

# **REVITALIZING THE RWN AREA**

**from an Industrial Blindspot to an Integrated Neighborhood  
Neubrandenburg, Germany**

**Lund University  
Master Thesis - Sustainable Urban Design - Anna Nötzel**



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NEUBRANDENBURG

Stadt der vier Tore am Tollensesee





# CONTENT



# CONTENTS

ACKNOWLEDGEMENTS .....	9
INTRODUCTION .....	13
LOCATION .....	17
HISTORY .....	21
ANALYSIS .....	31
SITE SPECIFIC ANALYSIS AND CHARACTERS .....	37
QUESTIONNAIRE .....	45
VISION .....	55
CONCEPT .....	59
TOOLS .....	63
DESIGN .....	67
Design Process .....	68
Evaluation of Spaces .....	68
Finding Directions .....	70
Finding a Pattern .....	71
Masterplan .....	72
Street Network, Green Analysis, Use .....	74
Block Variations .....	75
Detail .....	76
Phasing .....	78
Urban Context Integration .....	80
Critical Reflections Revitalization and Urban Area .....	82
REFERENCES .....	85



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# ACKNOWLEDGMENTS

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for support and encouragement

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for discussions and reassurance



# INTRODUCTION

# INTRODUCTION

## WHAT

The RWN Areal is a former industrial site that is located in the city of Neubrandenburg in Germany. The site was built during WWII, as a Torpedo Testing Facility (TVA - Torpedoversuchsanstalt).

With the end of WWII and the beginning of the German Democratic Republic (GDR), the RWN Areal was repurposed and used as a repair works facility for military track vehicles of the GDR military.

With the fall of the GDR government and the reunification of East and West Germany, the Areal has mainly served as a business and industry district but also has been majorly neglected in the city's development until today.

RWN stands for Reparaturwerk Neubrandenburg (= Repair Works Neubrandenburg) and has been referred to as «RWN» since then.

The site is about 36ha big and locates roughly 2km south of Neubrandenburg's city center. The rectangular shaped site borders a natural habitat in the North, a federal road in the East, a fragmented neighborhood in the South and the lake Tollensesee in the West. The RWN Areal offers great opportunities to be developed and linked to the existing urban fabric.

Through its adjacency to the lake, to existing sports facilities, the natural habitat, the city's main park, and the city center, existing assets can be linking the site to its surroundings.

Currently, the RWN Areal is viewed as the blind spot of the city, citizens know about it, but technically there is no reason to go there. Even though we have a rich and interesting historical background the site is very much characterized by leftover and undefined spaces, which make it hard to orientate. Nonetheless, the site offers high quality, big scale typologies that currently are either empty or have temporary uses, such as storage or exhibition spaces, or are business spaces. The area is lacking an internal structure that holds the existing spaces together.

The big scale typologies are connected by a lot of concrete and sealed surfaces, which are the byproduct of the former industrial use. But the site also offers some existing natural assets. Fully grown trees frame parts of the main street and the view towards the lake. This is to be considered in the further design process.

## WHY

The site has been neglected for many years, yet the existing urban fabric, the natural assets and the central position in the city's layout offer great potentials for the site to be developed in the future.

Even though Neubrandenburg belongs to a structurally weaker region in Germany, the city has become the «Town of Good Hope» in Eastern Germany, as it has been titled that by a national newspaper in 2013.

Also with the passing of the «Urban Areas» law in Germany in 2017, it is finally possible to densify areas

through diversity which includes working, living, and recreation. With this new option, new opportunities evolve, which I would like to take into my proposal.

I grew up in Neubrandenburg, I have seen it struggle and fall, but I have also seen it rise and shine. Currently, it is on a steady way out of being in the shadow of the stereotypical Eastern Germany middle-sized town. I believe that this proposal can become the backbone of the city in various ways, which is why I want to take on the opportunity to develop this area.

## HOW

Through its central position in the city, we have the opportunity of integrating a mixed-use neighborhood that can combine modern living with modern working with recreational purposes.

By putting a focus on what the city needs, I have been working user-oriented and conducted a questionnaire with the citizens of Neubrandenburg. I have also stayed in contact with the city's planning office, as well as one architect and owner of the Areal.

Spatially I will be integrating the existing built structures and green assets into the proposal. Focusing on what the city needs and what the inhabitants are missing.

The development of the RWN Areal will offer a user-friendly environment with short distances that combine living, working, and recreation that is ultimately resilient towards challenges and bring sustainable features into the urban design.



**LOCATION**

# LOCATION



Neubrandenburg in Germany

The Federal Republic of Germany spreads over an area of 357 000 sqkm and inhabits 83 million citizens. It is divided into 16 different states. The capital is Berlin.

The city of Neubrandenburg located in North-Eastern Germany. Neubrandenburg is located 140km North of Berlin, 215km East of Hamburg, 100km South-East of Rostock and the Baltic Sea, and 85km West of the Polish Border and the town of Szczecin.

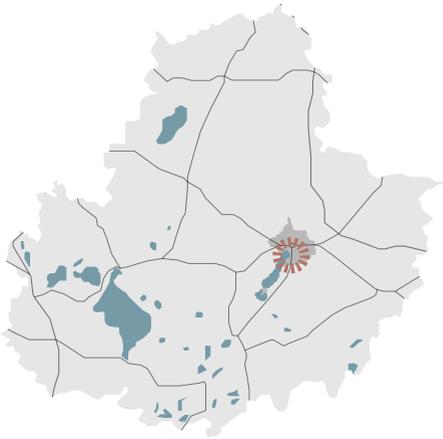
Neubrandenburg is located in the state of Mecklenburg - Vorpommern.

Mecklenburg-Vorpommern has eight municipalities with five bigger cities of higher regional importance, one of which is Neubrandenburg. The state is home to 1.6 million inhabitants in an area of 23 000 sqkm.

Mecklenburg - Vorpommern is considered one of the structurally weaker regions in Germany, which is still a relic of the former division of East and West Germany.



Neubrandenburg in the state of Mecklenburg-Vorpommern with Autobahn-connection



Neubrandenburg in the municipality  
Mecklenburgische Seenplatte  
with Autobahn-connection and federal roads

The municipality Mecklenburgische Seenplatte stretches over an area of 5 470 sqkm, which makes it the largest municipality in Germany. About 260 000 people live in the county.

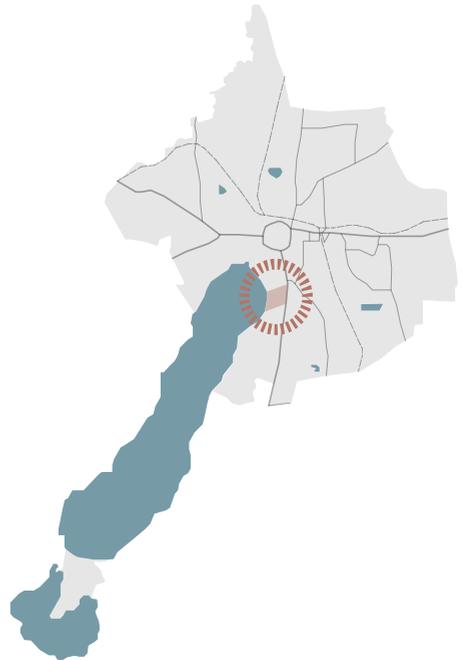
Neubrandenburg is the municipality's regional center and plays an important regional and political role and is an economic driver.

The landscape in the municipality is mainly characterized by its lakes and glacial moraines.

Neubrandenburg inhabits 64 000 people along a 17.9 sqkm lake, the Tollensesee. The town was founded in 1248 and still to this day has a well preserved medieval city wall, four brick gothic gates, and a brick gothic church in the center of the city.

Besides a diverse architectural background, the city is also well known for its sports culture and sports elite, its increasing regional development, and role as a node within the region.

The site is located 1.8km South of the city center. In the North, the site is bordering a natural habitat, in the East a federal road, in the South residential buildings and in the West the lake.



The site in Neubrandenburg  
with federal roads, connector roads, and train connection



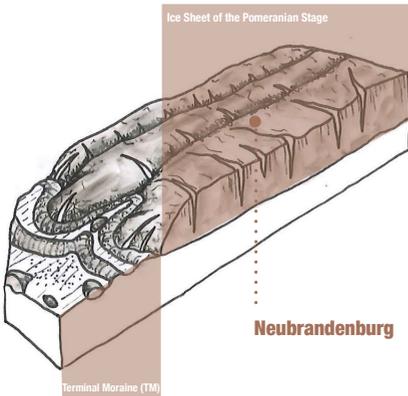
# HISTORY

# HISTORY

## GLACIAL LANDSCAPE

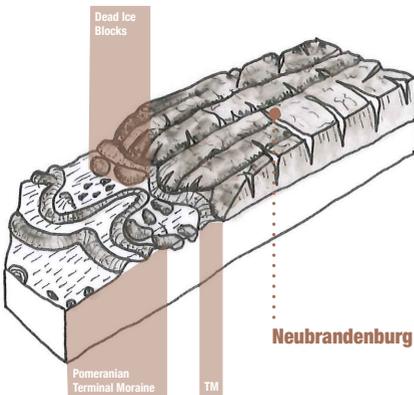
The History of Neubrandenburg, more specifically its landscape, dates all the way back to 14 000 years ago.

The area came to be through the movement of glacial ice sheets. In the following five stages the landscape and topography development of Neubrandenburg will be further explained.



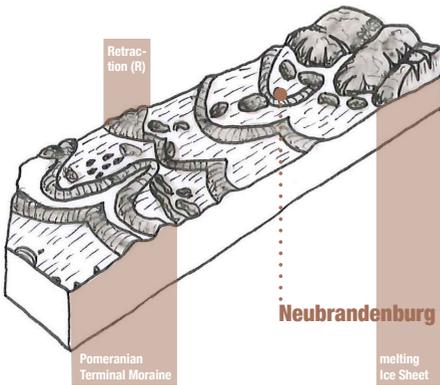
### PHASE I

The ice-sheet of the Pomeranian Stage shaped the topography of Northern Germany. While the ice-sheet pushed slowly, but surely from the North towards the South, terminal moraines were a geographical result of this heavy mass moving. The terminal moraines landscape south of Neubrandenburg has been shaped.



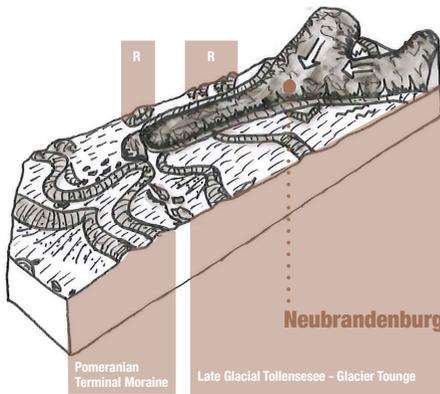
### PHASE II

Over the course of time, the ice sheet began to melt and retract. Leaving behind dead ice blocks and boulders. Neubrandenburg, in its current location, was still covered by the ice sheet.



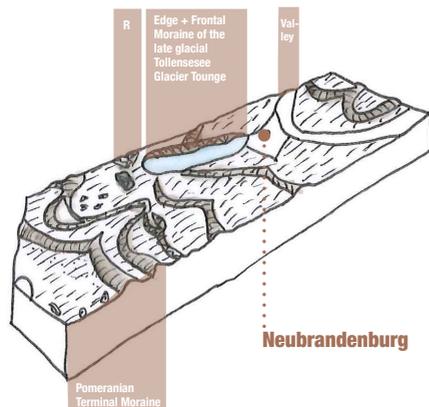
### PHASE III

As the ice sheet melts more and more, it leaves behind retraction zones. Which are today visible in the terminal moraine landscape as wider hilly areas. Remains of the ice sheet kept shaping the path for the following phase.



### PHASE IV

During phase IV the Late Glacial Tollensesee-Glacier Tongue kept pushing in from the North again. This Glacier Tongue changed the topography of the area once more, moving landmasses of the terminal moraine and retraction zones, shaping an entirely new landscape.

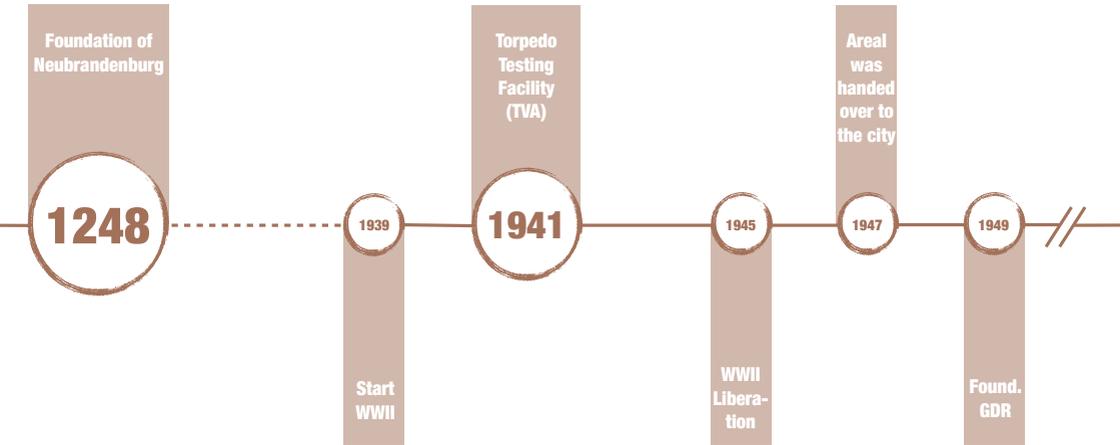


### PHASE V

The remains of the Glacier Tongue are clearly visible in the topography today. The lake Tollensesee was shaped, a valley that almost seems to be cutting through the moraine landscape with steep Edge and Frontal Moraines along the shores creating almost 80 m height difference within a fairly flat environment.

# HISTORY

## CITY & SITE



### 1248

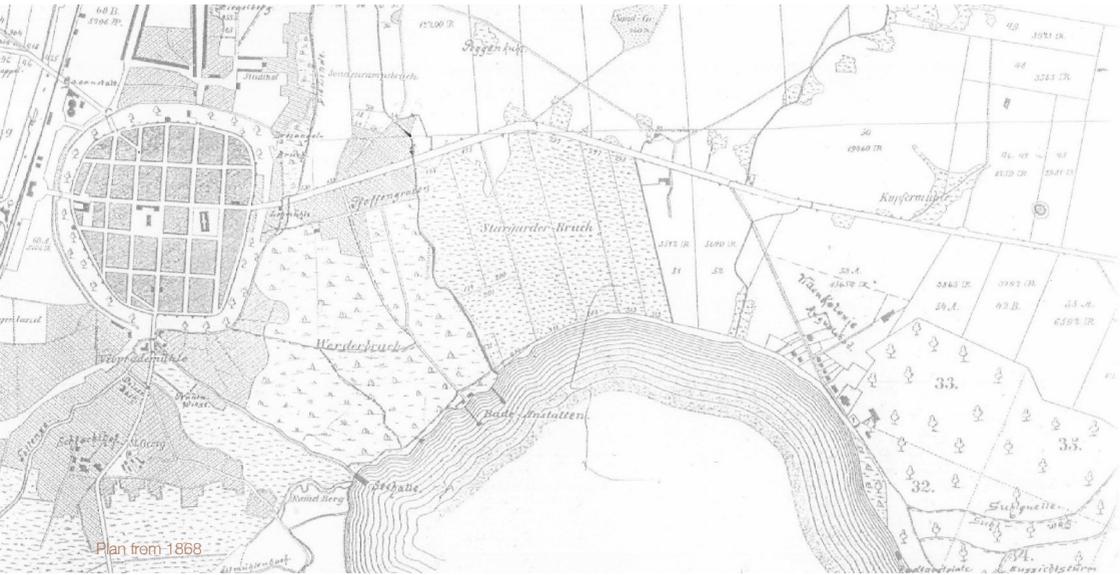
Neubrandenburg was founded in on 04. January 1248 by Markgraf Johann I. von Brandenburg.

The town was built on the Northern edge of the lake Tollensesee. Neubrandenburg's inner city layout is characterized by a vertical and horizontal street network that connects four brick gothic gates in the North, East, South, and West of the medieval wall fortification. This fortification, as well as the brick gothic church St. Marien in the center, are protected as historical heritage and one of the best-preserved town fortifications in Europe. After the WWII destructions, the inner city has been rebuild to its original pattern.

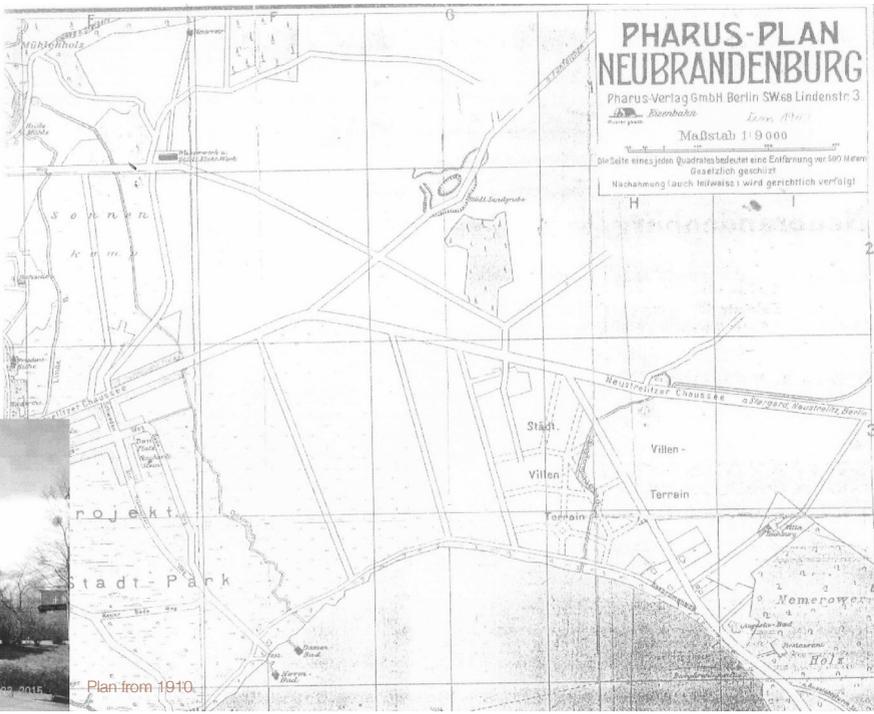
### 1900s

Over time, the city grew slowly but surely along the North, East, South, and West arms of the inner city. During the years of rapid industrial expansion in Germany, many people actually found their way back to the cities, also in Neubrandenburg.

Yet during this period, a villa colony alongside the shore of the lake Tollensesee was built. Some parts of which are overlapping with the current RWN Areal's border. Remains of the villa colony can still be found on site today, one lonely villa in the southern part of the site.



Plan from 1868

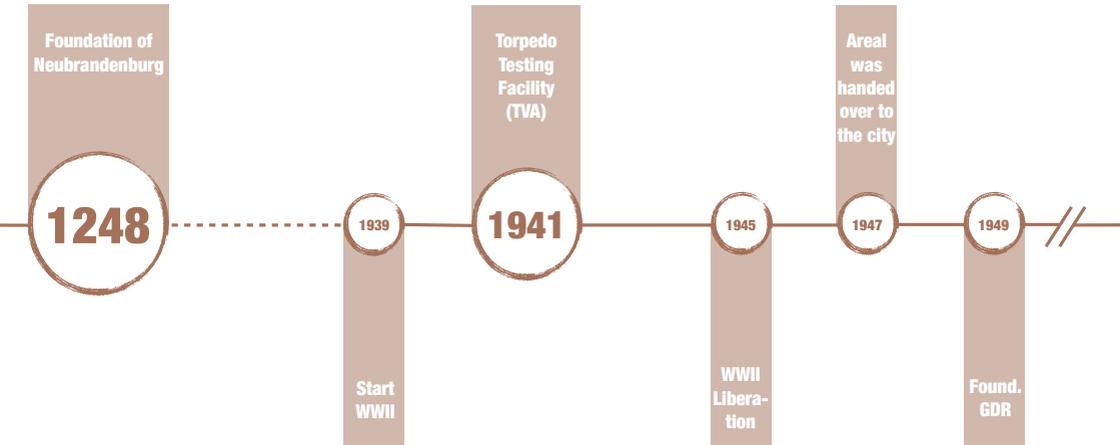


Remaining villa on site

Plan from 1910

# HISTORY

## CITY & SITE

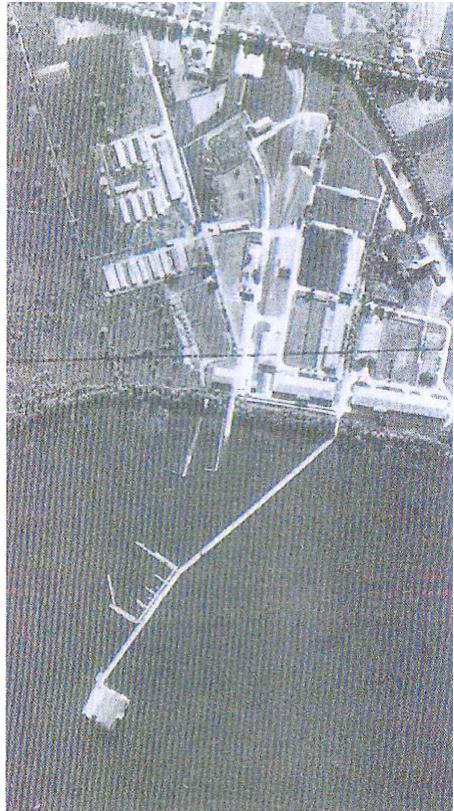


## 1939-1949

The history of the site leads back to the start of WWII in 1939. With Neubrandenburg's special location at the 10 km long lake Tollensesee, the site met special requirements for the navy to found a Torpedo Testing Facility (Torpedoversuchsanstalt, further referred to as TVA) at the North-Eastern shore just south of the city center.

In 1941 five warehouses, several secondary buildings, an air raid shelter, and a train connection were constructed on site by 200 German construction workers and 800 forced laborers.

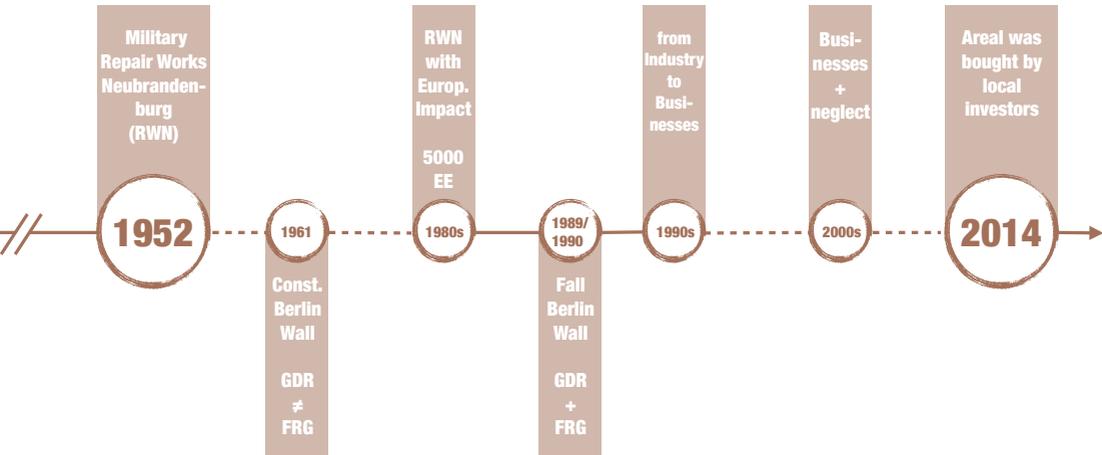
On the lake, a harbor area with a bridge leading to a controlling and





# HISTORY

## CITY & SITE



## 1952 - 1990

With the foundation of the German Democratic Republic in 1949, the former TVA got a new purpose. In 1952 the ministry of the interior decided on the major project «Reparaturwerk Nebrandenburg» (Repair Works Neubrandenburg further referred to as RWN) for military track vehicles.

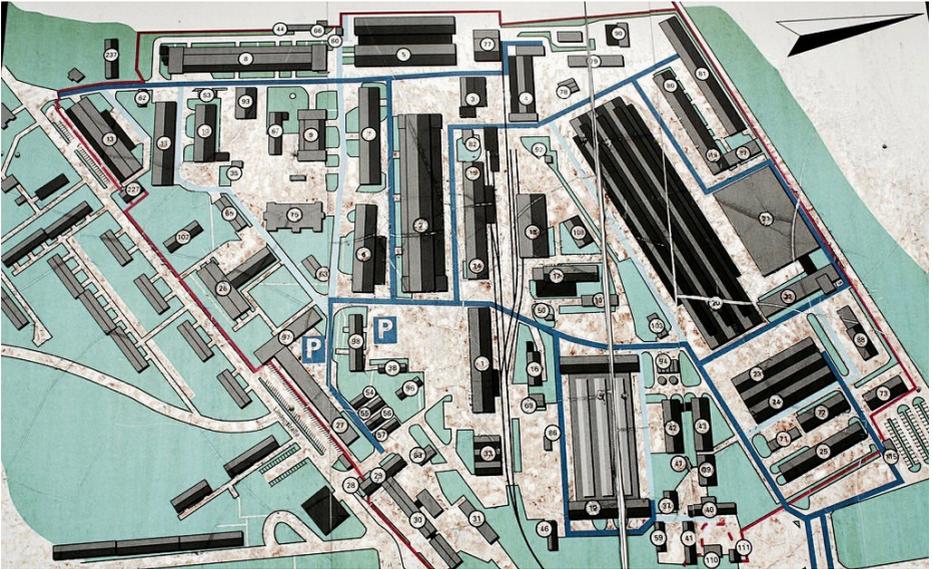
The RWN started operating in 1953 and by 1954 the repair works were going smoothly. Nonetheless, everything was being kept secret and under lock. Also during the following years, many buildings were added to the existing structures. Not only were tanks repaired on site, but specialists in the field were also able to receive



education right on site as well.

With the construction of the Berlin Wall in 1961 and hardened frontiers between the East and West during the Cold War increased the importance of the RWN Areal.

During the 1980s the RWN Areal became one of the biggest repair works for military track vehicles in Europe. With more than 5000



## 1990 - 2000s



employees it contributed majorly to the cities growth, bringing Neu-Brandenburg almost to 100 000 inhabitants.

With the fall of the Berlin Wall in 1989 and the reunification of East and West Germany in 1990, the RWN Areal was disarmed and the area became the property of the municipality.

After the German Reunification, the RWN Areal lost its purpose of military use. Businesses and industry moved into the area, changing the image of the site. Over the course of the last 20 years, the Areal was challenged with many challenges and neglect. Financially, the area was not a gold mine, but more so needed the dedication to be developed.

In 2014 the RWN Areal property was bought by a group of private investors, to save the site from further neglect and eventual destruction. Renovations of some buildings, having events on site and renting out spaces to local businesses have started a change for the Areal.



# ANALYSIS



# ANALYSIS

## CONTEXT

The RWN Areal lies in a very special position in town. Only 1.8 km south of the city center, the site continues a sequence of special uses along the northern shore of the lake. But not only that makes the location contextually interesting. The RWN Areal borders a topography change in the south, the Lindenberg - a steeply rising hill formed during the ice age. Bordering natural assets in the North and West, the site's Eastern border is a federal road and the Southern border form residential slab buildings.



## GREEN AND USES IN THE ADJACENT AREA



As mentioned before, a natural habitat lies just North of the site. With this green asset neighboring so closely, the industrial character of the site forms an enhanced contrast. Within parts of the natural habitat and around 1 km further North of the site, schools and sports facilities shape the environment.

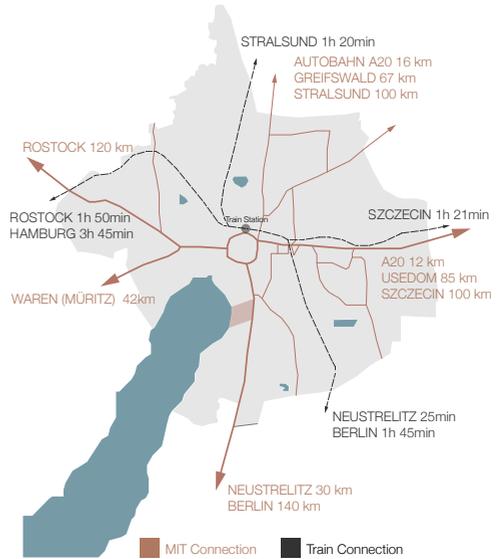
The lake to the West is highly valued as a recreational area in Neubrandenburg.

The Lindenberg hill, South of the site, is a mixed forest area with residential areas along the federal road B96.

# ANALYSIS

## REGIONAL CONNECTIVITY

Neubrandenburg is a regional center in the state of Mecklenburg-Vorpommern and the municipality of Mecklenburgische Seenplatte. It is not only a connecting city on the N-S axis between Berlin and the Baltic Sea, but also on the W-E axis between Hamburg and Poland. It is regionally connected through multiple federal roads and nationally connected through the Autobahn. Neubrandenburg is furthermore part of interregional and national train network between Berlin, Hamburg, Rostock, Stralsund, and Szczecin.



## STREET NETWORK



As mentioned before the site is located right next to the federal road B96. This road can be seen as one of the four arteries of the city's traffic network and is one of the busier roads in town.

The site has one access point from this particular road and two more entrances from the Southern side. The street network on site consists of one dedicated road that leads through the area, unfortunately, this is not the only place where cars are driving. The open spaces and concrete surfaces are used as informal streetscapes.

## BIKING PATHS

The town provides dedicated biking paths for cyclists, yet there is room for a better connecting system. Even though Neubrandenburg is more of an MIT commuter-based city, there are still quite a few people that are biking to and from work. But the city is lacking biking paths, in order to create a safe environment for any cycling person. Nonetheless, there are bike paths along the major roads and along more scenic environments. But most of the time bikes and cars have to share the streets.



## BUS ROUTES



The public transportation system in Neubrandenburg consists of several bus routes. Line 2 (green in the plan) has three bus stops around the site.

It system needs to be improved in any further development of the city. The bus fares a getting higher and the busses go less frequent - a development a lot of people don't agree with. And those people tend to take their car instead because it is cheaper to just park in the inner city for 4 hours than to take the bus back and forth.



**SITE SPECIFIC  
ANALYSIS  
AND  
CHARACTERS**



# SITE SPECIFIC ANALYSIS AND CHARACTERS

## SITE INTRODUCTION

The RWN Area is mainly characterized by brick warehouse buildings that are standing on open concrete surfaces. A lot of the area is fenced off, orientation and accessibility are lacking on site. Yet, the southern part of the site holds rich biodiversity with fully grown trees along the road and green spaces along the lake.

The future of the site is currently started to be discussed in the city's administration. The municipality and investors see the site with a lot of potential for high-class housing with recreational uses. There is no concrete concept yet



for the Area. Nonetheless, the site stands at a turning point, at which it either becomes a site that serves the citizens of Neubrandenburg as an open and reachable destination or it will become a gentrified neighborhood that only a few people can afford living in.

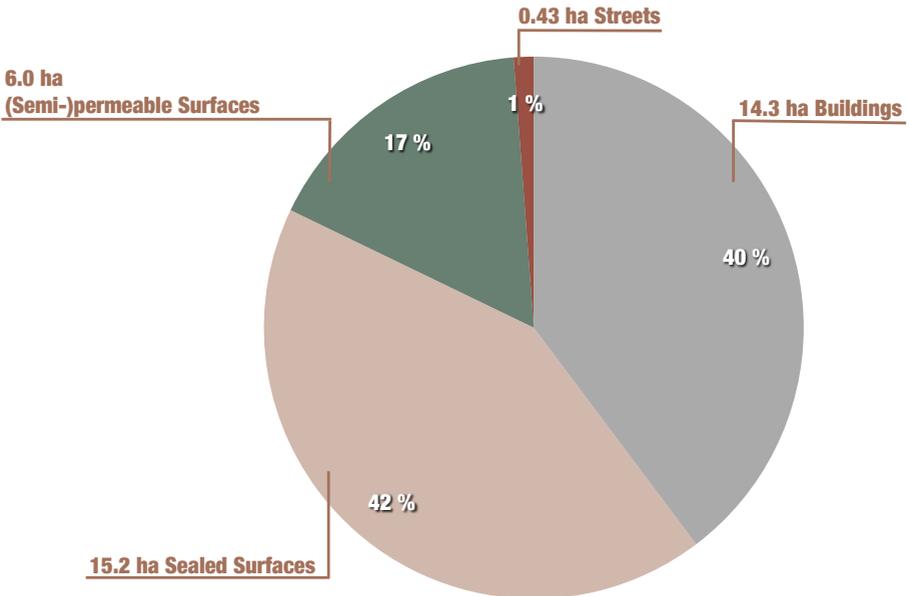
My proposal is a suggestion on how to develop a historically rich site into an area where living, work, and recreation meet. Where a diverse group of people can form a community, where living and working goes hand in hand, and where everybody is invited to experience leisure and recreation.

# SITE SPECIFICS

## SITE INTRODUCTION

If we were to break down the surfaces of the site, it is noticeable that 83% of the 36ha site is a sealed surface, which is either streets, buildings or other concrete or non-permeable surfaces. Only 17%, around 6ha of the site is (semi-)permeable surface.

This uneven distribution of non-permeable to permeable surfaces is very atypical for the city's general character and will further be considered into the design process, in order to achieve an environment that allows for sustainable solutions regarding storm-water management and serves as a green environment.



## GREEN ANALYSIS

Taking a closer look at the green spaces on site, it is noticeable that a green belt is surrounding the RWN Areal all the way around. Nonetheless, most of this green belt is not maintained and overgrowing, closing off the area even more, instead of connecting it through green assets. The Southern part of the site is also rich in green assets, such as green spaces in front of buildings or a diverse quantity of fully grown trees. The northern part of the RWN Areal, on the other hand, does not contain any sort of green spaces, only singular standing trees can be found here.



## LISTED BUILDINGS



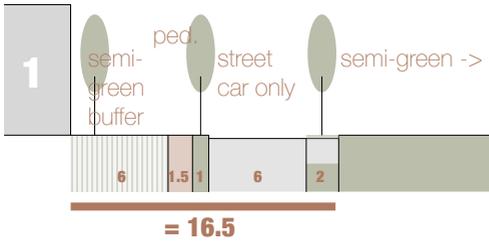
The architecturally and historically rich site contains listed buildings that need to be kept as heritage on site.

Those 12 buildings range in size, but are almost all characterized by the brick facade look, 2 to 3 story height and pitched roofs.

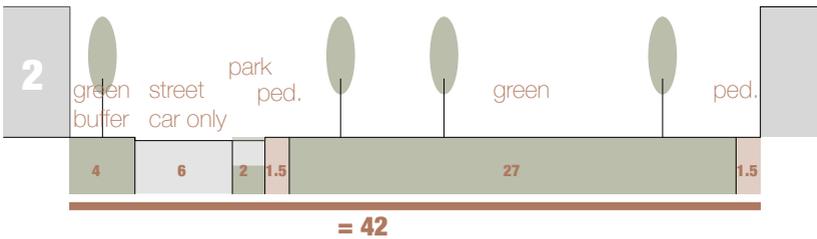
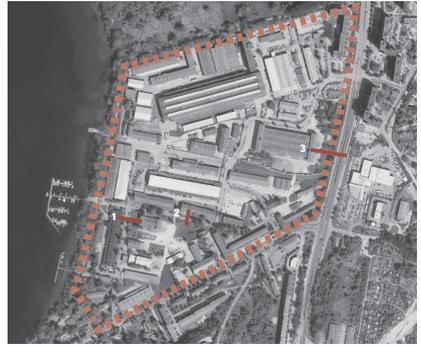
The listed buildings are the main visual driver for the area and provide the identity for the area and its further developments.

# SITE SPECIFICS

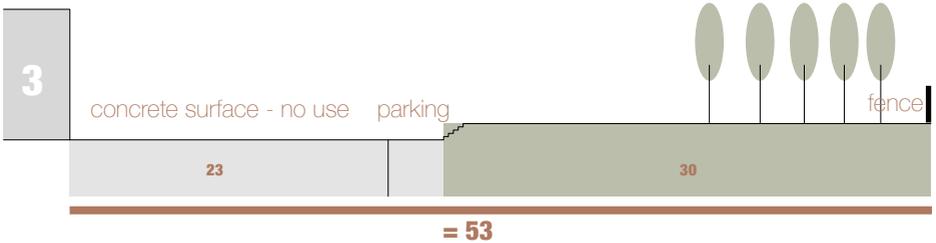
## SECTIONS EXISTING FABRIC



- parking along only one side of the road
- sidewalk only on one side of the road
- buffering zone in front of the building



- parking + sidewalk along only one side of the road
- big distances between fairly low buildings
- buffering zone in front of the building
- green dominates the view



- 1m height difference at the edge of the site
- unused concrete surface as the building frontage
- fence closing up the area
- dense green buffer along the fence

# OPPORTUNITIES AND CHALLENGES



- long distances = sightlines
- diversity in distance
- only little diversity in height
- buffer zone in front of buildings

- wide open green space
- district heating pipes bring different scale to site in public space



- open concrete leftover space
- different concrete surfaces
- unpermeable surfaces
- variety of vegetation

- fences and wall are barriers
- no relation of inside and outside
- vegetation and building are not related





# QUESTIONNAIRE

# QUESTIONNAIRE

With the start of the Master Thesis, my goal was to have a broad overview of the citizens` opinions about the RWN Areal. I, therefore, conducted a questionnaire with 13 different questions regarding the

city and the site, 49 people have participated.

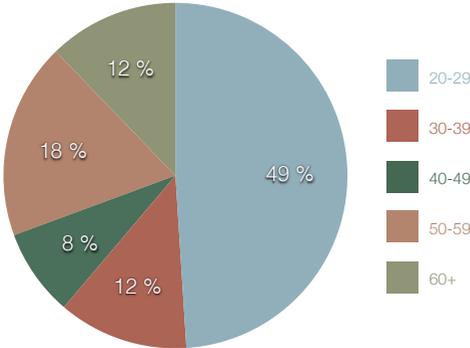
This questionnaire has influenced my further visionary and conceptual process.

## QUESTIONS

1. How old are you?
2. Are you living in Neubrandenburg?
3. What do you appreciate in Neubrandenburg?
4. What are you missing in Neubrandenburg?
5. For what reasons have you visited the RWN Areal?
6. What are your first associations with the RWN Areal?
7. Do you recognize the RWN Areal as part of the city?
8. Is the RWN Areal inviting?
9. How well are you able to orientate in the RWN Areal?
10. Would you visit the RWN Areal more often if you knew about interesting events?
11. Can you compare the RWN Areal with another area in town?
12. If so, which one?
13. Do you have any ideas or suggestions that you would like to see in the Areal's or city's development?

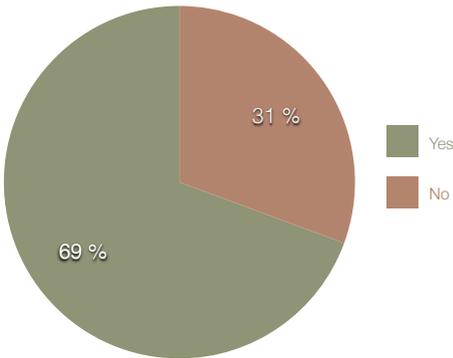
# DEMOGRAPHIC OVERVIEW

Age Distribution of Questionnaire Participants



Of the 49 answers received there was an age distribution ranging from 20 years old to 60+ years old. A wide range of people from almost all ages has participated. These diagrams show the distribution of ages, as well as if the participants are currently living in Neubrandenburg and the age distribution of the participants that are living in the city.

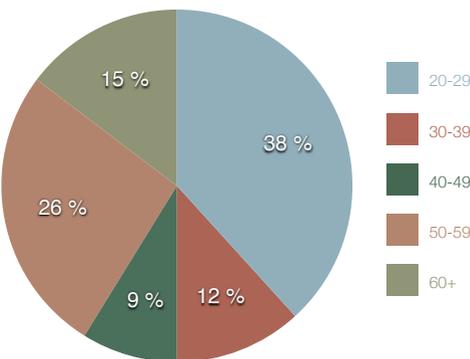
People living in Neubrandenburg



Neubrandenburg undergoes a negative demographic change, the older population is getting larger and the younger generation tends to move away, once reached a certain age (~18 years).

Nonetheless, I was happy to see the engagement in my questionnaire within the younger population under 40 and their interest in the city's development.

Age Distribution of the people living in Neubrandenburg



Through this wide range of participants, I was able to not only get an idea about what the inhabitants want and need, but it also helped me in my vision, concept, and design process.

# QUESTIONNAIRE

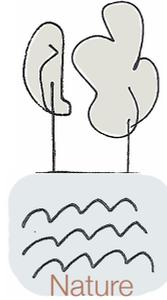
## APPRECIATION IN NEUBRANDENBURG

When asked for what the participants appreciate the most in Neubrandenburg the answers were very clear. Most named is the historical town center, the natural assets, but also the small town feeling with its short distances.

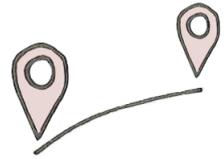
Particularly noteworthy with these three mentions are the levels of experience since they offer everything between a physically experienced space and a naturally reserved space.



Historical City Center



Nature



Short Distances

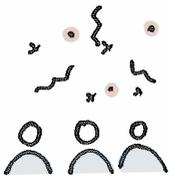
## WHAT IS MISSING IN NEUBRANDENBURG?

After asking the question of what people appreciate the most in Neubrandenburg, I have asked them if there is anything in particular that they are missing or would appreciate having.

Once again, a clear pattern was noticeable. The most given answers were cultural events for

young and old, more secure jobs, a better public transportation system, and more gastronomy.

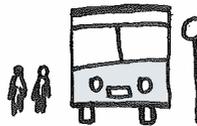
Most of the given answers call for future-oriented planning that involved local and regional economics and provides the citizens with a stable social structure in which they can live and work.



Cultural Events for Young and Old



Jobs



Better Public Transportation

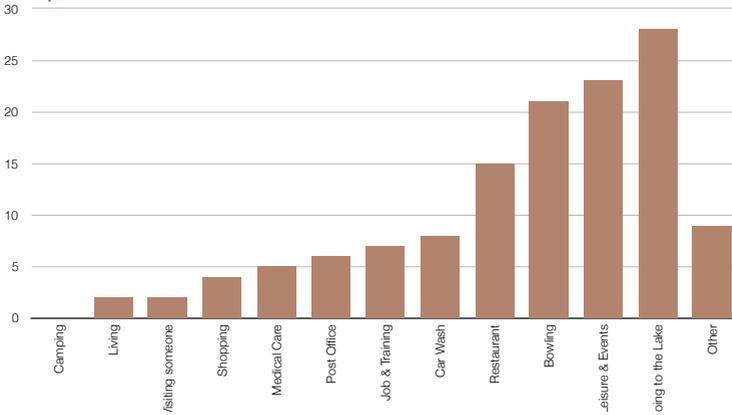


More Gastronomy

## REASONS FOR VISITING THE RWN AREA

The main reason people are visiting the area is more leisure activity related. Only a few people of the participants have visited the

RWN Area for other reasons, such as work or medical care. Nonetheless, does the site offer many possibilities and uses to inhabitants.



## FIRST ASSOCIATIONS WITH THE RWN AREA

These are some first associations the participants had of the RWN Area:

former restricted zone

lake, forest, nature

big, confusing, hard to orientate, dark, big ware houses

wasted potential

versatile used industrial area

empty

scary at night

slipway for boats

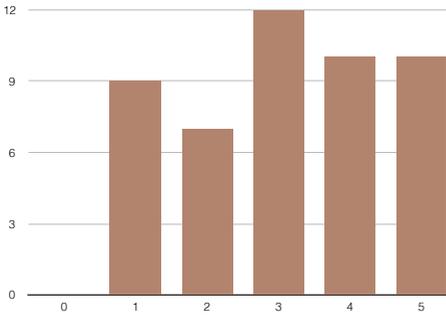
torpedo

old and shabby

# QUESTIONNAIRE

## IS THE RWN AREAL PART OF THE CITY?

The participants were then asked to describe on a scale of 0 (not at all) to 5 (very much) how much they see the RWN Areal as part of the city. The answers were surprisingly inconclusive, there was no



concrete answer that can be made out. But what is clear is, that no matter how much many participants were disliking the Areal everybody is seeing the site as part of the city, no matter how much they are disliking or liking the area.

This is a good indicator of an existing identity that belongs to the RWN Areal, that should be kept and supported in any further development.

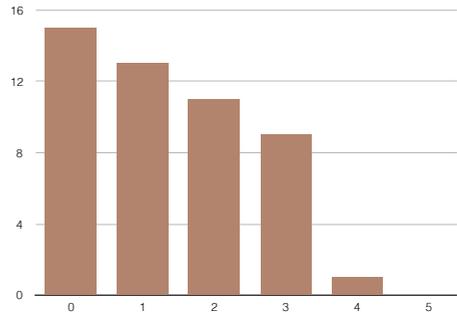
## IS THE RWN AREAL INVITING?

When asked on a scale of 0 to 5, again 0 being not at all and 5 being very much, if the RWN Areal was inviting, the answers were much clearer.

What was an initial answer with the first association becomes much clearer in a diagram.

The citizens do not find the RWN Areal inviting. Some more, some less, but what becomes clear in this answer scheme as well, is the absence of the one side of the spectrum - the very much inviting spectrum. This is something that also definitely will be considered

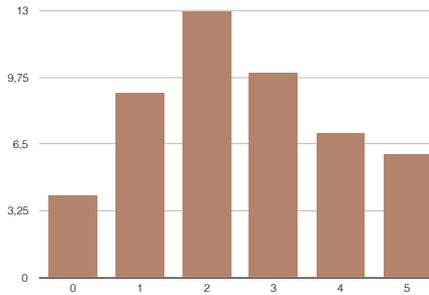
in the design process. How can an area be developed, that people do not find inviting? A question, I have asked myself over and over again during my thesis work.



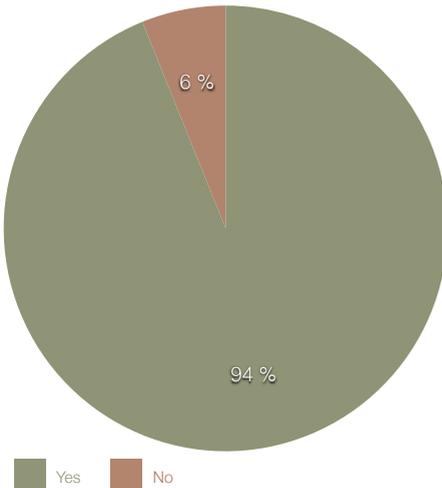
## ORIENTATION IN THE RWN AREA

The participants were once more asked - on a scale of 0 to 5 - how well they are able to orientate in the RWN Area. The results were also not 100% clear, but this actually shows some uncertainty and

the lack of orientation in the area, even though some say that they are able to orientate quite well. Nonetheless, the majority is uncertain if they can orientate well.



## WOULD YOU VISIT THE RWN AREAL?

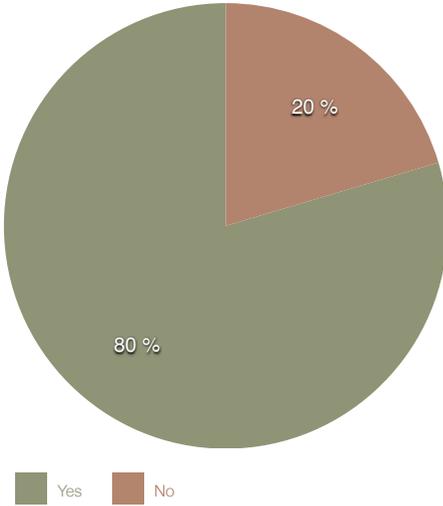


The question of, if they will visit the RWN Areal more often if they would know about more activities and events, the majority, except for one person said yes.

This is a very hopeful statement and answer because this actually has been one of the questions, where I for sure thought, that the answers would be very diverse. I was very happy to hear and see, that there was so much excitement and a will to get to know the area and visit it more often.

# QUESTIONNAIRE

## IS THE RWN COMPARABLE TO OTHER PARTS?



Even though the RWN Areal has a very unique history in Neubrandenburg's development, 80% of the participants indicated that the RWN areal reminded them of other areas in town.

Of course, this is not to be valued good or bad, but more so shows, that the inhabitants know the city they are living in and find spaces that are familiar to them.

## IF SO, WHICH?

The areas people kept referring to is the Ihlenfelder Vorstadt and Monckeshof. Both area that have been characterized by some sort of industrial use and neglect. But are located further towards the outskirts of the city.

Ihlenfelder Vorstadt

Monckeshof

## IDEAS AND SUGGESTIONS

As a final question I have asked the people if they would like to share ideas or suggestions for the RWN areal. Some of the statements:

It has potential as a trendy neighborhood. But more for the social middle class, instead of a zone (like the Augustabad) for the privileged. Certainly no supermarkets, more smaller shops. Small Apartments, also for the elderly.

Very outdated.

Obtaining the warehouse look and image.

Tear everything down and put some new industry there.

Living, restaurants, leisure activities and maybe shopping.

Finally making something out of it.

It's time to change something right there. The architecture scares me and reminds me of Torpedos and Tanks.

One could change the military appeal into something attractive.

Development of leisure activities. Structure as residential and leisure „park“.

It would be amazing if the RWN Areal could be reevaluated, connecting the lake, going for walks, businesses, art, and living would give the Areal a unique and distinctive character.

## CONCLUDING THOUGHTS

I conducted this questionnaire in order to find some guidance in my vision and concept process. I was able to gather many thoughts and opinions that will have some im-

act on my further ongoing.

The RWN areal shows how much potential is neglected and how much inhabitants want something to change.



**VISION**

# VISION

It was a dream that I had:

I was walking around the RWN Areal. At every corner I saw people walking outside, engaging in a conversation, sitting on a bench in the sun. The atmosphere was easy, spaces seemed to flow together, and I was not restricted to where I was taking my next turn.

A dream I, coincidentally, had at the beginning of working on my Master Thesis. Of course, what I dreamt was not real, but it has lead me to create a vision.

I want the RWN Areal to become an area, in which people can form a community, where they are taking care of each other and the environment, and where they can find work and living in one place.

A very simple vision, that includes aspects of everyone's lives.

I want to create a space where the barriers of what is public and what is private are lifted, where the residents and visitors can interact with the businesses, and where natural assets are valued, appreciated and supported.

Around these factors a community can form that will be self-sustaining and self-supporting.

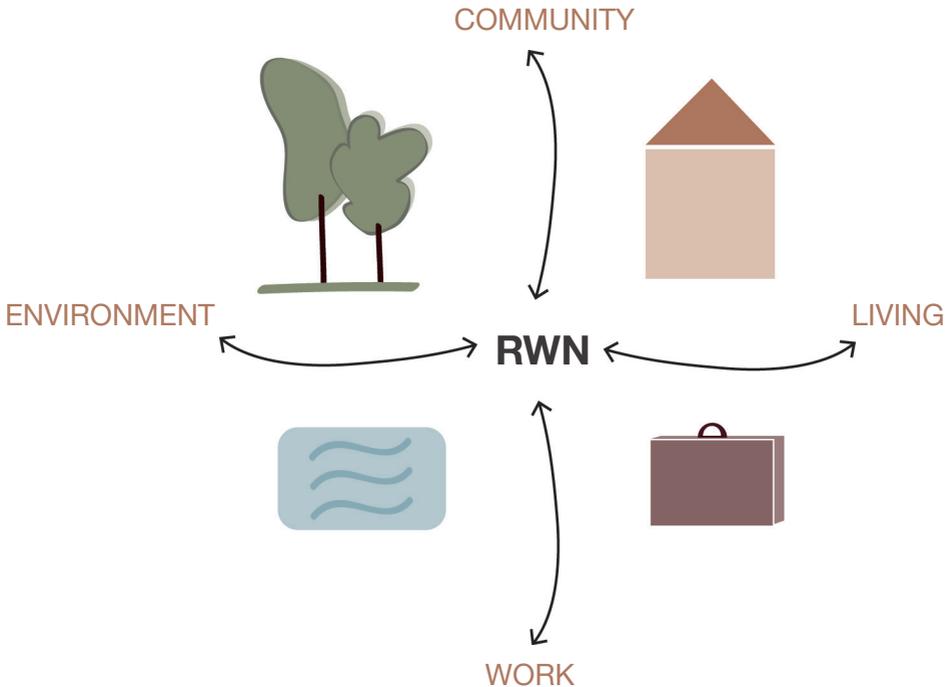
I see the RWN Areal as its own kind of eco-system. Whatever will be put into this system, will have an impact and mutually define something else. This vision can discover a new form of communal living and working. We can redefine the term «work-life balance», and create a space where this is real. Hierarchies can be eliminated and a freedom of living can be rediscovered.

## COMMUNITY ENVIRONMENT

- outside + inside // public + private are allowed to join - permeable and accessible areas
- discovering new forms of communal living
- self-sustaining + self supporting community
- close to natural assets
- facilitate spaces for cultural opportunities

## WORK+ LIVING

- discover understanding of a location-based working and living environment
- developing the existing industrial site into a productive quarter/ neighborhood
- work - life balance
- allowing freedom + flexibility





**CONCEPT**

# CONCEPT

The vision has lead me to a concept that is based on creating spaces that are supporting businesses, living, and recreation in one place.

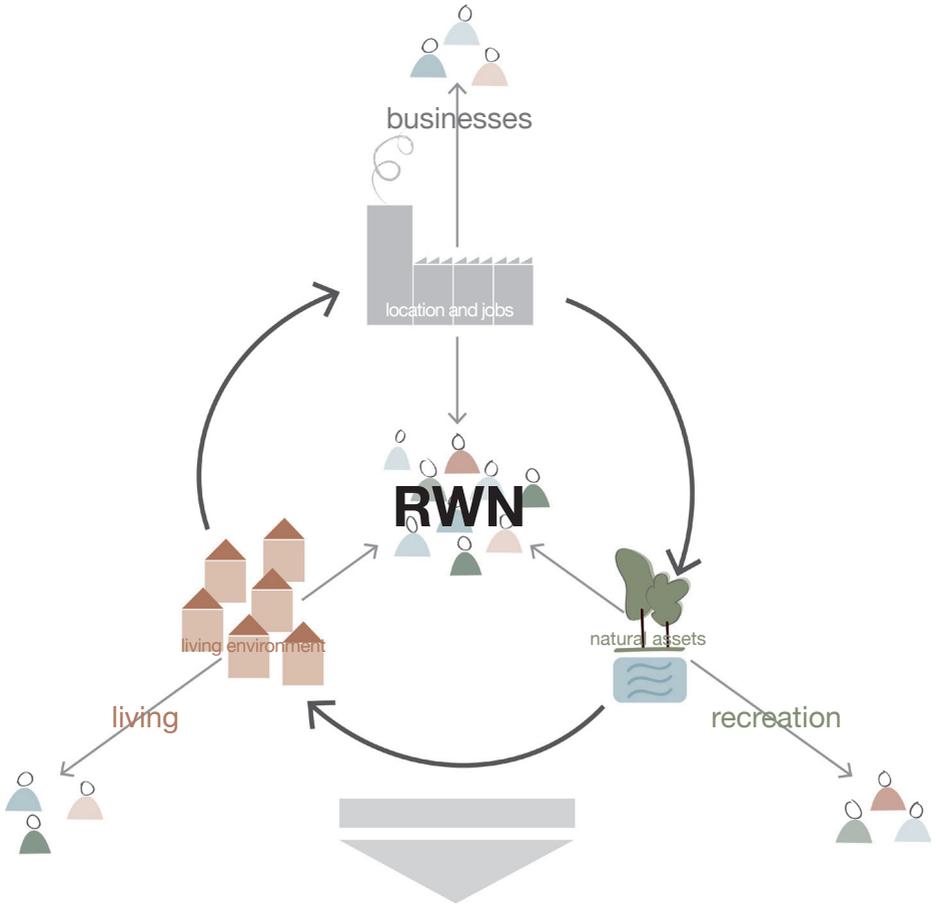
The idea evolved from the struggle of cities trying to keep businesses in the city, but more or less failing at doing so and keeping the balance. In 2017 the law of «Urban Areas» was introduced in Germany. This law finally makes it possible to create more diverse areas that unify work and living. And with this new option, new opportunities can arise.

I would like to take this opportunity into my proposal and create a sort of pilot project. The RWN Areal can become a synthesis between living, working, and recreation. With good location-based factors at the RWN Areal, the city will be able to draw in businesses to this location and ultimately creating new jobs that are badly needed in Neubrandenburg.

The existing industrial site will be developed into a productive quarter. The cities in Germany undergo a structural change, so is the working environment. We need to find solutions to on how to deal with this change and plan and design cities accordingly.

The RWN Areal as a productive part of the city can create a high-value environment with a positive impact on the city and the region. Opening this productive quarter to the citizens will create positive interactions with transparency and educational purposes.

The RWN Areal will be a revitalizing, but also re-urbanizing project, in which solutions of an Urban Area can be discovered, combining work, living, and recreation. Ultimately creating high-quality quarter, that is safe and accessible for all people, which will have an impact on the social structures and social sustainability of Neubrandenburg. Everything is interconnected and in synthesis.



Mixed Environment  
 Safe Environment  
 Self-Sustaining Environment

that is ultimately  
 resilient and sustainable



# TOOLS

# TOOLS

## HOW WILL THE CONCEPT LAND SPATIALLY?

In the design process, I made out five keywords that were my guidance in finding spatial solutions. The keywords were made by observing the existing structures and how the public and private space behaves around them.

Through these tools, I have constructed a base on how to work the new structures into the existing

network. This gives the opportunity to connect the old and new, without losing the characters of the site.

Keeping the identity and value of the RWN Area is just as important in the design process, as developing new structures.

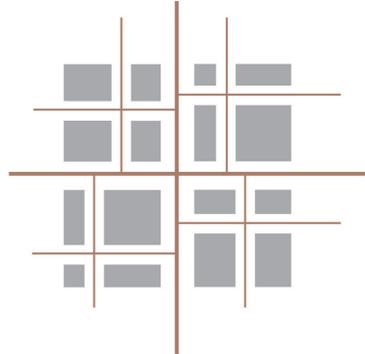
In the following, the keyword will be further explained.

### PERMEABILITY

open structures

letting public and private melt

living - working - recreational environment

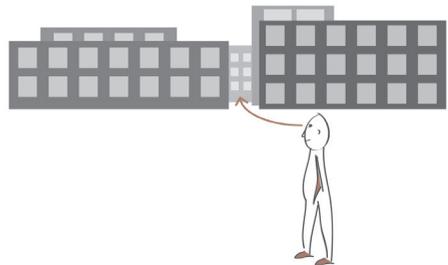


### SIGHTLINES

layers of experience

view layers

advantage of topography and height differences

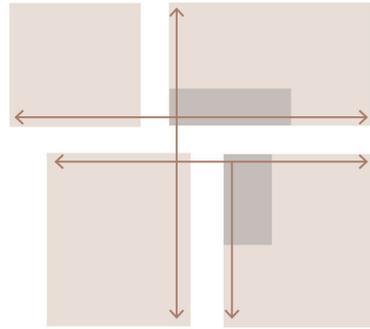


## LINEARITY

follow pattern of the existing

make big structures an advantage

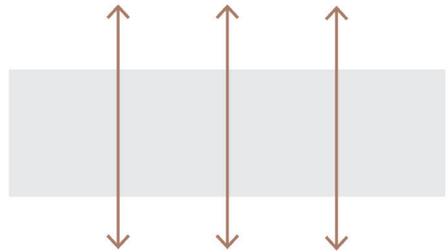
let big structures be the guidance



## BREAKING THROUGH

minimize distances

find opportunities in typologies

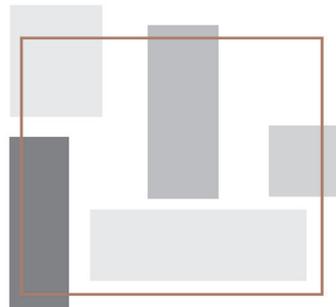


## GROUPING

find clusters

connect old + new

find functionality groups





**DESIGN**

# DESIGN

## DESIGN PROCESS

The design process consisted of several different steps.

After concluding the analysis and finding a vision and concept for the RWN Areal, I continued evaluating the existing built structures on site and decided on buildings and green structures to keep.

After this evaluation process, I once again analyzed the site and the spaces that have been created, by just removing parts of the

existing. Through the remaining buildings and green assets, I developed a subordinate structure and network to work with.

After creating a basic network I went into the design process, by placing buildings, greenery, uses, and other public spaces. The results will be shown and further explained in the following pages.

## EVALUATION OF SPACES

### 1

Evaluating the existing structures. The highlighted buildings in the plan to the right are the listed buildings that are protected as historic monuments and will, therefore, be kept.

### 2

In the next step, I evaluated every building that was not listed. The highlighted buildings in the plan will be kept.

I paid attention to the condition and the overall character of the buildings. If they were still in fairly good condition or supporting the visual character of the site they will be kept.

### 3

The next step was to evaluate the existing green assets on site.

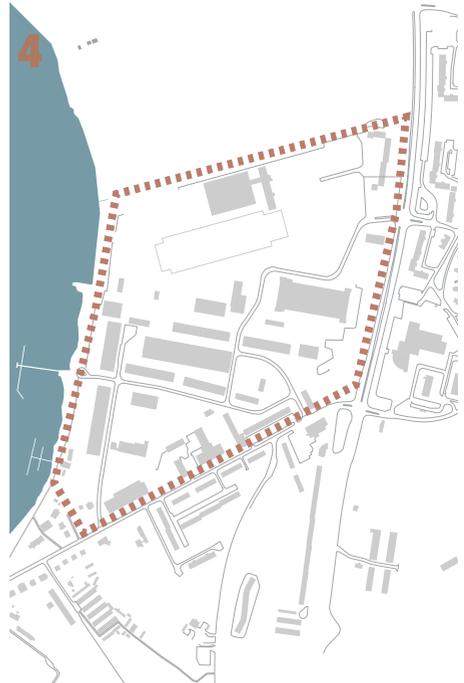
The trees and bushes along the streets will be kept.

Buffing green zones in front of the buildings will also mostly be kept.

The trees and shrubs along the bordering federal road to the East, as well as the dense green at the lake along the West side of the RWN Areal, will be kept but will need maintenance and thinning out to allow for the area to have a visual and physical connection for inhabitants and visitors.

### 4

The plan shows the remaining buildings and a remaining building outline for further design purposes.



# DESIGN

## FINDING DIRECTIONS

### 1

«Finding Directions» was one of the most important parts of the design process.

Before integrating new structures into the site, I firstly have concentrated on the remaining existing building and their orientation in the existing network.

Focusing on the orientation of the buildings, I was able to make out different clusters and groups, ultimately resulting in four different directions.

These four directions will be the groundwork for any further design.

This straightforward grid will help to integrate anything new into the existing fabric on site and in the surroundings, creating interconnections and synergies in the urban form.



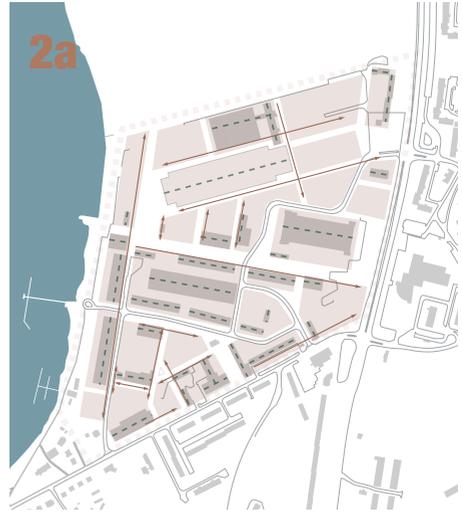
# FINDING A PATTERN

## 2 a:b:c

After finding main directions for a new network on site, I went into more specific characteristics on the existing structures. Always linking back to the before mentioned tools.

Focusing on these instruments and directions I was able to create a more concrete pattern.

These patterns allow for public spaces to be integrated, buildings to find a position, and streets a network.



# DESIGN



DETAIL

# MASTERPLAN

When landing in a design for the RWN Areal, it was important to me, to keep following the tools, directions, and patterns that I have created as instruments.

Resulting in a mixed-use neighborhood that allows for living and working in one place, but also facilitates many options in public spaces for citizens to use.

The design follows the four directions through a public space network with a variety of uses. The existing structures will support the working and business environment. New structures have different dedications mainly focusing on residential purposes, but also business and office spaces.

The existing main street leading

from East, through the site, to the southernmost end, will remain an important connector and will be recycled into the new environment.

The green assets on-site play an important role in the identity of the place and the values of citizens of Neubrandenburg. Trees and green structures along this road will also be kept, maintained, supported, and continued. New green spaces will be introduced, functioning as a guide through the area and as a connector to the surrounding environment.

The new design will facilitate a more permeable area, that will not be fenced of anymore, for people to roam free.



# DESIGN

## STREET NETWORK

The new street network is shown to the right and how it connects to the existing streets.

Two new bus stops will be added within the site, to minimize distances and discourage MIT. Furthermore, two underground parking lots will be added, to minimize parking cars in the streetscape.



## GREEN ANALYSIS

The amount of semi- and permeable surfaces on the existing site was 6 hectares. With the implemented proposal an amount of 11 ha of semi- and permeable surfaces was achieved, including public green spaces and courtyards. Green rooftops can be implemented on almost 2.5 ha flat roofs. Therefore achieving 13.5 ha of semi- and permeable surfaces.

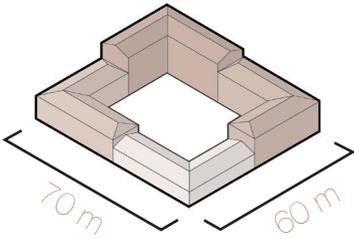


## USE

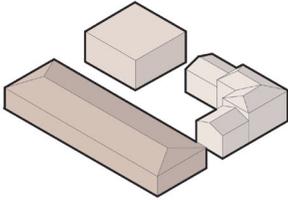
Besides the residential and business use, the existing warehouses will be used for public and cultural uses; the existing medical facility will be extended to a medical island by adding to the plot; ground floor uses will only be possible in the yellow highlighted parts of the site.



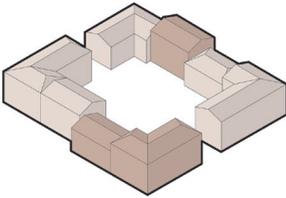
# BLOCK VARIATIONS



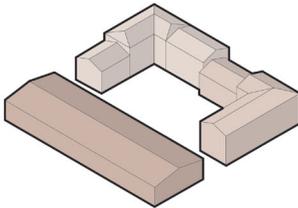
finding «standard» block size  
height variation 2-5 floors  
adapting pitched roof character



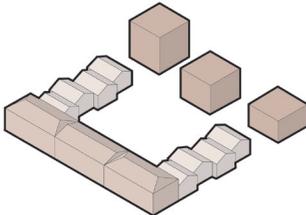
adding to existing buildings  
exploring variety in typologies  
combining pitched and flat roofs  
mixed use typology



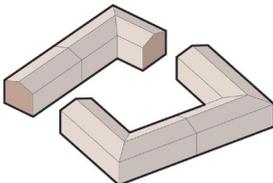
breaking up a regular block  
variation in height  
extruding/ intruding facades



add to existing fabric  
variation in height  
extruding/ intruding facades



introducing small scale housing  
open built structure - natural habitat  
secluded/ private



broken up and rearranged block  
tilted roofs facing the street scape  
adapting to existing character

# DESIGN

## DETAIL

Going into the detailed design, it was first of all most important to me to integrate the existing structures into the new design. This includes the existing asphalt street, the green buffers in front of the warehouses and the rows of fully grown trees.

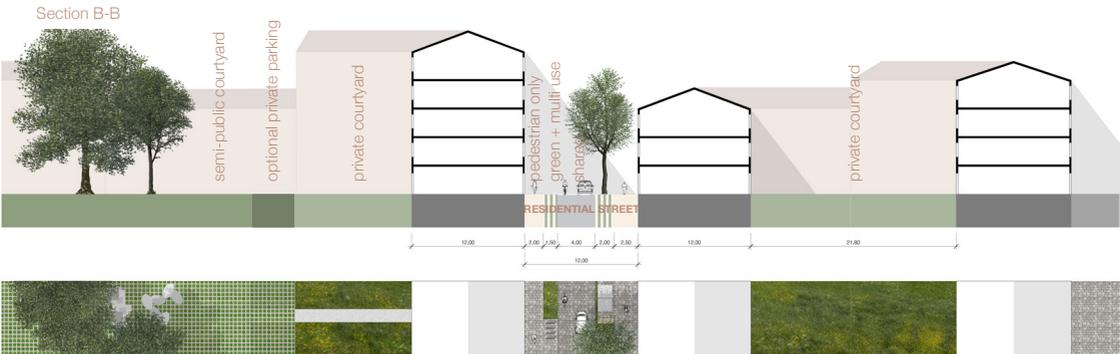
Adapting to these structures, I integrated bioswales onto the streetscape and in front of buildings, in order to provide more permeable surfaces in the public realm. The existing asphalt street is still in good condition and will not be removed. Nevertheless, there will be new pavement for any other street and sidewalks. The gaps between each stone will be permeable, therefore also achieving a semi-permeable surface.

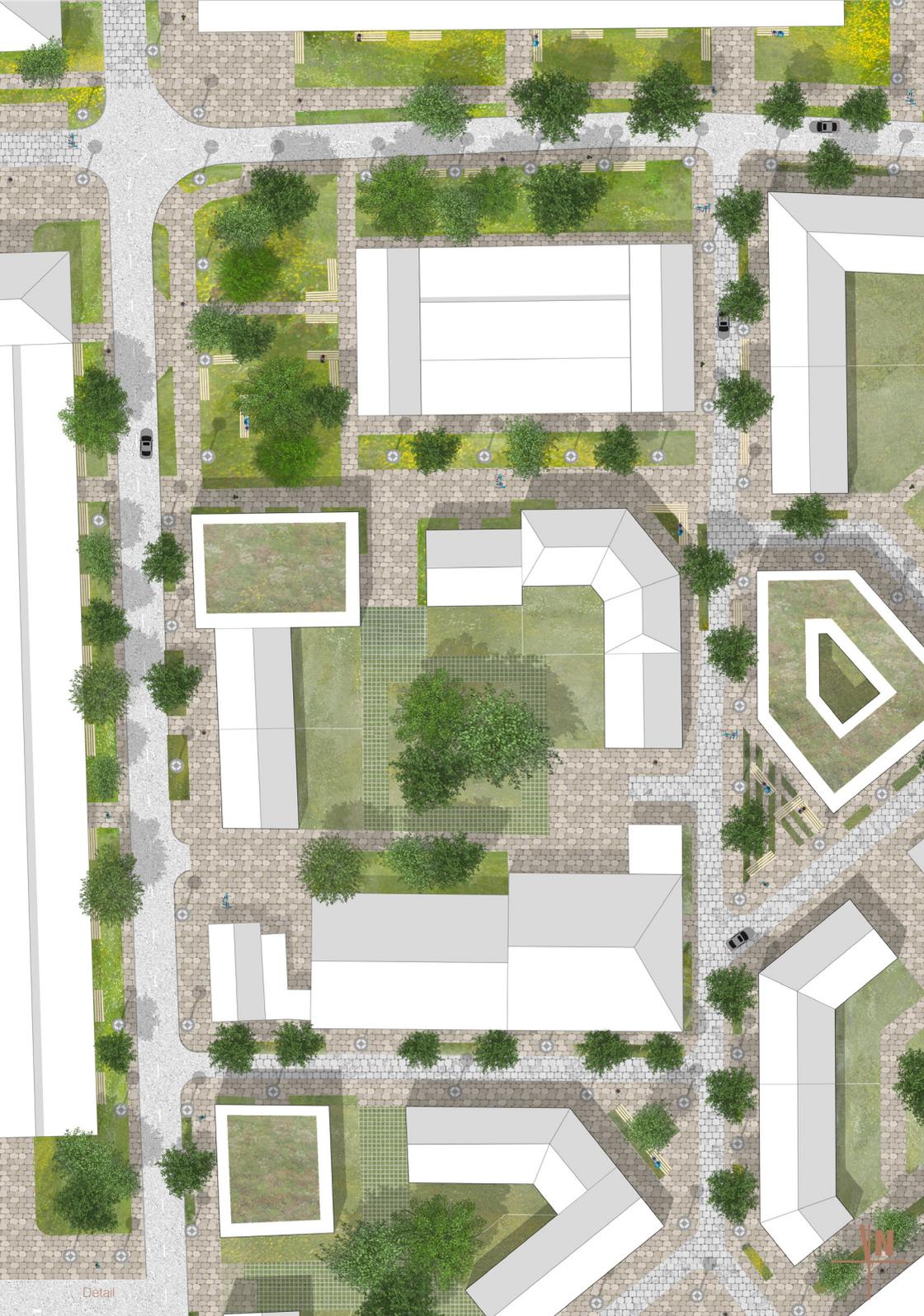
The residential streets will also have a shared character, allowing for a multi-use space, equipped with benches, bike stands, greenery, lighting, and sharable front entrance spaces.

The collector streets will have a designated car lane, bike lanes, as well as sidewalks, greenery and bioswales, and multi-purpose areas, attaining a safe environment for any road user.

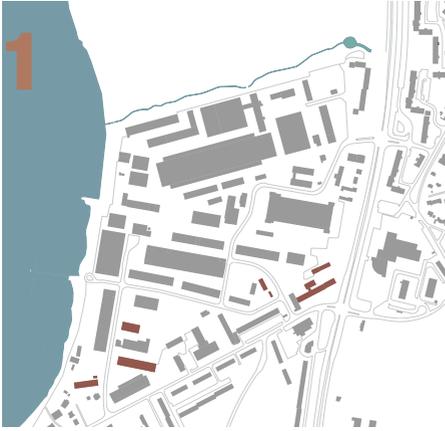
The courtyards of the blocks will have private and semi-public areas. Private gardens belong to the entire house and are shared. The semi-public part in the courtyard can offer space for infrastructural necessities, such as trash, bike stand or sheds. Here it is also possible for the residents to have optional car parking spaces. The semi-public part of the courtyards is free for everybody to walk through, there will be no fences or gates dividing the courtyards from the public realm.

On top of the flat roofs it possible to extend the private green space and integrate roof gardens, in order to increase a more biodiverse environment.





# DESIGN PHASING



Focusing on the southern part of the site. In Phase 1 the highlighted buildings in red will be demolished, creating an empty canvas for the buildings built in the following phase.



The southern part of the site will be completed with new buildings (in green) and the new road network, creating already a more complete site. Buildings in the northern part will be demolished (in red).



Continuing to densify along the main road and lakeside, in order to shape a more uniform visual identity. The longest building on site will be demolished.



In the finishing phase 4, new buildings on the northern part of the site will fill the remaining void. Composing a complete and connected new neighborhood.



**BEFORE: VIEW AUGUSTASTRASSE**



**NEW: VIEW AUGUSTASTRASSE**

# DESIGN

## URBAN CONTEXT INTEGRATION

The design is integrated into the urban context, following the pattern and direction of the existing fabric, visible in the bird's eye view to the right.

The adjacent natural habitat to the north of the RWN Areal is met through a more permeable point building structure, that allows the green assets to merge into the site. Through this gesture, the formal barrier of built and unbuilt is blended. The edge toward the Natural Habitat will be respected and therefore there will be no interference with the natural assets in it.

The federal road to the Eastern part of the site is met by one simple interference: opening up the fence to achieve a visual connection from the other side of the road and a more permeable public realm, for pedestrians to enter.

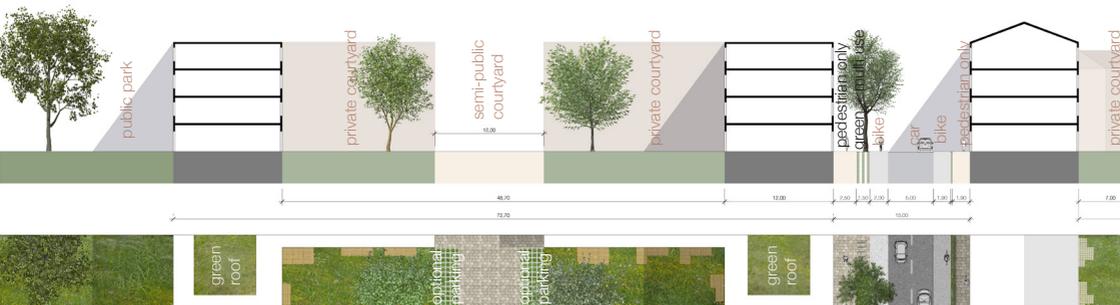
The Southern edge is mainly left

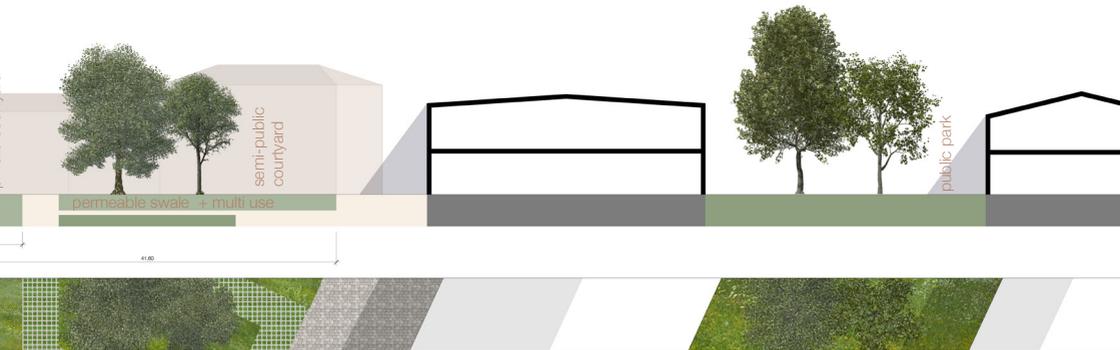
as it was, only adding one building to strengthen the streetscape. In order to avoid an edge character, any fencing will be removed as well, so people can pass and cut through easily.

The lakeside will need to undergo maintenance work. Wild growing bushes and shrubs need to be cared for, in order to strengthen the connection between the RWN Areal and the lakeside. Also providing better views and higher recreational qualities with more seating opportunities.

The buildings along the lake will remain for public and cultural purposes only, to prevent the privatization of the lakeside. On the Western sides of the buildings, terraces can be opened, for people to enjoy leisure activities close to the water.

Section A-A





# DESIGN

## CRITICAL REFLECTIONS

### REVITALIZATION AND PRODUCTIVE UBRAN AREA

The RWN Areal offers many great soft location factors, attractive for businesses to settle in Neubrandenburg. The proposal as a revitalization project is a take on how an urban area can develop around the decisive factor that working and living can coexist in a former industrial area. Creating a bold proposal, in the Neubrandenburg context, is a vision that the city needs.

There is this great sized piece of land with a rich history and a lot of identity, but it has just been neglected in the city's development over the last 30 years. Nonetheless, now that discussions are starting, on how the RWN Areal can be developed in the future, the project proposal can act as a guidance tool, integrating multiple aspects of life into one area, but still keeping it realistically and to the urban scale in the existing fabric.

The RWN Areal already has great potential to draw people into the area, it is now time for planning and design that also supports a vision of a liveable neighborhood.

But there are also problems that may arise with a project scaled like this, gentrification being a major concern.

Including a variety of stakeholders of different milieu into the planning process can avoid and minimize privatization and exclusivity. Of course, selling plots to private owners will not avoid this issue, but if we can achieve affordable housing and a permeable public realm, the social payoff will also be profitable in the long run.

With a sensible and sensitive approach to realistically implement new structures into the RWN Areal, a large variety of users is allowed to pursue an exchange of thoughts and knowledge. The synergy effects of businesses, living, and recreation will increase the quality of life, having an impact on the entire city, and maybe even being an exemplary model for other economically struggling cities in similar situations.

There is no guarantee that this particular proposal will be working in the future if implemented, but it also has to just start with a vision.



**BEFORE: VIEW NONNENHOFER STRASSE**



**NEW: VIEW NONNENHOFER STRASSE**



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# PLANS AND PHOTOS

DWG Base File

was given to me by the city planning office of Neubrandenburg through Janine Kriegler

Orthophotos

were given to me by the city planning office of Neubrandenburg through Janine Kriegler

p. 24-29

Historical plans and picture were given to me by Thorsten Viebke (architektur:fabrik:nb)

p. 39-40, 43, 79, 83

pictures taken by me

p. 81 Bird's Eye View

Base areal picture from Google Maps







SKATE  
←  
CAFÉ

403  
40-407