NATURE'S CORNER

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Group 4- Healthcare studio HT2022

DESIGN STRATEGIES

PERSON CENTERED DESIGN

STAFF

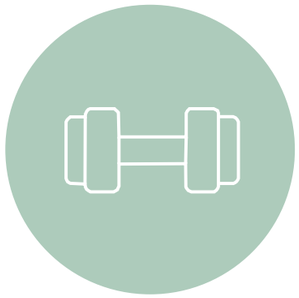
Collaboration
Sufficient spaces for collaboration work on different scales. These spaces should be placed near the examination rooms for quick access and increased usage.

Sound privacy
The workspaces should have sound privacy in order for the staff to concentrate. Sound privacy is also needed when discussing a patient or having a phone call.

Equality
Today the majority of staff in healthcare environments are women but in the future it might be a more equal division.The spaces for staff should be designed gender neutral in order to futureproof the building.

PUBLIC

Nature
The project should supply the surrounding neighborhood with nature that promotes people to be outside. Nature has shown to have a great impact on mental and physical wellbeing.



Exercise
The environment accessible for the public should promote physical activity. This could be outside of the building to reach the entire neighborhood and not only the listed patients.

Education
The environment should provide learning about health and how to improve your own wellbeing.

PATIENTS

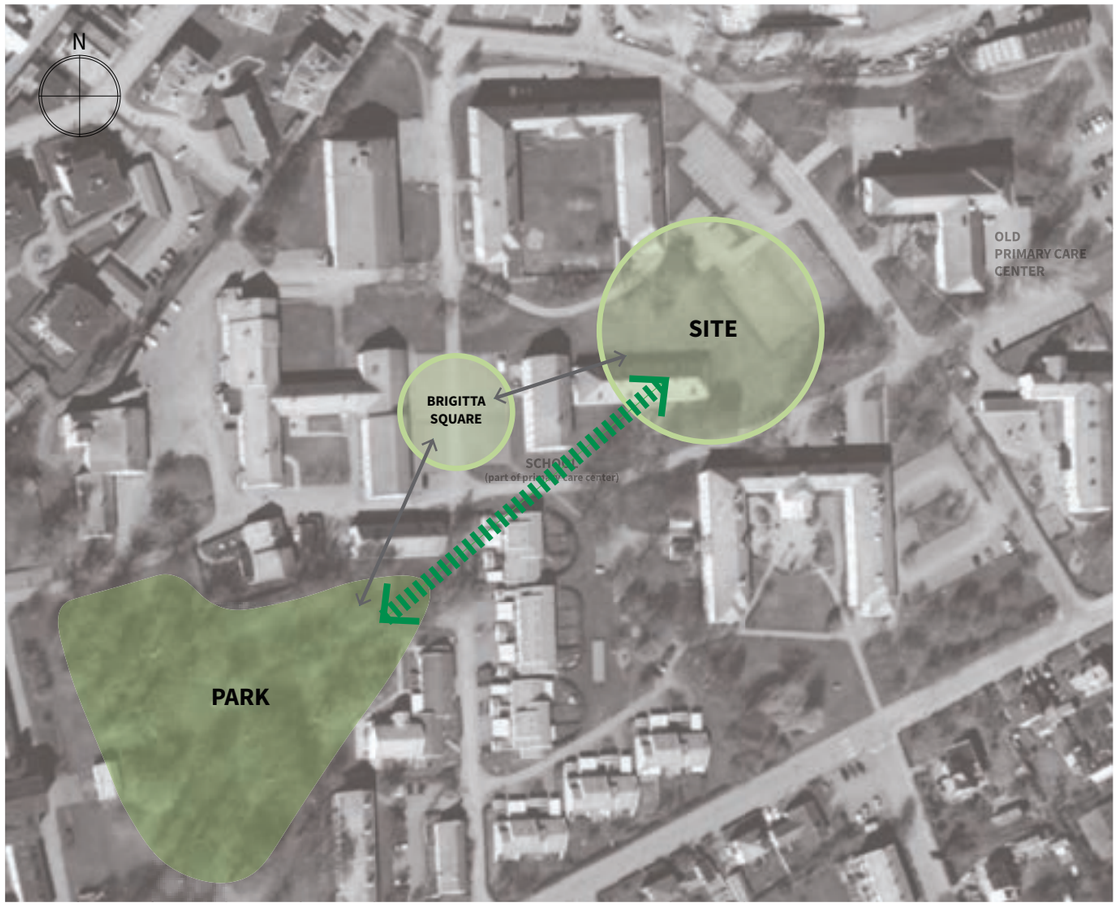
Easy orientation
The space should be easy to navigate. The patients should not have to walk through long corridors with a lot of turns alone in order to find their way around.

Participation
Involving the patients as much as possible in their treatment and health status. “Person centered care means close involvement around and with the patient. This means the need to work with information and documentation within the patient room.”

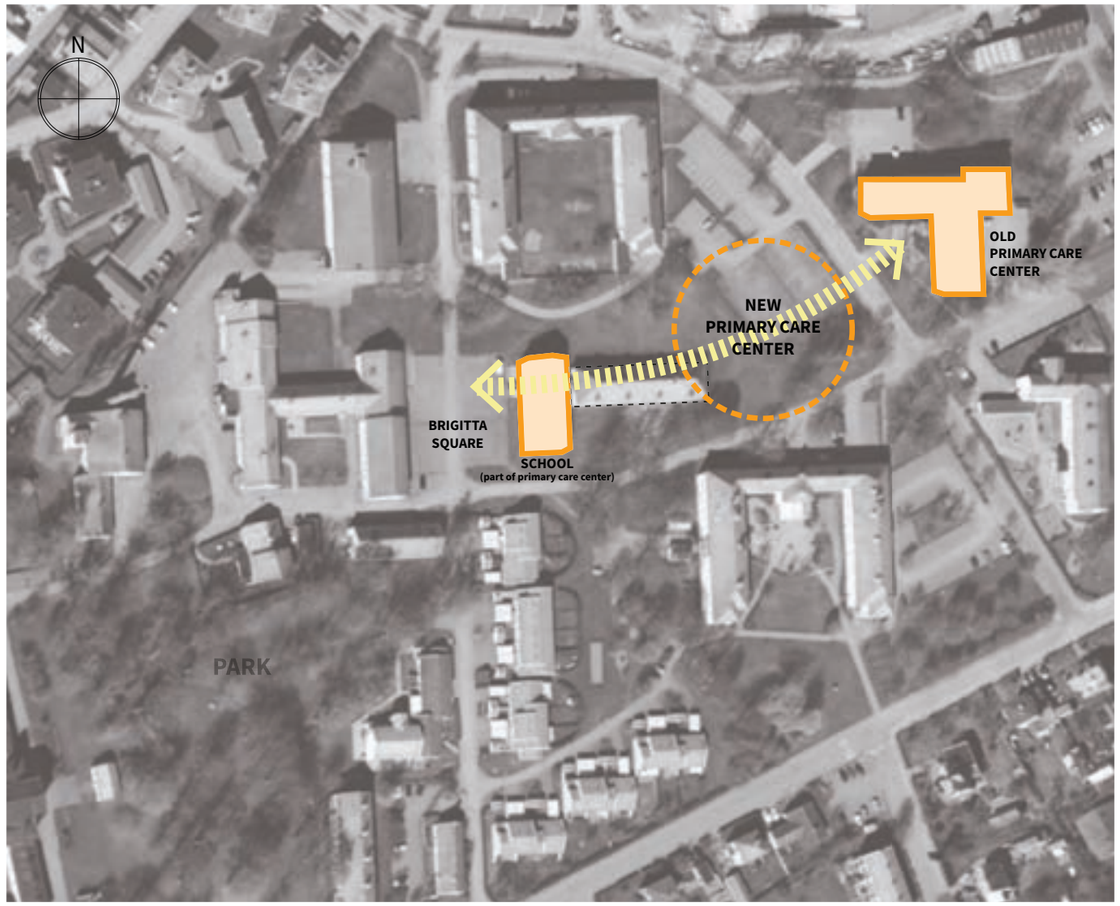
Privacy
The person should always have the option to sit more secluded and should not feel watched or unsafe in the examination room.

Anxiety and stress relief
The environment should strive to have a calming effect on the nervous system.

SITE & CONTEXT



Green extension: create a connection between the site and the large park on the southwest, extending the greenery to Brigitta square.



East-West connection: set an axis from Brigitta square to the old primary care center and place the new primary care center in the center of it.

CONCEPT DESIGN

1. Massing and volume placement

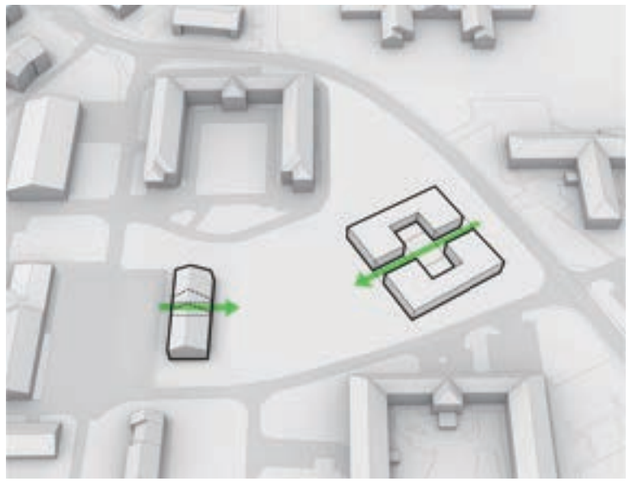
A massing volume (based on the required area of 3000 sqm) is placed on the site. The volume is placed in a way leaving room for a park, making it an integrated part of the primary care.

2. Rotation

The volume is rotated, in order to align it with the eastern car road. The rotation also enables the entrances to be clearly visible for drivers and pedestrians from either side.

3. Sunlight

The core is removed in order to make space for the sunlight to enter the building, naturally creating an inner courtyard enviroment.



4. Green extension

The two buildings is split in half, opening themselves from opposite sides. The split paves the way to the visitors to take part of the expanding nature.

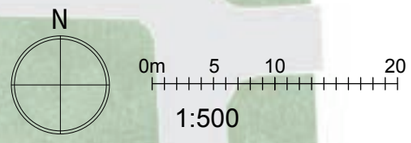
5. Connection

Covering the split creates a transparent and welcoming indoor environment - a corridor morphed into a waiting room! It's the heart of the building in which one can access all other facilities or just enjoy the views of nature which is provided both from the inside and the outside.

6. Future expansion

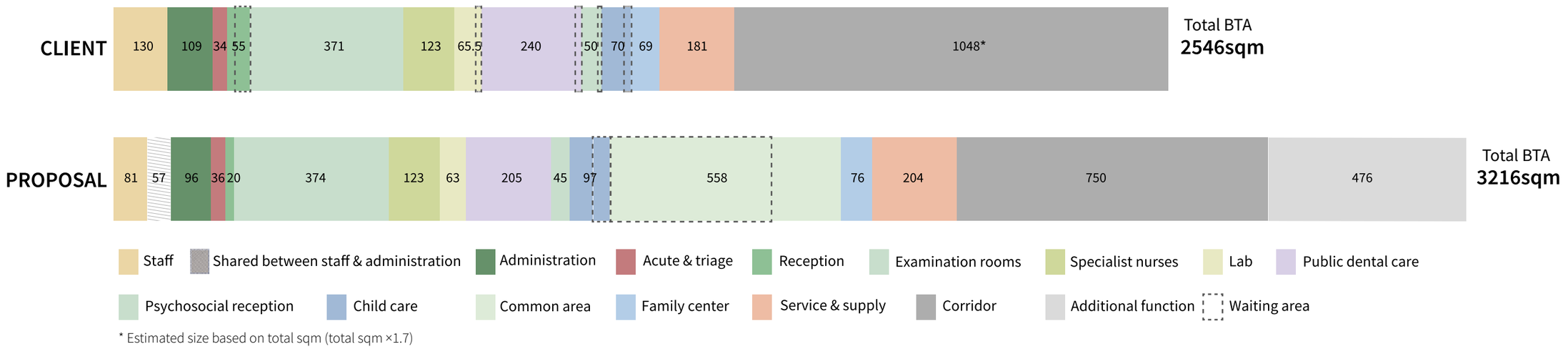
The building design allows for the expansion of 500 sqm in a smooth, non-intrusive manner. The square shape enables a flexible plan layout where the building can expand from all corners without obscuring the flow.

SITE PLAN


N
0m
5
10
20
1:500

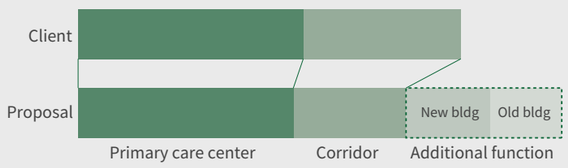
Covered multisport field
drop of zone
Infection
Acute
Goods
Main entrance
Outdoor gym
Bikes
Goods
Playground
Main entrance
Main entrance
Elevator
Main entrance
Café seating
Staff
Bikes

CHALLENGING THE BRIEF



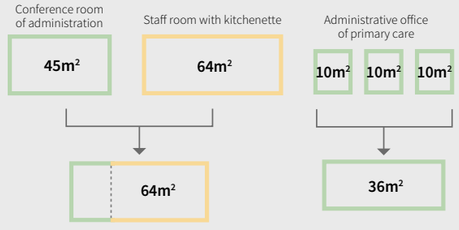
Concept of the new brief

Our proposal combined and shared several functions in the original brief in order not only to let rooms be used more actively in a workday but for future-proofing.
Enormous space saved by having a single corridor instead of double corridors is used for the common area that enhances way-finding and health-promotive functions.



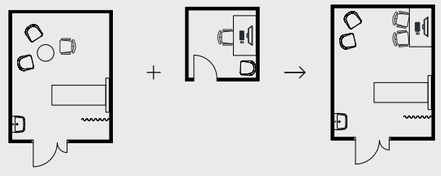
Staff & administration

The largest conference room for the administrative part and the staff room with kitchenette were combined so it could be a multi-functional room during the daytime.
Some administrative office rooms were also combined and turned into one shared office space for future flexibility and more effective use.



Examination room

We integrated all offices for one person in the original brief into examination rooms. As a result, all examination rooms in our proposal have both a conversation part and an office space.
Examination rooms are only used 20% of the workday, so in the afternoon, they stand empty. Here all rooms are used all day. Also, the doctors and nurses do not have to run back and forth between two rooms to do administrative work.

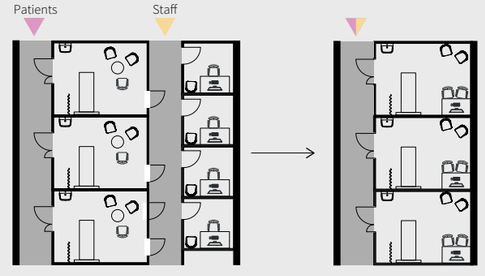


Common area

The waiting areas, which are distributed for each department in the original brief, are combined with being general waiting area that contains the central flow of the building. The waiting area is on both floors, yet it maintains coherent flow while having various kinds of space.

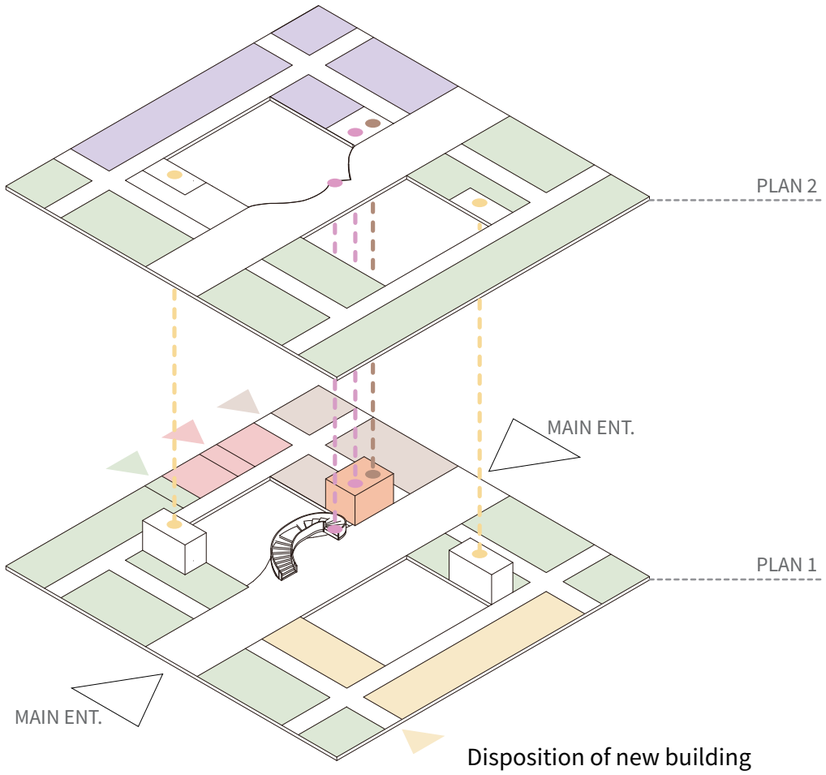
Corridor

By designing a single corridor flow, our building saves a lot of space. It is not only for patients to feel safer with only one door but also for all rooms to get sufficient daylight.



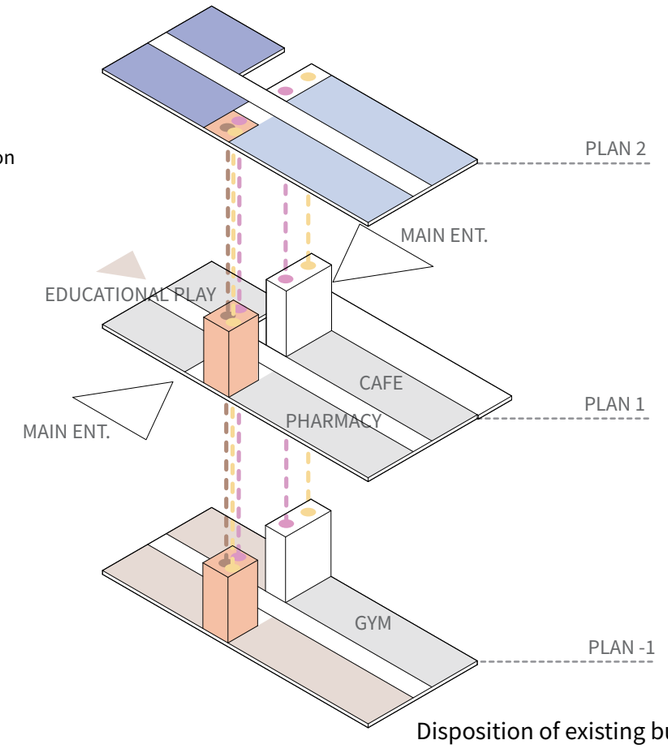
PROGRAM OVERVIEW

- Public dental care
- Primary care center
- Staff
- Acute
- Goods & Service
- Patient flow
- Staff flow
- Goods flow
- Elevator



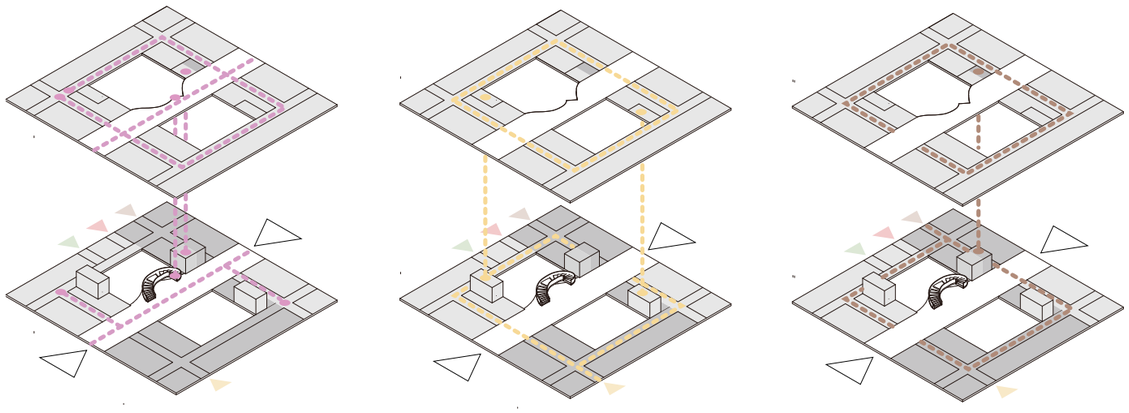
Disposition of new building

- Goods & Service
- Family center
- Child care
- Additional function
- Patient flow
- Staff flow
- Goods flow
- Elevator



Disposition of existing building

- Patient area
- Staff area
- Mixed area



Patients | Staff | Goods

Patients can access each department directly from the centralized waiting area without passing through any other departments.

Staff area has its entrance on the south facade; thus, staff can access there without interrupting the patient flow. This area also has separate stairs that enable them to go to the top floor directly from the changing room on the bottom floor.

Supply area has a separate entrance next to the parking for a track on the north facade. It also has a separate elevator for delivery.

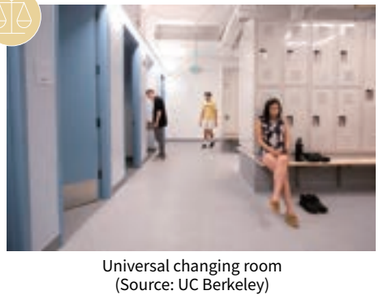
Additional functions are located in the existing building, which could be used with the park and contribute to health promotion.

PROGRAM OVERVIEW

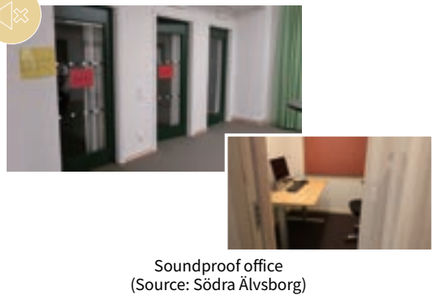
Waiting area with a fire place
(Source: Gustavsbergs vårdcentral)

Educational play
(Source: Universeum)

Outdoor gym
(Source: the Great Outdoor Gym Co.)

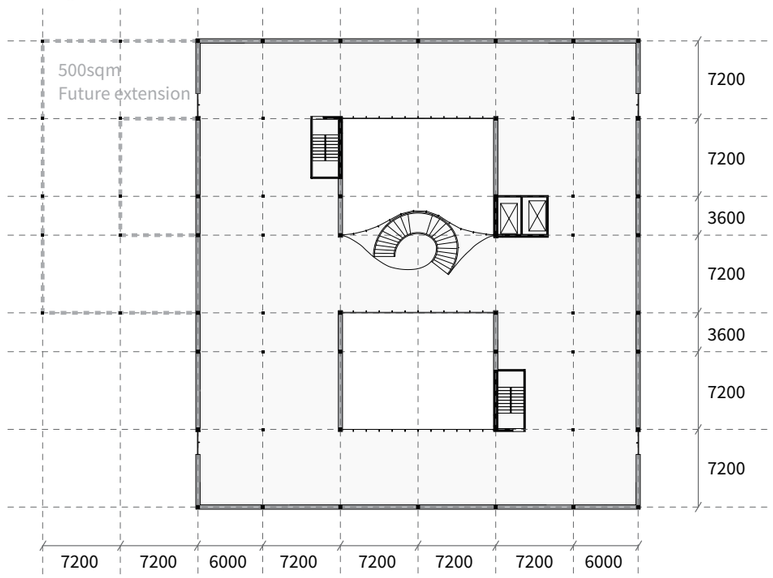


Universal changing room
(Source: UC Berkeley)

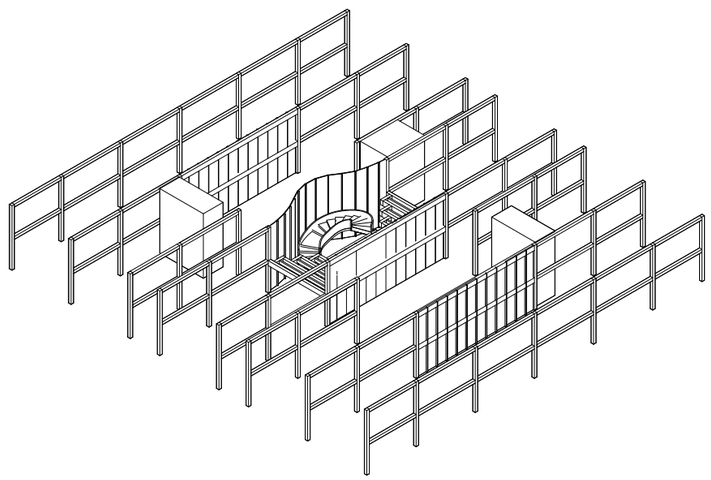


Soundproof office
(Source: Södra Älvsborg)

Core & grid plan Scale 1:500



3D structure



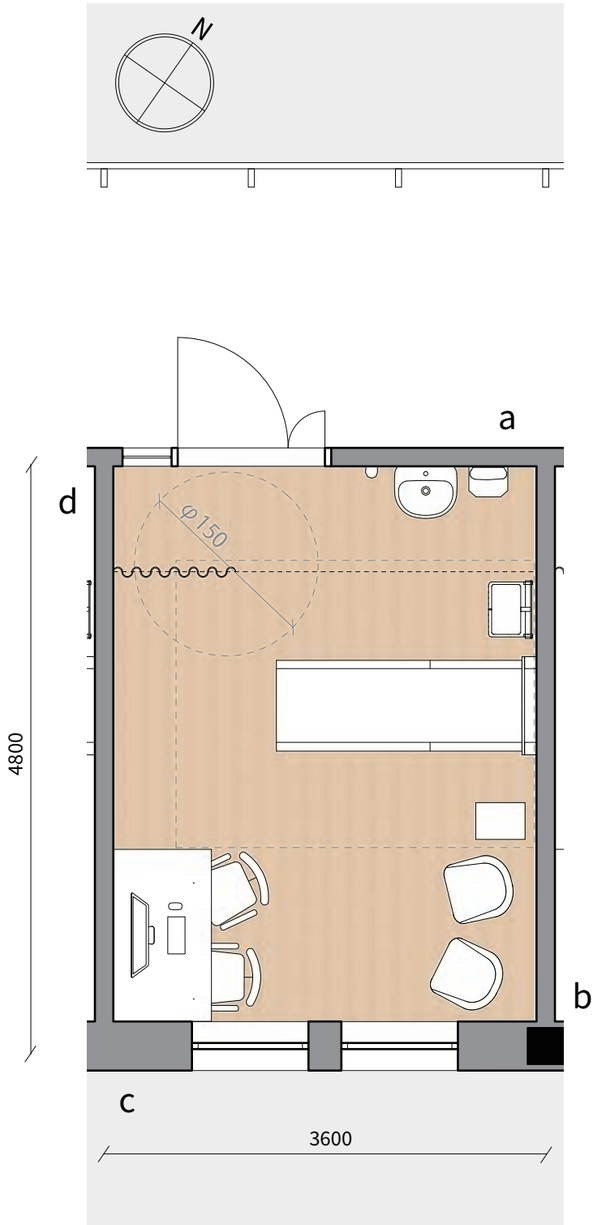
Additional function

Various functions were added for staff, patients, and the public based on our design strategies.
Several homey waiting spaces, such as one with a fireplace, were placed not only to reduce stress caused by long waiting times but also to let companies feel relaxed.
The existing building and the park have gyms open to the public as health promotive functions. In addition, it has health educational rooms for children where they learn about their body functions while playing.

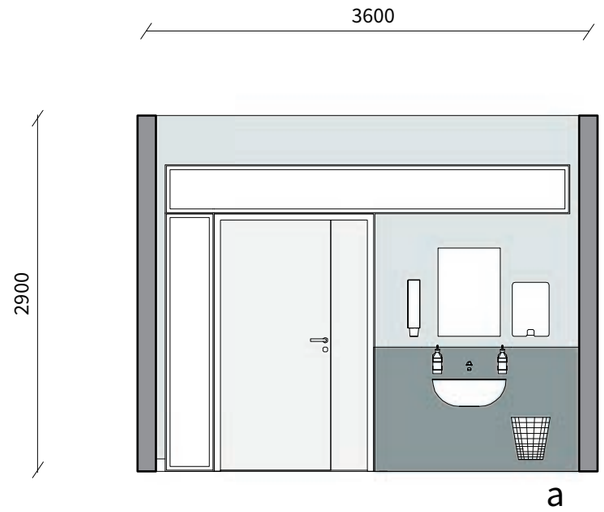
Structure

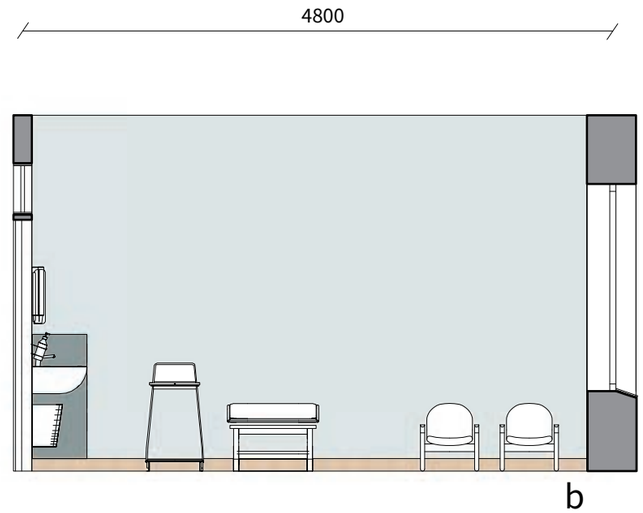
The flexible timber structure could work well for future extensions.
The primary structure grid has 7.2m spans, into which the required rooms fit well.
Some sections have 6m and 3.6m spans, yet all walls are placed along a minimum grid of 1.2m, enabling small changes in wall layout.

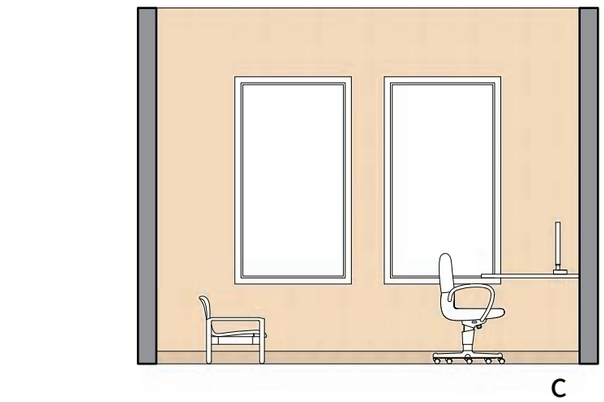
PROGRAM OVERVIEW

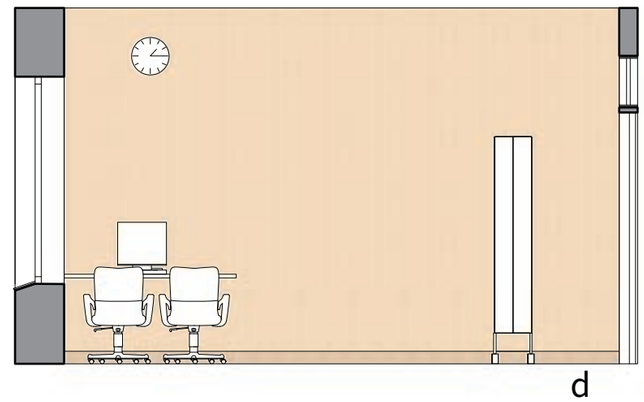


Floor plan: examination room Scale 1:50









Elevations: examination room Scale 1:50

Examination room

Each examination room has two or more windows and frosted glass slits towards the corridor; hence, the rooms and corridor get enough daylight. Some parts of the walls and the floor are finished with wooden material, which would be preferable for patients.

Anders et al. have reported that patient rooms with an intermediate degree of wood are preferable to ones with all wood or no wood.

(Anders Q. Nyrud, Tina Bringslimark & Kristian Bysheim (2014) Benefits from wood interior in a hospital room: a preference study, Architectural Science Review, 57:2, 125-131)

FLOOR PLANS

PLAN1

Group 4

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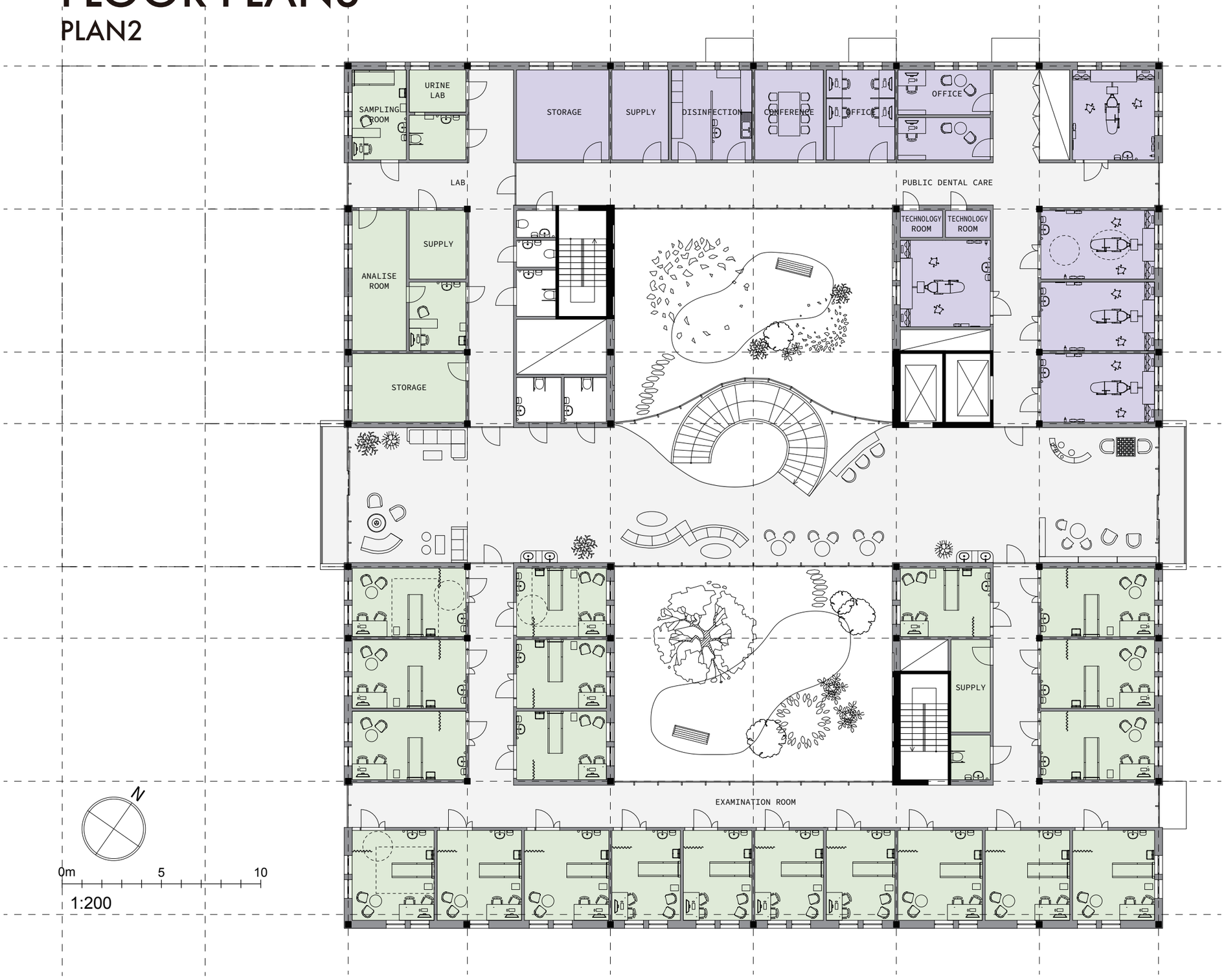
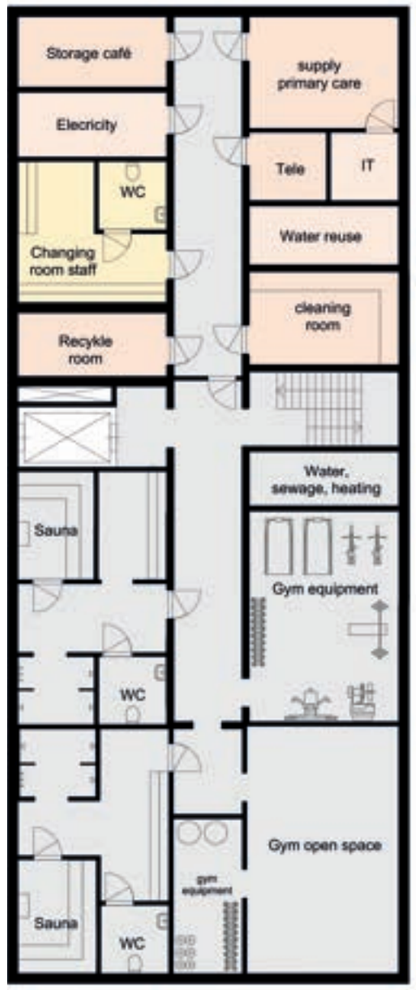
FLOOR PLANS

PLAN2

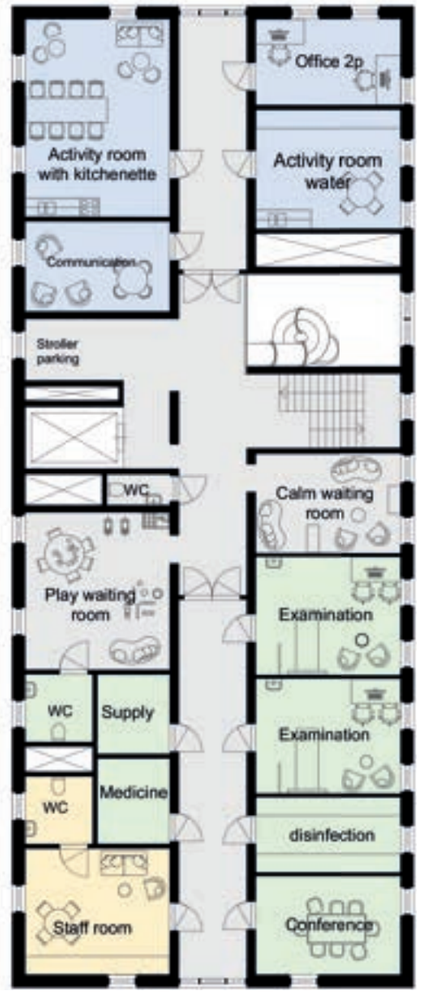


FLOOR PLANS OF EXISTING BUILDING

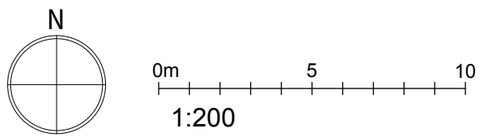


PLAN -1

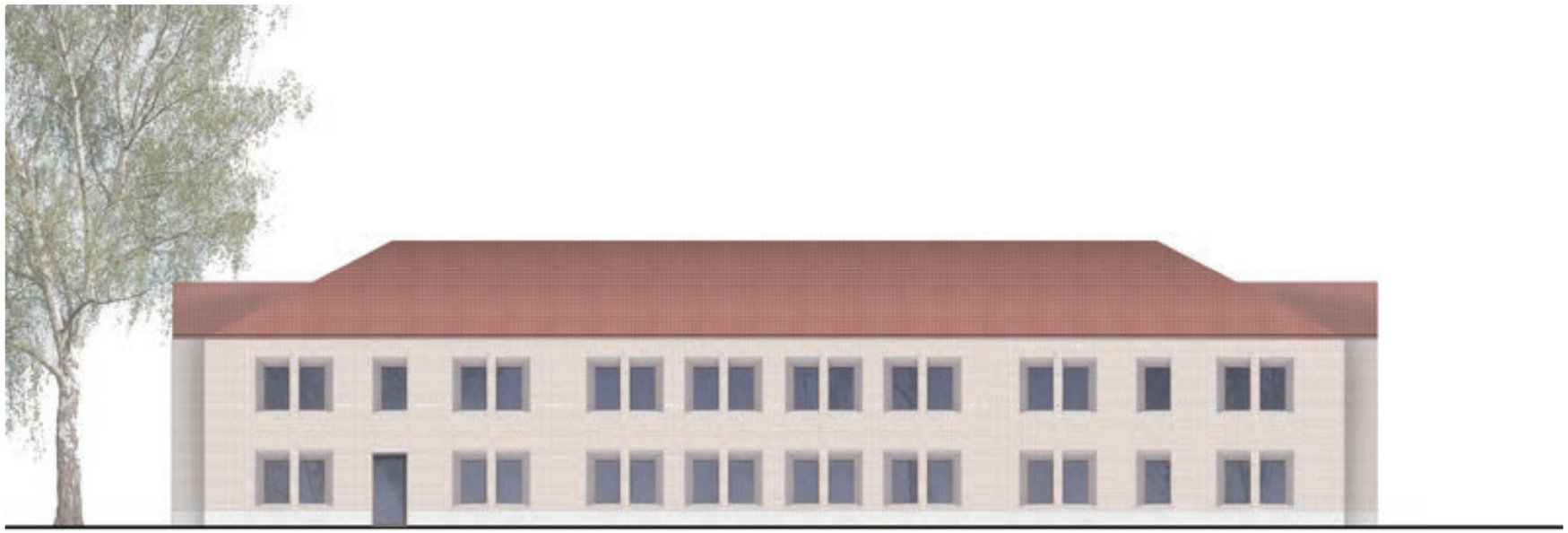
PLAN 1



PLAN 2



FACADES



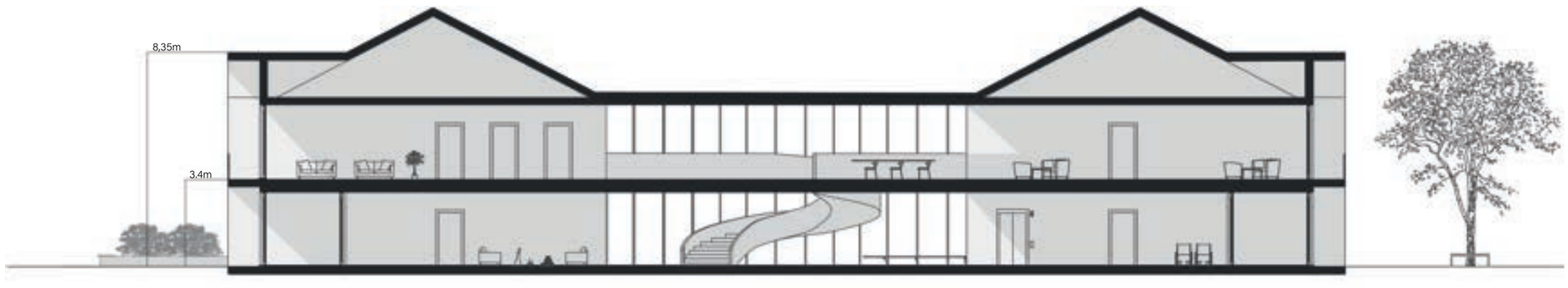
SOUTH

WEST

0m 5 10

1:200

SECTIONS



A - A

B - B

0m 5 10

1:200

DETAIL VERTICAL SECTION & ELEVATION

0 1 2m

1:50

Material & Detail

The integrated gutter system,is seamlessly incorporated into the design of the roof itself, forming a continuous line along the eave. The integrated gutter is a practical and visually appealing feature of the hip roof, and helps to enhance the overall look and function of the building.

The facade of the building is constructed using traditional brick masonry, a time-honored building technique that adds warmth and character to the exterior. The base of the building is clad in adding a touch of elegance to the design. The window on the facade features a cascading design, with rows of bricks arranged in a stepped pattern, adding interest and depth to the facade. The repeating material combination of brick and lime in the and the the windows, and the cascading window creates a cohesive and visually appealing exterior for the building, while simultaneously respecting the historical heritage of the site.

EXTERNAL PERSPECTIVE

EXTERNAL PERSPECTIVE

INTERNAL PERSPECTIVE