

Sussex Ouse valley way

River Ouse

Old Hamsey Church

Old Train line

S I T E

0° Prime Meridian

Train Line

SITE INFORMATION

Hamsey / Lewes
50°53'21.9"N 0°00'02.0"W



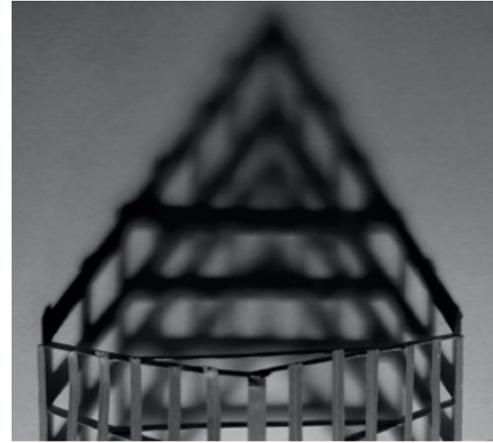
small **TEMPLE**
small **SHED**
place for relax, shelter from rain, wind, sun
just a space, for stopping for a bit and enjoy the nature
enjoy the sun, wind, rain

where: hamsey island
place for : rest, admire nature
for who: hikers, painters, dog walkers. for bikers, photographers
material: oak, reed



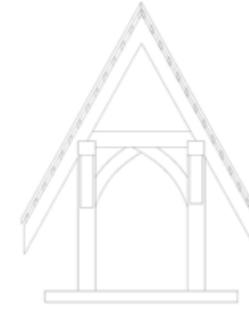
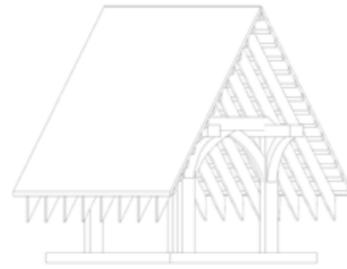


Roof structure in Hamsey

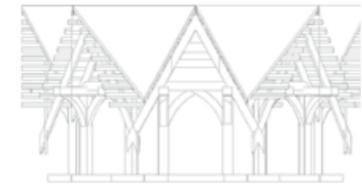
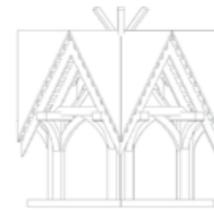
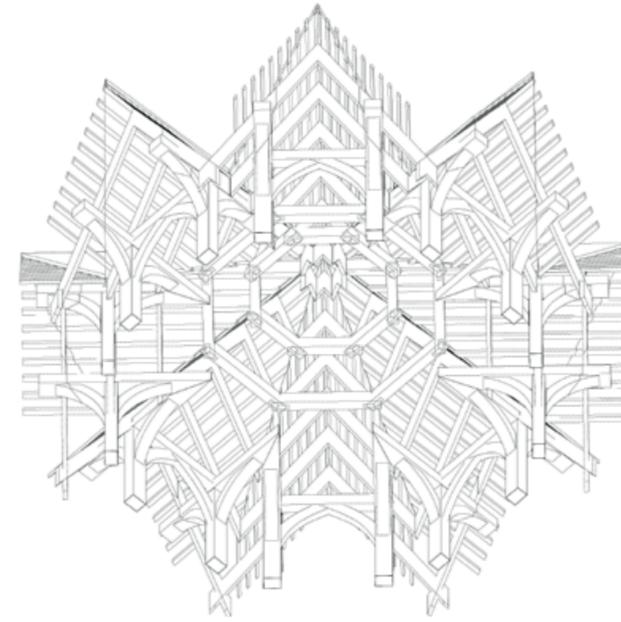
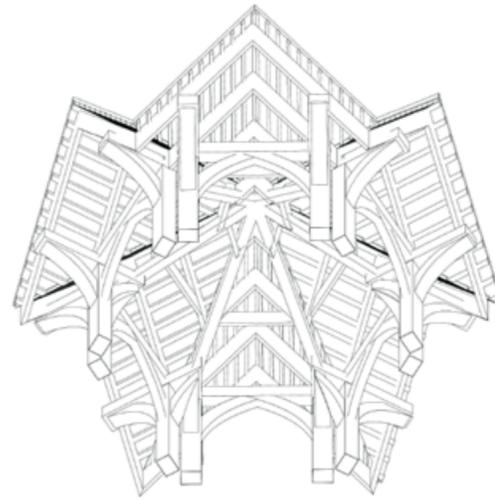


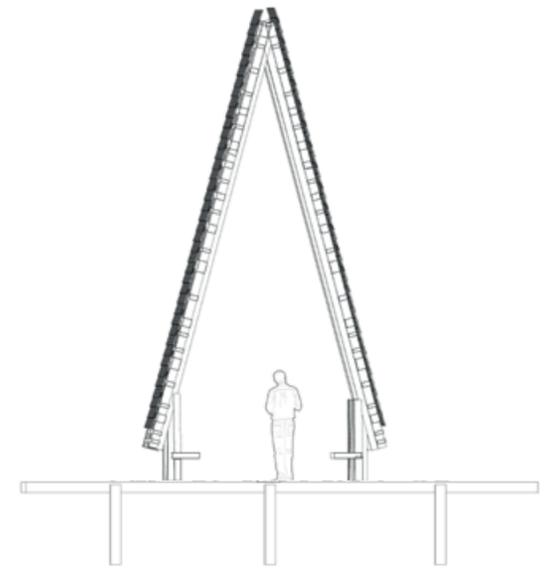
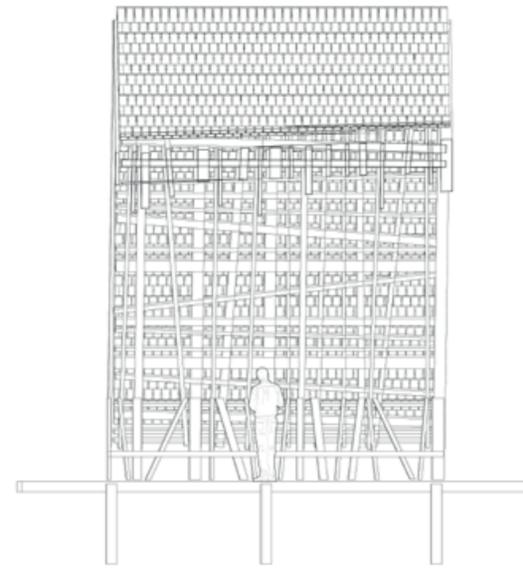
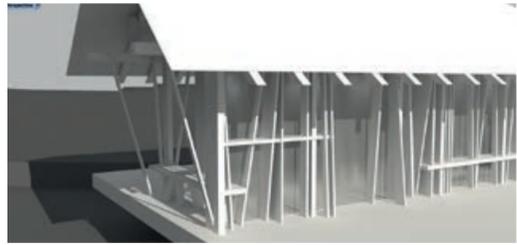
Model

For this project I mainly got inspired from the roof structure in Hamsey village. Creating a model enabled me to understand how it can be developed to other possibilities correctly.

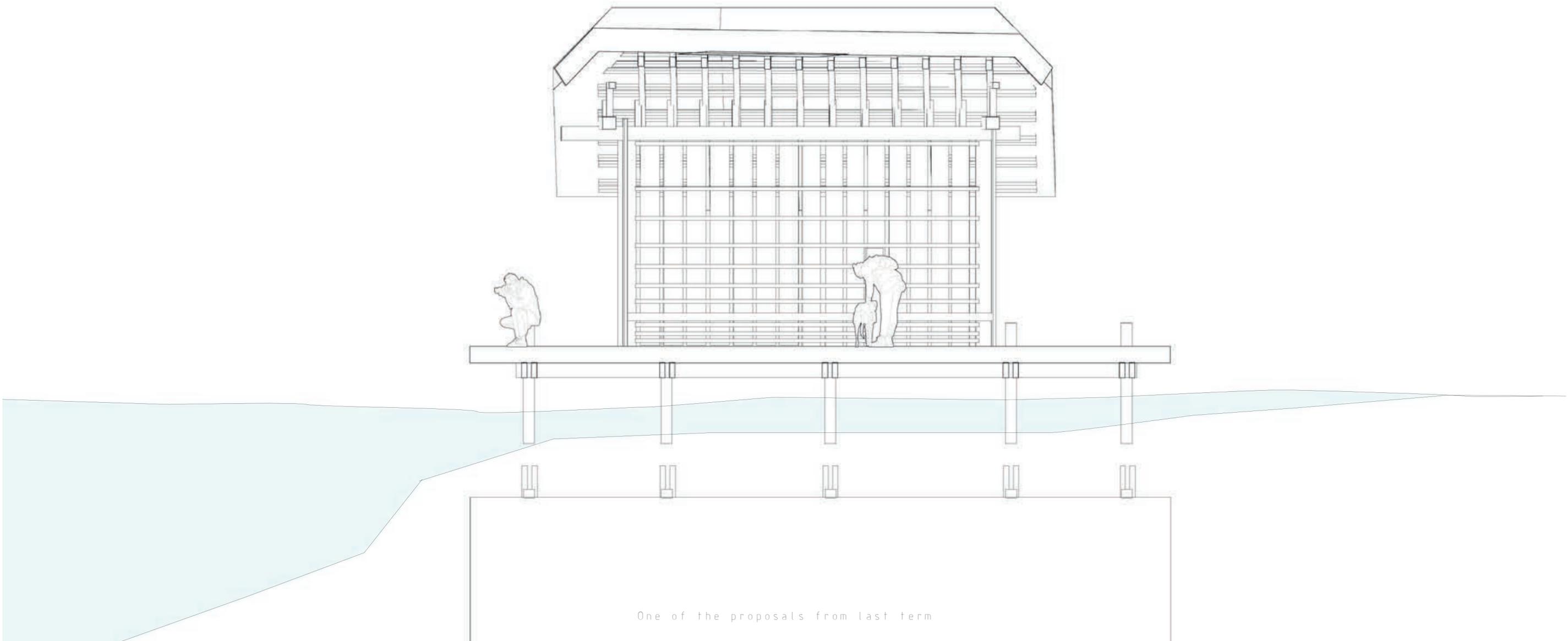


Initial proposal

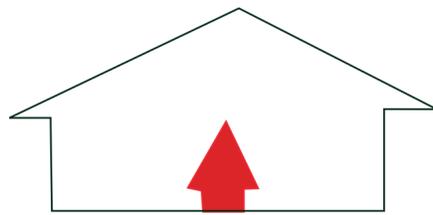




un-regularity on structure and on the roof
which is one of the aspect I would like to do more experiment on.



One of the proposals from last term



Term 1

Term 2

TEMPLE / SHED

Spaces to make TEMPLE / SHED
Spaces to learn how to make the TEMPLE / SHED

Ducklings

Duck

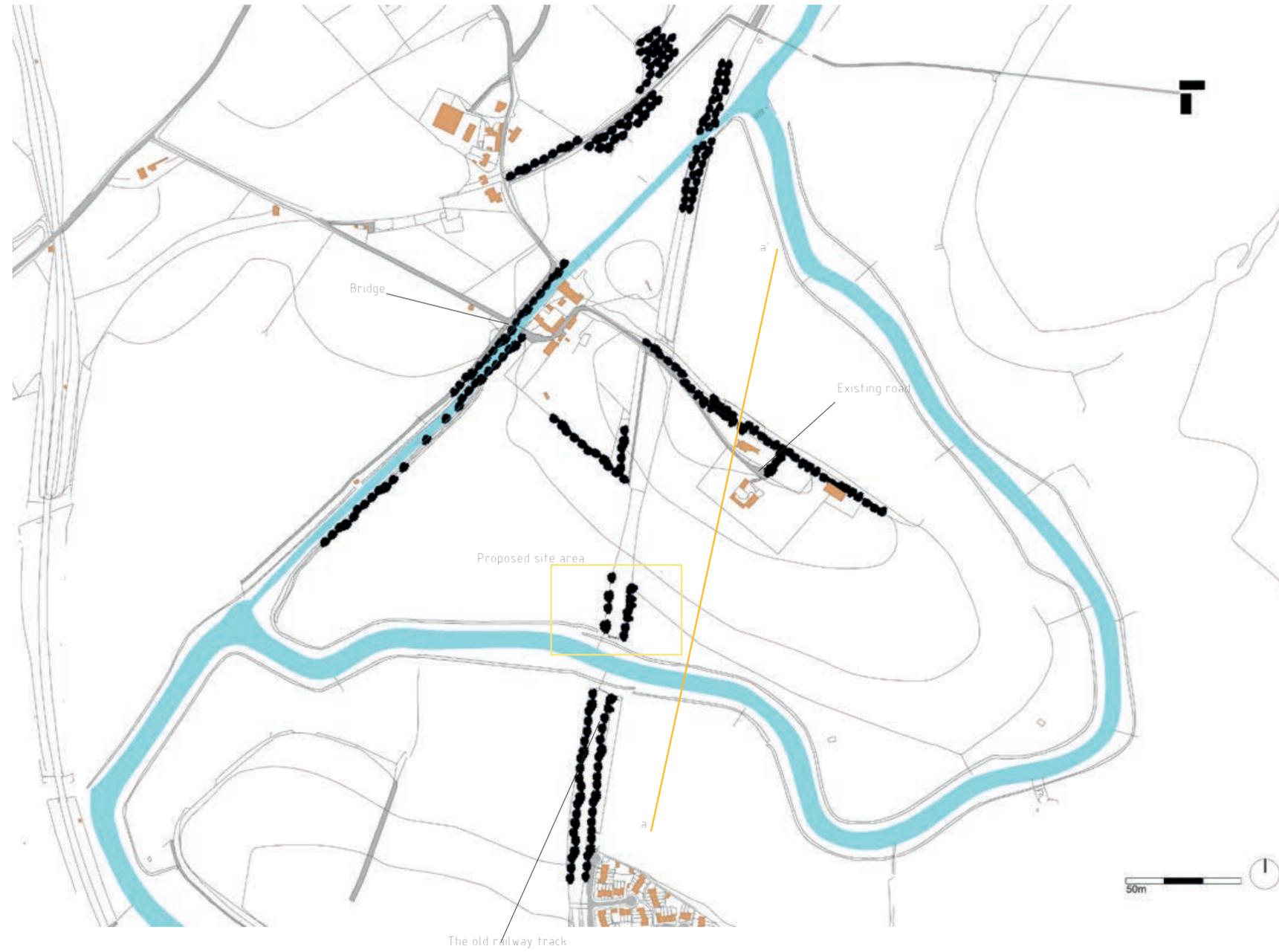
Old Hamsey Church



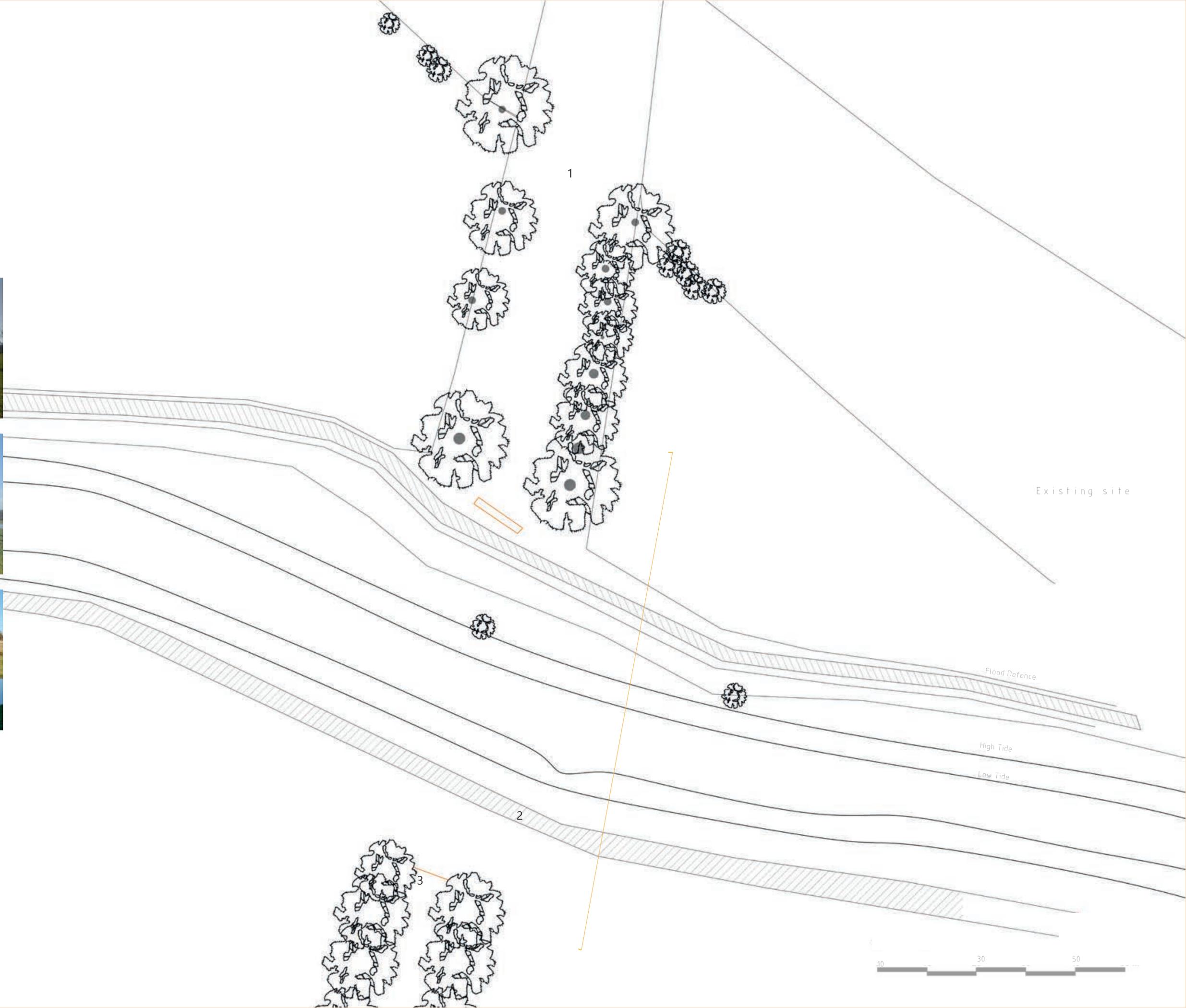
Site Area

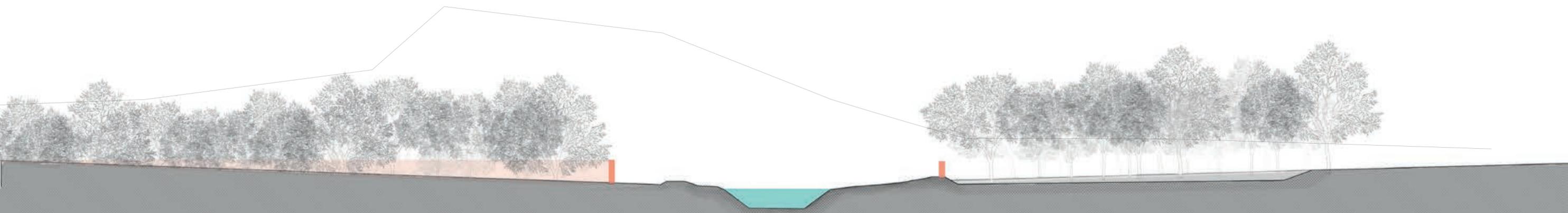
Hamsey Island / Lewes

Hamsey is full of history, along the way visitors can explore WWII bunker and Old Hamsey Church - 12th century church- that is placed on top of the Hamsey Island. Daily visitors are travelling here to experience the nature and the history comes with it.



There is only one entrance to the island of Hamsey and it is provided with the bridge on the west side of the island.

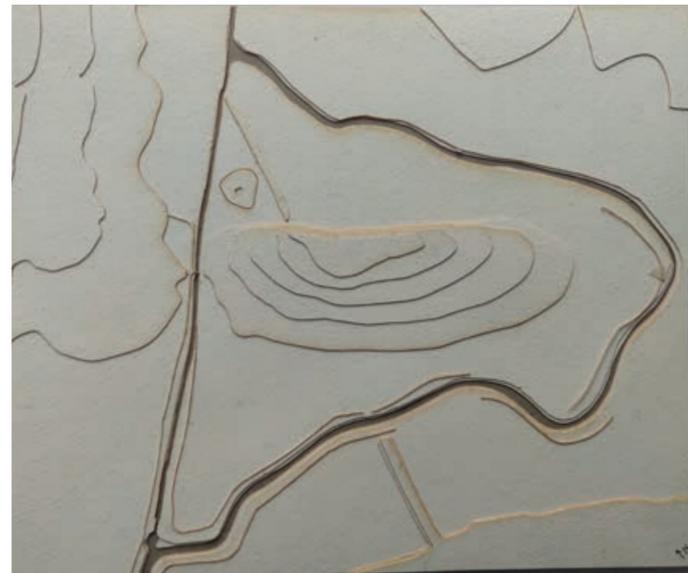
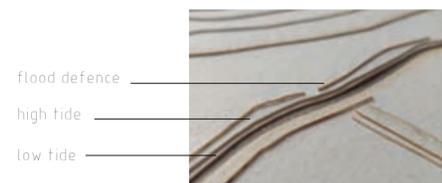




SITE SECTION



Site Drawing



Old Hamsey Church



ecological reasons - climate change- reminds us, going back to using traditional vernacular sustainable ways to construct our building

going back to craft
going back to tradition
going back to timber
going back to original
going back to WOOD
going back to nature

timber is becoming essential again
for buildings
no more concrete
no more steel
no more carbon

more timber

timber technology can allow anything that concrete steel can do

creating carpentry school where students can learn how to build how to design with timber
furniture making, sculpture making and house making with wood



Atelier5

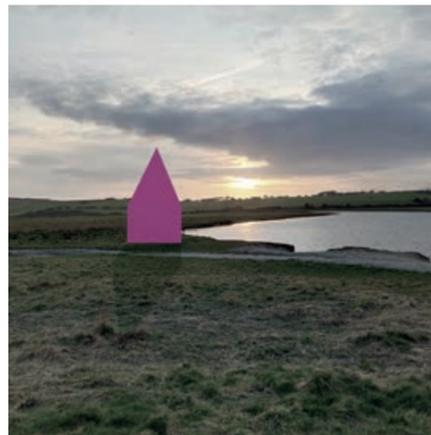
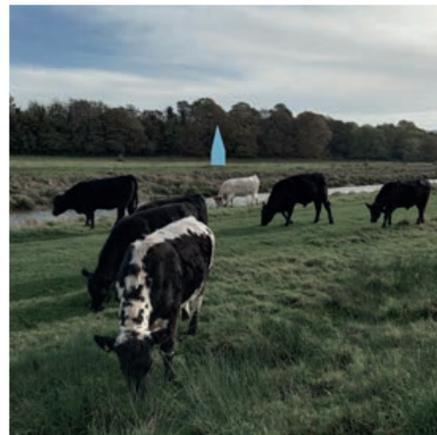
Atelier 5 is a design and manufacture, studio that specialize on timber. It combines art, design engineering, architecture and crafts.

Its consist of 5 technician/ teacher. They design and manufacture big scale products to small scale products. From pavilions to shed, from a chair to a wooden spoon. And they love teaching their knowledge to public who are interested in wood craft.

It is open to public via events, workshop and classes.
The Workshop spaces are place for both working and learning.

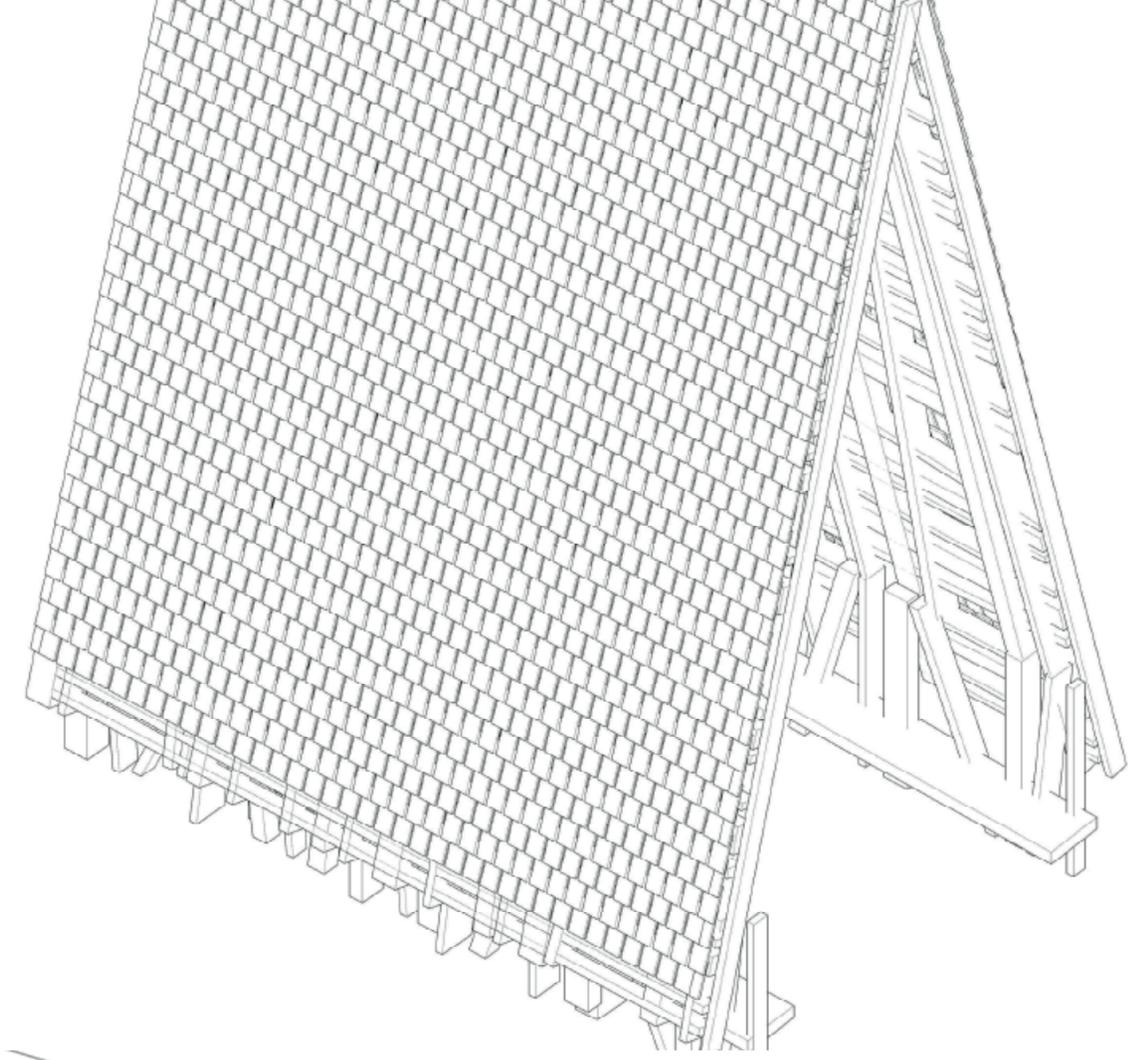
Possible Courses (for 6-8 people)

Shed making
Furniture making
Wood turning
Sculpture making
Traditional timber construction
innovative timber construction (testing and experimenting the limits of the wood)

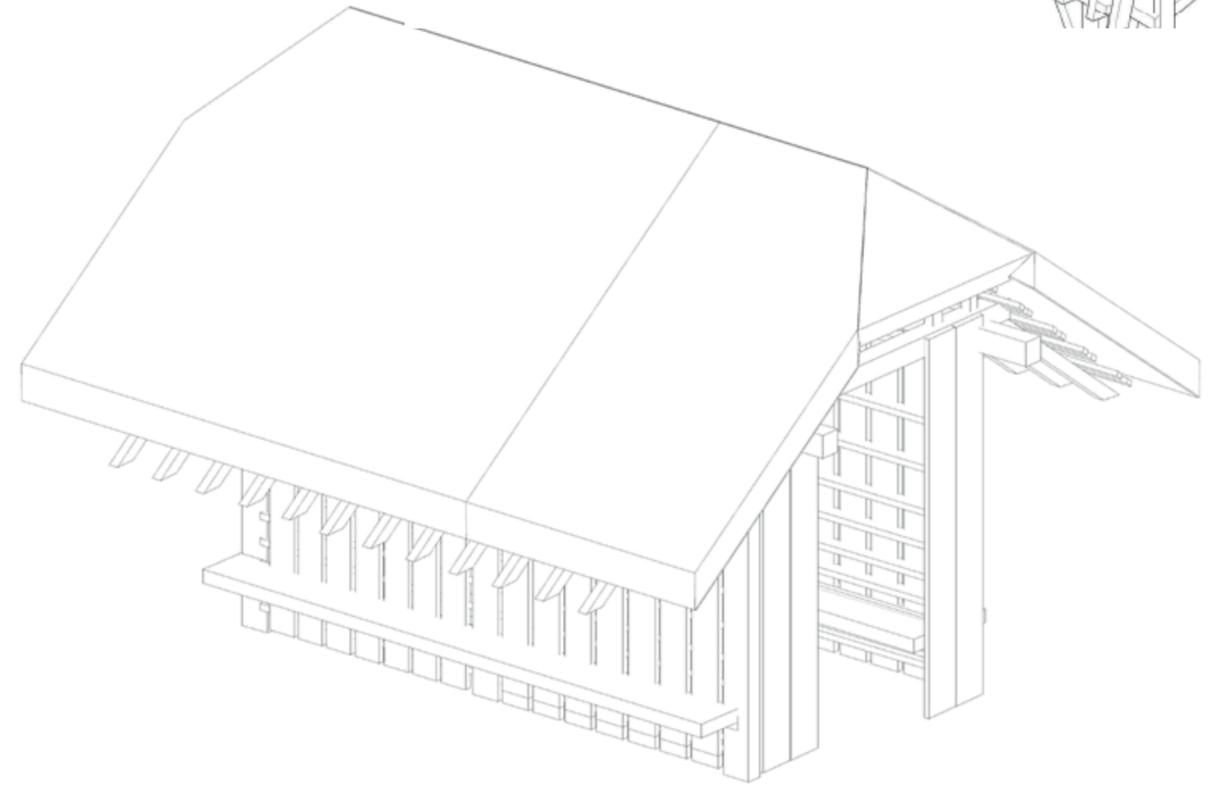


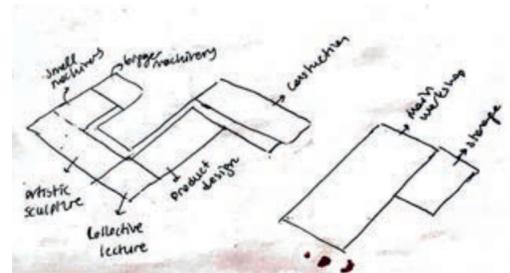
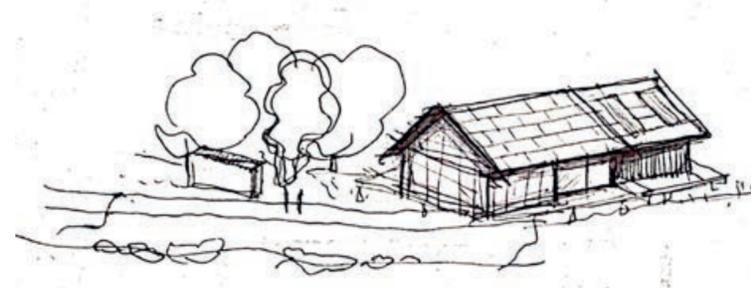
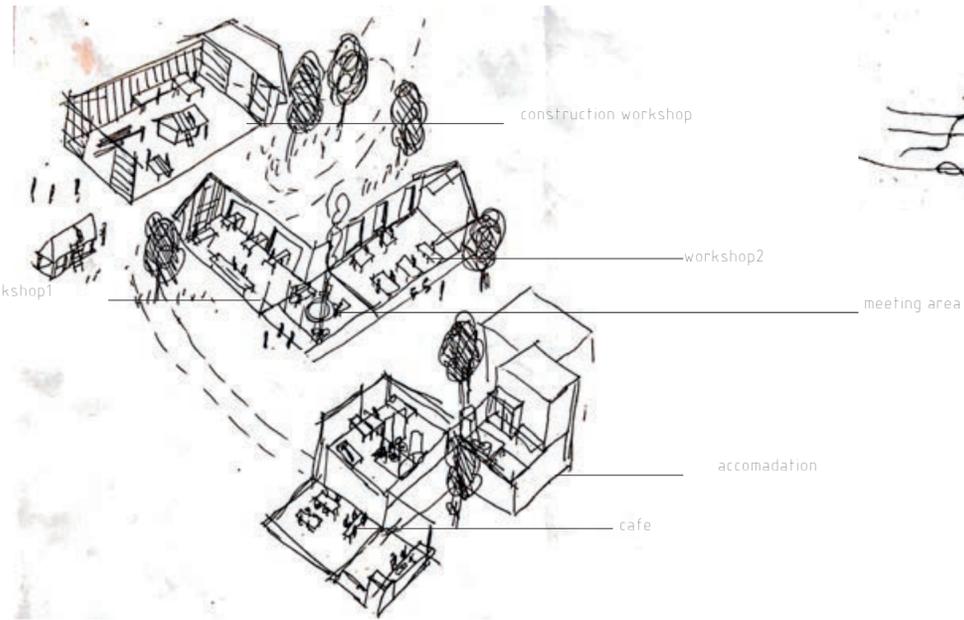
The River Ouse project

One of the projects they will be producing in workshop spaces, is to manufacture the temples/sheds and place them course of the River Ouse. Using river as a delivery route
Sheds become learning tools
atelier 5 works closely with public and provides the shed of sussex, garden sheds, temples, studio sheds , river sheds.



Place to create the temple, shed, hut.
Place to create table, chair, cabinet, bowl, sculpture



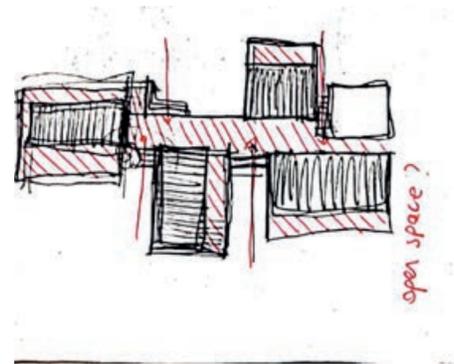


Craft workshops

Big scale structure workshop
 traditional and modern construction
 boat making
 big scale sculptures

small scale structure making workshop
 product design
 furniture making
 artistic sculpture

Totally 25 people
 8 construction
 6 product design
 6 sculpture
 5 staff



Big scale workshop

machinery workshop
 regular size machines
 large size machines like robotic cutters

assemble area- area for joining timber together
 (this also can be done outside, therefore needed to be connected to outside space)

offices for technicians (to use the roof space efficient)

presentation - lecture area
 storage?

in construction workshop

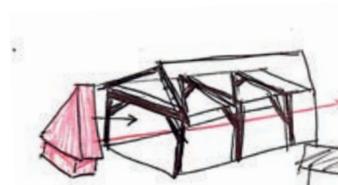
open roof space for tall roof structure (need to work on the structure)

it does not have to be used only by construction students, it can be used by other students. Collective lectures can be done here. so the space must be adaptable, flexible

cabins, joinery, boats (canoo), other timber stuff, detailed wood work

FIGURE OUT HOW TO MOVE STRUCTURES, TAKE THEM OUT FROM WORKSHOP?

DOOR?





Leaning the wood on the wall



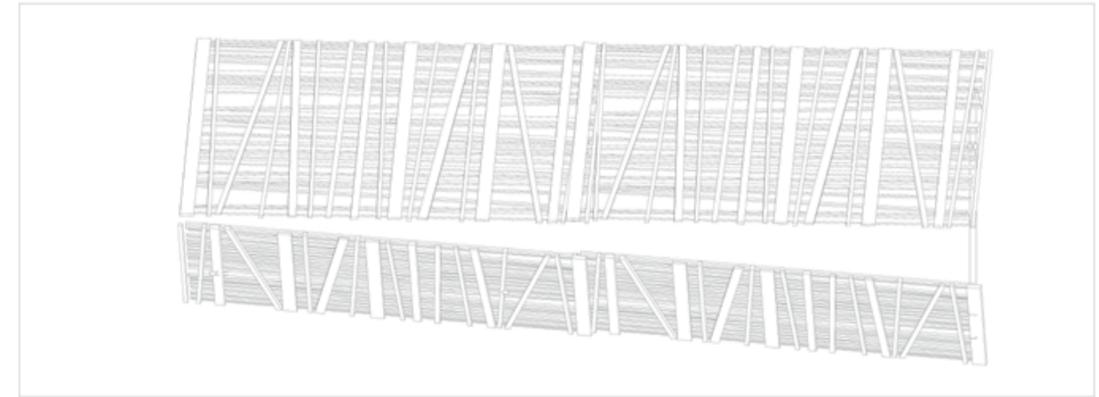
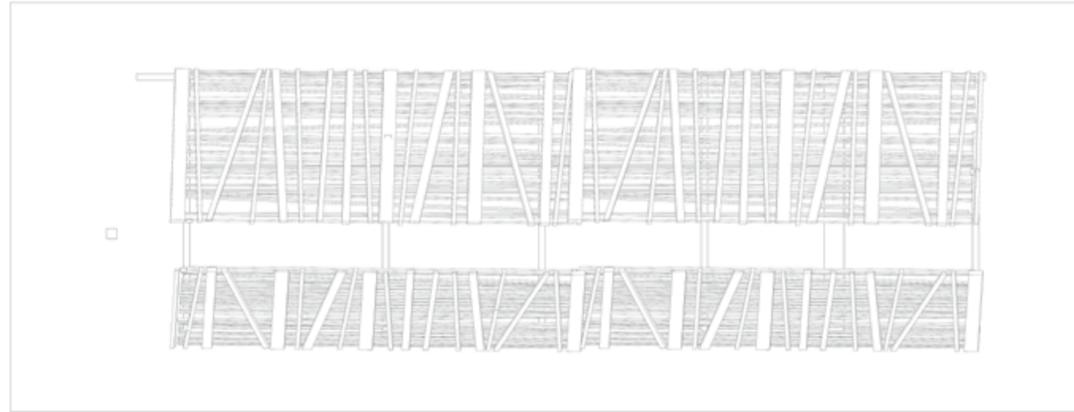
2500mm



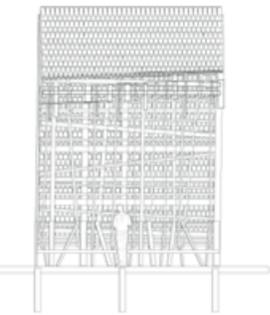
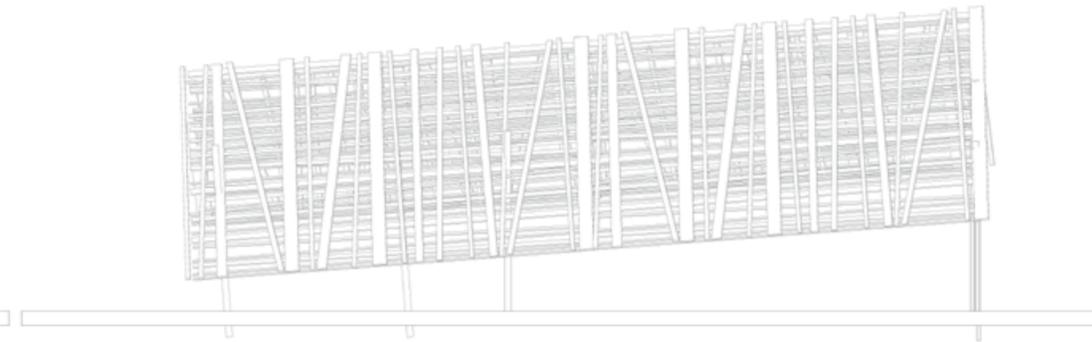
Understanding the workshop space, machinery, tools, possible actions in workshop.

kimitsugi house and screencaps from other youtube contents, pictures from Mithras House workshop

bird views



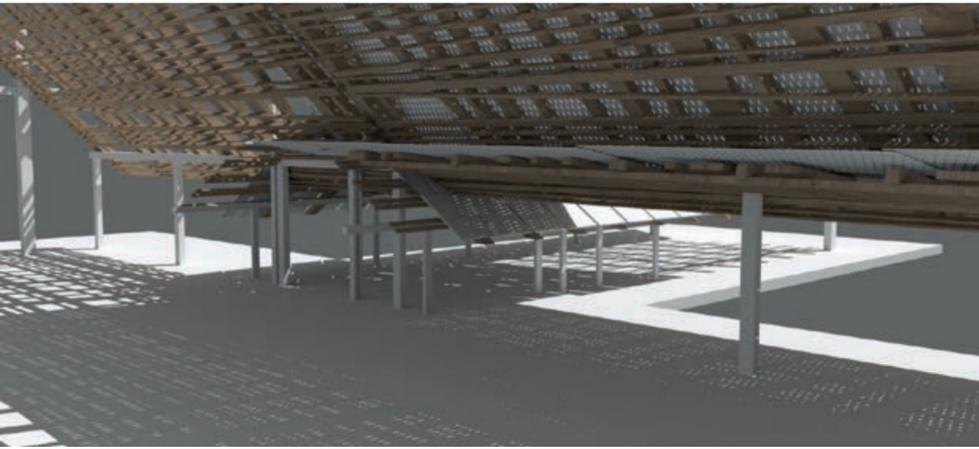
side elevation



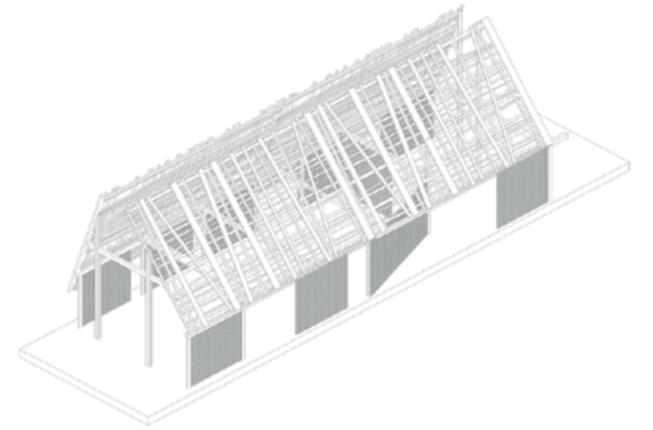
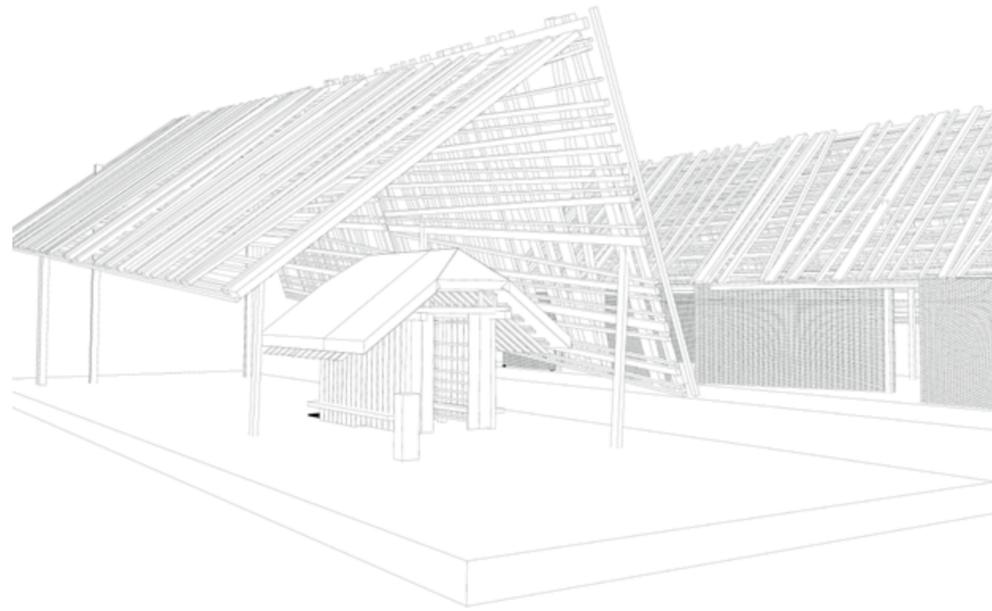
Main Workshop
extending the temple

It is a workshop where large sized designs are made. I start to do the workshop design by developing my first term proposal-temple.

irregular - non-uniform - uneven - disordered - confused - messy

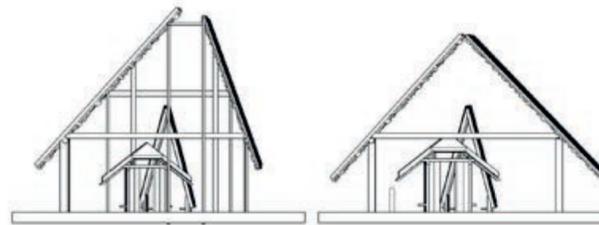
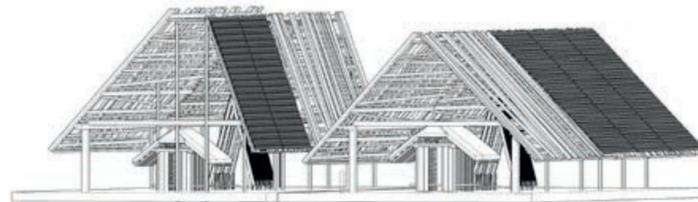


renders from rhino6, inside and outside look

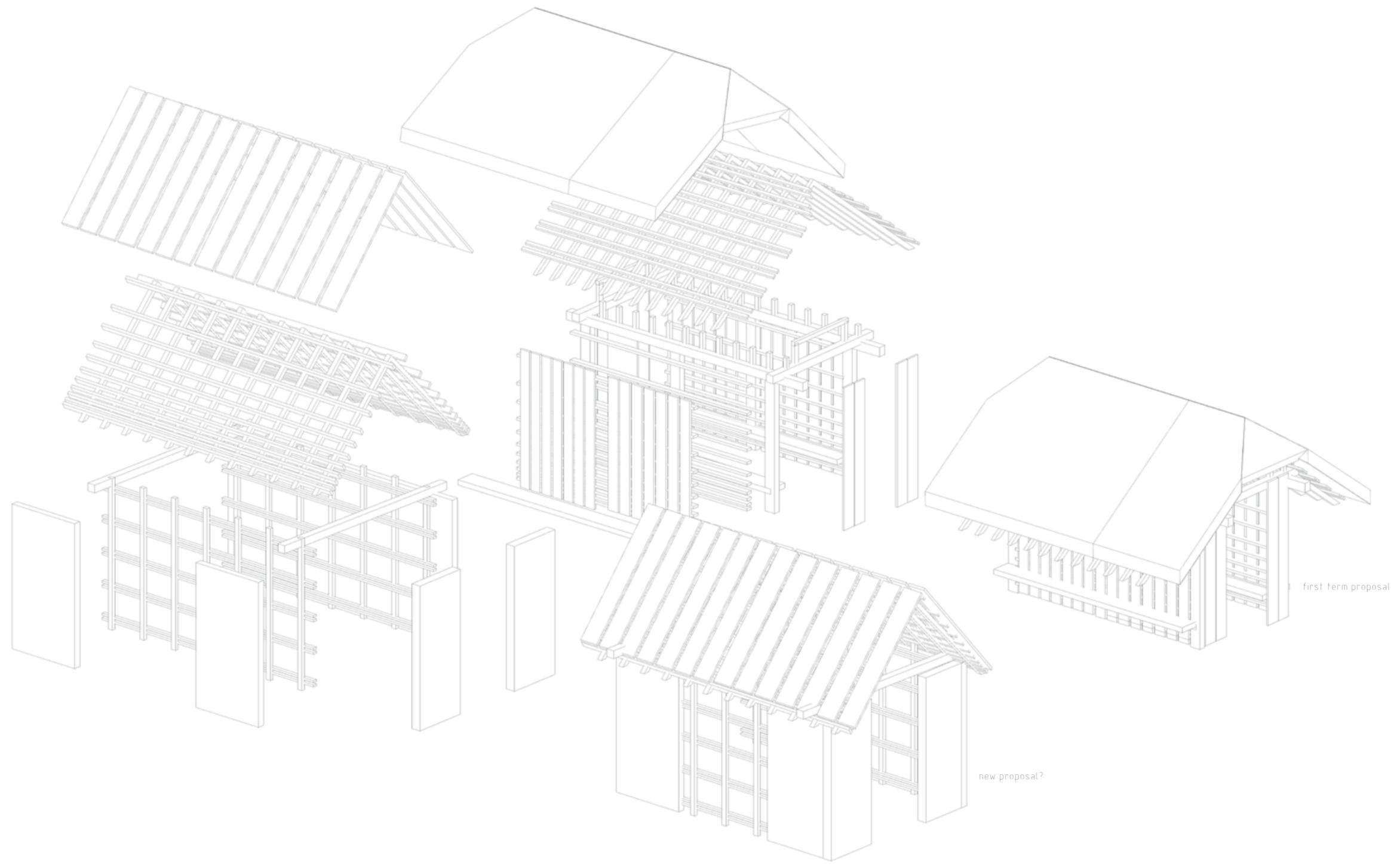




Why it didnt work?
not practical
more focused on aesthetic rather than practicality
waste of timber

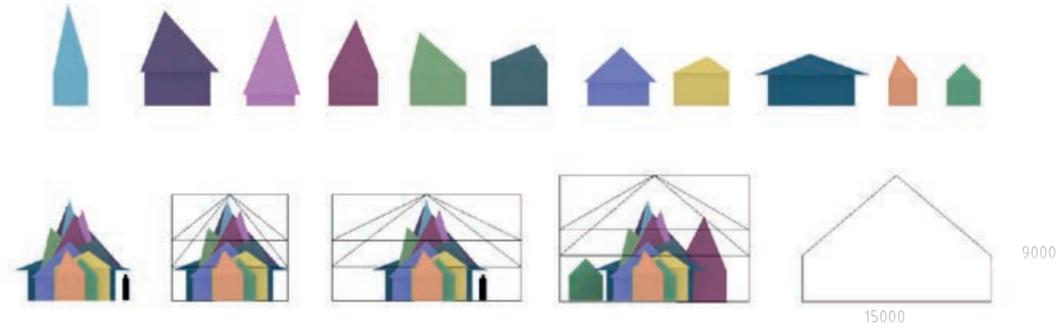


Thinking of different roof sizes and shapes.



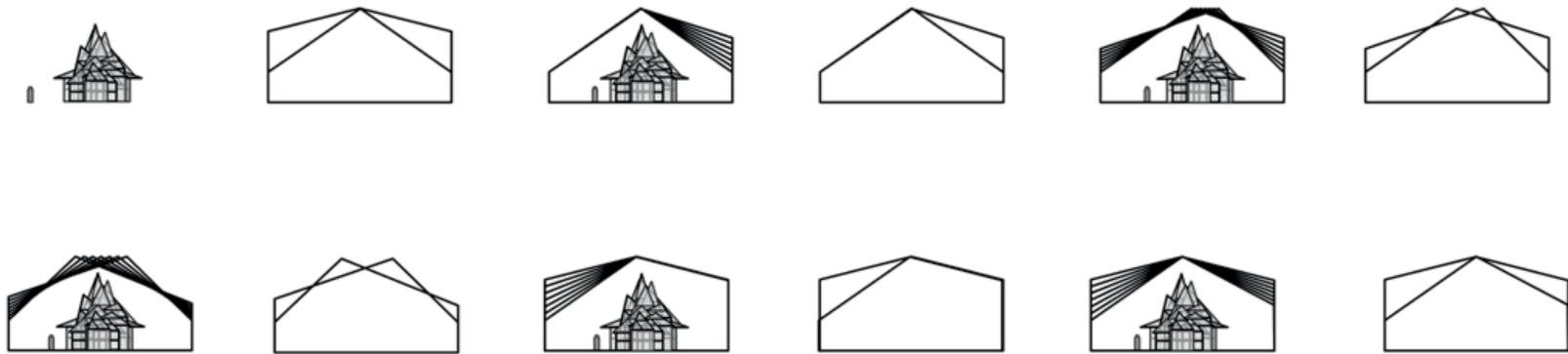
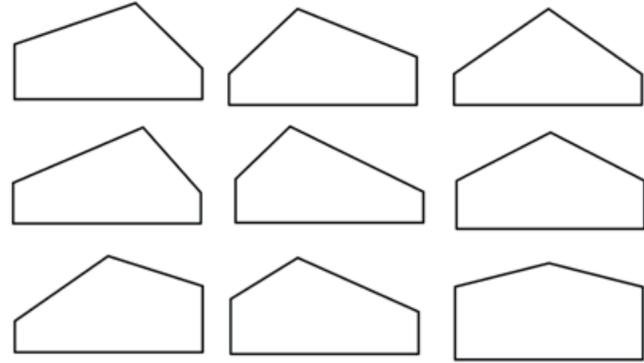
More experimenting

disassemble first term proposal, changing the location of components. wall structure becomes roof structure. roof material turns into wall material

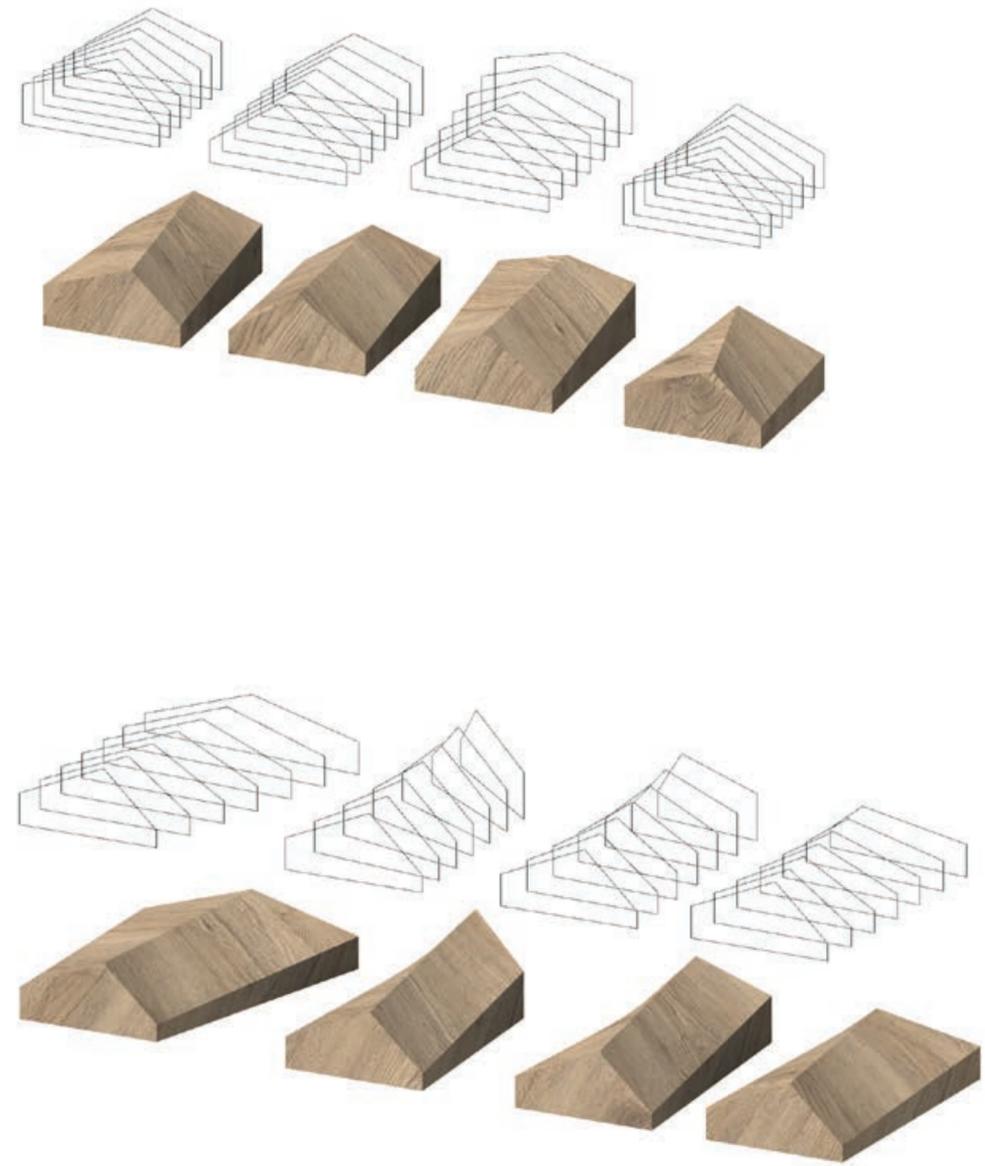
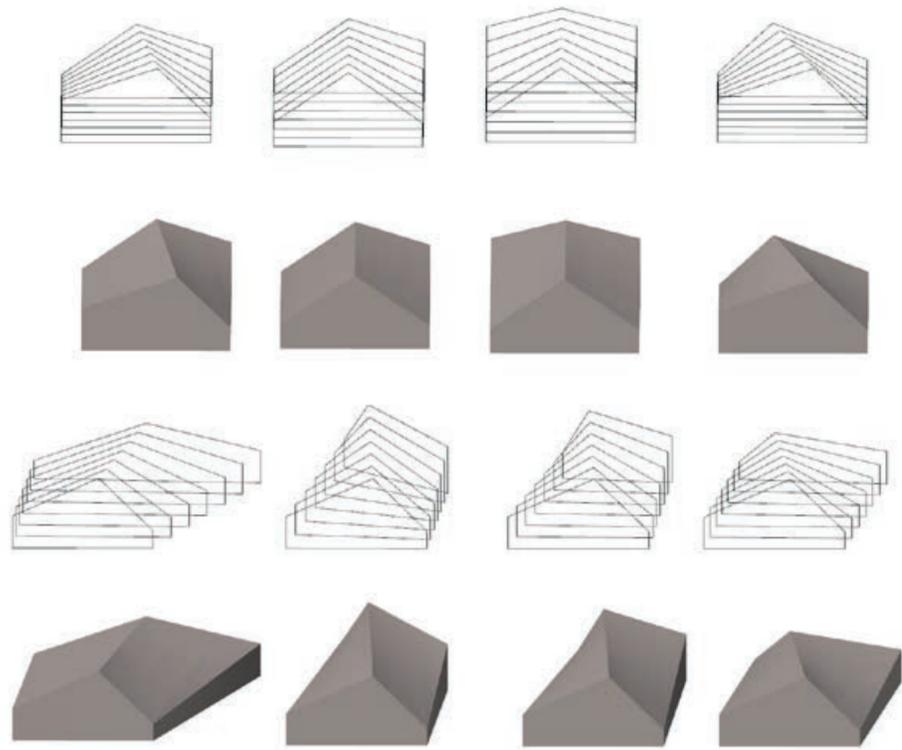


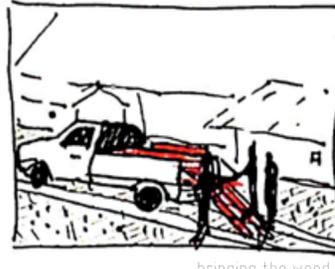
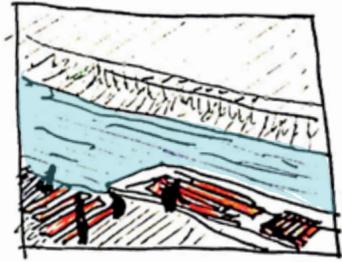
Diffrent variety of roof structures can be buit in the workshop space.
 Therefore Workshop space needs to be flexible and open.
 these huts taken into consideration to decide how big should yardhouse
 be. variety size of huts should be buildable

approximate scale, according to diffrent variety of sheds

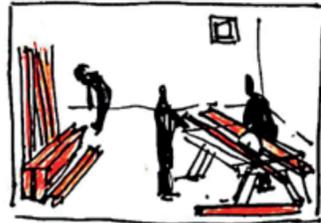


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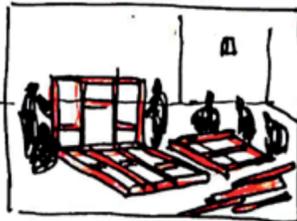
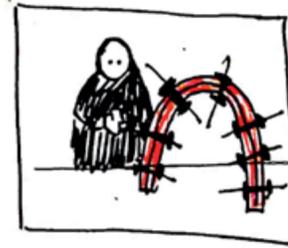
bringing the wood



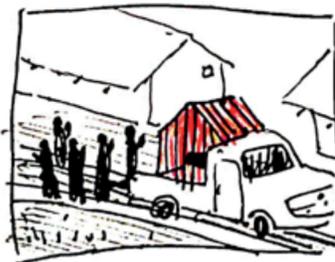
cutting pieces



detail work



assembling pieces



delivering the shed

PROCESS OF THE SHED

depends of the scale of the shed , either deliver the pieces and built on site, or deliver the prefabricated shed

stages

bringing the wood

cutting general pieces

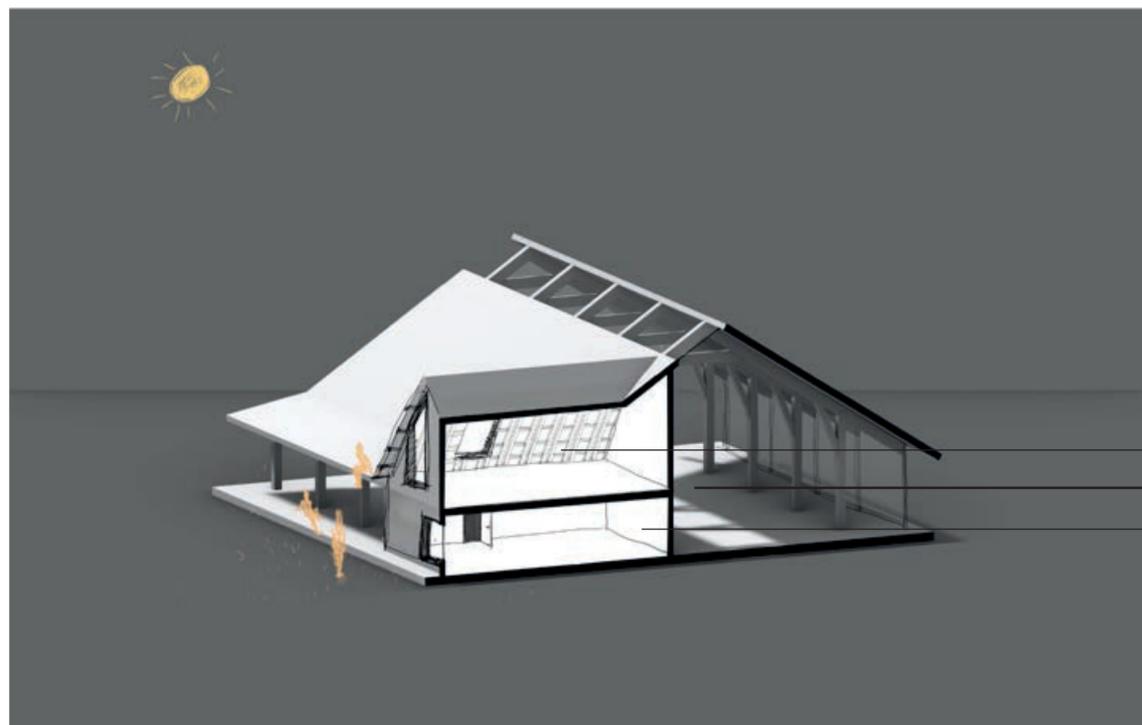
detail work on pieces
joinery cutting
sanding
bending

starting to assemble pieces

taking out the structure outside

machinery area

assemble area
either on the site or in the workshop
for learning.

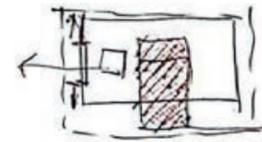


technician office

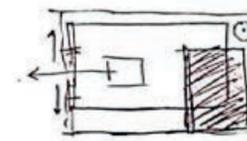
assemble area

presentation room

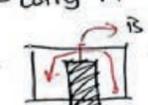
main workshop and office



divides workshop + assemble point

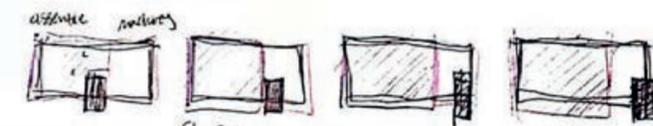


you need to carry it

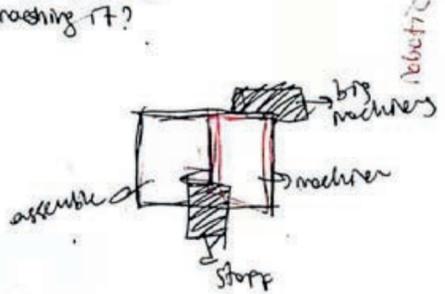


is this area enough?
to carry
you really need to be careful to not ruin the building by crashing it?

you cut the wood → your assemble part is just there.



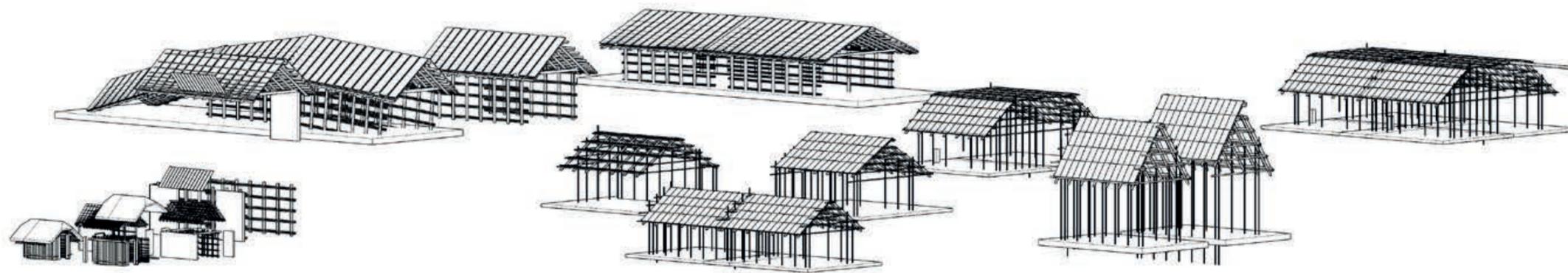
Staff They will have control.



assemble → stop

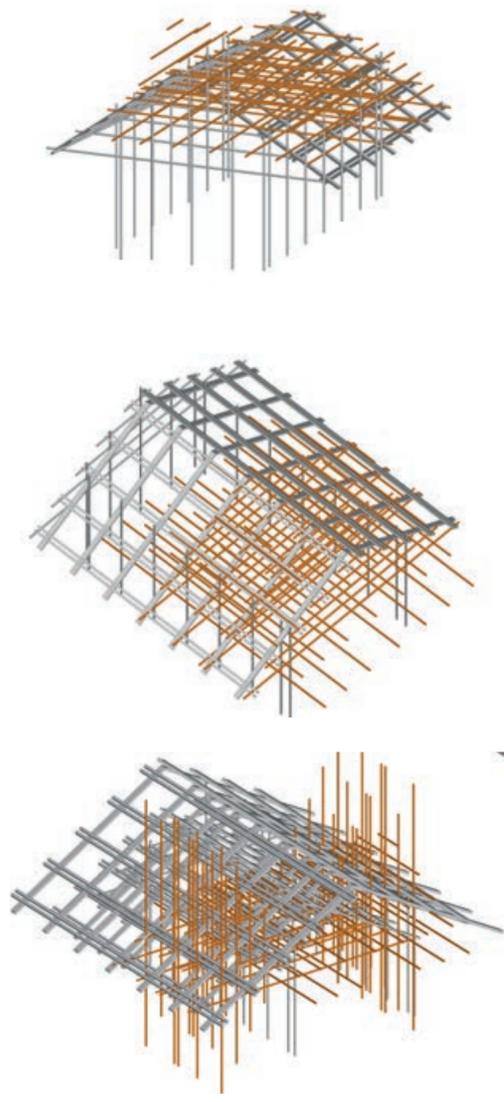
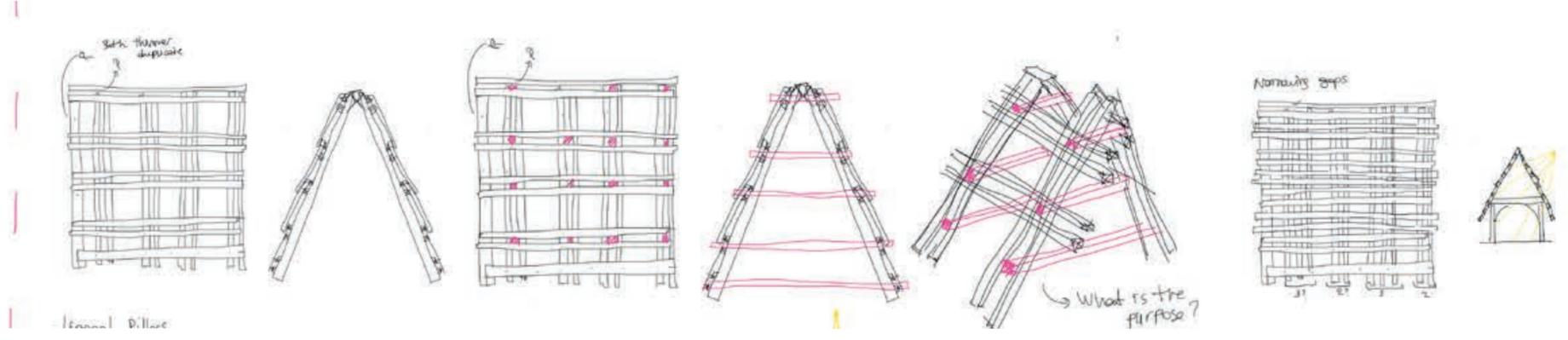
Understanding woodworking stages

In this proposal I decided to divide the workshop space between 3 rooms(stages). However workshop space lost his adaptability.

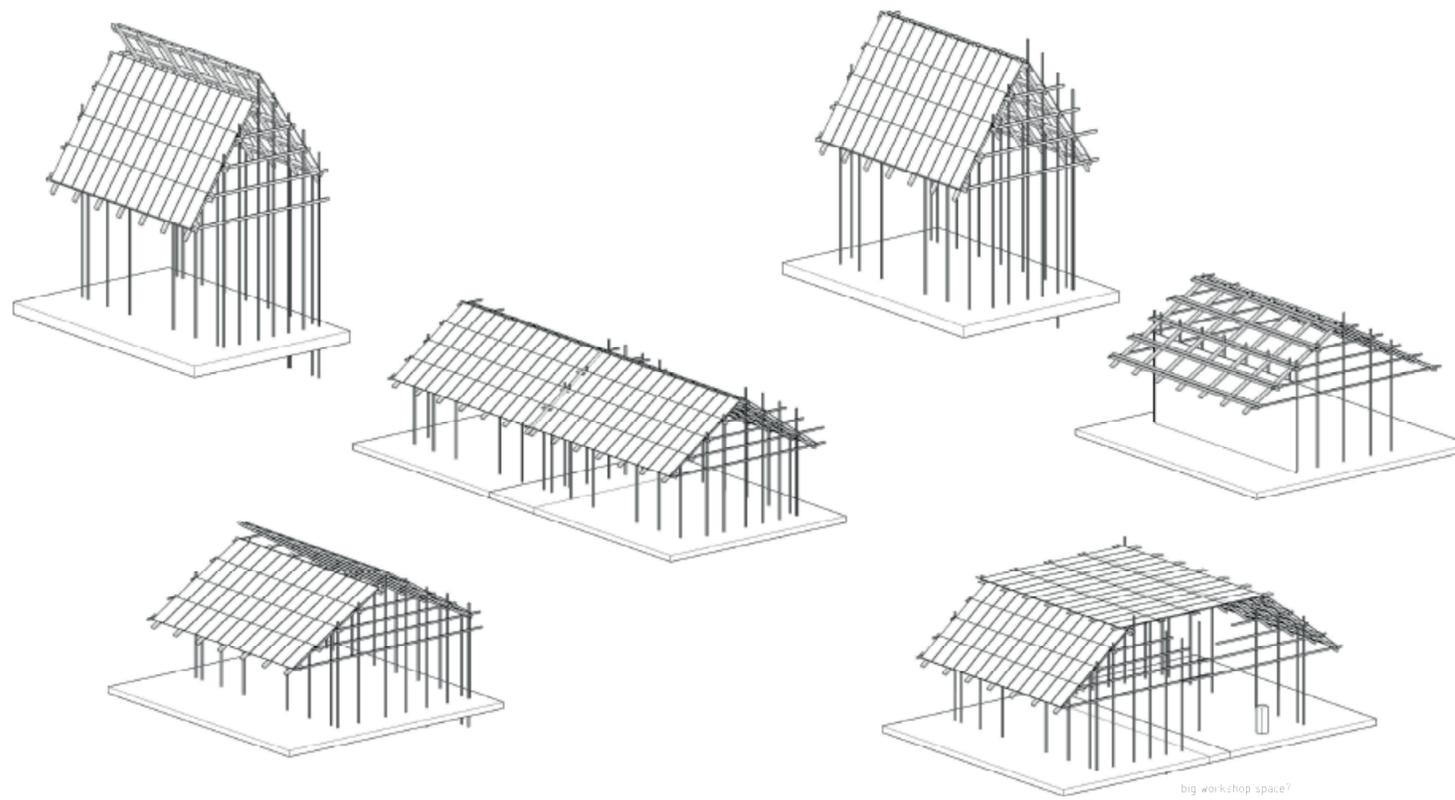


workshop a and b
14-16 student totaly

The biggest furniture to be made is the wardrobe (2m?)
no need for full roof space

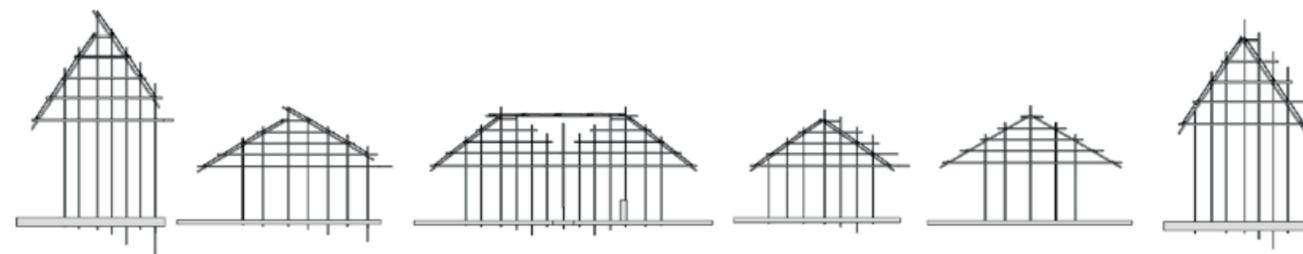


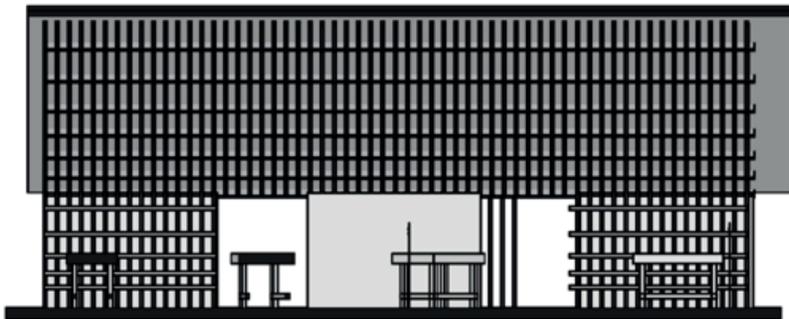
sketch from first term,
I wanted to apply these structures to the roof of workshops



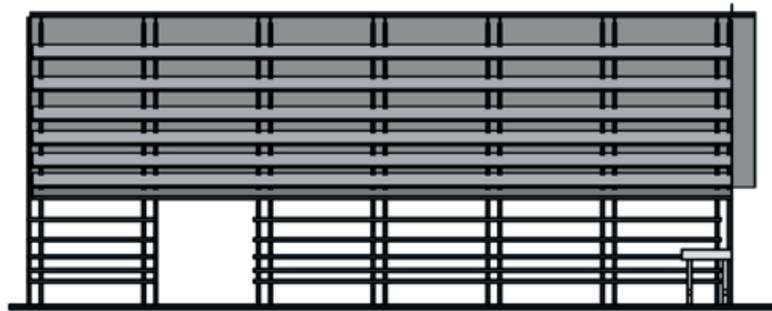
big workshop space?

big workshop space?

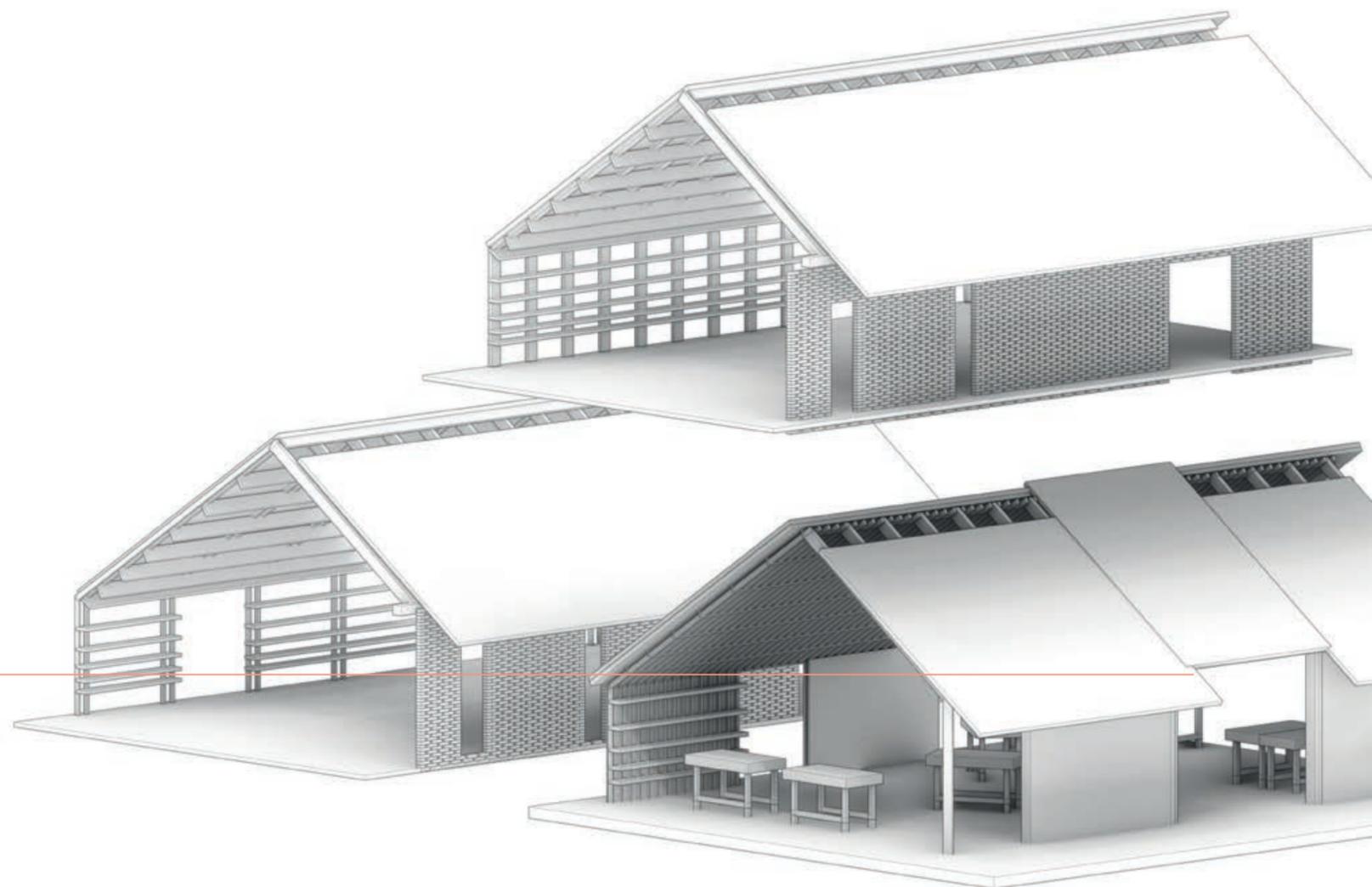


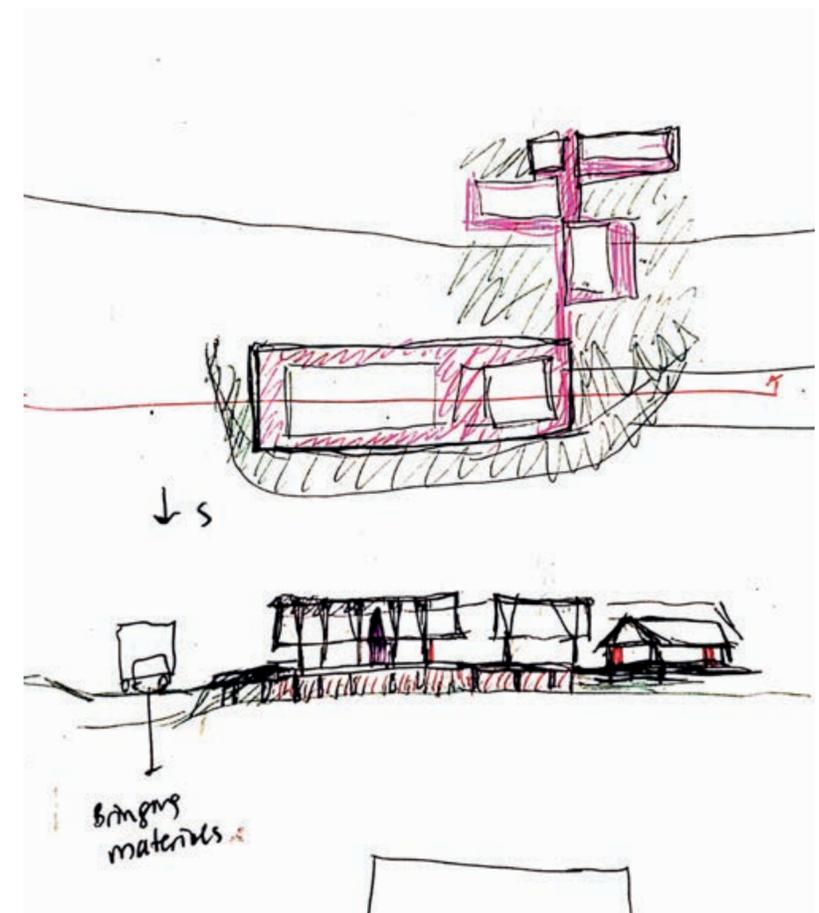
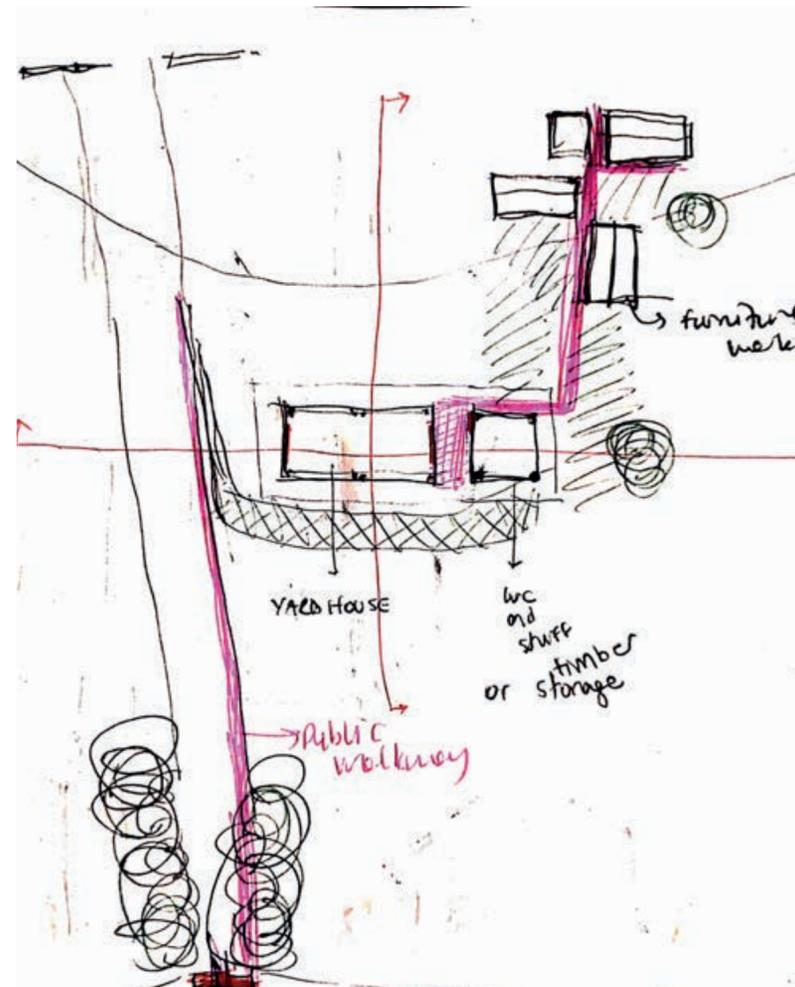
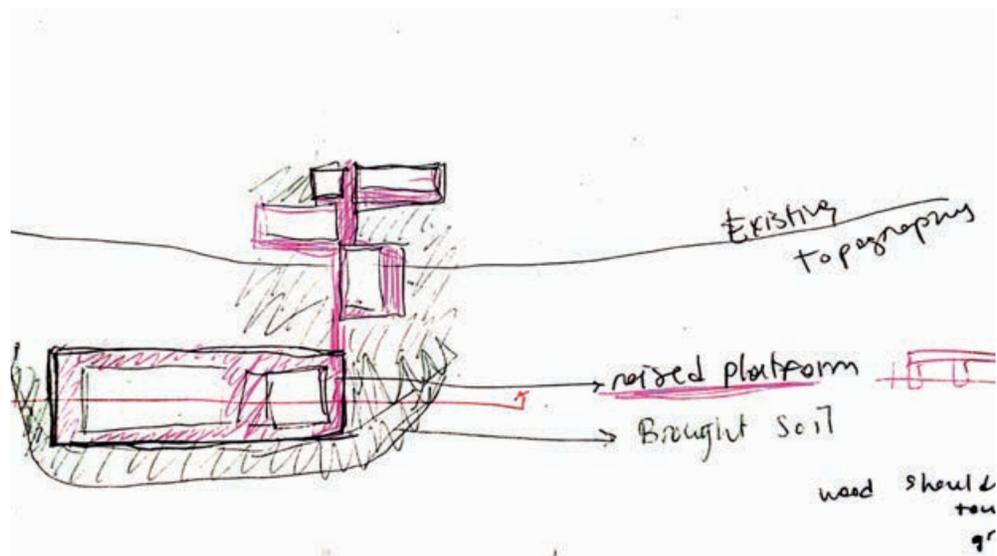
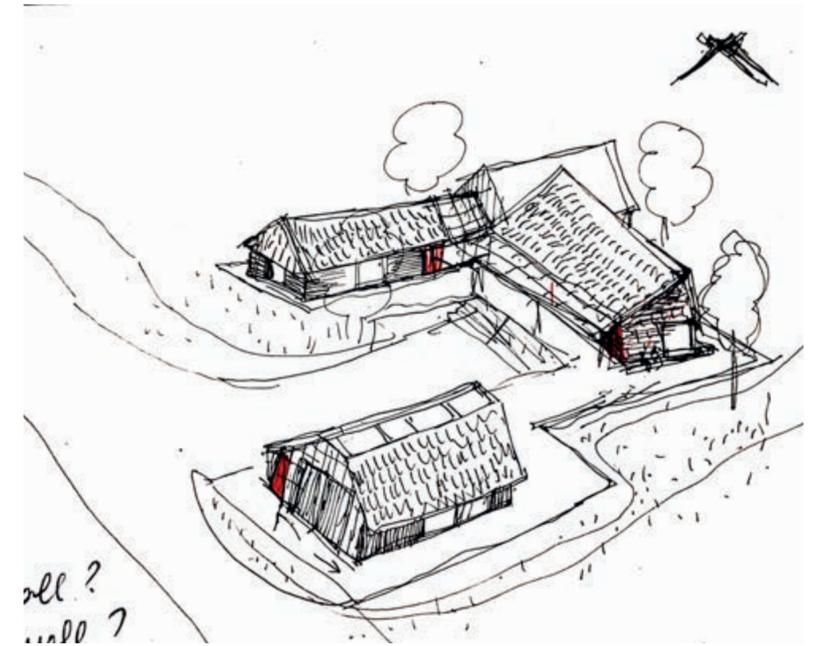
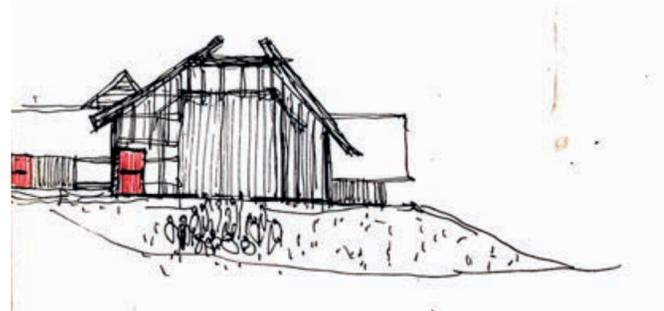
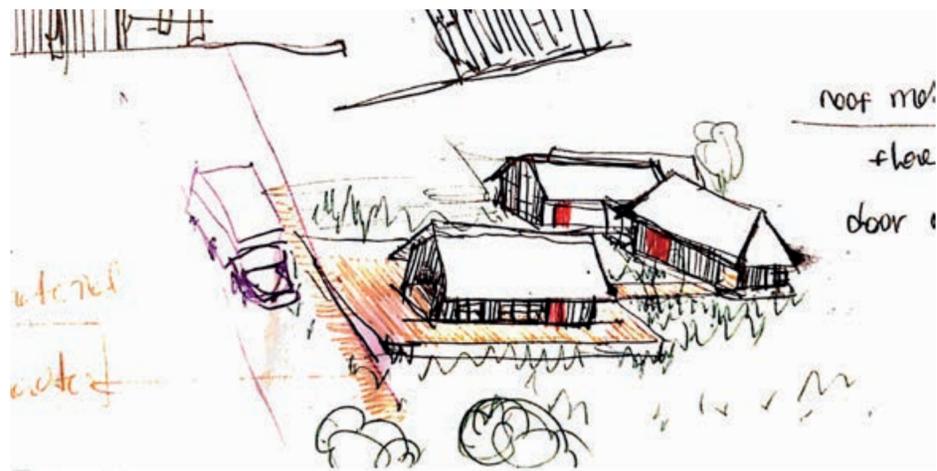


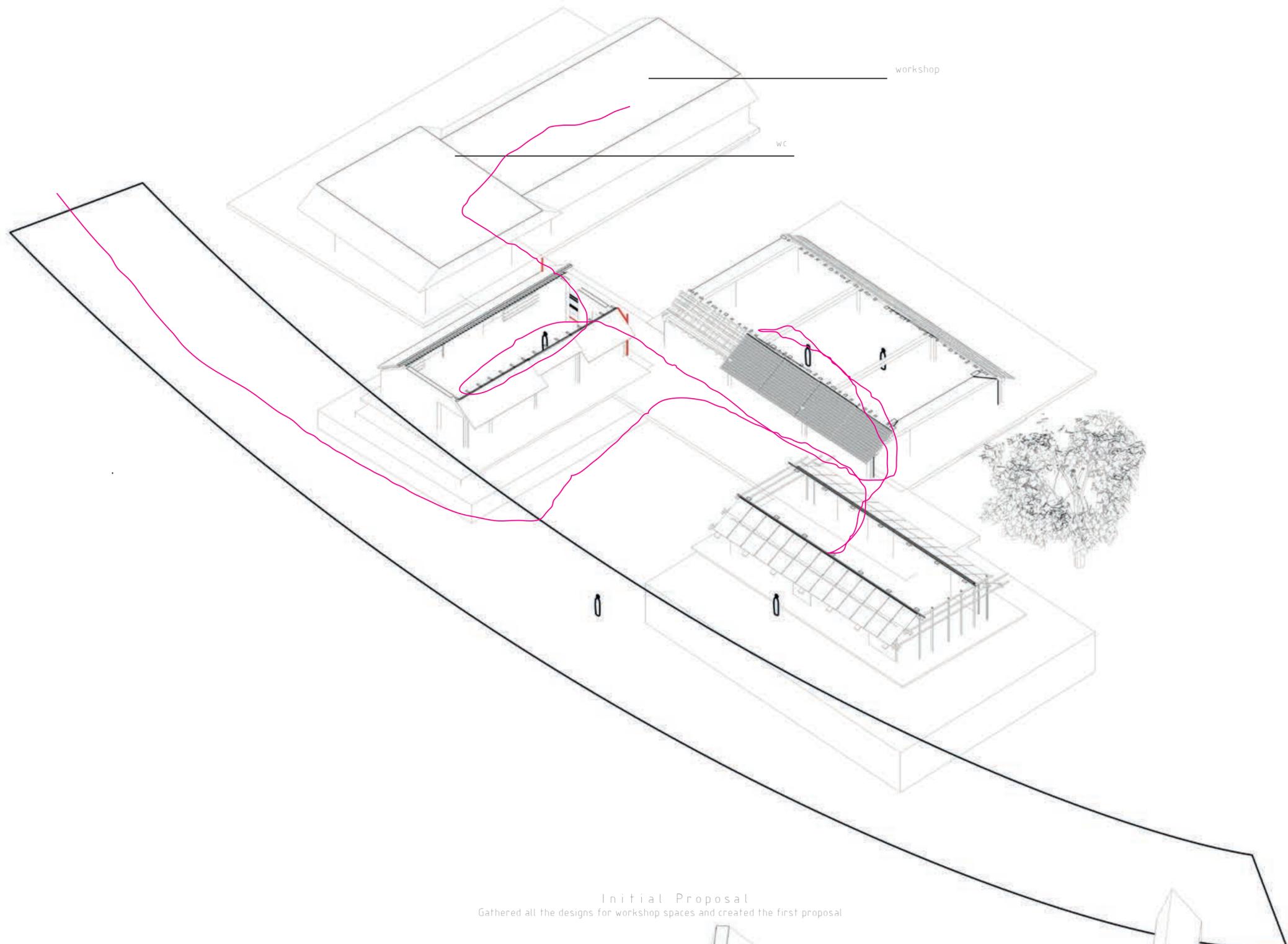
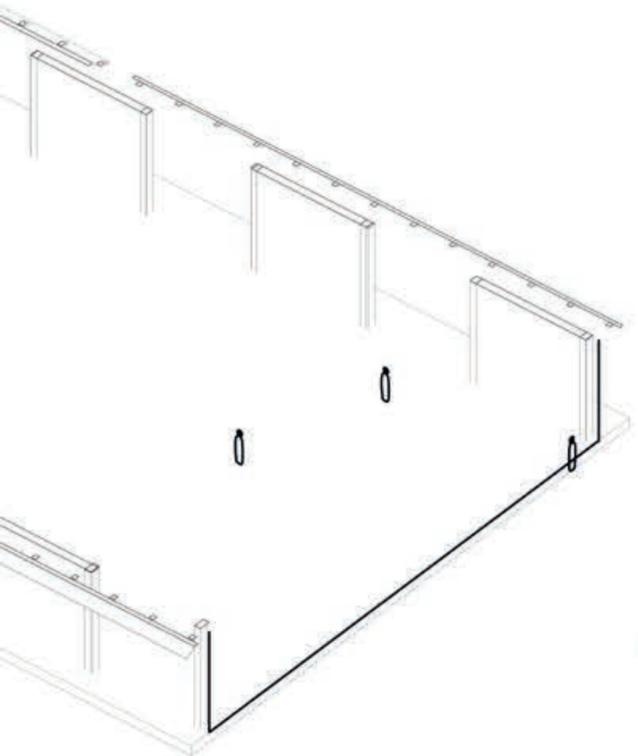
Unnesary amount of timber,
structurally useless



note to myself: this push- pull can be used in big workshop space for the door area.

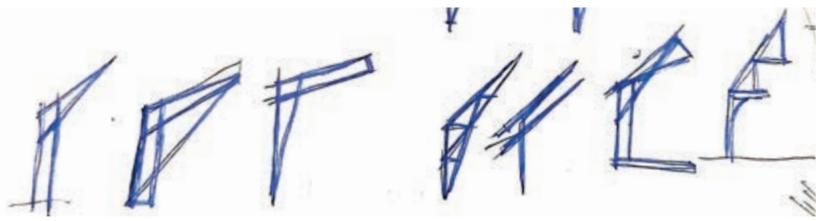
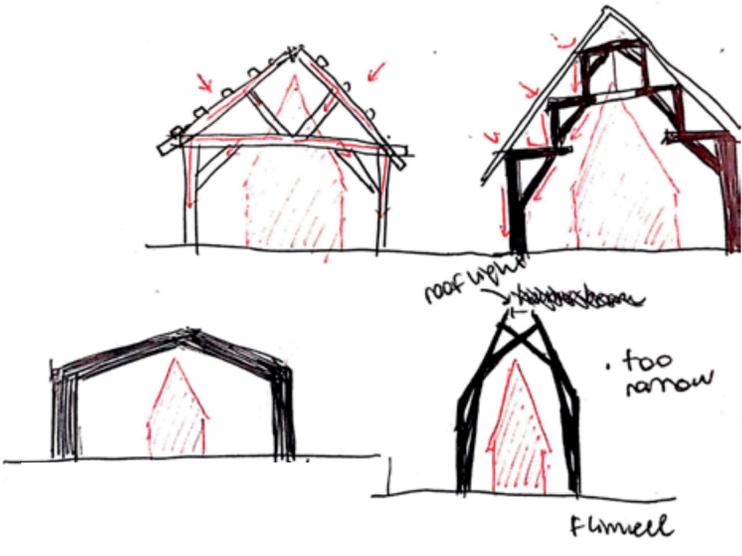
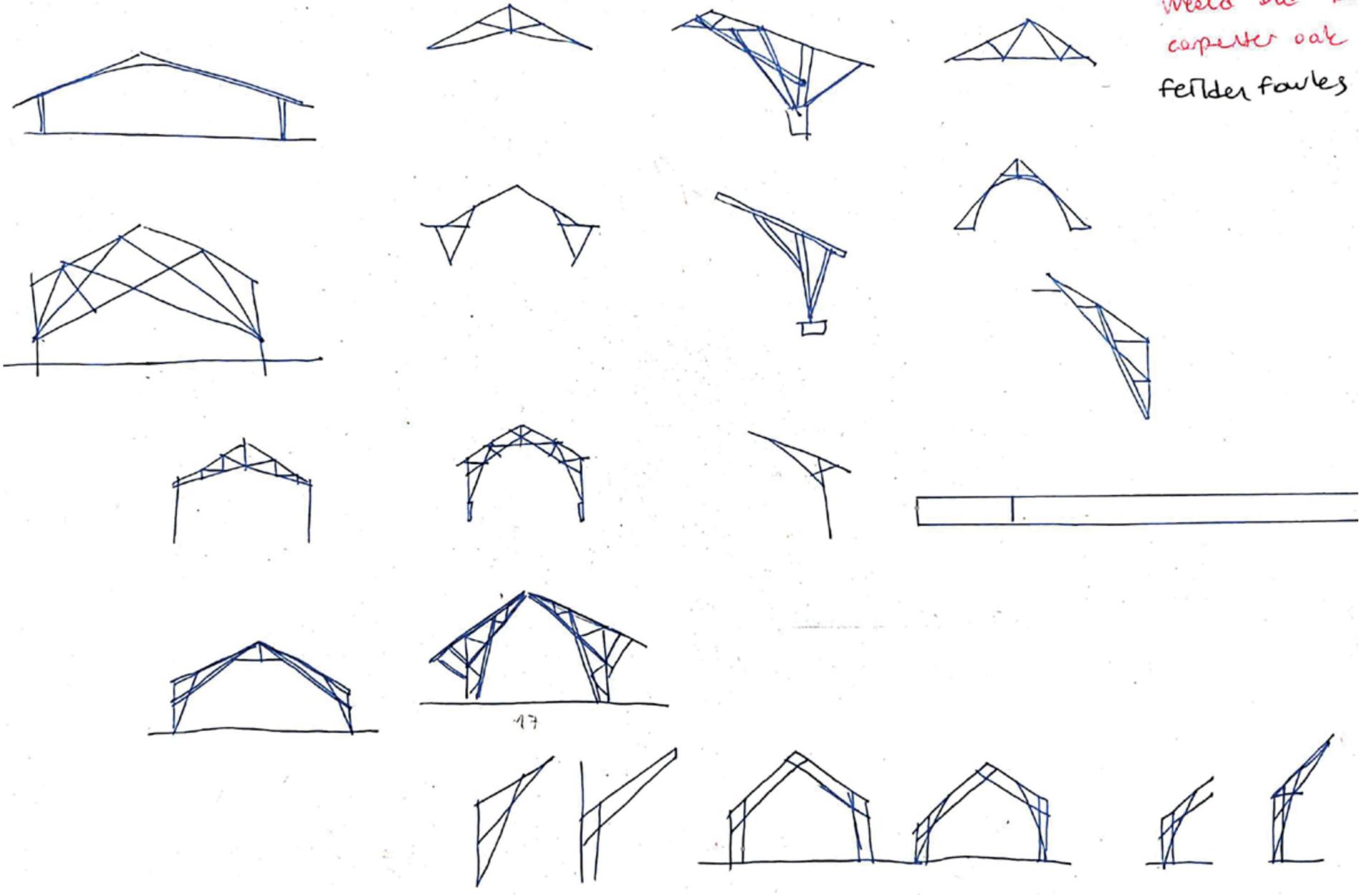


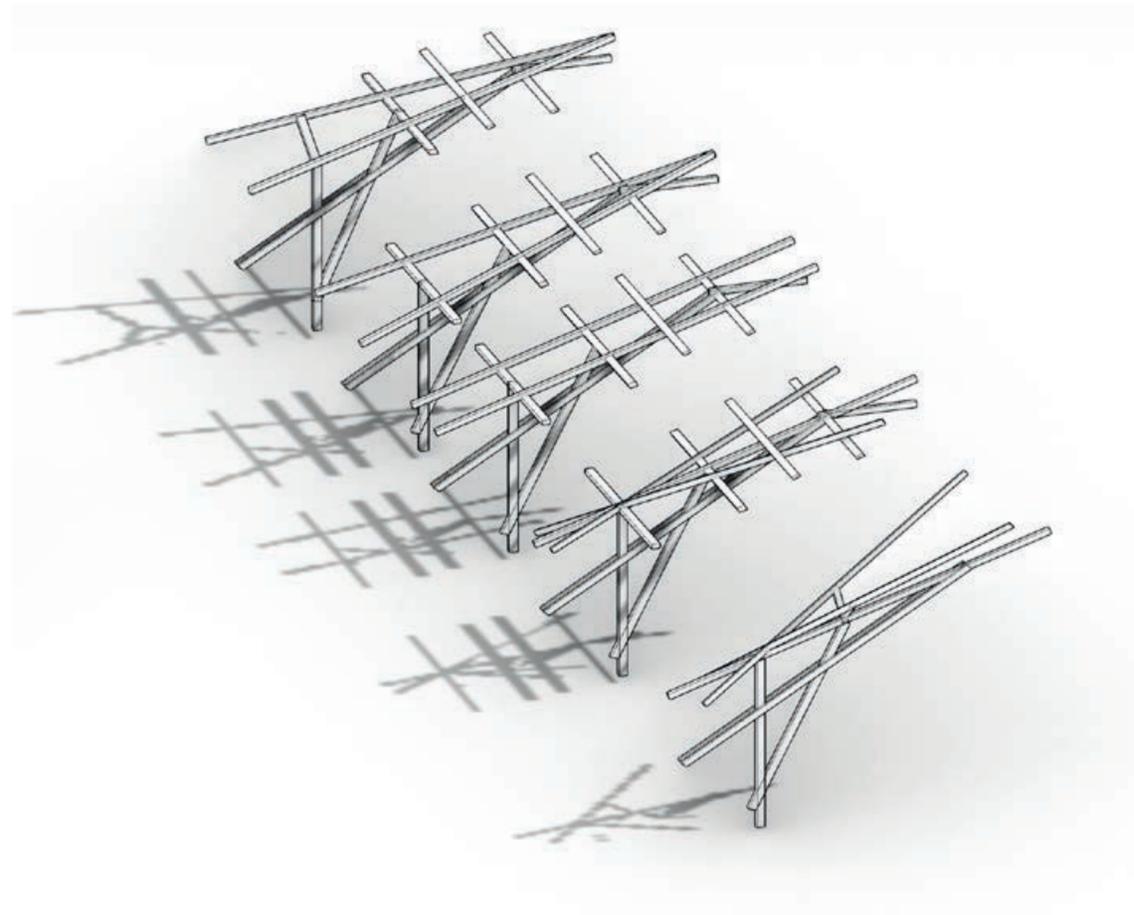
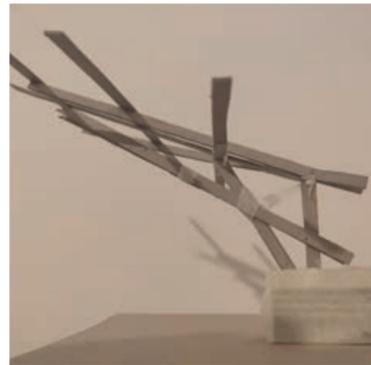




Initial Proposal
Gathered all the designs for workshop spaces and created the first proposal

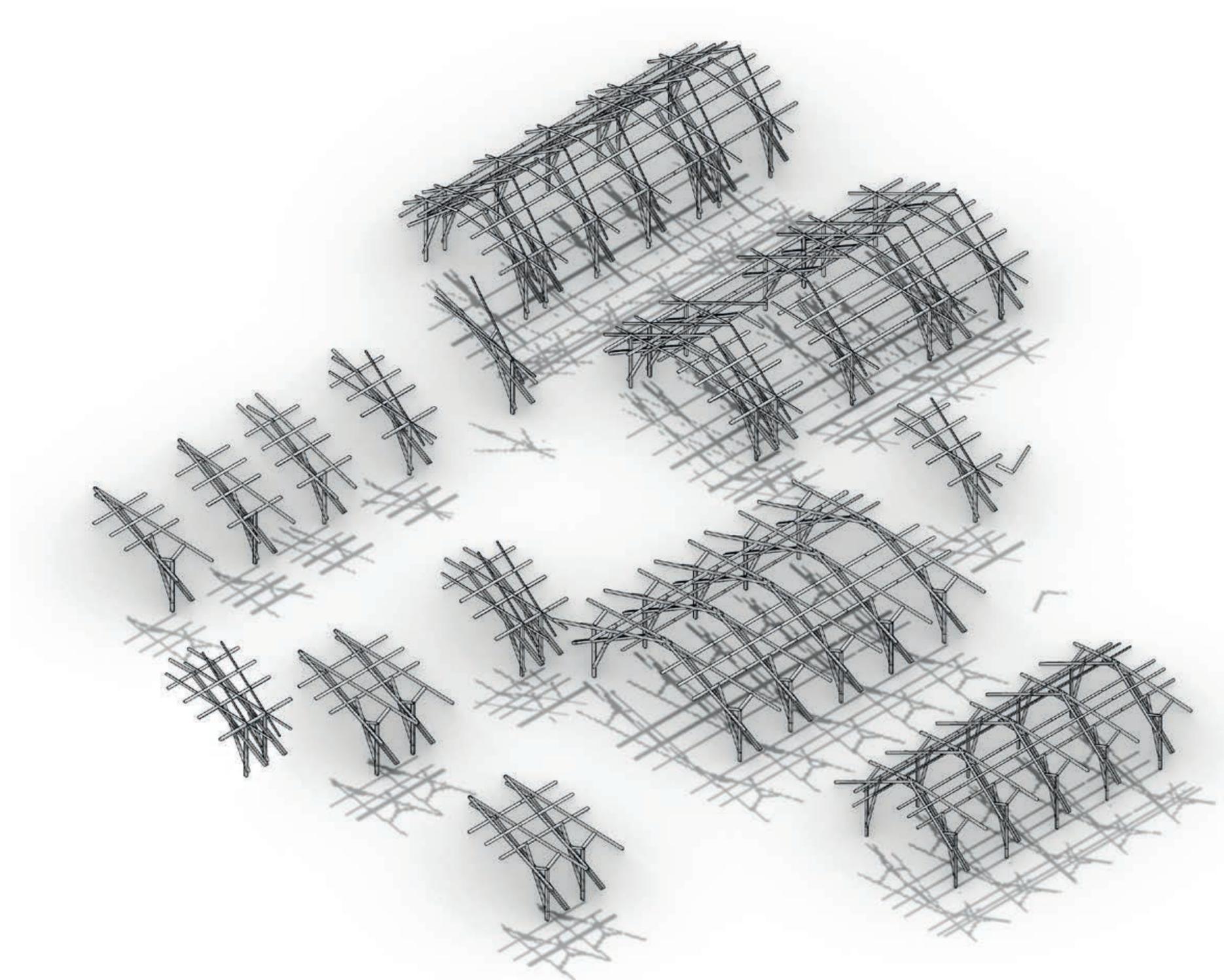
Weeld ord Da
carpenter oak
felder fawles



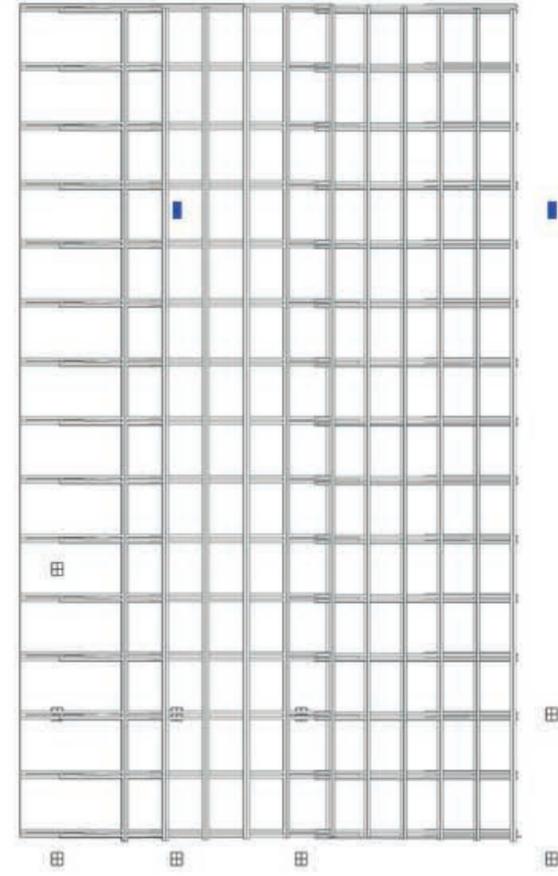
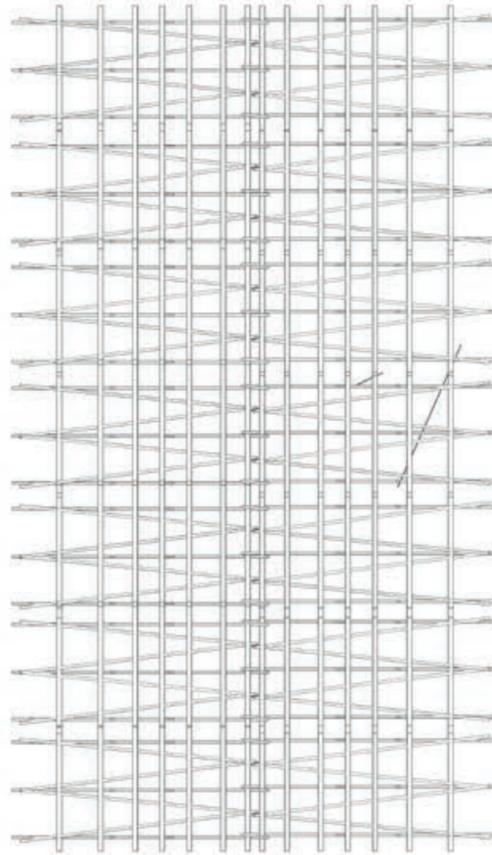
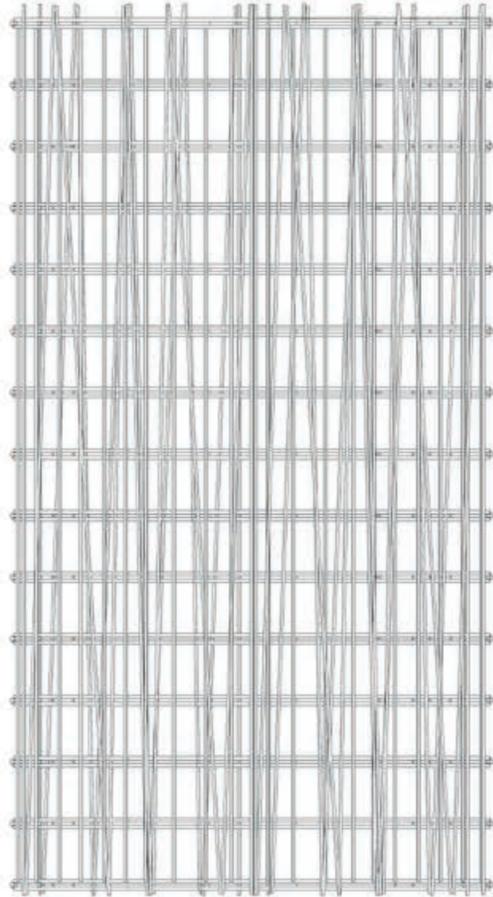
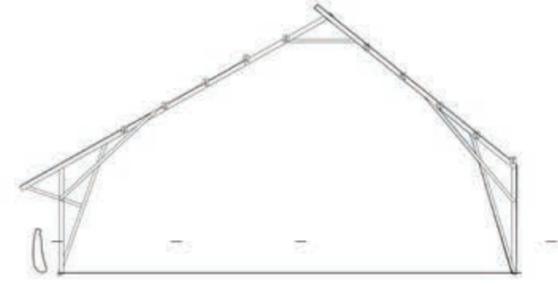


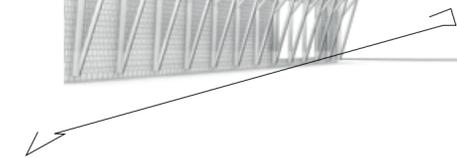
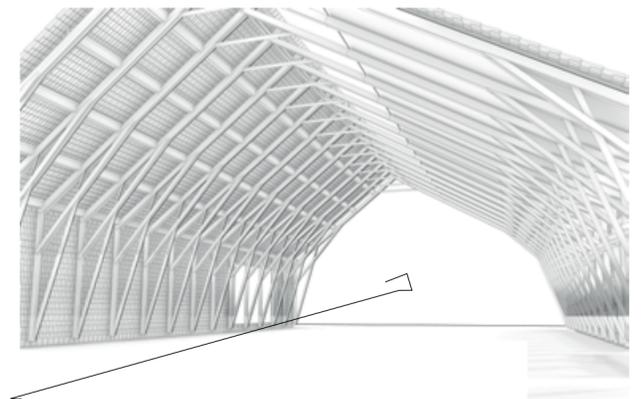
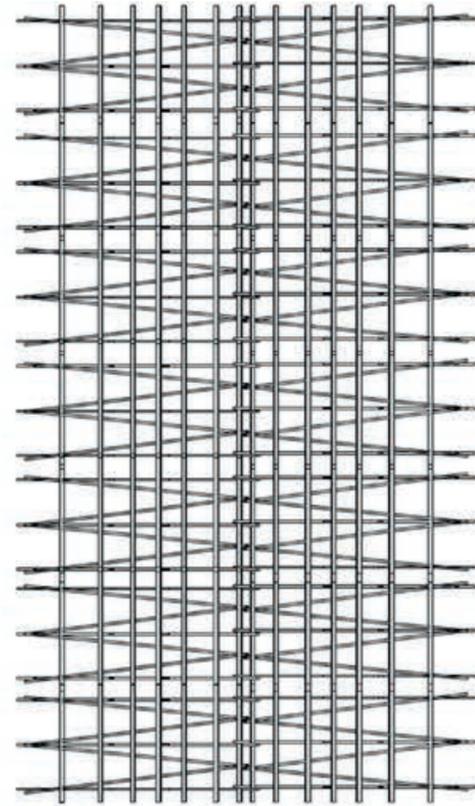
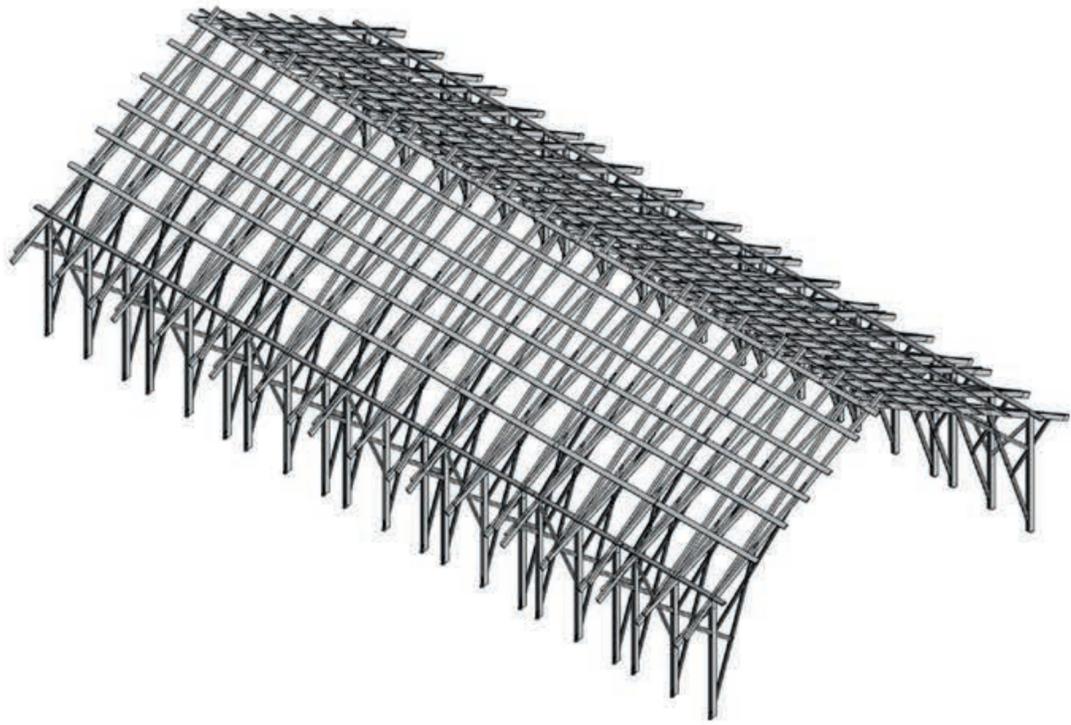
Combining bracing into columns

Main workshop space, structurally will need some bracing therefore I tried to combine diagonal elements first in the columns.



Combining bracing into columns

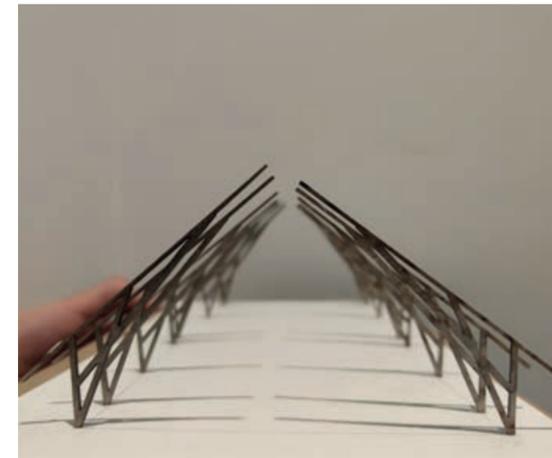
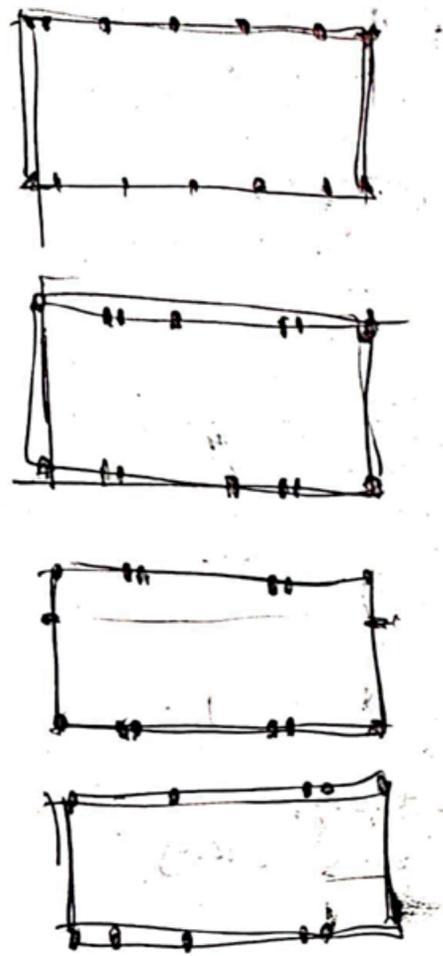




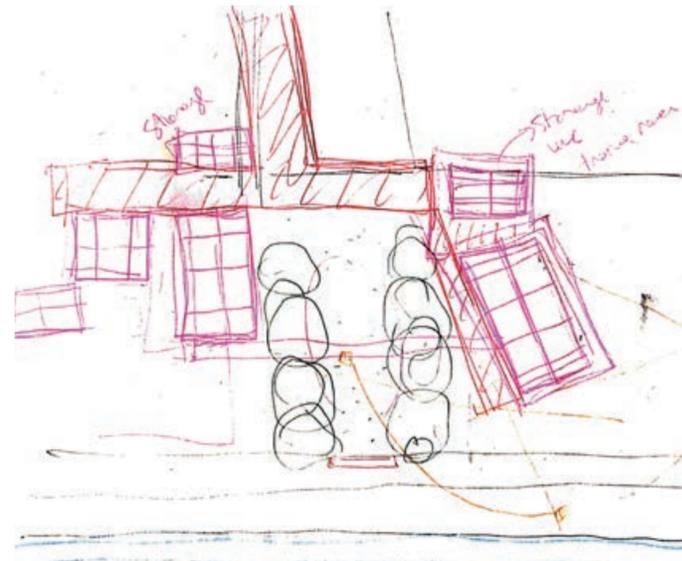
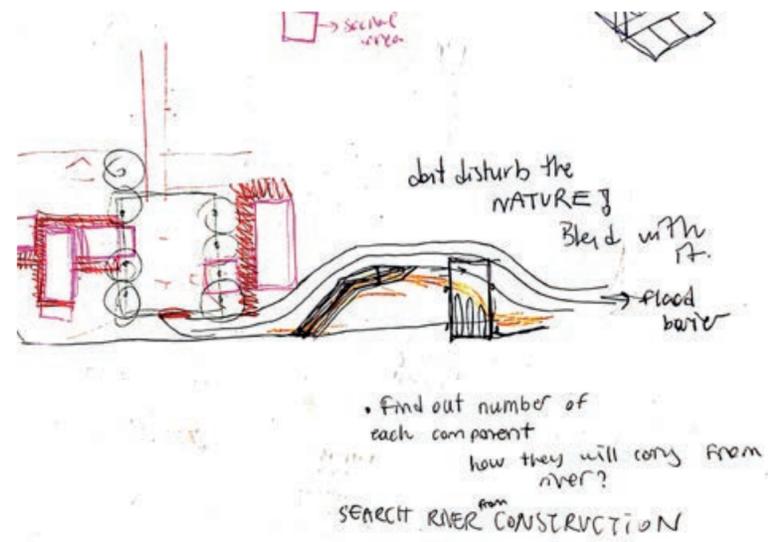
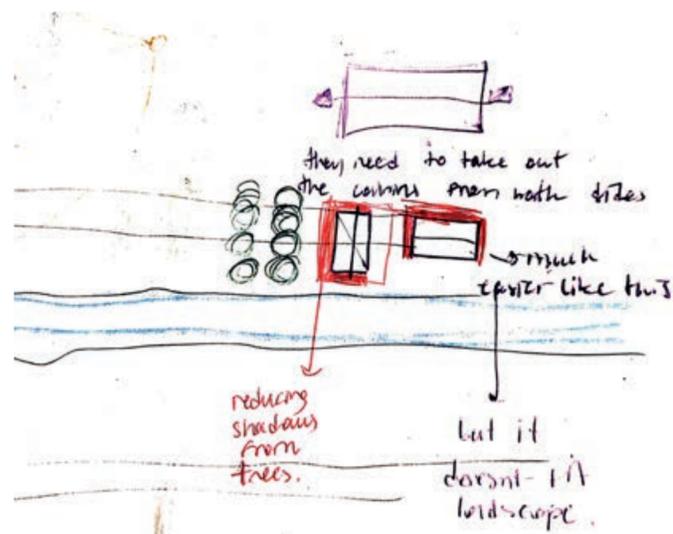
I really enjoyed designing this structures however, narrow rhythm columns were preventing sheds from leaving the side of the building.

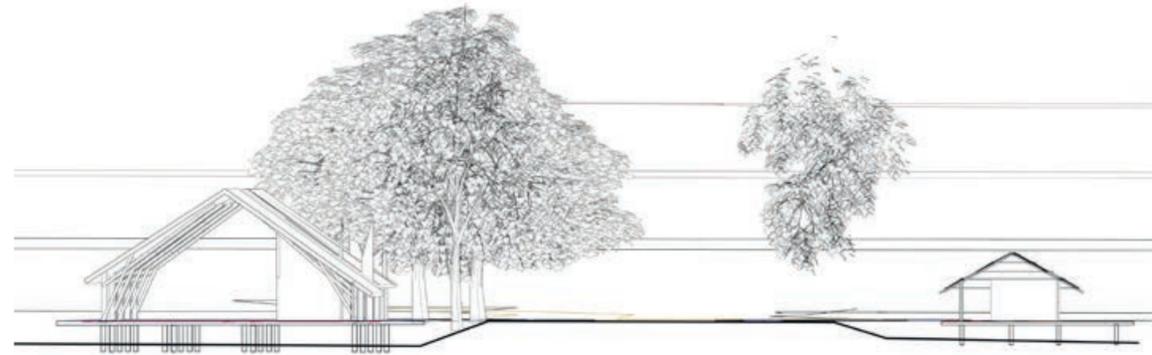
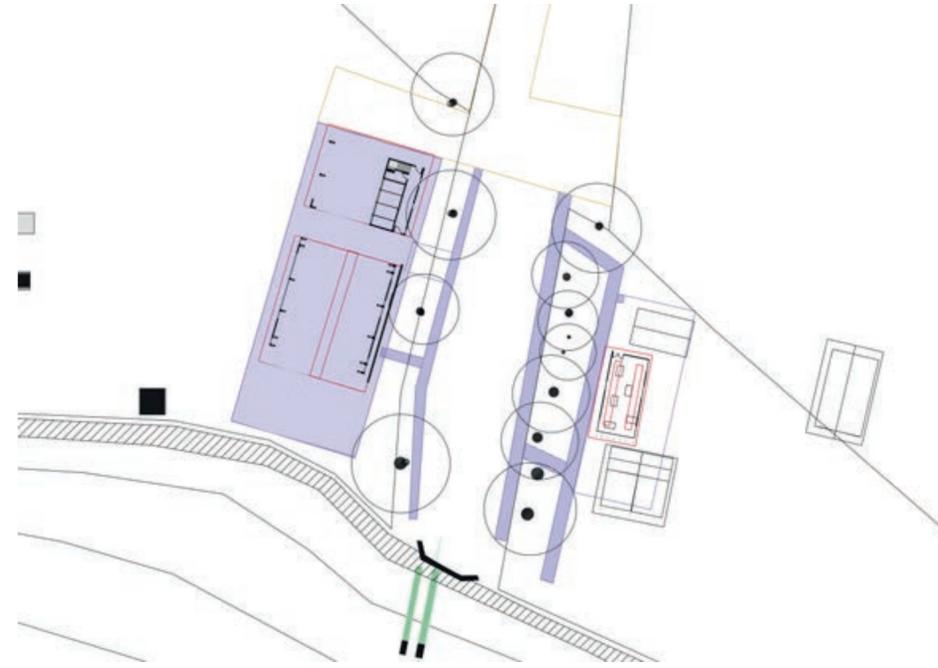
Why it didnt work?

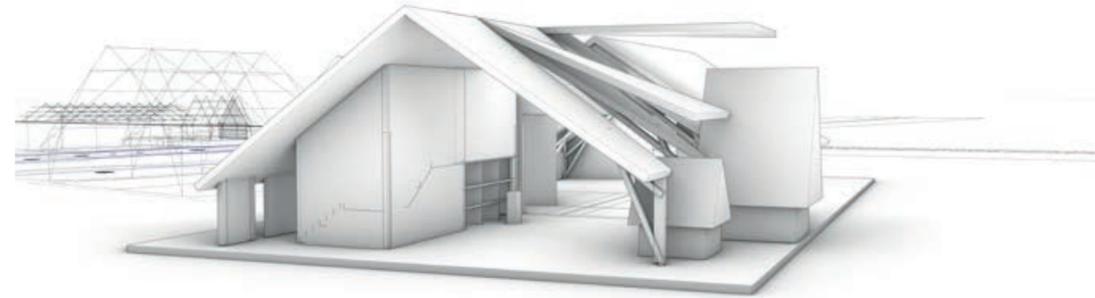
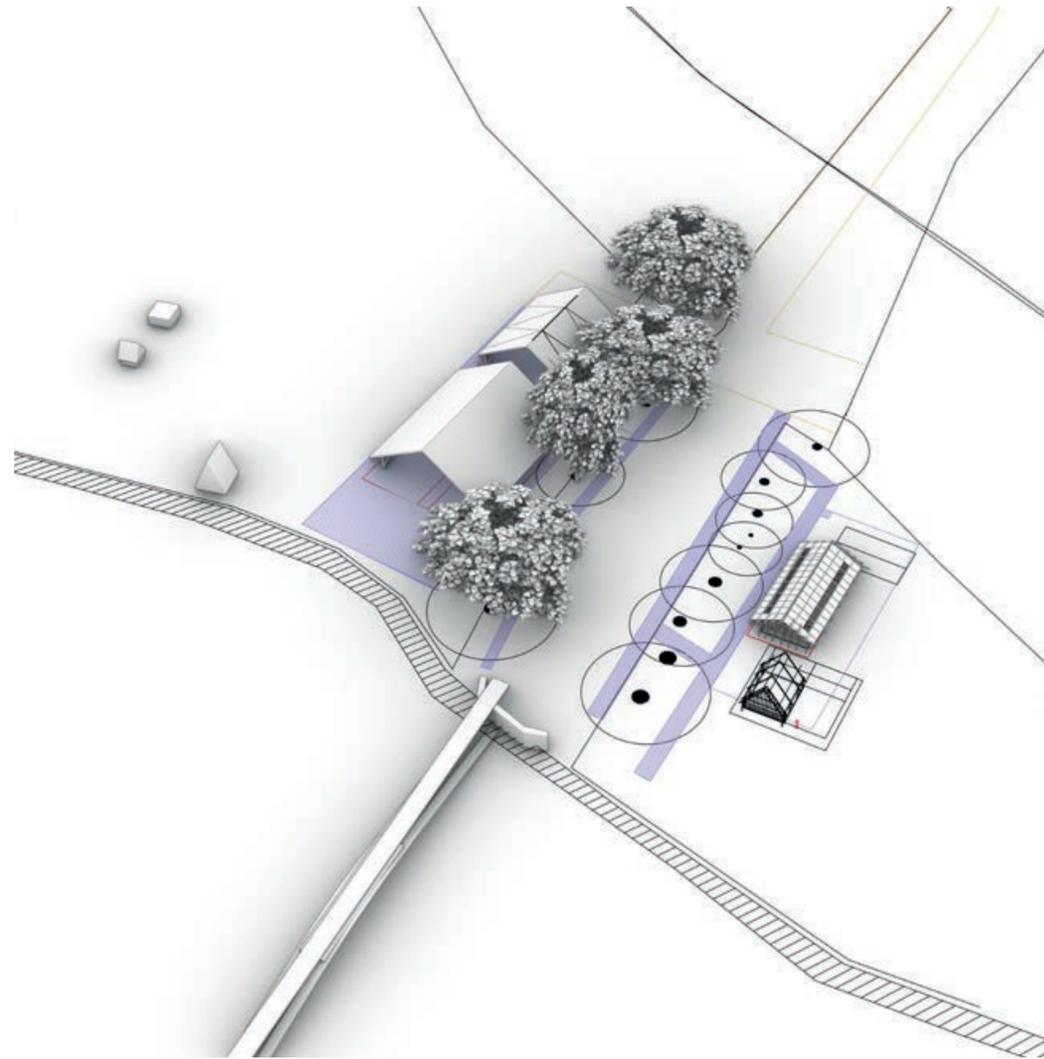
to much columns not flexible
 reduce the column number
 improve the structure



Why it didnt work?
with this proposal, the main workshop started to look like a church rather than an industrial space.

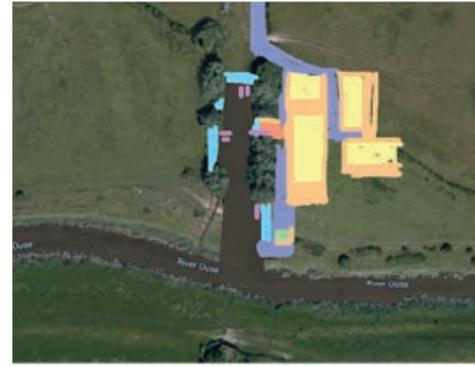






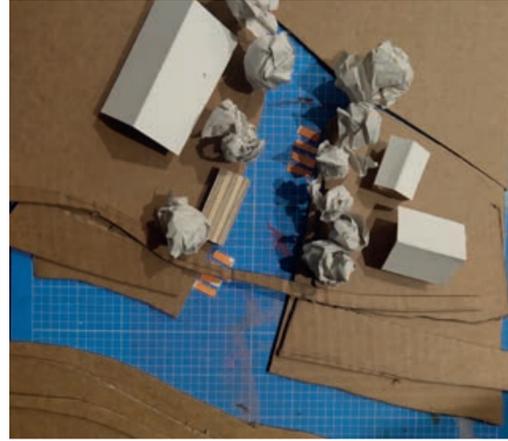
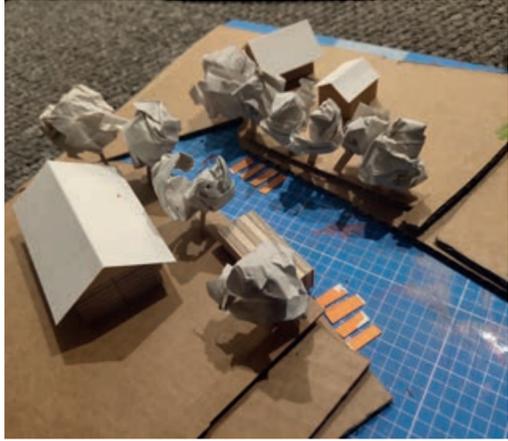
door?

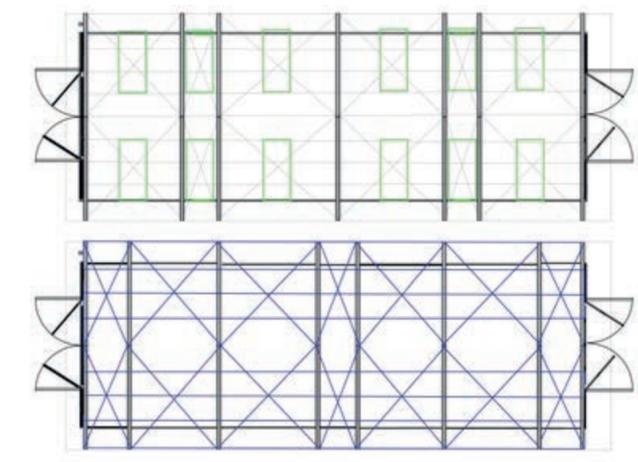
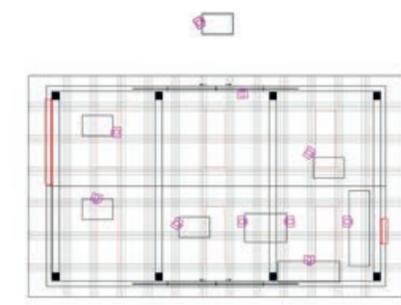
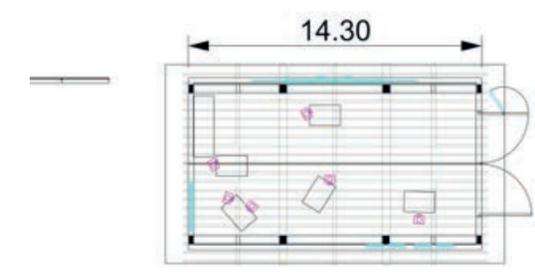
However, this location makes it difficult to remove the booths from the workshop, so the workshop design should be developed more. door?

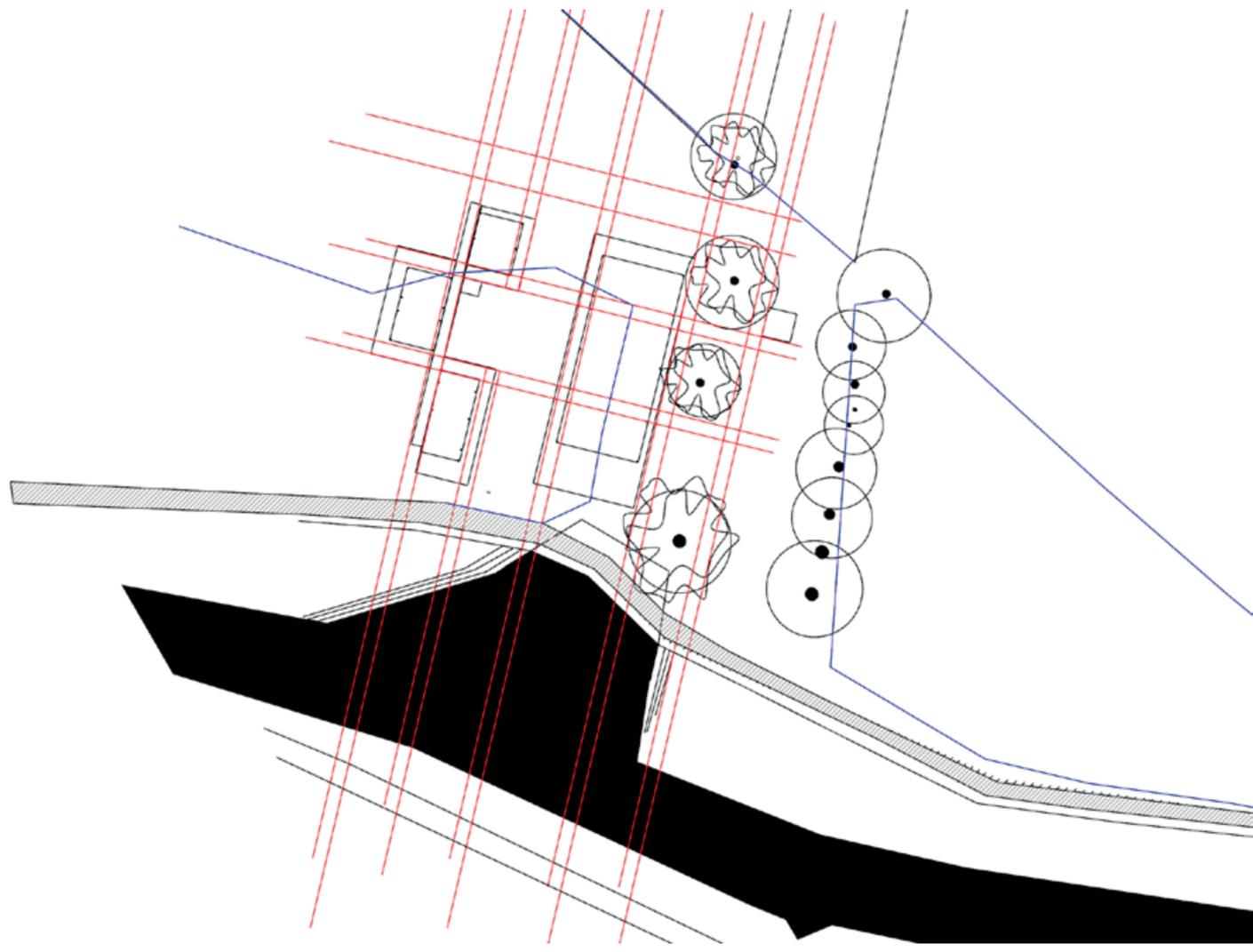


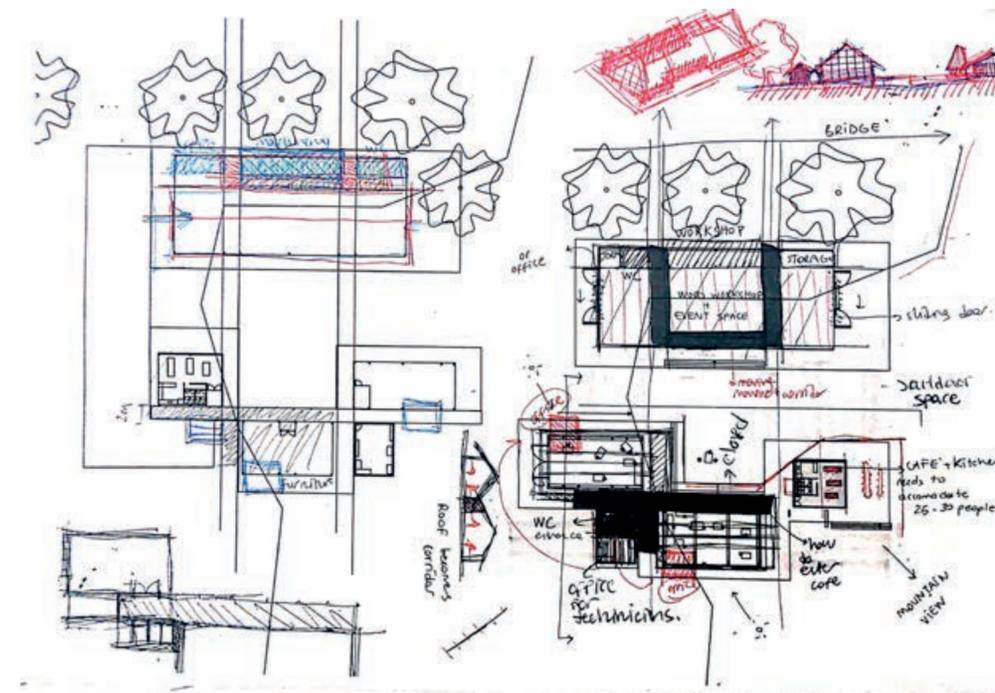
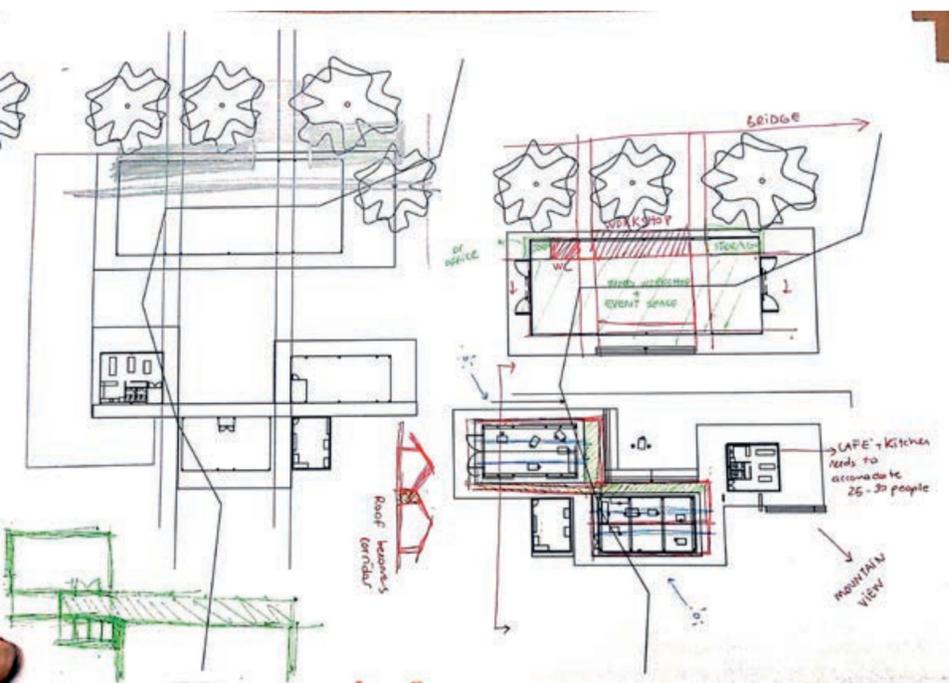
Cutting the River

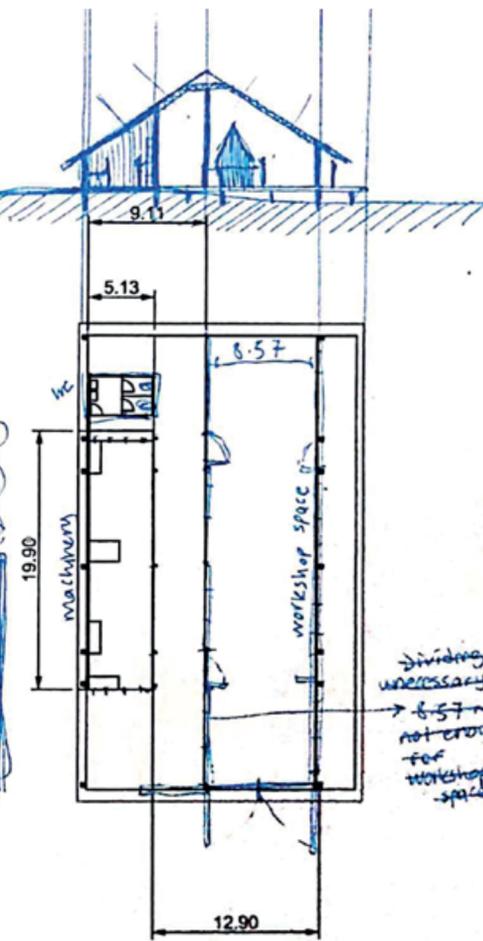
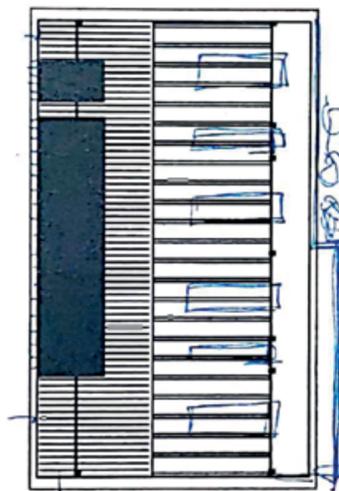
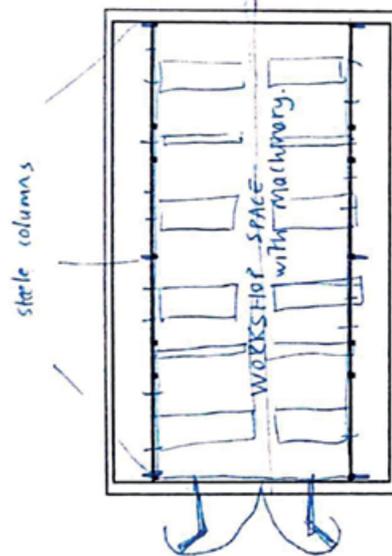
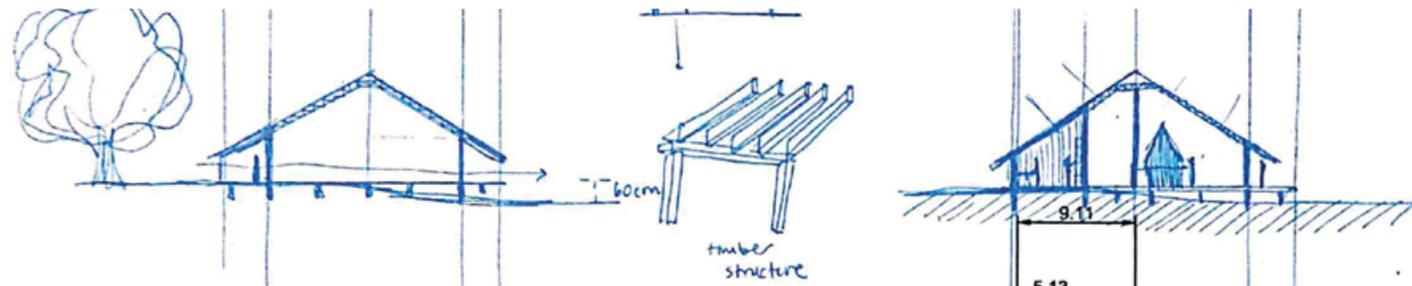
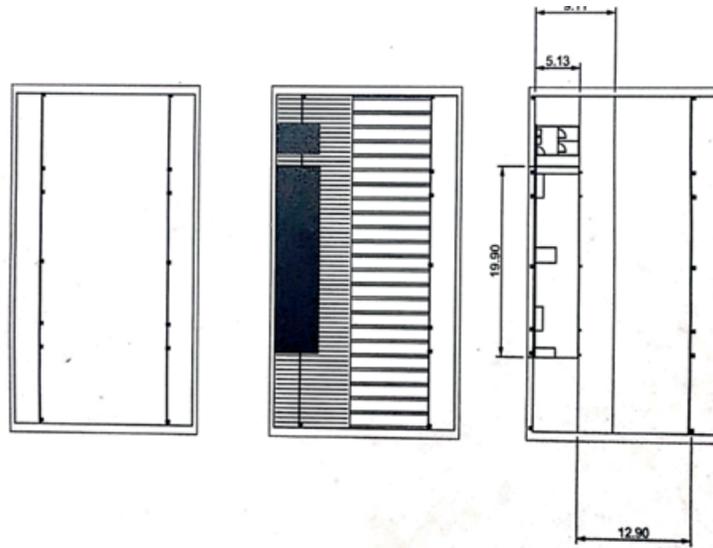
Large vehicles can not approach site because roads in existing site are narrow, delivery needed to be done with smaller vehicles and through river. Therefore cutting river edge will help for deliveries and The surface of the site area can be leveled with to soil that comes up with the extraction.







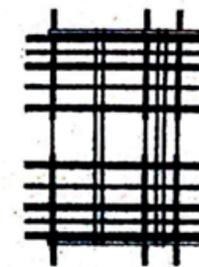
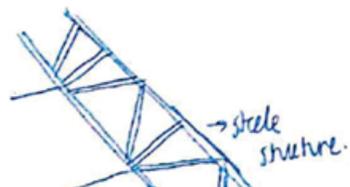


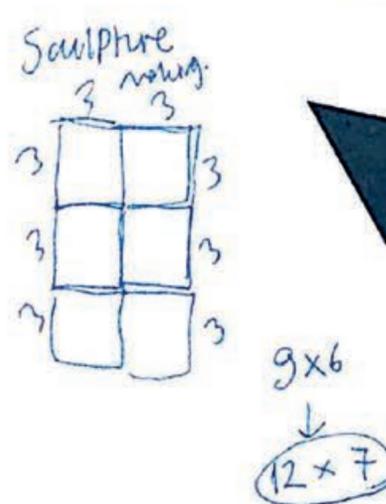
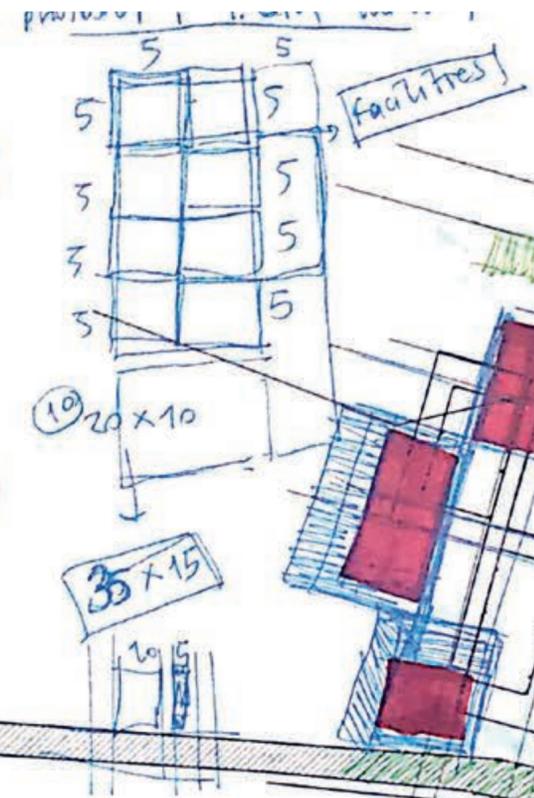
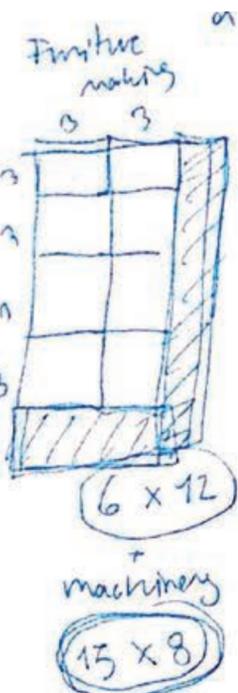
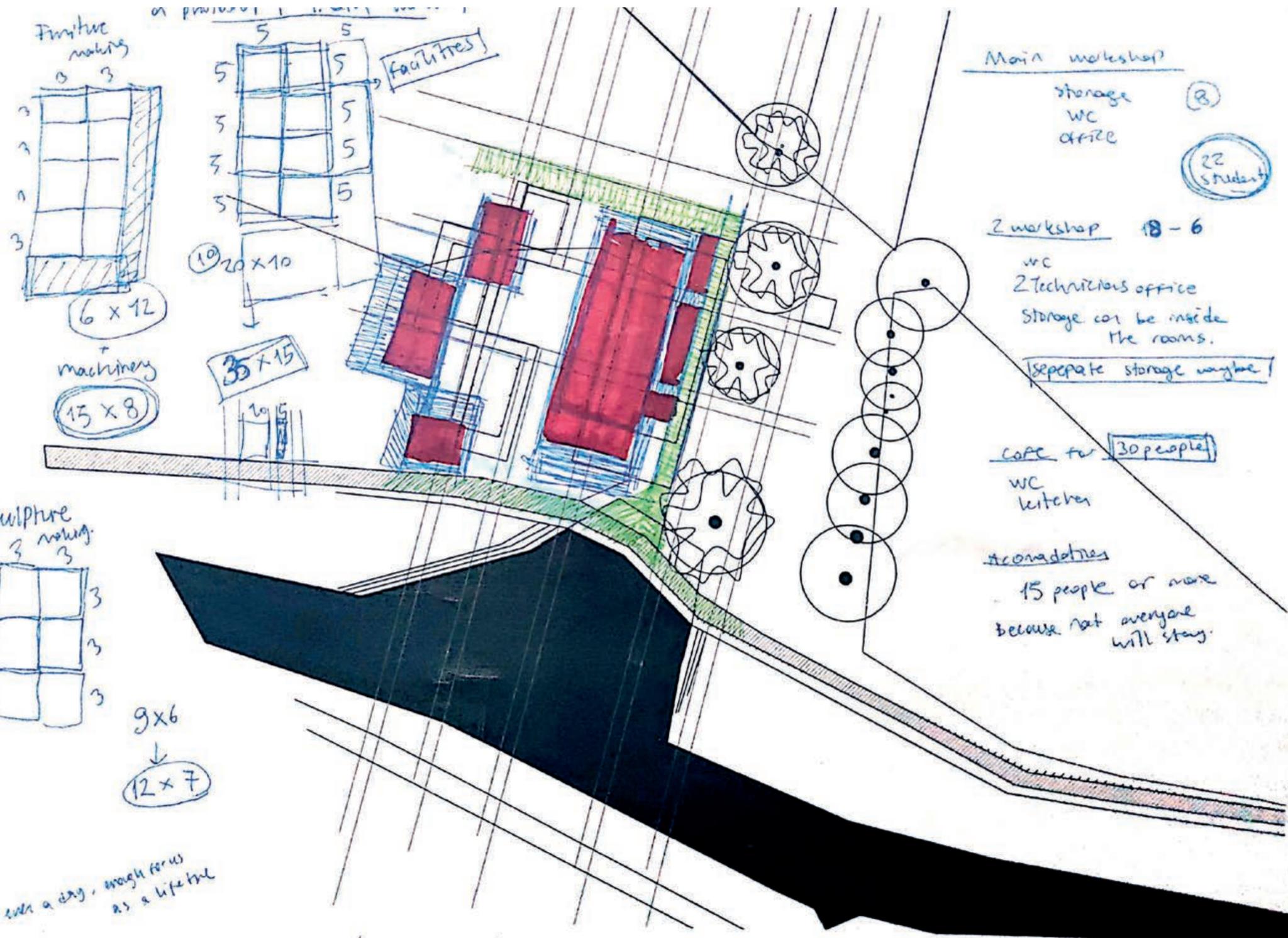


dividing is unnecessary
 → 6.57 m not enough for workshop space

for bigger machines and storage maybe

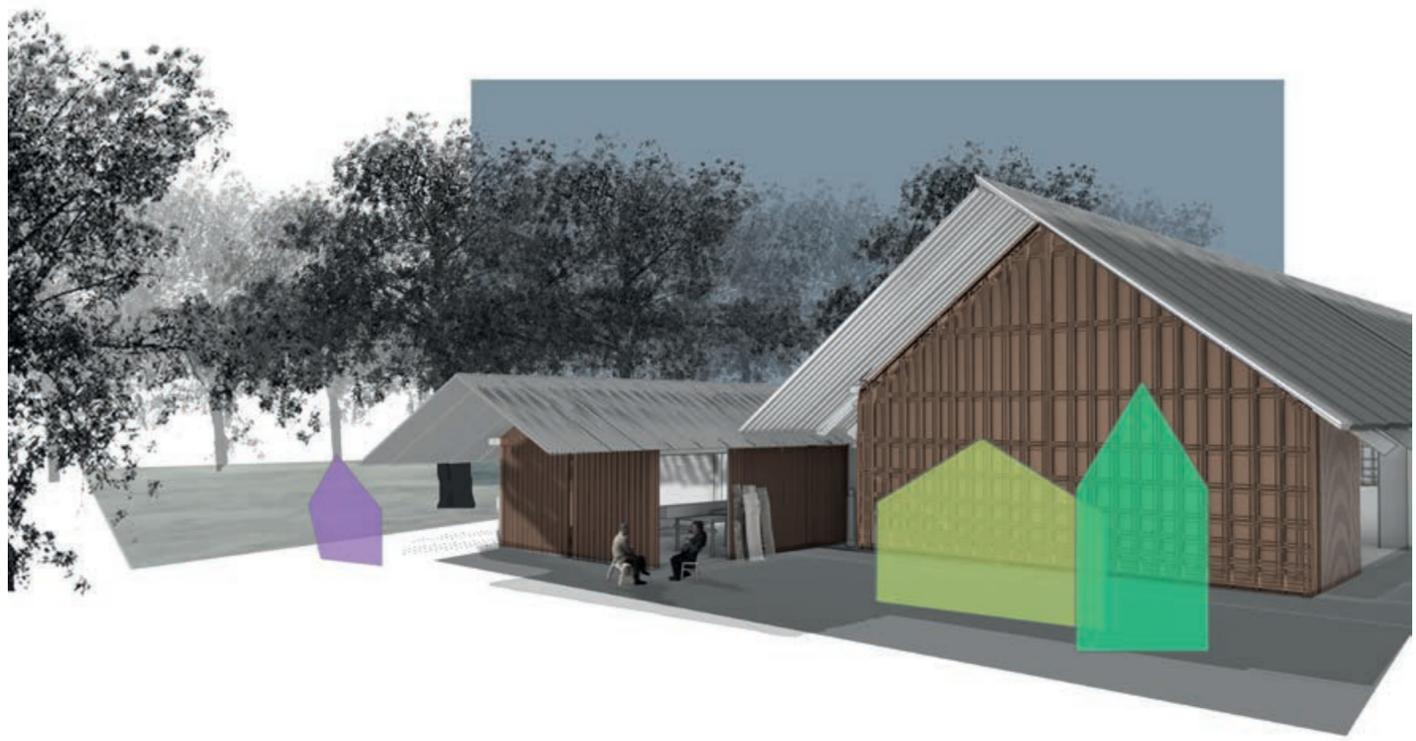
trying to bring width





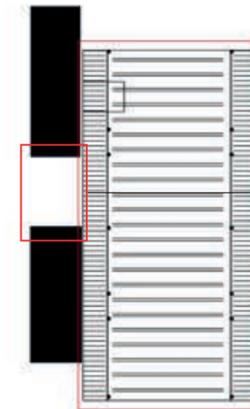
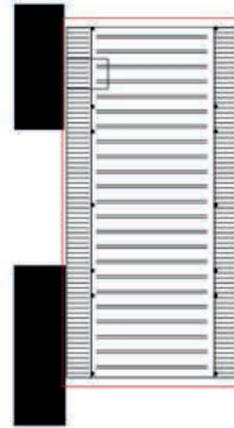
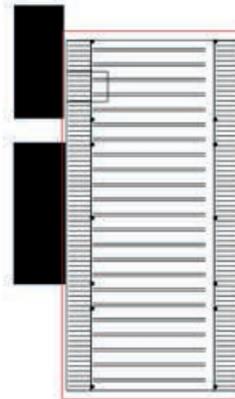
each a day, enough for us as a life time

- Main workshop
- storage
 - WC
 - office
 - 22 student
- 2 workshop 18-6
- WC
 - 2 Technicians office
 - Storage can be inside the rooms.
 - separate storage maybe
- Cafe for 30 people
- WC
 - kitchen
- Academies
- 15 people or more
 - because not everyone will stay.



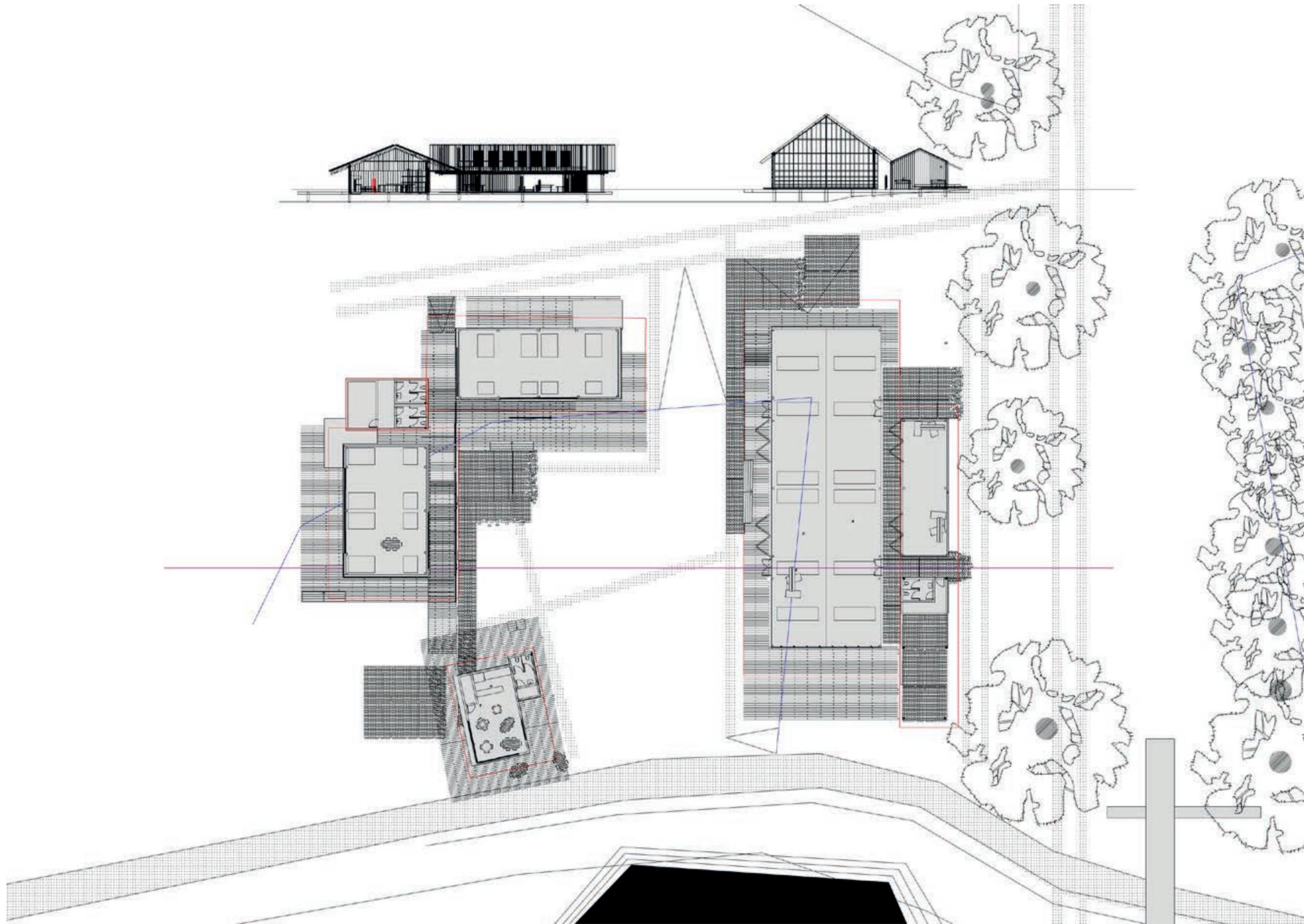


adding additional machinery space

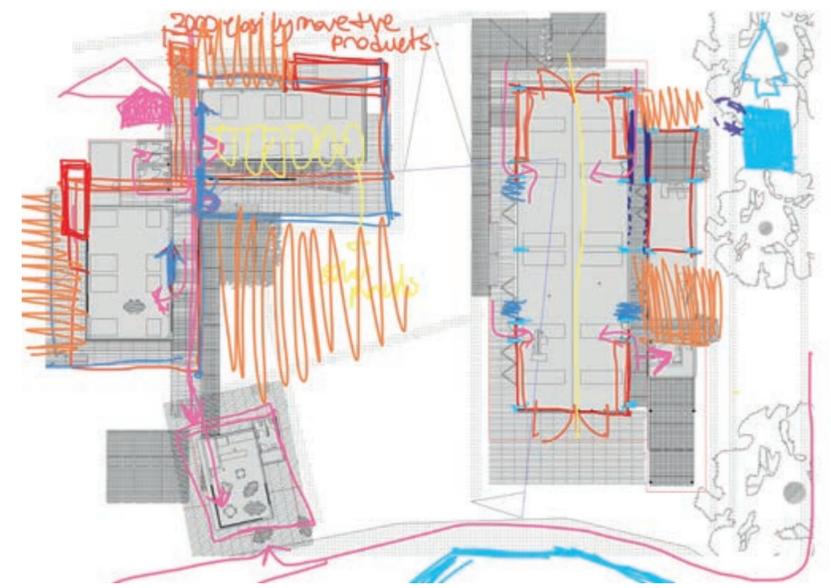
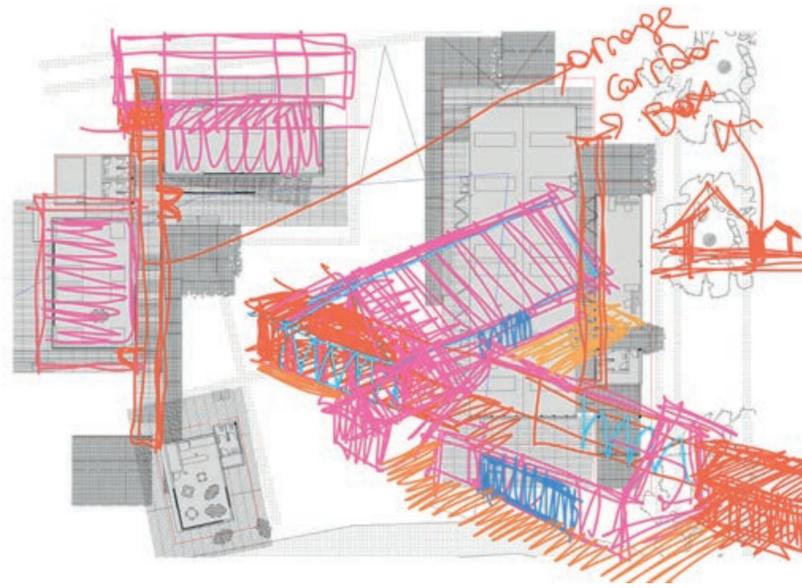


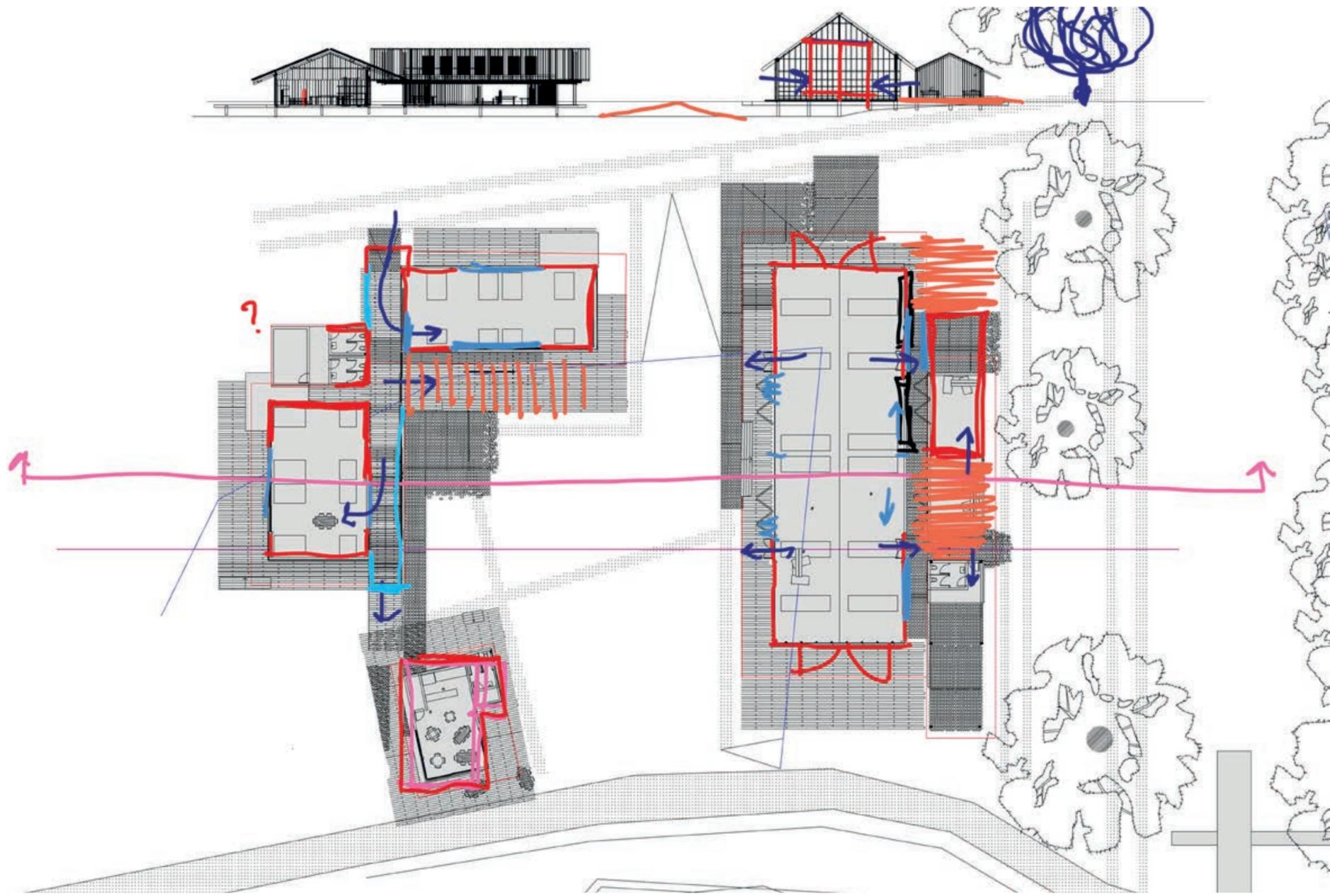
Sliding doors

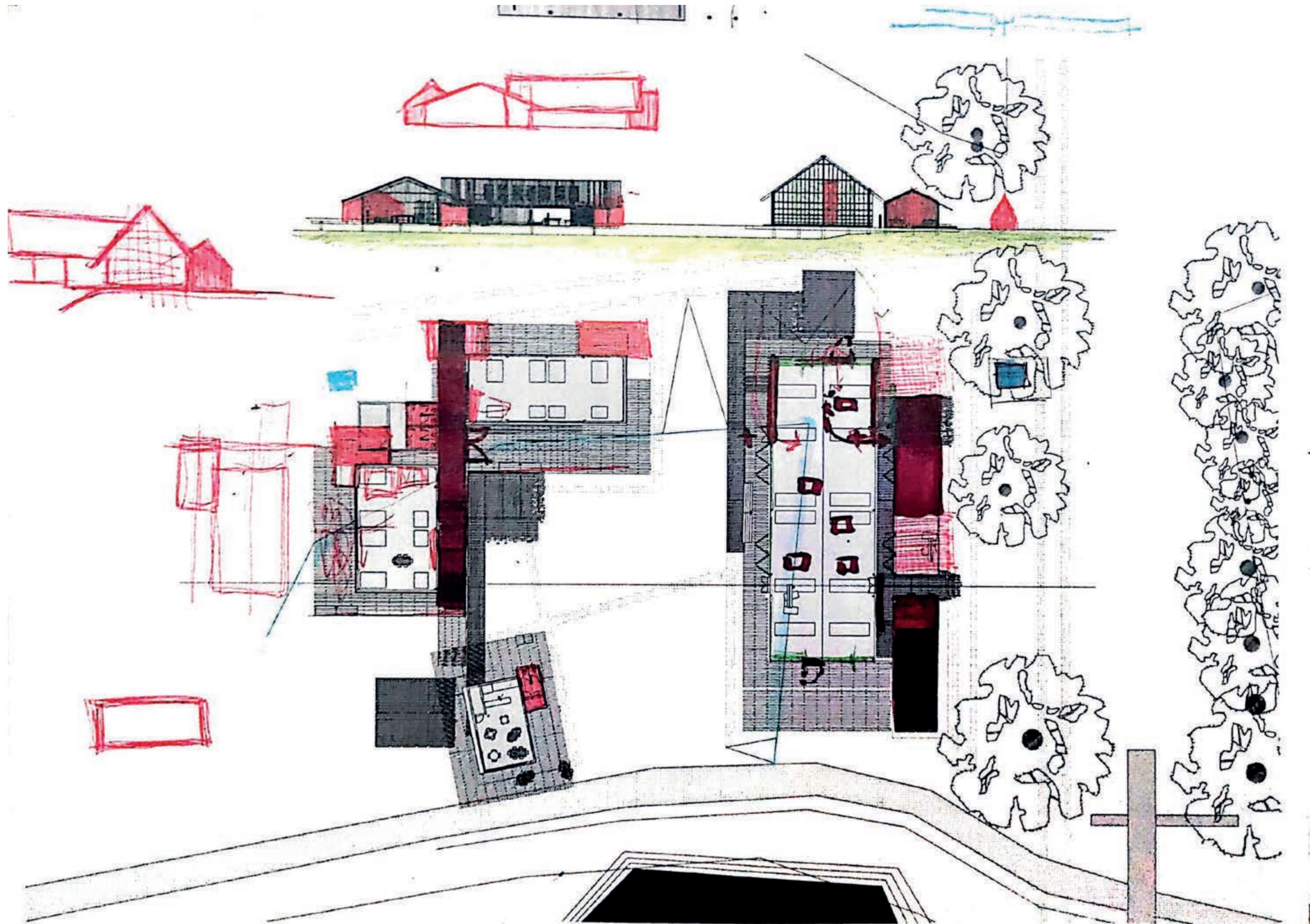
connection between outside space and workshop space. This area can be used in summer.

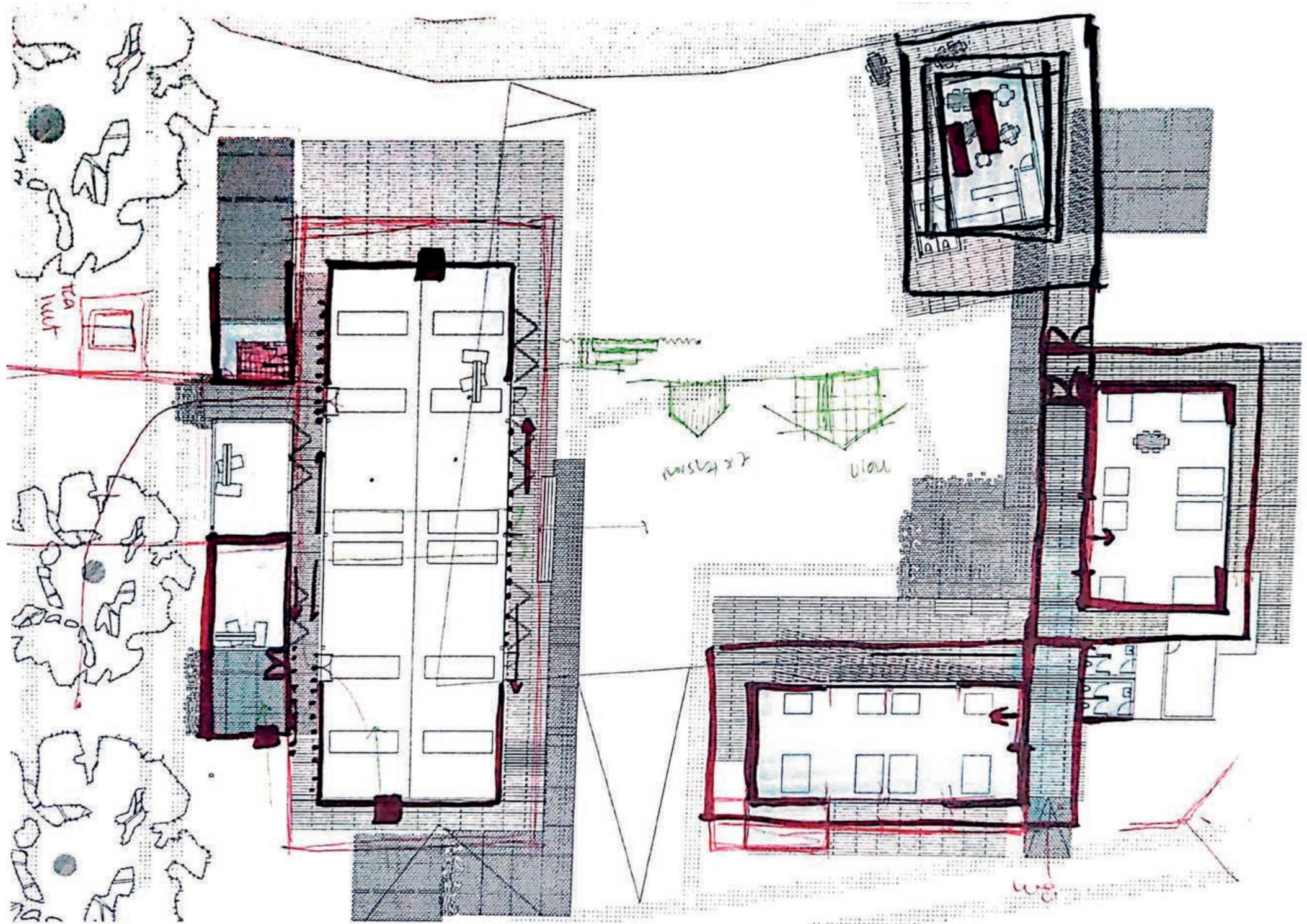


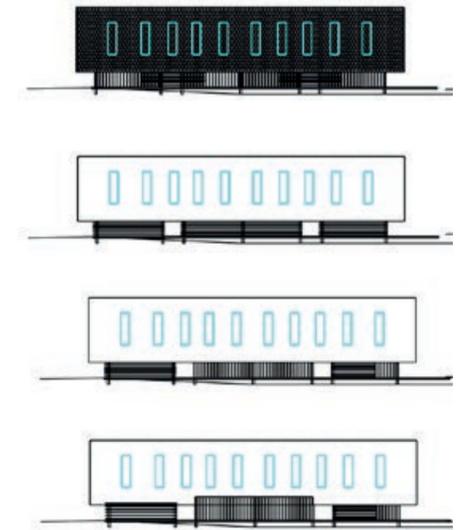
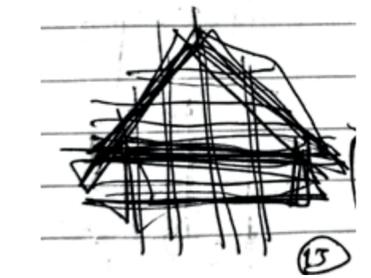
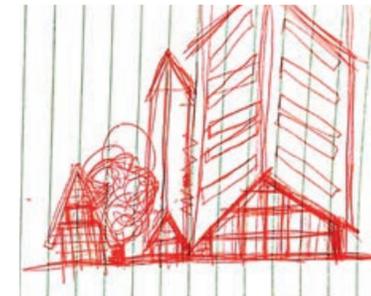
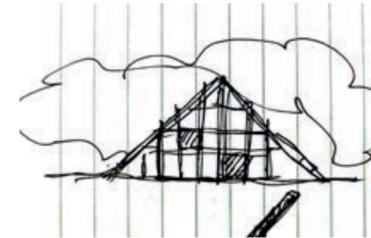
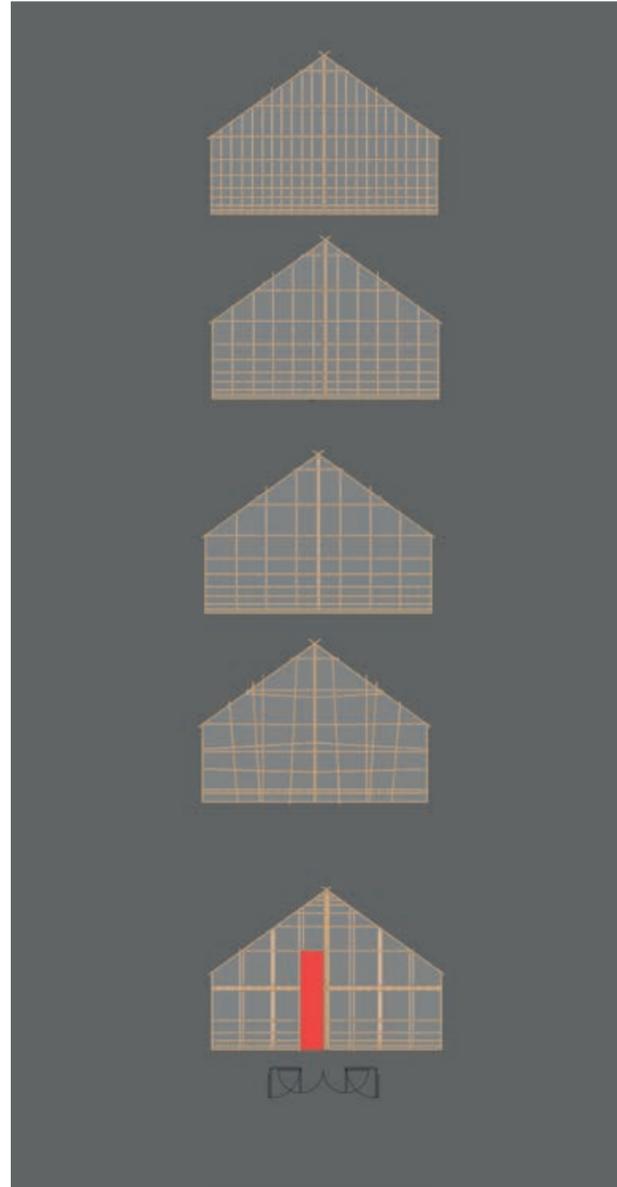
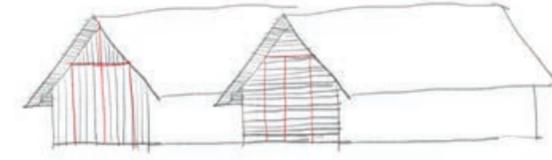
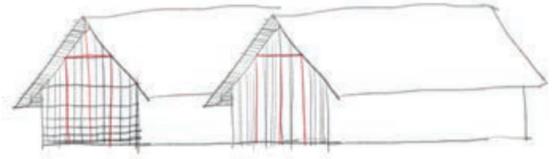
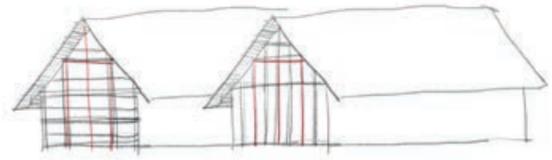
steel
providing additional layers of contemporary detailing

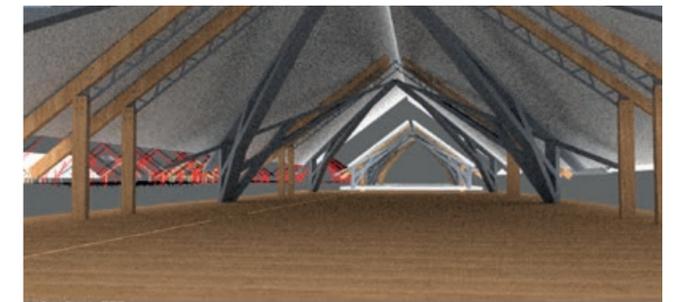
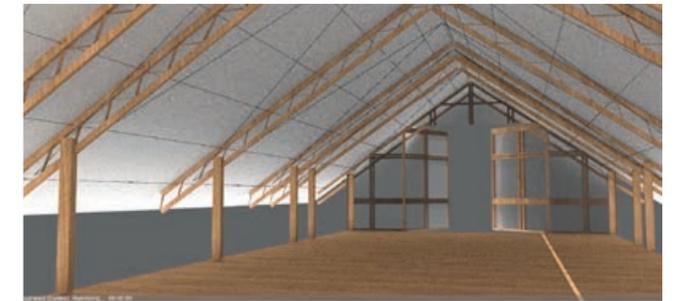
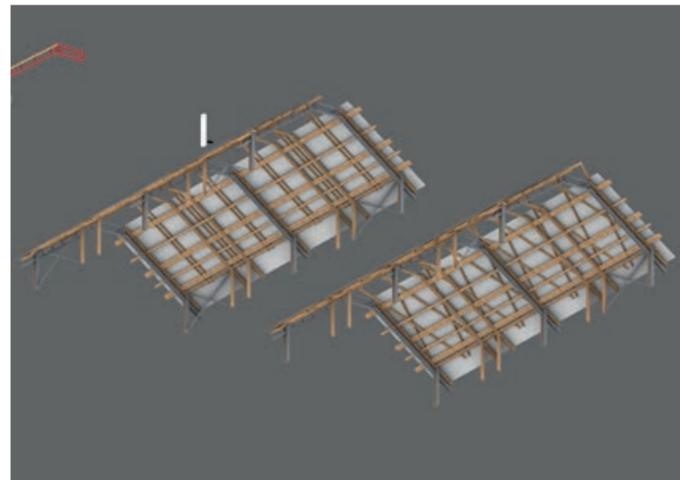
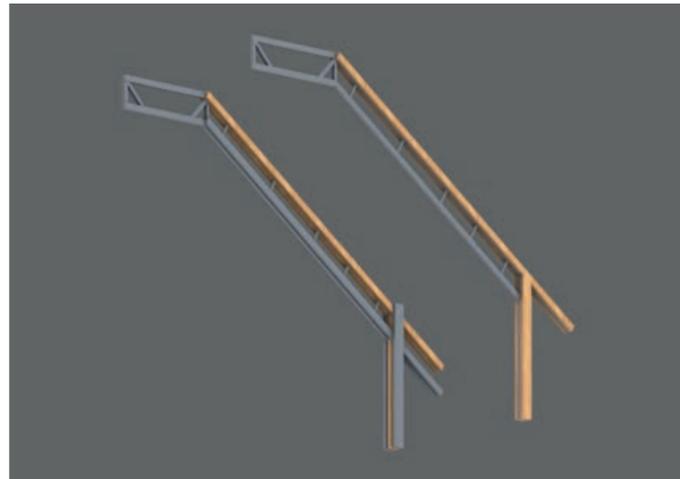




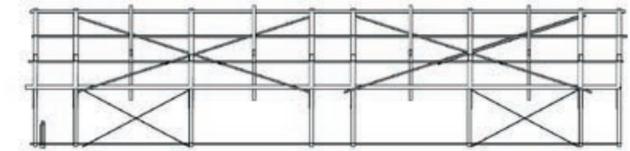
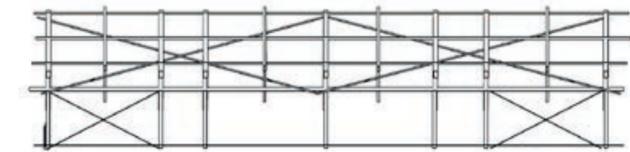
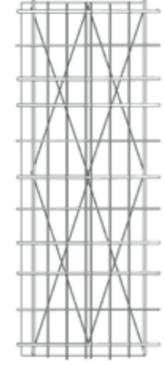
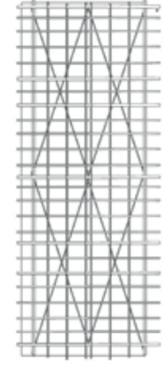
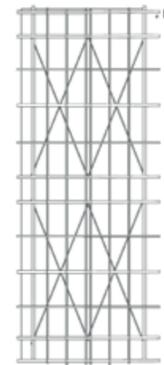
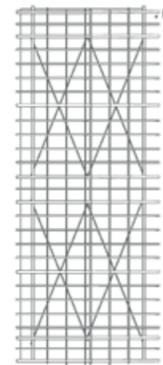




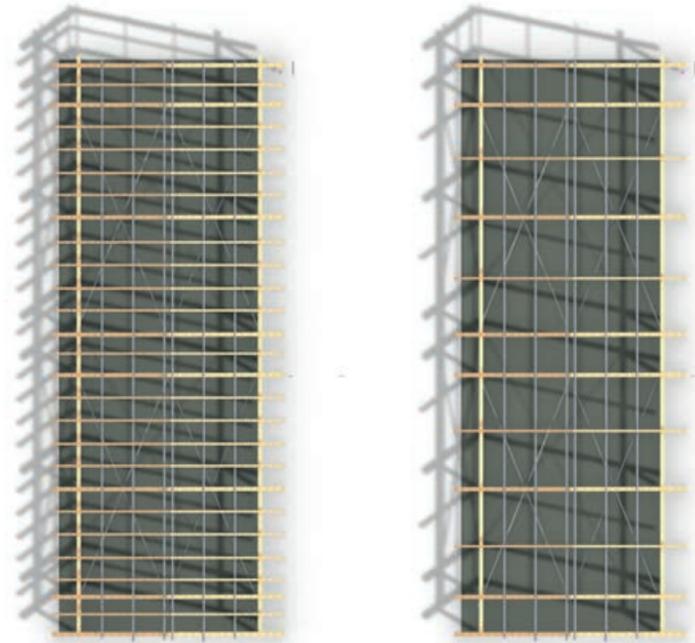




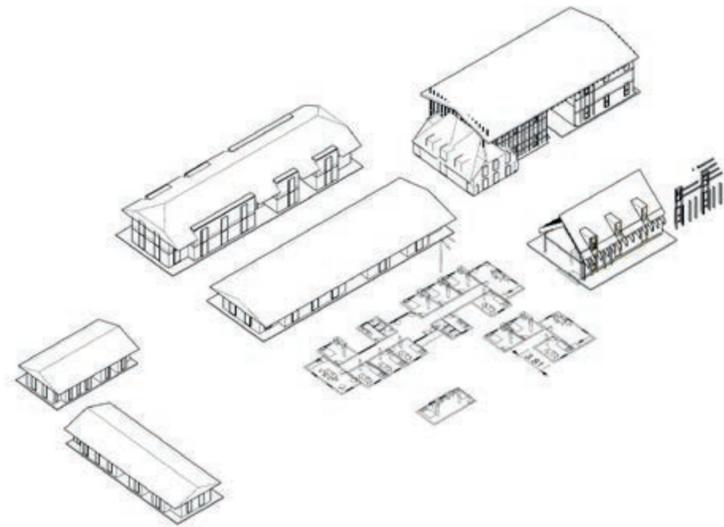
Bringing steel elements to the Structure
I decided to take into consideration bringing modern structural elements like steel columns, Bracing.
As I have large spans between columns, bringing steel elements will be structurally efficient as well.



Main Workshop-bringing steel elements
changes of roof structure when the columns order changed

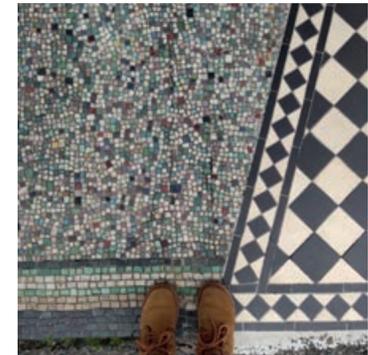
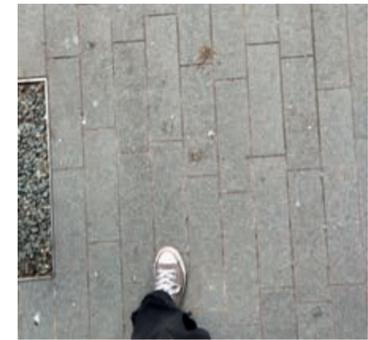
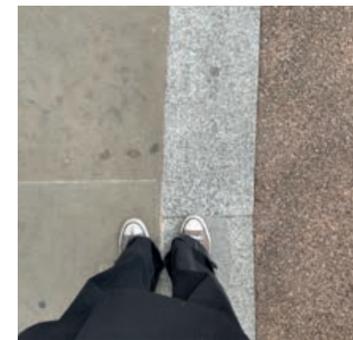
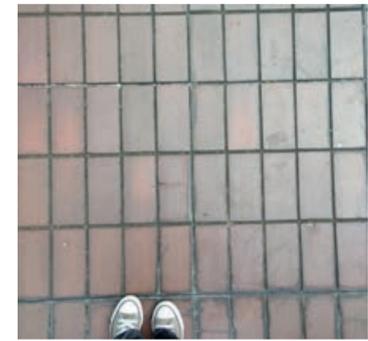
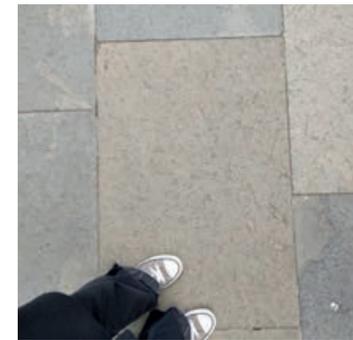
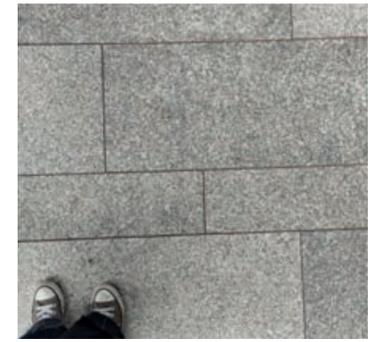
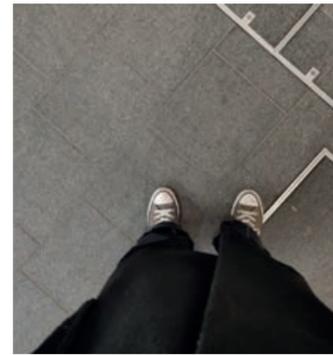
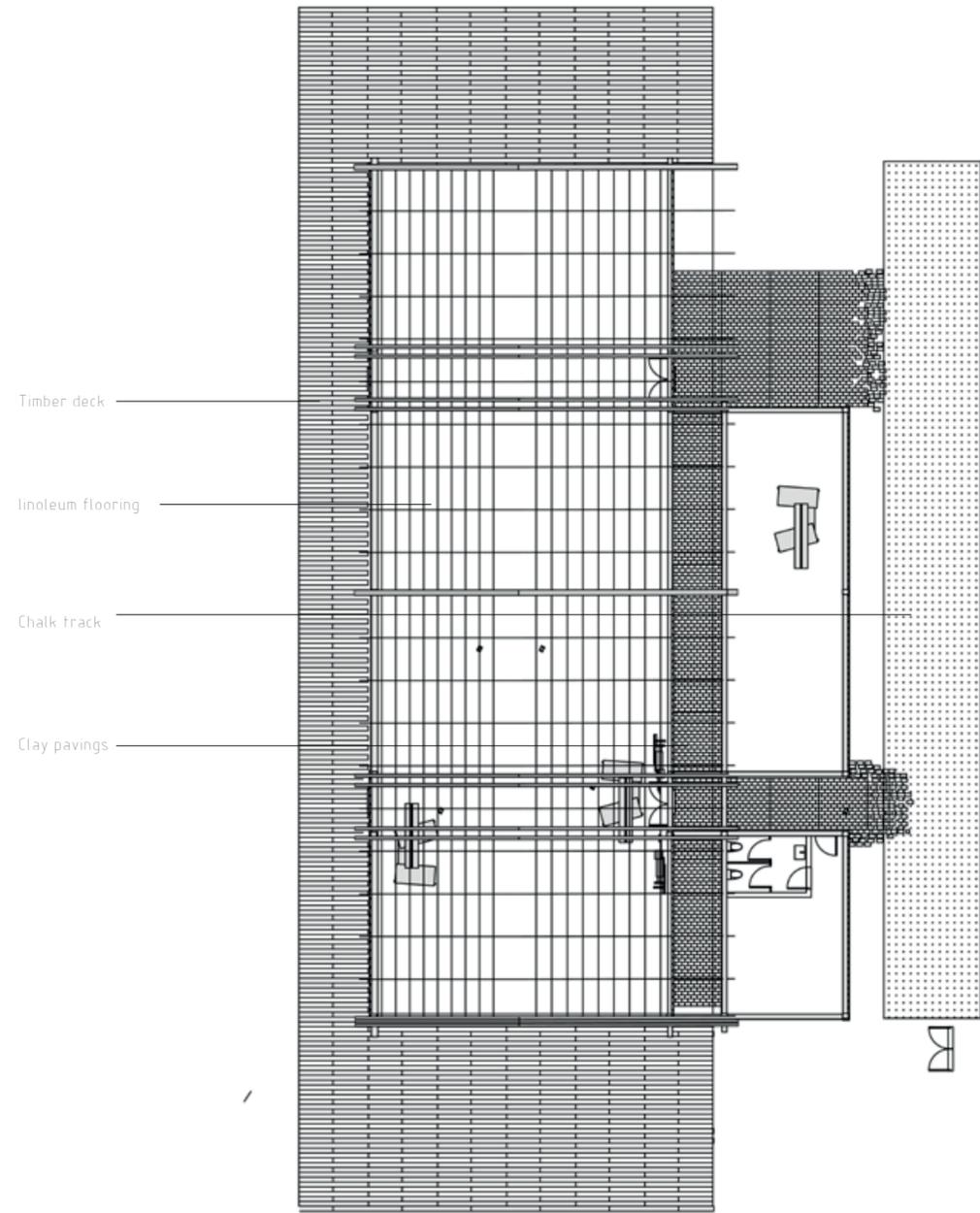


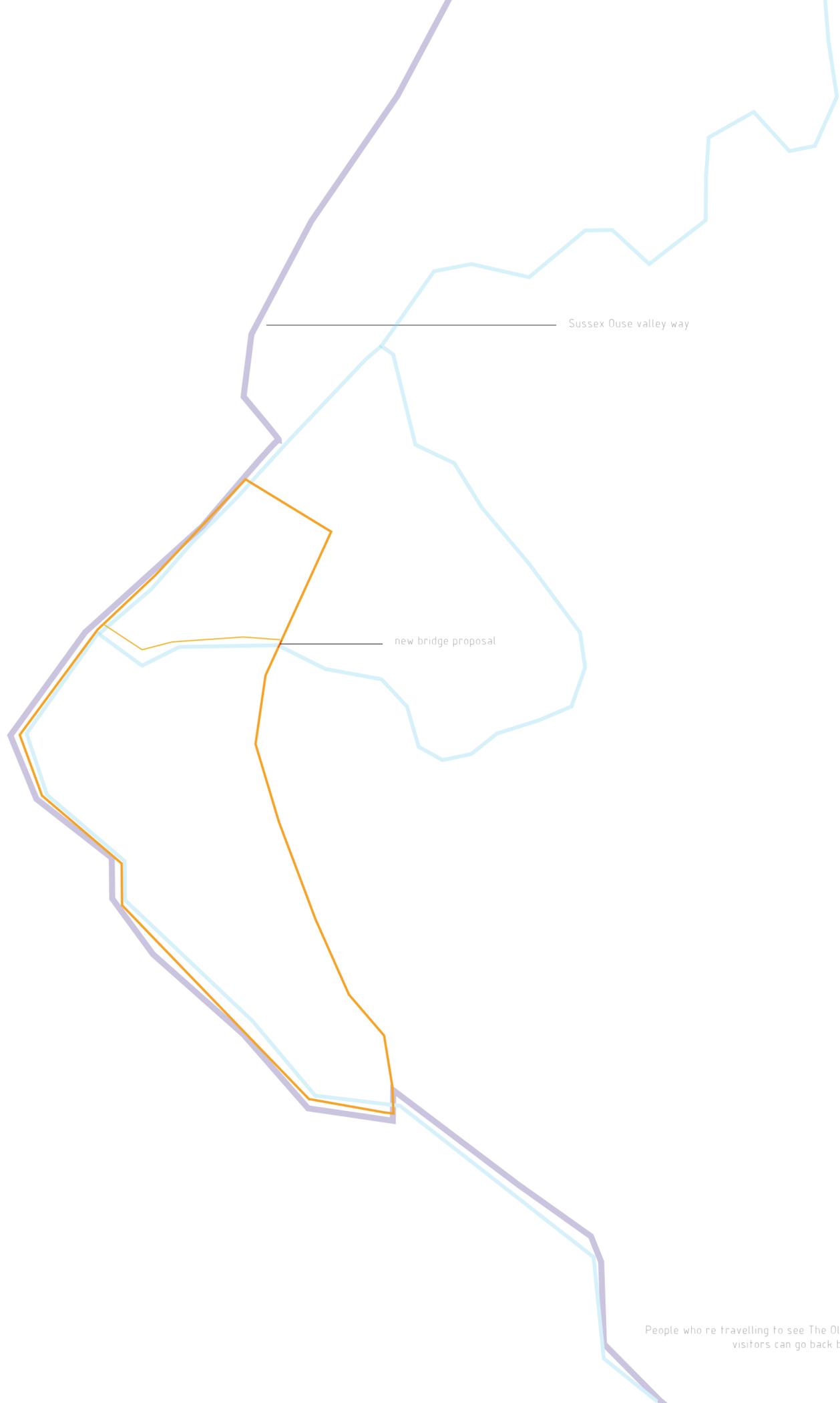
Main Workshop
Bird view



Accomadation

Accomadation can be built by students on the site later on. These are the proposal I come up with. However rather I think having little shed as accomadation will be much suitable for the site and for the context.

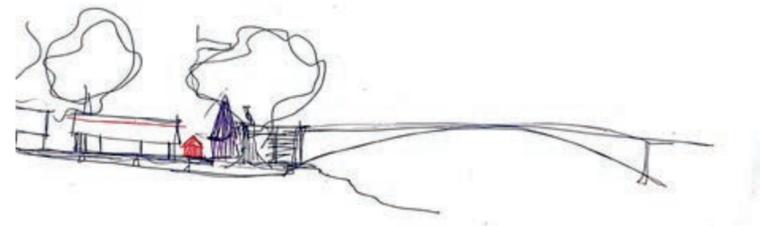
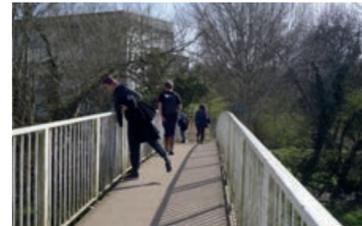
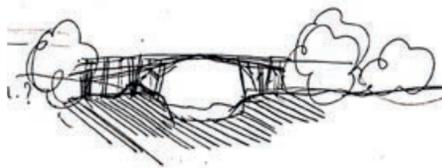
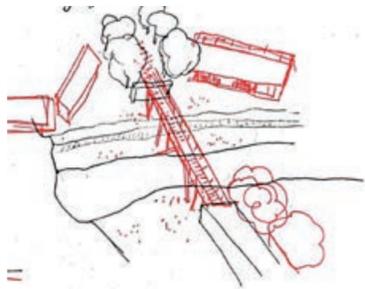
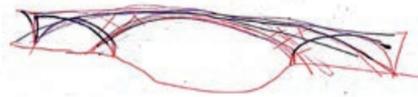
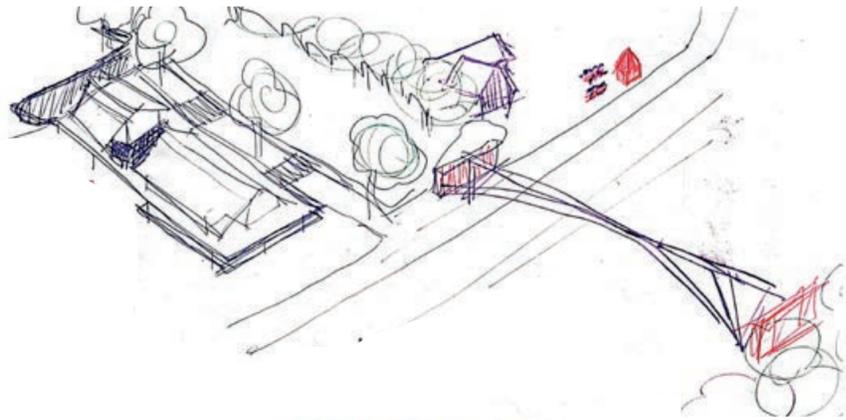




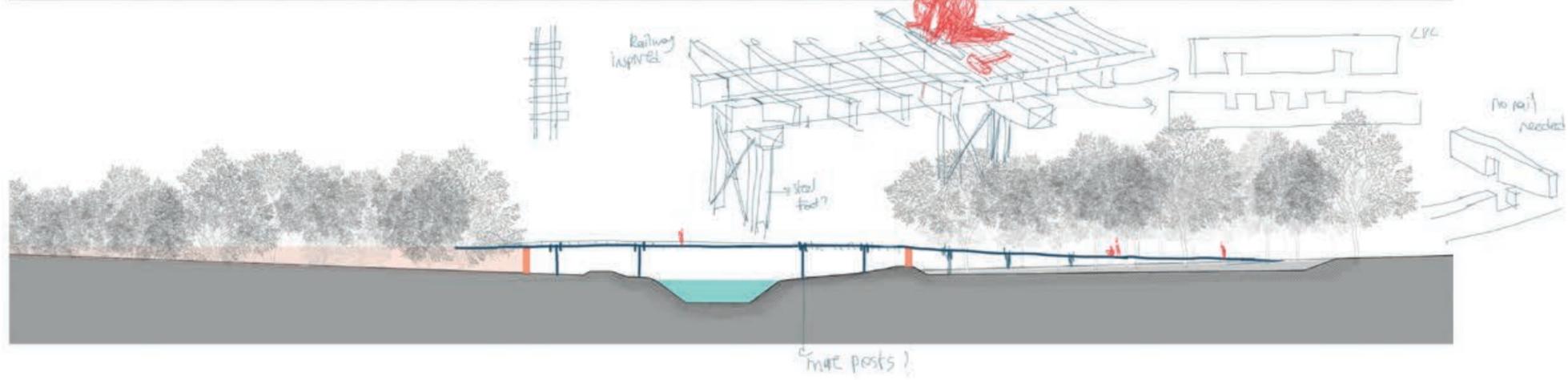
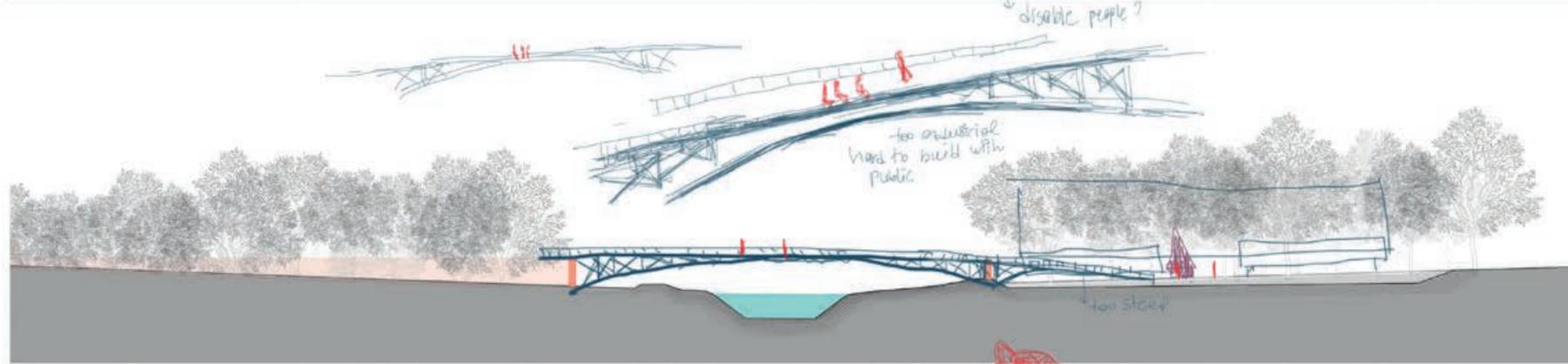
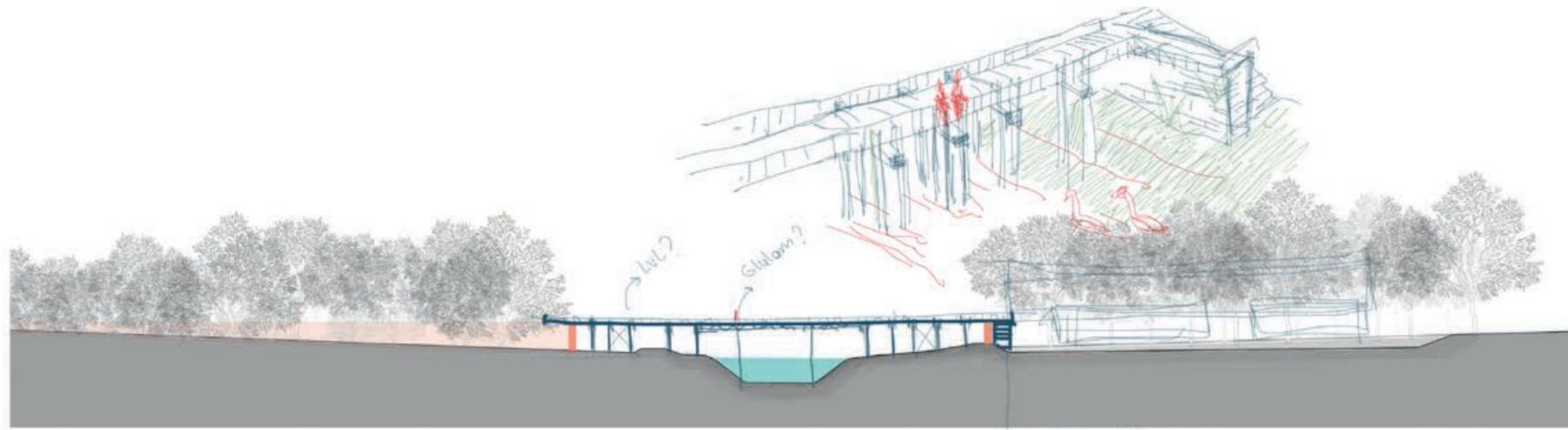
Old railway track

Creating an alternative route

People who re travelling to see The Old Hamsey Church are usually taking the same route to go back Lewes. With new bridge and route proposal, visitors can go back by following the old railway track which is surrounded by trees creates beautiful scenery.

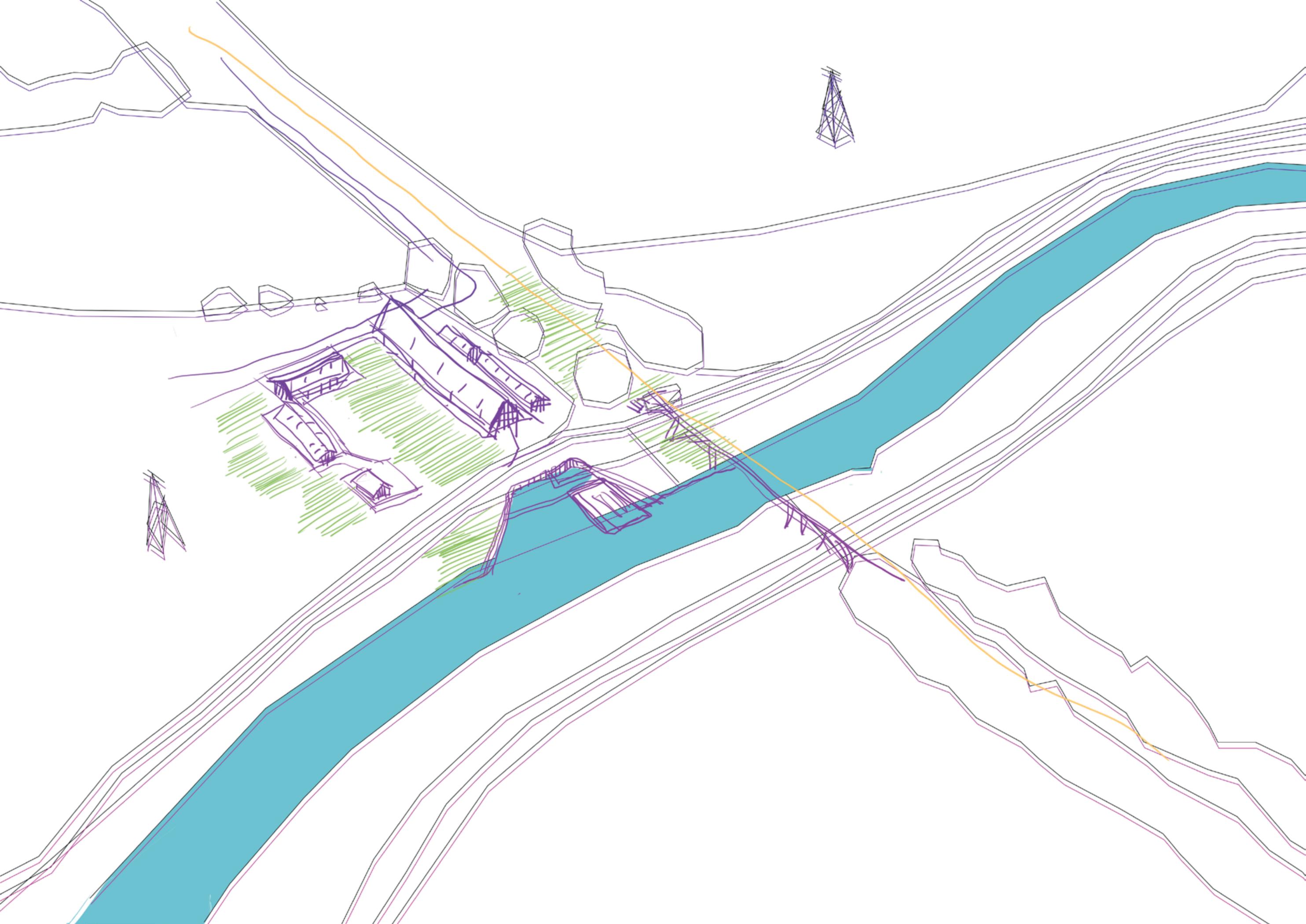


Initial Bridge Sketches and model



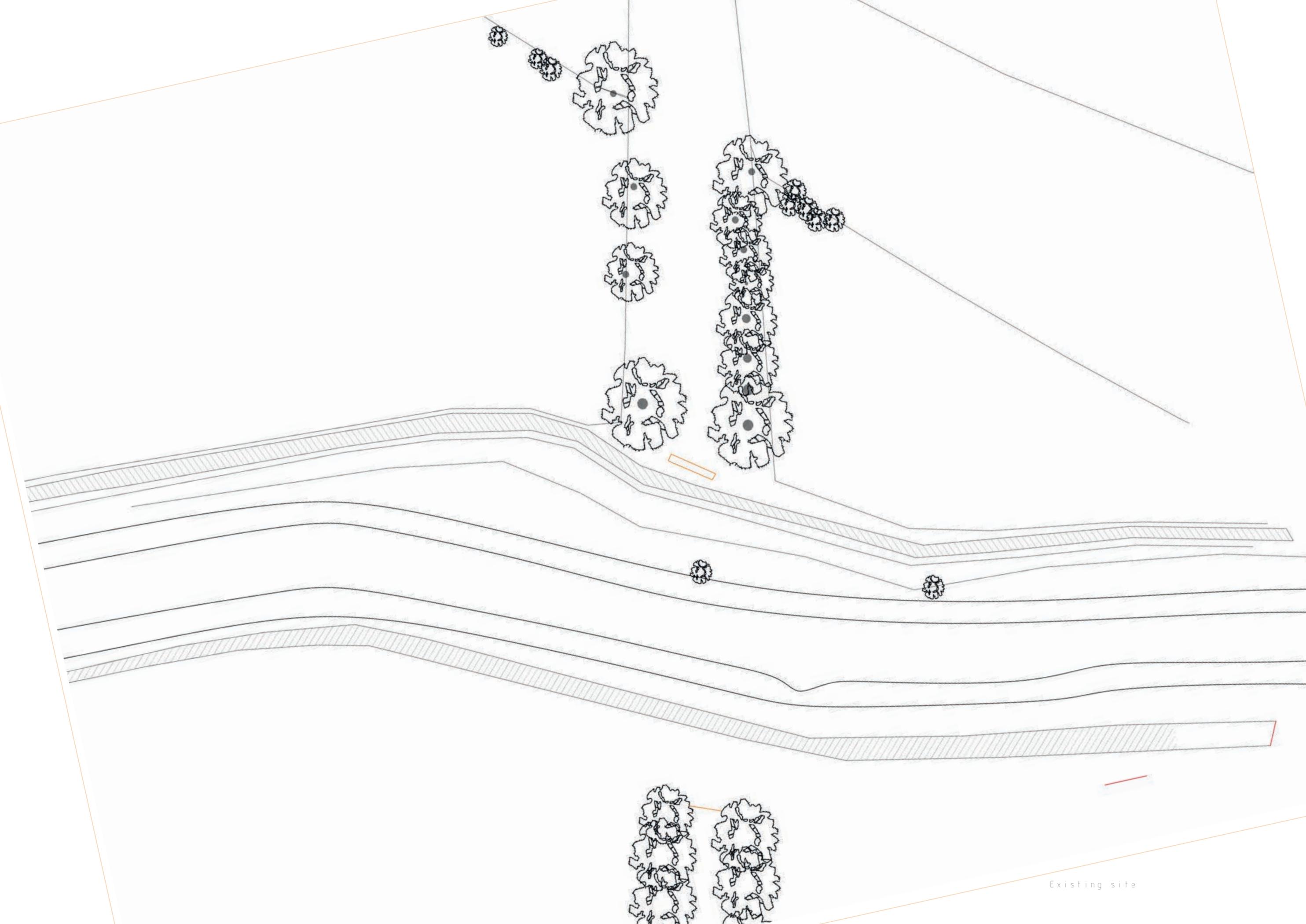


Red Bridge? maybe.

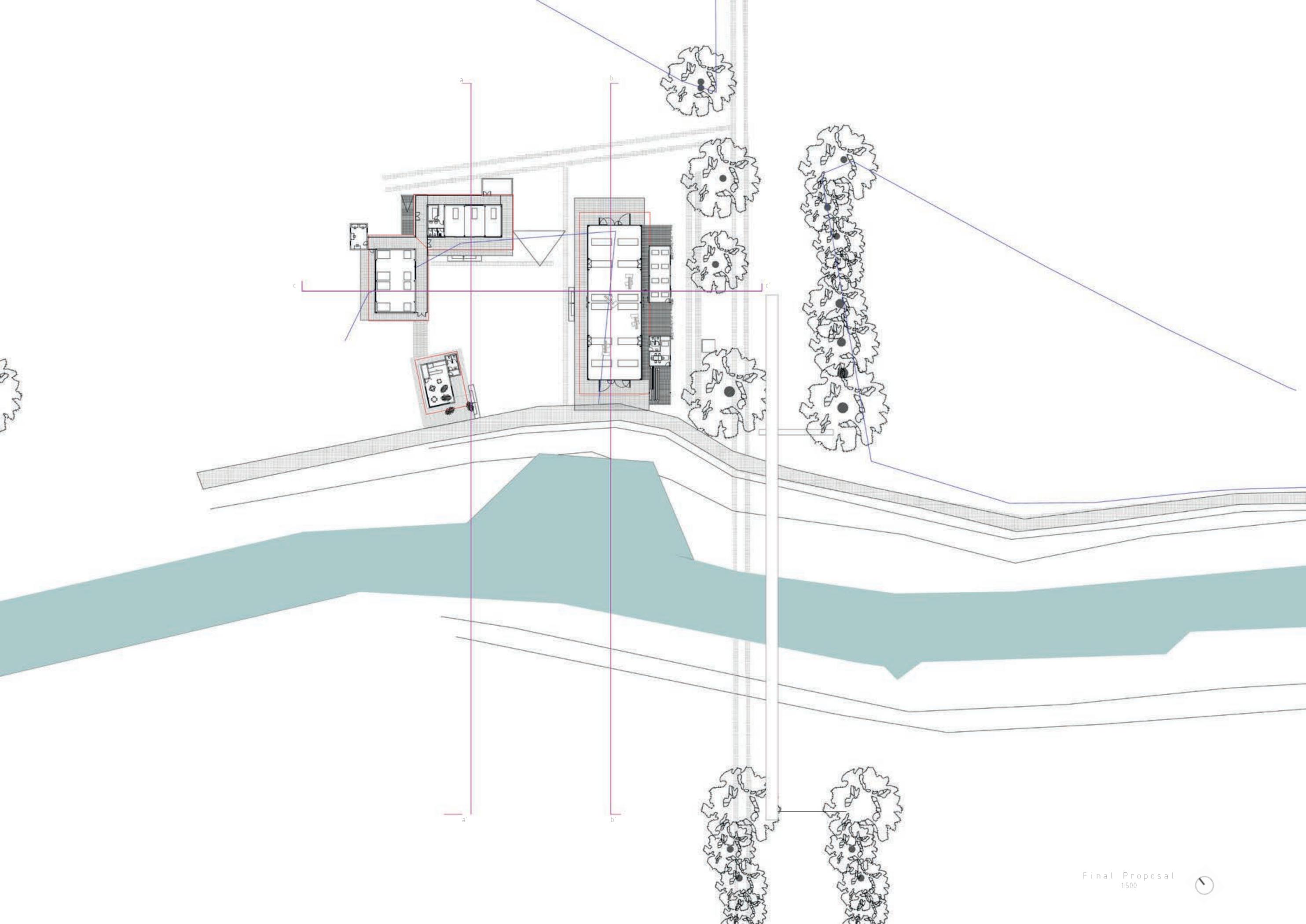


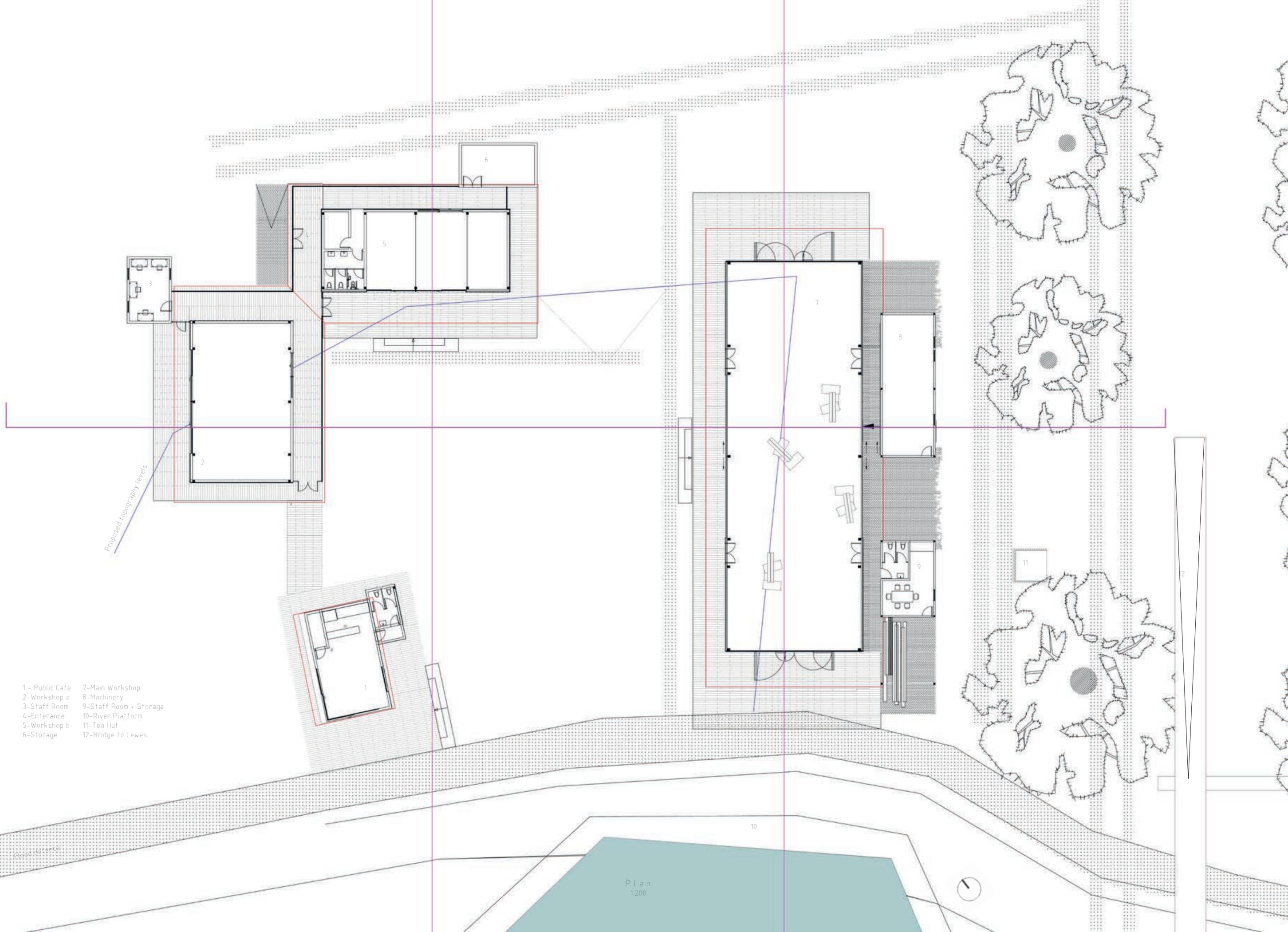


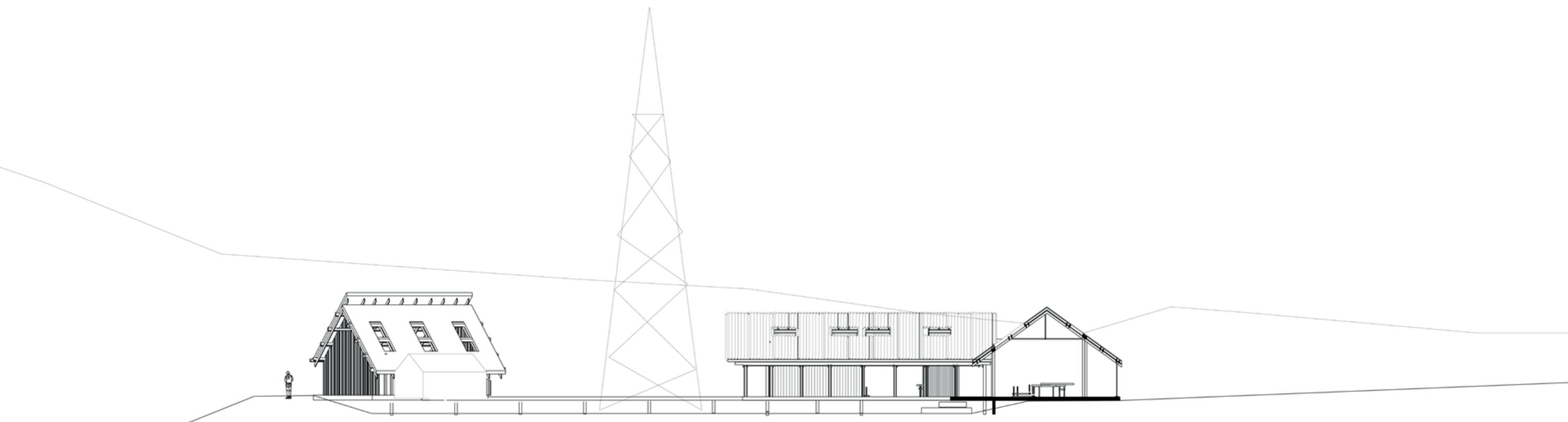




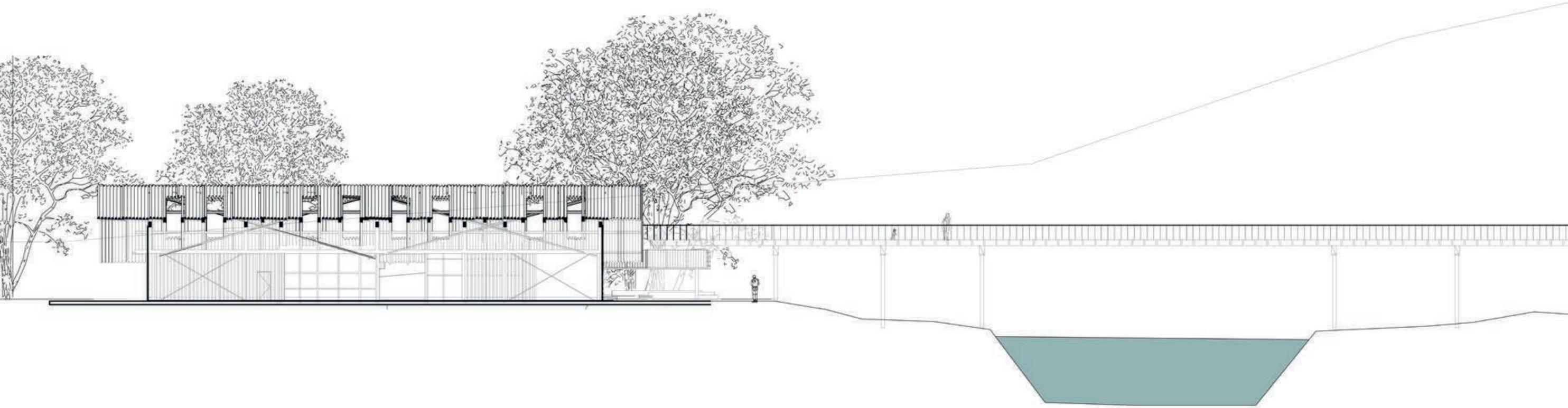
Existing site



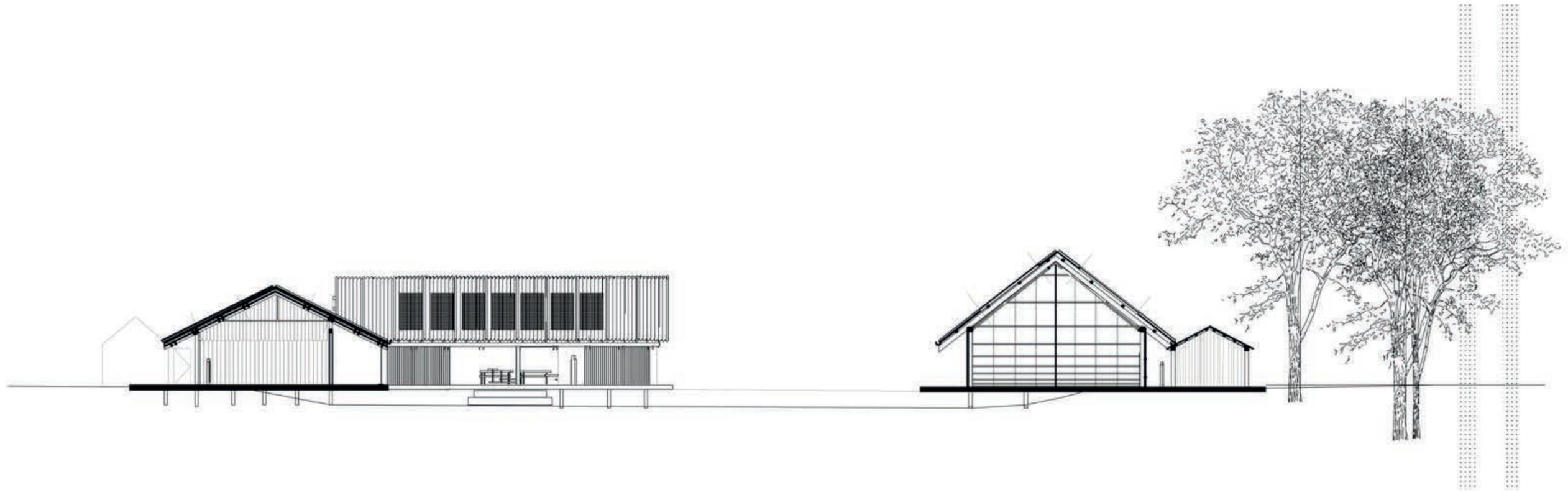




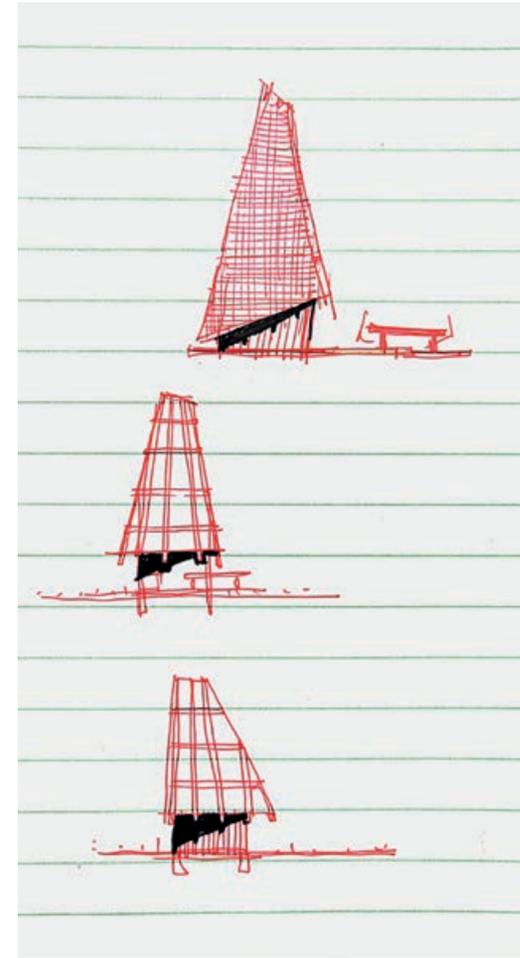
a - a' Section
1:200

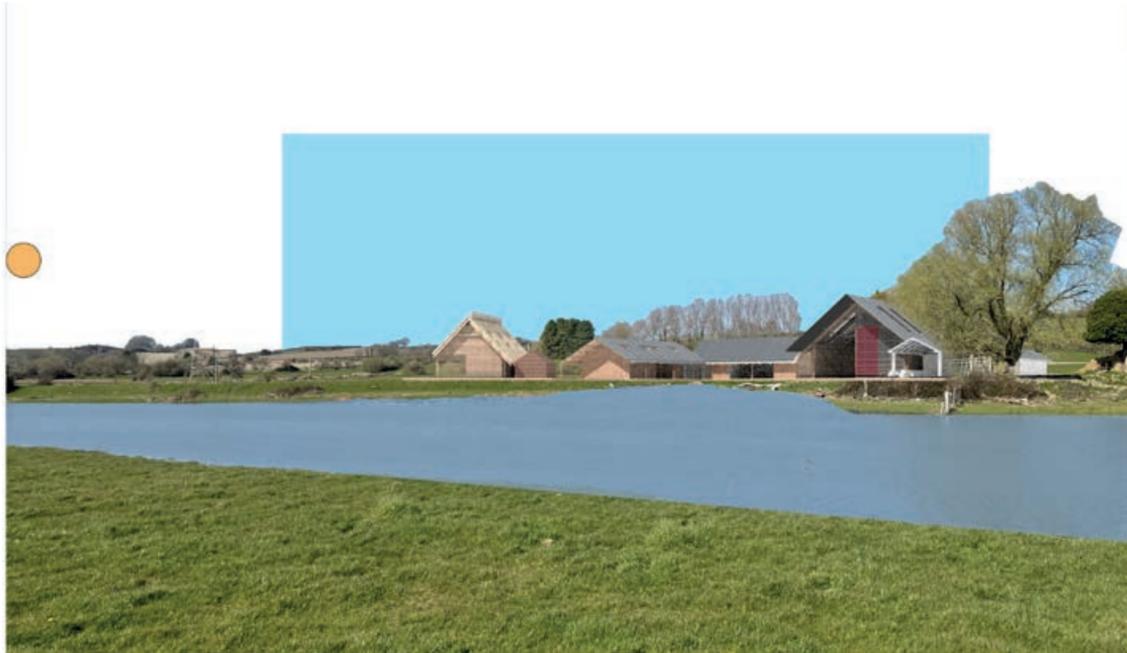


b - b' Section



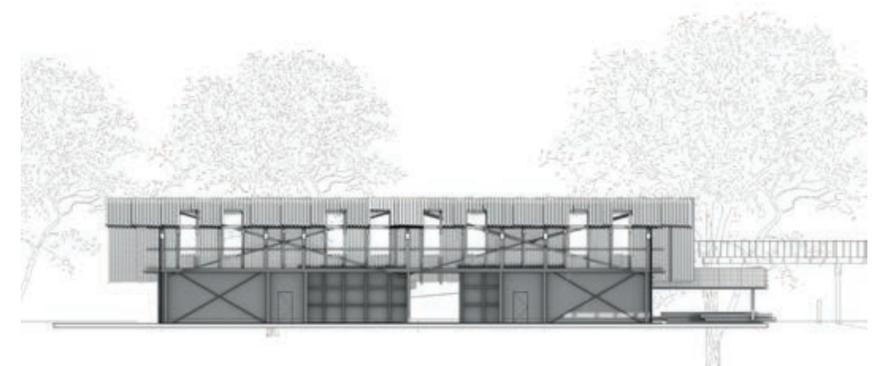
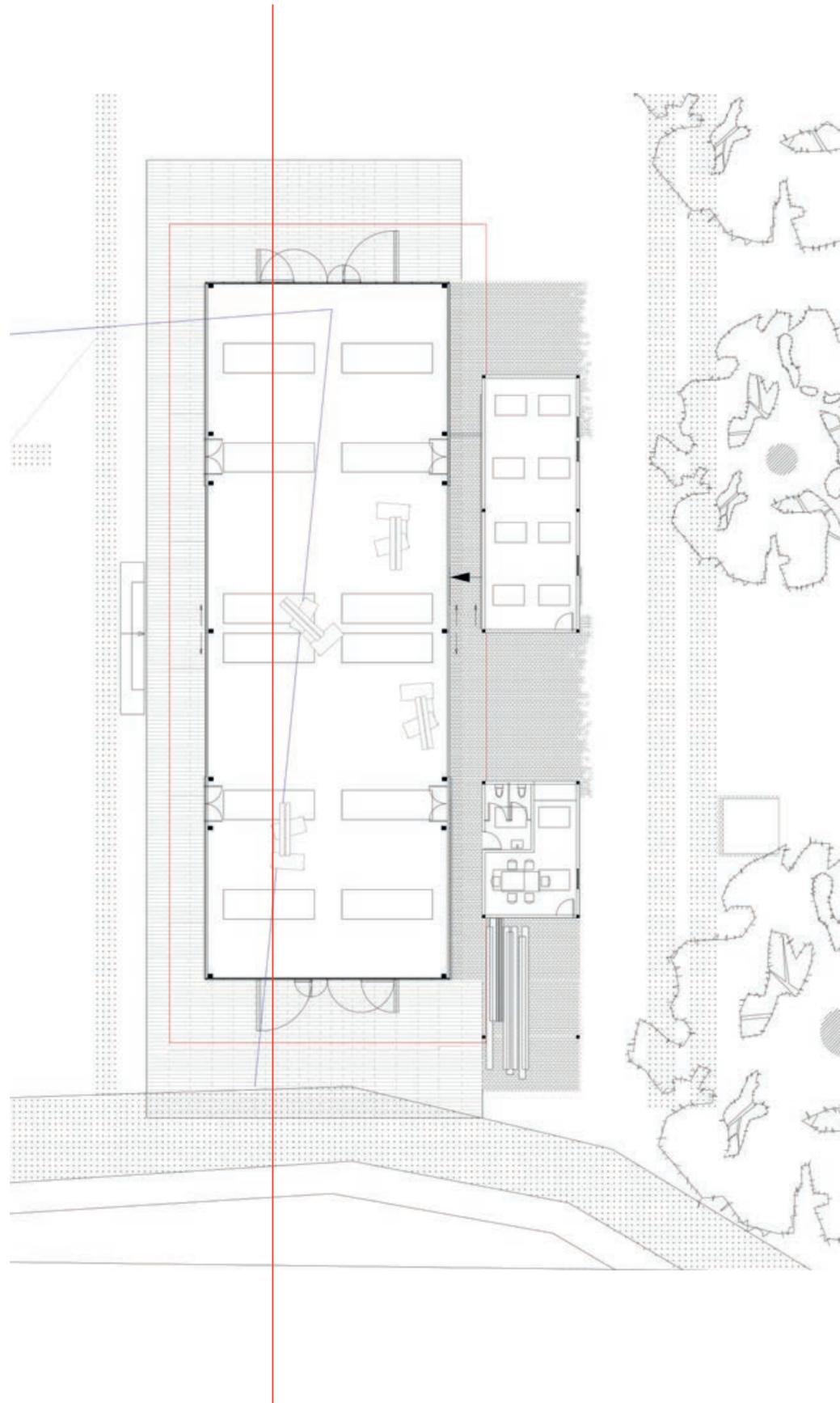
c - c' Section
1:200



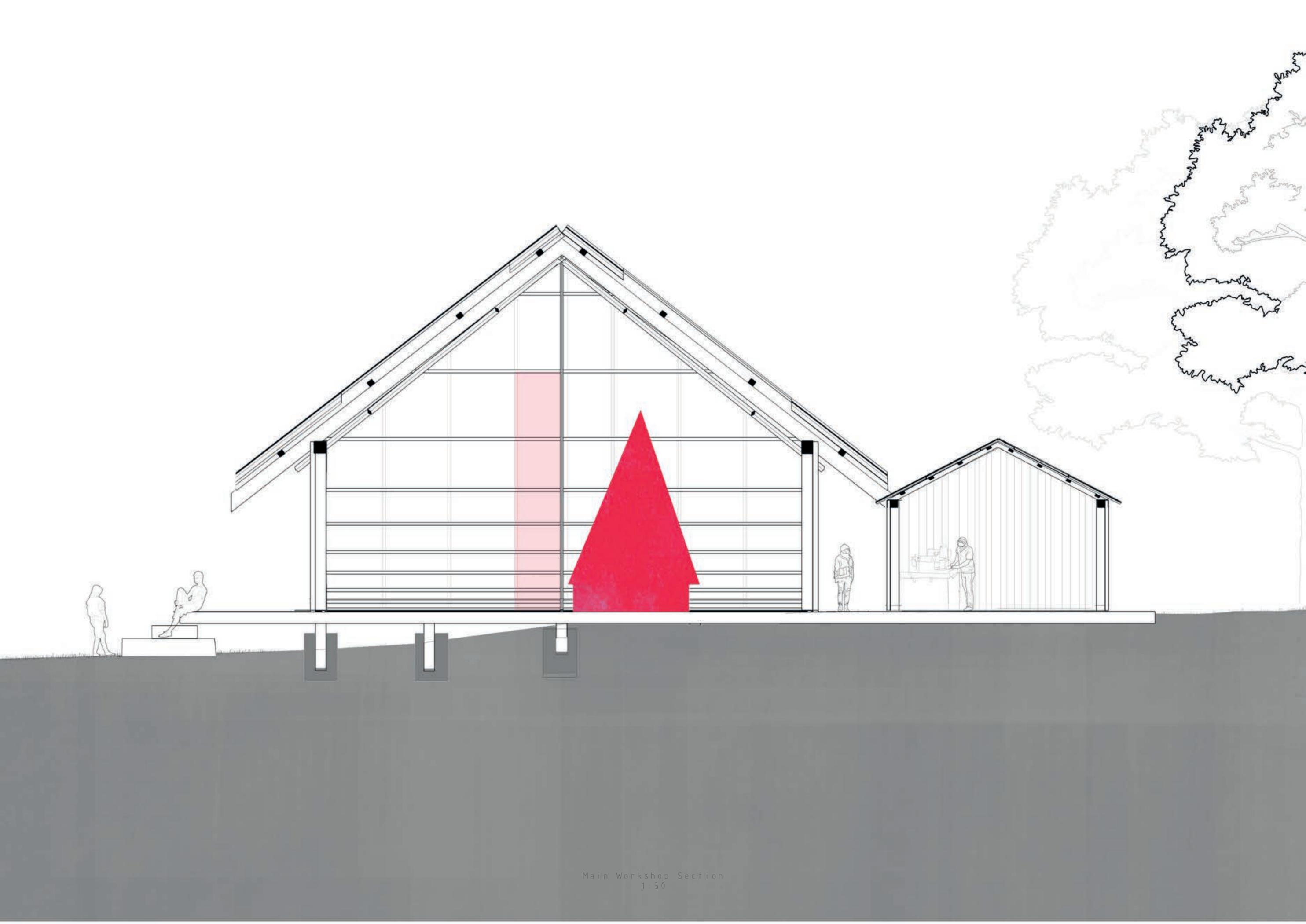




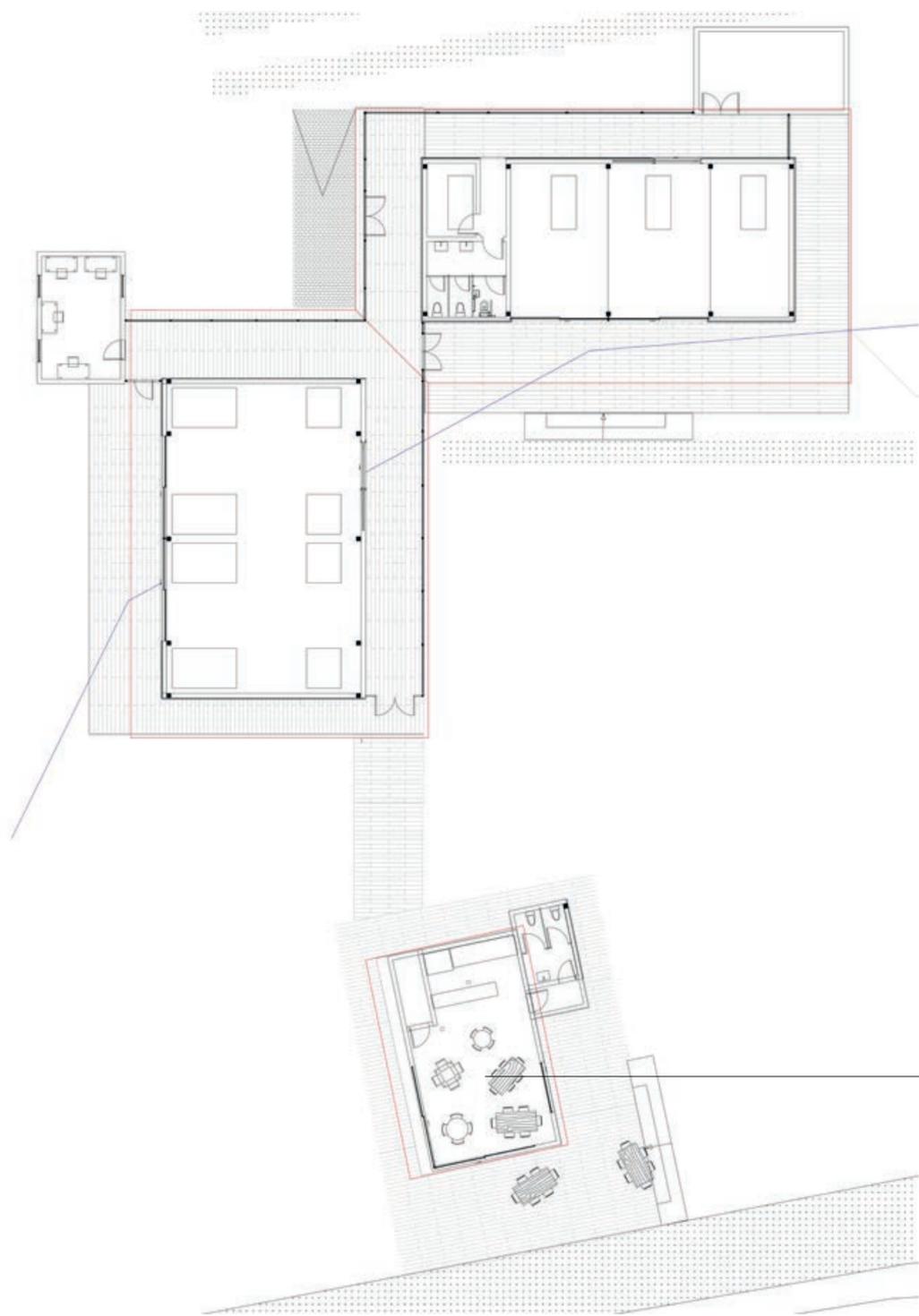
Late night working
04:36 am



Main Workshop Plan + perspective sections



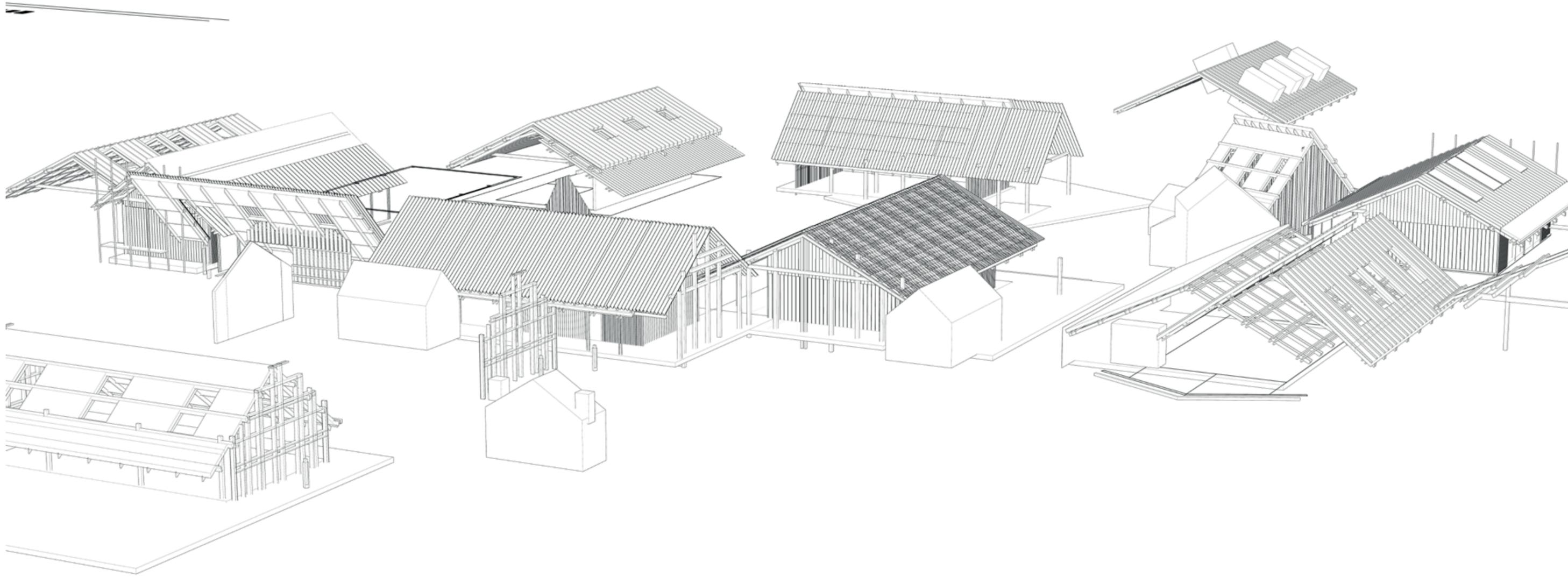
Main Workshop Section
1:50



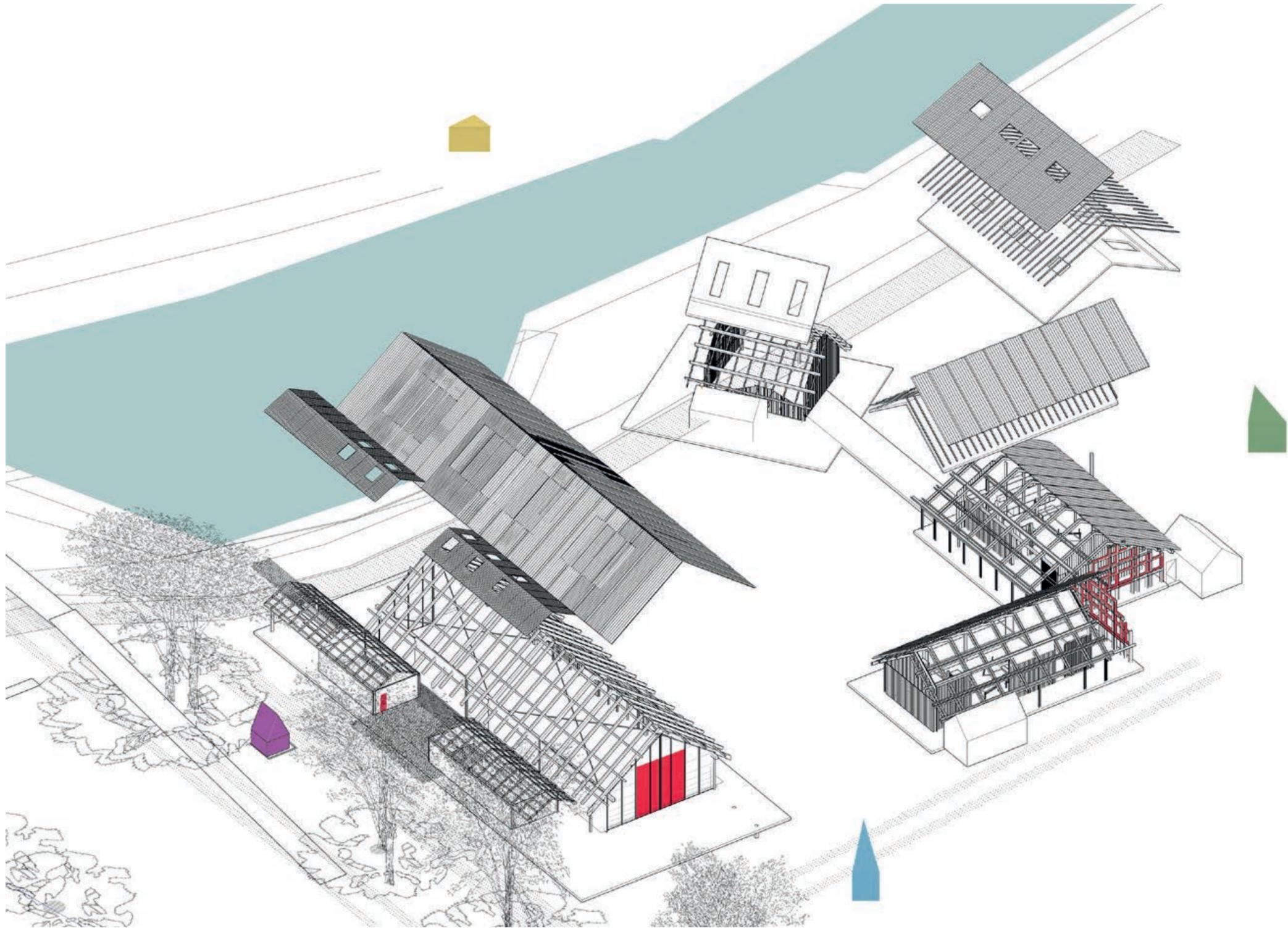
Entrance

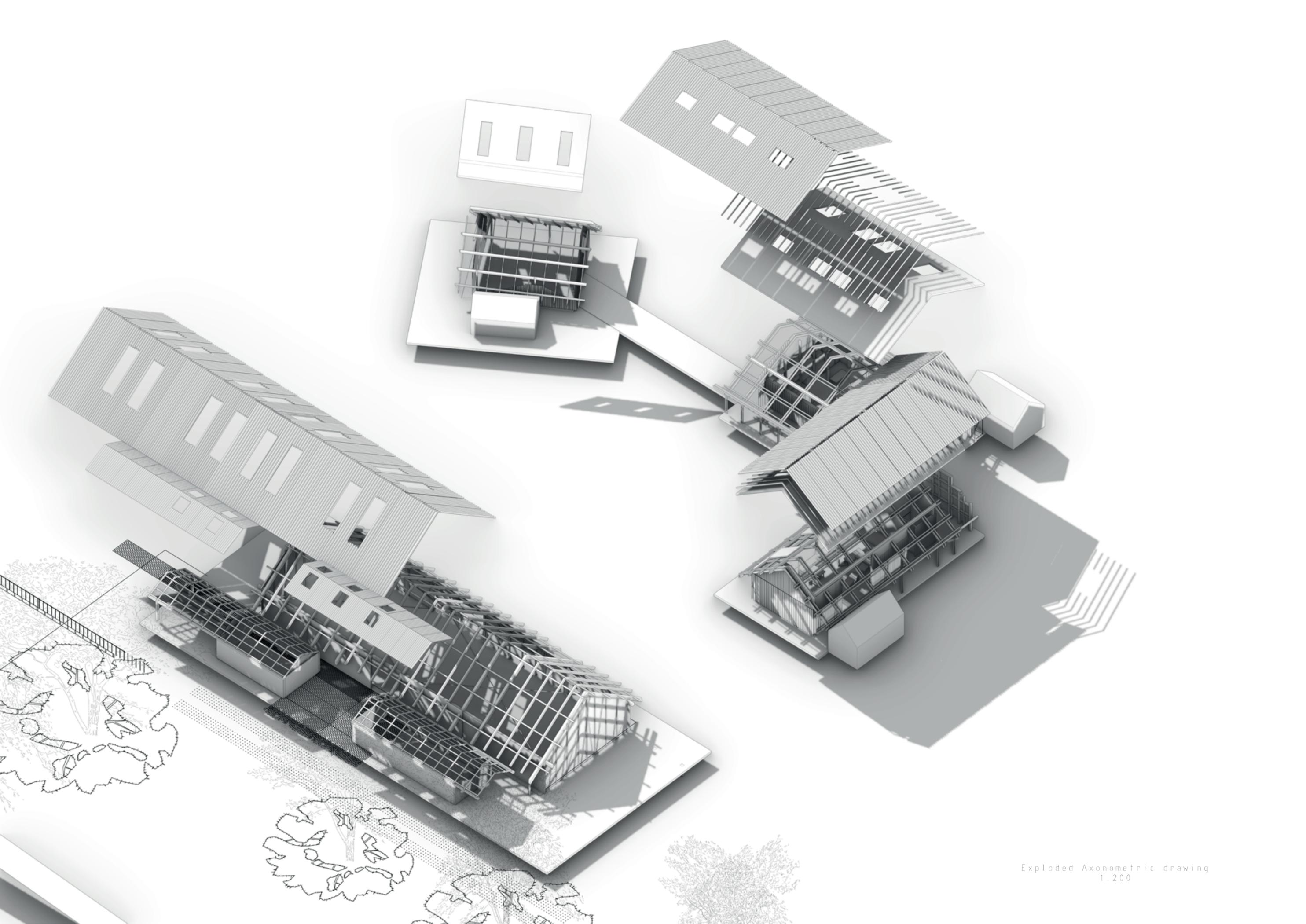


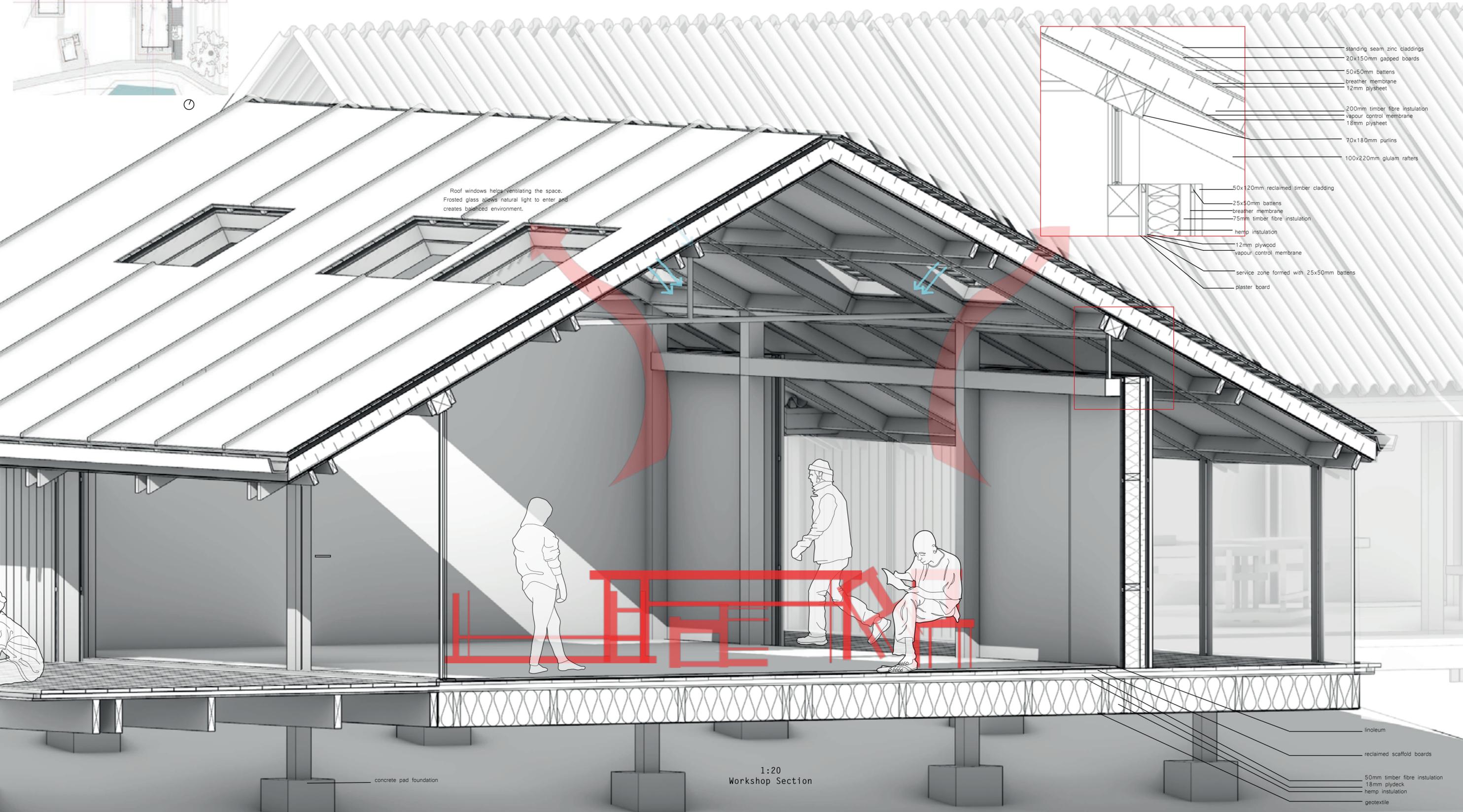
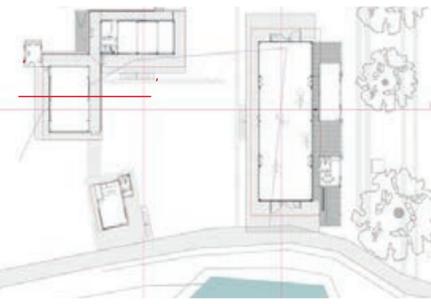
Cafe structure and roof light



all models made in the development process of the design.







Roof windows helps ventilating the space.
Frosted glass allows natural light to enter and
creates balanced environment.

- standing seam zinc claddings
- 20x150mm gapped boards
- 50x50mm battens
- breather membrane
- 12mm plysheet
- 200mm timber fibre insulation
- vapour control membrane
- 18mm plysheet
- 70x180mm purlins
- 100x220mm glulam rafters
- 50x120mm reclaimed timber cladding
- 25x50mm battens
- breather membrane
- 75mm timber fibre insulation
- hemp insulation
- 12mm plywood
- vapour control membrane
- service zone formed with 25x50mm battens
- plaster board

concrete pad foundation

1:20
Workshop Section

- linoleum
- reclaimed scaffold boards
- 50mm timber fibre insulation
- 18mm plydeck
- hemp insulation
- geotextile

