Uppåkra Arkeologiska Center

Process

DIPLOMA AUTUMN 2020

Candidate: Tobias Wihl

Institute of Architecture
The Oslo School of Architecture and Design

Supervisor: Marius Nygaard

Main themes
Extracted from Diploma Program

Sense of place

Purpose of a visiting center: mediate the history of the site and the character of the place through the building. Provide a shared program to anchor the building in the local community

Future expansion/Future reduction

The building grows in tandem with ongoing excavations of the site. With time, this increases the collection of found objects and could invite for a future new reading of the site and it's history.

Use of land

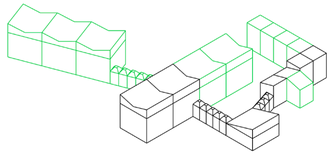
Issue of sustainability: highly fertile ground for cultivation as well as being an archeological site demands for repsonse in design of building.

Exhibit the archeology

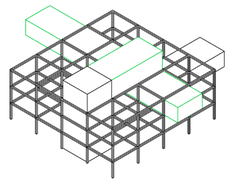
Issue of sustainability: highly fertile ground for cultivation as well as being an archeological site demands for repsonse in design of building.

Investigations of principles

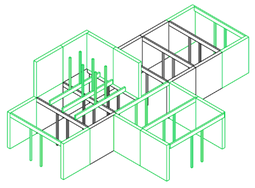
Principles for future expansion
Investigation



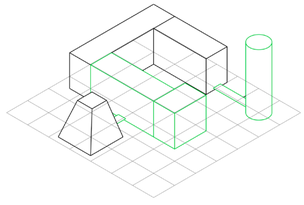
Additive Units



Structural framework



Additive components



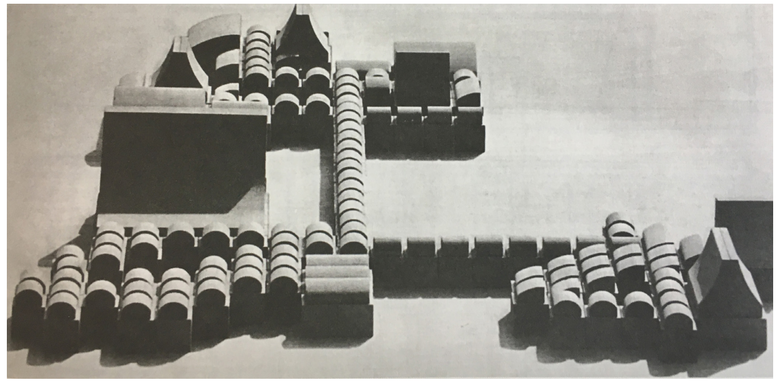
Theoretical raster

Additive units

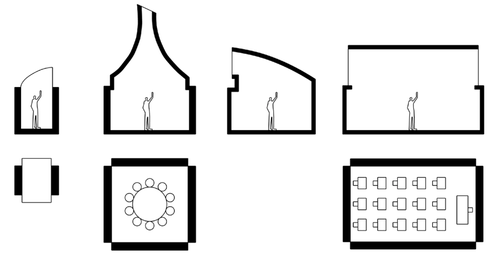
Different programs are defined by a specificly designed unit that together form a catalouge of rooms for different activites : one unit for pathways, one for classrooms, one for auditorium etc. Each unit can be added to another unit to form the complete building. This strategy gives a possibility to let the building grow over time and to respond to future changes. When the need for expansion arrives, a new unit is simply selected from the catalouge and added to the already existing building.

Advantages
As each unit in principle can function alone as well as when added to others, this gives the possibility for a more organic development of the project, where units can be added in tandem with new archelogical discoveries on the site.

Disadvantages
Using specialized units may be less adaptable to alternate future use, as each unit is ”frozen” to serve it’s specific purpose.



Jørn Utzon. College Campus in Herning, Denmark. 1969



Pathway Meeting room Auditorium

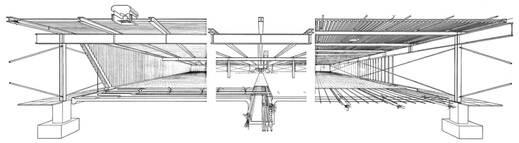
Specialized units.

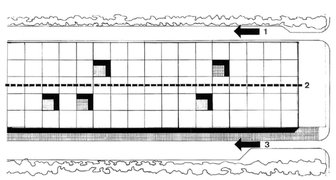
Structural framework

A structural grid that provides constructive and technical infrastructure. Partition walls, flooring, facade and window openings are flexible, enabling the building to quickly respond to changing demands.

Advantages
A pragmatic solution for adapting the building to alternate future use.

Disadvantages
The general character of the structural framework, such as presented in the reference below, could be a disadvantage in fulfiling the purpose of mediating the site, as this would call for a more site specific solution.The framework itself is permenent, and does not provide an opportunity to moved, which can be negative in terms of future excavations and land use.





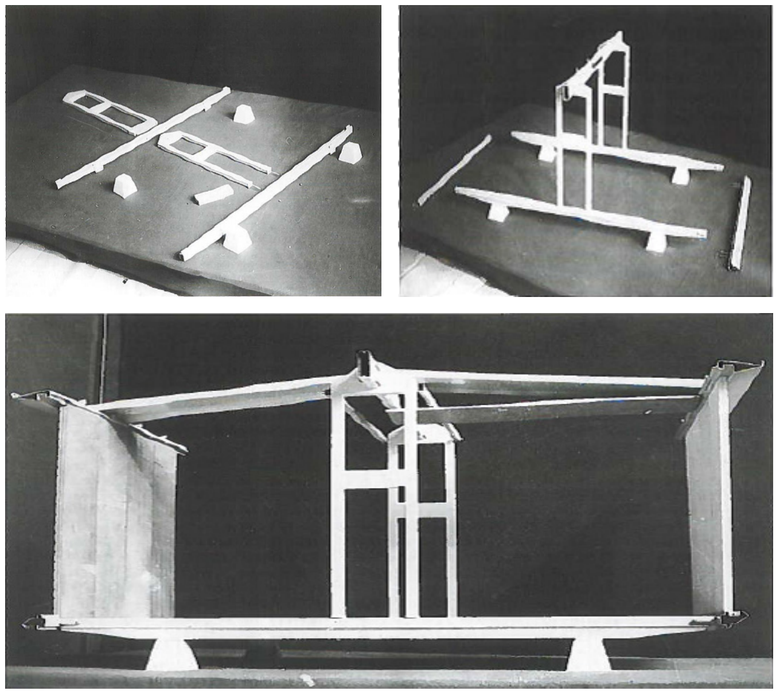
Team 4. Relience Controls, Swindon, England. 1967

Additive components

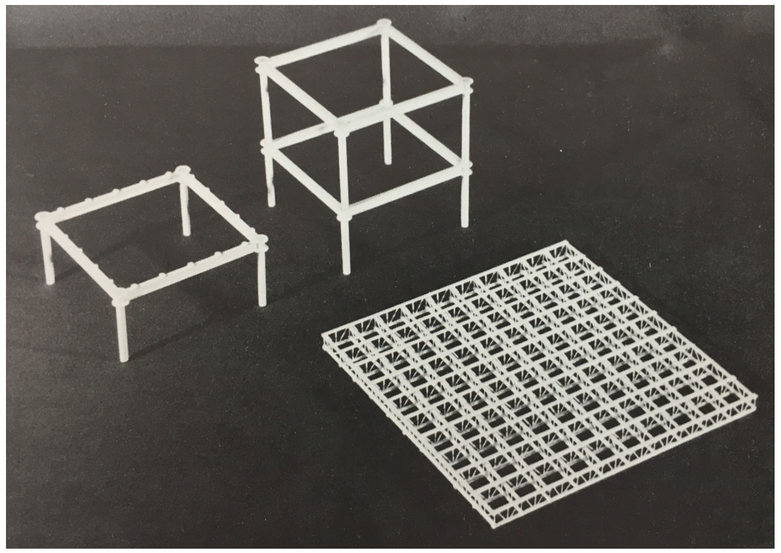
In order to quickly assembly, move, or pack up the building, the struture is defined as separate components that when added together forms a constructive framework. The strategy allows the building itself to be moved to a new location, and by adding or subtracting components, the building can adjust according to the local character of it's new location, as well as expand or shrink according to programmatic changes.

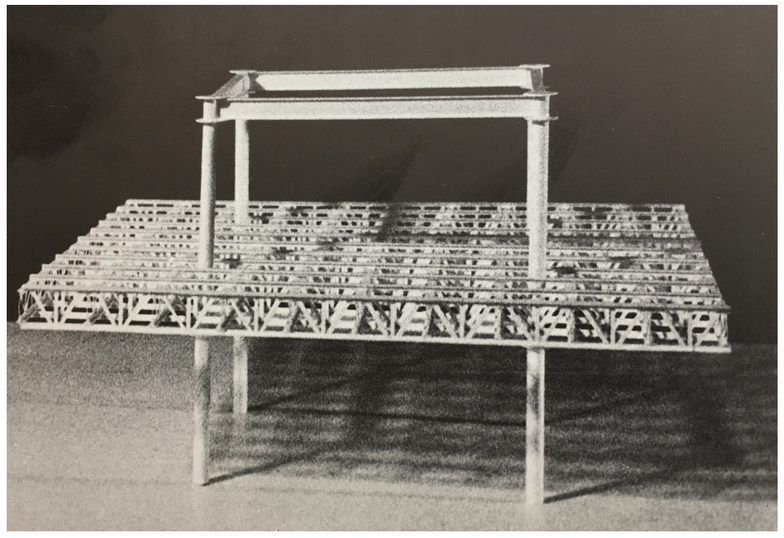
Advantages
As it is easily moved, the system can be used to minimize impact on the land, as the components can be removed if there is need to excavate on the spot that they are occupying. Likewise, the system can fucntion as a framework for both the center itself and the archeological excavations. Defining the structure as separate components that can be taken apart increases the possibility of re-use and recycling, and could thereby be a more sustainabale solution.

Disadvantages
In it's purest form, the system has a general character, with few possibilites for specific interventions, which can be contradicitve in terms of mediating the site.



Jean Prouvé, Army Barracks, 1939



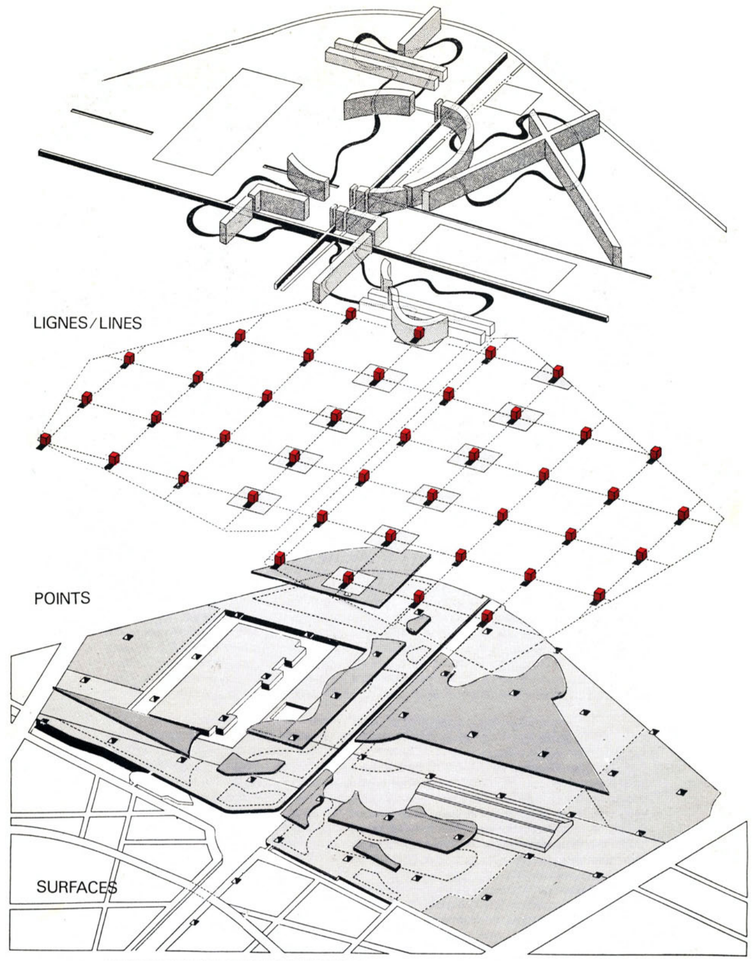


Theoretical raster

A theoretical coordination system is projected upon an existing situation. The coordination system sets the logic for new interventions - any new additions can thrive freely, as long as it touches upon this logic. The superimposition of these systems creates friction in the intersections, making for unexpected situations and creating a contrast between whats existing and what is addition. The raster creates a link between the existing (past) to the additions (the presents), completing the historic timeline.

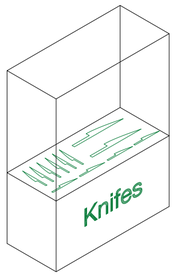
Advantages
As the rich history of Uppåkra lies buried, and few physical traces are to be found, a theoretical system incorporating immaterial values such as historical axises, sightlines and abstractions of the archeological work can bring forward the unseen, and help to mediate the history and sense of place for Uppåkra. If applied correctly, the raster can lift the architecture and give meaning, both poetically and literally, to the project.

Disadvantages
A theoretical raster demands a certain size of the project, as the in the example of La Villete where the scale is on a cityplanning level. Also, the raster itself offers no real architectonic solution. It is a method that demands precise articulation in the physical building in order not to become obsolete.

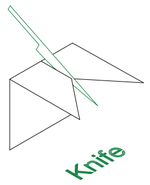


Bernard Tschumi, Parc de la Villette. 1987

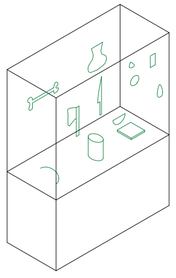
Principles for exhibition
Investigation



Traditional curation



One object tells the story



Quantity as quality

Traditional curation

Objects are grouped together and displayed after theme, such as object type (for example, all found surgical instruments from the iron age placed in the same display box.). Display is complemented with texts or audio guides that provides the context from which the objects are read.

Advantages
Traditional concept that is easy for the visitor to relate to.

Disadvantages
Does not take the uniquness of each object into consideration.Text and data about context can overload the visitor with information, which can be contraproductive and lead to lost interest.

Lund Historical Museum

The object tells the story

Instead of grouping all found surgical knifes together, only one knife - the one most ”knife-like” - is chosen to represent a certain theme or context. Display case are custom made to each object, thereby strenghtening the character and integrity of the object.

Advantages
Can provide a richer, more condensed, experience to the visitor, avoiding to numb them with too much irrelevant information.

Disadvantages
Puts certain demands on the quality of the collection of objects to meet certain criteria in order to be selected, as well as on the curation of the exhibiton itself. Is not well adapted for expanding or alternating an exhibiton as each display case has to be custom made to a new object. If the visitor is not in the ”right” frame of mind to percieve this certain type of exhibiton, the idea behind the concept can get lost all togehter.

Sverre Fehn, Storhamarlåven. Hamar, Norway. 1971

Quantity as quality

A general system for displaying the objects is used, where emphasis is put on exhibiting the highest amount of objects possible. The objects are experienced in context with each other, thus exhibiting the size of the collection itself.

Advantages
Well adapted to be expanded or reduced, as the demands on curation are minimal. Reduces the amount of objects that are kept in magazination. The size of the collection itself can be a quality to the visitor as it can tell a story about the place itself instead of looking at the objects in isolation.

Disadvantages
Lack of information or provided context along with the objects can numb and confuse the visitor.

Lina Bo Bardi, MASP Picture Gallery, Saõ Paolo, Brazil. 1968

Viewfinder

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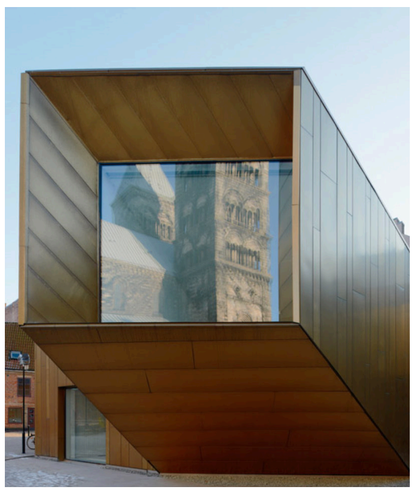
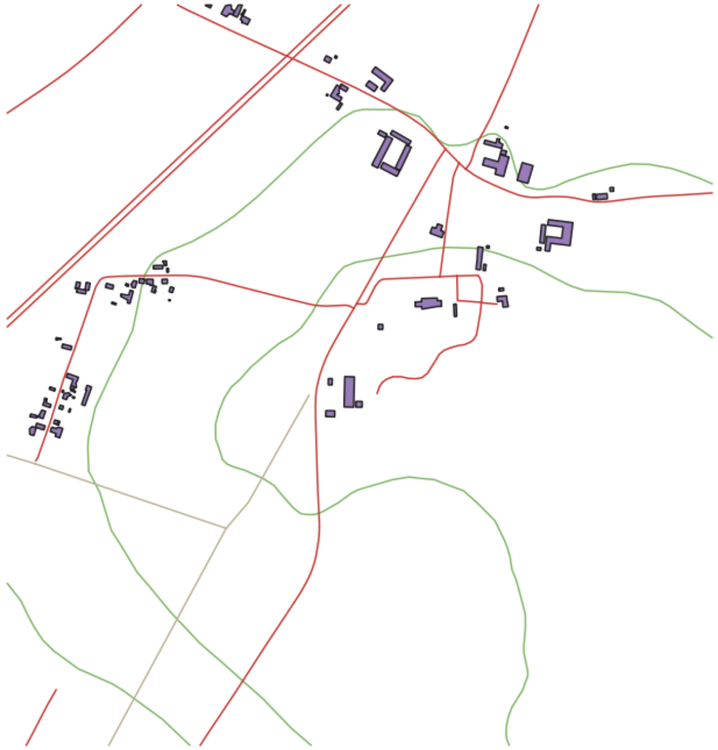
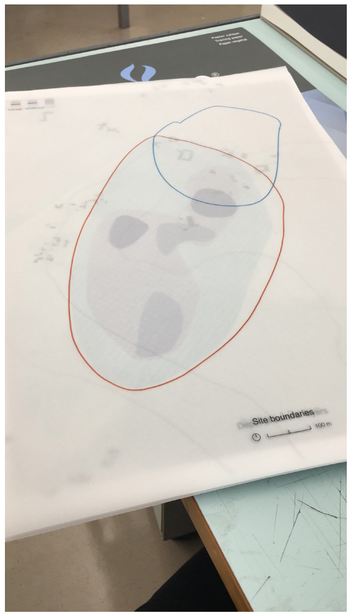
Viewfinder as an object.
Elemental, Seaside promenade, Constitución, Chile. 2010

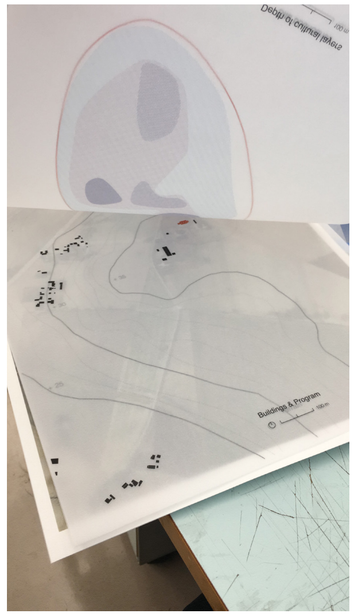


Viewfinder expressed in form of building
Carmen Izquierdo, Lund Cathedral visting center. Lund, Sweden. 2010

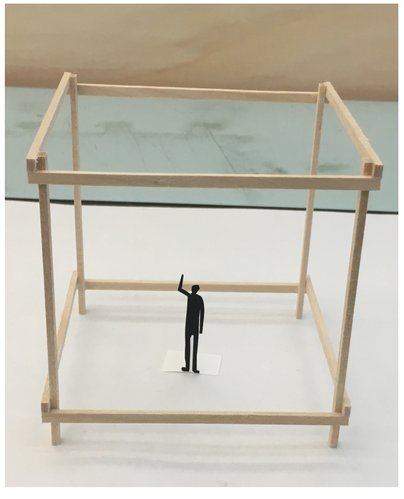
Proposals



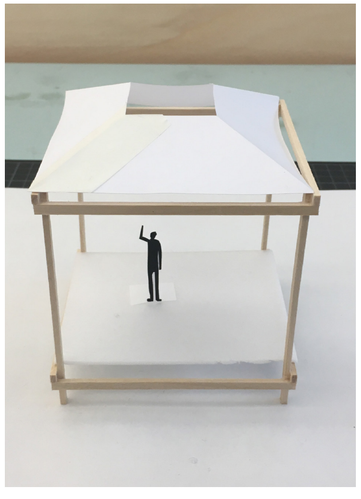

Site boundaries


Buildings & Program

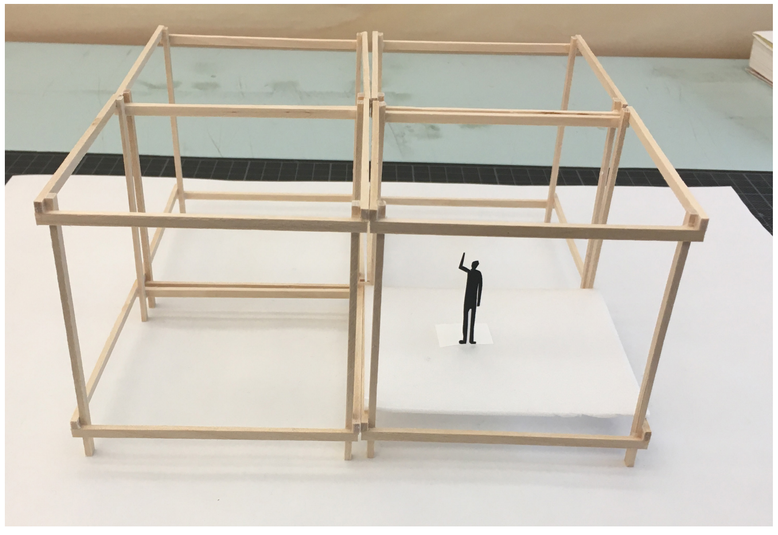
K.E.M

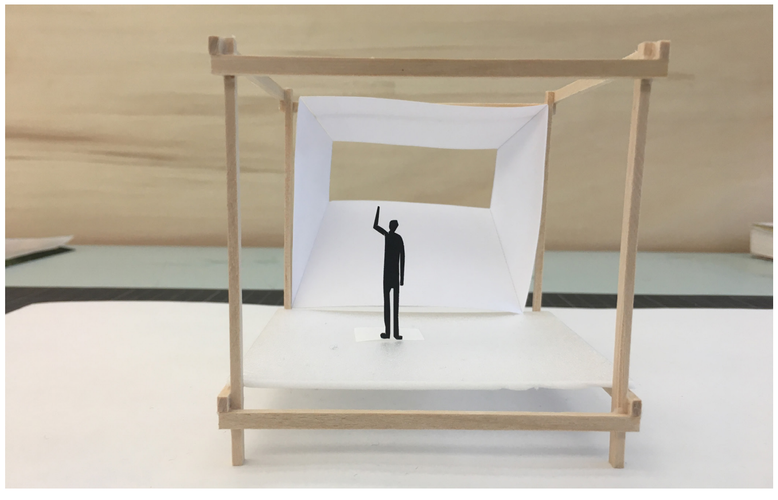


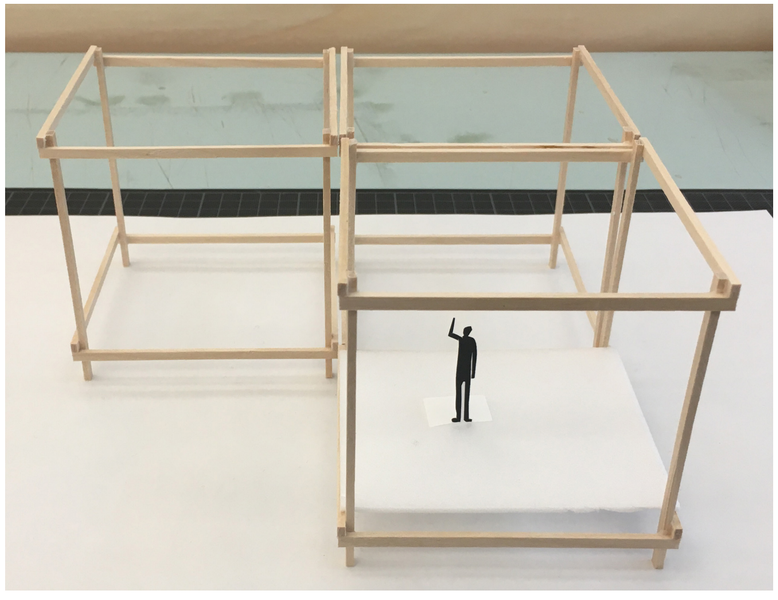
General structure that can stand alone or be added to eachother



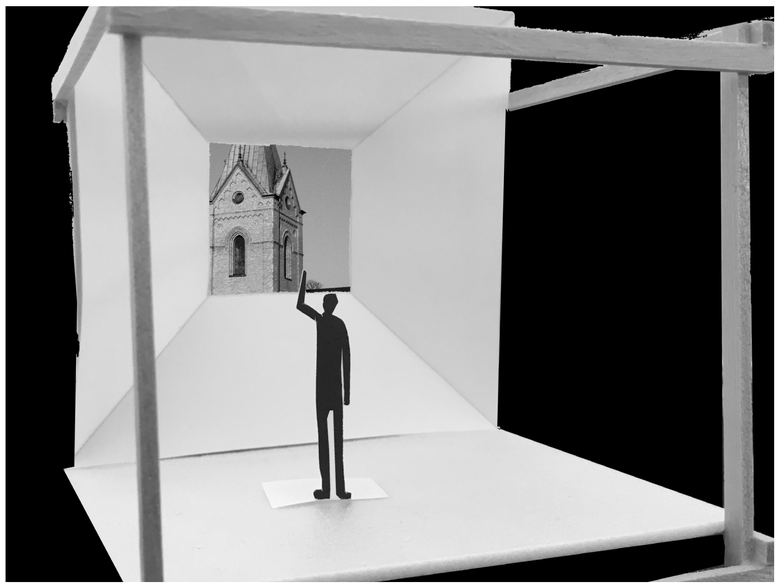
Roof, wall and floor is designed for specific qualities (here exhibiton)-



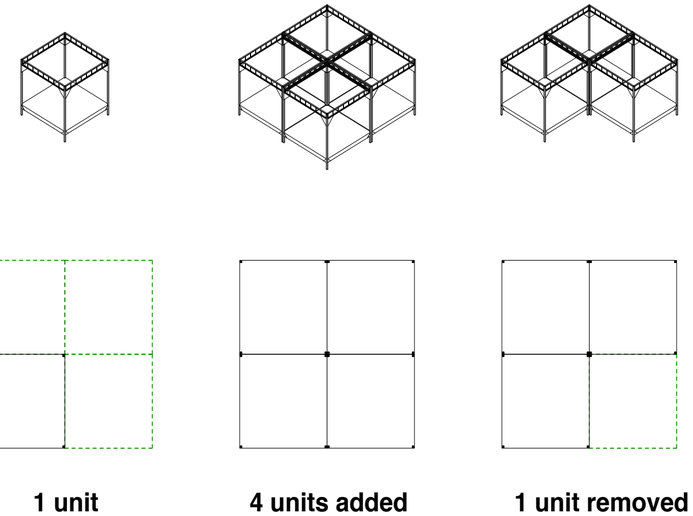


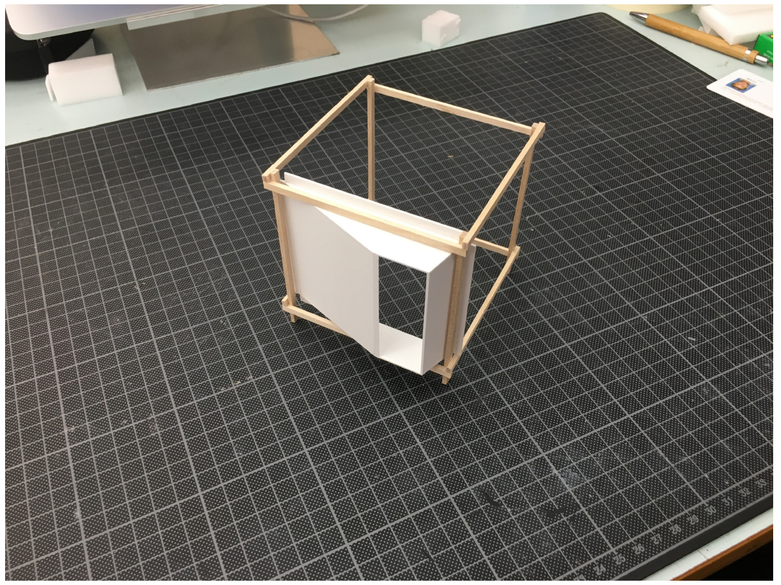


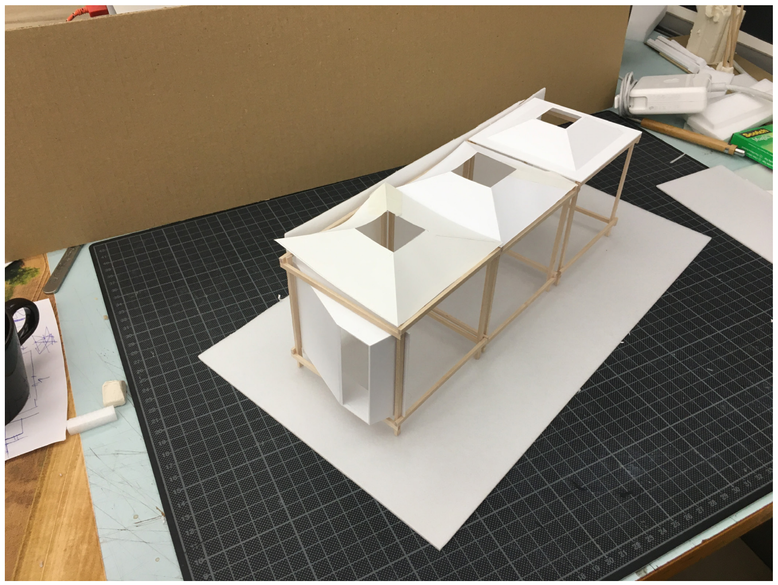
4 units: auditorium

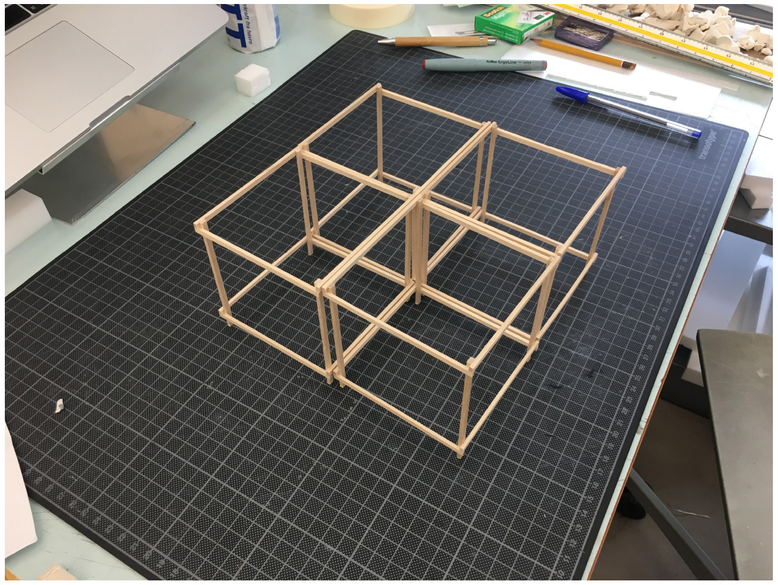


Specific quality: Viewfinder.

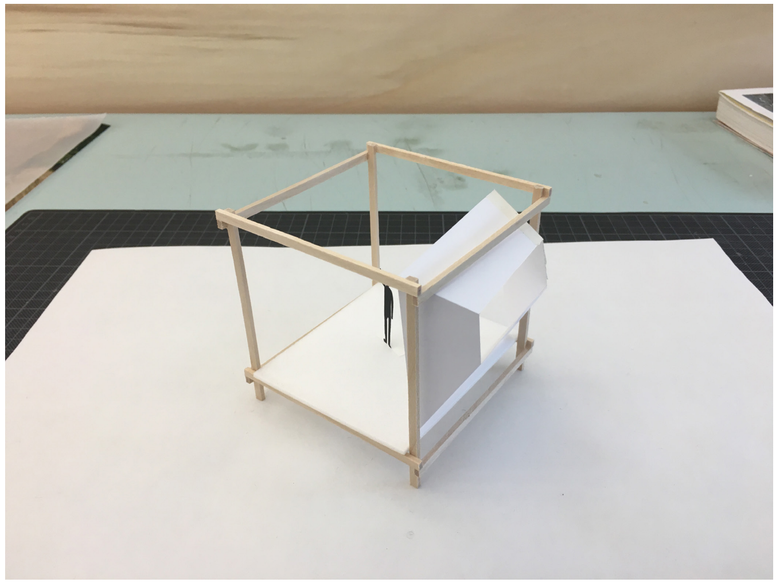


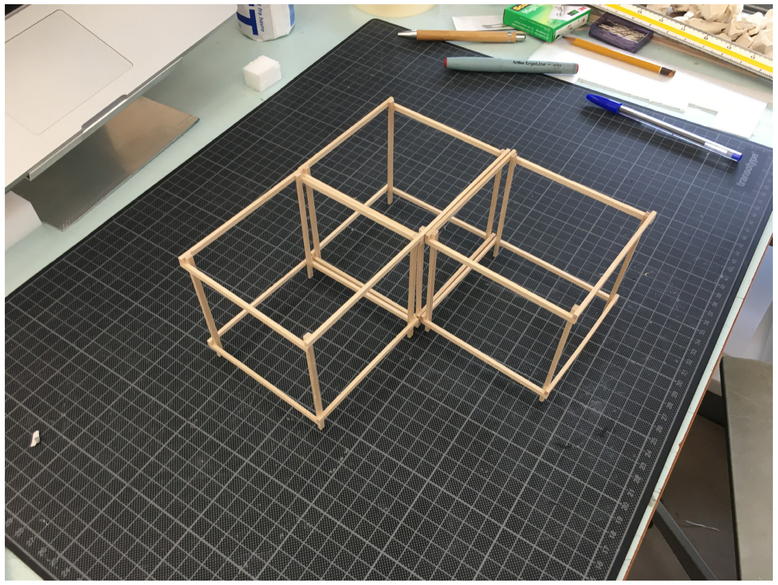




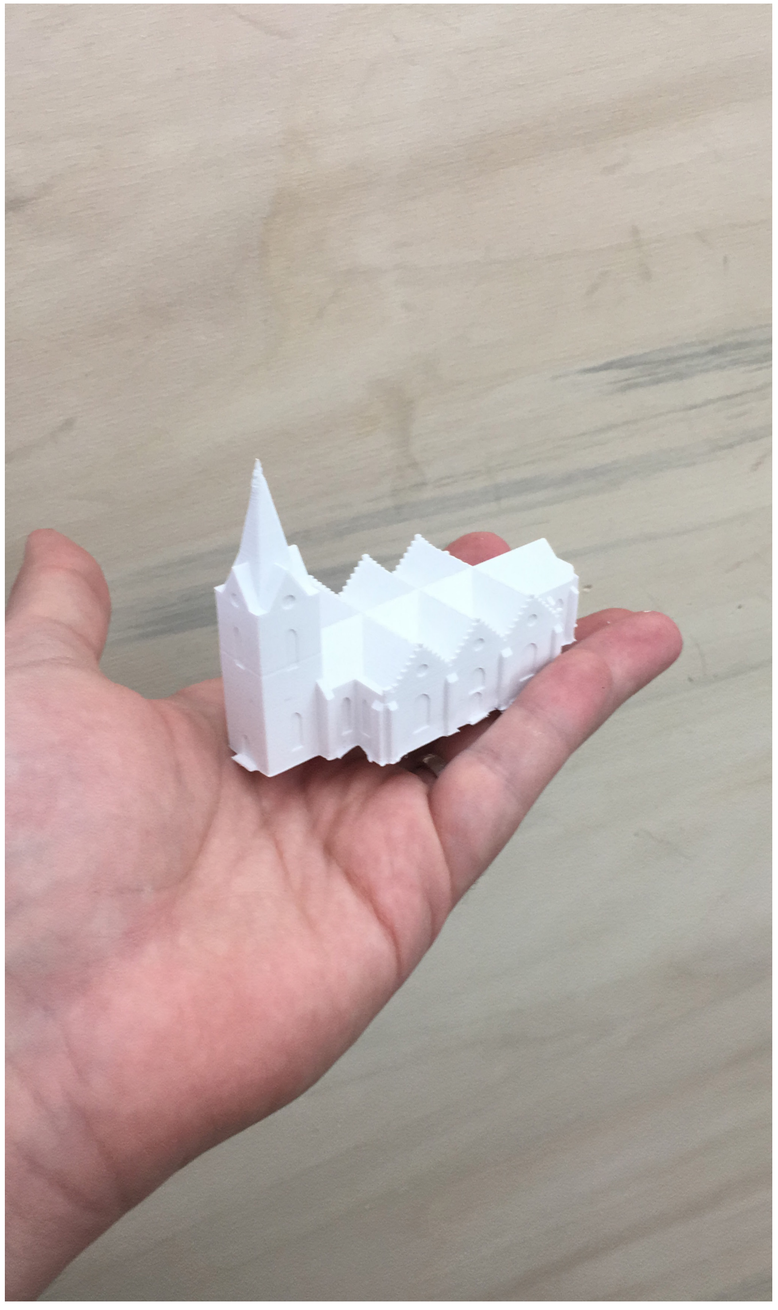


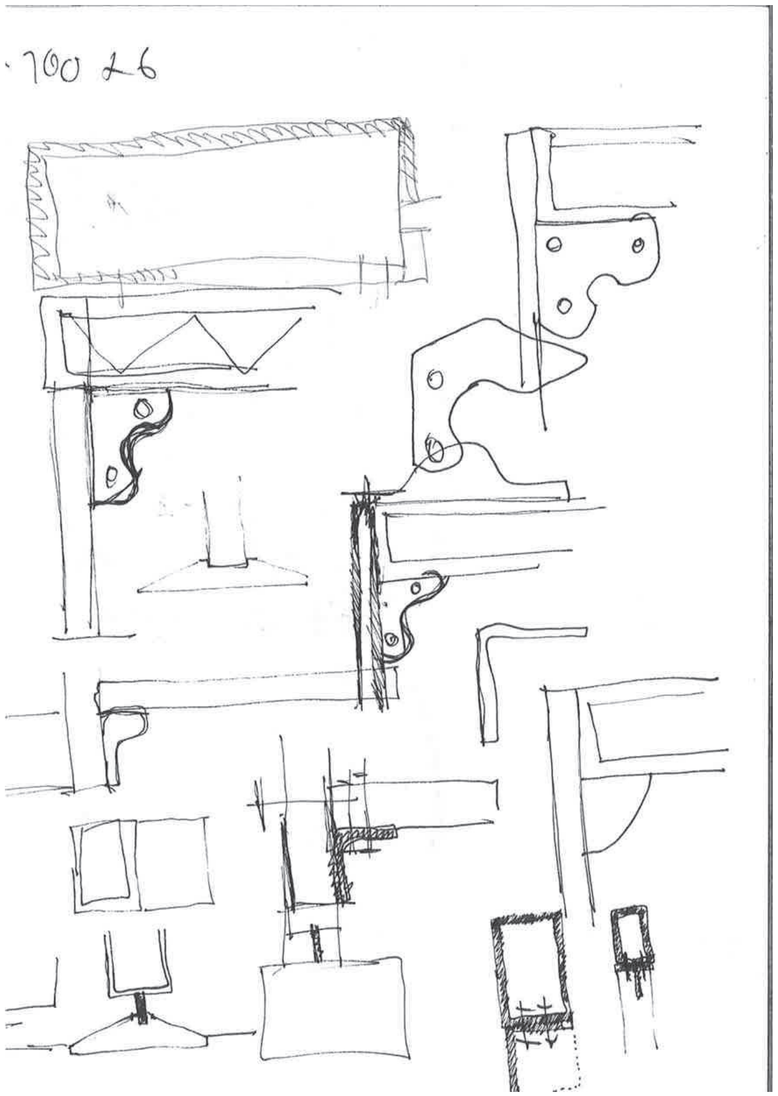
Units gropued together

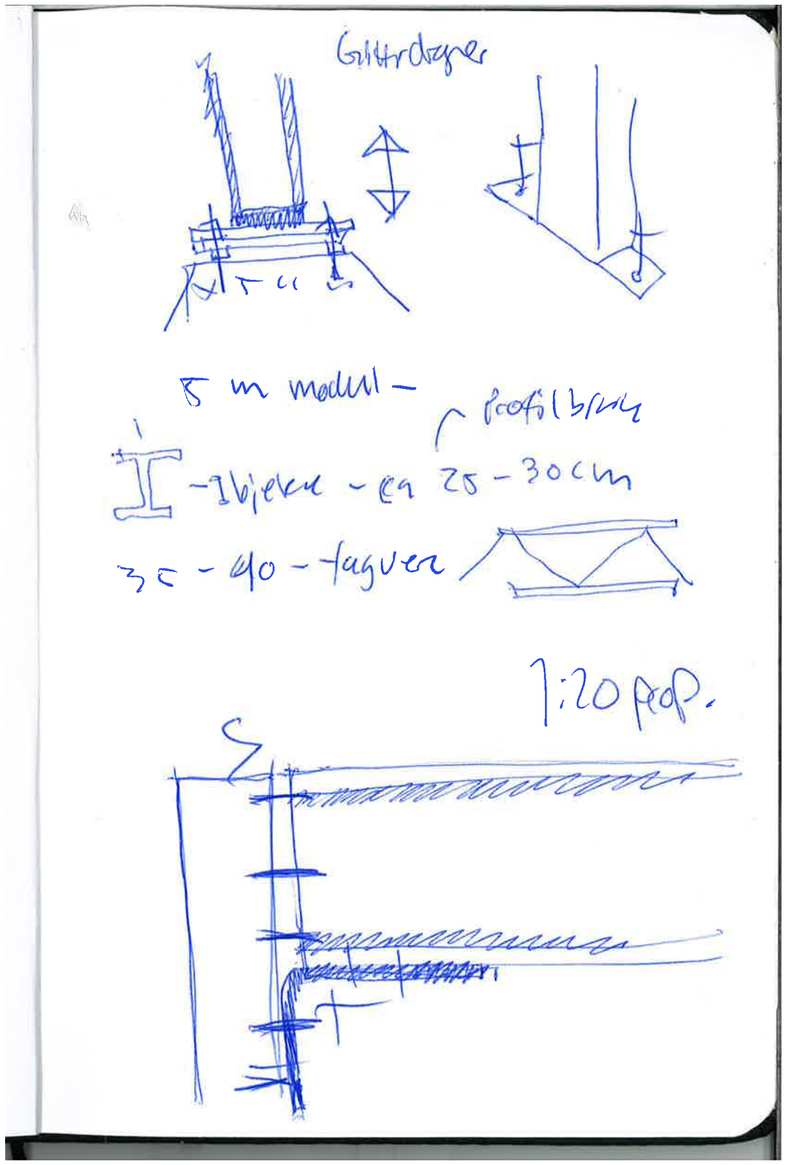




1 unit removed - remaining units still standing




·700 x 6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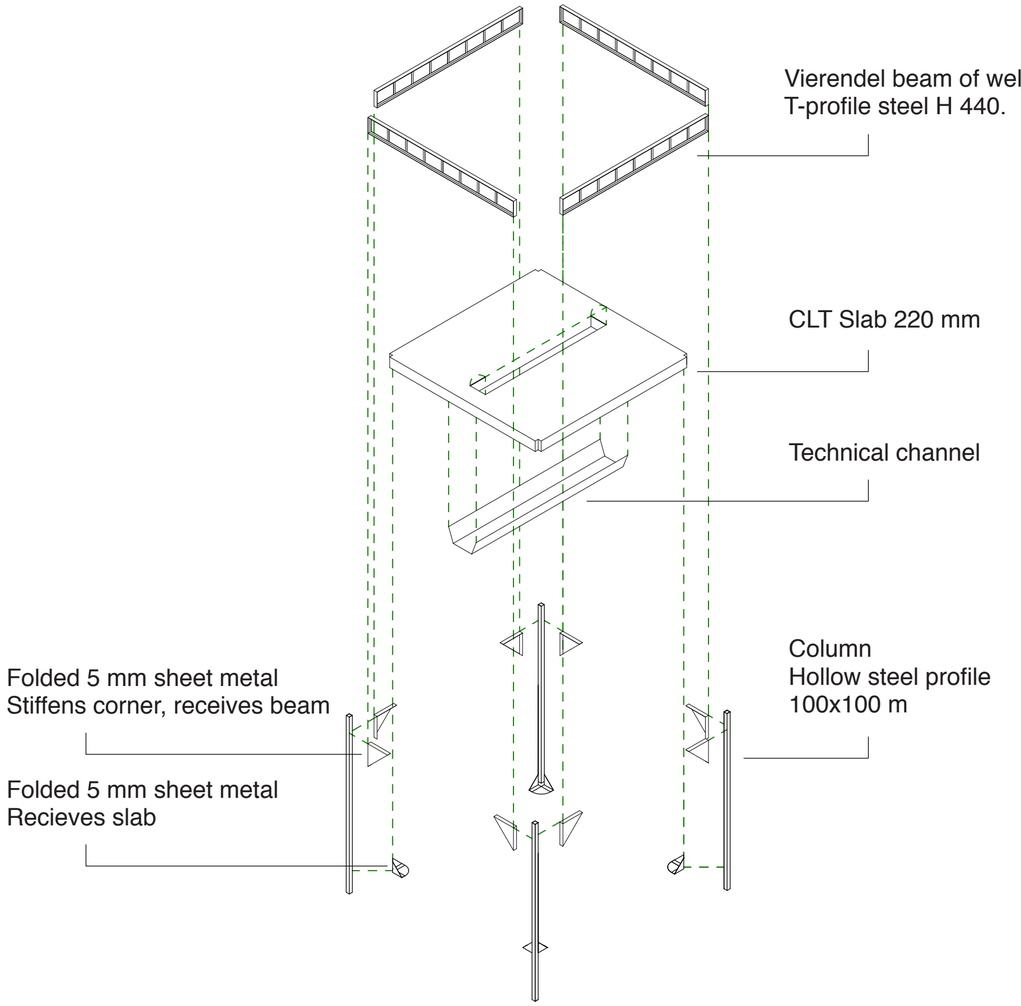
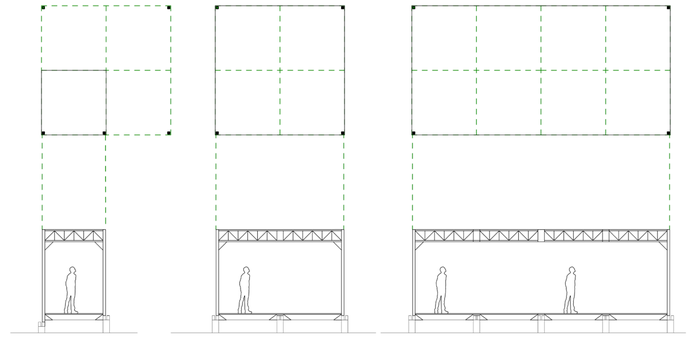
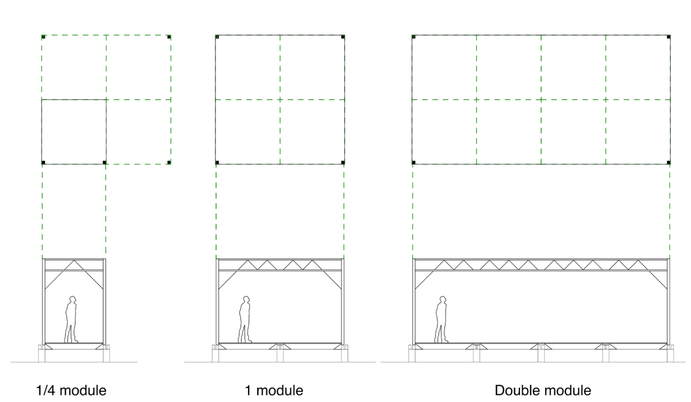
profilbrak
– Ibjelke – ca 25 – 30 cm
35 – 40 – taguera
1:20 prop.


Vierendel beam of welded
T-profile steel H 440.
CLT Slab 220 mm
Technical channel
Column
Hollow steel profile
100x100 m
Folded 5 mm sheet metal
Stiffens corner, receives beam
Folded 5 mm sheet metal
Recieves slab


1/4 module
1 module
Double module


1/4 module
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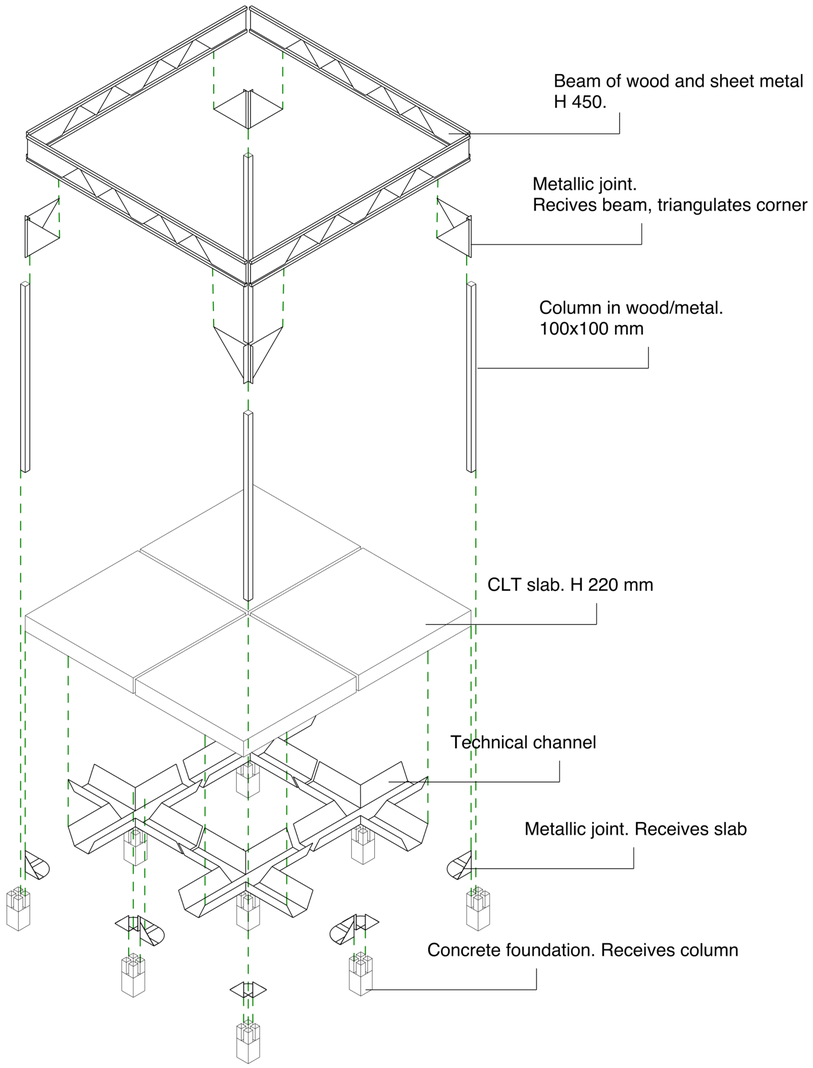
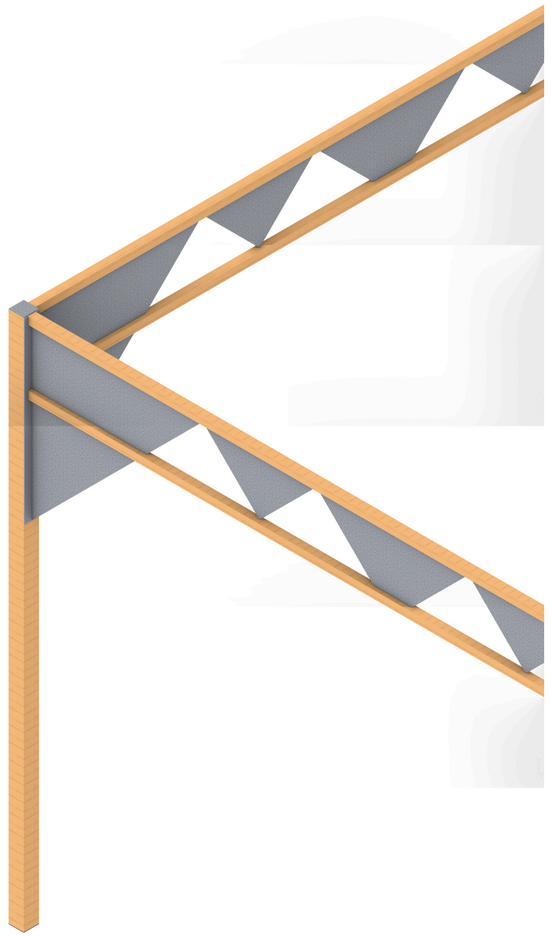
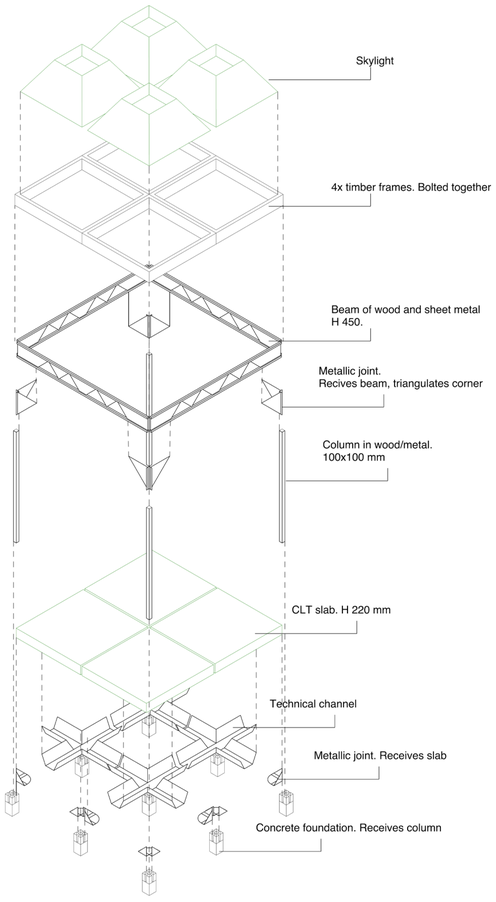
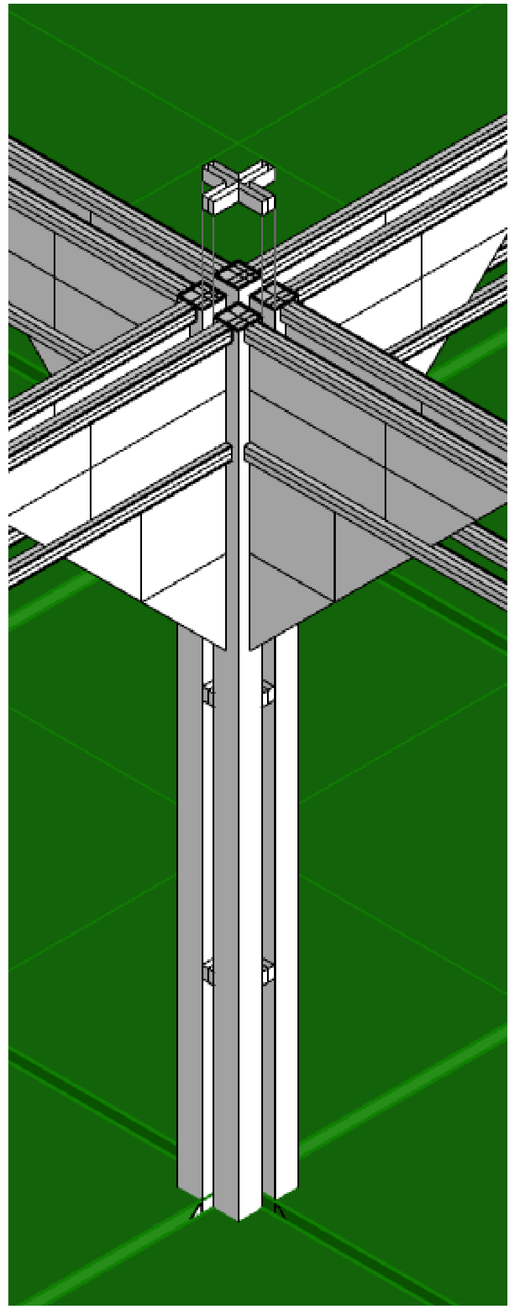
Double module


Beam of wood and sheet metal
H 450.
Metallic joint.
Recives beam, triangulates corner
Column in wood/metal.
100x100 mm
CLT slab. H 220 mm
Technical channel
Metallic joint. Receives slab
Concrete foundation. Receives column

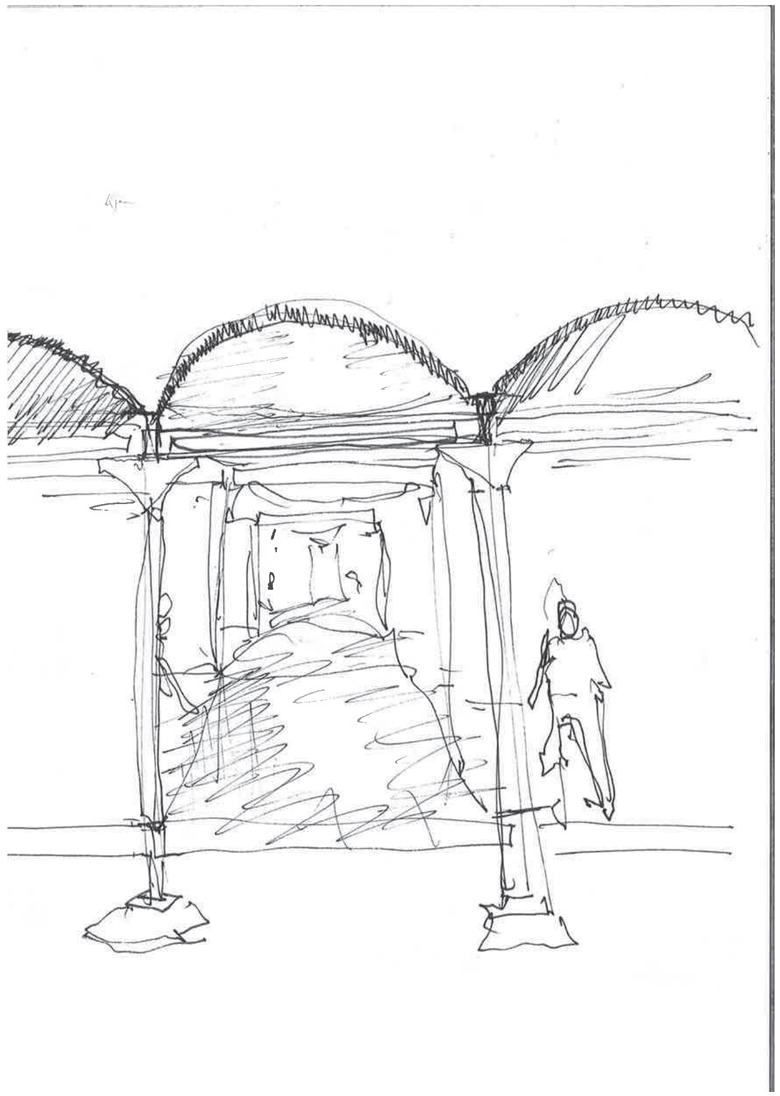


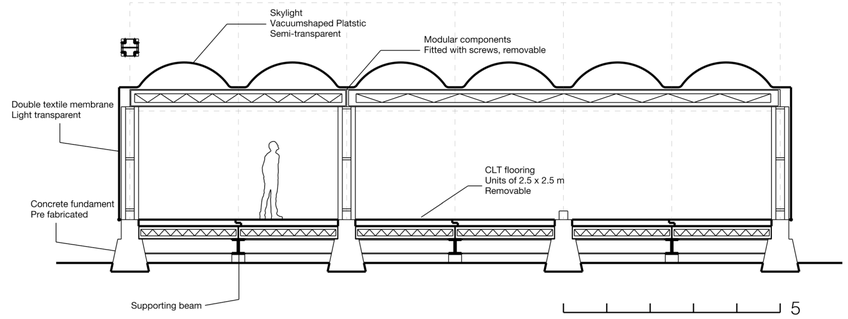


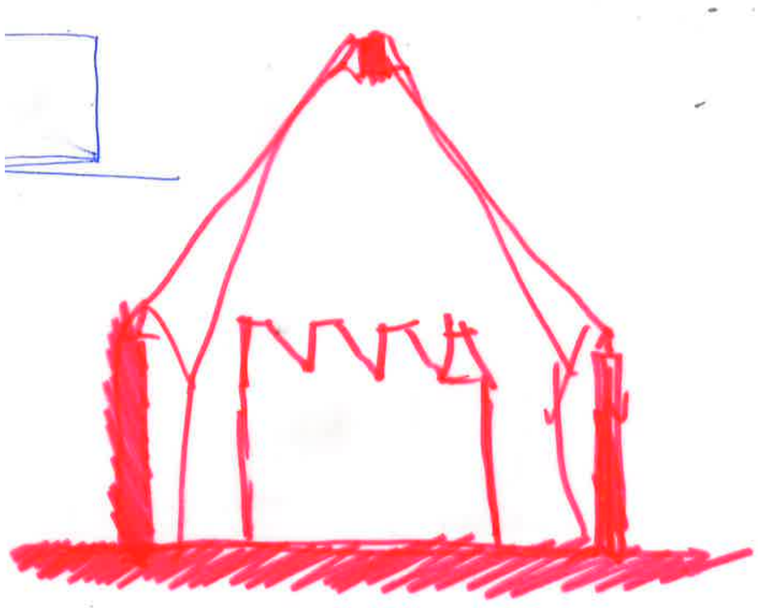
General structure
Specific intervention

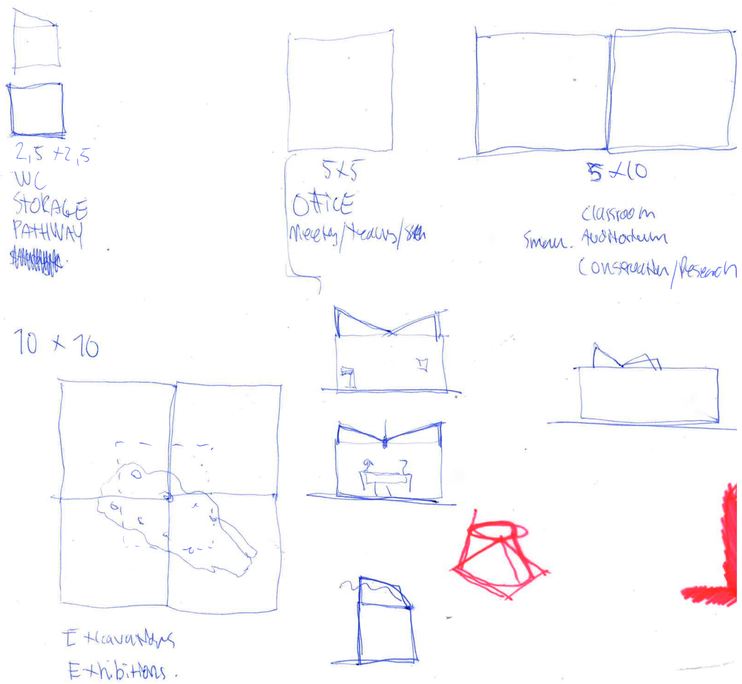


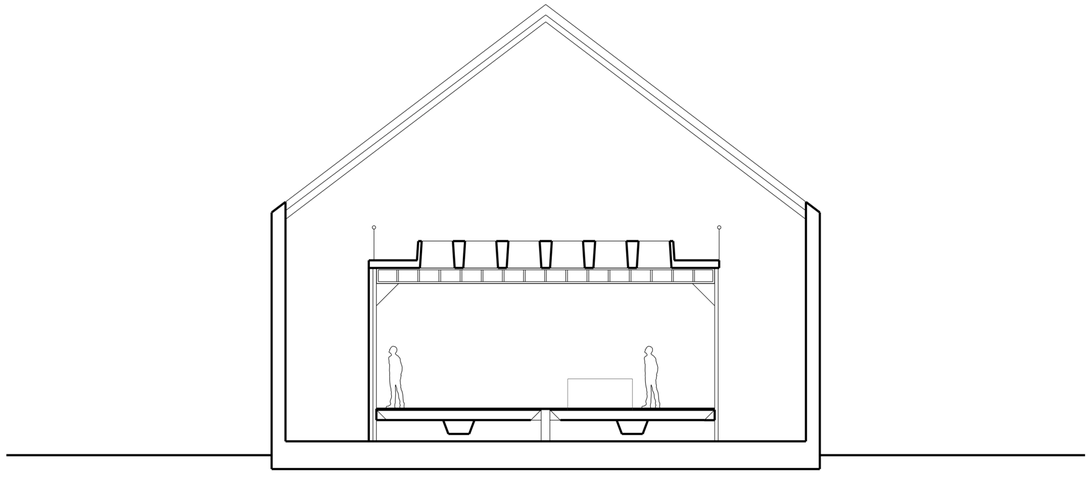
Bouquet of columns



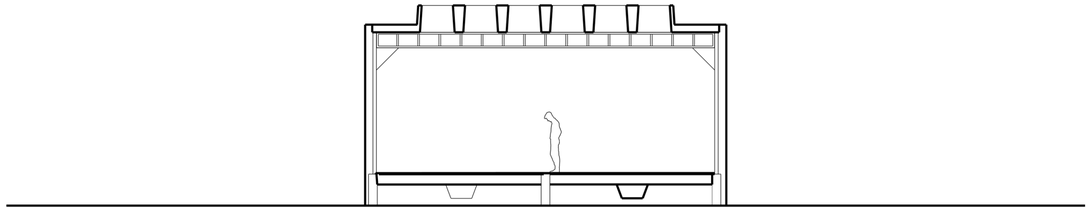

Skylight
Vacuumshaped Platstic
Semi-transparent
Modular components
Fitted with screws, removable
Double textile membrane
Light transparent
CLT flooring
Units of 2.5 x 2.5 m
Removable
Concrete fundament
Pre fabricated
Supporting beam
5



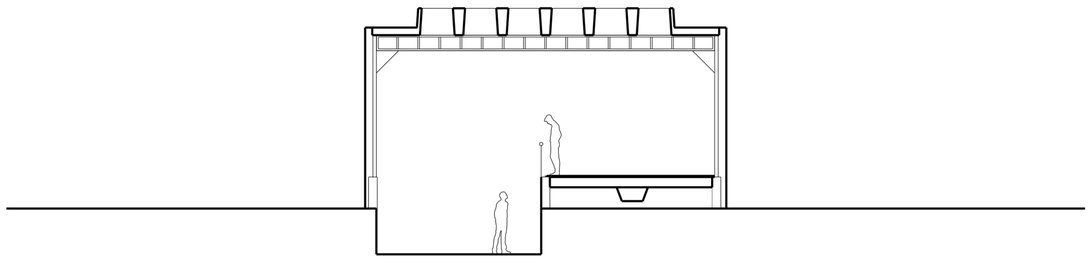




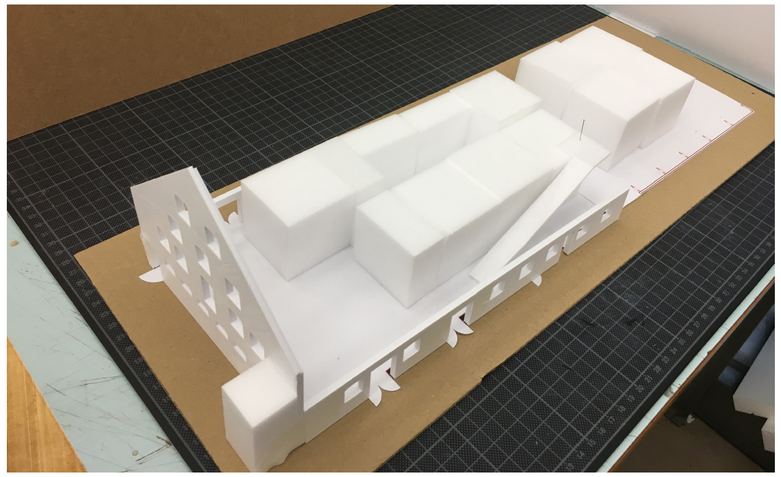
Inhabitating existing structure

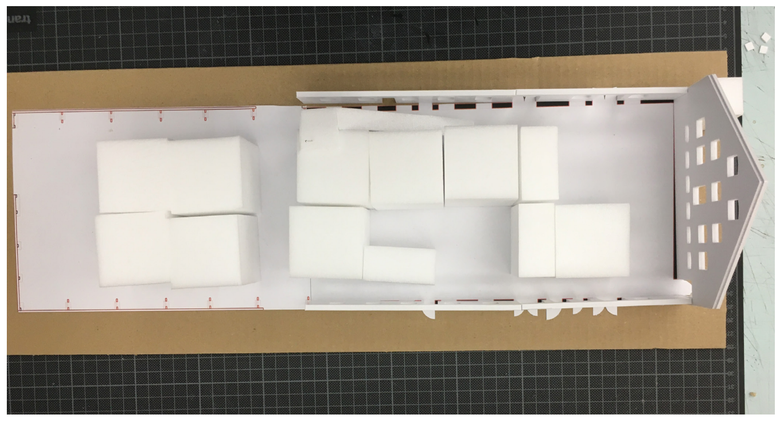


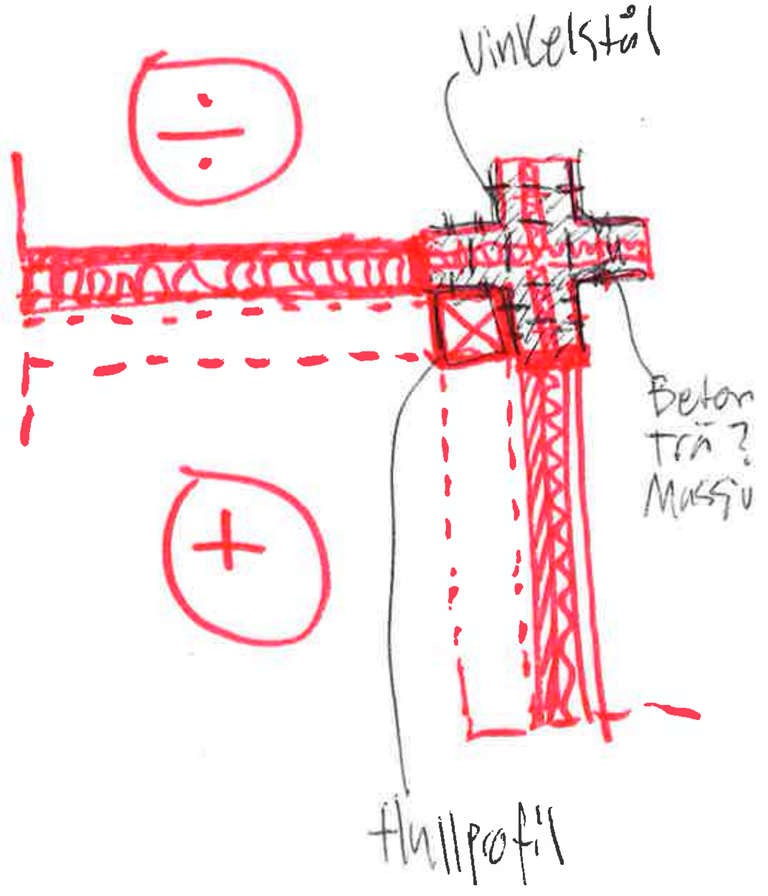
Walking hall



Floor removed for excavations






Vinkelstål
Betor
Trä ?
Massiv
fullprofil

Sightlines
Studies

Church
Hednic temple placed on the same spot as today's church. New church symbolizes the rise of christianty, which coincedes with the demise of the iron age society. The place of the church, on the highest point in the landscape, explains choice of location for iron age society: a strategic, easily defendable platou overlooking it's surroundings

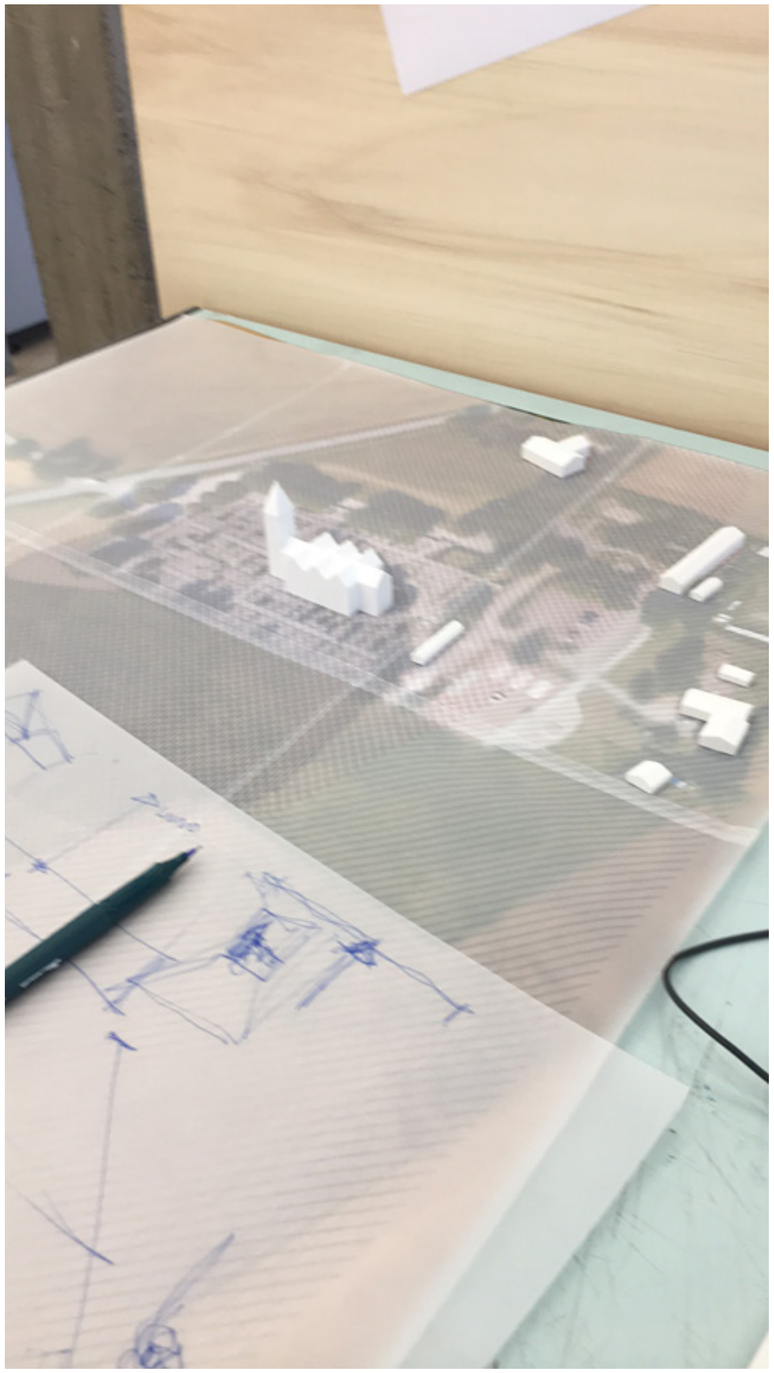
Lund
When the history of Lund begins, the story of Uppåkra ends. The view of Lund tells the story of iron age society's rise and fall: once it was a regional power center, while Lund didn't even exist.

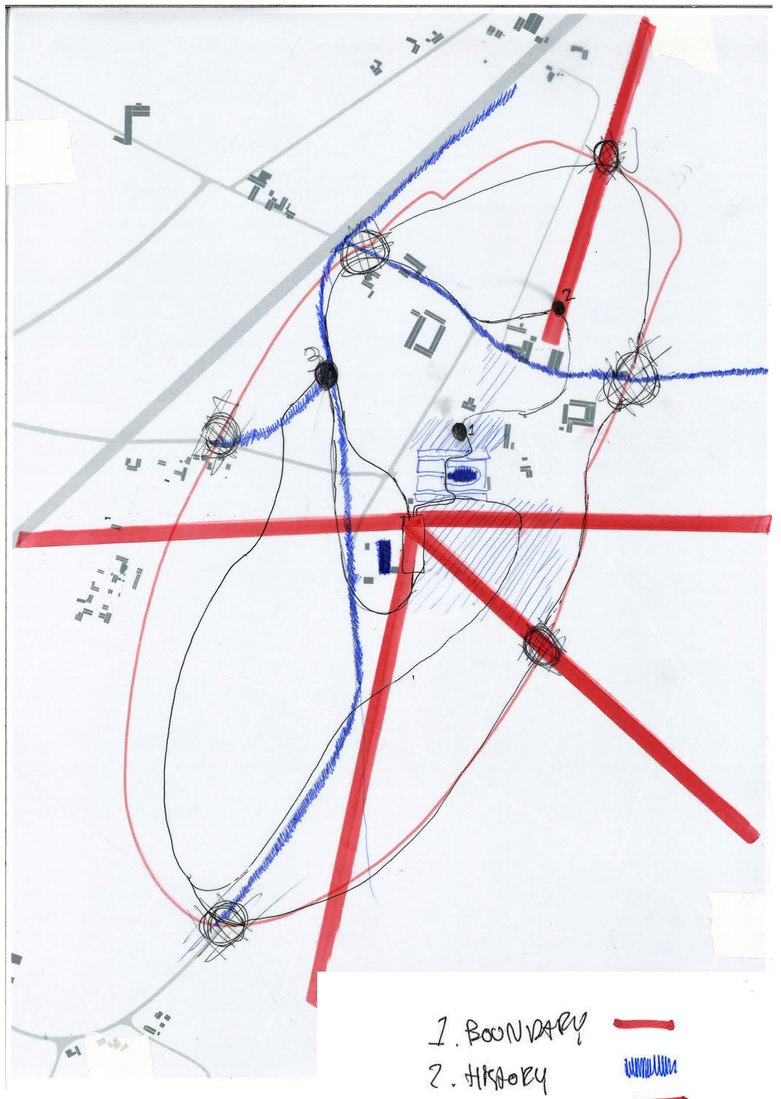
Agricultural landscape
The cultivated fields tells the story of Skåne's fertile earth, the main industry in Uppåkra both today and in the past. This view connects the historic Uppåkra with the present, as the main character of the landscape hasn't changed. Even some of the crops are the same today as it was a 1000 years ago.

Gullåkra Bog
This view tells the story of the ritual and religous cirumstances in the iron age, as Gullåkra was used as a sacred place for sacrifice.

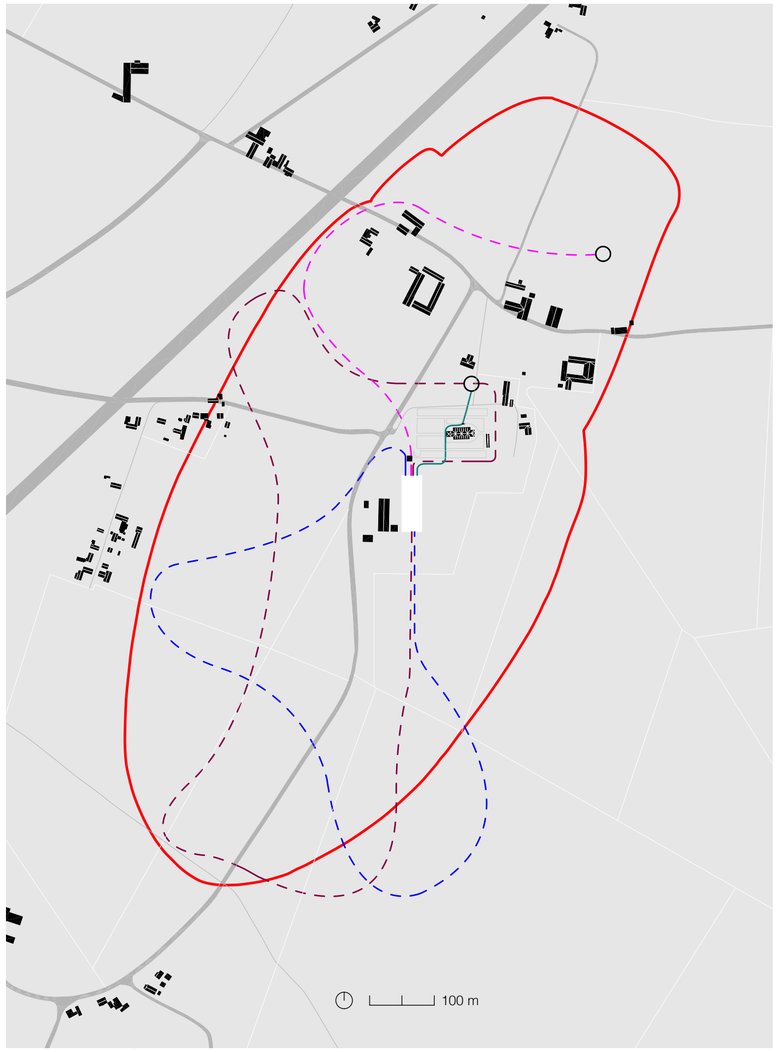
Öresund straight
Öresund tells the story of how Uppåkra was under Danish rule when the iron age society reached it's peak. The view also frames how Uppåkra was a regional centre for trade, as the proximity to the sea connected the place to the rest of the world

Malmö
Malmö is the story of the future, a view of a region that is increasing contacts with Copenahgen and continental Europe - a story similiar to the one of Uppåkra?




1. BOUNDARY
2. HISTORY
3. STRUCTURES
4. INTERSECTIONS
=
5. Connections make walking paths.

Theoretical, existing and historical layers superimposed on eachother. Points of intersection marks spots for watch towers, and set a route for walking paths.



Additions

Visitors Center

Walking trails

Watch tower

Theoretical

Intersections

Sightlines

Historic roads

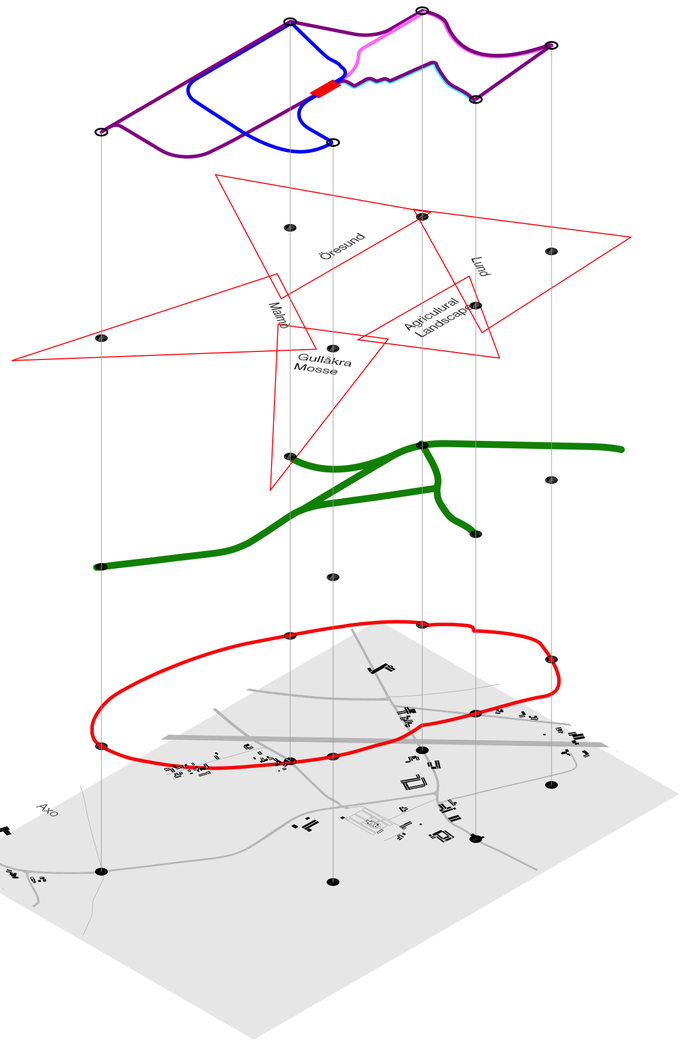
Boundary archeoligcal site

Existing situation

Surface

Buildings

Current roads



Walking trails

The visitors center is connected to walking trails that spreads out around the archeological site. Each trail has it's own theme, and connects to different points in the landscape. These points have all their own historical importance, thus telling it's own story of Uppåkra's history to the visitor. The trails have different length, from a short 30 minute walk, to a longer 2 hour hike. As all trails runs through the visitors center, the visitor can be "breifed" about the site through information, exhibitons and the framed sightlines in the center, thus mediating the site and enriching the experience for the visitor.

Trail 1 (30 minutes) Religion
Explore the development of religion from the Old Norse culture to Christianity.

Trail 2 (1 hour) Timetravel
A walking timetravel: explore the different periods of history (iron age, medival, current).

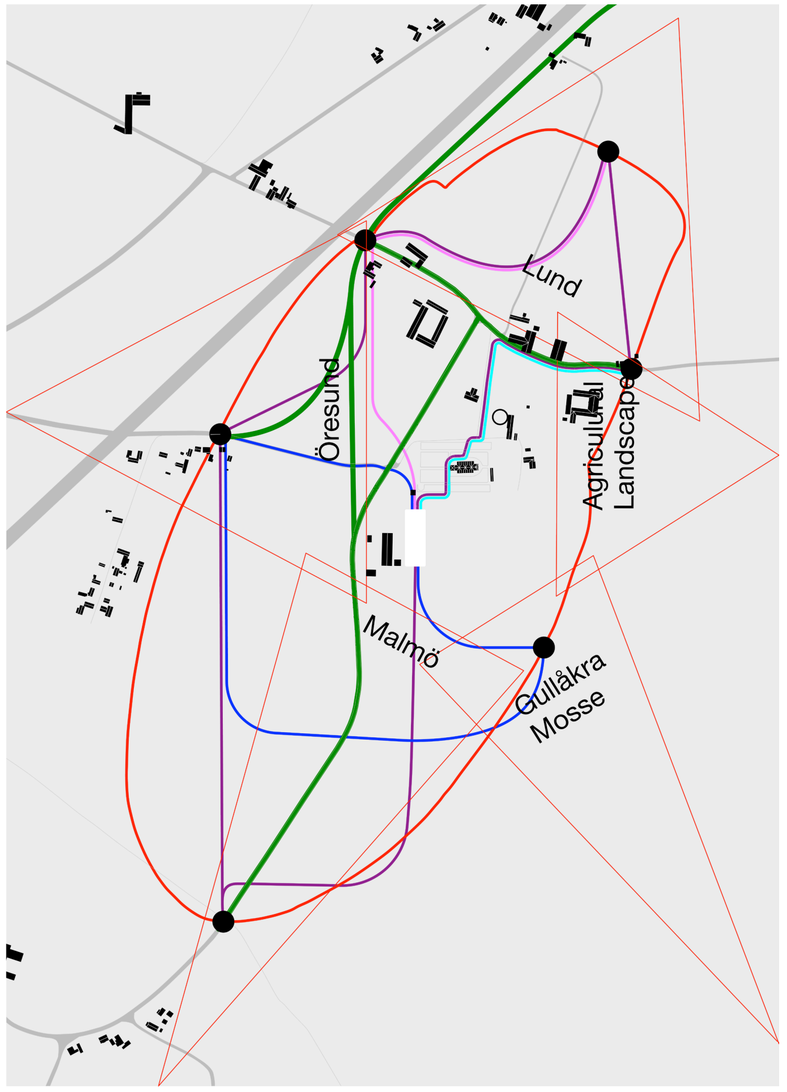
Trail 3 (2 hours)
Investigate the geography of Uppåkra,

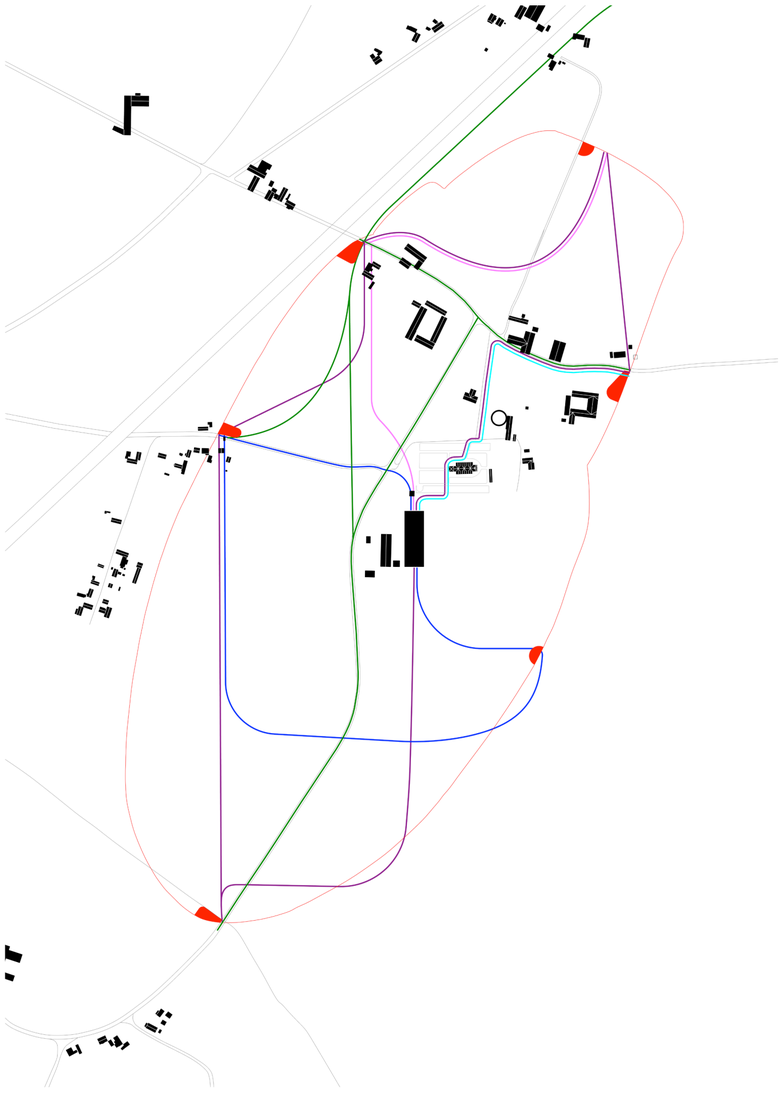
Trail 4 (2 hours)
The complete tour, suitable for biking.

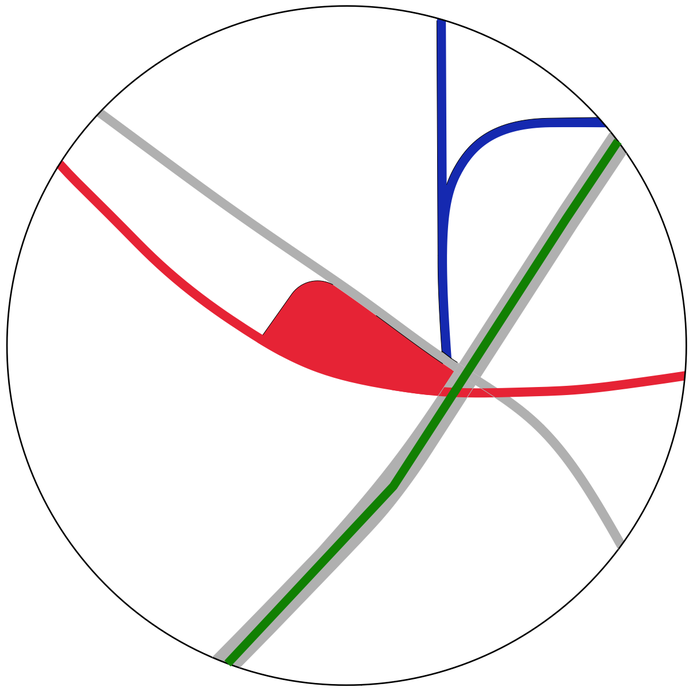
The trails are enabled by walking bridges marking the route. They are light constructions that can easily be added, re-directed or taken away. When passing over a theoretical layer, such as an historic road, the materiality of the walking bridge is changed with the intention of mediating and visualising the history of Uppåkra.

Watch towers

The watch towers are placed on the points of intersection between the different layers. Practically, they link the walking paths together, and offer a place for rest, contemplation and information about the place for the visitor. As placed objects in the landscape, they are oriented towards a specific sightline, as well as in the axis of the framed views from the visitors center. For anyone passing by, their placement, aligned with the boundary of the archeological site, reveals the importance of the place.







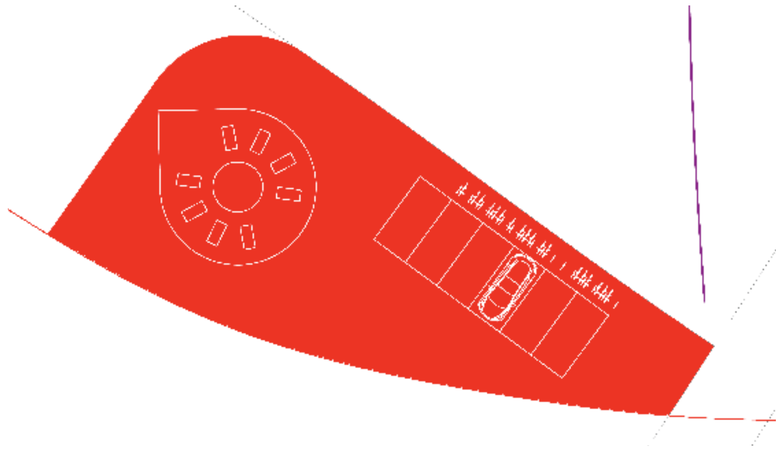
Historic roads

Boundary archeoligcal site

Current roads

Walking paths

Starting point



Placement
Investigation

The main road is acting as a barrier, dividing the site in three parts (A, B, C). As the visting center contains mixed use with existing church, proximity to the church is required in order to fulfilll functionality. Also, the possibility of incorporating historical elements, such as the burial mounds, is to be considered. The church, the burial mounds and the vicarage farm are all placed in part C. Thus, locations in part C is to be considered.

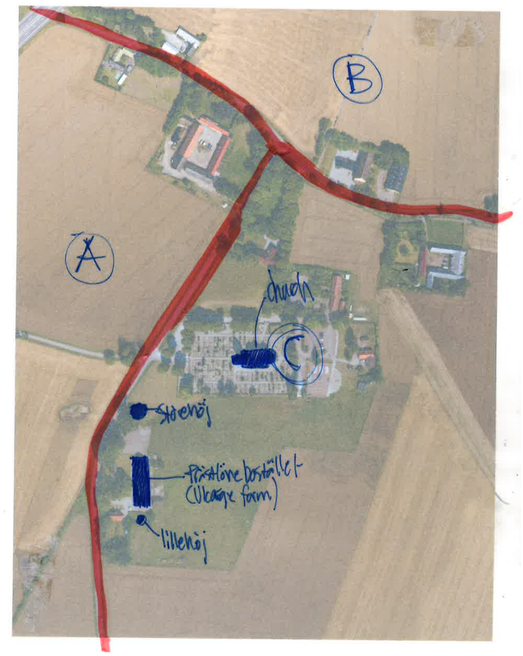
1. Vegetation around an open field forms an enclosed grove-like space. Placement in the middle of the medival village puts demand on new center to be morphologically incorporated to structure of village. Site offers clear sightlines of Lund. The enclosed nature on the site puts limits on possibilities of future expansion.

2. Similiar conditions as option 1. Has no clear sightlines.

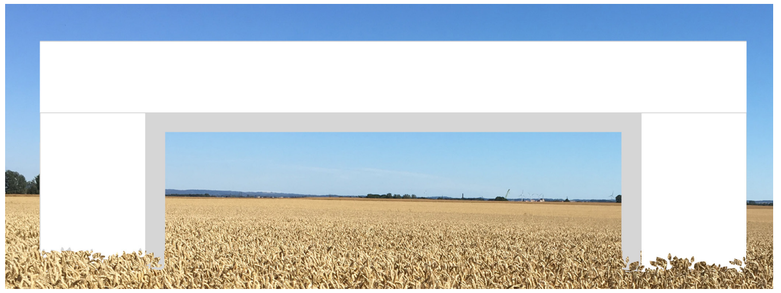
3. Connects to axis of church, enabling easy incorporation of mixed program. Site has low depth of cultural layers, making it easy to construct upon and demands little adaption of design, however this also Exisiting villa with no historical nor architectural value needs to be demolished to make room for new center.

4. Site connects to existing church and grid of churchyard. Placement could possibly be too close to the church and activity in new visitors centere could interfere with people visiting the cementary, which should be respected as a peaceful place for rest and mourining. Proximity to church gives potential that morphology in new visitors center refers to existing church and thereby strengthens sense of place. Has sightlines in most directions, apart from towards Lund which is blocked by church. Proximity to archeological excavations gives potential for incorporation in center. Thickness of cultural layers limits some design options (for exampe placing functions below ground), but this can also be seen as a potential to be responded in design of building. Has space for future expansion.

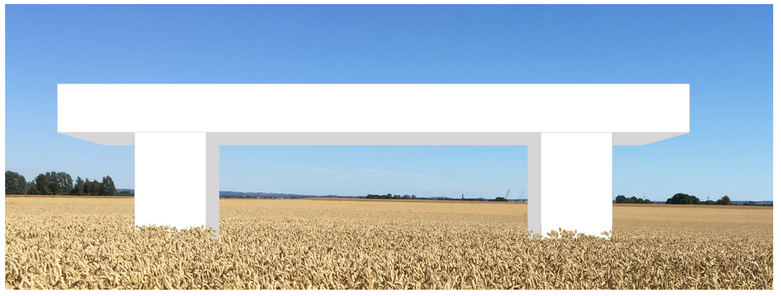
5. Potential to have a shared arrival with the church, stenghtening the established motif of entrances framed by trees. Potential to incorporate existing Vicarage Farm (transformation, reducing the footprint of new building) and the two burial mounds in new visitor center, strenghtening historical connection. Site offers sightlines in most direction, apart from to Lund which is blocked by trees. Has space for future expansion. Thick cultural layers increases potential for incorporating excavations into new building, but also demands a response in design (as in optiion nr. 4).

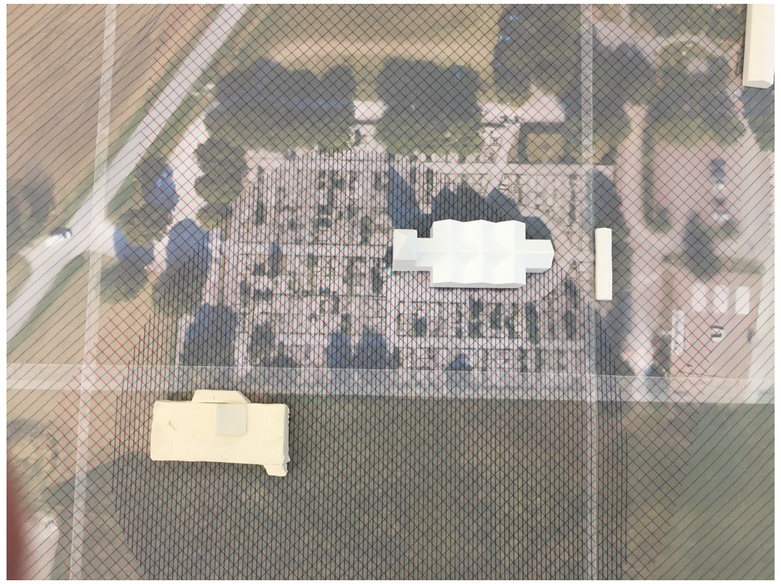


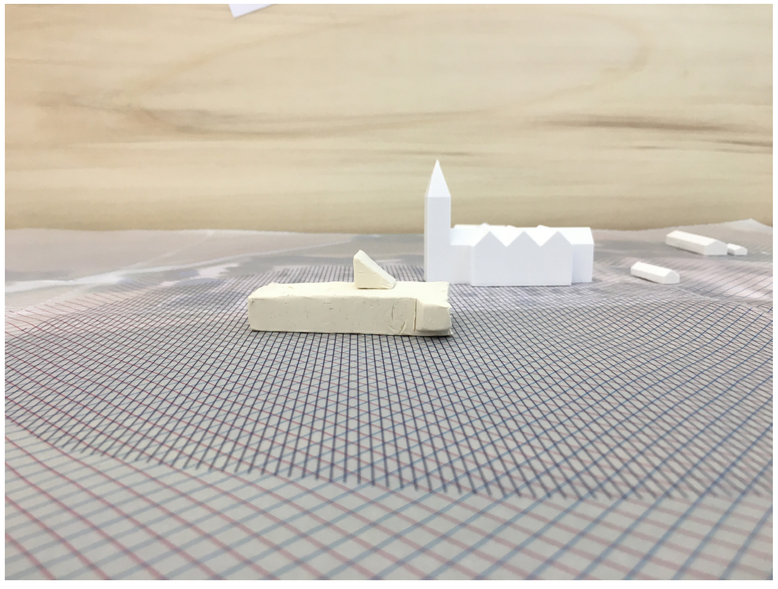
Existing scene. View towards east.

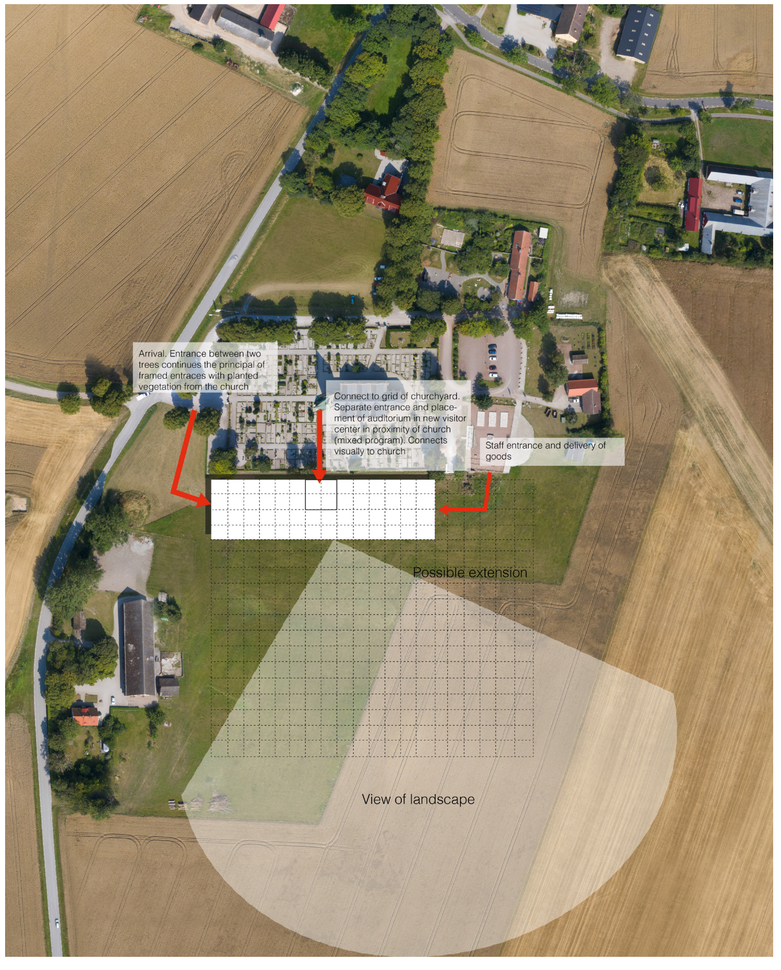


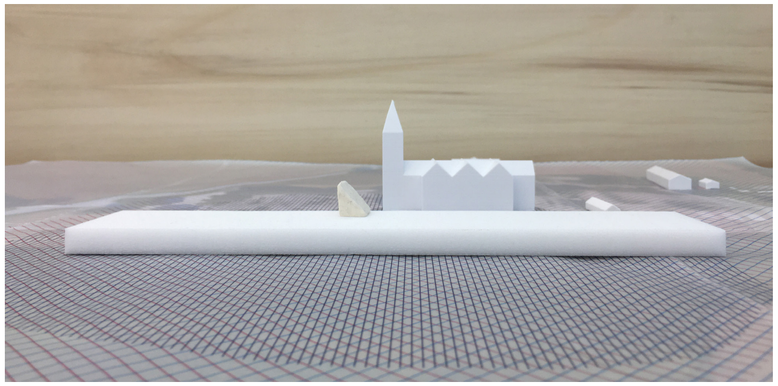
Big scale: building itself frames a portion of the landscape








Arrival. Entrance between two trees continues the principal of framed entraces with planted vegetation from the church
Connect to grid of churchyard. Separate entrance and placement of auditorium in new visitor center in proximity of church (mixed program). Connects visually to church
Staff entrance and delivery of goods
Possible extension
View of landscape

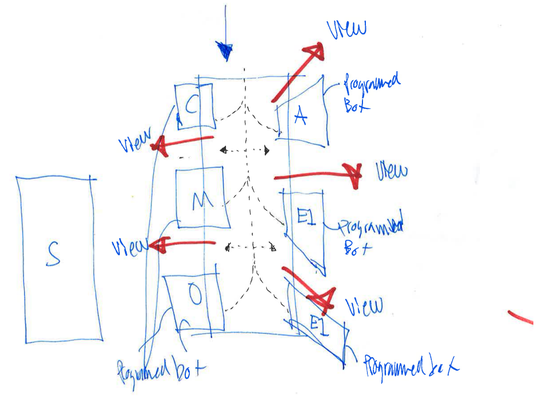


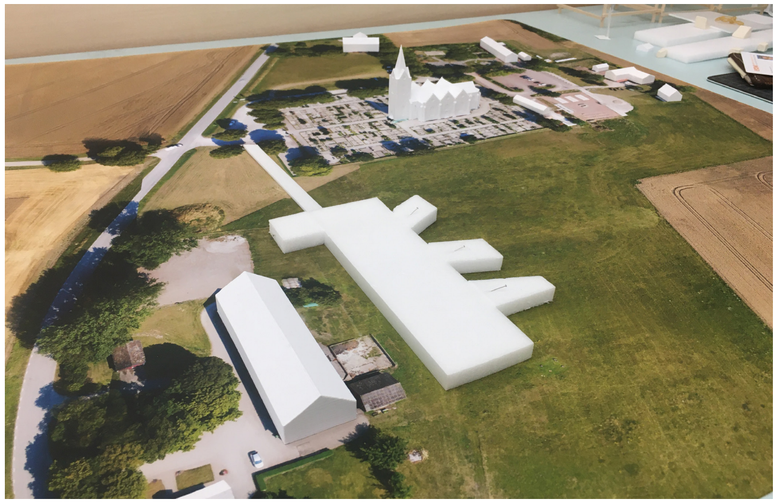
Volume study: maximum building envelope, one story with 5 m height.

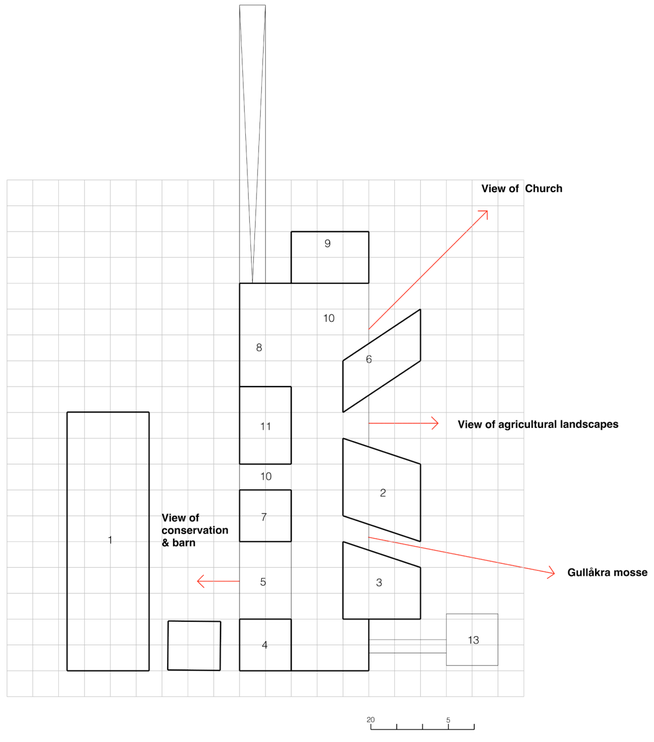
Concept

Sightlines are framed by programmed boxes, letting the visitor roam free between functions and views of the landscape. The programmed boxes are giving a specific shape in order to frame a given view.

Disadvantage: The potential for future expansion is reduced, as the shape of the programmed boxes makes them less adaptable for a modular system. Investigation for other solution for expansion is required in order to meet this criteria.



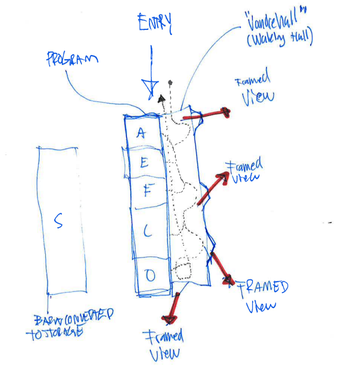


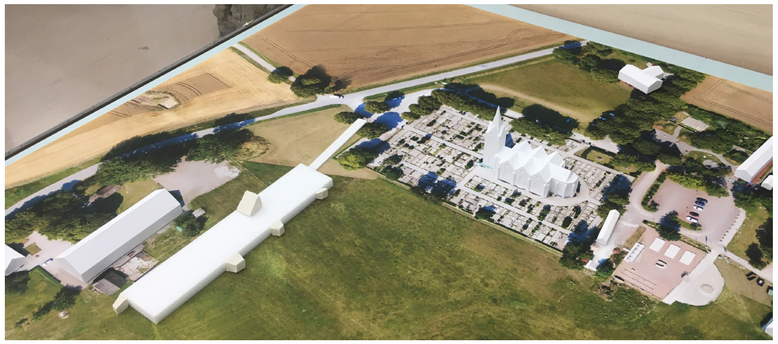


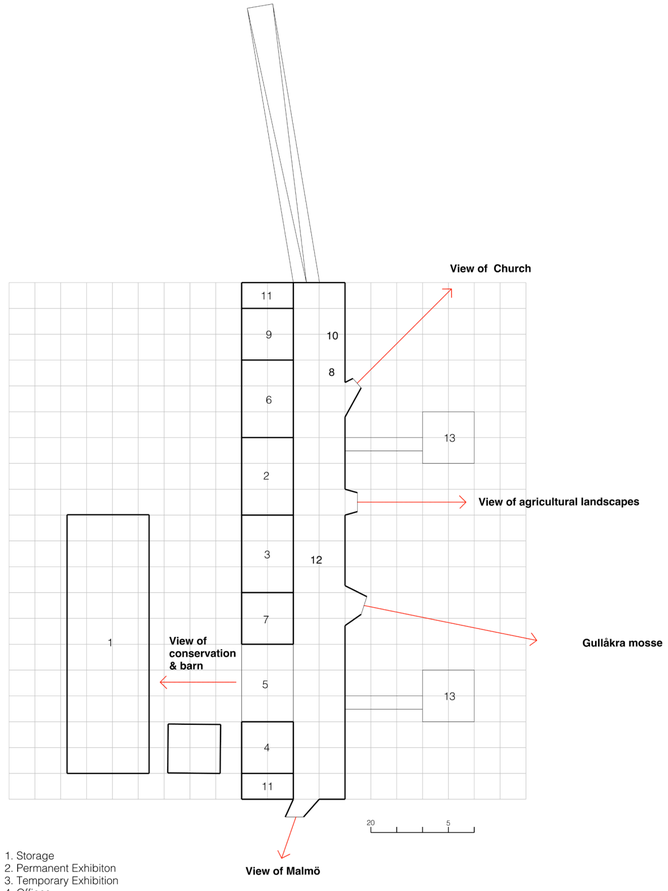
1. Storage
2. Permanent Exhibiton
3. Temporary Exhibition
4. Offices
5. Conservation
6. Auditorium
7. Educational
8. Reception/information
9. Cafe
10. Shop
11. WC
13. Excavations

Concept

Circulation is condensed into one ”walking hall”, separating the served from the servant spaces. The walking hall contains framed view of sightlines that each has a story to tell about the site and its history. The framed views are articulated trough specific interventions in the wall. The grid is laid out on the site proposing possible extensions. The excavations are connected to the ”walking hall” with walking bridges.







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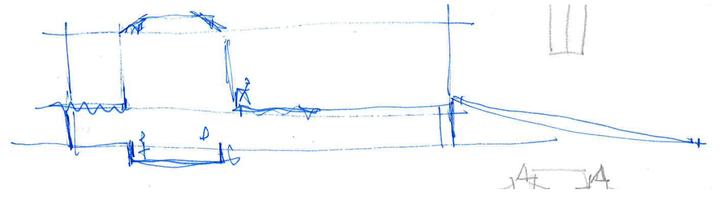
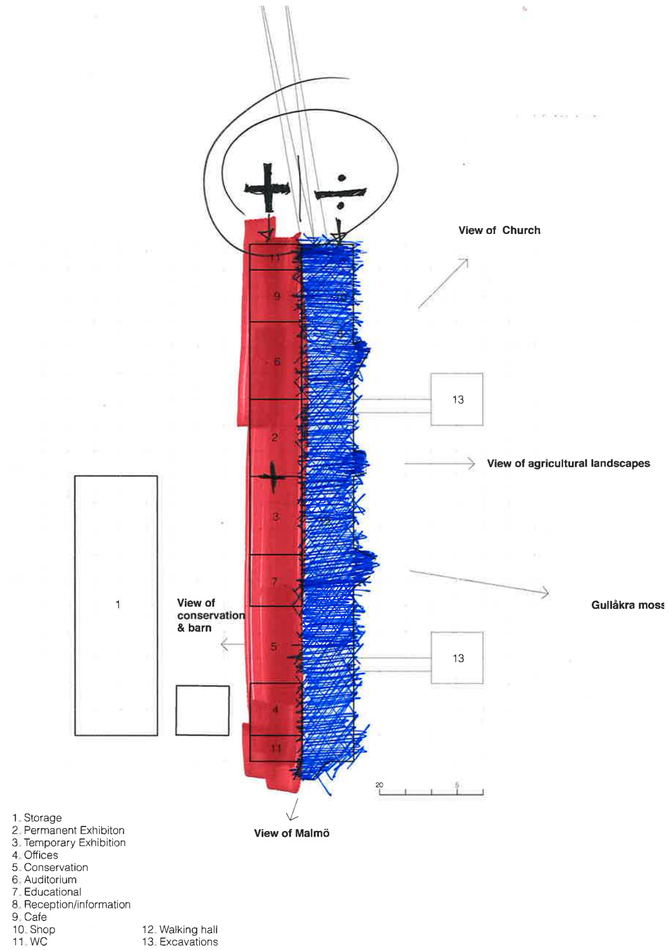


Section: floor can be removed, bringing the excavations into the walking hall. Building needs to be lifted above ground for this to function

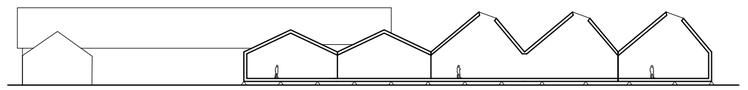


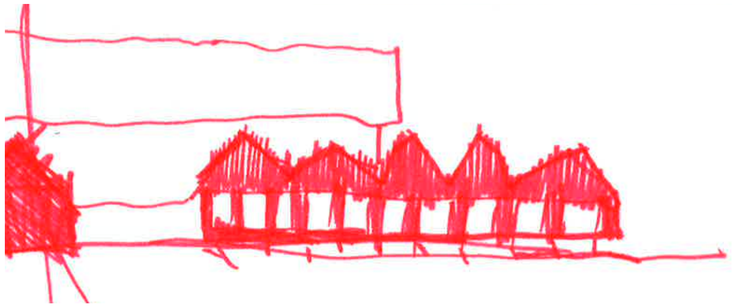
Potential: Walking hall is half-climatized (blue), demanding less of climatic shell and increases possibility of being reduced/expanded, as well as increasing possibility of integrating archeological excavations into walking hall. Functions are fully climatizes (red)

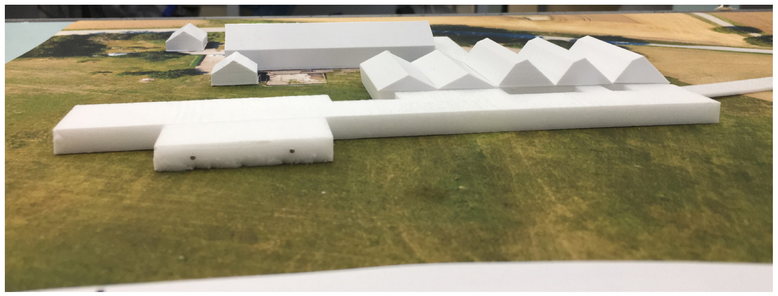
Concept

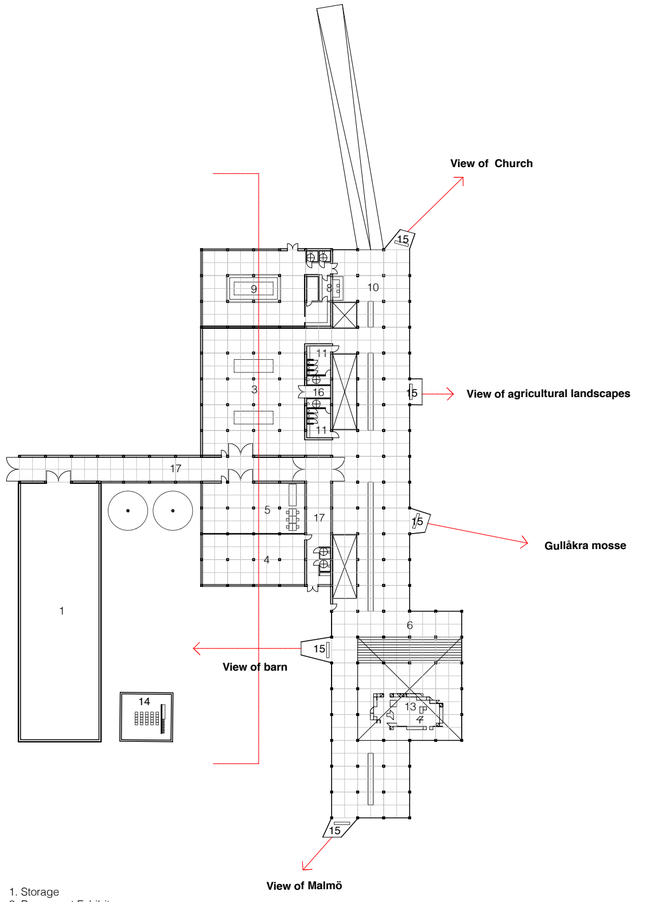
Program is divided into a permanent, fully climatized part, and a flexible half-climatized part. The half climatized part is the ”Walking Hall” where the visitor can freely wander. In the hall, a permanent exhibition takes place, stretching the lenth of the hall, displaying a large quanity of objects. The exhibiton is filled up as more and more of the site is excavated, and the collection of objects grow. The excavation of ”The Cult House” is rep-opened and paired with a small auditorium. The walking hall contains framed view of sightlines that each has a story to tell about the site and its history. The framed views are articulated trough specific interventions in the wall. Then plan is based of a grid of 5x5 meters, connecting the walking hall with the permanent climatized part, as well as regulation the structure for future expansion. The permanent part contains exhibiton room, where fewer, more precious objects that demand a higher degree of climitization are displayed, a cafe and spaces for curation and offices. The spaces of curation have a visual connection with the walking hall, breaking the barrier between front and back of house. The barn of ”Prästlönebostället” is converted into storage for collections, and the adjacent srvice building is transformed to house the archeological school. The storage is connected with the spaces for curation and exhibiton through a wide service alley,

The roof of the permanent part take up the gable roof-shape of the barn and the srevice building, refering to the local typologies. In the exhibiton room and cafe, the traditional roof shape is sightly distorted with a skylight.









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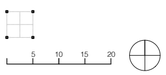
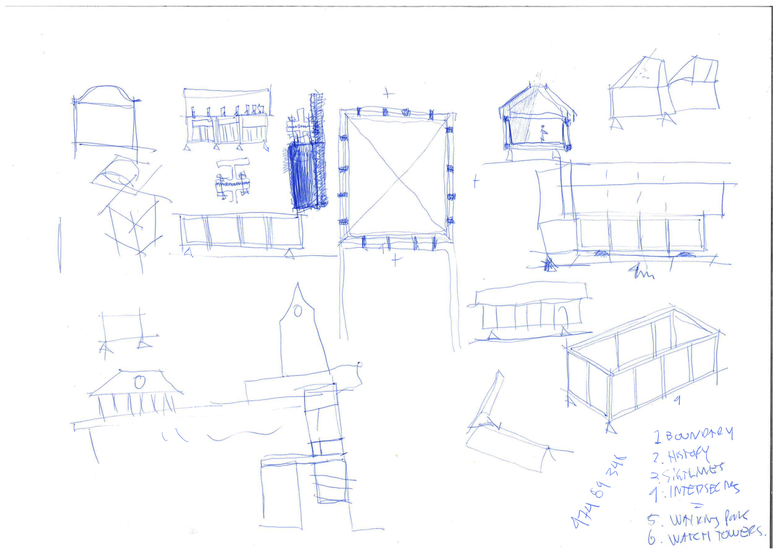
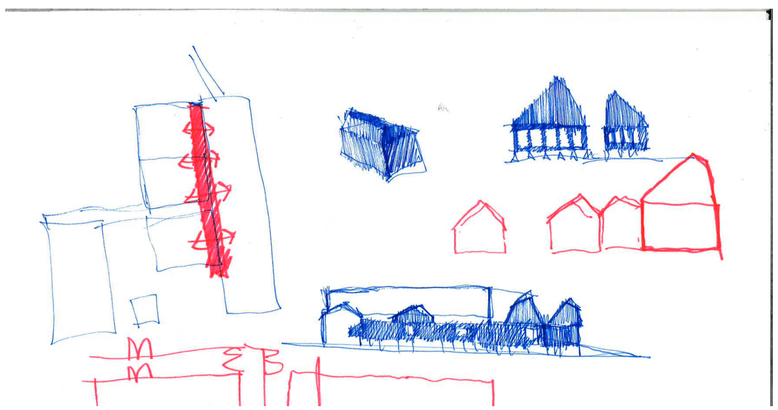
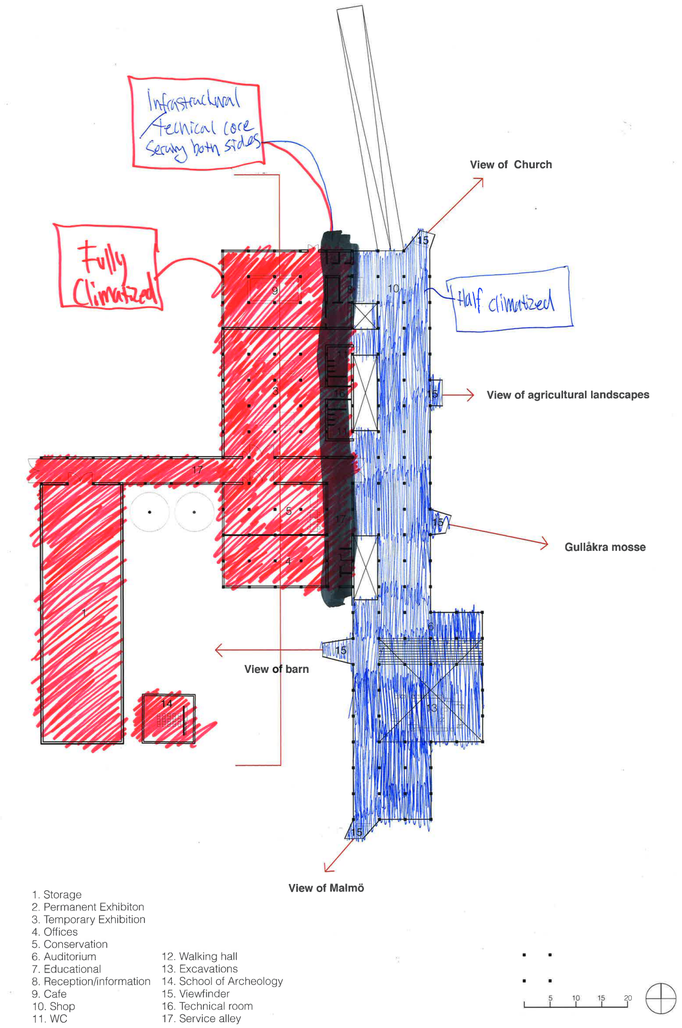
3. Temporary Exhibition
4. Offices
5. Conservation
6. Auditorium
7. Educational
8. Reception/information
9. Cafe
10. Shop
11. WC
12. Walking hall
13. Excavations
14. School of Archeology
15. Viewfinder
16. Technical room
17. Service alley





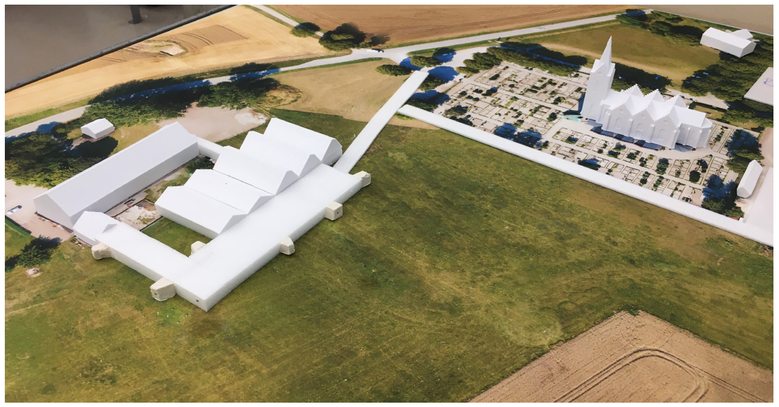


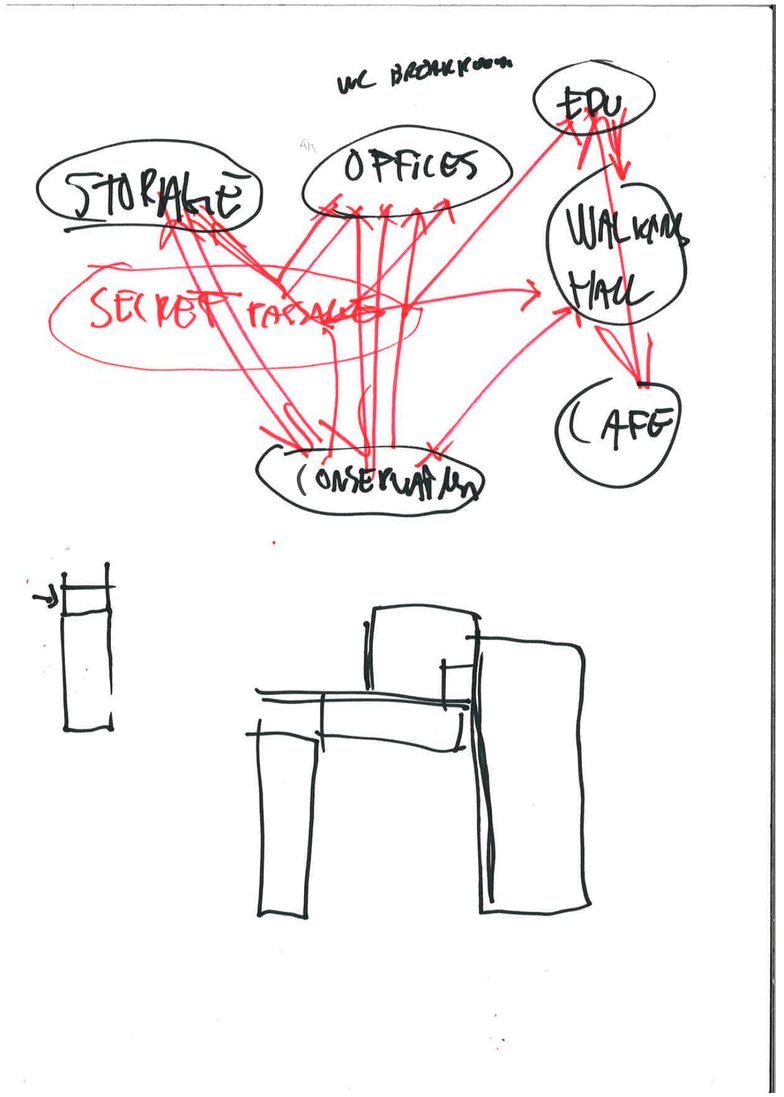


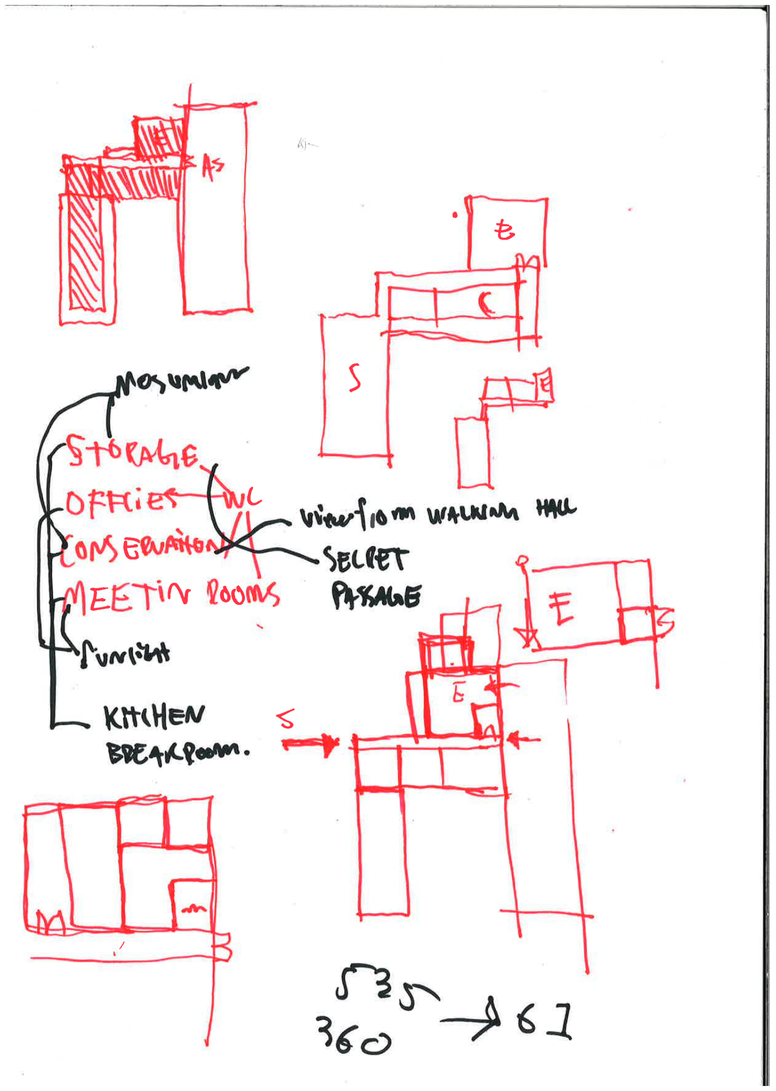
Red marks fully climatized, blue marks half-climatized, black marks infratuctural core (servant spaces) placed in climatized zone but also serving half climatized zone.

Concept

The walking hall extends to the service building of ”Prästlönebostället”, completing a courtyard. The main concept remains the same as earlier mentioned.



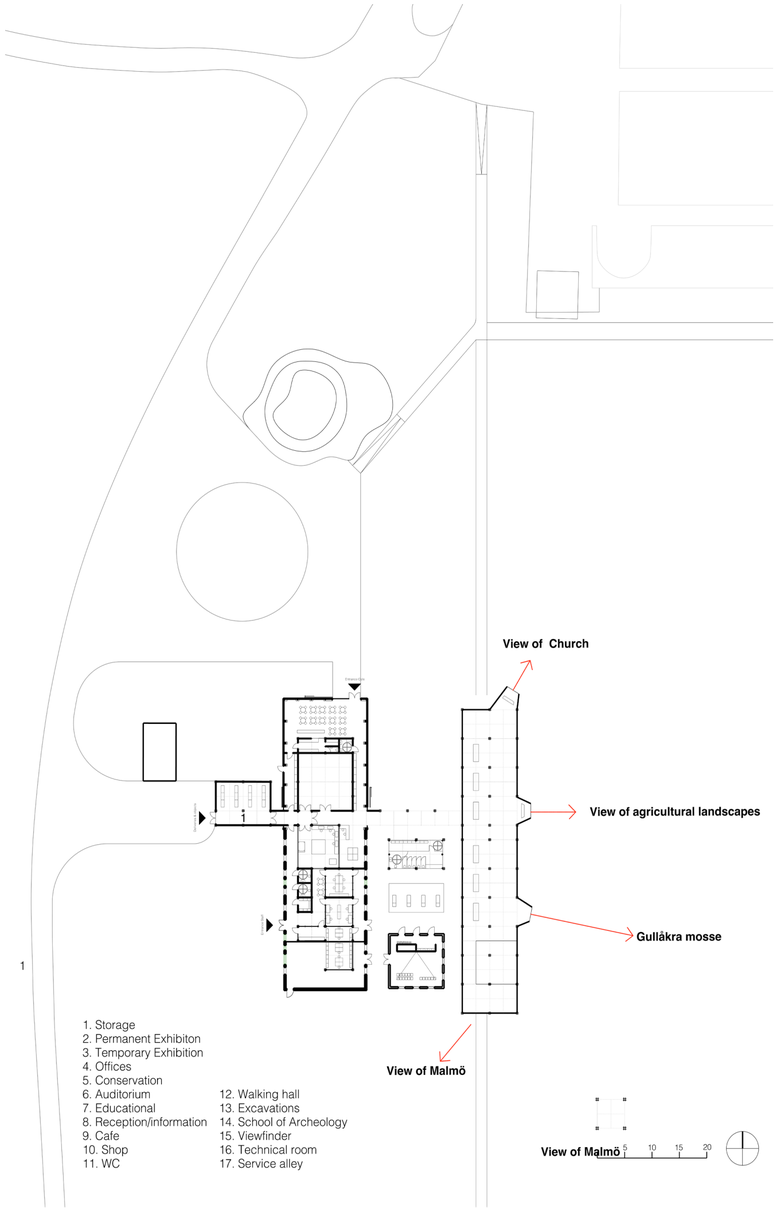


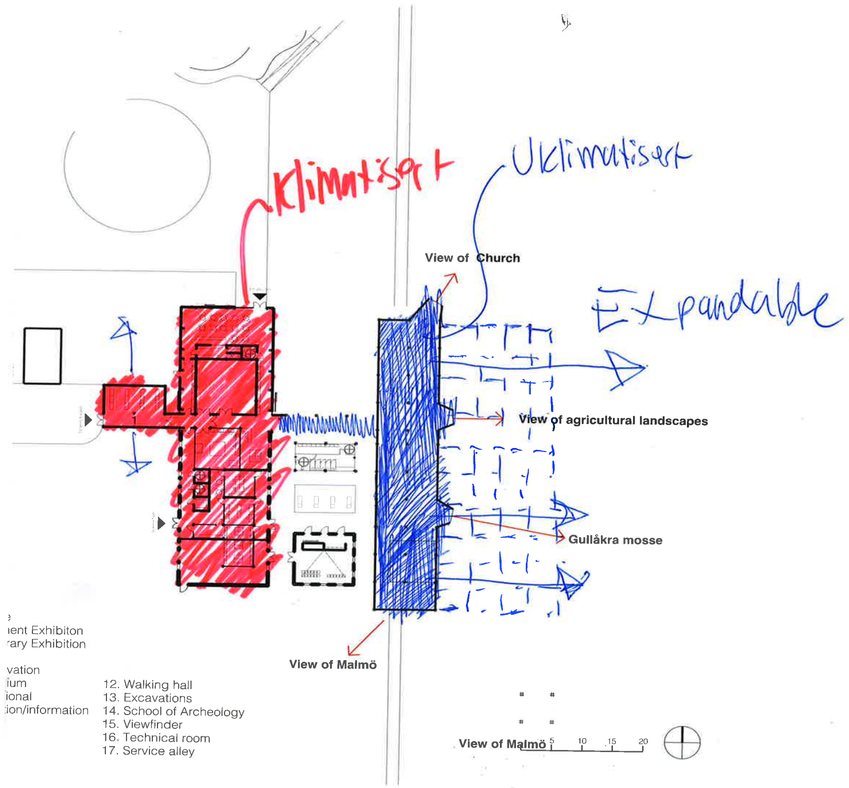


The same constructive system is used to inahbit the barn as in the walking hall.

First built

Future expansion/reduction




Klimatiserat
Uklimatiserat
Expandable
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View of agricultural landscapes
Gullåkra mosse
View of Malmö
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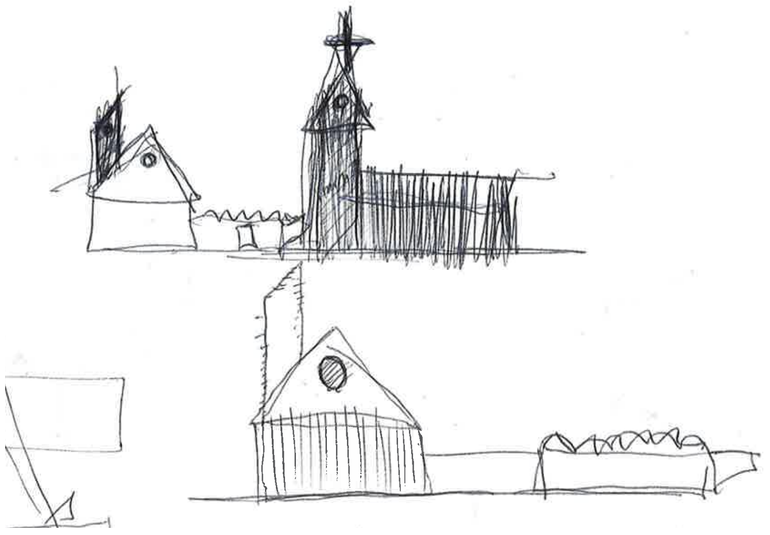
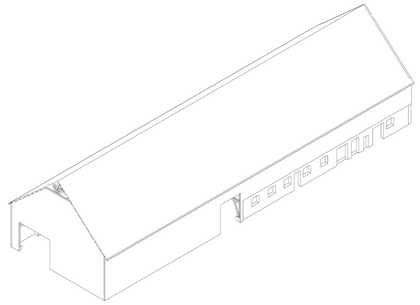
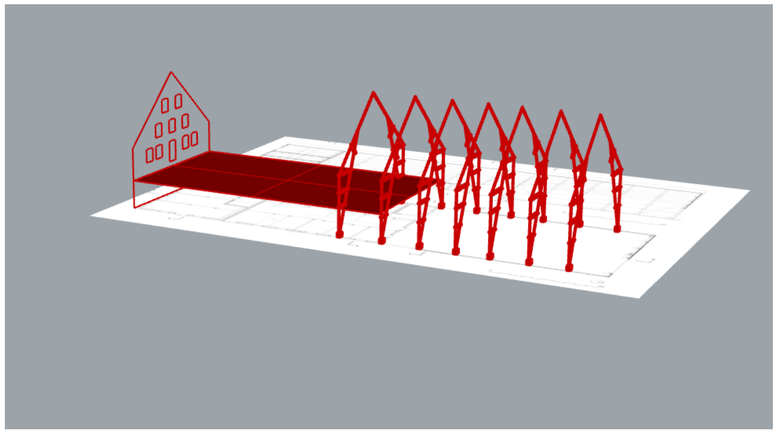
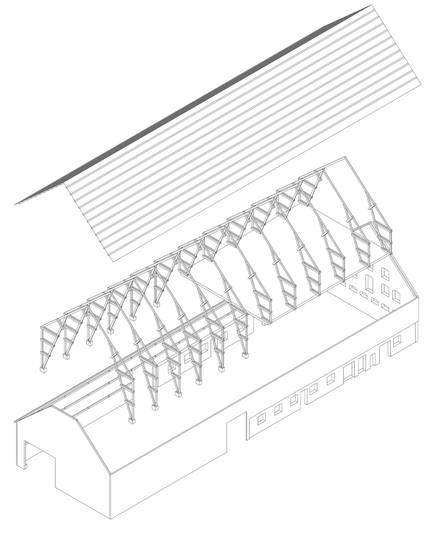
12. Walking hall
13. Excavations
14. School of Archeology
15. Viewfinder
16. Technical room
17. Service alley



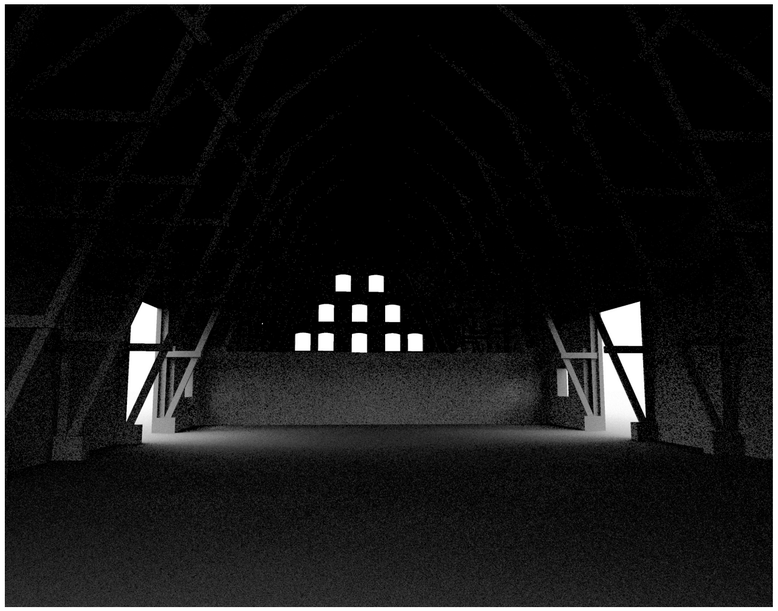


Isometric view

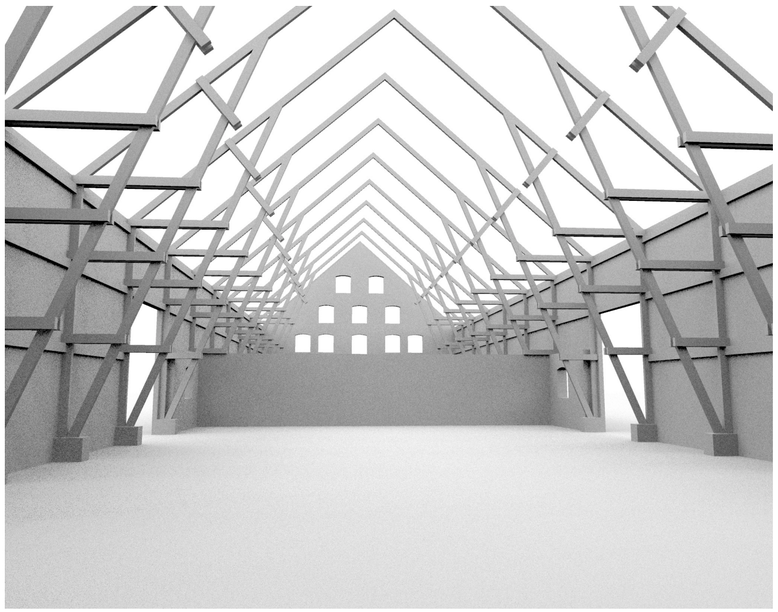




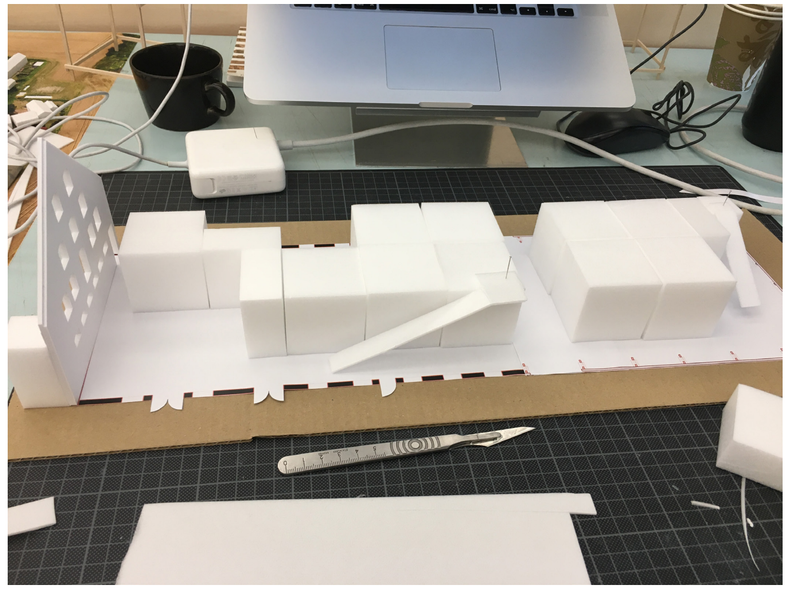
Exploded

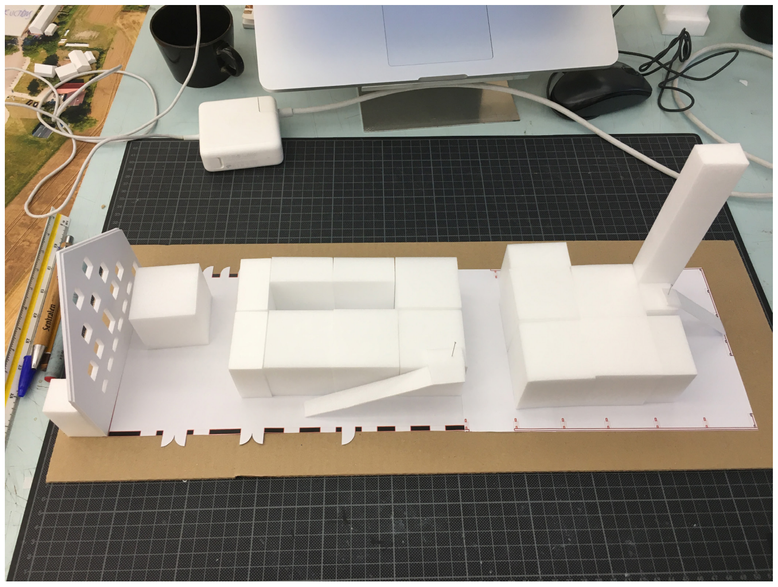


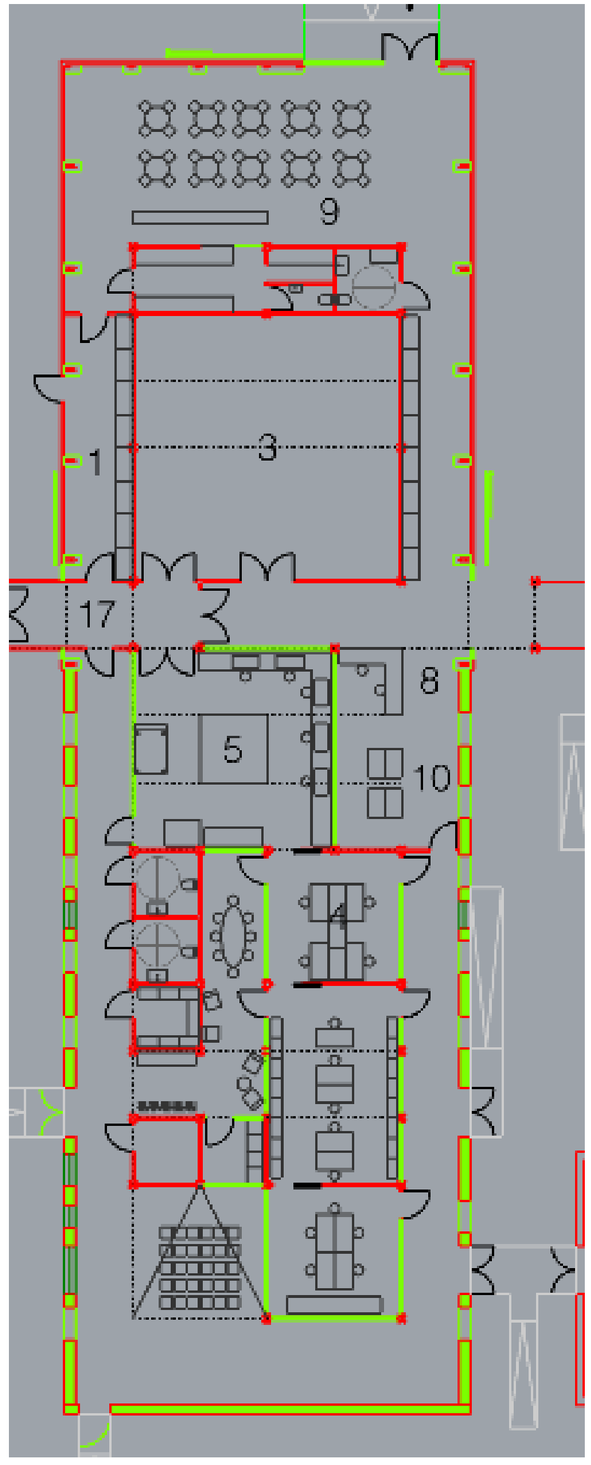
Existing situation



Roof removed - lets in light



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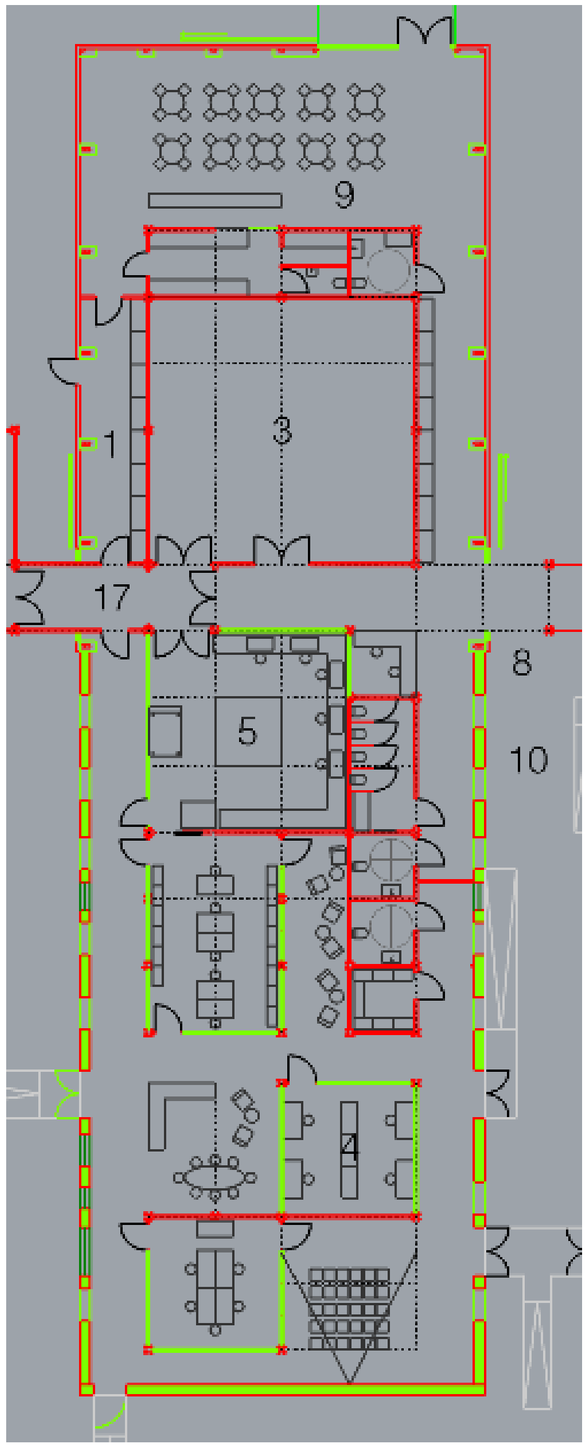
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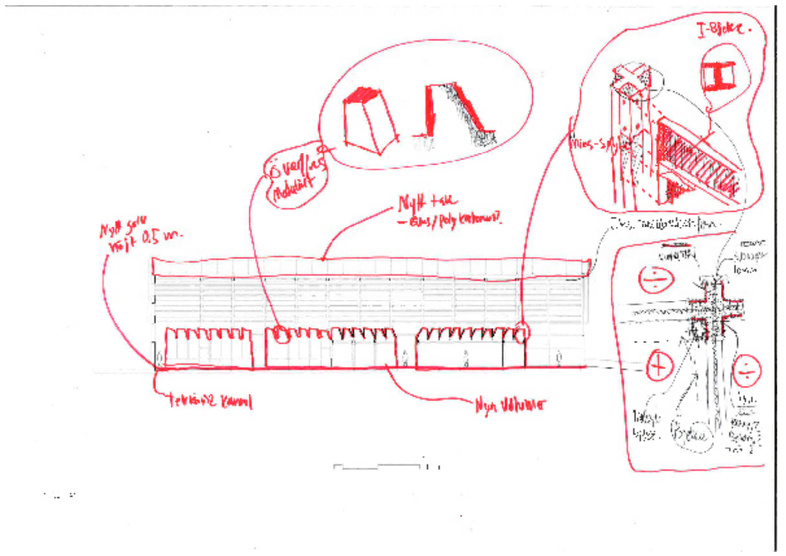
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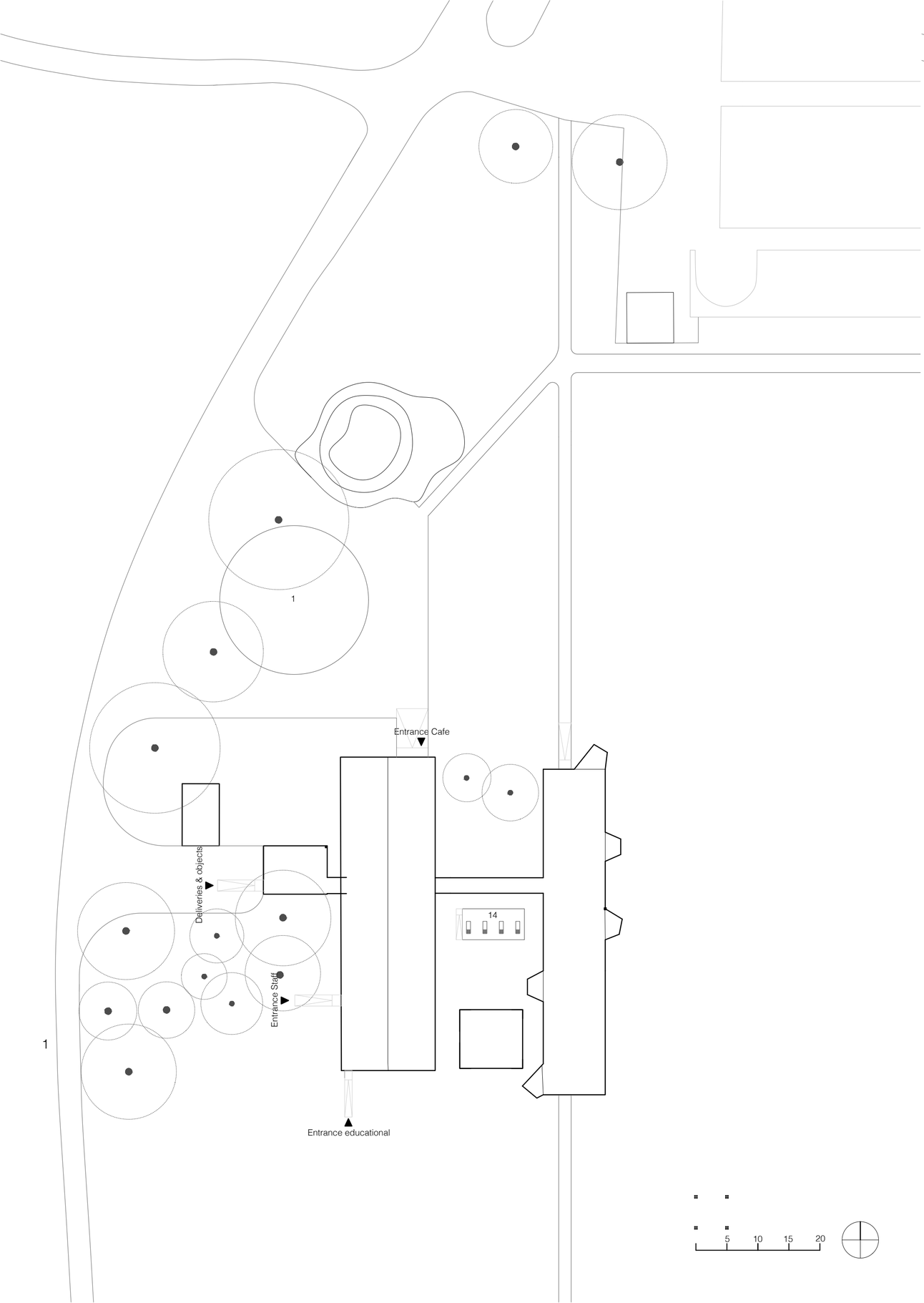
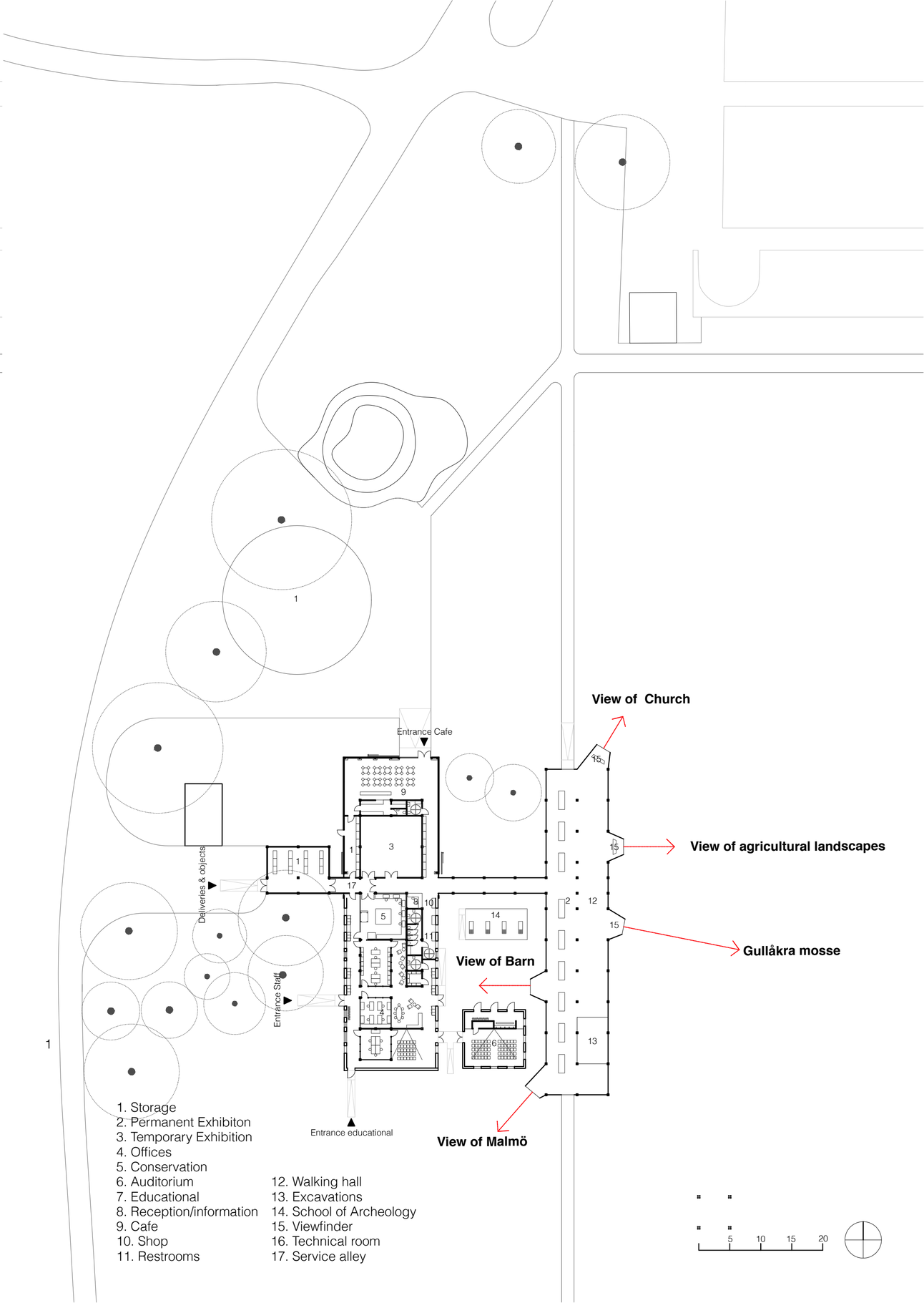
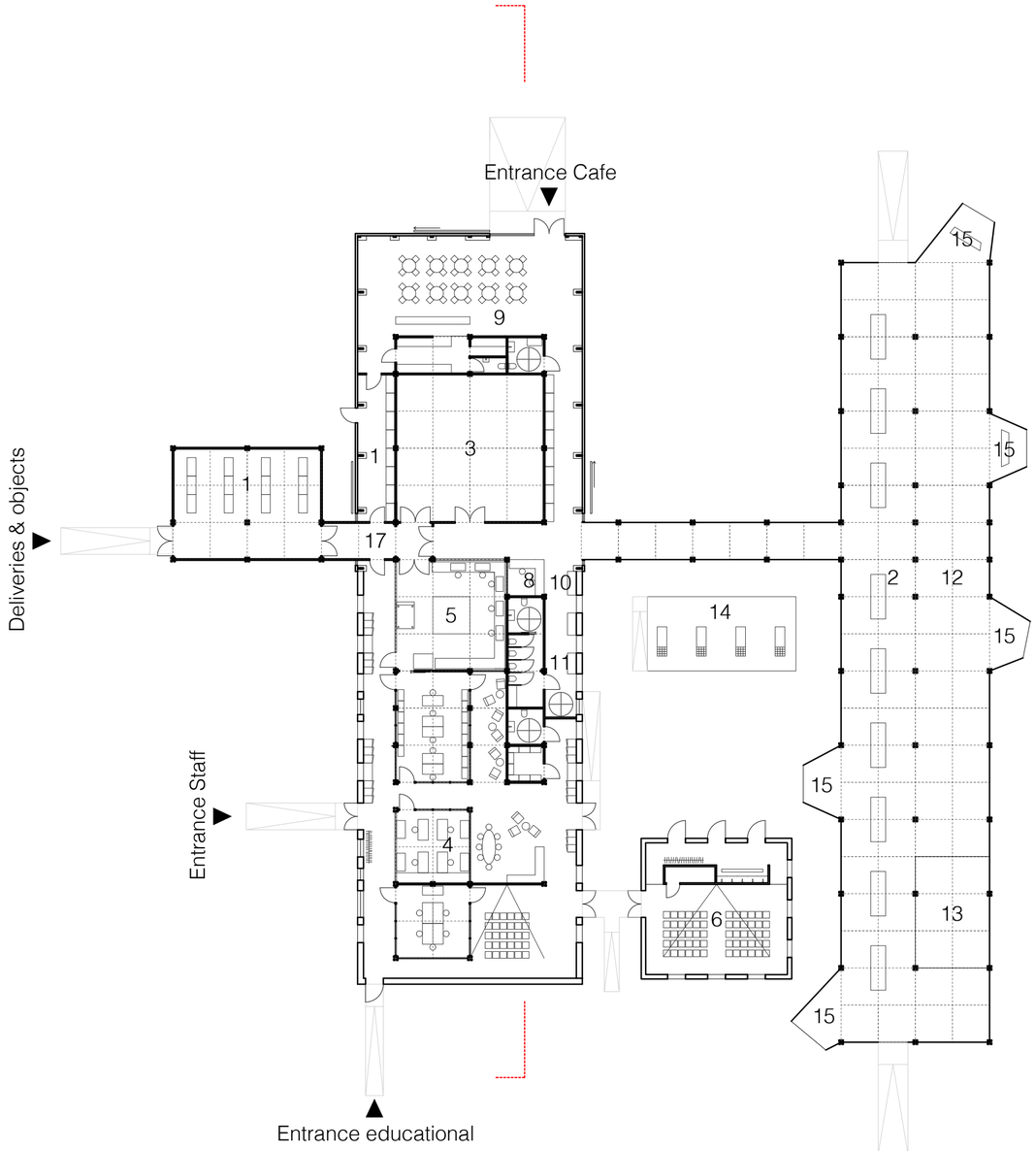




1. Storage
2. Permanent Exhibiton
3. Temporary Exhibition
4. Offices
5. Conservation
6. Auditorium
7. Educational
8. Reception/information
9. Cafe
10. Shop
11. Restrooms
12. Walking hall
13. Excavations
14. School of Archeology
15. Viewfinder
16. Technical room
17. Service alley



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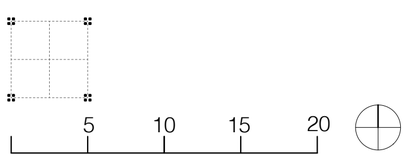

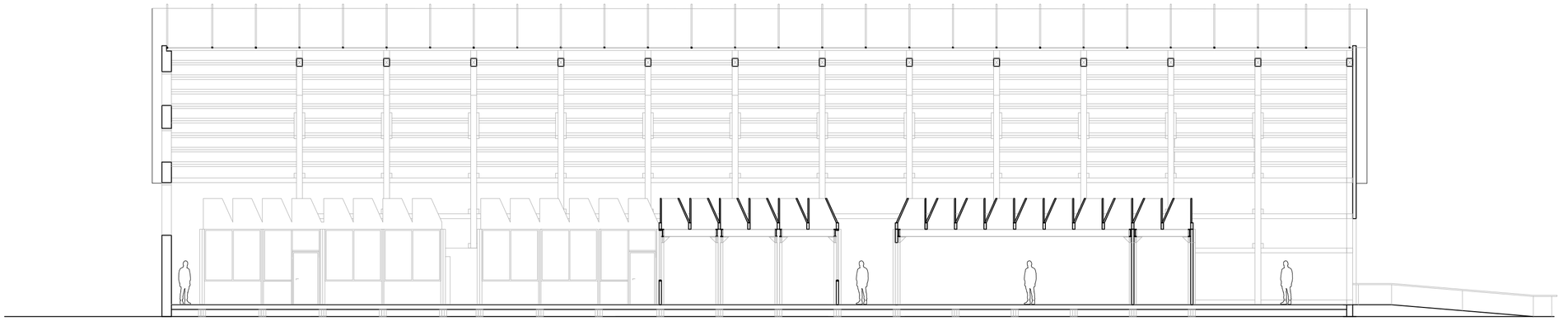

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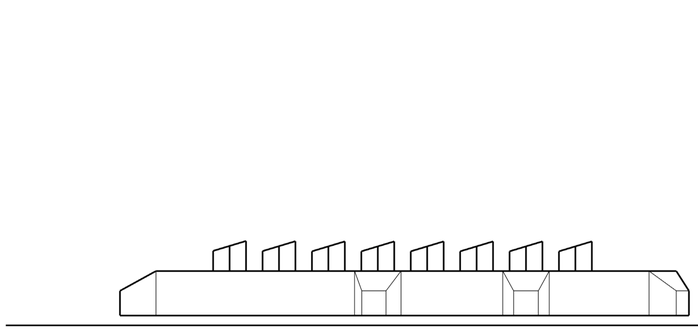

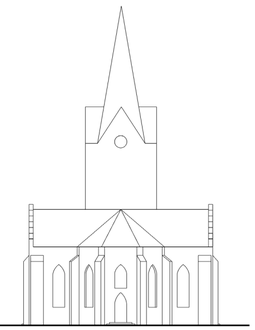

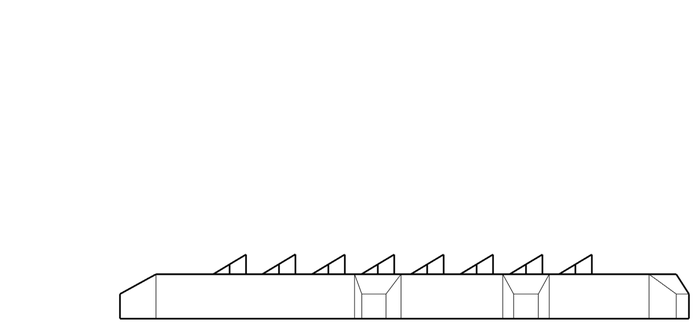

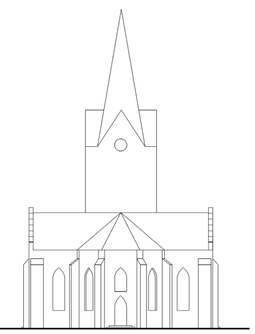

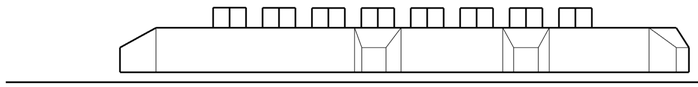

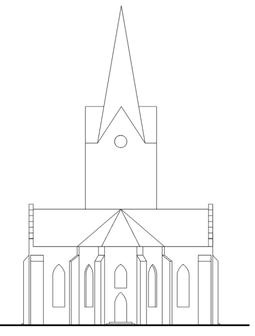

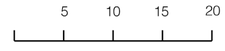
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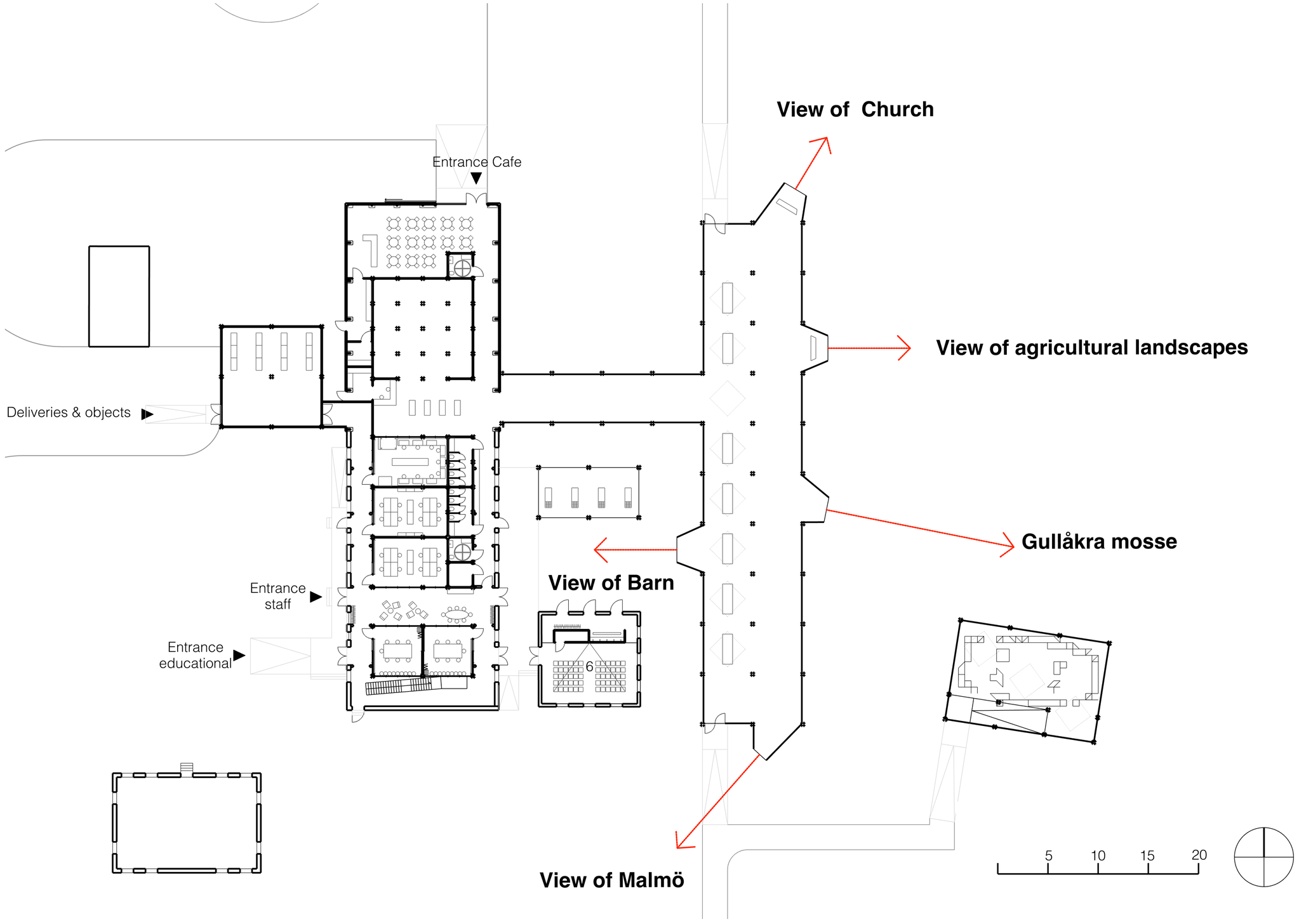
Entrance Cafe
Deliveries & objects
Entrance staff
Entrance educational
6
View of Church
View of agricultural landscapes
Gullåkra mosse
View of Barn
View of Malmö
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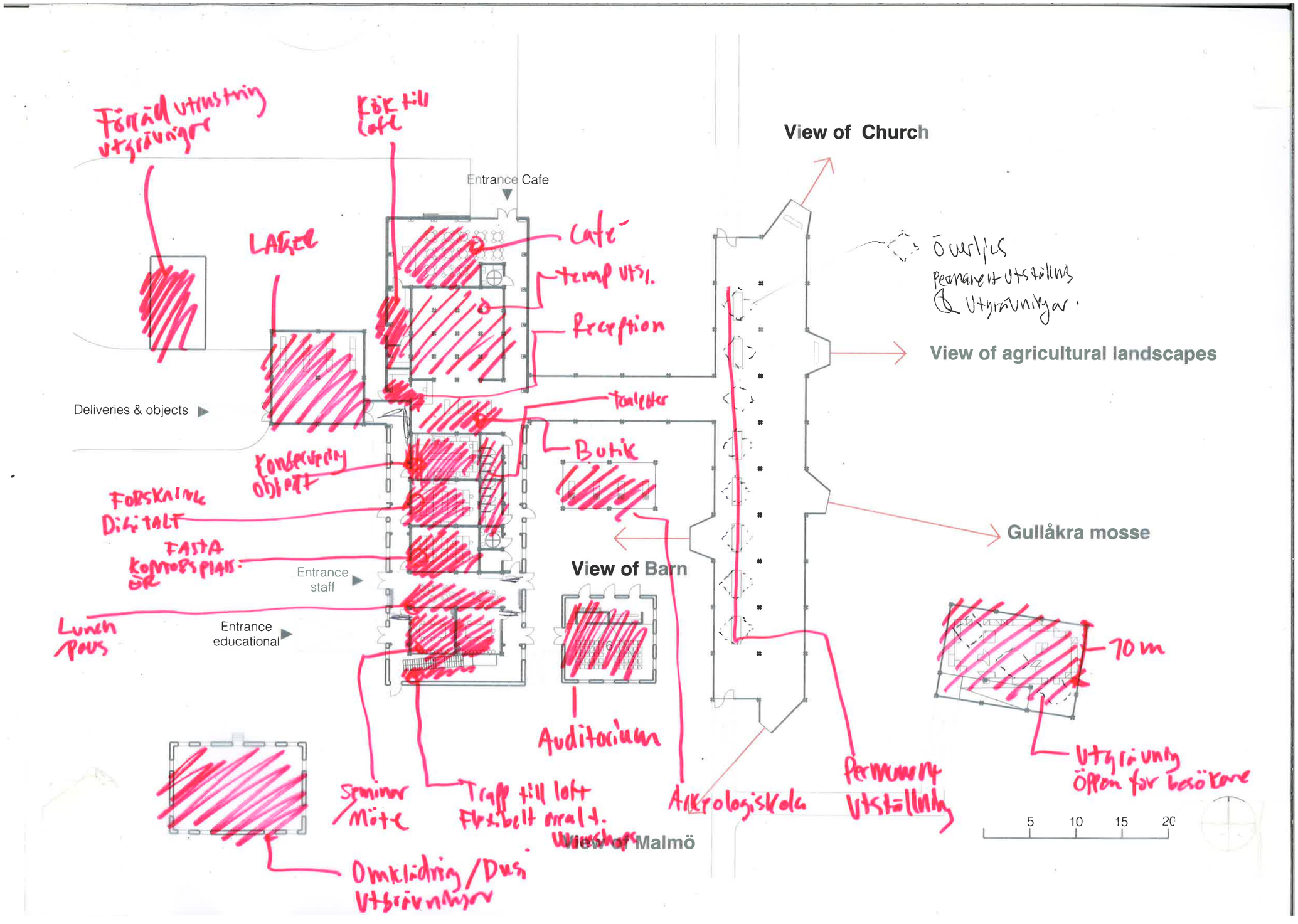

Förråd utrustning utgrävningar
Kök till Cafe
View of Church
Entrance Cafe
Cafe
temp utst.
Reception
LAGER
Överlics
permanent utställning
& Utgrävningar.
View of agricultural landscapes
Deliveries & objects
Toaletter
Butik
Konservering objekt
FORSKNING DIGITALT
FASTA KONTORSPLASS ÖR
Gullåkra mosse
Entrance staff
View of Barn
Lunch Paus
Entrance educational
70 m
Auditorium
Utgrävning Öppen för besökare
Seminar Möte
Trapp till loft Flexibelt areal t. Utrustning
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Permanent Utställning
View of Malmö
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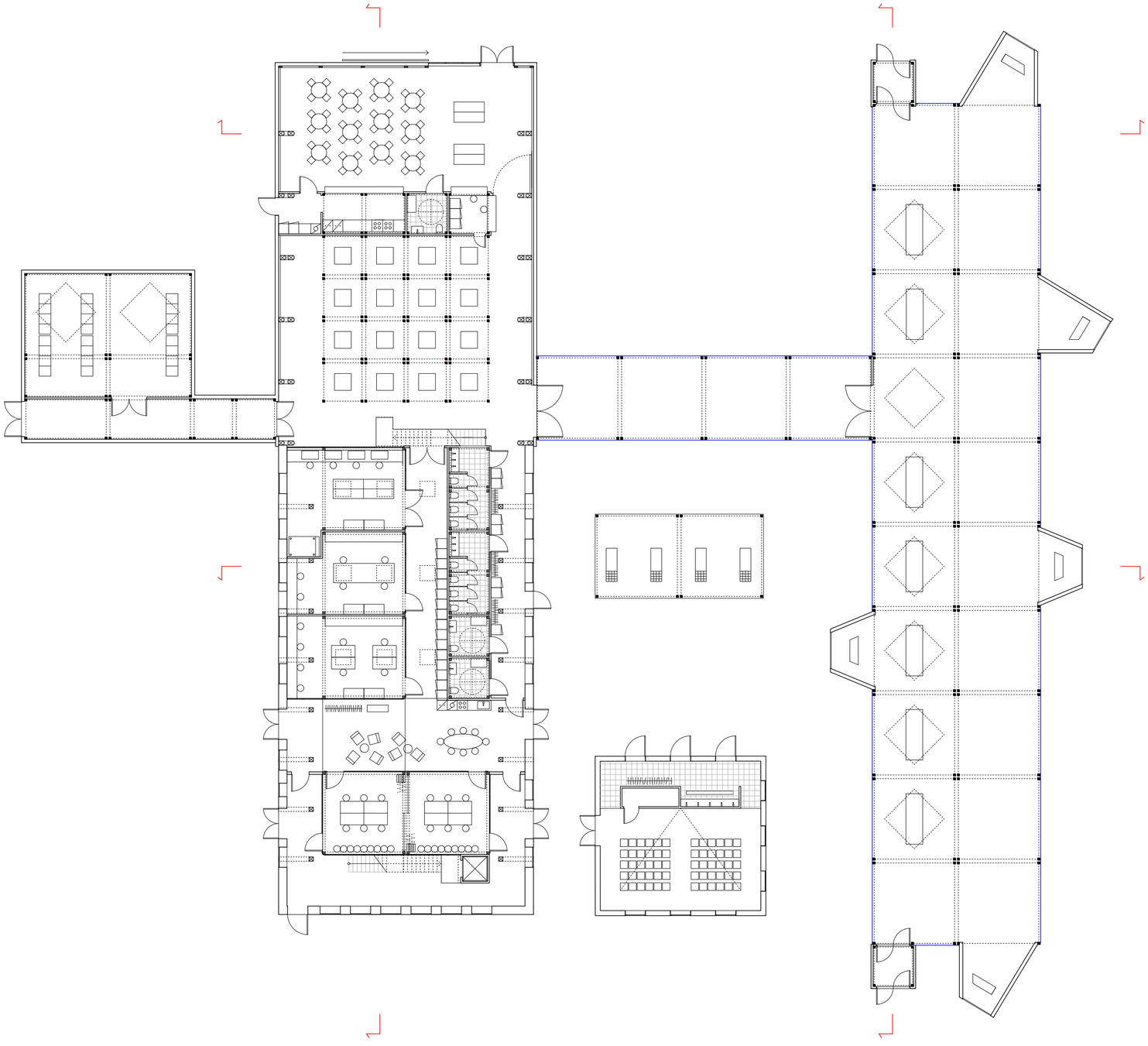
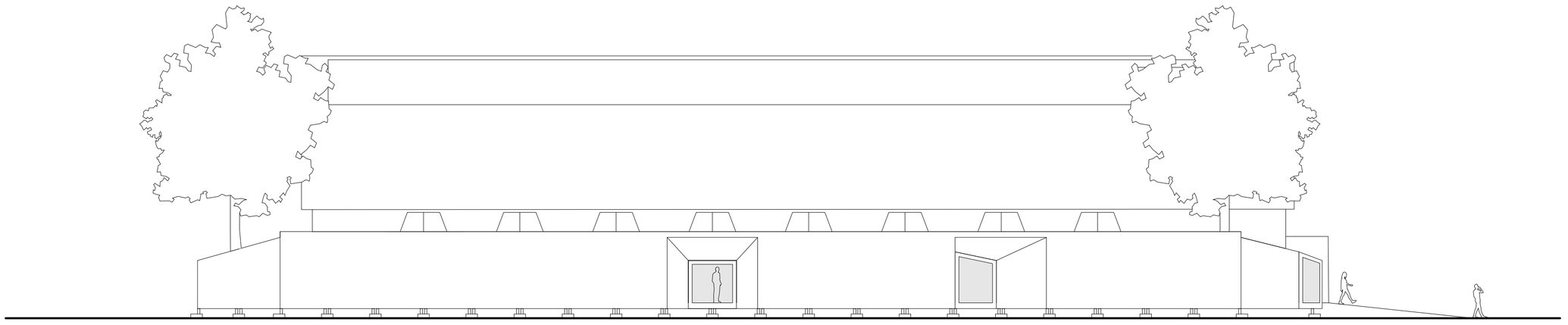
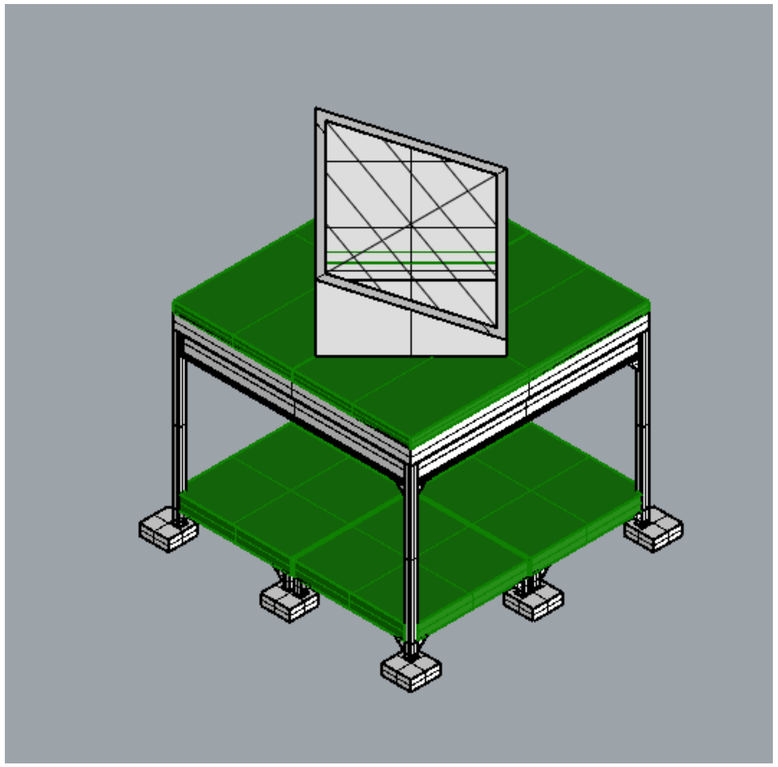
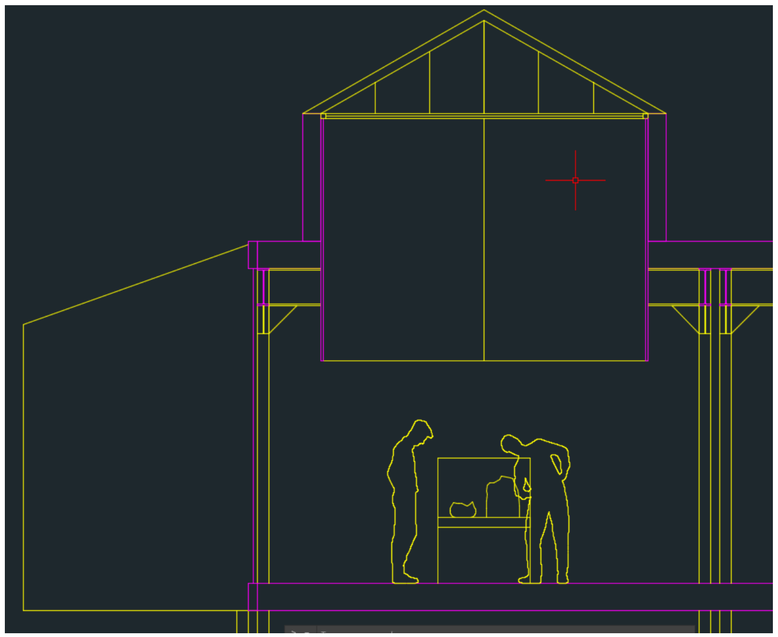
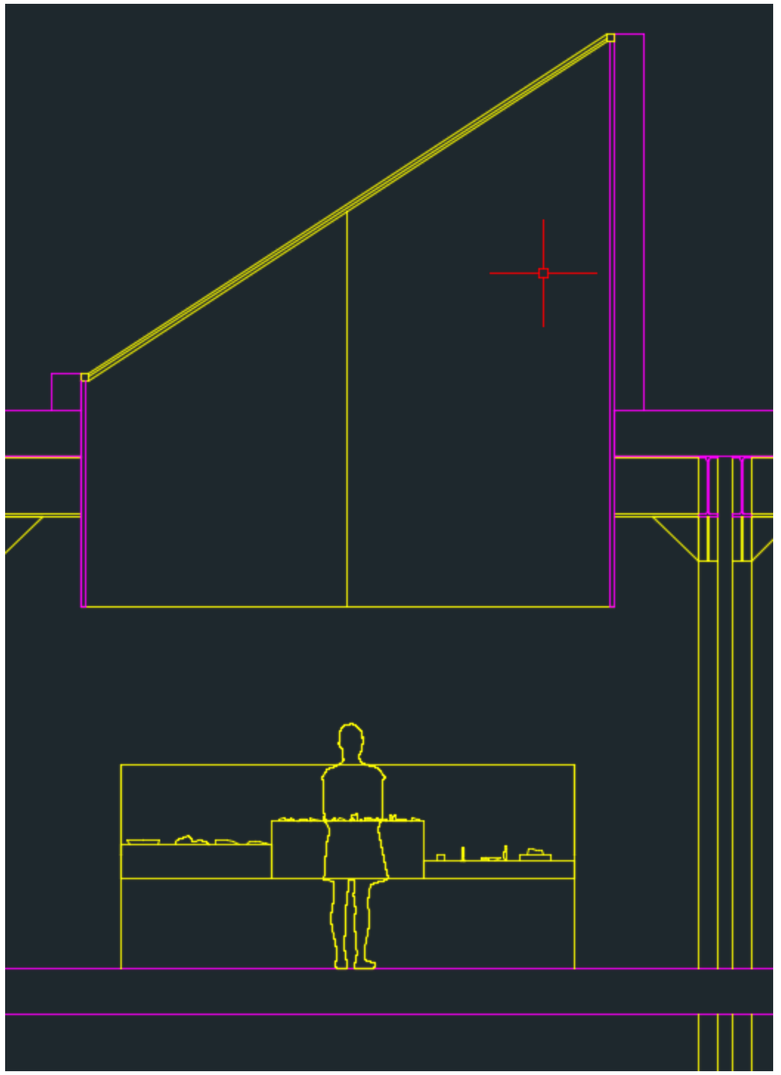
Omklädning / Dusj Utgrävningar

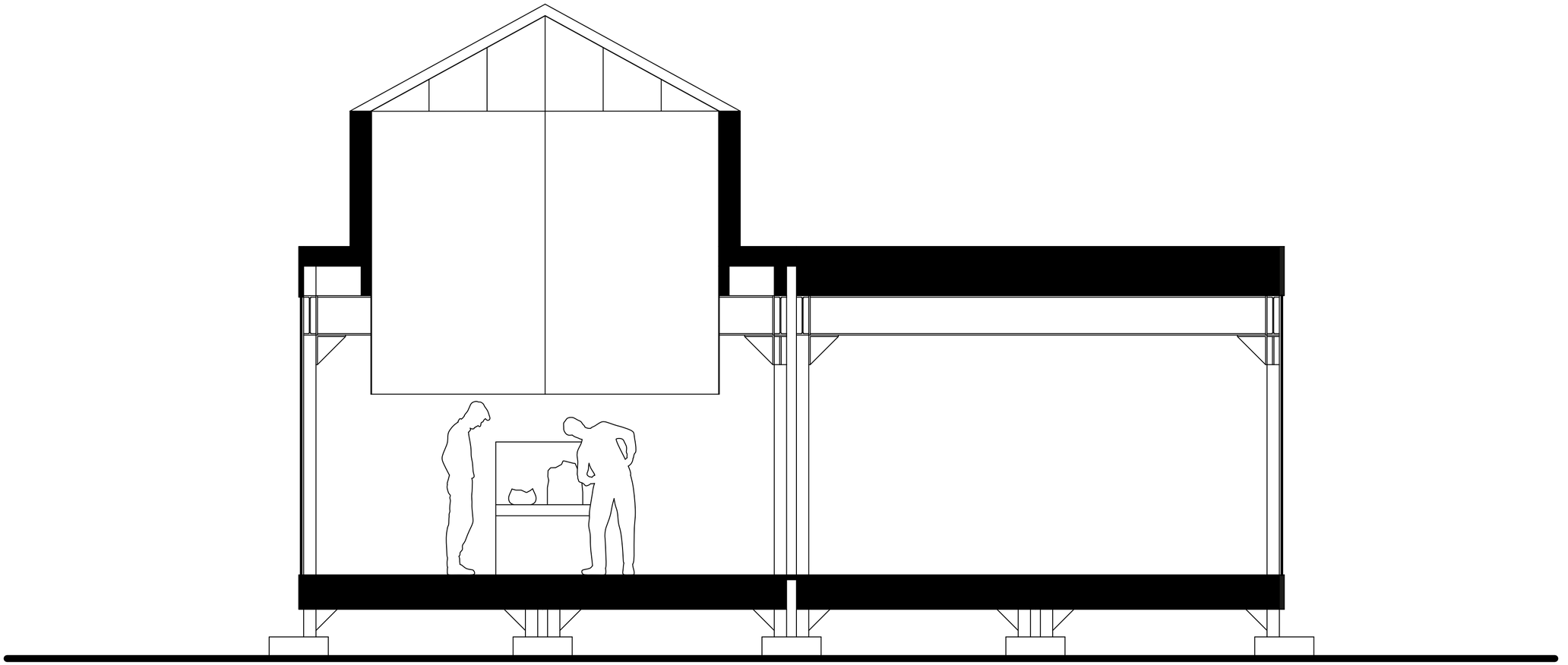


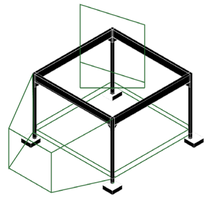






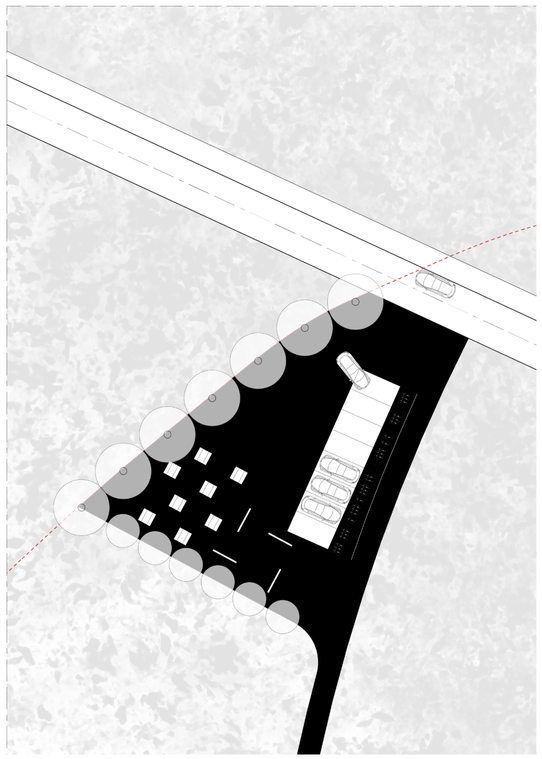


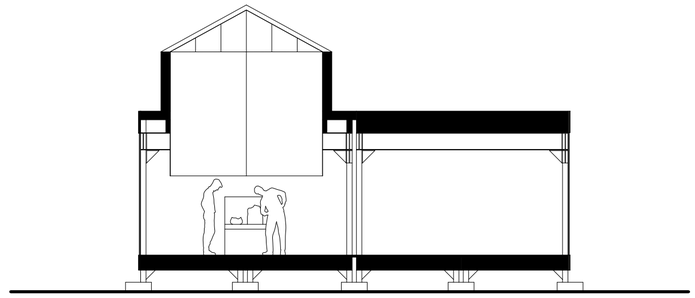




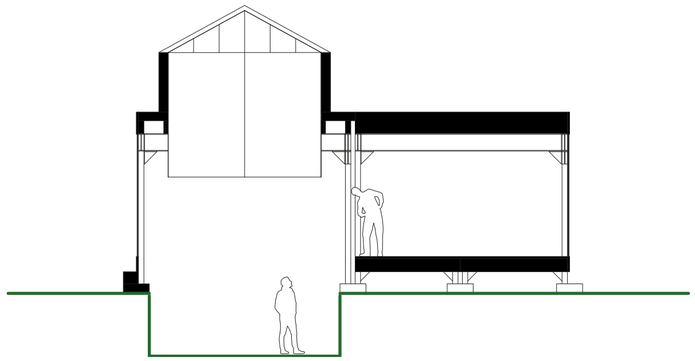
General framework Specific intervention

Constructive system in steel. Singular components added together forms a structural framework. Walls, floor, and roof are all free of carrying load and can therefore be articulated according to the specific situation, as well as respond to future changes.



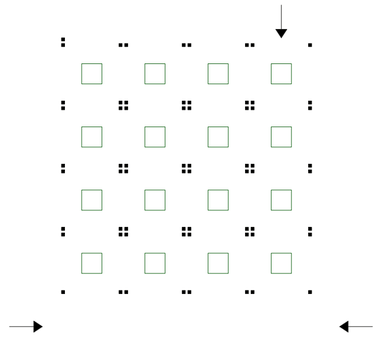


Pavillion with exhibiton

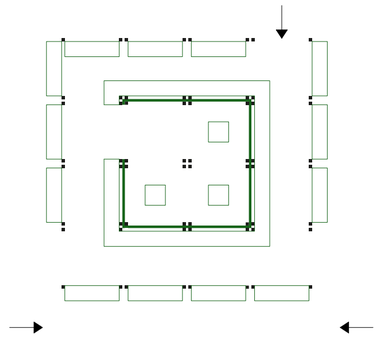


Floor removed for excavation - excavation becomes part of exhibiton

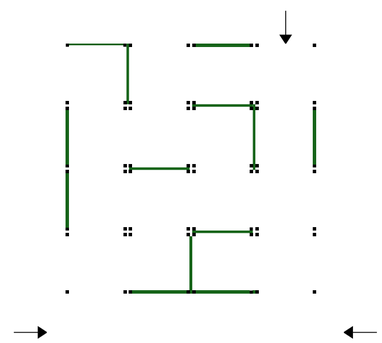
The construction system is used for the temporary exhibition space. Using the 2.5 x 2.5 module, the system gives a framework that allows for quickly changing exhibitons according to a specific theme or concept.



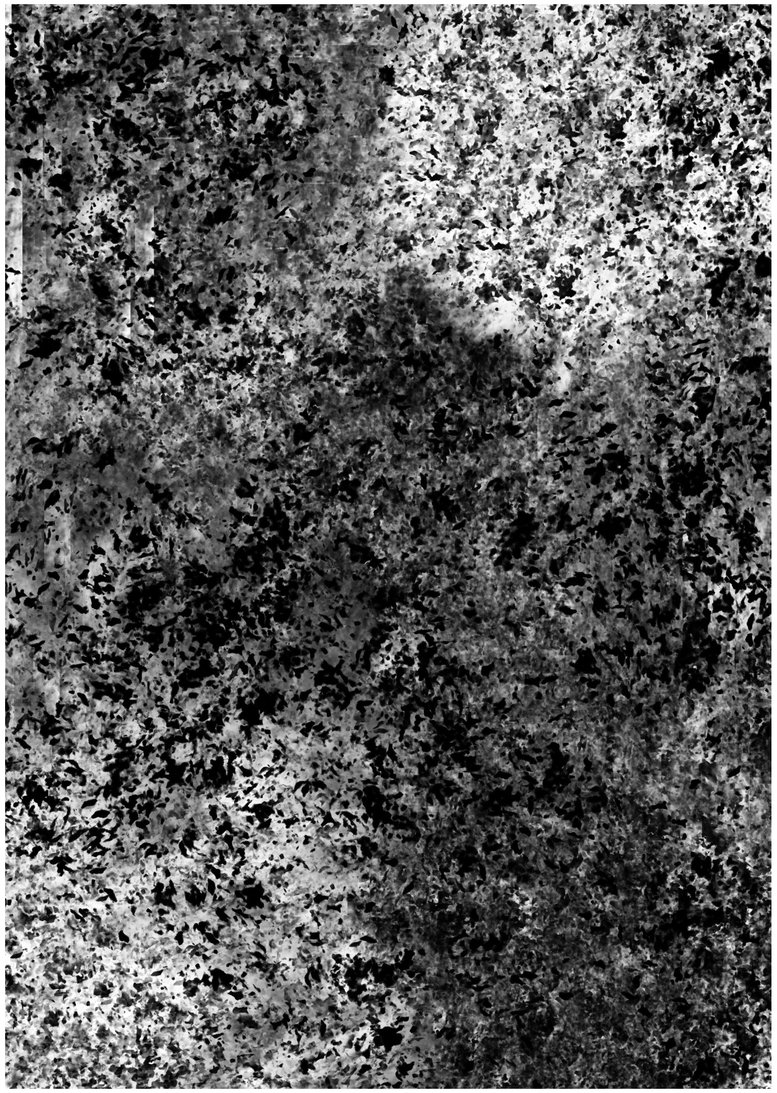
Exhibition with free standing objects, no partition walls

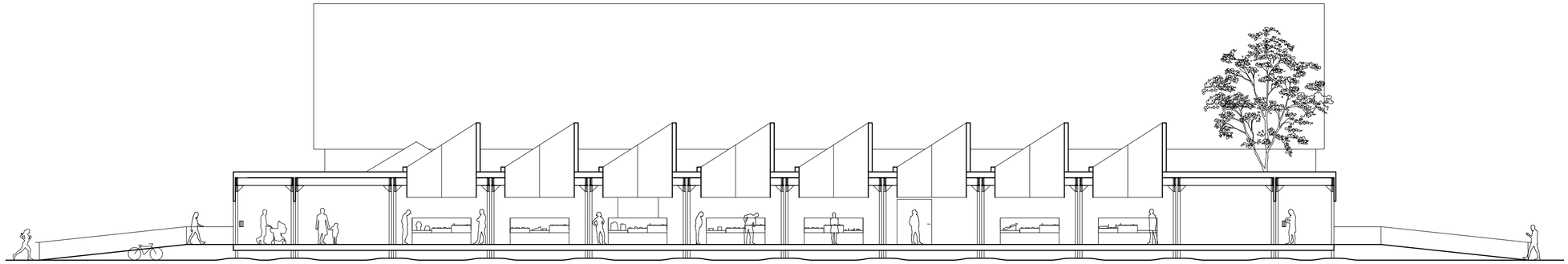


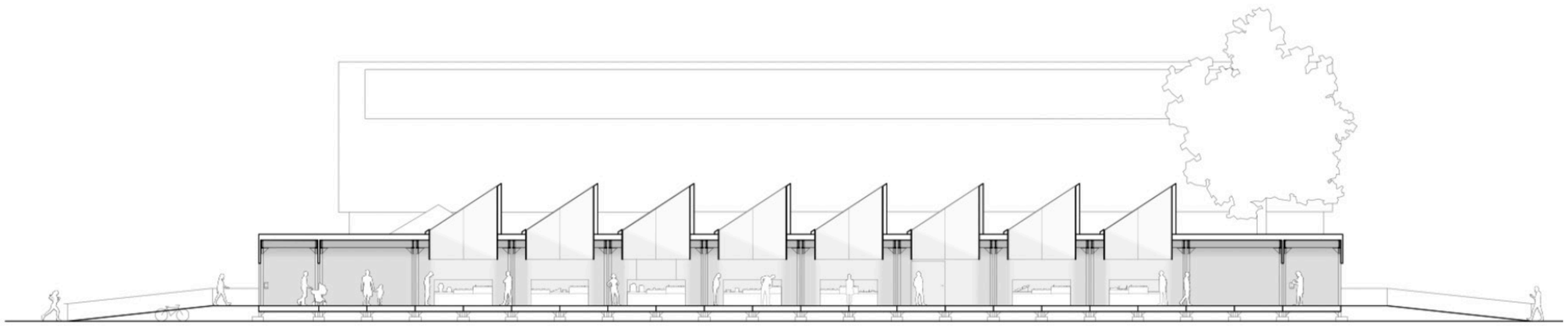
Traditional exhibition concept with display cases. Separate room in the middle

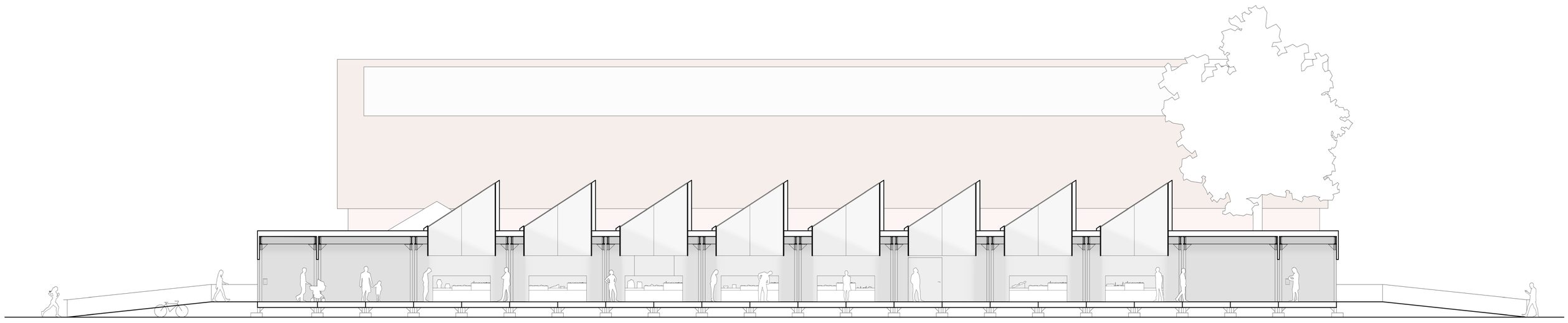


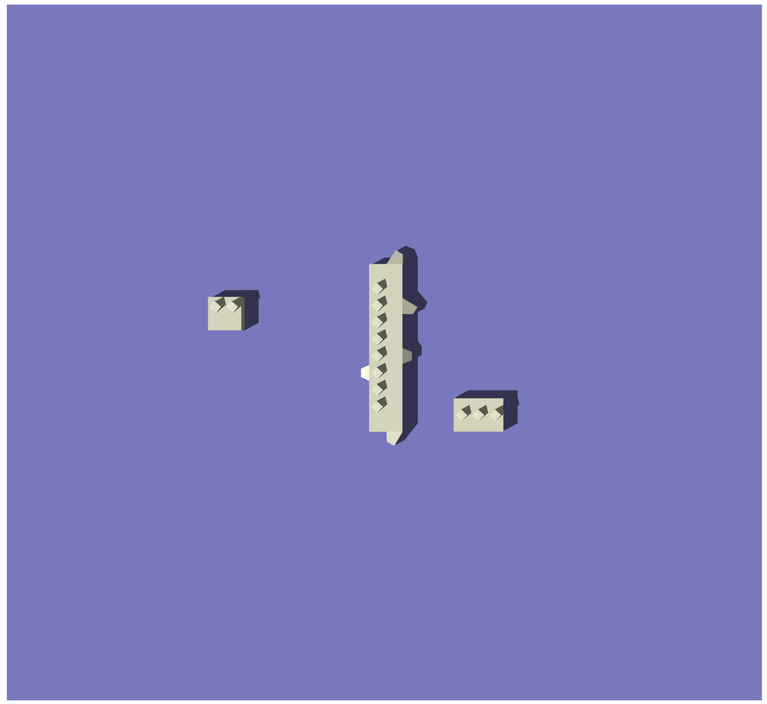
Exhibiton with poster mounted on partition walls

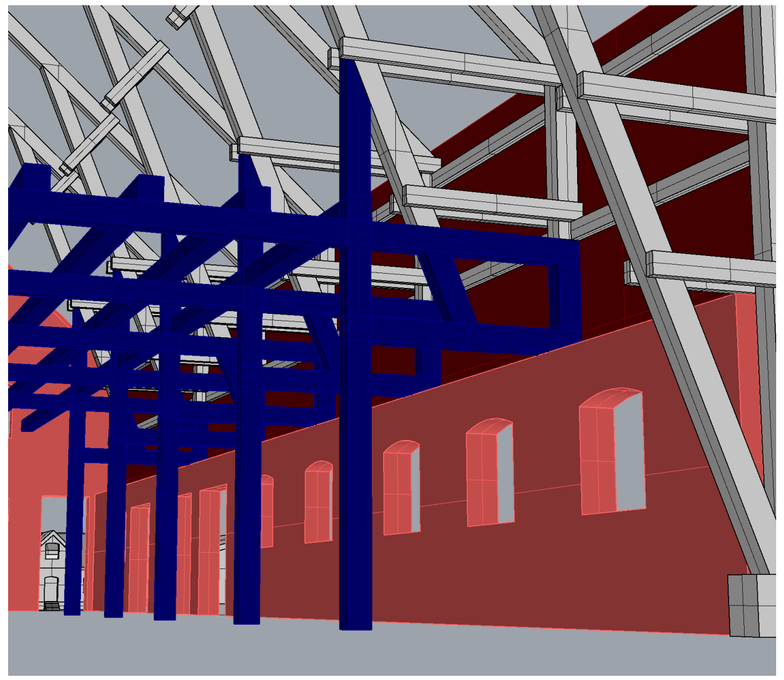


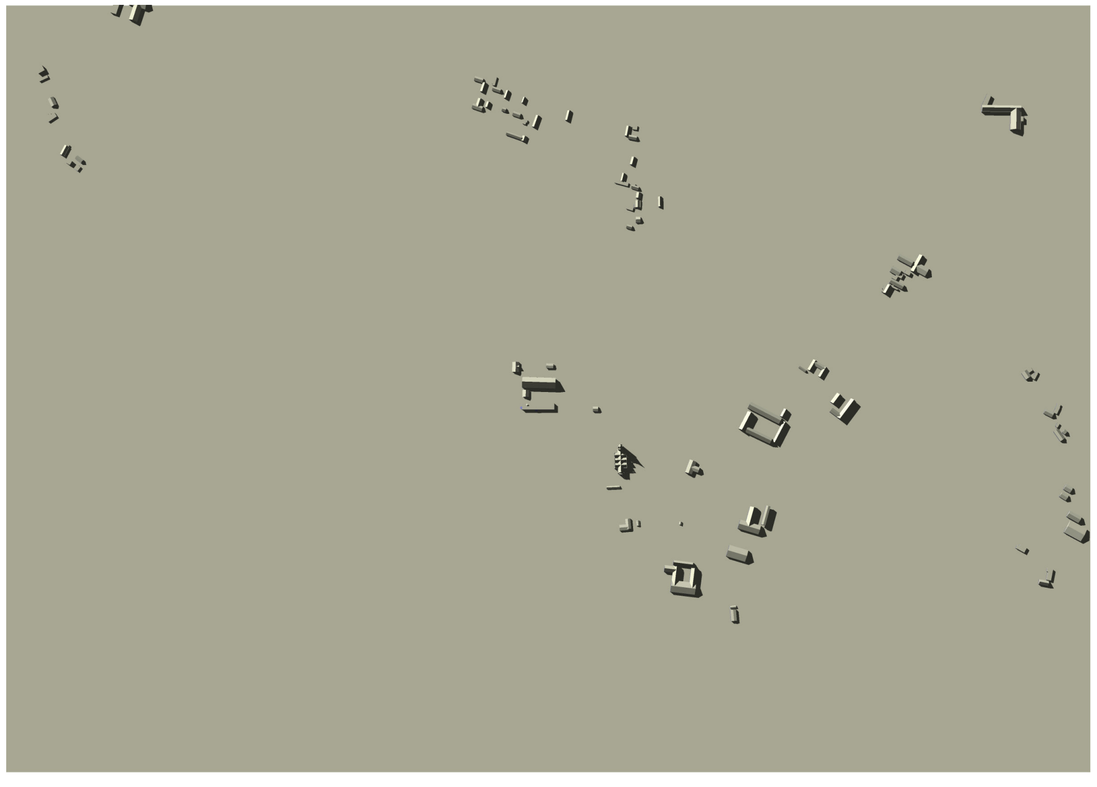


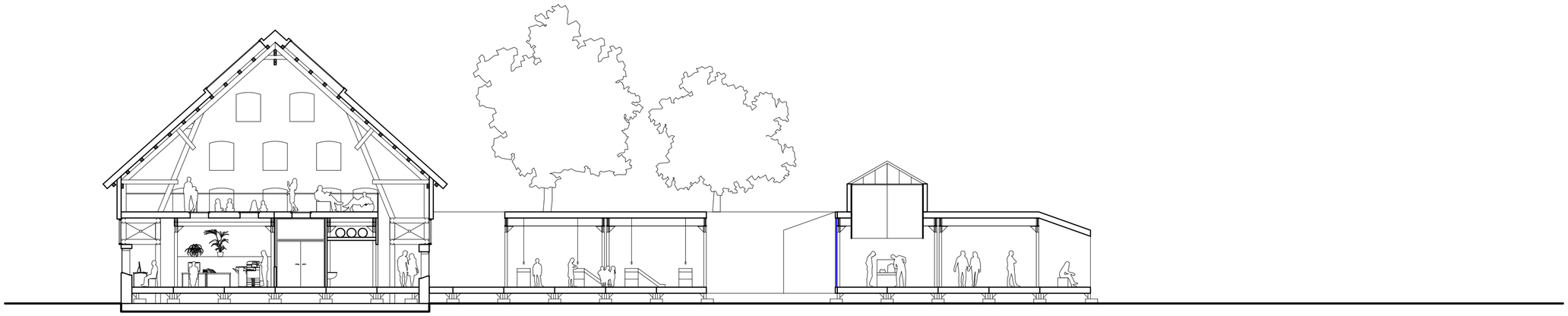






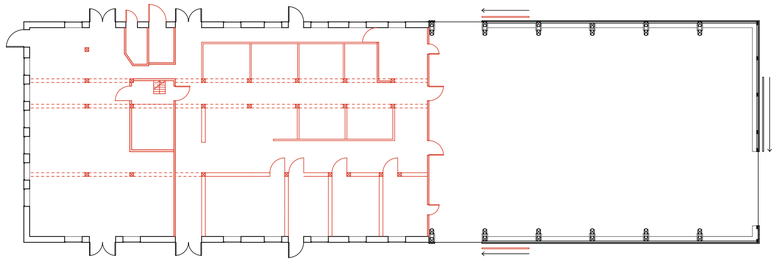




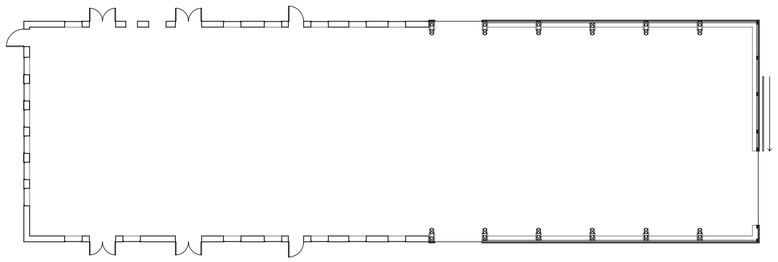


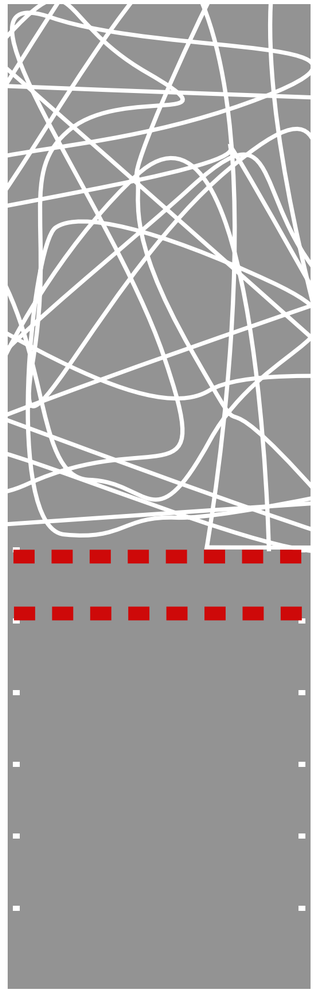
Interventions

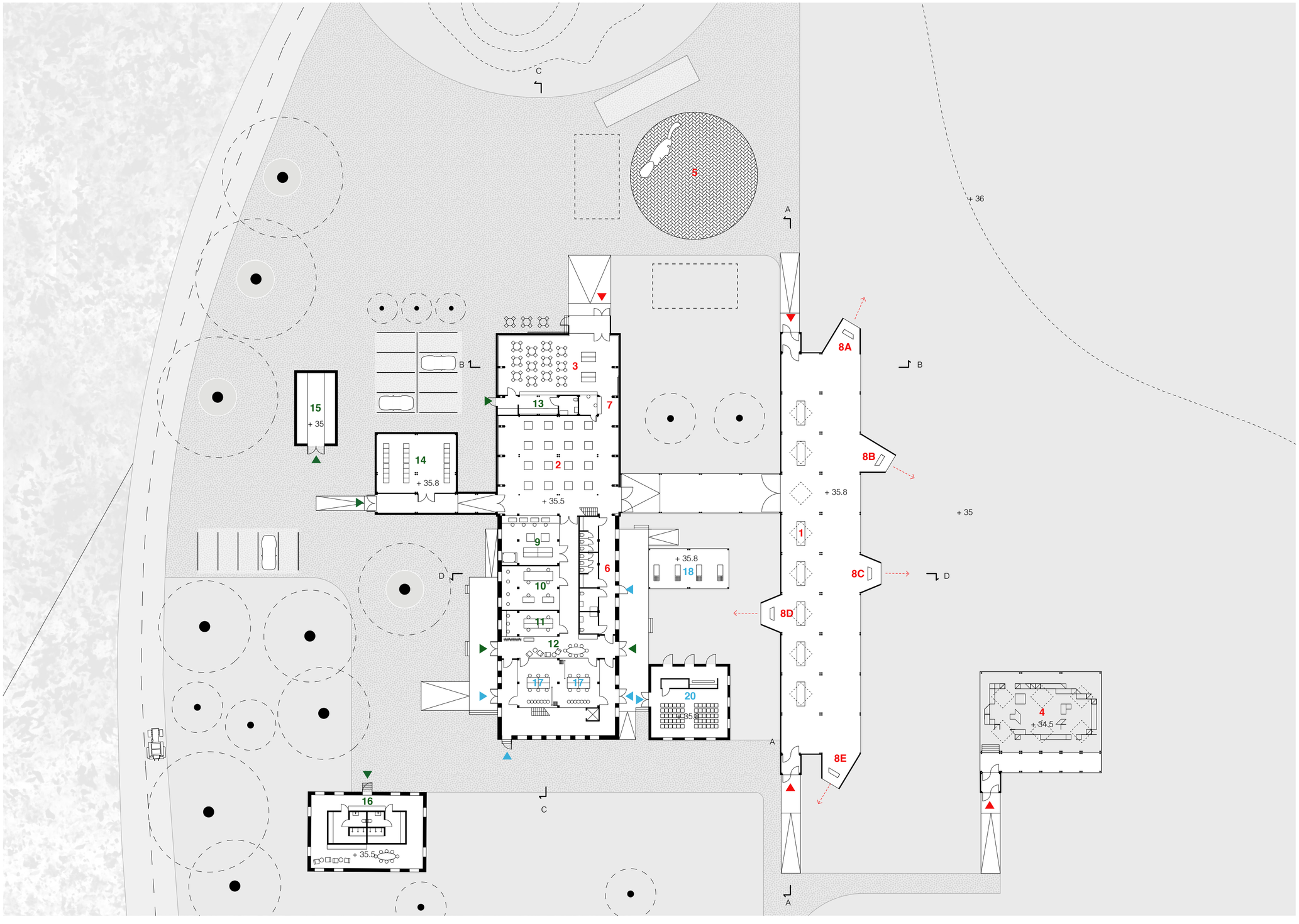
Demolishing plan



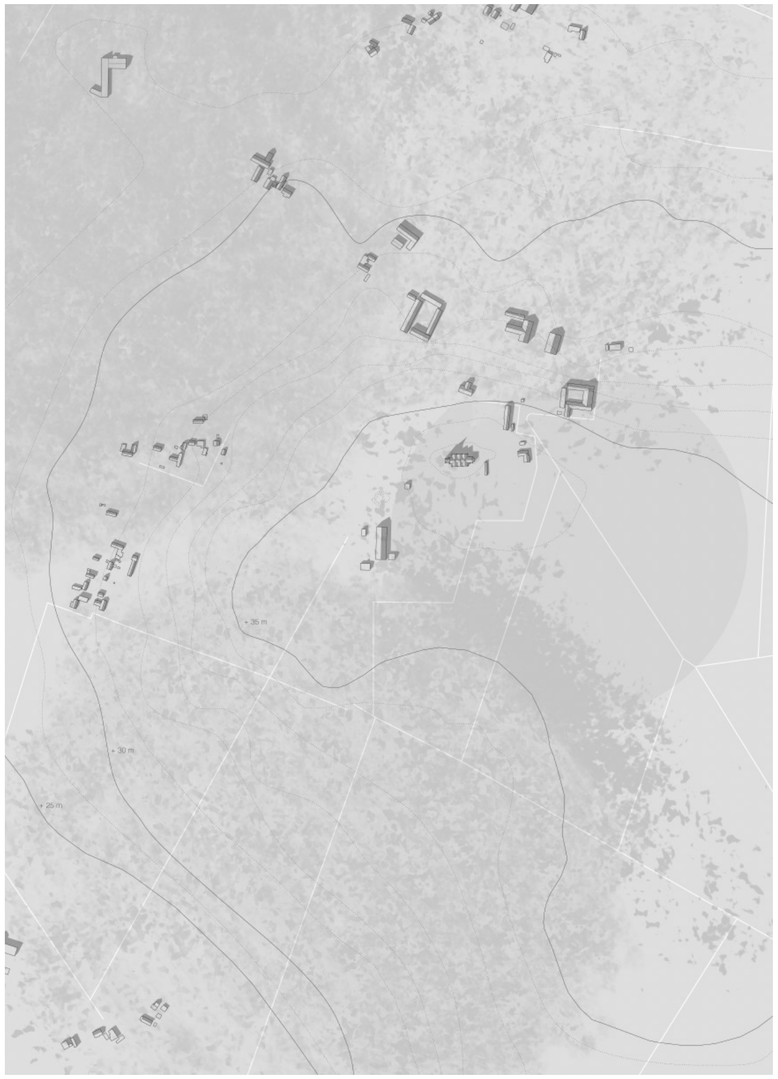
After demolishing - Before interventions

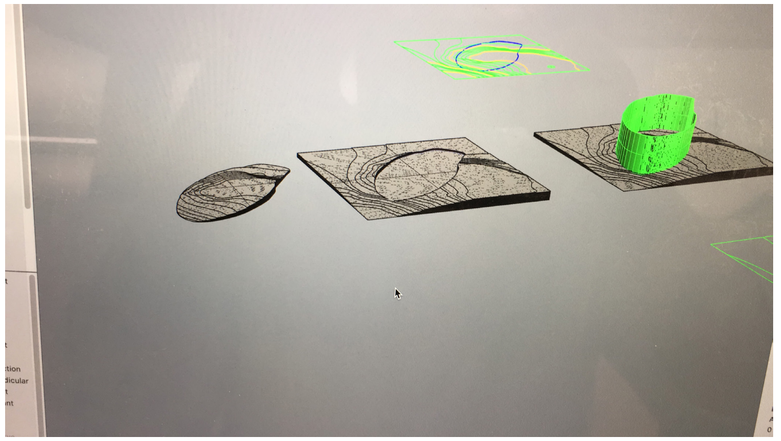


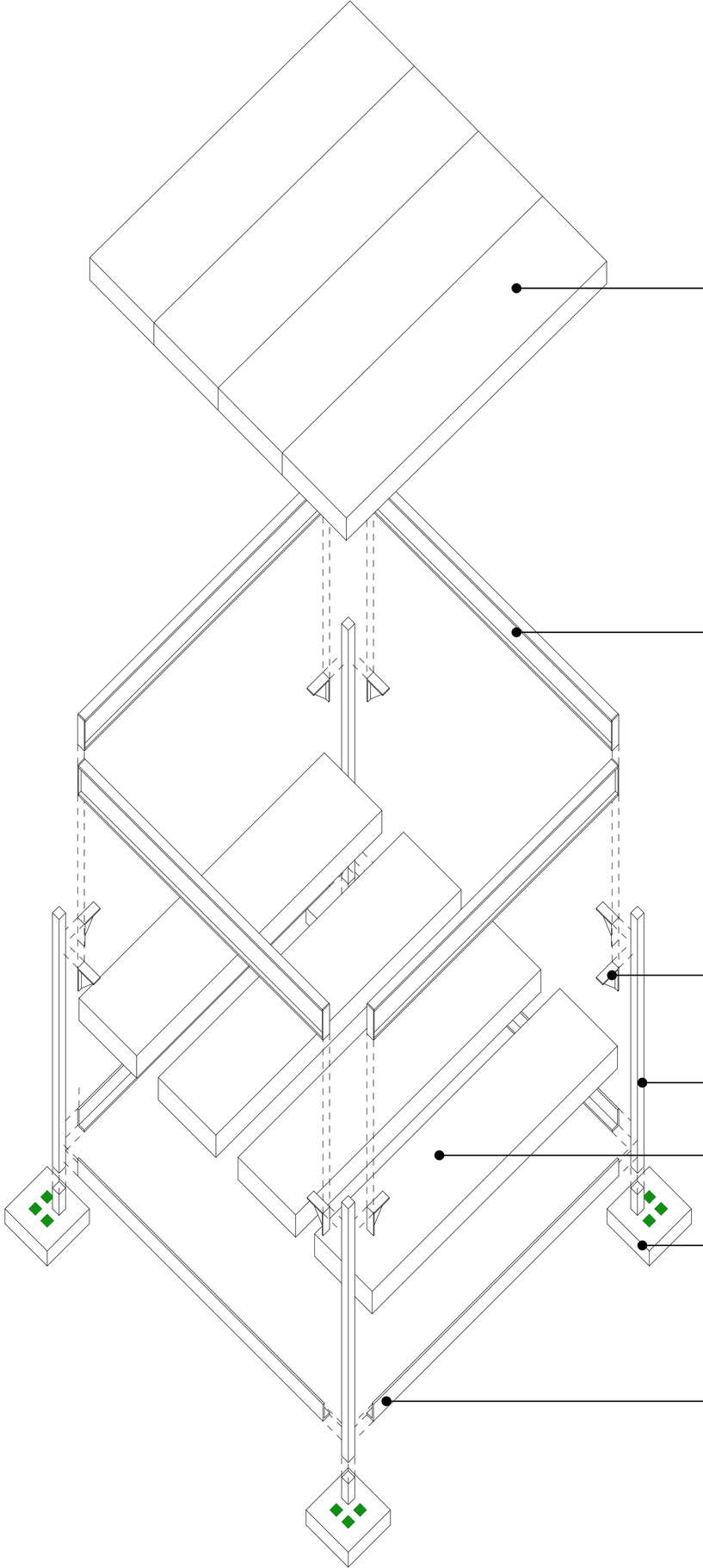




C
5
A
+ 36
B
3
13
7
8A
B
15
+ 35
14
+ 35.8
2
+ 35.5
8B
+ 35.8
+ 35
9
6
1
+ 35.8
18
8C
D
D
10
8D
11
12
17
17
20
+ 35.8
4
+ 34.5
A
8E
16
+ 35.5
C
A


+ 35 m
+ 30 m
+ 25 m





CLT roof elements

Steel I-beam
Recieves roof. Rests on column and truss

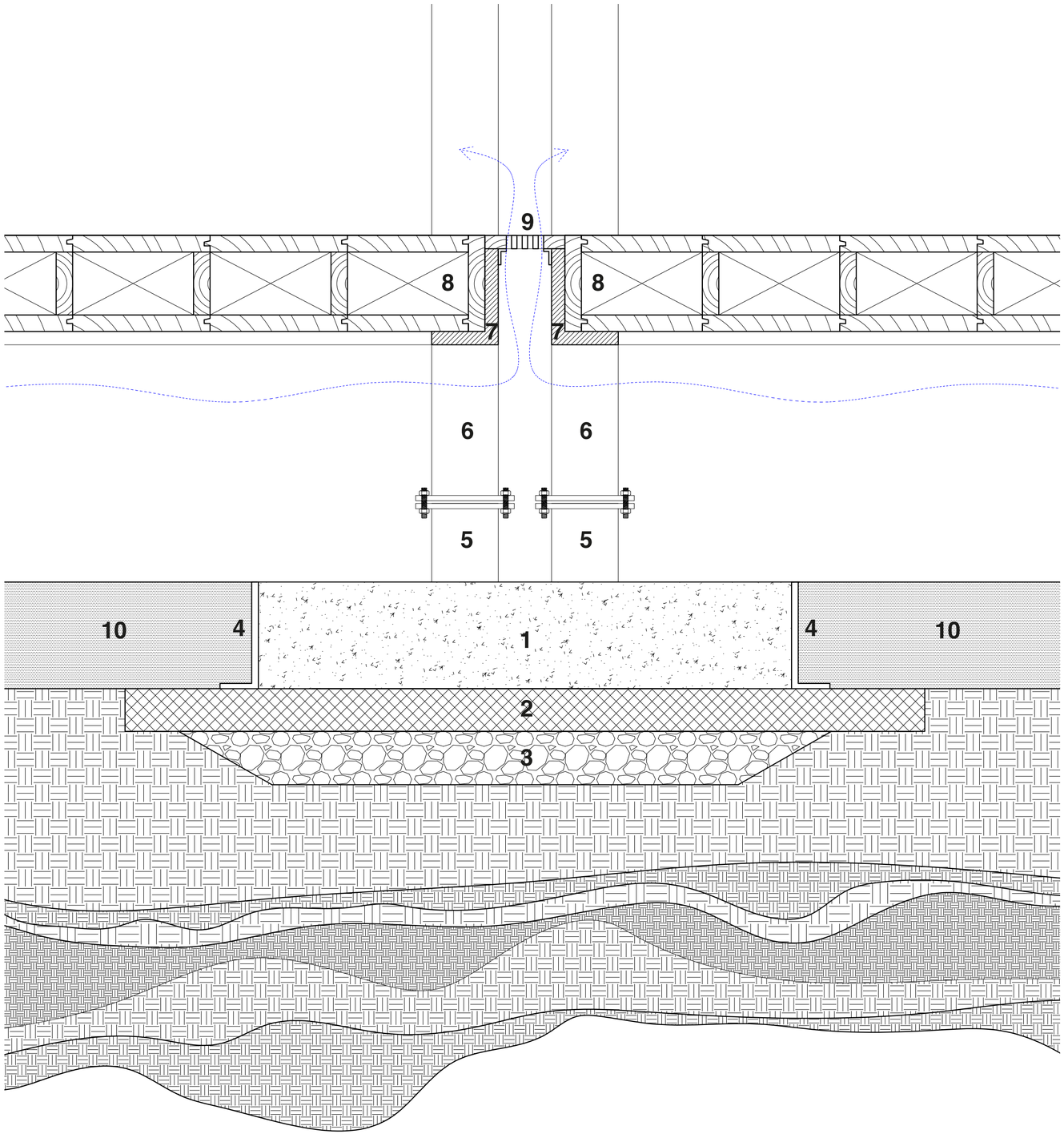
Steel truss
Stiffens corner. Recieves I-beam. Mounted on column

Steel column

CLT floor elements
Spans between L-beams. Can be removed for excavations.

Foundation

Steel L-beam
Recieves floor. Mounted to column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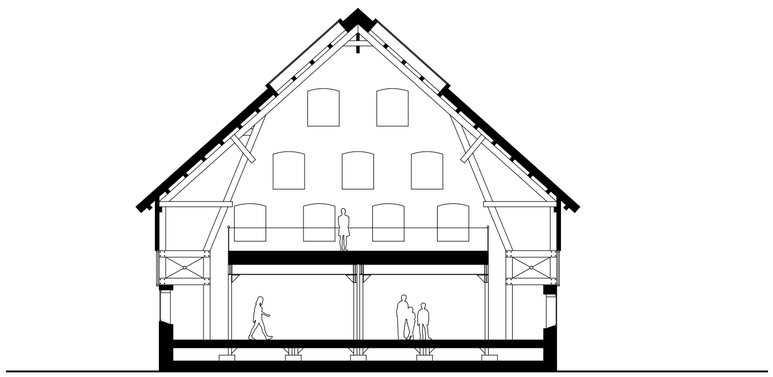

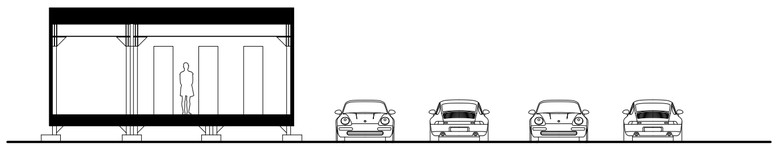

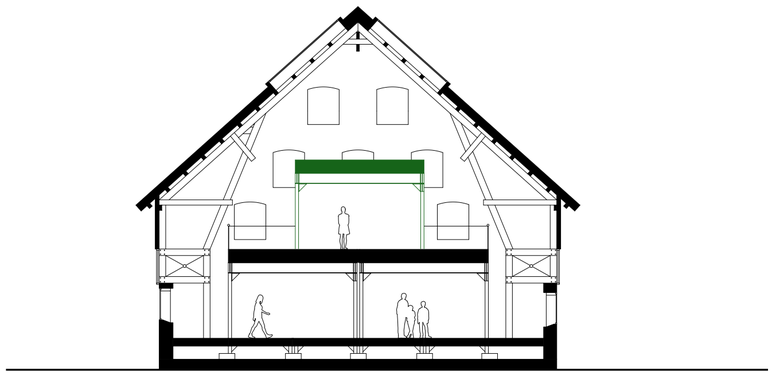

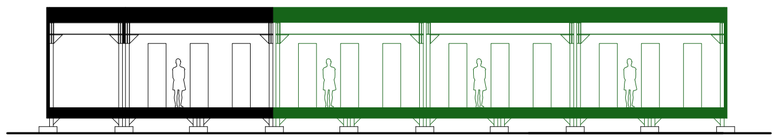

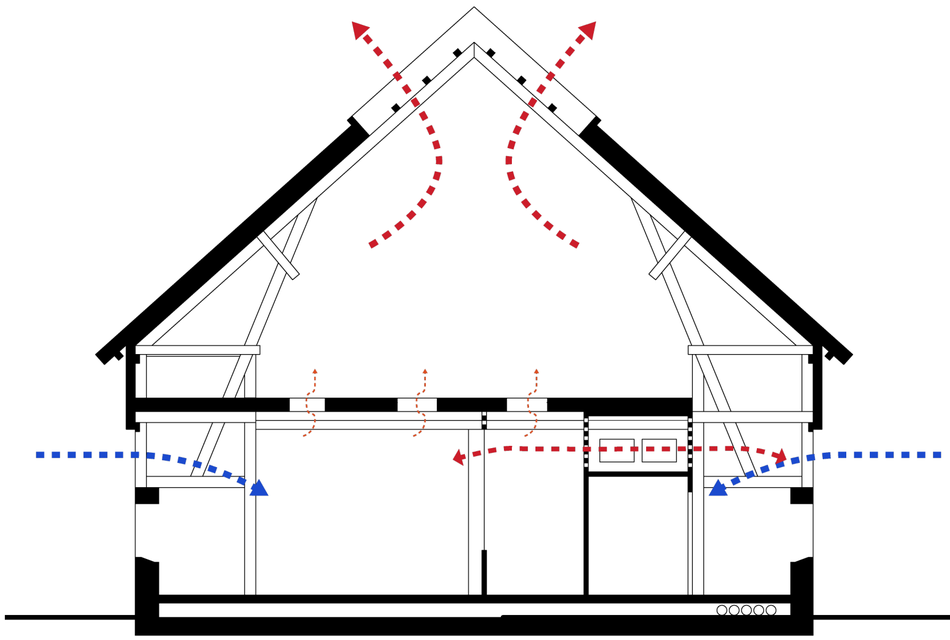

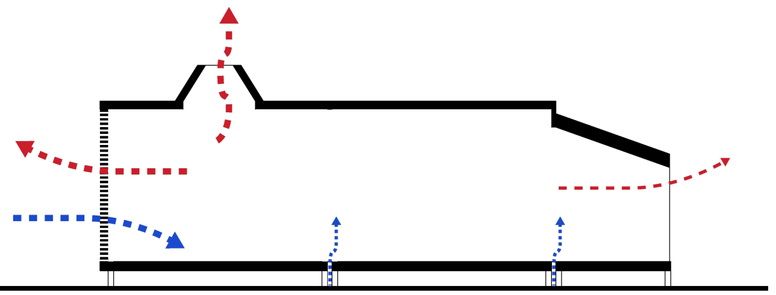

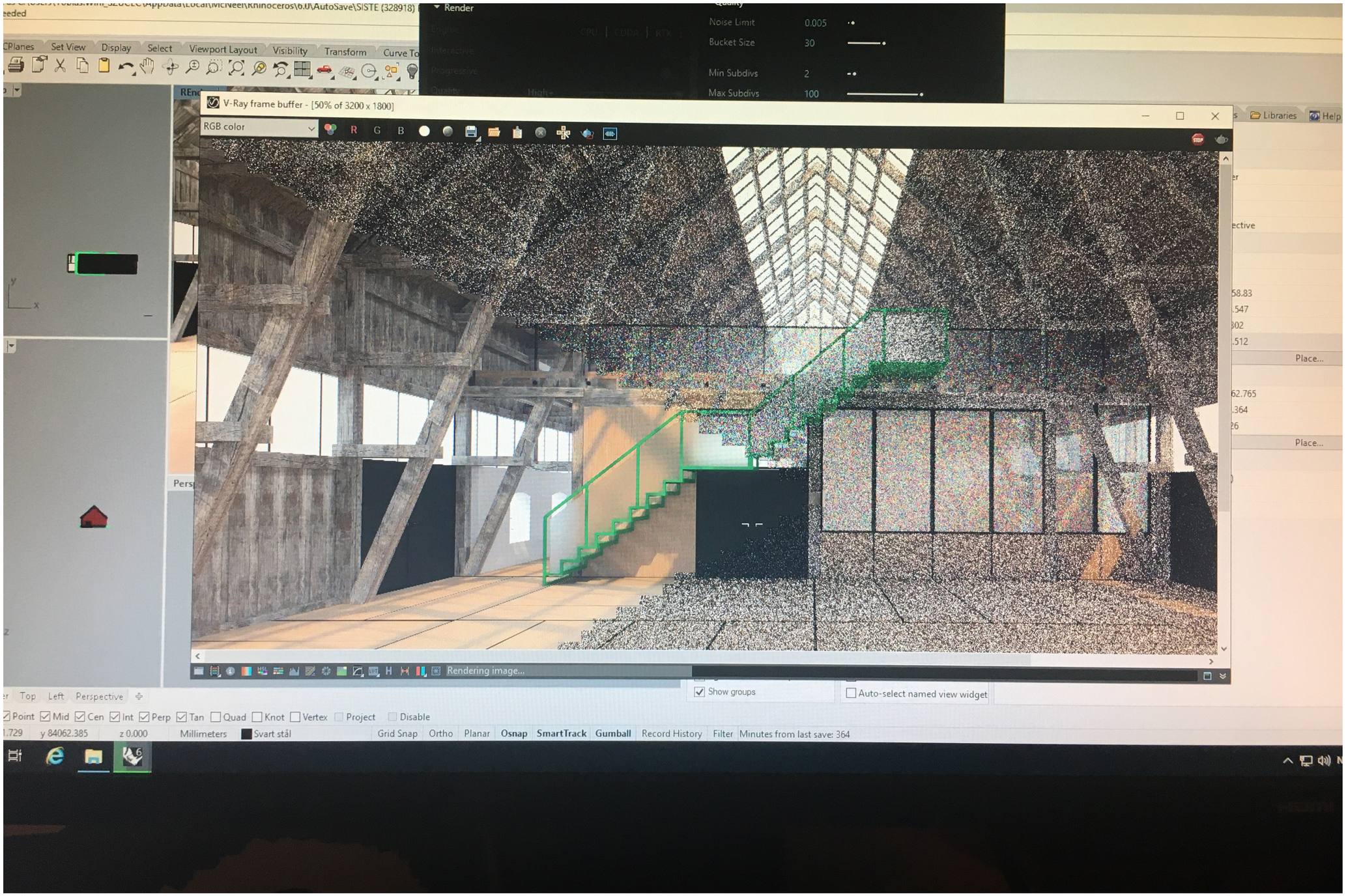
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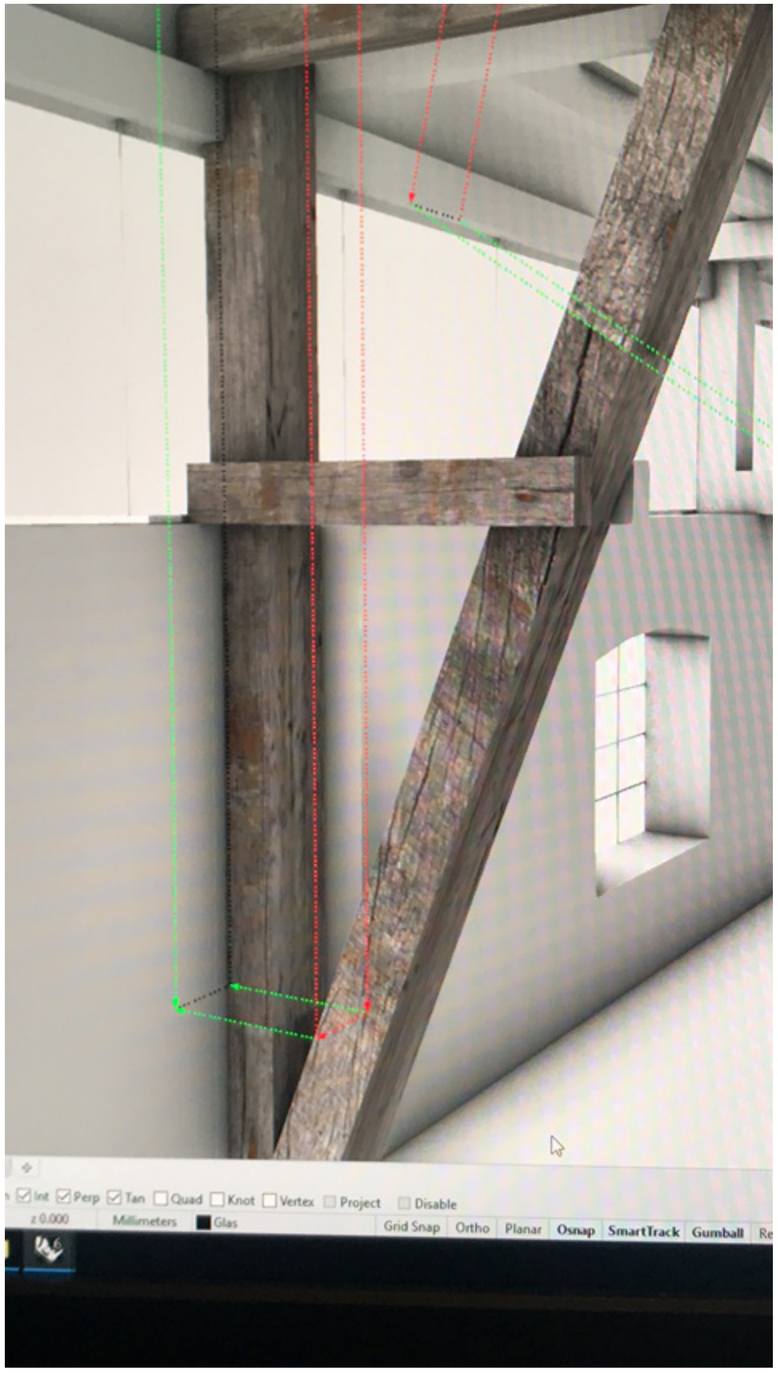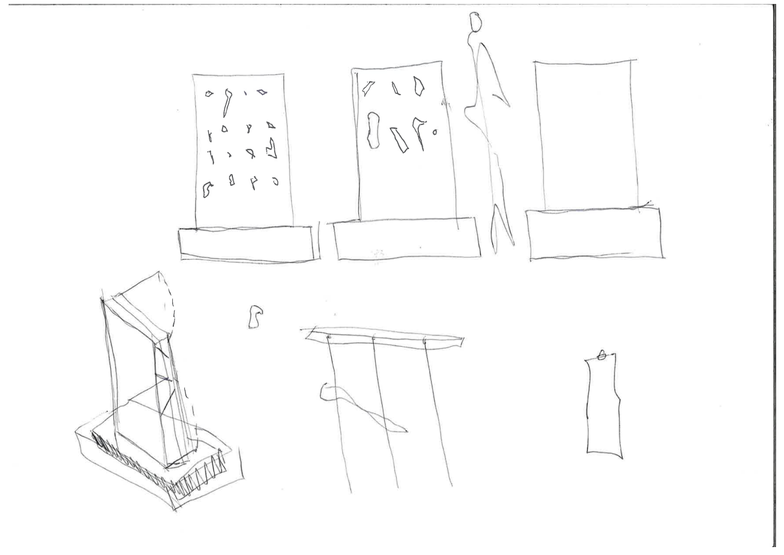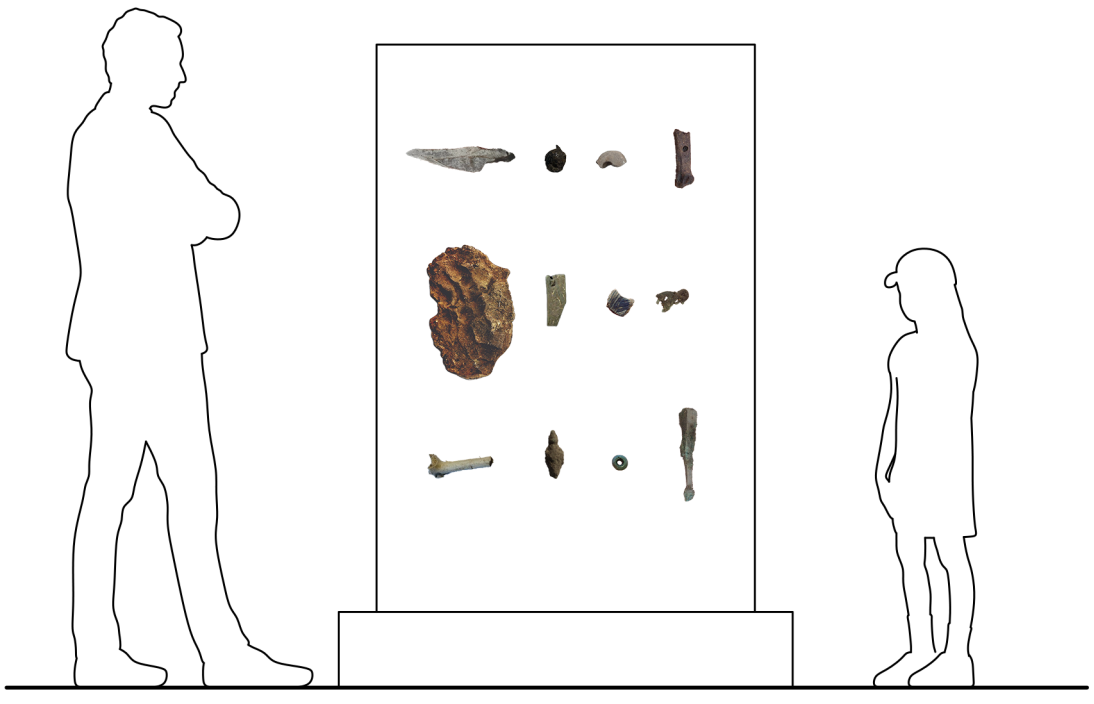
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