

PROMISED LAND

Proposal for a Labour Cooperative in Helsinki

DOGMA

NEW ACADEMY

This book is part of *Promised Land: The Ownership, Construction and Typology of Affordable Housing*, a collaboration between Dogma and New Academy, and supported by the Finnish Cultural Foundation.

The research focuses on collective habitation not as an idealist projection, but as a structural re-consideration of the entire housing production process: from land procurement to home ownership, from construction to typology. This section focuses on the proposal for a labour cooperative in Helsinki.

New Academy
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In collaboration with
Y-Foundation (Finland)

Introduction to the project	4
Siting	6
Ownership structure	8
Budget and schedule	10
Structure	12
Project	14
Unit	18
Construction	24
Application	30

INTRODUCTION

This project is developed in collaboration with Y-Foundation (Y-Säätiö) Finland. Y-Foundation is a non-profit NGO combatting homelessness in Finland. Unlike the ‘treatment before housing’ approach that has been prevalent for the past three decades, Y-Foundation operates on a housing first principle that prioritizes housing as a basic human right. For the homeless with mental health and substance issues, this places access to housing as the foundation for addressing their social and health issues. Y-Foundation currently owns and manages over 16,000 housing units and engages in the development of affordable housing through the framework of ARA, the Housing Finance and Development Centre of Finland.

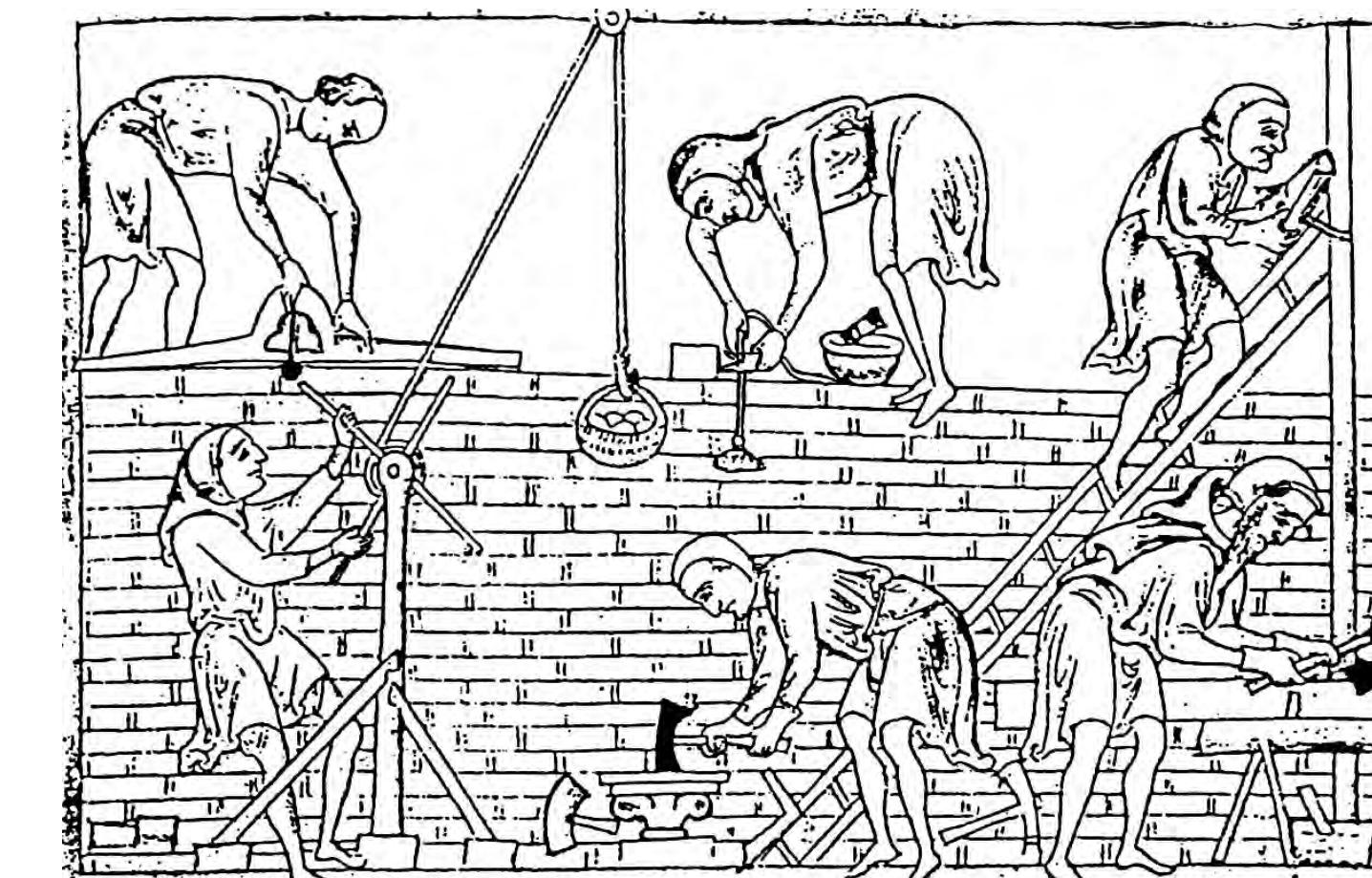
During their years of operation, Y-foundation has observed a worrying correlation of rising rental prices with increases in government housing subsidies. Though ostensibly socially progressive, housing subsidies have also served to create a very profitable environment for private landlords and developers as subsidies increase the price floor that prospective tenants can afford. Finland provides over two billion euros of housing subsidies annually, of which over 50% go to rents on the private landlords. Y-Foundation has stressed the need for additional affordable social housing and though they are committed to building an additional 350 affordable housing units in 2019, it can only operate with the limited means at its disposal.

A growing problem in Finland is the increasing number of youth that are unable to continue into either vocational training or higher education. With poor job prospects and limited access to credit, these youths are at high risk of marginalization and homelessness as they grow older. With the rising trend of homelessness caused by debt and insolvency, this project, Bysantti, is established as a cooperative venture with at risk youth, providing them with housing in return for their building labour. The youths develop skills in construction and building maintenance, while also providing them with a stable living environment that can support them in the future.

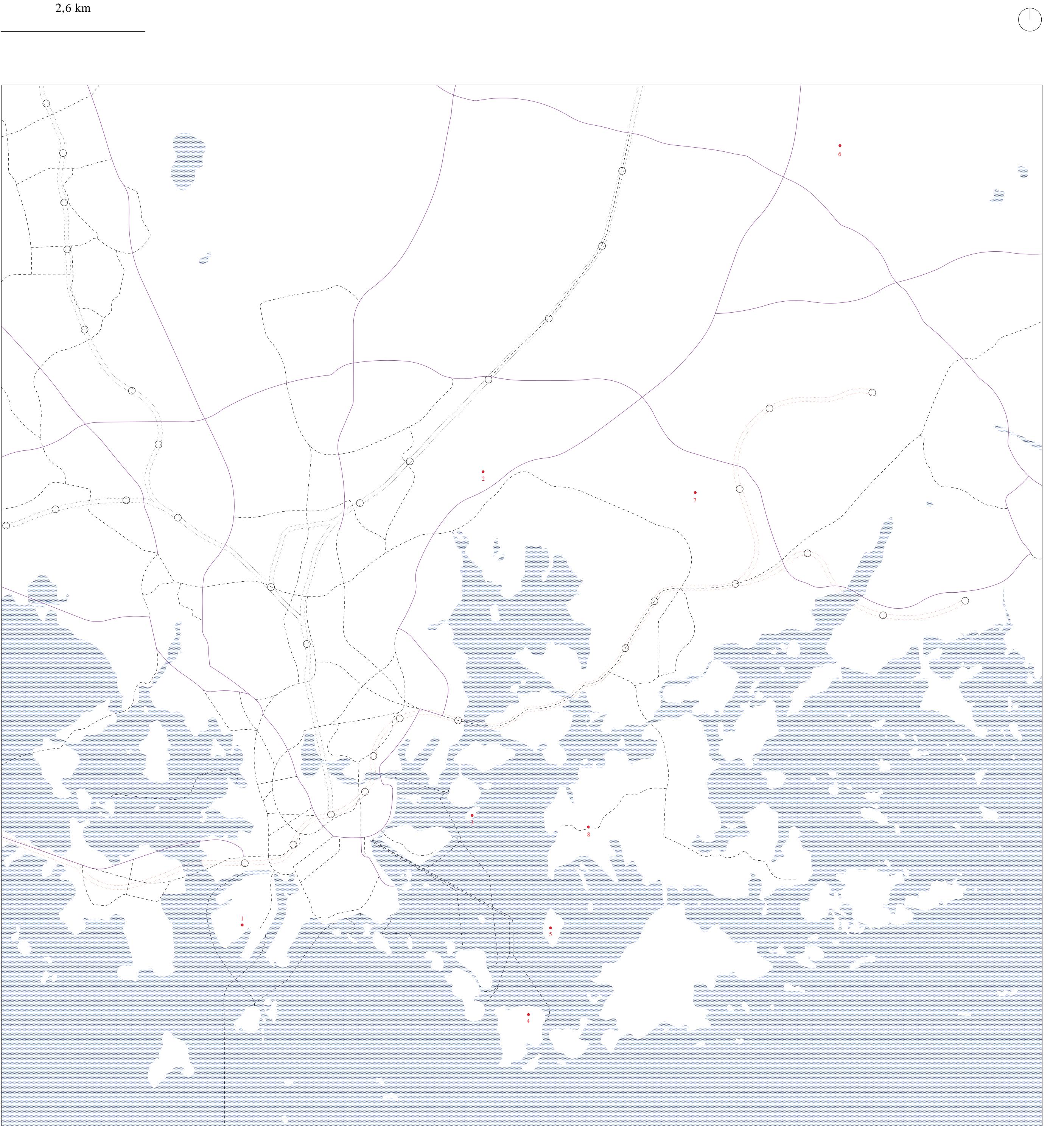
The project is situated on a challenging site that has been avoided by conventional development due to costs needed for foundations and ground work. By situating the project on top of a series of vertical structures constructed by hand from brick, the project avoids costly foundation work through laborious construction that navigates the difficult topography of the site. The sloping site also allows for handicap accessibility without the need for elevators, reducing long term costs. By prioritizing labour over capital costs, the project allows for a building made up of a monolithic brick structure, one that is extremely durable while only costing 1300 euros per square meter in materials.

Planned for a construction period of two years, Bysantti consists of 1200m² of affordable housing along with a communal ‘shed’ that begins the construction process. The shed is built as a ‘prototype’ building, allowing the construction team to familiarize themselves with the building process by going through all the phases of construction. The shed then becomes a workshop for the construction process, and is a communal space for meals and relaxation. The process of building is itself a collective endeavour, where the workers will build, eat, and live together.

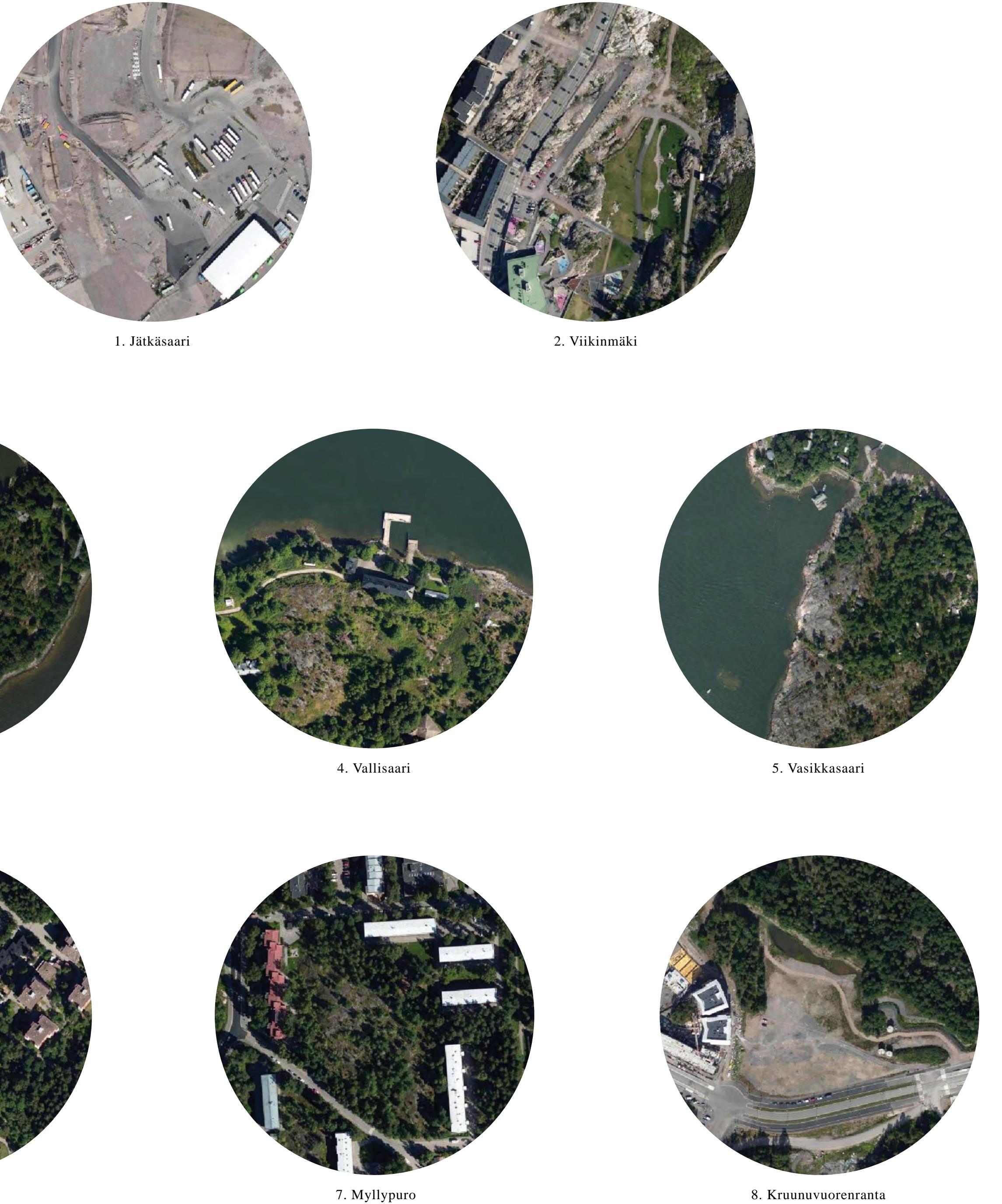
Operating under the ARA developer price target of 3600 euros per square meter, Y-Foundation provides the startup capital equivalent to 15 of the 30 units that will be managed and rented out through their M2Kodit program for affordable housing. Y-Foundation retains ownership of the land as part of its land trust, preventing any future speculation of the site. The remaining 15 units are owned by the labour cooperative, and distributed to the workers in exchange for their building labour. In addition to providing a stable living environment for the workers involved in the project, the units will serve as collateral for future developments, allowing the cooperative to expand its operations.



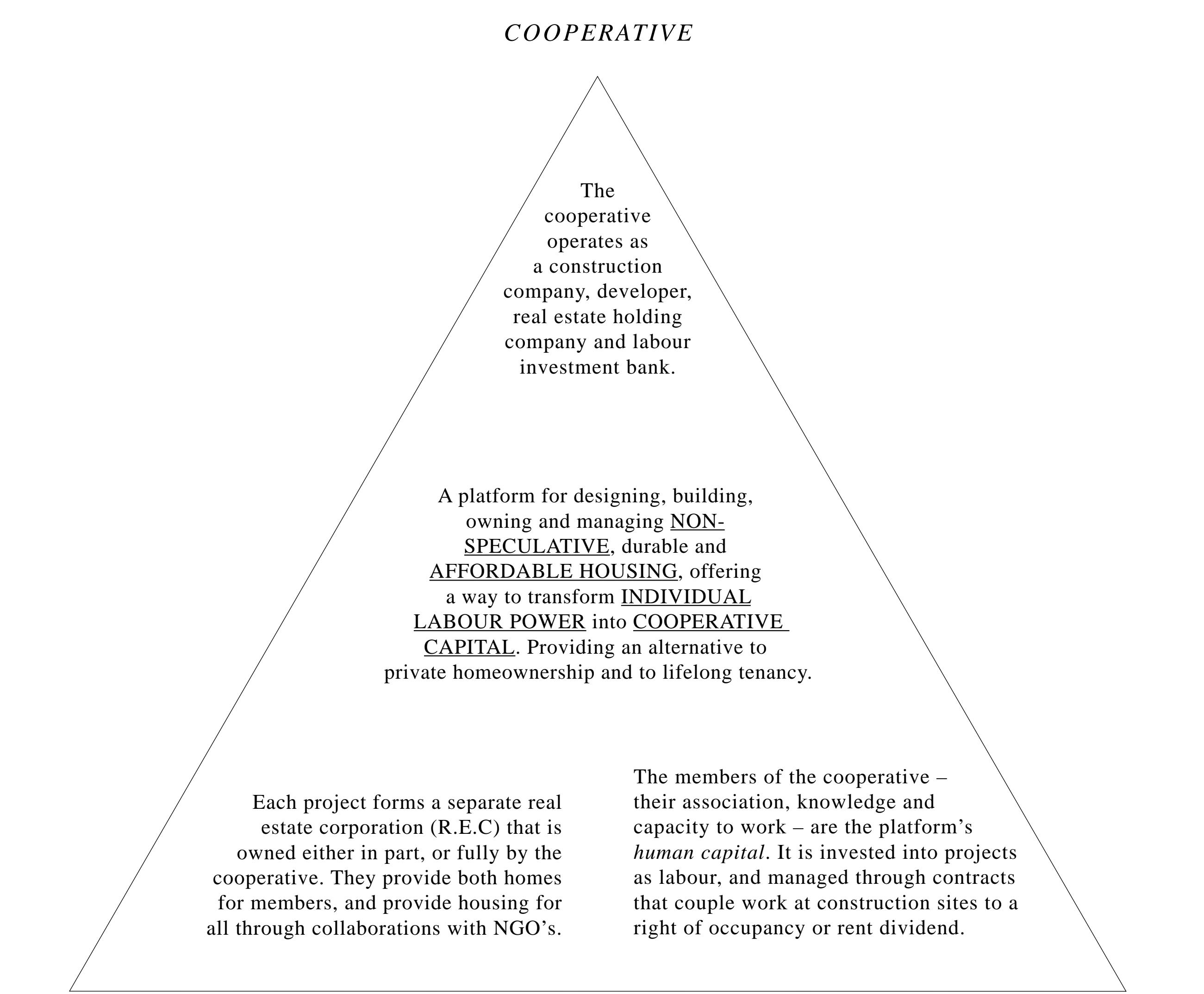
Thirteenth century miniature depicting medieval masons
Reproduced from Seppo Huhtaniemi and Ilkka Knuutila, *Muuraus-, laatoitus- ja rappaustyöt*, 1993
(Finnish Masonry, Tiling and Plastering Manual, 1993)



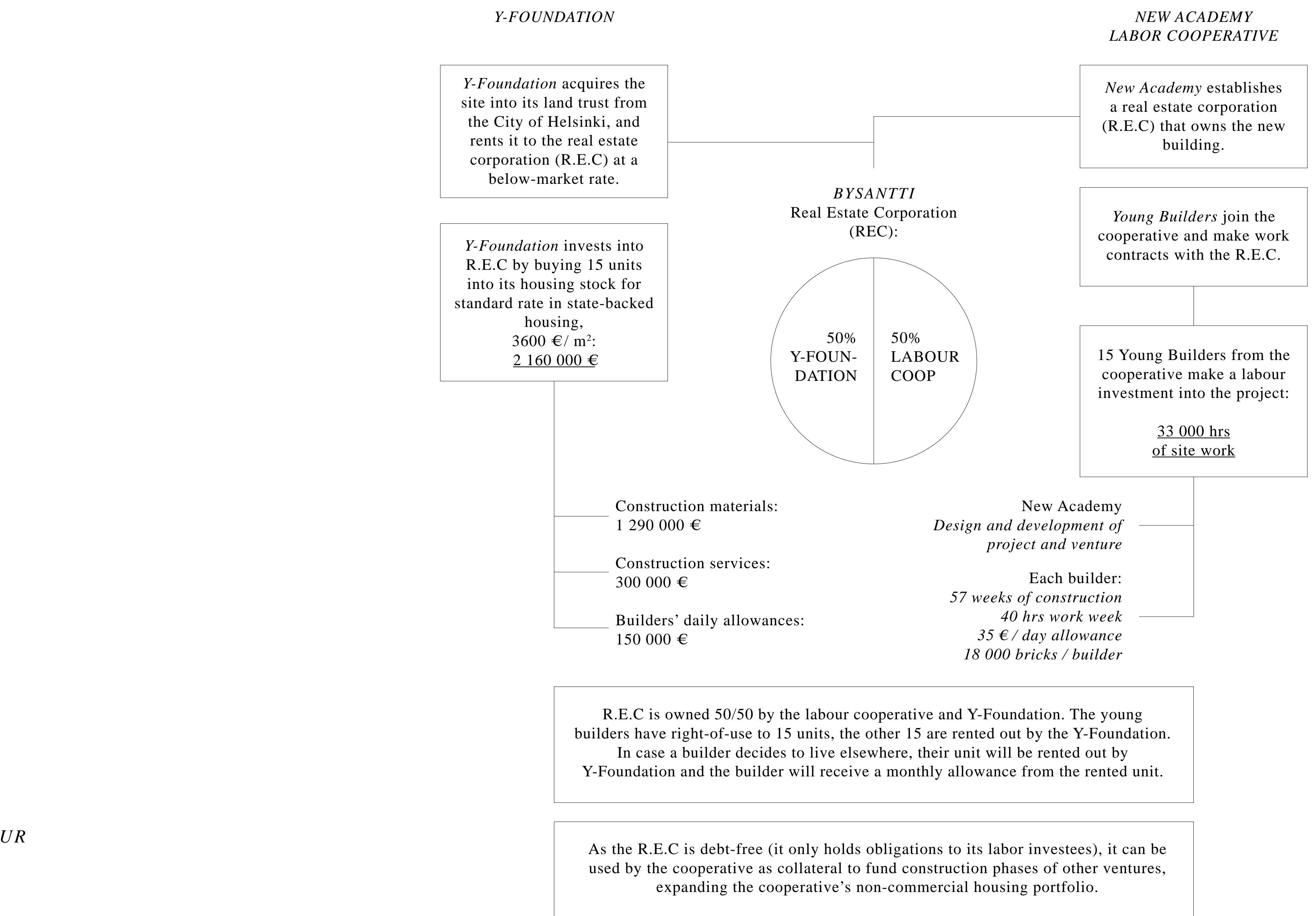
Map of Helsinki with selected sites



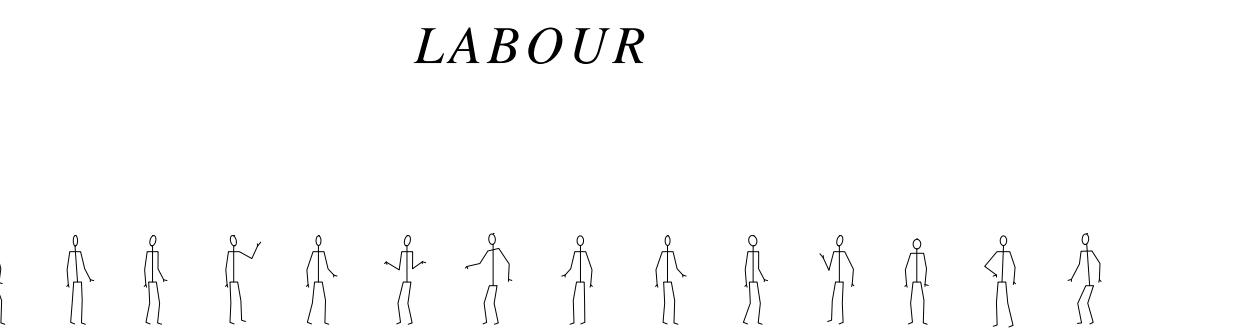
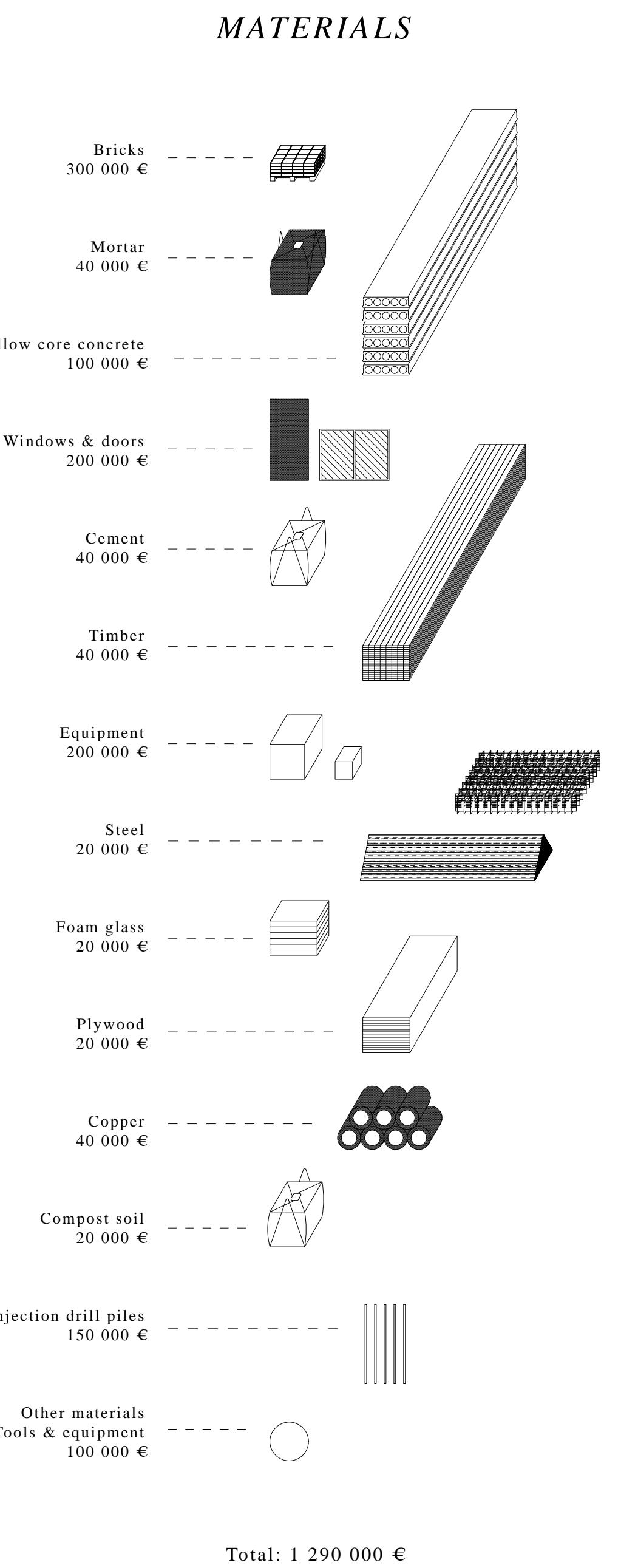
View of selected sites



Structure of labour cooperative



Bysantti – social and financial structure



- 15 builders
- 57 weeks of construction
- Each builder works 40 hrs/week
- Builders receive a daily allowance of 35€
- Each builder has two weeks of paid vacation
- Each working day includes an on-site meal
- Workers can enroll for night-guard duty and sleep on site after shed is completed
- Builders mostly work in teams of three
- One team is on site service duty (cleaning, cooking, planning, procuring, helping other teams)
- Teams are shuffled periodically
- Teams "compete" with quality and efficiency
- Builder's home units are determined by lottery at end of frame construction phase
- Builders will perform annual maintenance as part of agreement

COLLECTIVE LABOUR BUDGET:

- 4275 Days of work
- 34200 Hours of work

TOTAL LABOUR PER BUILDER:

- 275 Days of work
- 2200 Hours of work

Total allowance per builder: 15 000 €
Total allowances paid out: 150 000 €

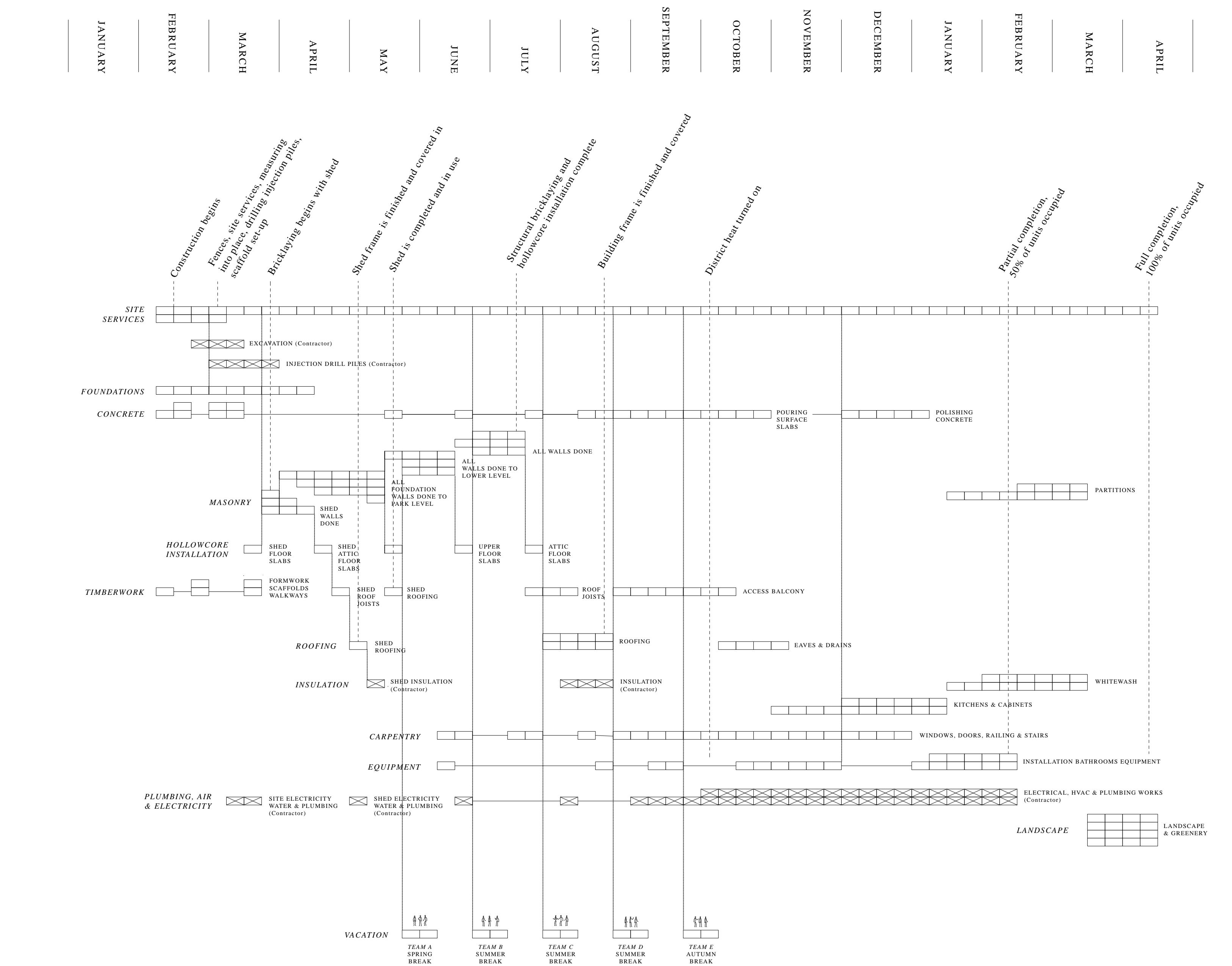
SERVICES

Permits, rental equipment, supervision, expert services, accounting, insurance, inspections, special installations

300 000 €
TOTAL: 300 000 €

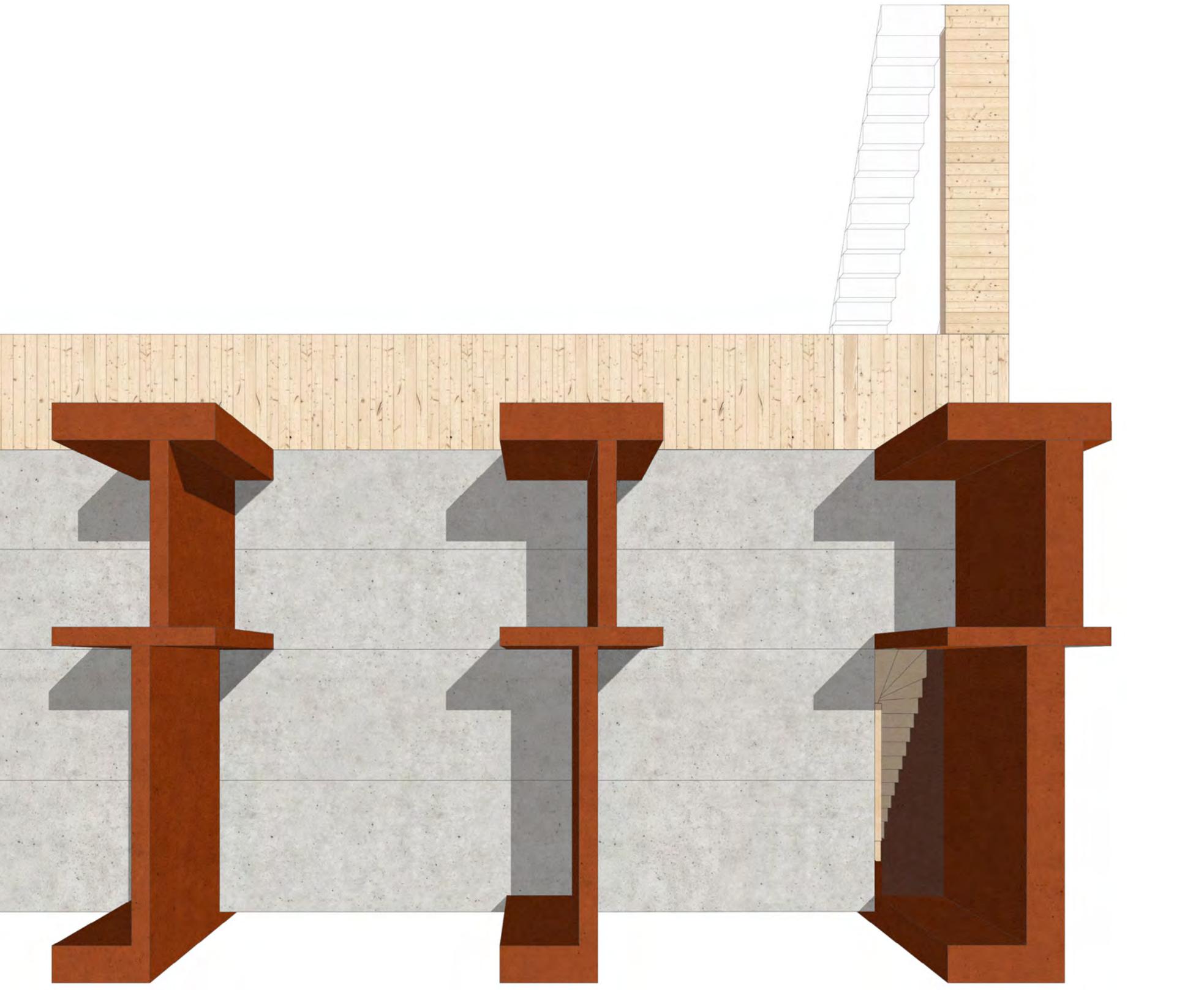
Total materials & services budget: 1 590 000 €
+ Allowances to builders: 150 000 €
= 1 740 000 €
= 1650 €/m² unit floor area
= 870 €/m² gross floor area

50% of units are sold to Y-foundation
at standard rate of 3600 €/m² unit floor area
to cover expenses:
• R.E.C construction cost debt: 1 740 000 €
• R.E.C income from sales: 1 890 000 €
• R.E.C is debt-free upon completion



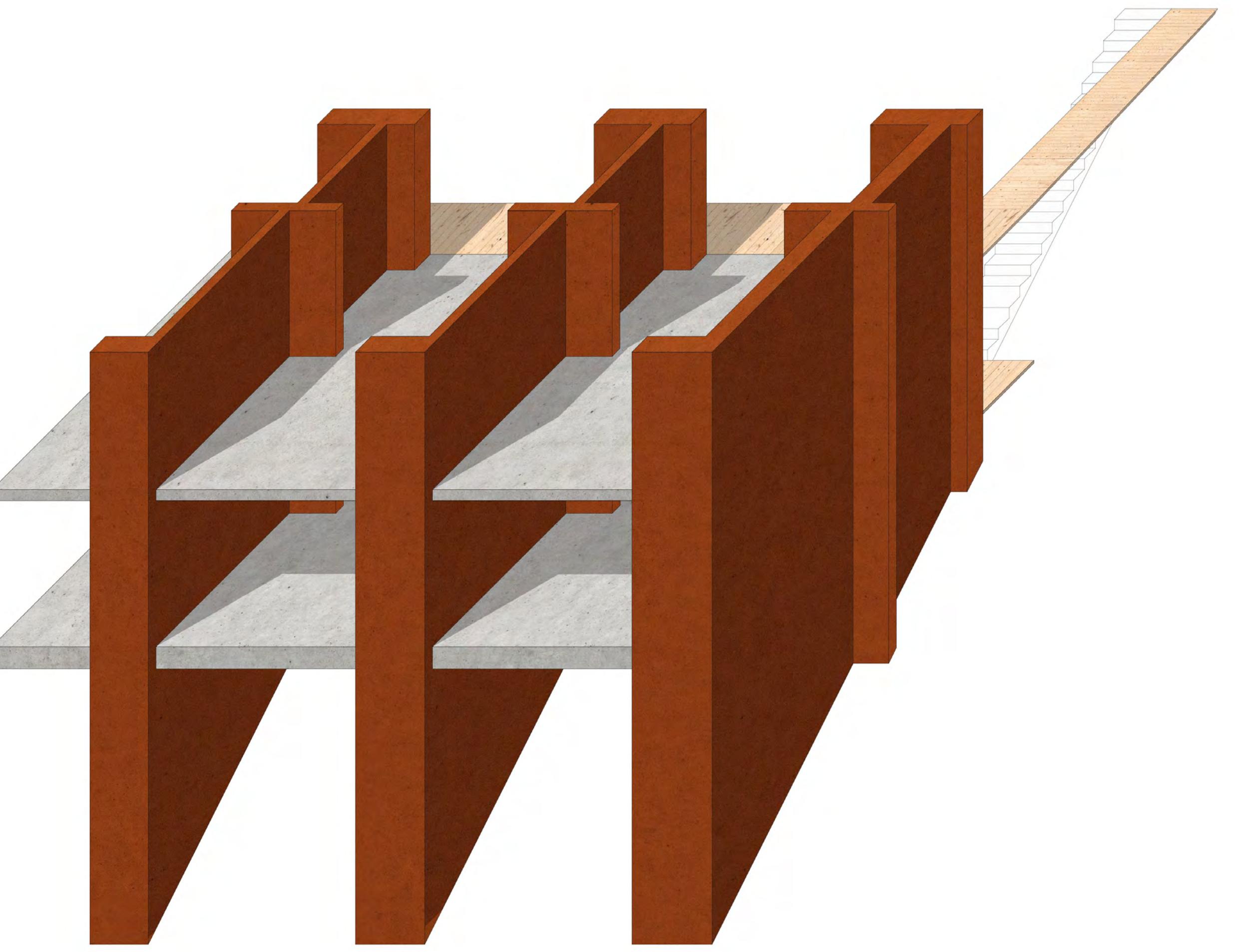
Budget diagram

Timeline



Structure diagram

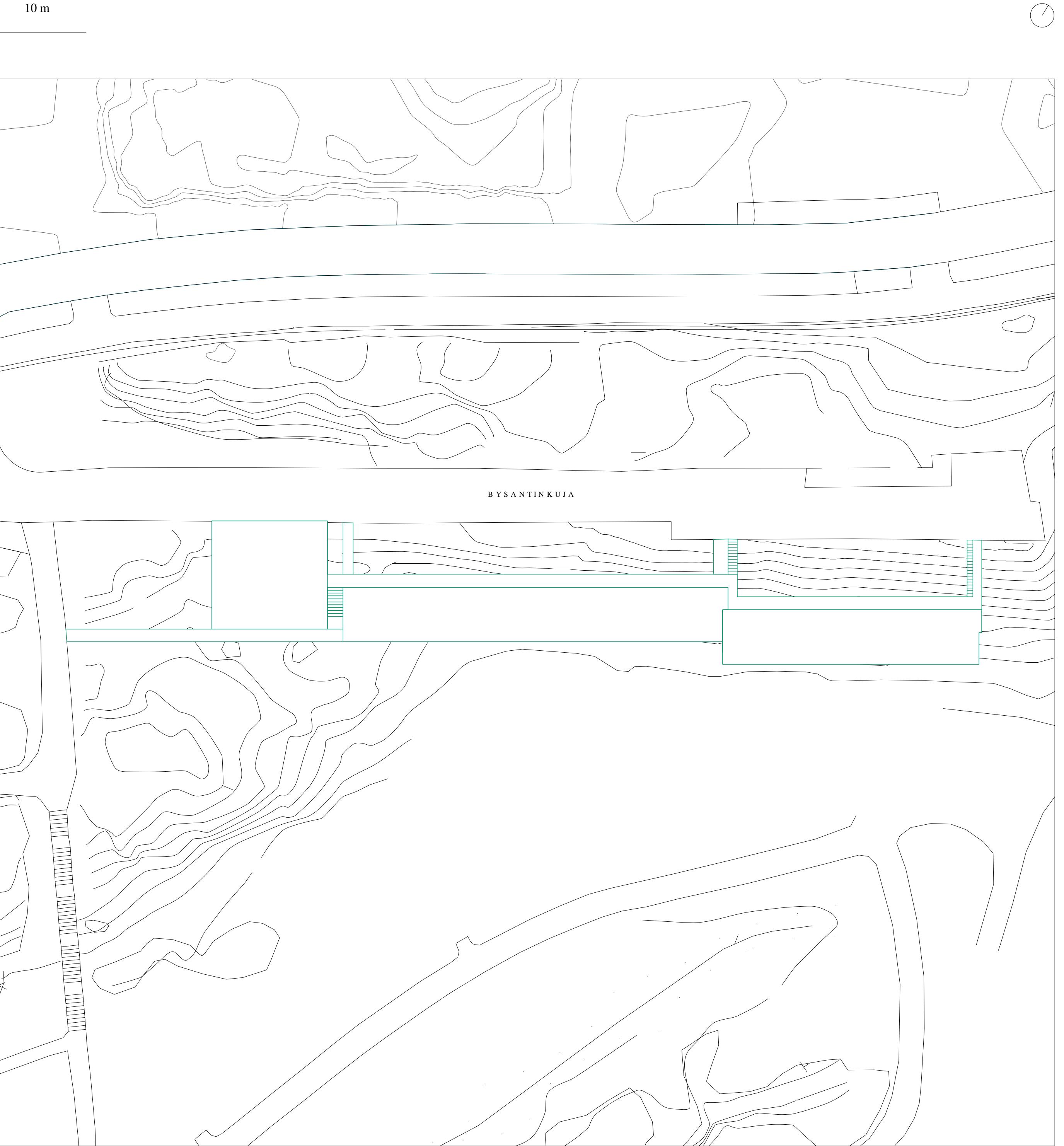
The brick structure provides lateral support while also dividing the spaces into the main technical cores.



Structure diagram

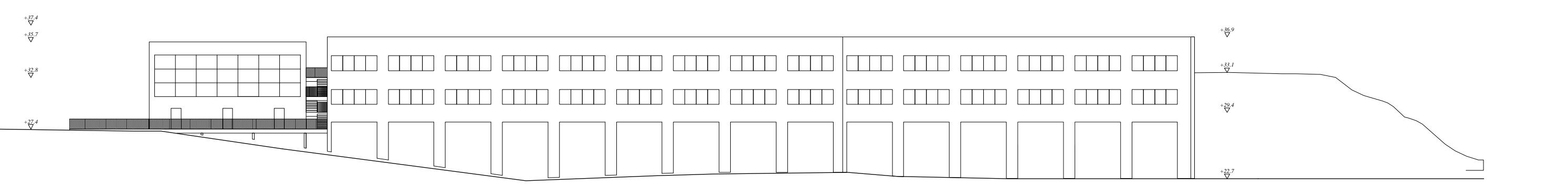


Application of the venture in Viikinmäki, Helsinki

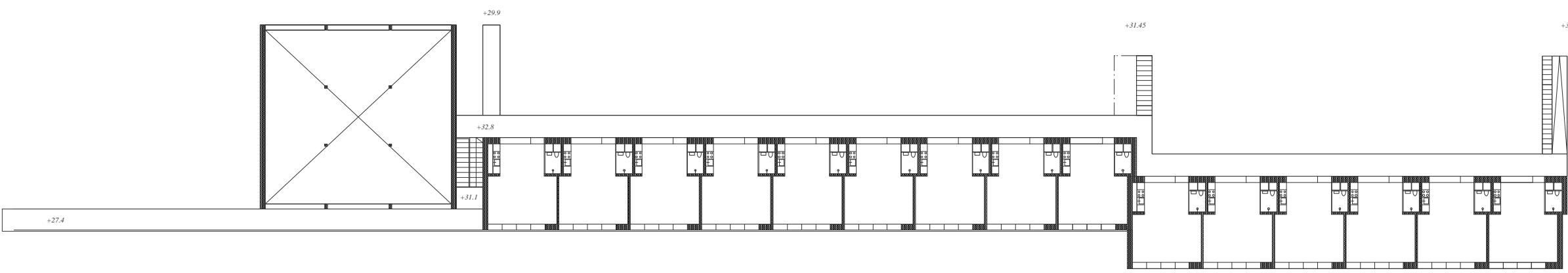


Site plan

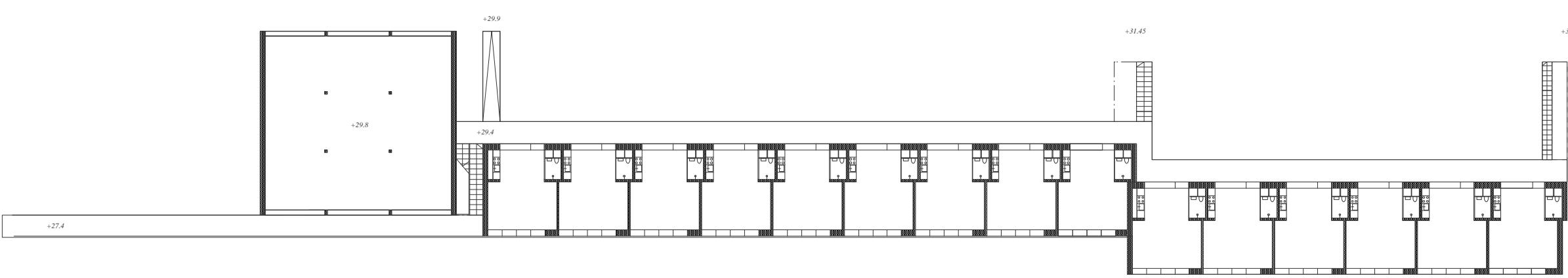
Elevation



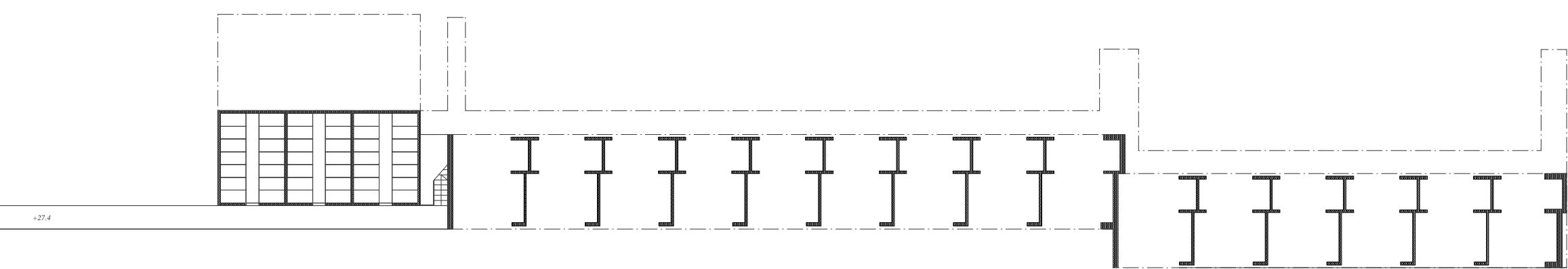
5 m



Upper level



Lower level



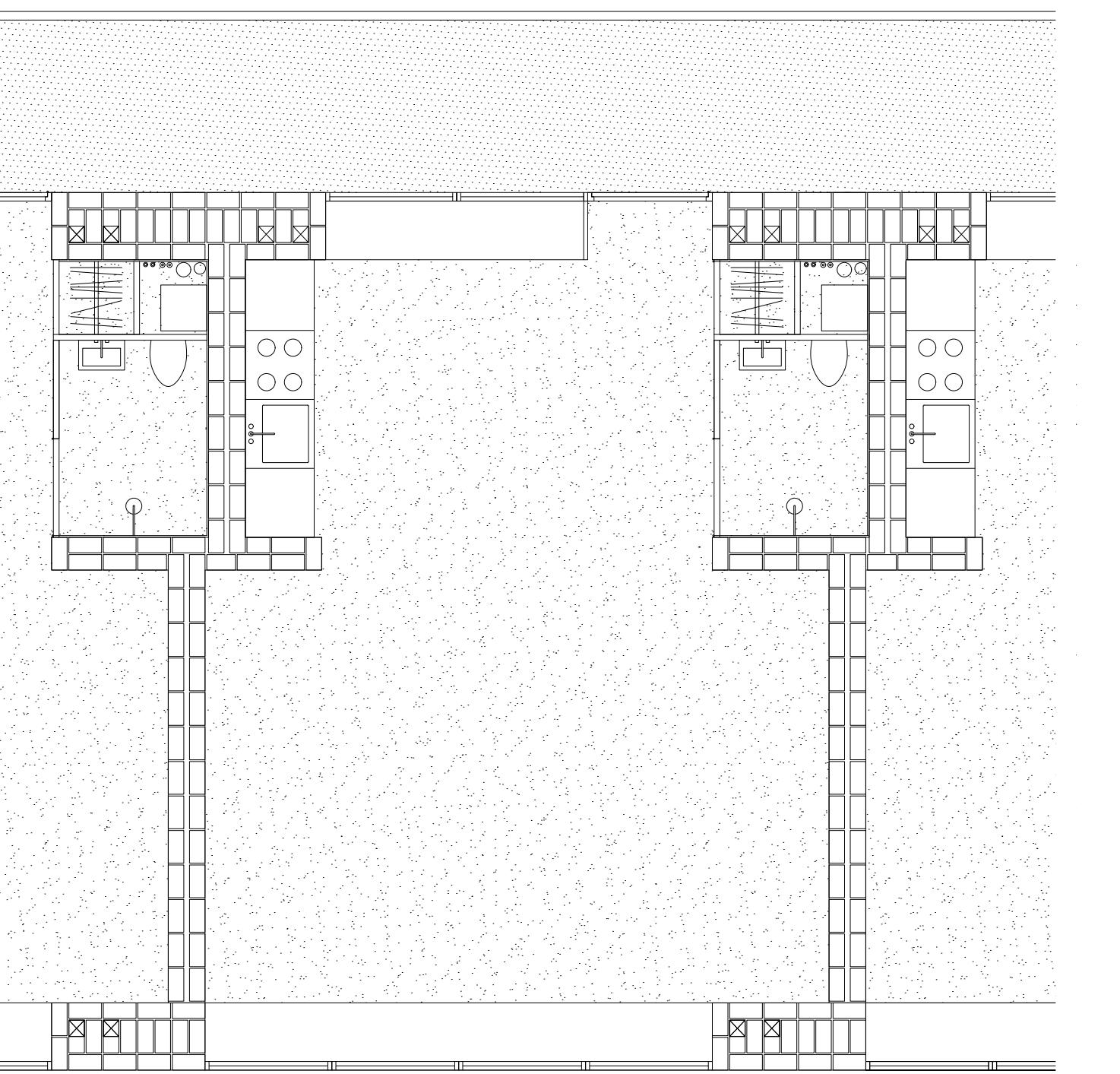
Park level

Floor plans

1 m

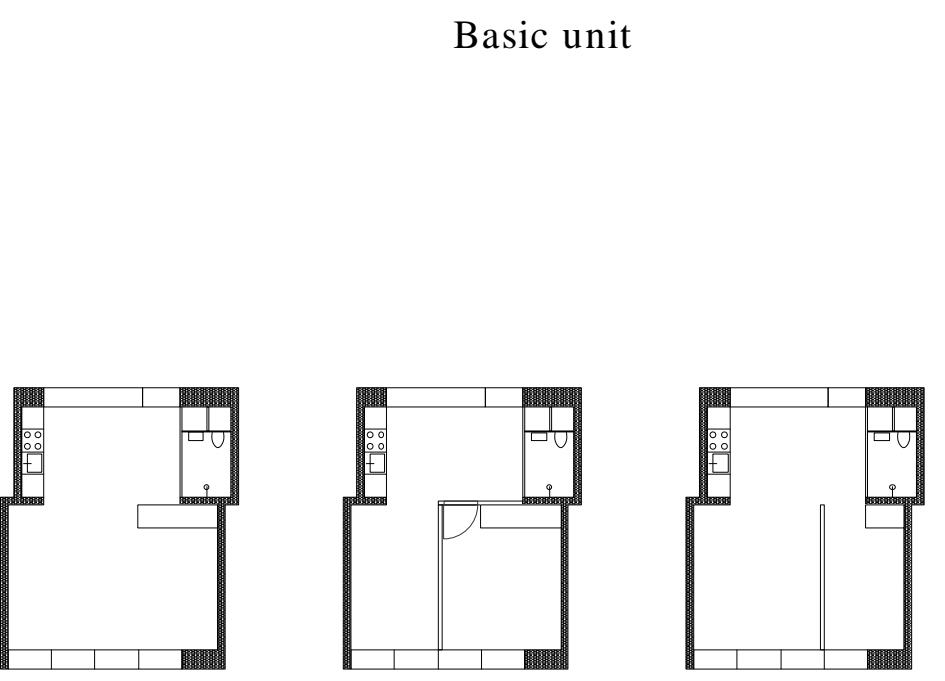
5 m

18



Plan of the basic unit

Basic unit



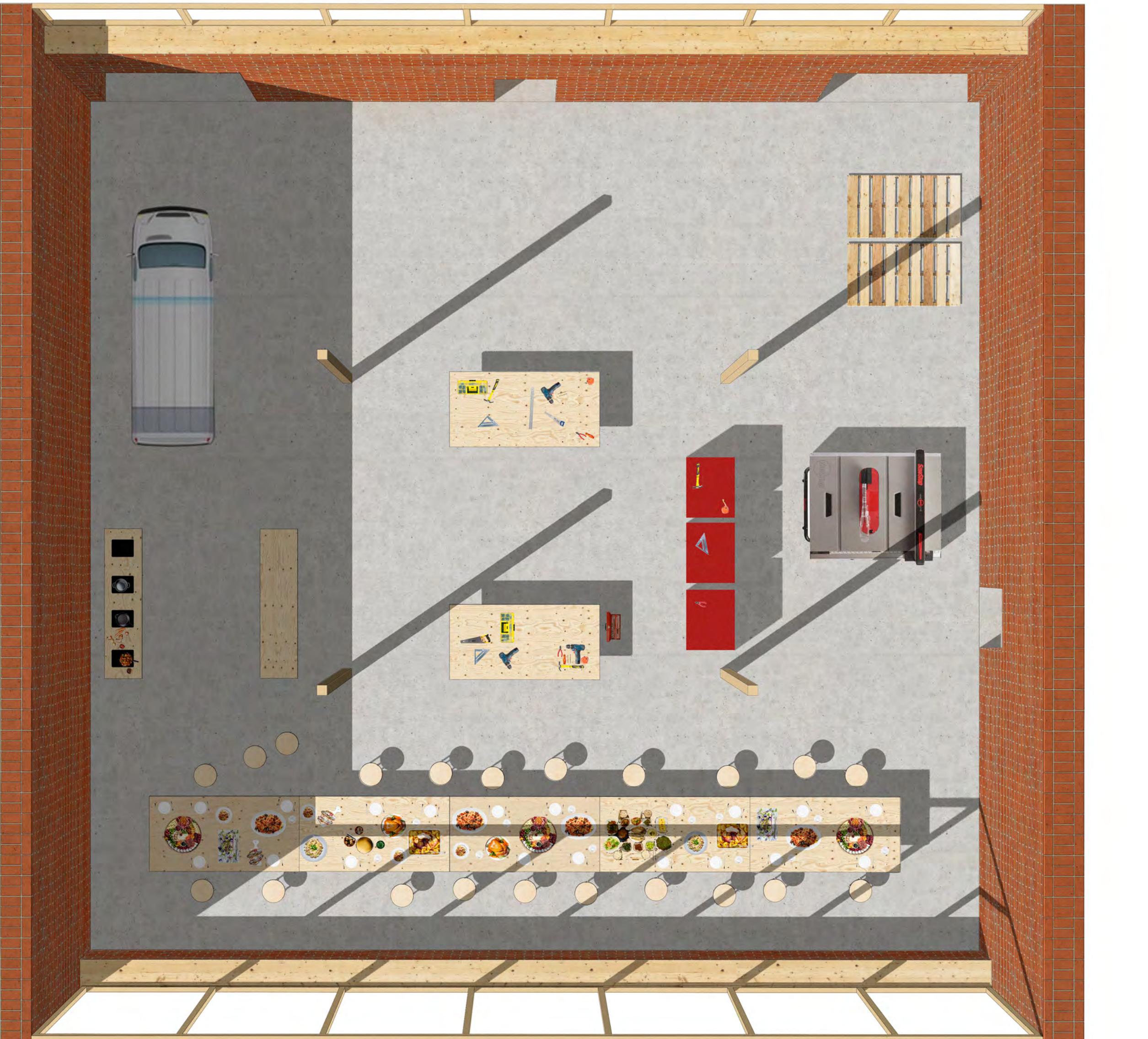
Combined unit



Units variations

1 m

20



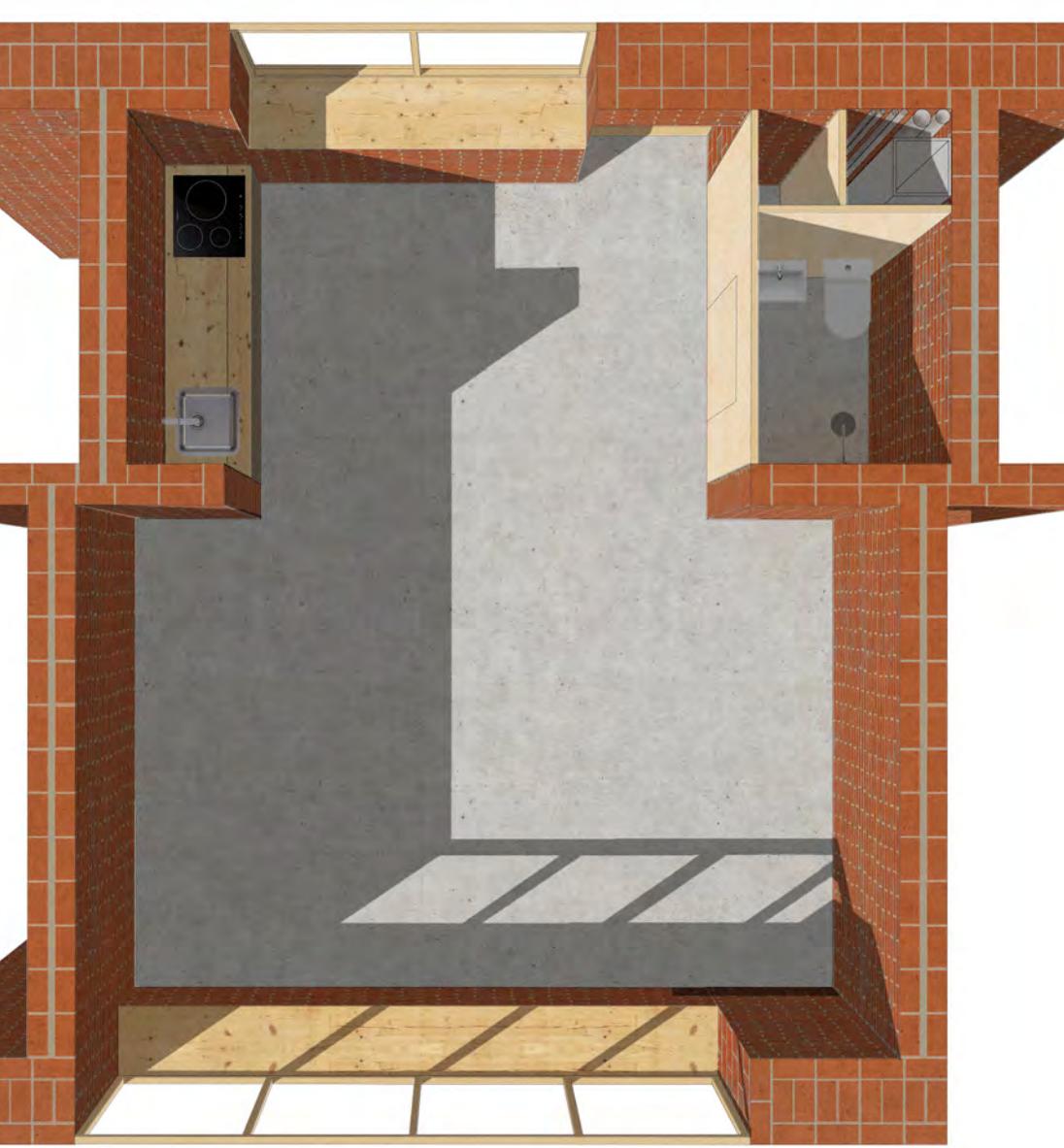
Shed

The shed is the initial 'prototype' building for the work team to go through all the phases of construction and learn building techniques. The shed then acts as a workshop and staging area during construction, and a communal facility for shared meals and breaks. The process of building is itself a collective endeavour, where the workers will build, eat, and live together.

1 m

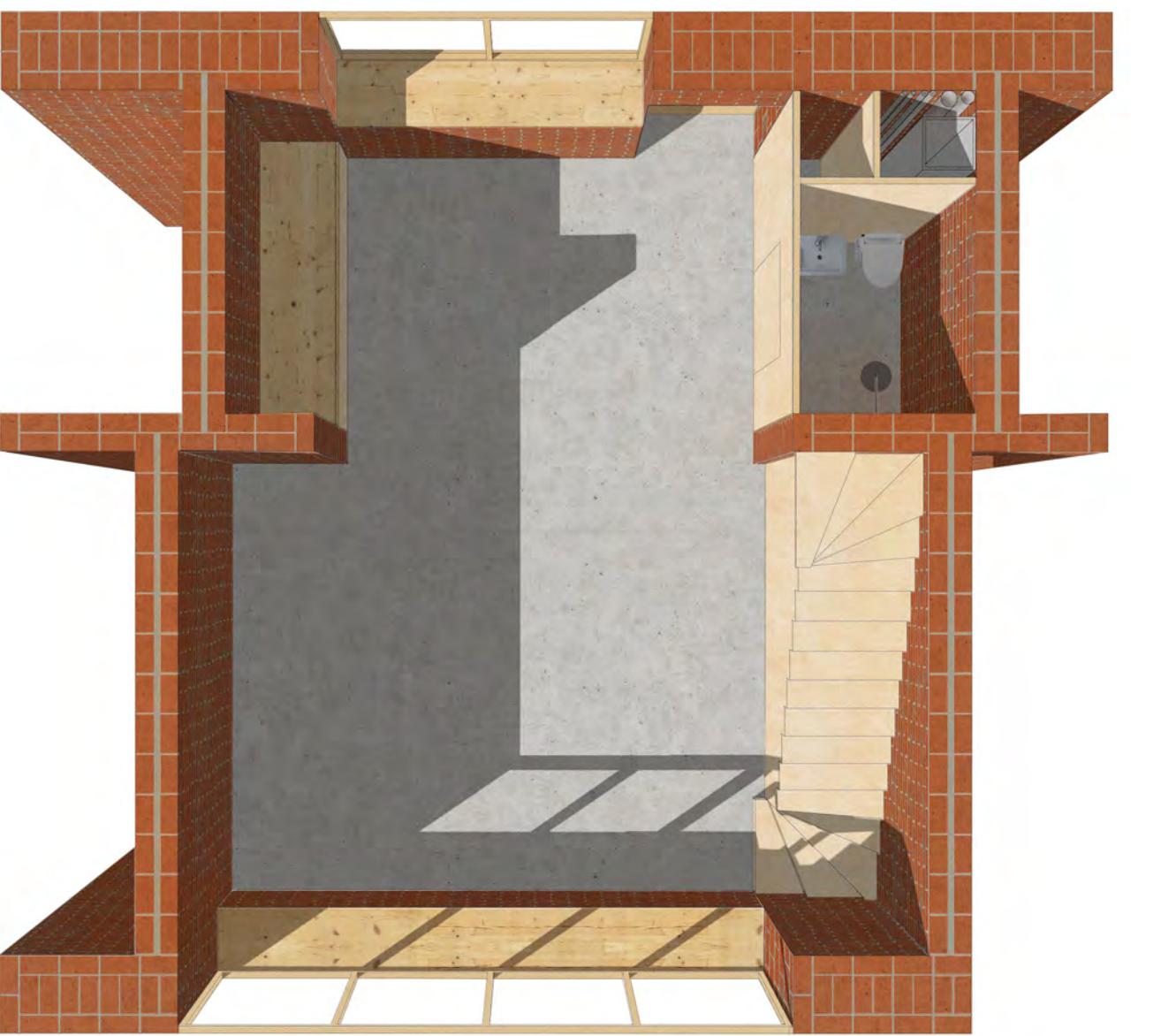
Basic unit

The basic unit consists of durable hard surfaces and can be configured in multiple ways.



1 m

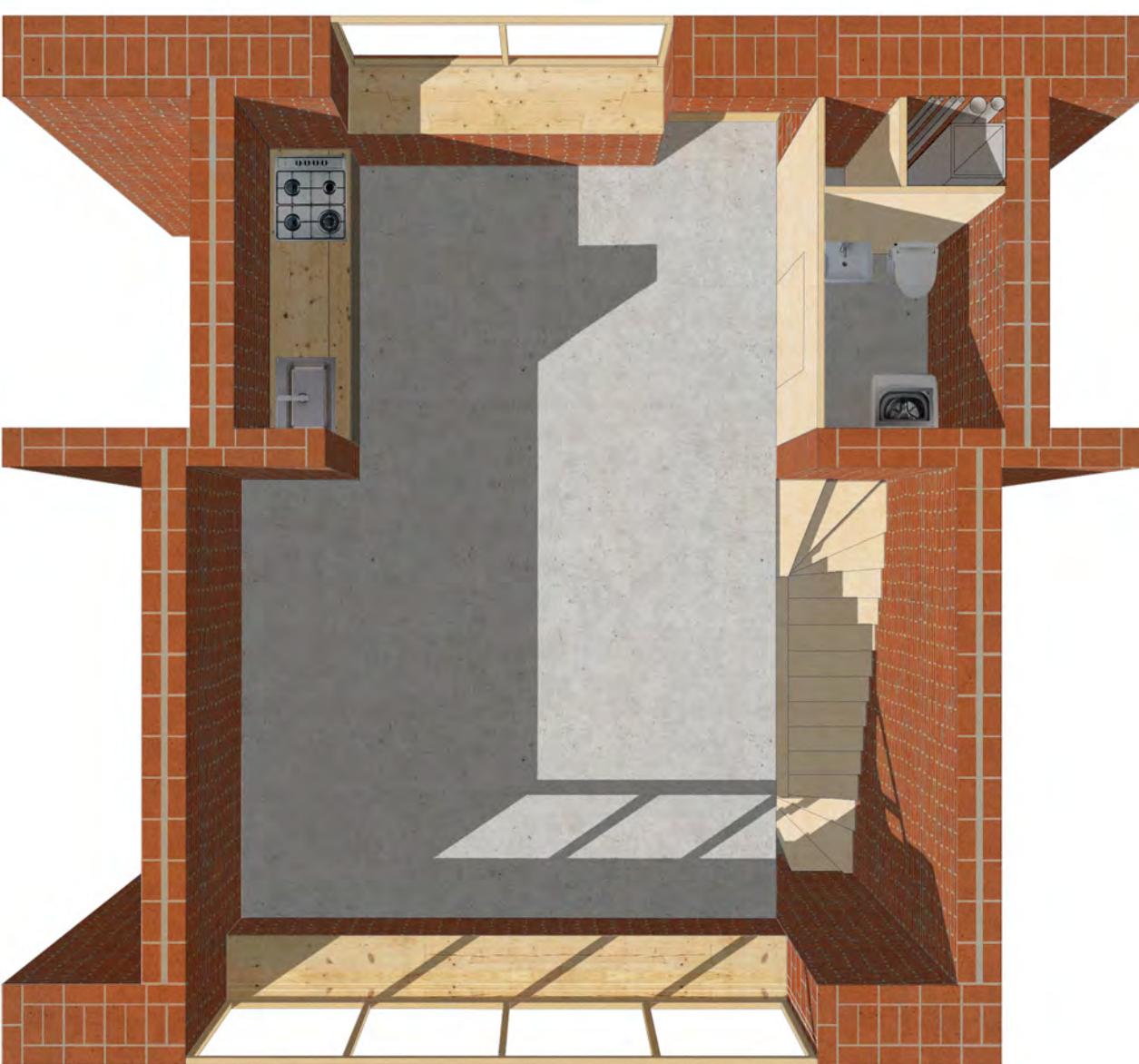
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Combined unit, lower level

Larger units can be created by introducing a stair to combine units together.

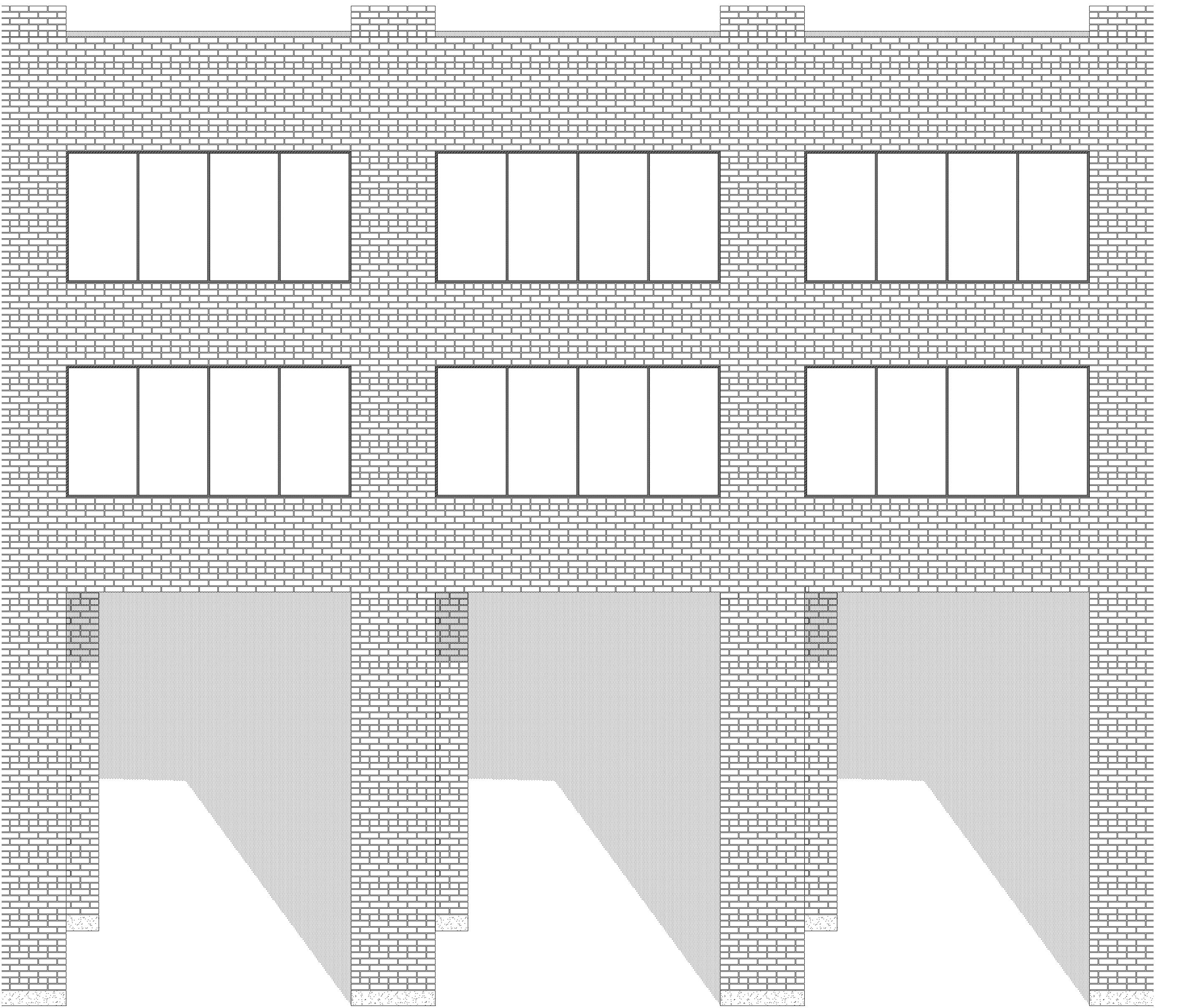
1 m



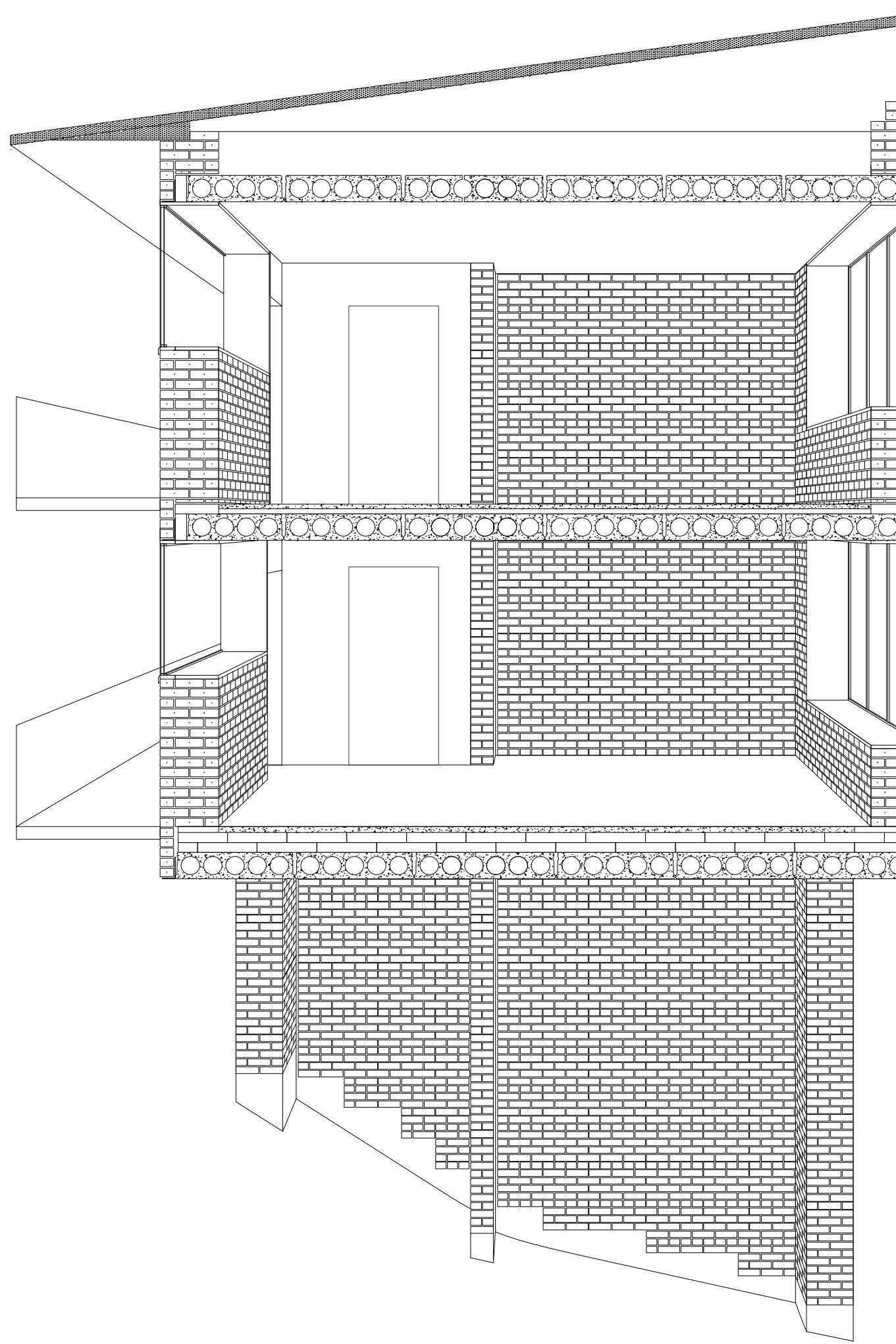
Combined unit, upper level

Larger units can be created by introducing a stair to combine units together.

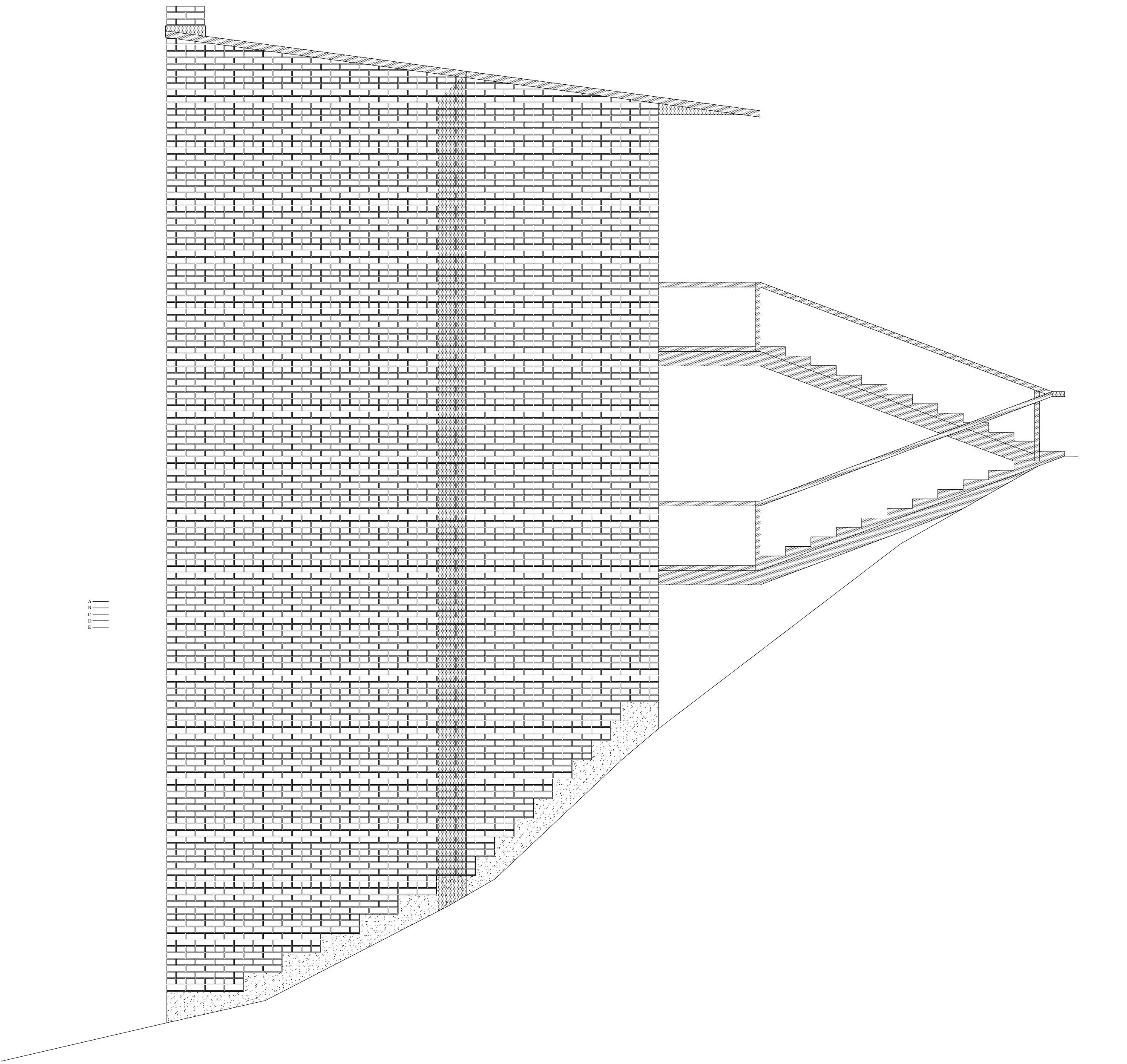
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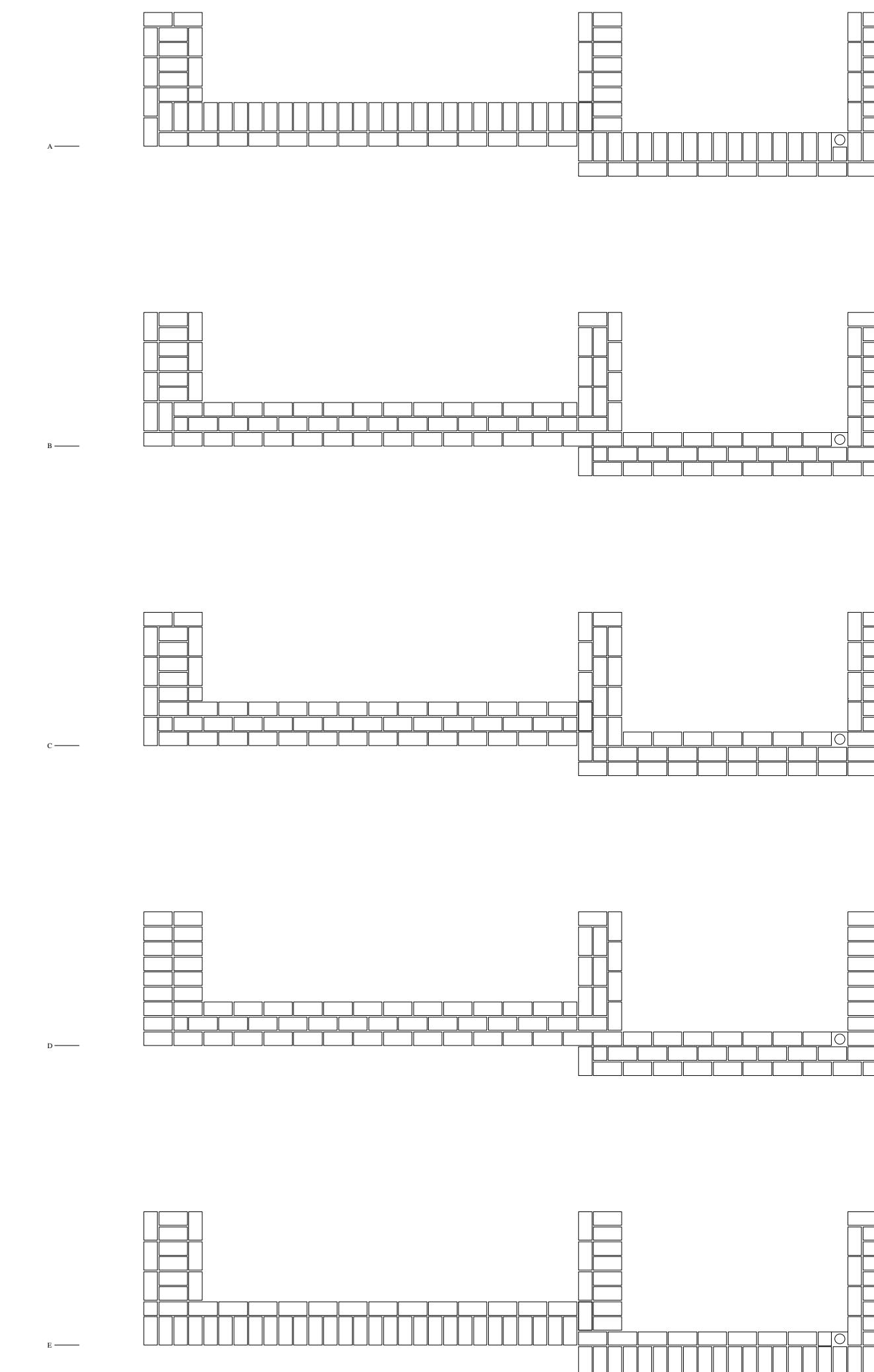
Facade detail



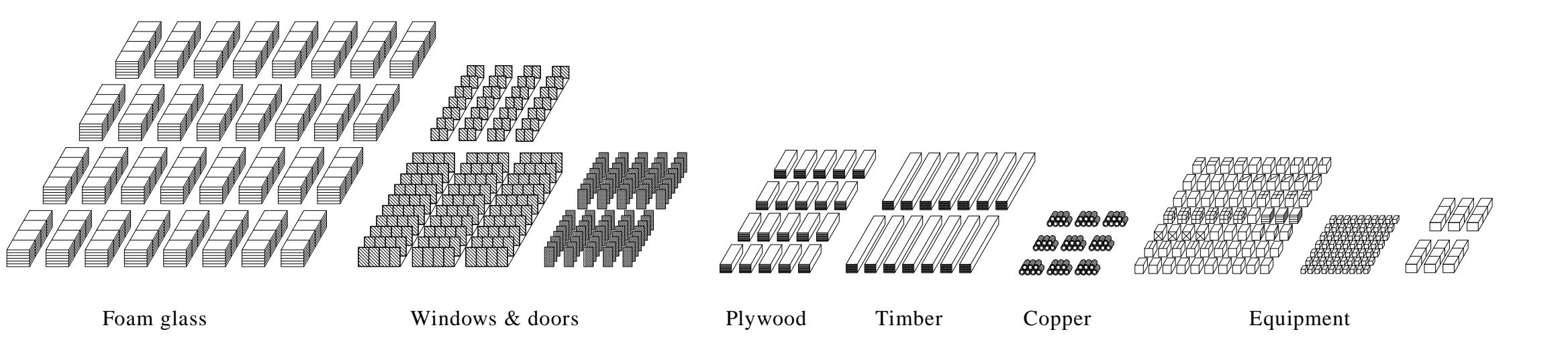
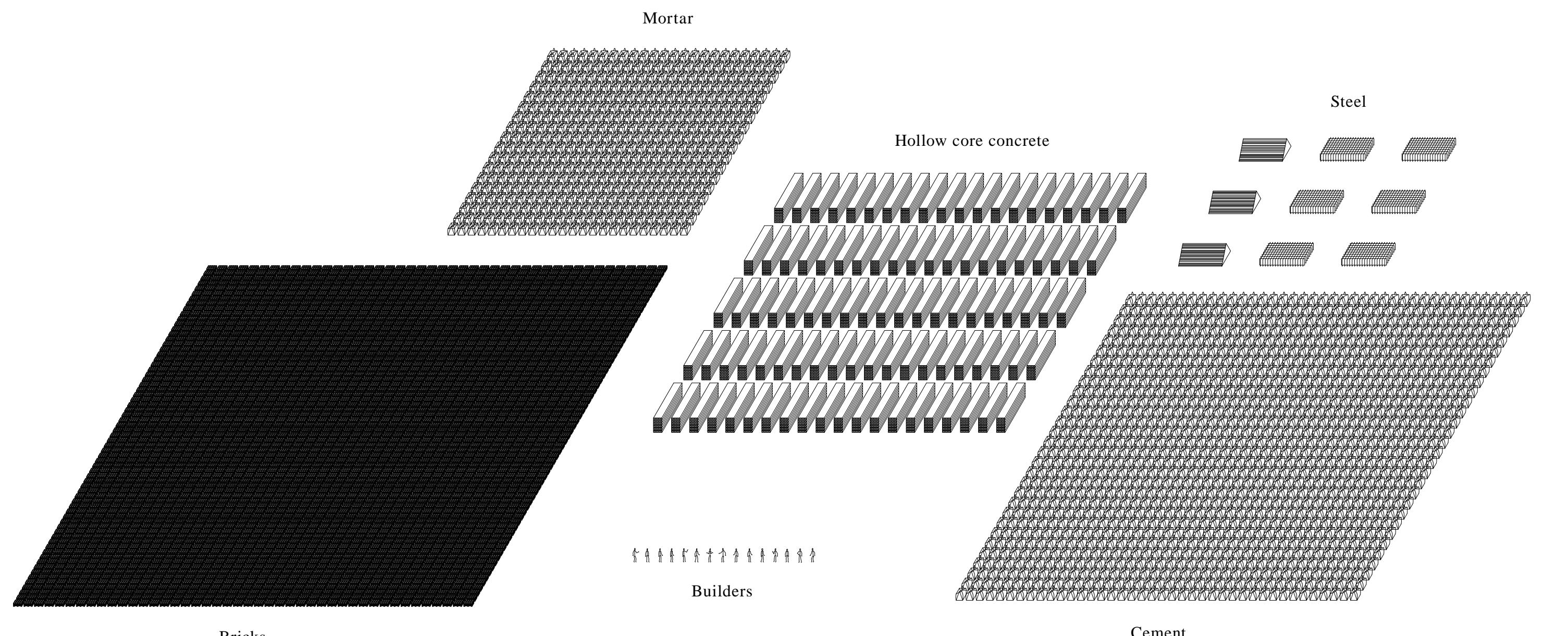
Section



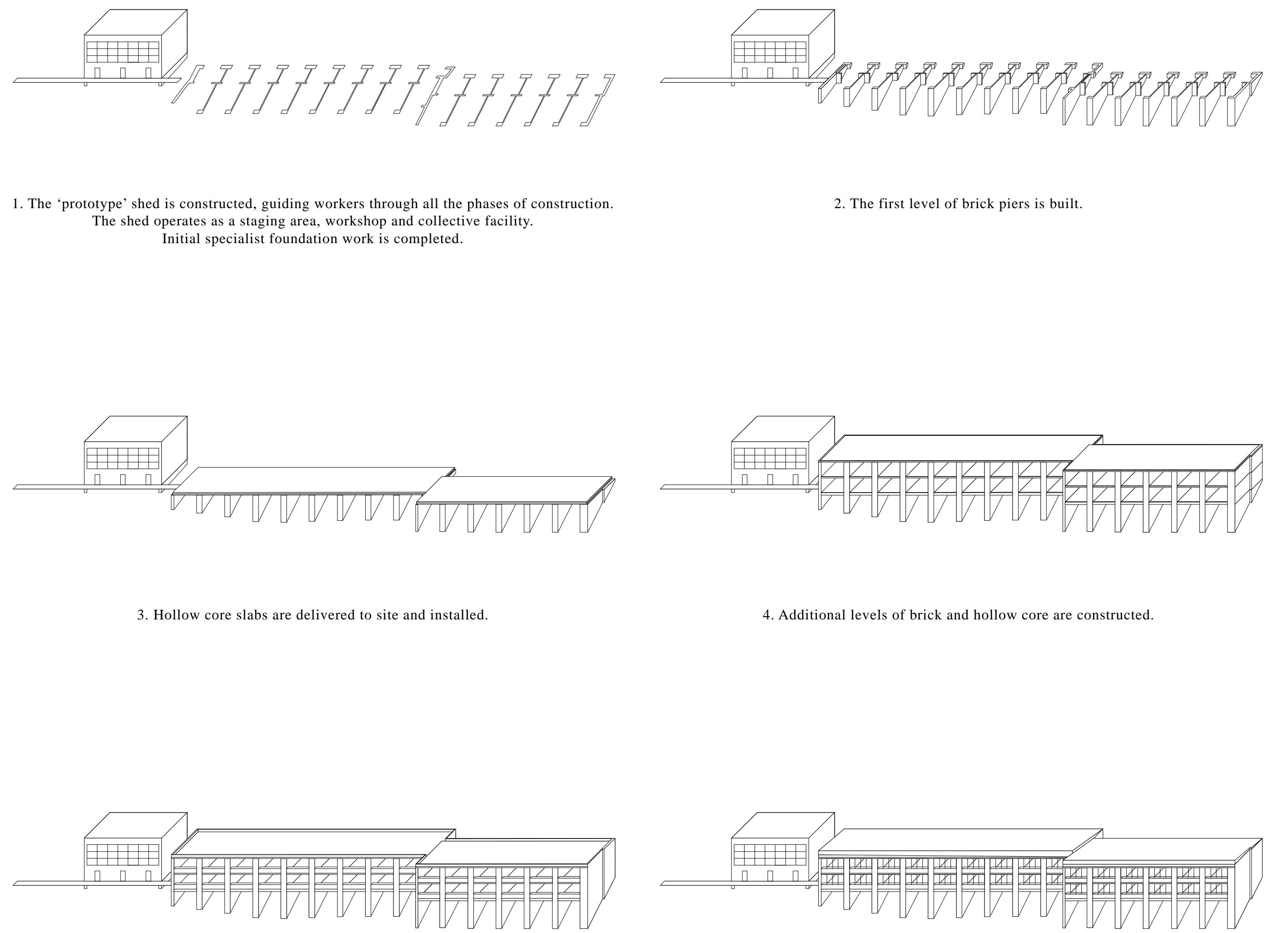
Brick coursing elevation



Brick coursing patterns

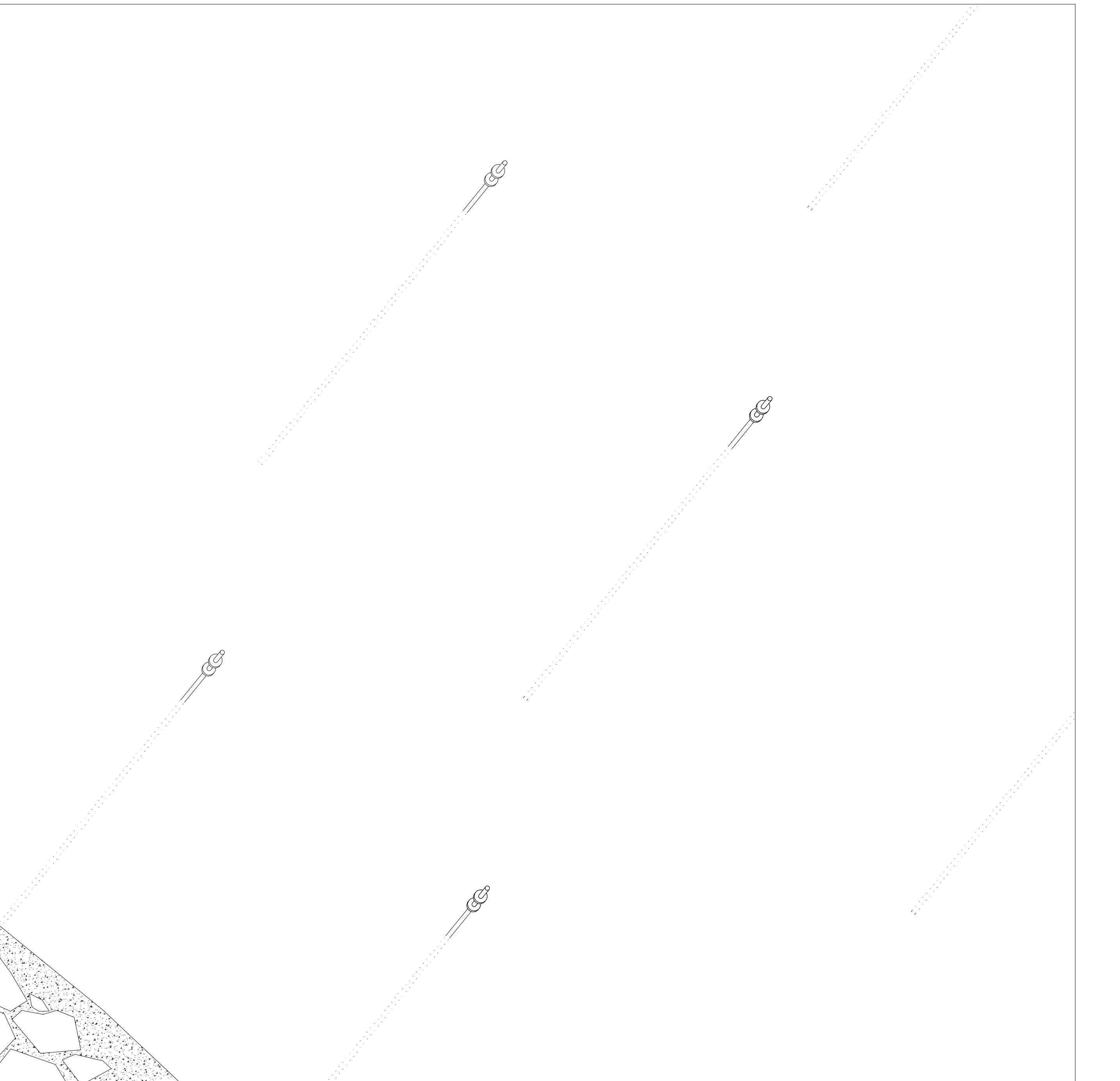


Construction materials and labour



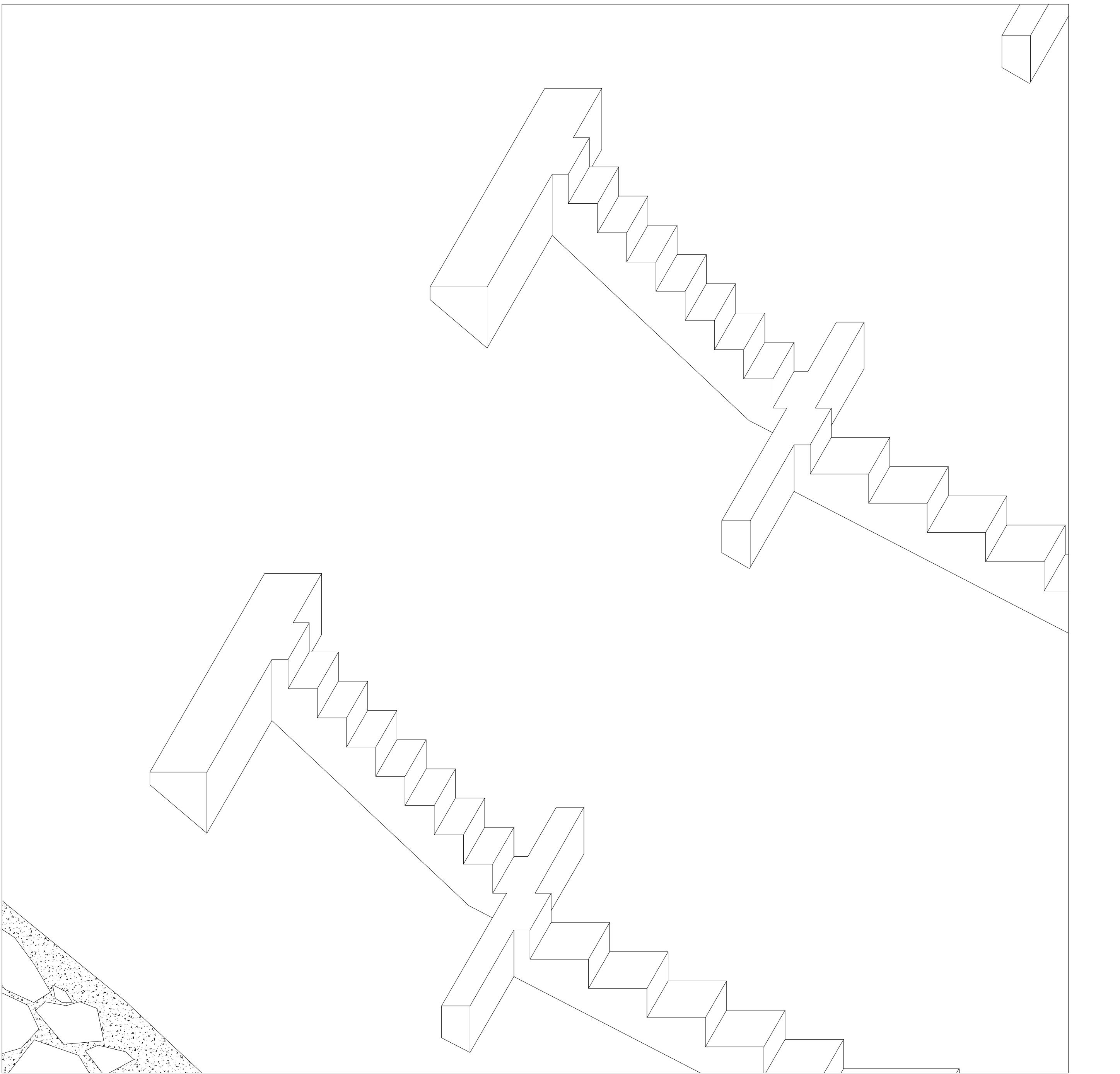
Construction phasing

30



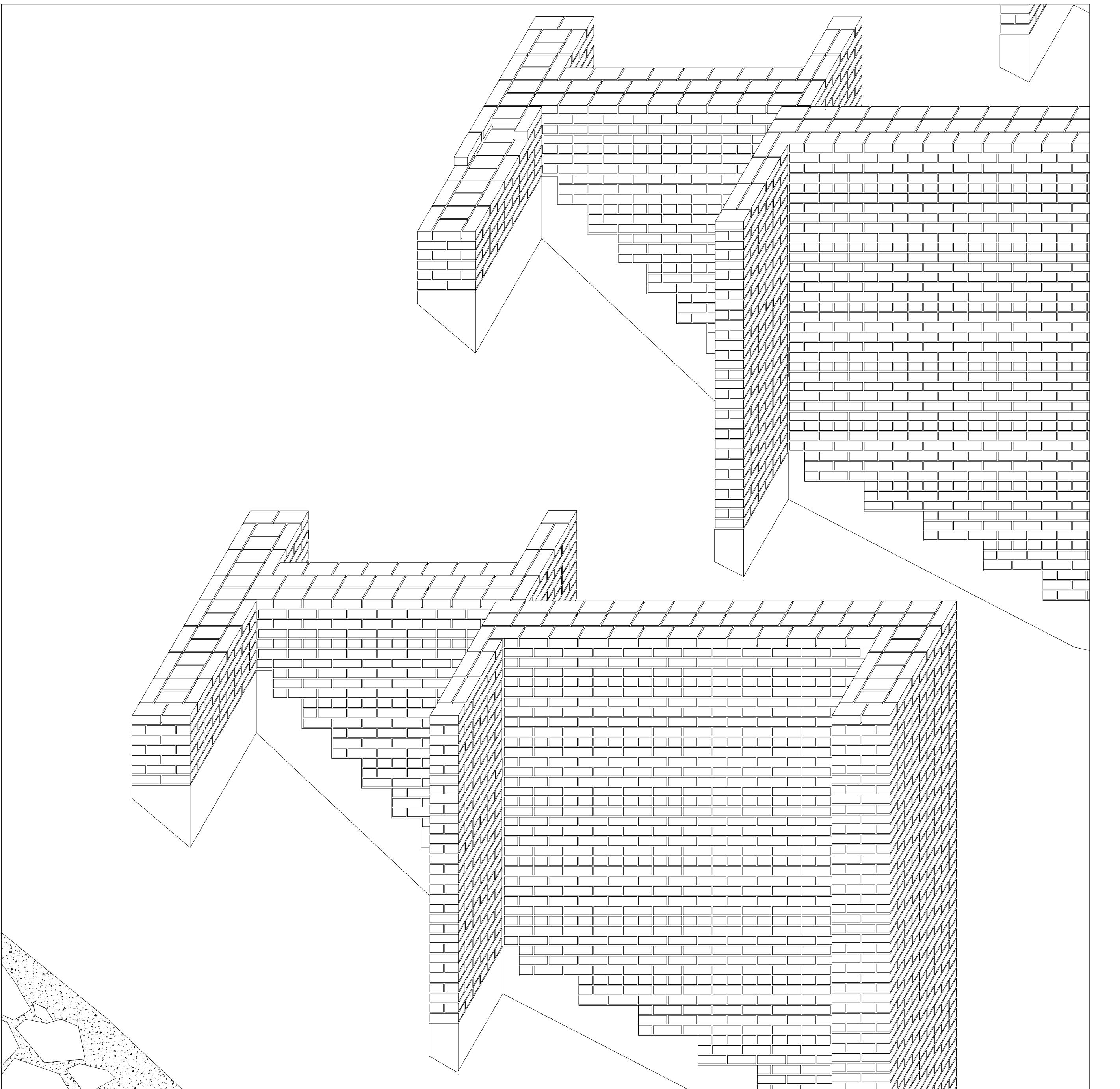
Foundation anchor installation axonometry





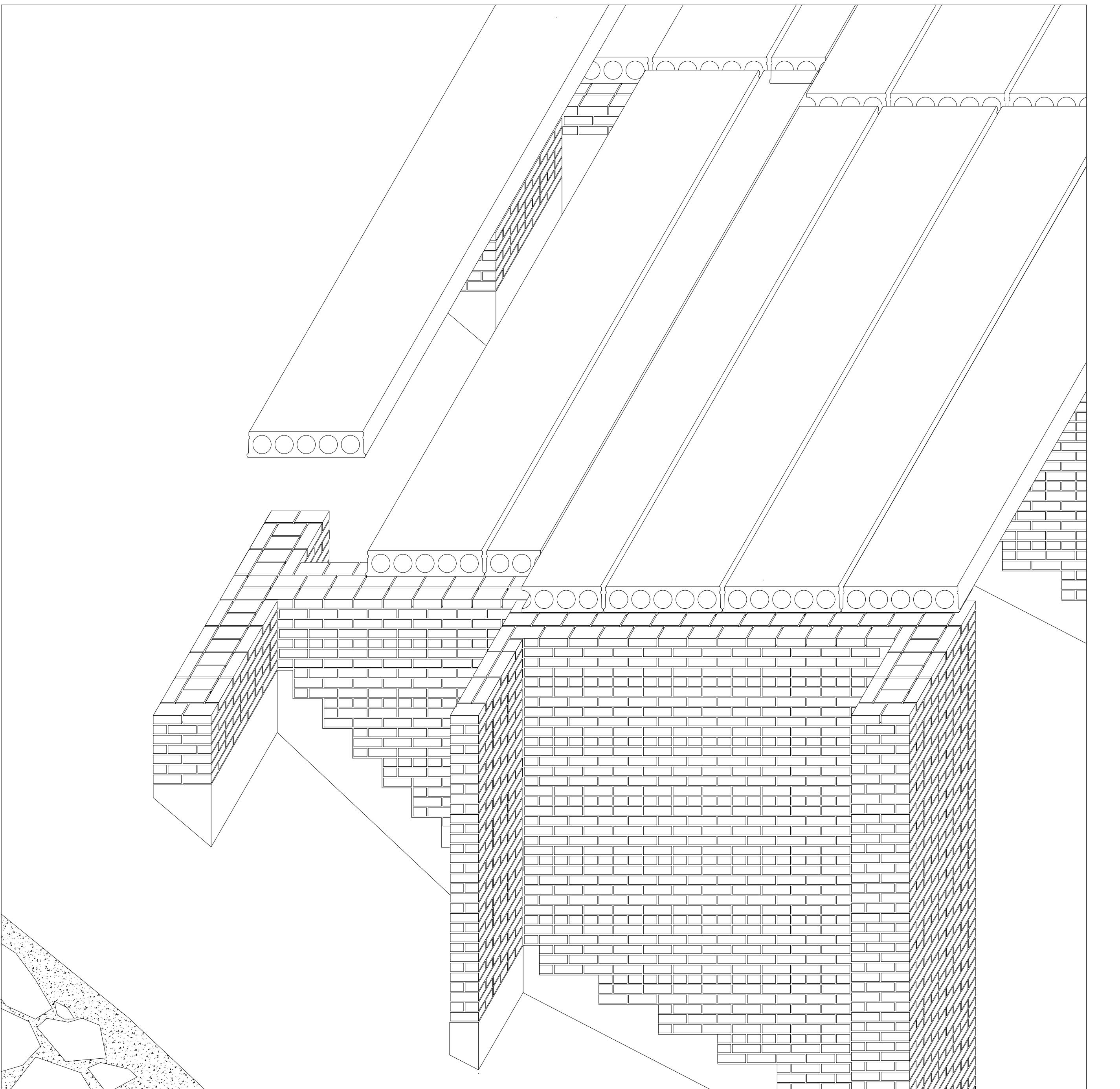
Foundation construction axonometry





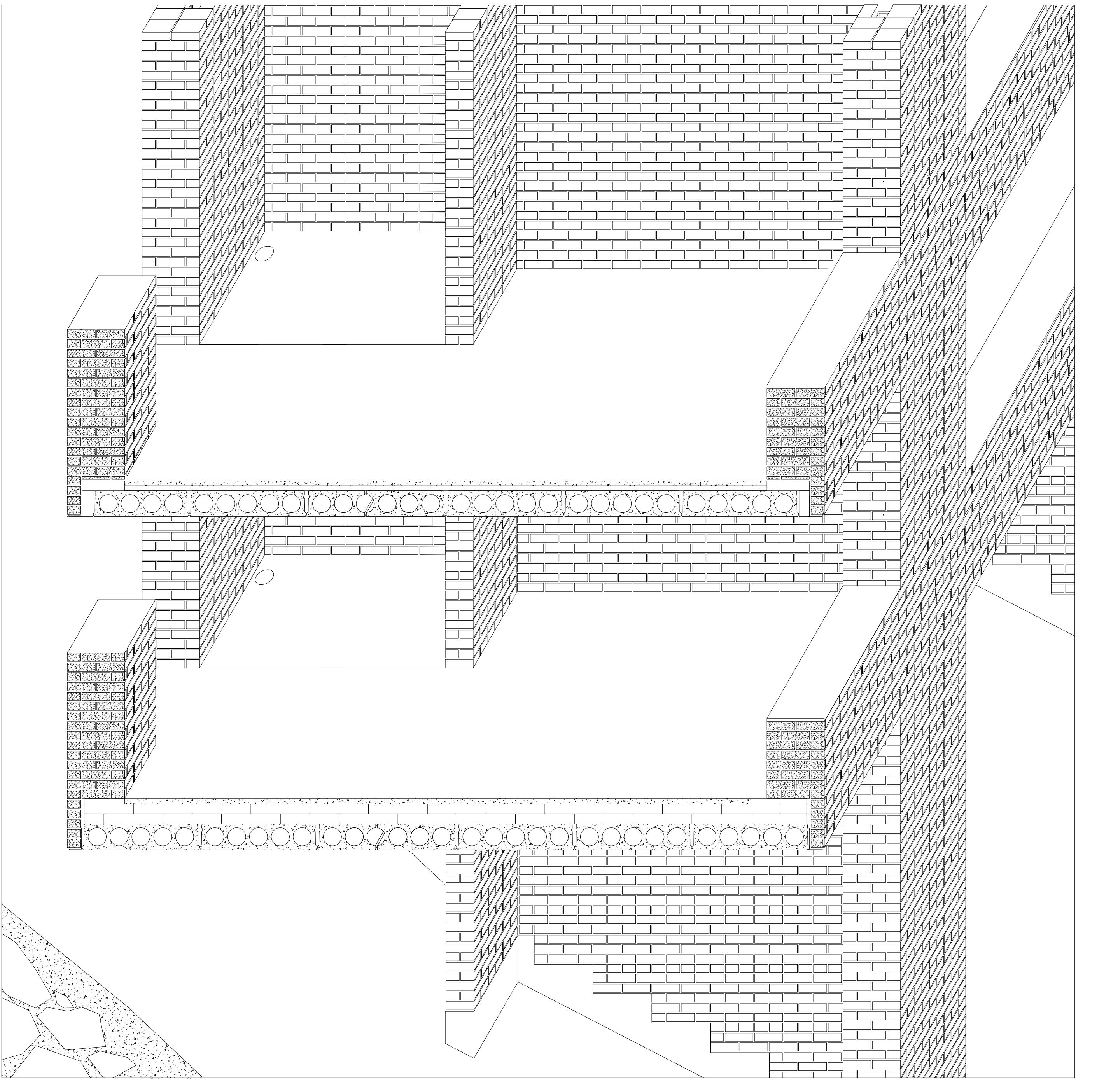
Brick construction axonometry





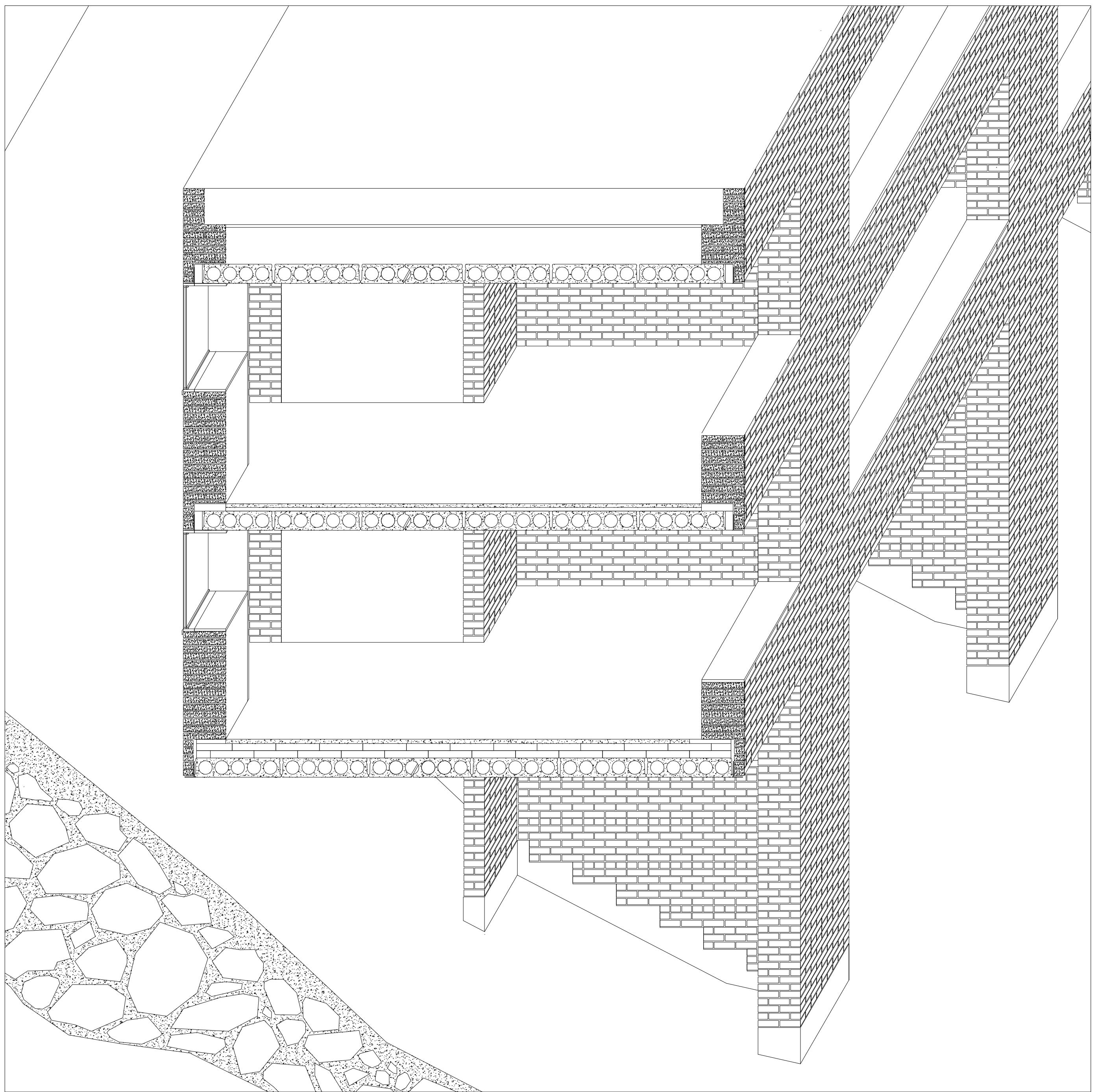
Hollow core installation axonometry





Brick sill construction axonometry





Brick parapet construction axonometry





