

### **DIPLOMA PROGRAM FALL 2017**

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Title of project: Atelier housing in Akersveien

# ATELIER HOUSING IN AKERSVEIEN Josefine Hauknes

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The diploma examines the potential for densification of a historical environment, by utilizing in-between, leftover or low density sites as a mean to add more dwellings with high living qualities to the center of Oslo. And how a new intervention can contribute to increased activity and quality of shared spaces in the immediate area. The ambition is to study architecture as an integrated part of a larger context, rather than an independent structure detached from history, to ensure a more coherent and sustainable development of the historical area.

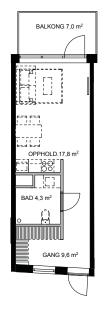
The background for the thesis is a reaction to the tendency in contemporary urban housing, where many of the projects are driven by maximising the developers profit, compromising living quality for inhabitants. Oslo is a growing city and it is necessary to continue densifying the city, but densification has to be carried out in a sensitive way to conserves the quality and character of, while adding new layers to the urban fabric to ensure sustainable development of the city.

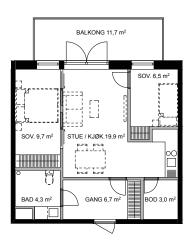
The hypothesis is working with small scale development rooted in place can result in a more coherent and sustainable densification of the city and to create dwellings with better living qualities than the average apartment buildings built today.

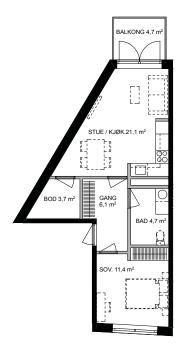
The aim of the project is to challenge the contemporary urban dwelling typologies by working with dwellings with a richer spacial experience. And to create architecture which adds new layers to the urban fabric, while conserving the heritage values and spacial character of the historical environment.

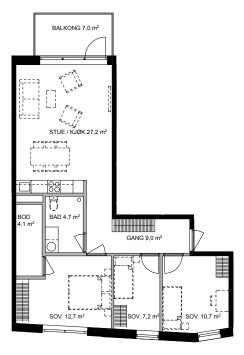
### 02 TENDENCIES IN CONTEMPORARY URBAN HOUSING

Oslo is a growing city with a need of 4600 new dwellings each year towards 2031. In average 2800 dwellings are built each year, which is only 60% of the need. Today's politics has made dwellings into an object for investment and speculation, resulting in dwellings made for the profit of the developers, instead of the inhabitants needs and benefits. The tendency in many contemporary housing developments in Oslo is for the projects to be driven by the main goal of maximizing the number of apartments built, resulting in low living qualities, inflexible use of spaces and few sources of natural light. This inflexibility and scarcity of space contributes to a high turnover of residents. one in five of Oslo residents moves each year, mainly within the city.









#### 03 ARCHITECTURE IN A HISTORIC ENVIRONMENT

Historic areas typically exhibit a range of heritage values, identified by past and present generations to guarantee protection of the environmetn. Urban areas with their buildings and streets change according to the needs of their inhabitants, in a growing city this means a need for more built space. How can this change and addition of new architecture be designed in a way that recognize and conserve heritage values, spacial character and quality of a historical environment?

The method of infill has historically been the prevailing method for urban development. The method allows building and their residents to integrate into the existing social and urban structure and can be a careful and sustainable way to increase the density by reusing unused or obsolete buildings and sites. This slower way of increasing density gives opportunity to design with more presence and to give the building a sense of belonging to the situation. It offers the opportunity to build more dwellings in the most attractive areas for living and start densifying the city from the center outwards.

The centre of Oslo mainly consists of a continuous city structure made up by the traditional perimeter block. In some places there is a fragment in the system, these fragments can be an empty lot between buildings, lots with low quality buildings or temporary structures. I want to study the potential of one of these in-between sites as a mean to achieve more high quality dwellings in central Oslo.



## 04 SITE AND HISTORY BERGFJERDINGEN

The site is located in a area called Bergfjerdingen, in the St. Hanshaugen district of central Oslo. The area has a character of great diversity in colors, materiality, geometry and organization of buildings. The steep terrain and old roads has determined the organization and offers more light and view to the dense settlement.

There are two main building types, small wooden or brick houses and masonry apartment buildings. The wooden buildings are close together, characterized by organic development with many expansions. There are very few gardens or outdoor space left and the public streets and paths passes right next to the houses. The apartment buildings follows a more organized system of the "bygård", but shows a large variety of geometry.







#### THE ORIGINS OF BERGFJERDINGEN

The settlement of Bergfjerdingen dates back to the late 1700s, when it was illegally established as a suburb to Christiania. Workers moved to the city to find work and put up simple wooden cabins. Shortage of building lots and enforcement to build in brick made housing in the city too expencive for workers. The area was, with a few exceptions, inhabited by the poorest groups in the society.

During the industrialisation Christiania had an enormous growth of inhabitants from 9000 inhabitants in 1801 to 230.000 in 1900. This resulted in a very high density of inhabitants in the area. In the 1865 census Damstredet 22 had fourteen inhabitants in a 35 square meter cabin. The area was allowed to grow unregulated, with a few attempts to regulate the growing density. In 1815 the area was regulated to building sites for the poorest, which offered little effect on the increasing density.

A large fire in 1858 ruined the settlement from Akersveien to Damstredet 8 and Dops gate 7. Regulations enforced brick as building materials for the new buildings and changes the characteristics of the buildings in the area.



#### THE ARTISTS

During the 1930s the social structure of Bergfjerdingen changed, when artists gained interest in the qualities of the area. Many artists and creative professionals started to move in.

The settlement was in decay and the city's authorities for heritage wanted strategies for conservation and needed to regulate the area to a public purpose, to be able to conserve it. Similar poor areas were demoished and redeveloped as a solution for slum areas and poor living- and light conditions for large parts of the citys inhabitants.

To avoid demolishion - the first plans for conservation was determined in 1946 and regulated the area to a public park where the settlement should be conserved.



#### **RENOVATION & CONSERVATION**

From 1960 large renovations were done by the new inhabitants in the area. These renovations was not regulated by law and a lot of improvement and changes were made to the original buildings.

Regulations made in 1958 once again threatned with demolishing to expand infrastructure of roads through the area. Luckily Bergfjerdingen did not end up beeing redeveloped as most suburban settlements, much because of the improvement made by the new inhabitants.

In 1994 a plan for conservation was accepted to avoid future destruction of the area and its unique character.





Top: Hans Holmboe Vogt, 1908

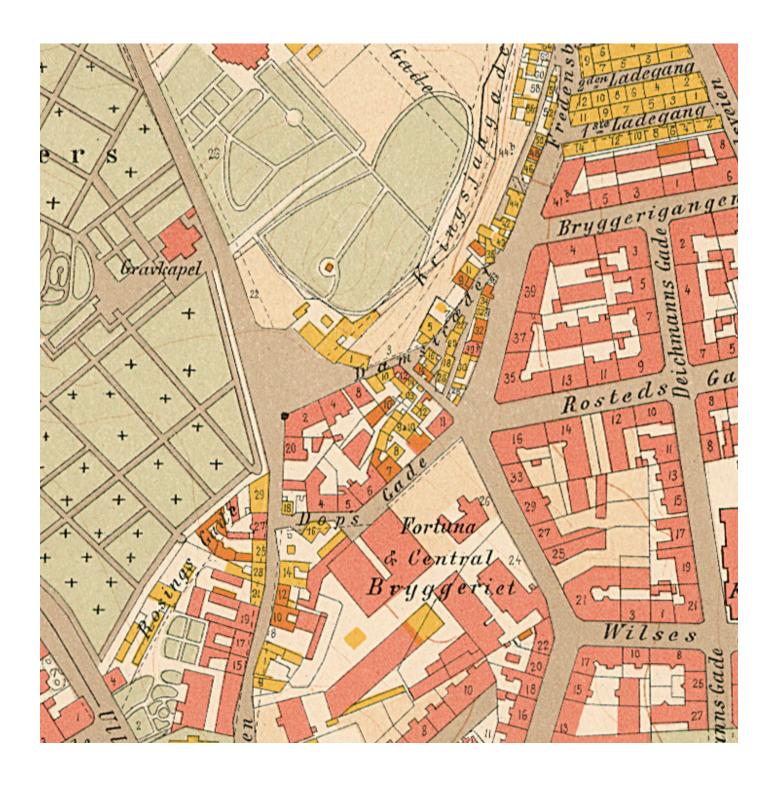
Bottom : Foto Film AS, ca 1960-70



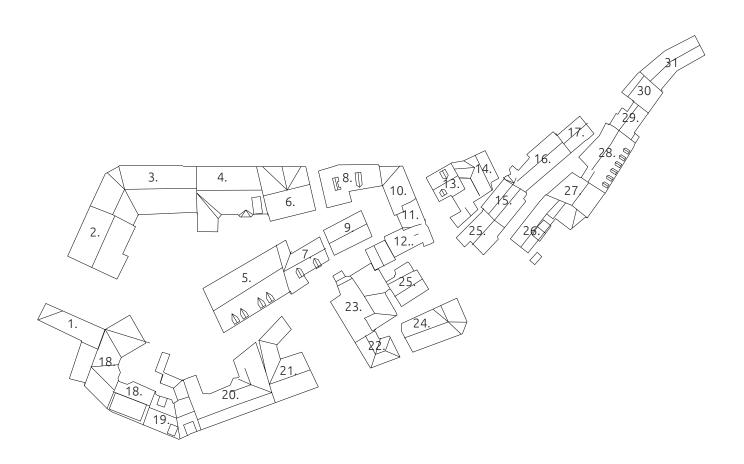








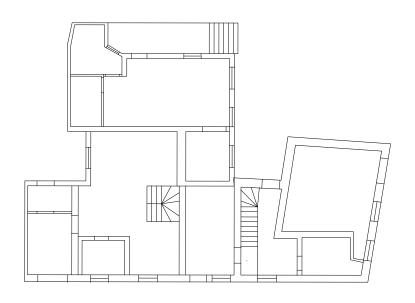




1. Akersveien 18 Bygård 1883 Dwelling Stonemason	9. Damstredet 8 Bygård Mid 1800 Dwelling	17. Damstredet 22 Wooden house 1850 Dwelling	24. Dops gate 12 Wooden house Early 1800 Dwelling
2. Akersveien 20 Brick house 1859 Architecture office 3. Damstredet 2 Bygård 1859 Dwelling Grocery shop	10. Damstredet 12 Bygård 1859 Dwelling 11. Damstredet 12B Wooden house Late 1800 Dwelling	18. Dops gate 4 Bygård 1860-1894 Dwelling 19. Dops gate 5 Bygård 1859 Dwelling Boutique	25. Fredensborgveien 28b Wooden house 1800s Dwelling 26. Fredensborgveien 30 Wooden house 1875 Dwelling
4. Damstredet 4 Bygård 1866 Dwelling	12. Damstredet 12C Wooden house Early 1800 Dwelling	20. Dops gate 6 Bygård 1861 Dwelling	27. Fredensborgv. 30b Bygård late 1800 Dwelling
5. Damstredet 4 Bygård 1887? Dwelling 6.	13. Damstredet 14 Brick house late 1800 Dwelling	21. Dops gate 7 Bygård 1859 Dwelling Dentist	28. Fredensborgv. 32 Bygård Early 1827 Dwelling
Damstredet 8 Brick house Mid 1800 Shared office	14. Damstredet 16 Brick house 1815 Dwelling	22. Dops gate 9 Bygård 1863 Dwelling	29. Fredensborgv. 32b House Early 1800 Dwelling
7. Damstredet 8 Bygård 1859 Dwelling	15. Damstredet 18 Wooden house 1820 Dwelling	23. Dops gate 10 House Early 1800 Dwelling	30. Fredensborgv. 34 Bygård Mid 1800 Dwelling
8. Damstredet 8 Wood house Early 1800 Dwelling	16. Damstredet 20 Wooden house 1801 Dwelling	23. Dops gate 11 Bygård 1880 Dwelling Hairdresser	31. Fredensborgv. 36 Bygård Mid 1800 Dwelling

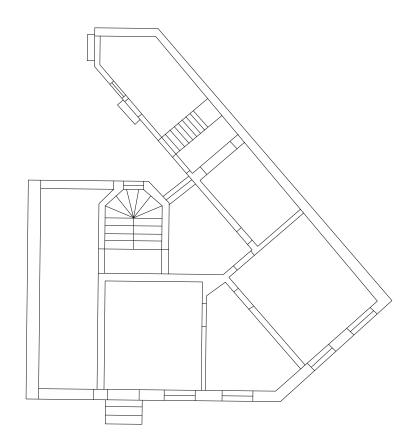












## PLAN FOR REGULATION OF BERGFJERDINGEN 1994.

#### Intention

The main intention for the regulation is to conserve Bergfjerdingen as a representative and virtually intact example of the early suburb settlement around Christiania. The regulation should secure a mixture of dwellings and business as it has always been, but adapted todays needs as long as it does not affect living qualities and conservation interests.

Description of area (By planning authority, Byantikvaren)

Bergfjerdingen are, together with Telthusbakken and Sagene the only remaining earlier suburbs of Christiania. The rest are entirely or partly demolished. The oldest settlement dates from late 1700s, while most buildings dates from early and mid 1800s.

The topography and roads has been structuring elements for the settlement. The steep terrain, the variation in buildings and the curved roads contributes to a unique city- and street environment in Oslo.

The settlement is varied in configuration, scale and style, but still appear harmonic because of the limited use of materials and architectonical means of the 1800s.

Bergfjerdingen has change little since the mid 1800s. Some of the houses has had its authenticity weakened by changed windows or panel. The renovations done after the area was inhabited by the artists in 1960s, is still an interesting part of the history which should be coserved.

The area has a large identity value with its characteristic, old settlement and painterly characteristic. It can tell a story about architectural style and social conditions of the 1700-1800s.

#### OUTLINE OF PLAN FOR REGUALTION

The area is regulated to special area for conservation.

Existing buildings, stairs, fences and similar elements in the settlement is not allowed to be removed, unless the absence of values for conservation can be documented by Byantikvaren.

Buildings and environment shall be keept in a good condition and not danger the values for conservation or appear unattractive in it self or compared to the rest of the conserved environment.

New buildings can be built on the sites Akersveien 20 and Dops gate 8, and has to be compatible with the values the regulations want to secure.

New buildings has to be placed and designed with consideration to sizes, volume distribution, articulation, materials, colours and others to harmonise with existing built environment.

Existing streets and places must be preserved with its existing value.

Existing gardens, alleys, single trees and other vegetation inside the area for preservation should be preserved.

#### **RELATION TO REGULATIONS**

While working with the project I will allow a looser interpretations of the regulations and property boundaries to have more freedom to explore different strategies for densification of the area.

I agree with the intention of conserving the character and history of the environment and conservation through use, rather than turning the area into a museum.

It is debatable whether the settlement is a «virtually intact example of the early settlement around Christiania» as the cultural heritage management office (Byantikvaren) states. The suburb was a poor area with decayed housing, it was valued as slum area waiting to be demolished. The shift made by the artists saved the settlement. They saw potential in the houses and secured conservation through maintenance, upgrades and use. The changes transformed it into the characteristic and picturesque area it is today, with some of the highest prices per square meter in Oslo.

The regulations appreciate the changes and upgrades made in the area during the 60s, even though the original buildings had its authenticity weakened.

I want to continue with this strategy and

facilitate a new shift in the area, by redeveloping a part of the block.

The proposed site is in Akersveien 18-20. The regulations allows a new building on the firelot in akersveien 20, but there is a potential to redevelop a larger part of the site to create more dwellings, an improvement of shared spaces and a better public situation to invite to more activity in the area.

There are four buildings on site; two sheds, a one story brick building housing a small architecture office, and a narrow three story "bygård" with six 25 sqm dwellings. The "bygård" has a large firewall towards Akersveien 20. The buildings deviate from the overall system by having a low density and a orientation that do not utilitize the site in an efficient way. Most of the buildings and their outdoor areas are not well maintained.

The site has views towards Vår Frelsers graveyard, towards the divided backyard and towards the street.

The lower parts of Akersveien has several small businesses and shops and is a popular pedestrian route, there is a potential to bring more public program into the site to create more activity in the otherwise quiet area.





Vår frelsers gravlund



Bygård and corner,<sup>^</sup> Akersveien 18





Architecture office Akersveien 20



Brick shed in backyard Akersveien 20





### 05 PROGRAM

The program consists of dwellings and a small art gallery with atelier spaces; Facilitating spaces to retain Bergfjerdingen as an attractive environment for creative professionals and invite to more activity in the area.

The project strives to compliment the existing typologies, by working with more generous sized dwellings to facilitate more families and long term residents. And to make a new interpretation of the existing typologies by working with a different spacial experience, inspired by the history of the neighborhood.

Through new interventions a upgrade of the outdoor spaces can be done by removing the division of the backyard and create one shared garden space.

### 06 APPROACH

The approach of the project centres around reseach through design.

The main theme for investigation is the realtionship between the historical environment and the internal logic of the dwellings, and how they intersect.

Historical context - Themes for research

- Scale
- Typologies
- Materiality
- Facades
- Program
- Private, shared and public spaces.

Internal logic - Themes for research

- Dwelling
- Spacial experience
- Materiality
- Construction
- Private, shared and public space.

### 07 DELIVERED MATERIAL

Project description
Area analysis
Program/pre-diploma
Censors booklet

Model 1:100 Site model 1:250 SIte model 1:500

Site plan Plans 1:100 Sections 1:100 Facades 1:100 Necessary details 1:20/1:50

Interior renders Exterior renders Model photos



Architecture with a connection to the layers of history present in the area. Study relation between dwelling and existing structure.



A sequense of spaces or zones to create a variety of experiences.
Working with dimentions, openings, views, color and atmosphere.



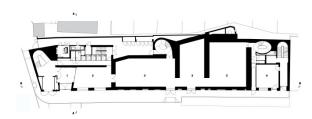
Transforming the divided outdoor spaces into larger shared spaces. Study relation between dwellings and outdoor space.



Introduce a new type of facade to the context. A structure which has an inherent ability to be open, closed or in between. Offering a greater variety of means in dealing with views and transparency.

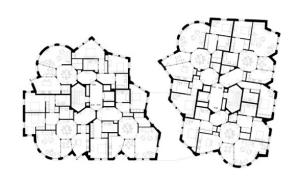
- 1. Museum für Naturkunde, Berlin (2010) Diener & Diener
- 2. Museo Bailo, Treviso (refurbishment) ( 2010) Studio Mas
- 3.Jessenløkka, Oslo (1922) Harald Hals
- 4. NDC house, Ho Chi Mihn (2016) Tropical space CO





Newport Street gallery, London, UK. 2004-2015. Caruso St. John





Housing for older residents, Hampstead, UK, 2017 Sergison Bates



Joachimstrasse Office, Berlin, 2013 David Chipperfield



Osaka Atelier, Tokyo (1973-91) Tadao Ando



Nerima Apartments, Tokyo (2013)- Go Hasegawa



Zen house, Bình Thanh, Vietnam (2016) - H.A.



Museo Bailo, Treviso (refurbishment) ( 2010) - Studio Mas



South london gallery (expansion) (2010) - 6a architects

# 09 REFERENCES Reading/research

### Books:

Conversations with european architects. Go Hasegawa, 2015.

Lost and found: architectural transformation. Christoffer Harlang, 2013

Knitting weaving wrapping pressing. Caruso St. John architects. 2002

Brick-work: thinking and making. Sergison Bates architects, 2005

Floor plan manual housing
Oliver Heckmann & Friederike Schneider.

Norsk arkitekturhistorie, Fra steinalder og bronsealder til det 21. hundreåret. Nils Georg Brekke, Per Jonas Nordhagen, Siri Skjold Lexau.

Byhuset - Histore, bevaring, istandsettelse. Søren Vadstrup

#### Articles:

Svensen, Mette, 100 års kamp for boligkvalitet i fare, Arkitektnytt Nr.1/2017 Bertram D, Brochmann, Nye forskrifter og bokvalitet, Arkitektnytt Nr.3/2017 MacDonald, Susan. Contemporary architecture in historic urban enviroments. Fall 2011.

http://www.getty.edu/conservation/publications\_resources/newsletters/26\_2/contemporary.html

## Changes in program from pre-diploma

From	То
Strategy for densification. Investigating several sites.	Study one site and the potential for densification. Larger emphasis on historical context.
New typology based on perimeter block and qualities in single family houses.	Typologies based on existing typologies on site.
Site: 10 possible sites	One site selected. Additional research of site.
	Changes in references based on changes in program and selection of site.

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