

# G2060

A MASTER THESIS IN ARCHITECTURE BY FREDRIK METSO



# G2060

FREDRIK METSO

MASTER THESIS AT CHALMERS ARCHITECTURE  
DESIGN FOR SUSTAINABLE DEVELOPMENT

EXAMINER  
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**CHALMERS**

# ABSTRACT

The ultimate aim of this thesis is to make an interjection to the discussion about the future of humanity. To widen the perspective on our common future and to remind us that its development depends on the choices we make different thought-provoking visions of how life could be in the year of 2060 are made.

This work is also a test to see if, and then how, the architectural tools and thinking gained during the architecture education can be used to visualize and communicate ideas rather than building designs. Except from common architectural tools narrative tools, such as fictional text, are also used to communicate the visions.

The thesis is structured as a “zoom in” from a broad starting-point down to a detailed example. Two scenarios that describe the development of the world in the next fifty years as well as the state of Gothenburg in the year 2060 are created. The scenarios are fictional but nevertheless made with an aim to be perceived as plausible as possible. Then, to concretize the scenarios, they are applied to an existing site and building. The building chosen for the purpose is Gårdaskolan, a former school built around one hundred years ago, located in the district Gårda in Gothenburg. According to the prerequisites given by the different scenarios the building and its immediate surroundings are redesigned in two different ways to show how they could have looked and been used if the scenarios came true.



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# INTRODUCTION

## BACKGROUND

As the last work of my architectural education I wanted to use my master thesis to show what I have learnt as an architect student as well as a way to position myself in the world of architecture. Therefore I chose to define and perform this project all by myself, according to my own interests.

I have a notion that the environmental and social threats that humanity are facing today mostly are countered by proposals of minor changes to the way we are living and that there is a lack of visions of how we could live our lives in the future. I wanted to address this lack by using the architectural tools that I have gained during my studies to create my own visions of the future.

Except from being an interesting study for me I also hoped that the work could be of interest to others and contribute to the discussion about our common future.

## METHOD

I have created two different scenarios of how Gothenburg could be like in the year 2060 and then concretized them by showing how an existing building and its immediate surroundings could have changed depending on the different scenarios.

The scenarios start with two versions of the history of the world from 2010 to 2060 and then describes how the development of the world have changed Gothenburg. This has been done by studying different trends and research about the future and merging it with fiction and my own imagination to get two radically different, but hopefully yet plausible, scenarios. The scenarios are presented with text, a time axis and a table, in the same section.

The scenarios have then given the prerequisites for the two different designs of the building and its surroundings. When redesigning the building I have not tried to do the most delicate pieces of architecture but rather possible solutions according to the prerequisites as it is the commonplace, not the extraordinary, building of the future I want to show. To further detail the building one room and its resident(s) have also been described for each scenario. The concretizations of the scenarios are presented with narrative text, explaining text, drawings and perspective pictures.

## REGARDING THE SUBJECT

The building I have chosen to work with is a former school called Gårdaskolan located in the district Gårda, in the eastern part of central Gothenburg. There are several reasons for choosing a building in this district as well as for choosing this particular building. Gårda has an interesting history that have resulted in a great mix of different buildings, an interesting location between a river and a freeway and is currently under investigation for redevelopment. Gårdaskolan has a basic structure that easily can be adapted to many different uses, is of adequate size for this work and is currently threatened by the plans of redevelopment.

## REGARDING THE SCENARIOS

Scenarios are not predictions but visions of how things could turn out given certain assumption. They should therefore not be seen as predictions of the future but as answers to the question “what if?”. Still, to make them useful as tools for discussion, planning and similar, it’s important that they are plausible – that people believe that they could come true. Even if the scenarios ultimately are products of my imagination I have studied research and trends as well as fiction about the future and I hope that they will appear plausible for as many as possible.

To stress that the future depends on the choices we make I have chosen to create two different scenarios that could be compared with each other. This also works as a reminder of the difference between a scenario and a prediction. To make the comparison between the two scenarios more interesting I made them radically different but at the same time tried to make both of them as plausible. A catch when doing two scenarios is that one easily could become much more desired than the other, that one of the scenarios becomes utopian and one becomes dystopian. A possible solution to this could be to create more than two scenarios but instead I tried to balance the scenarios so that both of them have both good and bad points.

I have chosen to focus on the ecological, economical, material and social aspects of the scenarios. Technological aspects has not been considered in this work. One reason for this is that it is very hard to imagine the technological development that will happen in the next fifty years.

## REGARDING SOURCES

For the creation of the scenarios I have gotten inspiration from many different sources. It may be films watched years ago, different newspaper articles, stories told by someone or an image seen somewhere. Because of this it is impossible to write a complete list of sources with references in a standard academic way. However there are some books that I have studied especially for this work and found useful. They are listed below. The sources of information for describing the current state of Gårda and Gårdaskolan will be presented in their respective sections.

Brown, Lester Russell, *Plan B 3.0 : uppdrag: rädda jorden!*, 2008

Gullberg, Anders, Höjer, Mattias & Pettersson, Ronny, *Bilder av framtidsstaden : tid och rum för hållbar utveckling*, 2007

Jernelöv, Arne & Palme, Joakim, *Oväntade framtider – om att förutse framtiden*, 2007

Lynas, Mark, *Sex grader : vår framtid på en varmare jord*, 2008

Sanne, Christer, *Keynes barnbarn – en bättre framtid med arbete och välfärd*. Andra reviderade upplagan, 2010

## REGARDS

Even if this master thesis is a product of my own the quality of it has doubtlessly increased thorough the helpful support of certain people. First of all I like to thank my examiner Björn Malbert for support and good advices throughout the whole process. I also would like to thank the jury members of the final seminar, namely Krister Wiberg and Lisa Åhlström, as well as the other two thesis writers attending the seminar – Maryam Sepehr and Yuna Tifani.

For great company, discussions and daily advices I would like to thank my studio partners Anna-Maria Blixt, Katarina Bäcklund, Pernilla Hagbert and Karl-Johan Sellberg and for useful comments on my work I would like to thank Maria Nykvist. Finally I would like to thank all of my friends and family that have put up with me, setting most of my social life on pause, while writing this thesis. Thank you!

# SCENARIOS

## WORLD HISTORY 2010–2060

The two different scenarios begins with a world history from the year 2010 until 2060, focusing on ecological and societal changes. From a common starting-point in 2010 the scenarios develops in two different directions.

One of the main differences between the scenarios is that in Scenario A the countries of the world doesn't manage to cooperate to solve global problems but instead isolates and try to manage as good as possible themselves, while in Scenario B most of the countries manage to cooperate and the countries that opposes are forced to cooperate. In both scenarios humanity's strain on the ecosystem is heavily diminished but at an expense – in Scenario A a strongly decreased world population and in Scenario B a decreased standard of living and freedom of choice, not least in the rich parts of the world.

The world history is presented with a time axis that shows different important changes through the five decades for both scenarios and one explaining text for each scenario.



SOCIETAL CHANGES  
ECOLOGICAL CHANGES

## WORLD HISTORY – SCENARIO A

Enormous efforts were spent to produce a deal to stop climate change that most countries of the world could agree on but not much progress was made. Even when the weather got more extreme and the effects of climate change turned more and more evident the leaders of the world couldn't agree and after some years all attempts to reach an international agreement were abandoned. After the defeat some countries continued with own programs to mitigate climate change while other countries continued to extract fossil fuels and exploit the ecosystems like nothing had happened. Because of this, international relations grew full of frustration and suspiciousness. World water shortage became more and more severe in large parts of the world and together with moving climate zones it made larger and larger areas inhabitable, forcing huge amounts of people to move. In particularly exposed countries where the government failed to provide the population basic needs as water, food and safety, conflicts, revolutions and civil wars broke out. This unstable state of the world made many countries prioritize their own citizens needs and security and closed their borders for food and fuel export, as well as for climate refugees. The insecurity also made most countries choose to heavily upgrade their defense.

As the deposits of fossil fuels decreased but the need for it didn't some countries tried to secure their supplies by taking control over resources in other, more or less functioning, countries. This gradually evolved to a worldwide war on scarce resources where most of the resources conquered were kept by the military forces to fulfill their own needs. The war strongly increased the amount of collapsed countries and took all focus from saving resources and ecosystems at a time when the need for it never had been bigger. Instead the, already seriously raised, global average temperature continued to rise and the effects of it became stronger. Large amounts of people trapped between moving climate zones, making areas inhabitable, and strongly guarded borders of inhospitable neighbor countries died. Animals and plants that were unable to adapt to the rapid change were extinct. Together the climate change, the war and their effects decreased the world population and biodiversity to a small share of what it used to be.

When societal systems broke down one after another the military was often the last one functioning, and depending on the situation some chose to loyally guard their country's borders while others tried to establish regimes of their own. When the different military powers of the world discovered that the war was pointless

or ran out of resources the war eventually died out and left behind a largely inhabitable world in a state of chaos, except from some isolated islands of more or less working societies. In this new reality people adopted different ways of living, from self sufficient solitary farm families and larger communities trying to create functioning societies, to people living of the rest products of the old world and armed gangs living of pillaging others. Even though life was hard and unpredictable in many places, in parts of the world life quality was decent and in some places it was even better than it used to be half a century ago.

## WORLD HISTORY – SCENARIO B

After many years of hard negotiations a majority of the countries of the world, including the top polluting countries, could settle for a deal to battle climate change. The increasingly apparent effects of climate change and strong citizen opinions had made it obvious that something serious had to be done, and feasible to propose extensive changes. The most important agreement was to charge the extraction of fossil fuels. The money from this new fee were put into a fund run by a new international organization with the mission to reduce the causes and effects of climate change. To protect threatened ecosystems and reduce the loss of biodiversity, the deal also included demands on the participating countries to protect large forest and sea areas.

As fossil fuels were made more expensive energy saving and the change to alternative fuels increased all over the world. Large investments were made in developing countries by the new fund, decreasing poverty at the same time as tackling climate change. This success encouraged the participating countries to raise the fee and expand the deal to include the extraction of other natural resources as well as the depositing of garbage, to promote closed cycles of material. Many people that had to lower their energy consumption and material standard of living protested and many wanted their country to leave the international agreement, which some countries even did. This worried the international organization that saw it as crucial that every country of the world should be part of the deal. Promises of big investments from the fund as well as threats of trade barriers were used to persuade countries outside the deal to join.

Even though a lot of resources were spent by the fund to mitigate the effects of climate change, moving climate zones, changed weather patterns and sea level rising made large areas inhabitable and forced many people to move. People in countries less affected by climate change, that already had lowered their standard of living, now had to share space and resources with big amounts of climate refugees. This caused conflicts and in many places the military had to be used to keep protests under control. The international organization, that heavily had increased its power and influence, became harsher. Protesters were imprisoned and countries refusing to join the deal were branded enemies and isolated. At the same time enormous improvements for the environment were made and the international organization was strongly supported by most countries in the world. Extraction of virgin material almost

stopped completely, as material cycles were closed, and the control over ecosystems increased, making it possible to reduce the amount of greenhouse gases in the atmosphere and recover ecosystems by manipulating biological processes.

The human race had both became in control of and in balance with the planet. Both the global average temperature and population stopped to increase, energy was taken from renewable sources and material was recycled in closed cycles. The changes had forced many people to strongly reduce their standard of living and limited their freedom of choice, but because of decreased cultural and economical inequalities between different parts of the world, maybe for the first time in the history, most people had a decent quality of life.

# GOTHENBURG 2060

This part describes the state of Gothenburg in the year 2060. The different world histories have resulted in two very different versions of Gothenburg – one almost abandoned city in ruins and one densely populated metropolis.

The scenarios are detailed and compared by different aspects in a table and then further explained in text.



	SCENARIO A	SCENARIO B
<b>CLIMATE / WEATHER</b>	<ul style="list-style-type: none"> <li>• hot climate</li> <li>• extreme weather</li> <li>• floods common</li> </ul>	<ul style="list-style-type: none"> <li>• warm climate</li> <li>• occasional extreme weather</li> </ul>
<b>CITYSCAPE</b>	<ul style="list-style-type: none"> <li>• water, wind and vegetation disintegrating buildings and streets</li> <li>• mostly abandoned buildings</li> </ul>	<ul style="list-style-type: none"> <li>• economical use of land</li> <li>• mix of buildings of different age and type</li> </ul>
<b>INHABITANTS</b>	<ul style="list-style-type: none"> <li>• few people</li> <li>• small groups living separately</li> </ul>	<ul style="list-style-type: none"> <li>• much people</li> <li>• densely populated</li> </ul>
<b>FOOD &amp; WATER</b>	<ul style="list-style-type: none"> <li>• own production</li> <li>• hunting and gathering</li> </ul>	<ul style="list-style-type: none"> <li>• mainly produced in the city or in its surroundings</li> <li>• professional as well as household production</li> </ul>
<b>MATERIAL RESOURCES</b>	<ul style="list-style-type: none"> <li>• reused, repaired, redesigned or discarded</li> <li>• some scarce and some rich</li> </ul>	<ul style="list-style-type: none"> <li>• reused, repaired or recycled</li> <li>• many things shared or rented – few personal possessions</li> </ul>
<b>ENERGY</b>	<ul style="list-style-type: none"> <li>• wind, sun and biofuel</li> <li>• own production according to needs</li> </ul>	<ul style="list-style-type: none"> <li>• from renewable sources</li> <li>• professional and household producers, connected to the same network</li> <li>• high energy efficiency</li> </ul>
<b>TRANSPORTATION</b>	<ul style="list-style-type: none"> <li>• mostly by foot, bike, boat</li> <li>• some motor-driven vehicles</li> <li>• some animal riding</li> </ul>	<ul style="list-style-type: none"> <li>• persons by foot, bike or public transportation</li> <li>• goods by ship, train, trucks and smaller motor-driven vehicles</li> </ul>
<b>HOUSING</b>	<ul style="list-style-type: none"> <li>• maintained and transformed existing buildings</li> </ul>	<ul style="list-style-type: none"> <li>• very diverse – from shacks in shantytowns to new-built apartments at central locations</li> <li>• low average space per person</li> </ul>
<b>OCCUPATION</b>	<ul style="list-style-type: none"> <li>• mostly what is needed to provide food, shelter and protection</li> <li>• some craft and trade</li> </ul>	<ul style="list-style-type: none"> <li>• wide range of jobs from unskilled to highly qualified</li> <li>• many small enterprises</li> </ul>
<b>HEALTH</b>	<ul style="list-style-type: none"> <li>• lack of medical knowledge and products</li> <li>• low longevity</li> </ul>	<ul style="list-style-type: none"> <li>• professional public health care</li> <li>• high longevity</li> </ul>
<b>EDUCATION</b>	<ul style="list-style-type: none"> <li>• people teach each other voluntarily</li> <li>• self-studies from books and other media</li> </ul>	<ul style="list-style-type: none"> <li>• public education for all</li> <li>• higher education for some</li> </ul>
<b>CULTURE</b>	<ul style="list-style-type: none"> <li>• mostly culturally homogenous groups that have little exchange with each other</li> </ul>	<ul style="list-style-type: none"> <li>• influential common global culture</li> <li>• diverse background of inhabitants have resulted in a multi-cultural city</li> </ul>
<b>SECURITY</b>	<ul style="list-style-type: none"> <li>• each group and individual have to protect themselves</li> </ul>	<ul style="list-style-type: none"> <li>• police and juridical system to protect the inhabitants</li> </ul>
<b>POWER</b>	<ul style="list-style-type: none"> <li>• hierarchies between different individuals and different groups</li> </ul>	<ul style="list-style-type: none"> <li>• many decisions made on global level</li> <li>• quite independent local democracy</li> </ul>
<b>RELATION TO OUTSIDE WORLD</b>	<ul style="list-style-type: none"> <li>• little</li> <li>• through vagabonds</li> </ul>	<ul style="list-style-type: none"> <li>• integrated part of a global society</li> <li>• rich electronic communication but moderate physical transportation</li> </ul>

## GOTHENBURG – SCENARIO A

The forces of nature haven't been kind to Gothenburg lately. Buildings that no one has taken care of have been turned into ruins by strong storms and some of them are now permanently flooded by the risen river and sea levels. Paved surfaces have been broken up by flowers and immigrated plants have replaced indigenous as the climate has got warmer. Most of the people that used to live here are gone, to the countryside where it's easier to be self-sufficient or further into the country to places that are less exposed to the weather and many have died, but there are still people living here.

As the society started to collapse some years ago infrastructure such as electricity, water and district heating became less reliable and eventually stopped working. The police, health care system, and other organizations followed the same destiny. This threw the inhabitants into chaos and forced them to almost totally change the way they were living to survive. Some years since the collapse the immediate chaos have settled to a new everyday reality where people eat, work, love, fight and die like people always have done in the city, even if the prerequisites are different now.

Even though it's safer in the countryside and easier to be self-sufficient there, the abandoned buildings and objects of the city attracts people. Some just come here occasionally in search for something desired while others live here permanently. The inhabitants mostly live together in groups in suitable buildings located in some part of the city which they often have claimed as their own territory and guards from intruders. The different groups tend to respect each other's territories and when a conflict occurs it often involves people that aren't part of any of the groups, like visiting outsiders.

Since all communication networks have been gone for years and fuel for vehicles is rare there is almost no exchange with the rest of the world. The only contact is through the treasure hunters, traders and vagabonds that visit the city. Because of this the inhabitants have to produce most of their food themselves. Grain and vegetables are grown where there used to be parks or parking places and animals are kept in the courtyards. In addition to this the inhabitants live off what they can find in the ruins. Salvaged items are reused, repaired and sometimes turned into something else there is a use for. Some items are also traded with other inhabitants or traveling traders. Medicine, ammunition and fuel for vehicles, all scarce but desired commodities that can't be produced by the inhabitants themselves, are traded to a high price. Other

things, such as clothes, furniture and vehicles are abundant in the city but is sometimes possible to trade with visitors.

Generally life in the city is unpredictable, sometimes hard and for some pretty short. At the same time the personal freedom is big and the workload is often low, which gives much time to spend on relations, interests and own projects.

## GOTHENBURG – SCENARIO B

The Gothenburg of 2060 is truly a world city with an international atmosphere. Not only has the population more than tripled the last fifty years but almost all new inhabitants have immigrated from other countries. The city has been spared the worst effects of climate change and has therefore attracted people from all over the world, especially climate refugees. This rapid growth and big mix of cultures has however not been painless. Violent conflicts, strong ethnical segregation and natives leaving the city for the countryside are some of the results. Other results are the large shantytowns that have grown up everywhere where there has been space in and around the city. Many of the immigrants have ended up in these areas while others that are better off have been able to buy or rent a dwelling. Even though many new houses have been built the increased population has also strongly increased the population density. Most of the existing apartments and houses now house more persons than they used to.

As energy and material products have become more expensive it's not only the average dwelling space per person that has decreased but also the amount of private possessions. Services have replaced many of the objects that people used to own before – personal transportation is mainly made by collective means, eating out has become more common than cooking own food, public baths have replaced many private showers and almost no one has an own washing machine any more. This service focused economy has resulted in a public space dominated by, mainly small, enterprises that serves most of the inhabitants needs. Material products are bought, exchanged, rented, reused and repaired until they are beyond repair and then recycled. Almost no material leaves this cycle and not much is put into it. The same applies to food, as all garbage and human refuse are collected and turned into energy and nutrition that are returned to the production in a closed cycle. This production is mainly local and consists of large facilities outside the city as well as various small facilities in the city. The warmer climate has made the agriculture more productive and even a small patch in a backyard or on a rooftop can yield quite much. As the case with food production, energy is also produced both by large and small producers, which all are connected to the same network. The energy comes solely from renewable sources but is expensive and is therefore used as efficiently as possible.

Even if transportation and traveling is limited and generally short to save energy, the electronic communication is vast. Ideas,

culture and personal messages traveling unobstructed across the globe have resulted in a strong global culture. The inhabitants of the city, all with their own cultural background, are both part of the local and the global culture. This division resembles the organization of power, where superior decisions are made on the global level but the local communities can act quite independently within the frames set by the superior global power. Both the global and the local powers are strong and protests against them are not likely to gain influence, on the contrary they are often obstructed or silenced.

The life in the city is intense and the material standard of living is generally low as well as the freedom of choice, but there is free basic education and health care for everyone, no one has to starve and the streets are pretty safe.

# BUILDING AND CONTEXT

## GÅRDA

The district of Gårda is located in the eastern part of the center of Gothenburg. It's delimited by the river Mölndalsån in the west, the freeway E6/Kungsbackaleden in the east, the road Redbersvägen in the north and the road Örgrytevägen in south. Gårda used to belong to Örgryte municipality until that municipality was incorporated into Gothenburg in 1922.

The location by Mölndalsån, that had access to Götaälv, and the Väst kust- and Boråsbanan railroad, that past the area where the freeway is today, made Gårda attractive for industries. In the 1880s Gårda was one of the most densely populated areas of Gothenburg, full of industries and worker's dwellings.

In the late 1960s and 1970s a railroad tunnel replaced the old railroad and parts of Gårda were demolished to make way for the freeway. The next big transformation of Gårda was in the 1980s and 1990s when large parts were demolished and replaced mainly by office buildings. Since that mainly residential buildings have been built in some locations in Gårda, most of them in the north part. The industrial buildings that have been kept have got new usages and today Gårda has a great mix of buildings of different age and function.

As this work is done there is new plans for Gårda in progress, to allow for an extension of The Swedish Exhibition and Congress Centre and a new carpark. To make way for the carpark some of the buildings along the freeway are proposed to be demolished.

### Sources:




Information about Gårda from <http://sv.wikipedia.org/wiki/Gårda> , 5<sup>th</sup> Dec. 2010

Satellite image of Gothenburg from <http://www.hitta.se/> , 6<sup>th</sup> Dec. 2010

Ongoing plans for Gårda and Geographical data from Stadsbyggnadskontoret Göteborg (Gothenburgs city planning office), 8<sup>th</sup> Sep. 2010



LOCATION OF THE SITE

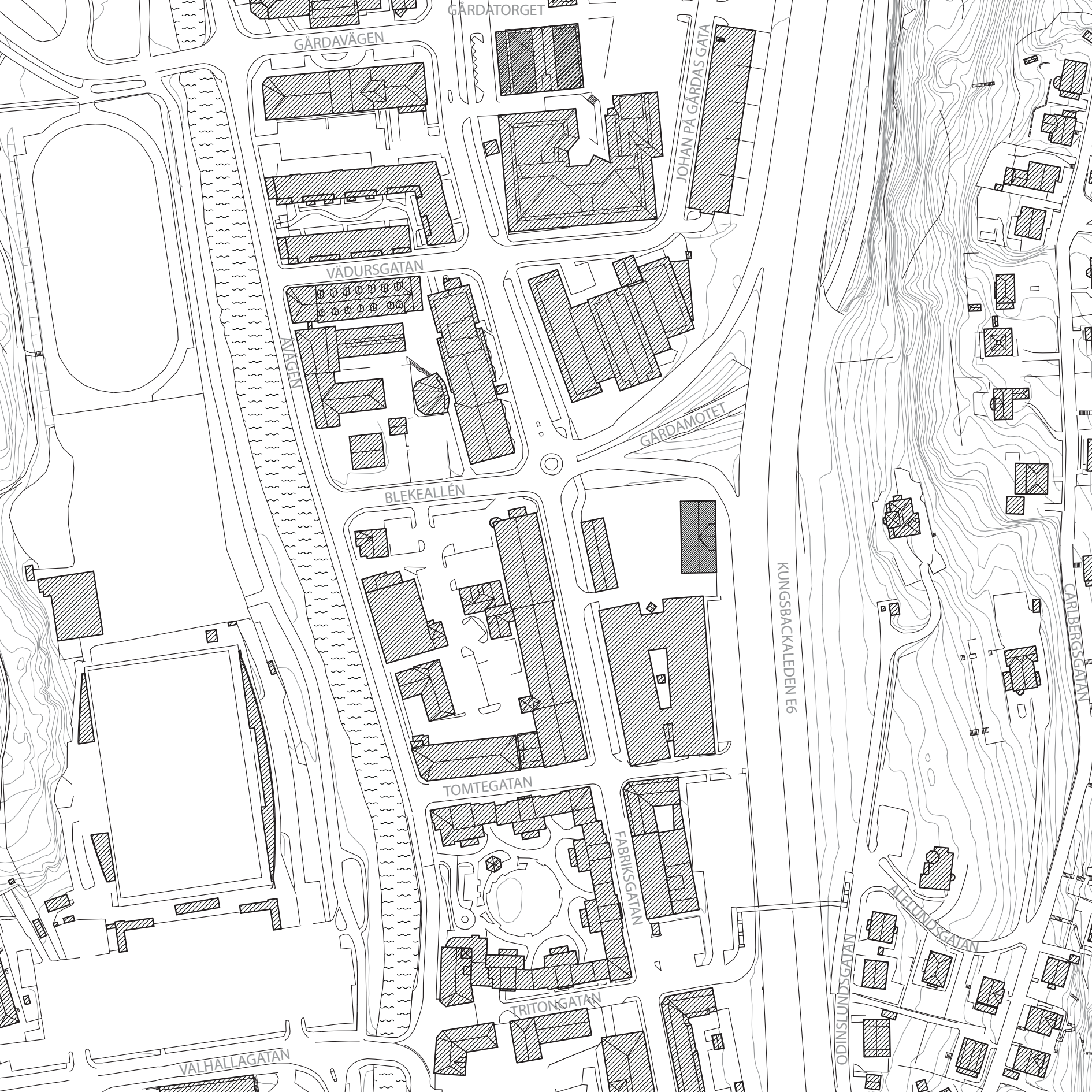
WATER   
GÅRDASKOLAN   
OTHER BUILDING 

SCALE 1:2000

0 20 40 60 80 100 m







GÄRDATORGET

GÄRDVÄGEN

JOHAN PÅ GÄRDAS GATA

VÄDURSGATAN

ÄLVEN

GÄRDAMOTET

BLEKEALLÉN

TOMTEGATAN

FABRIKSGATAN

TRITONGATAN

VALHALLAGATAN

KUNGSBACKALEDEN E6

ODINSLUNDGATAN

JÖLLINGEGATAN

CARLBERGSGATAN

## GÅRDASKOLAN

The former school now called Gårdaskolan was named Nya Gårdaskolan and later Underåsskolan when it functioned as a school. I have studied the history of the building through building permit drawings from the municipal building archive. Since the school was built sometime before Gårda was incorporated with Gothenburg there were no original drawings to be found at the archive and it's not even sure that there are any drawings archived since Örgryte municipality probably didn't have a building committee but from the style of the building I estimate that it was built sometime around the turn of the century 1800/1900. The fact that Gårda was strongly growing at this time supports my estimation.

The oldest drawings found are from 1934 and concern a boiler room. The boiler might have replaced older tile stoves. After that there are building permits from 1938 (plumbing), 1948 (medical clinic in the basement), 1954 (janitor dwelling), 1955 (storage for material) and 1967 (toilets).

In 1967 the plan for the freeway passed. According to that plan the building were to be demolished and replaced by a large freeway exit. The exit that eventually was built became much smaller than proposed and Gårdaskolan was not demolished, but it was probably now the building stopped functioning as a school. A building permit from 1975 makes it possible to use the building for offices and permits from 1978, 1980 and 1981 regards premises for different associations as well as fire escapes at the gables.

The plan for Gårda from 1987, that paved the way for the many office buildings that were built in the 1980s and 1990s, didn't include the property of Gårdaskolan but anyway illustrates the building as demolished. Although the building is still standing and the last building permit is from 2002 and regards a music studio and rehearsal rooms for bands in the south half of the building.

The more than one hundred years old building Gårdaskolan has been threatened by demolition since the 1960s and the threat is once again present by the new plans for Gårda that are in progress. However, if the building hadn't been in this limbo for such a long time the current use of it would probably not have been possible for economical reasons. The incoherence between plans and reality have kept the building in a sustained temporality that have discouraged investments and made it uninteresting for profit-driven enterprises.

Today Gårdaskolan is owned by the municipality and rented out to different cultural associations. The south half of the building

is rented out to the adult educational association Sensus that have built a studio and several rehearsal rooms used by 150-200 musicians. The other half of the building houses a concert venue, a polish cultural association and several different artists.

### Sources:

The building archive of Stadsbyggnadskontoret Göteborg (Gothenburgs city planning office), 28<sup>th</sup> Oct. 2010

Interview with tenant, 6<sup>th</sup> Nov. 2010





INTERIOR OF GÄRDASKOLAN





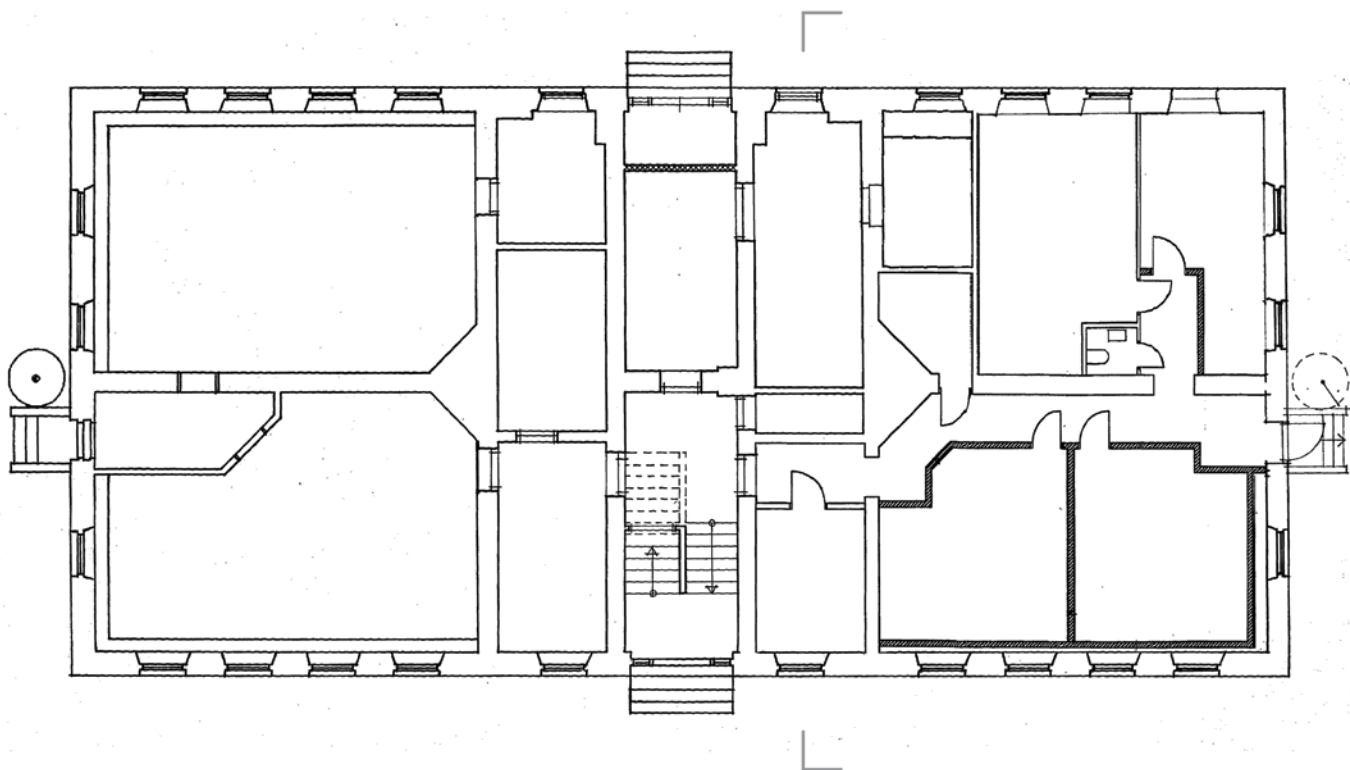


EXTERIOR OF GÅRDASKOLAN

## DRAWINGS

The drawings of the building are cut together from the different building permit drawings found, where only the part that have changed in every permit have been replaced on the older version. As buildings not always are built exactly by the drawings and some changes are made without a building permit the drawings that I have cut together are not in total accordance with the reality. If this work would have had the aim to propose a redesign of the building a survey of it would probably be necessary but as this work is fictional I found it unnecessary.

The original building had a quite simple and symmetrical plan, mirrored both along the long and short axis of the building. The biggest change to the structure of the building is that the eastern staircase has been removed and replaced by rooms. Toilets and fire escapes have been added at different times and many of the large classrooms have been divided into several smaller rooms. Some walls have also got new openings and some old openings have been closed.

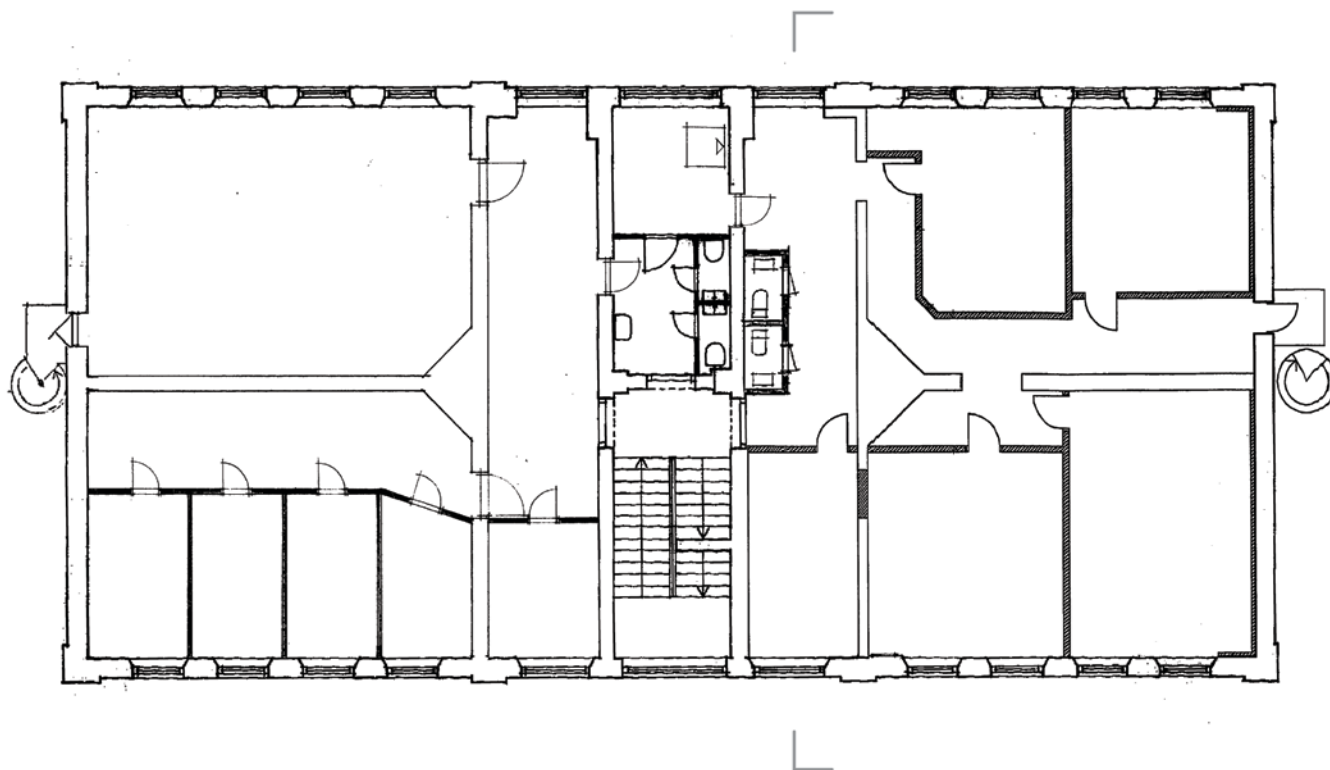


BASEMENT

SCALE 1:200

0 2 4 6 8 10 m

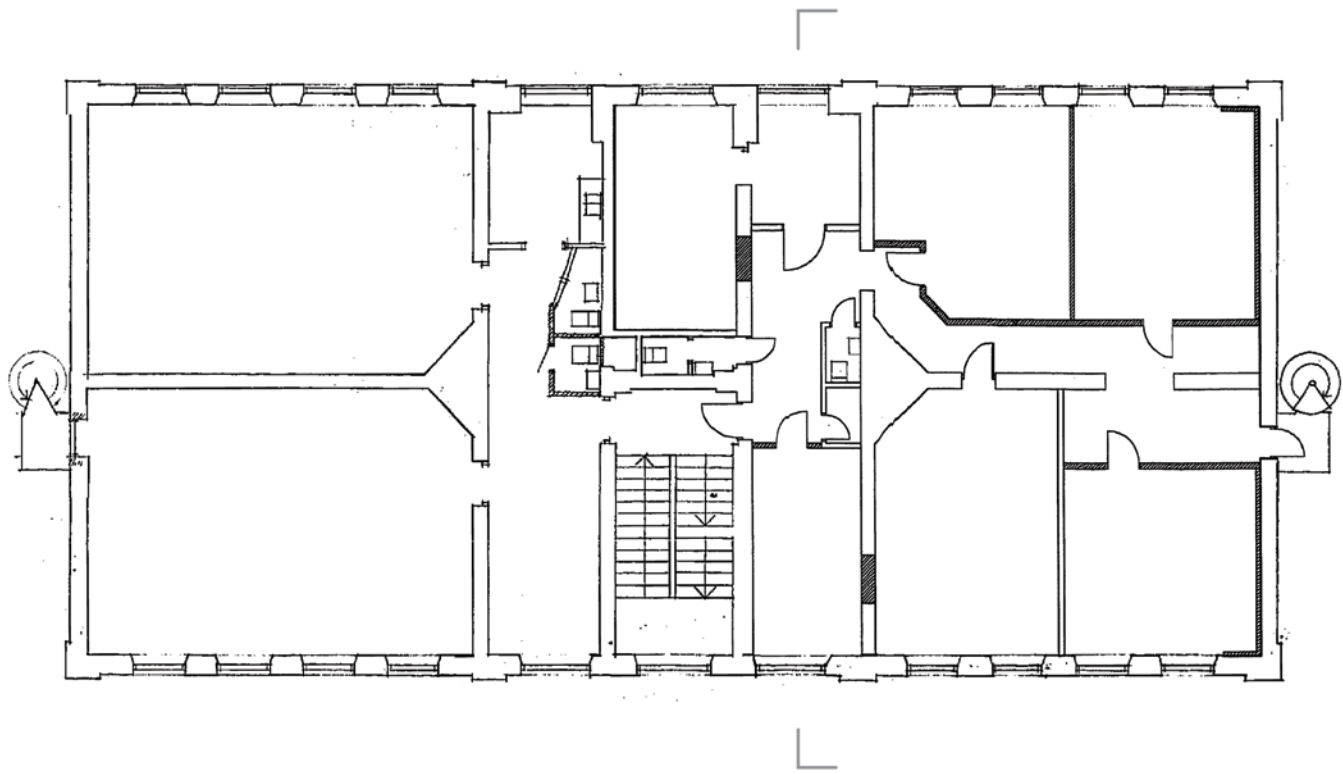




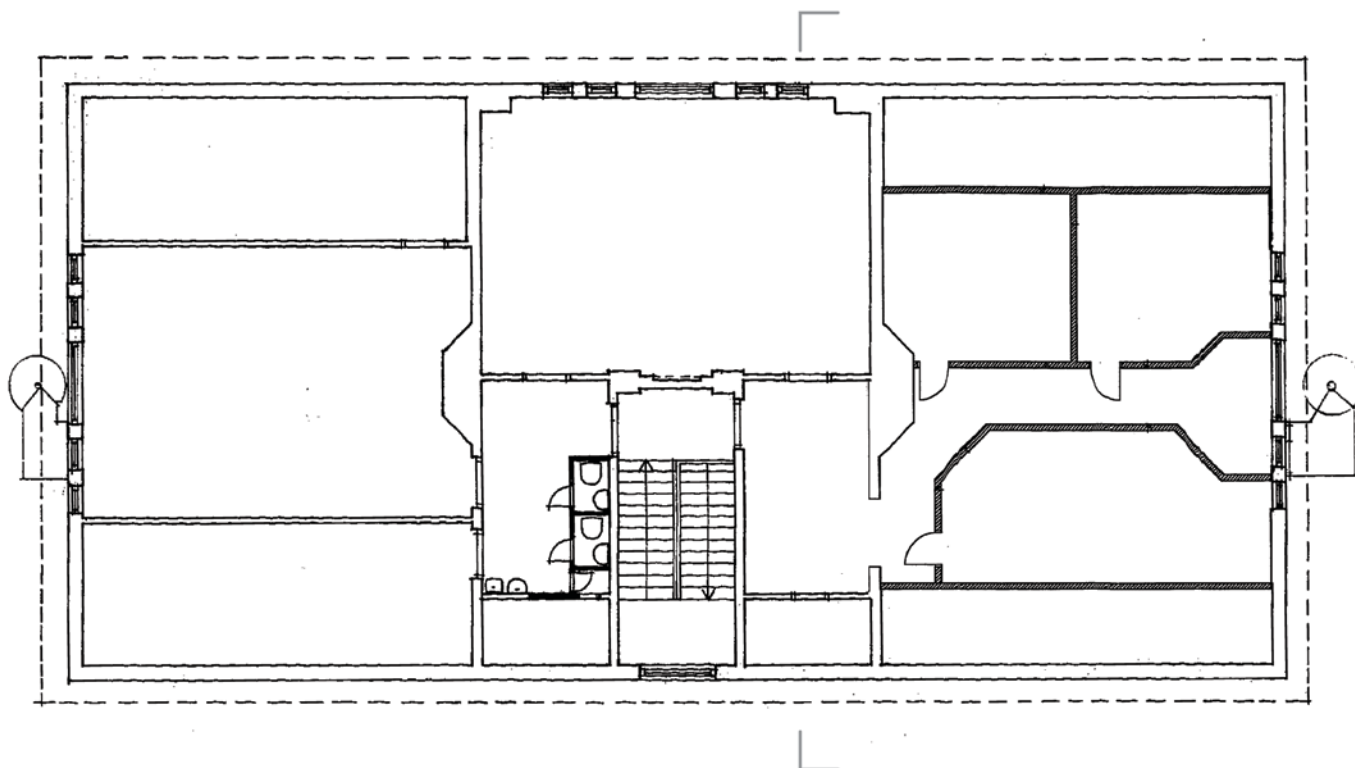
1<sup>ST</sup> FLOOR

SCALE 1:200





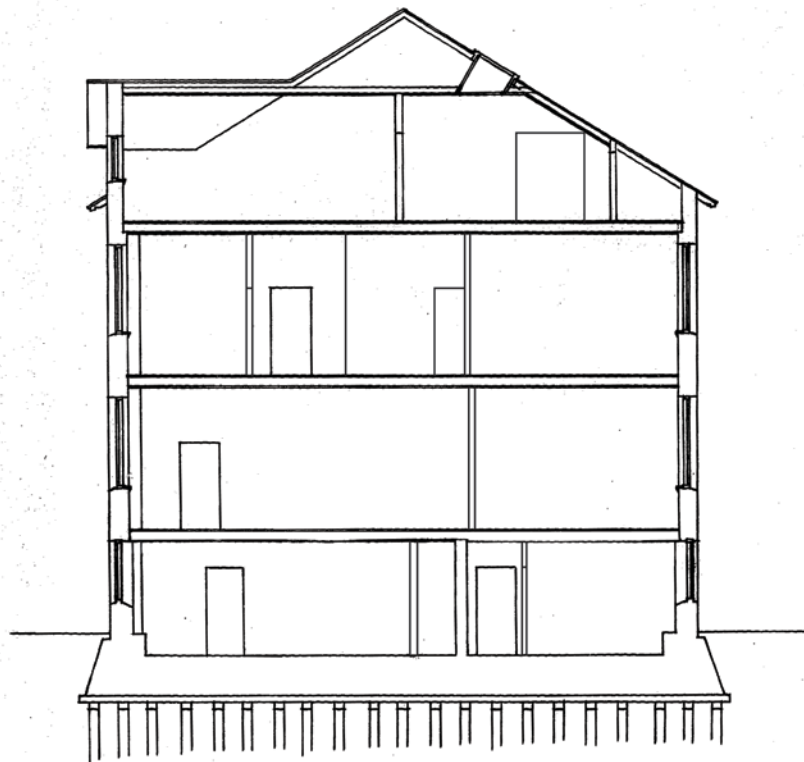
2<sup>ND</sup> FLOOR



ATTIC

SCALE 1:200





SECTION

# SCENARIO A







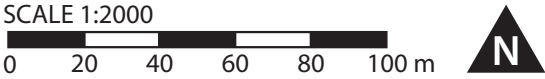


# GÅRDA

As for the rest of Gothenburg most of the buildings in Gårda are abandoned. Except from Gårdaskolan there are only a few buildings in the area that are inhabited. The level of Mölndalsån has risen and put lower laying areas under water, which has undermined one of the bridges and caused its collapse. As the sewage has stopped working the tunnel under the freeway has also been filled with water.

In the 2010s and 2020s some office buildings, a large sport arena and carpark along the freeway were built in the area. As the relations to the rest of the world became harsher and transportations got more and more expensive local food production became necessary and in the 2030s all available areas in the city were used to produce food. At this time the land west of Mölndalsån was turned into allotments. In the 2040s the most of the building activity was defence related and bomb shelters were blasted into the ridge east of the freeway. Since then nothing new has been built in the area.

- WATER 
- GÅRDASKOLAN 
- MIXED USE 
- ABANDONED BUILDING 





## GÅRDASKOLAN

In contrast to the decaying surroundings Gårdaskolan is in rather good condition. Its residents are taking good care of the building and repair the damage caused by the persistent storms. The courtyard is surrounded by a tall barb wired fence for protection against hostile strangers. A lookout tower built on top of the carpark also serve this function. Next to the lookout tower there are some wind turbines that provide electricity to the inhabitants.

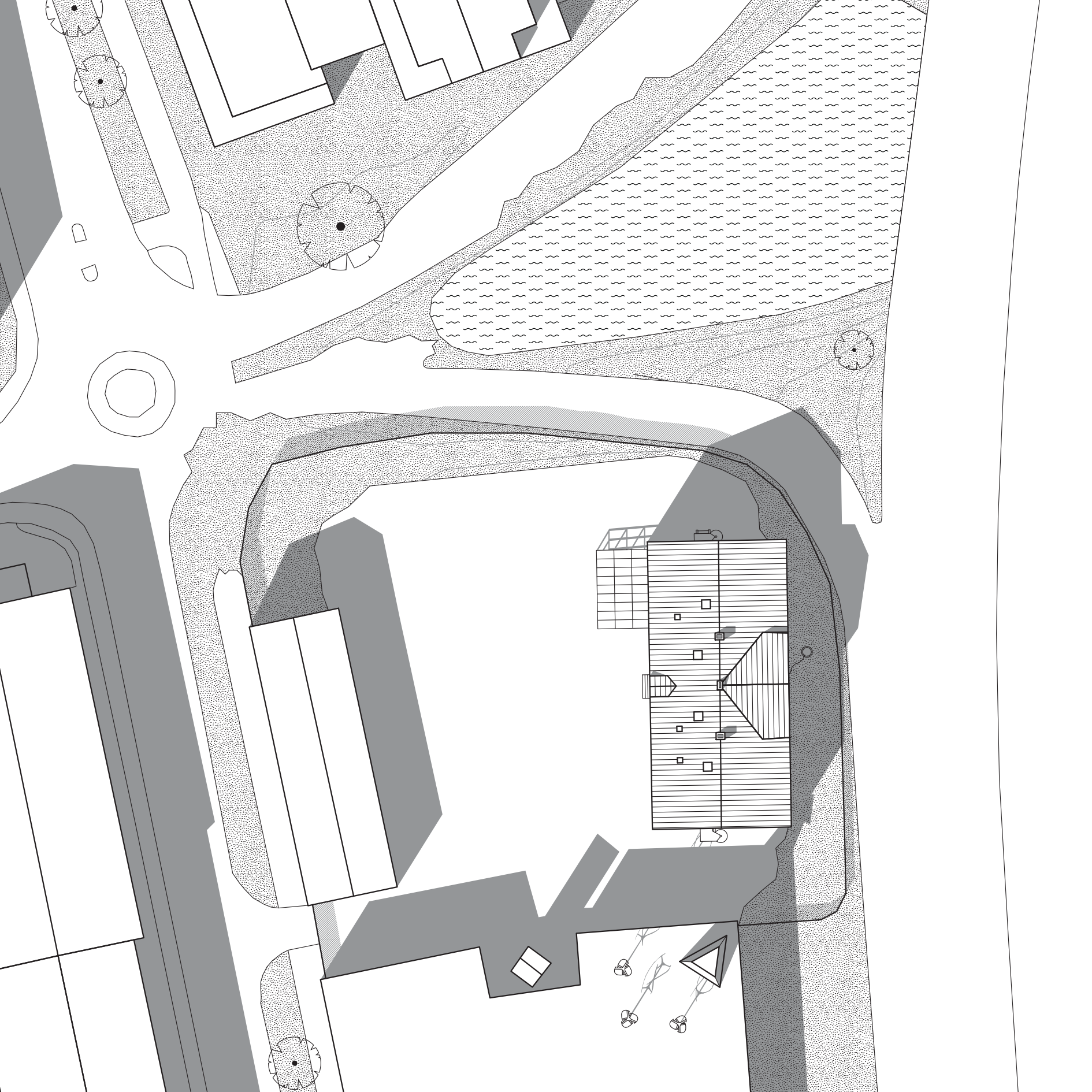
A greenhouse, poultry kept at the courtyard and fish grown in the water filled tunnel under the freeway provide some food but most of it is grown a short distance away where the soil is suitable. Water is collected from a well close to the building and the wastewater is disposed into the fish pond.

A group of 28 persons shares the building. Except for the residents private rooms all the areas of the building are common.

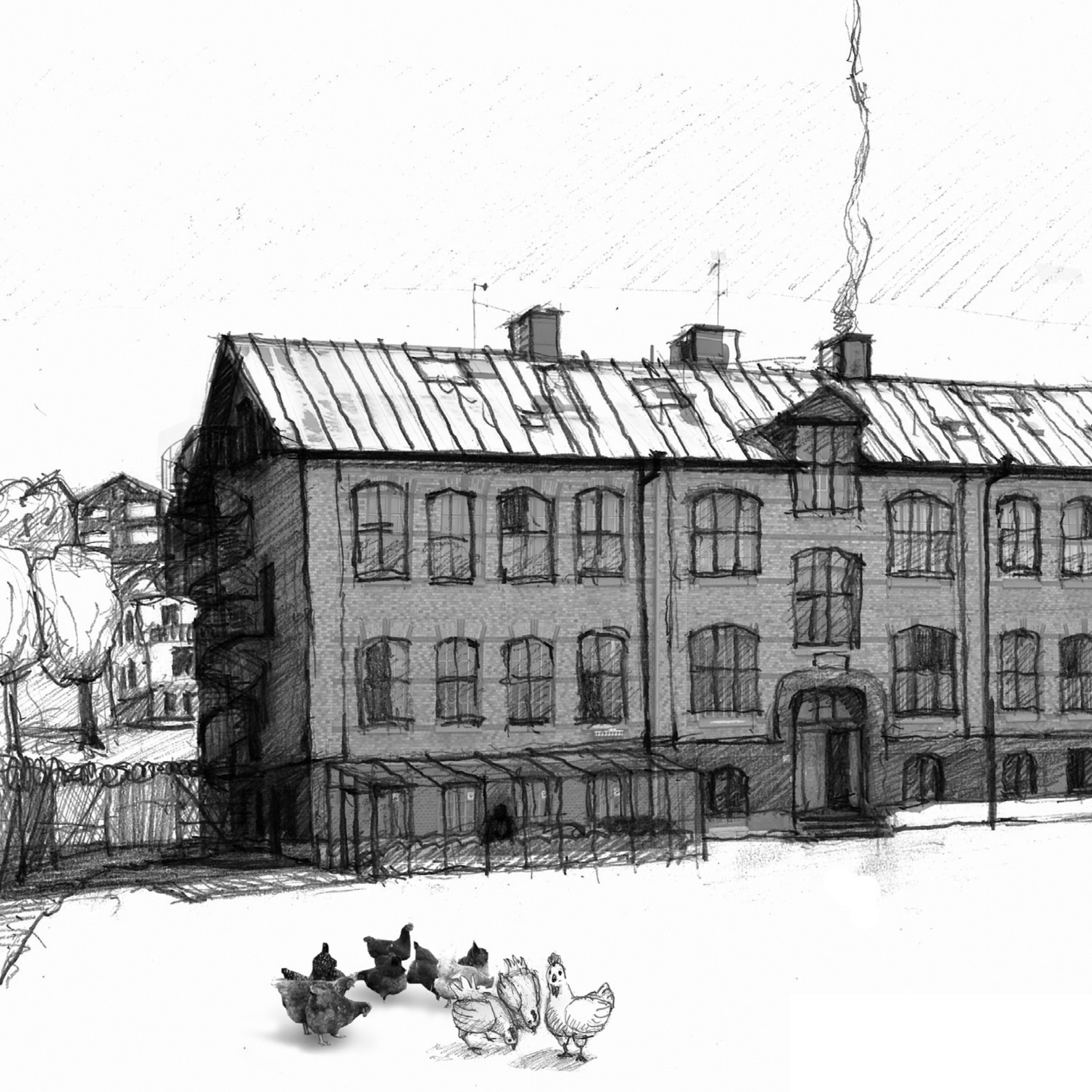
SCALE 1:500

0 10 20 30 m







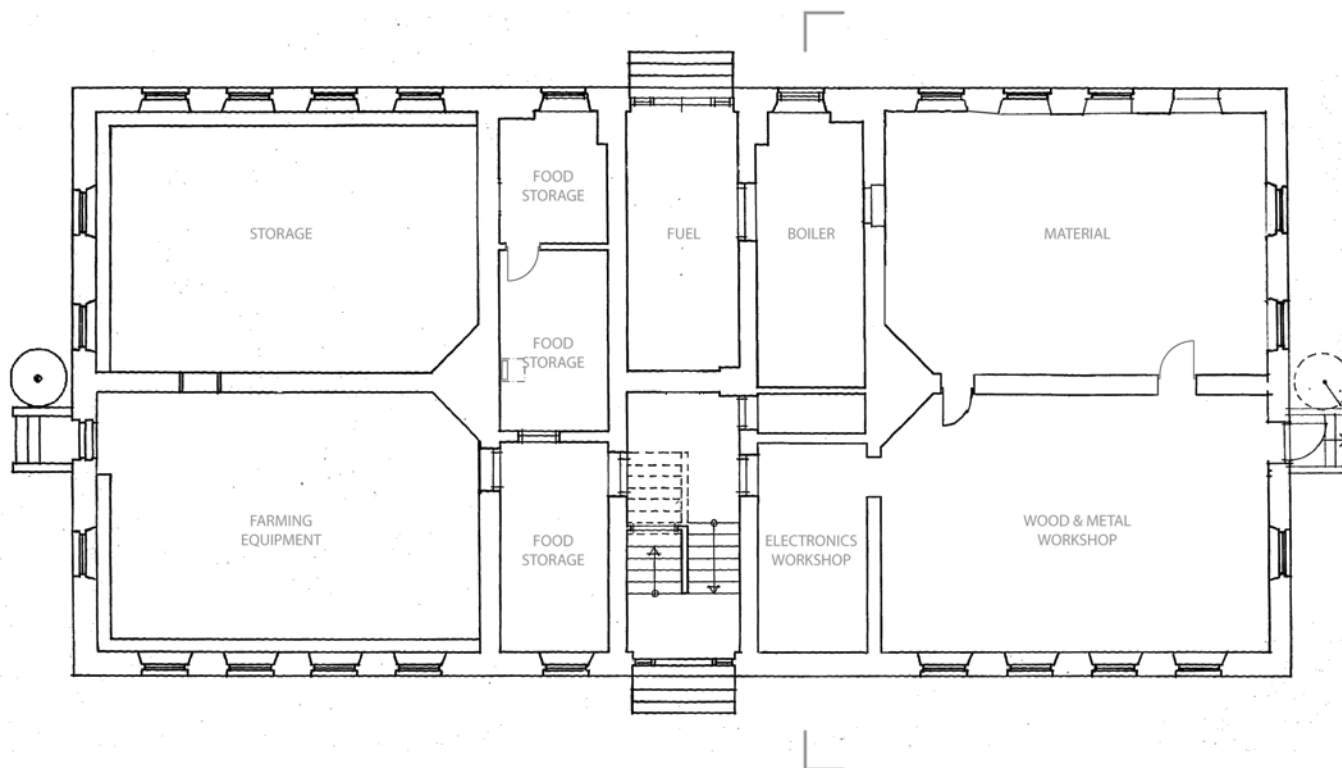




## DRAWINGS

The building was never planned to look the way it does now, it has rather grown to be like this. Instead of a general redesign of the whole building the residents are constantly maintaining and rebuilding part of it themselves, according to their shifting needs. This have resulted in a quite irregular layout of the building that suits the residents very good.





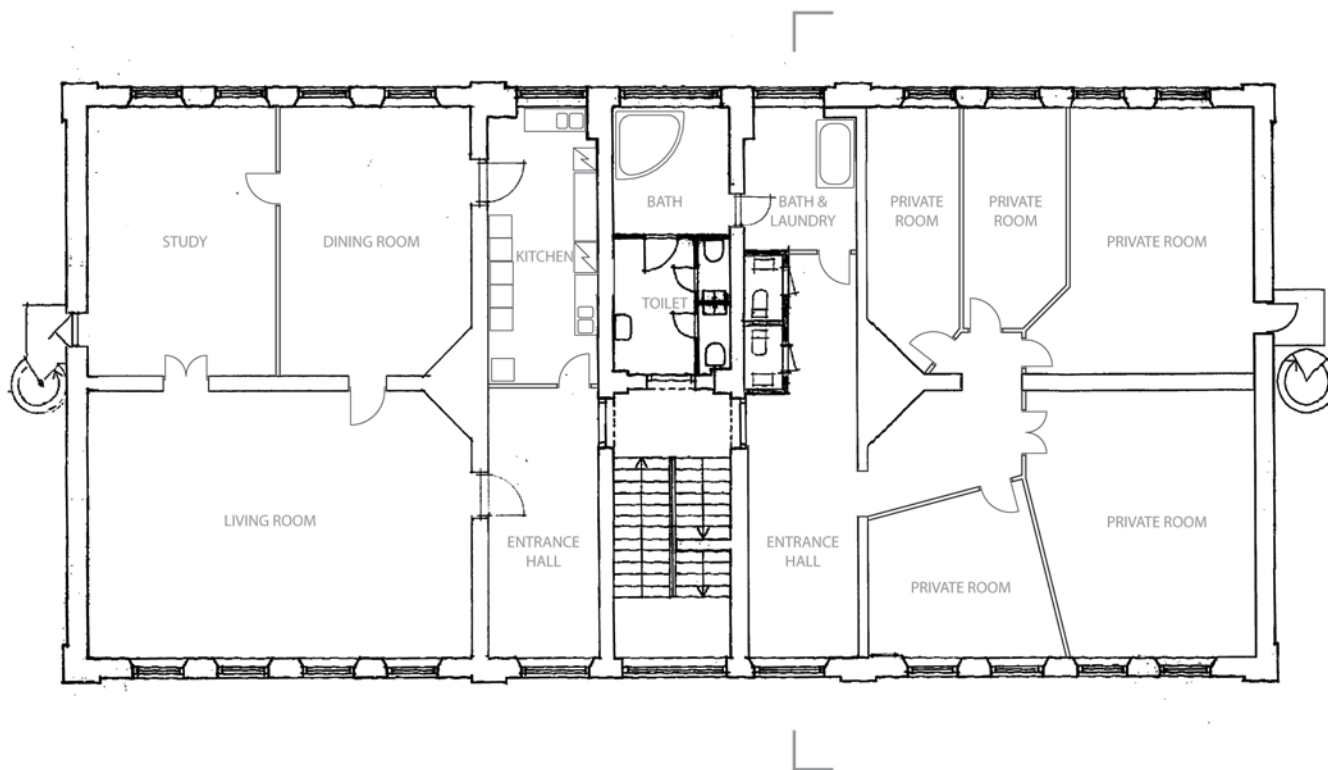
## BASEMENT

The south part of the basement has workshops full of equipment and material for repairing and constructing all kinds of items needed. Close to the workshops is a boiler that heats the house when needed and next to it there is a room for fuel, which is mainly firewood. The basement also works as a storage for food, farm equipment and other things.

SCALE 1:200

0 2 4 6 8 10 m

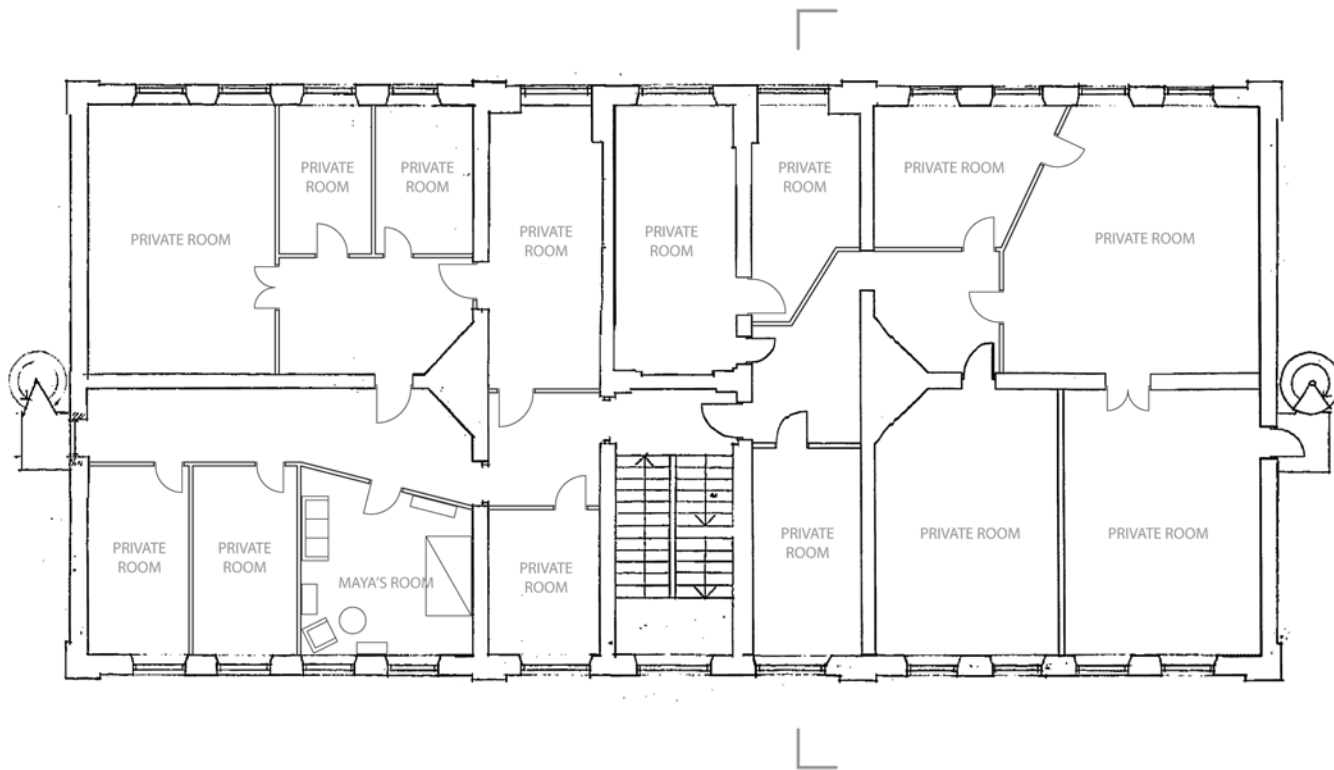




### 1<sup>ST</sup> FLOOR

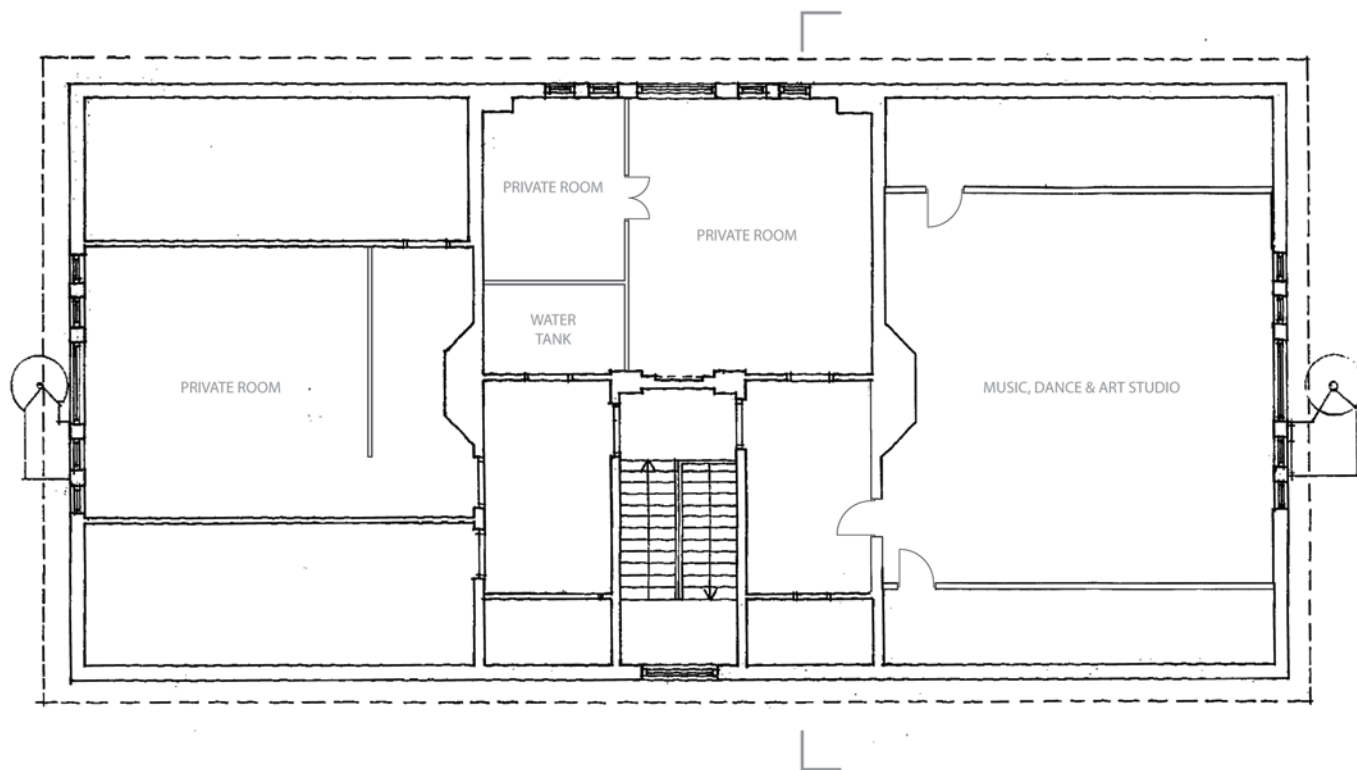
The north part of the first floor is the main common area for the residents. It has a kitchen with a floor hatch leading down to the food storages in the basement, a common living room, dining room and study. All rooms that needs water, like toilets, bathrooms, laundry and kitchen are gathered at this floor and are shared by all the residents. The south part of the story has five private rooms.





## 2<sup>ND</sup> FLOOR

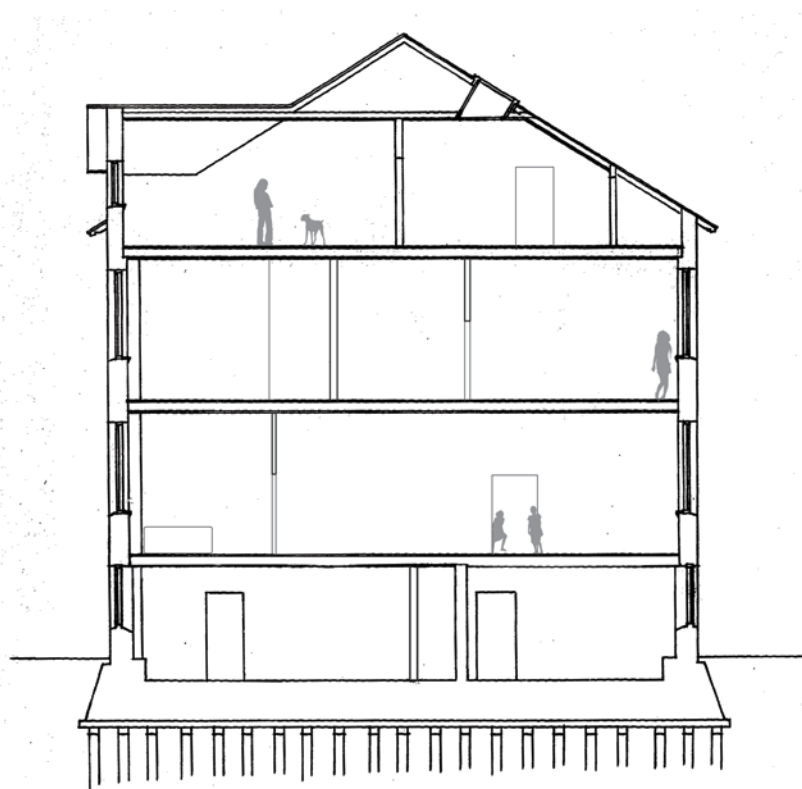
This floor houses most of the residents. Some of the rooms house only one person while other rooms house several persons. There are also some persons having several rooms together.



#### ATTIC

The attic has a couple of private rooms and a common room for cultural activities such as music, dance and art for the residents. On this floor there is also a water tank that works as an internal water tower.





#### SECTION

The high ceilings and large windows make the rooms spacious and light, which suits the residents well.

## MAYA

In a room on the second floor with two windows towards the courtyard lives Maya. Stretched-out in a armchair placed in one of the corners of her room, with one of her legs over the armrest, she gives a relaxed impression. Usually she is full of energy but now she has just had a hard martial art session in the attic and is pleasantly exhausted. Her skin is still red from the practice and her deep breath slowly expands and contracts the chest underneath the light-green dress. She starts to talk with a surprisingly deep voice.

– I really love to move, to find new ways to use my body, use it to its full potential. Do you get me? That's why I love to practice martial arts and dance. Those kind of exercises really make use of the whole body, and of course it's very fun!

She continues to talk about her passion for moving and mentions with a thoughtful voice that a fit body and some fighting skills also may be useful sometimes. After having said this she pauses, picks up one of her dreadlocks, holds it in her hand and looks out the window. There is a reason that the building is fenced in and that there always is someone standing guard in the watchtower. The residents of Gårdaskolan have suffered both thieves breaking in and hostile gangs attacking. It's fortunately not very often it happens but when it does all of the residents have to take up arms and help to defend their home. Sometimes it has caused the residents casualties and several loved ones have been lost in this way over the years. Maya turns her head back and continues to talk.

– You never know when the next gang of looters will come and when you meet a stranger you always have to stay alert since you don't know if he or she is your enemy. It can be mentally very hard sometimes.

Because of the insecurity and the lack of communications the residents of Gårdaskolan tend to stay close to home. Maya's favorite place is the greenhouse along the west side of the building. She spends so much of her time there that the others have started to call it Maya's garden. It has turned her into a really skilled gardener and she now provides all kinds of tasty vegetables and herbs to the common kitchen, to the other's great appreciation.

– If someone is looking for me they first look in the greenhouse and if I'm not there they check in the electronics workshop. I like to hangout there, with Mark. He basically lives there, in the basement, always working on some electronic gadget that needs to be fixed. He's such a great guy and we use to have really interesting discussions. He has also taught me quite much about electronics

and I try to teach him about plants, but it's really not cup of tea.

Mays laughs and tells about the dead dry sticks sticking out of different pots and containers on the windowsill of the electronic workshop. Mark used to live alone in Gårdaskolan before anyone else moved in and has almost lived here all of his life. The others that live here have moved in gradually. Maya moved here when she was around seven years old, soon after she had lost her parents in an accident. When it happened she didn't have anyone that could take care of her and she had to manage on her own for a while, until an older couple found her. They became like grandparents for her and soon all three of them moved into Gårdaskolan. Since then they have lived here and have become members of the family-like group of 28 persons that share the building. Unfortunately one of Mayas new grandparents got sick and died earlier this year. The disease could easily have been treated with an appropriate medicine but medicine is something that is lacking nowadays.

– The lack of necessary stuff, like medicines, and the insecurity are the worst problems of this situation. But I think I'm really lucky to have ended up here. This place and the people living here are great! In general I'm actually very satisfied with my life.

She stretches her arms up in the air, looks around the room and smiles contented.





# SCENARIO B



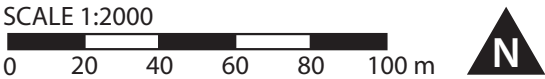


# GÅRDA

The increased population and variety of small businesses have given Gårda a vivid street life. Both Åvägen and Fabriksgatan have become popular streets and are often crowded by people. Mölndalsån has been widened to withstand the increased water flow and a new footbridge has been built in the extension of Blekeallén.

In the 2010s urban agriculture was promoted as a way to reduce the energy consumption and the land west of Mölndalsån was cultivated. At this time many of the existing buildings were also upgraded to consume less energy. In the 2030s the freeway was narrowed to give space to a public transport sky train and new buildings. In this decade the population started to grow fast and many new buildings were erected wherever there was space. Tall residential buildings where built at the ground of the old soccer field west of the river and buildings of mixed use where built at Blekeallén close to the new bridge. In the 2050s the population growth continued in a pace that the building activity couldn't keep up with and shanty towns started to grow up around the city. One of these area are located east of the freeway.

- WATER
- GÅRDASKOLAN
- DWELLINGS
- MIXED USE
- PUBLIC BUILDING / SCHOOL
- SERVICE / RETAIL / OFFICES
- INDUSTRY / FOOD PRODUCTION



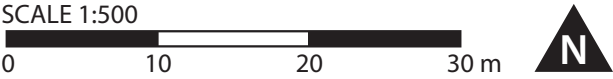


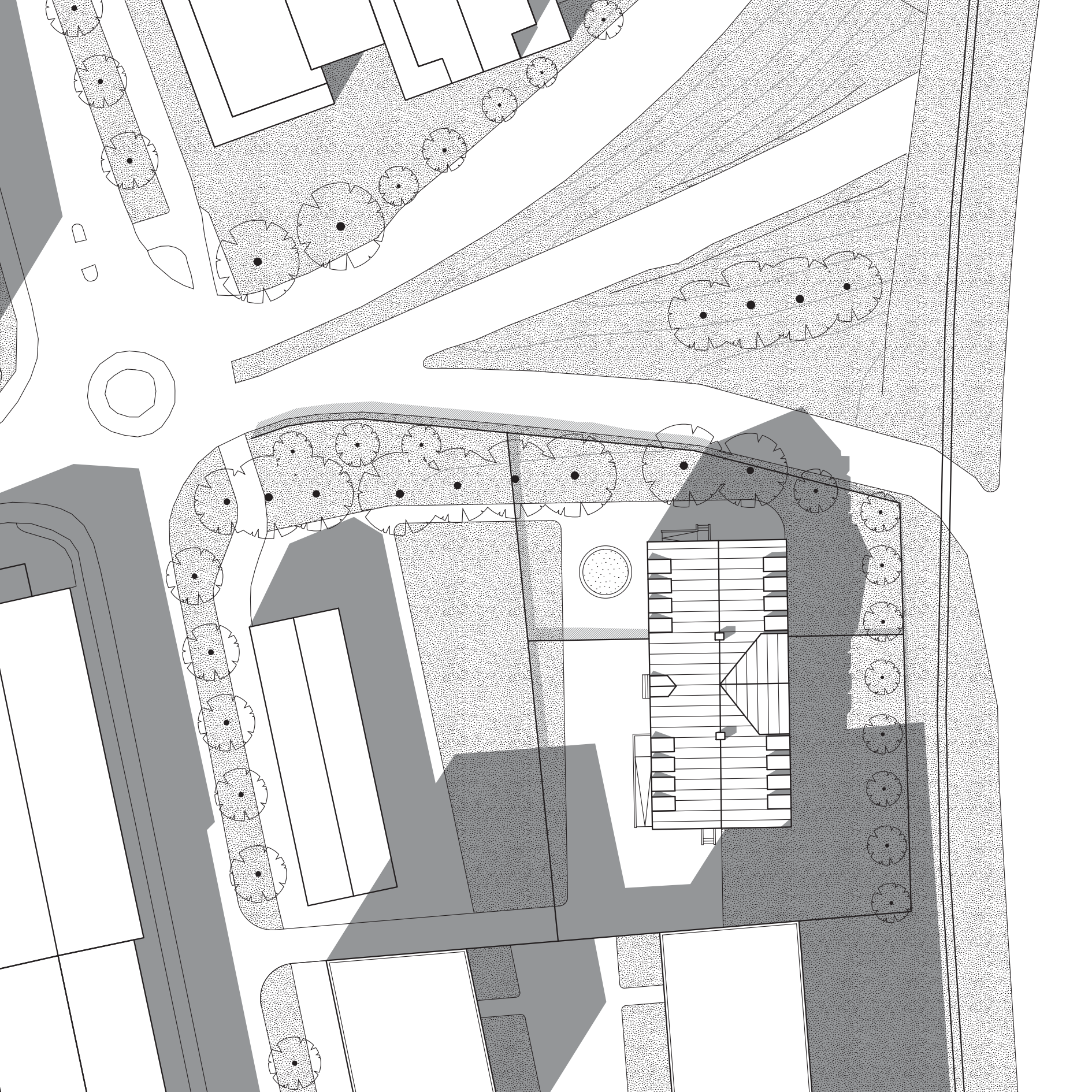
# GÅRDASKOLAN

The land belonging to the building has been divided in two parts – one for a preschool in the north part of the building and one for the residents. The rest of courtyard has been turned into a small public park. The surroundings are quite green, with lawns, small gardens and many trees.

Between the building and the freeway the sky train track runs through the air where there used to be more freeway lanes. South of Gårdaskolan that former carpark has been replaced by a one story building of shops and service businesses, that covers the whole plot, with two six story residential buildings on its roof.

Currently there are 82 persons living in Gårdaskolan and 18 children in the preschool.







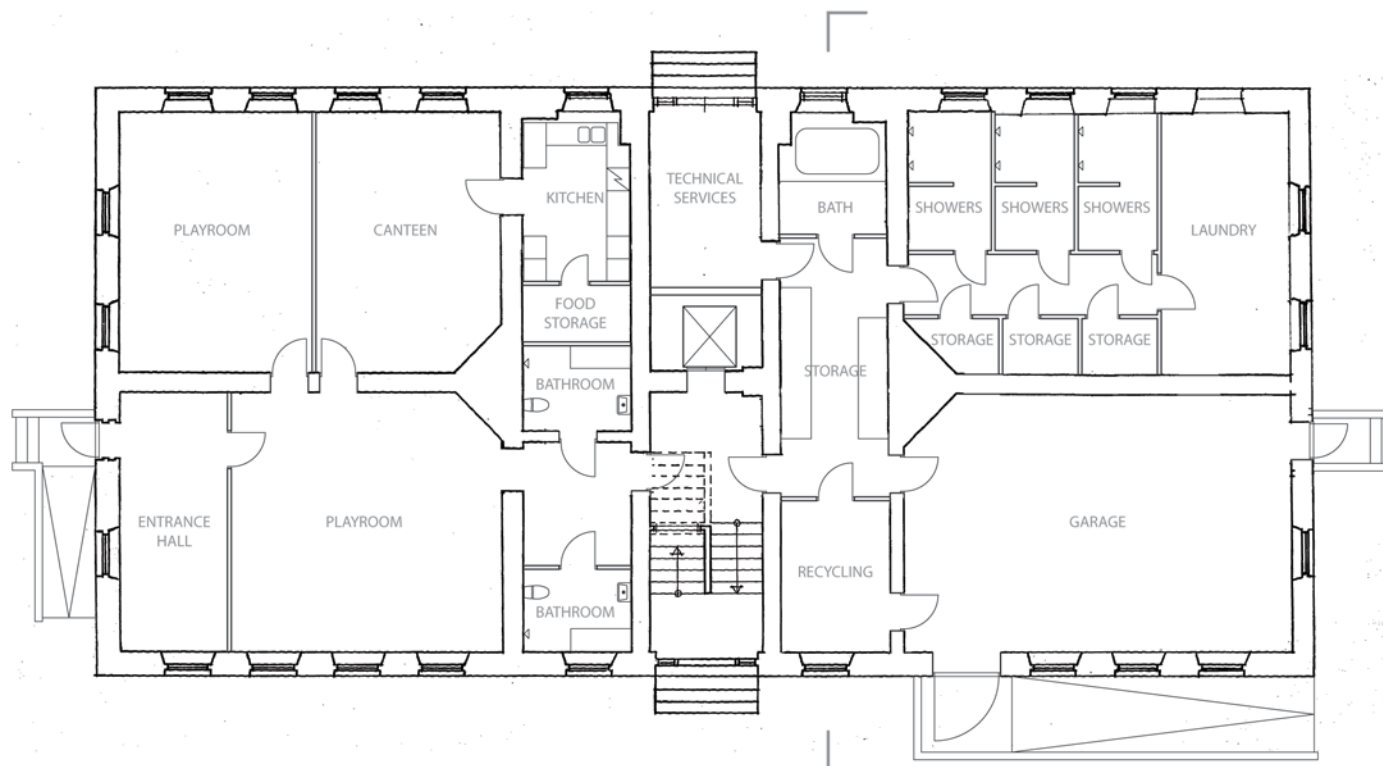






## DRAWINGS

The building is efficiently planned to achieve as much living space as possible. The apartments are between 10 and 45 m<sup>2</sup> large, most of them are studios and many of them have sleeping lofts. Functions as kitchen, bathroom and laundry are shared to save space and resources.



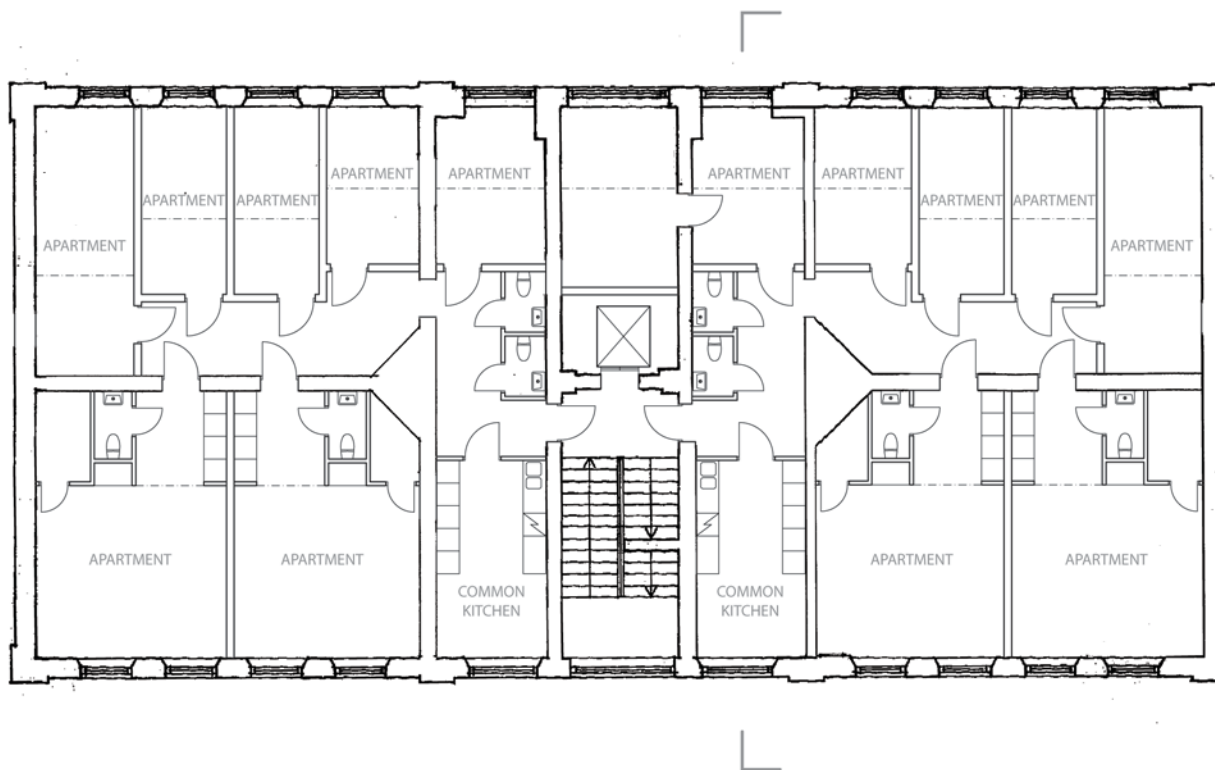
## BASEMENT

The north half of the basement houses a preschool with kitchen, bathrooms, two playrooms, a canteen and an entrance hall. The main staircase have been complemented with an elevator and behind it is a room for technical services, such as heating. The south part of the basement houses different common functions for the residents, like bath, shower and laundry facilities as well as a storage for common items. The basement also contains a recycling room, where the residents waste is collected, and a garage for bikes and small vehicles that can be accessed from the outside by a ramp.

SCALE 1:200

0 2 4 6 8 10 m

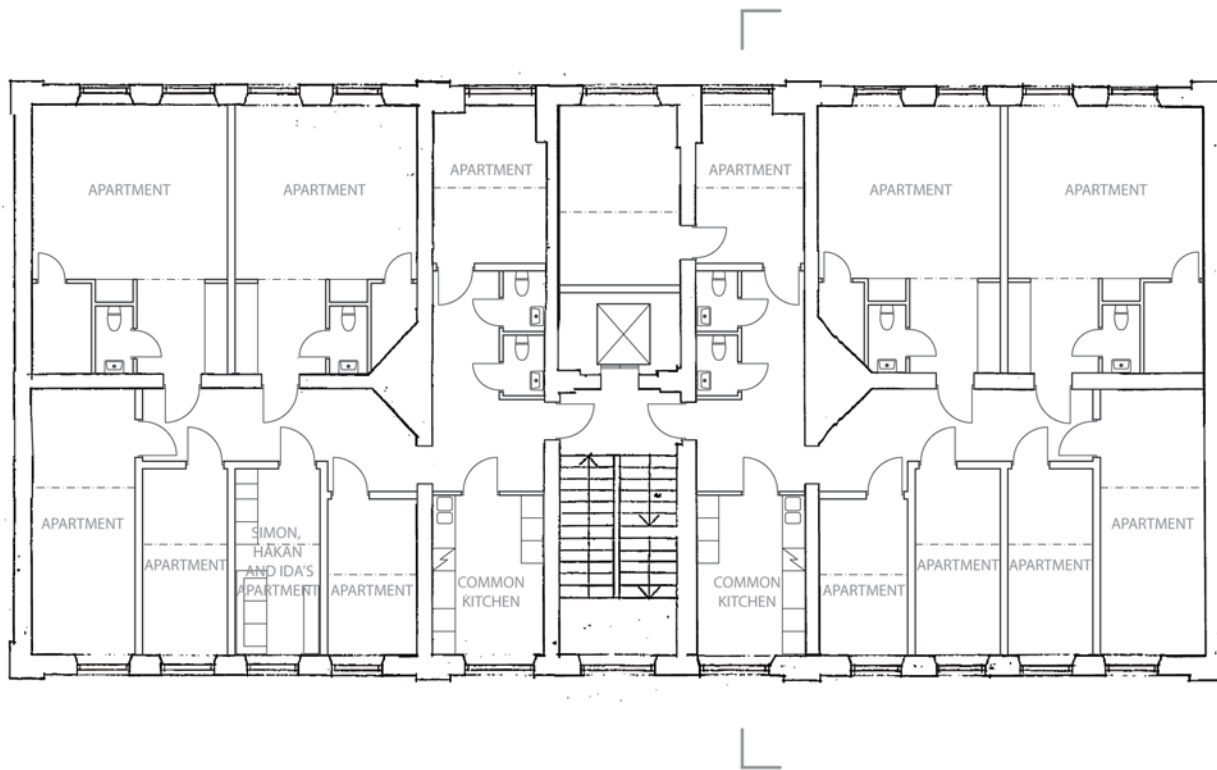




### 1<sup>ST</sup> FLOOR

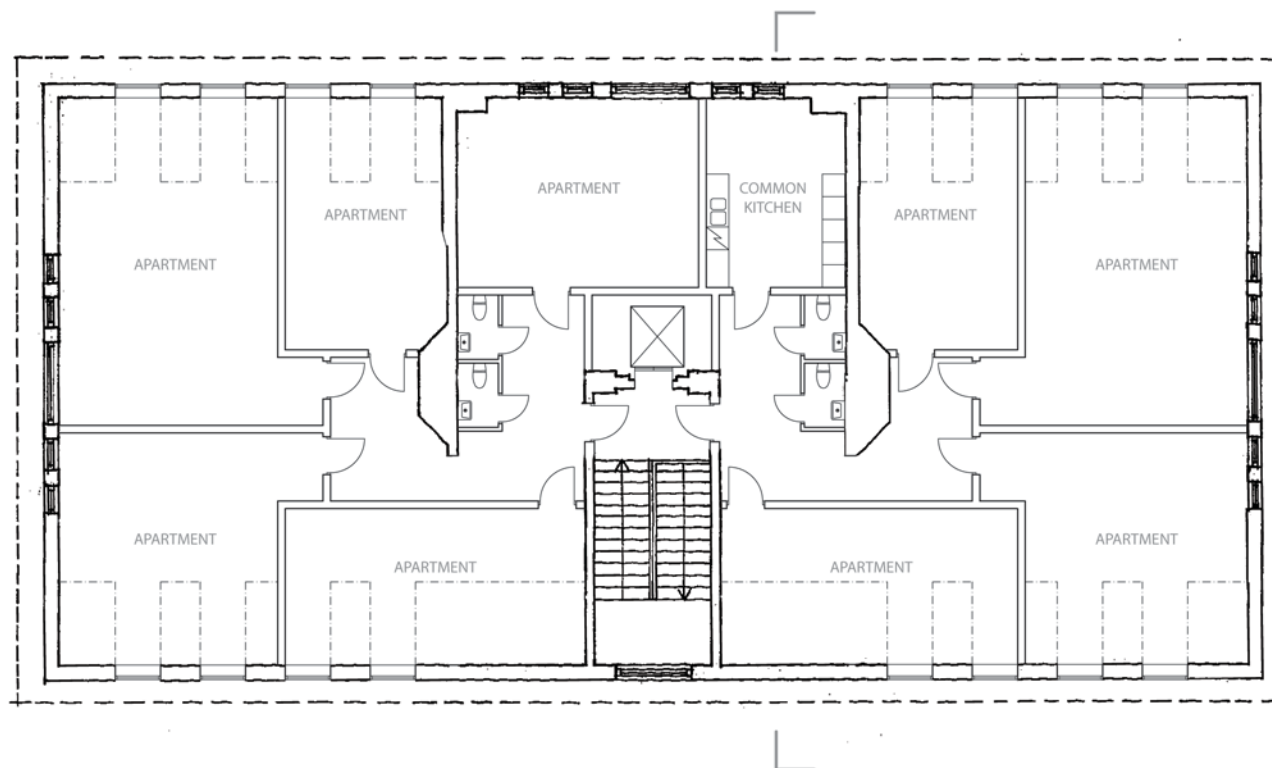
The first floor consists of ten small and four larger apartments. The small apartments have shared toilets in the hallway while the larger apartments have own toilets. Two kitchens are shared by all the residents of the floor. All of the apartments have sleeping lofts and the larger apartments lofts are large enough to be divided into two or three sleeping spaces.





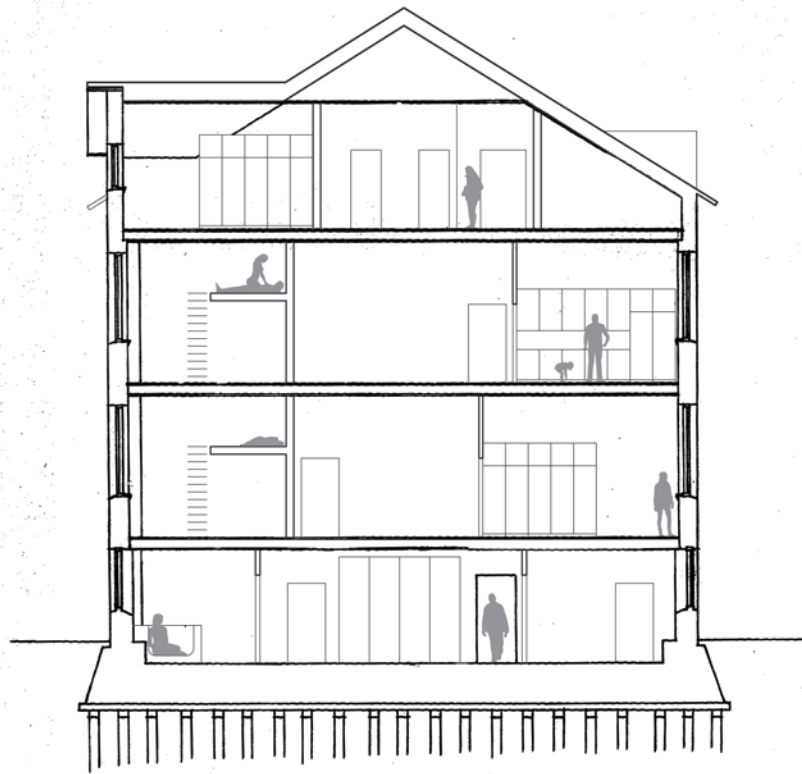
## 2<sup>ND</sup> FLOOR

The second floor has the same function and very similar layout as the first floor. The main difference is that the larger apartments on this floor are oriented towards east instead of west.



## ATTIC

The attic has nine apartments and one common kitchen. The apartments are larger than the small apartments of the first and second floors but have a lower ceiling height that doesn't allow for lofts. Along the long sides of the building the ceilings is sloping which further reduces the space but this has partly been compensated by dormers.



## SECTION

The ceiling height of the first and second floor allows for a tolerable space both below and on the sleeping lofts. Dormers have been added to gain space and light on the attic floor and the roof has been replaced by a thicker, better insulated one.

## SIMON, HÅKAN AND IDA

In a hallway on the second floor in Gårdaskolan one of the doors have a sign saying “Ida Simon Håkan” with straggling letters. Håkan is the one of those three that opens the door. He’s physically fit and well dressed in black pants and shirt. Past him the narrow apartment, ending with a window towards the courtyard, can be seen. In the area closest to the door the ceiling is lowered by a sleeping loft but except from there the apartment is higher than it’s wide. The curious but shy author of the sign peeks out from behind a wardrobe.

– Welcome to our little home. That girl in the couch, hiding behind the wardrobe, is Ida. We would prefer something larger but it is almost impossible to find if you want to live in the city, as we want. Maybe we could afford a house in the countryside but we like the city life with all its diversity and services. Here we also have most of our friends and relatives within biking distance. Neither do we want Ida to grow up in an area that is completely “Swedish”, as most places in the countryside tends...

Håkan is suddenly interrupted by someone opening the door. It’s Simon that is early home from work today. He says hello, gives Håkan a kiss and sits down in the couch next to Ida. From a grease stained paper bag he picks up a deep fried shrimp and hands it over to Ida. Judging her reaction it’s obviously food that she likes. Her fathers laughs at her reaction.

Simon works at a small takeaway restaurant specialized in seafood, not far from Gårdaskolan. He’s a very skilled chef and can turn almost anything into a delicious meal. At home his much appreciated cooking tips have raised the level of the food for everyone using the common kitchen. Originally he comes from Northern Africa but as many other Africans his family moved when the climate become harsher. Eventually Simon ended up in Sweden and soon he met Håkan. They moved to Gårdaskolan and short after that they got Ida.

– Isn’t she adorable? I’ve been working shorter hours since we got her to be able to spend as much time together with her as possible. I work as a lawyer for the municipality and they are very flexible and generous when it comes to those matters so there haven’t been any problems. It’s harder for Simon then, but he’s a workaholic so he’s ok with that.

Håkan winks at Simon who accepts the accusation with a smile and a shrug before he replies.

– Of course I love spending time with her but I get stressed

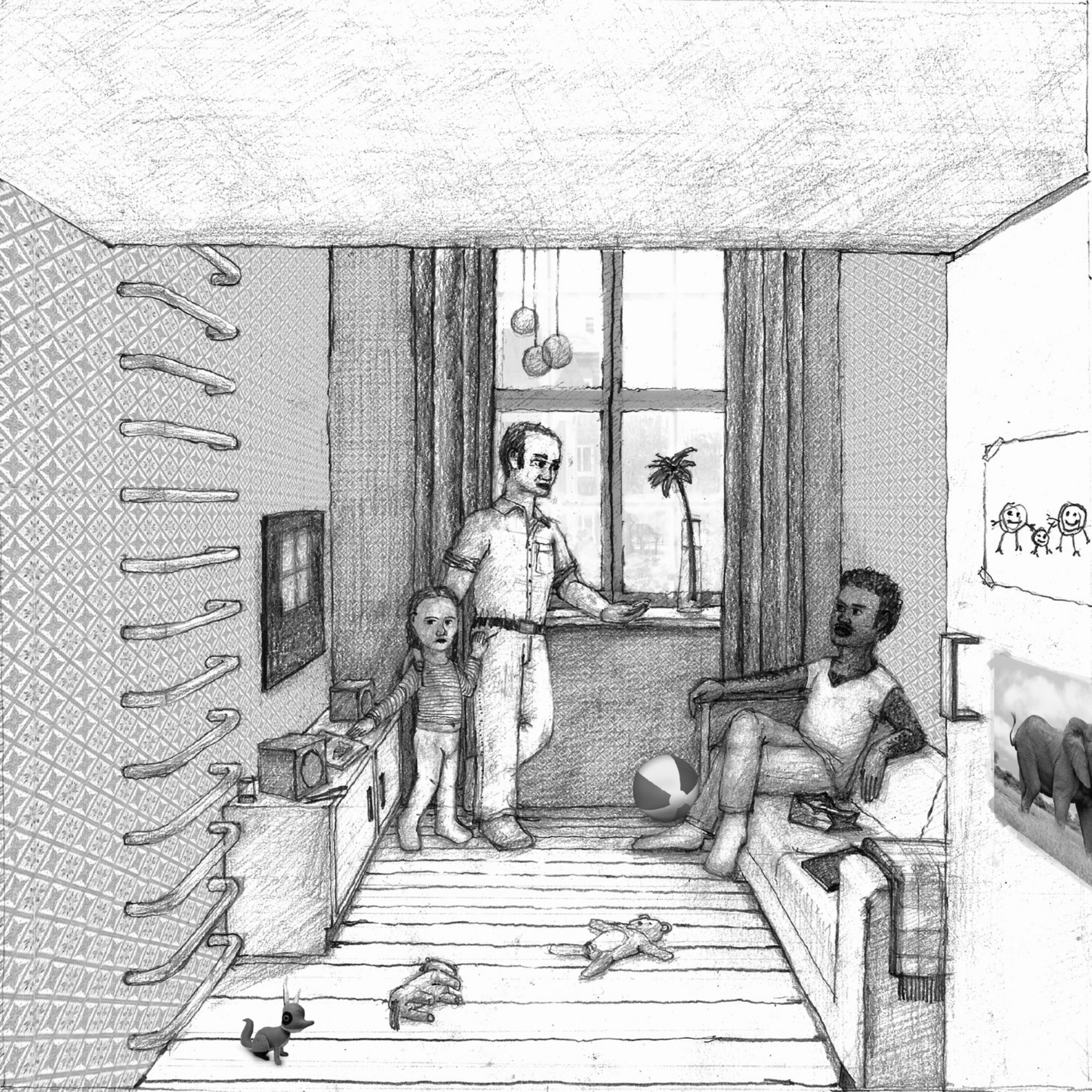
of going to the library or playground and stay there for hours, like the two of you do. Personally I need more action. We’re really different at that point but that’s great.

Ida, that has finished her shrimp, asks for another one. Simon says no but provokingly takes one himself and eats it really slowly. Ida protests loudly and climbs on him to reach the paper bag that he’s holding out of reach for her. After a short, but hard and loud, struggle he judges she deserves a shrimp and surrenders the bag to her great delight.

– When both Simon and me are working it’s very convenient to have a preschool in the basement. It’s almost like being at home for Ida. And you are such a big girl that you will soon go to school instead, aren’t you?

Håkan turns to Ida that nods yes with her mouth full of deep fried shrimps.





# REFLECTIONS

## REGARDING THE REFLECTIONS

During the work with the thesis many different questions have arisen. I believe that some of them could be interesting also for others than myself and have therefore made some space for them here.

## WHO WOULD CHOOSE WHAT AND WHY?

I have the impression that the ones I have discussed my work with have understood both of the scenarios as plausible. As it was very important to me that the scenarios not should be dismissed as just any kind of fiction this is satisfying. However all the people that I have asked would have preferred to live in the future suggested by Scenario B over the future suggested by Scenario A. Does this mean that I have failed to balance my scenarios and on the contrary actually have created one utopian and one dystopian scenario? That could be the case but I also have another explanation. Most of the people that I have asked have been Swedish and/or architects (or architect students) and I believe that both people that have grown up in Sweden as well as people that have studied architecture are more likely to choose Scenario B rather than Scenario A. To explain why I believe so I first have to clear out the differences between the two scenarios.

Scenario A describes a world without any official power where the individual has great personal freedom but also has to take care of oneself. In a world like this the fortunate ones may have very good lives but the unfortunate ones may perish. Scenario B on the other hand describes a world which is highly organized and regulated where the personal freedom are lower but the society guarantees a minimum standard of living. In this world people have less possibility to shape their own lives but few people perish.

Compared to other countries the faith in the society is strong in Sweden. People in general trust the state and believe it is working for the common good for the citizens. This is why I believe that people with Swedish values would prefer Scenario B. Regarding architects, they have an occupation that deals with the physical form of the society. Architects solve problems by planning and designing and most of them probably also to a great degree believes that their work is an important part in the creation of a good society. In Scenario B there is a great need for architects and their skills but in Scenario A the architect's competence is not necessary very useful. That is why I believe that Scenario B in general would be more desired by architects.

## TO REACH OUT AND INFLUENCE

As I stated earlier the ultimate aim with this thesis is to make an interjection to the discussion about the future of humanity. In order to succeed with that it is important that the work not only is accessible for as many as possible but also as it reaches out to as many as possible. This is a question of communication, both of how my ideas and visions are communicated with text and illustrations and how the work is distributed.

I have chosen to write in English and tried to make both the text and illustrations understandable for as many people as possible. How well I have managed with that is hard for me to judge myself. I would probably have to show the work to many people with different backgrounds and listen to how they perceive it in order to know what parts that are clear and what parts that needs to be changed to make it understandable for more people.

In the vast flood of communication of today it is easy for any message to drown and without economical resources to spread the message the only way the work can manage to be distributed is if people find it interesting and pass it on to others that might be interested. I do believe that there always is some interest for visions of the future and maybe is it even stronger now when it is becoming obvious for an increasing amount of people that we need to change the way we are living. I hope that this might help to spread this work even though I believe that the risk that it drowns in the flood of communication is bigger.

## REUSE OF THE METHOD

In this work I have used tools and methods that not are used very commonly in architecture practice, like scenarios and fiction. Even though it has become increasingly popular to use narratives as a tool in design processes the last years, known as storytelling, it is not widespread. Could the methods that I have used in this work be utilized in more in architectural projects? Could it even be a working business concept?

I can think of at least two applications of fiction in architecture. Firstly stories, settings and characters can be created to support the design process. When designing a project where the future users are unknown, as in a large housing project, it could be designed to satisfy different fictional characters' desires and a public space could be designed to be the perfect environment for a specific fictional story. Secondly, since architects are trained in creating visions of environments that is not yet existing but these visions often are communicated through drawings that can be hard to understand for non-architects, I think that architects could create and make use of stories to communicate their visions. Instead of just showing plans and sections of a proposed building a story of how someone approaches and moves around in the building could indeed be a very living and fantasy stimulating presentation of an proposed design.

If fiction in architecture is a niche profitable enough to base a business on is uncertain but it would be interesting if someone gave it a try, and even if it wouldn't work I still believe that fiction could be successfully utilized by architects to a much bigger extent.

