

WELCOME TO DRAMMEN!

diploma spring 2023
the oslo school of architecture and design

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supervised by **Lone Sjøli**

binder 1



WELCOME TO DRAMMEN!
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The Oslo School of Architecture and Design
Institute of Architecture
Disciplinary group: Building Art

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ORGANISATION OF THE BINDER

Binder 1 contains the final project of the diploma *WELCOME TO DRAMMEN!* For process material and appendices containing further model and site photos as well as texts, see Binder 2. The binder is divided into three chapters:

CHAPTER I contains the research question, abstract, and spatial programme.

CHAPTER II presents the drawing set, consisting of 18 drawings.
Scales 1:10000, 1:2000, 1:400, 1:200, and 1:50.

CHAPTER III is a collection of selected model photos of 1:1000, 1:50, and 1:20 project models, as well as collages and oil pastel drawings made earlier in the semester that still communicate the atmosphere of the project as it stands at the point of delivery.

CHAPTER I

RESEARCH QUESTION, ABSTRACT, AND SPATIAL PROGRAMME

RESEARCH QUESTION

Can the need for a new main gate to the Port of Drammen be met by an architecture which improves the workday and is a gesture toward those working there, while also manifesting the port's importance to the identity of the city?

ABSTRACT

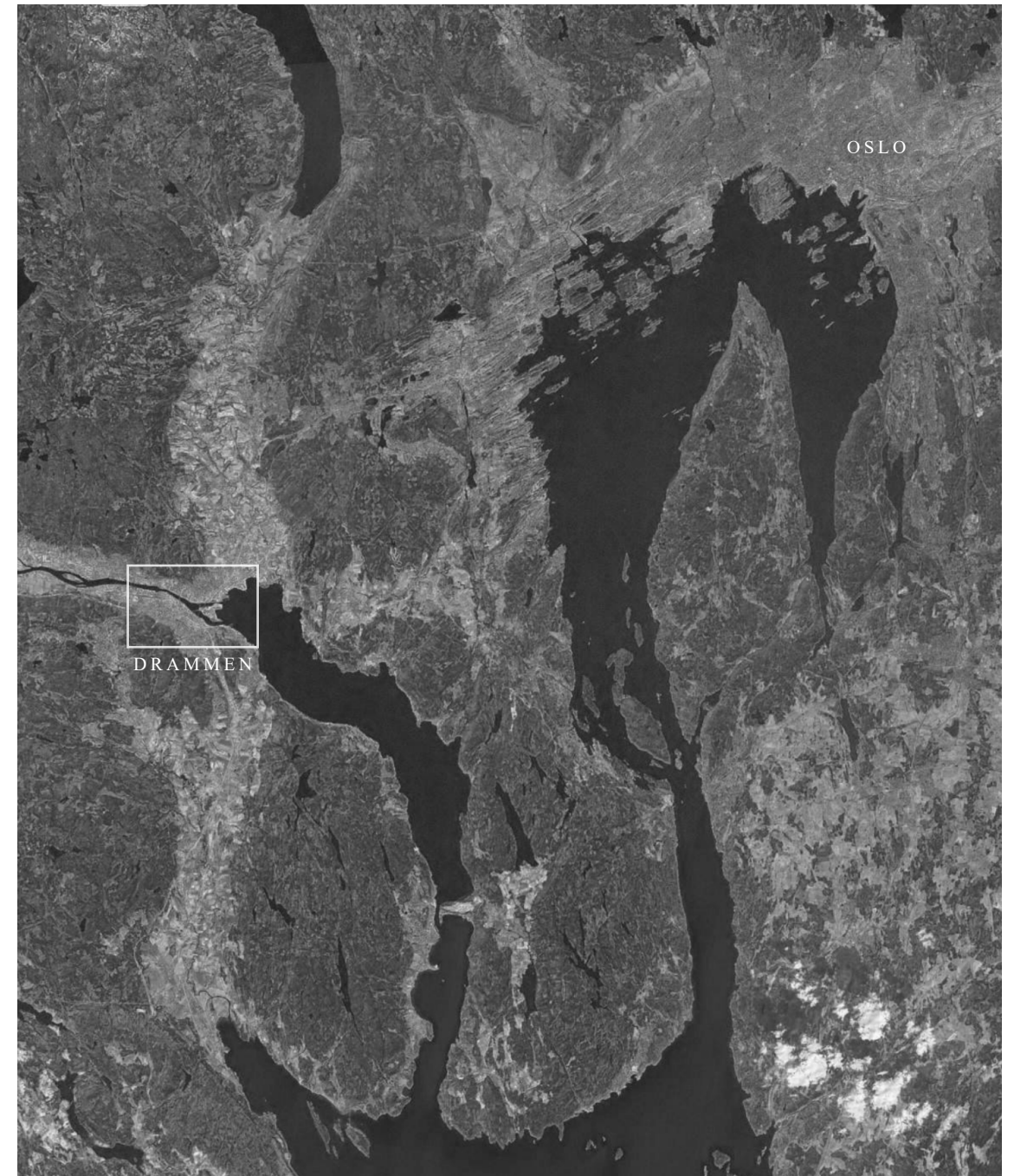
The diploma *WELCOME TO DRAMMEN!* works with the Port of Drammen, located mainly on the island of Holmen close to the centre of the city. Situated about 40 kilometres south-west of Oslo, Drammen is home to one of the biggest ports in Eastern Norway. As in other Northern European port cities, for instance Oslo, Drammen is redeveloping parts of its waterfront from logistical to residential, business, and recreational use, in Norway referred to as “Fjordbyen”, leaving less land for port activities.

However, as opposed to for example Oslo, where the port is being moved further away from the city, Drammen has chosen a different strategy: the city is co-localising all of its port to Holmen, the part of the current port which is closest to the city centre. This puts Drammen in a position where the presence of the port in the city, despite its total loss of area, could potentially grow. However, if not physically, Drammen wishes to distance the port in other ways - new office buildings and green belts are planned to shield the nearby city from the increasing activity at Holmen.

As part of this restructuring process, the Port Authority is relocating and building a new main gate and guard house for workers and truck drivers alike to access the ISPS area of the port. ISPS (International Ship and Port Facility Security) is the fenced-in, publicly inaccessible area within which goods are stored and port operations take place.

The given site and the need for a new main gate is the starting point for this diploma, and it seeks to explore what happens if the gate is considered an important social node and a symbol of the port rather than just an entry. The programme of the main gate is expanded, and includes new offices for the Port Authority, a common canteen for the entire port, as well as bedrooms and an adjoining sauna for truck drivers coming in at night. In doing so, the diploma sets out to provide a variety of new spaces which improve the workday for the over 1000 people coming to Holmen for work every day. At the same time, it wishes to strengthen the relationship between the port and the people of the Drammen, questioning the outspoken wish of the port to use green belts and offices to put itself out of view from the city.

The new main gate relates to and enters a dialogue with the port and its existing elements, both referencing and contrasting them. It strives for a permanent and bold expression while being informal in use, is both serious and playful, realistic and speculative. Merging thoughtfully sculpted bedrooms and offices, generous common spaces inside and outside, and an explorative construction with the matter-of-fact requirements of the transportation sector, *WELCOME TO DRAMMEN!* uses architecture as a tool to discuss the value we assign to the workers and the supply chain upon which we depend, and challenges the prevailing idea of profit over all else - all the time balancing between the pragmatic and the poetic.



Satellite image of Drammen, Oslo, and the Oslo Fjord.

SPATIAL PROGRAMME

Main gate to the ISPS area of the Port of Drammen.

Guard house with service functions.

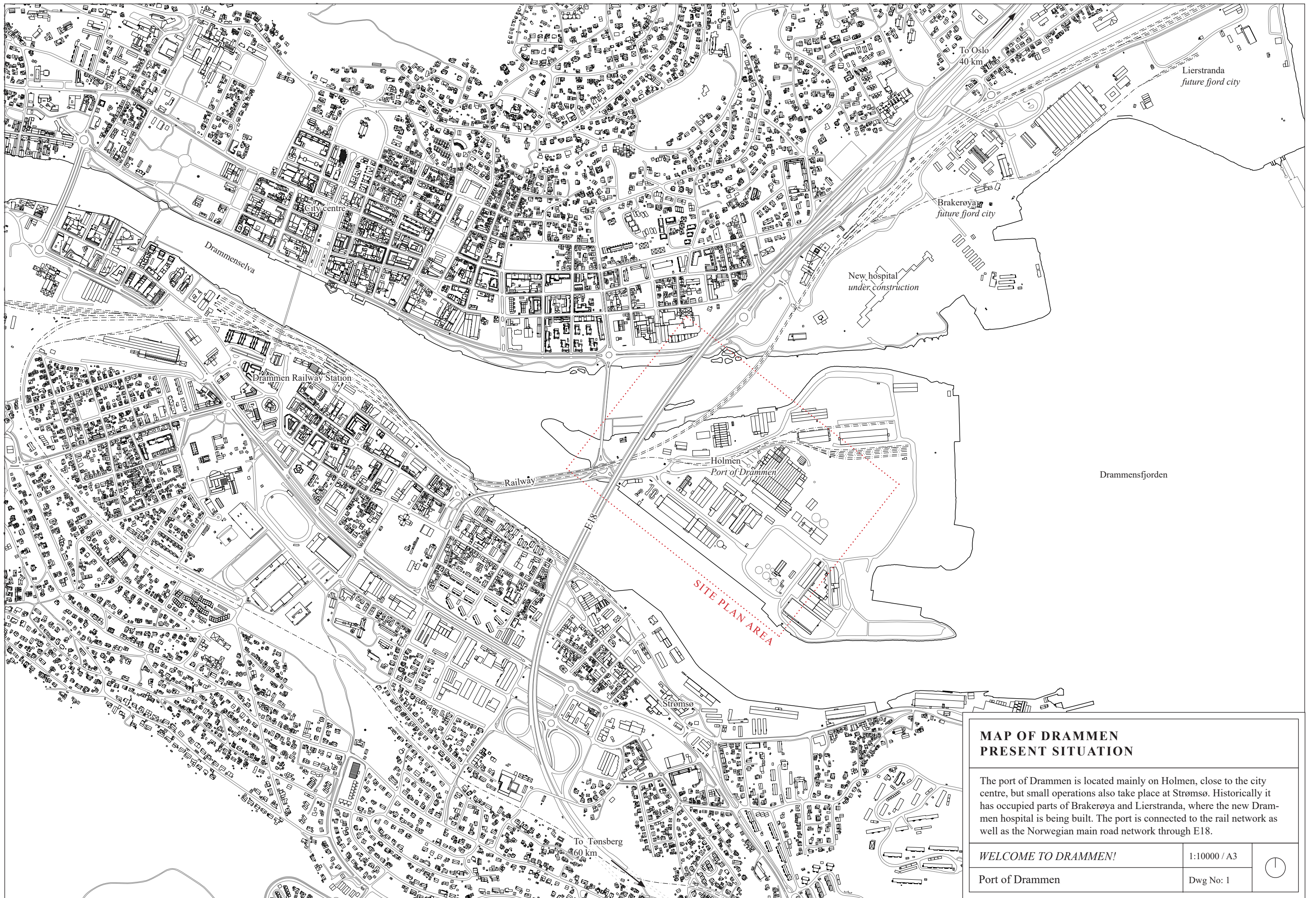
Office of the Port Authority of Drammen.

Common room and canteen open to the public.

Sleeping quarters for truck drivers + sauna.

Car and truck parking.

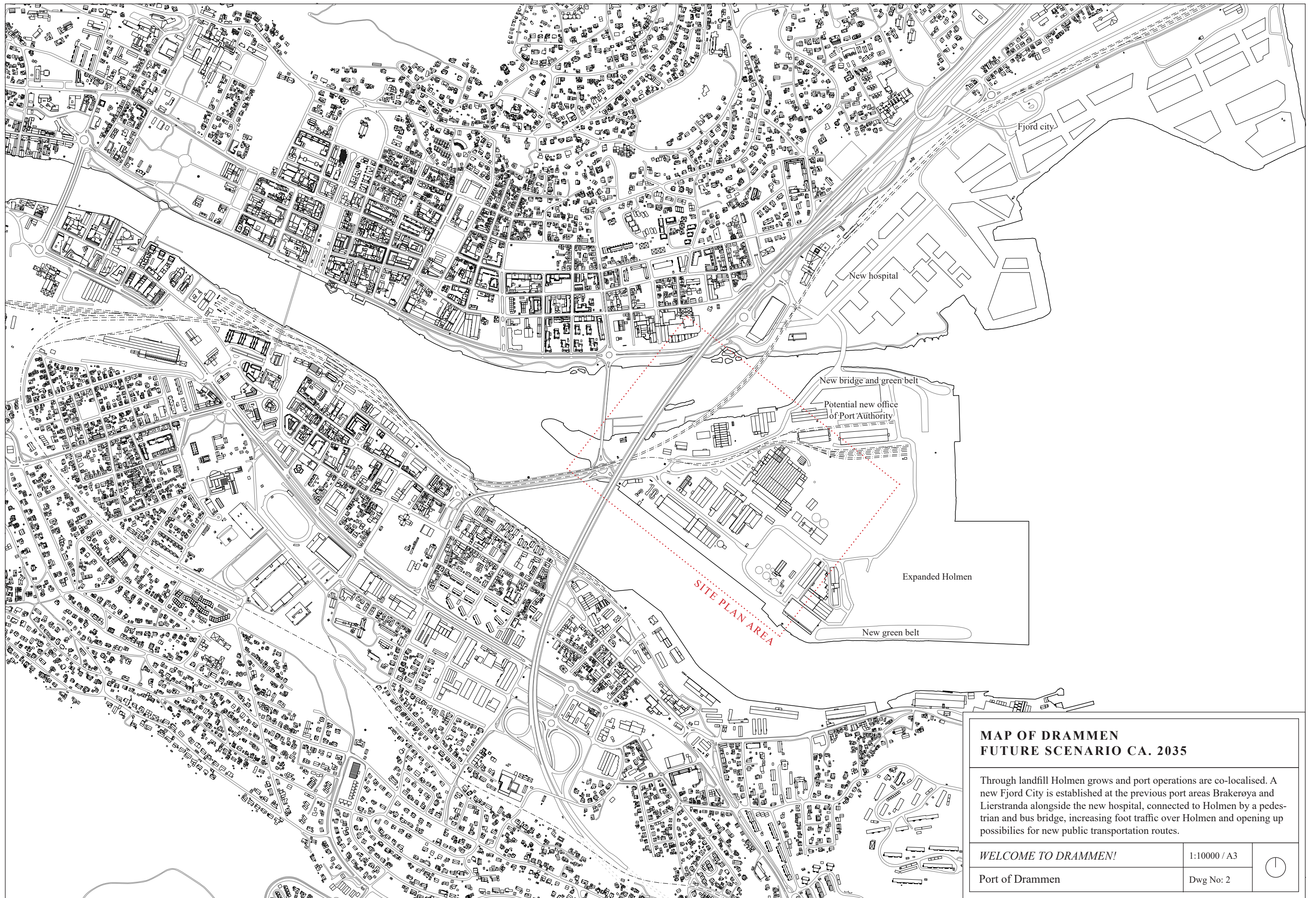
CHAPTER II
DRAWING SET



**MAP OF DRAMMEN
PRESENT SITUATION**

The port of Drammen is located mainly on Holmen, close to the city centre, but small operations also take place at Strømsø. Historically it has occupied parts of Brakerøya and Lierstranda, where the new Drammen hospital is being built. The port is connected to the rail network as well as the Norwegian main road network through E18.

<i>WELCOME TO DRAMMEN!</i>	1:10000 / A3	⊙
Port of Drammen	Dwg No: 1	

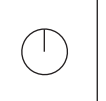


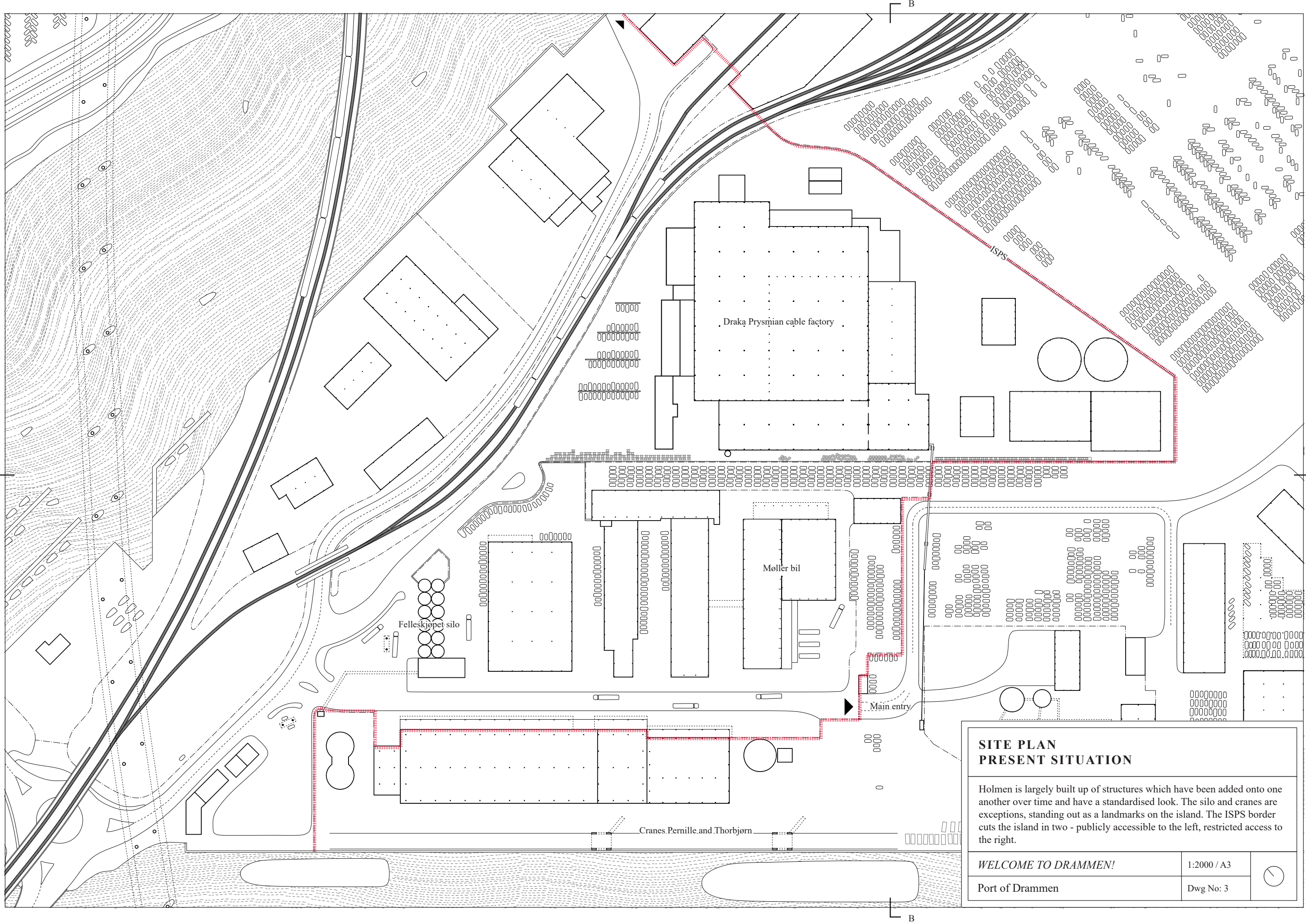
**MAP OF DRAMMEN
FUTURE SCENARIO CA. 2035**

Through landfill Holmen grows and port operations are co-localised. A new Fjord City is established at the previous port areas Brakerøya and Lierstranda alongside the new hospital, connected to Holmen by a pedestrian and bus bridge, increasing foot traffic over Holmen and opening up possibilities for new public transportation routes.

WELCOME TO DRAMMEN!
Port of Drammen

1:10000 / A3
Dwg No: 2





Draka Prysmian cable factory

Møller bil

Felleskjøpet silo

Cranes Pernille and Thorbjorn

Main entry

**SITE PLAN
PRESENT SITUATION**

Holmen is largely built up of structures which have been added onto one another over time and have a standardised look. The silo and cranes are exceptions, standing out as landmarks on the island. The ISPS border cuts the island in two - publicly accessible to the left, restricted access to the right.

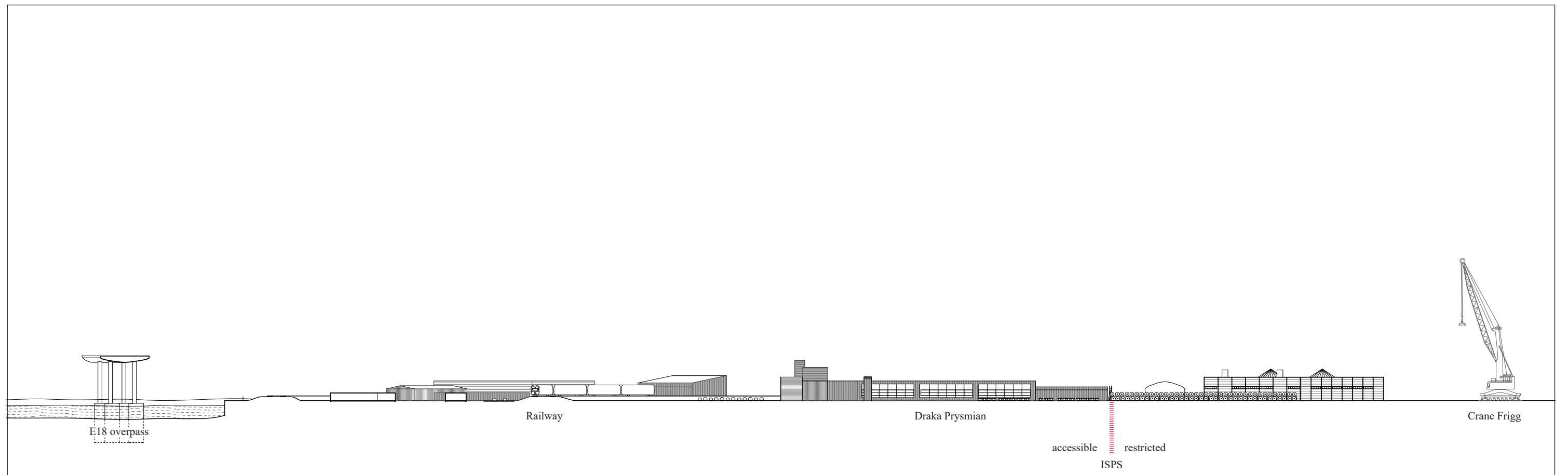
WELCOME TO DRAMMEN!

1:2000 / A3

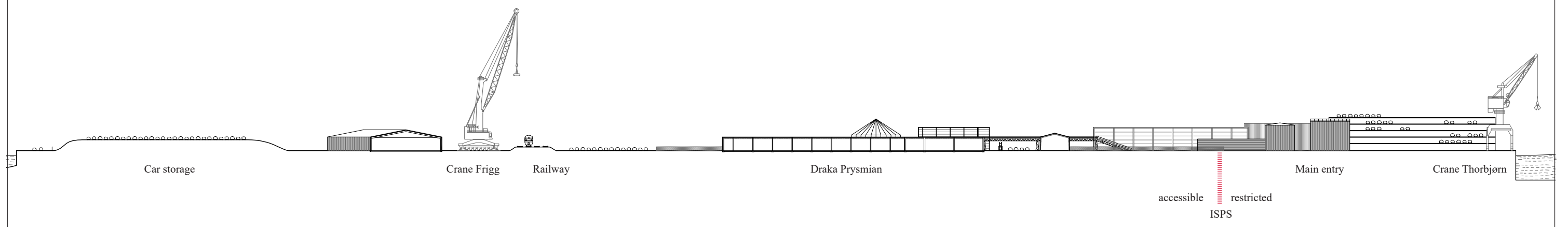
Port of Drammen

Dwg No: 3



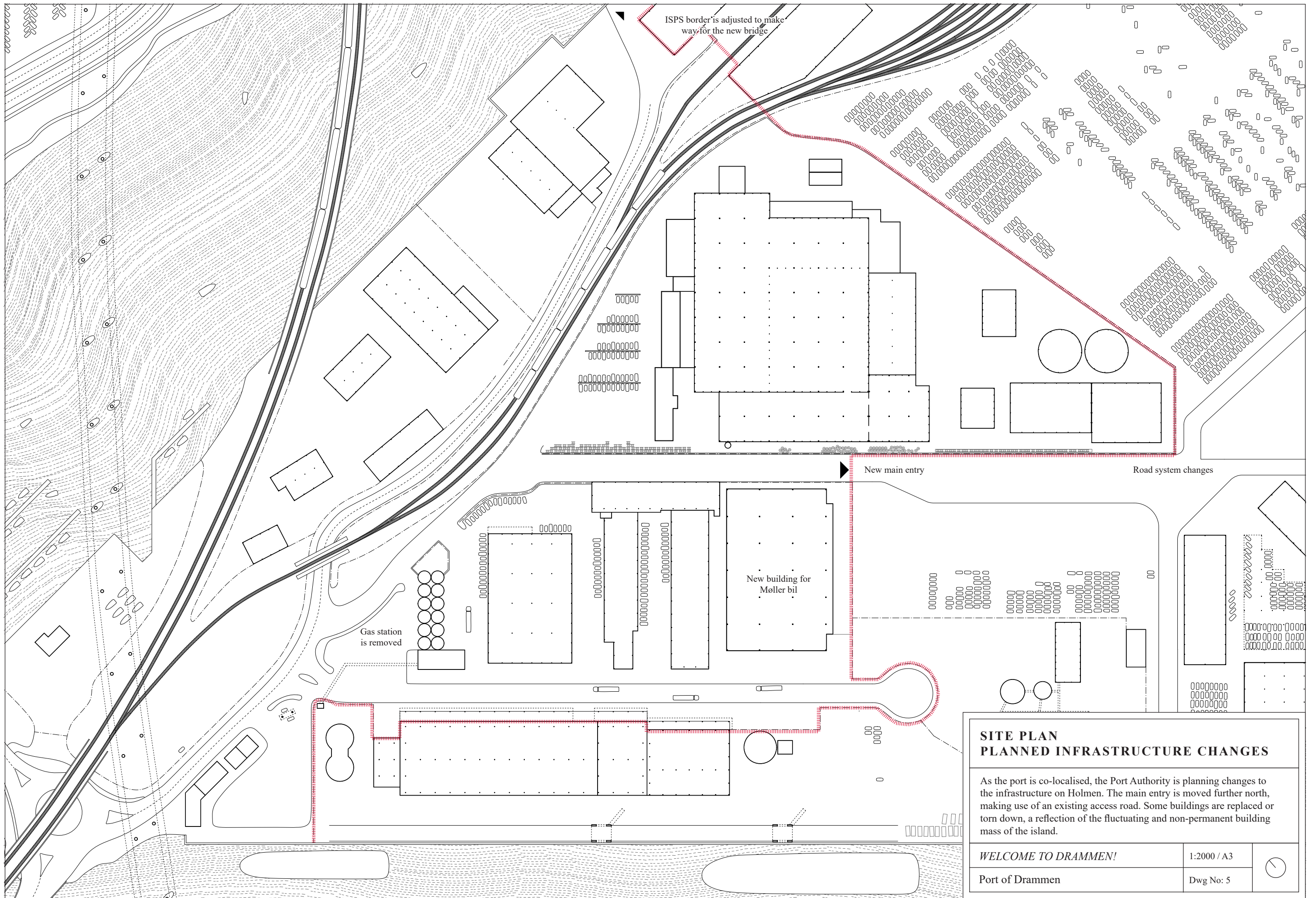


A-A west - east




B-B north - south

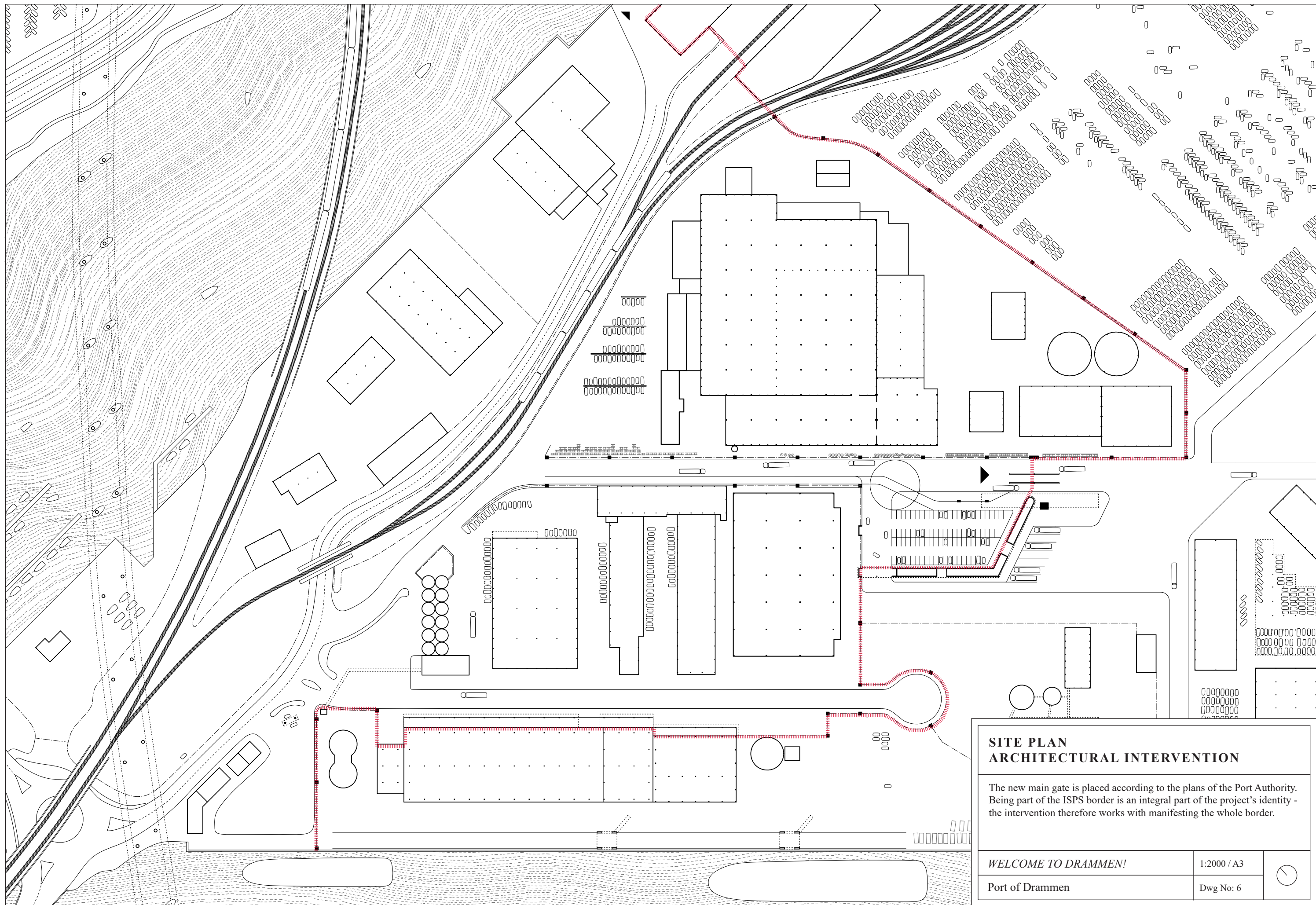
SITE SECTIONS	
PRESENT SITUATION	
<p>The structures of Holmen are predominantly horizontal, contrasted by the tall cranes. The standardised architecture of the island is visible in the use of metal sheets and corrugated facades, as well as a pragmatic and repetitive construction system. The mainly flat island is in large parts covered with asphalt, creating one large, homogenous surface.</p>	
<i>WELCOME TO DRAMMEN!</i>	1:2000 / A3
Port of Drammen	Dwg No: 4



**SITE PLAN
PLANNED INFRASTRUCTURE CHANGES**


As the port is co-localised, the Port Authority is planning changes to the infrastructure on Holmen. The main entry is moved further north, making use of an existing access road. Some buildings are replaced or torn down, a reflection of the fluctuating and non-permanent building mass of the island.

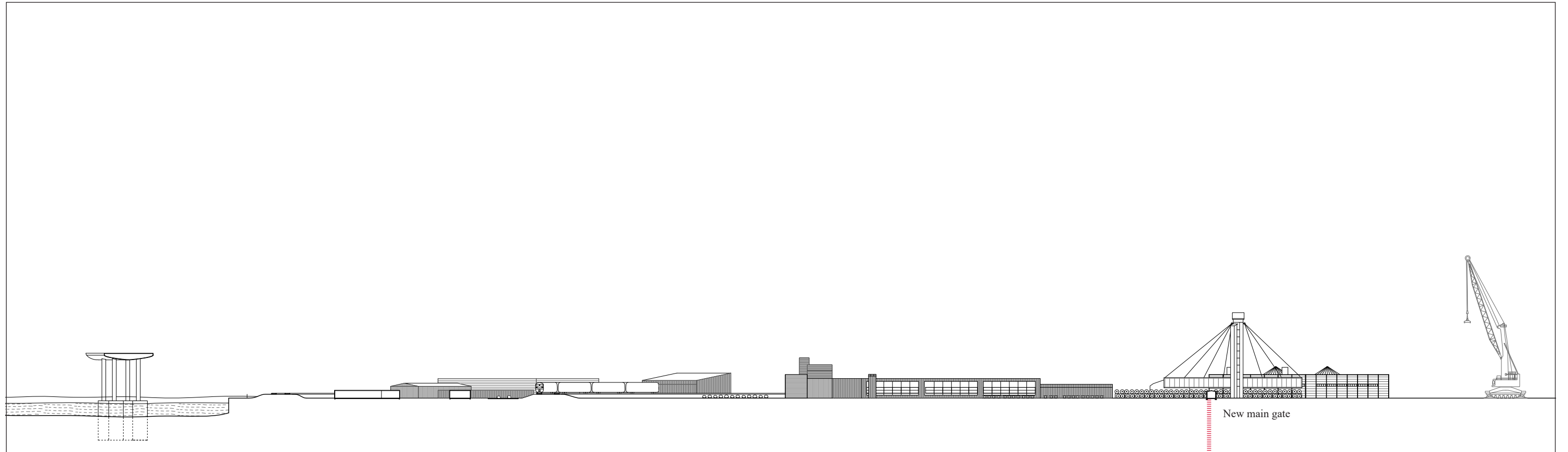
<i>WELCOME TO DRAMMEN!</i>	1:2000 / A3	
Port of Drammen	Dwg No: 5	



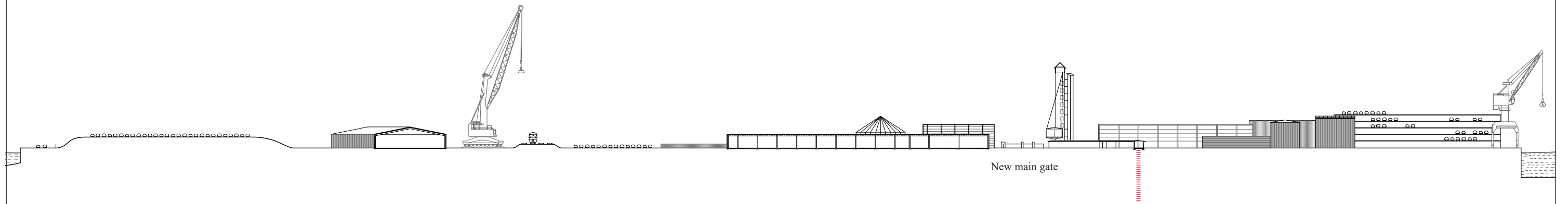
**SITE PLAN
ARCHITECTURAL INTERVENTION**

The new main gate is placed according to the plans of the Port Authority. Being part of the ISPS border is an integral part of the project's identity - the intervention therefore works with manifesting the whole border.

<i>WELCOME TO DRAMMEN!</i>	1:2000 / A3	
Port of Drammen	Dwg No: 6	

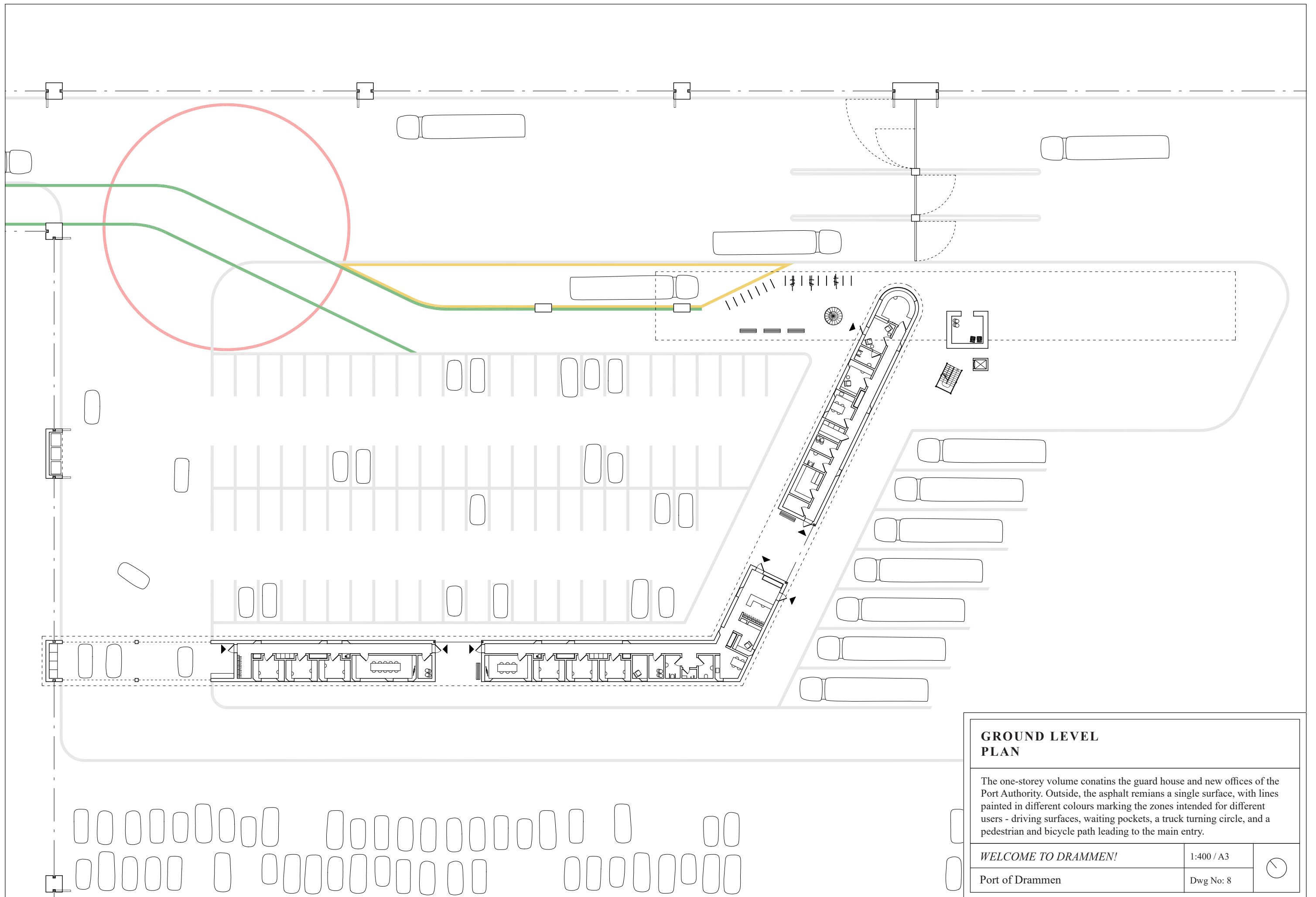


A-A west - east



B-B north - south

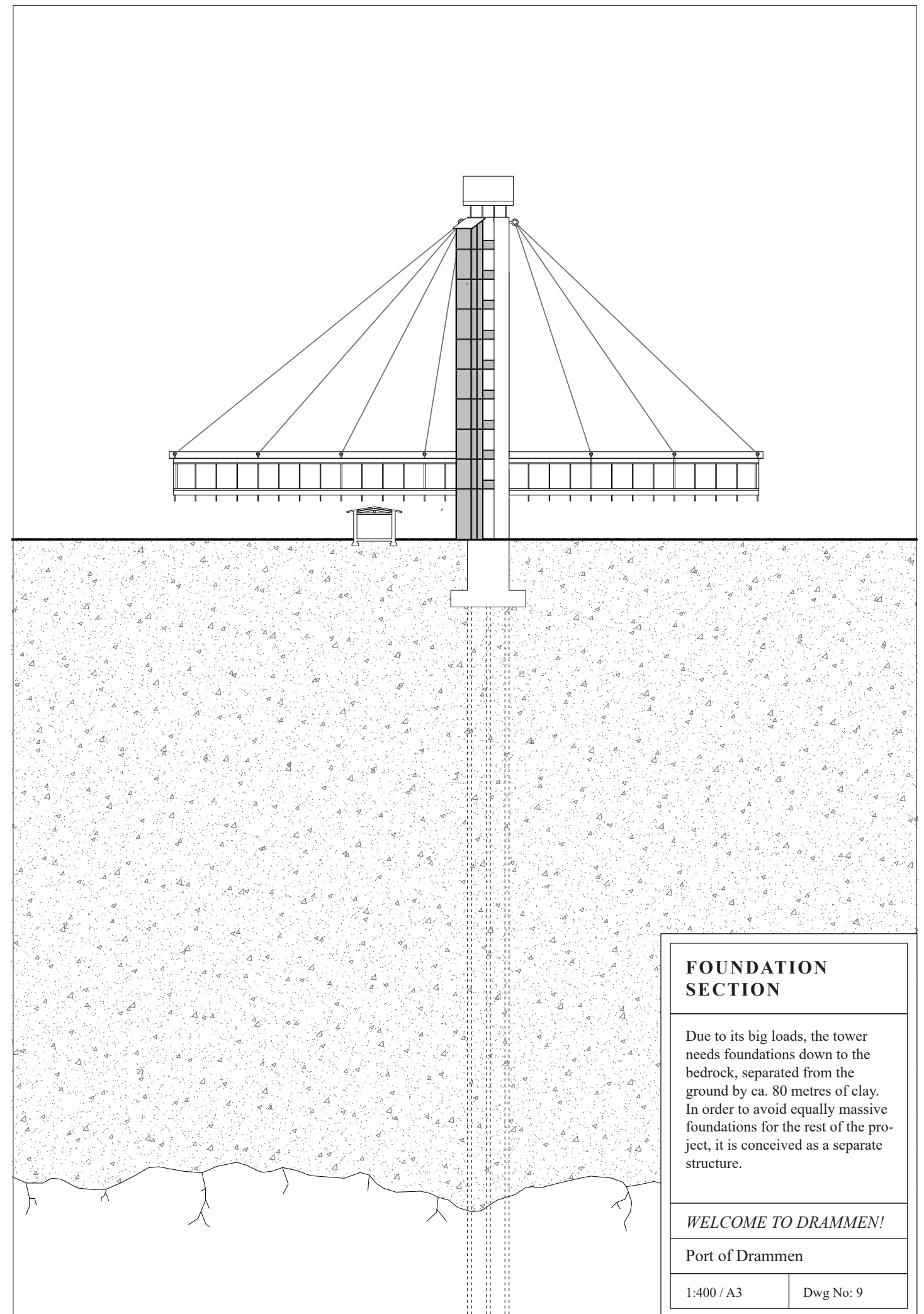
<p>SITE SECTIONS ARCHITECTURAL INTERVENTION</p>	
<p>Parts of the project are horizontal and relate to the majority of the buildings at Holmen. The tower rises up and becomes a symbol of the port, relating to other landmarks such as the silo and the cranes, and serves as a marker for where to go for those coming to Holmen for the first time.</p>	
<p><i>WELCOME TO DRAMMEN!</i></p>	<p>1:2000 / A3</p>
<p>Port of Drammen</p>	<p>Dwg No: 7</p>

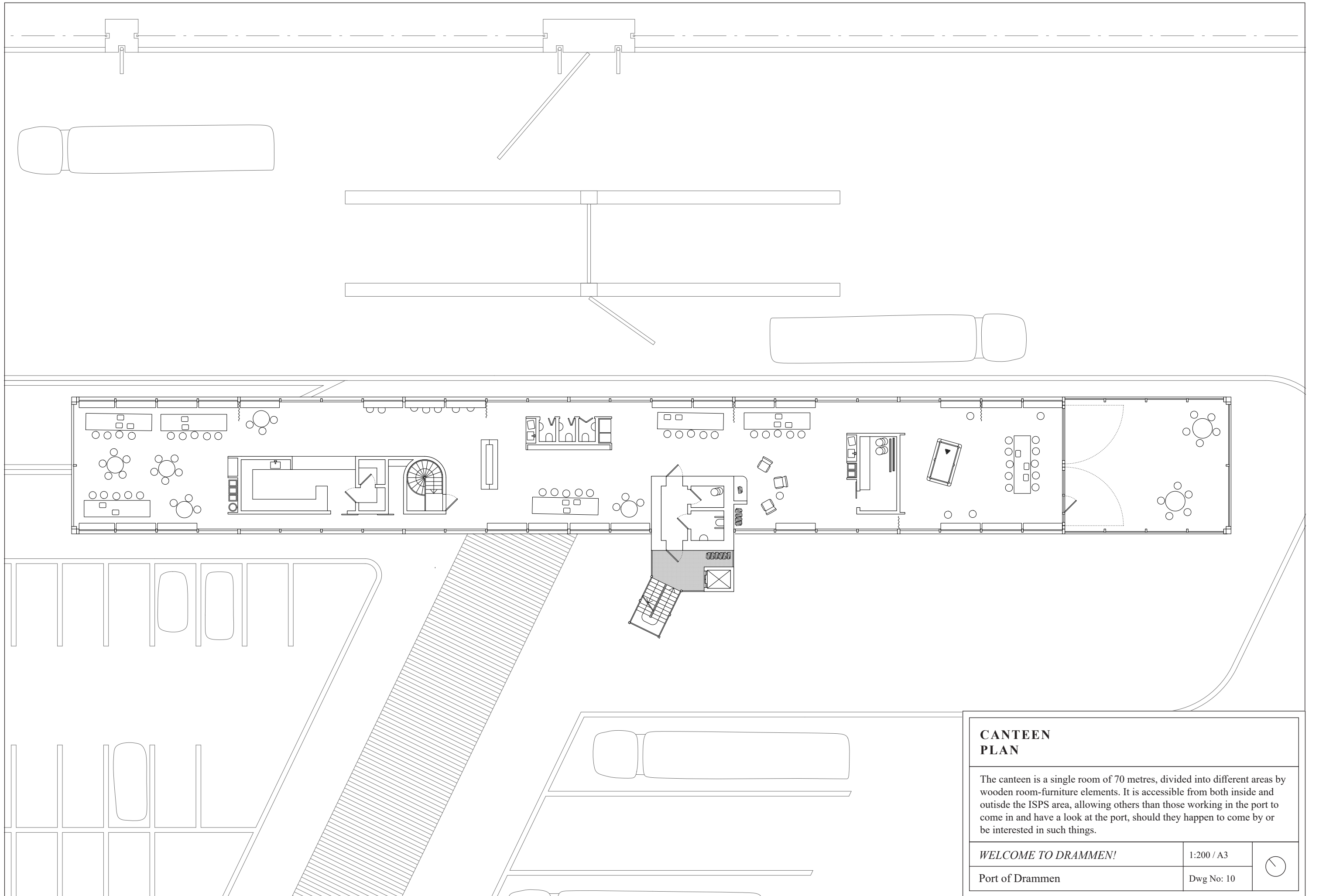


GROUND LEVEL PLAN

The one-storey volume contains the guard house and new offices of the Port Authority. Outside, the asphalt remains a single surface, with lines painted in different colours marking the zones intended for different users - driving surfaces, waiting pockets, a truck turning circle, and a pedestrian and bicycle path leading to the main entry.

<i>WELCOME TO DRAMMEN!</i>	1:400 / A3	⌚
Port of Drammen	Dwg No: 8	

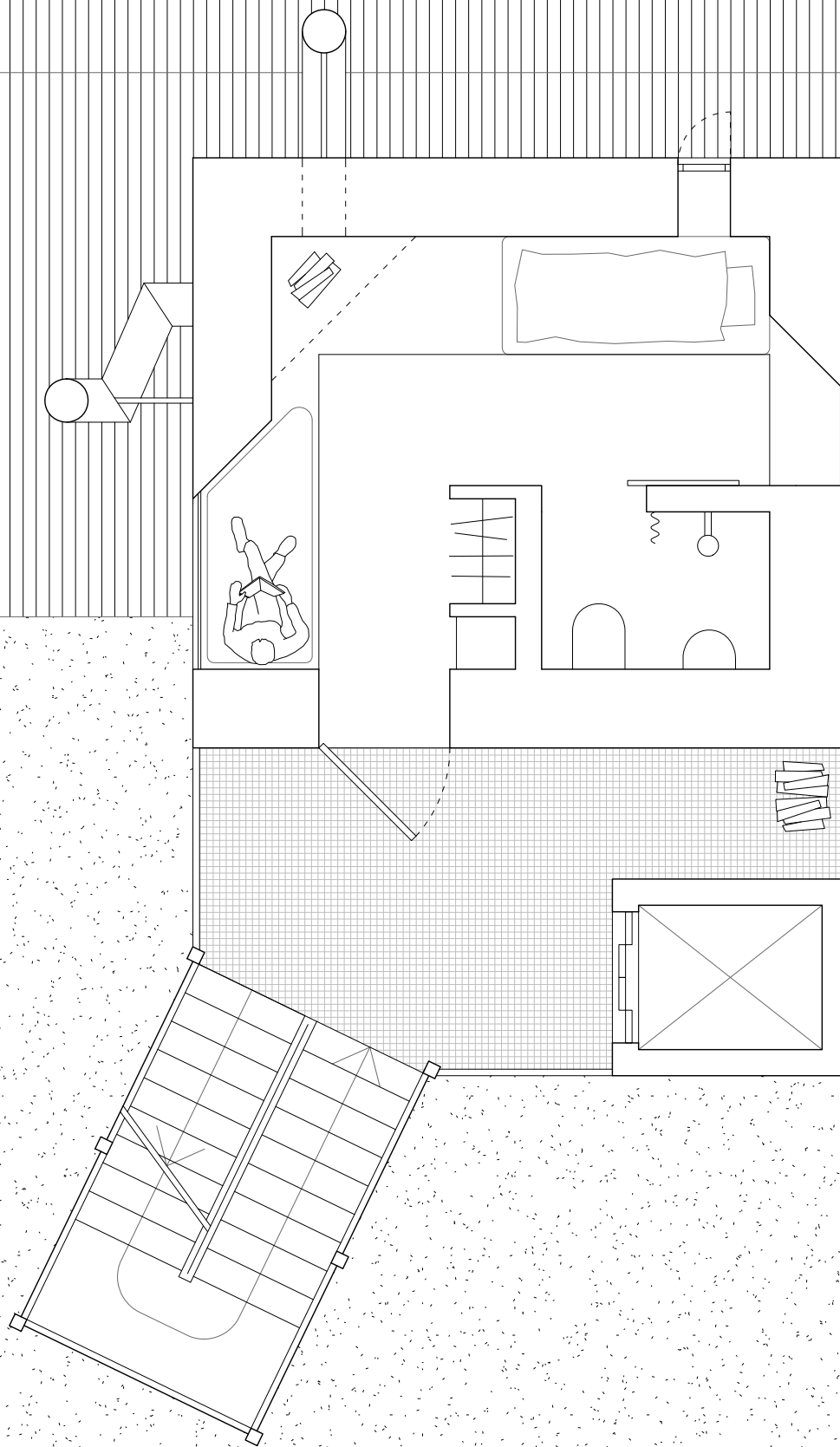




**CANTEEN
PLAN**

The canteen is a single room of 70 metres, divided into different areas by wooden room-furniture elements. It is accessible from both inside and outside the ISPS area, allowing others than those working in the port to come in and have a look at the port, should they happen to come by or be interested in such things.

<i>WELCOME TO DRAMMEN!</i>	1:200 / A3	⌚
Port of Drammen	Dwg No: 10	



BEDROOM FOR TRUCK DRIVERS PLAN

The bedrooms contain only the most basic necessities - a bed, a bench and a fireplace, all one surface, as well as storage and a small bathroom. Outside, every room has a small landing, perfect for a late-night cigarette or some fresh air.

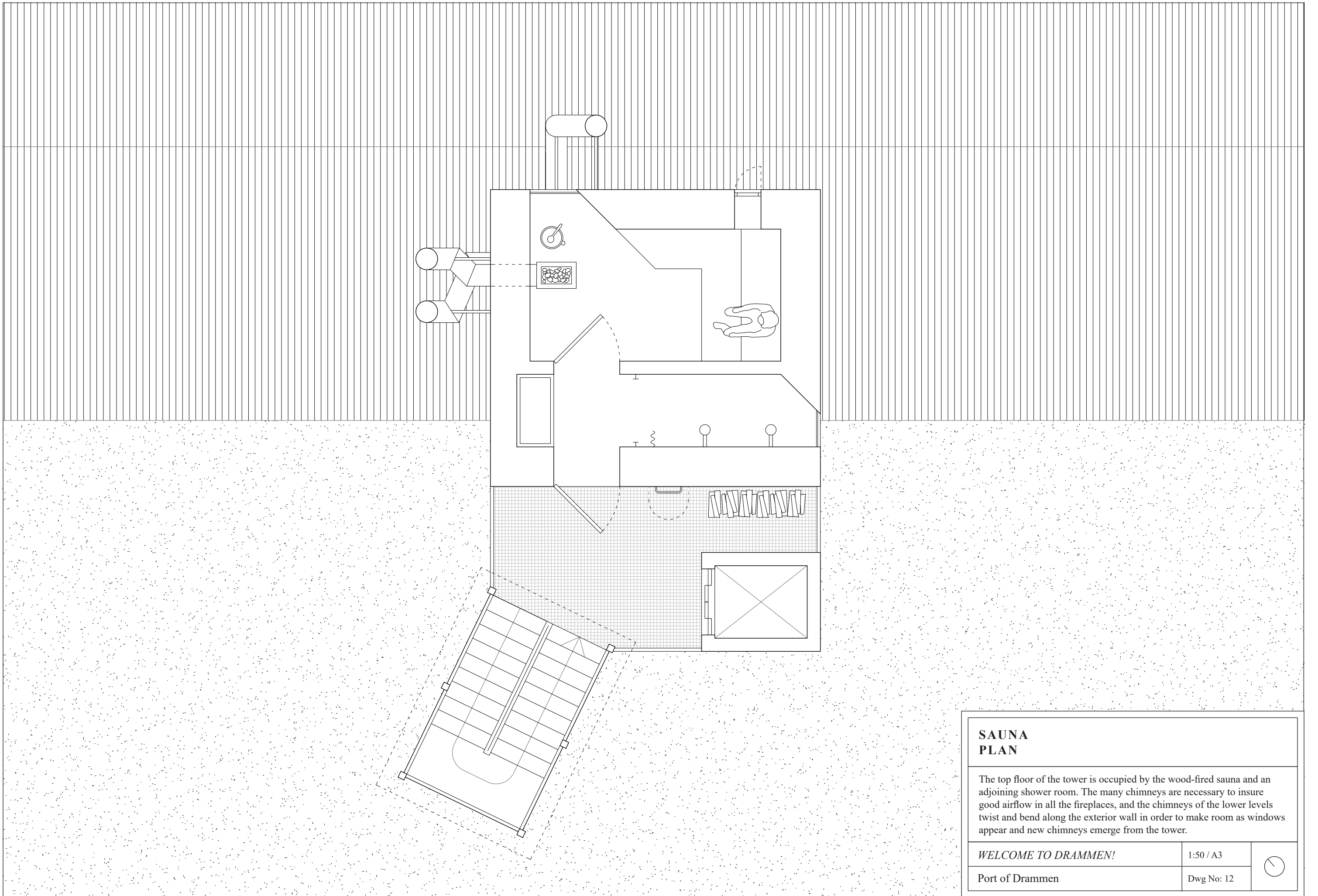
WELCOME TO DRAMMEN!

1:50 / A3

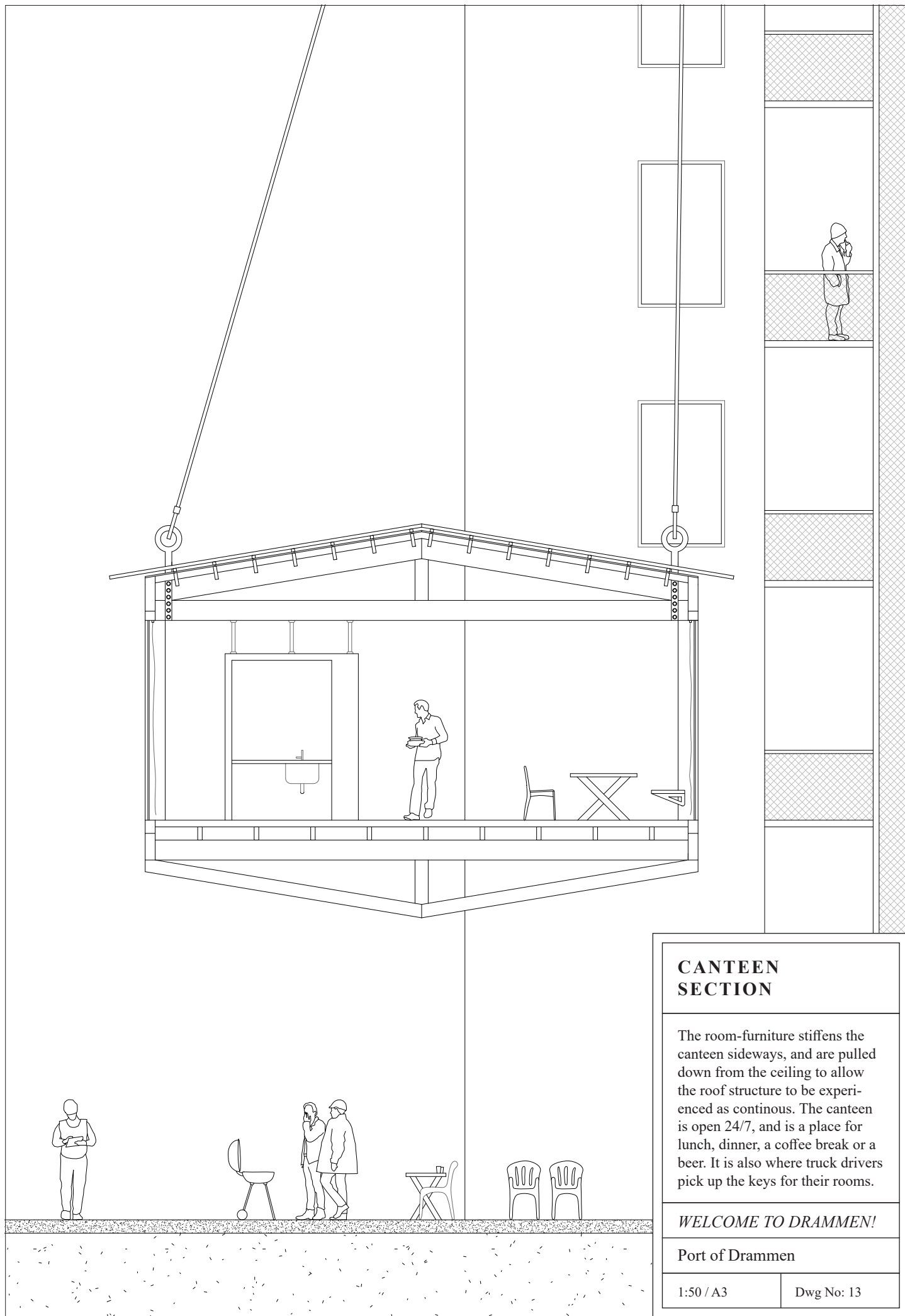
Port of Drammen

Dwg No: 11





SAUNA PLAN		
The top floor of the tower is occupied by the wood-fired sauna and an adjoining shower room. The many chimneys are necessary to insure good airflow in all the fireplaces, and the chimneys of the lower levels twist and bend along the exterior wall in order to make room as windows appear and new chimneys emerge from the tower.		
<i>WELCOME TO DRAMMEN!</i>	1:50 / A3	⊙
Port of Drammen	Dwg No: 12	



CANTEEN SECTION

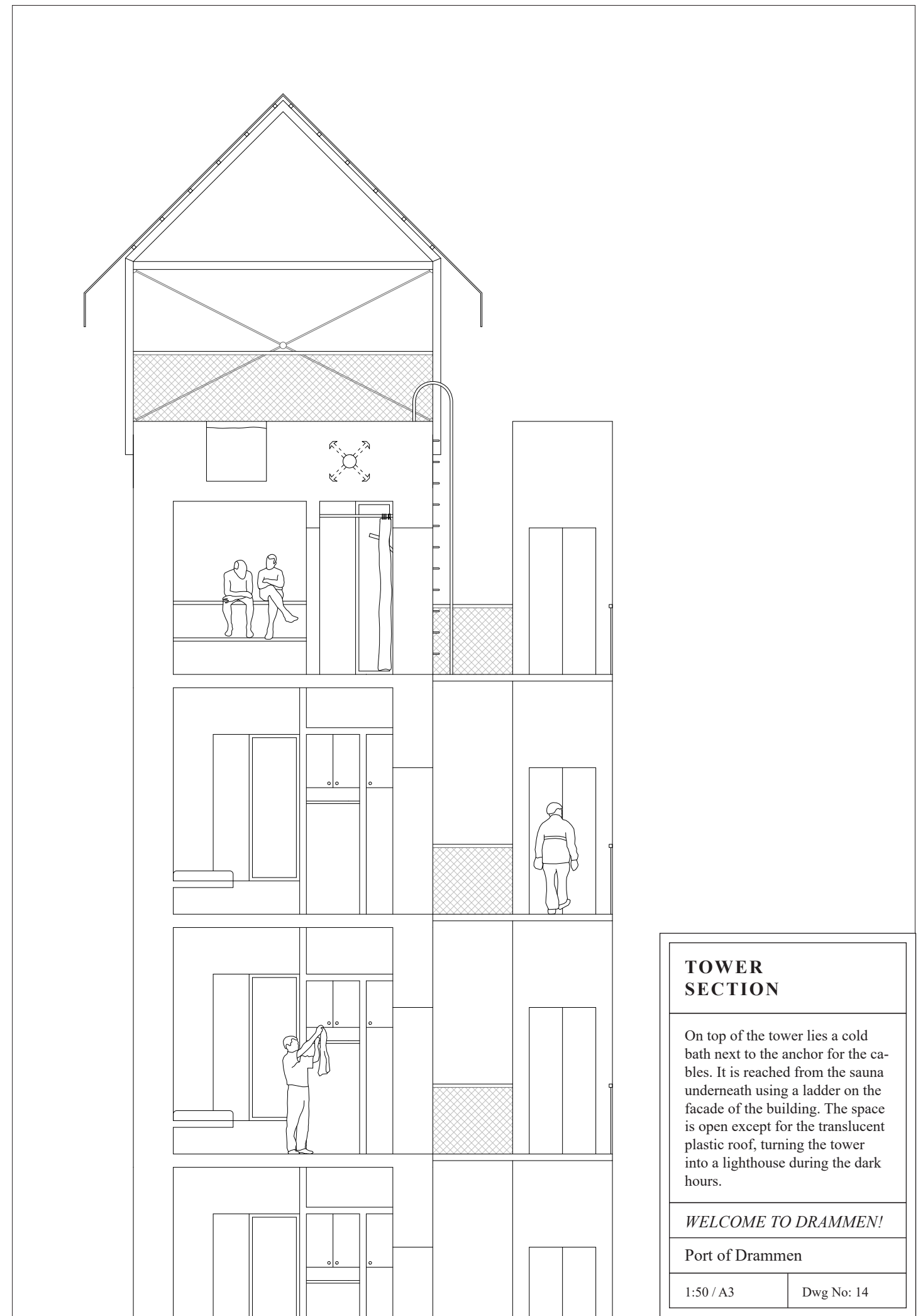
The room-furniture stiffens the canteen sideways, and are pulled down from the ceiling to allow the roof structure to be experienced as continuous. The canteen is open 24/7, and is a place for lunch, dinner, a coffee break or a beer. It is also where truck drivers pick up the keys for their rooms.

WELCOME TO DRAMMEN!

Port of Drammen

1:50 / A3

Dwg No: 13



TOWER SECTION

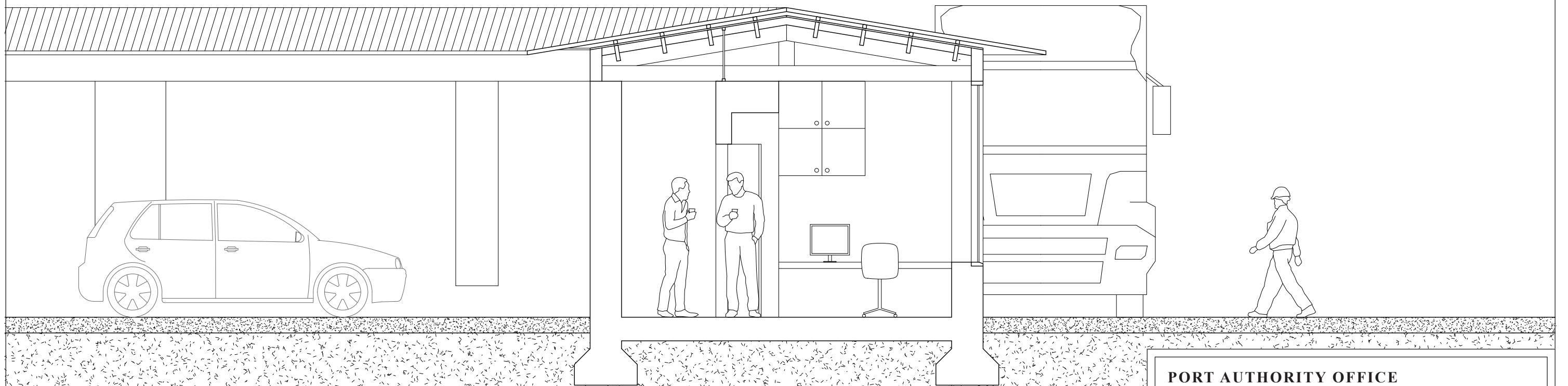
On top of the tower lies a cold bath next to the anchor for the cables. It is reached from the sauna underneath using a ladder on the facade of the building. The space is open except for the translucent plastic roof, turning the tower into a lighthouse during the dark hours.

WELCOME TO DRAMMEN!

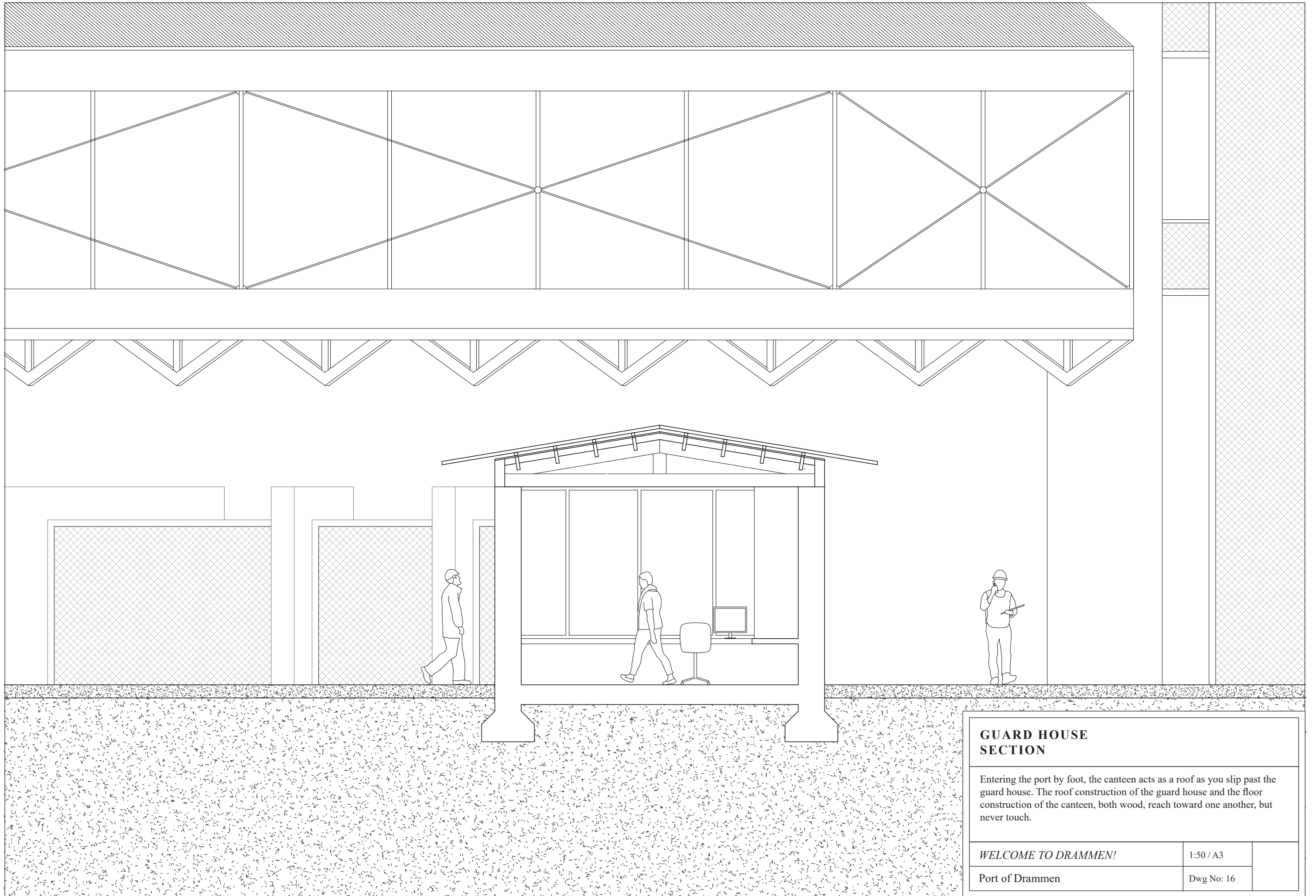
Port of Drammen

1:50 / A3

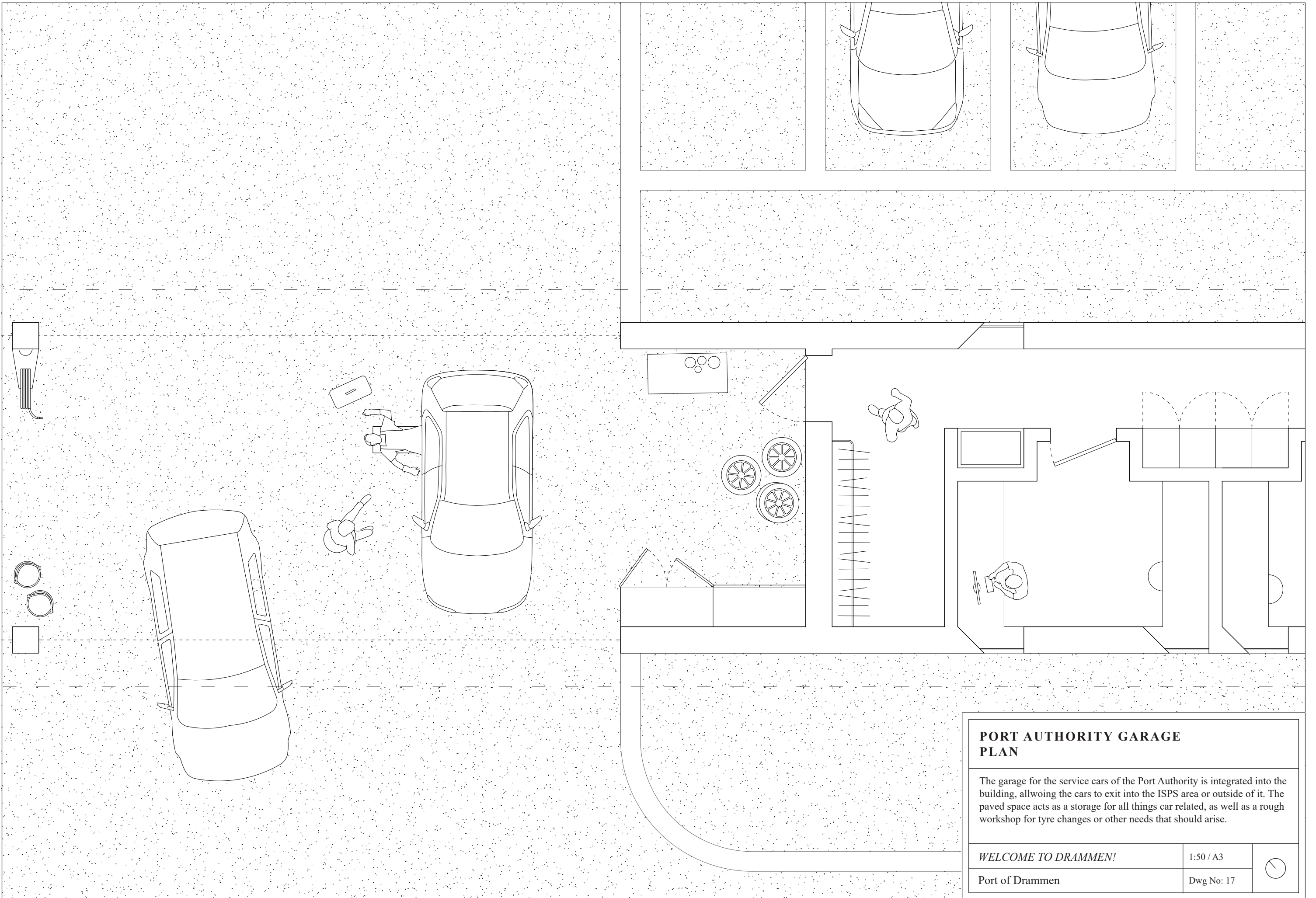
Dwg No: 14



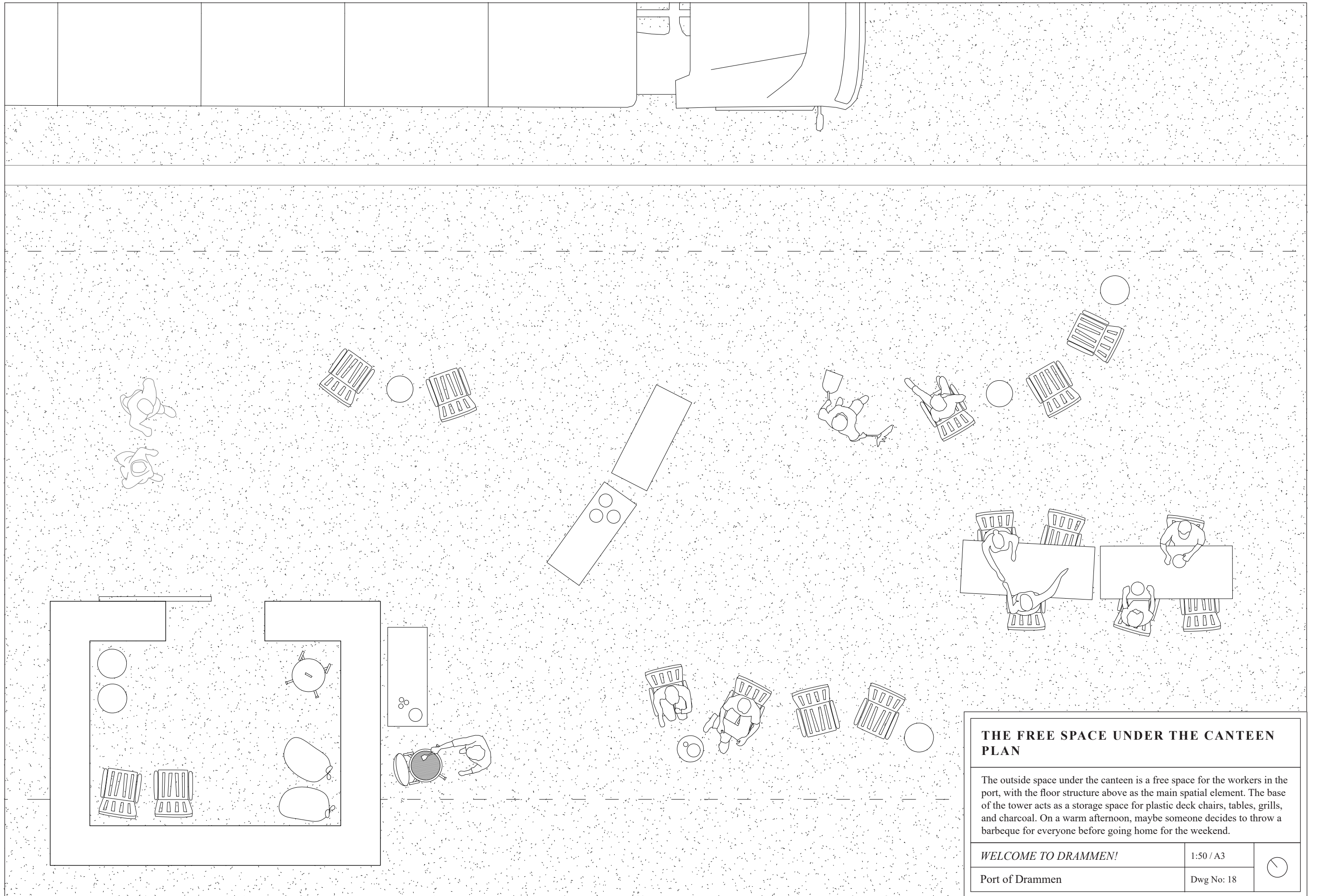
PORT AUTHORITY OFFICE SECTION		
The office building, along with the guard house, is the physical manifestation of the ISPS border in the project. It corresponds in height to the trucks which are parked right behind it and hides them, underlining its contribution to maintaining a certain secrecy regarding what goes on inside to those on the outside.		
<i>WELCOME TO DRAMMEN!</i>	1:50 / A3	
Port of Drammen	Dwg No: 15	



GUARD HOUSE SECTION	
Entering the port by foot, the canteen acts as a roof as you slip past the guard house. The roof construction of the guard house and the floor construction of the canteen, both wood, reach toward one another, but never touch.	
<i>WELCOME TO DRAMMEN!</i>	1:50 / A3
Port of Drammen	Dwg No: 16



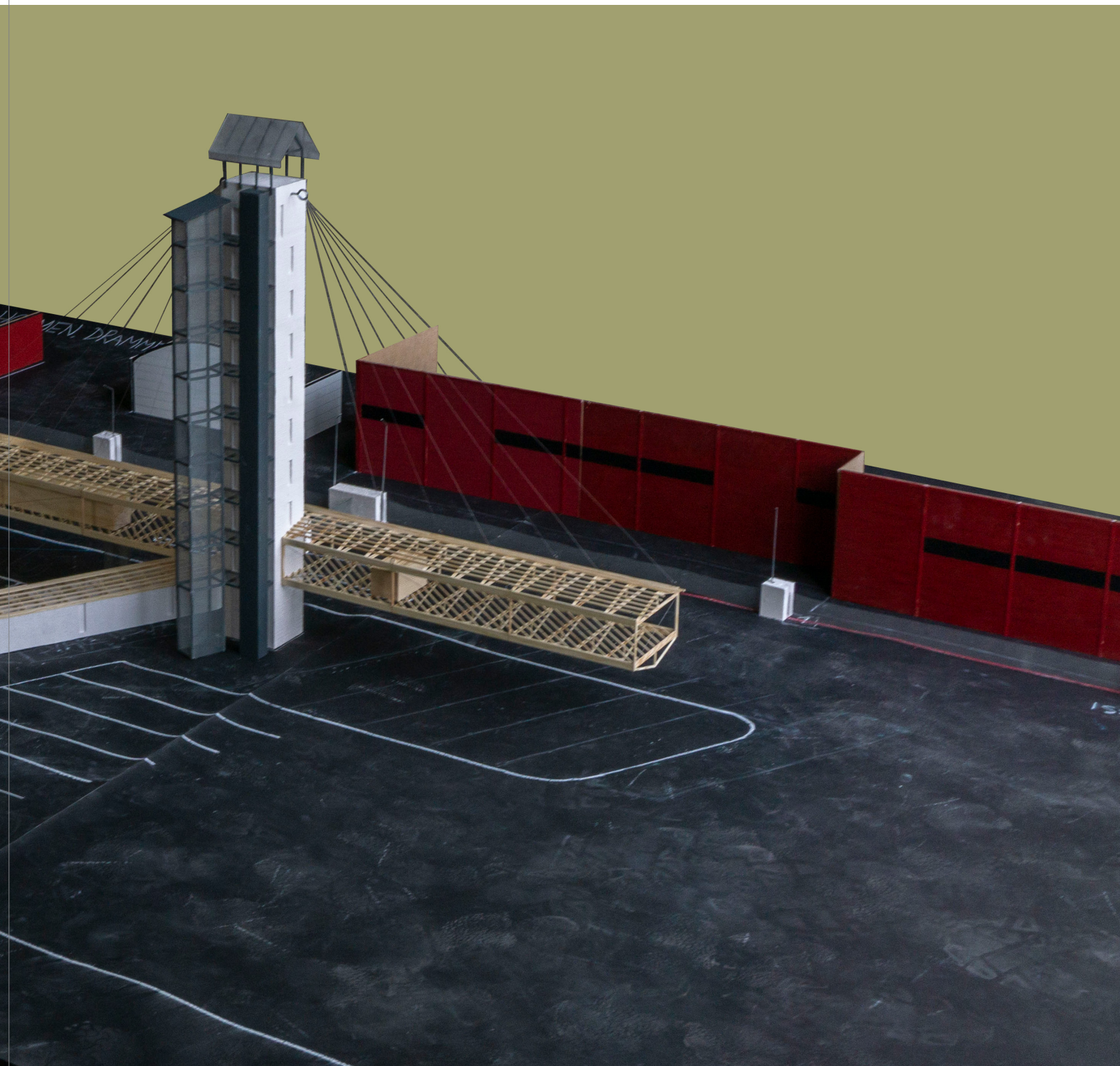
PORT AUTHORITY GARAGE PLAN		
The garage for the service cars of the Port Authority is integrated into the building, allowing the cars to exit into the ISPS area or outside of it. The paved space acts as a storage for all things car related, as well as a rough workshop for tyre changes or other needs that should arise.		
<i>WELCOME TO DRAMMEN!</i>	1:50 / A3	⌚
Port of Drammen	Dwg No: 17	



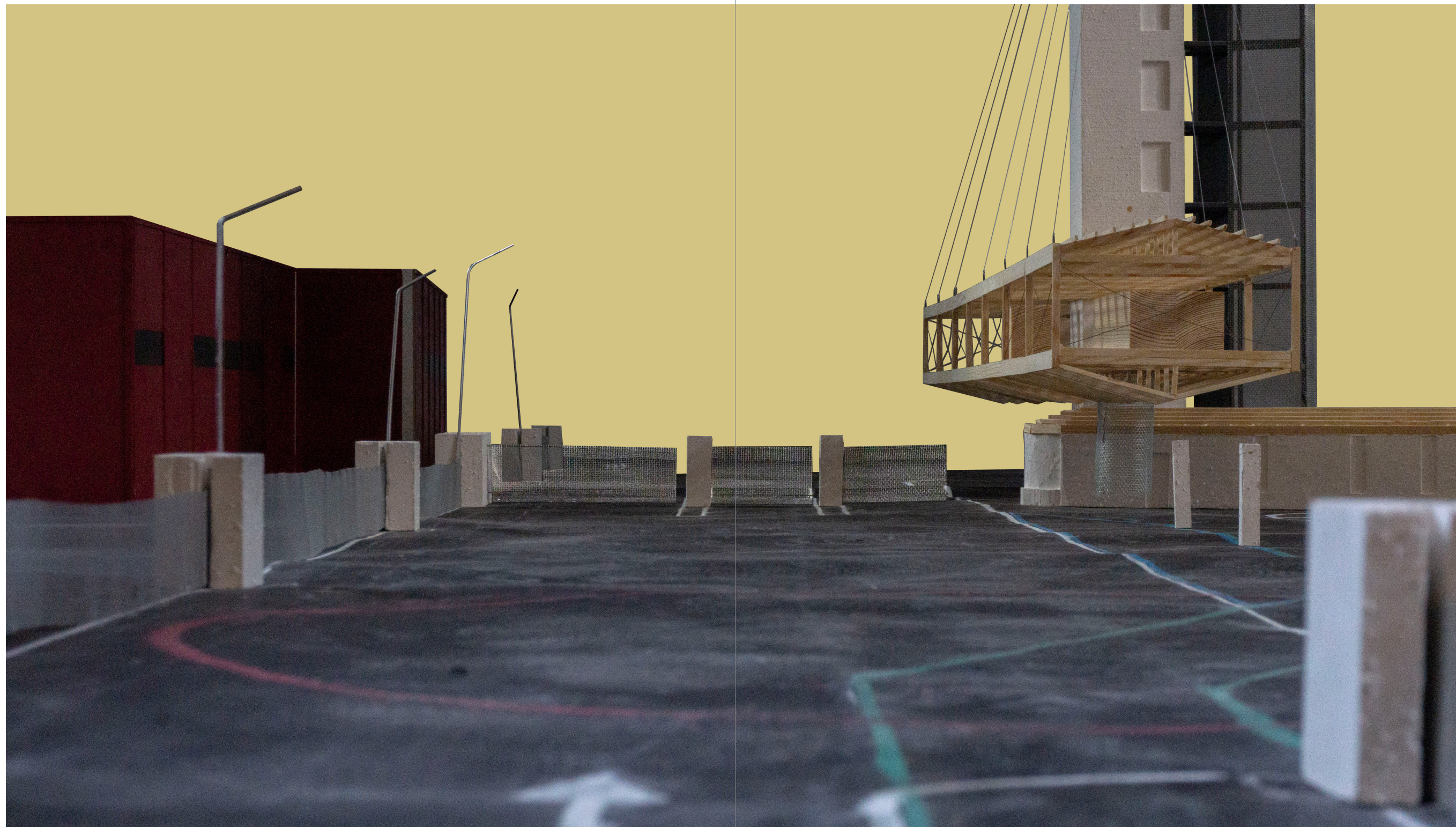
THE FREE SPACE UNDER THE CANTEEN PLAN		
The outside space under the canteen is a free space for the workers in the port, with the floor structure above as the main spatial element. The base of the tower acts as a storage space for plastic deck chairs, tables, grills, and charcoal. On a warm afternoon, maybe someone decides to throw a barbeque for everyone before going home for the weekend.		
<i>WELCOME TO DRAMMEN!</i>	1:50 / A3	⌚
Port of Drammen	Dwg No: 18	

CHAPTER III

SELECETED MODEL PHOTOS,
COLLAGES, AND OIL PASTEL
DRAWINGS



Behind the office and guard house lies the parking for truck drivers who have booked a room in the tower. Model 1:50.



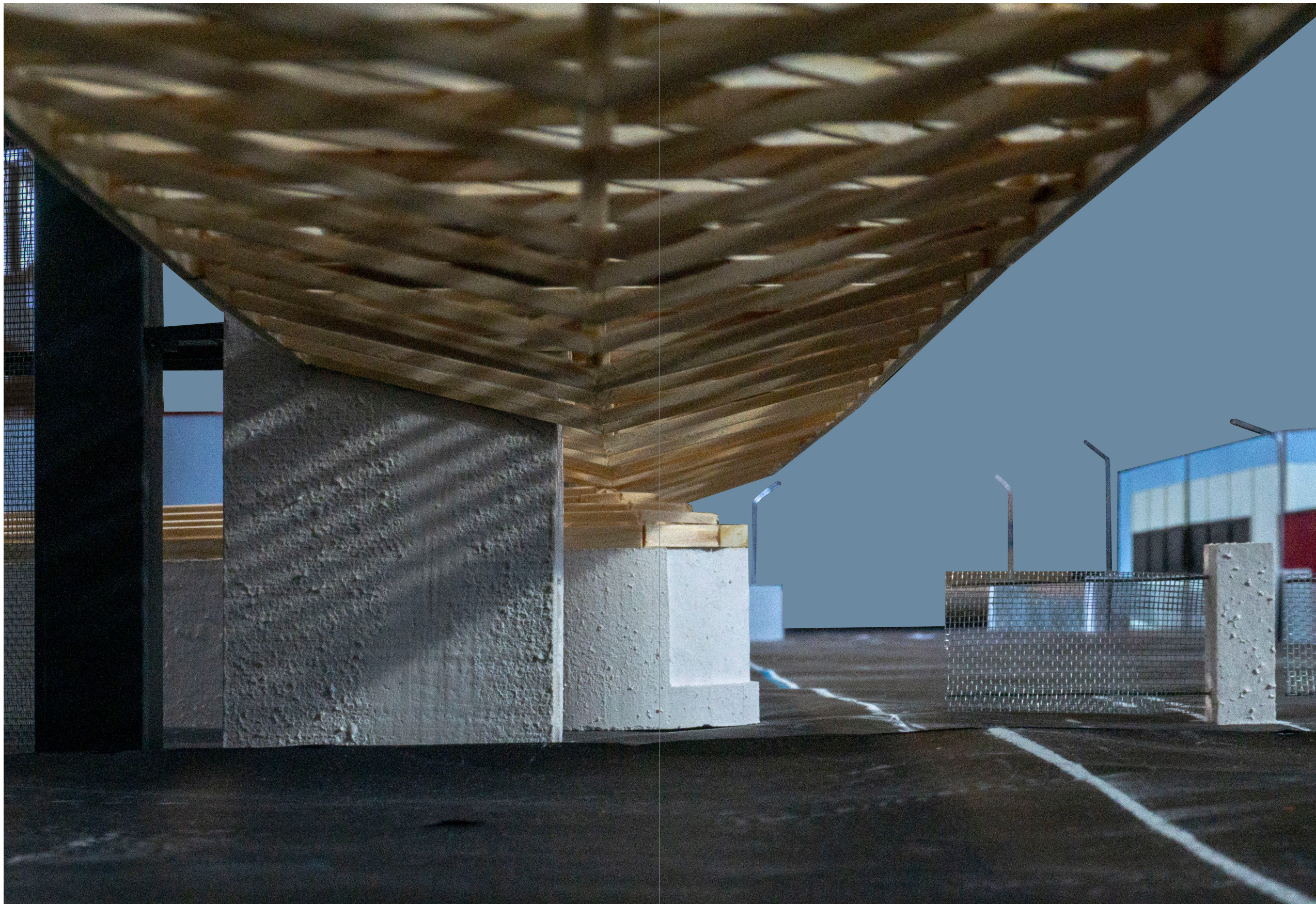
The canteen follows the axis of the access road which ends in the new gates to the ISPS area.



Outside the ISPS the canteen creates a covered entrance to the guard house, and a spiral staircase gives access to the canteen.



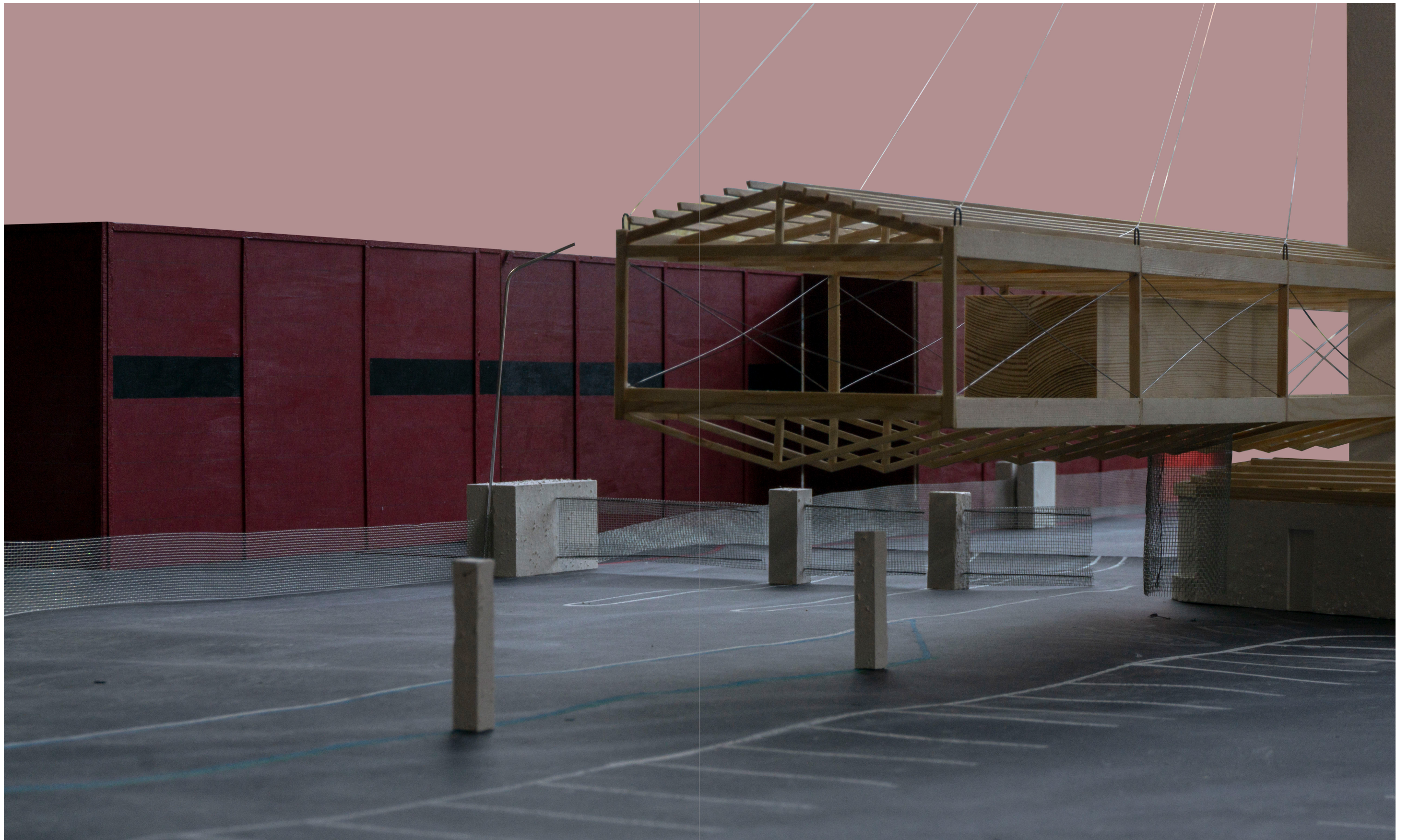
The concrete blocks of the fence have the same height as the concrete of the guard house and office, and double as lamp posts.



The free space underneath the canteen is a large, covered, unprogrammed area with good sun conditions.



The tower rises among its lower neighbours and communicates permanence and importance.

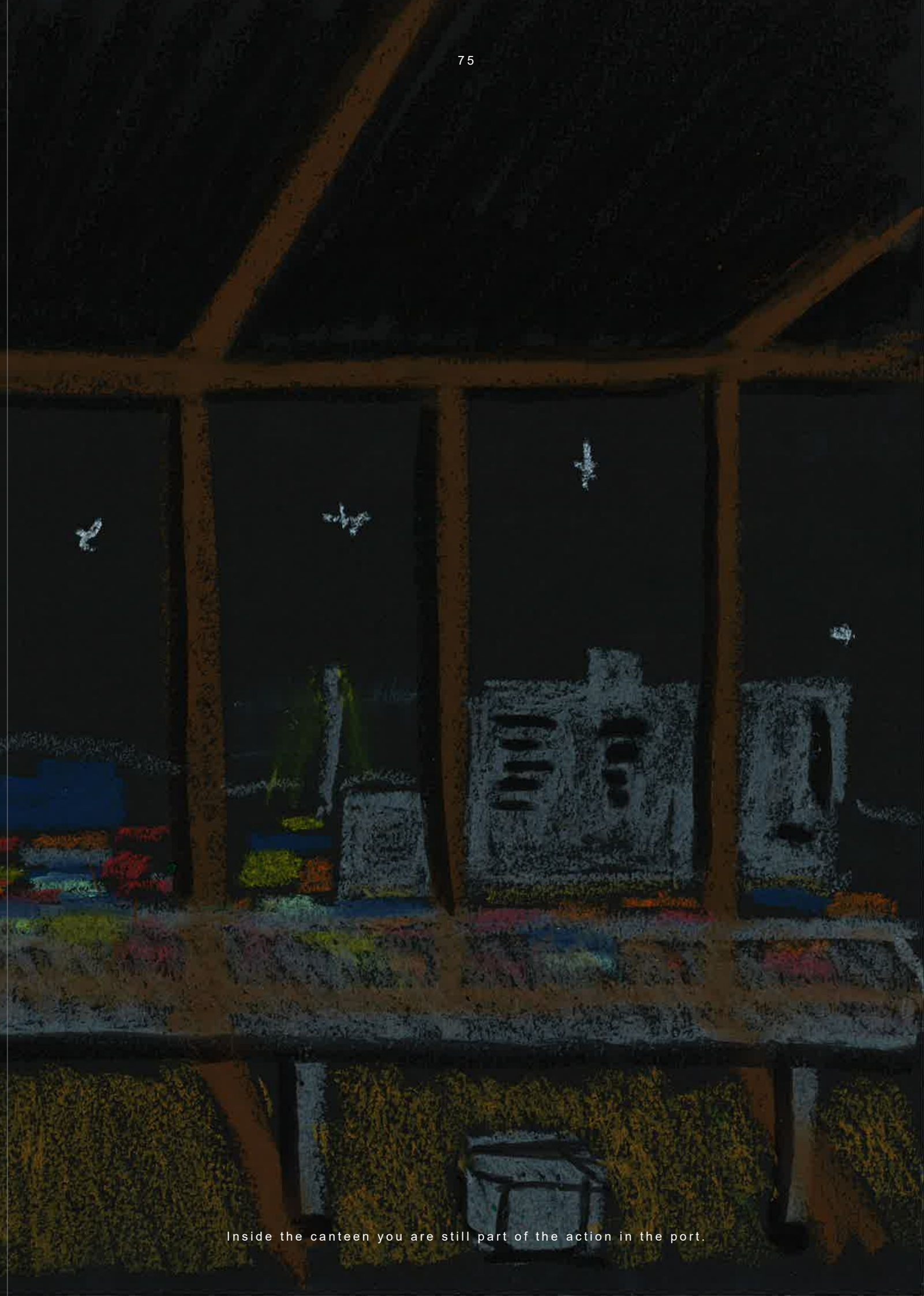


Two fuel pumps stand in a waiting pocket in front of the gates, as a replacement for the gas station which is disappearing when Holmen is expanded.

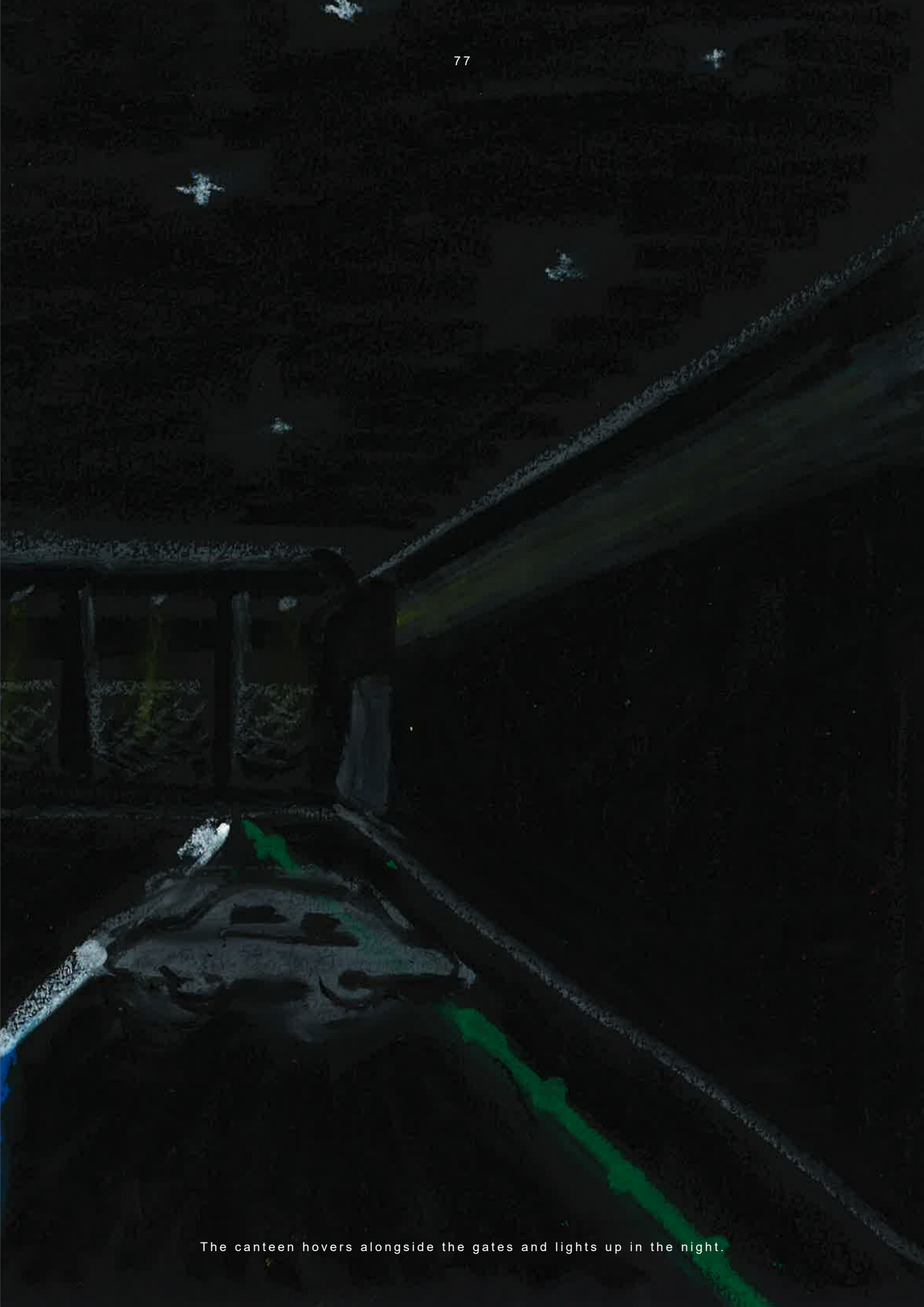




All the bedrooms have a fireplace and look out on the port and the city.



Inside the canteen you are still part of the action in the port.



The canteen hovers alongside the gates and lights up in the night.



Traffic comes in around the clock, and the guard house is manned all night long.



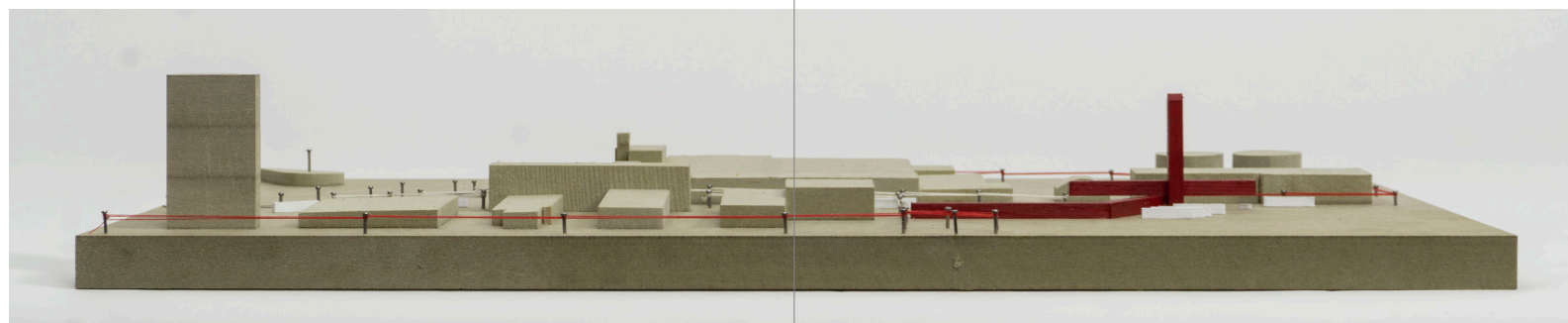
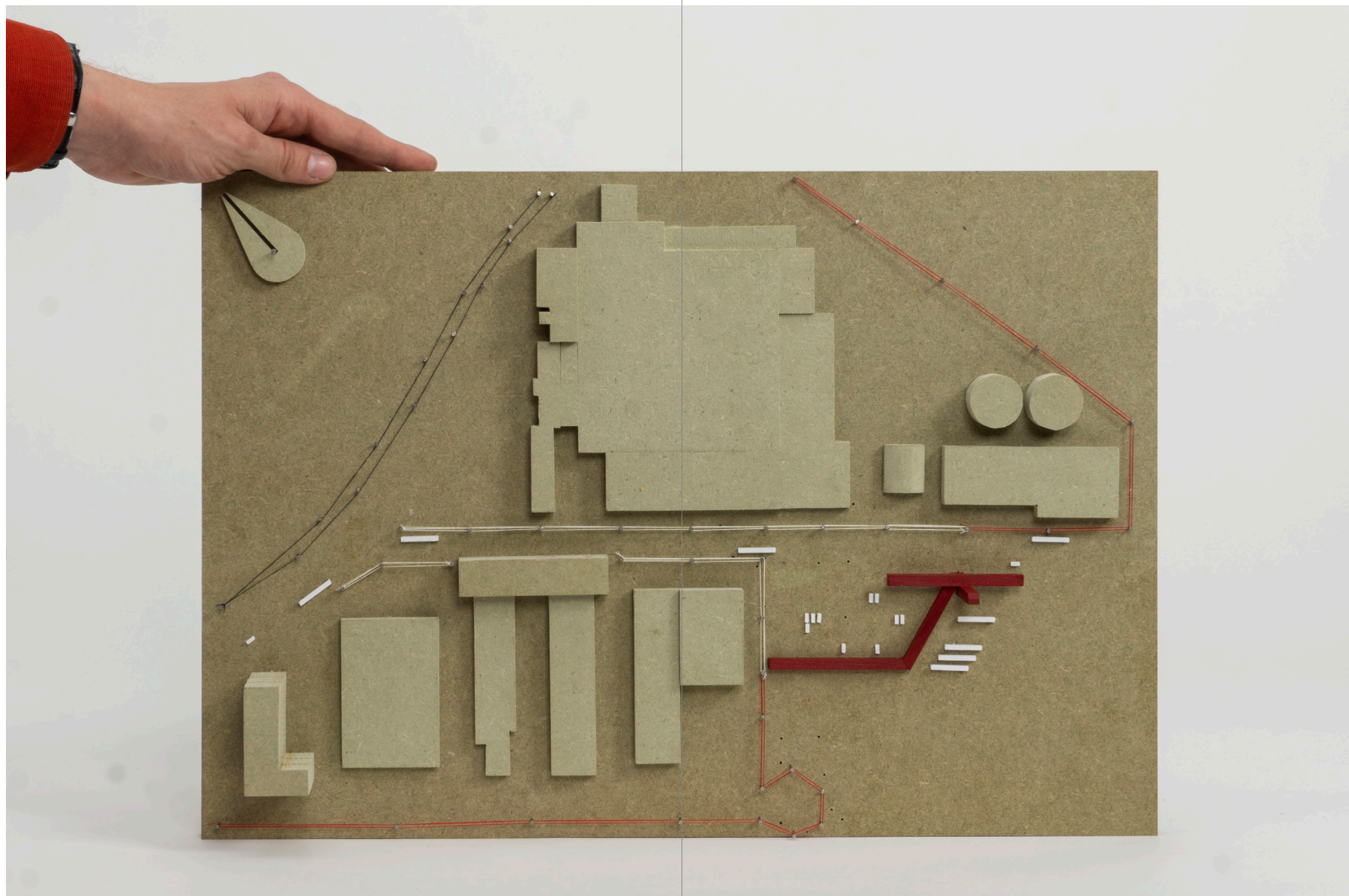
The fence posts, gates, and fuel pumps - all variations over the same theme, and related to the office and guard house. Model 1:50.



The canteen is a suspended structure, and the staircase which never touches the ground highlights its floating nature. Model 1:50.



The room-furniture of the canteen is pulled back from the exterior glass walls and placed to allow long sight lines. Model 1:50.



The axuality of the project is clearly visible in the situation model, 1:1000.



During the afternoon rush hour the main gate and canteen is a busy place.



The 24/7 nature of the main gate means that the canteen is also kept open all night, ensuring it's always possible to get a cup of coffee.



**HAVNE-
KROA**

DAGENS 129,-
KAFFE 15,-

Happy Hour 18-20

Nøkler fås i baren

The canteen is a laid-back place where it's possible both to buy food or bring your own, like these guys did.



The many chimneys on the tower become a sculptural element which nods to similar ventilation pipes found on the silo at Holmen.



The roof structure of the office is related to the structure of the canteen, and lands on a concrete base.



The concrete of the walls is used to create the furniture which is needed in the bedrooms.



The same principle is used in the office and guard house, which are both organised by a long, narrow corridor on one side of the building.

ACKNOWLEDGEMENTS

Thank you to

my supervisor Lone Sjøli for inspiring and helpful discussions throughout the semester,

Dagur Eggertsson and Kristine Kragset, external critics at the midterm reviews,

the workshop staff at AHO for brainstorming sessions and invaluable help with model making,

the school engineer Audun Fossum for help with constructive questions,

Ivar Vannebo at the Port of Drammen for meeting with me, showing me around inside the ISPS, and giving me insights into the workings of the port,

friends and family.

LITERATURE + REFERENCES

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ILLUSTRATIONS

Satellite image on page 15 is collected from <https://satellites.pro>, 09.02.2023.

All other images, illustrations, and drawings are by the author.

