

Mobile Heritage: Preserving Architecture on the Move

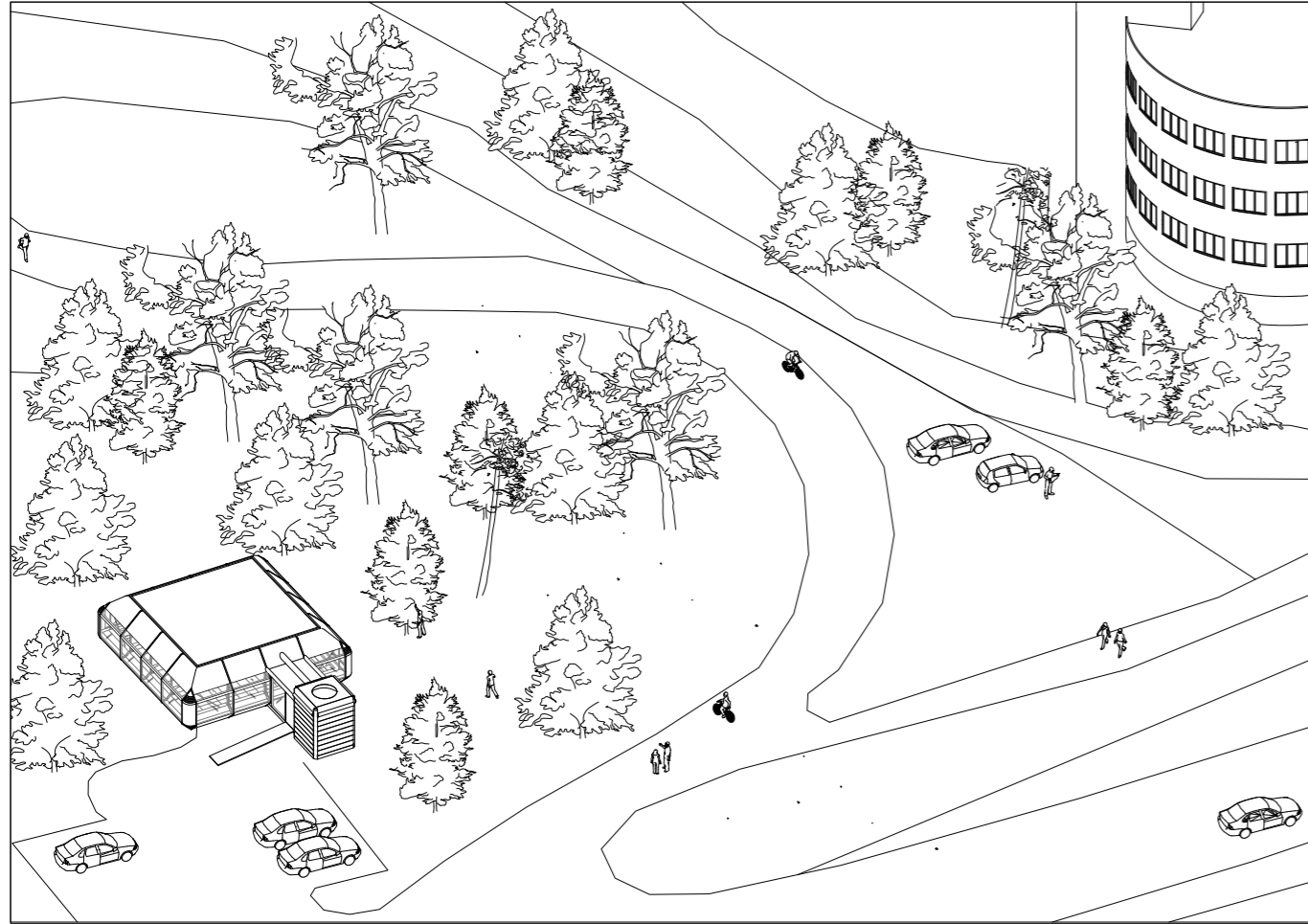
BINDER 1: A BRIEF INTRODUCTION TO THE DIPLOMA PROJECT

By Tora Lie Brunborg, 2022

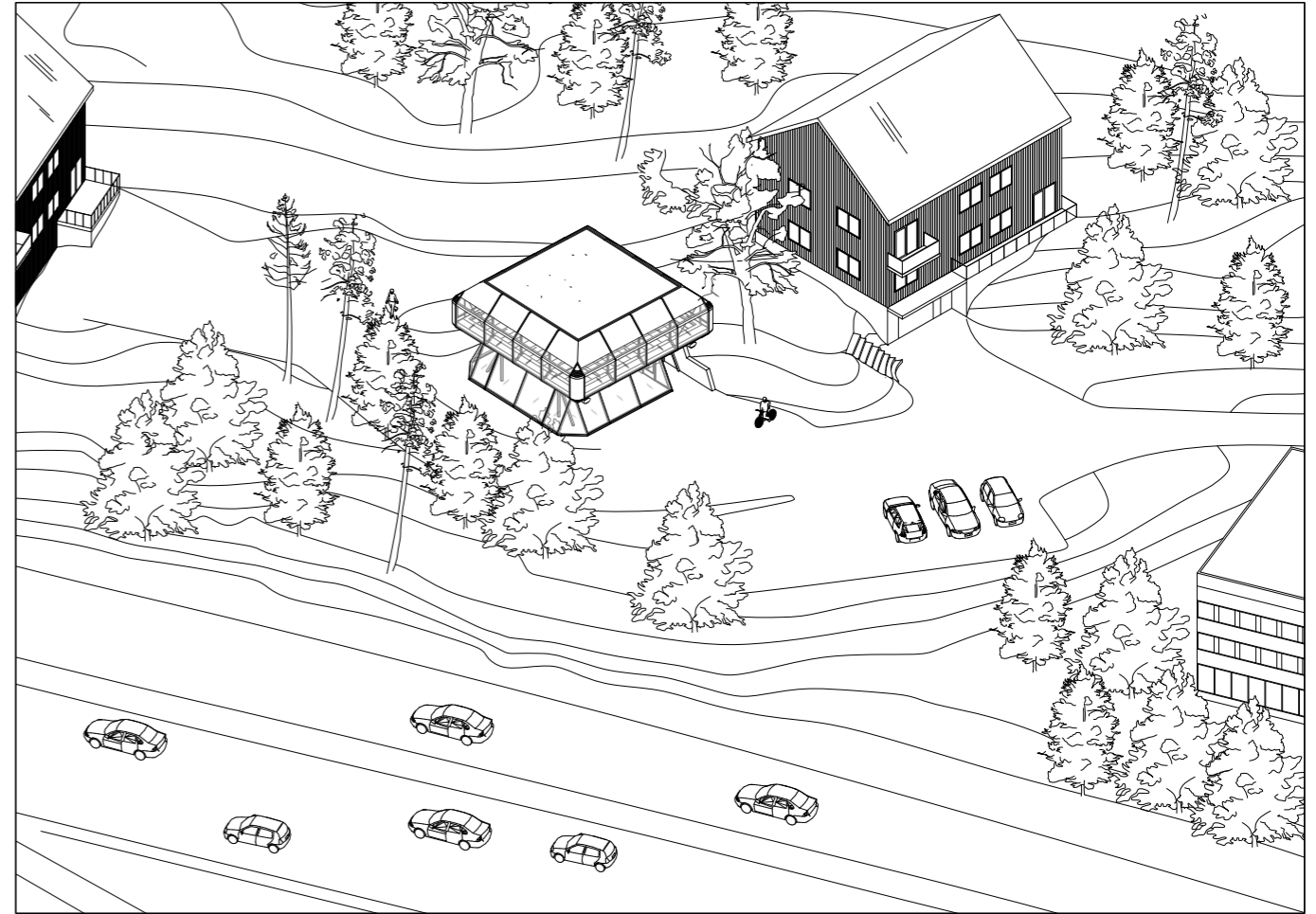


I sakte fart beveget Njål R. Eides arkitektkontor seg i natt fra Drammensveien 312 på Lysaker til sin nye tomt i det gamle Lysaker-krysset.

(Foto: Anita Østereng)



The Office Pavilion as it appeared in
Gamle Drammensveien 312,
1978-1990



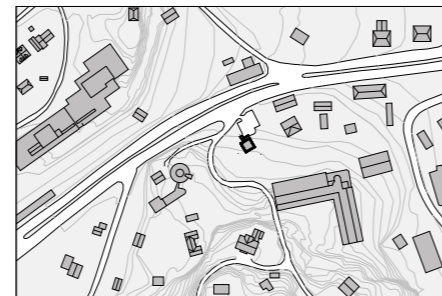
The Office Pavilion as it appears in
Arnstein Arnebergsvei 31,
1990-2023

From Drammensveien 312 to Arnstein Arnebergvei 31

Som en flyvende tallerken i sakte film letter romfartskontoret til Njål R. Eide fra sin plass på Drammensveien 312 på Lysaker sentrum halv ett i natt. Noen timer senere var det på plass på sine søyler på fjellknausen i det gamle fornebu-krysset.

Asker og Bærums budstikke 7. July, 1990.

Around midnight, a Tuesday in July 1990, a 107 square meter silver box of steel, aluminum, and glass, colloquially called the UFO, took off to a new destination, blocking the E18 Highway in the process. A service module was disconnected before the 10-ton building was lifted by a crane and onto a truck. Three hours later and 700 meters down the road, it landed on its new foundation, referred to by the architect Njål R. Eide as a "glass pyramid." Every square centimeter of the highway was used to the fullest, as workers from the road service even had to twist a sign for the building to pass. The spectacular event was extensively documented, with journalists referring to it as something out of a science fiction movie.



Top: Before Lysakerlokket

Bottom: After Lysakerlokket

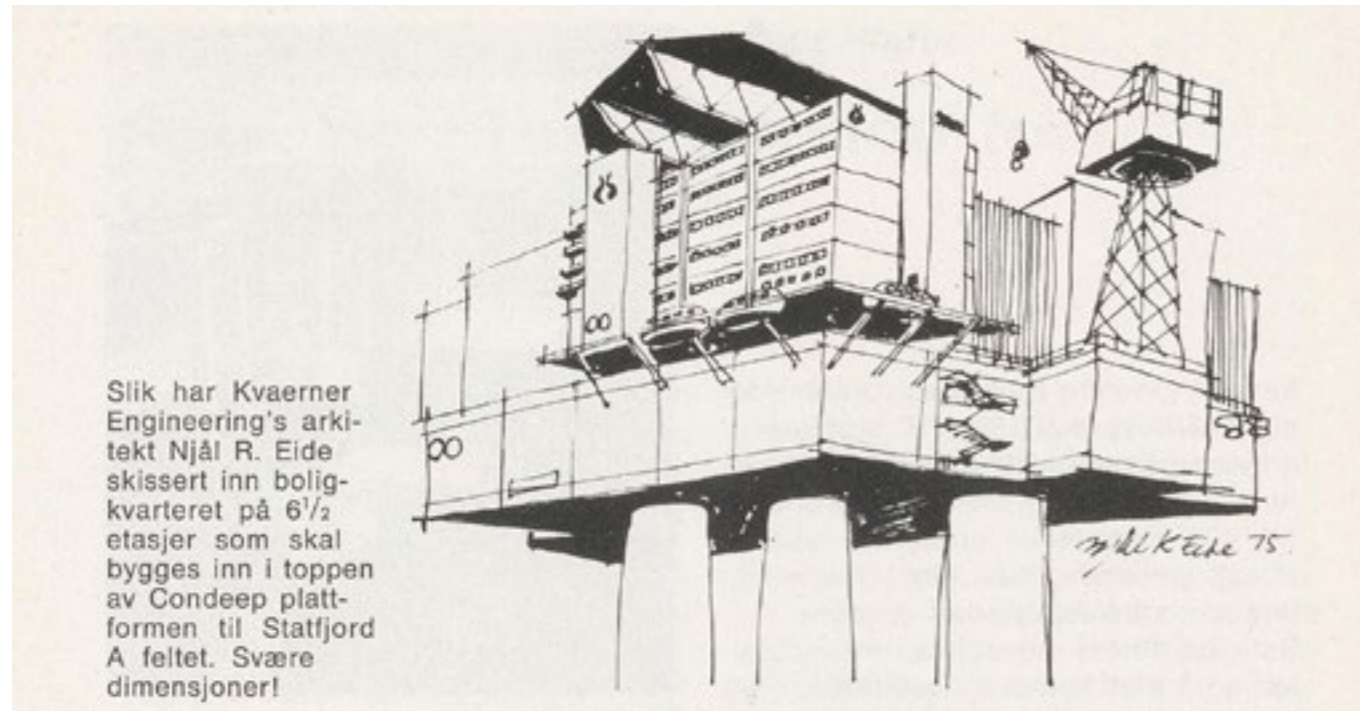


Over and under: Asker og Bærums budstikke, Tuesday 10. juli 1990



Because of the development of *Lysakerlokket*, a large-scale infrastructural project, Njål R. Eide's eye-catching architectural office was forced to move elsewhere. Eide was by no means averse to this. Ten years earlier, he was the first to propose this urban intervention of separating pedestrians and cars, a proposition that would require his office to move.

Eide initiated the pavilion in 1978 as a prototype for large modular buildings for his two primary sectors of operation: cruise ships and oil platforms. An optimistic belief in a future where technology and mass fabrication played an important role was incorporated into the design. Everything, down to the size of the components, was designed with movement in mind. The office pavilion rested on four concrete pillars, 60 cm above ground, on leased land. It had a 25-square-meter service module connected to it, containing an entrance area, technical installations, and water. The office pavilion was built to move.



Kontakt med Kvaernerkonsernets bedrifter. 1975 Nr. 2



Song of America
Frå Skaugen 70 år i shipping: AS
Eikland 1916-1981 (1986)



Above:
The Office Pavilion as it appeared in
Gamle Drammensveien 312,
1978-1990

Right:
The Office Pavilion as it appears in
Arnstein Arnebergsvei 31,
1990-2023(?)



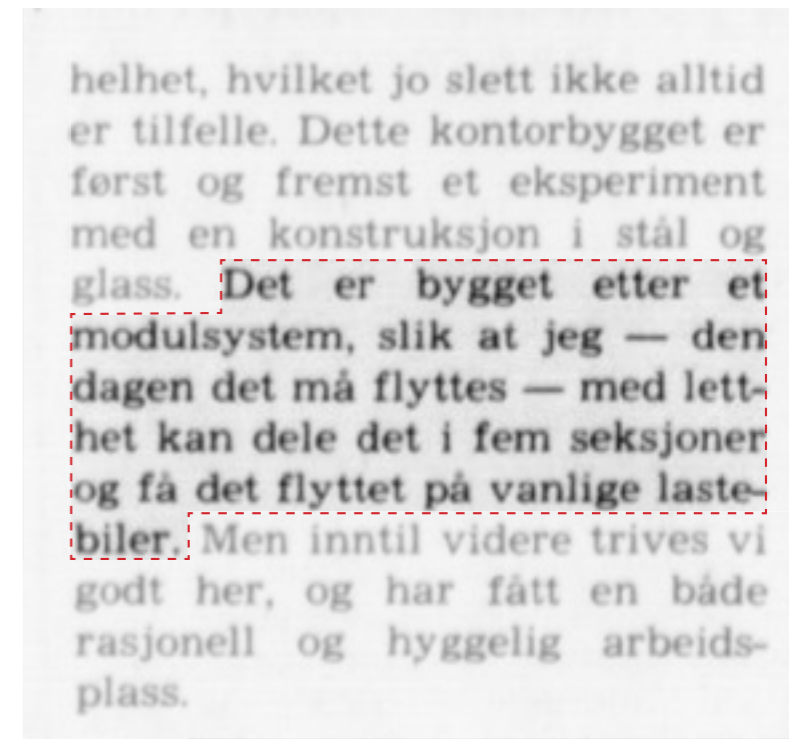
The unusual event on E18 more than 30 years ago is relevant for an architectural project today because the building in question is an unresolved issue – it currently lies vacant and derelict with no future plan. This poses problems from a climate perspective since society must now reuse more existing resources to achieve a higher level of sustainability. Secondly, as I will reveal through my diploma project, the building reflects a fascinating, multi-layered history. It is an heirloom from the recent past with a direct link to the oil industry and Norwegian cruise-ship design, two problematic fields which have shaped Norwegian society from the 1970s onwards. Furthermore, the diploma will show that Eide's project relates to the mobile architecture of the postwar period and work by architects and inventors such as Yona Friedman and Buckminster Fuller, devising a future based on space capsules, modules, pavilions, and entire cities of movable objects. The Norwegian pavilion's history as a preservation object on the move also connects it to heritage management, a field in which preserving by moving has been a recurring method since the ambitious attempts to save national treasures such as stave churches and other vernacular buildings in the 19th century, leading to open-air museums, with Folkemuseet, located in Bygdøy, Oslo, as one internationally prominent example.

Eide's portable office building is not a national icon but a style representative. If we are to nurture a holistic culture of reuse, more buildings from the recent past must be preserved and repurposed. According to the *United Nations Environment Programme's Global Status Report 2017*, in Europe, 80% of the buildings we will use in 2050 are already built. It is not newsworthy to claim that architects will have to engage more actively with existing building mass in the coming years. The paradox is that we also have a considerable building mass at risk of demolition, and the most vulnerable typology is the so-called generic mass-produced architecture from the post-war era. This thesis reveals that despite its alien look, the office pavilion is representative of this building typology.

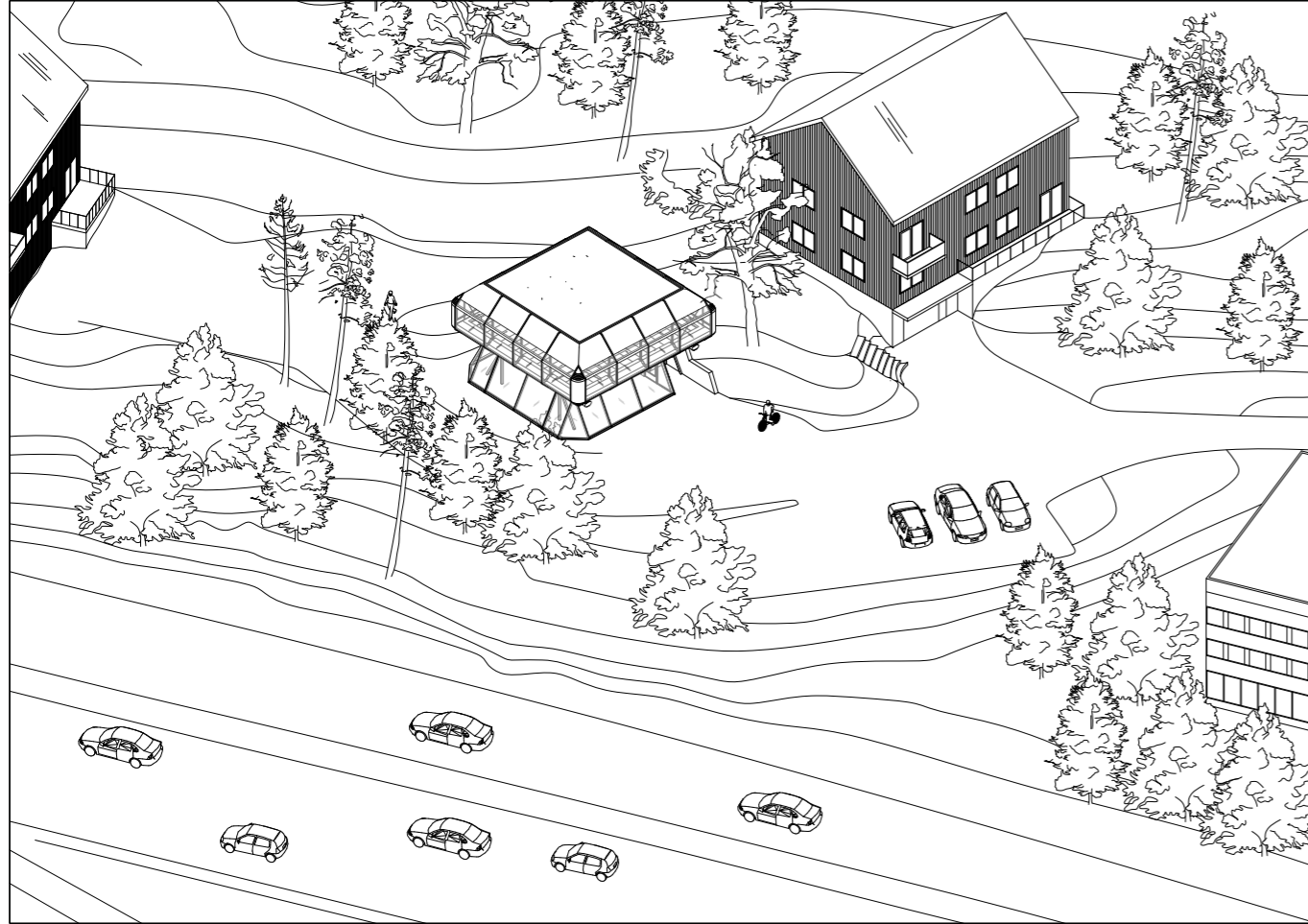


Asker og Bærums budstikke
1980.02.26, 1980

1. Quoted from the project description for the NFR-founded international research project *Provenance Projected: Architecture Past and Future in the Era of Circularity* by OCCAS (the Oslo Centre for Critical Studies in Architecture), 2022.



The main question asks how to restore, reuse, transform or dismantle this and similar structures. Such an undertaking requires thorough studies of such buildings, their construction systems, and materials to better understand their reuse potential. This is the aim of my diploma project, which proposes to move the office pavilion once again to explore its potential for survival and repurposing. Reactivating a concept of mobility as a source of architectural design and a preservation strategy, the project links the office pavilion to past ideas that might be as valid today as ever.



The Office Pavilion as it appears in
Arnstein Arnebergsvei 31,
1990-2023

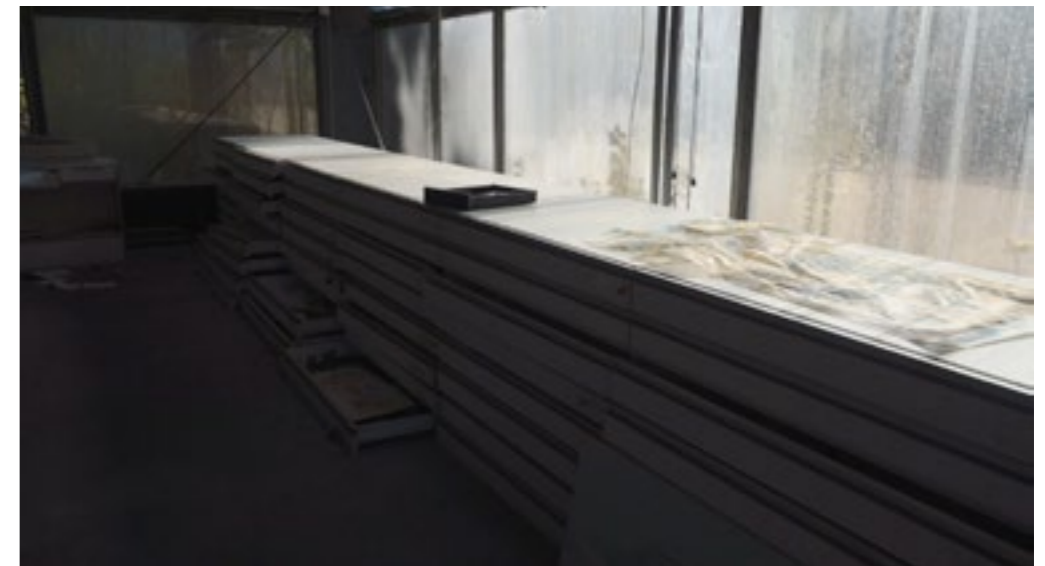


The Office Pavilion as it will appear in
Folkemuseet, Bygdøy
2023 -

From Arnstein Arnebergvei 31 to Folkemuseet

Today, the building appears as a futuristic ruin - dusty, dilapidated, with punctured windows and full of mold. Forty-four years have passed since its erection, thirty-two years since it was moved, and ten years since it was abandoned. Lysaker is yet again under development, and the building (together with Eide's archive) and all its surroundings are planned for demolition to make room for new buildings. The easy thing would be to destroy it and forget about it. So why shouldn't we?





The office pavilion can be argued to be both site-specific, national, and global, as it is unique for its specific site, but at the same time, part of a more significant technological development that took place in the 1970s and 80s as well as an earlier international style, based on modular housing and interchangeable components. The question isn't if it should be preserved, but rather what should be preserved and how.

When I started studying this building in its current situation, I was perplexed by the dissonance between the top and the bottom floor. Despite the contract in 1990 stating that the building could only stand in Arnstein Arnebergsvei 31 temporarily, the building received a new fundament/ground floor, which left it in a more permanent, less flexible state. The new floor broke all the rules of the original modular and flexible construction, maybe influenced by the idiom of the cruise-ship observation tower. Through my analysis, I have realized that they should be read as two separate and detachable buildings.

When buildings move, fundaments are left behind. When the office pavilion left Drammensveien in 1990, it left four fundament pillars and a service module. I argue that the top floor should once again be detached from its current fundament and continue its journey.

However, the original part (the top floor) is not independent. On its own, it has no use value – it is degraded to purely an aesthetic object – stripped of its function. Because of its extruded window profile, it is entirely contingent on some plug-in for us to even enter the building. And not to jeopardize the open space inside the building, every service function is always placed in the plug-in: kitchen, toilet, technical installations, and entrance area. This means that the use of the building in each new site determines how the plug-in should be formed.



The musician Arne Anderdal plays a song on his traditional hardingfele in front of the office pavilion.

My diploma project proposes moving the building to Folkemuseet as an ex-situ preservation tactic. This will emphasize its importance in Norwegian building practice and industry history and extend the museum's research to include buildings from the recent past. Aluminum, steel, and glass were becoming more advanced and available in a wider variety of forms in the 70s and 80s. I wish to shed light on the lack of knowledge about preserving these materials and buildings. How does one preserve a building that does not age "gracefully"? And as a museum is almost the definition of permanence, how can one incorporate a building which is intended to be temporary and interchangeable into a museum collection without ruining its essence?

Folkemuseet has reached total capacity. It is also protected as an open-air museum by the municipality, but with permission to change, add to or move most of the collection to achieve its development goal. The museum's strategic plan has an overall theme: "Norge i verden og verden i Norge" ("Norway in the world and the world in Norway"), which unfolds in three prioritized research areas:

- Dagliglivets utforming (The design of daily life)
- Problematisering av det norske (Problematizing Norwegian-ness)
- Fremveksten av det moderne Norge (The rise of modern Norway)

A collection that has reached full capacity combined with a desire for development are two opposing forces that compel Folkemuseet to challenge the traditional idea of it being a place lifted out of time. And if we look closer at the museum, things change and move around all the time. The last occurrence was in relation to the addition of three buildings from Finnmark in the north of Norway in 2019, which led the reshuffling of three buildings; two inside the museum and one demounted and placed in storage.²

The office pavilion will follow this circular notion of conservation. In the museum, the pavilion will be a part of the exhibition, with the possibility to enter it and experience how office life could have felt in the 1980s. It will also communicate part of a newer Norwegian history, including petroleum heritage. In addition, it will be a place to research the components, materials, and technical solutions - a study of how to prevent it from rusting, rotting, and falling apart. The building will follow a processual preservation tactic as opposed to ceasing time.

2. *Museumsbulletinen* nr. 90, 1/2019, Oslo, Norsk Folkemuseum

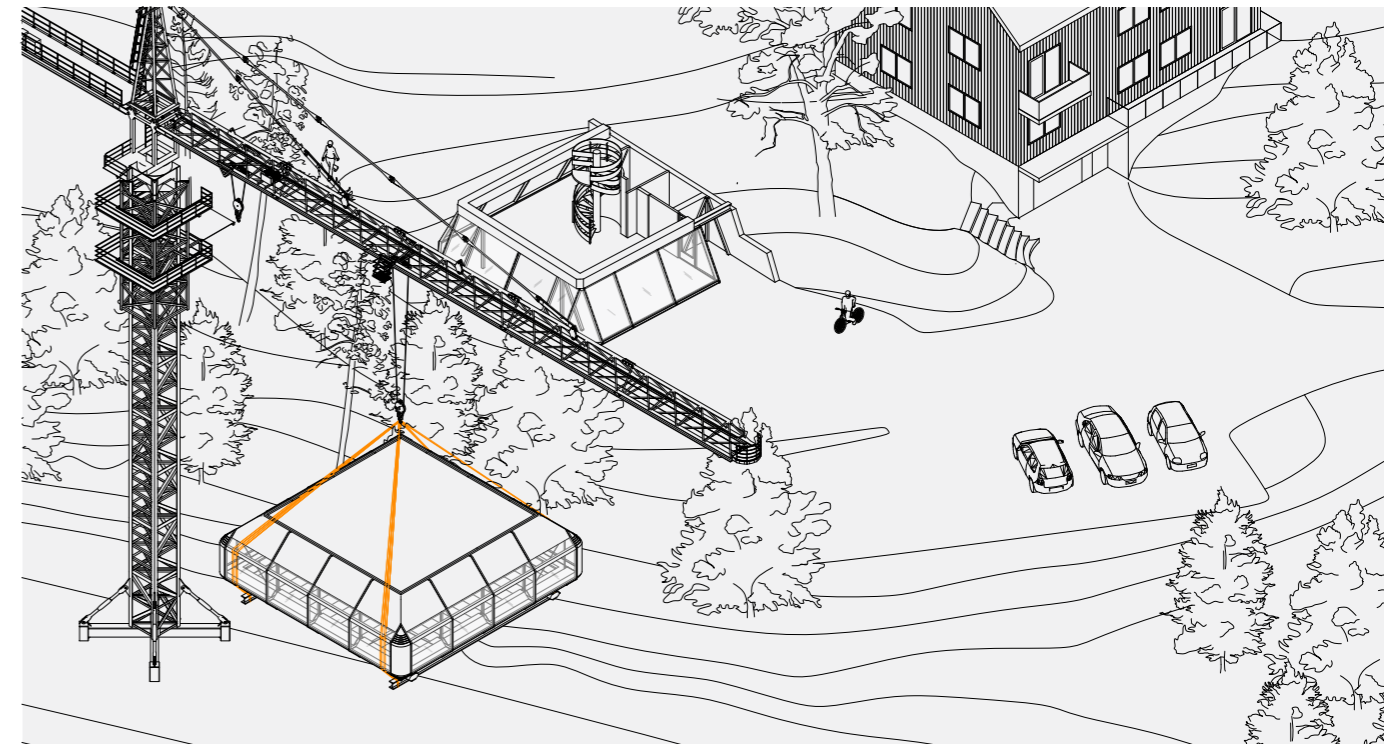


Diploma approach

This is an architectural research project more than a conventional design diploma. It is also a preservation project centered on the quest of moving the office pavilion to a new destination, involving several design tasks and decisions. Essentially, the diploma is an argument for *why* a chosen building should be preserved combined with a strategy for doing it. This takes the form of a preservation plan. The method used follows the research project *Provenance Projected: Architecture Past and Future in the Era of Circularity*, primarily how these scholars focus on traditional and untraditional archives, “also considering buildings as living archives that store and classify historical research, as depositories of material history and social life.”³

In the delivered material, the first binder briefly introduces the project and the questions it raises. The second binder identifies the building’s significance and provides a strategy for managing future situations for the building which could be applied to similar structures. All the relevant information I have gathered has been assembled and synthesized. This ensures that logical and consistent decisions on how the building should be moved, repaired, and maintained can be made in the future.

3. Project description *Provenance Projected: Architecture Past and Future in the Era of Circularity*.



The first binder consist of three main elements:

1. A film
2. An illustrated summary
3. A complete set of drawings showing the office pavilion in its three different locations

The second binder is separated into three main parts:

1. **Research (WHY)** – What is the story behind the building? Why was it built in the first place? What did the building try to accomplish when it was made? What is its value today, and **why** should it be preserved?
2. **Analysis (WHAT)** – What is this building? What is it made of? How are the components connected? How is the condition today? **What** should be demolished, and what should be preserved?
3. **Strategy (HOW)** – How should/could it be preserved? How can it be moved? How can it be dismantled? **Where** should it go? **How** does the future of the building look?

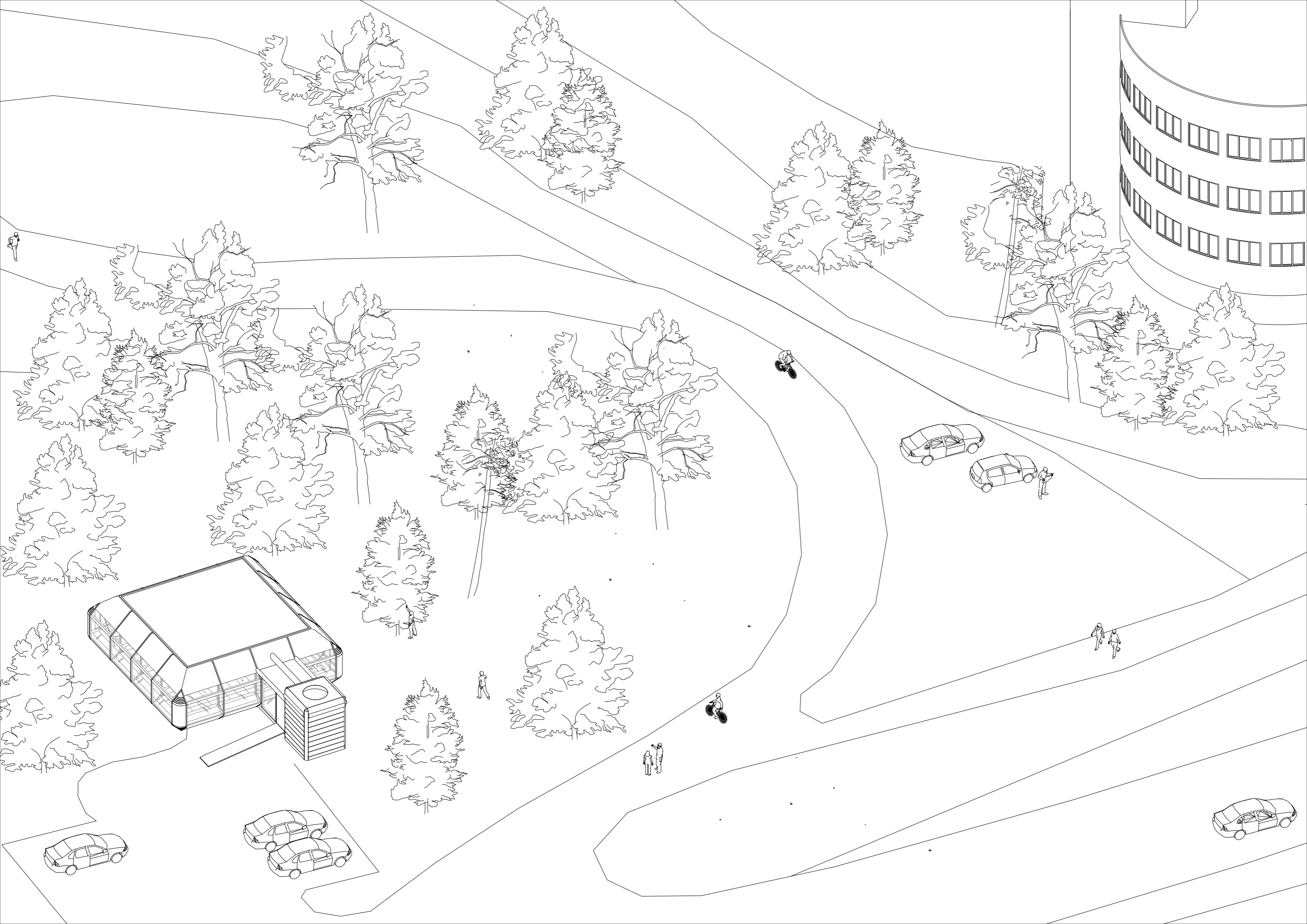
Complete set of
drawings

Drawing list					
Location	Category			Scale	Paper size
GD	A 00	01	ISOMETRIC SITUATION	-	A3
GD	A 00	02	EXTERIOR PLAN	1:200	A3
GD	A 01	01	PLAN	1:50	A3
GD	A03	E	FACADE EAST	1:50	A3
AA	A 00	01	ISOMETRIC SITUATION	-	A3
AA	A 00	02	EXTERIOR PLAN	1:200	A3
AA	A 01	01	PLAN GROUND FLOOR	1:50	A3
AA	A 01	02	PLAN FIRST FLOOR	1:50	A3
AA	A 02	AA	SECTION A-A	1:50	A3
AA	A02	BB	SECTION B-B	1:50	A3
AA	A03	W	FACADE WEST	1:50	A3
AA	A03	S	FACADE SOUTH	1:50	A3
FM	A 00	01	ISOMETRIC SITUATION	-	A3
FM	A 00	02	EXTERIOR PLAN	1:200	A3
FM	A 01	01	PLAN	1:50	A3
FM	A 02	AA	SECTION A-A	1:50	A3
FM	A03	N	FACADE NORTHWEST	1:50	A3
FM	A03	S	FACADE SOUTHEAST	1:50	A3
FM	A04	01	DOOR DETAIL - SECTION	1:10	A3
FM	A04	02	DOOR DETAIL - ELEVATION	1:10	A3
FM	A04	03	DOOR DETAIL - PLAN	1:10	A3

1978 - 1990

As there exist no drawings of how the building was put together, the following is based on a handful of photos found in the office pavilion.







DRAWING

EXTERIOR PLAN

ADDRESS

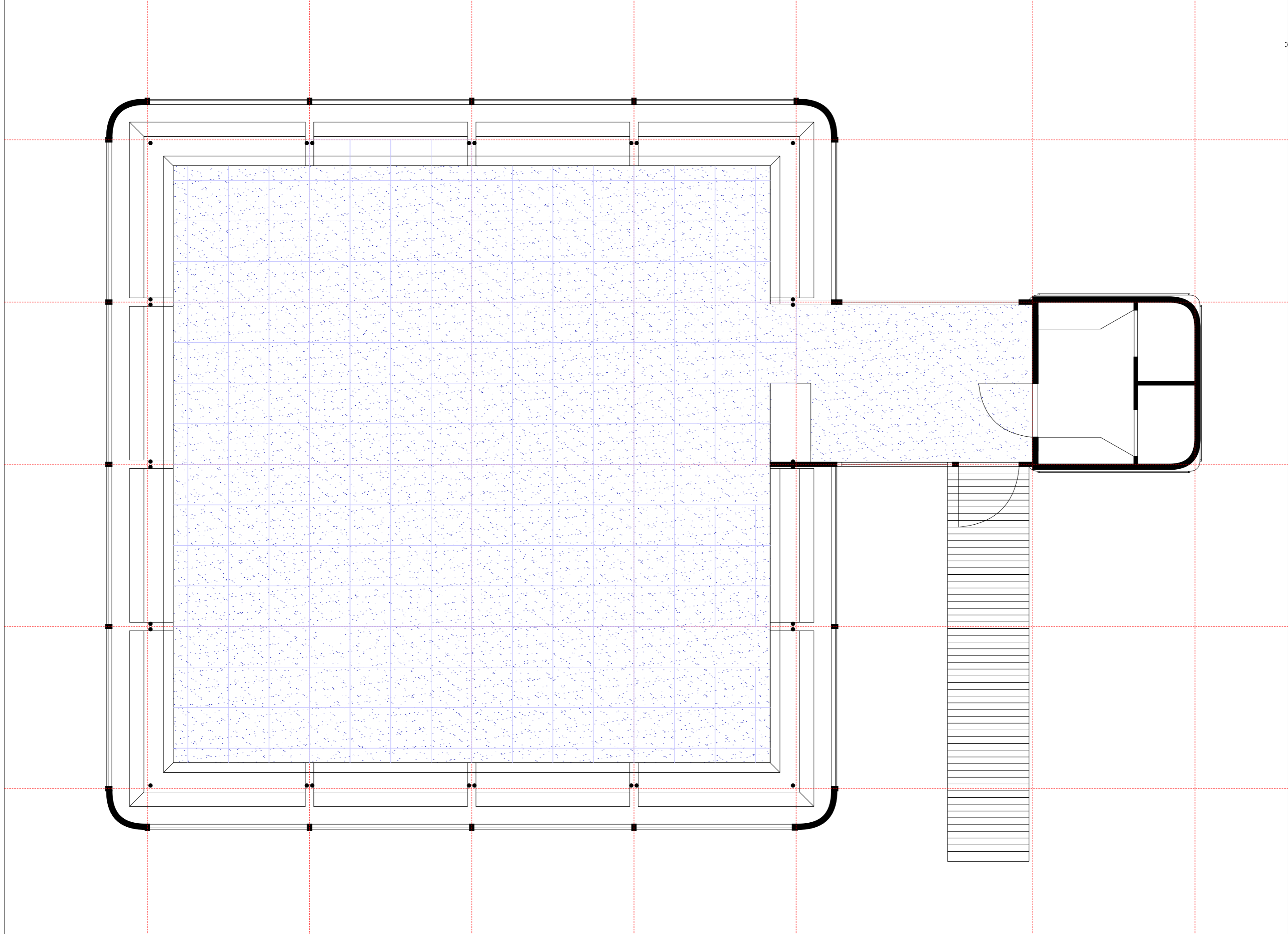
GD 312

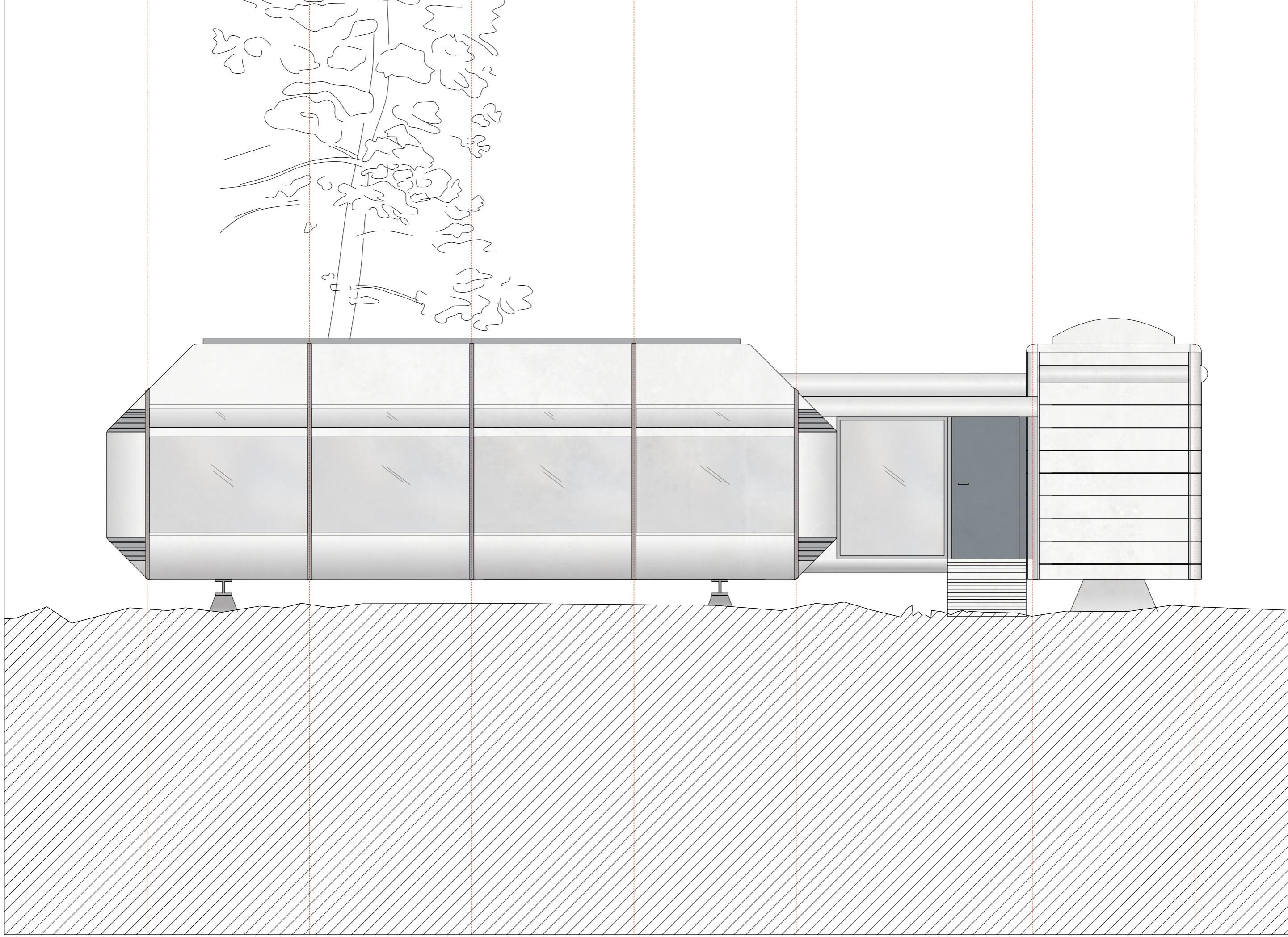
A3

1:200

A00 02

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EAST FACADE

ADDRESS
GD 312

A3

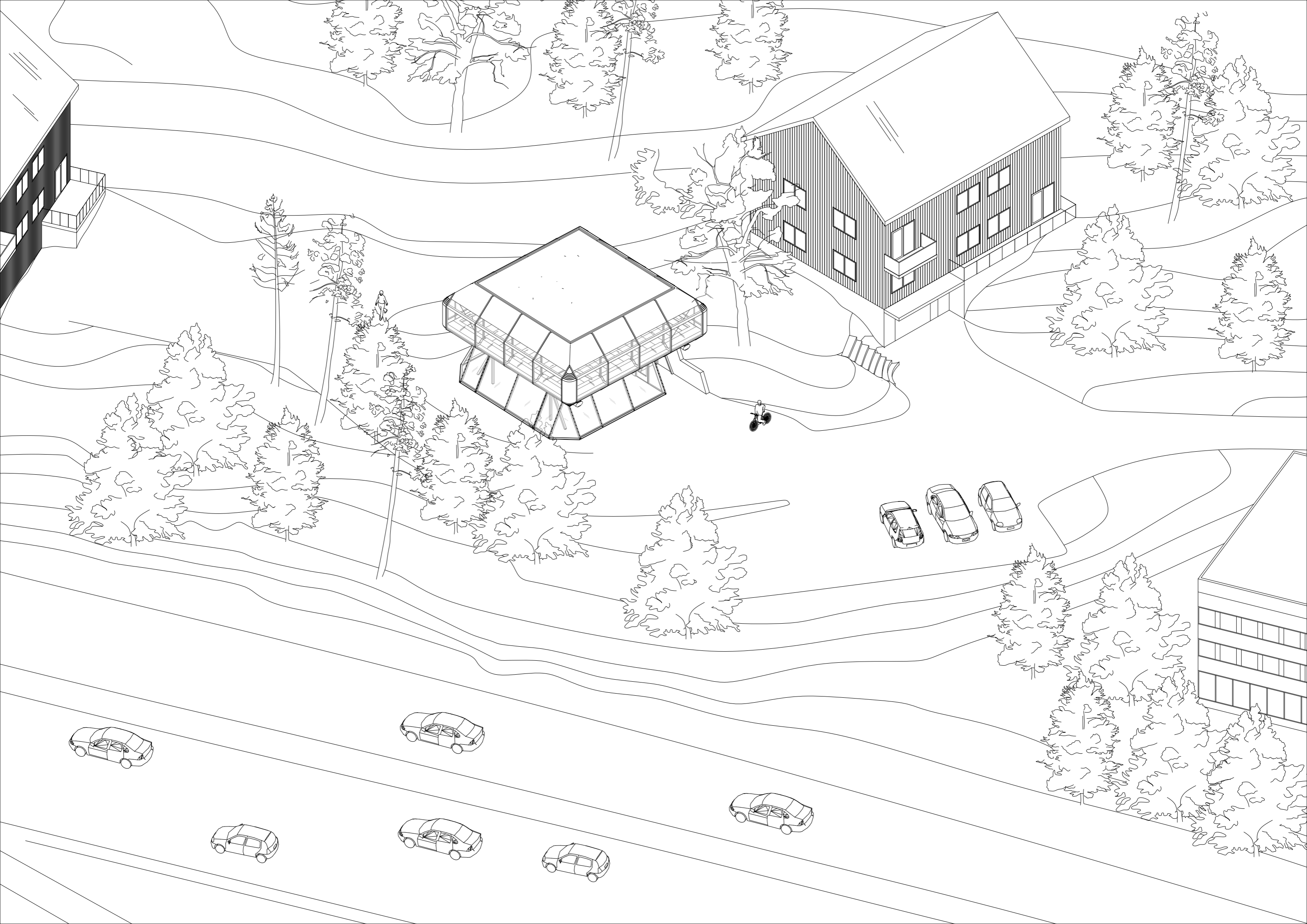
1:50

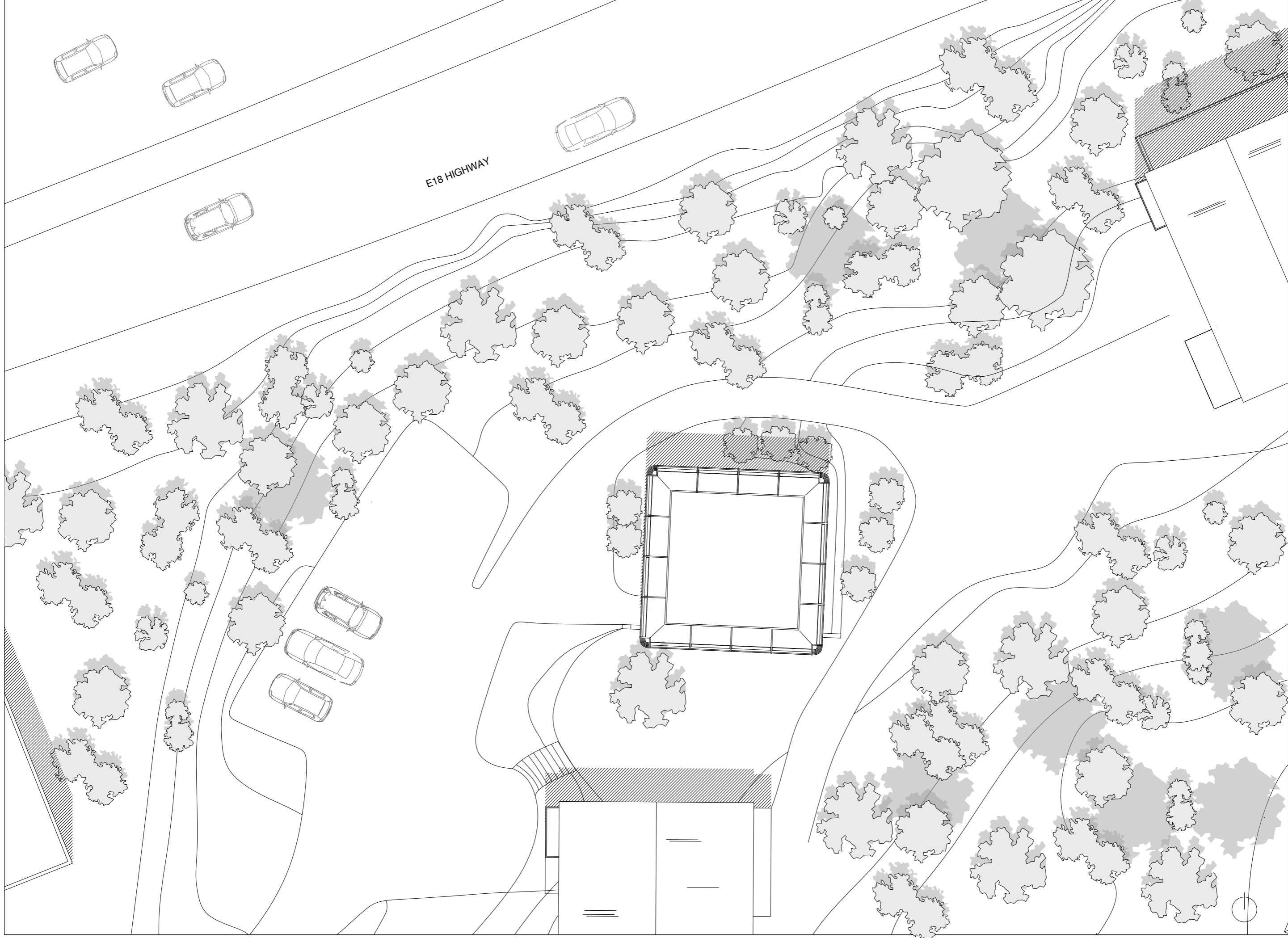
A03 E

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1990 - 2023

As there exist no drawings of how the building is put together, the following drawings are a product of surveying, measuring and remeasuring.





DRAWING

EXTERIOR PLAN

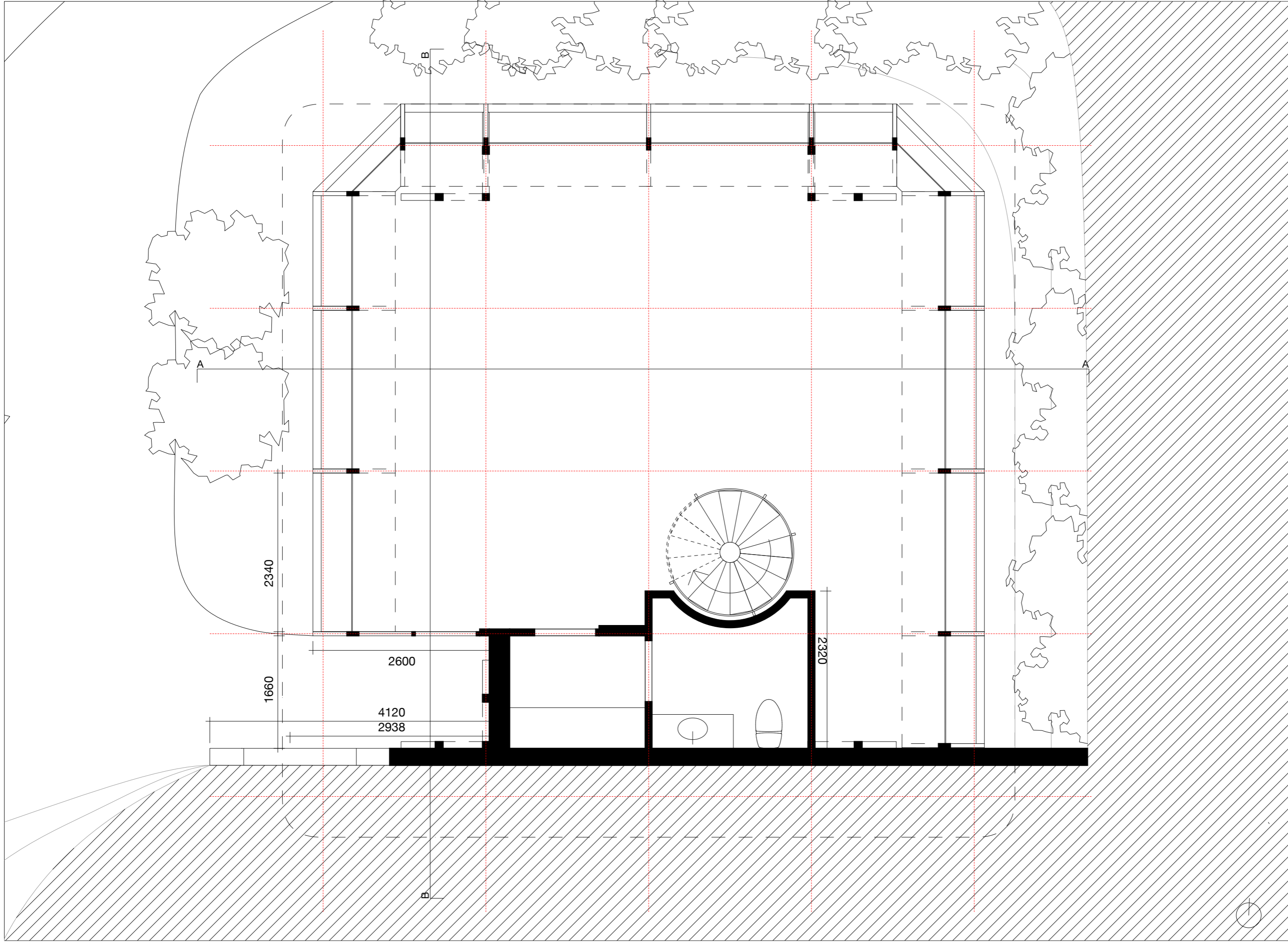
ADDRESS
AA 31

A3

1:200

A00 02

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architecture
preserving
on the move



TEGNING

PLAN GROUND FLOOR

ADRESSE
ARNSTEIN ARNEBERGVEI 31

FORMAT

A3

SKALA

1:50

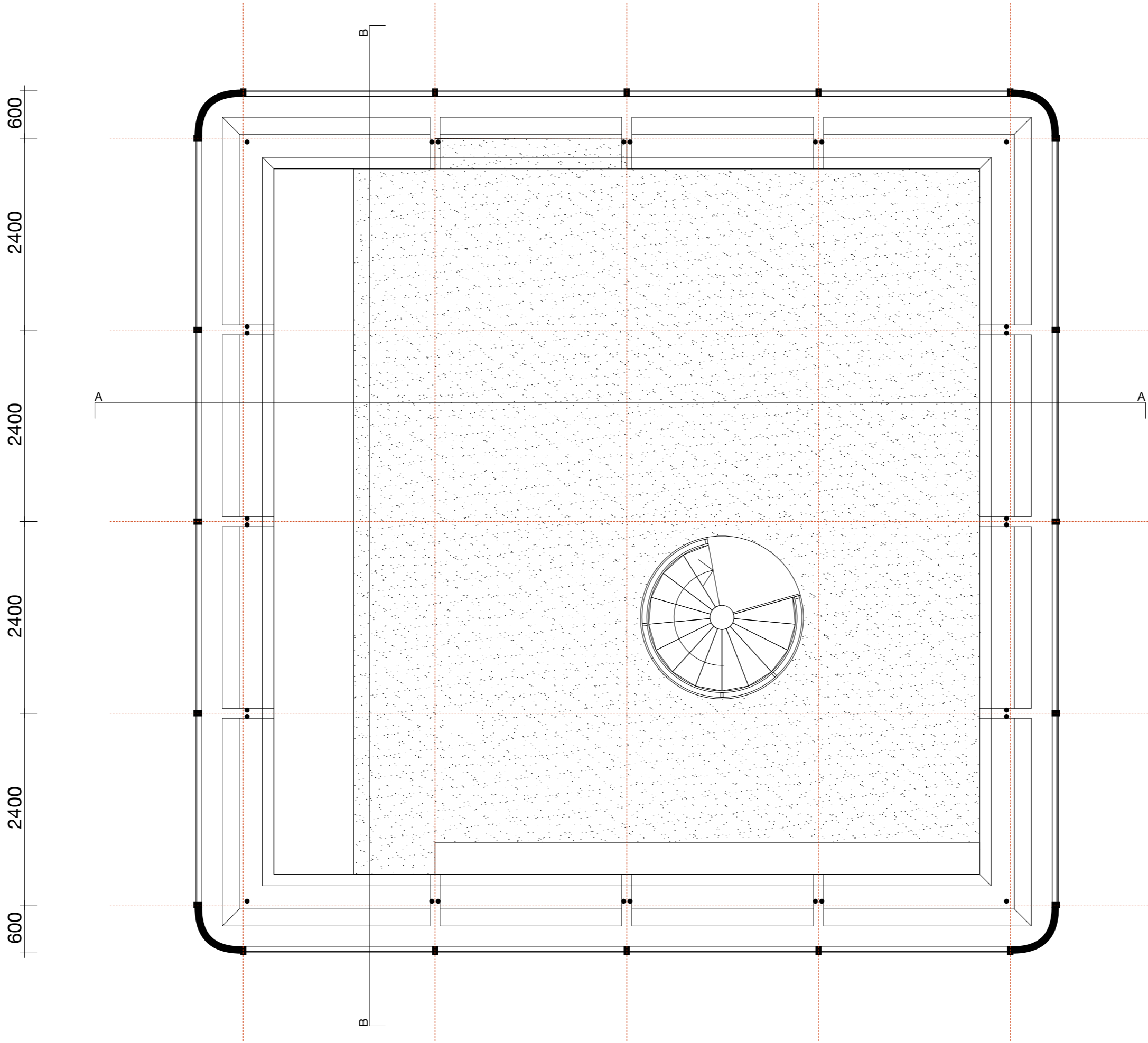
LOKAL

A01

LÅPENUMR.

01

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TEGNING

PLAN FIRST FLOOR

ADRESSE
ARNSTEIN ARNEBERGVEI 31

FORMAT

A3

SKALA

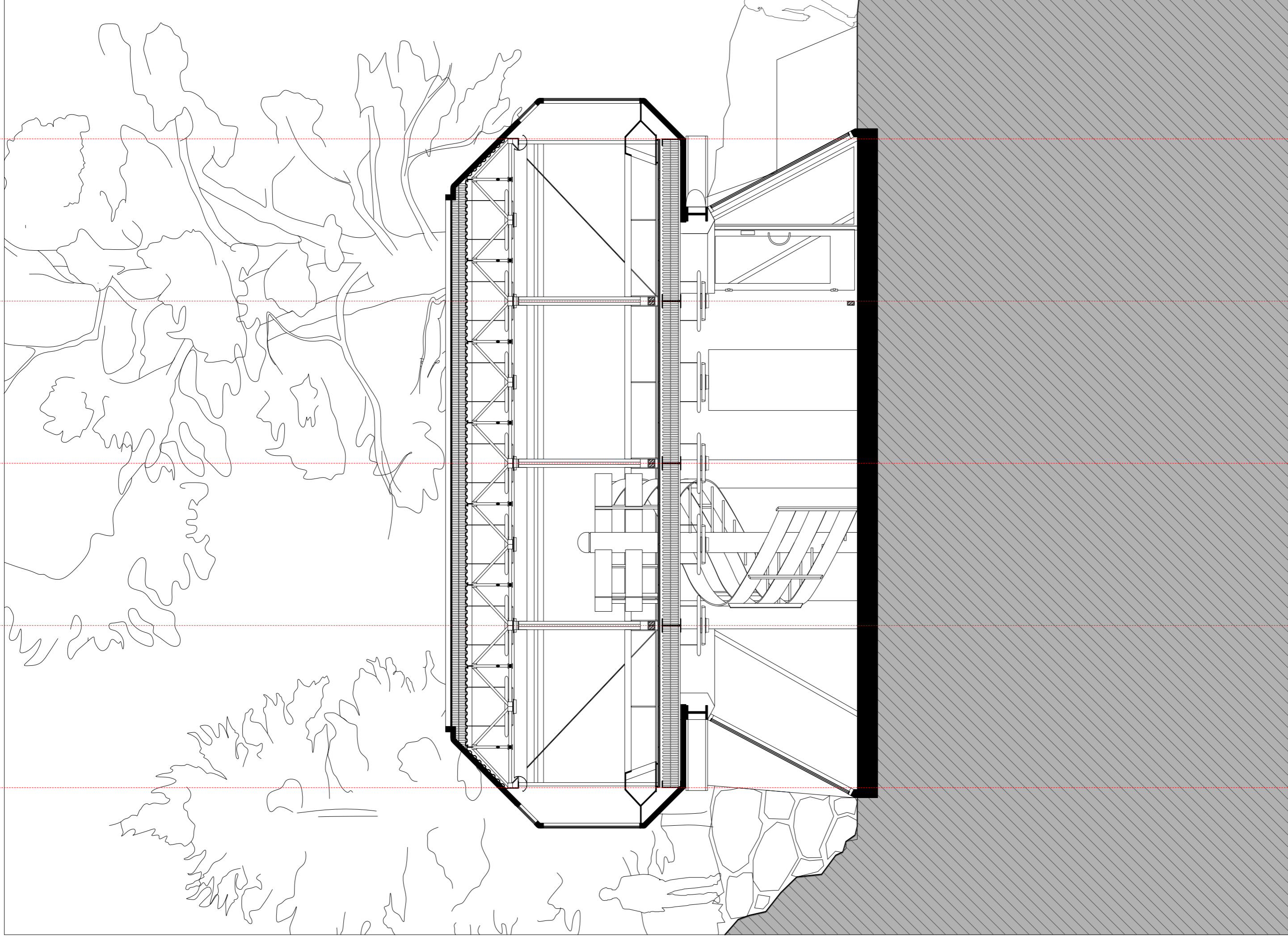
1:50

LOKAL

A01

02

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TEGNING

SECTION A-A

ADRESSE
ARNSTEIN ARNEBERGVEI 31

FORMAT

A3

SKALA

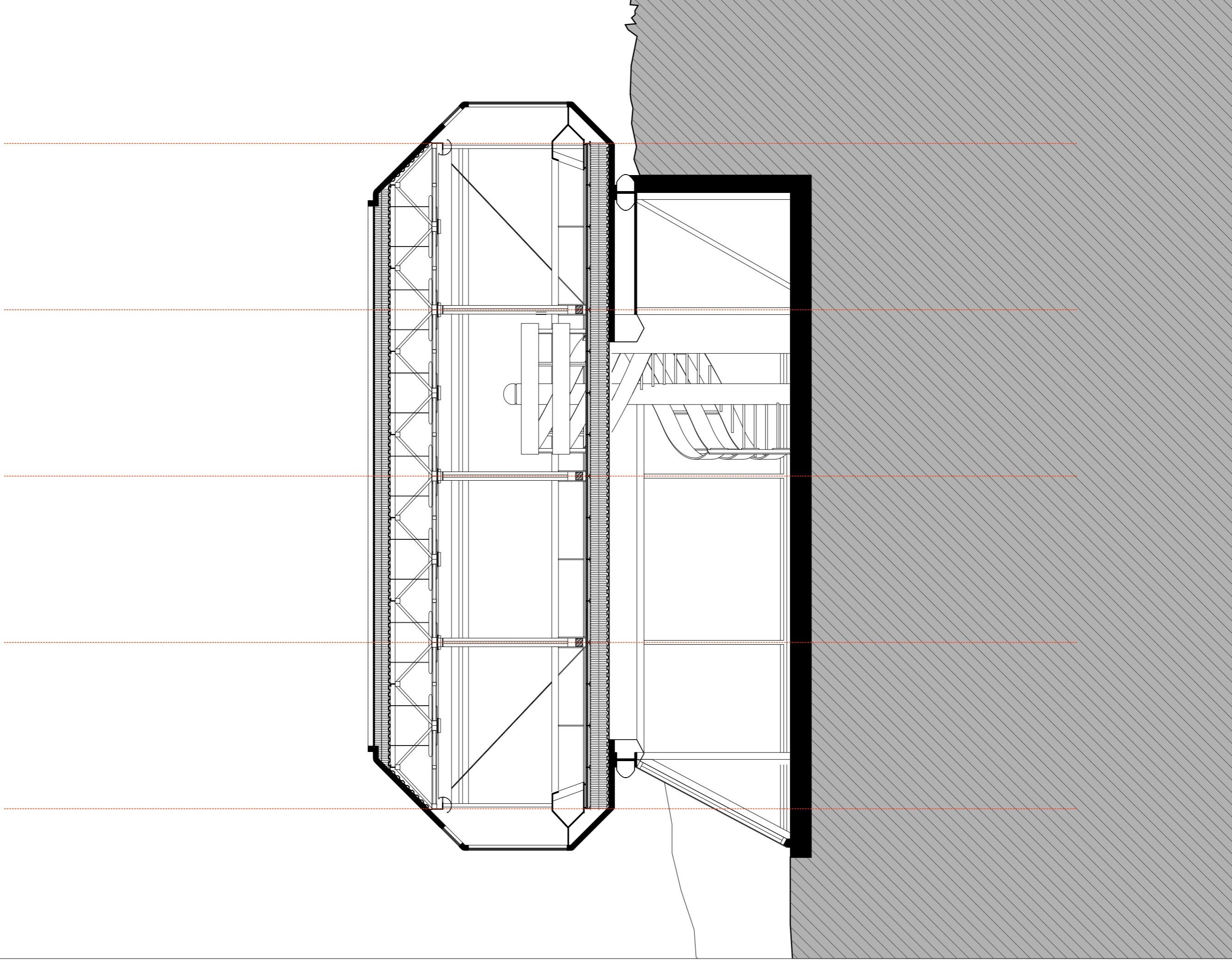
1:50

LOKAL

LÅPEHR.

AA

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SECTION B-B

ADDRESS
AA 31

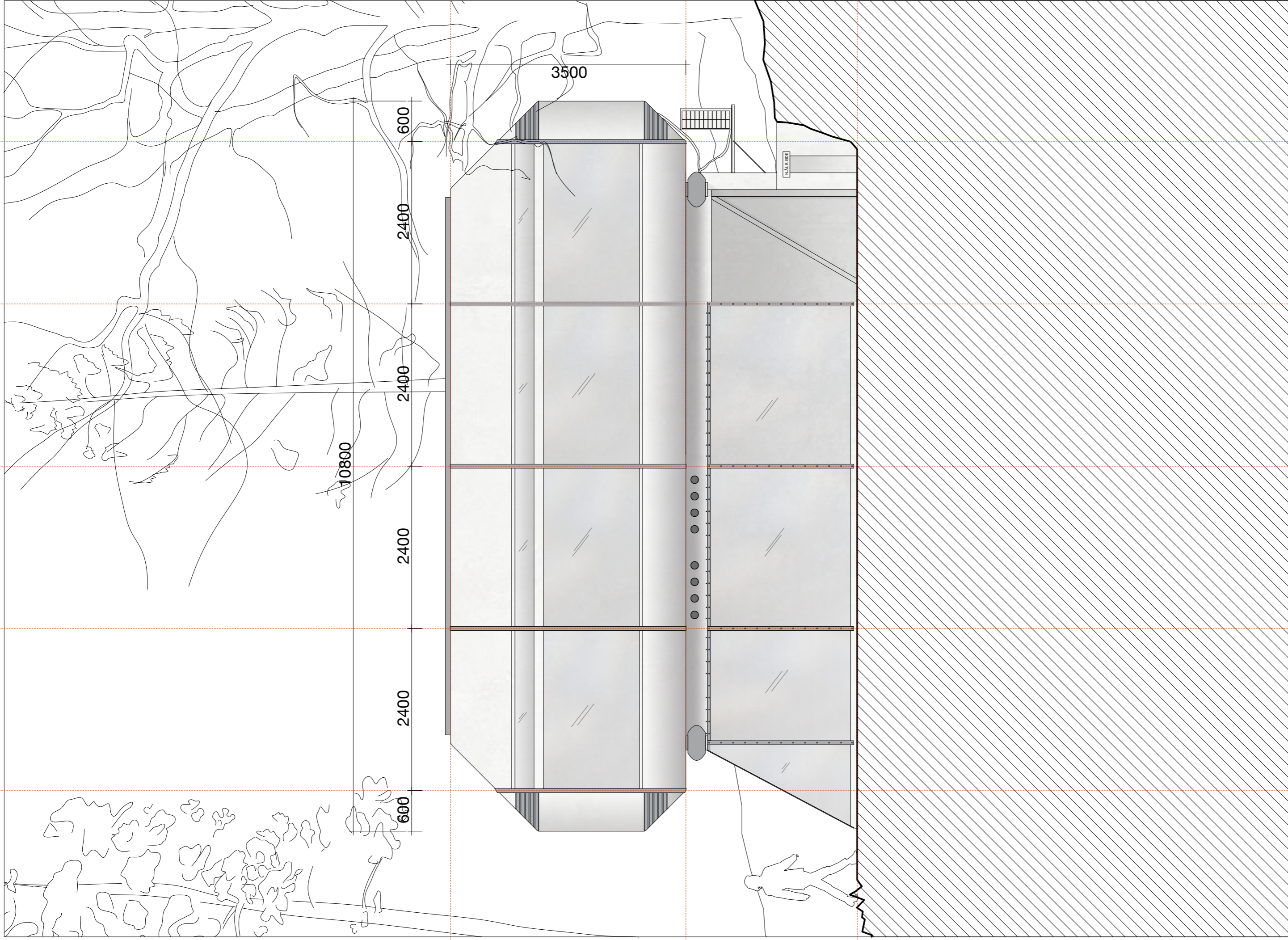
A3

1:50

BB

A02

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WEST FACADE

ADRESSE
ARNSTEIN ARNEBERGVEI 31

A3

SKALA

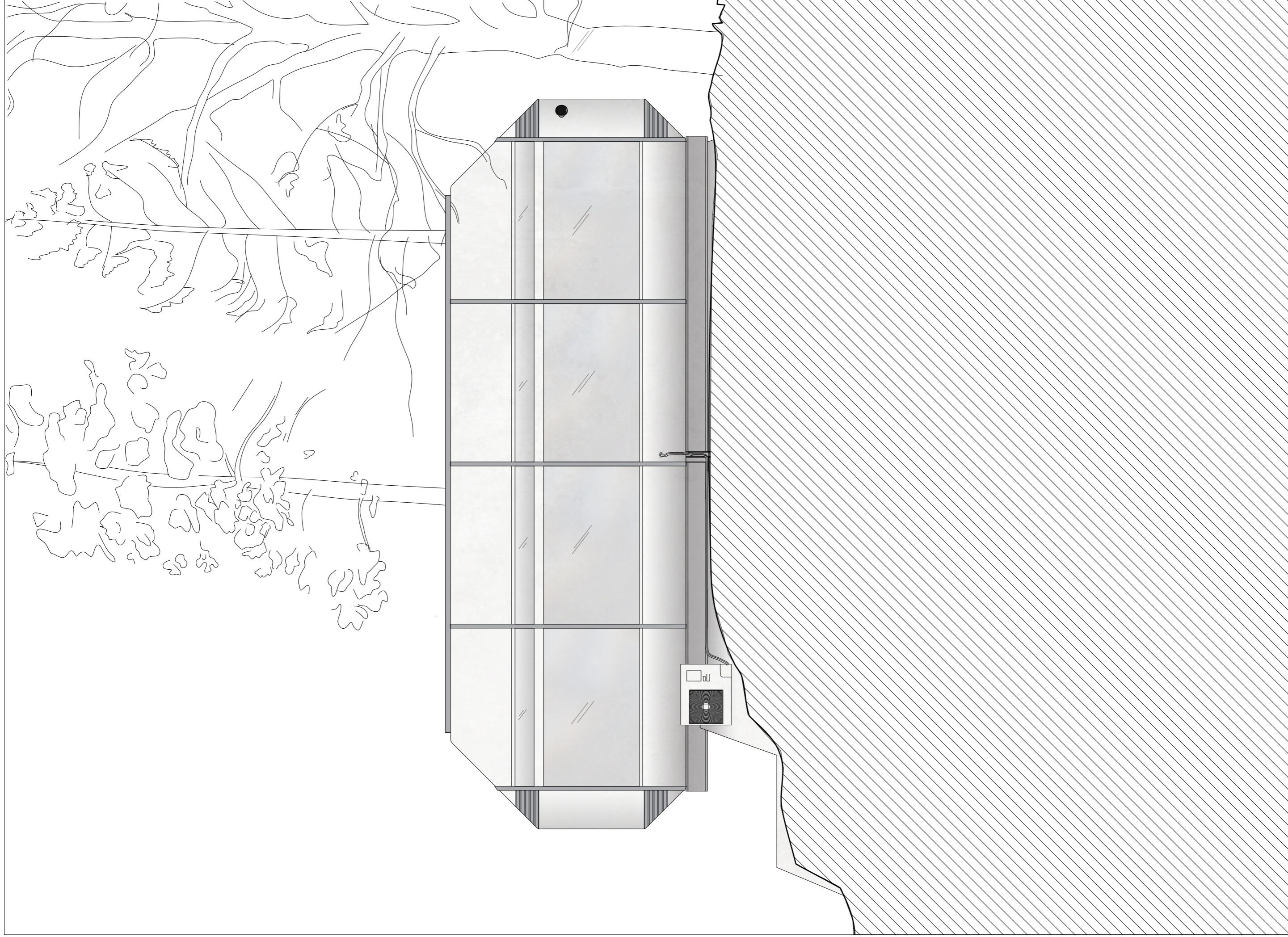
1:50

LOKAL

A03

W

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SOUTH FACADE

ADRESSE
ARNSTEIN ARNEBERGVEI 31

A3

SKALA

1:50

LOKAL

A03

L'ATPEHR.

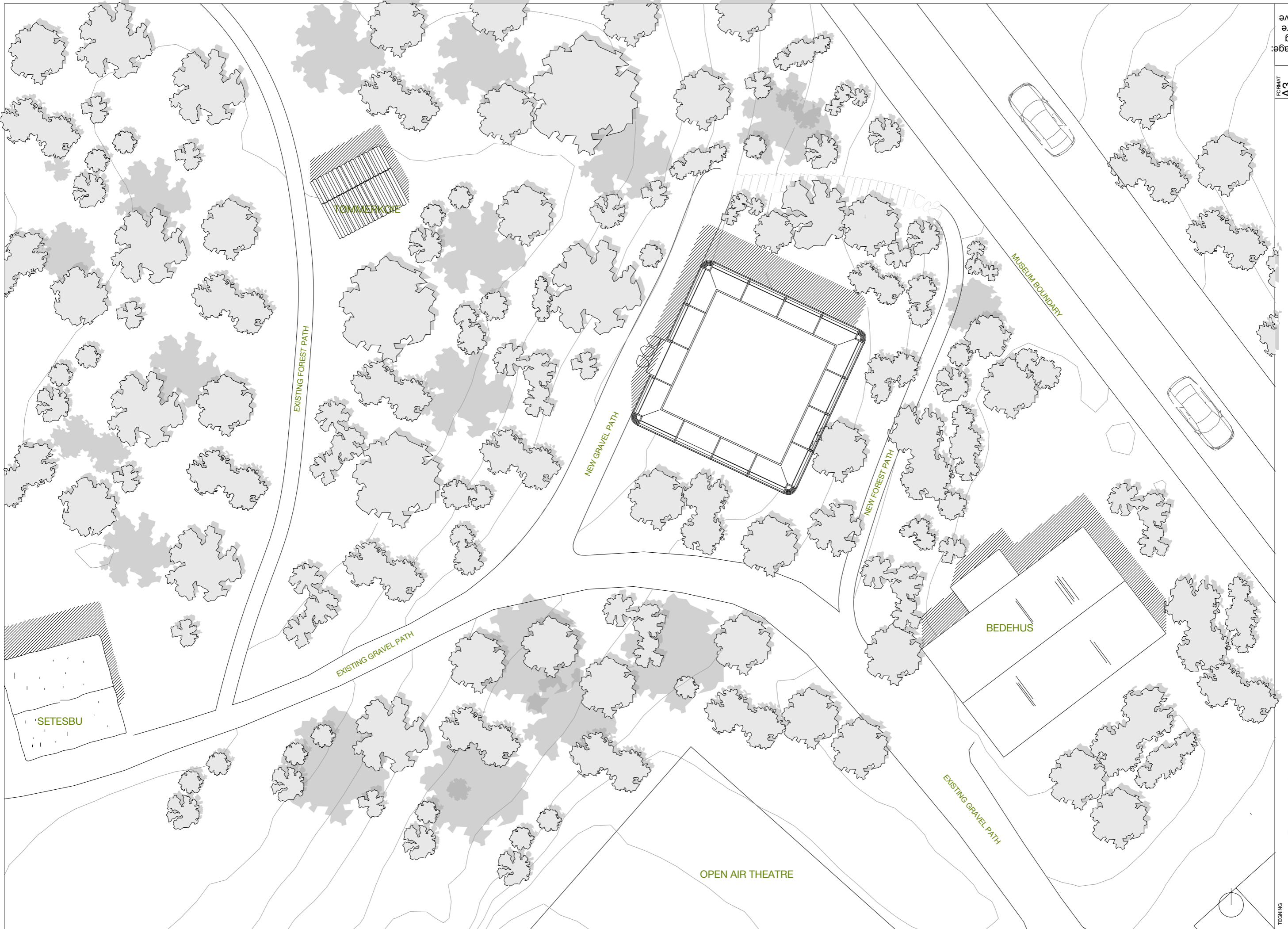
S

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2023 - ?

The following is the proposed
intervention and its new context.

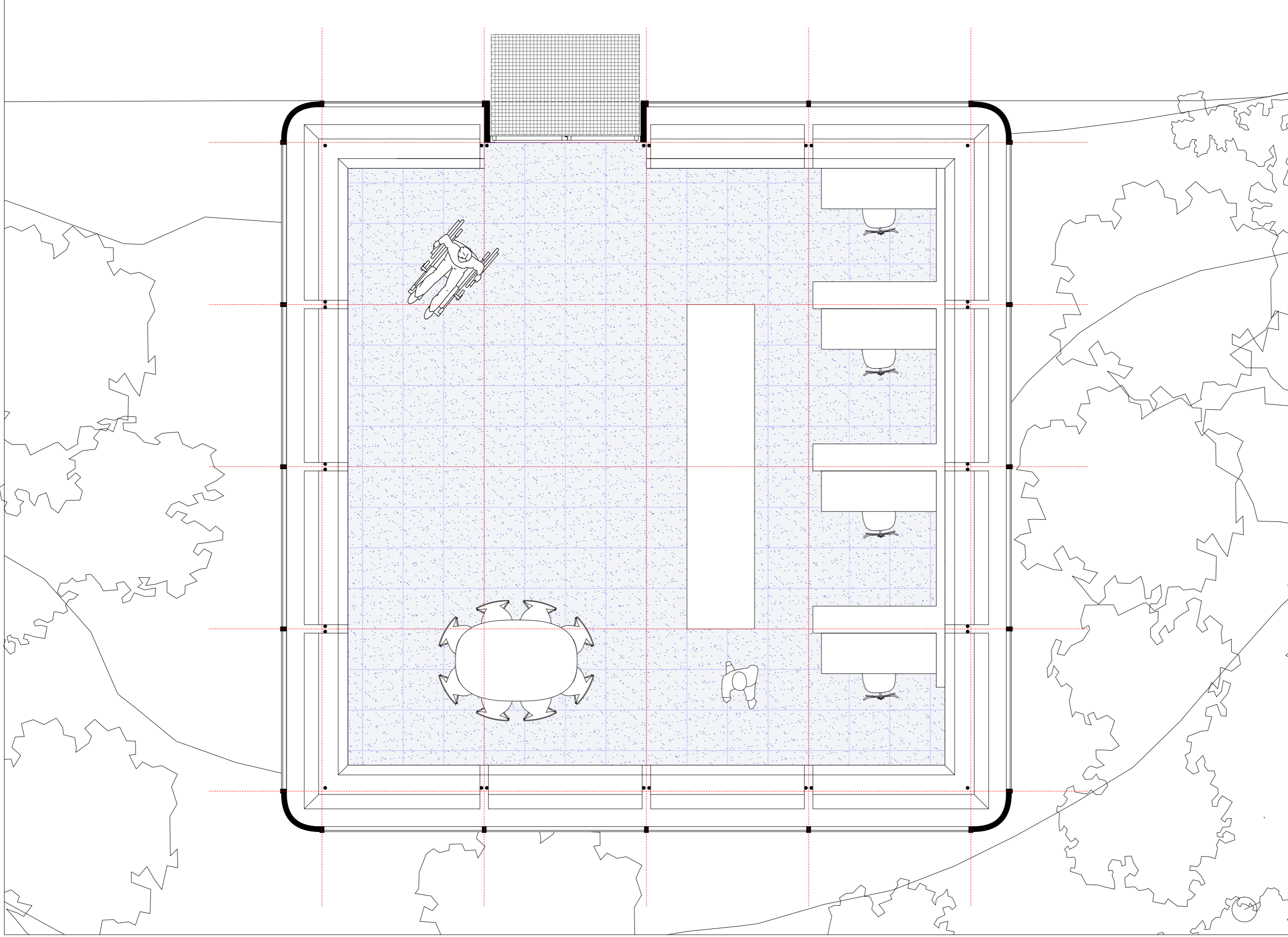




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FORMAT	A3
SKALA	1:200
LOKAL	A00
LÅPNEIR	2

TEGNING
EXTERIOR PLAN
ADRESSE
FM



DRAWING

PLAN

ADDRESS

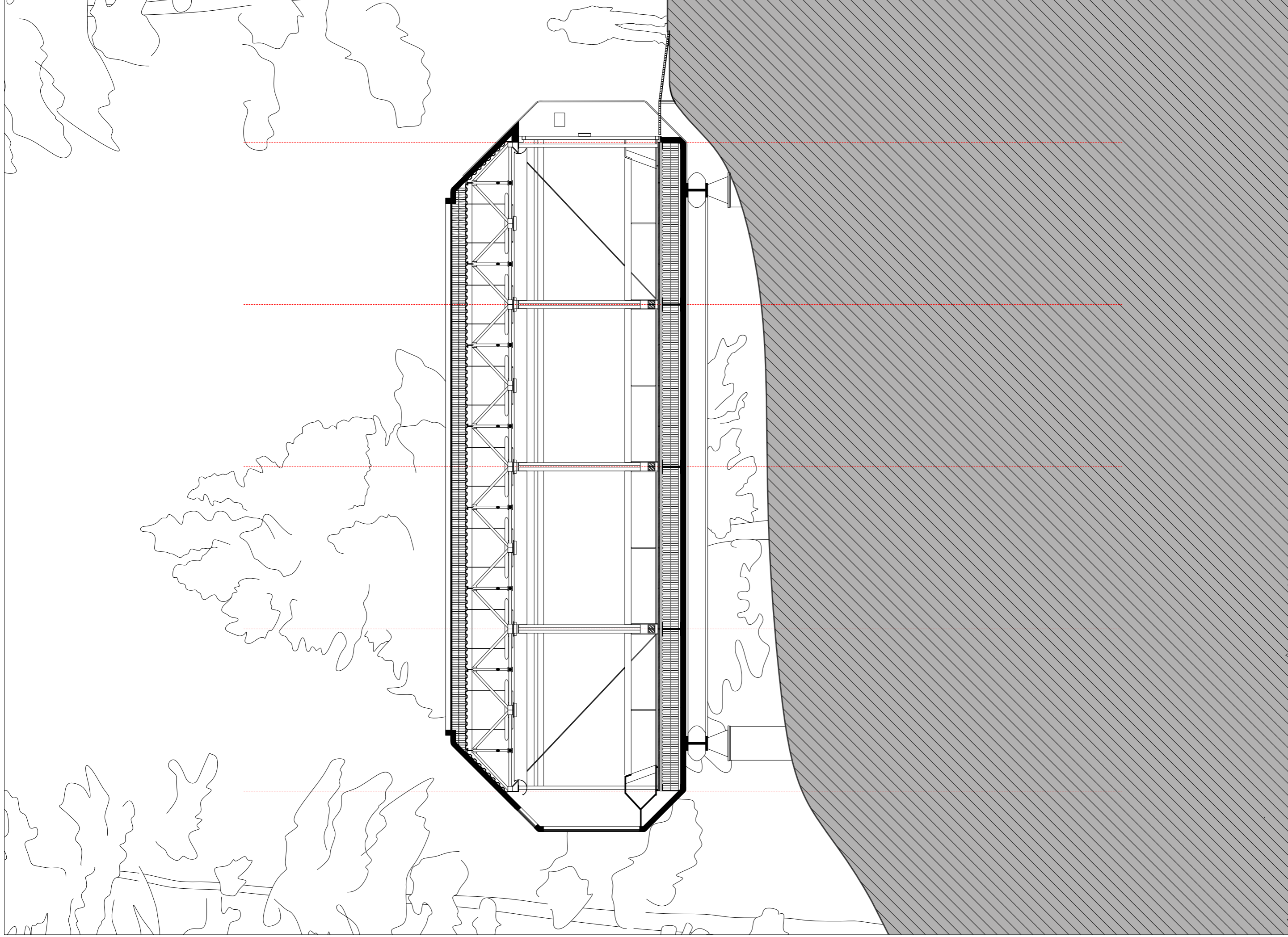
FM

A3

1:50

A01 01

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TECHNICAL

SECTION A-A

ADDRESS

FM

FORMAT

A3

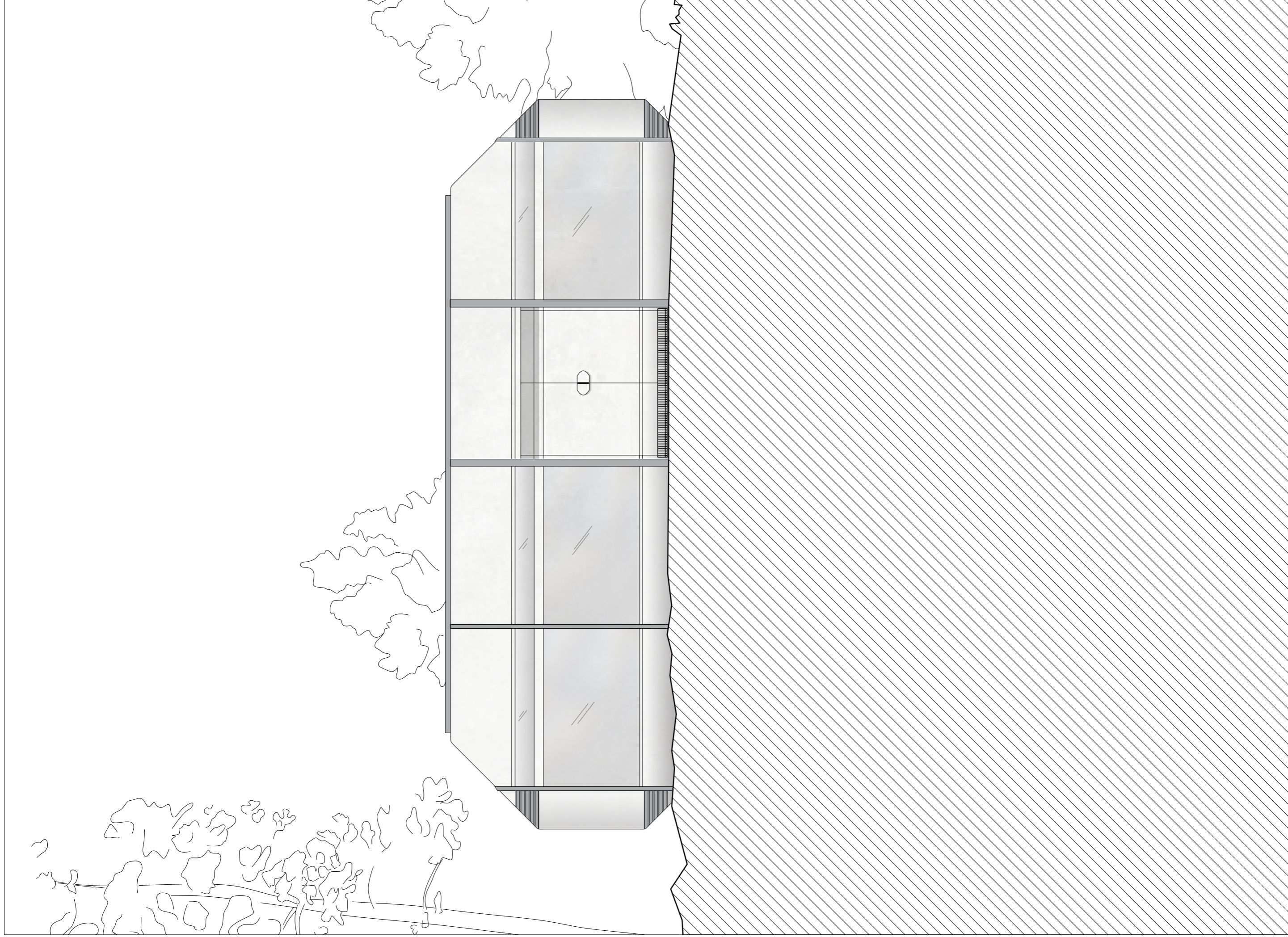
SCALE

1:50

A02

AA

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DRAWING

FACADE NORTHWEST

ADDRESS

FM

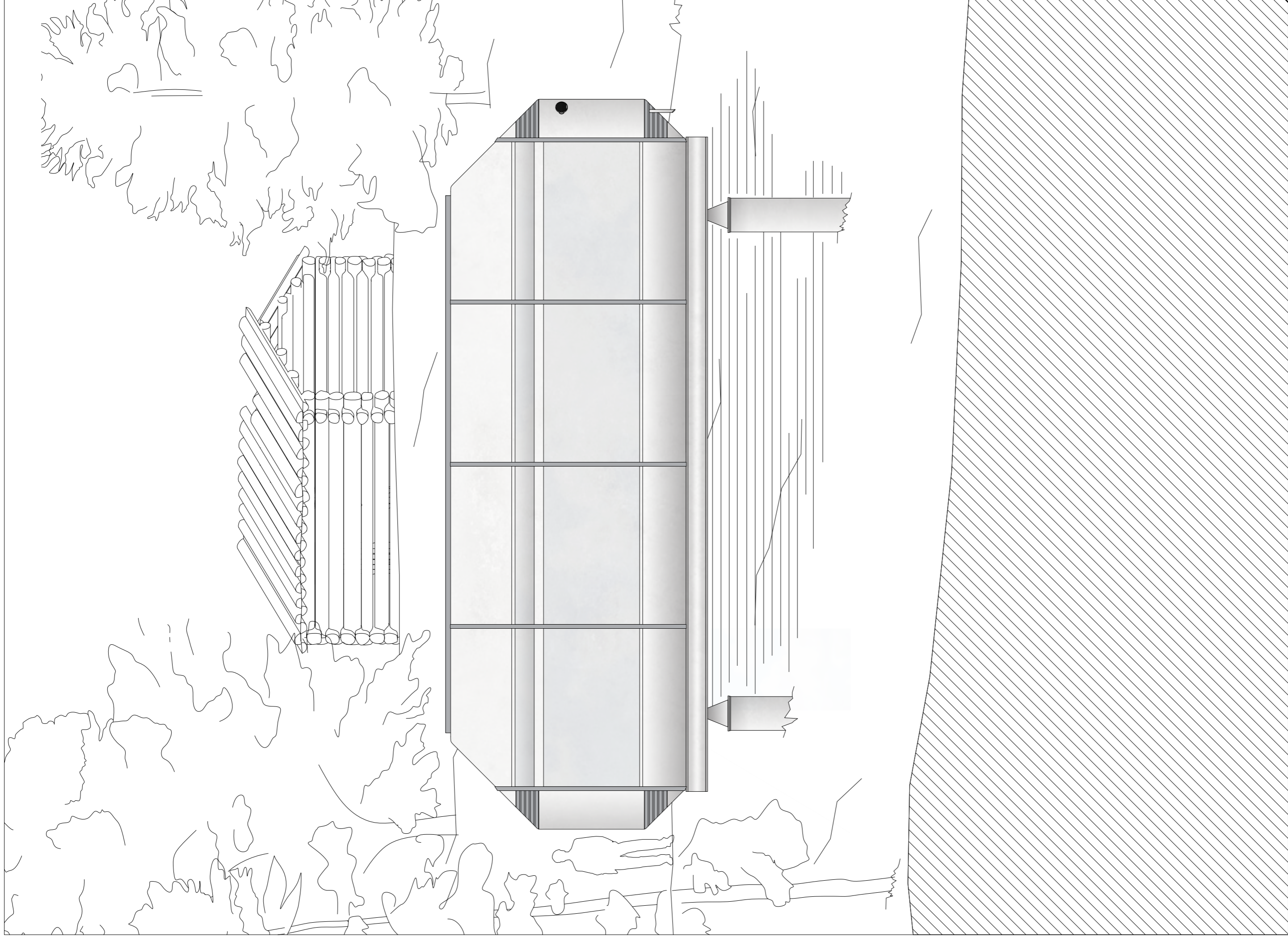
A3

1:50

NW

A03

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DRAWING

FACADE SOUTHEAST

ADDRESS

FM

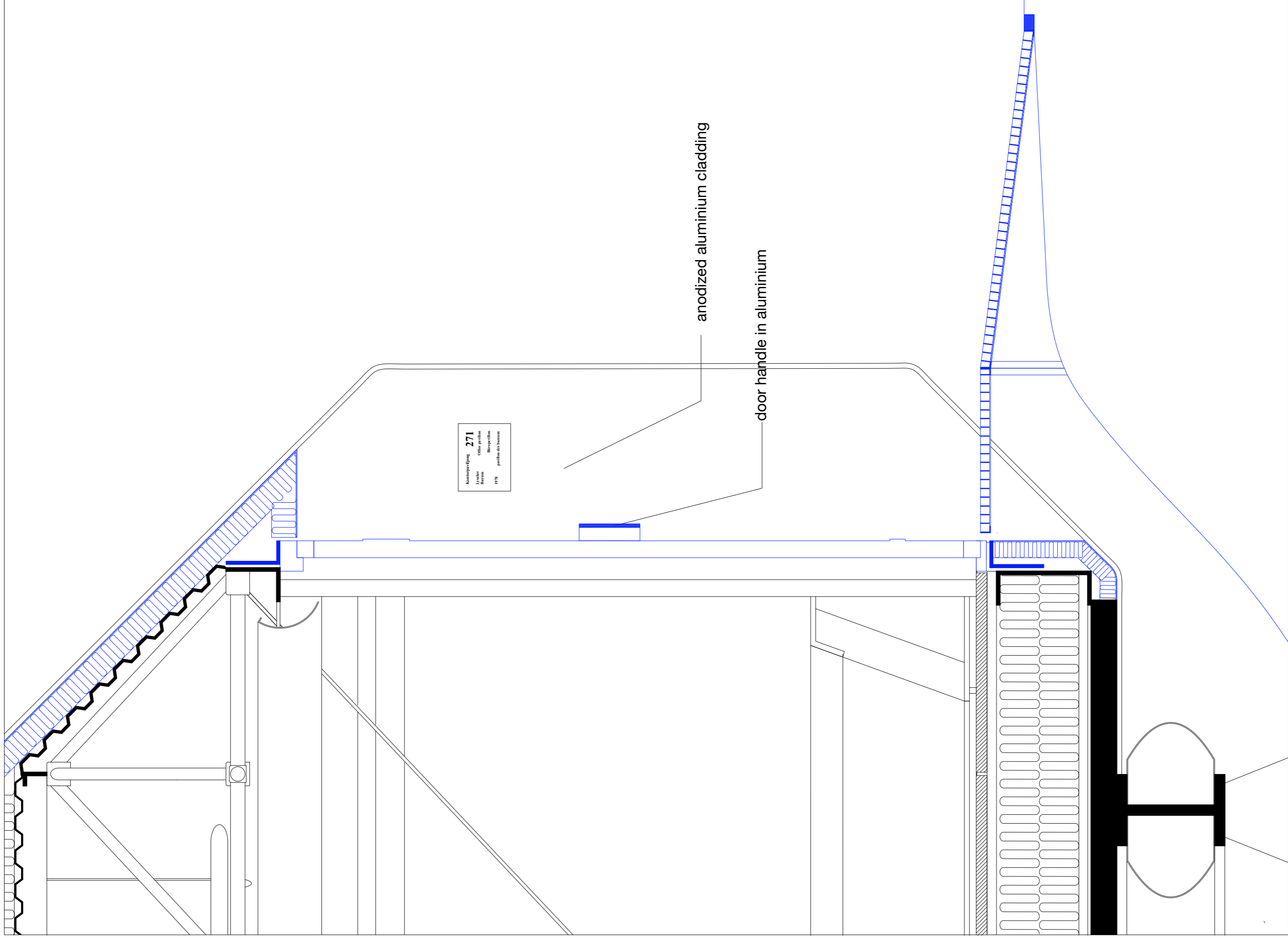
A3

1:50

SE

A03

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Kontorbygning 271
 Lyngby
 1978
 Office pavilion
 Nilsen
 Nilsen
 profile in brass

anodized aluminium cladding

door handle in aluminium

DRAWING

DOOR DETAIL - SECTION

ADRESSE

FM

A3

1:10

A04 01

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shadow profile

shadow profile

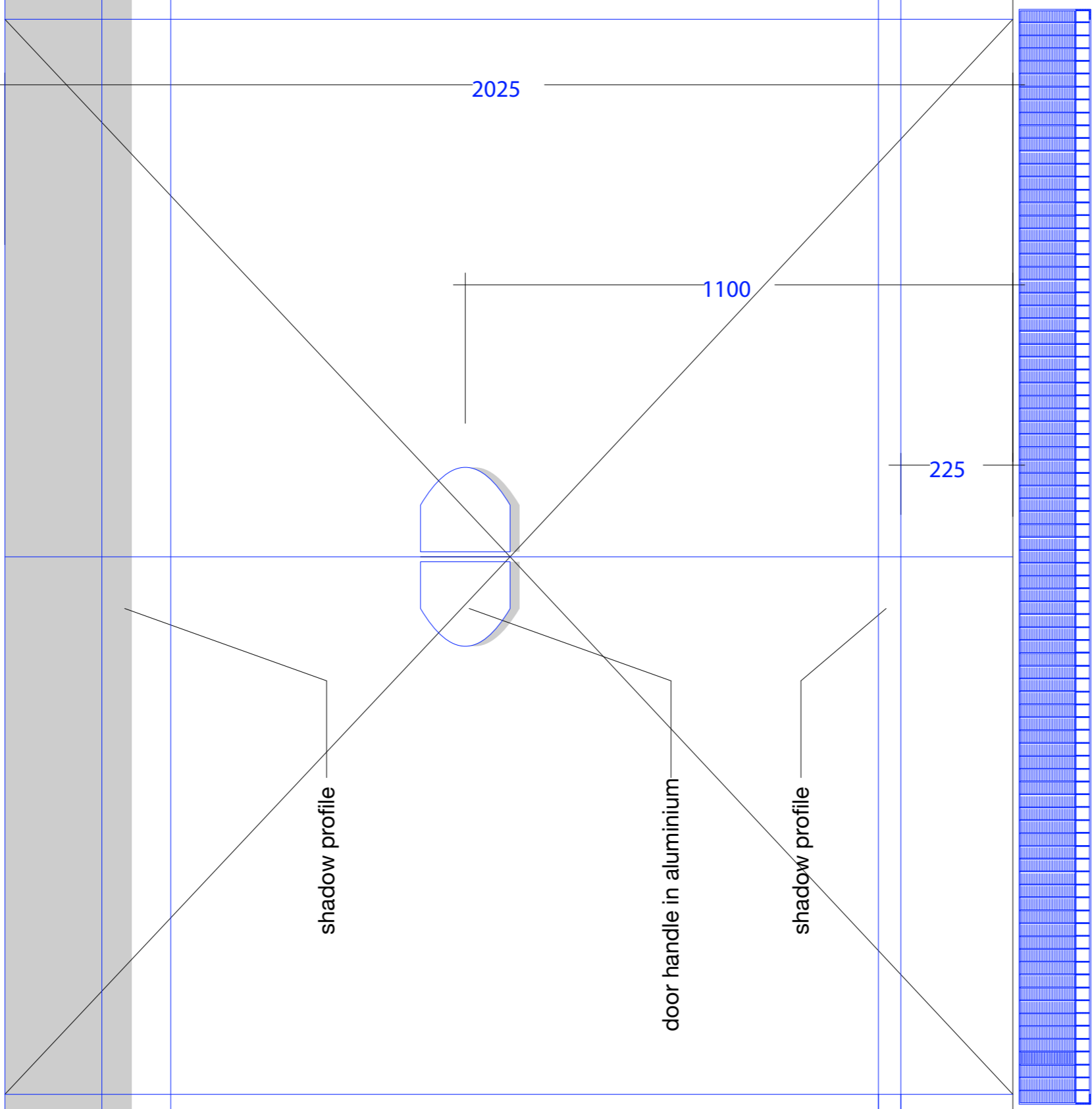
door handle in aluminium

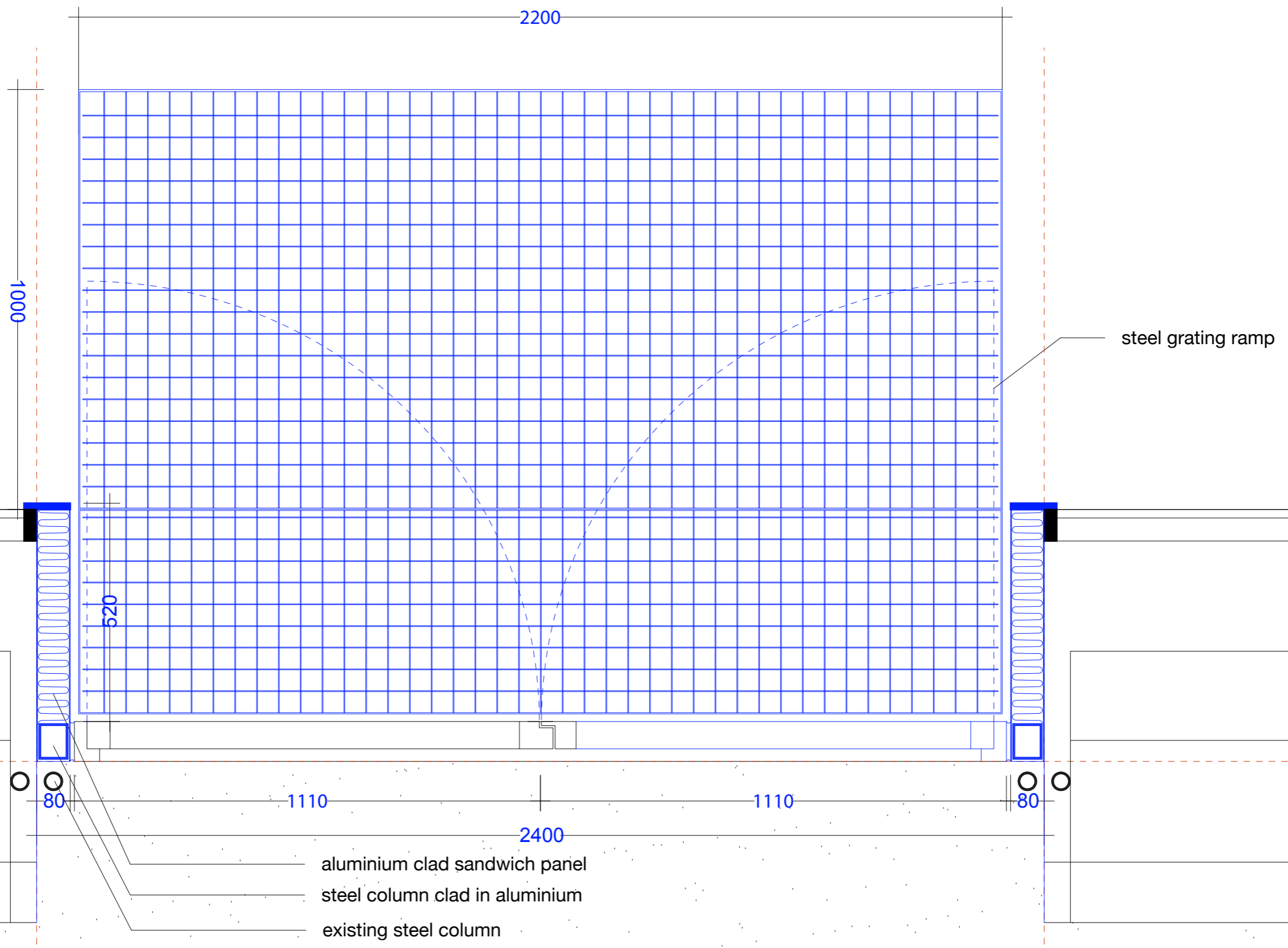
shadow profile

2025

1100

225





steel grating ramp

- aluminium clad sandwich panel
- steel column clad in aluminium
- existing steel column

DRAWING
DOOR DETAIL - PLAN
ADDRESS
FM