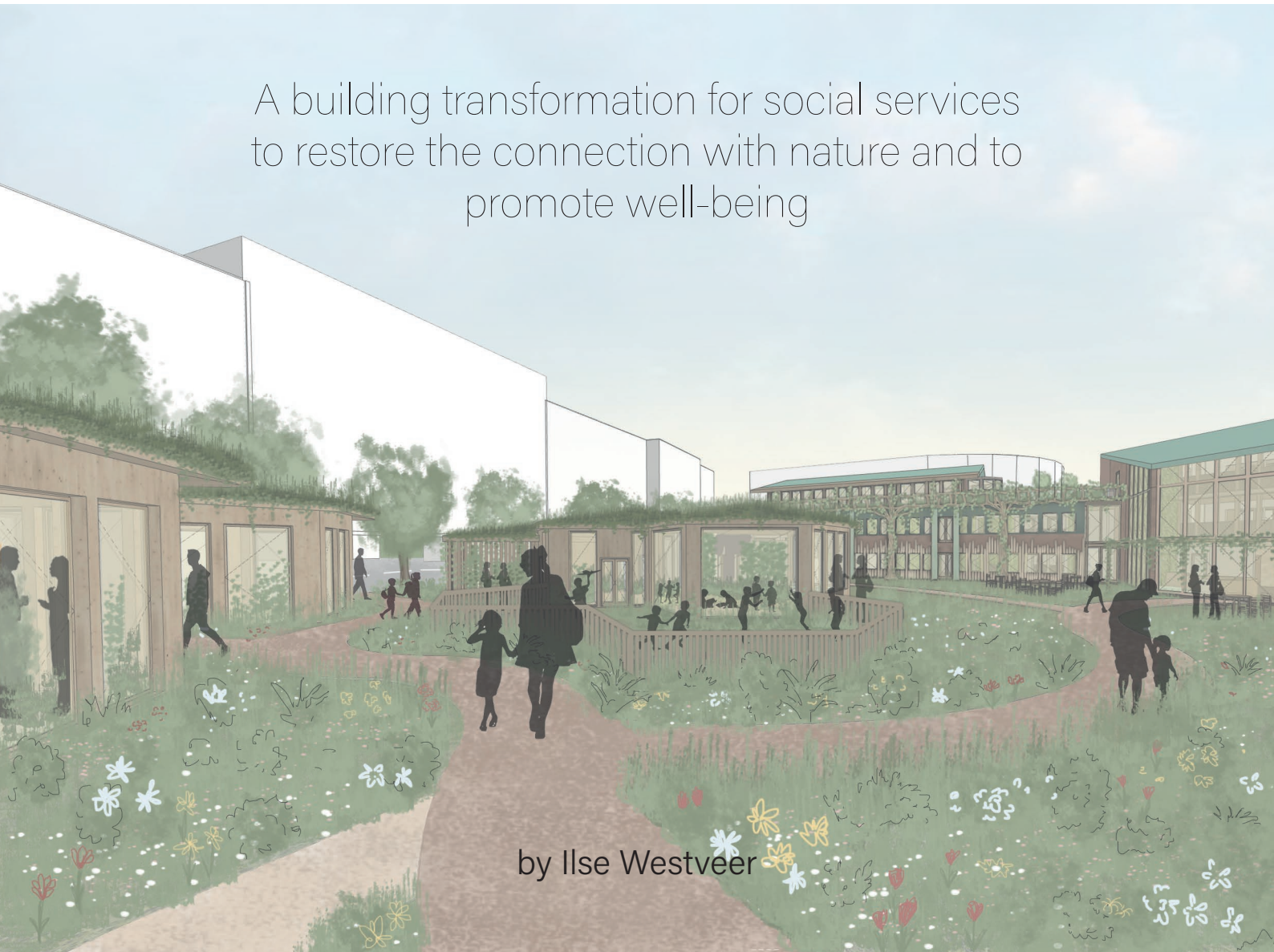


# THE SOCIAL WORK OASIS

A building transformation for social services  
to restore the connection with nature and to  
promote well-being



by Ilse Westveer

2023

Chalmers School of Architecture  
Department of Architecture and Civil Engineering  
Architecture and Planning Beyond Sustainability

Examiner: Liane Thuvander

Supervisor: Walter Unterrainer



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## ABSTRACT

For the last few years, research on how to design for one's well-being has significantly increased. This is because there is more interest in the topic and a greater need for it due to still rising mental health problems. This also applies for working environments, since these spaces are historically built to be efficient and are not about the comfort of the user. Additionally, the majority of people spend most of their day at an office.

Therefore this thesis aims to transform an existing social centre into a healthy working environment for body and mind while actively using nature. The research question which is used is: *How can the transformation of a social service building, in Gothenburg, prevent mental health issues, and promote well-being for the users while reconnecting them with nature?*

The social centre is located on Lergöksgatan 2A in Gothenburg and focusses on children and youth and their parents/guardians.

The methods include literature research on Swedish social centres, Health Promotive Building Design, Salutogenesis and Biophilia. These theories are used since they are proven to be effective for promoting well-being

and reconnecting workers with nature. Then a speculative reprogramming is made to change the tone of social centres from an institutional, to a positive inviting character. For this specific location, integrating a family centre is the key. The literature and speculative reprogramming is used to analyse the social centre. Together with a survey, which was sent to the social workers on location, this information is used to gain an understanding of strengths and weaknesses of the current situation. In order to make the design proposal, design strategies are made from which are used as a tool for this project. They can also be used as a base for other projects which aim to transform a working environment to increase the employees well-being and to give the building a communal values.

The results show that by adding valuable communal functions (such as a preschool, library/study space, a cafe and an interactive garden), and a positive social service, in this case a family centre, together with actively working with recreating nature, a Social Preventive Care Centre is made.

Keywords : **social workers, well-being, biophilia, salutogenesis, health promotive building design**

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process by being a listening ear or a great help for inspiration.

## STUDENT BACKGROUND

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- Sustainable Development in a Local Context
- Crash course: Beyond sustainability
- History, theory and method 7
- Reality studio
- Master's Thesis preparation course part 1 & 2
- Future visions for healthcare, housing and work 1: Residential healthcare - housing for seniors

### RELEVANT WORKING EXPERIENCE

Volunteer landscape architect at 'House of Peace' Almere. Designing a garden for International Horticultural Expo Floriade of 2022. (Jan 2021- Aug 2022)



### THESIS MOTIVATION

I am very interested in the relationship between the well-being of people and the built environment. I believe that both are very intertwined and affect each other a great deal. Transforming a social centre sparked interest in me since I wanted to design a space which has a negative stigma around it, into a space which is inviting for everyone and would benefit the whole community living around it. I decided to do this by using Biophilia because of the second important relationship: people's well-being and nature. I wanted to take on the challenge of bringing nature in its purest form into an already existing building and its surroundings. I hope that this thesis shows how important the atmosphere of spaces is and how architecture has a great influence on our well-being. Furthermore, I also hope to show the value of nature since in today's society, nature is often ranked at a lower priority, even though it is the pillar of all in life. Regarding, choosing a transformation of an existing building is because of the importance to find ways to create healthier places for body and mind while using minimal new resources. In order to move to a more sustainable society, we need to learn how to use what we already have, rather than destroying and starting with a new base.

## GLOSSARY

### Atmosphere

This project is focussed on how a space feels and looks like. It is about the experience of the place.

### Biophilia

The essential bond between people and nature. Submerging an office space with natural elements helps reconnecting people with nature and improves one's well-being significantly. This goes beyond the placement of numerous plants, it is also about recreating natural scenes such as diverse workspaces and the feeling of taking a stroll in the forest; this all in a building. Lastly, it also entails taking the surrounding into the design as well in order to reconnect the building itself with nature as well.

### Client

People in need of help and support of social services in Gothenburg. In this thesis, I aim to improve their well-being by improving the physical atmosphere of the social centre where they go to, to seek help. The chosen social centre helps children and youth and therefore are the clients.

### Employee

People working as a social worker in a child and youth social centre in Gothenburg. In this thesis, I aim to transform this centre to create a healthy working environment by promoting their well-being and preventing their mental health problems such as burn-outs.

### Healing environment

In this context, this means that the chosen social centre is transformed into a healing environment. This translates to creating a space which stimulates the well-being of both employees and clients.

### Healthy workspace

This is about the different areas in the building which are used by the employees to work in. The thesis defines a healthy workspace to be a place which continuously protects and promotes safety, mental health and well-being of the users of the building.

### Mental health problems clients

Mental health problems amongst children and youth are about mental illnesses related to depression, abuse, addiction and other sorts of social problems.

### Mental health problems employees

Mental health problems amongst employees are mainly workplace related such as daily hassles (see stress description), mental fatigue and burn-outs. Furthermore, it is about how the physical dull environment of the centre influences how they feel.

### Oasis

An oasis in this context means a place which feels like a refuge or a sanctuary. It is a place where one can go to, to seek shelter, to calm down and find inner peace made out of natural elements. Therefore, this thesis seeks to create an oasis in the chosen social centre.

### Salutogenesis

Salutogenesis is a term that is about preventing rather than healing illnesses. This thesis will be written from a salutogenic approach which means that it provides design strategies to prevent mental health problems and promote well-being. This is strongly connected to Biophilia and both work better hand in hand and because of this, they will both be used in this project.

### Social centre

The social centre is focused on children and youth and is a place which hosts office spaces for social workers, as well as functions such as therapy rooms and waiting rooms.

### Social Preventive Care Centre

The term used to describe the site after the transformation. This includes the revised social centre, family centre, interactive nature garden, the preschool, library/study space, therapy spaces and cafe. These elements together create an environment which promotes the well-being of its users, reconnect the users to nature and to each other and functions as a starting point for future neighbourhood development. The SPCC goes beyond the original plot boundary to achieve this and therefore takes the plot where the community hub is located on, into account as well.

### Social services

Social services are services provided by the municipality. One can go there, whenever they need help or support in their life. This help can be about various matters such as complicated family situations, alcohol and drug addictions and abuse. However, since they are a complicated matter, a more thorough description will be given in the coming chapter.

### Stress

Since this term will be abundantly used in the thesis, it is important to know what it really means whenever it is written. Crosswell and Lockwood (2020) state that there are five different types of stress, which are all applicable to this thesis. However, I will combine "life events" and "Traumatic life events", since they cover the same stress topics. Additionally, I will not take "acute stress" into consideration since this is based on short term events such as giving a presentation and are therefore not applicable to this thesis. Moreover, since the main focus lies on the employees, the "daily hassles stress" is mainly focused on. Since the other types are related to the people coming in the social centre for help, a short summary will be given:

1. **Daily hassles:** involves difficulties or obstructions in day to day life, which in this scenario can be work overload, negative working environment and coping with heavy stress and complicated situations of clients. This can result in built up frustration and the feeling of being overwhelmed.
2. **Chronic stress:** applies when one deals with threatening and/or challenging circumstances that negatively intervene with daily life for at least a month. In this context, it could develop because of constant stressors in the office.
3. **(Traumatic) life events:** relates to specific negative events in time which drastically change one's current life patterns, such as the death of a loved one or abuse. This type of stress is mainly related to the clients of the social centre.

### Sustainability

This thesis addresses two aspects of sustainability. On one hand, there is the social sustainability which is about the health of Gothenburg's people. On the other hand, the ecological sustainability of the transformation. This includes greener outdoor spaces and the

use of environmentally friendly materials and systems.

### Therapeutic environment

In this context therapy is related to using nature, this is done by creating a safe environment submerged in natural elements and including farming as a means of therapy.

### Transformation

This thesis is about the transformation of an existing social centre including the outdoor surroundings.

### Well-being

Well-being in this context is mainly about the psychological meaning of the word. It focuses on the feeling of having peace at mind.

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**“Wooing of the Earth suggests that the relationship between humankind and nature [can] be one of respect and love rather than domination. The outcome of this wooing can be rich, satisfying and lastingly successful if both partners are modified by their association so as to become better adapted to each other”**

*(Dubos, R. 1980)*

# 1. INTRODUCTION

## 1.1. Background

For the last few years, research on how to design for one's well-being has been trending. Especially after COVID-19's pandemic, which started in 2020, when researchers discovered drastic declines in the population's well-being in all sectors of life (Donaldson et al, 2021). Associated with this is the ongoing rise of mental health problems which is related to both the pandemic, as well as topics as the high pressure of society. The World Health Organisation (WHO) states that there is a newer trend related to this, namely the increase of people opening up about their mental health problems (Williams, 2021). This decline in well-being and the rise of sharing mental health challenges was the fuel needed to achieve the full recognition of the importance of society's well-being. Besides the well-known link to happiness, well-being is also important for greater creativity and work productivity, more effective learning and improved social behaviour and relationships (Ruggeri et al, 2020).

Another reason for this trend is that there are more available accurate measures and successful methods of improving mental health conditions. This is due to the gained fundamental understanding on the matter (Cloninger, 2008).

Furthermore, well-being has been a hot topic in the field of architecture since the pandemic. This is important because "the built environment is an important determinant of health" (Forooraghi et al. 2020, p.155). The last three years, trends related to well-being and mental health such as wellness and spiritual design and integration of nature have been significantly more adopted into designs (The Global Wellness Institute, n.d.). The scientific basis of these trends is salutogenesis. The salutogenic approach is "the orientation towards health that focuses on the origins of health rather than the determinants of disease (pathogenic)" (Forooraghi, 2020 p.3). A significant part of the salutogenic approach is the connection with nature and landscape and how it plays an essential role in our well-being and health (Rathmann, 2021).

It is important to mention that due to the fact that these trends have not been around for that long, that there are still a lot of knowledge gaps on how to design for well-being. Making it a highly relevant field to investigate and design for.

### Working environment

One type of built environment which can benefit greatly from introducing these trends, is the office space. Historically, they have been built to be efficient without taking into account the comfort of its users. Throughout the last two centuries of the existence of office spaces, there have been multiple attempts on creating a well working workspace. Unfortunately from open floor plan to cubicles, they all failed. A major reason for this is that the user is not prioritised in the design (Meetio, 2020). On top of that, the user's wishes have changed since the pandemic. During this period, a significant percentage worked from home. Since they have been back into the office, the line between home and workplace has faded; they want a place which provides cosiness and has a homely feel to it (Von Bell, 2022).

### Social work

One of the most stressful working environments is health care, in specific social work. Social work is strongly client-based where the workers have to mitigate complex, psychological situations while staying professional. Every case is different from the other and they constantly try to balance helping their clients while emotionally protecting themselves. This makes social workers prone to experiencing stress and burn-outs (Lloyd, 2002). Therefore, the design of the physical office space for social workers is very important to create a space where both parties feel comfortable.

Lastly, social service centres will always be needed since it is more effective to talk about one's problems while being physically removed from the situation which is often connected to their homes. Thus these workspaces will not cease to exist, since they act as neutral ground for clients.

## 1.2. Aim

The aim of this thesis is to explore interrelations between existing salutogenic and biophilic design strategies to interpret and apply them to create a Social Preventive Care Centre. This means 1), establishing a transformed working environment which increases the social workers' well-being by using elements of nature in the exterior and interior of the building. 2) Using the building and its plot, as a means of connecting the inhabitants of the neighbourhood it is located in.

## 1.3. Scope

Environmental sustainability comes into play through the choice of material, the use of locally sourced durable materials (including timber and plants) which promote physical and mental health, but first and foremost in the architectural process. This approach goes against the traditional demolishing/rebuilding of tired and unloved office buildings.

This project provides an example of an office building transformation for a long lasting connection between the users and their space. The scope of this social sustainable project concerns the transformation of a social services building while focussing on the physical, psychological and social aspects of an office to facilitate an improvement in well-being.

## 1.4. Audience

The primary intended audience of this thesis are employees in a high stress working environment offering social and therapeutic services. Since this project is about creating healthy workplaces, the secondary intended audience is stakeholders in the creative process of designing office spaces or social centres.

## 1.6. Goals

This thesis focuses on the renovation of a social centre entailing a deep transformation of the original building's interior, exterior and plot to:

1. Increase the well being of its workers in an effort to not only prevent mental health issues but also to create a better work culture.
2. Regain the connection with nature by transforming the plot, by creating a nature-like interior and by changing the exterior and facade.
3. Change the character of the site by combining it with other social functions to ensure a more positive outlook.
4. Showcasing how the transformation of the site can lead to optimised connection throughout the neighbourhood.
5. Illustrate the role design may play in achieving well-being in a work environment.

## 1.5. Research question

**How can the transformation of a social service building, in Gothenburg, prevent mental health issues, and promote well-being for the users while reconnecting them with nature?**

## 1.7. Method

To create an architectural design proposal, it is important to gain an understanding about the subject and the theories involved.

The thesis is divided by Research for design (RFD) and Research by design (RBD).

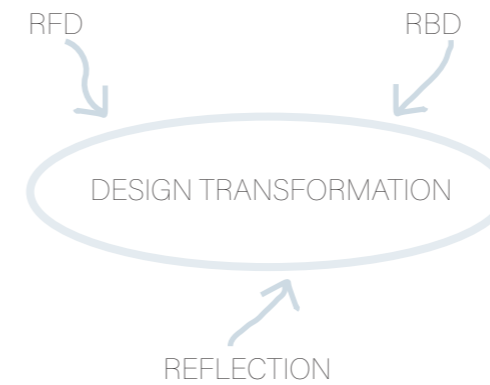


Figure 1: Conceptual explanation of transformation.

RFD entails the theoretical research part of the project. Starting with the background of a Swedish social centre. This research is used to gather information about how the system works, future goals and what the general problem areas are. After investigating this, the literature research starts on the relevant topics to achieve the goals mentioned before. The theories are on salutogenesis, healthy workplace designs, biophilia and material use.

These topics are interpreted into design concepts and strategies to improve the well-being of social workers by reconnecting them with nature in the physical office

space. Each theory is accompanied by relevant reference projects to get inspired and extract design choices. At the same time, it is important to get a more specific insight on the chosen site. This is done by visits to the social centre, and a survey for the social workers. This survey has been the only means of possible communication and includes questions on what work they do, their opinions about the building, their wishes and how important nature in the work place is for them. Six employees responded to the survey. Furthermore, it was not possible to get a look on the inside of the building and therefore there are information gaps; for example on what their day routine is. Nevertheless, the available information gave a general insight on what the problems and opportunities are. Following up, this research is used for the building and site analysis which results in points of interest for the design proposal.

The latter part, Research by design, entails the practical side of the thesis. By interpreting the research part, a new programme is made. The reprogramming consists of the structure of social centres and the chosen physical building. Furthermore, by testing the design strategies and concepts found in the literature research together with sketching, a conceptual site plan is created. This process of testing, sketching and reflecting continued in making the detailed design proposal while going back to the research part. Meaning that the project is an iterative process where the two parts run parallel to one another. By constantly reflecting on design choices, I got a more thorough understanding of how I could use the literature in the most effective way.



Figure 2: Conceptual explanation of Research for Design.

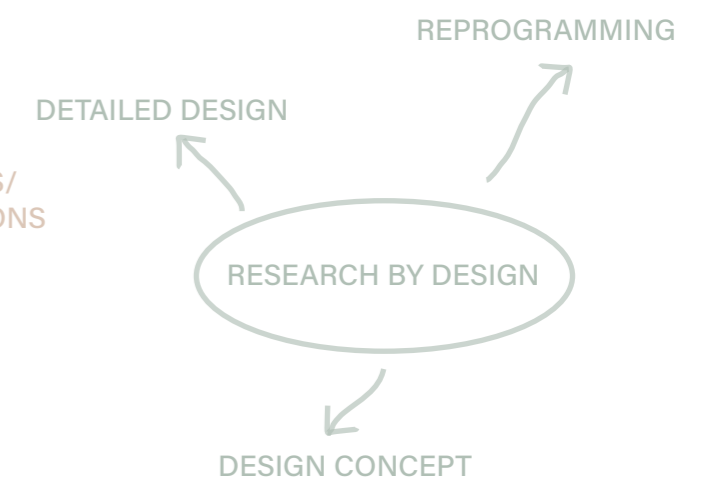


Figure 3: Conceptual explanation of Research by Design.

## 1.8. Delimitations

In order to complete this project in the given time frame, it is important to mention the aspects which are not taken into consideration. In addition, some aspects also fall beyond the scope of this thesis.

Starting with the theories that will be used. There is a wide variety of theories which can be implemented to achieve well-being and mental health. However, I will focus on salutogenesis, biophilia and material use since this is where most of the theories meet and where I saw most potential in.

Regarding the level of detail in the design, the project focuses on the use of the building and therefore the atmosphere of the place plays a major role. Meaning that the emphasis lays on the experience of the building rather than on technical and construction solutions. Equally important is that the project is not only about the building itself, but also includes the outdoors. This because it is an important aspect of reconnecting the users of the building with nature. Furthermore, the conceptual plan will be of a bigger scale than the final detailed design proposal. The reason for this is because the environment around the building with its own functions plays an essential role in achieving the set goals.

Although the project is about social centres in general, the actual physical transformation

proposal and reprogramming is only focused on individual and family services for helping children, youth and their parents. By doing this, the project can be more precise and relevant, since the system of social centres is complex and diverse and all have different needs. Regarding the reprogramming, the main goal is to change the tone from negative to a positive character. Meaning that it is about combining social help centres with other communal functions and activities to create a place where one does not only need to go to when they have problems.

Another point of attention is the focus group. Even though both clients and social workers are important to take into account for their own reasons relating to mental health, the project mainly focuses on the latter. This is because the project aims to alleviate stress and increase the well-being of stressful jobs, in particular in the field of social work. This does not mean that the former is not included in the design choices. This is further explained in chapter 4.1.

Lastly in terms of creating a sustainable transformation, the focus lays on social/ psychological sustainability. However, environmental sustainability in this project is more about using durable and locally sources materials, rather than on reducing emission and energy use.

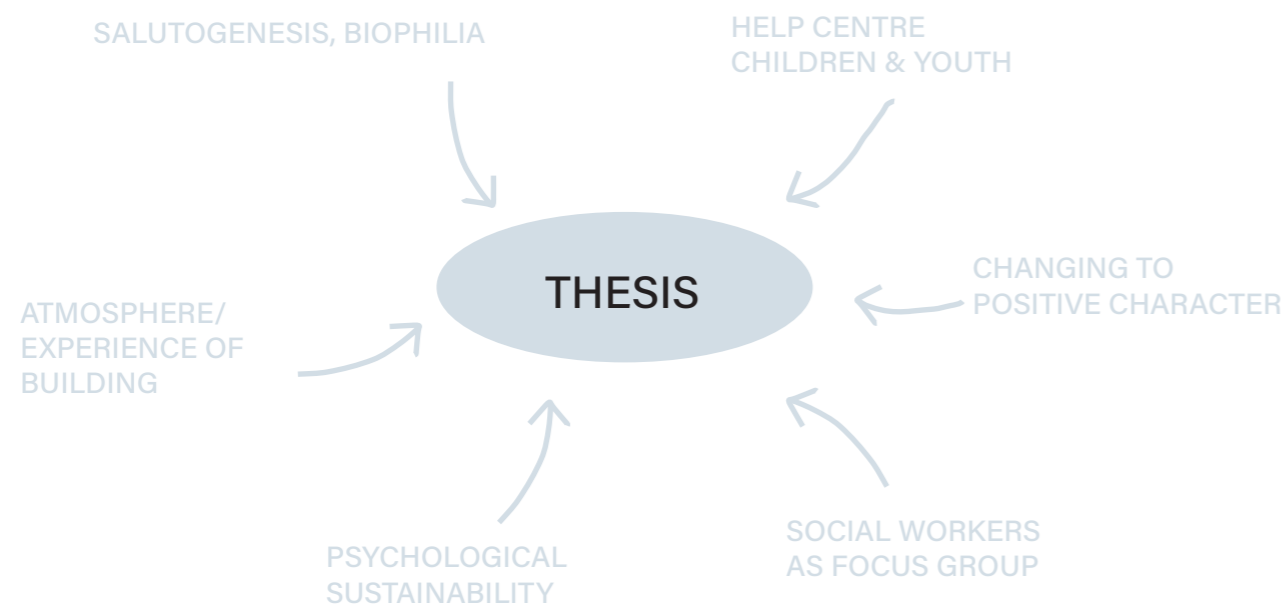


Figure 4: Conceptual explanation of thesis' focus points.

## 1.9. READING INSTRUCTIONS

This booklet is divided into six chapters, starting with the theoretical part of the subject followed by how this translates into an architectural design proposal.

### 1. INTRODUCTION

The first chapter functions as a starting point for the thesis. It provides an overview of the problem statement, motivation, as well as the purpose, aim and scope and the research question. In addition, this chapter presents the methods and the delimitations. Furthermore, it gives an inside to what a social centre entails together with the main focus group.

### 2. THEORETICAL FRAMEWORK

The second chapter presents the different theories and concepts used for the analysis and design of this transformation. Besides explaining the frameworks, it also provides design strategies and reference projects.

### 3. SITE CONTEXTUALISATION

The third chapter entails the first theoretical outcome of the research objective, namely the reprogramming of the social centre. Besides, it includes the analysis of the building and site as well as the outcomes of the interviews and observations. This is summarised in points of interest.

### 4. DESIGN CONCEPT

The fourth chapter, it the start of the design part of the thesis explaining the design hierarchy and providing a new programme for the building together with a conceptual design plan.

### 5. TRANSFORMATION DESIGN PROPOSAL

The fifth chapter entails a more thorough design including detailed plans of the transformation.

### 6. CONCLUSION & REFLECTION

Lastly, the sixth chapter answers the research question given in chapter one and reflects on the process, design and points of attention for further research and design in the field of this subject.

## 2. FRAMEWORK

### 2.1. Social centres

The next step it is get to know what a social service centre means and what it does for the Swedish society.

#### Social services - what do they do?

Social services provide a wide variety of help and support and can be seen as a tree (see figure 5) where every branch has smaller branches with more specific support. Therefore, it can be said that it is a complicated yet important matter. As unfolding the whole system is beyond the scope of my thesis, I will give a simplified explanation of the Swedish social services and I will dig deeper into one specific type of social centre I will be transforming.

Starting with the handbook and foundation for all social services, namely the "Socialtjänstlag" (SoL) which translates to the Social Services Act. The SoL describes the laws and regulations from how goals and tasks are met, to how data should be processed and documented. In general the services are responsible for providing care, support and service, giving information, advice, financial help and more to families and individuals in need of it. Overall, social services are designed to promote a healthy environment in a municipality. (Sveriges Riksdag, 2001) Furthermore, the "regeringen" (government) describes it as services which intend to provide support and help for people who are vulnerable or who are in difficult situations (Regeringskansliet, 2023). The diagram on the next page shows how social services operate using the SoL and which social services are available in Gothenburg (Göteborgs Stad, n.d.).

#### Sweden's social services history

Before going more into detail about how the social services provide help, it is interesting to give a brief overview of when they arose in Swedish society. There has always been some sort of care, but until the 19th century this was mainly community based. The first type of municipal led social care was "poor care" which arose in 1862. During the years after, the social care kept slowly expanding, but receiving such care was degrading and more focussed on

doing community work and not therapy. This led to the social services reformation between 1960 and 1970, which was an active debate about how social care could be drastically changed. This investigation ended in the SoL we know nowadays. First of all, they discarded the coercion of adults at the Sobriety Act and after that people started reaching out for help completely voluntarily. Furthermore, the care now started to get a more holistic perspective focussed on individuals which induced the flexibility of each treatment. They put emphasis on the voluntary character of the care and started normalising reaching out for help; someone who seeks help is capable of returning to "normal life". Moreover, the relation between social worker and client became more important since this would make the treatment more likely to succeed. Contradictory, more work became digitised which meant that the focus shifted to documenting it rather than talking. Around the 1980's, social services got divided into Individual and family services each with subcategories. This meant that specialisation started to take place which replaced the holistic view. Overall, the services have been growing and taking on more activities (Jönsson, 2018). Since the start of SoL, it has been frequently updated until 2001 and after that only minor changes have been added (SFS, 2022).

Numbers of Gothenburg:

905 social services businesses  
21873 employees

Types of social services:  
Child day care services

**Individual and family services**

Job training and related services  
Residential care



Figure 5: Conceptual representation of Social Services in Sweden.

Variety of social services in Gothenburg

Since social services are a rather broad subject, there is an abundance of them in Gothenburg alone. As said before, not all social services are about solving problems and supporting people in need for it. It also includes all day care for young children as well as companies who take care of residential buildings. Interesting is that the four categories mentioned at the top left have roughly the same amount of businesses.

Focus group for this thesis

This thesis will focus specifically on the branch of **individual and family services**. This branch covers most of the topics seen on the tree (figure 5). Overall, individual and family services is about providing advice, information and therapy for people in need of it.

Problems into potentials

A case study of ten different social services buildings has been conducted showing the current problems in architecture (Martinez-Conde & Agnesund, 2012). The overall outcome was the presence of a complicated power relation which is visible through architectural choices. Once the client steps into the building, their first impression is that they do not fit in society and that they are perceived as a "problematic individual". This feeling is created by the confined waiting rooms without any windows, uncomfortable furniture and sombre colours. Noticeable are the abundance of leaflets, notes and posters about the various problems of the people coming there, emphasising that they do not fit the "norm". Another important factor is the lack of privacy. This is found in the row like placement of the chairs, the open reception, in the size of the waiting room and the frosted glass corridors. The latter enables social workers to almost observe the clients while the clients do not know what is happening behind the glass. The last aspect that is mentioned is the lack of activating factors for both children and adults, creating boredom.

All of these aspects, however, can be transformed into possible potentials to upgrade social centers, creating a more inviting and inclusive atmosphere. This, in turn, can lead to improved social connections and a positive environment for personal growth and well-being.

## 2.2. Health Promotive Building Design

Before explaining how salutogenesis works in the built environment, it is valuable to understand the meaning of Health Promotive Building Design (HPBD), as salutogenesis is part of this broader concept. The first definition of HPBD was given by the World Health Organisation (WHO) in 1984 and states that health promotion is "the process of enabling people to increase control over, and to improve, their health" (WHO 1986, as cited in Green et al., 1999, p.7). This definition was later expanded by Norman (1986) to "the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health" (as cited in Green et al., 1999, p.7). Overall HPBD aims to create a healing environment and thus goes further than improving one's physical health (Miedema, 2020). Green et al. (1999, p. 8) explains the matter further by summing up six health promotion criteria:

- Encouraging public participation by individuals and communities;
- Taking a social and cultural perspective in understanding and responding to health issues and problems;
- Emphasising equity and social justice;
- Fostering intersectoral collaboration between healthcare organisations;
- Including physical, mental, social, and spiritual dimensions of health; and
- Focusing on enhancing health, not just on preventing problems

Miedema (2020, p.56) formulated four roles for healthcare architecture during the design project of Angered Närsjukhus in Sweden and touches upon the six criteria Green et al. (1999) made:

- Accommodating health promotive activities
- Supporting health promotive processes
- Symbolising health promotion visions
- Empowering people through the design process

Accommodating activities is seen as the primary strategy and involves the presence of educational kitchens, fitness equipment and spiritual places. This can be expanded according to the needs and wishes of social workers. The support of promotive processes includes flexibility in the use of the building, meaning that when there is need for it staff members can cross between divisions. Additionally, this support also includes the stimulation of healthy behaviour, by using the stairs for example. The third point is about using architectural elements to symbolise health. This translates to putting emphasis on the stairs as this symbolises physical health or having one entrance and reception as a symbol of intensive collaboration between different divisions. Lastly, using local building styles, in this case Scandinavian (wood, light colours and the presence of daylight), units the users of the building.

Because this thesis is not only about the architectural transformation, but also about the reprogramming of the system of social centres, these criteria and roles are highly relevant. Therefore, I will go more into depth on how to adopt these criteria and roles in chapter 3.

Figure 6 illustrates what is achieved by using these different criteria and roles. It illustrates the difference between a traditional, healthy and health promotive building based on Miedema's (2020) illustration. The illustration is adapted to make it fit to this project creating a health promotive social centre. A traditional social centre is primarily focussed on treating the disease. Whereas a healthy social centre has a more inward focus on the health of all user's of the building in an environmentally-friendly way. Meaning that nature passively starts playing a role in creating a healing environment. Lastly, a health promotive social centre has an external focus on increasing the health and well-being of the entire community, actively uses nature and implements salutogenesis. Therefore, this type of social centre aligns with the aim and goals of this thesis.

Lastly, Harris et al. (2002) distinguished five different design "features" of HPBD. I will use these four design features in this thesis (figure 7):

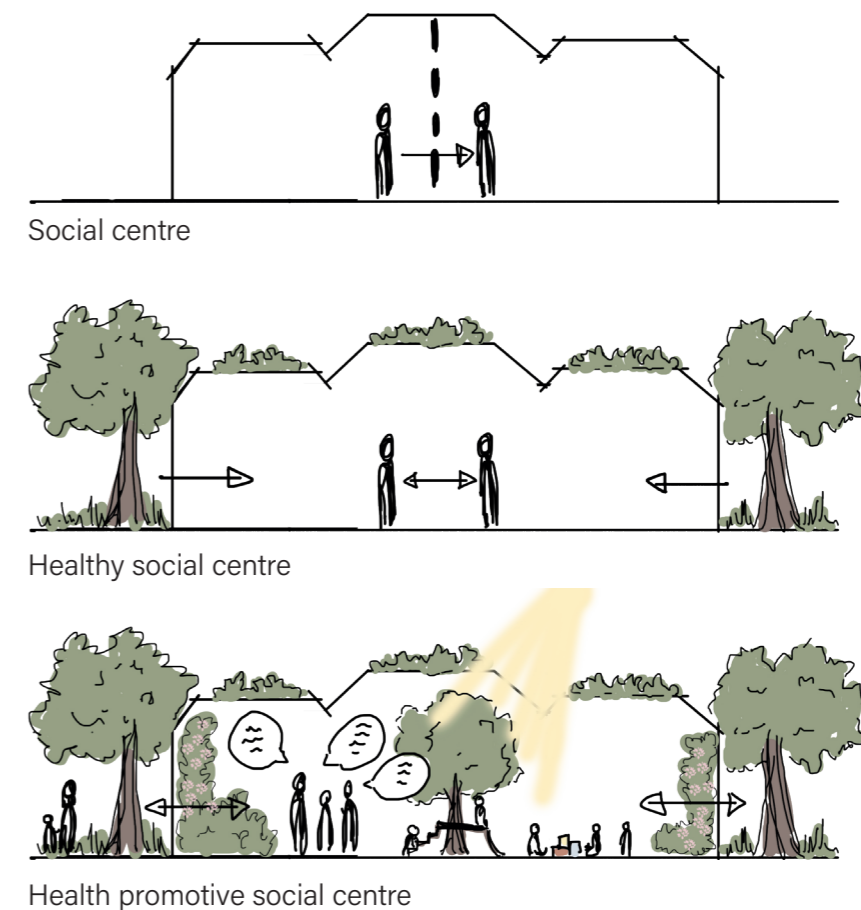
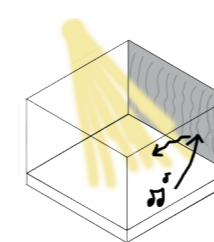
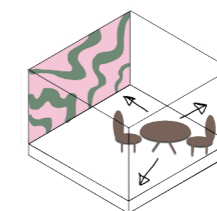


Figure 6: Visualisation of the differences between a social centre, healthy social centre and a health promotive social centre. This illustration is based on Miedema's (2020) illustration.



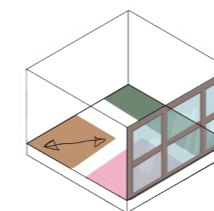
### Ambient features:

Include access to daylight, acoustics, indoor climate e.g.



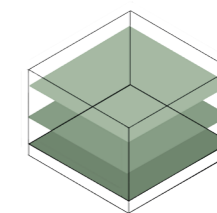
### Interior design features:

Include flexible elements such as finishings, furniture placement e.g.



### Architectural features:

Include permanent elements such as layout, room size, placement of windows e.g.



### Social features:

Include levels of social engagement (privacy, control access)

Figure 7: Visualisations of design features of Health Promotive Building Design. from Harris et al., (2002).

## 2.3. Salutogenesis

As mentioned in the previous chapter, salutogenesis plays an essential role in achieving HPBD. But what exactly does the term salutogenesis mean and what can it do in the built environment?

Studies on Indoor Environmental Quality (IEQ) and user health have been around for some years. These studies focused on identifying how to solve problems in the physical office environment such as the "sick building syndrome" which causes a range of health problems from allergies and headaches to concentration difficulties. Noticeable is that these studies all focus on the harm-causing factors, known as pathogenic aspects, leaving a knowledge gap on how to promote health issues and well-being. This caused the beginning of a paradigm shift to extend building and office design beyond prevention of diseases or solving discomforts to improving the quality of life (Forooraghi, 2020). Therefore, salutogenesis can be defined as "a health model that focuses on the origins of health instead of the causes of disease (pathogenesis)" (Antonovsky 1987 as cited in Forooraghi 2020, p.5).

Antonovsky developed the **Sense of Coherence (SOC) framework** which is part of the salutogenic approach. This concept is a "dispositional orientation that allows individuals to be more resilient to stressors in daily life, stay well and improve their health" (Galletta et al., 2019, p.2). Overall, it helps gaining an understanding of how people deal with everyday stressors and how they view life in general (Ryland et al., 1991). This is relevant for designing a working environment which is meant to be health promoting as for this thesis. SOC consists of three elements: **comprehensibility, manageability and meaningfulness**. Comprehensibility is about the ability to understand the nature of the challenges one faces. This understanding is essential to be able to cope with these challenges. The following one, manageability, is about the ability to identify suitable resources which can lead to the solution of the challenge the person is facing. Lastly, meaningfulness is the emotional element meaning that a

person looks at life seeing that stressors, which cause pain, are worthy of being coped with. Meaning that it gives the person the motivation to act on the stressor to positively transform it (Forooraghi, 2020 & Forooraghi, 2022). Applying SOC to the offices can help to find design characteristics that enable workers to cope with work related stressors which thus promotes their health (Forooraghi, 2022). Foroorahi (2020, 2022) and Roskams & Hyanes (2019) explain how these three elements are applicable to the working environment (see also figure 8):

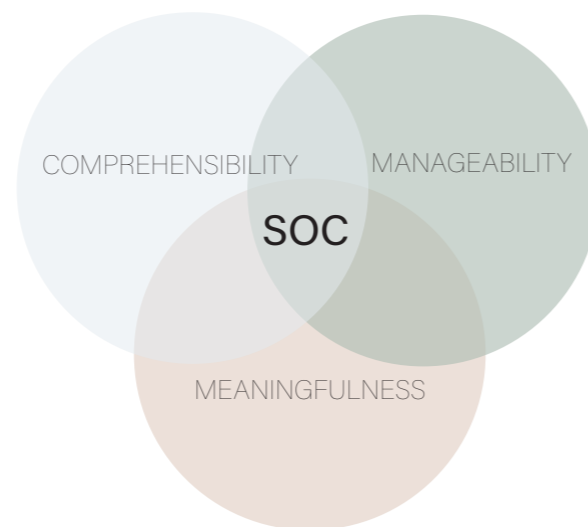


Figure 8: Visualisation of Sense of Coherence..

### Comprehensibility in the office spaces

High comprehensibility in the office is created by having an environment which is structured, predictable and explicable. Meaning that the employee understands the context, thus knows how to use the space, which enhances their confidence. These three elements are achieved by implementing good wayfinding, clear behaviour rules and having transparent communication. Wayfinding eliminates disorientation which causes anxiety, stress e.g. and exists of having a clear entrance, zoning and the use of materials and colour for navigation. Behaviour rules are connected to wayfinding in a sense that employees discuss the functions for each zone. Doing this amongst the users is found to be more effective than to impose the functions. Finally, the presence of communication, which is only applicable when the users need to relocate. It touches upon the employee's place attachment which needs to be respected when change is happening in the POE.

### Manageability in the office spaces

Manageability in the office is present once an employee feels in control of the workplace and induces happiness, job satisfaction, motivation and well-being. Control can be achieved in a variety of ways such as the possibility of regulating acoustic and or visual stimuli. Meaning that the employee has a say on the level of social engagement they want at a specific moment. Furthermore, participation in the design process is a means of providing control to the employees. This creates a feeling of belongingness which is beneficial for their well-being. The third point is having access to office resources which can be in the form of having personal storage spaces to adjustable chairs and desks. The latter is also beneficial for stimulating physical activity. By introducing means that induce exercise, the employee can cope better with stress. Since physical activity is very important for one's mental health (Paluska & Schwenk, 2012), I will talk more about this matter in the next paragraphs.

### Meaningfulness in the office spaces

The last element is seen as the most valuable in the office space (Roskams & Hyanes, 2019). Meaningfulness is when the employee feels that the stressors are worthy of investment, stimulating well-being, job satisfaction and the overall life meaningfulness. The main aspect, which I will be discussing more on in a later chapter, is biophilia. This innate tendency to connect with nature can be achieved by the use of natural features such as access to fresh air and daylight and natural materials, colours and plants. Meaningfulness is also accomplished by the place attachment which overlaps with the sense of belongingness in manageability and is about the presence of personal or communal items. It is said that this induces relationships with colleagues and makes the employee feel acknowledged in the office. Lastly, having a good working social environment is crucial for organisations and is dependent on the architectural layout and how spaces connect to each other.

Although there are a variety of ways to use salutogenesis, the SOC framework is seen as the foundation which should be incorporated in all salutogenic design strategies (Colenberg & Jylhä, 2021).

Colenberg & Jylhä (2021) summed up 59 interdisciplinary peer-reviewed papers on workplace design and what strategies work to positively influence the well-being of the employees. They summarised the strategies into four categories namely:

1. Design for comfort
2. Design for restoration
3. Design for social well-being
4. Design for healthy behaviour

Interesting is that Colenberg & Jylhä (2021) concluded that Design for comfort can merely be classified as part of the pathogenic approach. However, since they also mention this strategy to be the base for healthy workplaces, it can nevertheless be assumed that it is beneficial to be included. The main aim of Design for comfort is create a comfortable space which protects the workers from mental and physical stress. Design for restoration aims at supporting the recovery of physical and mental strain using biophilic principles. Therefore, this strategy already incorporates the element of "meaningfulness." The following strategy, design for social well-being, refers to the importance of social interactions with colleagues for one's well-being. It includes personalisation, territoriality and how an employee can regulate the amount of social interaction. An effective way of increasing the quality of relationships amongst colleagues is by introducing activities such as a cafe or farming (Spreitzer et al., 2019). Colenberg & Jylhä (2021) state that an open floor plan layout negatively influences the quality of relationships amongst employees. Lastly, design for healthy behaviour stimulates employees to do physical exercise during work hours which is crucial for both physical and mental well-being. This can be done by implementing standing desks and stimulating the use of stairs, as mentioned in "manageability." In addition, clear routes to the outdoors and having a central part in the building where most non-work related functions are (Colenberg & Jylhä, 2021).

To be able to apply the SOC framework in combination with the 4 strategies for a healthy workplace, design characteristics are needed. Table 1 on the next page shows an overview of the salutogenic theory where I summed up the characteristics which I found relevant to this project. They are categorised using Forooraghi

(2022) system dividing them into the following categories:

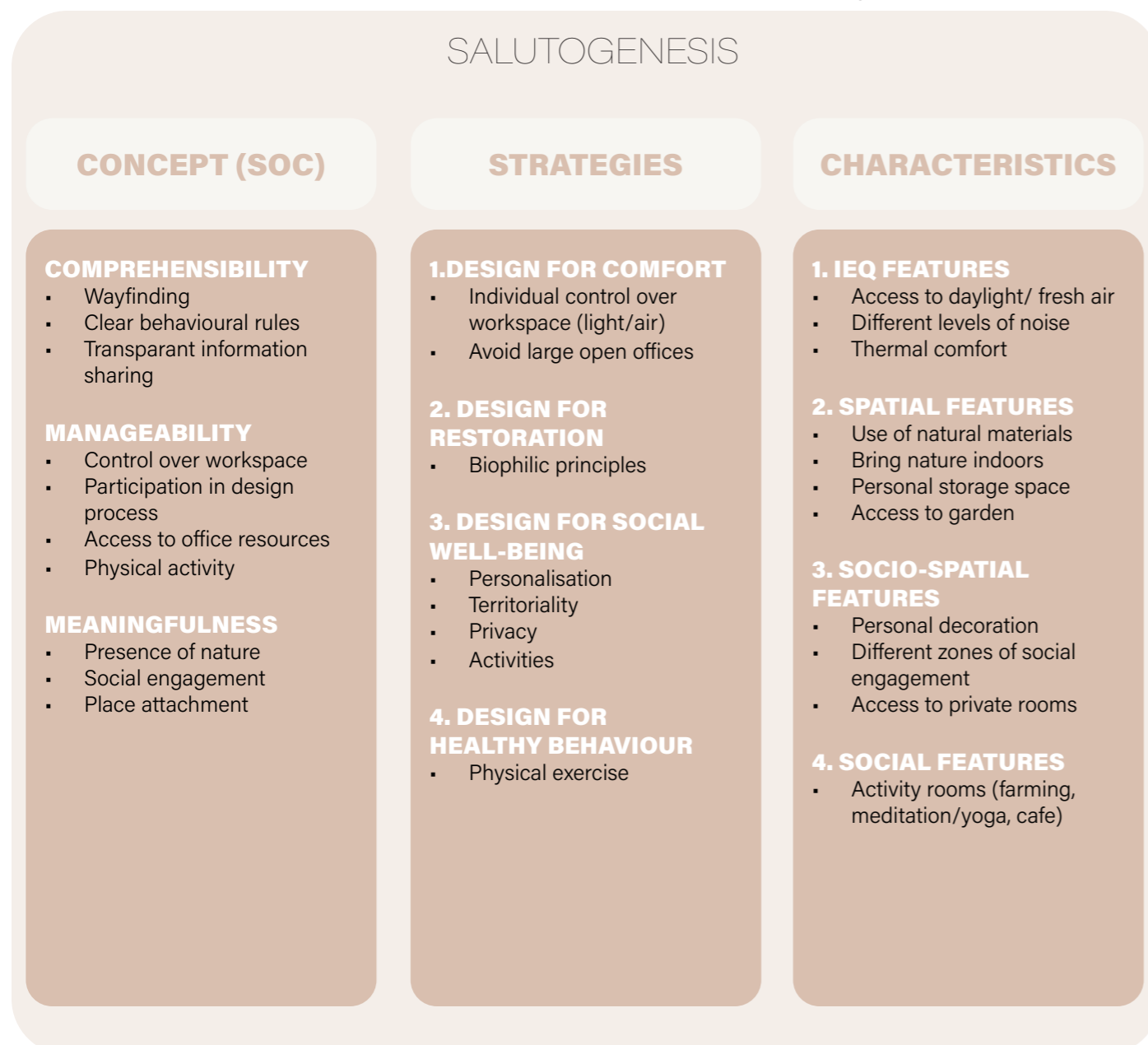
- Indoor environmental qualities features
- Spatial features
- Socio-spatial features
- Social features

IEQ features refer to the presence of an optimal environment in the office space. This is from thermal conditions, fresh air and access to daylight to acoustic and visual qualities (Forooraghi, 2020). Spatial features are about the physical layout and interior design choices in a workspace. Overall, it is about enriching the environment and providing storage space as well as providing options for physical activity

such as a garden path (Danko et al., 1990). Socio-spatial features are about topics such as sense of control, privacy and territoriality in the office. This feature involves personalisation, and zone planning to regulate levels of social engagement. Lastly, social features refer to the capacity of the working environment to interact with colleagues. A workplace should enable spontaneous interactions through the use of informal rooms.

These characteristics can be adapted to the specific needs depending on personal wishes of the employees and functions of the building. I will be using them as a guideline/starting point and I will adapt them to the chosen location for this transformation project later on in chapter 4.

Table 1: Summary of concept, strategies and characteristics of Salutogenesis.



## Reference projects

To get a clearer idea of how these salutogenic concepts, strategies and design characteristics translate into a design, I will mention some projects related to this topic. I will reason why I found them inspiring, how they do not relate/relate to my project and I will address their qualities and limits regarding salutogenic design.

### 1. Safehouse by Katarzyna Lech (design competition), 2021

The project (see figures 9 & 10) is about creating a space for homeless youth to come to in order to improve their quality of life and mental health. The building functions as a medium to let the users become part of a community again. It relates to this thesis, since the place functions as a refuge where youth can come together to grow their own food, to have activities together such as games and yoga and games all in order to improve their well-being. Furthermore, the project shows the importance of having different spaces with different levels of engagement and functions and shows the importance of having an enclosed space where the users feel safe. The main limit to this project is that they only use nature in its most simple form, meaning that besides having a plant nursery, there are no natural shapes created.

### 2. Alive + Well Wellness Center in Texas by Matt Fajkus Architecture, 2018

This Project (see figure 11 & 12) is about creating a space for holistic health where the architects focussed on establishing a wellness centre without having the traditional atmosphere of "going to the doctor's". This strongly relates to my project where I aim to shift the character of the building to become more inviting and positive. The wellness centre works with creating different types of relaxation rooms, such as beds, meditation and yoga rooms and saunas. They emphasise the importance of breaking through the rigidity of buildings. This is done by allowing light and open pathways rather than having closed corridors and inviting plants to grow within the building. Furthermore, they achieve this by allowing the walls to gently curve throughout the whole building. Lastly, they divided the waiting room into a more public part with a cafe and a more private part submerged with plants. These elements will be taken into account while designing the interior of the social centre.



Figure 9: Plant nursery by Lech in project Safehouse (2021) from <https://uni.xyz/projects/the-safehouse-desc-the-safe-house-is-a-pr>



Figure 10: Yoga space by Lech in project Safehouse (2021) from <https://uni.xyz/projects/the-safehouse-desc-the-safehouse-is-a-pr>

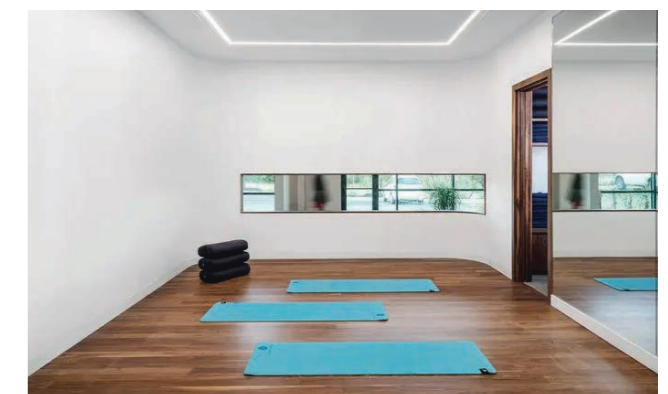


Figure 11: Yoga space by Matt Fajkus Architecture in project Alive + Well Wellness Center (2018) from <https://homeworlddesign.com/alive-well-wellness-center-matt-fajkus-architecture/>



Figure 12: Waiting room by Matt Fajkus Architecture in project Alive + Well Wellness Center (2018) from <https://homeworlddesign.com/alive-well-wellness-center-matt-fajkus-architecture/>

## 2.4. Biophilia

The term biophilia was introduced by the German psychologist Erich Fromm in 1964 as the "psychological orientation of being attracted to all that is alive and vital" (Fromm 1964, as cited in Barbiero and Berto, 2021). This definition has been adopted and reinterpreted by many researchers since, but they all come down to the innate love and connection for nature humans have.

However, the book "Nature and Culture rebuilding lost connections" by Pilgrim and Pretty (2010) explains how human's connection with nature has been lost during the modernisation and industrialisation of society in the last centuries. This happened because nature was no longer seen as a priority; humankind started to overlook the importance of it on their health. People started seeing nature merely as a means of recreational activities and saw more value in the exploitation of it. This resulted in an increasing separation with nature in fields of agriculture, manufacturing, education, healthcare, urban development and architecture (Kellert & Calabrese, 2015).

Nevertheless, it is not too late to rebuild the connection by actively integrating nature into our lives again. This is crucial since having the presence of nature has many benefits in our day to day life. It has a positive influence on one's physical, psychological and social well-being. In the case of a workspace, natural elements reduce stress, improve motivation, social interactions and the overall quality of life (Heerwagen & Hase, 2001). Furthermore, Kellert (2008) explains the correlation between having contact with nature and a healthy development of a child. These benefits are highly relevant in a high stress environment such as a social centre especially when it provides help for children.

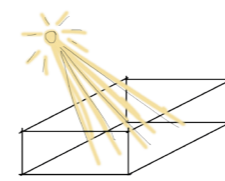
The design strategy connected to biophilia is biophilic design. "Biophilic design seeks to create a good habitat for people as a biological organism in the modern built environment that advances people's health, fitness and well-being" (Kellert & Calabrese, 2015, p.6). This is done by integrating the following principles:

1. *Biophilic design requires repeated and sustained engagement with nature.*
2. *Biophilic design focuses on human adaptations to the natural world that over evolutionary time have advanced people's health, fitness and wellbeing.*
3. *Biophilic design encourages an emotional attachment to particular settings and places.*
4. *Biophilic design promotes positive interactions between people and nature that encourage an expanded sense of relationship and responsibility for the human and natural communities.*
5. *Biophilic design encourages mutual reinforcing, interconnected, and integrated architectural solutions.*

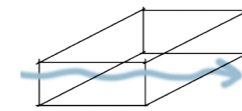
These principles form the foundation of biophilia's practice and even though they are not specific design implementations, one needs to have these five principles in mind while designing.

Regarding design strategies, Kellert and Calabrese (2015) made a framework consisting of three experiences which each have their own design attributes. Starting with the **direct experience of nature** which entails the actual, physical contact with natural elements in the built environment. Think of the presence of plants and water. The second experience is the **indirect experience of nature** which entails contact with the representation of nature, meaning images or natural processes, patterns and shapes. This is found in pictures, art, ornamental objects and natural materials. The last one is the **experience of space and place** and entails natural spatial features such as prospect and refuge and wayfinding. After reading into these attributes I made a selection of attributes which are applicable and most relevant to this transformation project as can be seen in figure 13. However, it is important to mention that some of the attributes such as biomimicry are not included in the framework I created since these are beyond the scope of this thesis. This does not mean that they are not important for creating a biophilic environment and may therefore be highly relevant for other projects.

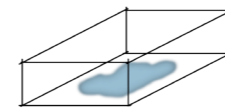
## DIRECT EXPERIENCE OF NATURE



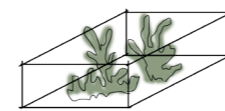
**Light:** Natural light is essential for one's well-being, understanding the time of day and wayfinding. Playing with patterns, light and shadow together with materials such as glass walls creates an aesthetically appealing atmosphere.



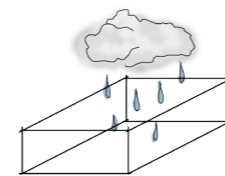
**Air:** Natural air circulation is both important for psychological and physical health; it stimulates comfort and productivity and is achieved by using operable windows.



**Water:** The presence of water is stress relieving and enhances performance and overall health. The most desirable way of implementing water is by incorporating one's senses, especially sound and motion.

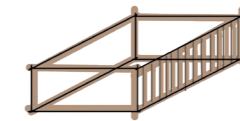


**Plants:** Abundantly bringing in plants and blooming flowers is the most direct way of fading the border between the built and natural environment. It reduces stress, stimulates physical health, improves comfort, and enhances performance and productivity.

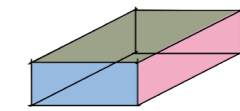


**Weather:** Experiencing weather such as rain or sun rays first hand works stimulating for the brain. This can be achieved by operating windows, balconies e.g.

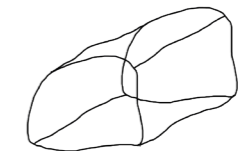
## INDIRECT EXPERIENCE OF NATURE



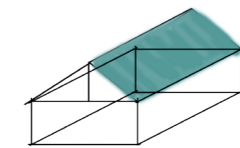
**Natural materials:** Using natural materials evokes positive visuals and tactile reactions which is hard to achieve in artificial materials. Some materials are wood, stone, wool and cotton and can be used for interior and exterior design.



**Intentional colour use:** Colour has been important for wayfinding since the beginning of humankind. All colours can be found in nature and therefore it is beneficial to use a wide variety of them in designs, but in an intentional way.

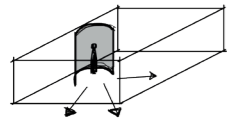


**Naturalistic shapes and forms:** Integrating naturalistic shapes and forms helps transform a space from having a static character to a more dynamic character mirroring a living system.

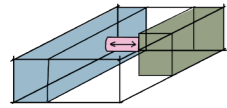


**Age, change, and the patina of time:** People have a positive response to seeing the changing character of nature in the built environment. This can be achieved by using natural materials that weather over time.

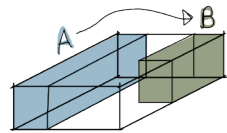
## EXPERIENCE OF SPACE AND PLACE



**Prospect and refuge:** This principle is coming from the beginning of humankind. Prospect means having an overview on the surroundings to spot opportunities and danger whereas refuge means the presence of shelter for safety.



**Transitional spaces:** In order for people to successfully find their way and to understand physical connections, transitional spaces such as hallways are important.



**Mobility and wayfinding:** The ability to move freely and to understand how to get from A to B is important for people's well-being and comfort and decreases anxiety.

Figure 13: Visualisations based on selected relevant Biophilic design strategies based on Kellert and Calabrese (2015).

### Reinterpretation Biophilia

This thesis aims to use the term biophilic design in its purest form meaning that I will be taking a more critical view upon the presented framework and reference projects. This means that the design will go beyond the ornamental aspects of the term in order to go back to the essence of Biophilia.

### Well-Certificate

The Well-Certificate (N.d.) is a tool to measure specific points in architecture. It also dedicated a part to Biophilia in order to create a way to make this theory measurable. This tool is very important to take into account, since it helps

designing a space which is truly biophilic. Meaning that it also comes to percentages, rather than simply adding a few plants in a room. It consists of two parts: Biophilia I - Qualitative and Biophilia II - Quantitative.

### Biophilia I - Qualitative

#### Nature incorporation:

The presence of environmental elements, lighting and a spacial lay-out.

#### Pattern incorporation:

The presence of using natural patterns throughout the design.

#### Nature interaction:

The possibility for human-nature interactions within the building as well as in the plot boundaries.

### Biophilia II - Quantitative

#### Outdoor Biophilia:

At least 25% of the project site features accessible landscapes (wild nature or gardens/ rooftop gardens) and 70% of this area needs to be covered by greenery.

#### Indoor Biophilia:

At least 1% of floor area needs to be filled with potten plants of plant beds. Regarding green walls this is at least 2% of floor area (or the biggest available wall).

#### Water feature:

The presence of at least one water feature of 4 m<sup>2</sup> for every 9290 m<sup>2</sup> in project. Note that this only counts for projects bigger than 9290 m<sup>2</sup>.

For this project, exact percentages will not be implemented, however it is used as a guideline to keep in mind while designing. It is important to show that mathematical tools exist for biophilic architecture and this could be relevant for other projects to take into account as well. In this thesis, the amount of greenery used, depends on the available space since this is about a transformation.

## Reference projects

There are a wide variety of architectural projects focussed on biophilia which are inspiring to take into account for this project. I will present some that stood out to me, how they do not relate/relate to my project and I will address their qualities and limits regarding the biophilic design strategies.

### 1. YingYang Rehabilitation Centre in Oslo by Daniella Ljahh (design competition) 2022

The project (see figures 14 & 15) is about combining two forces in the world, yin and yang meaning nature and man-made buildings, which resulted in a rehabilitation centre for adult orphans in Oslo (Ljahh, 2022). Nature is used as a means of therapy and to increase the visitor's well-being and therefore relates to my project. Furthermore, this project shows how to incorporate biophilic principles while being located in an urban context like this thesis. The principles include a green roof which can be used as a place for relaxation while preventing heat loss. The interior and exterior of the building have round shapes and interior courtyards are used to optimise daylight. The healing qualities of the centre include meditation rooms facing the South, a gym, pool, sauna, restaurant, greenhouse for farming and a cooking workshop space. These different activities create different levels of engagement in order for the visitors to have the freedom to choose to do something private or social. Lastly, every floor up has more intimate private functions which creates easy wayfinding. The main limit with this project is that the colours, exterior and composition make it feel institutional, which is not optimal for creating a safe space.

### 2. Uogu slenis in Lithuania by NG Architects, 2022

Although this building (see figure 16 & 17) might not appear biophilic at first glance, it connects to nature in another way. This kindergarten has the natural shape of a honey comb and offers a safe inward focused courtyard. The architect describes that by using this shape, the children have a dynamic view towards the natural surroundings from every angle in the building. This way of connecting the user with nature is heightened by the use of glass facades which block the view as minimal as possible. Since this thesis also entails the design of extra building modules, this natural shape could form the base of it. Note that besides the shape and connection through the windows, this building lacks crucial natural elements to be called biophilic.



Figure 14: Exterior of YingYang Rehabilitation Centre by Ljahh (2022), from <https://uni.xyz/projects/y-i-n-y-a-n-g-rehabilitation-centre-desc>



Figure 15: Green roof of YingYang Rehabilitation Centre by Ljahh (2022), from <https://uni.xyz/projects/y-i-n-y-a-n-g-rehabilitation-centre-desc>



Figure 16: Honeycomb shape by NG Architects in project Uogu slenis (2022), from <https://ngarchitects.eu/kinergarten/>



Figure 17: Glass and wooden facade by NG Architects in project Uogu slenis (2022), from <https://ngarchitects.eu/kinergarten/>

### 3. Kindergarten in Guastalla by Mario Cucinella Architects, 2015, Italy

This kindergarten project (figure 18 & 19) aims to use the environment as a "third educator". The design is an interaction between architecture, pedagogy, psychology, and anthropology. They actively used aspects of architecture, such as shape, layout and sensory experiences, to positively influence the children's development. The organic wooden structure is a resemblance of the womb which creates a safe environment for the children to fall, stand up and thus grow. These aspects relate to my project since I aim to create a safe environment where young people come to heal. However, it relates less to my project in a sense that it is only focused on the children and not on the teachers. Other qualities are the use of natural materials and colours which are used to soften the indoor-outdoor connection. The sensory garden is the part that jumped out most since they used the landscape to create an interactive journey which is not only beneficial for their development, but also for their well-being (MCA, 2015).

### 4. Limits of existing biophilic offices

It is also important to mention the limits biophilic designs have, especially regarding offices. Noticeable is that many of these designs only work with a handful of the biophilic attributes and call it "biophilic". However, is this enough to rightfully use the term biophilia? Figure 20 shows "IT'S Biofilia Office" in Brazil by IT'S Informov's architects (2019) and is an example of this. They used wood to create a grid structure where the plants grow in and have different bright coloured murals. Even though these are part of Kellert's (2015) biophilic attributes, harmony is missing. Together with the open floor plan lay-out, the design causes sensory overload.

Another example is Redesign Health in Manhattan by Cactus (n.d., figure 21). This transformation project focused on creating a so-called "living wall" which only consisted of potted plants on a metal framework. Furthermore, they built smaller, more private rooms which look identical to any other office, but with one plant. Although the intention is right, this is not an effective way of using biophilia to reconnect the employee with nature.

This being said, this does not mean that they are bad projects. However they could design with a more thorough and thoughtful approach towards biophilia to be more effective in my opinion.



Figure 18: Open interior Kindergarten by MC Architects (2015) from <https://www.mcarchitects.it/en/projects/nursery-school-the-whale-guastalla>



Figure 19: Open exterior Kindergarten by MC Architects (2015) from <https://www.mcarchitects.it/en/projects/nursery-school-the-whale-guastalla>



Figure 20: Sensory overloaded "biophilic" Office space by IT'S Informov (2019) from <https://itsinformov.com.br/en/noticias/its-aposta-em-biofilia/>



Figure 21: "Green wall" in "biophilic" office by Cactus (n.d.) from <https://www.cactus.is/rh>

### 3.1. Speculative reprogramming of social centre

This thesis is not only about the physical transformation of a social centre, but also interferes with the system of social services, in specific individual and family services. Therefore, a speculative reprogramming has been made of what I think would improve the function of the centre. In "Framtidens Socialtjänst" (Future Goals of SoL) they write about the goal of "preventing the need for help", and this is highly relevant since this is related to the salutogenic approach. The goal explains that social service activities should focus on the prevention of support as well as the prevention of inequality, segregation and thus make all citizens feel included in the society (Ahlström 2019). Since the SoL aims to shift its paradigm from solving to preventing, the way a social centre looks like, needs to be changed too. A social centre for individual and family services has the stigma of a place one goes to when one does not fit in society with its behaviour; that person will feel that something is "wrong" with them. The building mirrors this because of its sombre and institutional atmosphere. A study on "socialkontors väntrum" (Agnesund & Martinez-Conde, 2012) shows this already starts in the "väntrum" (waiting room) when one enters the centre. Frequently, there is no one at the reception who friendly welcomes the person, there are no windows or activating factors which leads to anxiety and boredom. Furthermore, the rooms look empty, stripped and lack comfort. There is no feeling of safety because of the way the chairs are positioned, usually close together or even in a line. Noticeable are the leaflets and posters telling about all sorts of problems the people coming there suffer from. This sets the tone and makes the clients feel like a problem, like they do not match the norm. Besides, the cold, strict interior is also not inviting for the social workers to be in the whole day.

Both the goal of preventive care and changing the negative character of the place (described above) can be tackled by transforming the social centre into a safe space. In this thesis this will be achieved by the following four strategies. These strategies are based on the literature research and help achieving the mentioned

goals.

#### 1. Combine with social functions

This entails with connecting the social centre to other social services such as a community centre (aktivitetshus) and a family centre (familjecentral). Sweden has been a pioneer in the latter and is therefore well established in the municipality. Family centres are for children and families to go to, to promote health and well-being and prevent social exclusion. The goal is to support parenthood and to help children find their place in society and on top of that the centre also functions as a meeting point for families. By combining the family centre and the social centre, the negative annotation disappears and children of young age do not associate social centres with "there is something wrong with me".

#### 2. Add public functions

The second method of changing the character to become more positive is by making the building feel more accessible. This is done by adding public functions such as a cafe and a public library and study space. As written in 2.1. this enhances the feeling of a well connected community and helps bringing people together to form new relationships.

#### 3. Exceed traditional therapy

By introducing more active ways of therapy such as farming, doing sports or meditation in combination with the presence of nature and thus going beyond traditional passive therapy (talking, counselling, informing), could be the key of improving the quality of life. This could change the stigma of going to therapy and therefore shift the paradigm from negative to positive.

#### 4. Quality over quantity

Lastly, since this project is about creating healthy workspaces, it is important to prioritise quality over quantity. Meaning that the amount of employees per square meter is highly relevant for creating a space which supports one's well-being and improves one's work flow.

Thus by taking these four strategies into account while designing a space would create a safe space for clients, creates a point where the community comes together and creates a healthy and positive working space.

### 3.2. Choosing Location

The next step is to choose a relevant location for this thesis to transform. The map below (figure 22) shows all the individual and family services in Gothenburg as well as the family centres and community hubs. The latter two are marked since I explained in 3.1. that having these functions nearby, is beneficial to create a healthy safe and inviting social preventive care centre. The map also shows the four possible locations I chose from, since these locations

were the most applicable to this thesis according to the research in chapter 2. On the next page I will explain their qualities and the final choice. Note that all of the social centres would be interesting to transform but are not as relevant for this thesis.

Figure 22: Map of Gothenburg with marked locations



In order to find the most suitable location to do this thesis, I used the following criteria:

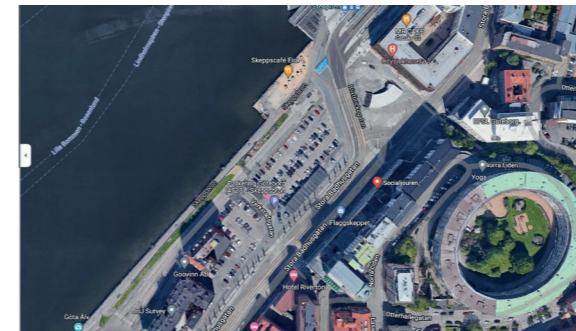
**Outdoor opportunities:** Presence of available space around the property which can be included in the design, since having an outdoor space is important to achieve an oasis.

**Challenging site:** It is important to show that a project like this can take place in whatever surroundings since not all plots will have the luxury of having the most optimal location.

**Type of social centre:** I am more interested in working with families and children since this fits the reprogramming of the social centre.

**Possibilities surrounding buildings:** Is there a family centre and/or a community centre close by?

## 1. Stora Badhusgatan 14



### Outdoor opportunities:

The building is located close to a large parking lot next to the water which creates interesting design opportunities with the waterfront.

### Challenging site:

This building is challenging because it is part of a row building block which makes it harder to transform the outside. Especially since it is located on a higher floor and there are diverse functions in the floors below it.

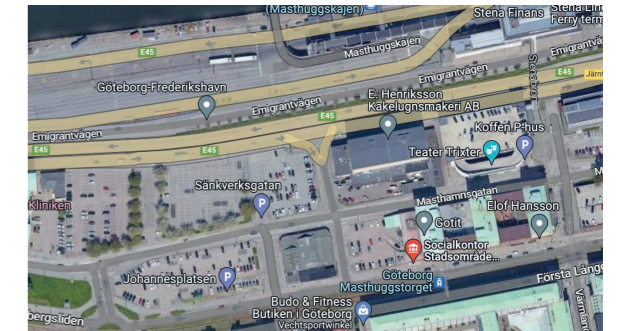
### Type of social centre:

This centre provides emergency assistance (including during the night) about homelessness, violence, abuse or if you suspect someone is harming a child.

### Possibilities surrounding buildings:

Since this social centre is located in a bigger complex, there are more social functions present.

## 2. Första Långgatan 21B



### Outdoor opportunities:

The building is located close to a large parking lot next to the water which creates interesting design opportunities with the waterfront.

However, it is located in a busy harbour part where the parking might all be necessary.

### Challenging site:

It is built between a busy road, where also the tram goes, and the harbour for ferries. This makes it a very busy location.

### Type of social centre

The centre provides help when one has a complicated family situation, is being threatened or beaten, anger or alcohol/drugs issues.

### Possibilities surrounding buildings:

Since this social centre is located in a bigger complex, there are more social functions present.

*\*All pictures are retrieved from Google Maps*

### 3. Lergöksgatan 2A



#### Outdoor opportunities:

There is a spacious parking lot, with relatively few parking places in front of the building which has great potential to be turned into a therapeutic garden which is a valuable addition to the design. However, the motorway runs along the back of the building, which results in less outdoor space all around.

#### Challenging site:

The building is located next to a motorway, is further away from greenery or water and has a large busy supermarket at the South side.

#### Type of social centre:

This centre hosts help for parents, children and youth who are caught up in a difficult family situation or know someone in the family who is at risk or is getting hurt. Furthermore, when someone has experienced or witnessed abuse/violence, has an alcohol/drugs addiction or suffers from a mental illness.

#### Possibilities surrounding buildings:

The building perpendicular to the centre adjacent to the same parking lot is an "aktivitetshus" (activity centre). Furthermore, next to this "aktivitetshus" there is a public pool/spa and both could be interesting to collaborate with. Lastly, there is a "familjecentralen" close by and as mentioned before, it would be interesting to see how these could work together.

### 4. Bohusgatan 15



#### Outdoor opportunities:

The building is enclosed by other buildings, tram lanes and roads. It does have a courtyard.

#### Challenging site:

The building is easily accessed, has a central location and is not connected to other buildings.

#### Type of social centre:

The centre provides help when one has a complicated family situation, is being threatened or beaten, anger or alcohol/drugs issues.

#### Possibilities surrounding buildings:

The building is very centrally located and has many diverse types of buildings around it such as the Ullevi stadium.

All four buildings presented have the potential to be transformed for this thesis. However, option 3 forms the most interesting base for a transformation regarding building and location. Together with personal interest in a child and youth centre and the opportunity to connect this social centre with a family centre, option 3 Lergöksgatan 2A will be chosen.

### 3.3. Site analysis

The site analysis helps gaining an understanding of how the chosen plot looks like and how it spatially functions. In figures 23-26 one can see how the neighbourhood is laid out. The social centre is located on a long "strip" with public functions such as a community hub, restaurants, gyms, a pool e.g. Noticeable is that the overall character is grey since this "strip" only consists of buildings and redundant parking spaces. When compared to other parts of the neighbourhood, the lack of natural elements becomes even more clear. This is enhanced by the presence of one of Gothenburg's busiest motorways adjacent to the strip.

Furthermore, the surrounding neighbourhood has multiple development projects for apartment complexes, especially to the North-West of the plot.

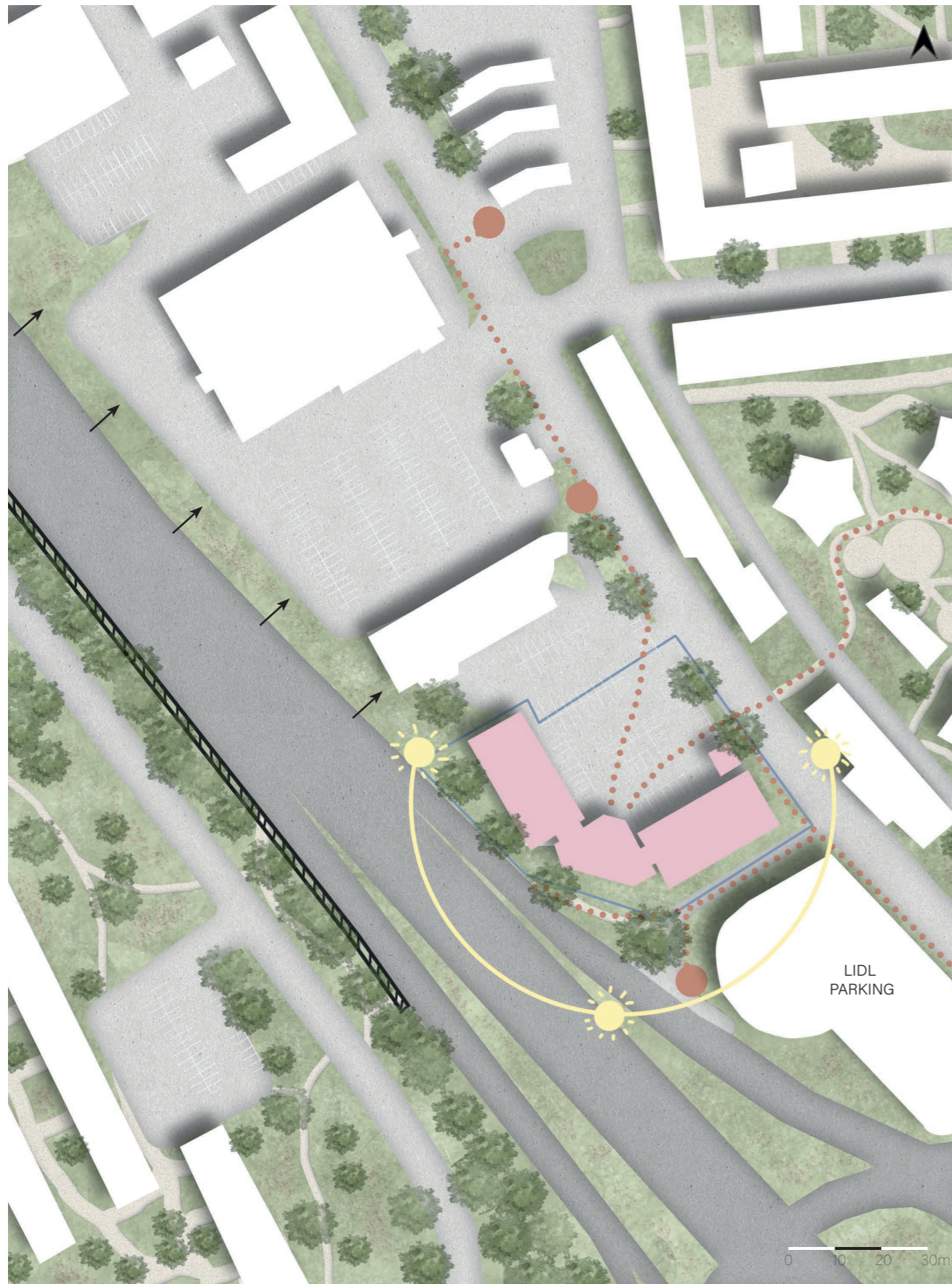
Regarding the accessibility, the plot is in walking distance of the shopping centre Frolunda Torg (5-10 min walk) and has different bus stops available as can be seen in figure 25. Furthermore, as said before there is a motorway adjacent to the plot at the west side. Due to the lack of trees or any type of sound barrier, the strip is uncomfortably loud and reaches between 70-80 decibel. Noticeable is that the west side of the neighbourhood has a sound barrier and an abundance of trees.

Figure 24, also shows the redundancy of parking spaces from closer up. The parking spaces are most of the time unoccupied since the plot is easy to reach via public transport. In addition, a year ago, the municipality built a supermarket to the South of the plot with a four story parking garage on top. This offers the ideal place for parking in order to bring nature back into this strip. In figure 25 and 26, one can see the height of the surrounding buildings, as well as how the plot and facade look of the existing building.



- |                  |                  |
|------------------|------------------|
| 1. SOCIAL CENTRE | 4. POOL          |
| 2. FAMILY CENTRE | 5. GYM           |
| 3. AKTIVITETSHUS | 6. FROLUNDA TORG |

Figure 23: Aerial image from Google Maps showing neighbourhood of chosen social centre.









-  Social centre & plot boundary
-  Sun path
-  Bus stops
-  Pedestrian & cycle route
-  Sound barrier
-  Incoming noise route

Figure 24: Analysis map of surroundings of chosen social centre Lergöksgatan (1:1500 A4).

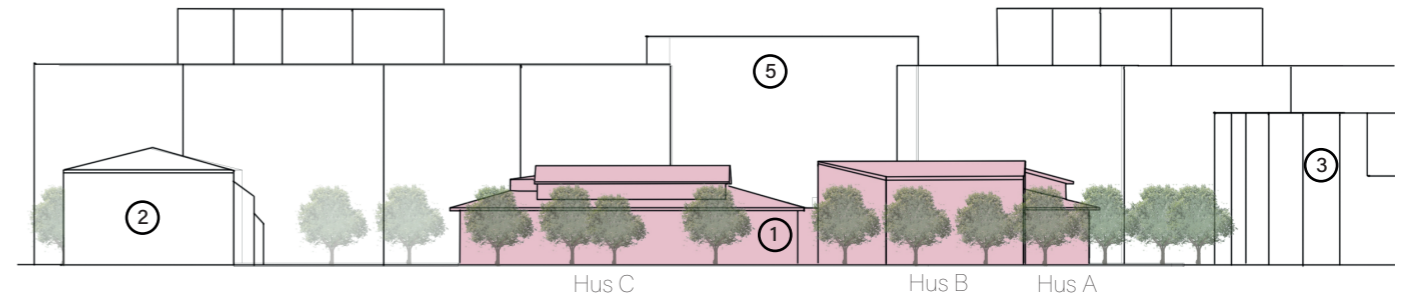
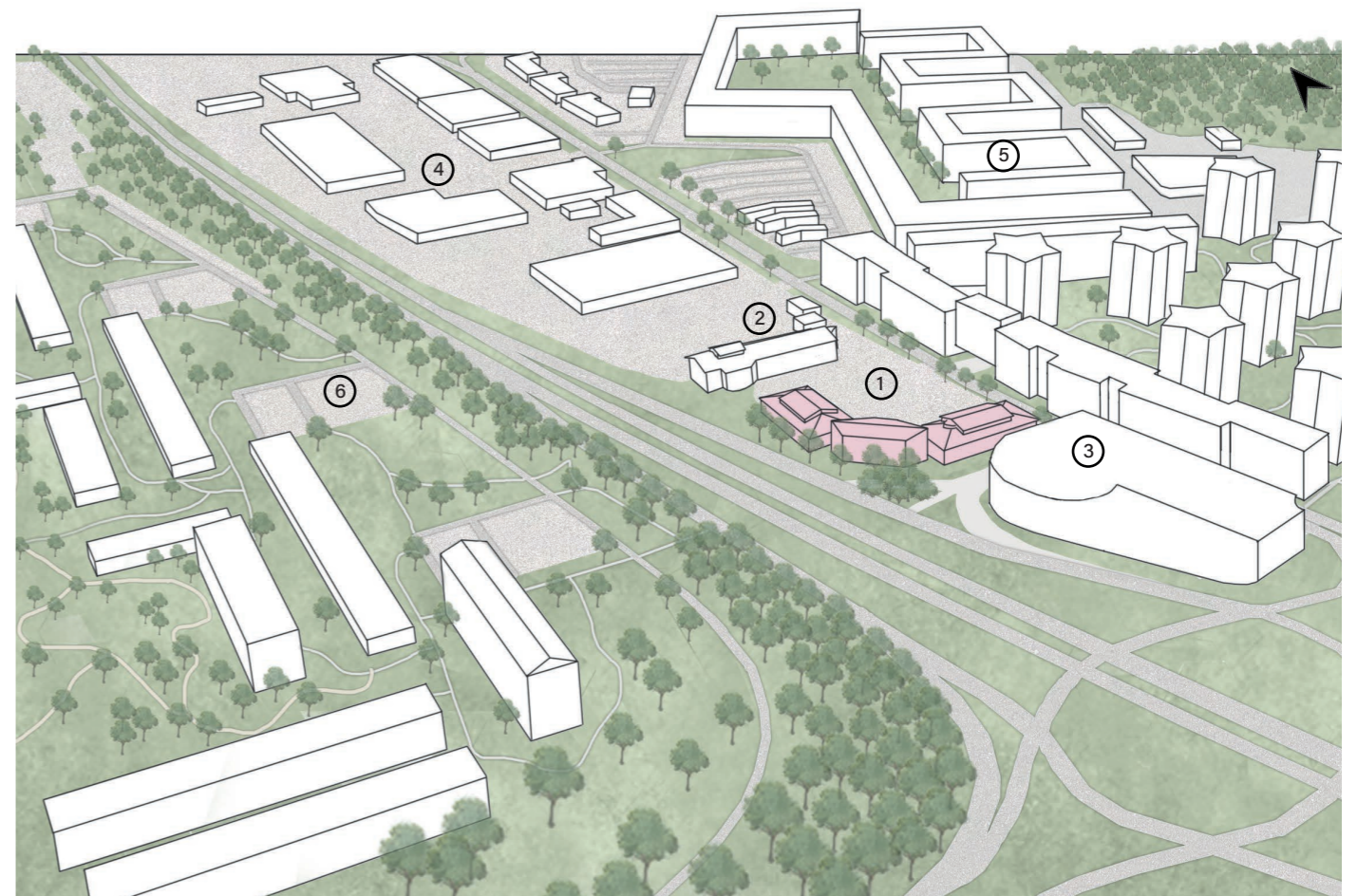
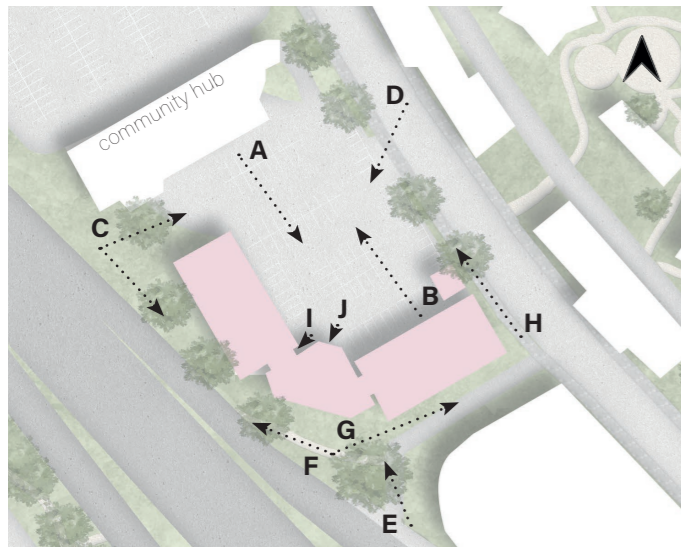


Figure 25: Section existing surrounding. Showing how the high rise apartments, community hub and four story garage and Lidl, enclose the social centre Lergöksgatan (1:1000 A4).



-  Social centre
-  Community centre
-  Parking garage & Lidl
-  The "grey strip"
-  High rise residential area
-  Residential area surrounded by trees

Figure 26: Location social centre Lergöksgatan and surrounding environment with characterising "grey strip"



The pictures below show the exterior of the building and its plot. As one can see, and what is described before, the plot is characterised by the greyness of parking spaces with a few trees on the grass strip at the back side of the building facing the motorway. The plot has currently no opportunities of eating outside or using the space in any other way. Lastly, the building's exterior is characterised by its red brick and copper roof.

The community centre, shown in photograph B, C and H, which shares the parking lot with the social centre is used for daily activities for the neighbourhood. It's mostly used for elderly and disabled inhabitants of the neighbourhood.

The illustration (figure 27) to the right shows what the facade of the building looks like from close up. The main elements are the brick character, the white framing around the windows and the copper roof. Because of the way the windows have a wide white frame and the brick sections in between, the building has a strong horizontal character to it.



Figure 27: Facade existing situation show the horizontal character due to the white windows and brick strokes.



A. View towards property and grey parking lot



B. View towards Aktivitetshus (Community hub)



E. View from bus stop towards property



F. View behind property facing motorway



G. View between Lidl and property



C. View towards property and grey parking lot



D. View towards property from the road



H. View from pavement



I. Detail of glass corridors connecting the three parts of the building



J. Detail of glass entrance and waiting room

\* All pictures are self-taken

### 3.4. Building analysis

The following figures 28-31 show how the social centre is currently used. The building is built in 1990 and is located in a four story building, including a basement. It consists of 3 parts, *Hus A*, *Hus B* and *Hus C*. Because of the symmetry, there is a strong geometry in the architecture which is hold together by the middle building, Hus B. Hus A and C are mainly used as office spaces and have a corridor based lay-out. Every floor has a small open breakroom in the middle of the corridor.

Figure 28 shows the basement which has been renovated in 2013 in order to put in an archive for the documentation. Note that this floor will not be redesigned since it works for its primary function.

Hus C has more central and public functions on the first floor, namely a waiting room, reception and intake rooms (figure 29). The waiting room has a very high ceiling making it a very open and exposed room.

The second floor (figure 30) is primarily used as office spaces where the majority of the rooms are similar in size. On this floor there are two small balconies which are, due to their size, mainly used as natural ventilation.

Lastly, the third floor (figure 31) which has some office spaces in Hus B and C, whereas Hus A is merely an attic used as extra storage space. Furthermore, the two main balconies are located on this floor. Interesting to mention is that whereas on the other floors the three parts where connected via glass corridors, there is no connection between them on the third floor. Therefore it is not possible to access Hus A and C via Hus B.

On page 49, one can see three different sections of the current situation. Because of the similar lay-out of Hus A and C, only one is shown. The sections primarily show the small, identical office rooms which are around 15 m<sup>2</sup> each.

Due to that a site visit into the building was not possible, it is unclear which entrances are used and how. Thus they are merely shown.

#### NUMBERS EXISTING BUILDING:

Social centre size:  
**3680 m<sup>2</sup>**















Office room size:  
**15-20 m<sup>2</sup>**

Office room amount:  
**100**

Total amount of office space:  
**1700 m<sup>2</sup>**

\*Number of employees Social centre:  
**100+**

\*Note that the exact amount of employees can not be confirmed since the Social centre does not release this. This number is based on answers from the survey.

	Office space
	Conference room
	Mail room
	Balcony
	Break room
	Waiting room
	Multipurpose room
	Archive
	Rest room
	Storage space
	Lift
	Reception
	Intake room
	Electric room

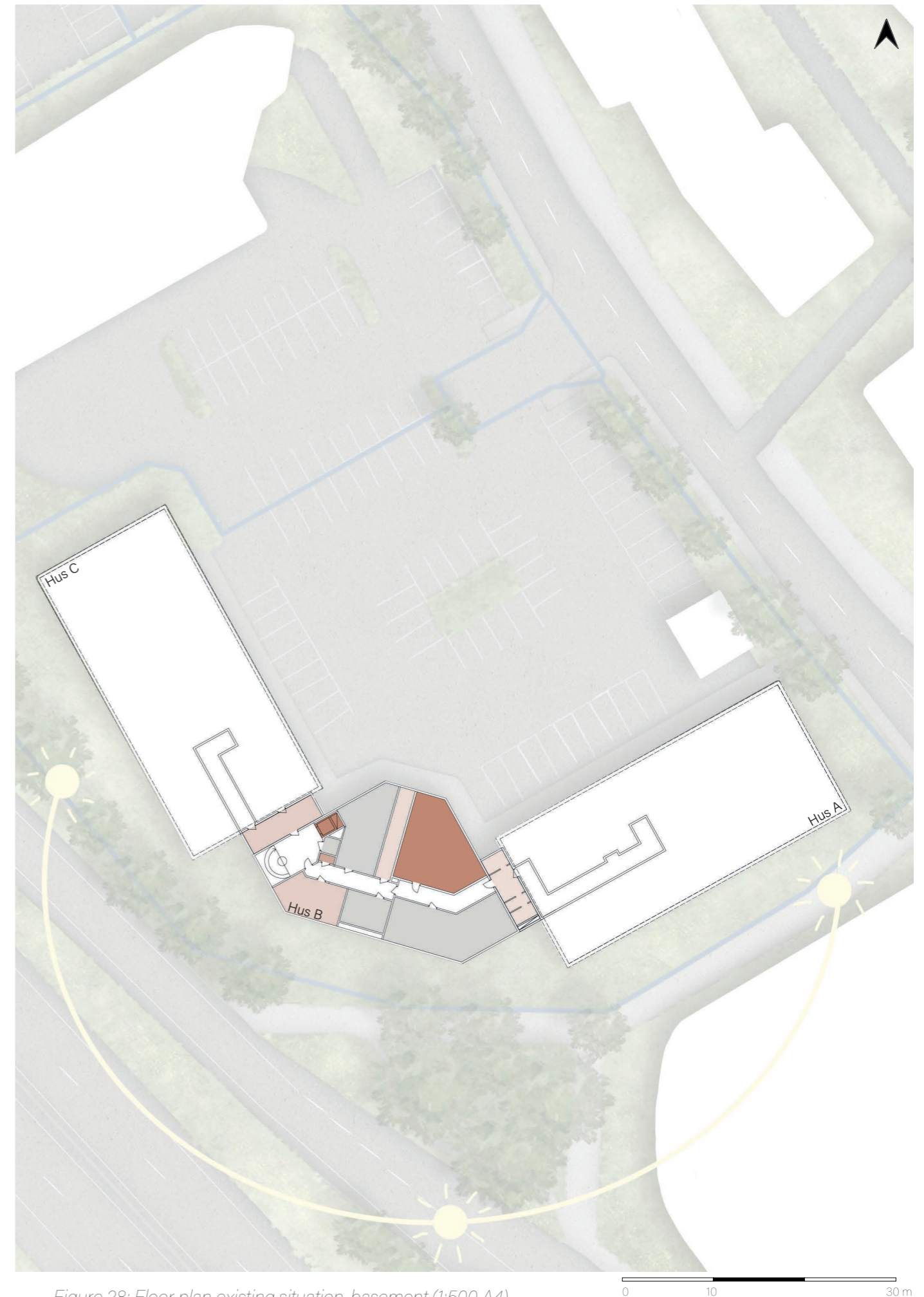


Figure 28: Floor plan existing situation, basement (1:500 A4).

0 10 30 m

1:500 on A4  
43

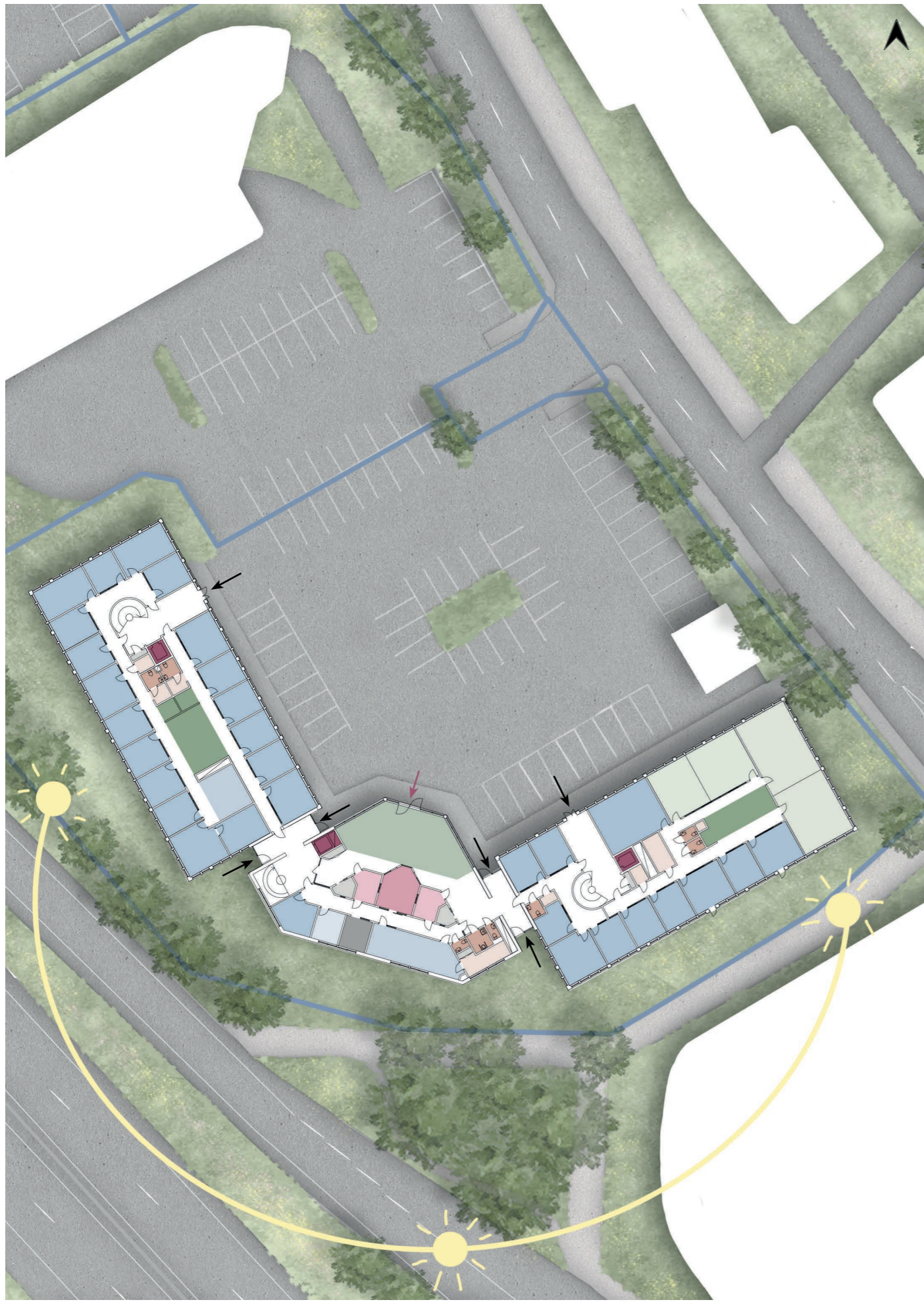


Figure 29: Floor plan existing situation, first floor (1:500 A4).

0 10 30 m

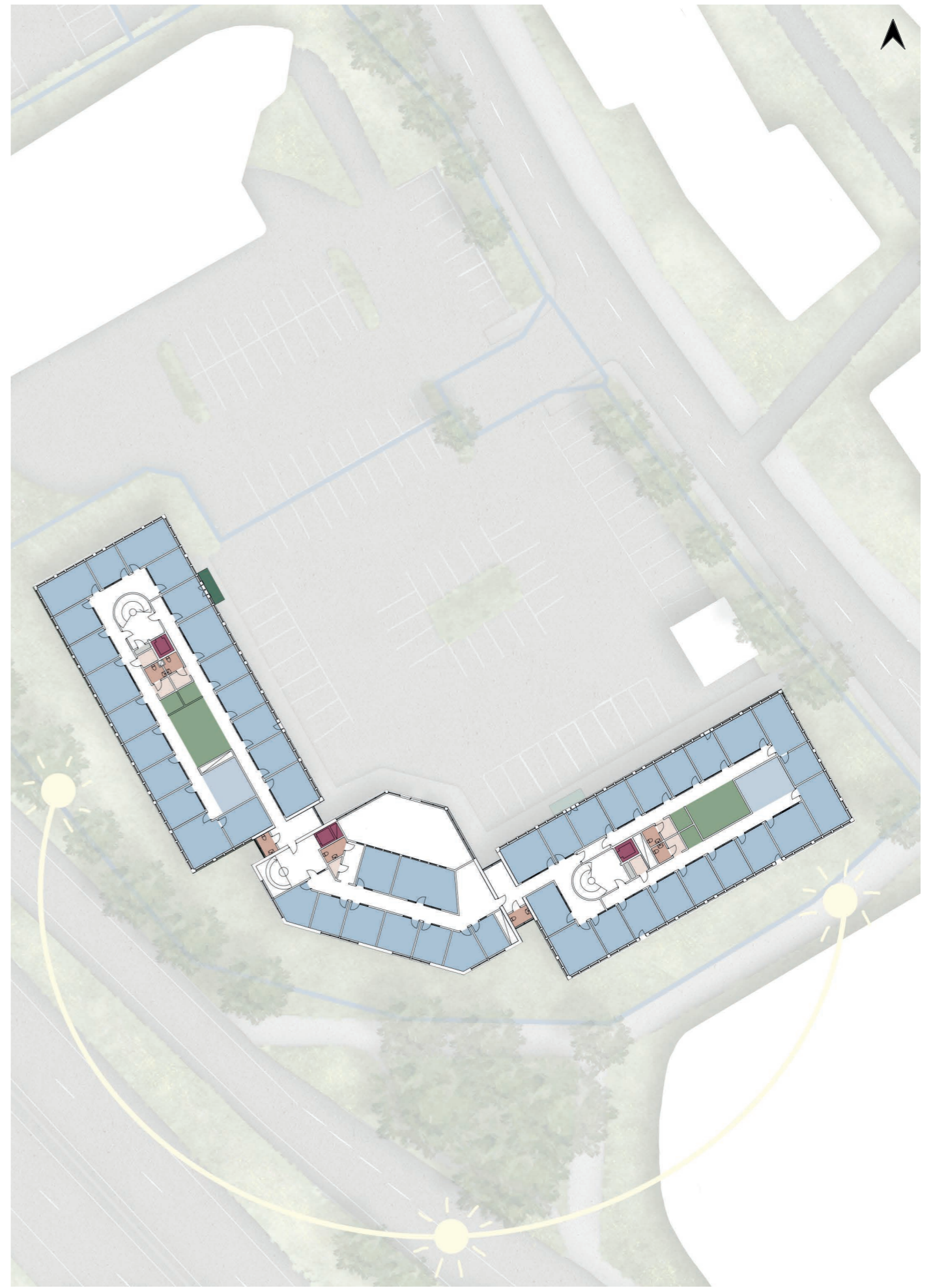


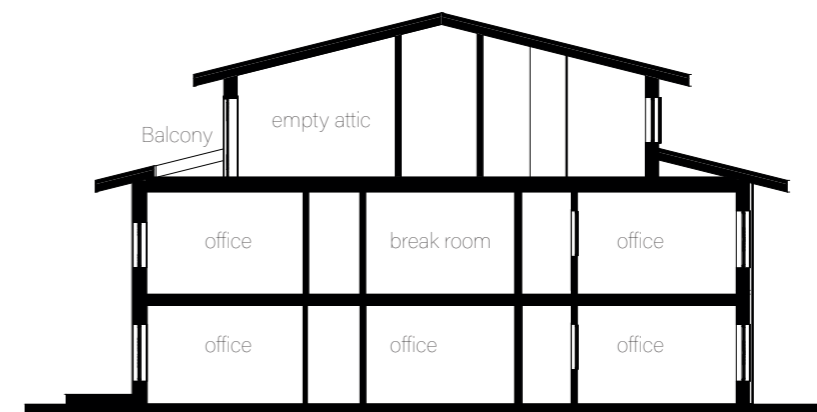
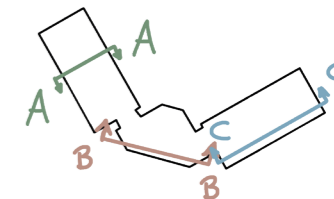
Figure 30: Floor plan existing situation, second floor (1:500 A4).

0 10 30 m

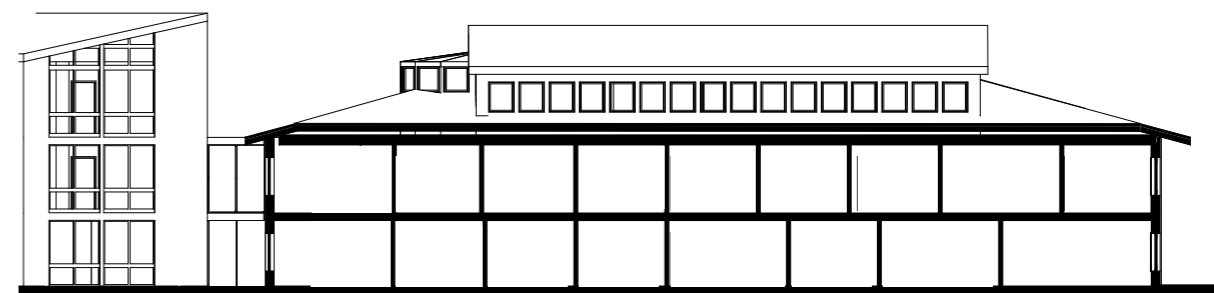


Figure 31: Floor plan existing situation, third floor (1:500 A4).

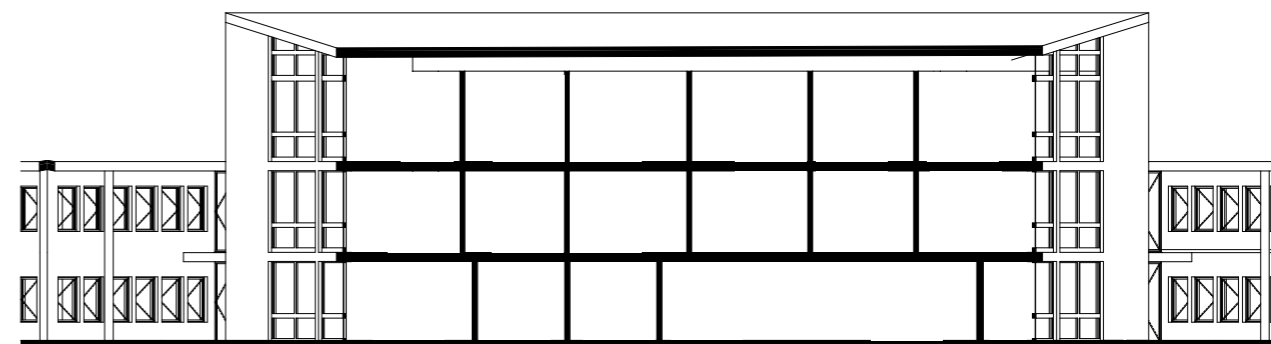
0 10 30 m



Section A-A: Hus A & C, showing corridor based lay-out of the building (1:200 A4)



Section B-B: Hus A showing small identical offices spaces of around 15 m<sup>2</sup> (1:300 A4)



Section C-C: Hus B, showing small identical offices spaces of around 15 m<sup>2</sup> (1:250 A4)

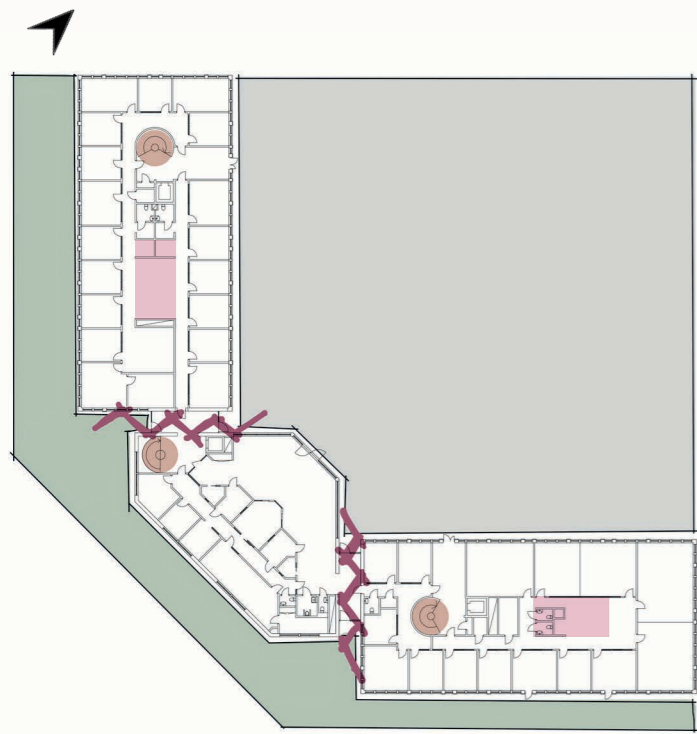


Figure 32: Analysis of floor 1 using the Salutogenesis approach discussed in previous chapter 2 (1:800 A4).

In order to understand how to transform this building into a healthy environment, it is essential to analyse it using the theoretical framework from chapter 2. This will help to clarify what needs to be changed and how. Note that only one floor is shown, since the floors are nearly identical.

### Salutogenesis analysis

The building (figure 32) does not offer the opportunities of any type of activities in both indoors and outdoors. Furthermore the staircases are dull and hidden, making it unattractive to use them. One of the most important fails of the building is the lack of central functions in the middle building (Hus B) since this could work as the connecting factor and the building is scarce in break rooms which have no character to them.

### Biophilic principle analysis

Since biophilia has numerous design attributes, I will present some of them in their own illustration (figure 33). Starting with the presence of nature, or the lack thereof. There are some trees around the property and a slim grass lane without which is not used. There is also no presence of a water source nearby. Furthermore, the building gets a lot of sunlight which appears to be unpleasant for the users since the entire South facade is covered in self made blinds of blankets. Because of this, there is no light entering the rest of the building which makes it rather dark. The balconies are faced to the North and because of this placement almost never receive sunlight. Nevertheless, the presence of balconies helps to experience the weather which is one of the named attributes. Regarding the use of natural materials, there is only brick and a copper roofing which prevents the ability of creating a green roof. Lastly, the most present element is the strong geometry of the building which leaves no room for organic shapes.

Figure 33: Analysis of floor 1 using the Biophilic approach discussed in previous chapter 2 (1:800 A4).

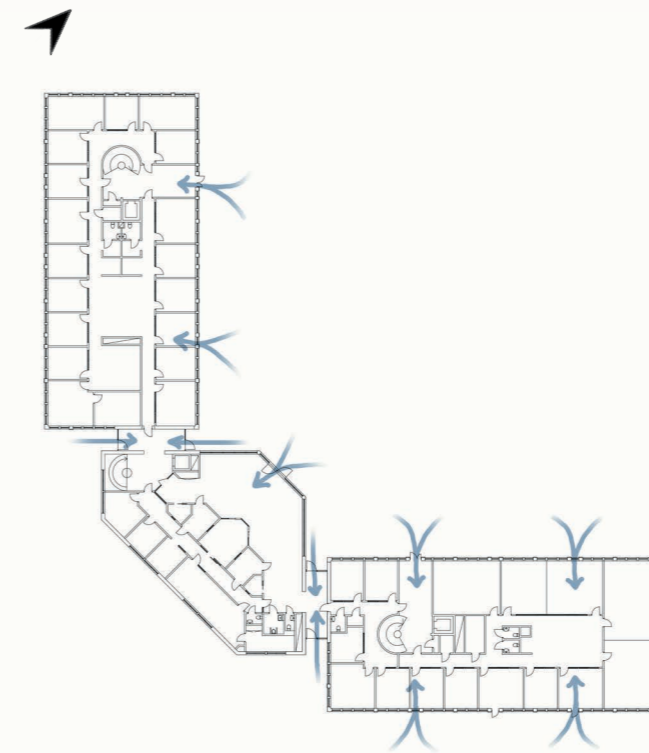


Figure 34: Analysis of floor 1 showing the poor existing natural ventilation as part of the Biophilic approach (1:800 A4).

### Biophilic principle analysis: Natural ventilation

Figure 34 shows the natural ventilation of the building, or the lack thereof, which is very similar for all the floors. The blue arrows indicate areas of high ventilation because of the presence of doorways. Because of the building's corridor lay-out, the ventilation is blocked and therefore does not go beyond the small office spaces. This decreases the air quality throughout the rest of the building. Therefore, having natural ventilation passages would not only enhance the air quality but also ensures a better indoor-outdoor connection.

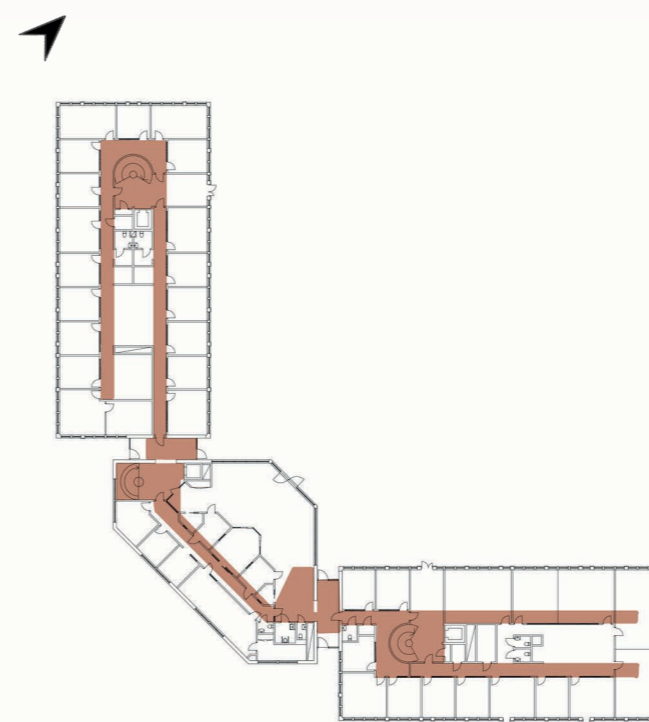


Figure 35: Analysis of floor 1 showing the transitional parts as part of the Biophilic approach (1:800 A4).

### Biophilic principle analysis: Transitional spaces

Having transitional spaces are very important for the user to understand the building and to find their way. As one can see in figure 35, the lay-out offers clear transitional spaces. Nevertheless, there is a lack of orientation due to their closed corridor character and symmetry. Additionally, the spaces can feel uncomfortable to move around in since they do not have access to any daylight and are therefore dark.

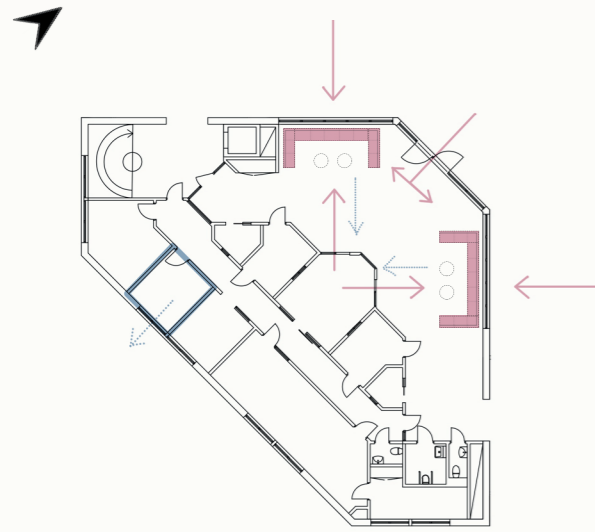
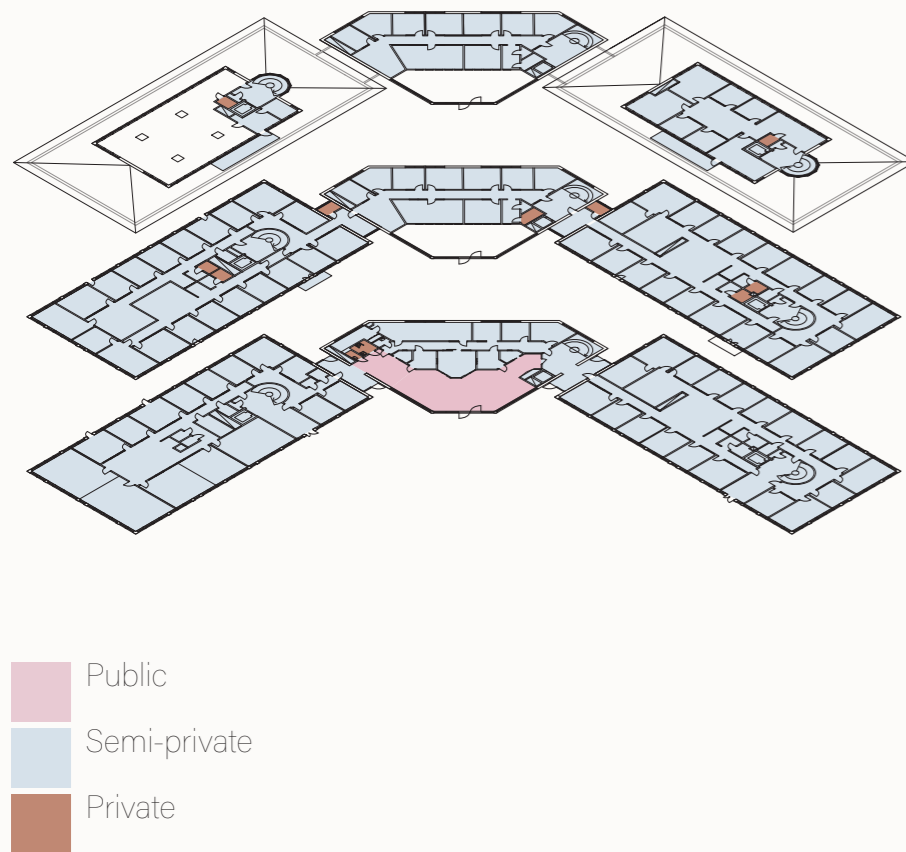


Figure 36: Analysis of floor 1, Hus B, showing prospect and refuge as part of the Biophilic approach (1:400 A4).

### Biophilic principle analysis: Prospect & refuge

As mentioned before, it is important to have the right balance between having an overview (prospect) and having the ability to seek shelter (refuge). Figure 36 shows that the building lacks this balance. In the waiting room, there is overexposure due to the openness of the room and the presence of the glass facade. Furthermore, the couches are faces towards the reception making it feel like the clients are constantly being watched. In all the other rooms, mainly office spaces, there is only refuge since they are all closed off. The only orientation point there is, are the windows.



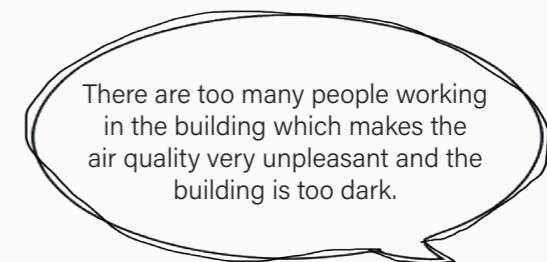
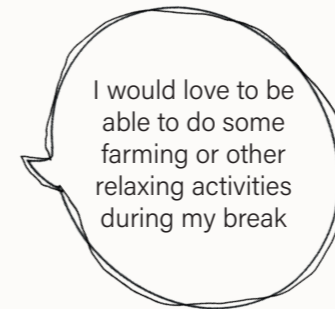
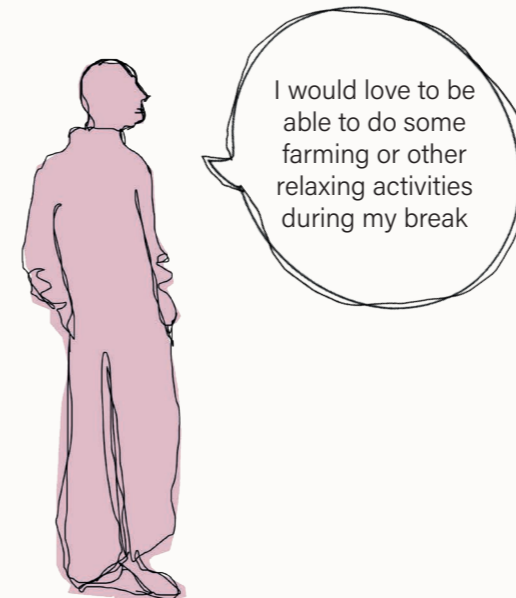
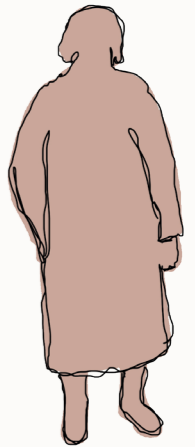
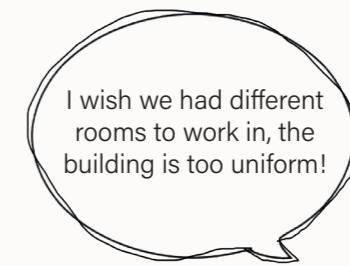
### Levels social interaction analysis

Figure 35 illustrates the different levels of social interaction in the building. As seen in chapter 2.1. and 2.2., the possibility of the employee to regulate the amount of interaction with colleagues is found beneficial to create a healthy workplace. The levels of engagement can be split into three categories: public, semi-private and private. Figure 37 shows that vast majority of the building falls into the second category (semi-public). The only private spaces are the restrooms and therefore this building could benefit by designing for these levels of engagement.

Figure 37: Analysis of floor 1 showing the levels of social interaction (1:800 A4).

### 3.5. Survey

In order to get a better understanding of what could be improved about the building, a survey was conducted. The survey was sent to the employees of the social centre and six of them responded. This is the only form of possible communication and because of this I have not been able to ask for more extensive elaboration to their answers. The survey was set up in a way to first understand what kind of work they do, and how their offices look like. They all mentioned how important social interaction is during their work days. Furthermore the answers all agree on how important nature is to them and the lack thereof in the building besides a few potted plants. The majority also agrees on that the design of the building influences how they feel during the day and they give the exterior as well as the interior of the building a 4.5/10. Noticeable is that most of the answers state that their offices are the right size. The last questions in the survey were open in order to give the social workers more freedom of expressing what could be improved on the building. The main things were the lack of nature and fresh air, the bad air quality that comes with it, the dull look of the office spaces, and the dark corridor. They also mention that the therapy spaces are child unfriendly and that they would love to be able to do certain activities during their breaks such as doing sports, yoga and farming. In addition they want more diversity of rooms in the building and have the possibility to use the outdoors.



Answers from conducted survey showing what the employees think of their work place.



Playground

### 3.6. Family centre

As mentioned in the site analysis chapter 3.3, there is a family centre (see figure 38) situated close by the social centre, approximately a ten minute walk. The combining of family centre functions to the social centre plays a key role in changing the character of the place positive and more inviting since the building will be used more for day to day life situations such as getting your baby checked or vaccinated. The family centre is roughly 466 m<sup>2</sup>. The family centre hosts an open preschool run by parents which occupies around 40 children and their parents every weekday and has a playground situated at the back of the building. Furthermore, the building has check up rooms for gynecological screening tests and STD tests as well as information rooms for abortion, parenthood, contraceptive advice and care during and after pregnancy. Lastly, it has some office space for administrative purposes.



Figure 38: Family centre floor plan (1:300 A4).

- Office space
- Conference room
- Wash room
- Break room
- Waiting room
- Entrance
- Rest room
- Storage space
- Preschool
- Reception
- Check up rooms

# 4. DESIGN CONCEPT

## 4.1. Hierarchy

Before jumping into the design concept, it is important to explain the hierarchy of the design. The graphic in figure 39 illustrates what this hierarchy means in relation to this thesis. At the far left side, there is the existing situation as it is now and through a series of design interventions, a Biophilic Salutogenic society would be created. Note that the latter is outside of this thesis' scope. The first and foremost intervention to create a place which stimulates the well-being of the social workers while reconnecting them with nature is the transformation of the existing social centre. This includes the workspace for the employees of the social centre as well as those of the family centre. The second step would be the transformation of the plot creating a biophilic and salutogenic garden. This together forms the main scope of this design proposal. However, in order to reach the goal of creating a social preventive care centre, the implementation of new structures is essential. These new structures include functions which are especially beneficial for the clients and the community itself. Since the focus for this thesis lies on the social workers, these new structures have a lower priority but are still crucial in the end. Therefore, the design

proposal will be mere a start of the design and will not have the same details (regarding . This offers the opportunity for a later project to focus on. Thus this and the transformation of the contextual surroundings form the general design proposal.

## 4.2. Design strategies

The presented design strategies on the following pages are based on the literature chapter 2 and the analysis of chapter 3. The latter consists of my own conclusions and the conducted survey. Important to mention is that, although they do fit in the three categories, Biophilia, Salutogenesis and HPBD, they are my own take upon these theories. Namely, my approach is to go beyond the given theories and therefore I created new design strategies (DS) which I later combine to make design choices for the design proposal. Furthermore, even though I could have chosen to combine all three categories in one, I believe in order to be as effective in creating a healthy nature rich workspace that it is important to be as specific as possible about which DS do what. Nevertheless, these three categories are still generic enough to act as a base for other projects

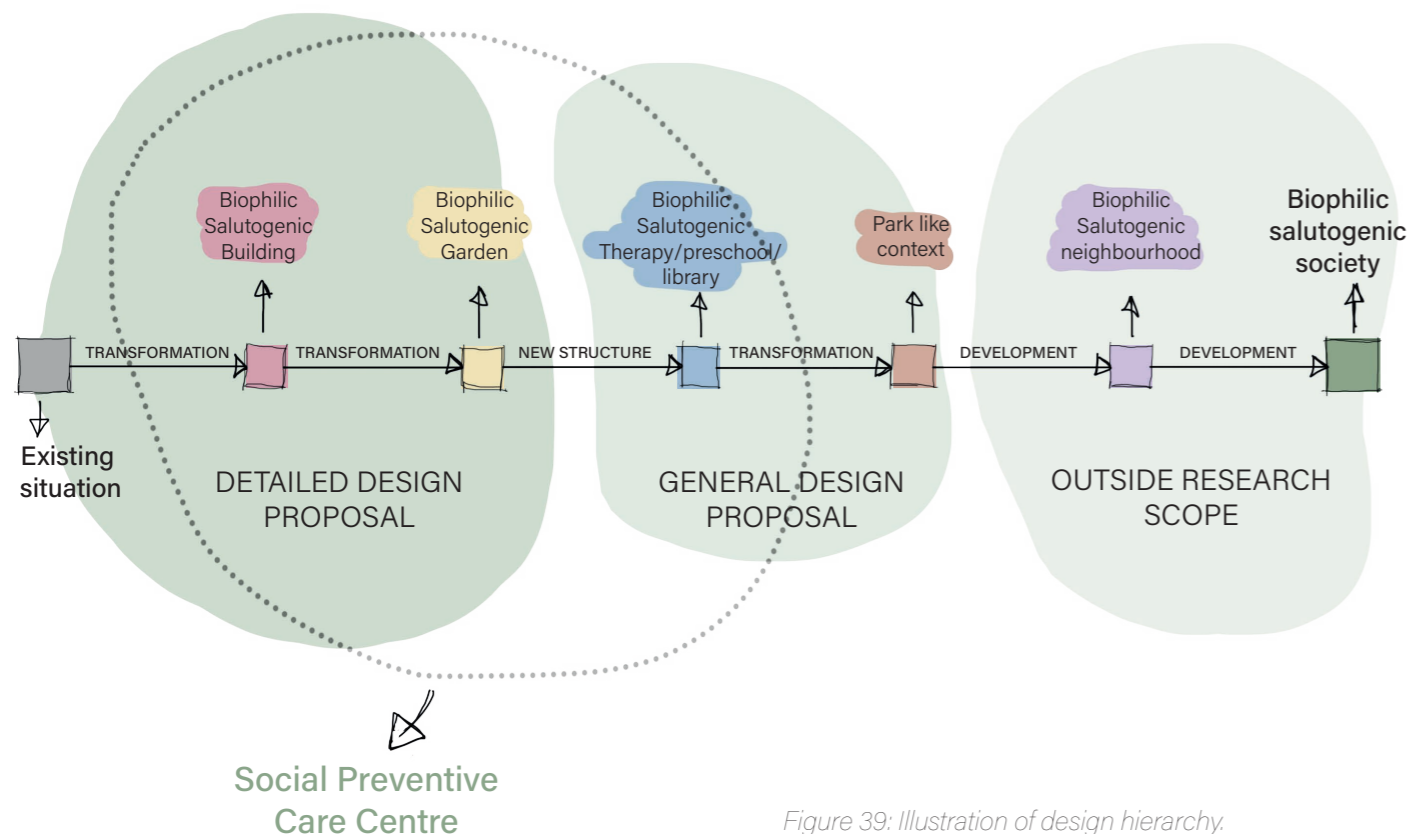
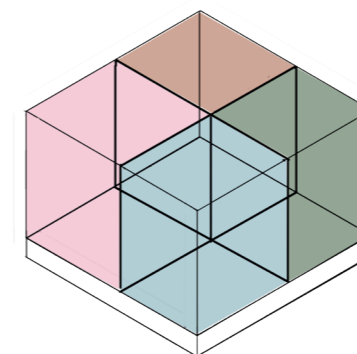
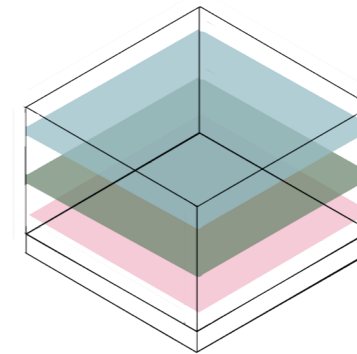
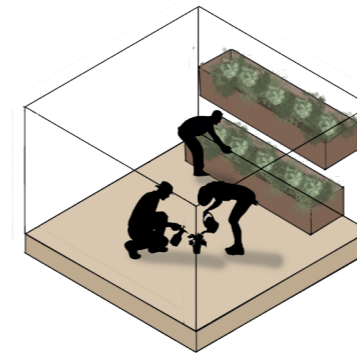
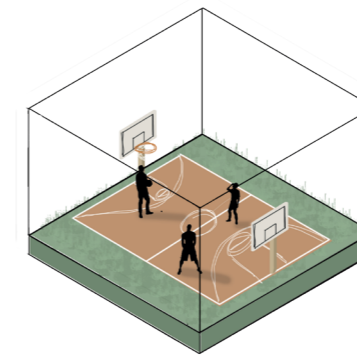


Figure 39: Illustration of design hierarchy.

## A. IMPROVING USER'S WELL-BEING (Salutogenesis)



### A1. Possibility for outdoor exercise

This can be translated into having an outdoor gym which is connected to the indoor gym located on the top floor. By transforming the sloped roof into a green roof, this is made possible.

### A2. Give users opportunity to grow own food

This can be translated into indoor and outdoor farming. The former would be located in Hus B since this building is facing South, and is made out of glass. The building would host vertical farming along the South facade and cut outs would provide space for crops to grow outside.

### A3. Create different levels of engagement in office space and breakrooms

By creating different levels of interactions, the workers will always have the flexibility to find a space which supports their needs for that moment. This can be translated into having more social work zones on the first floor and having more private work zones on the second floor. The third floor would be reserved mainly for individual activities such as meditating.

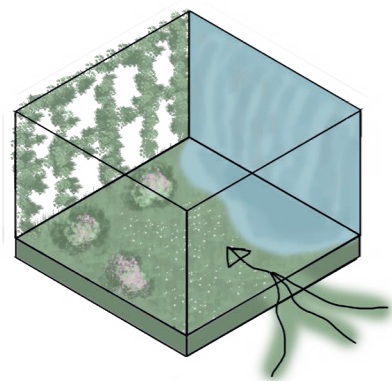
### A4. Create different activity rooms

This one is related to A3 where there is an activity for every level of engagement. Think of farming, cooking, playing games and chatting with colleagues, but also doing yoga, reading and going to the gym.

### A5. Provide optimal light and air condition

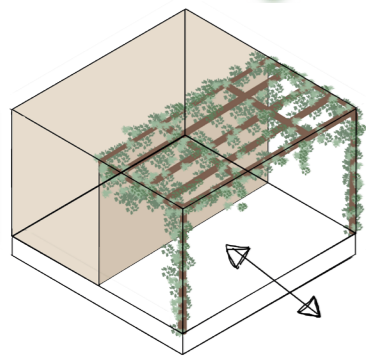
This is one of the main complaints about the current building and by making a cutout on the South facade of Hus A and B on both floors. To optimise the air flow and access to daylight through the whole building even further, small cut outs on floors 2 and 3 can be made.

## B. RECONNECTING USERS WITH NATURE (Biophilia)



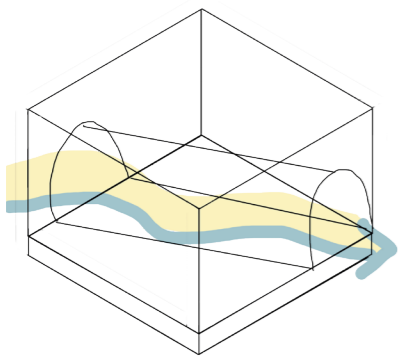
### B1. Bring natural elements indoors

This can be translated into the sufficient use of plants. By doing this in the form of green walls/room dividers, privacy is made while allowing air and light to go through. Green walls soften the ambiance rather than having rigid structures.



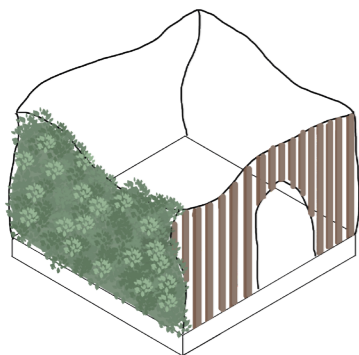
### B2. Enhance indoor-outdoor connection

By adding a wooden structure at the exterior for plants to grow on, the building looks from the outside more connected to nature and from the inside it offers shade from direct sunlight creating interesting light patterns and shadows. Furthermore, the plants also create privacy and it makes the building more approachable.



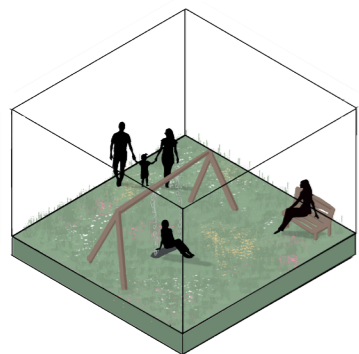
### B3. Create sun and wind paths

By creating sun and wind paths the indoor climate can be drastically improved. This can be accomplished by creating a semi-open floor plan to allow air to move through the building while preserving the privacy of the users as well as making cutouts (related to A5).



### B4. Use organic material and shapes

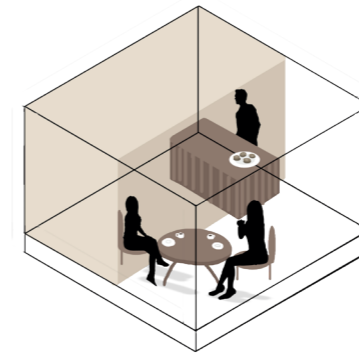
Since this is a transformation, one needs to bear in mind the existing structure of load-bearing walls. This grid works as the foundation of the floor plan and is connected through the use of curvy walls made out of wood and/or plants. Furthermore, to enhance the flowiness, the walls continue into benches and furniture follows organic shapes as well.



### B5. Actively use outside environment

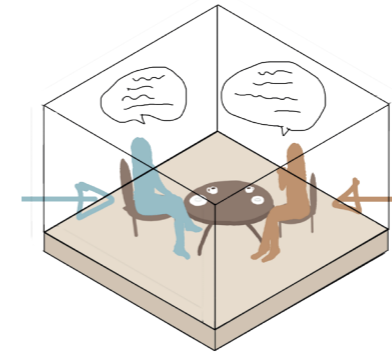
This can be translated into removing the sloped roof, leaving the perfect condition for an interactive green roof. Furthermore, the plot will shift from a grey space to a park like environment with communal functions such as a playground, cafe terrace and an outdoor gym.

## C. CREATING SOCIAL PREVENTIVE CARE CENTRE



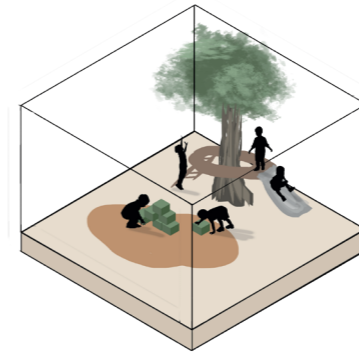
### C1. Add communal functions

In order to make the building more approachable and better connected to its surroundings, communal functions can be added. In this scenario the place would benefit most from having a study space/library for kids and youth, and a cafe for visitors and neighbours.



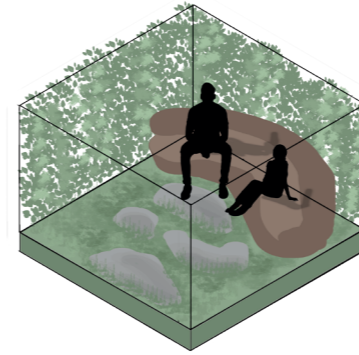
### C2. Create shared spaces for employees of social centre and family centre

Since the help centre and family centre are merged into one building for this project, it is important to offer opportunities for both units to interact and connect. This is what the breakrooms with its activities are for. These functions are most effective if placed centrally and are therefore located in Hus B.



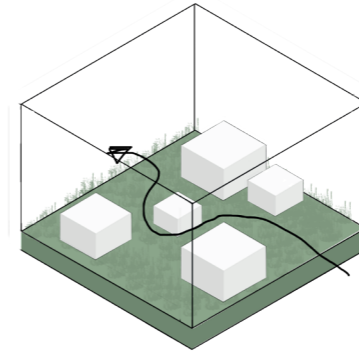
### C3. Create child friendly spaces

Another important element is the lack of any child friendly spaces, even though this is the help centre's main focus. By incorporating playgrounds in- and outdoors using organic shapes and greenery, this can be solved. Furthermore, the therapy rooms should have playful organic furniture in order for the child and the social worker to feel comfortable in.



### C4. Introduce nature based therapy rooms

As mentioned in C3, the atmosphere of the therapy spaces are crucial for both parties to feel comfortable in. Submerging the therapy rooms into biophilia supports the reconnection to nature and also offers the most neutral and calming environment.



### C5. Take entire strip into account

This one relates to B5 where replacing the redundant parking lots into a park like setting with communal activities, enhances the connection to its surrounding neighbourhood. Therefore, the design goes beyond its plot borders. This is possible since a significant amount of the parking spaces is not in used and a new parking garage has been built.

### 4.3. New Programme for the Building

From the research, analysis and constructed design strategies, a new programme is made which can be seen in table 2. Currently the building hosts over a 100 employees. This will change to around 90 since the employees expressed in the survey that this amount prioritises the quantity rather than the quality. Furthermore, the family centre which will be adopted into the building is around 466 m2

which is roughly equal to one floor of the social centre (567 m2) therefore the building needs a new structure in order to keep the social centre functional and to add the new functions. These new functions are divided into public, semi-private and private in order to realise a building programme which has different levels of engagement. The public functions are for everyone living in the neighbourhood, the semi-private are meant for the employees but in a social setting and the private functions are for individual activities.

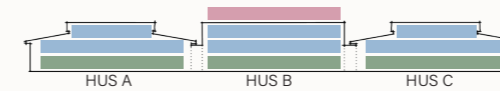
Table 2: New building programme.

NEW PROGRAMME			
	CHILD & YOUTH CARE CENTRE	FAMILY CENTRE	SHARED
PUBLIC	Study place/library (200 m2)	Preschool run by parents (150 m2)	Cafe (50 m2) Garden for farming Sensory garden Sportfield (162 m2) Outdoor playground (250 m2)
	Office spaces (1700 m2) Plant nursery therapy rooms (240 m2) Small breakrooms Conference rooms (95 m2)	Office spaces (15 m2) Plant nursery counselling/information rooms Check up and test rooms Small breakrooms	Prospect & refuge waiting room (80 m2) Informal reception (5 m2) Yoga/gym (140 m2) Kitchens (2x25 m2) Main breakrooms Outdoor gym (100 m2)
	Office booth (2 m2 each)		Reading nook Meditation space Sauna
SEMI-PRIVATE			
PRIVATE			

### 4.4 New division of the building

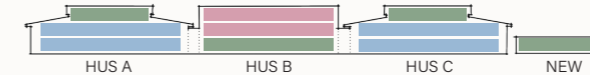
The options below show how the building could be split up and explains the strengths and weaknesses for each one. Option 4 is the combination of all the strengths of the other three options and therefore is used for this design.

#### Option 1



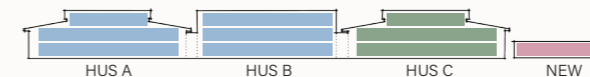
- + By adding the new structure on top of the existing building, an optimal connection between the family and the help centre
- However, by doing so the geometry is even stronger, making negatively influences the approachability of the building
- By spreading the shared functions across the three parts of the building, the communication between floors is compromised.

#### Option 2



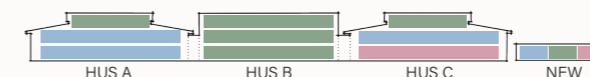
- + By having the shared functions over different floors, all floor are connected to it
- However, since they are not all in the same building, there is no optimal connection
- + By adding a low level structure, the stubborn geometry is broken through and it creates interesting new spaces on the plot and makes the building easier to approach.
- By putting the family centre in the middle part, the help centre functions get too scattered which results in confusing communication and it obstructs the flow of functions.

#### Option 3

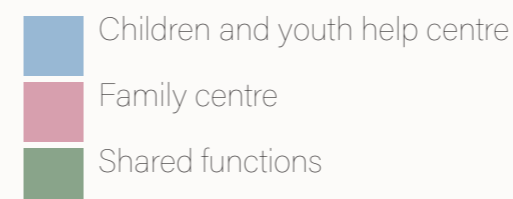


- + Having the shared functions in one part of the building covering all floors creates an optimal communication.
- However, since it is located at the far end, it is harder to reach.
- + Having the family centre separate, prevents confusing on how the space is used.
- However, there is no optimal connection between the functions due to the physical separation of the family centre and the main existing building.

#### Option 4



This choice combines all the strengths of choices 1 to 3 and therefore is used.



- + The presence of shared functions in the middle part of the building across all three floor, helps to create an optimal connection.
- + By adding the 3 different types into the new structure, all functions are optimally connected to the existing building.
- + Having the family centre on a separate floor increases connection without the communication getting chaotic.

## 4.5 Translated design strategies

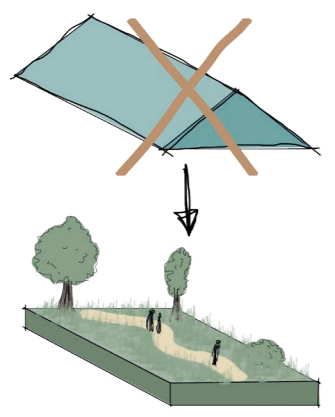
This sub-chapter shows how the design strategies presented in 4.2. are translated to this specific project of this thesis. They have been made more specific and have been combined where possible to create a design choice which

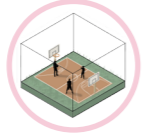
is fitting to the social centre. These design choices are directly implemented in the next chapter, chapter 5 Design proposal and can be seen in the floor plans.

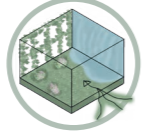
### Building


Design choice

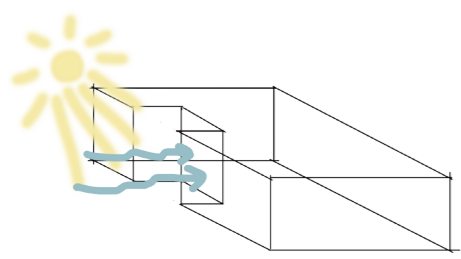
related to design strategies:




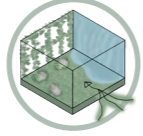
**A1**  **ROOF**  
The removal of the decorative roof makes place for an interactive green roof creating possibilities for outdoor exercise, brings nature closer in the building and offers a space where social workers of the social centre and family centre can meet and have their break together.

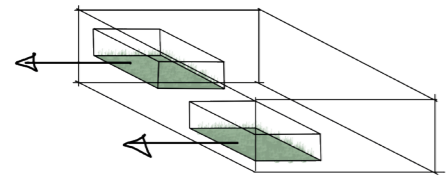
**B1** 

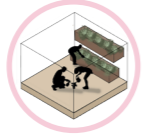
**C2** 

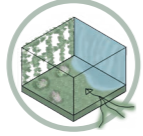



**A5**  **CUT OUTS HUS A+C**  
By making precisely placed cut outs in the building, day light and fresh air can enter the building more easily improving the indoor climate. It also creates the feeling of pulling nature closer into the building.

**B1** 



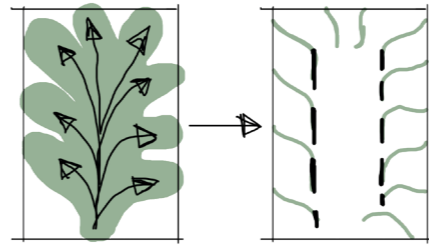
**A2**  **CUT OUT SOCIAL TERRACE**  
Because Hus B is faced South, it is too bright to work in, however this creates an opportunity for another way of bringing nature in: a social terrace in the form of two cut outs on floor 2 and 3. These spaces can be used to socialise and to grow and harvest crops.


**B1** 

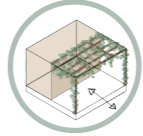
**C2** 


Design choice

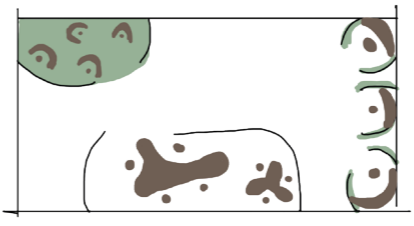
related to design strategies:

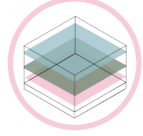


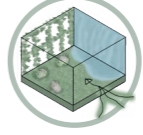
**A5**  **LEAF SHAPE WITH LOAD BEARING**  
The lay-out of the offices will follow the natural shape of a leaf which works well together with the existing load bearing walls. The curvy semi-permeable green walls are angled towards the sun in order to let optimise the intake of day light.


**B3** 

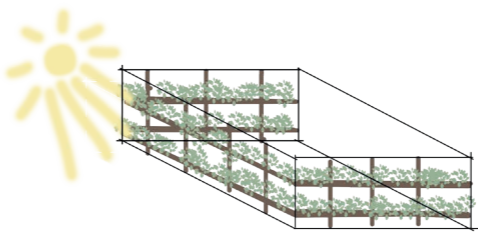
**B4** 




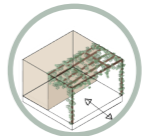
**A3**  **DIFFERENT LEVELS OF ENGAGEMENT**  
As proven in earlier chapters, having different levels of social interaction are very important to create a comfortable space for all parties. This is translated to nature themed office spaces which differ in size and different waiting areas on the ground floor. This allows users to choose whether and how they want to interact.


**B1** 

**C2** 



**A2**  **VERTICAL FARMING AND KITCHEN IN HUS B**  
Since Hus B will be used for shared break rooms and is faced to the South, (vertical) farming rooms are created which create a softer indoor-outdoor transition. Furthermore, because of the presence of kitchens, the employees can cook together which strenghtens their relationship.

**B2** 

**C2** 

## Transformation of surroundings plot

Design choice

related to design strategies:



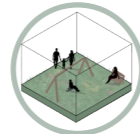
A4



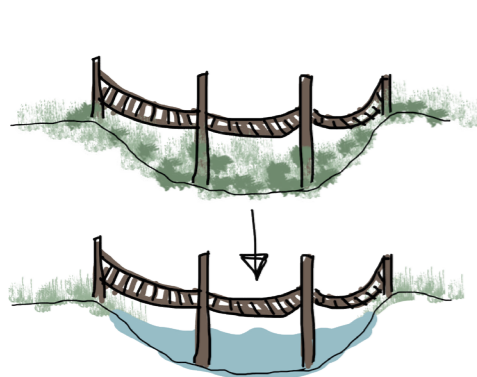
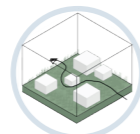
### NATURE AND ACTIVITY GARDEN

The garden is used as an extension of the building and offers different activities such as terraces, playgrounds, ping-pong tables, chess tables and "wild nature" areas. The kids functions are centrally placed to create an inviting space. In order to use the garden as a means to enhance the connection of the "strip", it goes over the original plot borders.

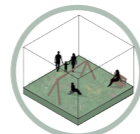
B5



C5



B5



### WATER PLAYGROUND

As mentioned above, the garden is an important tool to create a safe space and to reconnect the users with nature. A way of doing this is to create a water playground which shows how nature changes with seasons: in the summer it is mainly dry and in the winter, water stagnates.

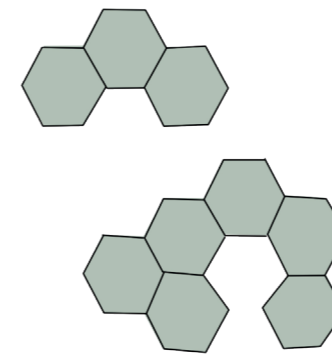
C3



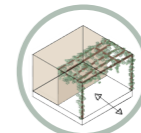
## Design of new biophilic salutogenic structures

Design choice

related to design strategies:



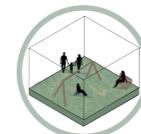
B2



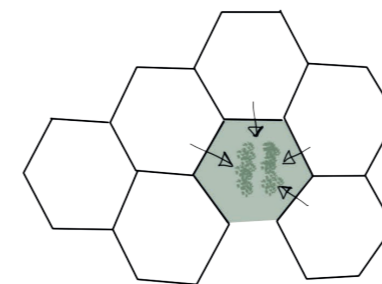
### HONEYCOMB SHAPE

Lastly, the new structures which are shaped like a honeycomb with different heights to break down the scale even more. The shape is based on the reference project mentioned in 2.4. This, and the wooden facade and green roof, create an inviting entrance where one is greeted by playing kids.

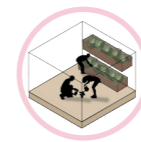
B5



C3



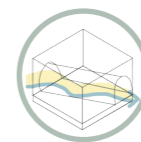
A2



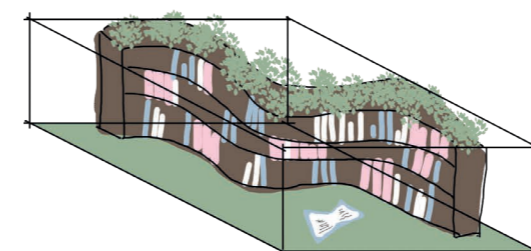
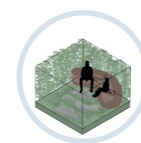
### PRESCHOOL AND THERAPY ROOMS SHARE COURTYARD

In order to create a safe inviting and playful environment for the children going to therapy, the preschool and therapy spaces are connected with a small courtyard which is used for gardening. The shape also offers many view points from the interior. Furthermore, the therapy spaces act like a plant nursery.

B4



C4



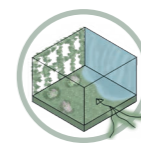
A4



### NATURE PUBLIC LIBRARY

By creating a space which has communal functions, the plot enhances its connection with its surroundings. The library offers spaces to study as well and acts like a plant nursery.

B1



C1



# 5. DESIGN PROPOSAL

## Visualisation concept into design proposal

Before showing the design proposal, it is important to understand the functions of the different elements and what has been changed from the existing situation. Figure 40 illustrates which parts are kept, which parts are new and which parts have been removed and shows the result of the previous chapter.

Next up is figure 41 shows a simple 3d visualisation of the design. The three colours show what part belongs together. As one can see in the illustration, the blue part of the existing building is the social centre. The blue marked part of the new structures functions as the therapy spaces and are easily accessible from the main building. Pink shows where the family centre is located in the main building and corresponds to the in same colour marked building part of the new structures. This part functions as the preschool and has a very central function on the plot, changing the character of the space entirely. Then lastly green represents the shared spaces including the ones in the existing building (break rooms) as well as the public library. The latter is strategically placed to create a better

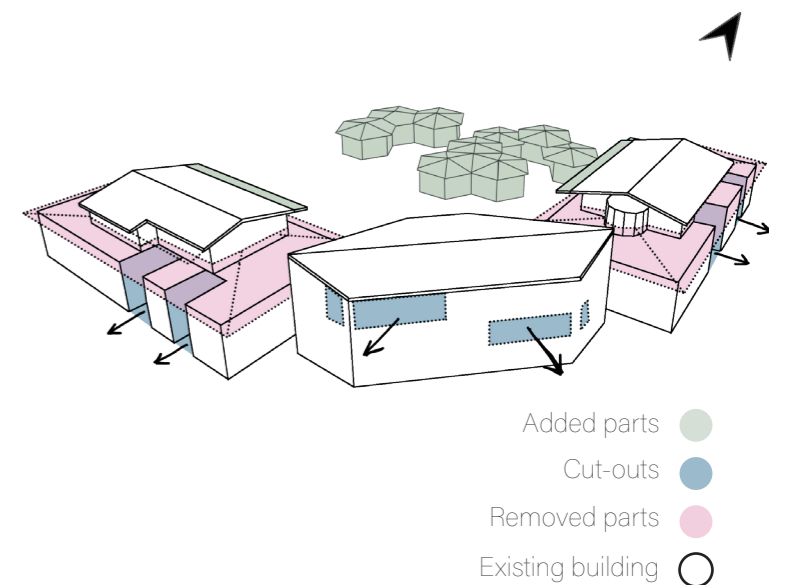


Figure 40: Illustration of transformed building with new honeycomb-shaped low-rise structures.

connection to the community hub to the right of the plot. The garden also shows the main routes to go to the different places. The main path leads through the low structures, passing the preschool playground to immediately create a safe and happy feeling. This path then either continues to the middle part of the building (Hus B) or to the family centre (Hus C).

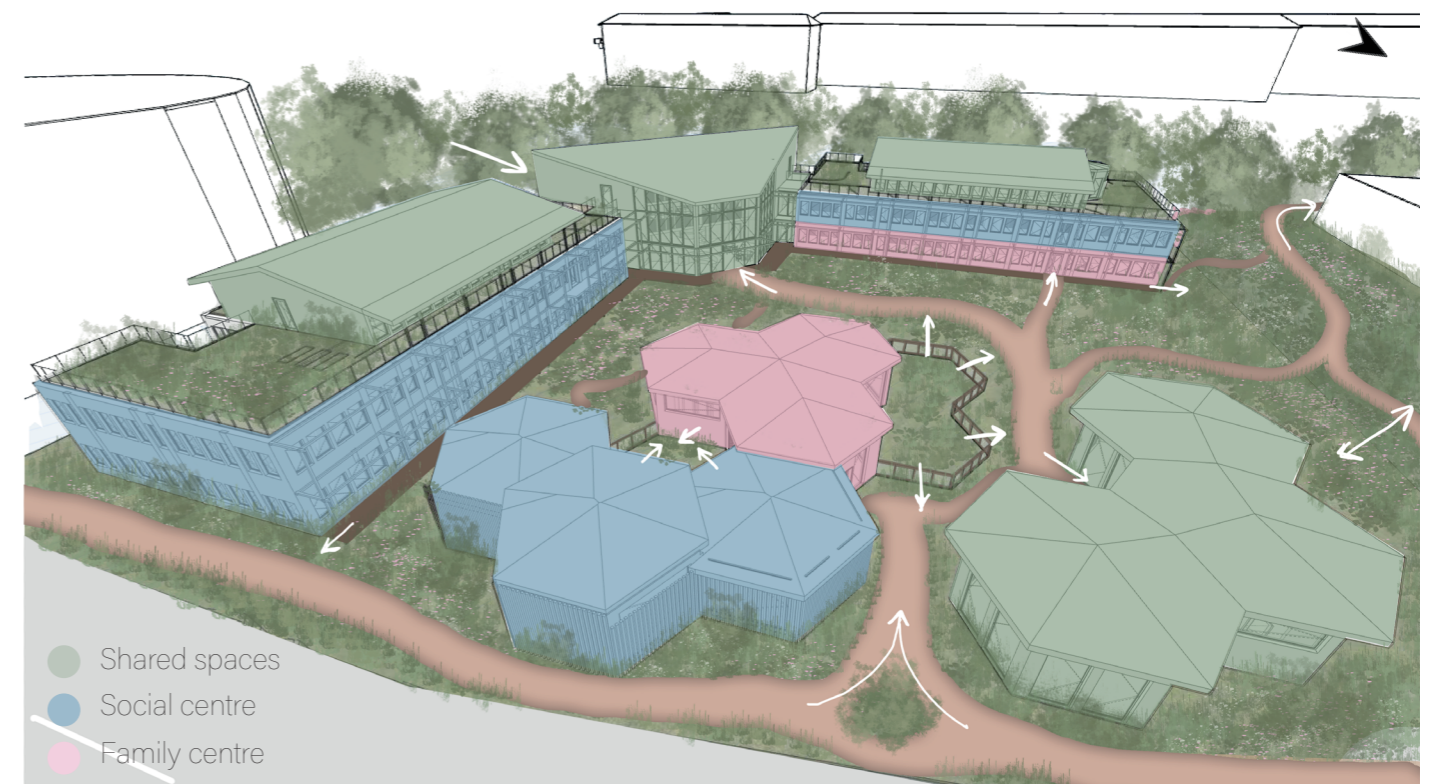


Figure 41: 3D visualisation of transformation showing the oasis with new honeycomb structures, green roof and cut outs. The illustration shows how the parts are connected and the general flow of the plot.

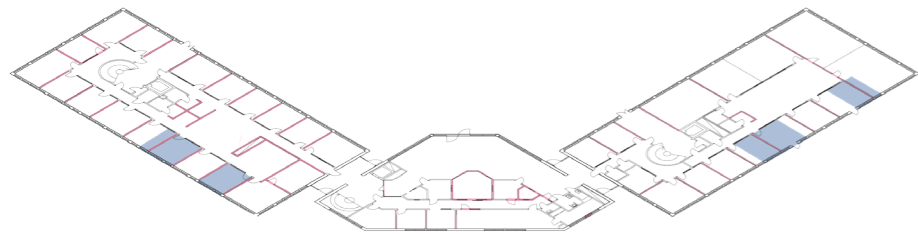
## Garden design proposal

The overall idea for the garden was to create an as much as possible natural environment where a lot of different plants and wild grasses can flourish. The thought of "letting nature do its thing", creates a flow from the outdoors to within the building, optimising the feeling of being in nature while staying inside. Together with this, there are a lot of different functions in the garden in order to provide opportunities for the social workers, as well as clients and people from the neighbourhood and community centre to make use of. This goes hand in hand with the translated design strategies explained in 4.5. Meaning that the garden offers a lot of different social features in a natural setting and although there are different zones, they all blend in one another to create the most optimal connection.

- ① **Playground of the preschool:** By placing this playground very central, users of this building walk past laughing and playing kids upon arrival, setting the tone for the visit.
- ② **Safe courtyard for farming:** This small courtyard is connected to the preschool and the therapy spaces and can be used for both creating a safe and positive inward facing space.
- ③ **Flood playground:** This public playground changes with the seasons teaching kids how nature changes in a fun, dynamic setting.
- ④ **Natural sound barrier with seating:** This green sound barrier incorporates already existing trees and offers unique seating possibilities on the flowing steps.
- ⑤ **Wooden deck path & pergola:** The path, pergola and plants help creating a softer indoor-outdoor transition and softens the rigid brick exterior of the building.
- ⑥ **Social terrace with seating:** These terraces are scattered over the plot and offer places to meet up with others.
- ⑦ **Wild grasses:** Planted wild colourful grasses create a peaceful and natural environment.
- ⑧ **Public table tennis and chess tables:** The garden offers different activities that the social workers and visitors of the community hub can do.
- ⑨ **Bike racks:** To stimulate people coming to work on a bike.
- ⑩ **Accessible parking**

Figure 42: Garden design proposal (1:400 A3).

0 5 10 15m



- Removed walls
- Cut-out

Figure 43: Axonometry showing removed walls during transformation



Figure 44: Building design proposal of first floor and new honeycomb structures (1:300 A3).

## Building design proposal: floor 1

The coming next three pages show the final result of the transformation to create a healthy working environment focused on bringing nature in. The design is based on a combination of the design strategies of 4.4. and the design choices of 4.5. In order to show what has been changed, figures 43, 45 and 47 show parts that have been removed during the transformation.

### Preschool, therapy rooms & library:

The new honeycomb shaped structures have wooden facades where plants can grow onto and have big windows which blurs the line between indoor and outdoor and due to their shape have many view points. The preschool has an open playful lay-out with many natural elements to stimulate the kids' curiosity and learning. The therapy spaces are rooms submerged in moss and other plants and have a more closed off facade to provide safety and privacy. Lastly, the public library follows the same natural lay-out with rooms to work in (1) and a reading nook between the book shelves (2).

### Hus A: Social centre offices

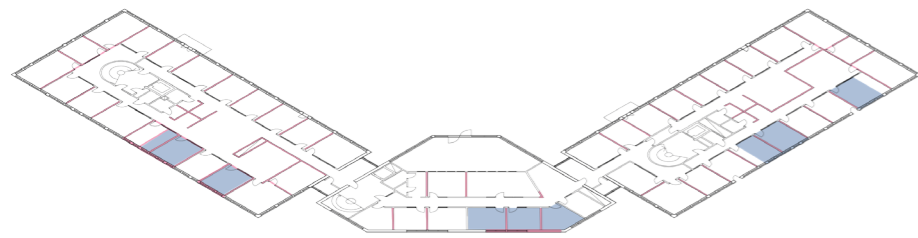
The working spaces have an abundance of plants and organically shaped desks which allow for working together. The rooms are separated by semi permeable green walls which allows light and air to pass through while maintaining privacy. The main path is made out of wooden planks and together with its flowiness and plant beds, it creates the feeling of taking a stroll in nature. It offers two outdoor terraces (3) and many sliding windows to let in light and air. There are multiple different room settings to increase the diversity, just like in nature.

### Hus B: Entrance hall

This building continues its natural atmosphere by creates different niches and flowy flooring. The building acts as the green heart of the building and has a cafe/ reception (4), natural playground (5) and three different types of waiting rooms: the most public (4) on is at the cafe, then the middle part offers more secluded seating (6) and finally at the back, where also the back entrance is located, there are hammocks (7). Furthermore, the floor offers a connection to the family centre (Hus c) and intake rooms (8).

### Hus C: Family centre

This part of the building has different check up and testing rooms (9), information rooms (10) and a waiting room with playground (11). The floor follows the same idea of wandering in a forest like Hus A, Only providing more privacy for the clients.



- Removed walls
- Cut-out

Figure 45: Axonometry showing removed walls during transformation



Figure 46: Building design proposal of second floor (1:300 A3)

## Building design proposal: floor 2

This page show the second floor of the building (figure 46). Since this floor is one higher than the last one, it means that this floor offers more private spaces. This is because the building works with different levels of engagement as mentioned in chapter 4.

### Preschool, therapy rooms & library:

As one can see, the new structures are only one story tall and have a green roof. This roof does not only function for insulation, but also makes the building greener to look at from the main building: it is as if the building flows into the landscape.

### Hus A: Social centre offices

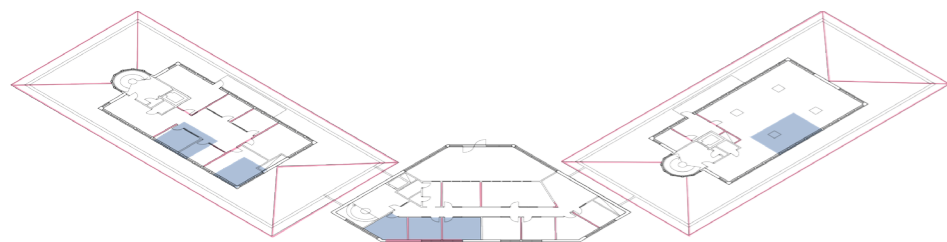
The overall lay-out and materialisation of this floor is the same as the floor below, however it offers more private working spaces such as working booths (1). Besides there are three different nature rooms where even the flooring is moss. These rooms can change function and are applicable for meetings, taking a short break or one can also work in them. In the middle of the floor (2), there is a cut out, which betters the vertical connection of the two floors and also provides another opportunity for light and air to flow in.

### Hus B: Entrance hall

Also on the second floor, this part of the building functions as the green heart bearing all communal functions for the social workers. Meaning that both the family centre and the social centre workers, come here during their break. The floor offers a terrace space (3), a big break room with kitchen (4) and allows the employees to grow and harvest their own food (5).

### Hus C: Social centre offices

This floor is roughly the same as of Hus A and is also used for the social workers. The lay-out differs slightly from Hus A to break through the stiff symmetry. The same applies for the cut outs, however, this is also in order for them to be as optimally placed as possible.



- Removed walls
- Cut-out

Figure 47: Axonometry showing removed walls during transformation



Figure 48: Building design proposal of second floor (1:300 A3)

## Building design proposal: floor 3

This page shows the third and final floor (figure 48) of the transformation. This floor has common functions as well and because it is the top floor, there are the most private, relaxing activities. By cutting away the roof, a green roof is created, offering yet another possibility for the social workers to be in nature.

The appendix shows the three bare floor plans in order to see more detailed which walls and parts are new due to the transformation.

### Hus A: Common relaxation room

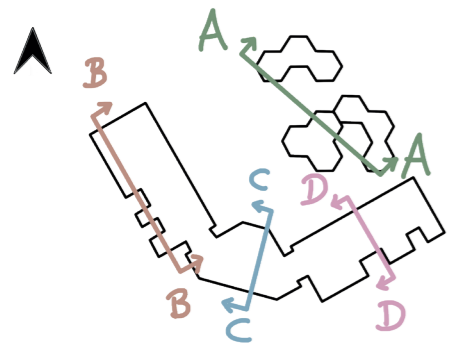
This floor is characterised as an activity space with opportunities to work out, to do yoga (even on the green roof) and to go into the sauna (1). The green roof is an extension of the floor and because of a newly made connection (2) to Hus B, the social workers do not have to go back to the first floor in order to reach this floor.

### Hus B: Entrance hall

This floor is similar to the floor below and thus offers more break rooms with a kitchen and a room for vertical farming. The terrace is mirrored in order to create a slight differentiation.

### Hus C: Social centre offices

As well as Hus A, this floor is for all employees. The theme of this floor, however is more calm than Hus A's. This floor offers meditation rooms where the social workers can sit on a pillow surrounded by moss and other plants (3), a room with comfortable beds (4) and a reading nook built against the window (5) and is therefore the most private floor of the building.



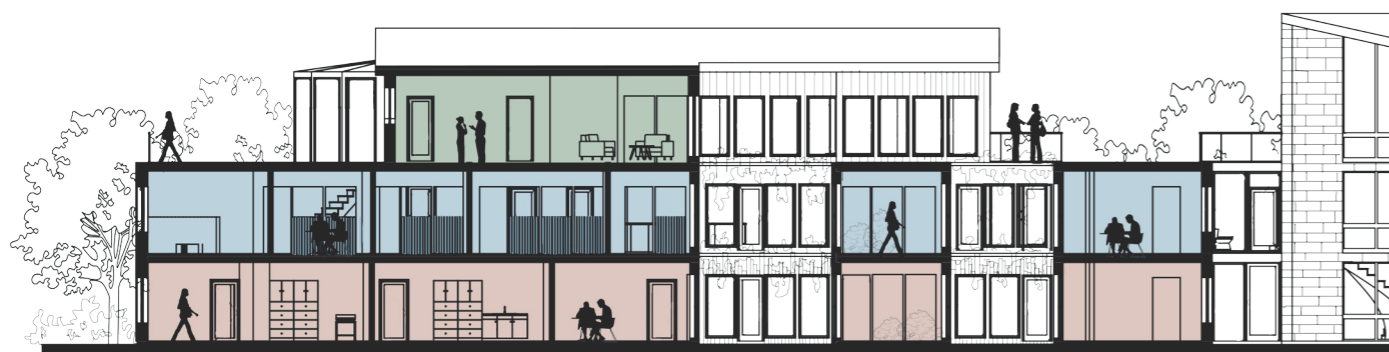
## Section

These four sections below show the most significant and important changes of the transformation. Because of the building's scale and symmetrical lay-out, not all three parts are shown since they share a similar design.



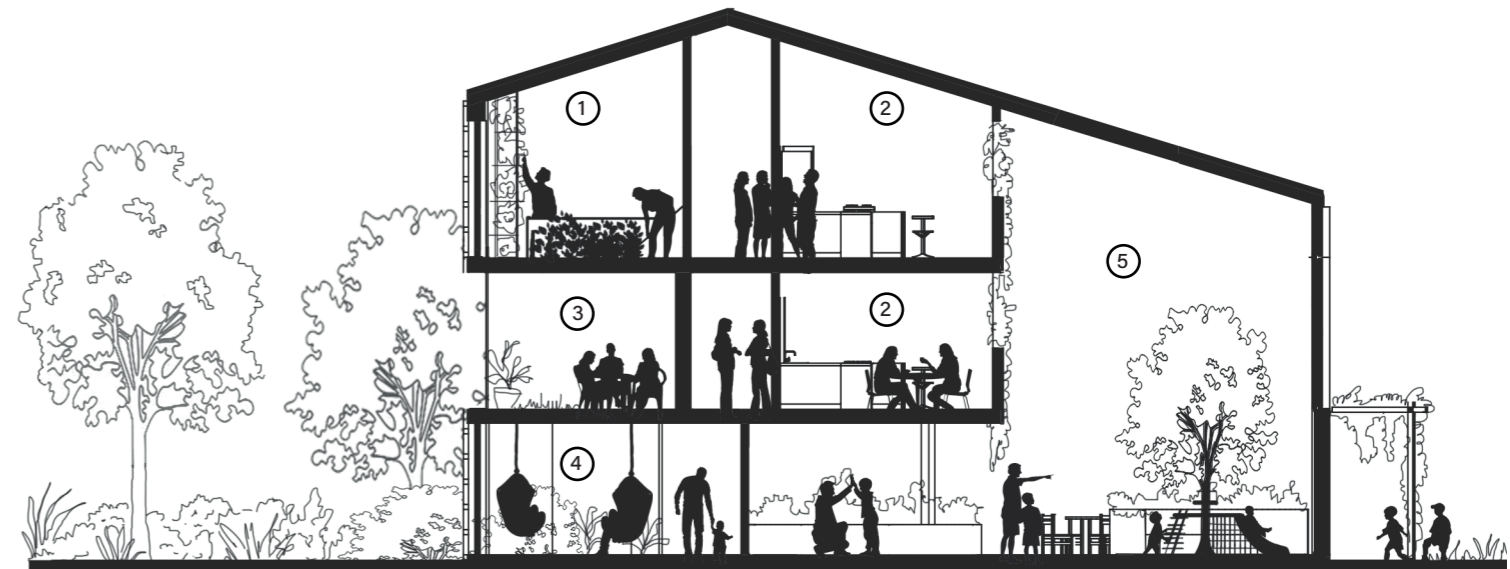
Section A-A: Showing general design proposal of new structures. 1:120 (A4)

- Public study space and library
- Plant nursery themed therapy spaces for the social preventive care centre
- Open preschool run by parents



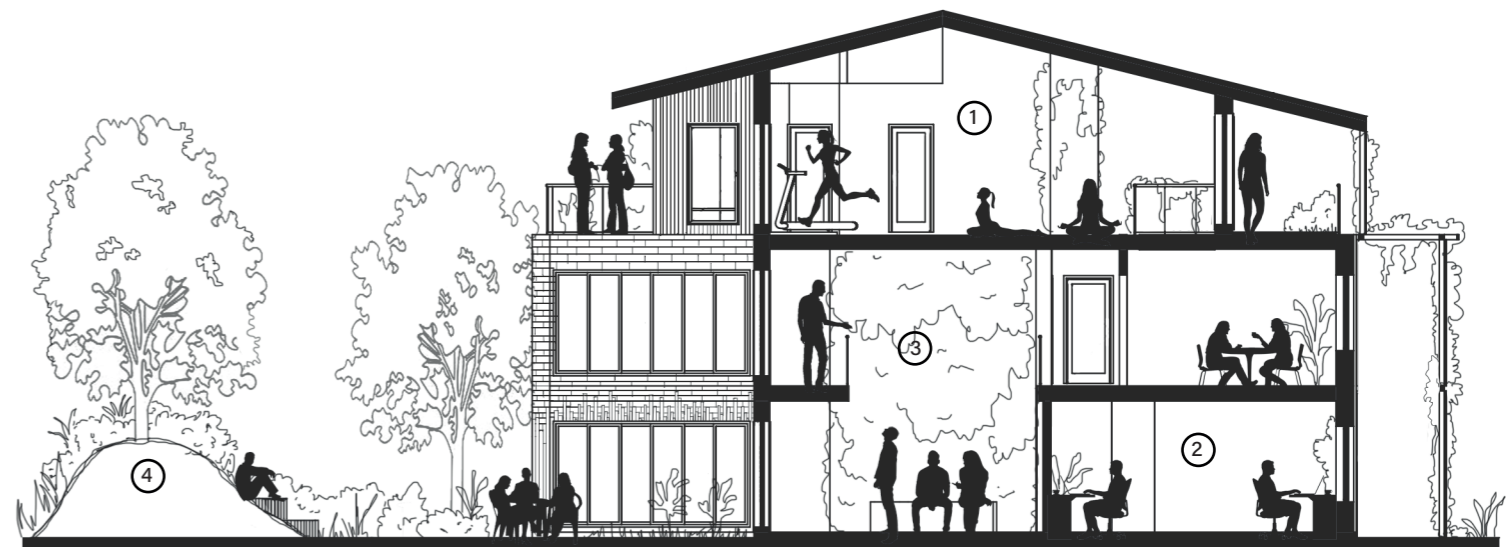
Section B-B: Showing transformation of Hus C with cut-outs. Note that Hus A has similar lay-out. 1:250 (A4)

- Top floor social preventive care centre. Functions as break rooms for all social workers with varied activities (yoga, gym, sauna, meditation, reading, roof terrace)
- Social work floor with office spaces that have a semi open lay-out and cut-outs to let in light and air
- Added family centre with different types of check up and information roofs



Section C-C: Showing transformation of Hus B. 1:200 (A4)

- ① Break room: (vertical) farming
- ② Break room: lounge and cooking area
- ③ Break room: roofed terrace with seating and farming possibilities
- ④ Private waiting room with hammocks
- ⑤ Public entrance with reception, cafe, seating and a playground



Section D-D: Showing transformation of Hus A. Note that Hus C has similar lay-out. 1:150 (A4)

- ① Private break room: different activities such as yoga, meditation, reading and working out
- ② Office spaces: depending on the floor, floor 1 has social rooms and floor 2 more private
- ③ Cut out: connecting the two floors through an extending green living wall
- ④ Green sound barrier hill blocking noise from the adjacent motorway

## Facade

Like discussed in chapter 3, the character of the facade before the transformation was very horizontally orientated (figure 49). This was because of the white framed window sections, brick sections and the copper roofing in between. Because of the building's shape, this horizontal character was even more emphasised making it appear even bigger and more institutional.

To break through this stiffness, wooden and organic elements are introduced, as well as bringing back the colour of the roof (figure 50). In order to still preserve the brick character and to create more depth, the thin wooden panelling is attached to the outside of it leaving small gaps. The panelling also has an irregular height which stimulates the organic character and makes the building appear more playful. Overall, by focussing on bringing in more vertical elements, the horizontal character is broken through. This is especially done by using green wooden planks which cover the two floors, as well as the pergola. This pergola has the shape of a tree and continues to the green roof where it becomes part of the railing. In order to make it seem like a real tree, plants grow onto the structure and together with the green painted window frames, it looks like the tree canopy. Thus by changing these elements that do not interfere with the structure of the building, the building looks submerged in nature, less institutional and more dynamic and playful.



Figure 49: Before facade with strong geometry caused by bricks, white window frames and copper roofing (1:100 A4).



Figure 50: After facade showing dynamic wooden elements and tree-shaped pergola (1:100 A4).

## Green wall

Since the majority of the interior walls are green walls, it is important to show how the walls could look like. The walls are made of wooden planks which hold some sort of wire in order for the plants to grow onto (figure 51). To create the illusion that the green walls bleed out into the flooring, there is a low planter implemented. With this enhances the feeling of the building being submerged in nature. Note that the measurements differ room to room to create an organic atmosphere. Besides the construction, the plants to the right in figure 52 show an indication of which types are ideal for this project.

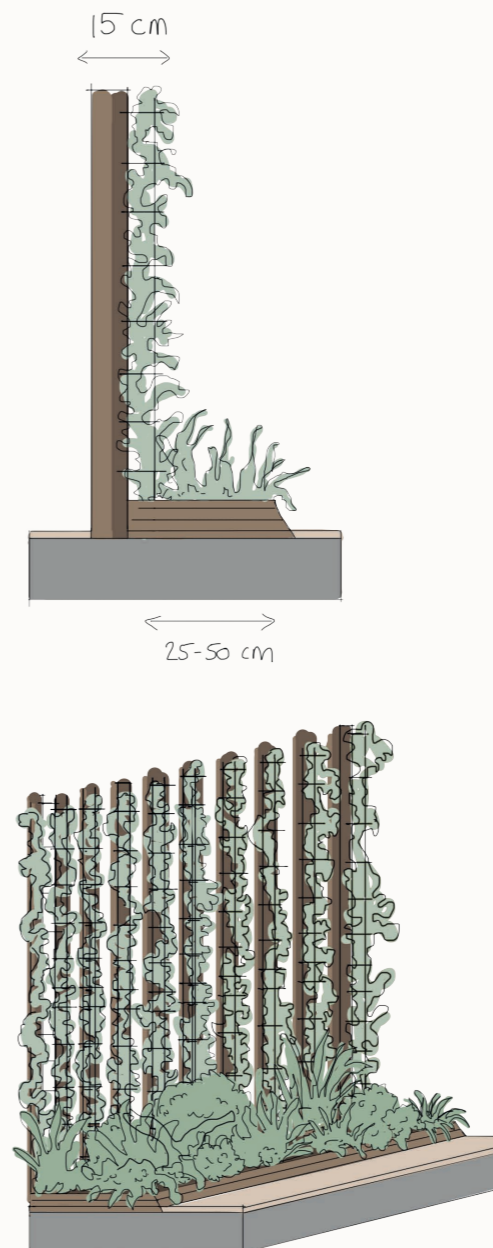


Figure 51: illustration construction green wall divider.

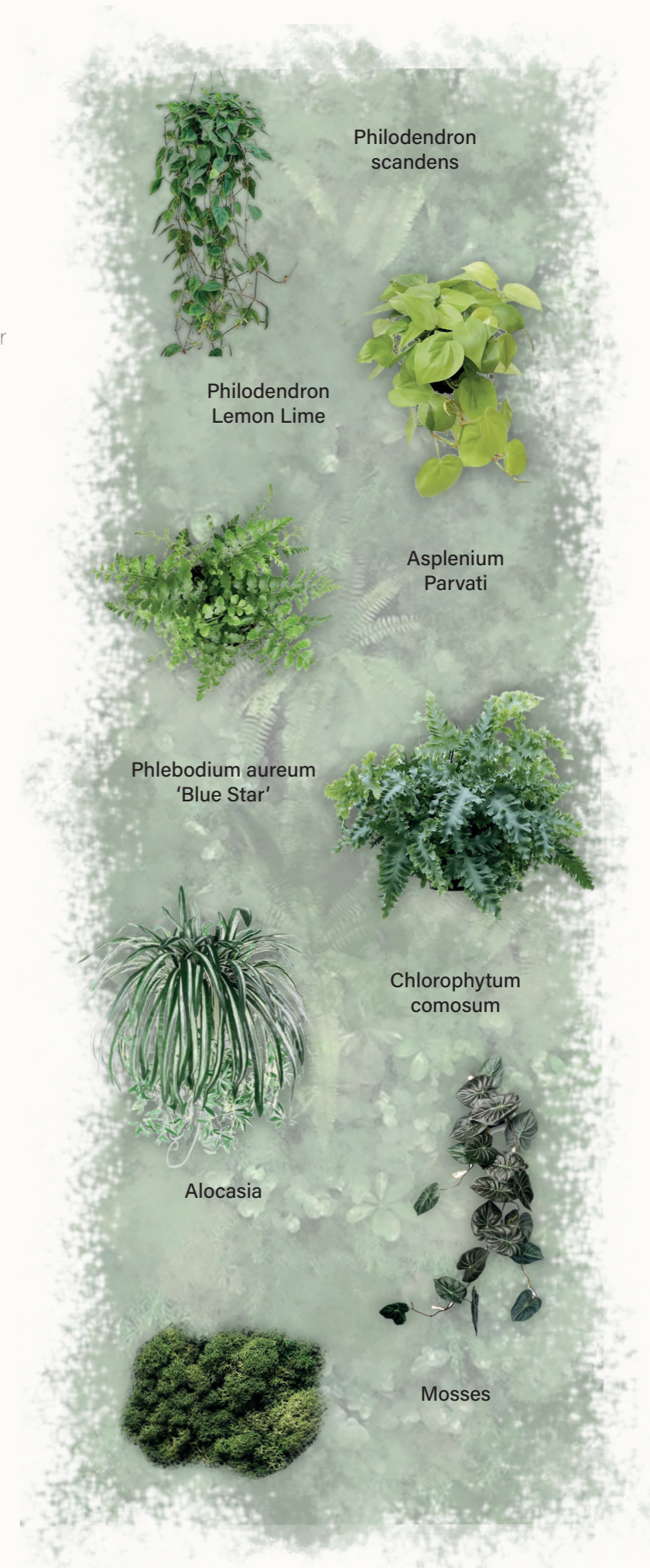


Figure 52: illustration green wall with potential plants.

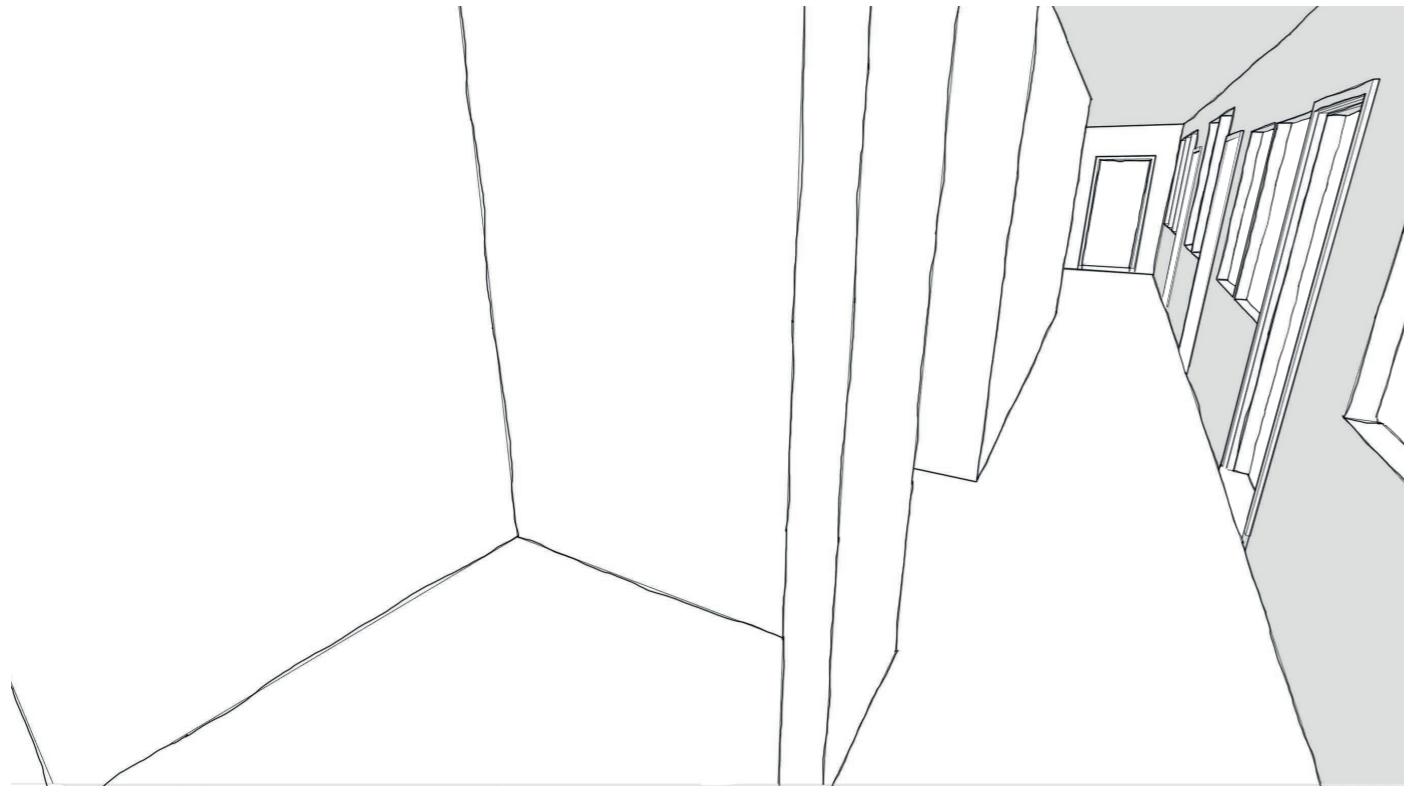


Figure 53: Before situation of office spaces floor 2 showing the narrow corridor lay-out



Figure 54: After situation of office spaces floor 2 showing semi-open floor plan with diverse working spaces, green walls, plants and the cut out connecting this floor to the first floor.

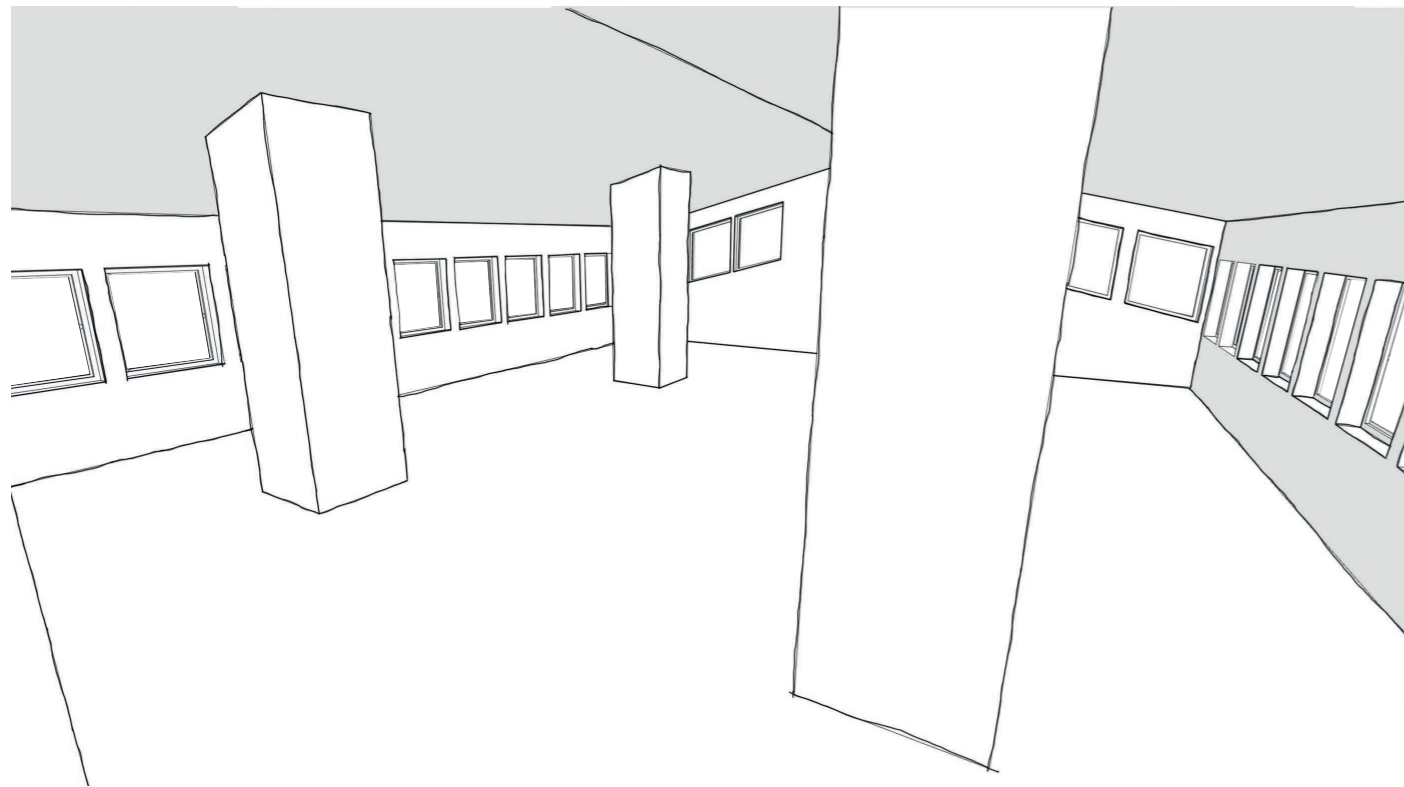


Figure 55: Before situation of floor 3 showing how it is currently unused.



Figure 56: After situation of floor 3 showing how the floor is used for mind relaxing activities, offering possibilities to work out, go in the sauna, meditate or go onto the green roof.



Figure 57: Before situation of South facade Hus B showing the closed off, sombre character.



Figure 58: After situation of South facade Hus B with balconies, newly made back entrance and terrace.

Figure 57 shows how the South facade used to look like. This side was not accessible and therefore, no one made use of this space, even though this is the only space which had grass. The windows are all shut with blinds because it was unpleasant to work in these overlit rooms. Figure 58 shows how the design proposal changed the character from sombre and closed off, to a social and inviting space. There is a back entrance for people coming from the bus stop. The deck around the building

creates a softer indoor-outdoor transition and offers the opportunity to walk around the entire plot. Because of the sun, the office spaces are replaced by balconies and the other rooms are used for vertical farming. The outdoor terrace can be used as a new place to socialise or eat lunch.

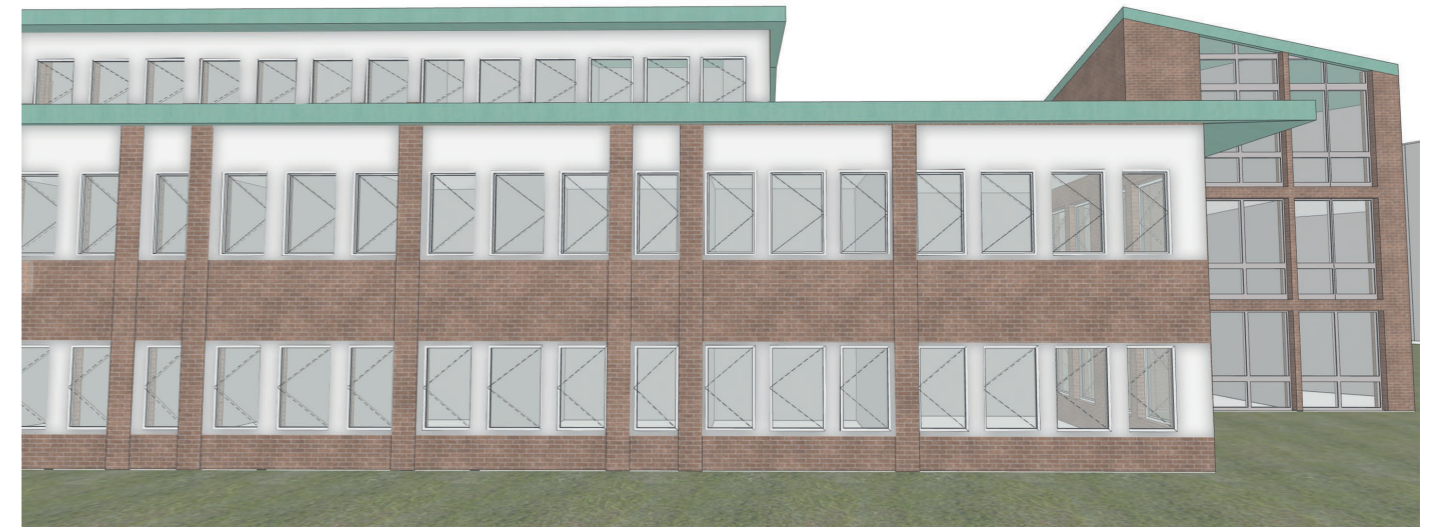


Figure 59: Before situation of monotone back facade Hus C.



Figure 60: After situation of back facade Hus C showing cut outs, green roof and new dynamic facade.

Figure 59 shows the situation of the back facade of Hub C before the transformation. The strong horizontal character of the white window frames and bricks is visible. Furthermore, the space is unaccessible and is therefore not used. Even though, this offers a sunny space to sit outside because of the South-West orientation. Therefore, the transformation in figure 60 shows how the space is made accessible for people to take small breaks, work outside or have lunch on

the wooden patios. The cut-outs also create interesting spaces in the interior and allows sun light and fresh air in. Lastly, the new facade elements show how the horizontal character is broken through, besides the cut-outs. This breaks down the scale and together with the pergolas, green roof, plants and wooden deck, strengthens the indoor-outdoor connection.



Figure 61: Before situation of plot showing the grey empty parking spaces and uninviting, institutional entrance.

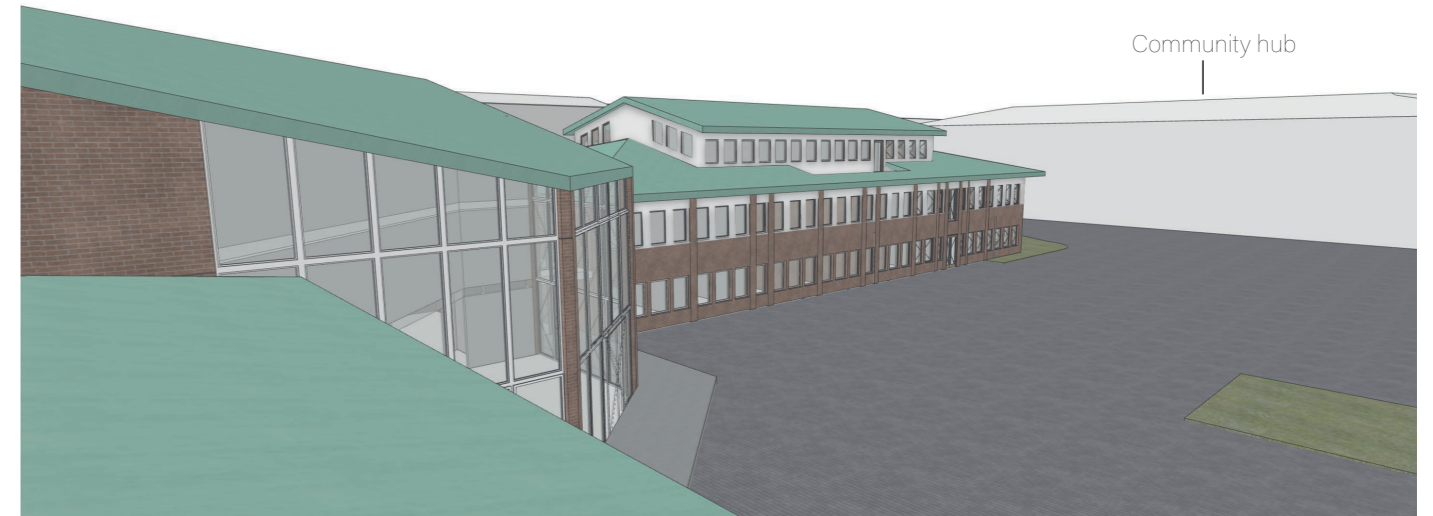


Figure 63: Before situation of plot showing the grey character facing the community hub.



Figure 62: After situation of plot showing an inviting entrance through the low honeycomb structures, greeted by playing children, the diverse wild grasses and a new dynamic facade.

Figure 61 shows how the plot used to look like. The entire plot was grey due to the parking spaces and because of the abundance of them, the space was usually empty. Because of the blank openness, the building creates an intimidating and clinical character which does not offer a feeling of safety. Figure 62 shows how the character has drastically changed by implementing small scale honeycomb structures with the therapy spaces, preschool and library and offers an inviting entrance where you are greeted by playing kids. You are

guided by the curved paths which lead you to the main building or further along. The idea is that the plot feels spontaneous and playful and this is seen in the numerous wild grasses, flowers and bushes. Lastly, the pergolas on the main building help soften its character and give the impression that it is co-existing with nature and not just placed on top of it.



Figure 64: After situation standing on green roof, looking over nature rich garden with water play ground with playing children, wild grasses and flowers and the preschool.

Figure 63 shows the before situation which is similar to figure 61 the grey parking lot, but from another angle. From this angle, the community hub building is visible which the social centre shares its plot with. Figure 64 shows the new situation from standing on the newly made accessible green roof. The roof is now also accessible from the third floor of Hus B, as can be seen at the left. Furthermore, it shows the nature rich garden with the water playground which changes with the seasons and the preschool. It also shows ping-pong tables

next to the community hub to use the garden as a means to connect this building with the social preventive care centre. Meaning that the design goes over the official plot boundaries. This is necessary in order to achieve the goals of including the neighbourhood and to change the plot from institutional to a positive, inviting space which is open to everyone.

## 6. REFLECTION & CONCLUSION

### Reflection/Discussion

I started this thesis because of the disconnection between people and nature and the absence of well thought through design choices regarding office spaces. Together with the ongoing problem of mental health problems. I chose to work with a social centre since this is stated as one of the most stressful jobs and because as their job they help people, it seemed highly relevant to create a healthy work space for them. When I started my thesis I asked myself the following question:

***How can the transformation of a social service building, in Gothenburg, prevent mental health issues, and promote well-being for the users while reconnecting them with nature?***

As I knew from the beginning, and still believe, it is hard to measure something when it comes to someone's well-being. This combined with nature makes it even harder. I believe that the answer is far more complicated than I can describe after doing my research. I did come to the conclusion that, even though I worked with different theories, Health Promotive Building Design, Salutogenesis and Biophilia, they do not differ that much from each other. I believe that they are strongly connected and all intertwined. This created a challenge of formulating new design strategies and showing how they can be combined.

I think that the answer to my question strongly lies in the adding of new functions together with submerging the building into nature. The former entails that by adding the family centre functions, the preschool, cafe and library, creates an interesting spatial relationship between all different parties. This allows the space to be used by different types of people, making it a diverse interactive space and thus is the character more positive driven. I chose the family centre and the named functions since this particular social centre was focused on children and young adults. Meaning that this exact approach will not work for all social centres. However, I do believe that all social centres can be combined with another social

function, and therefore does not have to be restricted to family centres. This aspect is not only about the spatial aspect, but about a reprogramming of what social centres do, too. It would be interesting to do more research on how and what could be changed about typical social help centres in order to be beneficial for our mental health.

The second aspect I named was the submerging of the building into nature. This was also a big challenge since there is not empirical research showing how nature should be implemented in order to be most beneficial for the mental health. Moreover, It was hard to find biophilic reference projects, especially on transformations. I noticed that most projects simply added some plants, a green wall and called it a day. That is when I realised I should start thinking more from nature and let go of the strict rules of office design. I tried to recreate as if you would be walking in nature, providing different types of rooms. This diversity was very important in my project since I believe it gives the user the freedom, just as in nature, to be in a place where they feel most comfortable in. This translated working with different levels of engagement and offering different activity room, mostly related to nature.

I believe that this shows how important it is to do more projects on office spaces and how it is possible to neglect a space where so many people spend the majority of their time in. It might be time to reformulate what well-being means to us and how we could spatially transform this. The same applies for Biophilia, we need to critically look at what we call biophilic and how this could be improved.

Another element I struggled with, is maintaining the priority of the social workers over the clients. I made this decision at the beginning of the thesis since it would not be doable in the time frame to do both stakeholders equally. I do believe that they go hand in hand and in order to design a well working place, all of the users need to be involved. This means that in future architectural projects, the other side, the client could be prioritised and this results in the further development of the new structures containing the library, therapy spaces and preschool.

Something else to mention about future

projects, is the importance of having access to the *located-to-be-transformed*. Unfortunately, I did not get access into the building or to have conversations with the employees. This made the transformation part more complicated since I did not know exactly what was there and what it looked like now. I do believe that from a sustainable transformation perspective, this information is crucial and therefore is incomplete in this thesis. However, I did manage to get some information about what the employees think of the building and this was a good starting point and it would be my tip to always get the human perspective as detailed as possible. Designing without this perspective simply creates rigid volumes with now value or connection whatsoever.

In general, this project was mainly about the atmosphere of the building. However, I do need to admit that during this process I expanded rather than narrowed down more than I should have. This made it hard to not wander off and slip away from the main thread of the thesis. This led to the inability to explore materials for example, even though this is relevant when it comes to establishing an atmosphere. In other words, I think it would have been beneficial to go back to my research question, aims and goals more than I did to design for its essence.

#### Take away for future projects:

Overall, this project has helped me gaining a better understanding of what nature and well-being mean for me and how important it is to show this importance with others in order for us all to start living more with nature again, instead of using her. This would also be the main take away for other architectural projects. This thesis provides three pillars of constructed design strategies which act as tools for projects about social services. Since they are somewhat generic, they can be shaped in a way which fits the involved site/building the most effectively.

All together, this project creates a starting point for development in the community it is located in. By transforming the site into an inviting, interactive environment with functions and activities for everyone, it acts as a space where people come together. The transformation does therefore not only reconnect the users with nature but also reinforces connections between users. As mentioned in the thesis, the

transformation of this plot is merely a starting point of developing the entire grey strip, where the social centre is located. Developing this area is of high value since the surrounding neighbourhood is characterised by residential development. Meaning that the landscape/urban transformation is as important and always needs to be considered during any project. This can only be done by daring to go outside of the plot borders, since nature does not follow boundaries either. Thus in order for communal development towards a greener, healthier urban living and working environment, we need to go beyond the borders and think further than the buildings itself.

## Conclusion

This thesis has investigated how a social services building could be transformed in order to create a healthy space for body and mind while connecting the users with nature. The primary stakeholders were the social workers, however in order to achieve a holistic approach, all other stakeholders, such as clients, were taken into account as well. First of all, a background of social services was provided to create an understanding of what type of building and work it is. The second part consisted of literature research which formed the foundation of the design transformation. The three different theories are, Health Promotive Building Design, Salutogenesis and Biophilia. The latter two presented, besides interpreted design strategies, also relevant reference projects which have been used later on in the design process. Choosing a suitable location was the following step and after doing so, a thorough analysis on the building and landscape using the theories was conducted. This, together with a survey was used to create unique design strategies which were translated into a conceptual design. The final chapter provides the design proposal where all design strategies result in floor plans, perspectives and sections. Since the primary focus layed on the transformation of the existing building, further projects could focus more on the newly added structures.

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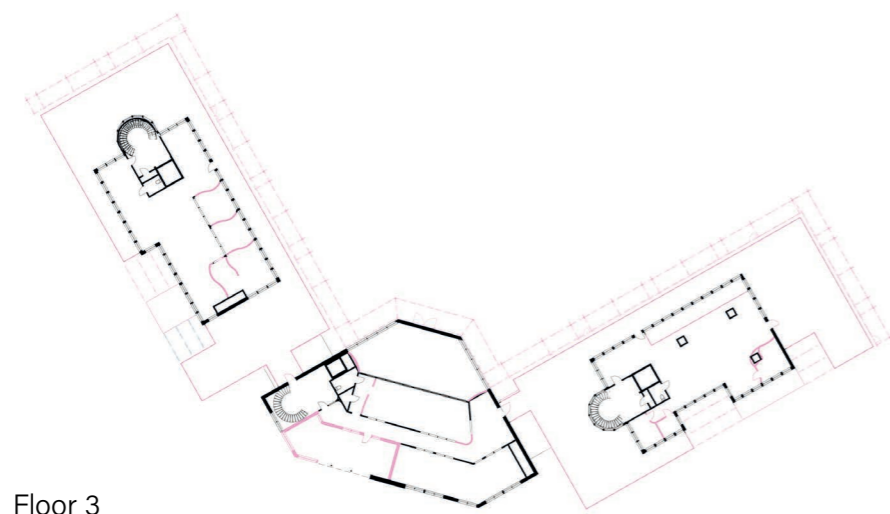
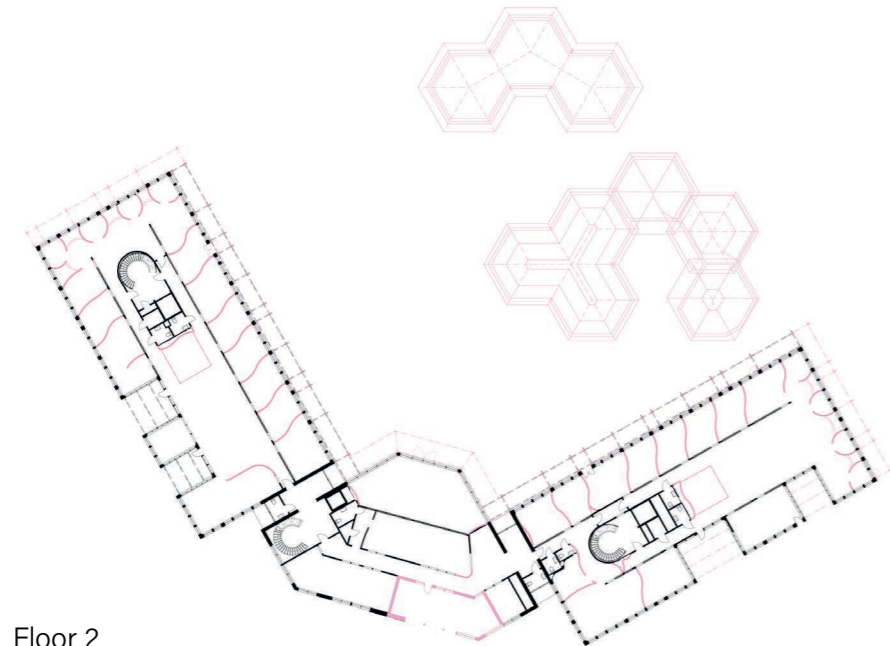
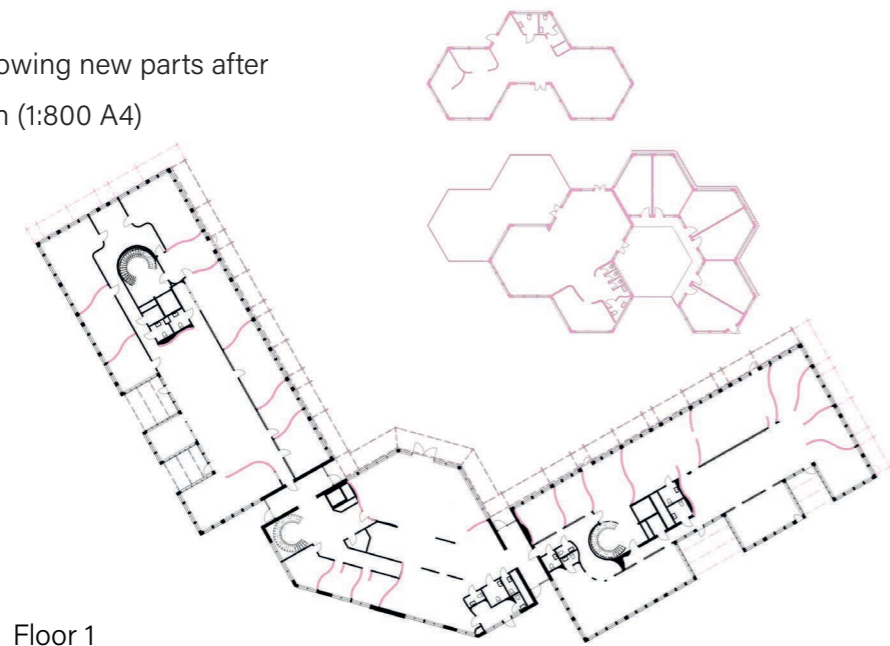
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## Appendix

Floorplans showing new parts after transformation (1:800 A4)



# THE SOCIAL WORK OASIS

A building transformation for social services  
to restore the connection with nature and to  
promote well-being

by Ilse Westveer

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