

ADAPTIVE, OBJECTIVE, CONNECTIVE

2014_08_21
rick de lange
Graduation design

In 2007 dutch Minister of Housing, Communities and Integration Ella Vogelaar defined the 40 most problematic neighborhoods in Holland. A large amount of government money was invested to help improve the social cohesion, economical standstill and liveability of those neighborhoods. However, Multiple evaluations of the investments, in 2009 and 2011, did not show any significant improvements. The evaluations showed that one of the biggest improvements measured involved cooperations selling their housing property to their current tenants. As a result, residents would feel more committed to and responsible for their surroundings.

Commitement and responsibility from local end-users is essential in this graduation project. This graduation project states that instead of spending government money in top-down initiatives, money should be invested bottom-up, supporting local initiatives and needs to upgrade existing real-estate.

The neighborhood of Malburgen, Arnhem, was chosen to support this approach. Malburgen is a neighborhood located south of the river Nederrijn in Arnhem. Plans for it were made pre-war, but construction started afterwards. Cheap and mass-housing were essential as Arnhem tried to house the citizens of a fast expanding city.

In 2007 Malburgen, together with four other neighborhoods in Arnhem and Nijmegen (see diagram...), was nominated as one of the forty most problematic neighborhoods of the Netherlands. The main stakeholders of Malburgen (The municipality, Avb-vastgoed, Volkshuisvesting Arnhem, Vivare and Schaarsbergen) received government subsidy to rebuild and upgrade the neighborhood. A total of €4.5 million a year.

Now, 7 years later a lot has changed in Malburgen. Property was replaced, additional program was added, the urban realm was renewed, and a large part the housing stock was renovated (see diagram...). However, recent polls show that the people of Malburgen still feel threatened on their own streets, the neighborhood reached the top 3 of most cluttered neighborhoods of the Netherlands and when you talk to the common man on the streets, they tell you that they haven't seen any improvements in the last couple of years.

The reason for this lack of awareness lies in the fact that the local residents of Malburgen weren't involved in the equation to solve its problems. A problematic neighborhood like Malburgen has certain deficiencies. Nothing is connected. To fix a problematic neighborhood one first needs to know what is needed and what is missing. What is needed in Malburgen is a program that makes people happy (see diagram...) again. When this additional program is connected to the current program and residents, a neighborhood has a change of survival.

To see quick improvements and test the viability of this proposal the center of Malburgen was chosen to elaborate on it. Most of the centers of problematic neighborhoods have the same characteristics. They are close to a main road, have an abundance of space, have one or multiple multinationals to draw people and, due to multiple ownership of the real-estate, have trouble with renewal. Drieslag, the center of Malburgen, fits right in this picture.

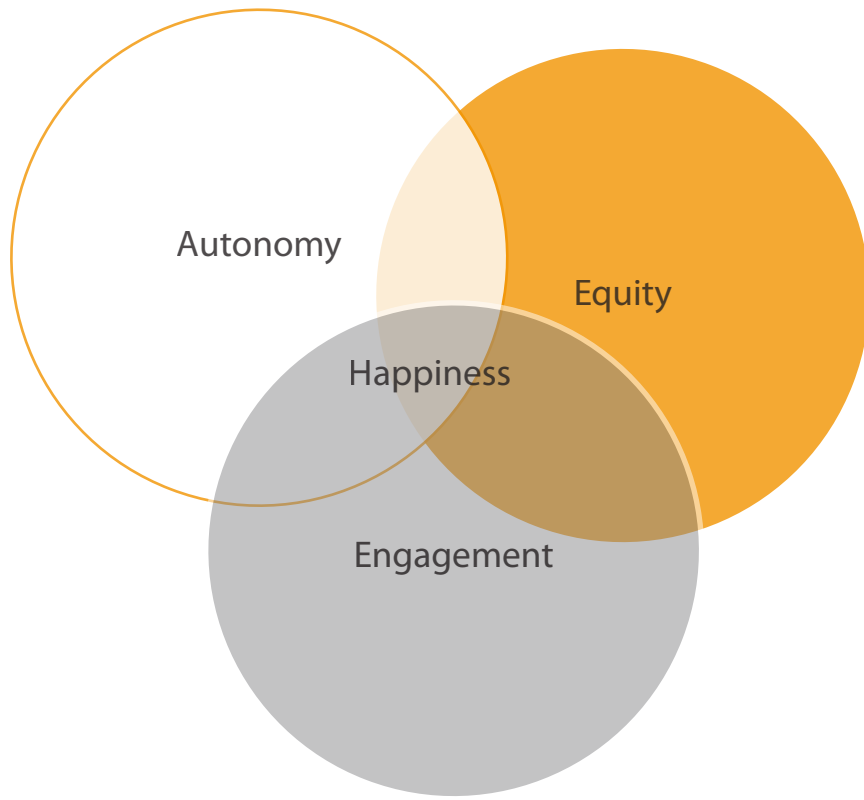
Drieslag is outdated. There are three multinational supermarkets that attracted the 17212 people to do their groceries and a lot of small, local entrepreneurs that struggle to survive (see diagram...). The real-estate is divided under 6 stakeholders. (see diagram...). To gradually update Drieslag, one has to see its weaknesses and possibilities.

The backside of Drieslag is disconnected from the rest of the neighborhood/center. Currently it is used as a logistic area for the local retail. However, by upgrading the backside, the possibilities rise to add program, connect the local retail and involve Malburgens resident.

To do so, Malburgen must initiate a process that slowly connects its residents to each other and the local program. They must be supported to grow as an individual. The local stakeholders should be provided options to support these local initiatives thereby sharing and securing the investment while upgrading their own property value.



Approach



Happiness
Es in nos corem et ipsam que pedis ratem eaquo biam fuga. Ferri ut faccum ute officimaxima con rem sum aute accus, conectus eiusam nonse et, sin coreptam corerspis consecet atenimus, quibusam estiore stiumquia qui ullies ad et reperiam nim cone pratisi beatque volorum eositis provitas ventorro commioles nam hillibus acesstempor reprepudione laut fuga. Nam aut rent magnimi, voluptatur? Cabo. Solum eos quatend ignatem as maxim facimos eum nonsequ atatet eatibus in corio. Optisi non nonsequide alibus, aliti il iusienim quam qui odipit vororio omnis ad exerro ea volor aut repuda dolor sin pra adi ipsanient. Quo corro ent. Ga. Eptaten distis ex etumque vereped quatur?
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End-user

Unemployed
In 2014 raakte de 45 jarige Eric zijn baan kwijt. Karin, was toentertijd werkzaam in de retail, maar toch kregen ze samen hun maandelijkse lasten, langzamerhand niet meer opheesten. Hoewel Eric geen stilzitter is, bleek het in deze tijden toch lastig voor Eric om aan een nieuwe baan te geraken. Tegen wat huunverlaging deed Eric na een aantal maanden thuis zitten mee aan het beheer programma van Malburgen. Door hieraan te participeren ging de huur wat omlaag, en werd het financieel

16%

Immigrants
In 2014 volgde Ismael een mbo opleiding economie. Toen zijn ouders hem vroegen mee te gaan naar een nieuw initiatief waar ze via de gemeenschap van gehoord hadden, budgetteringsadvies. Ismael had al wat gehoord van rare ruimte die aan de

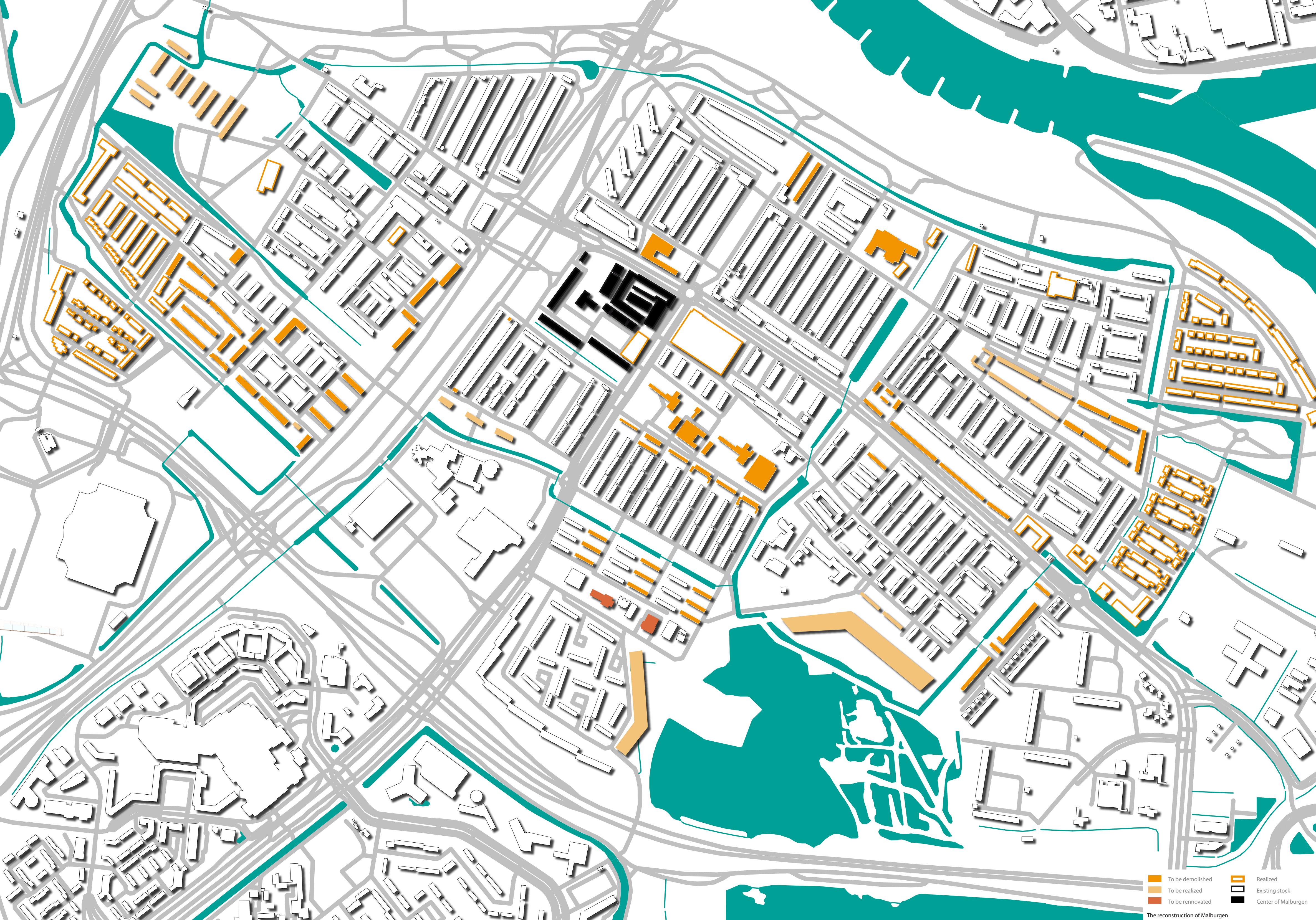
46%

Elderly
Jacobus is momenteel werkzaam in de werkplaats van de kringloopwinkel. Een trots man. Bij een groot deel van de ontwikkeling van de afgelopen jaren is hij betrokken geweest. Hij heeft ze zelfs gedeeltelijk gebouwd. Niet slecht voor een 80 jarige.

11%

Programmatic infill

Greenhouses	Workshop	Cooking studio	Daycare
300m²	300m²	120m²	120m²
Start-up	Meeting space	Quiet space	Classroom
5x 20m²	50m²	30m²	2x 20m²



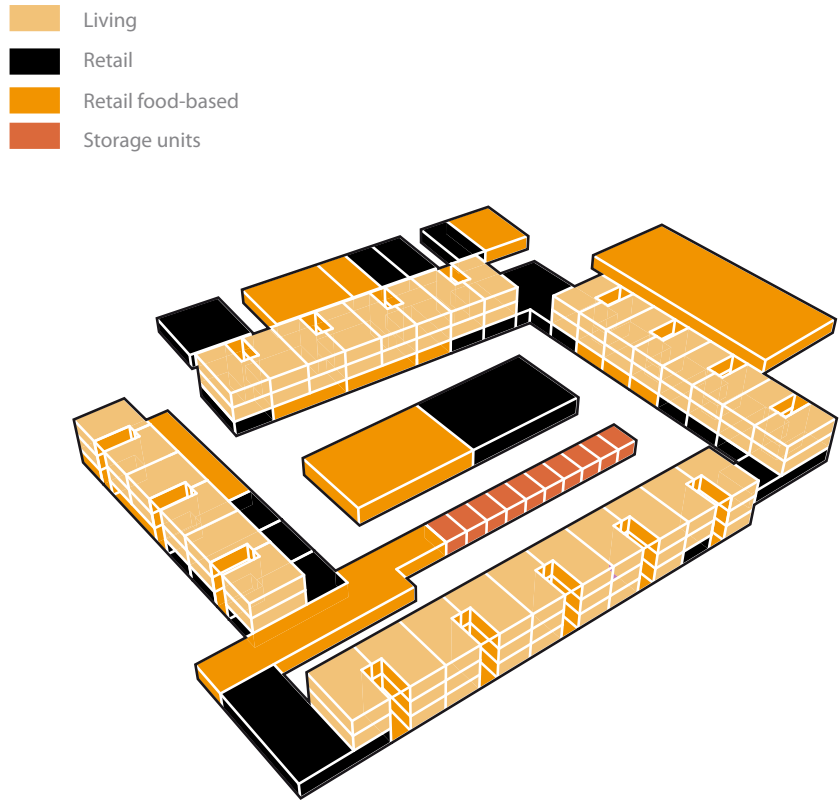
Nijmegen:	Hatert	Arnhemse Broek	
Households	5655	Households	3155
Average hh size	1.7	Average hh size	1.9
average age	45-64	average age	25-44
Hh per sq km2	6.578	Hh per sq km2	1.363
Foreign	54%	Foreign	44%
Income	10.800e	Income	10.200e
Average houserating	155.000e	Average houserating	150.000e

Arnhem:	Klarendal	Malburgen / Immerloo	
Households	4260	Households	17212
Average hh size	1.7	Average hh size	2.2
average age	25-44	average age	25-44
Hh per sq km2	10.606	Hh per sq km2	4.389
Foreign	61%	Foreign	50%
Income	10.000e	Income	10.100e
Average houserating	131.000e	Average houserating	132.000e

Arnhem:	Presikhaaf	Arnhem average	
Households	4440	Households	155356
Average hh size	1.7	Average hh size	1.6
average age	25-44	average age	25-44
Hh per sq km2	5.672	Hh per sq km2	1.43
Foreign	43%	Foreign	29,7%
Income	9300e	Income	22.1e
Average houserating	130.000e	Average houserating	156.000



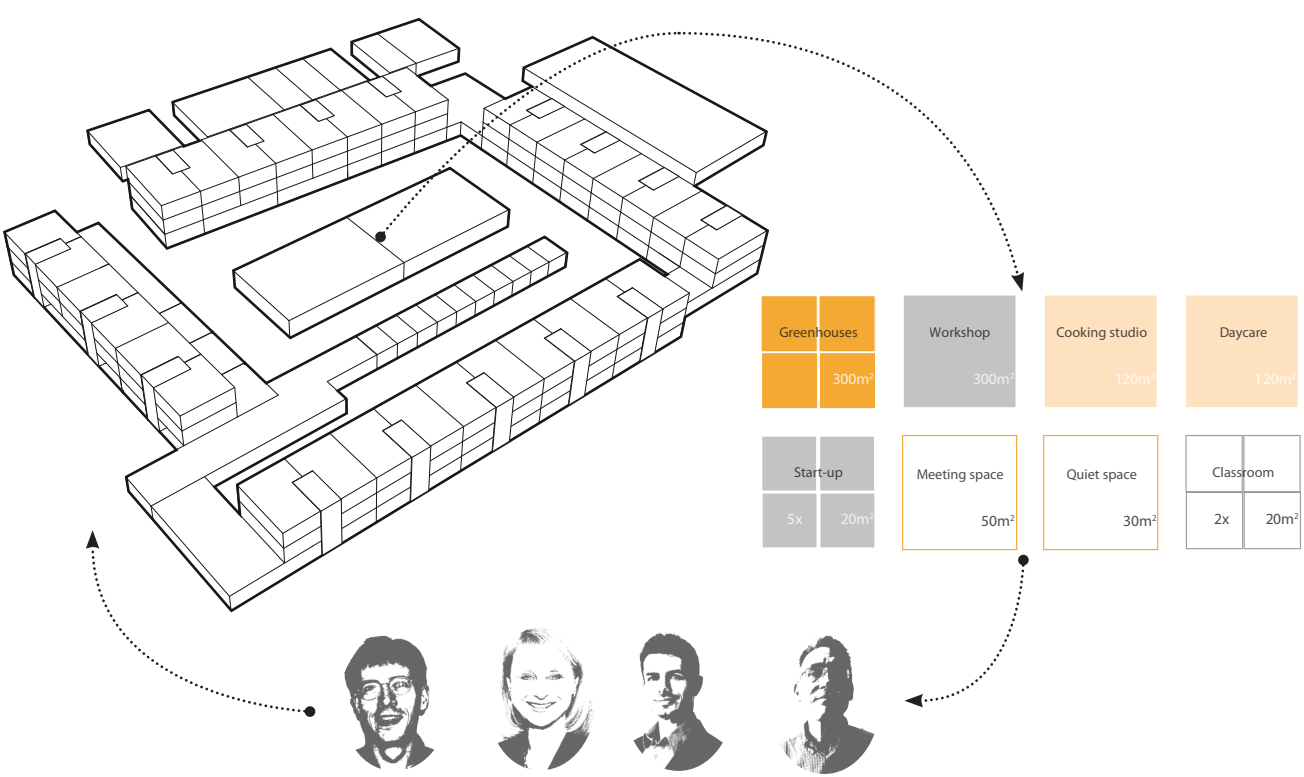
Program



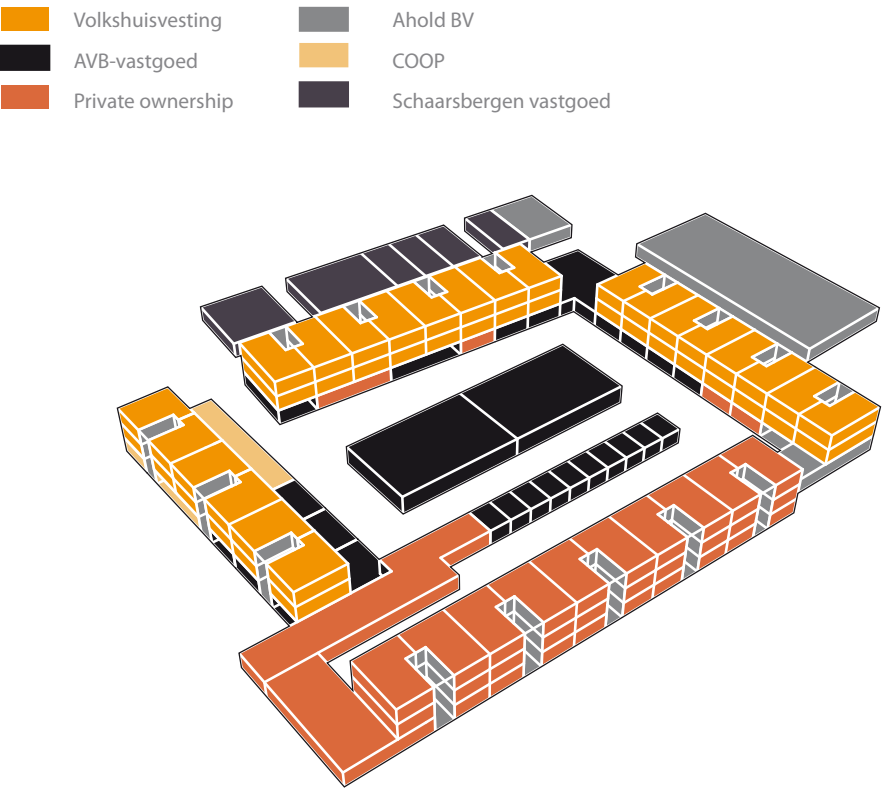
diversity
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50% retail food-based

Solution



Ownership



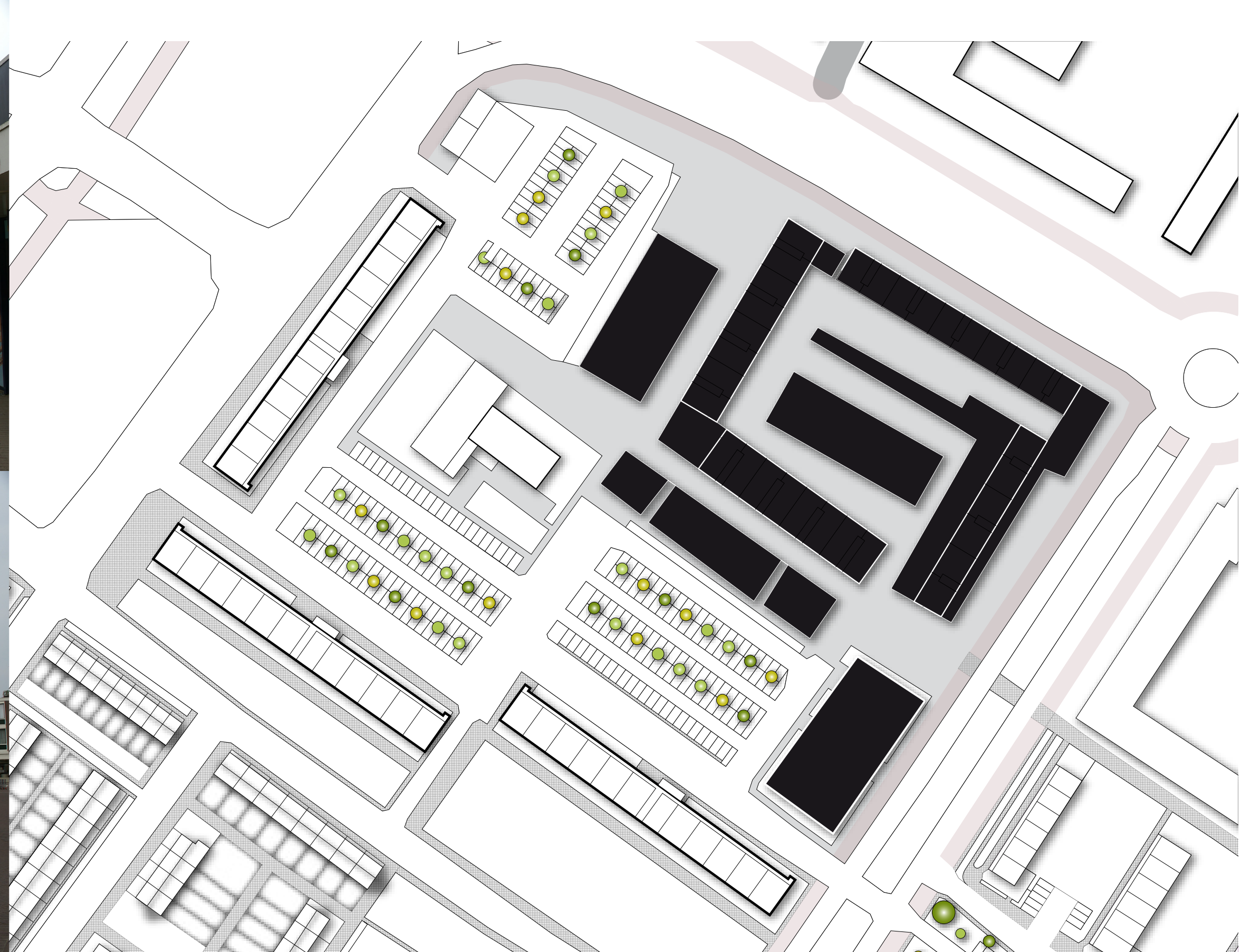
End-user
Tenant
AVB Vastgoed
Schaarsbergen
Volkshuisvesting
Ahold
Coop
Private property owners
Municipality
Neighborhood

6
10
Owners
Involved
Parties
involved

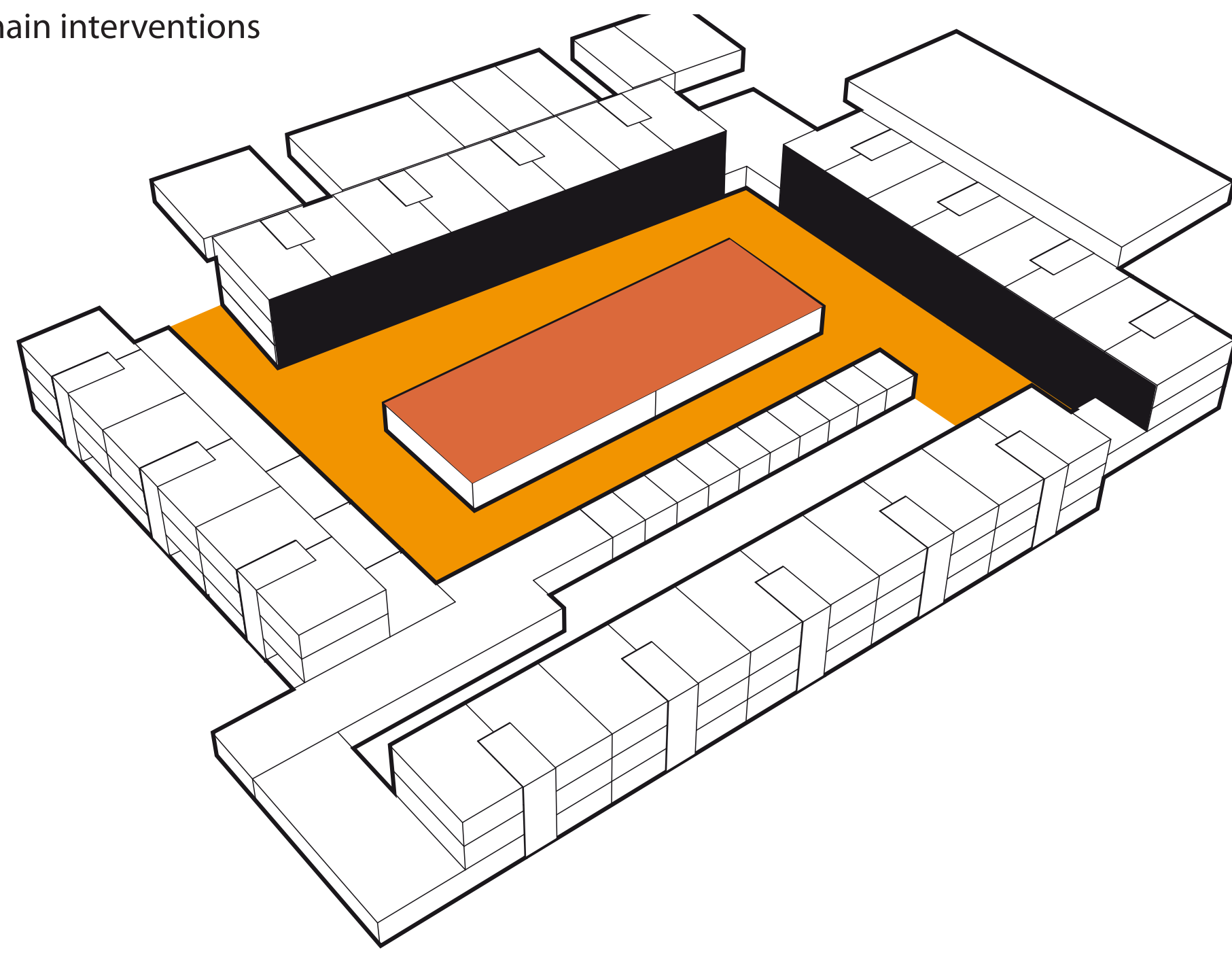
Center

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main interventions



Opening-up the backsides

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Changing the urban organization

As es quam nobit ut et magnis volori tes rem soloribus quam exerroriae idit, cullibus, con provit, officius id maiorer iaperi onsequam dolorum quaepe et, ut alit am eum vel inihicid quodiam faccumet, sa is id enihicit et, con nonsequ aectur arum num num nobiscid quos essi occusam et veni nim quia nit dunt volest quatempor aperio que nus coresque dolorum iunt ut voluptatia voluptur, venihic tatiissi nem imus et utecae repelitatur aut ati alitunt quam corem alibea dolupti omnienetTum der auc fatque aucer publiu conducessim elissimur utermactus

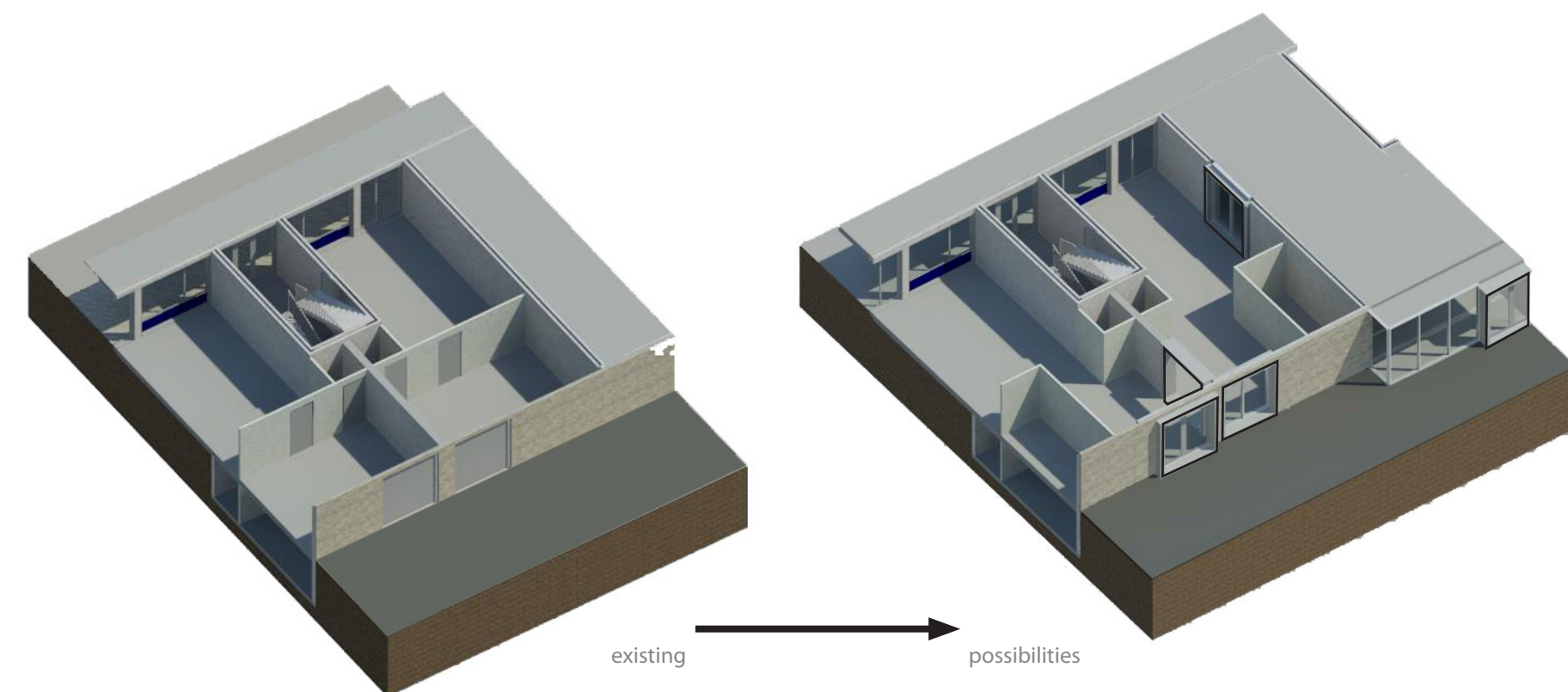
Adding program

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Adding breakthrough

A Adding 2 frames to open-up back- and sidewalls

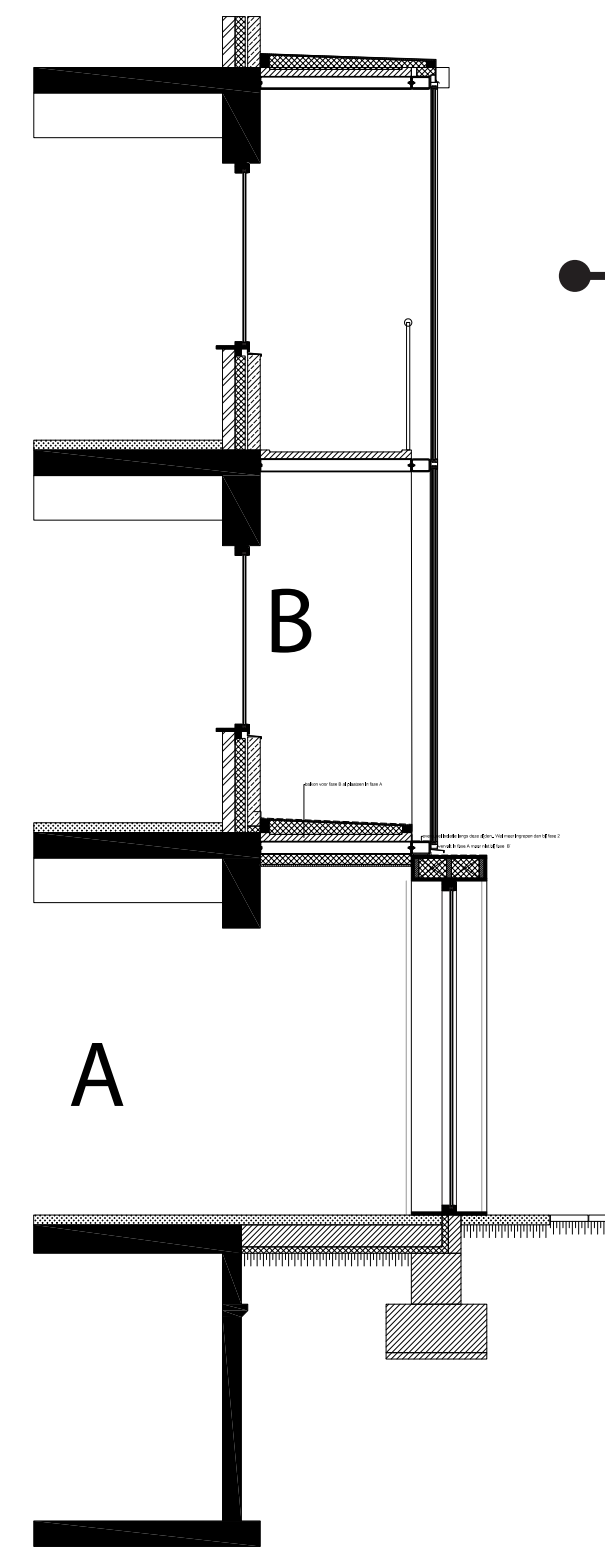
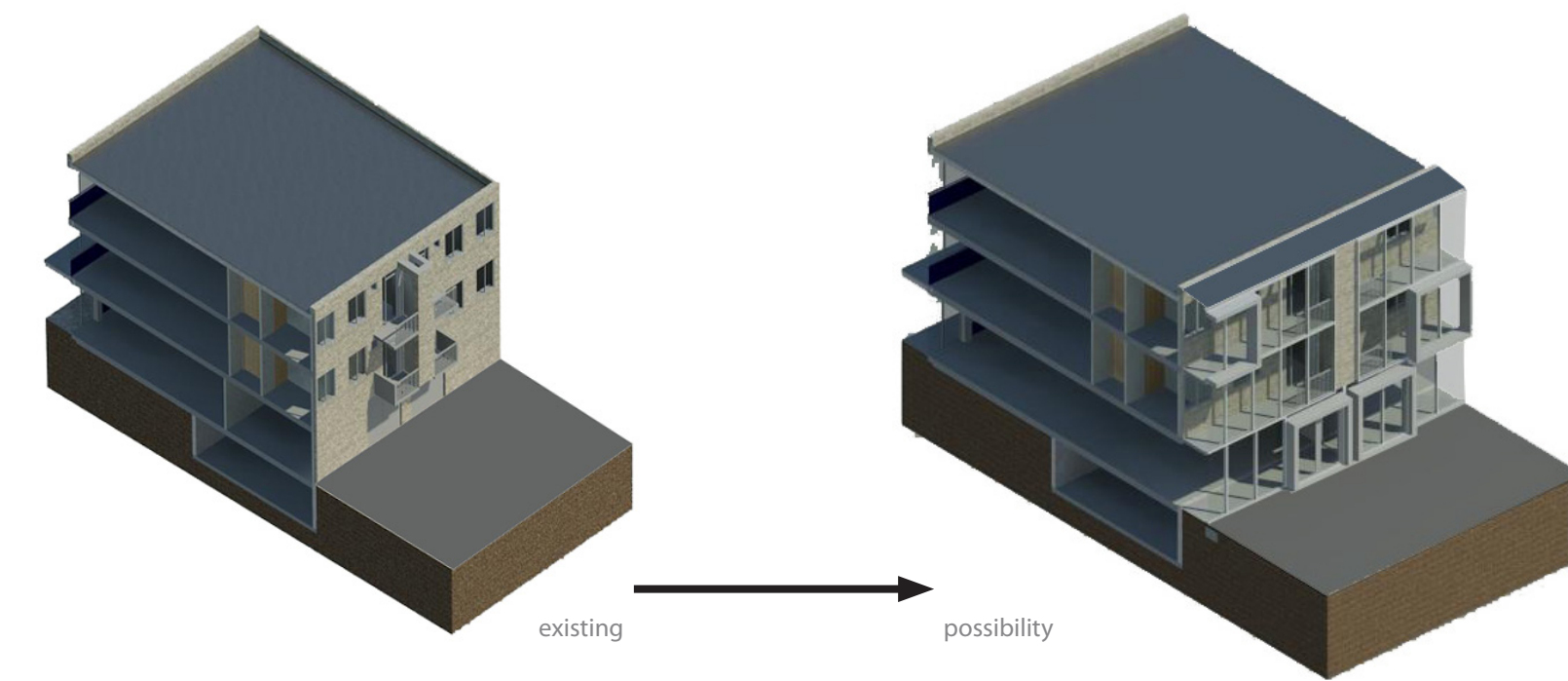
Terms and conditions tenants:
Adding 2 frames that may either be open or closed, but always transparant. 1 frame is placed in a sidewall, the other in the backwall.



Adding thermal isolation

B Thermal isolation and added property value

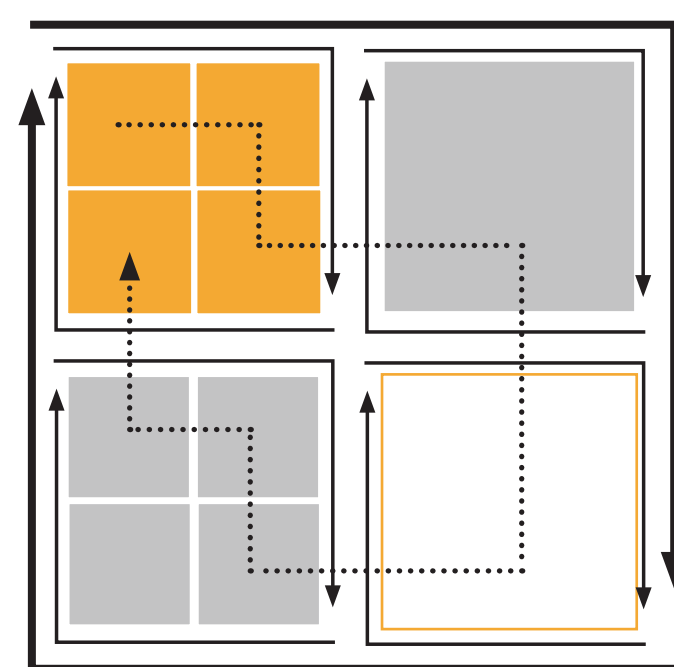
Terms and conditions tenants:
Without costs no frame with doors



Section intervention A-B

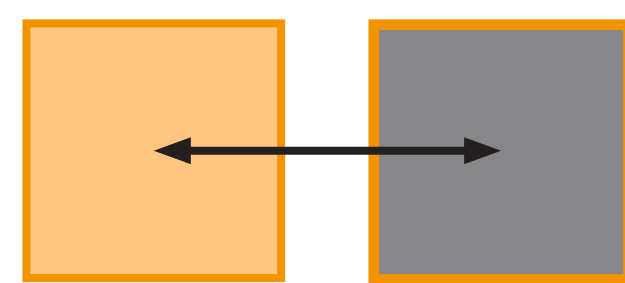
Architectoral concepts

Circularity vs randomness



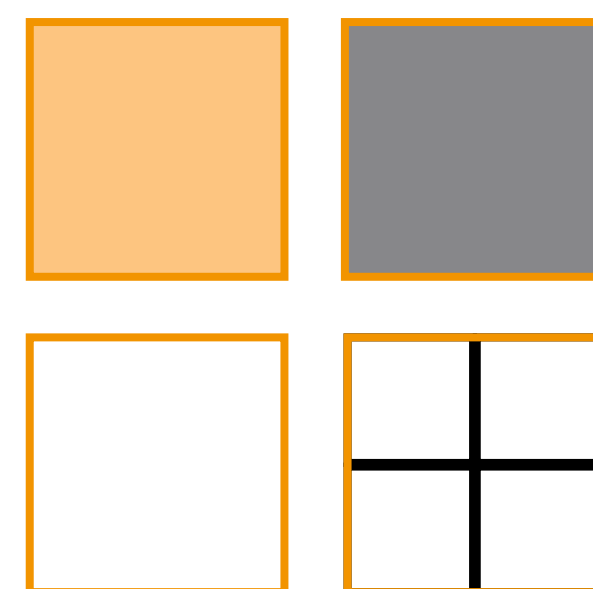
routing

Secondary connectivity



sight

Randomised unity



exterieur

Proces Initiative

preparation

Weaknesses and strength analyses

concept and designation
chances and inventarisation

Assembly

meeting
local etrepreneurs

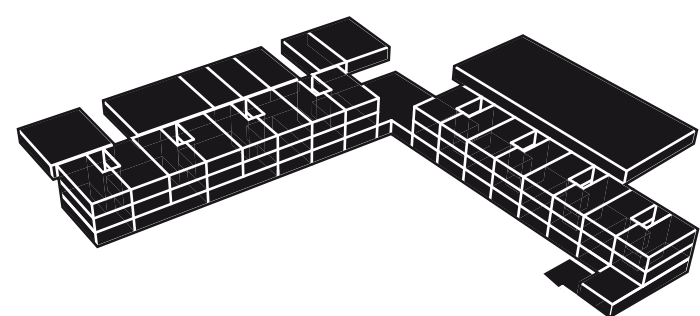
meeting
target groups

market

block party

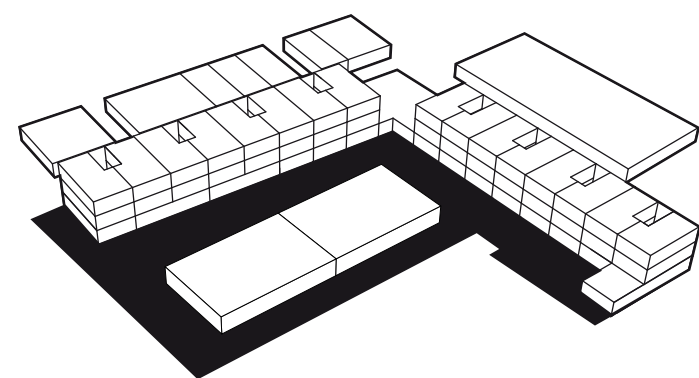
inquiry

Opening-up the backsides
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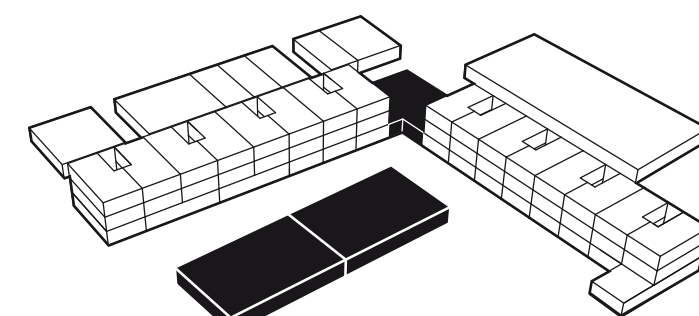
Benifitial parties
AVB-Vastgoed
Municipality
Tenant
End-user
Neighborhood
Private property

Changing the urban organization
As es quam nobit ut et magnis volori tes rem soloribus quam exerroriae idit, culibus, con provit, officius id maiorer laeperi onsequam dolorum quaepeid et, ut alit am eum vel inihicid quodiam faccumei, sa is id enihicit et, con nonsequ aectur arum num num nobiscid quos essi occusam et veni nim quia nit dunt volest quatempor aperio que nus coresque dolorum iunt ut voluptatia voluptur, venihic tatiissi nem imus et utecae repelitur aut ati alitiunt quam corem alibea dolupti omnienetTum der auc fatque aucer publiu conducessim ellissimur utermactus vivirtus vis, quodiem libussu llabis



Benifitial party
AVB-Vastgoed
Municipality
Tenant
End-user
Neighborhood
Private property
Ahold
Coop

Adding program
As es quam nobit ut et magnis volori tes rem soloribus quam exerroriae idit, culibus, con provit, officius id maiorer laeperi onsequam dolorum quaepeid et, ut alit am eum vel inihicid quodiam faccumei, sa is id enihicit et, con nonsequ aectur arum num num nobiscid quos essi occusam et veni nim quia nit dunt volest quatempor aperio que nus coresque dolorum iunt ut voluptatia voluptur, venihic tatiissi nem imus et utecae repelitur aut ati alitiunt quam corem alibea dolupti omnienetTum der auc fatque aucer publiu conducessim ellissimur utermactus vivirtus vis, quodiem libussu llabis



Benifitial party
AVB-Vastgoed
Municipality
Tenant
End-user
Neighborhood
Private property
Ahold
Coop

Investement phase A
Volkshuisvesting
AVB-Vastgoed
Private property
Tenant

Investement phase B
Volkshuisvesting
AVB-Vastgoed
Municipality
Private property
Tenant
End-user

2 living units
likely to invest in combination with option I
infill frame
1 x €21.500 = €21.5200
1 x €800 = €800

Investement phase A
Municipality
AVB-Vastgoed
Private property
Tenant
End-user

Investement phase B
Municipality
AVB-Vastgoed
Private property
Tenant
End-user

Investement phase C
Municipality
AVB-Vastgoed
Private property
Tenant
End-user

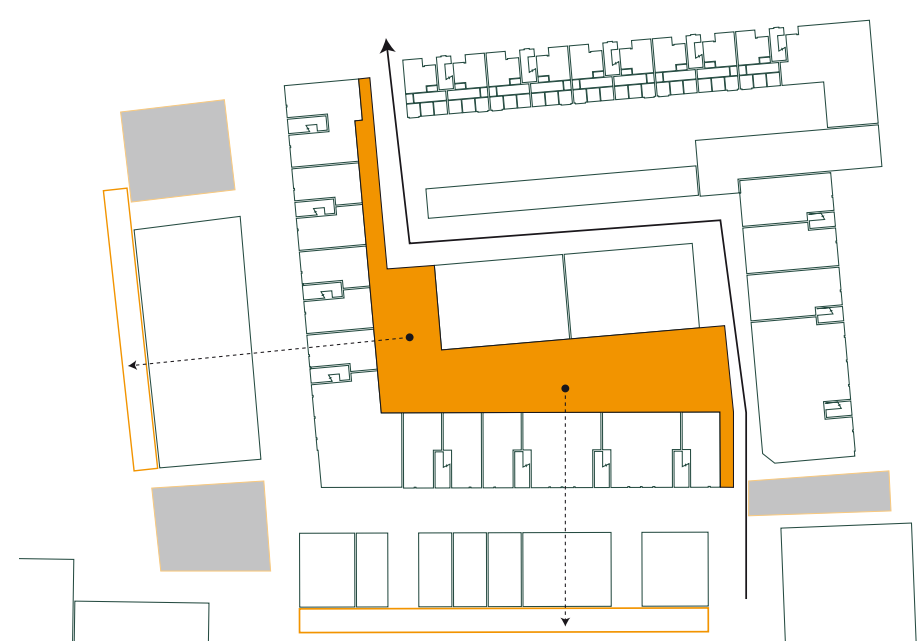
Investement phase A
Volkshuisvesting
AVB-Vastgoed
Municipality
Private property
Tenant
End-user

Investement phase B
Volkshuisvesting
AVB-Vastgoed
Municipality
Private property
Tenant
End-user

Investement phase B
Volkshuisvesting
AVB-Vastgoed
Municipality
Private property
Tenant
End-user

Activating urban area

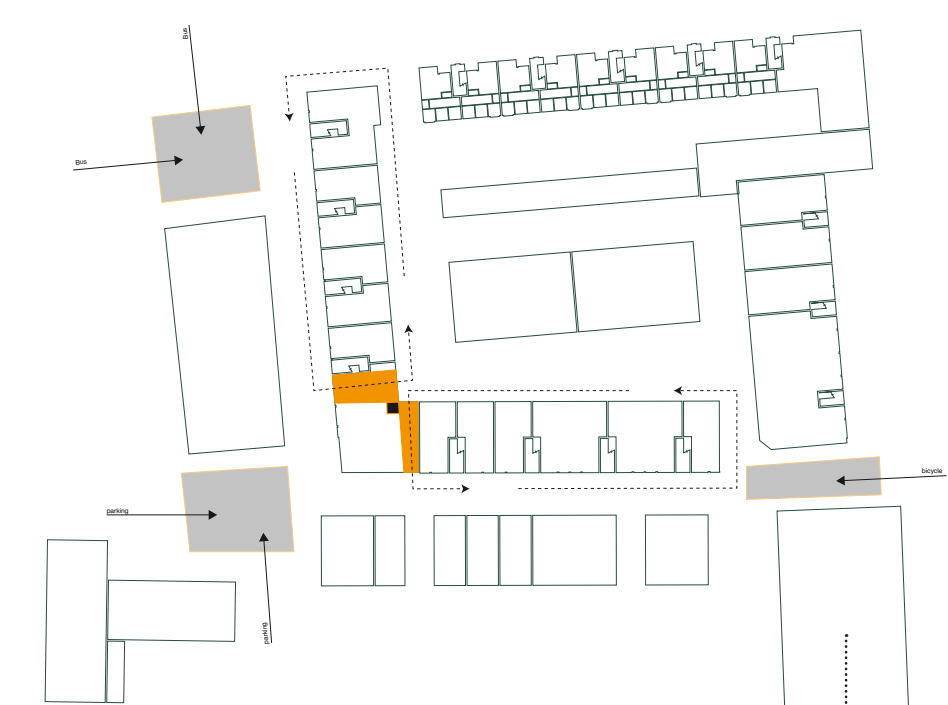
A Defining pedestrians and logistics streams



B Placing universal universal spaces to be used by community

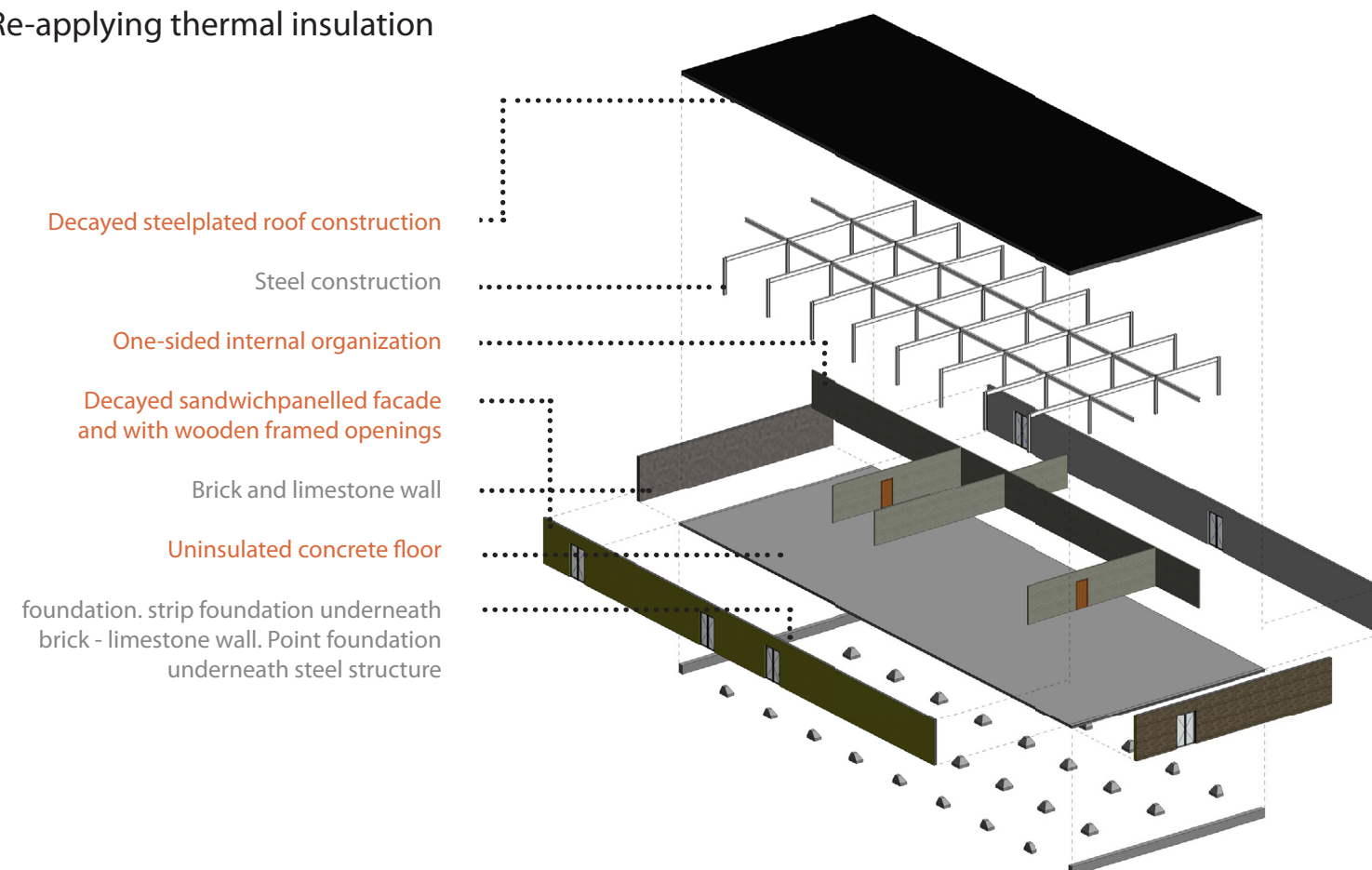


C connecting and circulation

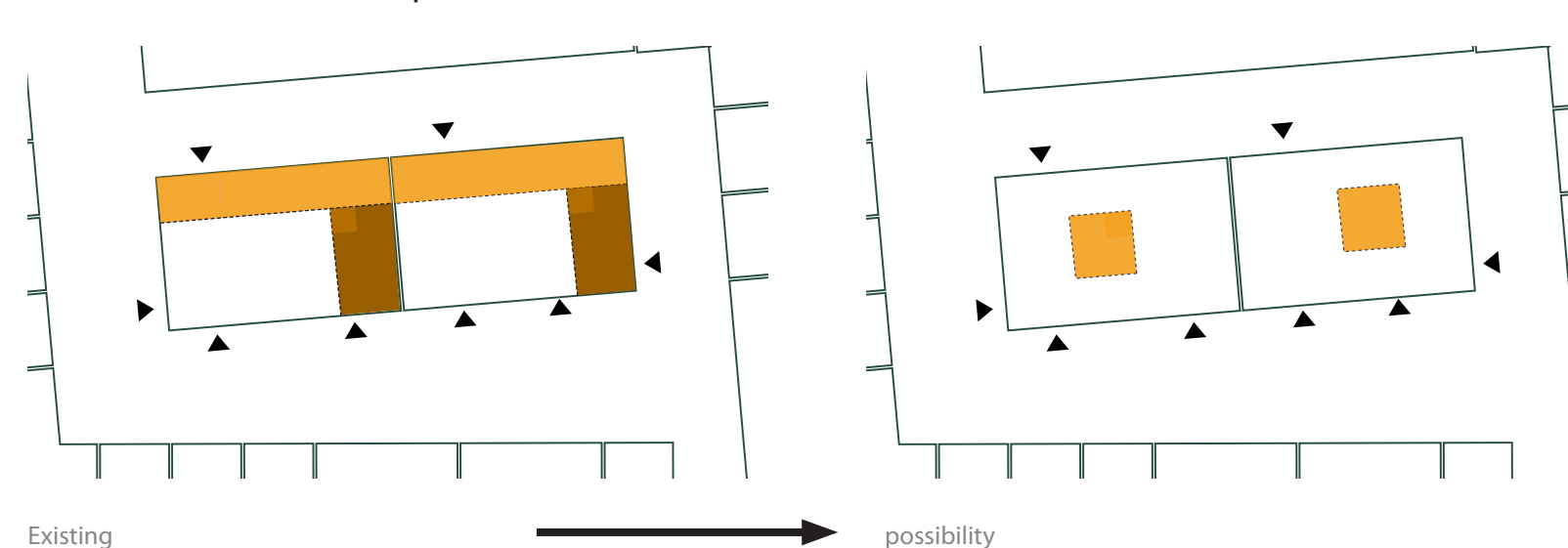


Adding program

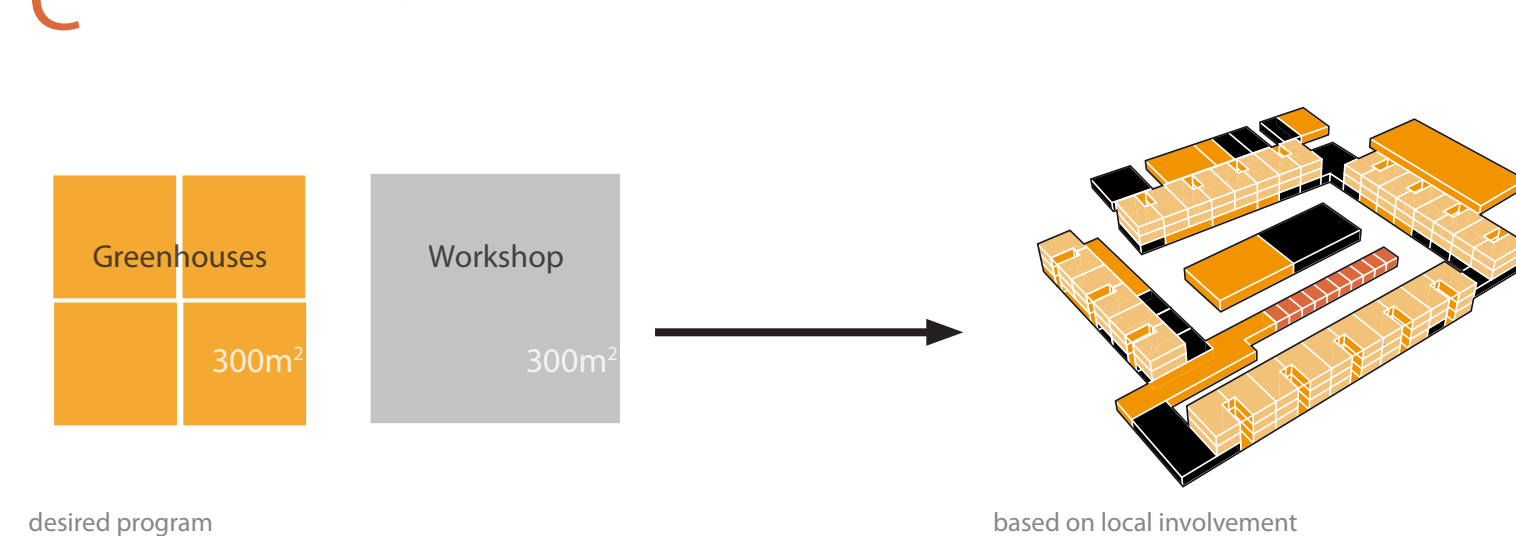
A Re-applying thermal insulation



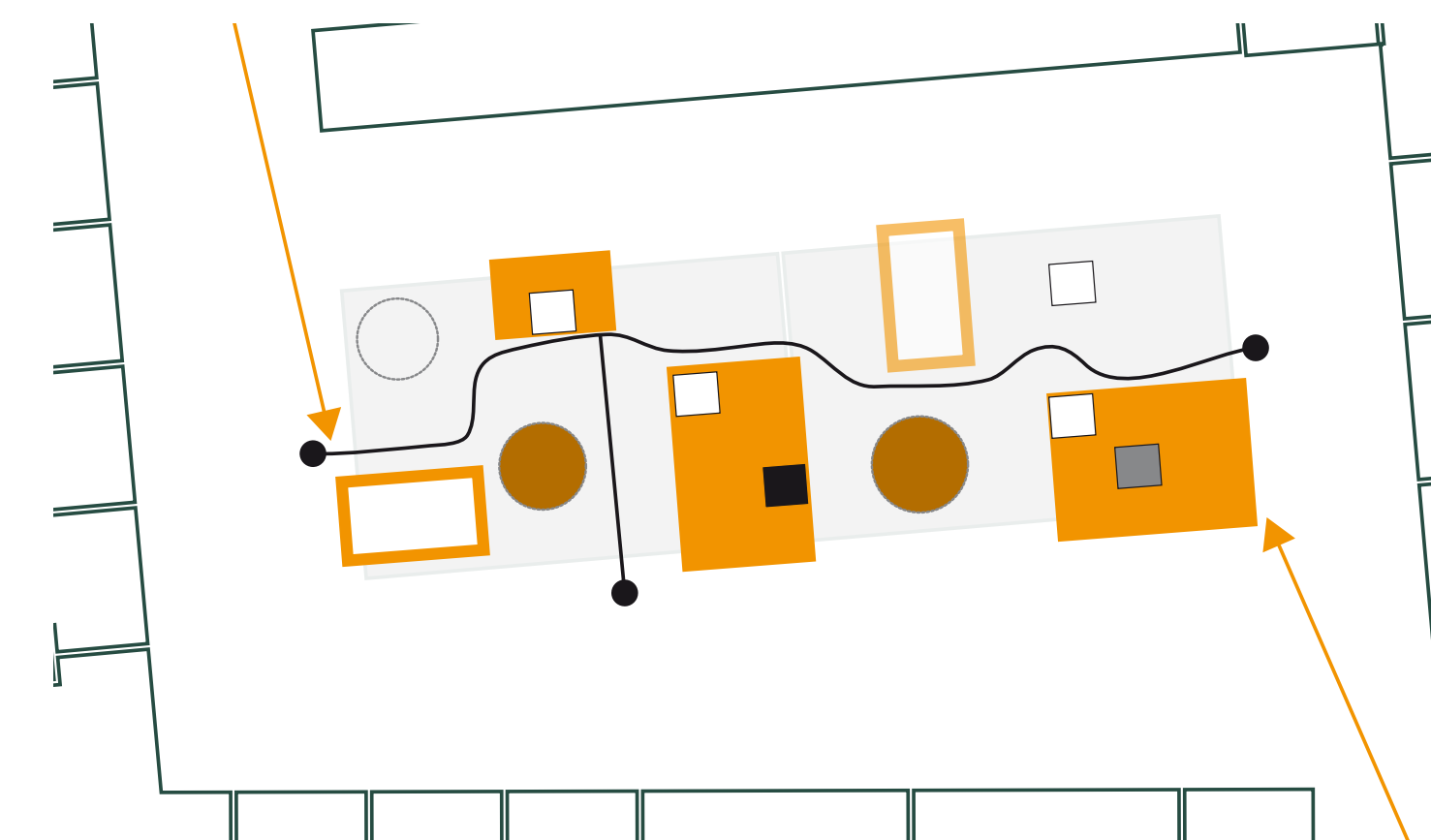
B Re-arranging internal organization and flexibel use of space



C Adding community oriented program



ABC Adding program



Spatial organization

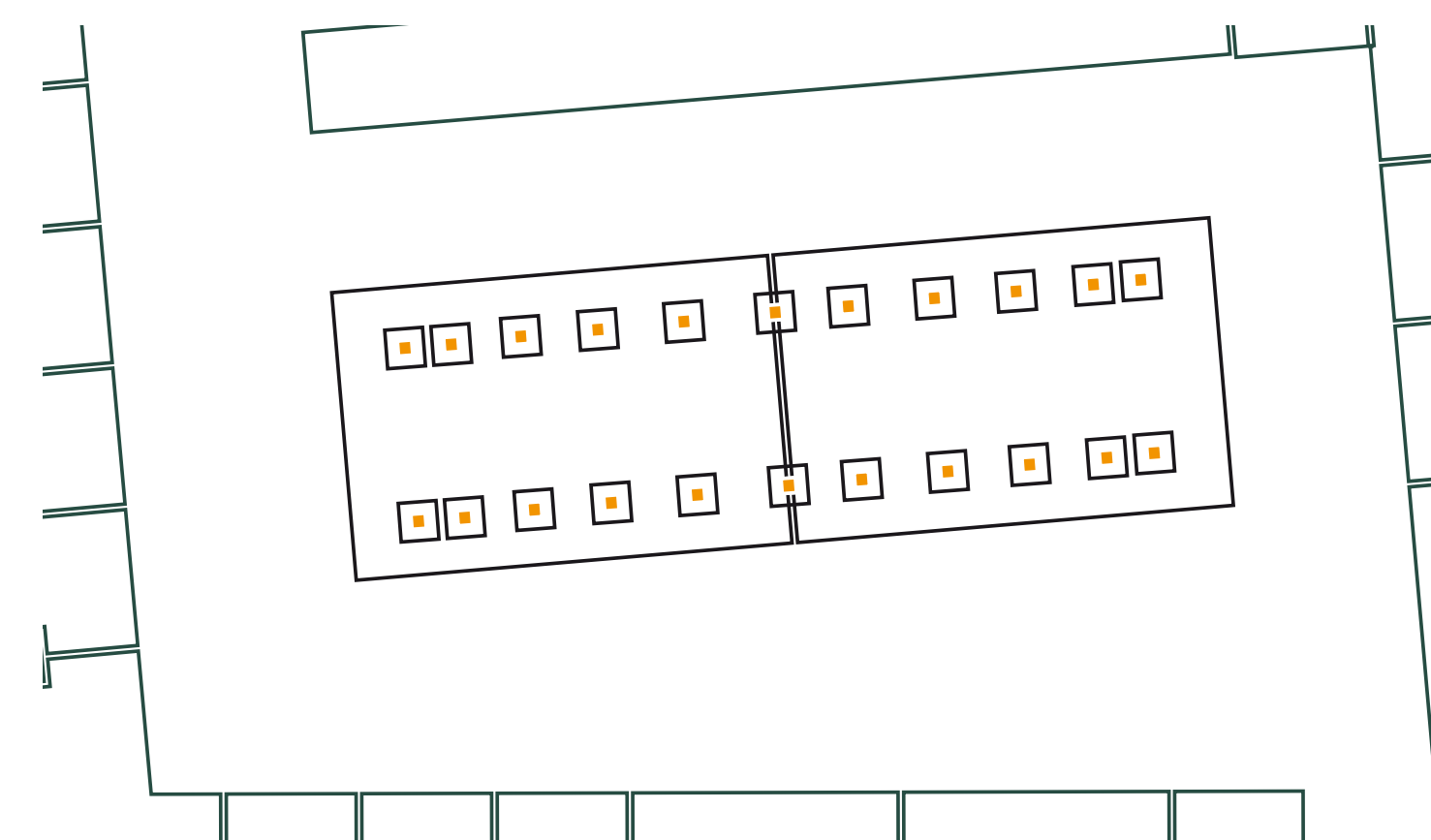
Line of sight
Thermal greenhouse
Non-thermal greenhouse
stairs internal
stairs external
patios/skylights
pathway

By overhanging three of the 6 greenhouse, the rooftop intervention becomes visible from all possible way of entry. Stairs connect both public and private space to the greenhouse rooftop. Greenhouse campsite are available for locals who want their own thrift shop greenhouse.

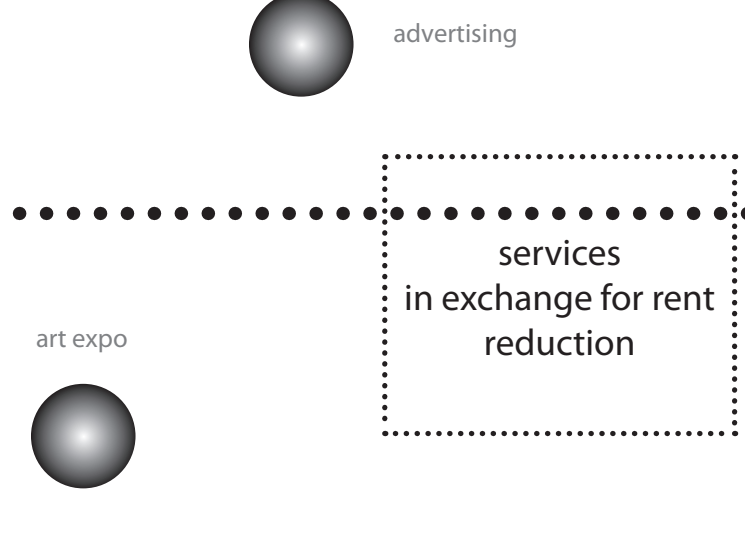
Main construction and installation

Wood cladde steel construction
To be demolished flooring

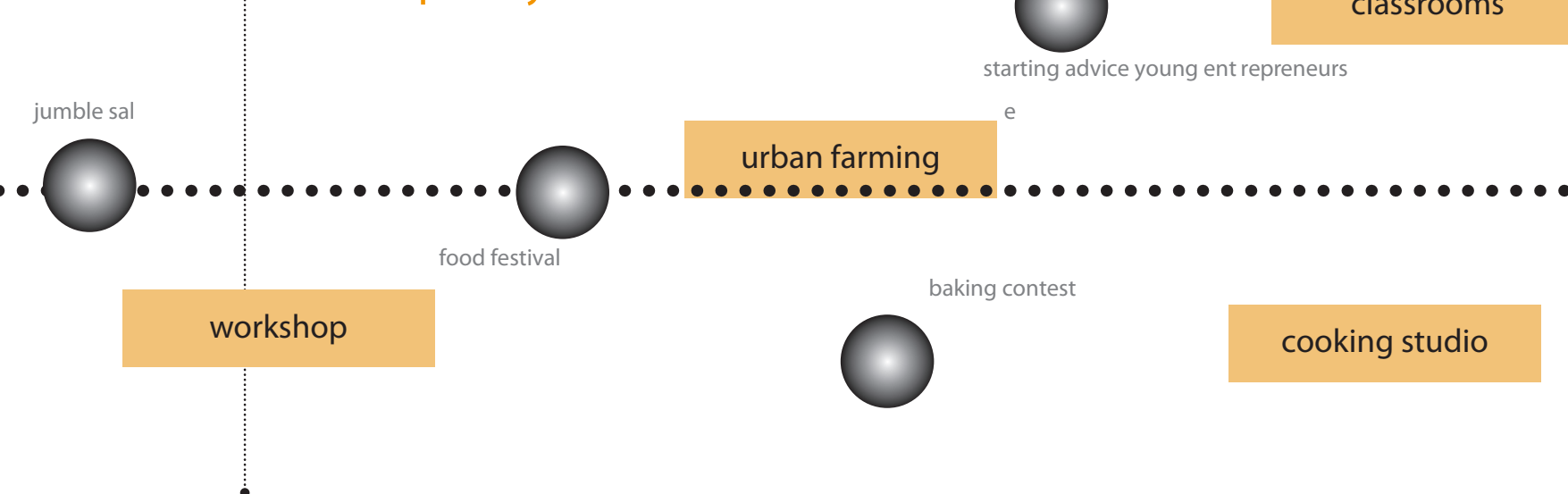
By overhanging three of the 6 greenhouse, the rooftop intervention becomes visible from all possible way of entry. Stairs connect both public and private space to the greenhouse rooftop. Greenhouse campsite are available for locals who want their own thrift shop greenhouse.



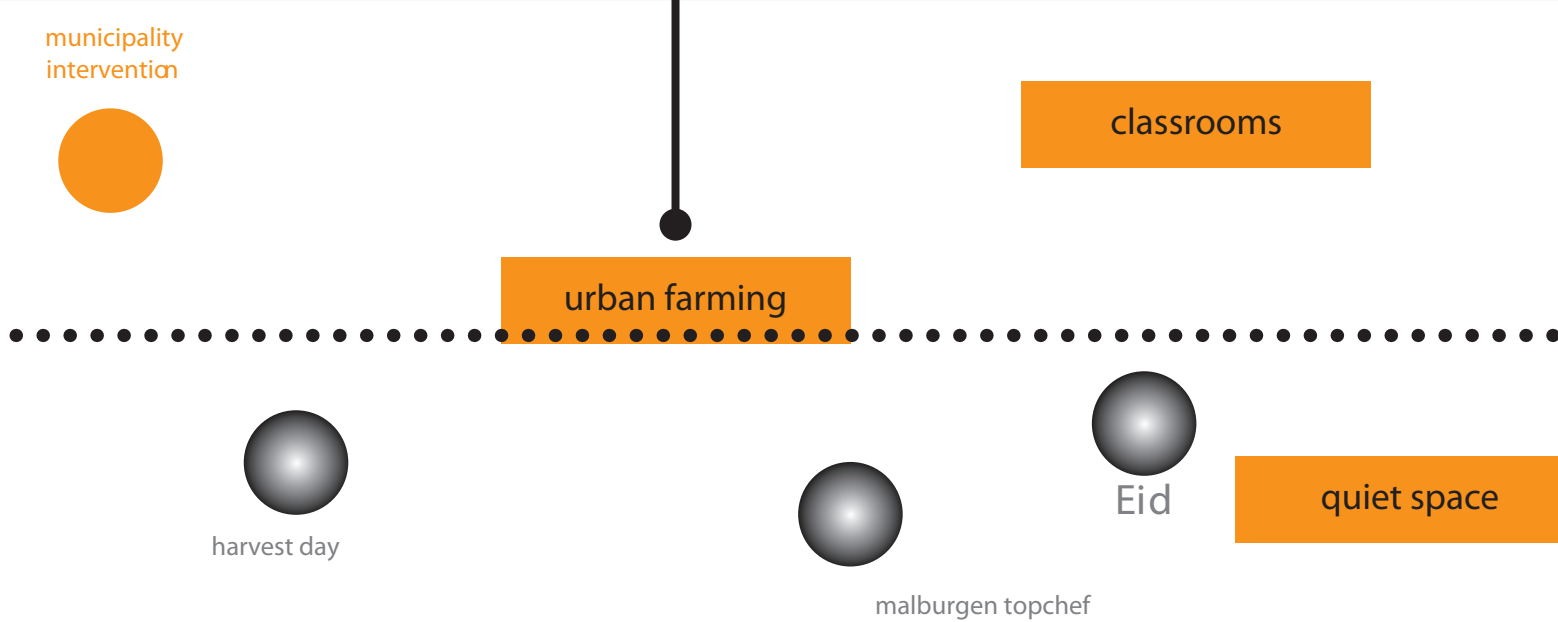
Exploration

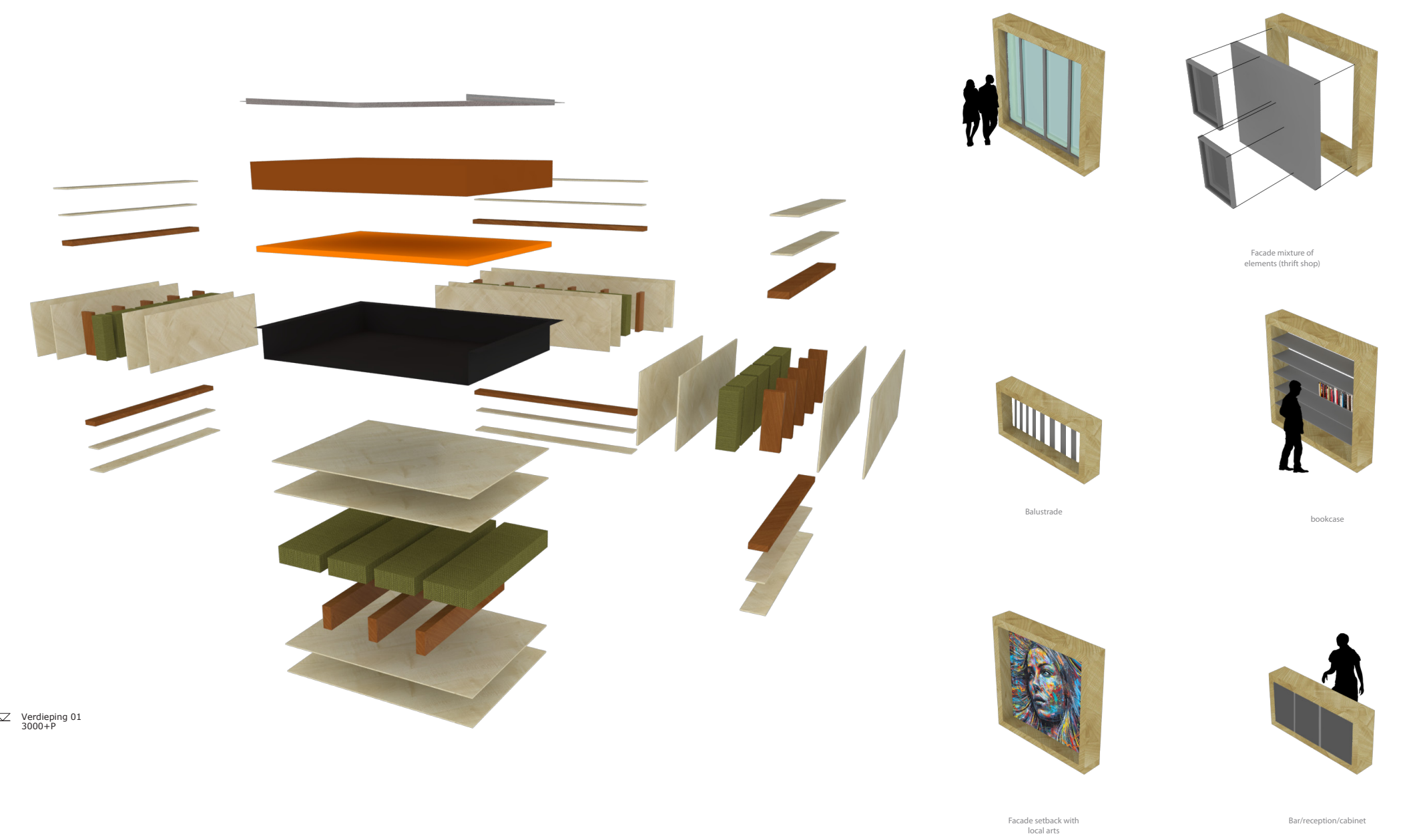
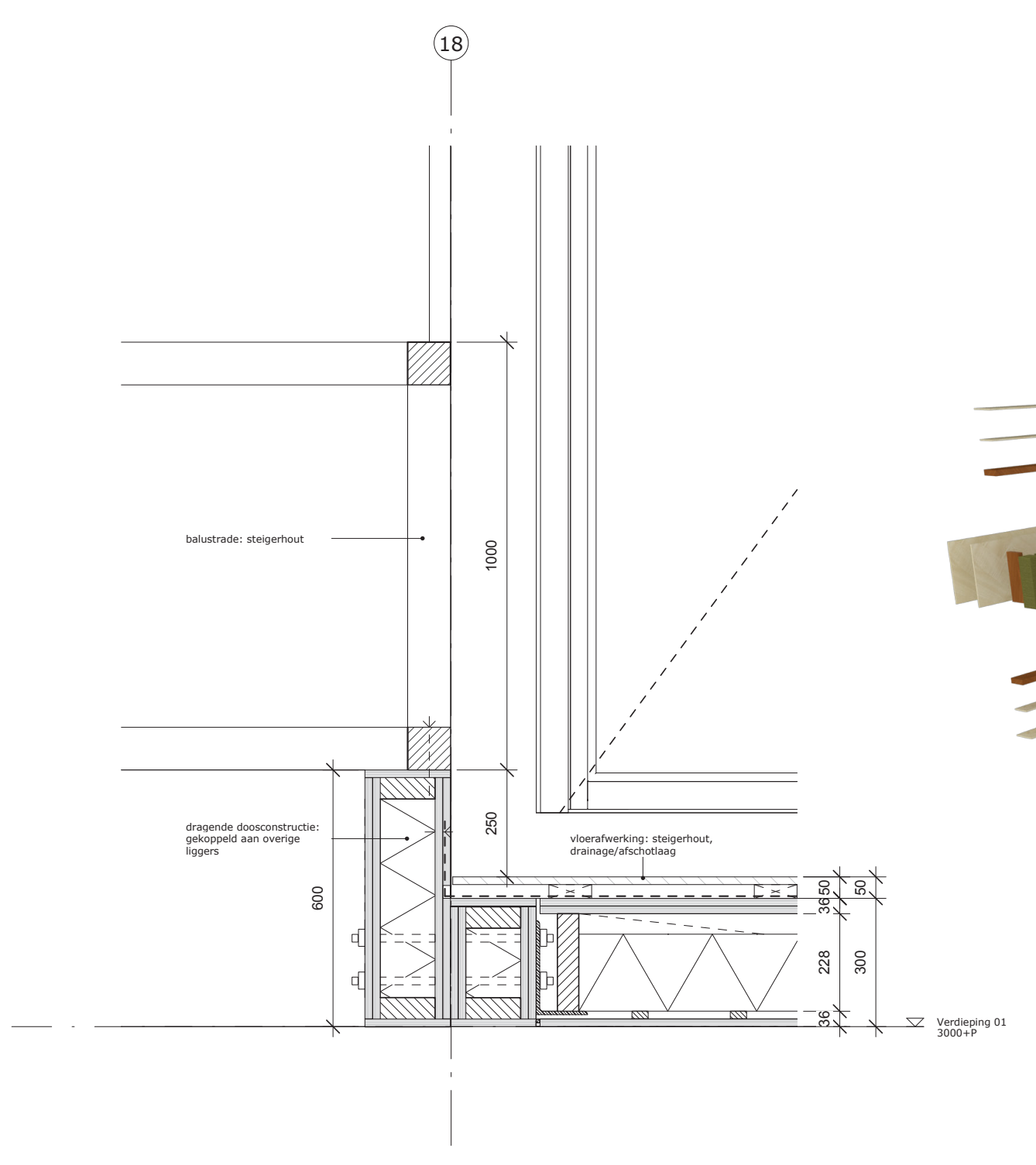
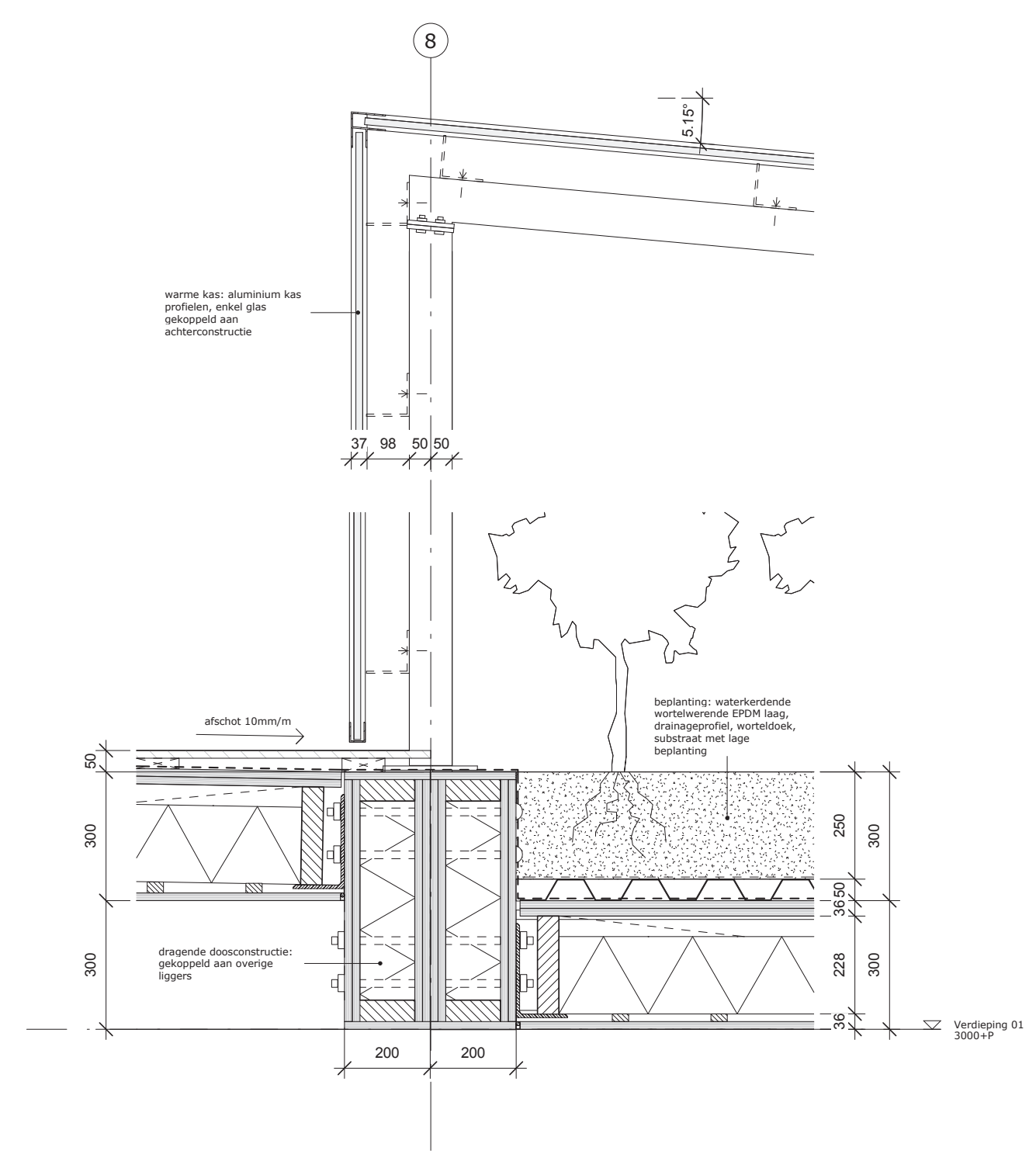
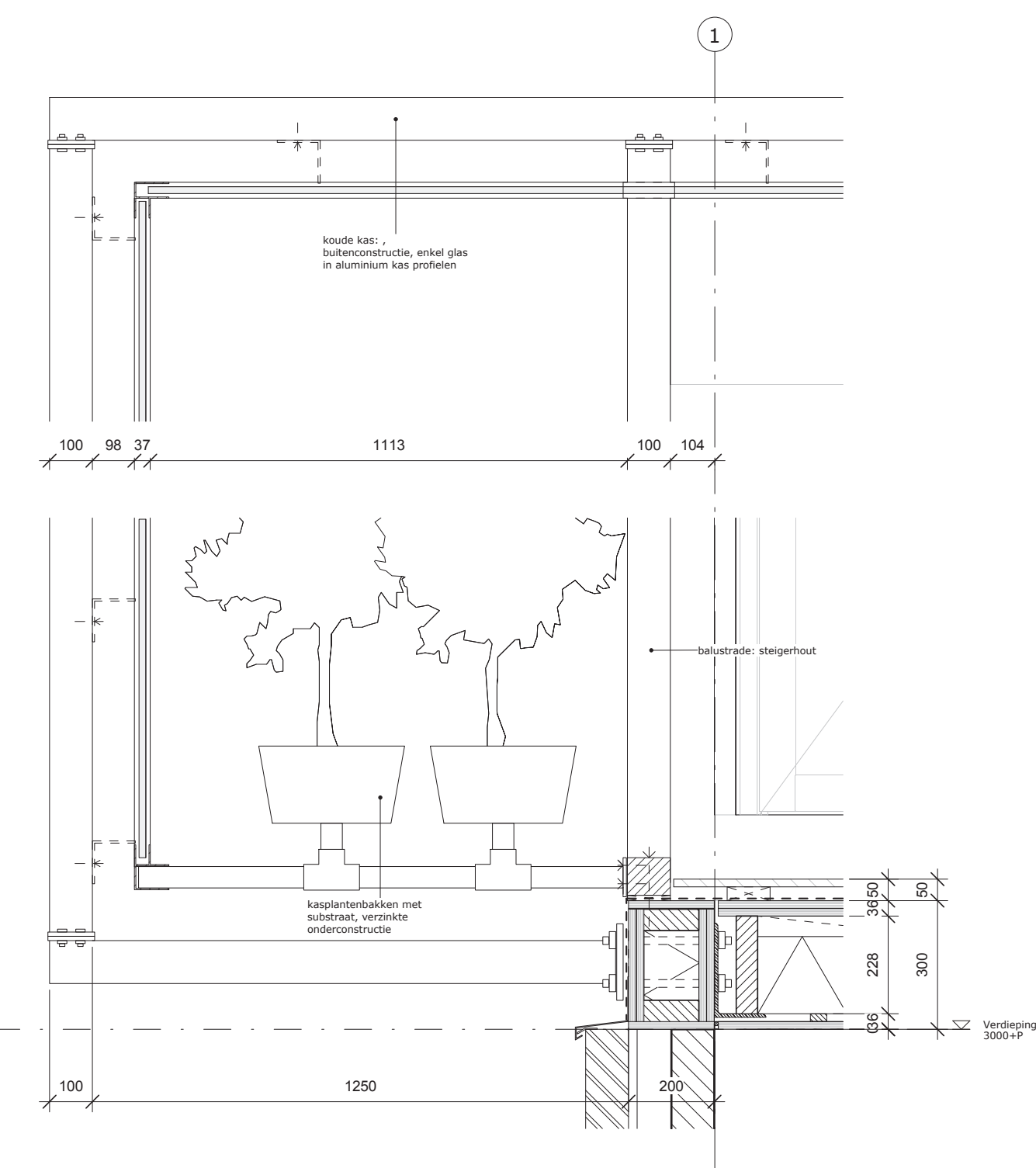
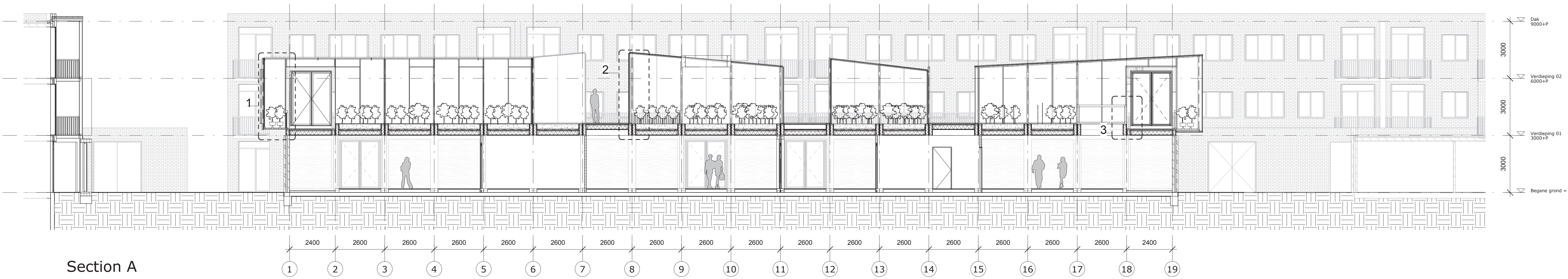


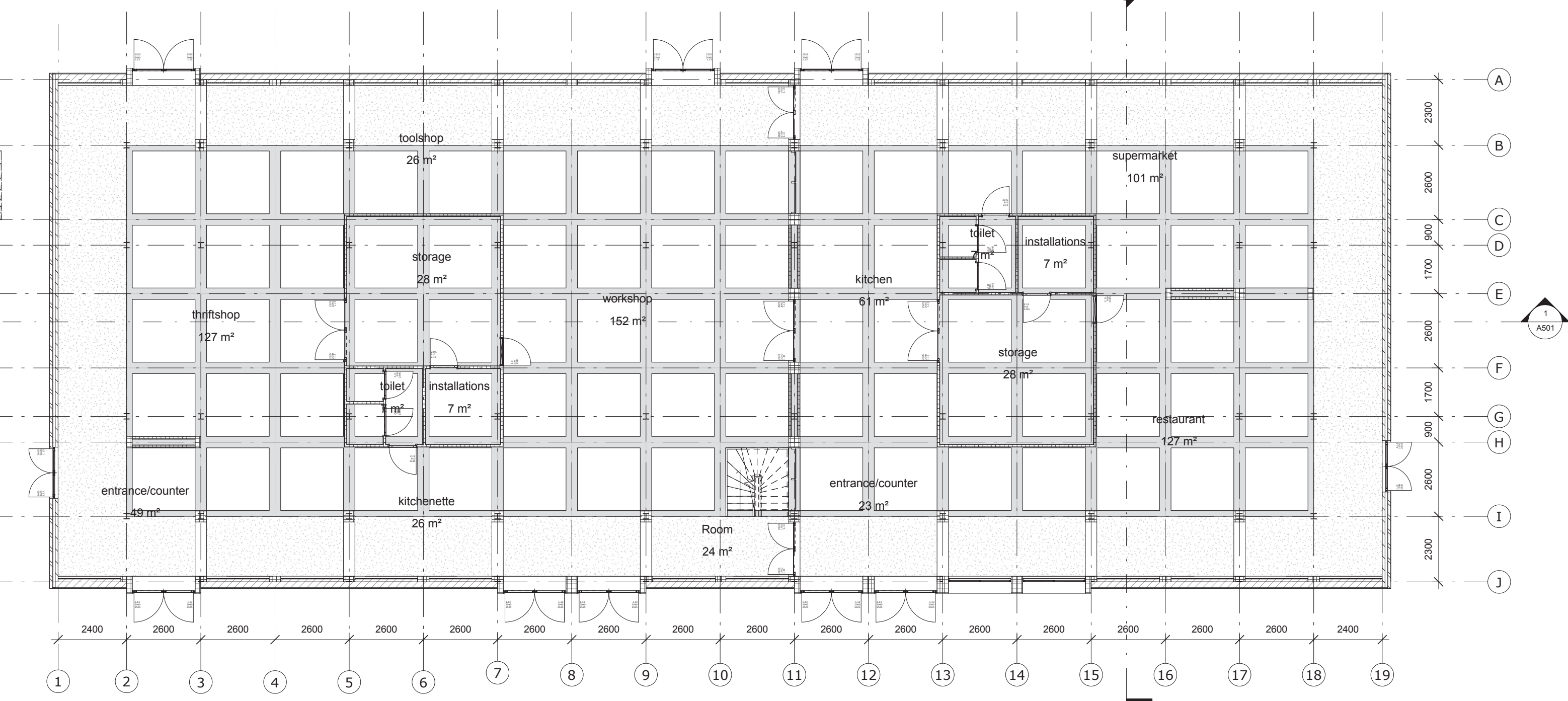
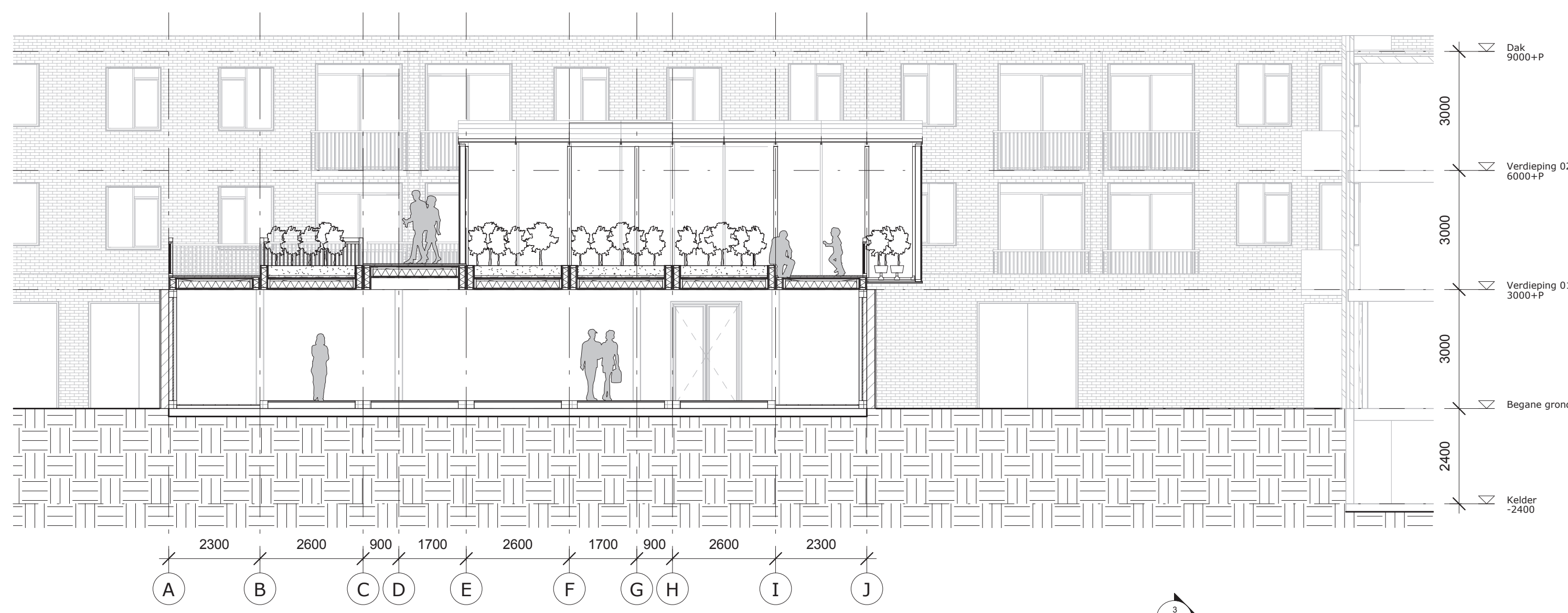
Temporary realization



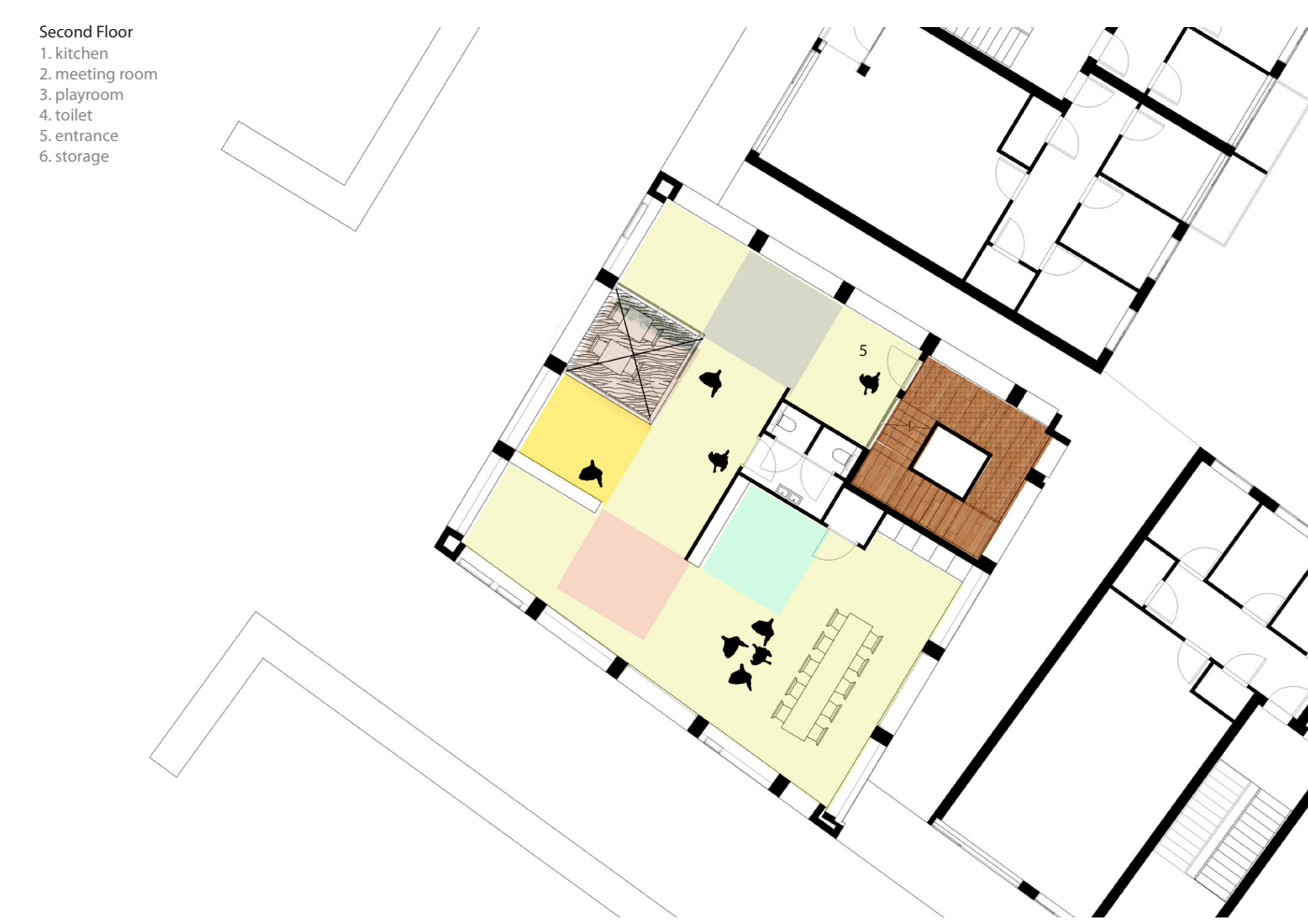
Implementation







first floor



Second floor

