



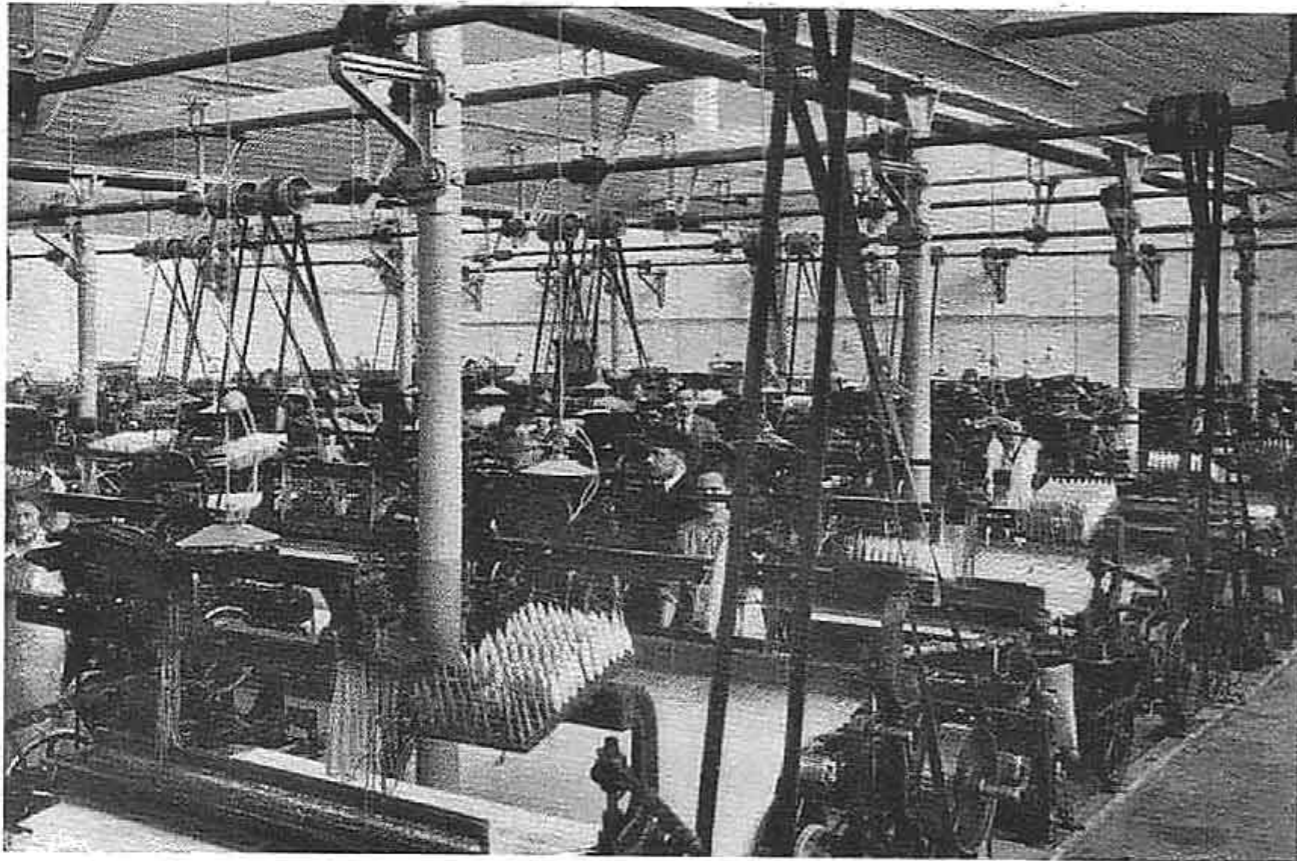
**A STUDENTS LIFE:**  
seclusion and social interacting in the scenery  
of Seiersborg Tekstilfabrikk

A diploma project by Anne Ringstad

SUBJECT



A/S SEIERSBORG TEKSTILFABRIK — FREDRIKSSTAD



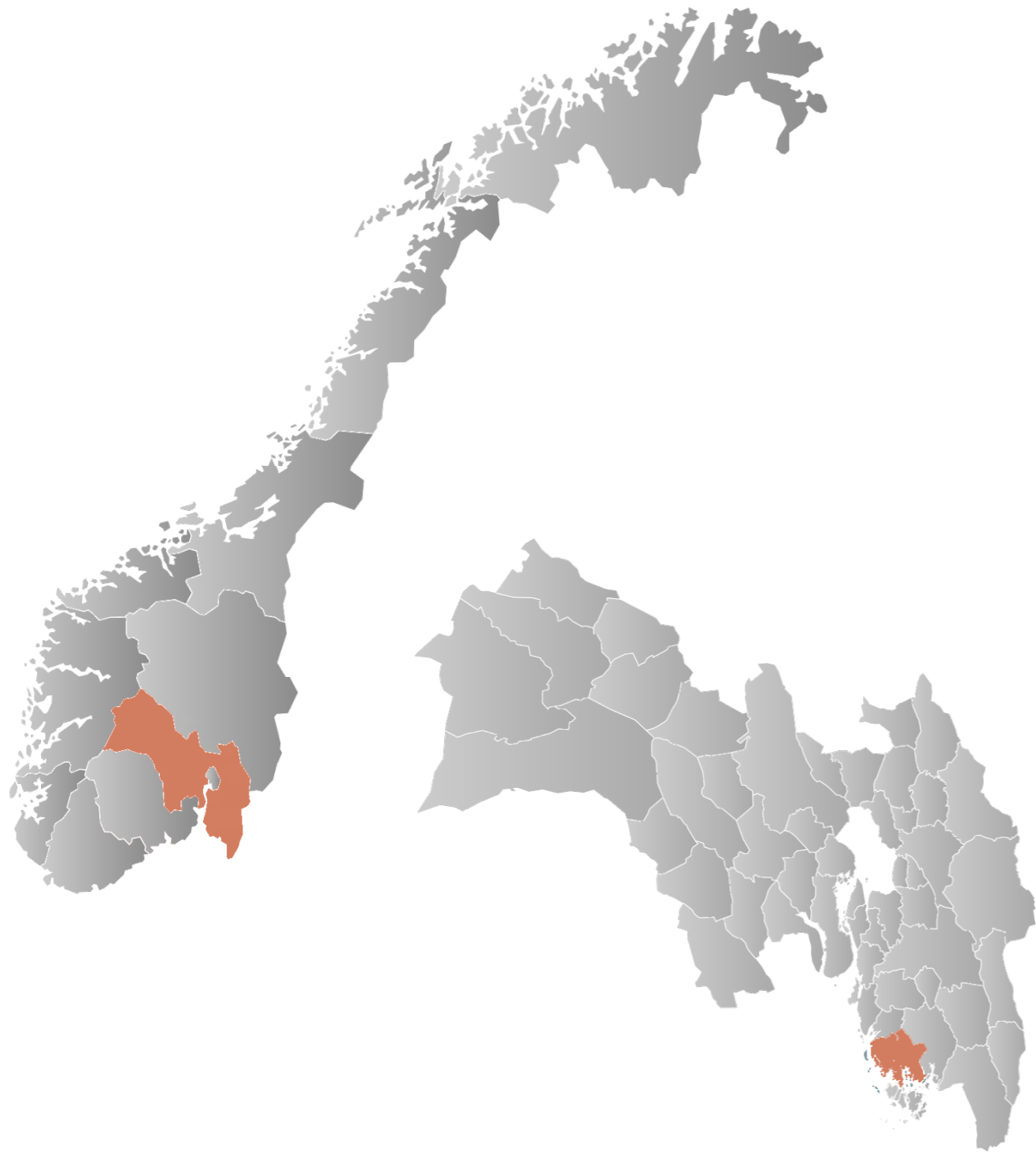
INTERIØR AV VÆVERIET



Stoppsalen.  
Richard Brtde t.v. i bakgrunnen.  
Ved siden stopperimester Harald Bergersen.



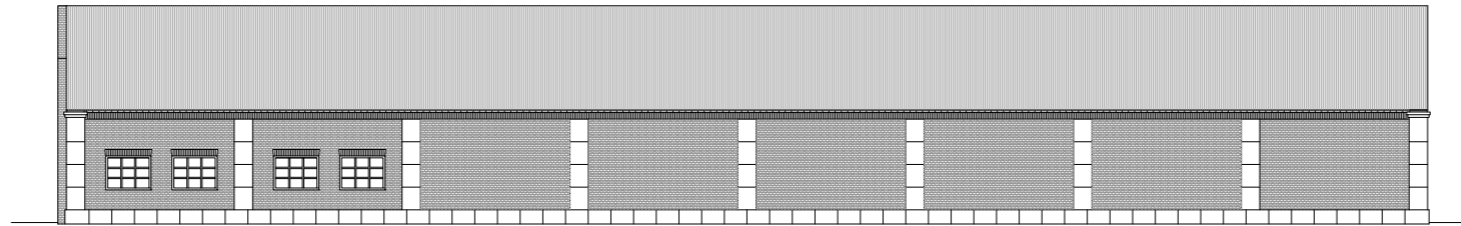
SUBJECT / GEOGRAPHY AND SITE



Teglverksveien 3 - Fredrikstad

0 10 30 50 100

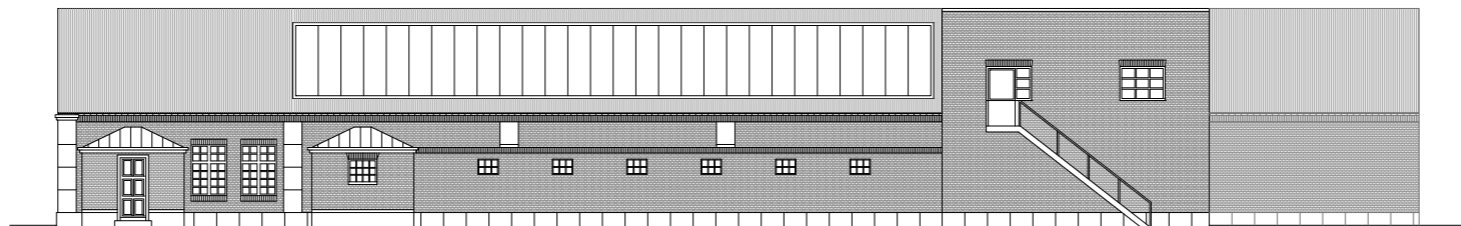
SUBJECT / ELEVATION



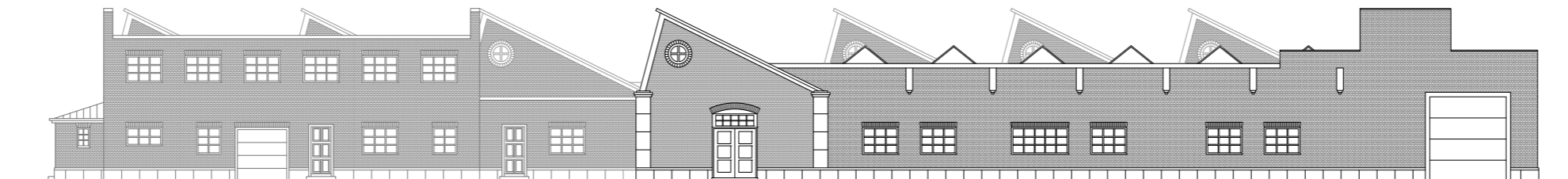
South



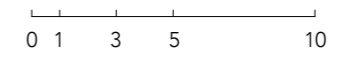
East



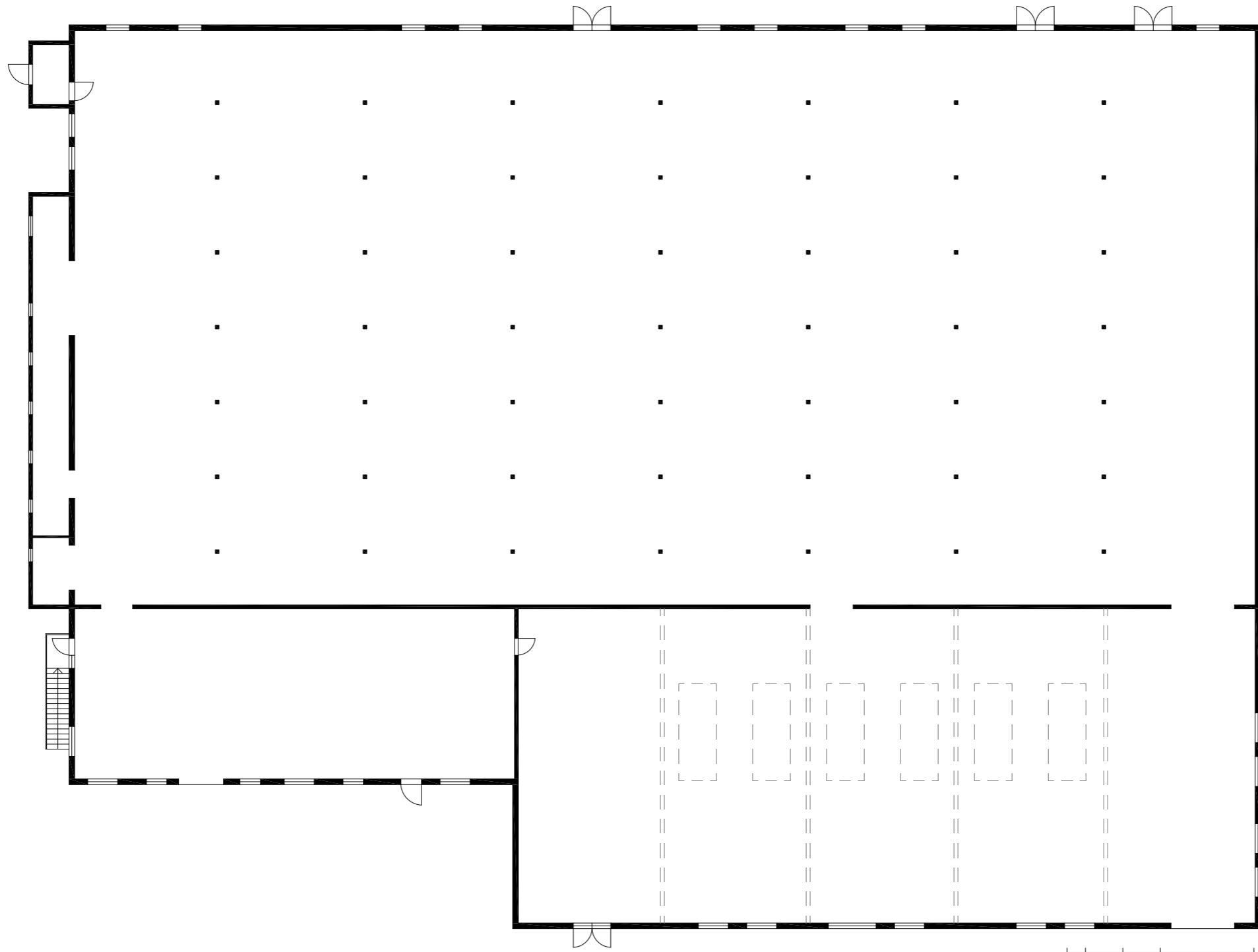
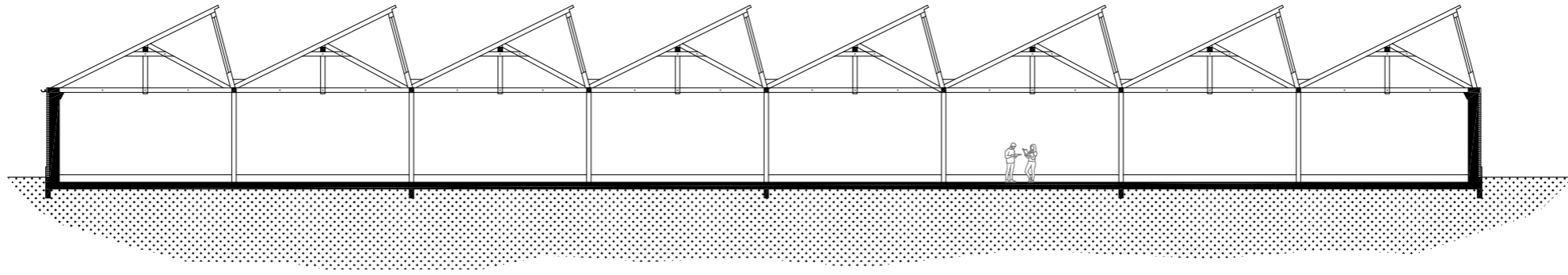
North



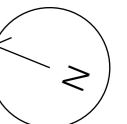
West



SUBJECT / SECTION A-A



0 1 3 5 10





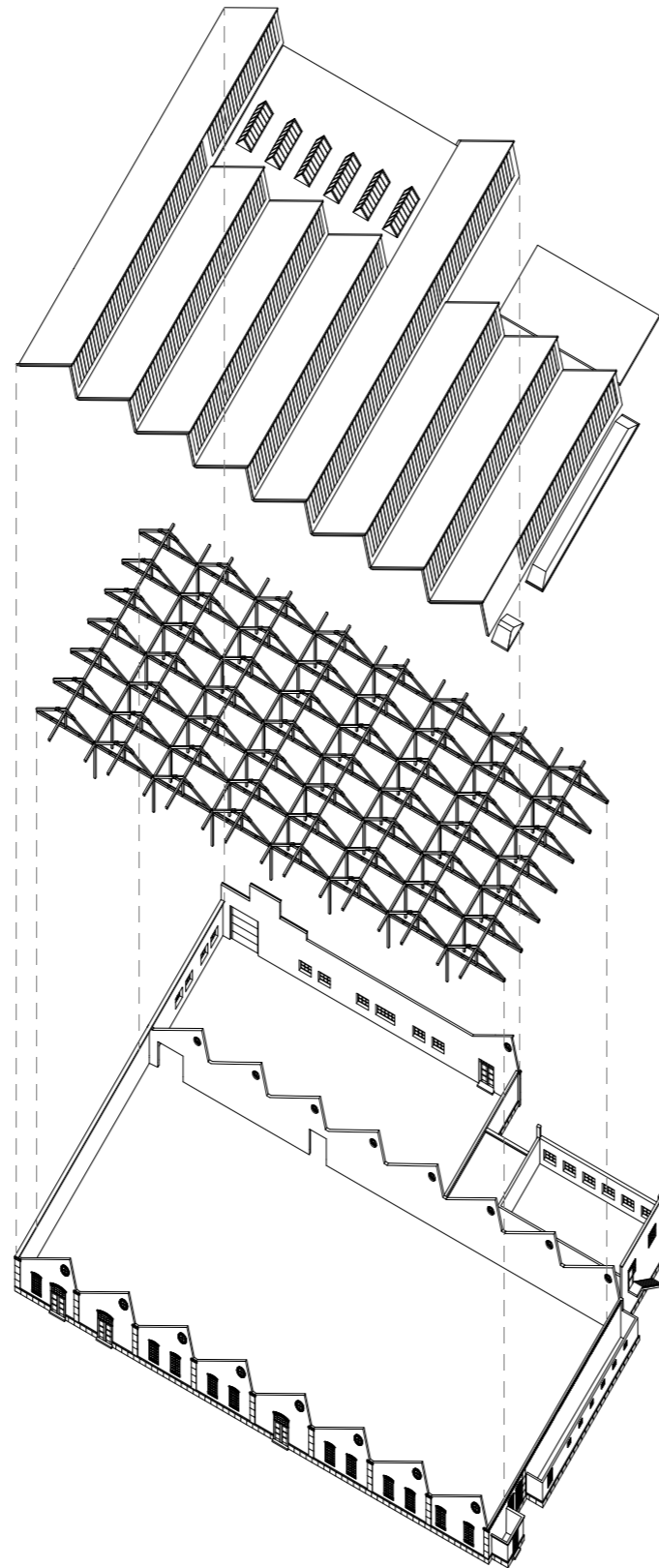
SUBJECT / INTERIOR PHOTOS





SUBJECT / INTERIOR PHOTOS





**BUILDING STRUCTURE**

1. Sawtooth roof with north-facing windows
2. Columns and trusses
3. Beraing fasade

PROGRAM



## Studenter foretrekker å leie privat: – Ikke godt nok tilbud på studentboliger

### Over 10.000 studenter venter fortsatt på studentbolig

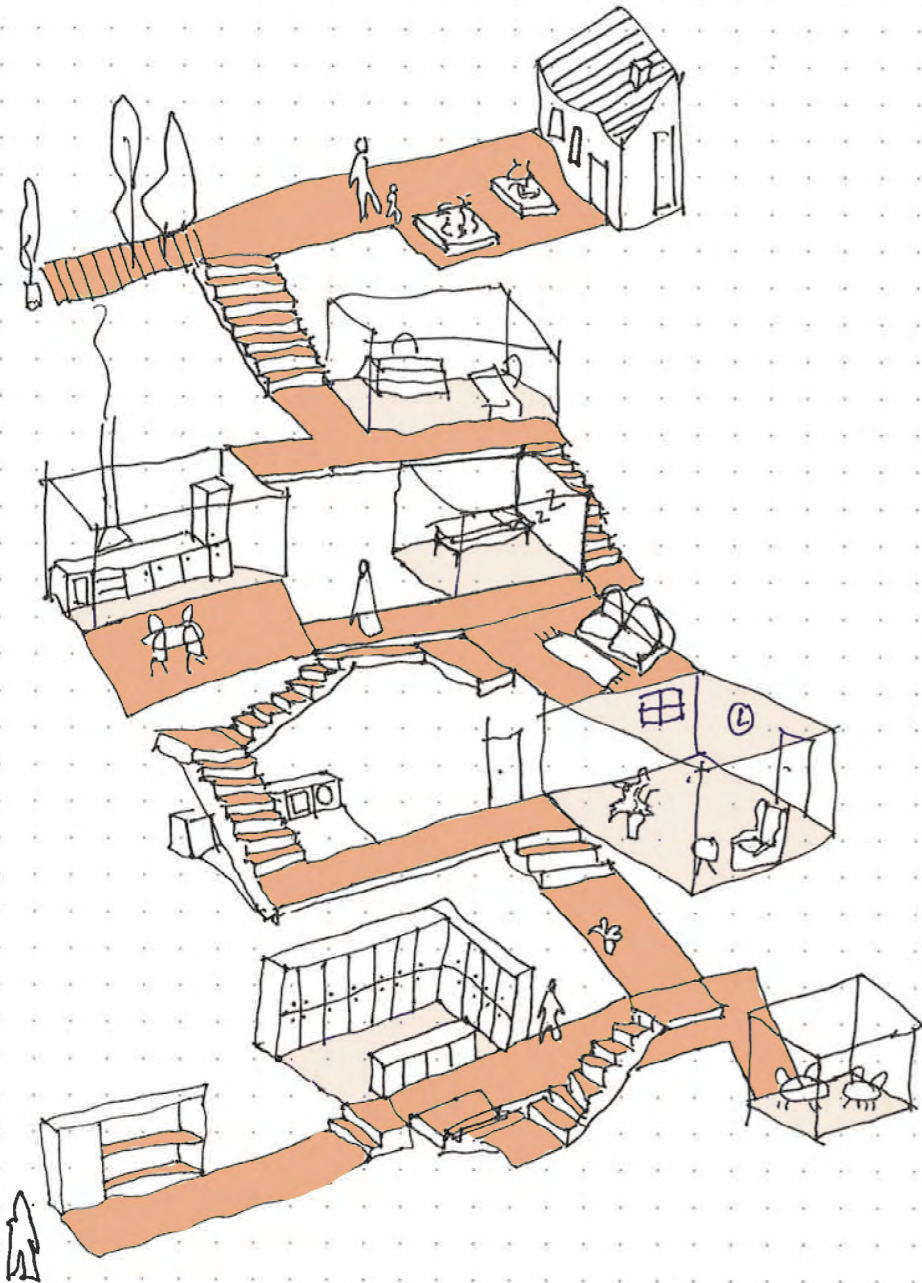
10.352 studenter står nå i kø for å få studentbolig. Det er 7.139 færre enn i begynnelsen av måneden, viser tall fra Studentsamskipnadsrådet.

#### WHY STUDENT HOUSING?

1. To ensure equal access to higher education.
2. Reach the national target of 20% student housing coverage. (Currently 14,5%. We need aprox. 14.000 more apartments)
3. Move students away from the private rental market. (51% of the students rents through the private market)
4. Facilitate an arena with focus on physical and mental health, quality of life and study achievements.

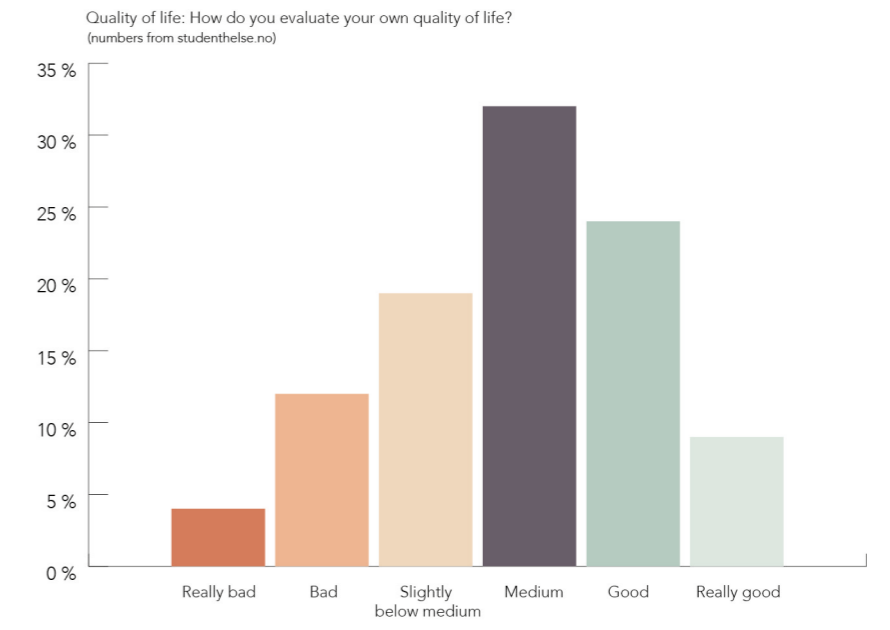
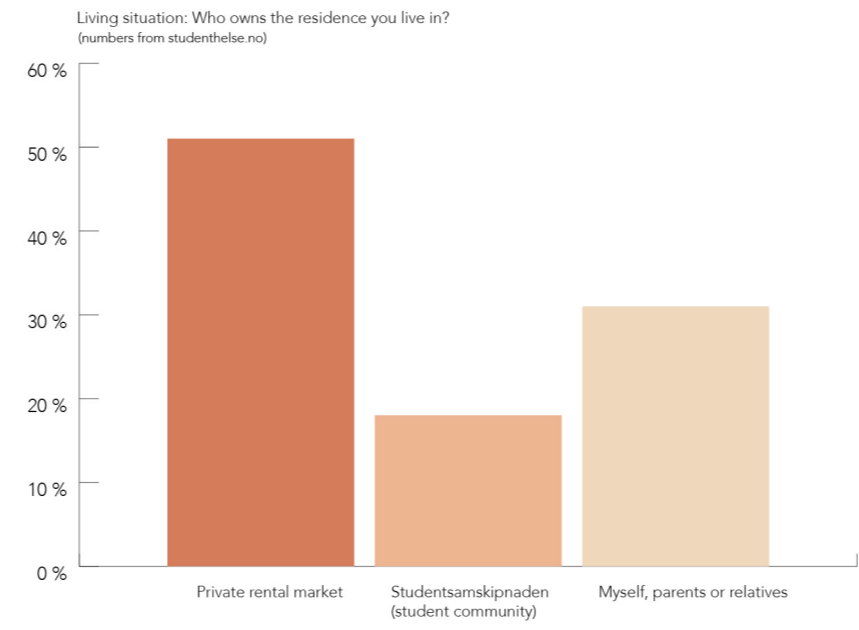
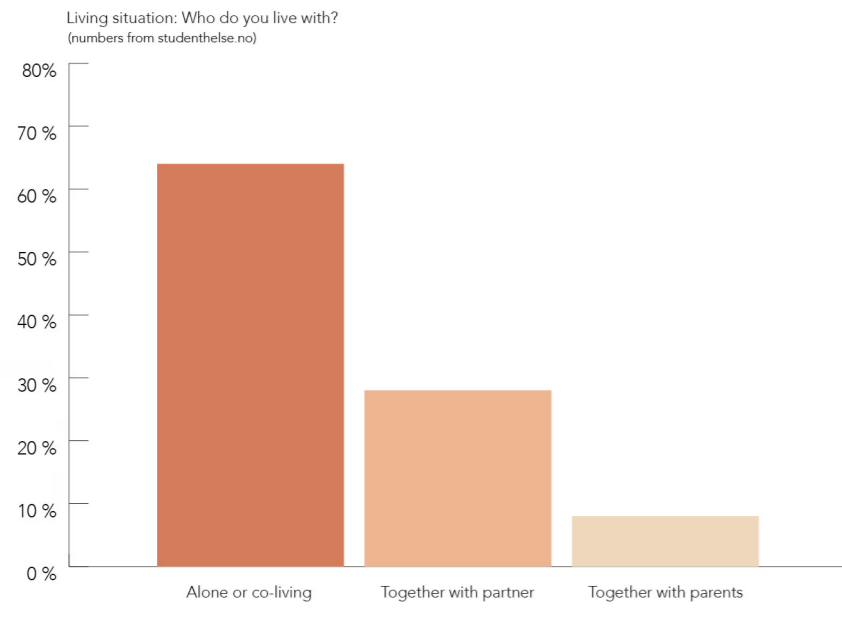
### Kommunelegen om studentbolig full av maur, fukt og skitt: Ubeboelig

Da Gabriel Berg (21) skulle flytte inn i studentboligen i Bø, ble han møtt av maur og fuktskader.

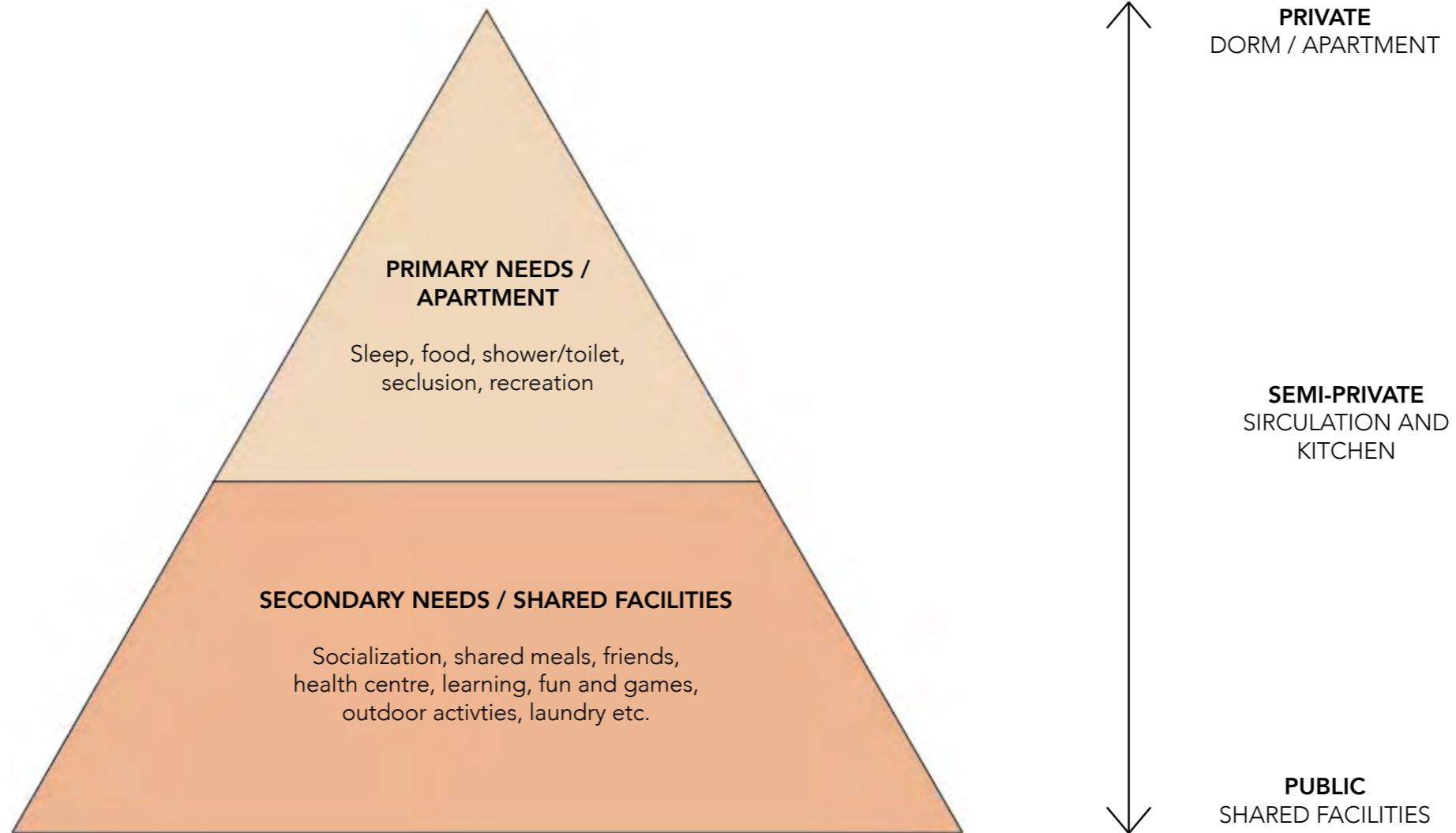




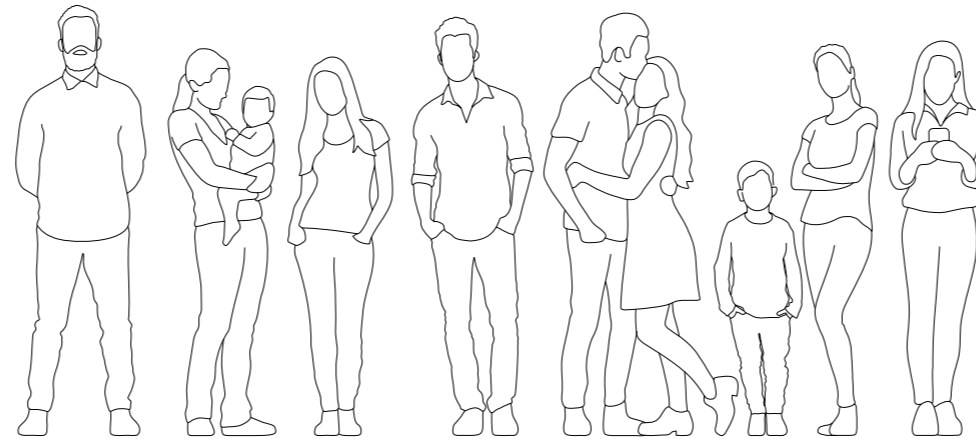
# PROGRAM / STUDENT HOUSING



**PROGRAM / STUDENT HOUSING**



## PROGRAM / STUDENT HOUSING



### PROGRAM

<b>PRIVATE</b>	<b>Apartments/dorms:</b>	Single, couples and families or groups. 15m2 to 45m2. All apartments will include bed, work space and bathroom.
<b>SEMI PRIVATE</b>	<b>Kitchen:</b>	Shared between 4-7 apartments.
	<b>Living room:</b>	Socializing, studying, playing games, watching TV, get to know others.
	<b>Auditorium:</b>	For lectures, presentations, shows or cinema.
	<b>Laundry:</b>	For cleaning and drying clothes.
	<b>Technical + entrance:</b>	Technical room, garbage disposal, mail-box, bicycle parking etc.
<b>PUBLIC</b>	<b>Café/bar:</b>	For grabbing coffee or food with family and friends.
	<b>Health centre:</b>	Physical activities, sports and health.
	<b>Outdoor area:</b>	Outdoor activities, roof terrace, sports, gardening etc.

## REFERENCE STUDIES



REFERENCE STUDY / 1

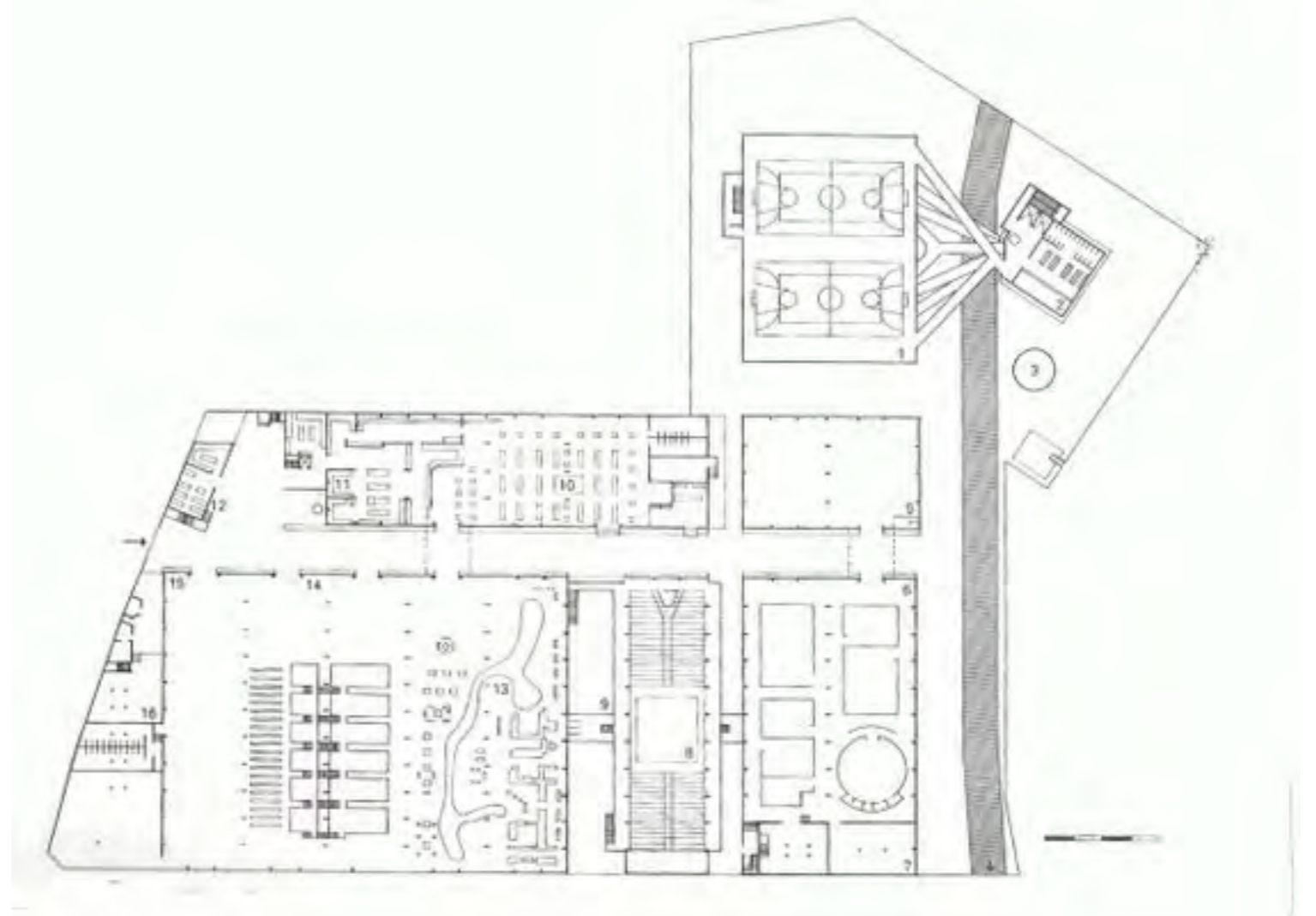
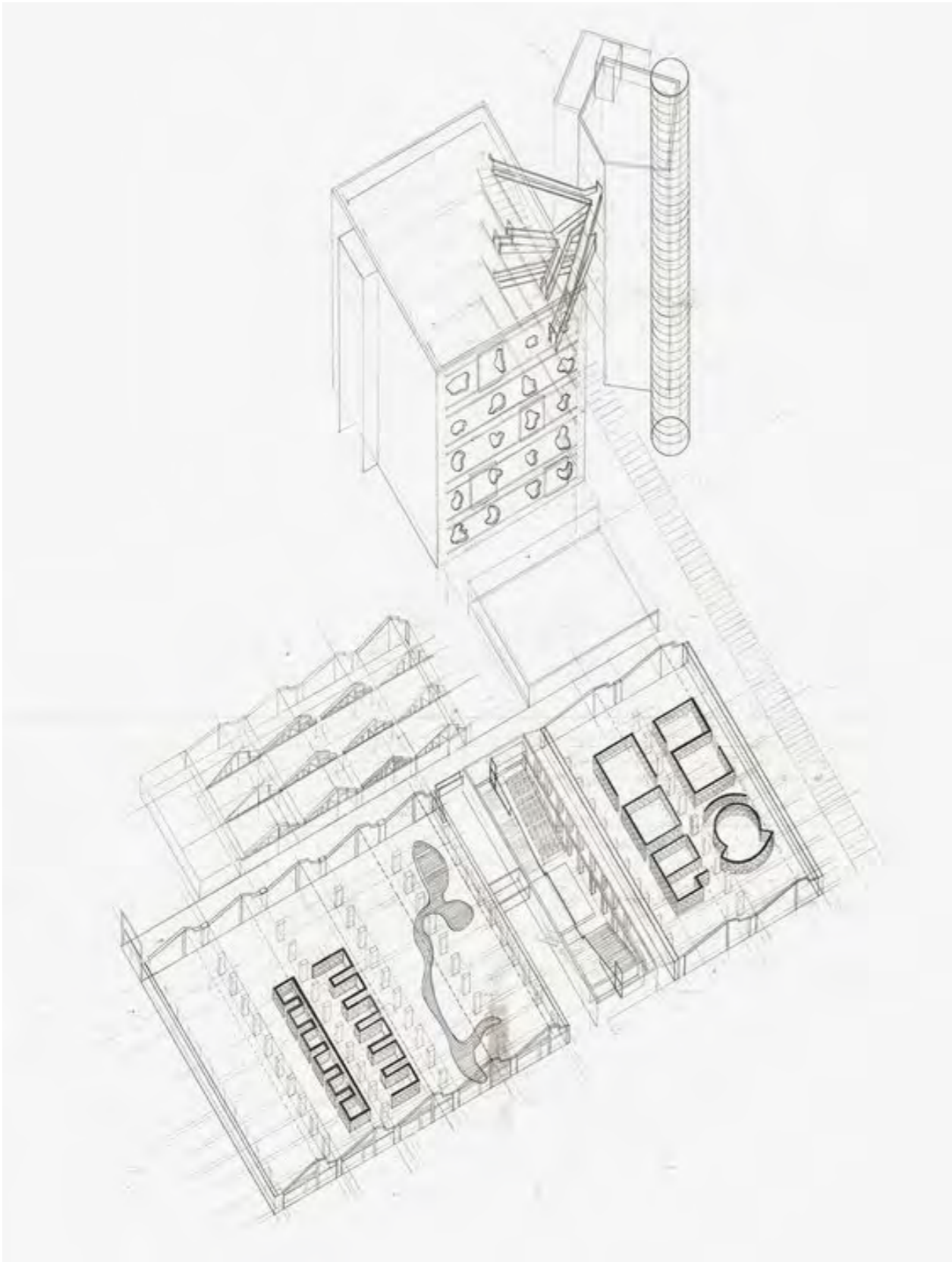
Lina Bo Bardi - SESC Pompeia (Brazil)





REFERENCE STUDY / 1

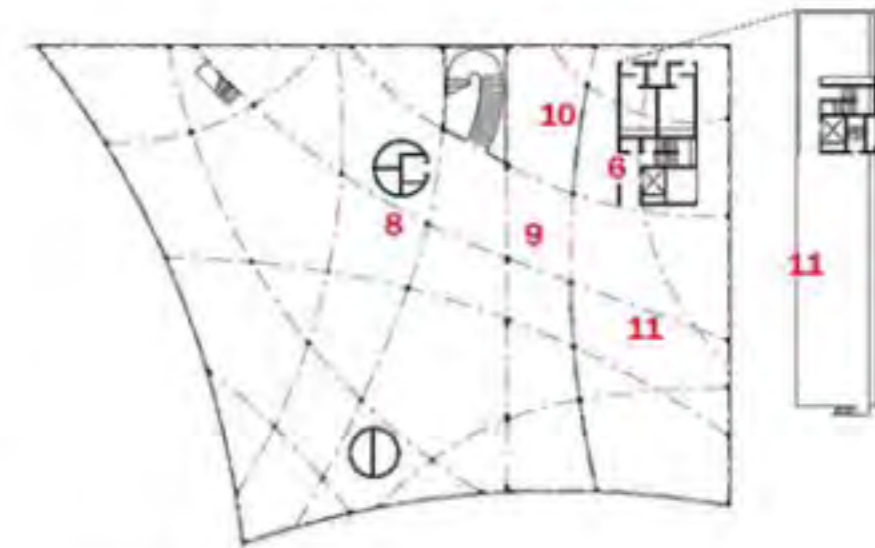
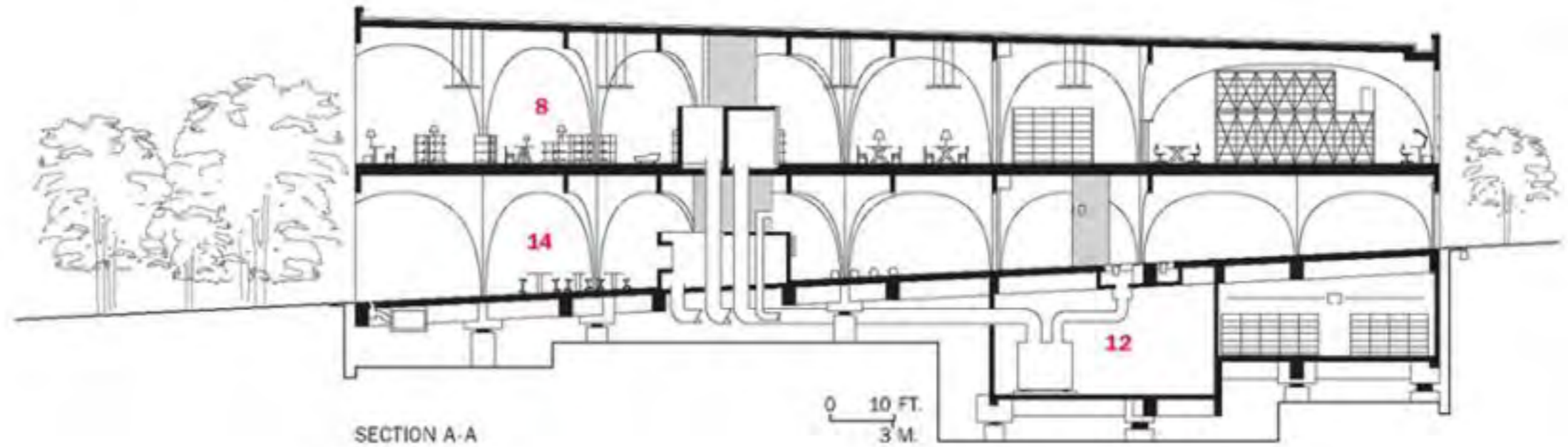
Lina Bo Bardi - SESC Pompeia (Brazil, Sao Paulo)



## REFERENCE STUDY / 2

Toyo Ito - Tama Art University Library (Japan, Tokyo)

1. Café
2. Café kitchen
3. Arcade gallery
4. Laboratory
5. Checkout desk
6. Office
7. Temporary theater
8. Open stacks/reading
9. Reference desk
10. Copying
11. Closed stacks
12. Machine
13. Compact storage
14. New books/magazines/multimedia





REFERENCE STUDY / 2

Toyo Ito - Tama Art University Library (Japan, Tokyo)





VALUES AND APPROACH

# VALUES

Historical and symbolical values

Architectonic/spatial values

Esthetical values

Social values

## VALUES / EXISTING STRUCTURE

### ARCHITECTURAL CHARACTER

So what are the values worthy of preserving in this building?

I aim to work with the buildings original shape, structure and appearance in the face of a new program, without too much intervention, due to my research question that addresses the meeting between an existing structure and a possible new program. Can the existing structure withstand the pressure of a given, new program and will the new program benefit from the flexibility that is provided by the existing structure?



### ROOF CONSTRUCTION AND ROOF WINDOWS

The roof is protecting the machinery and the workers from direct sunlight. The north-facing windows still admit natural light, which is a big benefit in this deep structure. (approx. 40-60 meters).

The roof's original shape is called a sawtooth roof. Before electric light was substituted for daylight in the late 19th century, consideration of good daylight strategies was essential. It was particularly useful in design factories and manufacturing buildings like this. Natural daylight will still be essential when building student housing, and this allows me to have dorms also in the middle of the structure.

### CONSTRUCTION

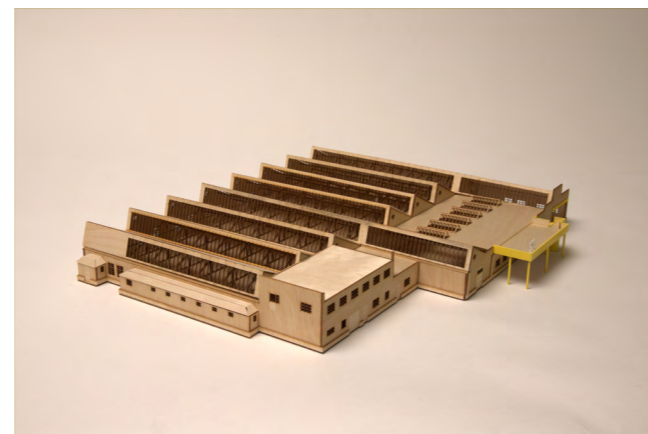
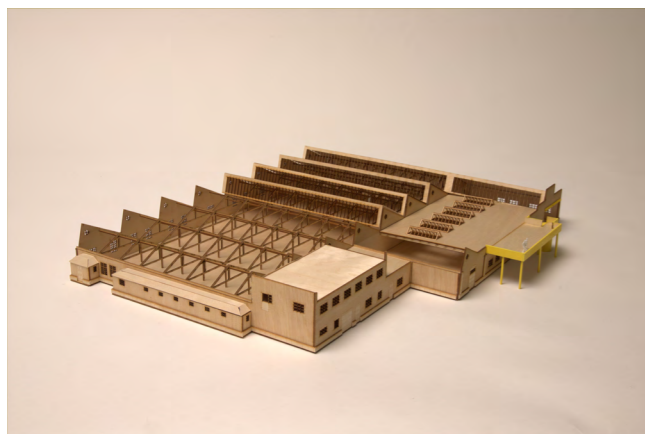
One of the biggest benefits of this building is its open and flexible space due to the existing construction. It consists of basic, exposed columns, beams, and trusses, which also give us a generous ceiling height (8 meters from floor to roof). This construction method was important to fit all the heavy machinery, and will also benefit my project in several ways.

### PRODUCTION FLOOR

The concrete floor is a big value in this building. You can see traces of over 100 years of production and life - the visible, three-dimensional record of our life on earth. I want Seiersborg to be for the future, and when the building and the outdoor area are opening up for the public it will immediately be more accessible. Therefore I find it important that the existing concrete floor is an extension of the outdoor city floor.

### FACADE

The facade is a self-bearing brick wall in a traditional red-brown color. Fredrikstad was one of the countries most significant industrial cities with industries related to sawmills and brickyards as the most important industries. In a way, the brick symbolizes Fredrikstads industry and industrialism in general. Furthermore, the brick is a very solid and almost maintenance-free material, and in my opinion - very beautiful and decorative.



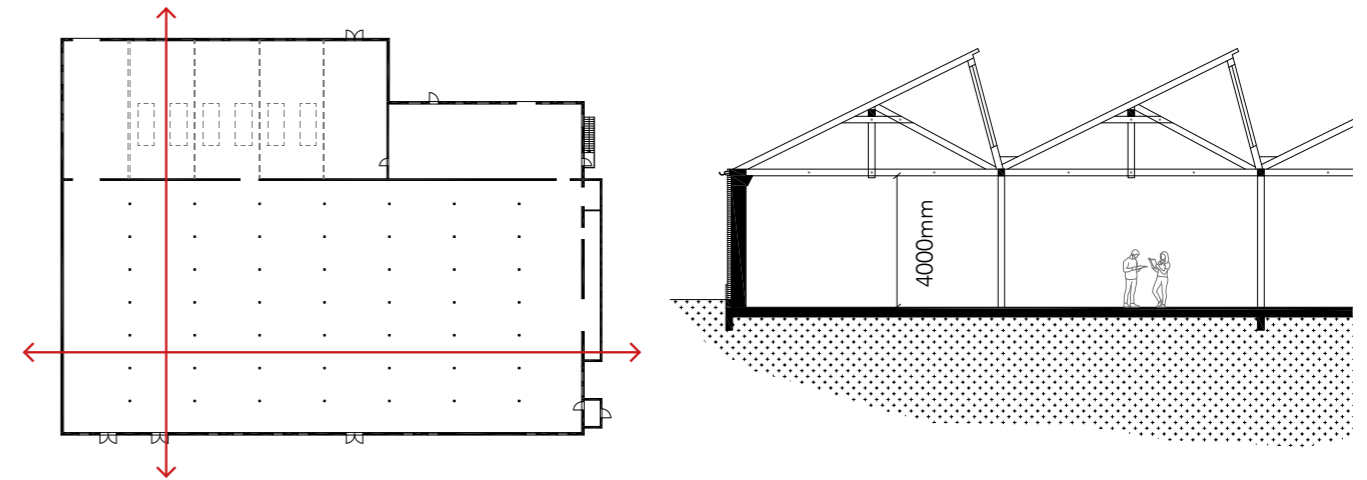


## VALUES / EXISTING STRUCTURE



## OPENNESS AND FLEXIBILITY

As mentioned, the existing structure leaves behind a spacious and flexible, open space. Where the columns bring the load to the ground, the open space is being "punctured", which gives the space some limitations, or guidelines. These guidelines can be represented by a 4 by 8-meter grid, and it might be natural to work within the grid.



## SYMBOLIC VALUE

It is obvious to me that citizens of Fredrikstad have a special relationship with Seiersborg Tekstilfabrikk. For several years, it has adorned the city as a landmark. Not only does it represent the past, but it were many employed in the TEKNO-industry compared to others.

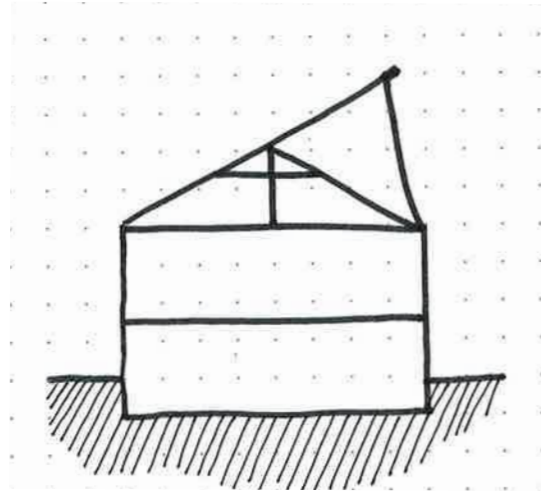
The factory is one of the areas most characteristic industrial buildings with an interest in conservation. The conservation value does not lie in pure conservation, but more in positiv reuse conserning the original structure.

## LOCATION / SETTING

Glomma is a significant part of Fredrikstad's landscape, and played an important role in the industrialisation of the city. As with most urban rivers, the banks were sites of heavy industrialization in the late 19th century. The building is parallel to Gutzeits Gate and Teglverksgata, close to the city center. It has a generous amount of surrounding space and is also only 1 km from Høgskolen i Østfold. These aspects make it attractive and easy to access for students and others.

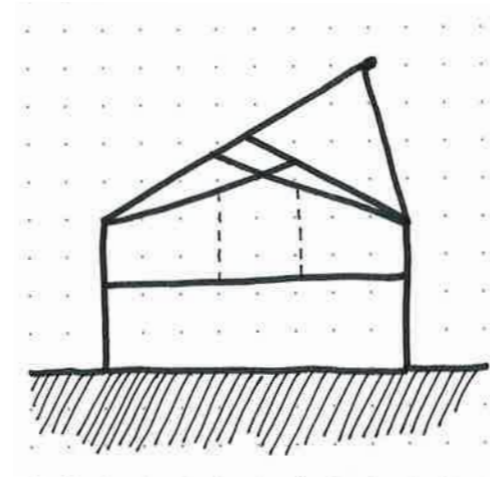
# APPROACH

## APPROACH / 3 ARCHITECTURAL STRATEGIES



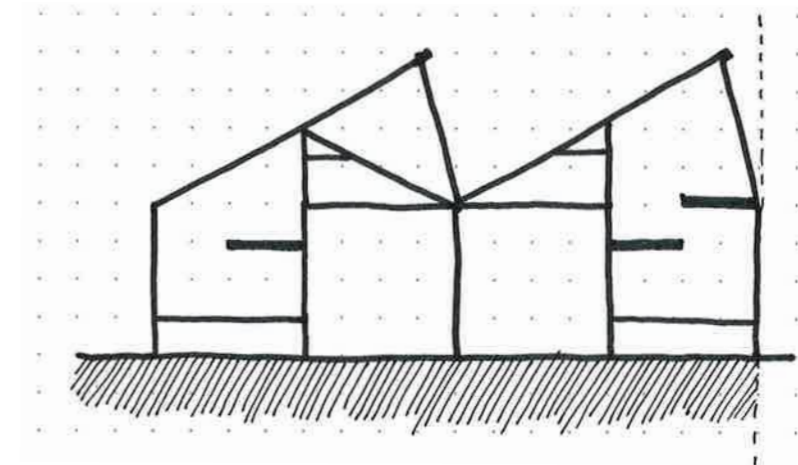
### STRATEGY 1: EXTRUDE DOWNWARDS

- + circulation in both directions in both floors.
- + doubles the area, and generous ceiling height
  - + exciting and dynamic
- + distinct separation of private and public
- constructively challenging due to digging
  - physical barrier from the the city floor
  - direct natural light



### STRATEGY 2: DEVELOP TRUSSES

- + In contact with outside world / city floor
  - + doubles the area
- + distinct separation of private and public
- circulation in only one direction in second floor.
  - might be constructively challenging
  - direct natural light



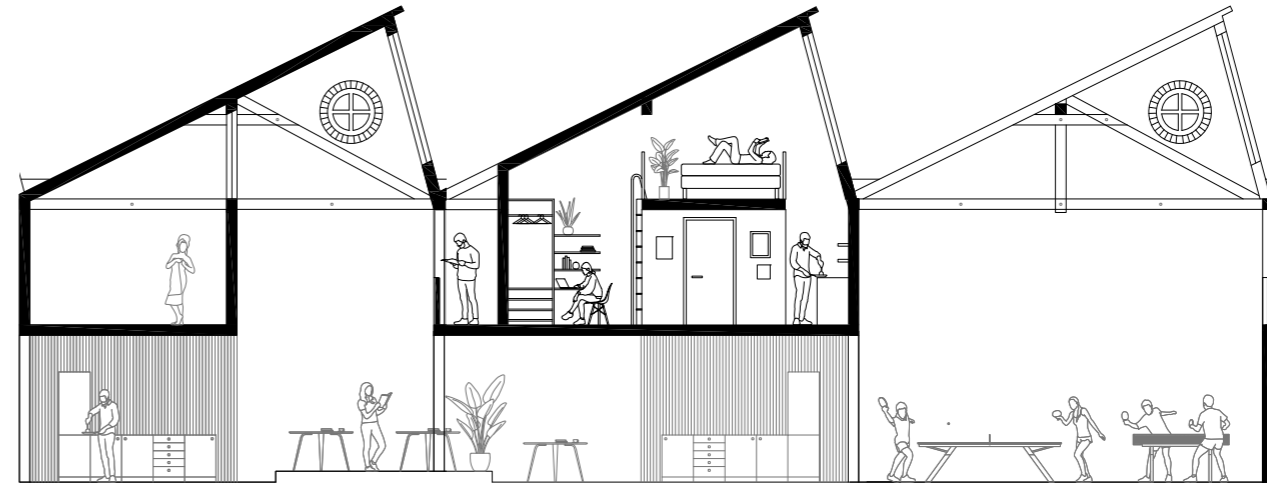
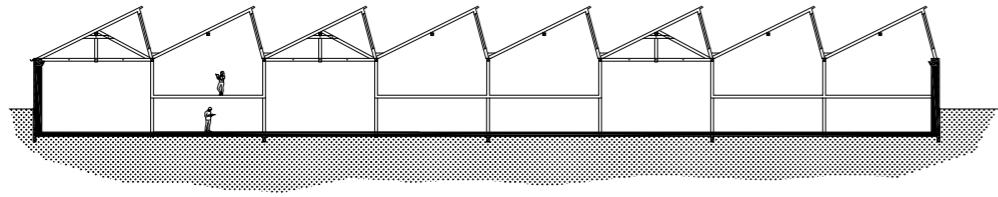
### STRATEGY 3: COMBINE PROGRAM ON ONE FLOOR

- + Neighborhood feeling
- + generous ceiling height for boht dorms and public
  - + every part of the building gets light from roof windows
- + the existing structure is "untouched"
- not very area efficient



APPROACH / 3 DIFFERENT STRATEGIES

STRATEGY 1: EXTRUDE DOWNWARDS

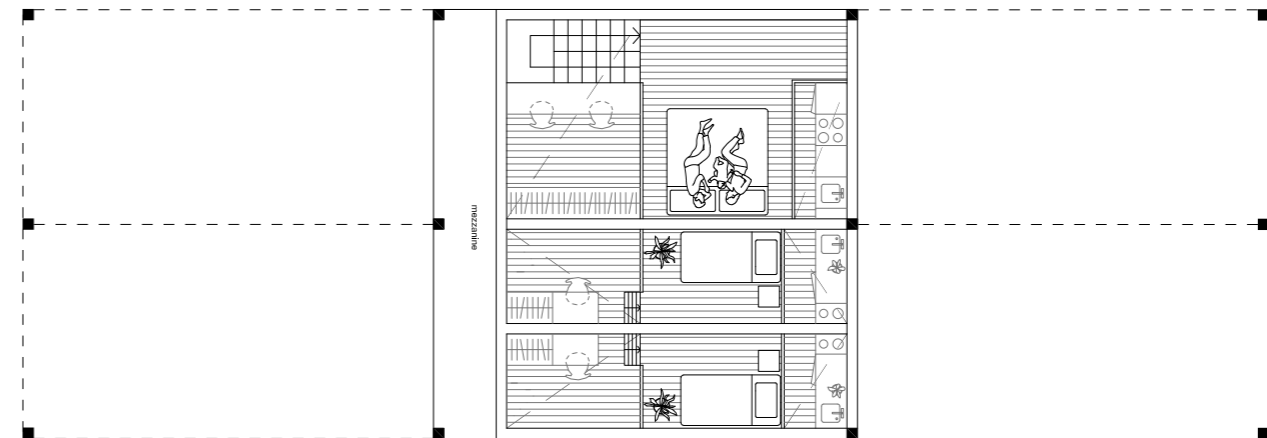


section a-a

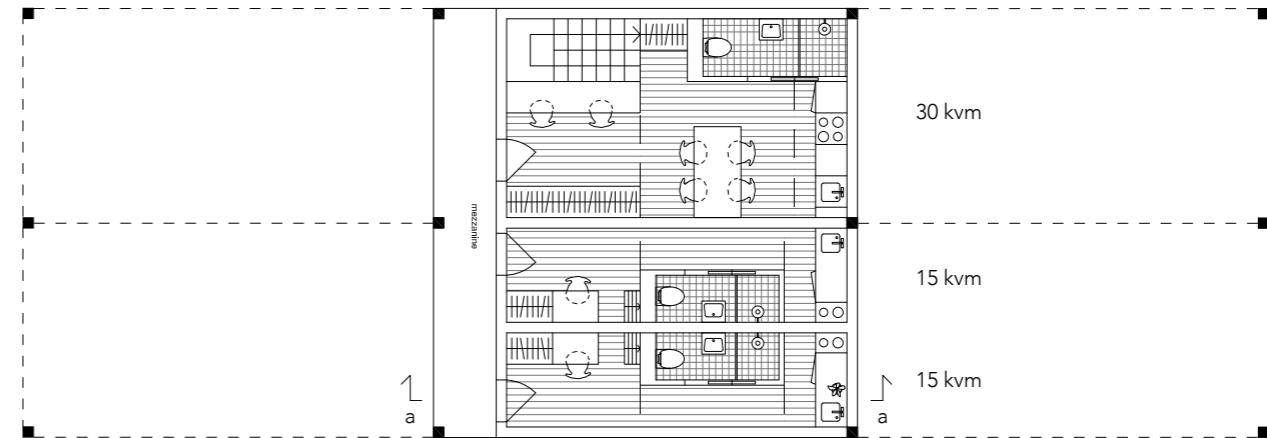


- Apartment (15 m<sup>2</sup> x 38)
- Apartment (30 m<sup>2</sup> x 11)
- Apartment (45 m<sup>2</sup> x 3)

TOTAL = 69 students



apartments loft

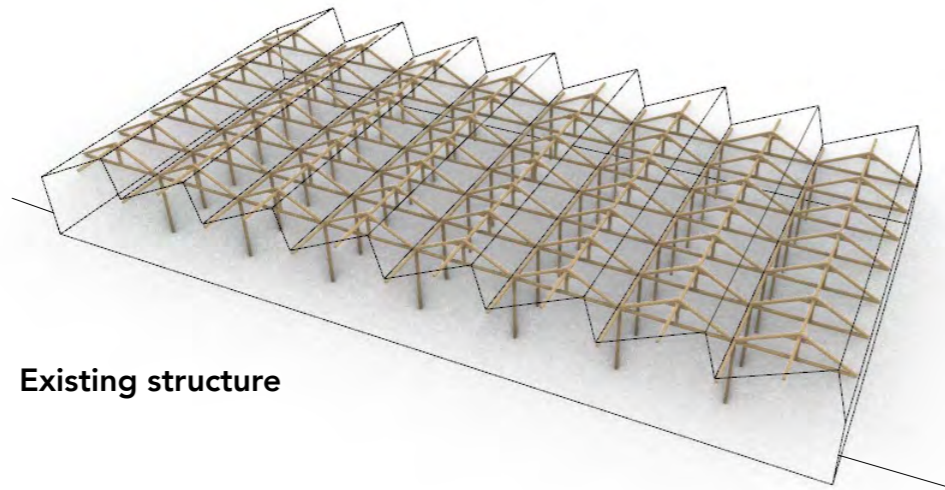


apartments

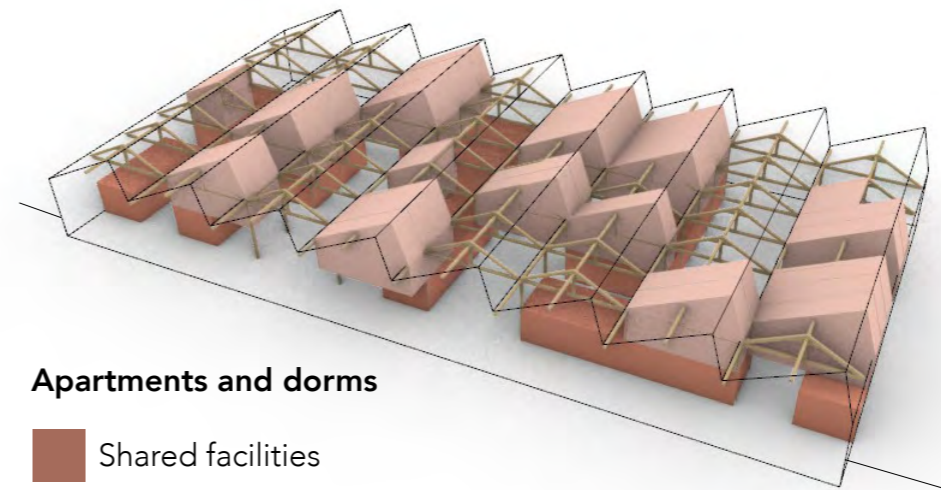




**STRATEGY 1: EXTRUDE DOWNWARDS**

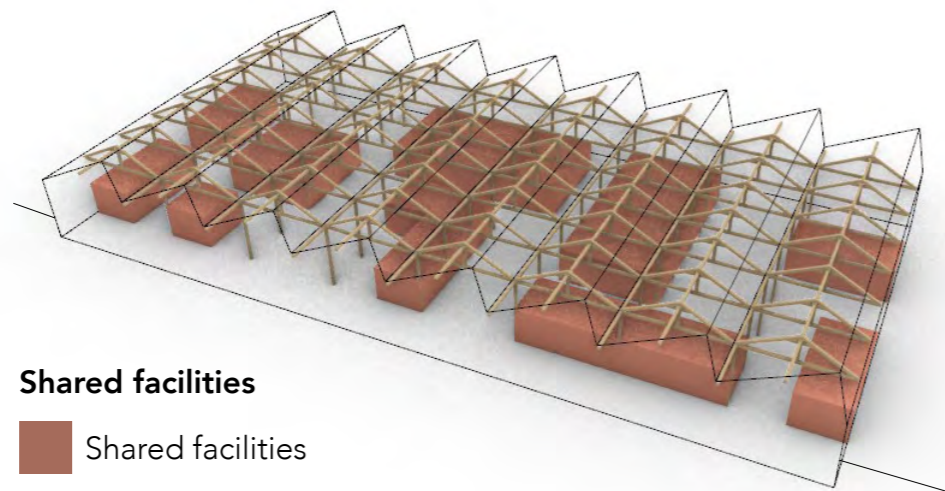


**Existing structure**



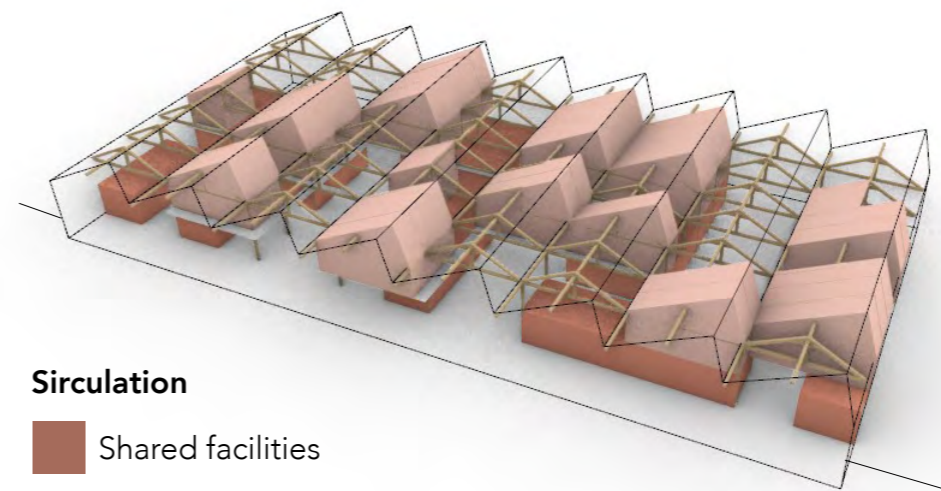
**Apartments and dorms**

- Shared facilities
- Apartments and dorms



**Shared facilities**

- Shared facilities

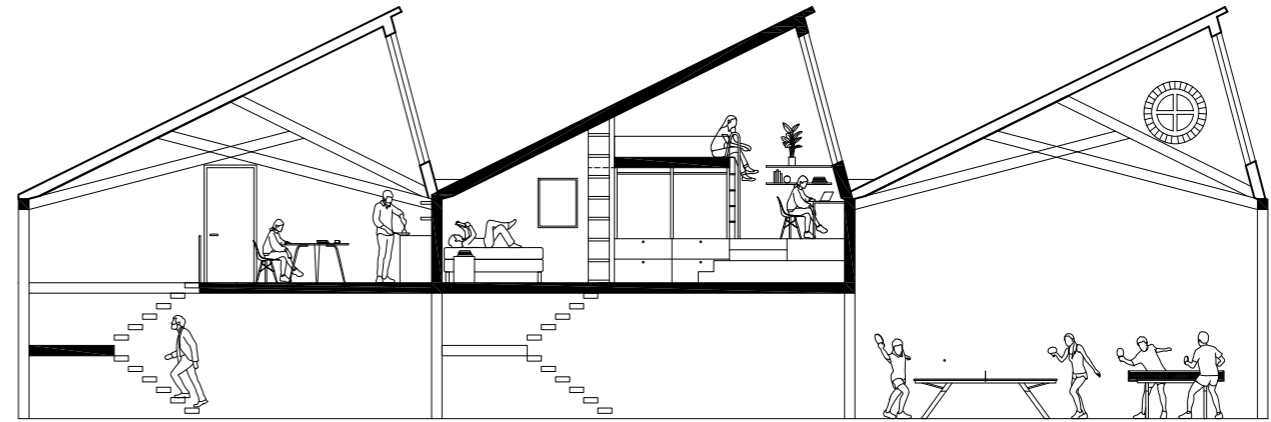
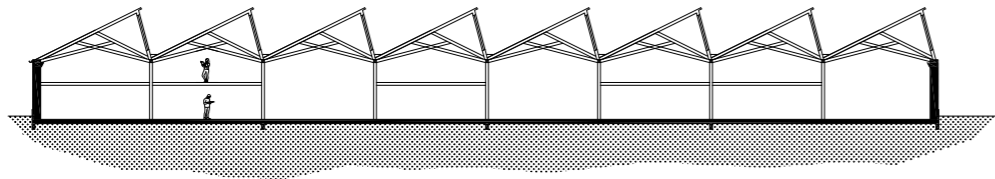


**Circulation**

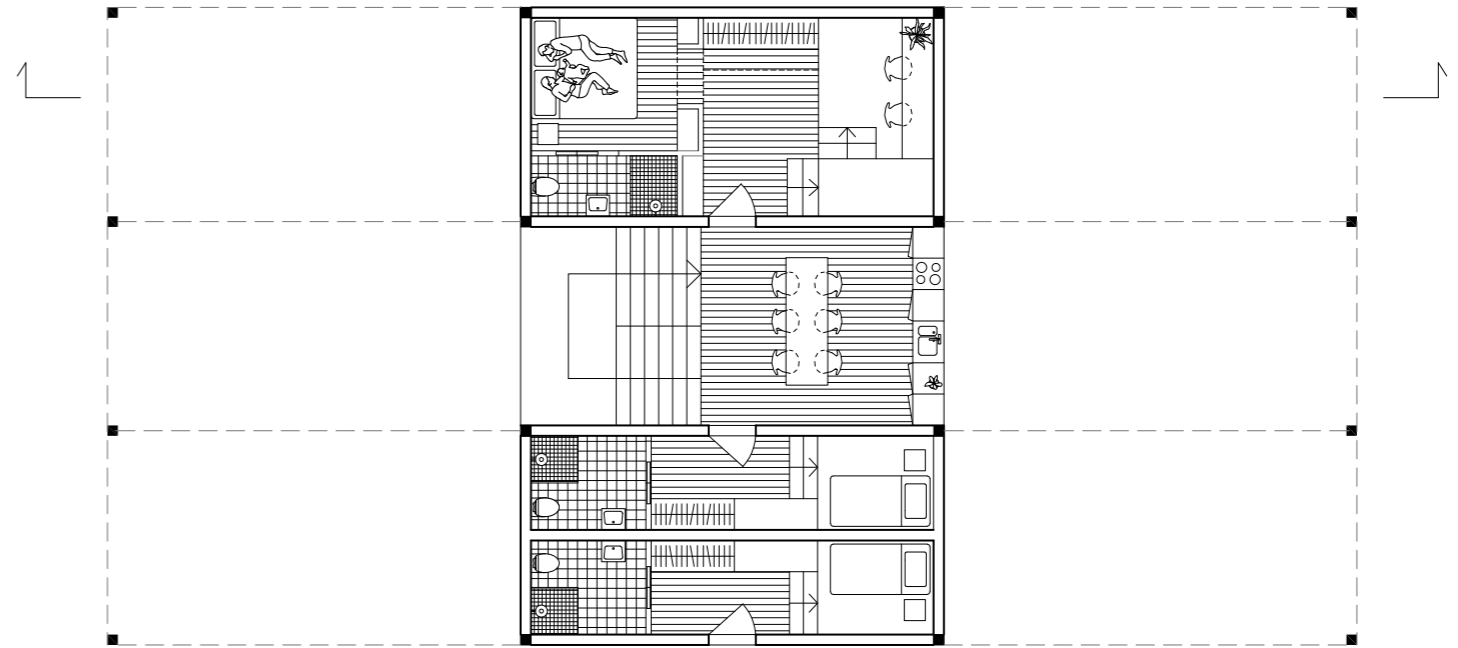
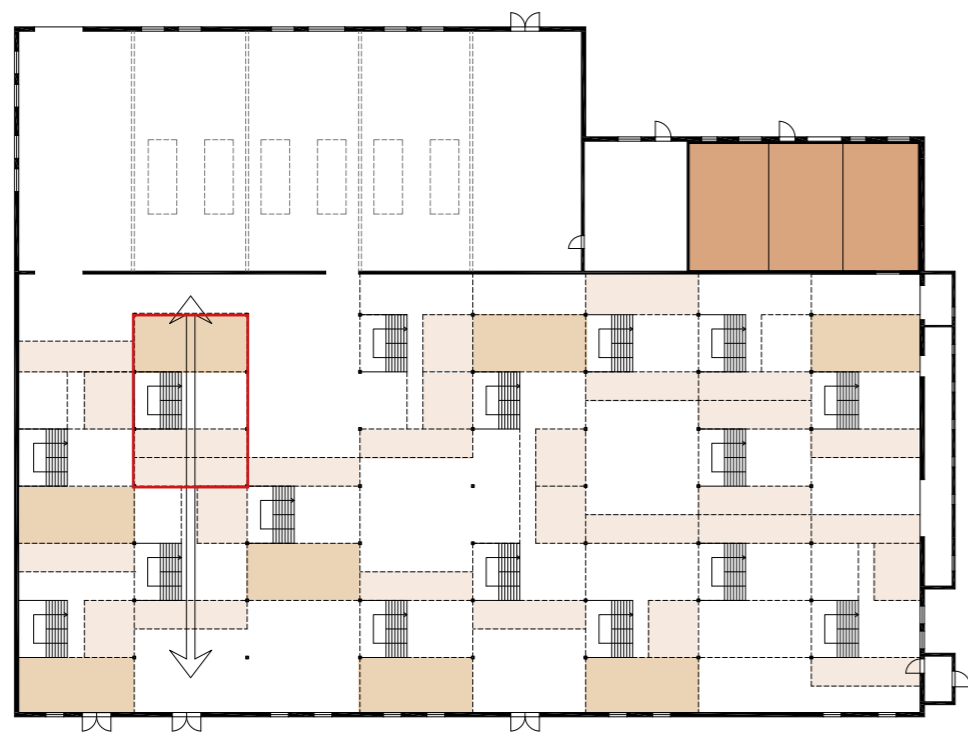
- Shared facilities
- Apartments and dorms
- Circulation

APPROACH / 3 DIFFERENT STRATEGIES

STRATEGY 2: DEVELOP TRUSSES






section a-a



apartments

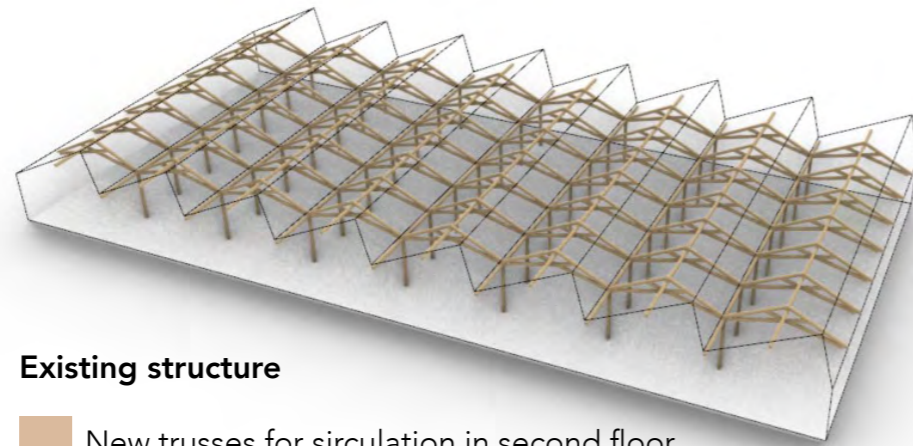


-  Apartment (15 m<sup>2</sup>)
-  Apartment (30 m<sup>2</sup>)
-  Apartment (45 m<sup>2</sup>)

TOTAL = 53 students

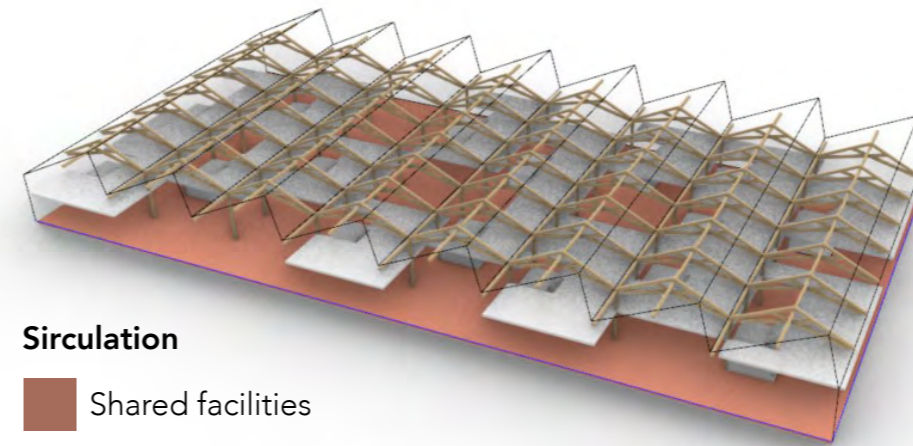


**STRATEGY 2: DEVELOP TRUSSES**



**Existing structure**

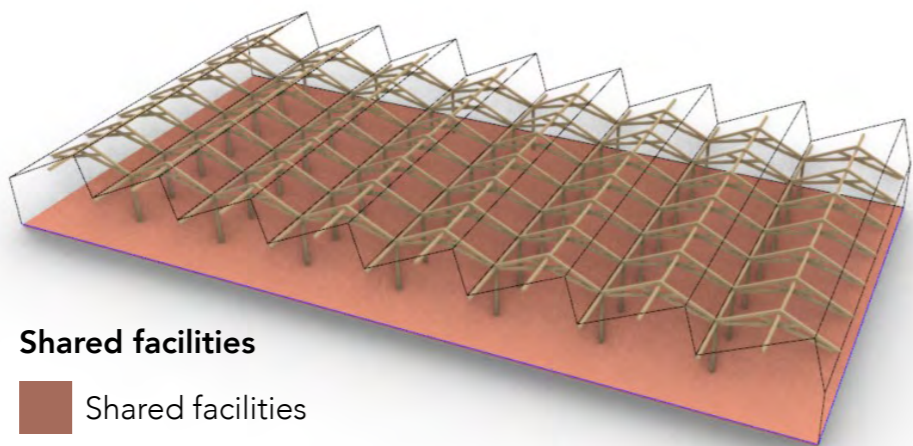
■ New trusses for circulation in second floor



**Circulation**

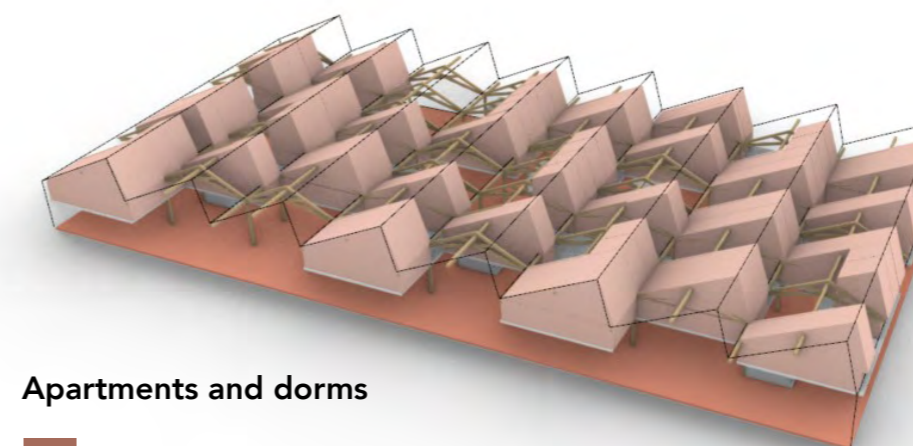
■ Shared facilities

□ Circulation



**Shared facilities**

■ Shared facilities



**Apartments and dorms**

■ Shared facilities

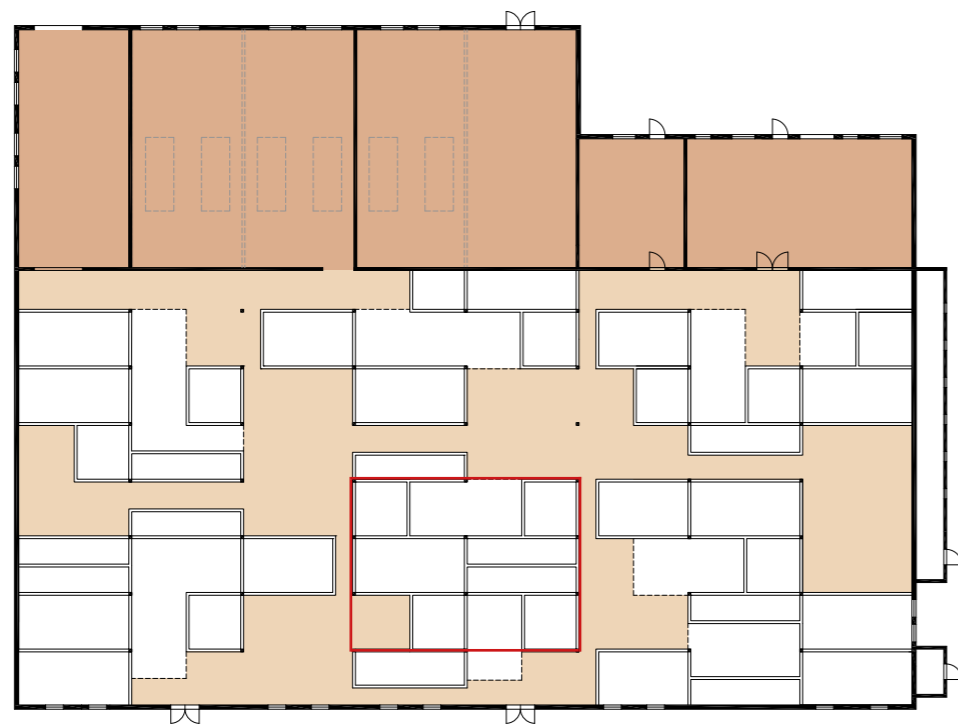
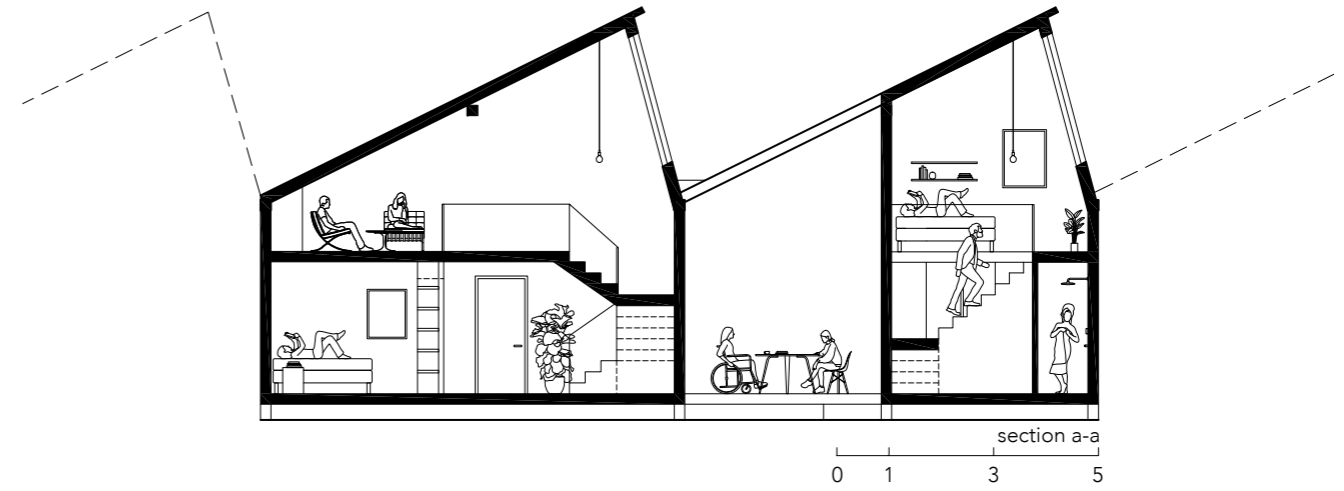
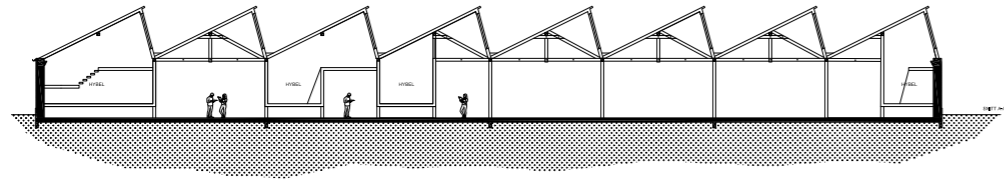
■ Apartments and dorms




□ Circulation



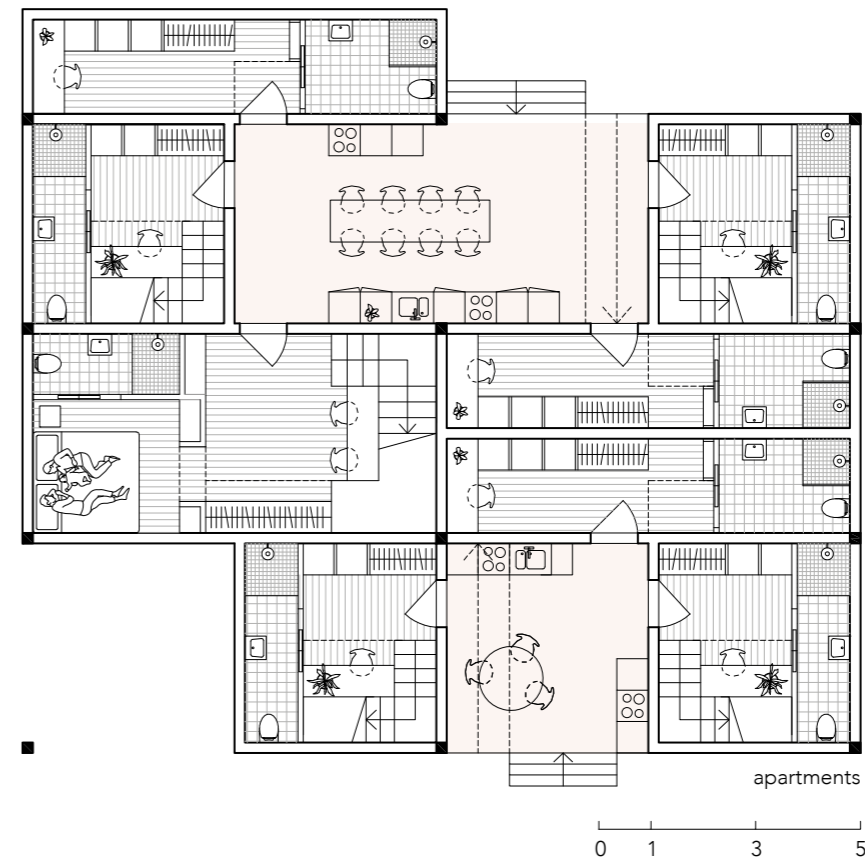
APPROACH / 3 DIFFERENT STRATEGIES

STRATEGY 3: COMBINE PROGRAM ON ONE FLOOR

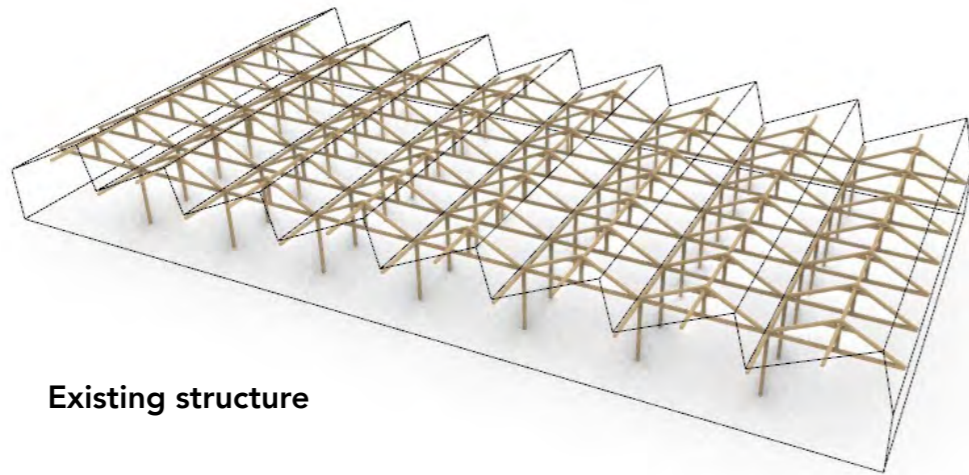


-  Positive space (private - apartments)
-  Negative space (shared functions)
-  Public (public functions open for all students)

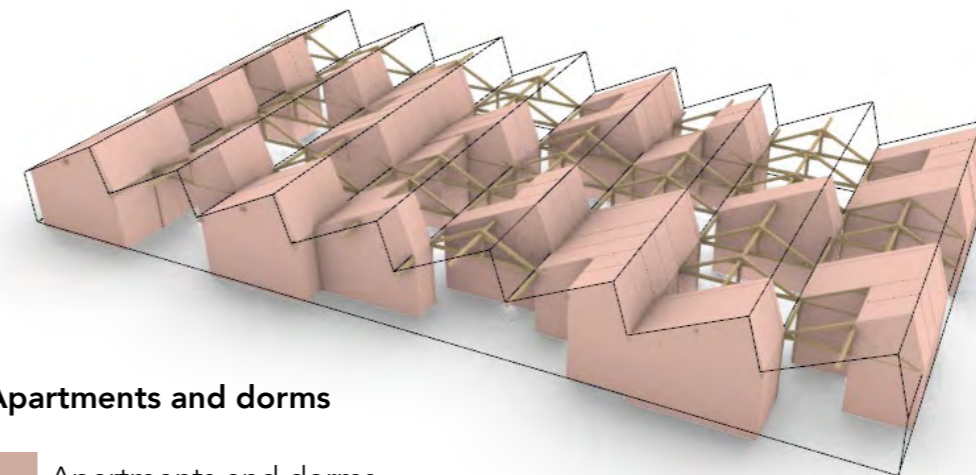
TOTAL = 60 students



**STRATEGY 3: COMBINE PROGRAM ON ONE FLOOR**

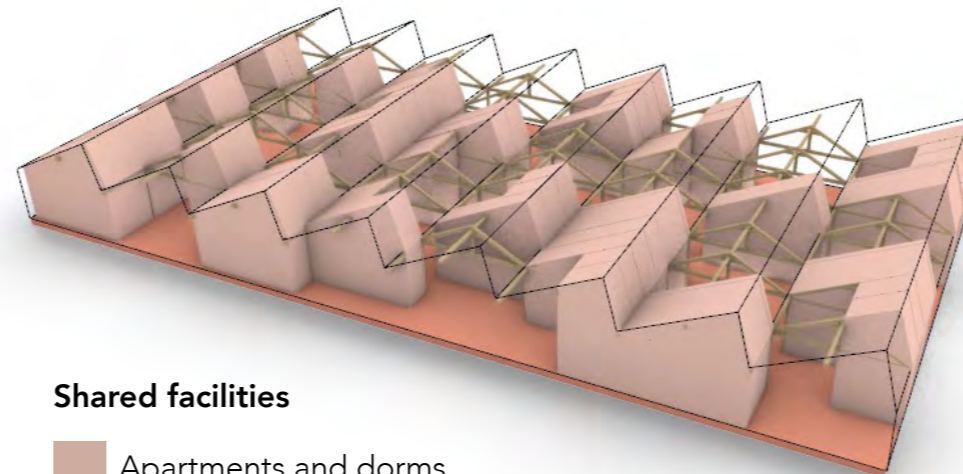


Existing structure



Apartments and dorms

■ Apartments and dorms



Shared facilities

■ Apartments and dorms

■ Shared facilities

# SITE ANALYSIS



PROJECT / SUN DIAGRAM



SUN DIAGRAM

- sunpath
- 04:00 ↑ summer (1st july)
- 22:40 ↓ summer (1st july)
- 09:18 ↑ winter (1st january)
- 15:23 ↓ winter (1st january)






0 10 30 50 100



# PROJECT / SITE ANALYSIS



## BUILDING TYPOLOGY

-  educational
-  housing
-  commercial
-  industry
-  public

## OTHER

-  site
-  heavy traffic (Mosseveien)
-  playground / public park
-  5 min walk- radius
-  city-ferry (Gressvik - Gamlebyen)
-  ferry pier
-  bus stops
-  parking lots

0 10 30 50 100

MODEL PHOTOS











