COLOFON

Synopsis

The project "Follow the tracks - developing an old industrial site in Aalborg" takes its departure in Aalborg, on one of the former industrial sites inside the ring road. A new development of the site concentrates in making the site into a new campus area for non-university educations and in creating a nice environment close to the stream to be opened. The aim is to design a dynamic area with possibilities in fulfilling the needs from both students and visitors. The design have been made by using the methodology of Life-Space-Edge-Building a method there is seeing the life in an area as the most important aspect in designing the area.

Aalborg, June 3th, 2009

Lise Bomberg

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Preface

"Follow the tracks – developing an old industrial site in Aalborg" is my master thesis from Aalborg University in Architecture and Design with specialization in Urban Design, where the theme of this project is transforming former industry fields into city areas. The setting of the project is Aalborg, where the area is a former roundhouse area formerly owned by the company Limfjords Banen, and now owned by the municipality.

The project site is as large as the old city and it is therefore recommended to develop it over several years as a process. The design in this project is focused on the starting point, the point closest to the public transportation, and the part of the site with fewer programs.

The project "follow the tracks – developing an old industrial site in Aalborg" consists of this project report and plan and section drawings to find subjoined in the report. The report is organized in different chapters there can be read alone, but is recommended to read the way it is organized. All references follow the Harvard standard.

Finally, I would like to acknowledge Bo Pehrson from Rambøll and the department of Byudvikling og Byfornyelse from the municipality of Aalborg, for letting me get an insight in what should happen with this site, and to give me an understanding of what is happening in the city today.

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Introduction

In the following pages the site and ideas will be introduces by i.e. location, the existing conditions on the site, what the first impression have given, the sense of place some history of the city and of the campus idea.

Development - from industry to city

Today many old industries are closing down and leaving large areas centrally located in the cities for new development. These new areas are often located close to the harbours and streams or as in this case close to the existing railway station.

The new possibilities the abandoned areas gives the cities are many, an entire city can end up changing the image depending on which kind of activities there are going to be located here.

The changing's in the society today also makes possibilities in how the new areas can be developed. We are today more open for new ideas and we can make areas with housing but without the domestication there can spoil the areas for common activities. [Florida, 2001] This kind of thinking in new housing areas is very common in Aalborg and the new area for development in Nørresundby (Tømmerhandlen), close to one of the departments in the municipality, are going to have a goal in making the area with houses cut into the green surface, and without private areas close to the house, and in that way give the city more green areas, without it is private gardens to villas. [Aalborg kommune 1]

Looking at the site of this project it is today with almost no green at all. In the nearby surroundings we have green parks like Tivoli and Kildeparken, but these two parks haven't got capacity for all citizens of Aalborg or just the nearby area. Therefore it is important to make this site green and open for public, and hide some of the scars from the old industries.

Aalborg

Aalborg is today a city in development. When the old factories like Nordkraft and the cigar factory C.W. Obel closed they gave the city its inlet back. This is one of the aims from the municipality to give the citizens the benefits from the inlet and open the walls there was against the inlet. [Aalborg Kommune3]

In Aalborg there the development of the harbour front has had both good and bad experiences. The area between the bridges in Aalborg was planned to be an area with many small canals and houses down to the canals, but course to the expenses in making the many canales, the project was changed. [Aalborg Kommune3] The result is that today the area hasn't got life between the houses and the buildings on the site feels more domesticating, so it doesn't feel nice to be there. To avoid this will happen again, the municipality have used many years and money in developing a plan for the rest of the harbour front, with public programs and also in making the car traffic go away from the harbour front.

The result of this is that today the Jomfru Ane Park is opened, and later they want to build a harbour bath, they are in progress with the area from the Utzon Centre to the House of Music, and all the way there will be open for public along the inlet. [Aalborg Kommune 2]

Campus - education

Today there is in Denmark a large problem that many of the public schools are falling apart. The municipalities there are the owners of the schools don't have much money and often each municipality have to choose between which school is worst and need most renovation. This is not a good solution, because many times the schools need much renovation, some times they are so bad that some of the rooms are so infected with fungus that the children and teachers get sick if they stay here. [Dr1 - Testen]

When the government wants Denmark to be known for the good education system we have, we also need to have good schools.

Gymnasiums have for many years now tried to renew their facilities or even in some cases been building new schools to enhance new ways of studying but also to get the new buildings where there will be no renovation problems the first many years. If the gymnasiums are moving out, then the public schools can use the gymnasiums old facilities, when their own are renewed, or they can even divide the school, so there will be place for the youngest and the older students in their own buildings. [campus og studiemiljø, 2009]

The way the teachers are educating the students today are also much different than it was 30 years ago. Today the teachers enhance the students to think for themselves and have their own opinions, but they also enhance team work, by doing team work one person can get more knowledge than if it worked alone, because you have more than one to get the knowledge and exchange it with the others.

The most amazing newly build gymnasium in Denmark is Ørestadens Gymnasium, they have no classrooms and all the lectures are held in one large room, with small areas where the teacher can have a lecture, but without a blackboard or a projector, all the things are online and each student can follow the lecture online. [Ørestadens gymnasium]

This type of studying will become more popular and many new planned universities and gymnasiums are working a bit with this idea, maybe not to demolish the idea of a classroom, but to make it less dominating in the buildings. [campus og studiemiljø, 2009]

Location regional

The project area is located in the capital of the northern Jutland, Aalborg. The city has approximately 122,000 inhabitants and this makes it the fourth largest city in Denmark. The municipality of Aalborg is the third largest in Denmark after the union of the four municipalities: Sejlflod, Nibe, Aalborg and Hals, this happened in January 2007.

Aalborg is known for many things, but mostly the production of Aalborg Akvavit, white concrete, the stone house by Jens Bang and the projects the Utzon Center, Nordkraft and the House of Music. The projects are very new and only the Utzon Center is finished by now. Nordkraft will open during 2009 and the House of Music hasn't been build yet.

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Illu. 01 Denmark

Aalborg
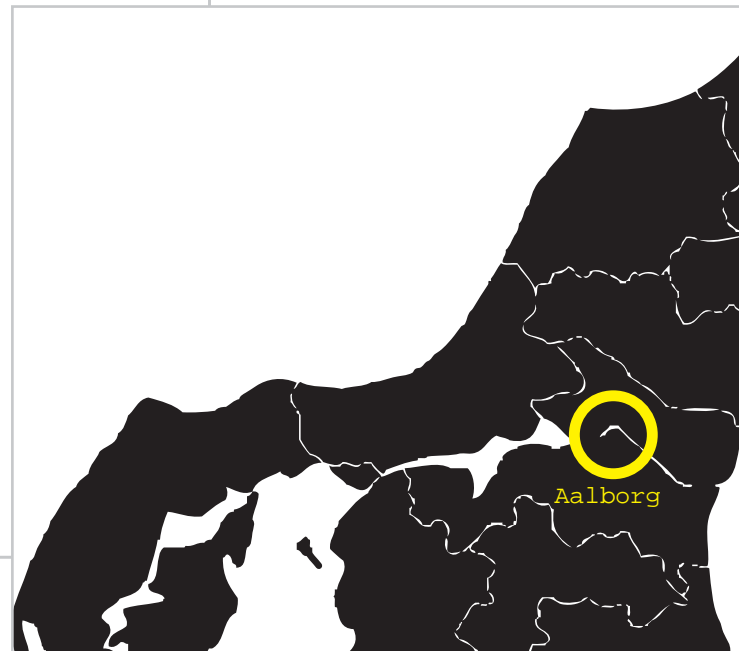
Illu. 02 Northen Jutland

Location local

The project site is located in the southern periphery of the inner city.
The nearest neighbour is the Kennedy arcade (it is actually on the site)
and the railway station.
Five minutes walk from the site, the pedestrian area of the city is located,
and most of the shopping life is also to find here.
The south end of the site is the inner ring road around the city, and it is
heavily trafficked with cars and trucks going to the city, but also the ones
going to the motorway east of the city. Towards west the rails are ending
the site and in east we have one of the bigger roads to the city centre,
Sønderbro.

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City centre
Railway
Highway
Motorway
Site

Illu. 03 Aalborg and Nørresundby

The site

Today the site is divided by different functions. The functions are car dealers, bus terminal and shopping, car rent warehouses, housing, craftsman area and wasteland used as parking and left over areas with lots of rails from the old roundhouse.

Most of the organised programmes are facing north towards the city centre, and it gives an impression that we are looking towards the old backside of the city.

By looking at the map it is easy to see that the workers area is dominating the site and after that the car dealers are having a large area. These two functions are often functions located out of the city centre which also indicate that this area hasn't been seen as the city, even though it today is an attractive location in the city.

car dealers
Housing
car rent warehouse
bus terminal
workers area
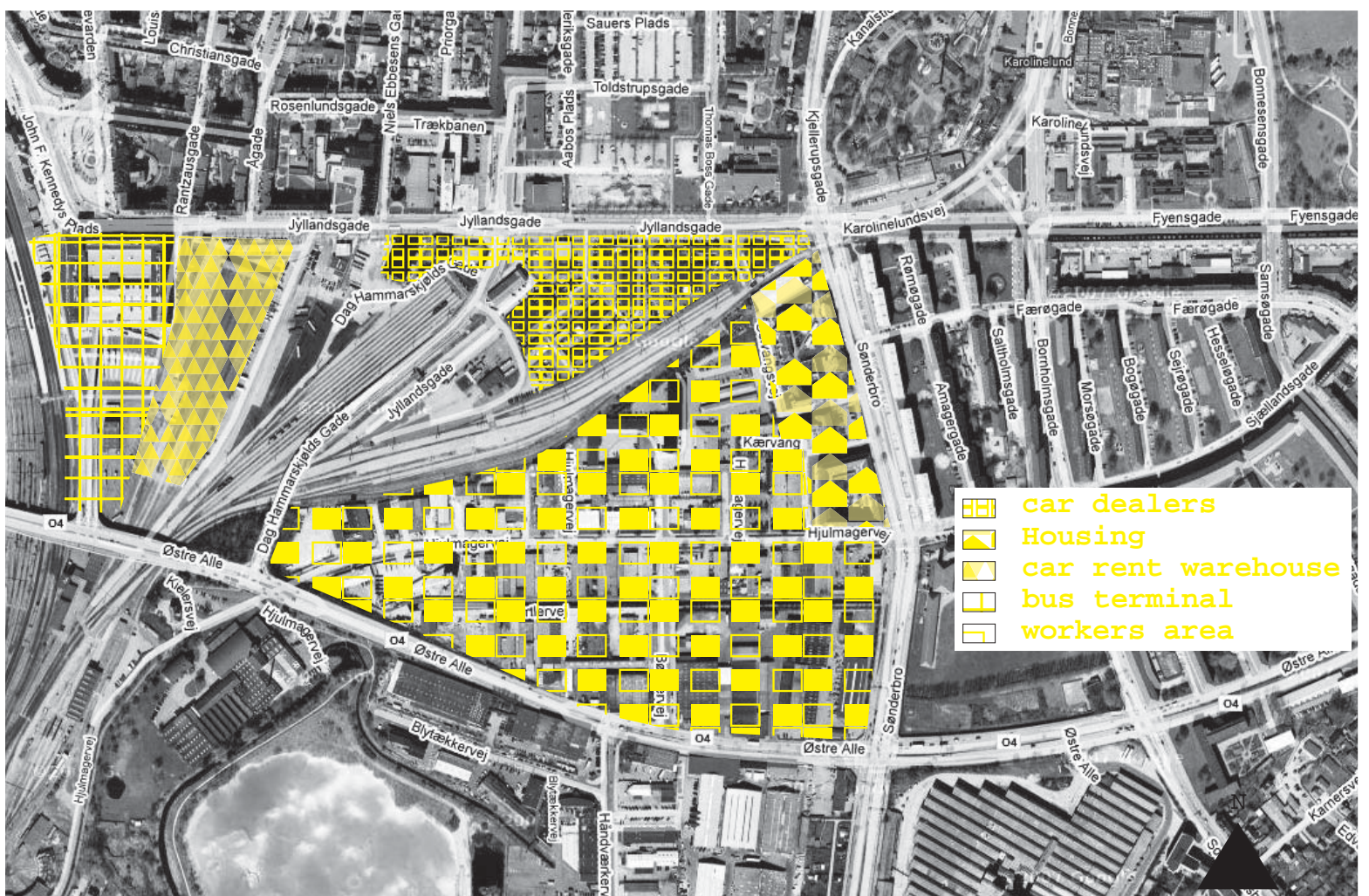
Illu. 04 The site divided by function

First impression

The first impression of the site is that it is a large abandoned area scared with the elevated street Dag Hammerskjølds gade.

But when entering and exploring the site the many leftovers from the old roundhouse gave the site an impressing feeling, the many rails and the large crane told a story about the large part in the history the railway have had in Aalborg.

During the exploring, the stream valley going all the way up to the site was also explored, and when going from the outskirts towards the city the valley showed very clear that it has been modified to fit in to the city and the fields around the city, this means that the stream has gone from wild to regulated and the last part piped and put under the city.

Illu. 05 The crane

Illu. 06 The tracks scars the site

Illu. 07 The stream vallew

Illu. 08 The modified stream closer to town

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Sense of place

The area is the former back of the city. Today the site still shows this, in the way the housings towards north is ending very fast, and the more temporarily buildings at the site, there is giving it the image, is directly facing the housings at Jyllandsgade.

The use of the old goods terminal, as a storage room for rental cars, is also indicating an adaptive use of existing buildings, which gives it a temporarily character.

The site is also giving the impression of the temporarily use in the warehouses and firms in the southern part, the buildings are in some cases old warehouses now used as offices for different firms for instance a security firm and Lauritz.com.

The factory Unicon is a concrete factory and the location of this is today inside the city, which isn't typical, but if we think of the fact that the site earlier been outside the city, the location makes sense again.

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Illu. 09 Unicon

Illu. 10 Old wareho

warehouses

Illu. 11 The goods terminal

Illu. 12 Tracks

Potentials in the area

The municipality have already got a lot of ideas for the area, and the fact that the reopening of the Østerå shall run through this site, gives a lot of potentials in making an area with lots of activities close to the stream.
One of the ideas is to make an area for non-university educations and by that give the educations new and improved facilities there can help making better study environments in Aalborg. These days the press is investigating public schools because of bad facilities both in classrooms, sanitary facilities and courtyards, the development of this area can maybe in the end expand and become a large area with scholar institutions, from public schools to the university.

The idea of making a campus area for non-university educations also gives a potential in many daily visitors to the area and in that way make more people come to this area.

The location of the site near all the central public transportations and the ring road also gives a potential in many visitors but also that people might go the few meters from the railway station to this site.

Today many people run and bike along the stream to get exercise and to walk their dogs, when the stream is reopened the people travelling along the stream can go directly to the city by using the paths along the stream.

Some of the old warehouses on the site also tell a story about the former use, and some of the buildings can be reused with new functions.
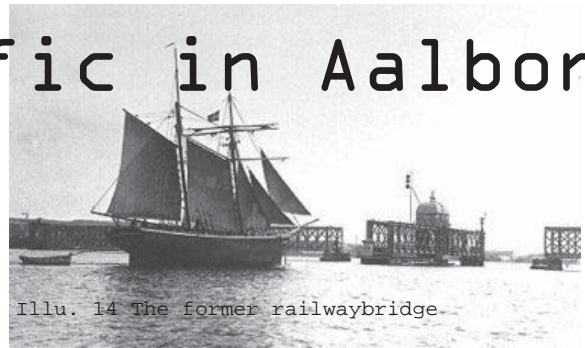
Illu. 13 Dang Hammarskjøldsgade bridge

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Illu. 14 The former railwaybridge

The city of Aalborg has grown in a river delta, with two hills surrounding it, one towards west and one towards east. The hills are rich on chalk and clay which later was very useful.
The original founders of the city were Vikings and they chose the place because of the protected position in the inlet, but also because there was good view of the incoming ships.

The railways have always been important for Aalborg, because this was one of the only places along the inlet the railway continued on the other side of the inlet. The passenger and goods was reloaded and transported by small ferries across the inlet and into a new train. This was a very slow procedure and in 1878 the first railway bridge was opened. The bridge had the possibility in turning the middle piece 90 degrees and letting the ships come through.

In 1865 the pontoon bridge connecting Aalborg and Nørresundby was opened, before that the only way across the inlet was by ferry. The ferries was without engine, and in really bad weather it was impossible to cross the inlet.

In the late 1800 the southern part of Østerå was piped and a few years later also the northern part. Many citizens felt it was a mistake to pipe the stream, because it also was a good thing, but the sanitarian problems were too large and to avoid them the stream was piped.
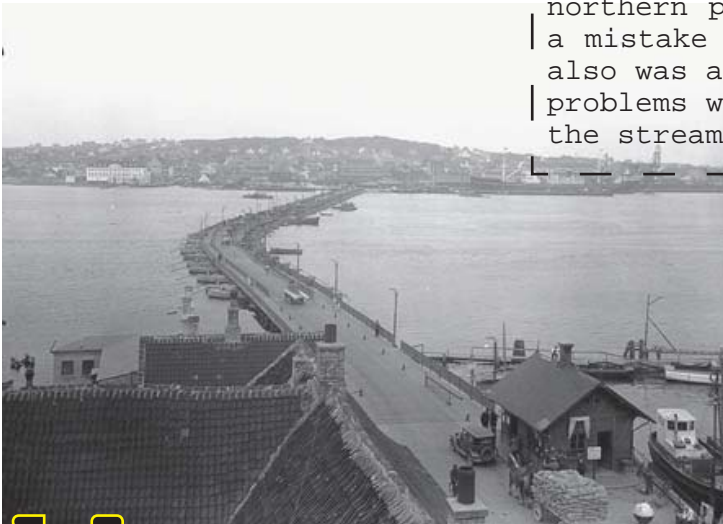
Illu. 15 The ponton bridge

Illu. 16 View of the two bridges

In the beginning the new street Vesterbro had parking facilities in the middle of the street, but as the traffic grow the parking was made into street for cars. Today the street have no parking and the street are much trafficked but it isn't possible to enlarge the street more.

In 1969 the traffic in Aalborg was much heavier than the bridge could transport, so to help this a new tunnel in the eastern end of the city was made. Today the tunnel is three tunnels close to each other and the planning of a new pipe or a bridge in the other end of the city are in progress.

Even though the pontoon bridge was made, the now heavier traffic was a problem and a new more permanent bridge was decided. In 1933 the new bridge opened and it has a middle section where the bridge can open to let ships through. To make the bridge a new landing was made in both sides, in Aalborg old buildings was demolished and the new street Vesterbro vas now the main street. In Nørresundby the landing ended in a large building and in the old landing of the pontoon bridge the hotel Royal was made, today the hotel is apartments.

Illu. 18 Vesterbro short after finnish

Illu. 17 Østerå harbour

In 1938 the railway bridge got a replacement, the replacement could have trains travelling faster across the inlet which was the actual reason for the replacement. The new bridge was partly a used bridge from Frederikssund. Today the old pillars from the first railway bridge are still standing and the one there was build in 1938 is the same as today.

Focus

The roundhouse area is a classic example in how a now closed "factory" can end up only having a waste land function with cars parked all over.

By making a new strategy and implying new functions there will give daily life in an area the area can change and get rid of the wasteland image.

The project is focusing on the development of the area in a strategic approach, where different themes and functions shall shape the area, but guided by the approach methodology created by Gehl Architects. [Kiib, H]

The site is not planned to make a vibrant area all year around outside the buildings, but to make an area there can work in the daily use, but also can change to engage other activities.

The main focus is not to design the buildings of the area in detail, but to design the outdoor spaces between the buildings and along the stream, there will be opened during the project of the House of Music, but also to make the several small brakes with small squares and plazas.

The plan is to make a campus area with shops, housing and education all mixed together. All of the area is also planned to be open for public, this means there cannot be any private small gardens with fences around.

"How to create a place for scholar institutions with flexibility to fulfil all the wishes from the schools, and also to create a well functioning city area close to the stream with possibilities in making knowledge exchange."

Aim:
Through a strategic approach to create a dynamic area with flexibility to fulfil the needs from the students, the visitors and the people living at the site.

Illu. 19 Large parking areas

The aim is to make a flexible area there can fulfil needs from various users and to make a dynamic area. The approach is therefore to find out different adaptable frames to the project.

First of all it is needed to find out what kind of urban context this area is part of. This is done by using different mappings of physical conditions on the site and in the end recapture the findings in maps.

Second it is important to find out what kind of place it is by finding the sense of place; this is done by visits to the area where the atmosphere has been adapted in the mind.

Case studies is used as a design inspiration, to see how similar problems is solved, the cases there have been chosen is from all over the world, with a notion of local (Denmark) regional (Europe) and global (World), there have been chosen one case in each area covering one of the three themes: knowledge space, urban flow space or creative - temporary clusters.
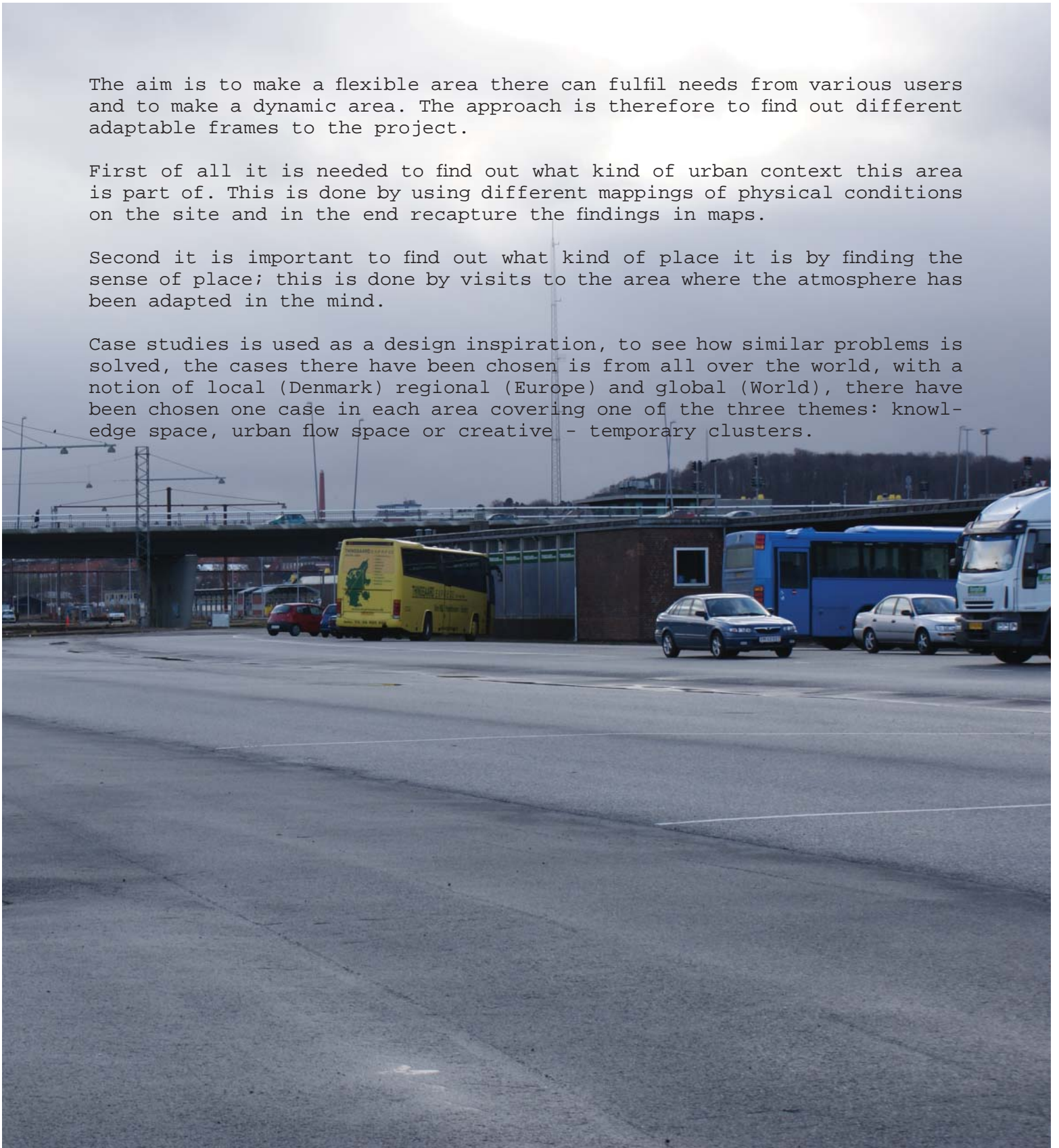
The campus

The municipality wants the area to be a campus. To try and understand what a campus can give the city and what the city can give to the campus it's important to find out what a campus is.

In the beginning the study halls in the monasteries was the campus. The cloisters were much closed towards the surroundings and only a few had the possibility in getting educated. The campuses were located near the frontier to the cities and educated people in religion which was the most important thing in the colonial age.[Campus og Studiemiljø, 2009]
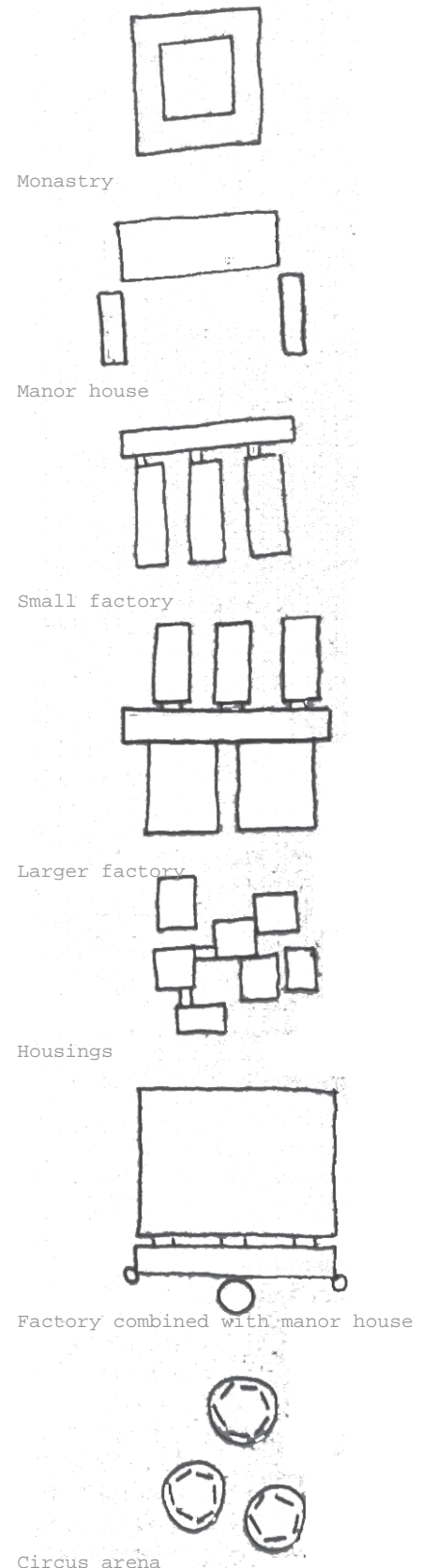
Later it became possible to be educated in good behaviour. This was mostly the royalties and rich people who had this possibility and the schools from then was mostly seen as manor houses.

When the industrialisation began the campuses also changed appearance, now the campus looked like a small factory, where everything was in connection with each other. As the universities grow, they looked more like large factories, with building complexes in connection.

Today the campuses are more small satellites in the city. After trying to make campuses outside the cities the campuses are now being moved back to the city, the University of New York is a good example. The university is located inside the city on Manhattan. In the process of making the university more open for public, the classrooms have change character and are today also located in the ground floor with large windows to the public. The classrooms looks from the outside more like a shop window and the people walking by can go in and enter a lecture. [Campus og Studiemiljø, 2009]

Monastry

Manor house

Small factory

Larger factory

Housings

Factory combined with manor house

Circus arena

22   Illu. 20 University of New York

Illu. 21 Differet types of plan solutions of campus

The future of campuses is open and invites people in either for a lecture, an exhibition or just to enjoy the campus area. The campus should become a place for knowledge, and the visitors will come and get info about what the students are researching and end up leaving with more knowledge than when they entered campus. Different campuses in the world is today trying to make more interest for the public but often the location of the campuses can create the barrier to the openness needed. [Campus og Studiemiljø 2009]

In USA the campuses are mostly just outside one of the larger cities. This means that the campus here is small cities with almost no car traffic inside the campus area, an example is Harvard. The campus of Harvard has housings, offices and commercial functions like shops and culture events.
Many students from Harvard can live at the campus and only go to Cambridge when they need to see different surroundings or wants to go shopping. [Campus og Studiemiljø, 2009]

The university ETH in Zurich is very different. The university is located 7 kilometres outside Zurich centre and is a technical university. This university have almost no housings and only a small amount of stores and cafés.
The campus area was build at the same time in the 1960ies which is visible in the plan solutions. In the 60ies the universities were planned as workplaces, you went to work in the morning and came home in the evenings. [Campus og Studiemiljø, 2009]

Illu. 22 ETH Zürich

Illu. 23 Harvard the extention plan

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This philosophy created dead housing areas dur-
ing the daytime and empty campuses and work-
places after 4 pm. This type of planning is also
visible in Denmark, the University of Odense,
DTU is planned a few kilometres outside Odense
city and the students doesn't live at campus,
but in the small towns around campus.

The University of Copenhagen is different than
the others; it is located in different areas
inside the city of Copenhagen. This means that
there is no need for housings at campus, be-
cause there are large areas with housing near
the different parts of the university.
Inside the campuses there are often only a few
cafés and bookstore shops, because we have the
city just outside the campus area. [Campus og
Studiemiljø, 2009]

The roundhouse area will be a campus area with
the openness for the city and with facilities
for both students and public.

Illu. 24 Copenhagen university - Life department

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The schools there will be stakeholders on the site are not the university, but gymnasium, business schools and school for health care. This is educations where the students can be from 15 years to 50 years old, so the variety of the students will give the site a large diversity in the use. This diversity can become one of the factors in opening the area; by locating functions as a public library and meeting facilities there can be booked online, so people from outside can come in. The location of the area is also important, the city centre is very close to the site and all the public transportation is located in a walking distance.
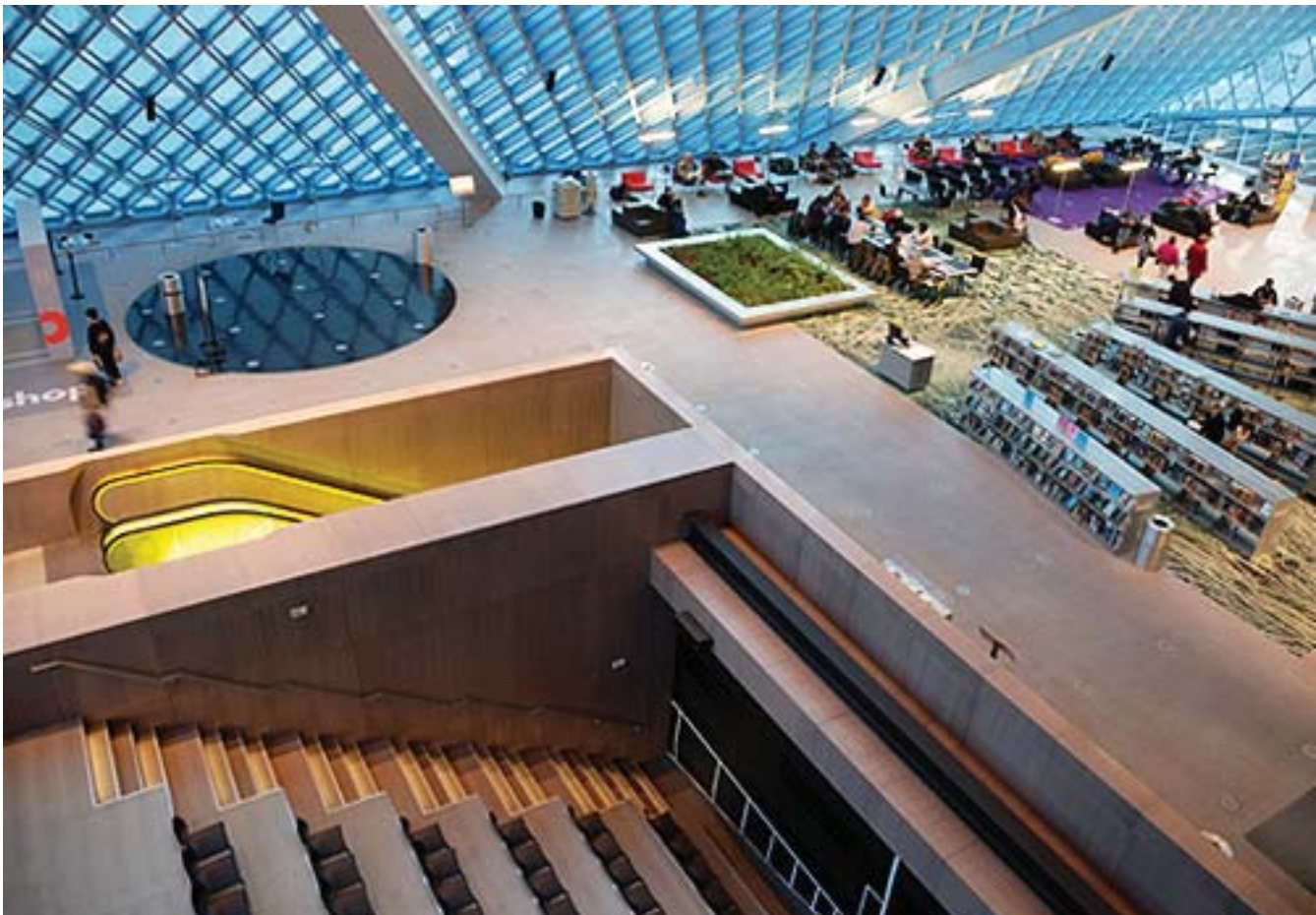
Illu. 25 Seattle library

Analysis

In the following pages the site will be analyzed by i.e. scale investigations, mappings, connections to the city, visual elements, identity of the site and finally a case study have been used to find in-spiration.

Scale investigation

The site is with its 337,254 square meters or about 3.4 acres a large area, and to get an understanding of how big it actually is other building and pedestrian areas has been laid out on the site to see how many of each there can be on the site.

The first area laid out on the site is the funfair Tivoli Karolinelunden it is 44,111 square meters. The Tivoli can be placed on the project site four times.

The second is the building complex of the congress and culture centre in connection with the Aalborg hallen, where all go the first day of school, when they begin at the university.
The buildings have a total square meter of 11,340 square meters and are laid out on the site ten times.

The third there is laid out on the site is the pedestrian street Bispensgade with the shops in connection to the street. The total meters is measured to be 328 meters times 139 meters.
The street can be placed on the site five times and because the street is a place people frequently visit and can relate to, has it been chosen for the test.

The last building laid out on the site is the Budolfi Church and with its 1233 square metres it can be placed on the site 82 times.
The reason why the church is chosen is again that it is a know church for many Danes and also that it is a church all citizens in Aalborg have seen and walked by, so they know how large it is. The students from the university does also know the church because it is located next to Gammeltorv the place everybody meet the first day of school when they begin at the university.

Illu. 26 Tivoli laid out on site

Perimeters: 954 meters

Area: 44,111 square meters
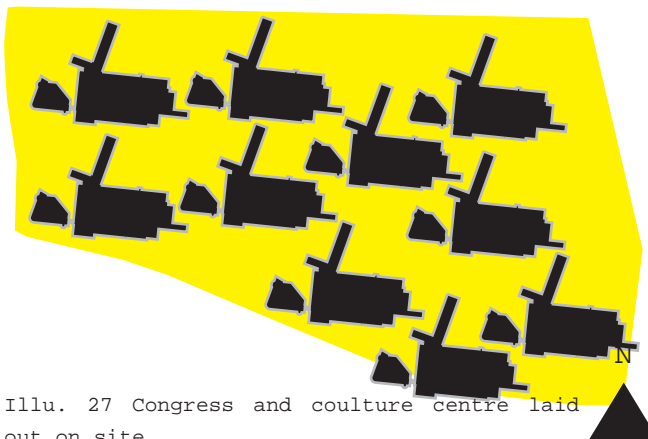
Illu. 27 Congress and coulture centre laid out on site
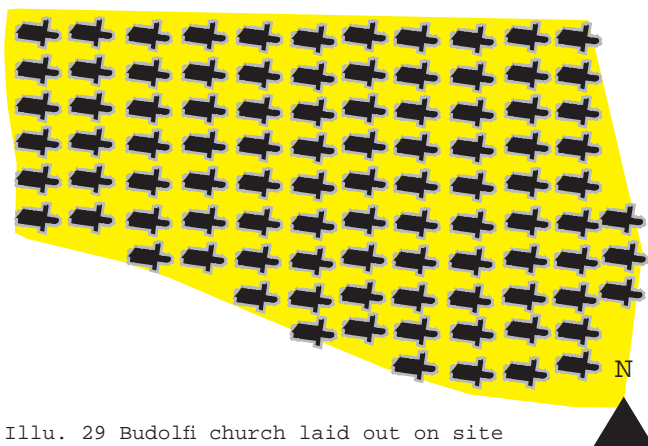
Perimeters: 788 meters

Area: 11,340 square meters

Illu. 28 Bispensgade laid out on site.

Dimentions: 328 m x 139 m

Area: 45,592 square meters

Illu. 29 Budolfi church laid out on site

Perimeters: 211 meters

Area: 1233 square meters

Mappings
Connections

Around the project site is there today a large amount of traffic by motorised vehicles.

The cars are almost using all the streets they can find to enter the city, and this make Dag Hammaskjøldgade a very busy street during the rush hours. The other streets surrounding the site is Jyllandsgade, Sønderbro and Øasterallé. Østerallé is the ring road around the city, and Sønderbro is one of the main roads to the city. Jyllandsgade is the old ringroad to Vejgård and is today very much used by local busses; the regional busses enter the city from Østerallé and Prinsensgade.

The diagram is showing the main roads around the site and also the entrances by car to the site.

Main roads
Secondary roads
Connection to city

N

10 m 200 m
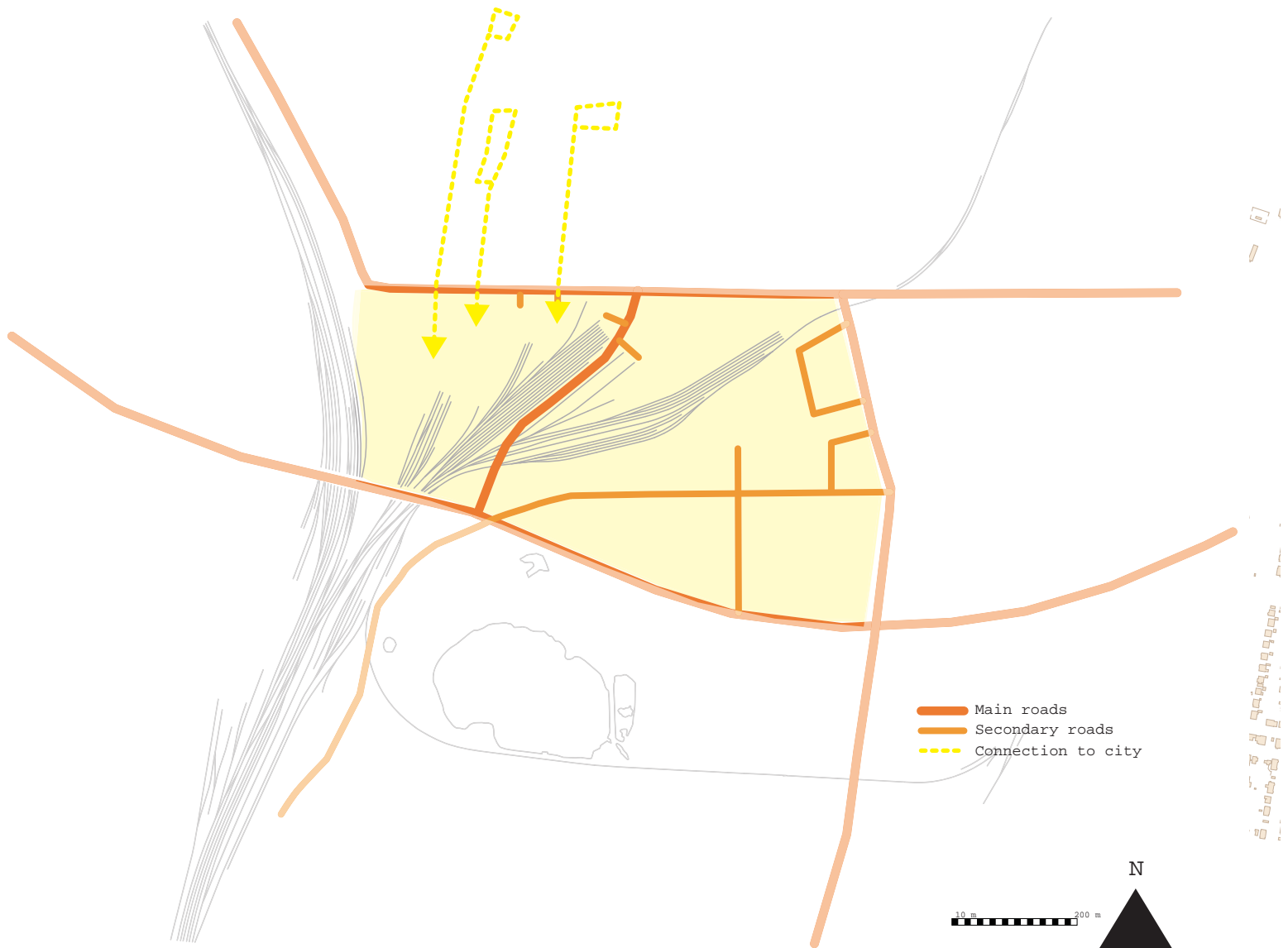
Illu. 30 The connections to and from the site.

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Buildings and Volumes

Today the site has mostly buildings in 1-2 storeys but there are also a few in up to 5 storeys.

The 1-2 storeys buildings are old warehouses or different shops like car dealers, or car repair shops.

The higher buildings are for instance housing blocks or the Kennedy arcade, a large shopping arcade with offices, cinemas and a parking house from second floor and upwards.

Many of the buildings on the site appears like more temporarily buildings or buildings left from old industries and in some cases the buildings are mostly worn down.

The few buildings on the site there has a potential in reuse with different functions are shown in the diagram there also shows the high of the buildings on the site today.


buildings 4-6 storey
buildings 1-2 storey
reuseable buildings

N

10 m   200 m
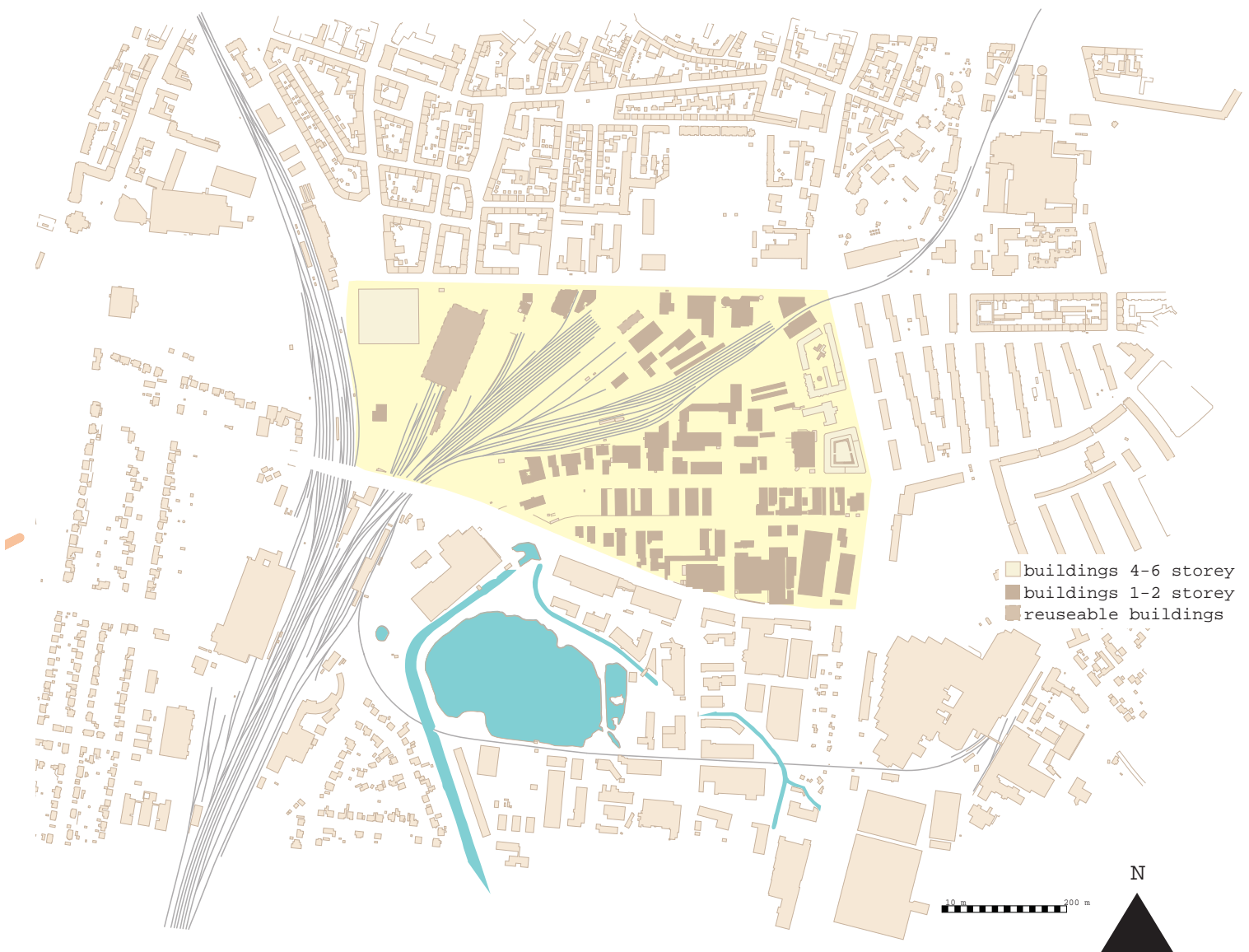
Illu. 31 The building volumes on hte site are making heights surrounding areas are not analysed.

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Green strokes

Today the site is mostly a large area with asphalt and leftovers from the old rails and the green is mostly seen in the weeds between the rails and the trees placed along the streets Hjulmagervej and Jyllandsgade, but it is still very little and by a small glance they can easily disappear in all the asphalt.

The site has a very significant location as the entrance to the stream valley from the city, but you can't see it, because there is hardly any green at the site, to make this visible the green should become more visible.

N

10 m ———————— 200 m
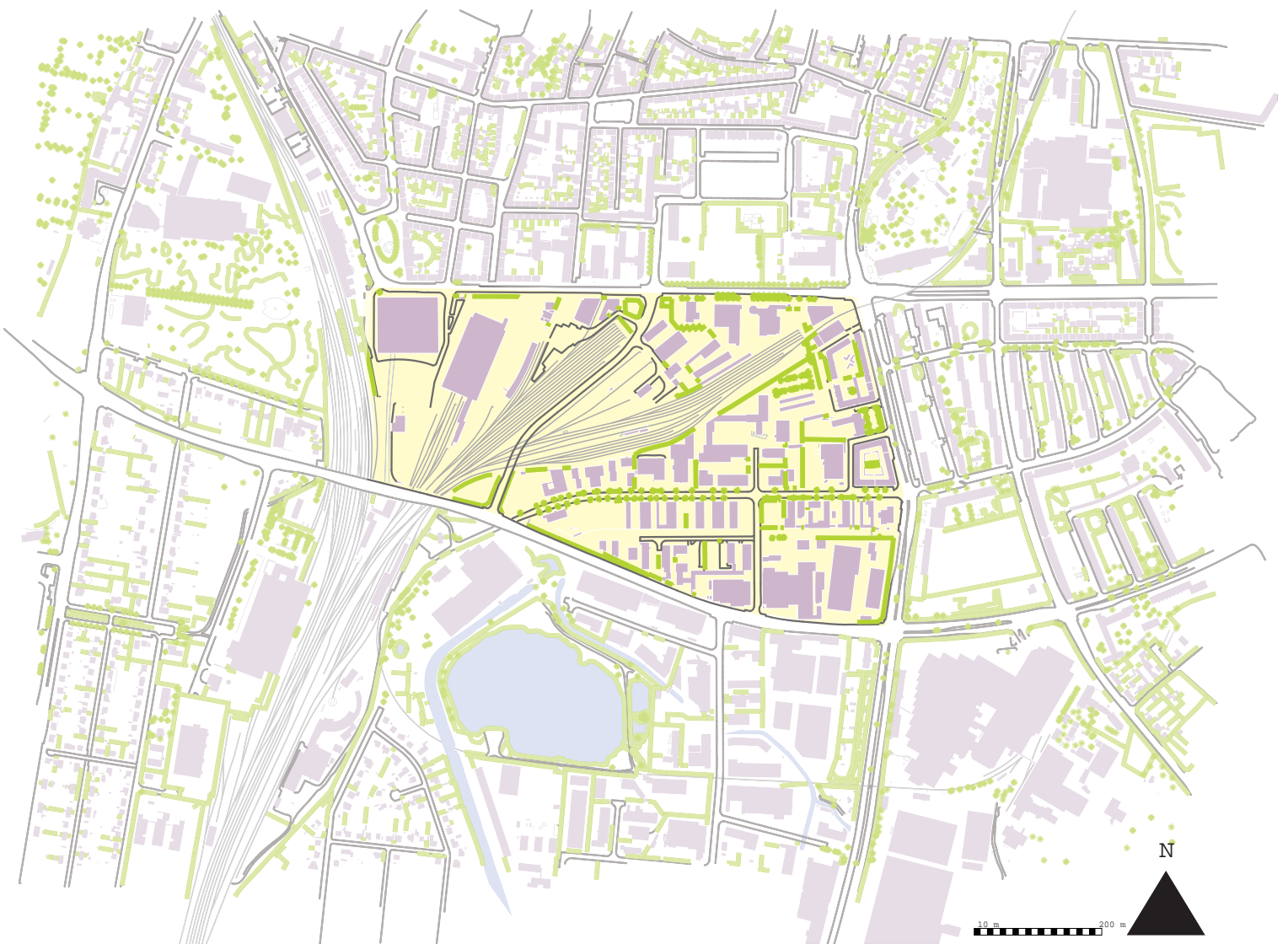
Illu. 32 The green spots in the area and the city.

The Stream

The old stream of Østerå is going to be reopened across the project site. The stream is going to get a new course by using a small part of the old stream, but also by making a new course directed through some of the important locations in the new development of Aalborg.

By reopening the stream the problems with capacity of the pipes can be reduces, because today the stream is a part of all the water going through the pipes, but also because by opening the stream the extra water there comes during rain, can go to the stream instead of the pipes.

To open the stream there is some conditions there have to be taken in consideration, the traffic and the length of the stream, every meter costs to dig.

The fix points to the stream are the only thing there is decided by now, and therefore the design and the stream can be how I want it to be. When the new stream isn't finally planned in where it should run across the project site, but it is planned to be opened from the old clothing factory Gabriel and it is planned that a small part of the stream shall run through the Tivoli, and go further down to the square in from of Nordkraft and end into the inlet in front of the House of Music, therefore I have free hands to decide how the course should be.

old stream
new stream fix points
new stream free drawing

N

10 m   200 m
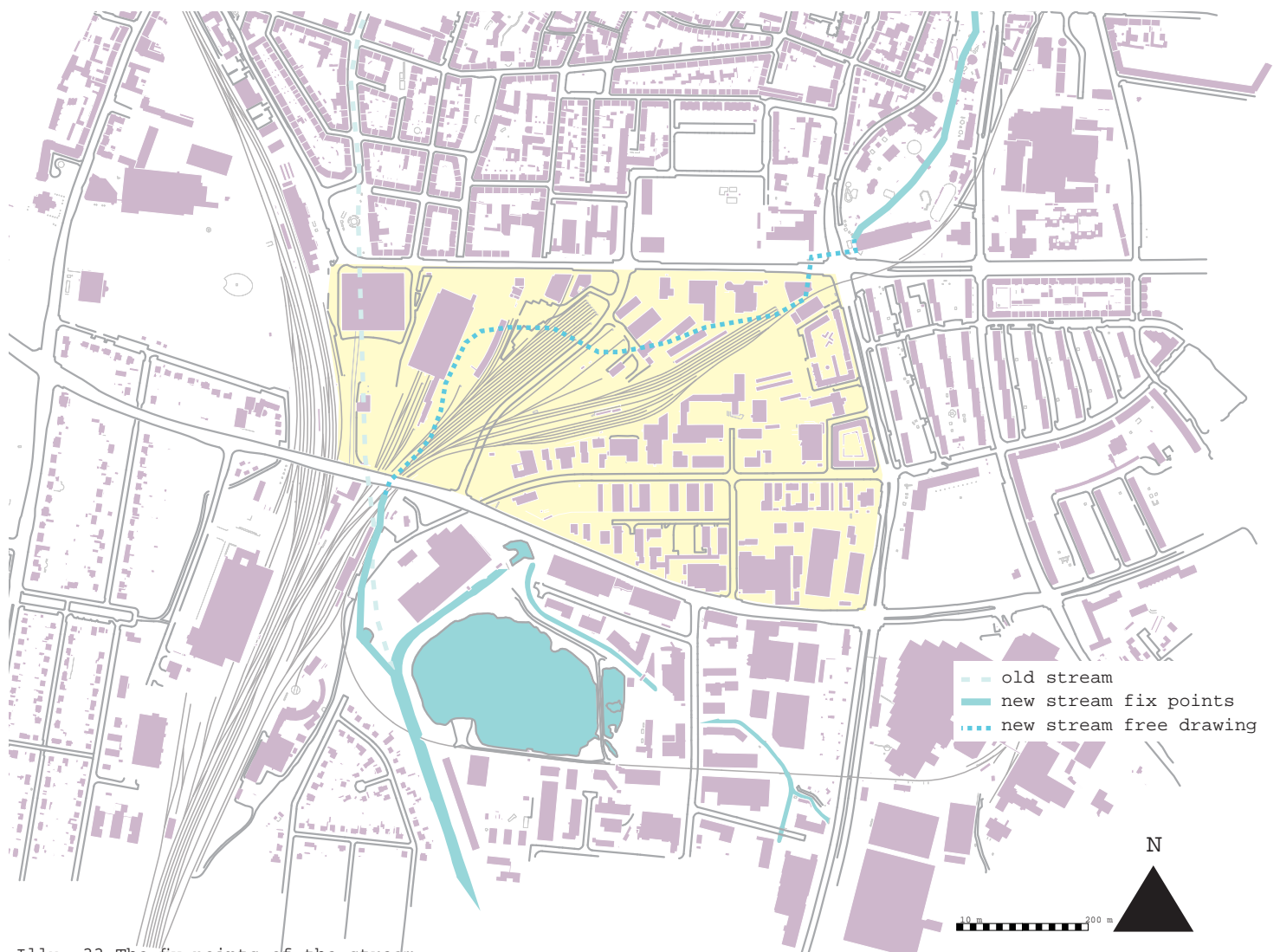
Illu. 33 The fix points of the stream

33

Recapitulation mappings

During the mappings some things have become clear, there are for instance no much green elements in the area, and it is also an area with many open spaces and many buildings in the height of 1-2 storeys.
The neighbour areas are having buildings in between 4 and 7 storeys. The site feel like it's a left over, between the good connections to the city and the out-skirts.
The connections to the stream valley are today hidden but when the stream is going to be reopened, it might help opening to city to the stream valley.

Illu. 34 Green strokes

Illu. 35 The stream

Illu. 36 Connections

Illu. 37 Builidngs and volumes

Illu. 38 All mappings together in one.

N

10 m ▮▮▮▮▮▮▮▮▮▮▮ 200 m

35

Squares in the city

Aalborg is a city with many squares; many of them are small squares in close connection to each other, but still in a distance where you cannot see from one to another.

Most of the squares are located north of Jyllandsgade in the older parts of the city. This makes sense if we also think of that all the developments there are taking place now is in the old industrial sites in the inner city.

The many improvements there during the latest decades have been taking place in Aalborg has also mostly been concentrated in making the city a nice place to be, and to make the city centre more pedestrian friendly.

The many small squares gives the city life, but many of the squares are also parking areas, and often the parked cars a dominating the nice squares there could give lots of life to the areas.

But there is also one square there once a week is a large market with small trucks coming and selling their goods from carriages or the trucks bag. In these days the square is full of life and many people are coming to the square and use it to do their shopping. This is an effect there could be nice to use in the project site, squares there can change their functions to adapt the kind of use there is needed.
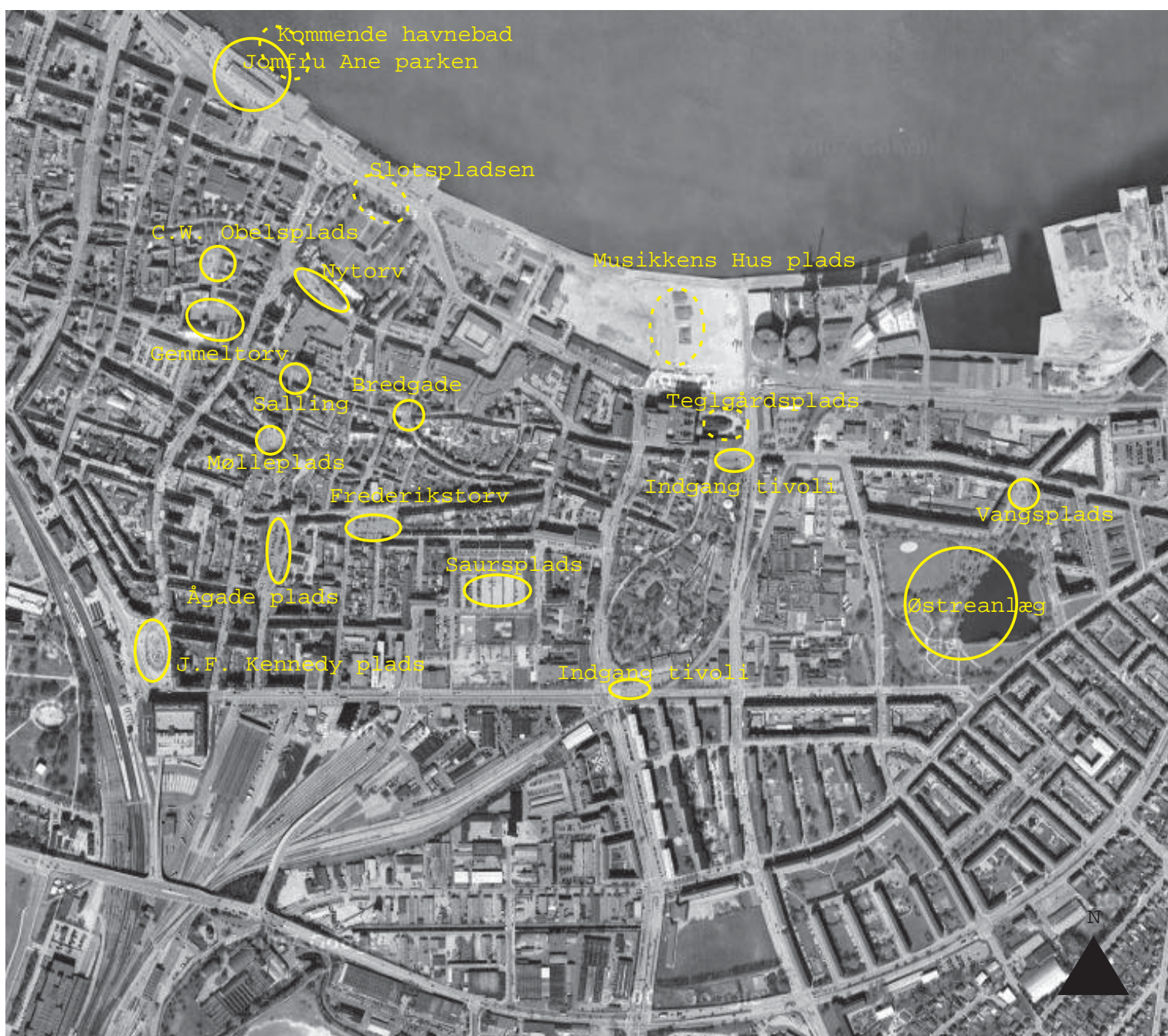

Illu. 39 Gammeltorv seen from Østerågade

Illu. 40 C.W. Obels plads

Illu. 41 Louise plads, a square with ecological solutions

Kommende havnebad
Jomfru Ane parken

Slotspladsen

C.W. Obelsplads

Nytorv

Musikkens Hus plads

Gemmeltorv

Bredgade

Salling

Teglgårdsplads

Mølleplads

Indgang tivoli

Frederikstorv

Vangsplads

Saursplads

Ågade plads

Østreanlæg

J.F. Kennedy plads

Indgang tivoli

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Illu. 42 The squares in the city

Visual elements


Illu. 43 Signs from the site

The area has many different visual elements it is signs and old factory parts or rails. These elements give the site many different impressions, and give the viewer many new things to cope with.

The signs are in some cases very clear and in others very hidden. On a trip down the Hjulmagervej the many different factories and shops have signs telling what they can offer and the street can seem like a jungle of signs and none of them is signs there are looking alike, or placed on the same spot on the fields which can become a bit confusing.

The left over rails are all showing the age by the rust and the weed there is growing between the railway sleepers. The bridge going over the rails are also having different marks by graffiti painters, a type of vandalism, but in some cases it ends up with a nice picture.

Another sign from the old times is the crane; it has not been moved and is still standing with the tellings of how much it can lift, but also in telling a story of what have happened here.

Therefore the rails and the crane are important to keep in some kind of appearance maybe the crane can become a lamppost and the rails can be guides in direction for paths.
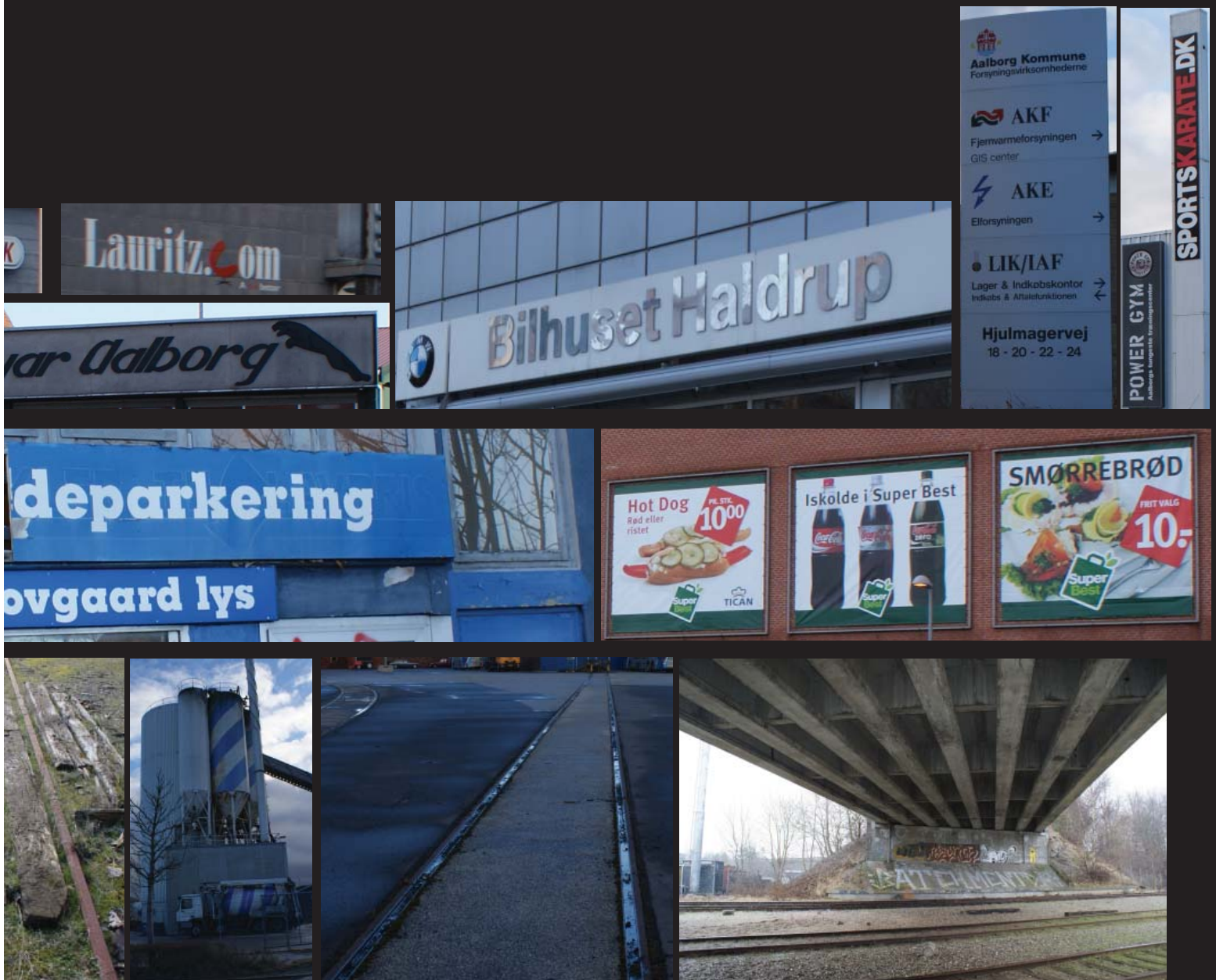
Rhythm

Along the site the many entrances to the site and the streets connecting from the site to the city centre gives a rhythm, these brakes there are between the intersections gives an indication in how the site can be planned in streets and entrances to the site.
Taking in mind that the flow there are around the site in many cases are cars, but in the northern part mostly is pedestrians and bikes coming from the city centre by the connecting streets or Boundewarden, gives an indication in where the pedestrian areas should be and where the cars could enter the site.

The squares there are in the city centre are in many cases made in intersections from different streets, or paths are meeting but there are also a few square there doesn't follow this pattern.


Illu. 44 How the flow in the city are located and also the entrances to the site

The squares in the centre are mostly outside the nearby area but there are a few inside the area it would be good to try and connect to for instance Ågade, Fredrikstorv, Karolinelunden, Kildeparken, Kennedy Plads and Louise gade.
These squares are some of them where many people go to and therefore the connection to some of these will give a good benefit for the site.
Further more the site is located between two of the few green parks there are in the city centre, and it could therefore maybe be a good idea to make the site appear as a green spot, which also will underline the connection to the stream valley.
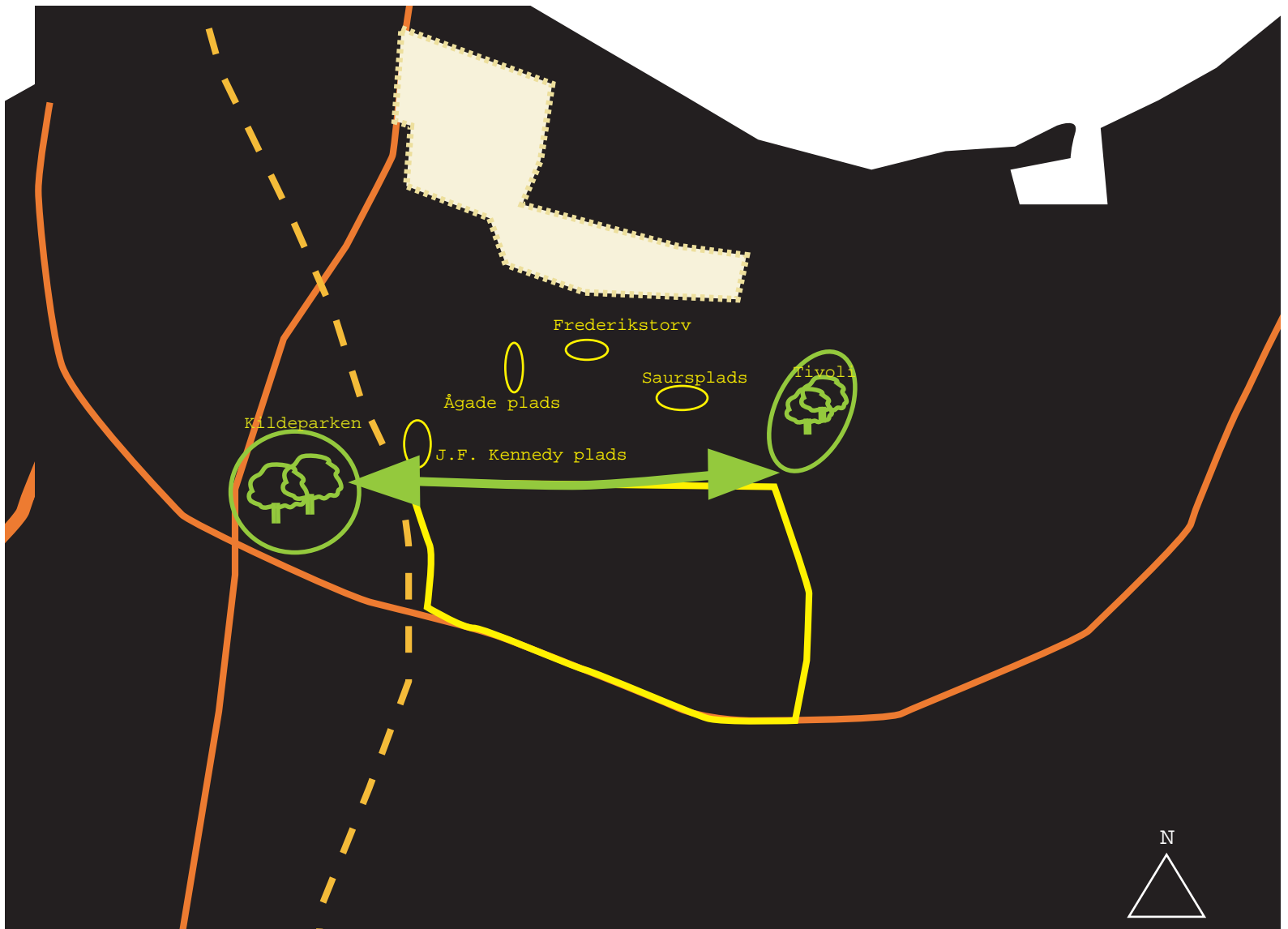
Illu. 45 The green areas in the nearby surroundings.

Identity of site

After looking into different aspects of the site, how the connections are, what the heights of the site are, and what can be reused in the new plans for the site has given a good understanding in the potentials of the site, but also of what the site stand for today.

The identity today is a large waste area, but it has a lot of potentials in the future, both the buildings the connections and the location gives the potentials, and the site can therefore end up getting rid of the image as the back of the city, and make it into the front of the city by making new design on the site, which make the site appear more green and by making activities there can generate life.

Illu. 48 Parking area in front of Eu...

Illu. 46 Map of where the pictures are taken.

Illu. 49 Rails going under Dag Hamma...

Illu. 47 Parking area close to a gas station under demolision

Illu. 50 Graffiti under Dag Hammaskjø...

of Eurocar

Illu. 51 The old Administration building from Limfjords Banen

Hammaskjøldsgade

Illu. 52 The rails in the eastern part of the site


maskjøldsgade

Illu. 53 Unicon

Focal area

The area chosen as the focal area is the western part of the site, the part there is most like a waste land, with no actual functions. This part is also the part with most flow in and around and if the new design can attract people to come to the area, then when the next part of the site will be developed it will be easier to attract people, because they already is near the area.

The other thing there is telling that this is the most important place to start the development, is the connections to the public transportations and the connections to the city centre, it is possible to drive down Rantzausgade and end in a square in the centre.

This part of the site is today also the part with less activities going on, there is only very few shops, and else it is warehouses with new functions, there doesn't interact with the surroundings.
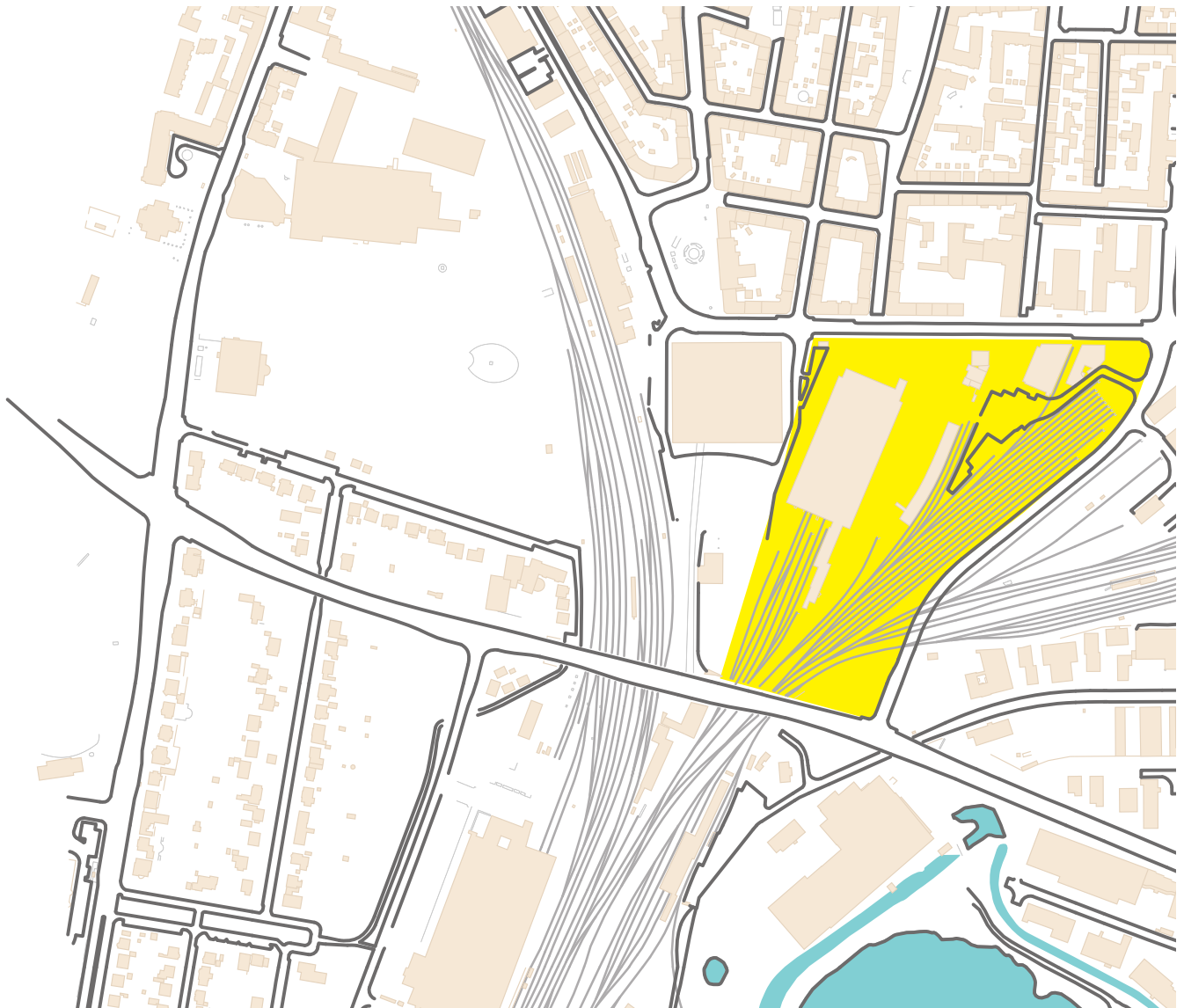
Illu. 54 Diagram marking the focal area

44

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10 m ▬▬▬▬▬▬▬▬ 200 m
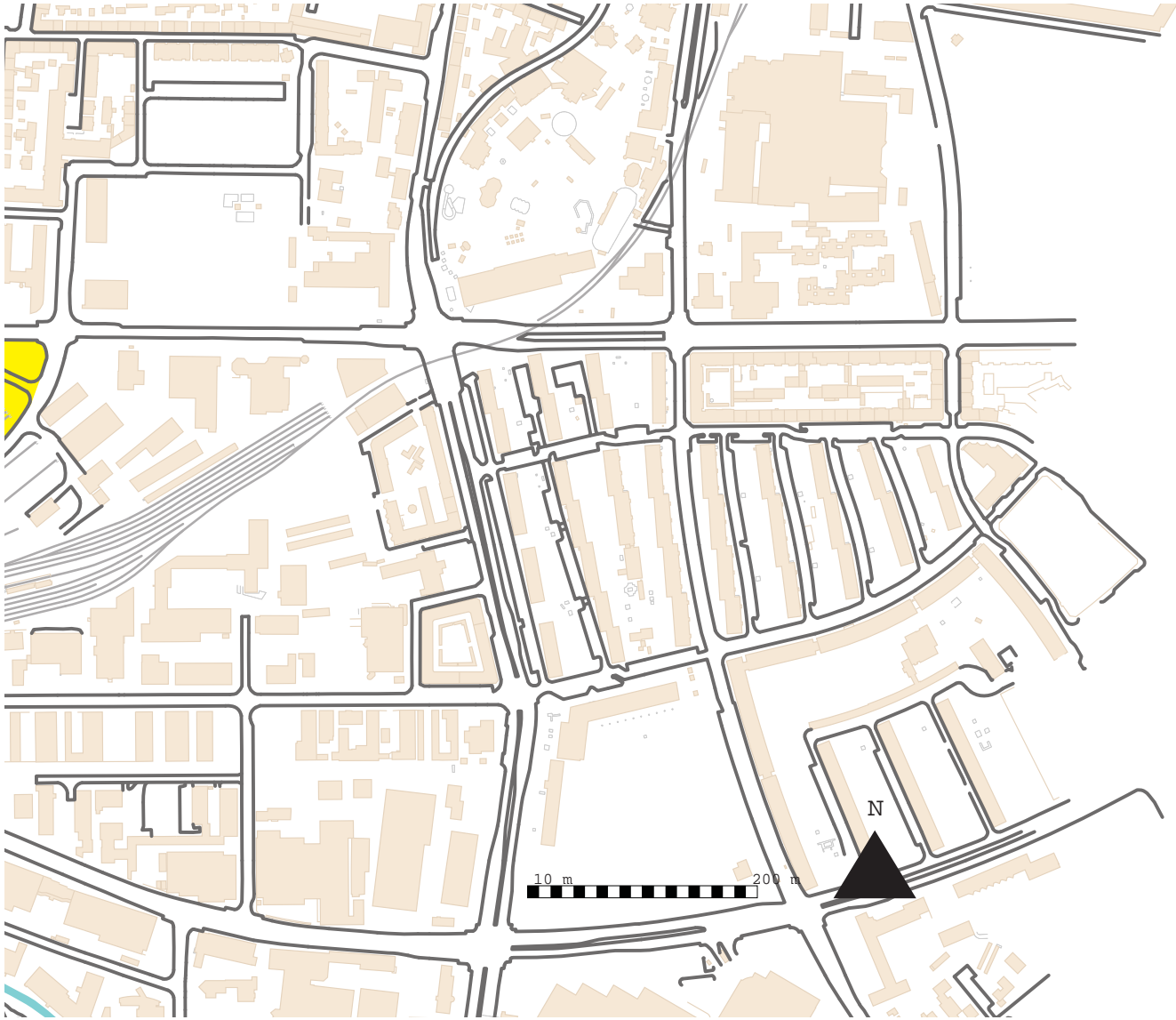
Design inspiration

Knowledge space

The project site is from the municipal side planned to be a campus area for all the pre-university educations. Therefore it would be a good idea to look into what kind of good knowledge spaces there are in the world today.

The cases there have been chosen is a gymnasium and two libraries located in Denmark (local) Europe (regional) and the world (global), this notion on which locations there have been chosen is similar for all the case themes.

Urban flow space

The project site is located next to some of the main road in and around the city, therefore it is important to design the area with functions there can support the flow, and attract the people to come to this area. The area is also going to be an area with lots of youngsters in the daytimes, but it should also be an area for others both elderly people and children.

The cases chosen are area where the focus group is more diverse and all can find their own place in this park of space. The cases are Prags Boulevard, the Digital mile and the Shanghai Carpet.

Creative or Teporary clusters

The creative clusters are an idea of making different areas in the site where each area have its own identity or theme. The creative is then thought both as drama schools, music schools and art schools by making an area with the purpose of enhancing people to come and se different types of art, and to make good facilities for the artists, can perhaps give the area more life and life after 4pm.

The cases chosen are Musiktorvet, the Delft schieovers and the 798 art zone in Beijing.

The cases are Ørestadens Gymnasium a very
new gymnasium with new ways of educating
the student and with a focus on communica-
tion. The second case is the Mecanoo cen-
tral library in Delft it is located next to
a very special building and the purpose of
this new library was not to take the focus
from the old building, but still have a
good design.
The last knowledge space case is the Seattle
library. The library is build to replace the
old ones where there wasn't enough room for
all the books. In 2004 the library opened
and since than the library have helped the
shops around it to get more customers.

Knowledge space

Østrestadens gymnasium

Illu. 55 Ørestadens Gymnasium exteriour

Description
The gymnasium is build to enhance a new type of education. There a no classrooms and all students have lectures in the same room. This large room is divided so there in one corner is a workspace for IT, in another a workspace for liberal arts and in the third a workspace for social science. In the basement there is a canteen. The Ørestadens gymnasium has a profile as a gymnasium with much focus on communication, media and culture.

Mecanoo Delft central library

Illu. 57 Entrance to the central library

Description
Mecanoo is the central library located next to the auditorium build in 1966 by the architects Van den Broek and Bakema, so to plan this library was difficult, because the architects and the city didn't wanted the new building to make the old stand back,.
The building ended up becoming a slope with grass and with a cone braking through the slope and under need the slope the library was located. To get light inside the building, the sides was made of glass and a ring around the cone was made as a skylight.

Seattle library

Illu. 59 Seattle library extriour

Description
Seattle library is build in 2004 and the designers was OMA – Rem Koolhass and Joshua Prince-Ramus. The building is divided in 11 storeys where each storey has its own identity. The outside is made of glass and steel, and is build because of the interior and not the other way which is most common. Inside some of the most impressing things are the book spiral and the yellow illuminated escalators. The building was very forward for its time, when it was build because of the outside, but many citizens like the interior and the many new facilities the building brought.

Interesting elements

- The way the knowledge space is working, is by communicating via the internet.
- The lectures are held in large classes, and afterwards it is possible to go work in smaller groups.
- The way the gymnasium is build, gives a more free learning process and by that they are preparing the students to the next step in the education ex. the university.
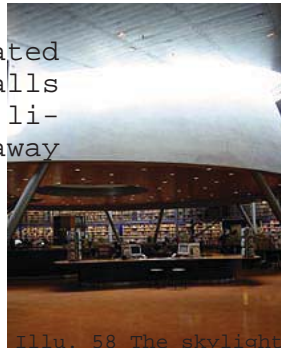
Relation to project site

The very free and open environment there is to find at Ørestadens Gymnasium is very adabtable in todays cities and campus areas, furthermore it is the way students and teachers are going to work in the future, we want our students to be self-sufficient all the way from public school to the university.

Illu. 59 Ørestadens Gymnasium interiour

Interesting elements

- The way the green element is engaged.
- The life there is, during the nice days, of students studying on the slope.
- The way they have located the interior with study halls in the same room as the library, but still a bit away from the noise.

Relation to project site

The way the students use the slope both for study and relax gives a good environment to the campus, and by using the green element in the buildings the area can maybe become a better place to stay.
The fact that the library also is partly a symbol for the area is also an important view, because in a campus all students need to visit the library therefore it is good to have a building that stands out.

Illu. 58 The skylight seen from inside

Interesting elements

- The division between the storeys and the way they are divided in different identities.
- The way the new building has generated a raise in the economy in the surrounding area.
- The choking effect the building gives from outside and the use of the very bright colours inside.

Relation to project site

The building is open for public and the citizens are starting to use this area more for every day. The building has some functions that many citizens can use for instance the 400 computers and the wireless internet there is all over the building. The library have also got access to all the books there are located here, the building is large enough to have them all, instead of the many other places where part of the books were stored away from the public use.

Illu. 60 The yellow escalaters

# Urban flow space

Prags Boulevard

Illu. 61 Praghs Bouldevard - the stage

Description

Prags Boulevard is a long straight street and when the neighbour street was renovated it was a wish from the citizens to have Prags Boulevard renovated as well. The citizens wanted a park area, and the architect took this in consideration and designed a special park for all ages. It shouldn't be a park with large grass areas soccer fields, but instead the plan was to make a park with themes like: the stage, the garden, the field and the box.

Digital mile
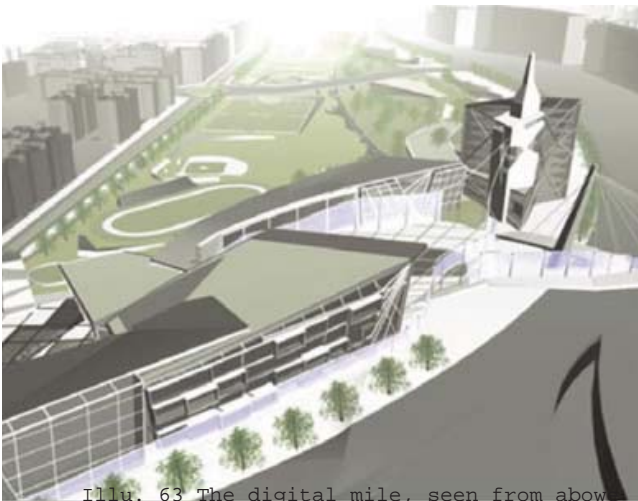
Illu. 63 The digital mile, seen from above

Description

The digital mile in Saragossa in Spain was developed on the old railway station area and was finished just before the EXPO 08. The mile is a pedestrian street connecting the EXPO area and the city. When you walk on the digital mile the street remember your foot steps and make a small light where you have walked. The buildings along the mile have mediated surfaces and the signs can change easily. All the way along the street there is wireless access points there makes it possible to get online where ever you are on the mile.

Shanghai Carpet
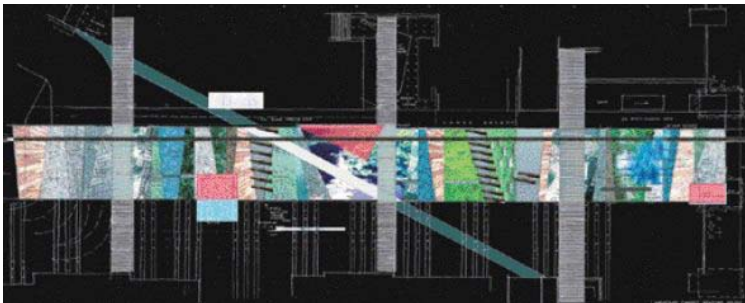
Illu. 65 Masterplan Shanghai carpet

Description

The Shanghai Carpet is a connection inside the university area in Shanghai. The street is covering a large parking area and the design of the street is with very sharp lines. The sharp lines is each having its own purpose for instance is one of the lines holding a historical Chinese garden, and another is made with mediated surfaces. All the way down the carpet the themes are shifting and some lines are made as paths crossing over the others.

Interesting elements

- The different themes tell a bit about who is going to use the area.
- The use of new interior and the design gives an interesting identity of the park.
- The use of moveable furniture there is easy to move, but a bit heavyer than normal, so visitors don't bring the chairs with them home.

Illu. 62 The garden

Relation to project site

The park is placed in a housing area in close connection to main roads and the inner city of Copenhagen. The park does also have a good use of the existing pavement and the park is today a place with no cars only bikes and pedestrians, this means that the closing of a former well trafficked street has been successful and they are now trying to do the same other places in Copenhagen.

Interesting elements

- The digital path where all people have their own path tracked, to maybe let other people try their route.
- The creative use of the mediated surfaces like for instance the water wall there is responding to human contact, and stops the water in the area people enter the wall.
- The use of signs on buildings, it can change all day or enhance the signing of offers and more.
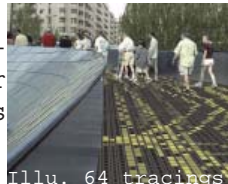
Illu. 64 tracings

Relation to project site

The much information you can get and give with the mediated surfaces is endless and gives a big possibility in learning from the users and the owners. The fact that the mile is build on top of an old railway area gives the area a very characteristic outlay like the old rails.
The mile has also got different themes all the way through it and only about a third of the mile is tracing the users, so the themes give a pause every time it changes.

Interesting elements

- The sharp lines give the carpet a very interesting character.
- The sharp lines have all got creative use of materials, and not necessarily expensive materials.
- The use of the digital media as a pavement material.

Illu. 66 mood picture for carpet

Relation to project site

The carpet is made of many different lines placed side by side or crossing over each other is a very interesting approach to the design and can perhaps remind a bit of a barcode structure. Another thing there is very interesting is the way they use different material to give the visitors a unique experience.
The linear structure can maybe be adapted to an area with many different connections to the area, which can give lines in another dimension.

Creative - Temporary Clusters

Musiktorvet

Illu. 67 Musiktorvet performance area

Description

Musiktorvet is located in the Ørestad region and is a project in transforming an old parking lot to a new culture square. Around the lot the old Kino, music rehearsal facilities and the future childrens art museum are located. The plan is to change the old kino into a café – Café Kino- and the square will be divided into different areas, one will be the intimae living room located in the small street between the square and the RUSK rehearsal facilities. In another area the field will be and the last will be the concert square.
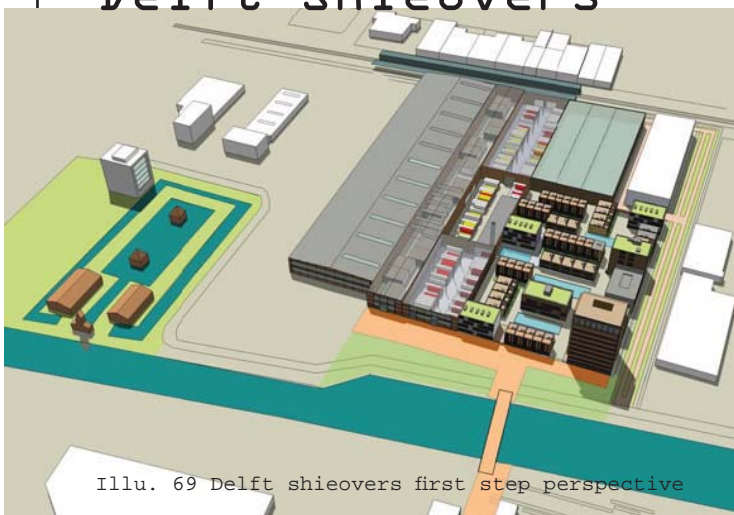
Delft Shieovers

Illu. 69 Delft shieovers first step perspective
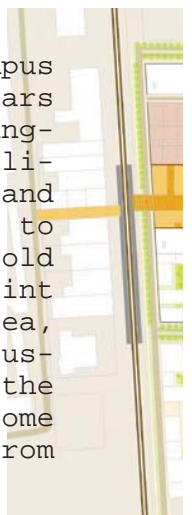
Description

Delft is a city with a large campus area, but they haven't for many years been able to keep the creative youngsters in the city. The municipality wants to enhance this problem and make the creative youngsters want to stay in the city by redevelop an old industrial area. The starting point will be to make a bridge to the area, and then use one of the old warehouses as studio and housing. Inside the warehouse old containers will become small apartments and the path from the bridge will go through.
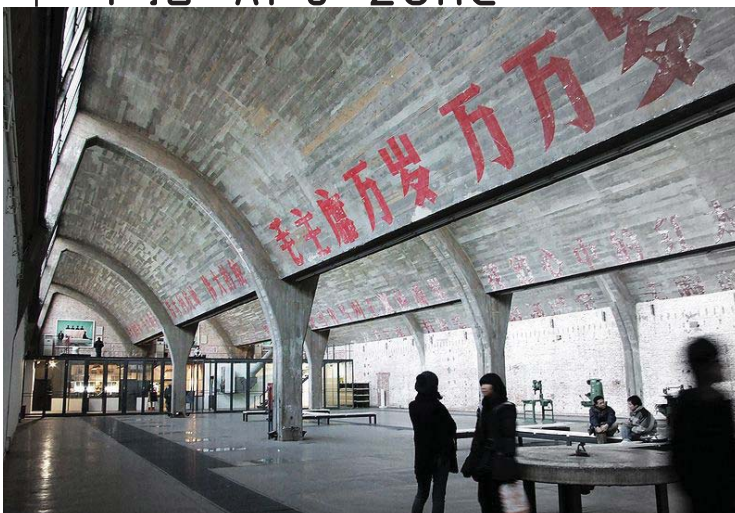
798 Art Zone

Illu. 71 the exhibision hall at 798 art zone

Description

The art zone is located in an old military factory in the outskirts of Beijing. Today the area hasn't got any military productions, but instead there is production of art. Some years after the factory closed some artist came and located them self and their studios in the old warehouses. One of the warehouses is especially good for art; it is build with continuous skylights facing north, which gives the perfect light for artists.

Interesting elements

- The themes of the area are all enhancing the culture.
- The shelter the roof of the concert square will give visitors and the possibility in making a more closed space with walls and roof.
- The use of the material of grass as a brake in the square.
- The roof of the square is very interesting in the way it is shaped as geometric shapes but in a curvy structure.
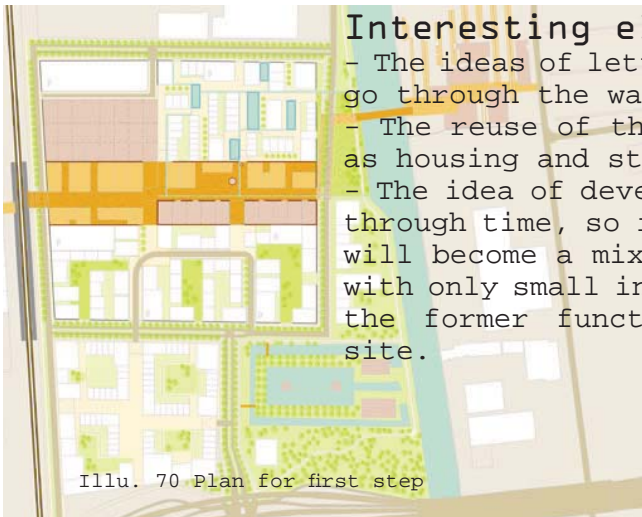
Relation to project site

The area of the Musiktorvet is supposed to enhance one major theme – culture. The project site shall cover more than one theme, but they can all be gathered under the theme of education and knowledge.
The way they have made the squares, so they can change into other activities gives a good adaptable function.

Illu. 68 The cafe area

Interesting elements

- The ideas of letting the path go through the warehouse.
- The reuse of the containers as housing and studios.
- The idea of develop the area through time, so it in the end will become a mixed use area, with only small indications of the former functions at the site.

Relation to project site

The ideas of letting the infrastructure become the first thing that leads to the areas development make good sense in relation to Aalborg. The reuse of the old warehouse and the containers gives an idea of reuse old train wagons or the goods terminal in different mixed use.

Illu. 70 Plan for first step

Interesting elements

- The buildings they have reused haven't gone through an overall renovation before they moved in; they only had to move the tools and machines from the factory.
- The area has a large variation in use and looks.
- The exhibition hall is open for public and have held large exhibitions with famous Chinese artists.

Relation to project site

The abandoned industries are interesting because they sometimes are becoming well functioning areas. The area in Beijing is today a area full of life and is known in art societies all over the world, this is an area only with artists and no other people can live here.

Illu. 72 The 798 area from outside

Approach

The study of the different cases can in summarize be a few notes on each theme, the notes are:

Knowledge
- Making the knowledge area more open and diffuse.
- Introduce a lighthouse to the area i.e. a knowledge hub open for everyone.
- Make the building structure flexible, to enhance different types of study.
- Make the knowledge area open for public.
- Introduce flexible meeting facilities.

Urban flow space
- Use materials to underline the identity of the area/street.
- Use the mediated surfaces to inform the visitors with facts of the site.
- Keep a few old things to tell the history of the place.
- Programme an area with different materials to enhance mixed use.
- Use the urban furniture to tell the scale of the site, or to make fun elements.

Temporarily / creative clusters
- Involve the locals in the use of the area.
- Renovate the buildings to a different kind of use.
- Make the area change over time.
- Tell a narrative to invite visitors.
- Use temporarily building facilities to create life in the area.

The summary sentences will be a part of the design, and should in as many cases as possible be the guide for the design.

Structuring

In the following pages the structures of the design area will be defined and the spine of the project will be

Design Principles

- Create a knowledge space to generate life in the day-time.
- Create connections to the city and transportation inter-sections around the site, to drag people to the site.
- Introduce lighthouses with strong public functions to attract the public to the area.
- Create an urban flow space in the public zones and give the different areas identity of the activities rolled out in the area.
- Create the area as an area for pedestrians and soft transportation by scaling the interior and cityscape to them.
- Introduce a flow scape along the reopened stream.
- Create an identity of the site which is significant for the former use and the future use of the site.

Concept

The concept is to create a knowledge space integrated in a public domain in this area; there is one of the most central locations when it comes to transportation. The location is very important but there need to be somthing to attract people from the outside, here the lighthouse comes in the picture. By creating one ore more lighthouses the site will become noticed and the curiosity of people will bring them here.

To make the site work there is need for more than a lighthouse, therefore the concept is to follow existing paths and make them the guideline for the location of high rises.

A way to create a purpose to come to the site can also be, to make some activities in the area to drag people in.

Both things can be done, and because the municipality wants to reopen the old stream Østeråen the areas going down to the stream can be programmed to recreation and the spaces around the stream will also have the good orientation with the sun free from high-rises.

The spectacular building structures will mostly be seen in high rises in 3 to 7 storeys, but the aspect of history shall also be seen. At this site most of the historical things have something to do with rails and trains, so the overall identity of the site has to relate to this.

Structure

The design of the area will be focused on the western part of the site; in this part we have the busiest transit area, with both the bus terminal and the train station. The concept is then to make a development in this corner and let this be the beginning of an over time development there will move towards east and in the end the craftsman's area will be redeveloped into city functions. This process is not ment to happen during five or ten years, but maybe up in around twenty years.

The first functions needed are the scholar institutions, who want to move in, in the year of 2012. This means that during the next three years the planning and construction will begin. In order to make it a part of the city it is needed to start in the end where most people are today, and because it is students then it's also necessary to make the development close to the public transportation.

2012

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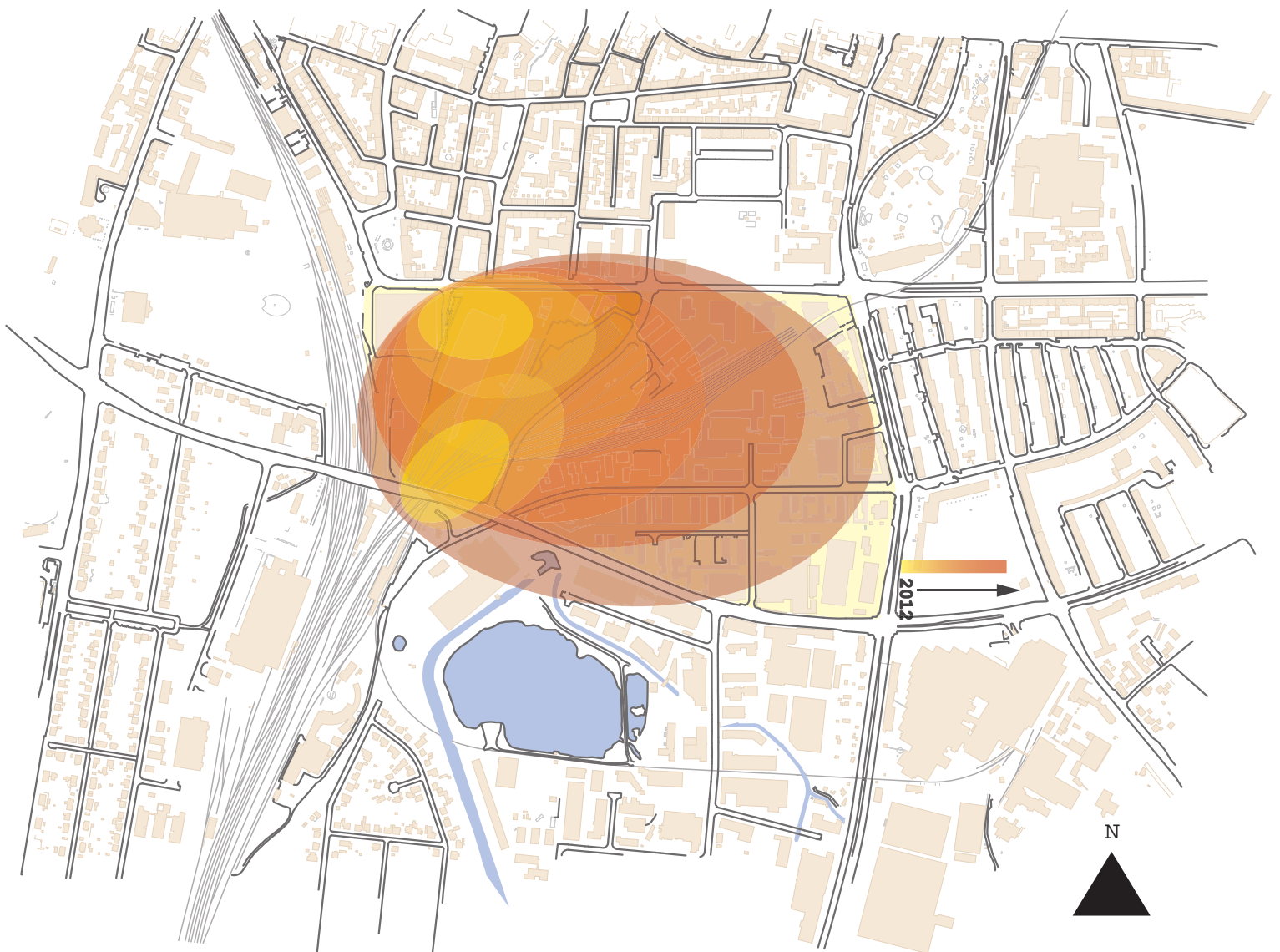
Illu. 73 Overtime development showing where to start

The other thing there is mend to start the development is the reopening of the old stream Østeråen. The stream shall go through the site and the area around the stream shall become a vibrant area with both flow and stay zones mixed together. When the stream is totally reopened the people from the House of Music shall be able to walk along the stream all the way to the stream valley outside the city, and on the trip meet different types of landscape and city life.

Users

As the first type of functions there will come to the site are schools, library, and a creative area for artists and small cafés, the users will be the users of these functions. One of the first things will also be to make a hostel at the site and therefore the guests will also be using the site. Another type of users can also be people passing by along the stream on the way to the valley or those who want the more urban experience of the stream.

Later there will be build some student housing blocks and some offices, where the housings is what can make the life during daytime cross the hour of 5pm.

After a few more years there will be build more housing and maybe also more scholar institutions as the location is very good for students and people from outside Aalborg and maybe the scholar institutions can expand to reach the public schools too.

The development of the site gives some new stakeholders of the site. Today are the stakeholders mostly car dealers or craftsmen and mostly located in the eastern part of the site. By developing the site from west towards east gives the existing stakeholders an opportunity in getting new facilities elsewhere before the development comes to their lot.

The area there will be the starting point is today a wasteland with tracks from the old Remise and holds functions as Slankedoktorne, Eurocar renting and an auto repair shop. The rest is abandoned buildings and parking areas.
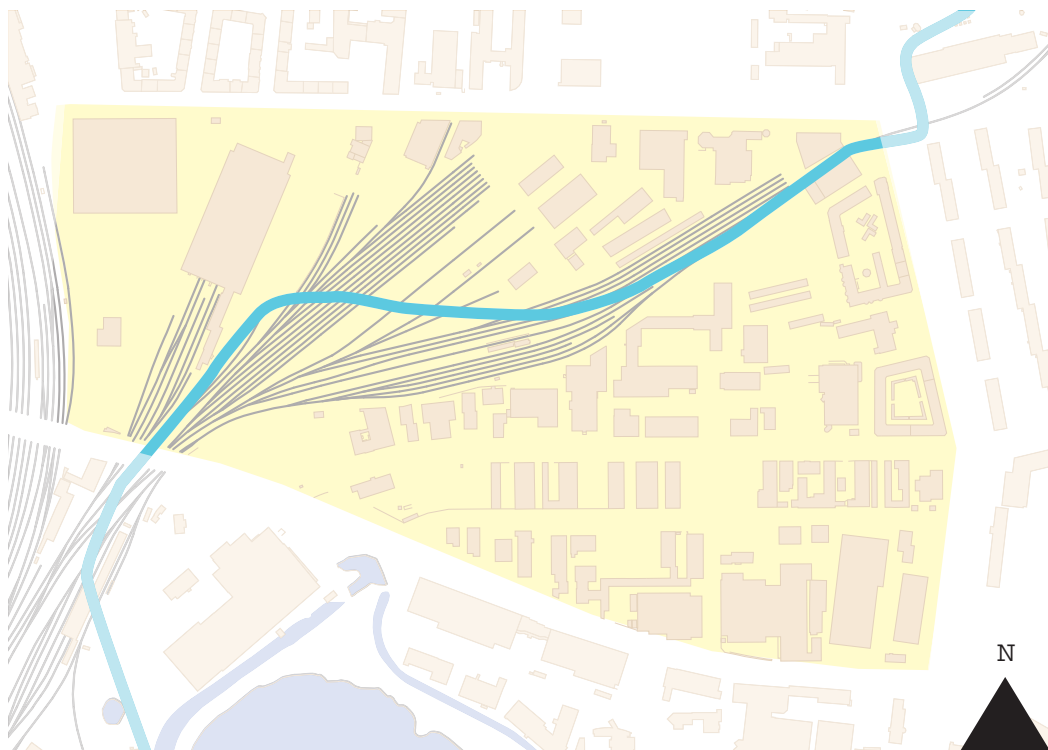
The Stream

The stream there is going to be opened is today not planned to have a specific course but it should end so it can go through the Tivoli Karolinelunden and down to the House of Music.

The municipality, there is going to pay this reopening, will probably like the stream to be having small curves, that it doesn't conflict too much with the traffic as well as the course is as short as it can be, because it then will cost less to build.

Today the many tracks on the site gives a very good indication in what there have been here, and they also give some very dynamic directions. The tracks are also giving a small curved course towards the Tivoli and it is an area there is free today, which means there is no need for demolishing buildings, but by only following the tracks, the steam can end up only being in the southern part of the site, and in that way it doesn't have any connection to Jyllandsgade and the city.

The different ideas of how to guide the new stream has all got potentials and has also got bad things, the one with the most benefit from the potentials and less bad things has been chosen and is the one the design will work from.

N

Illu 74 Drags the public into the stream and causes the least ravage in the trafficked intersection at Jyllandsgade and Sønderbro.

N

Illu 75 Makes a lot of ravage in front of the fire station, and the stream is to far away from the public most of its course.

N

Illu 76 The traffic situation is better because the stream has its course in free areas and it crosses the intersection in a better way, but the stream is still to far away from the pedestrians.

N

Illu 77 The nearness to the pedestrians is better, but the course across the intersection will be cost full because when it's being made they have to close the entire intersection instead of only on lane.

The tracks

The tracks are today just a kind of waste from the old roundhouse, but the iron from the tracks can maybe be useful in other ways like for instance they can be reused as bridges crossing the stream or as green elements in the pavement or the lamppost line and much more.

The tracks are in this project seen as a good element and will as much as possible be reused in the design, either as they are now in the ground or as decorative elements or even laid out again to guide people from the outside and into the site.

Illu. 79 the Stopper

Illu. 80 Tracks with light from above

Illu. 81 Track on a bridge comming from Gabriel

Illu. 78 Tracks as flower beds

Views to the site

Walking along Jyllandsgade it is important to make the site seem open and inviting and not closed, this can be done in different ways for instance can the buildings towards Jyllandsgade create an open structure with peek holes to the site, this can both make the inviting feeling because we can't see all of the site at once, but maybe also if people can catch a glimpse of the stream from Jyllandsgade can make a more inviting feeling. The buildings can also be designed in a way that interacts with the surroundings and in that way invites people both to use the buildings but also to go into the site.
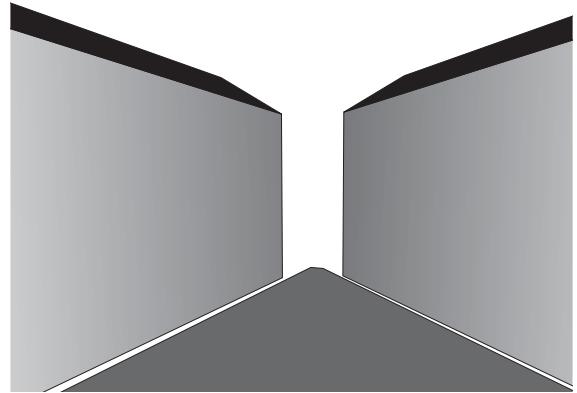
It could also be a possibility to make the façade towards the city an inviting green façade, with small green spots. Another thing there is important is to make the façade to the city free of parked cars, if the cars isn't there the area will seem friendlier to pedestrians.

The car entrances to the site will be from Dag Hammarskjøldsgade and Hjulmagervej, where one of them will be new developed and the one at Dag Hammarskjøldsgade will be the old entrance. For the buildings towards north the entrance is limited and is only for delivering goods to the buildings, but the entrances is still located the same places as today.

For delivering goods to the old goods terminal the entrance is from the western side (the back side) of the building, where the entrance is just after the intersection.
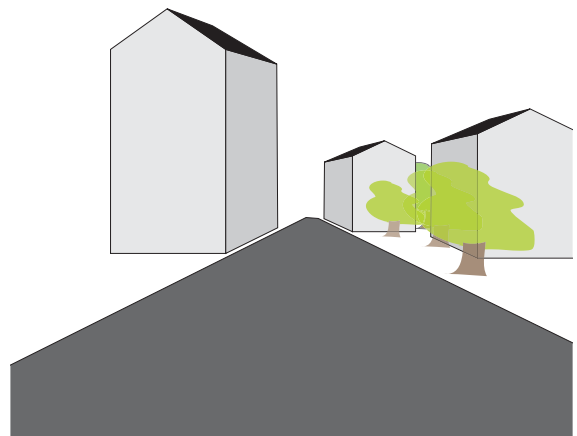

Illu. 83 Street with buildings closing in on both sides

Illu. 84 Street with building on one side and green on the other

Illu. 82 The facade towards the site

Illu. 85 Buildings and green mixed on one side and massive buildngs on ht other

65

Transportable hostel

DSB have for some years had ideas in how to reuse old train carriage and one of the ideas is to make them into hostel rooms. Some of the carriages are already made to sleeping wagons and have the necessary facilities like toilets and baths, these carriages can therefore easily be reused as hostels, and because it is an area with rails actually connecting to the real rail net the hostel can expand with only a few days notice for instance to the carnival.

Even though the carriages have all the facilities they need, a permanent building could become useful as canteen, reception and more here the old goods terminal can be partly used, the goods terminal has ramps so you can enter the carriages and it is also a very good building with a nice design and a notion of the history.

Illu. 86 Typical hostel room

Illu. 87 Sleeping wagons with 6 beds

Illu. 88 Sleeping wagon with 3 beds

Typical small hostel room, sometimes the rooms can be with up to 15 beds in one room, in trains the room can be with all from 2-6 beds, but often only with 4 beds.

A normal train carriage is 24.5 meters long and 3 meters wide, this means that there is 73 sqm. to use as hostel rooms, sanitary facilities and hallways to connect to the entrances and sanitary facilities.

The carriages can also become used in a different way so there instead of seven bedrooms with four beds can become a two room carriages and work like a small apartment.

A few examples for the trains to come here, the upper picture is presenting some MX (round nose) locomotives the old Nordjyske Jernbaner had, this is the actual engine part, on the next picture you can see how the carriages is looking. This type of carriages is the same type as the royals have, the royal carriage is though only for two persons to stay in and they also have a saloon with couches and chairs.

© Christian Fricke

Illu. 89 MX roundnose trains

© Henning Østergaard

Illu. 90 MX with carriages

The Royal carriage showing their living room.

Illu. 91 The former Royal Carriage

The Boundaries

The boundaries for this design become the stream, the rails, the reuse of the old goods terminal and the entrances to the site.

These boundaries are chosen because of the existing plans from the municipality, but also after the mapping of the site. By making these boundaries the design of the site becomes more easy, because there is some fix points, but also because each part of the boundaries gives some ideas of what I can use these thing to, in planning the activities and the building structures.


Illu. 92

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The Spine

The focal area is the western part of the
site, but to make a good design there should
be a spine to connect it all to. The spine
can be the stream, a streetscape some build-
ing structure and much more. In this case
the spine is an internal street going east
west and with a connection to the city with
a small street.
The spine is the most important area, it
is this all the design is going to connect
into and therefore this is a place there
should be strong in its impression.

Illu. 93

N

10 m   200 m
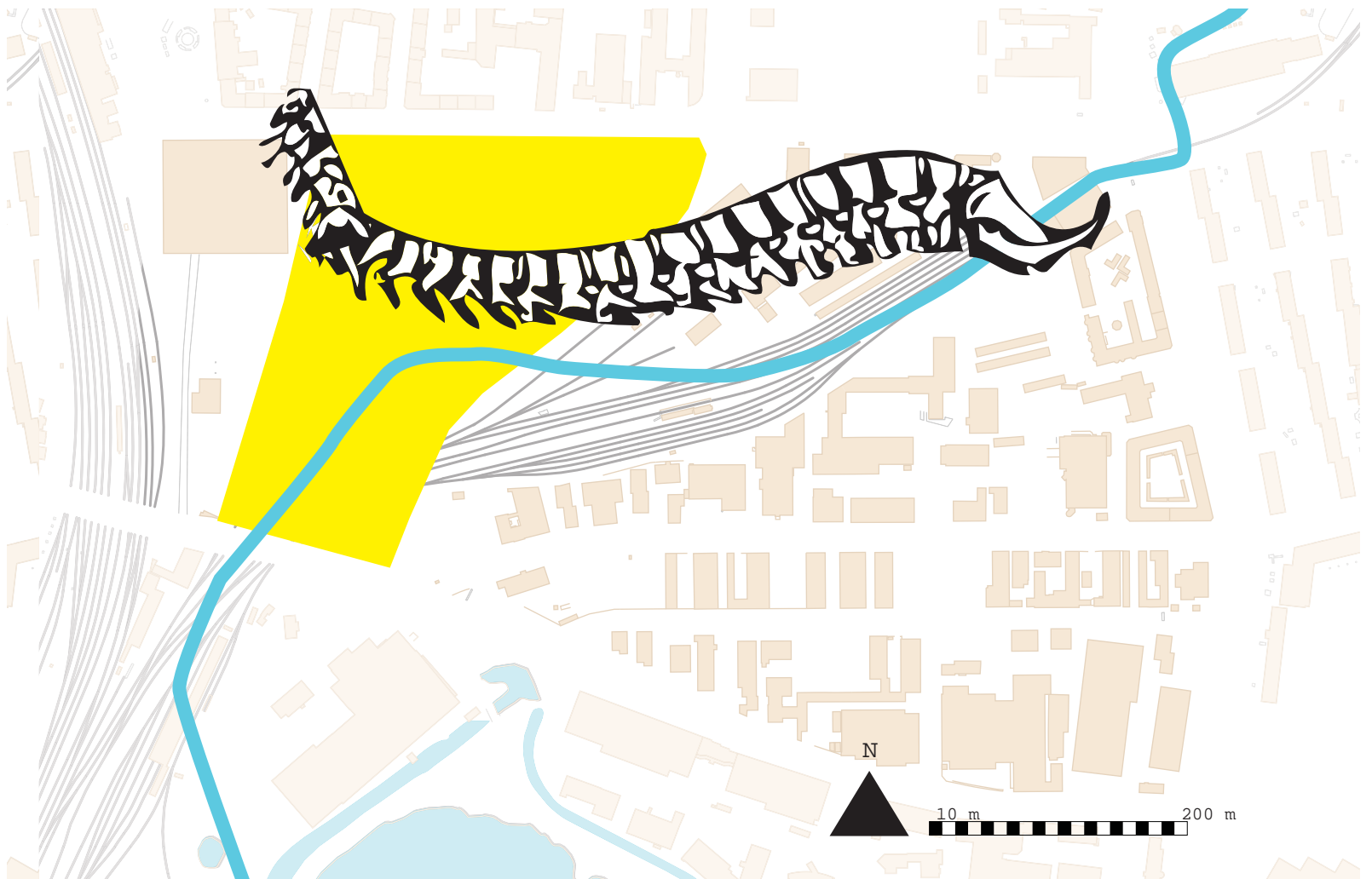
Metodology

In the following pages the methodology will be described step by step.

Life-Space-Edge-Building

The Strategy of this design is **Life – Space – Edge – Building** a concept made by the Gehl architects. [Kiib, 2007]

The approach of this design is to start by finding out what kind of life there is wanted at a specific site. After deciding which type of life there should be on the site, they are laid out on the site, so it is possible to se how the activities can interact with each other.

The spaces is then the second thing to define, the spaces will normally appear from areas where the life already is. The spaces can then be made to enhance different activities or if we have a lot of life along a string, then the spaces can become small dots on the string. The spaces can also be temporarily, transit spaces or recreation spaces and many more. The type of life wanted in the different areas is what defines which kind of spaces there will be.

The spaces can though become to large and perhaps a new building would destroy the life, and then the edges will become an important part of the design.
The edges can be everything from a change in the pavement to a row of trees or lampposts. Their purpose is to divide the space indirectly and it doesn't need to be a massive edge, it is often better if it is translucent or transparent.

As the next and last thing is the building structures defined and laid out. They will have to underlay the other steps in life, space and edge and cannot interfere with those areas, unless there is a good reason. After defining how the buildings should be the facades can be designed.
The Gehl theory can then also be a good guide here. The facades need to be interesting, maybe you can see what happens on the other side, and in that way never have the same façade, or maybe the facade is changing like in the old middle age cities. [Gehl, 2003]
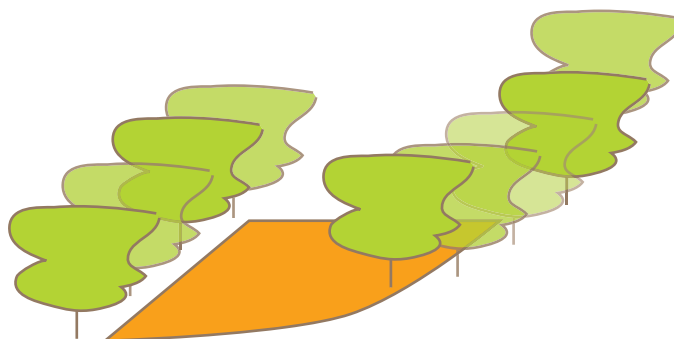
To make this type of approach, it is often a good idea to make a boundaries map, here are all the things important from the mappings marked and the keep worthy buildings are marked or if there is going to be a new traffic structure at the site or in the near by surroundings so the design can relate to the new development.
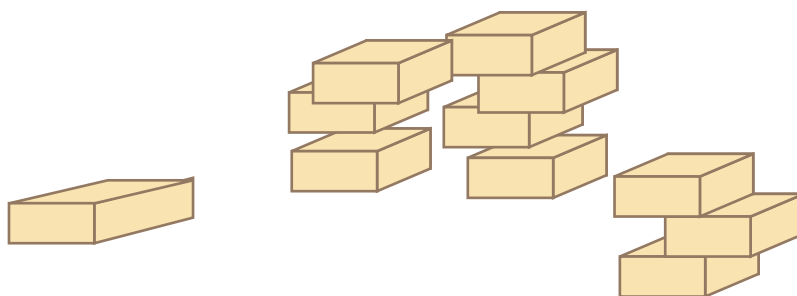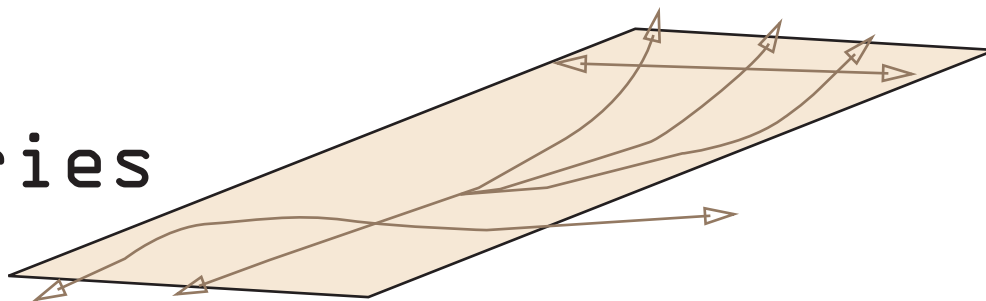
Life

Space

Edge

Building

Boundaries

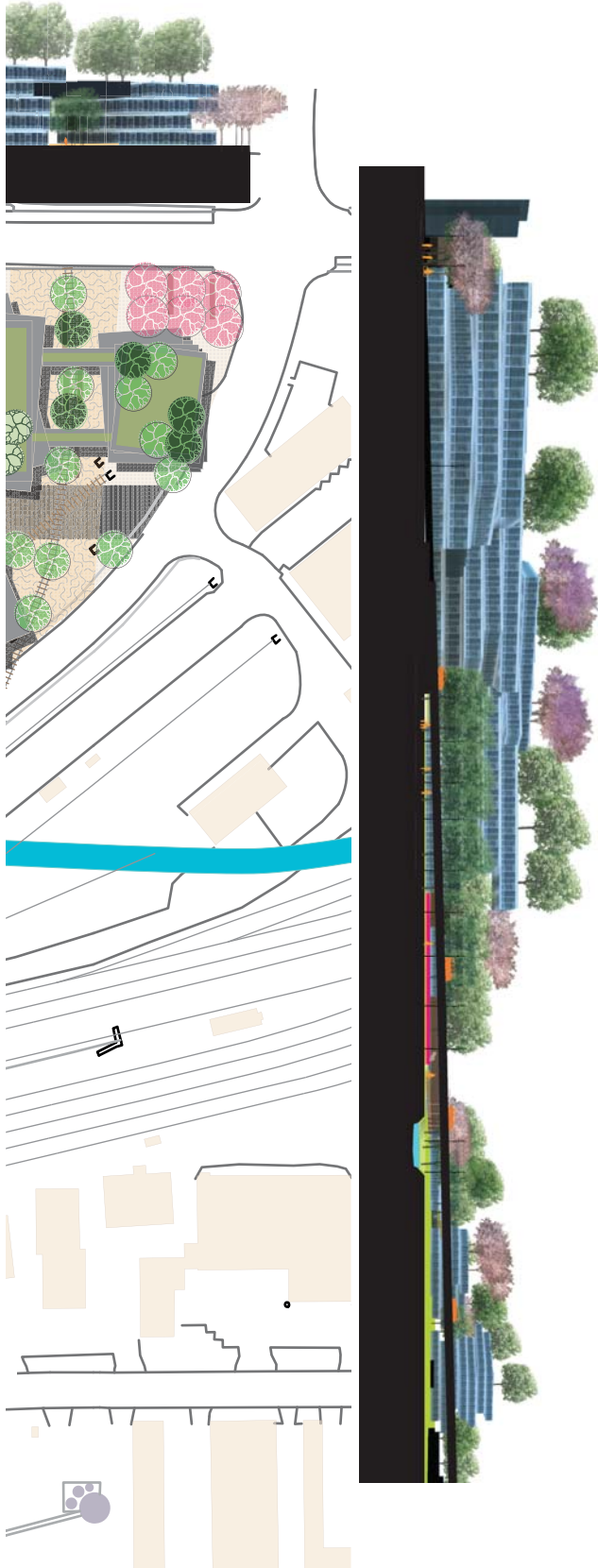Illu. 94 Diagram of the Life-Space-Edge-Building

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Design

In the following pages the design will be described and tested by reversing the methodology. The design will further be described in partial areas to tell what there can unfold in these areas.

Masterplan

Illu. 95 The masterplan with sections from two sides

The masterplan is covering the focal area, this is the one there should be the first to develop.

The main concept of the masterplan is to make a campus integrated in the city. The knowledge area will therefore become the bearing element and most of the site will be designed to enhance a pass on process of knowledge. The mix of users there will come from the different educations will both be different in age groups and professional competence and in the best cases the interaction between these factors gives an eye opening experience and a public domain will be developed.

The functions on the site will mostly be in connection to the knowledge exchange, but the outdoor spaces are bonded to the old tracks on the site and the stream there will be reopened. Even though the activities mostly are for the knowledge area, then there have also been room to make activities for the citizens. For example the new stream will be connected to the existing stream in the valley and along the new part there will be paths, so now you can experience the changing in the stream's appearance from the valley to the city. In connection to the stream there is also made room for a stage, for smaller events and many new small bridges crossing over the stream, made of the old tracks. The last thing there have been designed is an area for shopping, cafés and a transportable hostel made in the old building from Limfjords banen and some old train carriages.

In the following pages the design is tested by reversing the Life-Space-Edge-Building methodology and afterwards a more detailed description of some different parts of the design is displayed.

Testings
Buildings

The building structures are designed to be high rises standing alone, but in close connection with each other.
The problem there is about high rises is the fact that the buildings doesn't define a specific area for the life between the buildings. To try define the spaces the buildings makes, the buildings have been located towards the streets. The location of the buildings then also connects to the stream.

The buildings are also designed so they interact with the surroundings by having large overhangs changing for each level. The overhangs is a shelter for the whether but it is also making the people fell invited to walk close by, and by that see what happens on the other side of the walls.

The buildings are with transparent facades and the ground floor are for all the buildings semi public or public areas, for instance are the knowledge buildings with a hall area with possibility to have large lectures or areas for group work with work stations and wireless internet also in the connecting outdoor spaces.
The knowledge buildings towards Jyllandsgade is also connected between each other by building parts there is working as bridges, but with its 5 meters wide halls it can also be used as study areas.

The preserved building will be changed a bit, by tearing down the part towards Jyllandsgade there doesn't have the same characteristics as the part behind. Furthermore the warehouse will be opened with windows instead of the gates there is today. The front part will also be opened with windows one for each part of the roof. (see under spaces)

Illu. 96 Mood picture seen from Østeralle towards the office building

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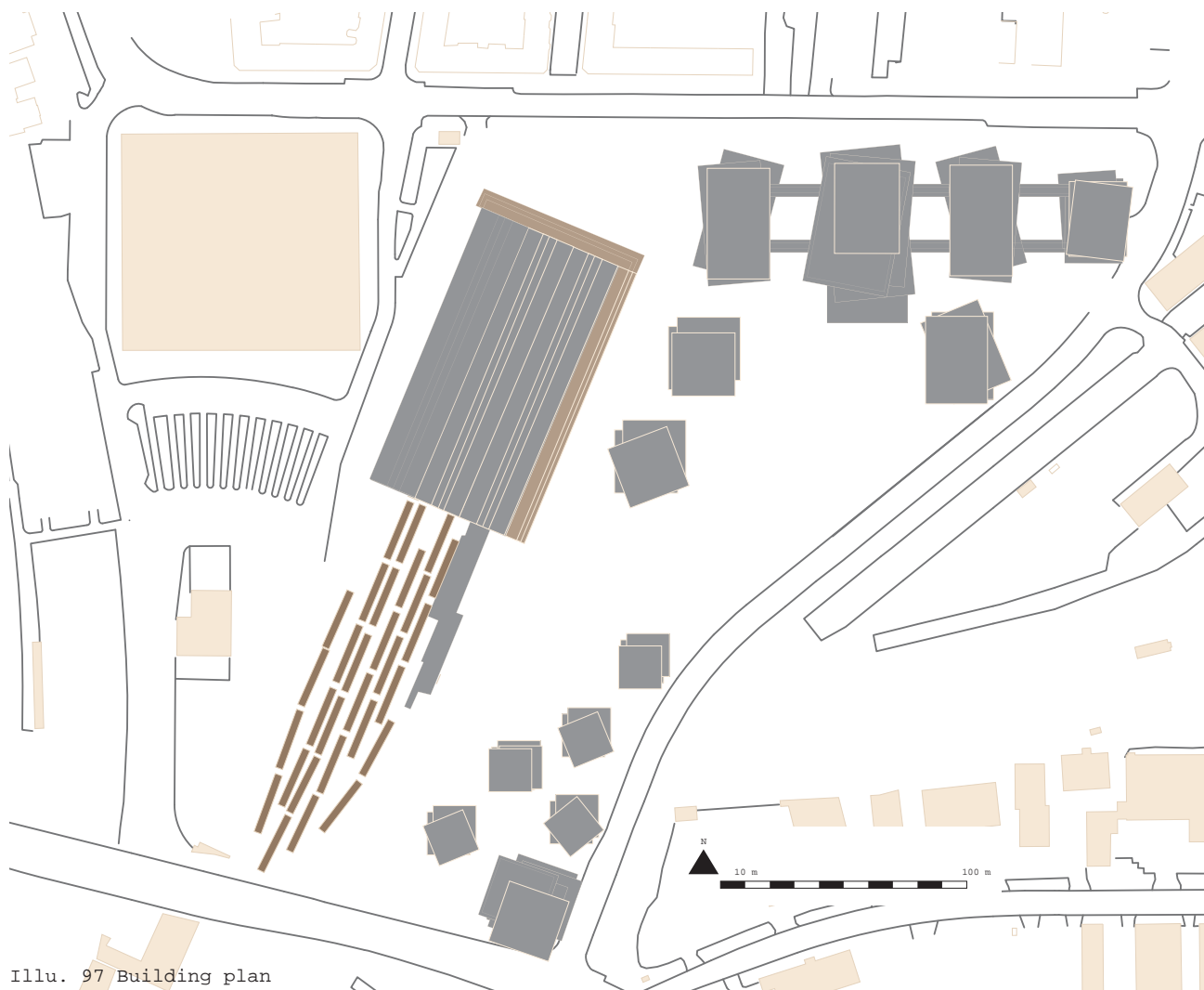
Illu. 97 Building plan
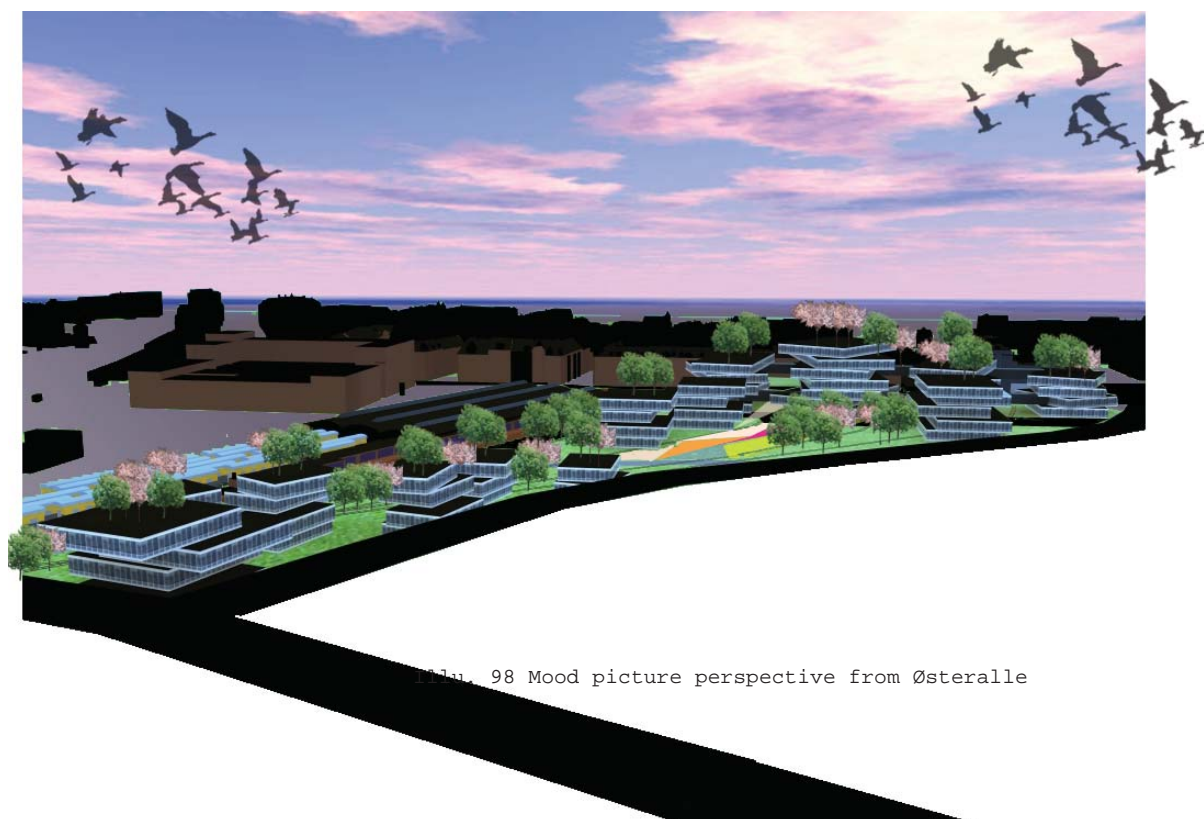
Illu. 98 Mood picture perspective from Østeralle

Edges

The new buildings on the site will be between two and seven levels which means the needed square meters are going to be put in smaller ground floor areas. Therefore the buildings aren't enough to divide the large outdoor areas.

To this purpose some of the old tracks are extended all the way to Jyllands-gade, and are use to divide the spaces and also to make fake perspective views through the site, like in the Parc de la Villette. The tracks will also be the natural area for the plantings and lampposts to be placed.

The trees are used to underline the direction of the tracks and they are mostly planted along the tracks between the sleepers.

The area towards the stream is divided by different pavements and benches. The different pavements in this area are mostly shaped in triangular figures and in that way also used to make the fake perspective views.

Crossing the site there is laid out a street. The street is covered in me-diated surfaces and in some areas the surface is tracing the paths chosen by the visitors. In other areas the mediated surface makes a virtual chess board or backgammon, this gives the opportunity in making the games often seen in parks where the pieces are made in giant size, the only difference is that the pieces are virtual.

The street is to keep cars in low speed divided by different types of pave-ments, tracks and up lights in the pavement.

Another edge material is the water from the stream. Along the stream there will be a path on both sides only paused by the different types of mate-rial there is going down to the stream. The brinks of the stream will have a green character with grass and trees all the way to the valley.

Illu. 99 Mood picture internal street
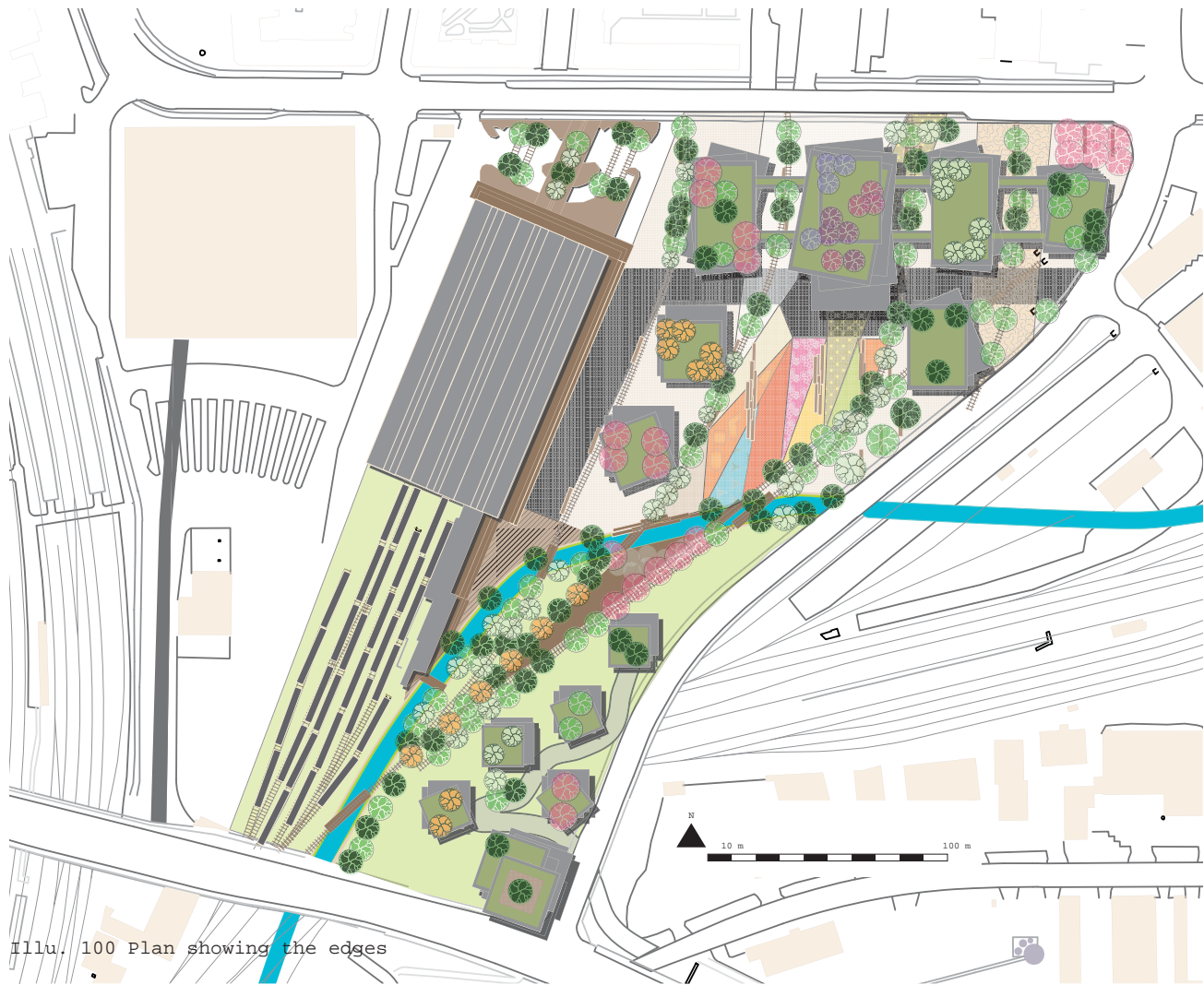
Illu. 100 Plan showing the edges

Illu. 101 Mood picture active area

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Space

The different spaces on the site are all having a theme. The different themes are giving an indication of what kind of activity there can be rolled out in which area.

The arrival area is going to be the main entrance to the site; it is an area where the history of old times are told, and also the history of the future. The entrance zone is in ground level the old asphalt with the old rails going through the building and out dividing the asphalt. Raised half a meter is three wooden deck, shaped as the old outline of the parking area. Crossing over the three decks are two ramps connecting the street with the old building, and also providing good access for wheelchairs and prams to the functions inside the building.

Along Jyllandsgade the space are meant for walking transit and the many changes in the pavements are underlining this. Across the street from the police station the area are called a place for the senses, this means that the pavement are going to be playing with our mind, and the different types of trees and the connections between the buildings are giving different impressions along with light elements on the buildings and in the pavement.

The crossing street indicates where it is possible to enter by car and the mediated surfaces are giving the visitors a curiosity in exploring what kind of activities there is going to be in the end, but by following the street can the visitor also get more information's about the site or the different types lectures and projects made by the different educations.
In the end the street ends in front of the terminal building, where different types of commercial things are going to find place. In front of the building the space will become a large playground with mediated surfaces. The mediated surfaces can change by request and in one spot people can play chess and next to them a hopscotch court can be made, or maybe a game of the old pacman can be made in real size, so you are pacman your self, going around eating cheese and escaping from the ghosts. The mediated surfaces will then become an important helper for the health of the Danes, by inviting them to be active in computer games and other types of play.

Illu. 102 Mood picture arrival

Illu. 103 entrance Esbjerg musikhus

The active area are surrounded by two different relax areas, where you can
sit and enjoy the nature and look at the people playing with the mediated
surfaces or being active in the active area.
The active area is inspired by the Shanghai Carpet and the many changes in
the pavements gives many brakes in the trip through the area.
The different types of pavement there is used are going to enhance differ-
ent types of activities, the many different activities in the area are also
going to be a good background if you are sitting in the library and need a
brake in the studies.

Closer to the stream is the performance area, it is an wooden stage on
one side of the stream going down to the water and on the other there are
benches also down to the water. The stage can also be with a roof designed
so it fits its surrounding with the many trees. If we look at the Music
House in Esbjerg the entrance area is made with a roof, inspired by trees
[Esbjerg musikhus], this type of roof, will be changed into a translucent
material and will be used during concerts and large events, like the gradu-
ation ceremony. To enter the stage the small bridges are used and one of
them is going directly to the stage, so an interaction between the audience
and the performer can be established.

arrival zone
transit zone
walking transit
area for the senses
relax area
active area
performance area
private relax
café relax

N

10 m   100 m

Illu. 104 Plan showing the space characters

Next to the performance area is the cafés servings down to the stream. The pavement will be of wood an warm material that gives a more intimae atmosphere. The café area will be a bit like in Århus where the different restaurants use the areas close to the stream and fill it up with chairs and tables. The atmosphere there is here when it is nice weather gives life to the entire area.

The two more private spaces are connected to the housing and the hostel. The hostel will be made with small passages providing access to the carriages, a little like the platforms on the station, but in wood and more narrow than on the platforms. The space there is around the hostel is going to be like if the hostel was as they normally are, with toilets and bath on the hallway and sometimes also with small kitchens.
The entrance to the hostel is going to be through the terminal building, where the lobby are located, and also with a few rooms for the crowed day.

In the housing area the main pavement will be grass, and the incoming street will be made in armed grass, which are flagstones with holes in to let the grass grow through.
The area will have a more private character because of the housings and the paths are also mostly just in the periphery of this area. Even though there aren't any paths through the area, the grass is inviting people to come here and use the field; it can be for a soccer game or to enjoy the sun.

The last types of spaces are the roof gardens, on top of every building. It's a small garden where the students and inhabitants can enjoy the weather or even have small beds with flowers or herbs. These areas will in the housing area be private, but in the knowledge area the gardens will be public and maybe one of the gardens have a cage for ball games.

Illu. 105 The stream in Århus, by the main library
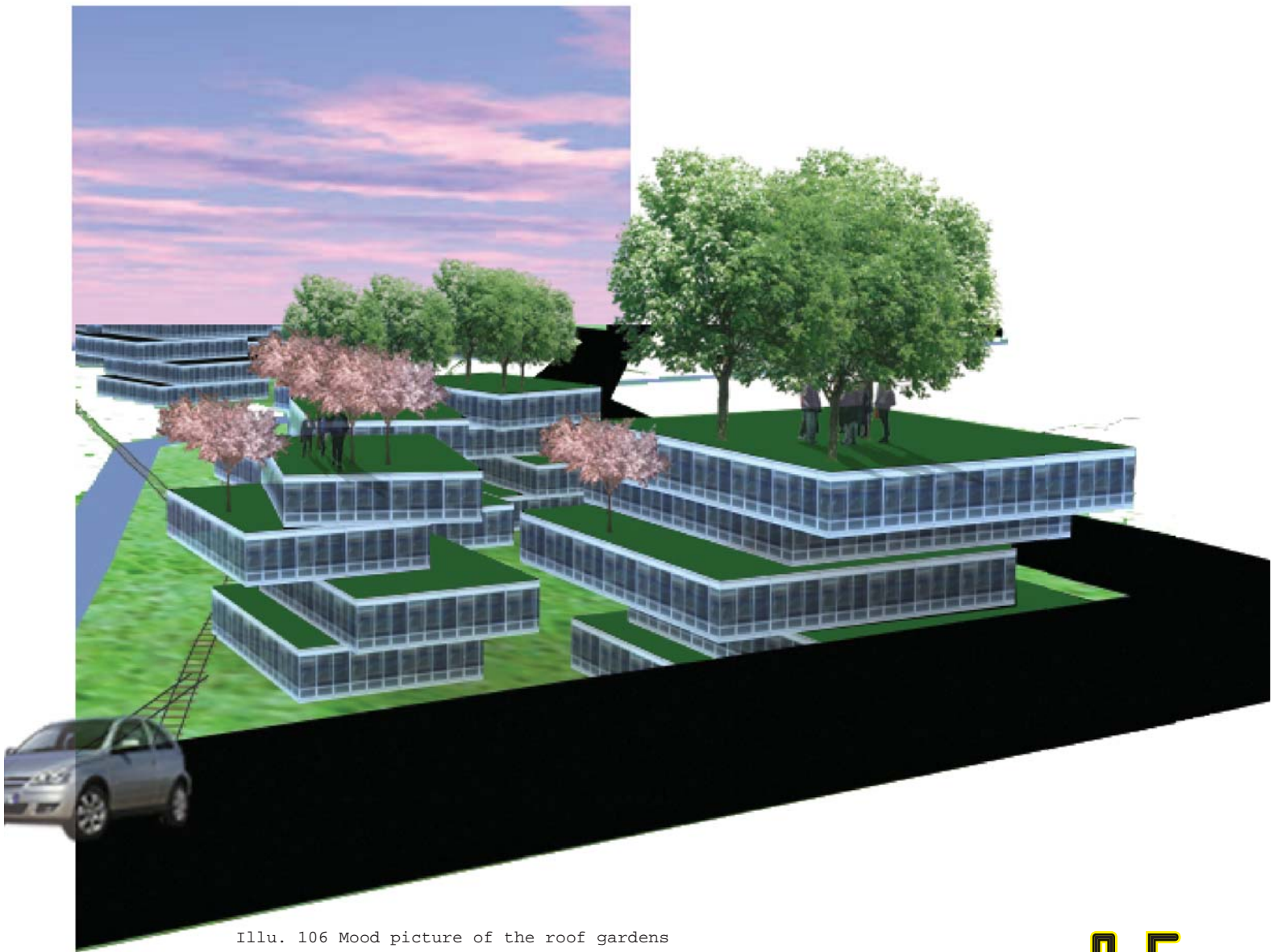
Illu. 106 Mood picture of the roof gardens

Life

The many different activities there have been wanted from the beginning are now in the end introduced in the design.

In the active area the life are ranging from ball games and skater environment to flowerbeds to look at and water fountains to play with.

Much of the knowledge exchange activities are going to be in the knowledge area, and in many cases inside the buildings, it is not meant that every education should have its own building, but more like the American High Schools, where every teacher have its own room. This is translated into a complex of buildings where the students are walking from one building to another going to the classes, a bit like it is at the university. This also means that the educations are together in paying for the heavy rooms like physics and chemistry and the IT areas, in the end each education can get a better deal and have more computers when the lectures are in IT lab.

One of the ideas for the knowledge area is also to make them more visible, this will be done by making the buildings more open, and even enhance the students in using the days with good weather to study outside and else use the large areas in the ground floor.

To make the site alive after 4 pm the hostel and the housings are going to be the provider. The hostel might be less occupied during the year, but for most of the year it should have some visitors. The idea of making some of the carriages into small apartments you can rent for some months for instance if you are a exchange student, there only will be here for a semester, the idea of renting a flat near centre and in an area full of live will be appealing and maybe also easier to get out of again.
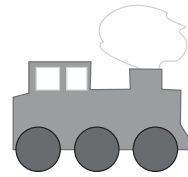
Illu. 107
Diagram: history seen on all the site

Illu. 108
Diagram: Transit seen in the paths, transit zones and arrival

Illu. 109
Diagram: sleeping facilities seen in the hostel and housings

Illu. 110
Diagram: climbing outdoor activity, seen in the active area

Illu. 111
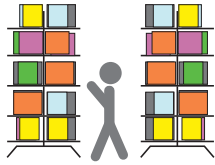Diagram: indoor sports, seen in the knowledge area

Illu. 112
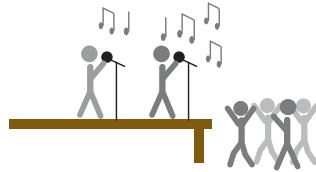Diagram: outdoor study, seen on the northen side of the stream and in roof gardens

Illu. 113
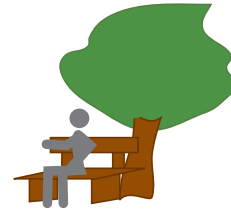Diagram: relax by the stream

Illu. 114
Diagram: skate environment located in the active area

Illu. 115
Diagram: library located in the knowledge area

Illu. 116
Diagram: performance area located as a stage environment by the stream

Illu. 117
Diagram: relax in the green element

Illu. 118
Diagram: commercial facilities as cafe, shops and cafés

Illu. 119
Diagram: public computers located in the library in the knowledge area

arrival zone
transit zone
walking transit
area for the senses
relax area
active area
performance area
private relax
café relax

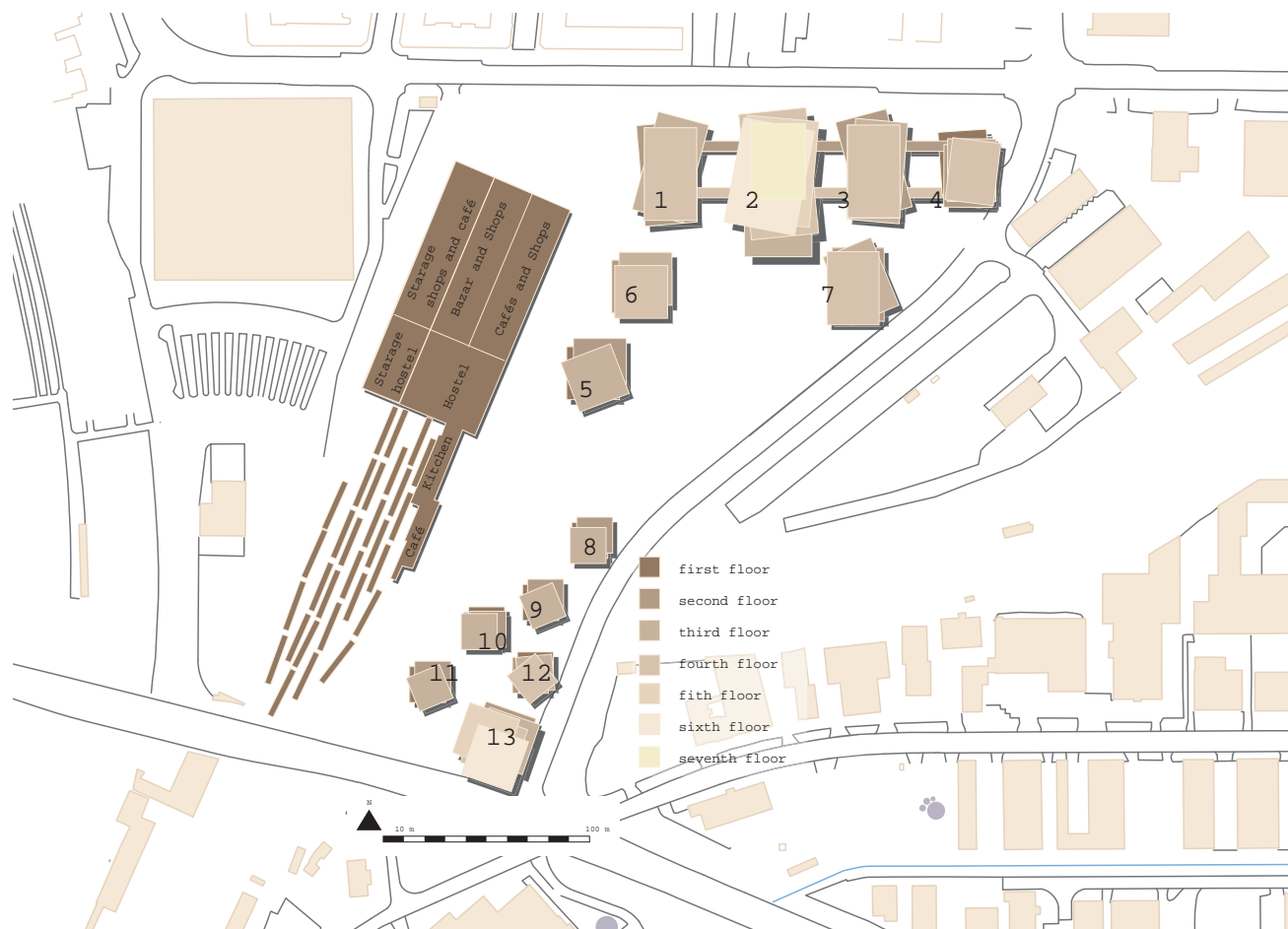Illu. 120 Plan showing the different categories of life areas

Distribution of Programs

The programs distributed on the site are located in small groups; where the same type op programs are unfold.

On the northern side of the stream all the knowledge functions are located, they are located here because of the public transport has good conditions here. Furthermore is this location more public and open towards the city, this makes this area good for public functions like scholar institutions.

Inside the knowledge area is a large library located. The library have more than one function, it is made so you can have some meting facilities or rooms for group work, the rooms are seen as rooms you can reserve over the internet, and it should be possible for all citizens in Aalborg to use those rooms.

Inside the library is also the sports facilities needed for the gymnasiums and after ended school hours the gym can be used by other organisations for instance a handball club, climbing clubs, badminton clubs and many more.

The library building will become a very important place in the knowledge area and the opening hours might then also be changed so the students and the citizens can use the library when they have the time, which means after work hours.

Inside the knowledge area is also a housing building, the housing here is seen as youth housing. The youngsters are often more open and inviting for the city activities and therefore they doesn't need as much privacy as people a little older.

Illu. 121 Plan showing the different programs in the goods terminal and marking buildings

On the southern side of the stream the housings with more privacy is located, the houses here are close to the stream, and the many benefits it gives. the housings all over the site have a open feeling in the ground floor, and even though it is marked as a hall, there is also apartments here, but the hall is also using a large amount of room. The cars there might come to the houses are parked in the basement of the houses.

The office building are public and the location near the ring road gives a good commercial benefit, because the banners outside the building will be seen by many people.

The old goods terminal are reused as a market place with restaurants and cafés and a hostel. The western side are seen as the feeding side, here we have all the storage room for every shop inside the building and it is also the only place they can enter with a truck.
The hostel carriages are in individual sizes, in some of the carriages there is only two rooms with maximum four beds in each, these are more apartment like and in others there can be four rooms with each four beds.
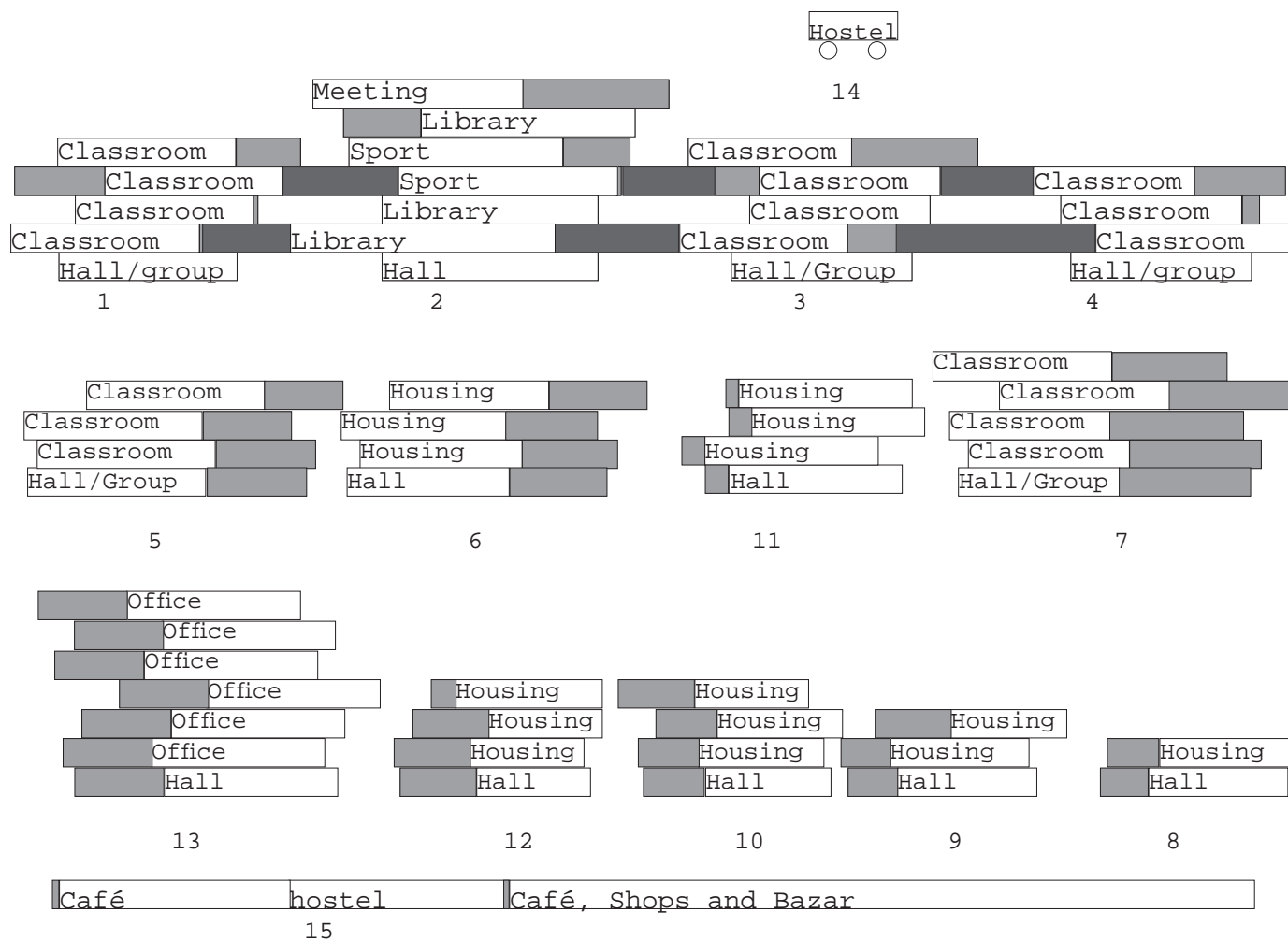
Illu. 122 Sections in the buildings, showing the programs outlay inside the buildings
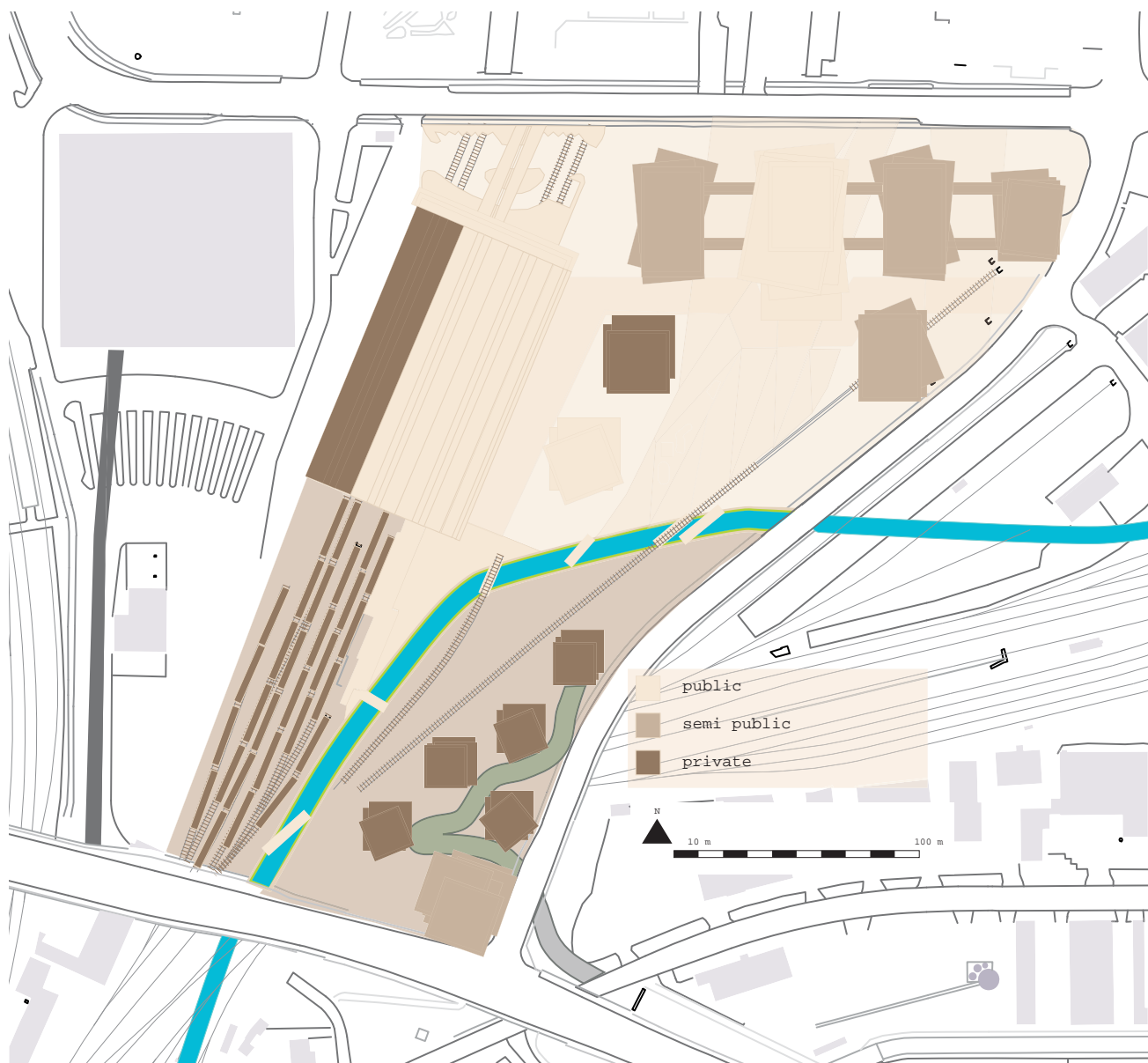
Public - Private

The site is located close to some very important public areas in Aalborg; therefore the site has to become much open and inviting. But also because the site is going to have some new functions, these functions are going to be public and city like in some extend.

The more semi public area there is to find south of the stream are going to be semi public, both because it is located in the back, but also because of the functions, the housing and the office building. An office building can easily be public, but depending on the type of office we have, it can also be very private.
For the housings the roof garden will become their private space, and each block can have its own design of the garden.

The area closest to the stream has to be public and the inhabitants in the area shall never become domesticating, because the stream is for everyone and hopefully it will be used by people who wants to go to the valley and enjoy the wild nature.

public
semi public
private

N
10 m   100 m

Illu. 123 Plan showing the public and private areas

Access conditions

The site is seen as a place for pedestrians and car traffic is only in a minimum because of the nearness to the train and buses.
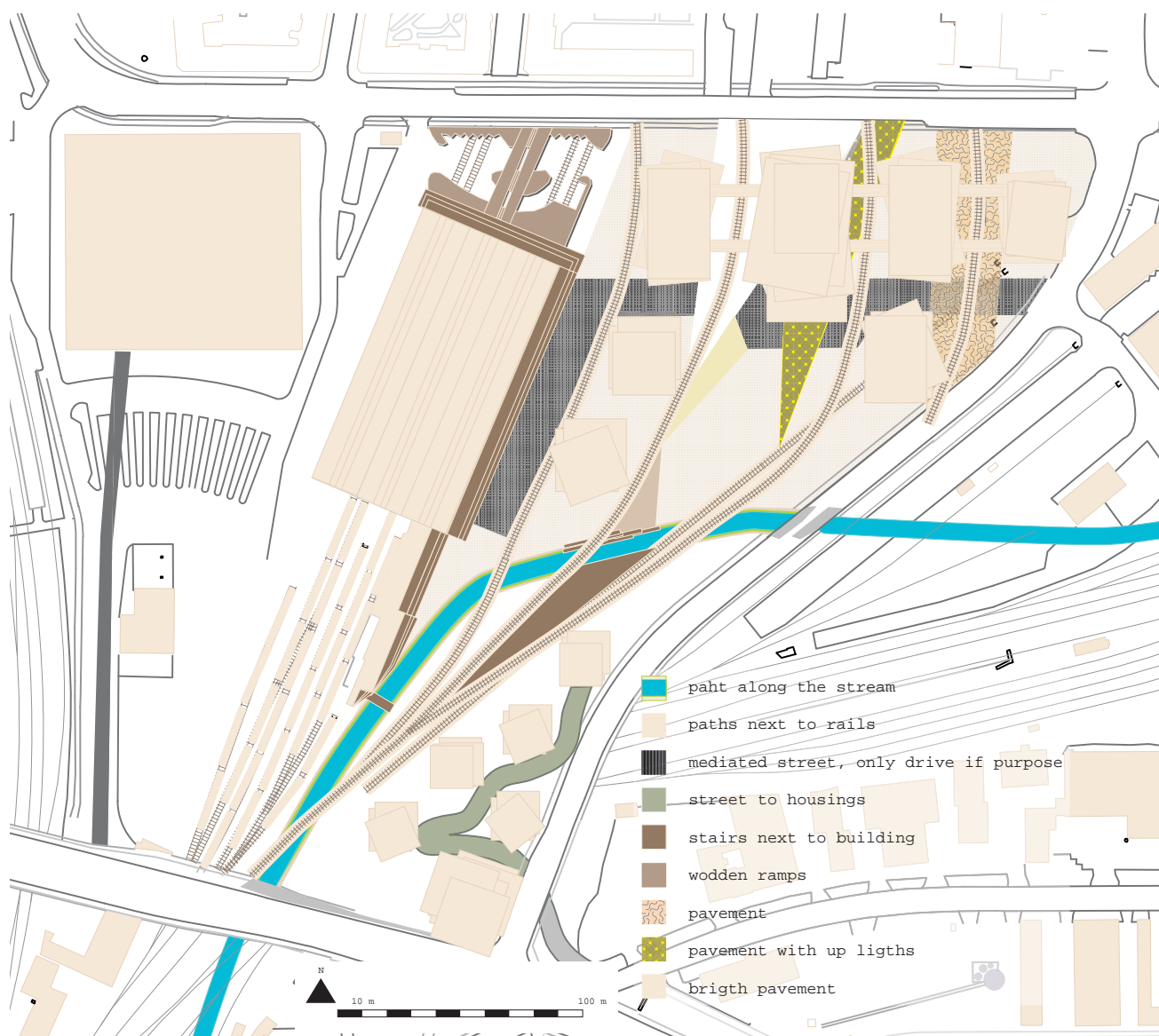The trucks there are going to enter with supplies for the knowledge area can only be there from midnight to 9 am. The access can in this period of time be from Jyllandsgade or the internal crossing street.
The old terminal building with shops, cafés and the hostel can get supplies all day, but only from the western side of the building.

The housing area and the office do all have parking base-ments and can enter from Hjulmagervej. The street they can come by is made of armed grass and will therefore appear green.

Along the stream there will also be access to the valley by paths very close to the stream, the pavement on this path can in some occasions change and become the same as the program at that spot.

The old tracks are also being important in this area, they are the ones indicating where the paths across the stream are located. And they are also indicating which way the directions on the site are.

Legend:

- paht along the stream
- paths next to rails
- mediated street, only drive if purpose
- street to housings
- stairs next to building
- wodden ramps
- pavement
- pavement with up ligths
- brigth pavement

N

10 m   100 m

Illu. 124 Plan showing the access possibilities on the site

Building plan

The buildings on the site are all inspired by the way a stack of papers can end up lie on you table, one of them are twisting a little, and the stack might have had a little push, so there is an overhang in some places.
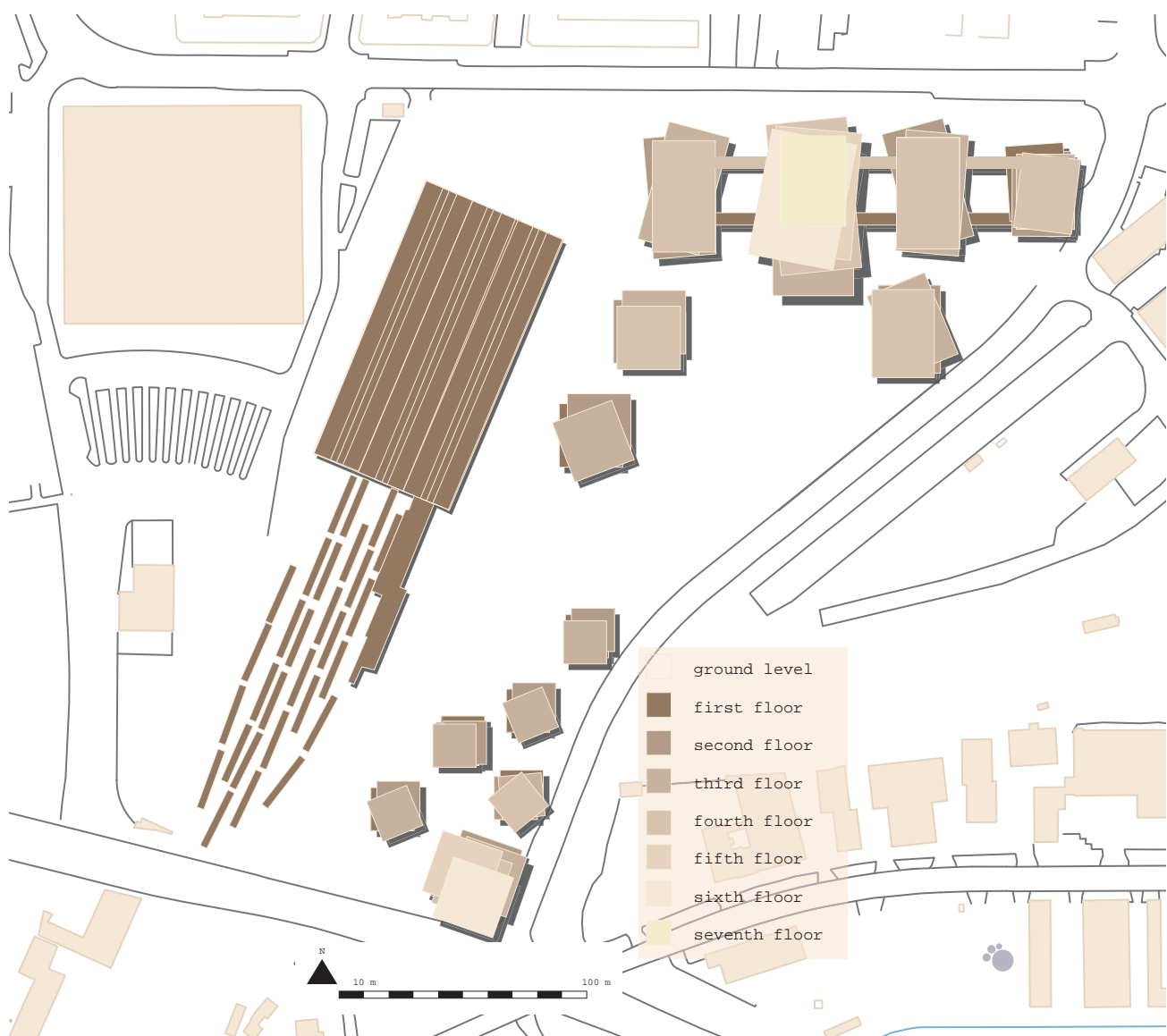
The three types of functions we can find in the buildings can also be seen from the outside. On the northern of the stream side all the new buildings where the levels have a twist against each other are all knowledge buildings, here incorporated a library and some sports facilities.

In the knowledge buildings there is also made a passage in the second floor and the fourth floor, this makes it possible to go between all the buildings inside and also having more rooms for the knowledge exchange by doing group work.
Another thing with the bridges are that they are placed so the highest passage are the northern end, this give the possibility to have a more friendly entrance, and also to have the sun going down to the ground level in the entrance and transit zones.

The building there hasn't got a twist in the overhangs on the northern side of the stream are seen as housings. On the southern side of the stream the housings are the buildings with a twisted overhang and the one with the no twists are an office building – commercial building.

Furthermore the buildings are towards the northern and southern street in between four to seven levels to create a back against the streets. The buildings are then going down in levels towards the stream so the buildings next to the stream are about three levels high.

ground level

first floor

second floor

third floor

fourth floor

fifth floor

sixth floor

seventh floor

N

10 m   100 m

Illu. 125 Plan showing the building heights

Green plan

The green concept of the site is to make is appear green even though the pavements isn't grass. The way this challenge has been solved is by having much planting of different types of trees. The different types of trees are going to make the green seam more diverse, even though the fruit trees and cherry trees only will have another colour than green for a few weeks every year.

The choices of the green plants have fallen to oak, because it is what earlier has been used for the sleepers in the tracks. The chestnut is chosen because of the "fruits" it gives, and also because they are easy to maintain. The cherry trees have been planted here because of the few weeks where the trees are beautiful and can give the graduation season some beautiful backgrounds for pictures and so. On top of the knowledge building are some lilacs trees planted, they give good shadow and when they are in flower a nice scent to enjoy studying in.
The birch trees are chosen because of their white stem and if they are being illuminated from below, the white stem can really make an area interesting.

The flower beds are seen as beds with flowers only from the summer seasons. The flowers can then be every thing like tulips to roses, just as long as they have a long flowering season.
The grass are seen as a little wild, or as grass they only cut every second week, this will give it the opportunity in grow so high that your shoes will be covered by the grass, but it will not be as uncontrolled as it is some places in the valley.

The fountains will be used as a blue element where some of the water from the stream is pumped up into some fountains lying in the ground. The fountains will then during the summer be working as a play area like the Toldbod Plads, but only with the fountains in the ground and not elevated.

Illu. 126 pictures showing the different types of trees

Illu. 127 pictures showing the different types of pavement

oak tree

chestnut tree

birch tree

cherry tree

fruit tree

grass

water fountain area

flower bed area

stream with grass brinks

N

10 m   100 m

Illu. 128 Plan of the green elements

Stream

The project of opening the old Østerå stream is a project the municipality has as one of it priorities and there have by now all ready been made a fond to pay the expenses. One of the main goals by opening the stream is to make a place like by the stream in Århus, where there during the summer is very much life along the stream and also in the winter the stream is a nice element, but not that much visited.

The biggest negative thing there can be said about the stream in Århus, is the fact that it ends in a grating just before Europa plads. In Århus it is not possible to make the stream going through Europa Plads because it is one of the most trafficked areas in Århus.

When they open the stream in Aalborg the stream will end in the inlet and not in a grating as it is now. The stream will be re-opened from the clothing factory Gabriel and go through the project site, down through the Tivoli and through the square in front of the Nordkraft building and end up dividing the square next to the House of Music.

Illu. 129 Mood picture of the area near the stream

One of the good things by opening the stream will be the extra "pipe" for the rain water. Today when it is heavy rain some basements and areas can be flooded. The stream will have a larger capacity than the pipes under the city and therefore the rain water, there normally ends up in the grids in the street, grids there often ends up being filled, can go to the stream and in that way help the piping under the city become ready for the new times with extreme whether.

The new course of the stream have been decided in the holistic perspective, and the idea of where it is going to go are good, because the stream will go from wild, to city and every part of the city areas are not alike, and they will therefore give many new impressions.

The benefit the stream gives the site are many and the most obvious are that there will be areas close to blue and green nature. The stream can also give a larger life of birds and fishes. The stream area inside a knowledge exchange area can also become the new place for events like "Universitarium" where the main theme can be water, and the projects you can play with can be put in the water.
The fact that you also can sit with the legs in water or sit on benches and study near the water gives many possibilities. The stage area by the stream can also be seen as a place the music lectures can be held on, or if there are a small intimae concert. But it will also be able to have large artists like TV2 or Infernal, the only thing there can be the limit is the amount of power they need.

The many programs wanted by the stream are all the best from the inspiration trips to Århus, Kolding and Vejle, three Danish cities there all have had an old stream reopened. In Kolding they have a stage like wooden area, where many people gather during the summer. The streams in all cities are used as places for gatherings which are a thing very much wanted in Aalborg, one of the main conclusions on why the stream should be opened.
In the municipality of Aalborg the minds of the stream isn't alike all over, but the people against are mostly thinking of the nightmare it will become to plan them out of the opening both with traffic when they dig, but also how they can get free of the existing pipes.

Knowledge

The new times in the education world makes new challenges in creating good working environments for every type of study. In the 30ies and up to about the 60ies the school was seen as a classroom where all students got the same knowledge at the same time. When Aalborg University was founded in the 70ies they buried the old school where every student worked alone on a project and only came to lectures and didn't do much study together.

The Aalborg model was the opposite, most of the time was marked as group work, the projects made during a semester are done in groups and every student is responsible for the other group members. The Aalborg model has since then become very popular and many times the factories, the students are working with can use the projects afterwards or even the extra knowledge the students have and hire them after graduation.
Today this type of education has moved on and many of the gymnasiums have changed their way of teaching. One of the most impressing and most forward thinking places are the Ørestadens gymnasium. They have no classrooms, everything happens in the large common area, where one part is made into an IT lab. Most of the education is also made so it can be followed from the laptop instead of the blackboard.

The new types of libraries are like the Ørestadens Gymnasium, it is open structures and also with many of the common public facilities. The libraries today also contain areas with public computers and wireless internet access all over the place.
The library at this spot is also going to have these facilities, and the extra facilities with sport and meeting gives the library more programs to keep it alive all the day.

The gymnasiums today have in many cases become specialised but they still have to have some laboratory facilities. The new way of teaching also makes the progress for the laboratories, it is wanted to have facilities for both the experiences and the documentation in the same room, and in best cases as small work stations for each little group.

The pictures are showing the new type of gymnasiums there in the progress both for gymnasiums and for the new universities.
The planned university of Kolding are also going to become a place with much common area, and less small closed rooms.

Illu. 130 Hallway on AAU, Krogh 1

Illu. 131 New ways of laboratory

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Illu. 132 Future University of Kolding

Illu. 133 Bio med. Oxford
university

Illu. 134 Ørestadens gymnasium

Ligth distribution

All over the site the buildings will be lighted from beneath and downwards from the overhangs, this type of lightning will both give much light to the street and squares around it, but also help telling the shapes of the buildings when it is dark.

Further more the active area has a illuminated triangle there are going all the way to the street. The internal mediated street will also in some extend illuminate the place, but it will not be much.

Along the stream there will be lampposts for every 10 meters and they will be in one meters height, so it does not interferes the outlook from the buildings and squares along the stream.

This type of illuminating water areas are very used by the Danish company Hansen og Henneberg a firm there have specialized in enlightening city areas all over the world. It is also them who have made the Brolandingen and the Harbour front in Aalborg.

Along all the tracks there will be made lampposts of the same type as the ones at the harbour front and the Toldbod Plads. The benefits from these lamps are that they can give light in many different directions at the same time and only have one post in the ground.
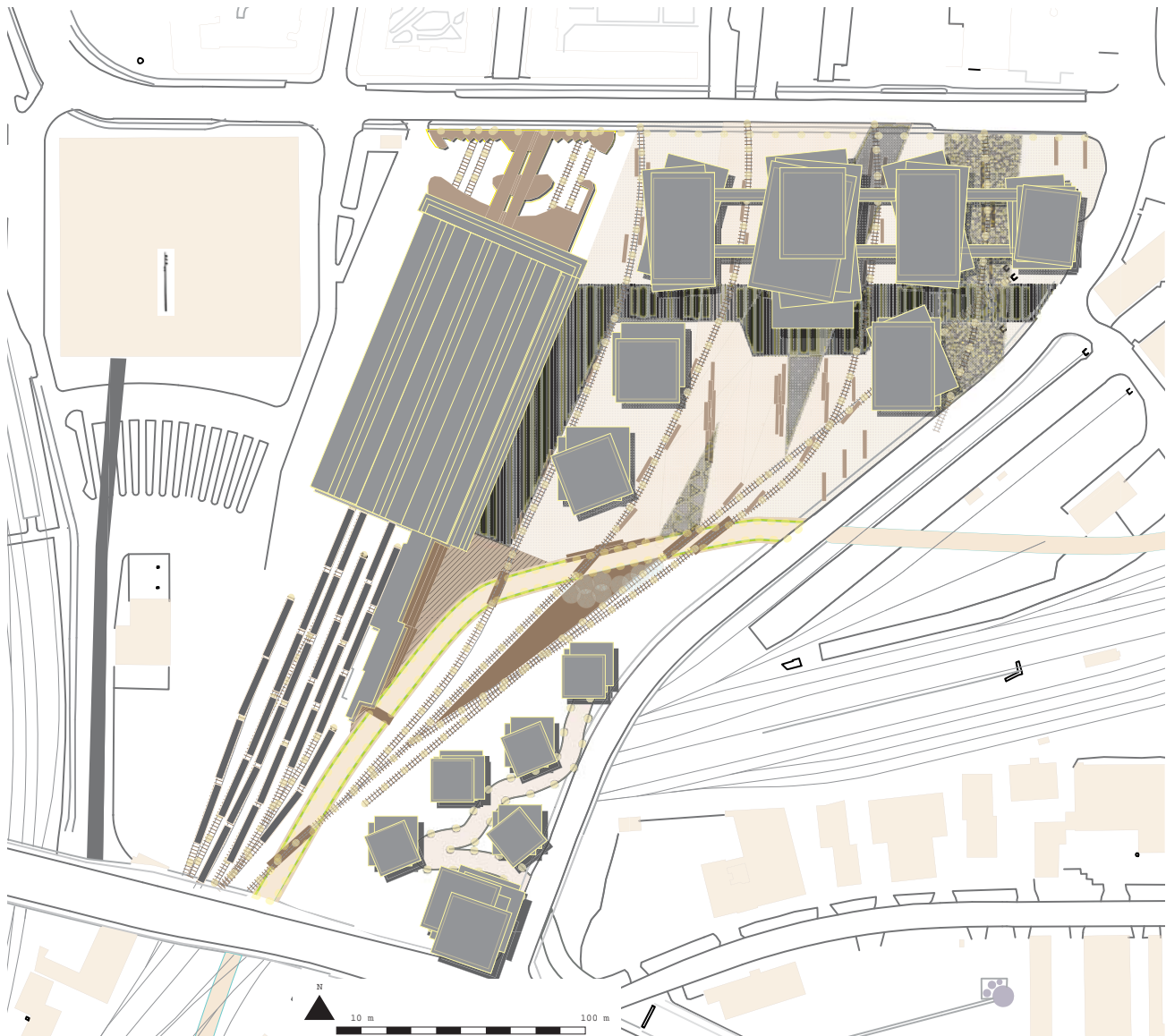
At the stage area another type of lamppost are suggested, they have small solar panels so they during the day get charged and during night uses the charged energy to lighten a place. These lamps are seen in Århus in the pedestrian street closest to the railway station.
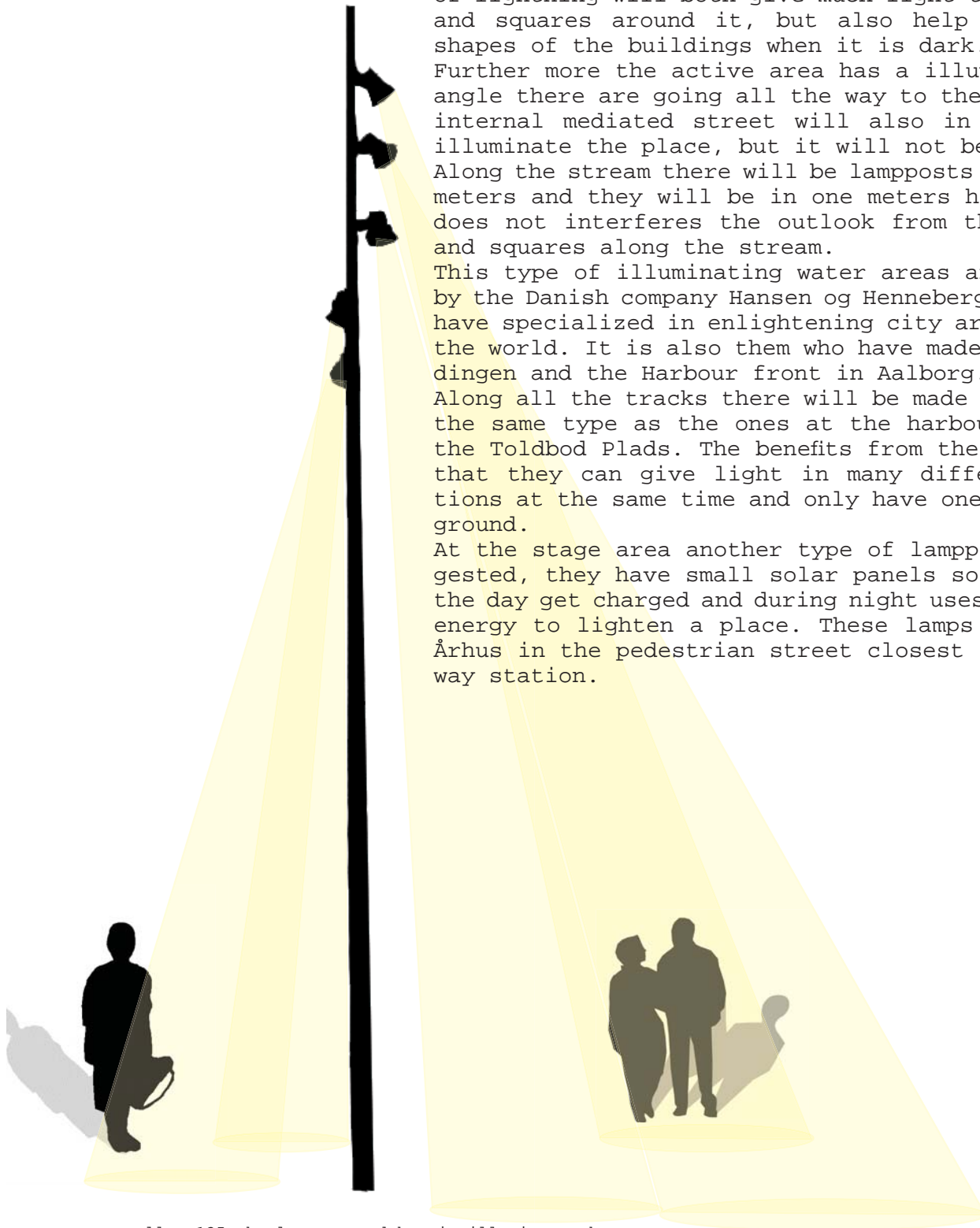
Illu. 135 The lampost and how it illuminate the area

Illu. 136 Light solutions for the site

Illu. 137 Plan of the light distribution

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Perception

In the following the project will be put in perspec-
tive and the different parts of the project will be in
perception in chronological order. And in the end the
concluding remarks of the entire project. The last part
will be a short summary of the project.

Approach and vision

The vision in creating a place for the institutions there is flexible to fulfil the different types of schools and making the area into a city area close to the stream have had an approach in how to fulfil this.

The approach for how to fulfil the vision has been to incorporate tree different types of functions, knowledge area, an urban flow space and a temporarily - creative cluster. The knowledge cluster has been seen as the scholar institutions and the library. Further more it was a good idea to make a light house, this haven't been done as it was seen at first, but instead of making one spectacular building, all the buildings on the site are seen as light houses. The back against Jyllandsgade are open and diffuse, and the buildings are between tree and seven floors are all special and as a whole they look like a complex of buildings there have to be together.

The scholar institutions do also have the new tendencies in mind, and the buildings are therefore made so they give the users some small areas to study in, but most the times open structures or structures with glass walls so you have the felling of interaction with the people on the other side of the wall.

The approach in making the knowledge area open for public and having the buildings diffuse and open are helping the extra benefit in getting a area for knowledge exchange, both for the different students but also for the public.

The urban flow space are seen much in the paths between the buildings but also in the internal street. The part of keeping a few old things are kept in the arrival area as platforms shaped as the old outline of the parking area, but it is also seen in the use of the old tracks. The tracks are giving the site a direction, and it also gives the site some fake perspective views. These perspective views on the site feels interesting and, the tracks invite to follow them and in that way visit the area. The uses of different materials are also helping underline the perspective views and also the different programs wanted in different areas. The mediated surfaces are seen as a good inspiration in getting people to exercise more. The mediated surface will therefore in periods be a information board telling what will happen, other times you can jump a certain place and a game of chess, Pacman or backgammon will appear, but to move your pieces you have to move your selves. It is seen today that the computer game Nintendo Wee are popular and the kids and adults actually move them selves when they play, which means that computer games can be healthy. The main focus for the mediated surfaces will therefore be to help people play and have fun with what they area doing.

The furniture's of the site are seen as benches maybe of old rail parts, and in the active area and the stage the benches are seen as the bench rows on stadiums. The height of these will give the audience a larger view and also become useful as a real audience place to concerts or sports events like a skate tournament.

The temporarily and creative cluster haven't been the largest focus, but the old goods terminal is also seen as a place for a few small studios or galleries. The temporarily theme seen in the hostel are mostly because the carriages can be transported to other places and be enlarged when there for instance are carnival or tall ship race or if there is lack of apartments for new students, they can then for the first few months live in a carriage and have the same facilities as in a normal apartment and maybe they even want to stay there instead of getting a real apartment.

The part of telling a narrative to invite the people are very clear in the many kept tracks, they can be seen from the street and the railway station and will in many cases make people interested in what is happening on the other side.

The stage are seen as a place people can come and use as they want, maybe there will be a large garden party here, or the shops or institutions have hired a band to come and entertain. The extra thing is that the stage can get partly covered and also has electrical facilities. This is helping the students, because they then can bring their laptop and sit on the stage studying in groups or alone.

Concept

The concept of letting the knowledge area be incorporated in a public domain is in my mind fulfilled because the area is enhancing the students and people in general to interact with each other and the theory of public domains, are saying that a public domain is when the users of the space are interacting and not only walking by each other.

The purpose in getting to the space is also important, when people have a purpose in going to a site it is easier to make them interact with others. The purpose in this site is the library and the schools, the library is seen as the one in the centre there either have one more location or that they just move to this site, instead of the place they have today, a location there is a little awkward and hided behind dominating walls.

Methodology

The methodology in making the life come before the rest is really good, and by using this method you end up seeing thing there often would have been overlooked.

But there are also things there are making the methodology a bit hard to use, it is especially if you have a site with almost nothing to relate to, then you need to make some decisions in what should be your boundaries. The process of making the boundaries have been hard in this project because there are not that many building to relate to, but there are many historical tracks that I wanted to keep, but they could easily end up making the site useless if there were too many tracks.

The experiences I have got by using this methodology are very good, and I would gladly use it again, and because I have tried using it once now, it would be easier next time.

Design

The design process has in this project been a bit confusing. For a long time I didn't want to make any boundaries or move any tracks, in the end I removed most the tracks, but I also added a good amount, so the track could go all the way down to the street Jyllandsgade. The tracks does also have a new function, bridges, you can only come across the stream by using the tracks, this give some areas with bridges close to each other and other places there are longer between the bridges, but there is not more than 200 meters when they are most apart.

In the beginning the buildings to be added was seen as organic shapes, but after trying to make this in 3d the idea was abandoned, then the organic shapes became ellipses and circles but they didn't work either, and they was also very hard to place. The reason why the organic shapes were tried out was because of the nice curvy elevated street, Dag Hammerskjøldsgade and the shape the tracks made. In the end the choice fell on geometric squares twisted and turned to make an interesting building.

The redesign of the goods terminal have in some extent become a secondary product, and the activities there are going to be there are chosen, but how to layout the interior haven't been done, which could have been a good idea, so that we could get an idea of how it would look like.

The choice of only designing a small part of the area has been good for the city life, because the entire site is as large as the inner city. A new development of an area in this size will end up being awkward and in the end it will feel empty for people because the area is so large. It will also be strange to have a new developed area there is as large as the city all done at the same time, if it is developed over time, the citizens will start using the one part and then move along with the development. The over time planning can also be good, if new designs should be tried out, because if the entire site has one design then if it doesn't work, then you have to redesign all the area, and not only a small part. And maybe the typologies of the buildings can change a bit so all the facades don't look alike, like for instance Bo01 in Malmö.

The ideas for the type of life there should be on the site have been the same for most the project, but in the end some of the functions have become a less important programme, for instance the indoor sports, the building where they have been located are large enough for a handball field, but the height might not be the best.

Other functions in the knowledge area have got more space than needed, but because the schools might grow or others also wants to join the space will in the end be used.

But is it possible for the different schools to have some common classrooms and be common about the different buildings?
The type of schools there are going to be here are mostly schools with no special needs, like kitchen facilities if the chefs education should be here. The main type of special rooms there are going to be are IT facilities, lab facilities for the chemistry and physics lectures, but also things like a studio for editing movies or making design. A studio for design will however be able to adapt and can also change into a normal classroom.
To make it work, the administration from the different educations have to agree in how to use the rooms, and have all the schedules made so the chemistry lab doesn't need to serve two different classes, but then again if it is possible for the two educations to have the same type of lecture, then why not have it if the facilities have enough capacity. In that way the teachers can help each other, and maybe they only need two chemistry teachers instead of fife, this means that one teacher can do what he or she do best, instead of having other lectures in areas they don't have specialized in.
In the end the campus area can work as one institution and help each other, so all have a winning situation.

Concluding remarks

The vision in making a knowledge area with capacity in fulfilling all needs of the institutions is a good vision, but has it been fulfilled? Is the area useful for all types of institutions there will be here. Another thing is, are the different institutions ready for common facilities?
The new campus area will give each education more room, the amount of square meters the municipality are planning on placing here is about 80,000 square meters in total for the entire site, with the functions office, housing and knowledge, not just the part I have designed. The amount of square meters I have places here are almost 52,000 square meters without the transportable hostel, where the 32,000 square meters are designed for the knowledge area, as a comparison is Bispensgade only covering 45,000 square meters.
The question on how the institutions are ready for the common facilities can only be answered by trying it out. There are institutions today where the new way of teaching is working, but so far the different types of institutions in a new type of teaching are not connected in the same building complexes, but I think it is important to try it out, because there can also be many benefits to gain from the differences in each education.

Summary

The project "follow the tracks - developing an old industrial site in Aalborg" is my master thesis from Aalborg University, architecture and design department, with specialization in Urban Design.
The vision for the area has been: "How to create a place for scholar institutions with flexibility to fulfil all the wishes from the schools, and also to create a well functioning city area close to the stream with possibilities in making knowledge exchange."

The site of the project is very important historical because this site has never been part of the city, even though it is located in the city. The former programmes in the site have been dangerous and therefore a place closed for public.
Today the municipality of Aalborg wants to give the citizens this area back, and make it even better by open the old Østerå stream across the site and make the area the new campus for non-university educations.
To try fulfilling all the wishes a design methodology has been used.
The methodology there has been used is taking the life before space and buildings. By using this methodology the life in the area will hopefully be rich and diverse in the use and the users.
The project does also focus in making a lighthouse to drag people in, the lighthouse in this cases is a public library with facilities for meetings, IT and sports. This mix of functions and the mix of educations there want to be here will in the end make a diversity in the users. The diversity of users can also be the magnet needed to drag even more people to the site and make it more public and in time also make the entire area a public domain.

To try keeping some of the old history an old goods terminal have been restored and reused, but many of the old tracks are also kept and extended to make the history more clear and to make guides for which direction to go. The use of mediated surfaces are also seen as a positive thing in making people know the area, maybe the street are having an exhibition where pictures from the old times are displayed in the street, and supplied by an guide from the museum to tell about the city.

The overall vision in designing a new campus area have been a success, but the educations also need to be open minded to make it work, the educations are now not having their own building any more, they are sharing the buildings with the other educations, this can in the end be difficult, but they can also benefit from it.

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Formalities

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