



AR3UA100 Urban Architecture Graduation Studio (2024/25)  
16 May 2025

Voor Joost Oma

This logbook documents the research and design process of my graduation project. Through reveries, photo reports, literature quotes, drawings and feedback sessions with tutors and students it elicits how research and design develop and start dancing together.

Special thanks to my tutors:

Sam Stalker (architecture), Eireen Schreurs (research) and Anèt Meijer (building technology) and the rest of the Urban Architecture Graduation Crew (tutors and students)

The logbook is chronologically structured and doesn't include a table of contents. You're invited to browse through unconstrained. Below, a legend to help you find your way.



#### Legend

Literature/reference study (studying the existing)

Fieldwork (finding takeaways)

Presentation/reveries/other (what did I add? becoming an actor)

Tutoring (stirring up my thoughts)

References (reuse from somewhere else)





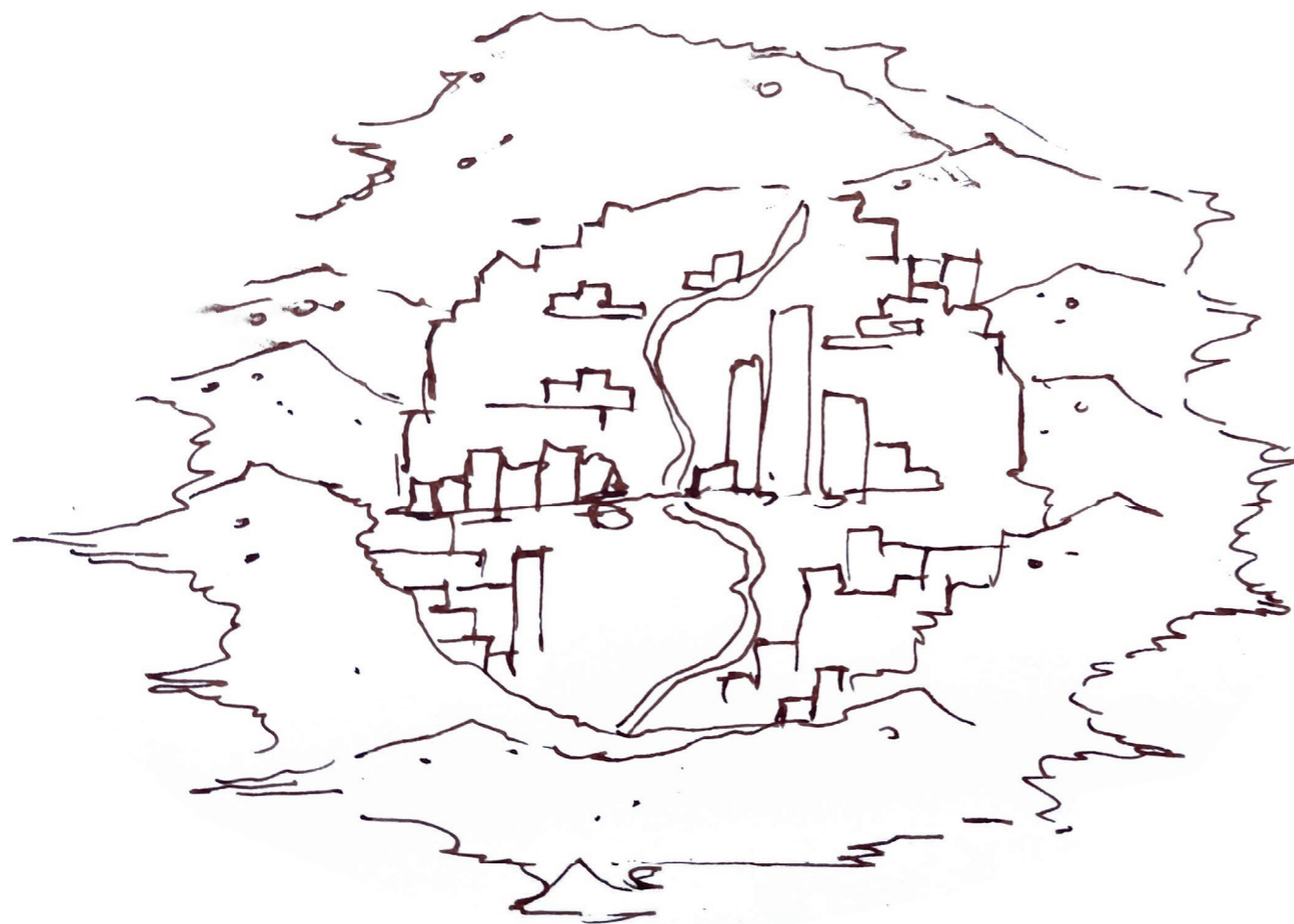
**Italo Calvino, Continuous Cities 1**

*“The city of Leonia refashions itself every day...*

*...A fortress of indestructible leftovers surrounds Leonia, dominating it on every side, like a chain of mountains...*

*...Perhaps the whole world, beyond Leonia’s boundaries, is covered by craters of rubbish, each surrounding a metropolis in constant eruption...*

*...The greater its height grows, the more the danger of a landslide looms.”*



Drawing by Lance

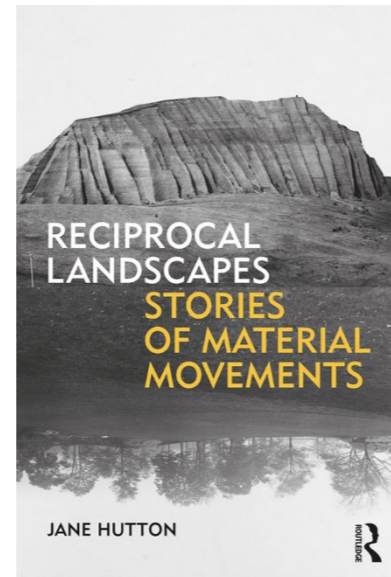
**P1 expo**



The bike highway diorama from Eilandje to Blikfabriek. Photo by Max Hart Nibbrig

Reading 'Reciprocal Landscapes'

Reciprocal Landscapes by Jane Hutton is an interesting book that discovers the relation between building materials and their place of extraction.



“Reciprocal Landscapes stems from a desire to think of construction materials not as fixed commodities or inert products, but as continuous with the landscapes they come from, and with the people that shape them.

[...]

I find myself particularly separated from the world of production. And so my intention is to try to understand materials as fragments of other landscapes; as the livelihoods and habitats of people who live near them; as connections between the most tactile aspects of a design and the global circulation of matter driven by capitalism.” (p.5)

- Jane Hutton -

**Most important until now**

- > A project, either a building site or an artwork, is not understood in isolation, but as a network of relations.
- How a particular geological or ecological condition became a desirable material commodity
- How a material came to travel a certain route to the construction site
- How the two sites (and the people and other species that occupy them) fared in this material transaction
- How design and aesthetics participate in all of this.

Robert Smithson's 'Non-site "Line of Wreckage"' project

For this project, Smithson took “geological materials from quarries, mine dumps, and other industrial landscapes (which he called sites), and installed them as sculptures alongside maps and other site documentation into gallery spaces (or non-sites).” (p.1)

Smithson: “It was as though one was at the bottom of a petrified sea and gazing on countless stratigraphic horizons that had fallen into endless directions of steepness. Yet if art is art it must have limits. How can one contain this ‘oceanic’ site?”<sup>1</sup> (p.1)

“a means for dialectical thinking. These pieces were more than fixed objects; they referred to the sites that they came from, and to their histories of geological and human transformation. The sites and non-sites were linked by material displacement from one to the other, but also through their differences. Sites were peripheral, overlooked spaces that supplied materials for urban development, while non-sites were central concentrations of cultural capital. Sites were real and physical, non-sites were abstract. Sites were the signified, non-sites the signifier. Between the two was a space to think and see.” (p.1)

--> A project, either a building site or an artwork, is not understood in isolation, but as a network of relations.

In this project the material is collected from the ‘natural source’ (Pine Barrens Plains) not from the urban landscape.

The material is curated and reconfigured by artist Robert Smithson into an art installation

The new site is an art gallery in Bayonne, New Jersey.

The material has not been altered drastically. Seemingly only the composition of the found pieces has changed.

The connection between site and non-site is shown by maps and photos.



Figure 0.1 Robert Smithson gathering slate in Bangor, Pennsylvania, 1968  
Source: © Holt-Smithson Foundation/SOCAN, Montréal/Licensed by VAGA at ARS, New York (2019). Unidentified photographer (Robert Smithson and Nancy Holt papers, 1905-1987, bulk 1952-1987. Archives of American Art, Smithsonian Institution).



Figure 0.2 Robert Smithson, *Non-site (Slate from Bangor, Pennsylvania)*, 1968  
Source: © Holt-Smithson Foundation/SOCAN, Montréal/Licensed by VAGA at ARS, New York (2019). Photograph by Walter Russell (Collection Dwan Gallery, Inc. In *Robert Smithson: Sculpture*, edited by Robert Hobbs. Ithaca: Cornell University Press, 1981, p. 125).



### Studying 'Ethics of Dust'

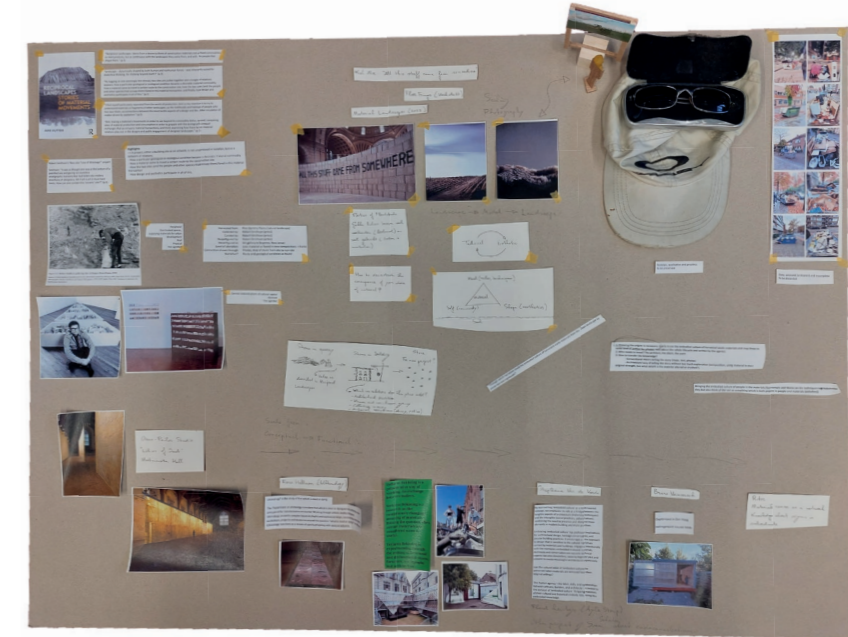
A powerful project that mixes renovation with interesting aspects of the history of buildings and the meaning of the patina.

“I’m interested in objects that have cultural significance over many generations. They are really treasures of humanity.”

“We might consider pollution as our world heritage”

“What you see is not my work, as much as the work of time”

– Jorge Otero-Pailos –



### Research tutoring 26 November 2024

Up to this point, an assemblage of different forces and references have played a role in my research. I have encountered many approaches, but didn't go very deep yet and didn't do a lot of fieldwork either. What I'm showing is a collection of references, with Reciprocal Landscapes as a starting point. This might be about a 'natural landscape', but as an approach is very close to my research subject. Robert Smithson's 'Non sites': a sample project. Defined by the Reciprocal Landscapes lense. The project Ethics of Dust is actually quite similar, but differs on some key aspects:

- Ethics of Dust works with 'waste materials'
- Ethics of Dust exhibits the material on its original site

Another reference project, Poetics of Plentitude by Werkstatt; an example of how the content of Reciprocal Landscapes can be translated to the build and research practice. Biobased instead of reused, but this could go hand in hand.

Other references and possible entrances I placed on a scale from conceptual to functional. Where should I dive into, and how?

On the top right I added a small personal note and some fieldwork.

-> Preliminary insights and additional questions.

- Ambitions:**
- **Joining Bruno!**
  - **Eco cathedrale**
  - **Flee market**

Where does it come from?

What would I like to preserve?

What would I like to express?

Making models?

Interviews? Or am I drifting to far off?

Idea: to create an exhibition space with a photo exhibition of the places where the materials of that exhibition space come from.

**Do the materials need to come from outside? Or is a reconfiguration of the existing enough?**

### Feedback Eireen and current state

Eireen critically asked me what it was I'm interested in, what I want to know. Chasing materials can be a lens to demonstrate relations outside the direct realm of architecture. Materials ≠ building though. After the research that I did so far (reference projects and dumpster diving), I stated that it matters to know the origins of where the material comes from. Eireen tells me to question this. That's a good question.

"Does it matter to know the origins of reused building materials? That should be your research question!"

~ Eireen ~

My initial research question was too broad. Does it matter where the waste materials come from? My references say yes, but I need to develop my own statement instead of building upon an echo chamber I feel comfortable in. Doing fieldwork! And not just informing my own opinion with suitable references is how I think I can interpret this.

She gave me some concrete tasks.

- To join Bruno
- To visit Opalis Rotor centres and talk to employees and clients.
- To do the flea market thing with Mari and Lance.

Eireen told me I have the tendency to drift a bit when it comes to my theme. Therefore it can be good to embrace these strict advices. She did however suggest that it could be good to conclude if and how some of the reference projects would answer to the origins question.



## Research Plan

"The collection, curation and reconfiguration of waste materials is what fascinates me..."

...Reconfiguring materials, and therefore their stories, is a powerful act."

### Focus points

The origins of leftover materials  
Reading leftover materials' patina, integrity and potential  
Reconfiguration of leftover materials

### Research question

To what extent do the origins of reused material matter?

### Main methods

Fieldwork  
Constructing stories

## Visiting the Opalis network

In order to know more about the way of working of companies which are part of the Opalis network, today I visited Groothuishandel (Klarenbeek) and Frank Pouwer (Doorwerth).

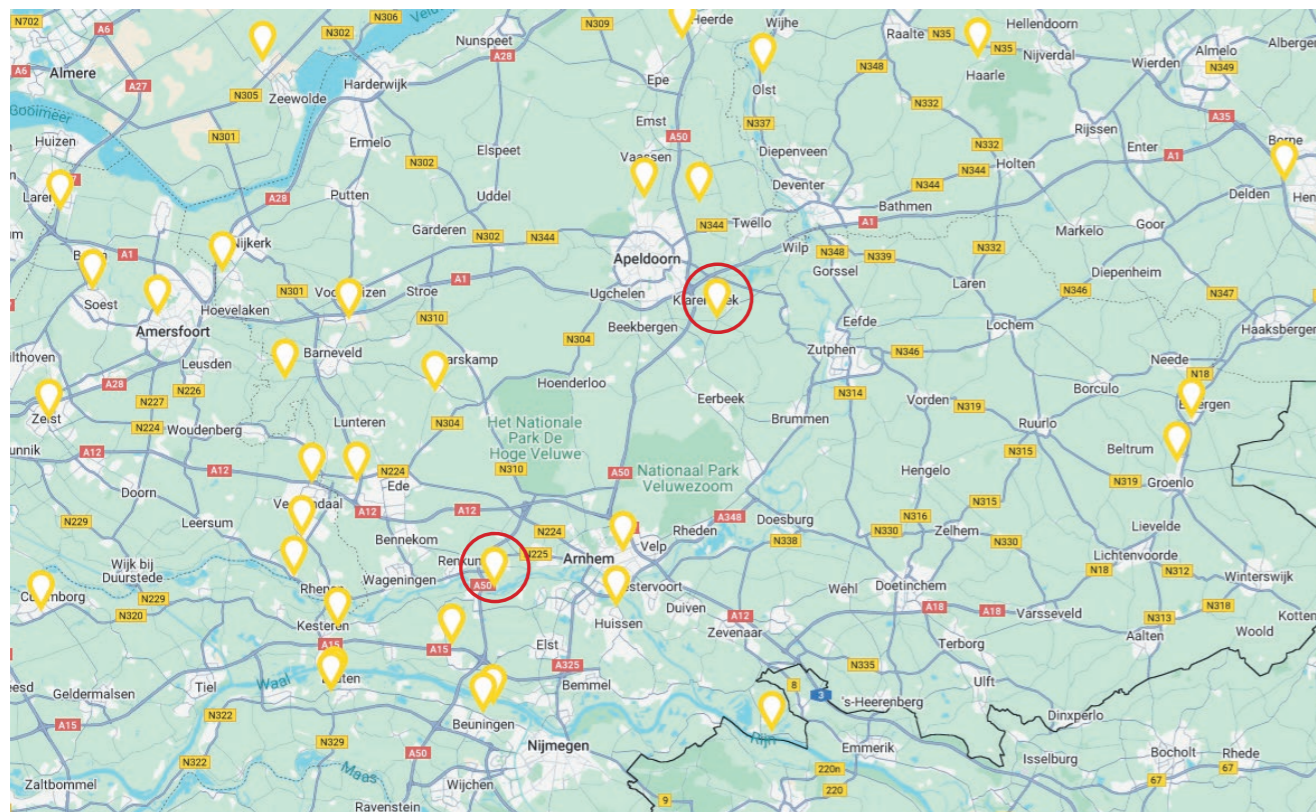
Before going I formulated some questions.

To employee:

- Since when is your company involved in trading reuse materials?
- Where do you get your materials from?
- Is it free to get your materials, do you pay or do you get paid?
- Which materials do you discard?
- How do you sort the materials that come in?
- How do you alter the materials before selling?
- What's important when storing the material?
- Who are your biggest customers?
- Where are the customers looking for?
- Is the origin of the materials important for the company?
- (How) do you communicate this with your customer?
- Do you see changes in the reuse network?
- Would you like to see changes in the reuse network?

To client:

- Where are you looking for?
- How much do you need?
- Do you mind where the material comes from?



Groothuishandel in Klarenbeek has a collection of pavement stones and brick pavers. Their centre in Tubbergen is bigger and also contains parts of dismantled sheds. I spoke to Mark Smit, branch manager of the centre in Klarenbeek. He explained me how they work, where they get their stones and how the market is changing.

The centre in Klarenbeek consists of one big square with pallets, big bags, transporting machines and cells where loads of stones are stored. The office is a small construction site hut. In the front of the terrain, there is an open air 'show room' which is accessible 24/7. With panels of different types of pavement, with their characteristics and prices displayed.

Groothuishandel gets their material from contractors and municipalities through projects they apply for. First they spot whether it's suitable and then they buy the stones. Often they clear the stones themselves. Depending on the case they either pay for the stones, get them for free or get paid to remove the stones.

The flow of authentic fired stones is decreasing. Municipalities, the biggest supplier, are more and more interested to keep old, historic pavement stones. Also the client sees the quality of this. Authentic brick pavers are generally of a better quality than concrete paving stones, more durable and less porous, but it's also really about the story they are then able to tell.

It shows an increasing awareness of the importance of history, craftsmanship and authentic quality. In some cases this awareness is profound and informed, in other cases it seems superficial. When age is used to show off without any knowledge of historical value or structural quality the situation steers towards reuse fetishism.



Sorting system; whole, half, pallets and big bags  
 Only whole stones on pallets, big bags with halves, sometimes additional.  
 Halves are used for cut work.

Other system: loose batches  
 Filling containers with a specific paver for a customer on base of weight and then giving a general percentage which won't be wholes.

Groothuishandel initially never mixes incoming loads, because of dimension changes. This pragmatic reason makes knowing the origin, or at least knowing which stones share the same origin, important. When they have different small loads of leftovers they sometimes make mixed loads, but then it's super important to communicate this with the customer.

A remarkable observation was the water installation they used. Something new for me. Just like on building sites they create a mist of water to prevent dust from blowing of the stone and spreading around the area. Since the stones where ones forming a road, this dust can be polluted by various reasons. They are therefore also bearers of unwanted particles and should be treated accordingly.

Mark really encouraged me to also have a look at the branch in Tubbergen. Here they have the parts of dismantled stalls. Sometimes they sell these as one and sometimes in parts, depending on the case.





At Frank Pouwer they sell reused wood. Here I saw an approach which was a bit more commercial. When entering the big main hall I got free capuccino and cake. During my visit I spoke to Geert, the guy in the sawing room, a young employee, a guy at the Bijzondere Tafel and Mathijs Pouwer.

Geert, an older employee that was filling in a financial excell sheet, was the first one I talked to. He told me that about 95 percent of the wood they sell is reclaimed. Most of it are planks coming from old train wagons in France and firm mooring posts, but they also sell structural beams coming from dismantled chateaus. I asked whether they keep track of where exactly the materials come from, but he told me that's too big of a hassle. It would mean a lot of extra work, while the consumer doesn't really care. As long as it's quality hard wood with a worn aesthetic, they're happy.

*"We only keep track of where the wood comes from in very special occassions."*  
~ Geert ~

*"You could give each piece of wood its own barcode, but then we have a lot of work."* - Geert

Geert told me they are not dismantlers. They don't buy the chateau, but they buy the wood that the demolition contractors get from it. It's mainly important to know how old it is more or less and that they know. More than the contractor, the consumer selects which reused wood he wants.

*"We have big projects in Spain, near Bilbao, and also England, Hollywood, Ibiza, Curacao. Most customers come from the Netherlands, Germany and Belgium."* - Geert

After talking with Geert I met a couple in their sixties, looking for a reused plank to hang as a floating cabinet in their atelier. They worked with professional machines and a lot of precision and made all kinds of things out of reused wood for their home.



*"We don't really care where it comes from, as long as it looks rough."*  
~ Customer 1 ~

*"I'm now looking for the perfect plank to hang in my creative space."* - Customer 2

They were very carefully looking for the perfect plank; worn out, with character, in the right colour and having the needed dimensions.

*"It's just one plank we need for a special place in our house. It will probably cost a few hundred euros, but for us that's perfectly fine."* - Customer 2

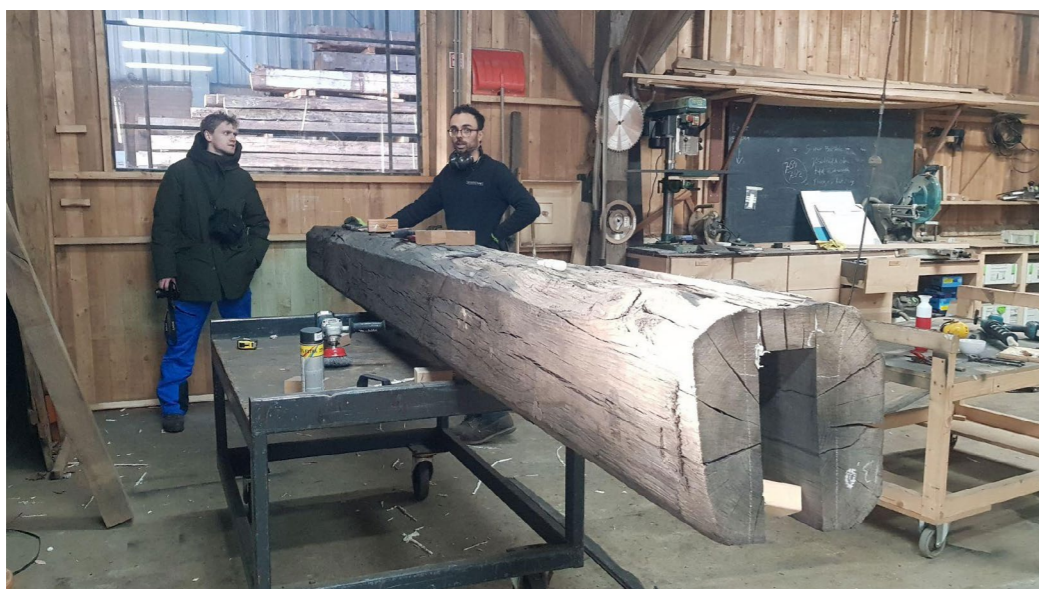
One plank was clearly their favourite. They spotted it during a previous visit, but as it was slightly short didn't buy it.

*"I wish it would've grown in the meantime!"* - Customer 2.

Both the collecting, storing, processing and selling happens on the terrain in Doorwerth. I spoke to various people working at Frank Pouwer and at a certain point entered a big hall with a strong draft. Here big beams were drying. Sometimes for over 5 years, Geert told me before.

In the hall was a smaller hut. Inside an employee of Bijzondere Tafel, a small firm that works on specific processing projects, located in the big halls of Frank Pouwer, was workig on a wooden cove. The cove would be wrapped around a steel beam in a villa in order to give the interior an authentic look. The employee had sawn the sides of a structurally sound wooden mooring post and was glueing these together. In order to hide the seams, he was now adding splinters of the wood where the pieces came together. Showcasing the patina, it reminded me of Otero-Pailos' Ethics of Dust. Although this had nothing to do with cleaning the mooring post.





To conclude my visit at Frank Pouwer I spoke to Mathijs Pouwer, probably Frank's son and marketing strategist of the company. He told me a lot about the way the company worked, how the wood comes in and what the selection process looks like. The exact origins of the materials they don't keep track of. This would be a lot of work and is not important for most customers. It's old, qualitative and looks authentic, that's the most important.

At Frank Pouwer they don't get nervous of the wood worm holes, it really depends per situation whether they have to treat the wood or not.

For the curating process of selecting and sorting out the wood, knowledge is very important. Employees really have to be educated before they do this. Mathijs stresses that this specialism is essential, also when buying the reused wood.

In regards to the Opalis network he didn't seem to know too much.

Mathijs was critical about some of the restrictions when it comes to using reused wood for building projects. The prices of processing, like labor and storage, are high and therefore it's not yet a very inviting option for contractors. The government should subsidize more, so reused wood becomes a more inviting alternative.

For the future Mathijs is quite optimistic. Reuse gets more and more popular. They don't necessarily have the ambition to grow, but to educate new young employees and, moreover, gather more and more beautiful wood.



December 2024



Two rows of roof tiles, overgrown by mosses and plants. Their decorative function gets extra quality by the interplay with nature.

A layered perspective. The rest materials and surrounding nature take on similar colour tones. By its displacement an ordinary concrete street post becomes a decorative piece, central in the composition of this photograph.



### Visiting the Eco cathedrale

8 December 2024

For the first meeting with our graduation studio we had made gifts out of waste. Chiara brought a brick that was gifted to her by a woman at the eco cathedrale. The task is to bring it back to Mildam and give it a new place in the gradually growing structure of waste materials, initiated by Louis Le Roy. On Sunday the 8th of December I set out to complete this task.



The brick on its seat back to familiar places.



Louis le Roy wetland. Next to the old atelier water is part of the composition, partly flooding the materials and offering a beautiful reflection.

A roof tile taking over a new function as rain gutter. The playful reconfiguration results in unexpected assemblages.



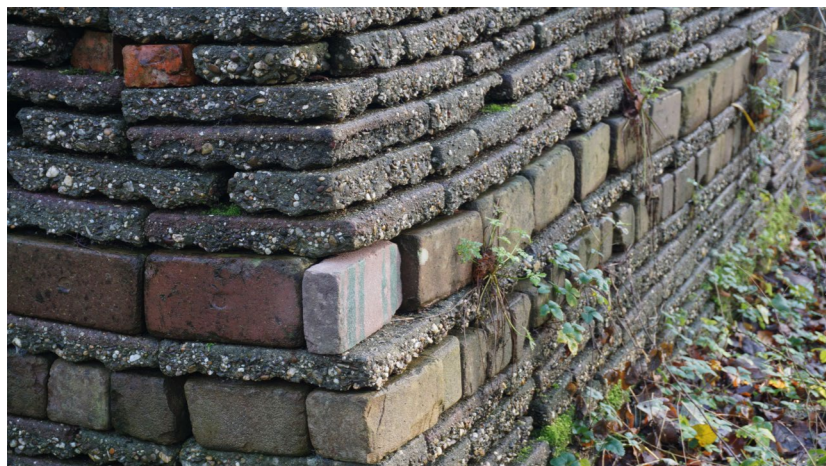
Levels, connections and form studies. The ordinary objects are mostly small particles and therefore easy to stack and reconfigure. Moreover, the assemblage is an inviting playground to discover.



December 2024



Trying out different new locations for the brick. The challenge is to avoid filling up an 'unfinished' porous structure, but adding and offer new leads.



Very present, but part of its context the brick locates itself on a corner of a big structure, largely intertwined with the landscape.



December 2024



Louis le Roy together with his wife, Inge. Two carefully stacked brick towers form the background of this cute scene.

## Making a masterplan

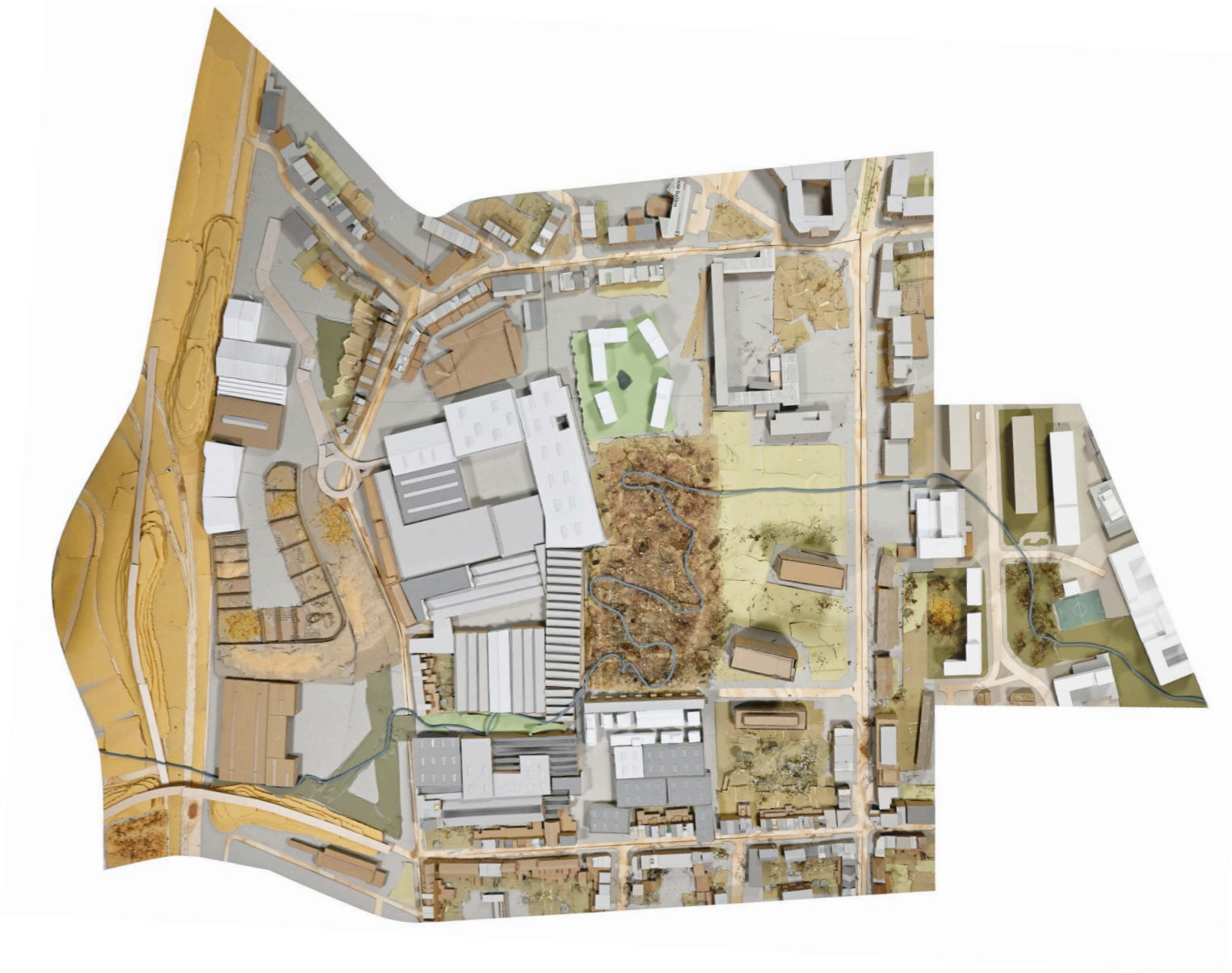
### **Lance**

*The site as a successive ecosystem with habitats and species*



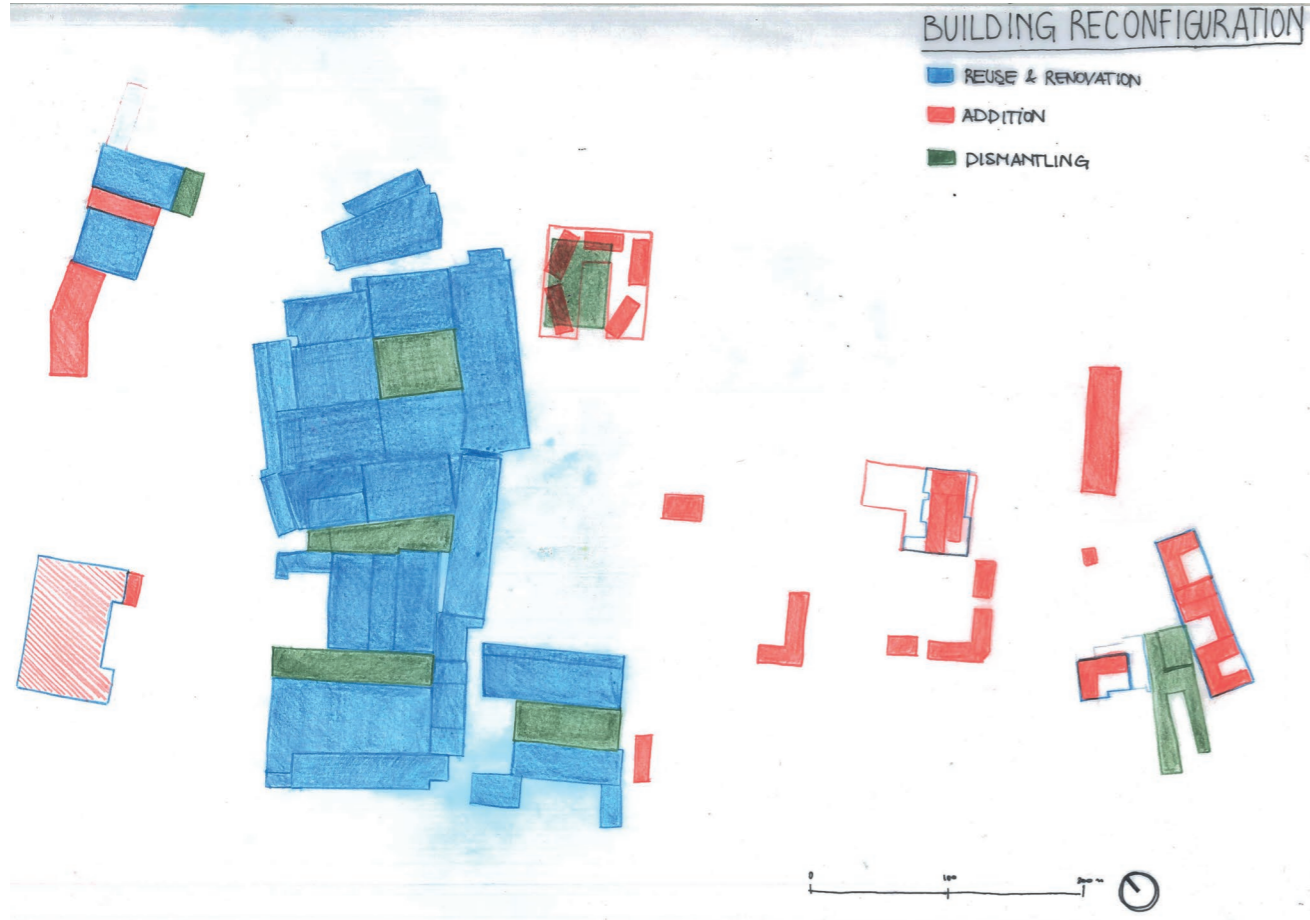
### **Marianna**

*Appropriation of the contours between private and public by domestic objects*



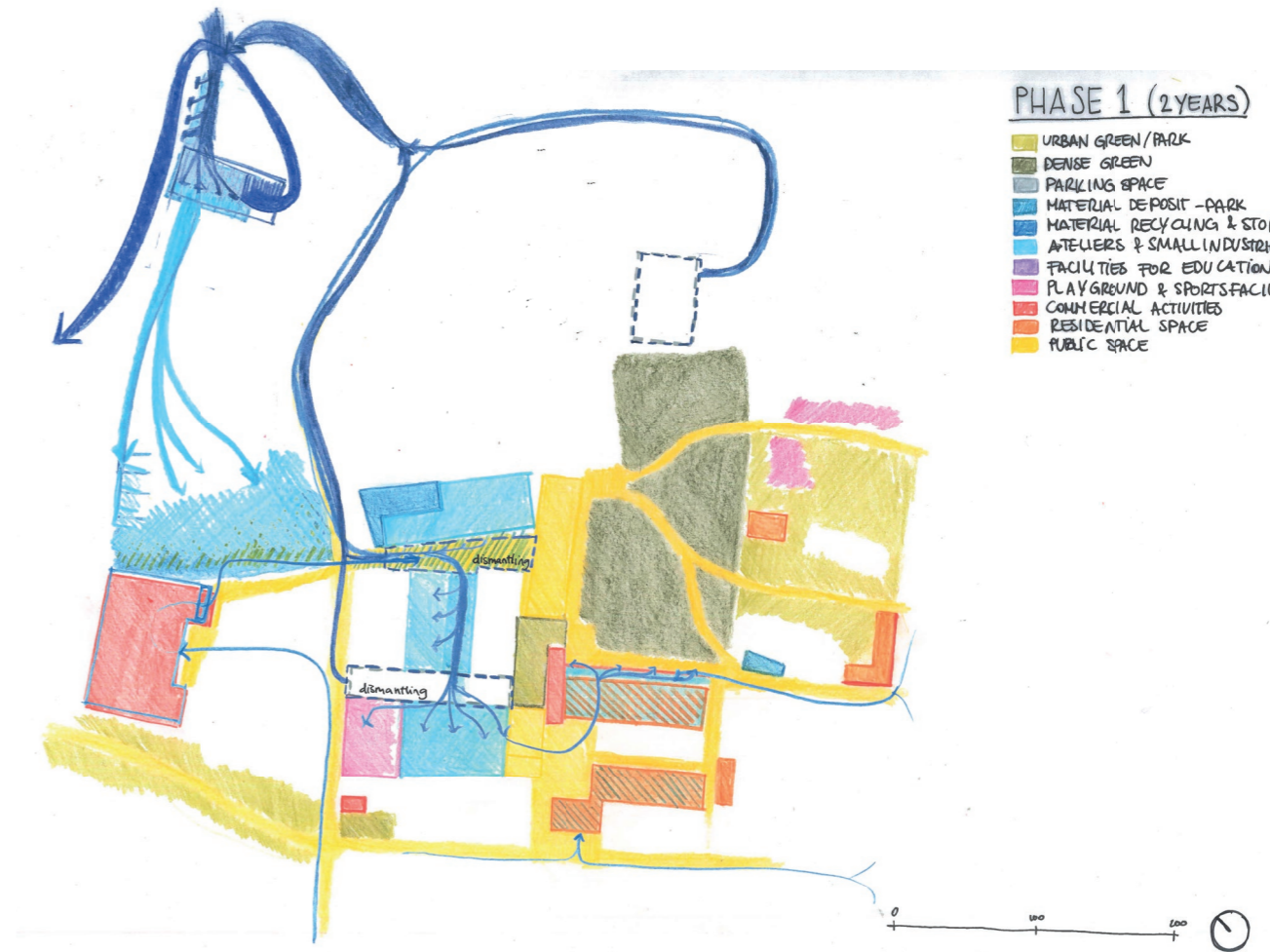
### BUILDING RECONFIGURATION

- REUSE & RENOVATION
- ADDITION
- DISMANTLING



### PHASE 1 (2 YEARS)

- URBAN GREEN / PARK
- DENSE GREEN
- PARKING SPACE
- MATERIAL DEPOSIT - PARK
- MATERIAL RECYCLING & STORAGE
- ATELIERS & SMALL INDUSTRIES
- FACILITIES FOR EDUCATION
- PLAYGROUND & SPORTS FACILITIES
- COMMERCIAL ACTIVITIES
- RESIDENTIAL SPACE
- PUBLIC SPACE



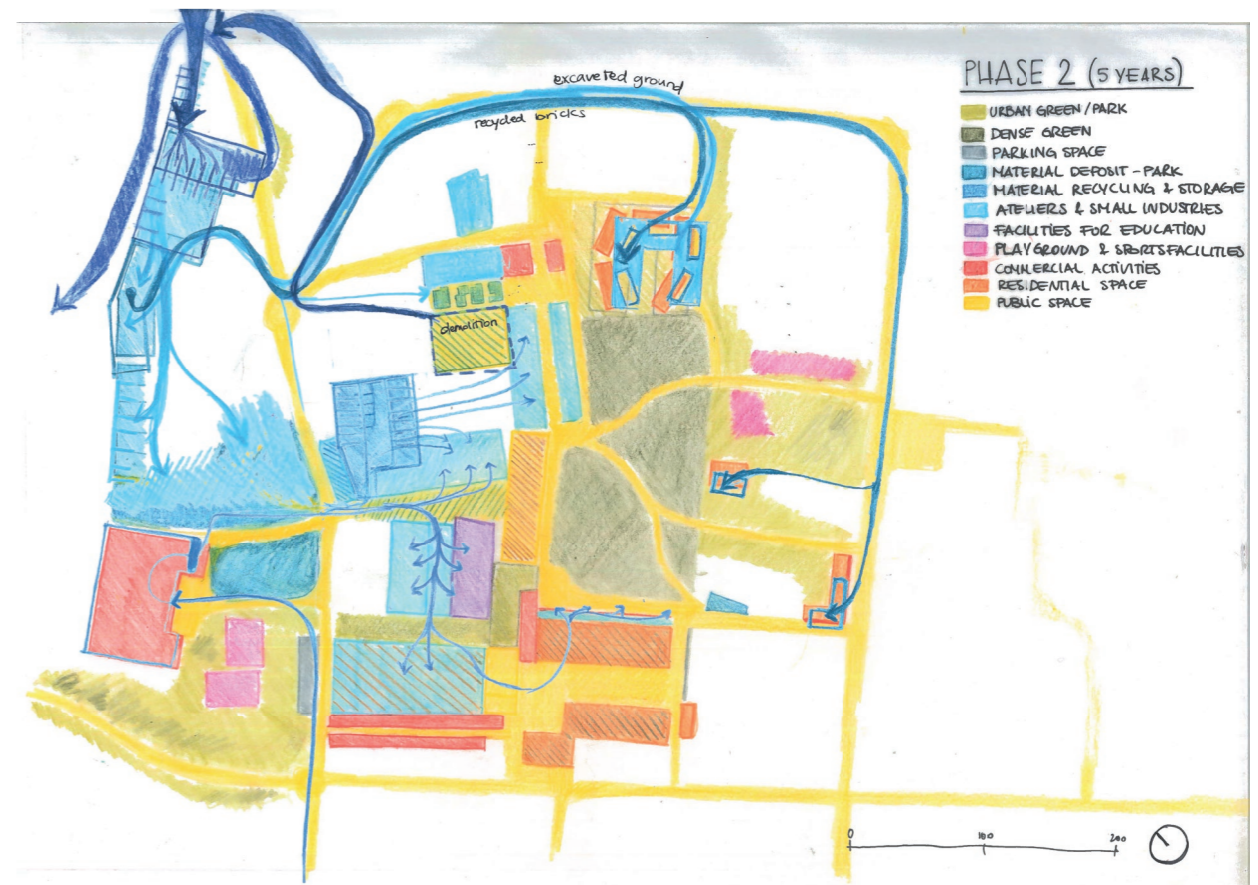
### MASTERPLAN'S POROSITY

- PUBLIC
- PUBLIC WITH CLOSING TIME
- COLLECTIVE
- PRIVATE



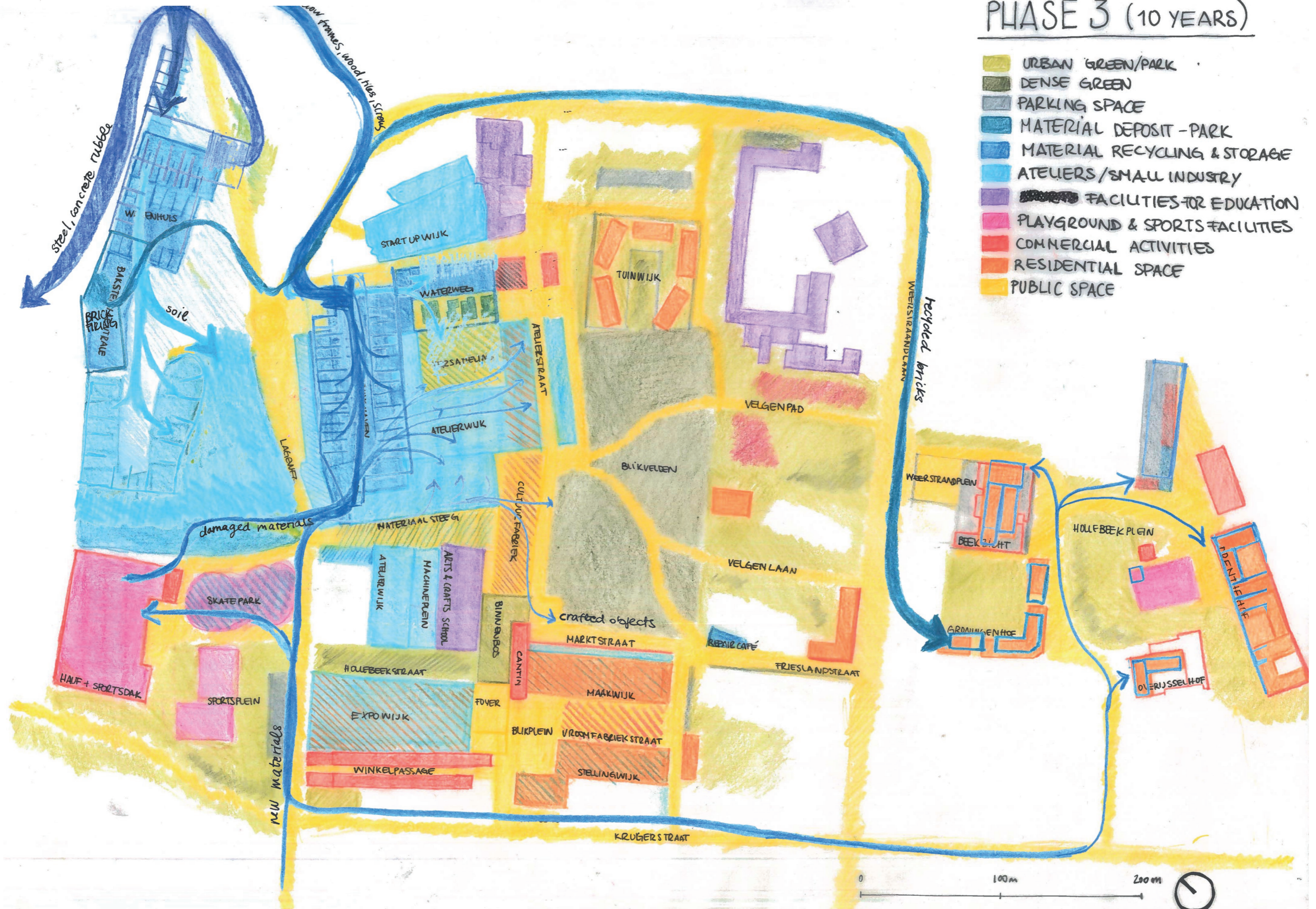
### PHASE 2 (5 YEARS)

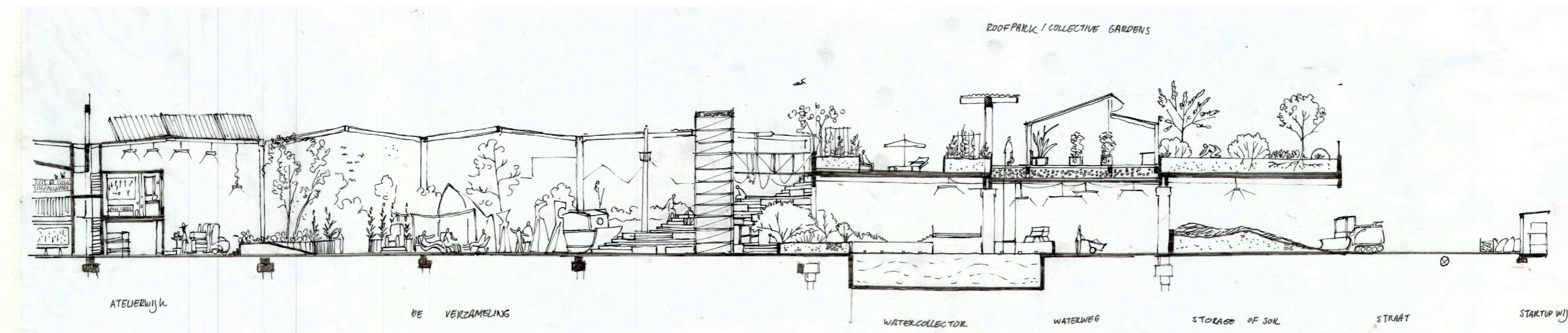
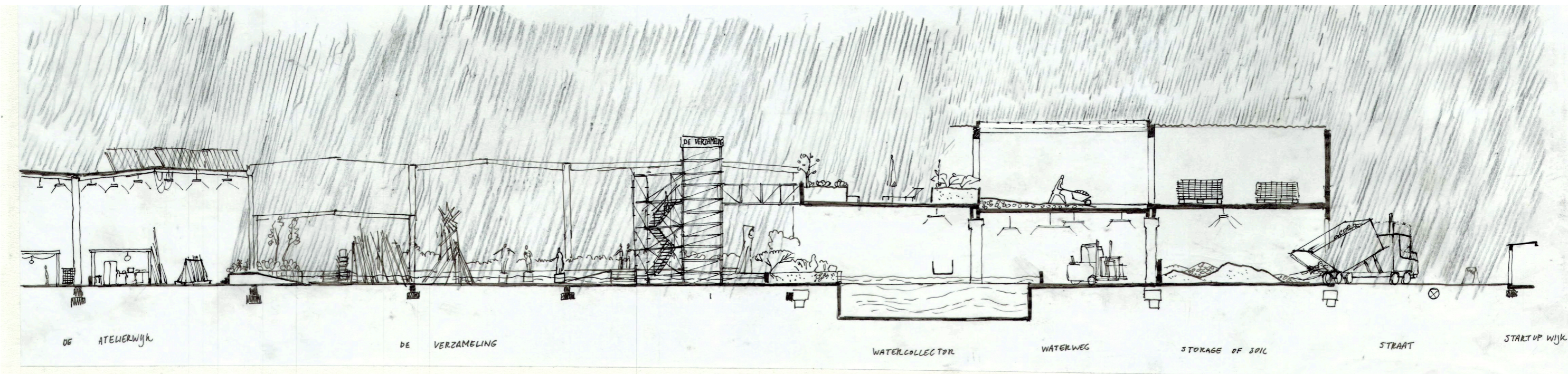
- URBAN GREEN / PARK
- DENSE GREEN
- PARKING SPACE
- MATERIAL DEPOSIT - PARK
- MATERIAL RECYCLING & STORAGE
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- FACILITIES FOR EDUCATION
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- COMMERCIAL ACTIVITIES
- RESIDENTIAL SPACE
- PUBLIC SPACE

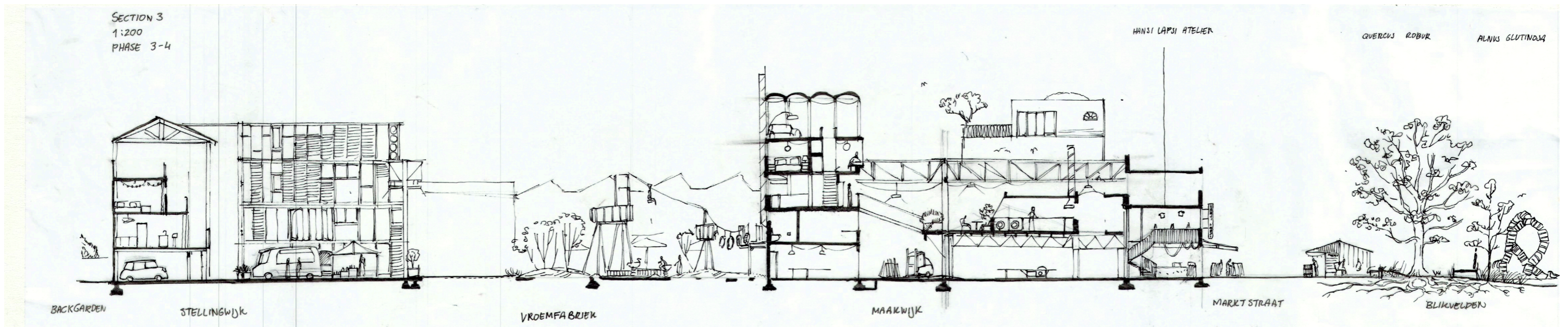
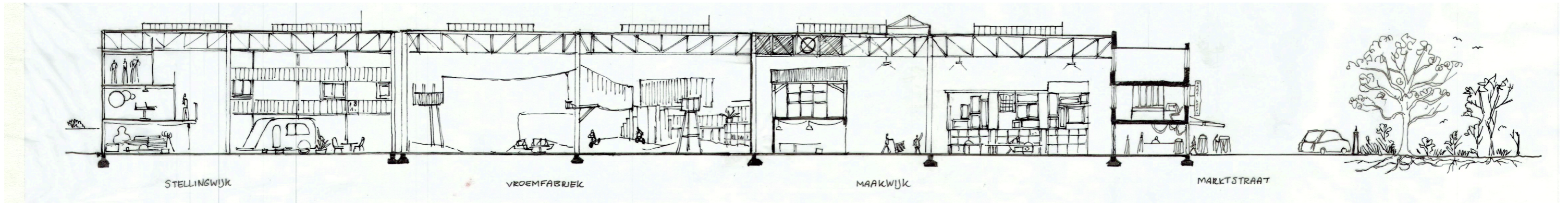


# PHASE 3 (10 YEARS)

- URBAN GREEN/PARK
- DENSE GREEN
- PARKING SPACE
- MATERIAL DEPOSIT - PARK
- MATERIAL RECYCLING & STORAGE
- ATELIERS/SMALL INDUSTRY
- ~~SPORTS~~ FACILITIES FOR EDUCATION
- PLAYGROUND & SPORTS FACILITIES
- COMMERCIAL ACTIVITIES
- RESIDENTIAL SPACE
- PUBLIC SPACE



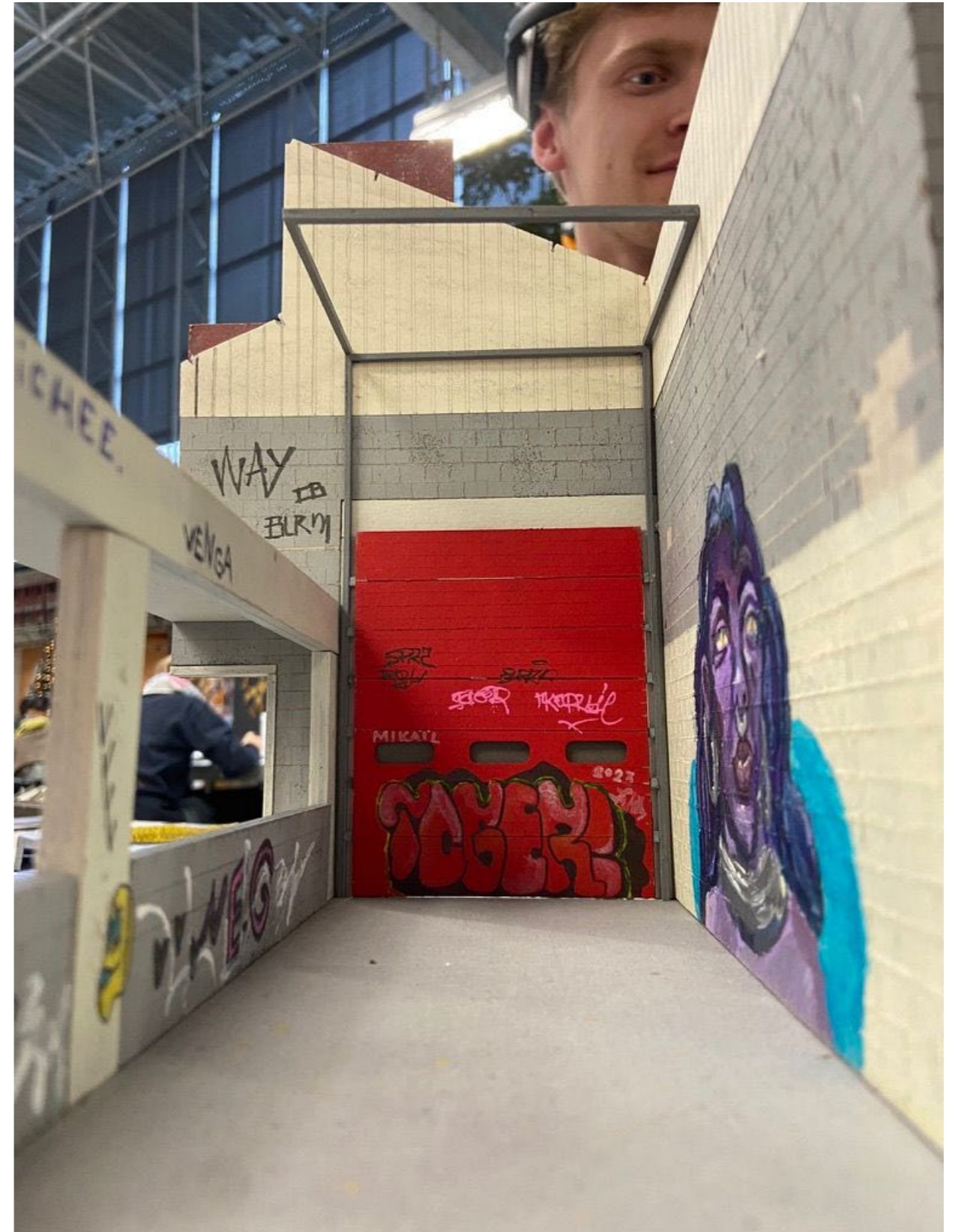






Scouting a fragment

An abandoned hall in the former rim factory.

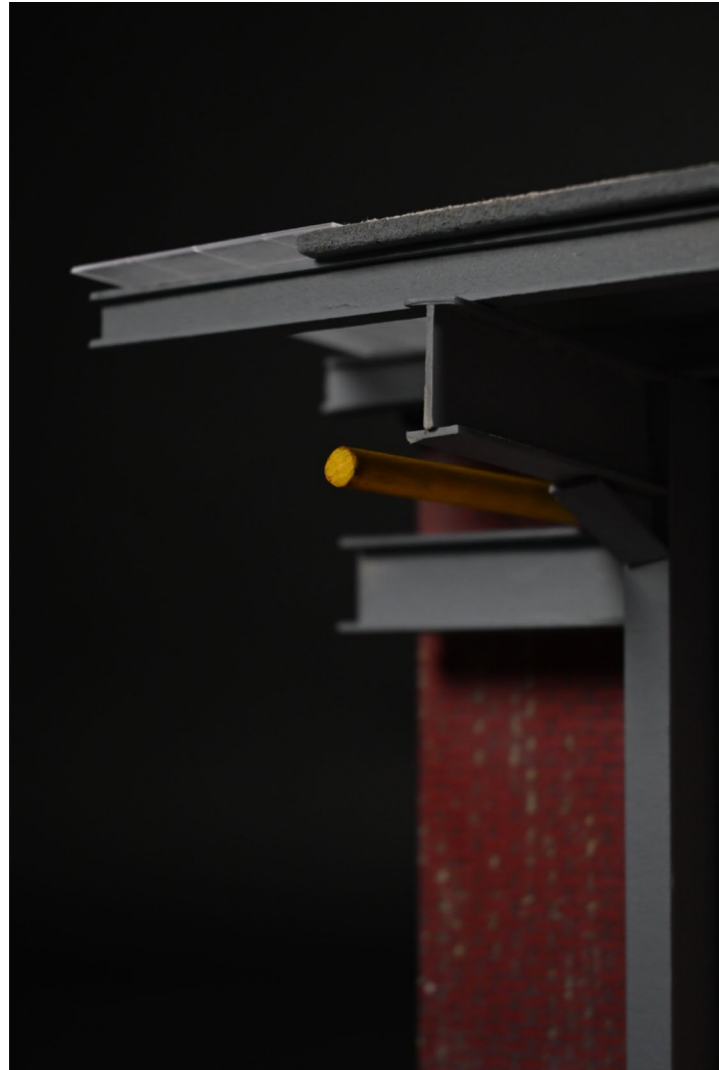


Making a fragment

A 1:33 fragment of an abandoned hall in the former rim factory.









### Research tutoring 17 December 2024

New research question after last feedback:

To what extent do the origins of reused materials matter? (+ an addition to specify?)

I did fieldwork to learn more about this question and its possible answers. During the fieldwork I also improved my knowledge about reuse in a broader sense, about practices like collecting, storing, processing and reselling. I went to:

Opalis network (Groothuishandel and Frank Pouwer) and the Eco cathedrale of Louis Le Roy.

*Groothuishandel in Klarenbeek (Mark Smit, branch manager)*

Mark Smit told me that the importance of the material's origins is increasing. Municipalities, the biggest source of pavers, see more value in authentic, historical brick pavers now. The flow of these pavers to Groothuishandel is therefore decreasing, as municipalities decide to reuse more of the brick pavers themselves. It's a shame for Groothuishandel, since the customer has an increasing interest in authentic brick pavers as well. From the words of Mark Smit it seems the interest of municipalities is coming from a historical notion and, in general, the interest of customers is more of a 'trend'. This trend however also stems from a growing awareness so probably is more durable than previous trends like anthracite pavement.

Another, more functional, reason why the origin of material matters has to do with storage and reselling. Groothuishandel never mixes incoming loads of pavers as the unity of dimensions and other characteristics is important for the customer. Not the exact origin, but knowledge of which stones share the same origin is therefore necessary.

Finally about the mist water system. Just like on building sites, with dry weather a mist of water prevents dust from blowing of the stone and spreading around the area. Since the stones were ones forming a road, this dust can be polluted by various reasons. They are therefore also bearers of unwanted particles and should be treated accordingly. As far as I know Groothuishandel doesn't differentiate between more or less polluted pavers.

*Frank Pouwer in Doorwerth (Mathijs Pouwer, marketing strategist)*

The unique selling point of Frank Pouwer Historische Bouwmaterialen is their big stock of high quality reused wood. The biggest part of their collection is hardwood from floor planks of old train wagons in France and mooring posts. On their terrain, an old stone factory, they showcase a train wagon. The exact origins of the individual pieces of wood is not important to employees of Frank Pouwer. They stress the amount of work it would cost when asked whether they keep track of where their materials exactly comes from. They link the question to sustainable certificates, which they don't really care about. The customer sees it's old and qualitative and that's enough.

Although customers sometimes do ask where exactly the material comes from, they indeed seem to care mostly about the authentic, worn out patina and not about the exact origins of their planks. The importance of the patina is strikingly exemplified when I entered the atelier of Bijzondere Tafel. Here, an employee was working on a wooden cove. The cove would be wrapped around a steel beam in a villa in order to give the interior an authentic look. The employee had sawn the sides of a structurally sound wooden beam and had glued these together. With the splinters of the beam he was now working away the glue seams. The patina here becomes more important than the actual material, which loses a lot of its bearing quality.

*Eco cathedrale in Mildam and exhibition on Louis le Roy in Museum Heerenveen*

The eco cathedrale in Mildam is initiated by Louis le Roy. After planting 1,4 acres of land randomly, he made a deal with the municipality. Road pavers would dump rest materials on the terrain with which le Roy could start making compositions. 'No nonsense, here we work precisely to the millimeter', he would say. The precise, but intuitive and unplanned, dry stacking of stones led to an intricate and playful landscape. Plants and stones overgrow each other. Ordinary tiles or street posts become valuable ornaments by the precise reconfiguration and the natural patina overgrowing them. The origins of the materials doesn't matter. It's really just rest materials. What matters is the sorting, processing and reconfiguring. By looking creatively at what's present le Roy reveals undiscovered qualities of standardised materials and actually adds a lot to their historical value.

"Why don't you start building now? Can you blow up the model?"

~ Leeke ~

## Feedback from Chiara and Leeke

*Leeke:* you have a good understanding now it seems of reuse networks, materials and their origins. Why don't you start building now? I said I might need restrictions or a goal for that. What would you like to build? A house, a landscape, a storage hall? I wasn't sure yet. Leeke said it could be good to also work with these scales like Lance. He notes a tension to work in a regional way, but it's actually a super urban subject and therefore should, next to scales like the individual patina and the neighbourhood, include the city. Maybe it could be a city within a city, 'an interior city'. What is Raf good at? He asked Mari and Lance. Mari: building precise models and careful observation through photos for example. Lance: I think including time could really be a valuable addition to your project. **Motion! Make a film, stop motion?**

“Start working with the materials you encountered.”

~ Chiara ~

*Chiara:* maybe it's too basic what I will say, but I think I have a picture of how you could work. Taking one of the materials you had a look at (for example brick or wooden plank) and showing these different moments of translation, from the collecting, to storing, to processing. Eventually ending up at the stage where you reuse and it becomes your design project. I like your observation of the importance of le Roy's translations. It's very powerful. Also, from the model, graffiti and drawings it seems you have a good feeling for the patina. That's something to develop. To work with the material itself.

*Leeke:* blow up the model. With reused materials that come in. Build in it. Develop. [Personal note:] Maybe make additional fragments of spaces that demonstrate other key moments of material collection.

*Chiara:* told about the heavy history of the brick, once part of a prison that was demolished (by prisoners?). And then, by displacement becoming a brick again. (Materials have value, but without composition are maybe just materials?)

*Lance:* the eco cathedrale as a cemetery of materials.

*Chiara:* good observation. But (also Leeke and me agree) it should/could move and be part of the urban dynamics.

## Visiting the Opalis network part 2

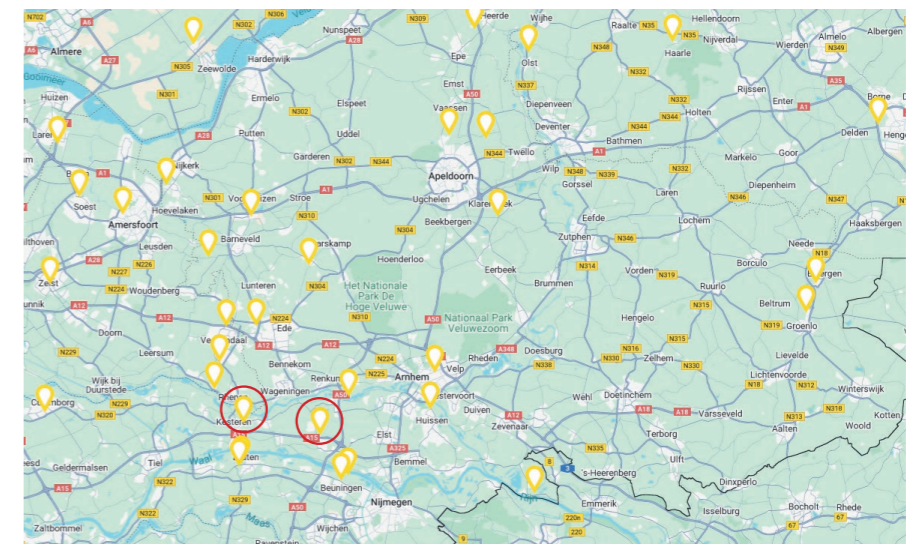
24 December 2024

Following my previous visits to Groothuishandel and Frank Pouwer, today I visited three other companies which are part of the Opalis network: Van Baal Materiaalhandel (Herveld), Sparo Tapijttegels (Herveld) and KempIQ (Kesteren). The companies trade with other materials than Groothuishandel and Frank Pouwer and use different methods to select, process and resell.

At Van Baal Materiaalhandel I spoke to some older employees, Piet and Fred among others. They told me harvesting materials was a rough profession, with scars and injuries. The company was already about 50 years old and in the last 20 years or so, the client network has grown rapidly. Nonetheless, Piet is not optimistic about the future and thinks in ten years the company won't be trading in reused materials anymore. 'The labor costs are getting too high. Although we mostly harvest materials when we get paid for it, it still costs way more than new materials. In Schiedam there's a reuse company that already bankrupted. There's too many traffic jams in the Randstad which raises the costs of transport to a non doable amount. It's the reason a lot of materials in that area get thrown away.' Van Baal Materiaalhandel doesn't map the exact origins of the materials. A customer came in to buy reused footbridge planks, but there were only new ones in stock. He looks for reused because, for him, it's cheaper, more beautiful and better for the climate. The new planks he'll use for a windowsill and he will make them a bit worn out manually before, also adding clay to make them look used.

Sparo was an unexpected bullseye. Although the carpet tiles are in principle not a very evoking reused material, they do quite interesting things with it. A striking example is their collaboration with Josse Popma and Simone Post for KaVA. The reconfiguration of the fabric, initially to soften out their patina, upcycles the esthetic and architectural value of the carpet tiles, almost linking it to natural stone flooring. I should talk to Josse Popma about reuse and the KaVA project. In comparison to Van Baal Materiaalhandel they are very organised and they also keep track of where the tiles come from in order to communicate this to their customer, who is often interested. However, special origins don't raise the price of the carpet tiles.

KempiQ uses the Kempische building method as a unique selling point and, in their collaboration with Polman Bouwbedrijf, offers a complete package of material and craftsmanship for Kempische style housing. The reused and natural aspects of their firm, like reused bricks and roof tiles and wooden beams, are visible and part of the building's hide, whereas new and more artificial materials are hidden in the facade. KempIQ is build on efficiency and making money. Reuse and 'authentic building' are central parts of their business case. The exact origins of the material isn't important, but they do pose with the fact that's it's (partly) from Belgium. Brick collections are intentionally mixed to create an optimal image.



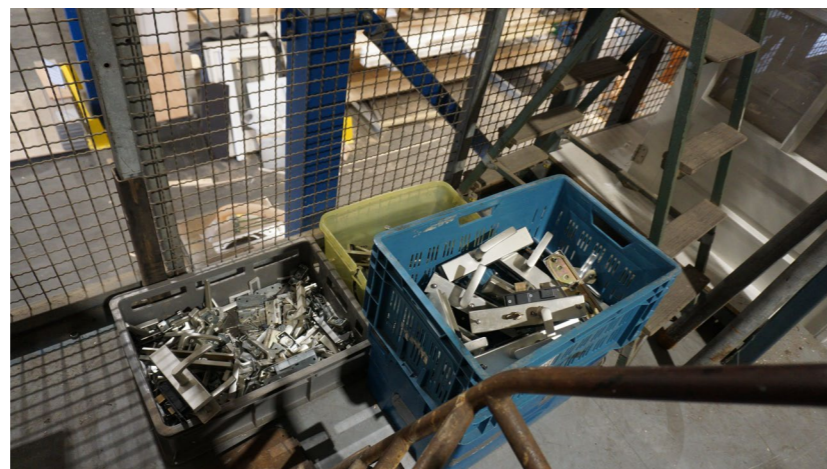
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Van Baal Materiaalhandel has a very diverse offer of reused materials. Doors, wooden beams, structural steel, chairs, lamps, window frames and so on. A big part of their stock is stored outdoors, but the most delicate pieces are stored inside of big factory halls.



Door handles are dismantled from doors and offered to the customer to make fitting matches.



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Long parts of structural steel are stored outside in the rain. At Van Baal they don't seem to use a very profound storing strategy. Pieces are laying around somewhat randomly.



High quality wooden beams quickly stored on the ground, screws and steel profiles still attached.



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This cart is used to discard waste of the waste materials in. Small parts that even for Van Baal have no substantial value.



An integral fence, presumably dismantled from a garden.

Crash barriers. Piet told me they sometimes resell these to farmers, as guiding barriers for their cattle.



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A Bert and Ernie drawing on one of the windows in the cabinat with plastic window frames. An obvious trace of human appropriation and embodied culture.

Under an electricity pylon a collection of carts and containers is stored surrounded by concrete blocks. The tools to store and restore.



While investigating the terrain I notice the intense traffic of little machines transporting the stock. A man of around 75 years old is cleaning one of the machines. 'For the machines to last, you need clean them before storing', he says 'especially like today. Just before Christmas.'

Tubes of...?



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Bigger machines sort out the waste within the waste.

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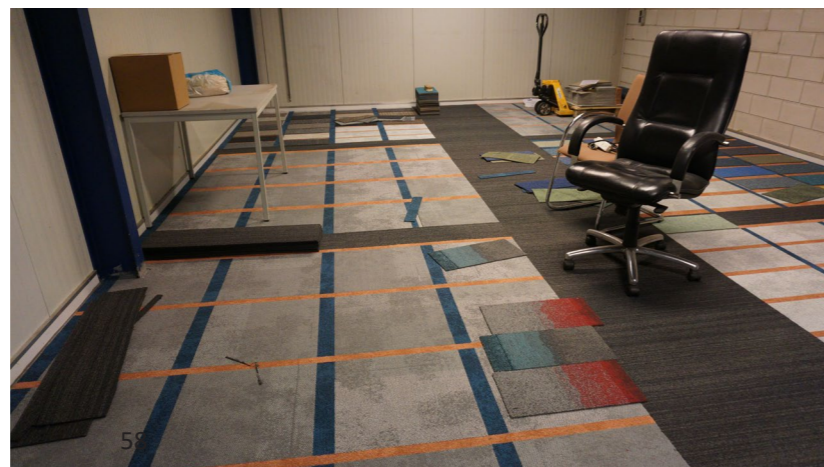
Cables.



Renze at KempIQ was too busy finishing the last things for Christmas, so I couldn't ask a lot of questions. I did however had a look at their showroom, 1:1 prototype and construction videos. I was also able to overhear a conversation between Renze and two potential clients. This brought a lot of insights about their way of working.



At Sparo they sell used and B choice carpet tiles. Currently they are working on a new technique, recutting tiles and making new patterns with them. Apart from the extra esthetic value, this process helps to shift the attention from imperfections in the reused tiles to the new patterns in which the worn surfaces fit better. Sparo worked together with Josse Popma and Simone Post for the design of Kantoor vol Afval for the Rijksvastgoedbedrijf, a prestigious design project that tried to prove that reuse, architecture and esthetics go hand in hand.





Natural stone details, typical for the 'Kempische bouwstijl'.

The showroom was carefully manicured to reflect the Kempische bouwstijl. The style is used as a unique selling point and KempIQ offers an integral package of materials and craftsmanship. In conversation with the clients, Renze explained the pros of this position. In combination with building contractor Polman Bouwbedrijf, another firm with the same owner on the same terrain, KempIQ could offer them

practically all the necessary authentic materials they need for their new house in Kempische style. 'To get the right Belgian sand for the mortar from another building contractor would cost a lot of money, but here we have plenty of it laying around.' Renze posed tactically. 'When you go for aluminium window frames instead of our wooden ones, you will see the house is not really in the authentic Kempische style anymore.'



A 1:1 facade detail showing the layers of the facade. Some interesting insights can be derived from this. All visible elements are fitting in the philosophy that the Kempische bouwstijl consists of natural and reused materials. However, practically everything that is not visible is not in line with that philosophy. It shows how KempIQ is treating reuse in the most cost efficient way possible, not using any reused material too much and covering which doesn't match the desired patina. The photo below shows reused bricks on top of new ones.

Renze explained they have a location in Tiel where all the bricks are stored. When I asked if I could make an appointment to look around there for after Christmas, he explained they preferably don't do that. An employee costs 50 euros an hour and it would mean he has to drive there to show me around, losing quite some hours and hundreds of euros for something which doesn't offer the company anything. KempIQ clearly doesn't aim to serve an educational goal, but is mainly focussed on making money.



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### Joining Bruno Vermeersch

2 Januari 2024

Tomorrow I will finally join Bruno on his reuse endeavours. I hope to learn about his reuse method; how he selects the harvested materials, how he then processes the materials, speaks to clients about the product and reconfigures the materials into a new design. In addition to that, I hope to increase my knowledge of materials and more specifically of joining reused materials together.

During my visits to companies part of the Opalis network, I saw a collection of approaches to reuse and its branding. Some companies focussed on practicalities such as the quality of pavers, whereas others mainly tried to sell a certain authentic style from Belgium. Many companies actually represent a mix of these approaches, using the quality of old materials as a unique selling point for their business. The exact origins of the materials isn't so important, the value lays in the fact that the materials are old and authentic. The value of the patina proved to be an interesting aspect. Patina sourcing in respect to patina cleaning (ethics of dust). Also with Sam I discussed the importance of the detail (the history of the detail) and how the traces on the old material tells the story about its implementation.

With Bruno I'd like to discuss my findings about the different Opalis companies and his take on the meaning of reused materials. How does his practice looks and what is the role of reconfiguration? How does he envision a future where reusing materials is common practice? In this context I can also communicate to him our ideas for the masterplan and see what he thinks about that. But first, let's just join him and see how things go.

### 3 Januari 2024

When I arrive, Bruno is fixing a flat tire in front of his house. He welcomes me in his living room. 'Still a big mess', his wife Judith says. Two of Bruno's children are playing with Kapla blocks. 'The youngest is really a builder', Bruno says proudly. The house is cosy and definitely liveable, but in the corners there are little piles of materials.

The piles grow when we enter the back garden. 'I'm slowly taking over the neighbourhood', Bruno jokes, 'after the house, I bought a garage at the other side of the street, an atelier closeby, some land to extend the back garden and now another garage. I will try to clean up the parts where the family lives.'

In the garden I see all types of materials, mainly wood, but also polycarbonate sheets. 'High quality, but discarded because of small scratches', Bruno assures, 'If I cut it into smaller pieces and reuse the parts in a new configuration it will be beautiful and look brand new.' It reminds me of the Sparo floor tiles technique.



Today we will work on the dormer windows two houses away. Bruno gets a lot of his projects through the neighbourhood and his personal network. Next to the front door there's a collection of harvested hard wooden window frames. Of those, we'll make water barriers in front of the old window frames of the dormer windows Bruno's renovating.



Bruno behind the miter saw.

We take three pieces upstairs. The attic is filled with wood and power tools. Bruno works on situ. First we clean the old window frames from polyurethane foam. Then, with the buzz saw, we remove the patina (outer layer with paint). The wood looks brand new and very strong. 'Hard wood is amazing', Bruno says excited.



Bruno's aim is to reuse everything. Rest wooden planks like these he uses for model making or lamps/furniture. The thinnest wooden slices he just started keeping as well, using them instead of the plastic adjusting blocks.



The dormer window we're working on today. The hard wood we'll screw onto the white outer part of the window frame, in order to make it water proof. During the day building and design go hand in hand. Like building a model we constantly remeasure and evaluate. The limited availability of materials, with specific lengths, challenges us to think creatively and in line with the materials' qualities.



Metal Bruno can't use anymore, he brings to the scrap metal dealer.

The slight chaos of the attic. Moments before the sawdust colours the floor brownredish.



A mist of sawdust filled the attic.





Material storage in the back garden.

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*“What I do feels like cleaning.”  
~ Bruno Vermeersch ~*

Meeting with Liesbeth, a client from the neighbourhood. She wants to renovate and connect two little buildings in her garden. Together they discussed how her wishes and available materials could match. She proactively was thinking along with Bruno and seemed open to adjust her initial ideas to the available materials and their limits. In this case, things seemed to work out nicely, but I can imagine how clients in a hurry and with more strict ambitions have a hard time working with Bruno and his reused materials.



In the little garage of the social housing block on the other side of the street, Bruno stores part of the materials. Here he showcased an available kitchen sheet of composite material.

‘What I do feels like cleaning’, Bruno told me. He just uses what’s laying around and makes it into something new with value. I suggested the word ‘reconfiguration’ and he agreed. Often the process of reuse is a struggle, but when seeing the result, he knows it’s worth it. He agreed with Erica Chladová and Robert van der Pol that upscaling is necessary if you want to make reuse part of the bigger building world, but he isn’t sure whether he wants to change his role. Growing a little bit seems necessary though, in order to do the projects he’d like to do. He would then want to educate certain people for certain functions. Such as a material scout, that could later grow out into someone who also does the processing with more responsibility.

I’m very happy I met Bruno today and it’s cool to feel that we might work together in the future. He has a lot of knowledge, drive and admirable principles and ideas. At the same time I saw his struggle organizing his materials, keeping his family happy and making time for the projects he’d like to do, projects that make impact. Actually, it seems Bruno tries to be a fully functioning reconfiguration centre on his own, a programme Mari, Lance and me assigned a whole masterplan to. The ambitions might be too high, resulting in a chaotic life and only small scale impact, helping out the neighbourhood, only partly reaching the building world with these promising ideas and ways of working. Cleaning a hard wooden window frame from its worn out hide takes time. Bruno and me were able to finish and attach the water barriers in around four hours, just four profiled pieces. Yes, we combined designing and building and saved money by using reused material, but it’s a process that takes a lot of time. It would save much time if Bruno could just walk to a ‘Hergebruikhaven’ nearby and select a fitting piece for a fair price, not one that is raised too high by all the links, distance and marketing strategies we know from the current reuse market. On the other hand, Bruno praised the therapeutic force of removing nails from a wooden beam. Maybe Bruno is the small scale example, we could base a larger scale system on. Bruno himself is open to fulfilling an educational, inspiring role, but mainly towards young people, not so much regular companies. The exact origins of the materials don’t seem to be so important for Bruno (I should ask more precisely next time), but it seems to be about knowing the materials’ value by knowing its qualities. This could be derived from its history of course, from its previous ‘stories’. I might join Bruno the 13th of January on a harvesting in an about to be demolished building of PostNL near Den Haag HS. Later on I’d like to join him in reorganizing his storage. To be continued.



### Research tutoring 10 January 2025

The last few weeks I've visited five companies that deal in reused materials and are part of the Opalis network. Furthermore, I went to the Eco cathedrale of Louis Le Roy and worked together with Bruno Vermeersch, an architect that builds with materials he harvests himself.

While searching for answers to the research question 'To what extent do the origins of reused materials matter?' I found out the companies have very different ways of treating and branding the materials, different narratives. An important term in this force field is 'authenticity'. The term is used by many companies to commend their product, but what is authenticity? And what's left of it when the materials are heavily altered and lose some of their either structural or esthetic value?

Apart from this rising issue of authenticity(/integrity), I stumbled upon other aspects of the reuse market that inspired me for further research.

The story of the detail is interesting. By looking carefully at the details of the reused materials, we can derive information about its previous use and assemblage. Also by making the fragment for the masterplan presentation, the story of the detail came about as an important topic. By reading the details of the existing, we learn about its stories and the necessary new details to unlock the space.

Reuse craftsmanship is needed to deal with the imperfections of reuse materials. Like the splitting technique.

#### Authenticity, a small note

As architects we're allowed to have an opinion on Bijzondere Tafel making wooden covers for steel beams, but I think we shouldn't neglect that a lot of people find it very appealing. Looking purely from the perspective of efficiency, isn't it beautiful that people want the patina of a material that others want removed? This way the life, and story, of materials gets multiplied in a way. Or, the stories might not get multiplied, but the different stories present in a material are told detached in different places.

#### Feedback Eireen

Eireen was really positive about what I did. She complimented me on the amount of work I did and really sees how this can lead to design. She encourages me not to be afraid to let some of the many findings sink to the background and select some others. These elements that I would let rest, could come up later again. She has a lot of confidence in the project and advises me to think of what I would want to present. To have this presentation as a starting point and build upon this, to select what products I want to make for that. Her idea is that the report I made is already really good and practically finished. Don't start too many new things now. Focus on the P2 exhibit and demarcate your products.

"Focus on the P2 presentation and demarcate your products."

~ Eireen ~

Eireen was enthusiastic about the photo report/stop motion of developing the fragment. It's in line with the principles of the studio, that it's all work in progress. She saw it as architecture of improvisation, developing on site. Only some of the brought in materials will find their place on the location. Others move on to other sites or are stored for later. This fragment project could be a very nice start of answering the evoking question 'How could Bruno's method be productive on the bigger scale?' I see a lot of quality and urgency in the way he works, but it seems almost too much for him alone.

Then there's some questions I should ask Bruno next time I see him.

- What does he want to express when using reused materials? What to show, which architectural choices does he make. Is it about showing the esthetics of demountability? Is it a temporal solution?
- What's Bruno's agenda? Does he have multiple? Material saving agenda, ideological or architectural? What opportunities does he see as an architect? It's about the different agendas of an architect.

The cove example was also evoking for Eireen. In this, she recognized the two main positions to reuse; a very practical one, thinking as a builder (using the structural qualities of a material) and the one about the look, using the patina as a goal in itself.

She asked what the answer of my research question was 'To what extent do the origins of reused materials matter?' I explained the answer wasn't uniform, differing per company. Often however, the origins weren't important, but either the patina (authentic look) or other architectural qualities (bearing, weather resistance) were important. I did not directly see leads to her previous hypothesis that origins matter more when an element is more 'intact' and less divided in particles. That could also be because I mainly saw more intact elements at Van Baal Materiaalhandel, a company that was really ran by demolition cowboys working as efficient as possible, in order to make money and let their collecting hours count. Eireen told me she'll definitely read through my report. It's also interesting for her research.



### Joining Bruno Vermeersch part 2

13 Januari 2025

Today I joined Bruno to the PostNL office near The Hague HS. The office gets renovated and Bruno harvests materials from it. It seems like the communication went through Beatrix, former project manager at IDEAL, where Bruno also worked. The materials were a bit less interesting to Bruno than initially thought. Kraaijvanger, that did the design of the renovation together with KCAP, glued a lot of the elements together which made it way less demountable. However we were able to save some underlayment and MDF panels from the waste pile.

I was mainly working on removing the screws of the underlayment panels. It's better to clean them on site to make the transport easier. Bruno made a fast calculation. The worth of the underlayment panels is about 13 euros per square meter. In two hours we were able to demount and clean around 20 square meters, so to save (indirectly) 260 euros. A nice hour loan of 65 euros per person you'd say. However, the panels also need to be transported and stored.

To make this profession financially doable and reduce as much waste as possible, Bruno is therefore always looking for extra reuse. Among the demolition contractors, he's using his designer's eye to come up with smart reconfigurations of the available stuff that would otherwise be transported of. One example stood out.

Bruno made a deal that he could take the wood of the sturdy indoor planters. It turned out to be a big hassle to demount these, because of their rigid assemblage. That's why Bruno came up with a new idea to reuse the planters. By sawing them in pieces, in a Gordon Matta-Clark fragment style, and rotating them, the planters seemed to be perfectly transformed into furniture pieces (benches and cabinets). Over the weekend he made a brochure for the new product and through the project manager of the renovation delivered this to PostNL (or the architects?). They reacted enthusiastically and are now thinking whether they want to use these for their new interior. If not, Bruno takes the pieces and sells his on his own, probably for a higher price. If they would take the pieces however, it would mean this innovative reconfiguration of the existing planters makes sure the materials on site don't even have to leave their site. This is both a financial benefit, that's why Bruno also advocated for detailing the new furniture pieces on site, as a way to reduce waste and transport emissions.

Another small financial extra was the find of a beautiful lamp in the container. One is worth 150 euros and the contractors were about to throw it away. These extras makes the act of harvesting more beneficial and financially efficient for Bruno.

One of the demolition contractors was looking at us in disbelief when he saw we were collecting the screws we removed from the underlayment panels. 'How is that profitable?' he asked Bruno. 'It isn't', Bruno responded, 'the panels and furniture reconfigurations are profitable, this is extra. And if I want to build with 100 percent reused materials, I can't buy boxes of new metal screws.'

During lunch there was more time to ask Bruno about his methods. I noted his different agendas. His financial agenda focusses on staying alive as an entrepreneur, the climate/reuse agenda wants to reduce waste as much as possible and his architectural agenda makes sure he creates good and appealing architecture. Which agenda has priority? The answer was clear. The financial agenda is number 1. Bruno talks a lot about money and time, 'it's all about efficiency, especially harvesting', he noted when I was working for ages on my first underlayment panel. 'Money and time are in my head all the time while working. That's just reality.'

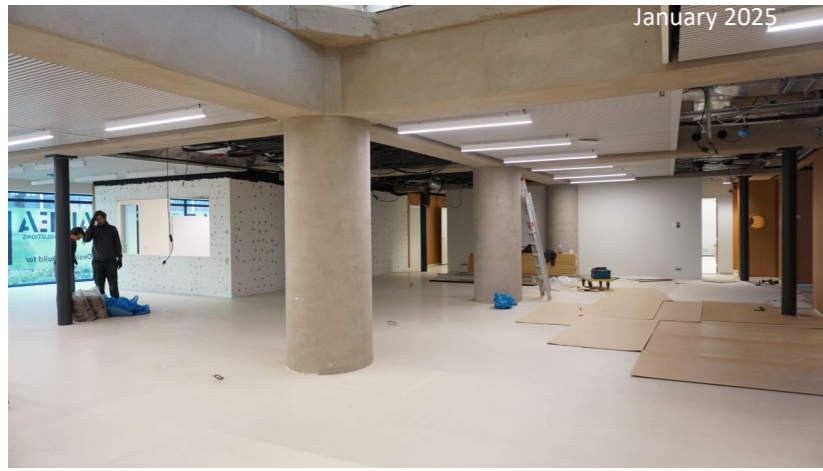
Then, on number 2, he would place the climate/reuse agenda. It's what drives his decisions and is the strong intrinsic goal. 'On the 3rd place I would put my architectural agenda, but also because I'm quite sure the architecture that I come up with by following agenda number 1 and 2 is good. It's a main goal to express through my architecture that reuse doesn't mean you have to do concessions on the architectural expression of the building.'

Bruno would describe his architecture as layered, showing the materials he uses and making sure they are demountable. 'In 10 years I think it's way too expensive to drop off your waste from demolition.' It's okay for him if you can see how the materials are connected, as long as the architecture still offers a spatial and sculptural appeal.

Bruno has ambitions to grow. He showed me how he envisions a successional growth into a firm of around 25 employees in final phase 4. The firm would have three divisions. The office where projects are being designed, the factory where the harvested material is stored, processed and the projects are produced and the lab where explorations with reused materials are tested. I suggested this part could also host educational facilities and he agreed. This idea of an unconventional architecture firm, builds a bit on studios like Werkstatt, but takes it a bit further, really treating every part of the reuse cycle process. Bruno also thought about the different members of the team of 25 and in which phases they would join the team. He asked me which role I would prefer and we saw he didn't account for any 'communication' related employees (although that's not the only thing I would see myself doing). He also envisions housing in this complex, with the current housing problem for starters in the back of his mind. Here, (partly) his employees could live. I would like to think of converging this programme on my design. Maybe the housing wouldn't necessarily be for the employees, but I do like the idea of a reconfiguration station, where there's more cohesion between the school and the ateliers, which would then become more of a united firm.

About his current role as one man reconfiguration station he said the following: 'You have to do everything to work adequate and with the efficiency needed in this process and to make reuse profitable. If I would let work forces with less design knowledge do the harvesting, I wouldn't have the income that I have now by discovering this lamp. Also to really reduce waste to its maximum, for me its essential to treat the whole reuse process.'

I also talked to Bruno about my initial research question 'To what extent do the origins of reused materials matter?' Bruno told me many clients want to know where the materials are from and, since he's still relatively small, he knows exactly where each piece in his garages are from without having to label them. He does make notes on his phone when he finds stuff on the street. He's proud of this quality, knowing exactly where it's from, but for him it's not the most important part. The most important is that the material is getting reused with all its qualities, not only its patina such as the cove of Bijzondere Tafel. If his firm would scale up however, he would want a labelling system to still keep track of the exact origins of his materials. 'Because that's better and clients love it.' Right now he's already making hand drawings of his designs, labelling all the materials and showing where they from. 'I'd like to give these to the clients of the projects, but not for free.'



The concrete structure of the PostNL building near The Hague HS. After just two years, the interior by Kraaijvanger is going to be replaced.

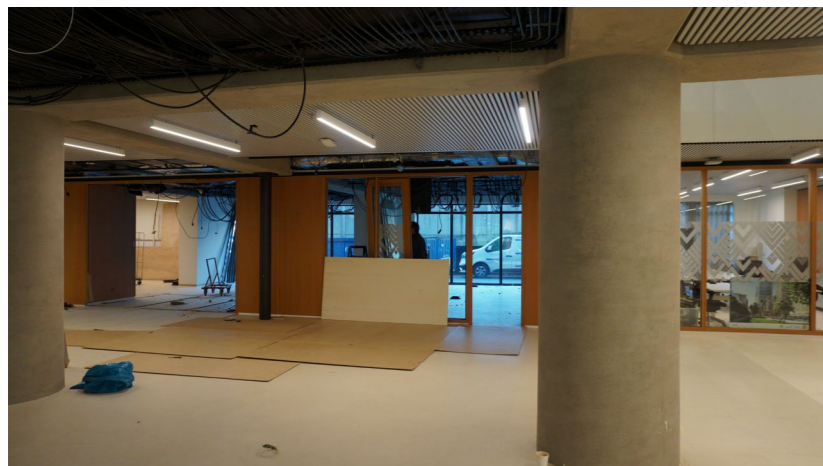


Bruno and one of the employees of the demolition company, deconstructing the partition walls.

Elements of the interior already demounted



Demolition workers using their tools amidst the chaos of a space in the state of reconfiguration.



One of the partition walls we removed, mainly consisting of MDF pieces, wrapped by a layer of finishing.



At the back door, two big blue containers for the material that can't be reused. Me and Bruno occasionally resurrected an object from the containers, like an expensive Belgium design lamp.

Some of the quite high quality underlayments panels. I was working two hours on removing screws from around 15 of these panels.



Mainly low quality MDF, shattered glass and insulation wool.



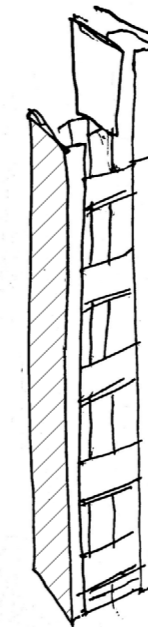


Te veel materiaal belandt in containers wegens te klein, niet goed genoeg of simpelweg omdat ze zijn verlijmd. Door middel van de zaagmachine en goed kijken bevrijden we uit onmogelijke constructies, structuren als meubels, als sociale structuren

Bruno's flyer for the reuse of the reconfigured planters. On Friday he harvested and sawed the planters. Through the weekend he transferred this into a flyer and a business idea. On Monday the PostNL heads were thinking about the proposal. In order to make these reuse reconfigurations work, Bruno works fast and efficiently.

Prijs

- ruw	235 euro
+ geschuurd en gekant	130 euro
+ gelakt* gebruiksvlakken	185 euro
+ kleurvlak / accent kleur **	60 euro



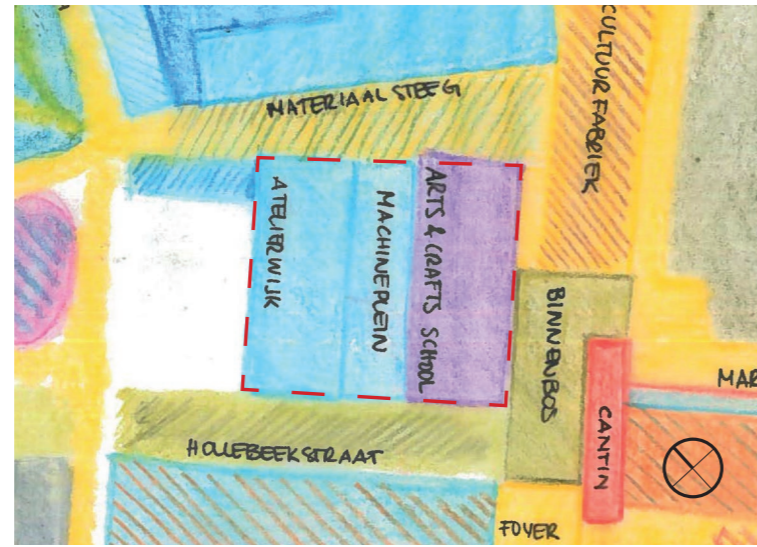
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**BEL  
MET.  
BRUNO**

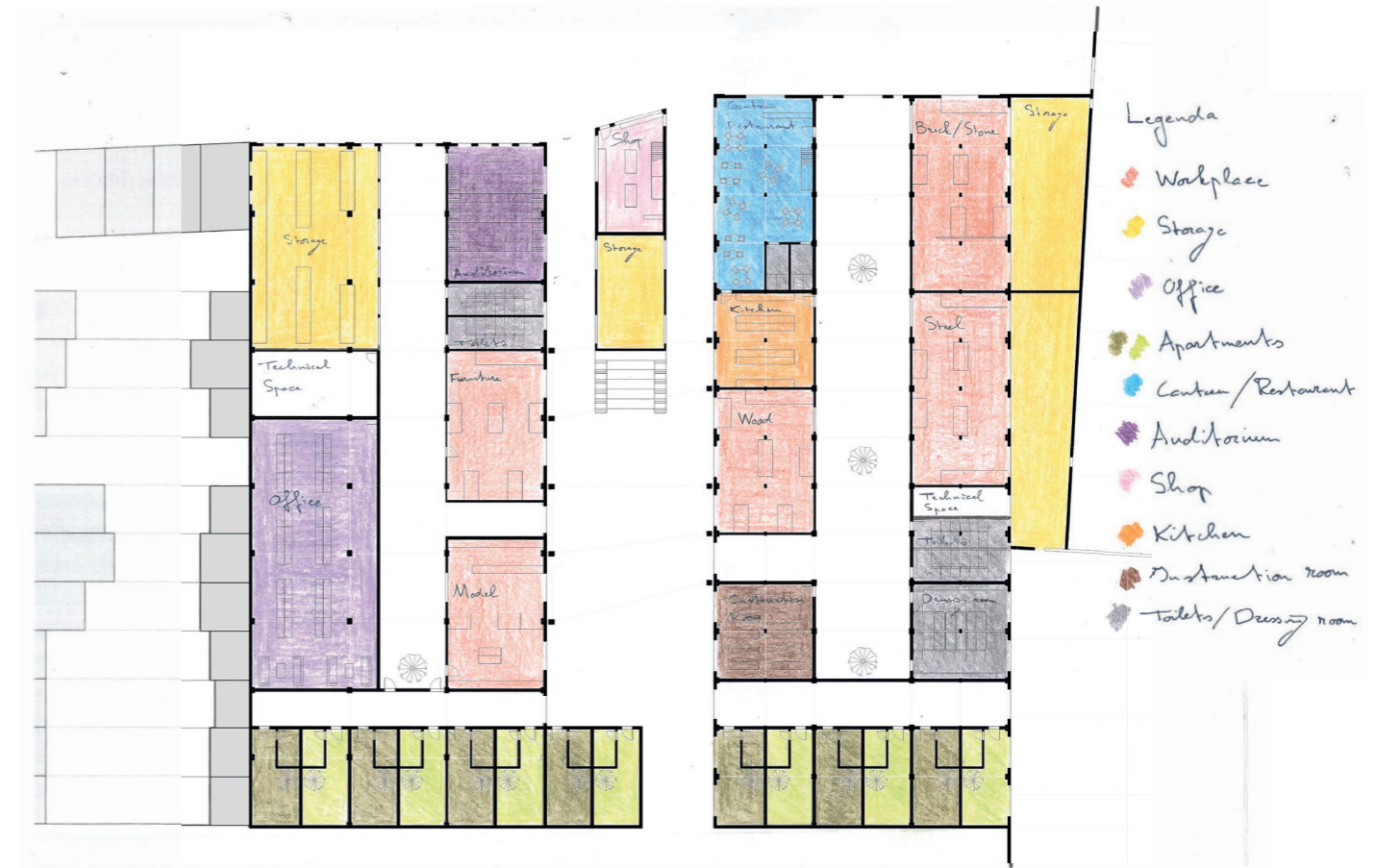
Price offer splitted into the costs of the raw materials and the labour needed for the reconfiguration. To sell a piece like this for hundreds of euros is good business for Bruno. He only had to read the material's potential and put in the work for the reconfiguration. Material was already present on location, so no costs for material, storing and transport.

P2 presentation

My personal design is located on an interesting pivotal point, close to the side of the masterplan where materials are collected and stored, but also next to spaces like Cultuurfabriek that open up completely to the neighbourhood. This material cycle closely relates to my research.



On this site, in the heart of our reconfiguration station masterplan I envision the Reconfiguration Institute of Leftover Materials, consisting of office, school and housing. By creating this programme, I unlock the capacity to build the developments on our site with leftover materials. The programme brings materials and agents closer together and proves how small industries and living can thrive collectively.



I've tried to blow life into the fragment by bringing in leftover materials I encountered during the fieldwork, literally opening up the closed doors and start cutting in the existing situation. A more adequate reconfiguration is the result. I documented the successive process of material tides and building interventions.







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*From Fixation to Leftover Reconfiguration*

Design tutor: Sam Stalker  
 Research tutor: Eireen Schreurs  
 Building technology tutor: Anët Meijer  
 Delegate board of examiners: Mónica Veras Morais

Feedback on P2 presentation

24 January 2025

They think I set up a nice project for myself.

Sam: architecture of improvisation, but how do you facilitate this improvisation? What are the boundaries or principles in which you improvise? How did you do it with the fragment stop motion? Could it be like jazz; improvisation within the set up classics? It seems like the fragment, plan and masterplan should be in constant dialogue with eachother, implementing the lessons from the other. Show flow of materials in plan. (New stop motion of materials on plan. Printing out big plan (1:50/1:100) and placing stuff on it could actually work, saving a bit material. Could also be a base plate with engraving.)

“Which principles will set the rules for your improvisation?”

~ Sam ~

Eireen: what did you learn from making the model? Maybe I should join her and Barten visiting the demolition site. To see how much space material takes when demounted. This might change my strategy concerning storage, into something more dynamic maybe. I shouldn't underestimate the value of keeping the materials on site, not having to dissect them completely. This is what the art school of Hoboken is going through. They are quite upset, because they now have to pay for their own dismantled materials that were already taken away. By reconfiguration, you can prevent the shattering of materials.

Sam: how to scale up improvisation?

Eireen: is your intention to use either material on site or the brought in leftover material? That's quite strict. On the way you might have to do concessions.

“Fragment, plan and masterplan should be in constant dialogue with eachother.”

~ Sam ~

Sam: the housing keeps being something to address. What would it mean to live on a building site? Is that the question to answer?

Anët: question about the wall of the factory at the end of the row house gardens, and about the new houses at the edge of Machineplein.

Sam in general: find out when to break the rules.

Next steps are:

- Starting with the profound survey of the existing
- Working on a design methodology (what products will help me in this methodology? Big groundplate for example)
- Setting the rules of the jazz classic, working from the preliminal conclusions of the research and its connection to the existing situation
- Reading more in As Found; Experiments in Preservation





Demounting a building asks for various work powers, ranging from big machines, steel dinosaurs nibbling away the building, to men, the so called 'handlangers' who sort out and clean the bricks. We've witnessed a choreography of these work powers, standing still, moving closer to the material, making sure it ends up on the right place.

Jamapro, the demolition reuse company, focusses on bricks. Those are the most consistent when it comes to resell value. Some other elements are also taken care of, but many other elements that smaller agents - like Bruno Vermeersch for example - could use, are discarded. To minimize waste it would make sense to let various agents come in the to be demolished building. In a logical order, these agents - with different interests, tools and expertises - would take away their material of interest. The percentage of reuse would probably be altered drastically. It would reflect a bit how a dead organism in a forest is slowly digested by different animals, fungi and bacteria. Letting leftovers lay around to create fertile ground.

Demolition of Beeld- en Dansacademie Hoboken

28 Januari 2025

Yesterday I visited the demolition site of Beeld- en Dansacademie together with Barten. Bart Dehaene and LAMUSCH Architecten, the firm Rosie works for, designed a new building for the academy. They looked into preserving the building. The foundation doesn't seem strong enough to carry the current building though and cracks have appeared in some parts of the masonry. As a consequence, the verdict is that the current building should be demolished and a new building is needed. Eireen, Chiara and Barten are now doing a research about what happens to the demounted materials. Barten and me travelled to the site in the centre of Hoboken. Barten brought a drone and needed to document the process.

Seeing how a bigger building is demounted and the materials are treated led to new insights concerning my research. The materials were organised in piles next to the shrinking building. While wandering through the empty rooms still intact I was well aware of the space surrounded by the materials, the rooms in which events had taken place and students had been learning. The rooms would vanish, despite their spatial qualities and organisational logic in relation to the whole. The loss of quality, especially of the interior, pressed heavy on me.

On the demolition site I encountered material in its various phases; from part of a building composition, to a teared of building element, materials fragmented on a pile of similar pieces to dust escaping the demolition site. I started thinking about this gradient and its characteristics. From building -> dust we can distract the related gradient 'static -> ephemeral', but when trying to formulate other gradients difficulties arise. Like 'high potential -> waste product' and 'ungraspable -> operational'. These relations are not adequately reflected by a gradient, but ask for an optimum curve or other, more complex graphs. Of course these curves depend on the situation and the envisioned new function for the leftover materials.





The school seen from the crossing. The materials and form fits in the rest of the urban tissue.



Some of the material piles. On the left pieces of concrete elements with the steel reinforcement, on the right the bricks.

Small explanation of the project at the front entrance.



I-profiles in a layer of wood.



The demolition is yet visible through the windows. A partly demolished ceiling.



The machine is eating from the building. 'Knippen' they called it, since it needs to cut through the reinforcement of the concrete. A process that's way harder than demounting the bricks, where they let part of the wall fall and it breaks in several pieces, removed by the handlangers.

Entering the demolition site. Where the big truck and street posts are now standing, there used to be part of the building that has been taken down already.



Fragments of the building open up in an almost artistic way. It reminds me of Gordon Matta-Clark.





Some typical row houses lined up next to the demolition site. When the machine was cutting the concrete, the front facade was sometimes trembling dangerously. What if it would collapse and fall on the streets and the row houses on the other side?



Low quality leftover wood, with the nails still in. It reminds me of Bruno. Would he be interested to reuse these pieces or are they too weak and slender?

Sometimes during the process of cutting, the demolition workers had to block off the street. Despite the hard sounds and clouds of dust leaving the site, most of the passengers were passing bluntly without any fear.



Inside, we bump into some kind of charcoal drawings of the school. Here of the view from the crossing.



A break. The dinosaur lets his head rest, waiting for its next task.



And here in its current state.

Moving in the building. Some kind of portico forms an interesting space.



On the steps of the stairs I see how once signs were guiding students and teachers through the building. Now, in an empty building with the demolition sounds nearby, it feels a bit sad and obsolete.



January 2025



January 2025





An unexpected pivot door on the first floor. It still turns super subtle. The quality of the space seems high. What a shame it will soon cease to exist. And what will happen with the door?



Carefully we look through the hall and have a real time close up of the machine's head making his way through the building's tough materiality.

On the second floor another beautiful and huge room. The absence of window frames makes the windows openings bigger and more light is coming in now. Of course not a durable save solution.



To document the process.



Around the corner, the machine is eating away the building. We're not allowed to enter in that part of the building.

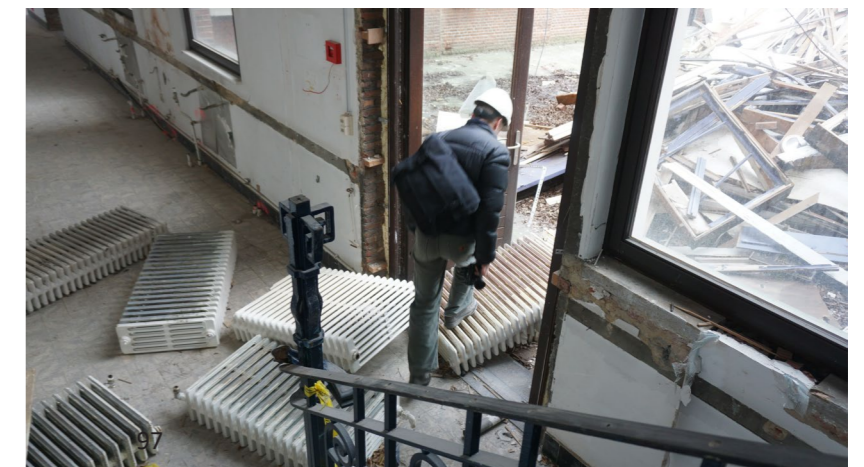


Terrazzo like windowsills. Demounted, but still laying around. Just like the radiators we eat our lunch on.

But we look into the spaces and see how the building becomes fully transparent by removing windows, window frames and doors.



The building is vomiting radiators, which we use to stand on, while leaving.



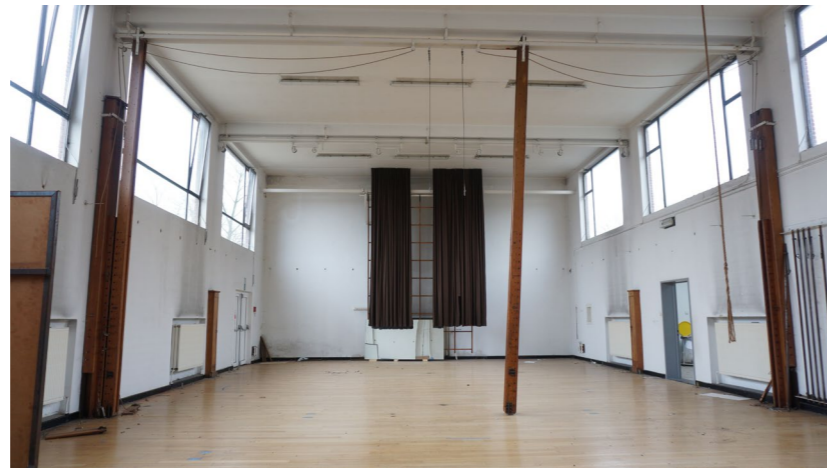


Sometimes, my lungs fill with dust. When an unexpected piece falls down and dust is everywhere. The demolition intensifies throughout our visit, as if a deadline has to be met. One worker is spraying with a fire hose to prevent the dust from leaving the site and cause too much trouble.



We see how much of the building has disappeared in the two hours we were here. The restroom still exists, but only half of it.

In order not to cross the work, we walk through the gym hall, that will be preserved. What is that column doing in the middle of it?



Big machines. The machine holding the sail to prevent rubble from falling on the street is the tallest.



A metabolism of working force. Machine and handlangers take turns to demount and sort out. We're witnessing a fast system that seems to be efficient. I wouldn't feel save in the middle of that pile.



From the street the view has also changed. With this tempo, the building will be gone in a few weeks it seems.

Handlangers throw bricks in containers, that are then emptied in a bigger container by the machines. With their gripper arms they can lift and move around almost everything.



Ik stond erbij en keek ernaar  
Het knippen gebeurde rücksichtslos en deed  
de gevel wankelen  
De passanten daaronder op straat waren zich  
van geen gevaar bewust

‘Het gebouw braakt radiatoren’,  
de rake opmerking sloeg in  
Het gebouw was ziek, chronisch,  
en misschien al dood  
Als torren doken de handlangers  
zich op het karkas  
En gauw uit de weg wanneer  
stalen snavels aanstalten maakten  
het skelet verder open te rijten

Moet ik dit geweld vastleggen?  
Ik hef de lens en schiet wat in het rond  
De sluitertijd brengt beweging in mijn  
stilstaande beeld  
Een opeenvolging aan stilstaande  
beelden doet dat ook, brengt de  
stromen rondom dit gebouw tot leven  
in mijn verslag

Ik weet niet of lange blootstelling of  
herhaaldelijke blootstelling de emmer moet  
doen overlopen  
Bij mij is 2 uur op locatie genoeg  
‘Sloop is moord’, zei Hertzberger en hij had  
bijna gelijk  
Sloop is slechts vertering, maar het  
overhaaste vonnis, dat is moord



Positioning myself in relation to the preliminary conclusions of P2

10 February 2025

Preliminary conclusions of P2:

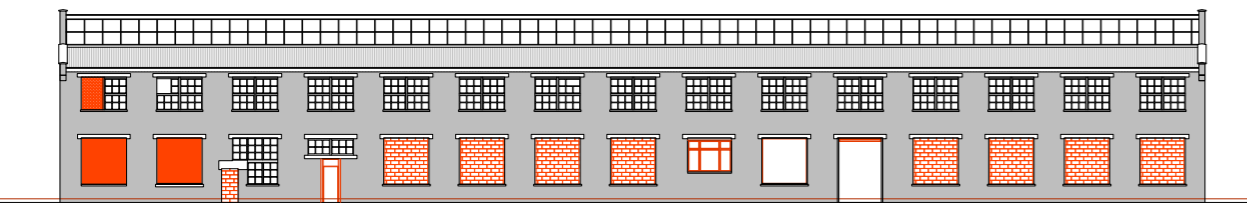
- Value of origins and authenticity
  - o Lot of different answers. If origins matter, it's because of a general authenticity, not exact location. This authenticity is often transferred through the materials' patina.
- Patina alteration and material core
  - o Many ways of treating the patina, sourcing the skin or removing the skin to source the core and its structural qualities.
- Story of the detail
  - o Telling us something about the assemblage with other materials.
- Reuse craftsmanship and architecture of the improvisation
  - o Reconfiguration comes with its own craftsmanship. Working with limited availability leads to an architecture of improvisation

1. I think knowing (and communicating) the origins of reused architectural elements is very valuable, but not per se necessary. In my design I want to strive for a representation of the origins of the materials I use, but not at all costs.
2. Although at first sight the sourcing and staging of materials' patina seems fake and wrong, I think it's good to acknowledge the value the patina contains and the people admire. To let patina and material core coexist and make use of both the material's expression and integrity is the ambition. When impossible to use both, I should re-evaluate, and see how to avoid waste as much as possible.
3. Reading the story of the detail is essential to learn about the potential of an element. In the design I create a new story, either following the plot of the element's previous life or reshaping it.
4. To implement the craftsmanship I discovered in guidelines for my design methodology is the current challenge.





Existing facade 1:200, black = original building from 1924, red = additions after 1924 until now

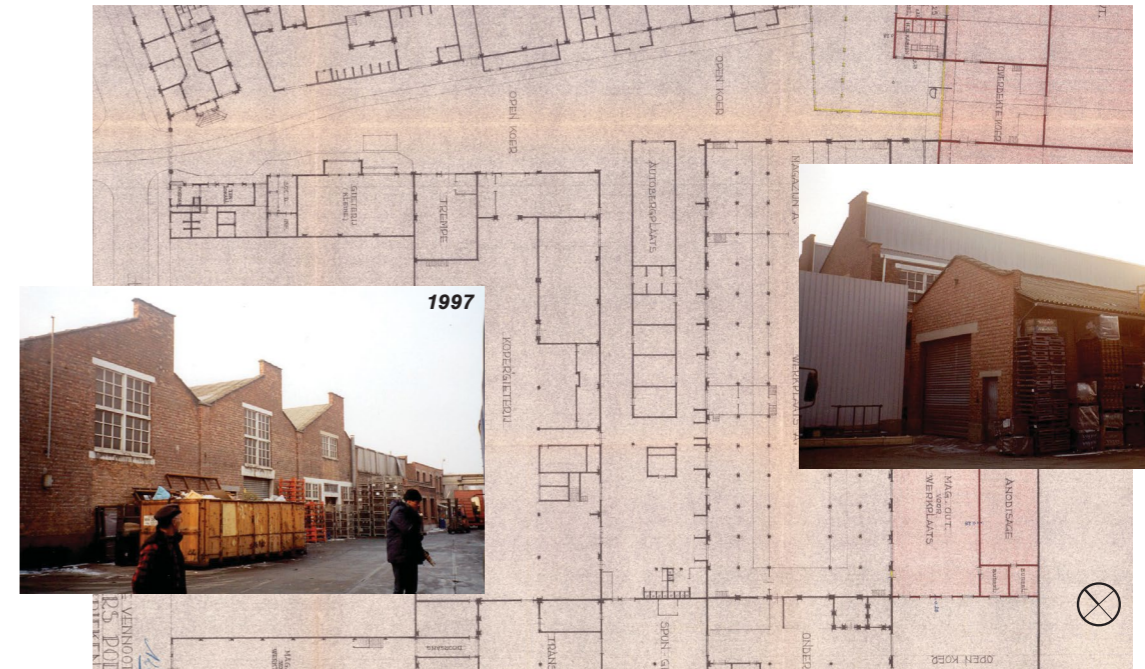


Existing facade 1:500, black = original building from 1924, red = additions after 1924 until now



Existing plan 1:2000, black = original building from 1924, red = additions after 1924 until now

1957



1997

ONTWERP: **ABETEC** N.V.  
 ARCHITECTEN & INGENIEURSEN  
 Industrieterrein hoogveld tel. 052/22.13.67  
 vissenhout B telefax 052/22.01.32  
 9200 dendermonde



FOTO 10



FOTO 11

6/06/97/12/0046

The following things I would like to discuss with Sam:

- Positioning myself after P2 and preliminary conclusions
- The methodology (what would work for him?)
- 1. The survey (facade and plan?) + first clues
- 2. Guidelines for jazzy reconfiguration
- 3. Work in progress products (2d drawings + model 1:100 / fragments 1:33)

#### *Positioning myself after P2 and preliminary conclusions*

1. In my design I want to strive for a representation of the origins of the materials I use, but not at all costs.
2. To let patina and material core coexist and make use of both the material's expression and integrity is the ambition. When impossible to use both, I should re-evaluate, see what to choose and how to avoid waste as much as possible.
3. Reading the story of the detail is essential to learn about the potential of an element. In the design I create a new story, either following the plot of the element's previous life or reshaping it. Here I shouldn't hold back to abuse the existing when needed, since we're not dealing with top tier heritage.
4. To implement the craftsmanship I discovered into guidelines for my design methodology is the current challenge.
5. Combination of existing materials on site and reused materials from Antwerp. Reconfiguration of material on site is the starting point. Reused materials that come in add the necessities, enrich the design, open up possibilities. What does the transformation of the fragment show?

#### *1. The survey (facade and plan?) + first clues*

Show facades, photos (glue facade photos together) and plan.

Copper hall (lower one) has undergone more reconfigurations, the construction hall (higher one) is in a more authentic shape. **To use this difference in my methodology?** Approaching construction hall more as a restoration project, eliciting the quality of the existing. Approaching copper hall as a big reconfiguration project, taking out, bringing in, outgrowing the roof.

Show archival plan (1957) and photos (1997).

Coincidental in between building, sketches. **Could I build this from the 'snelbouwstenen' I remove to create Machineplein?**

#### *2. Guidelines for jazzy reconfiguration*

Discuss the list and what form it should have.

**How to arrange this dialogue between the scales (fragment, plan and masterplan)?**

Maybe:

Make successional drawings in the current plan like the masterplan drawings by Mari, with different colours for programme. This I can base on the Masterplan drawings and enrich with my additional findings. Keep an inventory list of the materials I remove (destillized from existing plan and facade drawings), these will become my 'ingredients' for intervening.

The Masterplan I can adjust when the logic of the plan and programme asks for it.

When I feel the need to figure something out more precisely, I can use the scale of the fragment. This I could also approach by first making the existing or something close to that and then slowly alter and experiment into the new situation.

**Write a script for the (master)plan steps. This I could also do by drawing the successional plans.**

**How to simulate the materials I take?**

Visit Opalis companies in Antwerp. **Make a list of these and their products.**

#### *3. Work in progress products (2d drawings + model 1:100 / fragments 1:33)*

What I value about the way of working with the fragment stop motion is the sculptural, down to earth and immediate aspect of it. The spatial and pragmatic consequences of a design idea become evident

straight away and it could be very promising to work like this as a design tool. 1:33 is too big to make the whole site in, but 1:100 for the buildings would maybe just fit. And then making some 1:33 fragments of essential points in the design later on.

The facade drawings could maybe also function like this, or like a set of the facades without the spatiality of the plan behind it.

“Treat the project like a construction process and find out what needs to happen immediately.”

~ Sam ~

#### **Feedback Sam**

Sam was positive about the things I worked on and the ambitions I have. We had a good discussion about what should have priority at the moment and for next week's conversation with Paul.

Sam: you could treat the project like a construction process and find out what needs to happen immediately. How do you keep the principles of the existing in the plan with the introduction of function? What bigger principles do you work from? Like modes of insulation, differing spatiality of the halls, giving the programme its space in the existing. That's an important aspect that needs to evolve from the blocky plan you drew for P2. And probably Paul likes to see a good plan next week to give proper feedback on this. So evolve the plan a bit more immediately.

We talked about my ambition to make an inventory of the materials I take out and the materials available in the Opalis network companies of Antwerp. Sam encouraged me not be too stern in this sense. Let the design lead! Don't take note of every brick you take out, but check whether a proposed intervention (roughly) fits with the amount or type of material that becomes available.

Then we also discussed the work in progress products. Sam suggested many iterations of plan and section. He really liked my idea of the 1:100 working model and really seemed to get the quality of it. We did talk about how it doesn't get too much work though, since that could easily happen. Also deriving plans and sections from the model and start working with material that's very ephemeral, working towards more sturdy materials later on, when things are getting clearer. The model is probably something that comes just a bit after reinforcing initial plan a bit more, but I can already start preparing the file and logic of it (think about where to make sections and stuff).

Finally, we also rediscussed the housing. In the P2 plan it really feels like a compromise and Sam imagines my semester will be more relaxed when I drop the idea of it, since it comes with a lot of extra themes and the challenges seem to be rich enough already. I think I agree.

### Guidelines for jazzy reconfiguration

Don't **design** if you don't have to (JT)

Use what yet exists, add where needed (JT)

Design the exceptions and let the existing be (JT)

But, question the evident (JT)

**Build** in a logical manner (JT)

Work with what's on site, bring in what's needed

- Bring in reused materials through the nearby recycling network

Think about chronology and interdependency

- Let the unadjustable pieces (doors, windows and maximum spans) shape your design

Anticipate on material gradients

- Prevent dismantled architectural elements from shattering (cutting is easier than glueing)

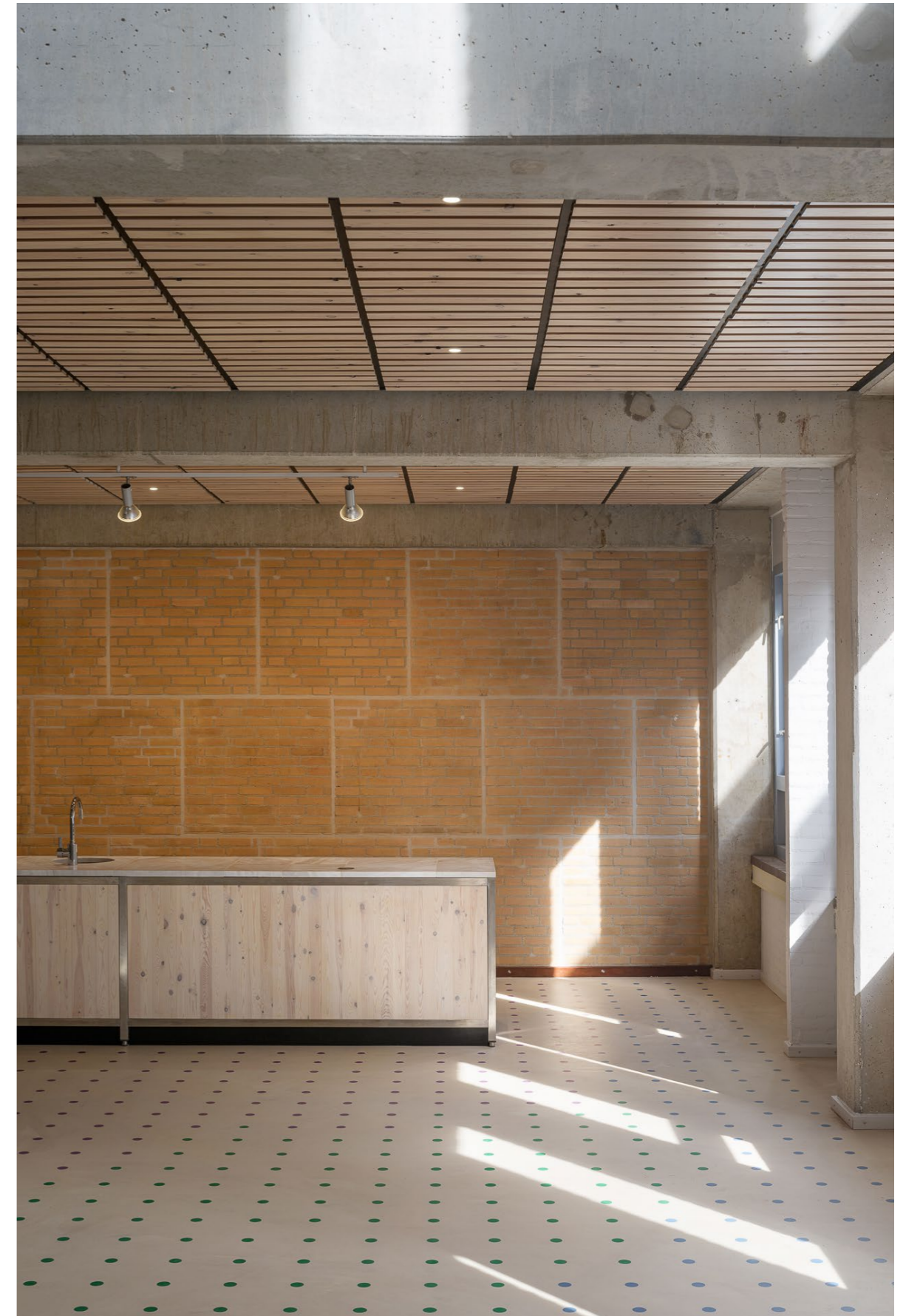
- Never glued, only screwed (JT)

Insulate only where needed (JT)

- Offer comfortable working and discussion spaces overseeing the building site and material flows

**Waste no material**

Create adequate material storage



## Reading 'As Found; Experiments in Preservation'

The book closely relates to themes I've been treating in my research until now, showing many reference projects. Two quotes from the theme 'reconfiguration' show this close connection to what I've been doing previously:

**“Re-evaluation is an integral part of reconfiguration, for this facilitates the rereading of the fragment, whether written or constructed.” (p.61)**

- Sally Stone -

“[...] the understanding of spolia has changed to become a general term used for architectural elements or pieces of sculpture taken from one site and used in a different one, often in a different way. The use of spolia communicates a message, it can create a link across the years, instil a status or reinforce a doctrine. The appropriated elements, whether deliberately or not, transfer and translate meaning and significance.” (p.62) - Sally Stone

The text under 'traces' discussed the concept of 'weiterbauen' (Philippe Koch and Andreas Jud), which closely relates to concepts as 'Schöpferische Wiederherstellung' (Hans Döllgast), 'restauro critico' (Carlo Scarpa) and the 'historical present' (Lina Bo Bardi).



## Research tutoring 18 February 2025

Since P2 I went to the demolition site of Rosie's school, read 'As Found; Experiments in Preservation', tried to position myself after P2 and its preliminary conclusions and started working on my methodology for the design phase. This consists of the survey, guidelines for jazzy reconfiguration and work in progress products.

Design and research are already very closely related, but what next research is now necessary? Maybe it should be about upscaling the architecture of improvisation. The programme is essential. Also because it's how Bruno envisions his ideal company. The creativity that comes with reconfiguring the as found and trying to solve design problems only with what's available is the core of my project until now.

Then, what did I learn from making the fragment stop motion?

During the presentation I answered I learned that material is often sturdy and removing takes effort.

Reconfiguring will therefore take time and energy.

But, there's more. I did also feel how easy it is to limit yourself to what's at hand. The cabinet's dimensions are derived from the pieces of wall that's cut out and the roof I removed. This is limiting, not everything is possible, but at the same time offers guidelines

**Feedback Eireen**

Eireen was positive, valued my interpretation of the project of Rosie's school and encouraged me to design! Let the design prevail over the guidelines. The guidelines you'll incorporate anyway and the design you can then sign as 'quality control'. Carefully formulating guidelines probably works too limiting on making a good design.



Plan ground floor, sketch 1:1000



Plan 1st floor, sketch 1:1000

## A+BT tutoring 21 February 2025

Brief summary for Paul.

Research Plan

"The collection, curation and reconfiguration of waste materials is what fascinates me...

...Reconfiguring materials, and therefore their stories, is a powerful act."

-> Focus points

Fieldwork: Opalis, Bruno Vermeersch

Stop motion fragment: when material on site and spolia come together -> architecture of improvisation.

For the project: like a jazz play, improvisation within guidelines. Jo Tallieu references.

Personal design on pivotal point of the site.

Two halls and infrastructure around, reacting to the structures around.

Programme: (reconfiguration) institute of leftover materials; building reconfiguration school, architecture/building/research office, ateliers and exhibition space.

By creating this programme, I unlock the capacity to build the developments on our site with leftover materials. The programme brings materials and agents closer together.

Translation of Bauhaus to current paradigma.

Method

Survey of the existing -> Sculptural work in progress products

Switching in scales; fragment /facade - plan/section - masterplan

Difference in halls. Copper hall more reconfiguration, construction hall more restauration.

Hall of construction: school | open up, experience spatiality

Hall of curiosities: office, ateliers and exhibitions | rearrange, explore

Cabinet system (expanded version of make do) and outgrowing the roof.

Discuss spatiality of the plan(/section) and connection to surrounding

"Not exceeding the existing roof would be logical, but the way you drew it also seems to make a lot of sense."

~ Paul ~

#### Feedback Paul

In general Paul was positive, lighthearted and provided some clear guidelines to continue with.

He encouraged me to find the ratio behind interventions I will do in the existing. Clearing away time layers - without considering reuse or 'weiterbauen' - would be a shame. Build on with the existing structures. Not building higher than the current roof would be a logical choice, but exceeding the roofs like I drew in section also seems to make a lot of sense. Opening the left span of the high building is very good. This way I open up towards Machineplein. Make a U shape out of it.

The stop motion was a nice video.

Paul isn't against diagonals, but they should have a clear function/reasoning behind them.

The building in the middle seems a little bit too small of a gesture, but it could function as a nice ground principle where you could bring out what happens inside (building with reused materials).

Paul: "You say Jo Tallieu, I say Inge Vinck en Jan de Vylder." I think this relates to building high within the

existing -> Search for references.

I agree with Paul that the existing facades on archival photos are really strong. Building high within the existing changes this facade. This could be an interesting interplay.

#### Feedback Anèt

##### General introduction

Be clear about your circularity approach. PvE is a dynamic document. First: document the existing.

Local heating, like infrared panels.

##### Personal

Think about fire safety at the side of the 1960 building. Brick is safe, but steel might cause problems

when it's closer than 9-10 metres.

Dust extraction of wood workshop comes with a whole system.

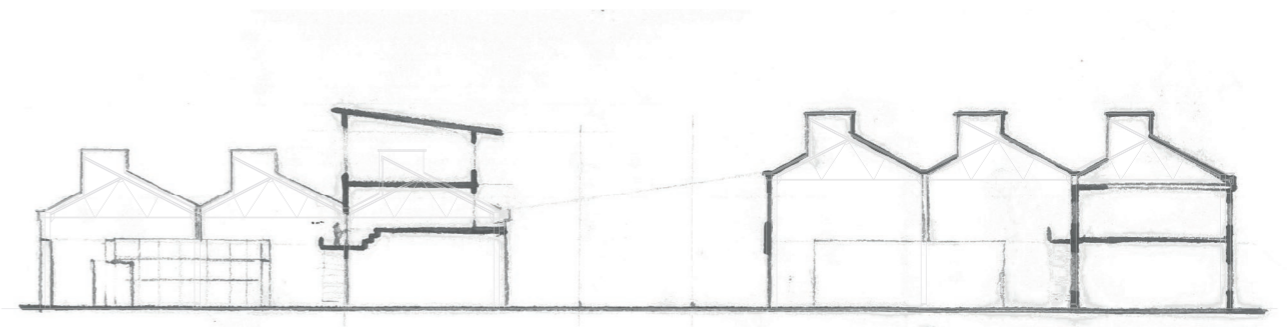
Compare some reference with similar programmes to see about necessities and facilities. For example: Education Centre T2 Campus, Genk, BE by Atelier Kempe Thill <https://atelierkempethill.com/projects/0167-education-centre-t2-campus/>

But also TU Delft model workshop at our own faculty!

Sawing the concrete building blocks in fragments and making a new wall is definitely doable and you need to search for a new aesthetic then. She has seen it once before, but forgot where.

"You say Jo Taillieu, I say Inge Vinck  
and Jan de Vylder."

~ Paul ~



Section, sketch 1:500

To discuss with Sam:

The plans and sections, the successional plan, the fragment.

Plan, some guiding principles:

- Working from the logic and potential of the existing halls
- Machineplein as the important centre where both halls come together.
- Immediately reintegration of leftover materials on site
- Profound curation of leftover materials from Antwerp
- Adequate storing system that's part of the architecture

Plan I presented to Paul + his feedback

Paul encouraged me to find the ratio behind interventions I will do in the existing. Clearing away time layers - without considering reuse or 'weiterbauen' - would be a shame. Build on with the existing structures.

Opening the left span of the high building is very good. This way I open up towards Machineplein. Make a U shape out of it.

Existing facades on archival photos very strong.

-> Walk through successional plan.

19: using existing structures towards the north to build the office in. Treating the rest as open field, with more sturdy development of ateliers at the side of Machineplein. Storage system that creates exhibition space and corridors in the rest of the plan (Huidenclub, Rotterdam).

17: open up left span to create big workshop space (reference Kempe Thill). Create conditioned zone in right span for programme that needs comfort.

-> How it looks in section (spatiality)

Section shows some similarity in the way the halls are now divided; open unconditioned space in the 2 left spans, conditioned space in the right span.

Fragment, key in showing how to deal with the complexity of the existing facade and how to build onto the existing structures, outgrow the current dimensions. Playful details and potential of leftover materials leading to safe and sound architecture.

### Feedback Sam

Sam made a lot of critical remarks. He did like the successional method of drawing plans, but suggested it would be more interesting to explore this in an architectural/builder kind of way instead of fitting in the programme. Functionally it seems to work, but how to get the most architectural quality out of the existing? Minimalize the effort, maximize the outcome.

The big halls are so qualitative/impressive, fitting in the programme with the exhibition spaces and storing system like that, seems like a compromise. Make use of those big volumes and don't cramp in too much.

Sure, the gutters and columns of the roof are a bit awkward, but that suits you. Looking at the stop motion of the fragment it seems to be in line with your approach, working your way around time layers by cutting in it. The roof, when replaced by polycarbonate for example, seems to have a lot of quality and could be a way more qualitative expo/working place. Why take away what's promising?

The lay out of 17 he was feeling a bit more. In 19 maybe build on top of the concrete block structures instead of

The situation seems to ask for the 1:100 work in progress model, so finishing the survey should be time well spent. The fragment will be easy, since there's enough interesting points to make a fragment of in

my project. The biggest task now is too elicit the architectural quality on the bigger scale and then make the small scale adjustments and repairs to unlock these qualities.

### Feedback Anèt

Anèt thought I was doing pretty well. We mainly discussed the weird characteristics of hall 19 and the way I'd plan to insulate. I'd have a look at Frenger plafond. She did say that insulating inside the concrete blocks would work and we also discussed the way the thruss connects to the brick. Since the penant is quite deep, I won't have a lot of trouble with humidity coming into the construction.

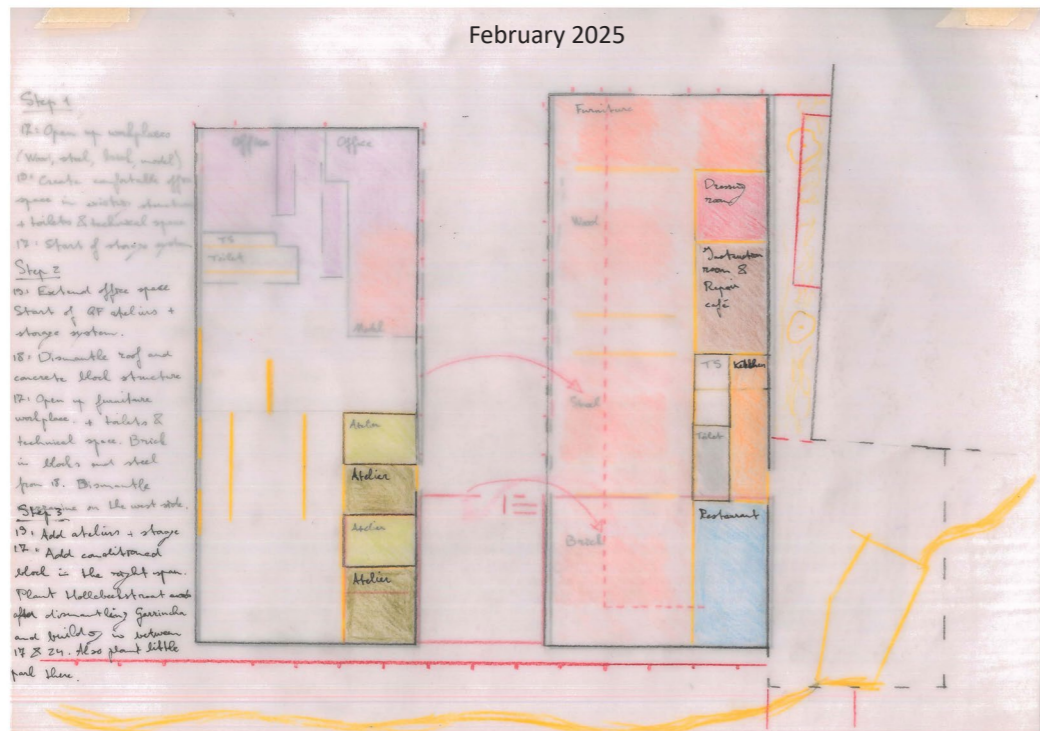


Successional plan phase 1, scale 1 : 333 (scaled to 1 : 1000)



Successional plan phase 1,2, scale 1 : 333 (scaled to 1 : 1000)

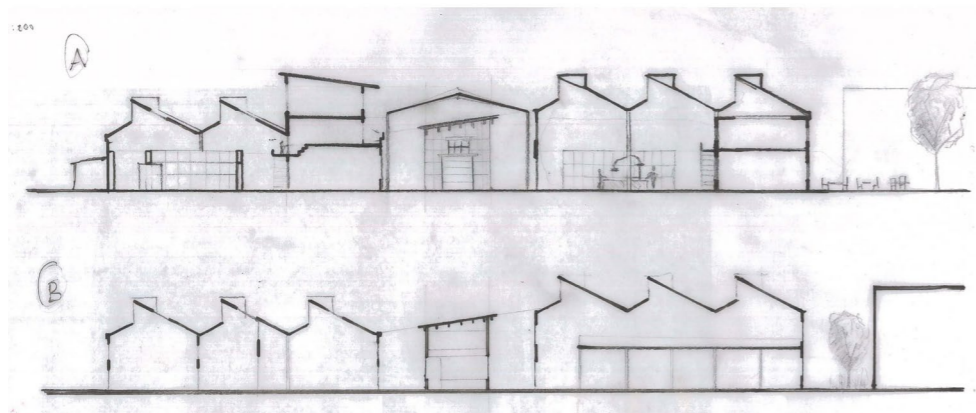
February 2025



Successional plan phase 1,2,3, scale 1 : 333 (scaled to 1 : 1000)



Successional plan phase 1,2,3,4, scale 1 : 333 (scaled to 1 : 1000)



Sections, scale 1 : 200 (scaled to 1 : 500)

Huidenclub - Atelier Thomas Dirrix





Research tutoring 4 March 2025

Catalogue proposal:

0. Introduction

Evoked interest by visiting Blikfabriek. The collection, curation and reconfiguration of leftover materials and its stories.

1. The routes of spolia

Focus on the network and reintegration of leftover materials.

Focus points

The origins of leftover materials

Reading leftover materials' patina, integrity and potential

Reconfiguration of leftover materials

References

"Reciprocal Landscapes", a book by Jane Hutton

"All this stuff came from somewhere", exhibition by WERKSTATT at "It's About Time", the 2022

International Architecture Biennial Rotterdam (quote from Kiel Moe in "Unless: The Seagram Building Construction Ecology")

Fieldwork

Opalis companies

Bruno Vermeersch, dormer window

Preliminary conclusions

Value of origins and authenticity

Patina alteration and material core

Story of the detail

Reuse craftsmanship and architecture of the improvisation (transform these titles into normal sentences)

2. The site as a material

The approach of a building/design site as a collection of material.

References

"As Found; Experiments in Preservation", a book by Sophie de Caigny et al.

"Ethics of Dust" an exhibition by Otero-Pailos Studio

Restauro course in Ferrara

Fieldwork

Various visits of the design location

Eco cathedrale

Products

Fragment

Survey

Preliminary conclusions

The as found has been, is and will be in movement => multi-layered heritage

3. The urban ecosystem

The relation between sites and spolia. What happens when they collide or when one transforms into the other?

Fieldwork

Bruno Vermeersch, harvesting at ING office

Rosie's school

Products

Masterplan

Fragment transformation (stop motion)

Preliminary conclusions

Sites throughout the city can both function as *sponge* and *sponsor*, depending on the site's *porosity* and the *volatility* of the materials on site.

Treating a demolition project as a digestion process of a dead body. With the right stakeholders coming in at the right time, to make optimal use of the available leftovers.

4. Reuse craftsmanship and architecture of the improvisation; a democratizing practice

Finally human agents come in. Reuse craftsmanship and architecture of the improvisation gets agents closer to materials (hypothesis) because it's:

- Immediate

- Accessible

- Transparent

- Readable

==> Minimal effort, maximum impact

Product?

Layered architecture as the backdrop for human life. No chaos, but reflecting resident's identity and history.

But: what do people like? Chaos of character or tidy and neat?

References

Bauhaus

Bruno's up-scaling ambitions

"Low-Tech", film by Adrien Bellay

Case study of own design: "The facades, the roof and the columns"

Departing from the inspiring situation in Blikfabriek, where leftover materials are transformed into gifts in the context of an historic industrial site, my research first followed the routes of spolia. I learned how 'authenticity' is used as a unique selling point by reuse companies and how the use of spolia can lead to new architecture by improvisation and reuse craftsmanship.

By approaching my design location as a material and reading the story of details on the facade and of the structure, I became aware how the as found has been, is and will be in movement. This leads to an understanding of our heritage as multi-layered.

Subsequently, bringing the insights about spolia and sites together, I've seen how sites throughout the city can both function as sponge and sponsor, depending on the site's porosity and the volatility of the materials on site. This invites for reading the city as an urban ecosystem.

The architecture of improvisation and its reuse craftsmanship is often immediate, transparent and readable (just like a fragment that cuts through the layers of a building that normally stay hidden).

When executed successfully these characteristics can communicate the role and potential of (leftover) building materials in the urban ecosystem to human agents. This is completely in line with the ambitions of our masterplan. How can the architecture of improvisation and its reuse craftsmanship become a democratizing practice on a larger scale?

In the suggested programme of my design (The Institute of Leftover Materials) I deliberately connect to the structure of Bauhaus 100 years ago - revaluing craftsmanship as a response to industrial standardisation. Reconfiguring leftover material is here posed as the new craftsmanship formulating answers to our current challenges. This craftsmanship of converting waste into gift should therefore be developed, both in a technical way (how to reconfigure with minimal effort and maximum outcome?), but also in a communicative way. How to involve human agents in the architecture of improvisation and reuse craftsmanship?

#### Feedback Eireen and Elsbetha

Eireen critically addressed whether my chapter structure wasn't simply a chronological depiction of my research steps. In the argumentation that she was partly right, but that it was a bit more, I explained the content of the different steps.

1. Spolia is not really an adequate word, since it has a more specific connotation due to discussions in the last five years. Better to use leftover materials.

3. Porosity is also a problematic term, since it's so strongly attached to biology. Better to use affordance (Gibson)?

4. The idea of designing the curriculum for my new school is really good. It cleverly connects research and design. The curriculum should reflect how I interpret the findings from the fieldwork and previous research.

Main question: what's relevant knowledge/skills when designing with reused materials?

The RAVB is definitely a good source to know more about curriculum. How do they design their curriculum? Present my curriculum to Marcel.

Interesting question of provenance. It seems like I say it doesn't matter where it comes from.

Eireen liked the way I tried to use specific words, but also warned that sometimes these are not yet the right words.

Jane Hutton and Kiel Moe are the right ones to study, but maybe I end up throwing them overboard, disagreeing with their terms. Not the provenance of materials matters, but the fact that they were once waste and now reused. This points towards and educates the potential of waste material.

It could be nice to start with a manifest (dare to be radical) and then base the curriculum on this. Any thematisation of catalogue or logbook you can retrofit in the curriculum.

The catalogue could be a school catalogue, showing the institute, and then the curriculum would be the result of my research as an important part of that catalogue. Like the theoretical and conceptual background of the building.

Go to Lille As Found conference.

Elsbetha: check out the New European Bauhaus. For design maybe nice if all parts of the cycle are visible. Design should reflect this reuse mentality ofcourse.

"Maybe provenance doesn't matter and you throw Jane Hutton and Kiel Moe overboard."

~ Eireen ~

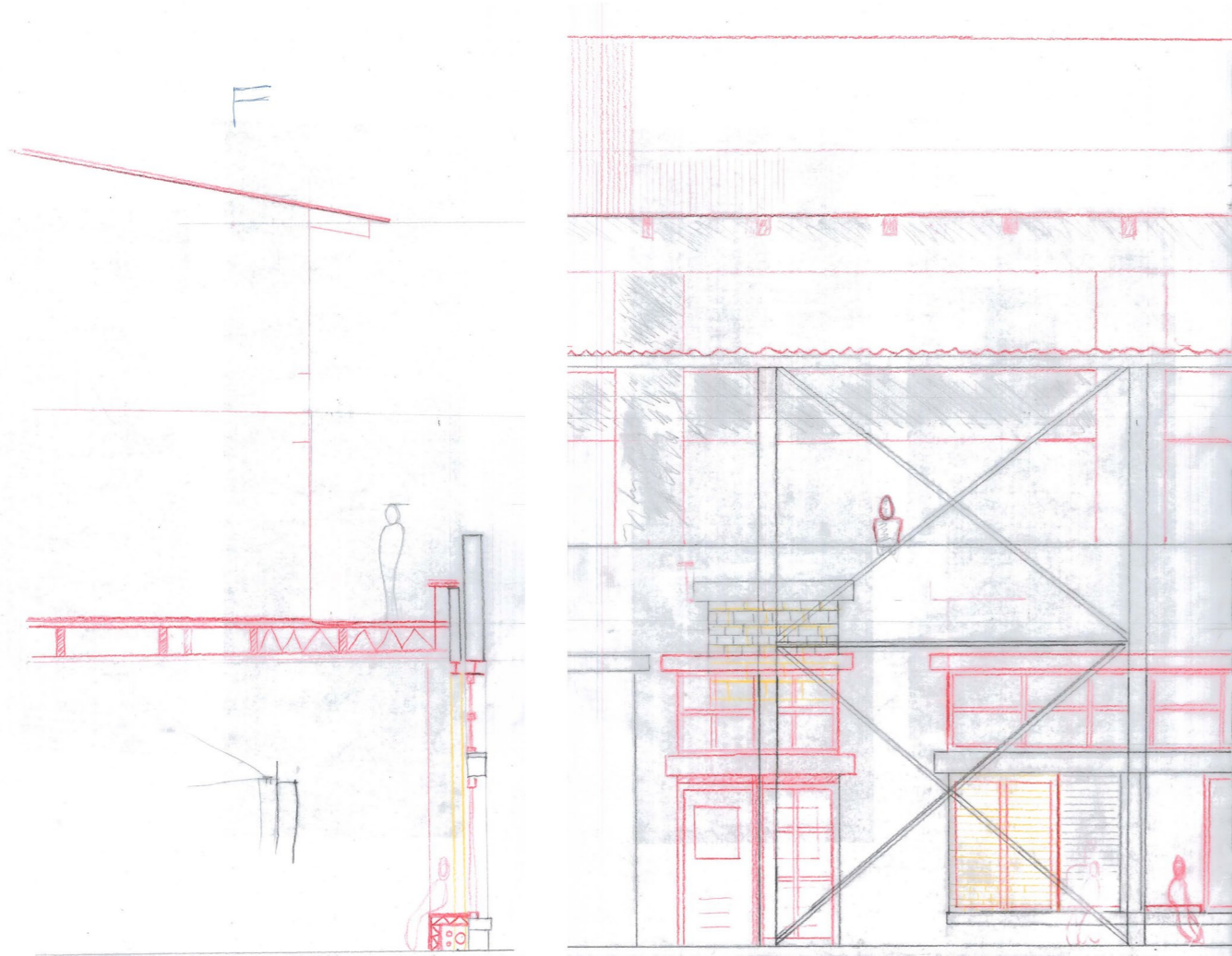
"It's nice how you build your own vocabulary, but be aware that sometimes you completely miss the mark."

~ Eireen ~

## Fragment tutoring 7 March 2025

Sam and Elzbieta were positive about the fragment location and the first sketches I did. They did see the value of going higher than the existing hall on that spot, also in relation to my research and P2 stop motion. To build onto all the existing time layers. Elzbieta compared it to a nice sweater, when you put patches on it to fill in the holes. These patches could be the leftover materials from the network! Sam talked about the thermal and the water line. It seems like the water line follows the new roofscape and the thermal line the two original halls. Elzbieta suggested it would be more logical to lift the thrusses and have the same roof, but then a little bit higher. For the higher storeys it makes sense to keep it as light as possible, maybe using steel as a frame, with lightweight biobased insulation and panels. Sam suggested to really explore this opening up and don't be afraid to sometimes exaggerate to stress certain peculiarities where time layers come together.

For next week it's okay to put focus on the development of the fragments, since this also informs your further plans and sections.



Fragment drawings 1:33 (scaled to 1:100)

## Design tutoring with Sam and Eireen 14 March 2025

This week I've been mainly working on the fragment and I made new - still quite abstract - plans and a section. To quickly update Eireen. In general, architecture of the improvisation, reuse craftsmanship, minimal effort, maximum impact, building on all time layers.

Treating two buildings very different, trying to build on their existing qualities and potency. The middle square as a central point in the plan.

The building as an accumulation of materials?

17: big, open, history of construction hall. Open up left span for big workshops and restaurant, foyer canteen.

19: fragmented, deconstructed, reconstructed. Different treatment of the roof: insulation, make transparent, outgrow.

"Apparently you don't have a lot of money and that seems to be your thing. But try to exceed all these innimini interventions and make a statement."

~ Eireen ~

**Feedback**

I got some radical feedback. Especially from Eireen, who's very good, but not completely informed about the location. This became clear with the light question, but still it was super informing. The fragment is a really good choice, because it encapsulates a lot of interesting aspects. They both really seem to like the move of lifting the roof, but they advocate of treating it as a bigger gesture instead of the small interventions I suggest. "You don't have a lot of money, that seems your thing, but don't be acting too subtle inniminy."

The place where the roof of 19 and 18 come together is very interesting. It probably should be closed (inside), but unconditioned. Centre Pompidou. Here you should exemplify the seriousness of the playfulness. The key concepts like water proofing and insulation in your project, while working from improvisation, that's very very interesting. Lewerentz showing the water through the gutter. 'Fixing the gutter'. Maybe the roof should be higher. The quality of looking onto the square from the gallery (and maybe also from the ateliers) is high, that you can try to hold onto.

Ateliers without light (and vision) is impossible. You need storage, huge quantities in fact. Give this a place in your plan. And consider this with the light you have. The big blind wall towards the gardens of the neighbour has a big potency of throwing materials at. Eireen said I should treat the whole ground floor as material storage, but Sam agreed that I could retain some ateliers at places where there's light and vision, such as the square and at Materiaalstraat I think.

Eireen: "Apart from the improvisation, you also seem to like the construction of the existing. Then respect it's qualities and also the defects of it."

"Respect the qualities and the defects of the existing construction."

~ Eireen ~

Moving up the right and the middle, maybe even two floors, to create all the ateliers and space you want, but leave the ground floor untouched.  
 I said I wanted to reuse the materials on site for the vertical extensions, but both Eireen and Sam seemed to think it would be wiser to acknowledge the network and take the materials from Opalis. Steel needs to go away first anyways Eireen said, but that's not true! I could rework it in the workshops. But yes, I can still acknowledge the network maybe, since it's also hard to judge how many materials I have available.

Squabble up the office! Open the whole left and middle span for materials coming in. -> More storage space, office along Machineplein,

Also use Black, Yellow, Red in sections and plans.

“In a way, fixing the gutter is the symbolic starting point of your project.”

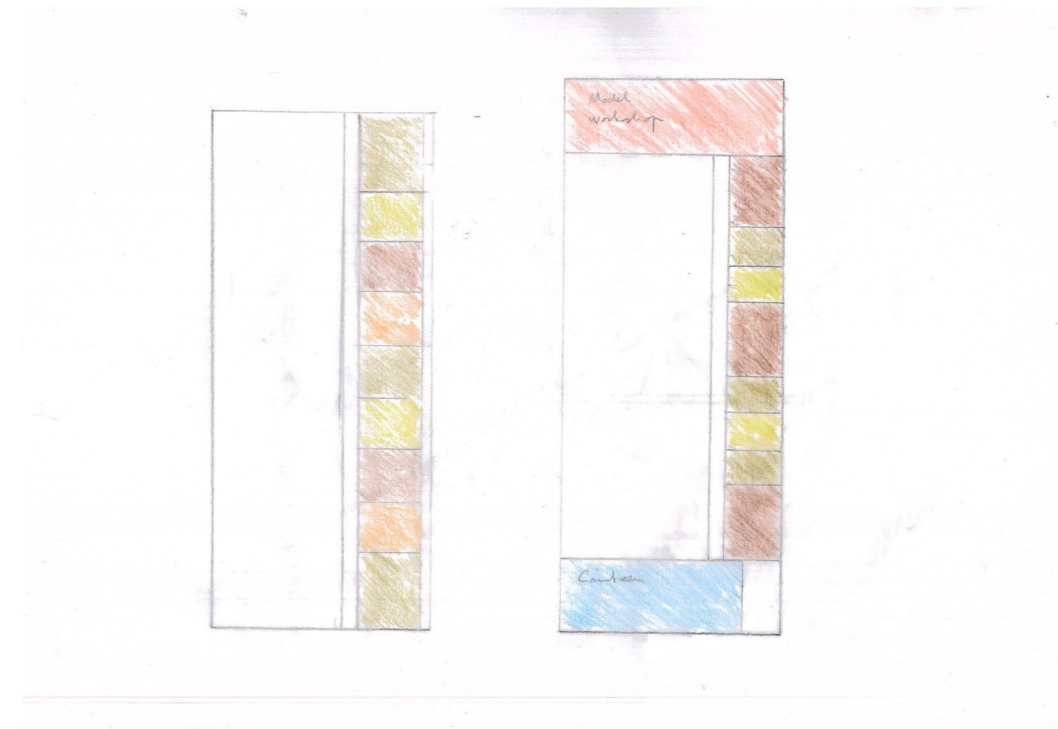
~ Sam ~

**Feedback Anèt**

Je moet staal inpakken als het niet op de bovenste verdieping is, maar met sprinklers moet het kunnen. Dak niet op elkaar aansluiten, want er moet dilatatie zijn. Maar je kan het zo om elkaar heen krullen. Ondanks dat het een water proof zone zijn, moeten je erkers wel lekdorpels hebben. Volgende week komt er een constructeur langs. Dan moet ik duidelijke tekeningen hebben! Maar het is oké om het fragment te gebruiken als hoofdonderdeel. Hoe isoleer je de stalen constructie tussen je geconditioneerd en ongeconditioneerde ruimte? Je kan de ramen ook wat naar voren plaatsen. De regengoot moet wel schoongemaakt kunnen worden.



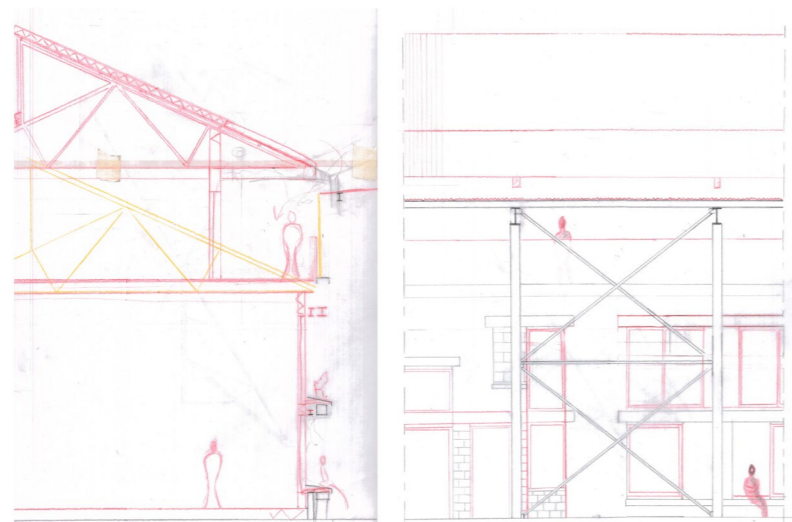
Ground floor plan, scale 1 : 333 (scaled to 1 : 1000)



1st floor plan, scale 1 : 333 (scaled to 1 : 1000)



Sections, scale 1 : 200 (scaled to 1 : 500)



Fragment, scale 1:33 (scaled to 1:200)



## Research tutoring 18 March 2025

**Curriculum of the Architecture School of Leftover Materials**

The curriculum should offer the relevant knowledge, attitude and skills for architectural reconfiguration with leftover materials. This is more than architectural design, but also comprehends the scouting, harvesting, transporting and converting of these materials. To be a capable reuse architect, the students need to be knowledgeable in all aspects of the reuse cycle. (Bruno et al.)

The reuse cycle

demolition site -> leftover material -> transportation -> storage/conversion -> building site -> building -> demolition site (design is encapsulated in all these phases)

Education type: hogeschool (first year students are 17/18 years old)

Five years, each year treats the whole cycle.

Build up of a year

0. Introductory lectures 'From waste to gift' all in line with the Manifest of Leftover Materials (speakers like Juliane Greb and Bruno Vermeersch)

1. Meeting the demolition site

1.a Collaborate with 'handlangers'

1.b Study the fragment

2. Preparing storage in the Institute of Leftover Materials and Hergebruikhaven

3. Collecting and curating on demolition site

4. Converting and storing in the Institute of Leftover Materials and Hergebruikhaven

5. Workshops for inspiration, open for the neighbourhood and residents of the project location (guest workshops like ...)

6. Joint pavilion

6.a Story of the detail

7. Design and taking part in the building of a project nearby (site of the Masterplan)

7.a Transfer the transparency

7.b Become an acting agent and interact

Content per year

Year 1: ~~the chair~~ / a market stall

Year 2: a dormer window

Year 3: tiny house

Year 4: addition to a factory hall

Year 5: new apartment building

(this buildup is in line with the succesional phases of the Masterplan)

Testing and presentation moments

During the presentation moments students communicate their findings, ideas and preliminary designs at the exchange points we formulated in our Masterplan. Tutors take a step back and make way for residents from the neighbourhood and other interested people from the city. The focus is on communication, instead of just visualisation. Through these moments and spaces, the Institute of Leftover Materials and its Architecture School of Leftover Materials opens up to its surrounding and tries to democratise the knowledge and projects. Making it part of the conversation in the neighbourhood and city, giving value to opinions of residents. Inviting for further collaboration.

Gesprekken voor curriculumontwikkeling?

Birgitte Louise Hansen

Bruno Vermeersch

Marcel Musch

**Manifest**

see Jazzy guideline for Reconfiguration

+

Demount in a logical order (precise harvesters first, bigger breakers later)

Read the detail: use clues from former joints and in the patina to derive information about structural capabilities. Not sure -> Overdimension

Study the fragment: make use of the informing sections during (de)construction

Design the principles, keep space for improvisation.

The city as an ecology, act as caretaker of the urban fabric

- Attention to the struggle points

- Divide fertile ground

Demolition site becomes the new excavation site and therefore also the main provenance we care about. We don't throw Jane Hutton and Kiel Moe overboard, but just don't go all the way back to the very first provenance. If that even exists. We study the place of origin that offers us the most important knowledge about the leftover materials we use and moreover: by seeing demolition site as provenance, we stimulate our waste to gift mentality.

**Feedback Eireen**

In the model hall, we had a good session about the curriculum I previously proposed. Eireen wrote a lot of advices down on my paper. Unfortunately, it's a few weeks later now that I write it down (13 April) so I don't remember it all.

First of all, she challenged the name of the school. Leftover materials doesn't do justice to the potency of the materials. Just like rest and waste materials it has a too negative connotation. Could it be the 'Reuse Cycle School'?

Divide the year in semesters and quarters, going from theme to theme, following the reuse cycle.

All quarters have a theory part and a practice part. How do these relate? Maybe some theory is semester wide, while the practice theme part stops after Q1 and in Q2 a new part starts.

Make sure that each year the complexity gets bigger.

Maybe introduce different tracks. Next to architect, also constructor and developer for example.

Three scales: small, medium, big. This could be the first three years. But then there's also different types, for example heritage or constructing on a plain site with reused materials. This could be electives.

All in all: visualise the ideas! Think in products. You already have a lot.

Paul encouraged me to stay closer to the existing. This wouldn't necessarily mean that the design can't be radical, it should just mean that the radicality should be derived from leads in the existing. My interest for composition is good, but better after a careful reading and interpretation of the existing. He talked a bit about rationality in Calbert's article in the most recent OASE. And how École des Beaux Arts combined rationalism with precise assessment. After having a look together at my survey of the existing, Paul offered me two possible locations for the tower (either on the left upper side or on the right upper side of hall 19). Hall 17 is an easy fill in exercise, hall 19 is a challenge. Tackle this challenge! Flipping the thrusses could indeed lead to a nice facade, but may not be the best option (maybe it is though). Don't kill your darlings, but develop them. The roofscape is an important aspect of hall 19.

Construction tutoring with Anèt and Julia

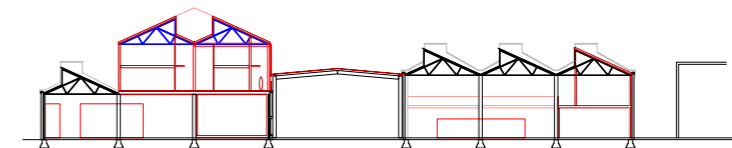
This tutoring was really nice, because I had a lot of drawings and therefore could really get certain ideas transferred and also examined by an expert. The idiosyncratic situation of hall 19 leads to extra foundation of the old grid, which I can use to put extra columns and therefore more realistically pose the proposal of adding layers. The wooden construction on top of the steel one, wasn't a problem at all and also the box I created inside the hall seemed realistic. Whether the concrete blocks have a lot of carrying force is a bit of a question though. If I use these walls in combination with extra columns on the old grid however, this will be strong enough.



Ground floor plan, scale 1 : 500 (scaled to 1 : 1000)



Ground floor plan black (existing), yellow (dismantled), red (added), scale 1 : 500 (scaled to 1 : 1000)



Section black (existing), blue (reconfigured), red (added), scale 1 : 200 (scaled to 1 : 1000)



28 March 2025

Gert Somers and Benjamin Groothuis were guest critics. I had two minutes to present. Maybe that turned out to be a bit too short. Gert and Benjamin seemed a bit confused about what was existing and what I added. Benjamin said he was a fan of poetic interpretations of the existing, but for him there seemed to be something subversive about my proposal, as if I did a bit too much effort. Gert seemed to agree, saying something about designing according to the qualities of the hall, not wanting to make it a nice space to live in, but using it as it once was. This reminded me a bit of what Eireen said.

“You’re the guy that needs the yellow.”

~ Benjamin Groothuis ~

Eireen however asked me to give Benjamin and Gert a tour. When we walked through my site, it turned out that both had misinterpreted my presentation. They were surprised by the roof of hall 18 and the layered buildup of the facades of hall 17 and 19. Now my proposal made more sense to them. Although Benjamin asked why I made the upper window wider. Intervening according to the constructional logic of the existing still seems to be a point of interest.

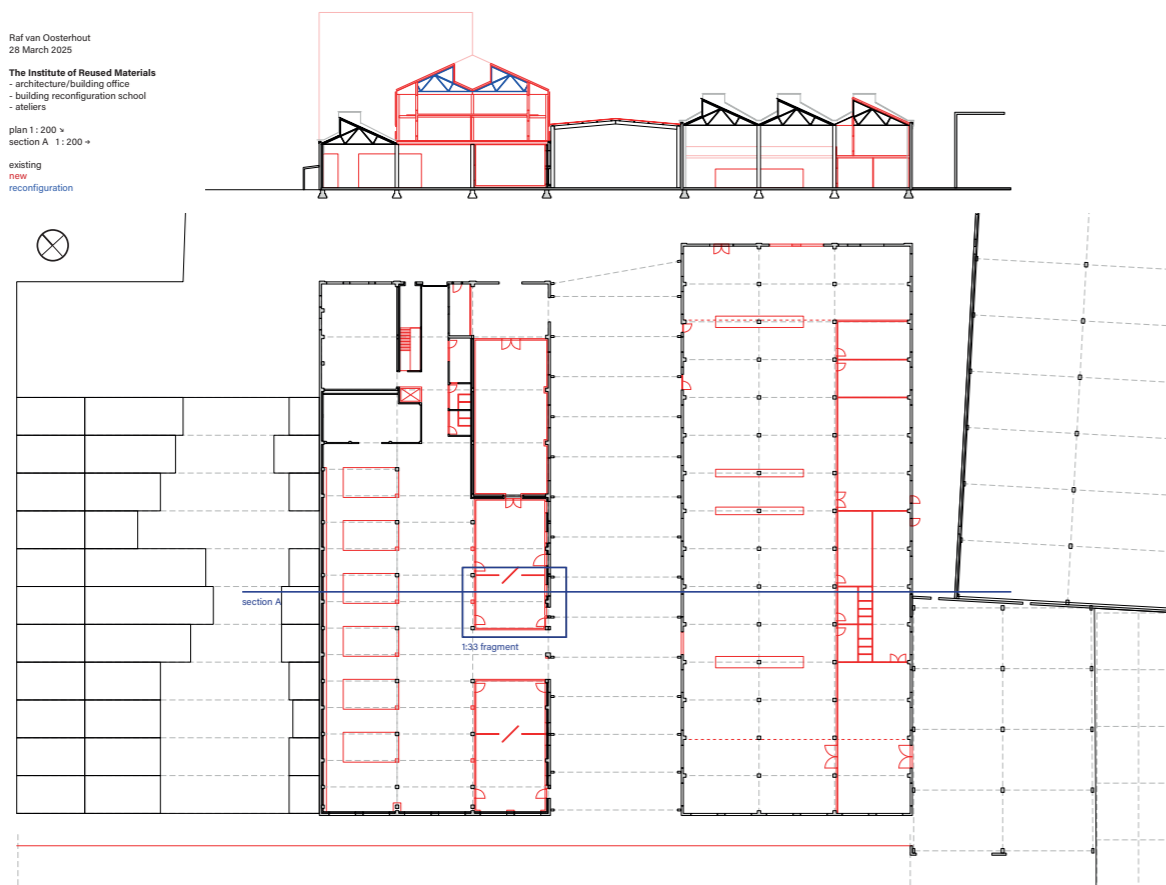
Eireen: nice model, it shows that you had fun building it. The design may have to become a bit simpler, less complex, instead of some designs of your peers.

Sam: I like the flipping of the truss you did. It’s an example of what I meant when we talked about smart improvisational reconfigurations on the scale of the building (not just the facade).

Anèt: beautiful model, with nice well thought implementation of construction and climate design. Make sure not to blend too much the different layers of Stewart Brand (facade and construction) and analyse the level of daylight in some rooms on first and ground floor.



Name Raf van Oosterhout  
 Date 28 March 2025  
 Project title **The Institute of Reused Materials**  
 Programme - architecture/building office  
 - building reconfiguration school  
 - ateliers  
 Drawings plan 1:200 v  
 section A 1:200 v  
 Legend existing  
 new  
 reconfiguration

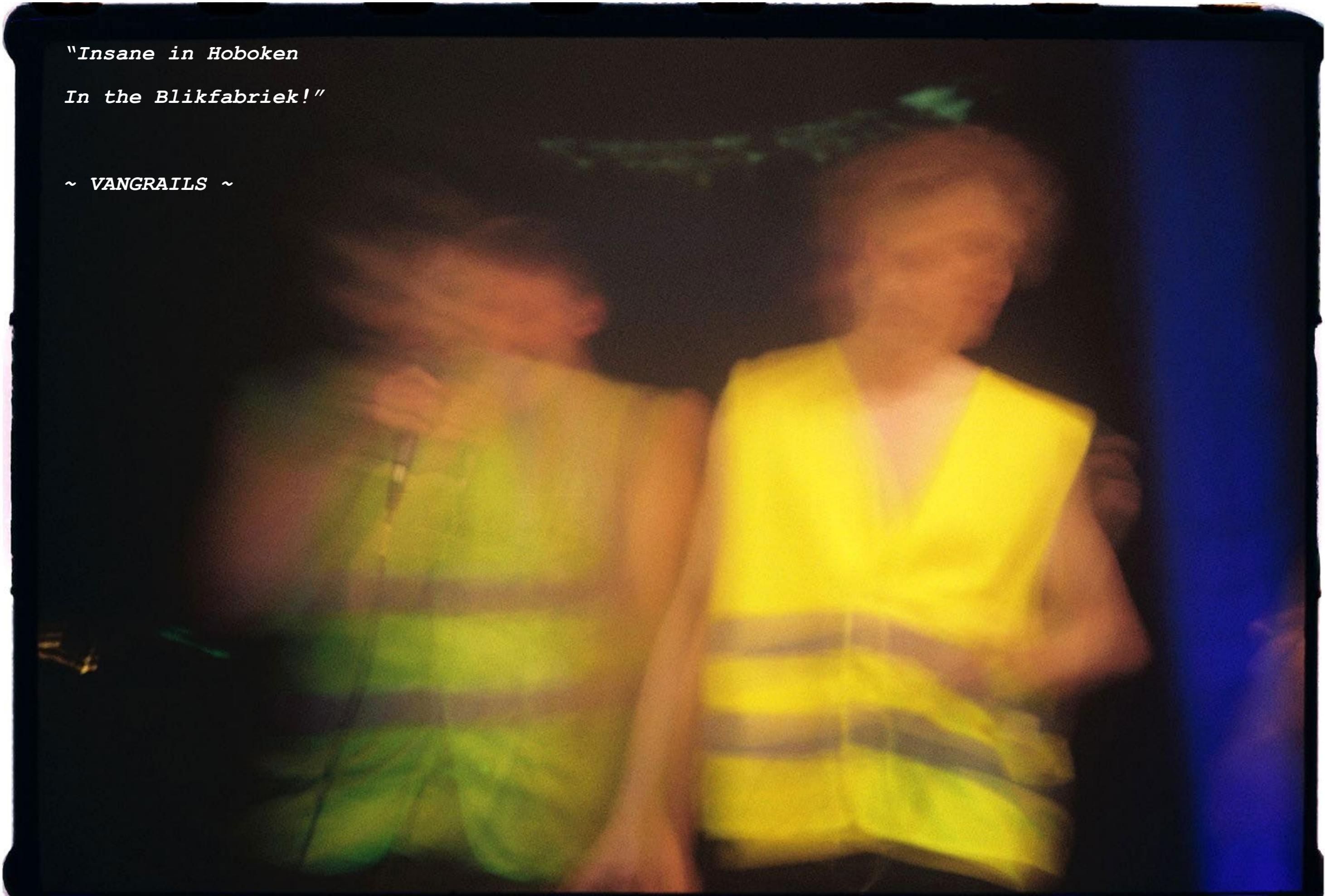


A1 poster for P3 with ground floor plan and section (20% of real size)

*"Insane in Hoboken*

*In the Blikfabriek!"*

*~ VANGRAILS ~*



Main points I'd like to discuss with Sam:

- P3, what did he like and what needs work?
- Paul's feedback, working more from the existing in hall 19 (not necessarily less radical)
- Volume study in 1:333 (finish walls of volumes in the morning)
- New plans (mainly first floor, but also additions on ground floor such as workplaces and water)
- New section

Small things:

- Positioning of stairs on ground floor
- Storage system
- Restacking bricks and/or concrete blocks on grid (maybe only for the short sides)
  - How to connect?

**Feedback Anèt**

Anèt seemed to have some trouble understanding exactly what I added and why. She stressed the importance of good drawings of the existing. I have that for the 1:100 plans and sections, but need to finish these on a 1:20 scale. For this I could use the location and drawings of the 1:33 fragment. We had a long argument about the connection of the columns to the vertical extensions. The problem stemmed from the wooden column under the floors. Those make it a bit unclear what the structural system is. To replace this column with a reconfigured steel column would make a lot of sense. Then use a steel UNP beam to connect the columns and put the wooden beam on it.

**Feedback Sam**

I had a tough time transferring my ideas and it feels like the project doesn't (yet) make a lot of sense. I also got weirdly specific at the wrong moments, which wasn't very good for the discussion. However, I have a lot of take aways to work on. For example:

- Circulation, what's the logic of it? A day in the life of a student/visitor/artist. What's the arrival moment? Maybe reimplement the little building in the middle as some kind of service desk. It's key to figure out circulation. It makes sense if you arrive in the middle of two buildings. Better not to make the restaurant part of this.

I need to find the logic to playfulness, but also: is there a simpler way to achieve what I'm trying to achieve? What am I trying to achieve? This is good to think about next week, also in relation to my curriculum:

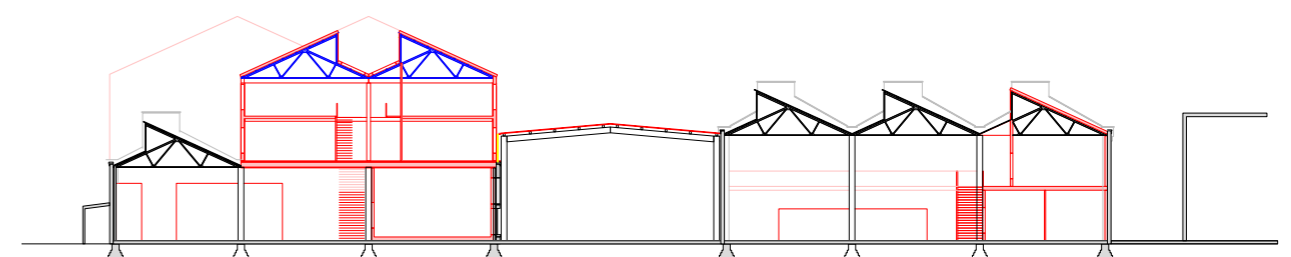
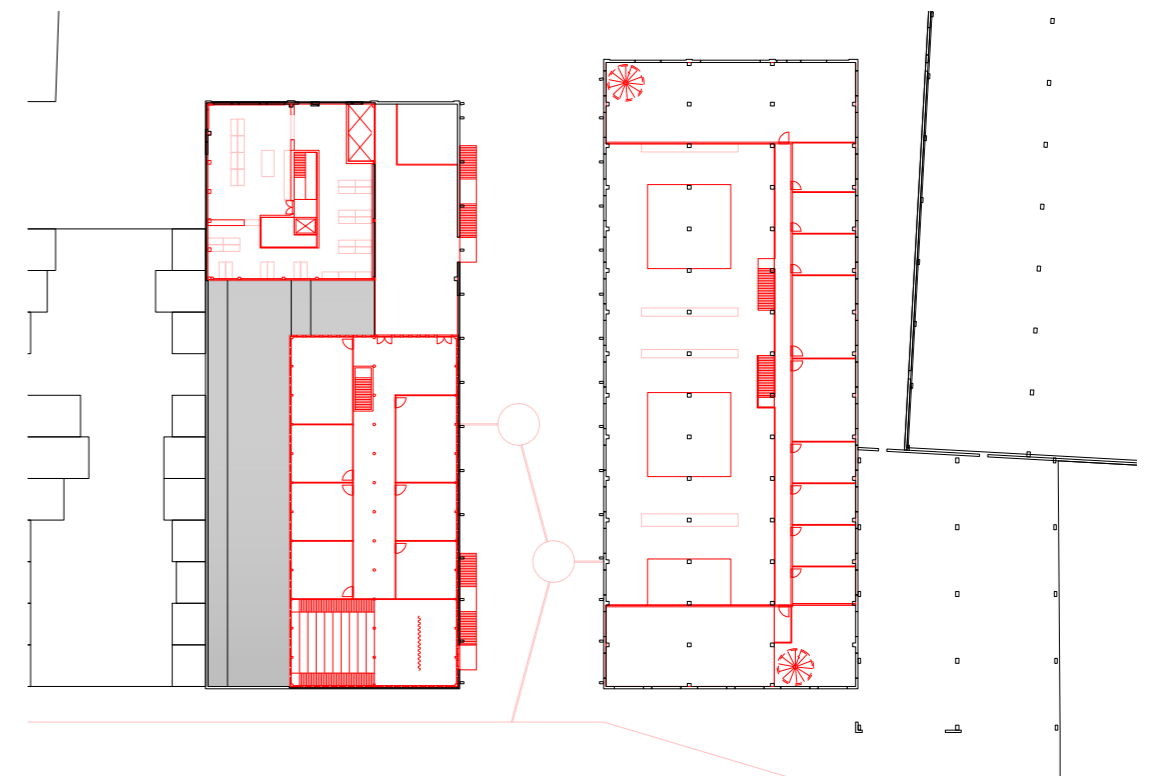
- Create nice lit atelier spaces above the industrial heritage
- Build on the layers of the existing
- Bring agents closer to materials
- Create a culture of care
- Facilitate reconfiguration

Sam opted to close of machine square. Public spaces are sometimes more public when you can close them of at night.

- Building onto the logic, but when is the awkwardness too much? It might not make sense to follow the same roofscape as with the other extension. Maybe it needs a simpler, smaller one. Just straight.

And do you really need two vertical extensions?

Sam also asked about the shifting of the thrusses. He did like it, but also noted that there were mixed opinions about it. Maybe it makes more sense to remove the top and bring in even more light. I was hesitant, but this could build even more on functionality and stuff. All in all it wasn't too bad, but I should just figure out the general circulation and my ambition with the building.



Na het herlezen van enkele manifesten, behandeld in MSc1, zag ik eens te meer de nauwe parallel met (de ambities van) Bauhaus. Ik besloot deze parallel te ontwikkelen. Dit doe ik door de woorden van Walter Gropius uit 1919 - manifest en programma - nauwgezet te analyseren en vervolgens te reconfigureren tot mijn manifest.

Ik gebruik een vergelijkbare kleurcodering als in mijn tekeningen: zwart = bestaand en blijvend, geel = bestaand maar gaat weg, rood = toevoeging, blauw = gereconfigureerd element (eigen toevoeging tov klassieke kleurcodering). Door deze kleuranalyse maak ik duidelijk welk gedachtegoed ik van Bauhaus overneem in mijn eigen school, wat niet strookt met mijn visie, wat ik toe wil voegen vanuit het onderzoek en wat door een herformulering op nieuwe wijze zijn plek vindt in mijn manifest/curriculum. De tekst als gebouw en transformatieopgave dus. Ook een manifest en curriculum ontstaan immers niet vanaf het onbeschreven blad.

“Do you like model making?”

~ Eireen ~

#### Feedback Eireen

In general Eireen was positive about the methodology of rewriting the Bauhaus manifest, approaching it as a transformation with the same colour coding. She was also critical and asked a lot of questions about among others the architectural element of the curriculum.

What's the exact difference with Bauhaus? Reuse cycle, not making new things. This should be visible in the manifest and curriculum. It already is a bit, for example the red in the chapter 'Divisions of Instructions' where I add the four quarters depicting the full reuse cycle. The amount of black, yellow, red and blue will elicit where it differs. Maybe it's enough to only show my remarks on the current manifesto and don't make an own one. But I responded how I see it and that also makes sense: having the full analysis in the logbook and showing in the catalogue:

1. The new manifesto on transparent paper with the Bauhaus one on the back of it.
2. The curriculum with on the left pages Walter Gropius' version with black, yellow, blue as: leave be, remove, rewrite. On the right pages my version with black, blue, red as: existing, rewritten, added.
3. The big ?

“For P4 just finish the logbook”

~ Eireen ~

The second part of our discussion was about the third part of the catalogue, or at least the representation of the architectural project. Explaining the school by the building. Eireen opposed the idea of the building as transformation case study, but encouraged me to document the building as functioning entity (so not an entity in the building phase). For example: a year in the life of the school. Depicting the different quarters and the parts in the building where this takes place. How to depict? In plans with stop motion, but then you can suffice with arrows. So in a model is better because way more spatial. 1:100 good to show the whole building as a functioning typology, 1:33 good for materiality. It's both needed. Eireen suggested to look together after P4 what's really needed for final P5 product

that ties it all together. She advised me to finish the logbook for P4, but leave the catalogue open ended, opening with manifest and curriculum and just show a start of the spatial translation through mandatory deliverables.

But the catalogue should transfer how the architecture looks! Maybe that's a second 'manifest'.

Explaining the essence of how the school is build in the existing situation. What do I add?

How do you build the Institute and how do you 'build' the Institute? What's the spatial translation of a programmatic idea? Maybe it works good to combine model photography with text?

Eireen's interpretation of the architectural essence:

- You take a factory as a school
- The basic building is a factory, the theory you build in
- The building spaces are rough materiality of factory, the theory spaces are peaceful soft wooden panels, looking onto the building spaces, situated next to or on top.
- Users move through the whole building and are constantly reminded of the interconnection between theory and practice, but also between demolition, storage, construction and maintenance.
- In the central hall, everything comes together?
- The architectural language can still be developed. What are blue collar parts (workers) and what are the white collar parts (business/academics)? And which zones are in the middle?

“Show the spatial translation of a programmatic idea. How do you build the institute and how do you 'build the institute?”

~ Eireen ~

Climate tutoring with Anne Struiksma 25 April 2025

Main points I'd like to discuss with Anne:

- Insulation, the facade build up when insulating on the inside (but also roof). Wooden timber frame construction against the concrete building blocks?
- Insulation, zoning
- Heating
- Cooling
- Electricity, solar panels?
- Ventilation, regular system C
- Ventilation of workshops, with ducts from cabins through space?
- Water reuse system

Feedback Anne

Anne didn't see a lot of problems and said Daan and me both already were on the good way. We had the discussion in Dutch:

HSB tegen de snelbouwstenen aan kan prima. Anne raadt wel aan om een dampremmende laag aan de binnenkant te plaatsen om te voorkomen dat de ecologische (niet biobased) isolatie vochtig wordt en blijft. Het is namelijk onduidelijk hoe open de snelbouwstenen zijn.

Zonwering is belangrijk! De zon warmt je gebouw enorm op en zal dat door klimaatverandering in groeiende mate gaan doen. Zeker voor plekken waar direct zonlicht niet per se nodig is (zoals klaslokalen) is het dus logisch om vaste zonwering te hebben, die de hoogste zon buitenhoudt. Dit kan ook een architectonisch 'mooi' element worden. [In mijn geval met golfplaten die gebogen worden of onder een hoek geplaatst worden tegen de gevel.]

Technisch kan van alles opgelost worden, maar focus erop dat het passieve systeem logisch is en op elkaar aansluit.

De herintrede van de plafondventilator, bijvoorbeeld om te zorgen dat de warme lucht die opstijgt weer naar beneden gaat. Mooi element in een grote ruimte. Het is bij scholen gebruikelijk om de verse lucht die toe wordt gevoerd in de lokalen, af te voeren via de gangen, zodat ook die onderdeel is van de luchtcirculatie.

Kanalen van zaagplekken naar technische ruimte kan prima.

Anne leek gefascineerd door het regenwateridee, maar zei wel dat grijs water dat je wil gebruiken voor het doorspoelen van toiletten (dus algemeen om drinkwater te besparen) niet in de open lucht en/of in de zon opgeslagen kan worden. Het moet geïsoleerd worden zodat er geen bacteriën in gaan groeien. Het opgeslagen water in een open bassin in de expohal kan dus niet hetzelfde water zijn waarmee je de toiletten doorspoelt, maar wel kan ik zeggen dat een deel van het water naar de toiletten gaat en het overschot naar de bassins wordt geleid om gebruikt te worden voor bij de werkplaatsen. Even afwegen of dit dan nog de kwaliteit heeft die ik voor ogen had.



A+BT tutoring 25 April 2025

Main points I'd like to discuss with Sam:

- Products, what's on the list and what can I skip/add? How to show the essence? = Building a school in a factory
- What models?
  - Remaking the fragment to show facade and corridor
  - 1:100 of entrance at Hollebeekstraat
  - 1:100 of vertical extension on office corner
  - 1:100 of entrance at Laadplein
  - 1:100 of staircase
  - 1:100 of face to face facades
  - 1:100 of everything?!
- Opening at the existing red door (drive through?)
- Going higher in the corner office part? Didn't do it yet because of foundation, but composition wise might be nice.
- Materialisation of this extension?
- Water system?

Small things:

- Library on second floor?
- Service point in corner?

Main points I'd like to discuss with Anèt:

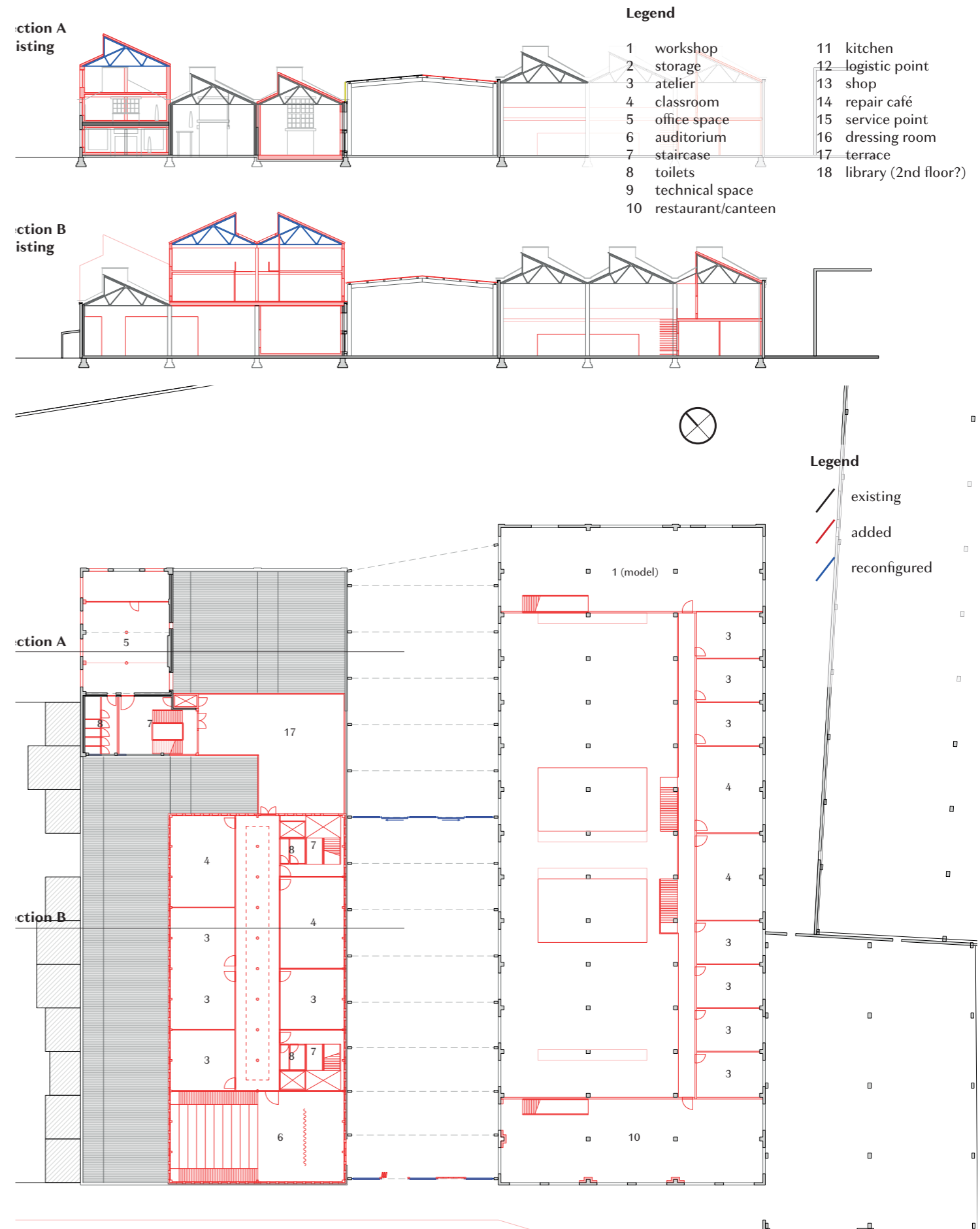
- Products, where to take the 1:5 details

**Feedback Sam**

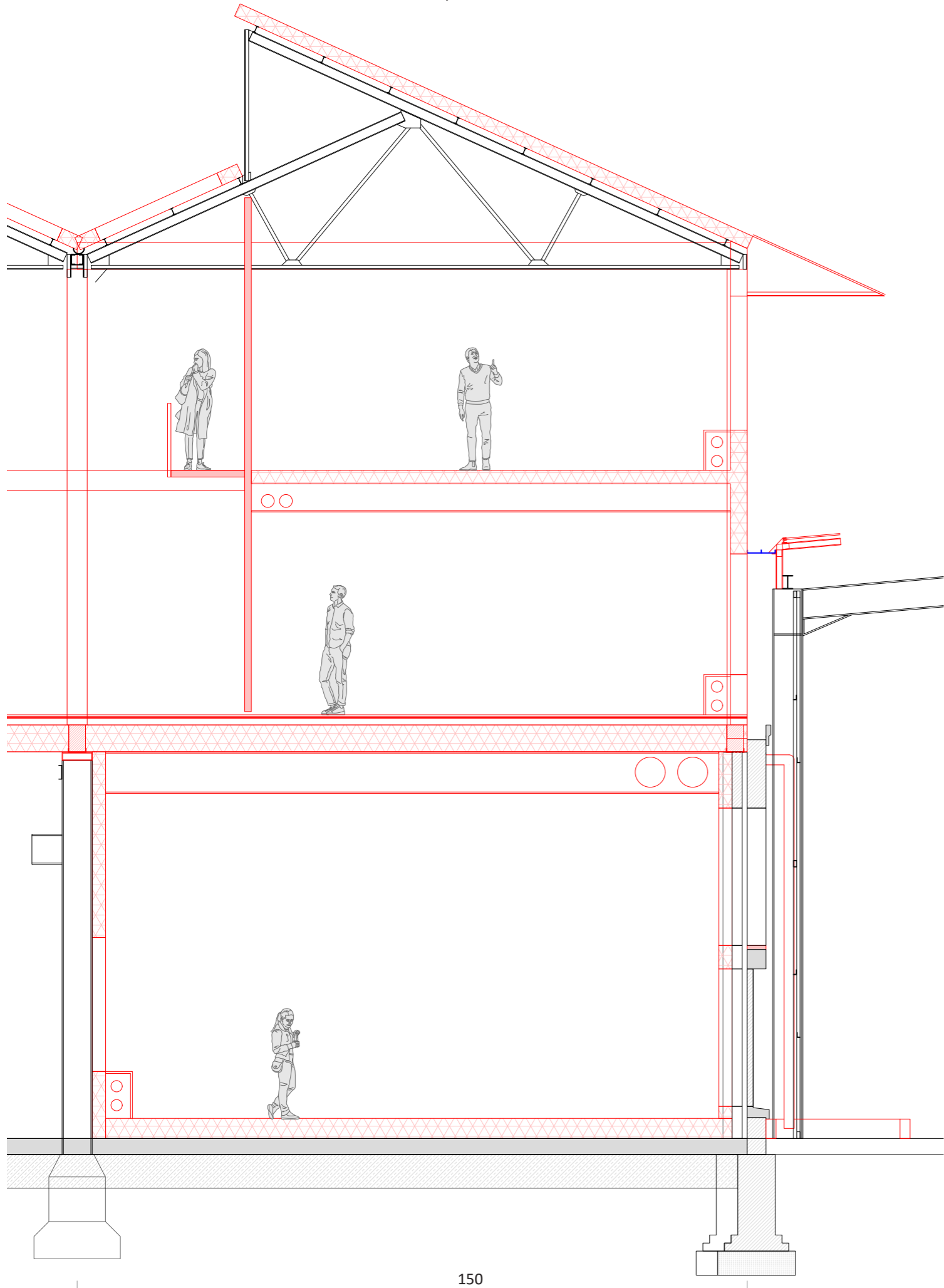
Sam was positive about my proceedings. The plan starts making a lot of sense and he encouraged me to dive into models and stop motion/film again. With this I could elicit what has to happen when. Treating the model as a set and performing the building phasing. I could start to see the construction methodology like a play again, a play about physical/material arrangements. It could really work out nice to already show some simple models with the P4 to show what the project is about. Rather leave the mandatory deliverables slightly simple to save time for the movie. With the models, I should be clever choosing the places and scales, the moments. A 1:100 of the whole building seems like too much

**Feedback Anèt**

Anèt was fanatically drawing on my 1:20 section, questioning bottom to top. In general, she said I was doing good and she really likes the section that I take, but she encouraged me to have the layers better represented in the 1:20 section of next week. Going from abstract to worked out. Then on that same 1:20 I choose the 1:5 details. Her comments:  
 The tiles under the concrete layer should be way thinner. Both when they are tiles (40-80mm) or stelcom plates. The lowered ceiling should be supported, + lamps and ventilator maybe. The profile not as a section. Replace the first flooring system with Kerto Ripa prefab, houten systeenvloer, lignatuur?  
 You'll need a crane anyway. Can you do tiles on the floor warming system? If yes, good to do, otherwise better not. What does the partition wall consist of? How do you acoustically insulate between the classrooms? With slightly thicker walls covering the thrusses and removing the I profiles in the other direction and replacing it with a stiff roofing system. Solve joint of the corridor. Roof glasses in the corridor smaller so people can walk onto the roof. Gutter reference! Needs to be better and bigger. Look up 'zakgoten' on the Detail page.

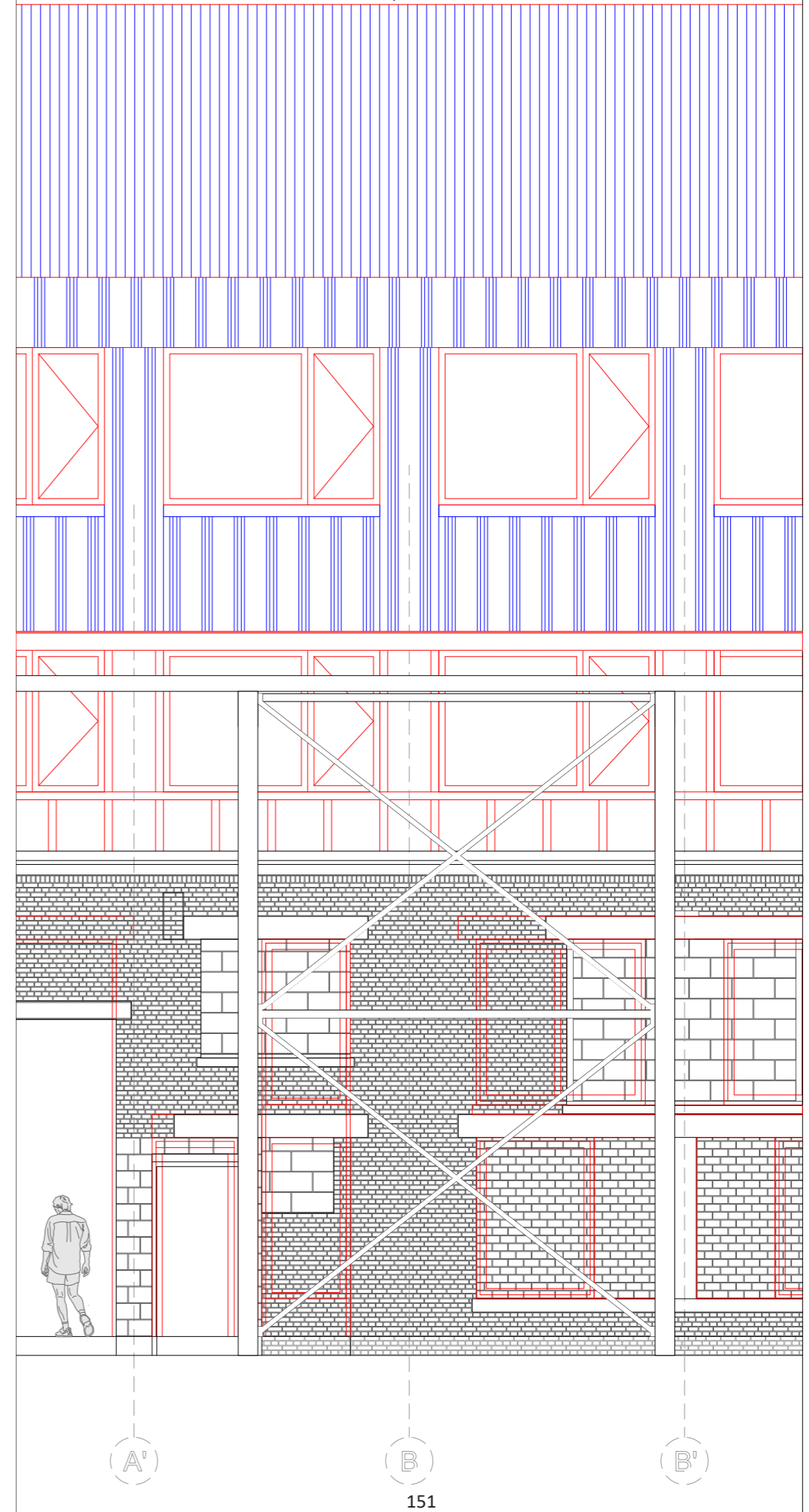


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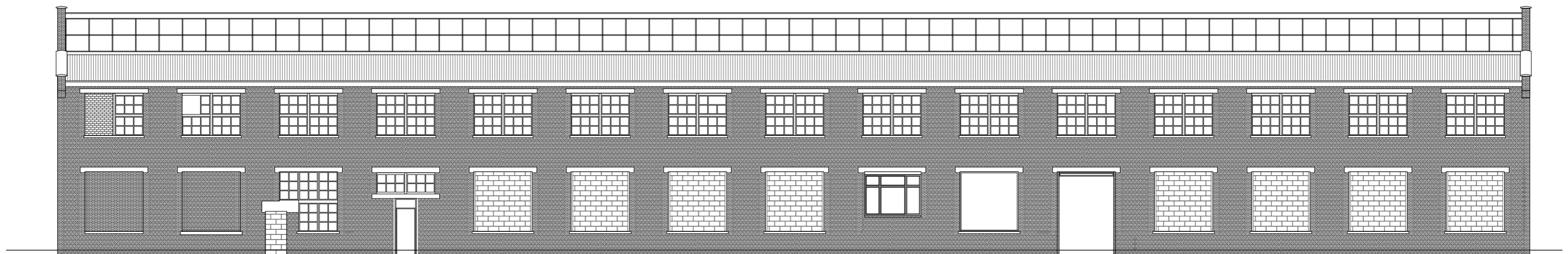
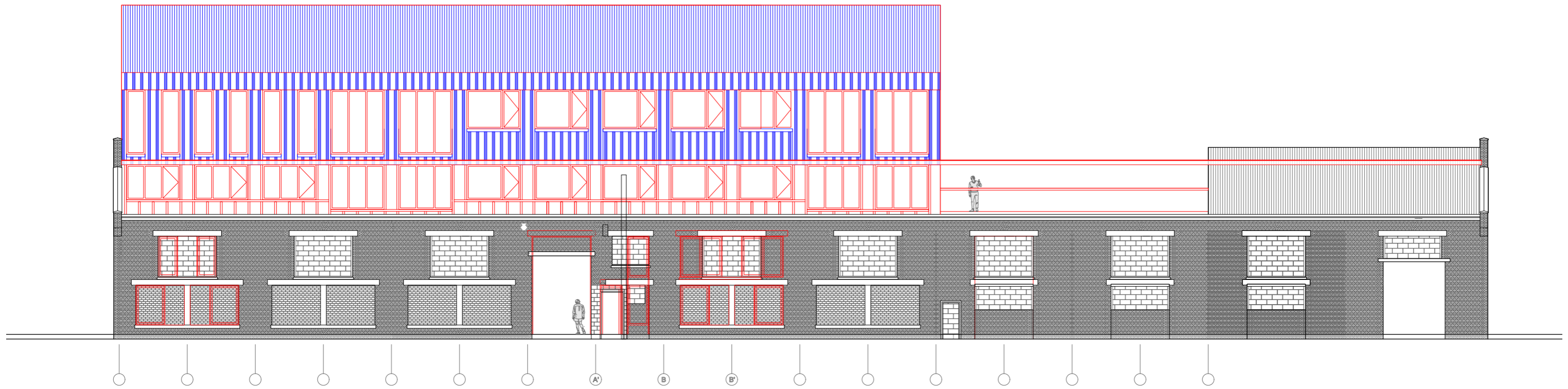


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April 2025



151



## A+BT and construction with Stijn Brancart tutoring 2 May 2025

Main points I'd like to discuss with Sam:

- Visualisation
- Section for 1:100 model
- Facades
  - Windows going higher in storage hall?
  - Doors at restaurant in construction hall?
  - Vertical windows at vertical extension?
  - Open facade higher at connection hall?
- How to draw a garage door?
- Water theatre

Main points I'd like to discuss with Anèt:

- 1:20 fragment
- Green house glass
- Gutter details
- Ventilation
- Connection/Assembly hall as warmth puller like the sun tower
- Visualisation of structure
- Technical space

Main points I'd like to discuss with Stijn:

- Disassembly thruss
- Green house glass on existing

#### Feedback Stijn

1:20 section looked good, but have a look at the timber elements that span the 3,5 metres. This needs to be a bit more, either more elements closer to each other or with clever timber joints. That could be a really good argument also reinforcing your point of working with leftover materials. (Maybe I could make some details showing how this works?) This could also help to not make the floor system too thick. I'm not using a wooden timber frame construction but a pole and beam construction with wooden timber frames as stabilising elements in between.

Nice story to reuse the greenhouse roof system, okay to presume that the structure is strong enough to carry those elements. Just like how it's okay to presume that the existing foundation under the old columns is enough to carry the two extra floors.

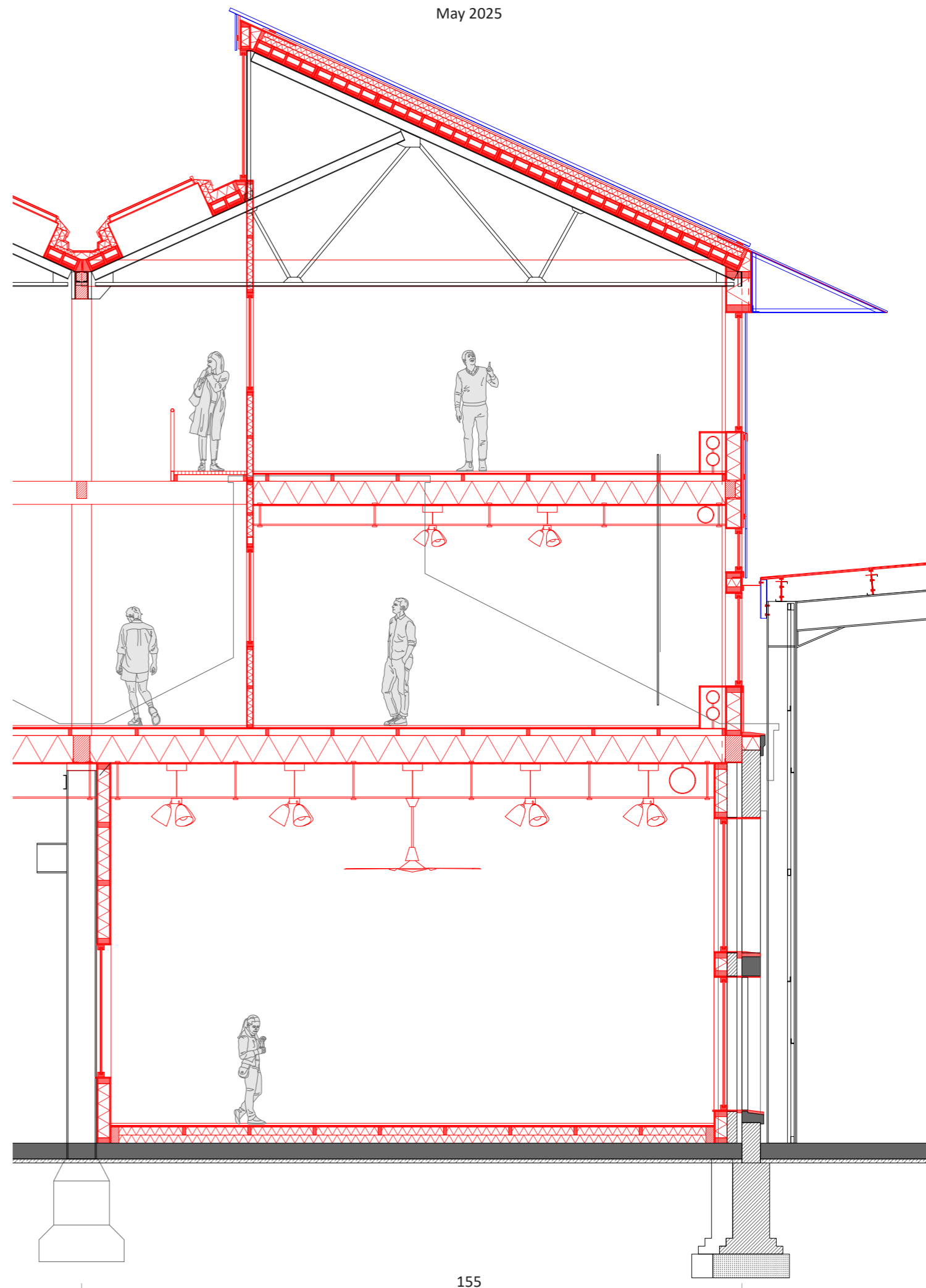
#### Feedback Sam

P4 should really show that your project is complete, combining research, design and building technology, but doesn't yet have to be finished in all aspects. The elevations evoked quite some discussion. It's almost Richard Meyer, Sam said about the assemblage hall. Don't you want to use reused products like doors and windows for your project? Then you should somehow show how you detail for improvisation. Tell the story of tolerance. It can be rough, but somehow show how you design for it. How you design for the materials that you stumbled into during fieldwork and research? Tolerance is a key theme that I should integrate.

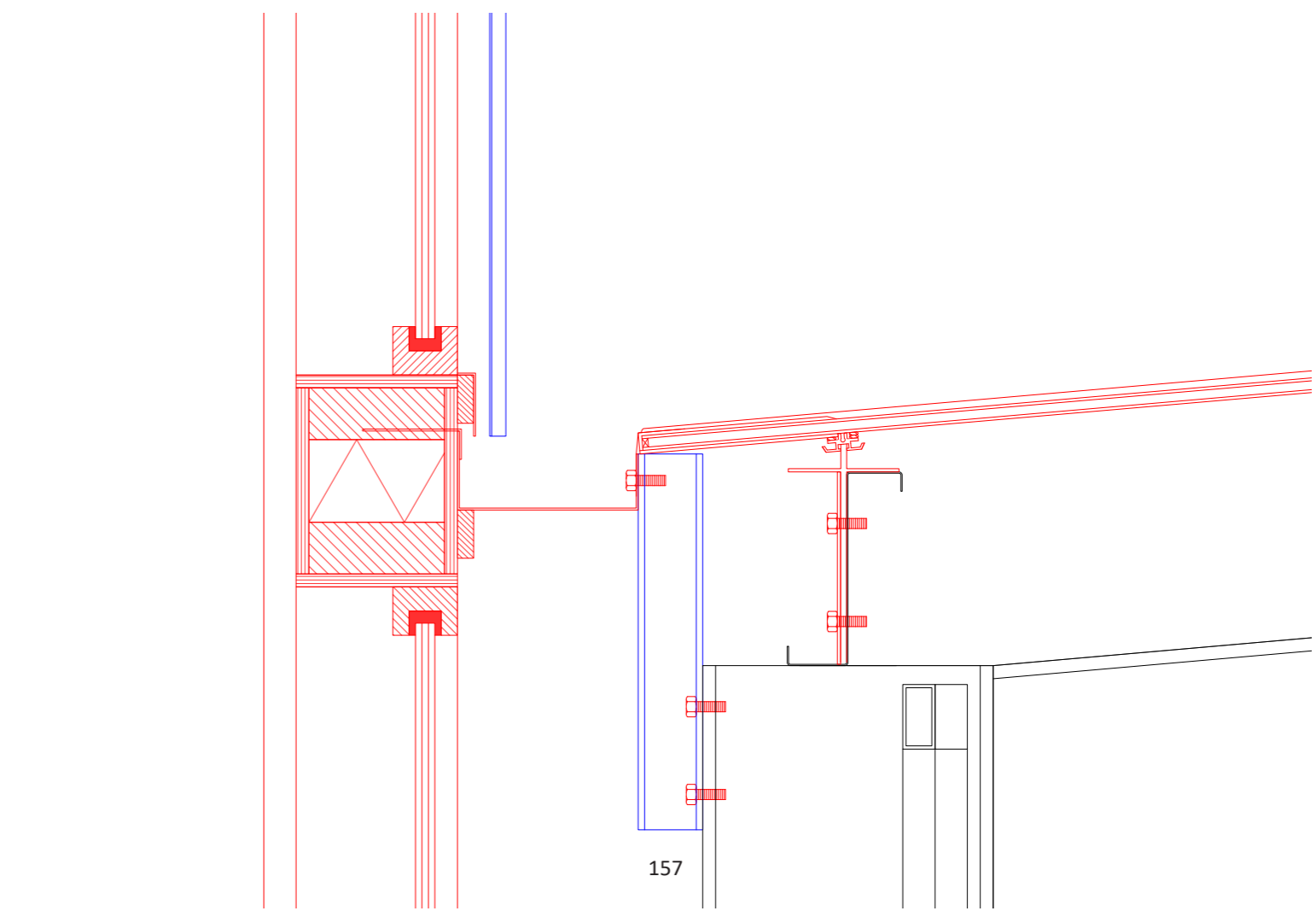
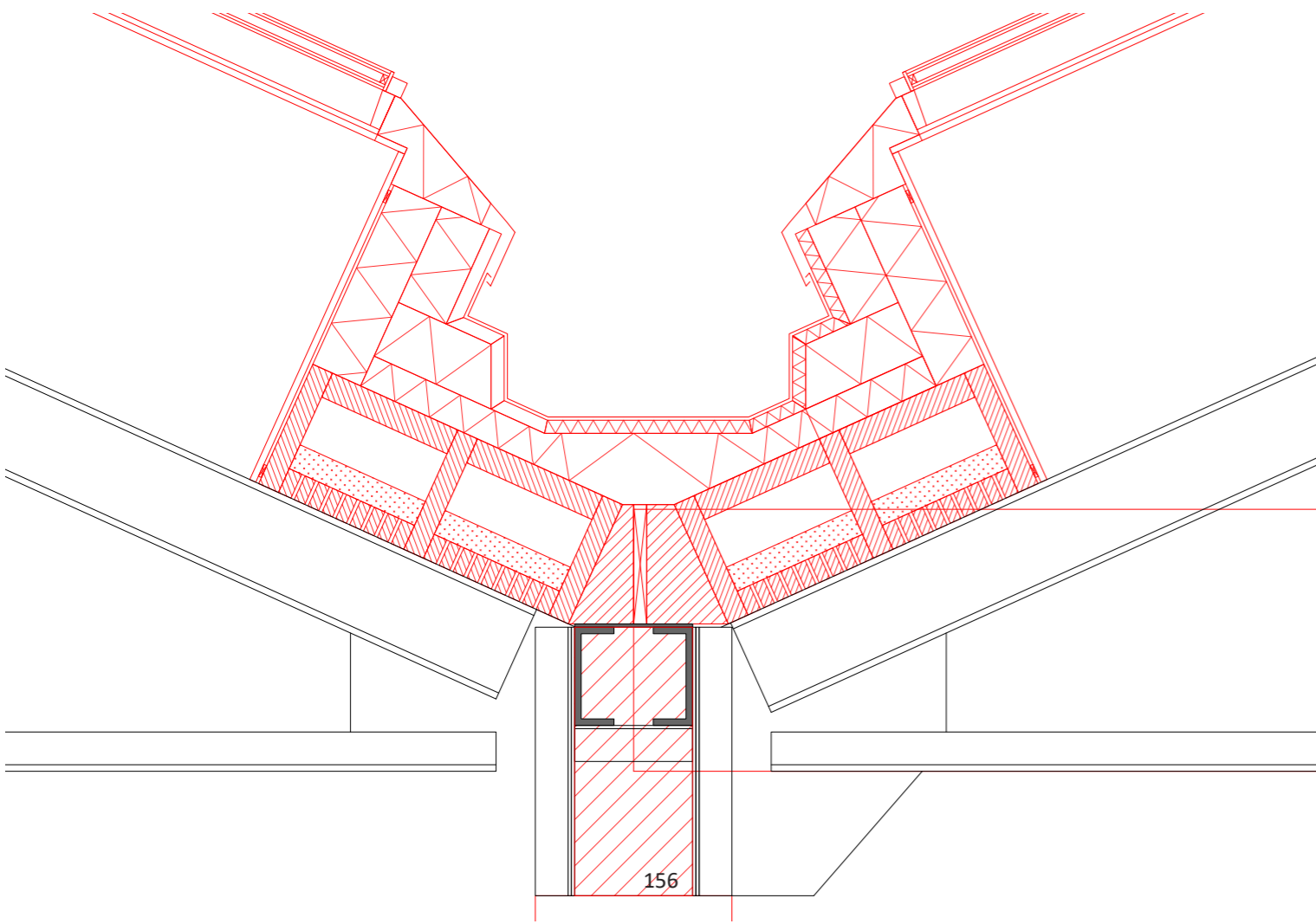
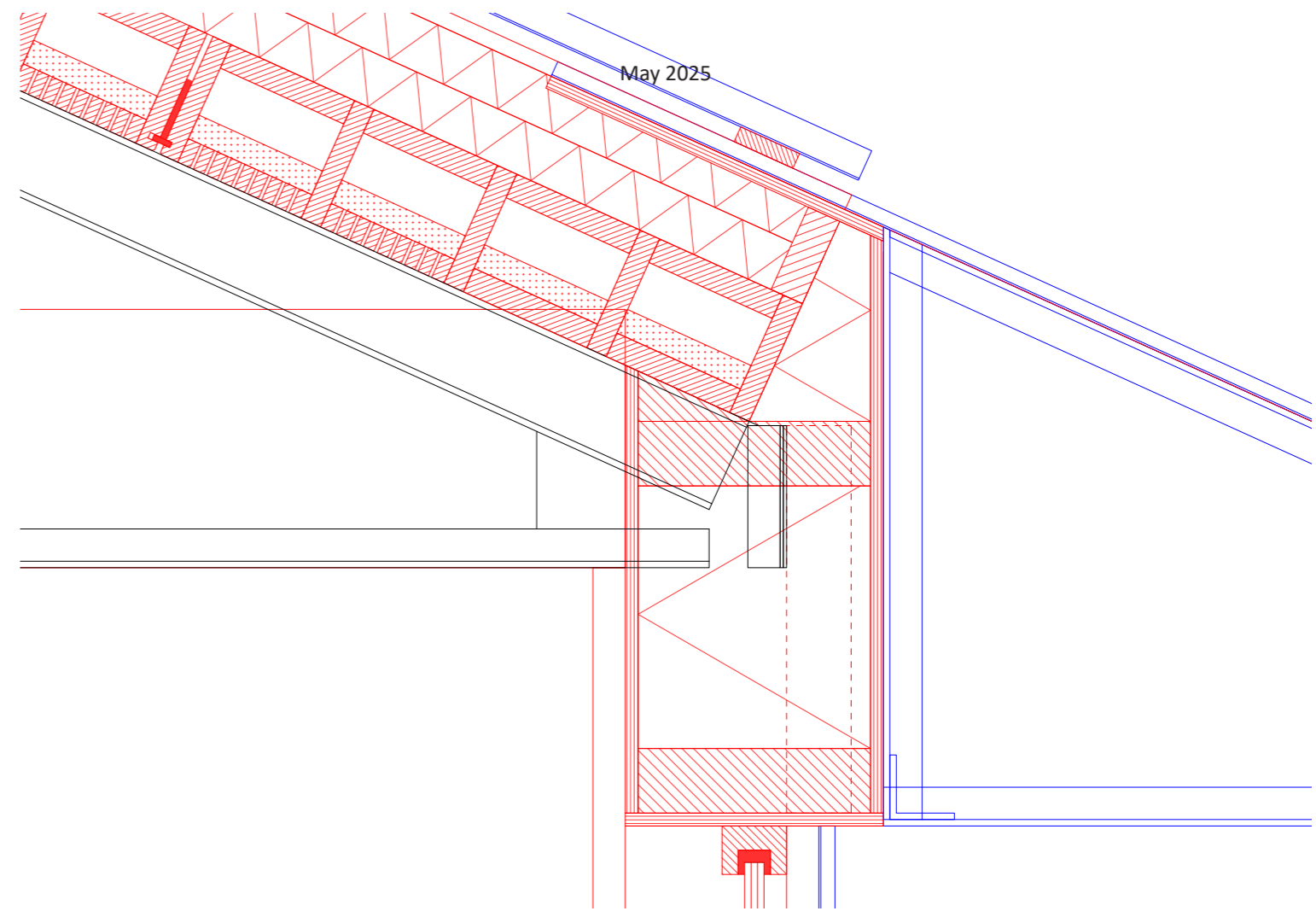
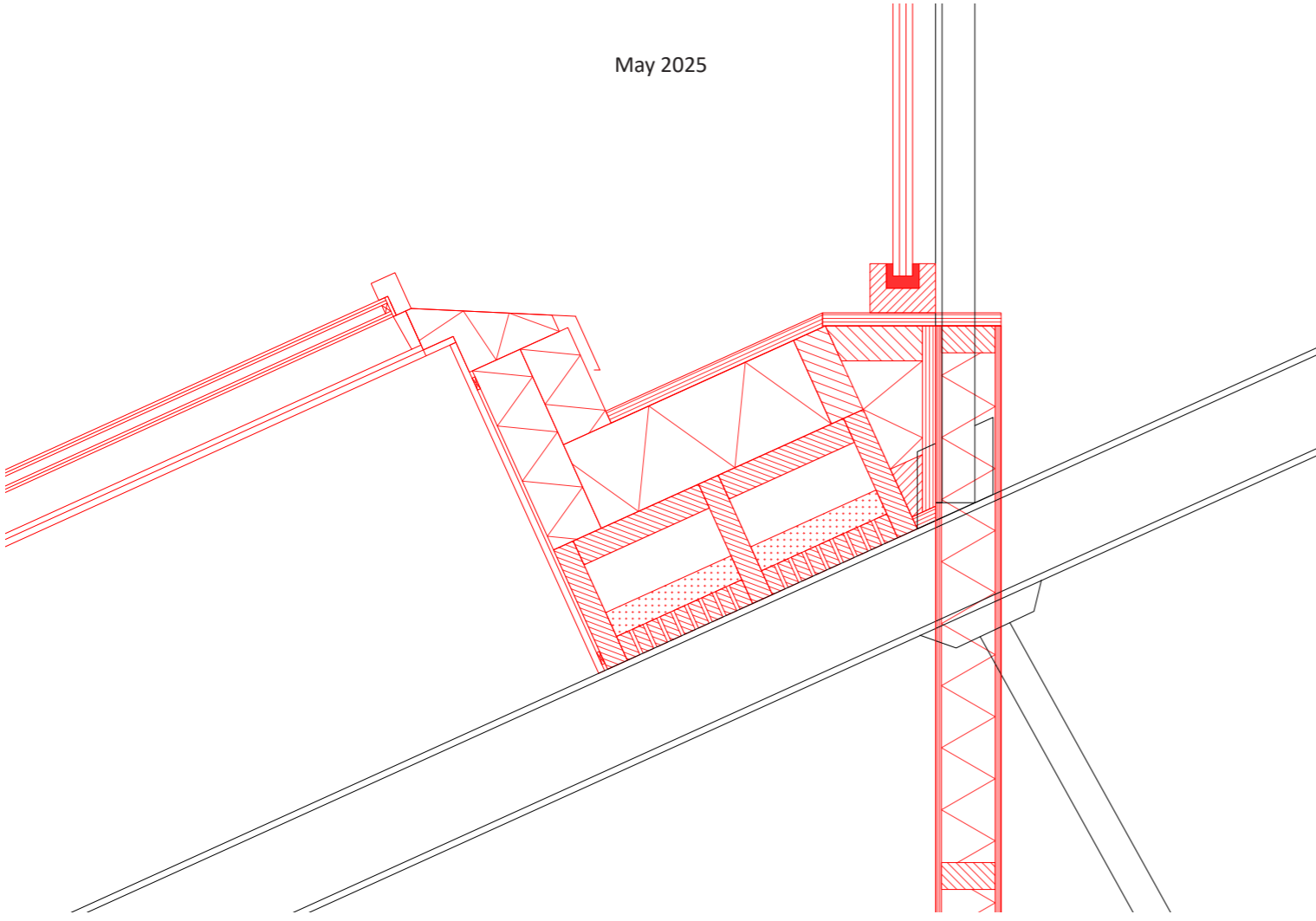
By closing of the water theatre you're privatising it a bit too much. Maybe make it open, a roofed piazza.

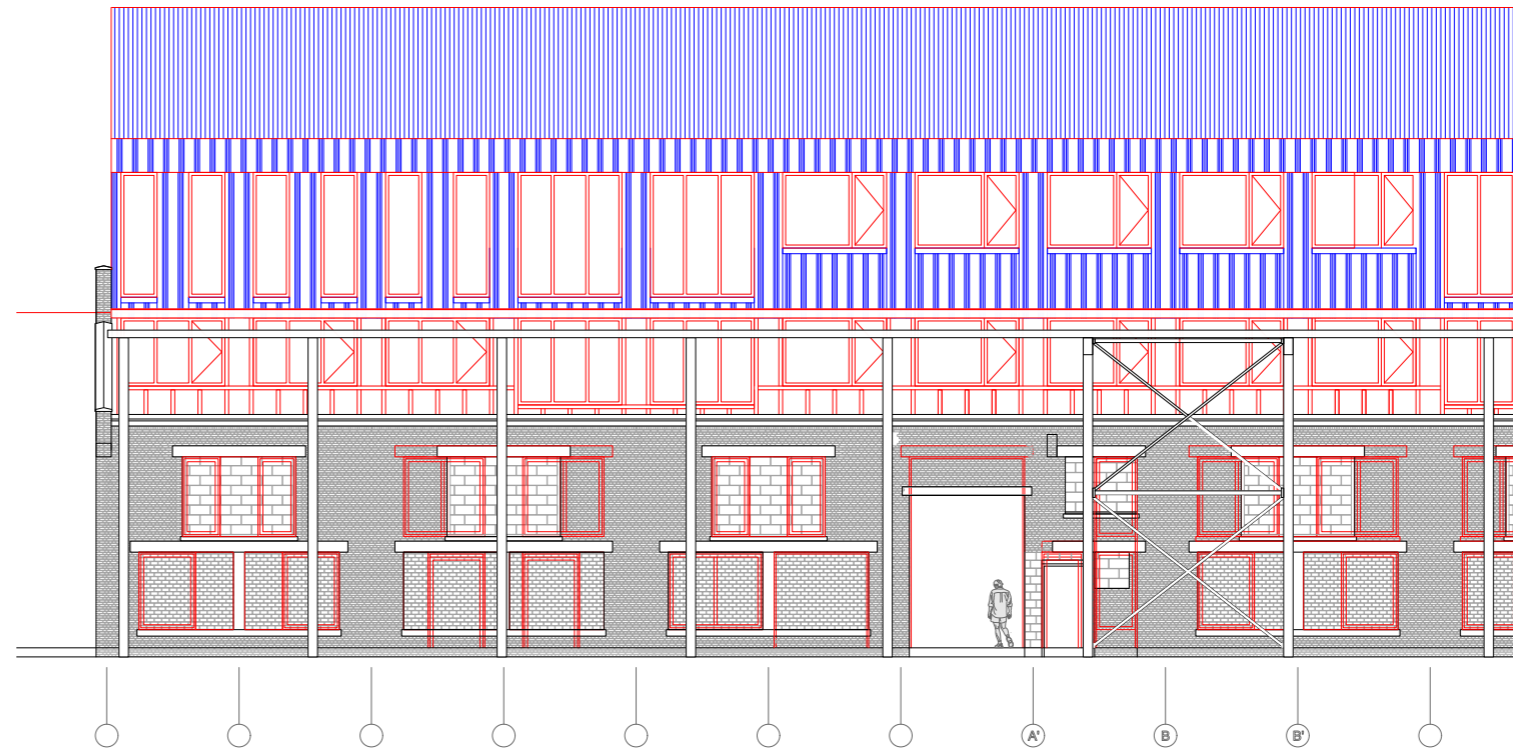
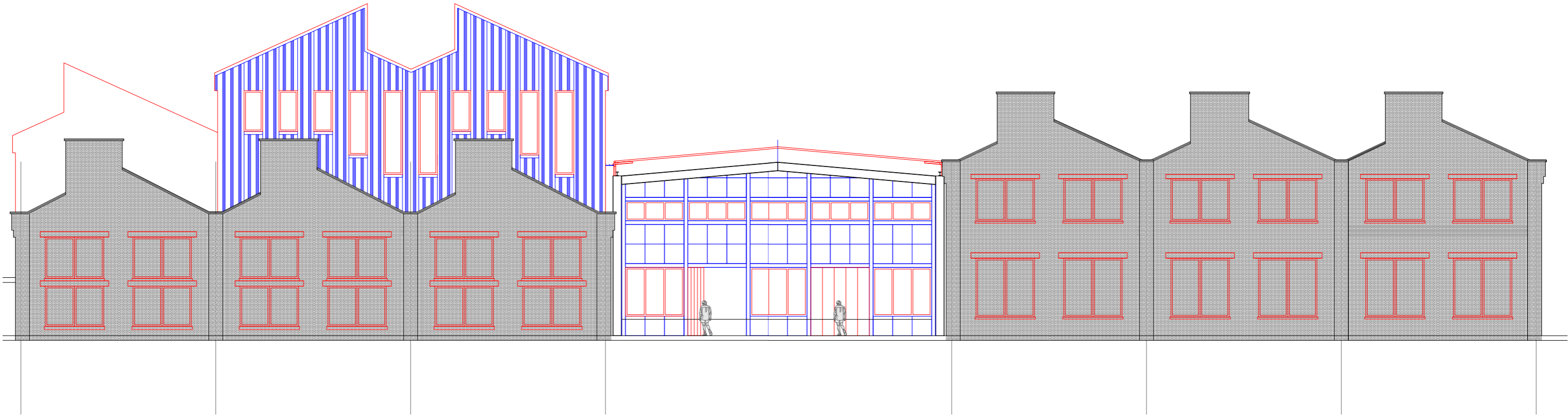
#### Feedback Anèt

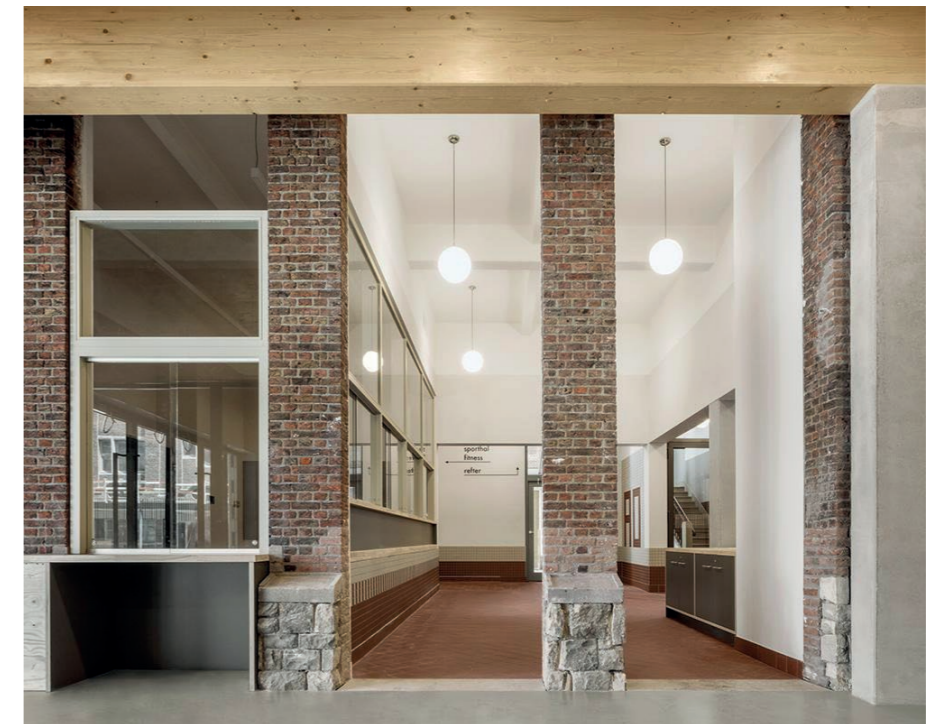
She drew a lot on my details. Thought I was very good on schedule. Said it was good that she had a lot to remark because it means there's a lot. Frames should be something to draw nicer for P4. That would be a shame not to have. Make gutter to storage hall so assemblage hall is independent. Foundation under assemblage hall? Draw stairs on greenhouse for maintenance.



May 2025







## Reflection 3 May 2025

My graduation project 'From Fixation to Leftover Reconfiguration' is about the collection, curation and reconfiguration of leftover materials in the world of building and architecture. Through a thorough research into the existing reuse network of Opalis and the practice of reuse architect and builder Bruno Vermeersch I learned about the importance of reuse craftsmanship when working with reused materials. If we want to build with what's available in our reuse network we steer towards an architecture of improvisation. At P2 I documented a small scale improvised intervention on my site through the method of stop motion.

'How do you scale up this improvisation?' and 'Which principles will set the rules for your improvisation?', were two questions my design tutor Sam Stalker posed after the presentation. This upscaling is necessary to seriously incorporate the reuse cycle into the profession of architecture, urbanism and building sciences. In the current age of extraction and discarding, reuse craftsmanship is underdeveloped. There's a knowledge gap when architects want to build with reused materials. This results in superficial reuse, which fails to play a considerable role in limiting CO2 emissions.

#### Herbouwhuis

To bridge this gap, as a programme for my project I proposed Herbouwhuis, a reuse institute consisting of an architectural/building office, a reuse cycle school and ateliers for individual artists and small artistic collectives. The project is located in the centre of our masterplan and connects the material flows in the west with the neighbourhood in the east. Herbouwhuis will develop knowledge of reuse craftsmanship. The building itself will be developed according to the principles of the school. The ambitions of the institute are somewhat similar to the ambitions of Bauhaus 100 years ago. It doesn't just celebrate craftsmanship over industrialisation, but pleads for reuse over production.

#### Research and design in constant dialogue

During the process of my graduation project, research and design pretty much merged together. My preliminary research conclusions resulted in Herbouwhuis' PvE for example and insecurities about design choices led me back to the research. To design a proper reuse cycle school, I decided it was necessary to also design the curriculum. By tackling both spatiality and theoretical content of the programme, the overall project grew stronger.

#### Approach, methods and methodology

There's a big contrast between improvisation and a large scale architectural project. Sometimes it almost seemed that the two were incompatible. The architectural heritage drawing technique of colour coding helped me to substantiate my method, showing clearly what's existing, what I take away, what I add and whether these additions are reused, reconfigured in situ or new. With head of the chair Paul Vermeulen I had an interesting conversation about time layers. 'Which time layers do you respect and which ones you take away?' He asked me. We concluded that it should be the goal to respect all time layers, even when this results in very complex design challenges.

Model making fulfilled a key role in the process until now. By making a model, we can bring the two dimensional and often digital ideas into a three dimensional reality. It offered me a convincing and informing way of getting closer to my main research and design object, the reused material. Looking back, I could've been more drastic in my approach, eliminating almost completely the digital 2D drawing and building the project in a scaled, but physical reality. In this respect, I could've been more courageous, but also the structure of our curriculum demands certain products that ask for a 2D CAD model. The curriculum in my reuse cycle school doesn't. My first hand graduation experience and actual process really much informed the design of my project's curriculum.

#### Positioning Herbouwhuis in society and academics

My project proposes a new coexistence of material and human agents. Very much in line with the



aim of the Urban Architecture Graduation studio 'Low Town Down Town', I try to normalise the 'from waste to gift'-mentality. This mentality should be considered on different scales. Together with two fellow students I made a 300.000 m<sup>2</sup> masterplan that functioned as a combination of a demolition contractor, a 'kringloop' and a recycling station. On the other hand, I investigated a fragment of 10 to 12 metres to see how reuse dynamics could lead to a useful intervention. Moreover, the reuse cycle school offers education for both architects, project managers and building contractors. Thus, the project is transdisciplinary and plays on multiple scales, showing the importance of a paradigm shift to a more holistic building profession. This way, hopefully, the reuse mentality becomes more common in society in general, bringing materials closer to agents and developing reuse craftsmanship, accessible for professionals and amateurs.

I did not yet address an important tension field in my project. A tension between academy and society. In general, a reuse cycle institute is somewhat symbolic. While the reuse cycle should be about holistic, democratic dynamics, an institute has an elite connotation to it. In my project I try to bring materials closer to agents, but I'm designing and presenting in the academic realm of TU Delft. Is it a bubble, a heterotopia? At least it's an environment that connects to a very specific part of society, not reaching many others. To tackle this schism, as a studio group we tried to connect to the people from Hoboken, the neighbourhood our designs are situated in. We did this by presenting our P3 on site in Blikfabriek, setting up a public exhibition that was accessible for free. Residents of the neighbourhoods visited the exhibition and saw our work in progress. Their feedback we could implement in the rest of our design process. In May of next year I'm presenting my project together with three other projects at a public event organised by the archive of Hoboken. Although these are just small gestures, I'm sure that this shifting from academic to urban context hugely enriches our projects and architectural urban understanding. Furthermore, it informs residents and other agents of spatial plans and ideas that might once have an influence on their personal life.

Just like the architecture of my project this process is very much about transparency. Showing what alterations materials undergo before reuse and showing what happens inside of the walls of a 'design institute'. I am convinced that transparency is key in shaping a qualitative urban landscape and I'm motivated to develop this democratic communication strategy in my professional life. In the coming weeks, I see a beautiful challenge to merge the research findings and design into transferable project results, with the P5 as an ultimate transfer moment where I communicate the projects to friends, family and colleagues. The past few months I found out how fieldwork and a careful investigation of existing qualities and dynamics can be very overwhelming. It has been hard sometimes to funnel these elements into a clear design. My plan for example, took a while before showing functional clarity, because I was too busy reacting to existing structures. Sometimes I had to kill my darlings, but moreover it's about spending time on communication. To make complex findings understandable for others, but mainly for yourself. Now I'm at a point that the building seems to make sense, a bit too much sense. How does the improvisation and unpredictable stock of reuse material make its way back into the project? I think to show this, I have to make things move again.

To conclude, I'd like to pose two reflection questions that relate to the content of my work.

1. To what extent is reuse a feasible future for large scale architecture projects?
2. How does reuse craftsmanship relate to the conventional skill set of an architect?



P4 presentation

Sam: It's a very good project, very urgent in today's architecture. We'd like to push you a bit, to bring all the potential to its maximum level. The main goal for P5 would be to develop what's there into a convincing architectural project. One that shows and transfers the aesthetics of reuse. There's some aspects of the current project that are, in this sense, underdeveloped. For example, the detailing of the trapezoidal sheet cladding. It's not so convincing that it follows the logic of the openings in masonry, pinching holes in it. [Actually it doesn't but I agree that I could develop playfulness in the logic of the trapezoidal sheet, just like Paul said.] Experimenting with perspective drawings from the street could be very helpful to decide the aesthetics of this cladding and the ensemble.

Eireen: Does provenance matter to you as an architect? Many colours, but maybe misleading architectural wise, because will you see this on the actual facade? Tony Fretton: "Your building (and facade) are a gift to the urban chamber(?)" You create the facades/contours of the urban landscape. Give yourself some freedom and think/design like an architect, the master of the project carrying this responsibility for the urban landscape. It's a very good project, because it evoked a lot of discussion.

Eireen loved the logbook and the quotes and said she would like a copy to show Leeke that logbook deserves some editing.

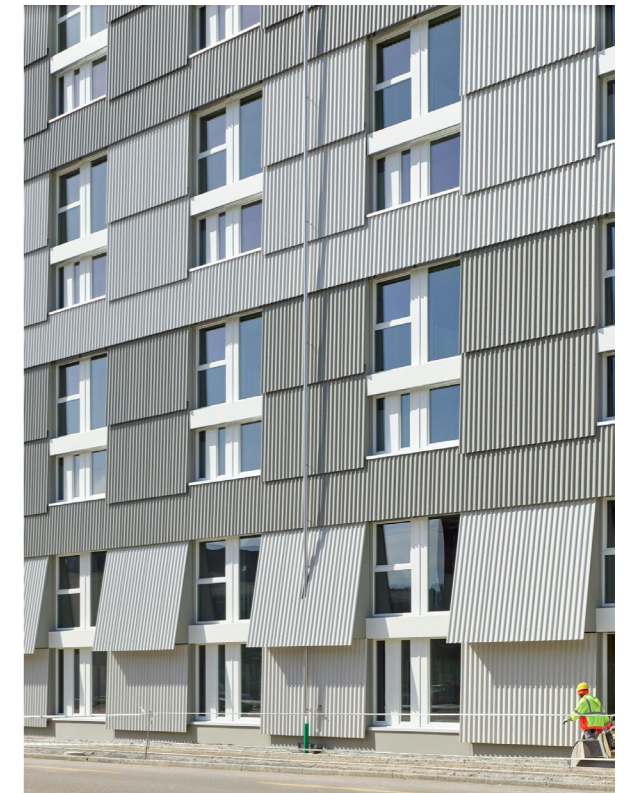
"You shouldn't take everything  
I say too serious."

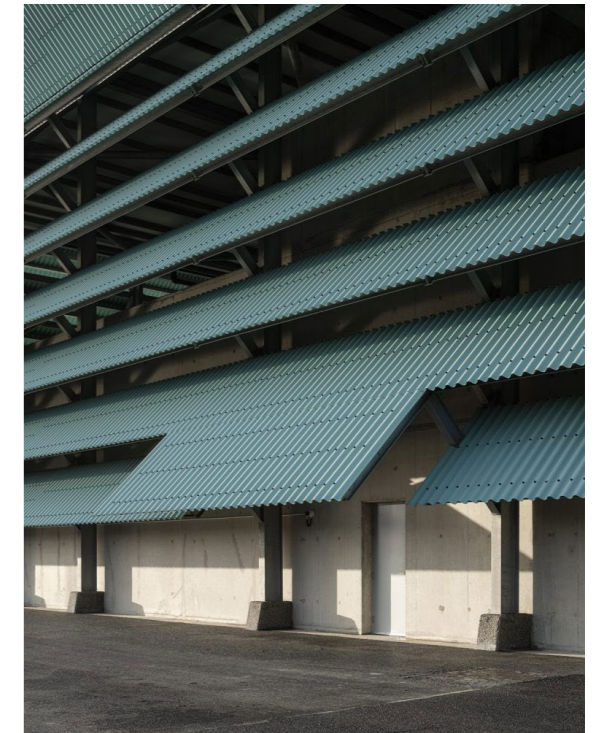
~ Eireen ~

Anèt made a comment about the rain coming from the roof of the vertical extension on the reused green house roof. The rain might drop too savagely from such a height. She also commented on the horizontal detail, where the door jumps back, because of the concrete block pier. A more dense insulation could 'solve' this setback and bring more 'architectural neatness'. She seemed to be okay with my answer that it's okay if things are sometimes not neat, and that the building logic and transparency is prevalent over a plastered uniform architectural expression. Ultimately she commented on the way I connect the trapezoidal sun screening to the facade. The corner profiles that form a triangle seem to work, but they will need to be placed quite frequently along the facade to have enough bearing force.

Unterfeld - Lütjens Padmanabhan Architektinnen







## A tutoring with Sam 23 May 2025

Since P4 I took some time off, wrote the feedback and references down in the logbook and had some brainstorming with friends. I think this last stretch is really about developing the architectural expression of the project in its urban context by having a closer look at the facade and its details. Taking a stand in how the trapezoidal sheet facade differs from the brick facade under it. Products:

- Model 1:33 update
- Model 1:100 update
- Model 1:333 update
- Extra 1:33 fragment model along Hollebeekstraat

*Questions*

- Do you think the standard sized window approach makes sense?
- Colouring elevations? No right? Drawings as intent, so no real materiality. Showing materiality in model is more logical.
- Reconfiguration discussion with Barten. What should the aesthetics of reuse be? Maybe in my case: dimensional flexibility, but qualitative soundness.

**Feedback Sam**

Lean into the building challenges and then fix these in a playful way. Work with the logic of the trapezoidal sheet. No flimsy pieces, but let the sheet be a sheet, like in the references of Lütjens Padmanabhan.

The drawings could very well remain the way they are, very analytical, more like an extended survey. Then the materiality comes back in the models. To clarify the drawings a bit, it could work very good to show the different layers and highlight what's existing, what's added, what's reconfigured and what's reused. This could even be gifs in the presentation that are running throughout to show the build up. Nice idea!

Then there's also a challenge to contextualise the project in the context of Antwerp. The way the project connects to the history of industry and production and how Hoboken acts as a place where waste is transported to. Maybe refining the masterplan and working on the narrative of the Masterplan with Marianna and Lance can already be this contextualising aspect, focussing more on bringing together materials and agents, the combination of production and living. This also as a response to the existing masterplan of 51n4e.

Together we discussed which kind of products would be nice. I described my ideas of updating the 1:333, 1:100 and 1:333 respectively to show the building in context, to show the general materialisation and build up and to show the more precise materialisation and details. Instead of making an extra 1:33 fragment model along Hollebeekstraat we discussed that it would be better to focus on the way the school functions [like Eireen also stressed earlier!]. This could very beautiful be shown. in an extension of the 1:33 model. To save material, time and money it could be a good idea to treat this model like a set (reference: Dogville). Making only the groundplate and then partly just drawing the plan on it, partly making 2D set pieces and partly working out real 3D 1:33 fragment pieces. Then props in it could be moving through and showing material exchange between the spaces. It's an ambitious project, but could work out very well and offers also a lot of freedom to do less when time runs out. With a good plan ofcourse.

Now it's about planning and starting. Maybe first on the 1:333 or even better, straight onto the big piece and developing the rest of the projects alongside it.

## Research tutoring with Eireen 27 May 2025

The idea of making a set, to stage the life in the school. A final stop motion?

1. To show the methodological ambition
2. To show the way it's built
3. To show the way it functions

Leaving the drawings quite simple and using the 1:33 set model to envision materiality and life.

*Questions*

- Do you think the standard sized window approach makes sense?
- Reconfiguration discussion with Barten. What should the aesthetics of reuse be? Maybe in my case: dimensional flexibility, but qualitative soundness.
- Narrative of presentation? Following P4 or working from stop motion to stop motion?
- Integrating unpredictability in the narrative?

**Feedback Eireen**

Eireen likes the idea of building a set and thinks the stop motion and model could be a good way to make the final connection between research and design. During the P4, the elaboration of the manifesto + curriculum and the explanation of the project didn't yet connect super well. Stills from the stop motion (or other model photos of the final model) could work to elicit how the school works and how it connects to the research!

We had a discussion about the research questions and answers that have been dominant during my project. The first one being: 'To what extent do the origins of reused materials matter?', but what was the second? And what was the precise answer of both? This is something that's yet present in the design, logbook and manifesto + curriculum, but could be formulated in a more concise, concluding way. The second question is probably: 'What does the curriculum of a reuse craft school look like?' And then it makes sense. Because the answer of the first is maybe that it matters that the material is living a second (or third, fourth, etc.) life, but not where exactly it came from, also since this is impossible to transfer and an interesting detail that comes after the initial expression of the project and materials. The important layer that materials gain, is the way they are converged, reconfigured into the new project. And that is exactly what my project is about. It teaches and develops this craftsmanship of reconfiguring, reusing on different professional and educational levels. The building itself is an example of this and shows different ways of expressing and reconfiguring in the different parts of the building.

Eireen encouraged me to make a short reflection on the transformation project of the manifesto and curriculum, since she had a hard time going through it. It probably encapsulates all the conclusions, but now it's time to crystallize these conclusions.

In addition she also suggested that it could work to pick out the main sentences of the manifesto/ curriculum and base the storyboard (and therefore the model and what (not) to build) on this. Which sentences need to be visualised? And which visuals could explain what sentences? Since she has to grade my project based on logbook and catalogue, she would like me to make a bit more out of the catalogue, adding this reflection to the manifesto+curriculum and adding photos of the final model that explain how the design integrates the findings of the research. This would be a super strong conclusion of the project.

What is the final stop motion going to show? Year rhythm, day rhythm, something else?

*References:*

- CaixaForum, Herzog & De Meuron
- Vlasmuseum Texture Kortrijk, noAarchitecten

- Boek van een theoreticus over de vijf uitgaves van een boek van Otto Wagner (lijkend op mijn vertaling van Gropius)

About the architectural development, Eireen stressed that it was a bit about the forms and proportions. How does the extension relate to the brick facade and then to the new facade of Expohal? She said that maybe I don't have to change a lot, also considering time, but I think there's something that's not yet convincing to her. Therefore it's good to at least show the sheet detailing in the 1:33 and also the new facade of Expohal in the new fragment.

#### BT tutoring with Anèt 6 June 2025

At P4 Anèt commented on the water flow from the vertical extension on Expohal's roof, the ground floor door jumping back from the facade and the connecting structure of the trapezoidal fixed sun screening. I should ask her whether I can keep the water flow like this and sketch over the details how it would look differently. I think the conclusion is that it's not worth to change, but let's sketch something. The ground floor door jumping back was alright I believe. The connecting structure of the trapezoidal sun screening is something to draw more precisely maybe, also since a similar construction will hold the tilted sheets for the new facade system.

Showing this new system is key to have figured out for the tutoring. Therefore I want to prepare new facade drawings that show the new system with the wider sheets and preferably a 3D sketch/model on the fragment how this could work structurally. Taking the references of Lütjens Padmanabhan as an example.

#### Questions

- What's the overall reaction on the new facade system?
- How easy is it to cut in trapezoidal sheet?
- Easier to cut in corrugated sheet?
- Logic in the sheet dimensions?
- What's the preferred height of a 'borstwering'?
- Clad the side of the verticals to protect the materials behind the cladding?  
(- Do I need to clad what's behind the trapezoidal sheet?)
- Are the structural triangles realistic?
- Materiality of the facade under Expohal's roof?

#### Feedback Anèt

Anèt really liked the little mockup I made and the fact that it shows how it brings order, logic and aesthetics in reused materials. The seams in between the sheets and the timber frame elements is a big BT problem though, so after a lot of options and discussion she advised me to make the horizontal low sheets vertical and flush with the rest. Hereby placing the whole timber frame construction a bit to the front to solve the cold bridge problem at the span. This comes with a bit more sawing, but reduces costs of making expensive profiles that fit in the seams between the vertical window frames and the sheets. I think it reduces a bit of the complexity and playfulness in the facade, but at the same time brings a bit more order and logic. So that's a choice I have to make.

We also talked about the gutter and how I really need one at the top as well as making the one at the bottom bigger. We discussed some options and also some other details about which I may write later and there's also a lot of sketches that I will photograph. But for now: onto the model!

Just to conclude, all in all Anèt stressed that she did like how I tried to figure out all these problems and integrate it into the architecture. I think she's positive about my process and project, so I may need to focus on architecturally transferring the quality more than fixing all these little issues.



# KARF VAIN OOSIERHOOI LOGBOOK

