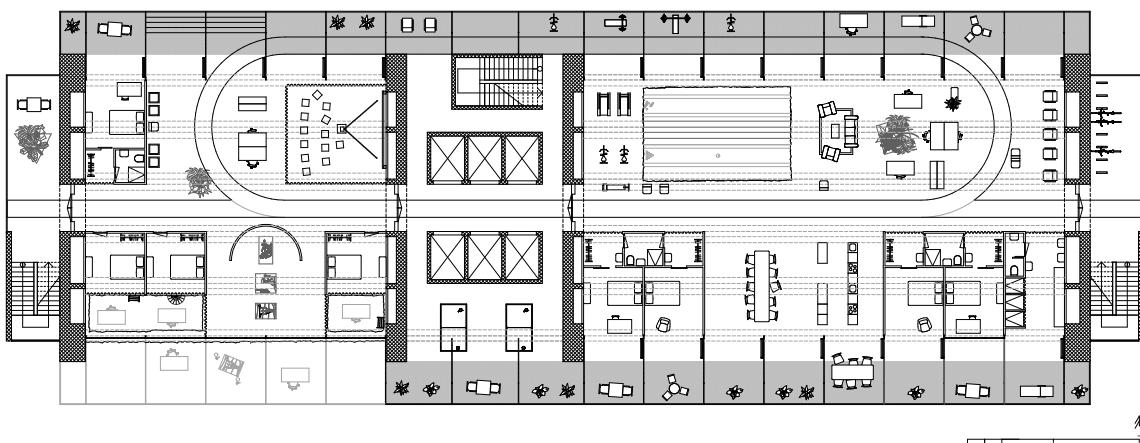
Atelier.



Floor plan; semi-private atelier space with public laundry and sleeping cells in the top floor.



North facade.



Floor plan; the system allows for maximum flexibility.

HOTEL ON A HILLSIDE

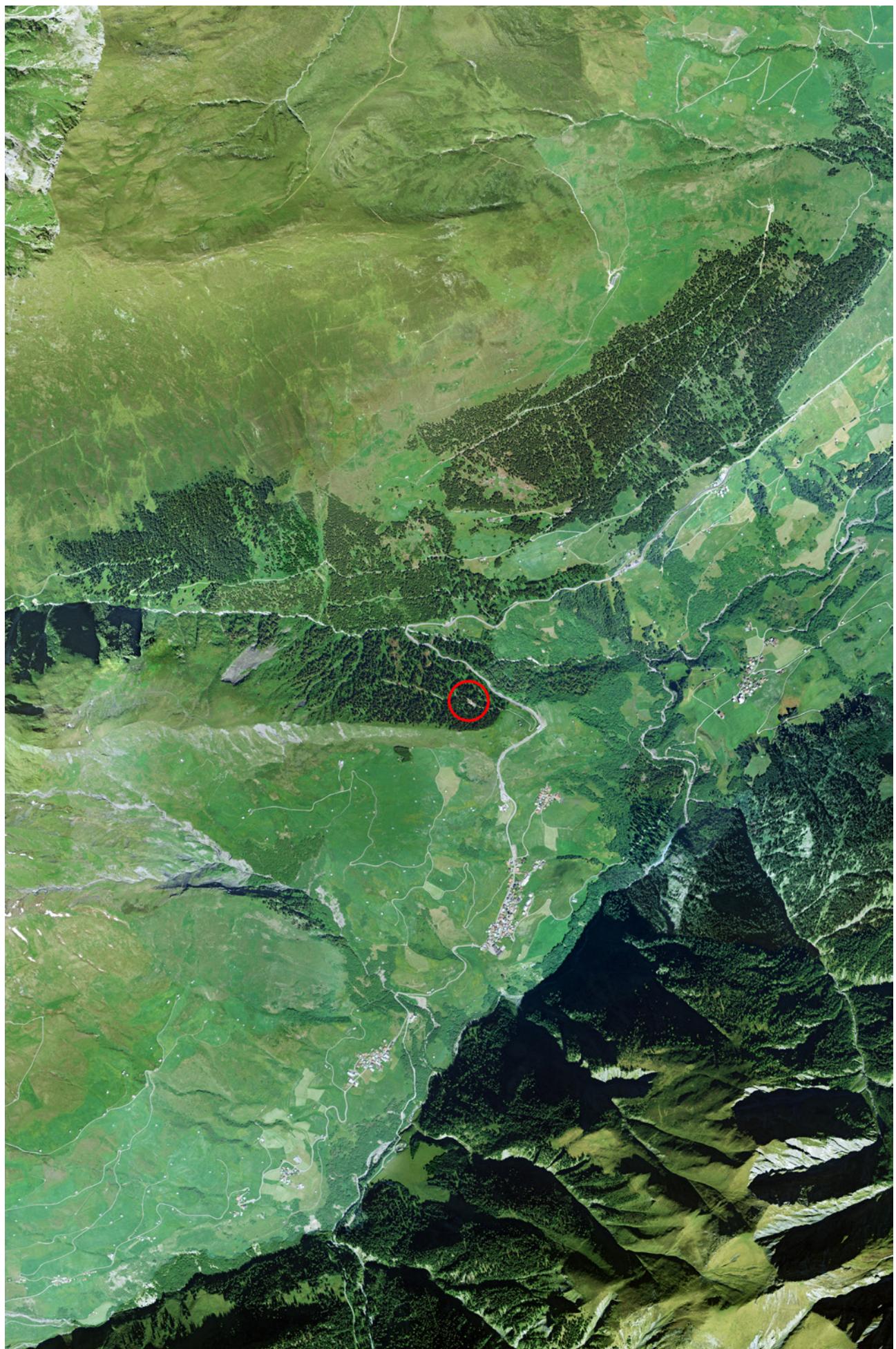
Is there a separation of nature and culture? How do we build in a comprehensive worldview in which humans are not a separate part of creation but an actor in a network?

The history of the hotel industry in Graubünden is as an interesting example on how the concept of nature has undergone transformative changes over the last century. Initially, nature was seen as a wild frontier for adventurers and hotels catered to their needs. As tourism flourished, a deeper appreciation for nature's beauty emerged, influencing hotel design and experiences. Grand hotels integrated seamlessly with the surrounding landscapes, offering panoramic views and gardens. In the mid-20th century, nature shifted towards a recreational perspective, with hotels serving as gateways to skiing and outdoor activities. Today, sustainability is a key focus, with hotels providing authentic nature experiences and promoting responsible tourism. Graubünden's hotels have evolved into guardians of the region's natural heritage, ensuring future generations can cherish and engage with the surroundings.

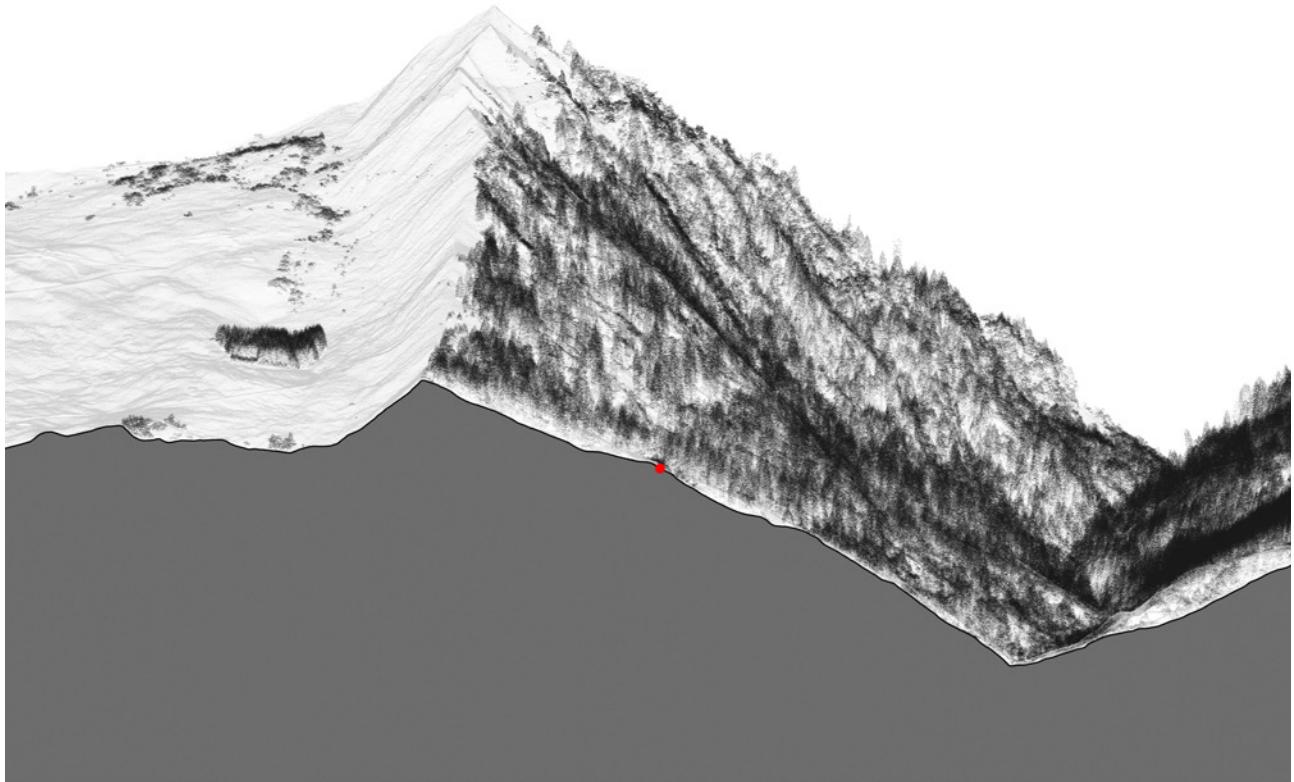
The goal is to create places that give people support and confidence. Culture is in some cases a complement or extension of nature, in other times a counterpart and a coping mechanism. A greater reconciliation of nature and culture cannot work as a matter of course. We do not live in nature and culture, but in concrete situations in specific places.



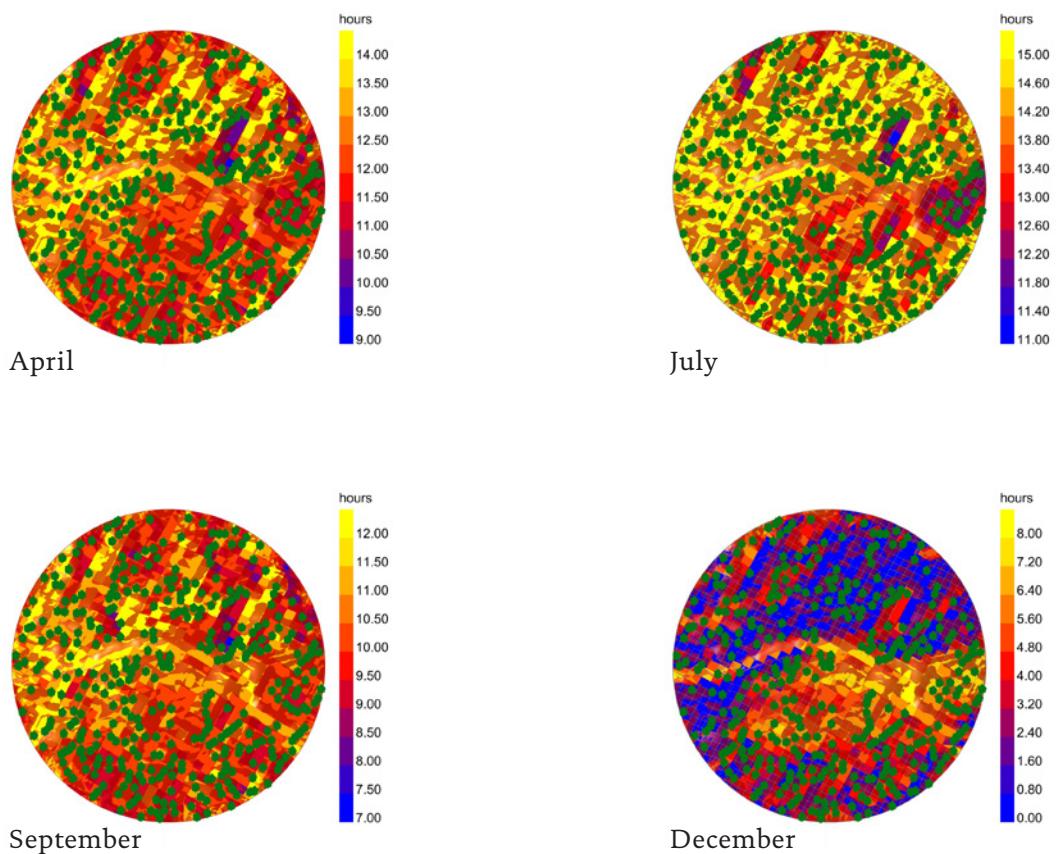
Site in Vrin, GR ($46^{\circ}39'53''$ N $9^{\circ}05'47''$ E).



Orthographic image; Site in Vrin, GR.



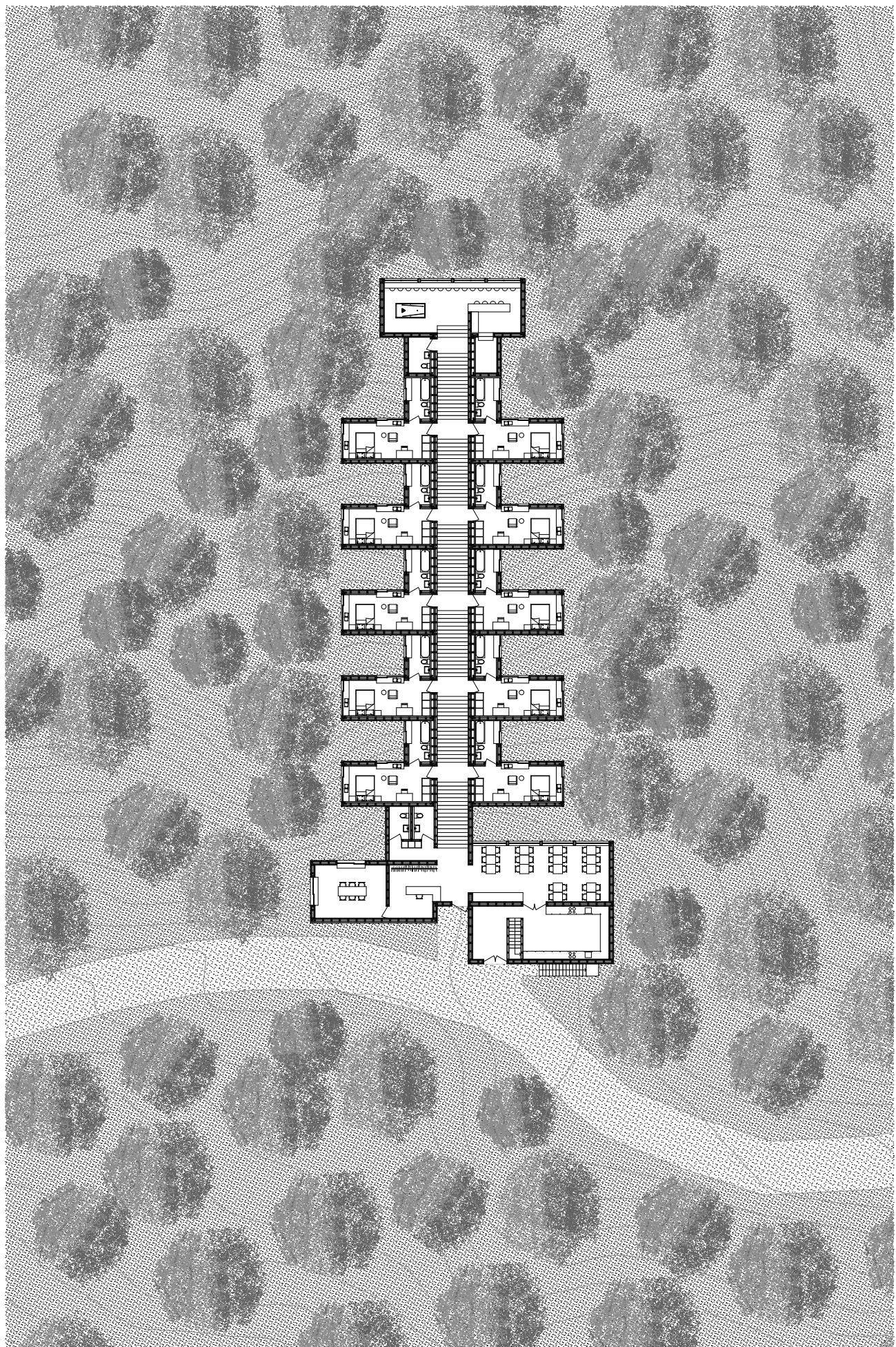
Pointcloud; Section through the valley.



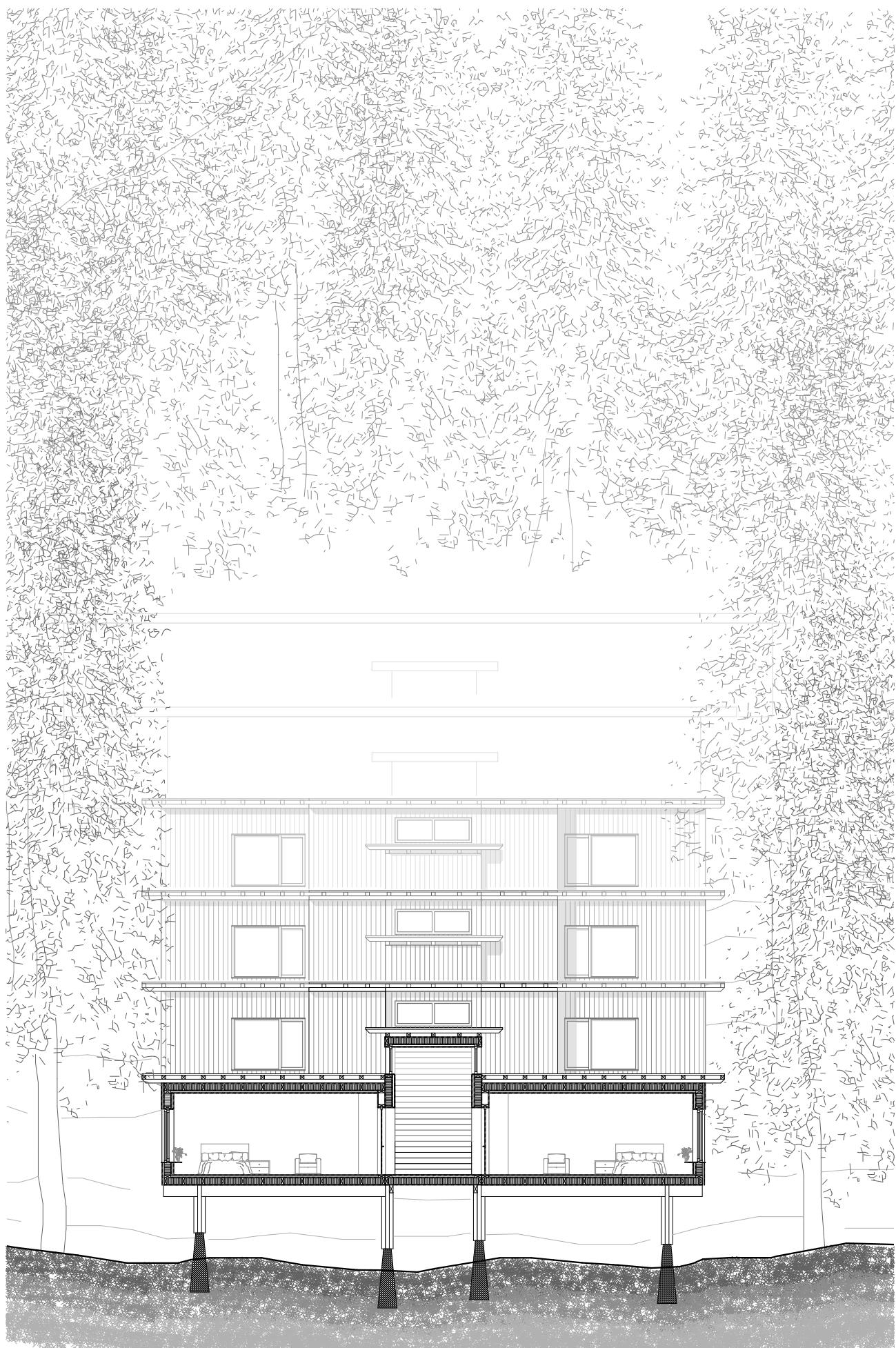
Diagram; Ladybug direct sun hours analysis in Grasshopper.



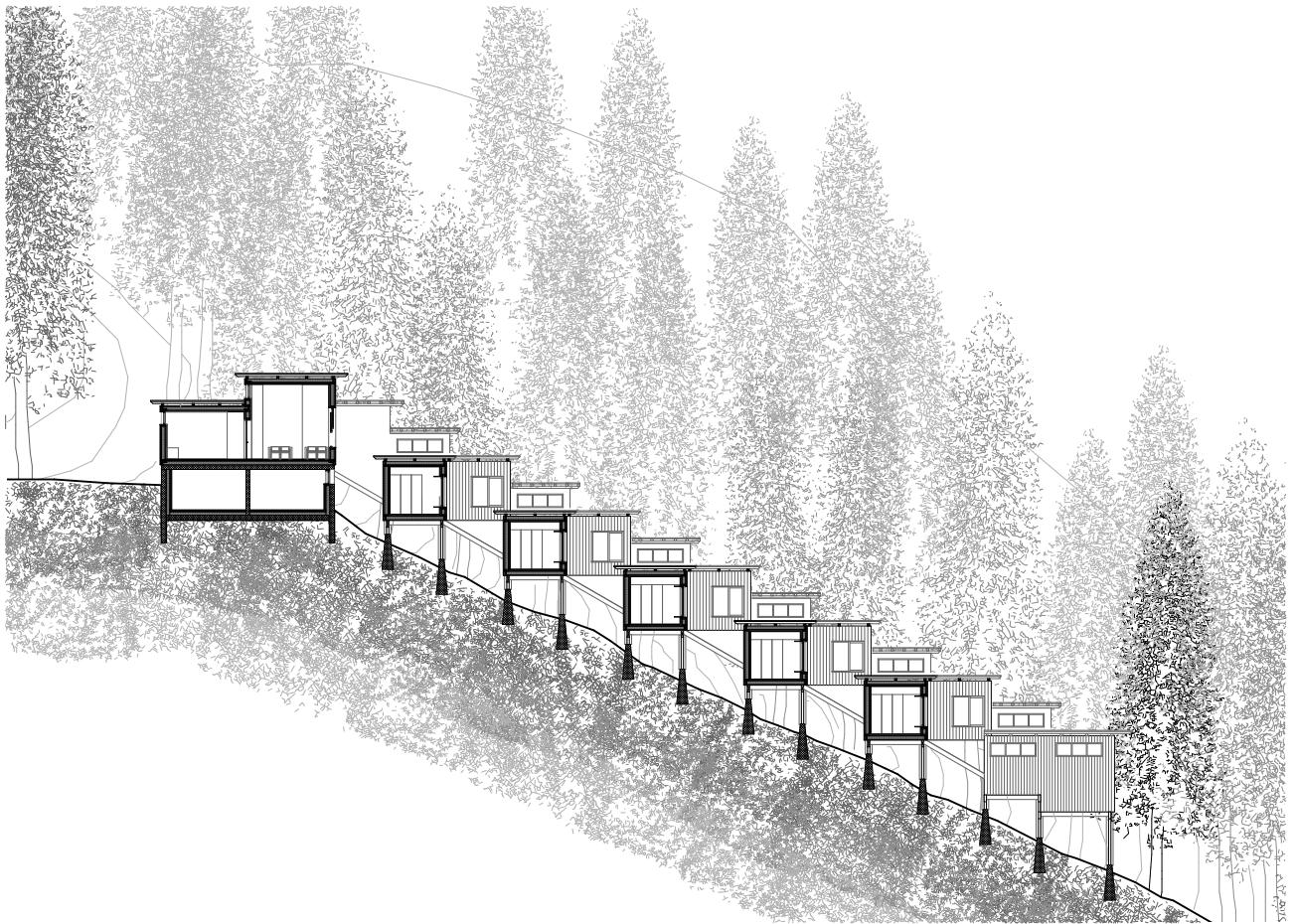
Clay model; “Ideenmodell”.



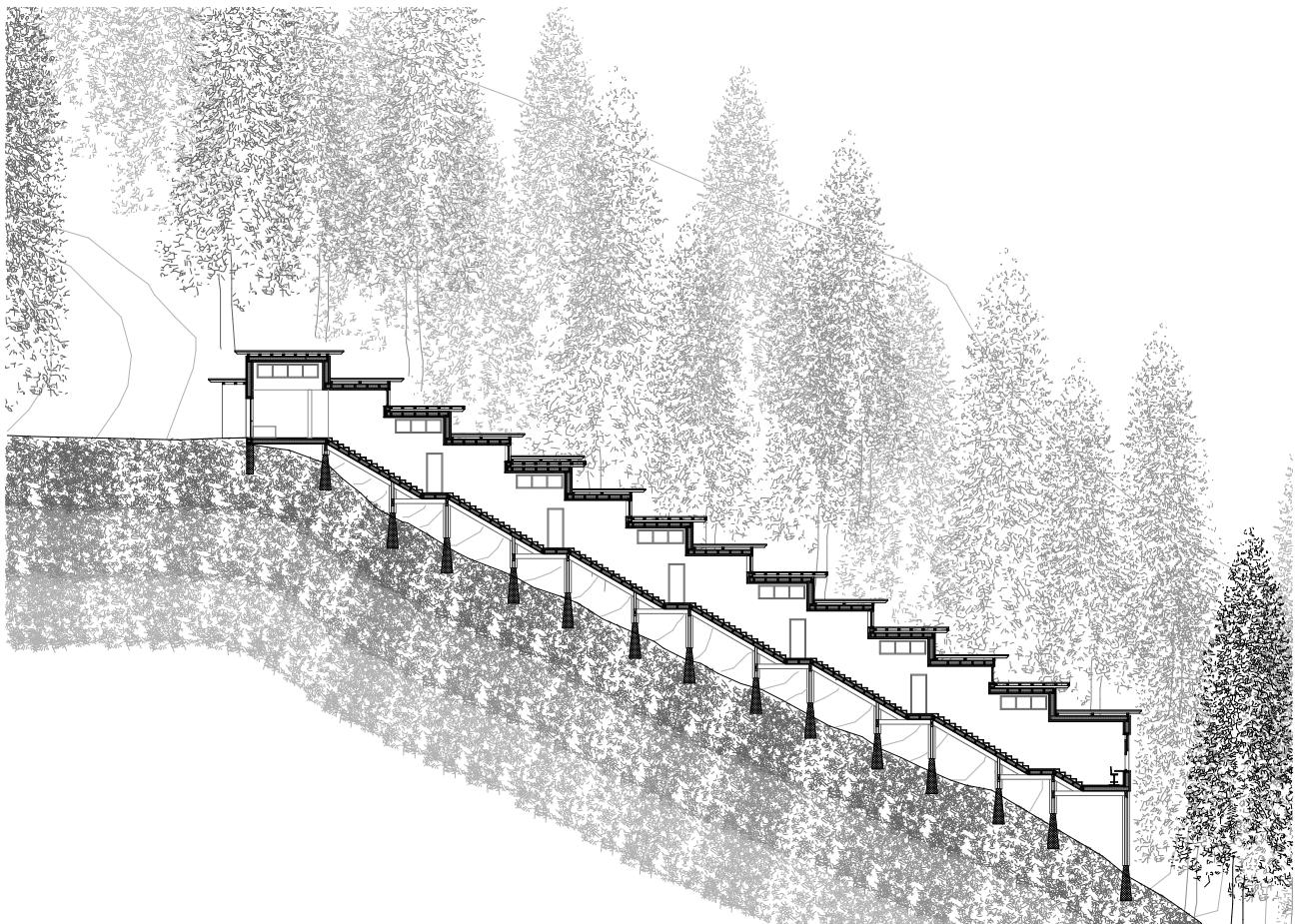
Floor plan; The dimensions of the volume are oriented on the existing clearing.



Section.



Section; Restaurant and hotel rooms.



Section; Stair hall.



View from the forest.



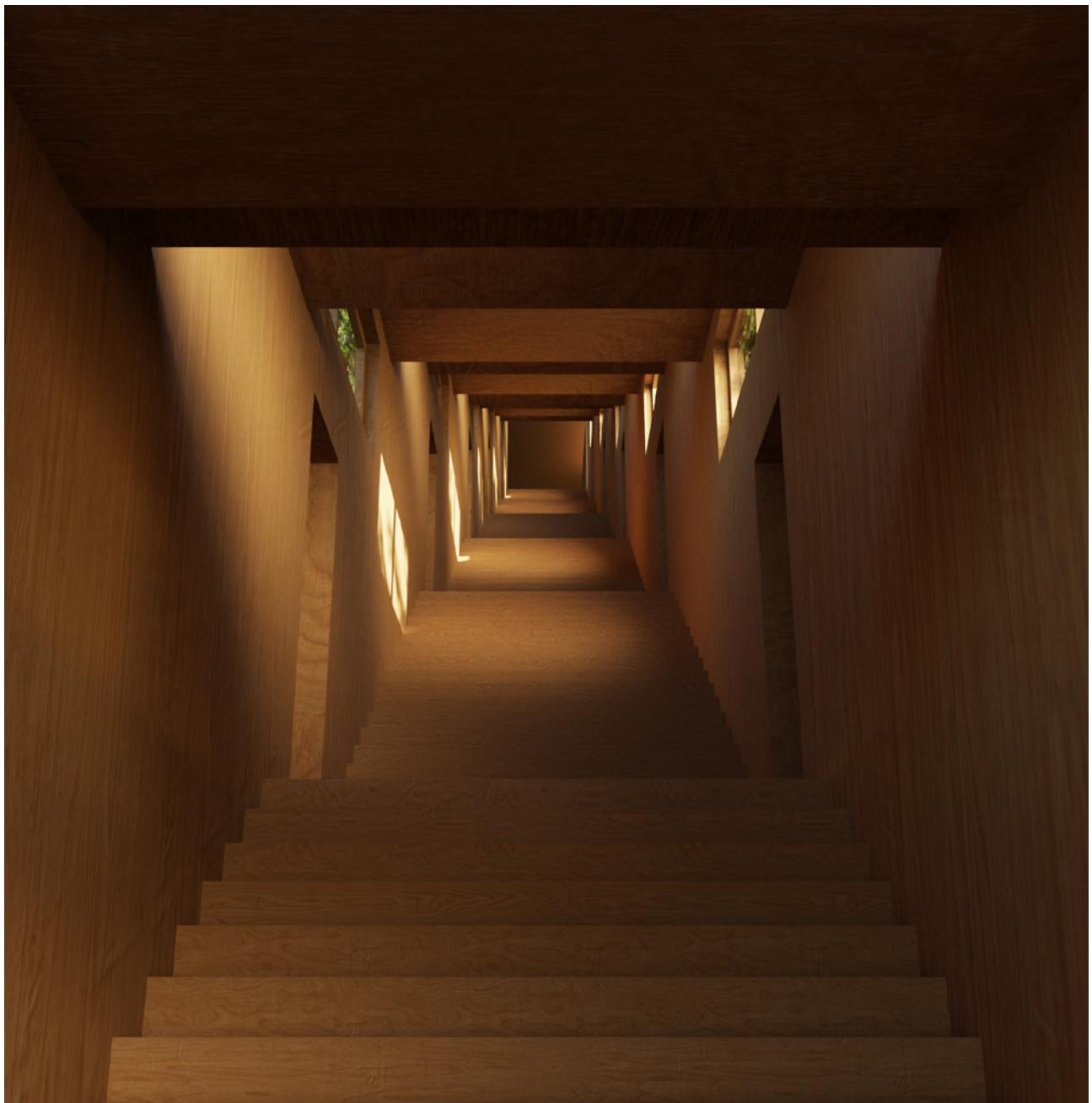


View from the hotel room.





View downstairs.



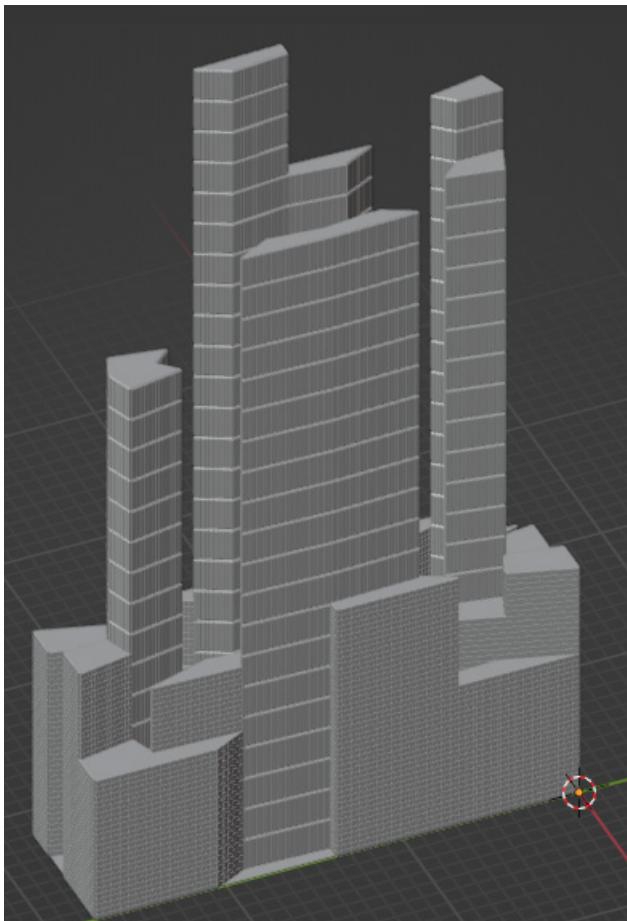
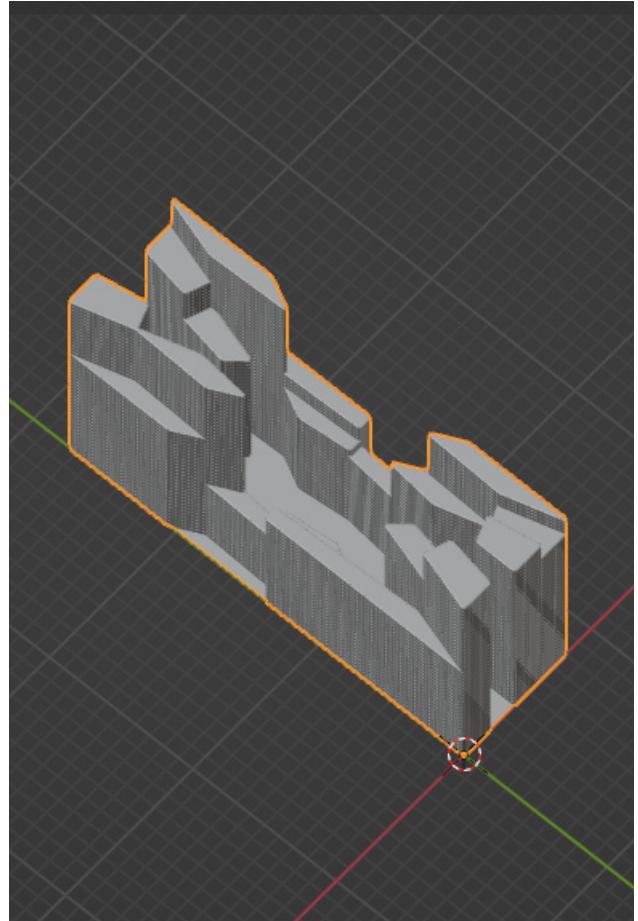
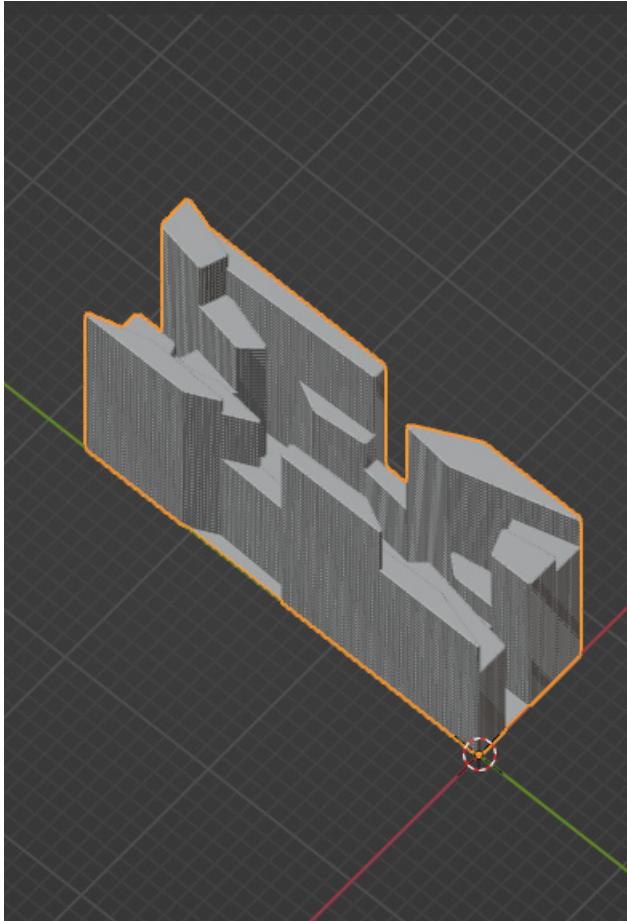
View upstairs.

DESIGNING WITH CODE

Designing with code has transformed architecture. Through coding languages and algorithms, it is possible to generate intricate forms, optimize structures, and analyze environmental factors accurately. Parametric and generative design processes allow for iterative refinement and customization.

FS 22

Prof. Benjamin Dillenburger
Advanced Computational Design
Individual Work
Leart Sejdiu



```

import sys
#change this path to point to where your local mola folder is saved
#for windows users switch "\\" to "/"
dir = "G:\LEART\ETH\TRASH\FS22\ADVANCED COMPUTATIONAL DESIGN\X_DI
if not dir in sys.path:
    sys.path.append(dir)

import mola
import mola.module_blender
import math
import random

def block_to_plot(my_mesh):
    #step 1
    newMesh = mola.Mesh()
    for f in my_mesh.faces:
        newFaces = mola.subdivide_face_extrude_tapered(f, 0.0, 0.75,
        newMesh.faces.extend(newFaces)
    my_mesh = newMesh

    my_mesh.update_topology()
    my_mesh = mola.subdivide_mesh_catmull(my_mesh)

    #step 2
    for f in my_mesh.faces:
        f.group = "plot"

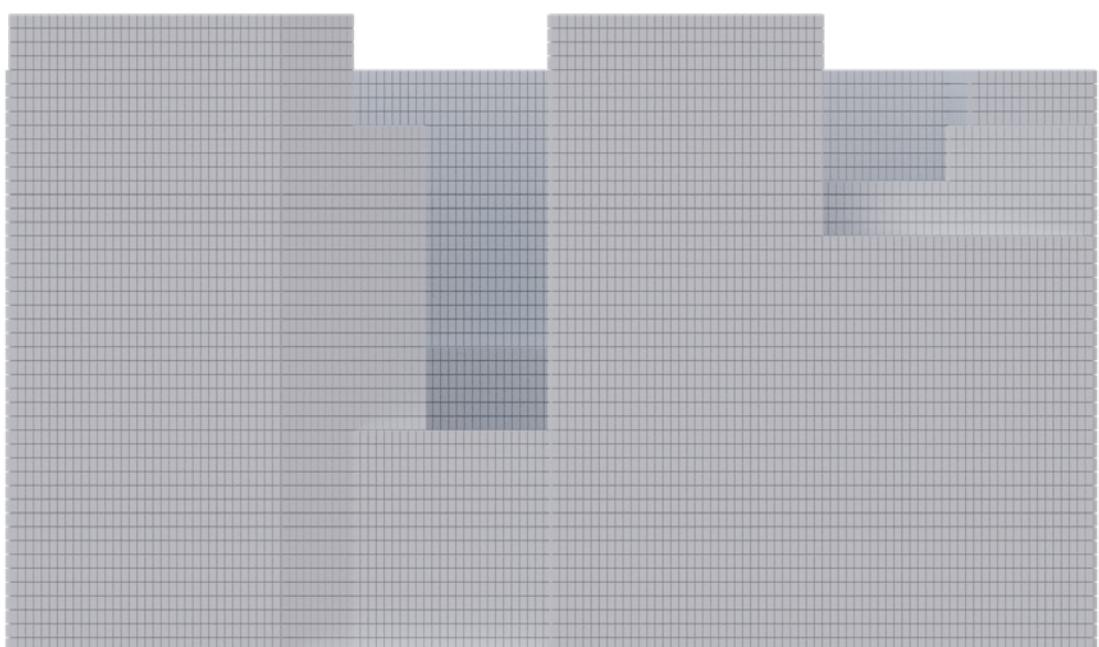
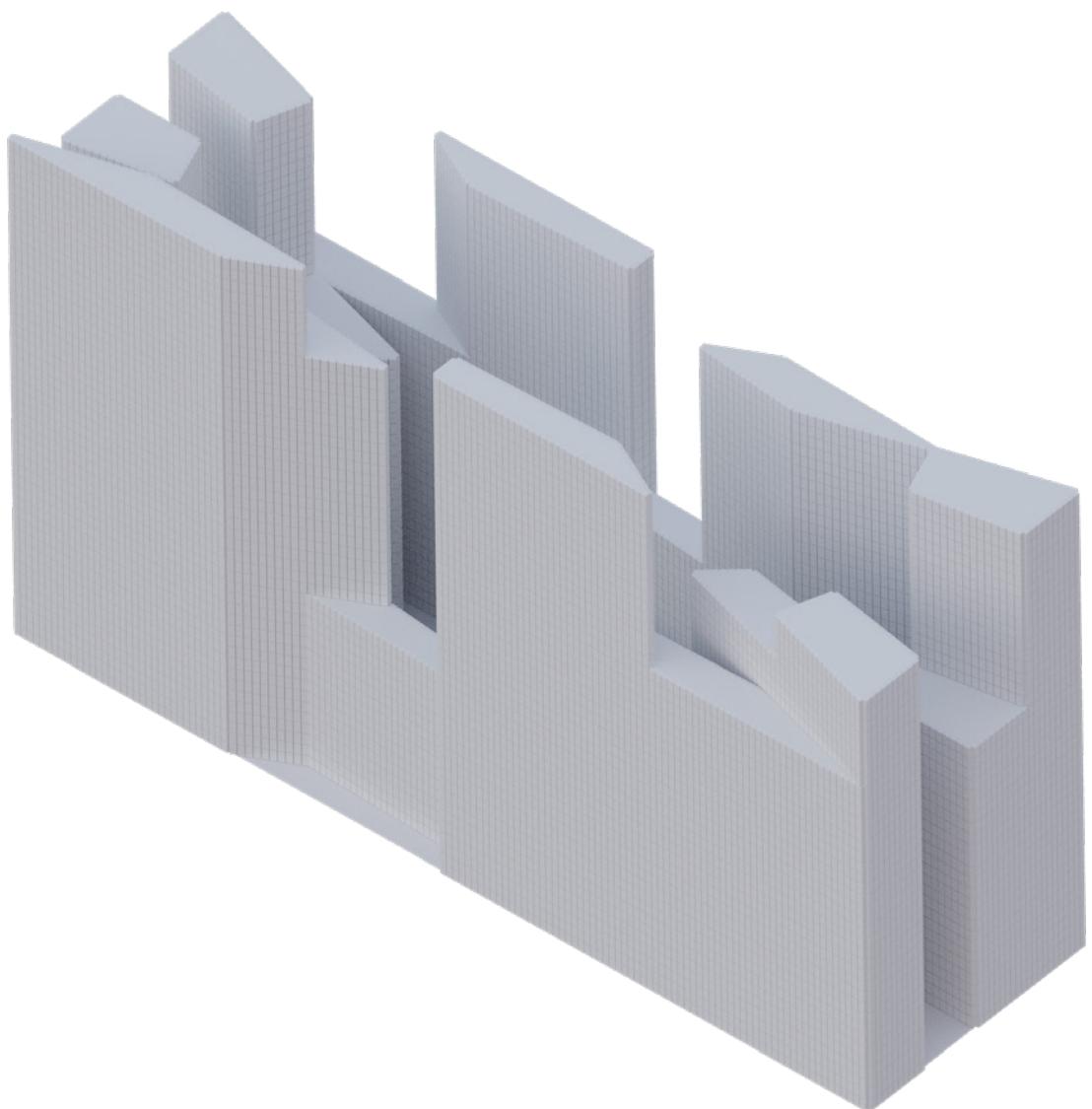
    return my_mesh

def plot_to_footprint(my_mesh):
    newMesh = mola.Mesh()

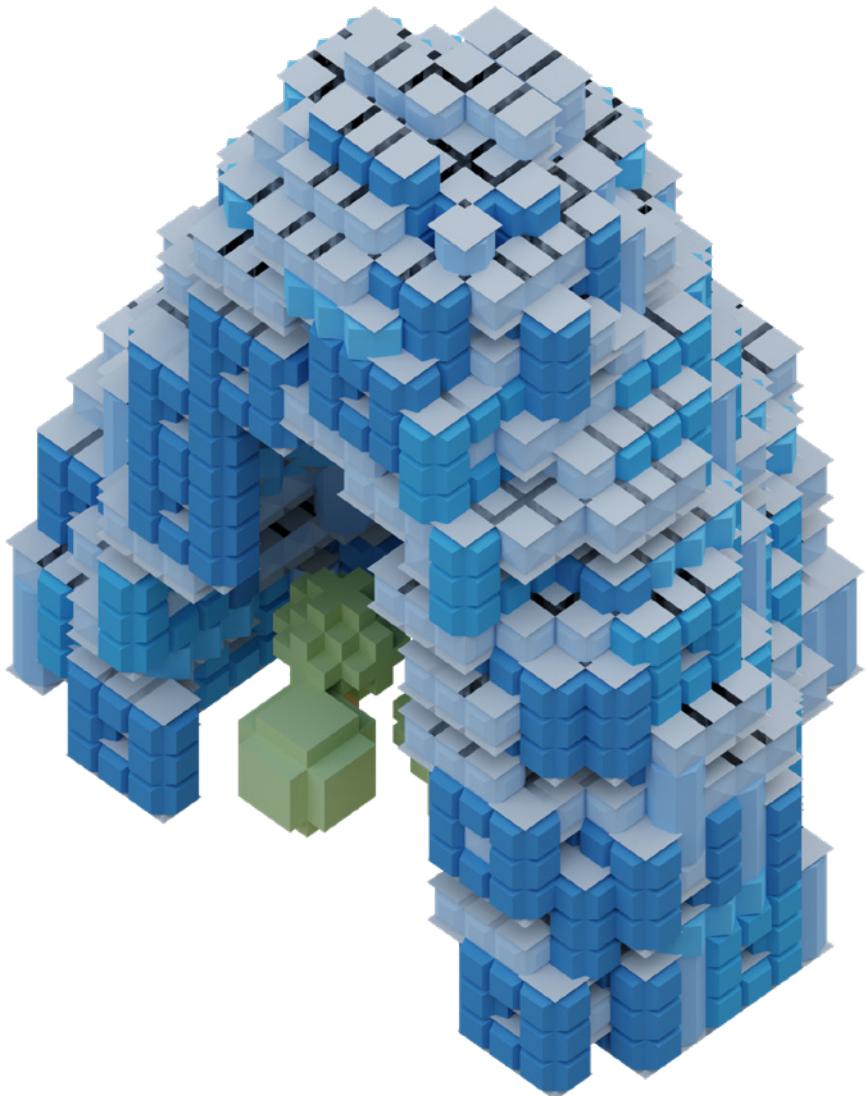
    for f in my_mesh.faces:
        if f.group == "plot":
            newFaces = mola.subdivide_face_split_offset(f, 2)
            newFaces = mola.subdivide_face_split_grid(f, 2, 2)
            for nf in newFaces[:-1]:
                nf.group = "construction"
                nf.color = (1, 0, 0, 1)
            newFaces[-1].group = "circulation"
            newFaces[-1].color = (0.5, 0, 1, 1)
            newMesh.faces.extend(newFaces)

        else:
            newMesh.faces.append(f)

```



Rule based design; City block.



Voxel based design; building.

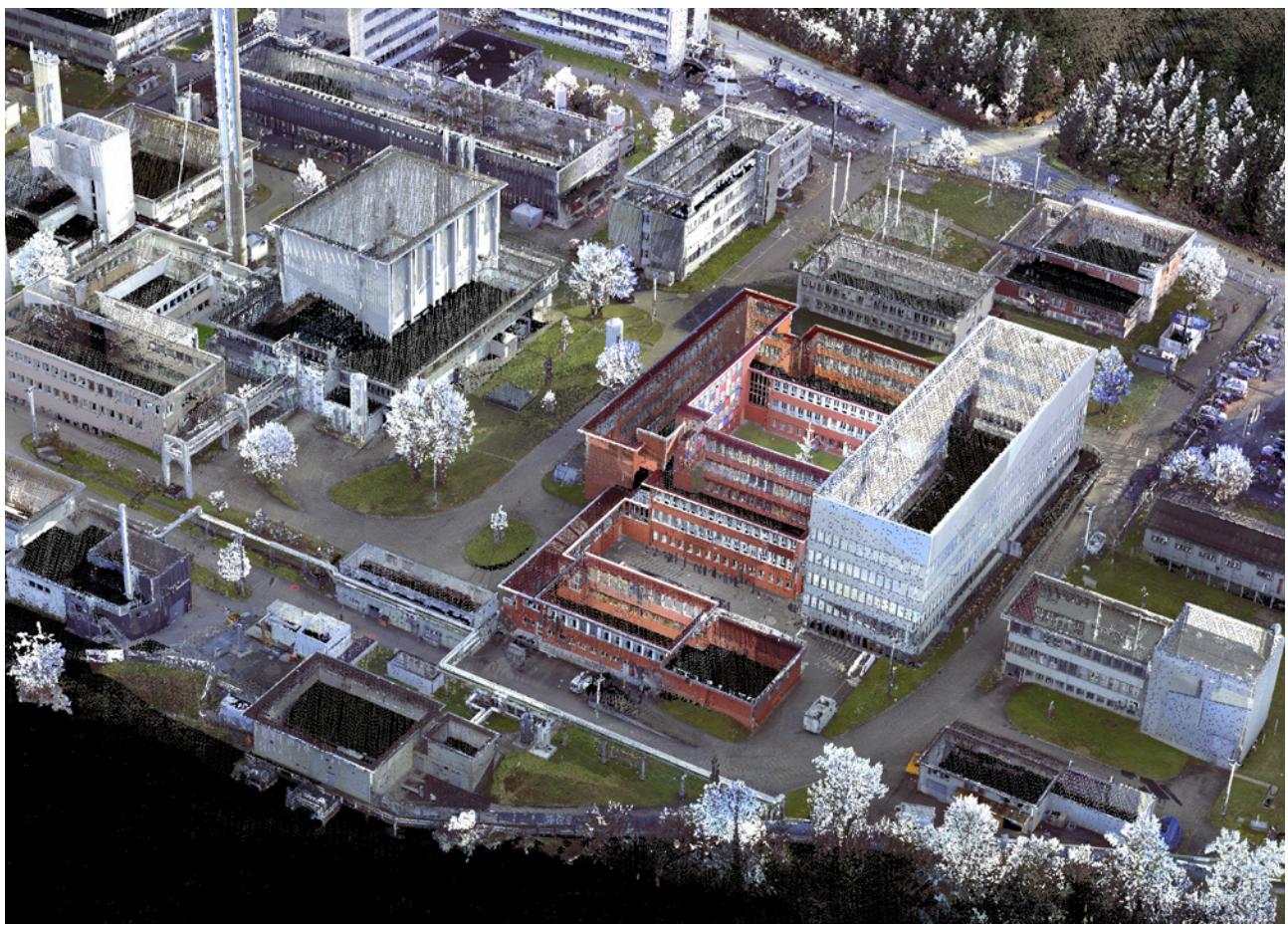
DESIGNING WITH VR

VR and point clouds have transformed the field of architecture. VR immerses users in virtual environments, offering a realistic experience of unbuilt spaces. Point clouds, generated through scanning or photogrammetry, capture precise existing conditions. Integrating point cloud data seamlessly incorporates context into designs. This combination enhances design refinement and construction processes, leading to informed and successful solutions.

FS 22
Prof. Christophe Griot
Focus Work
Designing with Pointclouds in VR
Group Work
Leart Sejdiu, Shota Shiratori



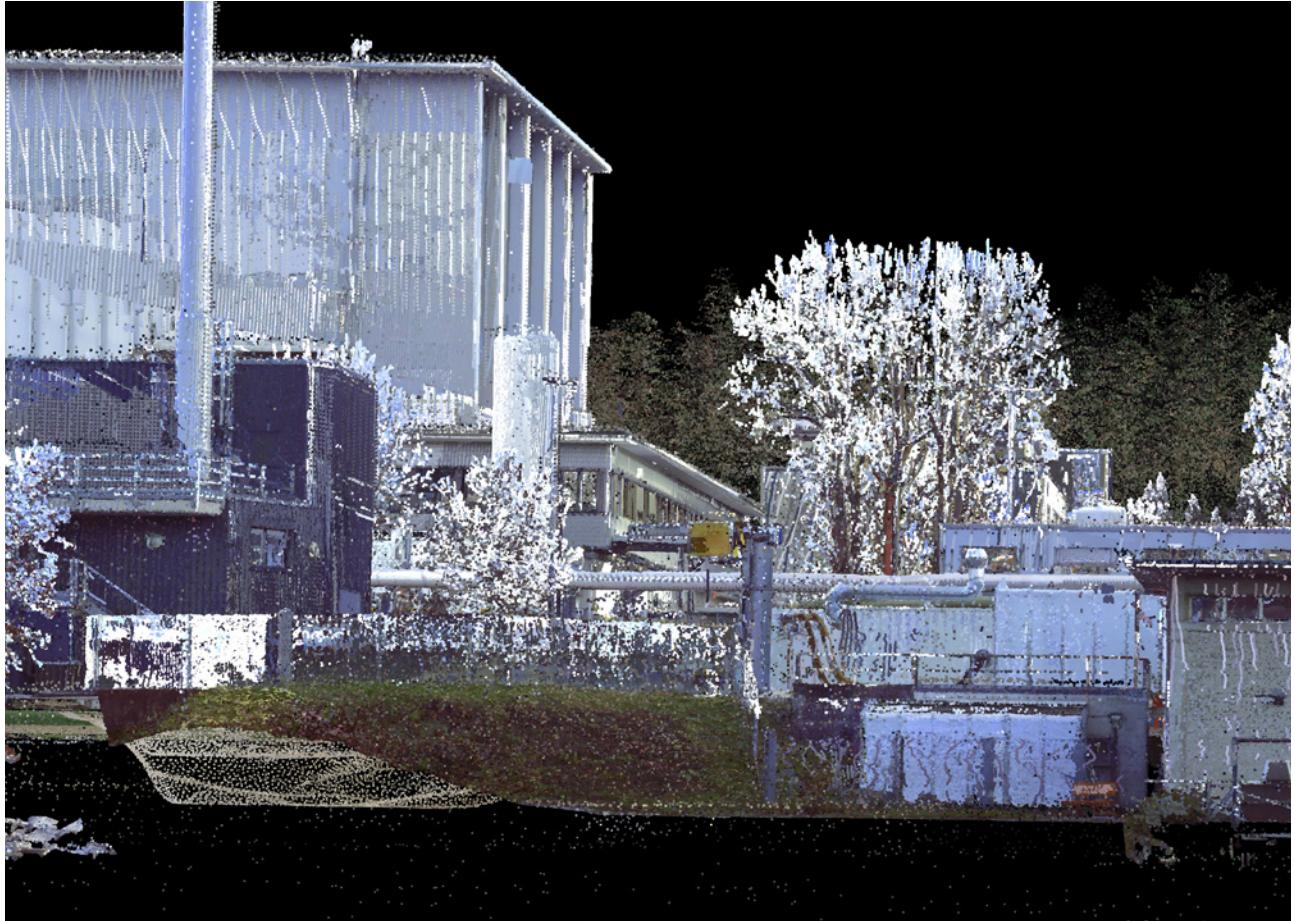
Pointcloud; Perspective of Sunken Garden in VR.



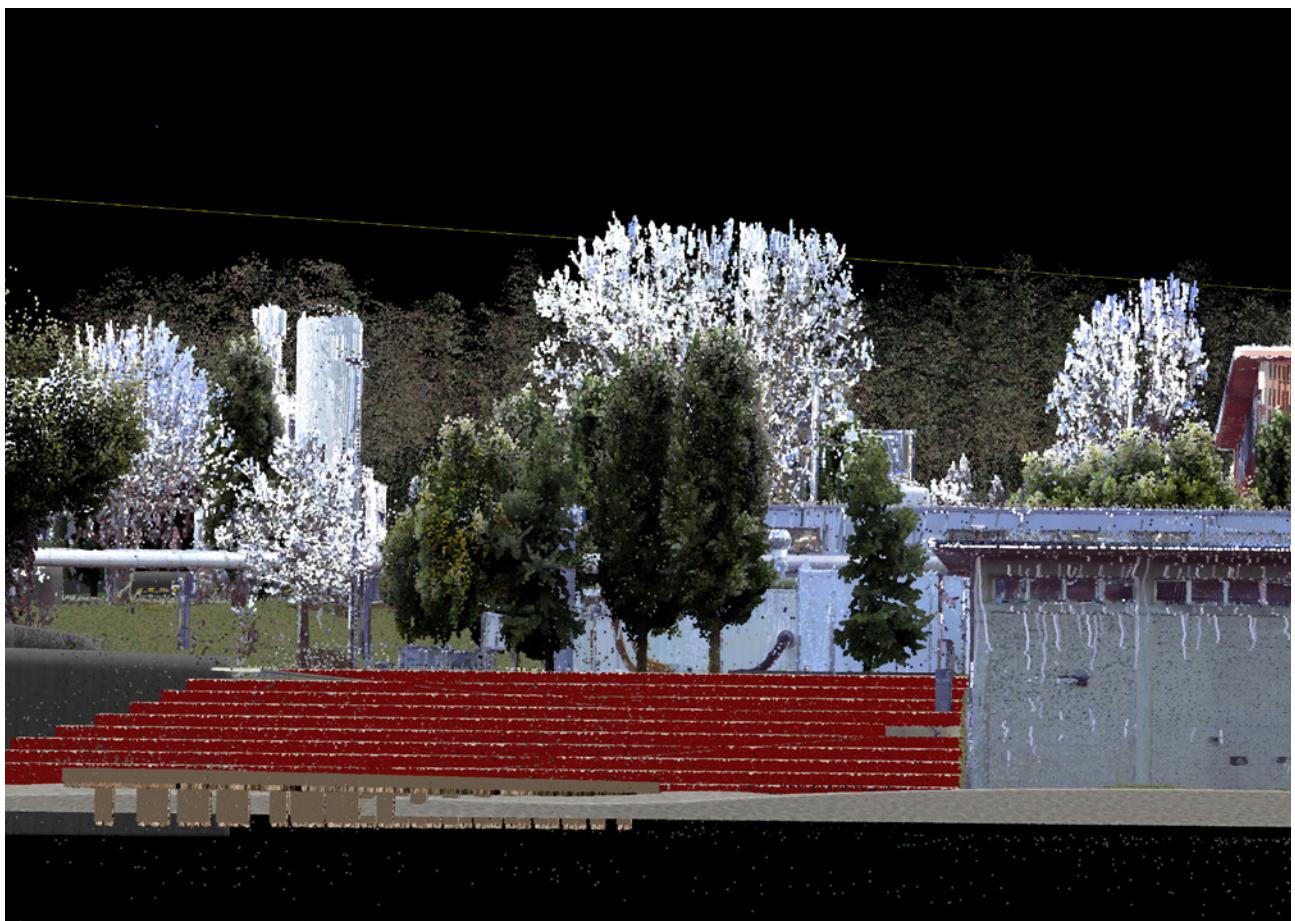
Pointcloud; Existing condition.



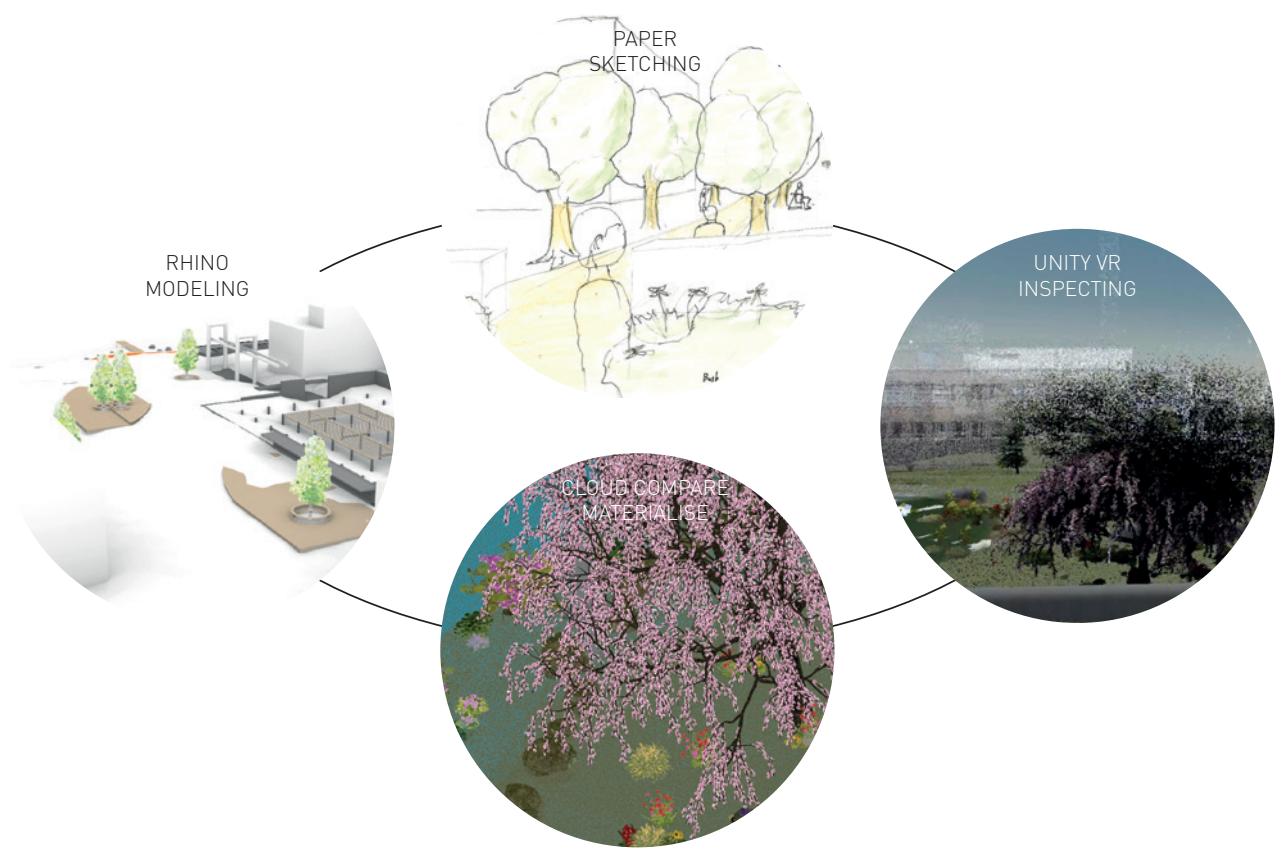
Pointcloud; Design implemented.



Pointcloud; Existing condition.



Pointcloud; Design implemented.



Designing and inspecting in VR.



Exhibition at PSI Campus.

REINHARD SITE, SACHSELN

The open landscape is a precious commodity! The progressive urban sprawl of the landscape is one of the biggest problems of our time. Unkindly designed and cheaply built “consumer architecture” covers the landscape and displaces the grown identity of our living space.

The space between the houses degenerates into a residual space that can no longer assume a social function. The old is destroyed too quickly, while the new radiates an undignified arbitrariness that leads to an increasing lack of character in our cities and villages. We therefore propose not to build on the hill south of the old wall. Of course, one could offer apartments apartments with a view of the lake. However an important and characteristic landscape element of Sachseln and thus a part of the identity of the village would be irretrievably destroyed! The old wall has marked a break in the topography for a long time. Once it was the site of a production building, and now the now becomes an interface between the settlement and the landscape. New and yet familiar: The new buildings are developed on the basis of the spatial structures of the existing buildings. The existing buildings are integrated into the development strategy. This not only ensures that the existing building fabric is treated in a resource-conserving manner. Even more: The history of the site is to live on. History of the site should live on, because it is a valuable asset that has grown over decades and has shaped the identity of the site.

The special status of the carpenter's workshop manifests itself in the large volumes that confidently mark the prelude to the village center. Instead of filling the area with a small-scale settlement structure, we recognize the special starting position as an opportunity to build a special living environment on this historic site. A place that a solidary neighborhood in which living and working are combined.

2021

Internship

Test planning Reinhard Site Sachseln
Steib, Gmür, Geschwентнер, Kyburz Architekten

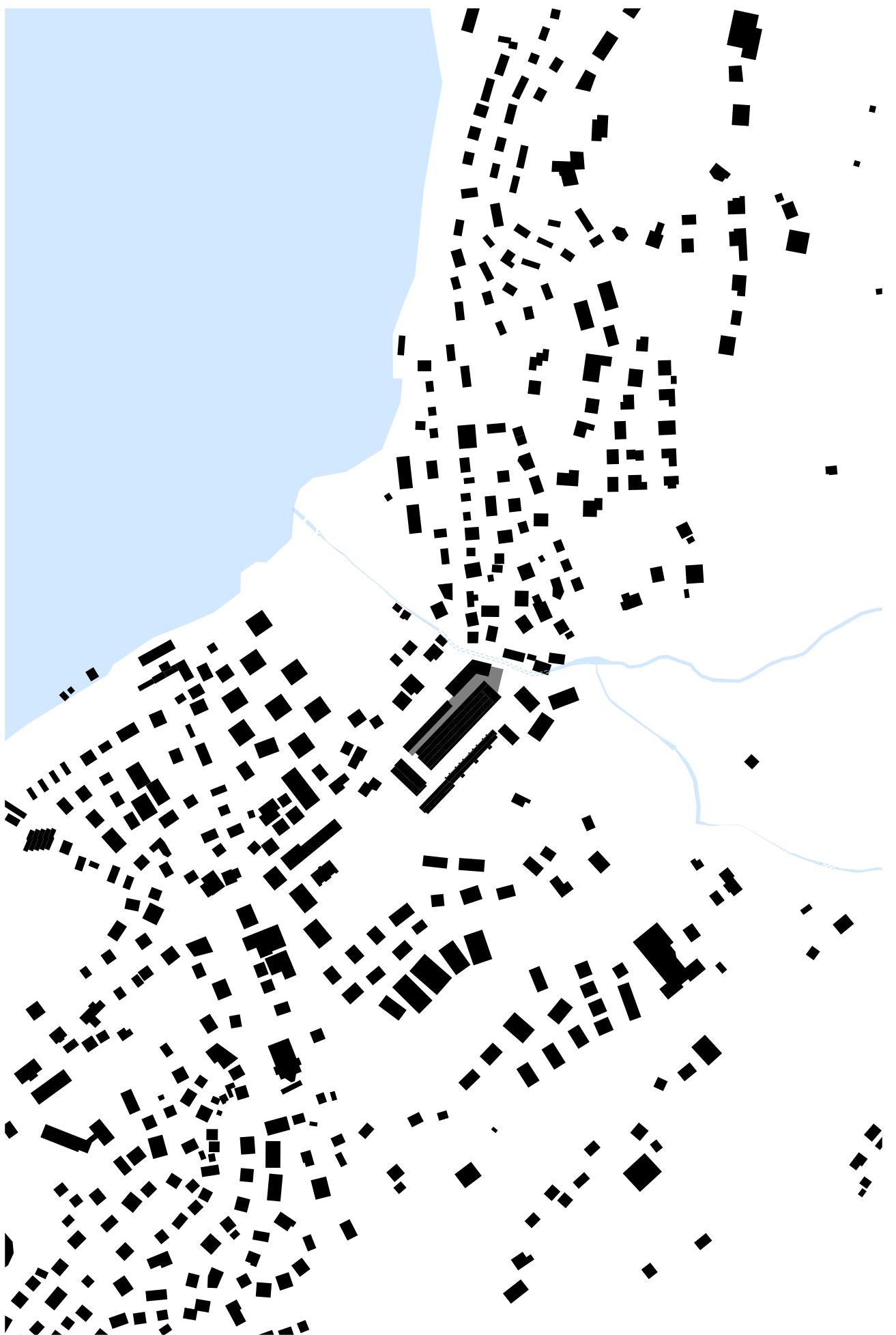


Figure ground plan; Sachseln, OW.

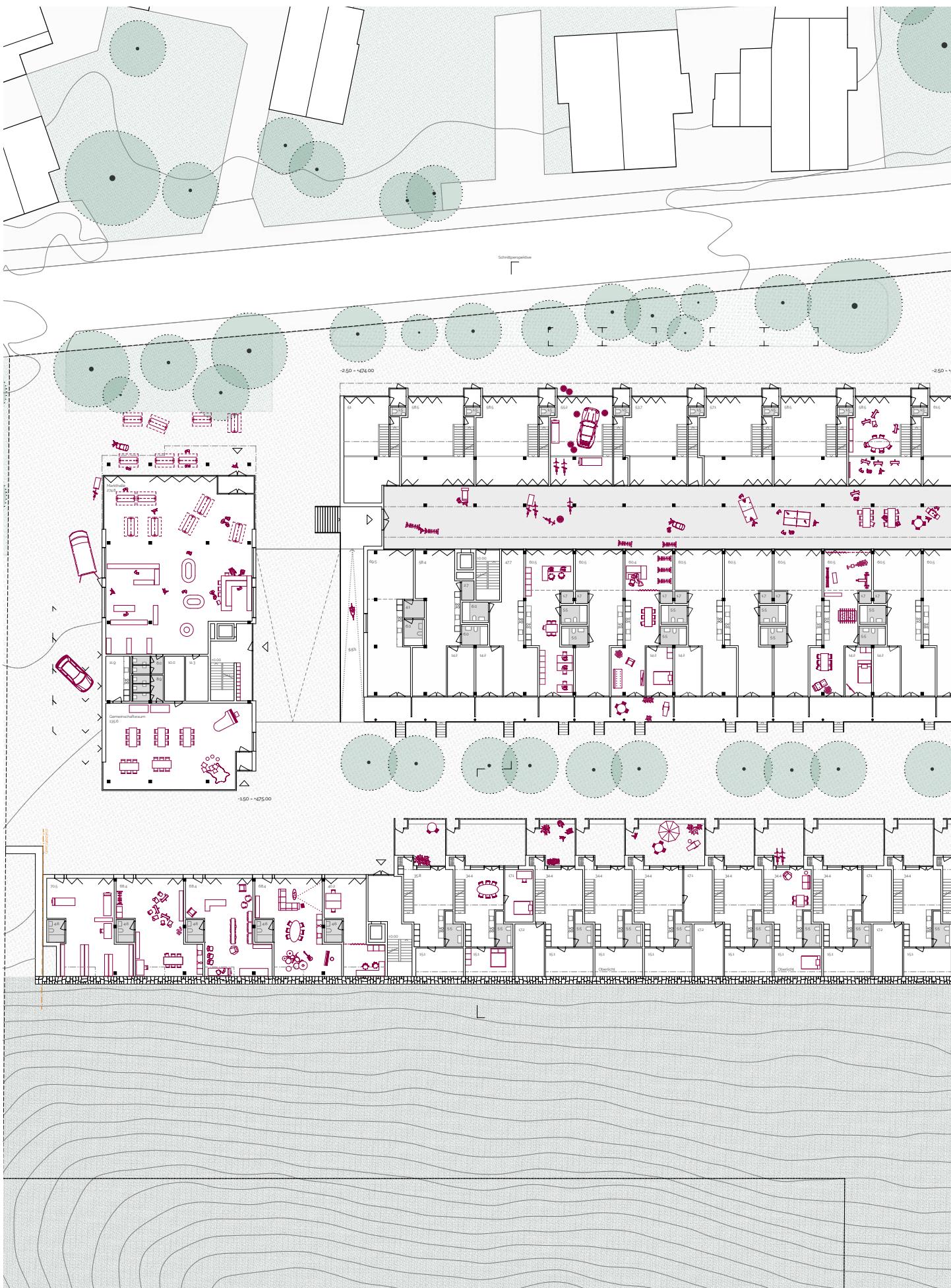
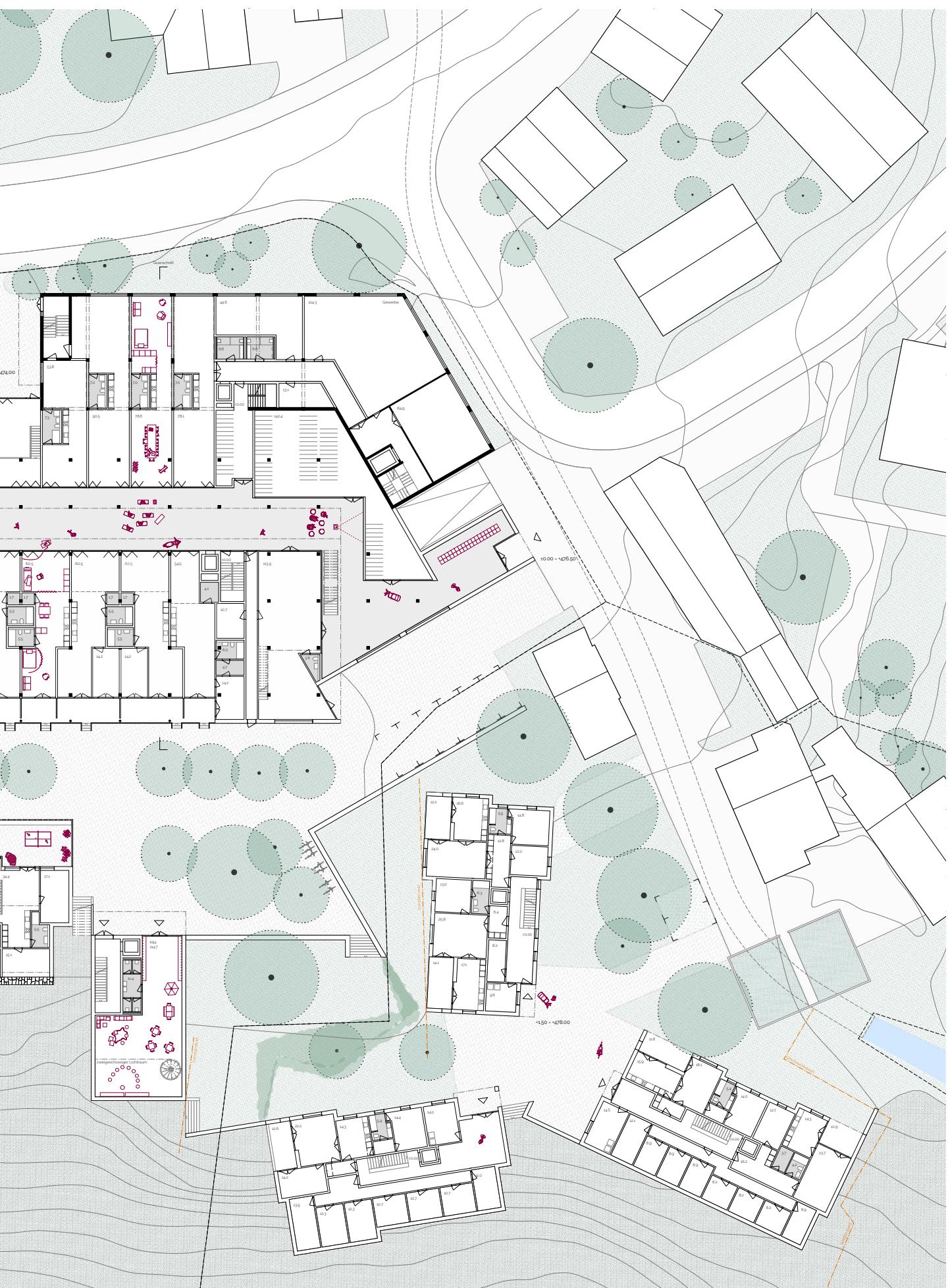
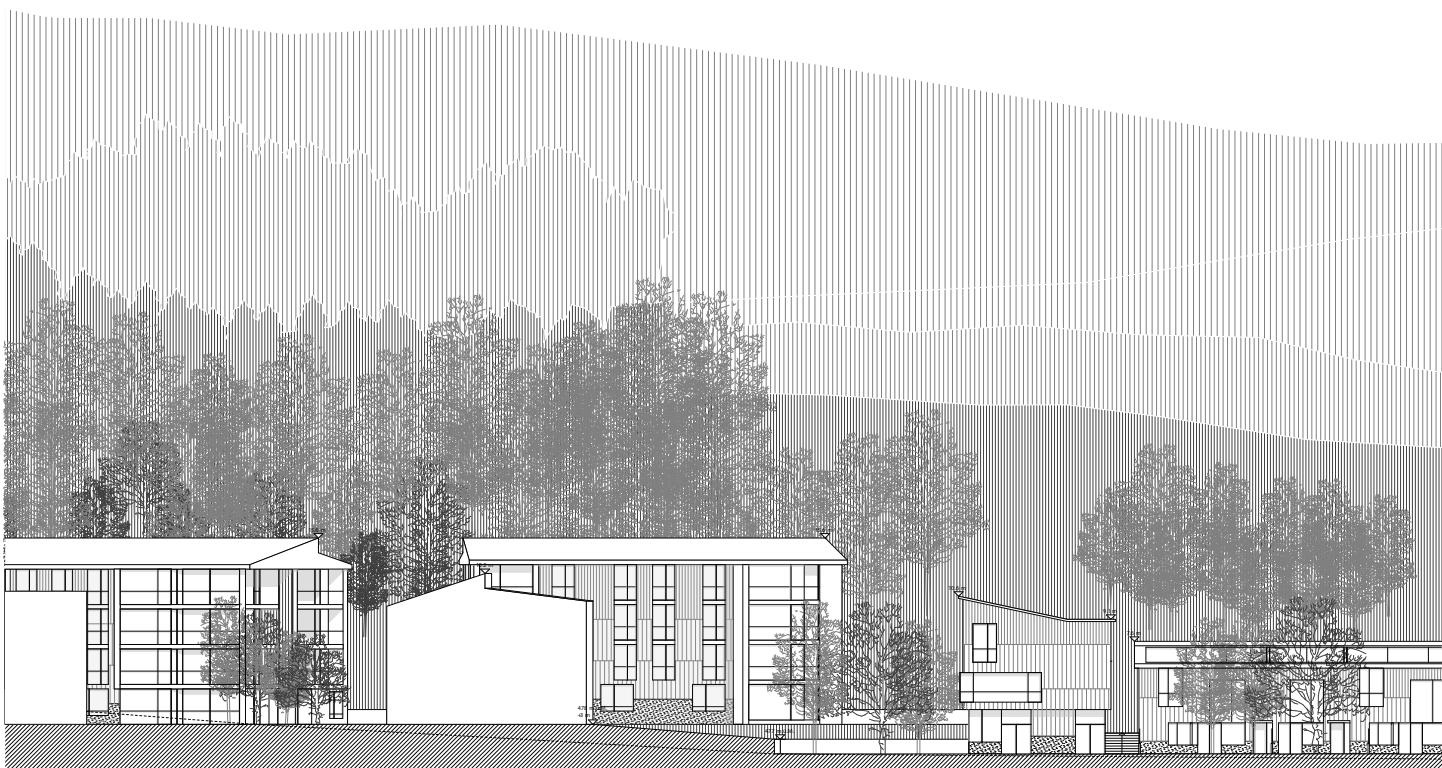


Figure ground plan; Sachseln, OW.

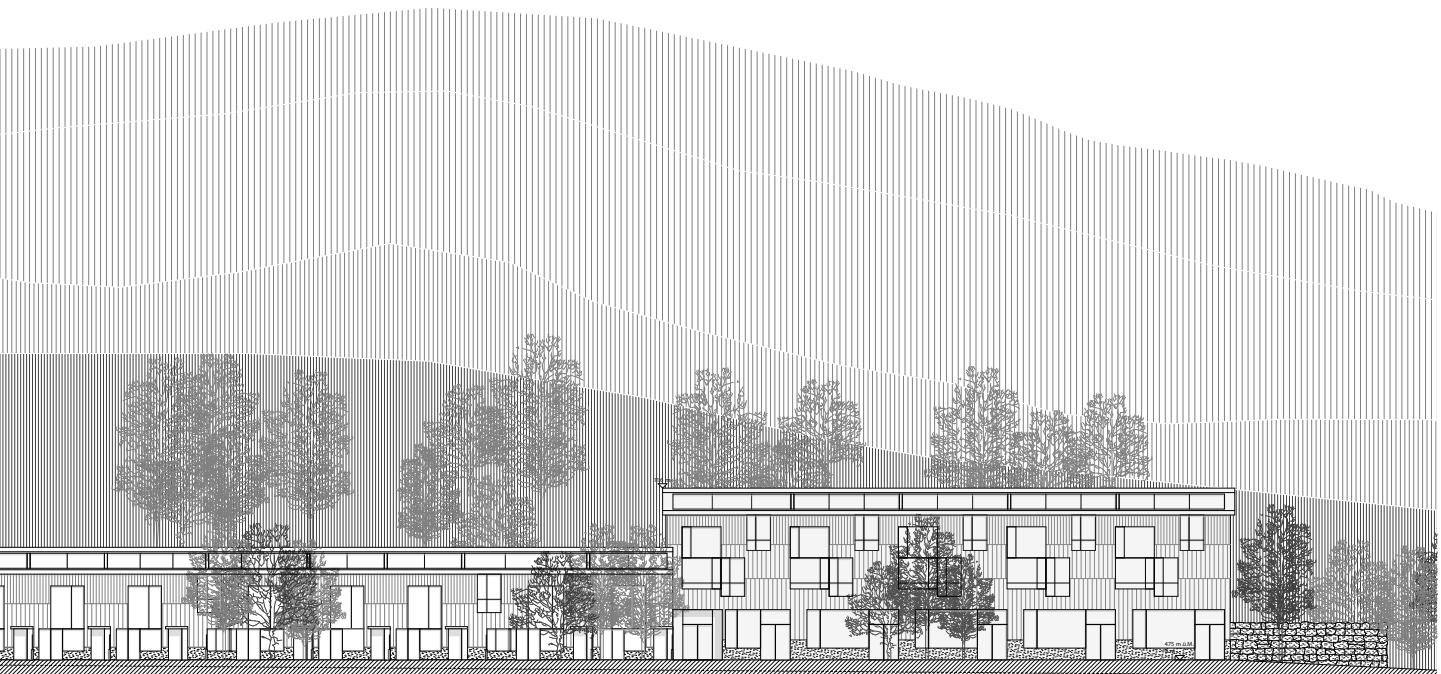


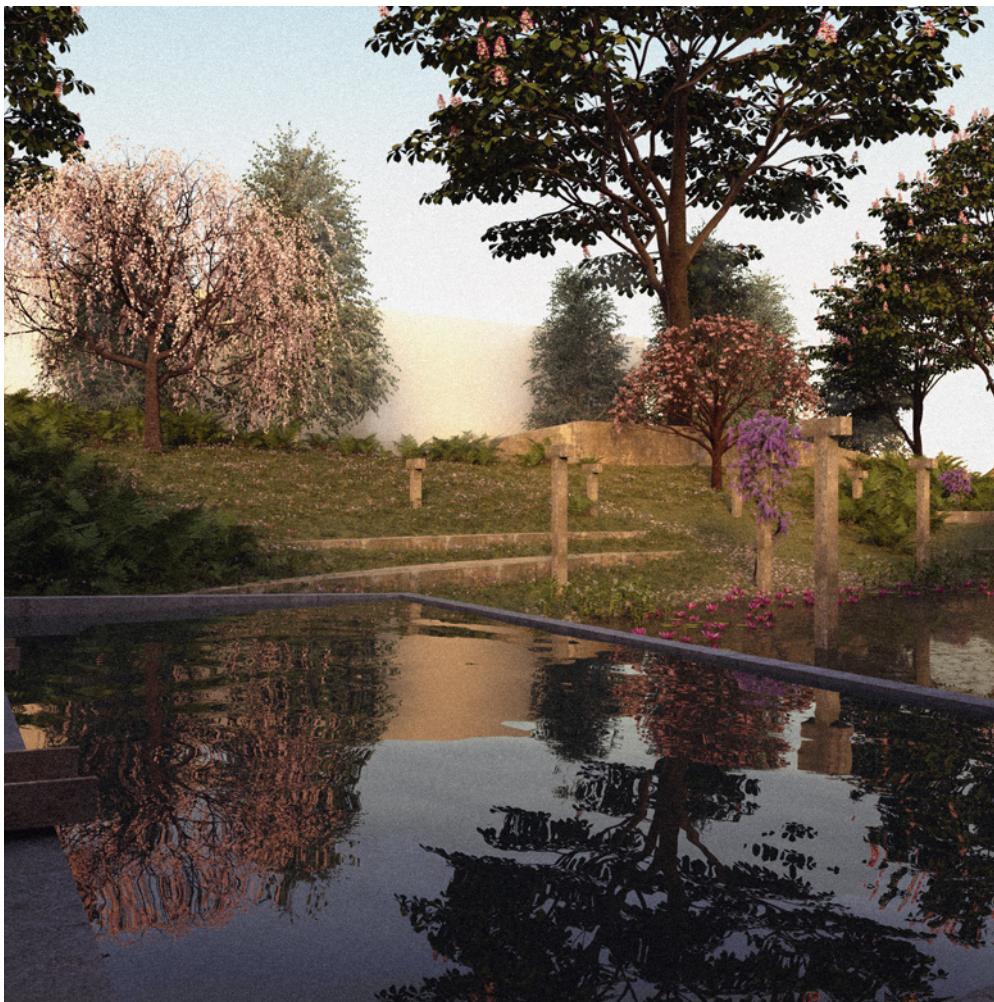


Section perspective.



Elevation; Atelier houses.





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079 363 7300