FROM UNIVERSITY CAMPUS TO A DIVERSE CITY HUB

PROCESS BOOKLET PART 2

ALEXANDER S. ANDRESEN MASTER OF ARCHITECTURE NTNU GRADUATE PROJECT AAR4990 SPRING 2020

STAGE 1 SITE ANALYSIS TABLE OF CONTENTS

Site Mapping 2 A Deep Dive into the Area and Site Facilities in District St. Hanshaugen **Current Situation** Nearby Functions Neighborhoods Land Use Green Parks and Outdoor Areas **Building Typologies** Urban Spaces **Building Heights** Street, Traffic and Transport Structures Street and Road Structures **Existing Building Programs** Concept Development 15 The Diverse City Hub The Square The Landmark The Circulation Volume Studies - Apartments and Gardens Mid-term Critique Towards the Final Proposal

Literature List 29

SITE MAPPING A DEEP-DIVE INTO THE AREA AND SITE

Before developing a concept, it was essential to get a better understanding of the urban fabric I was going to work with. *What qualities are already present,* and *are there elements that are lacking in the area*, were some of the questions I asked myself in the beginning of this stage.

To get the process started, I first dove in to programpotential. I knew early on that the new programs should be facilities that people need rather than want. They have to be diverse enough, with a strong financial foothold and longevity, so not to be quickly interchanged by new functions. The feedback I received from the residents, employees and users of the area, was invaluable. Their opinions gave me a glimpse into the different possibilities to introduce on site. The next step was to document the facilities that the district already offers. The categories include sports, rentable venues, culture, and parks and recreational areas. By analyzing the concrete data, it helped me narrow down the functions with the most potential.

Lastly, creating thematic maps of the area, focusing on existing green structures, building typologies, entrances into the site, formation of squares and outdoor spaces, has been a key tool in developing my final concept. They work as my own urban planning guidelines - each decision I made when designing takes in account the existing urban fabric. I do not wish to break with it, but rather develop it further, keeping the area's qualities intact.



Adamstuen Square. Photo taken by author.

SITE MAPPING FACILITIES IN DISTRICT ST. HANSHAUGEN - NATURE, CULTURE AND LEISURE

- **Swimming Pools** There are no public pools in this district, only 'Bislet bad' that is privately owned. Bislet bad has a17 meter pool, workout rooms, a yogaroom, and a sauna. The district lacks a 25 m. or a 50 m. pool.
- SportsOnly 2 sports facilities in this district, Bislett Stadion and Lille
Bislet.

Venues to rent58 venues altogetherType: Event venues (27), Conference spaces (30), Ateliers (2),
Outdoor venues (20).

Art and CultureThe old Deichmanske Library is moved down to the city center.
No local libraries in the district, except for Oslomet's university
library.

MuseumsThe 'Worker's Museum' is located along Akerselva. 'Sporveis-
museet Vognhall 5' is at Majorstuen, and Oslo Reptile Park is
at St. Olavs gate.

Geimyra gård by Oslo University Hospital (Ullevål sykehus), Sporveismuseet (Majorstuen), Fyrhuset (Kuba parken), Hønselovisas hus (Sagene), and Sagene festivitetshus.

Parks and Recreational Areas	Idioten, Stensparken, and Sankthanshaugen. Marienlystparken
Leisure	'Skattkammeret' offers free rental of sports equipment to chil-
Equipment to	dren and youth under the age of 18, and reasonable pricing for
Rent	those above.

Stensparken. Photo from Wikipedia



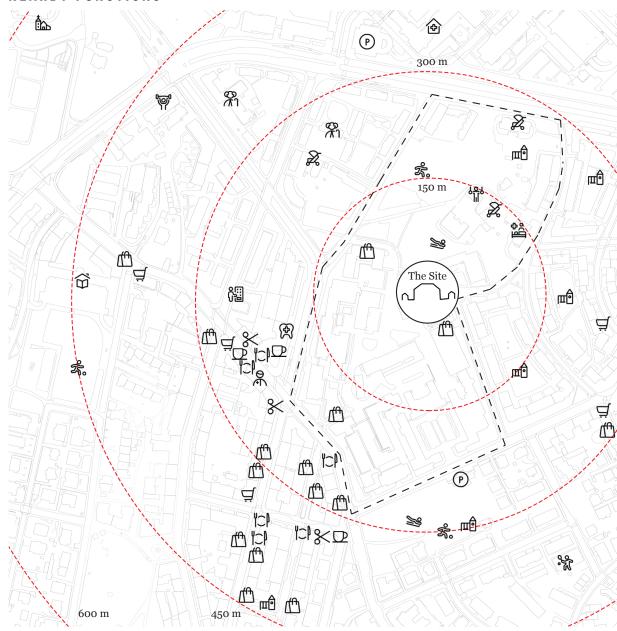
SITE MAPPING CURRENT SITUATION

Mapping the existing site and area has been an important tool in my design process because they help uncovered vital information about the urban composition and structure. The different maps provide information about existing building typologies and heights, density, area boundaries, and which facilities are located close by. The property border is representing the area Statsbygg current owns, but are in the midst of selling.

My proposal and interventions react to the site by building on what is already there, rather than superimposing. The spatial and atmospheric qualities I wish to create at the site, should become an extension of the neighborhood. However, it is still important to create defined attributes and that give it its own character.

I have used the information that the original maps convey, found in Statsbygg's Feasibility Study, to create my own maps of the current situation. They are visually different, but the overall information is the same as in the study.

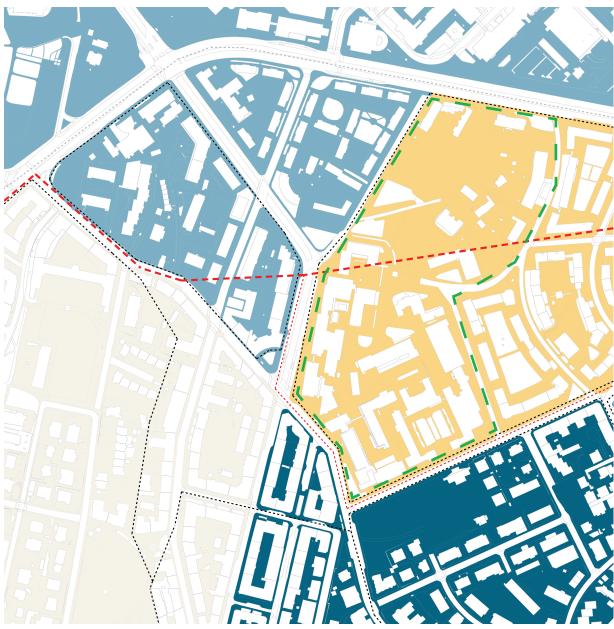
SITE MAPPING NEARBY FUNCTIONS



SCALE 1:5000 / ORIGINAL SCALE 1:1000



SITE MAPPING NEIGHBORHOODS



SCALE 1:5000 / ORIGINAL SCALE 1:1000

The border of inner and outer city Oslo has expanded over time. What was once recognized as farmland located at the periphery of the city, has now become a university institution within the inner-city borders. In the foreseeable future, the chosen site, where the current Norwegian Veterinary School is located, will be redeveloped, with a denser architectural expression. This neighborhood may even branch out from Lindern, gaining its own autonomy.

Legend



SITE MAPPING

NG LAND USE



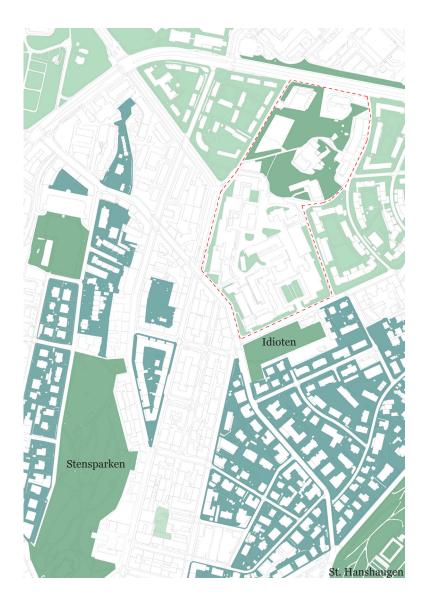
SCALE 1:5000 / ORIGINAL SCALE 1:1000

The majority of land today is allocated various forms and sizes of housing.

Once the university relocates, the site will become a prime place to introduce mix-use programs where housing, commerce and culture can intertwine. By supplying the existing neighborhoods with a variety of functions, the City Hub can become a catalyst for diversity, making the site both an appealing place to use and live.



SITE MAPPING GREEN PARKS AND OUTDOOR AREAS



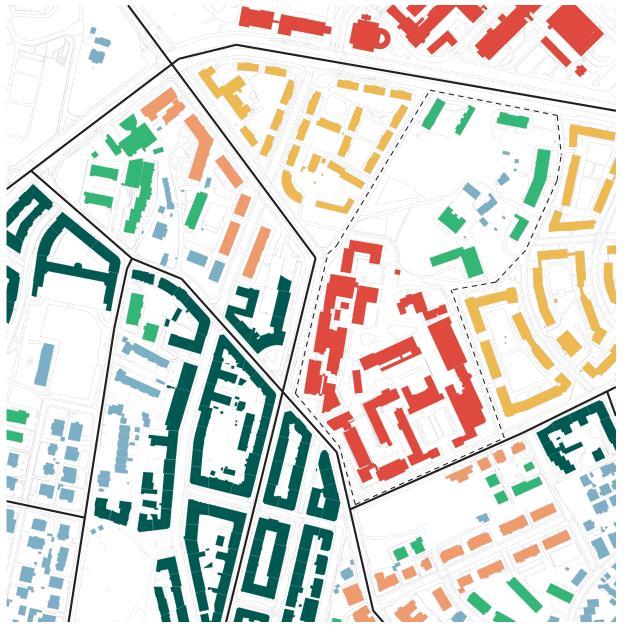
SCALE 1:8000 / ORIGINAL SCALE 1:1000

District St. Hanshaugen is fortunate to have ample amount of green areas and parks even in the midst of a dense, populated area. Retaining these qualities is important as there needs to be a balance between nature and urban development. In my proposal, most of the green area north of the City Hub, will be transformed into a park, in conjunction with a new sports center. Introducing specific green areas within the site, will also create a 'green transition' from the park in the north, to the hill, Idioten, in the south.



Legend

SITE MAPPING BUILDING TYPOLOGIES



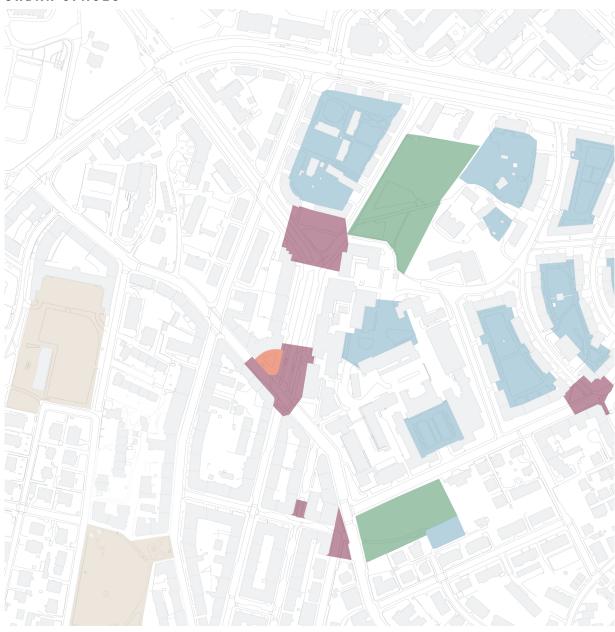
SCALE 1:5000 / ORIGINAL SCALE 1:1000

Attached houses and tenements are the types of buildings this area predominantly consists of. Integrating similar structures next to the historical buildings already on site, can create a dynamic interplay between new and old.



SITE MAPPING

URBAN SPACES



SCALE 1:5000 / ORIGINAL SCALE 1:1000

Forming new urban squares that can either work as extensions or supplements to the ones that are already present, is important to help define this area as a new city hub. Where do people meet for informal and formal gatherings, and where do people stop to rest, will be further analyzed and developed.

The existing squares are formed by their respective buildings that enclose and define the space. The less accessible, or more enclosed they are, the less public they become.



SITE MAPPING

G BUILDING HEIGHTS



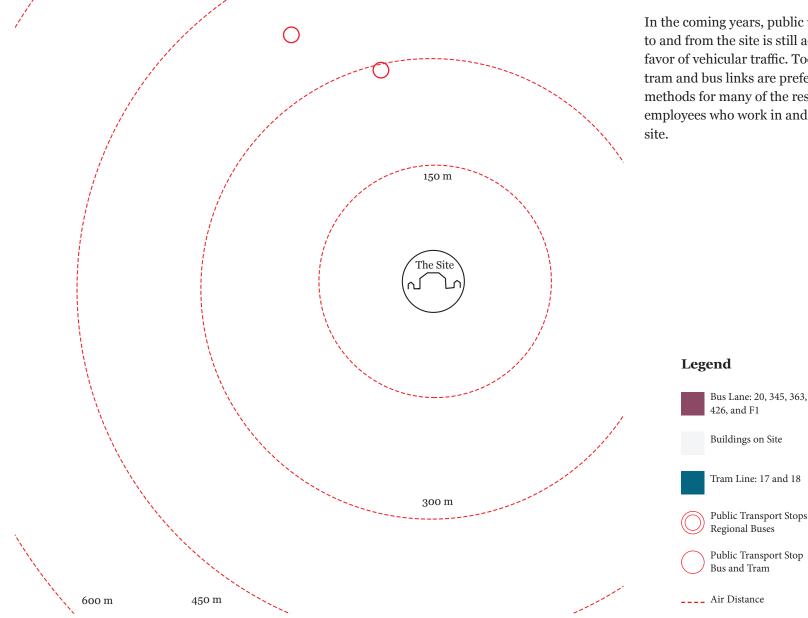
SCALE 1:5000 / ORIGINAL SCALE 1:1000

Building heights in the area stay consistent, with the chimney of the Boilerhouse being considered a landmark in the urban landscape. If this area is to change in the future, what new landmark can come about? Shall the chimney stay intact, or should another structure replace it? Is it possible to build taller without diminishing the architectural qualities of the existing building masses? These questions are further discussed and shown through sketches and the physical model.





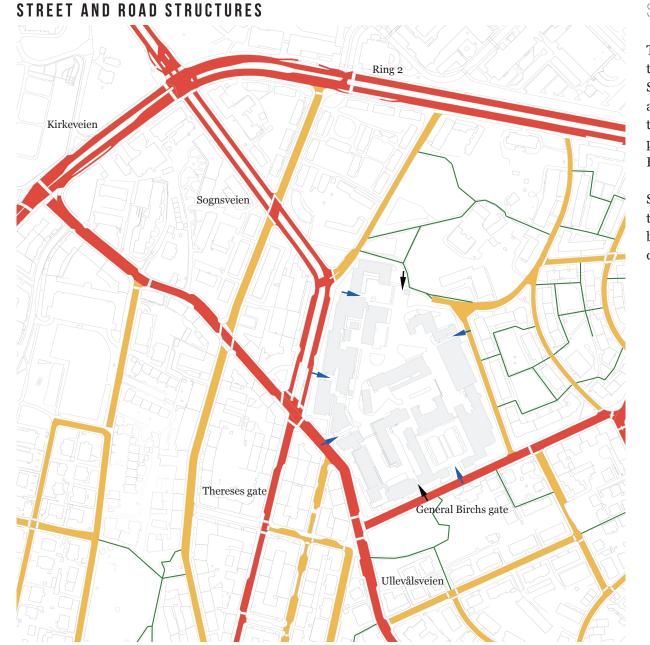




SCALE 1:5000 / ORIGINAL SCALE 1:1000

In the coming years, public transport to and from the site is still advocated in favor of vehicular traffic. Today, both tram and bus links are preferred travel methods for many of the residents and employees who work in and around the





SITE MAPPING

SCALE 1:5000 / ORIGINAL SCALE 1:1000

The main entrances are located to the side of the roads - Theresesgate, Sognsveien, and Ullevålsveien. There are no clear circulation paths within the site, but an inkling of a movement pattern seems to revolve around the Boilerhouse in the middle.

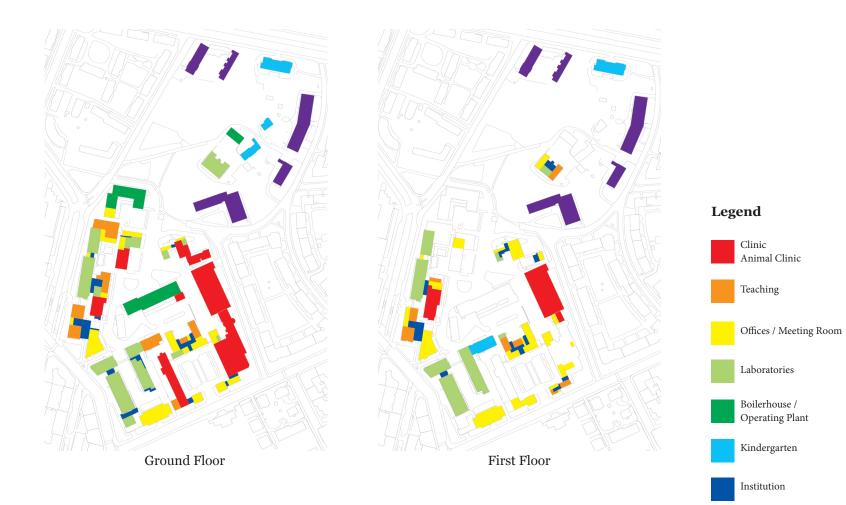
Secondary entrances are placed around the site's periphery. They can possibly become points of interest in the future development of the site.



SITE MAPPING EXISTING BUILDING PROGRAMS



Housing



CONCEPT DEVELOPMENT THE DIVERSE CITY HUB

When I started to develop the concept, *The Diverse City Hub*, I wanted to figure out what that actually meant. *What type of city is this, and what tangible and intangible qualities are created here?*

To clarify my vision, I have broken down the concept, defining two of the essential words *diverse* and *hub*.

Diverse: *differing from one another // composed of distinct or unlike elements or qualities.*

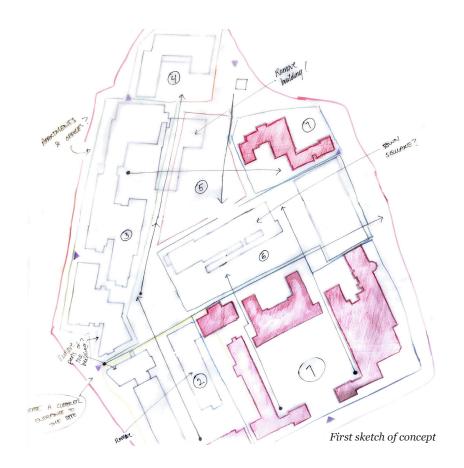
Hub: A center of activity // A focal point

I wanted the aspect of diversity in the project to come forth through these points

i. Building variety - both in architecture and function.ii. Spatial variety

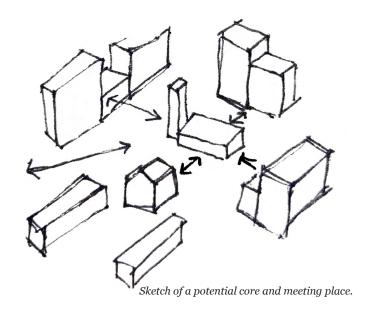
Creating diversity, in regard to what type of people will use this place, is difficult to achieve. This must happen organically. Instilling interventions that help with this process was therefore key.

Introducing functions that are inviting and cater to an array of users is the first step. Secondly, strengthening the area's foothold in the urban landscape has been an important factor in this project. This is achieved by using three distinct interventions derived from urban planning theory. Creating: places to gather, a landmark in the city, and central axis leading to the former.



The existing site has one clear square - the space in front of the Main Building. The green area is protected in accordance to the Cultural Heritage Act, classification 1, thereby making any drastic changes quite difficult to implement. Although the area around the Boilerhouse is not a defined square, the framing by the other buildings, makes space act as a natural meeting place. It is also situated in the center of the site, allowing for easy access from the other buildings.

Re-establishing the Square as a place to socialize, to rest, to watch, becomes an intervention that will help strengthen the overall concept. It must distinguish itself from other spaces both within and outside the compound, to be recognized as a new square.



Concept Diagram of the square. A meeting place for the residents.

THE SQUARE

Early sketches depict the formation of a square by introducing heavy and large structures around the center of the property. Framing the square is an important tool to highlight a potential focal point within the urban landscape. Thomas Thiis-Evensen states in his book, *Byens Utrykksformer*, that *the rectilinear square has one main direction that leads the gaze and movement to one of its sides*. (Thiis-Evensen, 1992)

The first vision I had was to highlight the Main Building's back-facade, transforming it from a parking-lot to a natural resting spot in the shade. This would be achieved by visually extending the walls of the Main Building's wings across the square, into a new building form. The rectilinear square would naturally create site-lines that would draw people's attention to either the Main Building or the potential health and recreational center.

Enclosing this space with a central axis running through, forms a sense of safety and comfort. Unless the aim is to get from one point to another as quickly as possible, people would rather choose to move along the facades, than straight across. This is because the walls and canopies form natural shelter and protection from rain, wind and other environmental factors. This organization also allows for seating to be placed along the periphery. People can watch the different activities, while still feeling protected due to the walls in the back.



A central square in the middle is formed by two enclosing volumes reacting to the existing Main Building.

CONCEPT Development The Square



Sketch proposing a sequence of squares and gardens in direct connection to the buildings

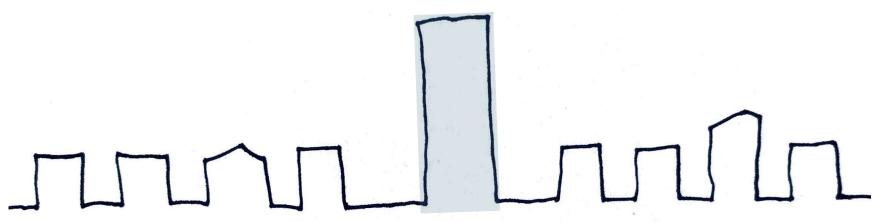
Today, the Boilerhouse's chimney acts as a landmark at the site. Compared to the buildings from the 1920s , that exude a monumentality due to their architectural style, the chimney, with its tall and slender form, becomes clear a contrast to the former. It stretches above the rooftops and becomes visible even from afar.

By removing this unique figure from the urban landscape, which I have purposely done, there is a need for another structure that can become a focal point.

What was challenging at this point in the design process, was whether the Main Building, or a new building connected to the square, should become the main attraction.



Boilerhouse and chimney. Photo taken by author.



Concept Diagram of the landmark.

THE LANDMARK

Kevin Lynch defines the 'landmark' as a type of point reference, and a defined physical object. They can either distant ones - seen from afar, or more local ones - visible only in specific localities. (Lynch, 2012).

When I asked people on the street what they associated the site with, they immediately said the architecture, especially that of the Main Building. It breaks with the typology of the area, giving it a grandeur in comparison to the typical tenement buildings located along the streetscape.

The site's characteristic 1970s buildings - brick construction with typical row windows and flat roofs, on the other hand received a more blasé response. They felt that the structures were too similar to other brick buildings from that time-period.

However, it is the combination of both, where each entity works in tandem, that gives the site its unique architectural quality.

Juxtaposing these specific styles with the addition of a new landmark had to be done methodically and with care. The goal is to help highlight the existing buildings, and to not overshadow them.

Placing a lower and larger volume in the middle was my first approach. The scale and function of the building would become a point of interest for the new residents of this city hub. This would also allow for the Main Building to retain its presence, because attention would automatically be drawn to its height and architectural style.



Placing a large structure in the center of the site could act as a new landmark.





Working model showing a larger form that could potentially act as a new landmark.



Working model showing the final proposal of a new apartment tower becoming the new landmark.

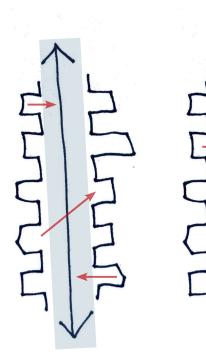
CONCEPT DEVELOPMENT THE CIRCULATION

Today, the majority of the streets are used for parking, as seen in the image below. Furthermore, the streets and pedestrian paths overlap, thereby creating undefined places to walk, bike or drive.

Establishing new access routes into the site will help create a more organized circulation pattern for both vehicle use and pedestrian movement.

The latter is prioritized with the streets resembling pedestrian boulevards with a tiled underlay instead of asphalt. Although the streets will follow a traditional rectilinear direction, movement along and across the axes should happen organically.



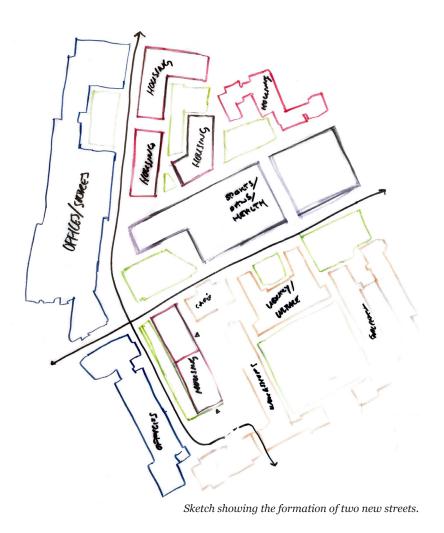


Concept Diagram for new streets.

THE CIRCULATION

The path is not only a tool to get from point A to B, but it can create partitions between objects of interest. The paths I have proposed will cut through the site, both across and longitudinal. Together, they will help define the different sub-areas of the site. The buildings on the west side will be allocated office and commerce functions, while the buildings to the south will become a cultural arena. Housing will be placed to the north, with paths leading to the main streets and to other social activities.

The two streets will mainly function as logistical routes for deliveries, and will be wide enough for emergency vehicles to pass by. Smaller paths will lead to designated points of interest such as the square, parks, and public facilities.



CONCEPT DEVELOPMENT VOLUME STUDIES - APARTMENTS AND GARDENS



Sequence of housing and garden layouts produced before the mid-term.

MID-TERM CRITIQUE

When I chose this site, my initial idea was to work solely on one or two of the buildings, transforming them into becoming a catalyst for a new, diverse city center. This idea was quickly put up for debate after I received my feedback at the mid-term presentation. I was suggested to choose one direction, whether it be transforming specific buildings on site, or the whole area. Having worked on elements of urban planning prior to the presentation, I decided that creating a new urban plan for the site was the most effective way to get my concept of a 'diverse city hub', across.

Changing focus from a single building to, now, the whole site, a new approach would have to be developed. I could still use the interventions of the square, landmark and circulation, however, they would have to be iterated and finely tuned.

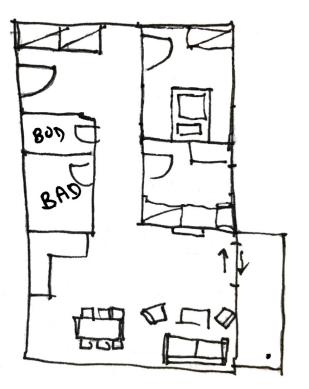
The last couple of months have been spent working on strengthening the aforementioned elements. New building rearrangements have been formed, more defined squares and streets have been developed, and I have introduced greenery and parks. The individual building programs and layout arrangements have also been decided.



After the mid-term, I shifted my design approach by focusing more on the micro scale. It was necessary to take a step back from the 'volume-studies' stage, and dive into the realm of detailing and sectioning of the rooms. The most suitable scales to work in were 1:500 and 1:200, where I could efficiently plan the different interior spaces. I established entrance points and defined public and private domains with the placement of functions.

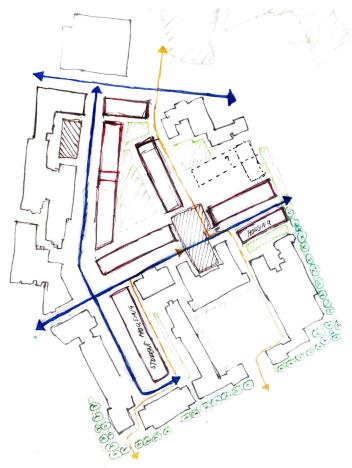
Information about the conservation status, helped me decide where to place certain functions in the existing buildings - restrictions became a determining factor in the overall layout.

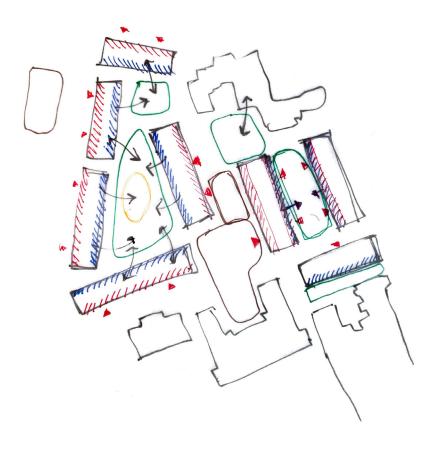
A major challenge during the process, was balancing the amount of detailing showcased in the individual buildings and in the urban plan. To overcome this hurdle, I chose to work simultaneously with the indoor and outdoor spaces. By developing their spatial qualities in relation to one another, rather than separately, the transformation of the site and what I have called my proposal, *From University Campus to a Diverse City Hub*, has ultimately merged the two.



Sketch of potential apartment layout.

CONCEPT DEVELOPMENT TOWARDS THE FINAL PROPOSAL





Sketch showing entrances to buildings and movement out to the gardens. Red indicates public entrances and facades, blue show private entrances and facades.

New building arrangements defining the central square.

CONCEPT DEVELOPMENT TOWARDS THE FINAL PROPOSAL



Physical model showing final proposal.

LITERATURE LIST BIBLIOGRAPHY

Bliss, Laura. "Moving Toward an Evolutionary Theory of Cities." CityLab. Bloomberg L.P., November 4, 2014. https://www.citylab.com/design/2014/11/moving-toward-an-evolutionary-theory-of-cities/381839/.

Byantikvaren i Oslo. "Norges Veterinærhøgskole - Ullevålsveien 72/Thulstrups Gate 3 / Undervisningsanlegg." Kulturminnesøk. Riksantikvaren, Direktoratet for kulturminneforvaltning. Accessed May 13, 2020. https://kulturminnesok.no/ minne/?queryString=https://data.kulturminne.no/askeladden/lokalitet/167029.

Byggforskserien. "Fortetting i Byområder." Byggforskserien. Sintef, 2001. https://www.byggforsk.no/dokument/3026.

Christensen, Arne Lie. Urbane Drømmer : Byutvikling i Oslo Og Akershus Fra 1960 Til i Dag. Oslo: Fortidsminneforeningen, 2011.

Gehl, Jahn. *Life between Buildings: Using Public Space*. Translated by Jo Koch. Washington, D.C.: Island Press, 2011.

Kommunal- og moderniseringsdepartementet. *Byrom - En Idehåndbok: Hvordan Utvikle Byromsnettverk i Byer Og Tettsteder*. Kommunal- og moderniseringsdepartementet, 2016. https://www.regjeringen.no/contentassets/ c6fc38d76d374e77ae5b1d8dcdbbd92a/byrom_idehandbok.pdf.

Lynch, Kevin. The Image of the City. Cambridge, MA: The MIT Press, 2012.

Ministry of Climate and Environment. "Cultural Heritage Act." Government.no. Government.no, June 9, 1978. https://www.regjeringen.no/en/dokumenter/cultural-heritage-act/id173106/.

Ministry of the Environment. "Planning and Building Act (2008)." Government. no. Government.no, June 27, 2008. https://www.regjeringen.no/en/dokumenter/ planning-building-act/id570450/. Oslo Byråd. "Vår by, Vår Fremtid. Kommuneplan 2018." Oslo kommune. Oslo kommune, June 28, 2018. https://www.oslo.kommune.no/getfile.php/13285977-1530184796/Tjenester og tilbud/Politikk og administrasjon/Politikk/Kommuneplan/ Forslag til ny Kommuneplan 2018/Forslag til kommuneplan juni 2018 (utskriftsvennlig).pdf.

Oslo Kommune, Statistikkbanken, and Statistisk sentralbyrå. "Bydel St. Hanshaugen." Oslo kommune - Bydelsfakta. Oslo kommune. Accessed May 15, 2020. https:// bydelsfakta.oslo.kommune.no/bydel/sthanshaugen.

Riksantikvaren. "Landsverneplaner." Riksantikvaren. Riksantikvaren. Accessed May 14, 2020. https://www.riksantikvaren.no/prosjekter/landsverneplaner/.

Riksantikvaren. "Innføring i Vernet Av Statens Kulturhistoriske Eiendommer." Riksantikvaren. Riksantikvaren, April 29, 2020. https://www.riksantikvaren.no/ veileder/bakgrunn-for-ske/#section3.

Riksantikvaren. "Fredet - Vernet - Verneverdig." Riksantikvaren. Riksantikvaren, April 29, 2020. https://www.riksantikvaren.no/prosjekter/fredet-vernet-verneverdig/.

Statsbygg. Invitasjon Til Parallelloppdrag: Adamstuen, Etterbruk Av Statens Eiendommer - Program for Mulighetsstudier. Statsbygg, 2017.

Statsbygg. "Landsverneplanar." Statsbygg. Statsbygg. Accessed May 14, 2020. https://www.statsbygg.no/samfunnsansvar/kulturminnevern/landsverneplaner/.

Statsbygg, and Link Arkitektur. *Statens Eiendommer På Adamstuen - Stedsanalyse*. Statsbygg, 2017.

Statsbygg. Resultat Av Paralleloppdrag: Adamstuen, Etterbruk Av Statens Eiendommer - Evaluering Mulighetsstudier. Statsbygg, 2018.

Thiis-Evensen, Thomas. *Byens Uttrykksformer: En Metode for Estetisk Byforming*. Oslo: Universitetsforlaget, 1992.