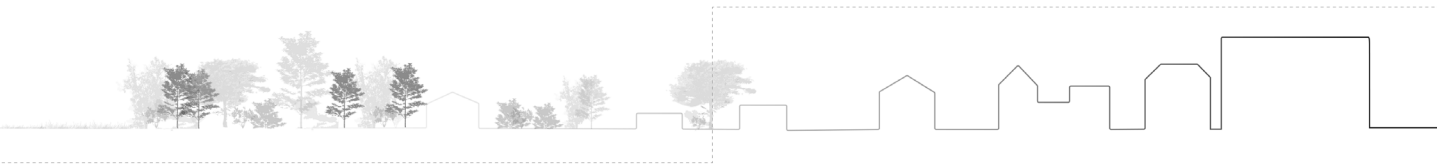Group 5

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May 2022

PLACE FOR COMMUNITY

A COMMUNITY CENTRED
NEIGHBOURHOOD DESIGN
FOR A MORE CONNECTED
SYDHAVNEN

ABSTRACT

The project aims to challenge urban development, directed by mass-housing development and private sectors. This is set with a focus on how quality urban design can create enhanced, and more contextually appropriate neighbourhoods, with attention to the local communities. To showcase this, the project suggests a new approach on how to develop the site "Molestien", in Sydhavnen, Copenhagen Southwest. This starts with an analysis of the local area, and how the history, built topology and urban features can help to appraise the site context.

To create a framework, the project draws from the New Urbanism approach, to set up principles of well-known urban design methods, and further create a toolbox on how a neighbourhood can become more communal and socially functional. This includes inspiration from the transect theory and placemaking, which guides the design with regulatory and specific design principles.

Moreover, this leads to a conceptualisation of how the different typologies in the project district can be used as guidelines for neighbourhood planning, both in terms of the built-up character and the associated culture. This ends up in a design proposal, for a new neighbourhood on Molestien. The proposal sets a new standard of how new development in an existing culture can become successful. The built environment in the neighbourhood is formed by small-scale local typologies, with inspiration from local surroundings. This intends to allow users of the neighbourhood to interact, and experience a great concentration of diversity, which can stimulate personal needs. In addition, the great diversity also creates opportunities for different places to stay, and interact with other people, which aims to enhance unity and community in both the local neighbourhood and the greater Sydhavn.

PLACE FOR COMMUNITY

Urban Architecture
Master's thesis

Number of pages: 139

Appendix pages: 13

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READING GUIDE

The project report consists of 7 chapters:

"Prologue" Introduces the project context and inspiration, methodology and process.

"Contextualise Molestien" is an analysis of the project site, Molestien. It presents and concludes on analytic findings that finally shape the problem statement.

"Designing the good neighbourhood" puts up a theoretical framework to shape the design criteria and concept.

"Zones and shapes" gives shape to design the design concepts and sets up requirements and strategies for further design.

"The new neighbourhood" gives a visual presentation of the design proposal in a masterplan, sections and render

"Design Programing" presents detailed programming, design details and principles of the masterplan. The chapter goes through, functions, building hieghts, access, public/private organisation, parking concepts, materials and vegetation.

"Epilogue" reflects and concludes on the project approach and beyond.

References

Harvard style referencing is used to refer to texts and other outside sources. Illustration has an indication, marked as "own" if the illustratoin is the project group's own. References will be put in a collected list at the end of the project. On each map is a scale indication as well as a north arrow.

VOCABULARY

Throughout the project, distinct and local words will be used to describe elements in the project. For example, when the report mentions "Sydhavnen" it refers to the district in which the project site is located. The rest of the local terms will be listed below. Then using the letter "T" and sometimes followed by a number; T1, T2 or T4, it is a communicative expression borrowed by The Transect theory (Bohl & Plater-Zyberk, 2006) referring to a specific typology. For example, T1 refers to Natural zones, T3 Suburban zones and T6 urban cores.

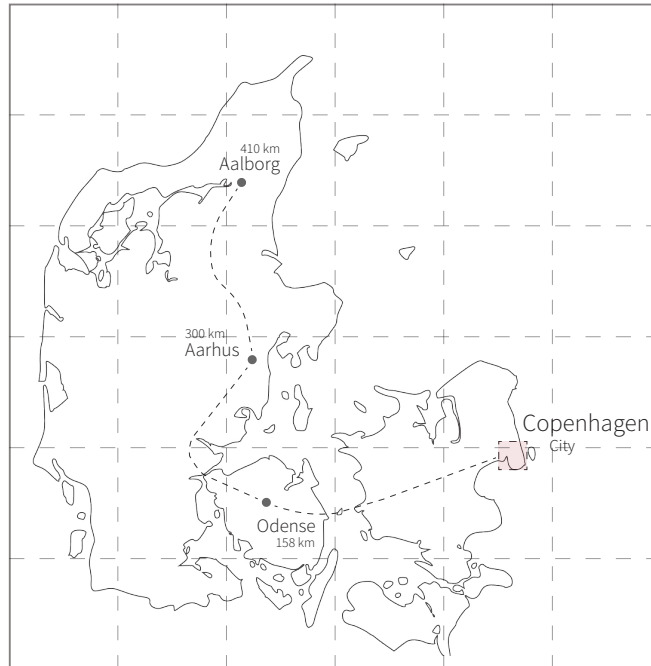**"Sydhavnen"** = The South Harbour, district in the southwest part of Copenhagen

"Sjællandsbroen" = The main road north of the site

"Bådehavnsgade" = The road carving through the site, coming from Sjællandsbroen

"Sydhavnstippen" = Big natural area at Sydhavnen

"Stejlepladsen" = Natural area south of the site

"T(1/2…)" = Typology (1/2…)

Ill. 1 Site location (Own)

Location of site

Sydhavnen,
Copenhagen South West, 2450

"Sydhavenen is like the city within the city".
Cafe owner, 2022 (Interview)

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03
DESIGN THE "GOOD NEIGHBOURHOOD"

04
ZONES AND SHAPES

05
THE NEW NEIGTHBOURHOOD

06 PROGRAMMING

07 EPILOGUE

01
Prologue

The first chapter is going to set the baseline and ease the immersion into the project theme and subject. First is the project context, existing future plans and inspiration presented, followed by methodology and process.

DESIGN FOR THE GOOD NEIGHBOURHOOD

What defines a "good neighbourhood"? The answer may be very personal, complex and often difficult to describe in one or a few factors. Nevertheless, we somehow know when we are there. They seem to have incremental cultural growth over time. They come in a variety of built forms and in varying densities. At times they occur as harmonious buildings and well-programmed spaces, and other times as vibrant, messy and crowded places. They are by fact primarily residential neighbourhoods but are equipped with a variety of possible opportunities and places of activity like shopping, workspace, schools, parks and space for leisure (Larice, 2005). These examples should transpire as objectives for urban developers and designers. However, in the current time's urban growth, cities are rapidly expanding to accommodate the increasing number of people and buildings, ignoring the urban quality and needs of people (Khemri et al., 2020). This draws back to the structural changes in the division of city development in the latter part of the 20th century, where the roles were handed more and more to private sectors, leaving the state to a more regulatory role (Madanipour, 2006). This created a more scattered and short term view of planning, as the private developers have tended to focus on housing units rather than urban issues, which they have seen to be beyond their remit. This has prevented a more holistic long-term view, hence the lack of interest and prioritisation of urban design by developers (Madanipour, 2006).

The consequences of this change exhibited in many newer development projects, are what remind us of just how important it is, to make urban design more connected to development. Instead, developers should work towards a stronger focus on the future of cities, moving beyond the single site, as well on a more concrete level than the large-scale maps of urban and regional planners (Madanipour, 2006). By doing this, the pursuit of the "good neighbourhood" is not too far from reality. Moreover, this should be of interest to the city's public authorities hence; the benefits of good design help to ensure a continued public acceptance of necessary new development, and thereby help to develop better governance arrangements. Well-designed neighbourhoods also makes the city more competitive, by attracting more residents, investors and visitors (Madanipour, 2006). For the local residents of the development areas, well-designed urban environments can play a powerful role in generating enhanced social meaning, providing a basis for social identities in urbanised societies. By promoting pride, local populations are encouraged to maintain emotional links with their environment, rather than abandoning it. Local authorities can then justify their role if cities are viable, rather than bankrupt and dilapidated places (Madanipour, 2006).

Ill. 2 Picture of "Dansk Metal" office. (Own)

"Because of all the constraints that exist within development, designers should simply get the most they can - there is no danger of ending up with too much".
(Bentley et al., 1985)

However, living in well-designed environments may provide a symbolic status for the better-off users. Yet the development of new urban areas affects all social groups, and therefore good design that provides a wide variety of opportunities, for significant activity and encourages growth of whatever potentialities the social cultures possess, should be available for everybody (Madanipour, 2006) (Grant, 2006). And lastly; "because of all the constraints that exist within the development, designers should simply get the most they can - there is no danger of ending up with too much". (Bentley et al., 1985).

TOWARDS A NEW NEIGHBOURHOOD

The current local plan for the area consists of approx. 41.000 m2. It is located south of Sjællandsbroen, east of Bådehavnsgade and north of Øresundsbroen in Copenhagen. The development plan includes constructing a floor area of 68,600 m2 distributed into housing, service industries and institutions with a further requirement of establishing 25% of public housing. In addition to this, a parking garage of 8,500 is established. This brings the total building percentage to 185%. The building construction at the current plan is of a relatively tall character, varying from 40 metres high, translated to 10 floors at the highest point, to 26 and 20 metres with blocks of 8-6 floors. (Københavns kommune, 2021) See appx. 5 for more illustraions of the local plan.

In comparison to the above, the proposed new development of the area has been expanded to a total project site of 89.000 m2. This has been done in order to make a more connected development, with a clear contextual line, assessing the surrounding neighbourhoods. Further, the extended area is a part of the overall development plan according to Copenhagen Municipality plan orientation (Bygge- og Teknikforvaltningen, 2000). The new proposal will additionally realise the requirements of the local plans for a building and environmental appearance that is in harmony, with the immediate surroundings (Bygge- og Teknikforvaltningen, 2000), as well as a requirement for a lower building structure (1 to 6 floors), than what has been decided by the current developers. This will ensure the special consideration which according to the local plan should be taken, to the allotment gardens adjacent to the west (Bygge- og Teknikforvaltningen, 2000). The building floor area of the new proposal will be 62.500 m2 and 12.200 m2 for parking areas. This brings the total and building percentage to 84%.
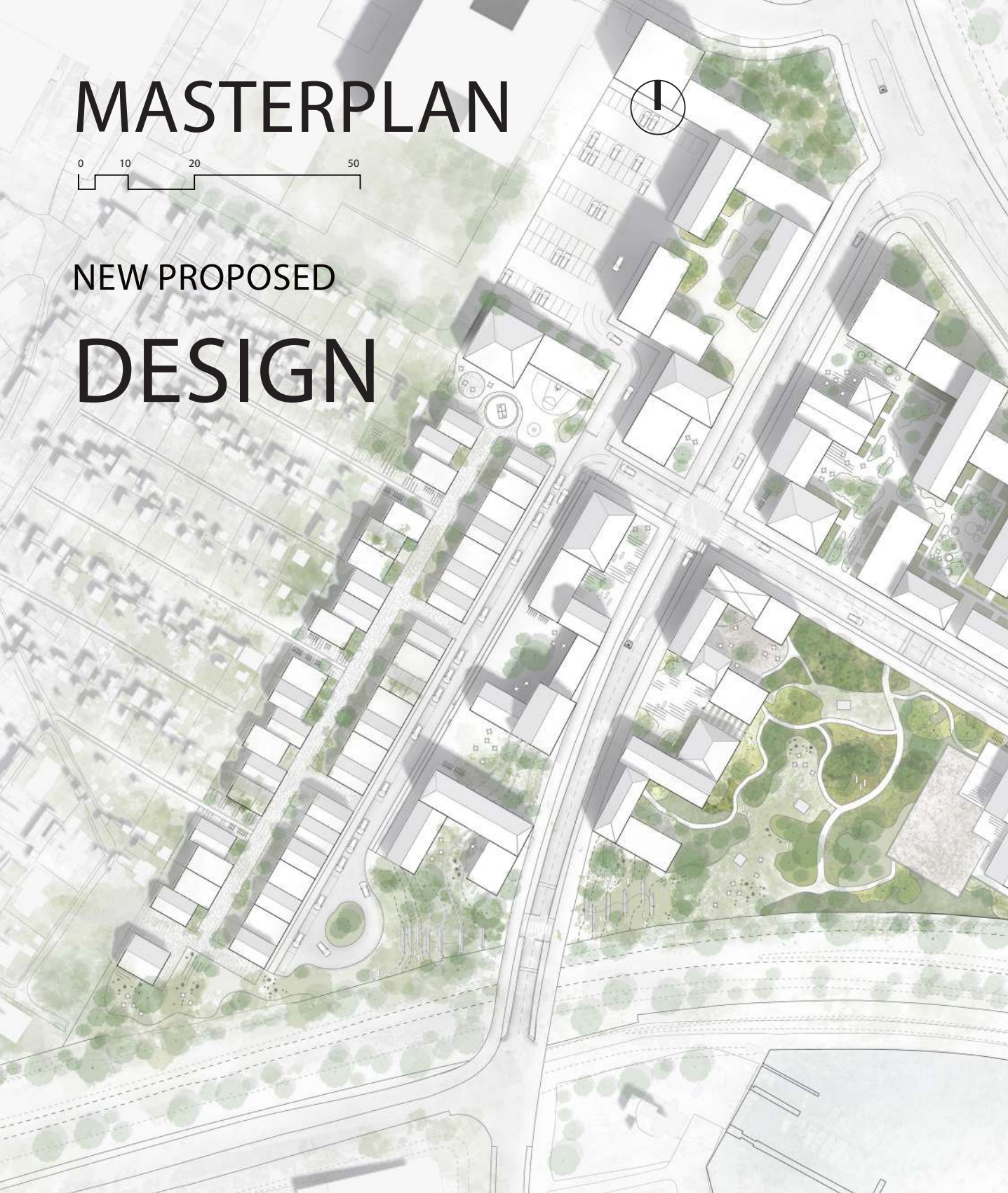
With this comparison, the following project intends to create a neighbourhood that is more connected to the local context at Sydhavnen, than the current development plan, which further can be criticised for not paying attention to the human scales and community. It will demonstrate how typologies, of the existing environment, can help to understand how the built characters, can clear the way for a better transition in both physical factors as well as for the local acceptance and success.

Ill. 3 Top down view of the site (Own)

OFFICIAL LOCAL PLAN

Ill. 4 Local plan development by DGA

MASTERPLAN

0 10 20   50

NEW PROPOSED
DESIGN

Ill. 5 Proposed new Masterplan (Own)

LITERATURE REVIEW

A literature review has been carried out on the thesis topic to organise and investigate the field. This has given rich information, ideas, and evidence that can be used in the project to argue standing points related to the project design. The review has been used to answer questions about; major issues within the topic, the origins of theories, key concepts and methodologies to assess our project outcome (Hart, 2018). The review has been carried out as an iterative process, with the main organisation phase to gather as much literature on the topic as possible, to sort it out in themes and relevance. This was used to later, read up on the organised literature when information on the fitting topic was needed. In total, the literature review was shortened down to a relevant group of 18 sources to provide references, ideas or guidelines for the project. This number has later been growing in parallel with the process of the project, where supportive articles and web pages have been given the needed information. For a more descriptive explanation of what the review meant to the project process and understanding see appx. 2.

## The key searching words for the review:

New urbanism, typology, placemaking, urban design, community, quality design, public, private, edge, street design, public space, planning, diversity, public realm, policy, social sustainability, living city.

Ill. 7 Design process (Own)

METHODOLOGY

The methodology of this report has a natural connection to the Integrated Design Process, by Mary-Ann Knudstrup (2004), which is a creative methodology and process entwined in the PBL process used by Aalborg University. The process has supplied the thesis project with an overall framework, made of five phases: Project idea, analysis phase, sketching phase, synthesis phase, and presentation phase (Knudstrup, 2004). The process and framework are meant to be highly iterative and overlapping and mostly serve as an indicative guide, rather than a strict manual to follow. To illustrate this design process in a simple way, Damien Newman's design illustration "The squiggle" has been used to visually describe this project's design journey of researching, uncovering insights, generating creative concepts, iteration of prototypes, supervisions, presentations and eventually a designed proposal (Newman, nd) (ill. 9). It illustrates how the project's commencement of; literature review, research and idea-making, spreads out the creativity and messiness and through analysis, synthetic focuses the project to the final design outcome (Newman, nd).


Research

Concept development

Research

Analysing

Sketching

Field Study
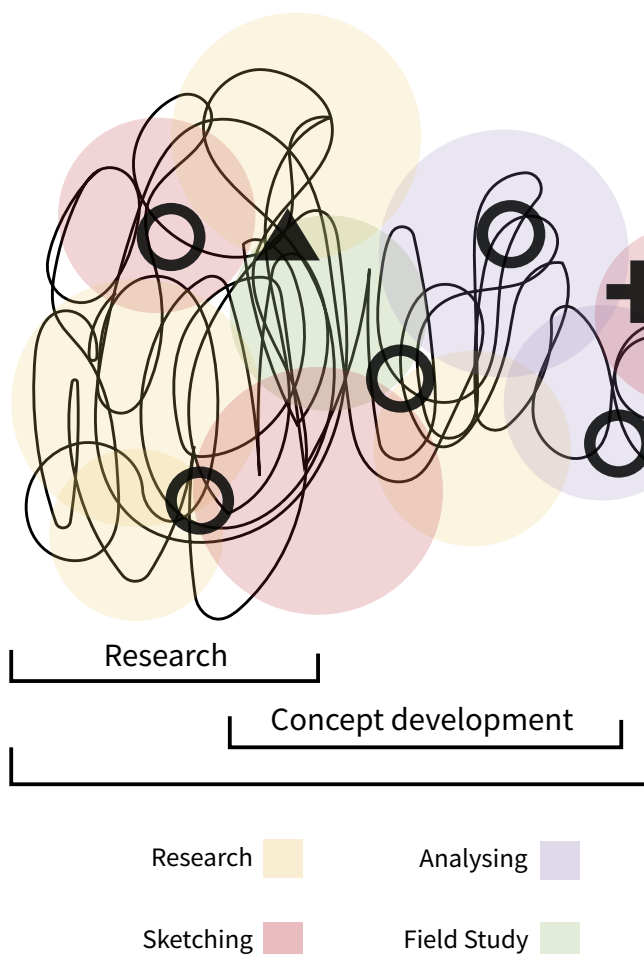
"As the master thesis topic and problem, cf. the semester description must be defined by the project group's own interest. The first point of departure was to find an overall theme to narrow down on the group's project vision. This was aided by a general thesis topic catalogue, where the topic of "public space" was agreed upon. This was followed up by the literature review described above in section. Some preliminary problem formulations started taking shape during the literature review and research phase, whereas a more focused project theme was created, and older ideas were discarded. The new ideas collaborated with a sketching phase where the ideas were brought to "life", and validated by testing and urban design theories. In order to contextualise the project ideas and design a field trip was conducted, to ground the desktop findings. Further, the field trip included a number of semi-structured interviews (see Appx. 3 and 4)

with local residents and shop owners, to understand the local perspective of the site and the values of the area.

The findings from the above drove to the finalisation of the conceptualisation, a more specific design development carried out in a group workshop, sketching, modelling, (see appx. 6 and 7) and the problem statement. Finally, the presentation of the design proposal was put forward, including a neighbourhood masterplan, sections, and renders.

"Drawings of various kinds are still the most extensively used modelling medium for evaluating designs – both informally in the designer's skilled reading of drawings and imagining their implications, and more formally in measuring dimensions, calculating stresses, and so on. [...] This modelling, testing and modifying is the central, iterative activity of the design process. (Cross, 2006)
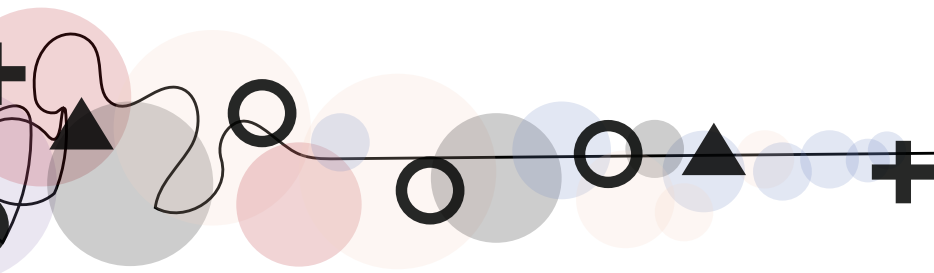
Design

| Resolvment | | Visualising | | Supervision | ◯ |
| Synthesis | | Pin up and midtern crit | ▲ | Model making | ✚ |

Ill. 9 Project process (Own)

02
Contextualise
Molestien

The following chapter is analysing the project site from a past and present perspective - the past unfolds the perspective of a close united and old neighbourhood. The present perspective builds upon this, explaining how the current situation and culture at Sydhavnen have strong roots and both need respect and cautiousness to provide a better future. The chapter ends by concluding on the analytic findings and presenting the problem statement.

ZOOM TO SITE

410 km
Aalborg

300 km
Aarhus

Copenhagen
City

Odense
158 km
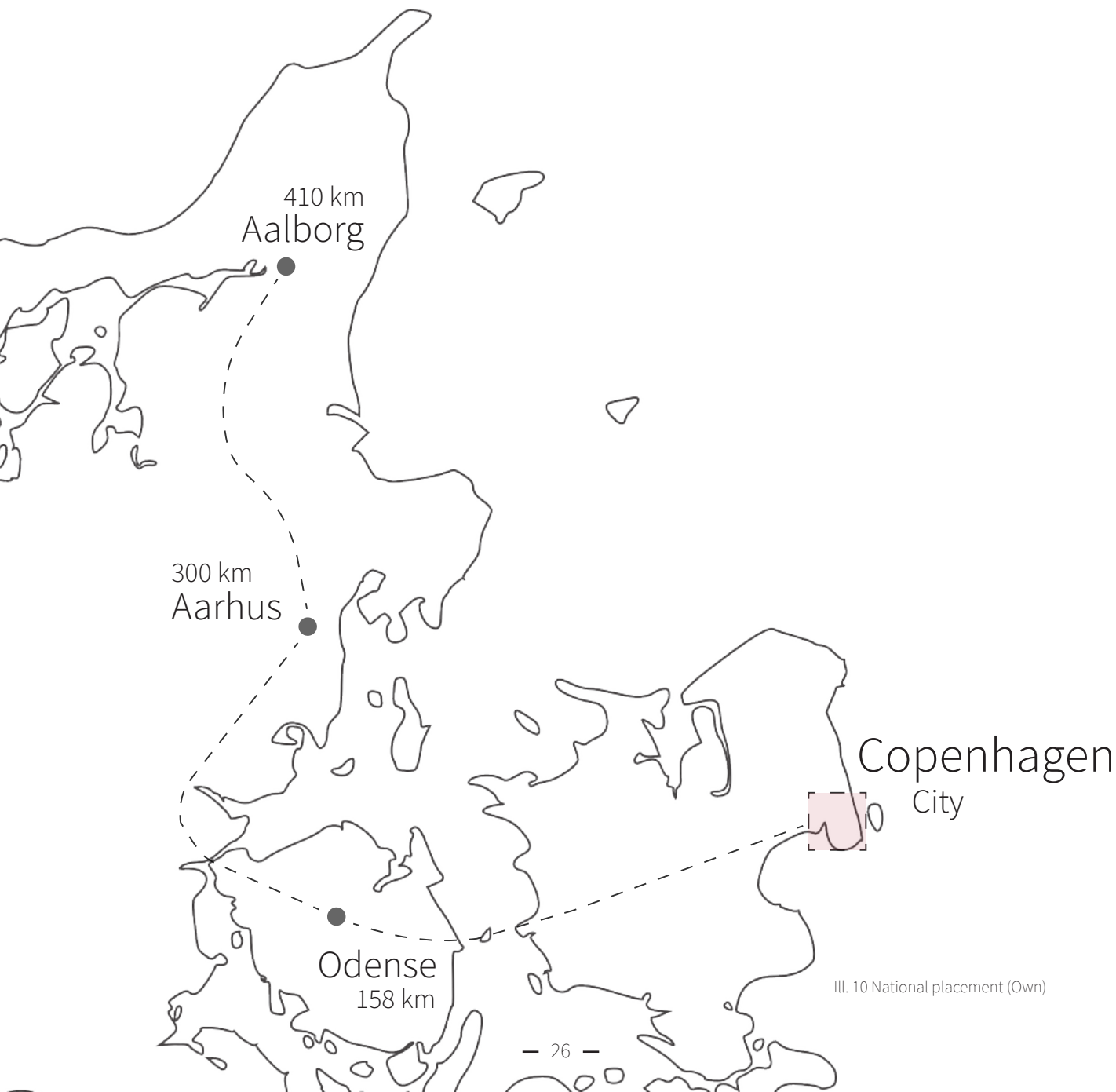
Ill. 10 National placement (Own)
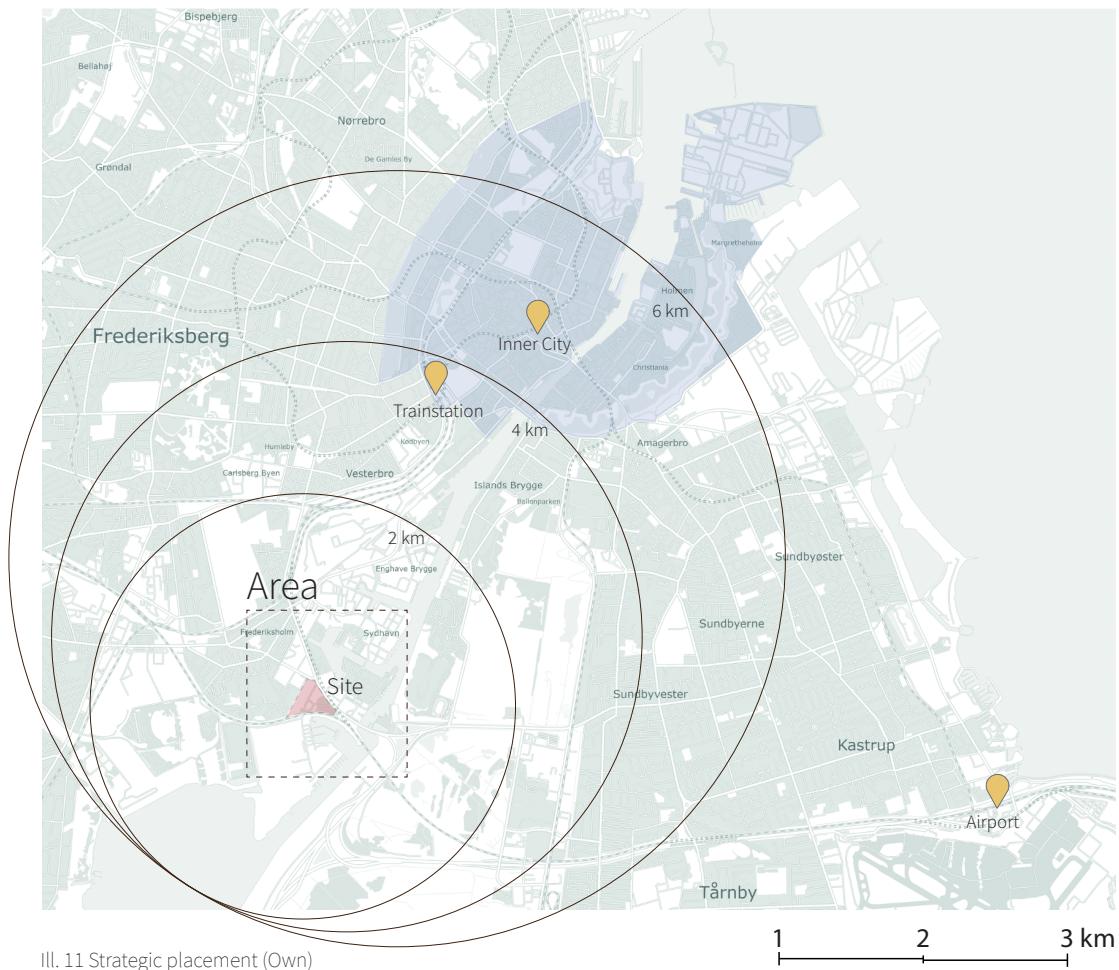
Ill. 11 Strategic placement (Own)

The site is located within 6 km distance to the inner city of Copenhagen in the southwest part of Copenhagen, making it a lucrative space for development. The site has a relatively big size, in relation to a complete and coherent development project. This gives a good opportunity to create a new neighbourhood that has a great impact on the district.

SITE
"Molestien"

The project area has a total size of 94.000 m2, and 89.000 m2 designated for possible development, on account of the deprivation of the square metres from the road going through the site. Currently, there are a number of industrial and office functions on the site, such as Dansk Metal (union), Scandic Hotel, Stark (builders merchant), car mechanics etc. These give an atmosphere of an area which is not intended for residential use, but for practical uses that foster building backsides and open concrete spaces. Each side of the triangular shape is facing toward a significant area of Sydhavnen with different typologies, history and cultures. This brings an interesting aspect to the site's placement and makes it necessary to appraise these differences.
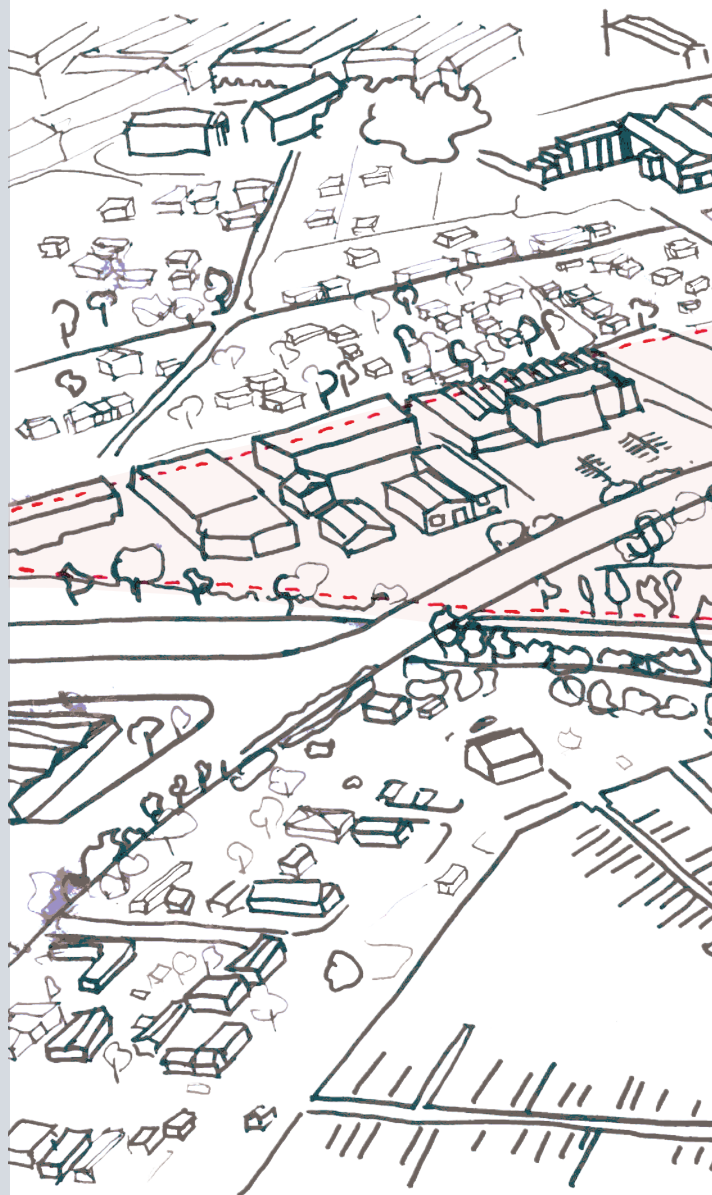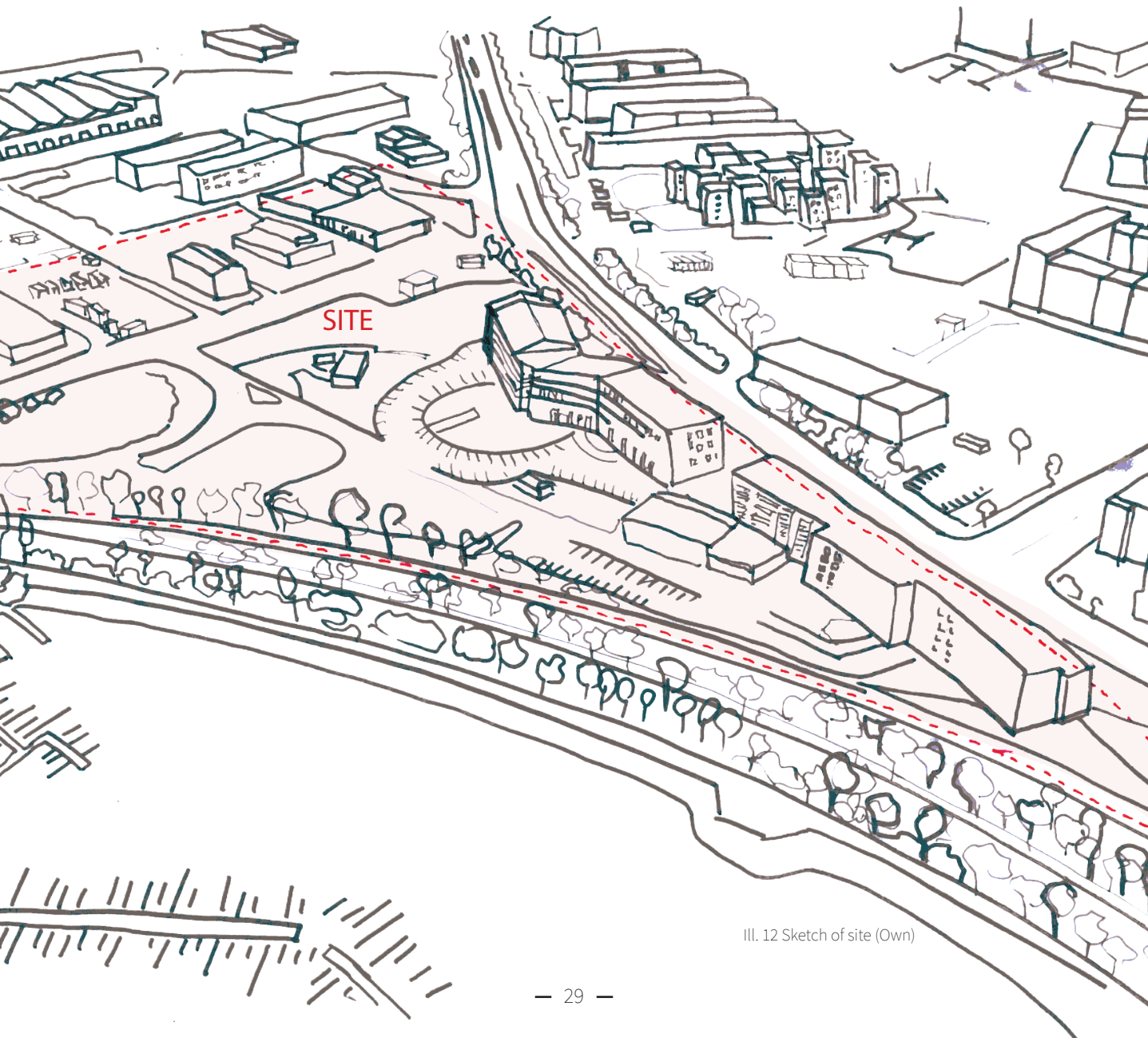
SITE

Ill. 12 Sketch of site (Own)

SITE PICTURES

Ill. 13 Picture seen from Sjællandsbroen

Ill. 14 Picture seen from Bådehavnsgade (Own)

Ill. 15 Picture seen from over the railsways (Own)

Ill. 17 Picture of the site seen towards north

Ill. 18 Picture of the area to the West of Bådehavnsgade (Own)

Ill. 19 Picture of the intersection at Sjællandsbroen

TRANSECTIONAL
Understading of the area context
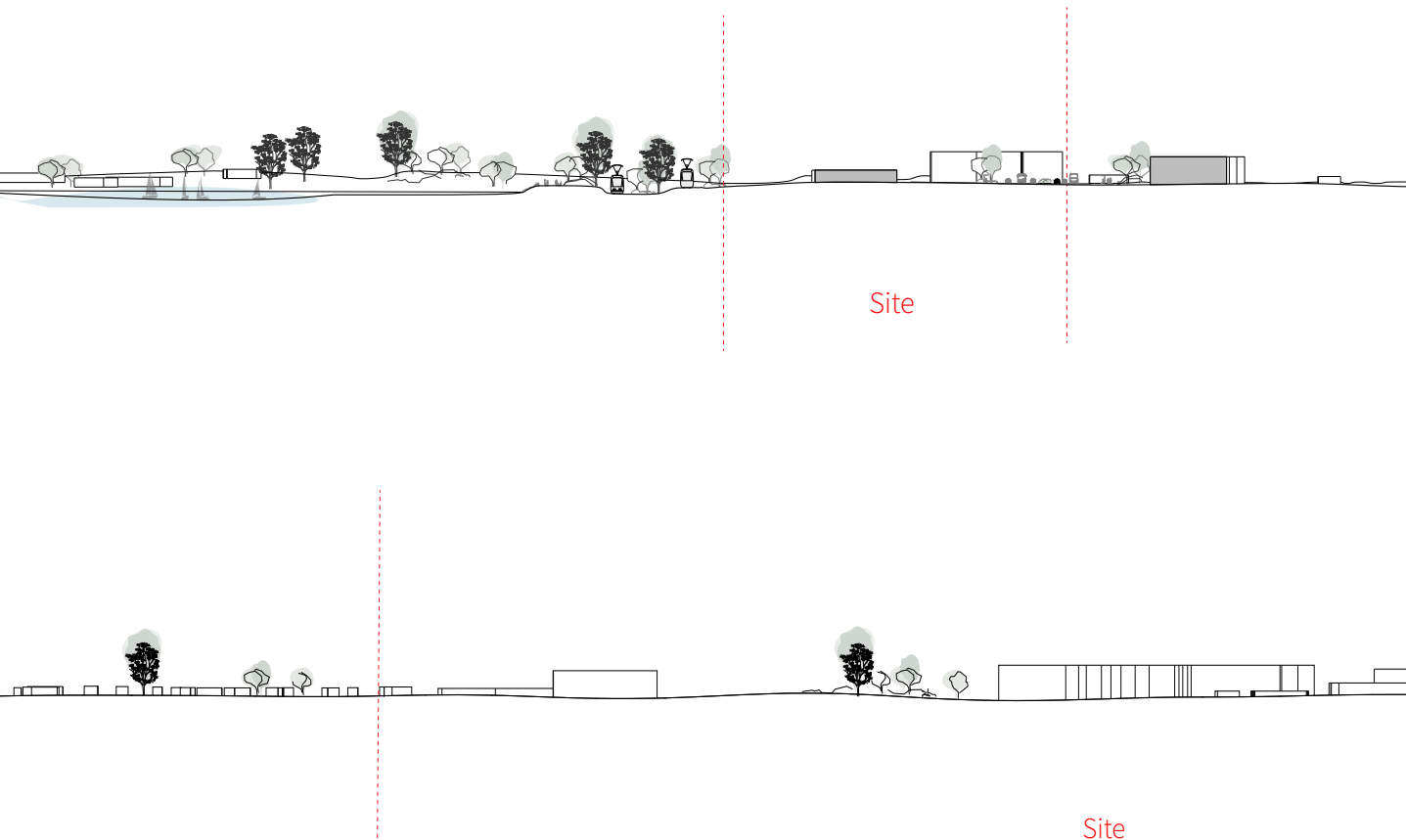
Site

Site

Ill. 20 Sections of existing site Morphology (Own)
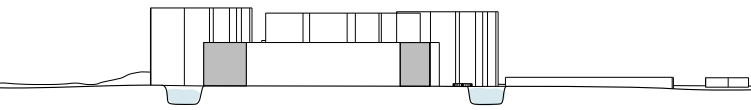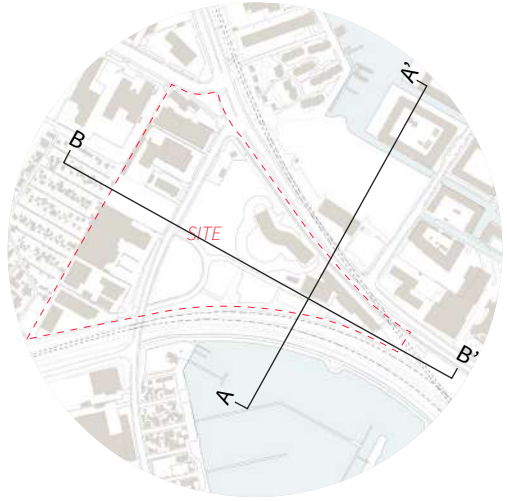
Section A - A

The diversity of typologies, mentioned in the former section "SITE Molestien", is further the main feature that is noted in the sections of the existing site. There is contrasting diversity in the heights, the sizes, and the function of the buildings. As a result, it creates a transiting contradiction in the co-existence of typologies along the area. In addition, the fluctuation of the terrain seems to take the advantage due to the declination of the altitude to enter the water level. Finally, there is a noticeable absence of the green elements in the build area and the site, while in contrast, nature seems to flourish in the proximity to the water.
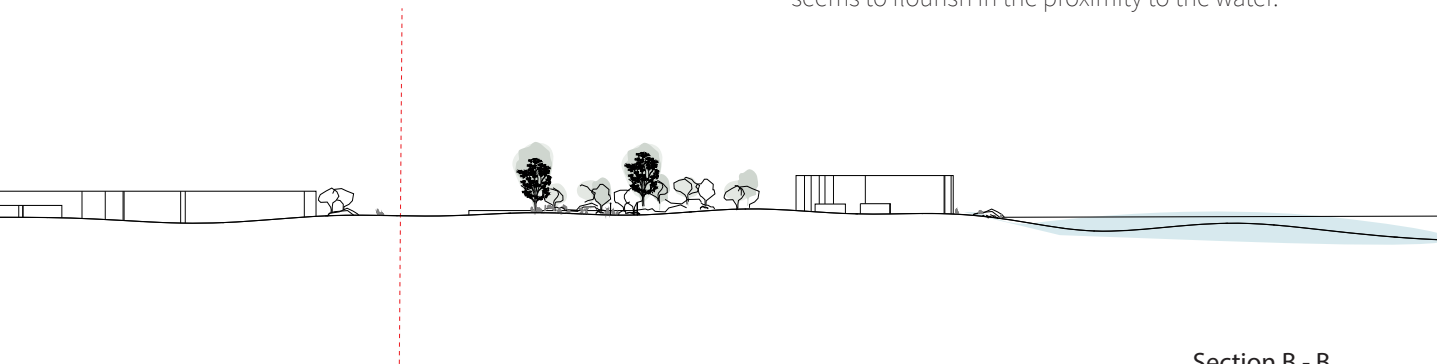
Section B - B

SYDHAVNEN

Long before the housing estates arose at the beginning of the 20th century, the foundation for Sydhavnen as we know it was constituted. Since the middle ages the King had ownership of the land and for centuries it consisted of pastures as far as the eye could see. In 1795, the land was sold to the municipality of Copenhagen, which was the start of Sydhavnen as we know it (Kgs. Enghave Lokalhistoriske Arkiv, 2021). The area which previously consisted of pastures, a clay grave and a few farms was transformed into a residential and heavy industrial area. In order to improve the industrial harbour, a barrier dam and lock were established in 1903, which today is a characteristic of the area. The year 1913, is Sydhavnen's actual year of birth. Here, the association Arbejdernes Kooperative Byggeforening (AKB) was formed, which is still today responsible for the development of the area (Kgs. Enghave Lokalhistoriske Arkiv, 2021).

Ill. 21 H.C Ørsted power plant, private photos
© Kgs. Enghave Lokalhistorisk Arkiv

| 1842 | 1928 | 1980 | 2022 |
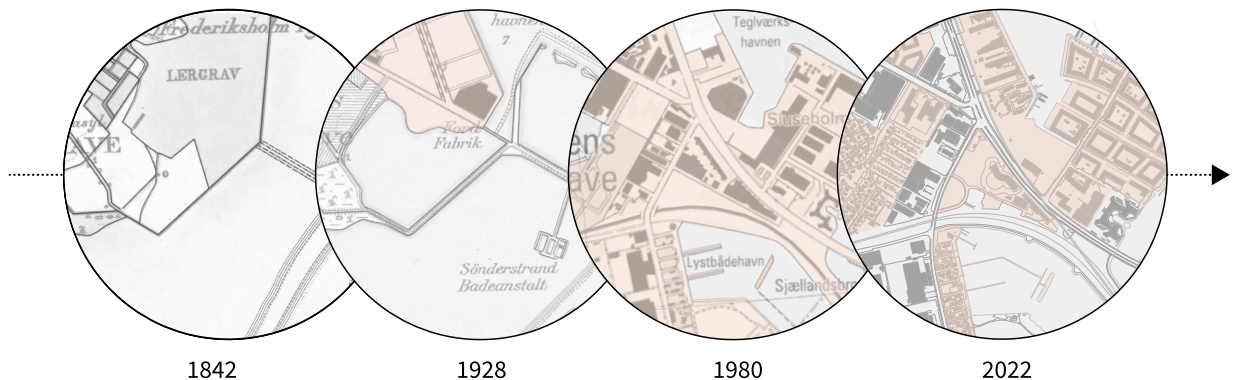
Ill. 23 Historical evolution of site area (Own)

In 1923 the garden association Frederikshøj was created. In the start, it was mostly used as beneficial gardens, but due to the housing shortage, many chose to settle in the area permanently. Between the 1930s and 1950s, Sydhavnen went through significant development, with the finalisation of Mozart Plaza and the surrounding neighbourhood, as well as the implementation of the fishing port - which is today used as a marina (Kgs. Enghave Lokalhistoriske Arkiv, 2021). At that time, Sydhavnen stood as a finished district with a cinema, pharmacy and schools, which has developed into what it is at the current time.

Ill. 22 Tram in sydhavn, private photos
© Kgs. Enghave Lokalhistorisk Arkiv

TODAY

Today, Sydhavnen has been divided into two main parts - the old Sydhavn and the new Sydhavn, which is cut up by the main road "Sjællandsbroen". The new Sydhavn has been developed into a coveted residential area, where the first residents moved into the housing at Sluseholmen in 2006 - The area is characterised by the presence of the water, and the inspiration of the canals in Amsterdam. The old part has properties with small apartments that were originally intended for dock workers. Measured on; income, education, unemployment and number of residents on transfer income, the area is one of Denmark's poorest (Propstep, 2021).

From the start of 2018, Mozart Plaza was closed off for the construction of the new metro line, which has been called out as the direct cause of the degradation of the local retail by the locals. Furthermore, the locally beloved area "Stejlepladesen" in the Old Sydhavn has had its preservation removed for the benefit of a new housing area, set to finish by 2024. (Kgs. Enghave Lokalhistoriske Arkiv, 2021)

Ill. 24 Sluseholmen

Ill. 25 Mozart Plaza (Own)

The architecture and environment in the New Sydhavn, implemented 2000-2020, is different from the Old Sydhavn.

Among residents in the old Sydhavn, there is a desire and need to include the older culture in what should be the Sydhavnen's future. It seems that some residents are adversaries towards the modernisation of the districts, therefore the steps taken must be done with respect for the existing, and with a mindset of compromise regarding regulations, and development on a scale such as Sluseholmen (AKB København, 2016).

In order to reach common ground, AKB has held workshops with the local residents. At the top of the list, residents mentioned a desire for specifically; street level and pedestrian streets with cafés, restaurants as well as clothing- and specialty shops, which today are limited in the district (AKB København, 2016).

THREE LOCALS

During a site visit, we encountered a number of people who commented on their relationship with Sydhavnen and the area's future.

Before heading to the project site, the group went to a local café to prepare. Just before leaving the cafe, we had a talk with the owner.

She did not live in the neighbourhood herself, but close to Valby. Although, she said that all her employees were from the neighbourhood, and maybe this had something to do with the fact that her cafe was the only one in the area.

She explained that "Sydhavnen is the city within the city", and thereby has its "own way of living". For that matter, it also concerned her how the new developments forgot the old context and focused more on "how much building that could be fitted in". She elaborated, "It is forgotten who is going to live here - it is missing in the equation". This raises a question of who can take part in the new areas, so it does not become "an expensive ghetto" - as she puts it before we leave the cafe.

While walking and observing the area around Mozart's square, a woman came and asked about our errand.

The housing and living conditions according to her stand as (quote) "some old trash". It does not have proper insulation, and the streets are built of poor design. In the same sentence, she asks herself, "where does the money actually go?". Hereby, she implies that the area needs renewal, but she wants it to be done with respect. She mentions that the neighbourhood has a billiard club and other small community events. However, this only attracts a small percentage of the residents, where the students and younger generation, according to her, do not wish to mix.

At a bench, by the marina, we started a conversation with a community-engaged resident.

As a very engaged resident, the woman spoke about the connected and existing community at Sydhavnen, which in newer times has been assisted by a Facebook group that she calls "the karma group". It is used to talk across the bigger district for the help of all types and demands. "Here we are taking care of each other, '' she says. It is not a question of "what i can get" it is about what one can give to support the neighbourship. This is deeply integrated with the culture and community at Sydhavnen.

"We help each other, we have so much karma!"
Local resident, 2022 (Interview)

Sydhavnen is divided into two main parts, with the main road, Sjællandsbroen, as the divider. The new and old area is in a cultural conflict, where the residents of the historical neighbourhood sense neglect of the existing neighbour-hoods and cultures. They want to preserve the social virtues, community and unity of which the Sydhavnen is built.
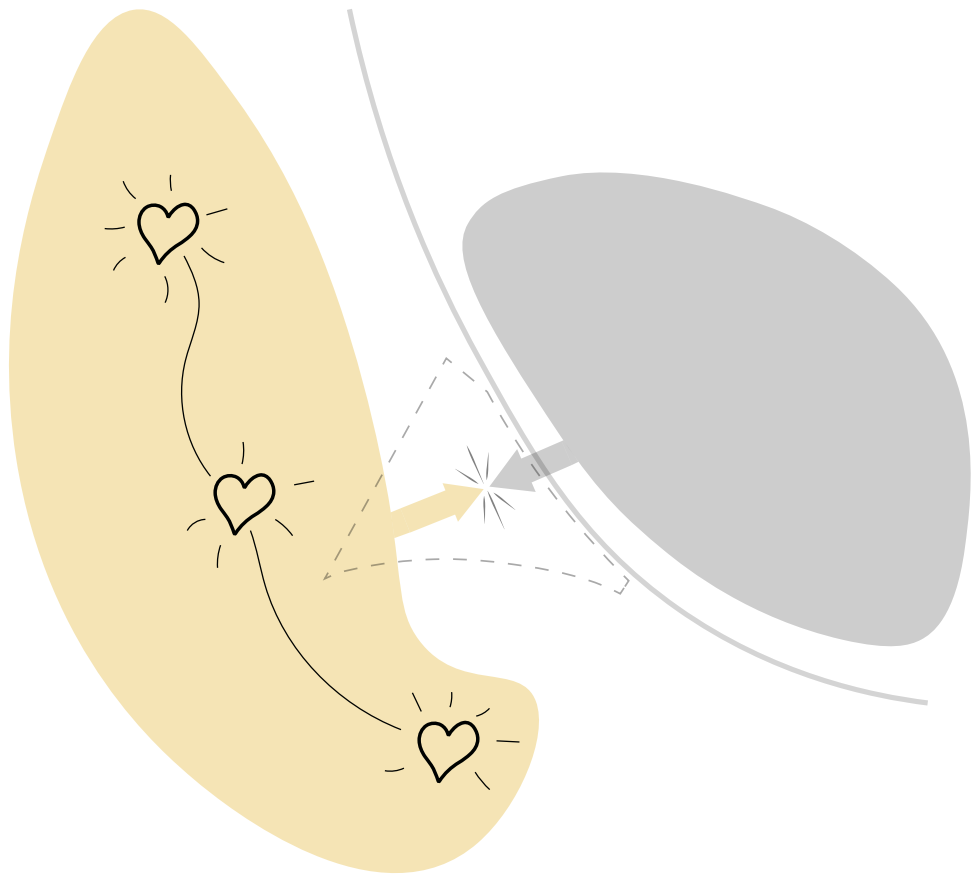
Ill. 26 Culture Clash Diagram (Own=
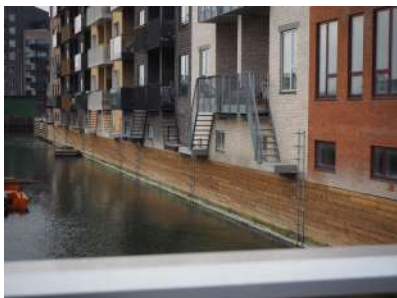
ill. 27 Sydhavn pictures (Own)

FUNCTIONS

Ill. 28 Funtions in Sydhavnen (Own)

Residential use
Mixed uses
Public use
Industrial use
Green landscape
Site
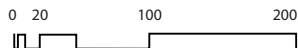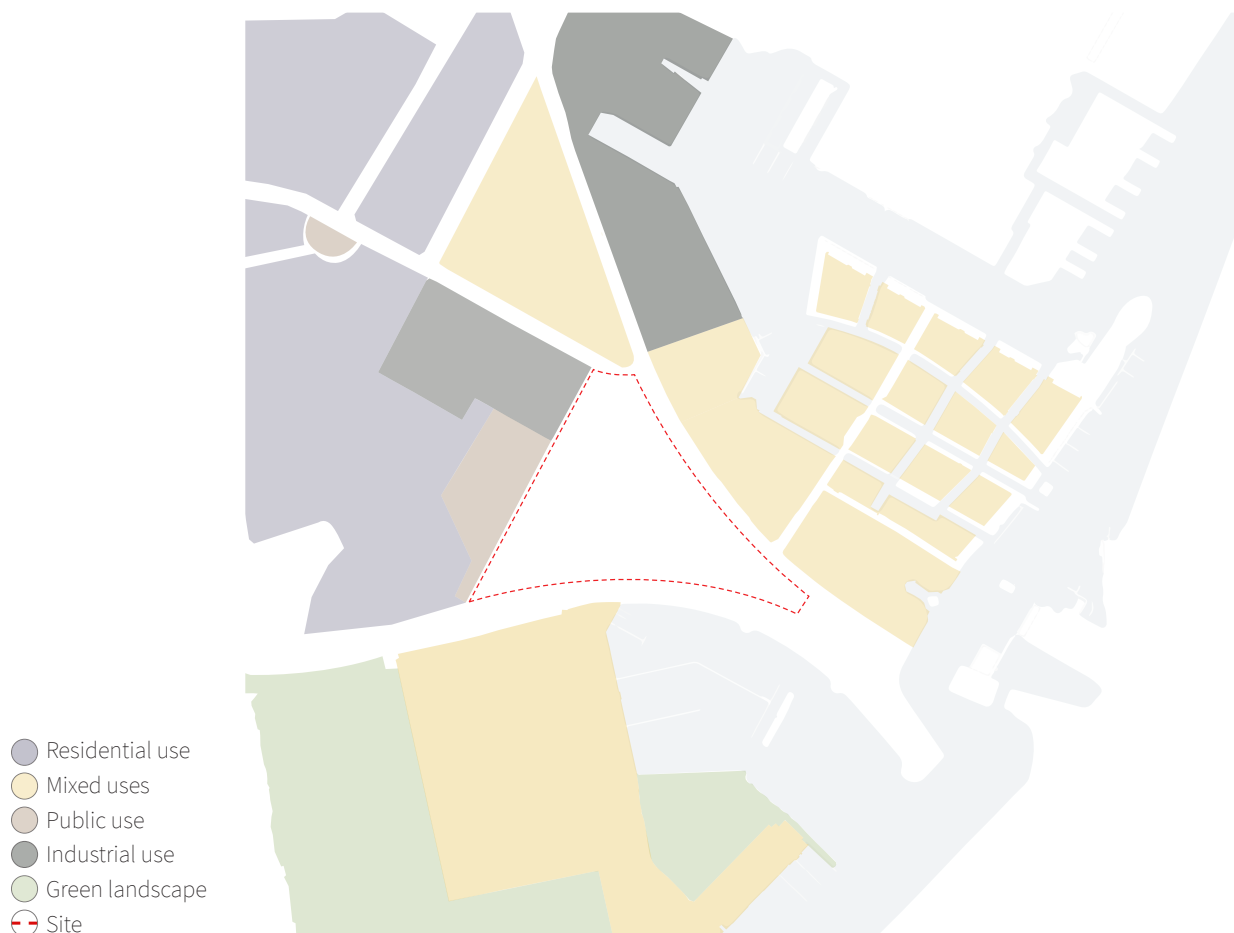
Sydhavn is commonly known as a multi-functional district in southern Copenhagen. A core element in the area is the business and industry quarter that is illustrated in grey colour. At the same time, retail and mixed-used functions can be present in the area highlighted with a yellow tone. Further, the purple colour is defined to depict the massive redevelopment of residential neighbourhoods that happened during the mid 20th century. Lastly, the defined public spaces in the district are relatively scattered and few, making the possibility for gathering poor. In contrast to that, there is an adequate amount of natural space pockets designated for "Sydhavnstippen" and "Stejlepladsen" which make a big part of the culture linked to the area.

LANDMARKS

0 20   100   200

Ill. 29 Landmarks in Sydhavnen (Own)

M
Metro Station

Aalborg University
CPH

Allotment Gardens

M

Climbing Club

Marine &
Sailing club

"Sydhavnstippen"

"Stejlepladsen"
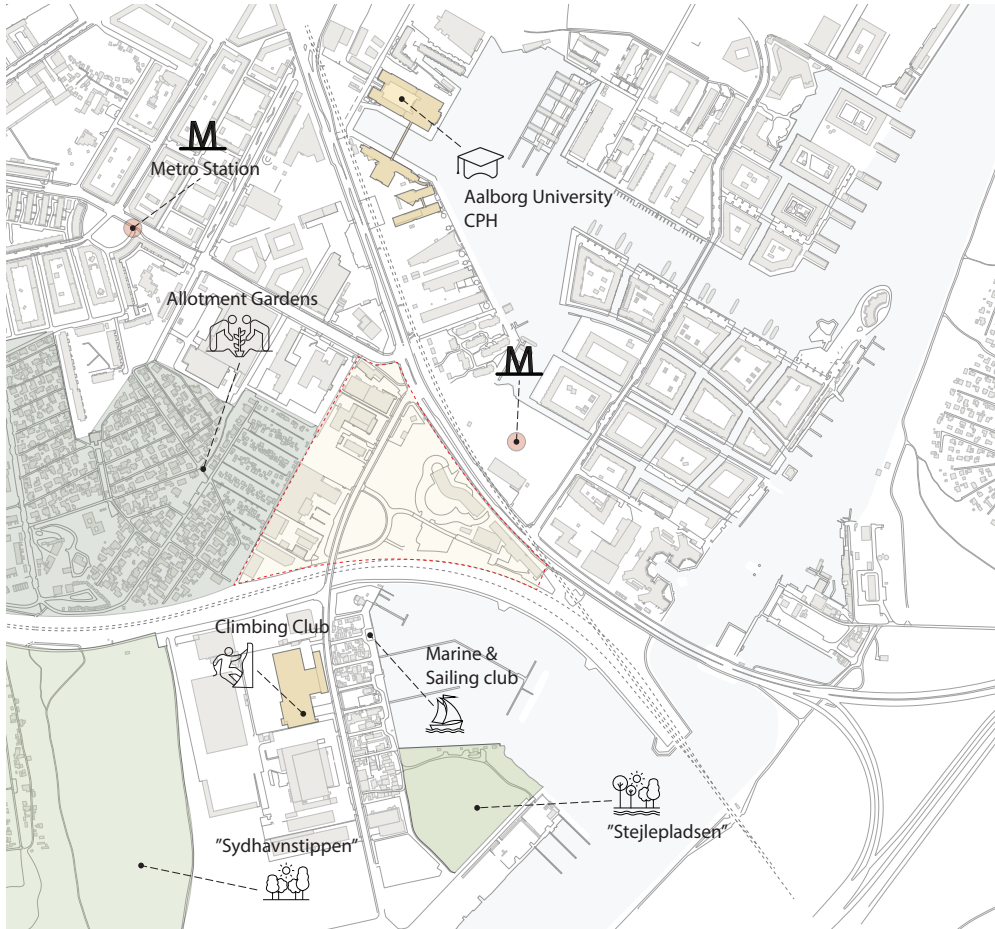
Site

Sydhavnen attracts people because it mixes nature, architecture and authentic harbour-site by the edge of the city. Among many business destinations, Aalborg University, with its roughly 4000 students, is a substantial reason why the area attracts people from outside the local district. However, public transportation in Sydhavnen is currently only served by the city bus line, therefore commuters and locals will be positively affected by the creation of Sluseholmen, and Mozart Plaza Metro station, which will originate two more landmarks in the area. Allotment gardens, Stjernepladsen and Syhavnstippen are further authentic and culture-based site destinations that showcase a dense heritage and strong bonding on site.

MOBILITY

0 20   100   200
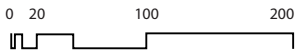
Ill. 30 Infrastructure In sydhavnen (Own)

Major bicycle path
Major-access road
Secondary road
Local road
Green route
Recreative route
Parking space
Major Node
Bus Stop
Site

The only possible road access to the site is from Bådehavnsgade. Bådehavnsgade is a secondary road which also serves the areas south of the railway, however the frequency of cars is limited, making the road calm. For pedestrians and cyclists, there is access to the area west of Bådehavnsgade via a viaduct under Bådehavnsgade immediately north of the railway.

However the site has a good connection to the city centre of Copenhagen, by Sjællandsbroen and the future metro station placed less than 300 metres away from the site, making the travel time to the centre 5-10 minutes, and 25 minutes to the airport.

ACCESS
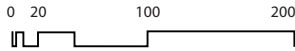
Ill. 31 Access points to site (Own)

12 min
650 m

15 min
270 m

11 min
520 m

4 min
340 m

Site edges
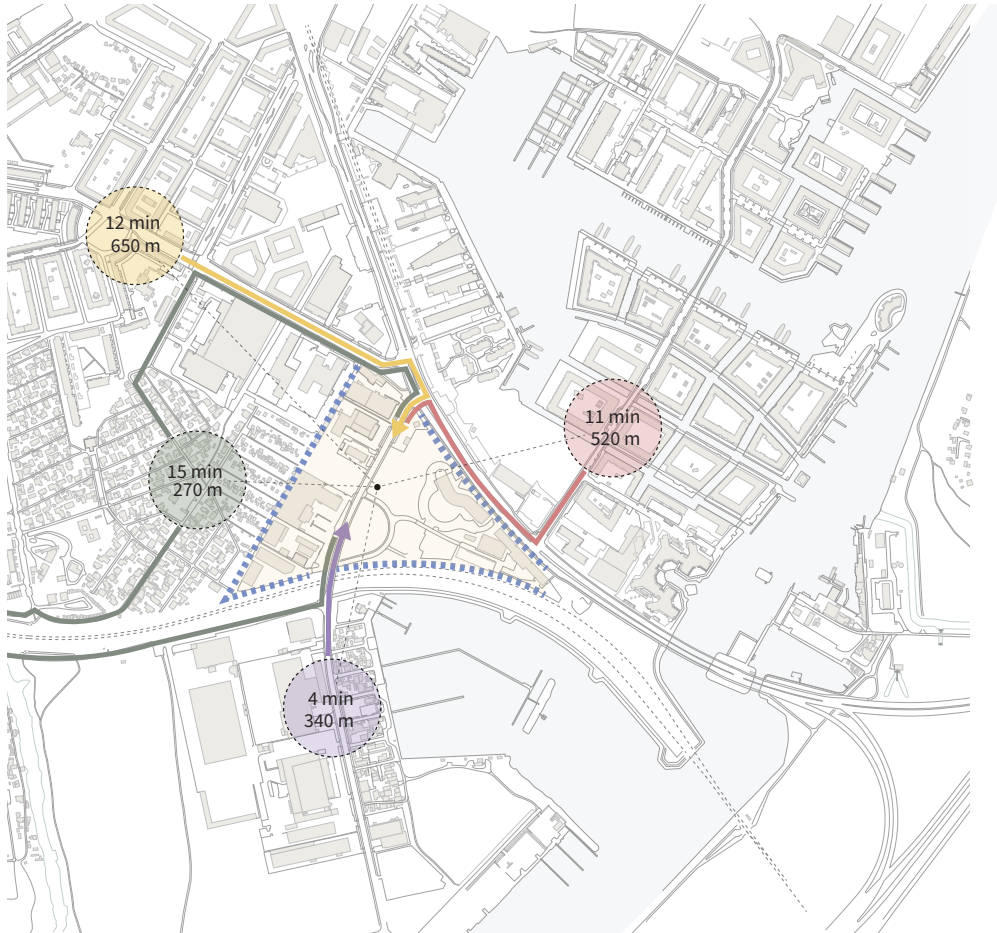
The site has only two rational access points from the north and south. The remaining perimeter is mostly prevented from passing due to edges such as fences to the west, the railway to the south and office buildings and fences to the north side. Despite the site's profitable location within close distance to various area destinations, an imbalance is seen in the travel time on foot, to the area's nearest neighbouring area to the west, as well as minimal access to and from the main road, Sjællandsbroen.

GREEN & BLUE

0 20   100   200

Ill. 32 Illustraion of the natual enviroment in Sydhavnen(Own)

◯ Sea
◯ Lake
◯ Green area
◯ Topography (0,5)
● Trees
● Tall trees
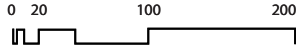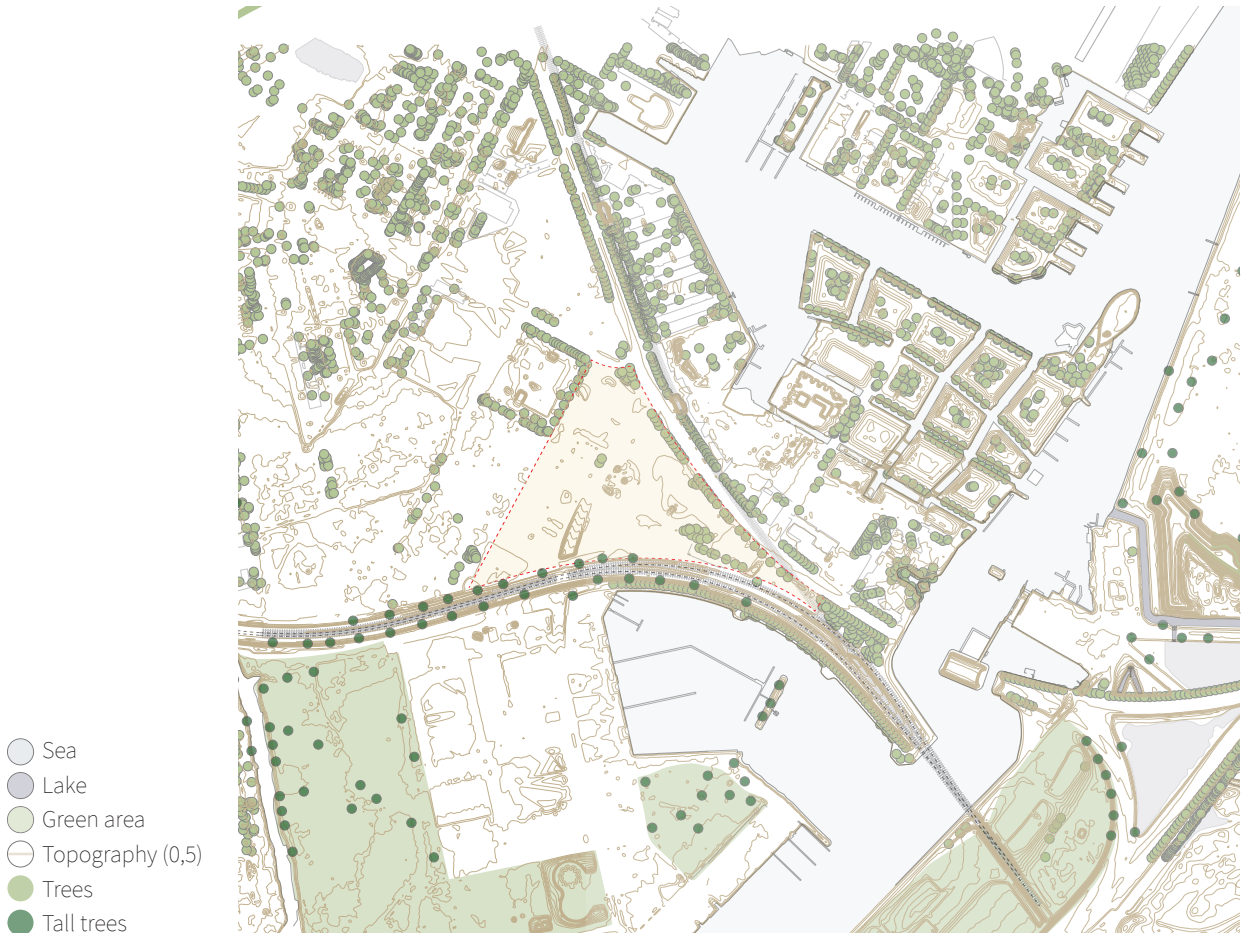
The blue and the green features in the area exude a feeling of being within a range of nature. The water element embraces the area and offers the user who visits the feeling of the natural element and the escape from the densely built environment.

The green landscape dominates the southwest and southeast of the area. This is seen as the unique nature and culture area: "Sydhavnstippen" which has a great focus on local biodiversity and sometimes as a cultural jewel of Sydhavnen called "Stejlepladsen", which is a natural extension of the marina. In addition due to the noise from the railway, it is observed that the site is underlined by a green edge that is created due to the high vegetation

NOICE & WIND

0 20   100   200
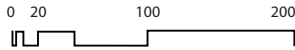
Ill. 33 Noice and Wind analysis in regards to the site (Own)

Over 75dB
70-75 dB
65-70 dB
60-65 dB
55-60 dB
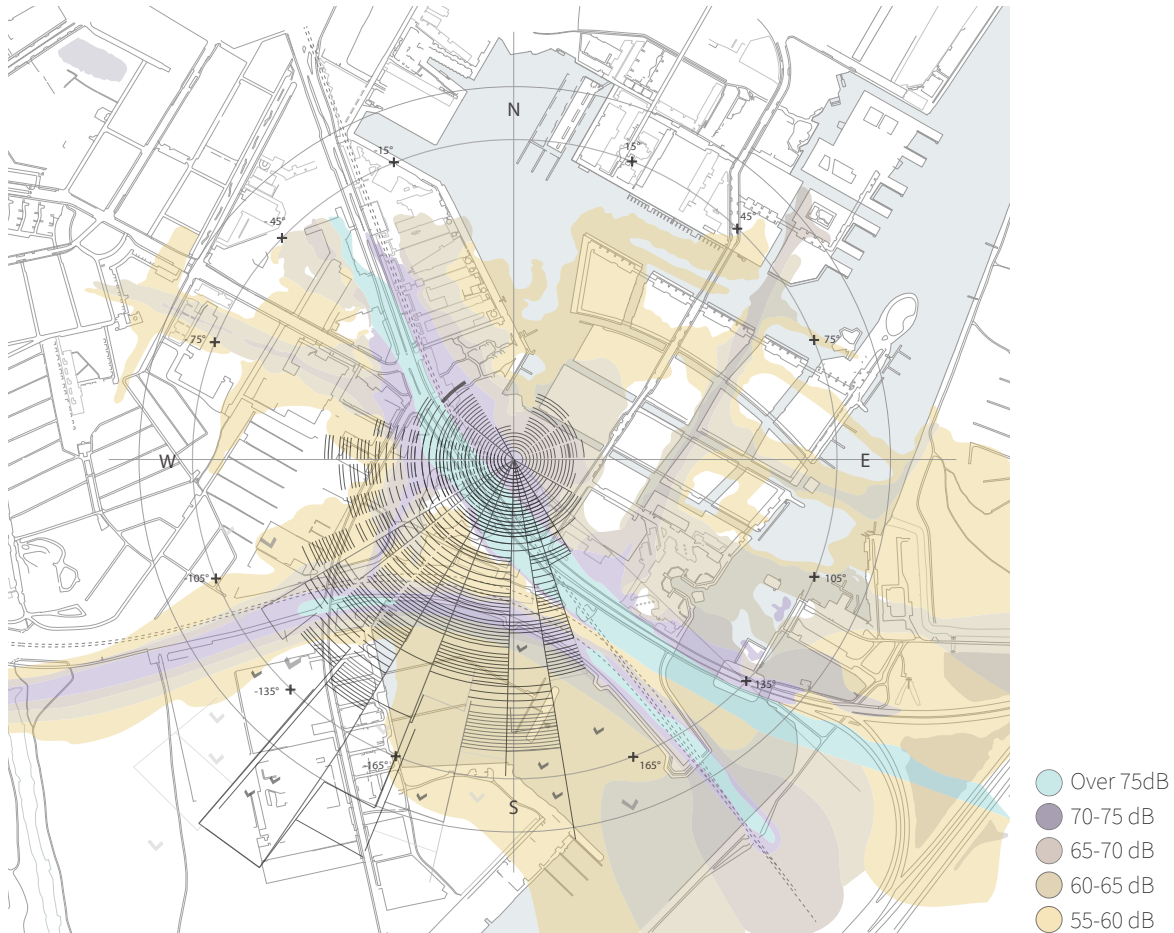
As depicted on the map the northern part of the site is highly affected by the heavy mobility that crosses through the Sjællandsbroen. Simultaneously, the designated colours are referring to the gradual noise (dB) ramifications to the site caused both, by the road traffic and the railway. Another environmental consideration illustrated is the strong winds towards the site from the south, southwest and west following the line flow.

AREA TYPOLOGIES

0   20   100   200
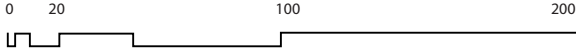
Ill. 34 Build typology around the area (Own)

- PUBLIC AMENITIES TYP.

- INDUSTRIAL TYPOLOGY (9-12m high)

- RESIDENTIAL COMMUNITY TYPOLOGY (3m high)

- RESIDENTIAL TYPOLOGY (15m high)

Industrial area unspesified boundaries

Opea area unspesified zones free movement

Area dedicated to the functions

Industrial area

- Hotel

- INDUSTRIAL TYPOLOGY (12m high)

- HARBOR TYPOLOGY (3m high)

- GREEN TYPOLOGY

- 6 DIFFERENT TYPOLOGIES (EXISTING) SOUROUND THE SITE:

- 3 DIFFERENT EXISTING TYPOLOGIES INSIDE THE SITE

PURPOSE OF DESIGN PROPOSA is:
→ Human scale approach
+ buildings that harmonized with the sourondings conditions.

Sydhavnen is an area with a variety of architectural typologies in the existing built environment. This results in different spatial qualities and experiences in the overall character of the area. The existing typologies that embrace the project site could be understood as 6 different urban patterns.

These are, first, the industrial space typology, which is characterised by large-scale zones occupied by uniform industrial buildings (9-12 m high) and surrounded by different physical boundaries. Secondly, in the zone to the north is the typology, which is dedicated to school and business facilities, such as Aalborg University. The third typology is the residential typology in Sluseholmen which is a development area with apartments and canals inspired by the Java area in Amsterdam. The typology of this part is characterised by the repetitive strict block shape (18-25m height) with the traditional courtyards. From the west side of the area, the typology of community gardens and single-family residence dwellings dominates, in an extremely opposite form and character. The main features are the individual garden plots, the narrow paths between beds, the human-scale approach of the place and the dwellings sizes (3-6m in height). On the south side of Sydhavnen is the old fishing marina which has the authentic harbour typology, with traditional fishing boats and colourful houses (3-5m tall), which have a freer allocation of buildings. Next to the port is the sixth and last typology of Sydhavnen, with a typology of a large green nature area, that works like parks and open natural spaces. The green element, the free flow of the user and the human-made path are its main characteristics.

By considering the existing diversity of typologies, fragments of the initial design conceptualisation are created. The great diversity and amount of the local typologies give an understanding of how the area should interact and not create another extra-foreign typology in the area. Instead, it will try to integrate harmoniously into the area, to respect and collect some important typological features from the already existing typologies.

SPACIAL CHARACTER


Ill. 35 Site visit route (Own)
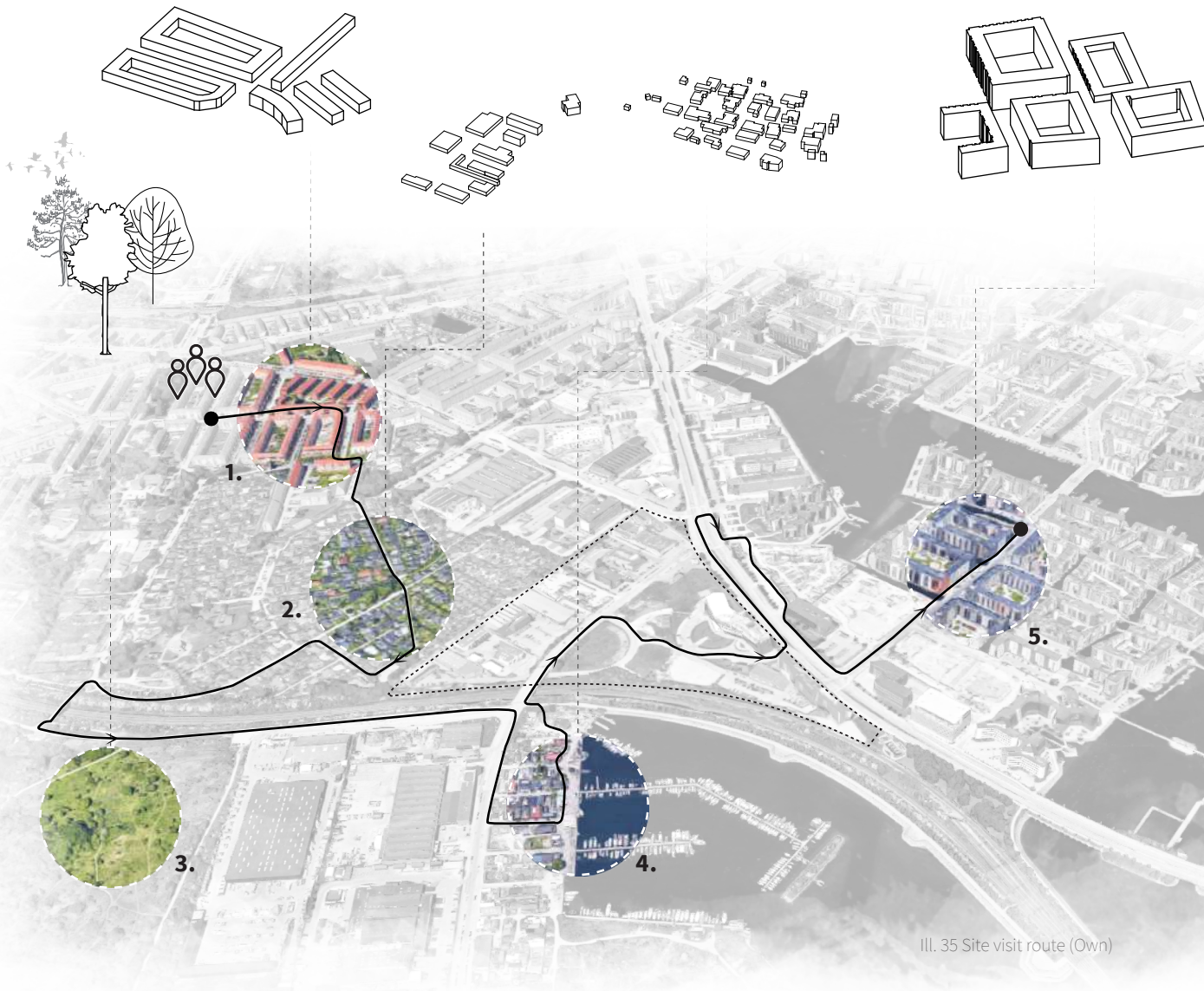
1. 50's Residential Area Character

The first stop started from the Mozarts Plads metro station which is one of the most common ways to reach the site. A neighbourhood that seems to serve the public transportation well, but not the public's wish as the best environment to live in. As touched upon in section "Three locals", people feel culturally disconnected even though they have short distances between different housing blocks. The buildings have been designed to be functional working-class neighbourhoods which do not seem to fulfil the desired human needs at present time.

2. Community Garden Character

Being a visitor to the allotment and community gardens you experience a more human scale, friendly, playful, and safe atmosphere. The overall impression of the character you could say is like a painting, in which each resident has put their own personal input into the space. There is also a strong sense of interaction among the neighbours who have their own gardens as well as the opportunity for social connection on an individual and communal basis.
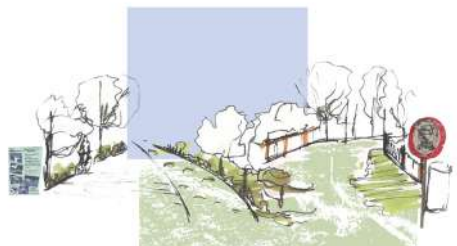
3. Green Area Character

Sydhavnstippen is a green pocket and cultural hub away from the fast pace of the city. It hosts several animals, plant habitats as well as protected water areas. It provides nature within close proximity to urban environments, which balances privacy and sociability while benefiting interactions and platforms for nature and human connections.

4. Harbour Character

At the marina, you can easily get a glimpse of Copenhagen's fishing history. It is an authentic place with the charm of the old port and the intense maritime heritage. The sound of the sea combined with the fishing boats, the colourful nets and the spontaneous socialisation among the users, create a peaceful atmosphere which enhances the identity of the area.

5. Modern Residential development

This part of Sydhavnen is striving for becoming a sustainable and diverse environment where different people share the same address. A new community at Sydhavnen is brought forward while having access to the assets of the district which are found in a close range. A sense of evolution dominates this part of the district while the spatial layering seems to be well functioning to accommodate the changes in life.

Ill. 36 Drawings of site visit character (Own)

SITE PROFILE

0   20   100   200

Major bicycle path
Major-access road
Secondary road
Local road
Green route
Recreative route
Railway
Edge
Site
Urban area
Green area
Hub
Landmarks
Typologies
Noise stress
Site entrance

Mozart Plaza

Centre

Allotments

Sluseholmen

Marina

Amager

"Stejlepladsen"

"Tippen"
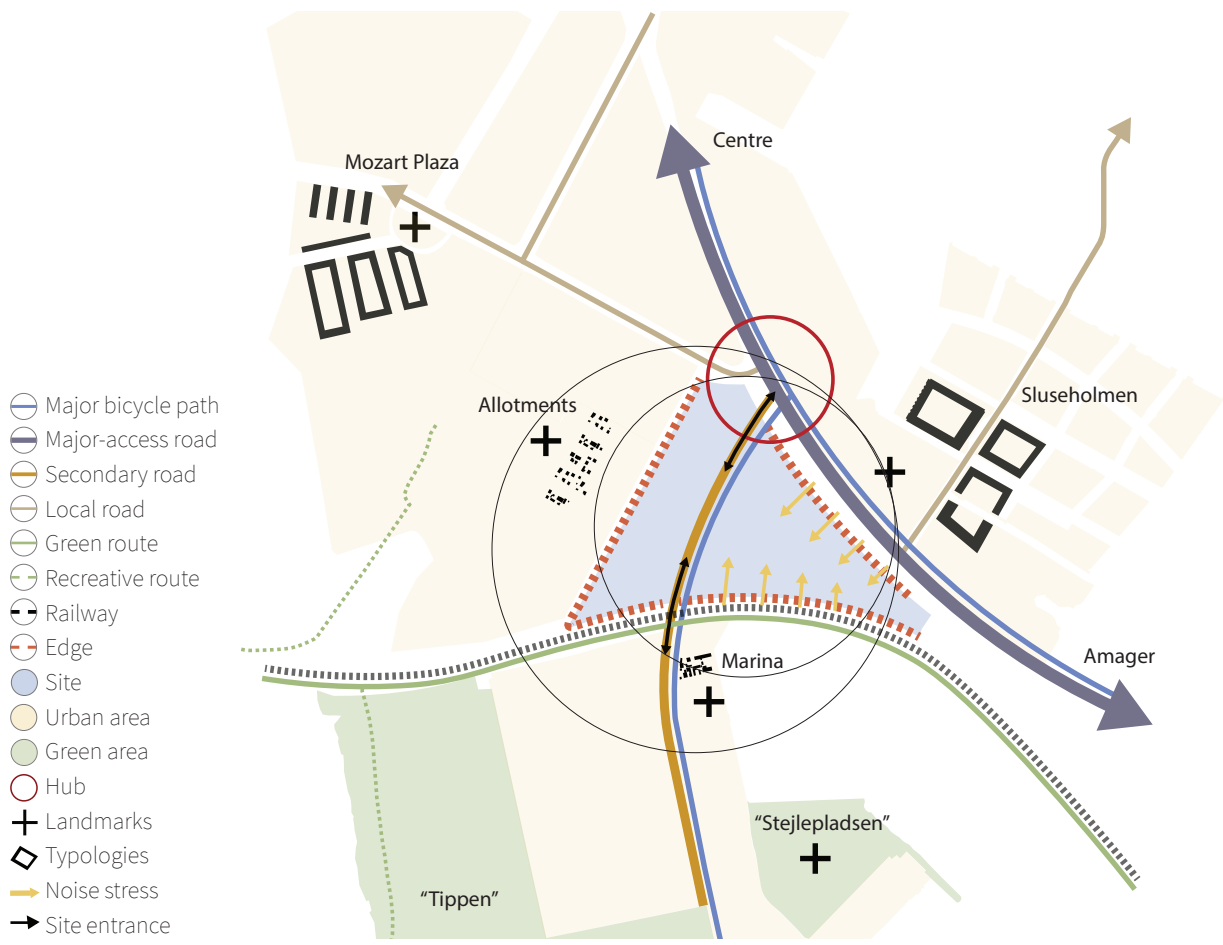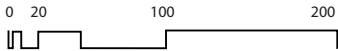
Ill. 37 Profile of site analysis (Own)

Upon the above analysis, Sydhavnen and the site have displayed itself as a complex, and yet deeply-rooted district, with a strong history and culture. Due to the development of the New Sydhavn, the district is facing a division of both typological and cultural character. In order to not neglect the foundation of Sydhavnen, the local wishes and physical elements from the older existing area must be appraised in the new development.

With its placement in the centre of the different areas, the site acts as a strategic piece to connect the areas together. However, the area is facing a negative impact from the triangular shape, with each site bordering edges created by f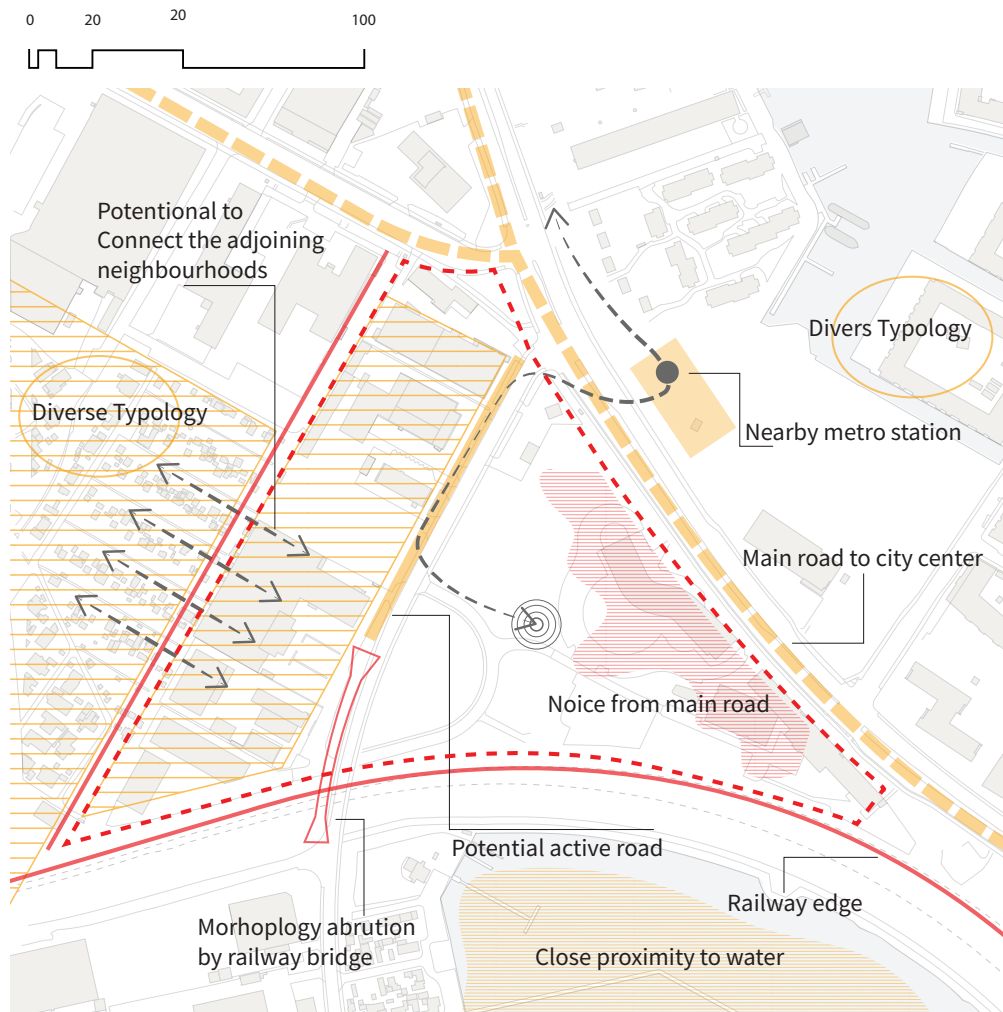encing, railways or heavy traffic roads. This is further creating poor accessibility to and from the site, which is compromising the possibilities of making the area a connection between the old and new districts.

In this regard, the current mobility at Sydhavn has a good connection around and to the inner city, but however not within and to the site. The network is created mainly in and by two types, useful for both soft (concentrated to the south of the site) and heavy mobility (concentrated to the north of the site). The mobility can further be connected to the functions and typologies of the district, which has a great variety, ranging from natural heritages and allotment gardens to heavy traffic roads and big urban blocks. The combined district and site analysis raise the question of; how this site could be structured in order to become a turning point and connector of the oppositions in culture and build character in Sydhavnen.

OPPORTUNITIES & CONSTRAINTS

0   20   20   100

Potentional to Connect the adjoining neighbourhoods

Divers Typology

Diverse Typology

Nearby metro station

Main road to city center

Noice from main road

Potential active road

Morhoplogy abrution by railway bridge

Railway edge

Close proximity to water

Ill. 38 Desing opportunities and constraints (Own)

● Opportunities to…

Avail oneself of good mobility connection, by road and metro station to the city centre, airport, making the area attractive to commuters among others.

Make connections and take inspiration from local attractions placed in the diverse typologies of Sydhavnen, such as the marina, nature, the allotment gardens and Sluseholmen.

Invite the engaged local community, rooted in the historical fellow-feeling at Sy dhavnen, to take part in the new area.

Connect the area with adjoining neighbourhoods, making the Neighbourhood more inviting to and from the surroundings.

Utilise the central road with relatively calm traffic.

● Constraints…

Faced by sounds coming from the main road, Sjællandsbroen, and the railways.

Of edges circumferential the site, making the accessibility limited.

Caused by the elevation of the bridge, making morphological challenges

Linked to the cultural disconnection of Sydhavnen, putting up extra requirements to obtain a successful community.

PROBLEM FORMULAITION

In regard to the above analysis, the site is located as a transition between the old and new Sydhavn, and is facing a number of challenges in both cultural and physical aspects. Thus, by making a contextually appraised transition between the two areas, the existing culture and typology conflict between the two areas may be resolved. This requires a design focus on the site regarding; better access to the site from both areas, a high activity that can attract residents and opportunities on the site that are interesting for both parties. At the same time, the residential opportunities must be varied, with a focus on changing environments. This may create a typological character that both residents of the old and new south harbour can access and identify with.

It should be mentioned, however, that the project is familiar with the economic situation in the old Sydhavn, and thus also the limitation for possible relocation from the old town, to the new project area. This is seen with a view to the area's socio-economic status and Sydhavnen's square metre price of almost 50,000 DKK in 2019. Thus, this project should not be considered a solution to the economic aspects, but rather a proposal of how the different cultures and values at the Sydhavn can be united into an area that interacts with the existing environments, local wishes and values. Jointly, the project aims to invite people to make use of the new neighbourhood, as a common ground for all the residents at the Sydhavn.

Therefore, the project aims to investigate the following:

HOW TO CREATE A NEW AND MORE COMMUNITY-FRIENDLY NEIGHBOURHOOD AT MOLESTIEN, WITH A GREATER FOCUS ON URBAN DESIGN AND THE LOCAL TYPOLOGY?
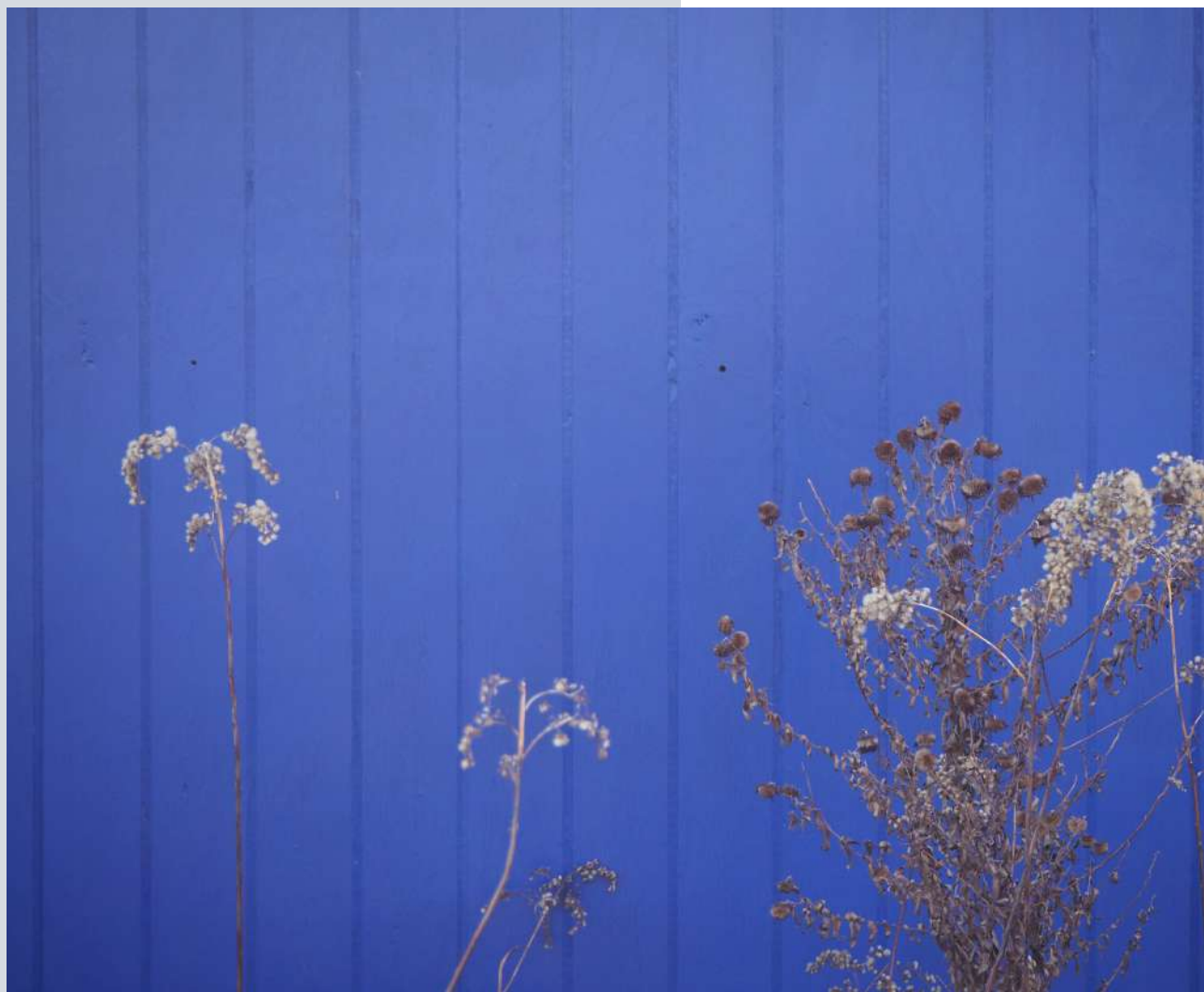
Ill. 39 Picture of facade in the allotment gardens (Own)

03
Designing the "good neighbourhood"

This chapter draws from the findings of the analyses and aims to provide a solid background for a design proposal through a theoretical framework and conceptualisation. This continues with the presentation of design criterias and strategy.

THEORETICAL FRAMEWORK

As a major development project and possible new hub at the Sydhavnen, the area on Molestien has great development potential. The area is located among a large variety of local typologies, such as the marina, 50s residential area in the old Sydhavn, new modern blocks by Slusehavnen and allotment gardens. The triangular design of the area, bordering the main road and railway, makes the area vulnerable, and a solution must therefore be made in which the limited access will not affect the area's function. Therefore, it is desired to focus on internal destinations, good and fast mobility, functionality and a comfortable environment. This should develop the area towards a neighbourhood that invites locals, instead of enclosing an area with tall buildings and low variety.

In order to design the physical environment of the neighbourhood, theories within New Urbanism could be useful. By putting "theories" in plural, it is argued that there is not just one single new urbanism, but rather many new urbanisms, as well as sub-topics that support the aims of the theory (Grant, 2006). Many of the roots to New Urbanism is found in studies by urban scientists such as Jane Jacobs who documented the failures of modernist planning of high rise housing planning and vast parks, in order to focus on how mixed-use and people-centred design could maintain vibrance and fine-grained use of neighbourhoods (Grant, 2006). This mindset leans on the rationale for this project and a belief that mass development and undefined areas do not benefit, to a design that can be used successfully by the local users. Further, New Urbanism concentrates its development of theory around a few themes and a number of principles, which according to the movement can plan good neighbourhoods. This includes special attention to issues of community, comparisons with sustainability and built form, that all tend toward the goal of making vibrant and comfortable environments (Grant, 2006). Community is an important

concept for New Urbanism because it constitutes the ultimate goal of design interventions. New Urbanism seeks to create opportunities for social interactions in defined places. By this, it represents an attempt to create local spaces for socialising, places to shop, play, and work near home. New urban approaches typically envision active streets, with people jogging, kids playing, people drinking wine and coffee with friends and locals calling out to the grocer on the way home (Grant, 2006). This might sound as an idyllic vision for a neighbourhood setting and to some extent movie-like. However, it is argued that by applying New Urbanism principles to development, it will overall contribute to an improved quality of life and a more livable neighbourhood.

Moreover, by comparing New Urbanism visions to literature appraising livability, the identical requirements of; *"an urban structure based on walkable, mixed-use neighbourhoods with locally-based employment and facilities. Neighbourhoods clusters around a centre to give sufficient population catchment to support main street retail, offices and community facilities [...]"* (Jones, 2001). Therefore, it could be argued that when designers plan for the good neighbourhood, with good livability and a strong community, New Urbanism principles have invested heavily in answering that question, to give a framework and mindset that might guide a design towards something successful (Ellis, 2002).

WALKABILITY

Principles of New Urbanism

MIXED-USE AND DIVERSITY

Green transport

Connectivity

SUSTAINABILITY

Quality of life

QUALITY ARCHITECTURE
& URBAN DESIGN

Increased density

(Grant, 2006)

"Few people who have visited
new urbanist developments
come away without agreeing
that these are beautiful places,
beloved by their residents. If
these places are not 'the form'
of the good community, then
they certainly provide amenable
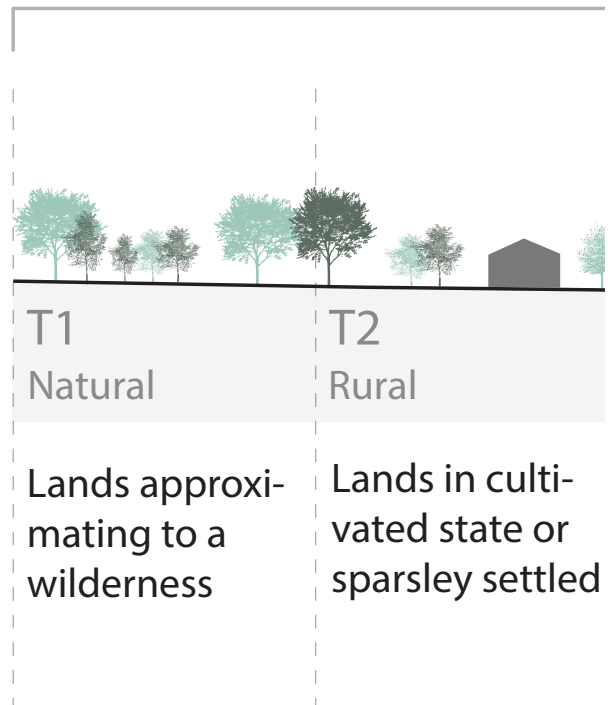living environments."

(Grant, 2006)

THE TOOLBOX

To give some more specific tools to how New Urbanism can be used to create the neighbourhood design, the concept of ´The Transect´ as well as ´Placemaking´ can be useful.

THE TRANSECT THEORY

The transect theory is an environmental understanding and model describing the gradient of building types from the most rural typologies to the most urban. The concept is based on the idea; that separation of nature and dense urban areas provide greater diversity and destinations as well as a highlighting of typology niches (Grant, 2004). It sets a framework where planners and designers are able to apply regional or local research about the environmental context, which can then be incorporated into a more place-based regulation form-design. It further reflects that a sustainable future must embody an interrelated continuum of natural and urban human environments, all with different densities and opportunities for social encounters in community settings, and a variety of activities linked to the environmental character (Bohl & Plater-Zyberk, 2006). This should also be understood as when we design for diverse and multiple typologies, it does not have to go from natural-rural-suburban to urban. The typologies can be mixed and interrelated
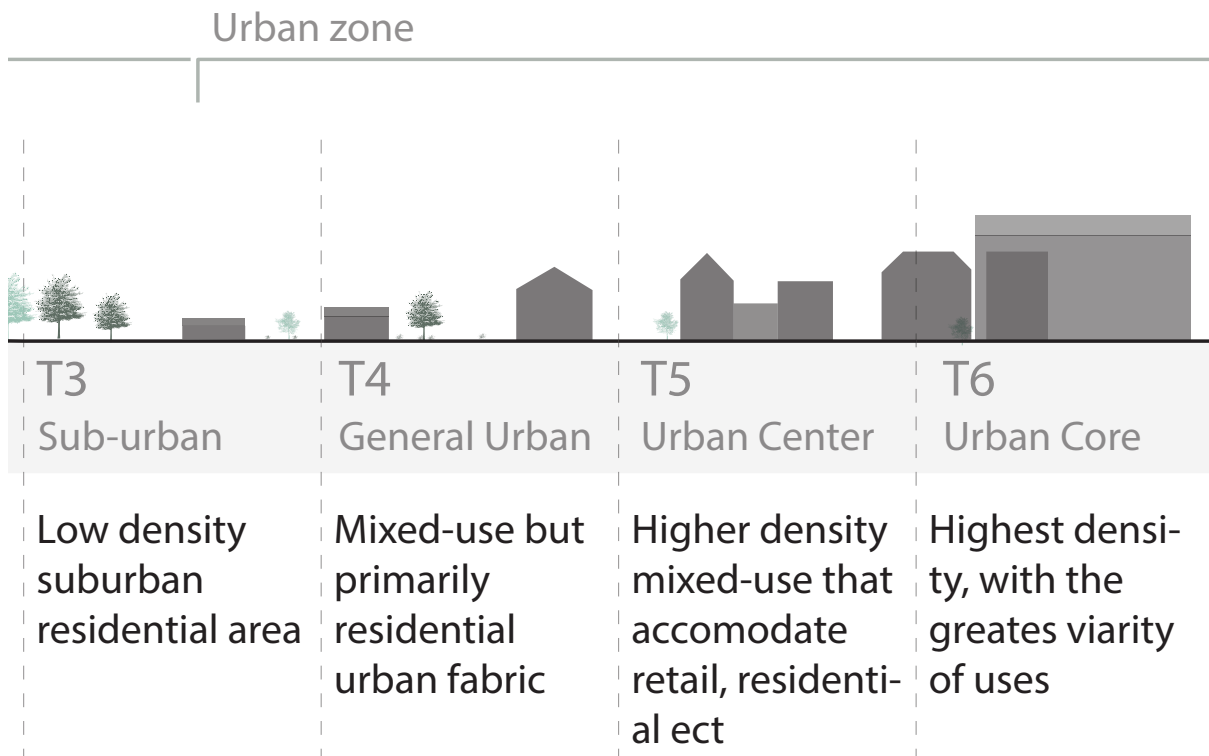
Rural zone

T1
Natural

T2
Rural

Lands approximating to a wilderness

Lands in cultivated state or sparsley settled

with each other, to create easy access to multiple types of environments, and thereby create the maximum chance for environmental stimulation in the local district and neighbourhood (Bohl & Plater-Zyberk, 2006).

The concept of the transect can either be used as a more explorative and informal approach, or as a more formal framework to facilitate community planning, precise regulations, organisation of typologies of streets, building types, open spaces and other aspects of the intended physical environments (Bohl & Plater-Zyberk, 2006). In this project the transect is intended to perform as a communicative tool, to present area zonings in design analysis and presentation and further give an understanding of what character these are intended to have. It will moreover support as a framework for how to design a more environmentally-diverse neighbourhood and how the typologies of the built environment should support this accordingly.

Urban zone

| T3 | T4 | T5 | T6 |
| Sub-urban | General Urban | Urban Center | Urban Core |

Low density suburban residential area

Mixed-use but primarily residential urban fabric

Higher density mixed-use that accomodate retail, residential ect

Highest density, with the greates viarity of uses

Ill. 40 Illustration explaining the Trasect zones (Own)

PLACEMAKING

Cities and neighbourhoods are enjoyable places to live and visit when they are designed as meeting spaces, providing the opportunity for people to socialise, explore, and strengthen their sense of community. However, as the project intends to touch upon, the increasing number of mass housing industries with tendencies of ignoring human scale and urban design, brings problems of lacking public space and little to no space for community activities (Khemri et al., 2020). Therefore, it is being argued that in order to be successful, cities and smaller-scale neighbourhoods need to have specified destinations that can provide the essential meeting spaces for human interaction and stimulation. Destinations that support the identity and the image of the community, which additionally can help attract new residents, businesses, and investment, need to be created (Project for public spaces, 2018). These destinations need to provide opportunities for walking, cycling, and enjoying public life in a comfortable and safe environment, facilitated by a human-centred design that increases the presence of people in the public space. The Project for Public Space has put up a framework to assess "great places" and argues that it essentially comes down to four key attributes. These four points can then be investigated further in the specific design, in order to make them as successful as possible, see appx. 8 (Project for public spaces, 2018).
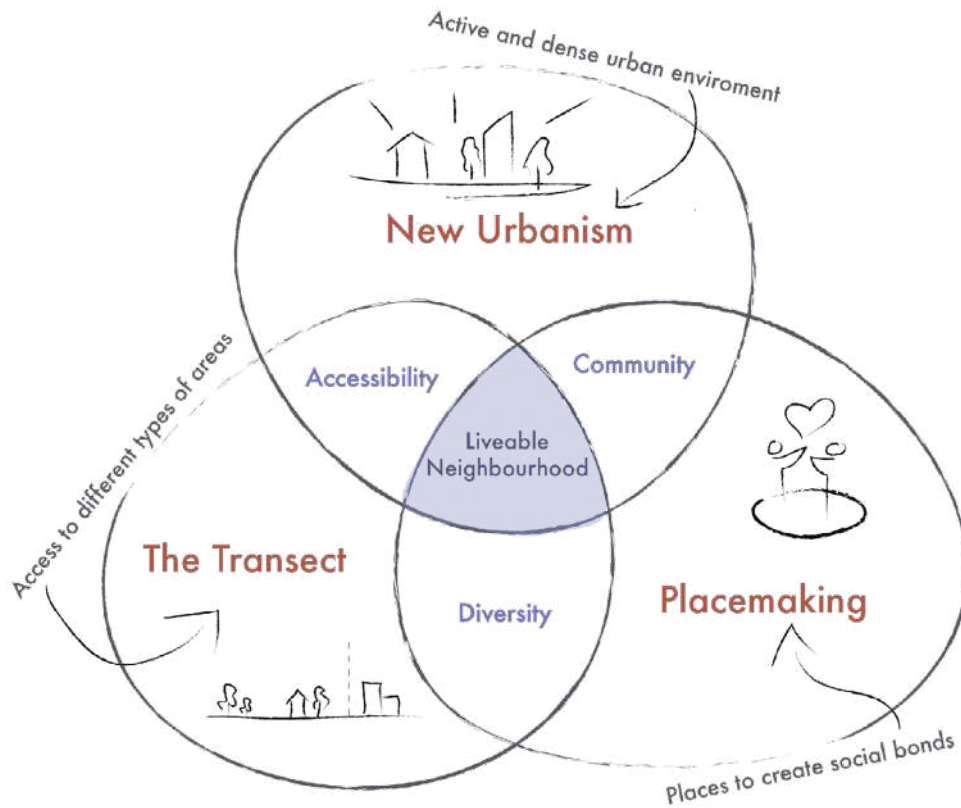
What makes a great place?
It often comes down to four key attributes...
(Project for public spaces, 2018)

"They are accessible and well connected to other important places in the area"

"They are comfortable and project a good image"

"They attract people to participate in activities"

"They are sociable environments in which people want to gather and visit again and again"

Ill. 41 Venn diagram illustration the theoretical toolbox (Own)

When designing with placemaking in the context of New Urbanism and the Transect, the main purpose is to create a neighbourhood that provides a general higher quality of life, a stronger community and identity as well as the essential access to environmental diversity. Together, they shape places to meet and enjoy the local community. The different spaces will perform according to the typological zone (with reference to the transect theory), which enhances the opportunity for different activities and identities in the area. A destination might be a main street, park or square. However, when designing with many layers of area specifications - the transect typologies and site-specific placemaking - it allows one to give the destinations, like parks and main streets, a more specific design and contextual activation. It can be seen as a zoom-in on the scale of design. New Urbanism set up an overall aim and a set of principles to make a better community. The transect creates a thorough planning of the neighbourhood typological, in relation to the surrounding context, and placemaking is creating specific destinations within the different typological areas. To simplify, when planning for destinations like; parks and main streets, these are linked to the specific typology of an area (Khemri et al., 2020). When we thereafter, activate these destinations by adding specific meeting spaces such as pavilions, shared gardens, and programming for cafées and shops, it gives a deeper layer of identity and a more substantial reason to use the public space.

DESIGN CRITERIA

Based on the contextual analysis and theoretical framework ,
the following criteria have been made as objectives for the design.

Create opportunities for community
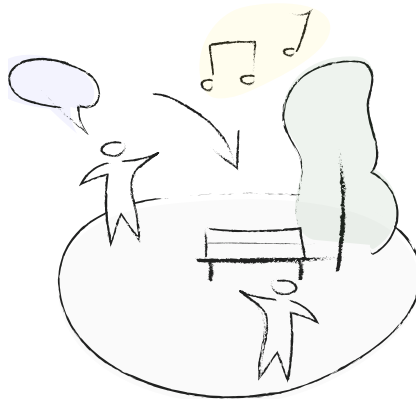
To connect a devided sydhavnen.
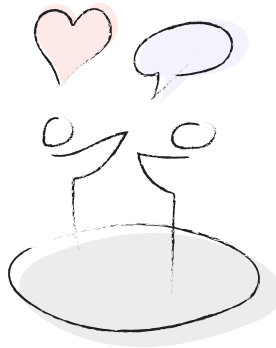
Enhance the built neighbourhood diversity

To create a neighbour-hood with multiple opportunities.

Create contextual placemaking

To make a strong sence of place, that promotes peoples well-being and happiness.
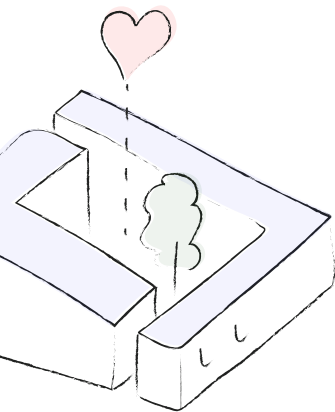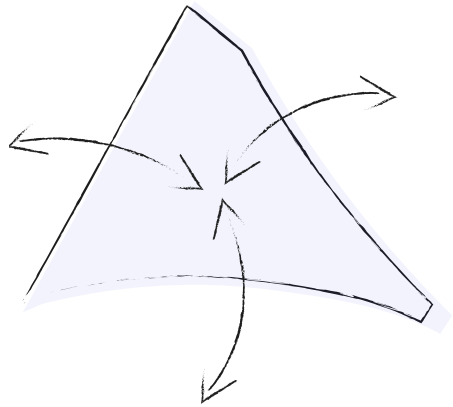
Create privacy in housing areas

To create safety and opportunity to choose between levels of social exposure.
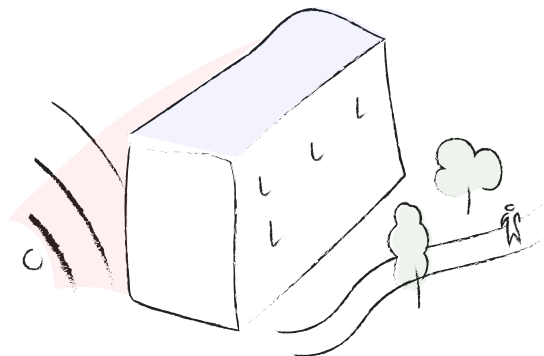
Enhance accessablity to and within the site

To include neighbouring areas, and create an inviting flow withing to and from the site.

Protect from noise

To ensure a comfortable and stress-free environment

Ill. 42 Diagrams of desing critera (Own)

04
Zones and shapes

The last chapter before moving onto the design proposal gives initial shape to the design, concepts and sets up requirements and strategies for design. Further, it will present special requirements for individual area zoning and how to solve some design problems.
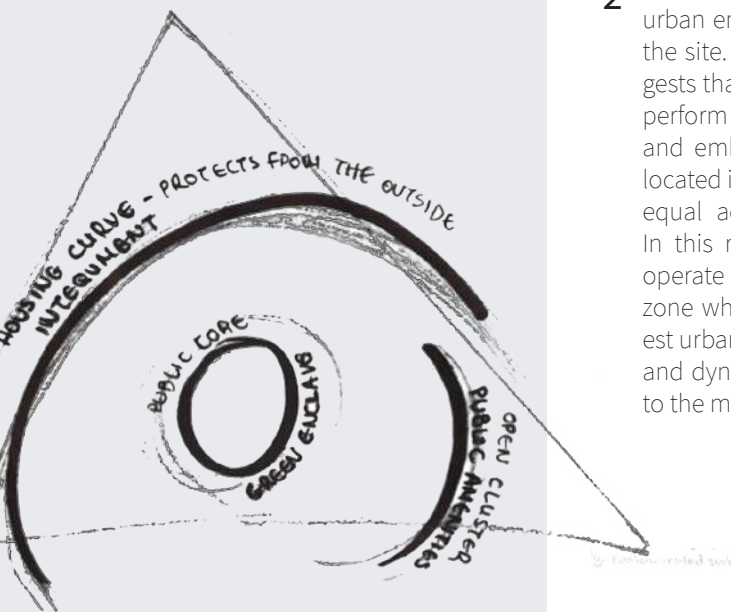
CONCEPT

In regards to the above theoretical examination, the project aims to create a neighbourhood design, with notable diversity in typologies and active destinations. In the context of the transect theory, the concept revolves around the approach of dividing and understanding typologies individually, in order to create more diversity. It intends to show the lines and inspiration of the existing typologies at Sydhavnen, and how these can be dragged into the site, to further ensure a respectful transition between different typologies. To see more concept development process go to appx. 9.

Ill. 43 Concept deveopment sketches (Own)

1 The conceptualisation started by delimiting spatial functional zones on the site, with axes that are oriented towards the surrounding and existing typologies of the area that we want to respect and examine. This action aims to create a concept that harmonises the contemporary with the existing while providing new spatial qualities.

village community typology

Residential contemporary block typology

Harbor typology

green nature typology

EMBRACE THE INSIDE

2 The marked zones with the most dense urban environments act as pockets in the site. Particularly, the concept suggests that housing and retail areas will perform as an enclosure that protects and embraces the public green core located in the middle of the site, giving equal accessibility to all the zones. In this regard, the build pattern will operate in two zones - the most linear zone which corresponds to the densest urban zone, and the more informal and dynamic flow which corresponds to the most natural green area.

3 Combined, the concept aims to simplify how the contextual typologies at Sydhavnen will be used in order to make coherence in the build environment. This will ensure a better transition in the physical conditions and an opportunity to make a place where the local residents can mirror themself. The first conceptual step of drawing lines from the existing typology ensures a diverse, yet familiar environment. The second step intends to allocate the build environment with equal accessibility to a natural destination.
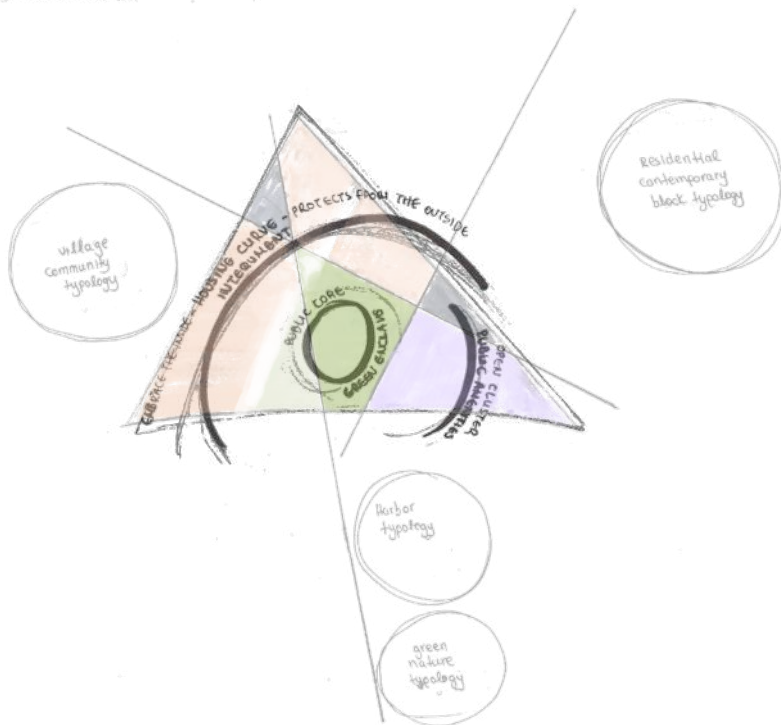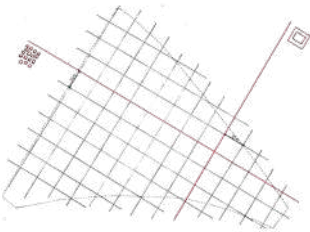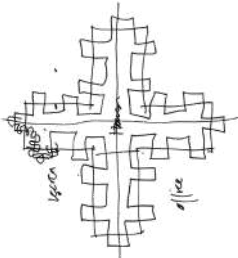
PLANNING

STRATEGY

In order to make the design concept more applicable, a planning strategy is needed to help organise the environmental scale, places, individual blocks and housing. See to appx. 10 for more process.
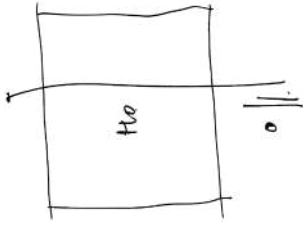
Assuming that the project site works as a white canvas, the next task is to investigate how the different typologies that are wished to be created, should be integrated and interconnected, to offer functional spaces.

We started creating our own grid with the aim to ensure sequence between the places/spaces. This was created from a scale of 20 metres, borrowed from the property width in the allotment gardens. This meant to ensure that the planning of the main lines was kept to a more human scale.

The idea of working with a crooked pattern proposes an approach to planning spaces and the dynamic spatial harmony between them. It is supposed to break the linear pattern to connect the individual zones and ensure that the "borders" between them are broken down. This will create a more interrelated neighbourhood, that doesn't work individually, but as a whole.

The above steps were the point of departure to start un-folding the puzzle and creating shapes and spaces in the appropriate scale to the context and project site.

Ill. 44 Neighbourhood planning process and concept (Own)

ZONES REQUIREMENTS

Before the design proposal, it is necessary to focus on the specific site requirements and from that point start considering the design solutions. Based on the existing constraints and in parallel with the design objectives, 4 different zone requirements were formed.

Ill. 45 Neighbourhood typology zonings (Own)

The blue zone aims to to break the boundaries between the site and the neighbouring community garden area. It aims to extend the typology and make new access to the community garden, making a clear invitation to the existing cultures.

The yellow zone corresponds to the wish for a more active area at Sydhavnen. It therefore aims to activate the existing secondary road of the site (Bådehavnsgade) converting it into a new lively road, with café-life, shops and small squares.

The red zone corresponds to the problem noise solution of the major traffic road north of the site (Sjællandsbroen). This area therefore needs to have sound protective design solutions.

Finally, the green zone corresponds to the beloved green typology at Sydhavnen. This is done by creating a green park that will become a new social gathering point for both the site's residents and visitors.

REQUIREMENT SOLVING

Ill. 46 Initial design solving (Own)
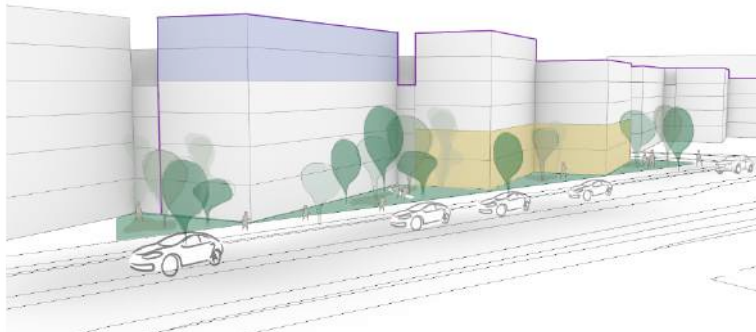
The diagrams illustrate a design solution for how the noise from the main road can be prevented by planning a sequence of tall buildings that act as a wall/barrier that prevents sound from entering the site. The wall acts as a dividing line that protects the inside from the outside.

The main use hosted in these buildings is office spaces, which is not as vulnerable to noise as residential. This can then enhance the safe and private feeling of courtyards and residential housing.
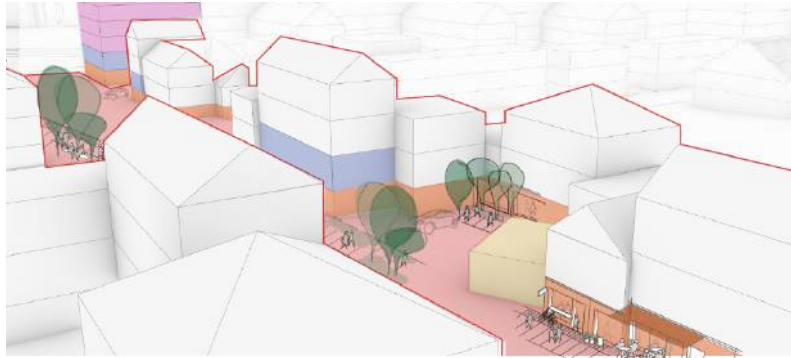
The diagram shows an initial solution of how the activation of Bådehavngade can become a new active street in Sydhavnen, with a ground floor focusing on retail and public access.

The diagram illustrates an initial view of the nature park proposal, and a solution to how the built environment is supposed to embrace and protect the park, and gradually increase in height. This is creating a calm space, protected from sound, ideal for leisure and spending time in a natural environment.

05
The new neighbourhood

The following chapter will present the design proposal. First, the chapter will present the masterplan vision in link to the previous project analysis and theory. Thereafter, case studies that have fostered additional and more form-based inspiration will be shown, followed by the design actions that are required to satisfy the objectives of the design. Finally, the masterplan will be presented followed by renders, sections and design programming.

VISIONS

To secure a successful outcome for the future, the new design proposal for the neighbourhood at Molestien, acts as a prospective standard of how neighbourhood development should show a greater focus on local typologies, in relation to both the build and the cultural environment. The proposal envisions new corners and innovative possibilities, on how to secure future generations' wellbeing by the creation of a transitional space, identity creation and places to create local community, on a city scale with housing and recreational urban facilities. The aim is to create a clear transition between areas, analysing conceptually, morphologically, and spatially the zones that lead from a certain space to another. The need for a smooth transition to and from spaces of intense diversity, such as the contrasts of; familiar-unfamiliar, internal-external, and public-private creates, which will be a focal point of the design. It will create a diversity of destinations, and choices that please both the visitor and the local resident. This will be displayed by the performance of our implications such as; accessible places to stay and stroll, active and diverse human-scaled environments, security, identity, activities, social interactions, and a sense of belonging.

Ill. 46 Early sketches of vison typologies (Own)

CASE
STUDIES

FÆLLEDBY, AMAGER

Ill. 48 Sqaure in Fælledby

FÆLLEDBY, AMAGER

Ill. 49 Roadscape at Onkel Toms Hütte neighbourhood

ONKEL TOMS HÜTTE, BERLIN

CASE
EXPLANATION

"Fælledby"
Copenhagen, Denmark
Architects: Henning Larsen
Architects

"Onkel Toms Hütte"
Berlin, Germany
Hugo Häring, Bruno Taut Otto,
Rudolf Salvisberg

"Fælledby" is a development project not far from the project site. It plans to develop an urban settlement in a big natural area (Amager fælled), to put a new standard on how humans can live in coexistence with nature. It has a vision to make a development that does not compromise the existing typology of the place, but instead, tries to strengthen the existing qualities of the area. Further, the project is inspired by the life in small communities and villages, which is believed by the Henning Larsen Architects to have a close connected community and a stronger connection to its context. The contrast between typologies, as seen on the reference ill 47 and 48, gives inspiration that is in line with the transect theory, where dense housing, nature, and buzzing squares can be in contrast with each other to provide a better diversity of the neighbourhood. (Henning Larsen, nd).

Back in the 1920s, architects designed the residential buildings avoiding monotony and incorporating diversity into their homogeneity. The buildings are modernised and practical. This project serves as an inspiration for our project due to the intention of the architects to bring the inhabitants closer to nature but also due to the diversity in the different parts of the estate. The mechanical lines of the buildings are also softened by household details, such as asymmetric windows and individual entrance doors (Architectuul, 2012). The apartment buildings have different colours, shapes, and sizes, as well as are separated at intervals by unpredictable paths, roads, forests, and parks.

Middlesbrough, Teesside, England

Community driven restoration design of dense residential path. It works as a conceptual and visual reference, of how locals can shape the neighbourhood, and how the pocket spaces between dwellings could be carried out.

Ill. 50 Dense playfull wedge going through residential road

Marseille, France: Architects: ESKIS landscape

The "Hospitality gardens" is an 8 ha park design within the dense city of Marseille with a focus on hospitality, social interaction and human balance. The reference spawns ideas of how to use natural environments as destinations in relation to Placemaking. (Eskis Payagistes, nd)

Ill. 52 Place to relax in the park

Messestadt Riem, Munich, Germany

After flight operations were moved to the new in 1992, the old airport buildings in Riem were demolished in the following years and the construction of the New Munich Messestadt riem were build. The coutyards show an intereseting opportunity for movement and stay.

Ill. 51 Top view over Messestadt Riem (Own)

## Nordhavn, Copenhagen: PARKING HOUSE + Konditaget, Lüders

The construction is a hybrid structure between a parking house and a playground. It redefinds the monofunctional parking construction and what is often an infrastructural necessity into a public amenity, and destination. (JaJa Architects, nd)

Ill. 53 Parking house with innovative playground on the roof

ACTIONS

Diagrams for desing interventions

1

4
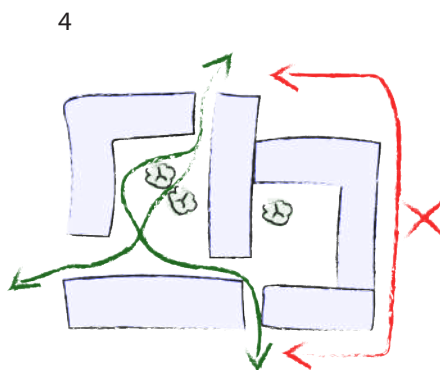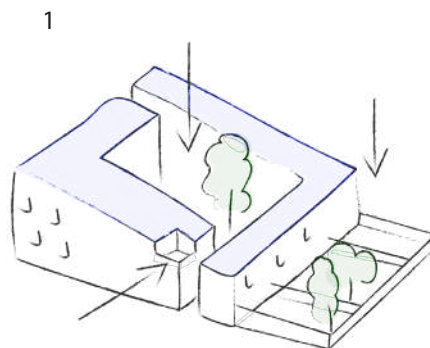
1. Privacy

Dynamic connections between public and private, minding the vital aspects from street watching and private needs to actually participate in the public community.
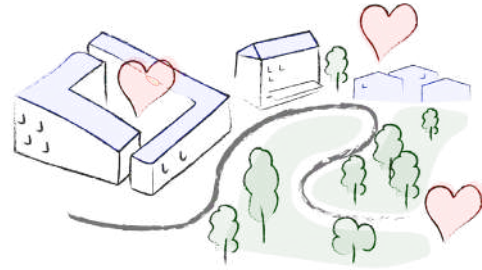
2. Natural environment

An element of nature is brought to the site allowing people to escape the urban environment and be present in a calm natural environment.
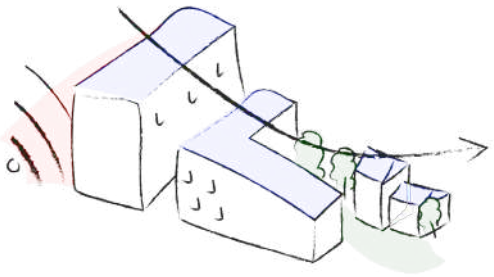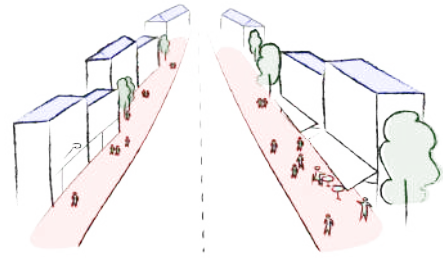
Ill. 54 Desing interventions (Own)

3. Placemaking/ Areas to meet

Implementation of designated places that reflect socialiblity, activities, accessibility, and comfort will support numerous aspects to improve the community.

4. Easy accessibility

Avoiding complex movements, creating flow with a goal of quick-and-easy access, convenience and the ability to get from one situation to another quick and easy.

5. Protect against high noise levels

Selected semi-enclosed and high rise blocks to protect the neighbourhood and its users from noise in the street.

6. Activating streets/ People on the streets

Activating and creating a central active road to allow active life on the street. It will create direct connections to open and enclosed spaces to make city life more attractive and explorative.

SITE
Typologies

In order to diversify the neighbourhood, the design proposal suggests a high variety of typologies within the site. Each area has a distinct atmosphere and different destinations and activities, which provides a high environmental diversity. However, these areas are still well connected through easy mobility connections, and throughout coherence in the material and built character.

In the first area, the lower row houses, are planned with a typology cf. the transect theory, comparable with type T3 or T4. It is characterised by relatively dense and low naturalistic planting, beside the private gardens. It consists of residential and community uses, mixed into the two rows of one- to two-story housing. These are carved in two by a green wedge, creating a passage and place to meet with neighbours. The area is taking inspiration from the typology at the allotment gardens with close adjoining gardens, and a low building height that makes a good transition to the neighbourhood.

The next area revolves around the road coming from Sjællandsbroen going through the site. It is comparable with the typology of T5, and is characterised by high density and mixed-use opportunities. It has a tight network with small squares, sidewalks, street planting and houses set close to the roadside. It accommodates retail like cafes and shops, as well as residential and business programming. The area is inspired by the loosely placed buildings at the marina, as well as local wishes for a more active street with shopping and social opportunities.

The area close to Sjællandsbroen is the neighbourhood with the highest density and has a typology type comparable to T6. It consists of larger blocks and buildings up to 6 floors. These are opened up to allow passage from the bigger roads, and between the adjoining blocks. It has a high diversity of programming and accommodates bigger office spaces, retail, residential and public facilities. The area has been influenced by the typology of Slusehavnen, where the big traditional block planning is dominant.

Lastly, the park area can be compared to a typology similar to T1 or T2. It is characterised by a landscape inspired by wilderness, using the local and wild plants, grass and trees. The mobility is defined by gravel paths as well as an explorative and free movement through tall and low grass. The area is planned with an institution that is placed alone in the natural environment, which gives a stand-out factor. The area is inspired by the big natural environments at Sydhavn, such as Sydhavnstippen and Stejlepladsen.

T3/4

T5

T6

T1/2

Ill. 55 Axonometric view of neighbourhood typology zonings (Own)

CONTEXTUAL PLACEMAKING

Ill. 56 Specific placemaking according to the context (Own)

T 1-2

Places to stay and meet

Minimalistic pavilions shading for sun and rain

Planting and shrubs to emerge users in a green environment

Kindergarten simplifies

Family life

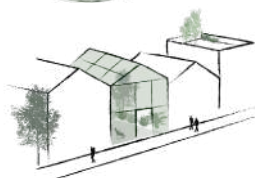Usage of the playground out of open houses

T3-4
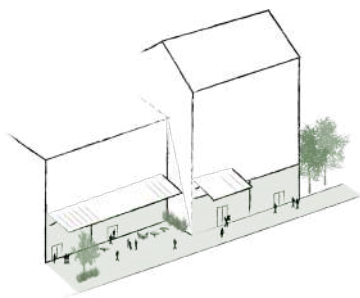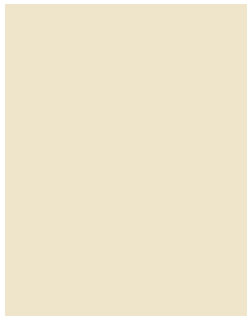
Places to play

Social interaction

Neighbourship

Shared passage in between housing to extend the private garden

Community house to meet neighbours in leisure time

Greenhouses mixed in the residential buildings

T 5

Active ground floors and public 24-hour activities

Wide sidewalks and bike path

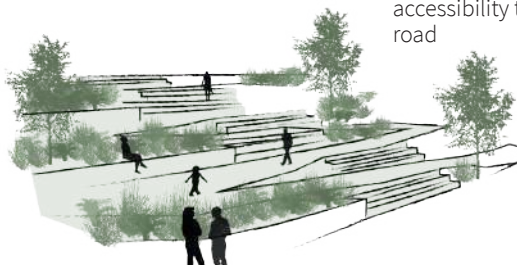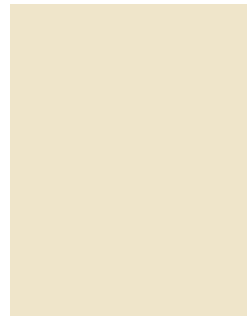Places to sit

Public squares

Planting to give the vibrant urban space a calm and coherent link to further areas

Staircase provides good accessibility to and from the road

T6

Safe and green courtyards
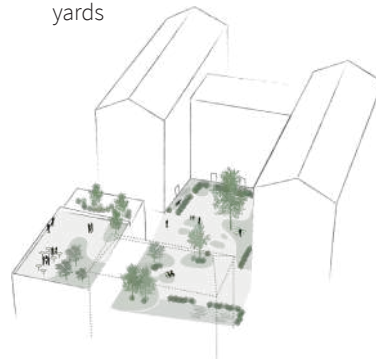
Good accessibility through pocket spaces

Sidewalks and bike paths

Temporary stays

Shared rooftops

Private perimeters in courtyards

DESIGN PROPOSAL

MASTERPLAN

Ill. 57 Masterplan (Own)

MASTERPLAN

A general desire for more housing, privacy, elbow room and cars can challenge the design of New urbanist inspired approaches. For every household willing to buy a unit in a central mixed-use area, another wishes to choose a more suburb-like neighbourhood (Grant, 2006). This master plan aims to please both households. With the diversity, inspired by the transect, both ways of living; in a small row houses, roads and block/courtyard areas can be fulfilled. Moreover, ways to experience and escape them both, are possible within a short distance and time.

The public environment will enrich the full Sydhavn and connect access from the surrounding areas. The focus on community and the existing local wishes may foster a better social environment and a willingness to engage in the new neighbourhood as a connected community throughout Sydhavnen. The designed places and environments will further invite all the residents and users of the local neighbourhood to interact and make use of it on an everyday basis, providing social and environmental stimulation to the individual as well as the community.

The master plan is designed to reflect the existing typology of Sydhavnen. This aims to ease the conflict of a cultural split in Sydhavnen, by providing physical spaces that can please the full district, no matter if you live or visit the site. Finally, the proposal provides the environment that all residents of the district can mirror themself in, and see a more coherent future for Sydhavnen.

DESIGN PROPOSAL
SECTIONS
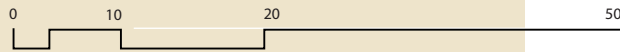
Ill. 58 Sections (Own)

SECTIONS

The sections are illustrated to reflect the main aims of the neighbourhood.

These are constituted as, the diverse life between buildings and the spatial, physical, and social aspects of people's life. Further it shows how the transition and typological transect delivers a diverse everyday life, comfort, convenience and community. Seen in the sections, the close proximity of the buildings and activities becomes clear. The different uses of the neighbourhood enhances the chance that residents inspire one another, to make use of the public space. Further, the close proximity can be translated into time, with the convenience of being able to do a wide variety of things on the same day, in the same morning, evening or at the same hour (Sim & Gehl, 2019).

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Section A - A'

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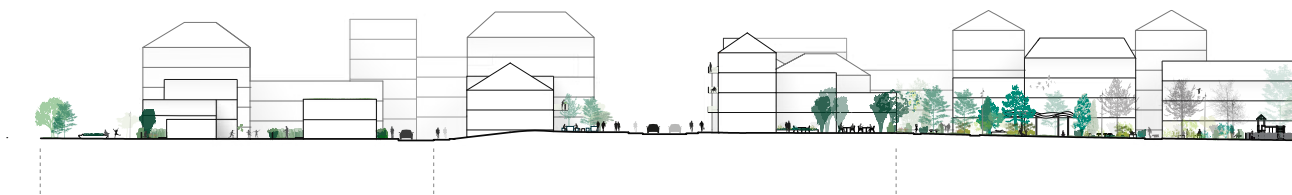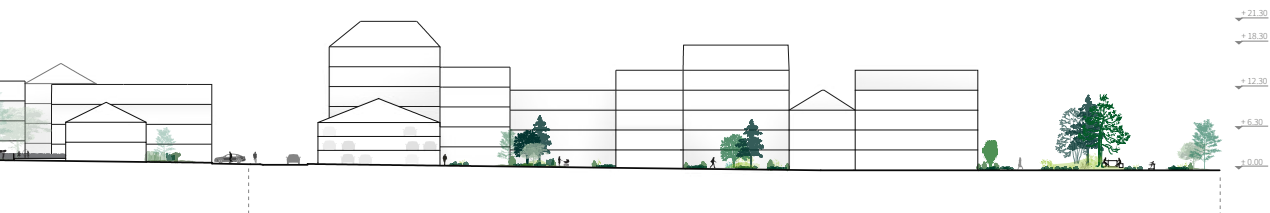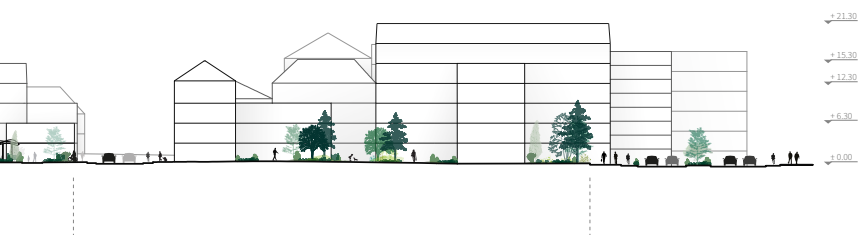
Section B - B'

SECTION A-A' /
Zoom in

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├──────┘        └────────────────────┤
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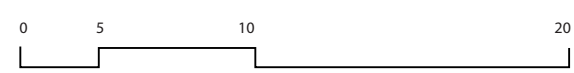
Ill. 59 Zoom in on sections (Own)
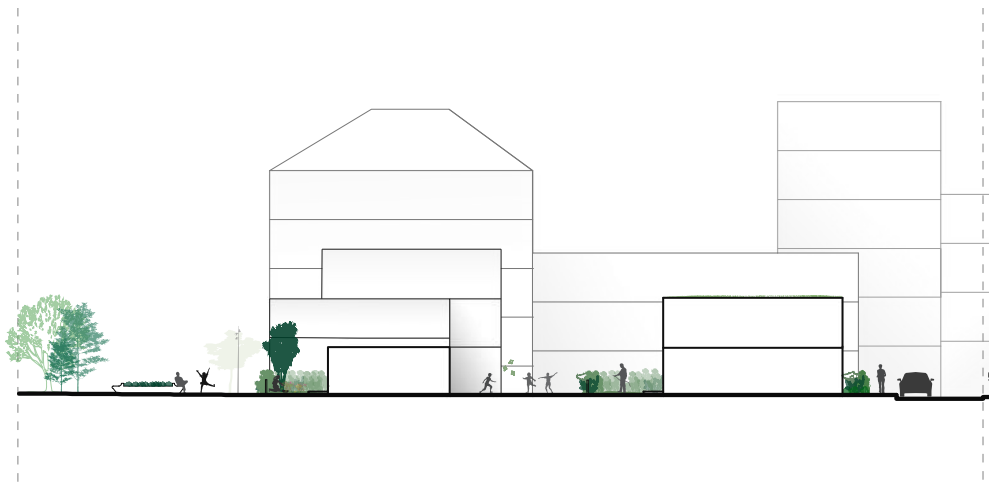
T3-4
Section A - A'
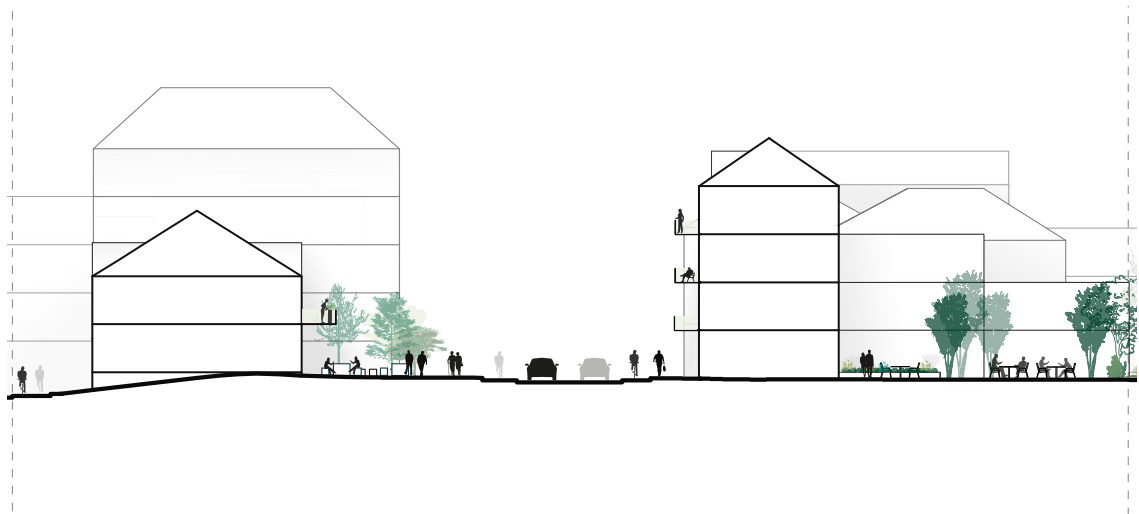
T5

Section A - A'

SECTION A-A' /
Zoom in

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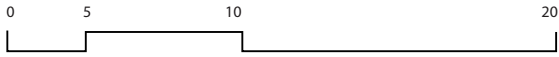
Ill. 60 Zoom in on sections (Own)

T1-2

Section A - A'

SECTION A-A' /
Zoom in

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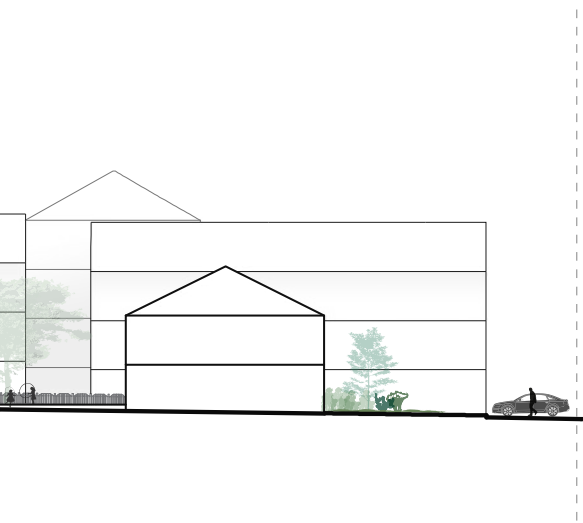
Ill. 61 Zoom in on sections (Own)

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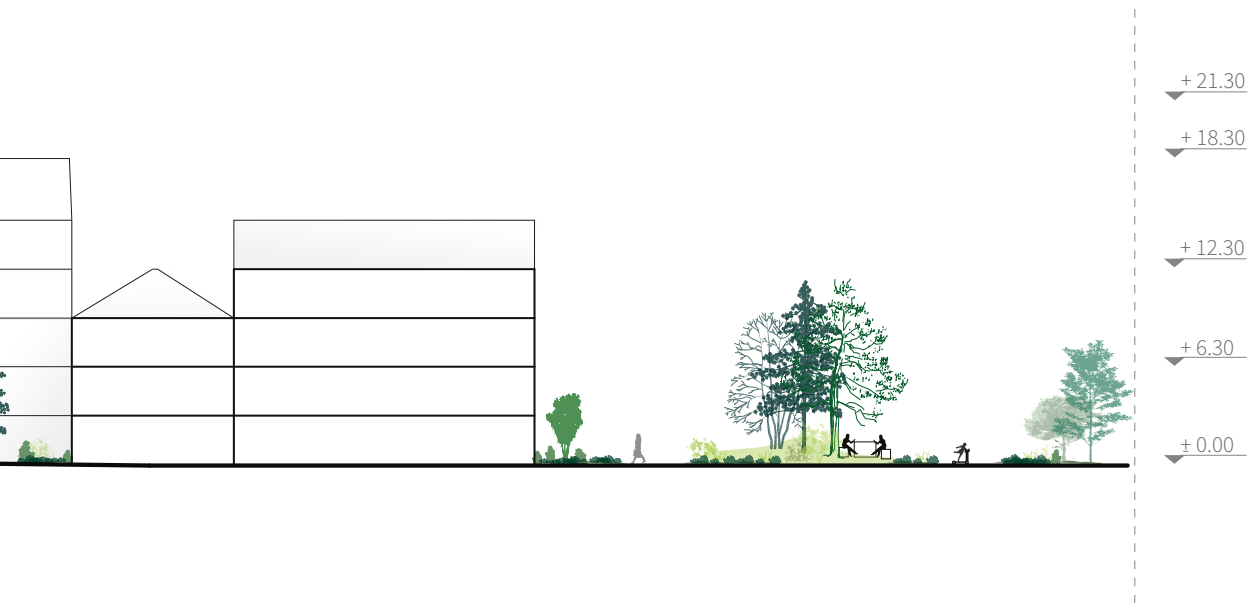
T6

Section A - A'

SECTION B-B'/
Zoom in

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Ill. 62 Zoom in on sections (Own)

Existing
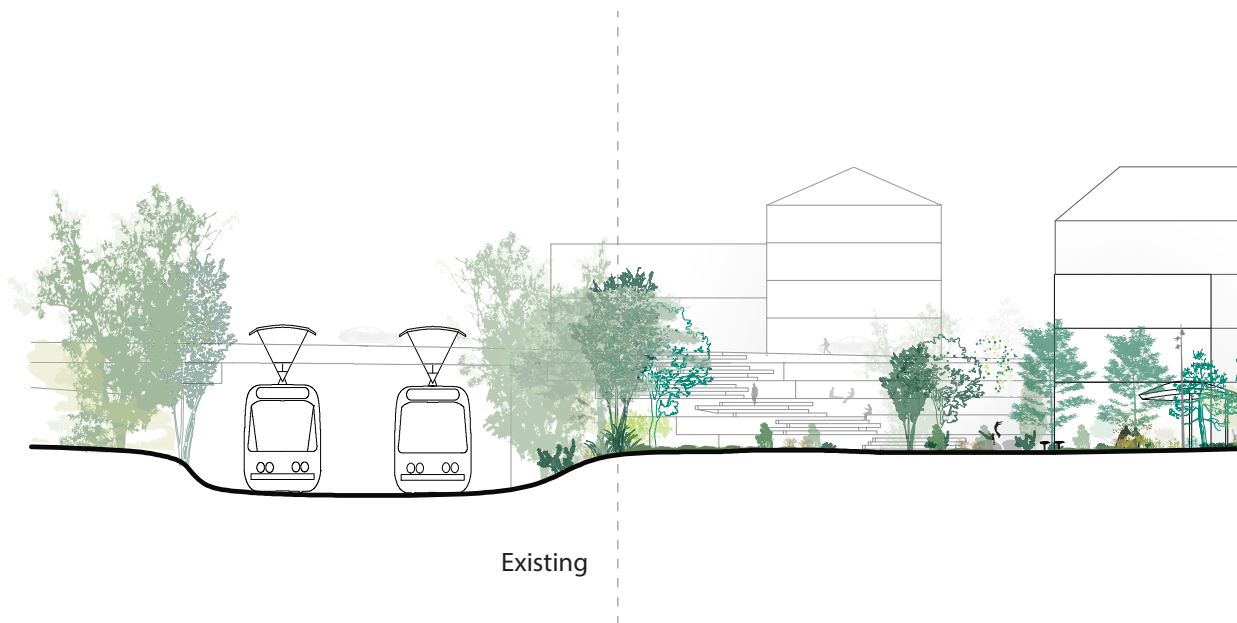
T1-2

Section B - B'

SECTION B-B'/
Zoom in

0   5   10   20

Ill. 63 Zoom in on sections (Own)

+ 21.30

+ 15.30

+ 12.30

+ 6.30

± 0.00

Existing
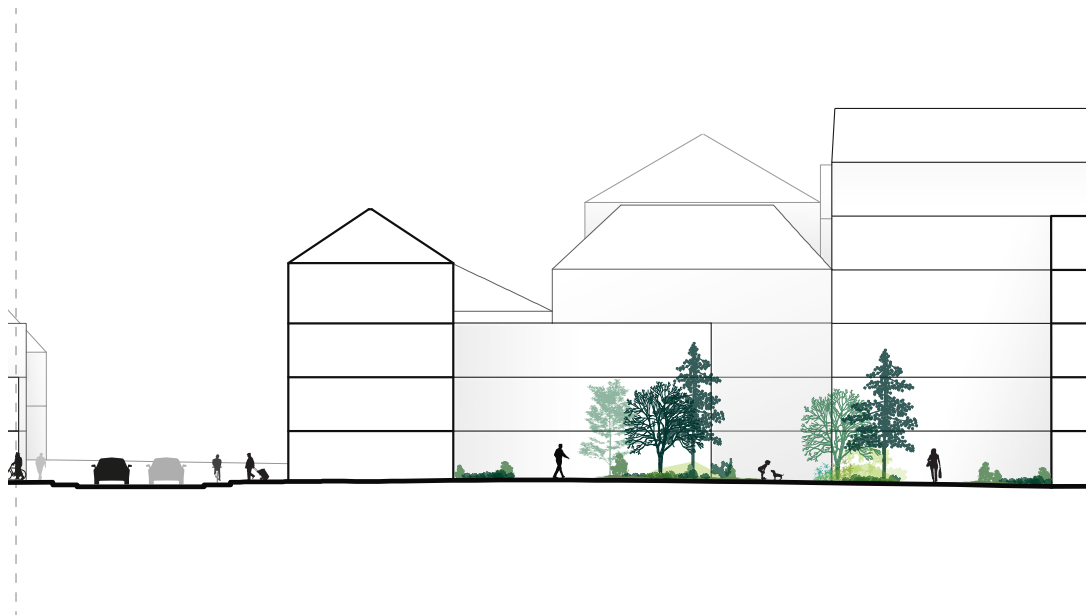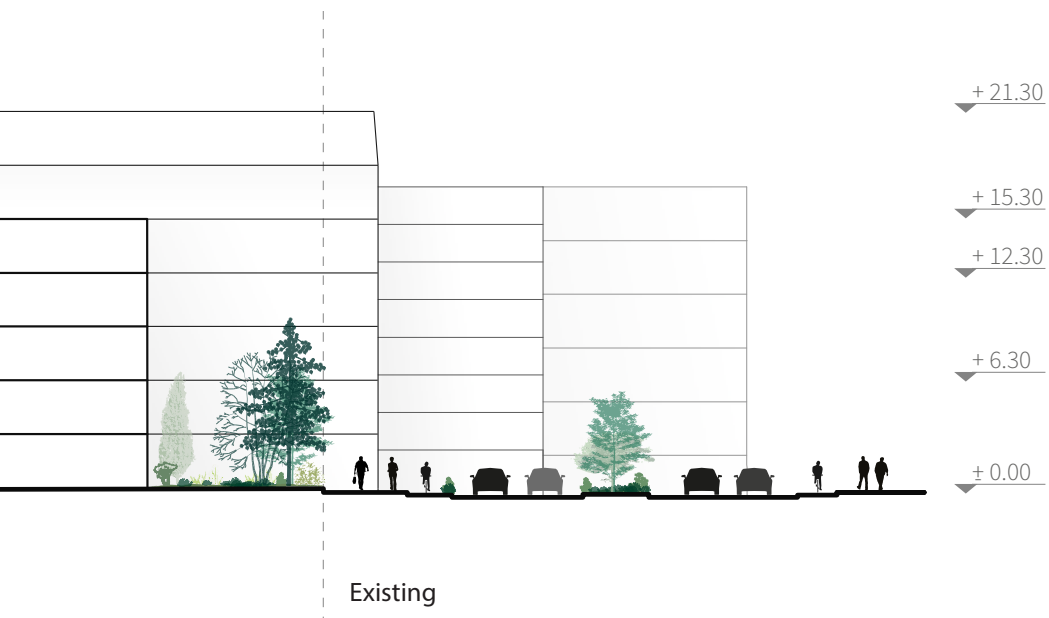
T6
Section B - B'

Community Park

Ill. 64 Render of park seen from the corner of the instirution (Own)

The nature park improves the urban environment and the quality of life whilst increasing health, biodiversity and offering an encounter with people and nature.

Being part of this nature experience is a great chance to disconnect from the quick everyday rhythms. It offers a stress free journey and stay, while kids are playing, and neighbours are chatting in the background.

Row

Houses

Ill. 65 Render of Rowhouses see from the green
wedge going through the dweelings (Own)

The selected view from row houses show-cases the closely connected and the car-free living, as well as the values of privacy and ownership. The shared strip provides a shared courtyard-like and semi-private space where people can meet in a semi-private setting. It functions as an extension of the individual gardens, but as a break up of the private space, into more community and social experiences.

The atmosphere of this zone echoes on a livable, high-density area which is loaded with low build volumes, allowing residents to experience the human scale, walkability and a sense of control and identity in the neighbour-hood.

Courtyard

Ill. 66 Render seen from with the courtyards of
the city blocks (Own)

The courtyards work as places which praise safety and the sense of belonging while breaking the monotony by offering semi-private meeting points or spaces to"escape" the road. It provides private space in front of the entrances, separating the public spaces to private leisure spots. Further, they create journey shortcuts to provide delightful experiences and mitigate the wind.

Stretched toward this view, the courtyard looks like public access is not prohibited. However, the very apparent spatial order indicates a sense of social control which should be respected by any visitor.

Active

Road

Ill. 67 Render with a view running down the activated road (Own)

The courtyards work as places which praise safety and the sense of belonging while breaking the monotony by offering semi-private meeting points or spaces to "escape" the road. It provides private space in front of the entrances, separating the public spaces to private leisure spots. Further, they create journey shortcuts to provide delightful experiences and mitigate the wind.

Stretched toward this view, the courtyard looks like public access is not prohibited. However, the very apparent spatial order indicates a sense of social control which should be respected by any visitor.

05
Design programming

The final desing detial will be present-
ed i the following chapter. It will pres-
ent detailed programming, design de-
tails and principles of the masterplan.
The chapter goes through, functions,
building hieghts, access, public/pri-
vate organisation, parking concepts,
materials and vegetation.

TARGET GROUP

The neighbourhood is intended as a destination for all the residents of Sydhavn. Still, there is an expectation and focus on the various local users and residents in the new neighbourhood. The housing types and different areas in the new neighbourhood are therefore organised to handle different needs, in relation to housing types and possible user needs. This contributes to a diverse neighbourhood that will be active at different times during the day and week.

Students

User group: Students

Age: 18-30 — Affordable student appartments with shared common space

Usage of public space: (5 trees)

Presence: Daily — 24h

Type of residence: Minimal living / Apartment sharing

Young people & families

User group: Young people & families

Age: 25-50 — Row houses and bigger apartments with private garden or shared space

Usage of public space: (4 trees)

Presence: Daily — 24h

Type of residence: Rooftops / Bigger apartments / Private gardens

Business & Office users

User group: Business & Office users

Age: 25-60 — Office enviroment with shared common terraces

Usage of public space: (2 trees)

Presence: Mon-Fri — 24h

Type of residence: Shared break space / Flexible office size

Elderly

User group: Elderly

Age: 65+ — Row houses and apartments with easy acces

Usage of public space: (3 trees)

Presence: Daily — 24h

Type of residence: Multiple housing choices / Comfortable accessibility

Ill. 68 Neighbourhood target group and usergrioup details (Own)

NEIGHBOURHOOD
Functions

The axonometric drawing depicts all the new functions of the design proposal. One of the main goals is to create an urban fabric that serves an assemblage of different services. Therefore, vertical mixed-used functions have been carefully distributed among the building's floors. Additionally, spatial layering, in other words, gives the opportunity to a town or a city to adjust and facilitate the ever-evolving reorientation of life (Sim & Gehl, 2019).

Housing

Offices

Commercial

Semi Public

Community

Educational

Indoors Parking

Ill. 69 Function programming of the neighbourhood Own)

NEIGHBOURHOOD
Volumes

The following volumetric assessment has been made to illustrate the values gained in this new design proposal. First and foremost, the design is made on the understanding that; "society is made of different people with different needs, different means and different dreams" (Sim & Gehl, 2019). Likewise, different building volumes reflect upon diverse townscapes, offering different experiences when passing from one room to another. Moreover, the transition of the building levels does not only work as a wall against noise pollution. The built typologies regarding volumes, reflects upon a meaningful positioning of building heights with a wish to create a blending to the existing environment and as a morphological attention to the surrounding neighbourhoods. This new neighbourhood brings down the monotones by being exposed to constant light and shadow game but also by creating desirable "obstacles" against the traffic road or "openings" to the more human-driven and cultural-oriented views.
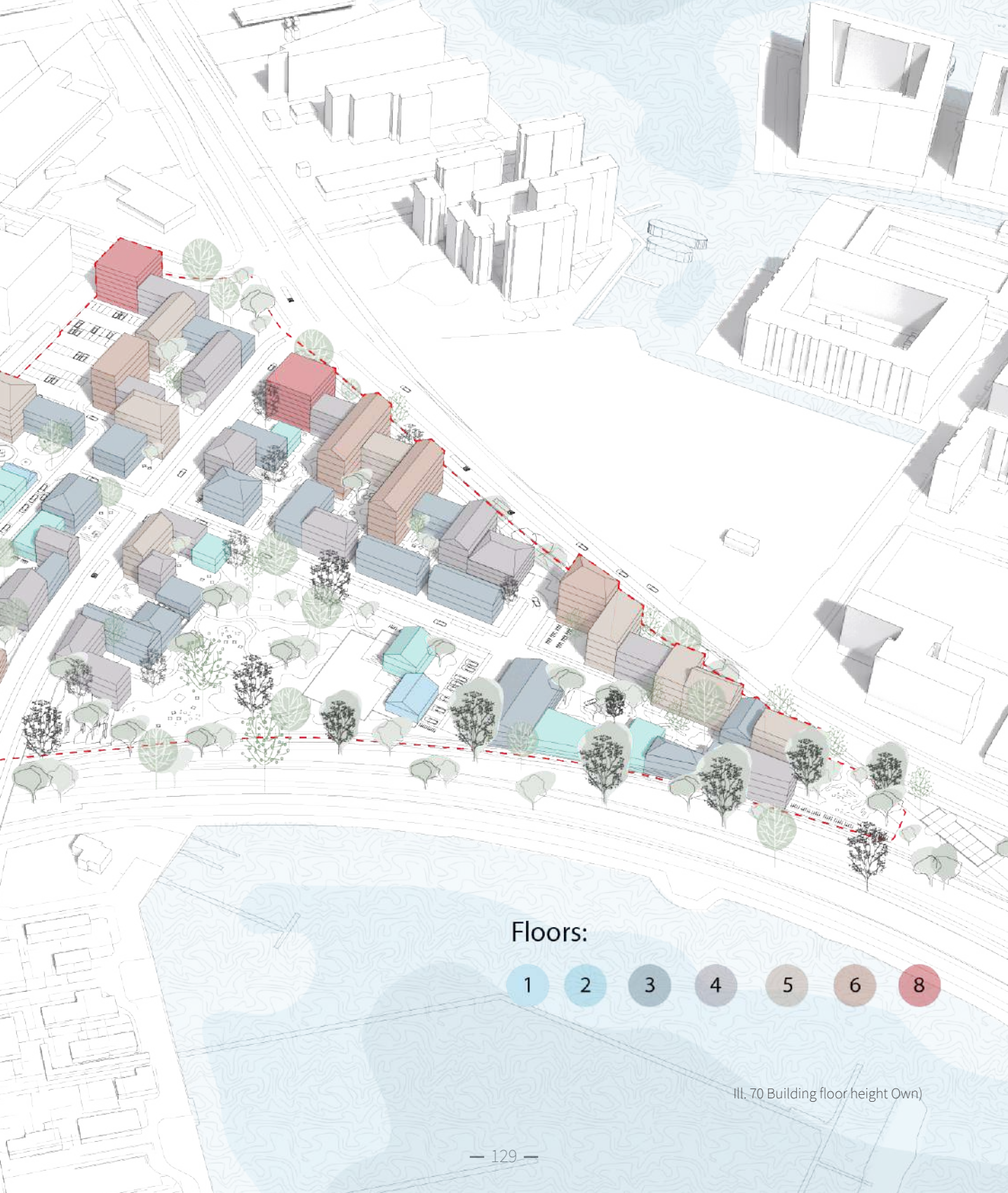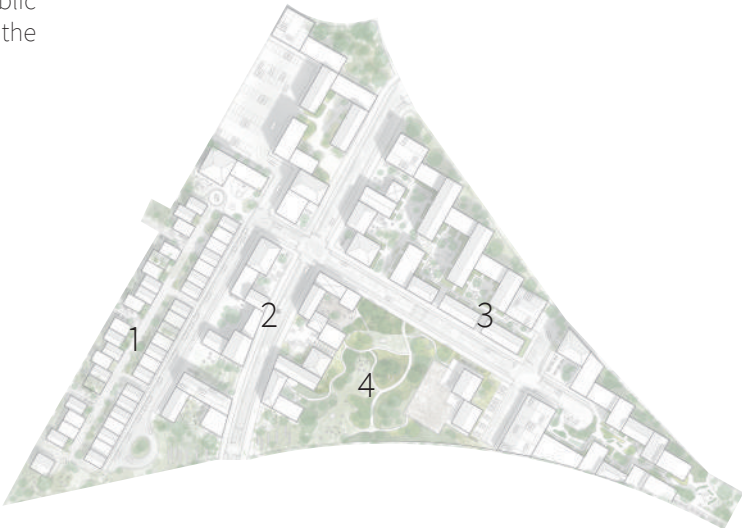
Floors:

1 2 3 4 5 6 8

Ill. 70 Building floor height Own)

PUBLIC/PRIVATE

The diagrams show the programming and distribution between the public, semi-public and private realm of the different areas in the neighbourhood.
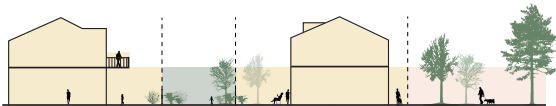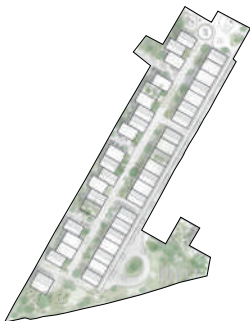

PRIVATE   SEMI PRIVATE   PUBLIC   BUSINESS

1

2

3

4
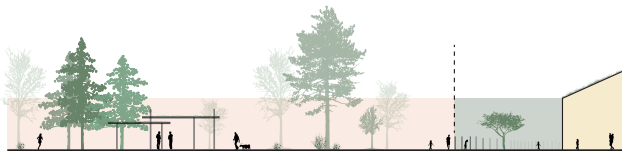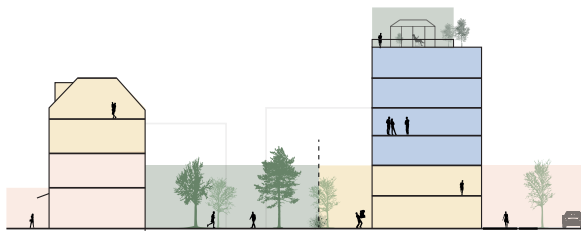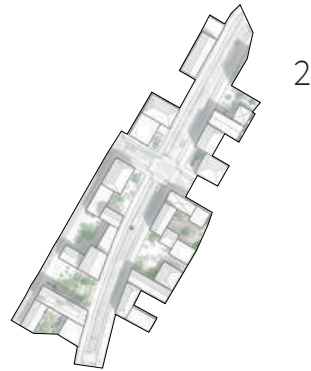
Ill. 71 Diagrams of distributions between private and public space (Own)

NEIGHBOURHOOD
Access points

Ill. 72 Diagrams of new access points and flow (Own)

The access diagram shows the new proposed access points, which stand in clear contrast to the current situation. Bådehavnsgade used to be the only direct access point to the site since there is non-passing edges to all side of the site.

The proposed design utilises as many entry points as possible the site could be endowed with. Part of the consideration was to create quick and accessible paths between different blocks, direct connections to the allotment gardens and easy passages with staircases from the lower levels to higher levels of the site. The neighbourhood, thereby opens up the allotment gardens to the west, inviting the existing neighbourhood to become integrated and smoothly transitioned into the new neighbourhood. The design creates smooth flows and connections between the inner neighbourhood through designated roads, paths and sidewalks, but also through non-specified paths between buildings and in the park.
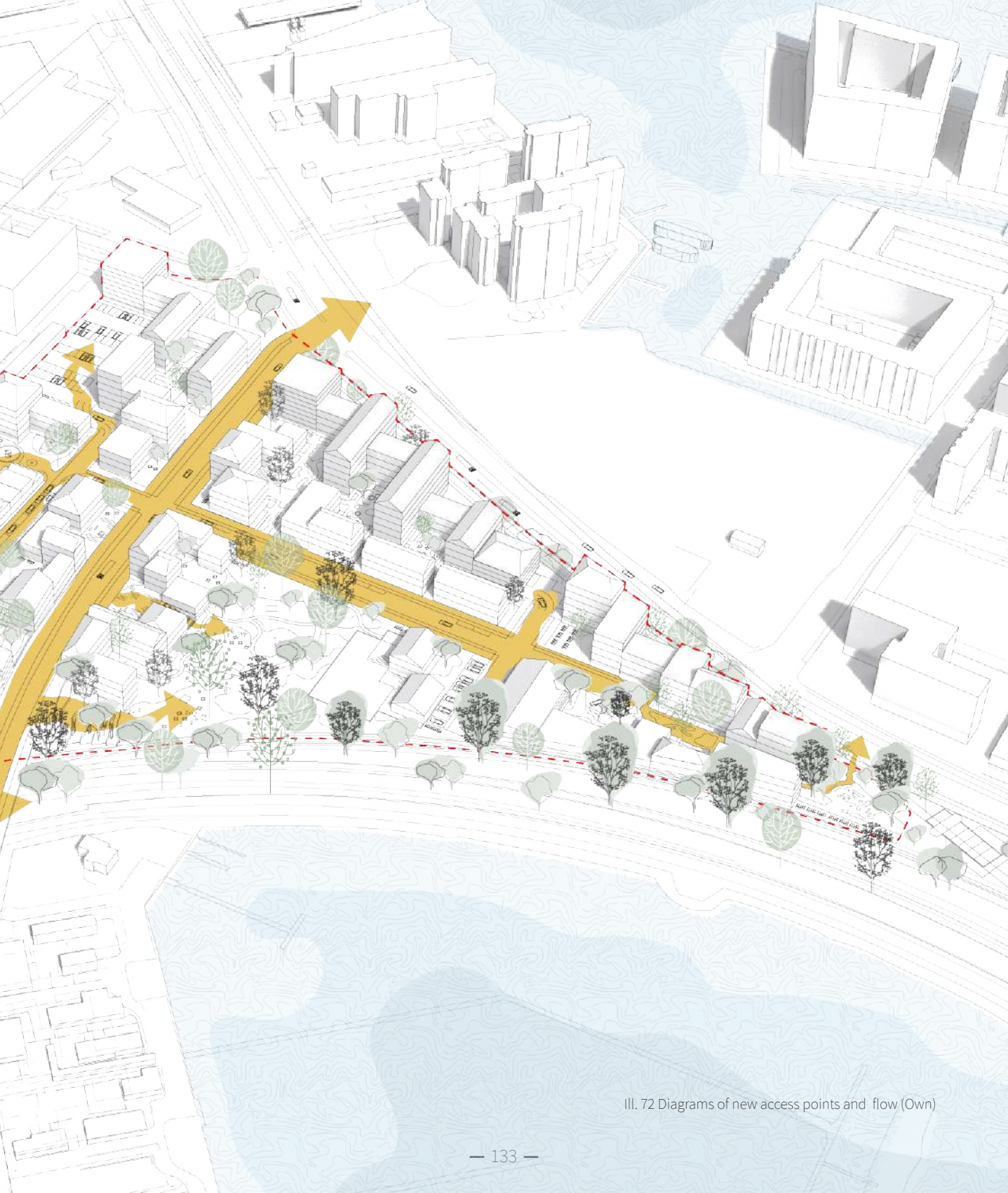
Ill. 72 Diagrams of new access points and flow (Own)

TRAFIC PLAN

0   10   20   50

In regards to the previous ´Access diagram´, the aim of the traffic proposal is to construct a welcoming area accessible to strolling, with priority of the connections and safety measures. In order to create a safer neighbourhood for soft mobilities, restrictions such as traffic bumps and speed limits are applied to direct the traffic on the pedestrian crossing roads. Due to this, the car speed in the contemporary plan differs on three different levels, to manage the different mobilities on the site. In regards to the previous ´Access diagram´, the aim of the traffic proposal is to construct a welcoming area accessible to strolling, with priority of the connections and safety measures. In order to create a safer neighbourhood for soft mobilities, restrictions such as traffic bumps and speed limits are applied to direct the traffic on the pedestrian crossing roads. Due to this, the car speed in the contemporary plan differs on three different levels, to manage the different mobilities on the site.

The speed limit of the active road will be 50km/h in accordance to the danish speed level in denser build urban districts. The active road works as a central main street of the neighbourhood and accommodates three accessible mobility options. It is bicycle-friendly and has the widest pedestrian sidewalks (3,5m) in the neighbourhood.

The speed limit of the secondary neighbourhood road is decreased to 30km/h, to create a more slow, safe and user-friendly environment. The speed limit is further reduced because it reflects a local neighbourhood road that is not meant to "host" active flow. More specifically, the road serves people who either live or visit the area for a specific reason.

In the tertiary street of the neighbourhood, the speed limit is gradually reduced to 15km/h. This is done to underline a neighbourhood area where free movement, play and human scale is in first priority.

Bike path

Side walk

Ill. 73 New trafic plan of the neighbourhood (Own)

TRAFFIC PLAN & PARKING

The various types of parking solutions are meant to serve 3 different needs.

Firstly, the parking is meant to be a service for the local residents. The design proposes parking opportunities close along the road to the row housing as well as big parking garages placed 5 places in the neighbourhood. Secondly, the parking is serving the people who work and visit the neighbourhood. Due to the close proximity to the metro station, there is an expectation of great use of public transport to and from the area. However, the parking garages as well as the ground-level parking lots are meant to serve the visitors. A parking concept, with flex-park among the different users during the day, as well as techinacal calculations, can be seen in appx. 12 and13. Thirdly, a few parking spaces have been delegated to users who need a quick stop, to shop, pickup etc. These will be proposed to have a maximum parking time of 30 minutes.

Ill. 74 Different parking solutions (Own)

- Big parking elevator
- Multifunctional parking elevator
- Ground level parking lot
- Roadside parallel parking
- Drop-off parking

Semi-private parallel **parking**
in front of residential area

Public open **parking** lots.
Used by visitors and residents
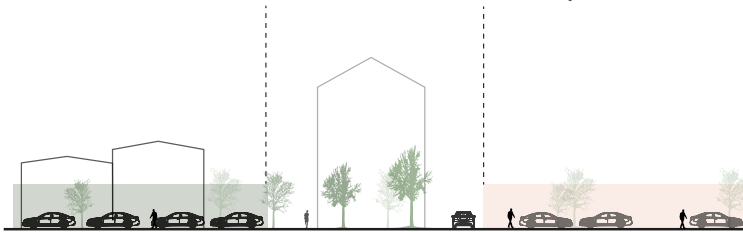
**Public elevator
parking** garage

Dense and low parking construction provides space
for programming on the roof of the carpark.
Such as; private housing, buisenesses and semi-private terraces
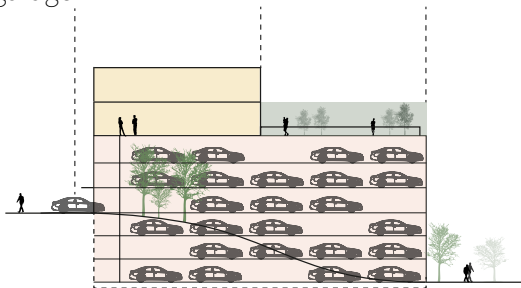
Large public parking elevator with close connection to a block or residence.
Provides a large amount of parking spaces in a compact space,
with close distance to housing or work.

Ill. 75 Section diagrams parking solutions (Own)
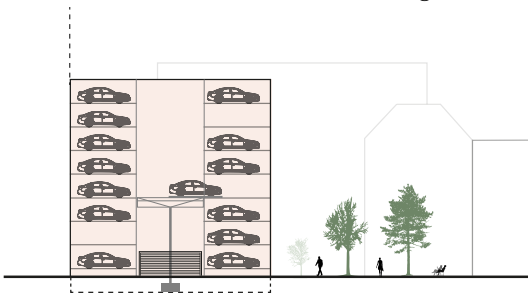
MATERIALS

Ill. 76 Material character of neighbourhood (Own)

Row houses

Clay brick roofs

Row houses with focus of natural materials

Social and privare gardenscape

Permeable pavements in claystone

Housing

Wood facade of housing units

Natural paths in grass or gravel

Blocks

Painted brick facades

Natural burned bricks

Mixed materials in facades

Pavement with red tones to match facades

Grey and sand toned pavement

Mix of materials in streetscape

NEIGHBOURHOOD
Vegetation

The availability of vegetation in public spaces is proven to highly contribute to the health and well-being of people. It does not only serve as a resource for physical activity but also helps reduce stress levels, mental fatigue and mortality. Vegetation also cleans the air, reduces pollution, and protects from the hot sun and noise (Khemri et al., 2020). The urban space and particularly the park area, is going to have a natural and green expression. According to biological studies in the local area, 182 species of natural origin have been recorded (Sydhavnstippen, 2010). This will be reflected in the neighbourhood's planting design, where the local natural typologies will be applied to enhance both dense human and urban environments, as well as healthy green park environments (Bohl & Plater-Zyberk, 2006). This includes a varying planting, in accordance with the different neighbourhood areas, including a focus on tree heights and the natural feeling the different trees and shrubs and grass. Moreover, the building blocks will accommodate shared and green rooftops. These will continue the local wild planting of small trees, shrubs and wildflowers (for more planting references see appx. 15).

20m

15m

10m

5m

Aspen
/Bævreasp

Scots pine
/Skovfyr

Mountain ash
/Alm. røn

Common ash
/Alm. ask

Bird cherry
/Alm. hæg

Ill. 77 Natural planing in the park, and reference for entire neighbourhood (Own)
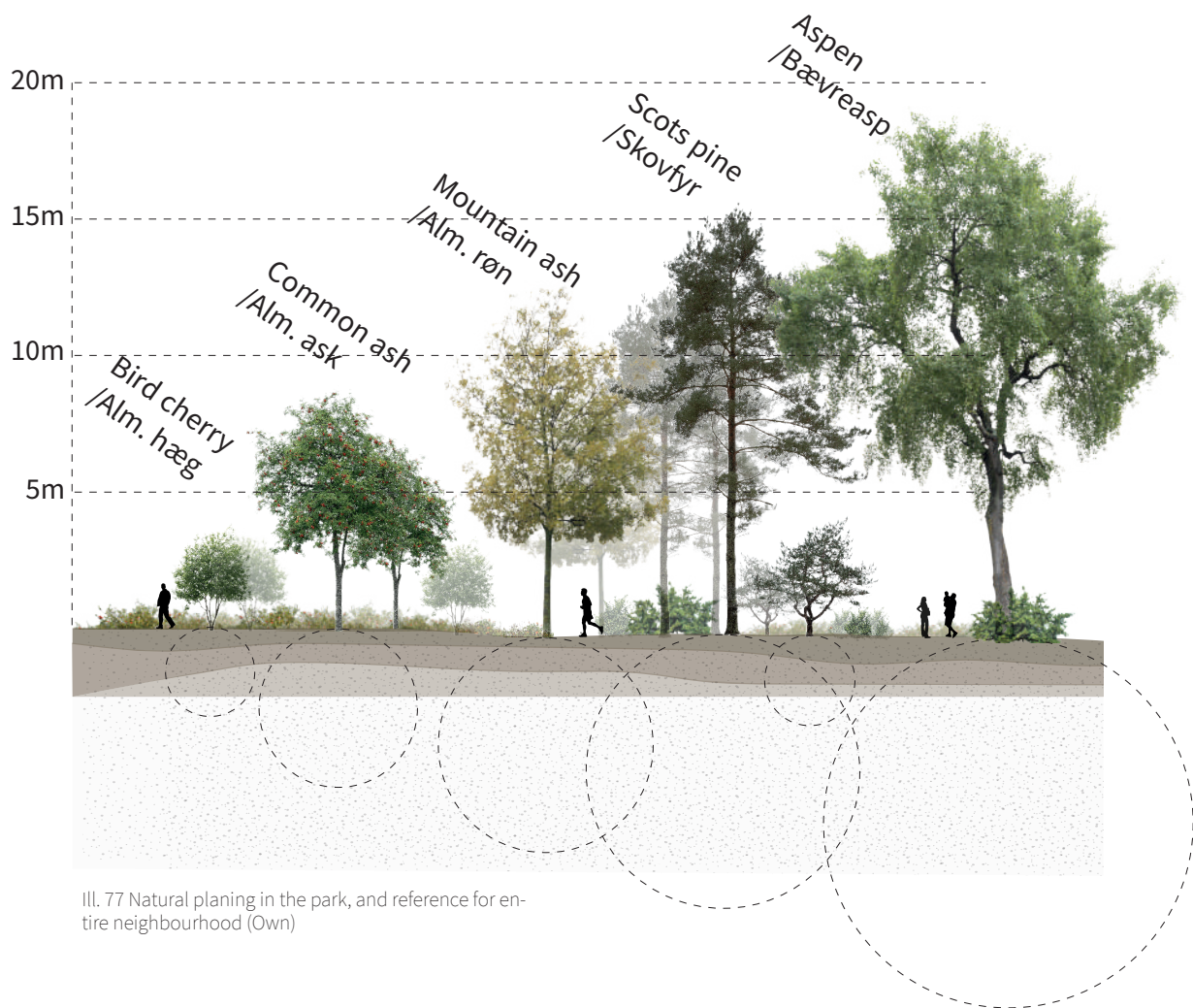
07
EPILOGUE

This closing and last chapter intends to round off the project. It will put up a discussion, with focus on the design approach and theory, and how these might be enhanced with future and new focus. This is followed by a conclusion that sums up and rounds off the project.

DISCUSSION
& Reflection

This project works as a challenge as well as an example of how to plan and design new neighbourhoods within a strong cultural setting. Further, it challenges the built character of the private and money-driven development, towards more quality and socially aware design, with respect for the existing environment of the local areas. However, It does not work as an ultimate guide on how one should apply to any project, due to the contextual analysis. Nor is it a perfect solution on how to solve the problem of cultureless development within the private mass-housing industry. Rather, It is a suggestion and a call for how future developers ought to pay a bigger attention to who is going to make use of their design. This includes a stronger contextual and nuanced understanding of the development area and not only the development site.

Worth mentioning is how the approach taken to solve this design task by fact has its advocates as well as critics. When choosing New Urbanism as an approach and inspiration for design development, we enter a discussion on whether this approach alone is simply applicable to master development, as well as whether new urbanism can actually achieve its aims (Grant, 2006). New Urbanism finds strong inspiration in the ´timeless ways´ of the classical form of architecture, meaning that the approach rarely considers many of the cultural and social contexts, and thereby abstract the design from its setting and social meanings. Therefore, getting a project built does not necessarily mean that a New Urbanism design will achieve the principles that it promotes, such as;

strong community, sustainability and better quality of life (Grant, 2006). Also, even though the approach may create well-designed streets and public spaces that provide an environment supportive for socialising, no one is forced to lead a life constrained by neighbourhood boundaries. There are no walls or gates to the neighbourhoods, and therefore the New Urbanism is an expansion of choice along with subjective and local preferences (Ellis, 2002). Within statements and visions from the local community, we however often find important cultural values. Often these align with the visions of New Urbanism, to create safe, comfortable, social and vibrant places. Where the problem comes to mind, is when New Urbanism mainly focuses on the physical and aesthetic frameworks for design planning. By doing so, it separates the social and cultural importance from the physical environment (Grant, 2006).

Physical form is certainly important, in creating the context, in which the ideal community may exist. Although, a bigger focus towards local knowledge could be a beneficial asset to the approach. This can further be reflected upon the Placemaking approach. When we want to create a place within the dimensions of placemaking, there are a number of objectives that can be related to physical form, supporting the detailing of New Urbanism. However, there are some considerable points of the process, of creating a good place, that demand attention towards the future users. Firstly, is to identify the assets within the existing culture and community, to bring a

sense of community ownership. This can create a deeper understanding of how spaces actually function, thereby overcoming obstacles. In relation to New Urbanism and the aesthetic physical perspective, this local information will help to understand what "form" one needs to accomplish the visions of the space. Secondly, places do not necessarily function from day one. The local partners do not only function as kickstarter and cultural anchors, but also as future actors, and for that same reason, the rationale for using their information and ideas to create the actual places may be crucial for the success of the design. Thus, a place is not only a physical place, but a complex and multidimensional space that needs life and culture in order to exist (Project for public spaces, 2018). With this said, the New Urbanism approach brings a good framework and toolbox to organise, and physically plan the visions that exist around the development project. It gives idealistic goals on how a neighbourhood should function, and how one may achieve this by physical design. However, if this proposal should be reflected into a future realisation, the approach would benefit greatly from additional aspects of the placemaking process and design.

CONCLUSIONS

Sydhavnen and the project site, Molestien, is a complex and deeply-rooted district with a strong history and culture. The site at Moletien is facing a development that can be criticised, for ignoring urban design and a human environment, in favour of prioritising a goal of applying a mass of buildings. Likewise, critiques have been given from the local community to the surrounding new development at Sydhavnen, where typologies and social situations have made a break in the district cohesion. This has resulted in a cultural separation in the neighbourhood, making the future outlook for the district uncertain.

With its central placement between important areas, Molestiens acts as a strategic piece to connect the areas together. However, after a contextual analysis, as well as field trips, the site shows negative impacts coming from factors such as, inaccessibility due to edges and noise stress. Nevertheless, the surrounding district at Sydhavnen serves good connections to the inner city in Copenhagen as well as a direct road to the airport, and a stimulating palette of diverse typologies. This makes the area attractive for many reasons and makes additional reasons why the development site should be created in order to strengthen Sydhavnen.

To confront the contextual challenges of Sydhavnen and the project site, a theoretical framework was put together, to guide a direction for an appropriate solution. This was made with approaches from New Urbanism, for the purpose of making a neighbourhood that values community, human scales, activity, connectivity and quality urban design. The approach was aided by two design and planning tools; the transect theory and placemaking. The transect created thorough planning of the neighbourhood topologies in relation to the surrounding context, and placemaking was used to create specific destination principles within the different typologies.

Drawing on the theoretical toolbox, a conceptualisation was created to direct the design proposal. The concept was built in the context of the diverse typology at Sydhavnen and the transect theory. This aided an approach of dividing the project site into zones related to the surrounding context, to create lines that inspired and created coherence in the built environment.

With reference to the problem statement, the design proposal presents a new and constructive approach, on how to create a neighbourhood with a stronger focus on community. This is done by giving the local typology as well as specific and planning aspects of urban design, a greater focus. The proposed design is carefully planned out to reflect the context of the existing surroundings, and works as a transition in the built environment, from the adjoining areas throughout the neighbourhood. Finally, it is created to host numerous destinations with a diverse character, to stimulate community life, creating a flow that comes both from within the local neighbourhood and from inviting the surrounding district of Sydhavnen to take part in the new opportunities.

In reflection on the design proposal, the project works as a challenge as well as an example of how to plan and design new neighbourhoods within a strong cultural setting. The framework and toolbox bring a base to organise, and physically plan the visions that exist around the development project. Further, it gives input on how a neighbourhood should function, and how one may achieve this by quality urban design.

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ILLUSTRATION

Ill. 4   Local plan development by DGA, Bygge- og Teknikforvaltningen, 2000, Copenhagen, Available at: https:/
             /dokument.plandata.dk/20_1072683_1576750493550.pdf. [Accessed: 22/05/2022]

Ill. 13   Picture seen from Sjællandsbroen, Bygge- og Teknikforvaltningen, 2000, Copenhagen, Available at: https:/
             /dokument.plandata.dk/20_1072683_1576750493550.pdf. [Accessed: 22/05/2022]

Ill. 17   Picture of the site seen towards north, Bygge- og Teknikforvaltningen, 2000, Copenhagen, Available at:
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Ill. 19   Picture of the intersection at Sjællandsbroen, Bygge- og Teknikforvaltningen, 2000, Copenhagen, Available
             at: https://dokument.plandata.dk/20_1072683_1576750493550.pdf. [Accessed: 22/05/2022]

Ill. 21   H.C Ørsted power plant, private photos, nd, © Kgs. Enghave Lokalhistorisk Arkiv, Available at: https://www.
             sydhavnenshistorie.dk/sydhavnens-historie/aarstalslist/, [Accessed: 15/4/2022.]

Ill. 22   Tram in sydhavn, private photos, nd, © Kgs. Enghave Lokalhistorisk Arkiv, Available at: https://www.
             sydhavnenshistorie.dk/sydhavnens-historie/aarstalslist/, [Accessed: 15/4/2022.]

Ill. 24   Sluseholmen, Sluseholmen, 2022, Link https://sluseholmen.dk/, [Accessed: 22/05/2022]

Ill. 47   Fælledby naighbourhood in Copenhagen, Henning Larsen, 2019, Copenhagen, Available at: https://hennin
             glarsen.com/da/news/archive/2019/12/05-new-masterplan-secures-copenhagens-first-neighbour
             hood-in-wood/, [Accessed: 22/05/2022]

Ill. 48   Sqaure in Fælledby, Henning Larsen, 2019, Copenhagen, Available at: https://hennin
             glarsen.com/da/news/archive/2019/12/05-new-masterplan-secures-copenhagens-first-neighbour
             hood-in-wood/, [Accessed: 22/05/2022]

Ill. 49   Roadscape at Onkel Toms Hütte neighbourhood, Architectuul, 2012, Berlin, Available at: https://architectu
             ul.com/architecture/onkel-toms-hutte/#/login [Accessed 18 May 2022]

Ill. 50   Dense playfull wedge going through residential road, 2013, © North News & pictures ltd, Available at:
             https://www.dailymail.co.uk/news/article-2397899/Community-transforms-Victorian-passageway-Middles
             brough-homes-oasis-greenery.html [Accessed 18 May 2022]

Ill. 52   Place to relax in the park, nd, Available at: http://www.eskis.org/portfolio_page/jardin-dhospitalite/.
             [Accessed: 18/5/2022.]

Ill. 53   Parking house with innovative playground on the roof, JaJa Architects, nd, Available at: https://jaja.archi/
             project/konditaget-luders/ [Accessed 18 May 2022]

Appendix

CONTENT

APPX. 1 CHOICE OF SITE ANALYSIS

Site : 94.000 m2

The new possible site is close to adjacent to the Sy-
dhavnsgade site and struggles with some of the same
existing issues, like the road to the east and, which is the
continuation of the same road. The site can be extended,
to the east to complete the triangle shape, or to the west
across the road, and include the not jet planned industri-
al area, adjacent to the high density community gardens.
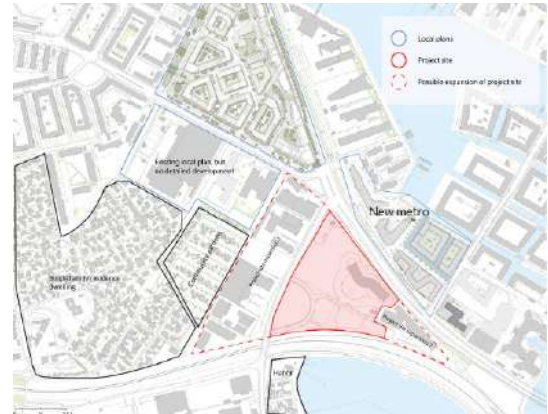
Ill.1 Legibility map (Own)

APPX. 2 LITERATURE REVIEW

As the main thing, the literature review clarified and con-
nected the theoretical frameworks chosen for the project.
Further, the literature review had four outputs. The first is
for placemaking, and the understanding of how to create
a good place. This helped to assess the final design; to
discuss whether it fulfils the principles of a socially sus-
tainable neighbourhood; as well as propose actions to be
taken in the future to ensure that the design and places
will be developed positively as intended in relation to
buildings and activities. The second output is based on
a better understanding of the differences and qualities of
rural, suburban, and urban places in the context of the
Transect theory. This defined how to scale this method
of mapping typologies, down to a city block scale, to en-
sure diversity in placemaking and functionality. As for the
third output, it gave an insight on the human perspective
in design, that needs to be livable and act as the means
for altering future development. This helped in a reorgan-
isation of how to think and plan the "life" of the project
design. As for the fourth, the theory of New Urbanism has
been explored. This has in fact been the ongoing field for
the above mentioned outputs, although the theory and
theme by itself gave insight on the critiques, origin and
strengths that design will get from using the approach.

APPX. 3 SITE VIST: FIELD ANALYSIS - METHOD AND FOCUS

Mixed methods

"By using mixed methods, the research will analyze the relationship between the built environment and the social activities (...) as an expression of social sustainability and liveliness through unstructured interviews and social activity mapping." (Khemri, et al., 2020)

Photo documentation

Document "life" of the different typologies around the site.

Focus on interplay between build and human.

Interview/talks

Randomized talks with people in the neighborhood.

Cafe owners, shops.

(Questions finished latest March 9th

Observation

1 hour each around lunch. Problem with the time. It would be good with additional observation during weekend hours.

Focus points:

"Sence of place"

The observation and mapping focused on the different social activities happening in the space, such as chatting, playing, strolling, shopping, eating or drinking outside, resting, jogging, dancing, playing music, participating in community activities (Gehl and Savarre, 2013), (Khemri, et al., 2020).

"The observations and mapping were carried out on many spaces of the neighbourhood, public (open public spaces, main streets), semi-public (secondary streets) and private spaces (residential area or tertiary streets)" (Khemri, et al., 2020).

Function: Human ergonomics

Physical attributes: The material reality

Meaning: 6th sense /ethereal sensing

Site visit observation strategy, made to align and to delegate different tasks to the project team
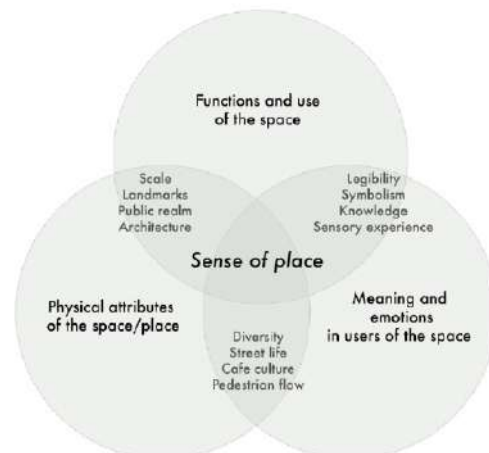
Ill.3 Site visit observation strategy

APPX. 4 INTERVIEW

Semi-structured interview inspiration / guide to ask informants during the sitevist at Sydhavnen.

Possible subjects:

Shop owners

People who looks interested, or people who is seated/not in a hurry.

People who exit a house.

Questions:

Do you live close by? – what area?

If no: why are you here?

Do you feel like this area attracts you for a purpose?

Do you feel like your neighborhood has a good life quality?

How would you comment on the activities in the neighborhood?

How would you comment on the housings?

Do you have friends or aquatinters nearby your house that you see for social situations?

What do you think is good elements to make you engage with neighbors of

friends in the public space?

Could you have more of this in your neighborhood?

If you could change/add some things to simply enhance your neighborhood, what would it be?

"Think wild"
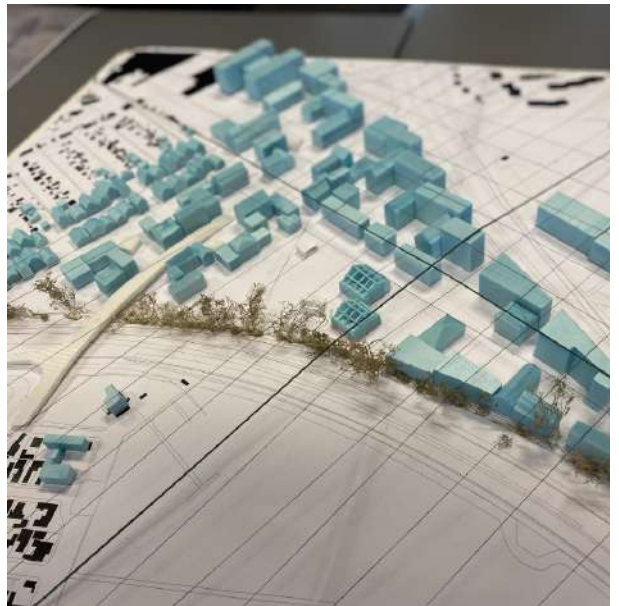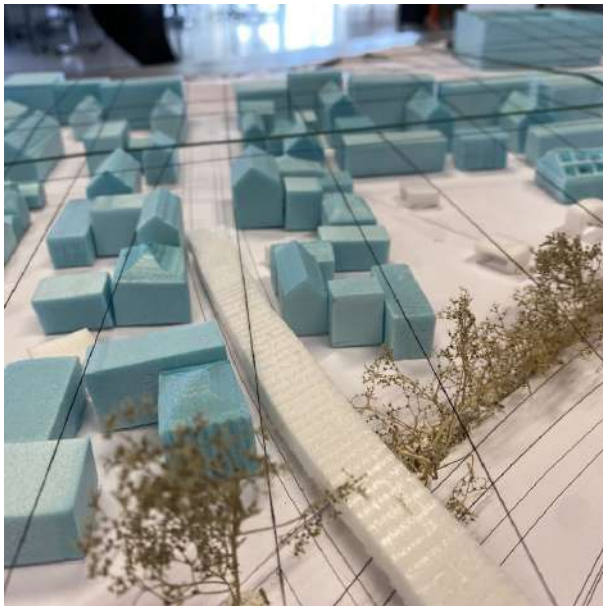
APPX. 5 LOCAL PLAN

The existing proposed development plan consists of bouldings between 5 and 10 floors, and a single block of 3 floors. This creates a semi dense area with heavy high-rise blocks. The courtyard has a positive prioritisation of green areas. However, they appear enclosed by the tall blocks and relatively inactive for public use. The site has planned one kid institution and senior centre, business bloks as well as a playground and garden.
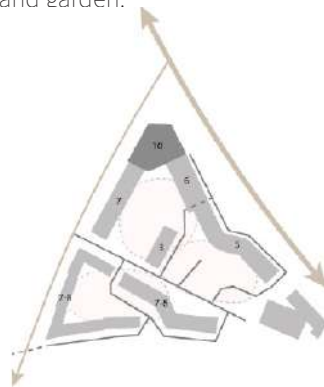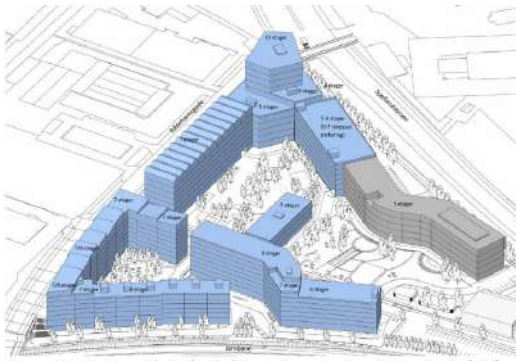
Ill.3 Volume model that shows an example of a possible design of the building in accordance with the local plan.
Illustration: (Design Group Architects)

Visualization showing an example of a possible expression of the buildings on the corner of Dådehavnsgade and the railway in accordance with the local plan. The illustration shows shifts in terrain level towards Tvåhavnsgade and the railway. Illustration: DesignGroup Architects.

Ill.5 Visualisations from Local plan proposal

APPX. 6 PROJECT PROCESS

Ill.6 Brainstorming the project framework

The departure point of the project started with a brainstorm, with which the group tryed to comment on why better environments are not being produced nowadays?

The brainstorm led the group to form discussions about social sustainability and whether the excessive legal, technical and administrative constraints such as money regulations but also, the lack of valuing local culture and coherency are the means for the root cause. Placemaking and community building present a challenge, if not a crisis, for our generation's capability to build more livable, beautiful, and enduring communities (Bohl & Plater-Zyberk, 2006). In fact, according to Gresham's law (2015), "bad money drives out good" and in relation to urban design, money tends to win above quality design leading to monofunctional non-contextual/ non-cultural designs. Therefore, the group choosed to investigate a complex area of the city of Copenhagen, in Sydhavnen

References: Bohl, C., Plater-Zyberk, E., 2006. Building Community across the Rural-to-Urban Transect, University of California, Issue: Places,. Available at: http://escholarship.org/uc/item/1zt6g0sr. [Accessed ; February 2022].

BRITANNICA, T., EDITORS OF ENCYCLOPAEDIA (2015). GRESHAM'S LAW. ENCYCLOPAEDIA BRITANNICA. AVAILABLE AT: HTTPS://WWW.BRITAN-NICA.COM/TOPIC/GRESHAMS-LAW, ACCESSED 09.02.2022

APPX. 7 PROCESS MODEL AND SKETCHES

Ill.7 process model of neighbourhood planning

Initial Vision diagrams

The initial vision diagrams have been created based on spesific keywords.

Keywords: Typology, social sustainability, quality of life, new urbanism, placemaking, transect, toolbox, neighbourhood, urban design.
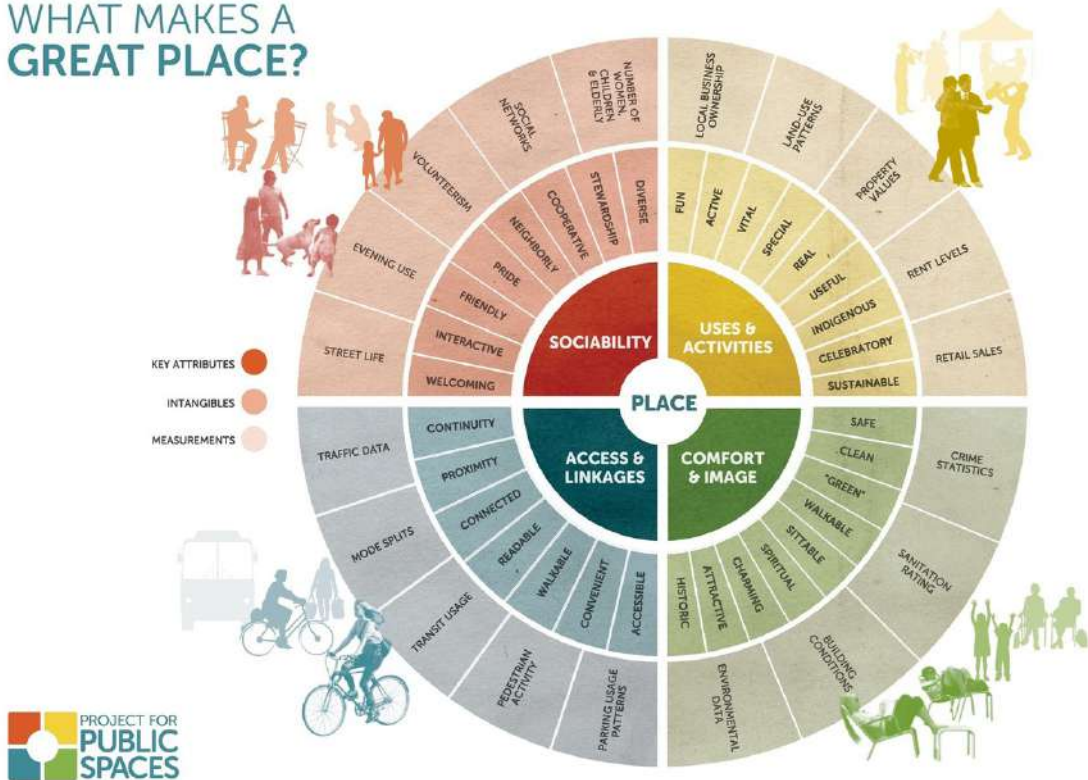

Ill.8 Group vision's diagramms (Own)

# APPEX. 8 PLACEMAKING DIAGRAM

Placemaking evaluation diagram.

Reference: Project for public spaces, 2018, Placemaking: what if we built our cities around places?, Available at:https://uploads-ssl.webflow.com/5810e16fbe876c-ec6bcbd86e/5b71f88ec6f4726edfe3857d_2018%20placemaking%20booklet.pdf [Accessed: 10/2/2022]

APPEX. 9 CONCEPT SYNTHESIS

The design proposal started with group workshops in which everyone represented their main concept idea. Therefore evaluating which aspects solve and approach our project vision, we tried to combine different elements and create a new concept all together.

Concept 1. Noise Volumes
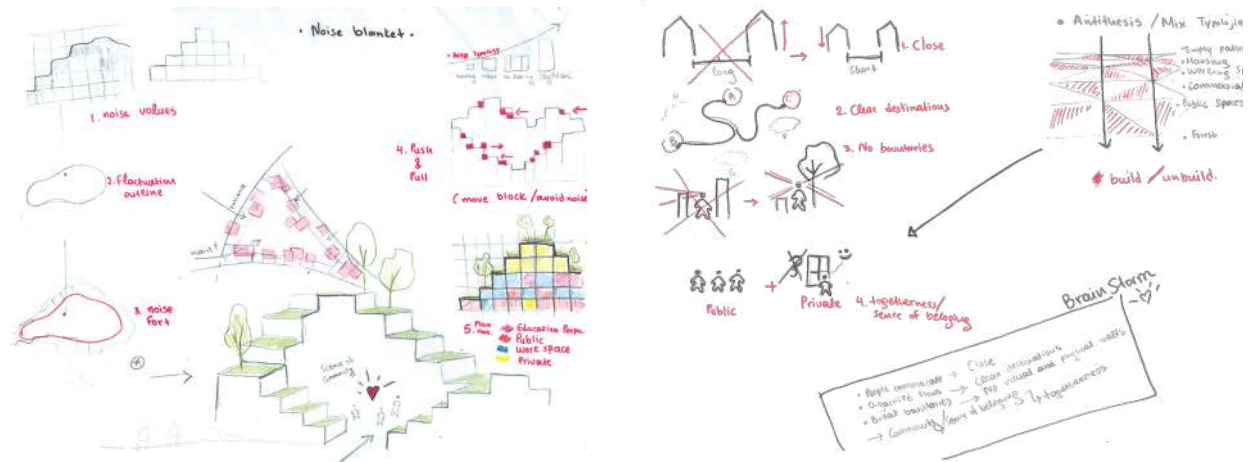
Concept 2 . Community clusters
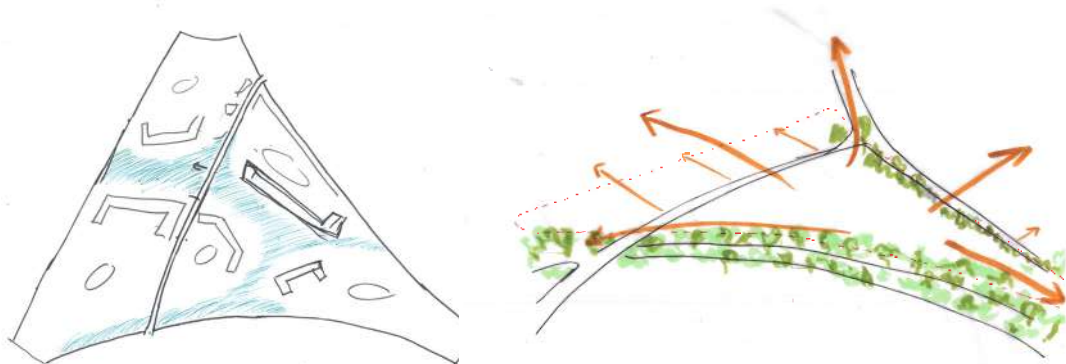
Concept 3 . Human Centered approach
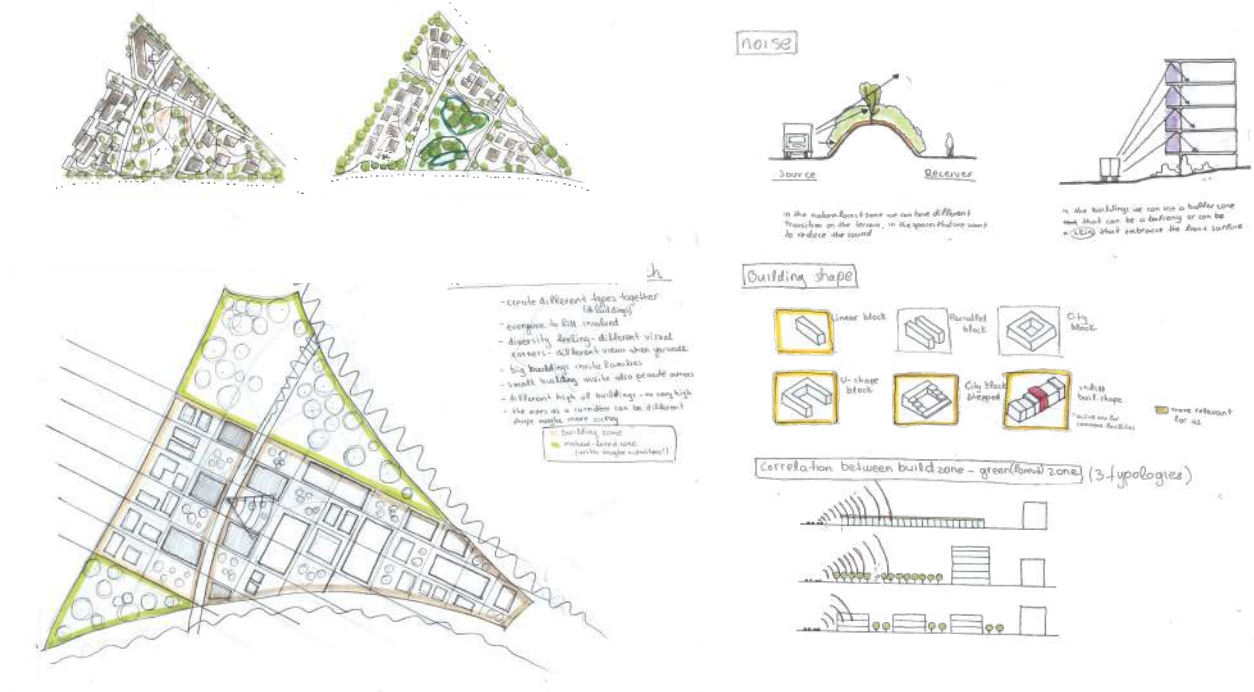
Ill.10 (Own)

APPX. 10 PLANNING SYNTHESIS

In order to plan the neighbourhood the group came up with a concept that is linked to the transect concept. Creating different typologies gives you the opportunity to escape from one to other but linking all in one neighbourhood.


Ill.11 (Own)

APPX. 11 PUBLIC-SEMI PUBLIC-PRIVATE EXPLORATION
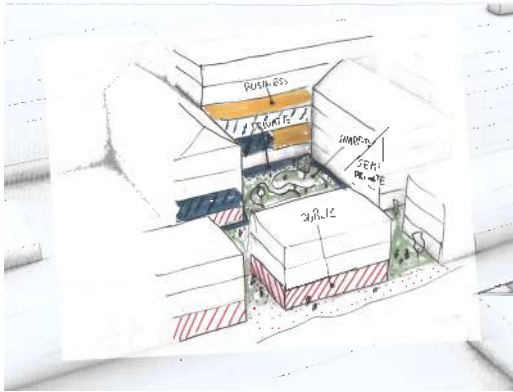
APPX. 12 PARKING CALCULATIONS (OUR PROPOSED ROOM FOR PARKING)

The calculation of parking space was done according to the needs of the proposal buildings. Depending on the operation of the building there are different parking requirements in the space that must be dedicated for parking. Thus, we divided 4 main categories based on the functions we have proposed. The residential category, the mixed uses category, the business category and the educational category. We found four different sums of parking space m2 and added them - the total parking space footprint need to cover was 12.500 m2
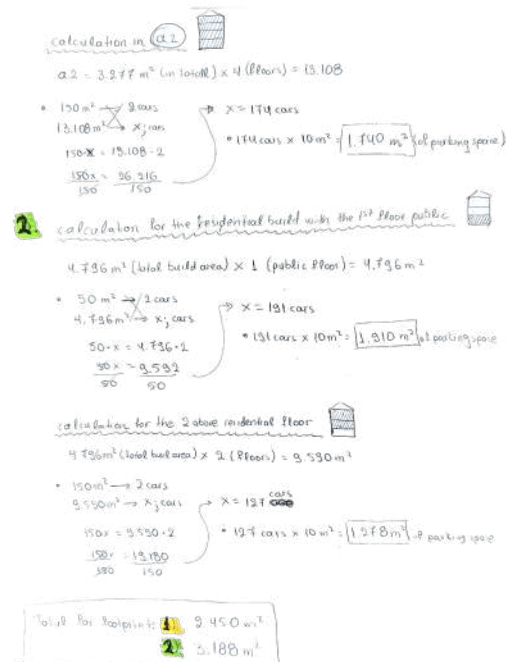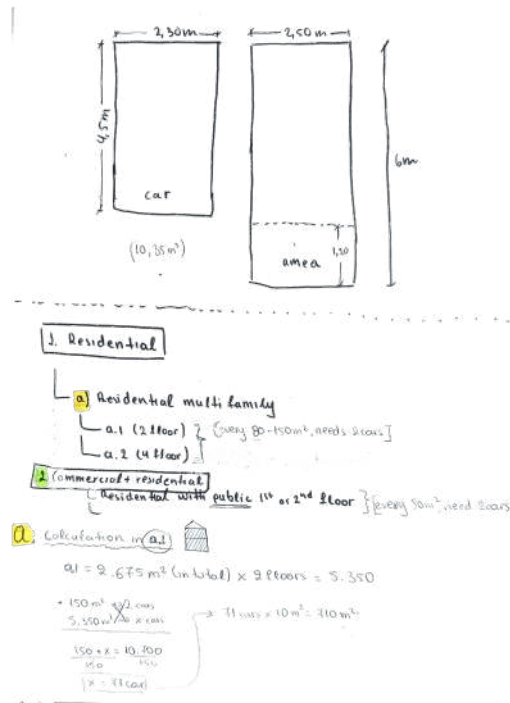
Calculations for the 1st public floor

3.337 m² (total build area) × 1 (floor) = 3.337 m²

- 50 m² → 2 cars
  3.337 m² → x; cars   → x = 133 cars
  50·x = 3.337·2   · 133 cars × 10 m² = | 1.330 m² |
  $\frac{50x}{50} = \frac{6.674}{50}$

Calculations for the working office floors

3.337 m² (total build area) × 4 (floors) = 13.348 m²

- 200 m² → 5 cars
  13.348 m² → x; cars   → x = 333 cars
  200·x = 13.348·5   · 533 cars × 10 m² = | 3.330 m² |
  $\frac{200x}{200} = \frac{66.740}{200}$

| Total parking space area for businesse buildings = 4.660 m² |

4. Educational

300 m² (total area) × 3 (floors) = 918 m²

- 100 m² → 2 cars
  918 m² → x; cars   → x = 18 cars
                           · 18 cars × 10 m² = | 180 m² |
  100·x = 918·2
  $\frac{100x}{100} = \frac{1.836}{100}$

· Open Parking Area (Sm)
→ 100 = 145 m²   ① ②

· Small elevator (S)
x 5 floors of 2.10 m
132.600 m² × 5 = | 1.663 m² | ①
             × 6 = | 1.956 m² | ②

· Medium elevator (M)
185.500 m² x
x 7 floors | 1.998 6m² | ①
x 8 floors | 1.484 m² | ②

· Large elevator
327.819
x 5 floors = | 1.639.085 m² | ①
x 6   = | 1.966.814 m² | ②

Scenario ① = 4.663.738 m² of Parking   40 % Parking
Scenario ② = ~~//////////~~ //////   5.450 m²
             5.308.657 m² — // —

Ill.12 parking calculations (Own)

Parking elevator technical drawing

| 11 Κάτοψη γκαράζ με ασανσέρ (A.I.R) → 12 – 13 | 12 Καθ' ύψους τοποθέτηση | 13 Τομή → 11 | 14 Χώρος στάθμευσης έως 20 IX |

2.50
5.30 25 5.00 25
Ασανσέρ
2.50 3.30
2.10, 2.10, 2.10, 2.10
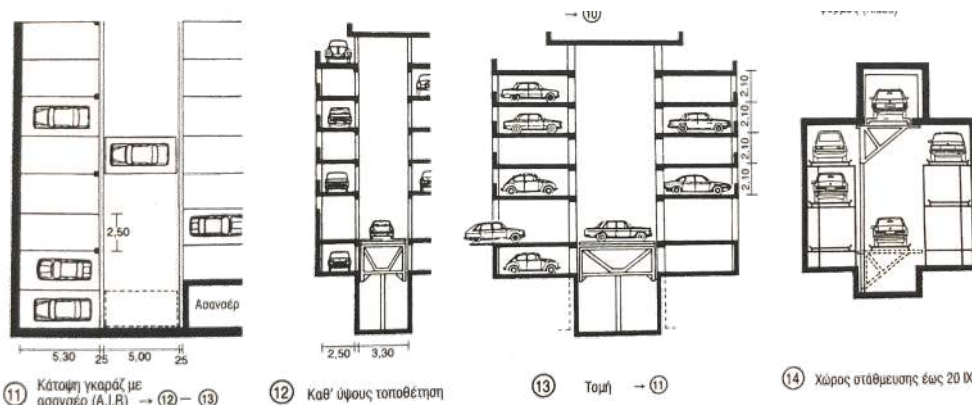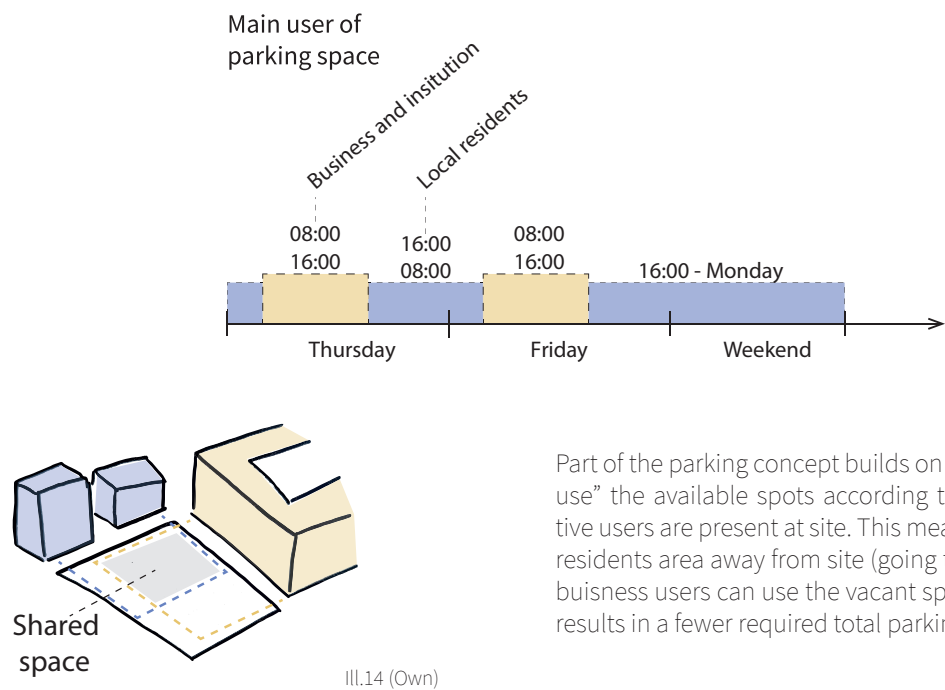
Reference: Neufert, E. Neufert, P. 2012, Neuferts Architects data. Available at: https://byarchlens.com/wp-content/uploads/2020/11/Neufert-4th-edition.pdf?fbclid=IwAR1zjb1O_MUX4zse1SPqqWvlzuqFRaSlkaynosl956BmLBzIi0YW-Zx9Xp-o

Ill.13 Neufert, Architect's Data, 2012

APPX. 13 PARKING CONCEPT DIAGRAMS (SHARED ROOM)

Main user of
parking space

Business and insitution

Local residents

08:00
16:00

16:00
08:00

08:00
16:00

16:00 - Monday

Thursday   Friday   Weekend

Shared
space

Ill.14 (Own)

Part of the parking concept builds on how users can "flex-use" the available spots according to when the respective users are present at site. This means that; when local residents area away from site (going to work) the on-site buisness users can use the vacant spots left behind. This results in a fewer required total parking spots.

APPX 14 WATER MANAGEMENT

Ill.15 Dingeo (2022) Molestien 7, 2. 2450 København SV.

Reference: Dingeo (2022) Molestien 7, 2. 2450 København SV. Link: https://www.dingeo.dk/adresse/2450-k%C3%B8benhavn-sv/molestien-7/2-/?fbclid=IwAR0qNoHjUbkNGt2ekDuuBkj4z1Sf3BbI-PH1kvTzAcdKU9ml66xfXWa64d4Y. Accessed: 28 april.

The average degree of impermeability in the area around the site is 50 percent. This means that approx. 50 percent of the surface is built up or paved with asphalt, tiles, cobblestones, etc. that prevent rain and surface water from seeping into the ground (Dingeo 2022). Further, The area consists of two watersheds. One to the north, connected to the management area at Sydhavnsgade, and one more internally placed and linked with the railways, to the south. The watershed with runoff linked to the railways can be internally helped by placing the park (with a low degree of impermeable ground) where there is a higher need for internal water management (Dingeo, 2022).

The modeled average groundwater depth is 2.9 meters at the site. If uncertainty / data variation is included, the average groundwater depth is in the range 1.5 - 3.4 meters. Therefore, there are no problems with high groundwater levels at the site (Dingeo, 2022).

Ill.16 Vegetation exploration