Imagine Helsingborg

Be involved in shaping the future of central southern Helsingborg

Structural prerequisites for the H+ project

HELSINGBORG

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The following chapter presents the prerequisites for the area that shall be seen as the starting points for the competition

The prerequisites for the area are complex and have been under investigation for a long time. Partially by external consultants, partially through planning work and consultation within the town and with other authorities, but also through internal think-tanks where all documented prerequisites have been questioned and then summarised again during the spring of 2008. The prerequisites will continue to be studied, and that which we know today can change in the future.

The ambition of this chapter is to summarise all the background information and to communicate the thoughts that have arisen and are considered generally accepted, so that the project is lead forwards by the competition. The maps and prerequisites clarify what are considered to be the prerequisites, and that which is considered to be possible. These possibilities can and should be additionally questioned by yourselves.

7.1 City landscape

Helsingborg has expanded through hundreds of years of shifting conditions and ideals. The current urban landscape shows traces of a typical appearance for Skåne (Scania), with influences from north European building traditions. The northern part of the town centre has an intricate network of streets from the middle ages, while the southern part is arranged in a strict 19th century grid system.

Helsingborg is located at the narrowest part of the Öresund, which has given the town several important characteristics. The proximity of Denmark and the water is very evident, with open views and sight lines across the sound, and to Kronborgs castle. The harbour entrance, the ferry traffic, the beach line and not the least, the ferry quays, reinforce the contact with water additionally. Several of the town's public spaces and buildings in the northern part of the town, are directly connected with the coast or harbour, while the southern parts have less contact with water and are mostly inaccessible since they comprise harbour warehousing and industrial land.

The Landborg plateau characterises Helsingborg and creates noticeable differences in levels within the city. The plateau rises 20 – 40 meters above the sea along the coastline and has had a great influence on the town's buildings, and how the form of the town has grown.
Today, the plateau characterises Helsingborg by enclosing the centre of the town on a strip of land between the edge of the plateau and the Öresund, and by regularly breaking through close to the town building areas with vegetation. From the water, the plateau appears as a high ledge and gives Helsingborg a coherent and legible silhouette. From the upper part of the town, the plateau provides a panorama of the town's roofs toward the sound and the Danish coast.

Helsingborg's southern entrance routes follow the lower edge of the plateau on their way into the town centre. The railway line, along with the marshalling yard, runs parallel with the main road, and continues down into Knutpunkten's underground station. This large-scale infrastructural route cuts right through the southern parts of the town and creates a strong barrier. The barrier effect is enhanced further by a difference in level of up to six meters between the southern part of the town centre and the H+ area. The southern harbour currently comprises a typical large-scale industrial landscape where heavy infrastructure and businesses connected with the harbour and ferry traffic are dominant.

Starting point for the task

- **Panoramas and the silhouette of the city should be taken into consideration.**
- **The H+ area should be linked together with the surrounding town sections in a natural way.**

Questions

- **In which way can new areas be linked together with the existing city landscape grammar, its historical centre, contact with the water, the plateau and its ravines?**
- **How can the quality of the harbour and its buildings be used to create a strong character for the area and an interesting landmark?**

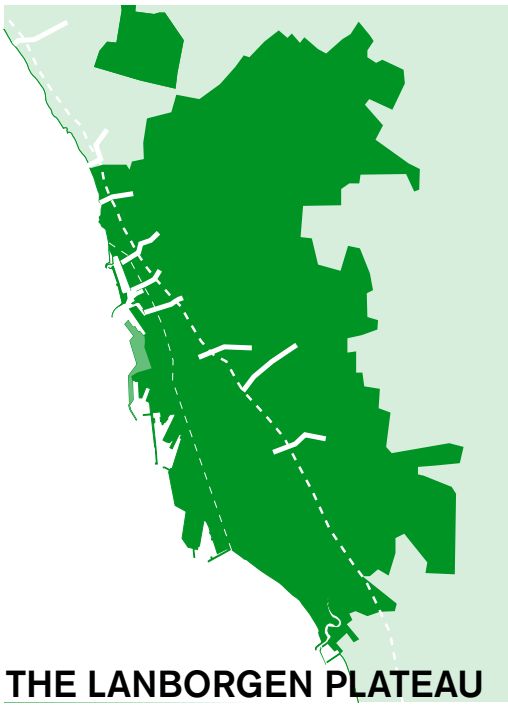
View over Helsingborg from Helsingör.

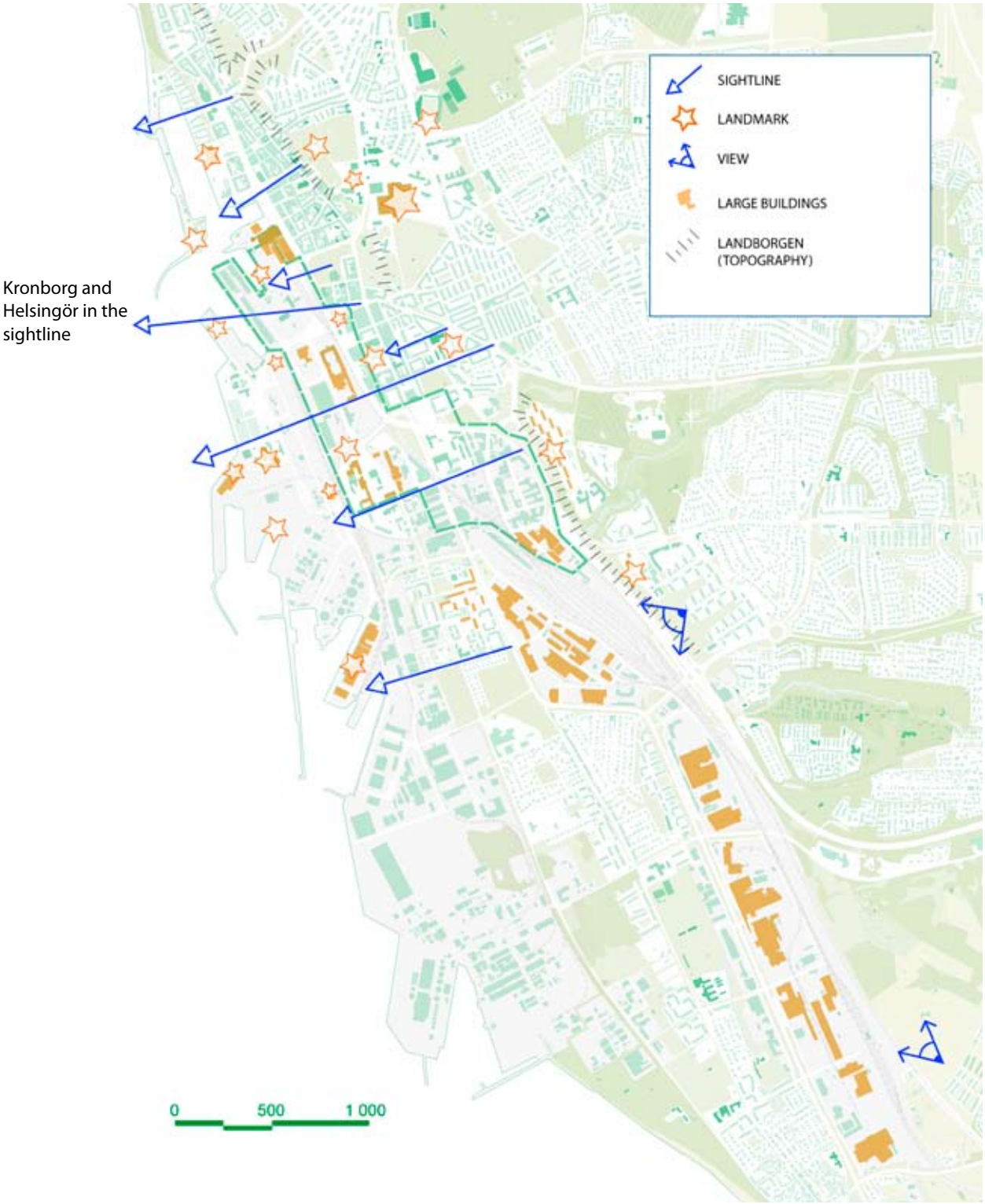
View over central Helsingborg from Tinkarpsbacken.

A river crossing the plateau of Landborgen.

Gåsebäcken.

Above: View form the edge of Landborgen above Norra hamnen.
Below: A walking path by Landborgen.





VIEWS AND LANDMARKS

The historical imprint of the H+ area

Until the middle of the 19th century, Helsingborg was a rather small town with a population of around 4000, however with the event of the industrial revolution, the town expanded. An important factor behind the rapid growth was grain export and Helsingborg developed into the largest export port in Scania for oats and became one of Sweden's most important ports. During this period, southern Helsingborg played an important role for the expansion of the town and has, to a great extent, laid the foundations for the qualities found in northern Helsingborg today.

The area contains environments and buildings from primarily the 19th and 20th century. None of the buildings in the H+ area have any formal protection, since in general all buildings were planned for industrial use, with the exception of Campus Helsingborg and the old sugar mill where IKEA is located. Any historic protection of buildings in the H+ area will be decided in the forthcoming planning.

There may be other buildings of historic interest within the area that may possibly fit in with newly planned buildings. However, an evaluation should be made of whether a greater density or other values can be accomplished by removing these buildings or environments. For example, the jute mill is in a typical conflict between the location of the building and the execution of the Södertunneln (southern tunnel) and possible electrification of the harbour railway track.

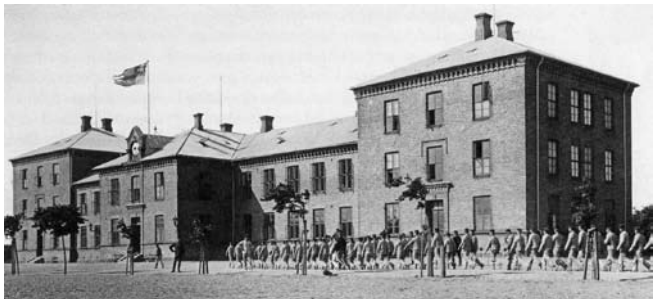
Railway

The railway has made legible marks and still characterises the H+ area. At the end of the 19th century, there were two railway stations in Helsíngborg. The central station was built in 1865 at the intersection of Trädgårdsgatan/Järnvägsgatan for southbound traffic to Malmö, and was torn down in 1987 to make way for Knutpunkten. Knutpunkten, the new travel centre with an underground railway track passing right through it, was ready by 1991 and made possible the construction of the northern harbour, which was completed in 1999.
Northbound railway traffic to Ängelholm was added during the 19th century and had a provisional station, the Steamboat station, which was also to feed ferry traffic to Helsingör. The intention was for the station to be used until the northern and southern railway tracks were connected together through Helsingborg.

During a long period, there were tracks at ground level between the north and the south, where shunting engines pulled trains through the town, much to the annoyance of other traffic. A railway official walked in front of the locomotive with a red flag to avoid accidents. The Steamboat station is still in place and currently contains Helsingborg's most popular live stage, The Tivoli.

Firestation in Gåsebäck.

"Jutan".



Husarregementet.

The Harbour

The harbour and its historical operations have also left their mark on the H+ area. In the 1910's, a new large extension of the harbour started, with the Oceanhamnen (Ocean harbour) and a new industrial harbour between Helsingborg and Råå. After this, the harbour expanded in several stages and the possibility of extending the railway into the harbour became restricted, and then in the 50's a large shunting yard was built at Gåsebäck on an old military exercise field. Several large and important industrial premises where built on a land fill east of the harbour operations. Some of them are preserved and currently make their mark on the area and illustrate the history of the place. Helsingborgs rubber factory was built in the Hermes area to manufacture galoshes and employed 3000 people in its hay-day. Today the building has been converted into the Campus Helsingborg University and some office activities. Helsingborg's old brick-faced sugar mill has recently been carefully renovated and now contains offices.

Skånska Jutefabriks AB

In the middle of the 20th century, Gåsebäck was developed into a mixed business and company building area. Skånska Jutefabriks AB at Gåsebäck was founded in 1896 by consul Petter Olsson and continued operations until 1964. The factory manufactured jute sacks and the factory building has a characteristic saw-tooth roof. Today "Jutan" functions as a popular skating and petanque hall in the shadow of Södergats viaduct.

Husarregementet

Helsingborg was already a garrison town by the 18th century, when a squadron of 60 men plus officers were sent to the town in 1773. The soldiers had their quarters amongst the town's burghers and the guard that guarded skeppsbro bridge were located at a building on Stortorget (Main square) known as the Högvakten (high watch). The Husar regiment had different names at different times, but were best known as Kronprinsens Husarregemente (Crown Princes Cavalry Regiment). In 1880, land just south of the current town limits in southern Helsingborg was allocated to the regiment's barracks, after which a complex was erected that covered six town blocks in the town plans. Today, the buildings house, amongst other things, the Rönnowska school, which is a preparatory school for craftsmen. The Husar regiment's barracks are now divided into two sections by Industrigatan.

Helsingborg's working class section

During the industrial revolution, Southern Helsingborg was the working class area and comprised narrow workers houses with a low standard and smaller workshops. There was already an idea to integrate the town centre with the South in the 1860's, but these plans were changed when the Krook family bought the land and donated it to Helsingborg town. The land was used instead as a park, the Krookska planting, also called the Stadspark (Town park), and an exclusive housing area was built around the park.

Eventually the housing zeal died down and industrial plants became the norm. Industries were often directed to the South during this time, and amongst these were a tile stove factory, a glassworks, and in 1875, consul Nils Persson established the Skånska Svavelsyre- och Superfosfatfabriks AB (Scania Sulphuric Acid and Super Phosphate Factory).

Historical coastlines

Around the turn of the 20th century, the South was a fully built-up section of the town and the first monumental buildings were raised. Gustav Adolfs church with accompanying square was initiated and Folkets hus was built. During the 1960's, a change occurred and low quality homes were replaced and industries were moved. Public buildings with architectural quality, such as the Simhallsbadet (Swimming centre), Gustav Adolfs parish home, Margareta school (pulled down) and the Town library were built. In the following years, older buildings were replaced by large scale architecture such as Söderport house, Domus department store, the old Courthouse building and the old Police station. Both of the last named buildings have been changed internally and the old Police station also has a new façade. The new Courthouse is located just north of the old Police station and is designed with a connection to the Southern harbour and Campus.

The idealism of the private car

By the middle of the 20th century, the number of private cars in the town had started to cause a problem and Helsingborg adapted itself to the ideal of the private motorism. Södergatan was split and run via a viaduct across Gåsebäcks marshalling yard. The Malmöleden (Malmö highway) was built to allow the motorway to run right into the centre of the town. At the same time, Oljehamnsleden and Bredgatan were built right through the old Husar regiment to connect directly to Industrigatan.

Söder i förändring

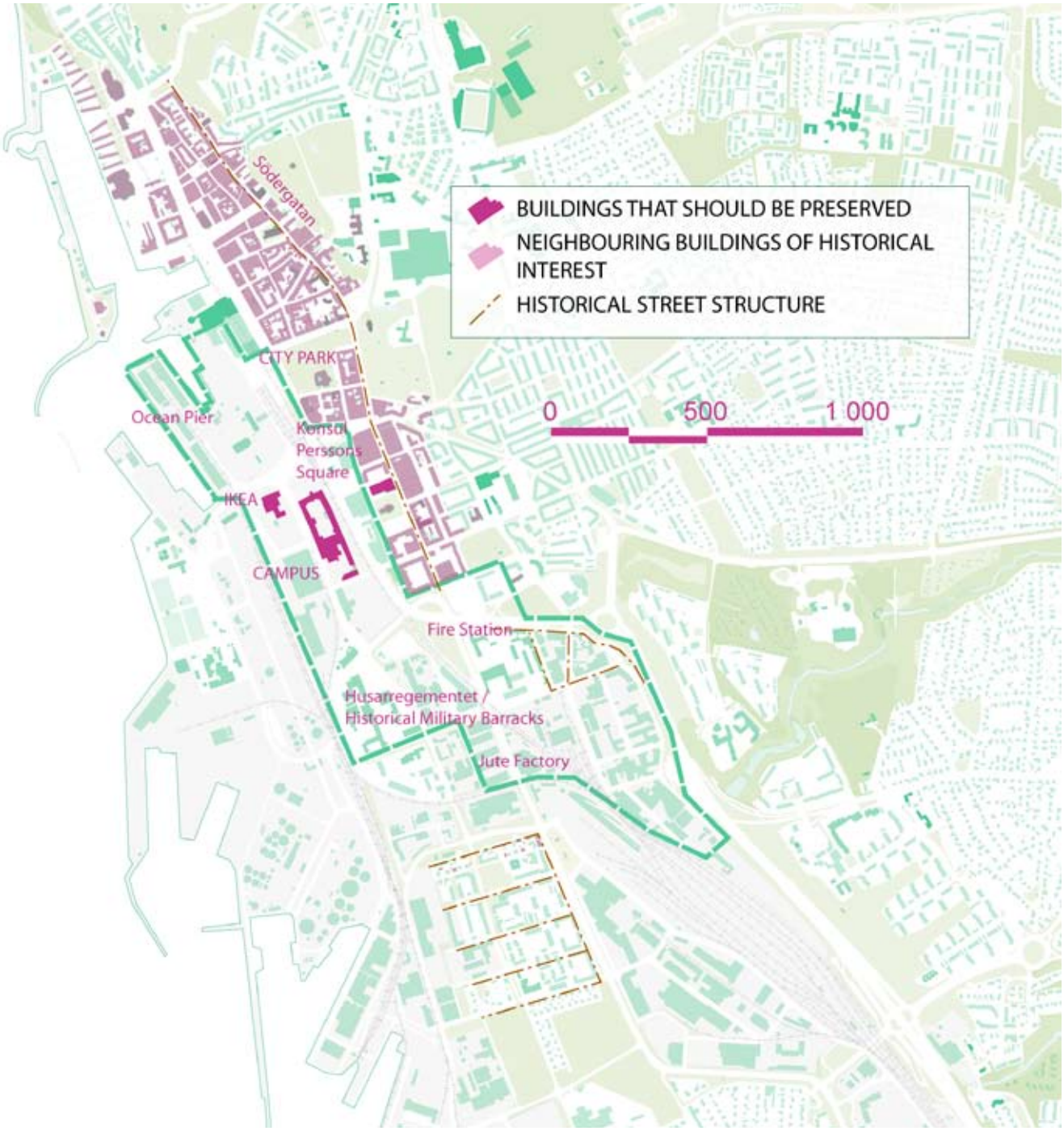
The project Söder i förändring (changes in the south) was started in 2001 to increase the attractiveness of the South and promote integration in Helsingborg. The overall goal was to develop the South to a "living and blooming section of town characterised by diversity, faith in the future, a good environment, well functioning infrastructure and good service." The project was planned to be long-term and handled partially on infrastructure and partially on values and attitudes amongst people who live or pass through the section of town. The project was executed using a dialogue with the populace and businesses, and the result is the basis of several political decisions and concrete proposals that have resulted in e.g. rebuilding Furutorps park, Södergatan/Carl Krooks gata and Gustav Adolfs square, new student accommodation in Bryggaregatan, renovating the IOGT house, a new sports hall at Gustav Adolfs school, a new Courthouse and renovation of Consul Perssons mansion and the Simhallsbadet.

Starting point for the task

- **Buildings marked in purple are to be preserved.**
- **Other historically interesting buildings in the area must be evaluated against exploitation.**

Questions

- **Southern Helsingborg has played an important role for the expansion of Helsingborg during the industrial revolution and has, to a great extent, laid the foundation for the qualities and wealth found primarily in northern Helsingborg. Which role can/shall Southern Helsingborg play in the 21st century?**
- **How can the history of the area be reflected in the future H+ area and be part of the area's identity?**
- **There can be a conflict between denser and higher exploitation and saving parts of the existing building structure. How shall this evaluation be performed?**



THE TOWN'S HISTORICAL IMPRINT

Topography of the area

The plateau in Helsingborg and its ravines are a result of a combination of a fault in the bedrock and earlier sea erosion. The difference in heights gives the town its character and identity. In the southern part of Helsingborg, the plateau is not as distinct and visible as in the northern parts.

From several places close to the H+ area, there are panoramas from the plateau out across the Öresund, but the most evident are the views from above the Stadsparken and from the upper parts of Furutorpsgatan.

Today, the southbound Malmöleden and the railway track divide the southern town sections into two areas, with only two links in the east-west direction. The Malmöleden is at the boundary of the H+ area and is a strong barrier between the area itself and the edge of the plateau with its vegetation and heights. The difference in levels between the east and west sides of the H+ area is 6 meters, with a slope toward the sound. The southern harbour and the western part of the South are however rather flat and lie at a height of between +2 and +2.5 meters above sea level.

Several national and international studies concerning adaptation of costal building sites and possible increases in sea level are in progress. According to current recommendations, proposed new building sites should be arranged to be at a minimum height of +3.2 meters.

Starting point for the task

- **Buildings should be planned at a minimum of +3.2 meters above sea level with regard to possible sea level increases**

Questions

- **How can the structure of the city and its buildings be prepared for a change of sea level?**

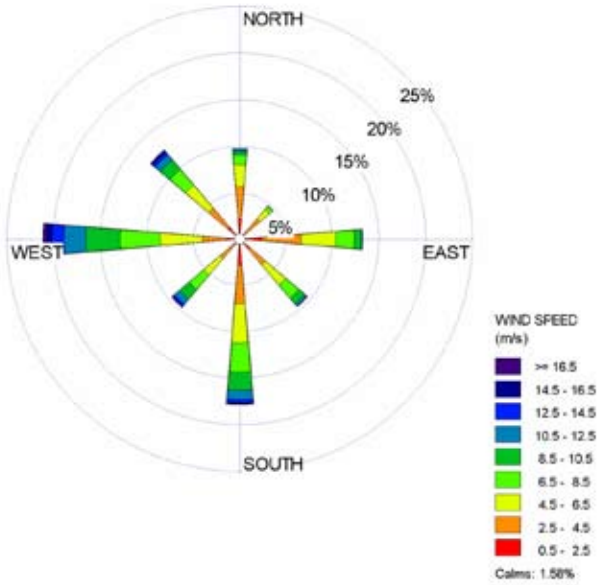
TOPOGRAPHY

- Landborgen
- 3.2 > m
- 2.2 - 3.2 m
- 0 - 2.2 m

Local climate

The position of the H+ area means that it is exposed to winds from the sea, with continuous, often strong, winds from the west. For weaker winds, less than 10 meters/second, the direction is more changeable, but westerly and southerly winds are normal throughout the year. During the autumn, winter and spring it blows more frequently from the east while north-westerly winds are more normal in the spring and summer.

The temperature conditions in the area are controlled by the winds and solar radiation. Solar radiation can be made use of by orientation and design of the new buildings. With regard to the exposed position, wind conditions need to be taken into account when planning the area – both the strong westerly winds and the more varied winds that are prevailing during less windy days, when people are outdoors to a greater extent.



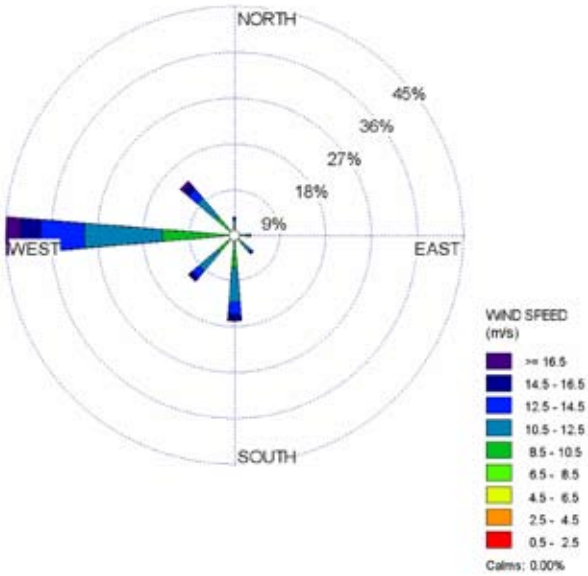
Distribution of wind directions during a full year, 1973-95. Average wind 6 m/s

Starting point for the task

- **Building design and public spaces should be formed so that a favourable climate is achieved with different weather conditions and seasons. The design should also provide conditions for good energy economy in the buildings.**

Questions

- **How can the overall design of the area be formed to both create a good micro-climate in differing weather conditions and take advantage of the contact with water?**



Distribution of winds with a minimum of 10 m/s

Source: SMHI, Underlag för klimatanpassad planering vid hamnen (Material for climate-adapted planning at the harbour), Helsingborg

7.2 The city's public spaces and routes

City life

This chapter presents the prerequisites for town life in central Helsingborg. Helsingborg's city life is described in more detail in the appendix Town spaces and city life, analysis and principles.

The interchange with Denmark and intensive ferry traffic characterise Helsingborg. For many Swedes, Helsingborg is the gateway to Europe and it is also the first sight European visitors have of Sweden. The place that most visitors see first is often Knutpunkten, the city's travel centre.

Knutpunkten, together with Campus Helsingborg, are important points of attraction in the city, and together with the city's parks and squares, create the meeting places that allow orientation and identity in the city spaces. One example is Gustav Adolfs square in the South, a multi-cultural meeting place with a much-visited market square and another is Krookska Planteringen, also called the Stadsparken (City park), a popular green oasis in the inner town where many meet for lunch.

Helsingborg city's central transport routes run mainly in a north-south direction. The traffic routes are along Drottninggatan and Stenbocksgatan and are characterised by the large scale, long lines of sight and of private cars. The city's retail trade can be found along Kullagatan and Södergatan, which are mainly pedestrian areas. The recreational routes are most evident along the green Landborgspromenaden and Strandpromenaden that stretch out from the centre to Vikingstrand.

Helsingborg is a city with a number of interesting cultural institutions and an active club lifestyle, and the central parts are drawn to these institutions, which are often located in the northern part of the city. Four buildings around which much of the city's cultural life rotates, have been built during different periods of time and are centrally located in the town. Helsingborg's Concert house, Sven Markelius' functional masterpiece from1932, lies alongside Helsingborgs town theatre from 1976. South of both of these buildings, one finds Dunkers Kulturhus, built in 2002 and in the middle of the central part of Helsingborg, lies Kärnan, a 700-year old remnant from Helsingborg castle. These buildings and the surrounding spaces together create an area with a great variety of music, theatre, exhibitions, children and youth activities and outdoor activities.
The architectural and housing exhibitions H55 and H99 have meant a lot for the citys reputation as a centre for architecture, design and form. Both exhibitions have left a lasting impression on the townscape, primarily around the Northern harbour. The Northern harbour's architecture and simmering lifestyle contribute, especially during the summer, to a particular feeling in this part of the town. The both relaxed and intensive beach life along the Northern harbour and northwards, with restaurants and café's, creates an almost continental atmosphere and the rock club The Tivoli in the old steamboat station keeps the feeling going in the evening.
"Wind in your hair" can characterise town life in Helsingborg, since it is strongly influenced by the climate. During certain times of the year, the city's public spaces are visited by thousands of people while on other occasions they are almost empty. As an example, the Gröningen area on a warm summer night will be crawling with people who grill food, bathe and eat picnics. On a windy day you will be lucky to see anyone but brave dog owners quickly passing, which applies to most of Helsingborg's coastal places. There has previously been a preconceived meaning that the Nordic climate would be an effective hindrance for serving food outdoors, and few pub owners saw the summer as an invitation to develop new business ideas. This attitude has changed and today there are more than 120 established outdoor restaurants in Helsingborg, admittedly seasonal, but important for the city lifestyle.
Sand in your shopping basket is another concept that symbolises city life in Helsingborg. Having access to centrally located beaches and bathing facilities is a unique quality that contributes to the city's ambition to come closer to the sea. Beach life starts at Tropical Beach and continues northwards via the jetties along Strandpromenaden to Kallis, Fria Bad and continues out to Vikingstrand.
The ability of spontaneous sports and play in central Helsingborg is limited. Well visited playgrounds can be found at Gustav Adolfs square, in the Stadsparken and the northern part of Gröningen. Otherwise, spontaneous sport is mainly directed to school playgrounds and at Kallis along the Strandpromenad.

There are differences in the centre's northern and southern parts, and as previously mentioned, nearly all cultural institutions are located together, along with several larger public places, in the northern part. Cultural life in the southern part consists mainly of smaller cultural clubs within music, theatre, film and cultural inheritance. The town library, however, is one of the larger meeting places in the city that is located in the south.

Helsingborg works actively towards creating an attractive environment. Our ambition is that squares, pedestrian precincts and streets with shops and outdoor eating places should be formed so that they are natural meeting places, both unexpectedly and formally. In the same way as town life continuously changes, this is a part of the continuous process where small and large physical efforts are mixed with events.

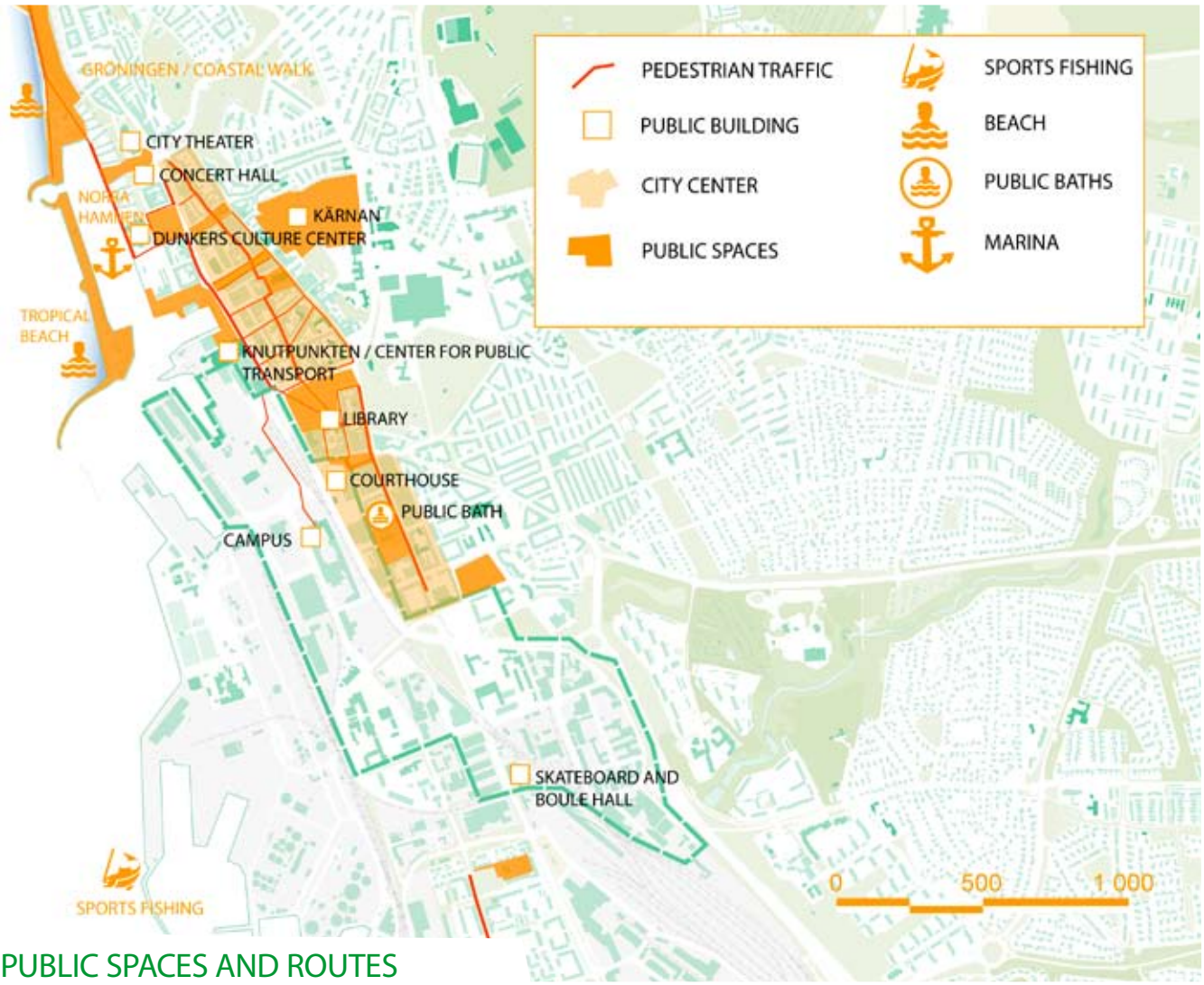
Starting point for the task

- **A number of new meeting places, of varying size and character, shall be created in the area.**

- **There shall be places that attract people to everyday meetings and attract both local inhabitants and other visitors.**
- **The H+ area shall reinforce the city life in central Helsingborg and expand the city centre in a natural way.**

Questions

- **How shall the area be formed so that public spaces attain an orientable structure and a human scale, that promote city life and creates an identity?**
- **How can we create places that encourage creativity and give us the desire to make use of the public spaces?**
- **Which type of meeting places can be developed in the area and where should they be located in order to support the city life?**
- **How can the small scale, wild-running and multi-cultural creativity be given a place in the city?**



PUBLIC SPACES AND ROUTES

Green structure

In Helsingborg, parks and green areas are an important part of the town structure and cultural history. The interplay between the buildings, parks and water is self-evident and an important part of the town's identity. The green areas also have a part to play as a structured and connecting element which softens up the town's buildings and, together with the other town spaces, create an important free space in the town where town life can be acted out.

The green areas create and permit places and spaces with individual qualities, they include both quiet and unifying park spaces and more urban town spaces of different sizes.

The town's climate and air quality is influenced by the vegetation in the green areas. Heavy vegetation moderates the climate so that extreme winds and temperatures are reduced. There is a need for wind protection in the area and a well planned green structure can reduce the exposure of pedestrians and cyclists to winds.

The natural prerequisites for the green areas in Helsingborg is the plateau with its level differences and deep ravines. The town centre contains a number of old, unique green park areas located close to, or as part of, the green strip along the plateau. The slope from the plateau, together with the surrounding parks create an important green area in the town and the water-eroded edges of the ravines with their deciduous forestry contain great recreational value. The ravines bind the northern part of the town to the west with those in the east and create a beautiful and interesting element in the town structure.

Jordbrodalen is one of these ravines, located in the southern part of the town. The Gåsebäck stream flows along the bottom of this tree-lined ravine, after which it travels via a culvert out into the Öresund in the H+ area. The vegetation that stretches through Jordbrodalen is one of the town's most important green east-westerly connections between the heavily populated areas and the cultural landscape outside. Other important green areas and green connections are the north-southerly stretch along Lussebäcken stream and the east-westerly section from the Stadspark via Bergaliden/Nya kyrkogården in the east, out to Viskäng, and northwards along the plateau.

The southern section of the town, the costal zone from the estuary of the Råå river up to Helsingborg's centre, was previously a large, tree-less area of land covered with heather and quicksand. The area was eventually planted with pine at the start of the 19th century and is today the green recreational area Tallskogsleden, which is an important north-southerly stretch through Helsingborg's southern town sections. However, there is no natural connection, in certain places, between the green area where the Tallskogsleden currently finishes and the housing area Planteringen.

Helsingborg is well known for its public parks, such as Fredriksdals museum & gardens and Sofiero. Ramlösa Brunnspark was, during the 19th century, an important destination that was visited by people to drink from the spring and bathe in the spa. The park still exists, but the spa was closed during the 1970's.

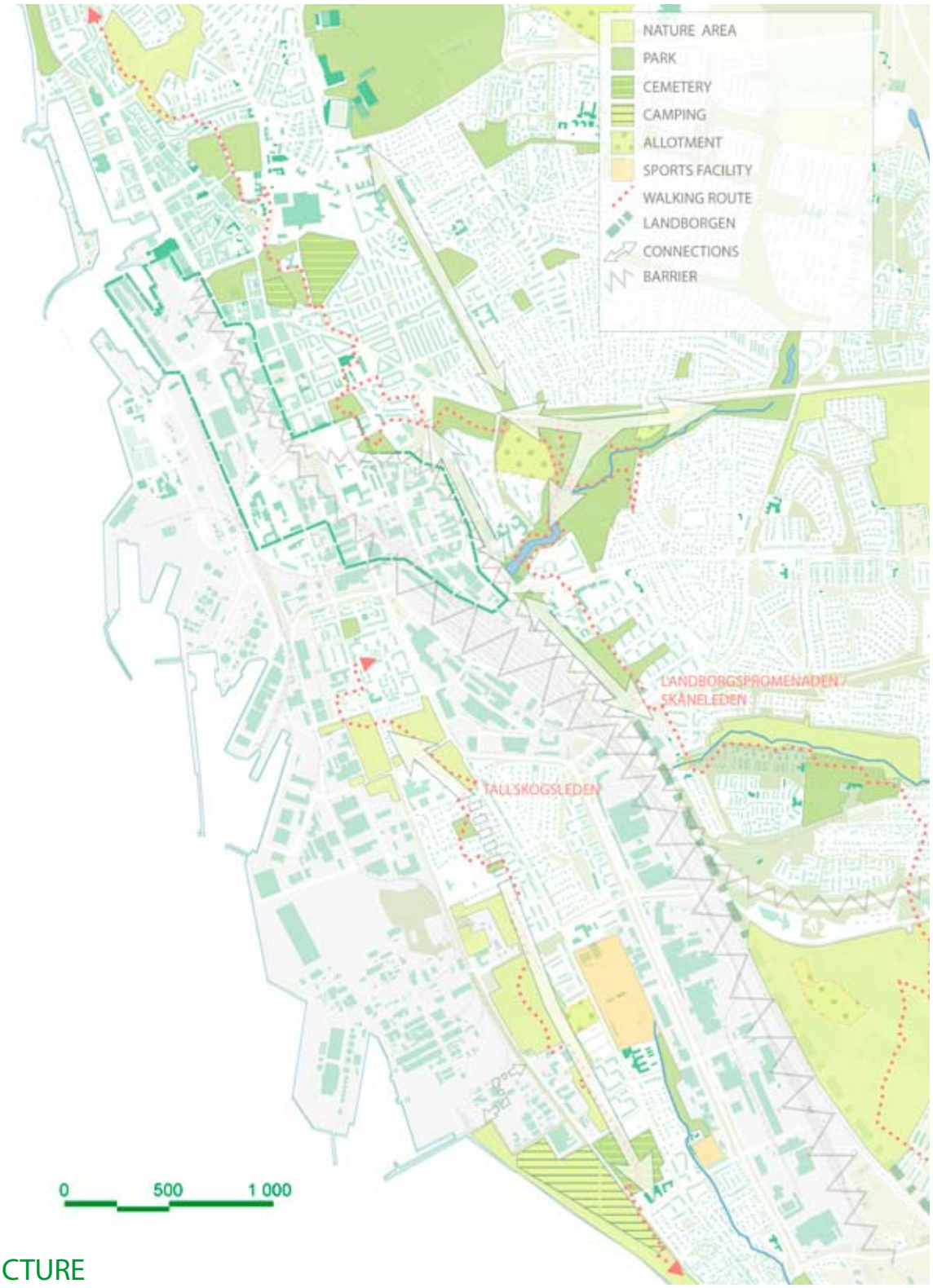
Today, the H+ area is dominated by lean, exposed vegetation in the form of uncultivated ground, traffic island flower beds and smaller areas of grass. The area has no unifying structure and connections to surrounding green areas and stretches are weak. As an example, the H+ area borders in the north-east on the Stadspark and Sturzenbeckers park, but is separated from them by Malmöleden.

Starting point for the task

- **The H+ area shall use green structure to create city spaces with differing qualities and develop the orientation and connection to their surroundings.**

Questions

- **How will the green structure and outdoor environments of the area appear in the future, and which functions will they fulfil?**
- **How can a network of parks and places of different sizes that unifies the area be created?**



GREEN STRUCTURE

Blue structure

Central Helsingborg lies as part of a string of pearls of activity along the northwest coast of Skåne. Helsingborg's contact with water, which is one of the towns great qualities and an important part of the town's identity and business attraction, is primarily concentrated to the northern and central parts.

In the northern part of Helsingborg, there are several sandy beaches with bathing jetties and a beach promenade with different types of activities and function associated with it. Due to use of land-fill to create industrial premises, a large part of the southern section of the town has lost contact with the water. Between Knutpunkten and Råå Vallar there is more or less no water contact today. The H+ area opens up the possibility of increased water connection with the Öresund, and work is currently in progress to create additional visual and physical connections even south of the H+ area.

Råå Vallar, which is named after the defensive dunes that were built after the Danish invasion, lies to the south. Today it is possible to walk along and bathe in the water at Råå Vallar. Directly to the north lies Knähaken, which is a maritime nature reserve.

There were previously several streams and waterways in southern Helsingborg. Today, most of them are run in culverts, and Gåsebäcken stream, that can still be seen on a 1912 map running into Råå, is now laid in culverts all the way from Malmöleden. Most of the water from Gåsebäcken stream runs directly out into the Öresund, together with surface water drainage.

Helsingborg has long been famous for its spring water, which is currently used by several bottles water companies, e.g. Ramlösa, Carl von Linné, Aqua Terrena and H2.

A study has been made of a waterway or a canal integrated with a building development between Bredgatan and Hamnleden, this proposal is considered as realistic. It is however not possible to make a deep sailable canal, only a shallower version due to the extensive pipeline networks that run through the area.

Marine biologists are trained at Campus Helsingborg and there is a desire to develop and expand the course with research connected to an aquarium in the area.

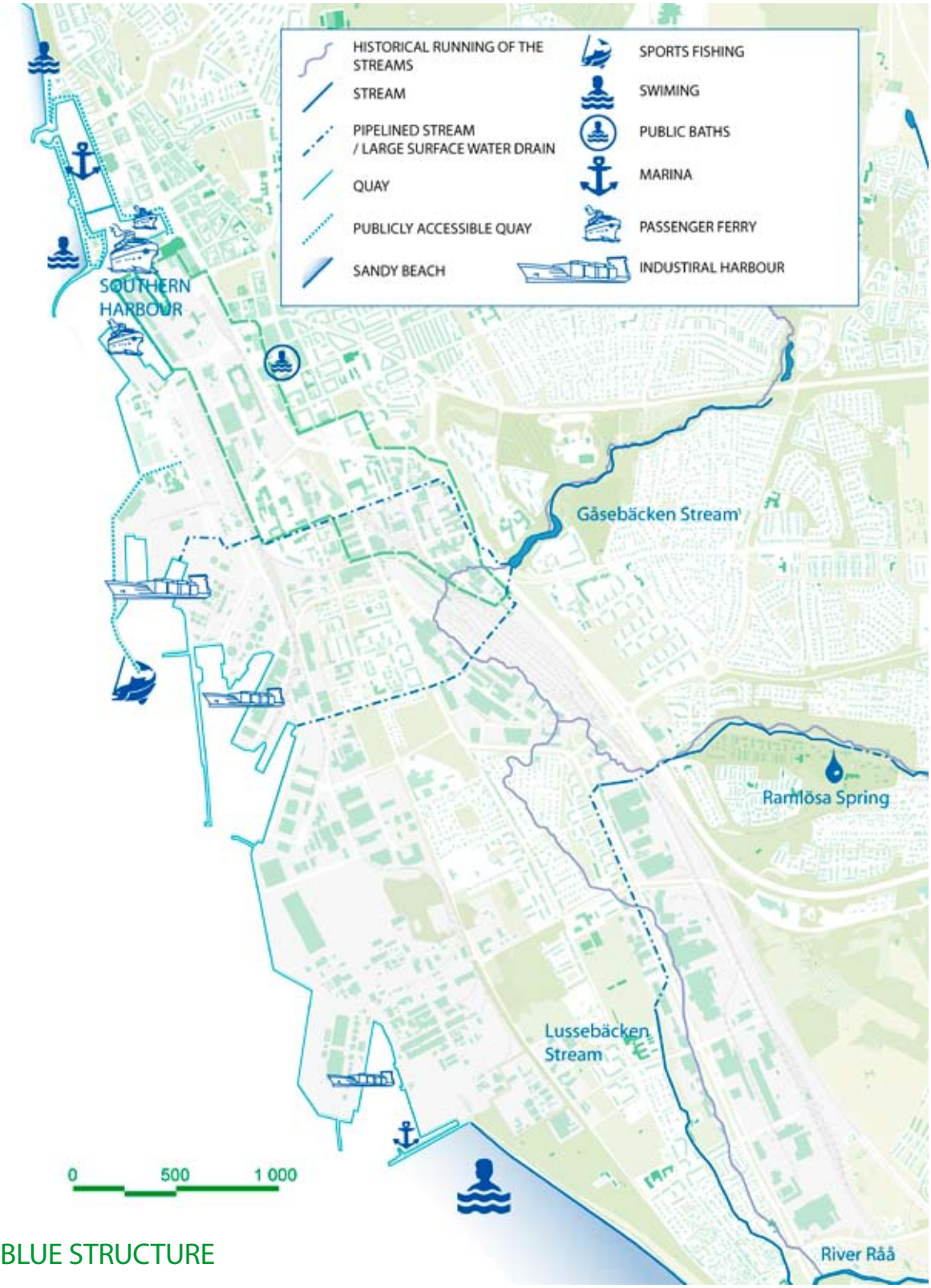
Starting point for the task

- **Older waterways and surface water drains can be used to create a visual surface water that permits closer contact with the water in a useful and playful manner.**

- **The outer quays along the Öresund will be accessible for the general public. The area round the sewage works is expected to be accessible for recreation.**

Questions

- **How can better sea contact be achieved?**
- **How can the outer quays be used in a new way?**



BLUE STRUCTURE

7.3 Traffic

Within the H+ area, there is a unique possibility to integrate the central town's building structure with the traffic system, by using structure, content, scale and proportions, so that the quality of the town environment is strengthened. Questions concerning the town environment, its traffic and people's everyday lives are intimately connected and provide the possibility to create a sustainable section of the town. The structure of the town and the relationship between homes, schools, workplaces, etc. is the basis upon which the sustainability of the town's transport system can be judged.

Public transport shall not be seen as just a means of transport, but a key question for town renewal and a contribution to the development of town life. Travelling by foot or cycle is the most advantageous way of travelling, with regard to health and the environment. Pedestrians and cyclists also enrich life in the town, both by their physical presence in the town spaces and by the small amount of room they require when compared with other forms of traffic.

This section considers pedestrians, cyclists, motorists and public transport, the logistics are described in the following section. The conditions for pedestrians are also handled in chapter "The town's public spaces and routes", where the focus is on the experience rather than the actual transport.

The point of view held by the town is based on equality between types of transport, which means considerably better conditions for sustainable methods of transport. The types of traffic should be in balance, which means that they work together and that each type of traffic makes an optimum contribution to the whole. The traffic systems interplay with the use of land and contribute to an attractive and sustainable development. Helsingborg's traffic plan from 2006 has the sub-heading " A new look at traffic" a statement that is intended to make an impression on the town's future traffic development, both in general and in detail.

Today, 14% of Helsingborg's population's travel is by foot, 12% by bicycle, 17% by public transport, while private car travel is 55%. In the H+ area, we have the chance to build up a town section from the ground up, where transport by foot, cycle and public transport will be a natural and obvious choice.

By foot

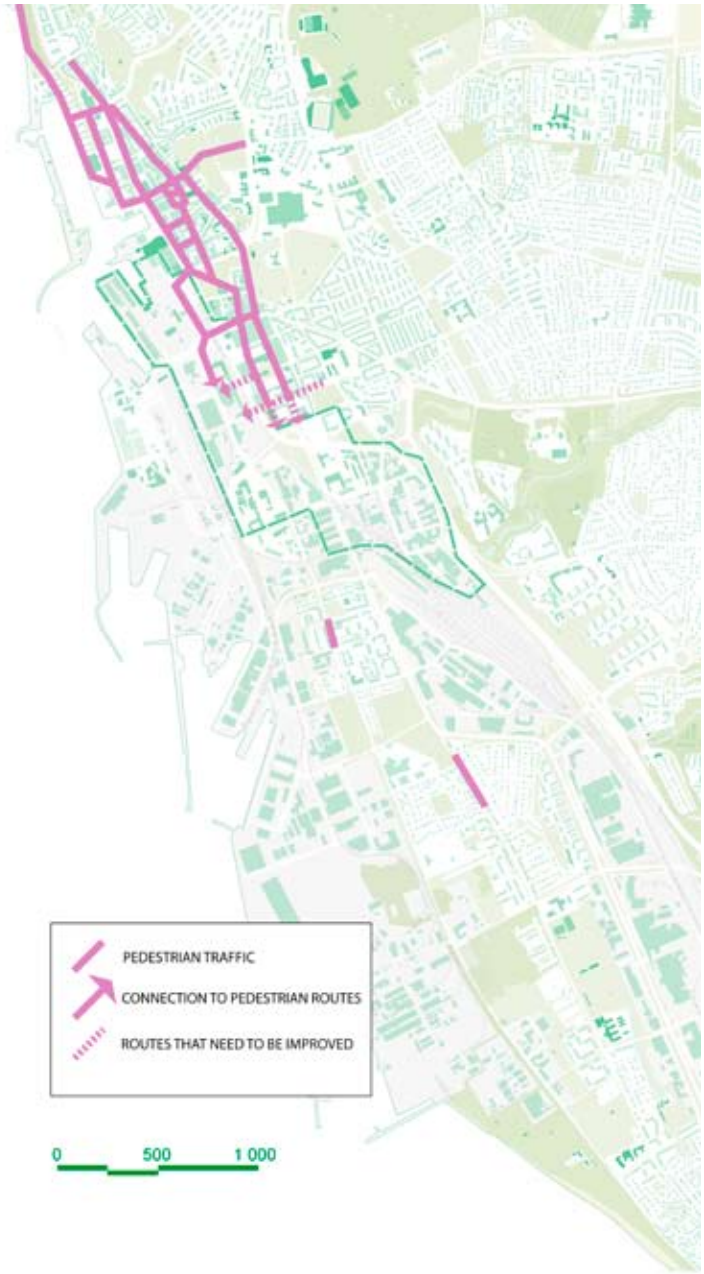
In general, all transport and travel involves some transport by foot, and the possibility to do this easily is a basic requirement for the town's transport system. In addition to the positive health, environment and safety aspects, an increase in pedestrian traffic provides more life and movement in our town spaces. Attractive, safe and pleasant pedestrian environments have a great significance for the competitiveness of local traders. Helsingborg's traffic plan points to specific enticements for pedestrians to reach a balanced and sustainable traffic system. Work with a pedestrian traffic plan has recently been started and the town is working for improved safety, security and accessibility for pedestrians, and even projects around schools and well visited meeting places are actual. The intention is to work in a systematic way with pedestrian traffic as a traffic type of its own. In order for pedestrian traffic to be experienced as attractive, a footpath network that is coherent, direct, safe, secure and accessible is necessary. In addition, it must be convenient, have good orientation and be aesthetically pleasing. Quality is determined by factors such as slopes, widths, barriers, the design and safety of crossings, illumination, standard of surface and winter path treatment. The proportions, scale, content and variations of the street spaces also play a role in the pedestrian's experience.

Only a limited part of the H+ area can currently be said to be adapted and attractive to pedestrians. Large scale traffic routes and railway tracks present barriers that limit the possibility to walk within, to and from the area. It is not just the physical design of the traffic environment that creates uncertainty and lack of security, but also the lack of life and movement in the town spaces.

By bicycle

Within the H+ area, the cycle path network is restricted and is characterised by insecurity, low accessibility and poor traffic safety, the cycle path network is most noteworthy for its lack of connections eastwards and toward the town centre.

The town's future main cycle path network, in accordance with Cycle plan 2007 can be seen on the adjacent map. The network comprises both existing and future cycle paths. For the past few years, the town has presented a strong initiative for making bicycles a serious competitor to private cars. Helsingborg can be a true cyclists town. In the H+ area, we have the chance to include cyclists requirements at the planning stage.
The goal, according to the cycle plan, is to create an attractive cycle network that is safe, secure, convenient and accessible. Direct routes, safe crossings, illumination, functional and safe cycle parking, as well as signposting and a commitment to service and maintenance, are examples of important components. It should also be simple and convenient to change between cycle and public transport.



BY FOOT

BY BICYCLE

By public transport

Helsingborg's bus routes currently consist of seven town routes, of which three are trunk routes with high traffic intensity and direct routing. In addition, there are service and industry routes as well as regional bus traffic. In Helsingborg, bus traffic is on the increase and more and more journeys are made by bus, the process of finding additional improvements is continuous and untiring. Convenience, speed and high traffic density are important ingredients and the task also includes an overview of a network containing high class public transport connectivity, such as trams/light railways as the most important. Within the H+ area, we have the chance to allow the public transport system to become structured by developing it together with the building process. This applies to both planning of routes and location of bus stops and nodes.

Two town bus lines currently traffic the H+ area, while in the north, Knutpunkten functions as a node for trains, buses, cycles, pedestrians and ferry traffic. In the south we have Ramlösa station, between the motorway and the railway track. The station is included in two town bus routes and has regional train connections.

By private car

Private car traffic dominates both physically and mentally in the town's traffic system, and a sustainable development of the town presupposes that this dominance is broken. Helsingborg's traffic plan points to strong and forceful remedies to reach a better balance, where traffic does not consume the town's qualities.

The upgrading of Österleden to a town motorway, to be completed by 2012, is planned to remove the load from the central north-southerly connection, Drottninggatan/Järnvägsgatan and Stenbocksgatorna and thereby improve the conditions for the cross-town traffic, the town life, pedestrian and cycle traffic and provide better air quality. An environmental zone, a new parking policy and the expansion of Hamnleden to secure a stronger harbour development are parts of proposed remedies.

The illustration shows how the main road network could appear in the future. The different functions of the roads are indicated by different colours. Within the H+ area, there are several roads that have important functions within the town's road system. Junctions in the road network are few, both to the east, south, to Närlunda and Elineberg and in towards the town centre.

Starting point for the task

- **There shall be more, better and more natural connection points between the H+ area and the surrounding town that are attractive for all types of traffic.**
- **A strong main route with high class public transport, possibly trams, should pass centrally through the H+ area and continue out to Planteringens centre and further southwards.**
- **Bottlenecks in the traffic system at Järnvägsgatan cause poor accessibility for bus traffic, and the possibility of allowing Bredgatan to take some of the load should be tested. Bredgatan can be a road where public transport, pedestrians and cyclists are prioritised.**
- **A new station entrance on the south side of Knutpunkten can be a natural point of attraction for the H+ area. Ramlösa station can be developed as a node for public transport and be surrounded by shops, offices and housing.**
- **Due to the building of the tunnel, Järnvägsgatan will change character and size.**
- **Car parking issues in the H+ area is intended to be solved with a below ground level car park. It should be located strategically so that walking to and from the car park contributes to the city life, and the building could function as a safety barrier to the harbour.**

- **Helsingborg's main access road, Malmöleden, can be changed and given a new character.**
- **Södergatsviadukten is planned for demolition due to the construction of the Södertunnel.**

Questions

- **How do we create a built environment where the buildings, streetscape and traffic system all contribute in making the feet, bicycle and public transport the natural choice?**
- **How can the area be connected to Knutpunkten and Ramlösa station and how can these public transport nodes be developed?**
- **How shall a high-class public transport system be designed so that city life in the area is strengthened and contributes to removing the barriers we have today?**

BY PUBLIC TRANSPORT

BY PRIVATE CAR

Södertunneln (Southern tunnel)

Södertunneln is a 1.5 kilometre long double track railway tunnel planned to lie south of Knutpunkten. The tunnel is to be built to allow development of the south, central part of Helsingborg – what we call H+. Exploitation within the H+ area contributes to a considerable part of the tunnel's financing. Södertunneln will become part of the Västkustbanan (West coast track) that connects Oslo and Gothenburg with the Öresund region, and will replace the existing double track at ground level.

The location and execution of the tunnel is being investigated

Concurrent with this project competition, a detailed plan of the tunnels location and execution is being performed by Banverket (Swedish rail administration). The detailed investigation takes into consideration the execution of the project, the adaptation of the tunnel to the new surrounding buildings and how the tunnel shall handle increased train traffic and a possible future connection to Denmark. Work with the investigation will continue until June 2009, building start is calculated to 2012. It will then be the grounds for discussion and agreement decision between Helsingborg town, Banverket and Region Skåne. After which, a railway plan and detail plan for the Södertunnel project will be drawn up.

From north to south

Södertunneln will be built from Knutpunkten to Gåsebäck, just south of Sandgatan. In the north, Södertunneln will connect to the existing underground station in Knutpunkten. Part of the existing tunnel will need to be demolished to widen the platforms to make space for steps and lifts.

From Sandgatan, the tunnel will rise up out of the ground and connect to the existing track at Ramlösa marshalling yard. This is also where the harbour track will connect, which is used for goods traffic to the combi-terminal and other activities in the harbour. Goods trains will only enter Helsingborg from the south and Södertunneln will normally only be used by passenger trains. The harbour track needs to be lowered in its existing route due to inclination demands at the connection point to the marshalling yard. An electrification of the track and a double track is also probable. A challenge is to achieve a long-term layout of the area and a good height to crossing roads.

Cooperation between the tunnel and town building process

In several areas there is a dependence between the tunnel project planning and the town building planning. Within the current Södertunnel project investigation, an assumption has been made concerning the block structure and road locations, but the continued work with the railway plan and the town detail plan need to build upon the result of this project competition. An example of some of the coordination requirements is given below:

Buildings can be built over the tunnel, but the distribution of load needs to be specially studied, based on the tunnel construction and final position. Due to the economic situation and the environment it may be advisable to avoid building over the tunnel in certain areas.

Large pipelines to the sewage works and district heating station are crossed by the tunnel. The crossover can be handled from a technical point of view, e.g. with cleaning pump technology, but they need to be located in a suitable position which is dependant on the local block structure.

Excavated material from the tunnel should hopefully be used within the H+ area or in the harbour area in a creative manner, e.g. for filling out or height increase within the harbour.

Södertunneln will be located between the city center and campus and during the construction time the car traffic will have to be diverted.

Södertunneln will be built as a ”cut and cover”

Södertunneln will lie just below ground level and will be built using the ”cut and cover” technique. This means that one digs a trench, cast the concrete tunnel and then refills the earth. After refilling, the overall road structure can be built, with e.g. the extension of Järnvägsgatan and Södergatan through H+.

This building method has a large influence on the area around it. During the entire building process, there is a requirement that train traffic should function more of less as normal. Provisional roads, bridges and footbridges shall ensure that the town continues to function, and hopefully create an attraction to the new area. The ambition is that development of the town within parts of the H+ area should be possible at the same time as the tunnel is being built.

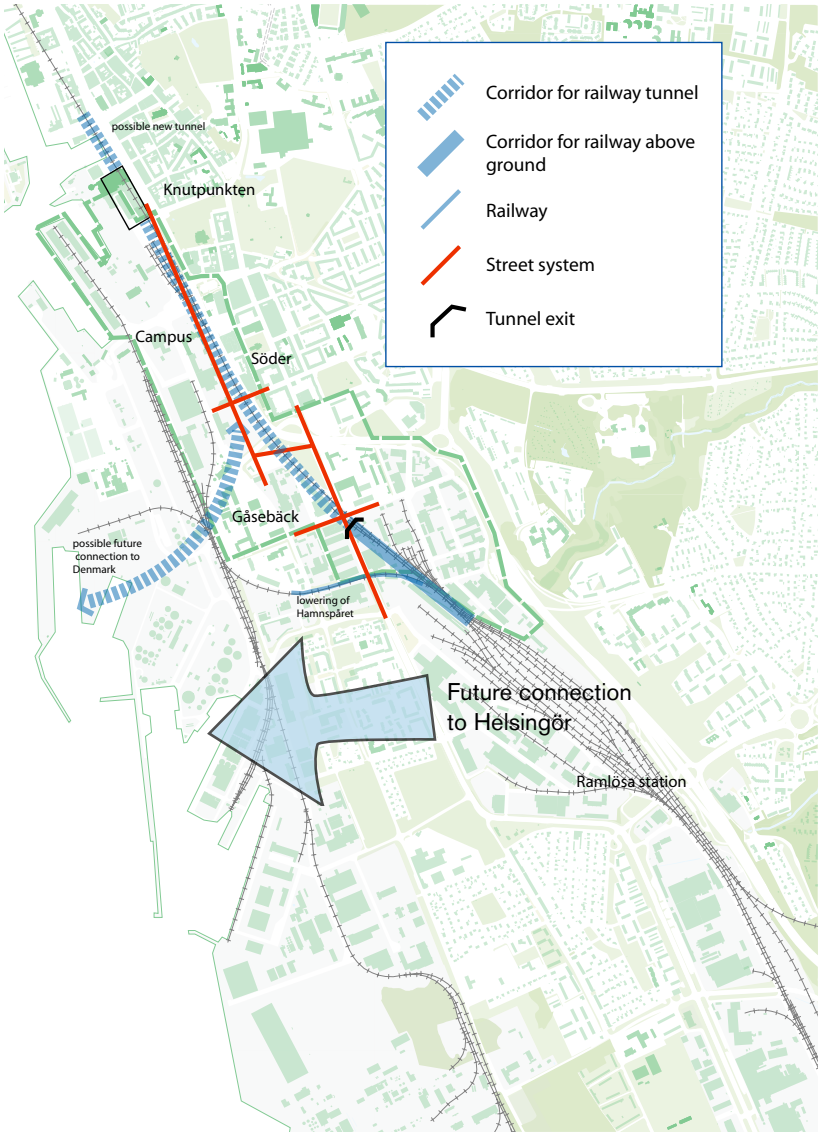
Future H-H link

Several large players in the Öresunds region, amongst them Region Hovedstaden, Region Skåne and Helsingborgs town, are working for a fixed link between Helsingborg and Helsingör. The question has been highlighted by the agreement between Denmark and Germany to built a bridge across the Fehmarn Belt. When that bridge is completed in 2018, new demands will be put on the infrastructure in the Öresund region. Several investigations show that the capacity of the Öresund bridge, especially regarding train transport, will not be sufficient after 2020.

The need of an investigation around the Öresund region’s future infrastructure is pointed out in the infrastructure proposition that the Swedish government presented in September 2008. So far there have been no decisions concerning the H-H link made. The question of types of traffic, layout of the link and location of connection points is therefore still open.
The need for restrictions in building and infrastructure to prepare the H+ area for a fixed link will be developed in a detailed investigation by the Södertunnel project.

Timing

The ambition is to start building the Södertunnel during 2012 with a building period comprising about five years. By the time the building has started, the City tunnel in Malmö will be initiated, but it will presumably take a few more years before the tunnel through Hallandsåsen is completed.
In addition there are plans to expand the Västkustbanan to double tracks north of Helsingborg C (Knutpunkten). Banverket is completing a preliminary study of the stretch up until June 2009. An alternative preliminary study is for a drilled tunnel below the Tågaborg section of the town, called the Tågaborgstunnel. Decisions and financing of this project are not yet completed. Most probably, the building work cannot start until after 2020.



Knutpunkten shall be accessible from all directions

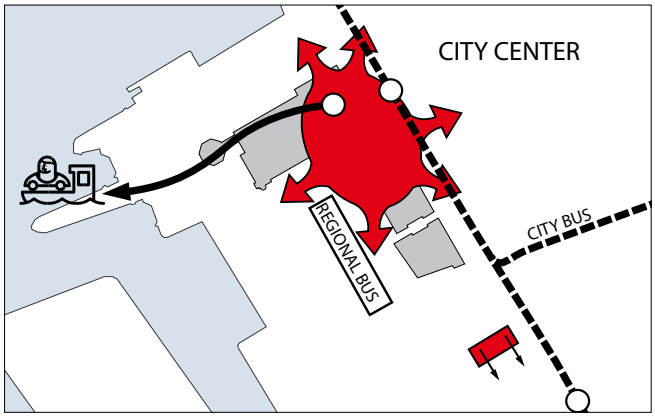
Today, Knutpunkten only faces the central parts of the town to the north and the east. The Södertunnel project and H+ presents new challenges for Knutpunkten. A new route passing directly through the building is required to connect the H+ area to the centre. Even new entrances toward the south and west are needed so that passengers can easily take a train, bus or ferry. Train travel has increased dramatically since Knutpunkten was built and the under-dimensioned access points to the underground station are getting crowded.

The Södertunnel project includes widening and lengthening of the platforms to the south so that new steps and lifts can be fitted. The tunnel roof above the lengthened part must presumably be removed to avoid bulky pillars on the platforms. The goal is to create an overviewable and secure environment with light and space. The location of the southern descents shall be positioned in conjunction with the Södertunnel project. Here, a transfer to a town bus (possibly a tram) can be developed, an important transfer relationship that works less well today. This can result in considerably fewer buses in the current bus terminal, which had a major renovation and reopening in 2005.

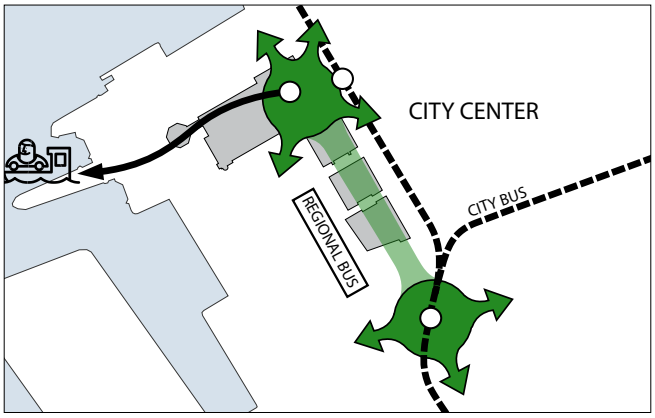
The purpose of the cooperation between Banverket, Skånetrafiken, Helsingborg town and the property owners is to coordinate alterations in the Södertunnel project with the property owner's plans for renewal of Knutpunkten. Working together, a complete plan can be drawn up for the travel centre from common goals. Apart from being an effective traffic node, Knutpunkten shall be a welcoming, secure and natural meeting place in the town.

Example of new descents to the platforms from the south with sunlight filters. Widening of the platforms creates a chance to add more functions to the southern exits.

Today there is no route passing through the town centre and the South harbour via Knutpunkten. The solid line marks the current route, the dotted line a possible future route. The black dots show the position of the new exits in the Södertunnel project.

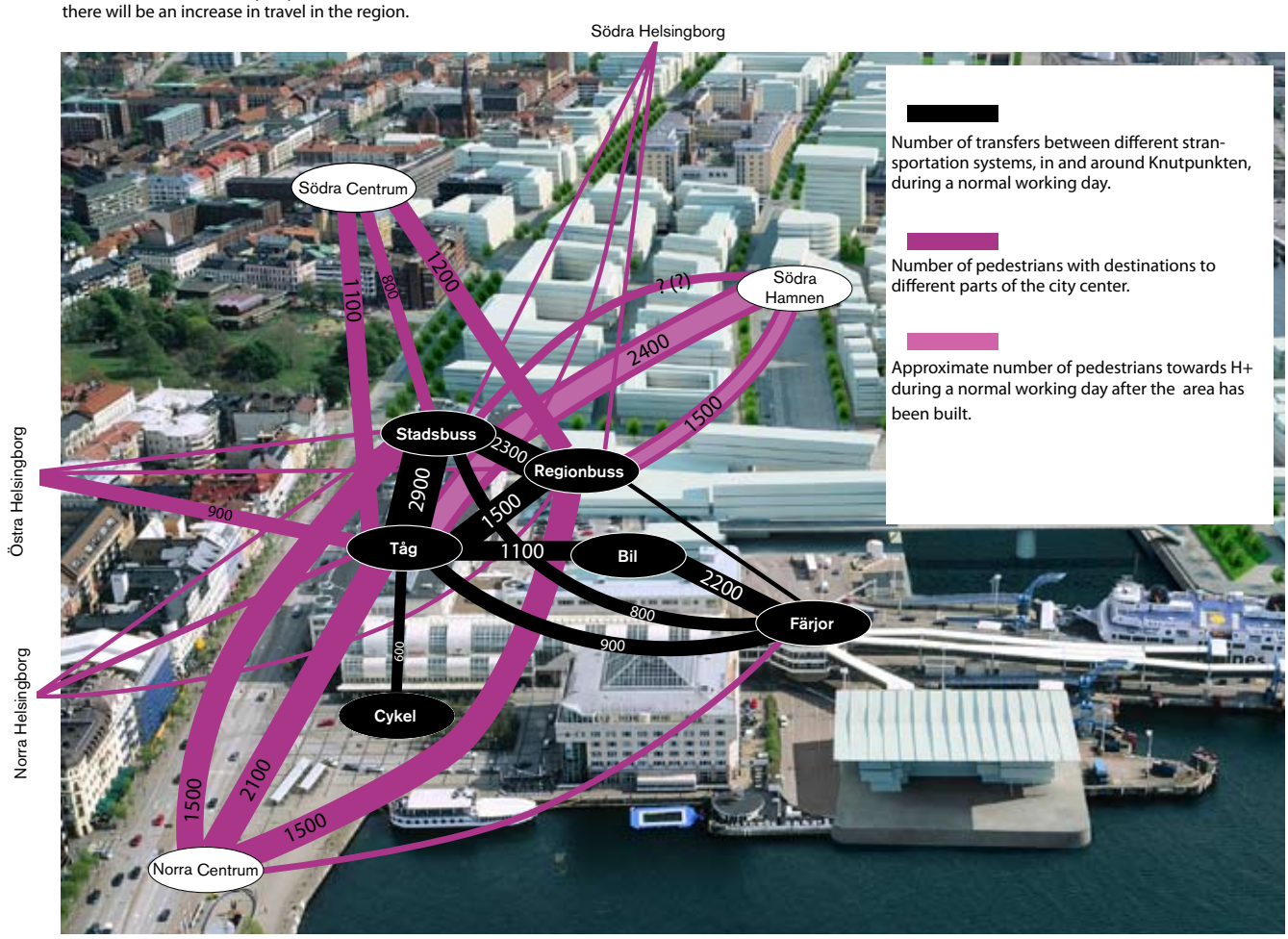


An alternative is to concentrate transfer functions to the current node in the north.



An another alternative is to develop important transfer functions in the south and create a new node, which would be possible when the platforms are widened southwards.

The flow between types of transport and the surrounding town section according to a travel investigation performed 2007. The figure illustrates the flow with new buildings in the H+ area. In a future perspective, it is reckoned that there will be an increase in travel in the region.



The logistical city

Its position at the crossroads of European motorways and railways, and at the narrowest part of the Öresund, has made Helsingborg a town with a strong logistical presence and one of Sweden's largest ports. Currently, the road-borne traffic to and from the ferries is almost 7 000 vehicles (yearly average day, yad), traffic to the goods harbour is about 1500/yad and the heavy traffic to the harbour is about 20% of the traffic flow.
Today, the truck traffic to the ferries uses different routes, Malmöleden is often the main alternative, but Rännarebanan, Planteringsvägen and Industrigatan are also used. These different routes make it difficult to offer vehicular traffic good conditions and to minimise the influence of the traffic. There is currently a project in progress to collect and lead all the heavy traffic to the harbour via the so-called Hamnleden (Harbour route).

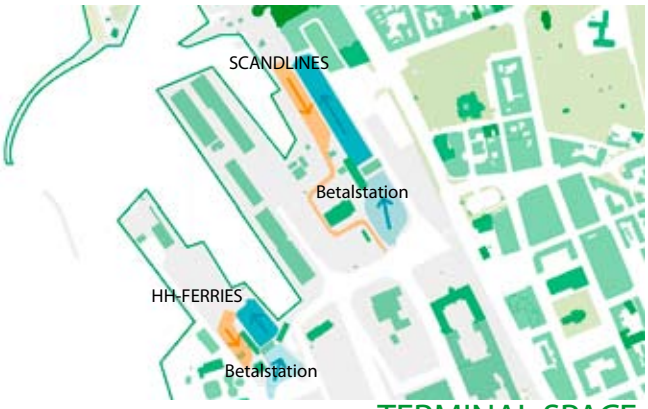
At Scandlines ferry terminal there is an approximately 50 000 square meter parking & storage area and at the HH-ferries terminal there is a corresponding 29 000 square meter area. When the combi-terminals capacity is fully used, it corresponds to about 150 000 TEU (Twenty-foot Equivalent Unit) per year. Today, approximately half of that quantity is handled via 1850 trains/year at the Container terminal. The remaining train traffic in the harbour area of approx. 250 trains/year comprises primarily tank wagons to Kemira and some railway traffic to Lantmännen. This gives a total traffic load on the connecting track of approx. 2200 trains/year.

The marshalling yards are owned by the Swedish state, Banverket, Jernhusen Fastigheter AB, Jernhusen Lager och Distribution and Jernhusen verkstäder (workshops).

The purpose of the Hamnleden is to secure and strengthen the development of the harbour via an effective, direct and well functioning traffic route. The actual route of the Hamnleden has been the subject of discussion and the town building and planning authority has analysed five possible routes in order to find the most suitable. The proposed route via Rusthållsgatan is the main alternative. In order to minimise Hamnleden's influence on its surroundings, much work will be performed on its design. Along the stretch at Rusthållsgatan, it is planned to partially sink the road into the ground and certain sections may even be covered over.

The traffic flow to the harbour in 2020 is expected to be 10 000 vehicles/yad in Koppargatan, of which 25% is heavy traffic. Vehicular traffic to the harbour increased during 2007 and this expansion appears to continue.

The harbour is making a strongly orientated effort toward railway transport, partly for sea-borne units and partly for long distance domestic units with destination and/or origin in the regional market. Due to environmental and logistical reasons,



TERMINAL SPACE

goods traffic via railway is expected to increase considerably in the future.

As far as Helsingborg is concerned, there is a conflict between the ferry terminals space-demanding parking and storage areas and their location in the middle of the H+ area. Until a fixed H-H link is in place, and depending on which type of traffic it will handle, ferry traffic will remain a very important part of Helsingborgs business and identity. Ferry traffic fullfils a large transport requirement, and for each year that passes, the integration between north-west Skåne and north Själland (Denmark) increases, in the same way as it does in the southern part of the Öresund region (via the Öresund bridge).

The question of the parking and storage areas can be studied and illuminated in different ways. Proposals that have been received are a combination of the two areas, or that the current areas are reduced and completely or partially located beneath ground level or decked over. Whether these proposals are possible from a risk and safety aspect has not yet been fully investigated.

Starting point for the task

- **The ferry terminals at Knutpunkten must remain where they are and the parking and storage areas must function rationally and effectively, but their locations and sizes do not need to be the same.**
- **The ferry terminal at Oceanhamnen is planned to be relocated but the container terminal is planned to stay in its current location into the foreseeable future.**

- **The harbour is expected to expand southwards within the existing harbour area.**

Questions

- **How can an attractive area be developed for housing, offices and recreation at the same time as the logistical functions continue to function for**
- **How can the logistical functions be a positive part of the area's identity?**

OVERALL LOGISTICS

Helsingborg Harbour

Helsingborg harbour occupies an approx. 1 500 000 square meter area located between the H+ area and the Öresund. The harbour is an independent company owned by Helsingborg town, it has a turnover of 289 MSEK and employs 256 people. The harbour's business concept is to be a transport hub for sea and land traffic, which with regard to safety and the environment, can offer cooperation terms with businesses, that can be expected from one of Sweden's most important logistic centres. The business comprises ferry traffic between Helsingborg-Helsingör and handling of unit, parts and bulk goods. In total, over 47 000 ship movements per year occur in Helsingborg harbour, of which 46 000 are ferry traffic. Helsingborg harbour comprises four geographic sections; Nordhamnen (north harbour), Västhamnen (west harbour), Sydhamnen (south harbour) and Bulkhamnen (bulk harbour).

Helsingborg has developed into a leading transport hub and this development is expected to continue to expand. Helsingborg's geographic location in combination with a modern and efficient container harbour provides good logistical conditions for export and import flows.
The harbour is attempting to increase the number of transports that include more than one type of transport through service offers and additional services. The capacity for unit handling will be increased by converting existing areas and new cranes will also increase the capacity.
The harbour in Helsingborg has a prioritised role in Sweden and the national Harbour Strategy Investigation placed Helsingborg Harbour as one of ten strategic nodes in the Swedish network for road, rail and marine transport.
In order to follow the global trend of containerising goods, the harbour is continuously adapting its operations toward container handling. Investments that are planned in the harbour's future analysis are the conversion of land, purchase of cranes and the replacement of container trucks with Transtainer handling. All planned expansion is intended to occur within the limits of the harbour area, by converting areas to other purposes, the first action will be the conversion of the Oil harbour.
Oil handling in Helsingborg's harbour is showing a decreasing trend. The oil company's are concentrating there depot operations to a more limited number of harbours. The result is that the remaining oil handling at the Oil terminal principally only supplies the regional market. This is the reason why the whole of the northern Oil harbour could be converted to a container terminal. The last depot, Din-X is to move from the northern Oil terminal in 2009. The remaining operators at the Oil terminal will have less space but are estimated to be able to retain their operations and transfer volumes for at least another 20 years.

Nordhamnen (Northern harbour)

The Northern Harbour has four basins and is dominated by the intensive ferry traffic to and from Helsingör. There are three Ro-Ro terminal for ferry traffic beside Knutpunkten and in the inner part of the Northern Harbour.
Scandlines and HH-Ferries traffic the route Helsingborg – Helsingör with vehicle ferries. Scandlines is located at Knutpunkten and HH-Ferries at the Oceanhamnen with the Sundsterminalen and both ferry lines transport both vehicles and pedestrian passengers. AceLink have their terminal in the old customs house and traffic the sound with smaller ferries for pedestrian passengers only.

Västhamnen (Western Harbour)

The Western Harbour is the newest and is used mainly for handling unit goods. It has two harbour basins that are used for container handling with a total of three ramps for handling Ro-Ro traffic. The Western Harbour has three rail-bound and two mobile container cranes. This harbour also has a separate quay for handling and storing pelleted bio-fuel, which is transported by conveyors directly to the bio-fuel magazine and the Västhamnsverket (Western Harbour plant).

Sydhamnen (Southern Harbour)

The Southern harbour has several different types of operation, a grain and oil terminal and a terminal for handling piece goods, Ro-Ro traffic and project loads. Lantmännen operate the silo and animal food factory in the grain terminal, which is one of the largest of its type in northern Europe.

Bulkhamnen (Bulk Harbour)

The Bulk Harbour is run privately by Industry Park of Sweden (IPOS) and Kemira Kemi AB who produce chemicals for e.g. water purification and synthetic fertilizers. There is an agreement by which the Bulk Harbour is manned by Helsingborg's harbour.
(Ro-Ro traffic = "Roll on - Roll off" i.e. traffic drives on and off the ferry itself)

Cruising vessels

Cruising vessels draw a lot of attention - especially from the media, and display the close cooperation between Helsingborg and Helsingör. Both towns are marketed as a common destination through the EU-financed cruising project "Cruise Baltic". Local purchases made by passengers have so far amounted to around 100 MSEK extra turnover for Helsingborg businesses. The existing cruising quay (Helsingör quay) can only take vessels up to 150 meter. In general, cruising vessels are longer than this and in the Oceanhamnen there is over 300 meters of quay with sufficient depth for cruisers.

Questions

- **How does the new area meet the Harbour and how can one make the harbour an integrated area with positive effects for the H+ area?**

Expansion plan for Helsingborgs Harbour

7.4 Housing and businesses

Helsingborg is facing a considerable growth. According to the latest prognosis, the town will grow from 125 000 inhabitants in 2007 to 154 000 inhabitants by 2030, that is around 23%. The town is working on a prognosis for employment. The number of employed persons should within reason, increase at the same rate as the population.

Places for businesses

In Helsingborg, the primary growth areas are credit and property administration and company services, as well as services for trade and transport. Commuting is on the increase. Commuting into Helsingborg is greater than commuting out.

The northern part of the H+ area has Helsingborg's best communication and a very good position in the Öresund region. For localising of certain types of company with many employees per floor space and intensive contact businesses, such a location is attractive. For the sake of the town, a few such companies would have an important influence on the town's continued development and image. The possibility of making room for volume-intensive and contact-intensive businesses in the northern part of the H+ area, close to the station, should therefore be investigated.

The Campus is part of Lund's university and has about 3 000 students. An expansion to 5 000 students has been sketched and provision for 10 000 students within 20 years should be possible in the H+ area. There should also be room for some start-up businesses for newly qualified students.

Helsingborg has an ambition to be a meeting place. For this reason, conference centres have been discussed. More contact-intensive businesses would increase this requirement. The possibility of a larger such centre within the H+ area should be studied.

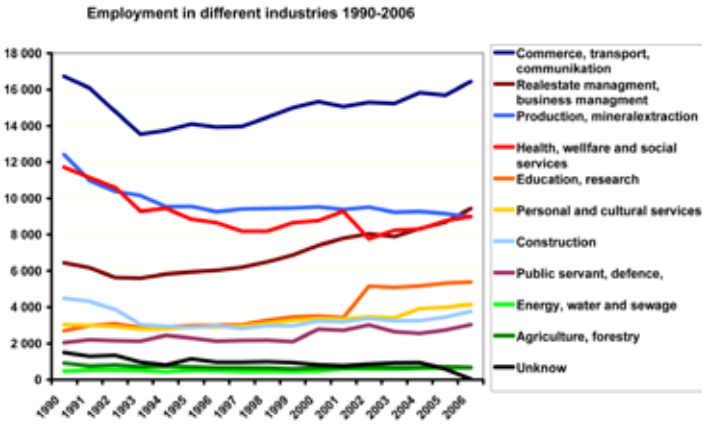
Within the H+ area, there are a number of virile businesses that need good conditions to develop. Even businesses that are important for the town and its development, but which can hardly manage higher rent costs should be given a place in the H+ area. Parts of Gåsebäck and its premises could be the right place for such operations. Gåsebäck also has an existing fire station and the "Jutan" – an activity centre for youths - which is judged to remain within the area.

Prerequisites for businesses

- **H+ needs to provide good prerequisites for developing the town's businesses. Space for volume-intensive and contact-intensive businesses should be provided close to Knutpunkten.**
- **Provision for more students at the Campus is vital. In addition, prerequisites must be given for virile businesses and for businesses that are important to the city.**

Retail trade

The general evaluation for the retail trade shows that daily purchases now increase at a rate of about 0.5% per person and year, and less frequent purchases with 2.2% per person and year. Together with the expected population increase, the development of retail trade can be assumed to be considerable.



This will place a demand for a large number of new properties in the town, even if there is a risk for an excess in the short term. The population and trade growth should create a demand for, and the conditions for, increased city trade. A restructuring is currently taking place within the retail trade where many, but not all, types of product are being developed with a demand for larger ranges and larger premises. In Helsingborg, these types of premises and ranges have primarily occurred within the motor sector. An increase in commuting with public transport will cause an increased demand for sales points at transfer nodes. High energy prices and a larger population without private cars will lead to a greater need for retailers at locations served by good public transport. The City is the area in the town that best fulfils the conditions to respond to these changes in society. Locations with both good public transport availability and good car access will be popular.

The chance to let the town's city respond to a larger population, a stronger role and an increased range of goods, should be investigated in the H+ area. For this reason, the possibility of allowing larger shop premises, probably in specific multi-storey retail trade buildings, should be emphasized. An additional request is the conglomeration of the city's different sections.

A larger number of new homes – most probably in the southern part of the H+ area, brings a need for local retail traders and other services, which due to the distance cannot be supplied by the city. A location for this should be found in order to respond to the need within H+ and the need to reinforce the existing parts of southern Helsingborg. Such a location should have good accessibility by public transport and by car, a good connection to other services and a good chance of successive realization.

Prerequisites for retail trade

- **A chance to let the city center respond to a larger population, a stronger role and an increased range of goods, should be investigated in the H+ area. Also locations for retail traders and other services to fullfil local needs, should be provided. Good accessibility by public transport and by car, as well as connections to other services, movement routes and attraction points in the area, are important.**

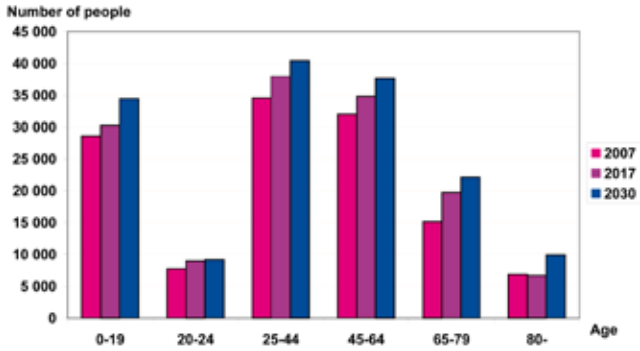
Housing

According to the latest population prognosis, all groups of the population are increasing in Helsingborg. There is a small deviation toward a larger number of senior citizens and a smaller number of 25-64 year olds. There is also a tendency toward an increase in single parent families. The total evaluation presents a future scenario where 700 new homes are needed by 2030.

Helsingborg has a wide spread income structure. Alterations in the population structure indicate a certain increase in this spread. The economical development indicates a generally better economy.

This means in general that Helsingborg will increase in all age groups, household types and income groups. This means that Helsingborg's housing requirements need to increase for all types of housing so that all groups shall consider that the area is suitable for them.
The goal of the town is that segregation should be counteracted and that every area should have a mixture of home types – such as house types, home sizes, ownership types and costs.

Number of people in different age groups in 2007, 2017 och 2030 in Helsingborg



"Campus Helsingborg shall work for a region under strong development, with national assignments in an international environment..../..the education and research environment at Campus Helsingborg is characterised by boundlessness, creativity and closeness to business life in the surrounding community.

Utdrag ur Campus Helsingborgs verksamhetsprofil, 2008.

Prerequisites for housing

- **The H+ area needs to be planned so that all groups understand that the area is suitable for them. Most probably, the number of families with children and other young people will initially be somewhat higher than the rest of the town, but this will adjust itself automatically with time. A mixture of housing types should be sought.**
- **Campus shall be seen as a catalyst for within the H+project.**

H+, laboratory for Campus Helsingborg

Campus Helsingborg shall develop specific training and research programs to follow and participate in the development of the southern harbour in Helsingborg's H+ project.

The H+ project includes extensive development of Helsingborg's southern harbour. The expansion of the southern harbour in Helsingborg will take more than 20–25 years and cover an area corresponding to the Ystad of today.

Campus Helsingborg is located centrally in this development area. In the first phase, the railway line outside the campus will be enclosed in a tunnel. The location and situation provide a unique opportunity to co-produce education and research. The scope of time is such that the educational program can be built entirely around H+ and the size of the project is so large that disciplines from all faculties can find relevant areas of common interest in the R&D project. The possibility of building on the integration of education-work is unique. Helsingborg town's opinion is that all contracts concerning project planning and building require cooperation with education and/or research at Campus Helsingborg.
The H+ project is a mega-project that creates the conditions for experimentation with work-place integrated training programs in a very large development environment that, at the same time, is an interesting object for R&D projects.

Extract from Campus Helsingborg's business profile, 2008.

"The layout of the new library and meeting place in the Southern harbour, has been built from the start under the premise that people have created the place. By using a process that involves both current and potential library users (children, youths, small businesses, Campus students, new families and craftsmen, seniors, etc.) a meeting place/library was created in the form of a "cultural café". Activities are guided by phrases such as "atmosphere", "platform", "conversation", "self-confidence" and "personal development".

Extract from visionary work from the town libraries' work around questions about a new meeting place in the H+ area.

7.5 Implementation economy

In order for the visions for the H+ area to be reached, the area must contain a varied mixture of types of homes and businesses, parks, public spaces, recreation, trades and schools. There must also be a number of natural meeting places, everyday meeting places, and for the entire Öresund region.

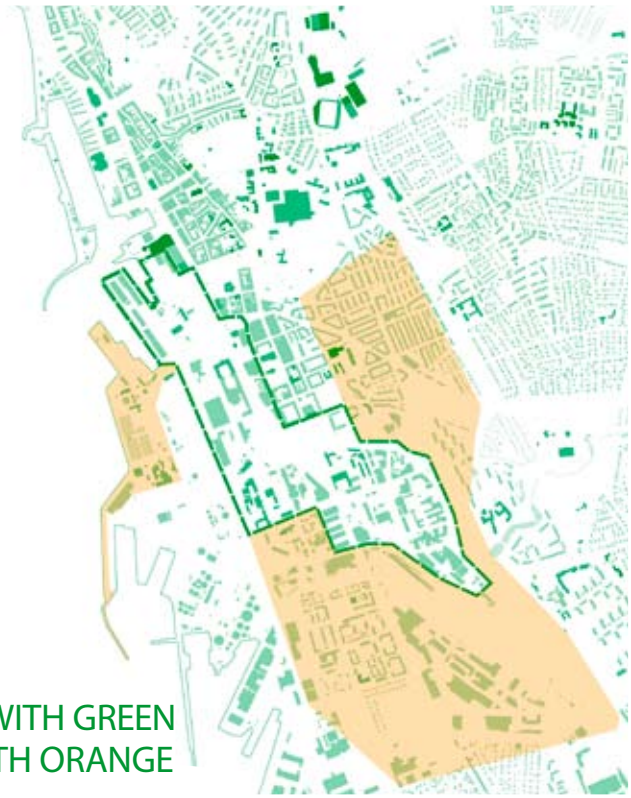
In conjunction with the decision concerning the Södertunneln in 2006, an estimation was made of the possible exploitation of the area, which is the basis of the financing calculation made for the area. This calculation is built upon an exploitation of approx. 800 000 square meters of new production within the H+ exploitation area, which would give a total degree of exploitation of almost 1.0 for the area. The exploitation area is marked on the map. The H+ area is expected to create a possibility for new buildings neighbouring the exploitation area, but this possible neighbouring exploitation is not included in the calculations.

The H+ exploitation area is marked in green on the map. The H+ influence area is considerably greater and includes the Oceantermialen to the west, the area along the outer quays alongside the sewage works, and from the Western harbour plant up to the Västhamnsfisket. It is assumed that the combi-terminal will be left in place. To the south, the area of influence stretches to Ramlösa station and to the east, across the Malmöleden and the plateau to Närlunda. To the north, the area of influence reaches central Helsingborg and the harbour entrance.

In the material for the calculation, there are buildings from three floors up to 6-7 floors. The calculation is based on differentiated price setting for the area, with a distribution between homes and businesses. In the calculation, the distribution between homes and businesses is about 60/40 with a somewhat lower number of homes in the Gåsebäck area and a somewhat higher number in the South and Southern harbour.

Prerequisites

- **Exploitation income is the basis for the investments in the area's infrastructure and public spaces as well as a part of the financing for the Södertunneln, and is essential in order for the H+ project to be executed.**
- **The degree of exploitation shall however not be seen as fixed, it is up to the competitors to test the density, height, character and content, based on the information given, and to describe the advantages for Helsingborg town with the proposed design.**



H+EXPLOATATION AREA MARKED WITH GREEN
AND INFLUENCEAREA MARKED WITH ORANGE

7.6 Other infrastructure and environmental influence

Disturbance

To the west of the H+ area are several of Helsingborgs major plants for district heating production and the town sewage works. It also includes Helsingborg harbour which also stretches into the H+ area via the parking & storage areas, and the highway that connects to the future Hamnleden. These activities influence how it is possible to build within the H+ area, due to risk factors from the plants, noise from the plants and odours from the plants. At the same time, it is Helsingborg town that owns and operates these plants, which to a certain degree are intended to be adapted to permit the H+ project.

The Harbour
The Harbour operations can be considered as a disturbance to the H+ area, partly due to the noise generated and party due to emissions from the operations, and also the experienced risks generated by the dangerous goods that are transported through the harbour and stored in the harbour. The lighting from the harbour can also be experienced as a disturbance.

The entire parking and storage area up to Knutpunkten ferry terminal and connecting roads is within the H+ area. The Harbour operation influences consist mainly of noise and lighting problems, in a second case the risk problems and to a lesser degree emissions to the air. The terminal is included in the H-H route and operates day and night with passengers, private cars, and truck traffic.

Noise from the harbour
BNoise from harbour operations at the combi-terminal occur primarily from machines and in conjunction with loading and unloading containers. As the company gradually replaces its machines, they are changed for quieter machines.

The parking & storage area is considered as a normal road and noise in accordance with normal traffic norms is permitted.

The noise is caused by motor vehicles that drive on and off the ferries.

The noise emitted from the H-H route terminals, i.e. the traffic noise from vehicles driving on and off the ferries to Helsingör, is less at the closest existing home, and at every time of the day, than the noise emitted from the neighbouring Järnvägsgatan.

Risks from harbour operations

Dangerous goods
With the Scandlines and H-H Ferries, passenger and load carriers with dangerous goods are primarily transported together. Dangerous goods with a higher degree of danger (e.g. larger amounts of flammable gases and liquids) are directed by the codes and "Östersjöavtalet" (Baltic agreement) to transport with a limited number of passengers. For products of an explosive character (class 1) the number of passengers is restricted to 12 persons. For the purpose of permitting transport with a limited number of passengers, there are ferries that travel at night outside the normal time tables.
HH-Ferries allow dangerous goods according to the same routines as Scandlines. The proportion of dangerous goods is less than Scandlines, e.g. less than 4%.
All of the heavy traffic, including dangerous goods, goes via Sjögatan, the roundabout at its northern end, and via HH ferries and Scandlines parking & storage areas, onto the ferries.
In general the following protective activities apply to the parking and storage areas:
- Units with dangerous goods are directed to special parking areas that are only for that type of vehicle. Next to this area, there is a service lane that is always kept free for rescue vehicles.
- The area is monitored visually with cameras.
- Waiting vehicles can be directed by the personnel on site and via the PA system, which informs waiting vehicles.
- The surface water system can be shut off so that any spillage can be contained.
- The response time for the rescue services is six minutes.

The analysis shows that the individual risk measure is not exceeded and that the majority of the transport of dangerous goods in conjunction with these operations is performed at night when passenger density is low. The risk level in the proximity of the harbour area is never higher than the criteria where the risk cannot be tolerated.

Harbour lighting
The lighting in the harbour and terminal area shall, according to Arbetsmiljöverket (the Work Environment Authority), be good and even across the entire harbour area. In the harbour, the working lighting has a level of 40 – 60 lux. At the outer edges, the value drops so that the edges of the lit area have a level of 2 – 5 lux. This lighting is sufficient for the monitoring cameras and

general good night time vision. High pressure sodium lamps are used throughout, since they provide good working lighting, even if low pressure sodium has a better efficiency.

The lighting masts are in general 22 meters high including foundation. Since harbour activities occur around the clock, the working lighting in the Knutpunkten terminal is always on. When harbour activity in the other harbour sections is dormant, the working lighting is lowered to a level of 5 lux from the same lighting masts.

Sewage works

Helsingborg's sewage works Öresundsverket is well dimensioned for the town's current and future needs. Öresundsverket, which is operated by the town itself, handles the waste water produced in the town, the majority of the industries, and waste water from several surrounding population centres.
The works comprises a filtering plant, tanks and large open basins where the water is treated both chemically and biologically. The cleaned water is released into deep water in the sound outside Helsingborg.
The safety distance that is generally given is a distance to homes of 1 000 meters, as a precaution for disturbances in the form of odours and the spread of bacteria. The works are equipped with a new production system for bio-gas (methane) with storage of gas, that actually only requires a safety distance of about 100 meters.

A general environmental study of the works states that with certain point measures such as encapsulating, odour purification and/or chimneys, the safety distance could be reduced to 200 –300 meters. There may however be both practical and aesthetic reasons to consider a total over-decking of the works, or a complete relocalisation of it.

District heating plant

The power heating station Västhamnsverket (plant 4) and heating station Israel (Israel 2) produce district heating and district cooling that cover a large proportion of the town's requirements. A smaller amount of electricity is also produced. The plant is run by Öresundskraft AB which is an independent company owned by the town.

Västhamnsverket is the main plant and comprises a steam boiler, a gas turbine and a heat pump. The plant operates mainly on pellets that are shipped to the plant by boat. A larges store for solid fuel – the Pelletsladan (Söder 1:6) – is alongside the plant and harbour. Natural gas is used as a complementary fuel.

Heating station Israel is an oil-fired reserve plant that is only used with production loss in the Västhamnsverket and during periods of extreme cold. With regard to the noise and odour, a general safety distance of 700 meters is recommended to homes for a plant with Västhamnsverket's output. If has been judged as realistic that actions can be taken to reduce the safety distance to approximately 350 meters.

The Israel plant may be decommissioned within a few years, meaning that the general safety distance of 500 meters can be reduced considerably. The plant will most likely be left in place as an important distribution point for district heating. A lesser safety distance for pressurised hot water may be required.

Pelletsladan has been studied as a separate fire risk object. The safety distance in question is 500 m which in general corresponds with the main plant's safety distance.

Other disturbances close to and within the area.

There are several industries within the H+ area at Gåsebäck and in the proximity of Gåsebäck that are illustrated on the map. These are expected to remain parallel with the development of the H+ area but are then expected to be disposed of. Parts of these industries can however result in a slower development of the Gåsebäck area.

Prerequisites

There are several investigations studying the operations of the described plants in progress, concerning their influence on and limitations to, new buildings within the H+ area. The studies also examine how the plants can be adapted to, or in certain cases be moved, to permit the H+ project. These studies will be an uncertainty in the project during a long period, that can change the prerequisites for the project. However, certain conclusions can be made from previous studies and cooperation with interested bodies that support the project competition.

- **The Container terminal and Scandlines parking and storage area will probably exist for the foreseeable future. Smaller cosmetic alterations to the container terminal are possible. However it will not be possible to enter the area for those living close by. One possible scenario is that the HH-ferries terminal is combined with Scandlines, so that the terminal can be removed in a presented scenario.**
- **The function of Scandlines parking and storage area must remain, together with the terminal, for the foreseeable future. If a fixed link is built between Helsingborg and Helsingör it is no longer thought necessary to have a connection**

between the vehicle ferries and Knutpunkten.

- Hamnleden, which is part of the E4, generates both traffic noise and risks due to dangerous goods, all the way from the town limits to the parking and storage area and ferries. It is possible to locate buildings directly alongside Hamnleden and the container terminal if they do not contain homes. However, it should be possible to build homes in the area between Bredgatan and Hamnleden if other activities, e.g. offices, ”shield” the homes. The building of homes must also be planned so that all homes have at least one “quiet side”, i.e. a side that does not face any disturbing activity.
- It is considered not possible to build homes that face directly toward the harbour entrance along the outer part of the Oceanpiren and Sundsterminalen, due to the noise from ferry traffic. However, it is considered possible to build homes on the Oceanpiren if all homes have at least one quiet side.
- The area along the outer quay up to Västhamnsfisket and around the sewage works may be available for the general public, which can be seen as a possible scenario for the competition.
- It is considered probable that the sewage works will be rebuilt to reduce problems of odour and risk. A complete movement of the plant is also being investigated, but is not a prerequisite for the competition.
- The reserve power station, Israel, is intended to be relocated or removed. A smaller plant for the distribution of the town’s district heating will be put in its place. This plant will however be integrated with the new buildings or alternately be a smaller independent pavilion.

Technical infrastructure

A large number of main water lines and the main pipelines for district heating and district cooling, that are a basic requirement for the town's existence, pass through the H+ area.
All spill water from Helsingborgs kommun is fed through the area to the Öresundsverket sewage works, for treatment and later release into the Öresund. There are a number of points of conflict between the pipeline system and the planned Södertunneln that require parts of the pipeline system to be repositioned.
Öresundskraft have a number of production and distribution plants within the area of study that need to be taken into consideration. The Västhamnverket is Öresundskraft's main production plant for district heating and district cooling in Helsingborg. The main plant, Västhamnsverket (VHV), was partially fired by coal up to the end of 2005. Since 2006, the main fuel has been bio-fuel (pellets, briquettes). However, fossil fuel (oil, gas) is used as a reserve and for point loads and when starting up VHV. Eventually the use of fossil fuel will cease.
Helsingborg town's environmental program and energy strategy has a clear orientation towards a more sustainable town. This document also points to the H+ area as being a demonstration area for new solutions. The ambition of Öresundskraft is to help form the shape of the H+ area and contribute actively to the energy strategy.

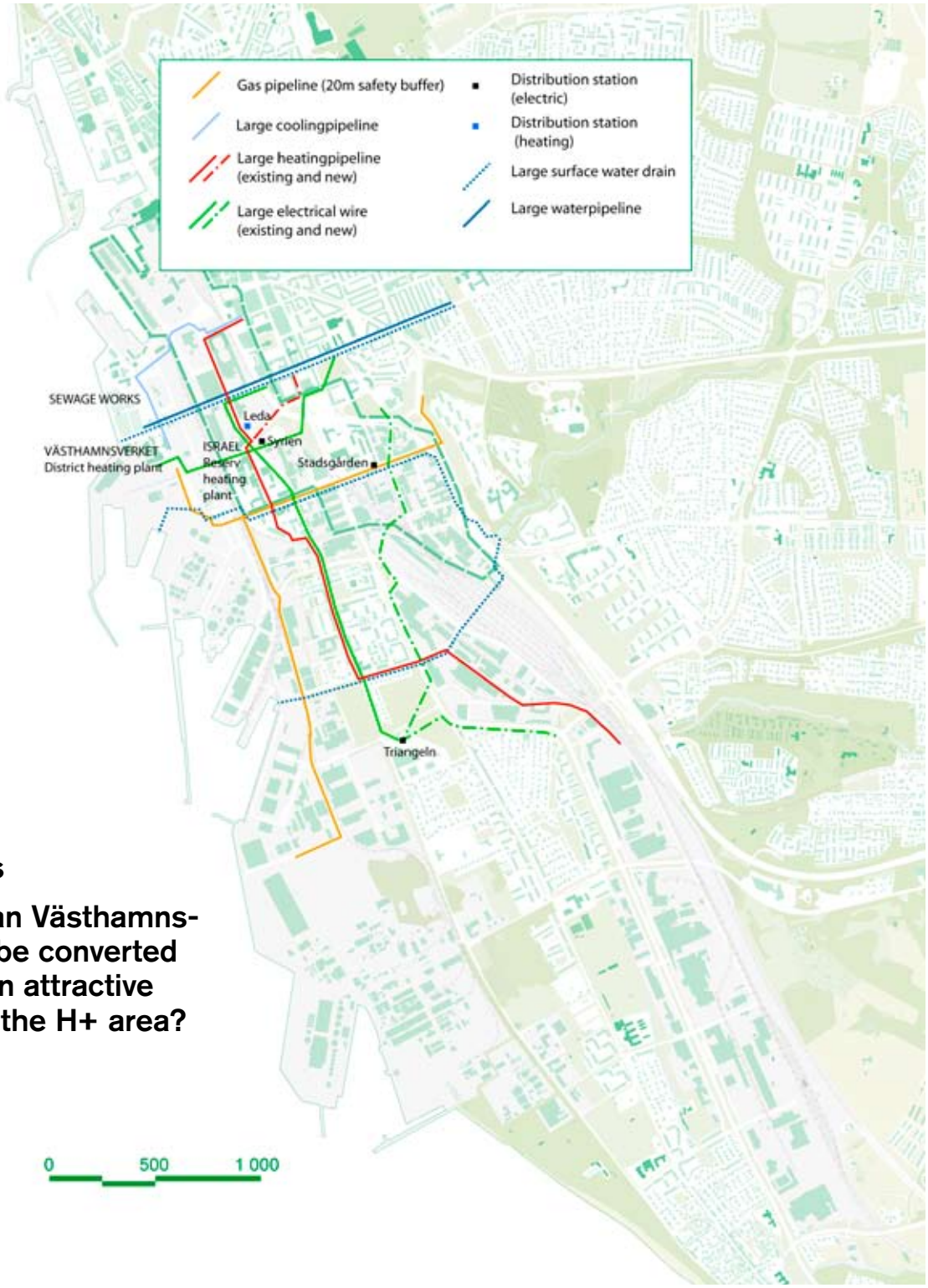
Prerequisites

- **Pipelines in Furutorpsgatan, Sandgatan and Bredgatan shall be left in place.**
- **Pipelines in the extension of Gasverksgatan are intended to be relocated in conjunction with the new building phase.**
- **The distribution stations in the Syrien block, triangeln and stadsgården are intended to be decommissioned within ten years.**
- **Västhamnsverket will remain. The reserve heating station in the Israel block is assumed to be decommissioned at the latest by 2015. However, a pump station that can be integrated with the new buildings must remain in the block.**
- **The distribution station in the Leda block shall remain, but is also possible to integrate with the new buildings.**

H+ shall be a sustainable part of the town. The energy strategy is basic material and a support for the H+ project; it provides the prerequisites within the energy area that the project is expected to take into consideration. A research project concerning sustainable building, with H+ as a demonstration area, is in progress.

- Energy and climate aspects have priority in all council planning. Localisation of homes and businesses shall minimise the need for transport.
- Public transport and unprotected persons in traffic are prioritised in planning.
- Energy and climate aspects are taken up specifically when drawing up exploitation and use of land agreements, and the possibility of directing the use of energy forms with the least possible emission of greenhouse gases is applied.
- By 2020 at the latest, all new production of buildings shall be in accordance with principles of low energy housing, with the lowest possible use of energy.
- Rebuilding to low energy housing is desirable when renovating existing properties.

Energiplan för Helsingborgs stad antagen hösten 2008.



Questions

- **How can Västhamns-verket be converted to be an attractive part of the H+ area?**

7.7 Projects in the vicinity

Helsingborg is growing and has to face some great changes/ developments within the coming years. The town will gradually transfer its resources and focus from the remainder of the town to the H+ area. The intention is that up until 2025 – 2035, half of all new development shall be within this area. By making such a division, the intention is to bring sufficient resources to the initiation of the H+ project while at the same time developing the remainder of Helsingborg.

During the last few years, Helsingborg has primarily expanded along the pågatåg stations (regional commuter rail system) within Helsingborg council. There are also several projects to the west of Österleden and the first project to the east of the route has also started. Helsingborg has also worked intensively to increase the density in central Helsingborg, with several project in the vicinity of the H+ area. A considerable amount of work has been laid down from the town's side to initiate a renewal of the town in southern Helsingborg, south of the H+ area. In this area, industrial land has been converted into parks and natural landscapes to create a connecting green thoroughfare. Several housing projects have also been initiated.

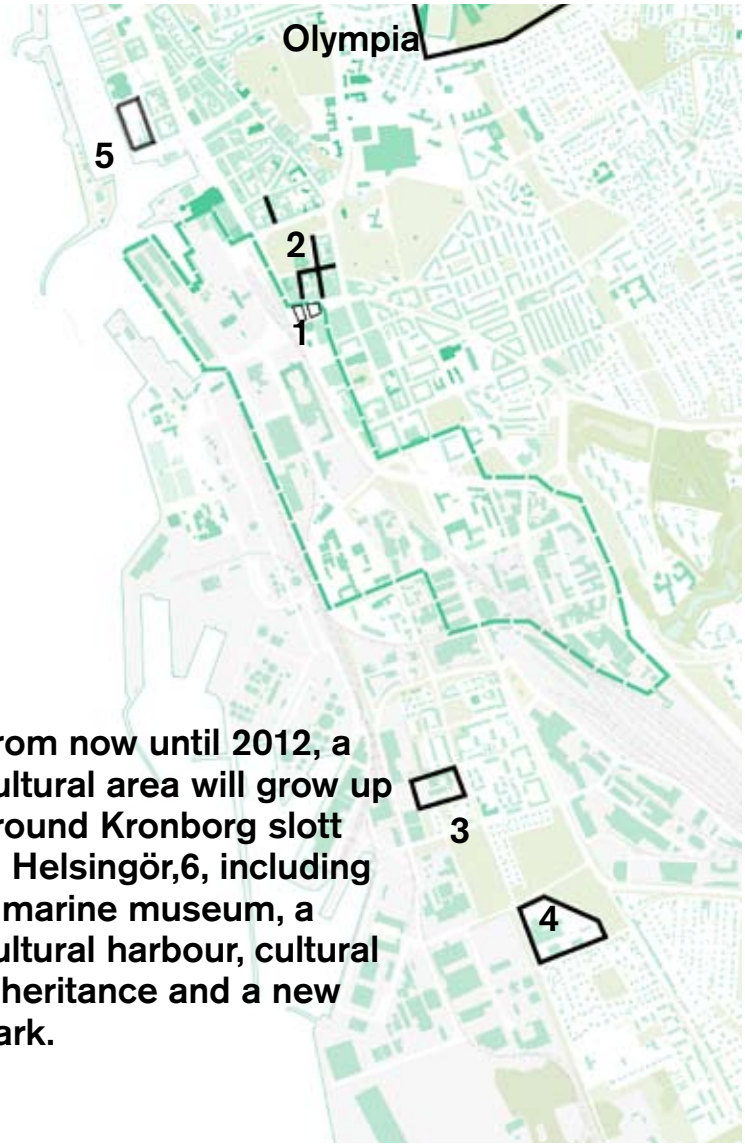
The town's sporting arena Olympia is due for a larger conversion where e.g. a new indoor arena is to be built and the sports park is to be opened up as a recreational area for all members of the population.
Helsingborg town has also started a project to develop the town's million program* area which lies like a belt around the town centre. (*a national development plan from the mid 60's to build 1 million homes that mainly concentrated on apartment buildings) This work is expected to be intensified and run parallel with the H+ project.

In central Helsingborg, several projects have been performed to strengthen the public spaces. During autumn 2008, the third phase of the town's harbour promenade will be completed. During 2009, the streets around the stadsparken will be given a new character. The town is placing significant force in "urban management projects" by creating and supporting events and activities in central Helsingborg.

Prerequisites

There are a number of projects, that can be seen as a necessity for the town's development strategy, that are under way in the direct proximity of the H+ project.

- **The construction of a new block in Konsul Olssons plats, 1,with a Filmstad (studio cinema) in the bottom floor, will be started during Autumn 2008. The entrance to the cinema will face Järnvägsgatan. The development is divided into two blocks where the westerly will contain homes and the easterly a hotel. The project is being run by Midroc and the architect is Johan Celsing.**
- **The streets around stadsparken, 2,are to be converted to pedestrian precincts in order to offer better conditions for trade and cafés and to connect Bruksgatan and Södercentrum. Söderpunkten is also due for a complete renewal.**
- **Several projects are already started in planteringen, south of the H+ area. New housing development is intended in the Lux block,3, and the existing industrial buildings are being filled with different types of meeting places, activity centres, dance halls, training gyms and studios.**
- **Three housing towers are to be built in the Triangeln block,4, together with some low town houses, at the same time as the old wagon workshops are to be renovated. The Tallskogsleden that connects the green areas in Southern Helsingborg is also being redesigned.**
- **A congress centre and a hotel are planned for the Ångfärjestationen,5, (steamboat station) north of the H+ area. The existing building is intended to remain in place.**



- **From now until 2012, a cultural area will grow up around Kronborg slott in Helsingör,6, including a marine museum, a cultural harbour, cultural inheritance and a new park.**

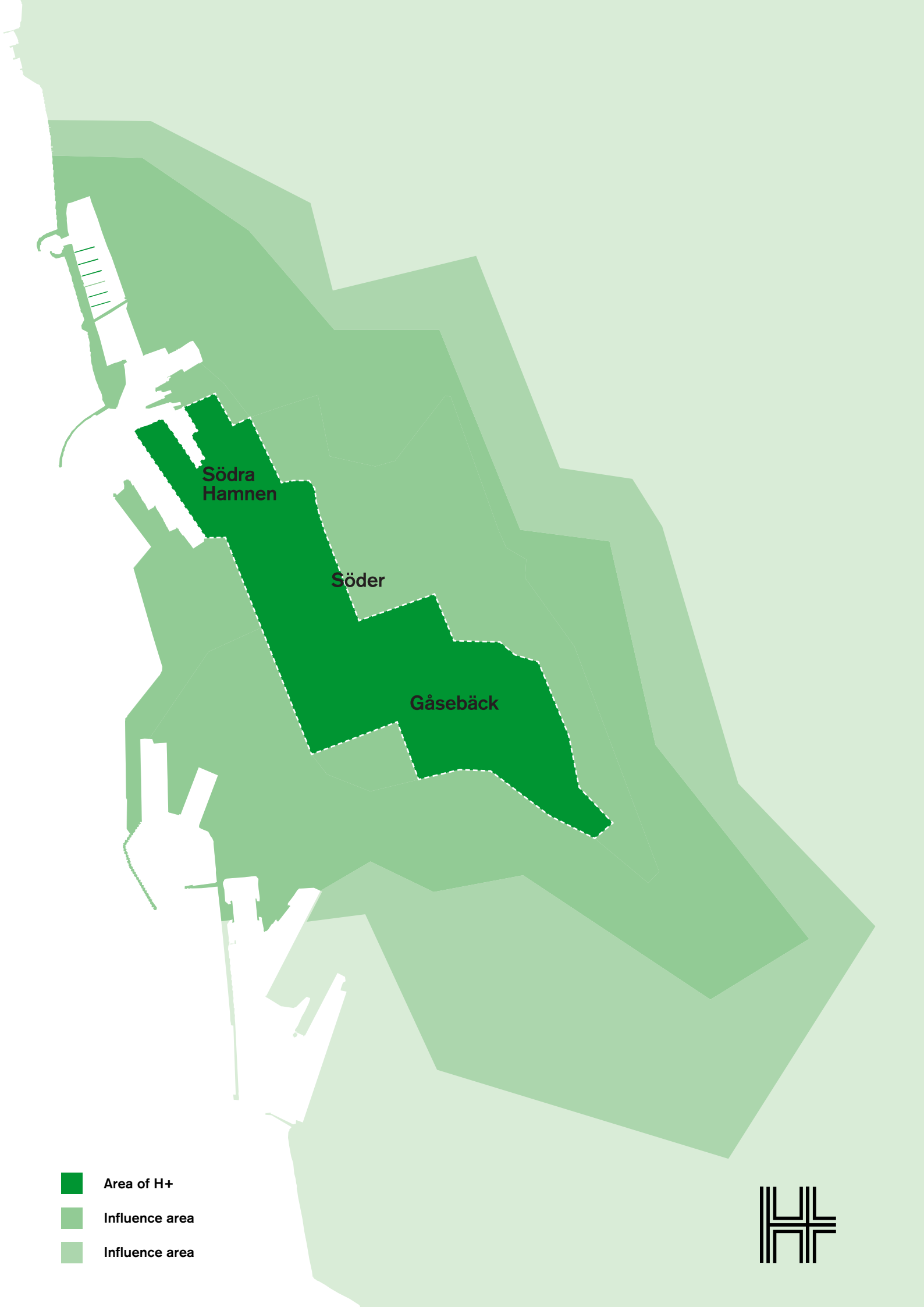

5. Ångfärjestationen.


4. The triangle block, Dagon by Fojab architects.


Above: Plan over thought recreation and sportarea Olympia.
Below: 1 Konsul Olssons plats, Midroc by Johan Celsing architects.

6. New Maritime Museum by Kronborg, City of Helsingör. by BIG architects.

PROJECTS IN THE VICINITY


Södra
Hamnen
Söder
Gåsebäck
Area of H+
Influence area
Influence area