

## Densifying suburbia

AHO 2018

(1) Oslo at the end of the 18th century was, much like any other city of the day, a small and compact unit, surrounded by farmland. 50 years later that was all about to radically change when Homansbyen (2), the first villa district of Scandinavia was established behind the royal palace. A new bourgeois class of urban merchants had acquired the means and will to replicate the life and style of the noble class villas of old, but this time in an urban context. Over the next century the phenomenon would spread rapidly over the easily purchasable farmland of the Oslo perimeter, driven by a combination of demand, speculation and the transport revolution. By the 1940s almost the entire Oslo basin had been covered (3) by a huge field of the new typology, of varying quality.

The forest limit (markagrensa), introduced in 1934 because pumping water above contour 220 was deemed unpractical, placed a limit on the sprawl, but in the neighbouring districts the development continued, with the province of Akershus experiencing the largest population growth of all Norwegian provinces after the war at 255% until today. Today roughly 47 % of the built area in Oslo is low density (4), and in Akershus even more so, where 70 % of the population lives in low density housing. In fact, almost 80 % of Norwegians live in a villa or semi-detached house.

The purpose of this project has been to investigate the villa phenomenon. What are the ideals (5) that still attract many to this mode of living, and is it true to the reality (6) of villa districts? In what ways are the villa districts of Oslo undergoing a process of densification today (7), and is it successful? Does the villa typology really best represent the demands, social compositions and ideals of our time (8,9,10)? And is it possible to re-evaluate the strategies employed to address the issue of urban sprawl, and at the same time paint a new image of what ideals suburbia could represent?



Choice of site



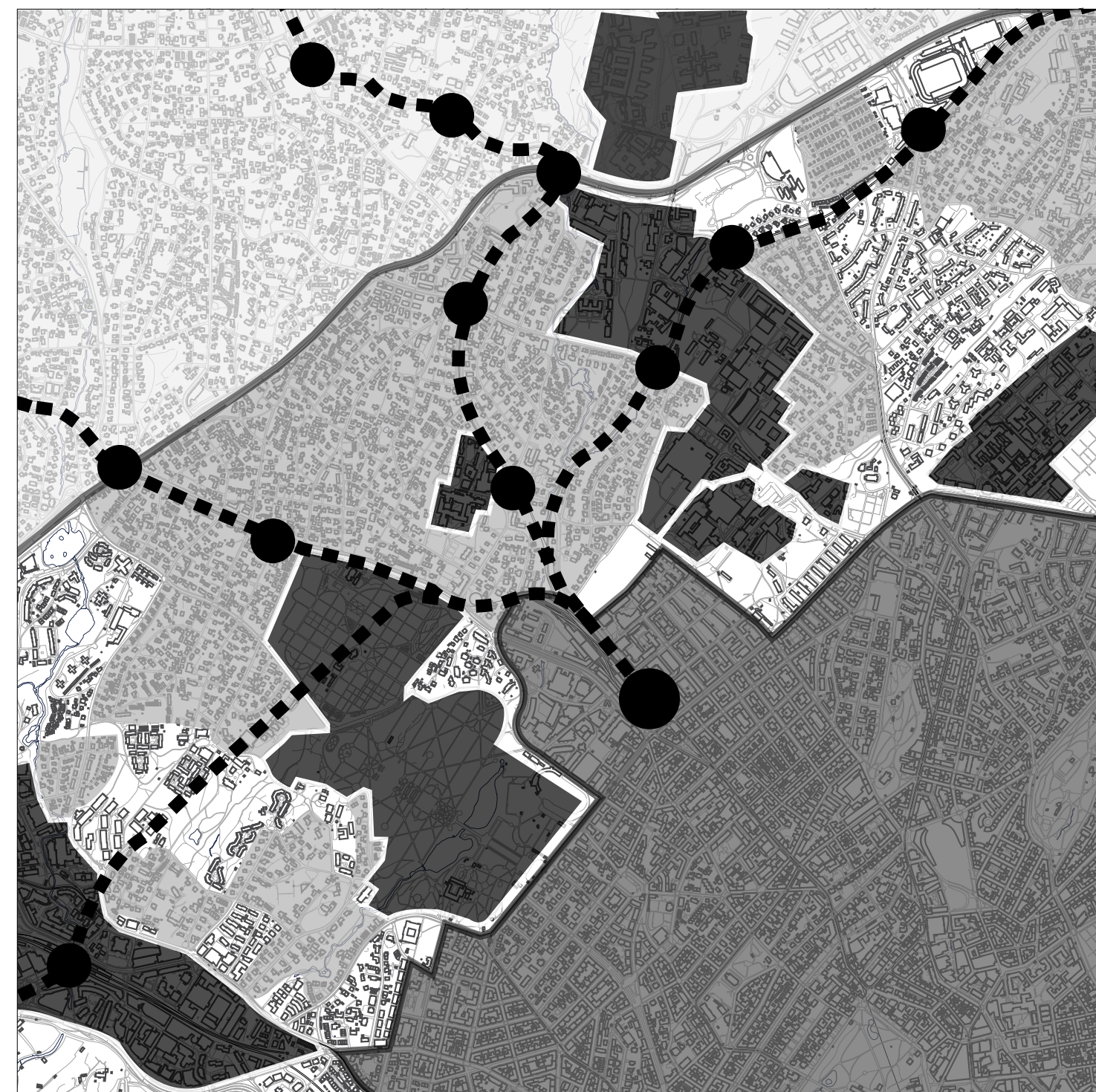
The focus area of the project is Borgen, in the western suburbs, close to downtown Oslo (project site in grey).



Borgen is a part of a continuous belt of villa districts, located between the second and third ring road, that are all located within walking distance of downtown Oslo.



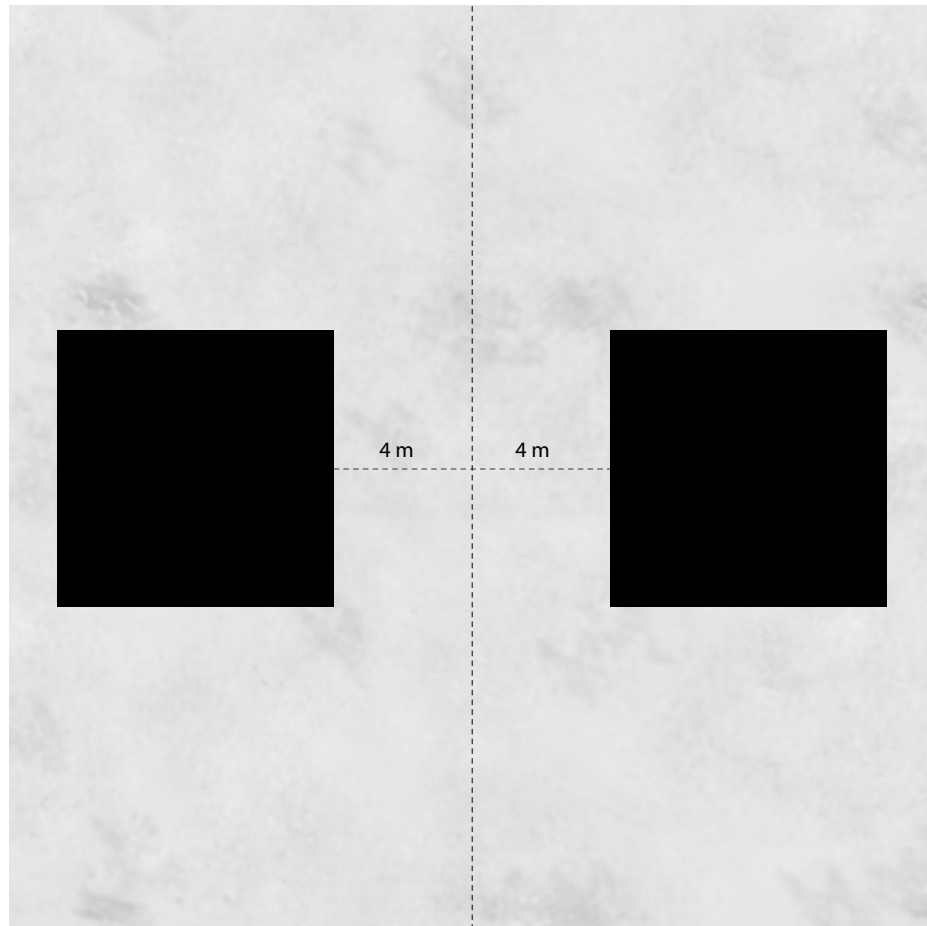
Borgen has several amenities and vital institutions within a twenty minutes walking radius, including three hospitals, the Oslo university campus, the Skøyen business area and the Norwegian broadcasting corporation, necessitating a daily flow of almost 100 000 workers.



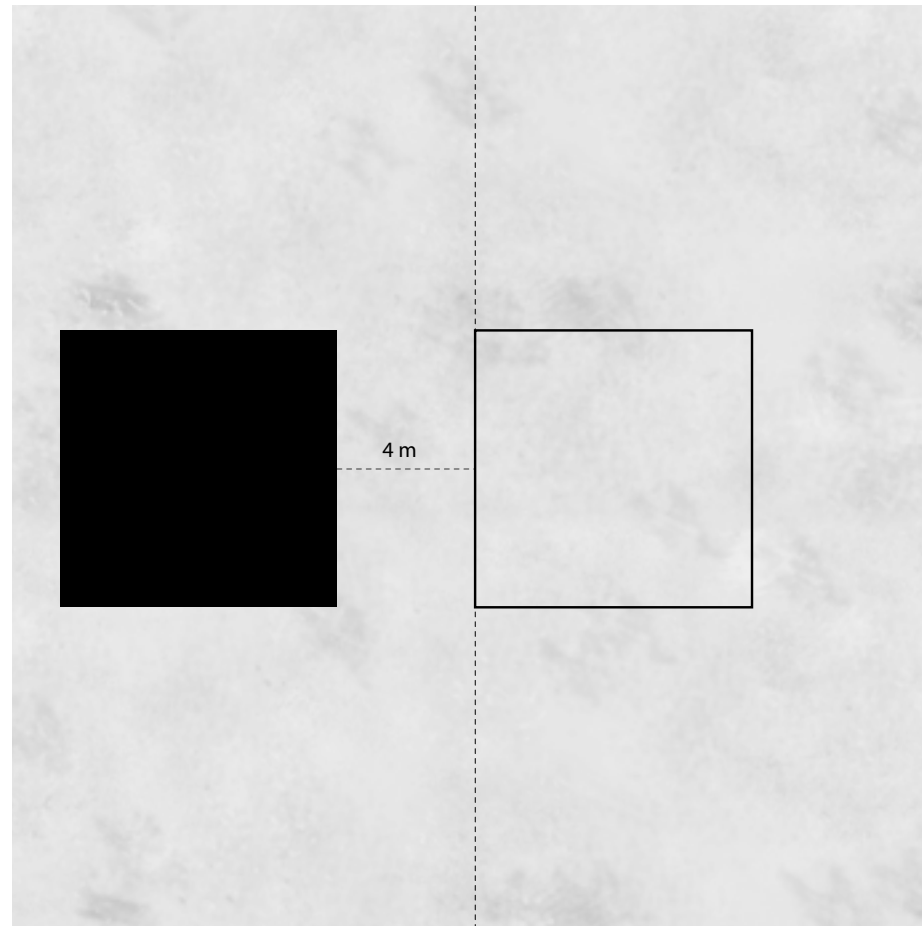
Borgen has a much greater transportation infrastructure than it's population density suggests and is not dependant on car travel. It has more metro stations (8) than downtown Oslo, and another one is soon to follow with the establishment of Fornebubanen.



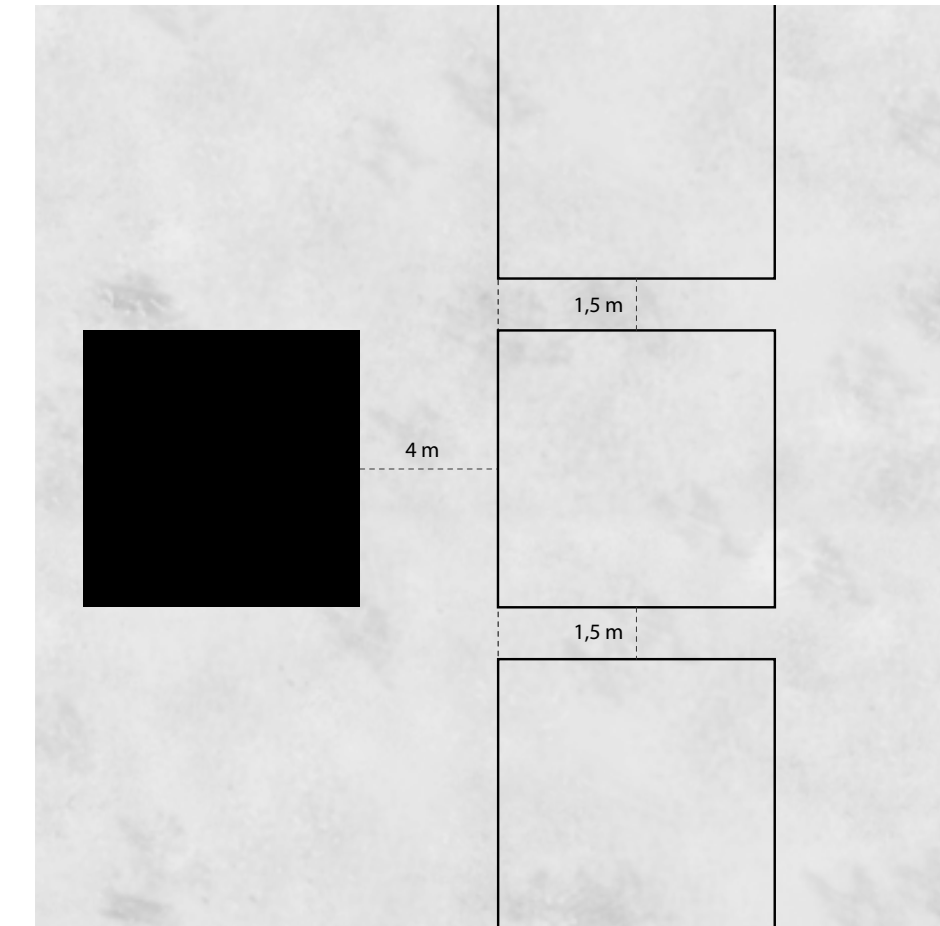
The strategy



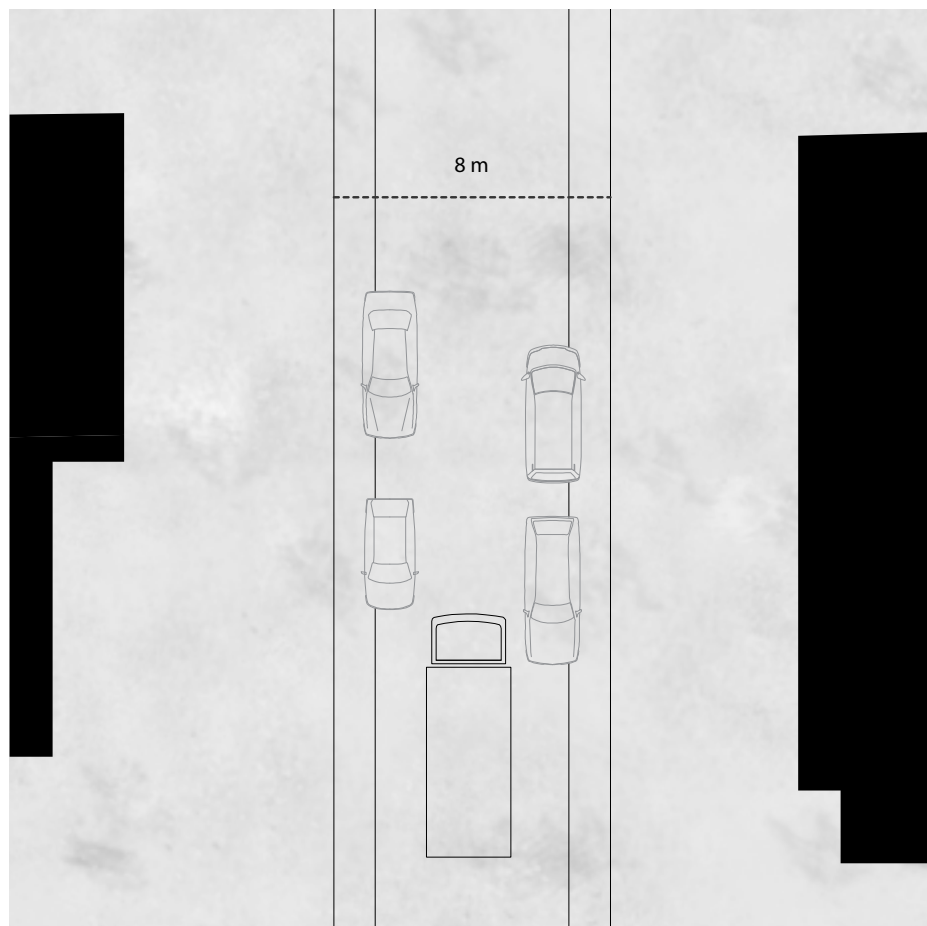
The minimum distance between houses in villa districts is governed by the four meter rule.



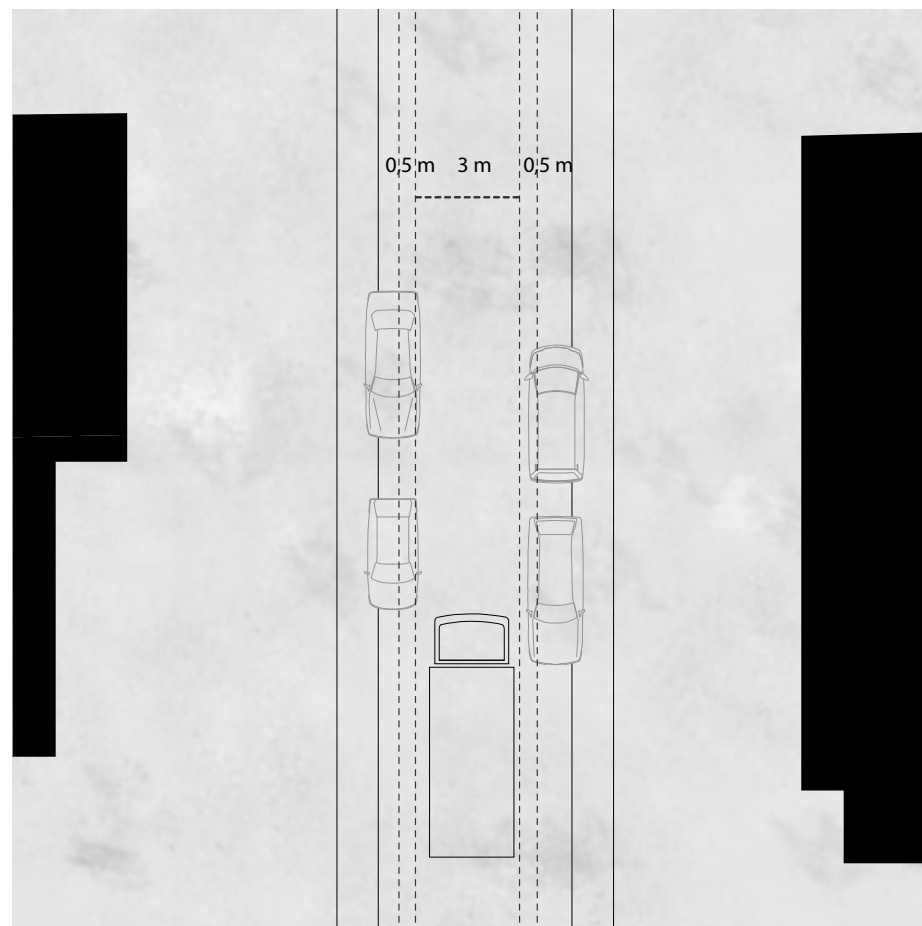
If one could be allowed to build at the plot line...



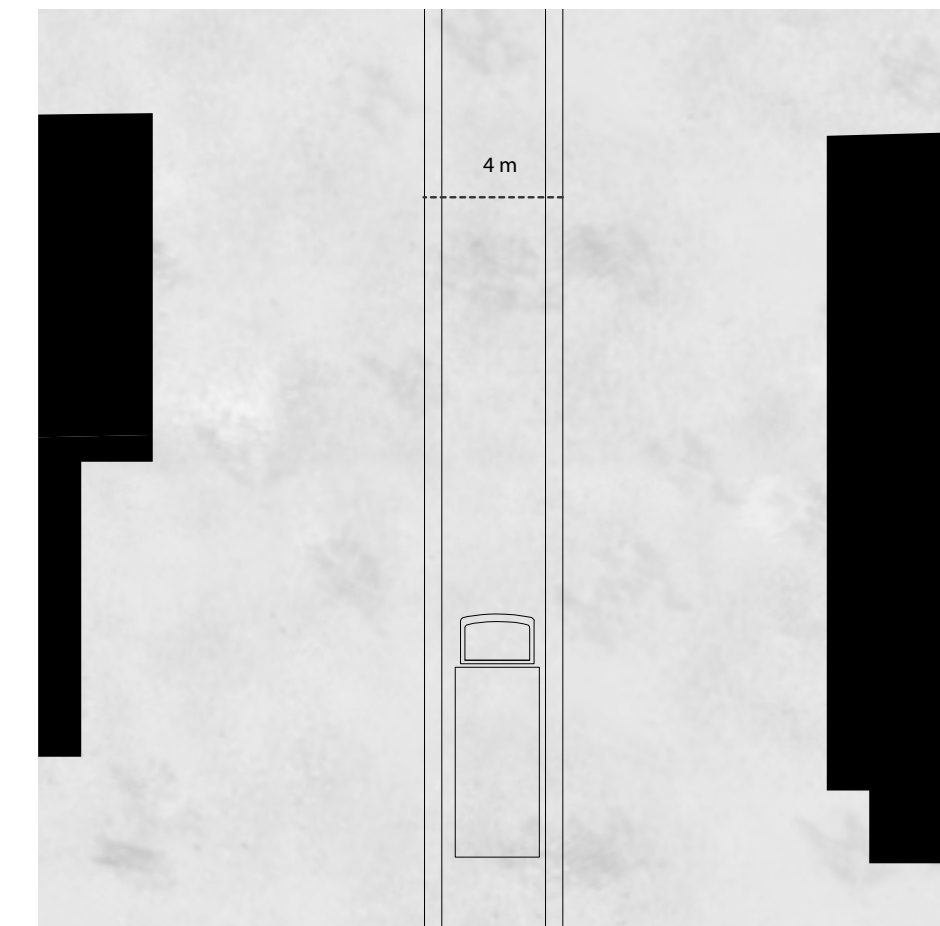
...and establish a new minimum distance of 1,5 meters between new plots, densification could be much more concentrated.



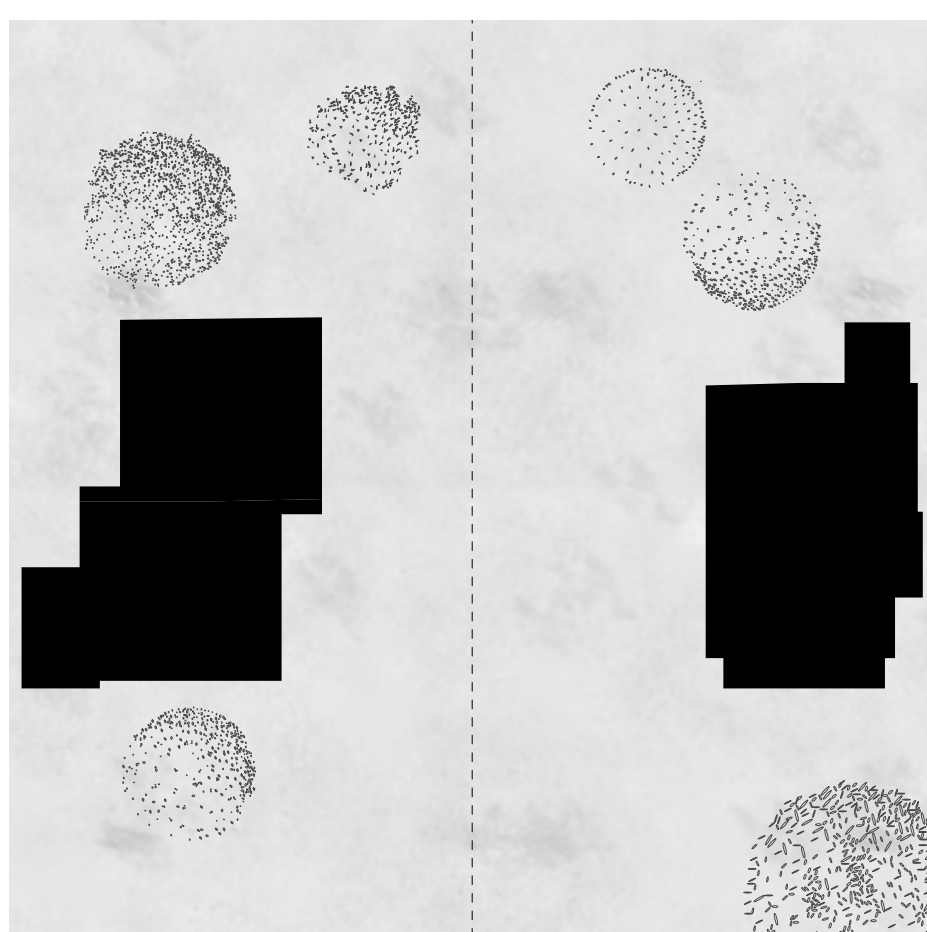
The average width of a villa throughfare is 8 meters, allowing parking on both sides, and large trucks to pass.



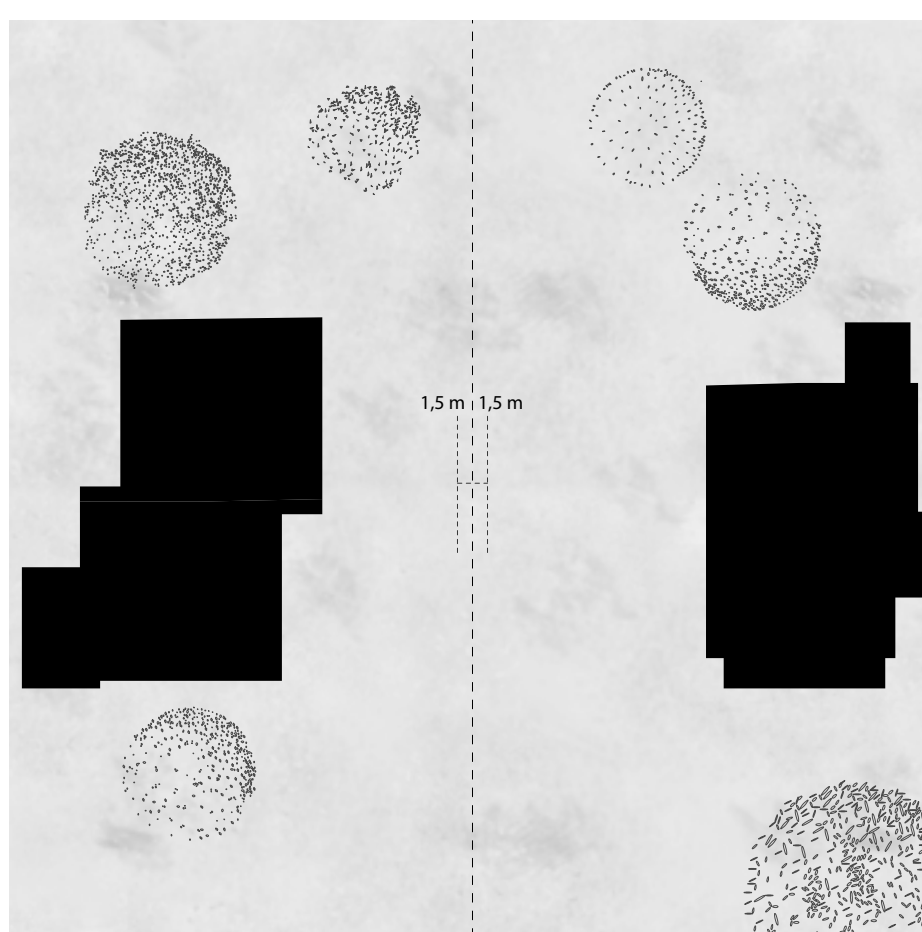
If the width of the road could be reduced to the minimum of emergency trucks...



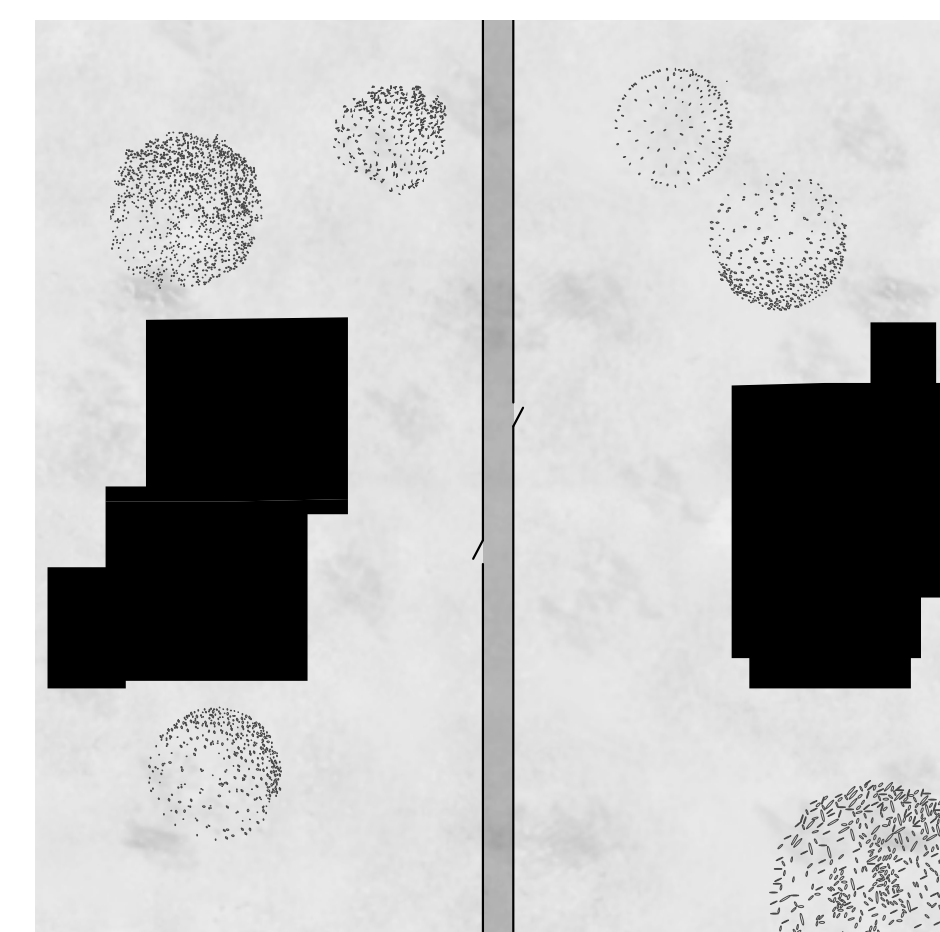
... more space for densification could be made, while disincentivizing car use and throughfare traffic.



Every villa is divided by a plot line.



If every villa owner could sell between 1 and 1,5 meters of the threshold between plots...



... a new pedestrian road could be established. Granting more intimate access to the qualities of villa districts, while making the large blocks more pedestrian friendly.



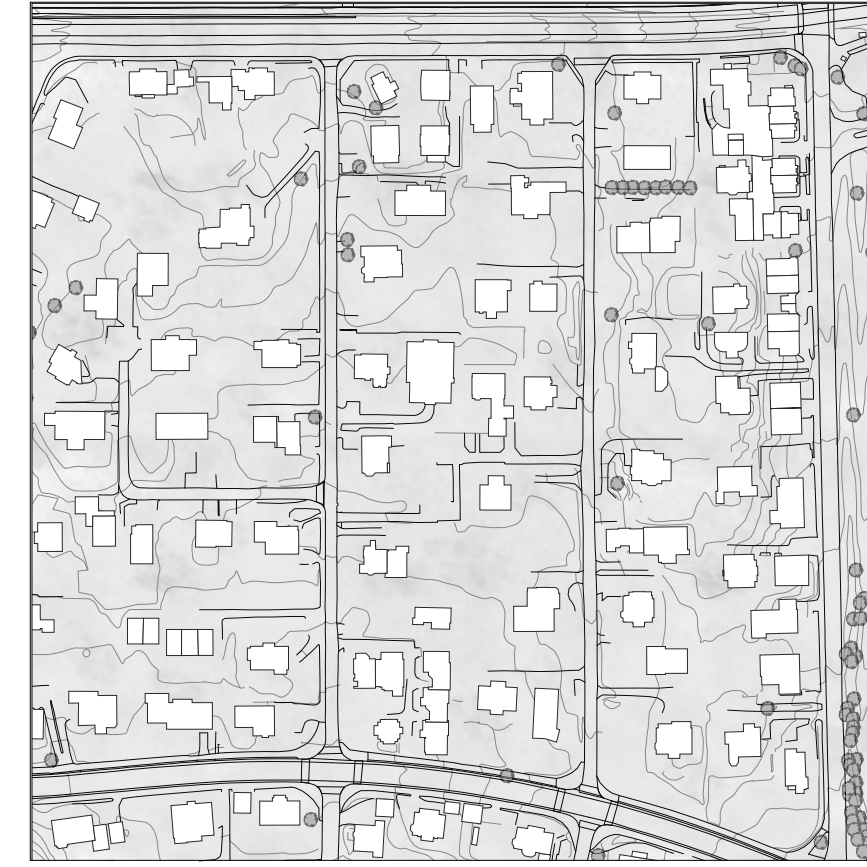
The strategy employed



The site has a massive transportation infrastructure of small garages and wide roads.



All existing villas could be preserved if the sprawl of small garages and driveways could be concentrated in collective parking houses by the entrance to a block.



The site without the small structure sprawl.



Defined by the new four meter minimum distance, all densification could take place along the road, to preserve the villa district within.



A new, much more narrow road is established, meandering through the site to make the most of the space on each side.



The plot boundaries.



A new pedestrian road is established in the threshold, allowing for a more fine-meshed movement pattern through the city and more intimate contact with the gardens. It can also be used by emergency vehicles.



A 9 x 9 meter grid is laid over the district to establish new plots for new typologies.



A volume plan for the new city. Necessitating an entirely new set of typologies in a Norwegian context.





Siteplan

1: Underground parking entrance  
2: 7-eleven  
3: Community house

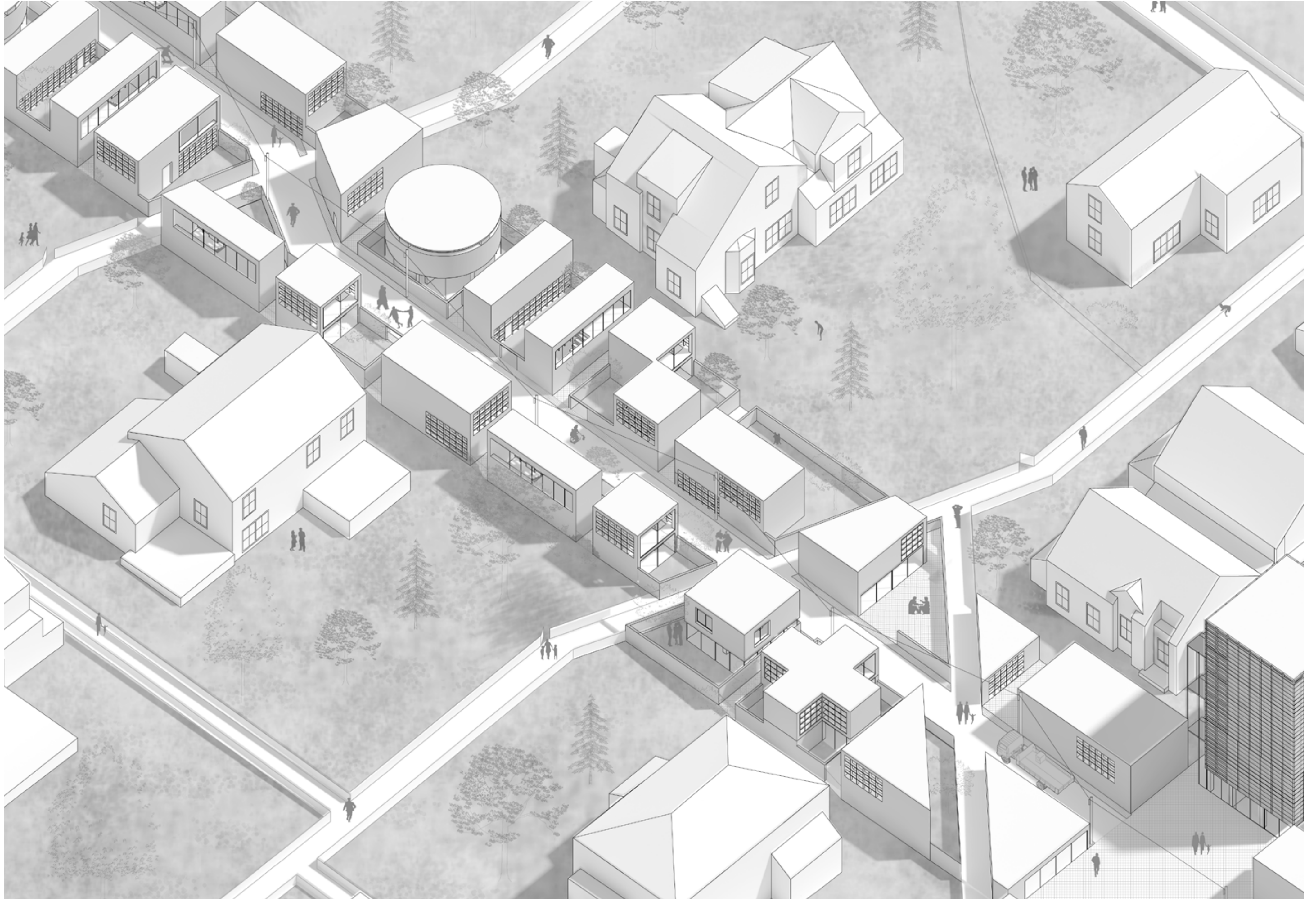
4: Restaurant  
5: Super market  
6: Underground parking entrance

7: Architecture office  
8: Biergarten  
9: Café

10: Community house  
11: Underground parking entrance  
12: Public rock garden

13: Public panorama tower





Axonometric perspective, lower end of street 1





Site elevation



Half built project: One advantage of the small scale typology strategy, as opposed to a megas-structure is that it can be built gradually and is not dependant on all villa owners to want to participate in order to work.



Future expansion: It's also more adaptaptable to a future where some of the villa owners might not be interested in preserving their house, and would rather want to sell their entire plot. In this instance one can imagine a rule that a certain percentage of the plot needs to be public space, and that historically significant architecture needs to be repurposed.





Site elevation

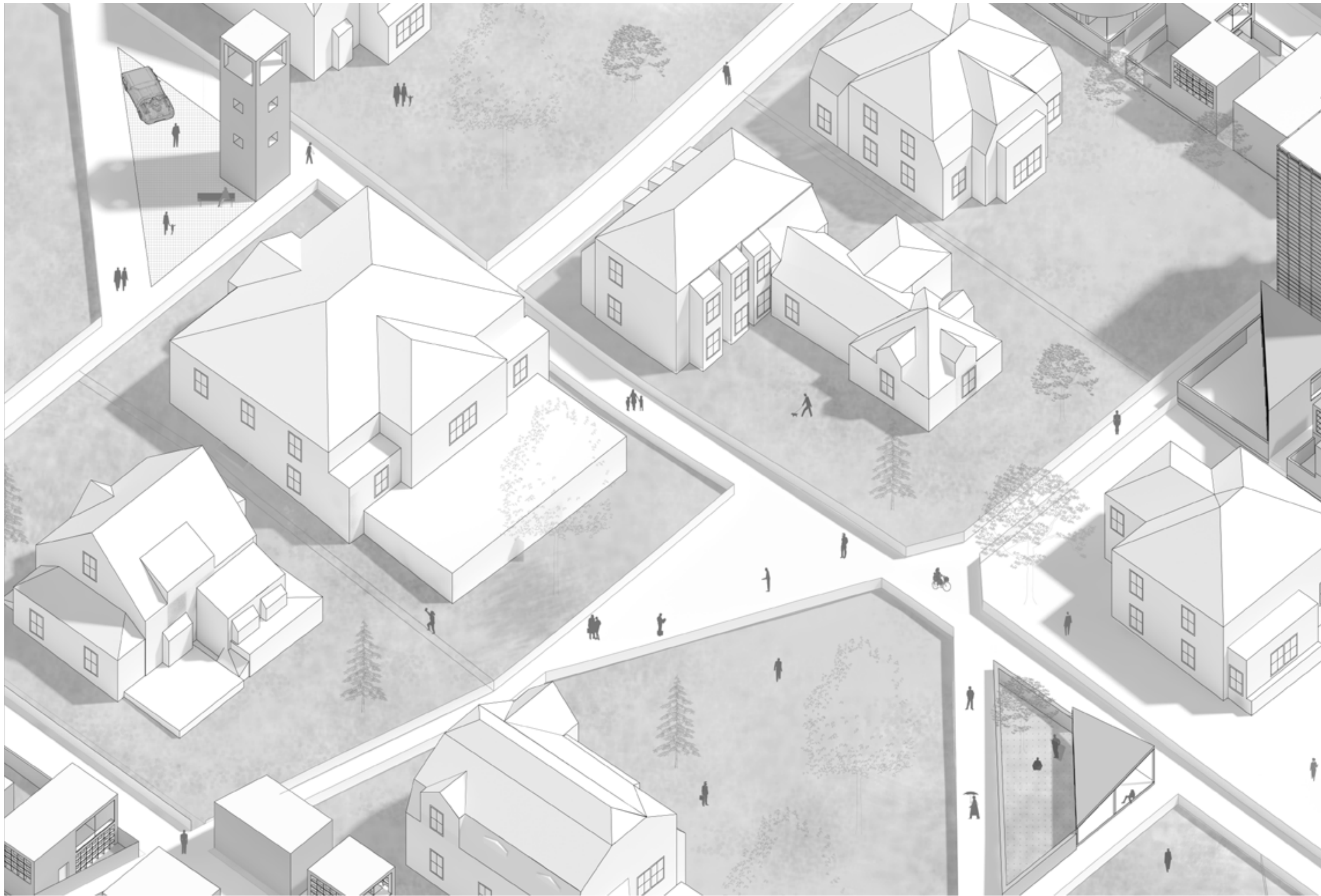


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Life inside the villa area: Is much like before, except that the new pedestrian road gives both locals and guests a more intimate way of discovering the villas and apple gardens of Oslo. Where garages used to be located the villa owners could either extend their gardens, or sell the plot to the street cooperative, allowing the introduction of small islands of publicness inside the villa gardens.



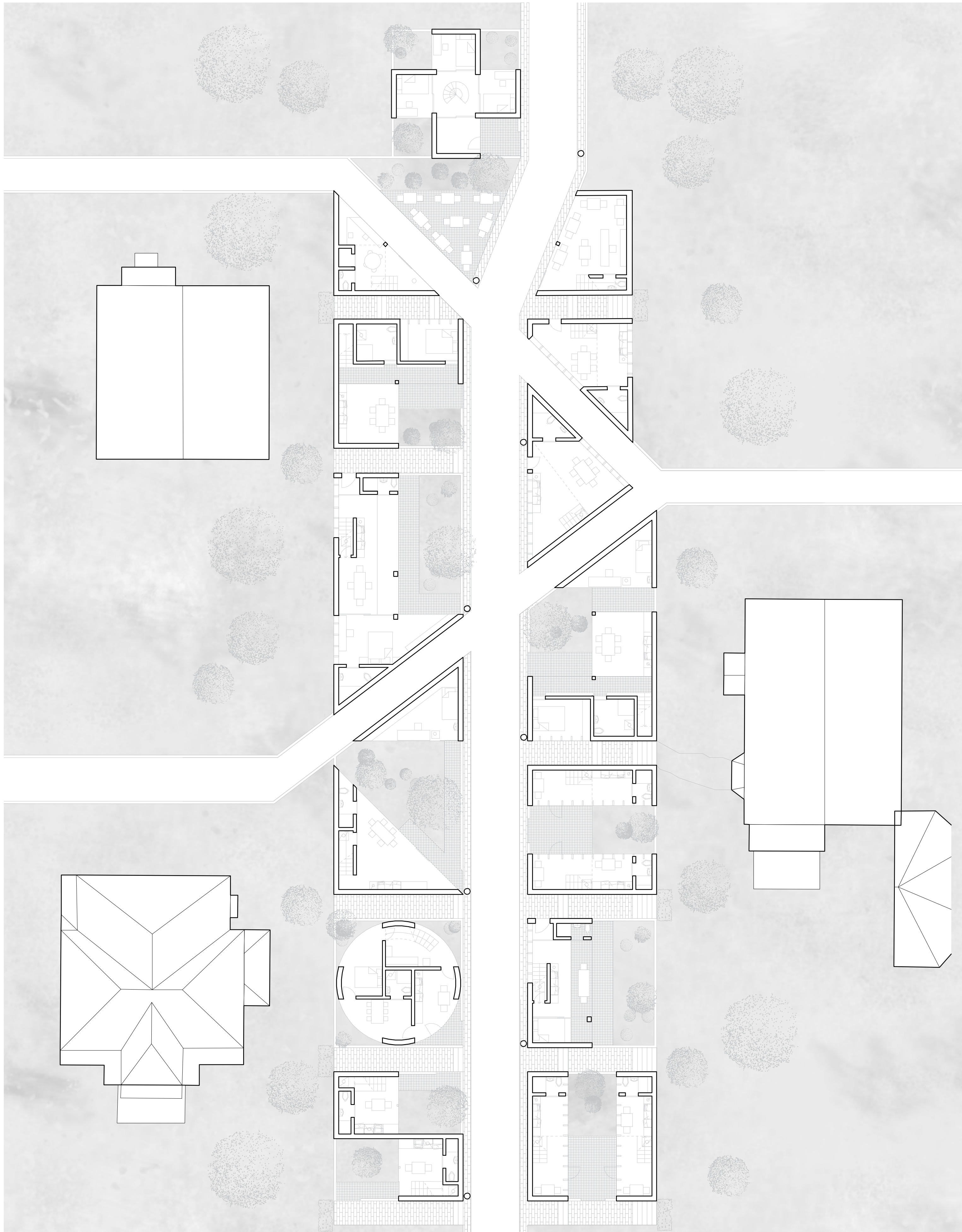
Perspective from the new street.





Detailed drawing of a public plaza: introduced at a regular interval at the largest crossroads inside the new city.





Detailed drawing of a typical street: The small alleyways is an attempt to avoid the new city to be perceived as a wall and allow full flexibility for the villa owners, who choose to either leave them open or seal them of with greenery.





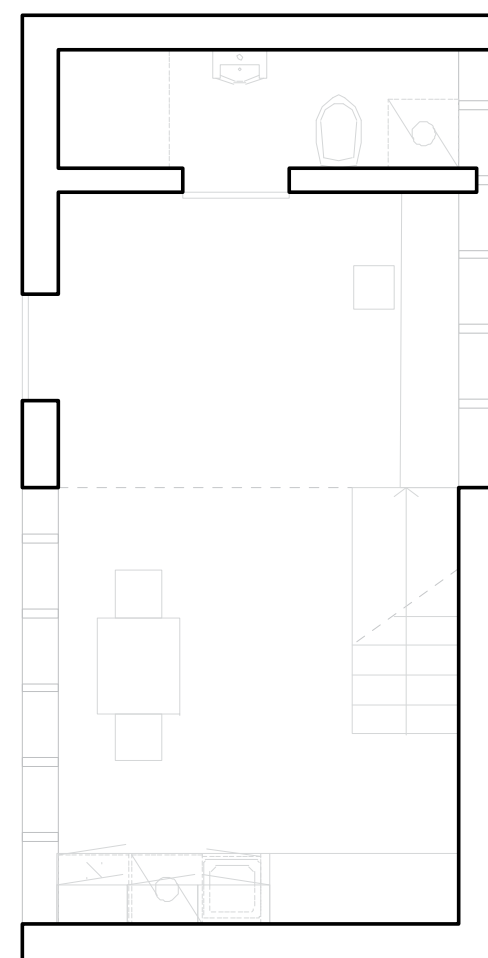
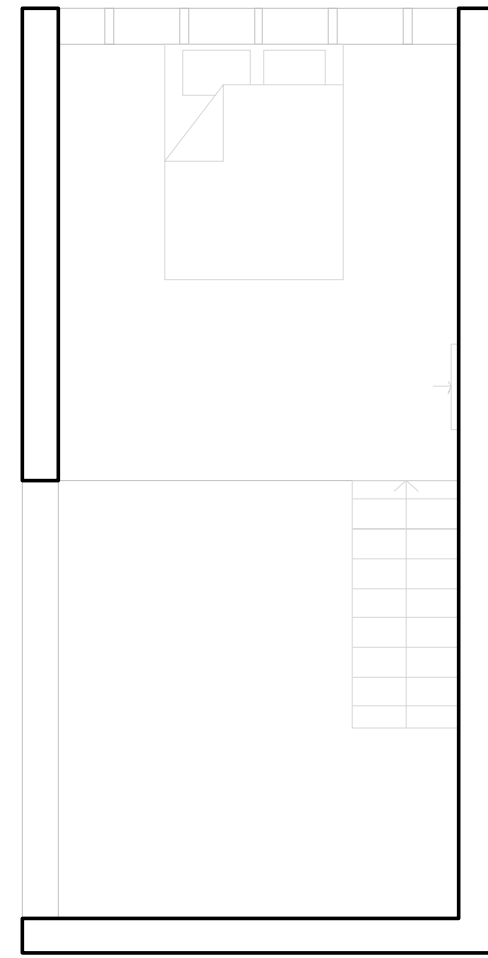
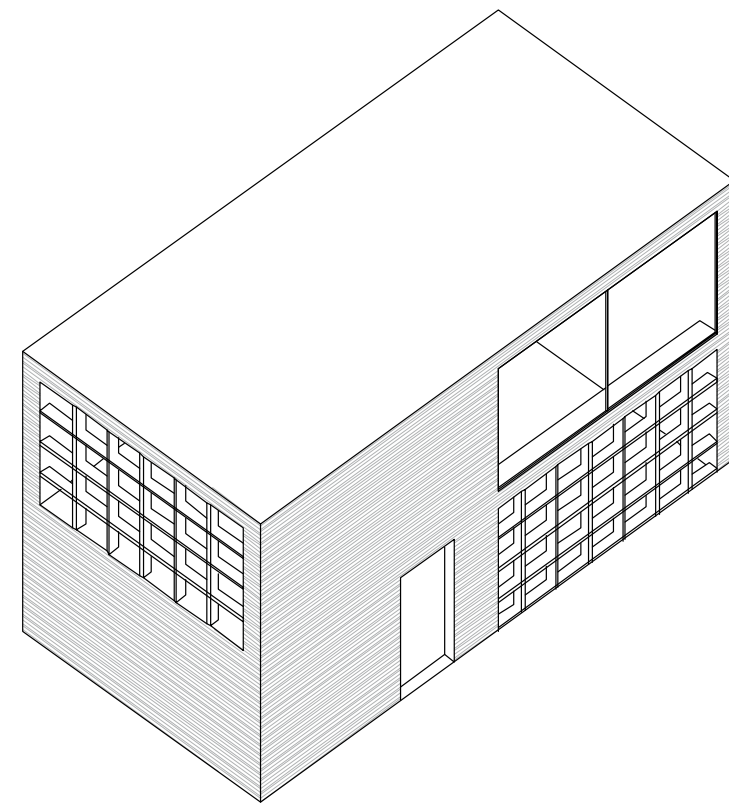
Villa/city threshold: The new typologies will stand as lamella wall on one side of the villa garden. They are designed to open towards inner courtyards and only face villas directly through filter windows of small rectangles of frosted glass and regular glass intermingled.







Bitcoin house

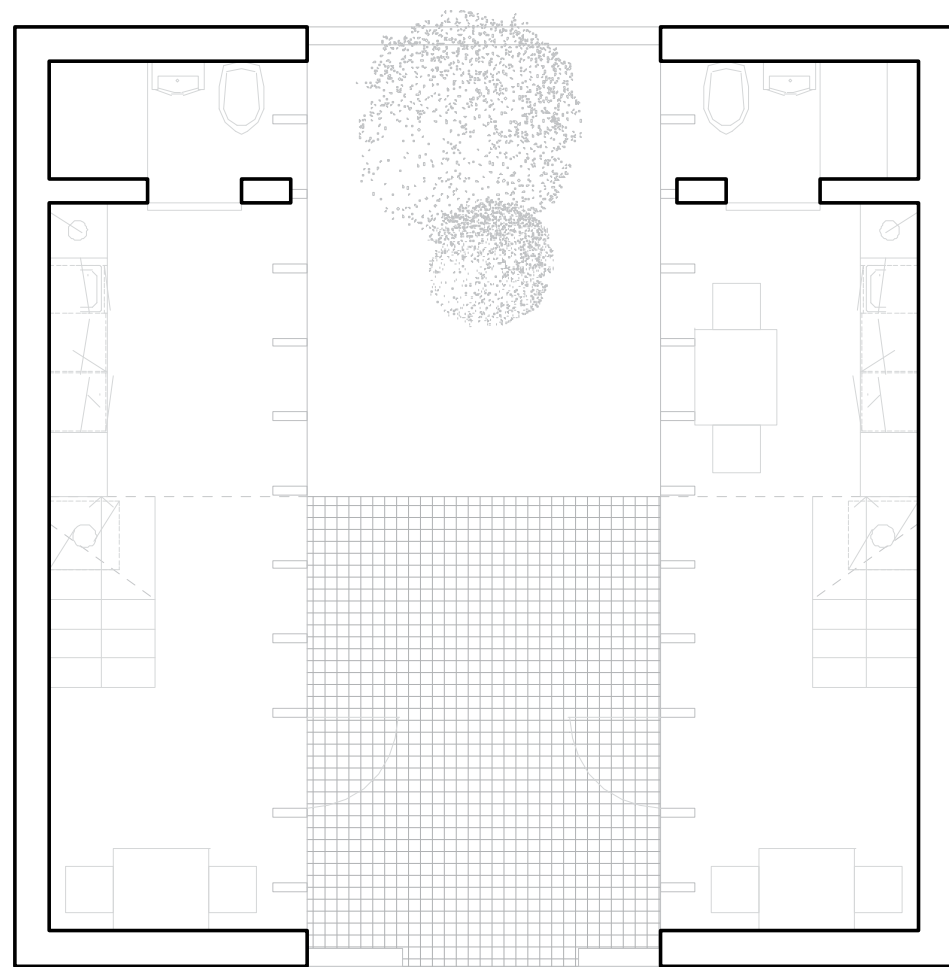
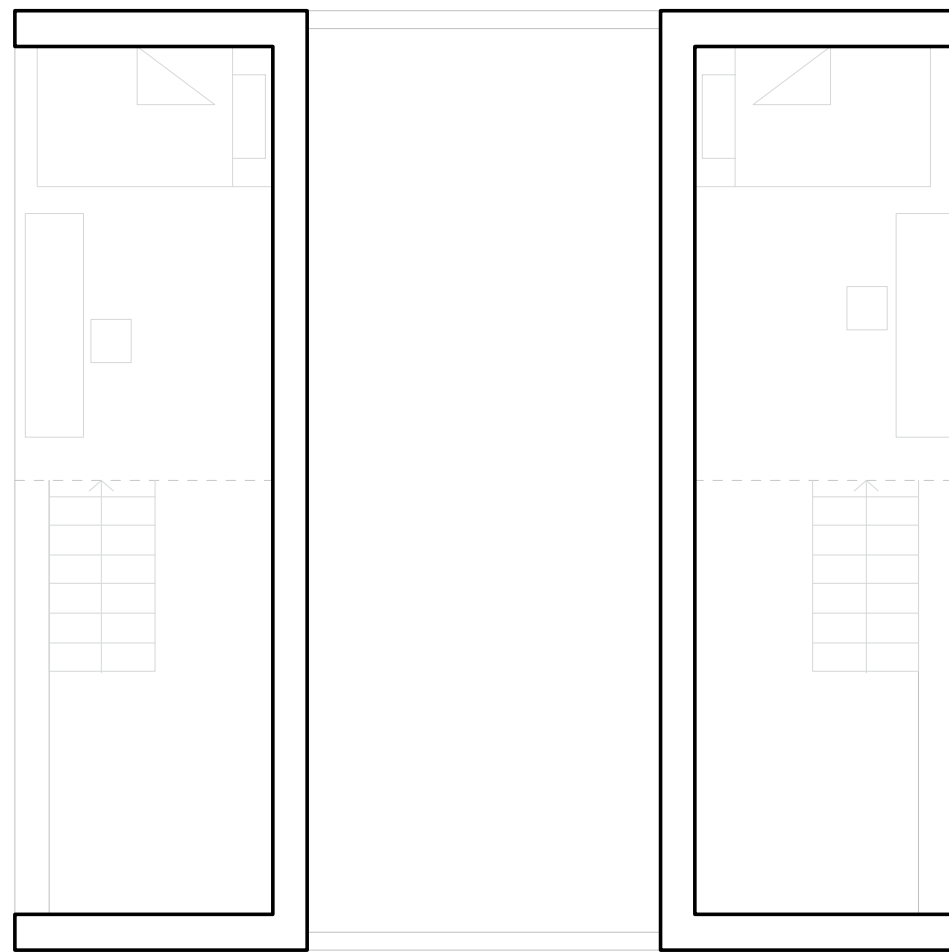
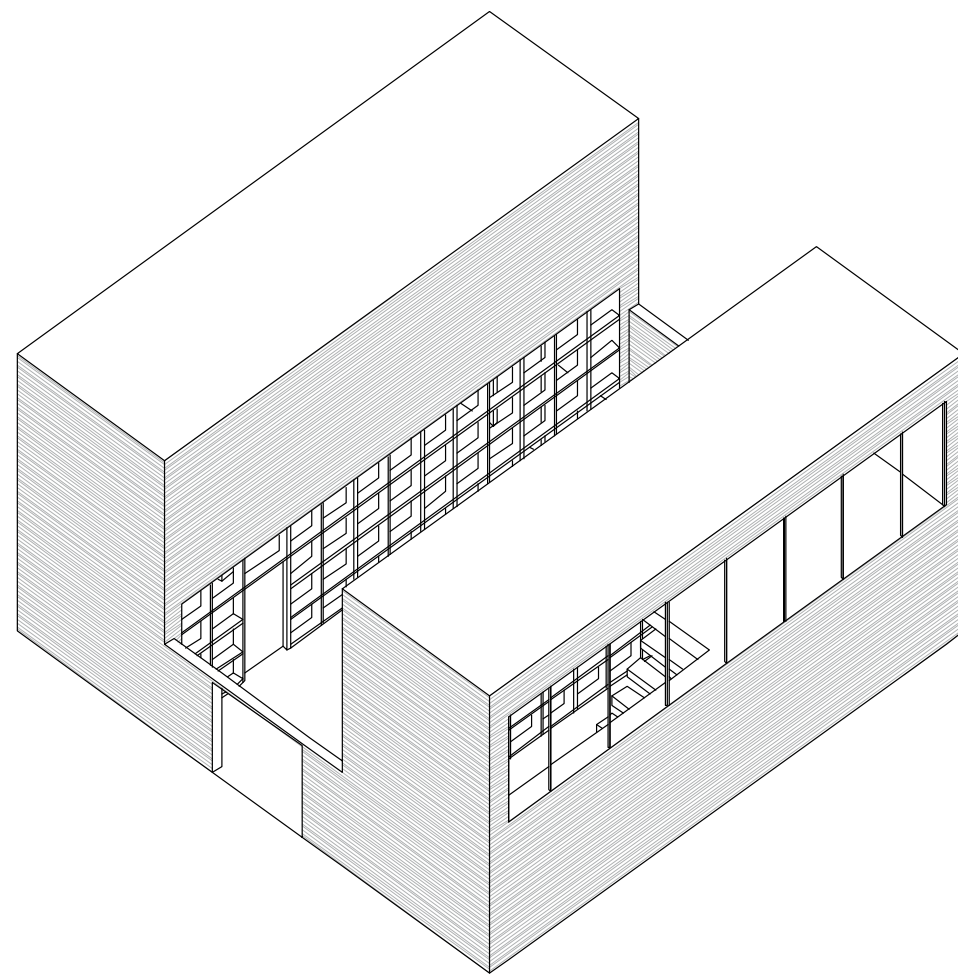








Lonely house

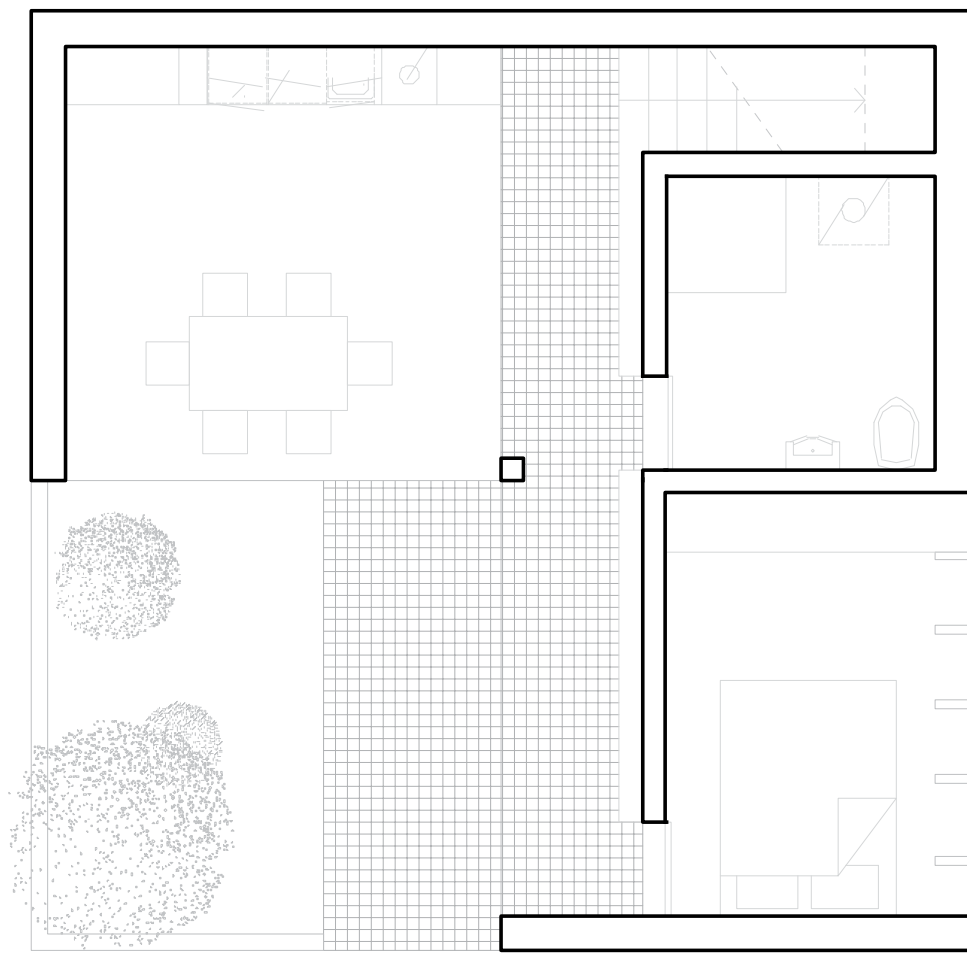
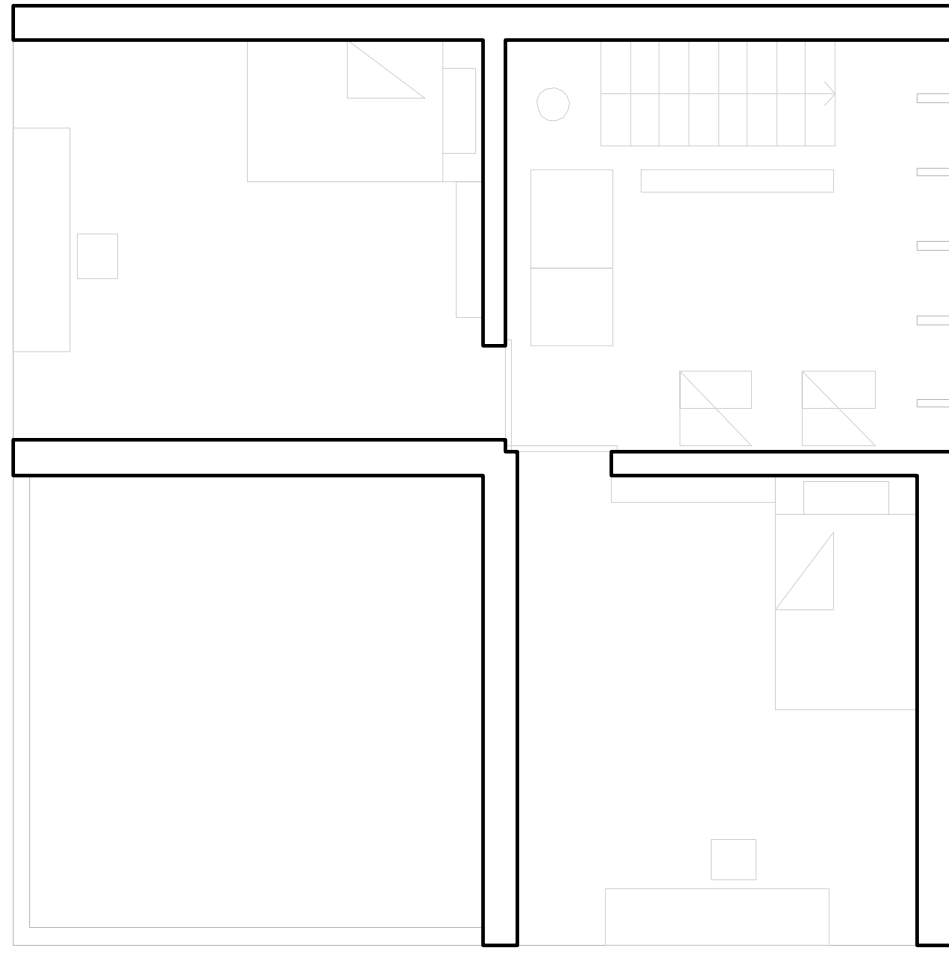
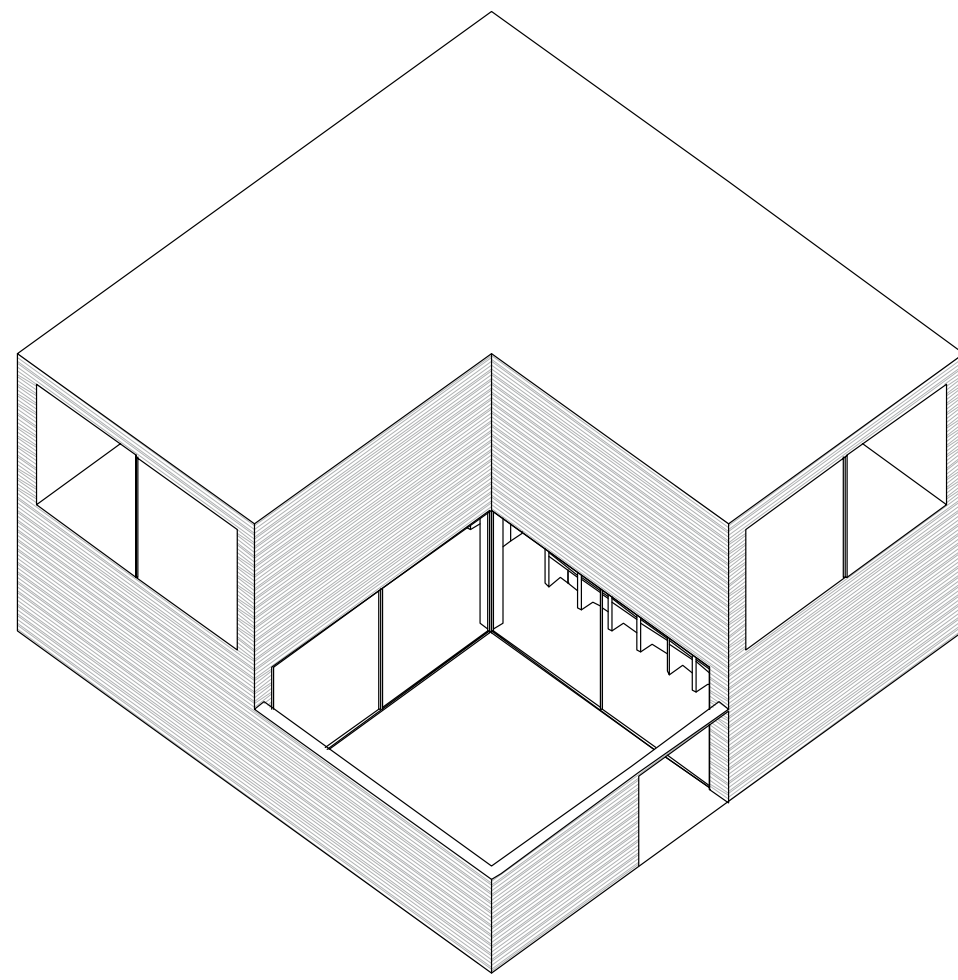








Family house

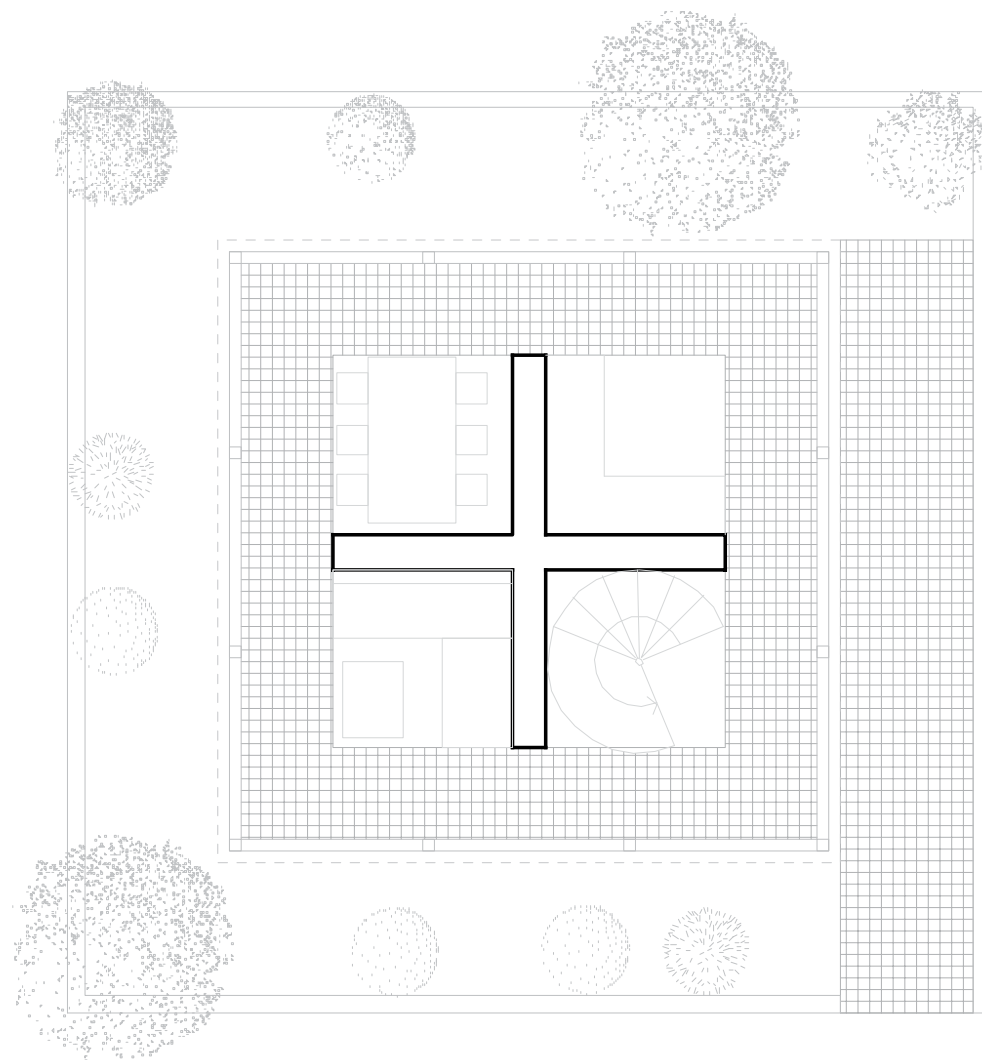
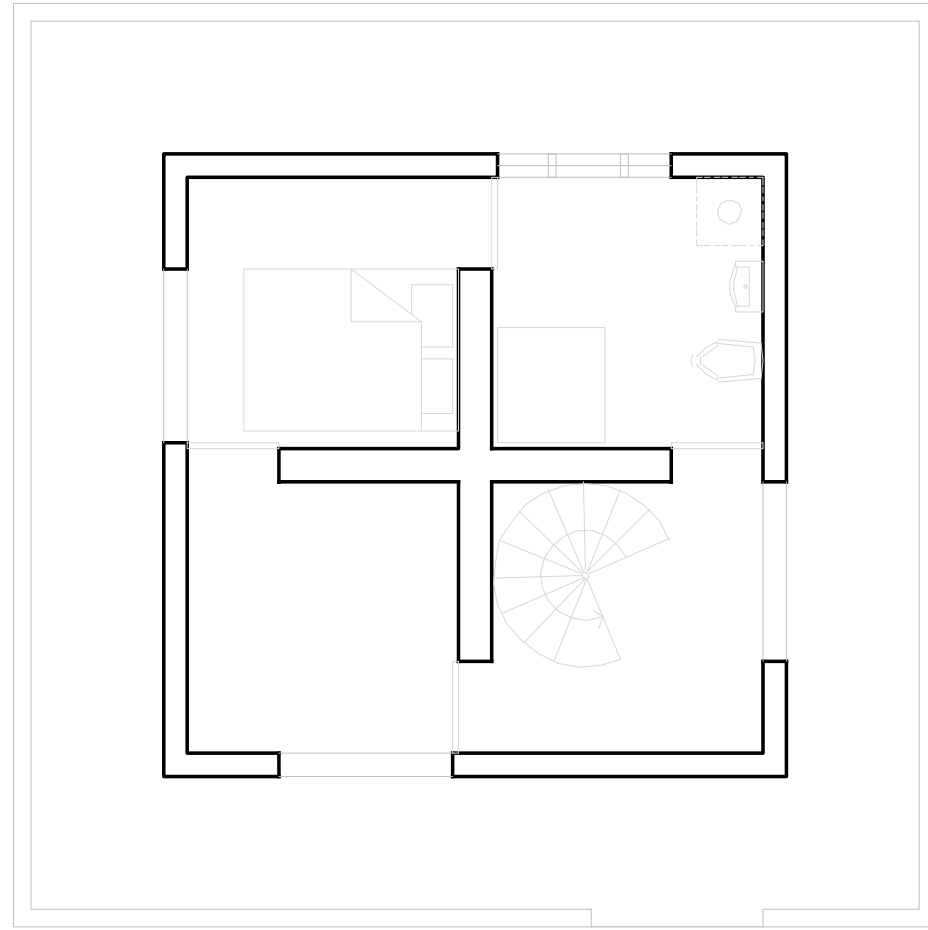
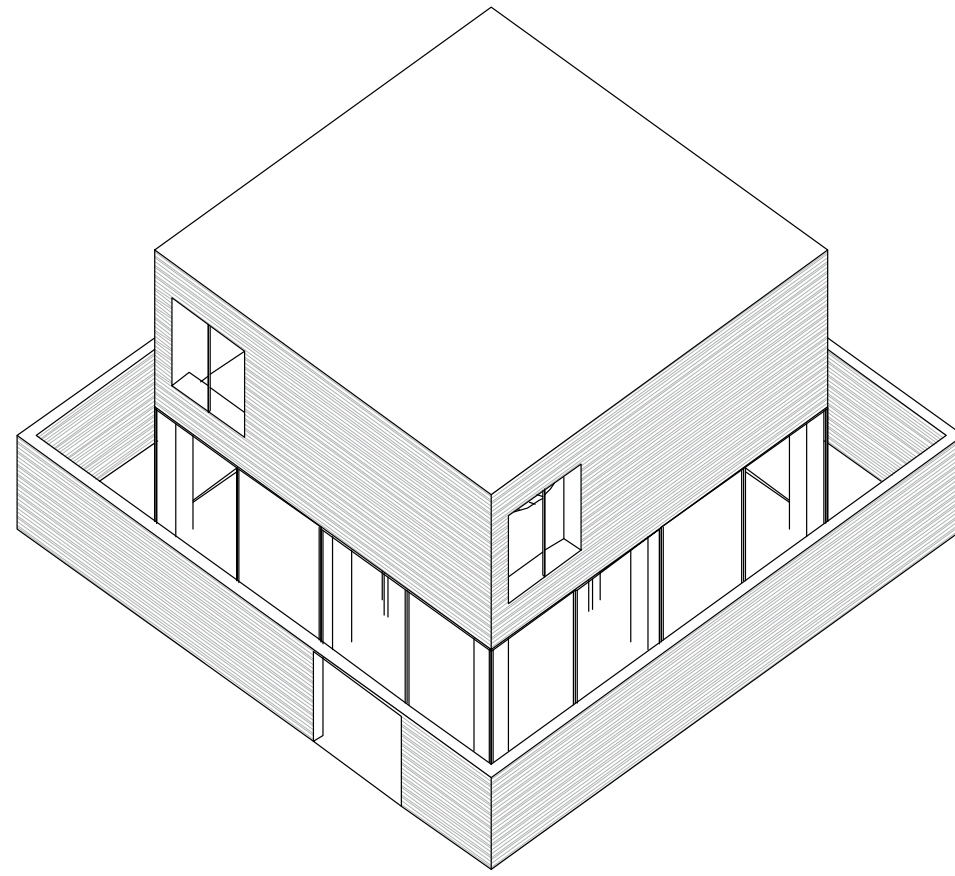








Square house

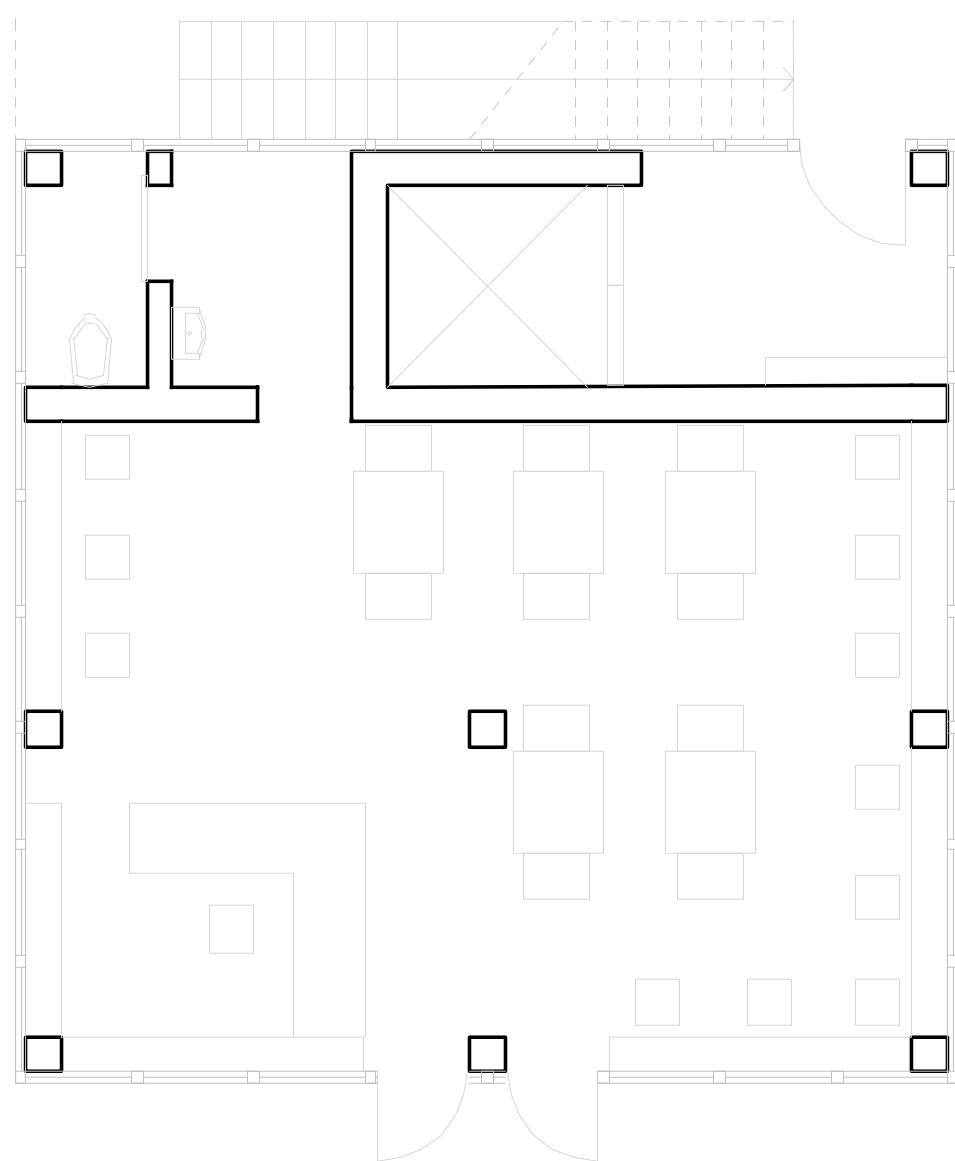
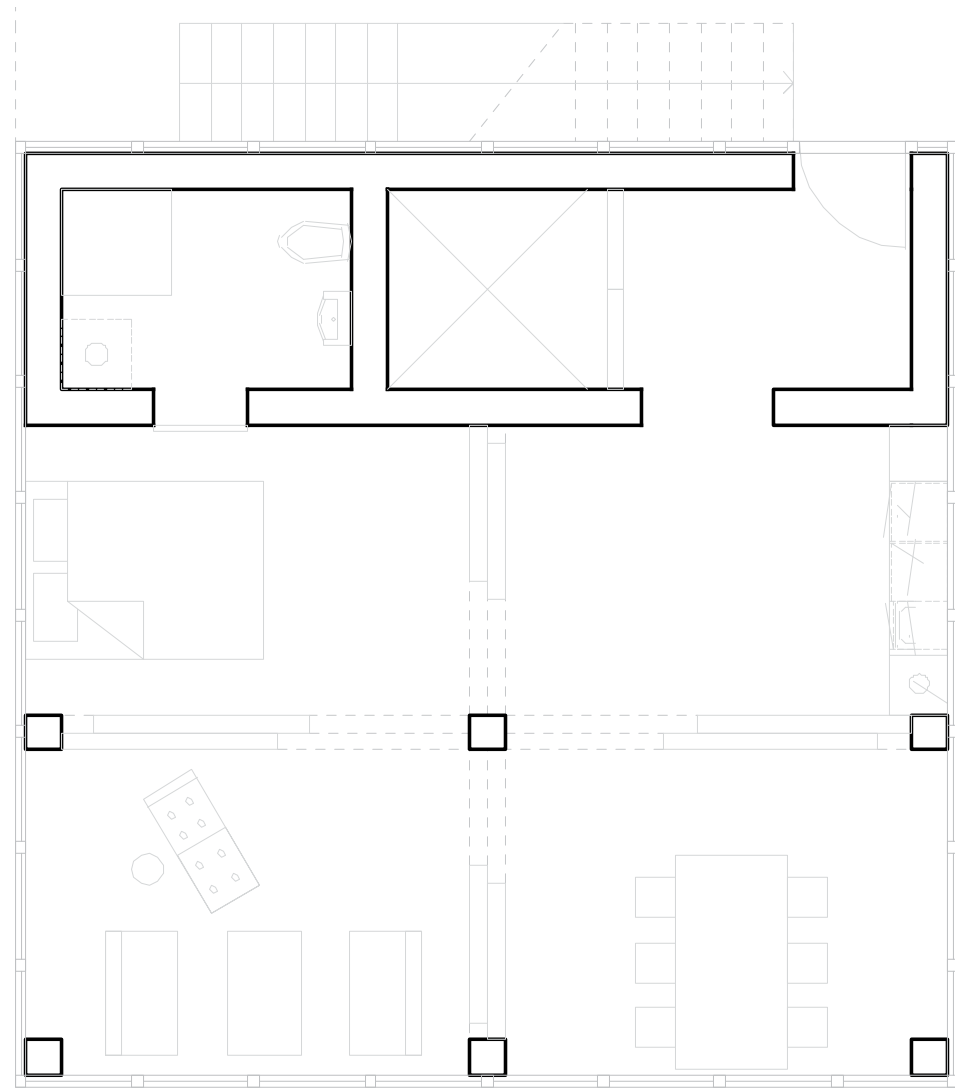
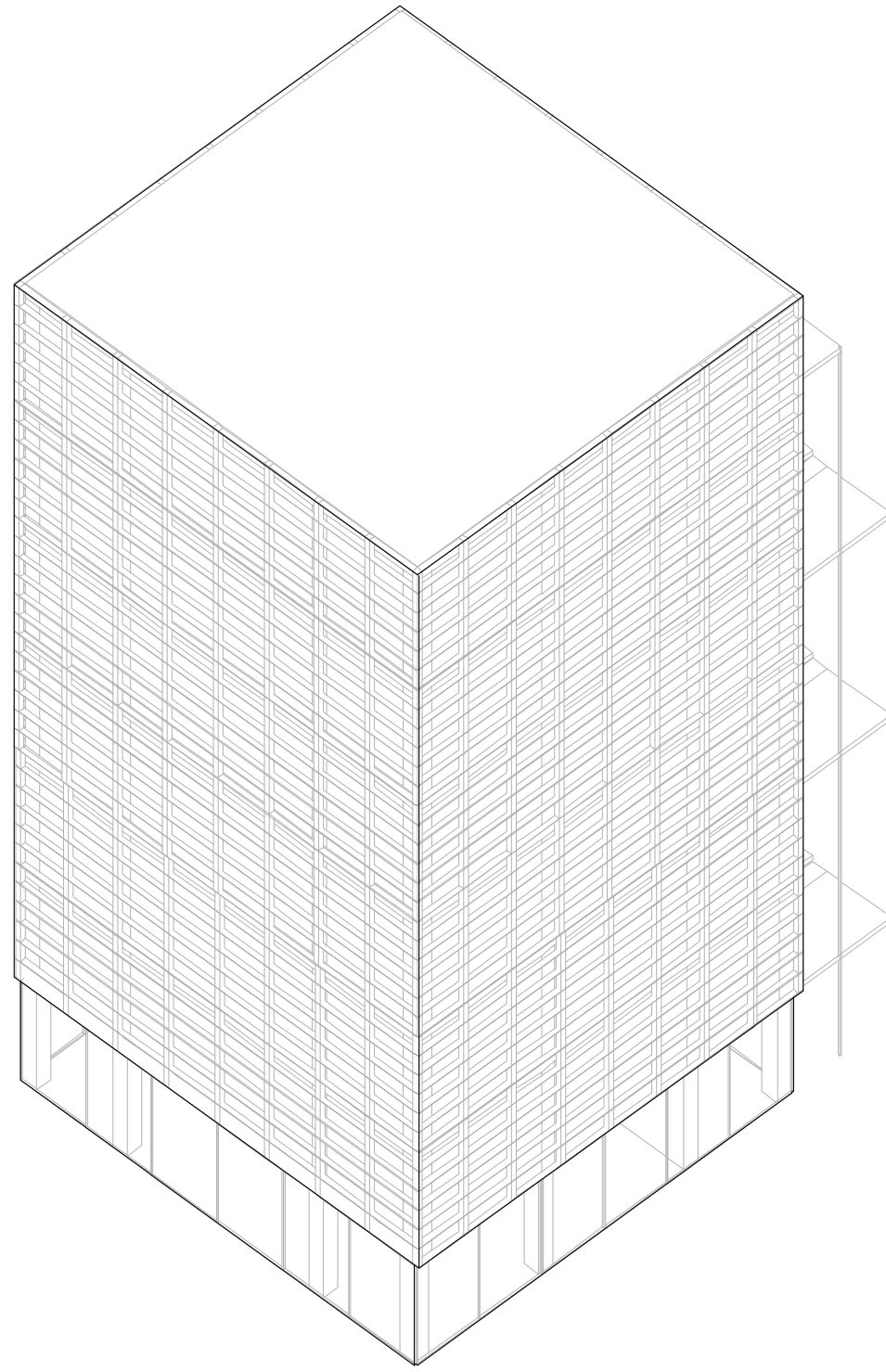








"High-rise"  
house

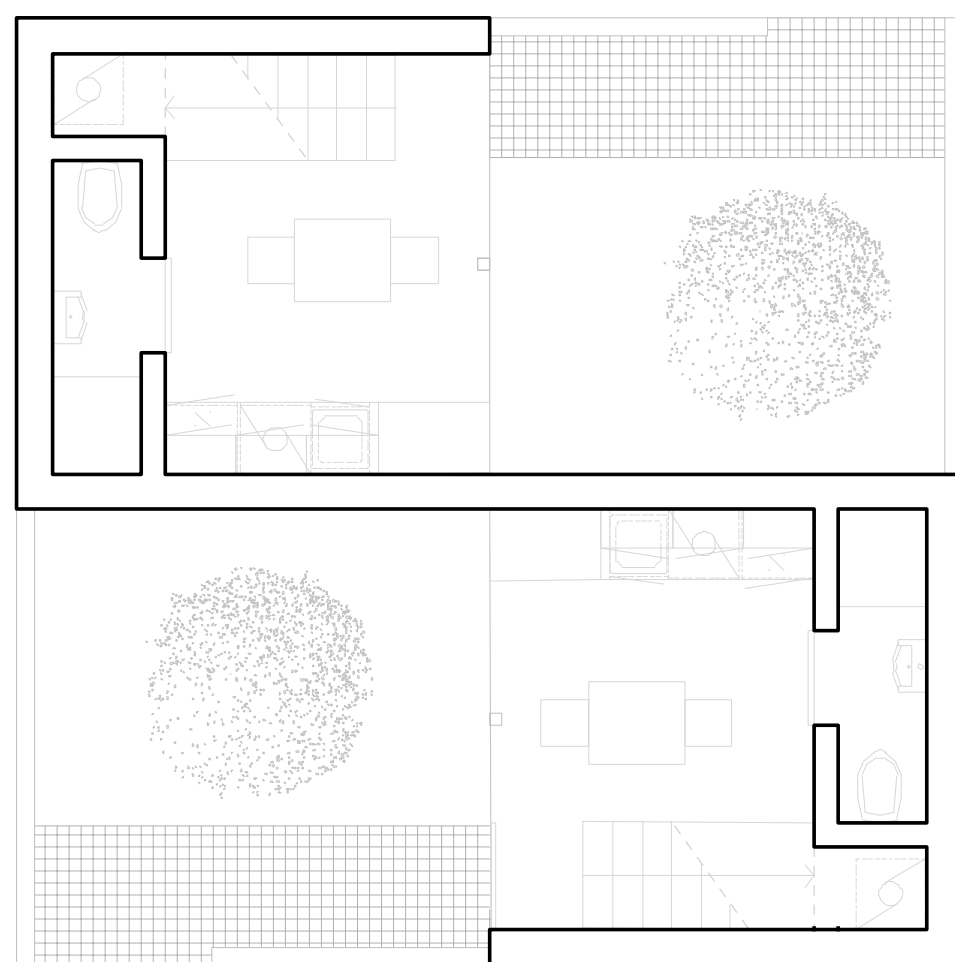
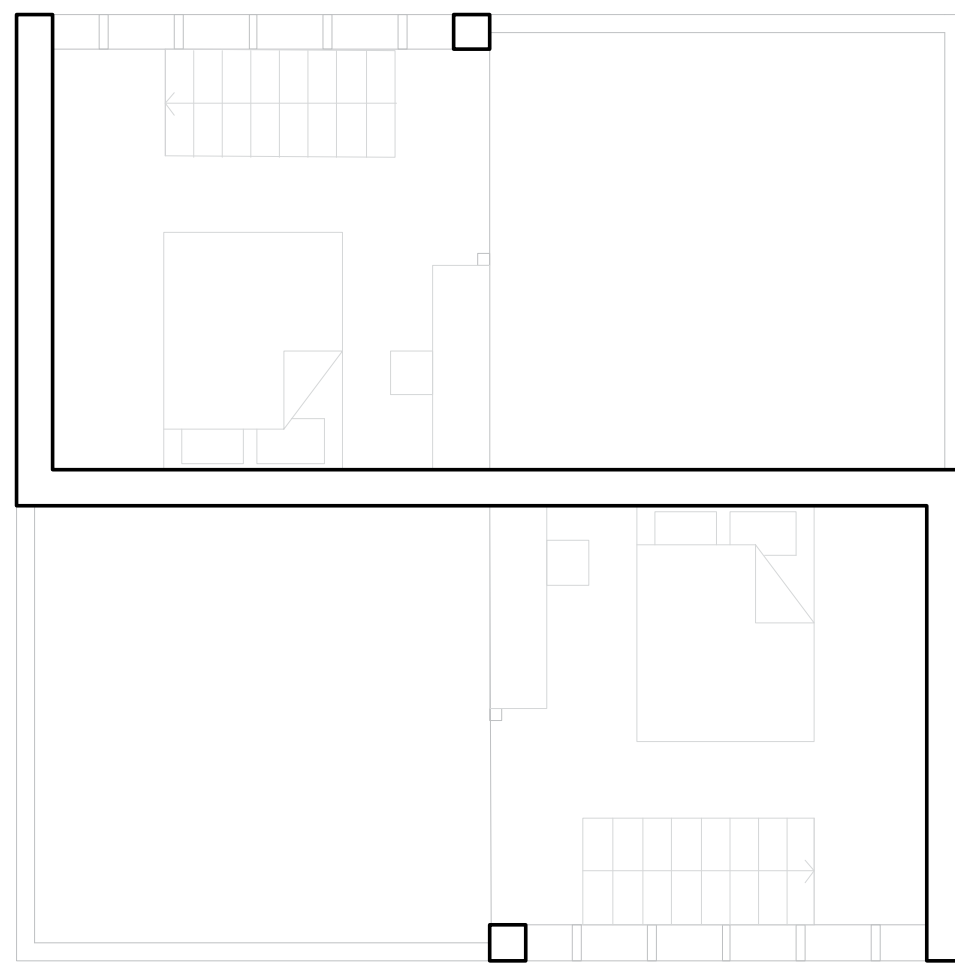
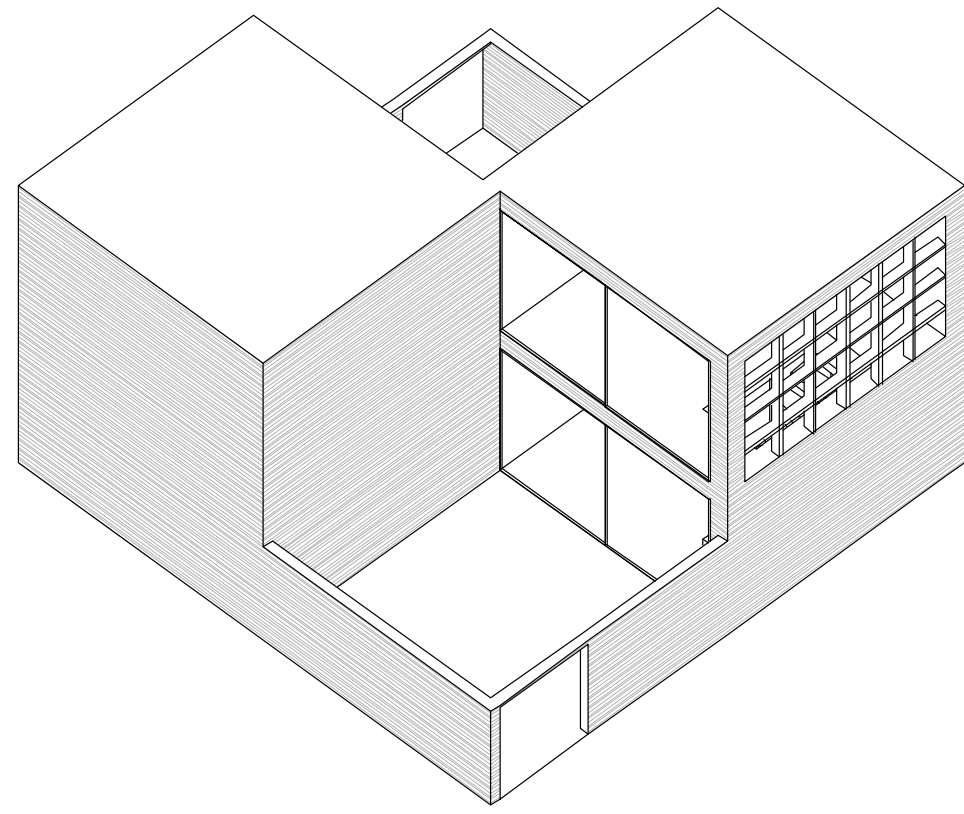








Couples house

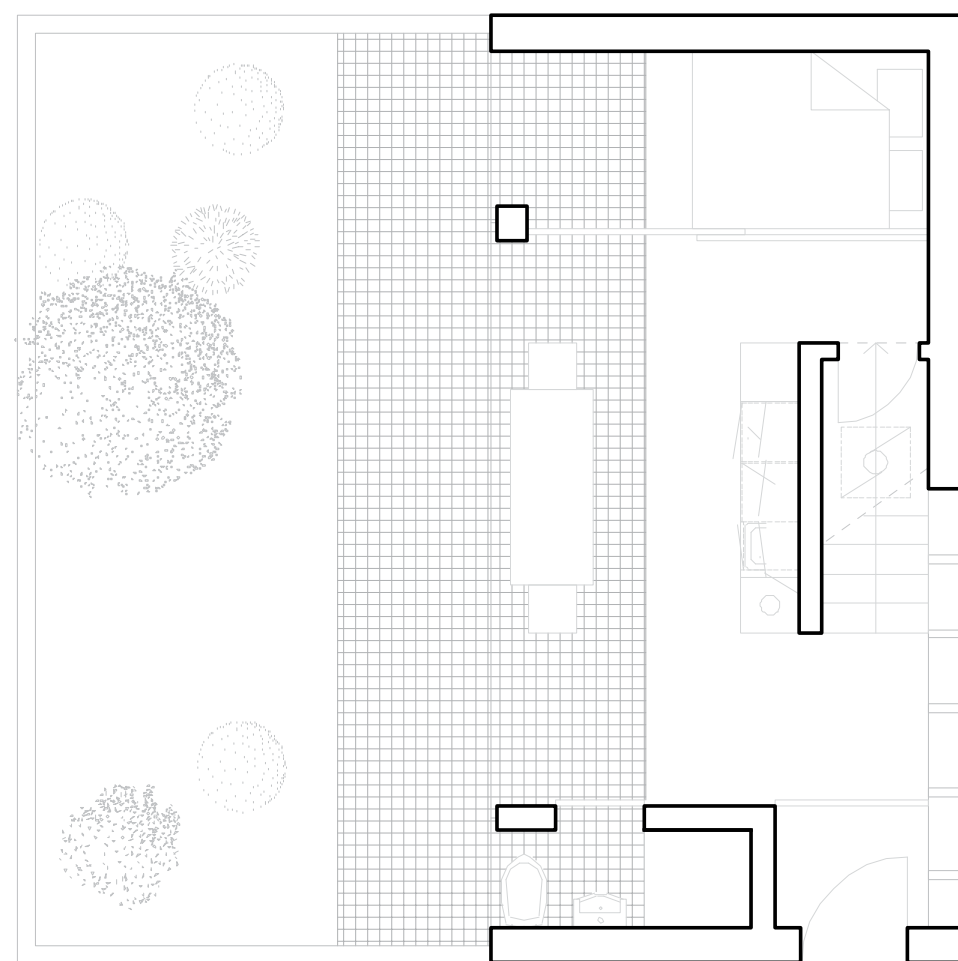
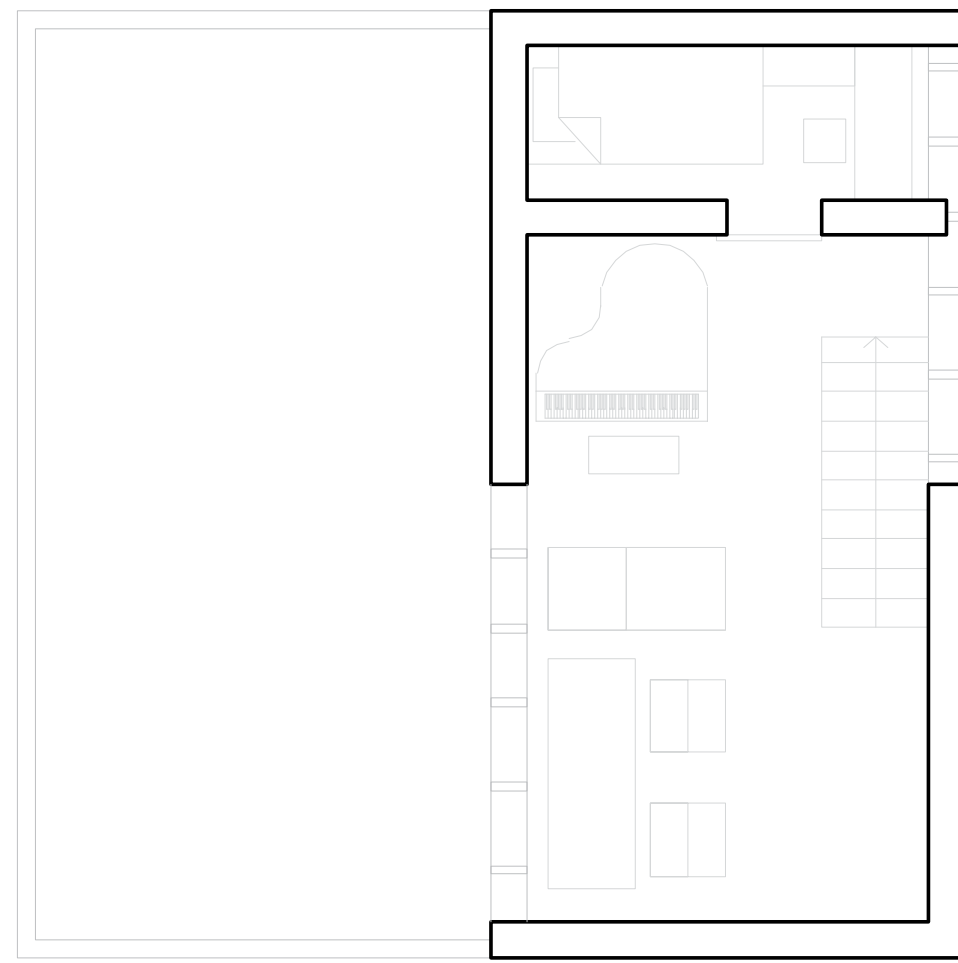
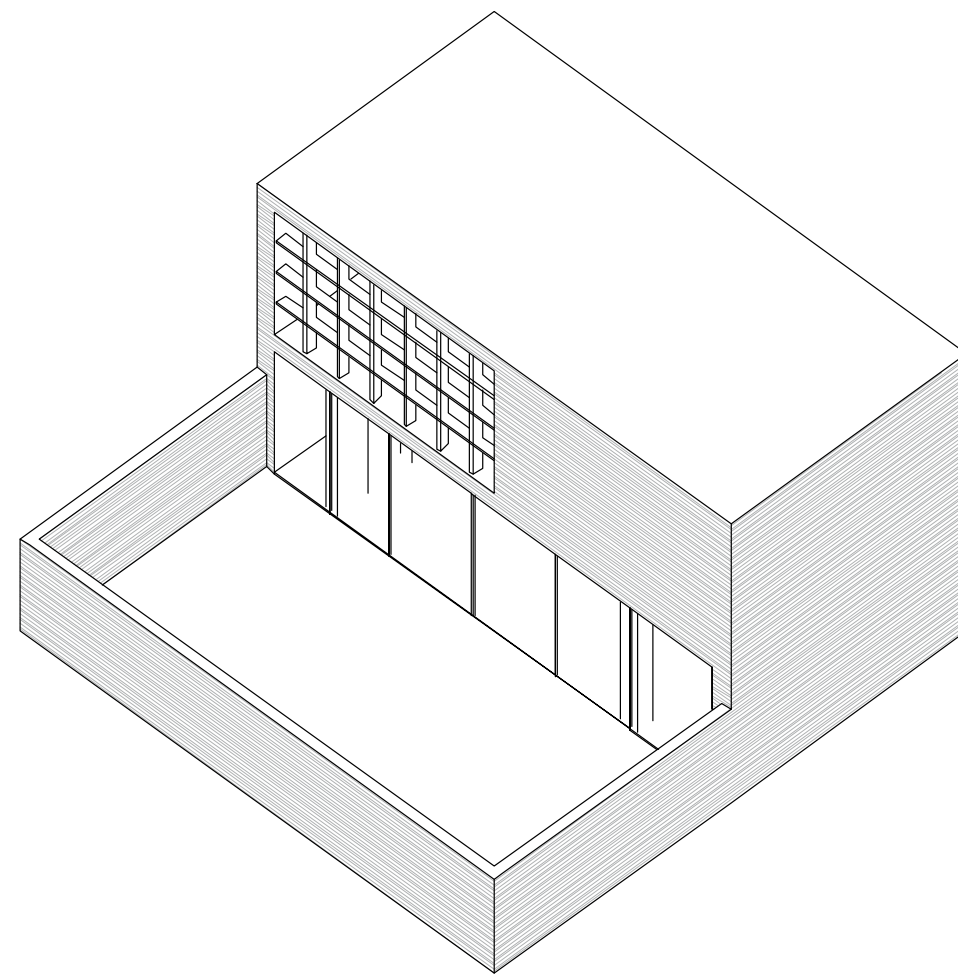








Shotgun house

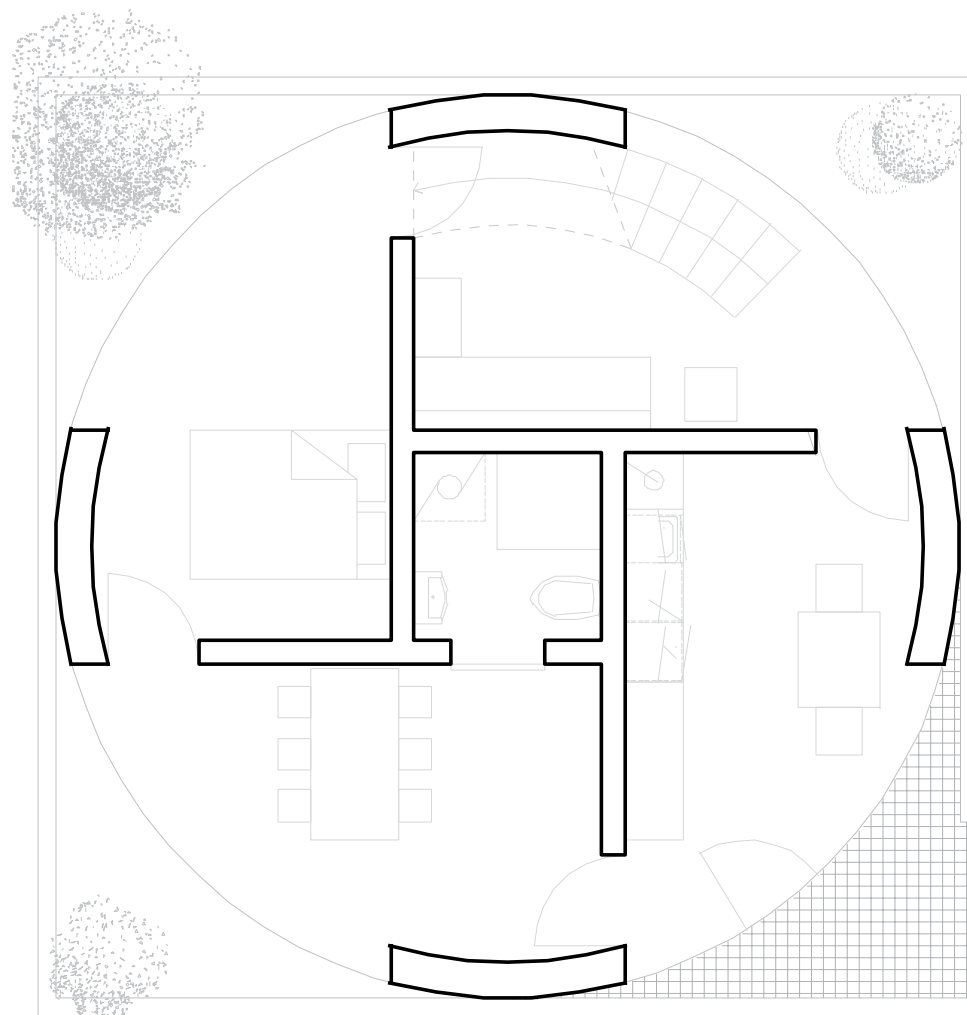
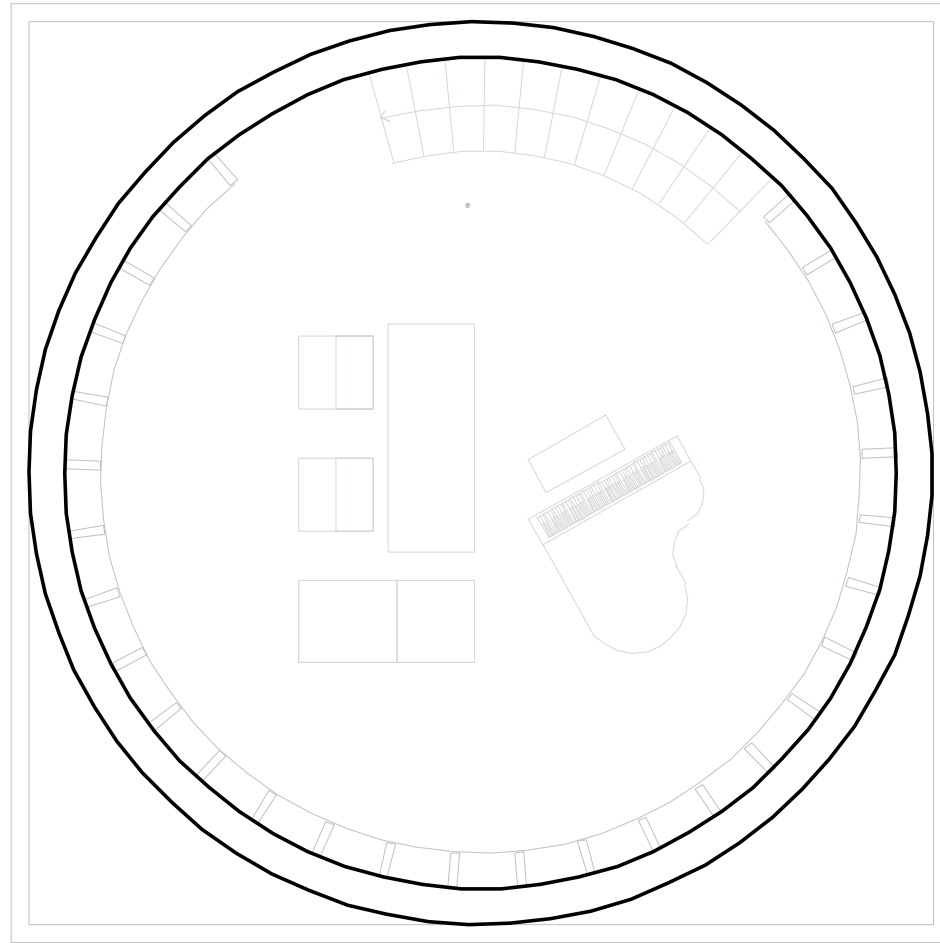
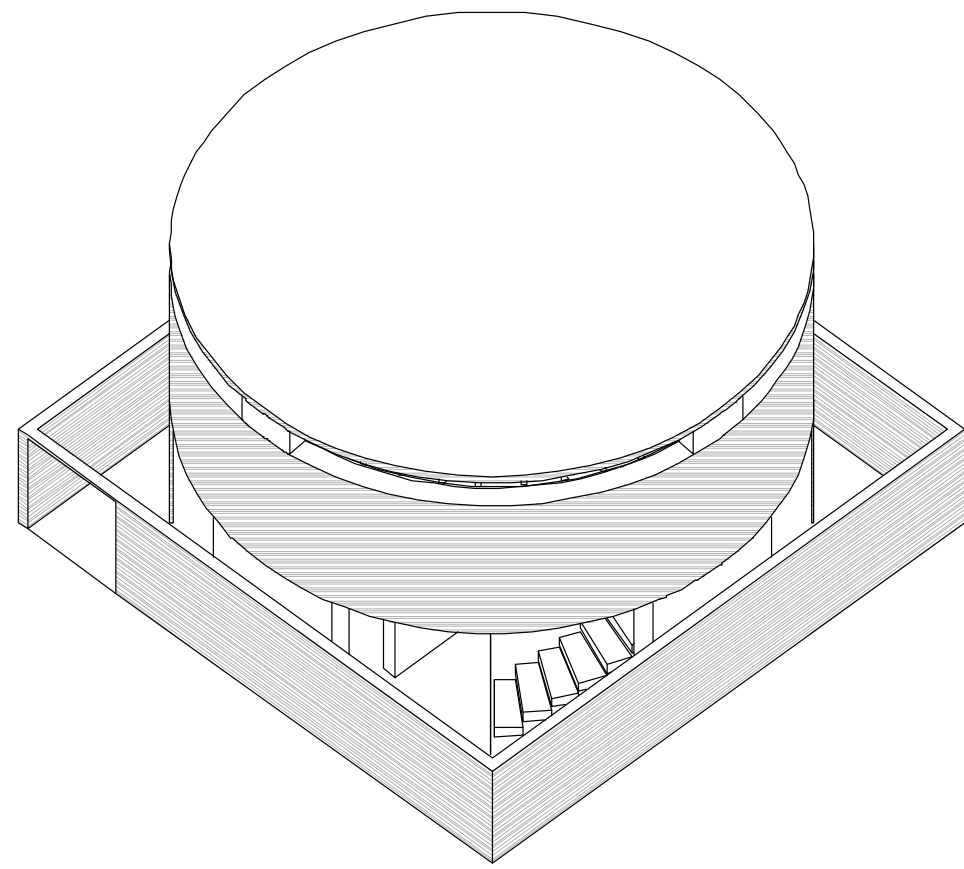








Circle house

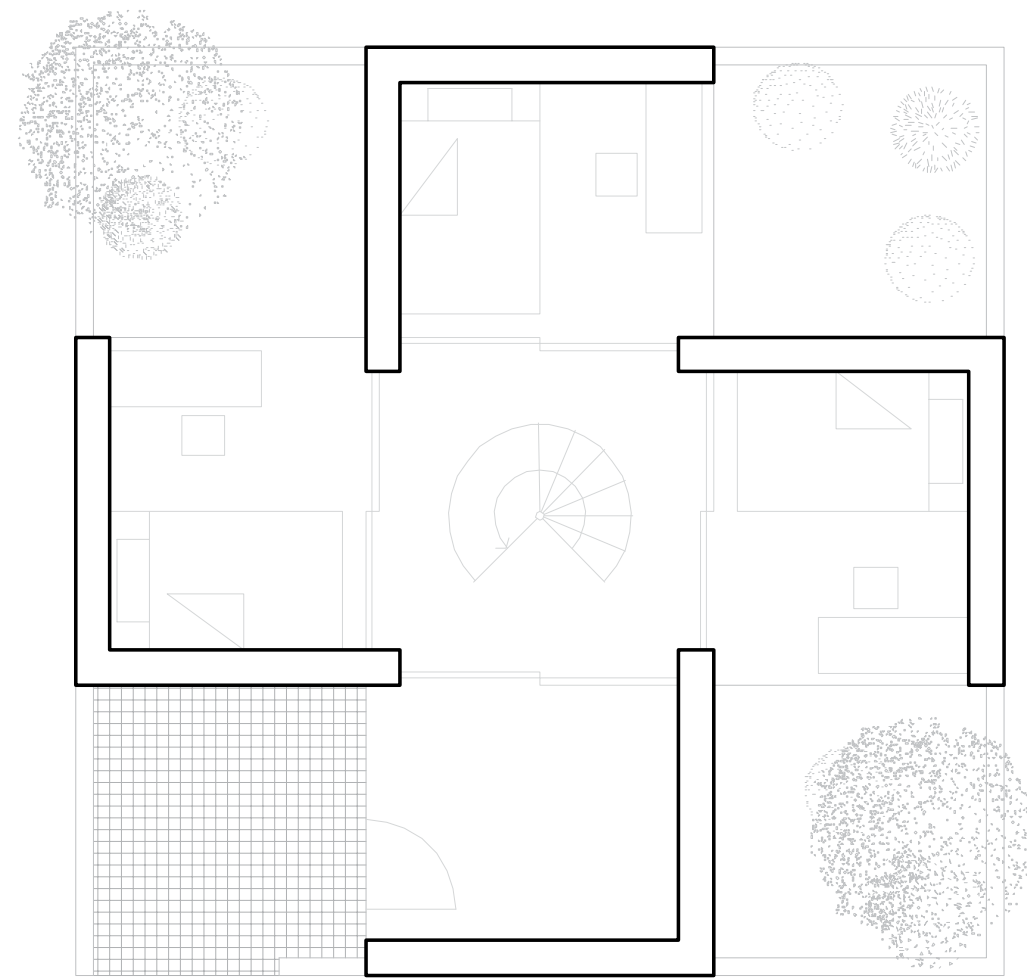
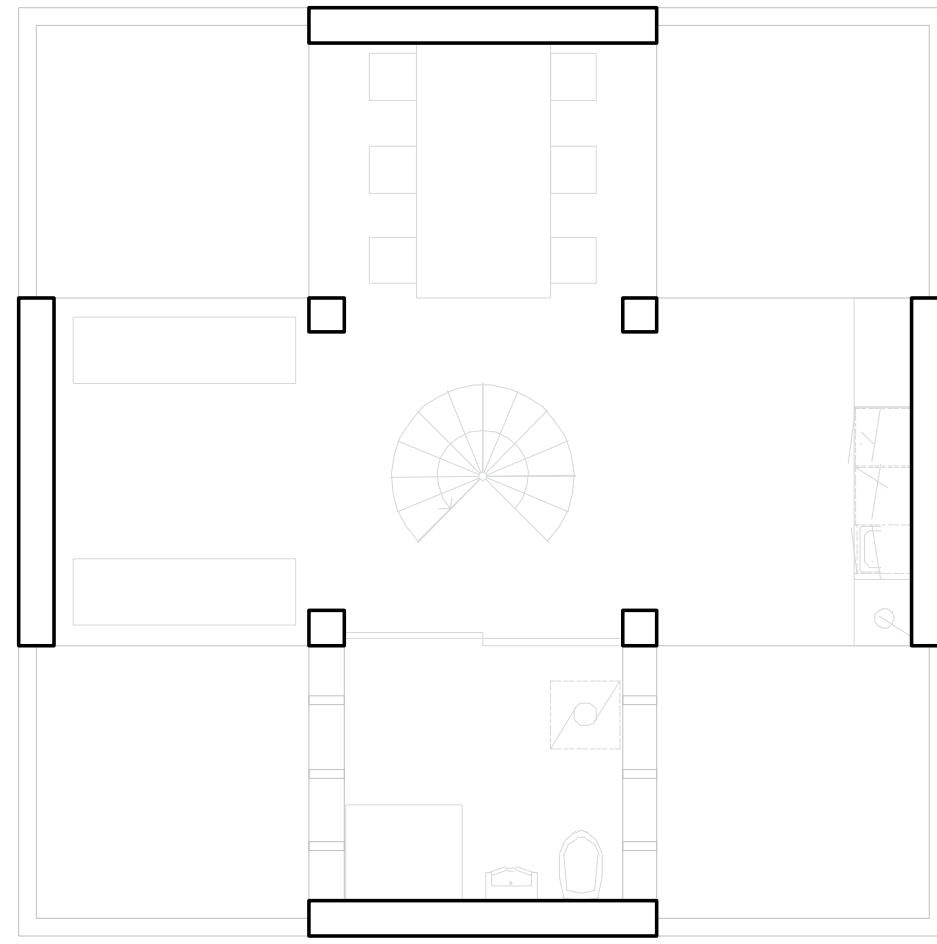
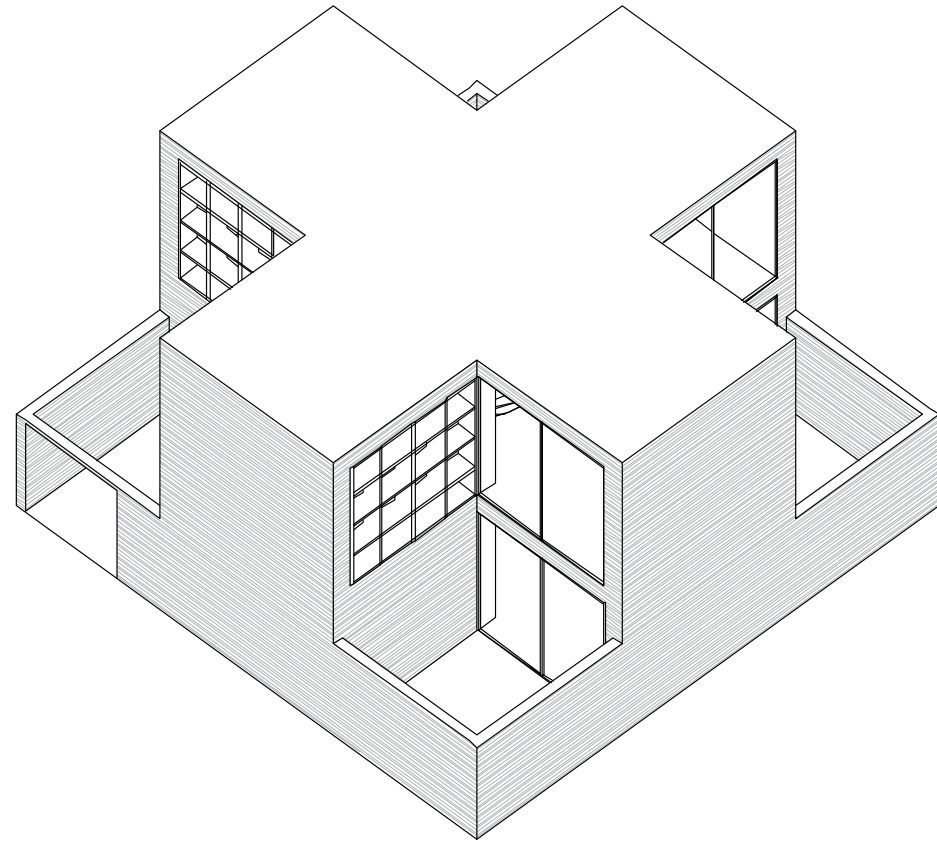








Student house









Triangle house

