BINCKS' MUSIC FACTORY

Graduation Report

AR3AP100 Music Marvel: Music & Popular Culture Re-wired

Chiel van Dijk | 4983416

Document compiled for online submission 23 may 2022

TU Delft
Architecture and the Built environment
Graduation studio Public Building
AR3AP100 Music Marvel: Music & Popular Culture Re-wired

Responsible Instructor:
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Course Coordinator:
Paul Kuitenbrouwer

Tutors:
Paul Kuitenbrouwer
Gilbert Koskamp
Sang Lee

Content

Part I - Research Plan

01 Research Plan

Problem statement

Our environment is changing faster than ever, due to the transformations of economic, cultural, and socio-political dynamics. As a result of the expansion and transformation of the major Dutch cities, former industrial areas that used to be outside the cities, such as Binckhorst, are now being absorbed and transformed by the cities.

While our environment continues to change, the music industry is also asking itself how music should transform with the present changes. Today, music is tangible for everyone, and it is impossible to imagine our lives without it. Music buildings today, therefore, require a certain list of requirements to be met to be able to listen to or play a concert. However, music buildings today cannot keep up with this demanded condition, multiplicity, and ever-changing character. Architecture for music has largely been transformed into an inanimate spatial form, characterised by its pursuit of timelessness, and limited to the perception of music. The architectural design of music spaces in our time is assisted, and often driven, by the science of acoustics, and the understanding of perception is often incomplete[1]. The spatial requirements and design parameters of a music venue should be taken into question to meet the demanded multiplicity of today's music buildings. Therefore, this research questions the perceptions and experiences of music venues.

All our information about the world around us is obtained through our senses. All this information helps us to carry out more complicated processes such as perception and recognition. Listening to music is a multi-sensory experience. We hear, see, and feel "moved" by music that evokes memories, associations, and emotions. As such, architecture and the perception of space is equally a multi-sensory experience, the qualities of space, material and scale are evenly measured by eye, ear, nose, skin, tongue, skeleton, and muscles[2]. The relationship between architecture and music is not limited to the creation of spaces for musical performances but should also be approached in a multi-sensorial way. This research aims to formulate design parameters that affect the perception of architecture and its contribution to the experience of music. This design catalogue will be used as basic guidelines for the design of Music Marvel. Having this as the theme of the research I intend to answer the following question: how can multi-sensory architecture contribute to the experience of music and form the guidelines for the music marvel in Binckhorst? With the following sub-questions:

1. What is a multi-sensory experience, and how is it motivated or demotivated?
2. How do the senses and their mutual relationships affect the perception of space (or architecture)?
3. How can architecture contribute to the perception of music?

[1] Oxenaar, A., Kloos, M., & Spaan, M. (2012). Music, Space and Architecture. Architectura & Natura Press.

[2] Pallasmaa, J. (2012). The eyes of the skin: architecture and the senses. John Wiley & Sons. p.41

Theoratical Framework

The previously defined research question is approached from a phenomenological position because of the direct relationship of architecture to experience. This is the knowledge that takes an important place in the study of how an individual perceives a space or an object. This movement merges the physical aspects of the space with the experiences and emotional influences of the observer, creating a perception[3]. This perception is different for everyone. Phenomenology is a broad field of knowledge and is widely discussed by architects, theorists, and philosophers. This chapter will define which theory and ideas are adopted to frame the research and avoid any ambiguity.

Both the perception of architecture and music are conducted through the stimuli of multiple senses. For this research, broadly speaking, two theoretical themes will be approached and treated, respectively the multi-sensory effect on architecture and the perception of music through 'sensory' architecture. For the first theme, the theory of Juhani Pallasmaa with the book 'The Eyes of the Skin' and Peter Zumthor with 'Atmospheres' will be used. The second theme will primarily extract its theory and ideas from the book 'Music, Space and Architecture' by Aart Oxenaar, Maarten Kloos and Machiel Spaan. In brief, my understanding of the topics and theories introduced concerning the research question and the elaboration of the Music Marvel in Binckhorst is given below.

Sensory Architecture

Sensory architecture refers to an approach whereby human senses are stimulated through architecture. It refers to the process of implication that the built environment has on the user of a given space through the understanding of the different components of architecture: form, light, colour, texture, scale, and patterns[4]. The user analyses these architectural components through the five basic senses: sight, hearing, touch, smell, and taste.

Perception of space

Each person has their own perception of a space. The perception of space informs the user not only about the physical and emotional properties of such a space but also about the desired behaviour that is acceptable in such a space. The user will automatically adjust his general attitude and posture in that space[5].

[3] Spence, C. (2020). Senses of place: architectural design for the multisensory mind. Cognitive Research: Principles and Implications, 5(1), 1-26.

[4] Canter, D. (1970). Architectural psychology. London: RIBA Publications Limited

[5] Pallasmaa, J. (2012). The eyes of the skin: architecture and the senses. John Wiley & Sons.

01 Research Plan

Perception of music

A person experiences how strongly their perception is their own creation, based on the connections they make and filled with their own emotions, memories, and thoughts[6]. A process by which one arranges and interprets musical information through identifiable characteristics of music such as melody, harmony, repetition, and rhythm and is different from person to person.

Multi-sensory experience

Perceptions involve more than one sense. A single sense cannot form a perception. Pallasmaa argues that every experience of architecture is multisensory and describes that the qualities of scale, matter and space are measured equally by the human senses[7]. In addition, vision is seen as the most dominant sense and the ultimate physical loss, i.e., the senses themselves are equal neither in kind nor in range[8]. Architects must approach a design from all senses to motivate perception.

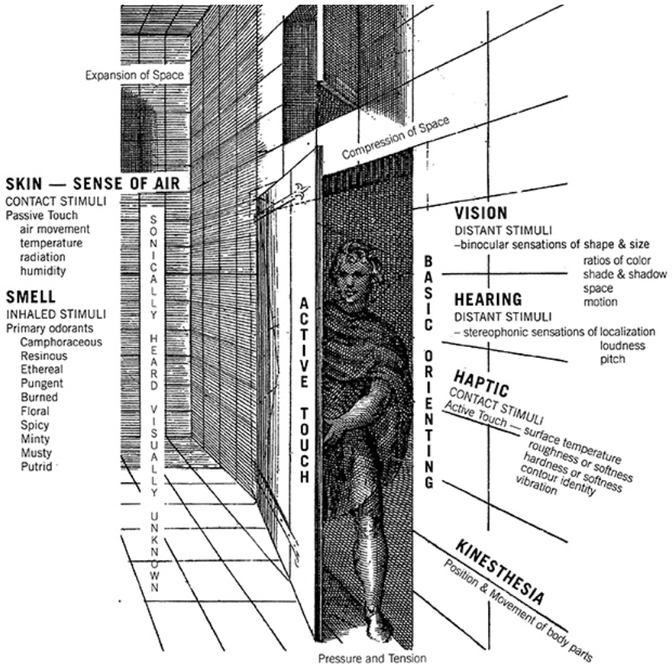

Figure 1: Range of the senses, Created by Joy Malnar and Frank Vodvarka. The senses themselves are equal neither in kind nor in range.

[6] Oxenaar, A., Kloos, M., & Spaan, M. (2012). Music, Space and Architecture. Architectura & Natura Press. p. 57

[7] Pallasmaa, J. (2012). The eyes of the skin: architecture and the senses. John Wiley & Sons. p.21

[8] Malnar, J. M., & Vodvarka, F. (2004). Sensory design. U of Minnesota Press. p.152

Methodological Approach

This research will be conducted through multiple qualitative research methods, including literature research, case studies and field research. They will provide the instruments to build a design catalogue that will define the multi-sensory architecture and its experience of music for the music marvel in Binckhorst.

As previously described, this research roughly consists of two themes to answer the research question: the multi-sensory effect on architecture and the experience of music through ‘sensory’ architecture. Both themes will be investigated utilizing literature research to formulate ideas and theory. For the first theme, the application(s) of each sense on the perception and atmosphere of a space will be investigated, resulting in an enumeration of potential methodologies for multi-sensory architecture. This could be, for example, the texture and materiality of a space, the form or the analysis of light and colour and their sensory effect on a space. The second theme will be approached more from a musical perspective to investigate the experience of music through architecture. With this, literature will be used to compile a list of which architectural interventions affect the perception of music and vice versa.

To bridge the gap between the theoretical approaches and the practical, relevant case studies will be used. These case studies will relate to the two themes and will be used to extract practical information. Case studies related to multi-sensory design are Olafur Eliasson’s previous exhibitions[9], Daniel Libeskind’s Jewish Museum, or an Anechoic Chamber. For the experience of music through architecture, a wide range of case studies and experiments can be selected to analyse, concretise, and conclude.

Both the literature research and the case studies will be used to compile the catalogue of design parameters and form the basis for the new music marvel. This catalogue is designed specific and needs to be related to the Binckhorst environment. To make this connection, field research will be conducted on the Binckhorst to make an optimal synthesis between the composed design parameters and the Binckhorst environment. This field research will be done by observation, sensory mapping, and notation. Preliminary research has already been carried out as a group during the P1 period. The extracted information is already documented and will be used during this research. Through this field research, the context of Binckhorst will be crystallised based on sensory perception.

[9] Olafur Eliasson’s The Mediated Motion (2001) and Olafur Eliasson’s The Weather Project (2003)

01 Research Plan

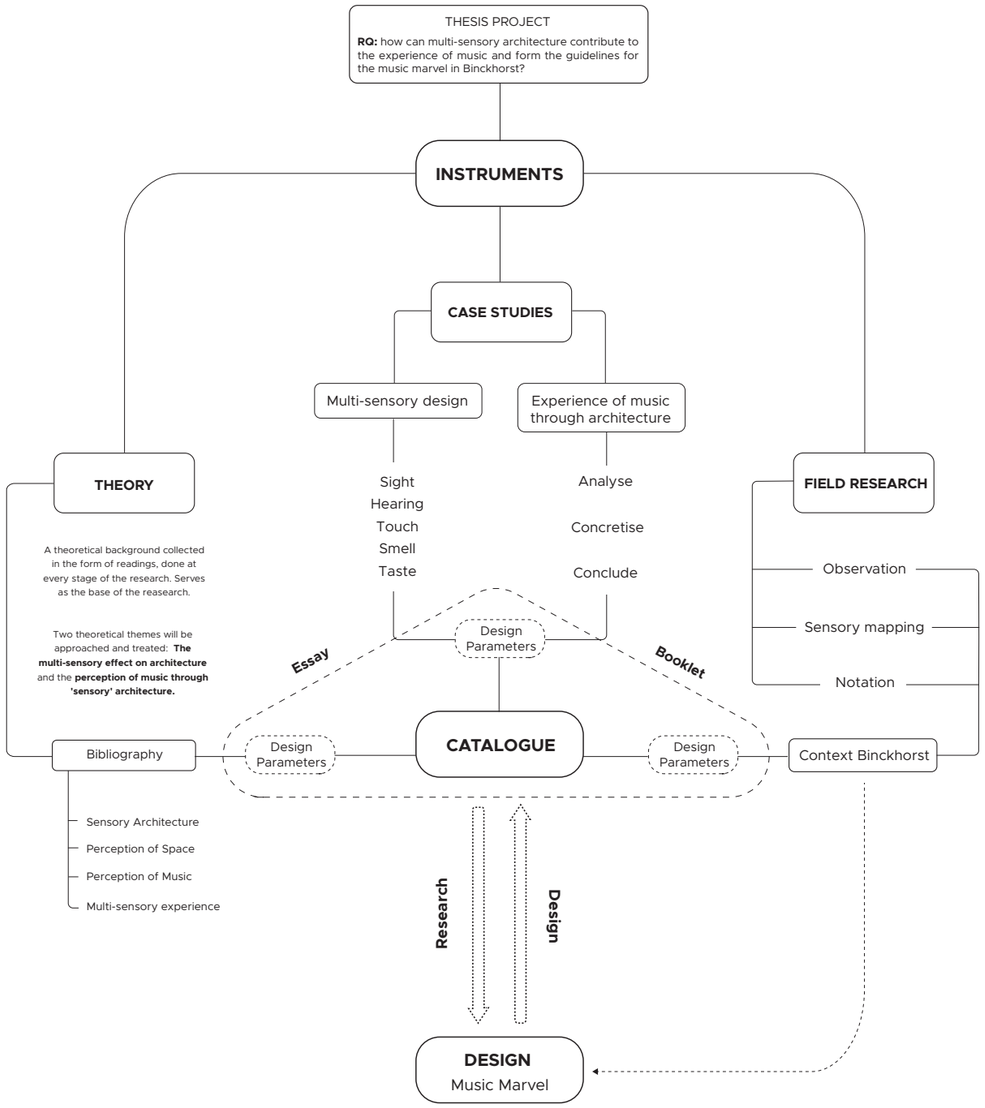

Figure 2: Main research diagram - Author's own work

Arguments on Relevance

This research will be conducted through multiple qualitative research methods, including literature research, case studies and field research. They will provide the instruments to build a design catalogue that will define the multi-sensory architecture and its experience of music for the music marvel in Binckhorst.

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Part II - Graduation Plan

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	(Chiel) Pieter Jan van Dijk
Student number	4983416

Studio		
Name / Theme	AR3AP100 Public Building Graduation Studio 2021-22 Music Marvel | Music & Popular Culture Re-Wired	
Main mentor	Paul Kuitenbrouwer	Architecture
Second mentor	Gilbert Koskamp	Building technology
Third Mentor	Dr. Sang Lee	Research
Argumentation of choice of the studio	Ever since I was young, I have had a great affinity for music. From visiting famous artists from America, to going to festivals, to entering the oldest jazz festival in Europe, Jazz a Juan. I strongly believe that nothing connects and fuses people better than music and culture, and we as architects have a wonderful responsibility to create public and private spaces for the people and their environments to encourage these activities.	

Graduation project	
Title of the graduation project	**A new way of perception for subculture**
Goal	
Location:	Binckhorst, The Hague, the Netherlands, Gasfabriek
The posed problem,	Our environment is changing faster than ever, due to the transformations of economic, cultural, and socio-political dynamics. As a result of the expansion and transformation of the major Dutch cities, former industrial areas that used to be outside the cities, such as Binckhorst, are now being absorbed and transformed by the cities. The former industrial area of Binckhorst is a collection of static activities and movements, with no clear future, as shown by the developments that have been going on for years. Perception and experience are absent or incomplete due to the homogeneity and obsolescence of the activities. Like Binckhorst, architecture for music is static and lacks perception. Music venues have largely been transformed into an inanimate spatial form, characterised by its pursuit of timelessness, and limited to the performance of music. The architectural design of music spaces in our time is assisted, and often driven, by the science of acoustics, and the understanding of multi-sensorial perception is incomplete. The spatial requirements and design parameters of a music venue should be taken into question to meet the demanded multiplicity of today's music buildings.

01 Graduation Plan

Research questions and	Having this as the theme and problem of the research I intend to answer the following question: **how can multi-sensory architecture contribute to the experience to music and form the guidelines for Binckhorst?** With the following sub-questions: 1. What is a multi-sensory experience, and how is it motivated or demotivated in Binckhorst? 2. How do the senses and their mutual relationships in Binckhorst affect the perception of space (or architecture)? 3. How can architecture in Binckhorst contribute to the perception of music?
Design assignment in which these result.	This research aims to formulate a design manual that will help and affect the perception of architecture and its contribution to the experience of music in Binckhorst. The project includes design parameters and a design catalogue to guide the design process and the result will be an example of this.

Process

Method description (see figure 1)

This research will be conducted through multiple qualitative research methods, including literature research, case studies and field research. They will provide the instruments to build a design *catalogue* that will define the multi-sensory architecture and its experience of music for the music marvel in Binckhorst.

The literature research roughly consists of the theory and ideas of two themes to answer the research question: the multi-sensory effect on architecture and the perception of music through (multi)sensory architecture. Based on this, an overview will be made of which architectural interventions affect the perception of music and vice versa.

To bridge the gap between the theoretical approaches and the practical, relevant case studies will be used. These case studies will relate to the two themes and will be used to extract practical information.

Both the literature research and the case studies will be used to compile the *catalogue* of design parameters and form the basis for the new music marvel. This *catalogue* is designed specific and needs to be related to the Binckhorst environment. To make this connection, field research will be conducted on the Binckhorst to make an optimal synthesis between the composed design parameters and the Binckhorst environment. This field research will be done by observation, sensory mapping, and notation. Preliminary research has already been carried out as a group during the P1 period. The extracted information is already documented and will be used during this research. Through this field research, the context of Binckhorst will be crystallised based on sensory perception.

01 Graduation Plan

Literature and general practical preference

Literature and references include the topics on:

1. Sensory Architecture
2. Perception of Space
3. Perception of Music
4. Multi-sensory Experience

Bibliography

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- Pallasmaa, J. (1994). An architecture of the seven senses. ARCHITECTURE AND URBANISM-TOKYO-, 27-38.
- Zumthor, P. (2008). Atmospheres. Birkhäuser.
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- Kerchner, J. L. (2013). Music across the senses: Listening, learning, and making meaning. Oxford University Press.

Project examples

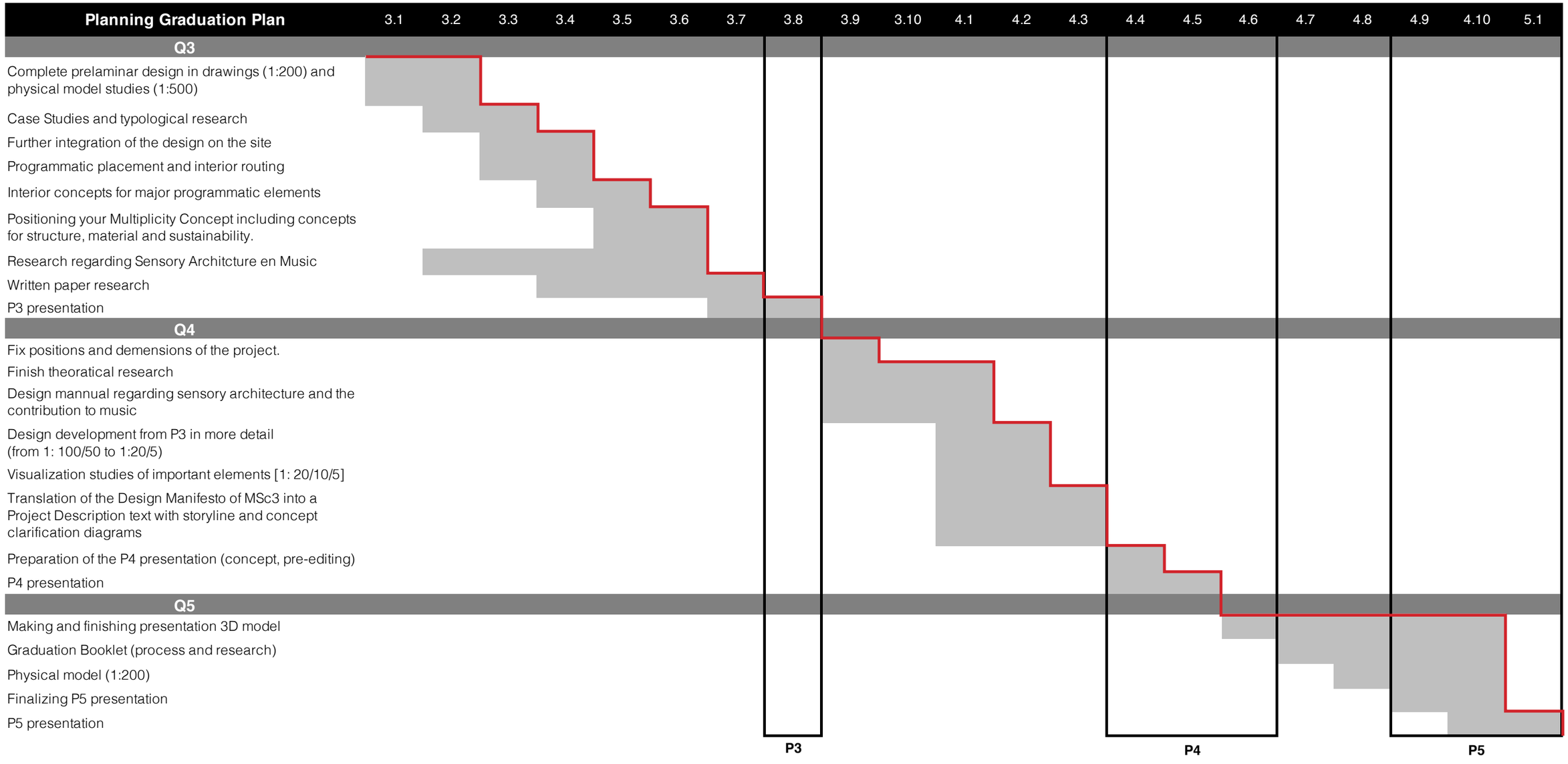
- Olafur Eliasson’s the Mediated Motion 2001 and the Weather Project 2003
- Daniel Liebeskind, Jewish Museum: The Garden of Exile, Holocaust Tower and the “Void”, Berlin, Germany, 2001.
- Realized projects of Peter Zumthor, Steven Holl, Carlo Scarpa and Eduardo Souto de Moura
- Anechoic chamber, TU Delft
- Preliminary research of the music buildings examined during the P1.
- Field research of the Binckhorst by observation, sensory mapping, and notation

Reflection

The purpose of this research is not to indicate that there is the 'right' solution to the research question, it is too complex for that. Architecture and music are connected beyond form. The themes are inextricably linked but require a different discipline to study them further. However, 'traditional' music buildings are designed purely on the perception of the experience of music. In my opinion, however, it is precisely the motivation or even the demotivation of sensory stimuli that can enhance the experience of music and the perception of the overall building. Traditional music buildings are often lifeless arrangements focused on serving one objective, providing a space to make or listen to music. Besides the acoustic qualities, visual and tactile qualities should also be considered to stimulate the experience of music.

This research tries to give a new perspective in architectural design by approaching music venues from the perspective of sensory perception. Combining the collected information into design parameters will contribute to the discourse of new guidelines for designing music venues.

02 Planning


Planning Graduation Plan
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Q3
Complete prelaminar design in drawings (1:200) and physical model studies (1:500)
Case Studies and typological research
Further integration of the design on the site
Programmatic placement and interior routing
Interior concepts for major programmatic elements
Positioning your Multiplicity Concept including concepts for structure, material and sustainability.
Research regarding Sensory Architcture en Music
Written paper research
P3 presentation
Q4
Fix positions and demensions of the project.
Finish theoratical research
Design mannual regarding sensory architecture and the contribution to music
Design development from P3 in more detail (from 1: 100/50 to 1:20/5)
Visualization studies of important elements [1: 20/10/5]
Translation of the Design Manifesto of MSc3 into a Project Description text with storyline and concept clarification diagrams
Preparation of the P4 presentation (concept, pre-editing)
P4 presentation
Q5
Making and finishing presentation 3D model
Graduation Booklet (process and research)
Physical model (1:200)
Finalizing P5 presentation
P5 presentation
P3
P4
P5

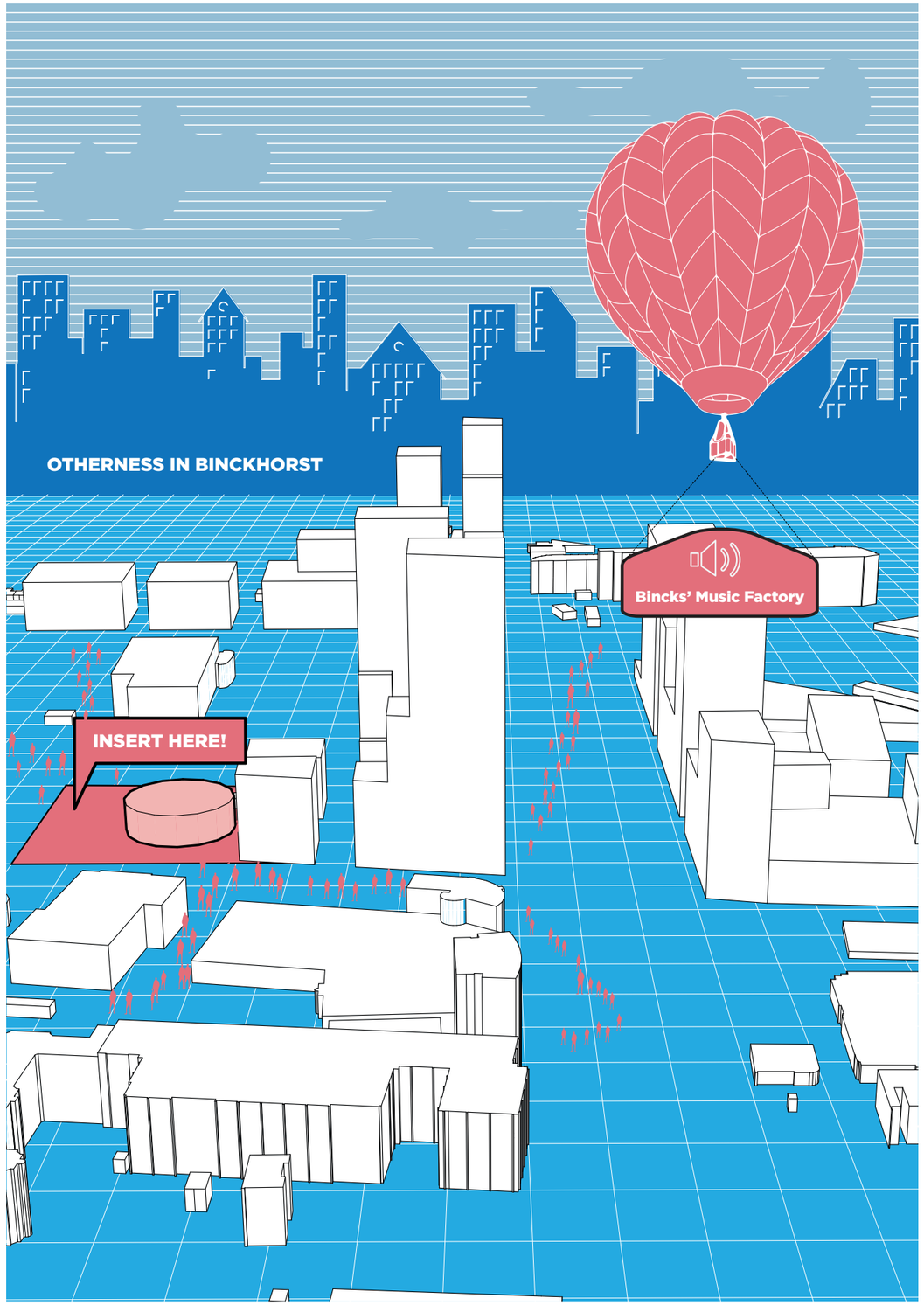
Part III - Design Manifesto

01 Design Manifesto

Explanation

As a result of the expansion and transformation of The Hague, the former industrial area Binckhorst, which used to be located outside the city, is now being absorbed and transformed. But what is Binckhorst? Preliminary research has led to the conclusion that Binckhorst is a collection of static movements and activities, a homogeneous area in The Hague. To achieve an identity and dynamism for Binckhorst, the area concerned needs to be injected with an autonomous zone for music activities, which profiles itself by being different in Binckhorst.

The hot air balloon positions these specific objects in Binckhorst from one place to another, within the anonymity of an isotropic grid. The hot air balloon is a metaphor to take on the role of ephemerality by guiding the whole process. the theory is to underline its existence by being specific in Binckhorst, an autonomous zone or otherness in Binckhorst.



Part IV - Theory Research

01 Theory Research

Project abstract

Our environment is changing faster than ever, due to the transformations of economic, cultural, and socio-political dynamics. As a result of the expansion and transformation of the major Dutch cities, former industrial areas that used to be outside the cities, such as Binckhorst, are now being absorbed and transformed by the cities.

The former industrial area of Binckhorst is a collection of static activities and movements, with no clear future, as shown by the developments that have been going on for years. Perception and experience are absent or incomplete due to the homogeneity and obsolescence of the activities.

Like Binckhorst, architecture for music is static and lacks perception. Music venues have largely been transformed into an inanimate spatial form, characterised by its pursuit of timelessness, and limited to the performance of music. The architectural design of music spaces in our time is assisted, and often driven, by the science of acoustics, and the understanding of multi-sensorial perception is incomplete[1]. The spatial requirements and design parameters of a music venue in Binckhorst should be taken into question to meet the demanded multiplicity of today's music buildings.

Architecture and music are connected beyond form. The themes are inextricably linked but require a different discipline to study them further. However, 'traditional' music buildings are designed purely on the perception of the experience of music. Instead, it is the motivation or even the demotivation of sensory stimuli that can enhance the experience of music and the perception of the overall building. Traditional music buildings are often lifeless arrangements focused on serving one objective, providing a space to make or listen to music. Besides the acoustic qualities, visual and tactile qualities should also be considered to stimulate the experience of music.

This project aims to formulate a design manual that will help and affect the perception of architecture and its contribution to the experience of music in Binckhorst. Combining the collected information into design parameters will contribute to the discourse of new guidelines for designing a music venue in Binckhorst.

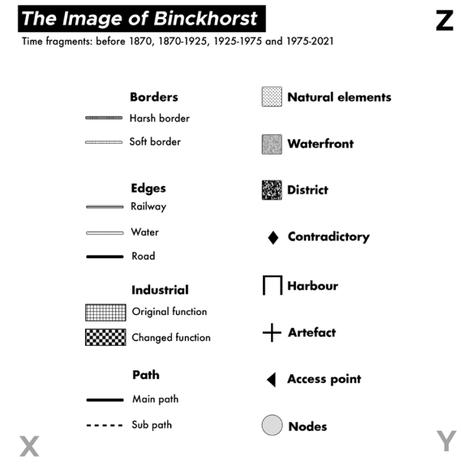
[1] Oxenaar, A., Kloos, M., & Spaan, M. (2012). Music, Space and Architecture. Architectura & Natura Press.

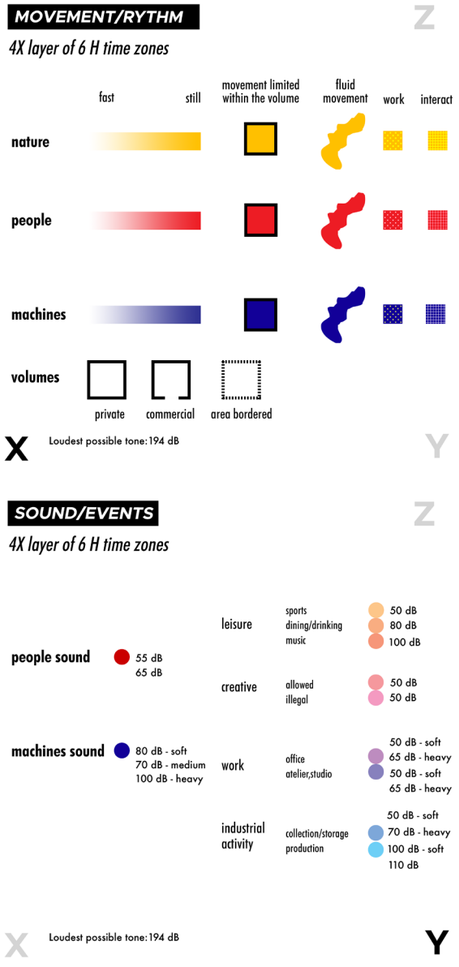
Collective research

Group 7: Marnix Prins, Mohamed Moussa, Serra Keklik, Chiel van Dijk

In order to understand the context, we conducted three different time-based analyses on Binkhorst: an image analysis to understand what the shape of the city means to people and what we can do to make the image of the city more vivid and memorable to the user; a schematic representation of movement through the area on a day to identify the system; and a schematic representation of events and related sounds on a day through the area to map the soundscape, existing activities and thus the multiplicity. These analyses showed that the area is homogeneous in terms of events, users and spaces, but not connected to each other.

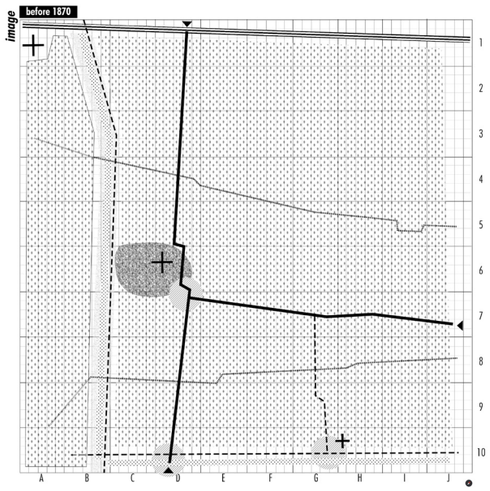
See next pages for:
1. The Image of Binckhorst
2. Movement/Rythm
3. Sound/Events

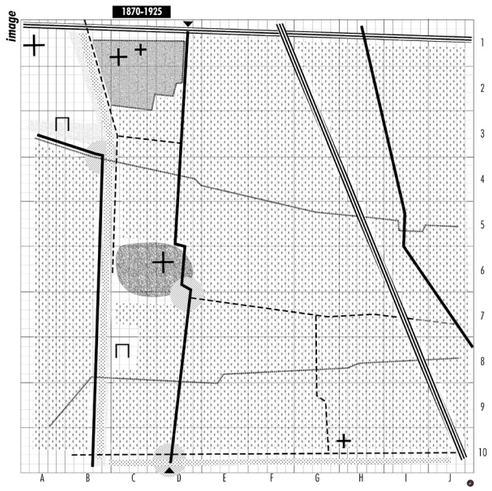


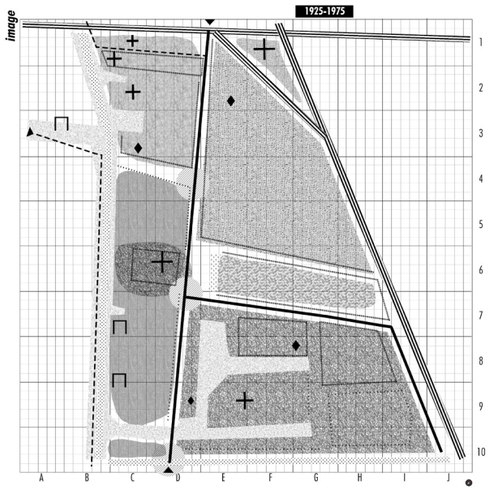


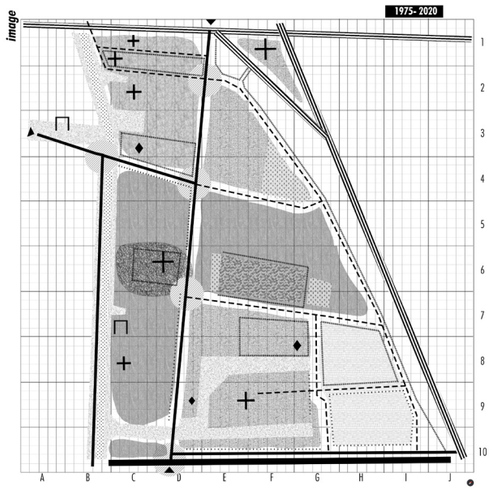
01 Theory Research

The Image of Binckhorst

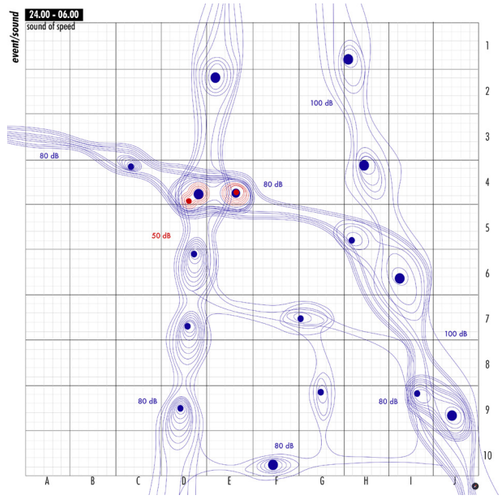


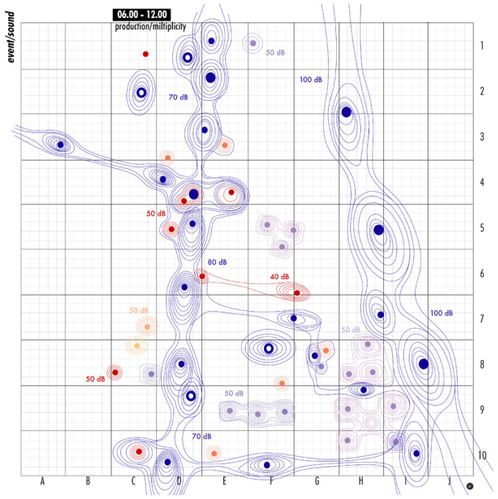


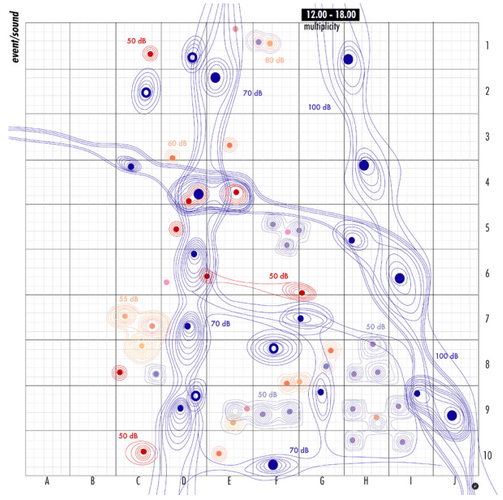


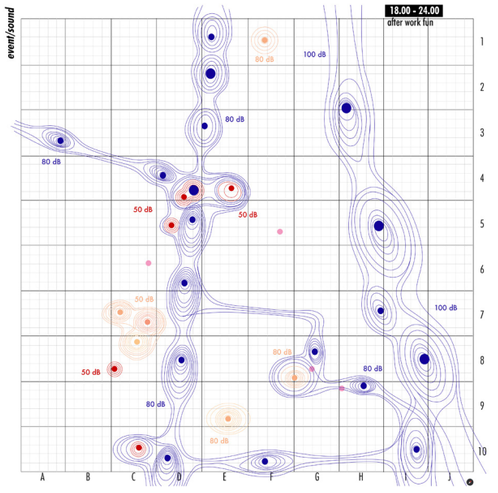


Movement / Rhytm



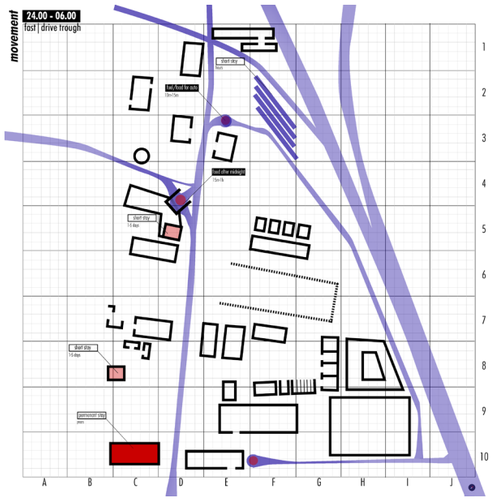


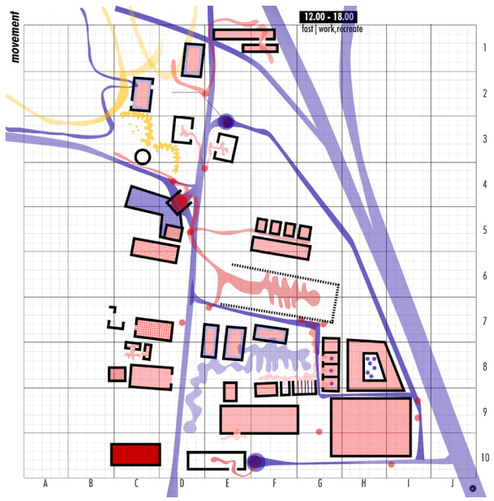


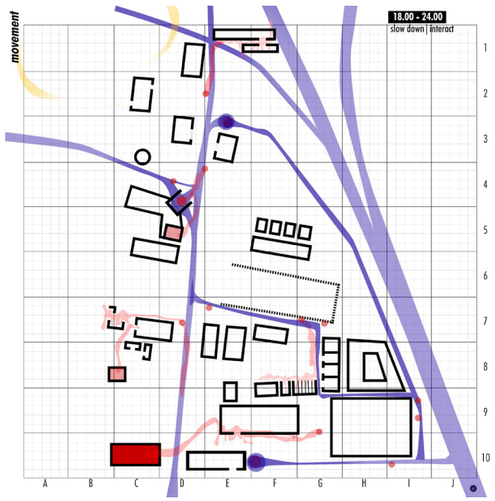


01 Theory Research

Sound / Events







Empathy Map

Part V - Design Brief

Venue	Pop I Rock I HipHop	Electric by Night	Experimental Music (Jazz / Recital)	Gross Area
Audience (standing)	800 - 1.200	800 - 1.500	250 - 400	
1. Concert spaces				
Stage (proportion 2:1)	110 m2, h=9m+	110 m2, h=9m+	40 - 60 m2 h =6m+	4%
Backstage	60 m2	60 m2	30 m2	2%
Side stages	20 m2	20 m2	20 m2	1%
Dressing rooms private (1p) 15m2	30m2	30 m2	15 m2	1%
Concert hall/space (prop. 1:2,5)	900 m2, h=9m	1000 m2, h=9m	300m2 h=6m	31%
Bar	2x	2x	1x	-
Balcony	+	-	-	-
VIP-area	-	+	-	-
2. Audience acces				
Waiting line	+	+	-	
Entrance/Foyer	470 m2	430 m2	130 m2	15%
Wardrobe	50 m2	50 m2	25 m2	2%
Cassier	20 m2	20 m2	20 m2	1%
Restrooms	72 m2	100 m2	72 m2	4%
Smoking area	-	+	-	-
Audience Lounge	(foyer)	(foyer)	(foyer)	-

Venue	Pop I Rock I HipHop	Electric by Night	Experimental Music (Jazz / Recital)	Gross Area
3. Dedicated access				
Artist entrance	+	+	+	-
Broadcasting space	30 m2	30m2	30 m2	1%
Practice rooms	200 m2	200 m2	150 m2	8%
Video recording room	20 m2	20 m2	20 m2	1%
Recording studio	40 m2	40 m2	20 m2	2%
First aid room	15 m2	15 m2	15 m2	1%
4. Support				
Loading area	1 truck	1 truck	-	-
Storage	50 m2	40 m2	20 m2	-
Parking cars	30 cars	20 cars	10 cars	-
Parking bicycles	400b/500m2	400b/500m2	150b/190m2	-
Technical spaces	+ 10% of GFA	+ 10% of GFA	+ 10% of GFA	-
5. Amenities				
Public Plaza (indoor/ outdoor)		860m2		13%
Restaurant		280m2		4%
Cafe/bar		150m2		3%
(back)Office		100m2		2%
Workshop space		240m2		4%

Total (without support) : 6739 m2

Total with support: 8852 m2

Part VI - Individual Research

01 City

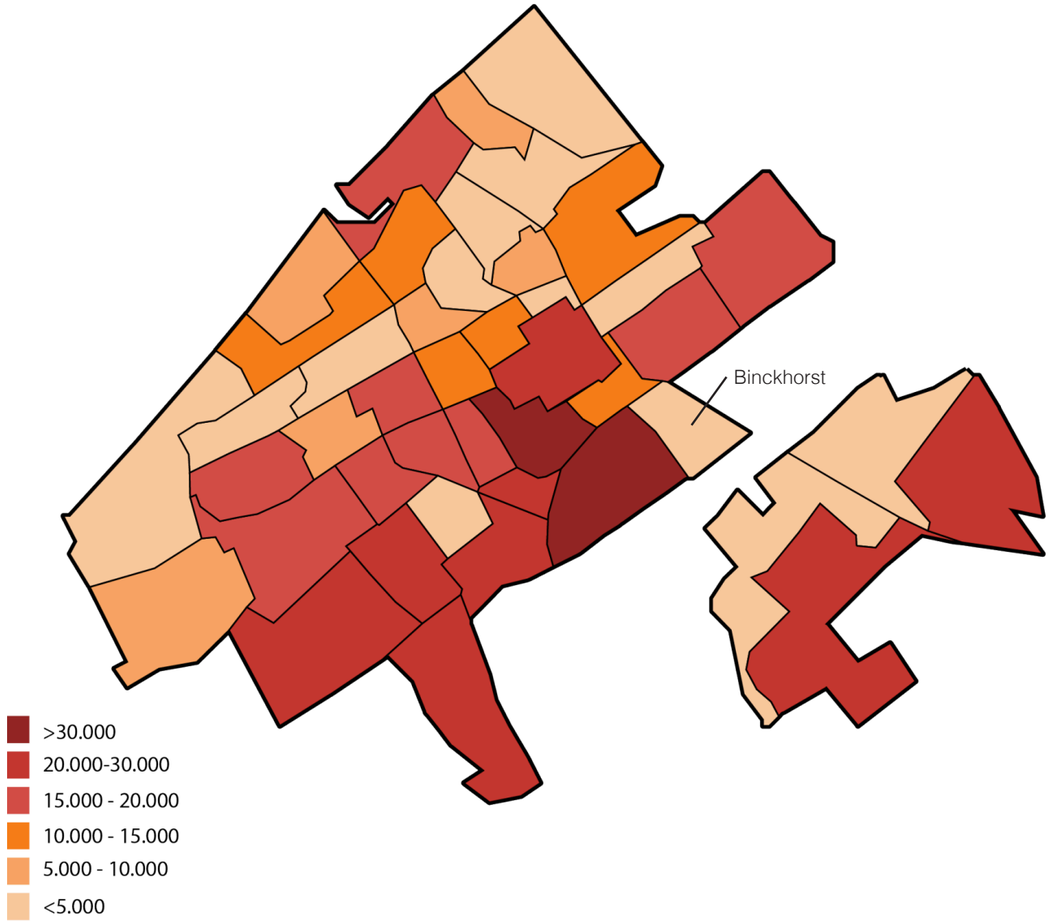
Demographics

The Hague is the capital of the province of South Holland and lies in the Randstad. With 550,000 inhabitants, it is the third largest city in the Netherlands after Amsterdam and Rotterdam. The Dutch government and parliament, the residence of the royal family and the ministers are housed in The Hague, including the Ministry of Internal Affairs and Kingdom Relations and the Ministry of Security and Justice.

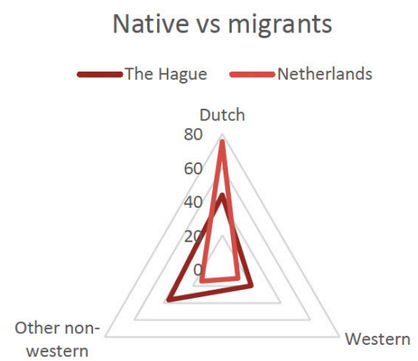
The Hague has a surface area of 9813 hectares (100 hectares = 1 km^2), of which 8245 is land and 1568 water. Approximately 270,000 households live in the 44 districts or 114 neighbourhoods. The average address density is 6607 per km^2, which is the highest of all cities in the Netherlands. Most residents live in Laakkwartier & Spoorwijk and Schildersbuurt, which border Binckhorst almost directly and therefore form a busy area. The density of Binckhorst is currently very low. The municipality plans to build around 2,000 homes in the short term, most of which will be high-rise. The population of The Hague has a relatively high migration rate compared to the average in the Netherlands. Especially non-western residents, countries like Morocco, the Netherlands Antilles, Surinam, and Turkey are present. Of the migrants, western is the largest, which is in line with the average in the Netherlands. The Hague's population is relatively young compared to the average, with adults aged between 25 and 45.

Conclusion

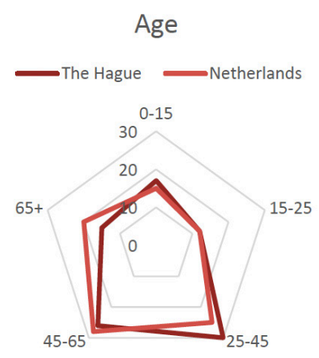
Government city The Hague is the most densely populated city in the Netherlands, with a population density of 6,500 people per square kilometer. 48 percent of the Hague's population have a migration background. Which makes The Hague one of the most vibrant, crowded and multicultural cities in The Netherlands.



Residents by district



Native vs migrants in The Hague & Netherlands



Age of residents in The Hague & Netherlands

02 Connection

Mobility in The Netherlands

People travel nearly three-quarters of the total number of kilometres by car as drivers and nearly a quarter as passengers. Per person this is 8,000 kilometres in the car. In terms of travel time, trips by car cover a smaller portion, namely less than half. The car is mainly used for longer distances. For short distances people often take the bicycle or walk. Of the total number of trips, almost half are done by car and an equal share by bike or on foot. Other means of transport are used in less than a tenth of the time. People annually cover almost 1,000 kilometres by bicycle and 300 kilometres on foot. Together, cycling and walking account for one third of the total travel time. The main reasons for travelling are going to work, schools, colleges and university, shops, visit family or friends and going to recreational activities such as sports, hobbies and touring. The most kilometres are travelled to commute to work. The longest trips are made for social and recreational purposes.

Trains in The Netherlands

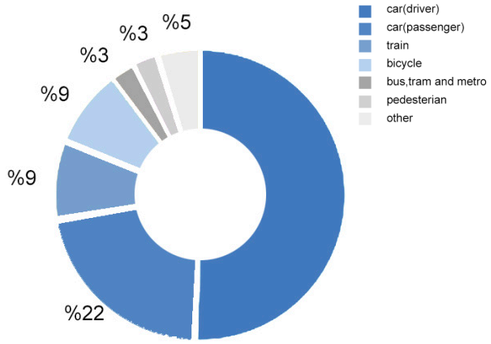
Rail transport in the Netherlands uses a dense railway network which connects nearly all major towns and cities. There are as many train stations as there are municipalities in the Netherlands. HSL-Zuid is a 125 km high-speed line in the Netherlands. Using existing tracks from Amsterdam Centraal to Schiphol Airport, the dedicated highspeed line begins here and continues to Rotterdam Centraal and to the Belgian border. Here, it connects to the HSL 4, terminating at Antwerpen-Centraal.Den Haag Centraal and Breda are connected to the highspeed line by conventional railway lines. NS offers a limited night service (Nachtnet). On weeknights, it is a U-shaped stretch with hourly service connecting Rotterdam Central, Delft, The Hague Hollands Spoor, Leiden Central, Schiphol Airport, Amsterdam Central and Utrecht Central (most of the Randstad's large cities and the main airport). Due to the U-shaped route, travel time from the first five stations to Utrecht is longer than during the day. Because the relatively-short distance between stations, no sleeping cars are used. During the weekend, night service is extended to Dordrecht and four cities in the province of North Brabant. On Friday and Saturday nights, there is an additional service between Rotterdam and Amsterdam.

Motorways in The Netherlands

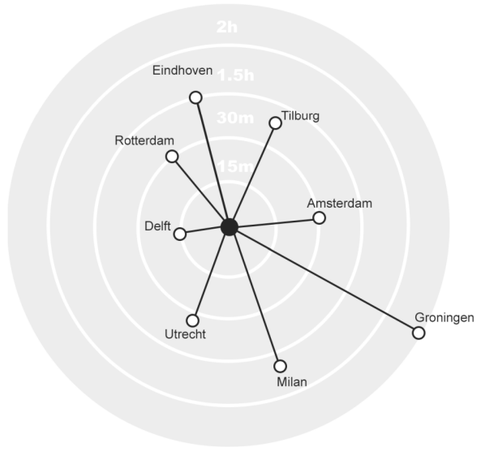
With 139,000 km of public roads, the Netherlands has one of the most dense road networks in the world – much denser than Germany and France, but still not as dense as Belgium Mobility on Dutch roads has grown continuously since the 1950s and now exceeds 200 billion km travelled per year. With a population of 16.8 million people, this comes down to an average of 32 kilometres per person per day. Around half of all trips in the Netherlands are made by car, making up three quarters of all passenger kilometres travelled,meaning that while Dutch roads are numerous, they are also used with one of the highest intensities of any road network. Car ownership in the Netherlands is high but not exceptional, and slightly lower than in surrounding countries.Goods vehicles make up 20% of total traffic, and road transport accounts for 40% of all freight movements registered, including overseas shipping The busiest Dutch motorway is the A13 between The Hague and Rotterdam, with a traffic volume of 140,000 motor vehicles per day. The province of Utrecht in the centre of the country however, has the busiest motorways on average (almost 100,000 vehicles a day), with major motorways A1, A2, A12, A27 and A28 running through it.

Conclusion

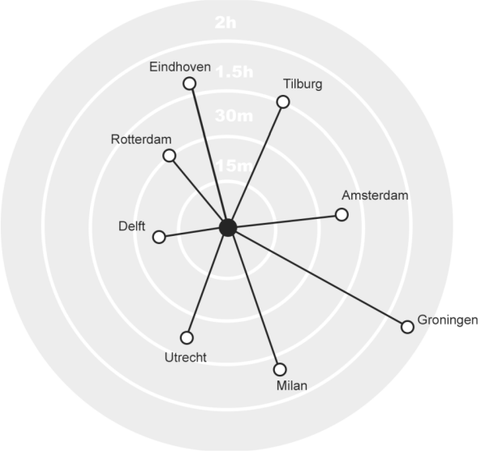
The Hague is connected to other cities in Netherlands with motorways and train lines. The busiest motorway A10 is between Rotteradam and The Hague while the only night train line in Netherlands stretch with hourly service connecting Rotterdam Central, Delft, The Hague Hollands Spoor, Leiden Central, Schiphol Airport, Amsterdam Central and Utrecht Central. The Hague is connected to the high speed rails trough Rotterdam with conventional railways.



Mobility of Dutch people my means of transport



Travel time by train



Travel time by car

02 Connection

Mobility in The Hague

Most visitors come by car (58%), followed by train (23%). This is strikingly different from other cities in the Netherlands, such as Amsterdam, where people travel more by train than by car.

Public Transport

The Hague's three largest stations are strategically placed within the CID district, to attract people from different cities to this new city centre. The stations form the abstract boundaries of the CID. Every day 18,824 people use The Hague Laan van NOI station, 40,894 use The Hague HS and 104,747 use The Hague Central. All three stations are mainly used during off-peak hours, except for Laan van NOI station. Transport after the train consists of walking, cycling, public transport and car. Central station makes the most use of walking with 59%, HS station the most use of public transport with 38% and Laan van NOI station makes almost equal use of walking and public transport. In addition to walking and public transport, cycling is also widely used. HS is the closest transport to the centre of Binckhorst, but all three stations can be reached within 20 minutes.

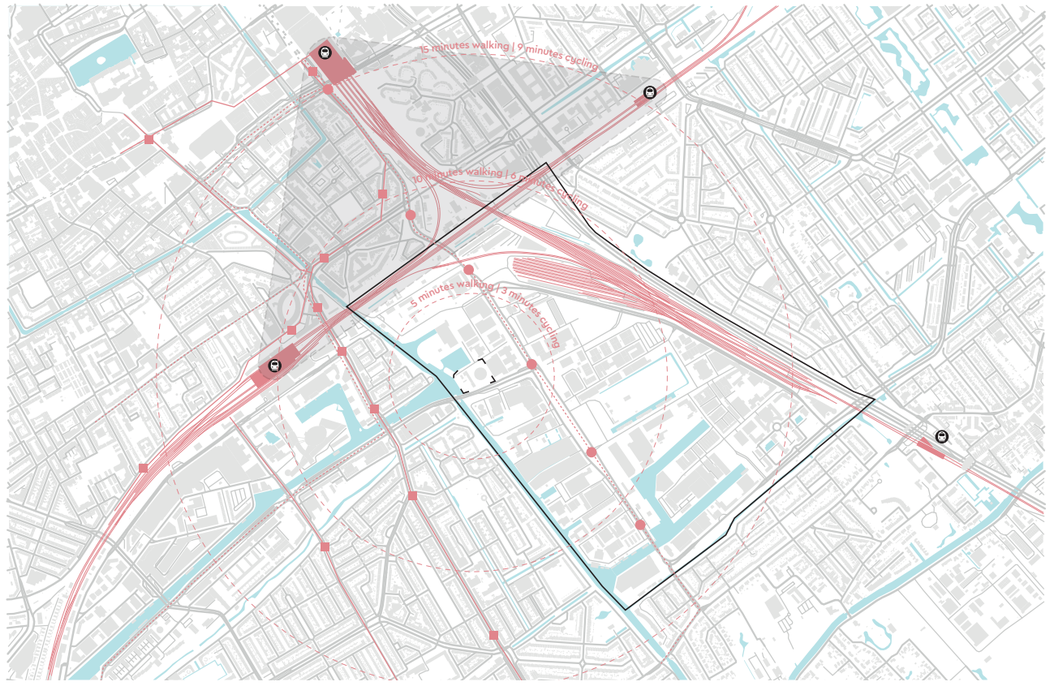
The tram is a widely used means of public transport in The Hague, as it is well connected to various districts in The Hague and cities nearby, such as Delft. Unlike the metro station, the tram line is the only form of public transport that crosses all three stations within the CID. The nearest tram station to Binckhorst is van Musschenbroekstraat, 7 minutes by bike. The last form of public transport is the bus, which has the closest connection to Binckhorst. This bus is connected to both Central Station and The Hague Holland Spoor. This means of transport therefore offers an alternative to walking or cycling.

Main Roads

The Hague is connected to the Binckhorst via four main roads: Rotterdam Road, Lek Road, Supernova Road and Mercurius Road. At present, the car is the most dominant user of The Hague's primary roads and with only one direct route leading to the centre of The Hague, the A12. The Utrechtsebaan or A12 can hardly carry the capacity. Therefore, The Hague is known for its time-consuming access to the city centre. However, the road is well connected to the other districts.

Conclusion

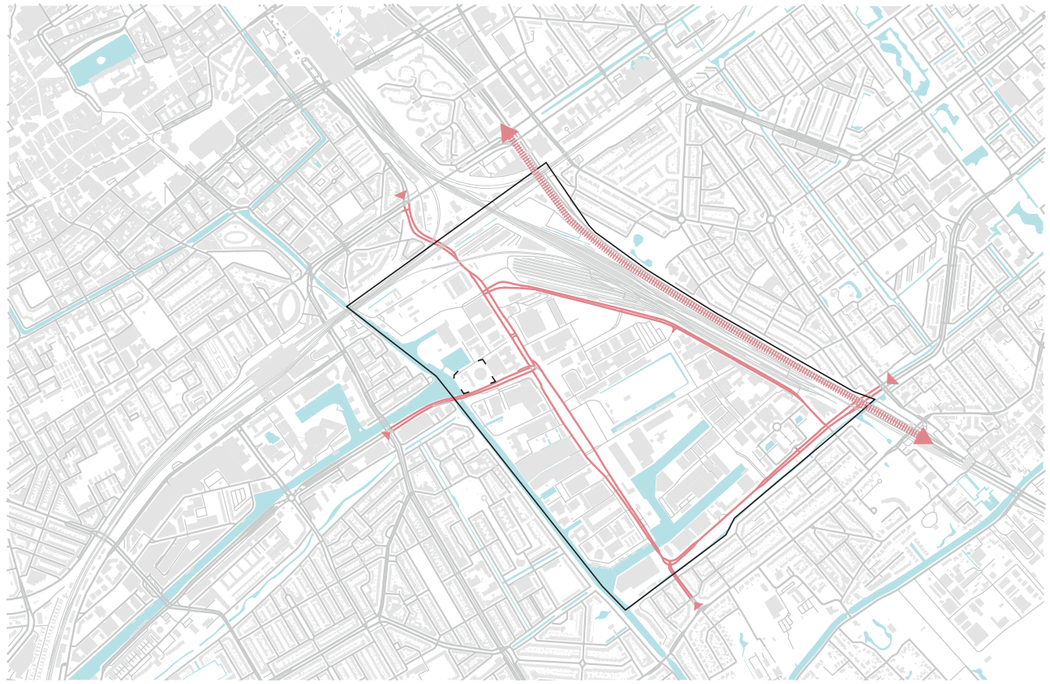
Major transportation methods to the Binckhorst are the car followed by the train. Depending on the location in Binckhorst. The southeast area within Binckhorst is a major access area for car traffic, while the northwest area is a major access area for public transport.



Public transport related to Binckhorst

Tram stop

Bus stop



Main roads related to Binckhorst

03 Culture

Dutch Music Culture

The Netherlands has several musical traditions. Contemporary Dutch popular music is strongly influenced by musical styles that emerged in the 1950s, in the United Kingdom and in the United States. The style is sung in both Dutch and English. Sometimes partly based on and growing up in the tradition of indie rock, new acts emerged in the mid-eighties with a mixture of Mainstream pop music, Dance, Jazz, Funk and Soul. Many of them performed and still perform in and/or outside the Netherlands, and some of them got (international) recognition, which sometimes resulted in a cooperation with big players from the United States or the United Kingdom.

From the end of the sixties, the post-war generation gained political influence. Throughout the country, many state-subsidised rock venues opened. These clubs, such as Amsterdam's Paradiso and Melkweg, were springboards for many alternative rock bands on their first European tour, and the Dutch public stayed well informed about new British and American acts.

Dutch techno, hardstyle, gabber, trance and other styles in electronic dance music conquered the world. Most of the best-known DJs in the EDM scene (and the world) hail from the Netherlands, including Tiësto, Armin van Buuren, and Martin Garrix, all of whom rank high in the DJ Mag Top 100 DJs and other rankings. The Amsterdam Dance Event (ADE) is the world's leading conference for electronic music and the largest club festival for the many electronic sub-genres on the planet. Festival and party concepts developed in the Netherlands are rolled out around the world with resounding success. Moreover, the world's largest Dance Music label Spinnin' Records is based in the Netherlands. These artists also make an important contribution to mainstream pop music played all over the world, as they often work with and produce for many well-known artists. Hip hop in the Dutch language (nederhop) is also very popular in the Netherlands and Belgium.

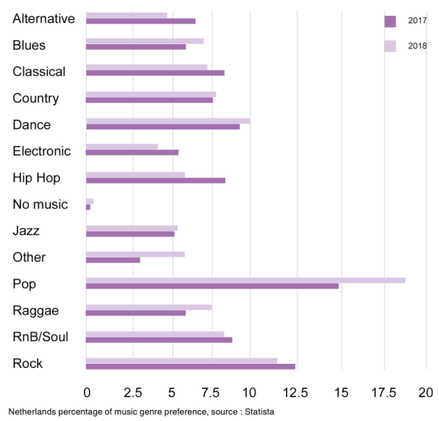
Live Music Venues and Festivals in NL

Music venues in the Netherlands are a vivid part of the social cultural environment of the country. In every big city there are concert halls for popular music, classical music and jazz. In addition to that in summer there are many festivals especially in electronic music. Selected venues and festivals that are known nationally and some internationally illustrated on the map with the information of the music genre and venue type.

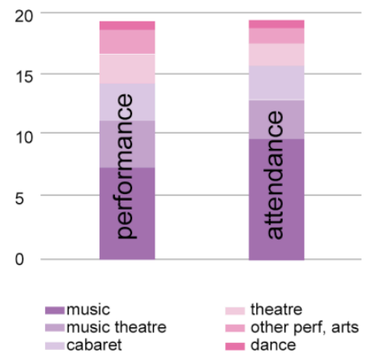
Also there is a number of multifunctional venues (like Ahoy in Rotterdam, Westergasfabriek in Amsterdam, Doelen in Rotterdam or Oosterpoort in Groningen) which frequently host musical acts. Furthermore, a number of sportstadiums feature on the megaconcert circuit, foremost Amsterdam Arena, and De Kuip in Rotterdam.

In every middle sized town of city (approx. 100.000 inhabitants) there's a music venue for popular music genres. In the Netherlands about fifty of these music venues receive funding from the government following the advice of Muziek Centrum Nederland. Other venues are independent or subsidiarised by the cities themselves or are local social centres, community centres and cultural centres with a stage facilitating music performances.

According to the diagram on the left that demonstrates music preference in NL in 2017-2018 ; pop , rock and dance music are the most popular genres. Second diagram demonstrates the number of performances and the attendance of different performative art events in NL. According to the diagram almost 15 million auideance attended music events and musical theatre



Netherlands percentage of music genre preference, source : Statista



Netherlands performing arts and attendance
source:https://www.cbs.nl/

03 Culture

Future of Live Music Venues

Design interventions must address the concerns about health and density that still linger for many people who are planning activities for upcoming events. After analyzing pre-COVID trends, the industry's pandemic response, and projections of post-vaccine preferences, Gensler identified six design and programmatic modifications that guide the development of the ideal music venue.

Venue expandability
Static, single-use venues are fast becoming a thing of the past. Expanding and contracting a venue and its amenities will be critical to accommodate more robust programming, year-round and around the clock, while maintaining the right energy for each individual event.

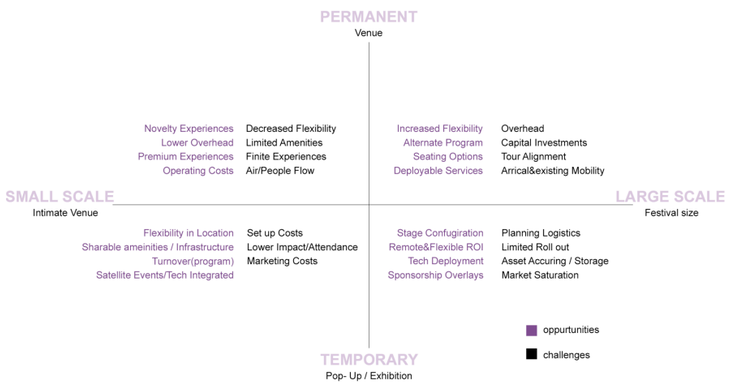
Inclusion of social spaces
Attendees at venues require more space away from the action to socialize and recharge.

Diverse offerings
Venues that curate simultaneous unique experiences for an ever-widening group of users will expand how much time people spend in a space and increase repeat visits.

Flexiblity
Incorporating flexibility in the seating product and arrangement, create unique vantage points for audiences and support a greater variety of event types.

Integrated digital experience
By integrating digital with the physical through immersive technologies such as augmented reality (AR), music venues can foster new experiences that heighten engagement for music fans.

Open air at all scales
Venues that incorporate outdoor space, even in smaller packages, will build in resilience and create opportunities for flexibility in the event of future disruptions.



Requirements of future live music venues and diagram of the spectrum of typologies
Source:Gensler Research Institute(2021), The Future of Live Music Venues

The Hague Music Culture

In the sixties, The Hague was known as the pop capital of the Netherlands. It was also called the Dutch Liverpool, because of the similar origin of famous bands like the Golden Earring. What made The Hague so suitable for young pop talent in the last century?

Because of the close connection and leadership from The Hague on the former Dutch East Indies, many Indonesians settled in the city in the last century and brought a new music culture with them. This culture brought with it a new kind of music, which consisted of a mixture of rock 'n roll and traditional Indonesian krontjong music, also known as indo rock. For many Dutch people, this was their first encounter with rock music.

Until the 1960s, it was mainly classical and quiet music, but then rock music flourished on Dutch radio. At the same time, international rock and pop music such as the Rolling Stones and The Beatles also reached Dutch culture. Together with international music, the 'Hague beat' was born. The combination of the rise of Indo culture and the cohesion between cultures through music in creative incubators created a real pop and youth culture. The Hague pop scene was subsequently strengthened in the following years by the emergence of music music schools, nightclubs and festivals, including Parkpop in 1980.

03 Culture

Public events in The Hague

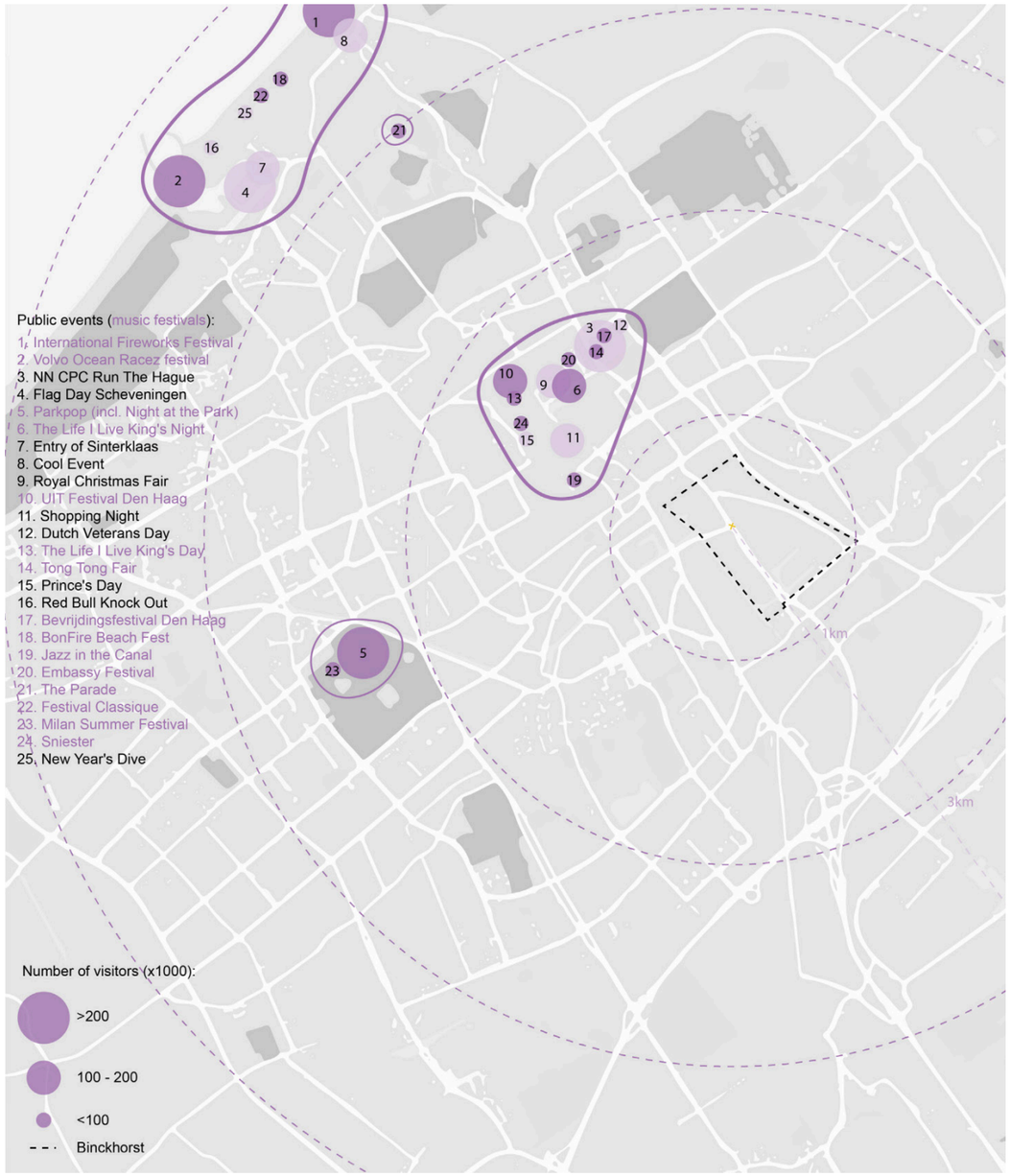
Various large-scale public events are organized in The Hague every year. These contribute to a lively and dynamic city, stimulate the economy and provide a pleasant living and residential climate for residents and visitors. The events differ from target groups and are both (inter)national and regional. The events are spread over the year and across the city. Typical music events in The Hague are The Life I Live and Parkpop. In addition, sporting events are given, which are mainly located in the Centre, Scheveningen, Escamp and Haagse Hout districts. There are few public events in the south Binckhorst, which can be an asset for making the area more lively. In winter there are several events that attract many visitors to the city through the annual Have A Royal Winter Program. The Royal Christmas Fair and the Cool Event skating events are the biggest crowd pullers in the city center and Scheveningen. Major events preferably match the profile of The Hague as a city by the sea, royal city or city of peace and justice. The well-known events are Prinsjesdag, Prinsjesfestival and Holland Historisch Festijn. In 2018, the theme year Feest aan Zee focused on strengthening its positioning as a city by the sea.

Parkpop

In the 80s, Parkpop arose from the mix between then Maliepop and Noordzeepop, in Malieveld. Then it moved to the Zuiderpark. At its peak in 1992, the festival, then the largest free pop festival in Europe, attracted 500,000 visitors. Nowadays, about half of them come. Because the visitors do not all come at once at free festivals, the capacity of Malieveld is suitable. In both the Zuiderpark and Malieveld it is not ideal to have all the visitors come at the same time. Parkpop announced last year that it's moving to the Malieveld. This will better position it nationally due to its good accessibility and in addition there is a lot of nuisance among the residents around the park. The Hague politicians, however, want it to stay in the Zuiderpark, because the pressure on the inner city would become too great and more people can be in the Zuiderpark (maximum 500,000 versus 80,000 in the Malieveld). Zuiderpark also has the distinctive atmosphere and historical character, which, in addition to the program, has determined the success of the event for forty years.

Conclusion

The Hague has an extensive and multicultural music culture, with an emphasis on pop and rock music. The music festivals often have a specific genre or target group or offer specific activities aimed at introducing people to other cultures or genres. The range of music venues also varies, with each music venue known for its own style.



Large-scale public events in The Hague between 2014-2018

04 Subculture

What is Subculture?

Music is considered by many to be the highest form of art and culture. Music is also considered by many to epitomise their values and tastes, as well as those of other people. Music is very often a product of its time – both a reflection of the 'here and now' and a 'recaller' of memories. Music and youth are usually deemed to hold a special relationship with each other. Music is delivered and sold to youth audiences, and young people on the whole are fans of one music genre or another.

A youth sub-culture is a group of young people who define themselves in opposition to the main culture of their society. One of the ways in which sub-cultures define themselves is through music. Each music genre might have its own subculture associated with it some examples of youth sub-cultures include Punks, hipsters, Rockers and Ravers.

The mods, rockers, punks, hippies, hip hop/urban/rappers, emo, indie, hardcore, glam rockers and goths are some examples of music based subcultures. Characteristically, members prided themselves on their musical taste, often dressing to affiliate themselves with similar members, yet also maintaining a sense of individualism within this music subculture. As the Internet dispersed throughout mainstream subculture in the 1990s, so to did the establishment of musical subcultures online, allowing members to communicate freely with one another.

But to what extent do the municipal authorities use music venues to boost the (local) subculture and thus profile their own place?

Berghain, Berlin a place for harsh techno subculture

A collage of artists and subculture artists

05 Case studies

Casa da Musica

An interesting case study concerning circulation, programme distribution and hall morphology is the Casa da Musica in Porto by OMA (2005). Available material is from the joint research during P1, book WEB_MusicMarvel_03_CASE 7-12.

Circulation

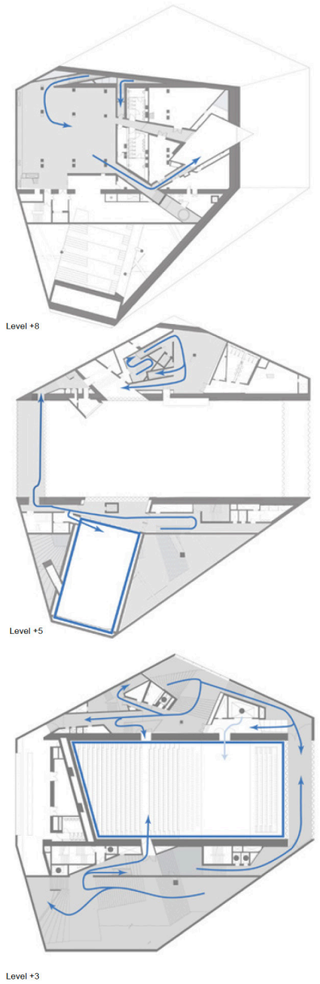
When the visitor has entered the building from the first floor, there are two main routes to proceed. The big staircases functions as a foyer, in which you walk around the main music hall. The visitors wander around and have different kinds of orientations of the city of Porto and viewpoints to the main music hall. The stairs ensure different kinds of movements and a spatial continuum in which the building is not horizontally separated into different floors and creates and adventure experience. The foyer is thus designed as a continuous surface. The route ends in a roof terrace.

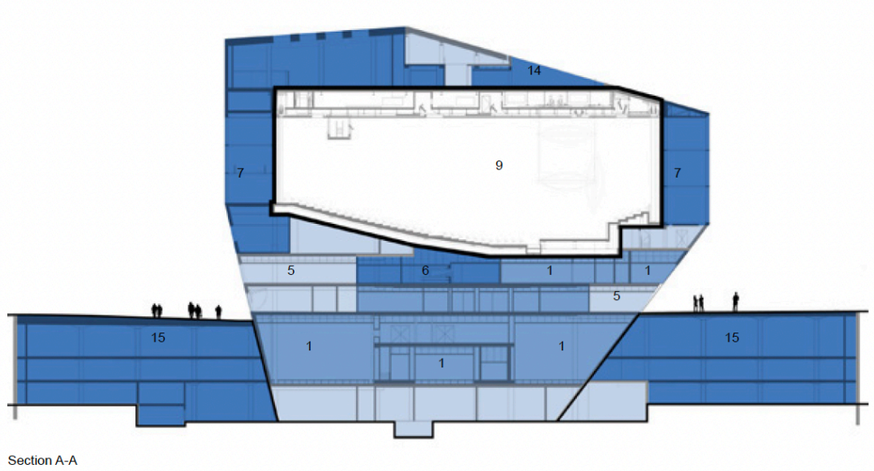
Program distribution

The three main music halls of Casa da Musica are situated as voids within a sculptured volume. The parking garage underneath the building is publicly accessible but also used for logistics and staff. The more upper floors are mainly used for the public. The lower floors are mainly used for staff and the musicians themselves.

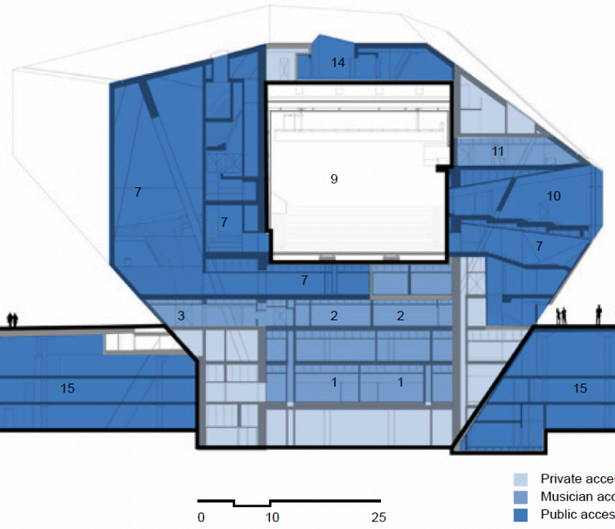
Morphology Music Hall

The main music hall of Casa da Musica characterizes itself by the amount of daylight that enters the hall. By usage of curved glass walls there is no negative result in terms of reverberance and sound quality. The spaces where the daylight penetrates into the music hall functions as another music hall, bar or circulation space.





Section A-A

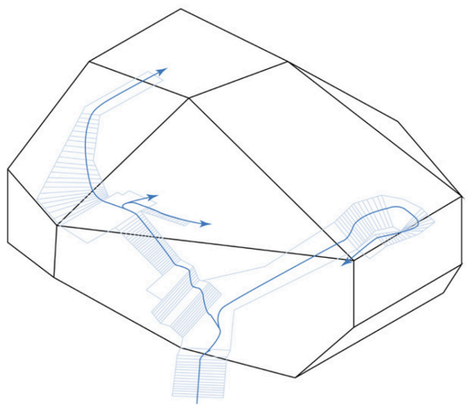


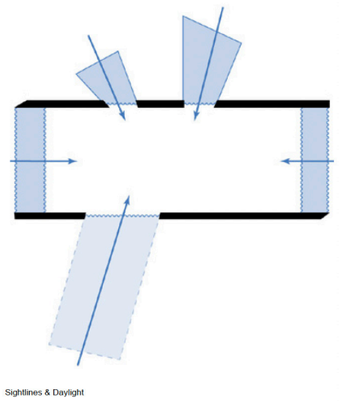
1 Rehearsel Room
2 Dressing Room
3 Restaurant Musicians
4 Entrance Musicians
5 Offices
6 Ticketsale & Garderobe
7 Foyer
8 Bar
9 Acoustical Music Hall
10 Electronic Music Hall
11 Educational Space
12 Small Auditorium
13 Restaurant
14 Roof Terrace
15 Parking Garage

Section B-B

0 10 25

Private access
Musician access
Public access





Sightlines & Daylight

05 Case studies

TivoliVredenburg

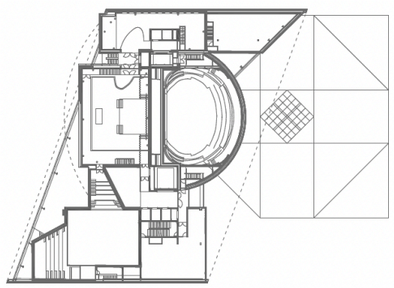
An interesting case study concerning circulation and music distribution is the TivoliVredenburg in Utrecht in cooperation with several architects under the direction of Herman Hertzberger (2014). Available material is from the joint research during P1, book WEB_MusicMarvel_03_CASE 13-16.

Circulation

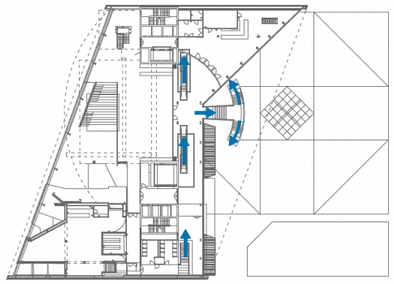
The visitor enters the building on the ground floor, which is designed as a public interior street. The street is at one side connected to the original concert hall on the ground floor and on the other side to the escalator, which is the starting point of the diagonal route to the remain halls. The logistics are connected to the basement, which in turn connects the two cores to the vertical program.

Music Distribution

Tivolivredenburg has an extensive program that covers the full spectrum of music genres. It has five multifunctional halls of different shapes and sizes that that covers this wide range of music. The vertical organisation of the music halls is disconnected from each other cause of the routing, which functions as an (acoustic) in-between space.

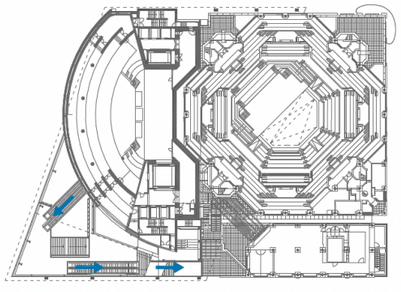


Level 4

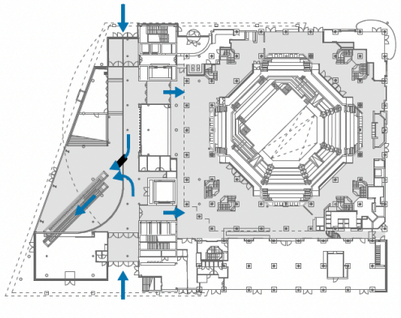


Level 3

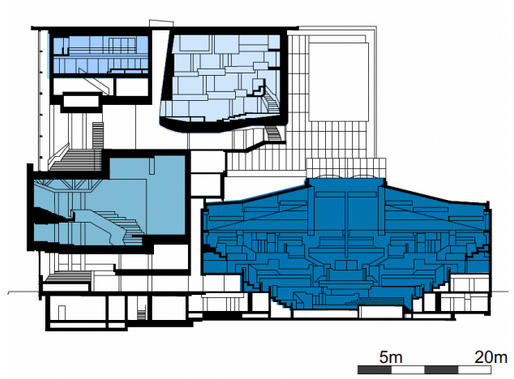
5m 20m



Level 2

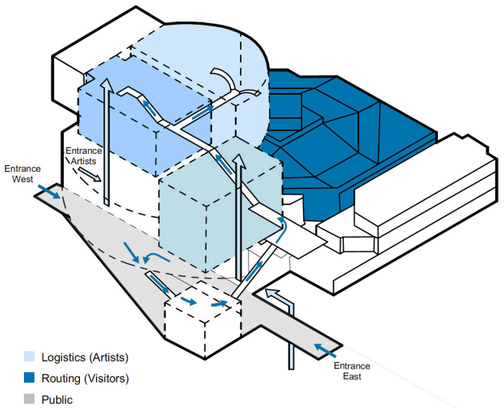


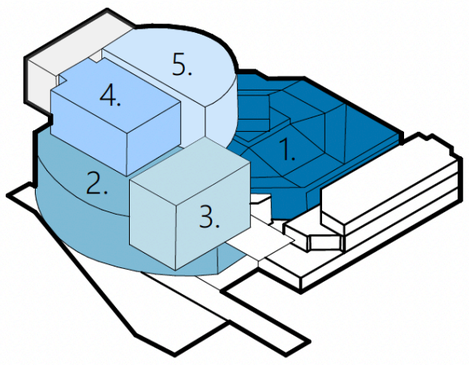
Level 1

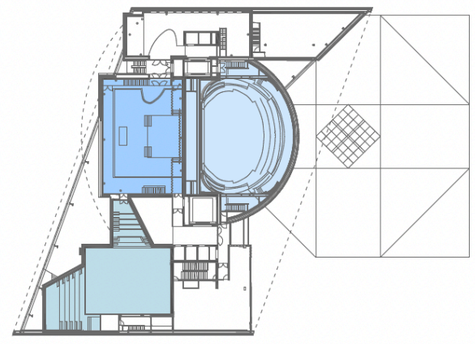


5m 20m

1. Main concert hall
2. Ronda
3. Pandora
4. Cloud Nine
5. Hertz
Other program







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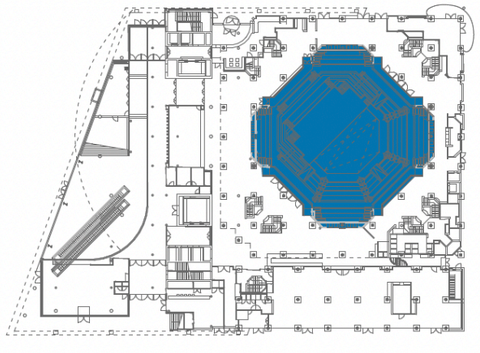
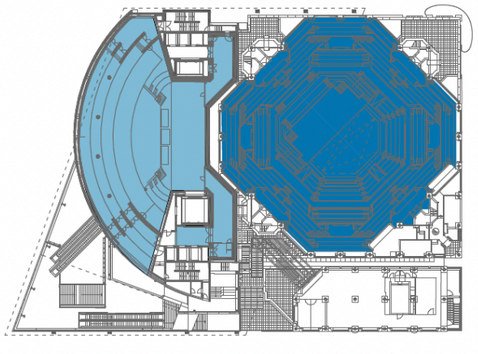


Level 1



Level 2

5m 20m

06 Sensory Design

Introduction

The previously defined research question is approached from a phenomenological position because of the direct relationship of architecture to experience. This is the knowledge that takes an important place in the study of how an individual perceives a space or an object. This movement merges the physical aspects of the space with the experiences and emotional influences of the observer, creating a perception[3]. This perception is different for everyone. This chapter will define which theory and ideas are adopted to frame the research and avoid any ambiguity.

Both the perception of architecture and music are conducted through the stimuli of multiple senses. For this research, broadly speaking, two theoretical themes will be approached and treated, respectively the multi-sensory effect on architecture and the perception of music through 'sensory' architecture. For the first theme, the theory of Juhani Pallasmaa with the book 'The Eyes of the Skin' and Peter Zumthor with 'Atmospheres' will be used. The second theme will primarily extract its theory and ideas from the book 'Music, Space and Architecture' by Aart Oxenaar, Maarten Kloos and Machiel Spaan. In brief, my understanding of the topics and theories introduced concerning the research question and the elaboration of the Music Marvel in Binckhorst is given below.

Sensory Architecture

Sensory architecture refers to an approach whereby human senses are stimulated through architecture. It refers to the process of implication that the built environment has on the user of a given space through the understanding of the different components of architecture: form, light, colour, texture, scale, and patterns[4]. The user analyses these architectural components through the five basic senses: sight, hearing, touch, smell, and taste.

Perception of space

Each person has their own perception of a space. The perception of space informs the user not only about the physical and emotional properties of such a space but also about the desired behaviour that is acceptable in such a space. The user will automatically adjust his general attitude and posture in that space[5].

Perception of music

A person experiences how strongly their perception is their own creation, based on the connections they make and filled with their own emotions, memories, and thoughts[6]. A process by which one arranges and interprets musical information through identifiable characteristics of music such as melody, harmony, repetition, and rhythm and is different from person to person.

Multi-sensory experience

Perceptions involve more than one sense. A single sense cannot form a perception. Pallasmaa argues that every experience of architecture is multisensory and describes that the qualities of scale, matter and space are measured equally by the human senses[7]. In addition, vision is seen as the most dominant sense and the ultimate physical loss, i.e., the senses themselves are equal neither in kind nor in range[8]. Architects must approach a design from all senses to motivate perception.

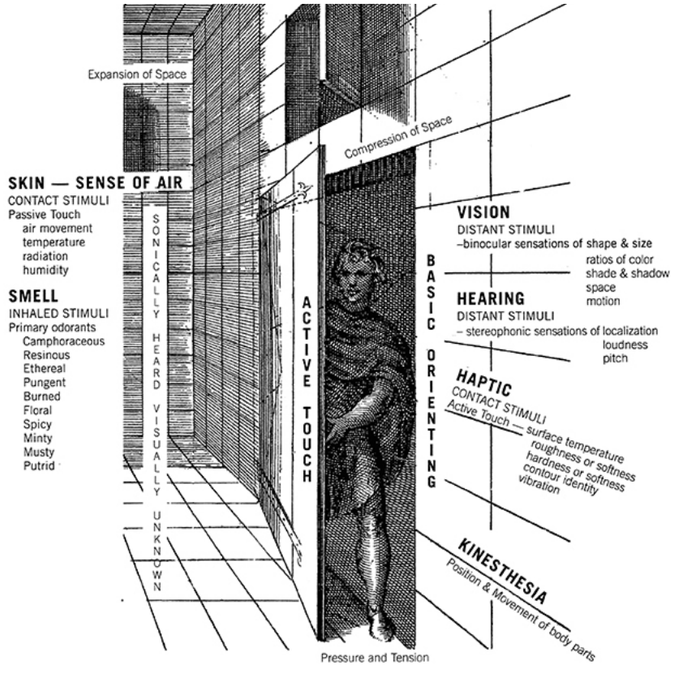


Figure 1: Range of the senses, Created by Joy Malnar and Frank Vodvarka. The senses themselves are equal neither in kind nor in range.

[3] Spence, C. (2020). Senses of place: architectural design for the multisensory mind. Cognitive Research: Principles and Implications, 5(1), 1-26.

[4] Canter, D. (1970). Architectural psychology. London: RIBA Publications Limited

[5] Pallasmaa, J. (2012). The eyes of the skin: architecture and the senses. John Wiley & Sons.

[6] Oxenaar, A., Kloos, M., & Spaan, M. (2012). Music, Space and Architecture. Architectura & Natura Press. p. 57

[7] Pallasmaa, J. (2012). The eyes of the skin: architecture and the senses. John Wiley & Sons. p.21

[8] Malnar, J. M., & Vodvarka, F. (2004). Sensory design. U of Minnesota Press. p.152

07 Site Research

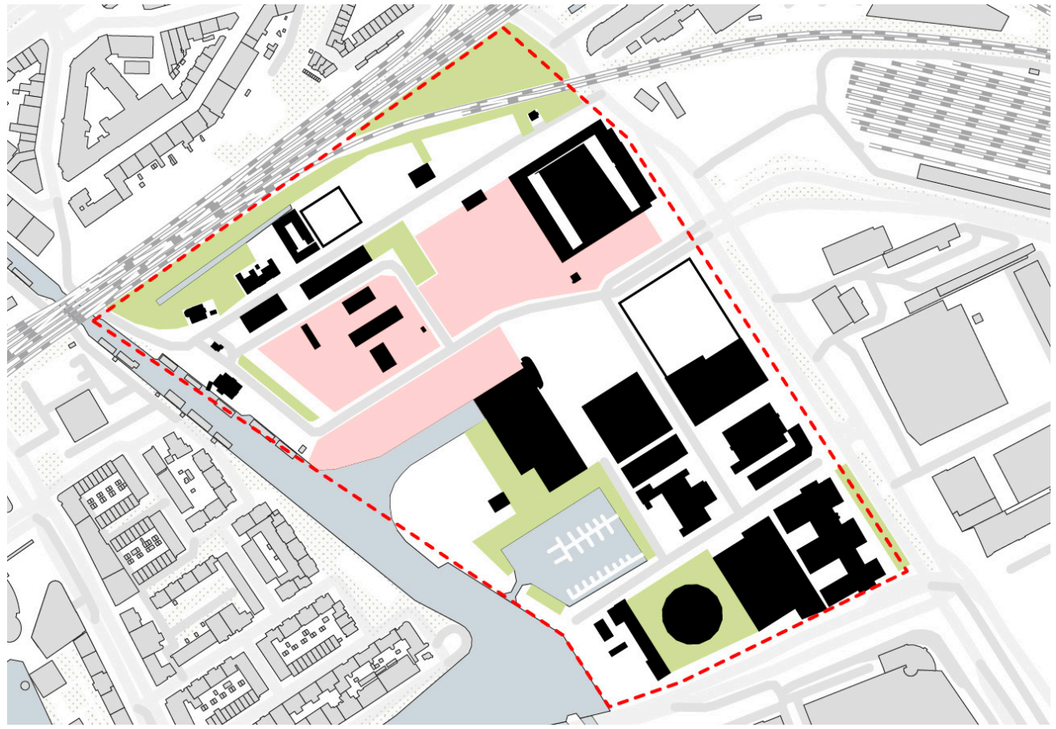
Introduction

Site research was done using the available material from the collective research during P1, book WEB_ MusicMarvel_05_SITE. In the following pages I clarify the take-aways I have taken.

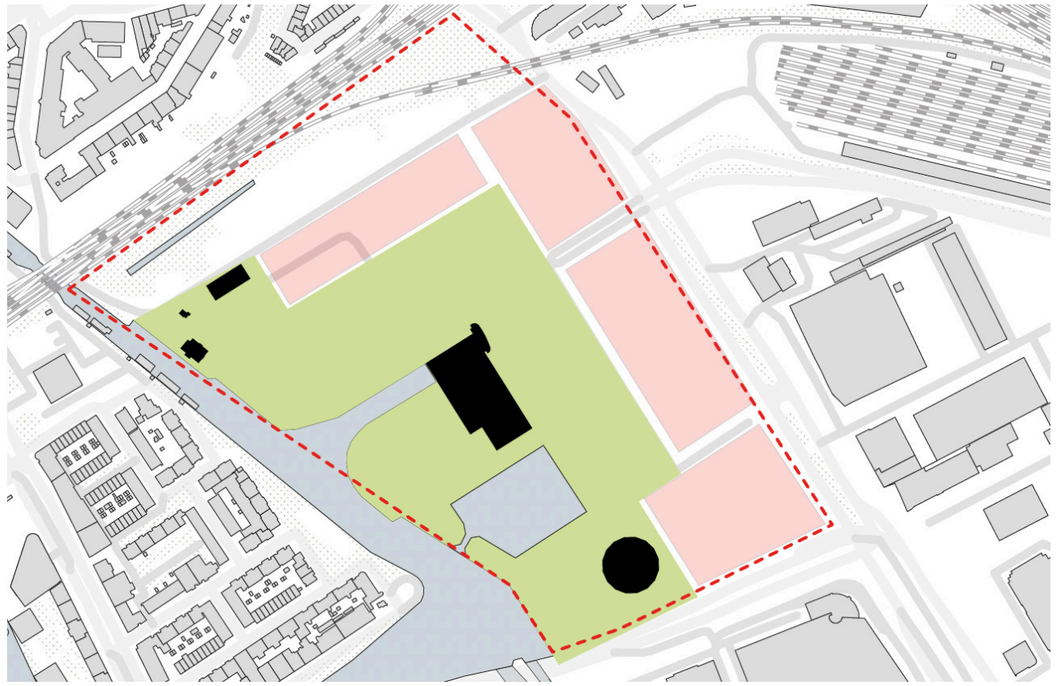
Former industrial enclave
The Gasworks terrain is located in the north-eastern part of the Binckhorst. It was the first area of the Binckhorst to be developed as an industrial estate for the production and storage of gas. This was the first step in the development of the whole Binckhorst area as an industrial enclave in the rapidly growing city of The Hague. Although most of the gasworks has disappeared, the remaining buildings have been preserved as monuments. The proximity of the city centre and Holland Spoor Station offers good accessibility opportunities. As a result, the area also borders directly on the envisaged Central Innovation District of The Hague. In contrast to the opportunities the location offers, the character of the area is dominated by its impermeability, caused by a lack of public space and a multitude of areas with restrictions and fences. In addition, the area is enclosed by the train tracks in the north and the Laakhavens in the west. The programme of the area is currently dominated by waste processing plants that occupy most of the area.

Current situation
The built-up area is characterised by buildings with a large footprint, such as warehouses and waste processing plants. Green areas are relatively scarce but also largely inaccessible. The land area is largely paved, with the exception of some fallow land.

Future land use
From hardened to green The planned development for the gas area includes a park where at least 60% of the area will remain undeveloped. The built-up area will be realised along Binckhorstlaan. This redevelopment offers opportunities to create a good connection between housing and green areas.



Current situation Gasfabriek terrein 1:5000



Future plan Gasfabriek terrein 1:5000

07 Site Research

Historic development

In 1839 the Hollandsche Ijzeren Spoorwegmaatschappij put in place the first railroad linking Amsterdam and Haarlem. This link would later be extended to reach Rotterdam through Leiden and The Hague, which had its station open in 1843. At the end of the 19th century, the city of The Hague started lacking adequate space to situate its growing industry as the existing waterways had reached capacity. An urban plan was developped by Lindo for the the development of the Laakhavens which was realised between 1898 and 1931. From 1907 the Binckhorst harboured the Second Municipal Gasfactory, which used coal shipped from the port of Rotterdam to make gas for Gasterrein historic development 1:20000 city heating. The gasfactory grew in size throughout the 20th century to accomodate chemical refineries. After the discovery of the natural gas reserves in Groningen in 1960, The Municipal Gasfactories where forced to close after a nationwide transition to natural gas. Most former buildings of the factory dissapeared alongside the train tracks that desserved the site. However some office buildings were preserved and remain to this day as monuments. The arrival of the Highway connection to Utrecht in 1981 provided an insentive for businesses to locate in the Binckhorst. Today we find different hardware stores and car related businesses

Gasterrein historic development 1:20000

07 Site Research

Current situation

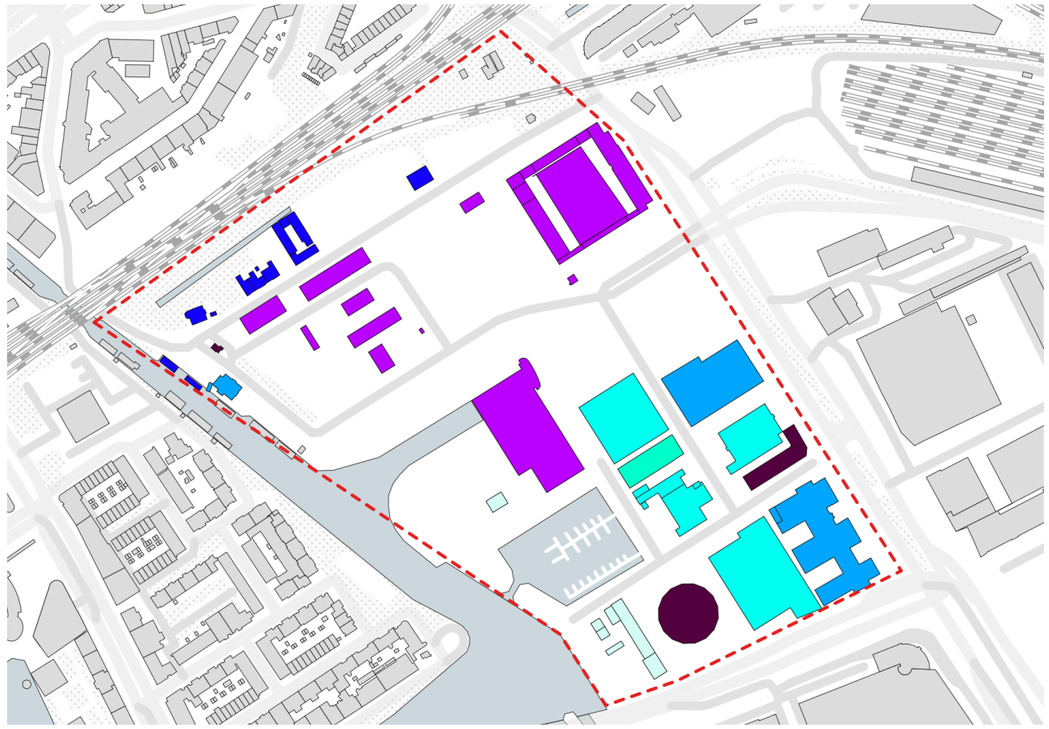
Program

The majority of the program is taken up by the facilities of The Hague Millieu Services and AVR waste processing. Commerce is present in the form of hardware stores and car repair shops. Office space is represented by the T-mobile building in the south-east corner of the area. Leisure spaces are ephemeral in nature with event-based activities. Other functions include a homeless shelter and a gasholder.

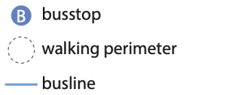
The activity of the site mainly consists of waste processing. Official opening hours do not fully represent the activity for these waste hubs due to the retrieval of waste in the early hours. A notable activity is the homeless shelter which mainly operates on off nominal hours.

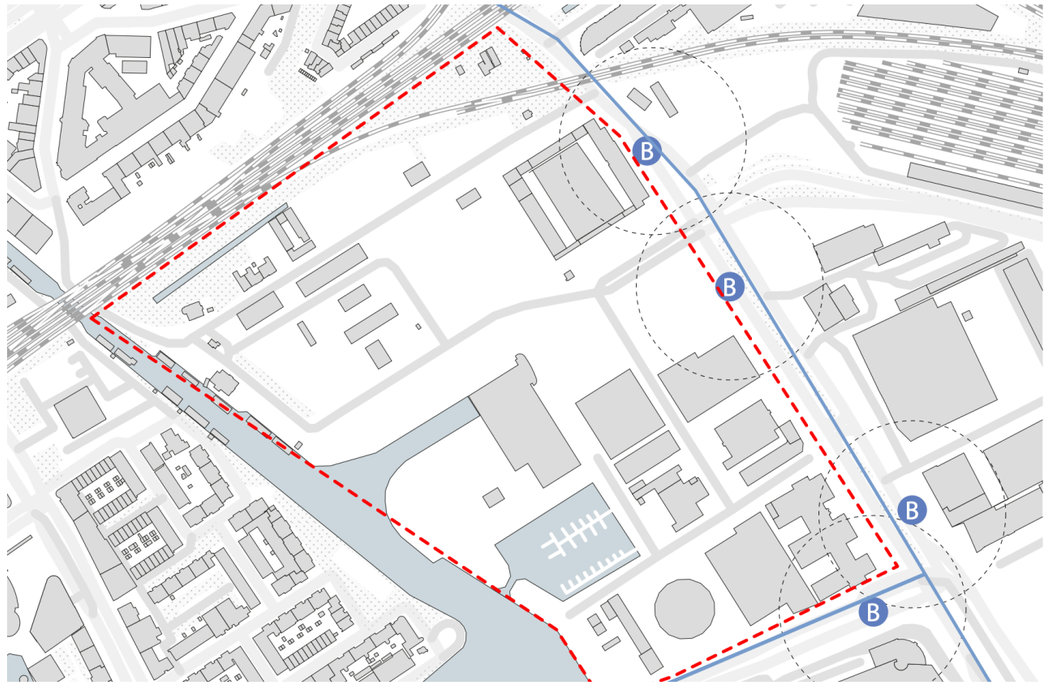
Connection/Public transport

Due to its close proximity to the city centre and both the central station ans Holland spoor, the site is very accessible by public transport. The public transport is well reachable by foot from within the site due to multitude of busstops alongside the Binckhorstlaan.



Current program Gasfabriek terrein 1:5000





Current public transport Gasfabriek terrein 1:5000

07 Site Research

Future Development

Waterfront park

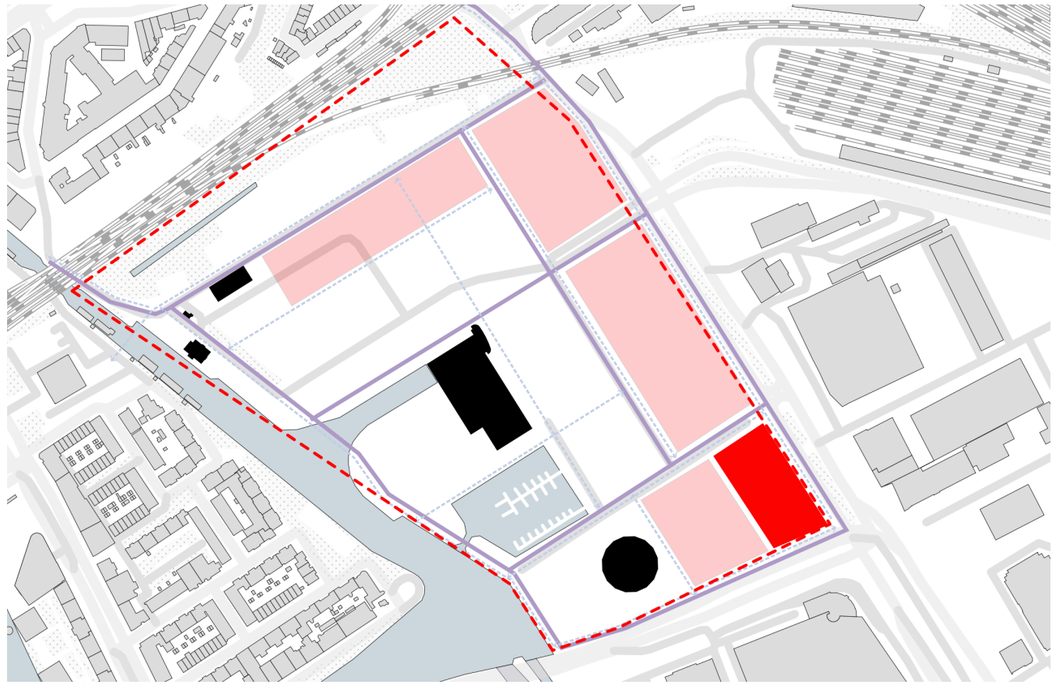
Due to soil contamination, the gasworks site is only partially suitable for building. Therefore, a waterfront park along the Trekvliet is planned, where only 60% of the area will be built on. In addition, a waterfront strip of 26 metres has been reserved exclusively for greenery.

Building development

The monuments will be retained in the future plans, as will the AVR waste facility building and the old gas holder. Future developments will be realised along Binckhorstlaan with the integration of a public plinth. The height of the buildings will decrease from low-rise closer to the water to high-rise along Binckhorstlaan.

The gasworks site is changing from a privatised fenced area into a public area. The retained buildings in the future planning provide an opportunity to further connect this new public area with the cultural the cultural heritage of the site. The stages can incorporate different parts of the park into the music experience.

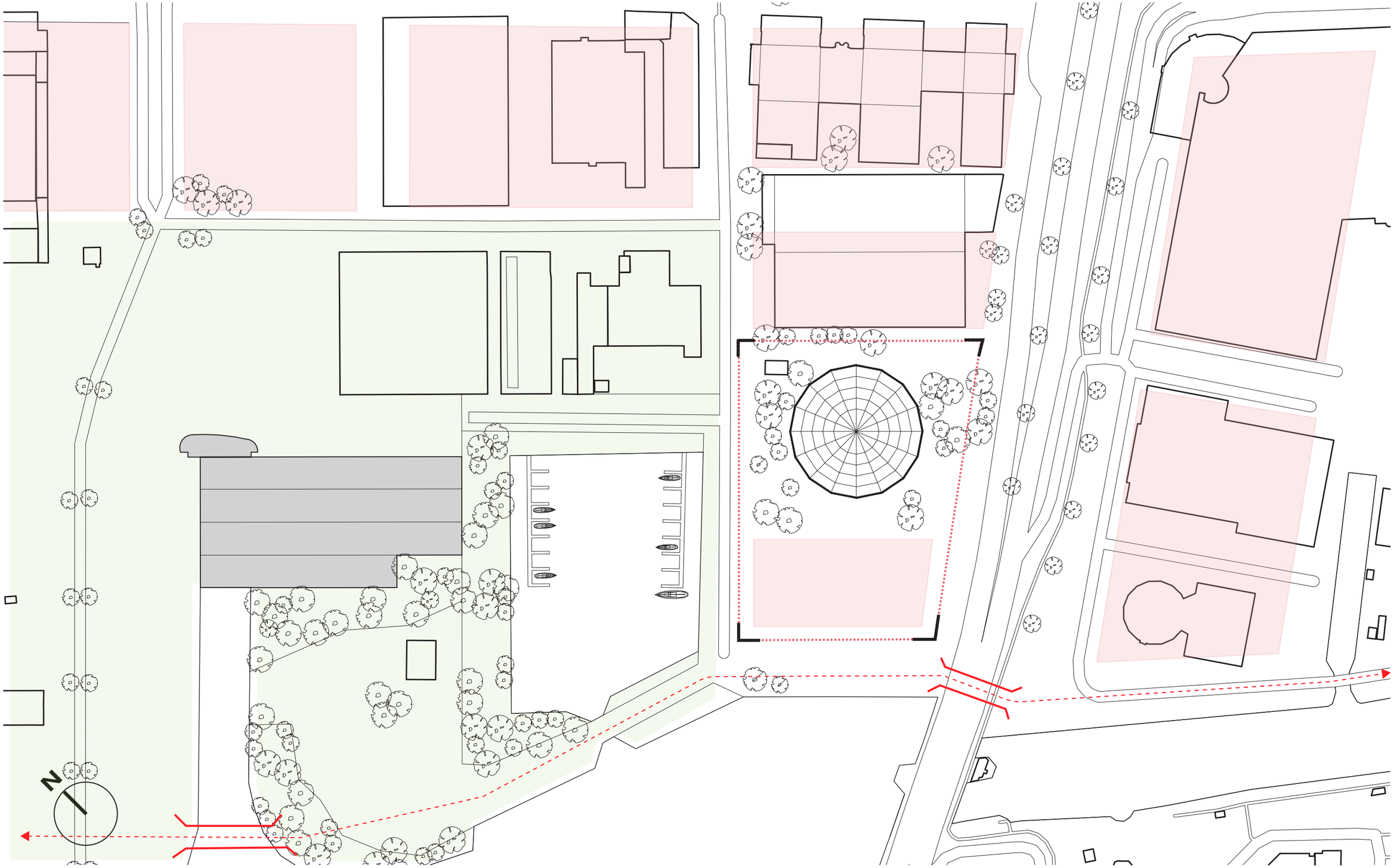
Future waterfrontpark Gasfabriek terrein 1:5000



Future building development Gasfabriek terrein 1:5000

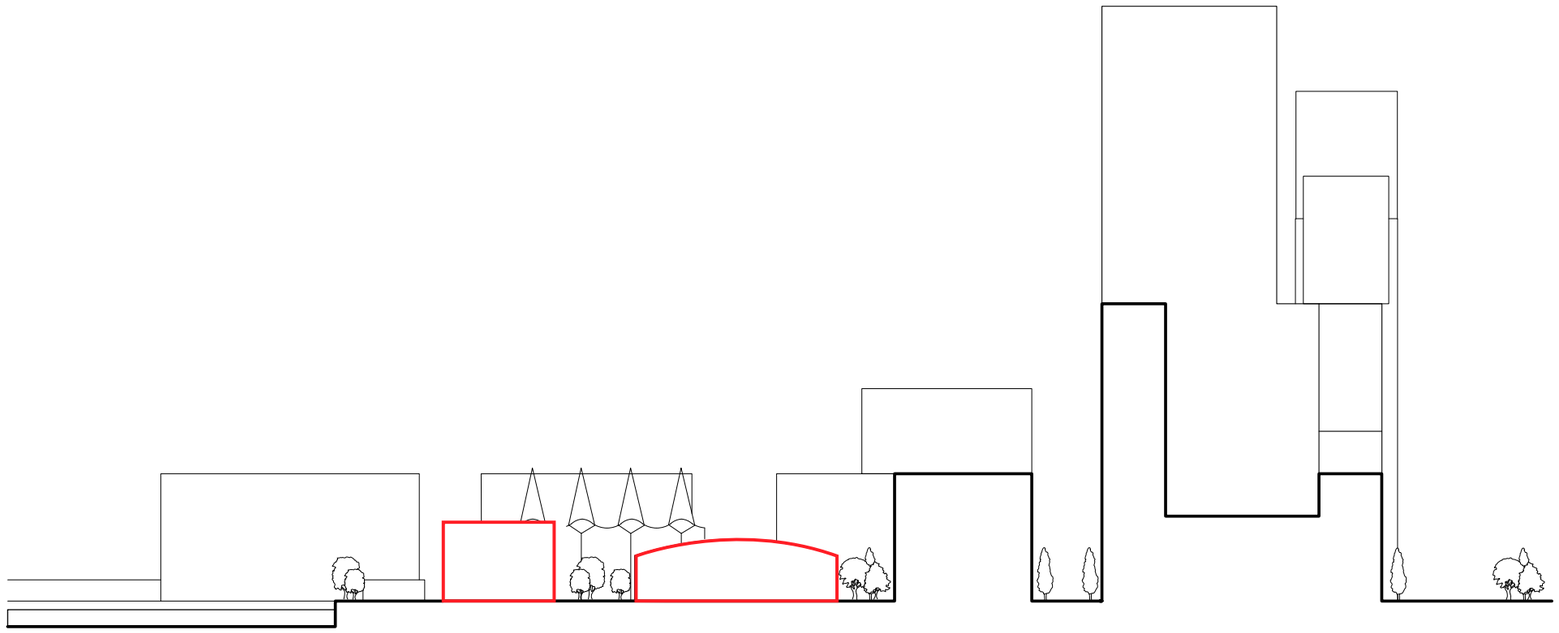
07 Site Research

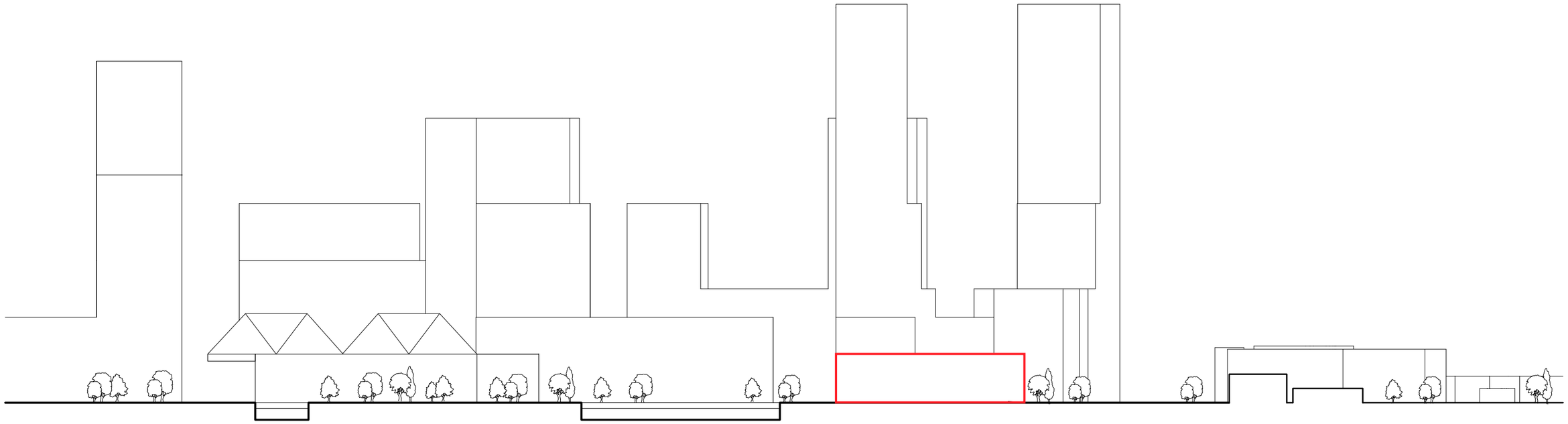
Place of intervention I situation



07 Site Research

Place of intervention I section



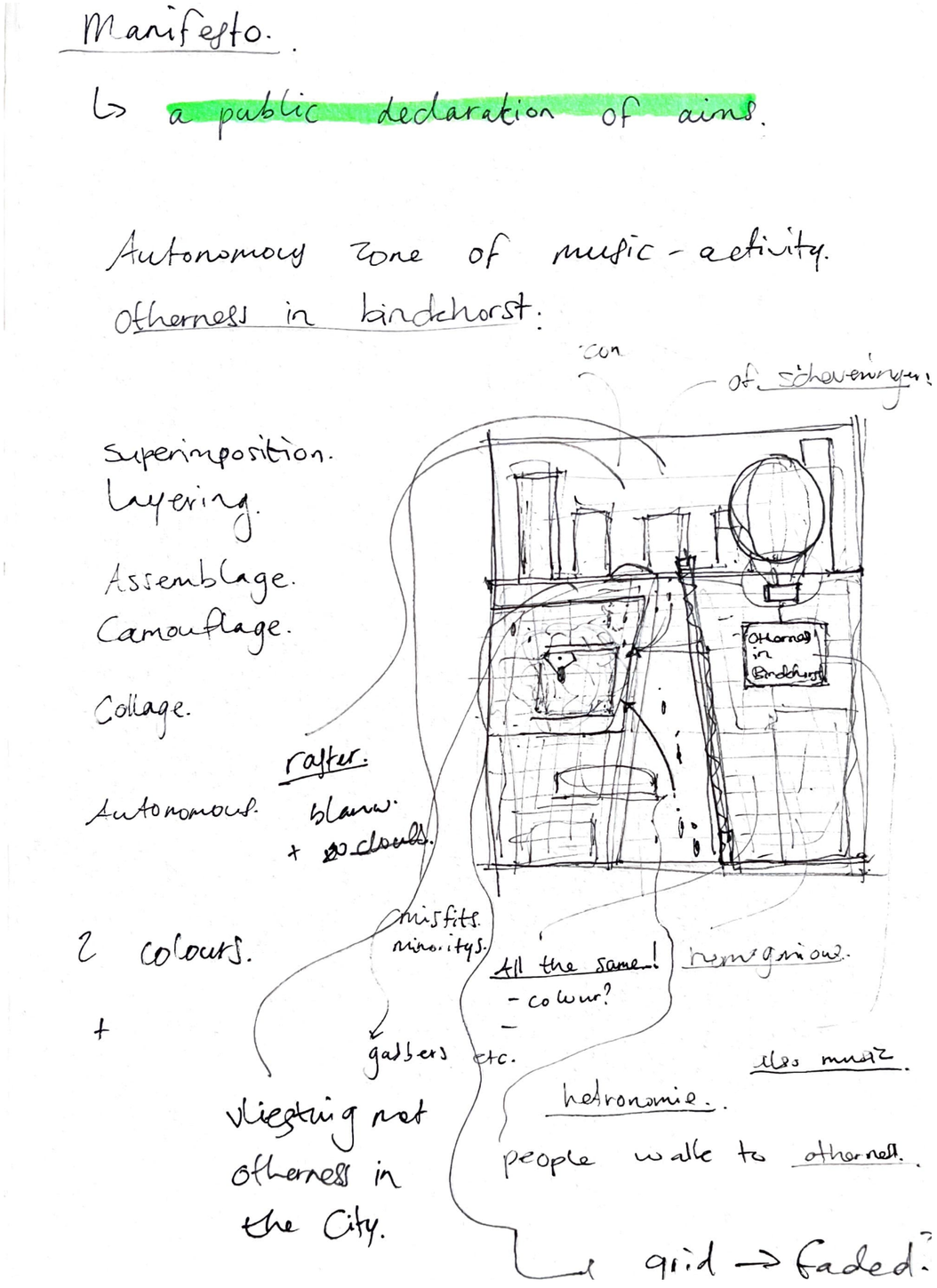


Part VII - Process Documentation

Towards P2

01 Manifesto process

Manifesto



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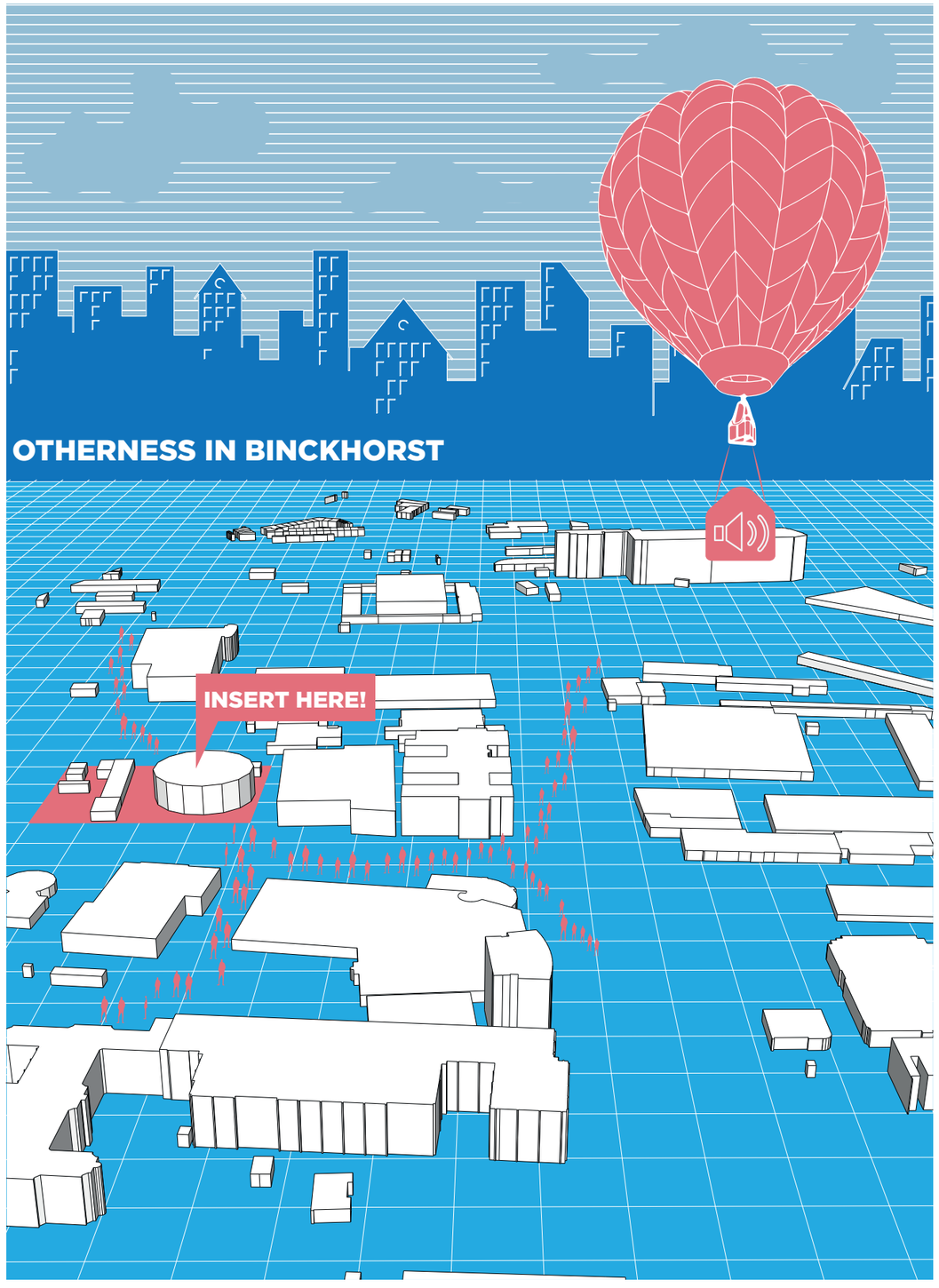


02 Draft I

First formulation of Design Principles + fascination

Use the analysis and case studies form P1 to draw your own conclusions to frame your project's assignment:

Design principles
1. the types of venues (specific, flexible, mix, etc.)
2. contextual requirements (access, program, physical conditions, etc.)
3. location(s) of possible site(s) within the (future) Binckhorst
4. project brief (size, complexity, iconic value, etc.)

A music venue in order to boost the local/national culture and thus profile their own place.

Music, Experimental, (multi)Cultural, Educational + Sensory stimuli = House of experimental music

"Music experimental hub"

"Music for misfits and minorities"

First approach Project brief
1. Types of venues
- Pop/Rock/Hip-hop venue (specific + mix) – Medium, 1000-1500 audience
- Jazz/recital (experimental) venue – Small (Specific), 500-600 audience
- Electronic by Night (flexible), Medium 1000 audience, moving stage (Toffler)

2. 'Plus programm
- Studio's (Pop/Rock/Jazz)
- Studio's (electronic music)
- Bar/restaurant

3. Contextual requirments
- Public ground level + public amenities
- An incubator for subcultures
- A building that plays with your senses by motivating or demotivating personal perception

4. Location(s)
- Gasfabriek terrain - next to the waste depot
- Gasfabriek terrain - next to the gas holder

First site approach

03 Draft II

Formulation of Design Principles

How will you Re-Wire Music + The City on our design site Binckhorst in The Hague?

To what extent do the municipal authorities use music venues in order to boost the local culture and thus profile their own place?

An incubator for (sub)cultures
A music venue in order to boost the local/national culture and thus profile their own place.

Music, Experimental, (multi)Cultural, Educational + Sensory stimuli

Program (What)
A bricolage of (experimental) music venues
1. Pop/Rock/Hip-hop venue (specific + mix), 1000-1500 audience
2. Jazz/recital (experimental) venue – Small (Specific), 500-600 audience
3. Electronic by Night (flexible), 1000 audience, moving stage

'PLUS program'
1. Studio's (recording + producing)
2. Workshop space
3. Bar(s)
4. Restaurant/Café
5. Public Plaza(s)
6. Broadcasting studio

Music experimental hub - an incubator for (sub)cultures - music for misfits and minorities

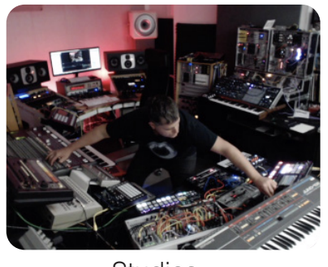
Site (Where)
Gasfabriek terrain - next to the gas holder
1. Easily accessible from The Hague Central Station and The Hague Holland spoor
2. Easily accessible on foot, by bicycle and by car
3. Visual sightlines from across the water, the train tracks and emerging new high-rise buildings
4. Surrounded by water, offering opportunities for leisure activities
5. Next to the old gas holder, offering opportunities for redevelopment
6. Surrounded by the new water park to be realised in Binckhorst (future)

Program indication


Pop | Rock | HipHop

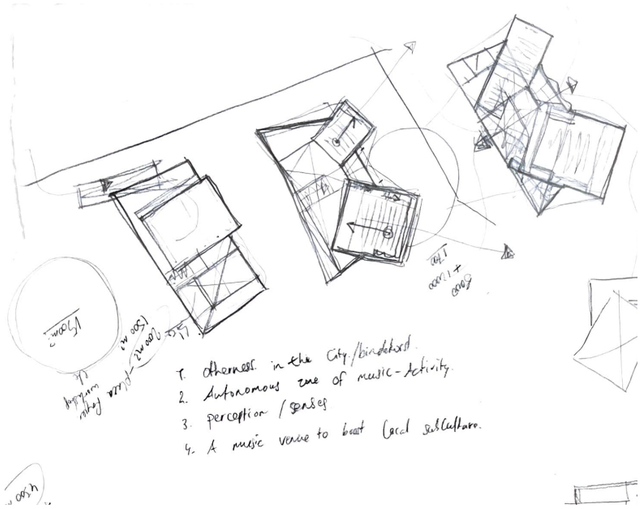

Jazz | Recital

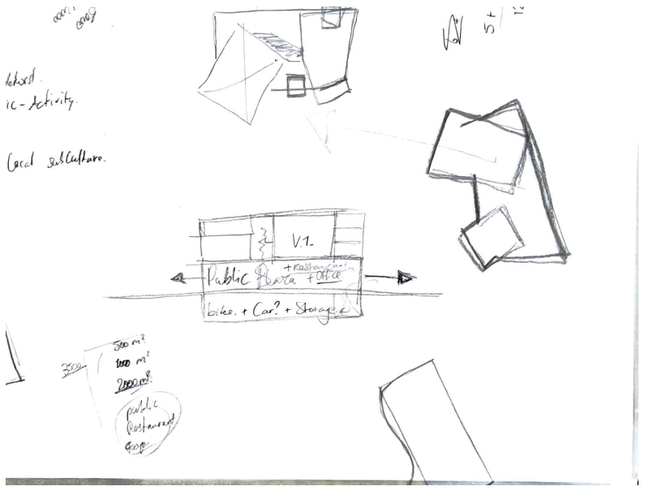

Electronic by Night

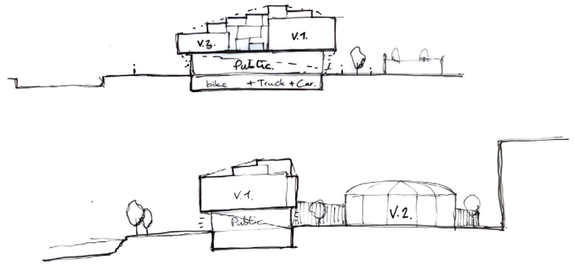

Studios


Broadcasting

First sketches

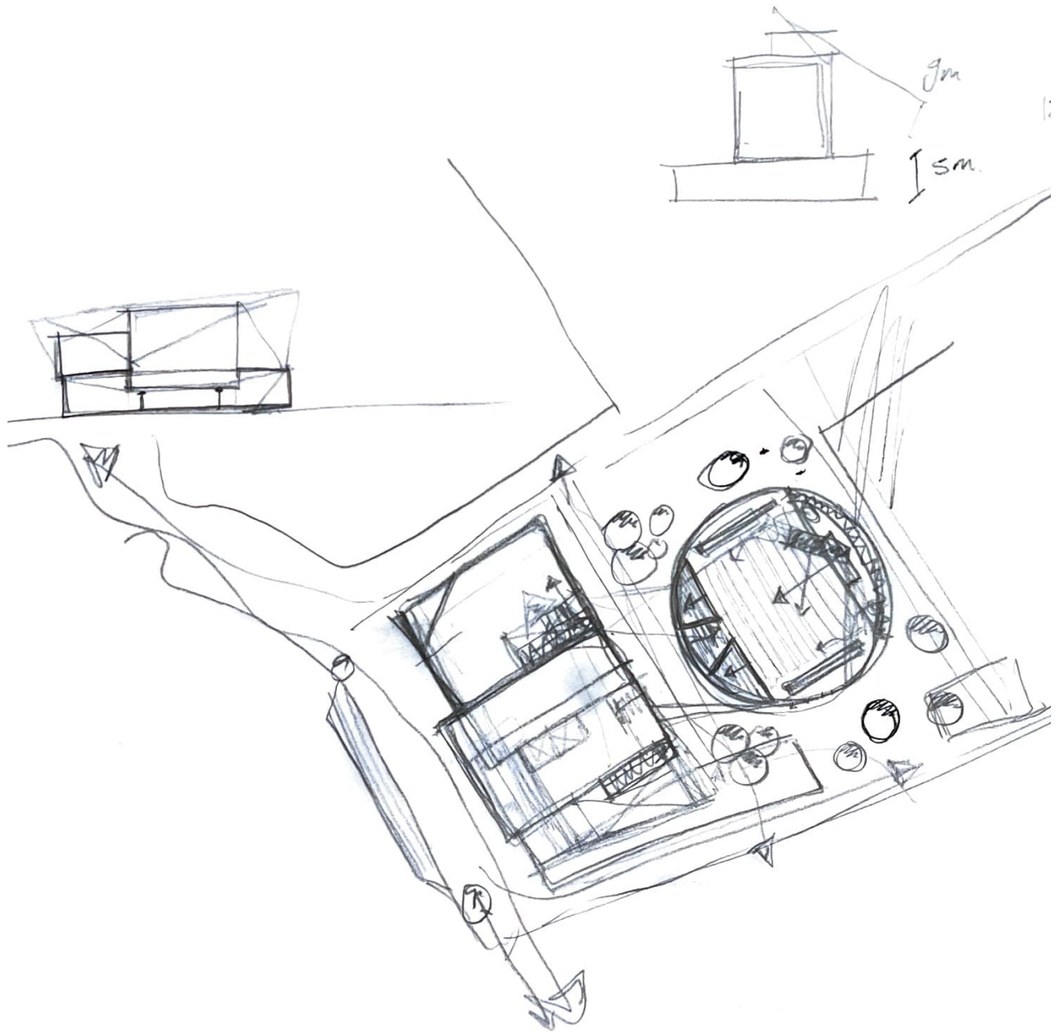




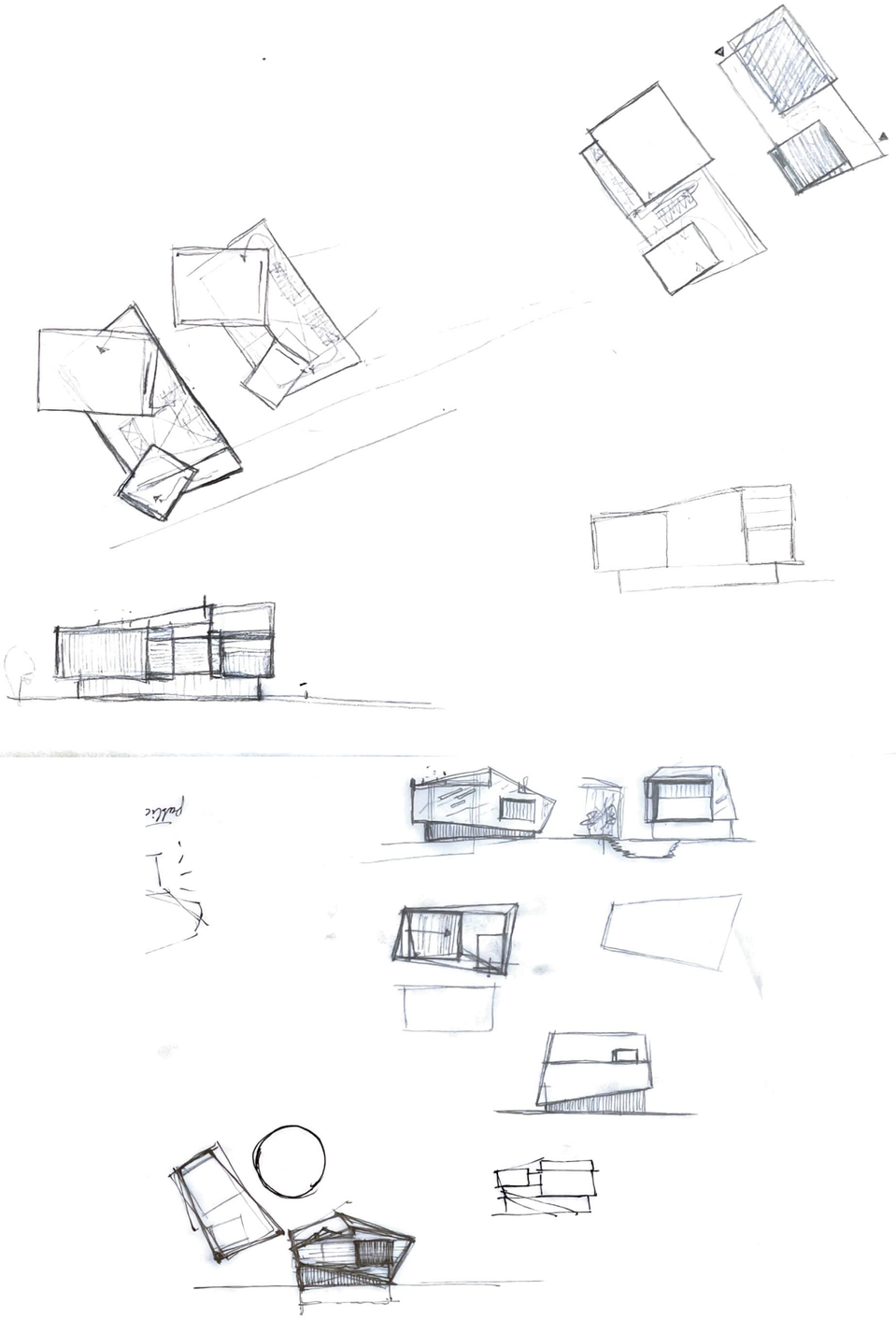


03 Draft II

Chosen site approach

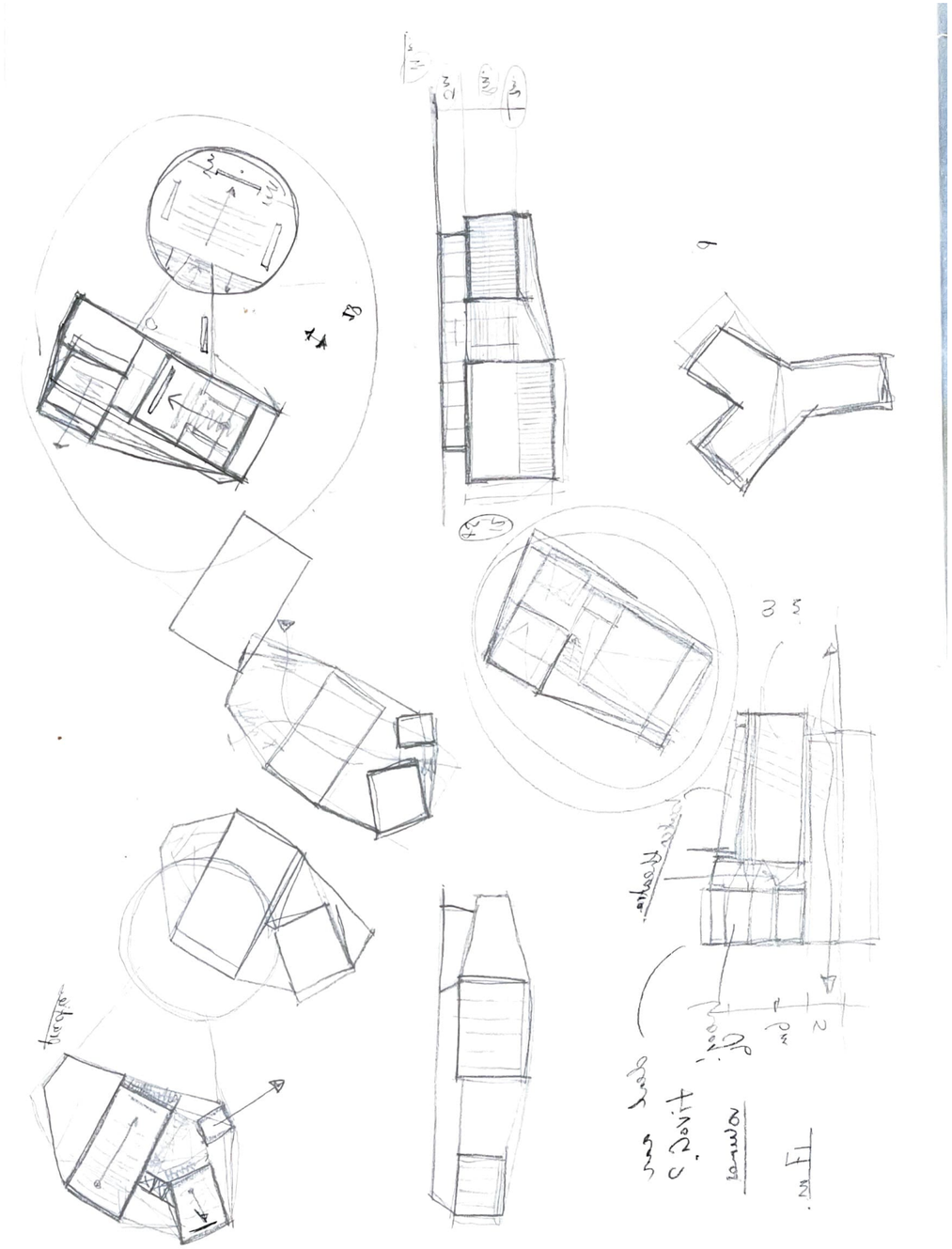


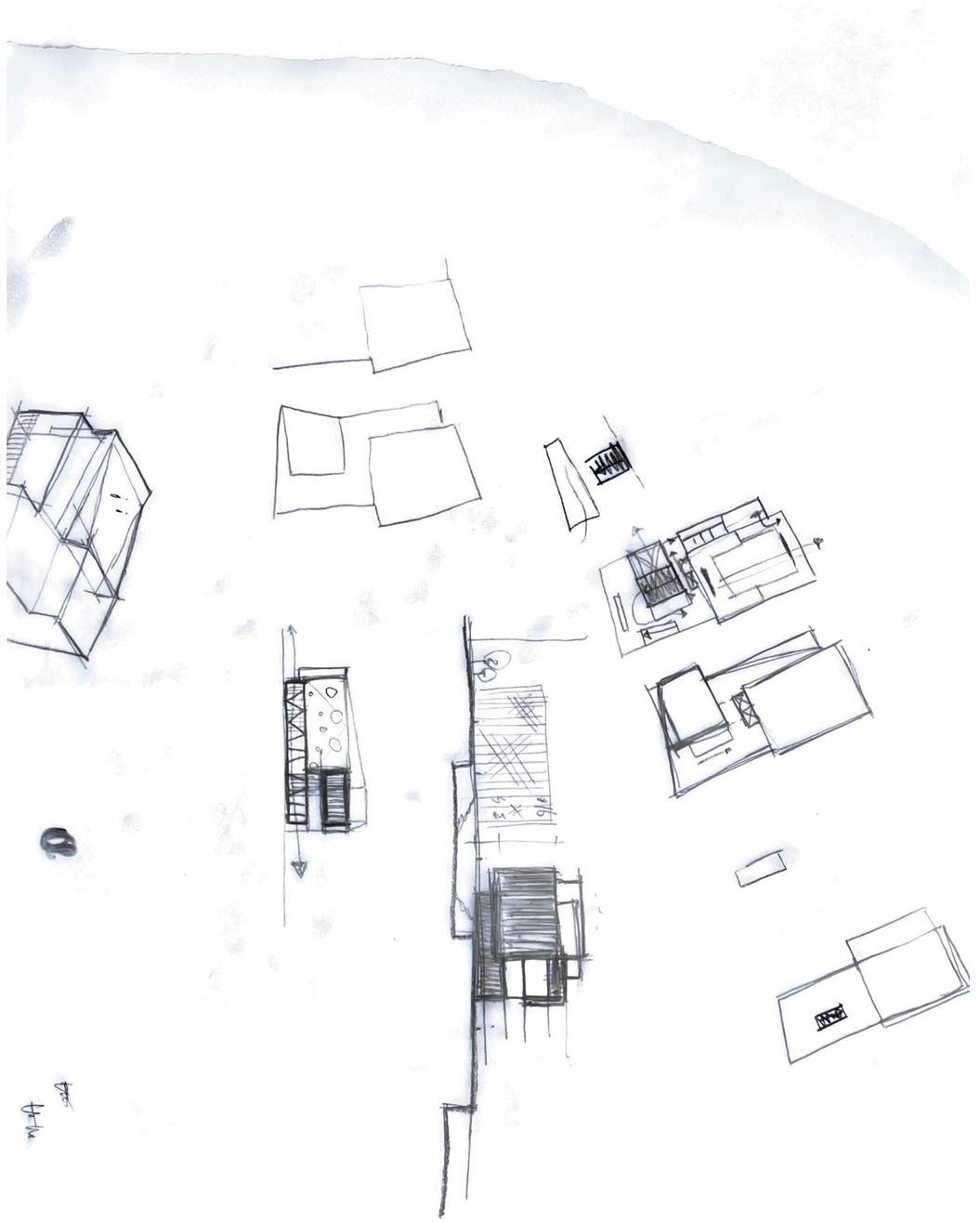
Sketches



03 Draft II

Sketches





04 Draft III

Formulation of Design Principles

How will you Re-Wire Music + The City on our design site Binckhorst in The Hague?

To what extent do the municipal authorities use music venues in order to boost the local culture and thus profile their own place?

What does Binckhorst need?
1. Otherness in the city
2. Autonomous zone of music-activity

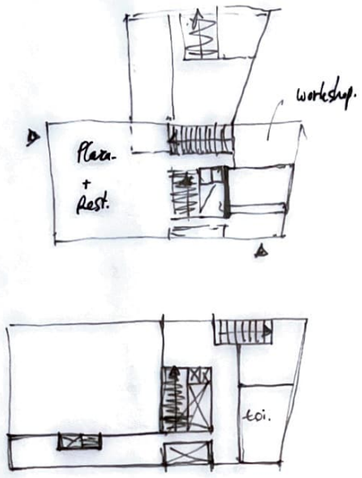
What	+	Where
Manifesto 1. Otherness in the city 2. Autonomous zone of music-activity		*Gasfabriek terrain* 1. Easily accessible from The Hague Central Station and The Hague Holland spoor Train Station 2. Easily accessible on foot, by bicycle and by car 3. Visual sightlines from across the water, the train tracks and emerging new high-rise buildings 4. Incubate the area through music 5. Extension of the urban curtain around the new waterfront park 6. Activation of existing gas holder
x		
Approach A music venue to boost the (local) subculture and thus profile their own place.		

Music, Experimental, (multi)Cultural, Educational

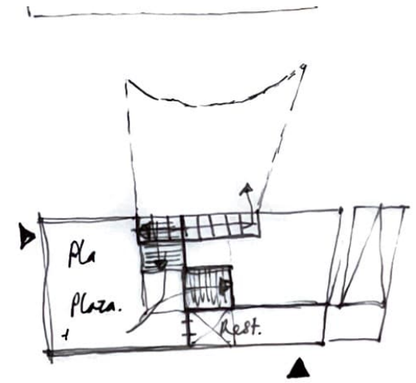
“Music experimental hub”
“An incubator for (sub)cultures”
“Music for misfits and minorities”

A bricolage of experimental music venues
1. Pop/Rock/Hip-hop venue
2. Jazz/recital (experimental) venue
3. Electronic by Night venue

Floorplan studies



04 Draft III



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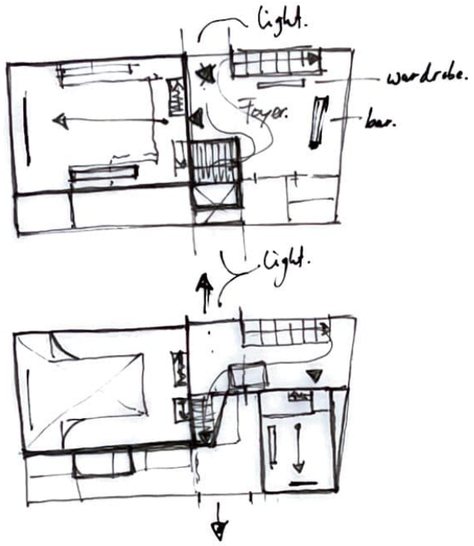

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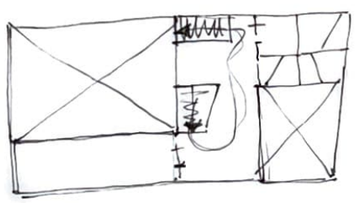

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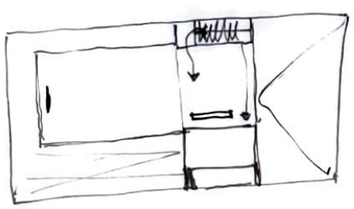

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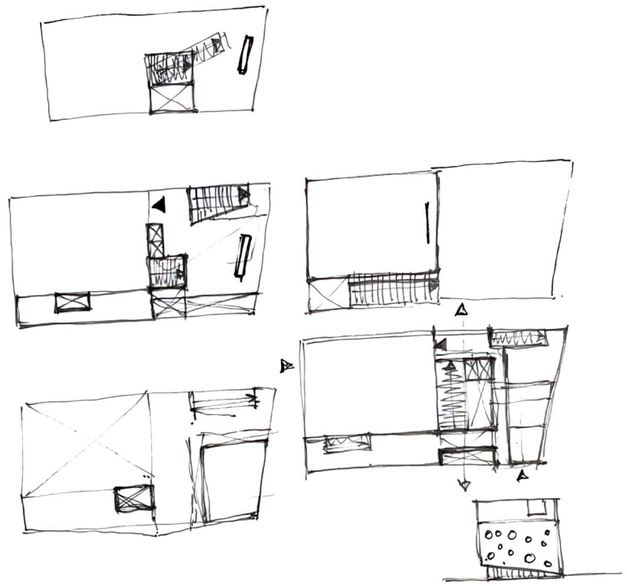
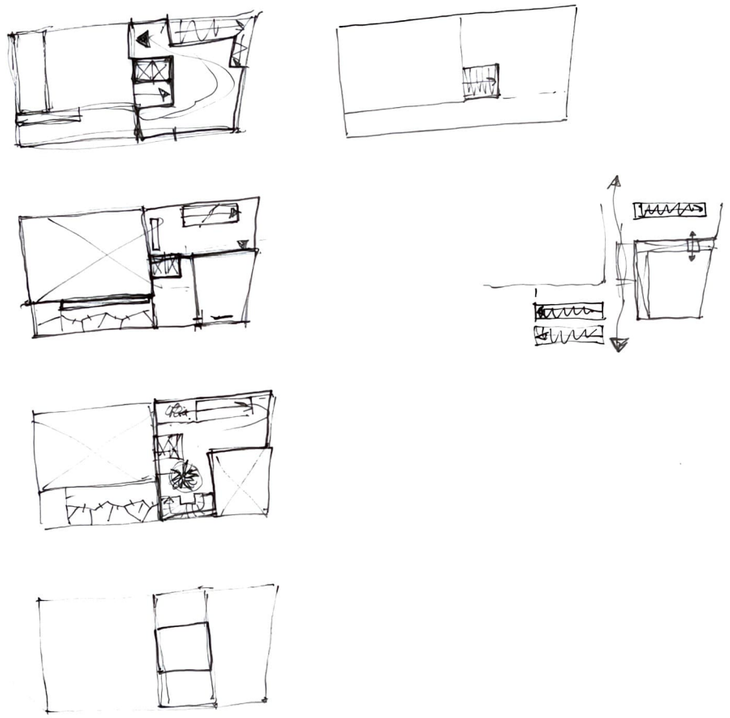




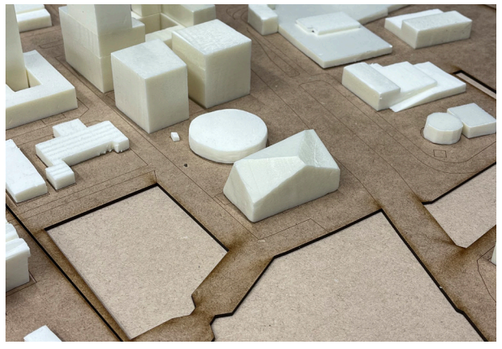
04 Draft III

Volume studies

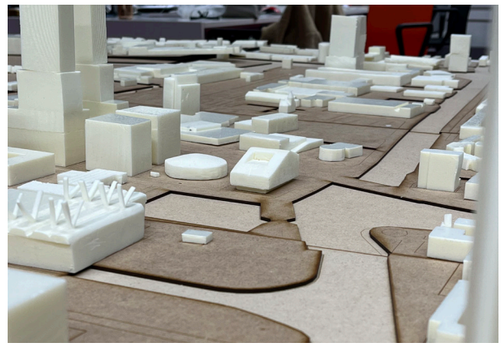
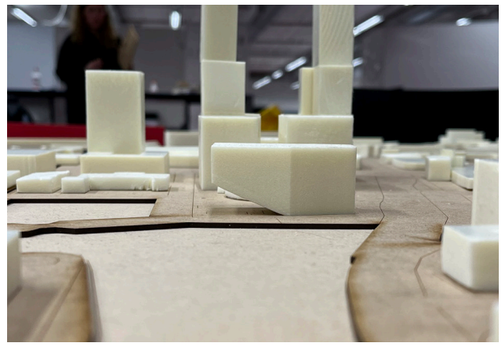


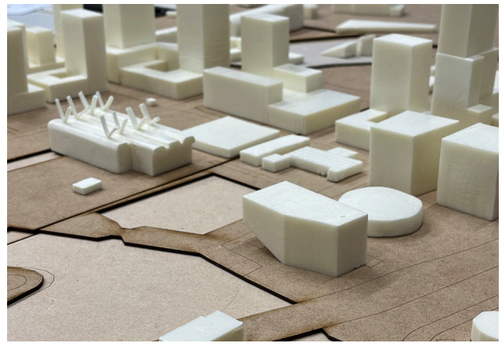











05 Final approach

How will you Re-Wire Music + The City on our design site Binckhorst in The Hague?

To what extent do the municipal authorities use music venues in order to boost the local culture and thus profile their own place?

What does Binckhorst need?
1. Otherness in the city
2. Autonomous zone of music-activity

Design Approach

Thematic research + Design Manifesto + Site research

1. Diversity
A bricolage of different music venues and styles for diversity

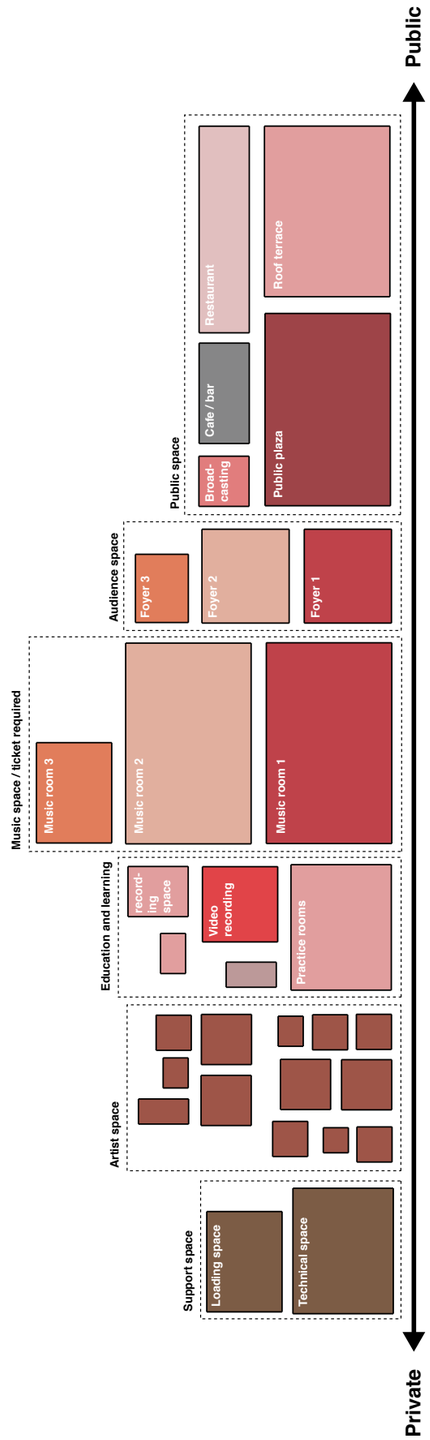
2. Perception
Perception and stimulation of music through multi-sensory architecture

3. The Protagonist
Subculture as the protagonist of the music venue to incubate the (local) subculture and thus profile their own place.

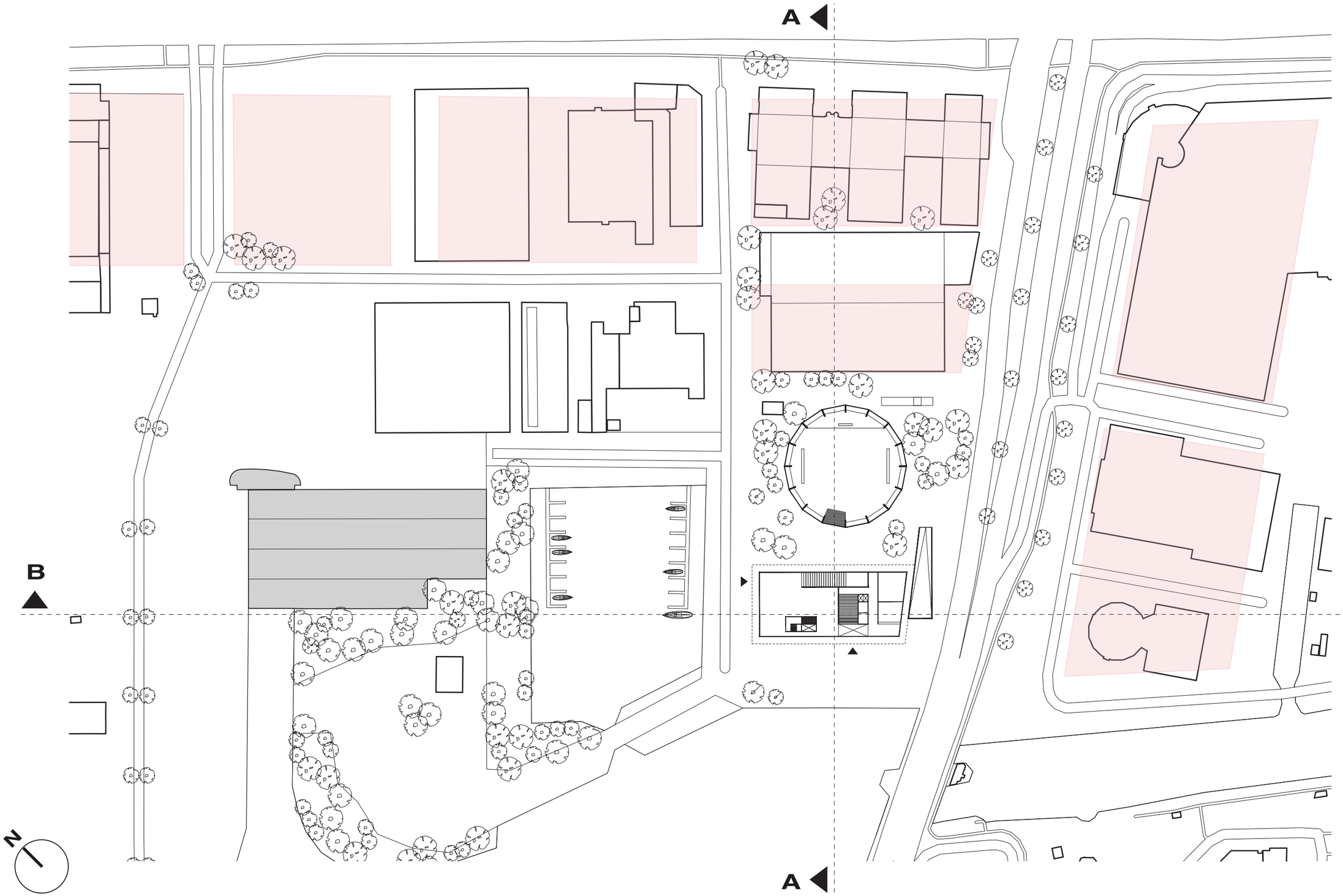
4. Autonomous Zone
Autonomous zone of music-activity to boost the Binckhorst through music.

5. Public Route
Building accessible to the public by a public route through the building, creating a contrast with the rest of Binckhorst.

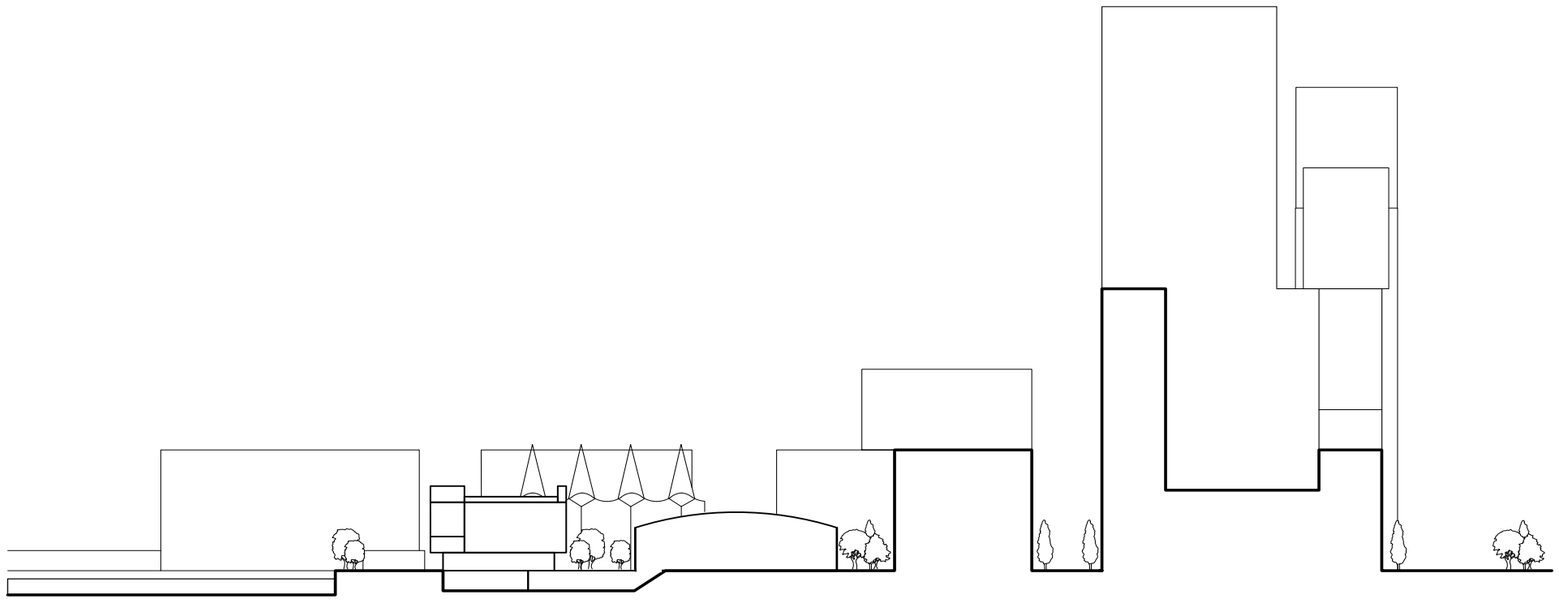
See chapter 2 ‘Design brief’ for the entire programme with the corresponding square metres.

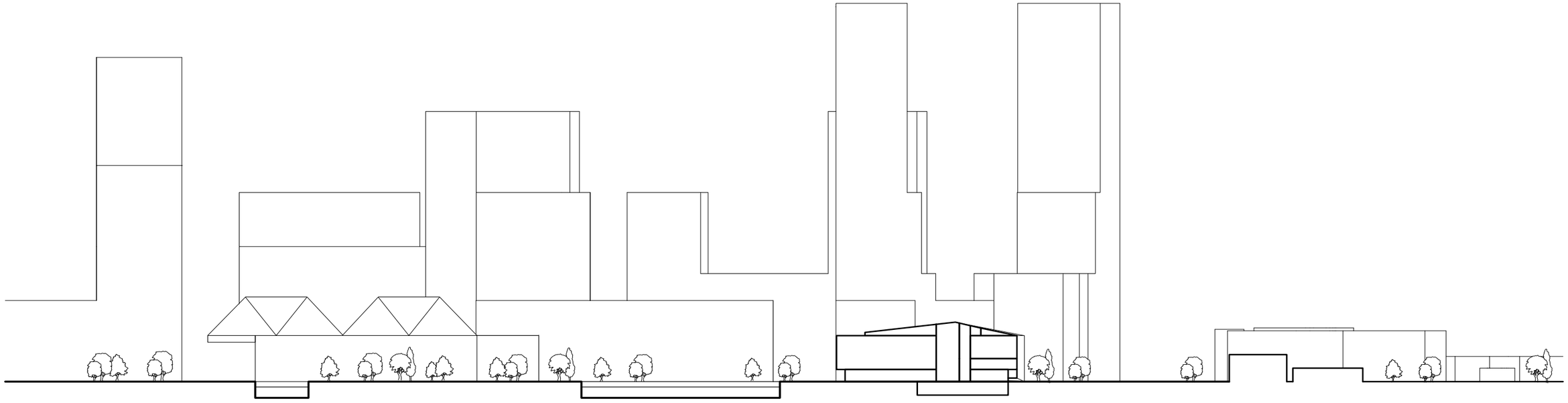


01 Situation

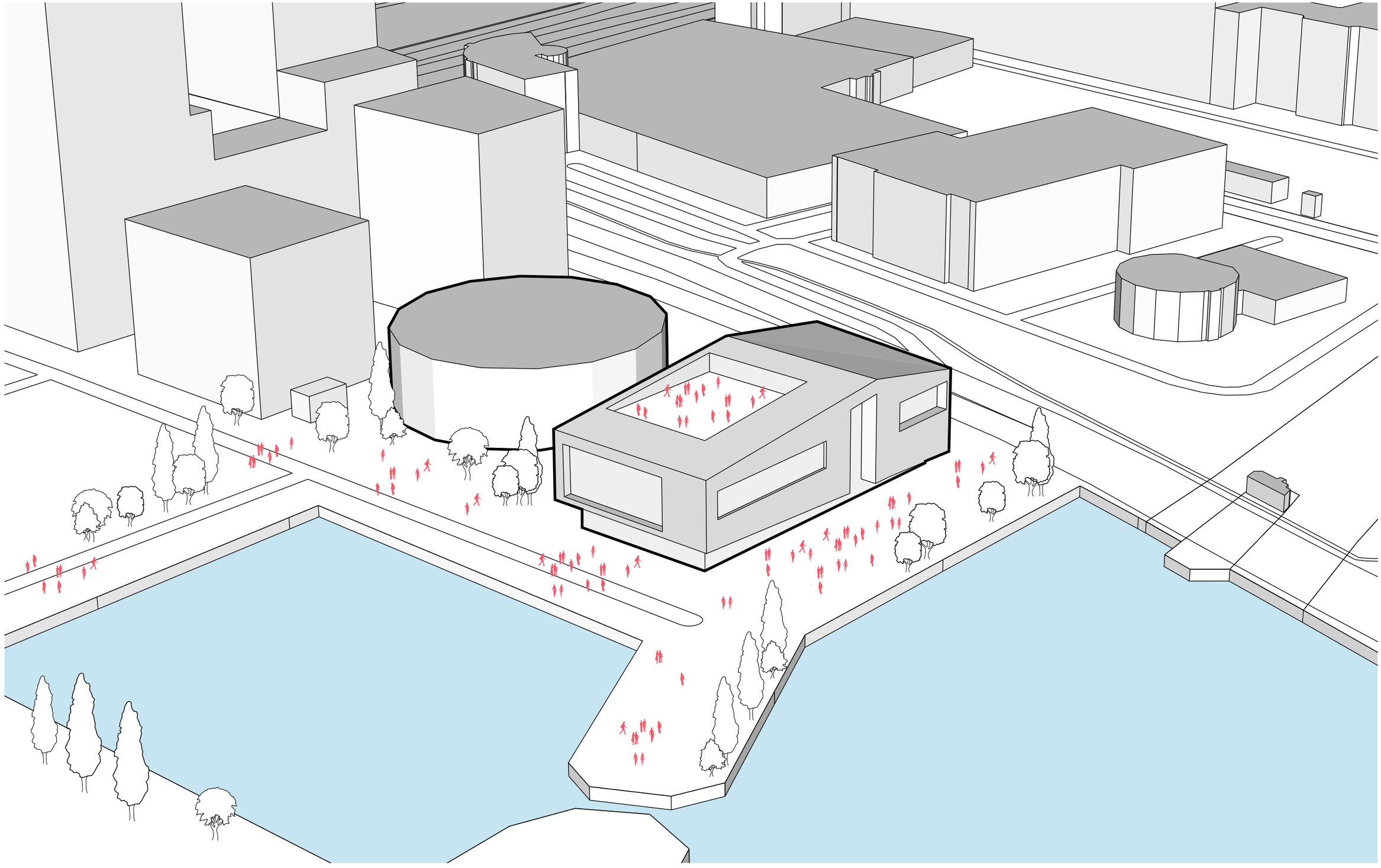


02 Site sections

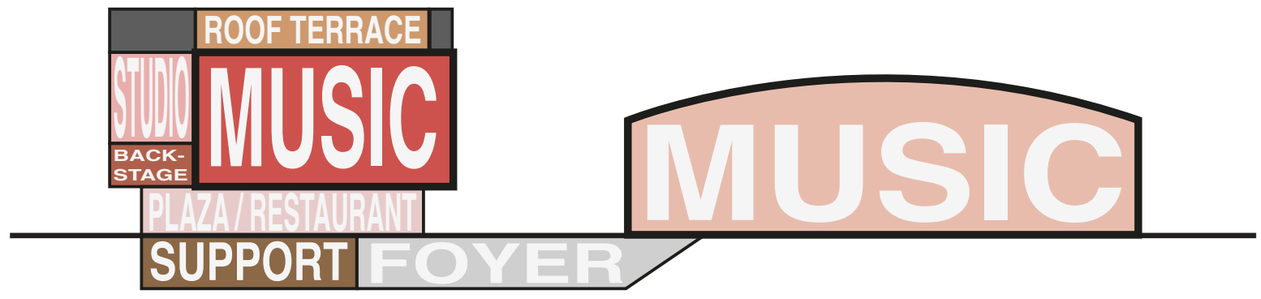


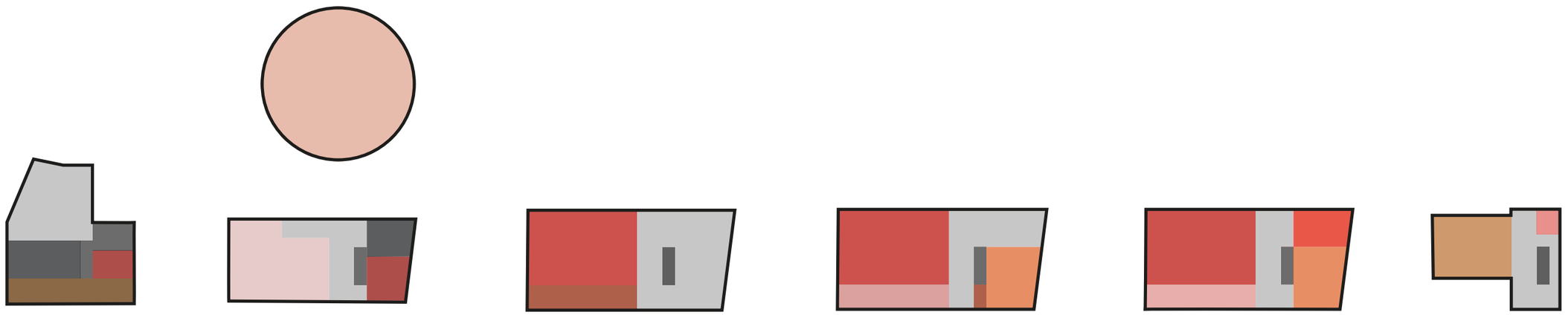


03 Volumetric massing

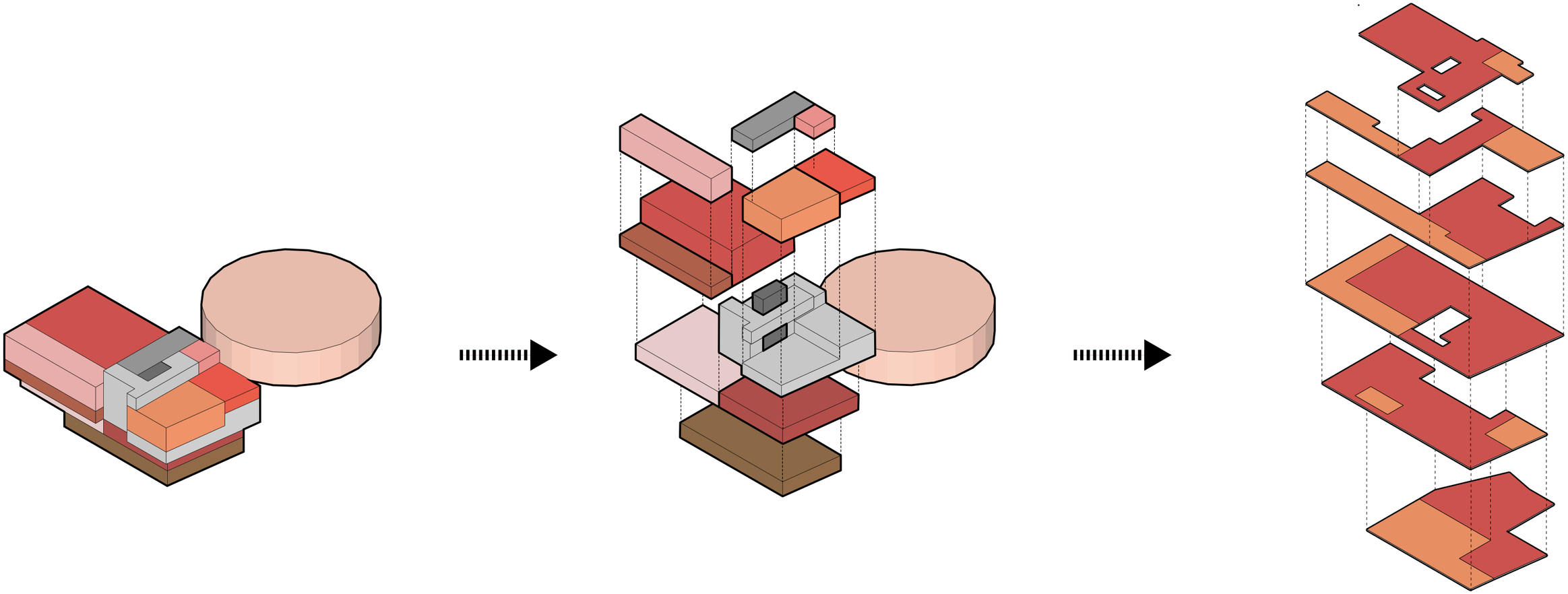



ROOF TERRACE
MUSIC
FOYER
RESTROOMS
BROAD-
CASTING
MUSIC
FOYER
WARDROBE
PLAZA / RESTAURANT
SUPPORT

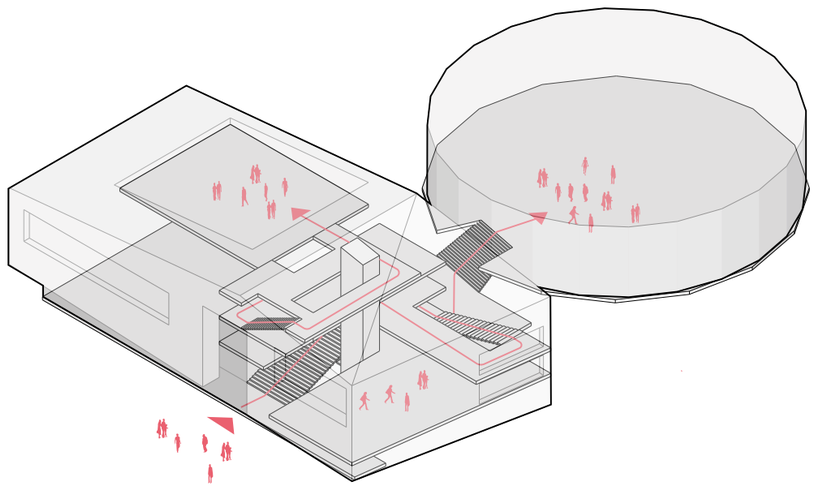

ROOF TERRACE
STUDIO
BACK-
STAGE
MUSIC
PLAZA / RESTAURANT
SUPPORT
FOYER
MUSIC

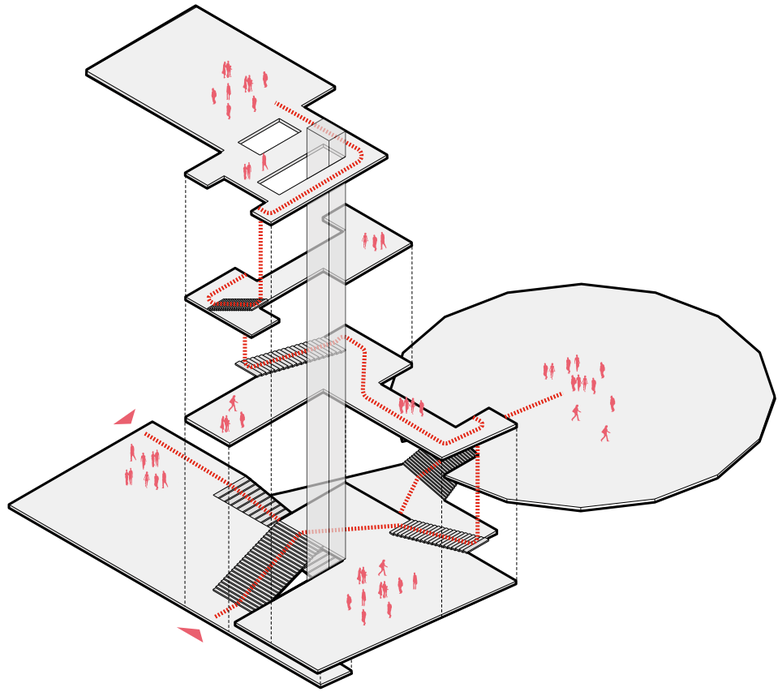


05 Program organisation

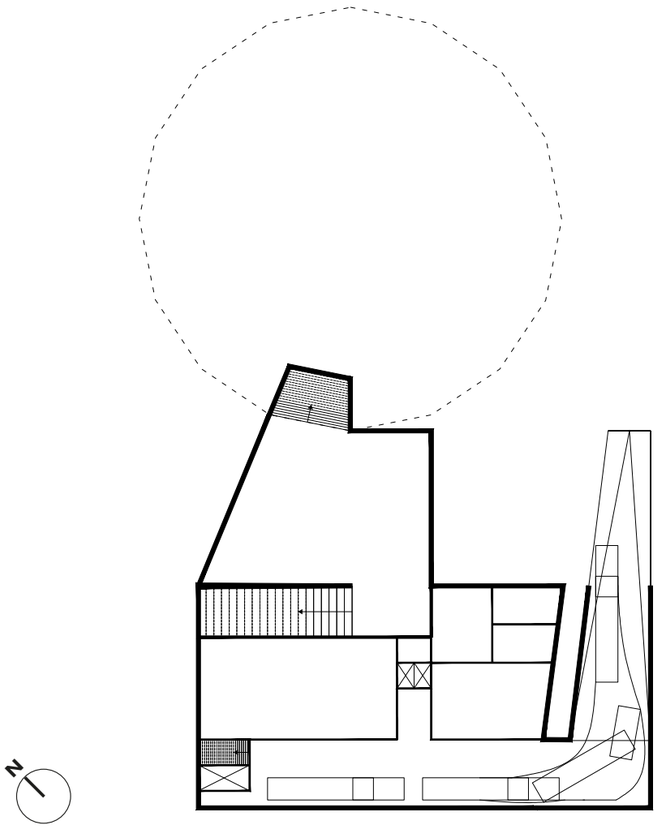


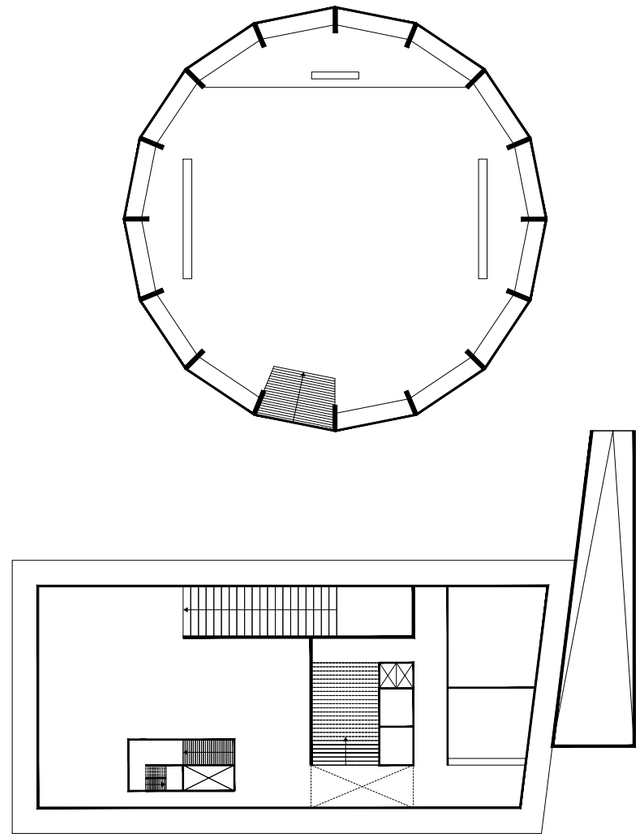
06 Building circulation

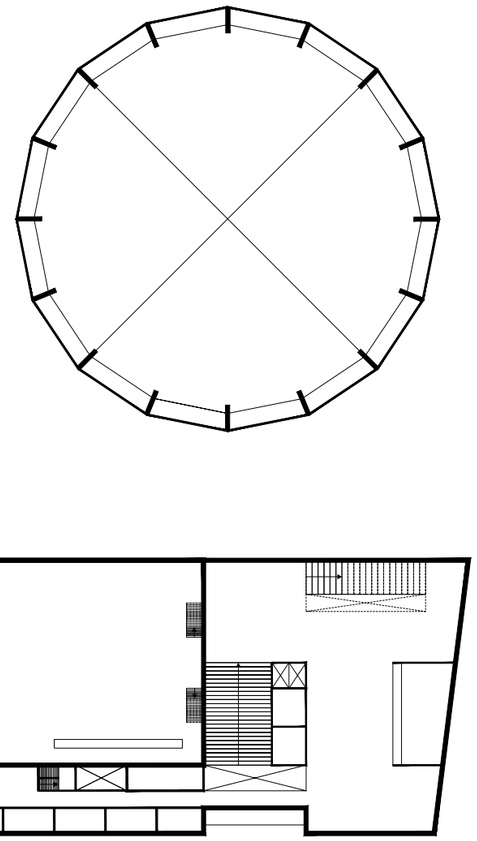




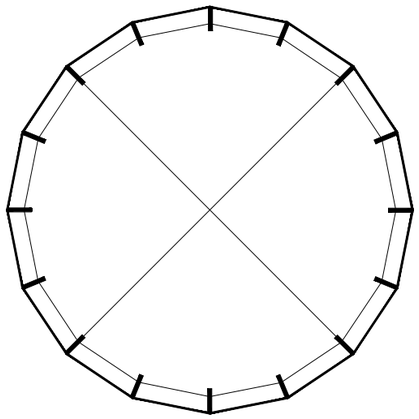
07 Floorplans

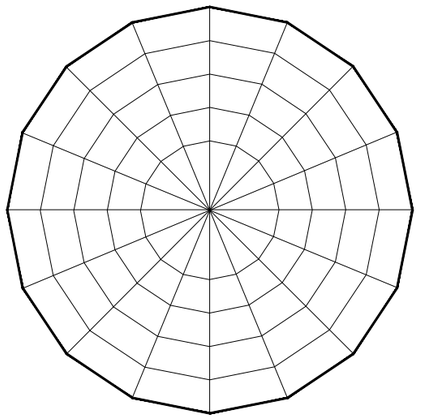


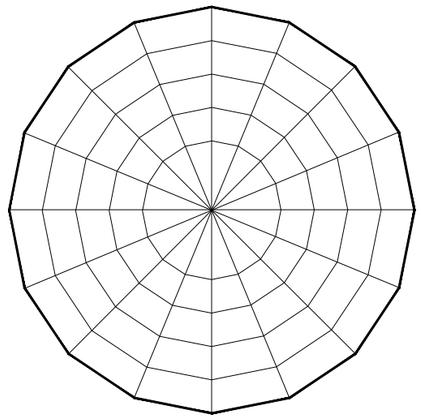


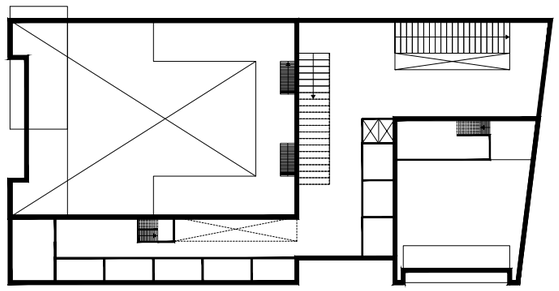


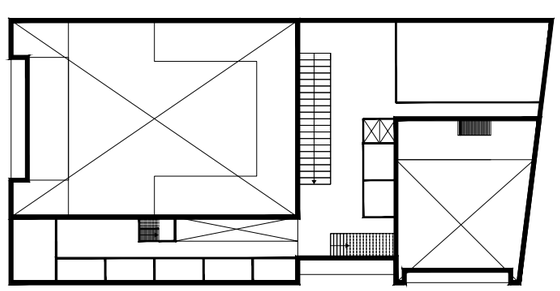
07 Floorplans

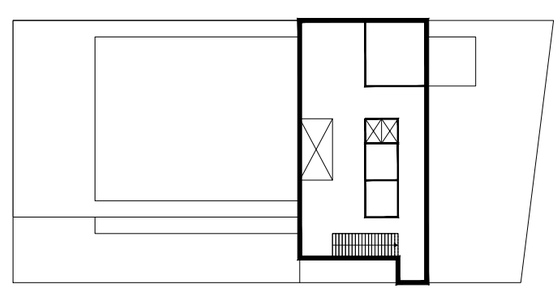




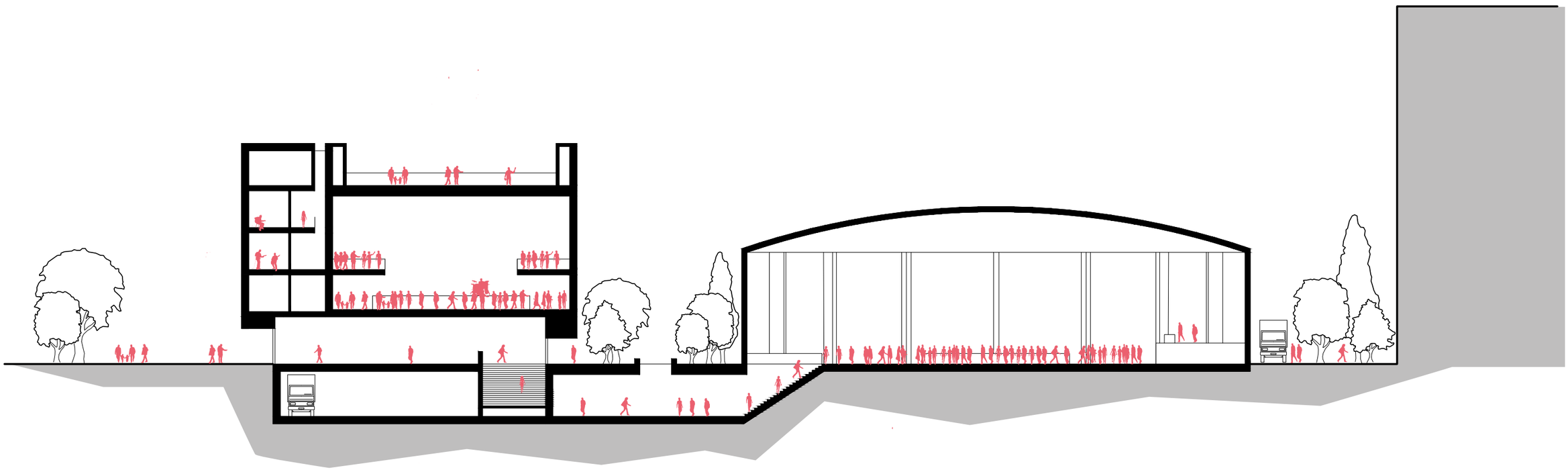


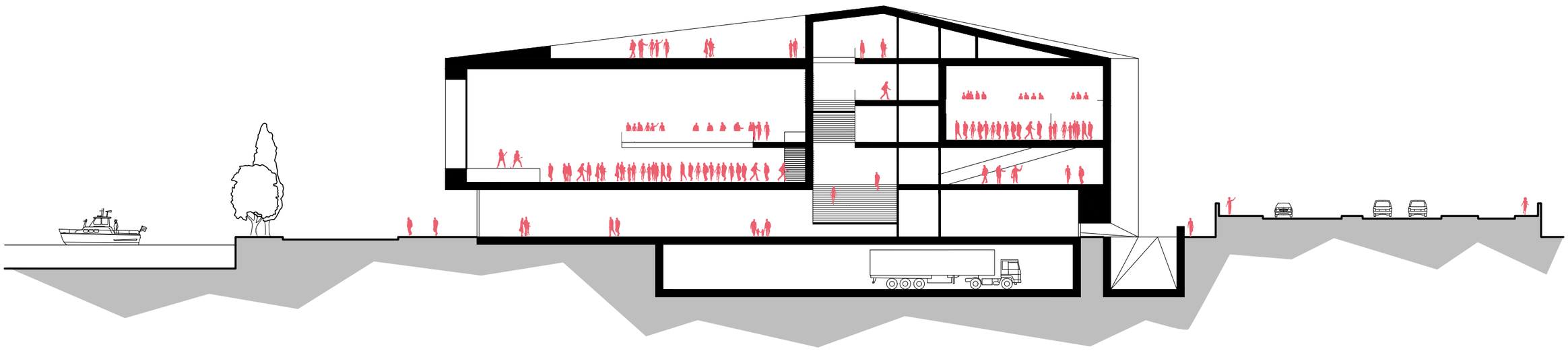




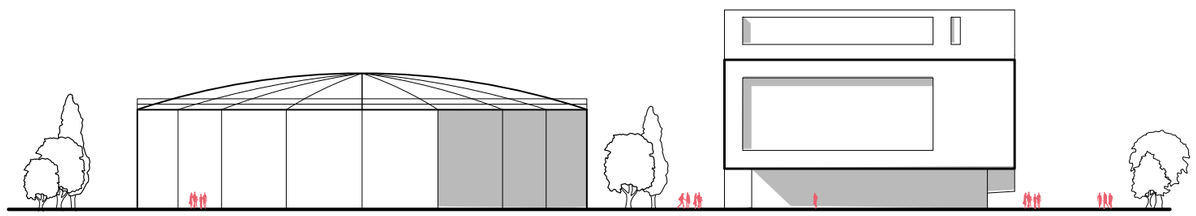


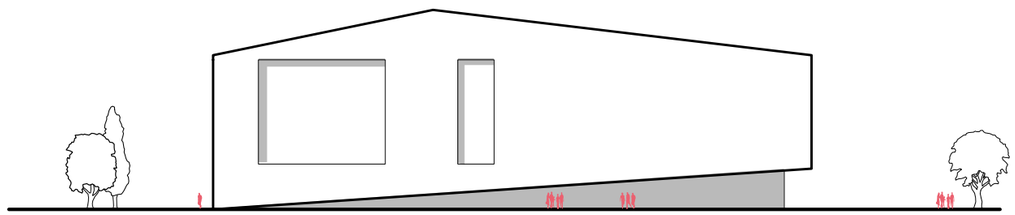
08 Sections

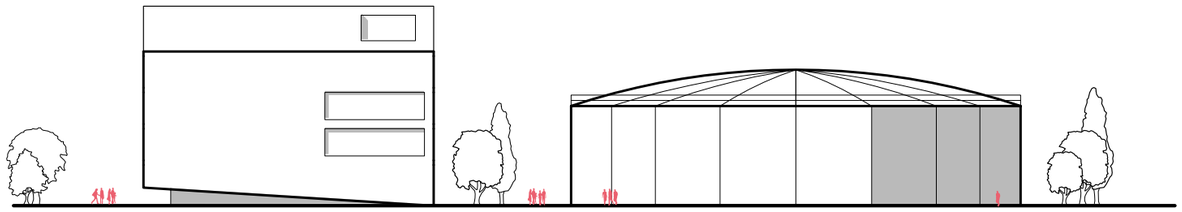


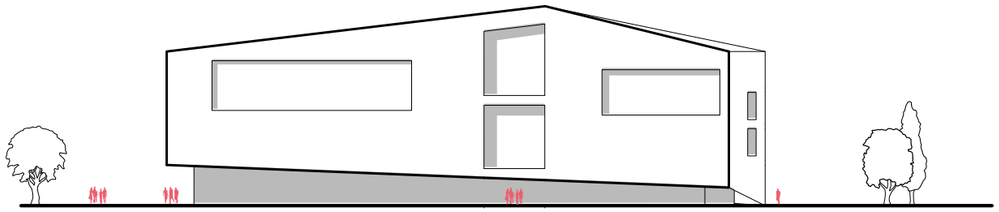


09 Elevations









10 Parameters to construct

Circularity

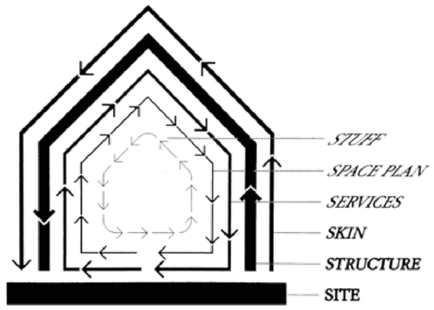
Circularity is a movement where today's products are tomorrow's raw materials. Materials and products are in a continuous flow and there is virtually no waste. By organising reuse and considering waste streams as valuable raw materials, economic value is preserved and even added. In today's linear economy, valuable raw materials lose their value during their lifetime. Conversely, the circular economy is about continuing to use these raw materials to the highest possible quality. All materials are reused infinitely.

i) Utilise available [materials and products]
ii) Use renewable [raw materials]
iii) Minimise environmental impact [during cycles]
iv) Extend life span
v) Future cycles

Circularity is often referred to as the Stuart Brand model. In my graduation project, I also want to approach circularity from this model.

Separate the different layers from each other to stimulate maintenance and disassembly. A structure can last for a hundred years, as opposed to installations (25 years). If these layers can be easily removed from each other without demolishing anything, the construction and therefore the life span of the entire building can be extended.

In addition, it may be interesting to look for local waste streams and materials to reuse in the building.



Steward Brand model

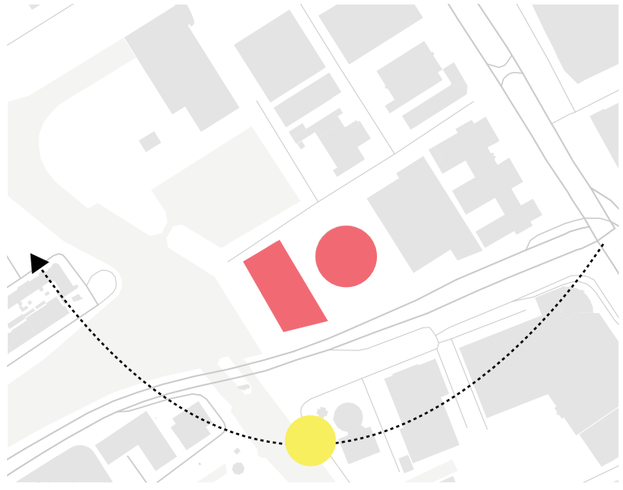
Specific site relations

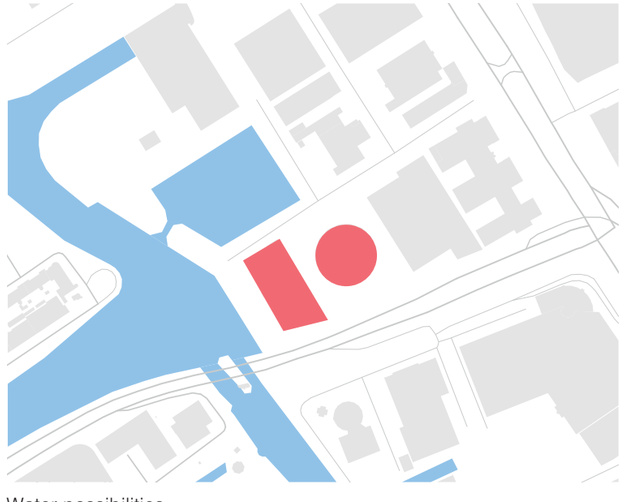
sun path

The location is ideally situated on the sun, this can be optimally used to get light into the building by using a large atrium in the middle of the building. In addition, the roof terrace has plenty of sunlight. The front entrance will also be an ideal place for large groups and gatherings.

water

the location is surrounded by water, the canal in front of the building and the harbour on the side can be used for leisure activities.


Sun Path


Water possibilities

10 Parameters to construct

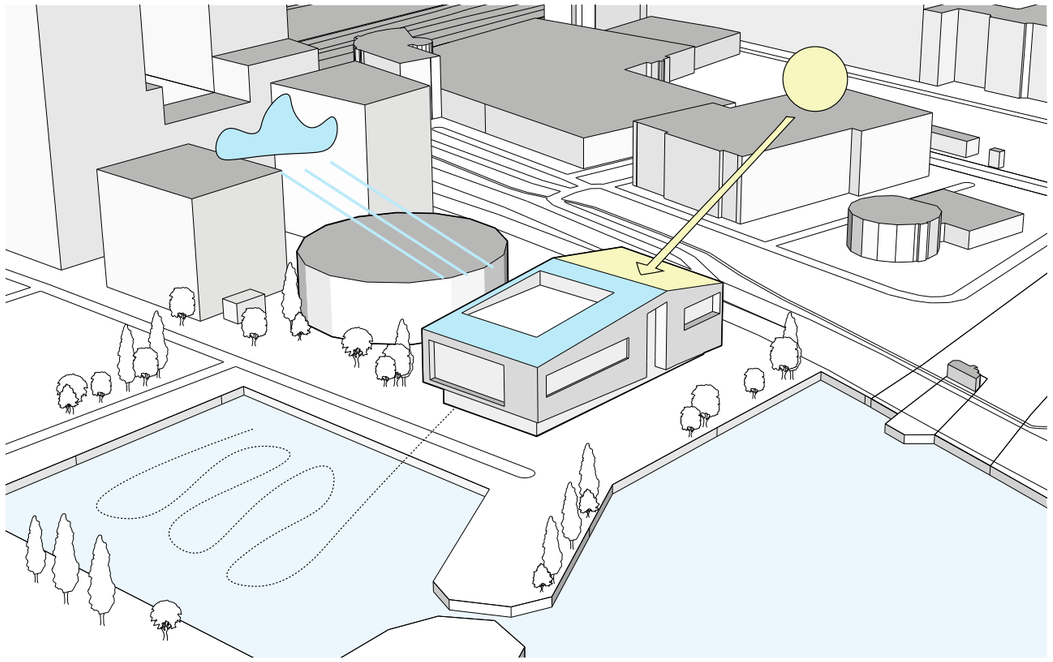
Energetic issues

energy generation

The building is used to generate energy by making use of the roof surfaces, both of which are at an angle to catch the ideal sun. In addition, rooms that are quickly heated internally by people will be placed on the north side to prevent the room from heating up.

water opportunities

The roof surfaces will also be used to collect grey water to be used for flushing the toilets. this will reduce the use of ‘clean’ water. In addition, the harbour will be used to build a water heat pump network to generate energy. This can also be used for adiabatic cooling.



Energetic issues

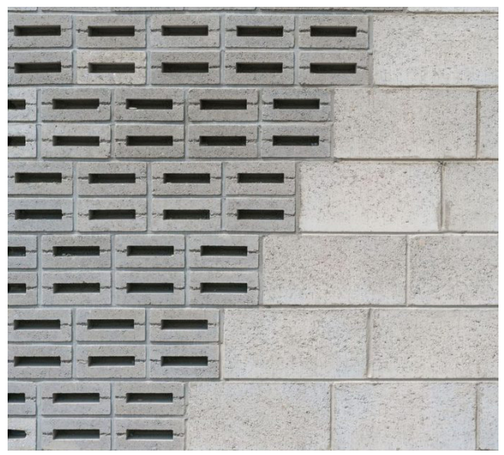
Materiality

For the use of materials, reference will mainly be made to the research and the solutions resulting from it. It will be obvious that the materials used are natural materials and/or concrete. In addition, materials with different textures will be used to excite and stimulate the users. However, further research will investigate exactly which materials are interesting for sensory architecture and the stimulation of music perception.

The use of sustainable concrete

Wooden structures

Innovative new materials for facade



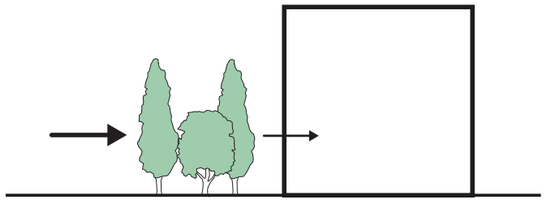
The use of different textures

10 Parameters to construct

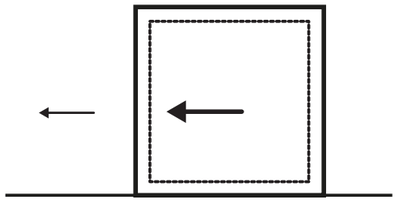
Acoustics

Two principles will be used to provide acoustic comfort; the first is to place trees around the building to reduce and capture sound from outside, the second is to wrap the music halls in a ‘box in box’ construction to reduce sound from inside to outside.

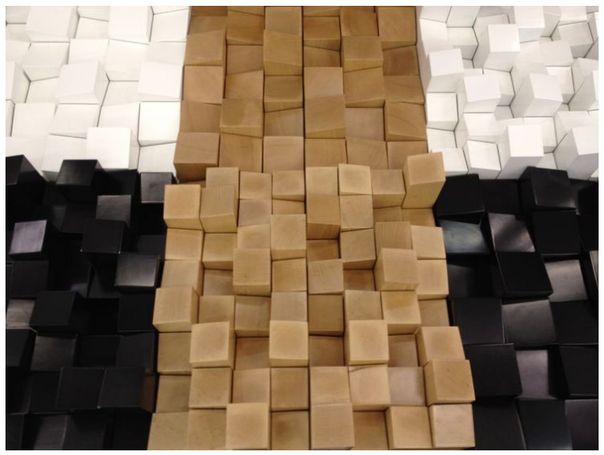
The choice of acoustic materials used in the halls will be based on natural materials and the use of heavy acoustic curtains to regulate and adjust the acoustics in the room.



Principle one



Principle two



Natural acoustic material

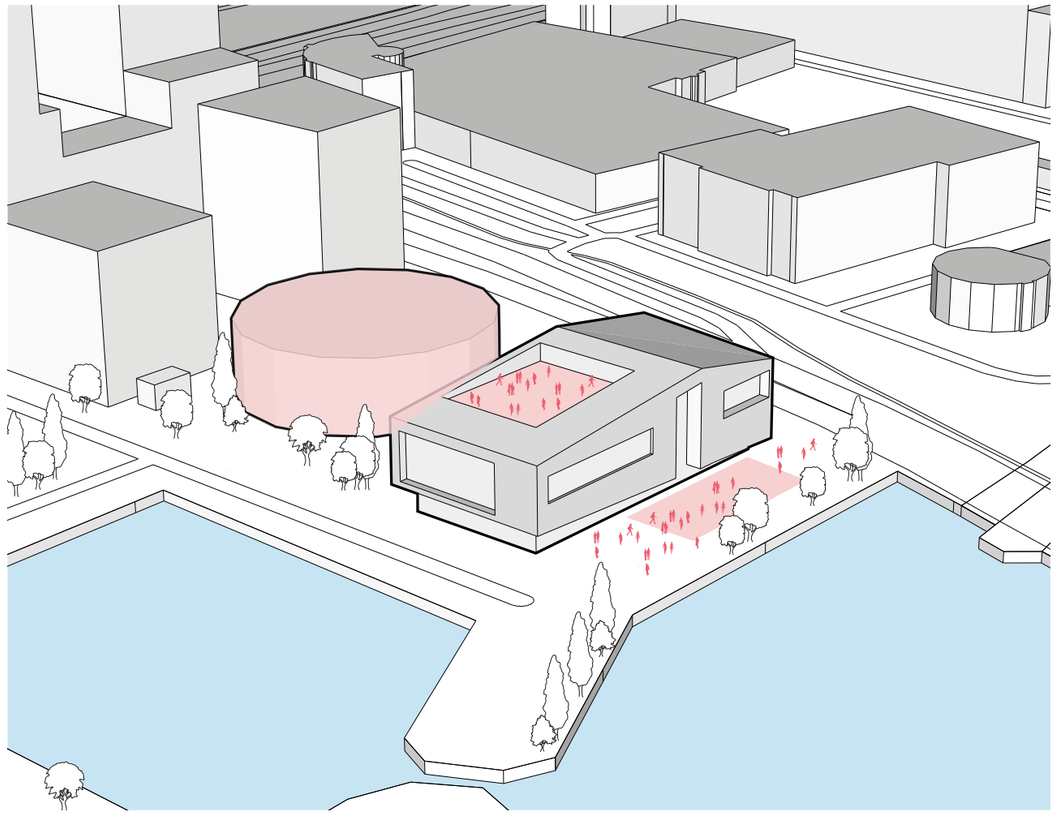
Heavy acoustic curtains

Multiplicity

The multiplicity of the building takes place on several facets. The first is the reuse of the existing gasholder to extend its lifespan. in addition, apart from music, the space will also be available for other events, such as exhibitions, fairs and other large group events.

A large part of the building will be available to the public, so the roof terrace with accompanying cafe will be accessible to everyone to enjoy the beautiful view. The space in front of the building can also be used for events.

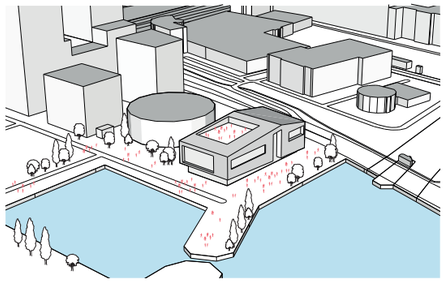
The building will be used mainly for music events in the evening, but during the day for education, learning environment and public spaces.



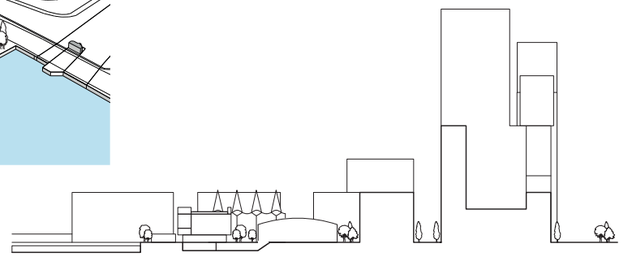
Building multiplicity

10 Posters P2

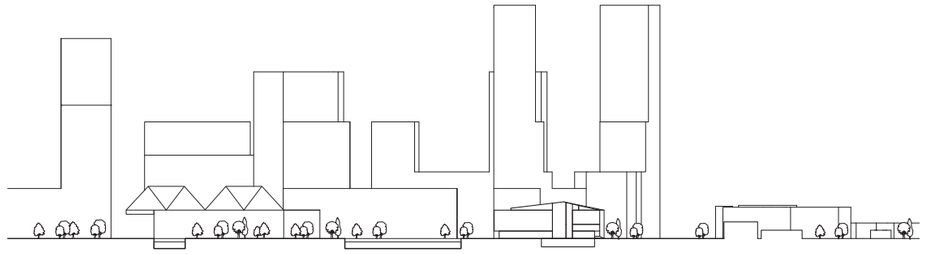
Chiel van Dijk I P2



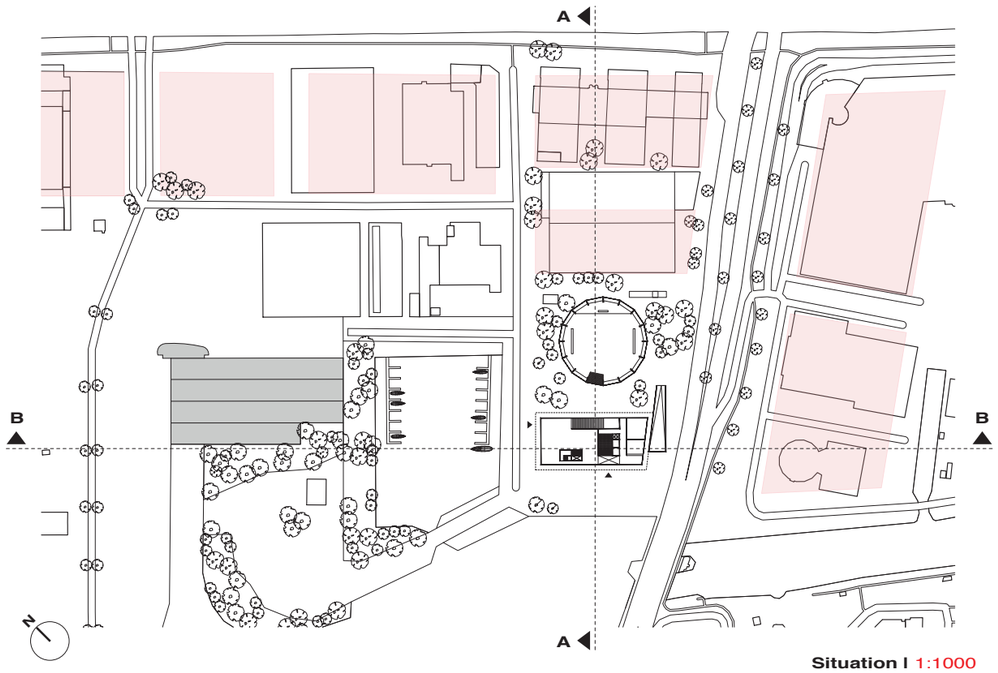
Perspective spatial structure



Section AA I 1:1000



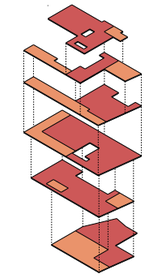
Section BB I 1:1000



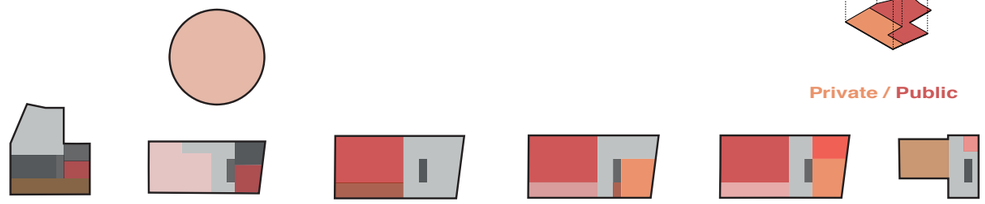
Situation I 1:1000

Chiel van Dijk I P2

Conceptual sections



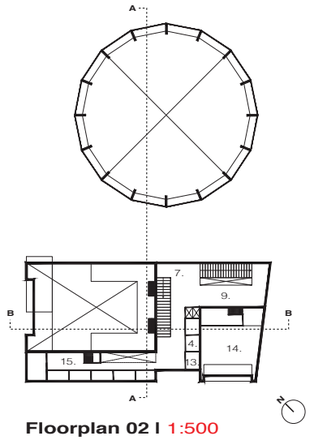
Private / Public



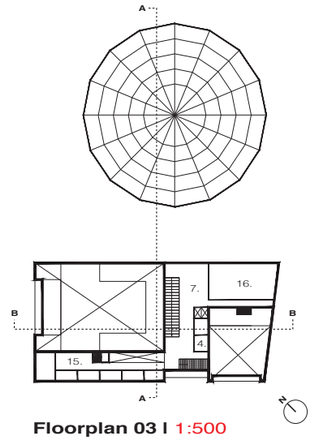
Conceptual Floorplans

Program

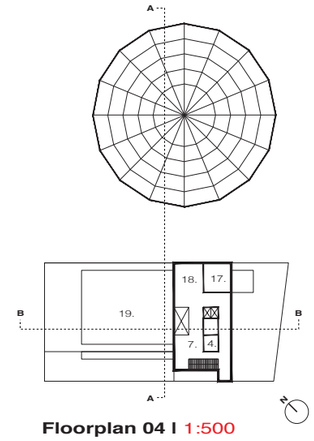
1. Loading dock
2. Wardrobe
3. Technical space
4. Restrooms
5. Foyer
6. Restaurant
7. Plaza
8. Storage
9. Foyer
10. Music room 1
11. Music room 2
12. Office
13. Artist space
14. Music room 3
15. Studio's
16. Workshop
17. Broadcasting
18. Cafe
19. Roof terrace



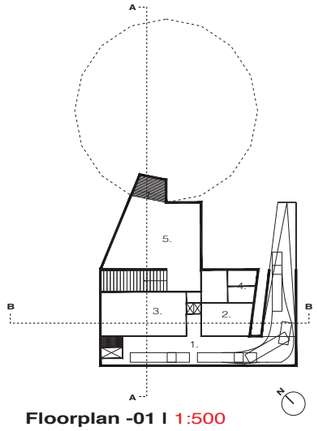
Floorplan 02 I 1:500



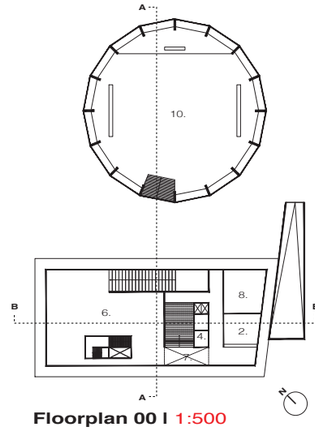
Floorplan 03 I 1:500



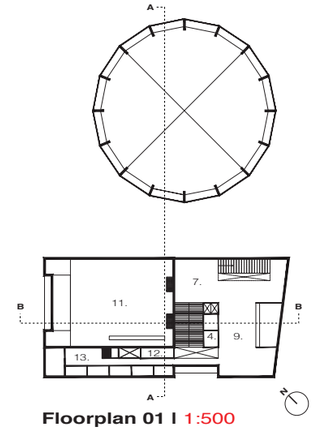
Floorplan 04 I 1:500



Floorplan -01 I 1:500



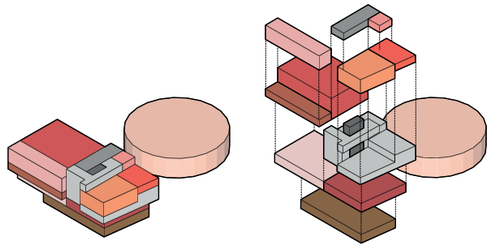
Floorplan 00 I 1:500



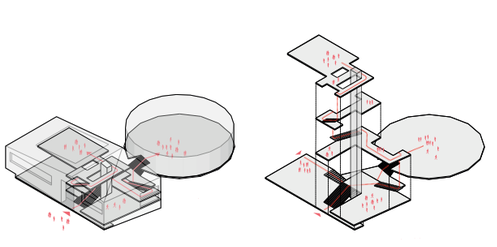
Floorplan 01 I 1:500

10 Posters P2

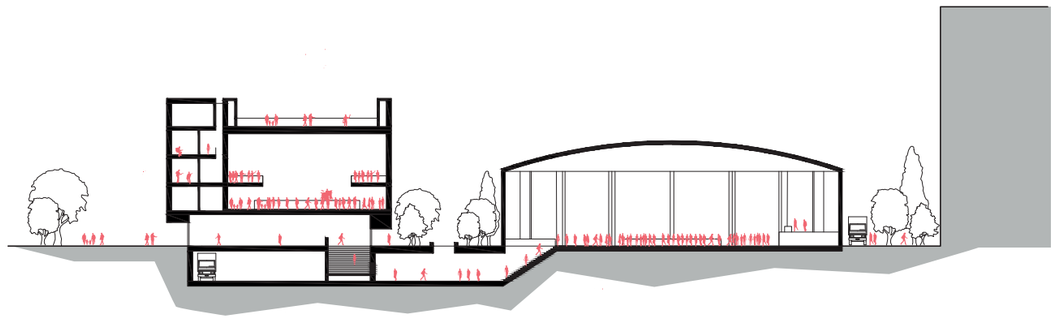
Chiel van Dijk I P2



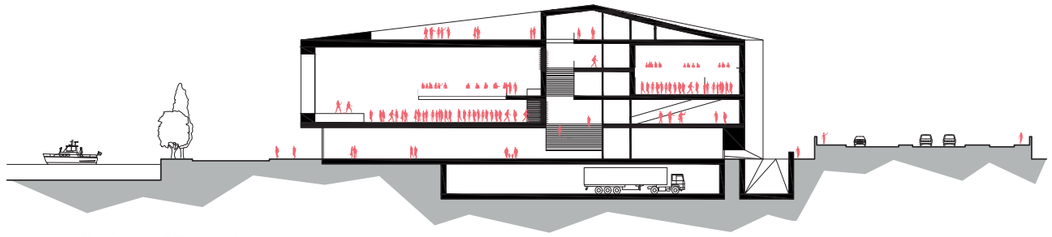
Program distribution



Circulation system



Section AA I 1:500



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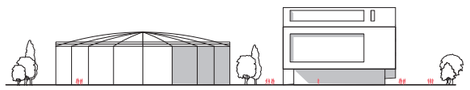

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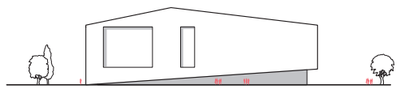

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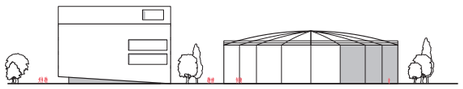

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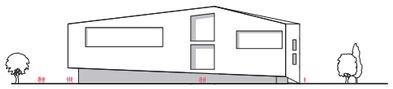
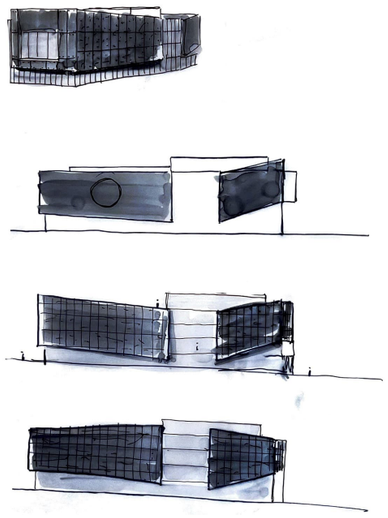


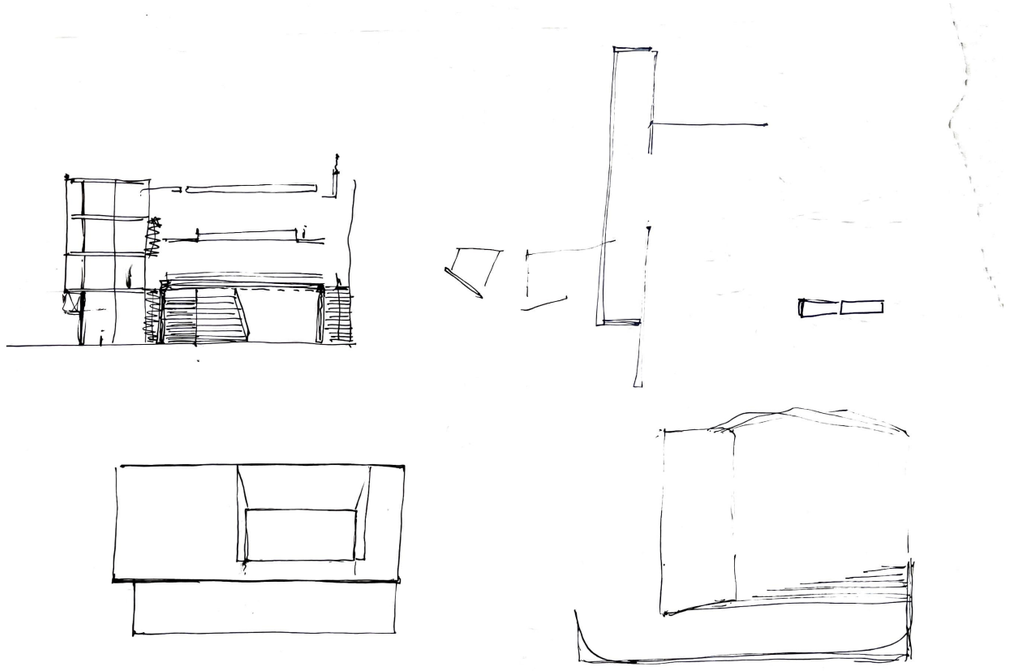
West elevation I 1:500

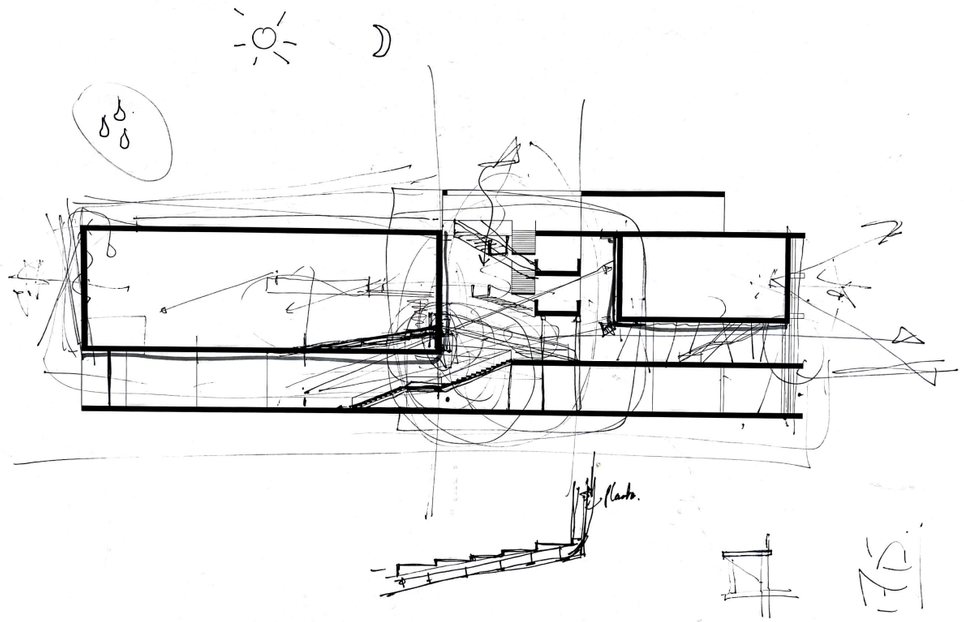
Part VII - Process Documentation

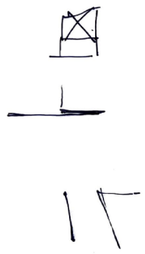
Towards P3

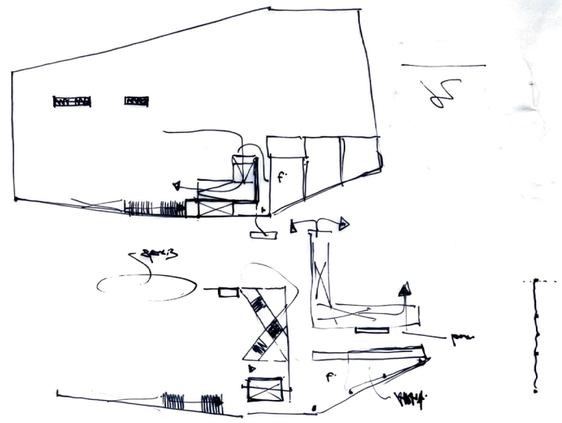
01 Sketches



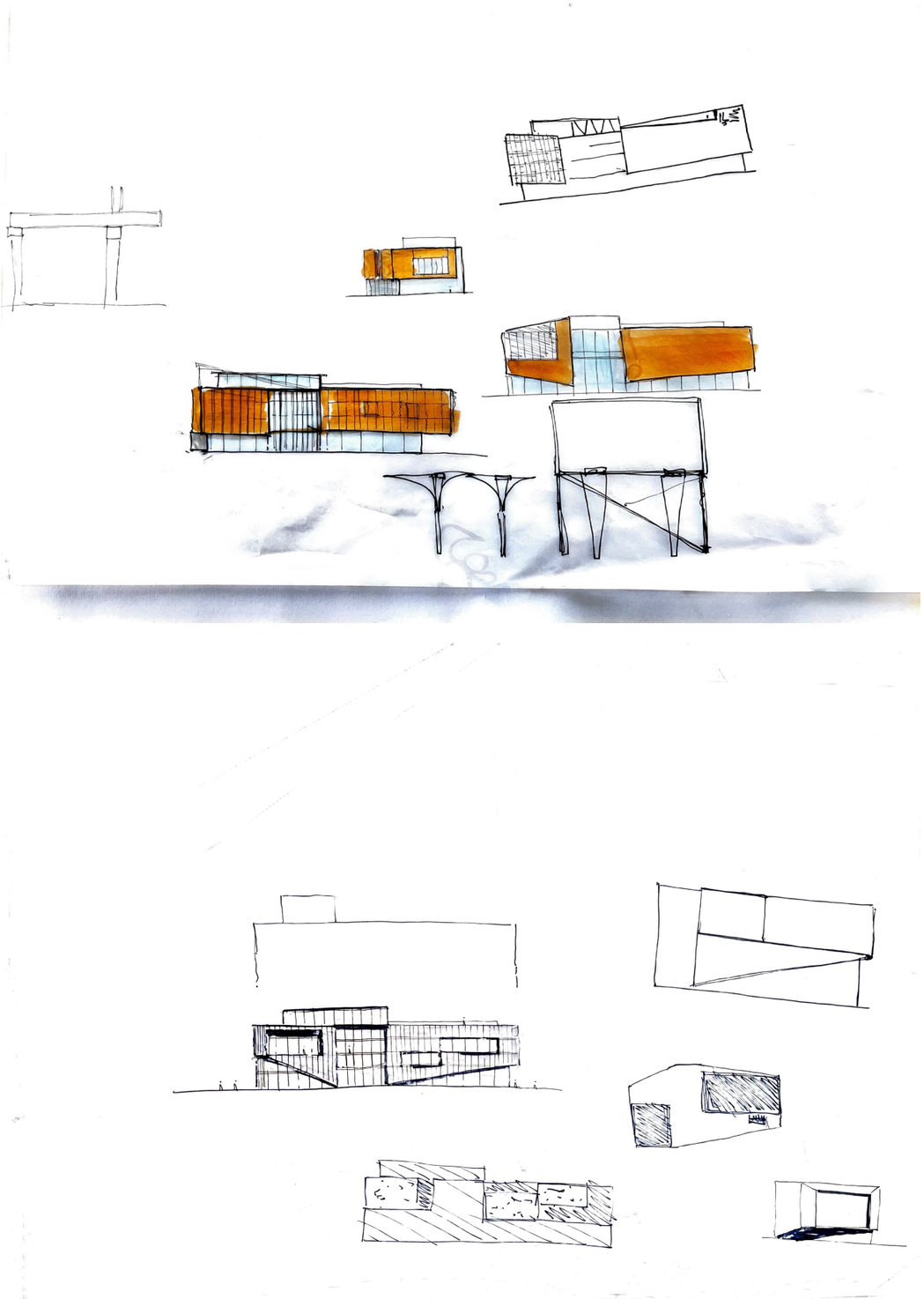


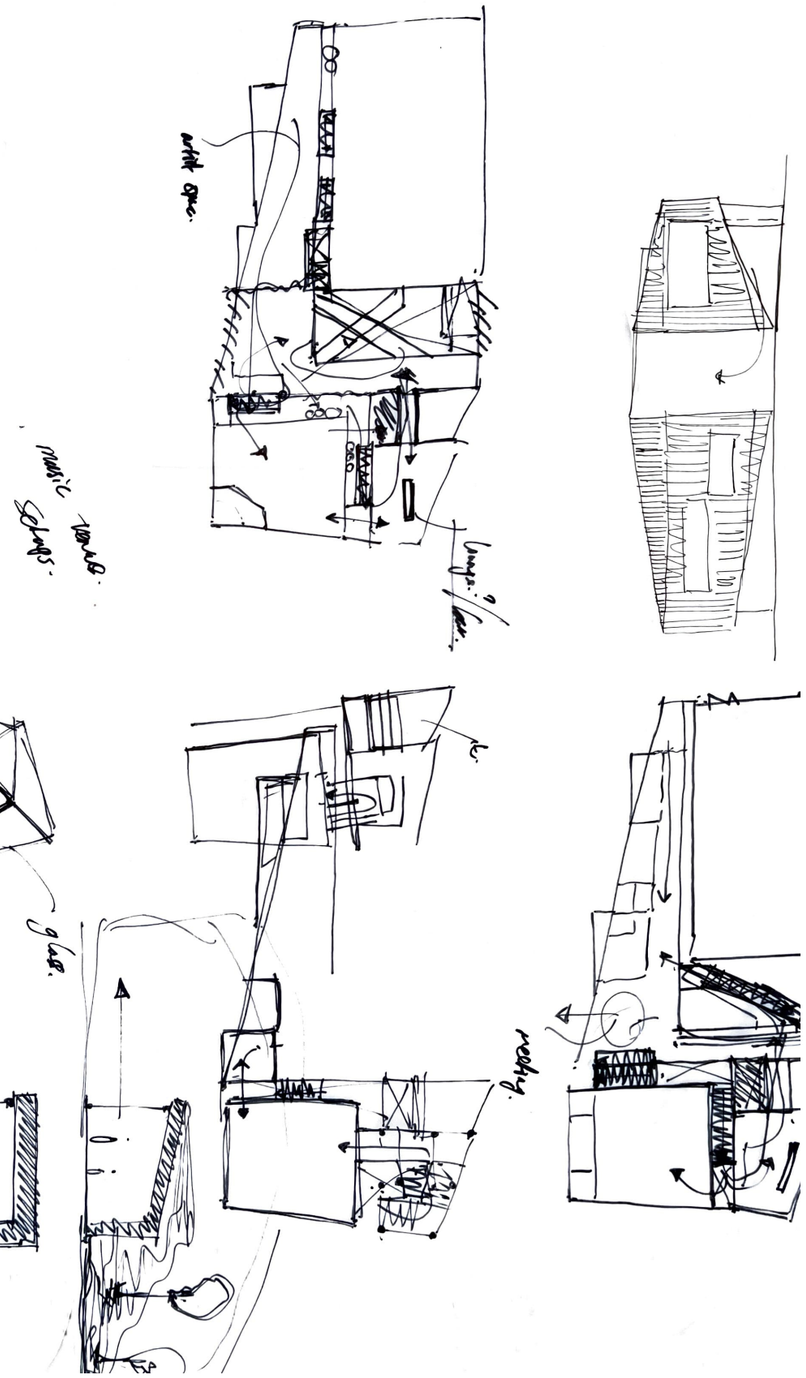


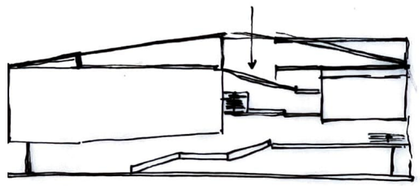


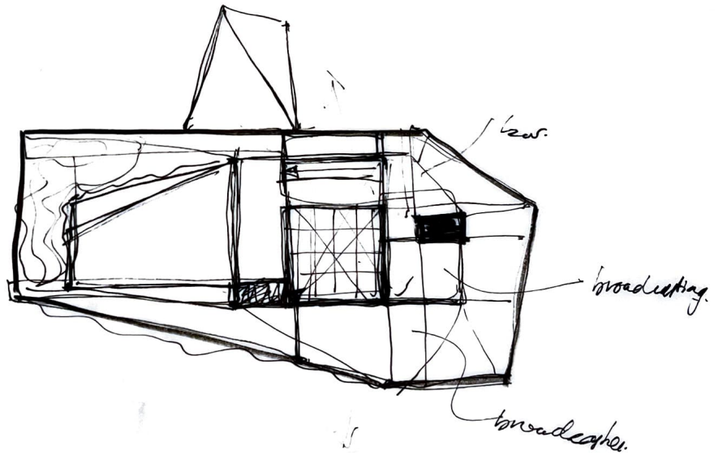


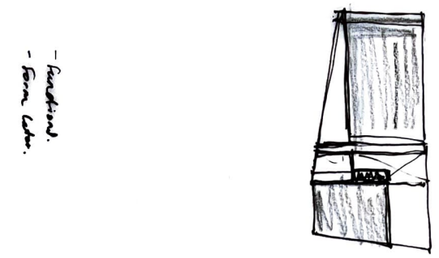
01 Sketches

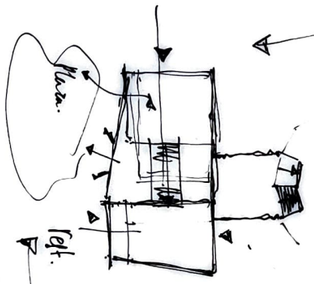


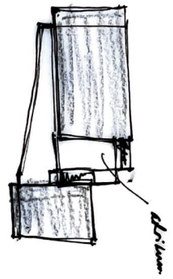





broadcasting.
broadcasters.


- headband.
- foam liner.


Plaza.
left.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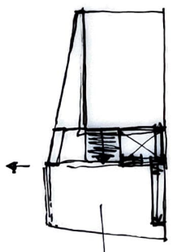
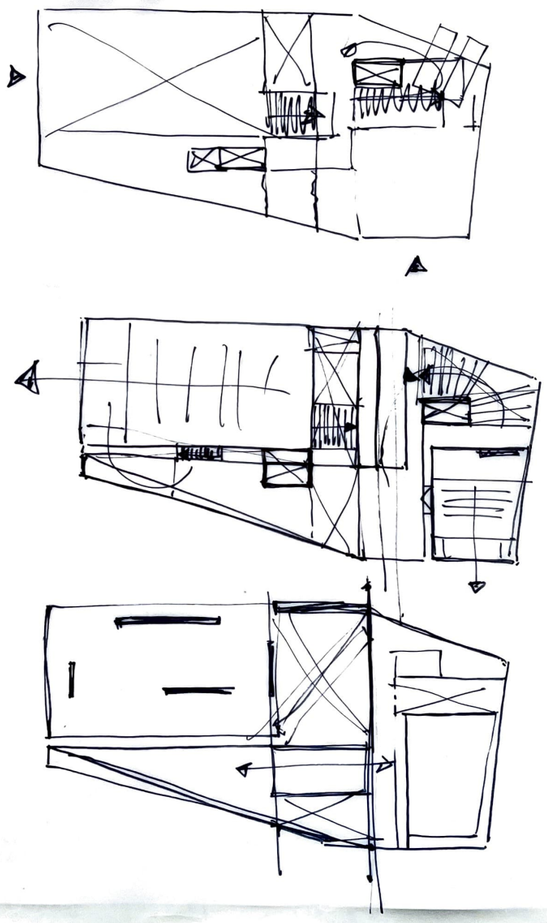
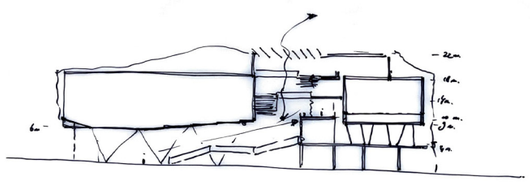
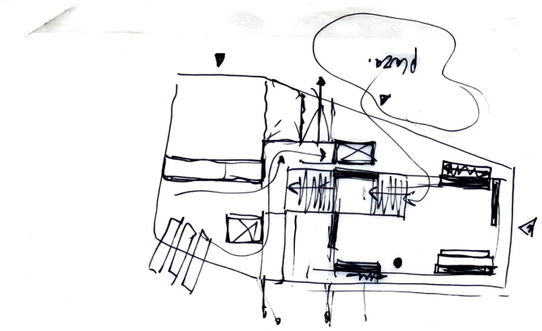
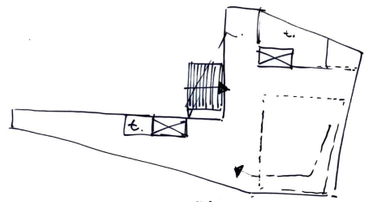

Plaza
+ foyer

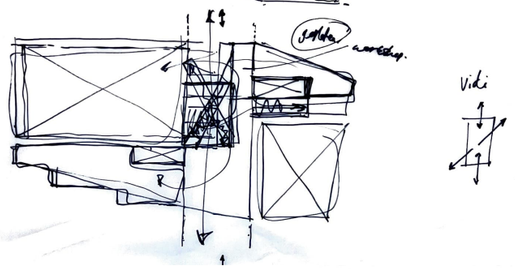
01 Sketches

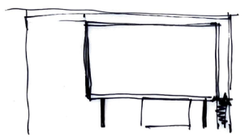


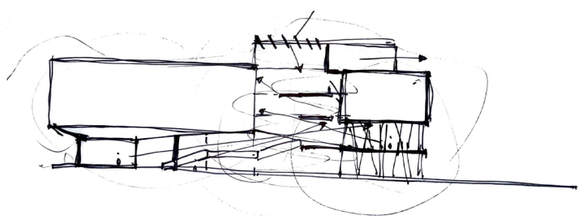


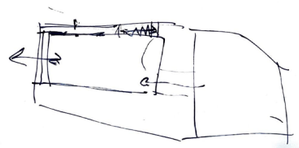


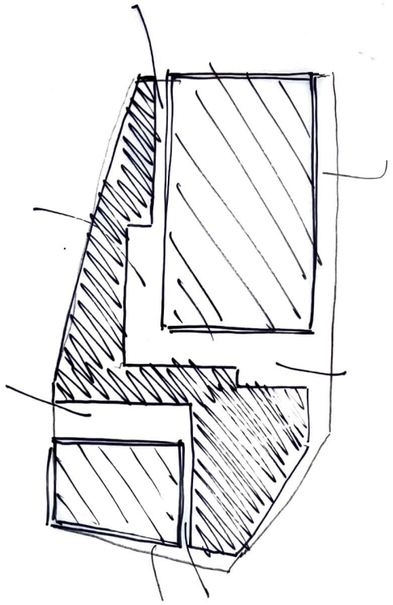


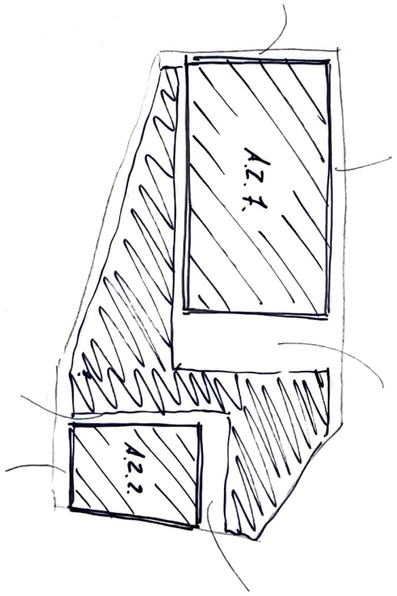


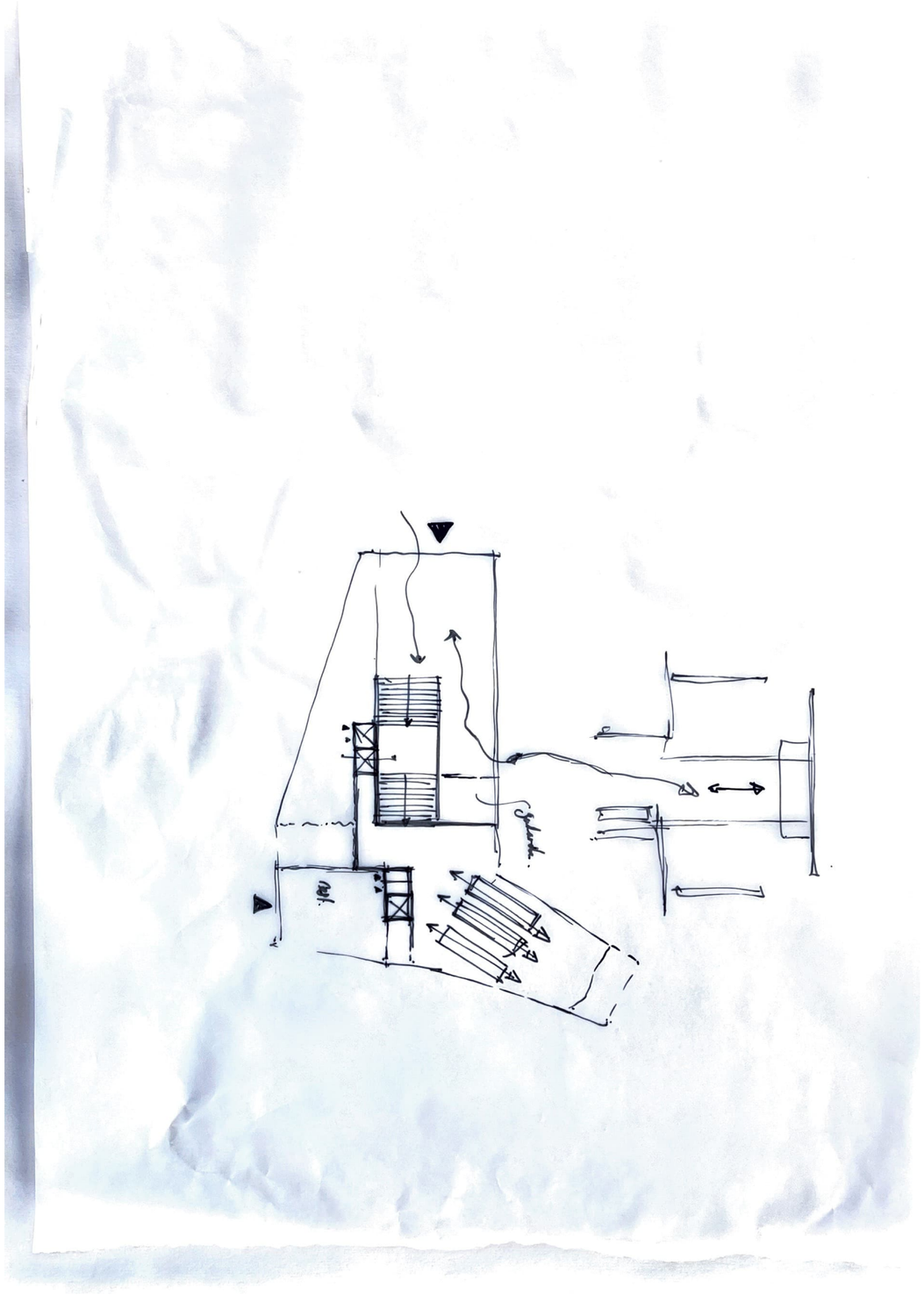




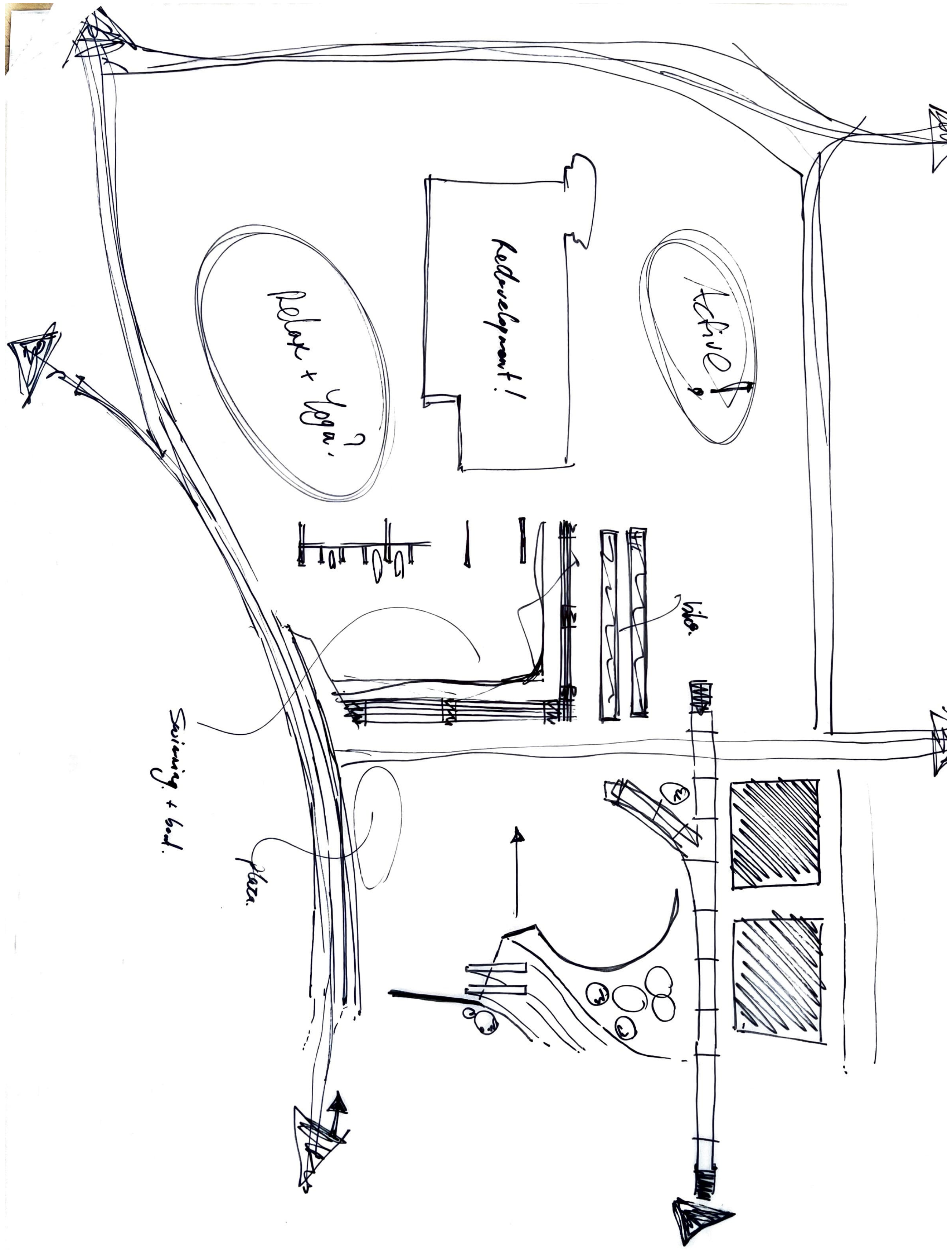


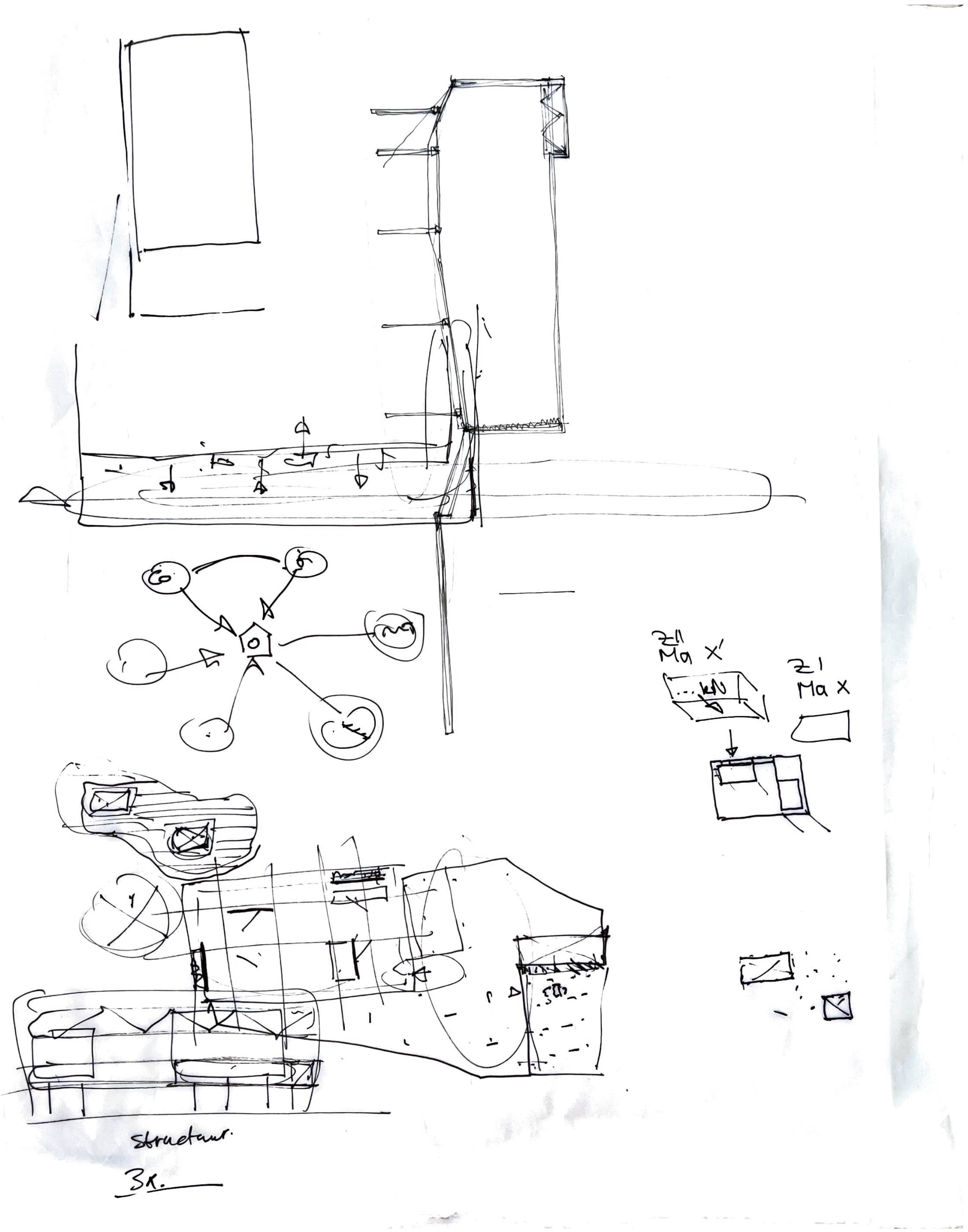



A1.1
A1.2

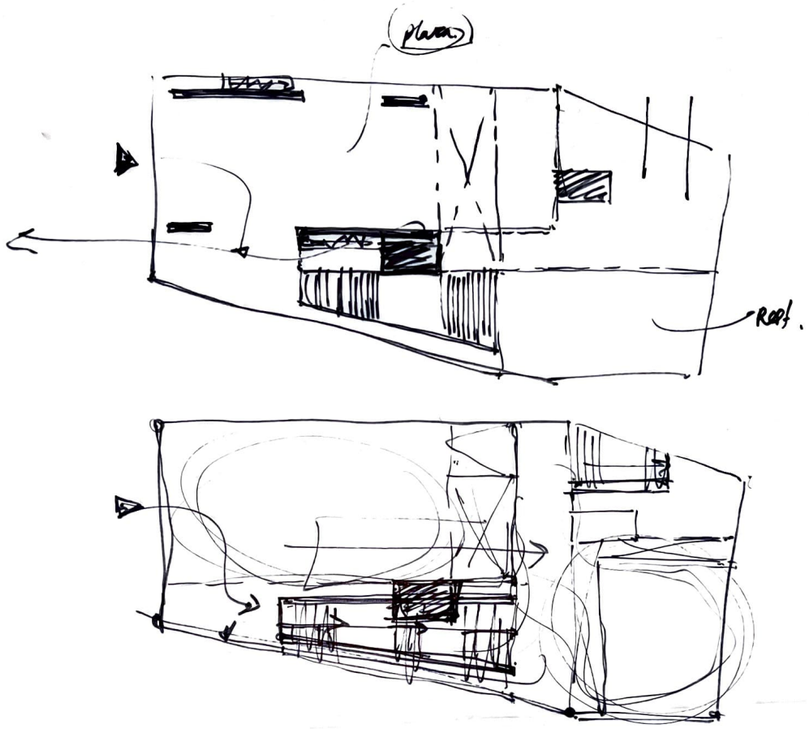


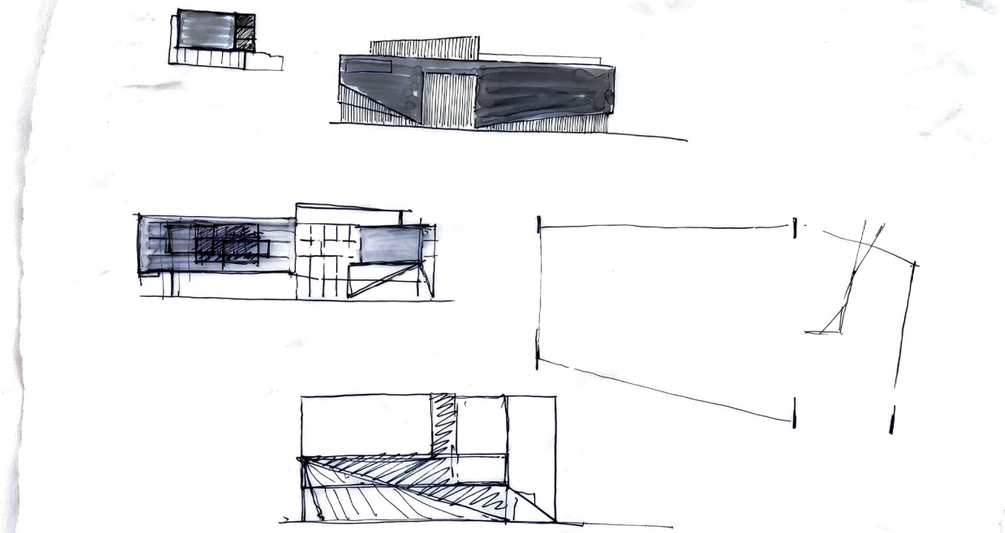
01 Sketches

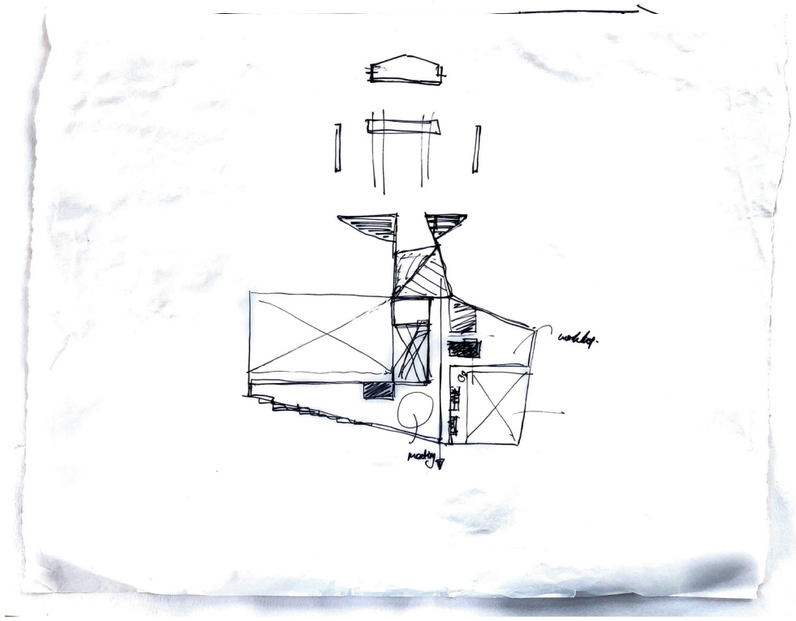


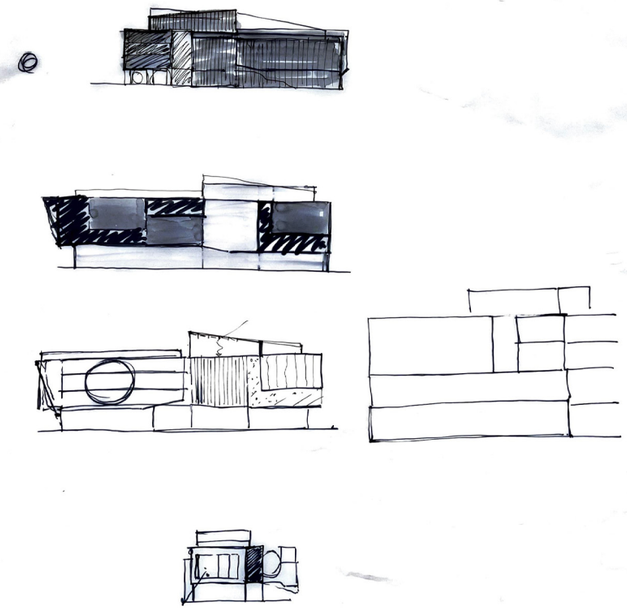


01 Sketches









BINCKS' MUSIC FACTORY - URBANISM

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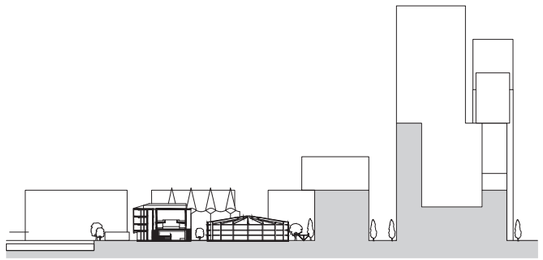
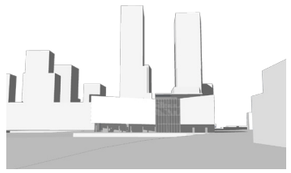
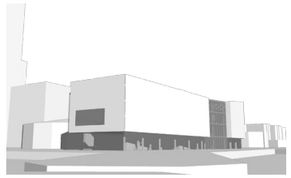
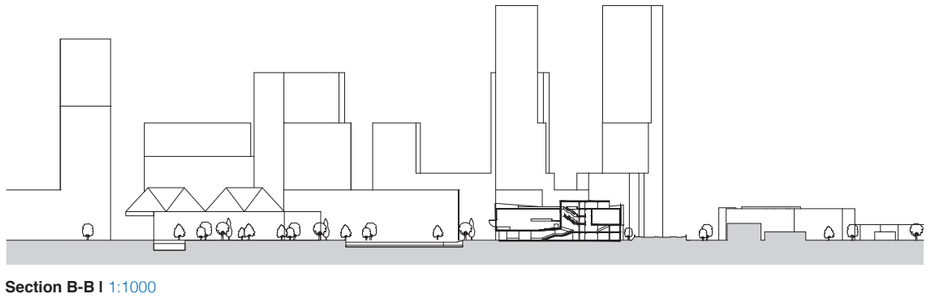


Section A-A I 1:1000

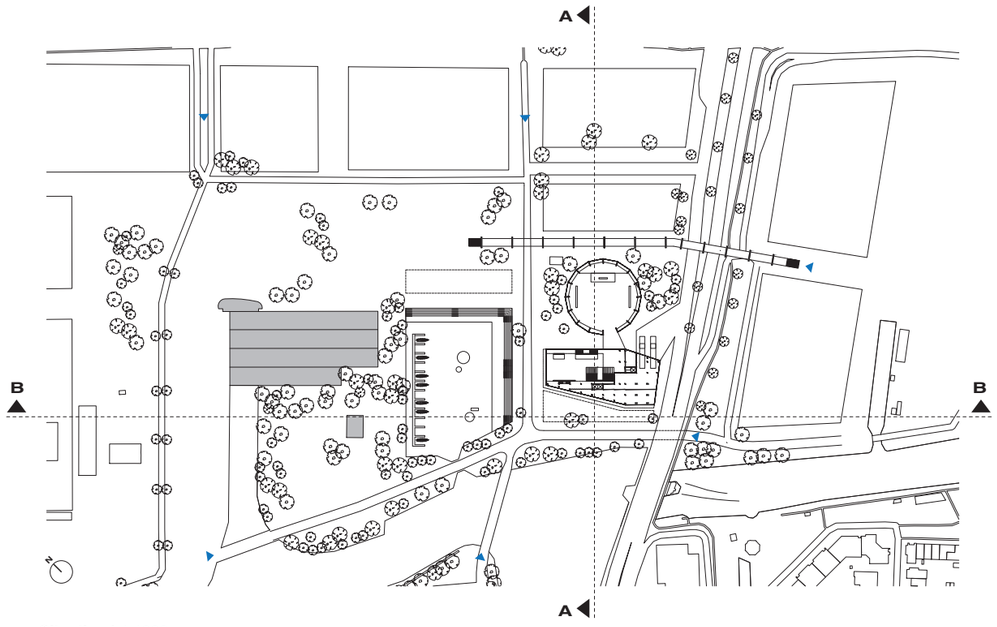




Approach



Section B-B I 1:1000



Situation I 1:1000

BINCKS' MUSIC FACTORY - ARCHITECTURE

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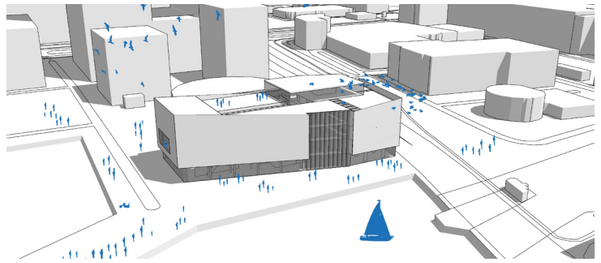
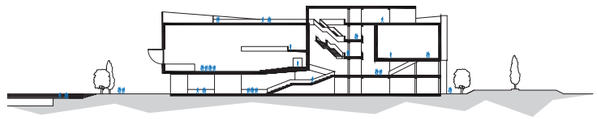


Birds Eye View



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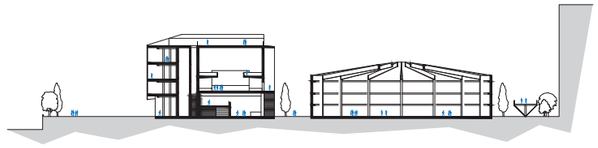
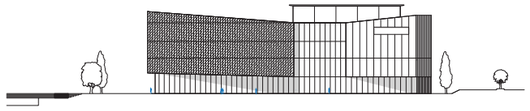
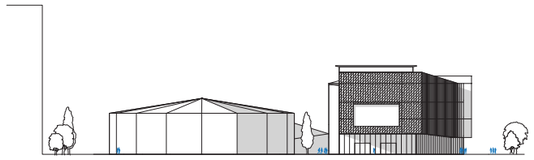


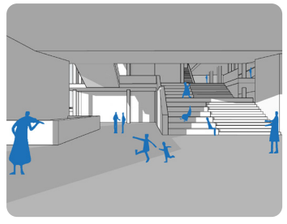
Section A-A I 1:500



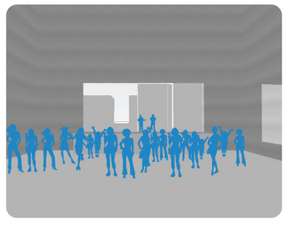
West Elevation I 1:500



North Elevation I 1:500

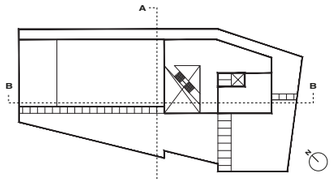


Entrance Foyer

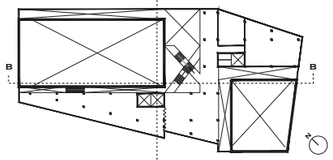


Music Venue 2

Level 04 I 1:500



Level 03 I 1:500



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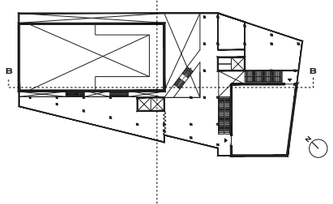
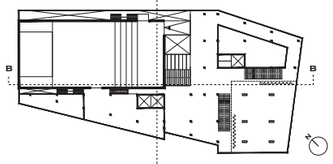
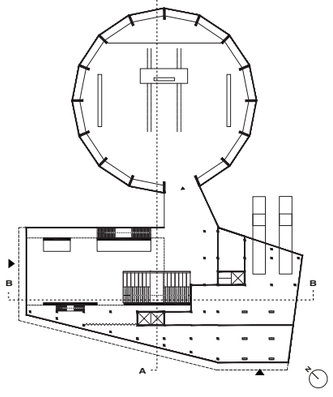


Level 01 I 1:500



Level 00 I 1:500



01 Poster P3

BINCKS' MUSIC FACTORY - BUILDING TECHNOLOGY

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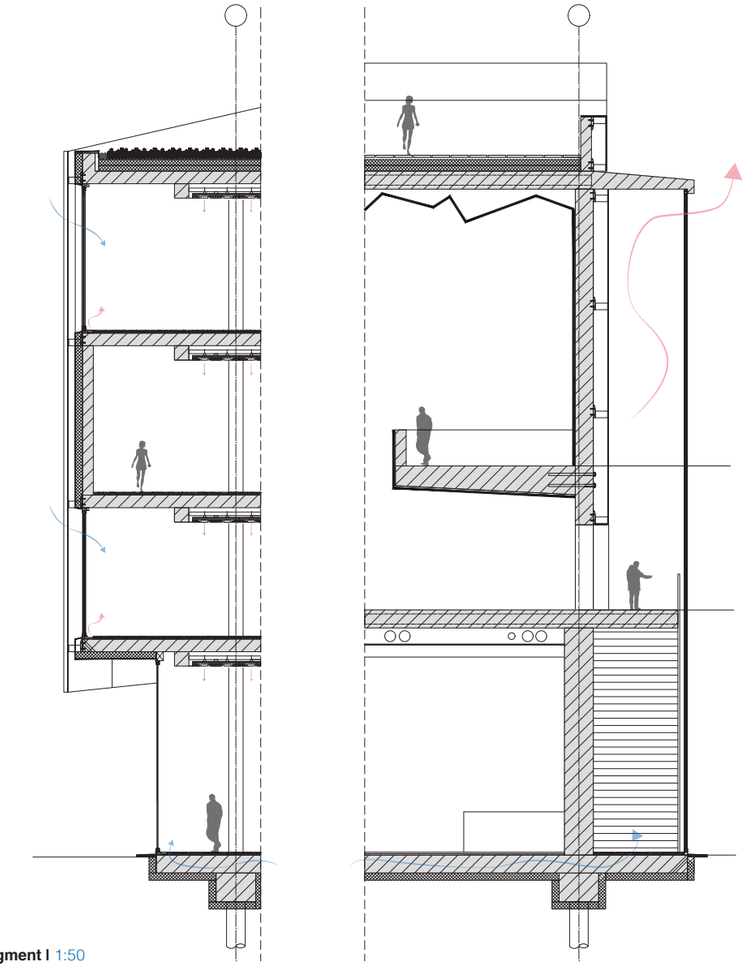
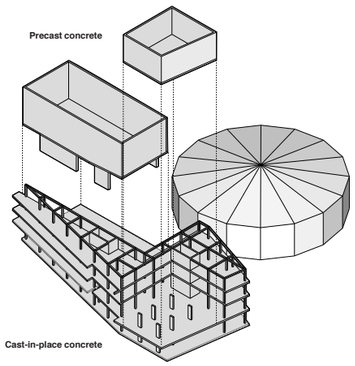
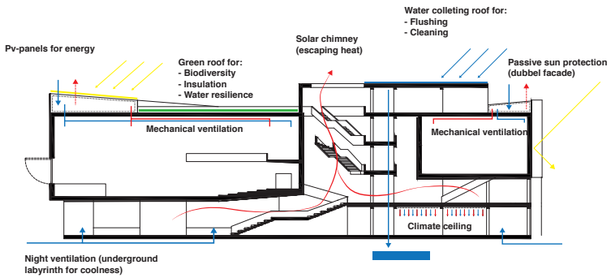


Building Fragment I 1:50



Construction Diagram

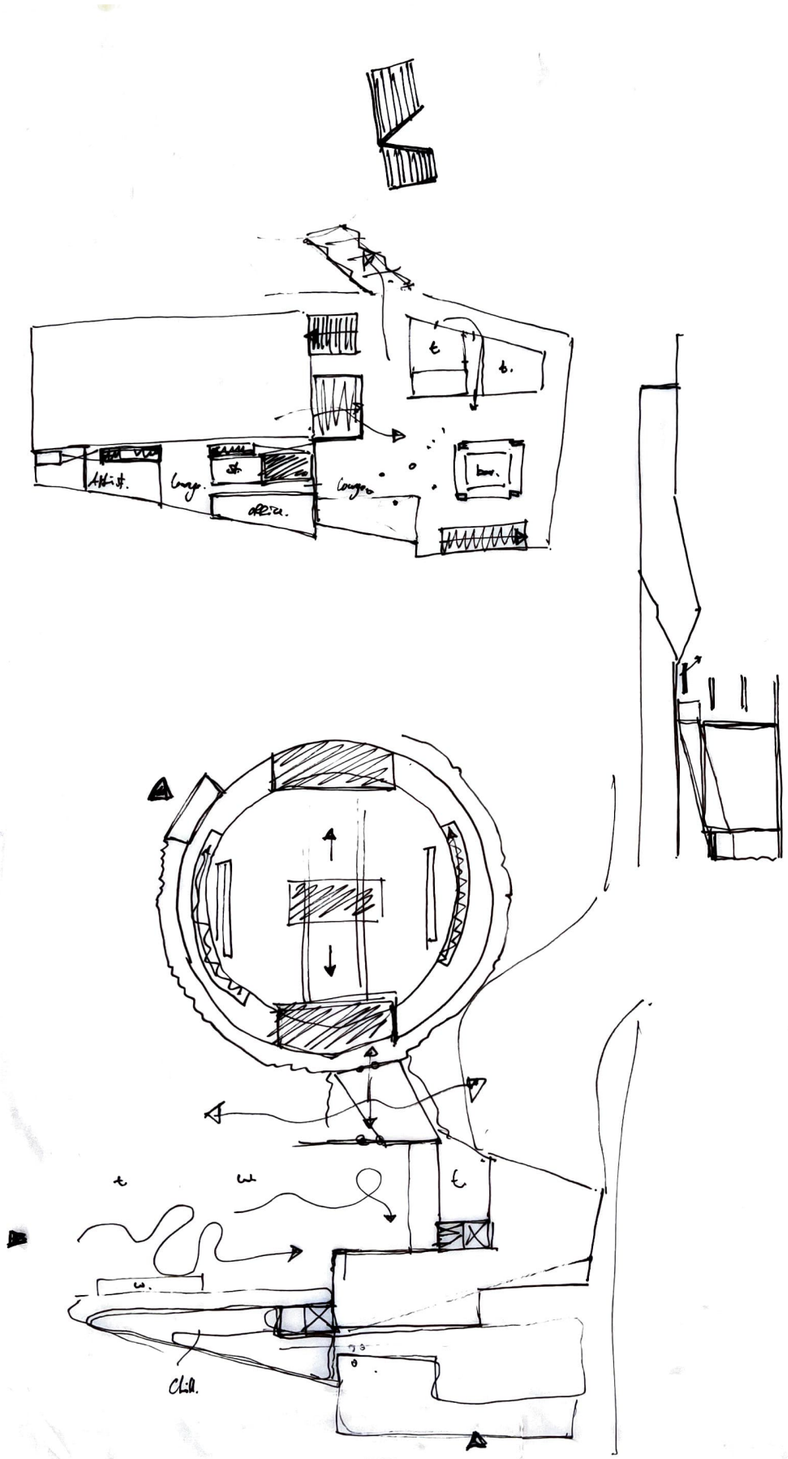


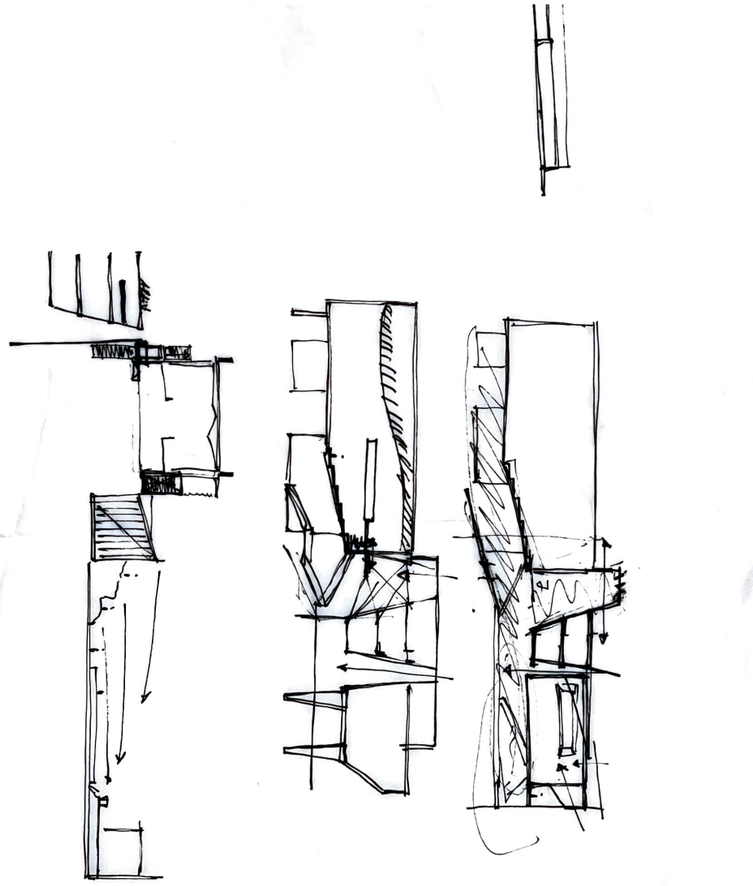
Climate Diagram

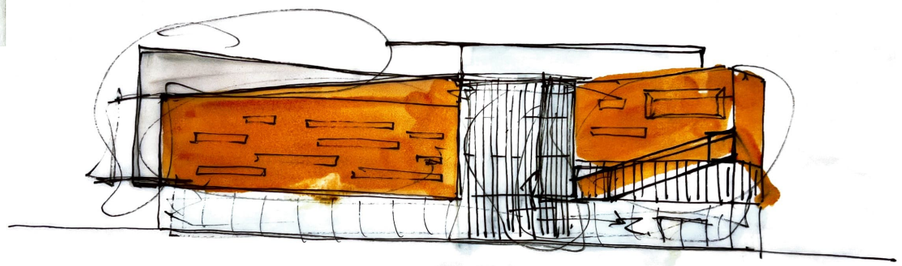
Part VII - Process Documentation

Towards P4

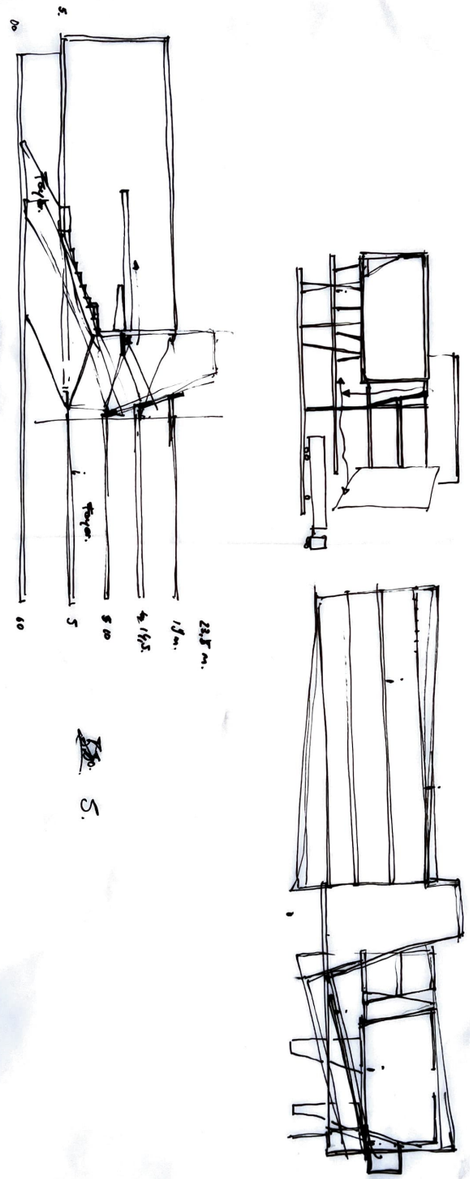
01 Sketches

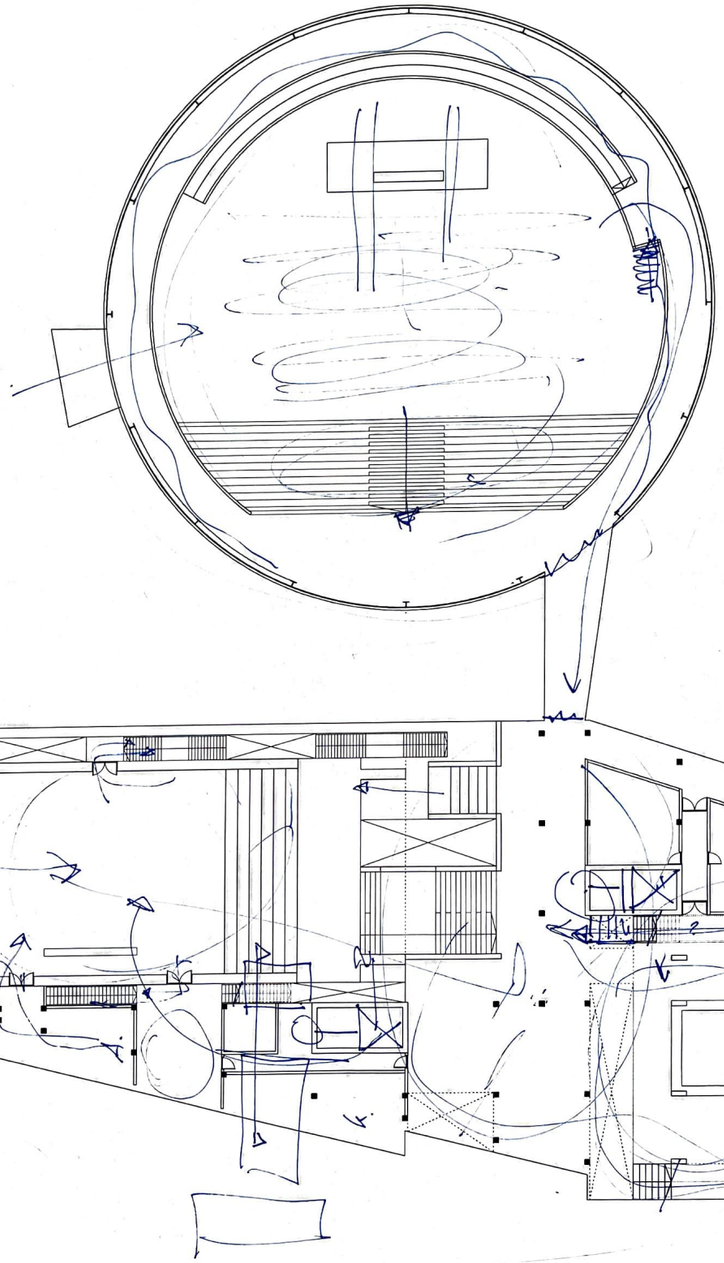






01 Sketches





BINCKS'
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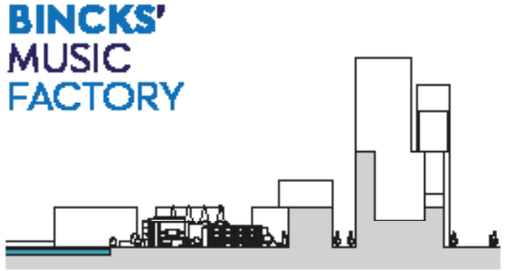
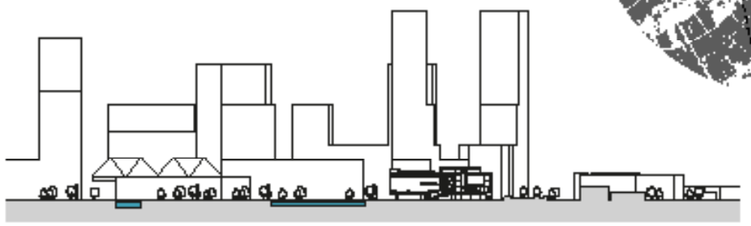
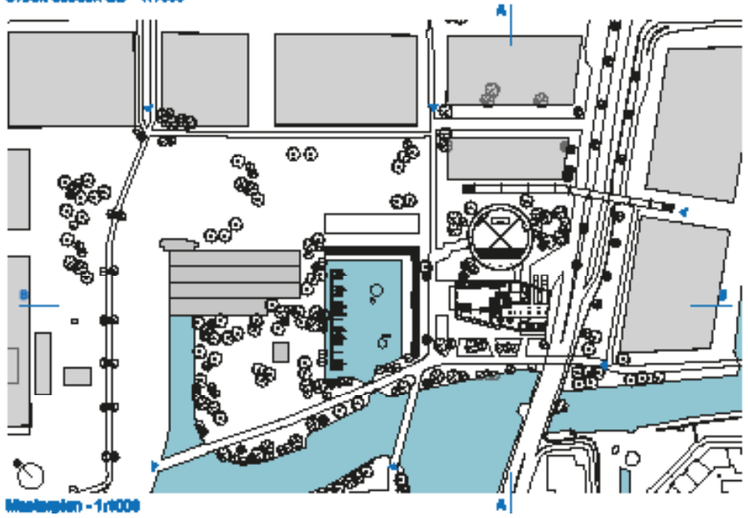
FACTORY



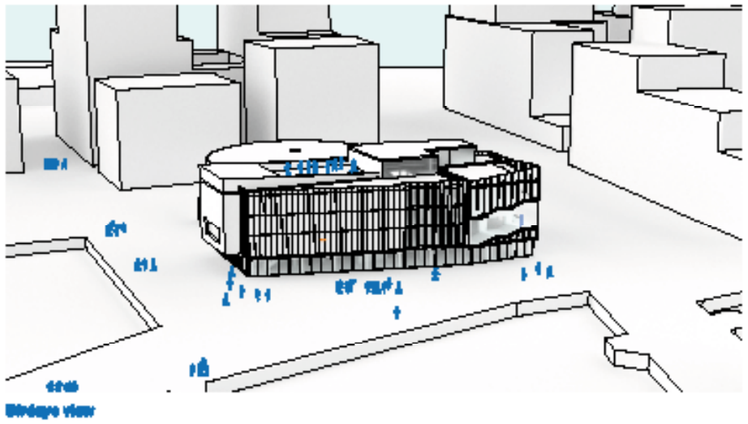
Urban section AA - 1:1000



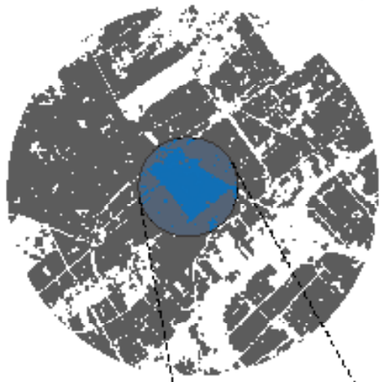
Urban section BB - 1:1000

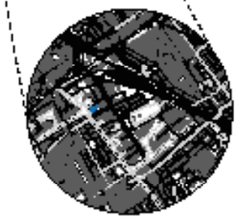


Masterplan - 1:1000



Birdeye view





Interior view

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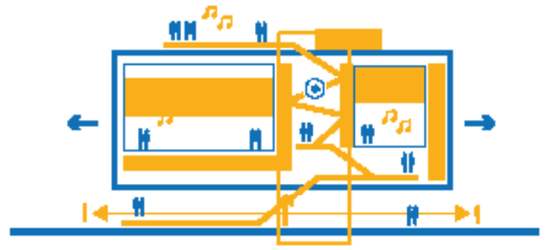
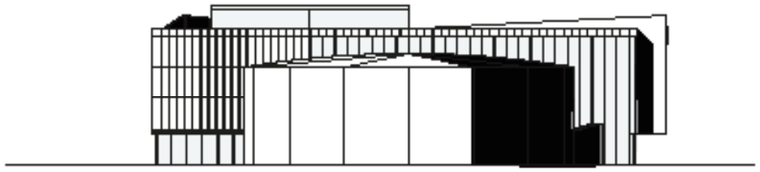
FACTORY



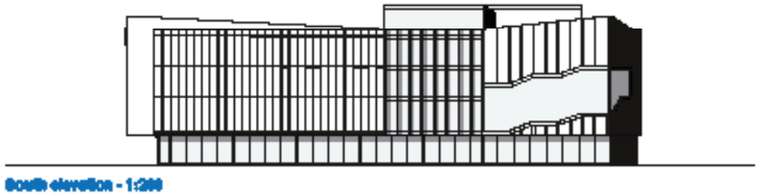
Concept diagram

Programmatic section

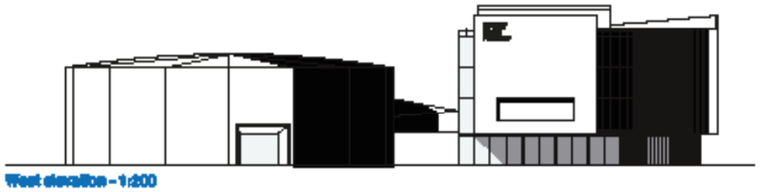


North elevation - 1:200

East elevation - 1:200



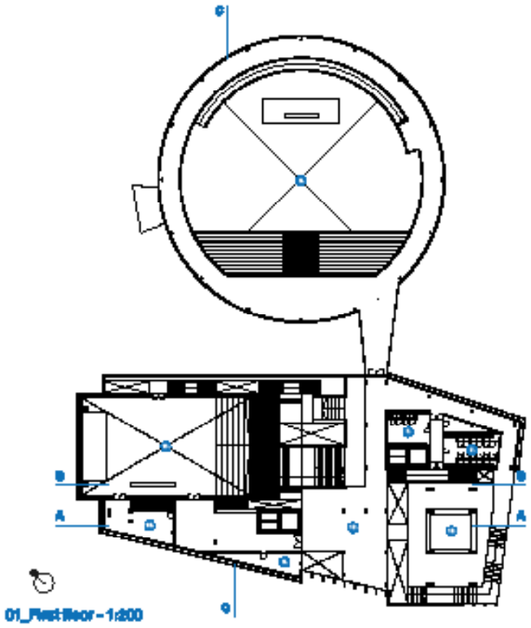
South elevation - 1:200



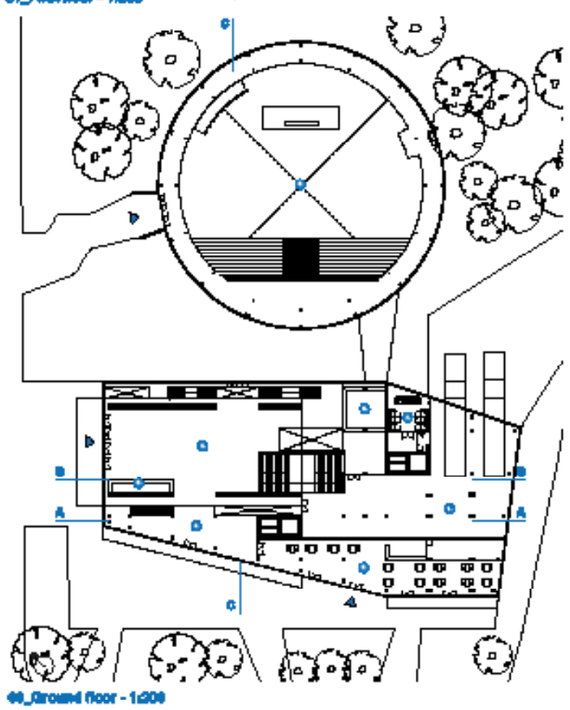
West elevation - 1:200

Interior view

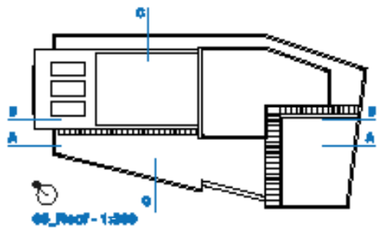
BINCKS'
MUSIC
FACTORY



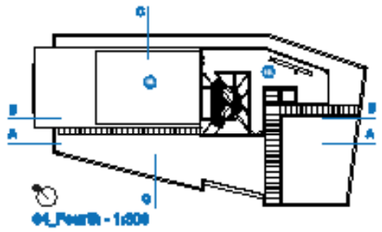
01_First floor - 1:200



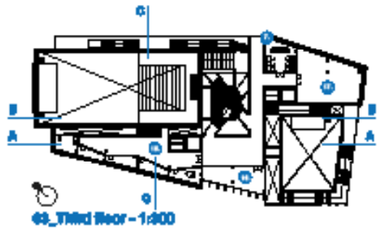
00_Ground floor - 1:200



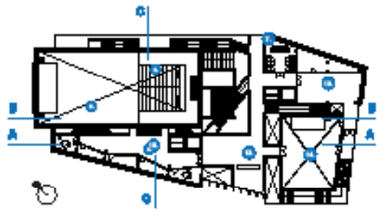
05_Roof - 1:200



04_Fourth - 1:200



03_Third floor - 1:200



02_Second floor - 1:200

Program

1. Loading dock
2. Restaurant
3. Tickets
4. Lounge
5. Entrance
6. Cloakroom
7. Toilets
8. AMPLIFIED VENUE
9. Office
10. Backstage
11. POP, ROCK VENUE
12. Foyer
13. Bar
14. JAZZ VENUE
15. Practice and recording rooms
16. Soundproofing room
17. Workshop space
18. Backup

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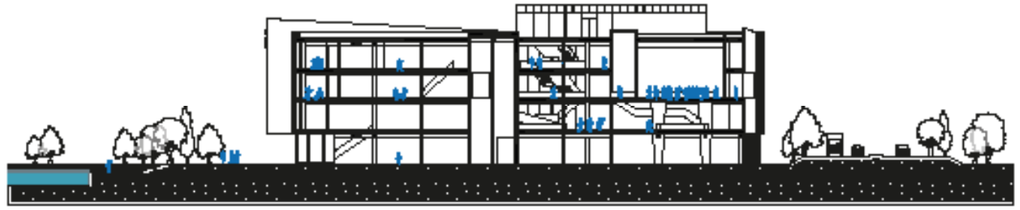
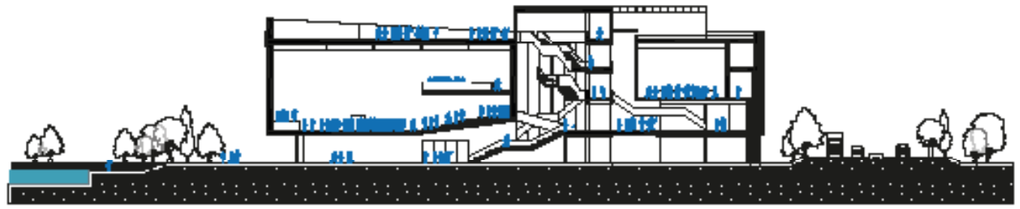
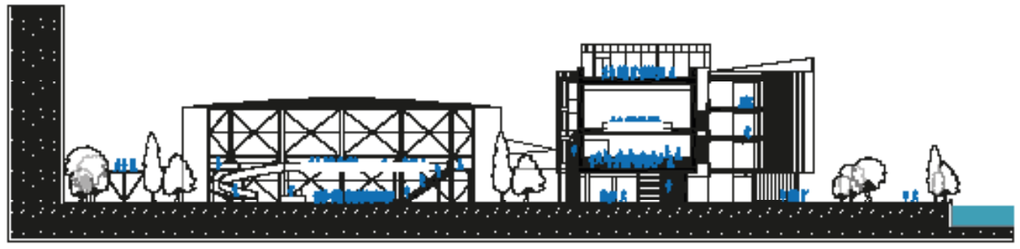
FACTORY



Section AA - 1:200

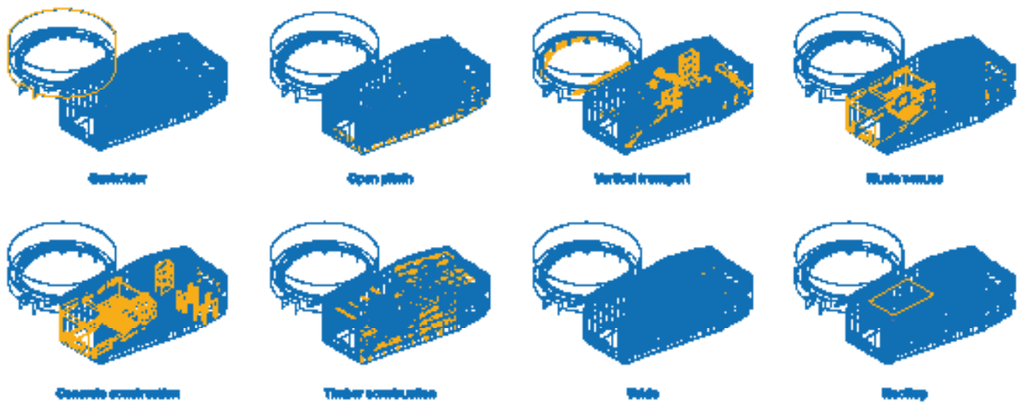


Section BB - 1:200



Section CC - 1:200

Architectural elements



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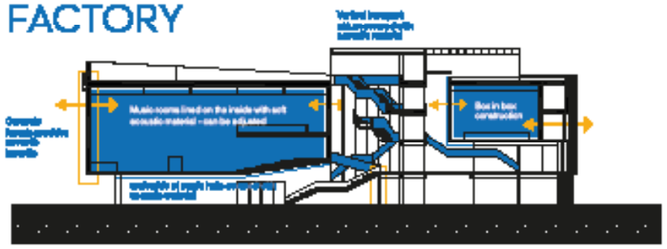
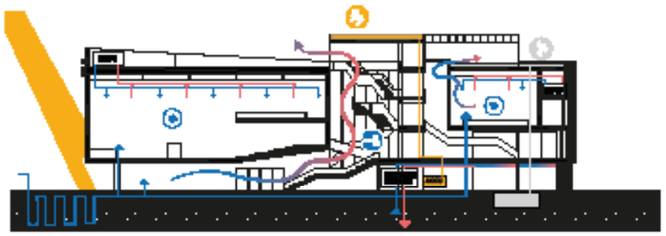
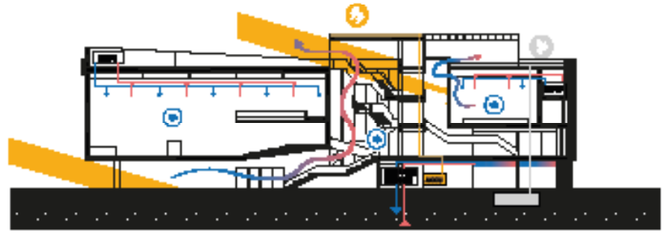


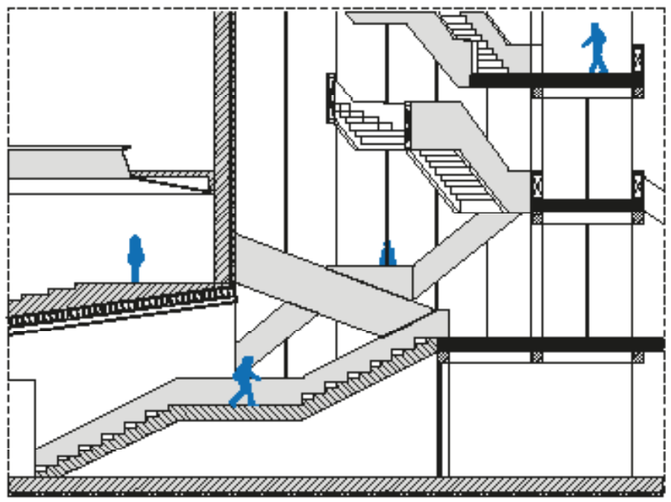
Acoustics



Climate - winter situation

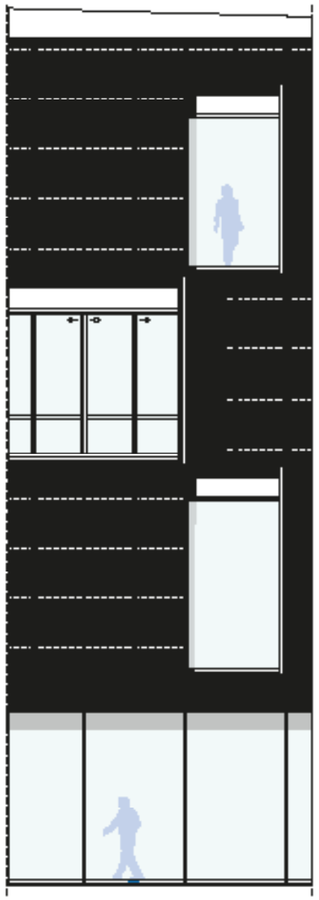


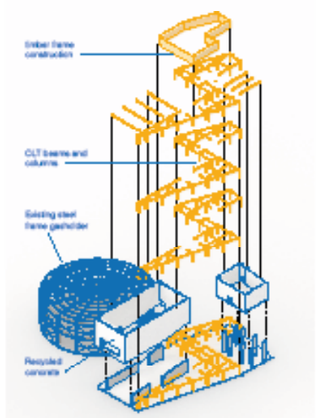
Climate - winter situation



Atrium fragment - 1:50

Facade view - 1:20





Contruction concept

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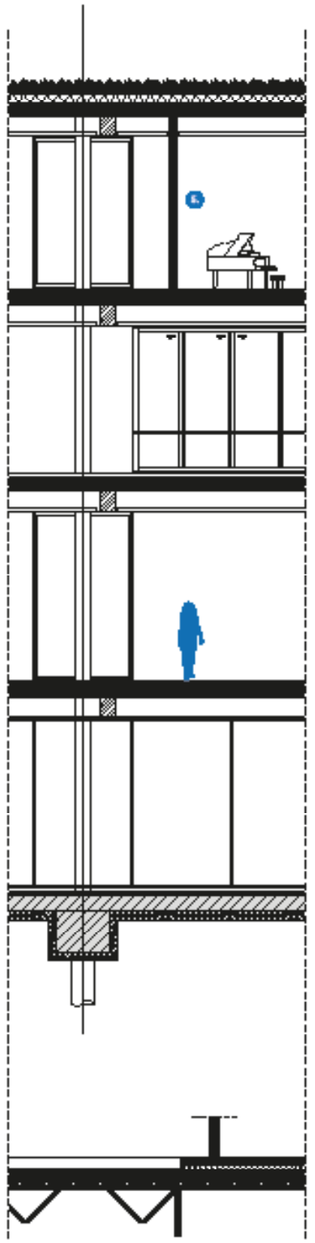
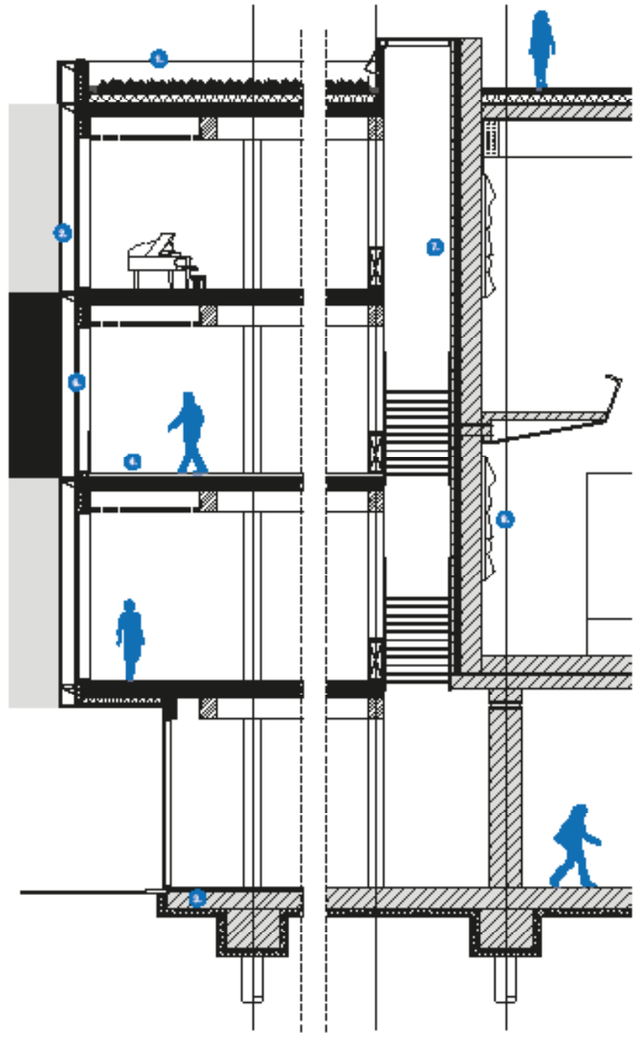
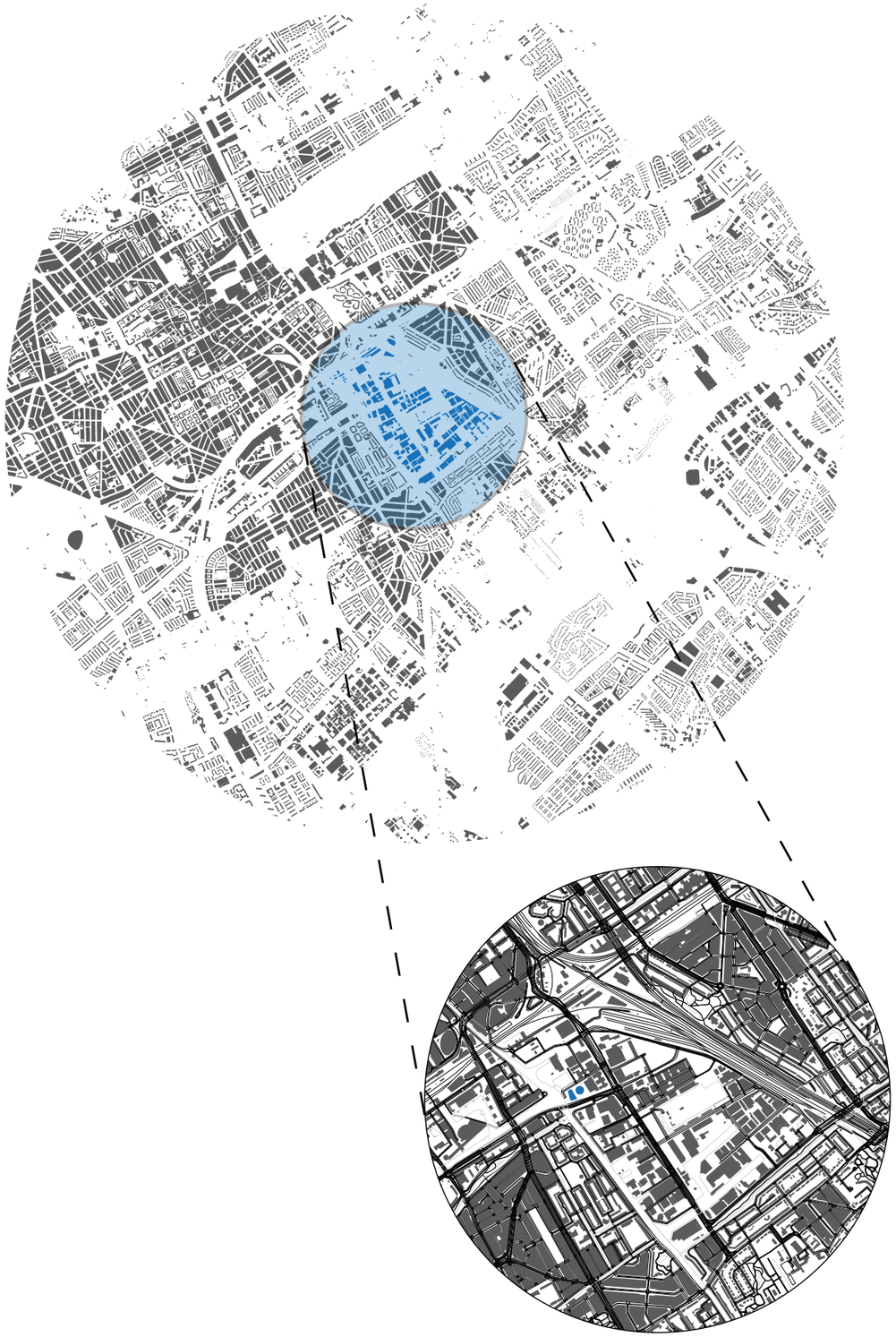


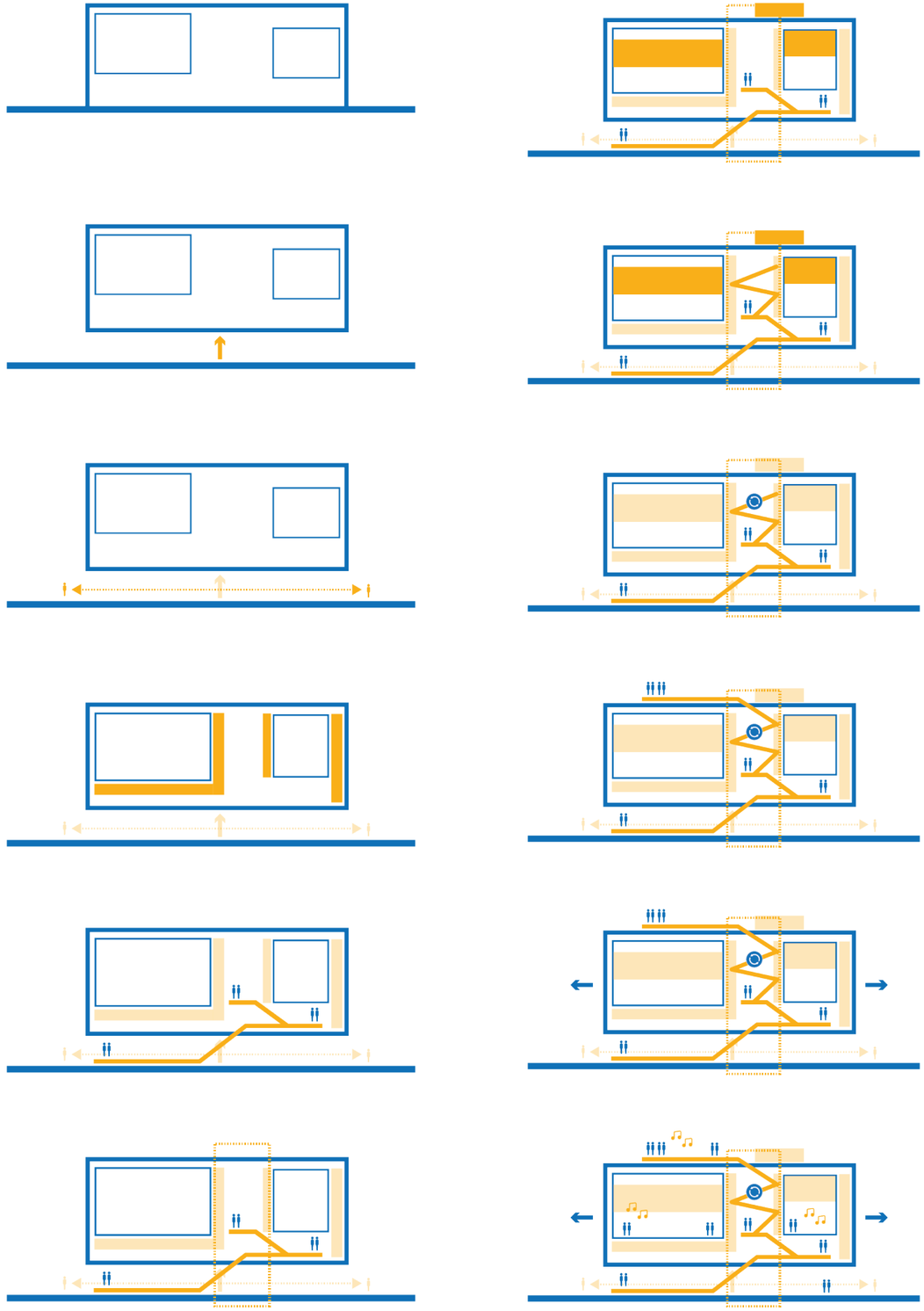


1. Roof
2. Facade
3. Ground floor
4. Floor
5. Wall structure
6. Window frame
7. Precast concrete element
8. Acoustic element

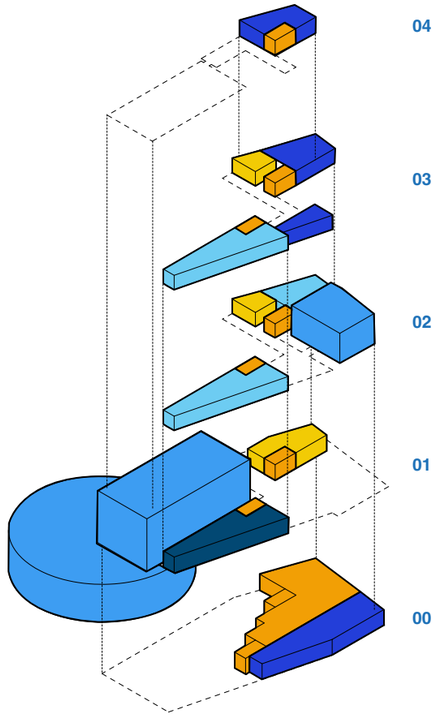
Part VIII - Final Design

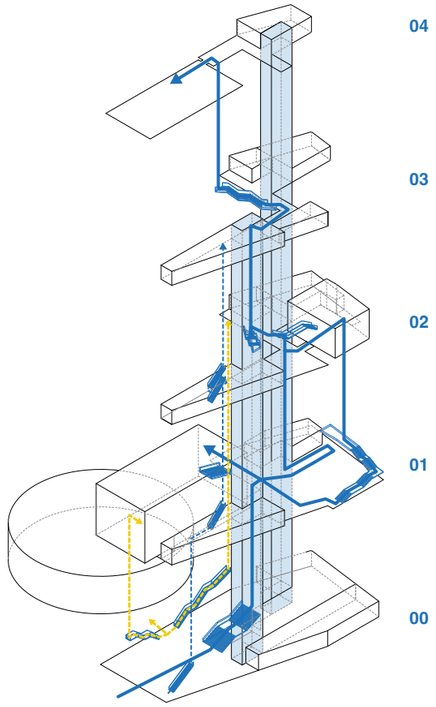
01 Final Design

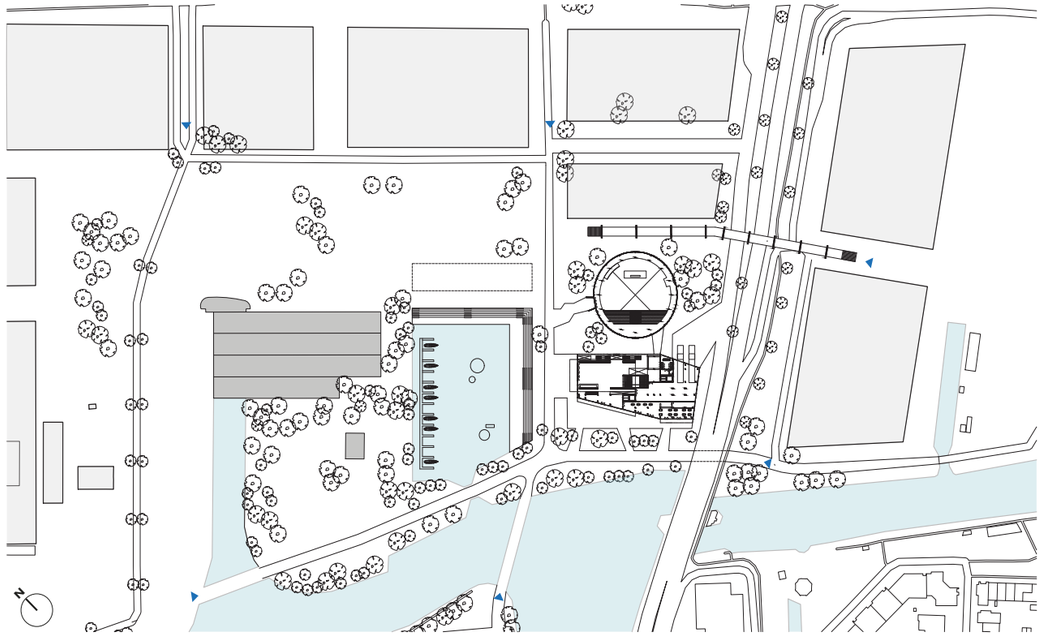


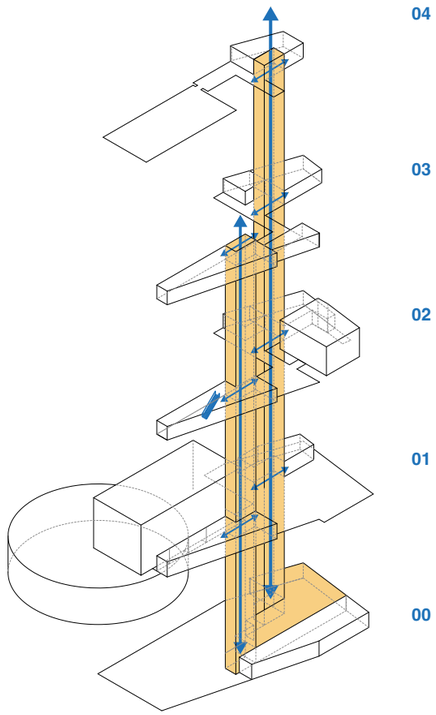


01 Final Design









Music spaces
Venue 1 - AMPLIFIED
Venue 2 - POP, ROCK, HIPHOP
Venue 3 - JAZZ

Audience acces

Dedicated acces

Support

Amenities

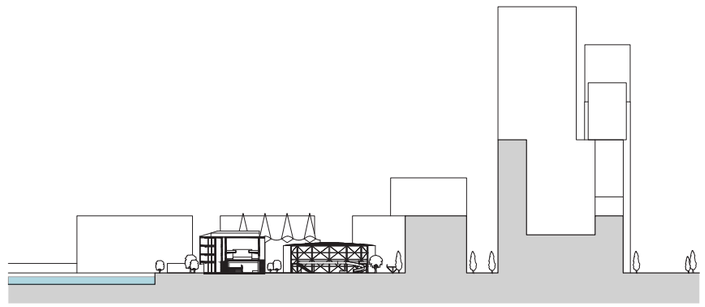
40%
Music space
Stage
Backstage
Side stage
Dressing rooms

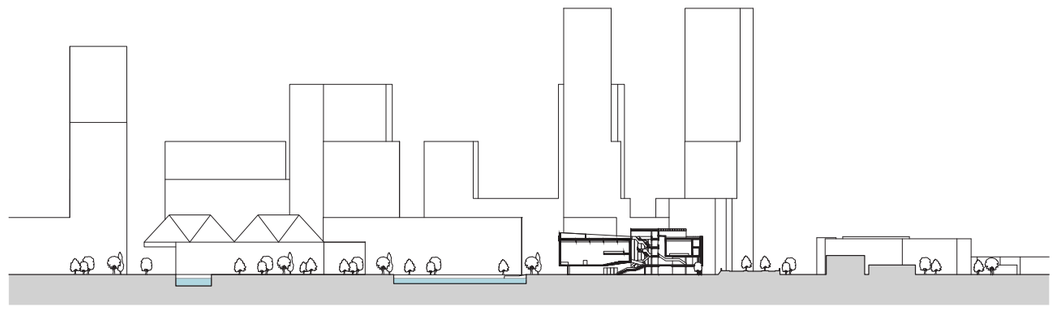
24%
Entrance
Foyer
Cloakroom
Cassier
Restrooms
Audience lounge

13%
Broadcasting space
Practice rooms
(video) recording studio

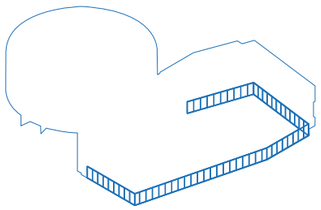
13%
Loading docks
Technical spaces

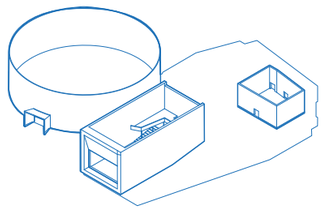
10%
Restaurant
Bar/cafe
(backoffice

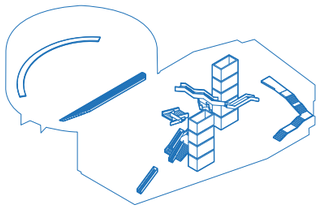


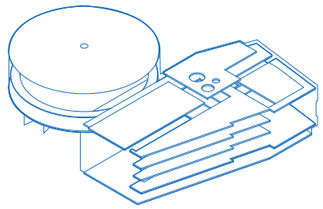


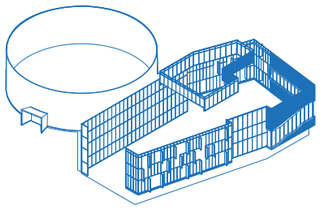
01 Final Design

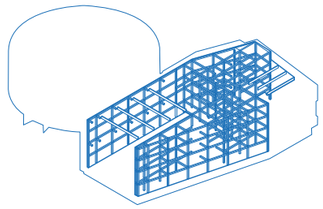


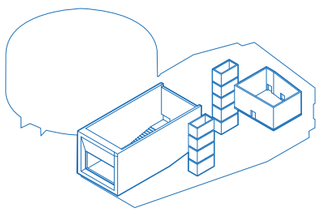


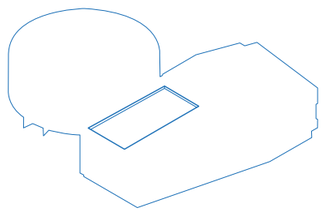


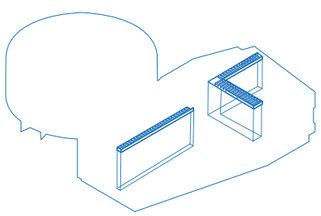


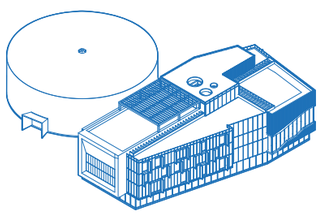


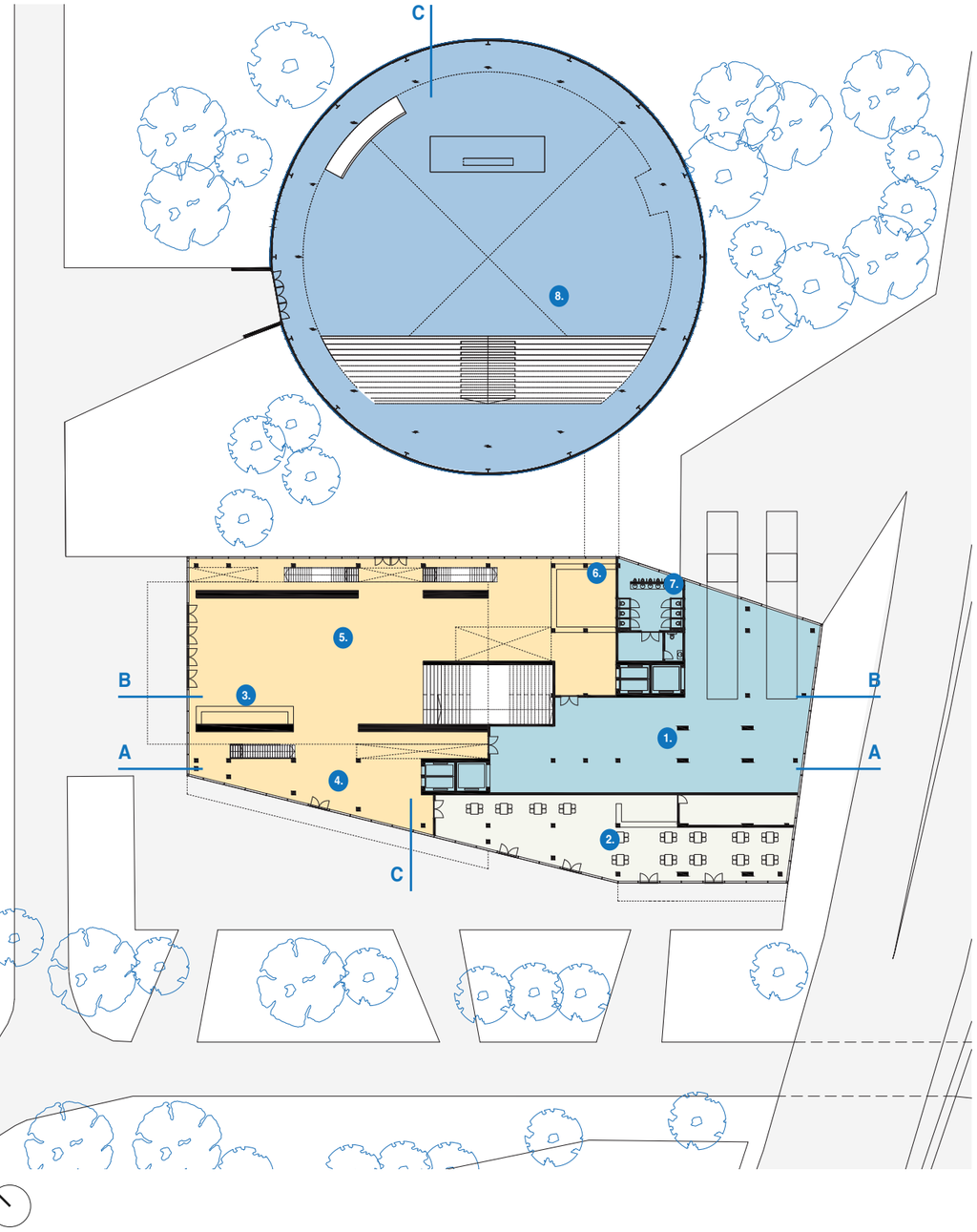






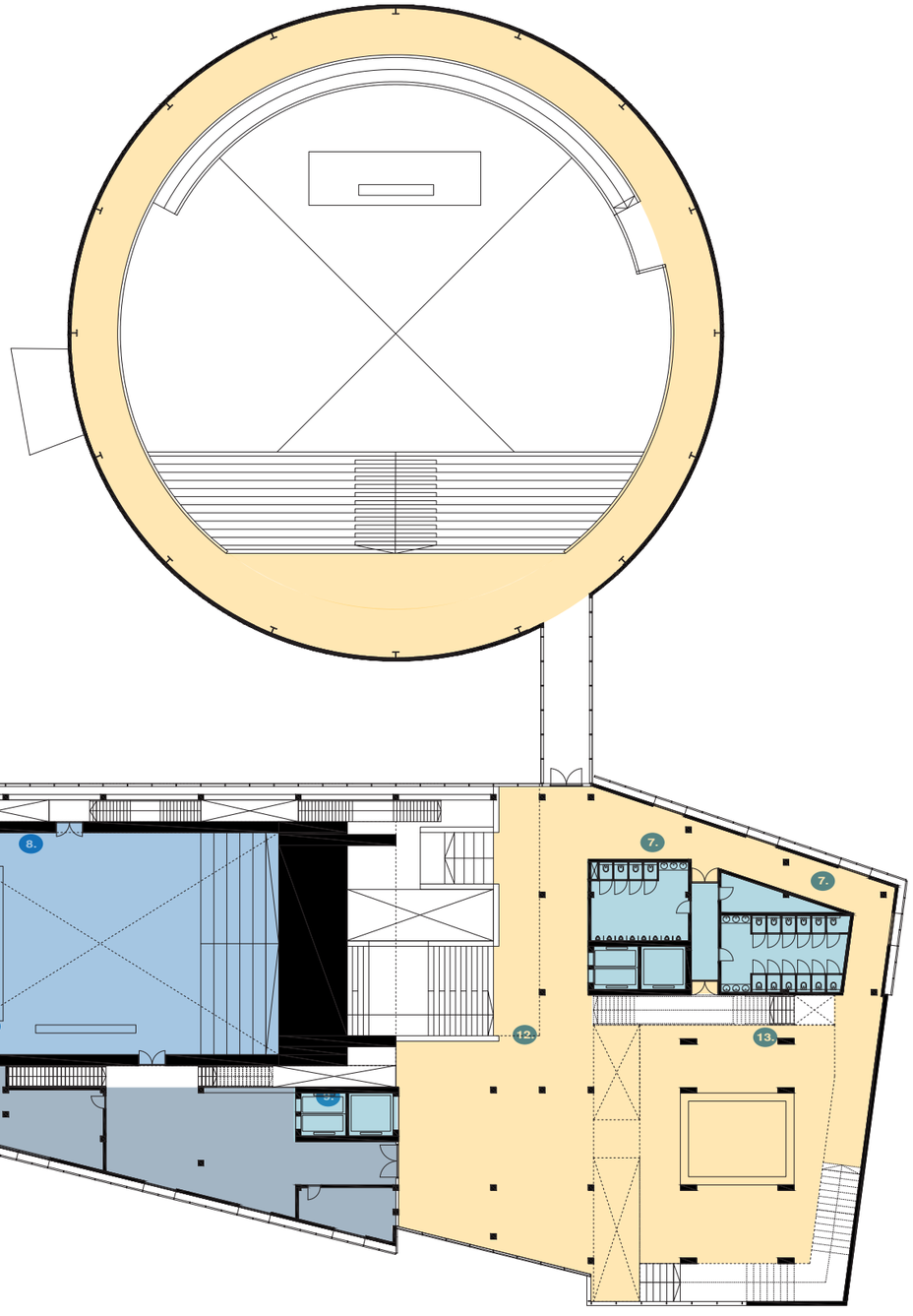






Program

1. Loading Dock
2. Restaurant
3. Tickets
4. Lounge
5. Entrance
6. Cloakroom
7. Toilets
8. AMPLIFIED VENUE
9. Office
10. Backstage
11. POP, ROCK VENUE
12. Foyer
13. Bar
14. JAZZ VENUE
15. Practice and recording rooms
16. Broadcasting room
17. Workshop space
18. Rooftop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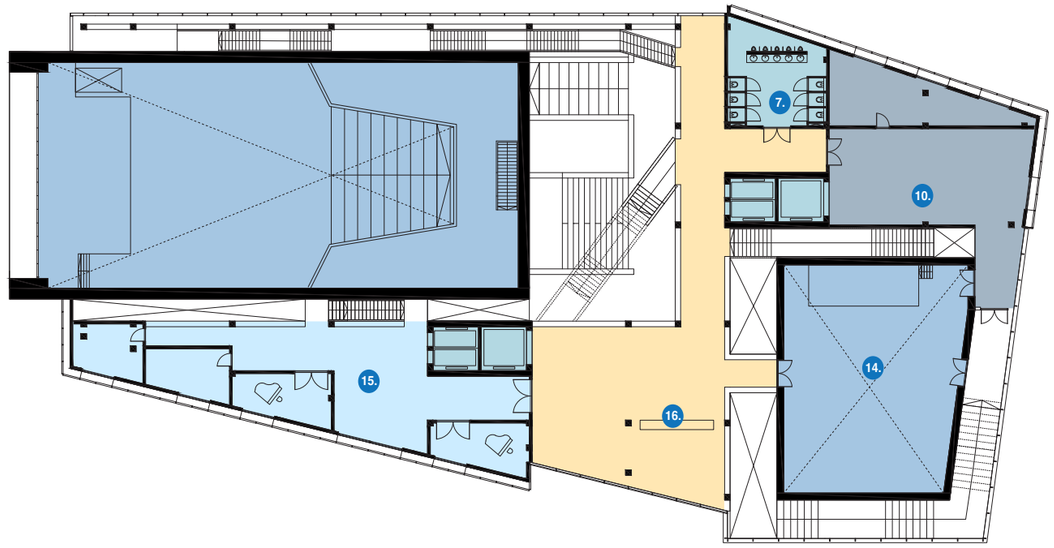
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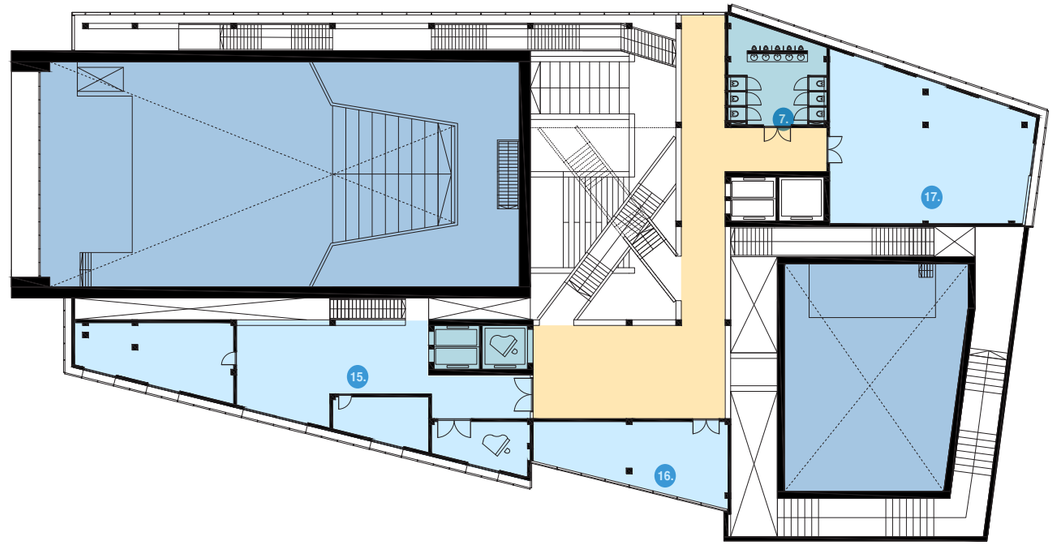
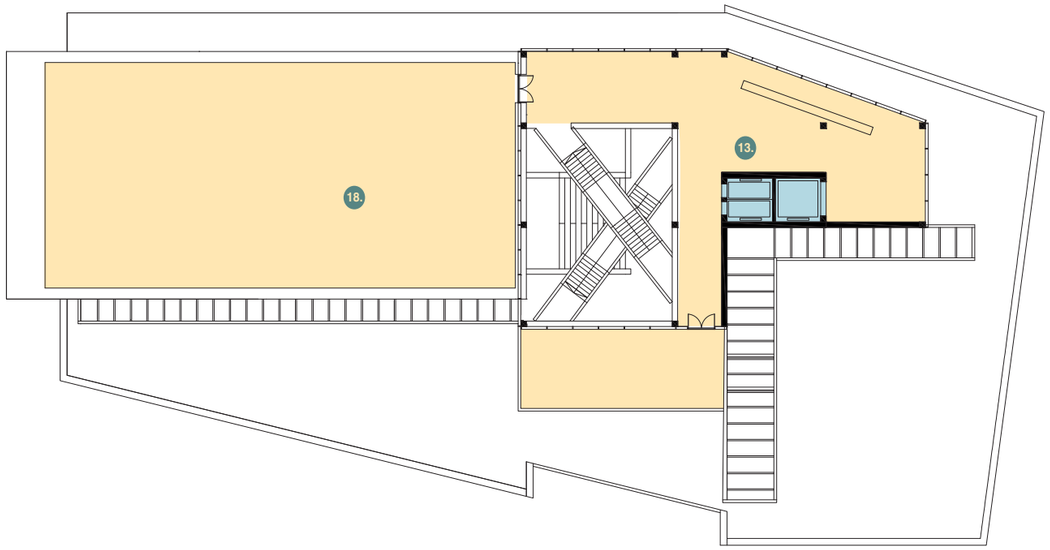
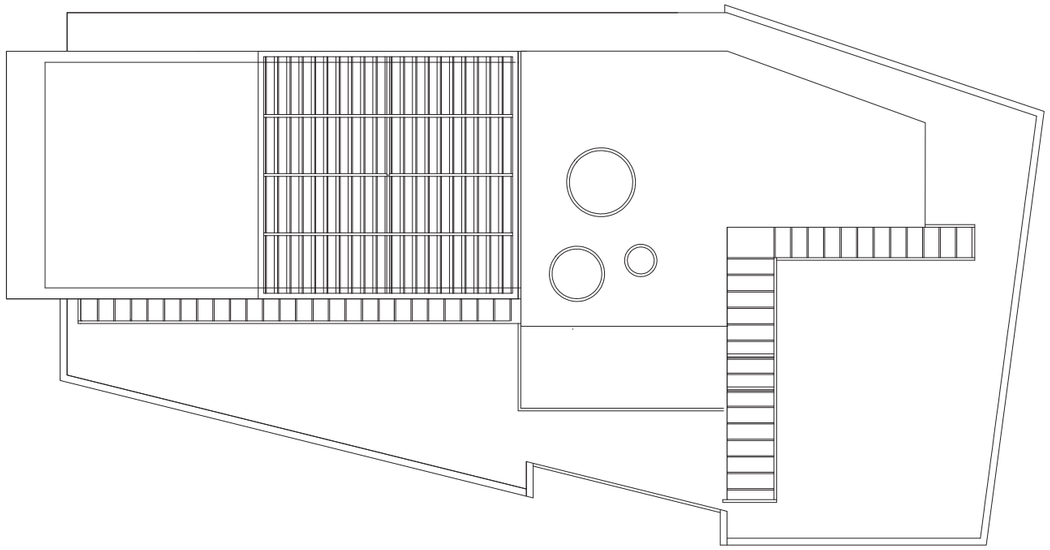
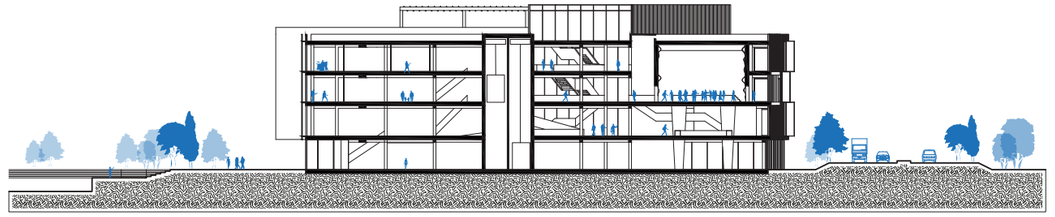
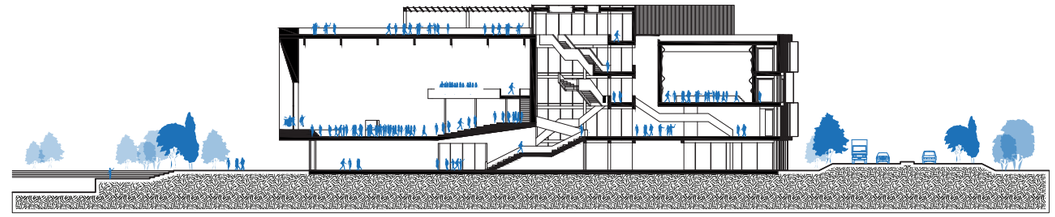

7.
17.
15.
16.

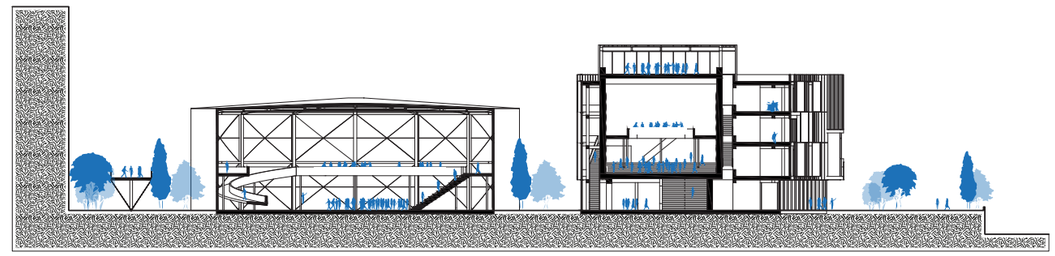
01 Final Design











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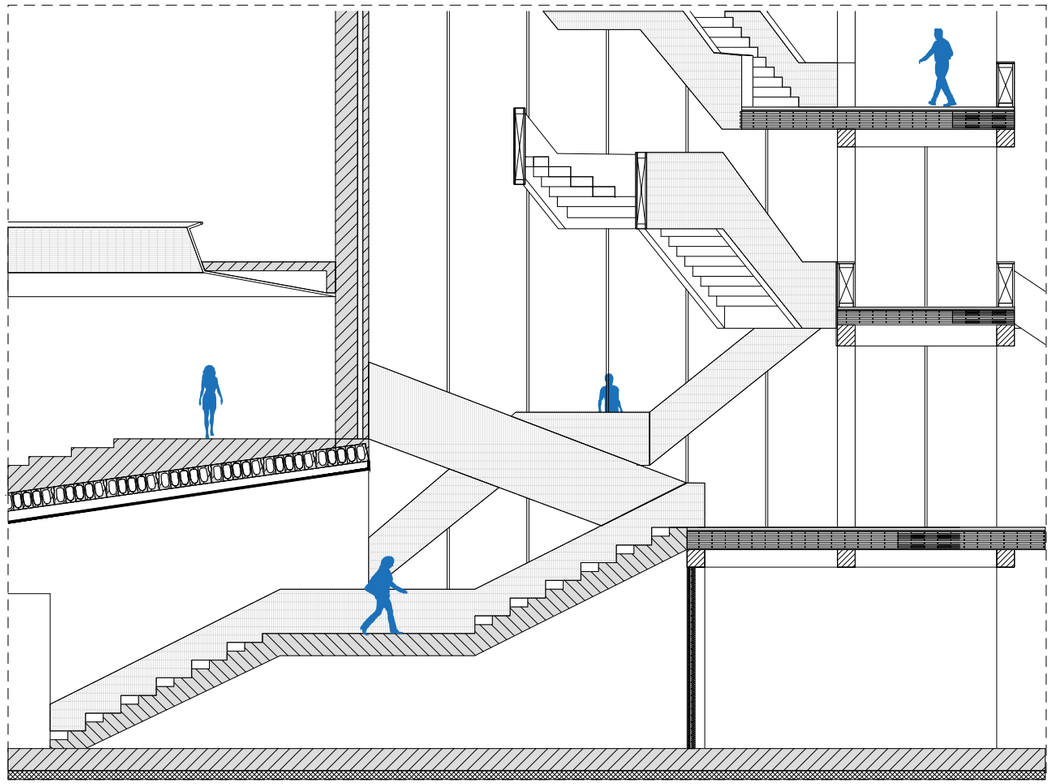

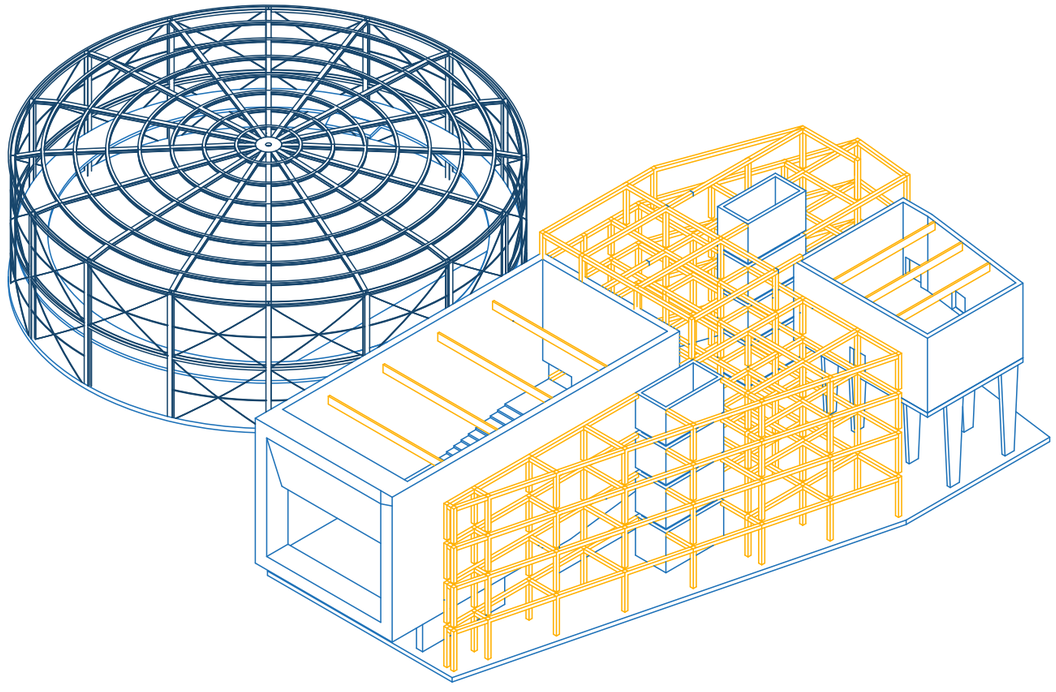

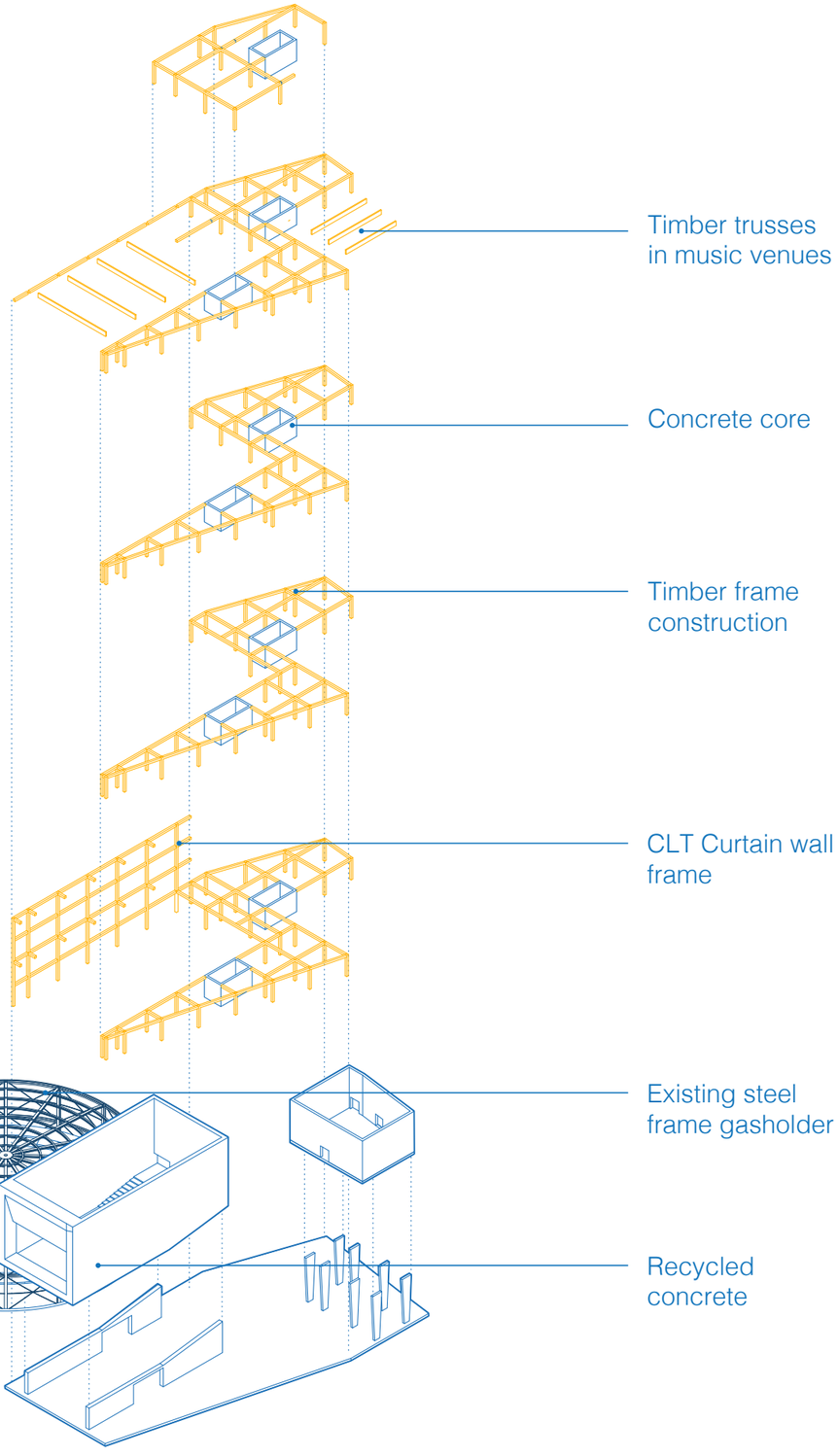

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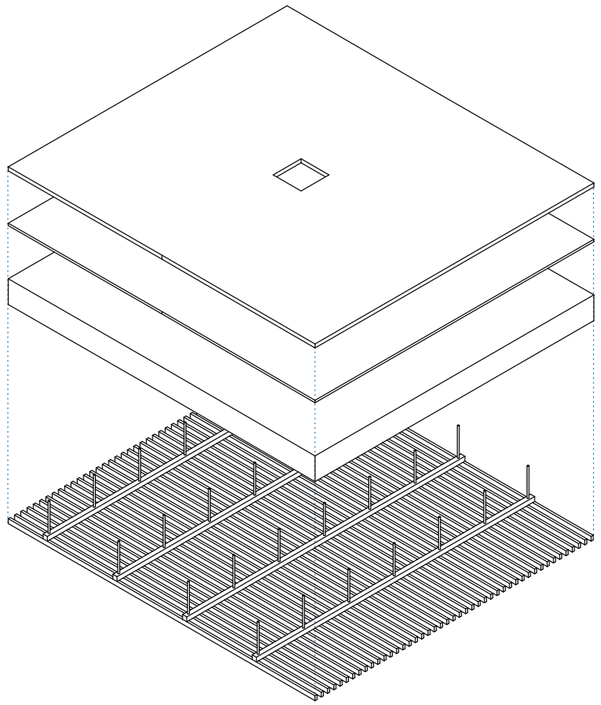
Concrete finishing

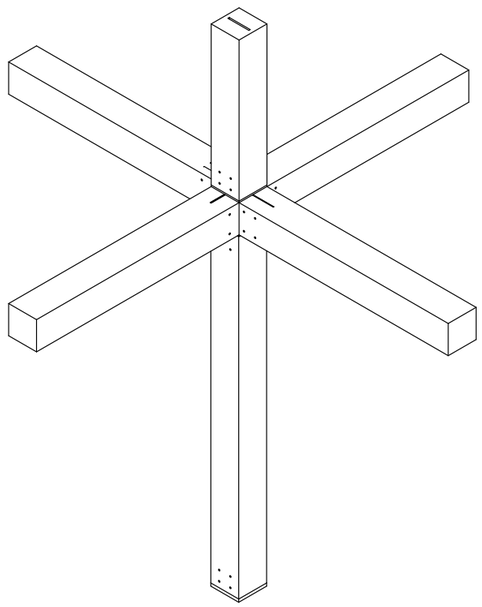
Acoustic layer

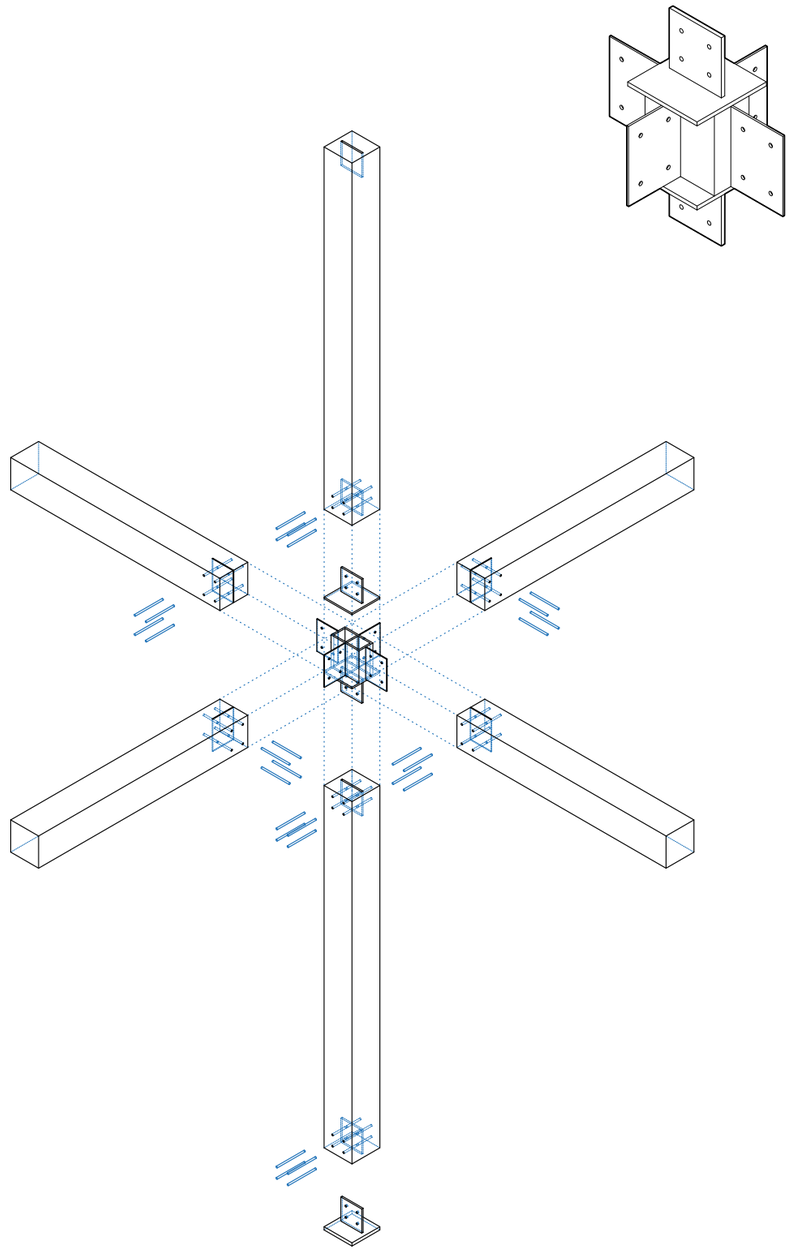
CLT-floor

Wooden ceiling



CLT-column





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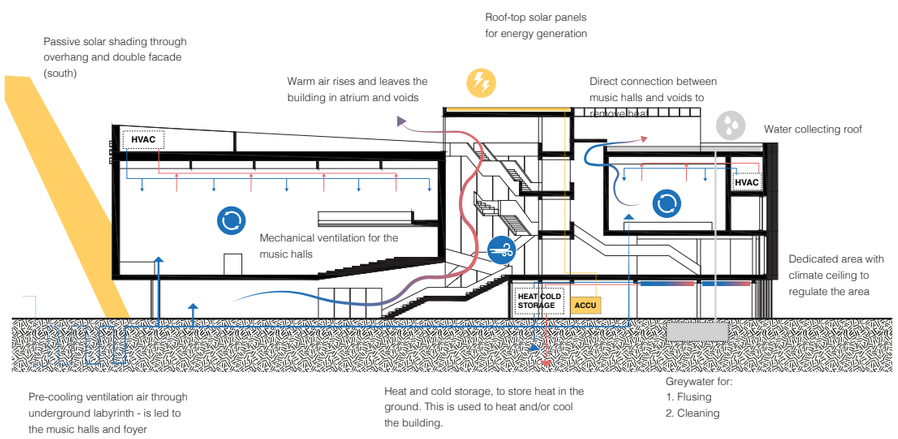

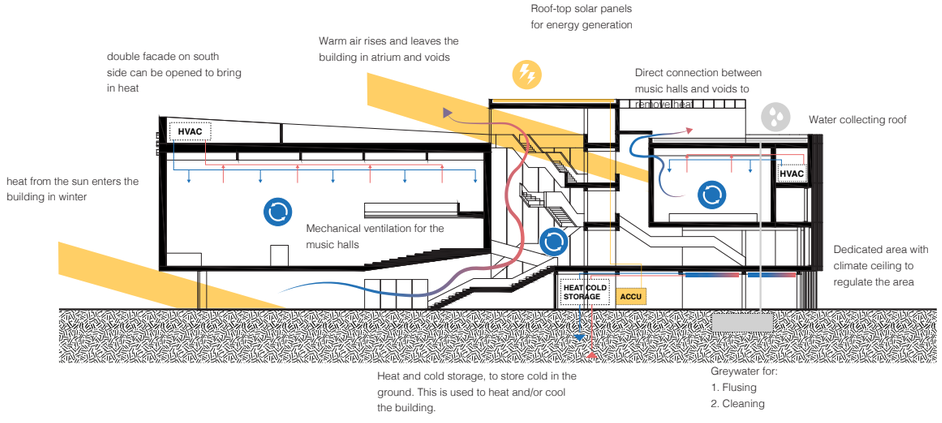

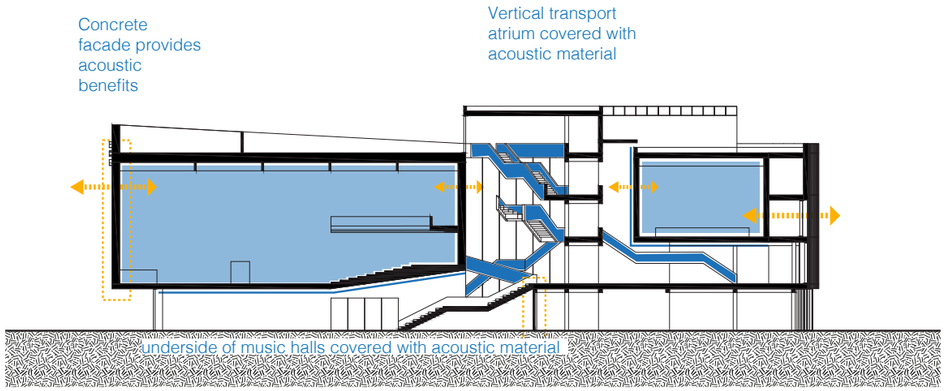

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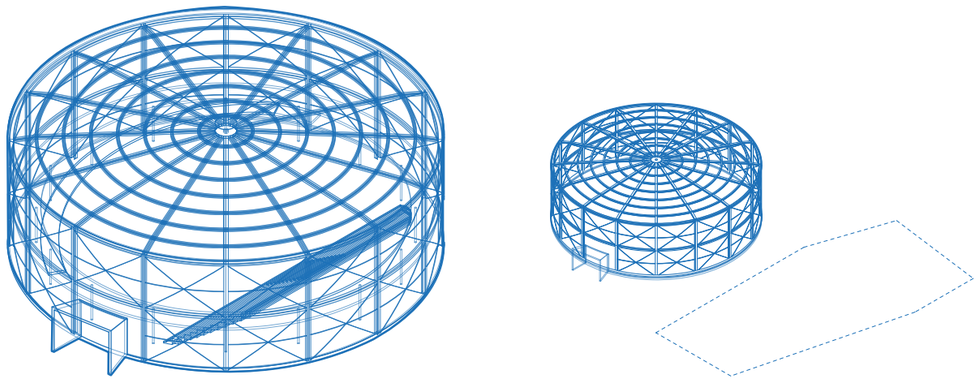
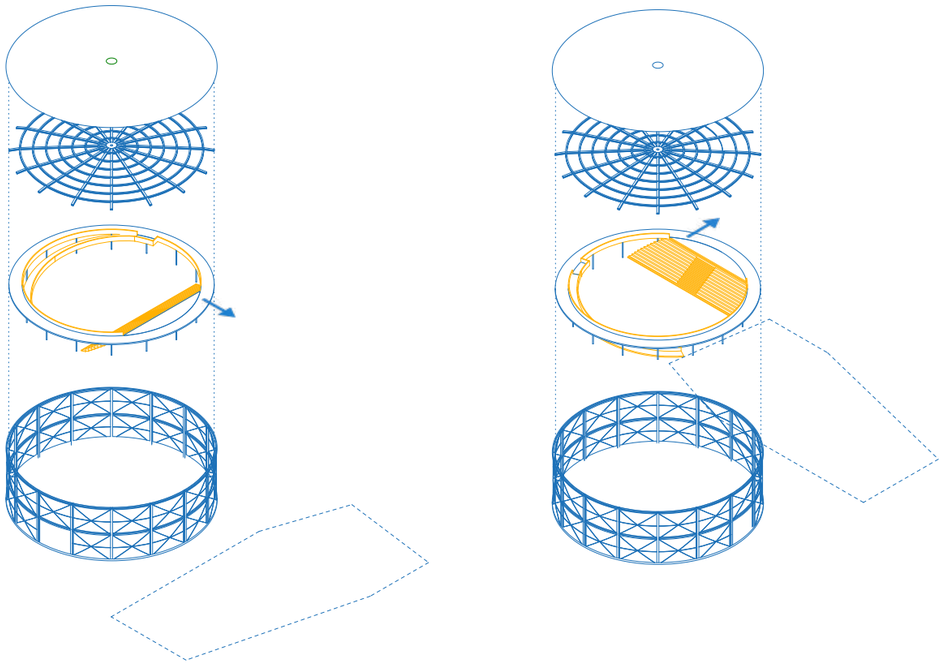
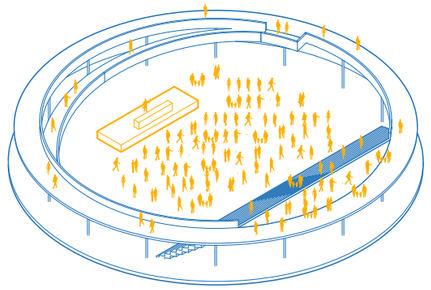
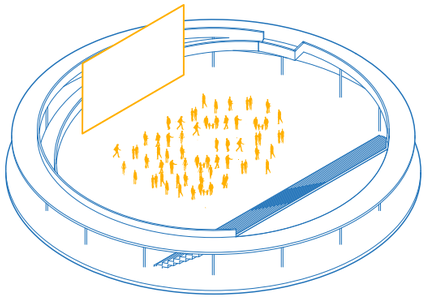


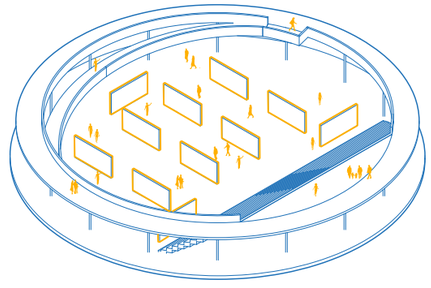




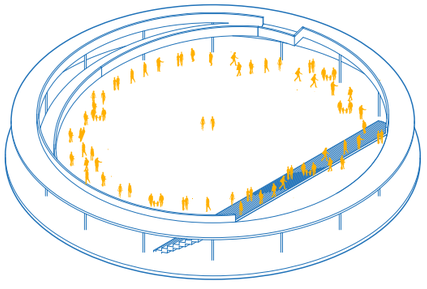
Music Venue



Movie theatre

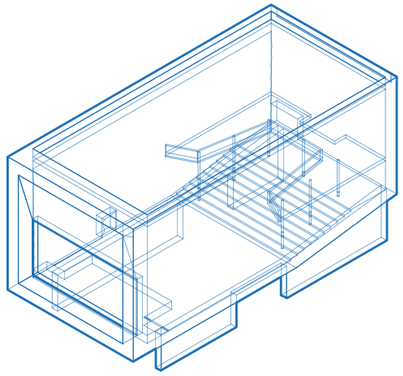


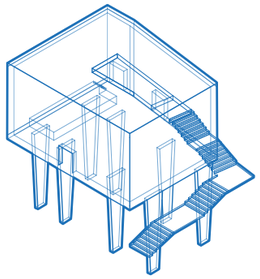
Exhibition

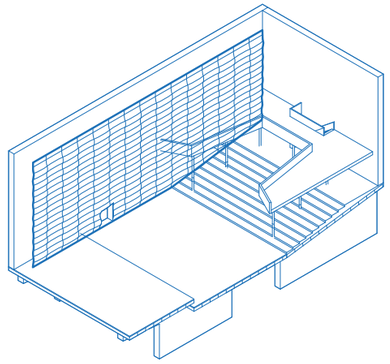


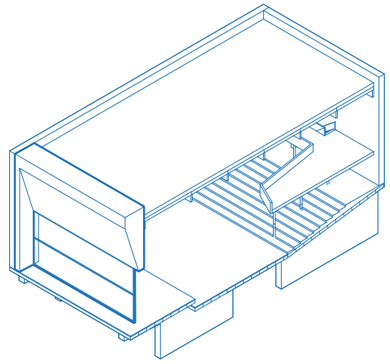
Performing arts

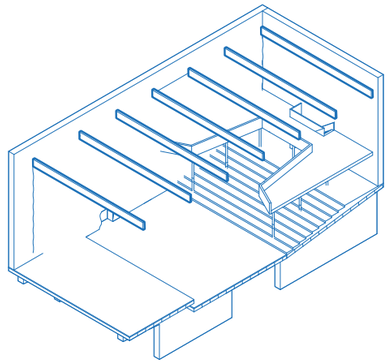
01 Final Design

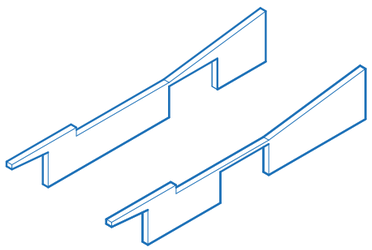


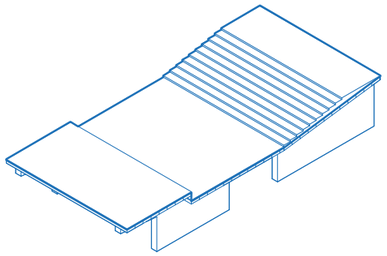


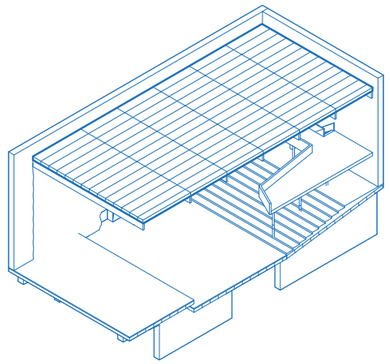


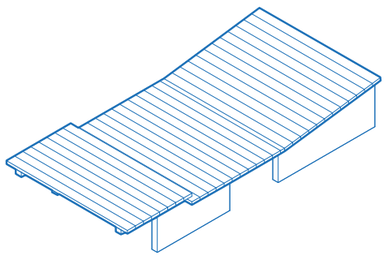


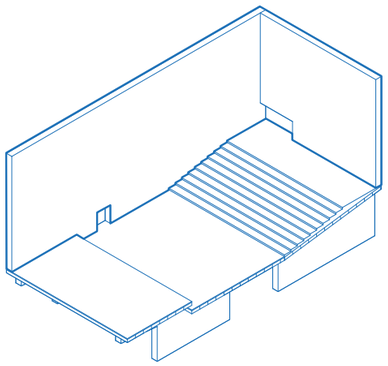


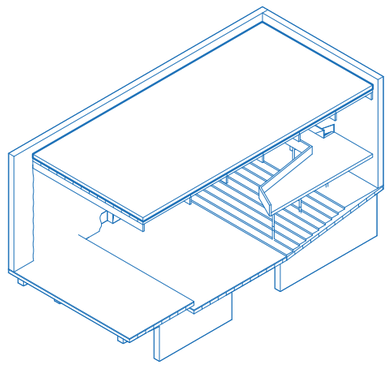












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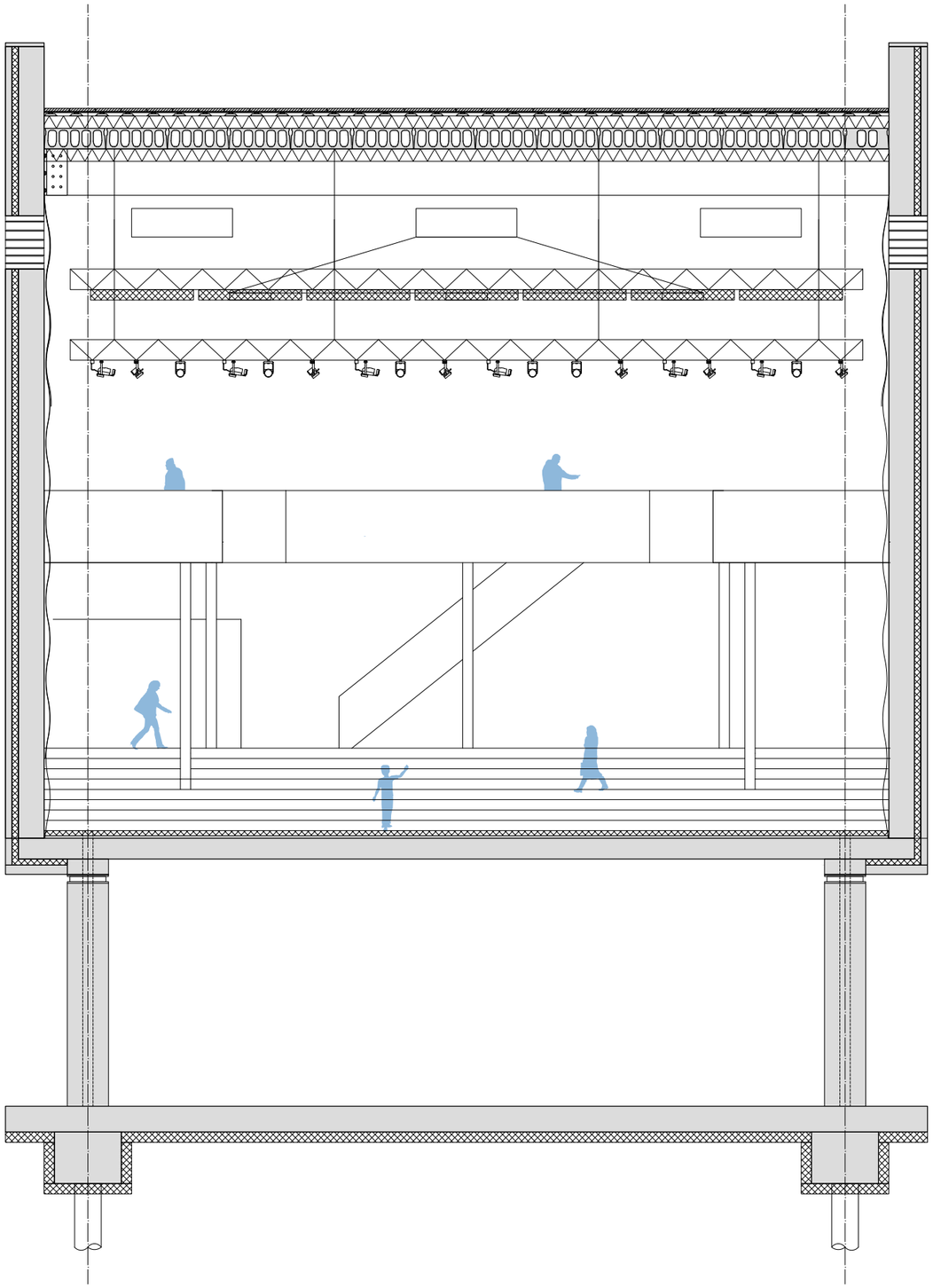

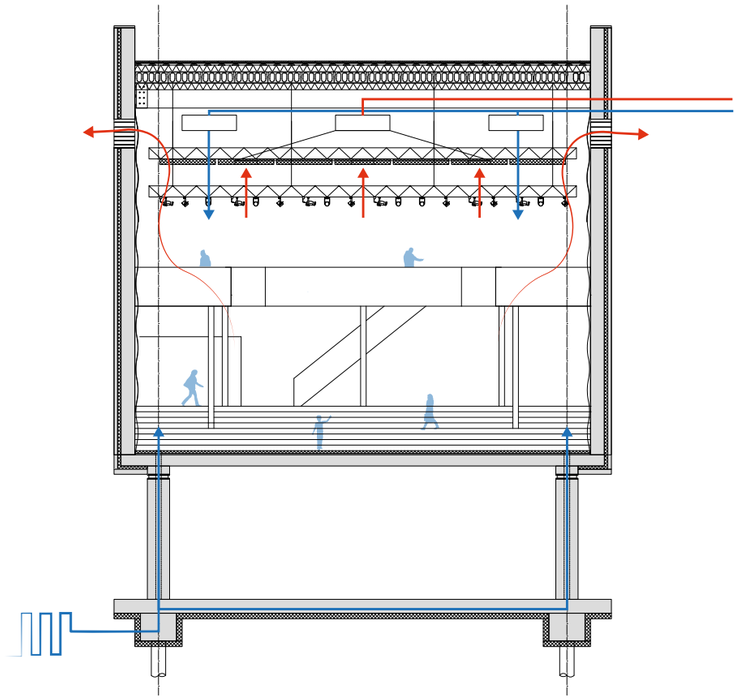

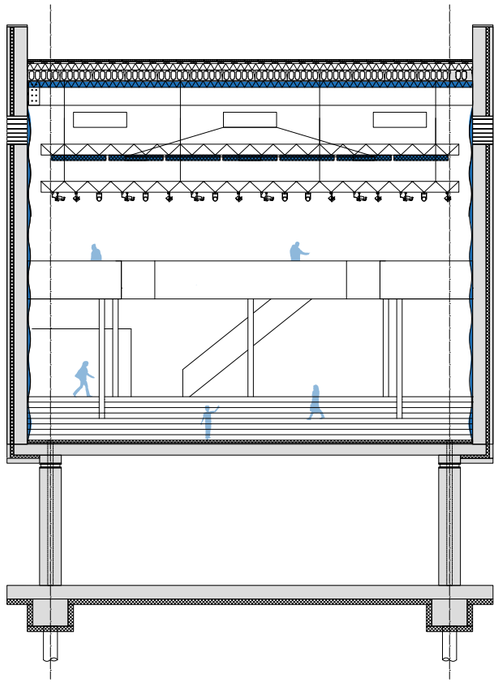

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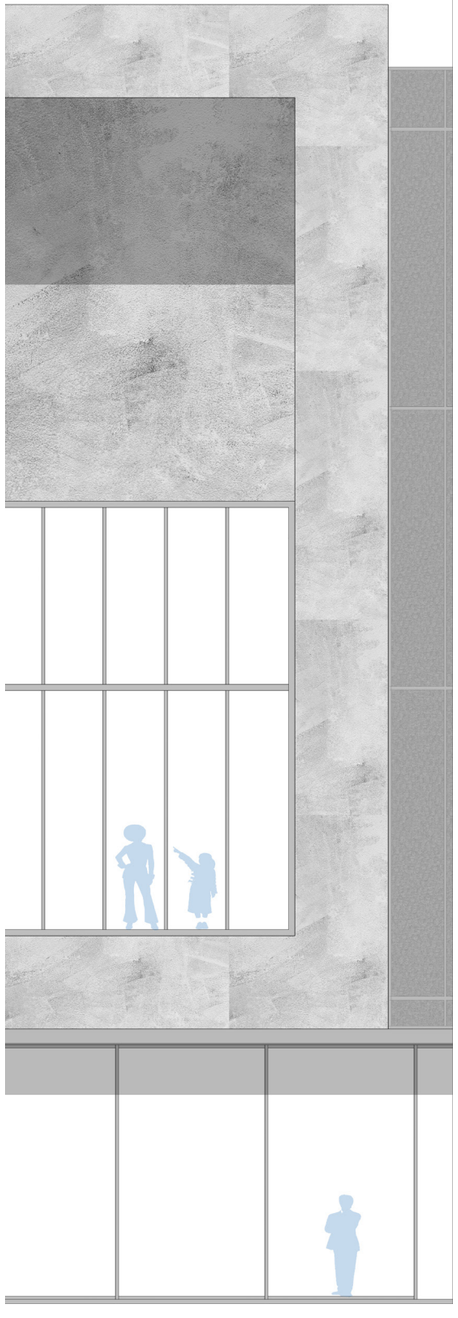

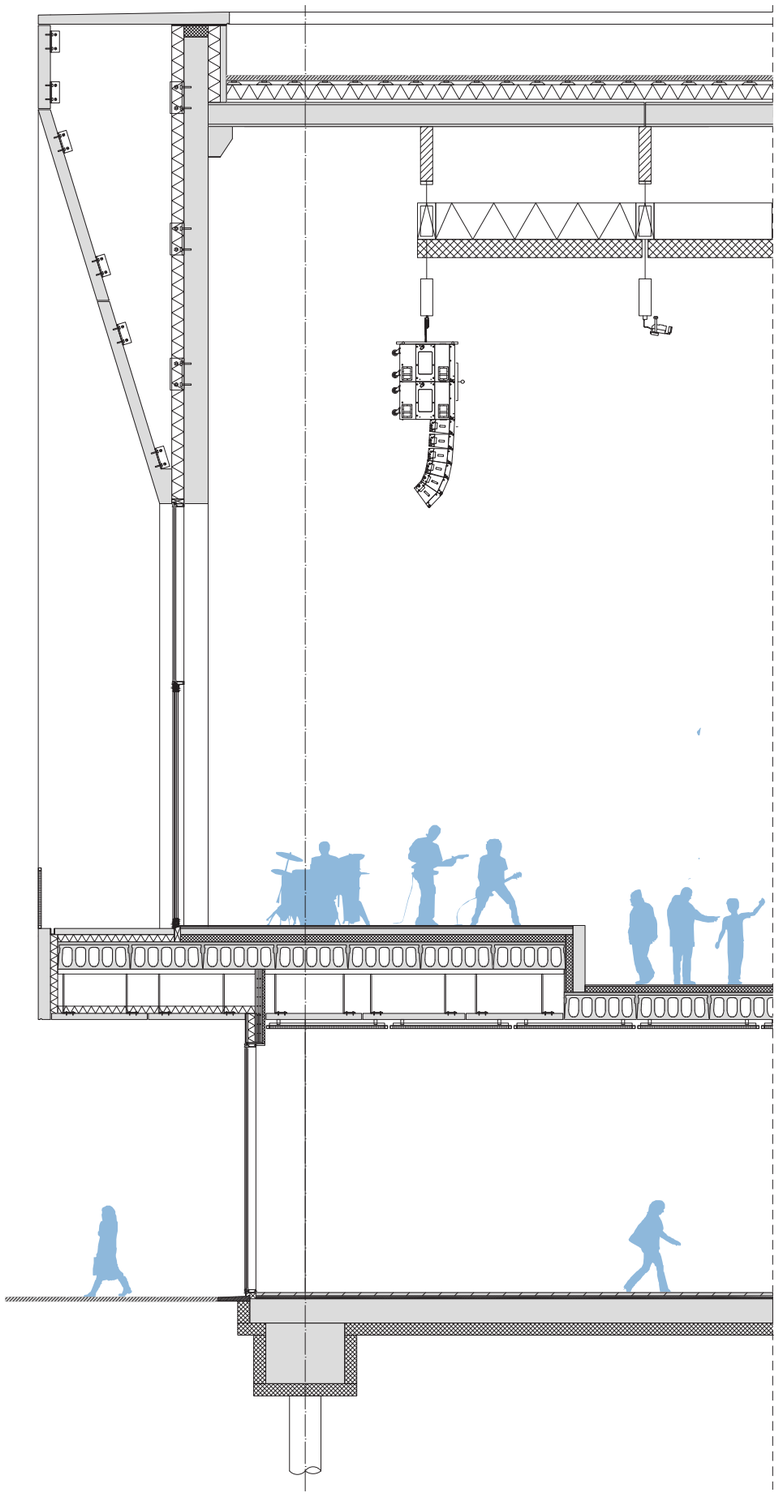

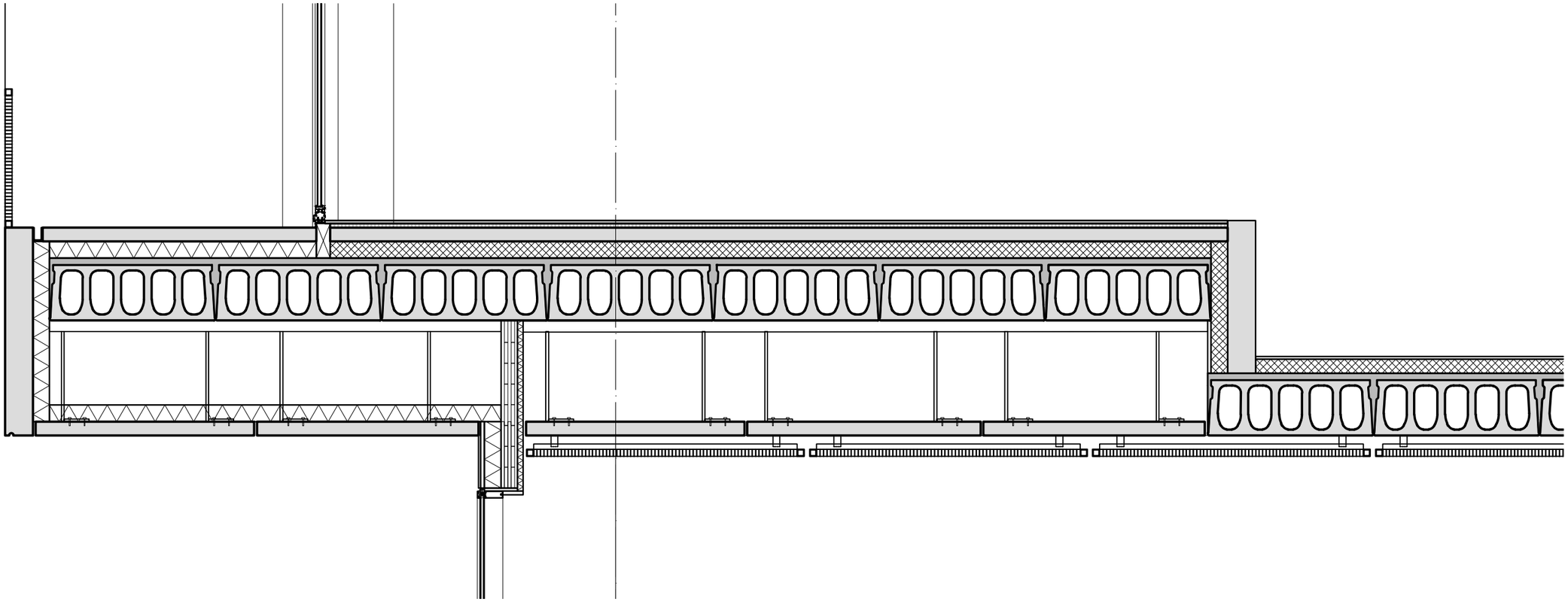

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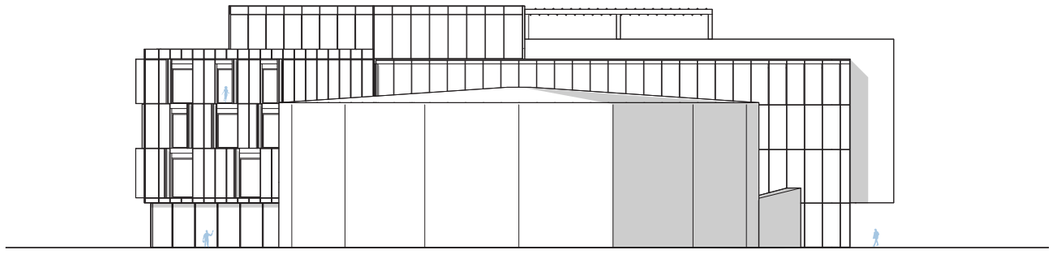
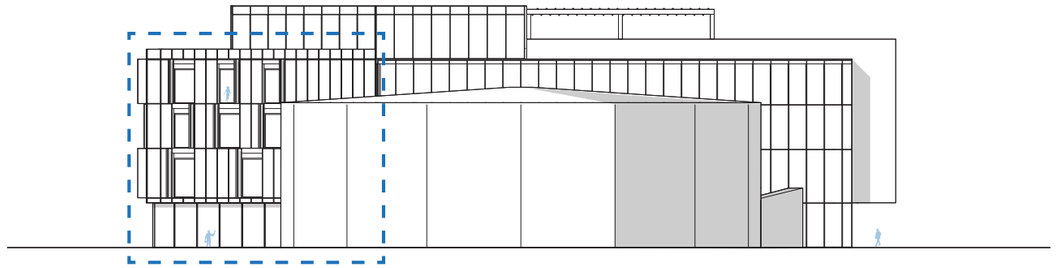
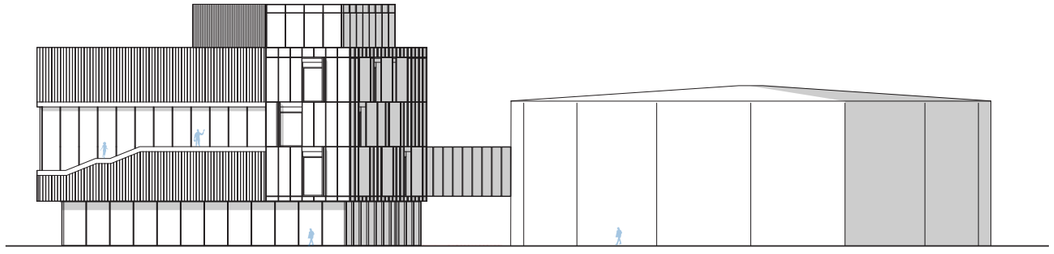


North elevation

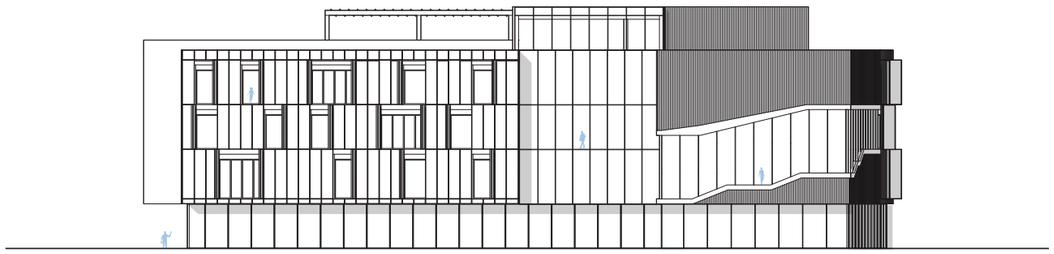


North elevation

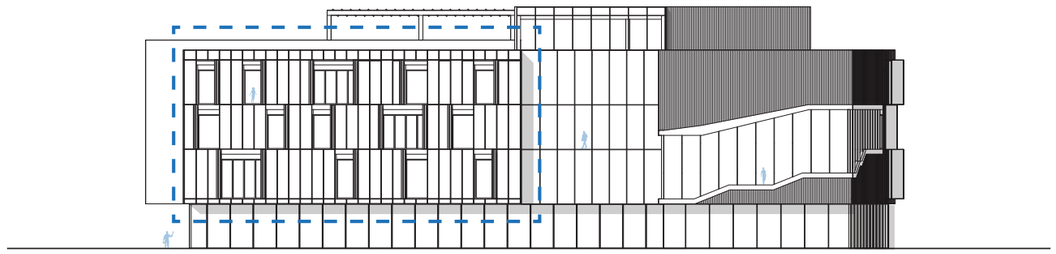


East elevation

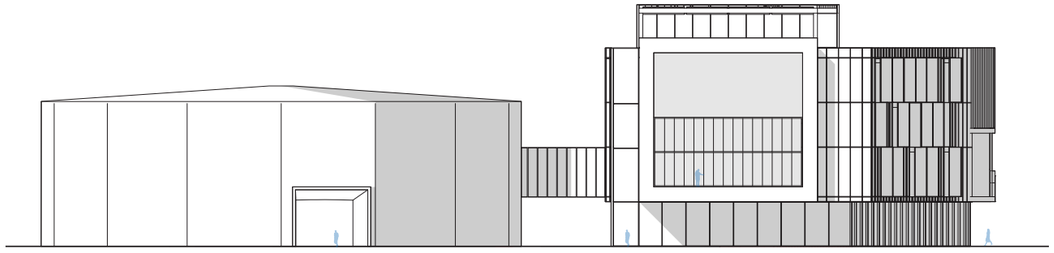
East elevation



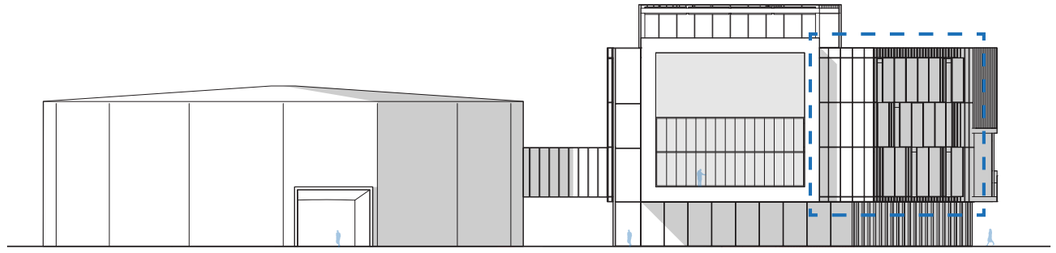
South elevation



South elevation



West elevation



West elevation

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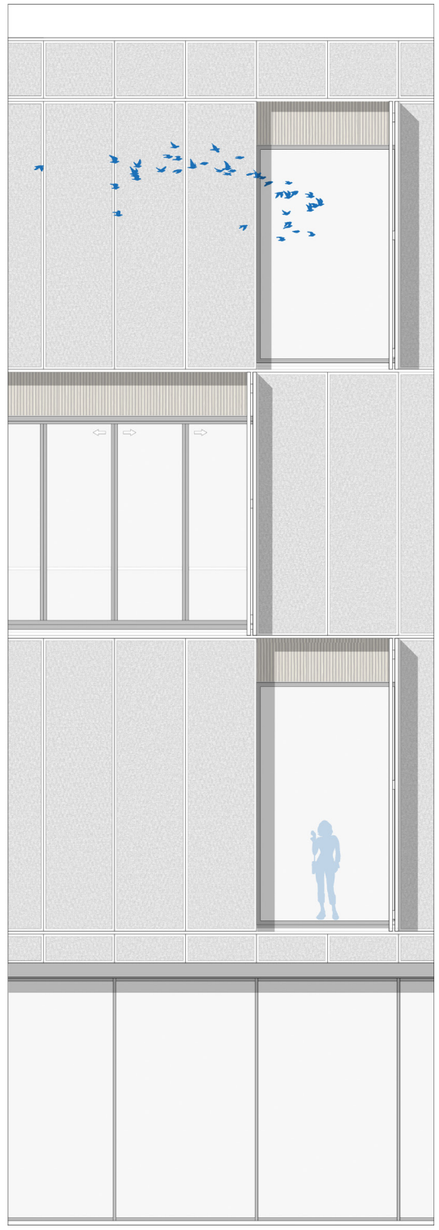
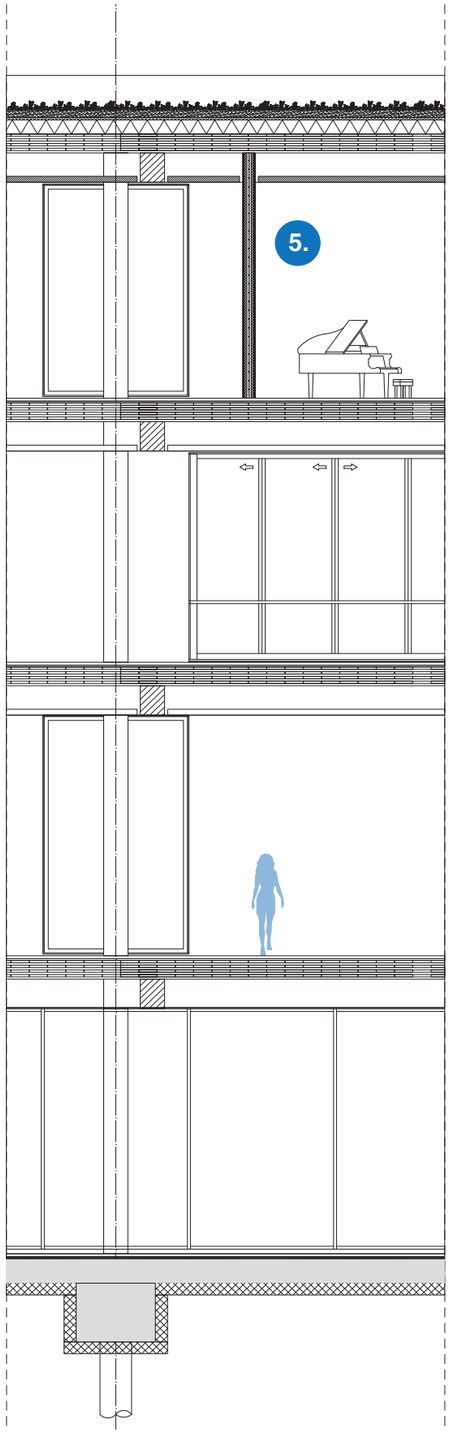
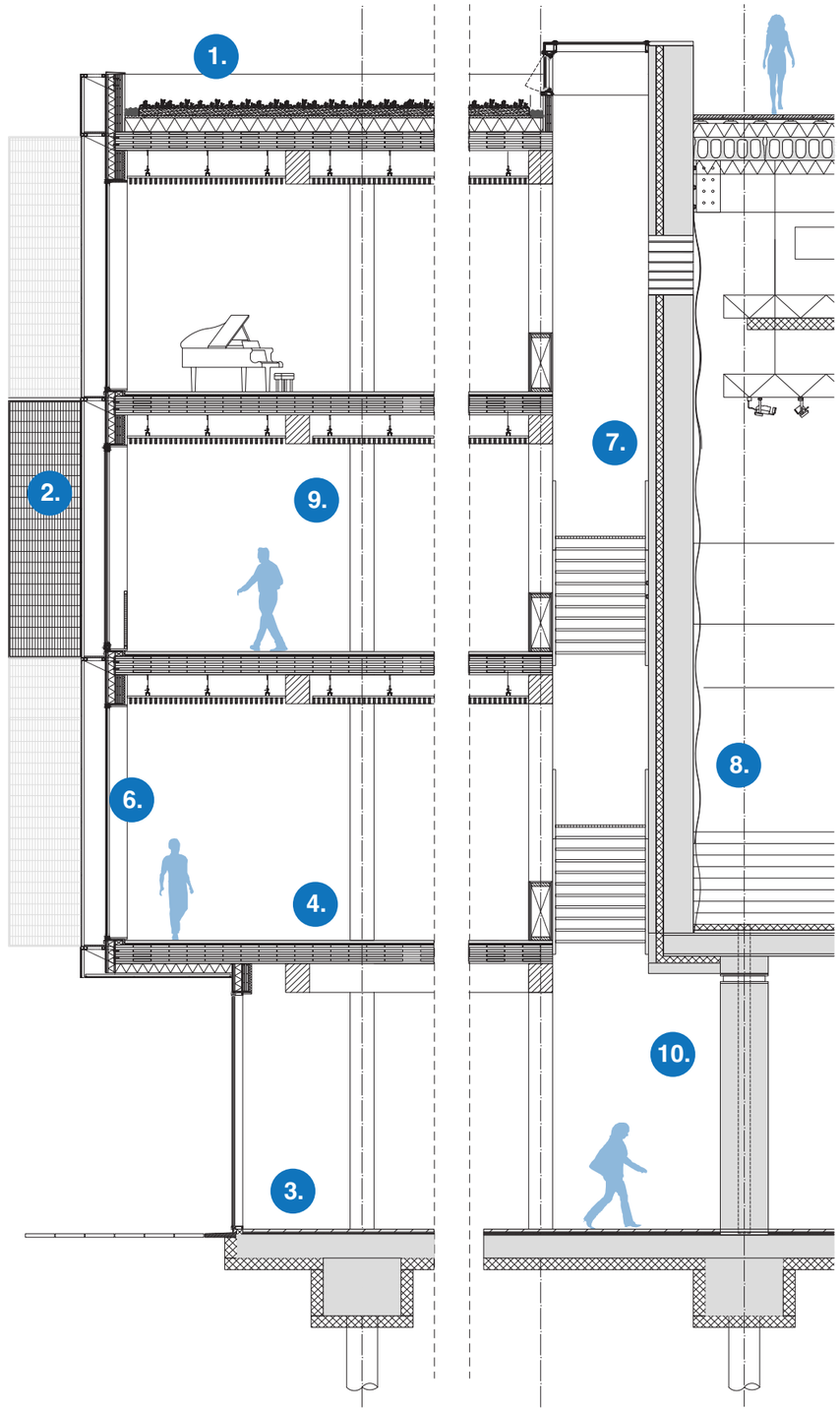
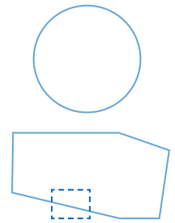








1. Roof
Green roof
Drain layer
Hard insulation
Clt floor
Acoustic ceiling

2. Facade
Steel perforated panels
Biobased composite finishing
Biobased insulation
CLT wall
Biobased insulation
Plasterboard

3. Ground floor
Concrete floor finish
Acoustic layer
Concrete floor
Hard insulation

5. Floor
Concrete floor finish
Acoustic layer
Concrete floor

5. Wall structure
Plasterboard
Biobased insulation
CLT wall
Biobased insulation
Plasterboard

6. Window frame
Aluminium frame
HR ++ glass

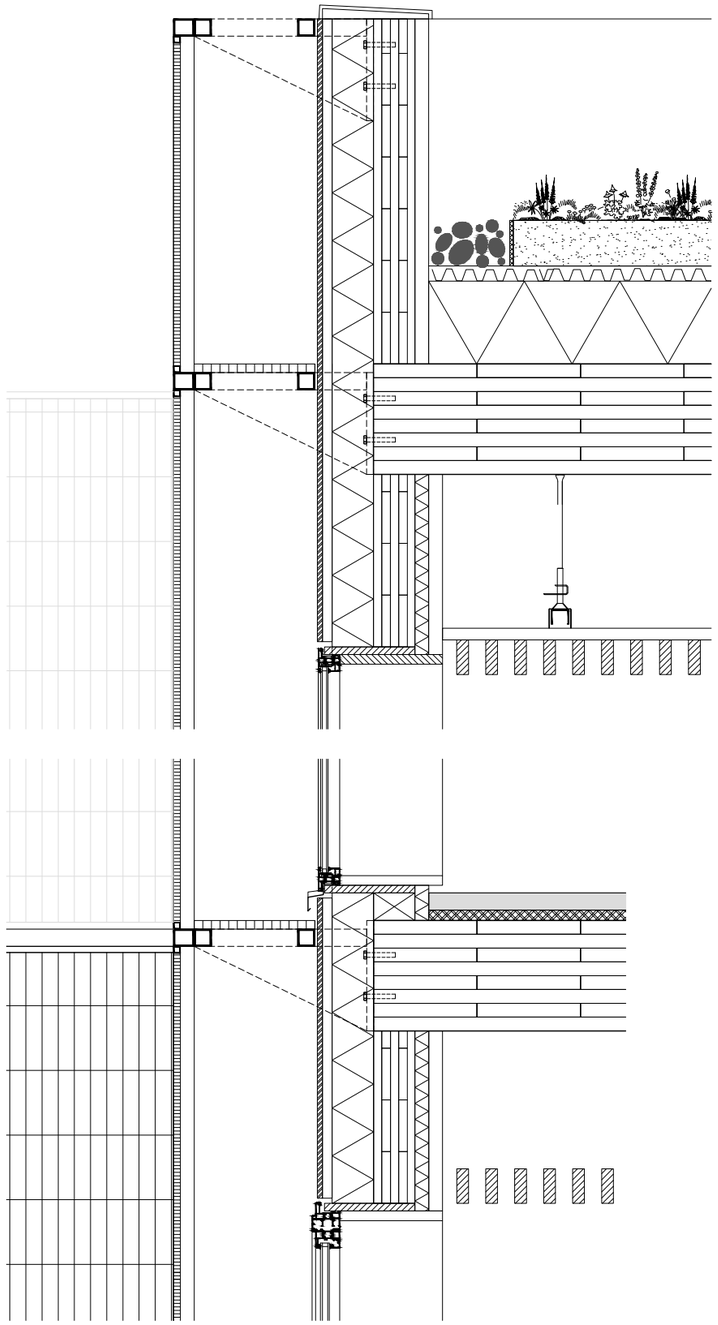
7. Precast concrete element

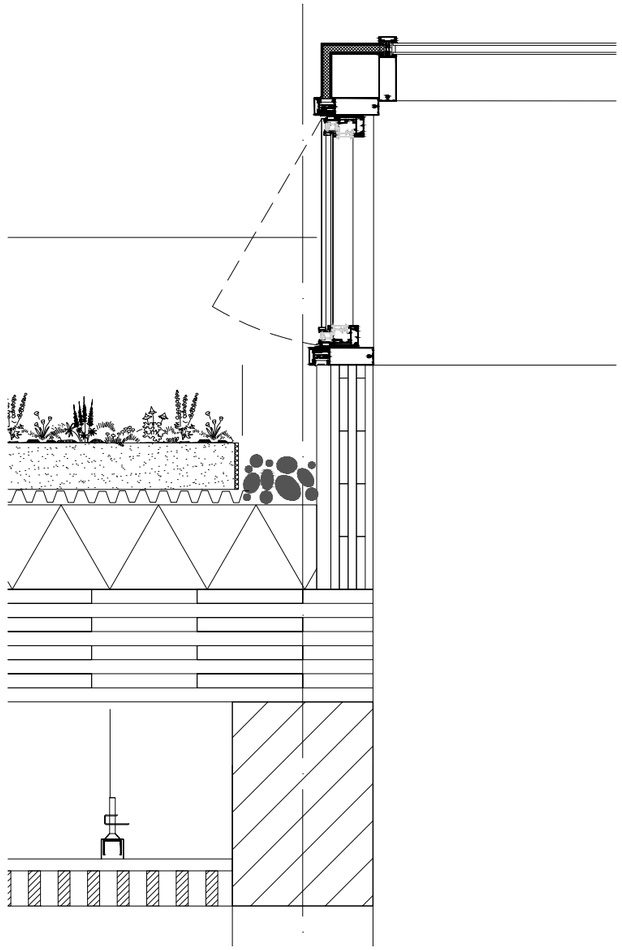
8. Acoustic element

9. CLT column

10. Prefab concrete wall with acoustic support

01 Final Design





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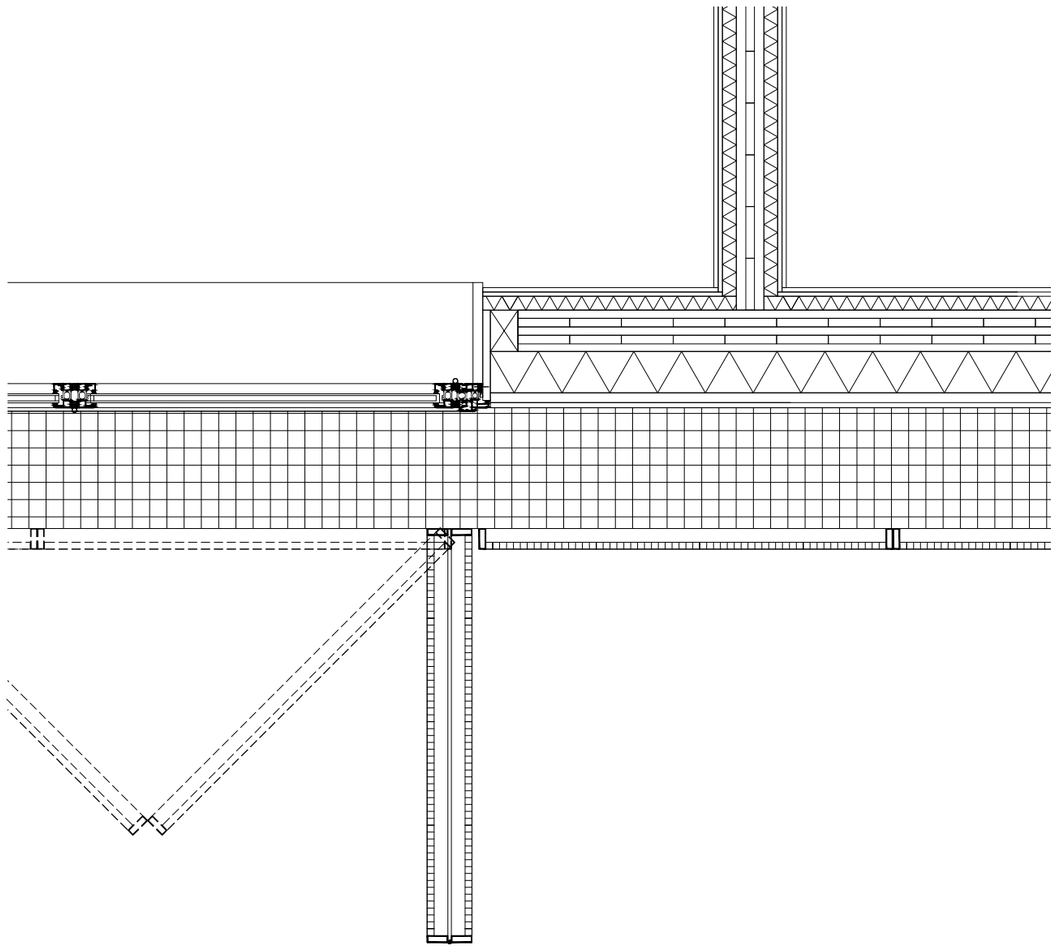

01 Title

Part IX - Reflection

01 Reflection

Introduction

The project ‘Bincks’ Music Factory’ is part of the graduation studio Public Building, a studio in which Multiplicity is researched as a characteristic of a Music Marvel. In this reflection, I account for my findings and results during my research and design in the graduation phase. In addition, the choice of method and argumentation that preceded the research will be explained and to what extent this was or was not implemented in the final design.

The study of the thesis begins with a preliminary study on music buildings and multiplicity to formulate and define its own Music Marvel. The ‘new’ Music Marvel as I designed it has the Binckhorst location in The Hague as its given parameter. This former industrial area has been absorbed by the city in response to the transformations of economic, cultural and socio-political dynamics, and will be transformed into an urban living and working area in the future. Currently, the industrial area can be perceived as a collection of static activities and movements, with no clear future, as evidenced by the developments that have been going on for years. Perception is absent or incomplete due to the homogeneity and obsolescence of the activities.

Goal definition

The question that immediately came up was how can a music marvel be embedded in Binckhorst and what are the characteristics of my music marvel? Nowadays, music is tangible for everyone and can no longer be ignored in our lives. However, today’s music buildings cannot keep pace with the demanding condition, the multiplicity, and the ever-changing character. Architecture for music has largely been transformed into an inanimate spatial form, characterised by its pursuit of timelessness and limited to the perception of music. The architectural design of music spaces in our time is guided and often controlled, by the science of acoustics. The understanding of perception is often incomplete. The spatial requirements and design parameters of a Music Marvel must be questioned in order to meet the demanded versatility of today’s music buildings.

To fulfil this demand for multiplicity, my Music Marvel is focused on facilitating a variety of music genres. Based on a personal fascination, I focus on various subcultures as a target group with the idea of offering them a place for interactions and incubation - a cultural factory where diverse components or subcultures come together to form a larger whole and refute the sense of social hierarchy. An autonomous place to stimulate (local) subcultures and thus profile its own place.

With this idea and the observations made on-site, the question arose:

How can (multisensory) architecture enhance interaction between different subcultures and contribute to the experience of music in Binckhorst?

Design Manifesto

For me, the connection between research and design is reflected in the final design of my project. From the beginning of the MSc3 studio, the research part started and continued until the last moment. In the first months until P1, the focus of the research was on the theme of the Studio, music and the typologies of music buildings. But, for me, understanding these typologies also meant understanding the Music Marvel as part of a larger network: subcultures in relation to the built environment and especially subcultures in relation to the different types of music buildings. With this in mind, it became important to understand the object in question - in this case, ‘the new Music Marvel’ - as a parameter in a much larger whole.

The relationships between the different parameters in the given context were further explored during the Seminar Delineation Research. This seminar was used to explore the available strategies and tactics to interpret them and, ultimately, to discover new ones; to make them my own as an autonomous means of reflection and dialogue. Ultimately, this led to the formulation of my own design manifesto;

To create an identity and dynamism for Binckhorst, the area in question needs to be injected with an autonomous zone for music activities. Pop, Rock, Jazz and Techno are the music parameters to mix and connect subcultures. Through this approach, Bincks’ Music Factory profiles itself by being different in Binckhorst.

As an analogy, the hot air balloon (see illustration 1) positions the object (i.e., the Music Marvel) in Binckhorst, within the anonymity of an isotropic grid. The hot air balloon is a metaphor for taking on the role of ephemerality by guiding the entire process. The theory is to emphasise its existence by being specific in Binckhorst, an autonomous zone or being different in Binckhorst.

01 Reflection

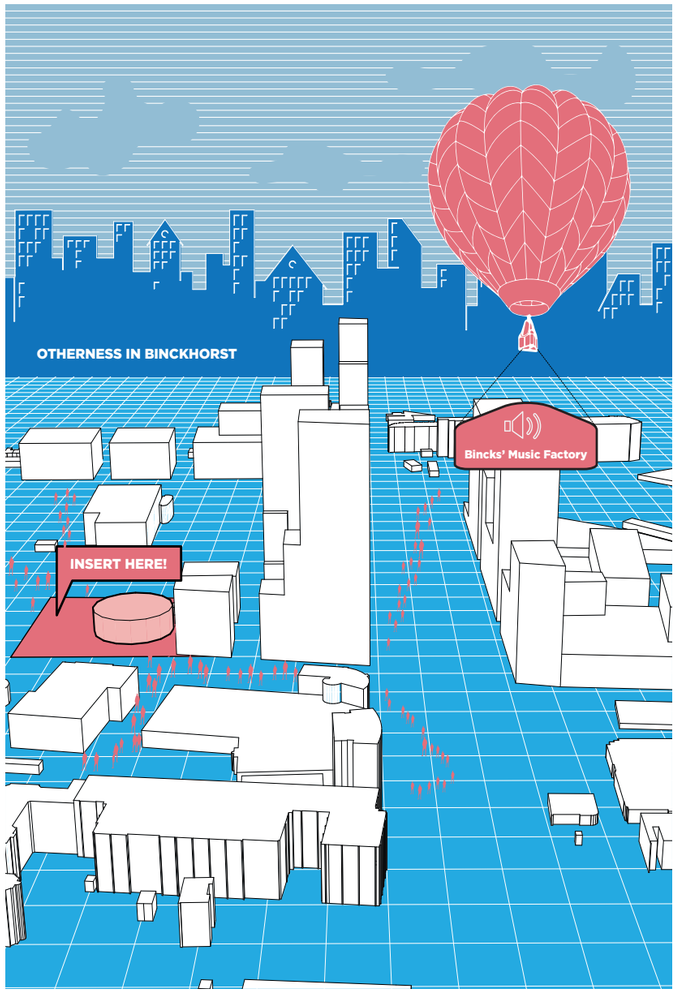

Illustration 1: Design Manifesto

Approach

At the beginning of the academic year, collective research was conducted regarding multiplicity, music buildings and music in general. Parallel to this, I immersed myself in the perception of architecture and its effect on the experience of music. And as I engaged in both collective and individual research, I began to think about the effect of subcultures on music and building. How can a building facilitate diverse subcultures and simultaneously act as a condenser for Binckhorst? The increasing diversity of cultures and subcultures in modern society calls for a new architectural strategy. Since architects are merely the designers of the stage on which music and subcultures can unfold, the role of the architect in the representation of subcultures was something that strongly attracted my interest from the very beginning of the studio. It creates new expressions that respond to specific cultural and local wishes and customs. The speculation of creating architecture that responds to the connection of various subcultures with the corresponding perception of musical styles became the breeding ground of my graduation project.

Feedback

The feedback from the mentors on P2 and P3 was fertile for the development of the project and they pointed out to me that the schematic design should not serve only as an example of the previously defined design parameters. It is not a generic ‘egg’, referring to the ‘perfected stereophonic form’ that can be moved from site to site. On the contrary, I was asked to approach the design brief as a unique assignment to connect subcultures, at the specific location chosen in Binckhorst. In addition, it became clear during P2 that the architectural expression of the presented proposal, the perfect form does not represent the subcultures and senses that are central to me.

In response, I approached my design from a bottom-up approach. Start by defining the general principles and finish with the details. Based on this principle, I constructed the building from the inside out, with subcultures and sensory perceptions as central elements.

Result

As a result of the research carried out, my design ‘Bincks’ Music Factory’ stands in a broader social, professional and scientific context. Looking at my design product, I see the result of the continuous interweaving of research and design throughout the process. The original concepts I started with are still visible in the design. And by adding layers of material, climate design and structural elements, I have anchored my concept to something tangible. During the process, I have always approached the interaction between architecture and building technology from an integral point of view. By intertwining these two disciplines, solutions are created that strengthen the design both architecturally and in terms of building technology. Contrary to what is described in my Graduation Plan, my design is not a design catalogue for the perception of architecture and its contribution to the experience of music, but a public building for subcultures anchored on a specific spot in Binckhorst.

01 Reflection

Of course, the design process was not without its struggles. Difficulties encountered during the design process largely revolve around the fact that I find it difficult to make choices and to concretise the design. But designing is all about making choices, and P2, P3 and P4 were of great help. In the design process, I found that designing through the various layers of scale and using various design methods helped enormously in making the design tangible.

After P2, I took a few steps back to take a critical look at the design principles; this step enabled me to concretise the ideology of my architectural manifesto. This led me to further investigate, test and implement step by step - the way to update my concept and design. Especially when designing a programme that is strongly based on human interaction, encounters between different cultures and the perception of music. Finally, the project is an opportunity for me to question the tools of an architect. And now, two weeks before my P4 presentation, I can say with a good feeling that I am proud of what I have achieved in a very small period of time.

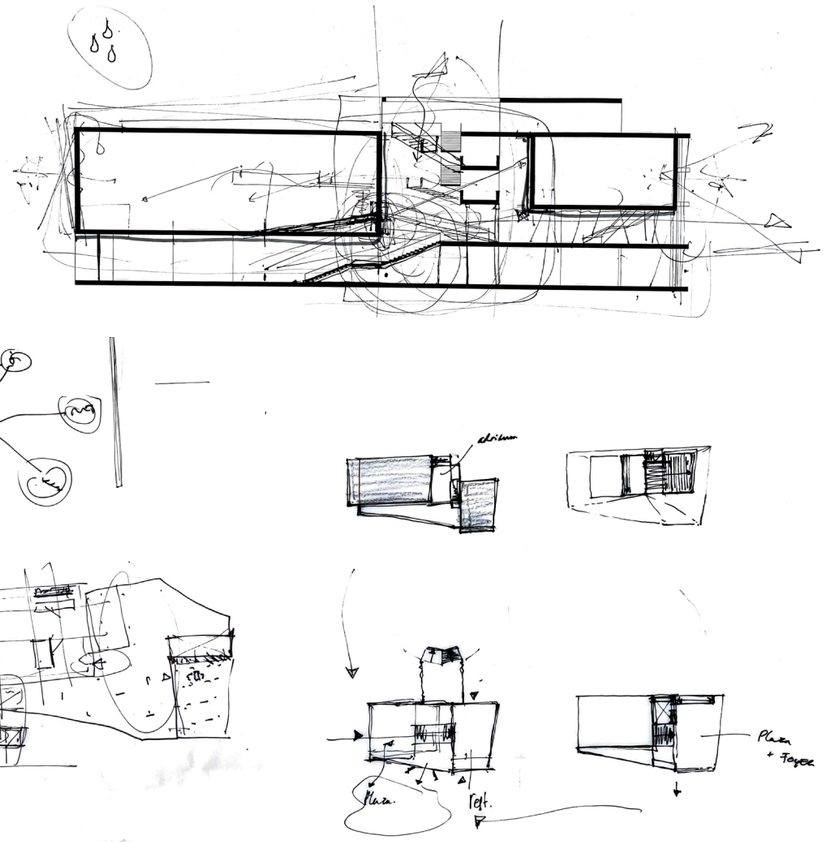

Illustration 2: Sketches of the new concept

Towards P5

Looking ahead to the last part of the graduation studio, I plan to fill this time by going into the different tactics of interpretation, drawing and representation techniques to better explain the integrality between architecture and building technology. In addition, I think it is important to make the design physically tangible by representing Bincks' Music Factory in scale models. This will lead to a better physical presentation of the design. Finally, I want to better explain the subject of sensory architecture and its contributions to music in the design and presentation. So until P5, I am working on the ways of representation that will make Bincks' Music factory tangible.

Part X - Bibliography

01 Bibliography

Theoretical

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Studio Booklets

WEB_MusicMarvel_01_CASE 1-6

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WEB_MusicMarvel_03_CASE 13-16

WEB_MusicMarvel_04_CASE CONCLUSIONS

WEB_MusicMarvel_05_SITE