Sulisjælbmá

A TRANSFORMATION OF THE REMNANTS OF A MINING SOCIETY

PROCESS

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SUPERVISED BY

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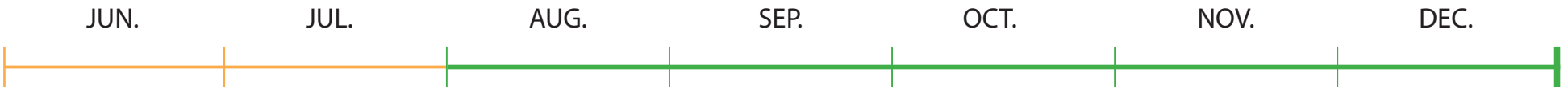

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JUN.
16-18

EXCURSION TO SITE

The weekend of 16th to 18th of June I went to Sulitjelma on an excursion. I finally got a real impression of the place that I had just read about and seen pictures of so far. The first thing that struck me was the size of the remaining building stock on Sandnes. It looked great on pictures, but definitely bigger in reality. This was further emphasized by the angle you see the volumes from as you drive along Langvannsveien.

Inside
I had not managed to arrange a visit to the building in advance, but luckily I managed to get in at the upper conveyor belt. Inside, it clearly showed the children's destructive joy. If not, the ravages of time. Fortunately, I received the impressions I sought - while taking many pictures, measurements of existing staircases and dimensions. It was also liberating to start thinking about future solutions.

Situation
Out in the open air I tried to get the most out of what Sulitjelma has to offer. The local grocery store, church, mining museum and school. And also historical mining remnants like Jakobsbakken and Fagerli. I also tried to get a view at the building stock from as many angles as possible - in order to fully grasp it's situation.

✓ Site pictures
✓ Building measures

Sandnes seen from Fagerli.

AUG.
16-20

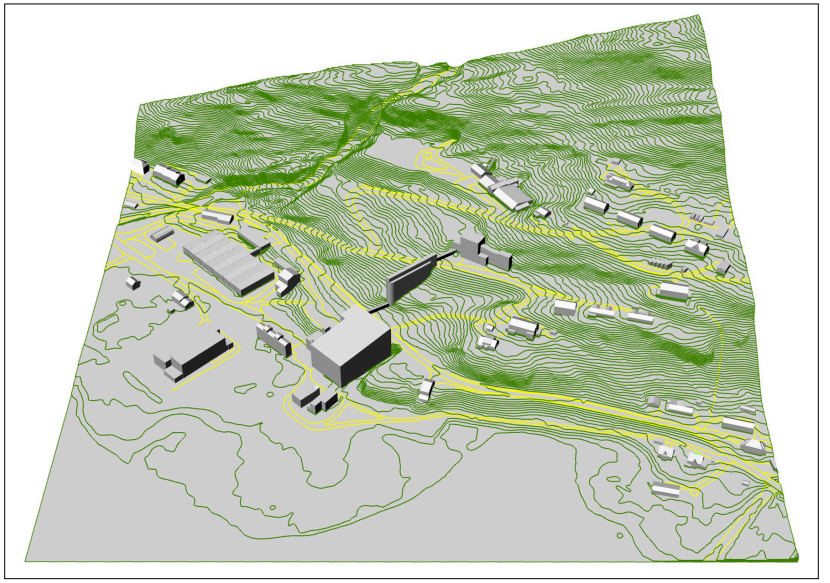
THE EXISTING SITUATION

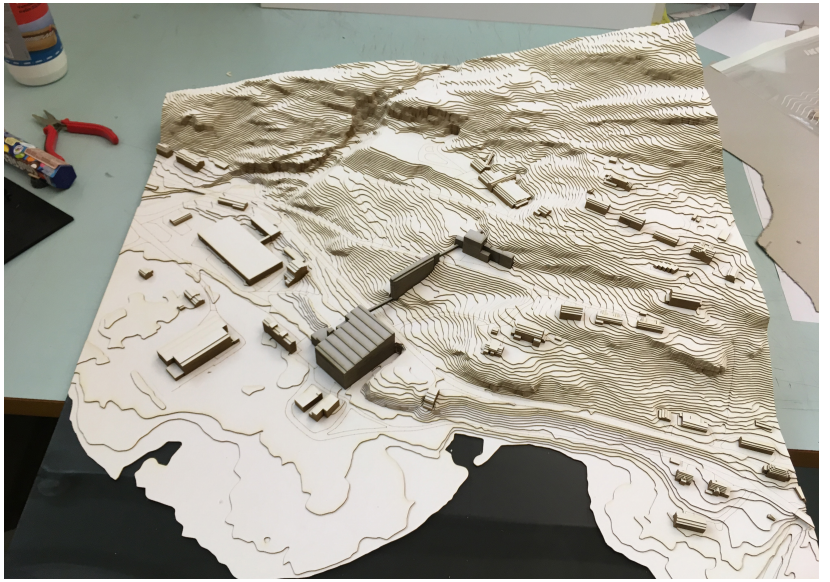
The first week I've spent documenting the existing situation of the building. I've completed a 3D model of the site in Rhino, with it´s neighbouring buildings and landscape. I also made a model of it in scale 1:1000. The actual building is not very detailed in this scale, but it allows me to get a grasp of its relationship to the surrounding landscape and neighbouring buildings. The model also gives a real impression of the contrast in size the buildings has with the rest of the buildings in Sulitjelma, and its location as a wall in the village. The landscape model will be a nice aid in the process and will be useful later in the semester.

Parking
The parking is already naturally placed next to the visitor mine, and a second south of the building. This already makes a natural division, where visitors could park at the northern parking lot and enter through the conveyor belt. While in the case of events or delivery parking could be south of the building, entering throught the same door as the workers did.

Paths
Behind the visitor mine there is a path that leads to Giken mining site, which was one of the first areas of mining in Sulitjelma. This is also the direction that leads you to the start of the Arctic Trail that goes to Kautokeino.

✓ Site digital model
✓ Site model, 1:1000





AUG.
21-27

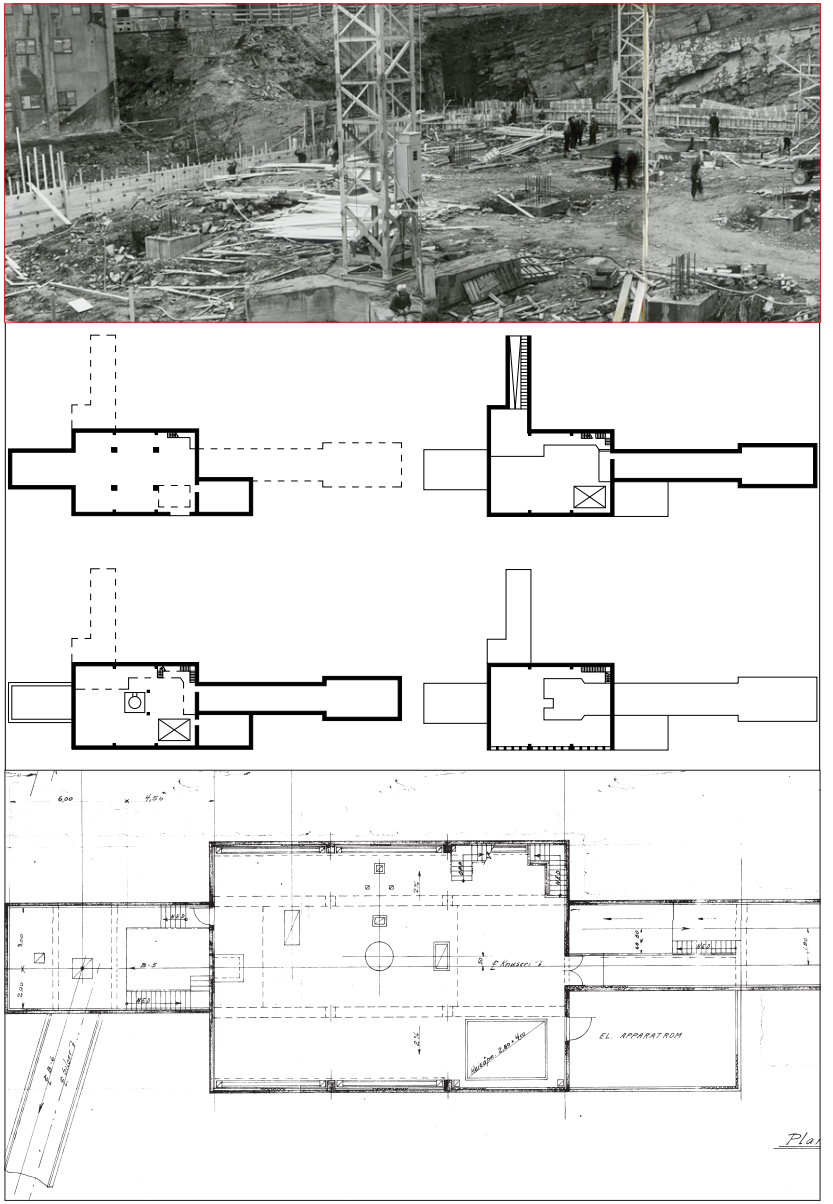
THE EXISTING BUILDING

This week I've been redrawing the plans of the existing buildings. It took more time than expected, as the material I've collected so far has a low level of detail. Luckily i had the measures from my excursion in June. I had to spend some time getting the inequalities between the planned building and the actual measurements I took on the spot to fit together. I also used these new drawings to make a more detailed 3D model of the buildings. I didn't manage to also make the sketch model of the building this week as planned, but I will do it in one of the following weeks.

The buildings is built up by a 150 mm thick layer of poured concrete with a 100 mm layer of wood wool cement plates. I have noticed the building's industrial grid, where dimensions are repeated in a structural order.

The main room's concrete floors are placed against the walls of the north and east while the southern and western are empty. I may also have to break down the height difference between the floors later in the process.

✓ Plans of existing buildings
✓ Detailed 3D model of existing buildings



AUG.
28-03

THE POTENTIAL FOR TOURISM

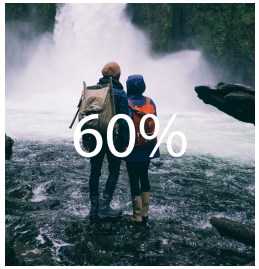
To support my ideas on working with the potential for mountain tourism in Sulitjelma, I have spent time mapping the situation as it is today. I am positive about the findings I have made regarding the thriving "northern light tourism" in the region, while now I can argue better for the project I'm working on. I have mapped which group of people who mainly travel to the region, how long they stay and what they want to do on their trip. I can also document the opportunity in the market, and at the same time connect it to the historical backdrop of Sulitjelma. I have tried to process the information into easy-to-read graphics, but I will have to spend more time on this later in the semester in order to make it more accessible.

The unique location at the very beginning of The Arctic Trail makes Sulitjelma unique, and I want to combine this with the possibility of industrial tourism. Therefore, my design must also reflect this idea. I will have to link the design to both mountain and to industry.

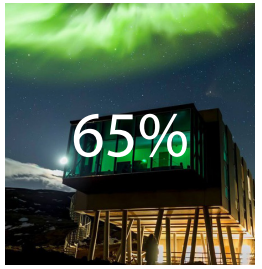
✓ Charts and diagrams with findings on tourism
✓ An understanding of the potential Sulitjelma has as a tourist destination

1. NATIONALITY
norway - 50%
germany - 13%
britain - 4%
france - 3%
netherlands - 3%
sweden - 2%
usa - 2%
italy - 2%
denmark - 1%

3. TRANSPORT
airplane - 55%
car - 14%
camper - 13%
ferry - 8%
bus - 4%
train - 3%
motorcycle - 3%



2. TRAVELERS
couples w/o kids - 60%
group of friends - 20%
couples w/ kids - 14%
single - 6%



4. ACCOMMODATION
hotel/hostel - 65%
tent/camper - 16%
camping site - 12%
in nature - 7%

SEP.
04-10

SPATIAL MODEL

This week I have built a model of the building in scale 1:100. This is part of the process where I will look at the volumes the mass is made up of. I have also studied the construction method and materials in detail to see what possibilities and limitations these provide. I really wish to keep the industrial appearance - so to make this a well-functioning place to spend time will be a challenge.

These large rooms, which are dimensioned for heavy machinery and tons of loads, have enormous potential. And I hope that there will be interesting situations in this encounter between existing and proposed intervention. I propably will want to break down the size ratio into human scale, but at the same time make sure not to lose this unique sense of machine dimensions.

With one entrance through the conveyor belt and another in the basement, it is natural that the first hole I take in the shell could be an additional emergency exit in the 2nd floor so that there is access to the landscape on all floors except the top one.

✓ Model of Knuseriet 1:100

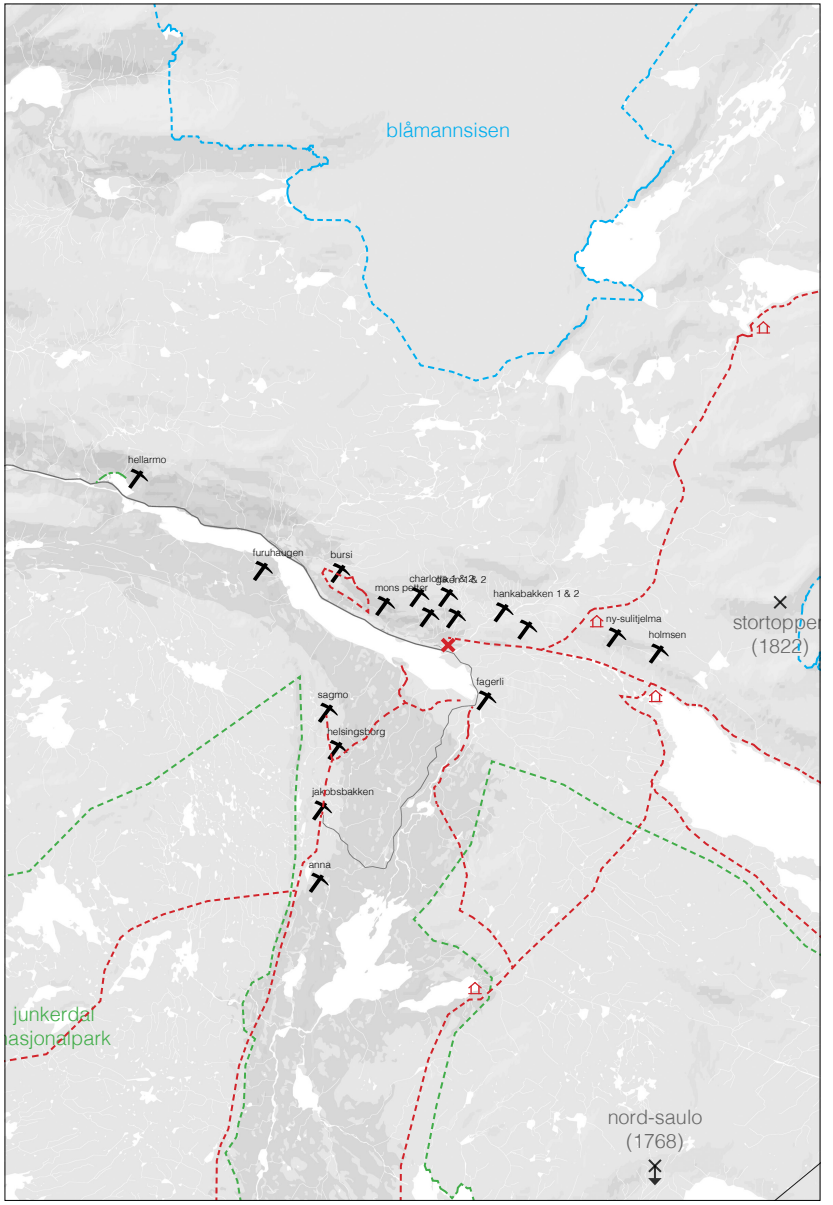
SEP.
11-17

CONTEXT

My aim is to get a complete understanding of the context as quickly as possible during the semester. I therefore studied more deeply the situation in which the building is located. I have looked at its affiliation nationally, where Sulitjelma is the starting point of The Arctic Trail (Nordkalottleden). Regionally, with longer hiking opportunities with Sulitjelma as a starting point. And locally - which paths, destinations and opportunities lies in the small community of Sulitjelma. With so many different era of the mining being represented, there is a great potential for industrial tourism combined with mountain tourism.

As I look at my project in a larger context, where Sulitjelma is being revitalized as destination, this historical and geographical context is extremely important to link up with the program and interventions I take along the semester.

✓ Situation plans in various scales, mapping the surroundings



SEP.
18-24

PROGRAM DEVELOPMENT

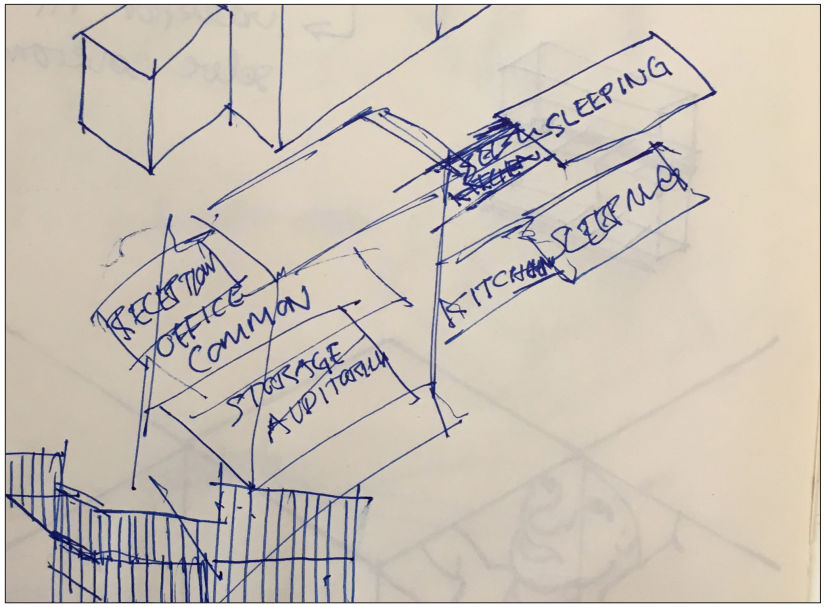
This week I have worked mostly on the program and how the different functions can be related to each other. Which should be adjacent to each other and which ones should be close to the common room. To kickstart the process i also tried to place the auditorium/cinema inside the volume, to see how this could be solved - and which rooms should be related to it.

As this is a village that lacks vital components, I wish that the programs I place into the building can be converted into a social meeting room for the local population. The auditorium space can become the local cinema one day of the week, old workers can finally come to their old workplace for a cup of coffee, and events can be arranged for bigger gatherings. It is important that such a project offers something to the population that remains with this footprint after 100 years of mining, and does not become a closed box solely for tourists and commercial operations.

I have also tried to sum up and complete the work I have done this week to get an overview of the road ahead.

✓ Diagrams of program
✓ Sketches of auditorium inside the main space area
✓ More print-friendly documents

	PARKING
	ENTRANCE
INFORMATION	RECEPTION
LIBRARY	COMMON
	TOILET
EVENT/CAFE	KITCHEN
EVENT/CAFE	DINING
	TERRACE
	OFFICE
EQUIP-RENT	STORAGE
CINEMA	AUDITORIUM
	BATHROOMS
GUEST ROOM	BEDROOMS



SEP.
25-1

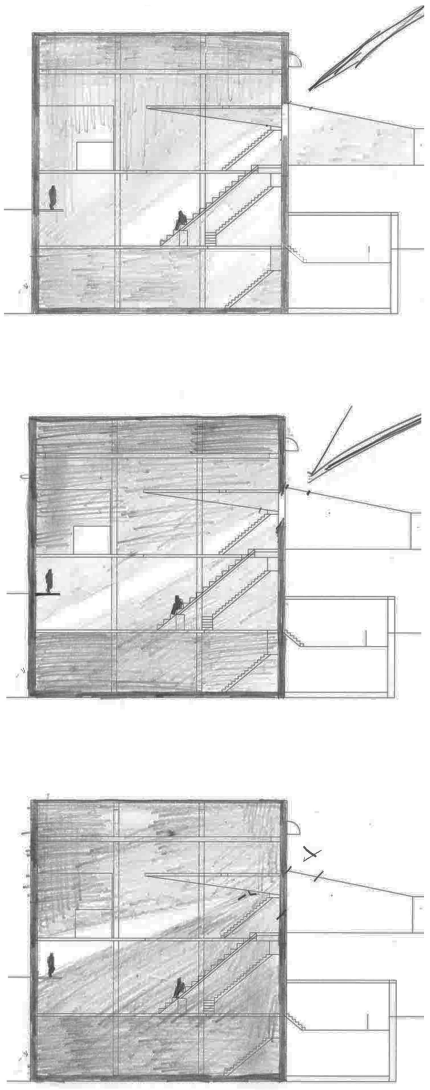
CONCEPT, VIEWS AND MATERIALITY

Once again I have gone back to learn more about the context built, and how this can help me take steps further into the design process. This has led me to go even further into the situation the building is located in, and look at references for my concept.

I also started to place the program inside the plans - and to penetrate to walls to allow light inside the structure. I want to do minimal intervention on the shell of the structure, as it is costly and breaks down the sense of the historical context of the building. A sense of being in an underground mine and how this once was for workers under such conditions is something I strive to imitate. The little light that I let into the building I want to be linked to the new programs added, and that they create designated spots for bathing in light.

I try to work with reuse of existing materials and cheap solutions, both for realism and for the sake of the challenge. Not least, this is important for the connection to the historical context. Among the potential objects for reuse are the old railroad tracks and the concrete I myself crush. Together with a new material as a contrast to the concrete, these can be converted into elements inside and outside the building.

✓ Sketches of the new plans in which the program has been placed.



OCT.
2-8

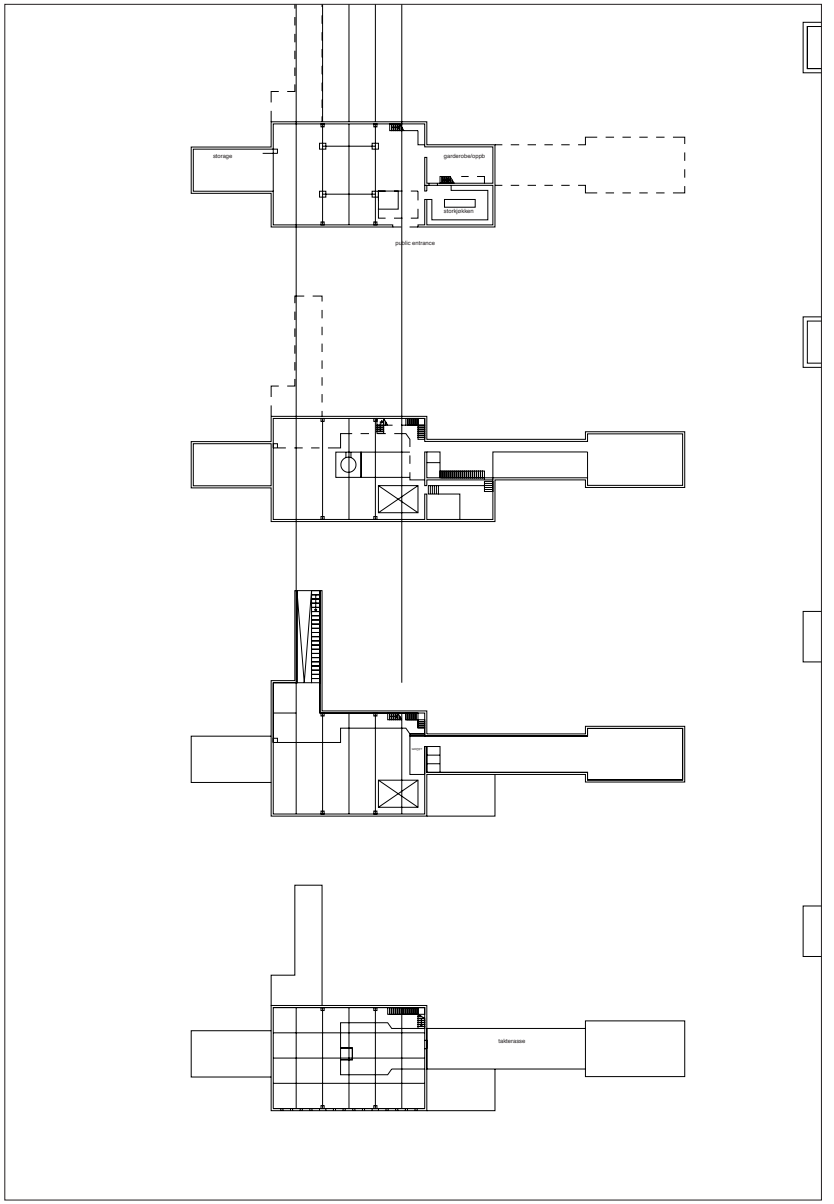
APPLY PRELIMINARY INTO REALITY

This week I have processed the preliminary studies into concrete plans, sections and 3d models. By working with these measured drawings, I've encountered new challenges in retrofitting new functions into the existing volume. How to effectively create a movement between the different floors without tearing unnecessary parts of the existing concrete. And how I can fit enough sleeping units, since it has a a lot of cubic and not so many square meters.

I try to keep the most of the main room without partitioning walls and elements, so as not to lose the feeling of this wonderful room. This means that the rest of the mass must be planned quite area-effectively.

Based on the previous program studies, it is natural to place bedrooms in the volume in east, stretching throught the tunnel connecting the two volumes together, and maybe also adding some sleeping units in the main room. The wet rooms (kitchen, bathrooms) should be centrally located, and it could therefore be placed in the middle of the two main volumes, where the tunnel rises to a higher ceiling height.

✓ Sketches of the new plans in which the program has been placed.



OCT.
9-15

PLANS AND SLEEPING UNITS

This week I have continued to work on solving the conflict between a big volume, and little floor area. As I want to keep the main volume mostly for common space, to not loose the sense of the big space of the industrial building. There is limited space left for necessities linked to a guest house. I´ve now made a wet zone inbetween the main volume and the sleeping area, containing common shower area, toilets and a possible sauna. So far there is a total of 14 doubles and approximately 56 single capsules. I've also started to materialize the situation as it is now in the model. I have found that in addition to single capsules for sleeping, I also will have to make double rooms with the possibility of attached bathrooms.

In the main volume I´m working on a sort of metal scaffold made mostly by the railroad rails, that effectively can universally fit the same staircase in different situations. I think of it as to fill the building with a metal grid before I start to dig out the areas I want to inhabit (as a reference to digging out a mine).

✓ Plans, sections

OCT.
16-22

VIEWS, LIGHT AND THE HUMAN SCALE

The introduction of the grid as a solution and tool has given a vertical division of the building that fits the human scale. I have begun to look at how these choices materialize three-dimensionally and through perspectives. I would like to actively use these perspectives as a tool to approach the solution, and as a way to show my final project.

This grid gives 7 floors instead of 4 and shorter stairs as a transition between them. In the main room, I do not want these to stretch too far into the room, to keep the feeling of the big volume. It effectively increases the number of sleeping units by 33%, and gives a sense of human scale where wanted.

As the grid also creates new floors in the main room, the relationship between the placement of these and the light becomes very important. With selected spots of sunlight, I must also start thinking about where to place som warmth in the uninsulated building.

✓ Views/perspectives
✓ Revised plans and sections

OCT.
23-29

SHADOWS AND TEXTURE

So far, I have temporarily concluded the location of the program, the concept of the development of the project and how to work towards the final result. I am currently working on some sort of conclusion before I can process it into more realistic situations.

Working with shadow as a concept implies that I need to establish a stronger hierarchy in relation to light/darkness, and warmth/cold - and how the different seasons affect this. Working with a project as far north implies greater contrasts in this particular field I place the project, which means I need to be more aware. This hierarchy must also be linked to the program. Something I also have to get started with at this stage is where I will place the elements I am reusing and how this affects the spatial situation.

Now that I use the old railways as an dividing and structural element of the project, I also need to make a choice on what new material I choose as a contrast to the industrial feel. Plywood has the same fine surface as solid wood, at the same time as it has stratified edges. The even layering of dark and light gives a crisp, linear detail and reminds the guest that it's both natural and industrially man-made.

OCT.
30-05

STRUCTURE

This week I´ve been working on how railways can be assembled in a simple and practical way - in order to have a honest expression.

By working on this, some kind of natural column hierarchy is formed, linked to the light of the building. In the basement there are no windows - no natural light, and the pillars are big heavy concrete pillars. Then comes the 2nd floor with its two joined vertical railways - and some light. The further up in the building one comes, the lighter the structural elements are, until the upper part is in the light and the constructive elements are wires and ropes.

Keeping on trying to reinforce the connection between my introvert situation, and the development of a system is also a choice linked to my desire in immitating a underground mine with its various constituents.

NOV.
6-12

THE LIGHT

Now that I've decided to work with minimal light, the light I'm getting into is of the greater importance. How big does a bedroom window need to be and how many concrete bits do I want to reuse? I have currently thought that a window of 30 cm diameter is about what I need. It is a manageable size to drill out, and a manageable size to move on the concrete pieces later to reuse as furniture. A concrete piece of this size will weigh about 20 kilos.

I also thought that when I cut out a new door that comes in direct alignment with the existing, this must be conveyed to the guest - so it is quite clear what is original and what is my intervention.

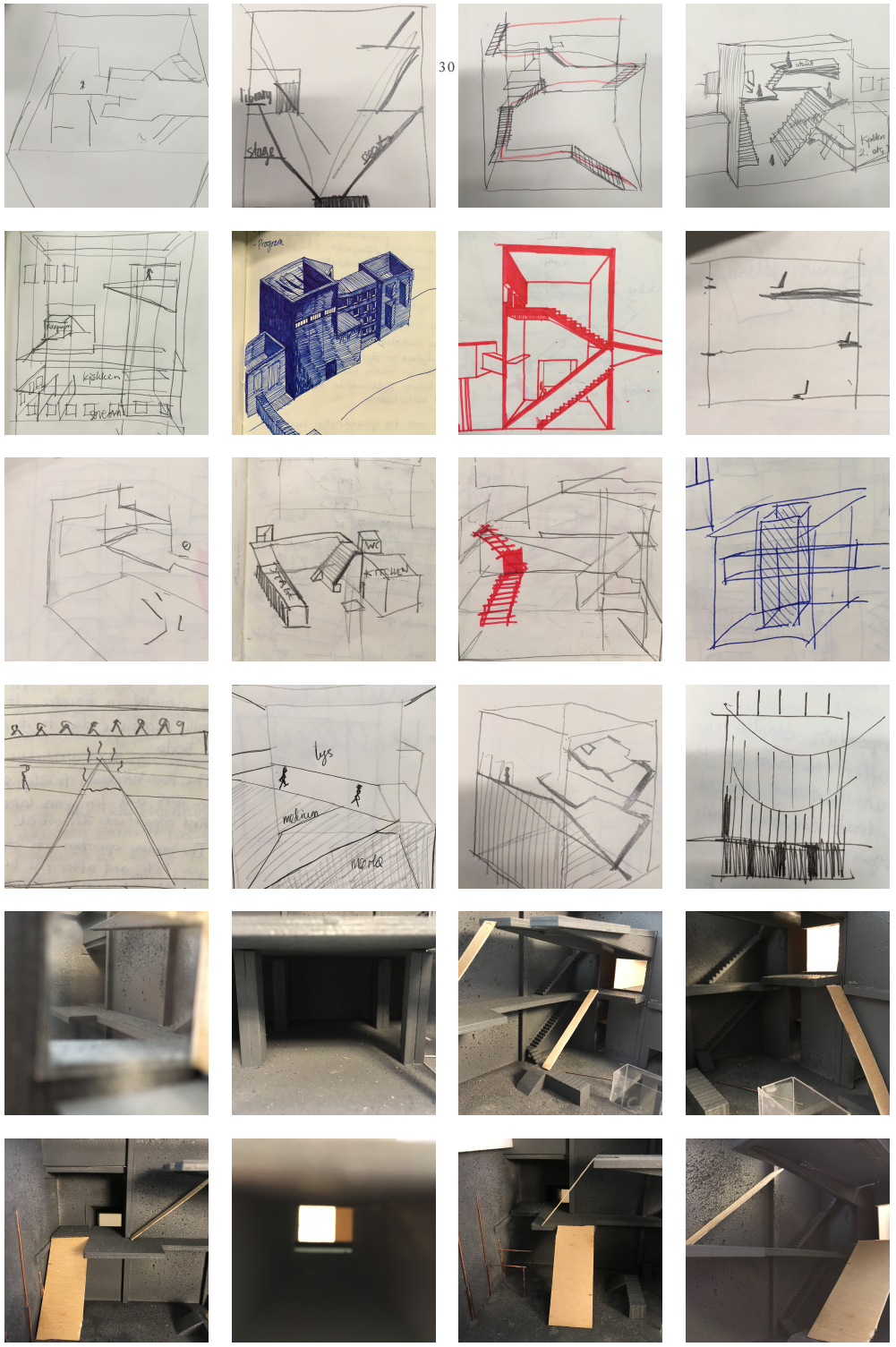
The process

main room

It was clear from the moment I walked into Knuseriet, that the main room was a wonderful space. I therefore aimed at keeping this athmosphere from the start. At the same time, I had to facilitate for human scale by adding a new floor between each of the original ones. Linked to the idea of light being filtered down into the structure, these plateaus stretch further into the volume the lower down they are.

It is this movement in height that makes the room interesting, and this arrangement of stairs has been a major part of the project. I occasionally thought of replacing new stairs with a lift that could facilitate all floors, but decided against it as I think a movement along all the walls makes it more interesting.

While being interesting, each floor also serve a purpose beyond opening the space feeling of the visitor. The idea of the big staircase/cinema seats as a element that complements the original movement in the structure came early. At the same time it had to be placed in such a way that it was hit by naturul daylight, and did not block other features of the room.



The process
sleeping units

Sleeping units
Based on the idea that the project should relate to Sulitjelma's former overcrowded sleeping arrangements, I initially wanted to accommodate as many bedrooms as possible in the building. This was also justified by the low level of comfort, considering that the main room was likely to be the highlight anyway. Then the bedroom was left for sleeping only.

In order to really experience the natural qualities of the building, I would also create the opportunity to sleep in all the different spatial situations. That's how I ended up with the situation where the bedrooms range from the most private single rooms to the hammocks in the top of the main room.

I have nevertheless tried to be realistic and arranged for three of the rooms to be connected to t private bathroom. This was also a reason why I walked away from the single corridor solution, as it simply became too messy to use steep stairs and latters to reach the bedroom.