

under the

**SKY**

on the verge of

**LAND**

and

**SEA**



Christiaan Smits  
Master Project - 30ECTS  
Landscape Architecture - Master's Programme  
Alnarp 2017



## Preface

Water plays a crucial role in our existence. The planet and the way we live on it has been and will always be shaped by water. For example through accessibility to drinking water, transportation and recreation purposes. In recent times climate change is challenging our relationship to water.

People are attached to water and the specific environments the presence of water creates. In densely populated areas a major challenge lies in the implementation of adaptation measures to rising sea levels. Taking into account the unique but often overlooked local qualities in the creation of these measures by preserving, enhancing and creating new interesting yet safe relationships on the physical interface between land and sea is of great importance. It is this topic that has been of greatest interest to me and is addressed in this report.

In this paragraph I would like to conclude with a thank you to my supervisor Arne Nordius for his critical and constructive feedback. Furthermore, I would like to thank both Fredrik Hellström and the municipality of Helsingborg for an interesting and inspiring process. Finally, I would like to express my gratitude to my friends and family for their continuous help and support.

Christiaan Smits

Malmö. May 12, 2017

**Title (EN):**

Under the sky, on the verge of land and sea.

Working on the interface of land and sea on the site of Inre Hamnen in Helsingborg.

**Title (SV):**

Under himlen, på gränssnittet till land och hav.

Arbete med gränssnittet mellan land och hav på Inre Hamnen i Helsingborg.

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## Abstract

This thesis gives in insight into the creation of a design proposal for the Swedish municipality of Helsingborg. More specifically a design proposal for Inre Hamnen a centrally located site in the city of Helsingborg that should be adapted to the predicted rising sea levels. There are many uncertainties surrounding the future of the site that create a complex and challenging project. An important part of this project and report is taking into account these uncertainties.

This thesis is structured into four chapters showcasing different stages of the design process. These four stages are inspired by the four traces concept method developed by Christophe Girot (1999). Throughout these chapters you get gradually introduced to the way of working and a generated respect for the site of Inre Hamnen and the city of Helsingborg. A way of working that is characterized by experimenting with different adaptation measures to rising sea levels within a site-specific context. In this report the focus is on fascination, creating different narratives that range in tone between objective and subjective. Rather than working from a central research question the report is written around questions and challenges that came up during the design process. This narrative can be found in the structure created by following the four-trace concepts method.

Throughout the thesis fascinations, encountered uncertainties, site-specific characteristics and the found solutions are presented through diagrams, photos, drawings and written text. A specific tone and style engage the reader into the site, design process and design proposal. In the last phases you get introduced to the solutions grounded in the unique inspiration and knowledge generated in the earlier phases. Different responsive adaptation measures that are preserving and enhancing the experience of the site are presented. The new interesting yet safe relationships between land and sea in the site of Inre Hamnen are communicated in the form of a graphic narrative. A graphic narrative that takes you on a fictive journey that allows the reader to experience the new waterfront.



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# INTRODUCTION



## 1.1 Getting started



Sweden



Scania



Helsingborg  
municipality



Helsingborg

This report is constructed around a design proposal made together with Fredrik Hellström. This design process was initiated before the creation of this report which was executed individually. The last paragraph elaborates on the division between these works. Now I would like to give insight into the early steps leading to this report. During the spring semester of 2016, I spoke with Fredrik Hellström on doing a design project for a municipality as part of our graduation work. We were keen on working between the practical and academic context and wanted to be appointed to a specific site and problem. In the start of the autumn semester of 2017 this desire crystallized into a design project for the municipality of Helsingborg.

A design proposal to improve the centrally located site Inre Hamnen. The municipality pointed out sea level rise as a threat they need to adapt to. They were curious to see how two soon-graduating landscape architect students would take on this challenge and in the resulting generated ideas. The aim was not just to solve the challenge technically but to generate additional values by applying a multidisciplinary -typical for landscape architects- approach .

Initially the intention was to develop a design proposal and to write a report together. While working we noticed that it would be more interesting to write a report individually alongside the design proposal. During the writing of this thesis report the representation of the proposal has shifted here and there. This had to be done to create a consistent and coherent document.

The process of creating a design proposal for the Municipality of Helsingborg is still ongoing and will be completed after the hand in of this report. The imagery for the proposal is thus a momentary representation that is likely to change. To avoid any confusion I would like to conclude by mentioning that this report represents my personal interpretation of the design proposal developed together with Fredrik Hellström.

Figure 1 - Location of the working area.

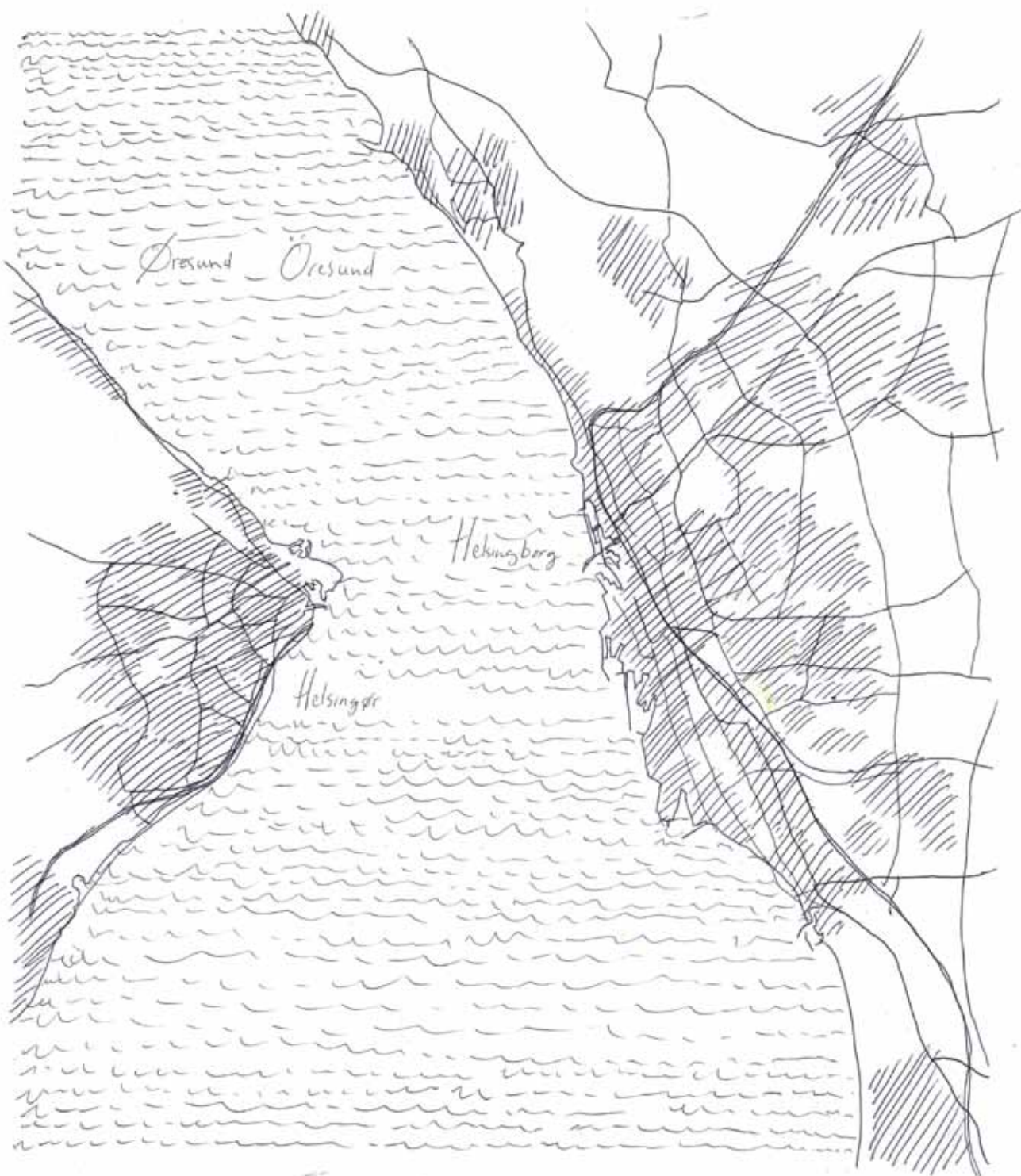


Figure 2 - Map showing the vicinity of Helsingborg and Helsingør on the narrowest stretch of the Öresund

## 1.2 Background

Helsingborg is one of the oldest cities in Sweden and lies in the southernmost region of Scania. Situated on the shore of the narrowest section of the Öresund it has always been a stronghold. The Öresund strait connects the North Sea to the Baltic Sea. It measures just four kilometres in width between the Danish city of Helsingör, and Helsingborg that has been part of Sweden since 1658. Helsingborg has flourished from this strategic location and grown into a major hub for both trade and industry. It connects Sweden to the continent with a flourishing harbour and ferry connections. As of today it is the eight city in Sweden population wise. Counting around 140000 inhabitants within municipal borders.

The growing harbour of Helsingborg gradually expanded and defined the shoreline of Helsingborg. Forming a strip between the city and the sea, a strip characterized by dense infrastructure and large warehouses. The harbour gradually grew in a southward direction abandoning the more centrally located facilities. The city has been actively redeveloping these areas over the last two decades into mixed residential, recreational and commercial districts. Re-defining the cities relationship to the sea. Today these redevelopments are following the harbour in a southward direction.

Our climate is changing rapidly due to global warming. This is recognized and acknowledged by Helsingborg municipality in their documents on climate adaptation and mitigation. Sea level rise is defined as a major issue. In Helsingborg the sea is projected to rise about a meter over the course of a hundred years. Along the coast there are different sites that face that should be adapted to these changes to different degrees. Inre-Hammen is one of these sites and should be adapted on the short term to prevent flooding.

Inre hamnen is the most central and historical harbour structure of Helsingborg. It is the location where the first harbour structures were built. You could say it is the place where Helsingborg has its very origins and that it is the place it grew from into what Helsingborg is today. Over



time the functions and scale of the built environment on and adjacent to the site have changed drastically. As of today it finds itself in the transformation from a predominant industrial sea-city interface towards a residential, leisure and commercial oriented sea-city interface. Having started with the redevelopment of Norra-Hammen just to the north of the site. Now towards the south the redevelopment of former harbour areas is in full effect. A famous large scale redevelopment that goes by the name of H+.

This redevelopment creates a different expectation of the sea-city interface and affects the demands placed on the spaces that define this interface. Places on the verge of land and sea have unique characteristics in itself that to a large extent can be attributed to the very visible and tangible presence of both sea and sky. These qualities are being challenged by the aforementioned redevelopments of harbour areas. Redevelopments that are focussed on residential, leisure and commercial orientated functions. Combined with the required adaptation to the consequences of global warming this forms a complex challenge.

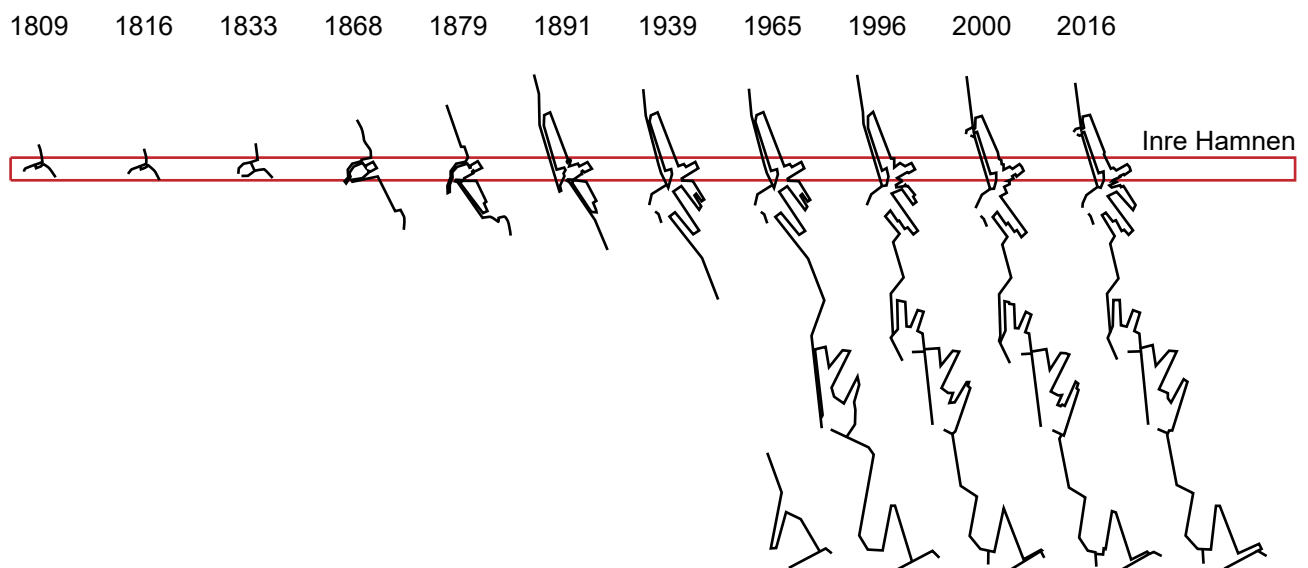


Figure 3 - Depicted is the historical development of the harbour structures in Helsingborg. There is a clear acceleration in the development since the second half of the previous century.

### 1.3 Problem

In this project the focus has been on a problem and challenge suggested by the municipality of Helsingborg. The challenge is to find a solution to the predicted sea level rise for a site in the very center of Helsingborg. The project so far is a design process that explores different problems and challenges associated to the site and the problem suggested by the municipality of Helsingborg. Setting out the task and the interpretation is an essential part of this report.

The municipality mentioned site-specific and representative as words to describe a desired future. What kind of a future is that and how can you realize this? The municipality was introduced to the desire of working on site and using that as the main inspiration. There was no clear method from the start, intuitive actions centered on analysis-activities were performed to generate an understanding of the site. Rather than applying a tabula-rasa approach the search for the desired future is conducted through the site.

Searching for a workable method that suits the aforementioned desires was a process of orientating and immersing myself in writings by Ellen Braae & Lisa Diedrich (2012), Alexandre Chemetoff (2009) and James Corner (1999). In this process I came across the four traces concepts method by Christophe Girot (1999) published in *Recovering landscape: Essays in contemporary landscape theory* a book by James Corner (1999). This method allowed me to put words to the ongoing design process and steer it in a desirable direction. The method will be introduced in detail in the next section.

Exact spatial boundaries were not defined by the municipality. Starting from the water body called Inre Hamnen boundaries were to be drawn in order to define a working area. Working with water poses a challenge, water is a dynamic ever changing material that by nature transcends boundaries. The interface between this body of water and land is contested and highly uncertain due to extensive redevelopments. In the site of Inre Hamnen water is the main material to work from and a strong character defining element. The projected changes in this

material attributed to climate change should be investigated. Another challenge is in figuring out the mystique that surrounds water as a design material.

This thesis has a unique approach where not one specific issue is addressed. This thesis is a way to position and experiment as a landscape architect between the practical context of a municipality and the academic context of a university. The problem in this thesis is not defined as a single question or hypothesis. It is written around fascinations that bring together different challenges, problems and possibilities. A wide range of different concepts is introduced that together form a loose framework. The aim of this project is to work with a method that generates a desirable design proposal for the site of Inre Hamnen for the municipality of Helsingborg. A method employed with the purpose of generating a site-specific and representative proposal.

### **Fascination:**

This thesis investigates the following notions: identifying with a site as a designer, understanding water as a design material, exploring boundaries to define contexts, the land-sea interface as a contested space and communicating a legacy.

### **Reading this report:**

The structure of this report is inspired by the different phases of the four trace concepts methods which is introduced in the next section on method. The chapter named 'Landing' is focused on identifying with a site. The chapter called 'Grounding' is focused on understanding a site, its processes and the context. The chapter that goes by the name of 'Finding' is focused on working with the context, processes and site. The final chapter 'Founding' focusses on communication the work in the form of a design proposal and a reflection discussing this complete body of work serves as the conclusion.

## 1.4 Methodological framework

Part of the challenge within this project is in interpreting the desire of the municipality for site specificity as a driver for the project. The concept of site specificity will be elaborated further on in this thesis. In this section the focus is on describing the search for a method. As introduced the intention was to work on site as much as possible. A desire to immerse in the site, to form a point of view. Shaping a way of thinking and finding a method for this thesis and –ongoing- design process was as mentioned shaped reading work from Ellen Braae & Lisa Diedrich (2012), Alexandre Chemetoff (2009) and James Corner (1999).

The French architect, urban planner and landscaper Alexandre Chemetoff (2009) is well-known for his projects that are shaped by visiting the site. Chemetoff walks, talks, photographs and then connects these activities to other experiences. He is amazed by the underdeveloped relationship between architecture and the world. He states the reality surrounding us is both the starting point and destination for every project. Braae and Diedrich (2012) have reflected on Chemetoff's Île de Nantes project in the light of site specificity and state that its continuous site-observations, transformations and monitoring define its site specificity. An open-ended transformative action revolving around the notion that a process has no ending. The other project reflected by Braae and Diedrich (2012) is Euroméditerranée, a project in Marseille. Site specificity in this project is interpreted differently and relies on diagrams that present the editing of components that were found in the design process. A more classical way to work with site-specificity in design rather than the long term on site transformation that shapes Chemetoff's project.

The time frame of the thesis and project doesn't allow for Chemetoff's method to be tested. The Swiss professor in landscape architecture Christophe Girot (1999) developed a method motivated by the question: How do you familiarize yourself with the site and process this into a legitimate design? A question often faced by designers when executing a project as an outsider. The method is called 'The four trace concept method'. It is constructed around four concepts; landing, grounding,

finding and founding that can be interpreted as phases in the design process and are followed sequentially. Each phase is composed of a gradient of discovery, inquiry and resolution and asks for a specific attitude and action. Briefly introduced below and elaborated for the specific phases afterwards.

The landing phase is constructed around the first encounter. A curious, subjective and interpretative state of mind and a trust in intuition is key. How do you enter the site? A found rock or a conversation with a stranger, every detail matters in this stage. It's also the phase where you try to generate an awareness of what might influence you throughout the process.

Grounding is the second phase, it focuses on grasping the site and its unique context and characteristics that have been shaped over the course of multiple years, decades and even centuries. Being on site, map studies, looking at historical photographs, reading in literature and conversations served to find the 'residue and promise' that is found in every site.

The third concept; finding is about the process of generating evidence for a discovery that has arrived in the landing and grounding stages. The outcome of this phase is open, one should be getting closer and closer to a distinct quality of a place. Focussing on the promise rather than the residue.

Founding is the fourth concept, and serves as the final stage where the finding phase is placed in a future perspective and most importantly the wider context. The so called legacy of a project.

This method provides an inclusive approach focused on retrieving as much as possible from a given site. The process leaves space for chance by providing freedom in choosing activities and methods intuitively. Accepting that different activities will generate different outcomes is part of the process (Giro, 1999).

## Landing

Prejudices are shaped by prior experiences. Understanding these experiences generates an awareness of the influence this might have throughout. A descriptive analysis of my personal memories is my method of generating this awareness. In modern society we familiarize with sites at the ease of a couple of mouse-clicks, I refrained from this practice (non-consciously) but being aware of this practice called for an analysis of this practice. The first site visit has been consciously documented in a way inspired by Cullen (1971). Site-inventory is conducted to generate an understanding of the site and documented in photographs to allow for 'seeing again' a concept defined by Chemetoff (2009). A photograph freezes a memory. Watching it again over and over allows one to going back to that very moment. Additionally it can trigger inspiration and the creation of new meaning by watching it over and over again. These activities and methods shaped the landing phase and generate an initial understanding of the site, early fascinations and an awareness of prior experiences.

<b>Method/Technique</b>	<b>Input</b>	<b>Output</b>
Descriptive analysis of personal memories	Prior experiences	An initial understanding of the site & Awareness of prior experiences.
Online familiarization	Analysis of online sources	
Arrival study inspired by serial vision (Cullen, 1971)	Field research, photographs, drawings & maps	
Site-Inventory	Field research, photographs, drawings & maps	

## Grounding

In this phase the project is starting to shape, especially the defining and interpreting of the task. This was done in an ongoing dialogue with the municipality. A dialogue that generates challenges, limitations and triggers fascination. The aim in this phase is to grasp the site and its unique context and characteristics. This understanding will be based on a larger scale coastal landscape analysis. By doing this analysis as a walk according to Schultz (2014) and Chemetoff (2009) we employ all our senses and stimulate engagement, intuition and reflection which makes you actively perceive space and generate knowledge and ideas by testing changes to the landscape in your head. The findings from this walk along with those from the landing phase initiated a literature review.

<b>Method/Technique</b>	<b>Input</b>	<b>Output</b>
Dialogue	Findings (process) and Limitations (municipality)	Thorough understanding of the spatial and social context, design conditions (client's demand) & initial thoughts on the 'residue and promise'
Literature review	Fascination	
Landscape analysis (coastal walk)	Field research (photographs & drawings), Maps	

## Finding

Generating a thorough understanding of the spatial and social context is key in this phase. In dialogue with the municipality many uncertainties came to the surface. The identification of different types of developments and challenges is a complex yet essential process. This phase builds on the landing and grounding phase and displays materials from the –ongoing- design process. In this phase a research by design approach applies different solutions to rising sea water levels and flooding found in north-western Europe to the site specific context found in Inre Hamnen. Understanding the many uncertainties in this specific context brings a desirable solution and future closer.

<b>Method/Technique</b>	<b>Input</b>	<b>Output</b>
Identifying spatial, social and geo-political developments	Municipal development documents, Dialogue	Understanding of uncertainties and desirable solutions to sea level rise
Municipal publication review	Climate related municipal documents	
Research by design	Sketches, photos, diagrams and maps	



## Founding

This phase is focussed on concluding and communicating the design process its outcome in the form of a design proposal. The representation methods are inspired on the notions of legacy and open end-ness mentioned in (Braae & Diedrich, 2012; Chemetoff, 2009; Girot, 1999). My personal motivation to communicate this in the form of a graphic narrative and collages challenge more common-place landscape architectural communication techniques. A graphic narrative challenges the recipient to imagine and actively engage with the proposal. The choice of style was made conscious and motivated by a hypothesis that black and white drawings leave room for imagination. The hand drawings appear less definite then digital equivalents and allow for a dialogue on the future of Inre-Hammen rather than a defined future.

<b>Method/Technique</b>	<b>Input</b>	<b>Output</b>
Graphic narrative	Digital landscape model & Drawings	A visual representation of a desirable future
Collage	Drawings, photographs	



South



Inre-Hammen

North

2

LANDING



## 2.1 Prejudices

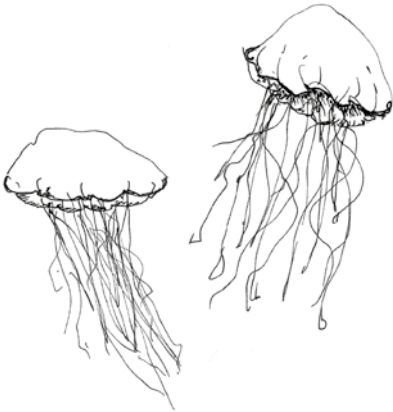


Figure 4 - Jellyfish.

As an interlude to this chapter I would like to remind you of the scope of the landing phase. An open mind-set is required, in this phase all senses have been employed actively to identify with the site. This will become clearer after the first step in this phase which deals with generating awareness of personal prejudices. This chapter stays very close to how I identify, associate and familiarize with the site. My way of getting closer to my prejudices was to dig into my personal memories to this site. Four personal memories I have to Helsingborg form the base for this section. They are presented in chronological order.

### 1.

For my first encounter with Helsingborg we have to go back to 1996. I was on holiday in Helsingör with my parents. They told me how we took the ferry to Helsingborg for a day trip. There is not much I remember from that holiday except a graphic image of a harbour filled with jellyfish in my mind, I'm not sure on which side of the Öresund it was...

### 2.

Fast forward to spring 2014, while I was on Erasmus exchange in Alnarp I visited Helsingborg. I found myself walking the Landborgen trail from Kärnan to Sofiero. The interplay between the topography and the sea along this path creates many dramatic views that have gained a permanent place in my memory. From looking at the many pictures I took that day I could recover a sentiment of neglect towards Inre-Hammen. It only managed to sneak into one picture, a view from Kärnan to the Rådhus with the Öresund as backdrop.



Figure 5 - View from kärnan over the Öresund.

### 3.

One and a half year later I returned in the context of a school excursion to Pålssjö Slott in Helsingborg. I remember walking through the famous hornbeam tunnel. Here an interplay of filtered sunlight and shadows created by the craggy stems create a truly unique atmosphere. The tunnel opens up to a grand view over the Öresund. A view dramatized by the steep drop in topography that characterizes the Landborgen ridge. Between the ridge and a thin strip of houses, a narrow road, and a slim stretch of beach line the narrowest section of the Öresund. The Danish coast emerges on the horizon completing this spectacular view.



Figure 6 - The hornbeam tunnel at Pålssjö slott.

### 4.

After this excursion I worked on a design project on the Helsingborg shoreline. The task was to create a contemporary memorial site. For this I picked a place which lies encapsulated by the harbour. The memorial site sought to re-establish the connection to the sea and make the spatial impacts of today's harbours visible while addressing climate change and more specifically sea level rise.



Figure 7 - Photo of the site discussed in memory 4.

As I went through these memories I established that Helsingborg for me is about the relationship between land and sea. I appreciate the closeness to the sea and I hold an interest in the impact of today's harbour structures on the city. These memories and prejudices will probably influence this project.

Figure 8 - Reimagining the relationship between port and sea. Intertwining social, educative, recreational and industrial functions.



## 2.2 First visit

Moving on this section describes the first site visit. But before presenting this visit I would like to draw attention to the way we familiarize with a site today. In the section of online familiarization an attempt is made to imagine what could have been my first encounter. A site could be a destination and is discussed from that perspective. After this the findings of the first visit are presented. They are divided into three parts; arrival, boundaries and objects.

### Online familiarization

One of the most common ways to familiarize yourself with a destination nowadays is to go onto the World Wide Web. Prior to a first visit one could be checking the websites of TripAdvisor and Wikipedia either on the PC or smartphone. Figure 9 on page 29 shows the top 10 things to see and do according to TripAdvisor. The list is composed by Tropikariet an indoor zoo. The Sofiero estate which famous for its Rhododendron valley. The old castle tower Kärnan on top of Landborgen. The Scandlines ferry that sails between Helsingborg and Helsingör. The open air museum Fredriksdal. The beautiful St. Mary church, impressing Rådhuset and shopping street Kullagatan in the historic city centre. The museum Dunkers Kulturhus and Pålsjö estate and forest complete the list. The Wikipedia page of Helsingborg displays a photo collage of Sofiero with its blooming rodondendrons, Kärnan, Rådhus, Dunkers Kulturhus, The ferries to Denmark and the Ramlösa water source. Sketching a similar view to the outsider about what Helsingborg is supposed to be about. The location of the attractions has been included in Figure 47 on page 53 and will be elaborated there.



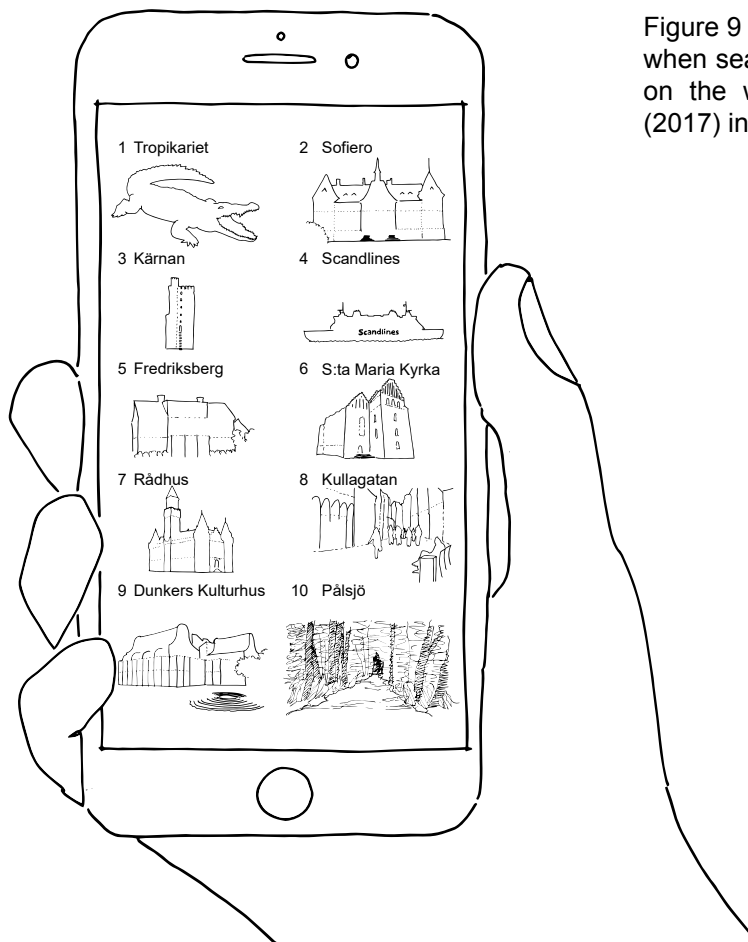
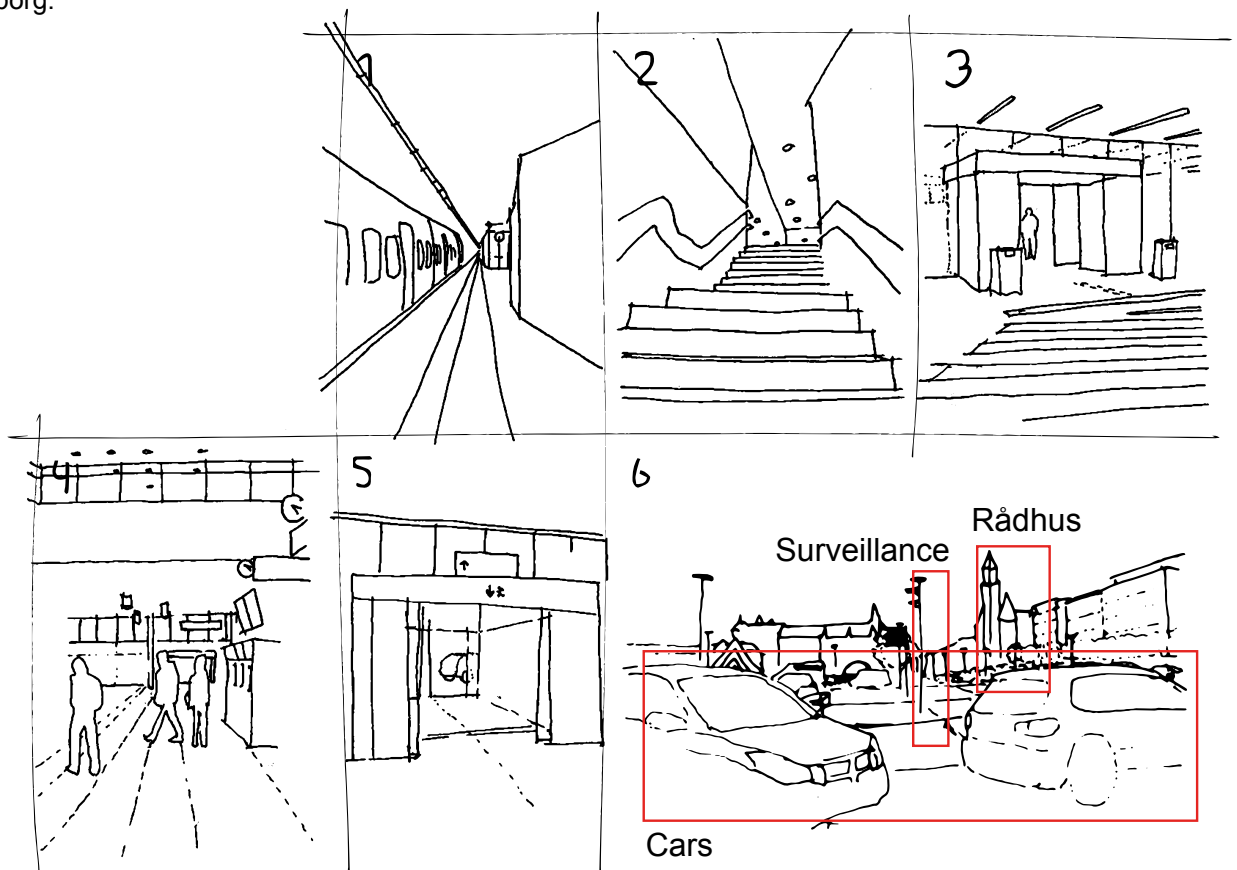


Figure 9 - Top ten attractions when searching for Helsingborg on the website of TripAdvisor (2017) in the month of January.

Figure 10 - My arrival: It was a rainy morning in early November as I got on a Helsingborg bound train from Malmö. (1) Arriving at Helsingborg Central train station the experience starts when stepping foot on the narrow train platforms. (2) Climbing up a set of stairs one enters the maze called Knutpunkten. (3) Walking through different rooms each divided by its own entrance tunnel. (4) Eventually walking into the main hall which is surprisingly light and airy, a big contrast. (5) A contrast further emphasized by leaving the station through a final entrance tunnel. (6) Spatial chaos awaits, a 'kiss and ride', the taxi waiting place, surveillance cameras and a far sight to the prominent Rådhus welcomed me into Helsingborg.

### Arrival

In the employed method the first encounter is a key moment. To memorize; It is essential to employ all the senses to immerse in a site and discover its specific unique characteristics and atmosphere (Girot, 1999). To actively participate and process this key moment I documented my first arrival in a sequence of simple drawings inspired on Gordon Cullen (1971). My arrival is described in Figure 10, additional selected views of potential first impressions of the site are shown in Figure 11, Figure 12, Figure 13.



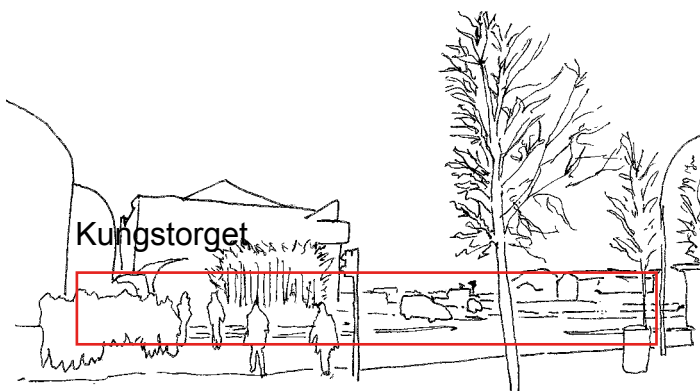


Figure 11 - View from Möllegränden towards Inre Hamnen: A void suggests the presence of the sea. The reason the sea is not visible from this spot is the busy traffic and chaotic spatial organization surrounding Kungstorget.

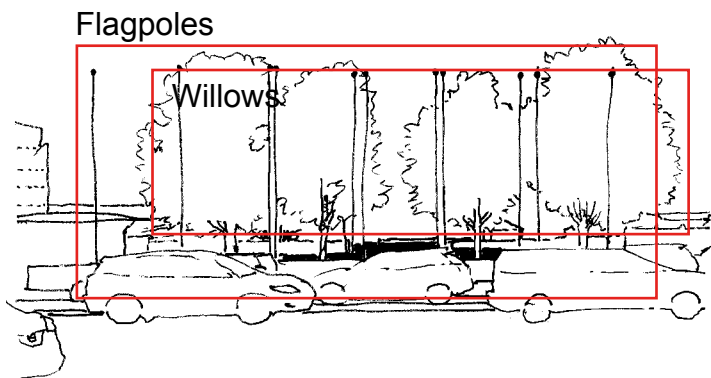


Figure 12 - View from Norra Kyrkogatan towards Inre Hamnen: Flagpoles call on a harbour/coastal feeling. Referencing boat masts and the international character of harbour sites. The actual view on the harbour and water is actually blocked by willow trees.

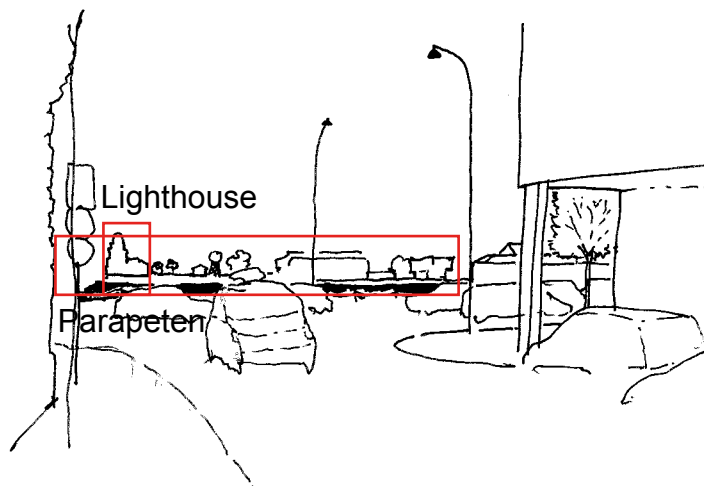


Figure 13 - View from Södra Kyrkogatan towards Inre Hamnen: From this direction the view is drawn to the lighthouse on Parapeten and Denmark on the horizon. This view is however hidden behind the busy traffic.

## Boundaries

To document and process perceived spatial boundaries photographs and notes have been used extensively. A similar method is in the partly overlapping section 'Objects'. In Figure 15 there is an overview of the most common names that will be used to describe the site. Figure 14 shows the walked route around Inre-hamnen. We start off where we left in the sequence shown in Figure 10 on page 30. Continuing the walk from Kungstorget. The walk was conducted as close as possible to the water's edge. An initial idea on the spatial boundaries is that the site opens up to the west and is framed by grand facades that are interrupted by the width of Järnvägsgatan. This image is diffused by the chaotic spread of elements and objects that seem to reduce the readability of the sites boundaries.

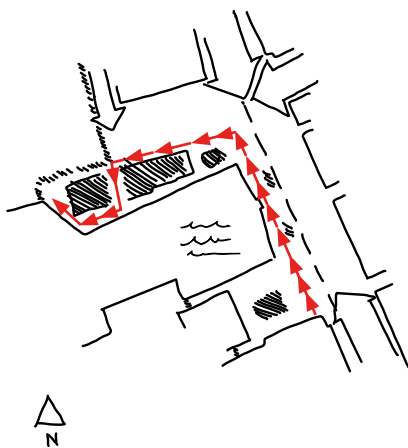


Figure 14 - Walked route shown as a red line. A walk documented in Figure 16 to Figure 24.

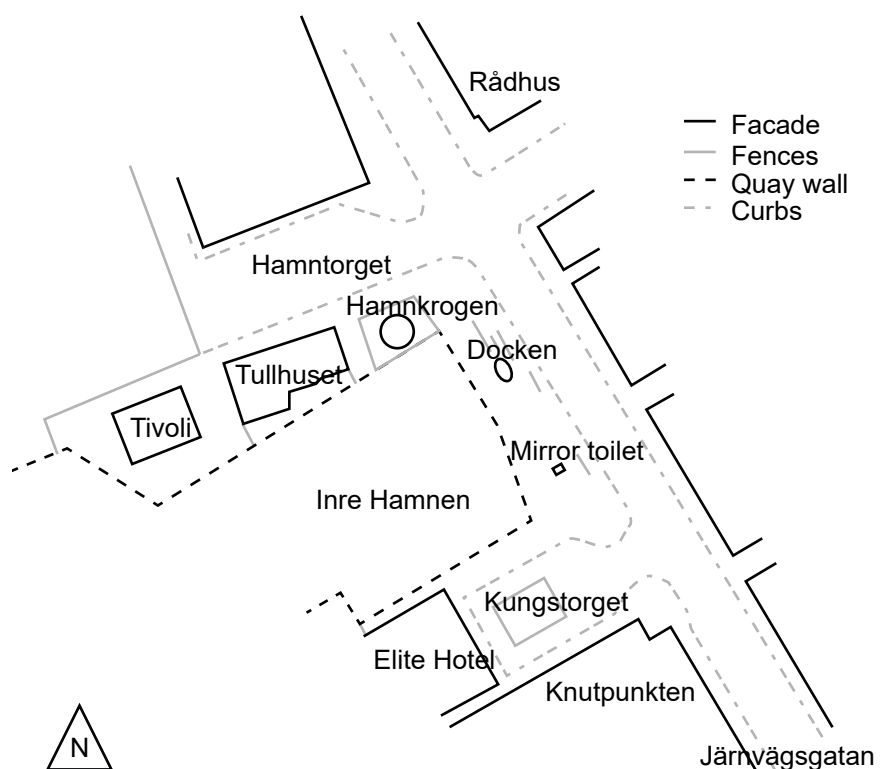


Figure 15 - Overview of the names of the most important elements found on the site.



Figure 16 - Kungstorget is the name of the public space in front of Knutpunkten since 1991. The square is characterized today by a fenced bicycle parking under a grove of linden trees. Curbs in varying heights divide traffic flows.



Figure 17 - The square is used as a kiss and ride, taxi waiting place and aforementioned bike parking. They are tied together by the paving picture that can be seen in the picture. Notice the food truck providing life but at the same to reducing the presence of water to a glimpse.



Figure 18 - One of the grand buildings along Järnvägsgatan that line the site. In the other pictures the Rådhus takes a prominent position as focal point.



Figure 19 - Past the food truck the site opens up to a view over Inre Hamnen towards Parapeten. The new Tivoli and Tullhuset where Sundbussarna is currently docked form a barrier in front of the grand buildings that line Hamntorget.



Figure 20 - Continuing we find a public toilet clad in mirrored panels. Towards the street are some granite walls with seating. Street lanterns provide direction and together with Cafe Dockan and the flagpoles behind compose a barrier between Järnvägsgatan and the water.



Figure 21 - On the waterside we find Kungstrappan, a rare place where one can get to the water's surface. An arrangement of fences willows and garbage bins differentiate the boundary along the water's edge.



Figure 22 - Moving on to a grand view onto the open water of the Öresund and the lighthouse on Parapeten. In the foreground we notice the water's inaccessible edge along Tullhuset and Hamnkrogen. A Scandlines ferry lies docked at Knutpunkten.



Figure 23 - On the other side of Hamnkrogen and Tullhuset is the edge of Hamntorget, a parking lot that is lined on the north by buildings in the same grand scale as Järnvägsgatan.



Figure 24 - Trying to reach the water is unrewarding. Finding a fence around Tullhuset serving as a barrier demanded for its role in international transportation.

## Objects

During the walk a big variety of objects presented itself. To get an insight into the chaotic character some quick research on the objects present on site was necessary. In the next pages a selection of objects is presented.



Figure 25 - Knutpunkten opened in 1991 as main public transport terminal in Helsingborg. On the edge of Kungstorget it features a curving roof structure from glass.



Figure 26 - Flags and flagpoles have been a sign to welcome people at least since colonial times. Here every flagpoles has a label with the name of the country's flag that should be put up.



Figure 27 - 'Spiegeltoaletten' is a public toilet clad in mirror panels reflecting the surroundings. It has been in place since it was built in 2012.



Figure 28 - Chaotic storage for bicycles underneath a grove of linden trees.





Figure 29 - One of the first things you see when walking out of Knutpunkten is the art piece 'Bon Voyage – lycklig resa' by the artist Carl Magnus. A bronze pyramid that is split in two and has a water and light installation. It was erected on Kungstorget in 1992.



Figure 30 - A copper ring on the edge of Inre-Hamnen with three water jets aiming water into it. It's an artwork erected in 1994 by the landscape architect Sven-Ingvar Andersson. It doubles as a favourite resting spot for the many sea gulls.



Figure 31 - On the edge of the bicycle path that runs along Järnvägsgatan is a bicyclist counter. A possible indication of Helsingborg's interest in promoting alternatives to car-travel.



Figure 32 - Blåbärspajerna are a set of concrete pies covered in a blue mosaic made from broken tiles from nearby Höganäs. They were constructed in 1994 and are covered by water streaming from its centre.



Figure 33 - Onsite there are some of these planters with different compositions. Presumably to stimulate the senses and create some vegetative experience.



Figure 34 - On the edge of Inre hamnen there are several elements that give the impression that there must have been ships docked recently.



Figure 35 - Kungstrappan got the name from King Oscar II who first set foot on these stairs here during a visit to Sofiero or Helsingborg.



Figure 36 - 'Serveringskiosken' was built in 1994 after a design by Forsberg & Wikerstål arkitektkontor AB. The shape is inspired on a ferry called 'Kvick' that used to sail between Hamntorget and Parapeten until 1969.



Figure 37 - A high amount of other small objects is found around adding to a chaotic character.

## 2.3 Discoveries

During the landing phase the trust in your intuition is emphasized. First hand experiences triggering fascination. Finding your own position on site by walking around and thinking about prior experiences in the form of memories. The first allows for the creation of site-specific impressions and insights, the latter generates awareness of otherwise overlooked personal prejudices and can help to anchor the design process revolving around inspiration, fascination. Giving chance a place within the process. This section synthesizes the landing phase into a first personal view on the site and the generated material in this phase.

### **Mental and Physical arrival**

From prior experiences and the first visit in the here and now the interaction between the city and the sea has gained foothold in my mind. The panoramas over the low lying parts of the city form the Landborgen ridge. The open views over the narrow stretch of the Öresund opening up to the north and south. The silhouette of the Danish Castle Kronborg, Helsingør and Denmark on the horizon.

From north to south is a big contrast. The large scale infrastructural characterizing the port in the south compared to the estates in the north. The grandeur of the historical buildings contrasted to structures abandoned or in a state of disrepair. I get the idea that these identities merge in the water of Inre-Hammen. A reflection of both the magnificent Rådhus and the infrastructural pressure surrounding slightly distorted by the undulating water.

### **On arrival**

Reflecting on my arrival; a logical choice was made for the train as a means of transportation. From Malmö the train is the most efficient way of travelling to central Helsingborg. It was a no brainer that dramatically influenced the experience of the first visit. In Figure 38 on page 37 the process of arrival by boat, an alternative is described.



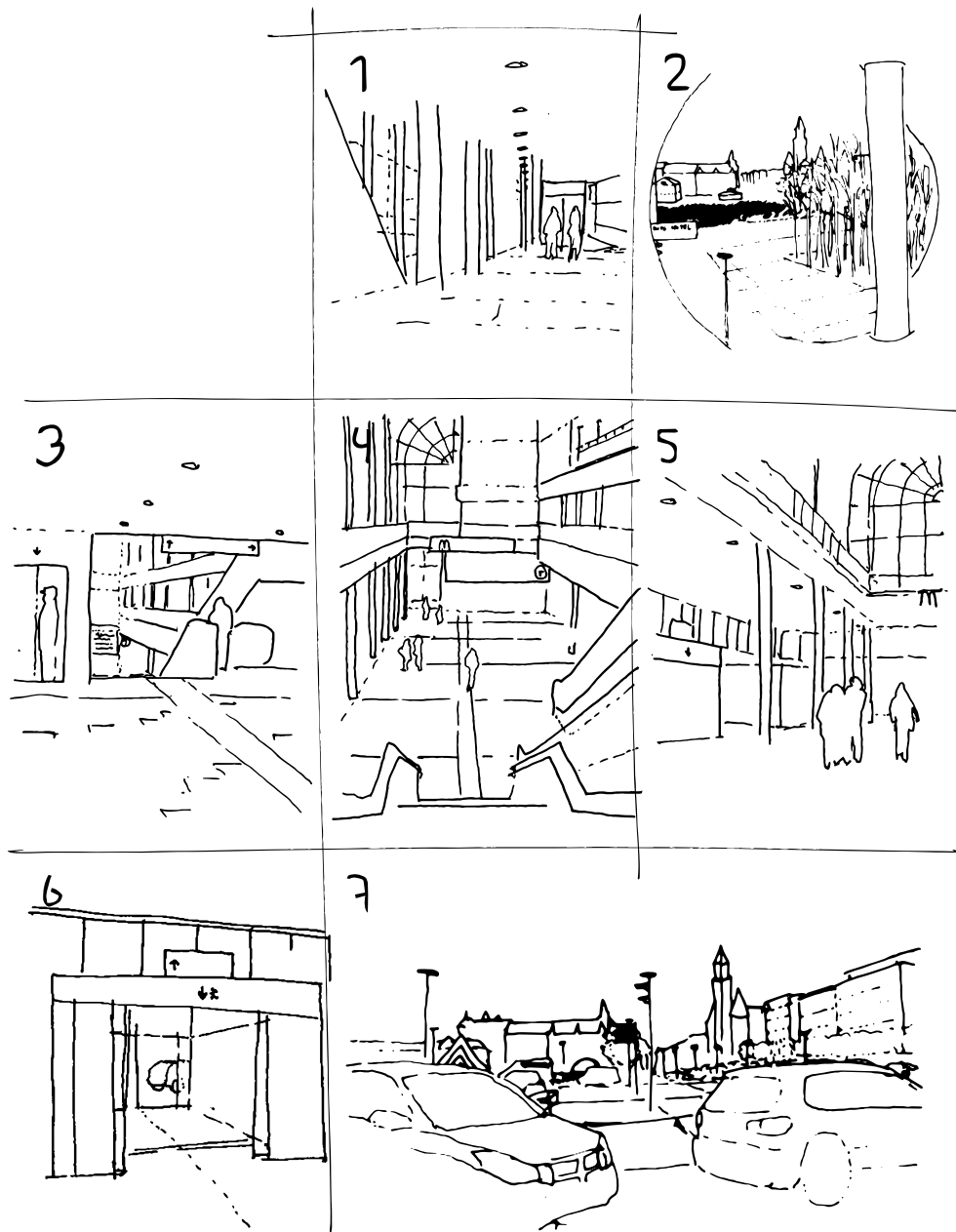


Figure 38 - What if the first visit would have been after arriving by boat? (1) arriving in a light corridor with a clear direction to the Atrium of Knutpunkten. (2) Round windows alongside give a hint of what comes, a view on Rådhuset over the water, The grove blocks out most of the chaos found closer to Järnvägsgatan. (3) The pavement directs you to the in to the Atrium. (4) Light and spacious it's a pleasure descending the stairs. (5) The atmosphere changes when down, with people hurrying in all directions. (6 & 7) A contrast further emphasized by leaving the station through a final entrance tunnel. (6) Spatial chaos awaits, a 'kiss and ride', the taxi waiting place, surveillance cameras and a far sight to the prominent Rådhus welcome you into Helsingborg. Instead of climbing up and transecting the lesser spaces of Knutpunkten. The experience is more forgiving having had a sneak peak through the window of what's to come.

Interestingly a process in the exact same building is perceived very different. From the different views of potential arrivals onto the site a chaotic and dynamic character comes forward. A sense of arrival combined with an urge to move on straight away is not necessarily a positive sequence.

Having taken a sneak peak in the history surrounding Inre-Hammen, it becomes clear that this place has always been the point of arrival to Helsingborg. This is where Helsingborg grew from. Back in the old days everything harbour related happened here, passenger's traffic, fishing and trade. A story that can still be read today is on one of the most important passengers to arrive; the Swedish King. It left its mark on the site in the names given to the Kungstrappan (King's stairs) and Kungstorget (King's square). The royals might use other modes of transportation today when they make their way to Helsingborg, the story lives on in the names.

With the spatial expansion and separation of functions in Helsingborg's harbour new structures developed and Inre-hammen was there mainly for the arriving ferries. An essential puzzle piece in the connection between Sweden and the continent. Maybe the exact point has shuffled around from the north side to the south side, Inre-Hammen is still the point of arrival for people coming from the continent. Arriving just like me in Knutpunkten.

### **Chaos**

References to function and history on site are presented somewhat chaotic in the form of objects like art pieces, signs and name giving to elements. The spatial appearance of the public space was established in the early 90's and 2010's. The overarching form found has been established in a major overhaul in the early 90's. With the burying of the railway an area for the public was created between the water and Järnvägsgatan. In the 2010's the introduction of a bicycle programme on to the site which has resulted in the creation of different bicycle

related structures. Another change probably related to recent shifts in safety demands have introduced CCTV onto the site. Developments in smoking regulations have created smoking areas directly outside of Knutpunkten. The need for a public restroom has resulted in the placement of a mirror clad restroom. To me the site is a representation of ideas that were dominant in those time periods and is a sum of an initial concept that has been diluted by the quick fixes described. Initially access for cars directly in front of the station, two (safe) pedestrian crossings over the major road at the far ends of the site. Art pieces (to watch) as a tool to activate public space. Fences to define a safe border between land and sea. Benches with (half) protection to the back. Light concrete paving within a grid of dark natural stone shaped the site.

### **Fascination**

In the described chaos the water is a relative calm element. The water is not always as visible as I would like but when it appears it catches my full attention. Appearing between the quay wall and parapeten with a glimpse of the Öresund and Denmark on the horizon. From time to time a boat appears (quite often) a fascinating sight!

Figure 39 - A photo taken from Parapeten depicting a view onto the site. The picture was taken on the day of the first site visit.



Figure 40 - View over the water from the north-eastern corner in a south-western direction.



Nowadays, the site is often perceived from a distance.  
The water is far away hidden behind the continuous flows of traffic.

What can be seen...

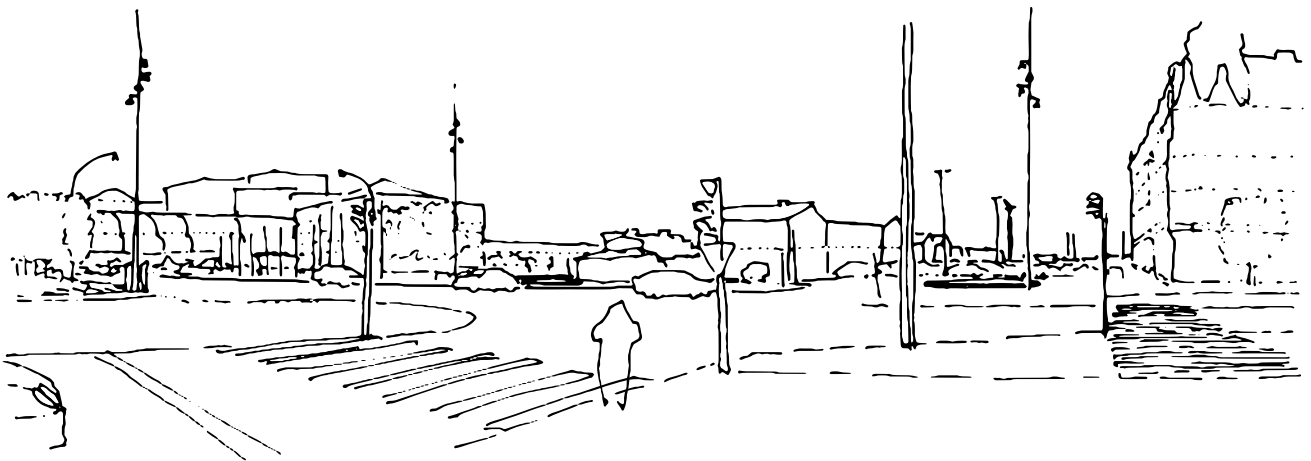


Figure 41 - View from Rådhuset  
towards Inre Hamnen.

Around the dock the best views are inaccessible to the public.  
We are withheld from the best experiences Helsingborg has to offer.

What can not be seen...

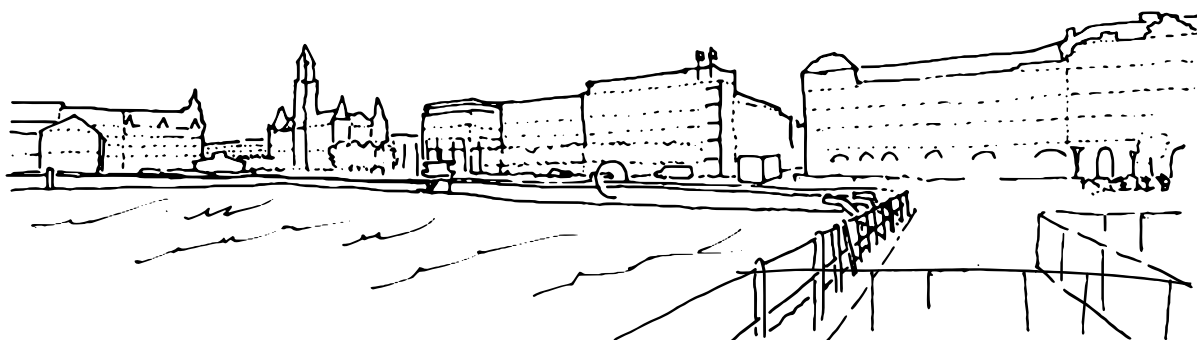


Figure 42 - View from a fenced off area near the Elite hotel to the Rådhuset.

3

GROUNDING



## 3.1 Dialogue

Moving into the next phase; grounding the scope shifts from individual imagination towards research and analysis activities (Girot, 1999). As introduction to this next phase a description of a meeting with the municipality serves as a first step in the concretisation of the design. This meeting included people from different departments and helped to deepen the knowledge and understanding of the city, site and most important our task and role. Having introduced the city of Helsingborg previously, the next section is mainly focussed on the dialogue surrounding our role and task.

In dialogue with the municipality conditions rather than a task were defined. One condition was to guarantee safety for a predicted +3,5m sea level during a one in a hundred year storm surge event in the year 2100. A document on climate change in Helsingborg that was published in November 2016 can be used as most actual base. Another condition was more loosely defined and should be discovered and established in the process. How to integrate the site into a partly existing walking route that focusses on direct contact with sea. Creating a possibility to walk directly along Helsingborg's varied shoreline. From the sandy natural looking beaches to the artificial urban and industrial shorelines. The last condition was about the site. The boundaries of the site are open for interpretation and discussion but as a starting point served the dock structure of Inre-Hammen and a demand to work site-specific. A concept that be explored further on in this chapter. This left a lot of freedom in creating an understanding of the site and coming up with a proposal. As introduced instead of opting for a tabula rasa approach the aim was to work from the site itself. Looking for inspiration in the site itself in the form of tangible and intangible qualities.

Recognizing Inre-Hammen as area of Helsingborg that is very dynamic and under constant (re-)development. An uncertain future that is challenging to work with. Knutpunkten as the arrival point for Helsingborg, the rising sea level, makeover of roads, new infrastructure, parking garages, new hotels, conference centre, neighbourhoods, parks, plazas and more. Since these developments will constantly influence the



boundaries, function and usage. Assumptions on underlying relations have to be made, evaluated and incorporated into the design proposal. These assumptions will be discussed in Dialogue 2.0 a section in the next chapter.

As a conclusion to this dialogue it's important to emphasize that the expectations surrounding this –ongoing- design project the focus has demanded a realistic approach towards the design proposal. This partly shaped this phase; generating an understanding Helsingborg is working with global warming and more specifically sea level rise. Zooming out and looking at the position of the site within the wider context of Helsingborg's coastal landscape. The last part of this phase is an attempt at trying to anchor down fascinations within a literary framework and an application of generated ideas on site in the form of diagrams.

## 3.2 Sea level rise

From the dialogue sea level rise is introduced as a binding condition. But first we should know what sea level rise is, what causes it, how does it work and what does it mean for the site we are working with? Sea level rise is one of the consequences of global warming. A warmer climate will cause an increasing amount of water in our oceans. The increase is caused by melting glaciers and polar ice caps. Low lying areas along the coast are extra vulnerable (Church et al., 2013).

Helsingborg municipality has published some documents in recent years on how they want to adapt to the faced consequences of climate change. As a base for this section serve: Slutrapport – klimatanpassing av Helsingborgs stad (2016) and PM Klimatanpassing (2012). Figure 43 on page 47 gives an overview of the faced consequences by Helsingborg mentioned in the 2012 document. With sea level rising being the binding condition the focus is on that.

### Climate change

In the 2016 document it comes forward that an approximate 1 meter rise of the sea level is expected. This is a result of the rise caused by global warming and land subsidence in Southern Sweden. F.3.2.2 gives an abstract representation of the development of the shoreline since the 17th century, the balance between natural and engineered shoreline, the approximate area affected by sea level rise and the proposed adaptation tactic in the 2016 document. The development from a natural to an engineered coastline has deleted the natural process where the sea constantly searches a new balance between land and sea. The coast is now a combination of sea barriers and beaches that are being nourished with sand to keep them in place. The shoreline is fixed in one position. The socio-economic values on land are too high to return to a situation where natural processes deal with sea level rise. This leads to a dependency on engineered solutions that have to be adapted to current expectations.

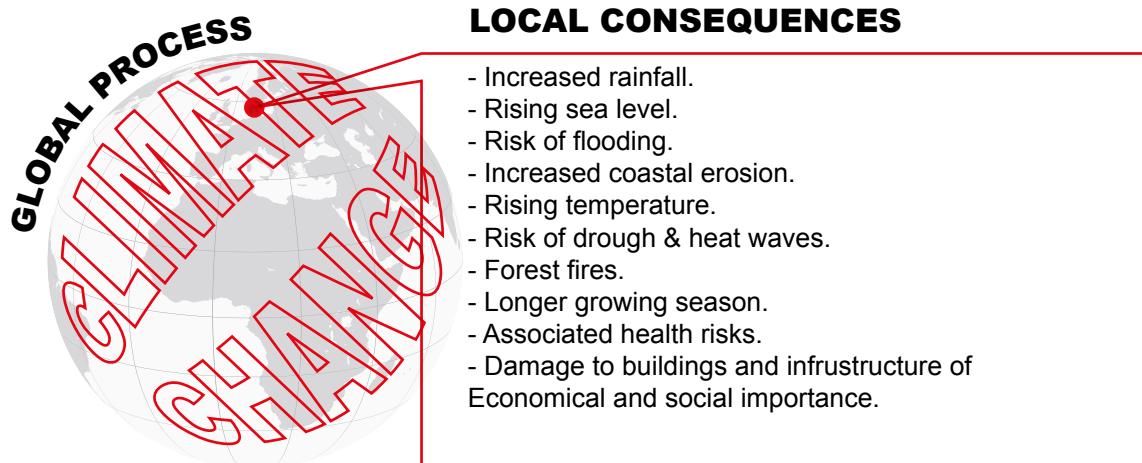


Figure 43 - Consequences faced by Helsingborg municipality due to climate change (Based on PM Klimatanpassing Stad Helsingborg 2012)

### **Sea level rise**

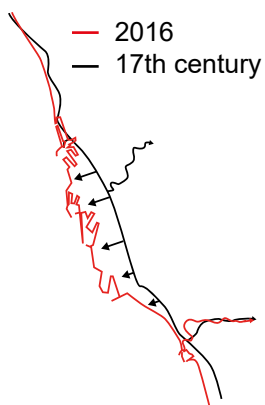
Most of the shoreline is not prepared for the latest predictions. Helsingborg in its 2016 document proposes three strategies to deal with this. Beach nourishment, urban adaptation and semi urban adaptation. Beach nourishment is periodically supplying sand to keep the shoreline in place. Urban and semi urban adaptation are about adapting existing structures to the predicted changes. For example flood proofing buildings and strengthening sea walls. The difference is in the form language which is in line with the scale of the urban fabric and the difference in socio-economic values present. Urban adaptation proposed for the dense city centre of Helsingborg and Semi-urban adaptation proposed for the less densely populated urban centre of Råå.

### **Helsingborg's way**

Most of the shoreline is not prepared for the latest predictions. Helsingborg in its 2016 document proposes three strategies to deal with this. Beach nourishment, urban adaptation and semi urban adaptation. Beach nourishment is periodically supplying sand to keep the shoreline in place. Urban and semi urban adaptation are about adapting existing structures to the predicted changes. For example flood proofing buildings and strengthening sea walls. The difference is in the form language which is in line with the scale of the urban fabric and the difference in socio-economic values present. Urban adaptation proposed for the dense city centre of Helsingborg and Semi-urban adaptation proposed for the less densely populated urban centre of Råå.

Figure 45 on page 51 is an interpretation and adaptation of the information in the 2016 and 2012 documents for the site of Inre Hamnen. The real danger for Helsingborg lies in the occasional storm surges which will increase erosion, coastal recession and an increase in the risk of water breaching existent flood protection. Today's built environment on the shoreline has to be adapted to withstand the faced impacts from sea level rise. Our houses, hospitals, schools, offices,

Development of shoreline since 17th century



Natural shoreline



Area directly affected by sea level rise

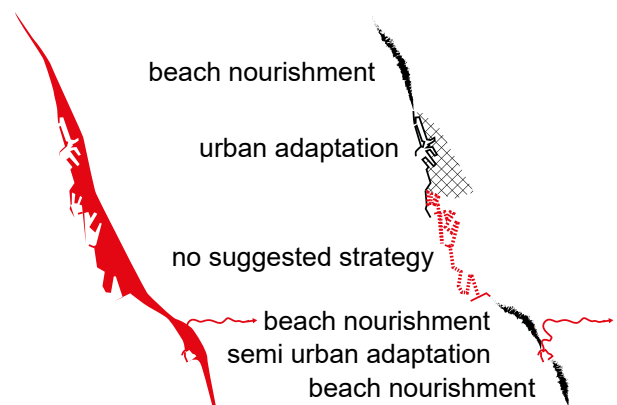


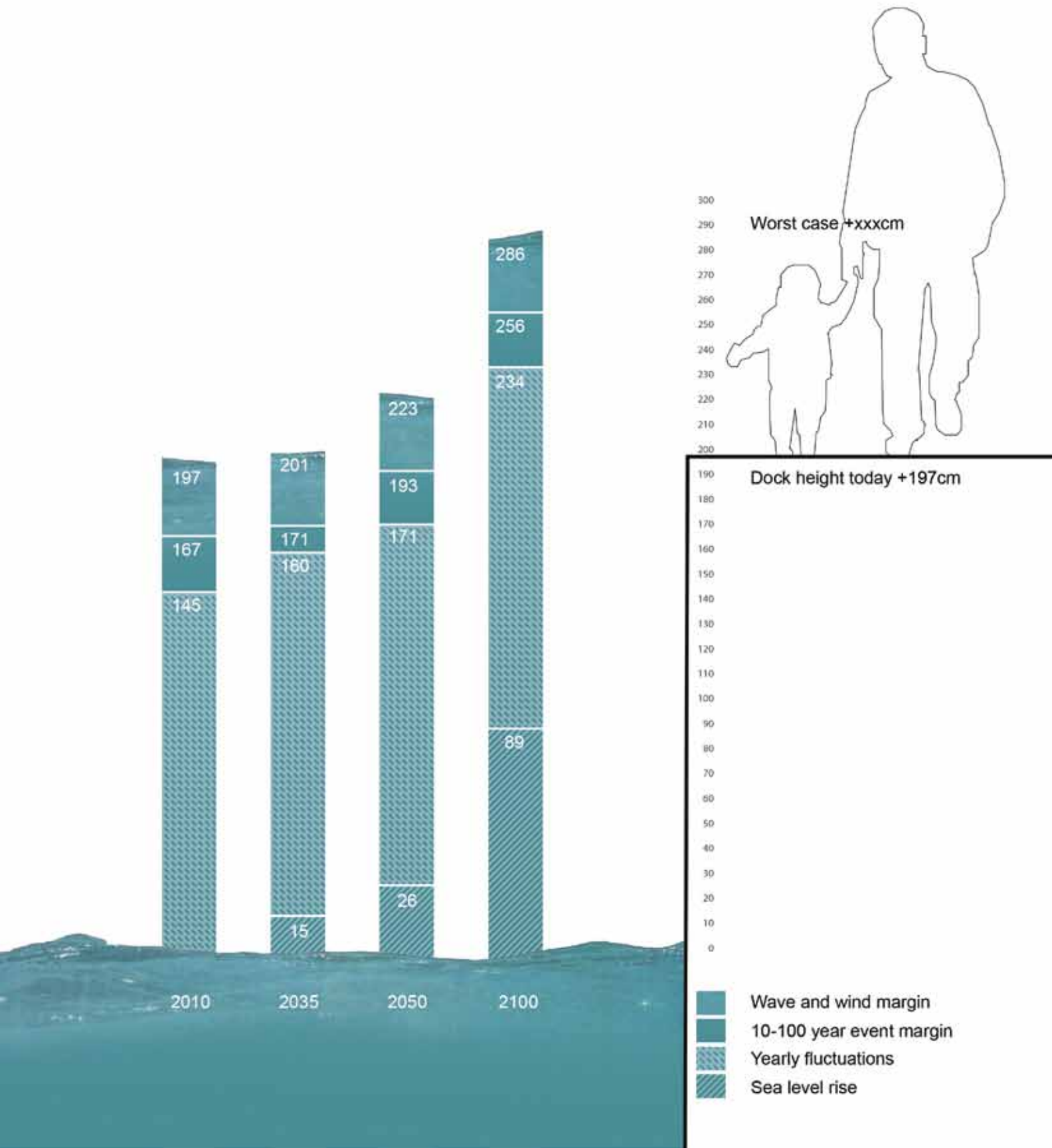
Figure 44 - Interpretation of the figures used in the different documents published by the municipality of Helsingborg (2012; 2016)

infrastructure, ports and existing flood protection measures are under direct threat. If Inre-Hammen is not adapted the centre of Helsingborg will function as a bathtub. Knutpunkten will be flooded, disconnecting Helsingborg from the world to a large extent.

The model is split up into the four elements that make up the threat. Sea level rise 80-100cm in 2100, the yearly tidal and storm surge fluctuations approximately 140-150cm, 10-100 year events of 20-25cm and a wind and wave factor of approximately 20-25cm. Because of the storm breaker structure in front of Inre-Hammen the effects are less worse than at other places along the Helsingborg shoreline.

In the next chapter the focus on finding a desirable solution to this problem. There will be additional attempts at grasping sea level rise and how to work with it.

Figure 45 - Attempt at an interpretation of the figures used in the different documents published by the municipality of Helsingborg (2012; 2016) for the site of Inre-Hammen in scale: 1:200. The information for year 2035 is incorrect.



### 3.3 Helsingborg

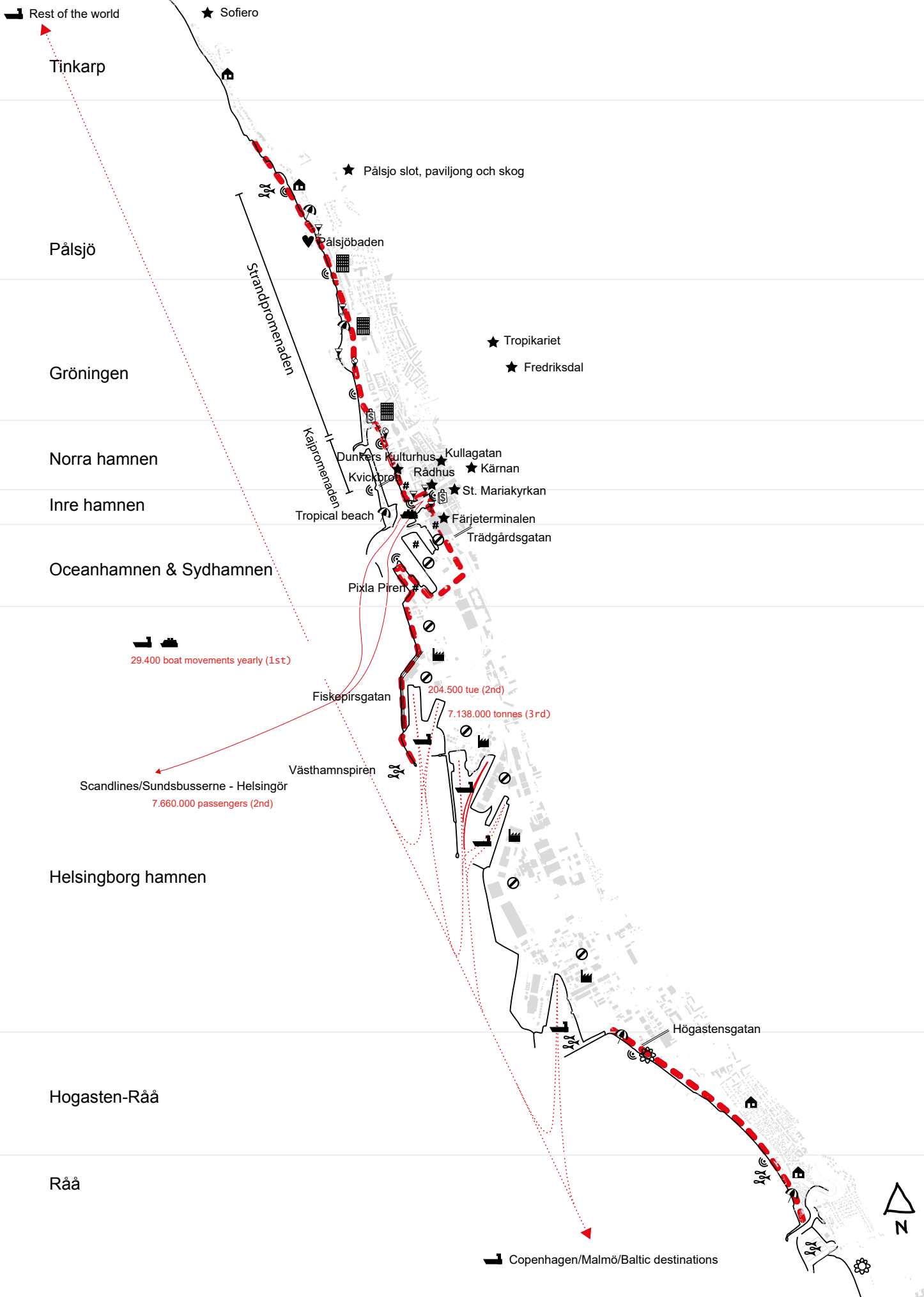
This section generates a wider understanding of Helsingborg through an analysis made while walking a large section of the shoreline. The municipality pointed out that they want the site to be integrated into a walk along the shoreline that is partially constructed and proposed. By walking along the Helsingborg shoreline and seeing the current state with an own set of eyes. Walking brings together perception, creative-action and reflection (Schultz, 2014). Armed with pen, paper and a camera the current state of the walk was documented. Figure 47 on page 53 shows the walk made in a dotted red line. The walk was made in two stages, first from Inre hamnen to the North and back and then from Inre hamnen to the South and back. The aim has been to follow the coast and see where the proposed Kajpromenaden-Strandpromenaden is already accessible and what kind of experience it offers. Kajpromenaden-Strandpromenaden is a proposed walk from Västhamnspiren in the south to the already existent strandpromenaden in the north. It was proposed in *Imagine Helsingborg: var med och forma centrala södra Helsingborgs framtid H+ manual* published by H+ Kontoret, Helsingborg stad (2011). The walk is presented starting from the north and gradually move towards the south. Ending with an literary exploration into a fascination triggered by the walk.

Figure 46 - Legenda for Figure 47 on page 53

-  Route
-  Spa
-  Urban transformation
-  Top 10 attraction TripAdvisor
-  Small scale housing
-  Large scale housing
-  Shops
-  Kiosk
-  Place serving alcohol
-  Inaccessible shoreline
-  Passenger port
-  Freight port
-  Industrial area
-  Beach
-  Nature
-  Fishing spot
-  Sights



Figure 47 - Helsingborg coast walk through sections, photographs and symbols



This description starts where Drottninggatan turns into Sofierovägen. It is here where the road turns from the coast up to Landborgen. Here Drottninggatan is a two lane road for road traffic with bicycle paths and pedestrian spaces. On the east the road is lined with a mix of villas and apartment buildings in different sizes and the forest covered Landborgen rising up thirty meters directly behind them. To the western edge of the road is a small height drop to the beach. Closest to the road it's covered with tall grasses and small shrubbery (*Rosa rugosa*, *Lycium barbarum*) and towards the sea a sandy strip partly covered in seaweed marking the transition to the open sea. On the beach there are small boats and constructions potentially used for fishing. Along the road rationally lookouts with seating have been constructed. Concrete pillars, decks and furniture in the same wood and steel railings. These lookouts offer magnificent uninterrupted views over the Öresund.

Moving to the south the strip of beach becomes slightly wider and some isolated houses pop up where an informal path runs behind the lots as an alternative to the 'sidewalk' along Drottninggatan. Close to Pålsjöbaden and Pålsjö Krog the width allows for a trimmed lawn potentially filled with sun-bathers on a sunny day. The lawn lies in between Drottninggatan and a separate path that marks the border to the sandy beach. The lookouts have disappeared as well as the small boats. It feels like this section is fulfilling recreational purposes. Passing Pålsjöbaden we are greeted by a bronze Statue of Helsingborg's football legend Henrik Larsson. This marks the transition to a different section.

Here where we turn onto Strandvägen because Drottninggatan bends off between the double row of buildings sitting in between Landborgen and the sea. The profile of Strandpromenaden changes radically. The width of the pedestrian space increases to 15 meters. This space is filled by oversized furniture that affords for sitting and lying down. The furniture is accompanied by high wooden lampposts reminiscent of ship masts. The transition to the sea is a wall, it's here where you hear the waves smashing into the rocks that have been laid in front of the wall to break them. The buildings lining the street here form a line

Figure 48 - Drottninggatan facing north. The wide profile of the road contrast in a unsettling way with smaller scale houses to the side of the Landborgen ridge. The beach to the left presents an interesting spectacle of small fishing boats and a sandy beach.

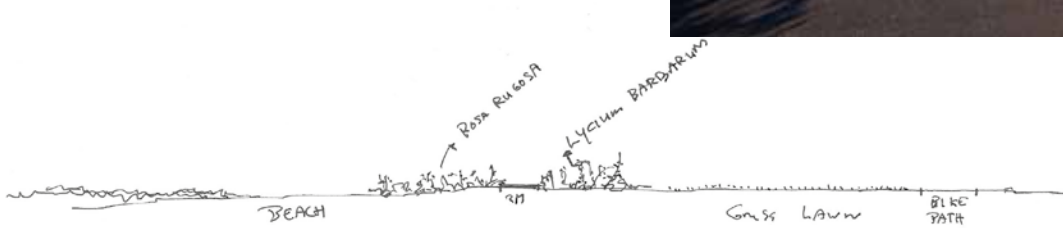


Figure 49 - The profile of the wide road is contrasted by quite intimate, rational occurring viewing platforms elevated above the beach. Providing a refuge from the road and enhancing the experience of sea and sky from a slightly elevated viewpoint.

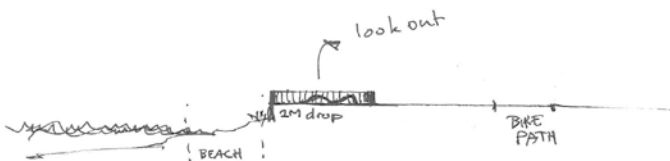
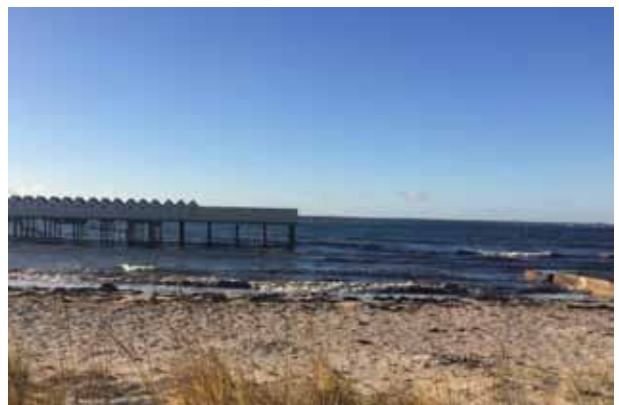


Figure 50 - Pålsjöbaden floats above the sea as a quite a slender and elegant element that breathes bathing culture.



of three to four story apartment blocks. These elements form a rational lay out and provide clear spatial order and a sense of direction. This section continues until an intersection marked by a high apartment building and the appearance of the railroad.

Strandvägen connects with Drottninggatan and the pedestrian and cycling paths that make up Strandpromenaden separate from the road traffic and follows the shoreline. A section of beach stretches from this intersection to the Sillen and Makrillen restaurant. Just in front of the Sillen and Makrillen restaurant we travel through a recently planted pine grove reminiscent of coastal landscapes found along the Scanian coast. This marks the transition to Gröningen which is characterized by the absence of a sandy beach, we do however find a huge lawn between the bank lining the railway and Strandpromenaden which runs directly along the sea. It is clearly fulfilling recreational purposes signalled by the high presence of restaurants, kiosk, seating elements, playgrounds and a mini-golf course. To overcome the wall and height drop to the sea there are three piers that create direct access to the water.

The end of this section is marked by the white and grey apartment blocks of the Norra Hamnen development. Here the Kajpromenaden starts, a walk along the marina that before being transformed into its current function was host to ferries and cargo ships. The promenade is pretty uniform and straight forward. A jetty covered in wood offers closer interaction to the still waters of the harbour. The jetty and marina are interrupted where the prize winning Henry Dunkers Plats meets the water, a wide funnel shaped plaza opening up to an uninterrupted view over the the sound towards the famous Kronborg castle on the Danish side of the sound. The jetty and marina return until Kwickbron which connects Parapeten to mainland Helsingborg next to Dunkers Kulturhus.

This bridge at the moment marks the transition to an area under transformation. An area surrounded by fences covered in images showing luxury appartments, a hotel, park and conference centre.

Figure 51 - Strandvägen, a small square with a statue of the famous footballer Henrik Larsson marks the transition to a more stylized promenade. Big lampposts and oversized furniture characterize this place. The transition to the sea is formed by a sea wall. A transition from the beaches we saw earlier.

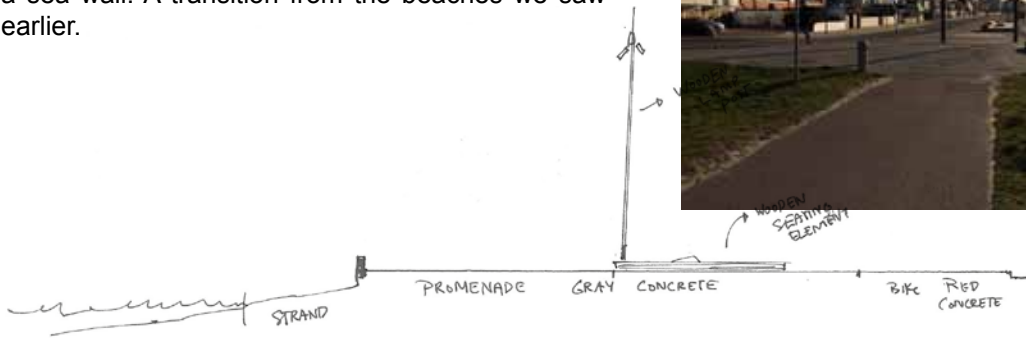


Figure 52 - In the south of Gröningen we can see the sea wall and a large wooden deck that is the stage for curvy furniture. I associate these shapes to an attempt to reference the sea.

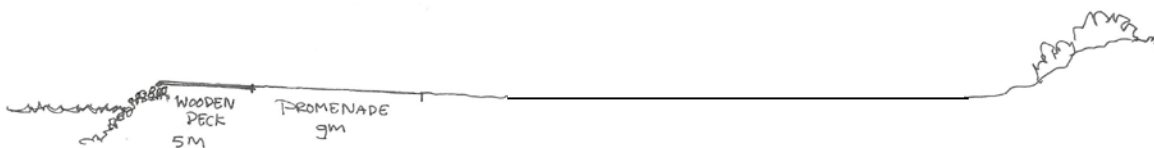


Figure 53 - The square between gröningen facing Norra hamnen marks the transition to this recently built area. A sharp promenade lined by quite monotonous building blocks is contrasted by a marina filled with colorful boats.



Access to the water is restricted and forced to turn onto Kungsgatan Tullhuset appears which marks the return to Inre Hamnen. Having walked in a nearly straight line for four kilometres it's relieving to make a sharp turn for a change. Turning left at Tullhuset a vista composed by Rådhuset marking the beginning of Stortorget which ends at the remarkable set of staircases up Landborgen to Kärnan that completes it. Another sharp turn this time to the right reveals Knutpunkten with its characteristic bulged roof. This marks the end of this section and the start of a more experimental phase of this walk.

For now past Knutpunkten there is little visible of the proposed continuation of the Strandpromenaden-Kajpromenaden route. Walking along the shoreline is impossible instead we find ourselves on a narrow path fitted in between the fenced off area where cars and trucks wait to board the ferry and the railway that emerges from the tunnel again. Bright colourful signs indicate a route to an area called Pixla Piren. Pixla Piren is an experimental temporary public space awaiting further development created on the former HH-Ferries terminal. Here it is possible to get on the shoreline again and watch the Scandlines ferries sail past. Over the next decades this area should be redeveloped into a mixed use neighbourhood.

The next section is along the shoreline of the parts of the Helsingborg harbour that are still in use. Harbour activities experienced mainly by its smells and noises since the visual spectacle is limited to different types of fences, walls and sea barriers rising on either side of the road. Fiskepirsgatan the name of the road gives a clue of what awaits. At the end of the road is a parking lot with some shacks presumably belonging to a fishing association? This marks the end of the Southern section of Strandpromenaden-Kajpromenaden.

Not included in the proposal is a further continuation along the harbour towards Råå. This section is characterized by the inaccessible areas dedicated to port activities. Somewhat abrupt this section ends at Högastensgatan where access to the shoreline is possible again. The

Figure 54 - Sight from the promenade over the marina to Parapeten. The water slightly undulating water surface is distorted by the movements of the boats. This creates interesting patterns on the water's surface.

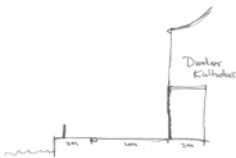


Figure 55 - View over the ferry terminal marking a sharp transition to a predominantly gray landscape catered to infrastructure and logistics.

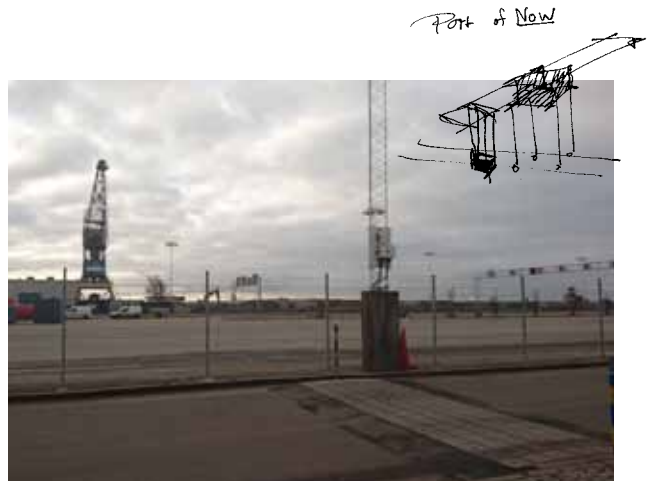
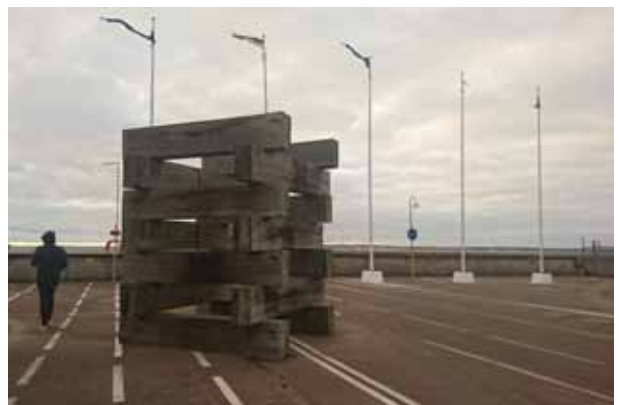
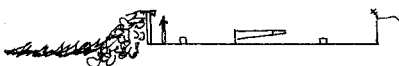


Figure 56 - Pixla piren is an interesting refuge on a to be developed pier. It's characterized by an unprogrammed character that has created room for experiments like this art piece.



pier marking the end of the industrial harbour is shared with fishers. A sea dyke with a walking path leads down to the old fishing village named Råå. Abandoned Bunkers remind of the strategic interest of this narrow stretch of the sound

### **North versus South**

The perceived big contrast between the industrial characters of the south to the polished character of the North is part of a bigger discourse. As part of the H+ project two students from Lund University have conducted research on segregation between the north and south of Helsingborg. H+ is an ongoing long term urban development plan to redevelop the port and surrounding neighborhoods structurally and socially. Paul Sherfey (2011) and Samanthe Hyler (2013) work from the well-known invisible segregation line at Trädgårdsgatan, a street marked in Figure 47 on page 53. Hyler (2013) applied an ethnographic method to map the social cityscapes of Helsingborg. She describes Söder as a multicultural working class neighborhood. An area perceived to be populated by lower income residents. Söder's unique atmosphere created by the shops and restaurants selling exotic products. She describes 'centrum' part of Norr as the more affluent area composed of ethnically swedes, a shopping area with chain stores and cafes, the beaches and most of the Landmarks. Sherfey (2011) partly attributes this difference to the historical spatial development of the city explaining. With the centrum being the most historical part of the city nowadays characterized by economic and leisure activities surrounding the pedestrianized streets, squares, parks, landmarks, cultural institutions, nightclubs, cafes, restaurants and harbour-side promenade. In the late 19th and early 20th century to the north of the centrum neighborhoods developed for those who could afford to move from the centrum and enjoy the peace and quietness of Påsjö skog and views over the sound. To the south the port and factories developed. In the first half of the 20th century the area started to get the shape it still has as of today. A neighborhood developed next to and under the smoke of the aforementioned developments rather than a lush forest



Figure 57 - Deeper into the harbour we find a rough and rational character. in the absence of recreative facilities it's quite an adventure to venture out here.

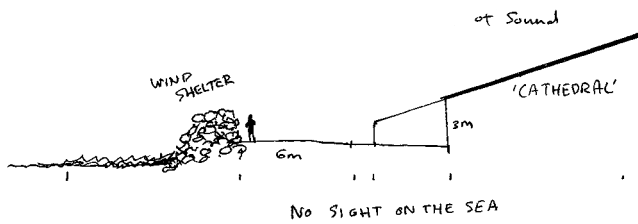


Figure 58 - To the south of the harbour area we find this recreation area which stretches to fishing village of Råå. This landscape bears many reminscent to the strategic location in the form of war memorials.



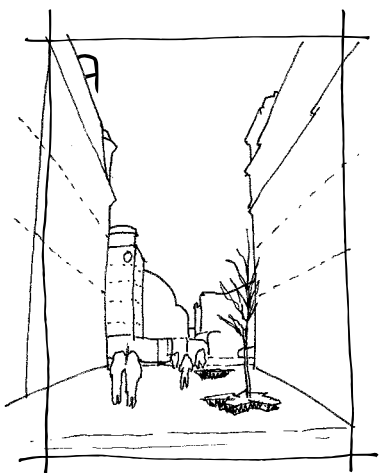
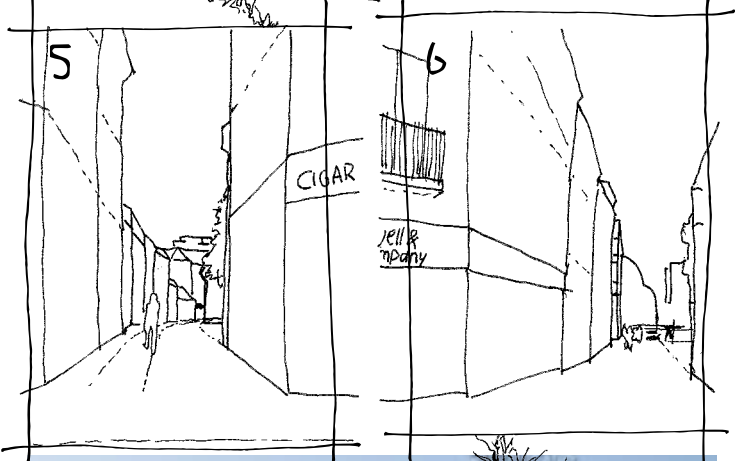
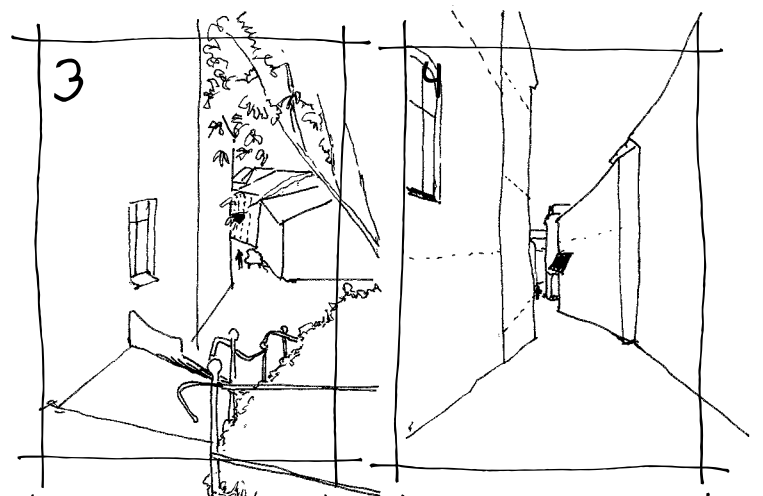
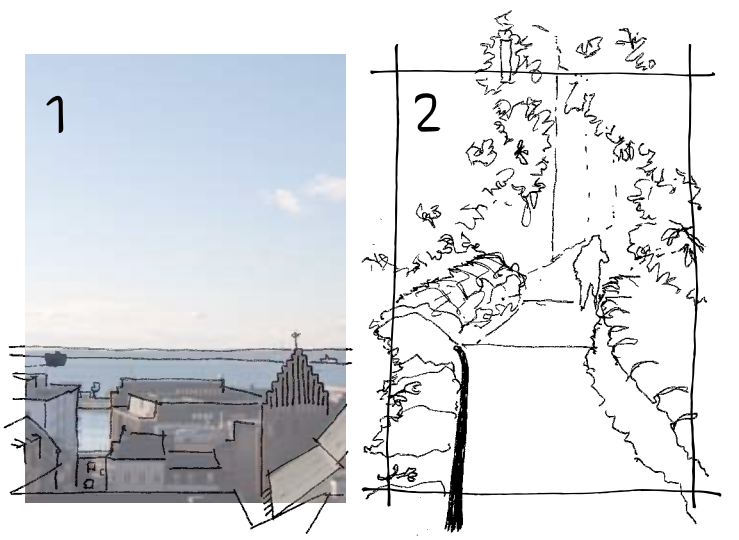
Figure 59 - View from Råå with the island of Hven on the horizon. Just south of Helsingborg you enter a complete different world. An idyllic fishing village, where the city feels far away.



and views over the sound. This neighborhood was characterized by its blue-collar character. A place to start life in Helsingborg, and when climbing the socio-economic ladder one would move away to more affluent parts. Hyler (2013) and Sherfey (2011) both point out the risk of gentrification with a big development as H+. They present the creation of an understanding of the present social structures as an essential step in shaping H+ developments.

These studies working from the Trädgårdsgatan boundary have focussed largely on the north-south divide. When zooming in on Inre Hamnen and studying the different paths that lead to the site Järnvägsgatan sparks a similar feeling. Heading down from one of the many paths leading down from Landborgen you experience the identity of the south, the winding streets, leisure oriented and historical which abruptly ends at Järnvägsgatan. Figure 60 shows the way down from Landborgen through Möllegränden. The small scale meeting the large scale, from pedestrian orientated to any other form of transport except pedestrians orientated and the contrast between anything but 90's architecture and exact that represented in Knutpunkten and the Elite Hotel.

Figure 60 - The curvy way leading down from Landborgen to Knutpunkten forms a big contrast to the scale and form language around Hamnbassängen. (1) Watching over the skyline of Helsingborg from Rösenträdgården. A slice of Inre hamnen is revealed through Södra Kyrkogatan. Parapeten forms a thin line in between to the Örsenund. (2) Immersed in the green of Landborgen the buildings Himmelriksgränden appears. (3) The sharp topography is handled through a curvy stairway, at the bottom the a cul de sac marks the start of the winding streets leading to Knutpunkten and Inre Hamnen. (4) Closer to where the street name changes to Möllegränden restaurants and shops start to fill the windows on the ground floor of the buildings. (5) Along Möllegränden the buildings reflect building styles from different time periods and have different heights allowing for a varied character. (6) Having descended some 30 meters the street straightens and the characteristic bulging roof of Knutpunkten appears. (7) The public space at the end of Möllegränden has recently been overhauled, it features pavement and furniture that are reminiscent of stars. (8) The busiest intersection of Helsingborg marks the rough transition onto Kungstorget.



## 3.4 Öresund

Water has shaped the planet we share, water keeps us alive and water is one of the most attractive visual elements of the landscape. This presence creates unique atmospheres. In its presence water is linked to being an essential component of 'place'. The next section will discuss place and the role of water.

### Space

Norberg-Schulz (2007) states place is constructed and defined through space and character. Space being the three dimensional expression of place. A space is defined by the quality of its boundaries (Loidl & Bernard, 2003; Norberg-Schulz, 2007). Loidl and Bernard (2003) introduce two types of boundaries. A boundary is either uniform or composite. A uniform boundary could be a row of buildings, a wall, a fence or a clear height difference. A composite boundary is made up from different elements that together form a boundary line. An example would be a line of trees mixed with bicycle racks, benches and street lights. The boundaries define an area, a surface that in itself shapes perception through uniformity and contrast expressed in its materialization. A strong boundary creates a weak area and oppositely weak boundaries create a strong area.

### Character

In defining experiences character is key, reaching deeper than the appearance of space. Norberg-Schulz (2007) expresses character as a combination of atmospheres, meanings and images that affect emotions. Reaching deeper levels than the mere visual appearance experiences are shaped through acoustic delights, the enjoyment of smells, warmth or cold (Latz, 2002). In the research into the perception of public space in relation to microclimates this individual sensory experiences are further emphasized. How we experience spaces is largely influenced by the weather and microclimatic conditions (Brown, 2011; Eliasson,

Knez, Westerberg, Thorsson, & Lindberg, 2007; Lenzholzer, 2013).

## **Place**

Place is a function of time, a unique spontaneously experienced whole (Norberg-Schulz, 2007). Analysed through the concepts of space and character. The spirit of a place is revealed, the very essence of a place, a unique quality. A quality stressed as important by many landscape architects. The four trace method employed throughout this report is largely concerned with finding this unique quality. The method enables a designer to give way to intuition and experiences of place. Allowing these site-specific impressions to shape the design process (Giro, 1999).

## **Site**

While working with Inre-Hammen, from early on clues about space and character became clear. The special atmosphere surrounding Knutpunkten, the chaotic surface, historical facades and the presence of the Öresund. The latter being the starting point of a literature study into the perceived relationship of water.

## **Essentials**

Starting from the chemical composition H<sub>2</sub>O, water itself is formless and has no shape, hardness, sound or taste (Schwenk, 2001). It is the interaction with its surroundings that give it a colour, form and meaning. Before looking into meaning a look into water as a landscape element. To understand it as a landscape element we should look at nature (Dreiseitl, 2001; Schwenk, 2001; Woodward, 2001). The appearance of water is defined by setting, containment, movement, lightning, wind, sound and depth (Woodward, 2001). The dynamic character can be exemplified using some more practical examples inspired on what Dreiseitl (2001) penned down: In the interplay between

water and air rain appears because of the droplets catching light while suspended in air. If those droplets land on a lake rings of waves and an accompanying soundtrack are created. These waves meet each other and form new patterns continuously. Would it be night, waves would remain invisible but the soundtrack would still make us aware of the waters presence. Water naturally tends to meander, finding new ways continuously. Shaping our planet through the process of erosion and deposition (Burmil, Daniel, & Hetherington, 1999). Defining access to drinking water and water as a transport medium subsequently shaping our settlement patterns (Geiger, 2001).

### **Meaning**

The dynamic appearance of water creates atmosphere and moods that effect our emotions (Woodward, 2001). In a historical context we have to go back to the relationship we have towards our environment. Water forms the material basis for this relationship (Dreiseitl, 2001). Without water we die within a matter of days. Water has been embedded deeply culturally, spiritually and religiously. Pouring water over the body or submerging in water is now and historically has long been part of rituals associated with the most fundamental aspects of human life, with birth, marriage and death (Burmil et al., 1999). Water, acts as a symbol of purity (Völker, Matros, & Claßen, 2016), perceived cleanliness and refreshment associated with water lead to a sense of regained energy, youth and health (Bachelard, 1983 cited in Burmil et al., 1999). Rivers represent the cycle of life and death, the flow from source to sea representing different phases in human life (Schama, 1995 cited in Vroom, 2006). The sea represent the great depths, calling on your fantasy and imagination creating deep impressions and triggering emotions like desolation and fear but also the sublime (Corbin, 1988 cited in Vroom, 2006). Water stands for openness and exchange and creates a sense of relationship to a larger whole (Dreiseitl, 2001). Watching a twig float by until it disappears out of sight. Observing the continuous formation and disappearance of waves on the shoreline. Wondering where that big container-ship comes from, what carries

and where it is heading. As a mirroring surface it is the stage for a play of sound, movement, and light reflection (Kluckert, 2000; Ogrin, 1993 cited in Vroom, 2006). Images of the viewer and surrounding setting appear either clear or vague, a breeze produces a new image. This characteristic allows for imagination and idealization (Bachelard, 1983 cited in Burmil et al., 1999). Water in all of its forms is a mysterious element in the landscape and material to work with. All depends on individual perception, put in the words of Marc Treib `` While nature may be an inspiration to some, it's a burden to others'' (Treib, 1999: 39).

## **Atmosphere**

Apart from the meanings attached to water through its form defined by containment and setting. The transparency, reflectivity, refractivity and color defined by lightning, wind and depth, movement caused by gravity and/or wind and sound which is a result of movement trigger our senses generating a wide array of moods and atmospheres (Woodward, 2001). Water's ability to mediate smell, taste and sound: The smell of spring transmitted downstream by blossom floating on the water's surface. The splashing sounds of a large fountain in the middle of a traffic junction filter out the noise of the passing cars. The rumbling sound of the ocean, and its salty taste and smell. Water distorts, refracts and reflects light, watching the sea on a grey rainy autumn day or a sunset on a nearly wind still day in the middle of the summer with the orange and purple hues coloring the sea (Dreiseitl, 2001; Woodward, 2001). Important in the atmosphere is the interface between land and water. The movement of water takes a form depending on this interface. Shorter horizontal distances and increasing height differences create stronger movements, where water meets the most resistance it appears with most force (Burmil et al., 1999). The wide range of different colors water can appear in is created by suspended materials, containment, light, wind and depth influence affect the atmosphere in a major way.

Water appearing in a shade of blue is preferred over yellow and is an optical stimulant that comes forward and is associated with coolness. White water is associated with power and roaring sounds (Litton et al., 1974 cited in Burmil et al., 1999; Arnheim, 1969 cited in Vroom, 2006; Smith et al., 1995 cited in Völker & Kistemann, 2011). The deeper the water the deeper it's color, transitions between shallow and deep water create fascinating paintings, perceived best from elevations (Woodward, 2001). The sounds generated by the interplay of water and its surroundings houses all the characteristics of music: volume, pitch, sharpness, softness, rhythm and harmony (Woodward, 2001). With water anything is possible but awareness about possible generated perceptions is essential.

### **Site-Specific**

The appearance and subsequently our perception depends to a large extent on natural variables and the specific social, spiritual and religious conditions. The Danish professor Høyer (1999) suggests that the quality of light might be the only truly unique ingredient in a landscape. Using the quality of light in his home country to describe the experience of a cool soft light rich in middle tones. A result of the damp climate and being surrounded by water, the light is reflected on the water bodies and refracted in the water particles in the air. These conditions create an experience that by itself can be overwhelming. This brings me to the influence of local weather and microclimates on the perception of water bound sites. Eliasson et al. (2007) found that a exposed waterfront plaza in Gothenburg was perceived to be more beautiful at higher wind speeds and lower air temperatures, both generally experienced as indicators for discomfort. They also found that clear skies affected perception in a way that the participants experienced it warmer and calmer than the actual situation. The researchers link this to wind having a positive aesthetic and symbolic value. The place comes alive; interesting reflections on the water and interesting scenes created by the winds at a nearby marina. They found in literature that naturally occurring wind was tolerated much more than wind patterns



created by the built environment. Natural winds are sometimes even appreciated for being a representation of nature (Westerberg, 1994; Nikipoloulou and Steemers, 2003; Chiesura, 2004 Cited in Eliasson et al., 2007). They found that in general intensity of use increased when there were lower wind speeds and higher air temperatures (Eliasson et al., 2007). Something regarded as specific for Scandinavia are the long dark winters and short summers triggering a strong urge to go out whenever the sun appears (Gehl and Yencken, 1996 cited in Eliasson et al., 2007). Water can give meaning, structure, create space and mystery becoming both more readable and clear and mysterious contributing to a strong sense of place (Burmil et al., 1999; Völker & Kistemann, 2011) Combining the aforementioned factors water is a unique element and contributes positively to a place

### **Health and Well-Being**

A strong sense of place can influence well-being (Völker & Kistemann, 2011). That brings me to the relationship between water, health and well-being. Not only our emotions and feelings are effected by the appearance of water it also affects our sense of well-being by influencing humidity, temperature, cleanness of air and the climate of places (Dreiseitl, 2001). By now it should be clear that the associated weather and microclimates create unique impacts and conditions. Places characterized by the presence of water have been associated with healing spatially and emotionally (Völker et al., 2016). Just the view of water has beneficial psychophysical effects, potentially meeting restorative needs (Ulrich and Simons, 1986; Hartig et al., 1991; Parson, 1991 cited in Burmil et al., 1999). Mental immersion is explained by reactions as tranquility, attention, interest, fascination or compatibility (Herzog and Barnes 1999; Ulrich 1981; White et al. 2010 cited in Völker et al., 2016). The sounds produced by water can be experienced as restorative (White et al., 2010).

### **Shifting relationships**

Our relationship with water is as dynamic as the material itself. From an historical perspective much of our relationship to water has been embedded culturally, spiritually and religiously (Burmil et al., 1999). With cultural and religious preferences ever-changing this might cause shifts in our relationship to water. Dreiseitl (2001) uses the description of the role of water as being the very reason for our existence to emphasize our relationships to water as a complex cultural construction. Continuing to exemplify by highlighting how access to water for transport and drinking water supplies decided where we settled. And how we have taken up an increasing controlling relationship towards water. Especially the technological development during the industrial revolution led to waterbodies being straightened, canalized, built over, buried and filled in. Only for water to return as a threat by breaching these technical measures subsequently flooding areas stretching far beyond measure. Resulting in severe damage, triggering an urge for revisited and increased control measures. White et al. (2010) point out that the environmental changes caused by climate change might affect our perception of water. Geiger (2001) points at the difference in treatment of supplies of oil and water. The

latter being perceived inexhaustible, a mistaken assessment that will affect livelihoods and subsequently our relationship. We will have to see how this relationship develops in the future. Looking at the here and now we can't deny that there is an extreme high level of attraction of water to humans (Völker & Kistemann, 2011). White et al. (2010) asked people to rate photos of environments containing varying proportions of aquatic, built and green. They found that in photos containing green and built along with the presence of water is generally linked to higher preferences, greater positive affect and higher perceived restorative values. Scenes containing only water were rated lower than those with a proportion green and built. This could indicate the interface between water and land is the optimal environment (Herzog, 1985 cited in White et al., 2010). Looking at trends in development, locations on the interface of land and water are a hot commodity (Braae & Diedrich, 2012; Völker & Kistemann, 2011). Many of these developments take place on abandoned harbor areas along our rivers and oceans.

### **Water in the harbour**

Helsingborg is not alone in seeing the port-city relationships being challenged. A model developed by Hoyle (2000) describes six stages of port-city relationships. Evolving from the organic spatially and functional entangled city-port from the old days into two separate entities in the early second half of the 20th century. The containerization within sea transportation and the ever growing ship sizes demanded new port types and access to deeper water. This led to the abandonment of the original core which was claimed for redevelopment. The usually central shoreline locations and closeness to the sea made them attractive to be turned into public spaces, offices and apartment buildings. This proved so successful that cities have started to grow towards their ports again and forcing them to move further away or densify (Daamen & Vries, 2013; Hoyle, 2000). Helsingborg is one of the cities actively rethinking the relationship between the port and the city. In their H+ plan development and the 2012 design competition for the port and its container terminal there is clear desire to enhance the relationship between city and port by creating promenades and look out along the

harbor activities. The combination of port and city functions lead to multiple challenges that have to be overcome to make them successful. The demands associated with recreational, commercial and living environments create conflicts with the existing port functions. Safety, noise and customs lead to fragmentation and result in accessibility issues (Daamen & Vries, 2013). Braae and Diedrich (2012) and Stevens (2009) are concerned about the reintegration of these transformation projects into the existing urban fabric. They point out that most developments are economy-driven reflecting a limited range of socio-economical expectations often resulting in the creation of idealized settings for consumptive behavior and place. Stevens argues that waterfronts should afford activities that have been associated to them from early days. Spontaneous, unorganized and ever-changing activities. A call for dynamic landscapes that afford more than a new Instagram update. One problem is that many new waterfronts prevent physical explorative encounters with water because the interface has been tamed to provide safety and comfort Stevens (2009).

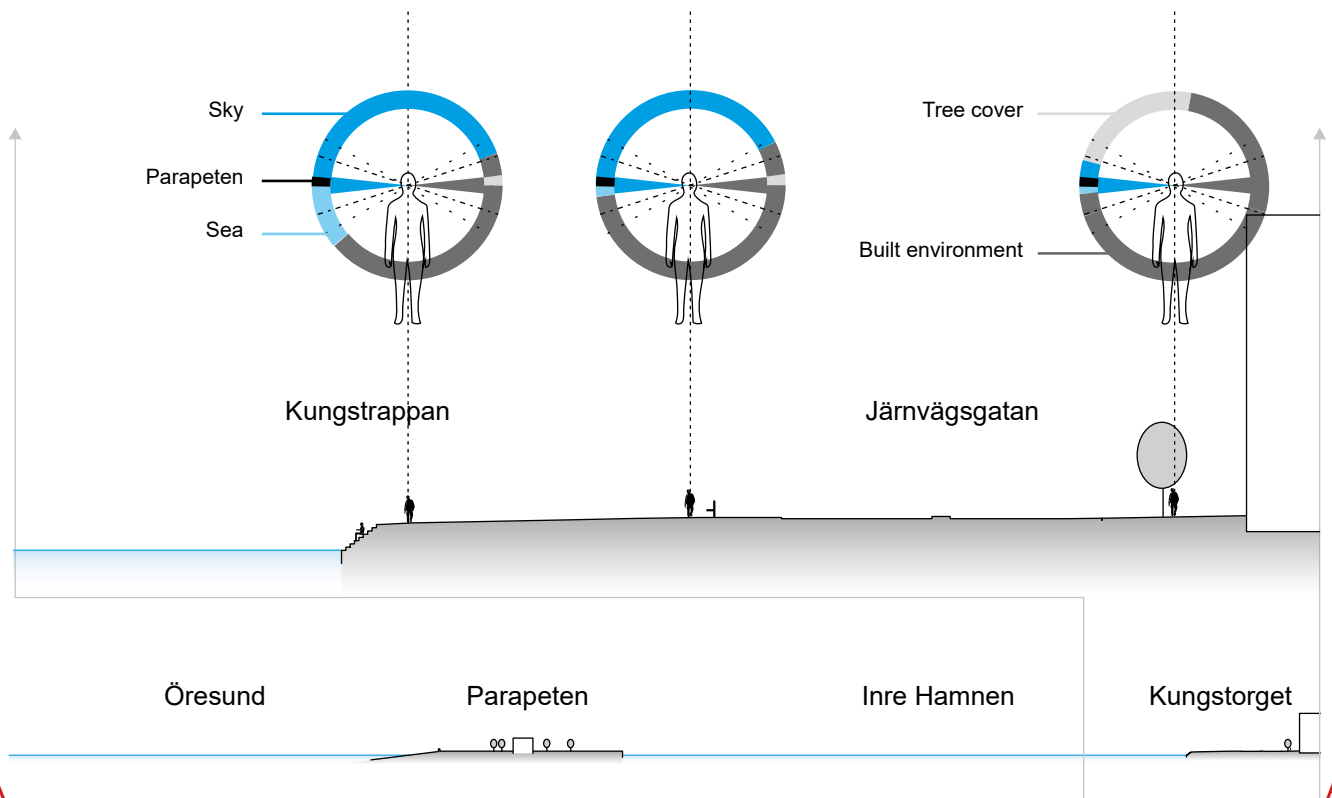
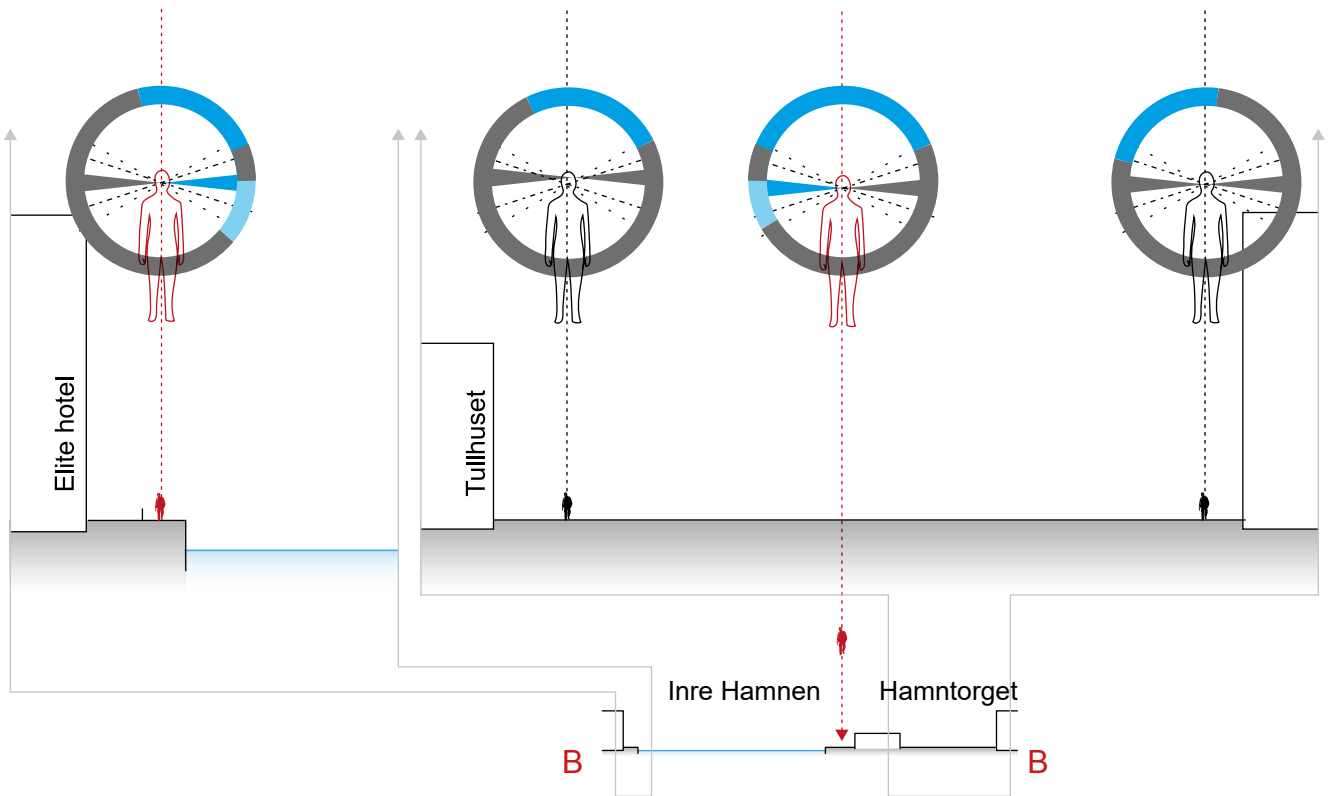
### **A unique character**

Concluding this section the presence of water is the main character defining element in the site of Inre-Hammen. The interplay between ocean and sky creates a dramatic setting that should be as visible as possible. Water attracts people so this place can do with a modest approach that caters to enhancing the relationship with the water.

Shifting back to the findings in the prior phases. Figure 61 represents an experiment to get insight into the visual relationship between land and sea. This experiment will be used in the next chapter to different desirable solutions. The location of the sections is marked in Figure 62 on page 75. The red bodies represent experiences inaccessible to the public. A motivation for the design proposal, some of the best experiences should be opened up.

Figure 61 - Diagram exploring the visibility of the water on site. Knowing that the interplay between sky and sea is unique it explores that relationship as well.

Boundary: Sky/Water factor



A

A

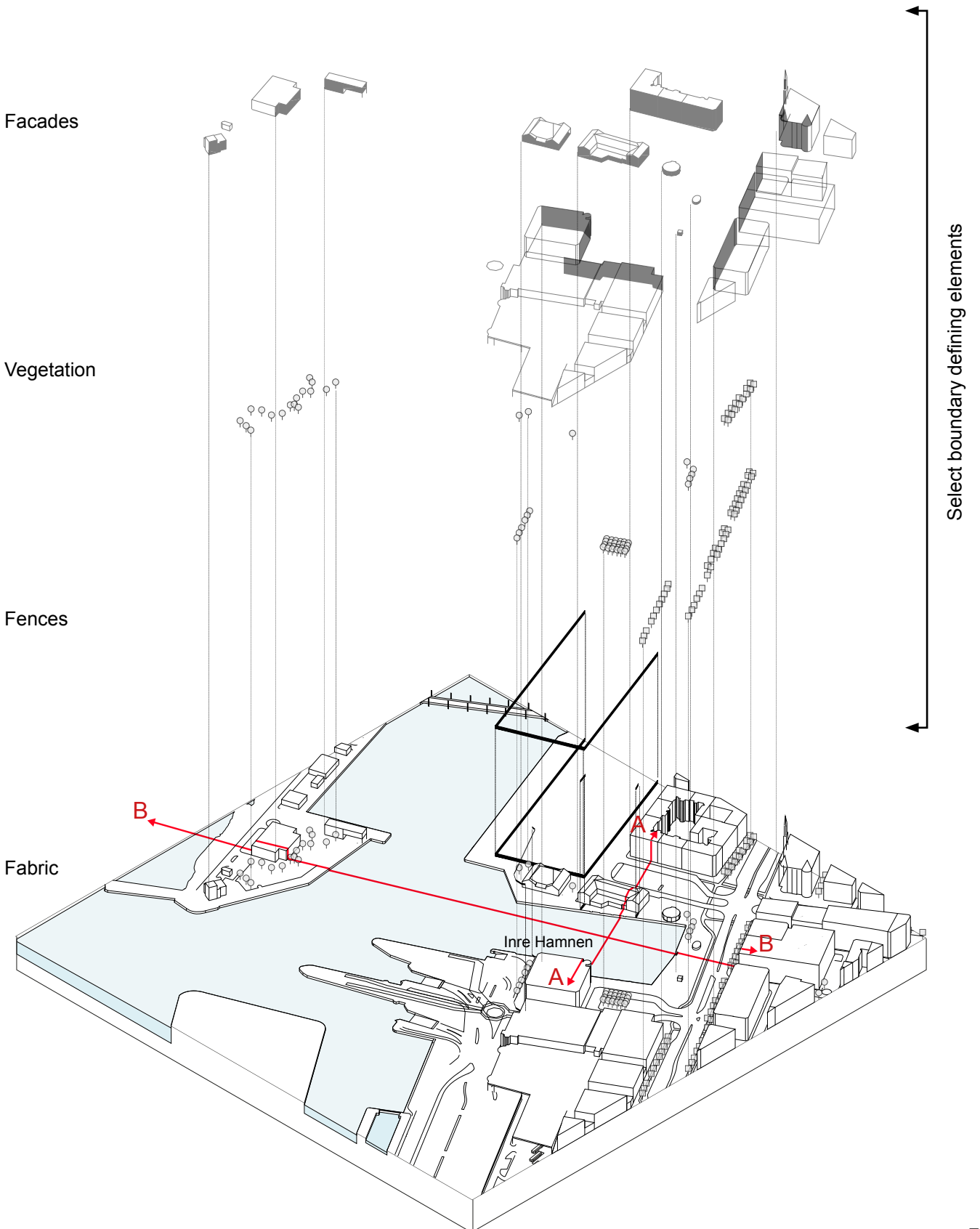
Having zoomed out to place the site into a context it becomes even clearer how unique the character of the site is. It's the only waterfront that has historical buildings of this scale. Also it's one of the few nonlinear waterfronts which create an interesting experience revealing new views from shifting visions at every corner.

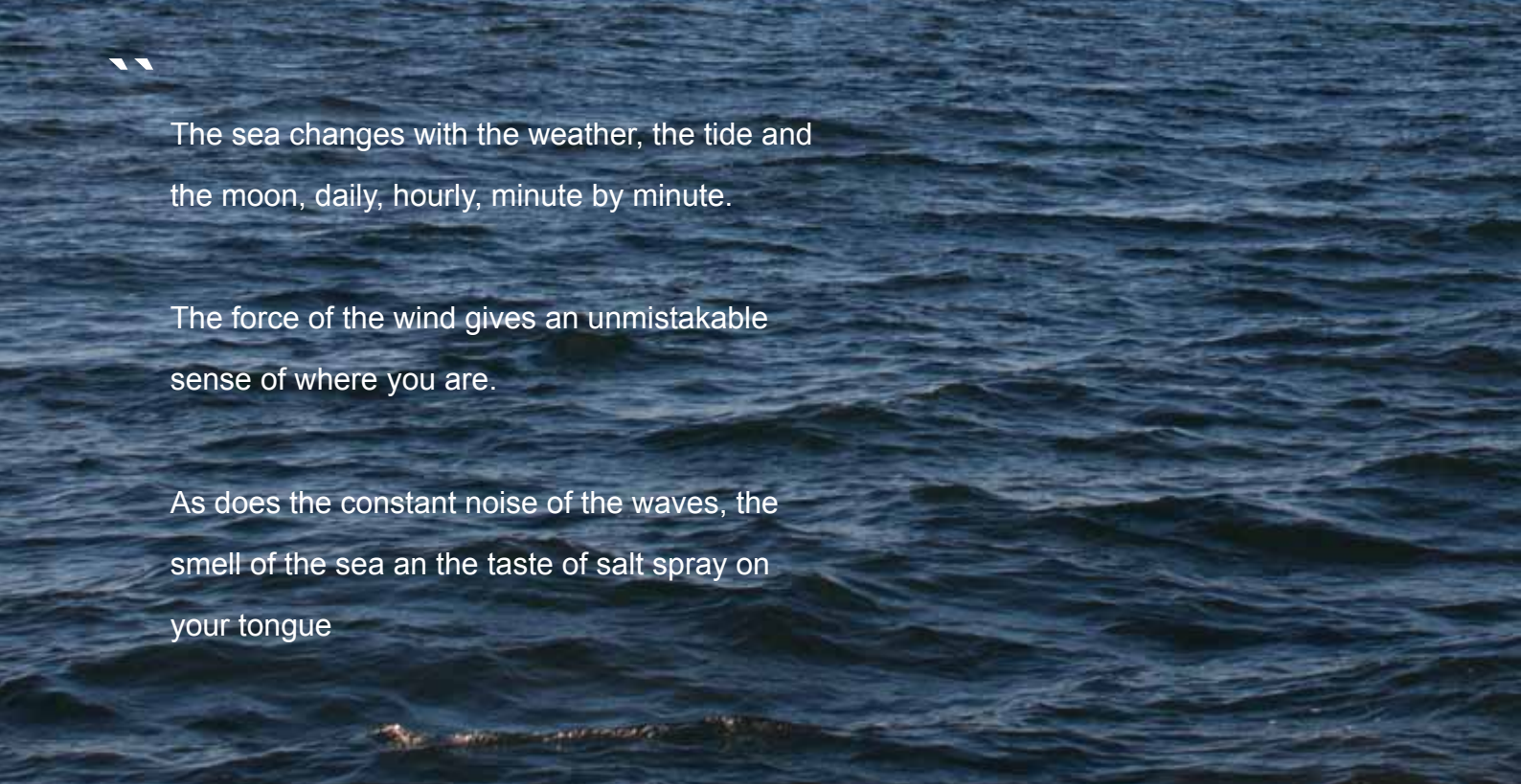
The diagram in Figure 62 shows the different scales in buildings and highlight the facades that frame Inre-Hammen. The enclosed waterbody that opens up to the west over Parapeten brings in the sun, wind and sky in the otherwise dense urban fabric.

The site is characterized by it's mainly hardscape material palette. The municipality works on this with portable planters. A more sustainable approach would be the introduction of vegetation which helps to cool down the site and offers refuge from the elements. Today's fences form a major obstacle in the experience of the site. It's one of the key challenges to overcome. Something further elaborated in the next chapter.

Figure 62 - Further exploration of the relationship between sea and sky and the definition of the site through boundaries.

Sky



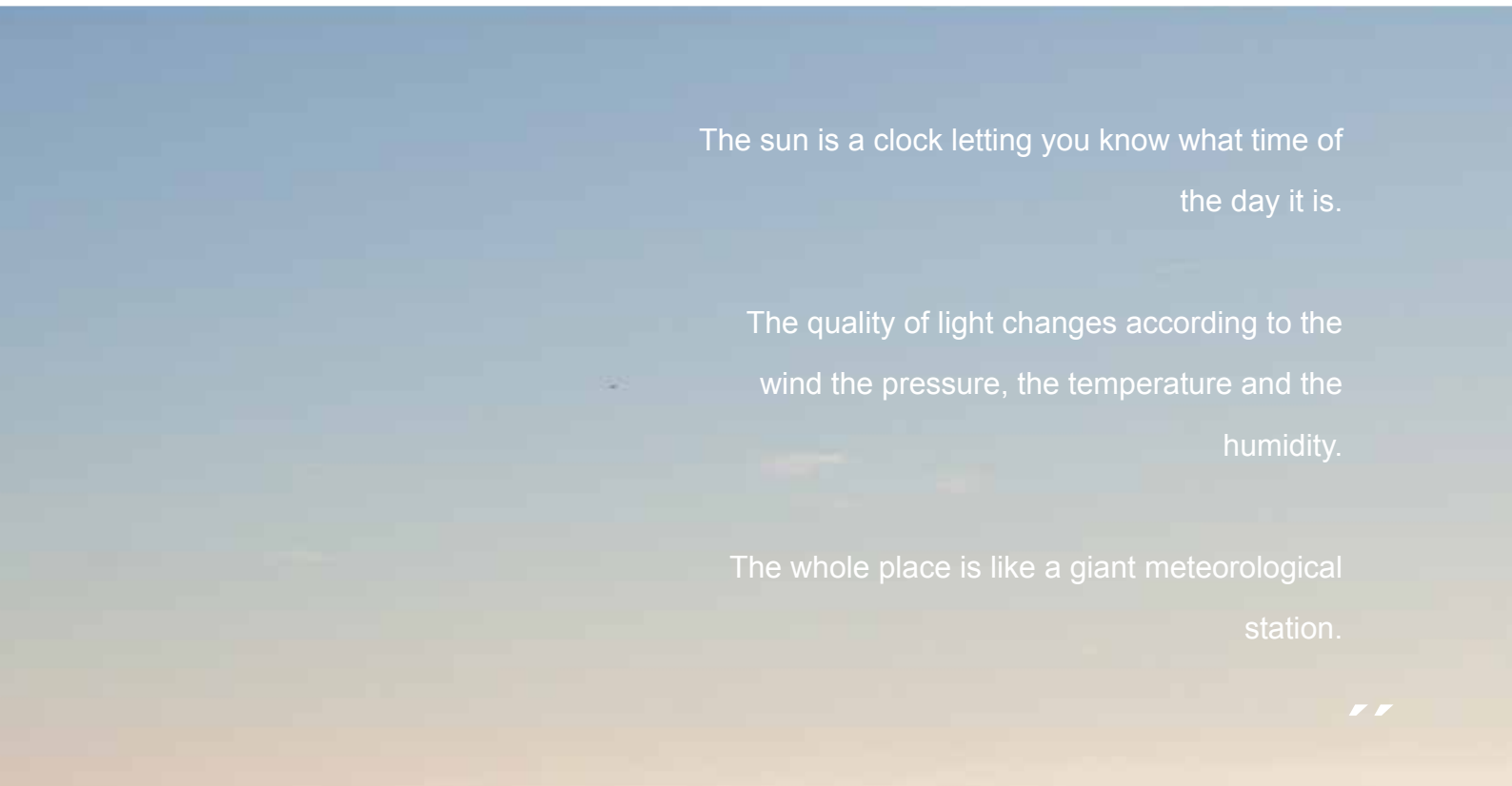


“  
The sea changes with the weather, the tide and  
the moon, daily, hourly, minute by minute.

The force of the wind gives an unmistakable  
sense of where you are.

As does the constant noise of the waves, the  
smell of the sea and the taste of salt spray on  
your tongue





The sun is a clock letting you know what time of  
the day it is.

The quality of light changes according to the  
wind the pressure, the temperature and the  
humidity.

The whole place is like a giant meteorological  
station.

//

Figure 63 - Photos taken on a  
winter afternoon somewhere  
along the Helsingborg coastline.

Text: Kathryn Moore on the  
sea in overlooking the visual  
(2010:1-13)

4

FINDING



## 4.1 Dialogue 2.0

Finding, this phase marks the shift from 'searching' towards the 'discovered'. The next chapter is deconstructing and constructing what has been found in the previous phase. The balance shifts more towards enquiry based activities. Throughout the design process there have been regular meetings with the municipality. This provided a stage to present findings in early stages and reflect on them. Where in the section 3.1 Dialogue the focus was mainly on constructing a task, as said this left a lot of freedom in creating an understanding of the site and extracting inspiration from within. Looking for inspiration in the site itself has generated a personal understanding in the form of both tangible and intangible qualities as presented in the previous phases. Dialogue 2.0 instead focuses on input from the meetings with the Municipality. Input that revolved around the context, a continuous flow of new suggestions on what to look out for. Leaving the task of making assumptions on underlying relations that have to be made, evaluated and incorporated into the design proposal to the designer. Figure 64 on page 81 gives insight into a selection of the challenges faced that required some form of enquiry. The list might would probably expand if the duration of the project was prolonged. Inre Hamnen is an extremely dynamic site under constant (re-)development.

### **Natural uncertainties**

From the previous chapter it should be clear that the unpredictable nature of water is fascinating. The appearance is defined through interactions with the surroundings. The sea is no exception forming a complex and exciting interplay which will never come to a standstill (Palmboom, 2010). The influence of climate change will further challenge ways of working with water. Apart from influencing our livelihoods in multiple ways, White et al. (2010) point out that the environmental changes caused by climate change might affect our perception of water. So to grasp something as uncertain as water it is essential to grasp climate change and elaborate by going into the uncertainties surrounding climate change.

Figure 64 - Working through different spatial scales represented in a conceptual way.

Legend:

- # Project
- > Development/Process
- ? Rumour
- = Existent 'challenges'

Site:

**# Adaptation to climate change**

- > Overhaul Järnvägsgatan
- > Vågparken
- > Conference center + Hotel
- > Bridge to Oceanhamnen (H+)
- ? Overhaul Storgatan
- ? Tullhuset
- ? Knutpunkten
- ? Elite hotel
- ? Bicycle Parking
- = Customs regulations
- = Scandlines
- = Sundsbusserne
- = Hamnkrogen
- = Dockan
- = 'New' Tivoli

Municipality:

**# Coastal promenade**

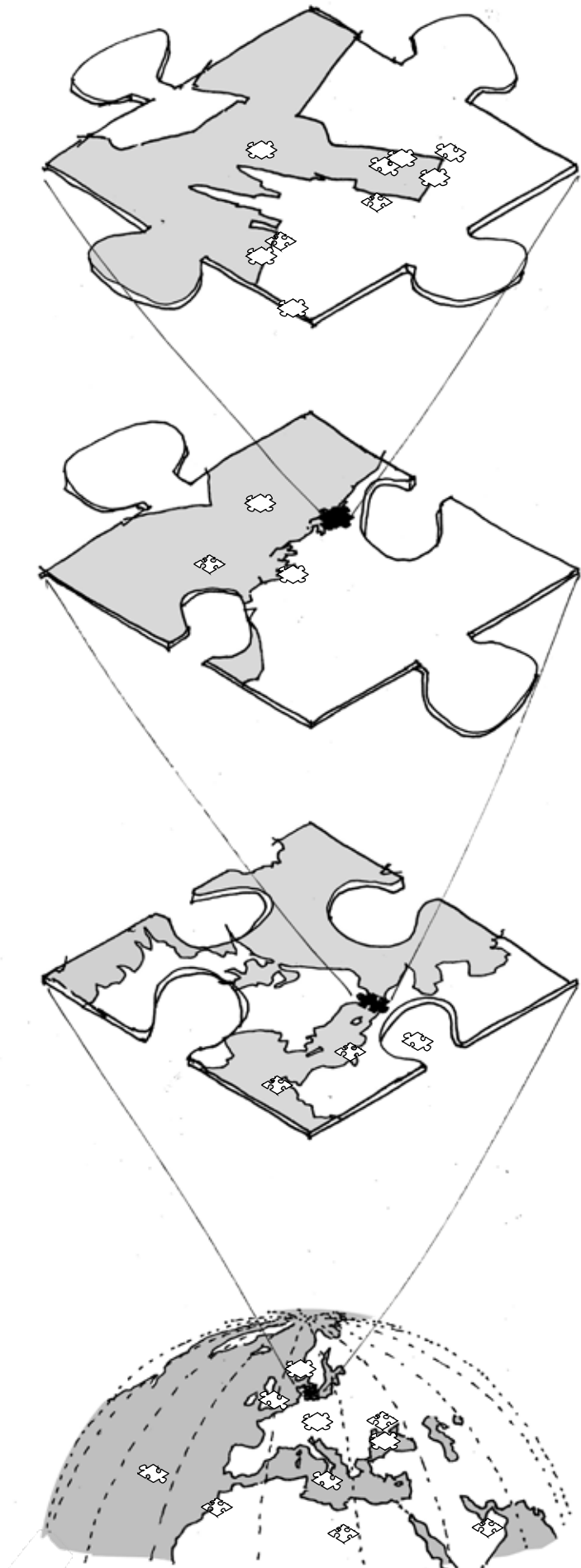
- > H+
- > Development Helsingborg Hamnen
- > Climate change adaptation
- > Population growth
- > Parking garage under Rosenträdgården

Regional - National:

- > Urban growth
- ? H-H tunnel
- ? Helsingborgs hamn
- = Länsstyrelsen (Riksintresse hamn)
- = Kustbevakning (Coastal guard)

Global:

- > Geo-Politics
- > Climate change



How will the exact development of climate change over the coming years, decades and centuries affect us? It is not a question about if but more to which extent? Building a sea wall with the knowledge of today might be proven insufficient tomorrow.

Climate change uncertainties are linked to three major sources: future emissions of greenhouse gasses, scientific uncertainty and natural variability (Hallegatte, Shah, Brown, Lempert, & Gill, 2012). The first two being largely intertwined, the models scientist use are built around assumptions. There are different RCP models based on different assumptions about population growth, income growth, technological developments and improvements in energy use efficiency. The models are named after radiative forcing values expressed in Watts per square meter ( $W/m^2$ ) in relation to pre-industrial levels. For example: 2.6, 4.5, 6.0 and 8.5. The last has been used as a base for predictions in Helsingborg's 2016 document on climate change: Slutrapport – klimatanpassing av Helsingborgs stad. The 8.5 model is based on high population growth, relatively slow income growth with modest rates of technological change and energy use efficiency. Meaning that in the long run there will be a high energy demand with a large share coming from fossil fuels. This in turn leads to high emission levels of greenhouse (Riahi et al., 2011). Helsingborg prepares for a worst case yet deemed likely scenario. Uncertain to different degrees are the relations between: How the global mean temperature will respond to the increase in greenhouse gasses, the regional effects of global warming and how the affected systems like glaciers and lakes will respond is uncertain (Hallegatte et al., 2012). Global warming thus draws parallels to the appearance of water, we try to understand it, to predict it but are still at large. Like water, climate change transcend different scales, something small and natural like sorting your garbage is part of preventing the flooding of your house.

### **Cultural uncertainties**

Shifting from the socio-economic factors influencing climate change to the perception of the socio-economic and cultural challenges will affect the character of the place. The challenges described by Hyler (2013) and (Sherfey, 2011) in bringing together the segregated Helsingborg. Creating inclusive places and growing together as a city. It's a priority for the municipality, Pixla Piren is an interesting example of this new type of urban spaces created for all the people of Helsingborg. Geo-political developments and trends will directly and indirectly influence the site. Helsingborg being a trade city means a high dependence on globalization.

### **Spatial uncertainties**

Influenced by both the challenges posed by the natural and cultural factors the city of Helsingborg charges forward with the ambitious H+ plan as well as the new Vågparken and Conference centre on the edge of the site. Add to that the countless rumours and ambitious plans that are concentrated at the sites edges.

To conclude the mentioned uncertainties categorized in natural, cultural and spatial. These uncertainties will together define the future of the site to a large extent. All of them require a flexible and open approach with room for evaluation and transformation along the way.

## **Assumptions**

This paragraph is an attempt to make sense of the uncertain, dynamic and challenging future. The uncertainties surrounding the site posed questions that were impossible to answer without consulting the municipality and come to a common Assumption. The following two were the most apparent: (1) Which water level to use? (2) Which spatial developments to incorporate into the design?

(1) Within the different publications on climate change and the expected sea level rise there were some differences. Inre hamnen is being protected from the power of the open sea by Parapeten and the wave breaking structures marking the entry of the harbor. This results in an assumption that the site will suffer less from wave and wind set-up (Vinduppstuvning/ Våguppstuvning) and decrease some of the risks associated with storm surges. This however depends on the aforementioned uncertainties. If the safety levels on the frontline prove insufficient aggravated consequences can be expected.

(2) The unfixed future is dependent on a wide array of decisions on different political, societal and corporate levels. There is a wide array of actors with interest in the site, a complexity expressed in f.x. A complexity that could most likely be extended much further if the scope of the project would have been on negotiating a new future. The municipality however would prefer the generation of ideas that could stir up a conversation surrounding the site. In this light the following assumptions were made regarding the future of the site. Incorporated into the project are:



- I. Upgrade of Järnvägsgatan: Historical looking, yet modern pavement and street lights. Intended to be a classy upgrade to it's current dated character.
- II. Development of the waterfront around Tivoli (completed during this project).
- III. Vågparken, a new park at the western end of Hamntorget (sv: Våg - en: Wave) (Under Construction).
- IV. A new conference centre and hotel to the north of the to be developed Vågparken (Under Construction).
- V. A parking garage for bicycles underneath Kungstorget (Proposed).
- VI. The construction of a foot and bicycle bridge between Knutpunkten and the H+ development.

This means that figments and proposals of redevelopments of Hamntorget, Knutpunkten, the Elite hotel and Stortorget have been excluded. Without necessary consulting the municipality an assumption was made on the public and private spaces surrounding Elite hotel and a small building belonging to the same hotel. We need this space to provide a public connection independent of Knutpunkten from the new bicycle- and foot-bridge to Inre Hamnen. Another space constraint caused by the customs regulations surrounding International ferry traffic at Tullhuset was solved by making an assumption on the move of these facilities to another site. This could be at Parapeten, possible arguments: It would allow for the visual spectacle of boats arriving and making their departure to be retained. This while still providing a central landing point. It could motivate the construction of a bridge to Parapeten which would integrate it into the urban fabric. Tropical Beach and undisturbed views of the Öresund await. By moving these functions a continuous walk along the waterfront can become a reality. The building of Tullhuset could then be converted into for example a Saluhall, how it's visualized further on in the project.

## 4.2 The experience of rising sea levels

Continuing from the introduction into the challenge of sea level rise in Helsingborg and the previous chapter which introduced the assumptions surrounding the site it is time to go into detail. Evaluating different spatial adaptation measures. Measures that have been discussed throughout the design process to find a desirable solution that works with the unique character of the site.

In this paragraph there is a sum up of the main assumptions and findings that form the working base for this chapter. In the climate documents of Helsingborg the years used in the predictions are 2010, 2035, 2050 and 2100. For consistency reasons this report follows the same years even when 2010 lies behind us.

### **The challenge:**

Presented in the previous sections were sea levels that in extreme events increase to +3,5 meters in relation to water levels today. A level that refers to a situation for a site on the shoreline of the open sea. In the following paragraph there is a site specific assumption for Inre Hamnen. In this stage input comes from three documents on sea level rise in Helsingborg.

The figure on the next page is a translation and interpretation of the municipal documents (2012; 2016) into site specific assumptions for Inre Hamnen. The first figure is based on measured sea levels taken at a station in Viken between 1977 and 2009. From this the following generalizations can be made:

- On a yearly base the sea level fluctuates between 0 and 30cm more than 90% of the time.
- Approximately 7% of the time the levels fluctuates between 30 and 60cm.
- The remaining percent reflects fluctuations between 60 and 170 cm with a sharp decline towards 170cm.

Open sea

Inner harbour

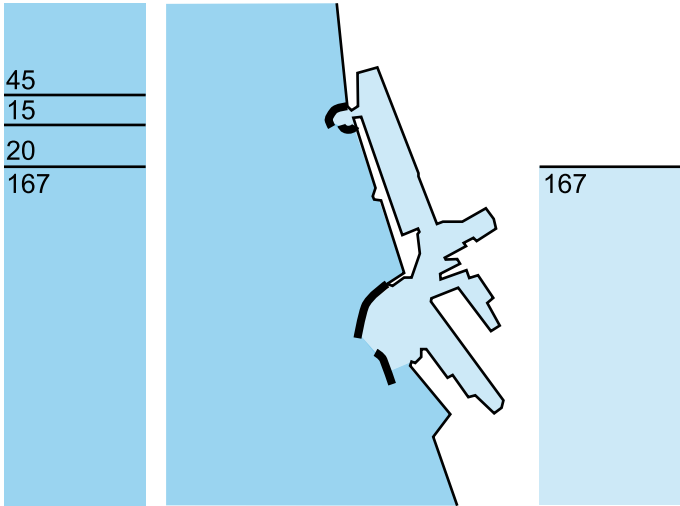


Figure 65 - Inre-Hammen is protected from the open sea by the harbour structures in front of it. This reduces the influence of wind and waves.



Figure 66 - The situation of the site in today.



Figure 67 - Photo montage of the risk faced tomorrow without any form of adaptation.

Even when this data was measured at open sea it gives a clue of the behaviour and shifting levels of the sea levels in Helsingborg. As we know now the presence of water is the main asset of this site. The visual presence is under threat from a conventional solution, the permanent one meter high wall. A proven solution that is aesthetically unpleasing. This solution is tested out in Figure 69 on page 89 and Figure 73 on page 93.

For inspiration the focus has been mainly on projects executed in the field of flood risk adaptation in north-western Europe. The Netherlands has over half a century of experience in dealing with the risk of flooding. In recent decades urban environments around rivers have been challenged by the consequences of global warming and rapid urbanization. The Netherlands, Germany and France have been actively working on finding suitable solutions within these environment. The spatial constraints surrounding these environments make it a suitable source of inspiration for the site of Inre-Hammen.

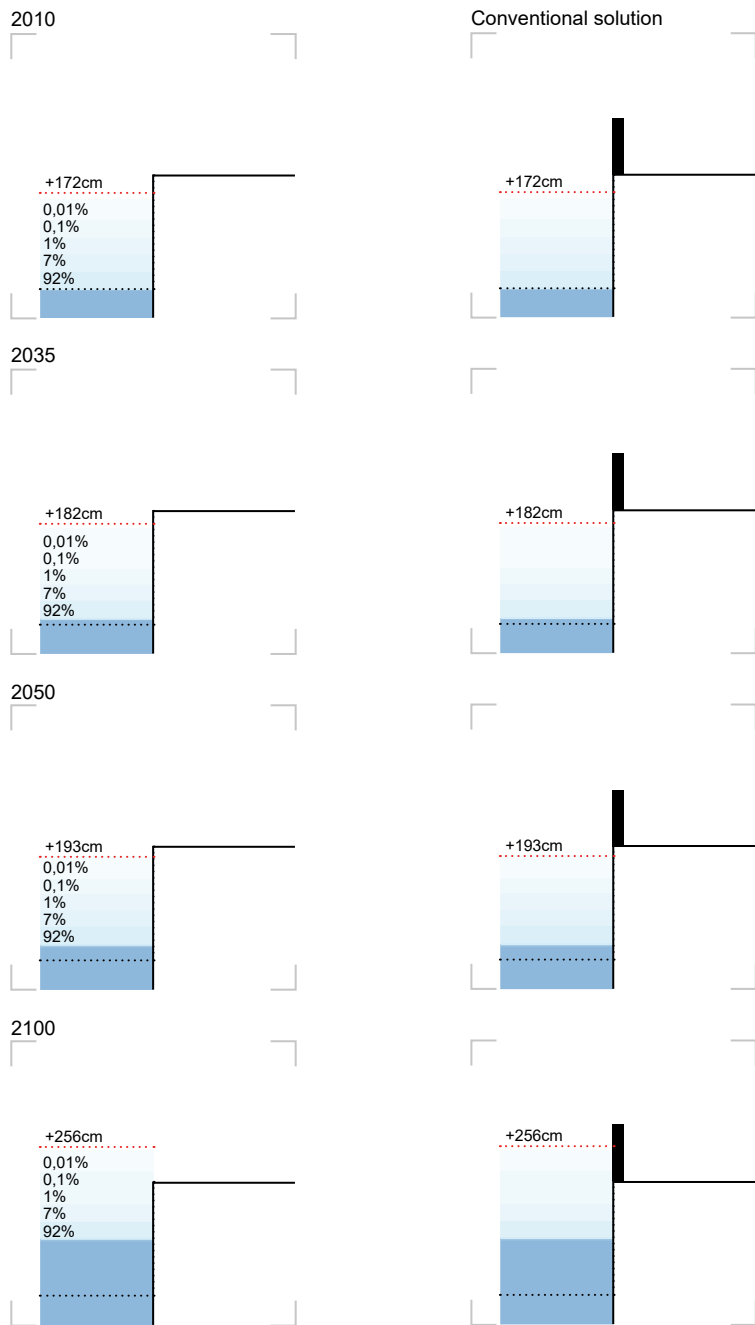


Figure 68 - Based on measurements taken at Viken between 1977 and 2009 the following trends are recognized. Every step represents 30 cm, the red line indicates the maximum level. Projected into the future to generate an approximate indication of what water levels might be expected.

Figure 69 - Continuing from Figure 68 this projection uses the proposed solution of a permanent wall at a height of one meter. In Figure 69 this projection is evaluated on the visual impact it has.

### Solutions:

For the possible solutions inspiration has been taken from flood risk presented by Nillesen (2014) and Prominski, Stockman, Zeller, Stimberg, and Voermanek (2011). An interpretation and summary of some of the discussed solutions is shown in Figure 72 on page 91.

Nillesen (2014) introduces multiple lines of defences as an integral approach. By placing the challenge into its wider context the aim is to create the most attractive places to live, work, recreate and invest in within the constraints of rising water levels. Water travels boundaries and is hard to limit to a single site. In this light it would be interesting to have a storm surge barrier at the mouth of the harbour. This would limit the interventions around Inre-Hammen. With the ferry sailing into the harbour this is a very unlikely scenario. Another measure that takes into a larger context is a new shoreline, a concept tested out in different places around the world. In the narrowest section of the Öresund the introduction of this would be very challenging. Shifting to more conventional solutions that can be introduced into the site of Inre-Hammen.



Figure 70 - The recently developed area around the 'New Tivoli' has been raised in expectance of sea level rise. The great height difference makes the relationship to the water more distant.



Figure 71 - The projected extreme rise in sea level is shown in this photo montage and shows how the area around 'New Tivoli' is safe.

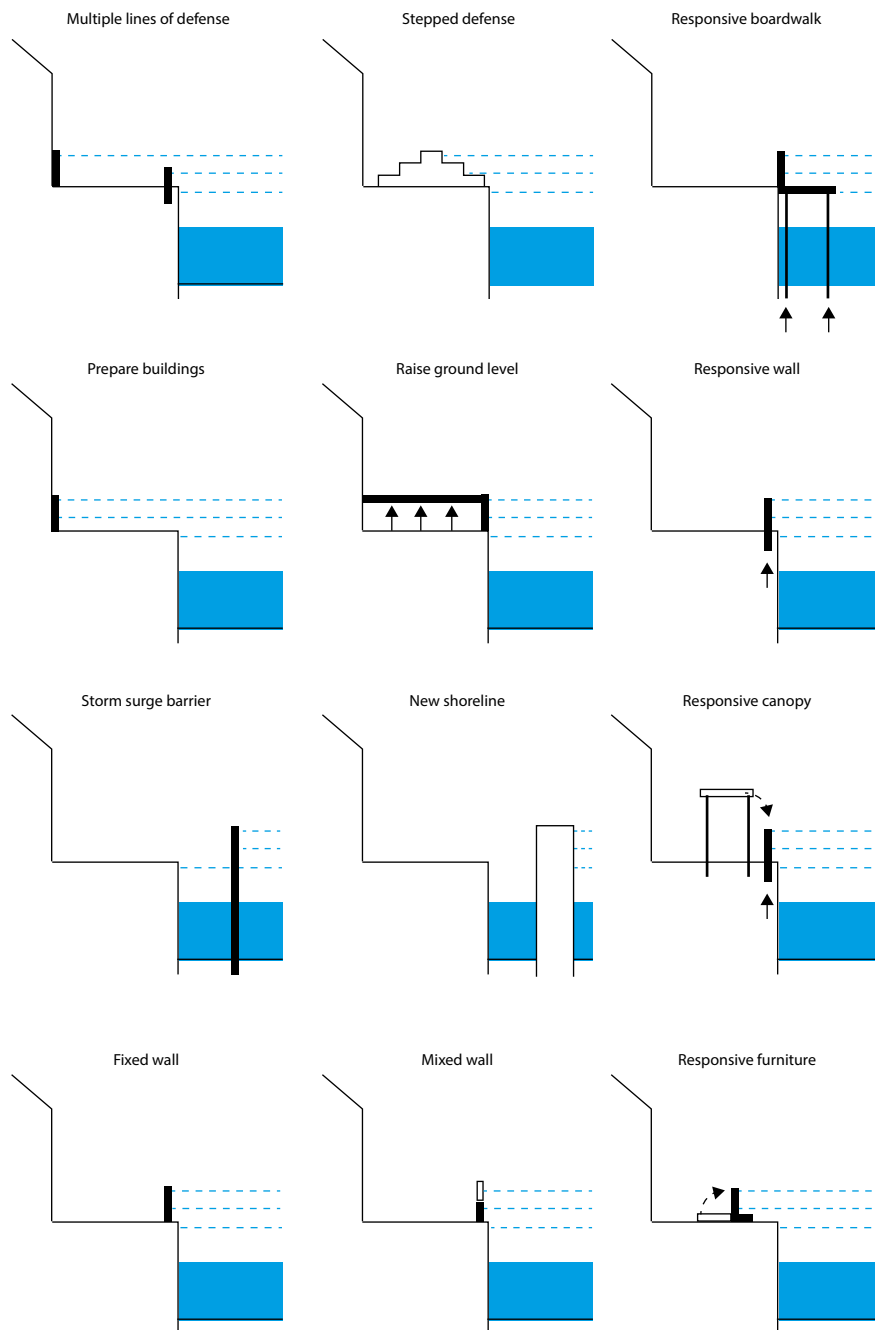


Figure 72 - Schematic overview of the different solutions that were discussed during the design process. Solutions based on existing adaptation measures applied in North-Western Europe.

The previously analysed sea wall has a negative consequence in its visible presence when it is not functional. The Special character of this piece of sea in the middle of the city would be damaged. A stepped defence is a variant that allows for more interaction between the surrounding environment and the water. A space demanding solution that is permanently affecting the visible relationship between sea and city. Raising the ground level is undesirable in many locations because it makes the relationship to the water more distant. This can be experienced around the newly developed public space at Tivoli. In the design process the solution seemed to be in multifunctional responsive adaptation measures. Different variations models and variations have been tested, canopys, furnitures, walls and a boardwalk. All have their specific qualities which make it either unsuitable or suitable for actual application around Inre-Hammen.

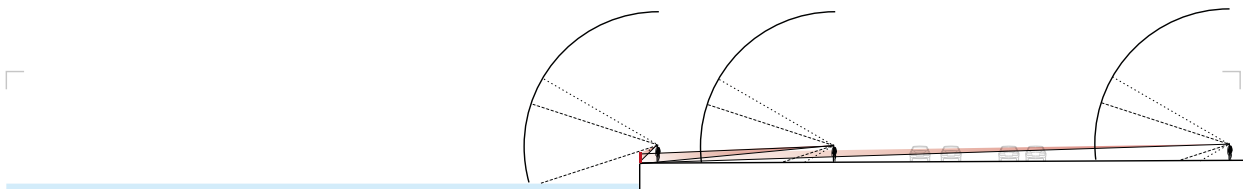
### **Safe, engaging and fitting**

Moving towards a desirable solution the multiple lines of defense approach is essential. Responsive adaptation measures seem to be the way to go from the perspective of the unique character found in this site. Figure 73 on page 93 is a representation of an evaluation of the impact of different solutions in relation the site.

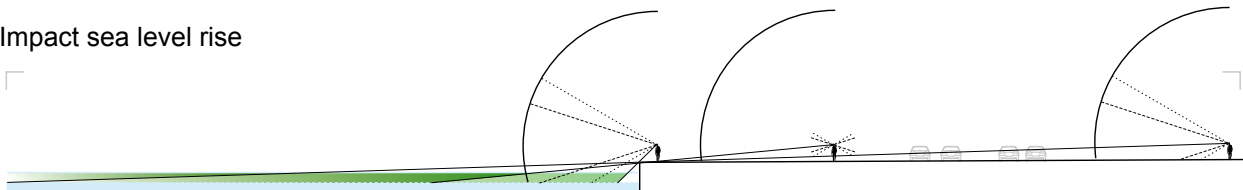


Figure 73 - Evaluation of the visual impact of a conventional solution, sea level rise and the proposed boardwalk. Section of Järnväggsgatan showing the different positions someone could perceive the water. The black lines and circles indicate the prime field of vision, the colours indicate the effect on the visual experience. The conventional sea wall indicated in red has large undesirable consequences. Sea level rise will actually make the experience of the water more intimate. The last showing the possible addition of a boardwalk which shows a slight negative effect on the experience from the quay wall. This is however being compensated by a new and potentially better experience of the water then currently found.

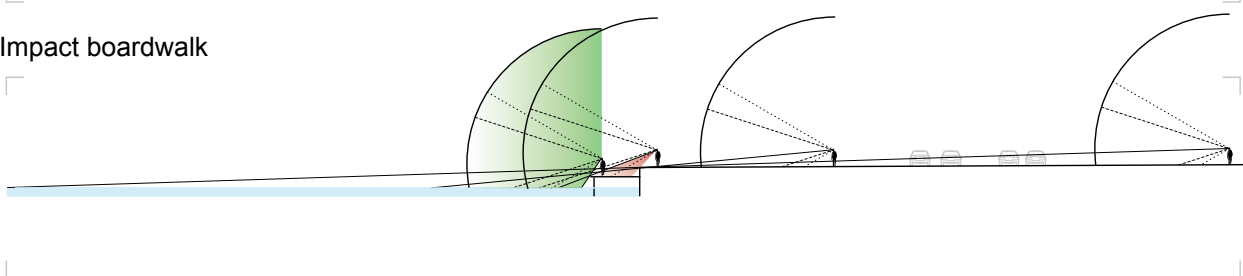
Impact conventional sea wall



Impact sea level rise



Impact boardwalk



### 4.3 Desirable solution

After having evaluated and experimented with the site conditions, constraints and available solutions shown in Figure 72 on page 91 this section presents different variations of responsive adaptation measures. The responsive character of the measures assures the visual relationship between the water and its surroundings is not unnecessarily hindered. Only appearing when needed these measures are highly flexible. From a conceptual perspective it would be desirable that the measures are self-powered by the force of the rising water levels. From a security perspective this could appear controversial with the dependence on nature to protect against itself. Depending on ambition levels a choice could be made for the measures to be powered from an electrical grid.

Figure 74 and Figure 75 on page 95 are variations of the same; A responsive reclining wall. Depending on the location a choice can be made on having a solid wall appearing and disappearing as a whole. Another option is a wall that consists of bench elements with the voids being filled by responsive elements in the ground. Opting for a solid wall is a greater technical challenge compared to the fragmented bench type measure. The fragmented bench type has a greater intrinsic strength. Another advantage is that it can double as a semitransparent barrier if some type of permanent barrier to the water is desired. The strength of the fully reclining wall is the transparency created in its absence.

Figure 74 - A pattern of benches forms the backbone for the measure. Benches that can be used on all occasions except when the voids between benches are filled by responsive elements that rise from the ground to form a solid wall to gaurantee safety to the high water level.

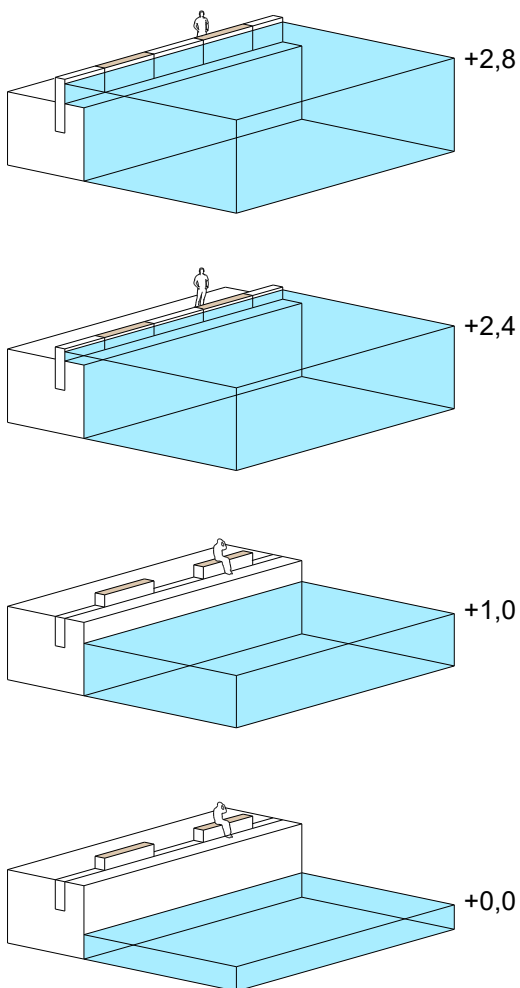
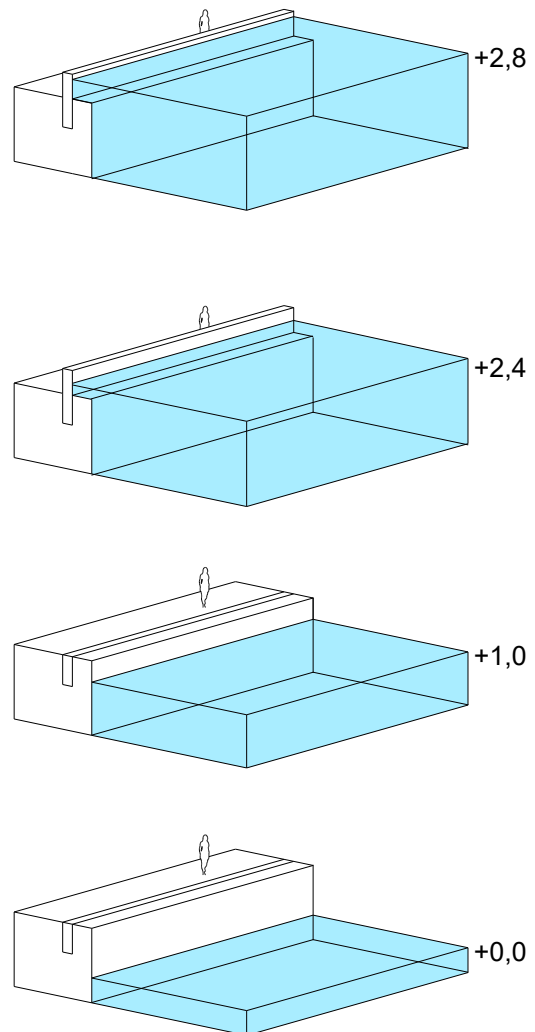


Figure 75 - A continuous wall out of one element that is responsive to the water levels and appears when needed as a strong element. The least visually obstructing type of responsive adaptation measure in a wall form.



Reminiscent of the measures discussed on the previous page is a low ever present bench that has a deck that is responsive to the sea level. This measure is shown in Figure 77 on page 97. When there is a desire for a large amount of seating this type can help to create these in a subtle manner. Less high than a conventional wall the visual impact of this measure is kept to a relative minimum. The measures discussed so far have focussed mainly on solving the threat in a constrained space. Another solution as exemplified in Figure 76 on page 97 is to moving the measure into the water. From an adaptation perspective a more aggressive approach. This approach however plays with the prior discussed quality of enhancing the water-bound experience. By making a gesture of allowing to get closer to and interact with the water a richer experience is created.

The site challenges these measures and calls for a patchwork of these solutions. To avoid unnecessary damage to the character and atmosphere of the place for each stretch an individual decision should be made. A decision that couples the measures specific possibilities and limitations to the specific limitations and possibilities of the site as well as the expressed demands. In the next chapter the outcome of the made decisions will be presented.

Figure 76 - A responsive promenade, enhancing the experience of to the water. When the sea levels rise the promenade transforms into a responsive adaptation measure that provides safety.

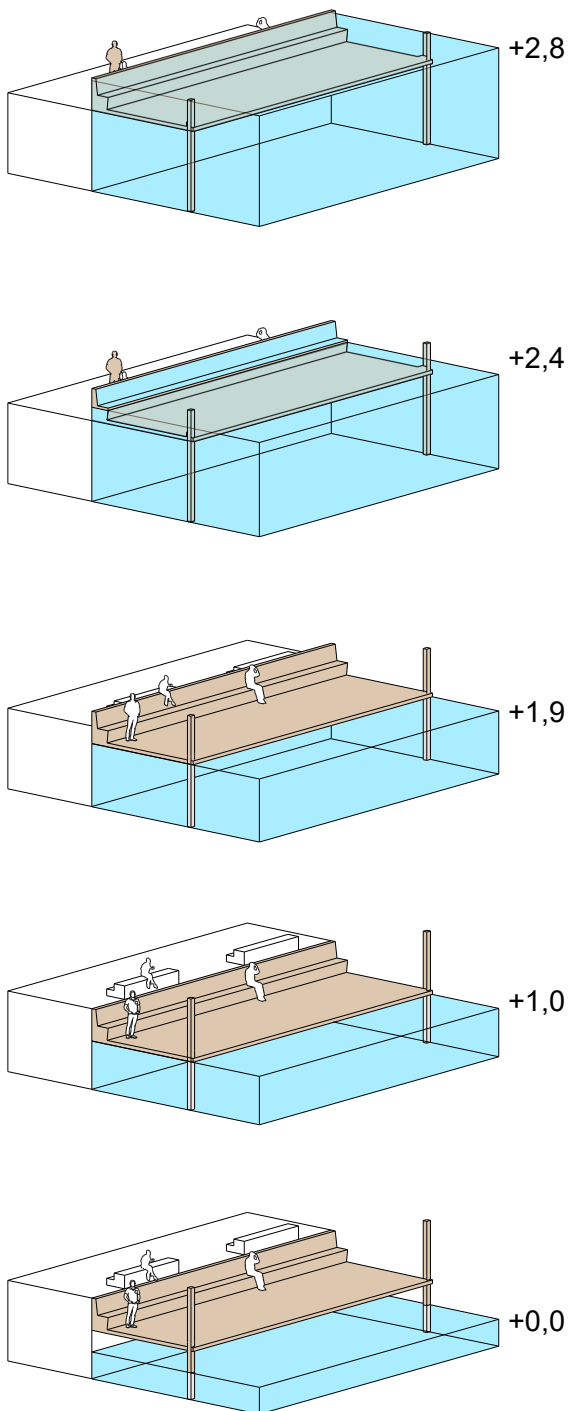
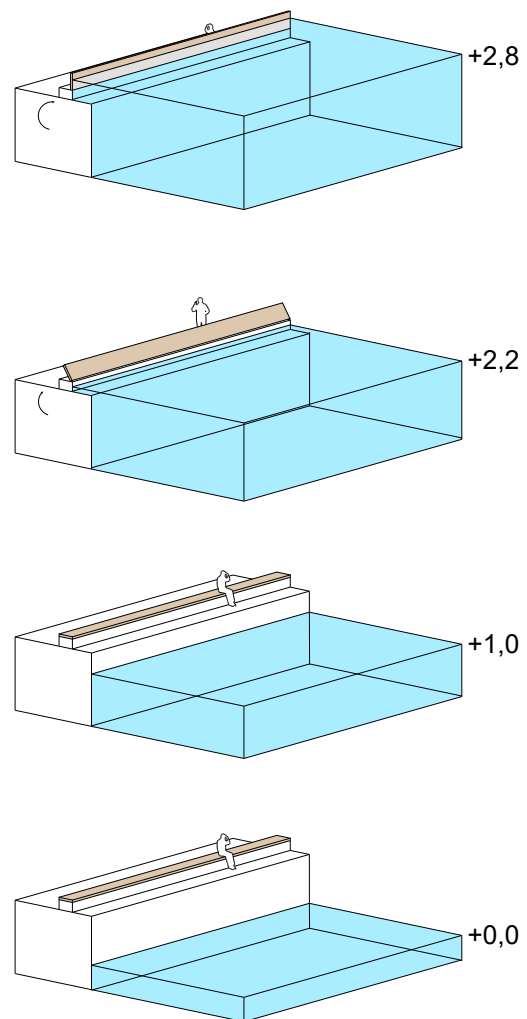


Figure 77 - This responsive bench has a limited visual impact compared to a conventional sea-wall. The seating deck is responsive and transforms into a protective measure when the sea level reaches the shown thresholds.



5

FOUNDING



## 5.1 Transformation and Legacy

The founding phase is the synthetization of the previous three phases, the sum of all the activities that were part of this intuitive process. Before presenting the proposal I would like to remind you that it is a momentary representation. With the design process continuing the plans, ideas and representations will change.

Inre Hamnen; On the verge of land and sea, a perceived social divide and the past, and the future... Part Sea, part sky, part city. The mystique of water, part threat, part joy. The Specificity of the sky; ever unexpected. Transformation; part expected, largely desired.

Adaptation to predicted levels of sea level rise is a must. Accessibility of the land-sea interface a desire. A representative entrance for Helsingborg the outcome. Visibility, accessibility and potential to interact with the water allow for a unique atmosphere. This will be the place people remember as Helsingborg, this is Helsingborg.

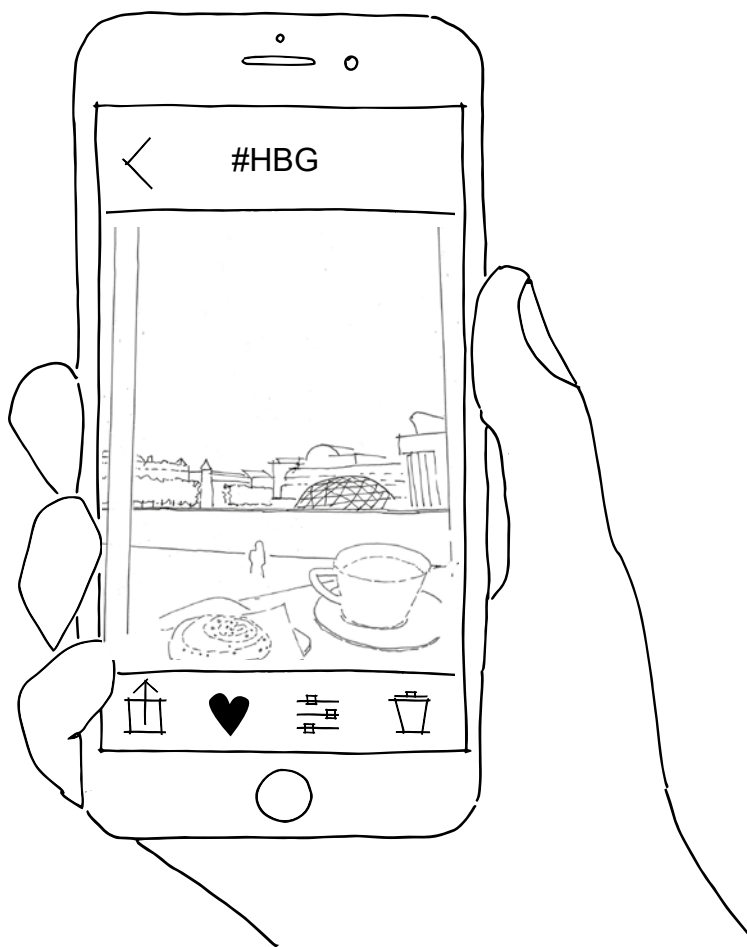


Figure 78 - 2,5 meters above the current sea level would be enough to flood big parts of the inner city



The design proposal is presented as a graphic narrative that takes place in the year 2035, introducing the changed urban fabric of Helsingborg. From the H+ development and the new iconic bridge to the proposed new urban space around Inre-Hammen, to the new conference hall and the Saluhallen.

Bringing together the uncertainties that have shaped this project and communicating the intention of connecting the future Helsingborg and providing an upgrade to what I would name the most important public space one can find within the municipal borders of Helsingborg.

After the graphic narrative there is a chance to create an understanding of the design proposal in more classical landscape architecture visualizations. A plan view, sections and collage-impressions that reflect specific weather moments encountered in Scania's unique climatic conditions. An important aspect to avoid cliché sun, happy people and kids visualizations.

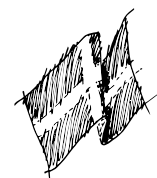
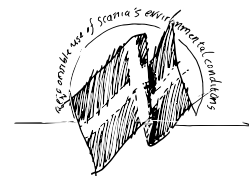
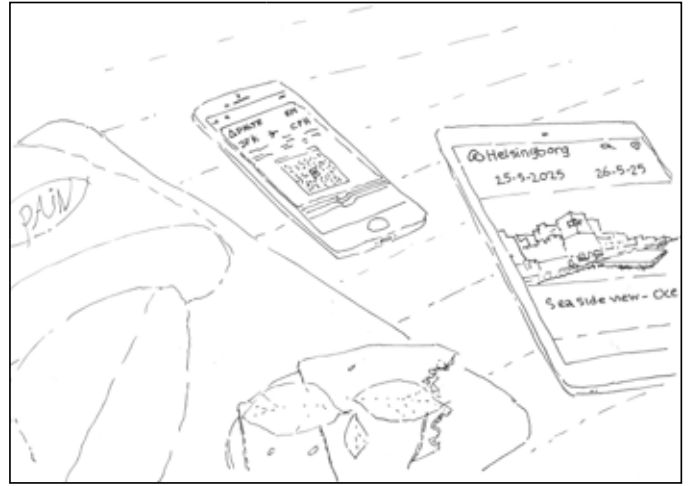


Figure 79 - Concept for a seal that recognizes the use of authentic environmental imagery in Visualizations.

# CLIMATE SUMMIT: #HBG2025

... In the aftermath of the rise of climate change deniers like Donald Trump you feel extra motivated to attend the Climate Summit organized in the Swedish city of Helsingborg...



All prepared, Ticket ready, and booked a lovely apartment with a sea side view! Can't wait to be in Helsingborg...



The trip was a breeze! Zero waiting time...

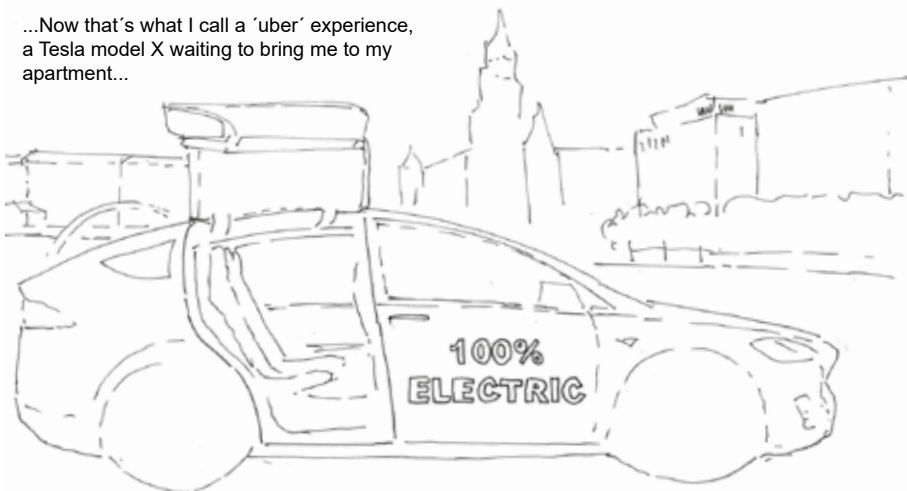


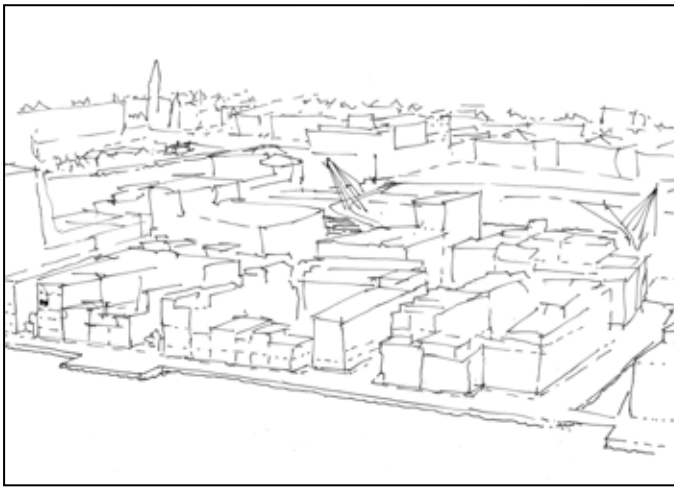
After boosting the carbon footprint it feels better to continue on the train...

...Since it's running late and being exhausted from travelling you book a cab...



...Now that's what I call a 'uber' experience, a Tesla model X waiting to bring me to my apartment...

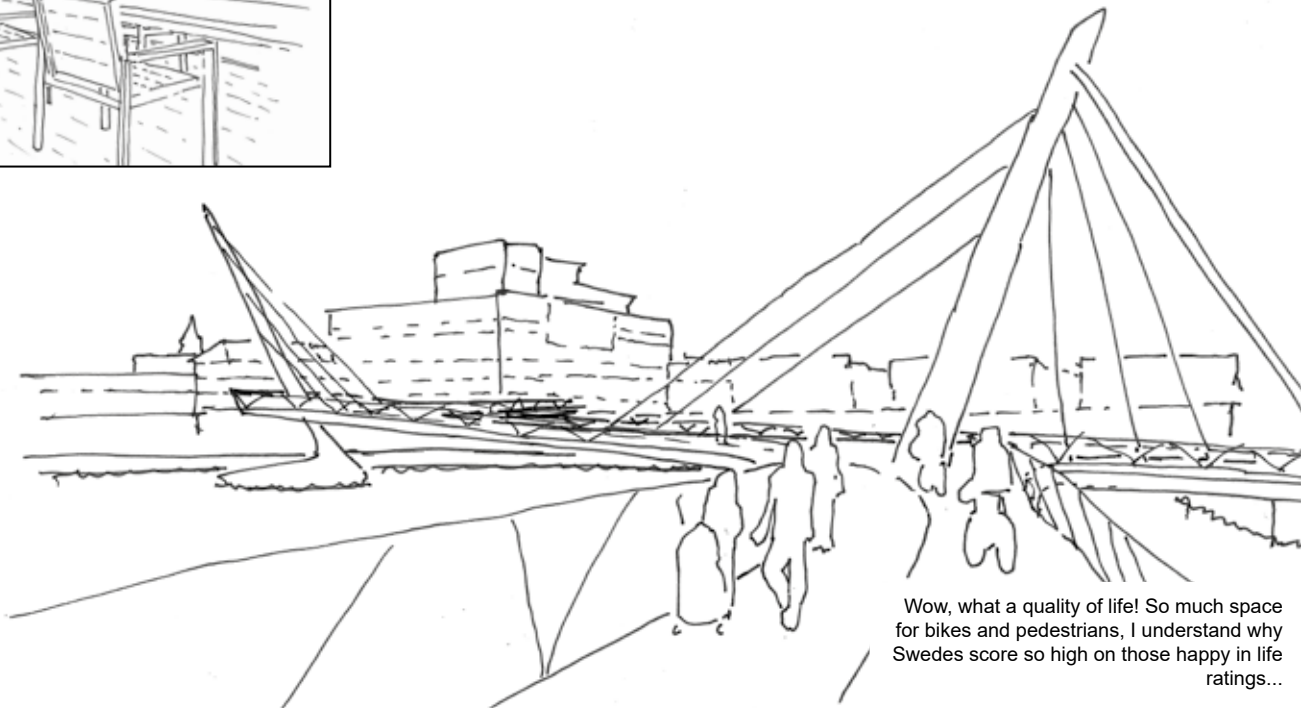




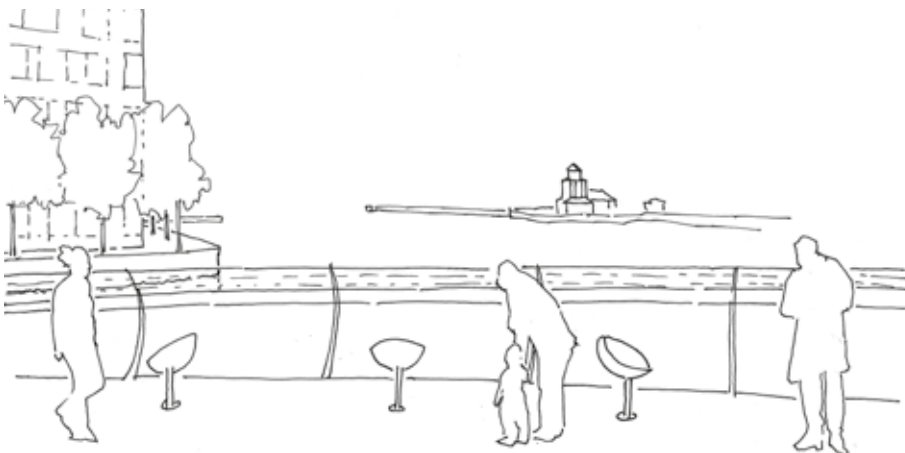
...That was a promising first impression, the historical centre so close to this beautiful new neighbourhood, can't wait to explore the city tomorrow...



What a way to wake up, this is a view I can appreciate, the ad didn't lie about a 'sea side view'... Now that breakfast is done, let's explore this city!

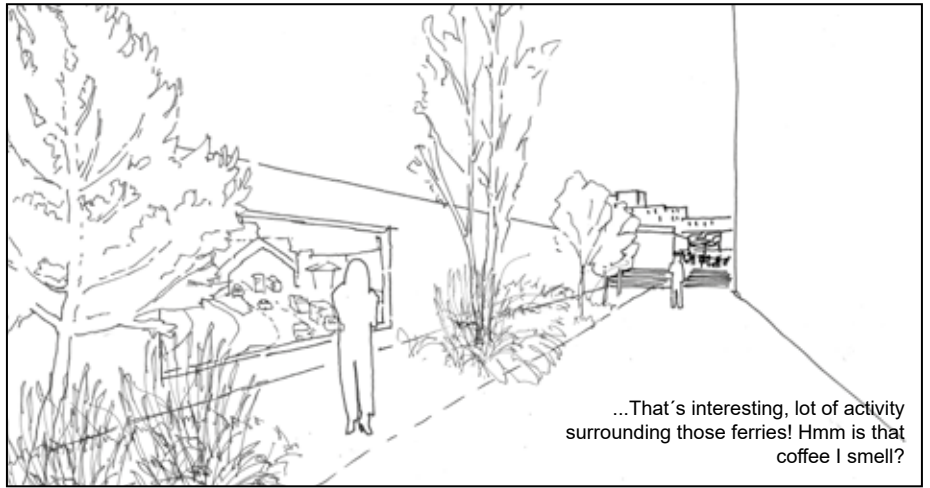


Wow, what a quality of life! So much space for bikes and pedestrians, I understand why Swedes score so high on those happy in life ratings...



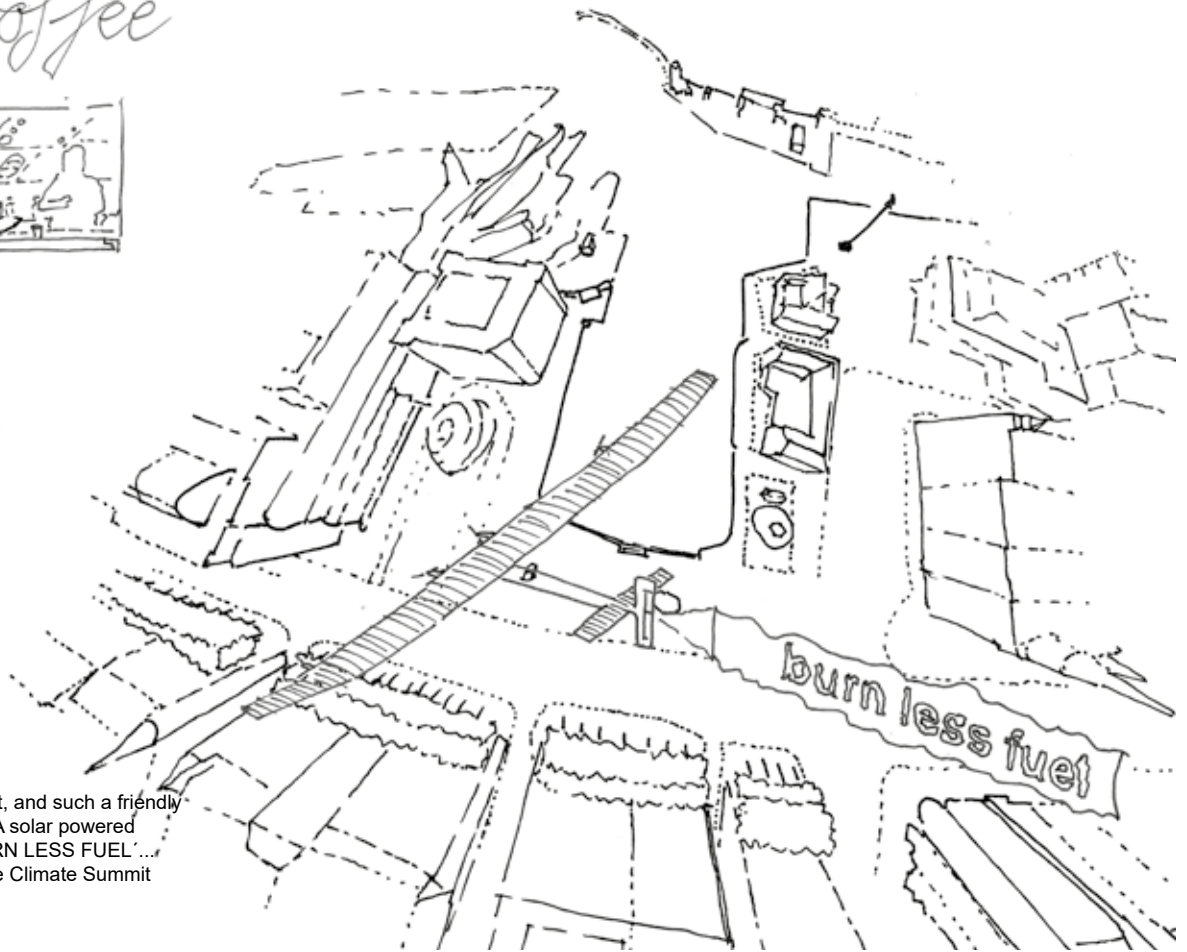
...Perfect walk to the city, beautiful views over the water...



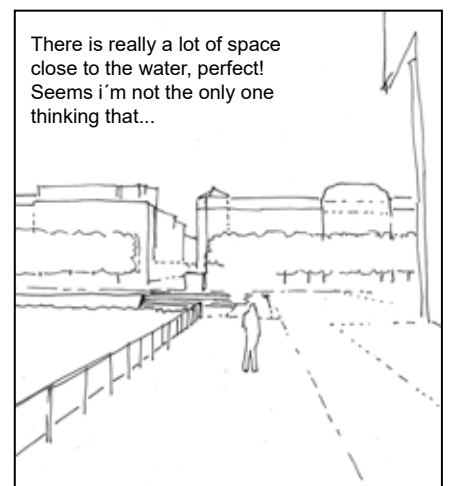


...That's interesting, lot of activity surrounding those ferries! Hmm is that coffee I smell?

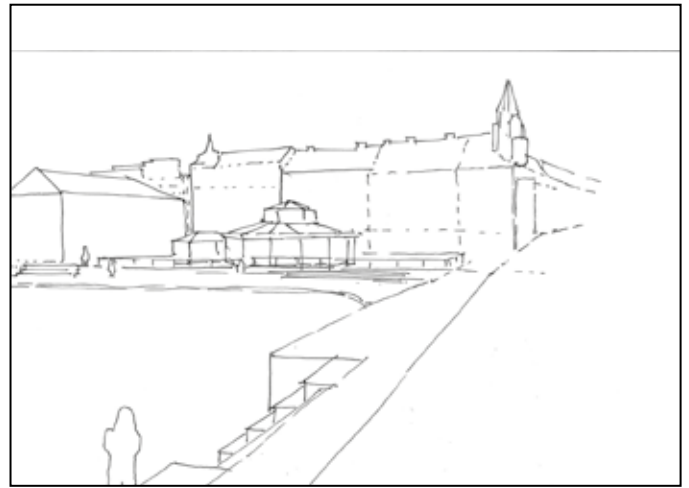
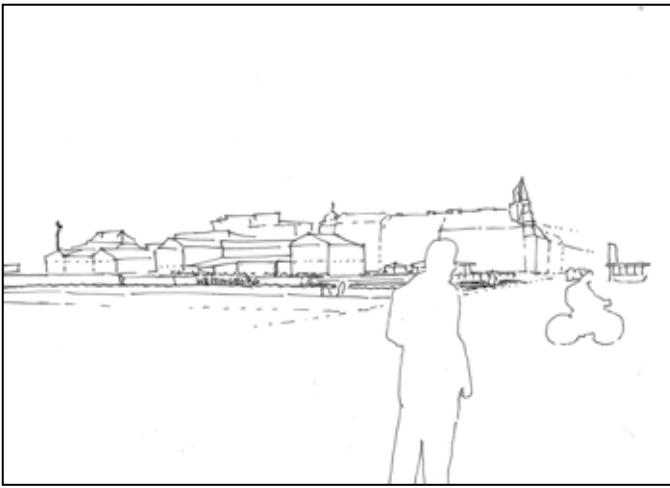
TILLY'S Coffee



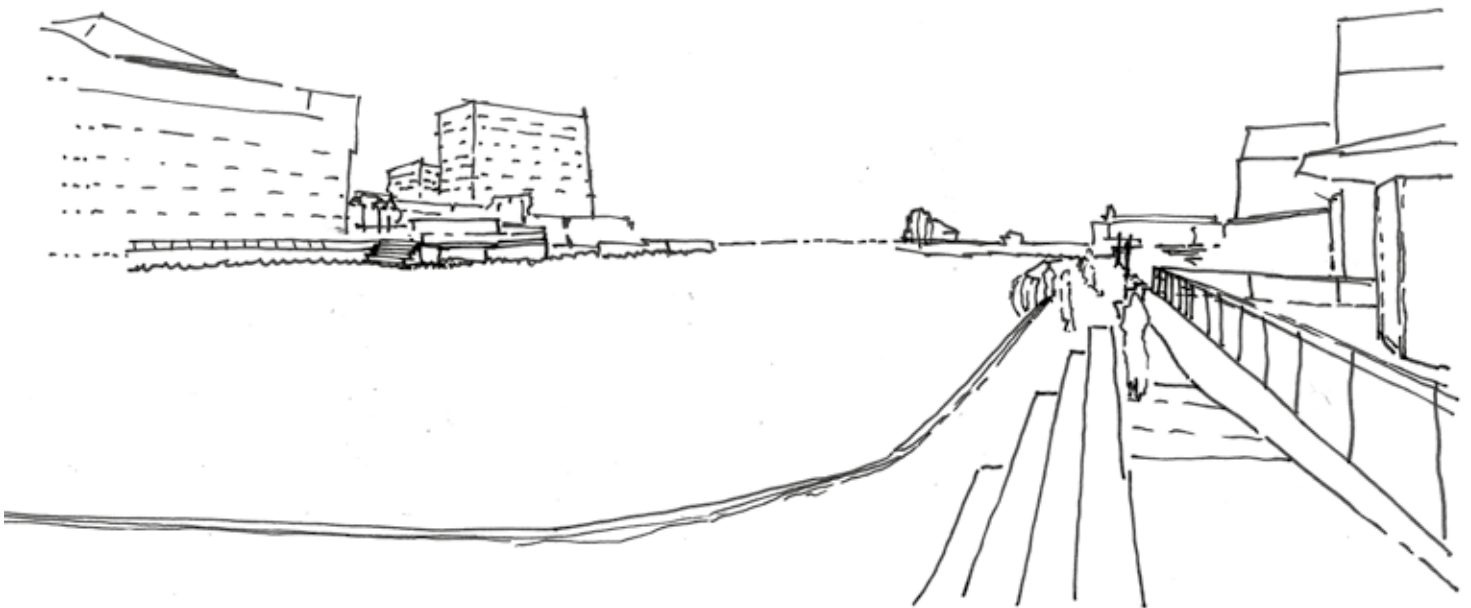
This espresso is perfect, and such a friendly barista!.. What's that? A solar powered drone flies above, 'BURN LESS FUEL'.... That must be part of the Climate Summit #HBG2025, cool!



There is really a lot of space close to the water, perfect! Seems i'm not the only one thinking that...



A nice guy strikes up a conversation, he's also in town for the climate summit. He tells the conference centre is close, about 200 meters from here.. He offers to show the way ``it's behind the 'Saluhallen' just tag along!''... While walking here we agree on what an amazing job Helsingborg has done in working with their waterfront.



Cool new building and what a nice park. In the very centre of the city and so close to the water, love it! Really excited for the summit, it's about to start now...

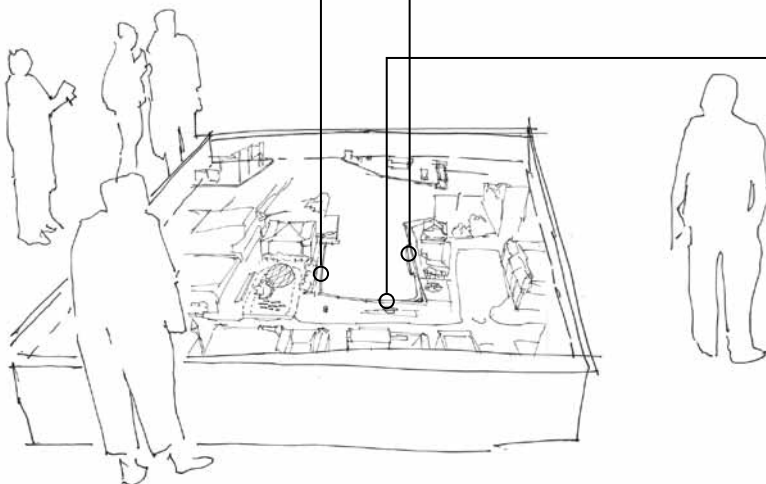
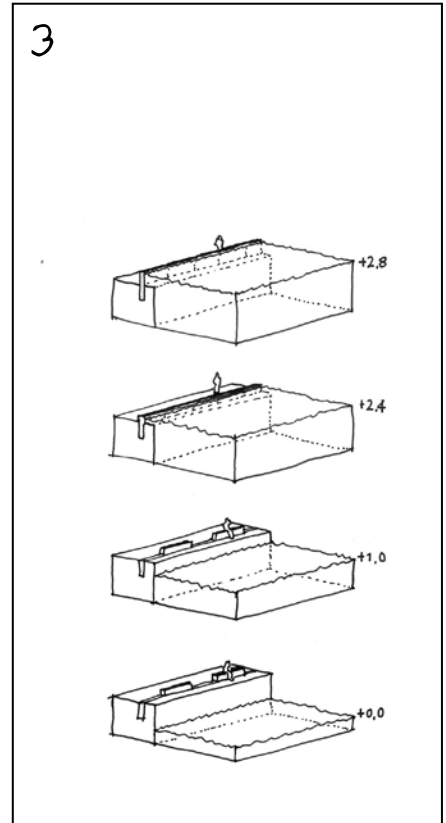
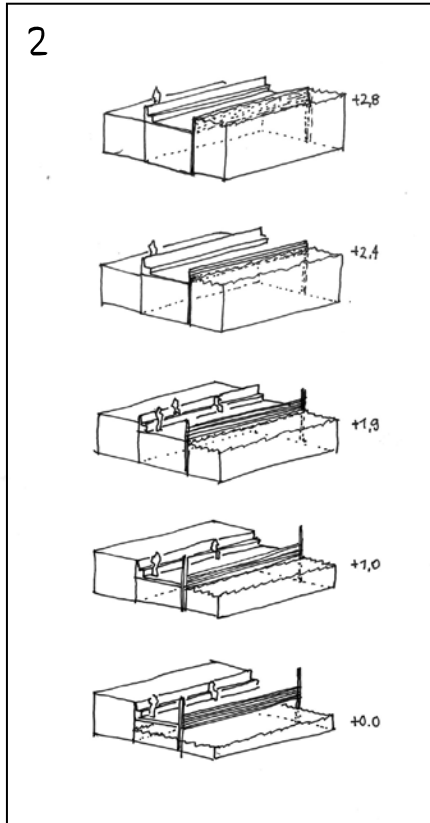
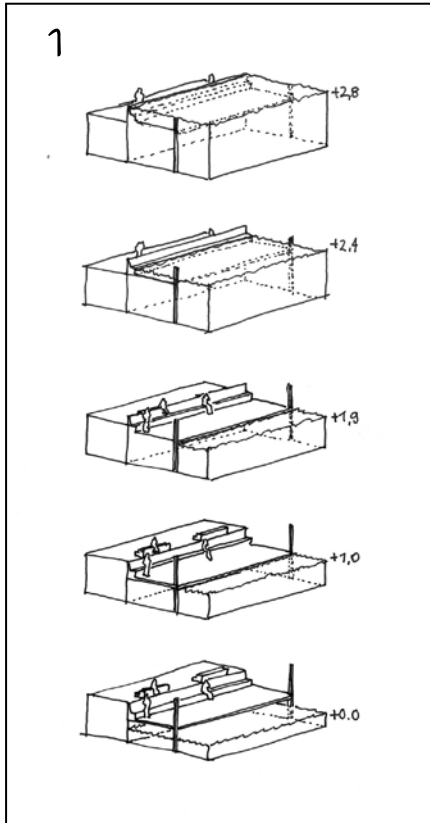
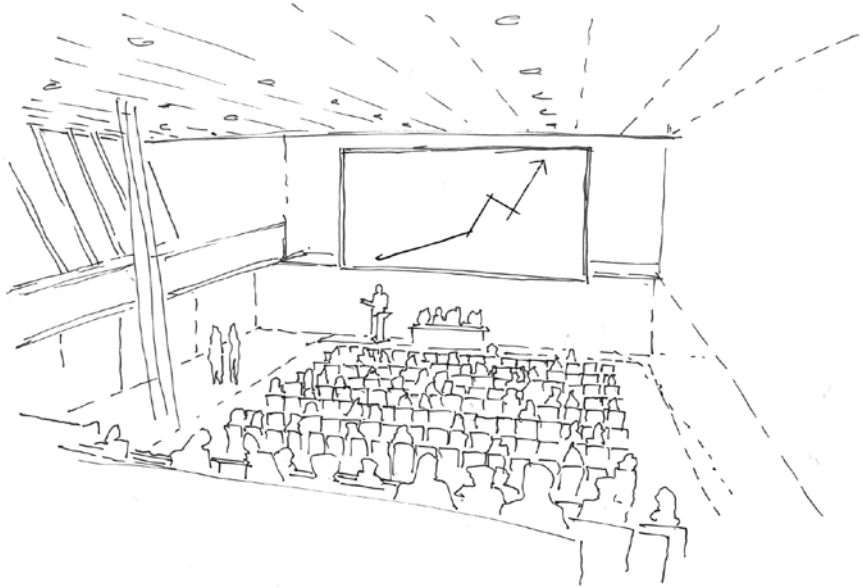


“Welcome to Helsingborg, we’re very glad to have you here and proud to share our way of working with all of you!”

Climate change is really a pressing topic, we have to take action. We, the city of Helsingborg hope to contribute to a better environment and higher quality of life for our inhabitants!

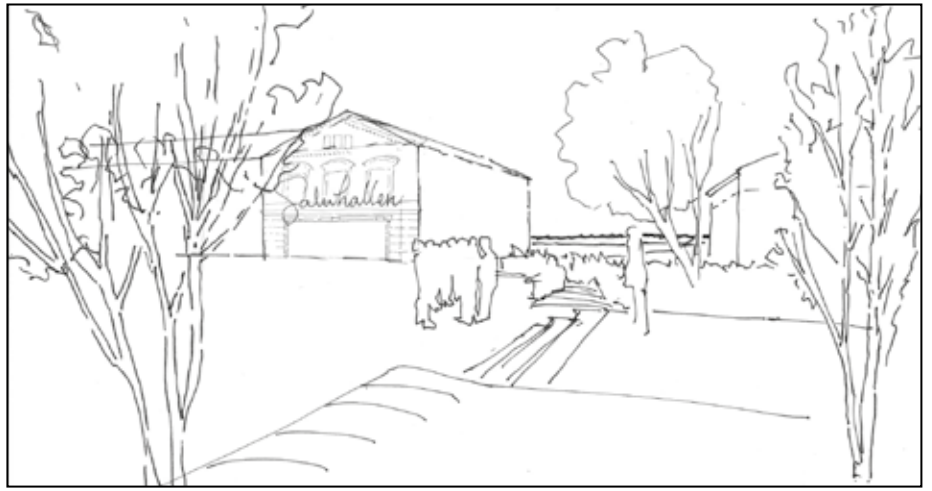
First I would like to take you briefly through the challenges we have faced here in our inner harbour. The historical character and relationship to the water is very important for the image of the city and as a meeting place for the people of Helsingborg. With a predicted rise in sea levels of a meter this place would be lost, unacceptable so we had to take action. We actively looked at a way to preserve and enhance the character of the place; our beautiful city meeting the sea.

We have developed three measures that guarantee the safety of our citizen. All of the solutions make the threat visible and help to raise awareness and show how our relationship to the sea is shifting.”

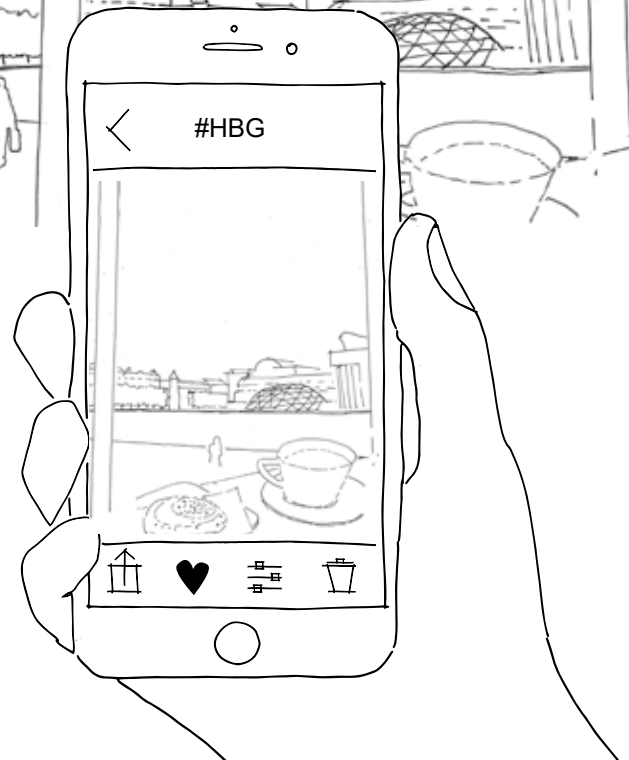
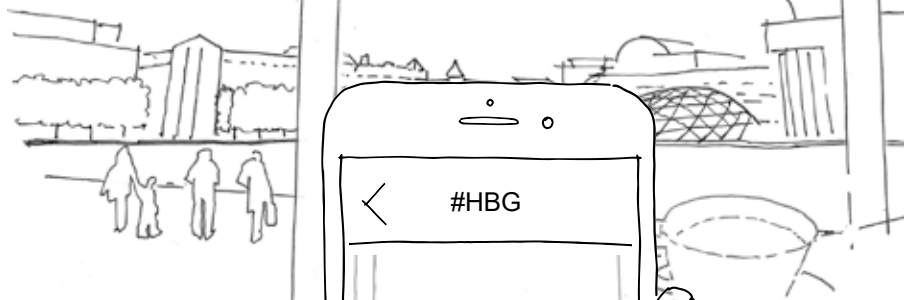


That was an inspiring lecture, now they show this beautiful model which simulates the rising sea levels and the responsive defence measures! (1) A deck that responds to the rising water with a transformable bank for the worst occasions. (2) Another responsive sea deck, but this one is always accessible because of its ship inspired fence. (3) Responsive furniture that transforms to a defence wall during the worst conditions.

..Full of inspiration we decide to try out the 'Saluhallen' my new friend pointed out on the way to the conference... Just opposite of the conference centre, perfect after this long day! What a surprise, the building is filled with food stalls from all around the world, with names that sounds interesting. Spanish tapas from 'Carmen' or fresh Falafel from 'Sara's'...



...That went fast, bye-bye nice harbour! A quick last snap of the city, definitely going to show this to all my friends and colleagues! Now boarding the train to Copenhagen to start my journey home full of inspiration.



Having walked around the site in the year 2035 one notices the big changes that have occurred. The urban fabric has changed drastically. H+, Vågparken and the conference centre are connected to the existing fabric by the transformed Inre Hamnen. The chosen adaptation measures have enhanced the relationship between the city and the ocean. Previously inaccessible areas have been opened to the public. The desire for unprogrammed inclusive public spaces has resulted in a clear surface that defines public space. There has been a choice to limit the commercialisation to the existing locations, the new Saluhallen in the old Tullhuset and a small coffee bar next to the viewing platform with probably the best view on the Rådhus. The additions however make it possible to open up previously inaccessible fenced off areas. The public is winning here. Connecting to the new bridge with a passage that makes it possible to avoid Knutpunkten will bring life to the place. In the next pages a plan, sections, collages and photos of the current existing situation try to communicate these ideas.

Figure 80 - Conceptual sketches presenting the main principles: Embed in new urban fabric, connect to water and enhance visual relationships.



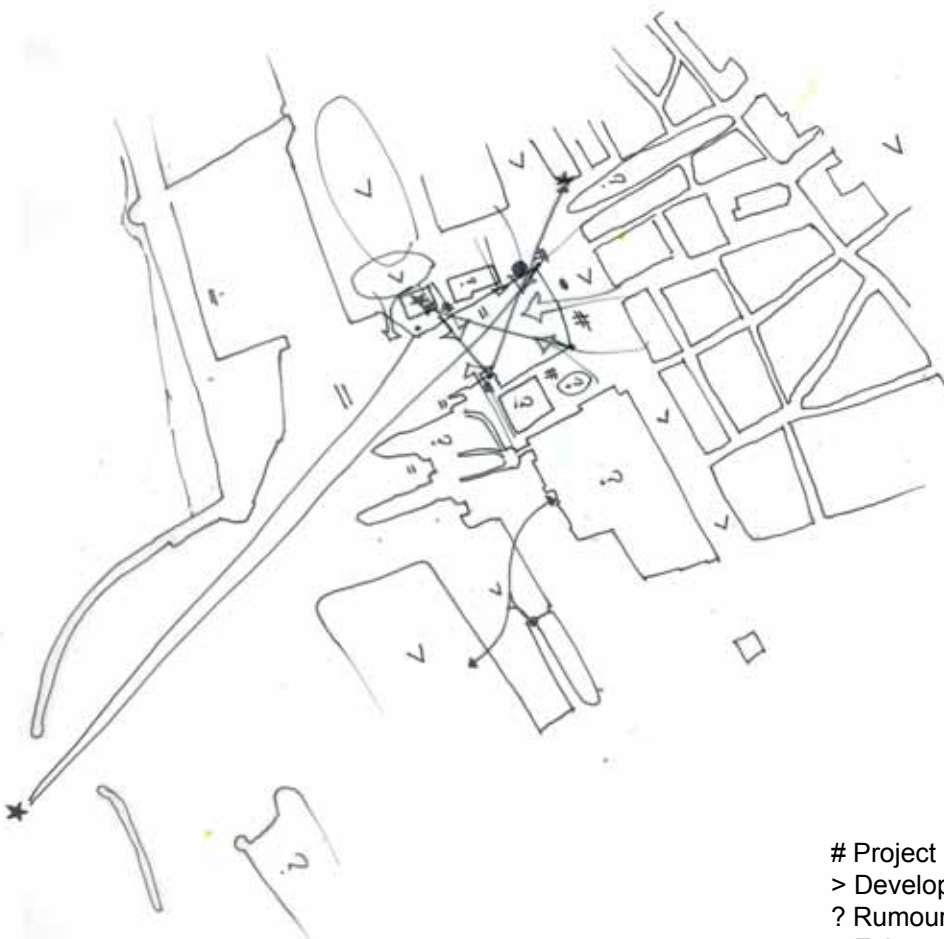
Embed in new urban fabric

Connect to water

Enhance visual relationships



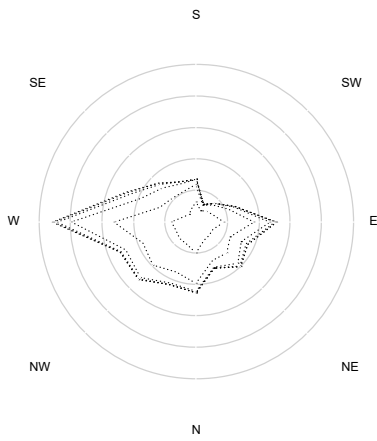
Composite conceptual map



# Project  
> Development/Process  
? Rumour  
= Existent 'challenges'



Figure 81 - Conceptual experience generator, imagening vegetation throughout the year nad lifetime, length of day (approximate), temperatures, wind direction (approximate), amount of rain (approximate) and rainy days(relative) and the wave fluctuations throughout the year (shades of grey)



PS: Pinus sylvestris  
 PA: Prunus avium  
 CA: Corylus avellana  
 LA: Leymus arenarius

RD: Rain days  
 HT: High temperature  
 LT: Low temperature

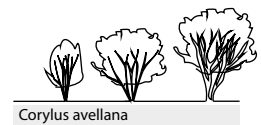
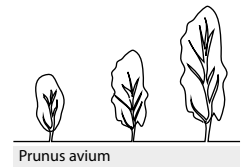
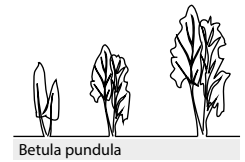
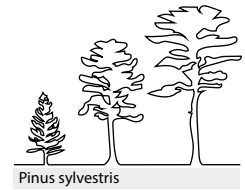
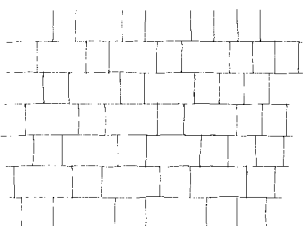
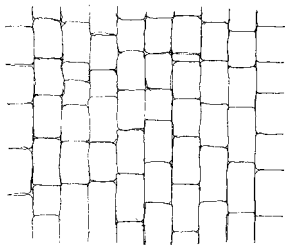
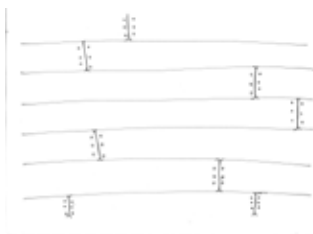


Figure 82 - Material inspiration based on site observations motivated for a limited material palette. Blending in with materials and patterns found on site and near vicinity should embed deep into the urban fabric.



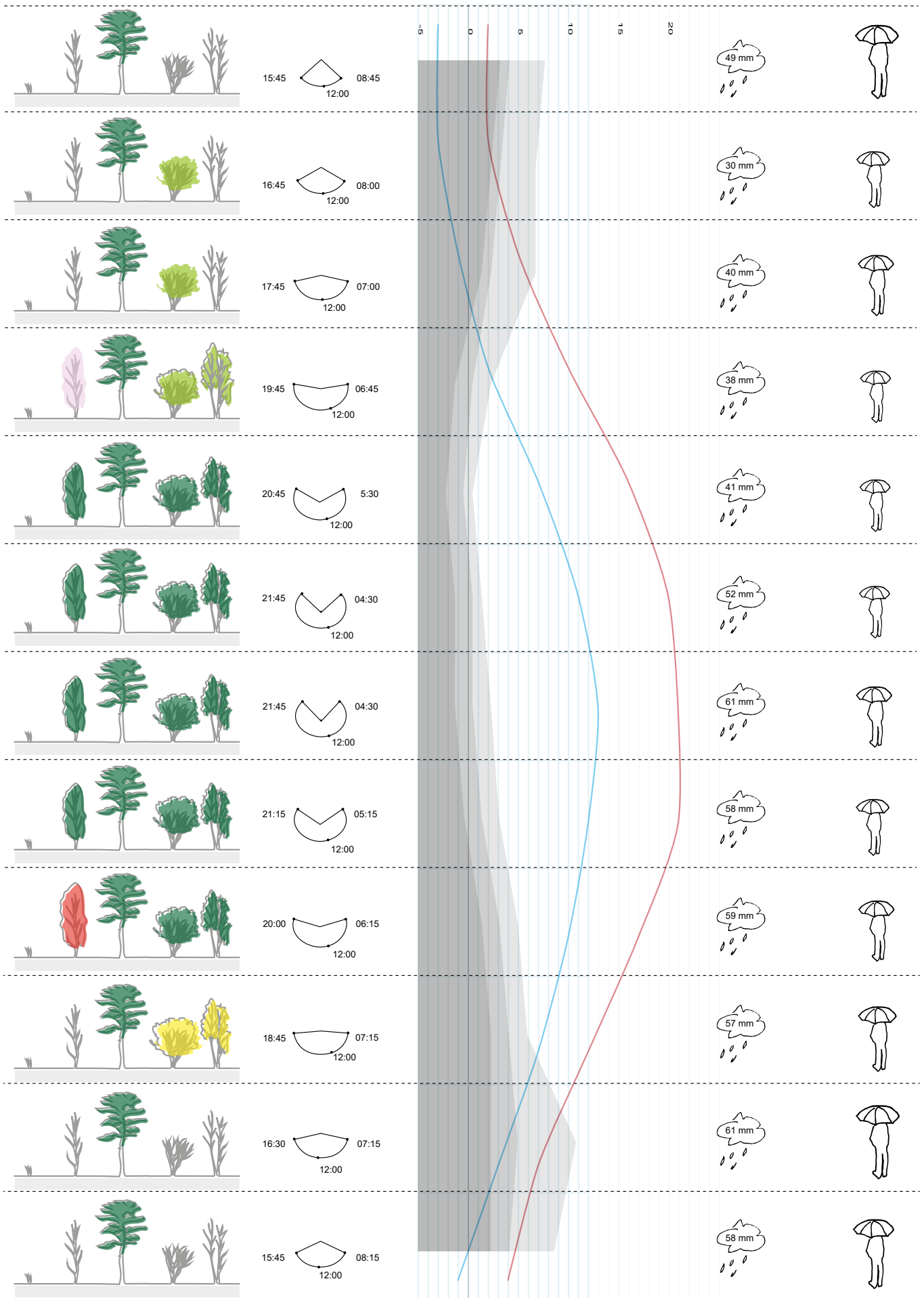
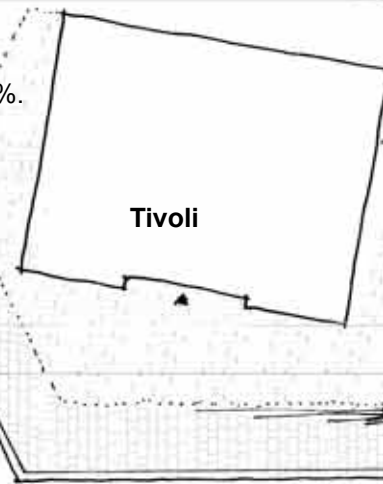


Figure 83 - Plan view of the -ongoing- design process. Drawn in scale 1:400 scaled to 50%.

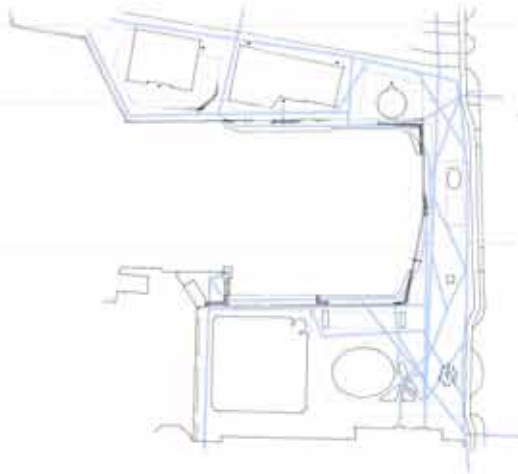
**Programmed versus unprogrammed space**



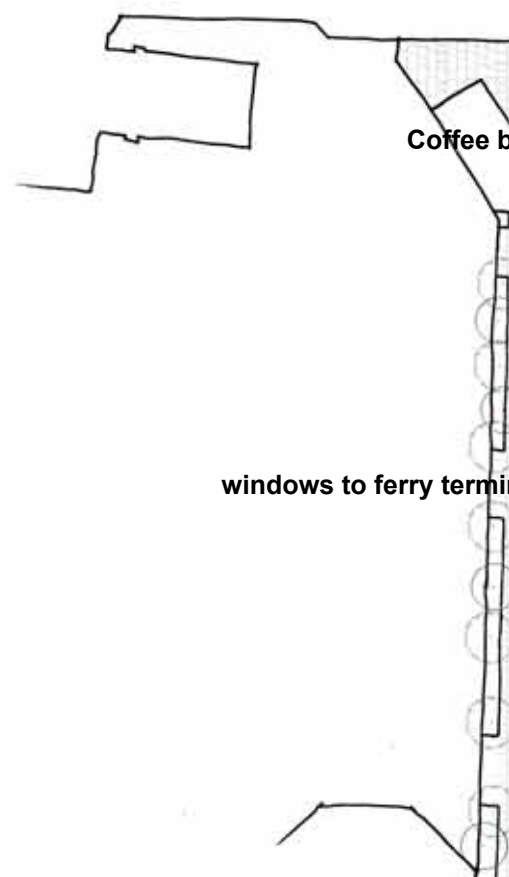
Tivoli



**Potential new movement pattern**



Coffee b

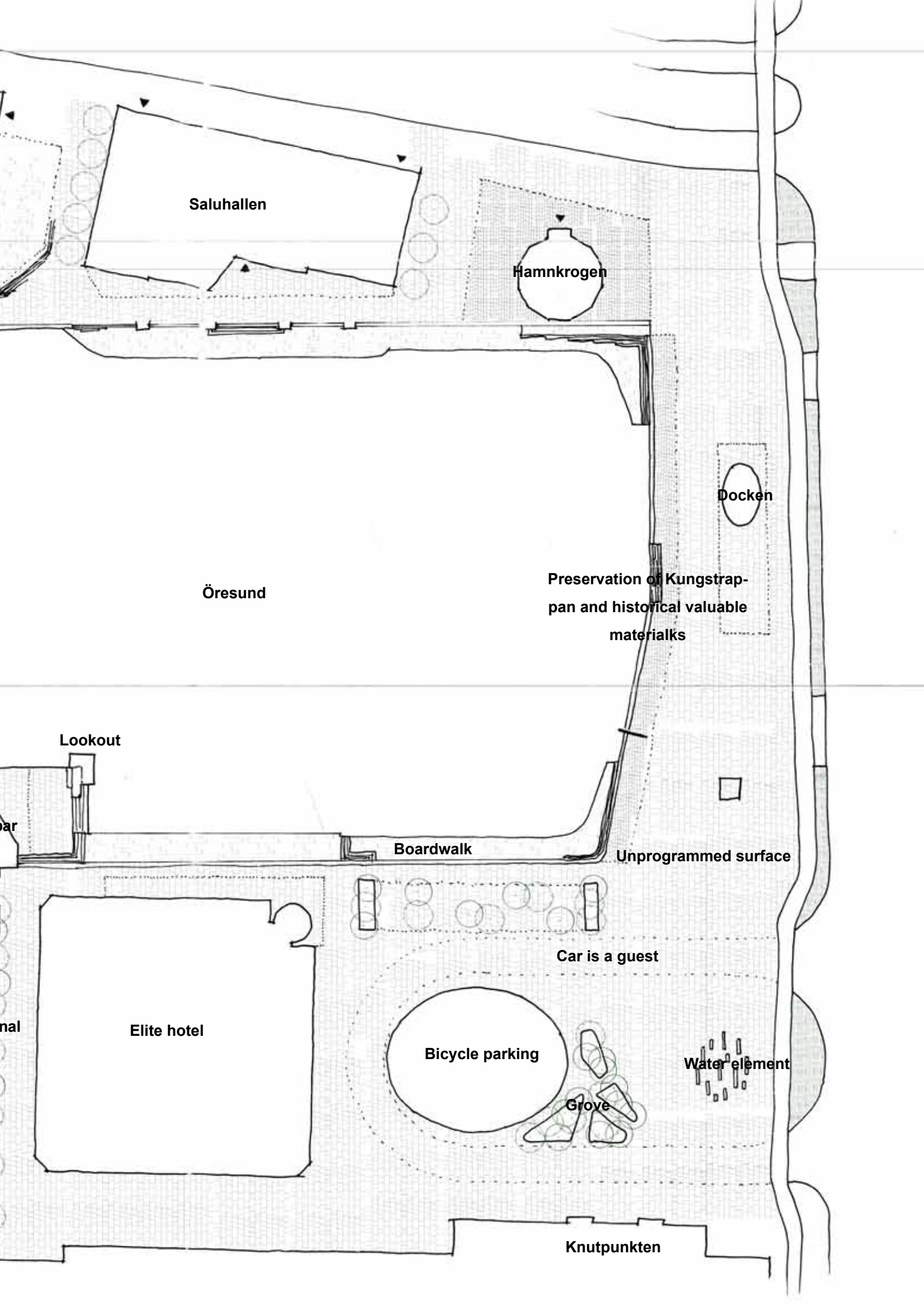


**Location of responsive adaptation measure.**



windows to ferry termi





Saluhallen

Hamnkrogen

Öresund

Docken

Preservation of Kungstrappan and historical valuable materials

Lookout

Boardwalk

Unprogrammed surface

Elite hotel

Car is a guest

Bicycle parking

Water element

Grove

Knutpunkten





Figure 84 - The walk connecting the future bridge to the dock today.



Figure 85 - The walk connecting the bridge to the dock. Windows offer a peek into the working ferry terminal. Perched in between the building and wall this place is a refuge from being exposed at the waterfront. The native vegetation gives a sense of place by its local character indicating seasons.



Figure 86 - View towards Rådhus today. A fenced of area that places the possibility of engaging in this experience out of boundaries.

Figure 87 - A fresh spring day, a coffee on the new viewing platform gives the perfect sight on the Rådhus.

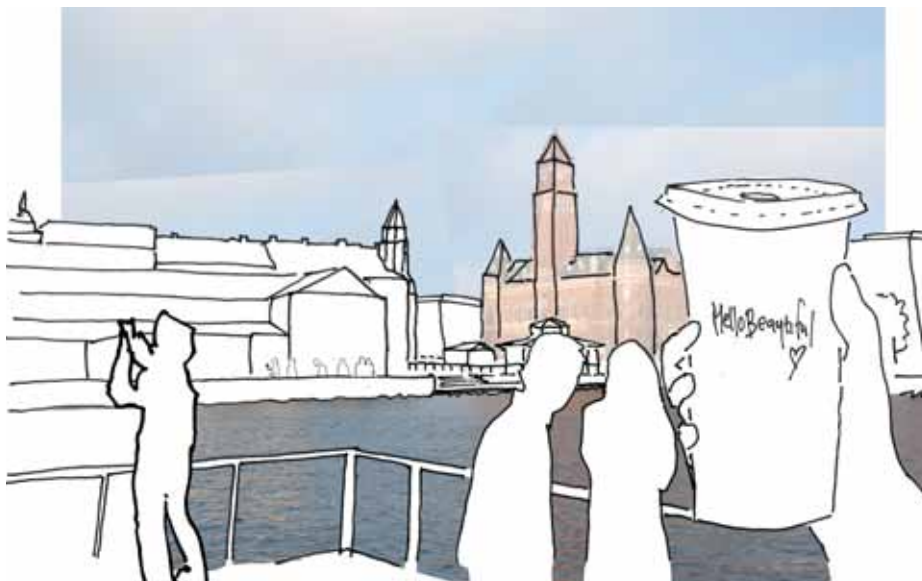




Figure 89 - Situation today. Cramped and narrow, uninviting to the public.

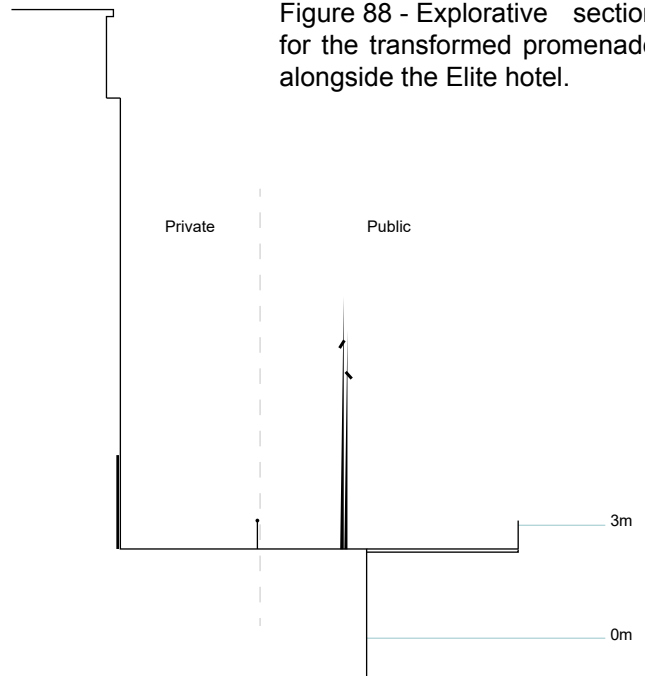


Figure 88 - Explorative section for the transformed promenade alongside the Elite hotel.

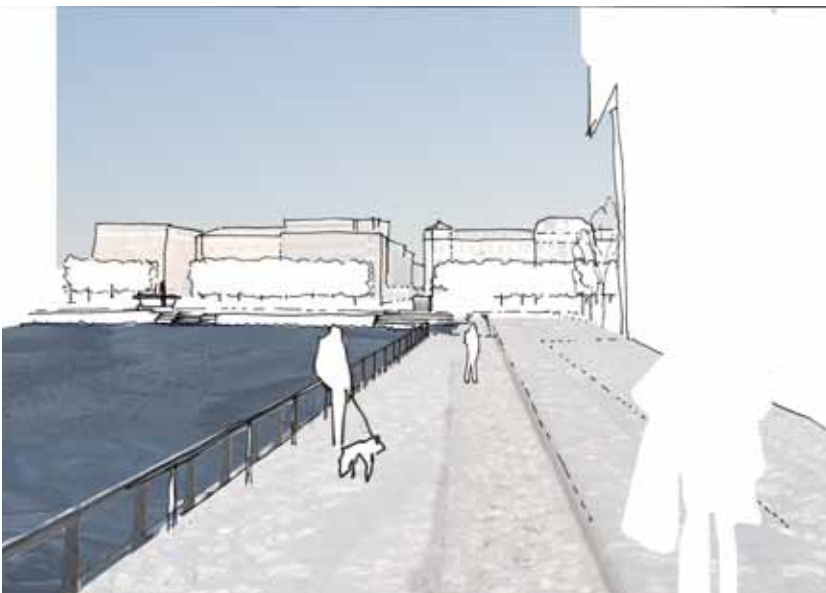


Figure 90 - Situation today. Cramped and narrow, uninviting to the public.





Figure 91 - Kungstorget in todays situation.

Figure 92 - Kungstorget re-imagined. A water feature, vegetation and an enhanced view of the Rådhus welcome you to Helsingborg.



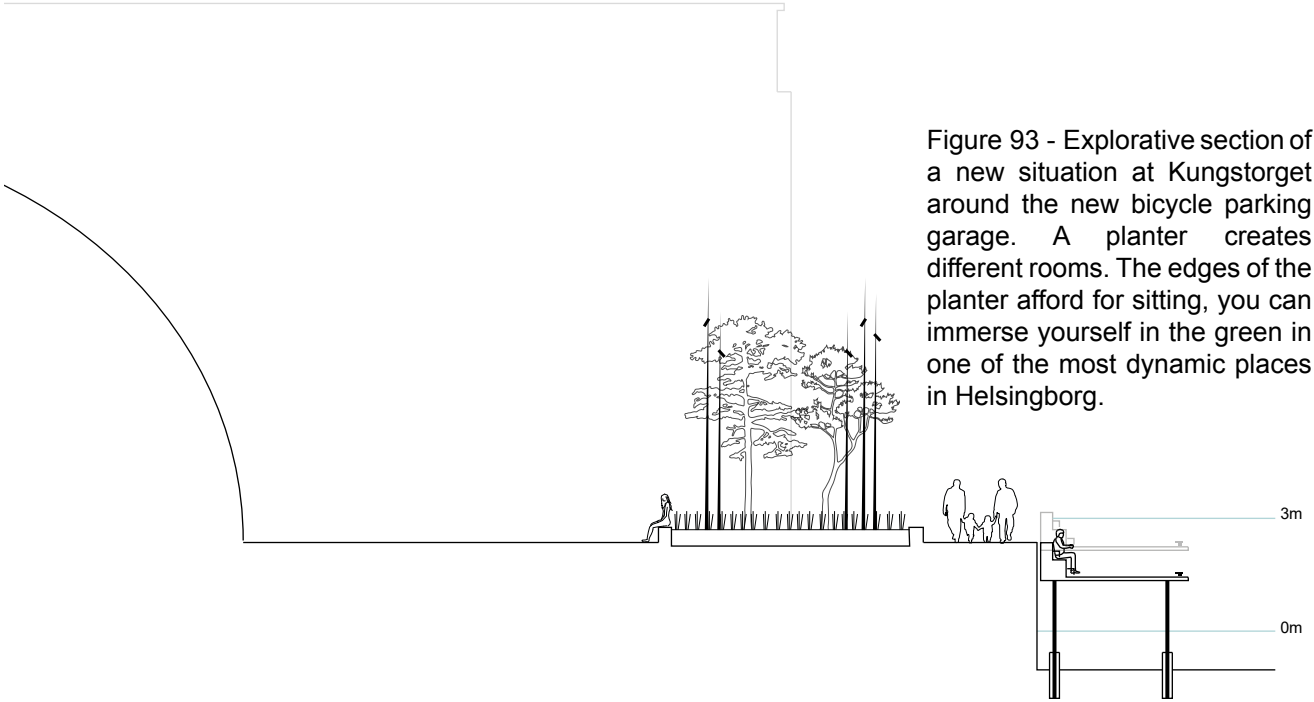


Figure 93 - Explorative section of a new situation at Kungstorget around the new bicycle parking garage. A planter creates different rooms. The edges of the planter afford for sitting, you can immerse yourself in the green in one of the most dynamic places in Helsingborg.

Figure 94 - Kungstorget has an unprgrammed and inclusive character. Allowing for spontaneous acts and gauranteeing acces for everyone.



Figure 96 - Kungstrappan, the widened stairs are defined by new stairs with a contrasting profile compared to the original preserved section. This creates new possibilities to interact with the water.

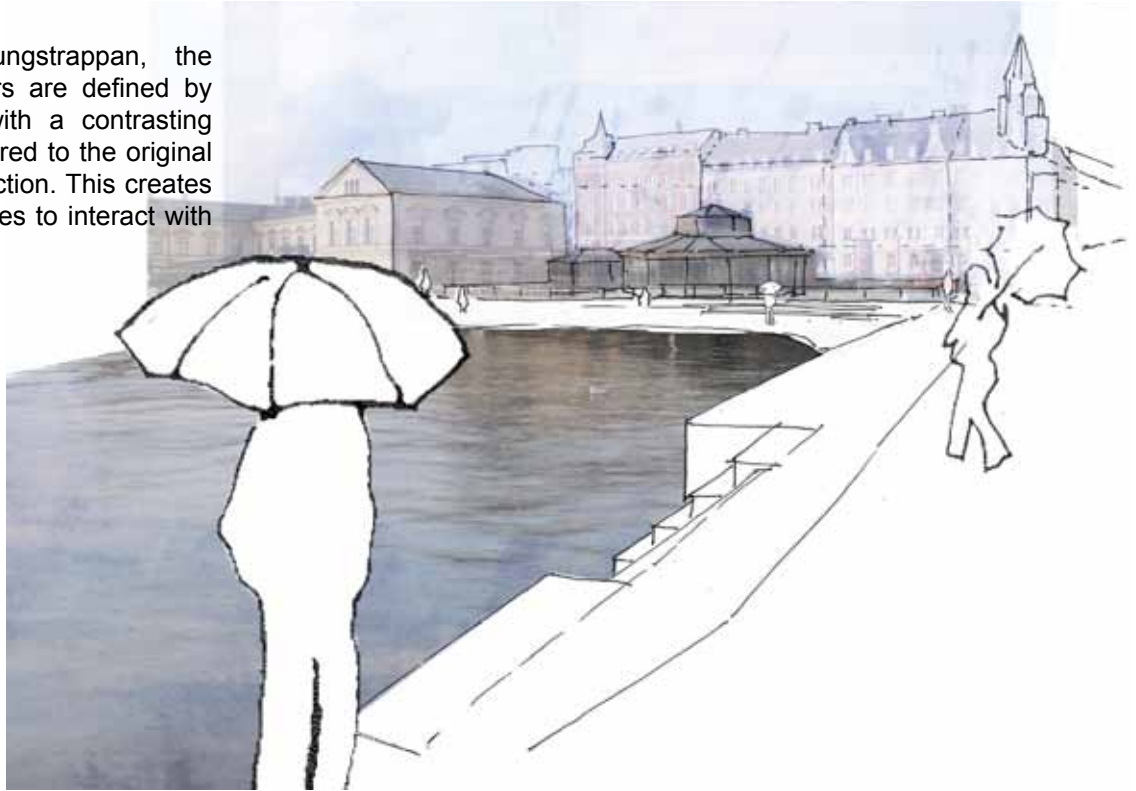


Figure 95 - An explorative section showing the responsive wall type of adaptation intervention. The planter on the far right divides Järnvägsgatan from the public space.

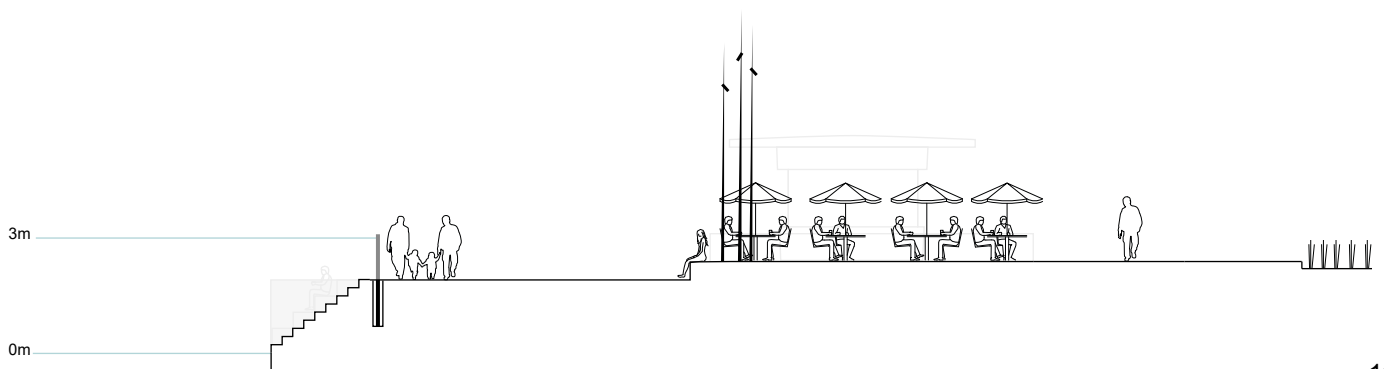


Figure 98 - Explorative section highlighting a responsive self-powered concept.

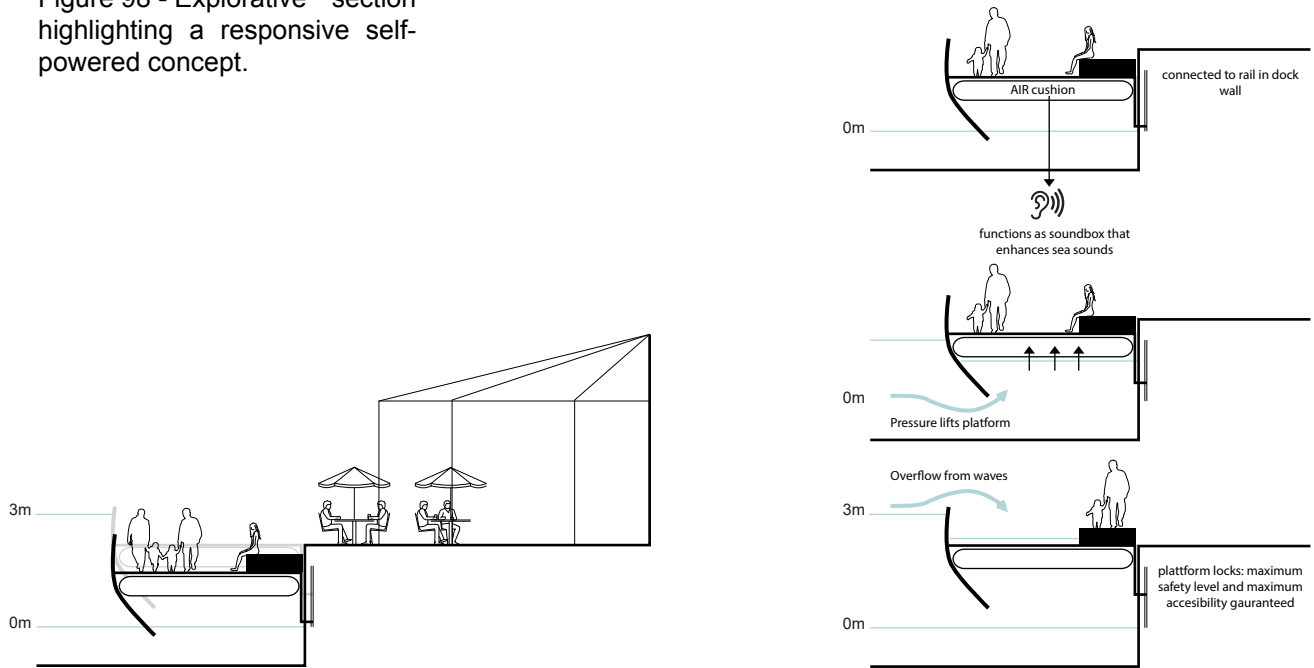


Figure 97 - A fresh day in spring brings out the people. The new promenade allows for intimate contact in a place that was previously out of reach for the public.



Figure 99 - The cherries are blossoming. A small meeting places melts the existing promenade and newly created promenade together

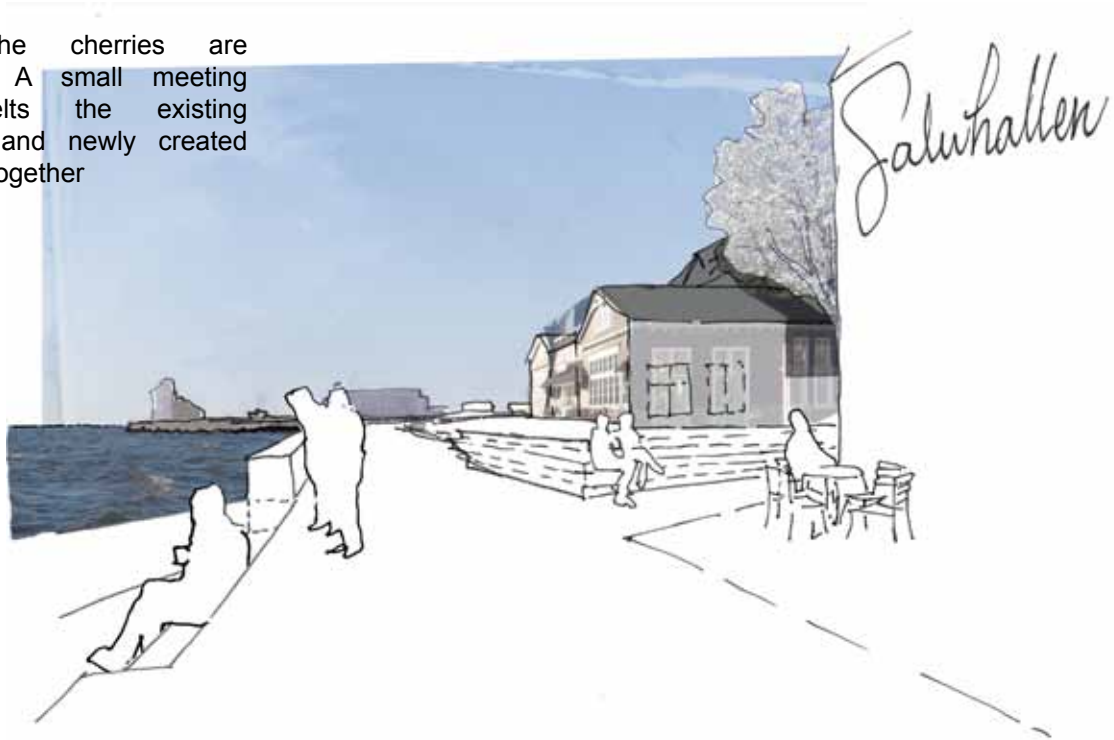
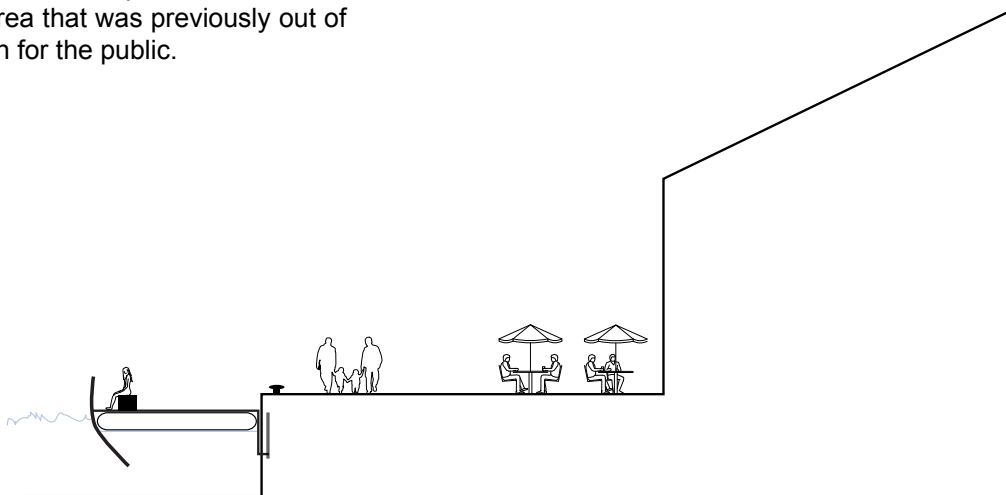


Figure 100 - Explorative section of an area that was previously out of reach for the public.



## **5.2 Reflection**

### **Reflecting on Inre Hamnen**

Within this project the self-formulated aim has been to work from the site. The site has been the main inspiration for the design proposal and this thesis report. Finding a method that allows for subjectivity while pursuing objectivity proved intriguing. The application and communication of this method within the practical context of a department within a municipality and the academic world challenged expressed and especially unexpressed expectations. The intuitive notions created a sense of mystery around the body of work. Directions could change overnight depending on fascination and the activities it triggered. In most stages the communication of the work was a process rather than an (to be) refined end product and was met with mixed responses. These reactions were continuously synthesized and channeled into the design process. This has been an important element of the process itself, not positioning oneself above as an expert-designer but rather a learning mediator.

### **Atmosphere**

Working on site extensively allowed for elaborated reading of the site. Talking to locals, testing out design ideas but most important experiencing the site at different times in different weather conditions. In the optimal situation experiencing the site for a year would have been desirable. The limited time frame of this thesis however meant it was limited to the winter season. Prevalent in all conditions however was the presence of the sea, sky and the grand buildings that frame the site. All factors that define the site are designated as out of the designated physical boundaries of the site. This proved challenging; how can one develop and communicate a design that enhances that what is found outside of the sites limits? As a landscape architect it feels natural to place a site into a wider context. Recognizing tangible and intangible contexts often invisible to the untrained eye by dissecting the many layers that are present within a site. Very present in understanding the uniqueness inherent to a waterfront site. Waterfront sites are places for unorganized, spontaneous and most importantly ever-changing

activities. It also serves as a place where one can have explorative encounters with water. These uses are conflicting with the development spurt going on in water-bound sites. Further challenged by climate change which imposes hard safety demands to protect civilizations most precious assets. Resulting in many clinical waterfronts that overlook a sites unique qualities and cater to safety and development goals.

## **Water**

As a design material water is one of the most complex available. Appearing desirably in controlled in the form of a fountain or undesirably as a flood caused by the changing climate. A beloved somewhat unpredictable and sometimes even feared material. Shaping our livelihoods by defining access to drinking water and wiping out civilization where land-water relationships are out of balance. Water transcend multiple scales both in a physical and psychological way. We associate and relate to water in very personal ways. By representing both life and death people have very different and strong experiences. The dynamic character of water can be attributed to the fact that it has no shape and color by itself, it is a product of its surroundings. When working with water you are working with the surroundings. This will define the level of success in an intervention. You could say water is one of the most site-specific materials available.

## **Legacy**

The design proposal is a result of this process. A humble proposal that focuses on creating spatial connections and preserving visual connections. Using the challenge of climate change as a unique possibility to upgrade a neglected site that in its current form has passed its expiry date. While working with the many uncertainties that surround the site it became clear that the success of this intervention would largely be defined by them. The impact of all the uncertainties proves hard to predict. By sticking to the essence of the site, the presence

of the sea and the sky. There is room left for uncertainties to crystallize into certainties. A flexible design that allows for further adaptations that hopefully extends the legacy of the place into the far future.

### **Reflecting on my work**

Within the thesis there have been two intertwined lines of work. A continuing design process in conjunction with Fredrik Hellström which was temporarily paused to individually compose a written report. Both of us have chosen an individual way to use the design process as input for the written report. This temporary pause allows us to place the work into a context, associate and visualize freely in an exploring way that will shape the final step of the design process and result in a design proposal for the site that is to be presented to the municipality in Helsingborg.

The four trace concepts (Giro, 1999) was initially employed by me as a method to put words to the ongoing design process. The method suited the desire of working on site intensively, being there physically to create a thorough understanding of the site. An intrinsically motivated decision grounded in respect for the existing and forgotten opposing the extreme tabula rasa approach. Found some time into the project the method over time started to shape the process and especially my way of thinking. To such a large extent that it ended up forming the framework for this report.

### **Four traces**

Having transcended through the four phases sketched by Giro the method poses I would like to reflect on the method. As discussed the method is defined loosely it does not present a step by step guide on how to work in each of the phases. It describes a certain mindset and desired outcome (open chance). By employing this method it was possible to experiment with a wide variety of more defined analysis and communication methods that seemed suitable within a certain phase



and it is respective time. This allowed to work on, with and from the site. Within an academic context this method can flourish affording the tools and mindset to approach a project. I would speculate that the time aspect and infrastructural complications faced in the competition or practical world will most likely not allow for this method to be used to its optimal extent.

Having experimented with this method contributed to my understanding as a landscape architect of the importance of the element of chance within a design process. The importance of being on a site at least once, keeping in mind the value of first encounters. This method has helped me to work from intuition and fascination and accepting that different activities yield different outcomes that generate new activities and new outcomes. Immersing in a process without knowing the destination generated a respect for a site. It is prevented oversimplifying and directed attention to the legacy of a place and how a transformation should contribute to it.

### **Fascination**

The method was a tool that helped to identify with a site as a designer in conscious way. Following intuition, allowing chance and employing all senses are key. Investigating water as a design material helped to build understanding of the unique character of the site and the importance of our relationship to this material. A relationship challenged by climate change and spatial developments. The land and sea interface is one of the most interesting and challenging topics I have been familiarizing myself with during my education.

### **Graphic narrative**

The earlier mentioned dynamics of presenting and communicating a process rather than a place has resulted in a fascination to find a way to communicate this. Towards the end this fascination has crystallized into employing a graphic narrative as a tool to communicate the many uncertainties. As a tool it allowed for an abstraction level which suited the many projected changes which sketched an unclear future for the context of the site.

The aim of the chosen style was to allow the recipient to freely associate. A tool to steer a spatial discourse into the direction of enhancing the relationship to the water rather than further fragmentation of the space by over programming. The exact materialization or spatial composition is carefully decided to be of less importance to the overall experience. By realizing access to this truly unique waterfront we come as close to the essence of the experience of the site.

### **Intertwining objectivity and subjectivity**

By dividing work in a different way between time spent theoretical grounding, on-site analysis, dialogues with professionals municipality and testing out different design solutions the project could have been grounded more firm in a theoretical base. Within this specific project an emphasis has been on allowing space for an intuitive approach to accommodate a proposal grounded firmly on what the site has given. Finding a balance between objectivity and subjectivity is a major challenge within landscape architecture. Dealing with perceptions and emotions outed in opinions can claims on public space. A space that is threatened by processes of which some can be expressed in facts and figures while others remain hard to grasp for scientists and the general public.

In the future I will carry this site-specific thinking with me and be wary of the personal tone linked to perceiving a place and transforming it. The last phase of the design proposal will benefit from these insights. In communicating site-specificity through word and image it is possible to respect a site for what it is and make humble gestures that employ tangible and intangible elements to create new experiences.

## References

- Braae, E., & Diedrich, L. (2012). Site specificity in contemporary large-scale harbour transformation projects. *Journal of Landscape Architecture*, 7(1), 20-33.
- Brown, R. D. (2011). Ameliorating the effects of climate change: Modifying microclimates through design. *Landscape and Urban Planning*, 100(4), 372-374.  
doi:http://dx.doi.org/10.1016/j.landurbplan.2011.01.010
- Burmil, S., Daniel, T. C., & Hetherington, J. D. (1999). Human values and perceptions of water in arid landscapes. *Landscape and Urban Planning*, 44(2), 99-109.
- Chemetoff, A. (2009). *Alexandre Chemetoff Visits: Town and Territory: Architecture in Dialogue*: Birkhäuser.
- Church, J. A., Clark, P. U., Cazenave, A., Gregory, J. M., Jevrejeva, S., Levermann, A., . . . Nunn, P. D. (2013). *Sea level change*. Retrieved from
- Corner, J. (1999). *Recovering landscape: Essays in contemporary landscape theory*. New York: Princeton Architectural Press.
- Cullen, G. (1971). *The concise townscape*: Routledge.
- Daamen, T. A., & Vries, I. (2013). Governing the European port-city interface: institutional impacts on spatial projects between city and port. *Journal of Transport Geography*, 27, 4-13.
- Dreiseitl, H. (2001). Water is universal. In H. Dreiseitl (Ed.), *Waterscapes: planning, building and designing with water*. Basel: Birkhäuser.
- Eliasson, I., Knez, I., Westerberg, U., Thorsson, S., & Lindberg, F. (2007). Climate and behaviour in a Nordic city. *Landscape and Urban Planning*, 82(1-2), 72-84.  
doi:http://dx.doi.org/10.1016/j.landurbplan.2007.01.020
- Geiger, W. F. (2001). Think global, act local. In H. Dreiseitl (Ed.), *Waterscapes: planning, building and designing with water*. Basel: Birkhäuser.
- Girot, C. (1999). Four trace concepts in landscape architecture. In J. Corner (Ed.), *Recovering landscape: essays in contemporary landscape architecture* (pp. 59-68). New York: Princeton Architectural Press.
- Hallegatte, S., Shah, A., Brown, C., Lempert, R., & Gill, S. (2012). Investment decision making under deep uncertainty--application to climate change.
- Hoyle, B. (2000). Global and local change on the port-city waterfront. *Geographical Review*, 90(3), 395-417.
- Hylar, S. (2013). Invisible lines crossing the city: Ethnographic strategies for place-making. *Culture Unbound: Journal of Current Cultural Research*, 5(3), 361-384.
- Høyer, S. A. B. (1999). Things take time and time takes things. In J. Corner (Ed.), *Recovering landscape: Essays in contemporary landscape theory* (pp. 68-77). New York: Princeton Architectural Press.
- Latz, P. (2002). The idea of making time visible. In T.-E. L. Magazine (Ed.), *About Landscape* (pp. 77-82). Munich: Callwey.
- Lenzholzer, S. (2013). *Het weer in de stad: hoe ontwerp het stadsklimaat bepaalt*: Nai 010 Uitgevers/Publishers.
- Loidl, H., & Bernard, S. (2003). *Opening Spaces: Design as Landscape Architecture*. Basel: Birkhäuser.
- Moore, K. (2010). *Overlooking the visual: Demystifying the art of design*: Routledge.
- Nillesen, A. L. (2014). Improving the allocation of flood-risk interventions from a spatial quality perspective. *Journal of Landscape Architecture*, 9(1), 20-31.
- Norberg-Schulz, C. (2007). "The Phenomenon of Place". In M. Larice & E. Macdonald (Eds.), *The Urban Design Reader* (pp. 125-137). London New York: Routledge.
- O'Brien, C. (1997). Form, function and sign: signifying the past in urban waterfront regeneration. *Journal of Urban Design*, 2(2), 163-178.
- Palmboom, F. (2010). *Drawing the Ground—Landscape Urbanism Today: The Work of Palmhout Urban Landscapes*: Walter de Gruyter.
- Prominski, M., Stockman, A., Zeller, S., Stimberg, D., & Voermanek, H. (2011). River, space, design: planning strategies, methods and projects for urban streams. Basel: Birkhauser Architecture.

- Riahi, K., Rao, S., Krey, V., Cho, C., Chirkov, V., Fischer, G., . . . Rafaj, P. (2011). RCP 8.5—A scenario of comparatively high greenhouse gas emissions. *Climatic Change*, 109(1-2), 33.
- Schultz, H. (2014). Designing large-scale landscapes through walking. *Journal of Landscape Architecture*, 9(2), 6-15.
- Schwenk, W. (2001). Water as an open system. In H. Dreiseitl (Ed.), *Waterscapes: planning, building and designing with water* (pp. 106-107). Basel: Birkhäuser.
- Sherfey, P. (2011). Managing Otherness: Segregation, sociality, and the planning of a sustainable Helsingborg.
- SMHI. (2014, 2015-02-12). Vad är RCP? Retrieved from <http://www.smhi.se/klimat/framtids-klimat/vagledning-klimatscenarier/vad-ar-rcp-1.80271>
- stad, H. (2010). H+ Stigande havsnivå Sårbarhetsanalys och förslag på anpassningsåtgärder för stigande havsnivåer i tidsperioden 2010-2100.
- stad, H. (2011). Imagine Helsingborg: var med och forma centrala södra Helsingborgs framtid H+ manual: H+ kontoret, Helsingborgs stad.
- stad, H. (2012). PM Klimatanpassning.
- stad, H. (2016). SLUTRAPPORT – KLIMATANPASSNING AV HELSINGBORGS STAD.
- Stevens, Q. (2009). Artificial waterfronts. *Urban Design International*, 14(1), 3-21.
- Treib, M. (1999). Nature Recalled. In J. Corner (Ed.), *Recovering landscape: Essays in contemporary landscape theory* (pp. 29-43). New York: Princeton Architectural Press.
- TripAdvisor. (2017). Top 10 things to see in Helsingborg.
- White, M., Smith, A., Humphries, K., Pahl, S., Snelling, D., & Depledge, M. (2010). Blue space: The importance of water for preference, affect, and restorativeness ratings of natural and built scenes. *Journal of Environmental Psychology*, 30(4), 482-493. doi:<http://dx.doi.org/10.1016/j.jenvp.2010.04.004>
- Woodward, R. (2001). Water in landscape. In H. Dreiseitl (Ed.), *Waterscapes: planning, building and designing with water* (pp. 12-13). Basel: Birkhäuser.
- Vroom, M. J. (2006). *Lexicon of garden and landscape architecture*. Basel: Birkhäuser.
- Völker, S., & Kistemann, T. (2011). The impact of blue space on human health and well-being – Salutogenetic health effects of inland surface waters: A review. *International Journal of Hygiene and Environmental Health*, 214(6), 449-460. doi:<http://dx.doi.org/10.1016/j.ijheh.2011.05.001>
- Völker, S., Matros, J., & Claßen, T. (2016). Determining urban open spaces for health-related appropriations: a qualitative analysis on the significance of blue space. *Environmental Earth Sciences*, 75(13), 1067. doi:10.1007/s12665-016-5839-3