

Life Gateway JÖNKÖPING

Julia Aronsson, Andrea Marmol Diaz, Congrui Zha

The Project

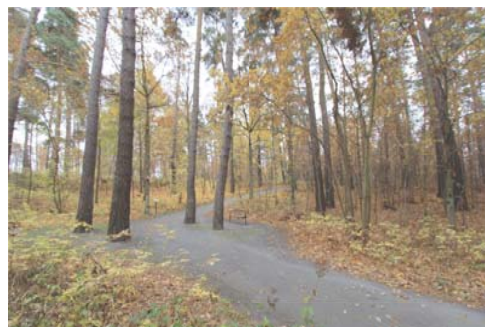
In an assignment to create a new gateway to the region hospital Ryhov we were asked to look forward and imagine how you could work here in the future. This building should be the meeting point between the city and the existing hospital a portal to prevent people from becoming an in-patient. (being admitted to a ward.)

“YOU GIVE ME WHAT I NEED, WHEN I NEED IT AND IN THE WAY I NEED IT.”

These are words that was said in an introduction for the project and together with words that often are uttered in Ryhov,

“TOGETHER FOR GOOD HEALTH”

These phrases create a solid base to anchor this project in. The question then remaining is how are our needs in the future and how can citizens and medical staff work together to give the population of Jönköping good health?



Views surrounding the existing entrance area

Jönköping



The Site



• Changing the old entrance point to something better

or

• Create a new entrance

• Keep the existing emergency entrance

or

• Move the emergency entrance



• Connection with existing function

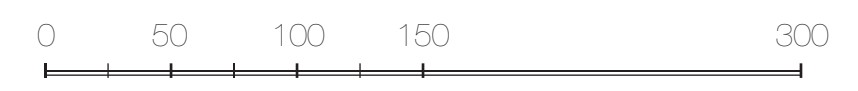
or

• Moving existing functions

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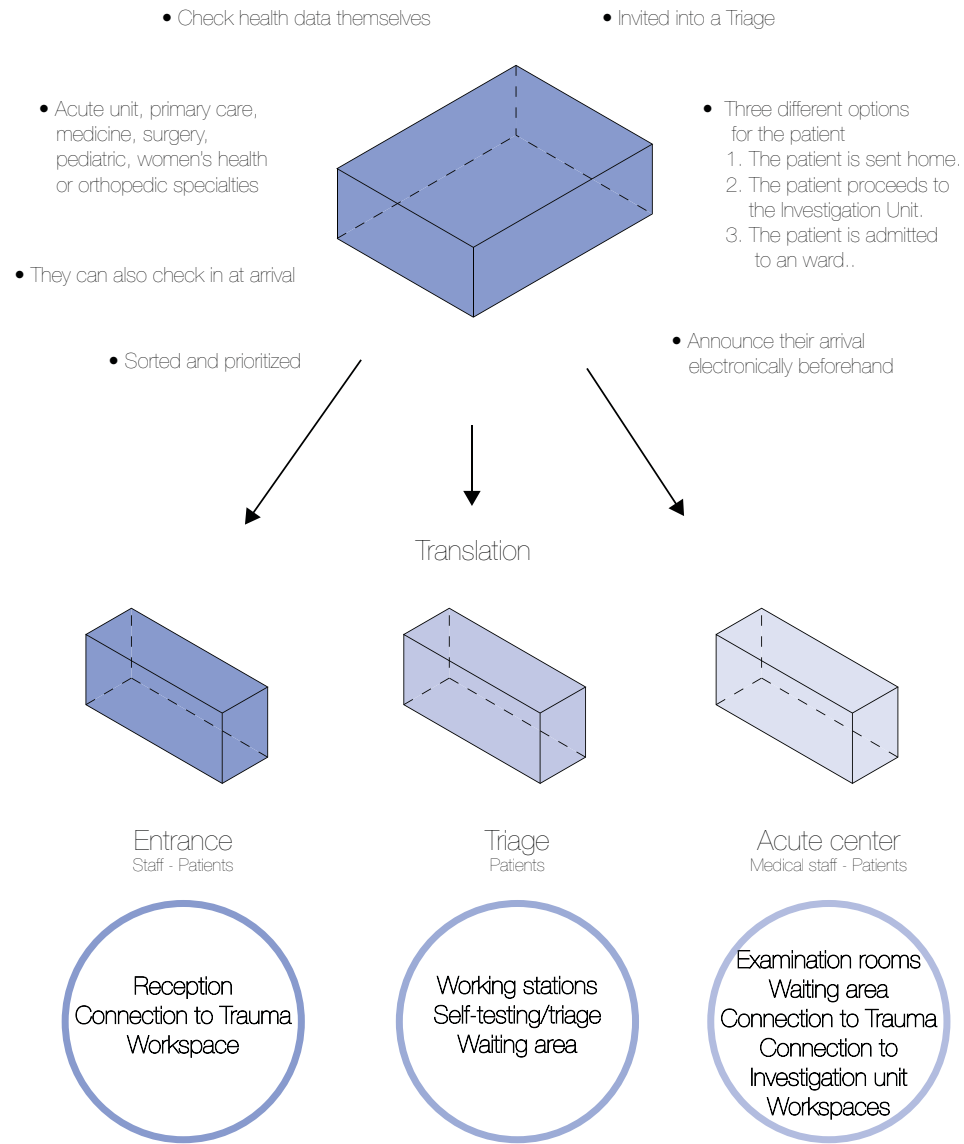
Site 1

 The site we chosen
 The sites we were given

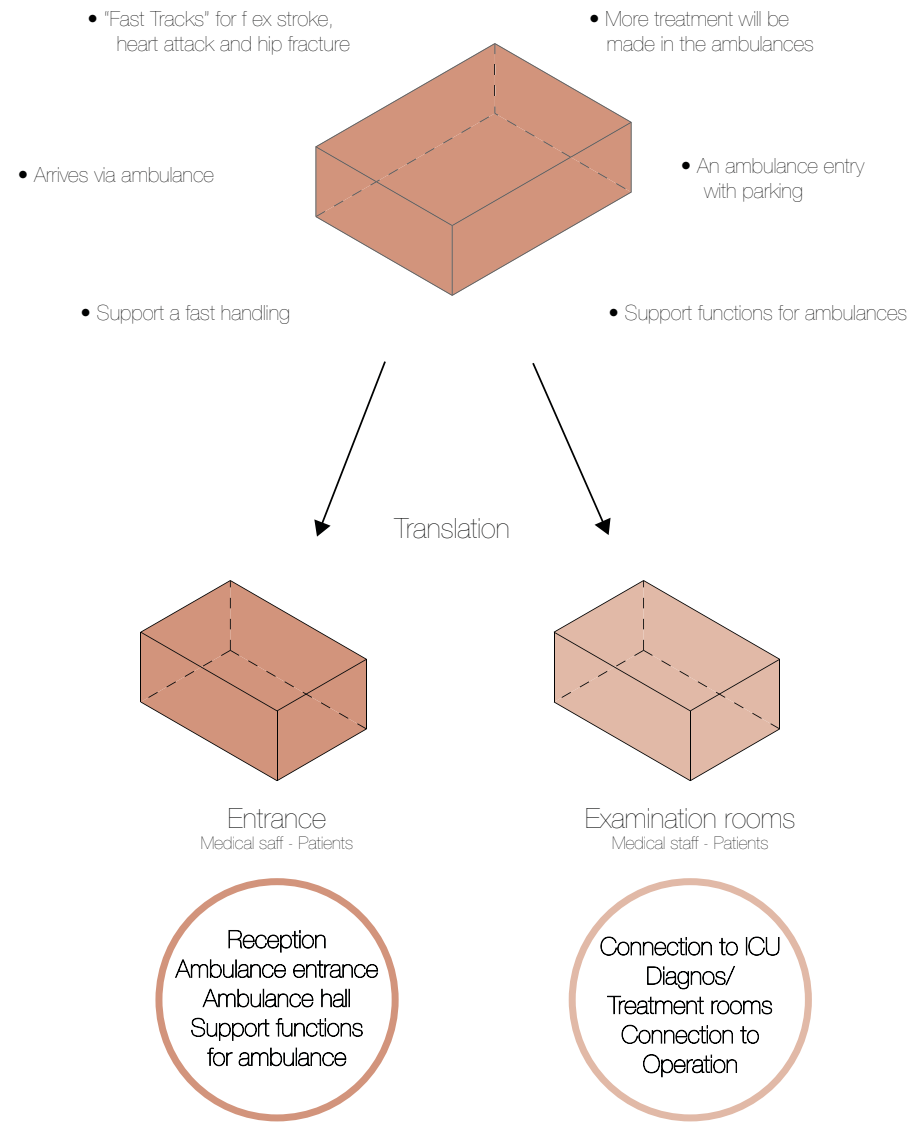


Program

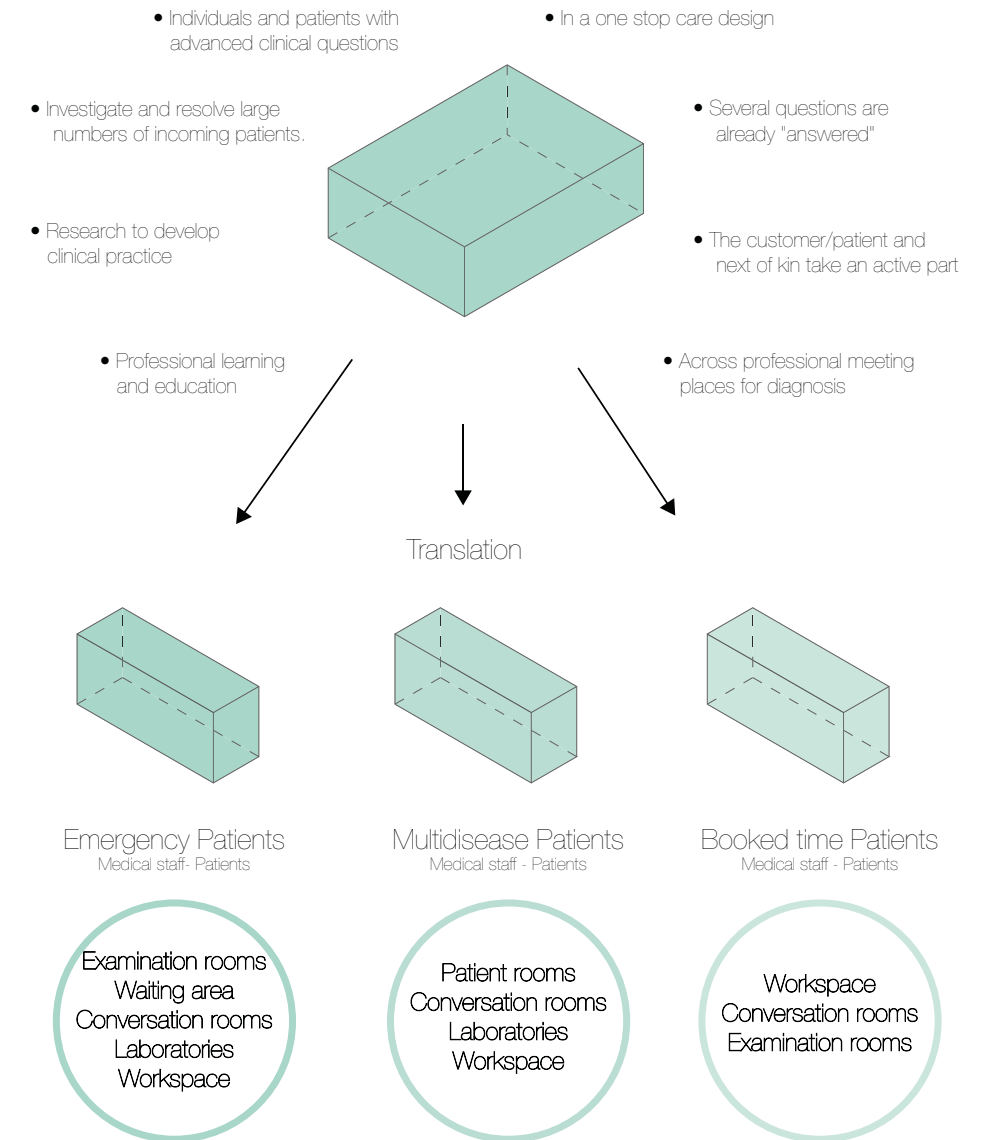
Reception and Acute center Program



Trauma Program

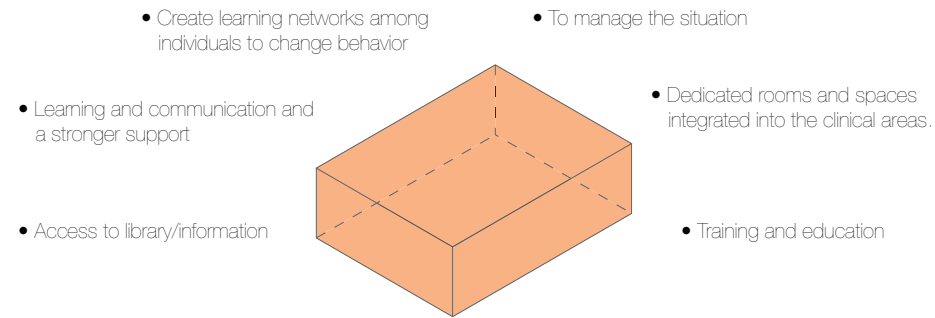


Investigation unit Program



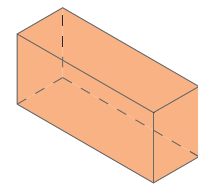
Program

Learning center Program

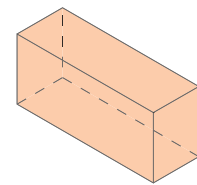


• "Sense of coherence"

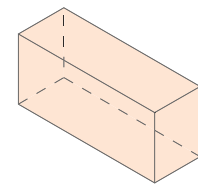
Translation



Professional learning
Medical staff- Professors- Students



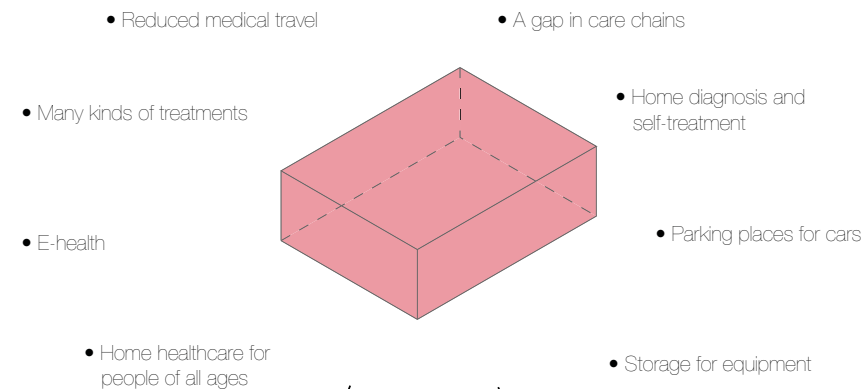
Information and education
Patients- relatives- medical staff



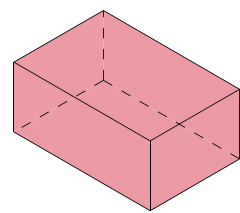
Meeting places
Citizens



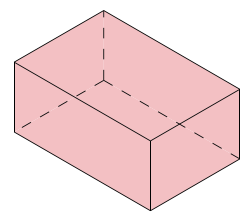
Home care center Program



Translation



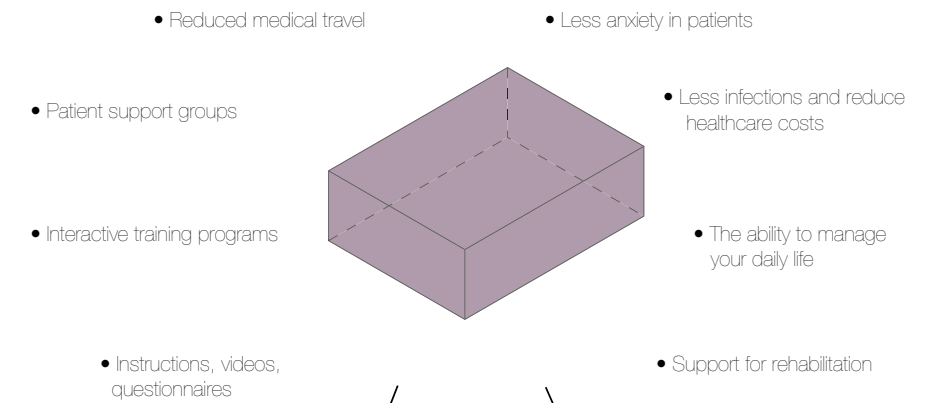
Staff area
Staff



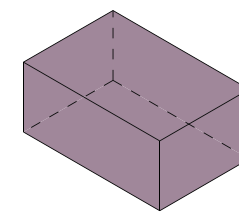
Meeting places
Staff- Patients



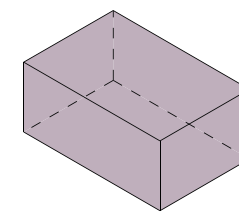
Training center/ Rehabilitation Program



Translation



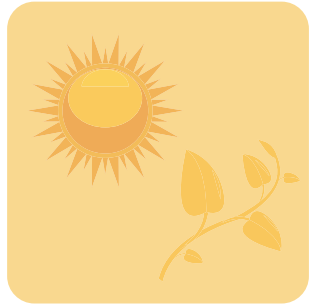
Staff area
Staff



Meeting places
Staff- Patients- Citizens

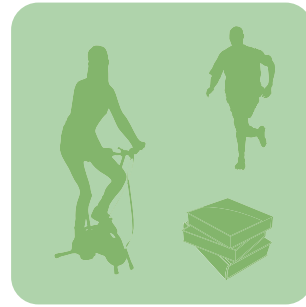
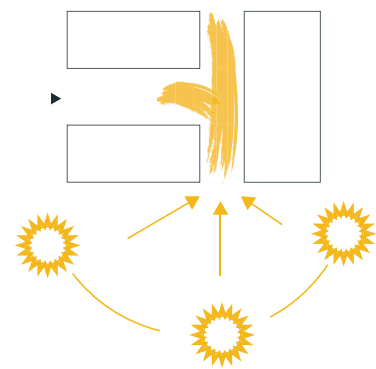
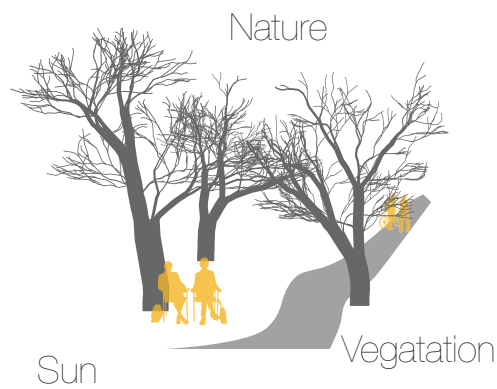


Focus points



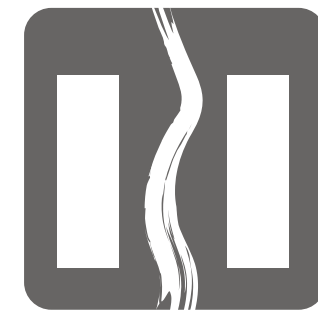
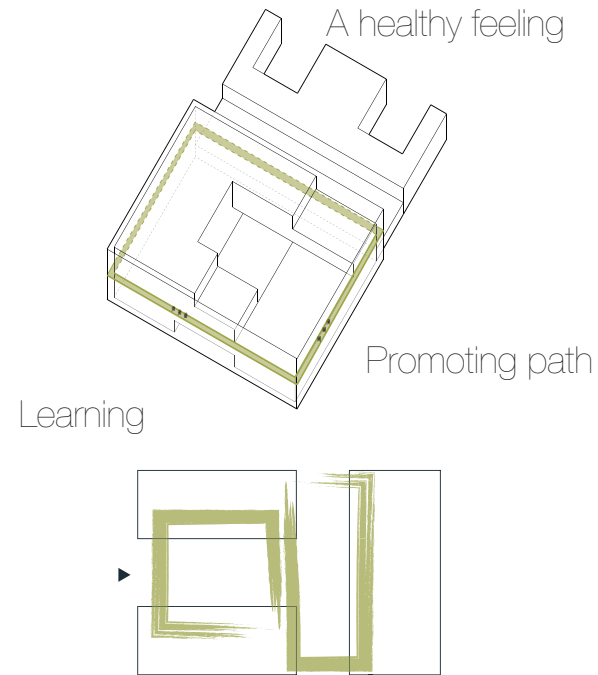
Healing environment

As we all know nature and sun are two things that calms the human being, these factors are healing environments and are therefore a big part of this project. Terraces and atriums are letting sun down, but they are also great places to have vegetation.



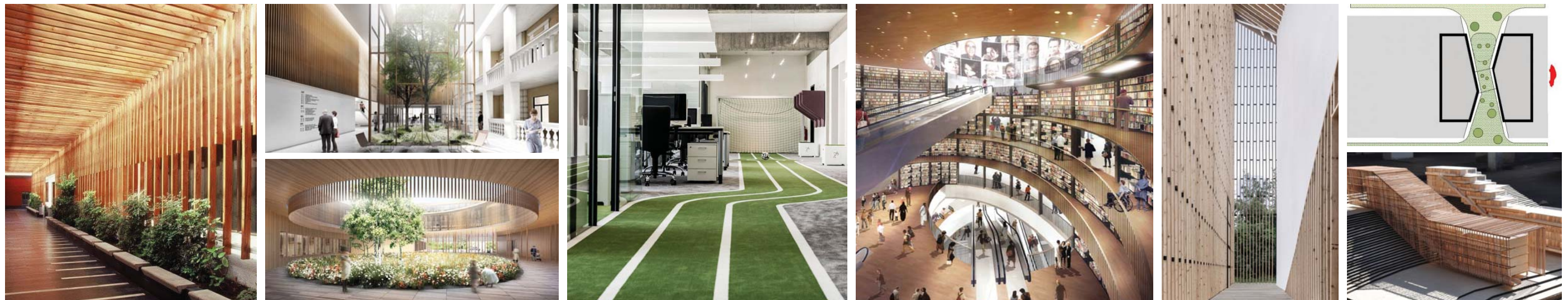
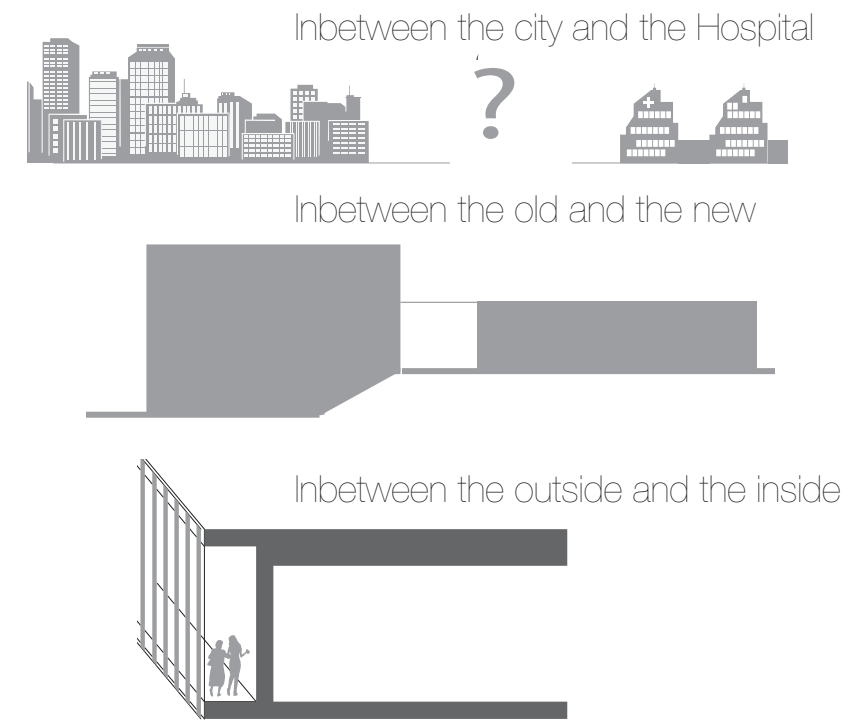
Promoting wellbeing/ learning

The knowledge about wellbeing is a lacking factor in today's society. To prevent a sicker population, it's important to spread the knowledge about exercise and healthy food. We want to promote this by making most of the visual parts in our building learning spaces or exercising spaces.

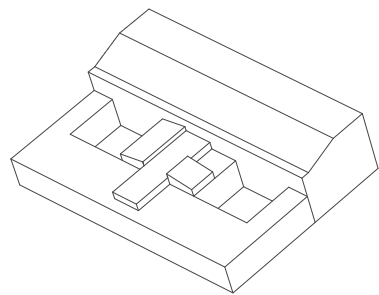


Inbetween

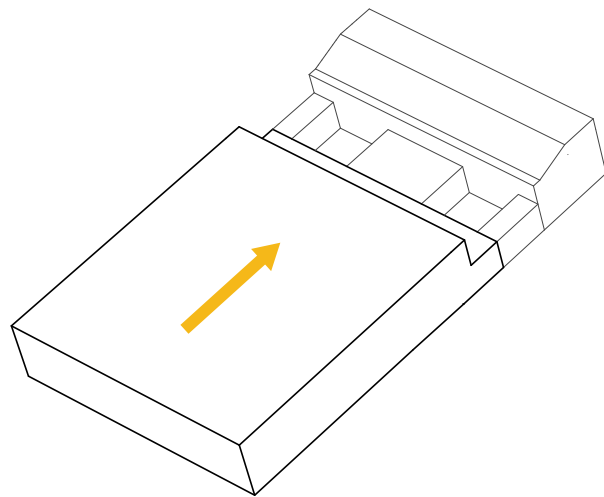
Our inbetween is a result of our translation of the program the building itself is an inbetween, inbetween the city and the hospital this is the translated in this building. The inbetween is actually the factor that helps us to create our healing environments and our promotion/ learning, because this is where the occur the most.



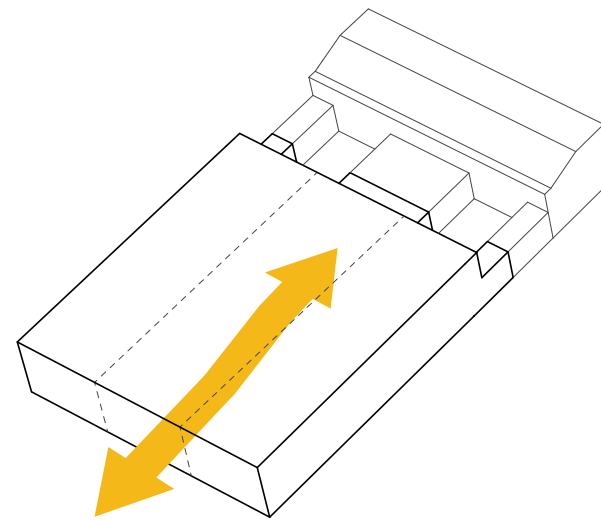
Volume concept



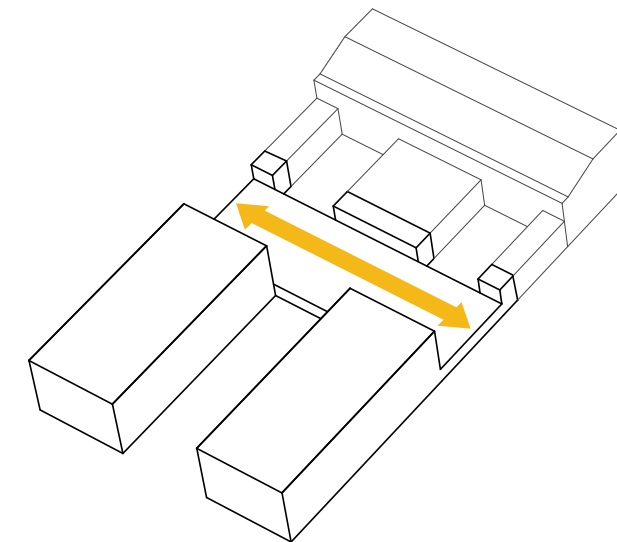
Existing building



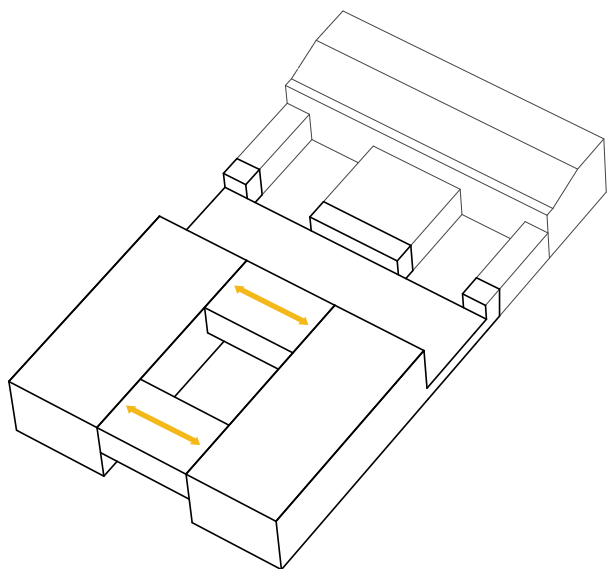
Some of the roof is demolished and the new volume is pushed in to the existing one



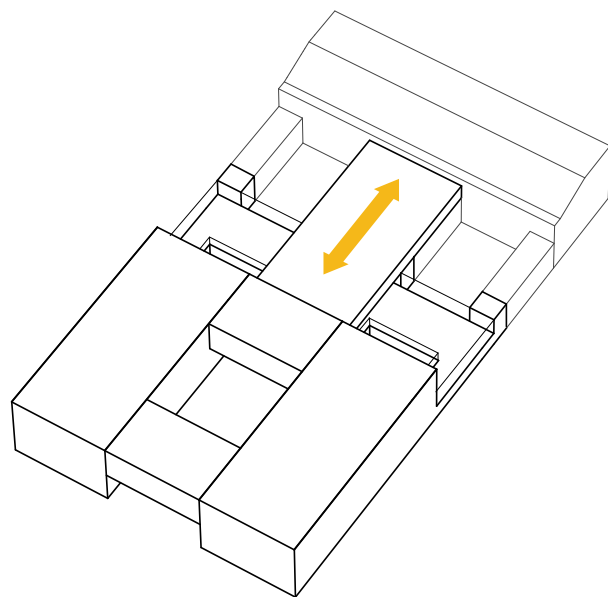
We want the connection through our building to be clear and are therefore creating an inbetween from the new square to the existing building.



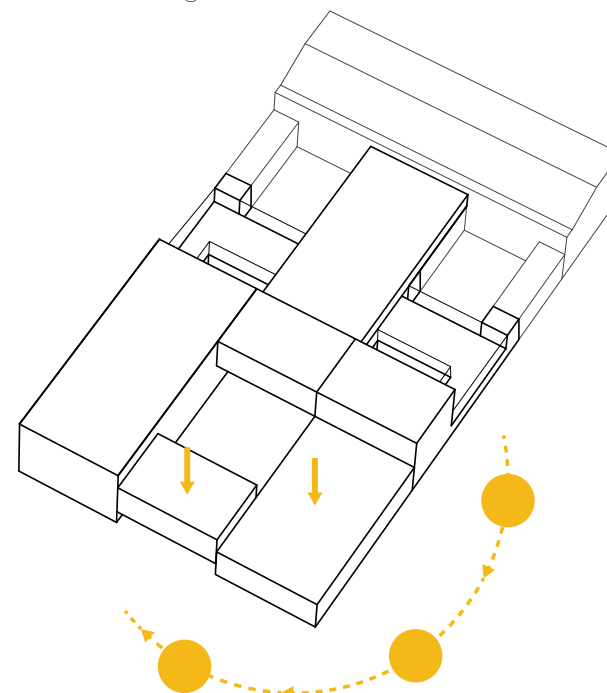
We also want to create an inbetween between the new and the old to make a softer connection.



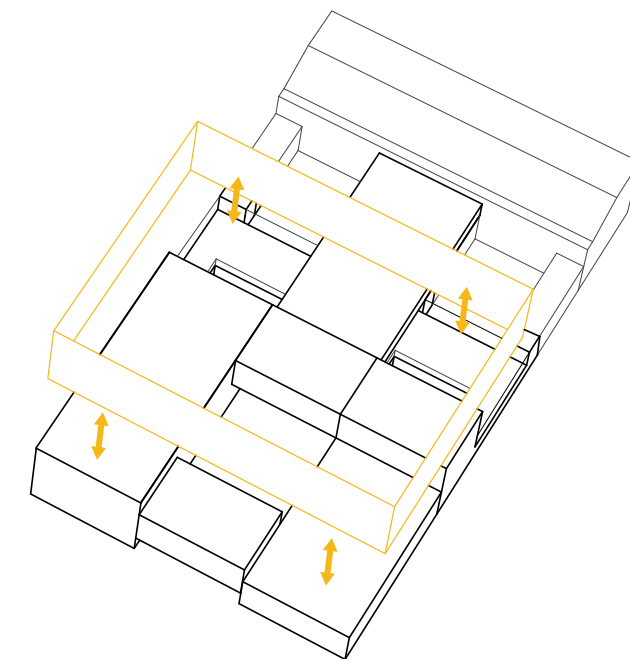
To keep a clear orientation we then bridge back the two new volumes again



To create a nice connection to the old building we propose to rebuild parts of the existing restaurant and create a bridge through this



To let down sun and also create green relaxing areas we push down parts of the volume and creates terraces.



As we want to play with a transparent facade we also add a second skin to give more privacy.

Ryhov area

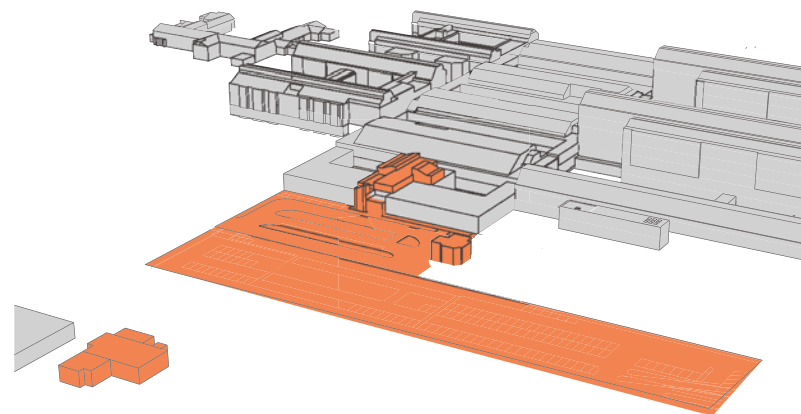
Connections

The entrance level of the new building will be located in Försörjningsvägen, and therefore is the existing road, leading up to today's entrance, being demolished. Försörjningsvägen is kept where it is, but it's widened.


We also think that today's options for riding your bike or walking to the hospital are not enough, we propose a new bridge stretching from the nature reserve across the highway into the west parts of Ryhov. By this way, we are also creating a better connection between the hospital and the city.

As we want to create a welcoming entrance we have designed a square just in front of the building. This square will be the meeting point for all the people who are coming to the hospital, and the square is then leading the people in to the building.

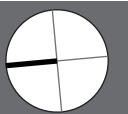
- 1. AVA, education, wards (according to the development plan of Länssjukhuset Ryhov)
- 2. Technical (according to the development plan of Länssjukhuset Ryhov)
- 3. Infection clinic, oncology, wards (according to the development plan of Länssjukhuset Ryhov)
- 4. Patient hotel
- 5. A new square with a new bus stop



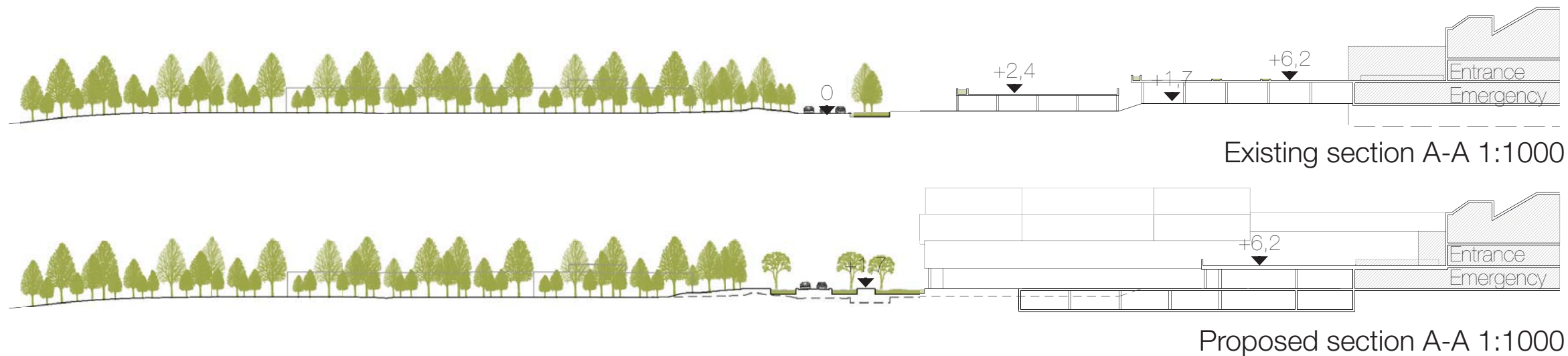
Here you can see what's being demolished within the existing hospital.

 New walk and bike lane connecting with the paths of Rocksjön and an option to cross the E4

Plan over Ryhov 1:4000



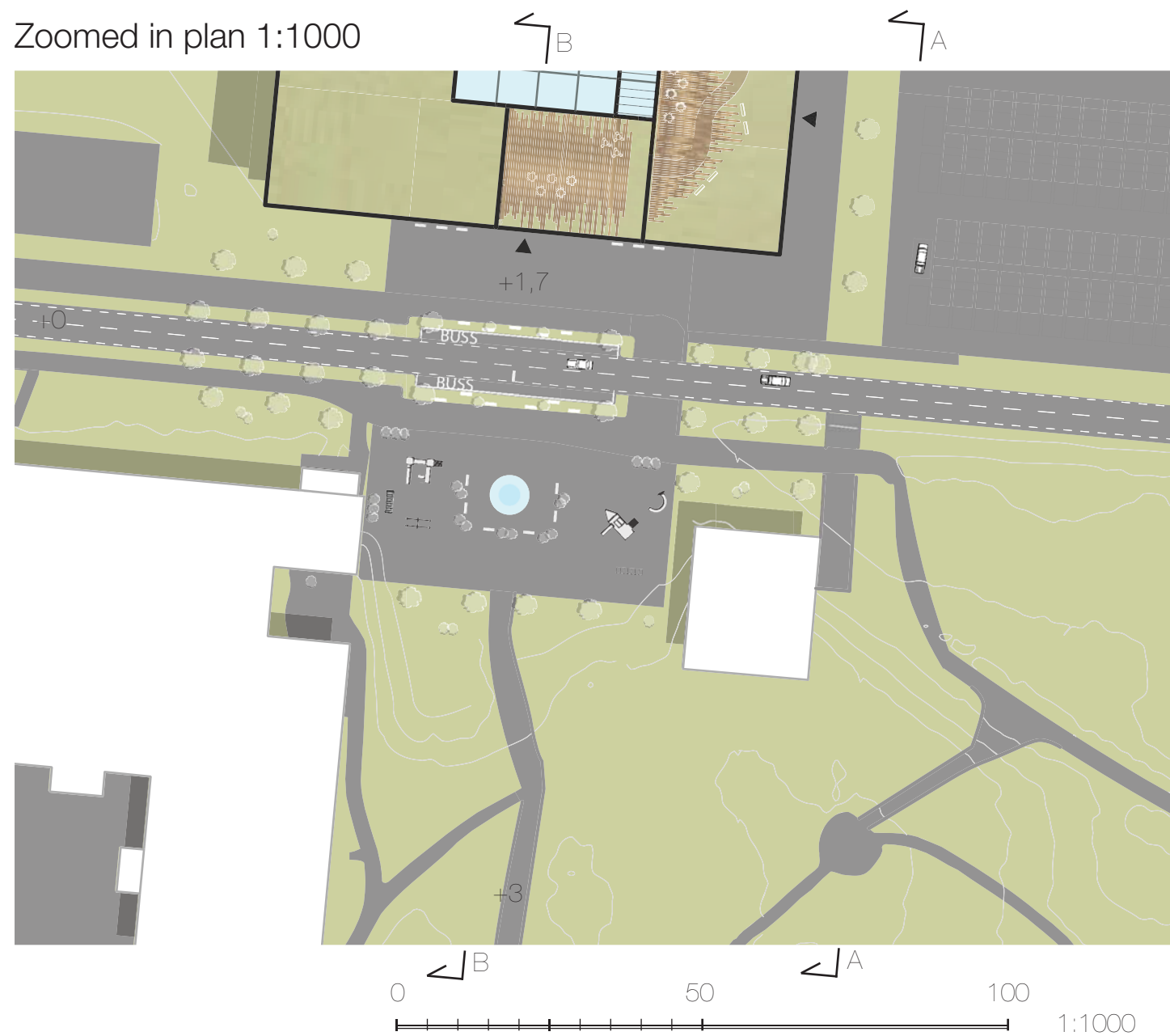
Försörjningsvägen



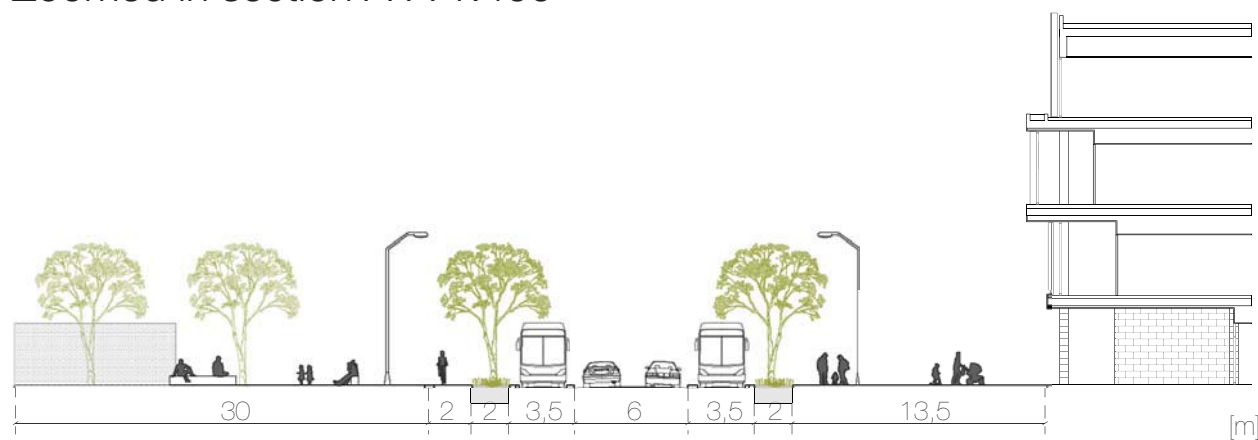
We are keeping Försörjningsvägen at its current position but we are modifying its level to meet up with the new entrance. As we can see in the sections we are increasing 1,7 m just to be in the same level as the emergency department and therefore create a better connection between the new building and the existing.

As we are redoing this road we want to change its section to create a slower pace, but also a softer road and give room for bikes and pedestrians. As a result of changing the road and creating a big square in front of the new entrance this road will be given a new status.

Zoomed in plan 1:1000



Zoomed in section A-A 1:400



Zoomed in section B-B 1:400

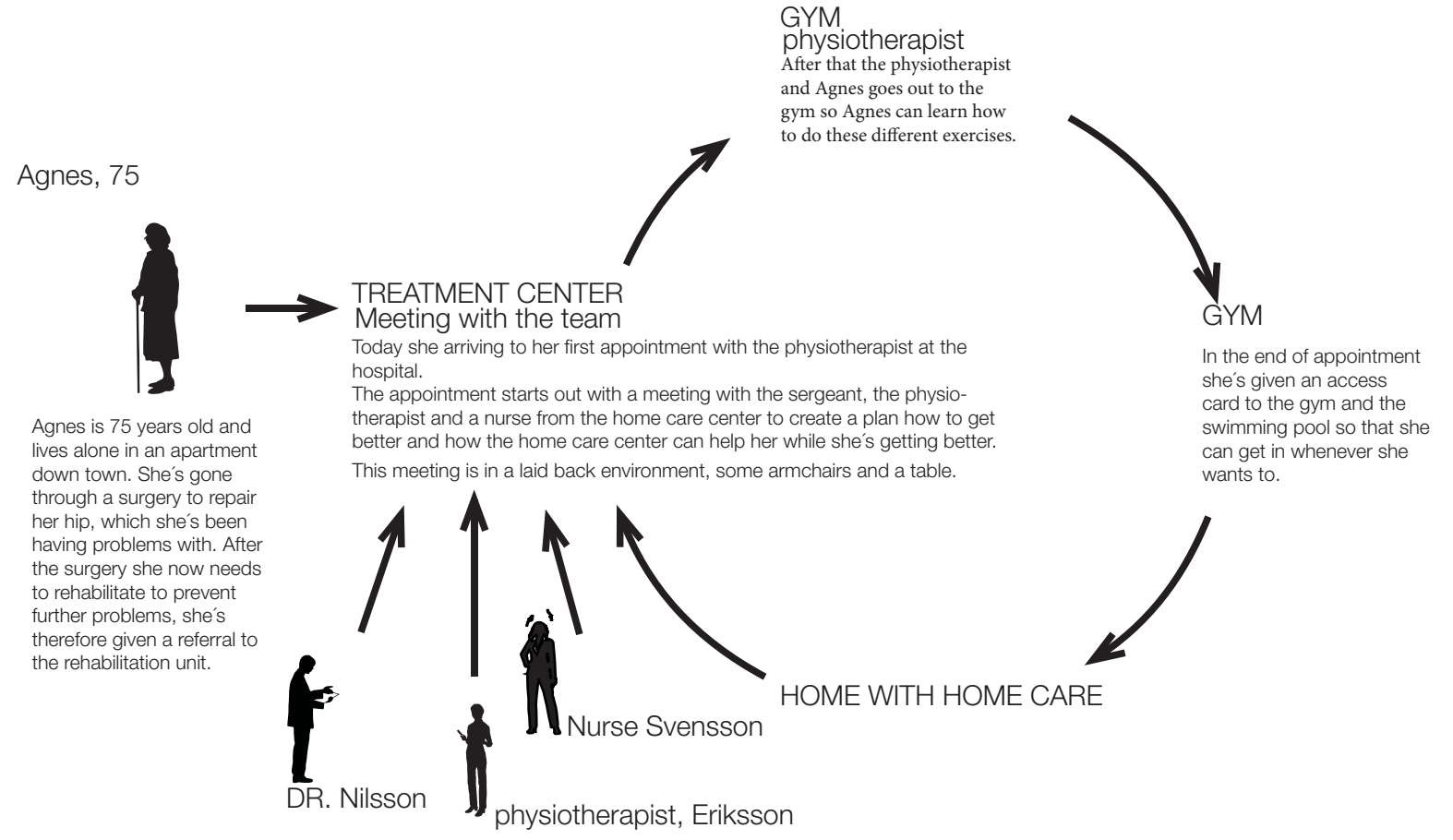


Patients

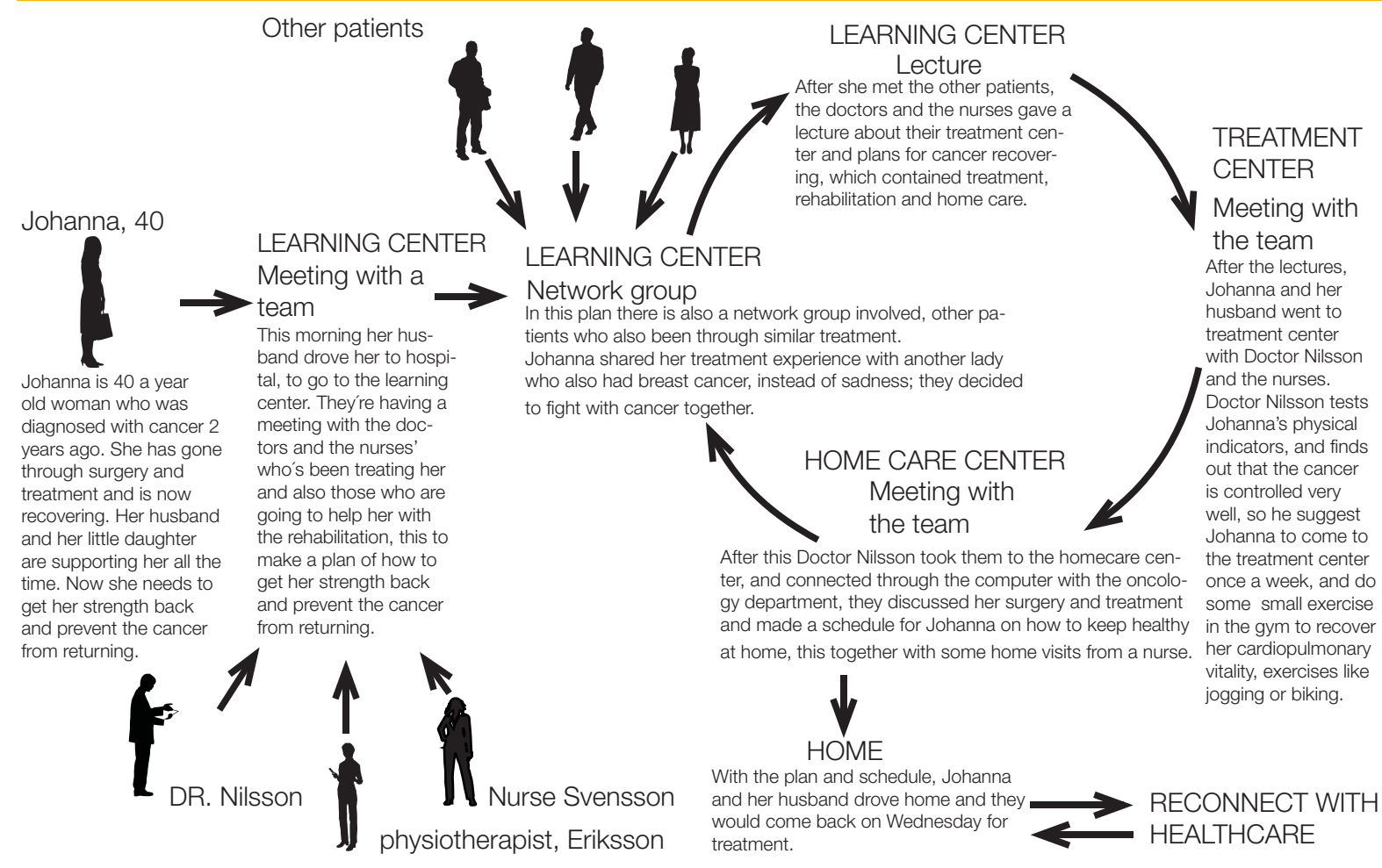


To understand the patients' needs and their travel through our building we made up patients and imagined the disease and the different steps they had to go through. By doing this we got and understanding both about the program but also some parts of how you work in a hospital. These are 2 of our patients, their journey, but also the different spaces they need and what they could for this specific patient.

Understanding the patient

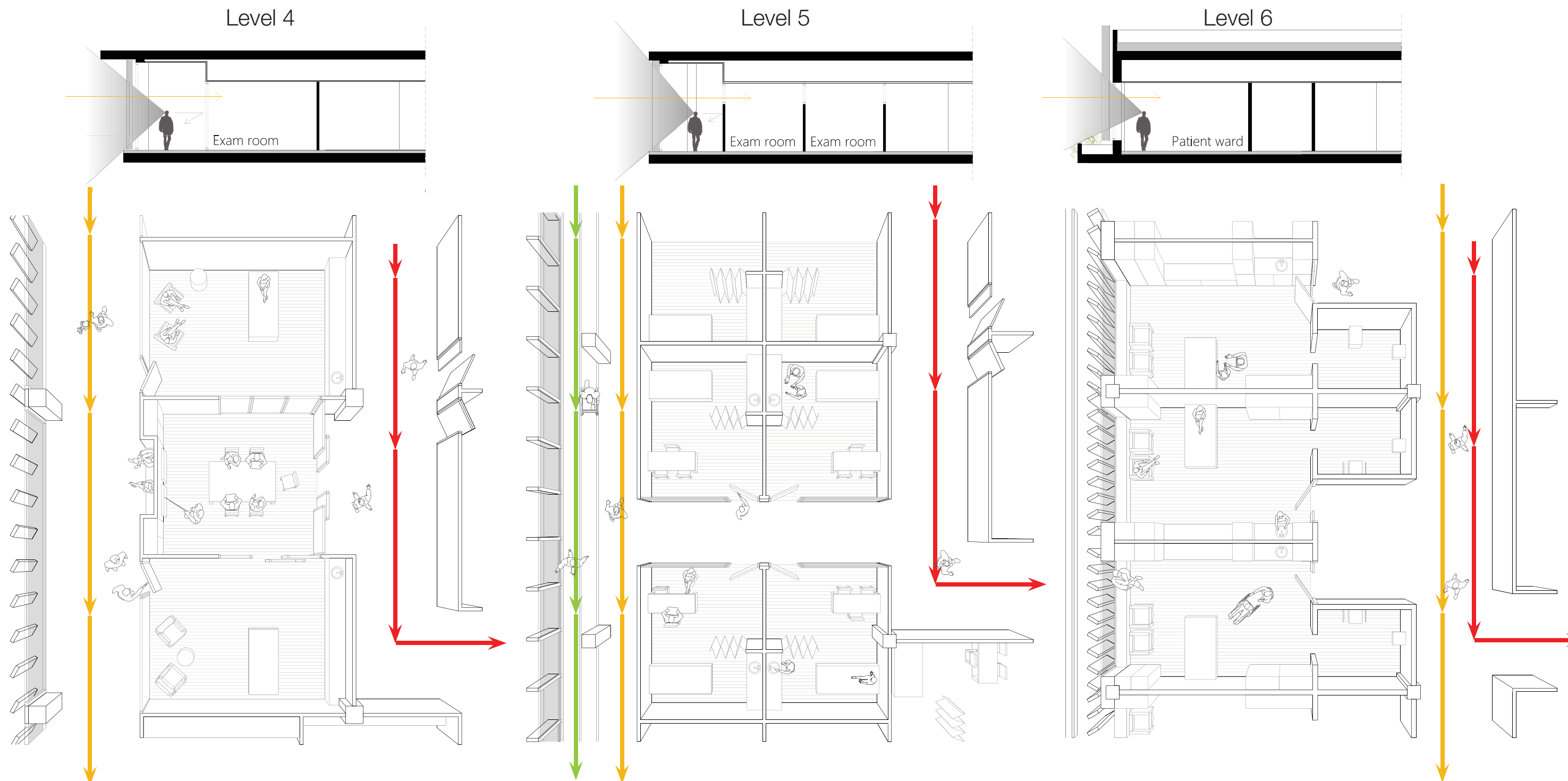


- Social interaction
Promoting interaction
- Accessible
- Managable
- Orientation
Well structured, symbols, visual (not hidden)
- Happy place
Bigger place in which you can find your own space



- Promoting wellbeing
Greenery and environment that promote exercise
- Laid back
A comfortable and relaxed place for interaction and resting
- Professional
Meeting spaces where Professionals can meet patients or their relatives
- Educational
Group rooms and small room for learning and meetings
- Supporting
A place to meet family, friends and professionals in natural spaces

The investigation



In our interpretation of the program we have worked a lot with this unit. This is the place where patients and medical staff can meet. But as the medicine is changing it is needed to think further on how this meeting can be in the future. Another factor that has determined the design of this unit is the different patients that will visit this hospital. As a result of this, the project has three different departments for the investigation unit.

1. Emergency patients: These patients are sent to this unit after being checked by a doctor in the acute center. This department is designed with a clear corridor for patients, units of two patient rooms with a shared meeting room and an internal working space for medical staff.

2. Booked time patients: Patients who come to this unit already know what they have so they are supposed to have a booked time to meet the doctor, maybe this is to plan their treatment. This unit is more public and it is mixed with other functions as the rehabilitation unit. The corridor for these patients is part of the rehabilitation department so it is going to be a dynamic space.

3. Ward patients: this department is designed for patients that need to be in the hospital for more than one day. There is constantly an increase of multi-deceased patients and this unit is designed more for them. In this level the patient's flow and medical's staff flow are mixed.

- Staff
- Patients
- Other people

Sustainability

Ecological

Materials



Fir
Fir is a tall evergreen tree related to the pine that yields durable timber. It's a common material in Jönköping because of the amounts they possess, and that's also the reason this material is used in this facade.



Slate
Slate is a fine grained stone often used in buildings as facade, floor or roof. The darker slate which covers our external pillars is a good complement to the natural grey fir.



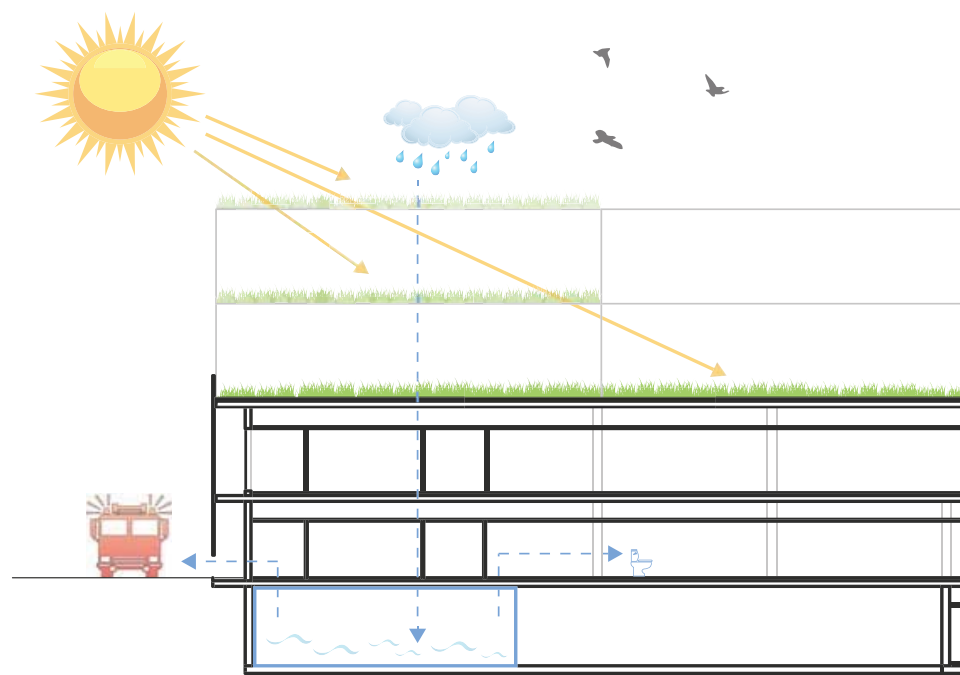
Glass
A transparent material gives the opportunity for the patients to look out over the hospital area, but is also allows more sunlight into the hospital itself.



Reuse

By collecting the rain water and leading it down to a collecting container in the basement, this water can be reused in different parts of the building, for example can it be used by the firefighters, but also for

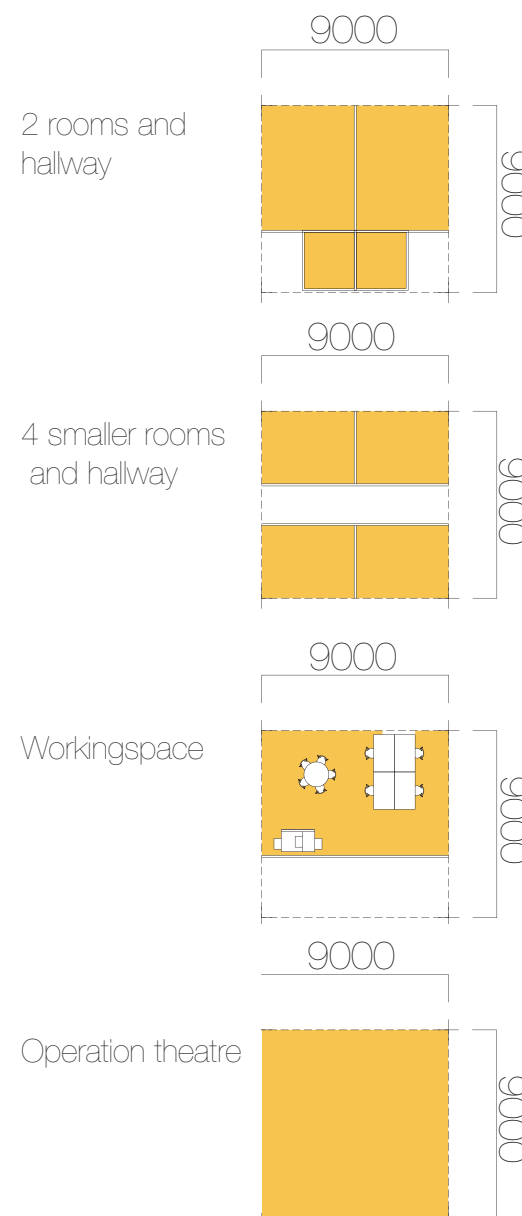
flushing toilets. The green roof is also a sustainable factor, it's taking care of some of the rain water, but it also favours the biodynamic system, as well as purifying the air to some extent.



Economical

Flexible grid

By creating a grid which can contain several different function we open up for changes in the future a unit that today contains a 4 smaller rooms and a hallway can in the future become an operation theatre or wise versa.



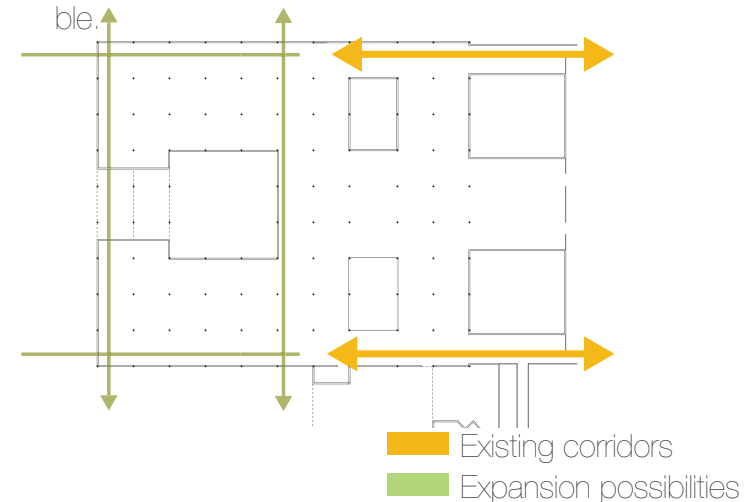
Flexible facade

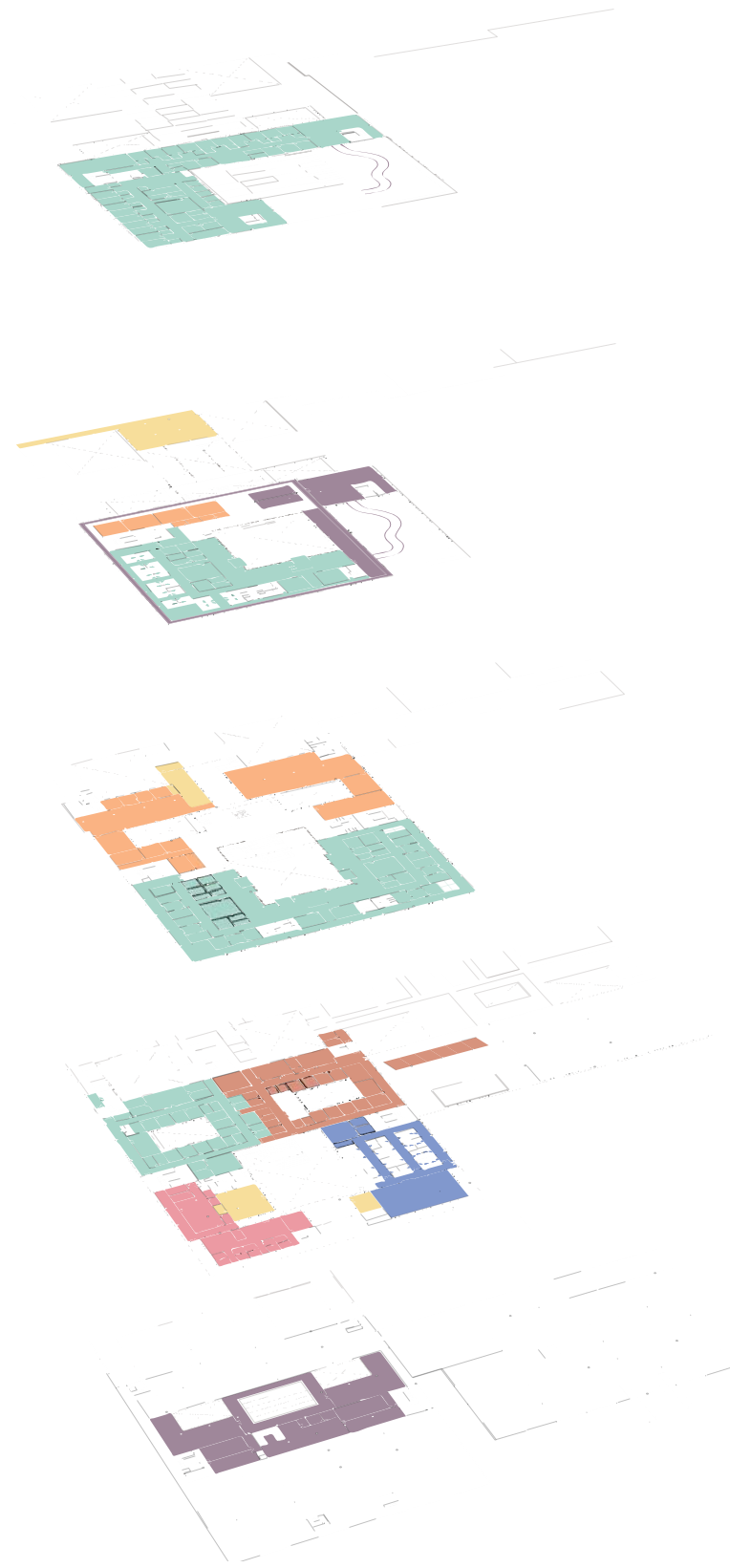
When time passes by the styles changes a lot, but what if you easily could change the "skin" of the façade? A double façade gives you the opportunity to do just that, as well as giving a better balance between sunlight and privacy.



Expansion

To be able to continue the existing corridors was an important question in this project. This so that the existing functions easily could connect to these new once. Another important question was to be able to extend in the future, which we made sure could be possible.





Axo

Level 6	
- Investigation (Ward)	3000 m ²
- Terrace	420 m ²
Level 5	
- Investigation (booked times)	1700m ²
- Training (with instructor)	1150 m ²
- Learning center	300 m ²
- Public service	380 m ²
- Terrace	1000 m ²
-Other (Communication etc.)	400 m ²
Level 4	
- Investigation (emergency)	3000 m ²
- Learning center	1700 m ²
- Public service	200 m ²
-Other (Communication etc.)	1200 m ²
Level 3 (Emergency)	
- Acute center	1200 m ²
- Trauma	1400 m ²
- Investigation (emergency)	1500 m ²
- Home care center	780 m ²
- Public service	250 m ²
- Ambulance hall	1000 m ²
-Other (Communication etc.)	1400 m ²
Level 2	
- Training (swimming pool)	2000 m ²
- Delivery	1500 m ²
- Installation	3000 m ²
<hr/>	
-Total	28480 m ²

The journey through the building

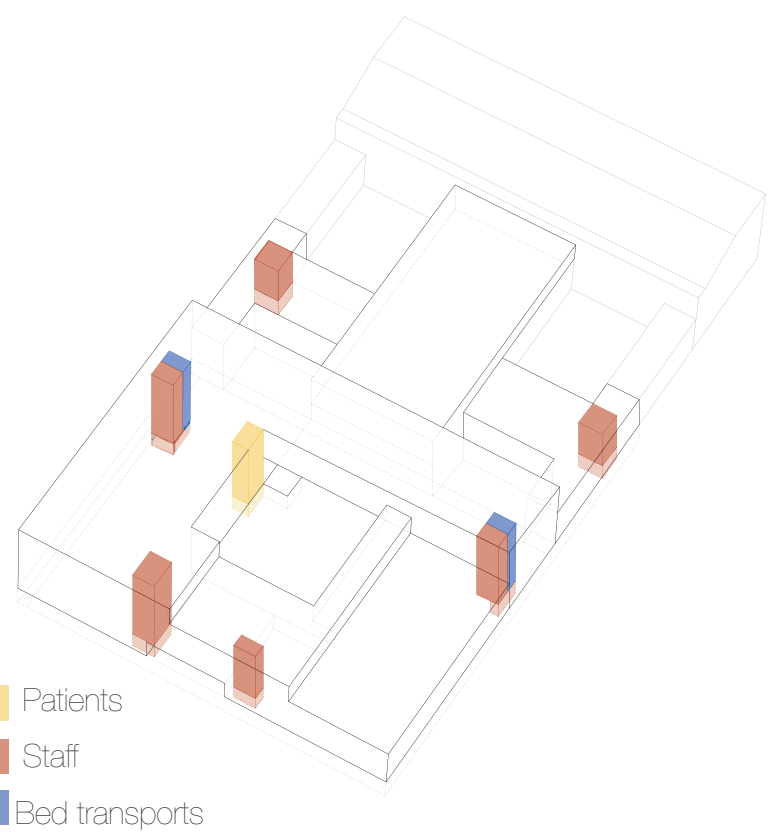
With focus on the journey you arrive to the hospital through the new square, this new square then leads you in to the entrance. When entering the volume opens up in a light and lush atrium. This atrium is a part of the healing environments in this building, and as you look up you can see people

reading, meeting and exercising all through the building. On the left hand corner you can take public elevator to level 5, this is the rehabilitation centre, where you can find a promoting path along the façade. If you don't want to take the elevator, there is a big stair in front of you, this will lead

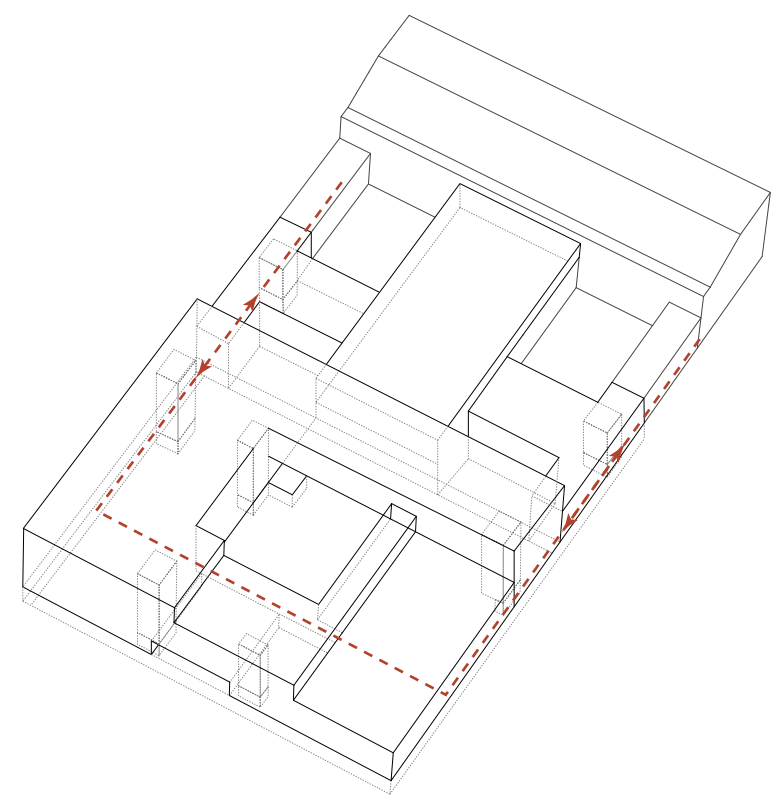
you up towards the old entrance. The stair is also a part of the focus on promoting wellbeing in both relaxing and exercising. After climbing on the stairs, you'll enter in to a more narrow pathway before it once again opens up in a wider and higher learning space. This part of the building is

covered with a glass roof and on both your sides you have two garden atriums coming down. To the right you have the more quiet part of the library and to the left the library is more interactive. Just inside the library you'll find a stair leading you up to an extension from the Restaurant Matilda.

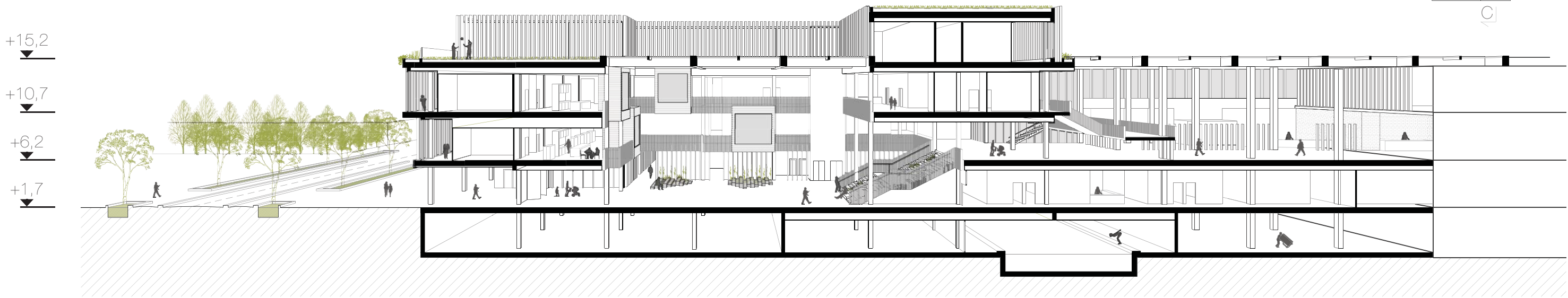
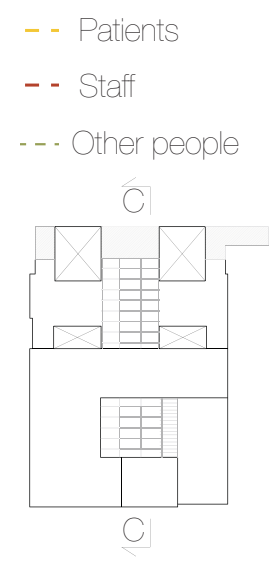
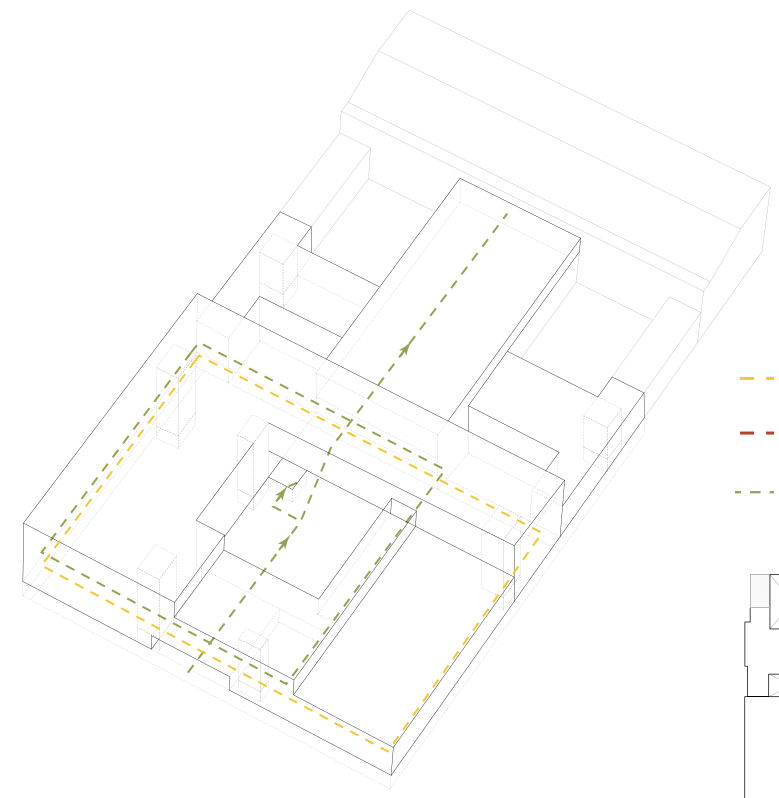
Vertical communication



Staff horizontal communication

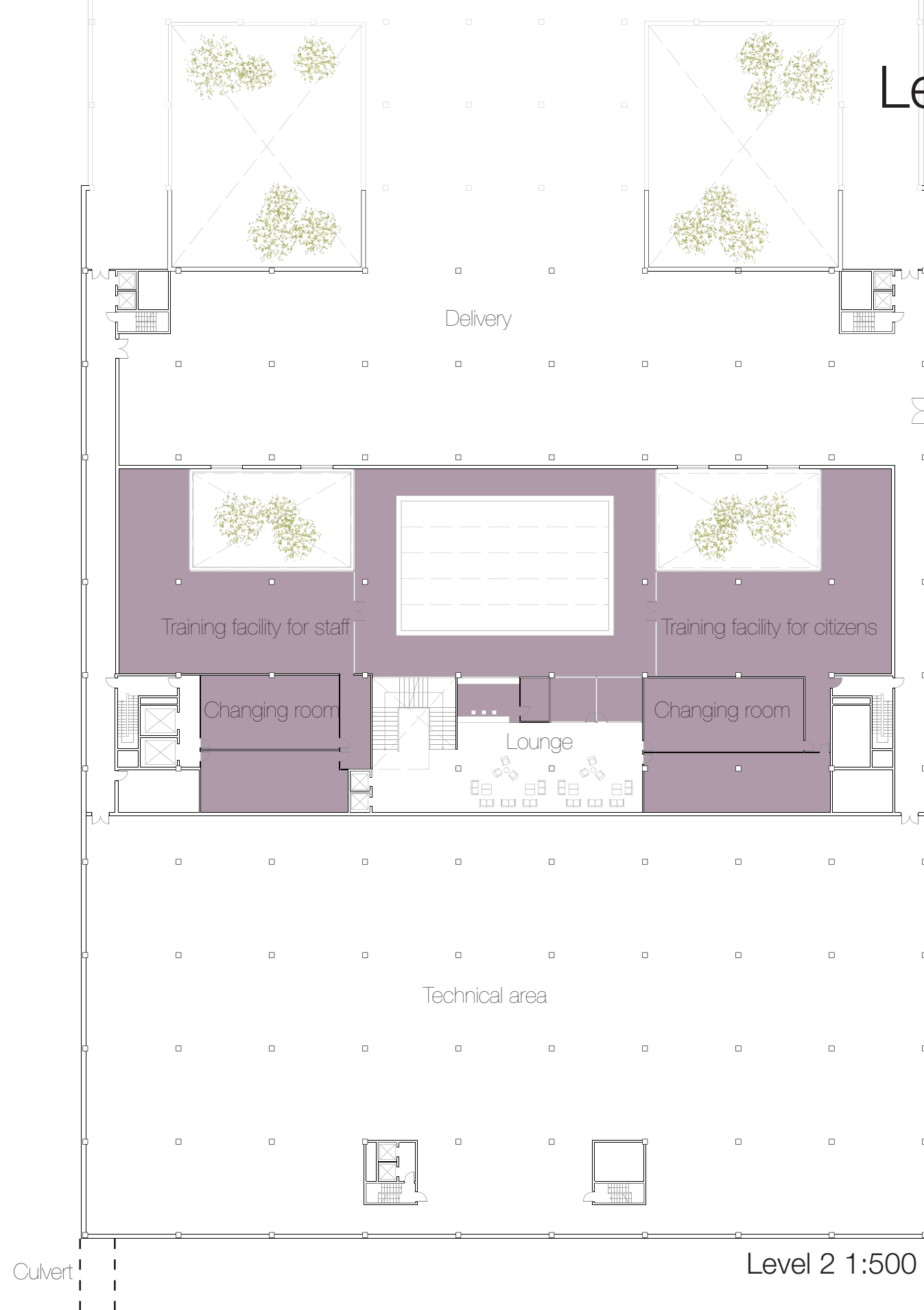


Visitor horizontal communication



Section C-C 1:400

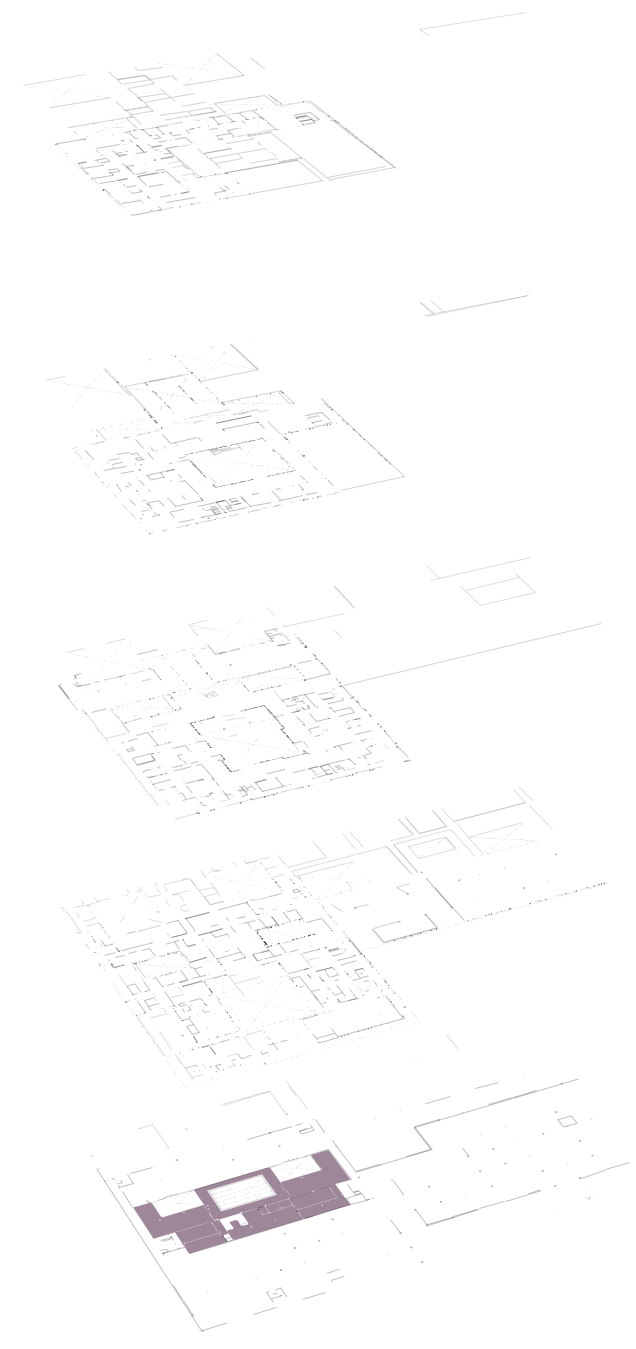
Level 2



Delivery entrance

Level 2 1:500

- Trauma
- Acute center
- Investigation unit
- Home care and primary care
- Training center/ Rehabilitation
- Learning center
- Lobby/ Public



In this level there is a training area both for staff and for citizens. There are two separated areas as it could be necessary for staff to have a private zone without patients. There is a shared space with a swimming pool as it can be a good complement to the rehabilitation center. There are two different ways of getting to this level. There is the public en-

trance by the main elevators or the stairs located in the atrium and the staff entrance which is situated with the specific elevators only for staff. In this level there is also some parking and the department for deliveries which is directly connected with the existing building. And there is also a technical area with all the installations.



Level 3



Level 3 1:500

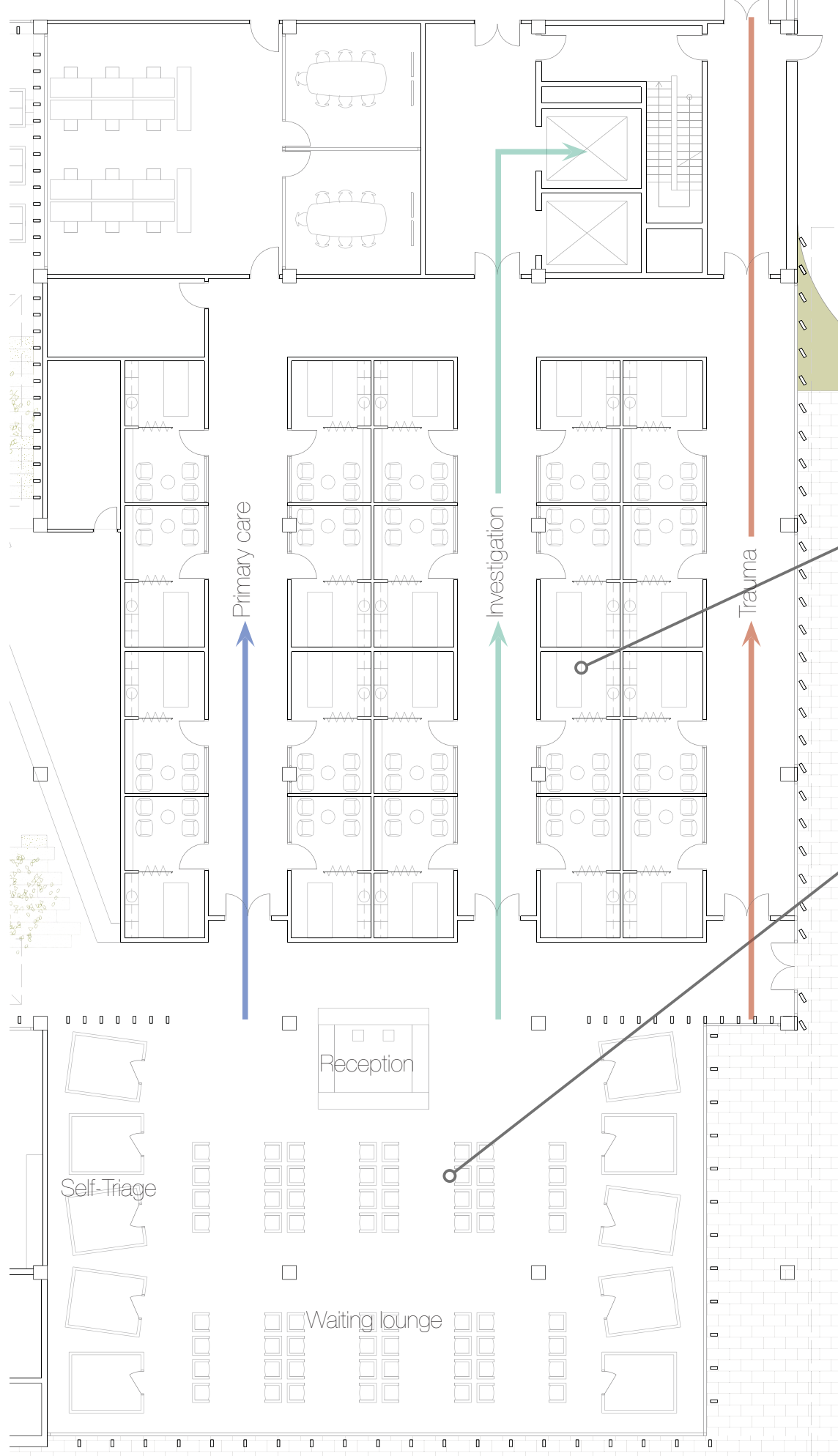
- Trauma
- Acute center
- Investigation unit
- Home care and primary care
- Training center/ Rehabilitation
- Learning center
- Lobby/ Public



Level 3

This is the entrance level. Once you are inside the building there is a big atrium where the main elevators and stairs are situated in the front site to make people know how to move around the building. In this atrium there is also the main reception, some public services and the entrance for the acute center. The entrance for the acute is situated just inside to reduce the infection spreading incase this occur. There is also the home care center with opportunities for a smaller primary

care unit. This department is thought for people who need help but still don't need to go to the acute. In the back site of the atrium there is trauma department which is directly connected to the functions in the existing building. There is also a part of the investigation unit connected to the trauma as there could be the need to send some patients from the trauma to this unit.



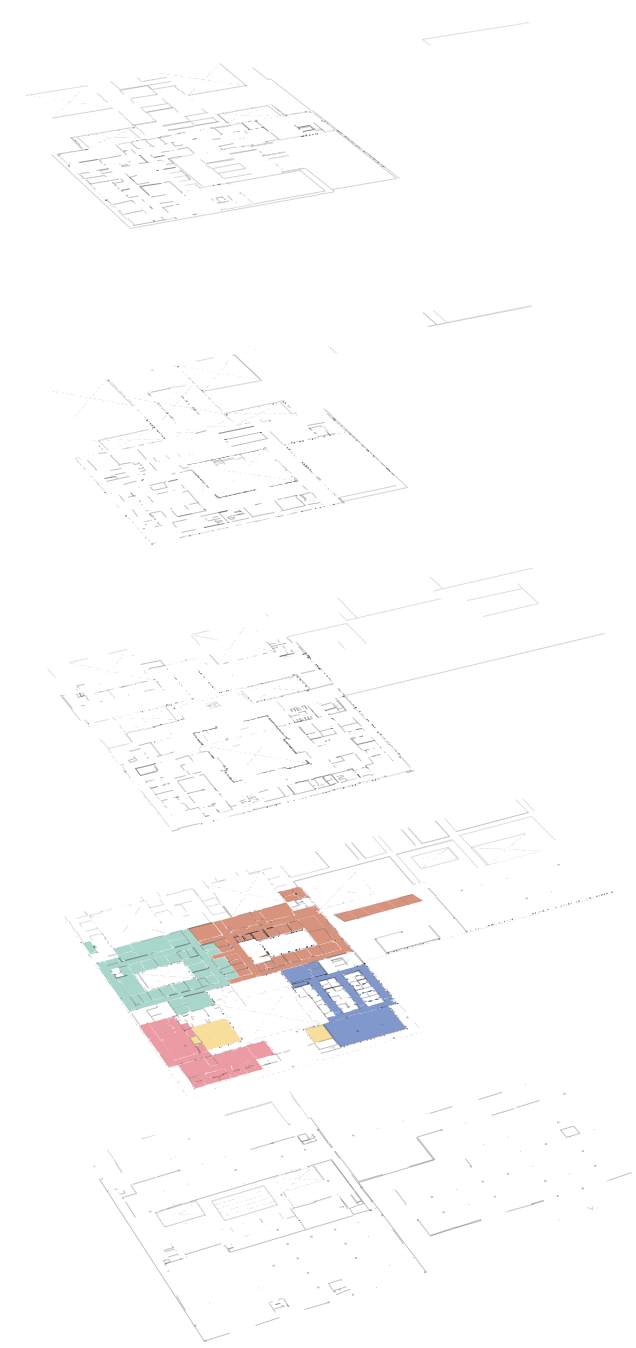
Examining rooms

The different examination rooms are divided into three corridors. As there will be a pre-triage there will be a section which meets people who need primary care, another one with people who needs further help and maybe needs to go to the investigation unit and people who are sent to trauma go there straight away.

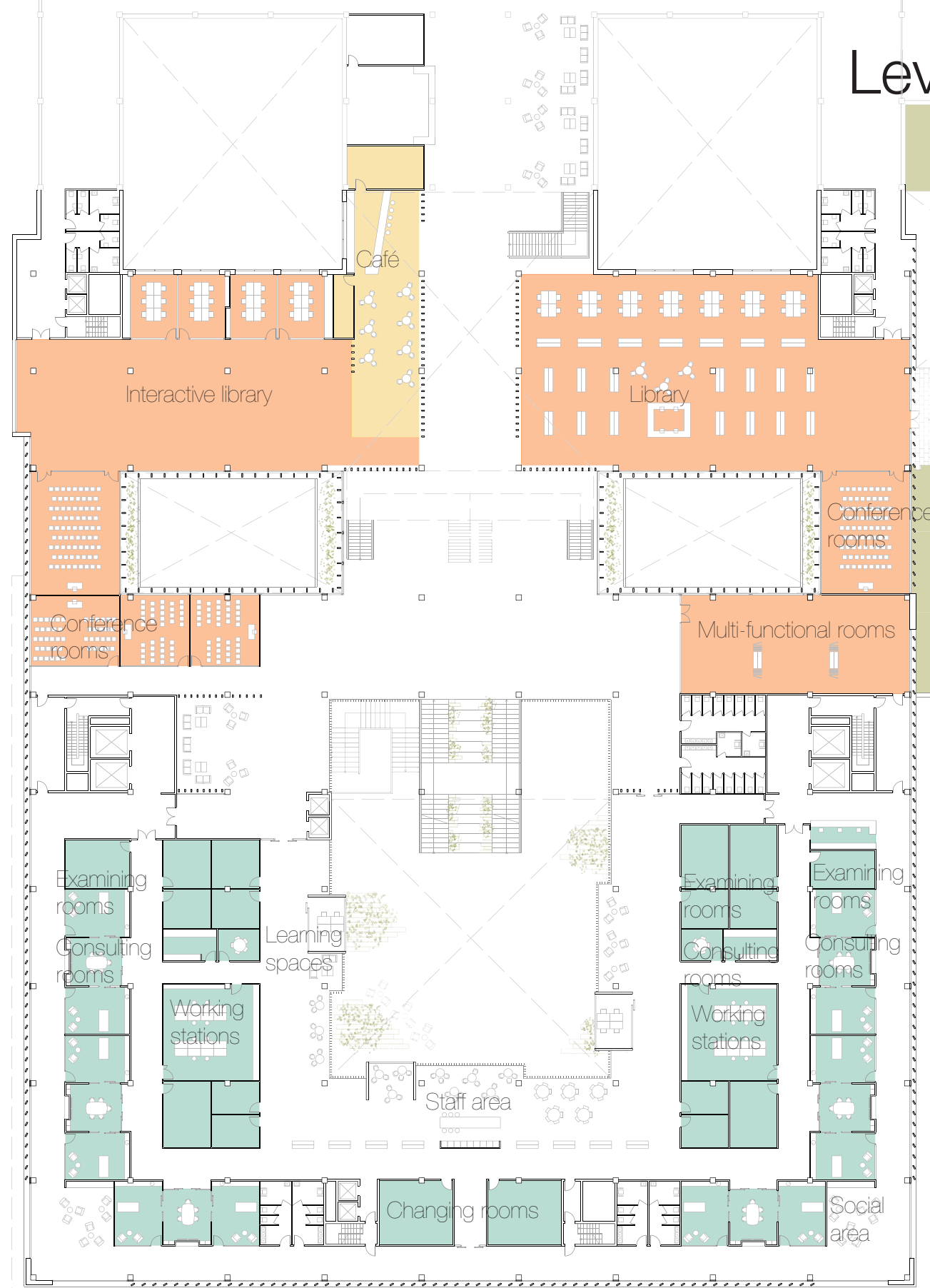
Triage

The acuter center is thought to have two different parts. The first one is the pre-triage and waiting area. In this part there will be some small boxes where people can make a self-check before meeting the doctor.

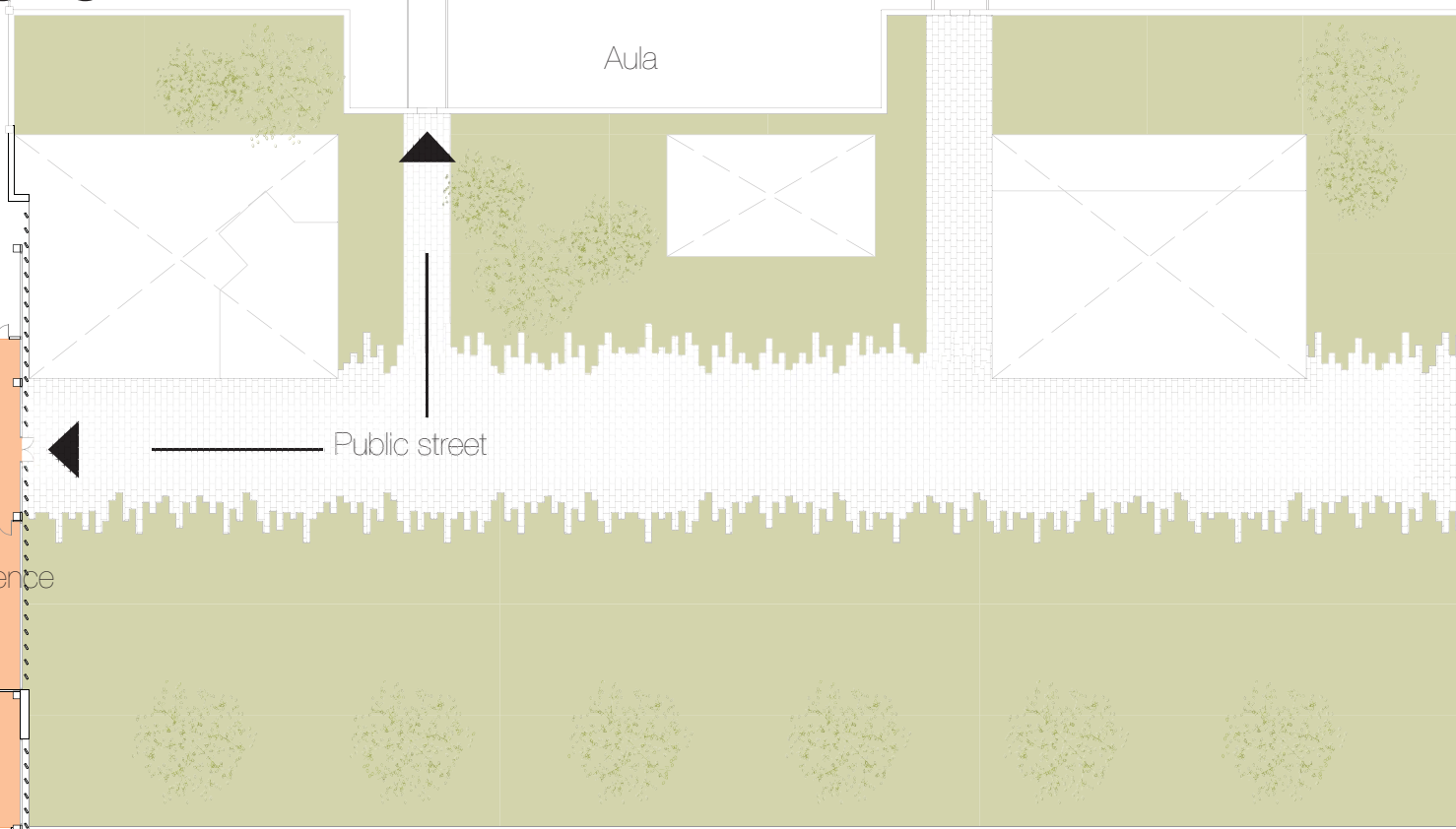
Render Entrance



Zoomed in plan 1:200



Level 4



Level 4 1:500

- Trauma
- Acute center
- Investigation unit
- Home care and primary care
- Training center/ Rehabilitation
- Learning center
- Lobby/ Public



Level 4

In this level there is the connection with the existing building, most of the learning center is also located here. Public services and the investigation unit for patients who come from the acute center is also located in this level. Once you arrive at this level from either the main stairs or the elevators you can enter the existing building. To do this you have to go through

the learning center which is situated in the space in between the new building and the existing one. There is a library and some conference rooms, but also an interactive space. There is also a café and the stairs for going to the restaurant which is connected with this open space.



Zoomed in plan 1:200

Examining room

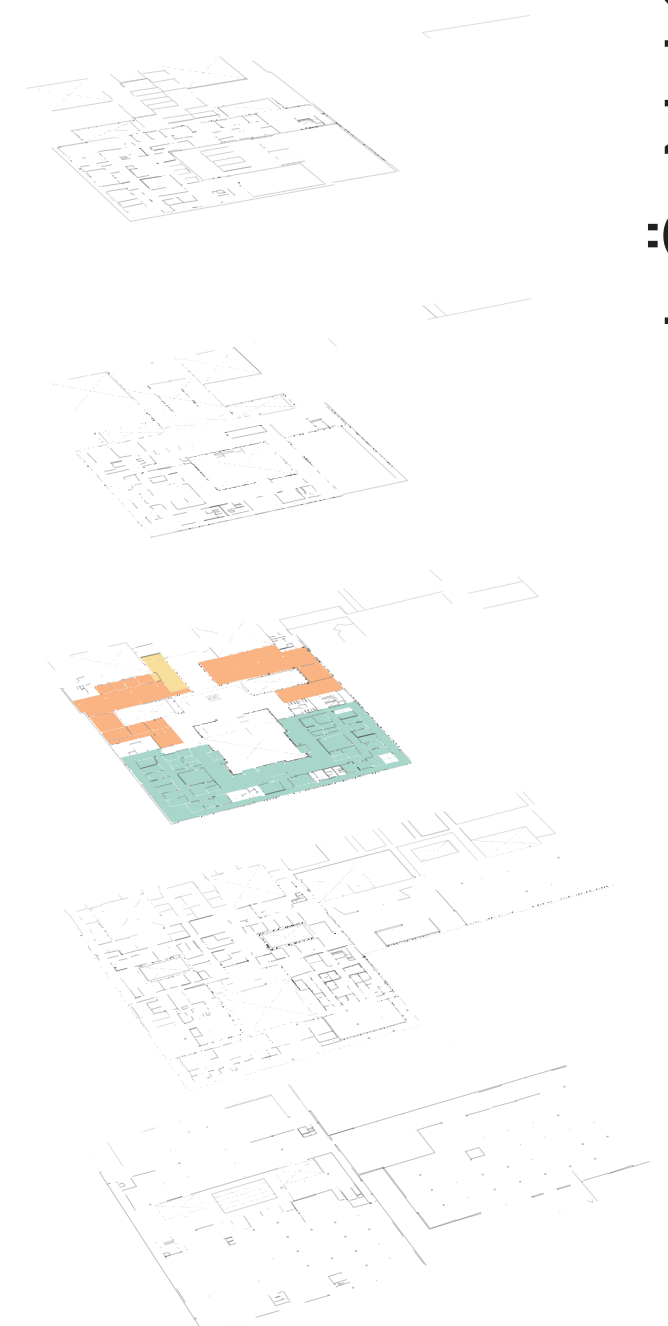
These rooms are thought to have glassed walls with some opacity to get in sunlight but avoiding exposure of the patient. Rooms are divided into two parts, one which is more conversational and another for examination.

Conversational room

There is a conversational room connected with two patient rooms. This room is thought to be equipped with technological equipment to help doctors to investigate patient's problems. There can be also a meeting between patient and doctors in this room.

Social area

As this unit is for patients that needs more help but still they can take care of themselves, the external corridor which is just for patients also contains some resting areas where relatives and patients can talk and enjoy the views.

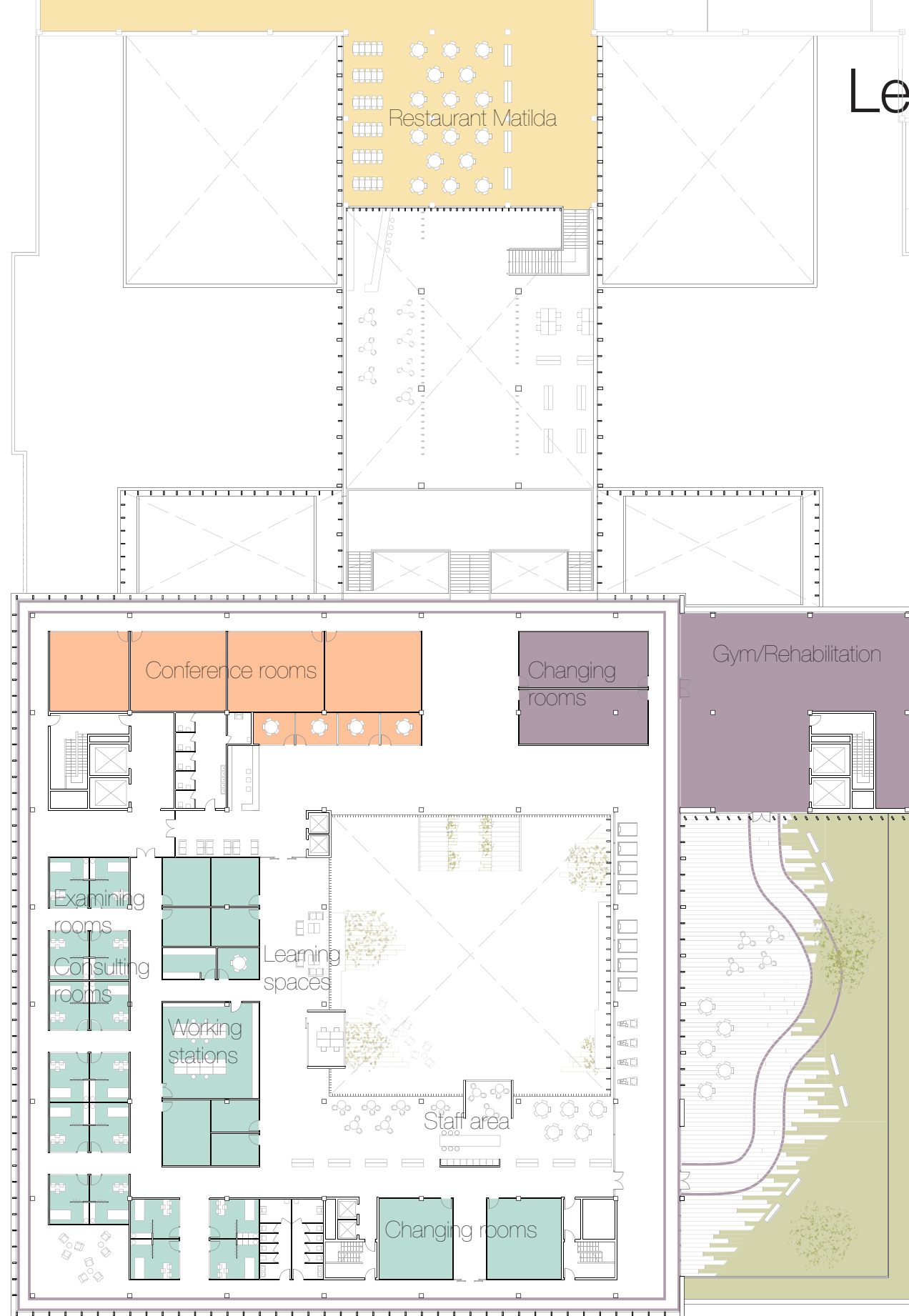


Render Library



Render Learning area for staff

Level 5

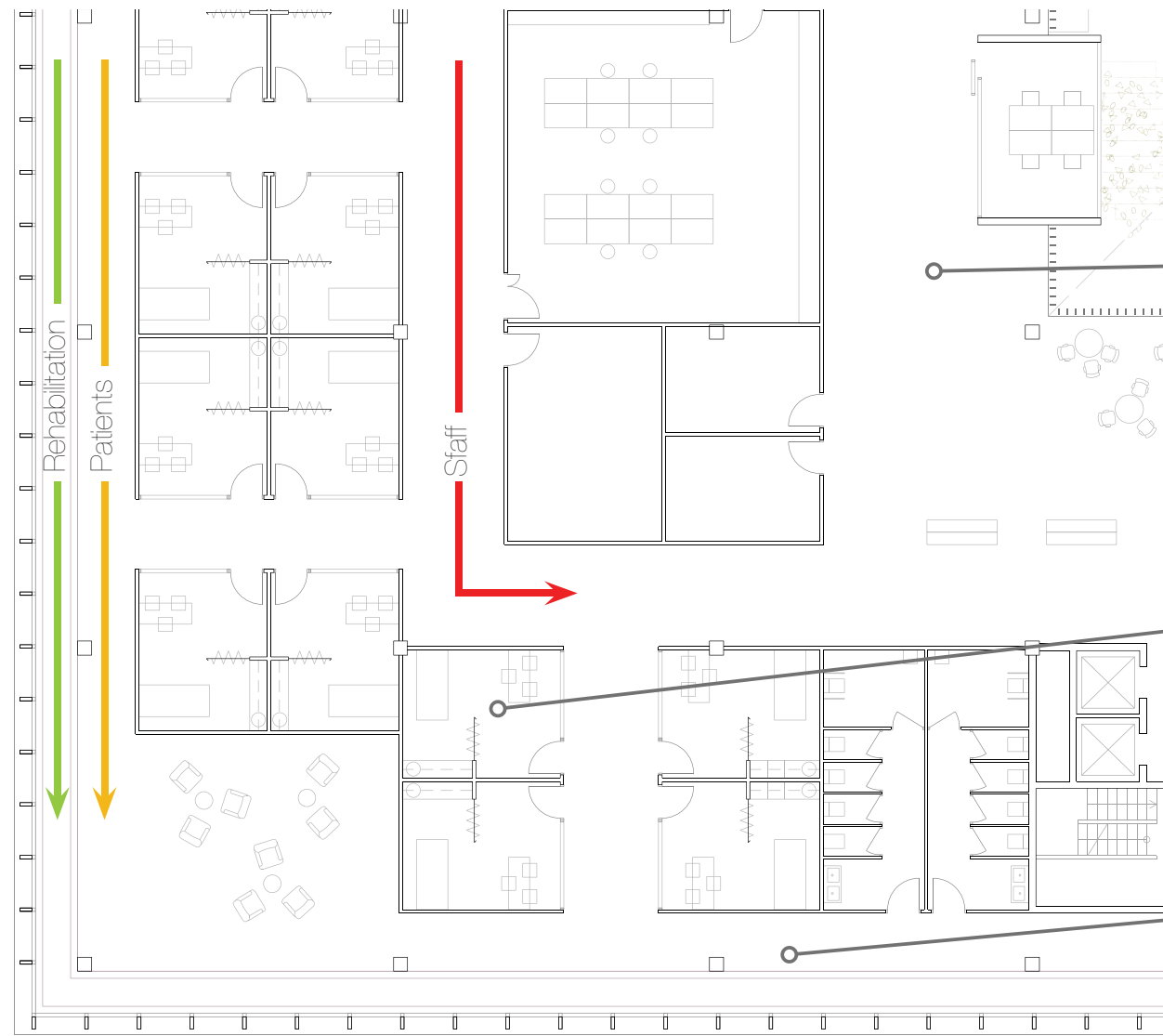


Level 5 1:500

- Trauma
- Acute center
- Investigation unit
- Home care and primary care
- Training center/ Rehabilitation
- Learning center
- Lobby/ Public



Level 5



In this level there is the booked time investigation unit, some part of the learning center, the rehabilitation unit and a big terrace. It is designed as a public level where all the functions are mixed. There is a walking path around the building and it is mixed with the corridor for the investigation unit. By this way

there will be two different flows: one more dynamic for people who are working out and a softer one for people who have a meeting with the doctor. The terrace in this level is opened for every-body: patients, citizens and medical staff.

Working space

This area is opened to the atrium and there are different spaces for medical staff. There are some spaces designed for having informal meetings, others for having lunch or maybe resting.

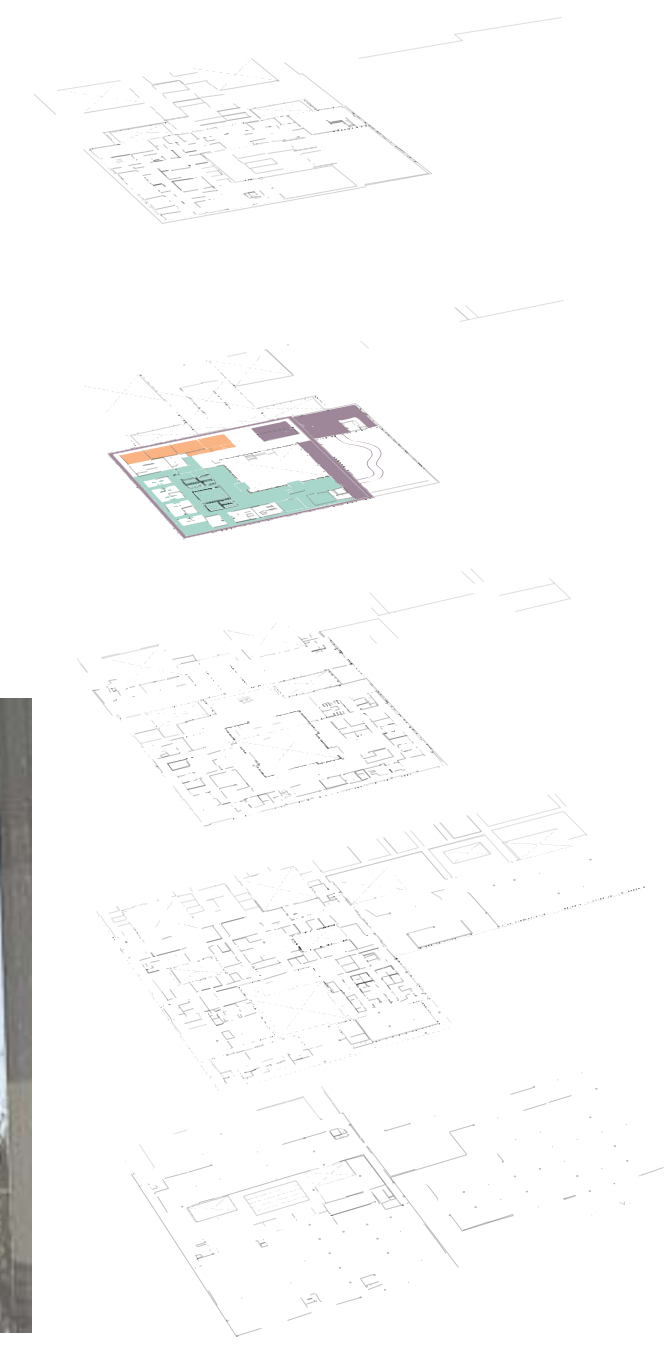
Examination rooms

These rooms are designed to have conversations between medical staff and the patients, a small part of this room also contains an examinational corner.

Corridor

There are two different flows, one for patients in the investigation unit and another one for people working out. In this space there are also some resting areas.

Zoomed in plan 1:200

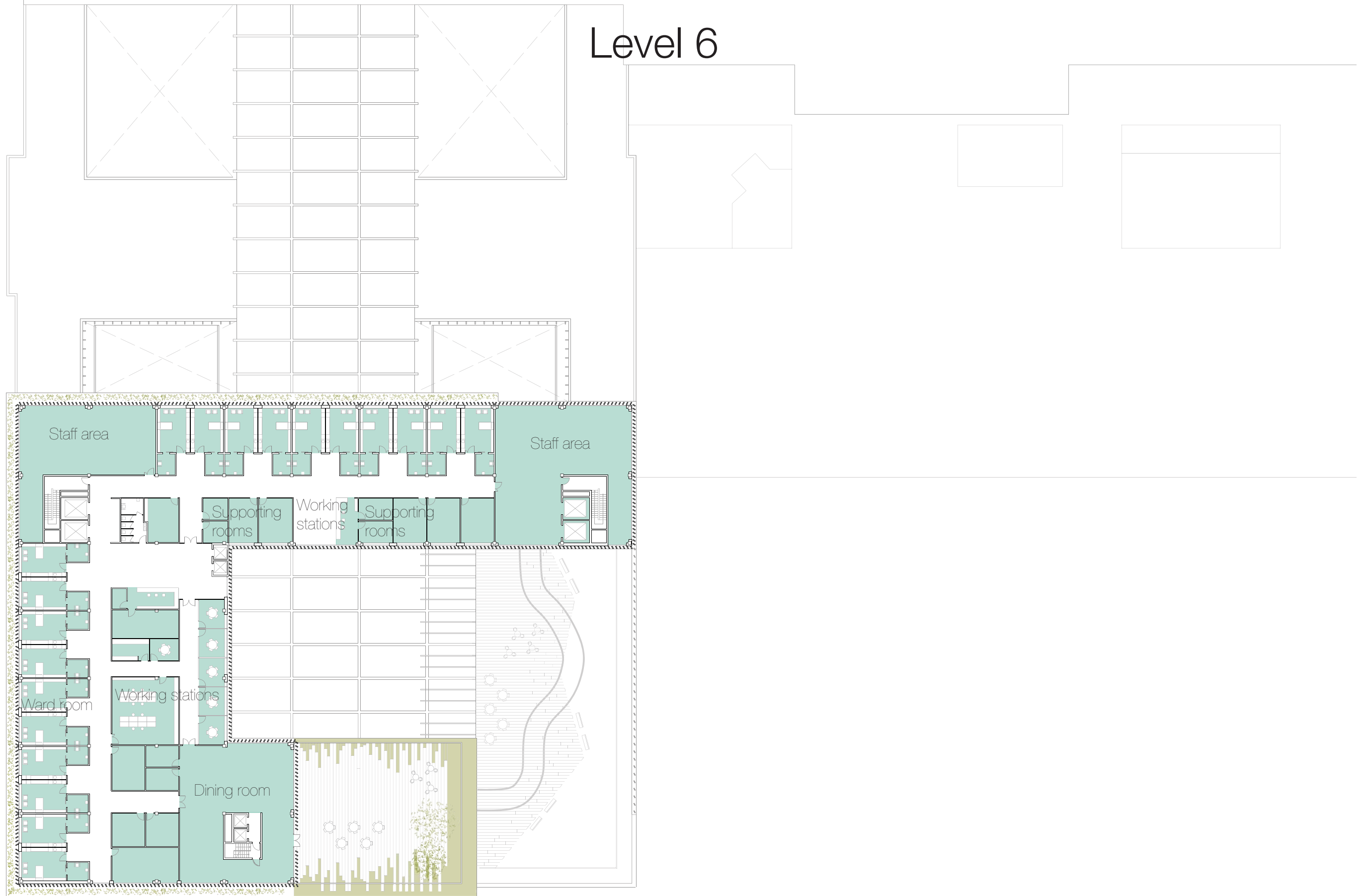


Render staff area



Render promoting path

Level 6



Level 6 1:500

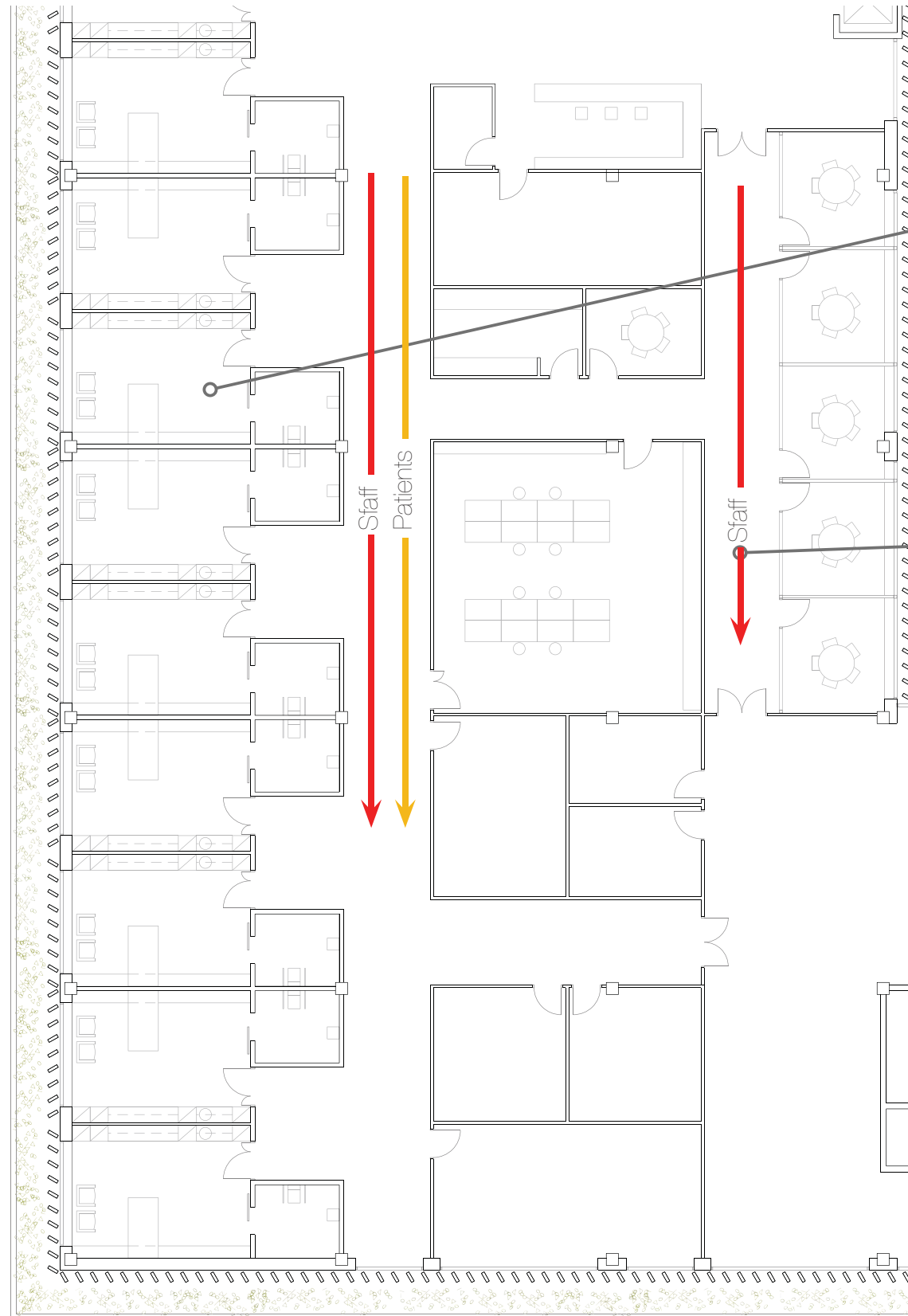
- | | |
|--|---|
| Trauma | Training center/ Rehabilitation |
| Acute center | Learning center |
| Investigation unit | Lobby/ Public |
| Home care and primary care | |



Level 6

This level contains 20 single-bed ward rooms for multi-disease patients, these are patients who will stay longer than a day. The other space in this level is working space for medical

staff. To get more sunlight in to the rooms, there is no corridor along facade in this level. To give something extra to this ward there is terrace in the south with a lot of greenery.



Zoomed in plan 1:200

Ward room

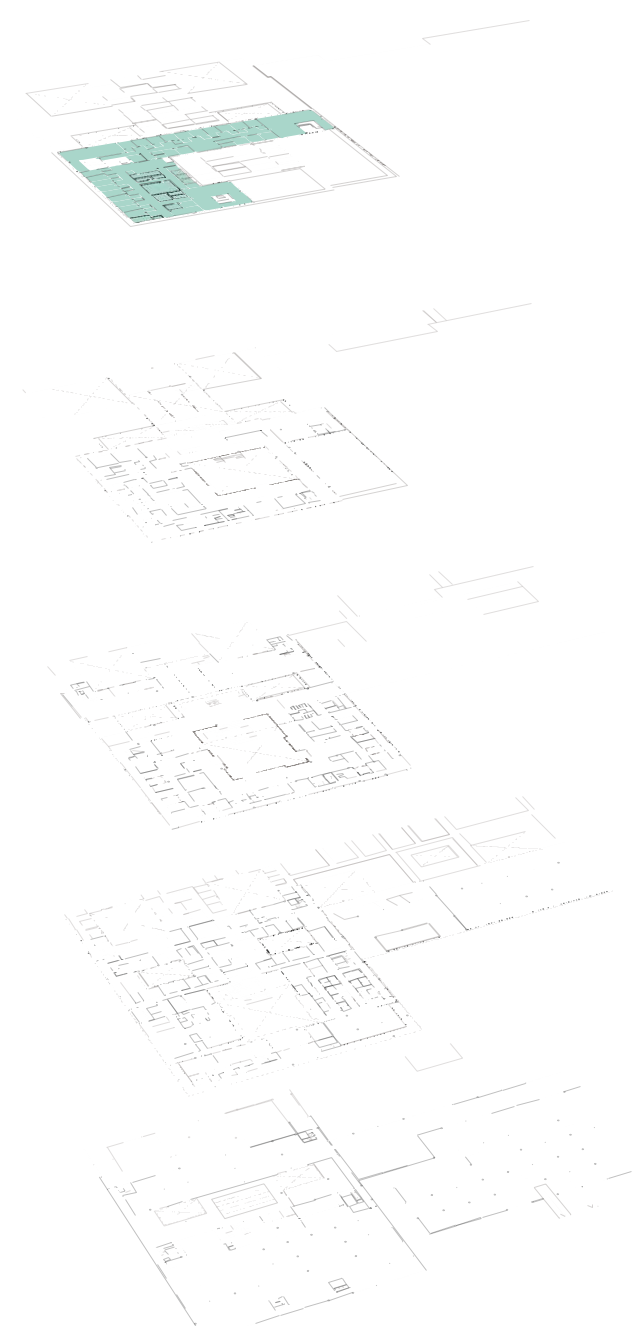
Ward rooms on this level are well-equipped with big window, bathroom and chairs for relatives. To get a great view but still offer some privacy, the angles of lamellas is changed after location of bed

Working space

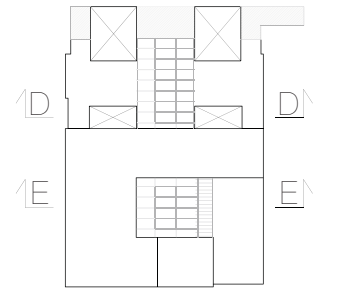
Working space for medical staff is on the opposite side of ward rooms. They consist of working stations, meeting rooms and other supporting areas.



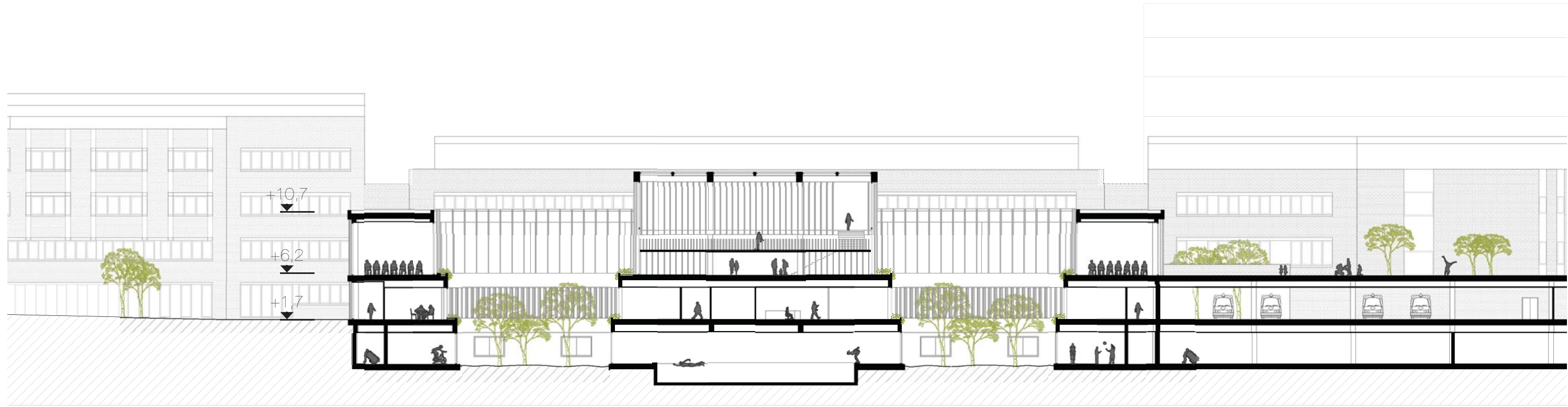
Render ward



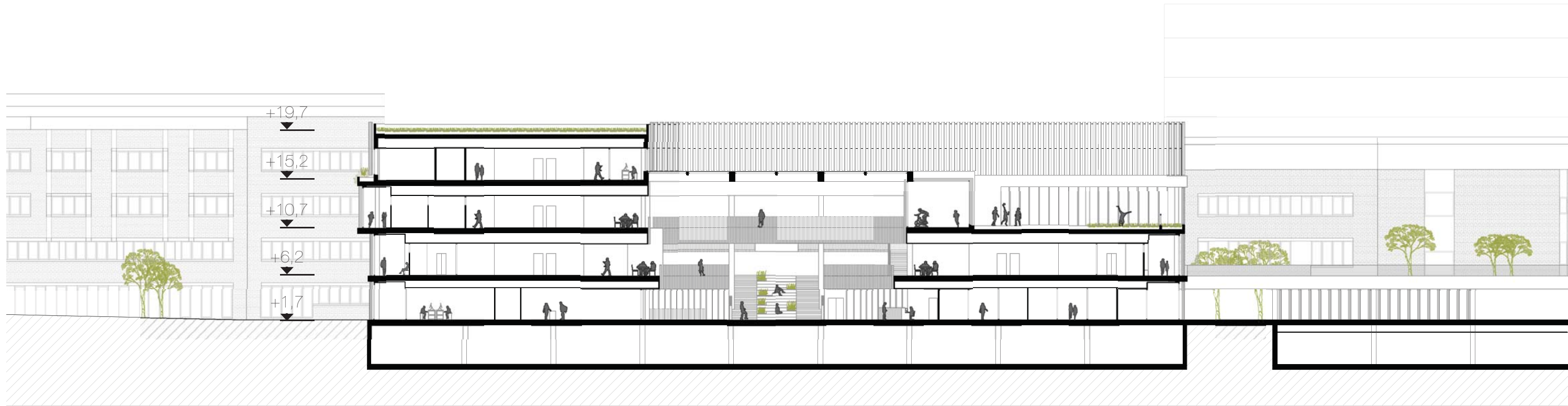
Sections



Life Gateway JÖNKÖPING



Sektion D-D 1:400



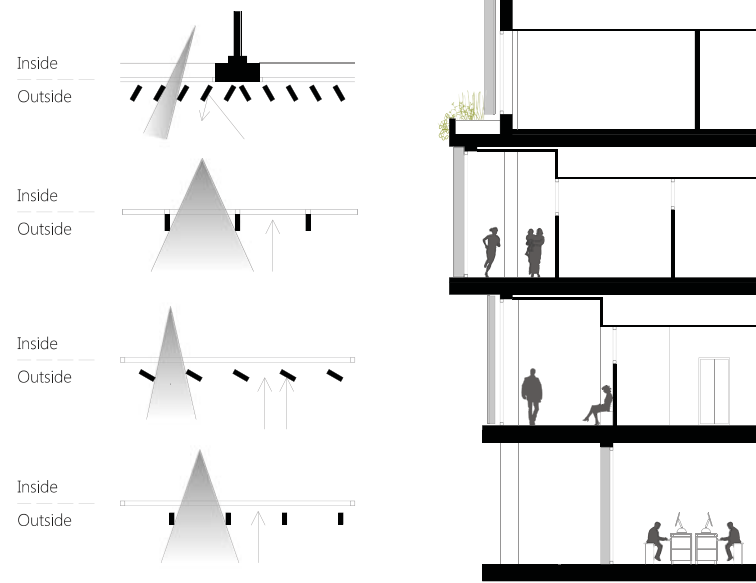
Sektion E-E 1:400

Facade



South facade 1:400

Facade diagram



The facade responds to what is happening inside the building. It is basically composed by a glassed skin covered with a second wood skin. This second wood skin is formed by wood lamellas that have different orientation and different separation between them. The position and orientation of each lamella is determined by the privacy needed in each department. As it is shown in the diagram there are two levels which are more exposed. These levels are the entrance floor, where we have some departments that need to be easily found by people and the third floor where there is the walking path all around the building. Level two needs more privacy so the lamellas are lightly angled. In the fourth floor as there are the patients wards the lamellas are closer for having more privacy and they have different angles depending on the position of the patient's bed.



Exterior render



West facade 1:400