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OASIS: CITY 2.0

ausgeführt zum Zwecke der Erlangung des akademischen Grades

eines Diplom-Ingenieurs / Diplom-Ingenieurin

unter der Leitung von

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E253/4 Institut für Architektur und Entwerfen

Abteilung Hochbau und Entwerfen

eingereicht an der Technischen Universität Wien Fakultät für Architektur und Raumplanung

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von

Wien, am 06.11.2015

ABSTRACT

This project tries to explore a new form of dense living. A concept for the city is made in which the urban density is not standing in contrast to open space and green. Using the specific site, it is shown how such a project could be brought into life: an existing strip mall called "Gewerbepark Stadlau" in Vienna's 22nd district is gradually converted to a dense city quater. The project is split into two parts: the first part is a master plan, where the general concept is presented, and the second part is architectural project where - using one of the "blocks" as an example - it is shown how such a concept could function in detail.

KURZFASSUNG

Dieses Projekt versucht eine neue Form des verdichteten Wohnens zu erforschen. Es ist ein Konzept der Stadt entstanden, bei dem die städtische Dichte nicht im Kontrast zu Freiraum und Grün steht. Es ist anhand eines Konkreten Falles dargestellt, wie ein solches Konzept durchgesetzt werden könnte: der heutige Gewerbepark Stadlau im 22. wiener Bezirk wird etappenweise in ein verdichtetes städtisches Quartier umgewandelt. Das Projekt gliedert sich in zwei Teile: In erster Phase ist ein Masterplan erarbeitet, wo das Gesamtkonzept erläutert wird, und in der zweiten Phase wird am Beispiel eines "Blocks" in architektonischer Maßstab gezeigt, wie dieses Konzept im Detail funktionieren könnte. I would like to thank to Prof. Alsop for joyful and isnpirational classes.

and to my dear friends : Tamara, Danijela, Ania, Fabek, Aleksandar, Miguel, Pavle, Dragiša, Nikola, Song, Francesc. My deepest gratitude to all of you.

Najviše se zahvaljujem mojim roditeljima na bezuslovnoj podršci tokom svih ovih godina.

A city should have magical places where phantasy is possible.

CONTENTS

Introduction	8
Analysis	11
Master Plan	29
Project	61

INTRODUCTION VIENNA - A GROWING CITY

As the capital of Austria and through its geographic proximity to the new member countries of the EU, Vienna attracts a constant inflow of new inhabitants. 20.000 immigrants per year make Vienna one of the fastest growing cities within Europe. The current city government has proclaimed its intention to canalize this growth into a sustainable city development, using its critical mass to create new types of urbanity within the city and on its fringes. Renewable energy, sustainable mobility and greater development of public transport facilities are now at the focus of attention of those responsible. Intel- ligent mobility is the name of the game: it is planned to double the proportion of bicycle traffic. Infrastructural frame conditions form the basis for forward-looking ur- ban planning. By launching more participation projects, it is hoped to improve the integration of urban dwellers into the process of urban design.

Over the past few years, large-scale Viennese projects have been focused on former railway station sites. This wave of reorganization has led to concentrated build- ing activities and to redensification. The City of Vienna intends to establish itself as a main node in the trans-European railway network. Inner urban waste lands have been created through closures, shifts and the restruc-turing of major infrastructural centres. In the 1990s, Vienna's housing activities (which had peaked during the 1920s in "red" Vienna's socialist heyday) reached a level of saturation in urban extension areas, resulting in redensification measures in inner city and built areas, which are still going on today. Today the city follows a two-fold strategy: on the one hand the development of new urban quarters along new lines of infrastructure (most prominently "Seestadt Aspern" at the end of sub- way line U2), and on the other hand the densification of areas in-between, where existing monofunctional struc- tures can be infiltrated with housing and other functions in order to become urban quarters with a mix of uses.

In order to organize the growth of the city, the City Development Plan of 2005 (STEP05) already defined the so-called "Zielgebiete": target areas on which the department of city planning focuses its attention, trying to both stimulate and coordinate the growth of the city. Among these target areas are, on the one hand, the ar- eas formerly taken up by rail stations, where new urban quarters are to be inserted within the existing urban fabric, such as the new main station area, or the areas of the former Nordwestbahnhof and the former Nordbahnhof. On the other hand, new centralities are created along the main lines of public transport that lead from the centre to the periphery: extended subway

lines and overground trains as much as new tramlines. The most prominent example is "Seestadt Aspern", a new urban core at the end of subwayline U2, which is supposed to accommodate 20.000 inhabitants and 20.000 workplaces. But the strategy of the target areas also is meant to revi- talize come-down areas of the city or establish corridors of usable open space along the main waterlines cross- ing Vienna. Last but not least, the program proposes to redefine peripheral zones where an apparently formless conglomeration of old village structures, large pieces of infrastructure, business parks, single family houses and agricultural areas has created a lack of urbanity which makes them highly unattractive. Today, the situation has slightly changed in relation to the proposal from 2005, due to the growing demand for housing in consequence of the growth. Therefore, subsidized collective housing (as opposed to single family homes) is generally taken as the main motor to introduce urbanity to these areas. The introduction of housing to sites where up to now other uses predominated is one of the proposed strategies. Monofunctional developments, like business parks or industrial areas, are to be planned as mixed-use neigh- bourhoods.

Another important strategy implemented by the city is the "Grüngürtel Wien" (green belt), presented in 1995. Taking up the idea of the "Wald- und Wiesengürtel" from the year 1905, the Grüngürtel creates a sequence of green spaces that surround the built-up area of Vienna. By the 1995 proposal, the frame created

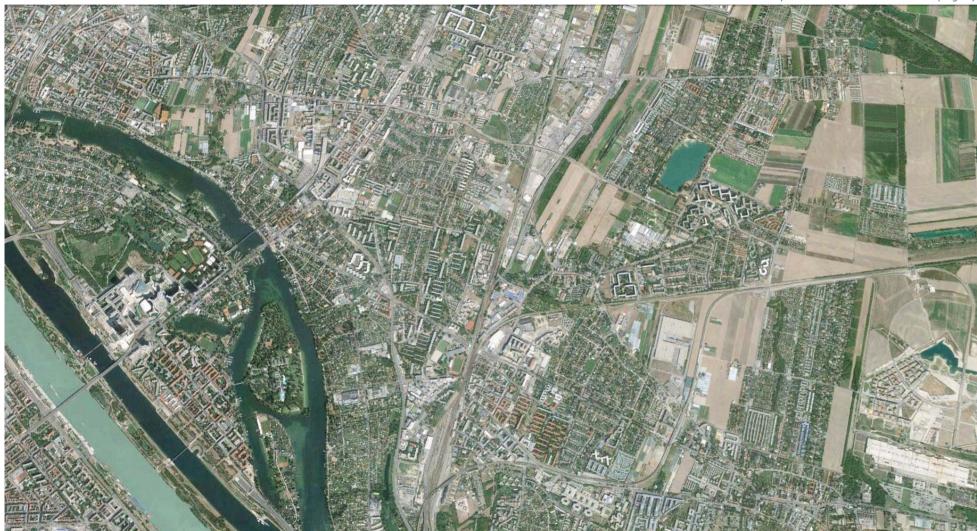
in 1905 was closed and the northeastern parts of the city – beyond the river Danube – were integrated. Many areas still in use for agriculture were assigned to remain green spaces, excluding them from the built development.

Ten years later, the maintenance of the Grüngürtel was again confirmed in the City Development Plan (STEP05), stressing the need to consolidate and densify those areas that are already built upon and leaving large open spaces free. Today the network of green spaces still remains, but a potential densification along its fringes seems necessary.

Vienna is connected to the surrounding country by a large network of overground trains, the Schnellbahn, which also has a number of important stops within the city. On the other hand, the existing system of subway lines is continually expanded, acceding also those areas which are still not densely populated. In between this – mostly radial – lines of train and subway, bus and tram lines connect those areas that are not directly acces- sible. All these means of public transport are seen as a motor for development: the building of new subway stations is usually coordinated with the development of new housing plots and commercial areas. Seestadt Aspern is the most prominent example of such a public-private partnership, where the city provides the main infrastruc- ture for a mixture of publicly and privately funded developments. But also the introduction of new tram lines is meant to trigger local restructuring on a lesser scale.



DONAUSTADT



Donaustadt: a patchwork of different structures (img 02)

Historically, Donaustadt forms, together with the neighbouring district Floridsdorf, part of "Transdanubien", that area of Vienna which lies on the northeastern side of the river Danube. In general, the built structure of Donaustadt is much less consolidated and dense than on the other side of the Danube. Until the early 20th century, the area was largely countryside, with some villages along the radial streets from Vienna. This area was subject to regular flooding, until the regulation of the Danube made a stable development along the river front possible. It was not before 1904 that the area beyond the Danube was incorporated into the city of Vienna.

The district Donaustadt is Vienna's largest district in surface (102km2) and its 2nd-largest district in population (162.000 in-habitants). Building density is quite low – only one quarter of the surface is built-up area – and nearly 60% of the area is dedicated to green space – in large parts used for agriculture, but also to be accounted for by the floodplain forest along the river Danube (Lobau), which is under protection as a national park. Still, there are large un-built areas which can be developed, which is why Donaustadt today is the fastest growing district of Vienna.

The city's densification strategy focuses mainly on Donaustadt, trying to use this potential to re-qualify the suburban sprawl and create new sub-centers. At the moment, the city of Vienna is promoting growth along the extension of the subway line U2, culminating in the New Town project "Seestadt Aspern". Subsidized housing is the main motor for these developments. However, the growing demand for housing cannot be met by these projects alone; other areas, in-between the main vectors of devel-



"Josephinissche Aufnahme": 18th Century map (img 01)

Seestadt Aspern (img 03)



opment, are identified which can be transformed and densified. Today the urban structure of Donaustadt is a patchwork of different settlement types and urban structures. In general, functional segregation prevails. As to housing, the various models of social housing which the city of Vienna implemented during the last hundred years are assembled: for example the garden city settlement "Am Freihof" (1923-27), the large mono-functional housing complex "Trabrenngründe", also infamously known as "Siedlung Rennbahnweg" (1973-77), or Donau-City, a new mixed-use city quarter with high rise buildings constructed above a highway along the Danube. These neighbourhoods of social housing form islands surrounded by carpets of single family homes. Interspersed are allotment garden communities with the typical small Schrebergartenhäuser. In between, the old village centres are still visible, following the settlement type of the Angerdorf – a compact settlement around a longitudinal open field in the middle – or of the Straßendorf – with a consolidated street front of linear lots opening towards the fields at their back. Large infrastructural vectors (railway tracks and stations, motorways and subway lines) cut through the district, creating, on the one hand, strong barriers, while on the other hand turning areas in the middle of nowhere into extremely well connected places. In the spaces in-between these vectors and attached to these infrastructural lines, pockets of commerce and industry have been established. Outstanding among these is the shopping centre "Donauzentrum" at the former terminal stop of subway line U1, Vienna's largest indoor shopping mall. On the other hand, the city of Vienna has used the empty spaces of Donaustadt to loDonau City (img 04)





Trabrenngründe (img 06)



family houses (img 05)

cate large "heterotopic" functions, like the second-largest hospital complex of Vienna, the Donauspital (SMZ Ost), the waste management plant of Rinterzelt, with its striking tent structure, or the landfill site of Rautenweg, the biggest waste deposit in Austria, where the emerging gas is utilized for the production of energy. Over the years, the hills of Rautenweg have been transformed into a grassy steppe, with a special biodiversity, even functioning as a reservation for endangered species like the mountain goats.

A new addition to the infrastructural network of Donaustadt is the Stadtstraße: In the future, a new principal street will be joined to the S2 at the highway node Hirschstetten, extending the A23 to the east and connecting it directly to the S1, with a prominent exit to "Seestadt Aspern". This street, called "Stadtstraße", is intended to relieve the existing east-west connections through the district, basically old village streets which suffer highly from traffic congestion and opens possibili- ties for traffic calming measures there. The character of this street should be that of a green boulevard, slightly sunken and accompanied by a park stripe. This project is supposed to be completed by 2017.

Topographically, Donaustadt forms part of Marchfeld, the plain which extends from the Danube towards the North- east of Vienna. Towards Marchfeld, the city disintegrates without a clear border, fraying out into open fields which are agriculturally used. These fields are interspersed with small lakes that are renmants of clay extraction for the production of bricks. Some of these lakes are used for bathing (Badeteich Hirschstetten); some have assembled small settlements along their banks (Pony- Teich). Along the Danube, the Donauinsel, the Alte Donau and the wetlands of Lobau offer recreational areas and green spaces related to the riverfront. To the Northwest, the wooded hills of Wienerwald and Bisamberg are visual points of reference in the distance. The landfill site of Rautenweg, with its artificial hillside of 45m height, is a strong topographical occurrence in the flat landscape of Donaustadt.

Today, Donaustadt can be regarded as an outstanding urban laboratory of the city of Vienna. As already mentioned, the extensions of subway lines U1 and U2 have introduced a new vector of development into the district. Another, less spectacular, but not less important focus of attention for the municapility is the area around the subway stations Kagran and Kagraner Platz, selected as one of the target areas of the City of Vienna. The aim of this program is to develop an attractive district centre ("Zentrum Kagran") as a multifunctional urban guarter along the axis of Wagramer Straße and the subway line. Pedestrian and bicycle routes are to be improved, open and green spaces are to be revitalized. The new prolongation of the tramway line 26, in order to connect the radial lines of the subway - U1, U2 and U6 - is supposed to activate the areas in between. This is also the reason why the project site has gained a new potential for redefinition and densification.

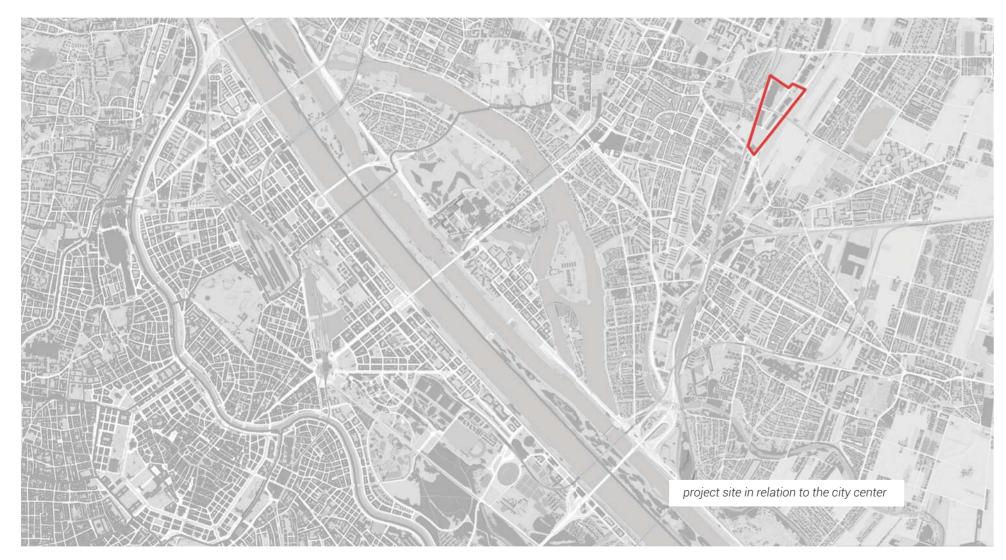


Rinterzelt (img 07)



Donauzentrum (img 08)

PROJECT SITE



The project site is part of a wedge opening between two major lines of infrastructure that lead from and to Vienna: to the west the railway line from Vienna to Laa an der Thaya, and to the east the route of the motorway S2. The rail tracks today are only used for freight trains, but with quite a high frequency and considerable noise emission. The S2, the "Wiener Nordrand Schnellstraße" (Vienna north periphery motorway), is basically the prolongation of the highway A23, the "Südosttangente" (south-east ring road). It leads north to the S1 ("Wiener Außenring Schnellstraße"), the incomplete motorway which is to connect the Southern and North-

project site



ern periphery of the city via the airport at Schwechat. Nowadays, the S2 is the main access route to the city center from the Marchfeld, the region to the Northeast, with heavy commuting traffic. In order to allow for an unhindered flow, all level crossings have been made in the last years, transforming the S2 into a separate motorway with access and exit points. In the future, the new "Stadt- straße" will join the S2 at the southern tip of the study site. A ramp leading into the new highway intersection at Hirschstetten will take over part of the study site at its southern tip.

strong barriers: railway and motorway



At the present, the site is taken up by the monofunctional enclave of "Gewerbepark Stadlau": Oriented towards the motorway, a large commercial area extends from Hirschstettner Straße to Rautenweg and even further. This area is divided into the "Gewerbepark Stadlau" and the "Gewerbepark Kagran". "Gewerbepark Stadlau" takes up the southern part from Hirschstettener Straße to Breitenleer Straße and has its own access from the motorway. It houses a number of smaller retail and chain stores, but also a do-it-yourself megastore, two chain stores for electronics and a large supermarket. The catchment area of the smaller shops is local and regional, whereas the large stores attract customers from the northern parts of Vienna and the countryside beyond. Some gas stations are located close to the exits from the motorway. Two cafés and one hot dog stand offer food, drinks and the only reason to linger after shopping has been done. At the southern tip of the study site, a large empty lot is still available, with an existing warehouse at the site of the future highway access ramp.

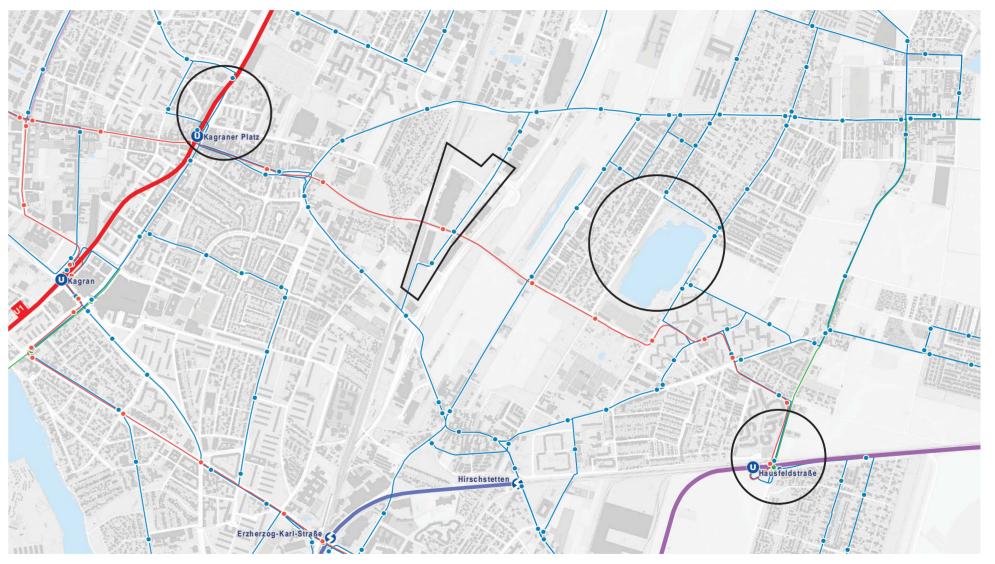
North of the project site, "Gewerbepark Kagran" extends further. Here the most prominent chainstore is situated, the IKEA Wien Nord, one of two IKEA-stores in and around Vienna. But also the other stores of "Gewerbepark Kagran" are large-scale units, differing from the mixed-scale logic of "Gewerbepark Stadlau". Behind the commercial area some factories are located, but also a strip of more than 100 single family homes, a driving parcours of the ARBÖ automobile club and some farmland to the West.

The spatial logic of the commercial area "Gewerbepark Stadlau" is that of a strip mall, with each shop as an independent unit and its own parking space spreading in front of it. Large flat structures with not more than two storeys house a number of chain stores each. Only a few stores are located in isolated buildings.

The ownership structure follows the same logic, with a different owner for each lot. All the shops are oriented towards a central parking space and show only their logos towards the motorway.

"Gewerbepark Stadlau" has its own access/exit from the motorway S2, which leads to a central roundabout, feeding into the central axis. The area is completely isolated and cut off from its surroundings by large pieces of infrastructure. Whereas the train line is irrelevant as a means of transport, the motorway directly leads into the area and structures it. Car mobility is the reason for the existence of the commercial areas and has up to now been the only way to get to and from the area. Pedestrian connections are weak because of large distances to sur-rounding neighbourhoods, especially since the area is accessible only from a few points. This isolation is now partly dissolved owing to the recently constructed tramway line 26 that crosses the site from East to West and reconnects it with the neighbouring areas, but the elevated tram tracks do not provide for any pedestrian or bike connection. Still, tramway is an important link to Kagran and subway line U1 and to the open fields beyond the motorway, with the recreational area of Badeteich Hirschstetten only two stops away. Getting to the study site from the city centre in public transport may take up to 45 minutes.

Between the heavy concrete pillars a staircase and elevators lead up to the tracks. The space underneath the viaduct – with a height of some eight meters – is currently assigned to parking. The tram line makes a strong visual and spatial limit, although it allows for the free flow of traffic. It has become one of the most prominent features of the study site, and even more so where it passes over the empty fields to the east and west.



the red tramway line is crossing the site at 10m height and connects it with two metro lines (U1 Kagraner Platz and U2 Hausfeldstraße), as well as with Badeteich Hirschstetten, a public bathing pond



The construction of the tramway line crosses the railway and the strip mall: shops as independent units motorway as an elevated track, without touching the ground.





Gewerbeparkstraße: the central street





view towards the elevated tramway station



tramway line: a strong visual limit

North of the project site, directly south of Breitenleer Straße, there is a large empty plot, the former Mobil Oil area. This area is heavily contaminated, due to the destruction of the oil plant during World War II. An elaborate program to control contamination of the groundwater is in action, connecting this site with the open area east of the motorway, where the necessary wells and groundwater barriers are situated. A longitudinal treatment pond is the visible sign of these ecological interventions.

The immediate neighbourhood of the study site – always mediated by lines of heavy transit – is diverse. Most striking are the large open fields east of the motorway, which allow for the horizon to reappear. In between fields, there are narrow footpaths connecting the city fragments. These fields are mainly used for agricul- tural, with some unkempt areas, and form part of the "Grüngürtel", the green belt surrounding the city as defined by the city development plan of 2005.

A green corridor, or rather a chain of biotopes ("Trittsteinbiotope") is supposed to link the green belt system southwards with the "HirschstettnerAupark", in the sense of a chain of green spaces which ultimately are to link the open fields to the flood plain forests of Lobau.

Further north of the former oil plant, the area framed by motorway and rail tracks extends nearly up to Wagramer Straße, with more large stores, distribution centres and factories, but also a small neighbourhood of single-family homes in the middle and some tracts of open land. North of Rautenweg, on the other side of the rail tracks, stands "Rinterzelt", with its emblematic tentshape, whereas on the other side of the motorway the landfill site of "Deponie Rautenweg" rises up to 45 meters above street level, forming the highest "mountain" of Donaustadt. North of the landfill site the area of the former railway station Breitenlee extends over more than two kilometres. This area has over the years turned into an important ecological reserve and is defined as "deserving protection". In the long term, this green space is supposed to connect with two green corridors that run from north to south, passing east and west of Seestadt Aspern and connect to the national park Lobau. Apart from the important networking of plant and wildlife habitat, this connection will be accessible through bycicle routes and footpaths. Other important green spaces in the raltive proximity include river Danube and Alte Donau, Vienna's most prominent bathing locations.

To the west of site, across the railway tracks, industry and commerce take up large areas, with agricaultural voids in between. Towards Wagramer Straße housing estates take over. In the triangle between the rail tracks, Hirschstettner Straße and Breitenleer Straße, single family homes and terraced houses occupy most of the space, with a few larger housing estates in between.

Along Hirschstettner Straße, some supermarkets and restaurants are located, each with its own large parking spaces, typical of suburban commerce. This stretch of Hirschstettner Straße would be the main route to Kagran from the project site, on foot, bike or by car.



Southeast of the study site, beyond the stretch of fields belonging to the Grüngürtel and following Hirschstettner Straße, lies Hirschstetten, a small historical village cen- tre of the "Straßendorf"-type. As is the case with many of the remnants of old village structures in Donaustadt, a certain sense of identity still pertains to Hirschstetten. However, there is little urban infrastructure to be found there, no shops still remain but a cigarette store and a restaurant. Heavy through-traffic is a problem. However, the "Badeteich Hirschstetten", a public bathing pond, and the flower gardens of the Viennese municipality

("Blumengärten Hirschstätten"), open to the public, offer attractive public spaces nearby. Hirschstetten is surrounded by its own small-scale green belt of gardens and parks. Towards the east, following Quadenstraße, a number of large social housing estates surrounded by row-houses and single family homes form the outskirts of the city, giving way to open fields.

At the southern tip of the project area there is a large empty lot which is the last part to be developed since the commercial area has been populated from the centre where the main access from the motorway lands. Towards Hirschstettner Straße the area is fenced off; The only structure is a large warehouse, which is currently used for a flea-market taking place on weekends. The rest of the site is empty, only temporarily rented out, as the example of Circus Belly shows.

A change of strategy is the reason why sites like this one come into focus for the city of Vienna. Owing to the strong population growth, the city planning department is looking for areas with a potential for densification in unexpected places. The strategies defined in the City Development Plan from 2005 have to be



Badeteich Hirschstetten

adapted to this growth and a changed real estate market. Monofunctional areas for commercial and industrial uses become obsolete against this background, because buildings have a very low density and a short life cycle. Changing them into mixed-use urban quarters entails an increase in value for the site owners and the opening of new potentials for densification within the existing fabric for the city. It is an advantage of these places that one part of the future mix already is given on the site: the existing uses. The combination of housing with other uses there- fore is not only wishful thinking but a given reality.

The site at Stadlau is a perfect test case for such an adaptation of the existing city fabric to new demands. It is exceptionally well connected to the regional street network. It has a high potential of gradient conver- sion, due to the small scale of lots and buildings. In the near future it will be connected to the network of public transport, thereby breaking up its isolation.

Concluding the analysis, following questiones needed to be answered in this project: Which kind of spaces are able to create an attractive urban island which profits from the lines of infrastructure but at the same time is protected from the noise they produce and escapes the confinement through its barriers. Does this island offer an introverted enclave or does it rise above the barriers and open to its surroundings? Is a combination of the two possible?

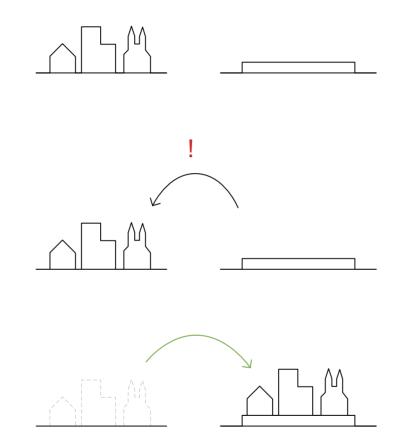
flea-market inside of the warehouse

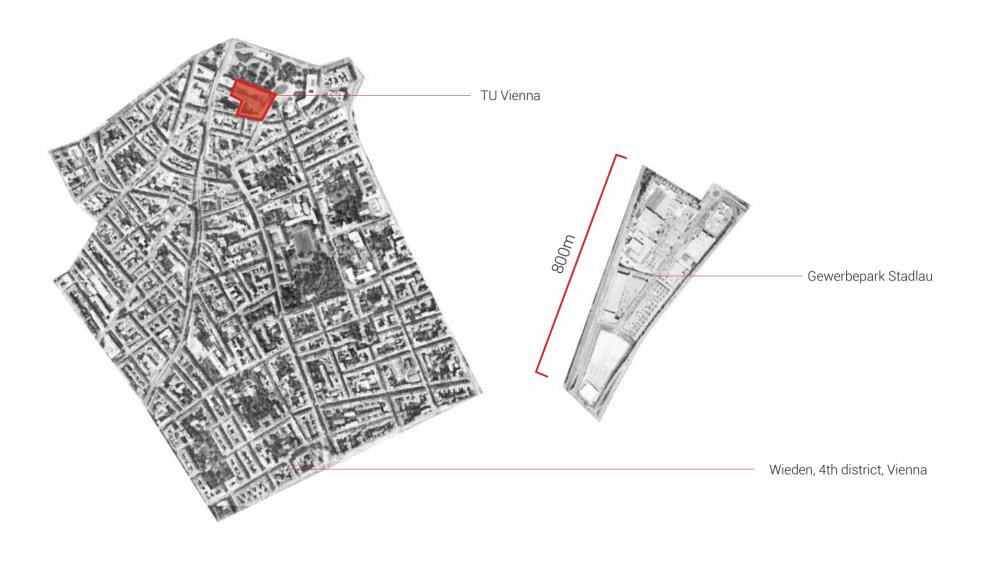


MASTER PLAN

CONCEPT

The problem of shopping malls on the edges of urban peripheries in today's European cities such as Vienna is increasingly common. People are turning to day trips to the nearby shopping center, abandoning the city. Small shops in town centers are hardly even any. And they are, in addition to cafes and restaurants, the most important factor of vibrancy in the city. Thanks to the actual economic system, companies tend to an increasing merging, prices of land in the outskirts are much smaller, and there are fewer building regulations. Given such trends, there is little chance that it will change soon. Shopping malls cannot really be accommodated in dense city areas. Solution that this project offers is to use the potential that already exists at the location (a large number of visitors and the diversity of offer) and bring city to the site. By bringing in dwellings and parks the zone will be "humanized", ie. converted into an urban neighborhood. At the same time, the shopping mall will also benefit from the new structure and become more attractive.



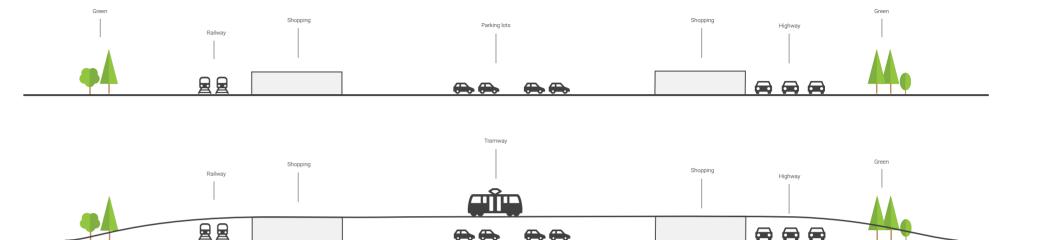


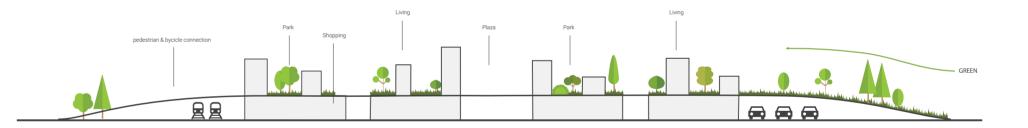
Currently, the site is surrounded with heavy traffic and occupied with cars. It completely cut off of the surrounding nature.

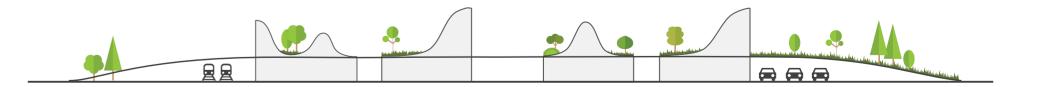
With the introduction of the new tramway line the site gets third dimension. But the tramway strucure stands as an isolated element on the site. The question was how to best incorporate this new structure into the site and reconnect it to its surrounding.

It is achieved by introducing a second level into the site, which will be at the height of the current tramway station. This level will act as a "green carpet," covering both the low structures beneath it and the lines of the heavy traffic - the railway and the highway. It will gradually blend with its surroundings, thus reestablishing connections and leting the the nature to "flow" into the site. The new sturcutures at the ground level will fill wast empty spaces between shopping malls. Between them, new streets will emerge. The new "carpet level" will act as acounterpoint to the lower one. Whilst the one on the ground has the feel of the city, the upper one is reserved for living and represents the nature.

In order to further streighten the feel of living in nature, the buildings in the upper level get the shape of hills. Future inhabitants will live in the hilly landscape, while always having an opportunity to come down into the "town".





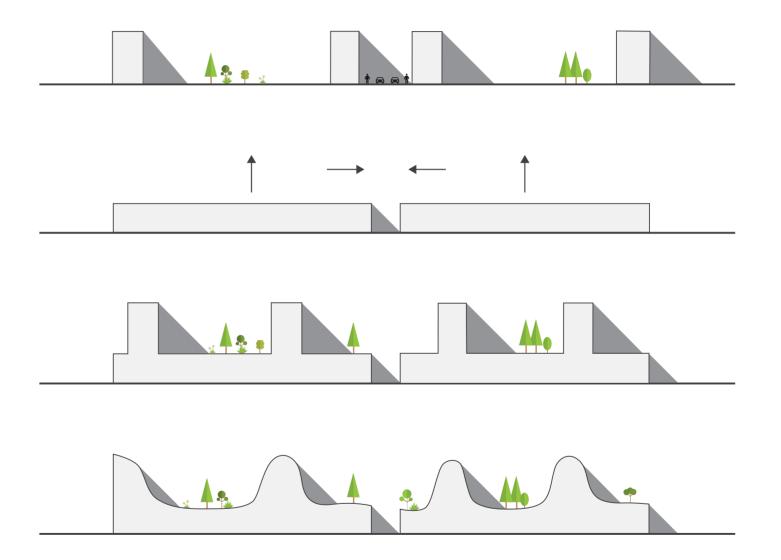


Usual typology of Vienna's city block (blockrandbebauung). Due to the Vienna's bulding regulations the with of the streets have to be aproximately the same as the height of the surrounding buildings (in order to allow for enough light in the lower floors). The strets are wide and crowded with cars. Pedestrians can use only the narrow sidewalk.

Blocks from Kagran are used and put near to each other. An average height of some 8m makes narrower streets possible. Humane size of the street and surrounding buildings, as well as the lack of cars, make the street much more pleasant.

Residential buildings, together with parks, are put on top of the commercial base. A new level emerges. In order to make narrow streets possible, these residential buildings have to be far enough from edges of bases, to allow enough light to penetrate the street

A possible evolution of this concept?



NARROW STREETS, SMALL SQUARES ...



Barcelona











Wien



Wien



Madrid

... AND PARKS





Madrid

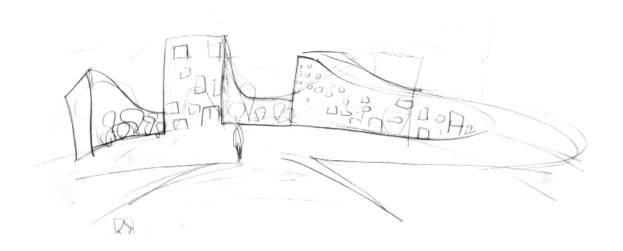


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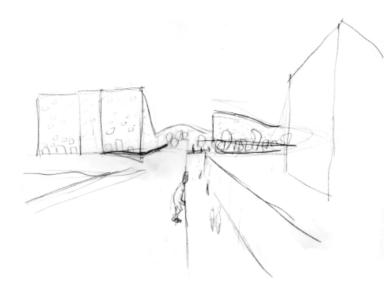
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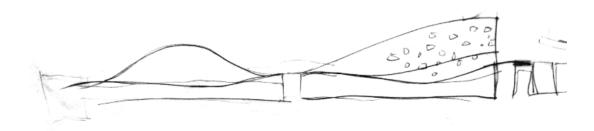








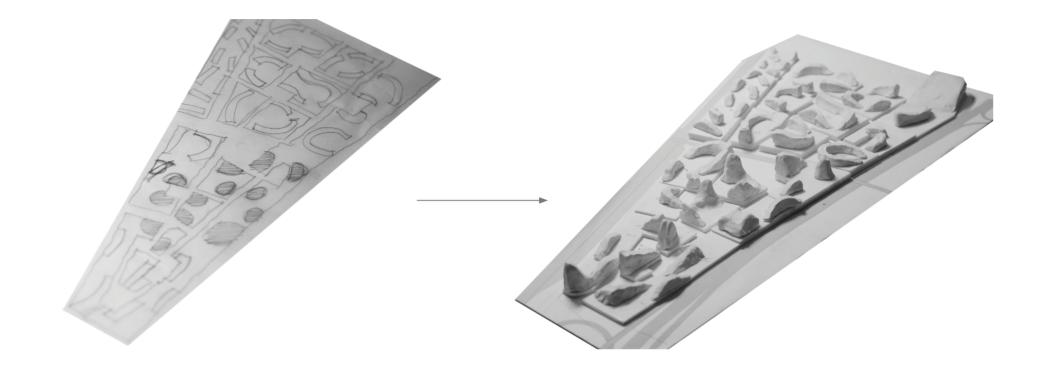




WORK MODEL

The first work model of the site (without the empty lot on the southern side).

This more organic concept with "islands" that have rounded corners was abandoned in the early stage because it had a couple of disadvantages: Firstly, it didn't offer enough privacy on the street level and the space was too open. Also, the squares and the streets were melting into each other and there was no clean distinction between the two. Secondly, on the upper level, the "islands" were not big enough to provide enough space for parks. They were too divided.



PROCESS

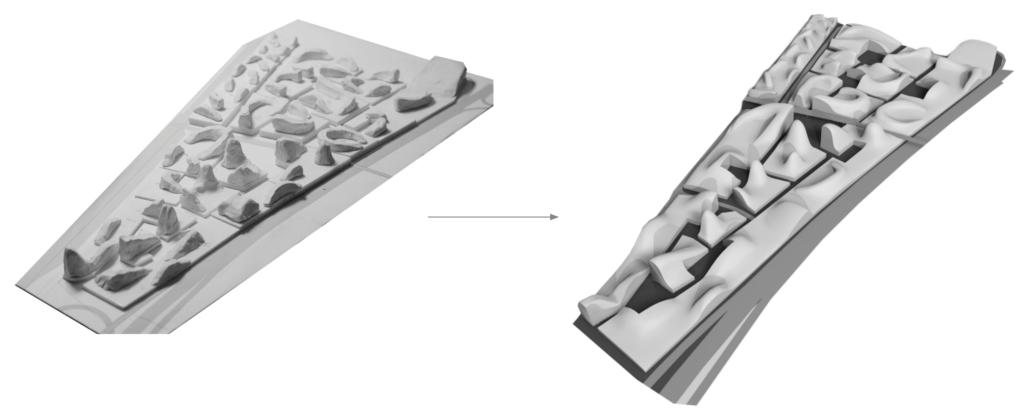
After finding an optimal postition of the "islands" and the buildigns on top of them, according to the density of street grid, another model has been made, in order to find optimal shape and height for each building.

WORK MODEL



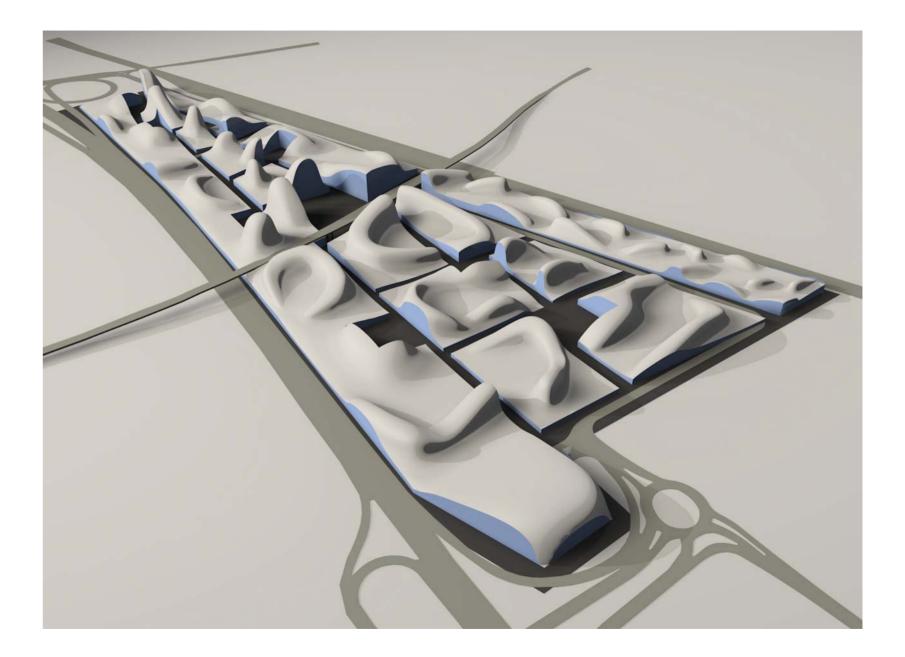


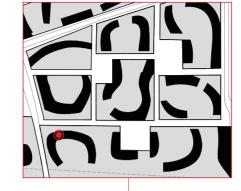
WORK MODEL/ DIGITAL MODEL

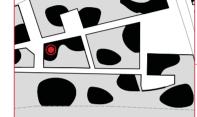


PROCESS

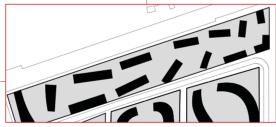
In the next step the physical model has been transfered to a digital one, for the further optimization of the shape. The shapes of the upper level have become smoother. The street level is the same as in the physical model. Street network of the ground level is cutting the landscape of the upper level.

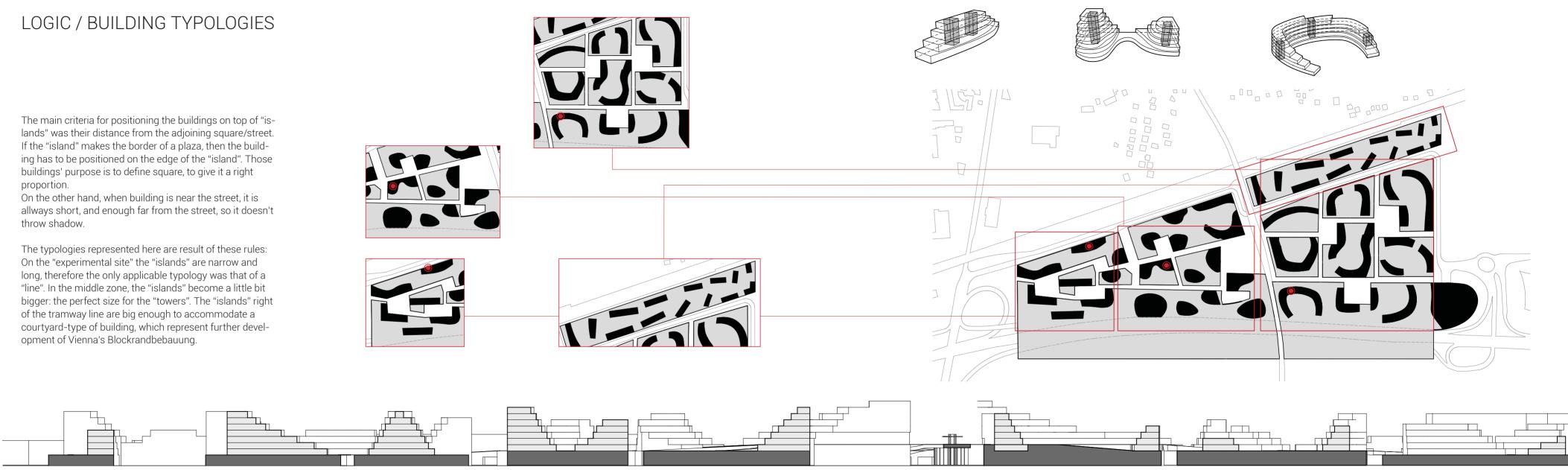












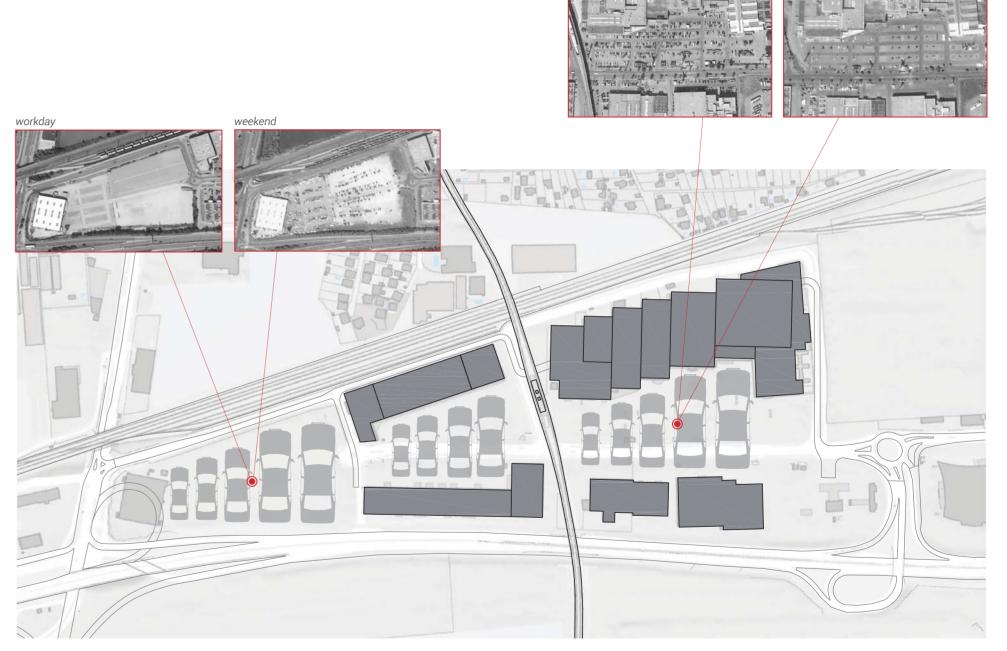
4 STAGES OF DEVELOPMENT

Considering that the area of the project site is covering some 187.000 m² (around 18,7 Hectare) of land, it is reasonable to expect that the whole plan can be realized only step by step. Therefore, the plan foresees different stages of development. Each stage means improvement of quality and more urbanity on the site, but at the same time, each stage would enable normal functioning of the area on its own.

CURRENT STATE

Current state is determined by vast parking space, a consequence of using cars as a primary means of transport. This situation has now changed. With the new tram line, the number of guests using public transport has increased considerably.

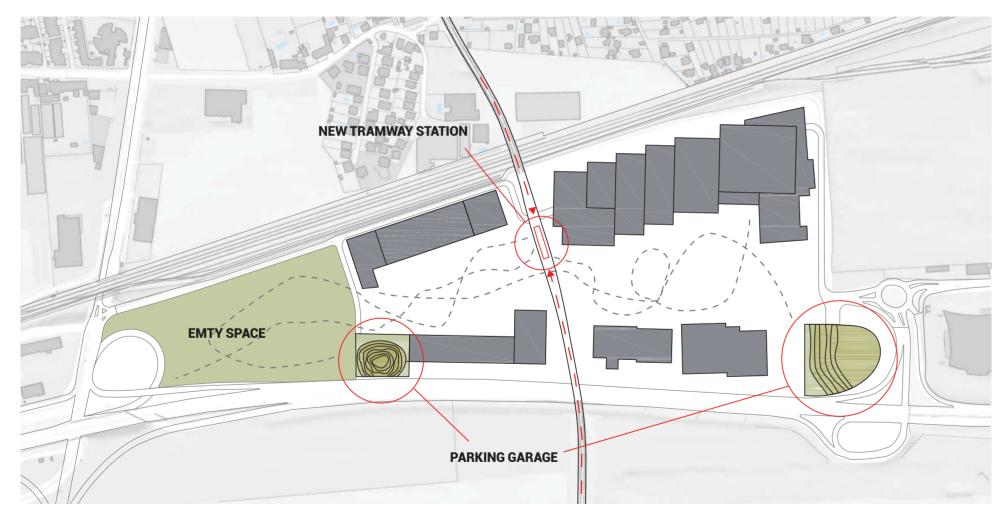
While the parking lots of the Gewerbepark are occupied during the week, the empty space on the southern end gets busy on weekends: the large warehouse is currently used for a flea-market taking place on weekends.



weeken

STAGE 0

The first step is to build two large parking garages big enough to replace all capacities of the existing parking lot. In this way the land can be freed and left for use to pedestrians and cyclists. This space can now be converted to temporary parks. The area becomes much more attractive for pedestrians. Though the question remains: what to do with the wast empty lot on the southern side of the project site?



STAGE 1

At this stage the first "test area" is built, that would demonstrate the principle of functioning of the entire future project. As already explained on page 37, new structures have two levels of public space: the lower, ground level, and the one which is at 5-7 m height (the height of the shops nearby). The existing warehouse for the flea market was moved to the lower part of the new structure and attached to the square close to the new parking garage.



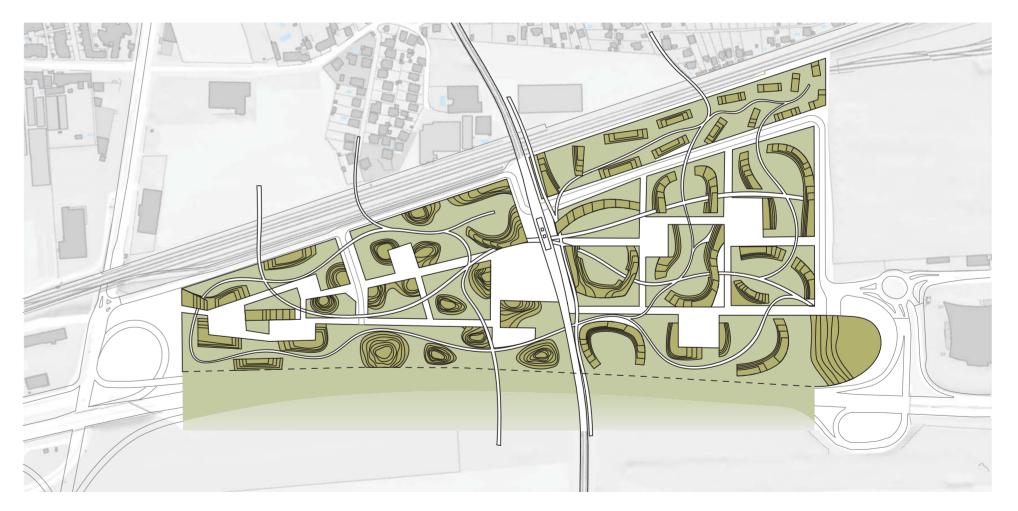
STAGE 2

At this stage the pilot project begins to spread over the project site. Densification is needed to bring more life into the area. Narrow streets and squares emerge between the new and the existing structures. The space becomes much more enjoyable. A new "oasis" of green and parks appears between the existing structures. These new "islands" in its ground zone now offer new contents, which are used by former Gewerbepark visitors as well as by new residents: there are now cafes, restaurants, post office, shops, medical and veterinary institutions, etc. The experience of shopping is completely changed: instead of the wast open space this place is now characterized by narrow streets and squares. The problem of connection of the site with its environment still remains open.



STAGE 3

This is the final shape of the settlement. New "islands" and new buildings on them appear on the place where old stores once stood. The concept has now been fully completed. A network of paths for cyclists and pedestrians is established, which extends over the entire site and connects it with surroundings. The highway is now covered, and on top of it, parks extend towards adjacent fields. On the other side, the paths in the form of ramps reach the existing or planned streets in the neighbourhood. The tram station, which along with the main square in the middle makes the heart of the project, is now very easily accessible from every building on the upper level.



STAGE 0 / PERSPECTIVE VIEW



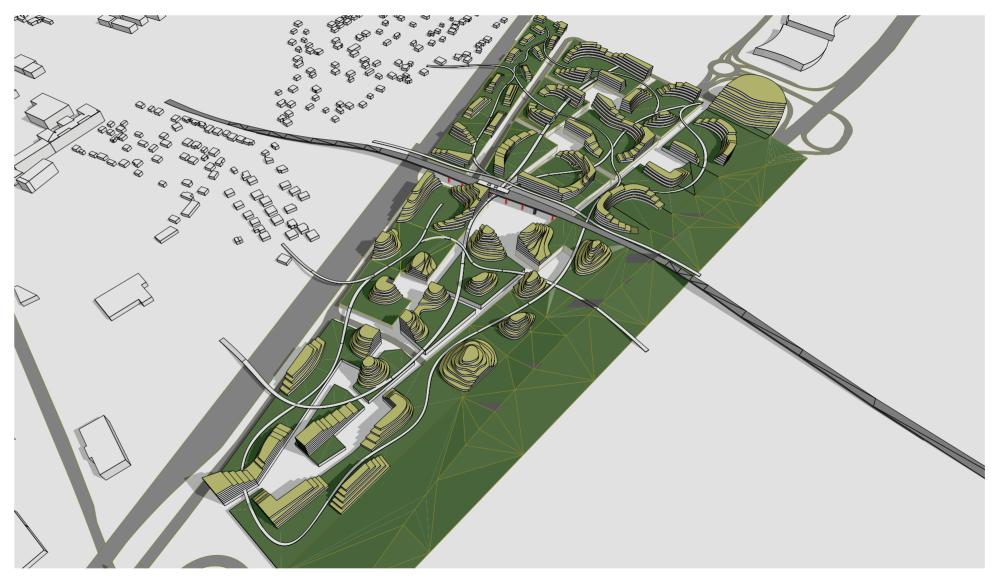
STAGE 1 / PERSPECTIVE VIEW



STAGE 2 / PERSPECTIVE VIEW



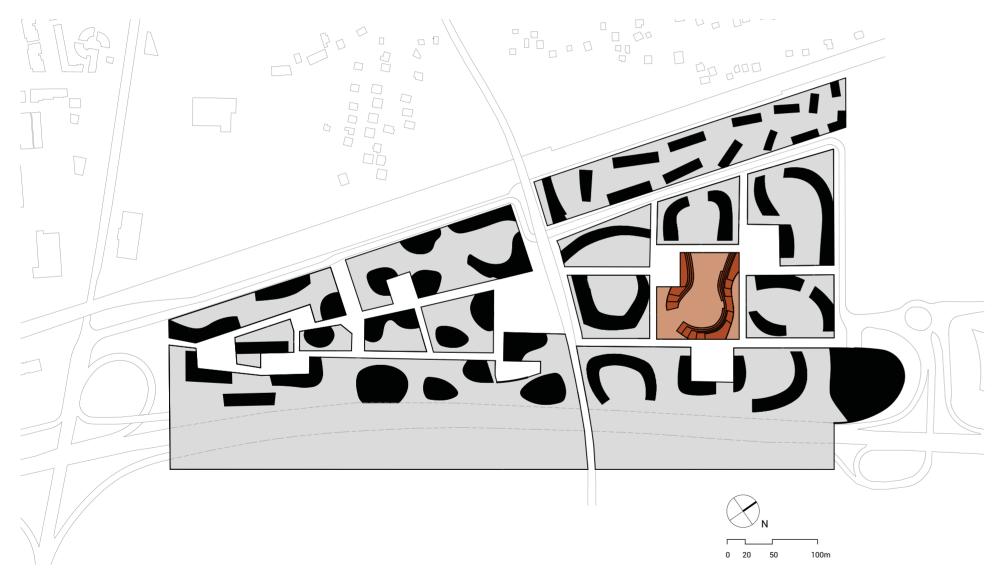
STAGE 3 / PERSPECTIVE VIEW





PROJECT

LOCATION



MUSIC STORE



The aim of this part is to demonstrate the overall principle of the urbanistic proposal in more detail.

The general plan foresees that large stores can be acommodated into the "islands". One of those large stores is specially interesting: it is the biggest shop for music instruments in Austria, called "Klangfarbe". It contains 3.500 m² of space, which is almost a perfect size to fit into one of the "islands".

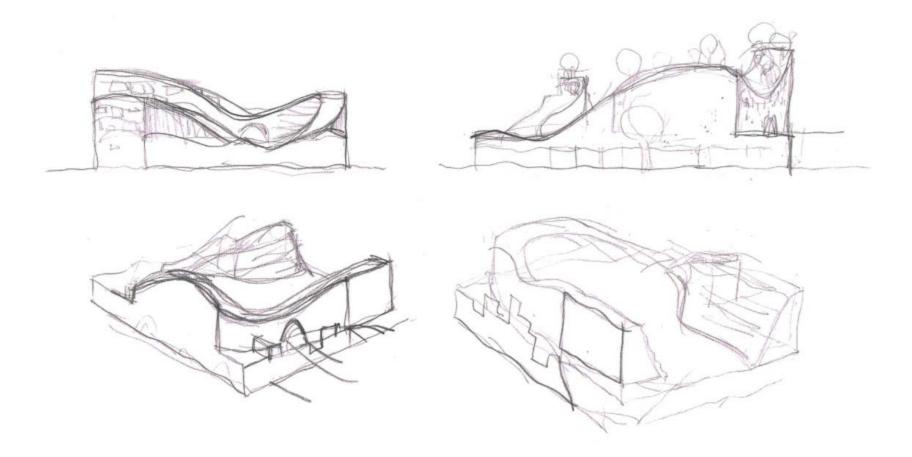
It is consisted of 8 different categories of music instruments / equipment: 1. Guitar & Bass 2. Acoustic Instruments 3. Drums & Percussion 4. Keyboards 5. Studio & Recording 6. DJ Equipment 7. Sound 8. Light & Multimedia

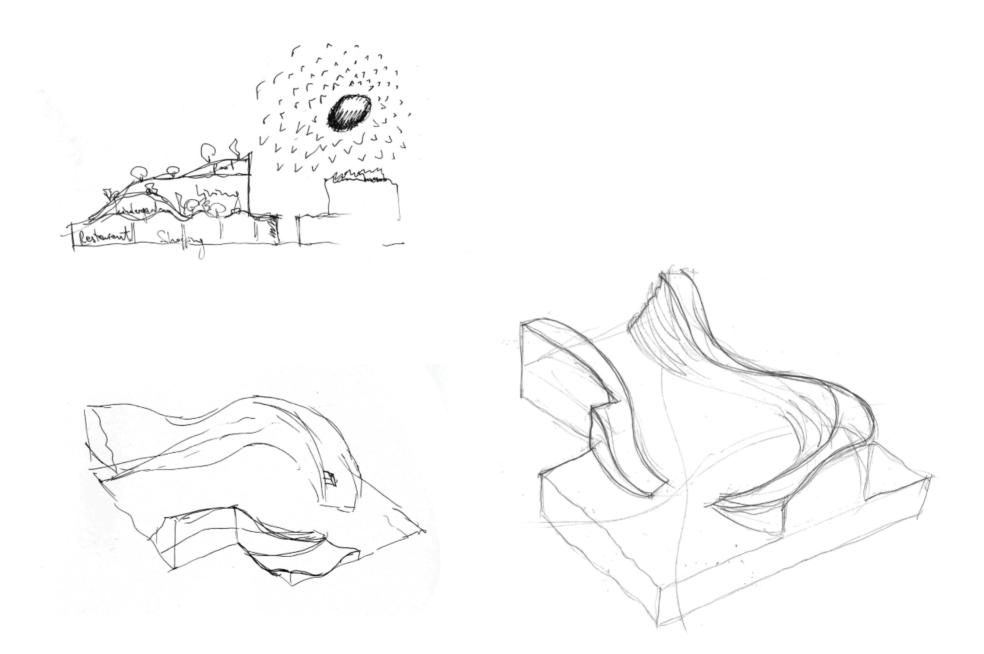
This "island" has been chosen because of the two reasons:

1. Its positioning on the site relating to other "islands" is the one that we can call "most typical": it is located in the middle, and therefore it is surrounded with other "islands".

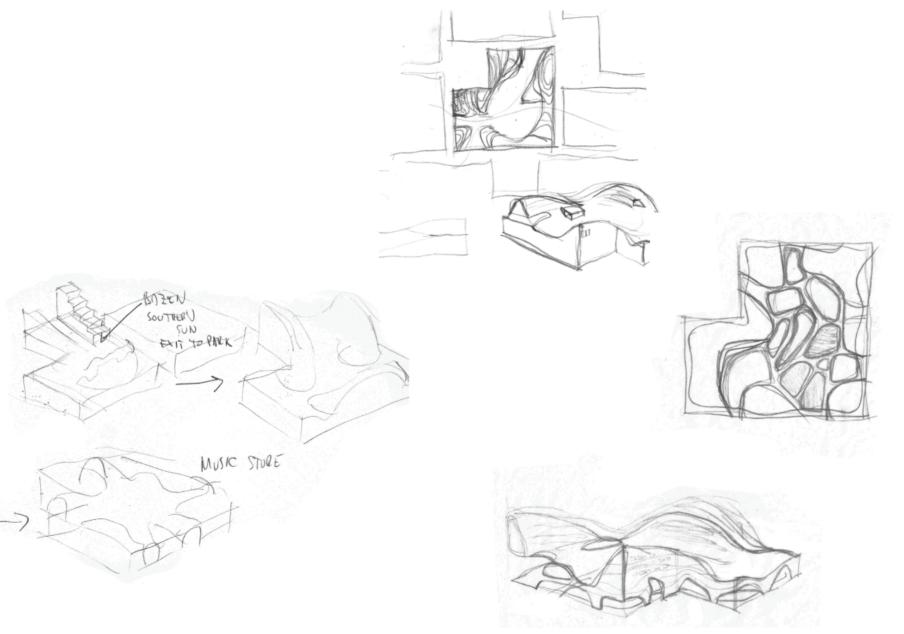
2. Its size is appropriate to demonstrate the third typology in the project: a courtyard type.

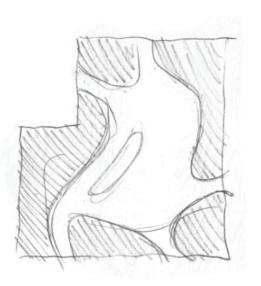
FIRST SKETCHES



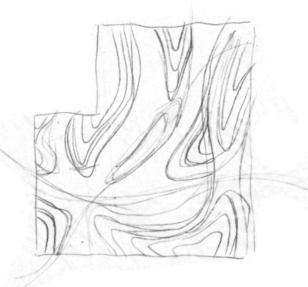








In the base of the "island" there is a music store": It is carved out of the lower "island" mass in form of a cave, and is partly visible from the outside when "cave tunnels" reach to the facade.

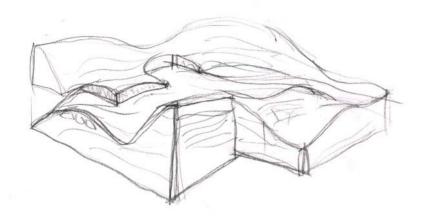


Adjusting the shape of the bilding to the paths that are cutting the site. This was a search for an optimal positioning. The patio of the lower part for the music shop is visible from above.

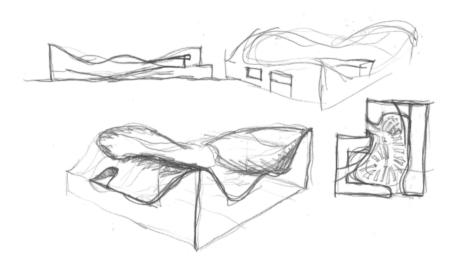


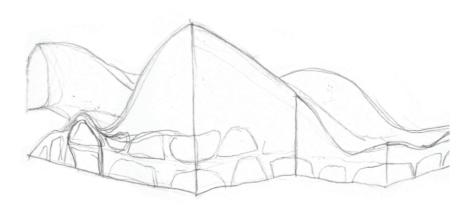
One should perceive the buildings as a continuation of the terrain.

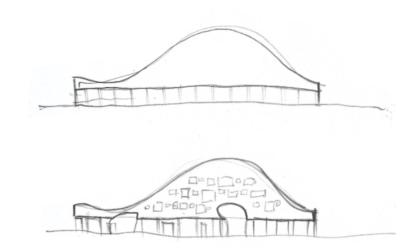
SEARCHING FOR A SHAPE

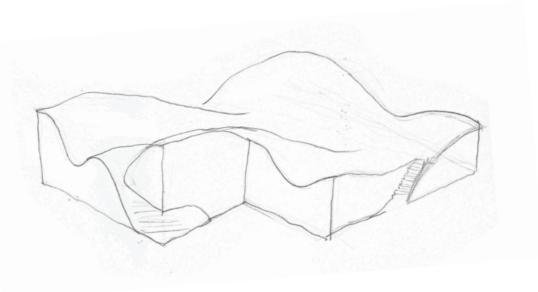


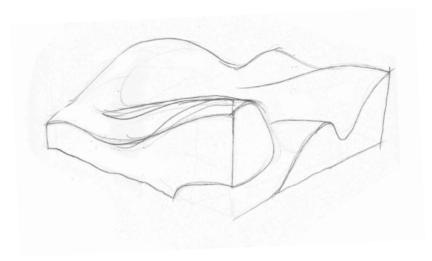


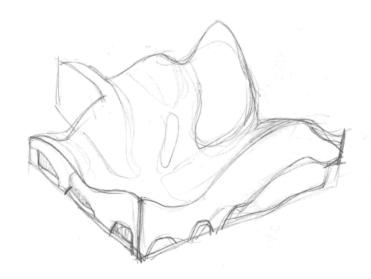




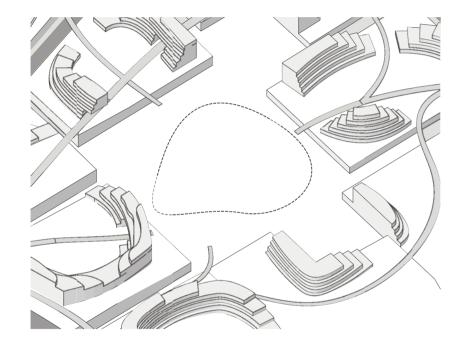




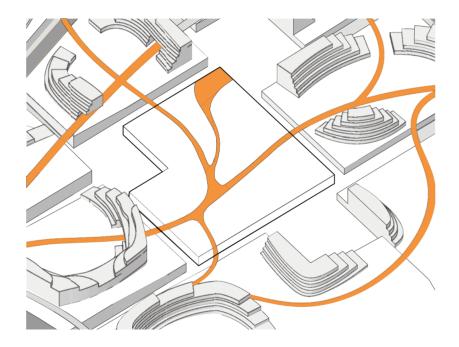




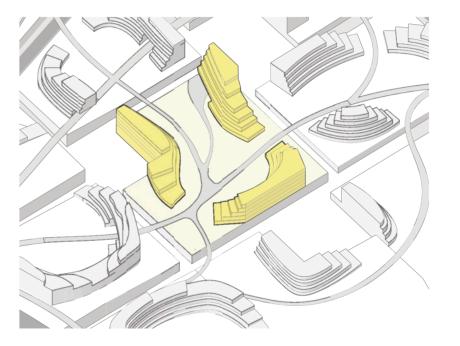
CONCEPT



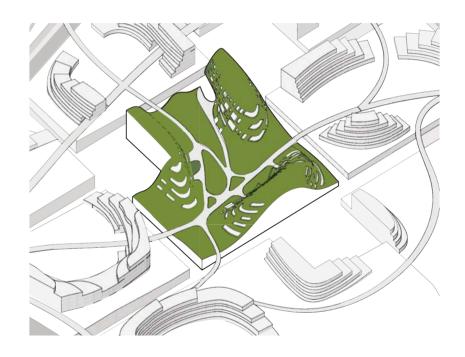
The empty site with surrounding buildings.



The "island" provides spaces for the music store. The paths cut the site in both directions. One connection is established from the square on the corner of the "island" in order to connect upper level with the lower one.

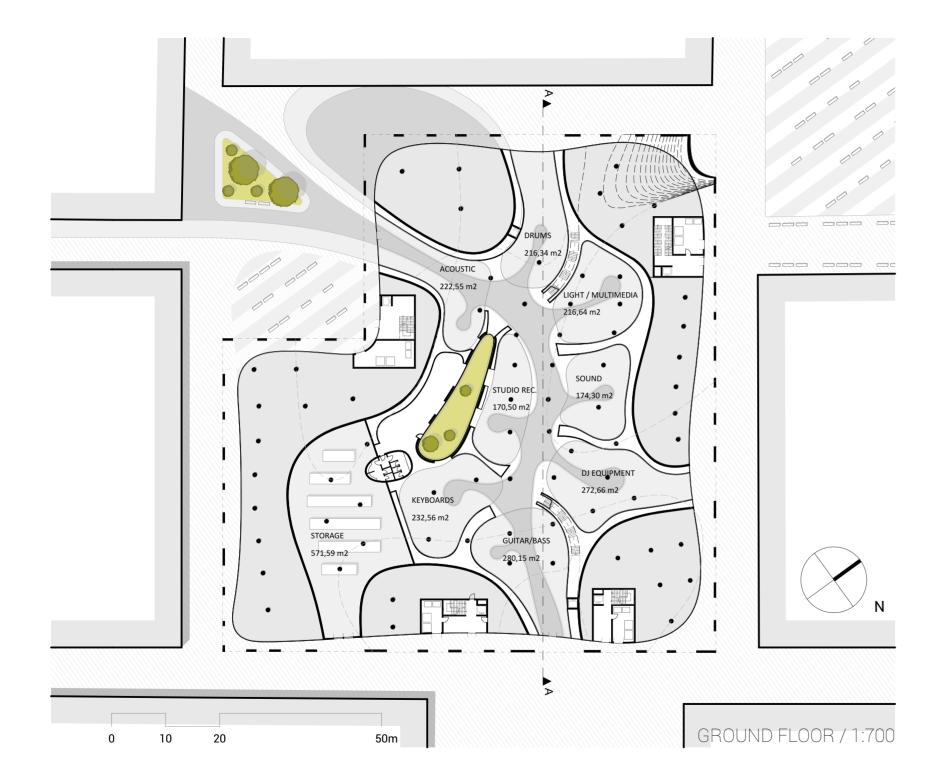


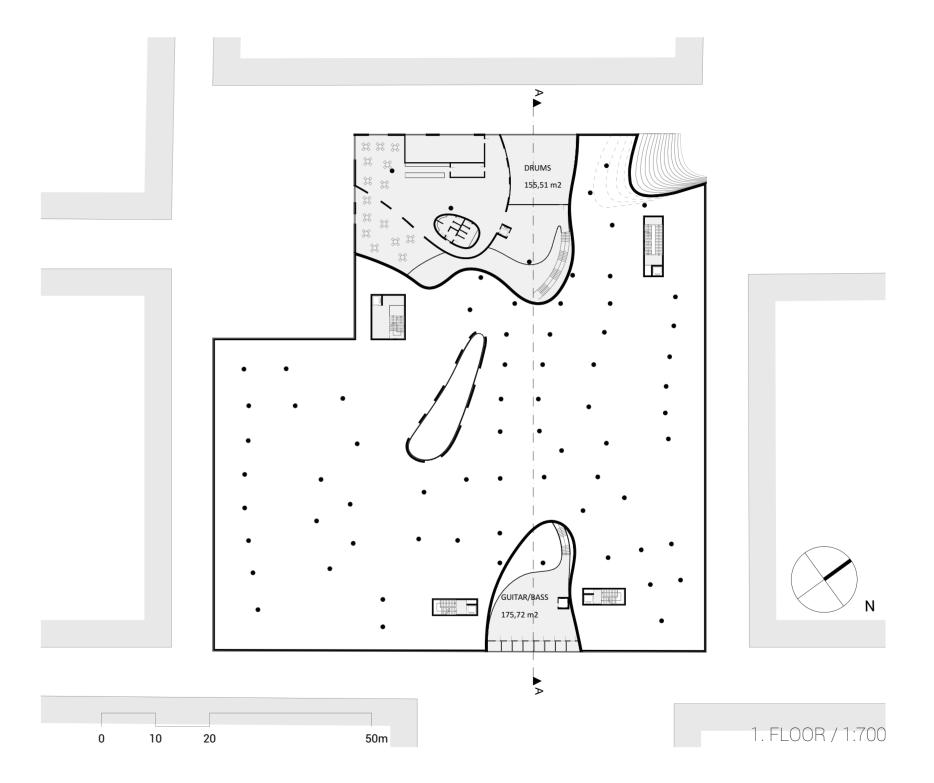
Buildings on upper level are by the roads on the upper level and by their relation to the surrounding streets and plazas on lower level. Towards the three plazas buildings are high - to define the public space of each plaza. At the same time, near the neighbouring streets they become lower.



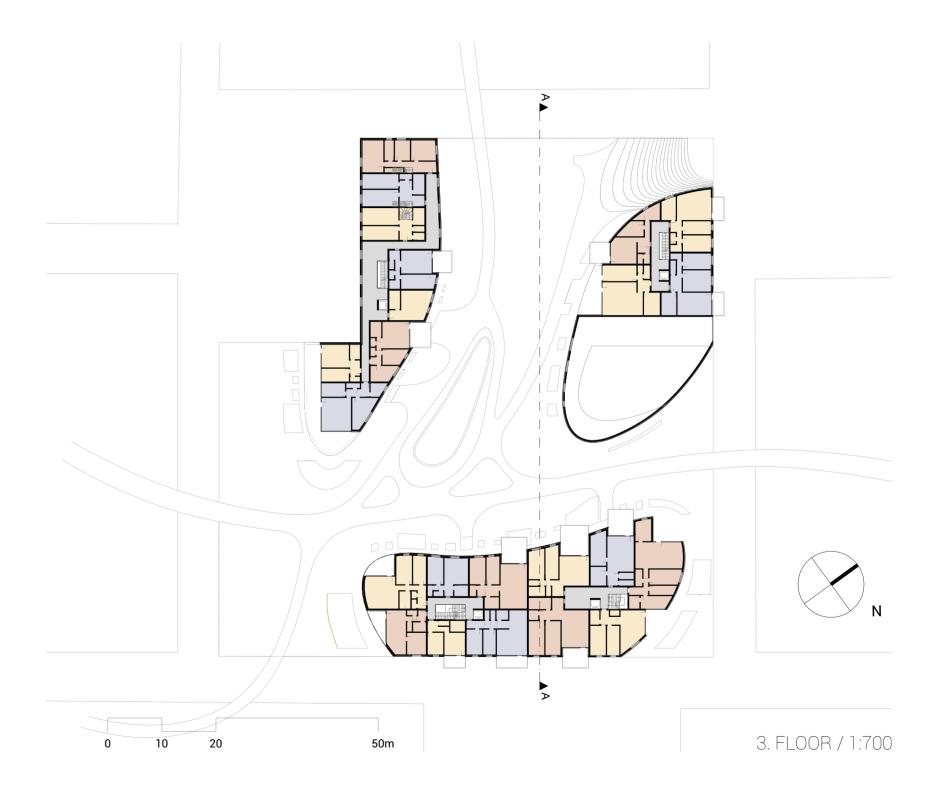
The final shape is the result of smoothing of the original building masses. One perceves it as a continuous "terrain" and has the feeling of being surrounded with natural hills.

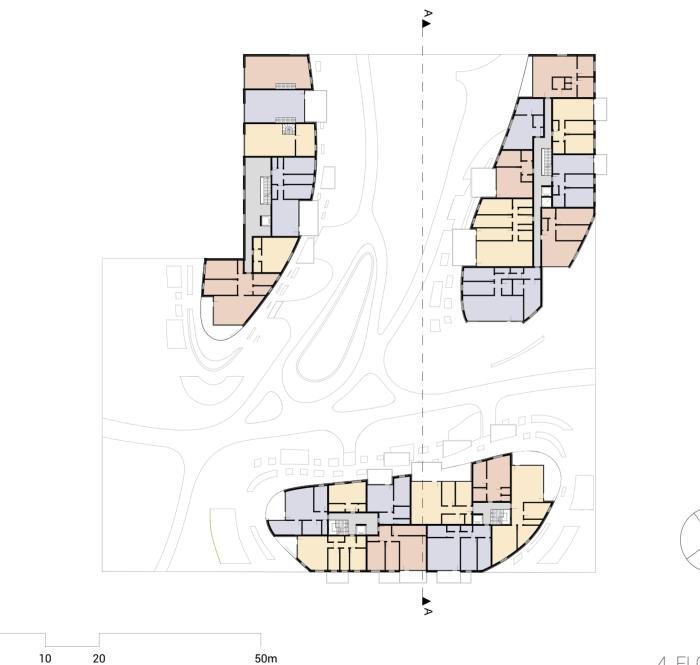
PLANS









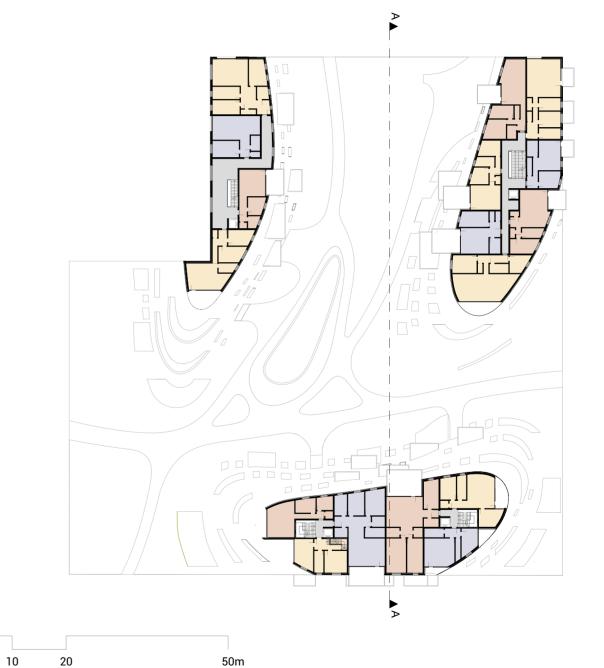


4. FLOOR / 1:700

0

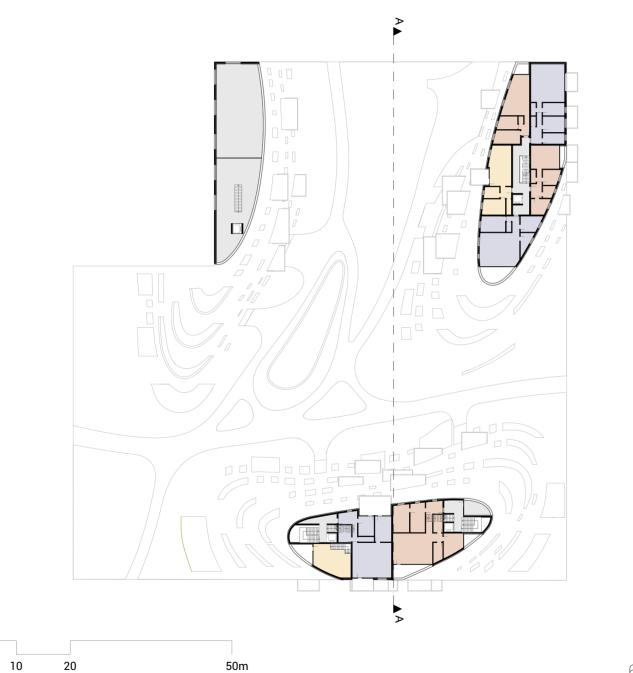
78

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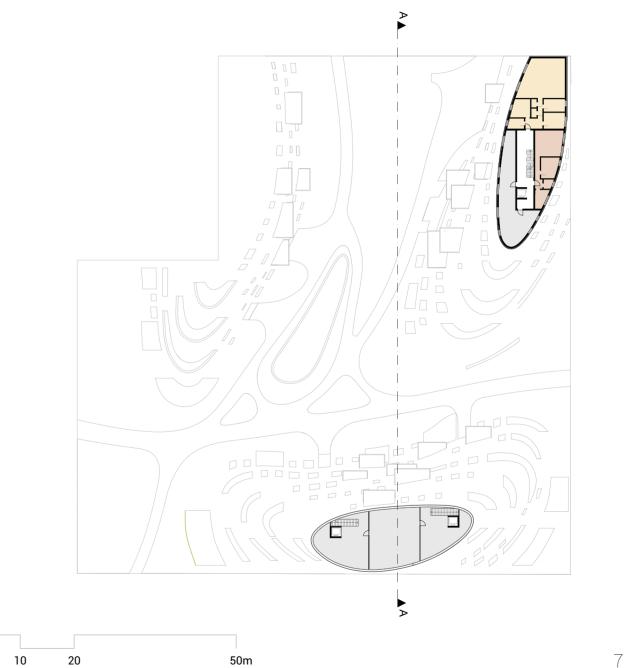
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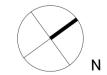
5. FLOOR / 1:700 ⁷⁹













SECTION AA / 1:500

VISUALIZATIONS









NOTES

01 - google earth

02 - https://de.wikipedia.org/wiki/Wiener_Donauregulierung#/media/File:Josephinische_Landesaufnahme_Wien.jpeg

03 - https://www.wien.info/media/images/40780-donau-city-dc-tower-uno-city-19to1.jpeg

04 (trabrenngruende) - https://de.wikipedia.org/wiki/Trabrenngr%C3%BCnde#/media/File:Wien_Rennbahnweg_Hof.jpg

05 (seestadt aspern) - http://immobilien.diepresse.com/images/uploads/4/4/6/1561670/aspern2_1392200812980377_v0_h.jpg

06 (rinterzelt= - http://www.botanische-spaziergaenge.at/Bilder/Lumix_10/P1990305.JPG

07 (donauzentrum) - https://upload.wikimedia.org/wikipedia/commons/5/51/Donau_Zentrum.jpg

08 (naglergasse) - http://www.fotocommunity.de/pc/pc/display/28314585

10 (spittelberggasse) - http://www.panoramio.com/photo/92618301

11 (wien, naschmarkt) - http://images03.kurier.at/46-58310955.jpg/83.291.355

12 (madrid plaza san ildefonso) - http://www.panoramio.com/photo_explorer#view=photo&position=4937&with_photo_id=24592574&order=date_desc&user=369285

13 (heidelberg) - https://c2.staticflickr.com/6/5184/5753295286_3fa0ccae4d_b.jpg

14 (tuerkenschanzpark) - http://www.botanische-spaziergaenge.at/Bilder/Lumix_20/P2030208.JPG

15 (madrid, parque del oeste) - https://upload.wikimedia.org/wikipedia/commons/8/8d/Madrid_-_parque_del_Oeste.jpg