Counter-Monument: Transformation of An Industrial Structure in Halifax, Nova Scotia

by

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CONTENTS

ABSTRACT

Industry plays a crucial role and partially constructs the identities of Halifax as a port city in Nova Scotia. The industrial facilities in Halifax possess qualities that help frame the city's identity. Halifax's south seaport area was designed exclusively for industrial purposes. It is part of a "terrain vague" space and has a negative impact on the public by creating a sense of disconnection in the city. While the port is still fully functional, the granary and surrounding railways on the site are experiencing a rapid decline in use. Once these industrial structures become inoperative, they have the potential to become a "counter-monument" and provide opportunities for public and cultural benefit.

The thesis examines the qualities of Halifax's industrial structures from a counter-monumentality point of view and discusses the possibility of reconnecting the granary building and surrounding landscape to the public realm by experimenting with reprogramming and design.

ACKNOWLEDGEMENTS

CHAPTER 1: INTRODUCTION

The City's Identity and Sense of Ownership

In Italo Calvino's *Invisible Cities*, the narrative is organized as dialogues between Marco Polo and Kublai Khan. Marco Polo tells stories of 55 cities that were conquered by Khan, though he had never visited these cities himself. The cities described by Marco Polo are real and unreal at the same time. All the features and images rendered by him reflect his memories of his home city of Venice.[1]

The book poses a question that explores the relations between desire, memories and cities: Once an emperor has conquered land or a city, how will he claim the ownership: by ruling, intimidating, plundering, or killing? Kublai Khan chose a restrained and poetic way to express this sense of ownership: by understanding the cities. Without understanding them, the cities would just be symbols, and the "ownership" would only be a symbol. From this point of view, for residents or tourists, even though one lives in a place or travels to a city, without understanding it, any sense of "ownership" or "belonging" towards the place is presented as only a name, a symbol. However, everything is impermanent, and cities are constantly transforming, so how do we go beyond the "symbol" and understand a city and its identities?

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1   Italo Calvino, *Invisible Cities* (New York: Harcourt Brace Jovanovich, 1978).

Monuments and City's Identities

Theseus's Paradox

In the metaphysics of identity, Lucius Mestrius Plutarch (c. 46 AD – 120 AD) once put forth a thought experiment and proposed the question of the Ship of Theseus. The Ship of Theseus, which was sailed by the battle hero Theseus, was kept in the harbor as a monumental object. Over time, the materials and parts needed to be replaced for restoration purposes. After several centuries, all the materials and parts had been replaced several times and none of the "original" parts remained. Therefore, was this still the same ship, and should it still be named the "Ship of Theseus"?[2]

Historically, there were several resolutions proposed for this issue. There was an extreme one suggested by Heraclitus of Ephesus that there is no identity over time. Even if nothing was replaced or changed, its identity would change over time because the identity is defined by the events at the time. This means the ship sailed by Theseus is not the same as the one parked in the harbor, and the identity of the ship that is in the harbor changes over time.[3] The problem with this resolution is that it ignores the effect of memories, and there is no recognition of the relationship between time, memories and identities. According to the theory of "four causes" in Aristotelianism, the "purpose"

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2 "The Internet Classics Archive: Theseus by Plutarch," *The Internet Classics Archive,* http://classics.mit.edu/Plutarch/theseus.html.

3 Ibid.

or "final cause" of the ship parked in the harbor as a monumental piece is to remember the event "Theseus sailing the ship". This piece bears public memories of the event, and as a result, the identity of the ship is kept through the "purpose". On the other hand, the identity of the object would also be affected by the other "causes": "material cause", "formal cause", and "efficient cause".[4]

Another resolution that helped frame the concept of a place's identity in the thesis is related to reductionism. The argument of reductionism does not emphasize the materials and the alleged "essence" of the materials; instead, it focuses on the relationship and interaction between the parts that constituted the object. The relationship and interaction are the factors that define and maintain the identity.[5]

The relationship and interaction between parts, as interpreted by Aristotelianism, are closely tied with the "formal cause" and the "final cause": The "formal cause" is retained as the physical formal design of the parts, and so the ship is preserved in a way. On the other hand, the initial layout and the design of the interaction of the ship are determined by the "desire" or "purpose" at the time, and at another time, the relationship between the parts is retained as the purpose of carrying the memory

4   R. J, Hankinson, *Cause and Explanation in Ancient Greek Thought* (Oxford: Clarendon Press, 2004),159.

5   Ted Honderich, *The Oxford Companion to Philosophy* (Oxford: Oxford University Press, 2005), 793.

of "the event" (in this case, Theseus sailing in the battle). Therefore, the object becomes a monumental piece that carries the identity of "Theseus sailing the ship"; this is interpreted as the "final cause" preserved to maintain the identity.[6]

Based on the interpretation of identity above, the parts of a city and their internal relationships that are carried by "formal cause" and "final cause" become primary elements to be studied in this thesis in terms of being able to study the identity of the city.

Monuments as Organs; City as a Type

In the architectural context, typology can be a means for discussing "formal cause" and "final cause" in relation to identity. Typology study simplifies the subject to its essential elements and studies how these elements interact with each other and form the whole and how these relationships are retained through time and space.

As stated in the book *The Architecture of the City*, Aldo Rossi read and studied the city as architecture, and instead of considering the city as a series of buildings and other elements, he sees the city studied as one systematic artifact to understand the "construction of the city over time". Rossi suggested that there are two fundamental subjects of

6   G. E. R. Lloyd, "Causes and correlations", in *Adversaries and authorities: Investigations into ancient Greek and Chinese science* (Cambridge: Cambridge University Press, 1996), 100-107.

architecture: "aesthetic intention" and the "creation of better surroundings for life". However, architecture also creates solid forms that allow the cities to develop or evolve spontaneously, and they follow the "original theme" while developing and changing the "theme" while they are constructed; this endows cities with characteristics and memories.

Rossi's attitude towards typology proposes the idea that one should "read the city as a type". He stated that "we can say that type is the very idea of architecture, that which is closed to its essence. In spite of changes, it has always imposed itself on the 'feelings and reason' as the principle of architecture and of the city."[7] If we see the city as one man-made object, there is no element created or invented; all the elements come from the surrounding nature and human reactions towards their surroundings and form the city as a type, just like in architecture. Francesco Milizia's idea that "any building consists of three principal items: its site, its form and the organization of its parts" is cited in Rossi's book. Here, type is again seen as the closest description of the essence; it is, as clarified by Rossi, "permanent and complex, a logical principle that exists prior to form and that constitutes it".[8]

In the book *The Architecture of the City*, Poete's theory that "persistence is revealed through monu-

7   Rossi, "Typological Questions", In *The Architecture of the City*, 35.

8   Ibid.

ment, the physical sign of the past" is presented.[9] Cities tend to remain and the nature of the cities is conservative, and as stated in the article, "the past is partly being experienced now, and this may be the meaning to give permanence: they are a past that we are still experiencing".[10]However, the persistence of the city is embodied in the aspects that construct the city such as its history, industry, sociology, culture, etc. With the city's transformation through time, the architectures involved in urban evolution and public memory among these constituent aspects continue as physical or symbolic images, and they become monuments.

The permanence of cities expressed in these monuments not only allows people to feel the physical formation of the city in the past, but it also conveys how functions and aspects of these urban elements are involved in the operation of the city. This commemorative quality relates the monuments with the identity of the city in the past and present.

Finally, the city can be considered as a type. Here, we try to combine the views of reductionism to discuss the composition of the city's identities. As a key argument of this thesis, the memorials involved in urban evolution are washed and precipitated over time. Monuments are considered as the "primary elements" of the interaction to reflect the identities of the city and present their transforma-

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9   Rossi, "Monuments and the Theory of Permanences", in *The Architecture of the City*, 59.

10   Ibid.

tion.[11]

Monument and Its Counter-monumentality

Based on the above, monuments are the primary elements that carry the identities and collective memories of the city. However, the most powerful factor related to making a "monumental change" in a building is if the building is associated with a public event occurring at a certain point in time, and the event is often closely related to the identity of the city. On the one hand, the building itself may be directly involved in the historical events of the city in a significant sense. On the other hand, the birth of a building may be a commemoration of a historical event. Alois Riegl distinguishes this as "intentional monument" and "unintentional monument". The latter may only have contemporary artistic value; it connects the building with collective memory in a way that is reinforced by the outside world. It does not participate in historical events, so these kinds of monuments and the places they create cannot be seen as the "primary elements" involved in forming the identity of the city. This thesis only discusses the former. In the traditional definition, monumental buildings have a monumental scale, experience long-term and solemn forms, and the building sites they create are often limited to collective memories that serve to com-

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11 Rossi, "Primary Elements", in *The Architecture of the City*, 86.

memorate a specific event.[12] However, the topic to be discussed in this thesis is, as a city develops and identities evolve, how do monuments have the quality of "counter-monumentality".

"Counter-monumentality" firstly subverts the traditional definition of a monument in terms of the form, material and scale. For example, the monument can be more than just a single building or sculpture. Event-related landscapes or fields can also be seen as monuments. Secondly, the monument no longer merely has to solemnly commemorate the activities of a single event. When the initial function and form of the monument become inappropriate to the current public context, the monumental space has the opportunity to be involved in active urban public life and re-participate in the composition of the current city identity through reprogramming and formal transformation. At the same time, the monument still provides opportunities for the public to experience the past and understand the city's identity by preserving its original monumentality.

For instance, from the perspective of traditional monumentality, the Great Wall is a symbol of the national identity of China and its majority ethnic group, the Han. The commemorative space created by the Great Wall can only commemorate ancient wars and the Han's ethnic pride. In the

12 Aloïs Riegl, *"The Modern Cult of Monuments: Its Character and Its Origin,"* trans. Kurt W. Forster and Diane Ghirardo, *Oppositions*, no. 25 (1982): 21-51.

context of "counter-monumentality", with the social development and integration of many ethnic groups in the country, it has become inappropriate to discuss only historical events that commemorate the Han's resistance against foreigners. In this case, in addition to retaining the public experiences of ancient China and the Han's ethnic identities, in recent years, there have been experimental art projects based on the Great Wall that have taken advantage of the monumentality and special qualities of the architecture and the landscape. These approaches have been a good means of re-engaging the monument into the public realm through the attitude of "counter-monumentality".

If we say that monumentality is about eternity, then "counter-monumentality" is about objectively accepting and expressing the impermanence of things.

Broadly, "counter-monumentality" emphasizes the importance of not unilaterally controlling or strengthening collective memories from a specific group's perspective, but instead allowing people to participate in everyday urban life by publicizing and generalizing memorial sites. This allows the people to objectively experience the past and observe the city identity at the same time. The following is a summary of the major monuments that reflect the city identities of Halifax as defined in this thesis from the perspective of "counter-monumentality". It discusses how this type of monument positively contributes to public life and constructs

the present city's identities during the evolution of the city.

Mi'kmaq Settlement

Lake Banook

Mi'kmaq indigenous peoples are Aboriginal people living in the Canadian Maritime provinces. The Halifax Region is part of the traditional ancestral land of the Mi'kmaq. Before European colonists established their first settlement, Aborigines established the settlement around Halifax harbor as their summer camp for fishing, hunting and gathering.

The Mi'kmaq people were the earliest travelers to explore the Nova Scotia peninsula and the mainland. The "highway" they took from the winter camp in the mainland forest area to the summer camp on the Halifax and Dartmouth shore is a natural waterway called the Shubenacadie Waterway. This links today's Halifax Harbor and the Bay of Fundy on the other side of the Nova Scotia peninsula. In the Mi'kmaq language, Lake Banook refers to the "first lake" in the Shubenacadie waterway system. When European colonists arrived at the Halifax harbor and set up fisheries, Mi'kmaq also introduced these waterways to the Europeans. The colonists built and used canal transport systems based on the waterway between 1826 and 1871.[13]

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13 E. H. Keating, *The Shubenacadie Canal* (New York: American Society of Civil Engineers, 1883), 4.

From the perspective of monumentality, with the developments of railways and highway systems, the first lake and the Shubenacadie Waterway do not have the traditional form of buildings or sculptures but rather the form of urban spaces. On the other hand, the monuments are not only used to commemorate the use of waterways by previous Aboriginals and colonialists as a major event that constructed the early "city's" identity. As the city's life changed, the role of the memorial space created by the monument itself in public life also changed. In fact, as early as 1827, the public had already started playing hockey on the ice of Lake Banook, and Lake Banook was declared the birthplace of hockey. On the other hand, Lake Banook is the location of the three main canoe/kayak sports clubs, and the lake has clearly become the canoe/kayak sprint hub of the city and even the province. It is reasonable to infer that the role of Lake Banook in today's urban life can be traced back to the monumentality of the place, which constructed the early identity of the city during the Aboriginal period. For example, the canoe was a major tool used and inherited by Mi'kmaq people. On the other hand, there are lakes, waterway systems and important public places with Mi'kmaq-related names, such as Lake Micmac (called the "Second Lake" by Mi'kmaq peoples), Mic Mac Mall, Mic Mac Amateur Aquatic Club, Shubie Park, etc. Therefore, in the context of "counter-monumentality" Lake Banook is a monument that reflects the city's identity and is involved positively in public life.

Defense City

Halifax Citadel Hill

With a geographical feature that has the advantage of a terrain elevation and a long coastline that extends back to the estuary, Halifax was established as a defensive city in 1749 to protect the British settlement around Halifax Harbor. The British colonists built fortifications on Citadel Hill to defend against the attacks of French, Acadian and Mi'kmaq peoples. There were four citadels developed on Citadel Hill after 1749 that were intended to defend against different enemies in different historical periods. Until the first and second World Wars, they were also used as detention camps and barracks. Until the end of World War II, Citadel Hill was involved in the construction of the "defense city" identity, which was its most important role of the city. After the end of World War II, Citadel Hill did not participate in urban life as a military fortification anymore and began to be seen as a monument piece due to its historical heritage value and significant collective memories.

On the other hand, not only have the buildings and objects of the fortifications at the Citadel Hill summit become monuments, but the hills and the open field create a monumental space with a distinctive space feature in the city that inclusively allows the current public to experience the past. At the same time, the places formed by these elements are also involved in the daily life of the public. The fortifications on the top of the hill were host to the Halifax

Army Museum after World War II, and they were used as the Nova Scotia Museum and Maritime Museum of the Atlantic before they had their own hosting site. Citadel Hill's own landscape, along with its adjacent Halifax Commons and Public Gardens, which are the most important vast green spaces in the city's downtown area, provide the public with a variety of recreational public spaces.

Point Pleasant Park

Point Pleasant Park is inextricably linked to the formation and history of Halifax. This park is where Edward Cornwallis first established fortifications and settlements, and later during the French and Indian War, more military fortifications were built in this area to defend against warships entering the harbor. These fortifications were occupied by the military and used for defensive purposes until the Second World War was over. The park also exists as a source of stone quarrying and tree felling. In 2003, the park's forest was almost destroyed by Hurricane Juan. Fortunately, more than 70,000 trees were replanted with the help of the federal government's efforts for the restoration of vegetation, and the park's forests returned to their pre-hurricane levels in 2008.[14]

Now Point Pleasant Park serves as the city's most important urban forest. It not only provides a quiet living environment for the surrounding residents but also is open to the public, making the park

14   Janet F. Kitz and Gary Castle, *Point Pleasant Park: An Illustrated History (*Halifax, NS: Pleasant Point Pub, 1999), 34.

an important public recreation and entertainment venue in the city. The park now provides a variety of walking and jogging trails, off-leash dog areas, and a variety of event spaces for outdoor weddings, play performances and rehearsals, and filming.

Port City

Fort Needham Memorial Park: Halifax Explosion

Originally the Fort Needham Memorial Park, this is a historical site that was established as a British colonial fort during the Revolutionary War and served as a part of the harbor defense system until the end of World War I. After the Halifax Explosion in 1917, the park was turned into a significant memorial site, since the hill provided a clear view towards Pier 6, where the explosion took place, and the Halifax Explosion Memorial Bell Tower was established on the hill. [15]

The park is currently used as a hybrid-landscape, as it hosts various memorial events while also serving as a community park. It provides vast green land, an off-leash dog area, a children's playground and sports spaces such as tennis courts. There was also debate around what the new developments should be for the 100th anniversary of the Halifax Explosion. The plan was to expand the memorial space, remove the tennis courts and re-

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15 Harry Piers, *The Evolution of the Halifax Fortress*, 1749-1928. (Halifax, NS: Public Archives of Nova Scotia, 1947), 48.

duce the off-leash dog areas.[16] The neighborhood is concerned about the balance between community public space and space for the memorial site.[17]

Halifax Waterfront Boardwalk Development

The Halifax waterfront is a linear pedestrian boardwalk development, and the area is used as a working harbor and for the fishery industry. Since the 1970s, the city has incorporated plans aimed at generating more economic and social value for the public.[18] The waterfront boardwalk today is one of the most significant hotspots in the city that serves the public life and provides high-quality spaces for commerce, education, cultural programs and places for public events.

Dwelling City

With the economic development and population increase, Halifax has become the major commercial and educational center in Atlantic Canada. With a population of 0.43 million in 2017, Halifax is home to six universities and three community col-

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16 "Fort Needham Memorial Park Master Plan," *Halifax* (December 2018): https://www.halifax.ca/recreation/arts-culture-heritage/halifax-explosion/fort-needham-memorial-park.

17 Jennifer Grudic, "City Hosts Open House about Fort Needham Memorial Park Revitalization," *Global News* (November 2016): https://globalnews.ca/news/3074220/city-hosts-open-house-about-fort-needham-memorial-park-revitalization/.

18 "The History of Develop Nova Scotia," *Develop Nova Scotia*, https://developns.ca/about/history/.

leges, with over 50,000 public students enrolled.[19] The land value in the city has kept increasing, and there are two bridges connecting Halifax and Dartmouth. Many of the original industries have moved out of downtown Halifax and moved to industrial areas on the outskirts of Dartmouth. The land within the city provides space for a large number of residential, commercial, educational, and public spaces. The geological situation makes Halifax a city that has plenty of access to nature. There are 899 parks that provide outdoor recreation places for various events and activities. Halifax is also a cultural hub of Atlantic Canada and is home to diverse cultural and art communities and performance art, visual art, and filming groups. It is home to 17 museums, including the Art Gallery of Nova Scotia, which is the largest art museum in Atlantic Canada. Many arts and related cultural events and festivals are held annually, including significant festivals such as the Atlantic Film Festival, the Halifax Pop Explosion, the Halifax Pride Festival, the Atlantic Jazz Festival, and the Nocturne Art Night. Nowadays, the city is more about education and public life, which suits Halifax's identity as a dwelling city.

Monuments and Positive Public Spaces

In this section, the relationship between the monuments and the positive public spaces of the city is studied through a series of mapping analyses.

19 "Halifax: the Ultimate College Town," *The Globe and Mail* (May 2018): www.theglobeandmail.com/news/national/education/halifax-the-ultimate-college-town/article4192822/.

Map showing the monuments described in the thesis that frame city's identity (Halifax Regional Municipality Geo-database 2018).

Mapping study, urban fabric

Public programs and pedestrian link

Urban Fabric

The fabric of the city of Halifax developed with clear zoning; boundaries that divide residential areas and public institutional areas were well defined. Urban fabric spread around the Halifax Common and the Citadel, The public institutional zone follows a north-south linear layout alone the waterfront and Barrington Street, which is the original main street of the town. The south end of this zone is the most active area of Halifax's downtown core, which hosts commercial, educational and cultural institutional programs of the city.

Public Programs and Pedestrian Link

With the mapping of the major public programs in the city, the public programs or activities were described as "public bubbles" laid out on the map. The area of the bubbles represents the influence of the "sense of activation" of public activity. The pedestrian routes that create links between these "public bubbles" help create a positive public experience. As shown in this analysis, the monuments of the city have become places of participation in daily public life and for hosting major public activities.

Public Space with Residential Access

After laying out the residential fabric and the "public bubbles" on the map, the accesses to public space create a "pedestrian-friendly zone". In my definition, this "pedestrian-friendly zone" is a zone with a positive sense of public activation, sense

Public space with residential access

Pedestrian friendly zones and "place & occasion"

of neighborhood and street life, at the same time friendly with human sense instead of traffic. The "pedestrian-friendly zone" is crucial to connecting both residents and tourists with the city and frames the city's identity by embracing the memorable places of the city.

Pedestrian Friendly Zones

By building the links between public spaces in between residential and public zones, the existing "pedestrian-friendly zones" are presented on the map in a darker tones; the darker the area, the more positive the area is when discussing the definition of "pedestrian-friendly zones". As indicated on the map, these zones are connected and create a continual ribbon with pedestrian-friendly experiences. The argument is that these pedestrian-friendly experiences and the "public bubbles" around them are essential elements to forming public life and memories, and these are where "place" and "occasion" come together to host the stories and scenes of the city. This mapping study is based on my own study and experience of the city.

Key Question: "Monuments-Link?"

The major "monuments" of the city are surrounded by this continued pedestrian-friendly ribbon; in fact, this phenomenon already makes the monuments the "primary elements" that frame the city's identity. The internal relationship and interaction between these elements comprises the formal lay-

out that has been maintained throughout the years and the role these monuments play involves frequent participation in public life, with some of them having been reprogrammed and become part of the "place".

With the continued pedestrian-friendly ribbon existing in the city core, there is one large area that is still disconnected from the rest of the city: the south end port area. With the definition of "monuments" in this thesis, the port and grain elevator are the "monuments" of the city that are linked to the city's identity. While the port itself is still fully functional and is one of the most important ports in Canada, the grain elevator is experiencing a tremendous decrease in use and will be obsolete in the near future.

As a conclusion of the above discussion, the thesis question becomes clear: Is including the old granary and surrounding landscape into the public realm and bridging the "monuments-link" the answer to this "terrain-vague" and "disconnection" issue? Moreover, what is the "counter-monumental" potential of the study area?

Key question: Monuments – Link

CHAPTER 2: SITE

Positive Public Space

After the discussion of the existing public space and monuments in the city in the previous chapter, the methods used to frame public space are studied in this section. According to Jan Gehl's theory in *Life Between Buildings: Using Public Space*, three types of public activities are described as categories: "necessary activities", "optional activities" and "social activities". Moreover, the higher the quality of the public space, the more frequent that optional activities and social activities will be. The necessary activities stay the same since these activities, such as going to work, school and shopping for groceries, are necessary to daily life no matter what the quality of the environment. Here, we are discussing the qualities of the public space that help with the "optional activities" and "social activities".[20]

In order to have a closer focus on the study area, the south port, as a case study of the Halifax public waterfront, is included in this section. The public waterfront is the last section of the "monuments-links" that connects with the study area; it provides a pedestrian experience and facilitates many of the public activities that can be defined as "optional" and "social". The diagram below shows studies of the public programs and activities that exist on

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20 Jan Gehl and Jo Koch, *Life between Buildings: Using Public Space* (Washington, DC: Island Press, 2011), 31-49.

the boardwalk.

Room in The City

Positive public spaces are never left over from the occupation of roads or the edge of a building. Public spaces should be designed as rooms in the city, and the rooms should be designed to fit certain public activities or events. The rooms should take the human scale as a primary consideration instead of the "traffic" or "parking" scale.
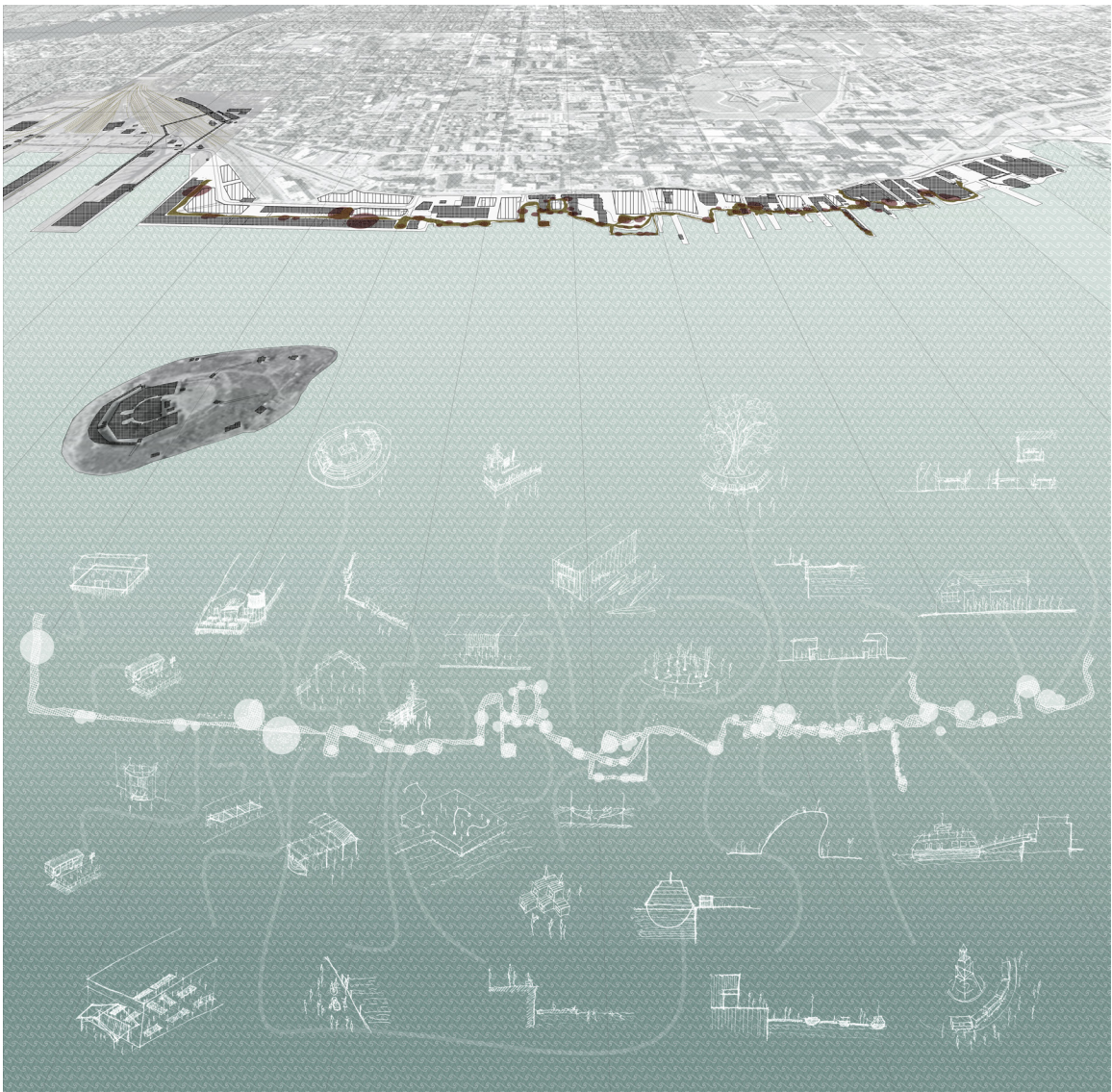
Positive public space study – Halifax waterfront

Being Populated

There should be sufficient public programs or events or so-called "public bubbles" or "hotspots". People are more likely to be attracted to places where more social contact takes place for a greater sense of "safety" and to make the space more "engaging".

Senses of the City

Architectural interfaces should be friendly to the human scale. People on the outside have clues about what is happening inside the adjacent "shelter", and people in the building have visions on the street. A sense of multiple aspects of the city can be felt, such as the street, the green spaces, the water, the smell in the air, and the special connection from one place to another. In this case, views from inside and outside of the public space, the storefront, the streetscape, and the landscape should all be considered in the design.

Monumentality

The monument brings the past and the collective memory to the public, and people use the space in their contemporary interpretation and understanding of the identity of the city they are living in. This is an ideal "counter-monument" transformation in a historical site and makes a great public space. The Halifax public waterfront is an example of this transformation.

Terrain Vague Area on the Site

According to Aldo Rossi's attitude toward vague terrain area, a city does not need areas that are not finalized; if these areas do exist, then they are in the process of being transformed; this reflects the status of "no conclusion" of these areas during the city's identity transformation[21].

These "left-over" areas are not defined in the city in terms of what their role is, and they are not well programmed for attracting population and housing activities. They also create disconnections in public experience.

Vast land around the granary has existed as "terrain vague" for decades. On the west side of the granary, the residential fabric has expanded too close to the building and no in-between space is left for public programs. Detached houses and apartment buildings are common here, and there are no public spaces such as stores or restaurants that are open to the streets. The linear form of the granary building and its orientation create dead ends that are oriented perpendicularly towards the building. Even passing pedestrian traffic is minimized, and local traffic mostly occupies the streets. This urban depression forms a sharp contrast to the downtown area just a few blocks away.

On the other side of the building, the vast lands are occupied by the railways that connect the city and

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21 Rossi, "Processes of Transformation", in *The Architecture of the City*, 95.

the port to the rest of North America. This area is the very east end of the national railway system, and it has been serving the same purpose since 1872. This working area is now less active compared to its broad field. The majority of the railway lanes are idle or used for the parking of train cabins. No paving or surface is designed for walking on the bare dirt, and free-growing plants and weeds are everywhere.

The working port zone expands from the end of the public waterfront to the east edge of Point Pleasant Park. One civic road separates the port zone with the railway's lands, and this is a busy road for the port traffic that connects all the port facilities with the rest of the city. The traffic is heavy all day and night on this road, and most is passing traffic and large carrier vehicles coming in and out of the port. No space is designed for public life, and people have little social contact in this area except for working personnel.

This "terrain vague" issue also causes the problem of confusion about the public waterfront's end and the access to Point Pleasant Park. It cuts off the continuing public experience, and the sense of there being another side of the city is blocked.

On the other hand, with two significant public spaces of the city located on each end of this area, there is no clear path for the public to walk between the two. The closest pathway is blended in the residential district's local traffic and takes mul-

tiple civic routes because of the dead ends caused by the granary building. (This path is indicated in the diagram below as a solid yellow band.)
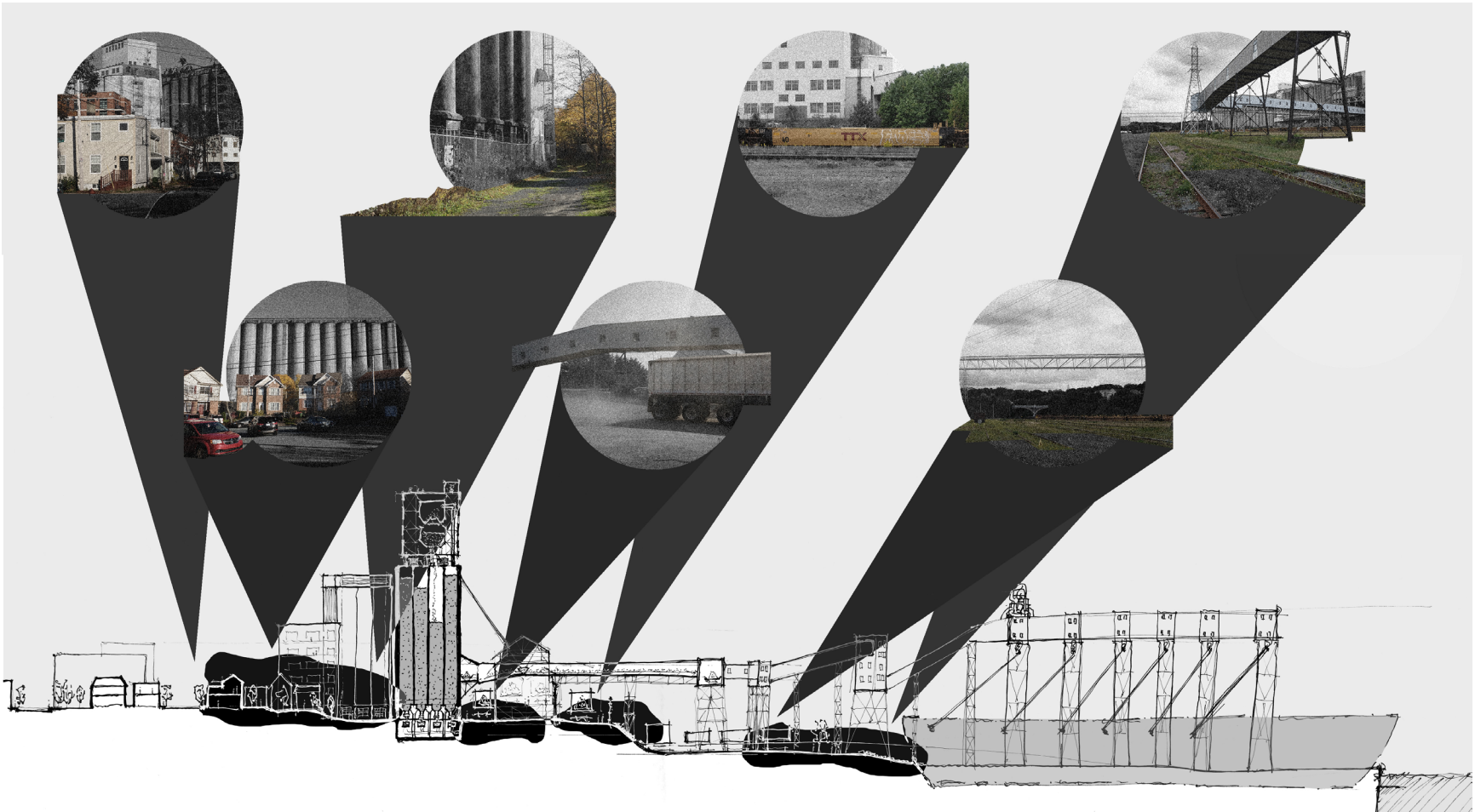
Terrain vague area condition adjacent to the grain elevator building

DOWNTOWN
HALIFAX

WORKING ZONE
TRAFFIC

PEDESTRIAN
ROUTE

PUBLIC
TRAFFIC

PUBLIC END OF WATERFRONT

INDUSTRIAL WASTELAND

800   600 550   400   300 250 200 150 100

ACTIVE WORKING PORT

WORKING ZONE
TRAFFIC

PEDESTRIAN
ROUTE

POINT PLEASANT
PARK
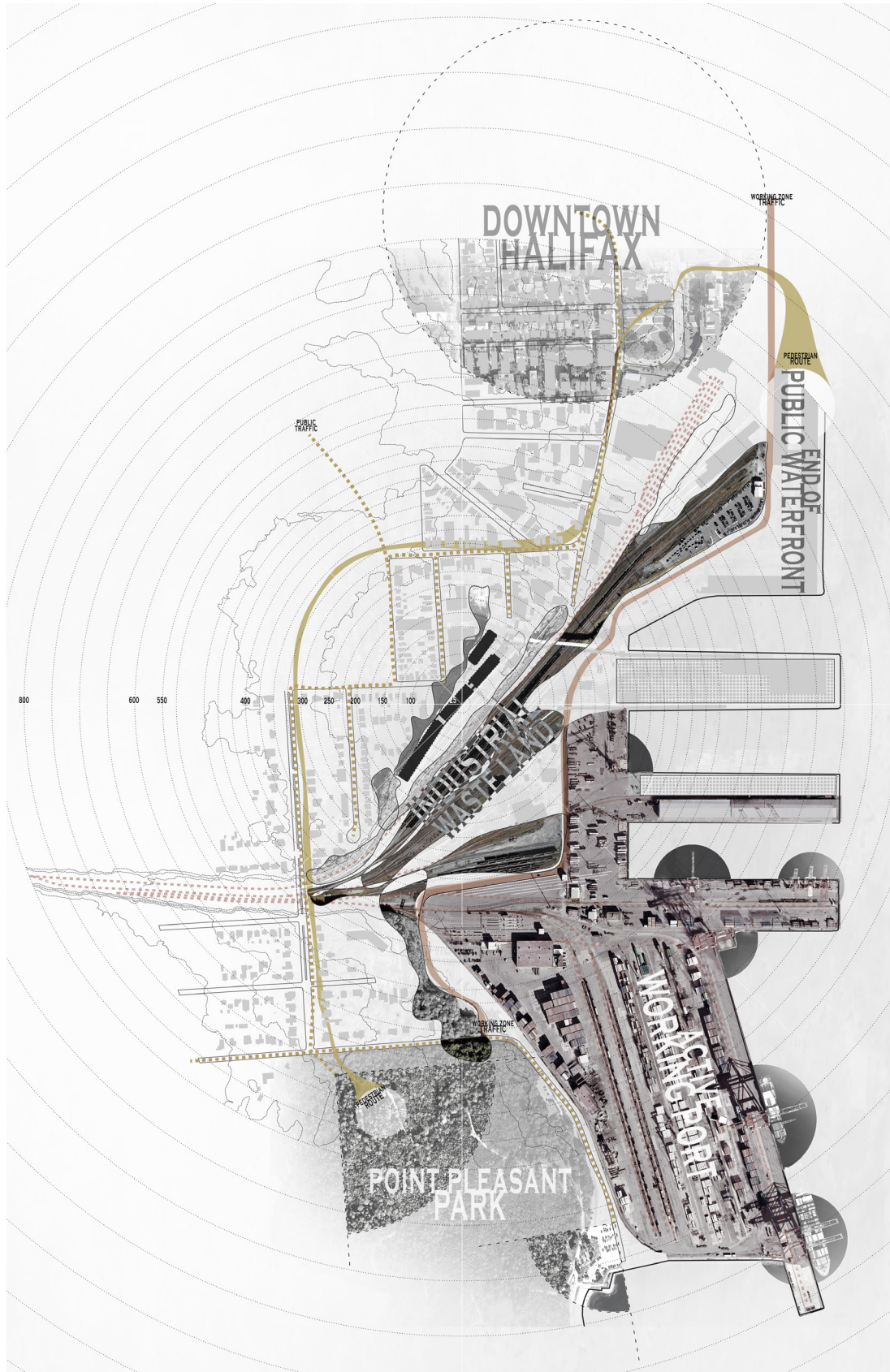
Terrain vague area cuts off the pedestrian experience

The Industrial Port and the Grain Elevator

The South End Terminal

The south end terminal is one of the most critical container terminals in Canada and internationally. The terminal was opened in 1969 and its extension was completed in 2013. The terminal has three berths and six working piers. The total capacity is close to 750,000 TEUs (twenty-foot equivalent unit, 45-foot or 13.7-m containers equals 2 TEU). The terminal can be accessed by the railway and civic road. A large number of trucks bring very heavy traffic to the only road (Marginal Rd) that passes through this area, which cause traffic congestion in rush hours, especially on Fridays.

City map of the port area with the surrounding, (Halifax Regional Municipality Geo-database 2018).

Ground floor plan showing the urban context and surrounding landscape (Base map from Halifax Regional Municipality Geo-database 2018)

Halifax Granary

The grain elevator project is a part of the Halifax port terminals complex. The granary was built in 1925 and was continually expanded until 1967. It consisted of 356 grain silos with a capacity of more than 14 thousand tonnes of goods. The goods imported and exported from the granary can be transported through roads, railways, and waterways. Shipments can receive wheat from the self-loading system that consists of a set of transportation bridges (called galleries) that extend to reach out to the marine piers, and the ends of these bridges are connected with marine towers that can load and release goods to the shipments. The grain elevator is operated by Halifax Grain Elevator Limited, and this company provides transportation and storage for various grains such as corn, maize, wheat, and barley. Moreover, the company itself also sells grains.[22]

The granary has been experiencing decreased activities for decades. The reasons for this decline include eastern Europe no longer being a large grain importer, as eastern Europe stopped importing large amounts of grains in the 1990s; the opening of the St. Lawrence seaway; and the completion of some granaries in Quebec. Operations in the facility were reduced from 70–80% in the 1970s to

22 "Halifax Grain Elevator," *Port of Halifax*, www.portofhalifax.ca/facilities/hpa-facilities/halifax-grain-elevator/.

1925 — House No.1+Track Shed+Workhouse No.1

1920 — House No.2+Gallary No.2

1936 — Gallary No.1+Gallary No.25

1956 — Gallary No.3+Gallary No.4

1958 — House No.3+Gallary No.2A (Short Gallary)

1964 — Gallary No.1 Reconstruction

1967 — House No.4+Gallary 28+Marine Tower

Halifax granary development

1925

work house 1

house 1

track shed

~ 1936

work house 2

gallary 1

fans + dust collector

house 2

gallary 2

~ 1958

work house 3

gallary 25

short gallary

gallary 3

gallary 4

house 3

~ 1967

gallary 4

gallary 1 reconstruction

marine tower

gallary 28

Halifax granary development

10-15% of its capacity at the present time.[23]

While the granary still serves some primary markets, the condition of the building is no longer suitable for working. An explosion occurred in 2003, and luckily there were no injuries or deaths. A huge dust collector was added outside the south facade. The mid-elevator that was damaged by the explosion is still out of operation today. A discussion of whether the granary facility should be shut down was brought up after the explosion.[24]

After visiting the site and researching, the granary facilities were studied using architectural methods. The exploded axo-drawing below shows the composition and components of the building. The building mainly consists of three grain silo com-

23 "Halifax Regional Municipality Regional Goods Movement Opportunity Scoping Study Final Report," *Halifax* (November 2016): www.halifax. ca/sites/default/files/documents/about-the-city/regional-community-planning/HRMGoods Movement Scoping Study (Davies 2016).pdf.

24 "Halifax Grain Terminal Rocked by Large Explosion," *The Western Producer*, (Aug 2003): www.producer. com/2003/08/halifax-grain-terminal-rocked-by-large-explosion/.
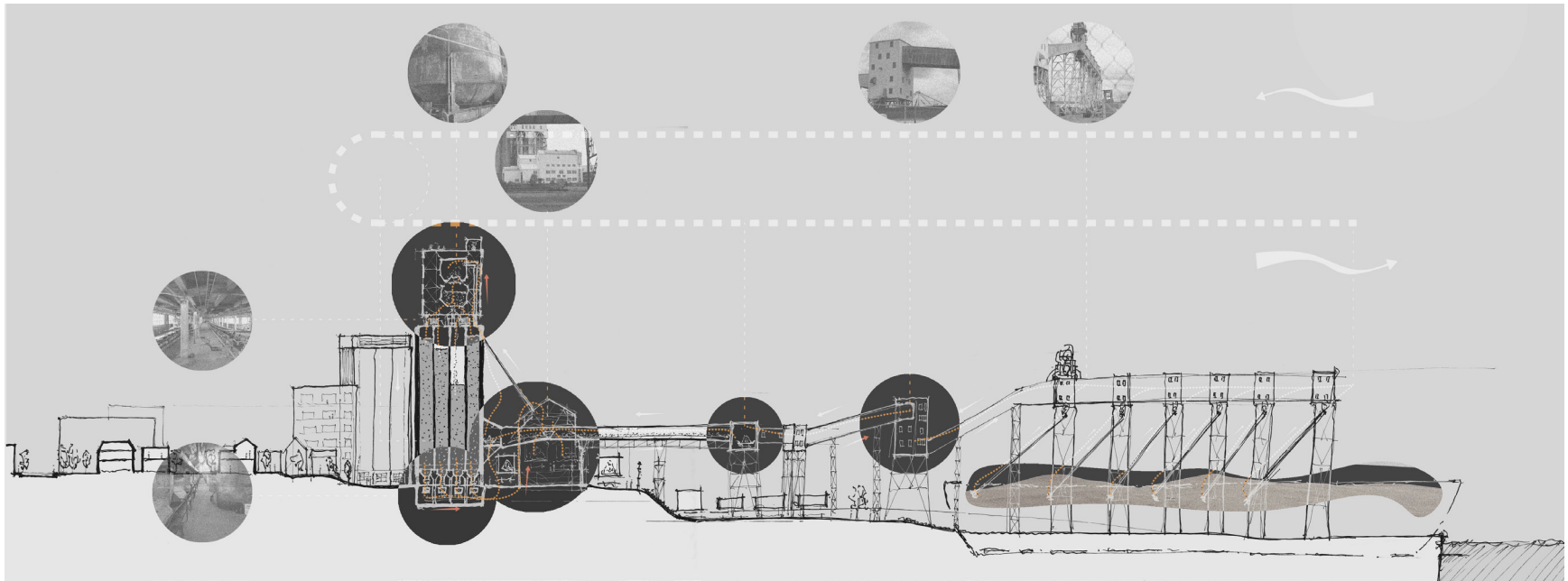
Diagram: Granary system working flow

bination-bodies, with vertical elevator systems located in between and a horizontal transportation band system located on the top of the silos to connect the four combination bodies. The silos are individual cylindrical containers made of concrete; they are 22 meters high and have two different diameters: the smaller silos are 5.3 meters, and the larger ones are 8.8 meters. This dimension system gives it a convenient grid system for future modifications. The silos are arranged side by side, with four of them in a horizontal row, while the number arranged in vertical rows vary. There is no floor or horizontal structure within the silos' space. The basements are a colonnade with massive round columns. Also, the transportation band system is located inside the steel envelopes between the bodies and the top floor. However, these metal envelopes were not constructed with thermal protection, and they are not waterproof. There are two band-systems hosted by the structures called "galleries" that reach out from the grain elevator to the port waterfront loading zone.
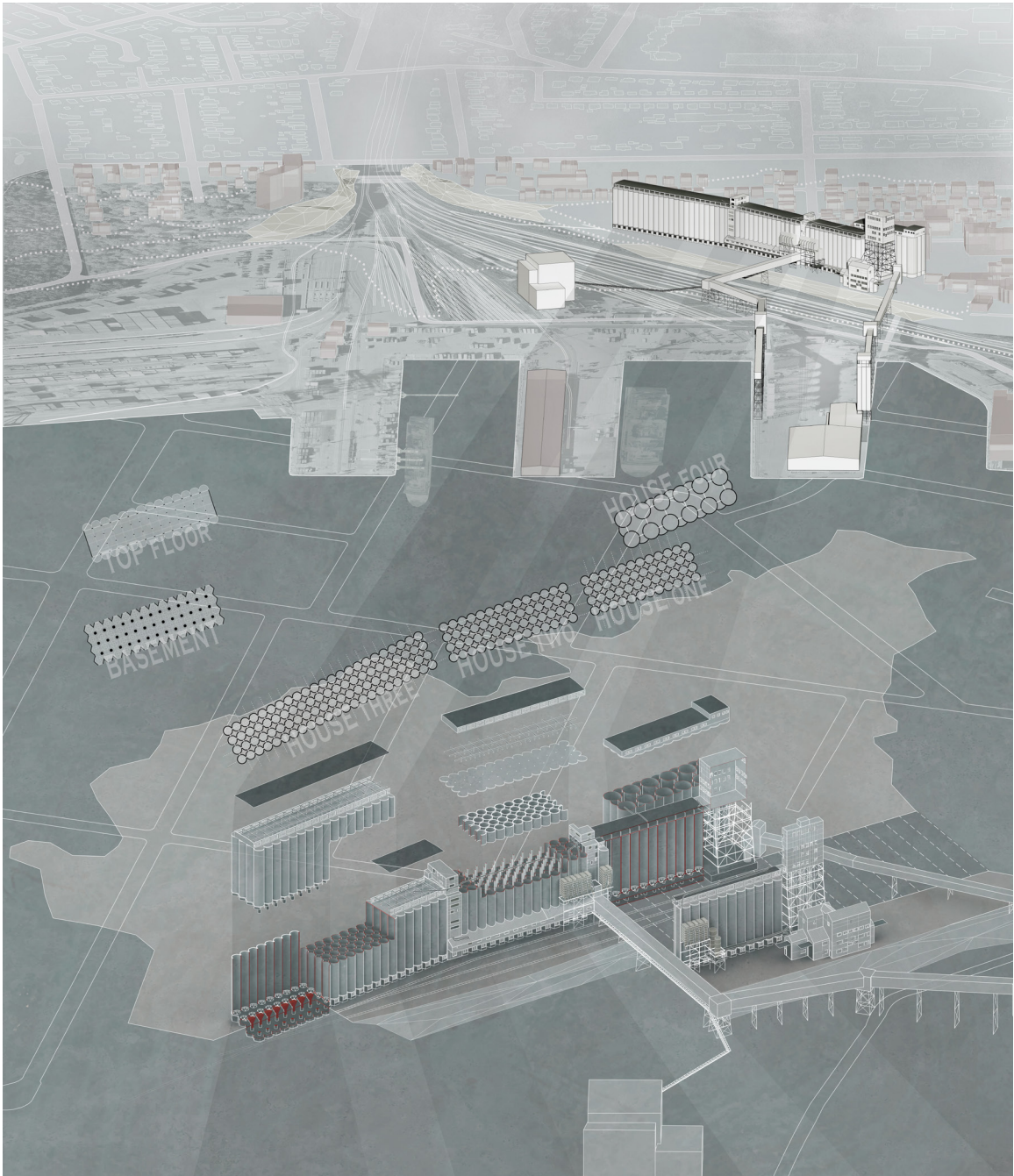
Axonometric drawing showing the building system and components' layout.

track shed

fans + dust tank

work house 2 +gallary 2

work house 1

working shed + marine tower

basement

workhouse 3

grain bins radius:8.8m
(house 4)

top floor

grain bins radius:5.2m
(house 1,2,3)
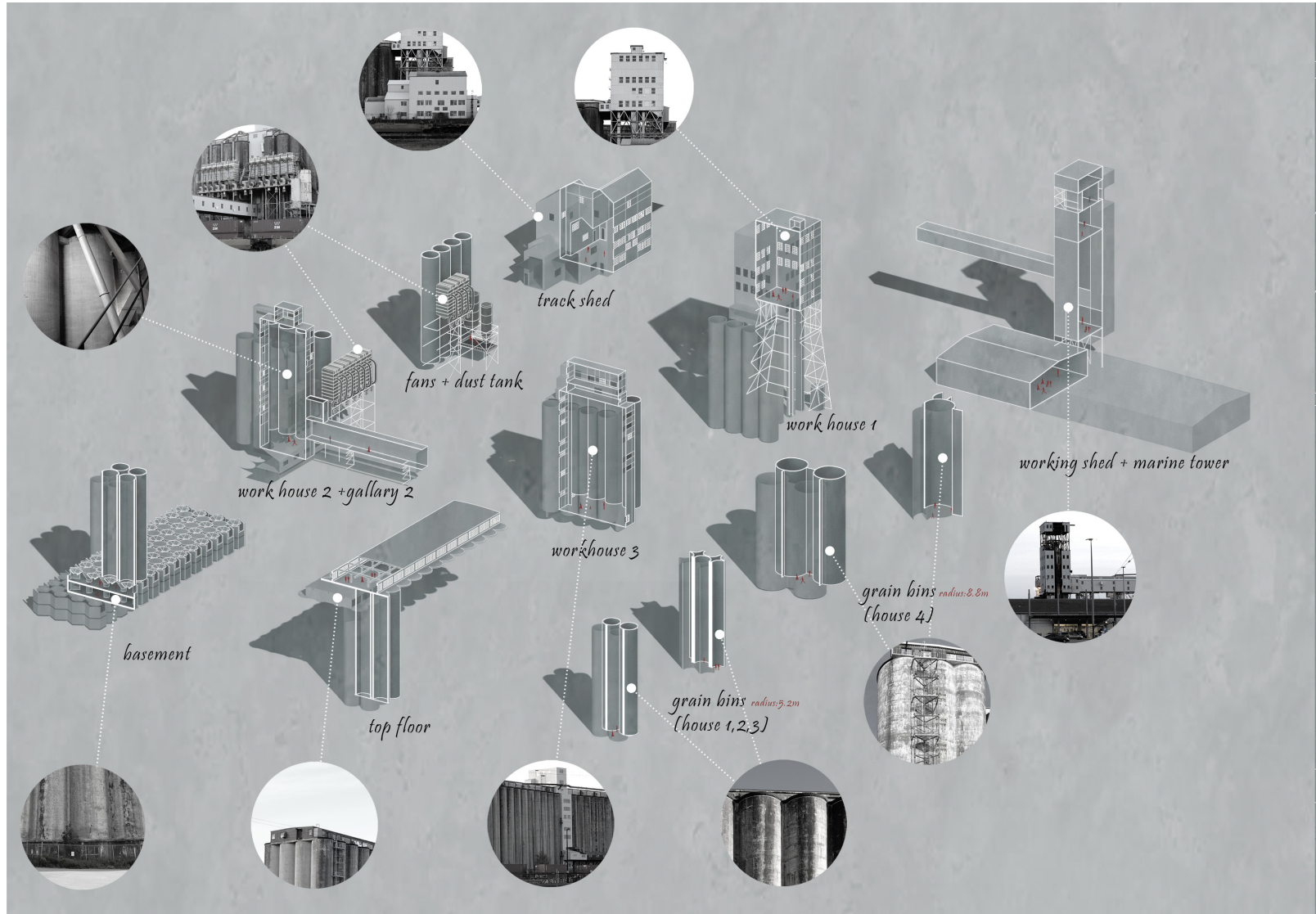
Diagram: System components

Phenomena on Site

Appearance

The appearance of the historical site is a crucial element that impacts the monumentality of the site. It provides the "original taste" of the place and demonstrates how the place participates in the city's evolution. The granary has a brutal look compared to the surrounding architectural world, especially compared with the urban environment. The "façade" was not designed with architectural considerations, and the scale does not match its context. Similar buildings will not be constructed in the future. These qualities give it an unusual and mysterious atmosphere. This rough industrial look creates a feeling of unease; on the other hand, it also brings a layer of attraction and curiosity.

Photos showing the appearance as a phenomenon on the site

Photo showing off-scale height of the silos' body compared to the surrounding context

city threshold

The study of how the urban fabric and landsape frame the image of the grain elevator as a visual "monuments".
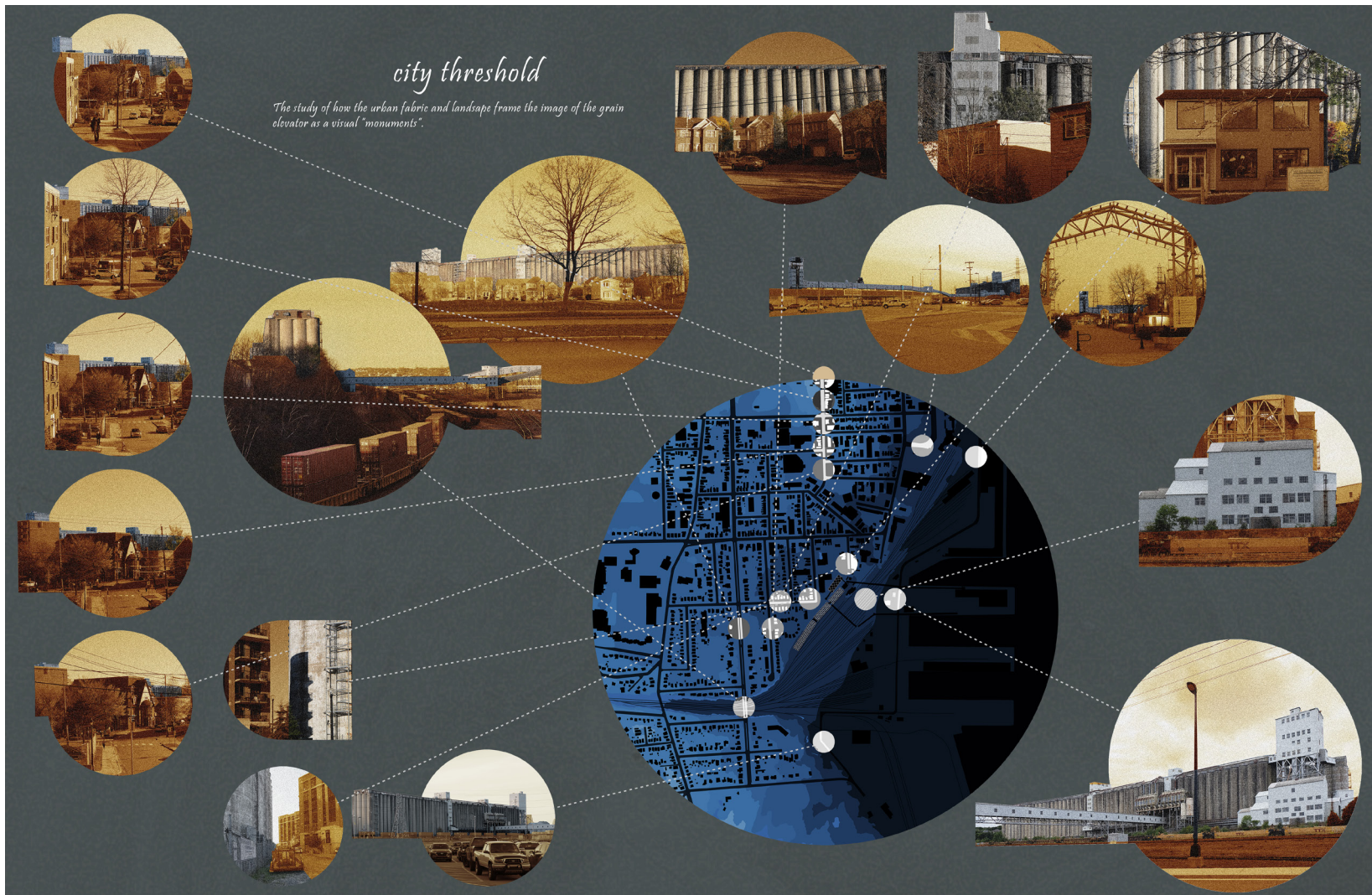
Phenomenon study: Urban streetscape and landscape frames the building as monument

Weathering

The traces of time can be seen through material weathering. The cement body has been washed by rain and weathered in the dust for many decades. The outside appearance should be maintained as it is, and minimal interference, such as cleaning or fixing structural damage, should be applied.

Sound and Light

The sound and light phenomena at the site are also interesting. The noise from the industrial working zone is mostly blocked by the topology of the train valley and the high raised body of the granary. The body is solid and thick, and the shape of the building extends along the edge of the working area, which protects the residential community from noise.

As darkness falls, the industrial working zone is lit up, as both the port and granary operate 24 hours a day. The solid body is merging into the dark, and only bands of light are left at night.

Photos showing the weathered concrete silos' body

Main source of noise: railway

Top floor lights up at night
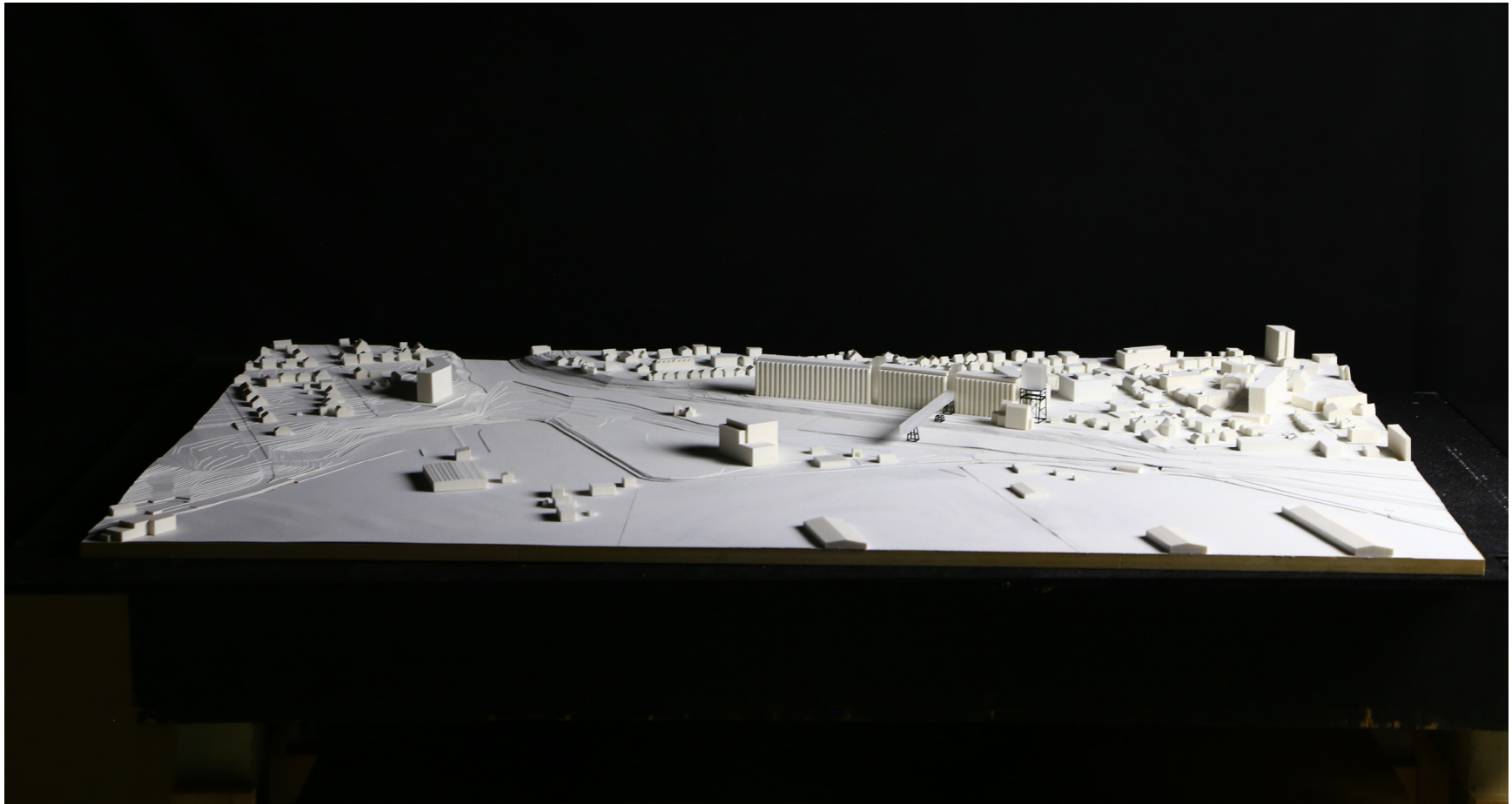
1:1000 site model showing the scale and site relations
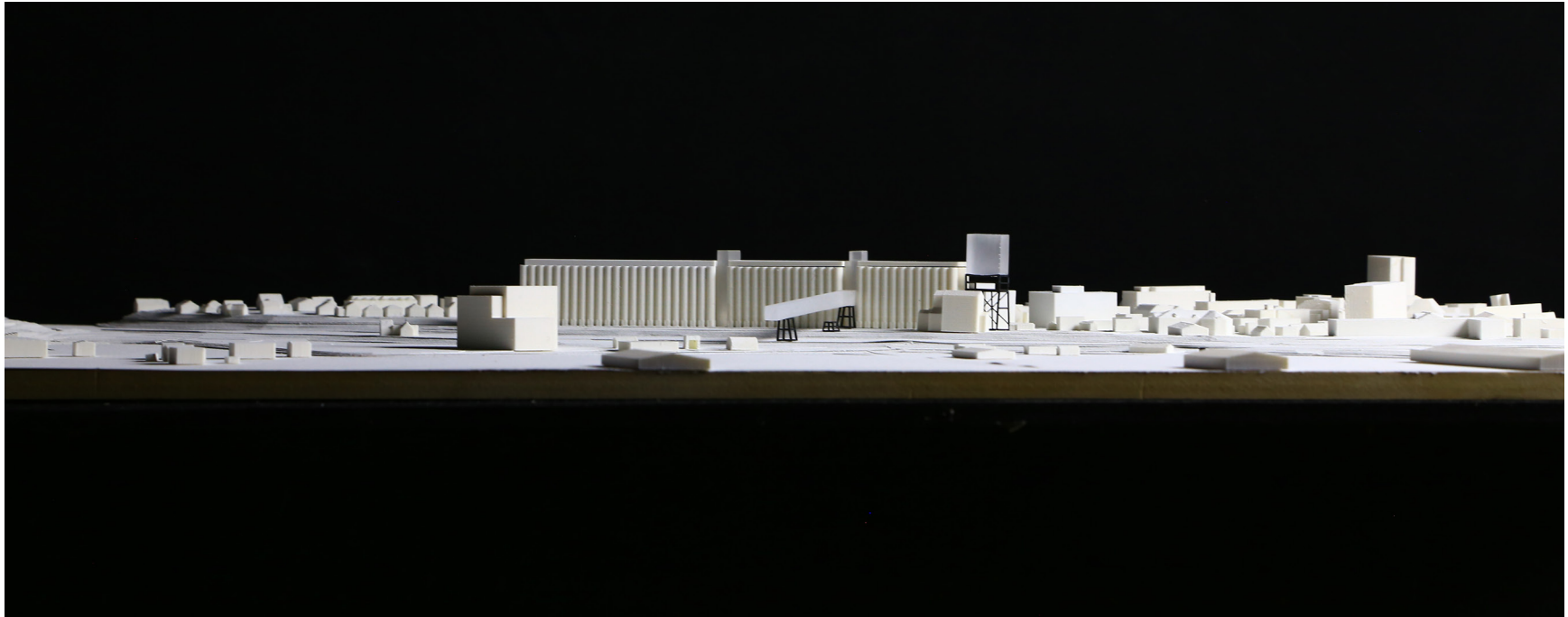
Photo of site model showing the view from the working port side

Site model photo showing the residential neighborhood is hiding in the shadow of the high silos' body and lacks sunlight in the morning until early afternoon.
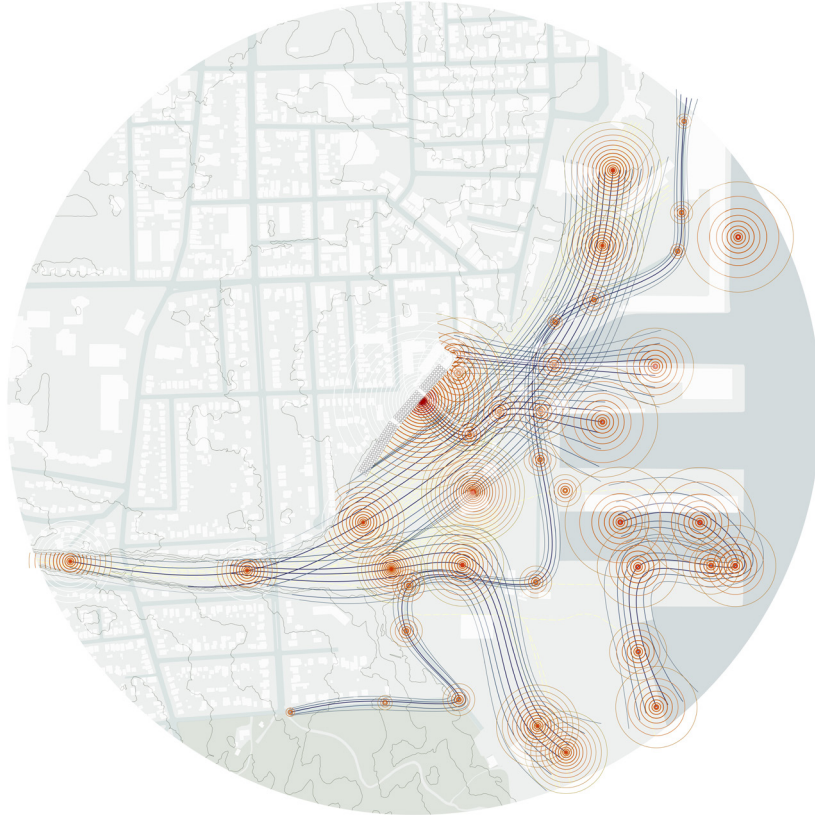
Phenomenon study – sound

Phenomenon study – light

CHAPTER 3: PROGRAM

Program and Public Space

Dwelling City: Public Life, Education and Tourism

In this dwelling city, public life, education and tourism play important roles in the city. This section includes program studies and examines what programs are lacking in the city and in public space transformations in terms of programs. The mapping for public programs and zoning studies is shown in the diagram below. Most of the cultural institutional facilities are centrally distributed in the downtown area and are relatively close to major educational institutions and commercial districts. The institutional buildings form a linear zone that runs north-south and overlaps with the "pedestrian zone" described previously. On the other hand, a large-scale multipurpose music performance facility is lacking in the city. Moreover, art and educational institutions such as NSCAD and the Art Gallery of Nova Scotia are expanding and looking for more space. The existing NSCAD campus is located in the port district, which is adjacent to the end of the public waterfront.

Zoning and Public Program Map

N

Indastrial Port

Railway System

Public Waterfront

Major Park/Green Space

Education Institution

Residential Zone

Primary Road

Grocery Store

Retail / Shopping Mall

Public Related Buildings

Retail / Shopping Mall

Grocery Store

Sports Institution

Music/Performance/Theatre

Museum/Historical Site

Art Program/ Art Gallary

Library/Archive
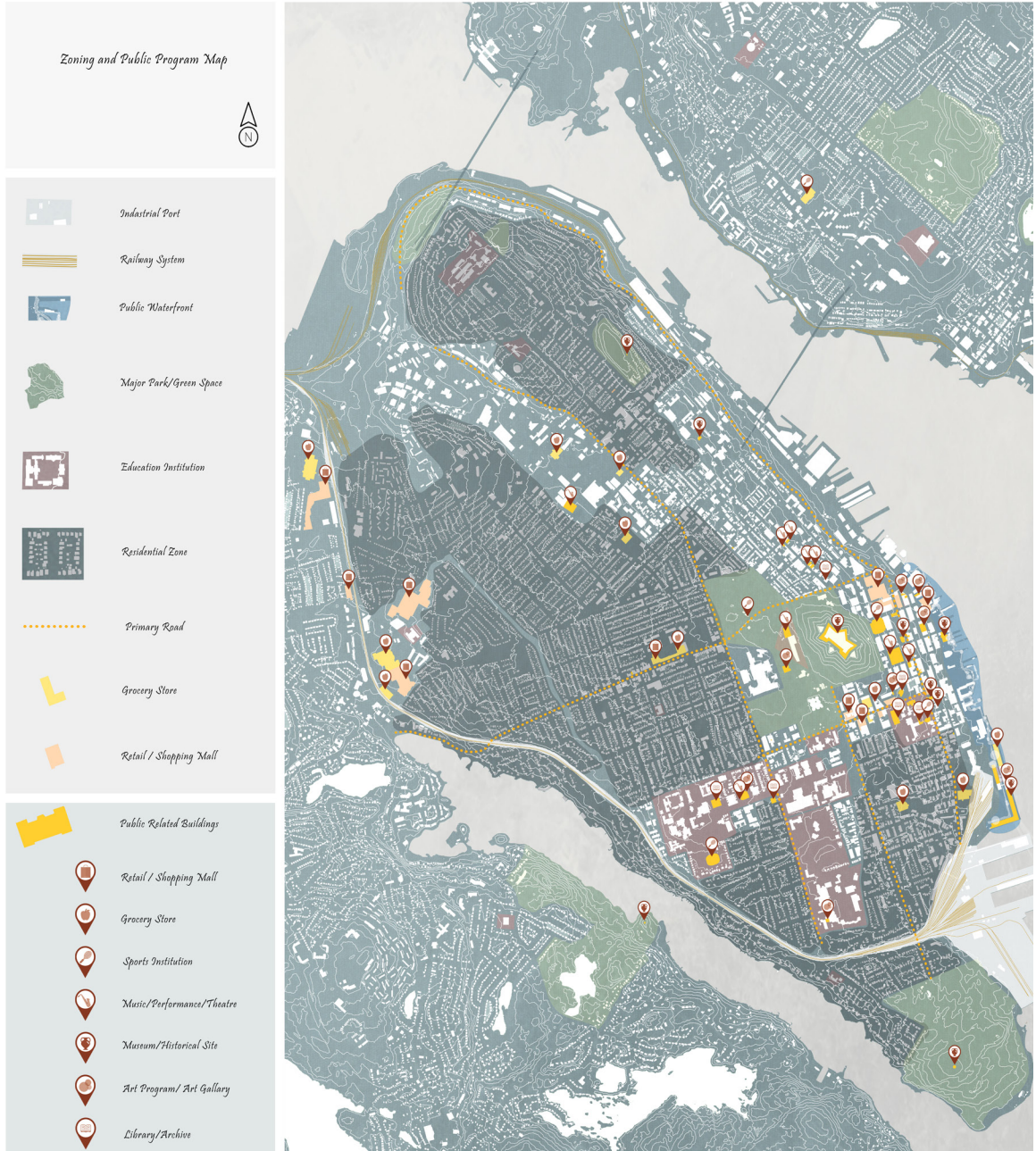
Program & Zoning Study

Program System Analysis

The relationships between the existing architectural forms and the programs are described below.

Architectural Layout

Two types of basic architectural layouts are studied and will be used for the design modifications: formal and informal layouts. The formal layout is regulated by grid and presents a colonnade layout, while the informal layout is more freeform and spans a larger space.
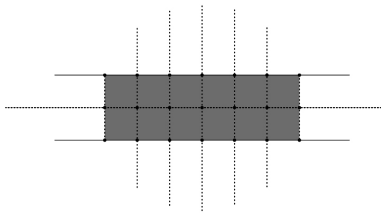
Formal layout: grid and colonnade
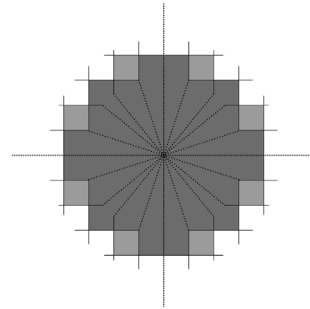
Informal layout: span and freeform

Spatial Qualities of the Existing Building

Once we try to apply the two basic architectural layouts to the existing building form, two spatial types are generated, and we can analyse its architectural qualities as shown in the diagrams below. The methods for potential intervention are also suggested.
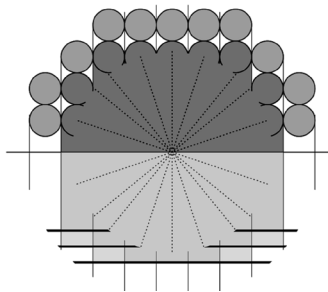
Informal space: Inserting and cutting out
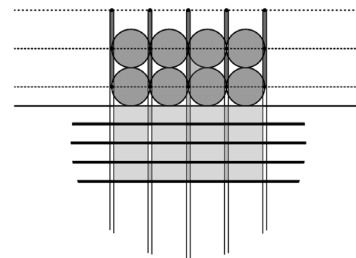
Formal space: Importing columns and floors

Programmatic Qualities that Related to Space

Two types of programs are studied here: uniform and uneven. Uniform programs refer to public activities that are less hierarchical and have more privacy and fewer restrictions, such as classrooms, workshops, offices, stores, public dining rooms, and servant spaces. Uneven programs are more hierarchical and are more public and flexible and are used for events such as public gatherings, exhibitions, performances and ceremonies.
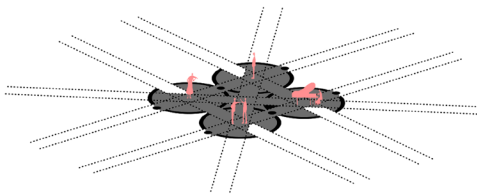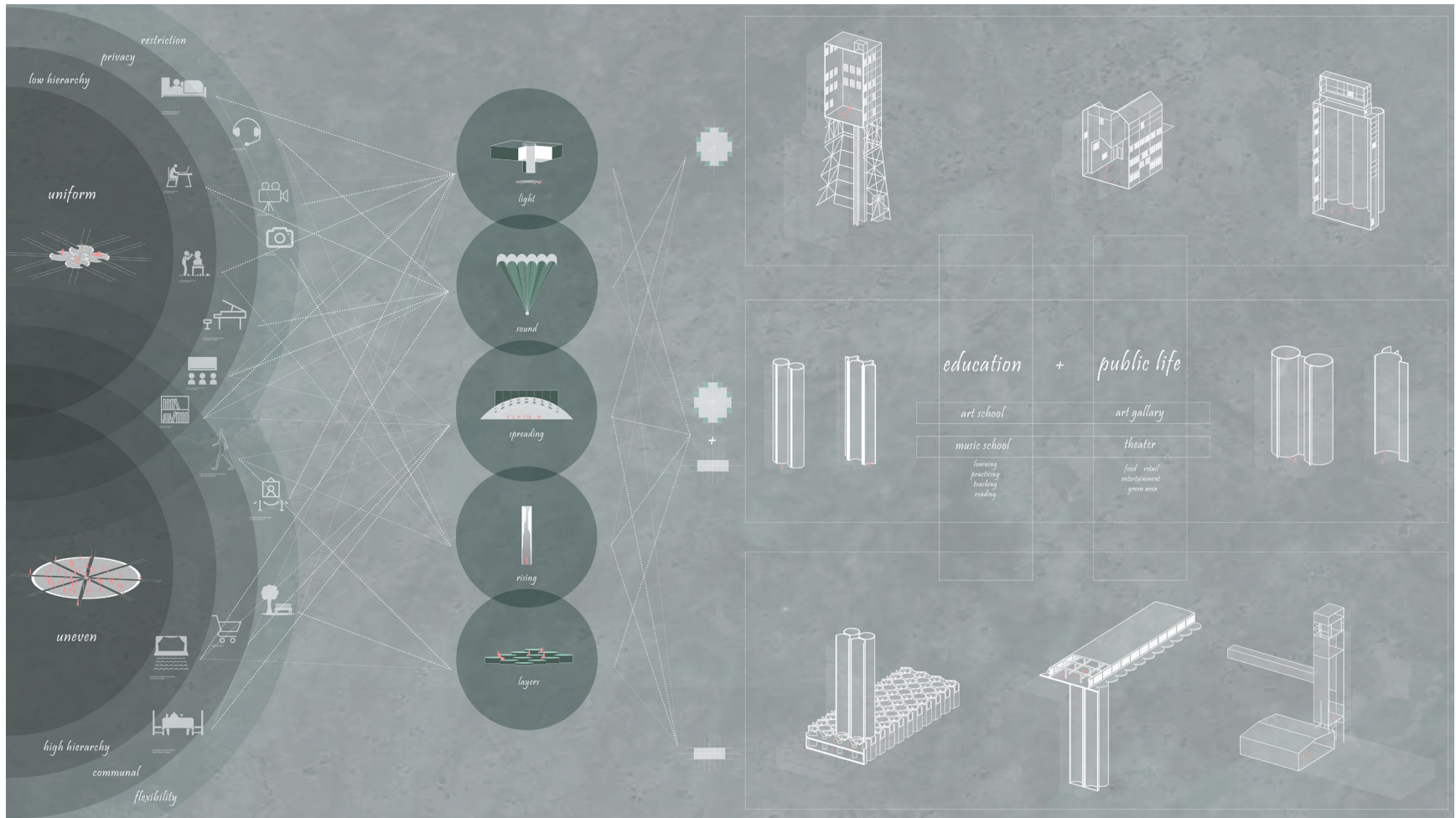

Uniform programs
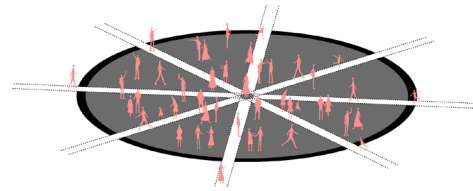
Uneven programs

Program System Generation

By establishing the relationships between the architecture quality of the building and program quality, we can generate the potential architectural elements: structure, room, circulation, and phenomena. The phenomena are essential since they present the original "taste" of the space. The diagrams below show the process of architectural generating and how they are linked with potential public programs.

formal layout

colonnade
grid

formal space

column
+
floor

uniform

low hierarchy
privacy
restriction

spacial layout   +   architectural quality   +   programmatic quality   ⟶   architectural elements

informal layout

freeform
span

informal space

insert
+
cutout

uneven

high hierarchy
communal
flexibility

room   hall
space

frame   shell
structure

vertical   horizontal
circulation

light   sound

spreading   rising

layers

phenomenon

System diagram generates the architecture elements

System diagram generates the potential programs

Conclusion

The idea of "social condenser" was proposed and practiced in the proposal for Parc De La Villette by OMA, in 1982. The project aimed to create social interactions and providing inclusive experiences for all the groups of public, and the programs should work for "pleasure" by appreciating and improving everyday life. The project was also asked to be highly culture related. Rem Koolhaas believes the skyscrapers are urban congestions that generate social interactions and fit in modern urban lifestyle. And these urban congestions created the hotspots by providing overlapping spaces for various programs, and this generated unstable and uncertain urban activities in a shared public space. In OMA's proposal for the park, the concept of seeing the site as a horizontal skyscraper, and the site was designed to be a hybrid filed that hosting dense cultural programs. Taking the reference of the OMA's proposal, by testing with the programs' variety and density.[25] This thesis will discuss the possibilities of creating this kind of "hybrid power" both in the building and on it's surrounded landscape filed as an urban culture "congestion". On the other hand, I believe the interactions between inside and outside is also worth to be explored.

The proposed project in this thesis takes advantage of the situating and the linear building form of the existing building and has the potential to be transformed as an art/cultural district. Public pro-

25 "Parc De La Villette." OMA, oma.eu/projects/parc-de-la-villette.

grams that need more space can find their place here. The building itself will be designed as a hybrid project that provides space for art exhibitions, public lectures, music/performance art, youth education, artist studios or workshops as well as commercial/retail areas. The ground floor and landscape condition will be designed to embrace the surrounding urban context and bring in visitors by bridging the disconnection between the public waterfront and Point Pleasant Park. A pedestrian experience is proposed as a continuation of the public waterfront boardwalk, and small-scale public spaces are provided along the pedestrian path for the "public bubbles" growth. The programs include open-air exhibitions, retail spaces such as cafés or restaurants, outdoor performance spaces, green landscapes, and ocean view lookouts.

The image below shows conceptual images of potential program inhabitations along this section.

Wish image with programs proposed

CHAPTER 4: DESIGN

Design Strategy

The design is composed of three parts.

First, to host the proposed public programs and complete the aim of reconnecting the terrain vague spaces to the public realm, the project should be a "hybrid", and the building along with the site should be divided into three sections to host three "families" in terms of programs and spaces: "family of exhibition", "family of fair" and "family of concert".

Secondly, part of the surrounding "terrain vague" area is considered for landscape design in the project and will give friendlier and more positive conditions for connecting the public streets with the building's ground floor.

The third part is from a "counter-monumentality" point of view and involves bridging the architectural qualities of the building with a new public program by proposing the design methods of "cutting and infilling".

Program "Families"

As a conclusion from the last chapter, the project will serve public life and education by providing space for programs including art exhibitions, public lecture events, retails and markets, music concerts, music festivals, various performance events, and musical-related education programs. In this case, the project is divided into three sec-

tions based on the nature of the programs and the spatial and architectural qualities of the granary building. The "families" are hosted along the linear body of the original grain silo composite. Each family occupies one whole section of the body and shares space on the ground floor and landscape.

Diagram showing the situation of three program families

Family of Exhibition

This "family" hosts the art exhibition-related programs. Exhibition spaces of various conditions and a lecture auditorium are designed in this "family".

Family of Fairs

This "family" is designed to provide a "public opening" to the surrounding urban situation. It provides spaces for retail and markets on the ground floor. A grand hall space is inserted in the main part of the building. This space is designed to be highly flexible in function but celebrates the original monumental quality of the site. Small exhibition spaces and sitting areas are also provided in this family.

Family of Concert

This "family" provides space for music/performance and education-related programs. The design idea is to provide the "auditorium" and "stage" along the movement both within the building and the surrounding landscape. The main theater is designed in the building, and one outdoor performance room and one moveable performance box are proposed along with the new landscape design.

The green surfaces indicated the new floor slab proposed in the new design.

The red surfaces indicated the public exhibition spaces that can be accessed from the ground floor.
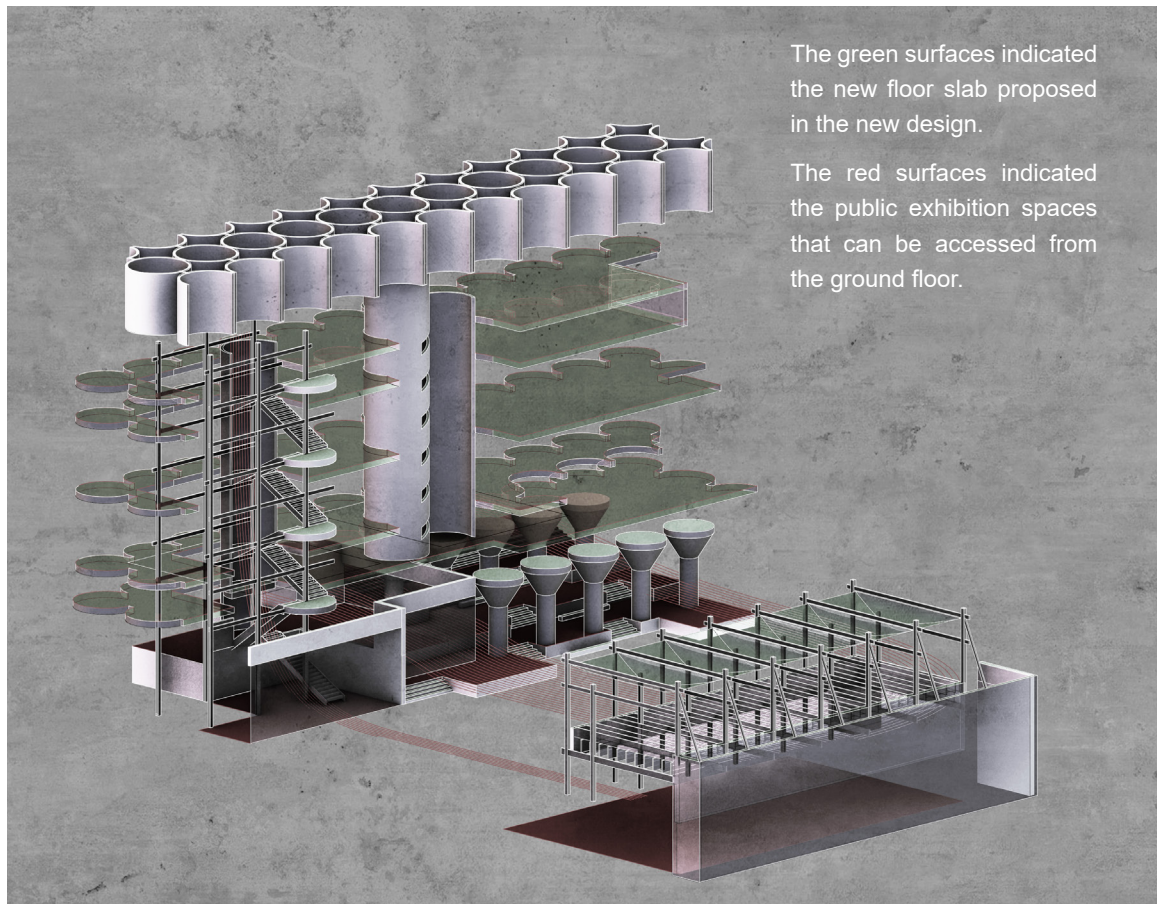
Family of exhibition: Observation along the path

The red lines indicated the public movement flows.
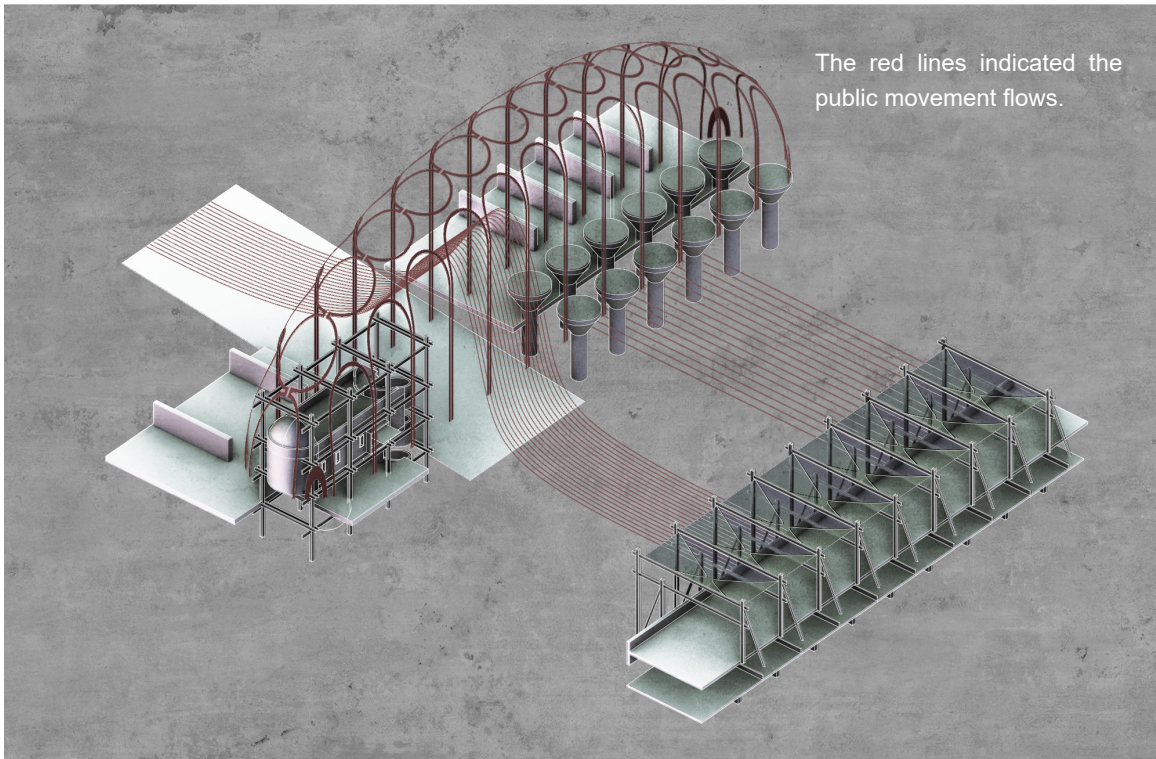
Family of fairs: Movement and open space

The green surfaces indicated the proposed platforms as auditoriums.

The red surfaces indicated the proposed platforms as stages.
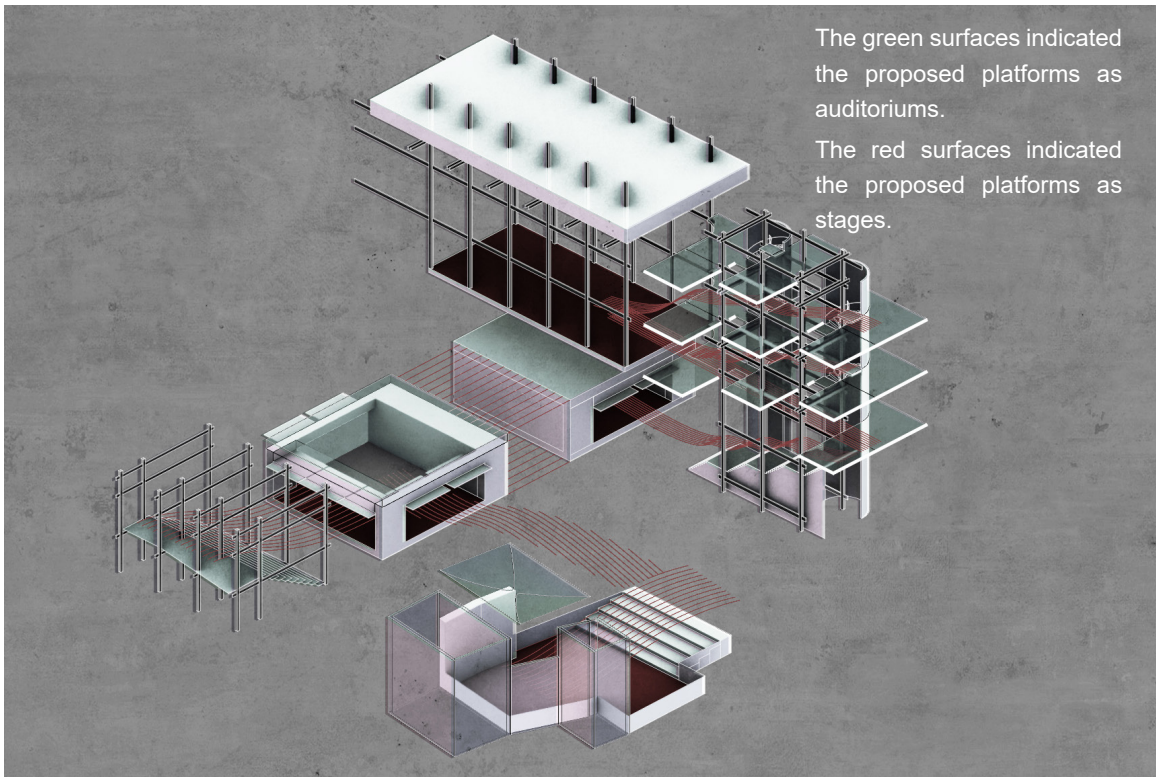
Family of concert: Stage and auditorium

Site Strategy

An urban site strategy needs to be developed to help determine the boundary condition of the design area, the zoning situation in terms of the program, and how these factors work within the existing urban context.

Process by Steps

The first step is mapping the restrictions and projections regulated by the existing contexts. The diagram shows the lines generated by many critical elements that exist around the site, such as the building and urban fabric orientation, the coastal line, and railway projections, as well as the street and property restrictions.

Next, an open area that can be used as part of the site modification is generated within the frame, which comes from the restriction and projection lines, and these areas are considered for potential public space development.

In the third step, potential pedestrian access paths are proposed to connect the open areas with each other to attempt to bridge the disconnection that exists in the city and create the "monuments link" that is part of the answer to the thesis question. Some of these new paths are using the existing ground conditions and the transportation bridge structures, and some require newly designed architectural forms.

The next step proposes public courtyards along

the pedestrian path; this is the design method used to bring "public bubbles" to the whole pedestrian experience and achieve the goal of extending the public waterfront boardwalk. These courtyards will be designed as rooms for public activities and events; they should be suitable for specific types of programs and have a high level of flexibility.

STREET
RESTRICTION

COASTAL LINE

COASTAL LINE

RAILWAY

RAILWAY

BUILDING ORIENTATION

OCEAN LOOKOUT

SUBJECT

BUILDING ORIENTATION

INDUSTRIAL ACCESS

BUILDING
ORIENTATION

URBAN
FABRIC

Situating condition

END OF THE PUBLIC WATERFRONTTHE

INACTIVATED INDUSTRIAL ZONE

TERRAIN VAGUE

PUBLIC PARK ACCESS

TRAIN PARKING
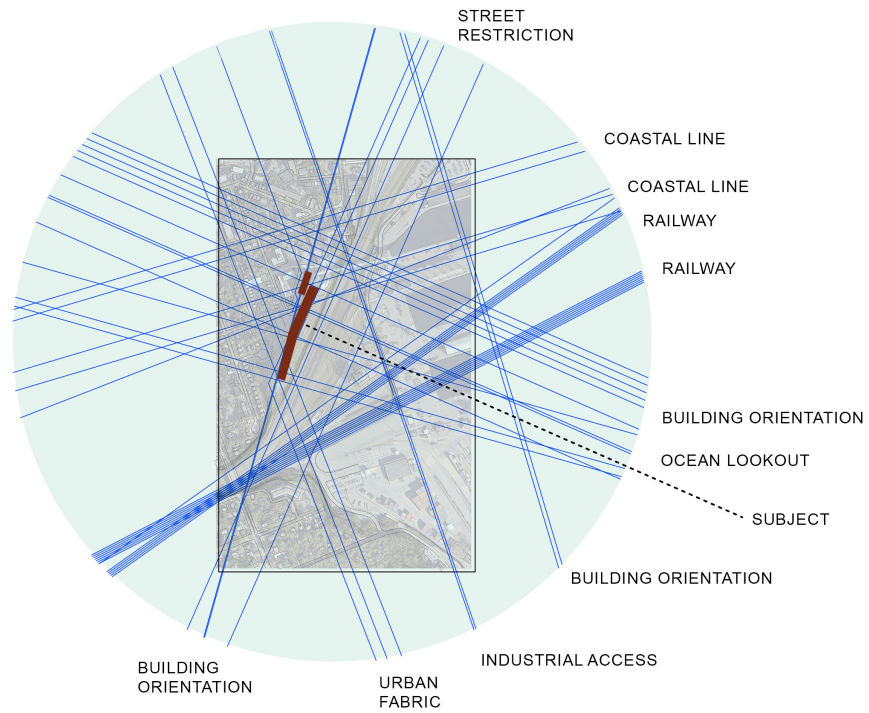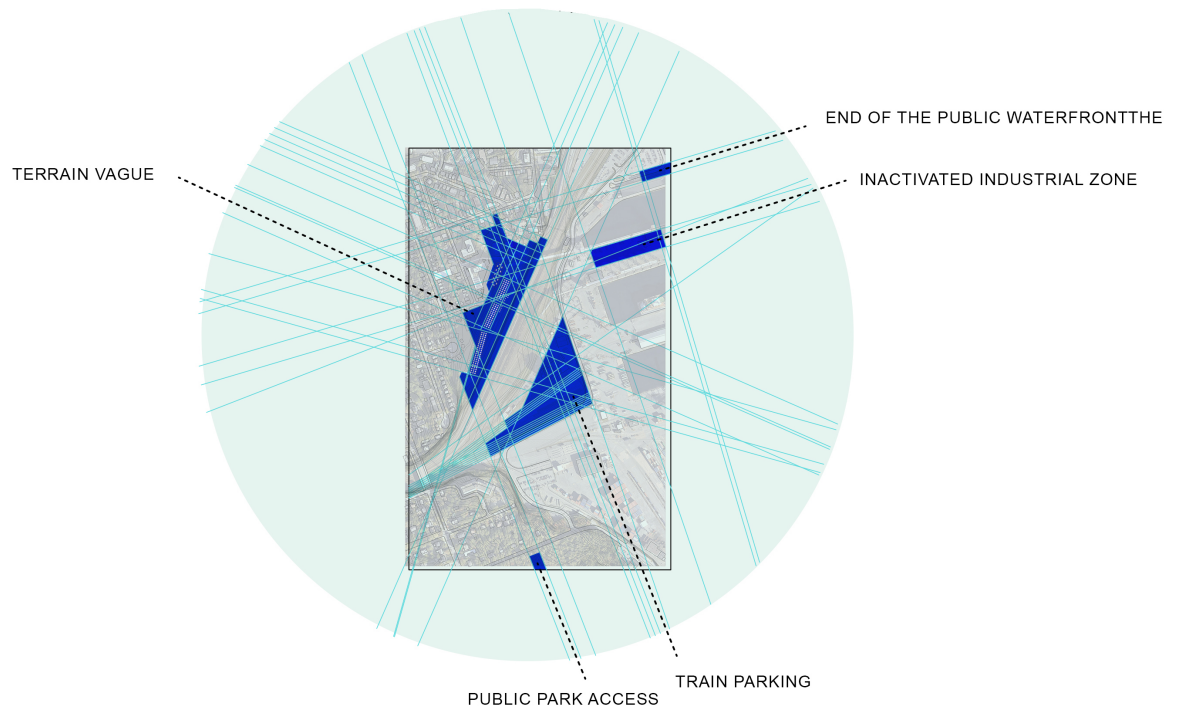
Defining new public space

EXISTING TRANSPORTATION
GALLERY

PROPOSED NEW ACCESS

EXISTING TRANSPORTATION
GALLERY

PROPOSED NEW ACCESS

EXISTING TRANSPORTATION
GALLERY

PROPOSED NEW ACCESS

EXISTING TRANSPORTATION
GALLERY

Public pedestrian paths

URBAN ENTRANCE
LANDSCAPE

MAIN URBAN ENTRANCE
RESHAPE STREETSCAPE
STOREFRONT

URBAN ENTRANCE
LANDSCAPE

POST-INDUSTIAL PARK

CITY PARK ACCESS

Public courtyard

Finally, proposed programs are applied to the frame and form the complete site strategy.

WATERFRONT PEDESTRIAN
CONTINUATION

commercial

art exhibition

fairs

extention of park

CITY BALCONY:
SENCE OF THE OCEAN

URBAN PUBLIC COURT AND ACCESS

GREEN SPACE ACCESS
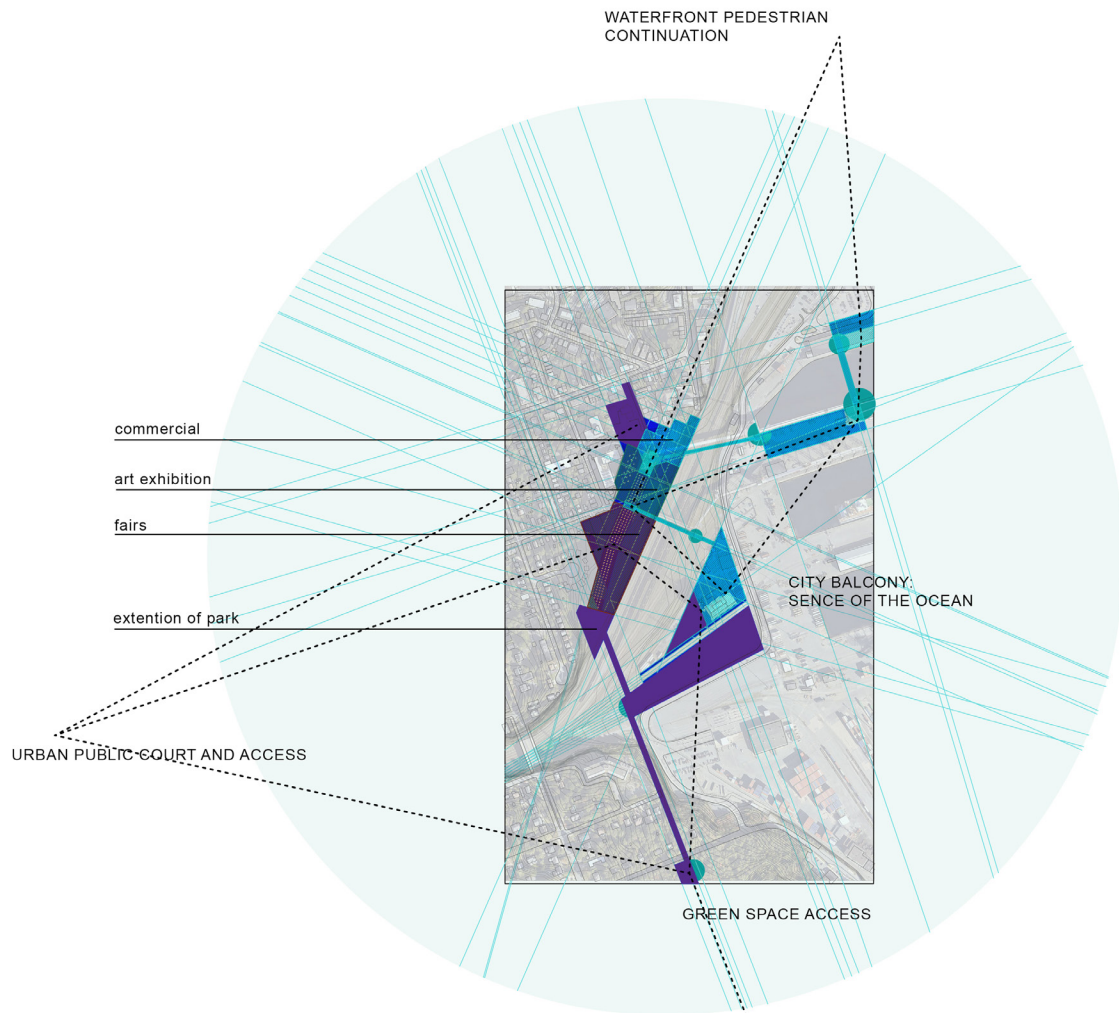
Site strategy

Landscape Strategy

One of the major challenges is that with the surrounding industrial working zone and terrain vague area, the site is lacking public access, and the building acts as a "wall" and contributes to an unfriendly streetscape. The design operation is taking place through four steps to bring the exclusive site into the urban public realm.

Urban Streetscape

The first step is creating an open public interface to the street. In the new design, the existing basement and ground floor exterior walls are removed, so the former basement and the ground floor are now working together spatially and are infilled with an open-air public landscape and a glass curtain wall "wrapped" indoor space to host any necessary programs on the entry level. The new ground floor plans are sunken from the street level to provide a stronger visual connection when walking on the street.
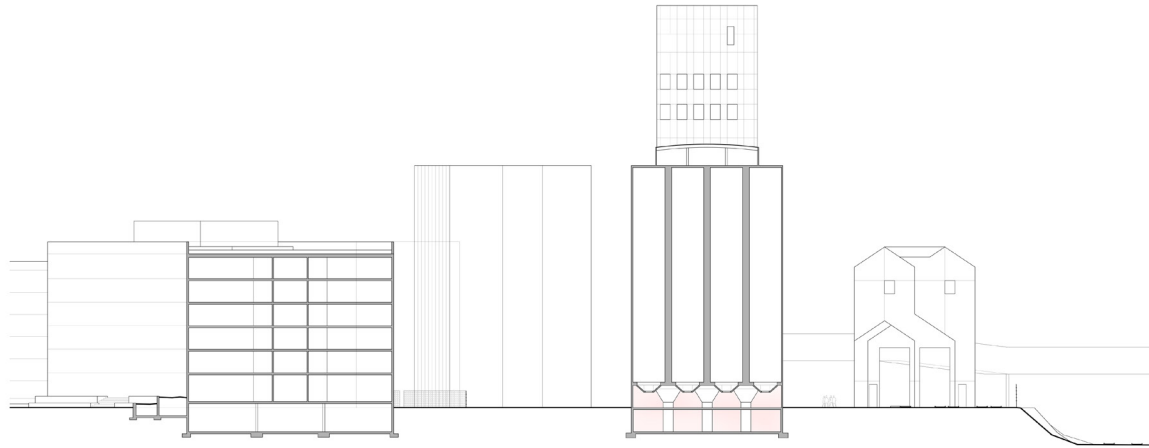
Diagram showing the situation of three program families
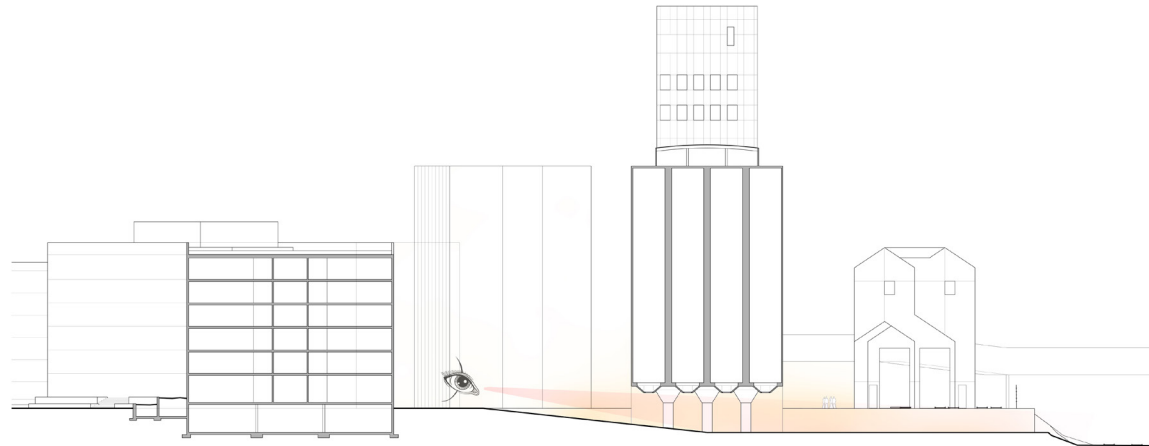
Diagram showing the situation of three program families
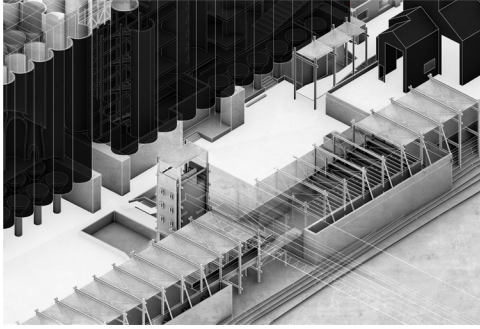
"Families" Courtyard

The landscape is also working with the idea of the three "families". The previous south part of the building was unpaved dirt land, but the new design is proposing three paved courtyards to provide public open space that can be shared by the three families.
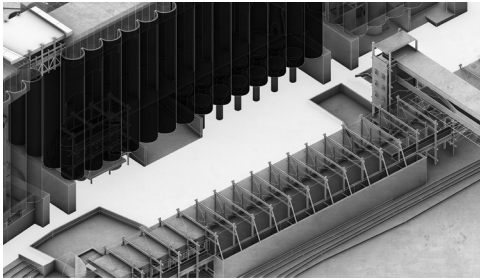
Multiple Entrances

The original metal envelope used to cover the elevator mechanical system is located between the silo composites; they have been in poor condition for decades. In the new design, these metal envelopes are entirely removed, exposing a giant gap between the silos' bodies. This creates opportunities for light to come through so the sense of both sides of the city can be felt. The gaps are also designed as multiple entrances for public access.
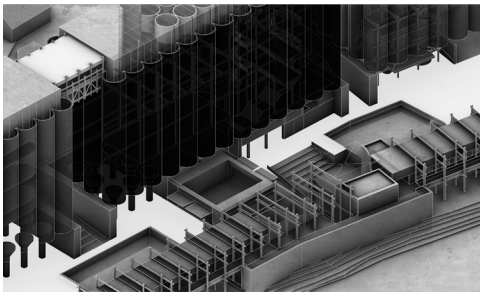
Diagram showing the design of three families' courtyards
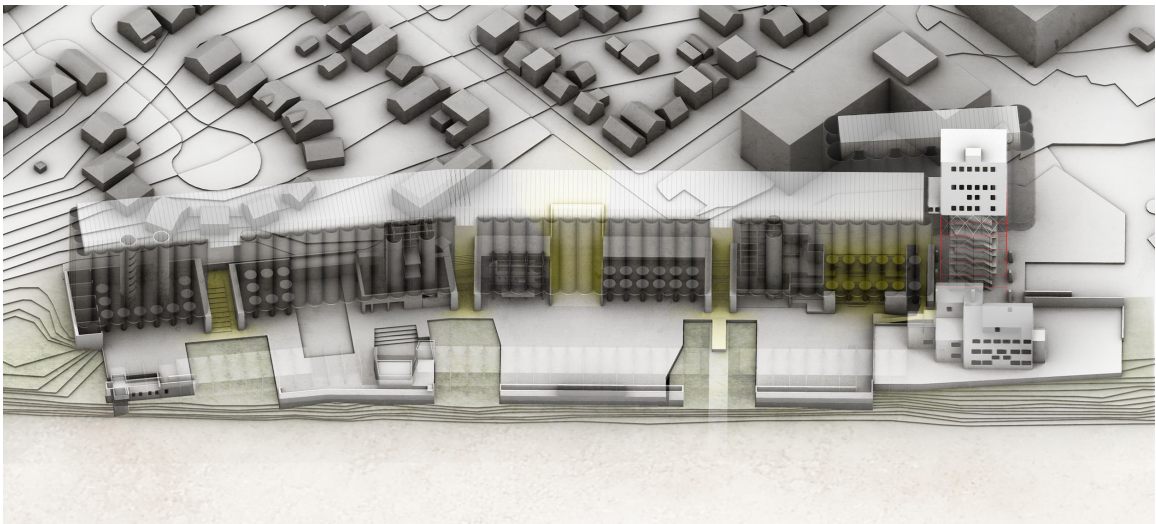
Diagram showing the multiple entrances that connect the public courtyard with the community

Circulation: Pedestrian Pathway

To address the aim of bridging the disconnection between the public waterfront and Pleasant Point Park, the design decision is to create a pedestrian street experience along the south side of the silo composite as an extension of the public waterfront experience. Much like the public waterfront, along with the pedestrian circulation, there are architectural spaces provided to host small-scale public programs and activities such as galleries, retail spaces, restaurants, seating and performances. A new linear architecture volume is proposed on the other side of the pedestrian street to host most of the "public bubbles".
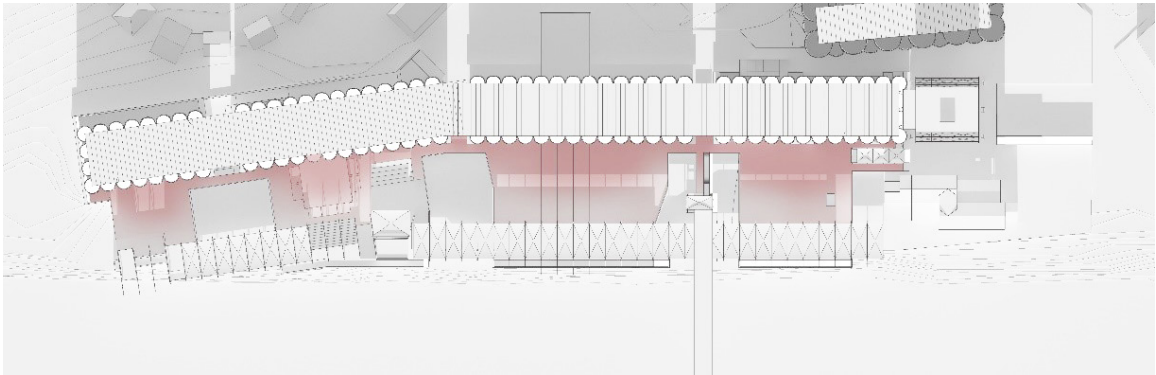
Diagram showing the designed pedestrian pathway that connects the three families courtyard

Design Methods: Cutting/Infilling

The grain silos are individual 5.3-m by 5.8-m closed concrete cylinders, and to make the space architecturally useable, the restrictions of the original spatial grid need to be broken by cutting part of the concrete shell away and creating a larger span and space. On the other hand, additional building systems are inserted into the bodies to enhance the architectural qualities. As a major premise, the

thesis question is defining the old grain silo build-ing as a potential "counter-monument" that partici-pates in public life. The design methods of "cutting and infilling" are addressed from the "counter-monument" point of view in four different aspects

In all 365 existing silos, 8 are completely removed to create a new entrance to the site, and the larger silos in "house 4" are entirely maintained and the whole building of "house 4" is designed to be the storage space. In the main building of the granary, about 1/3 of the silos (133 in number) are involved in the major "cuttings" and are heavily modified, and massive structural reinforces needed to be considered. And the rest are maintained their over-all geometry but receive some minor modifications such as cutting through holes for pathways, mak-ing doors and windows for rooms, and adding re-inforce structure for vertical circulations.
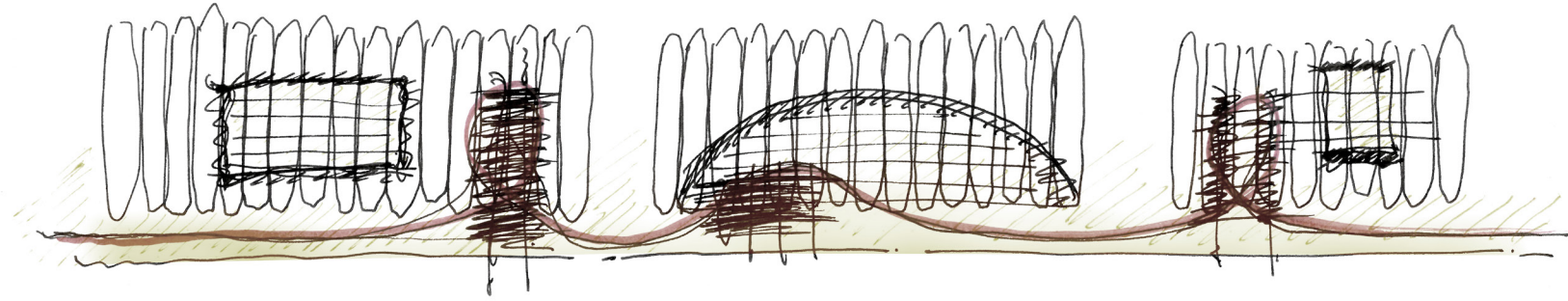
Early sketch developing the design idea of cutting/infilling

Old and New

"Old and new" is always a significant topic in adaptive reuse projects. In this thesis, the design principle of not changing the overall layout and form from outside has been proposed from the early stage of the design to maintain the original character of the old monument when walking from the street. The cutting method is applied only on the inside silo shell. New architecture forms that support the new programs only grow up from the ground floor and infill the large spaces created by "cutting". These are not very visible from far away. Only the ground floor exterior wall and most of the metal envelope that covers the elevator mechanical system have been removed and replaced.

Service and Servant

To celebrate the spatial quality inside this old monument, a large-scale space with a high ceiling is required to host major programs such as the main exhibition space, grand hall, and the theatre. The monumental qualities such as light, sound, and other phenomena can be felt around this cuttings. The new infilling structures are providing space for most of the service functions that require less space and more uniform space.

Permanent and Temporary

Again, the large cuttings are a celebration of the original monumentality, and they are permanent moves that are not easy to reverse because of the nature of the material and the method of construc-

tion. On the other hand, the new infillings are "small and secondary." They need to be temporary and reversible, so it is better for themto be not expensive as well. In this case, the system proposed here for the new infilling is wooden framing.

Flexible and Restrict

If every idea is a celebration of the monumentality of the old building, and the architectural modifications are also permanent and restrictedly serving certain programs, on a certain level they also create new monumentalities, which is not the aim of this thesis. The design of the main cutting space should be as flexible as possible. Instead of doing a lot of small and complex cuttings, the inside cuttings should be simple and major. At the same time, the new infilling structures can be designed to be tailored to specific programs and offer more restrictive functions; however, as mentioned before, these new moves should be economical and easily reversed.

By proposing these principles, the idea of "counter-monumentality" is tested: the flexibility of the old monument provides opportunities to be involved in the active public life by reprogramming. The use of the space for the public can be changed over time, as is the objective expression of the city's identity at one time. On the other hand, the original qualities of the space should subjectively present the past, and the public should be involved in creating its new history.
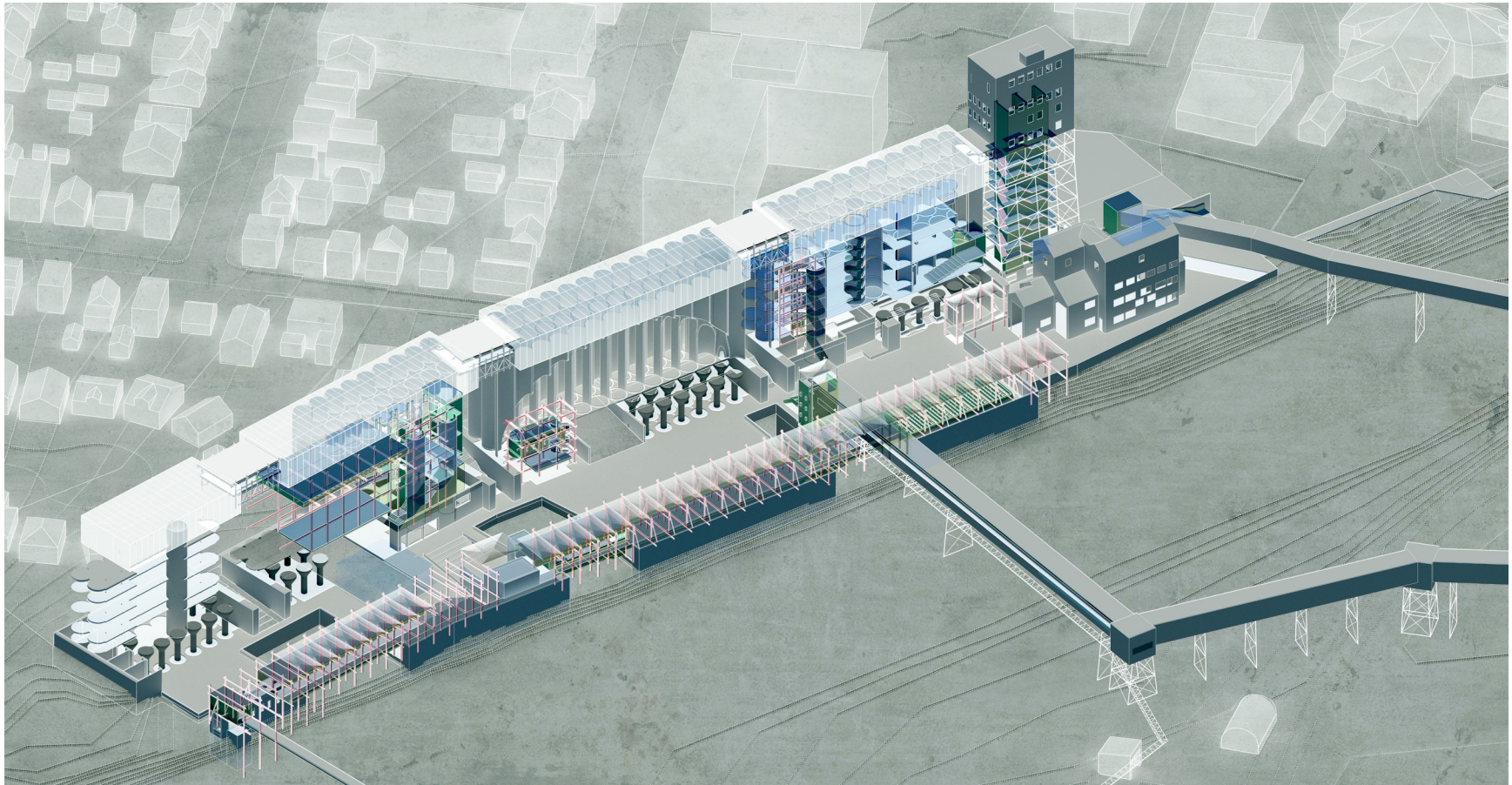
Axonometric hybrid drawing showing how the design method of "cutting and infilling" is applied in the four aspects.

Design Analysis

Urban Connections

New urban connections to the site are proposed based on the site strategy.

The gigantic silo body brought an extreme "wall" condition to the site. The streets around the building were running into dead ends because of the existence of the block.
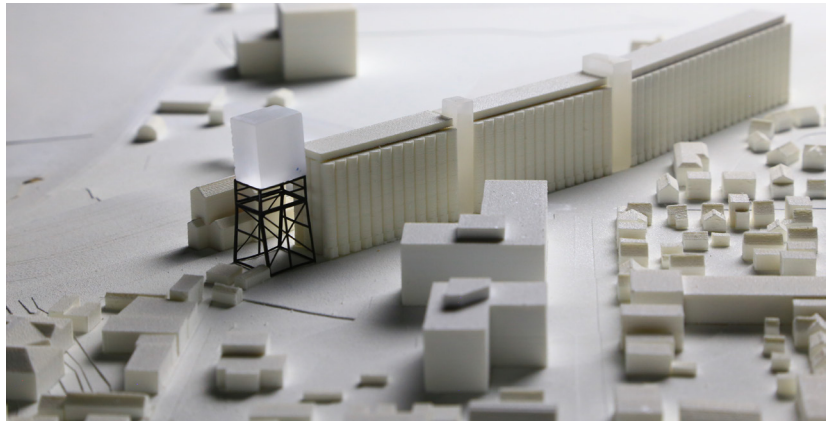
Model photo showing that the public access is lacking because of the "wall" condition on the site

In the new plan, the courtyards should have access to the streets from multiple directions. And the existing transportation bridges will be transformed into pedestrian connections and will reach far out to the waterfront.

Site photo showing the existing transportation bridges can be used for pedestrian connections

POINT
PLEASANT
PARK

EXTENDED PARK AERA
FOR FUTURE
DEVELOPMENT

END OF
PUBLIC
WATERFRONT
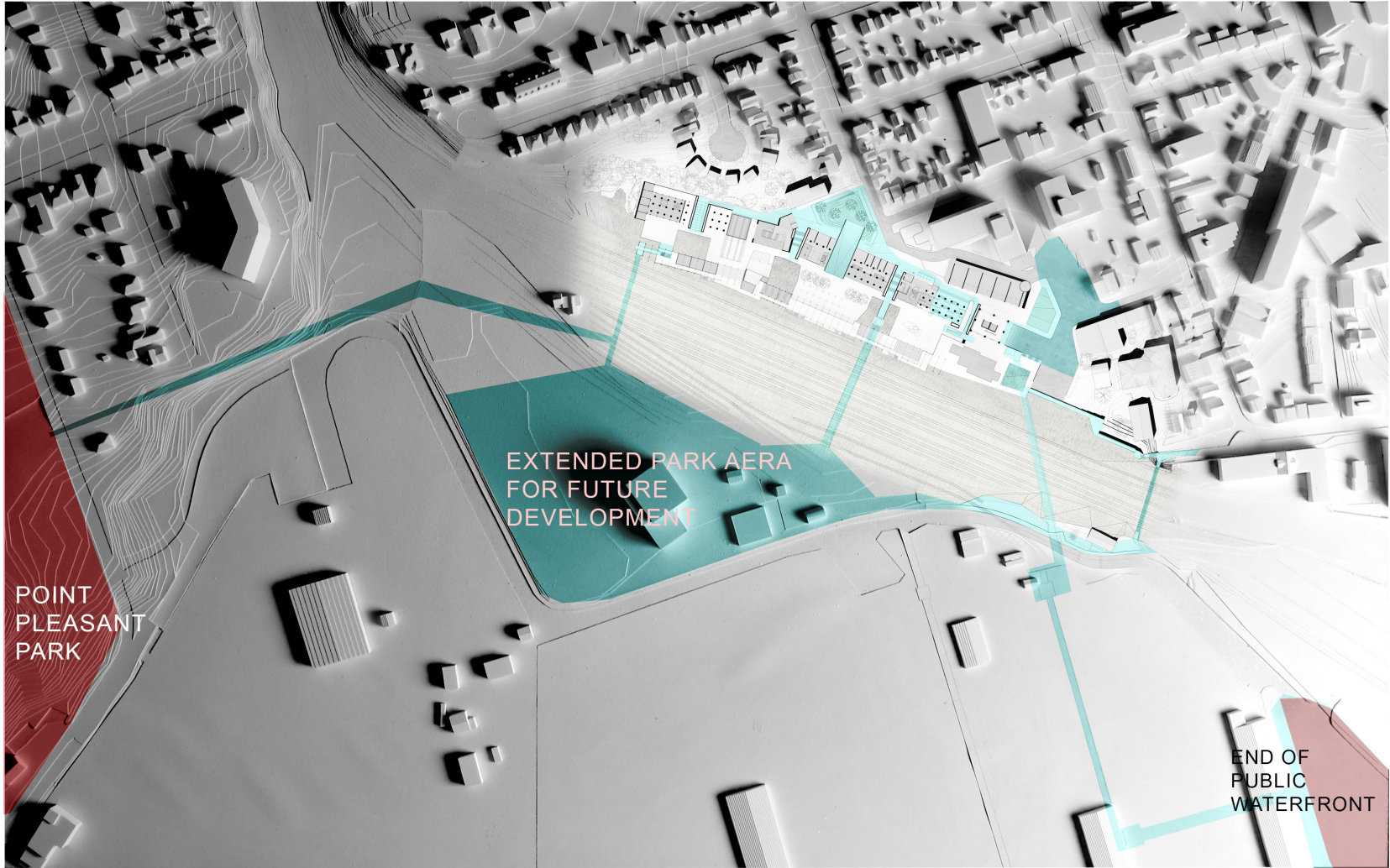
Diagram showing proposed new urban connections
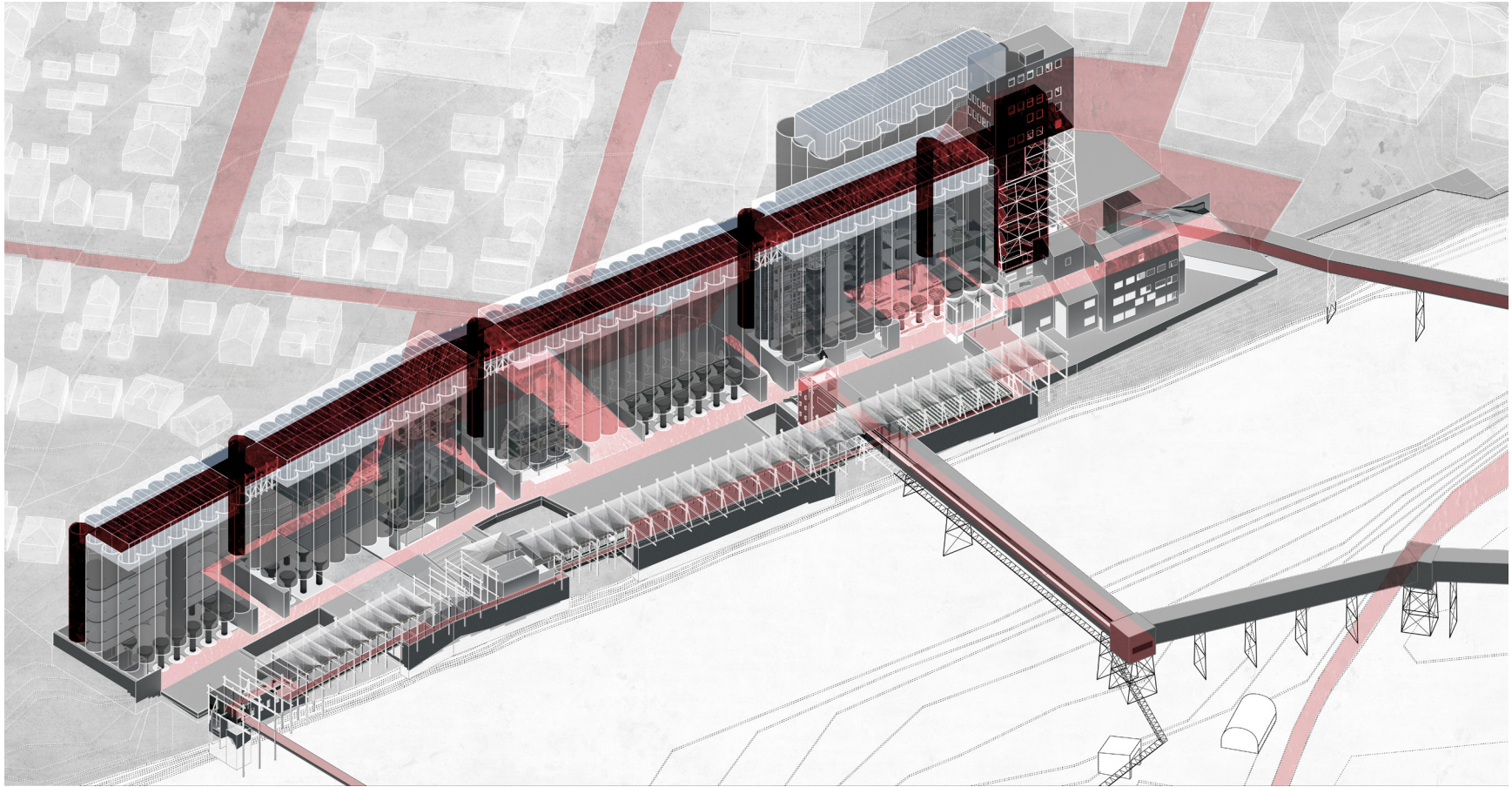
Diagram showing site circulations
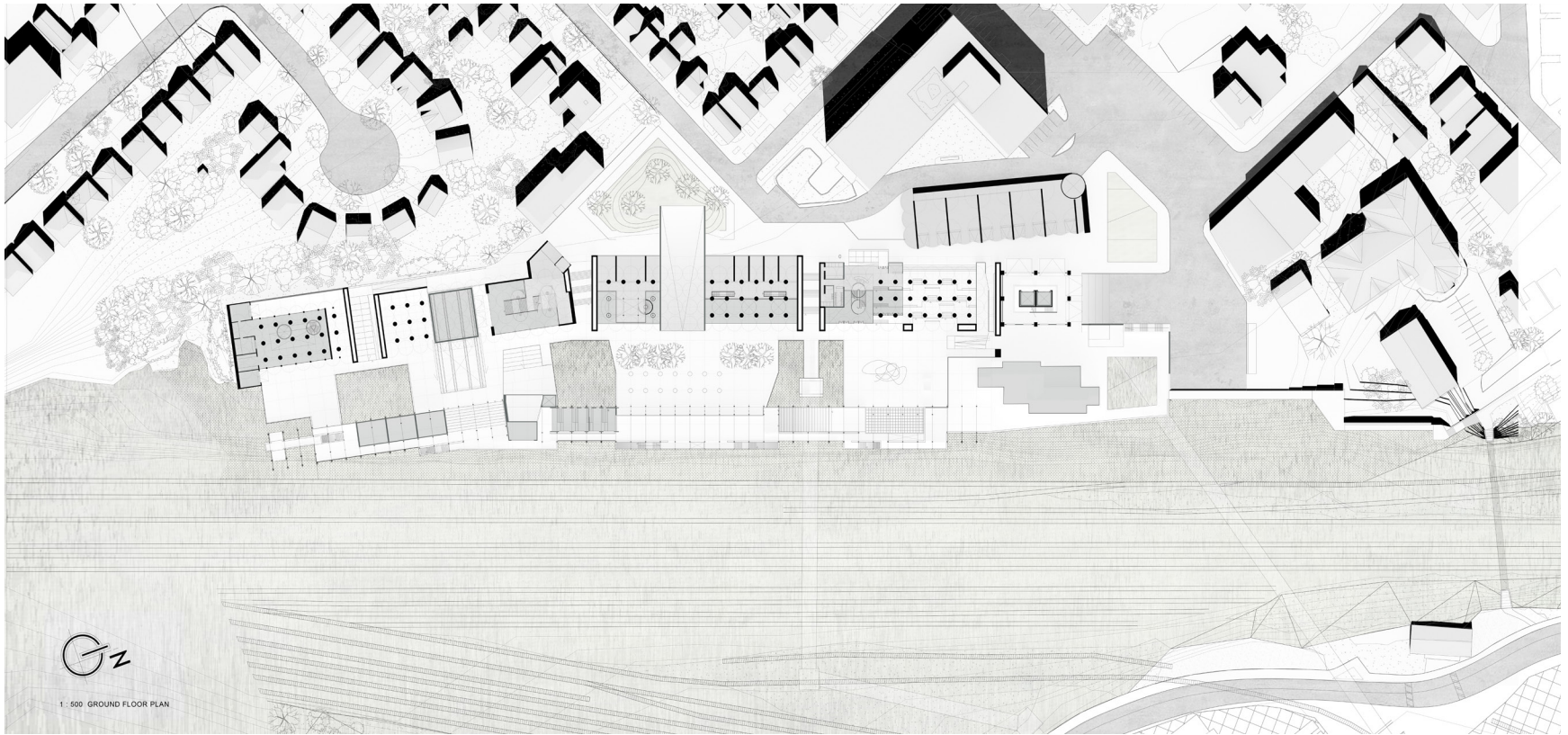
Ground floor plan showing urban context, street connections and public access

1 : 500 GROUND FLOOR PLAN

Program Inhabitation

The Family of Exhibition
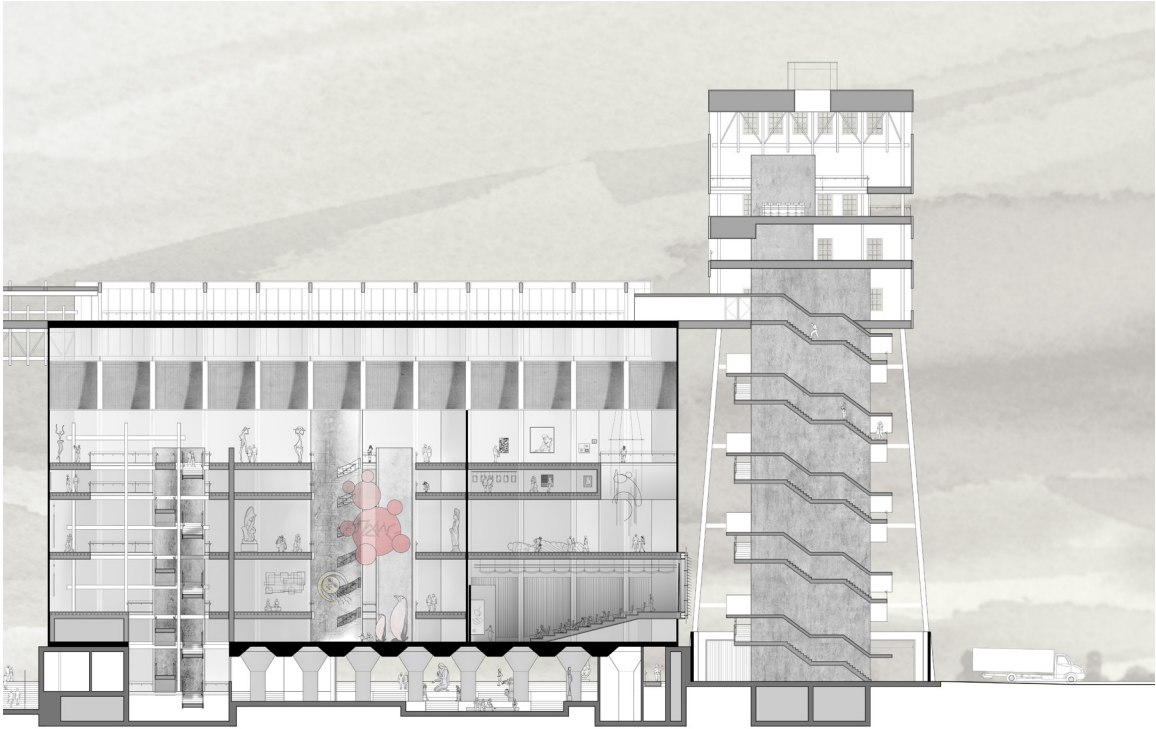
Inhabited section showing space layout and programming of exhibition space
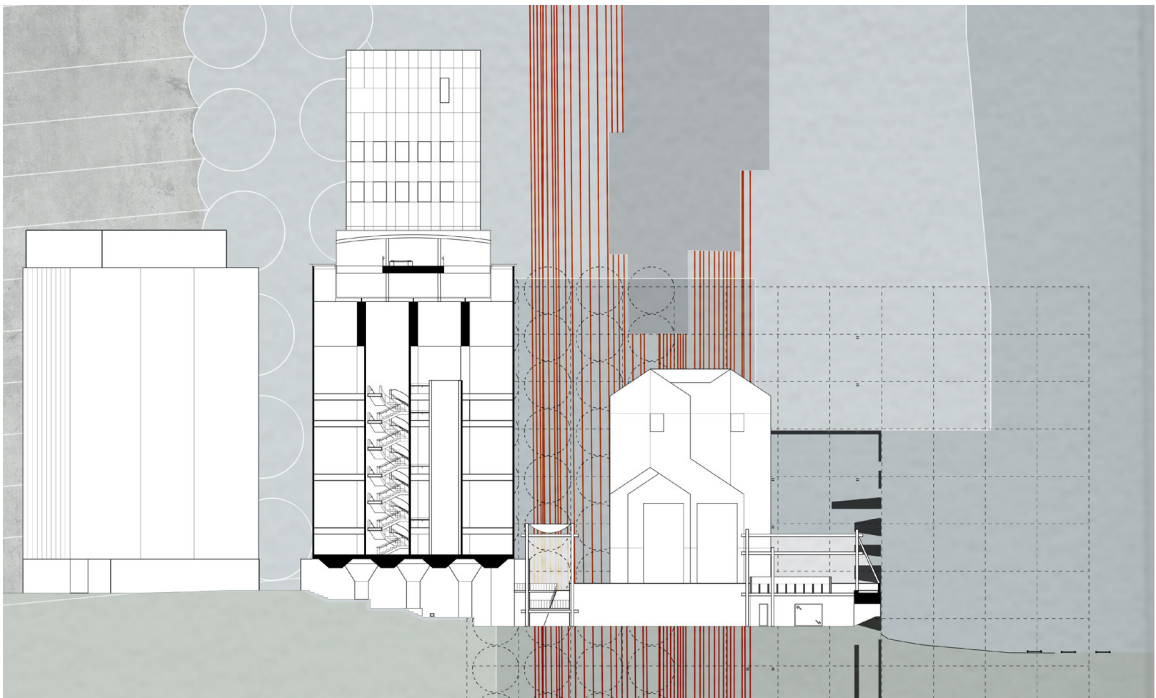
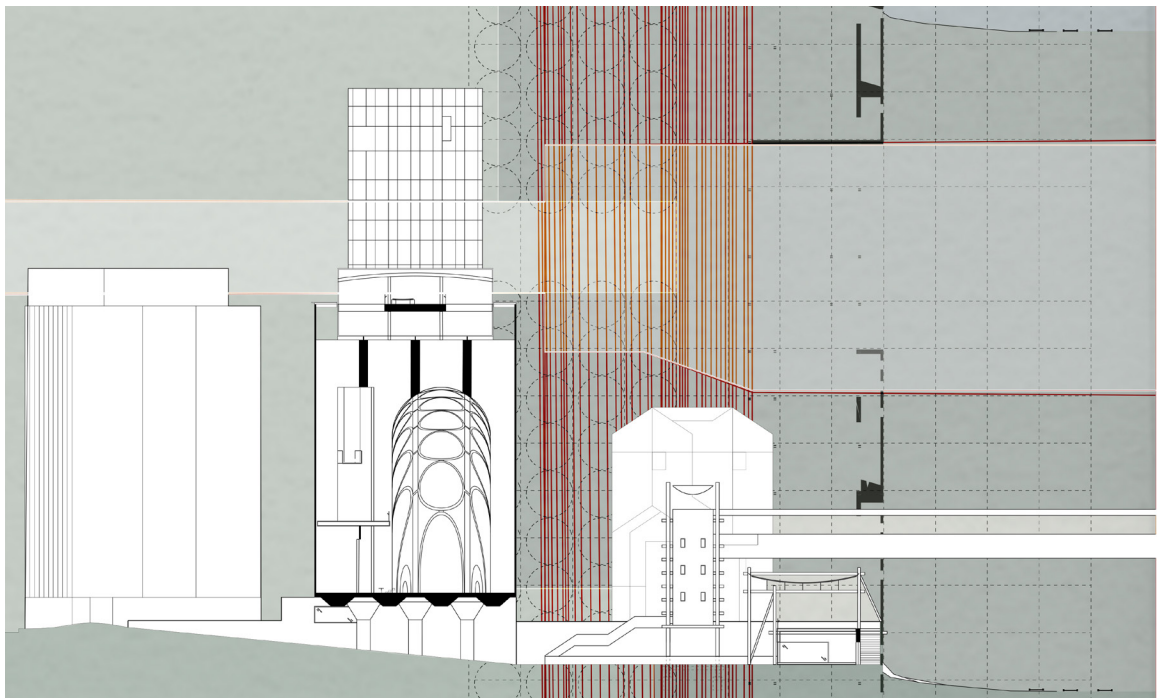Inhabited section showing space layout and programming of exhibition space

LOBBY +EXHI-BITION

EXHIR-ITION HALL

EXHIBITION ROOM

AUDIT-ORIUM

LOBBY SCULPTURE GARDEN

EXHIBITION COURTYARD

OPEN EXHIBITION ROOM
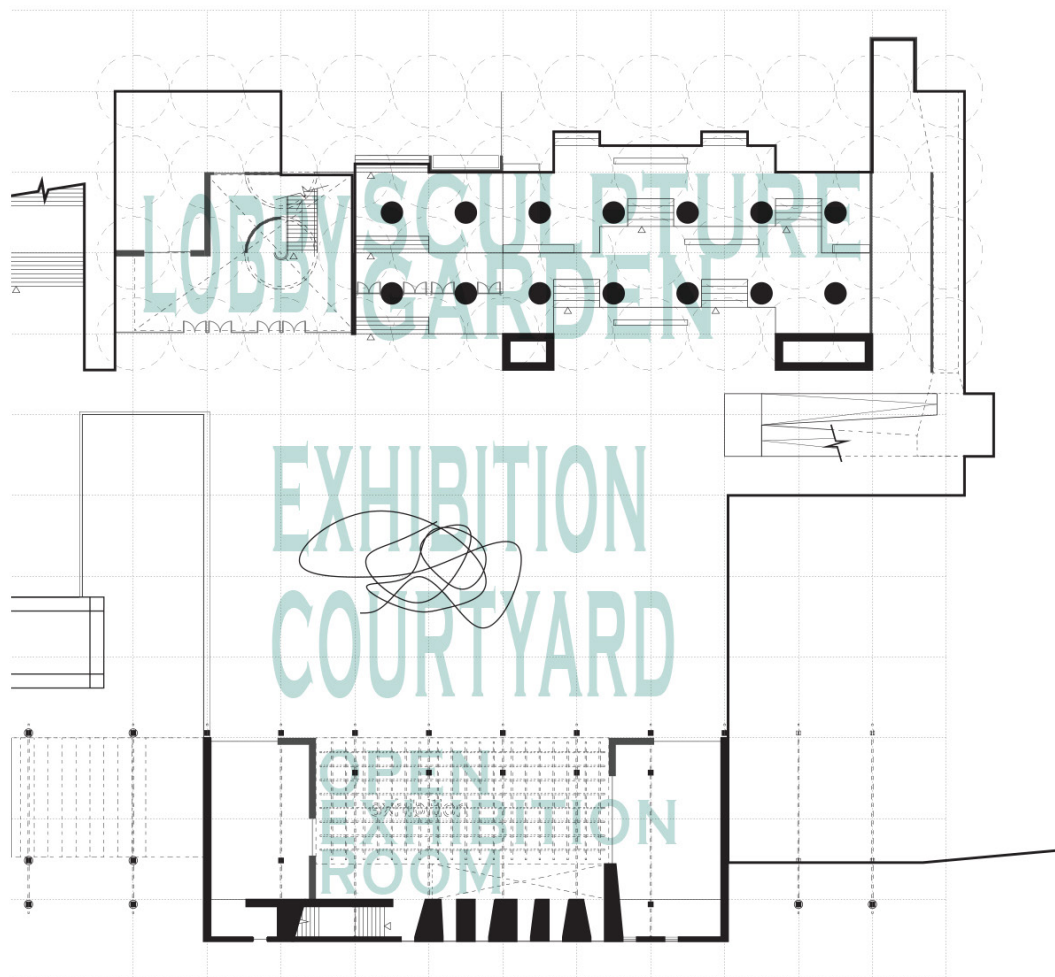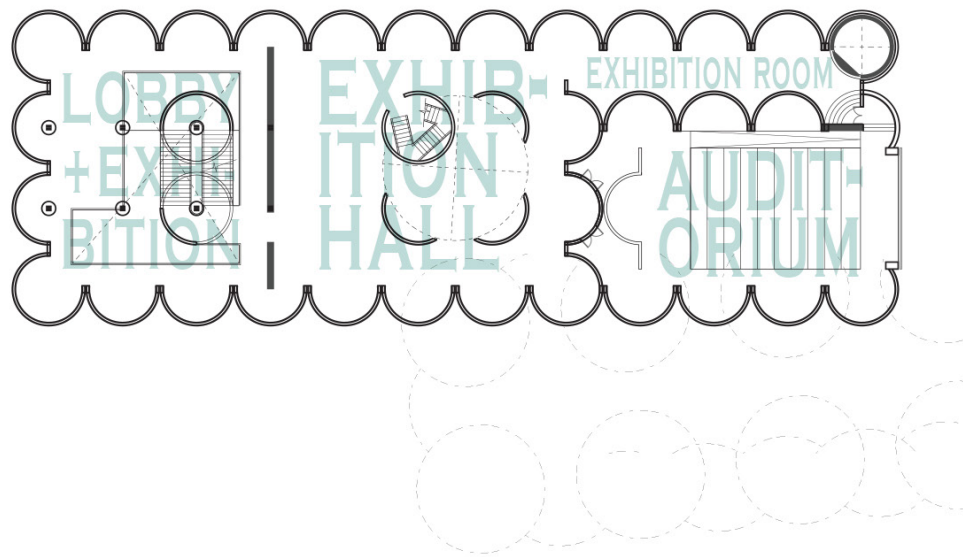
Ground floor plan and the 2nd floor plan showing programming layout - family of exhibition

The Family of Fairs
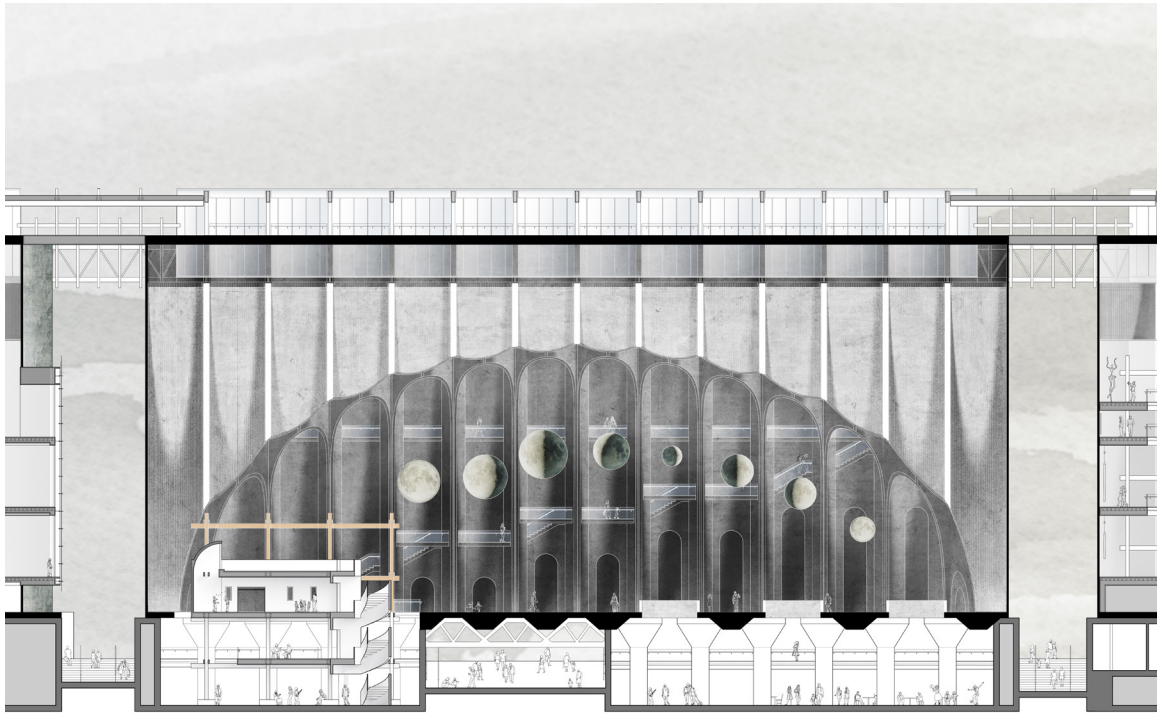
Inhabited section showing the main hall and public space within the "family of fairs"

Inhabited section showing space layout and programming of exhibition space

MULTI-USE ROOMS

ENTRANCE PAVILLION

GRANDHALL

RETAIL SPACE

MAIN ENTRANCE RAMP

RETAIL SPACE

FAIRS

COURTYARD

RETAILSPACE
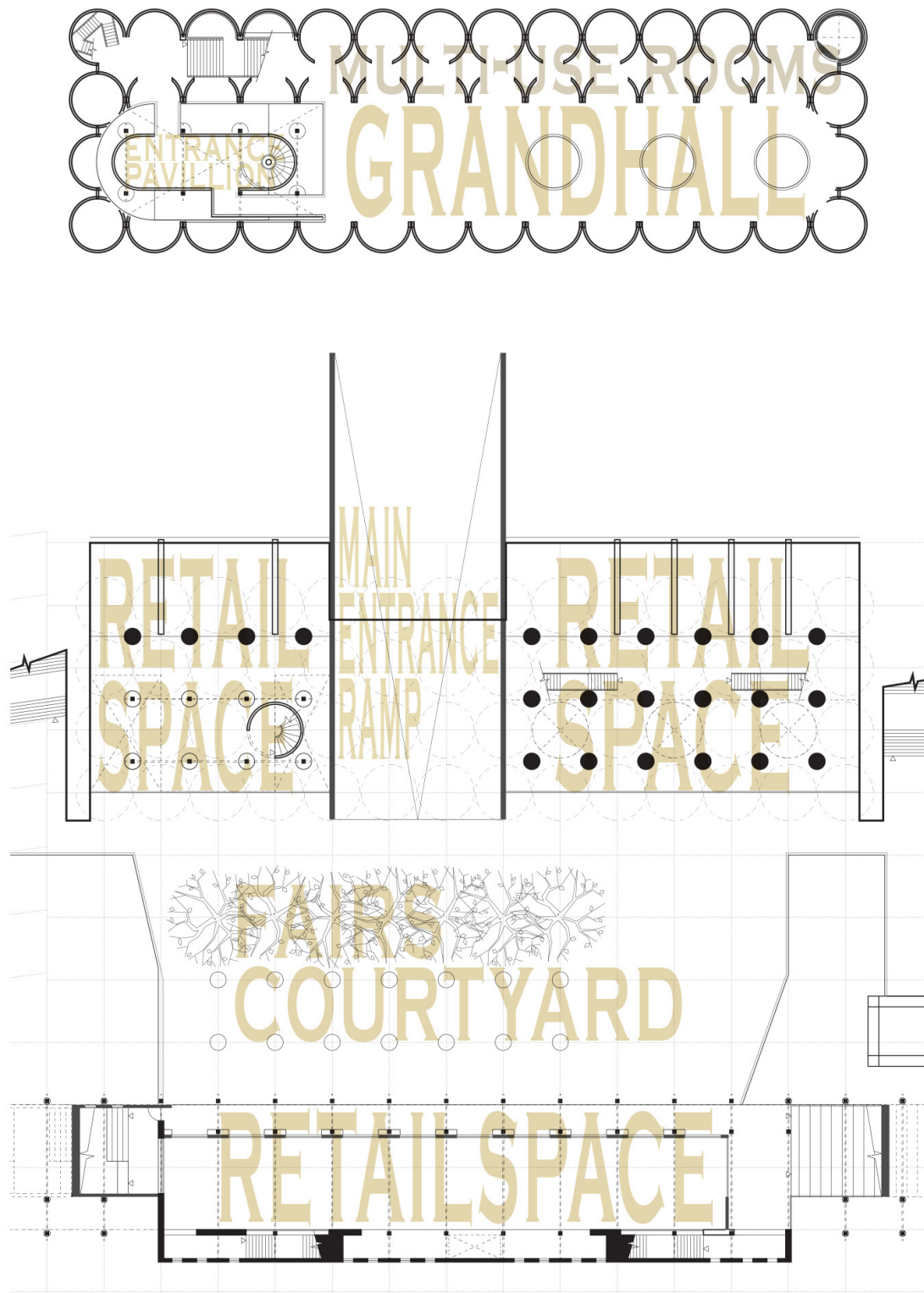
Ground floor plan and the 2nd floor plan showing programming layout - family of fairs

The Family of Concert
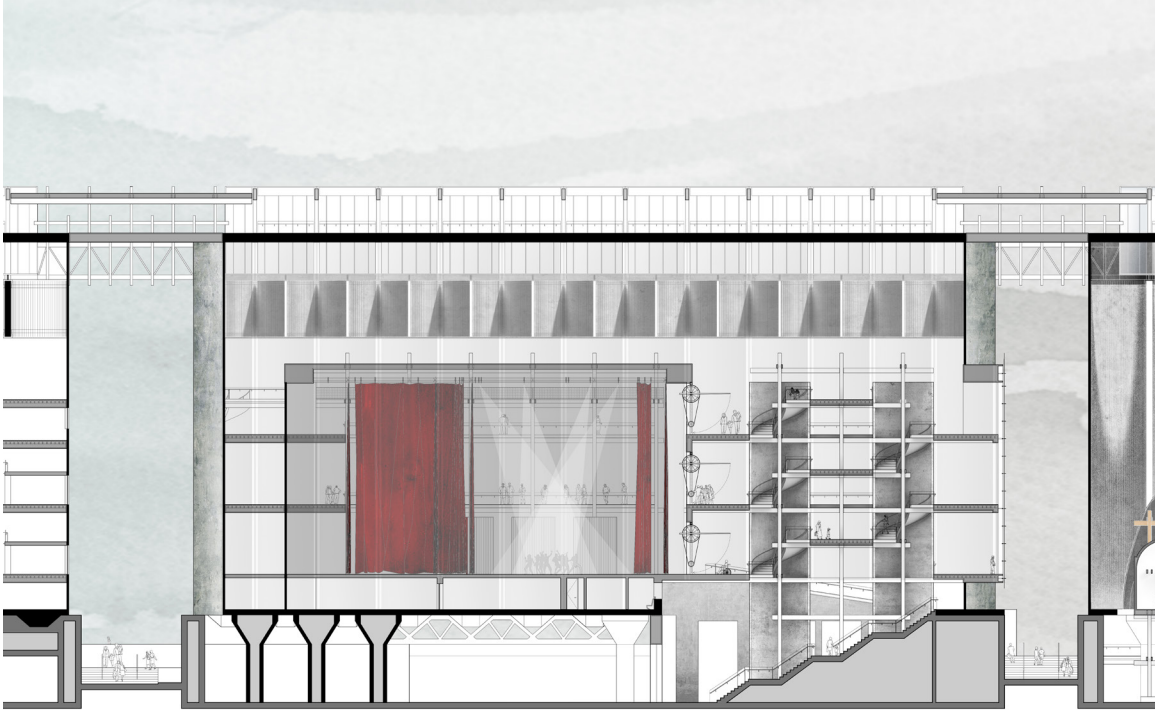
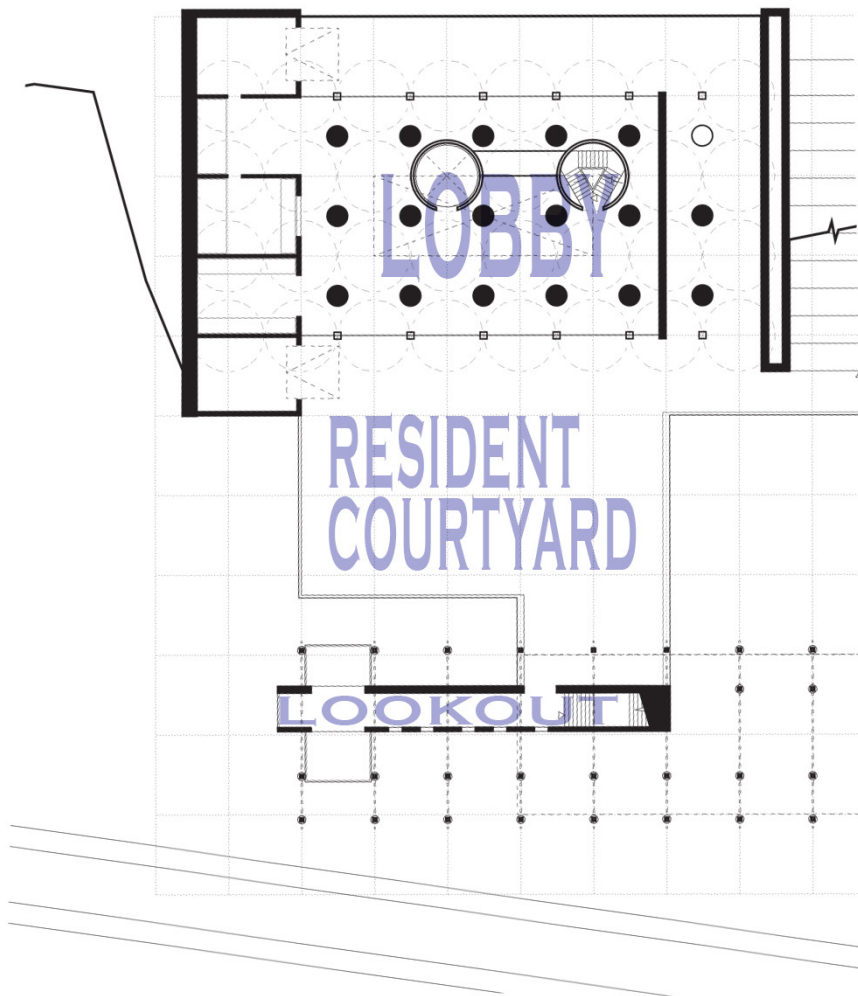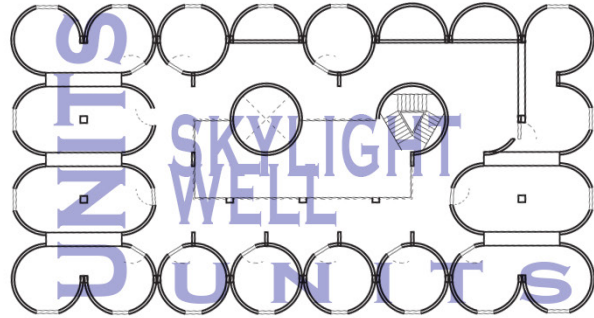Inhabited section showing the space of the "family of concert"
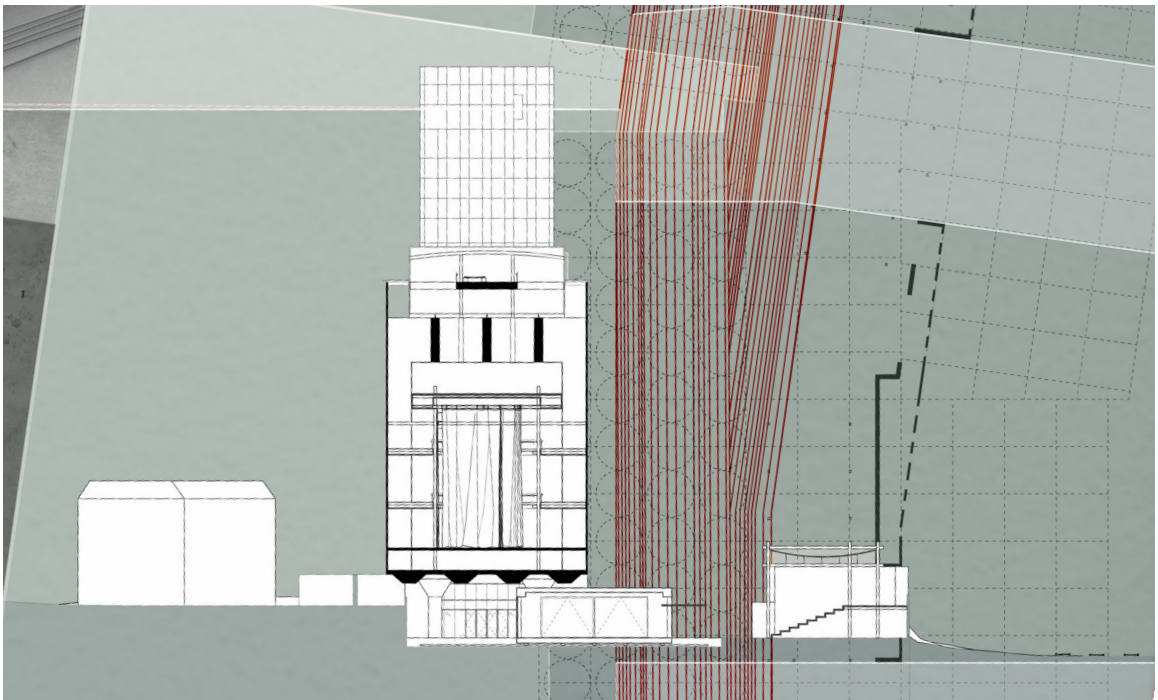
Inhabited section showing the space of the "family of concert"
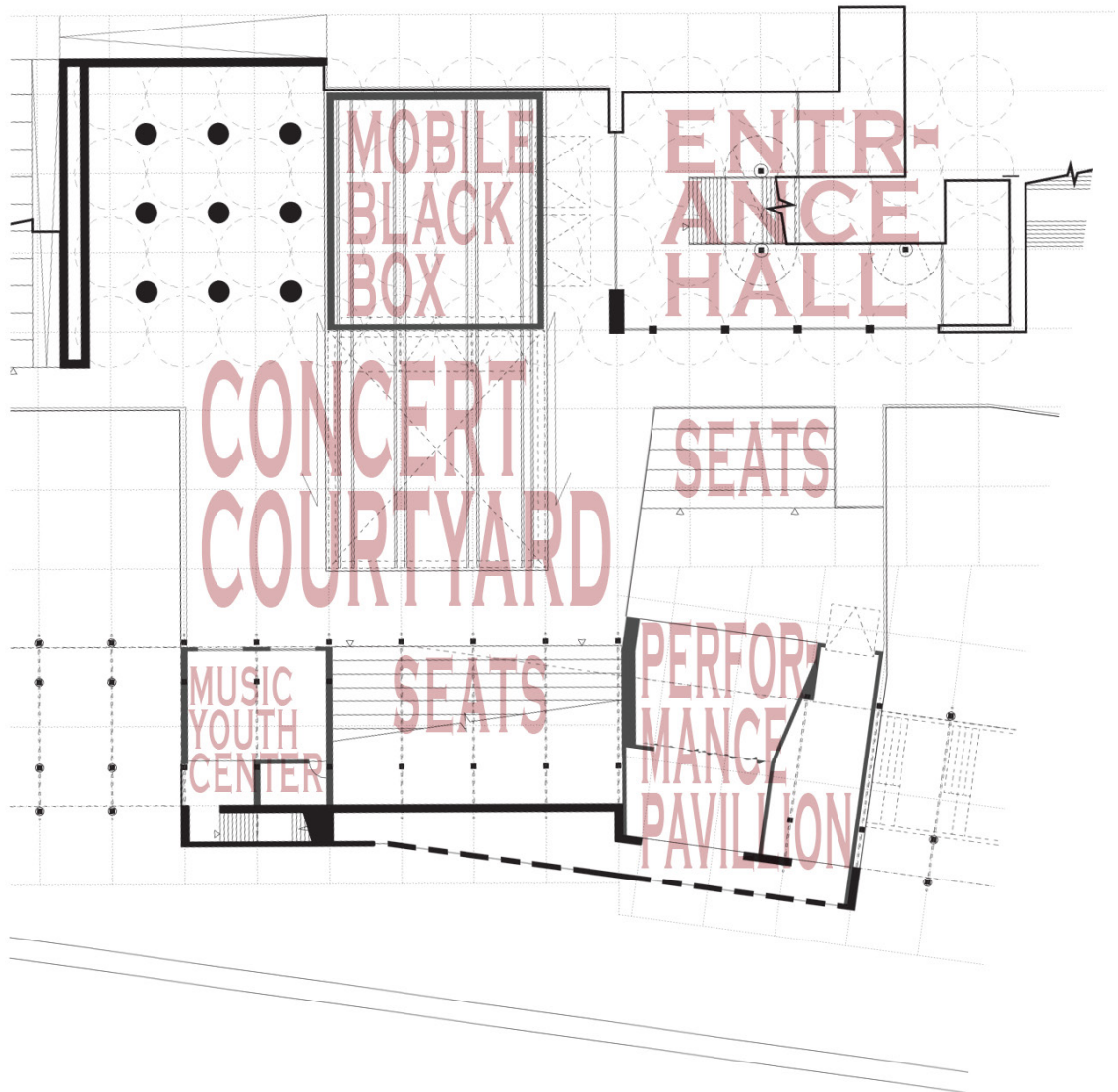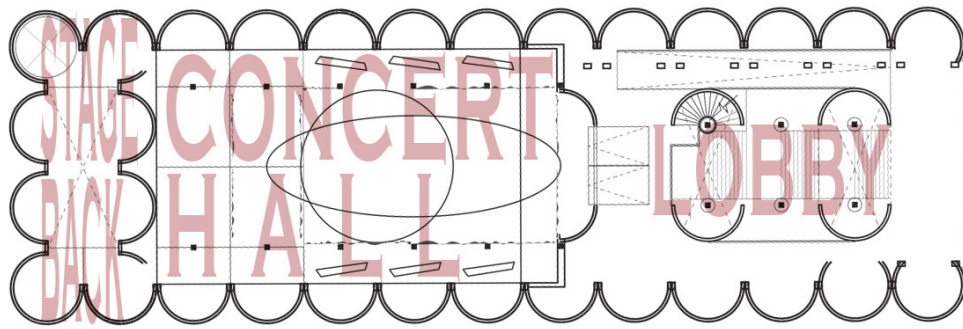
Ground floor plan and the 2nd floor plan showing programming layout - family of concert
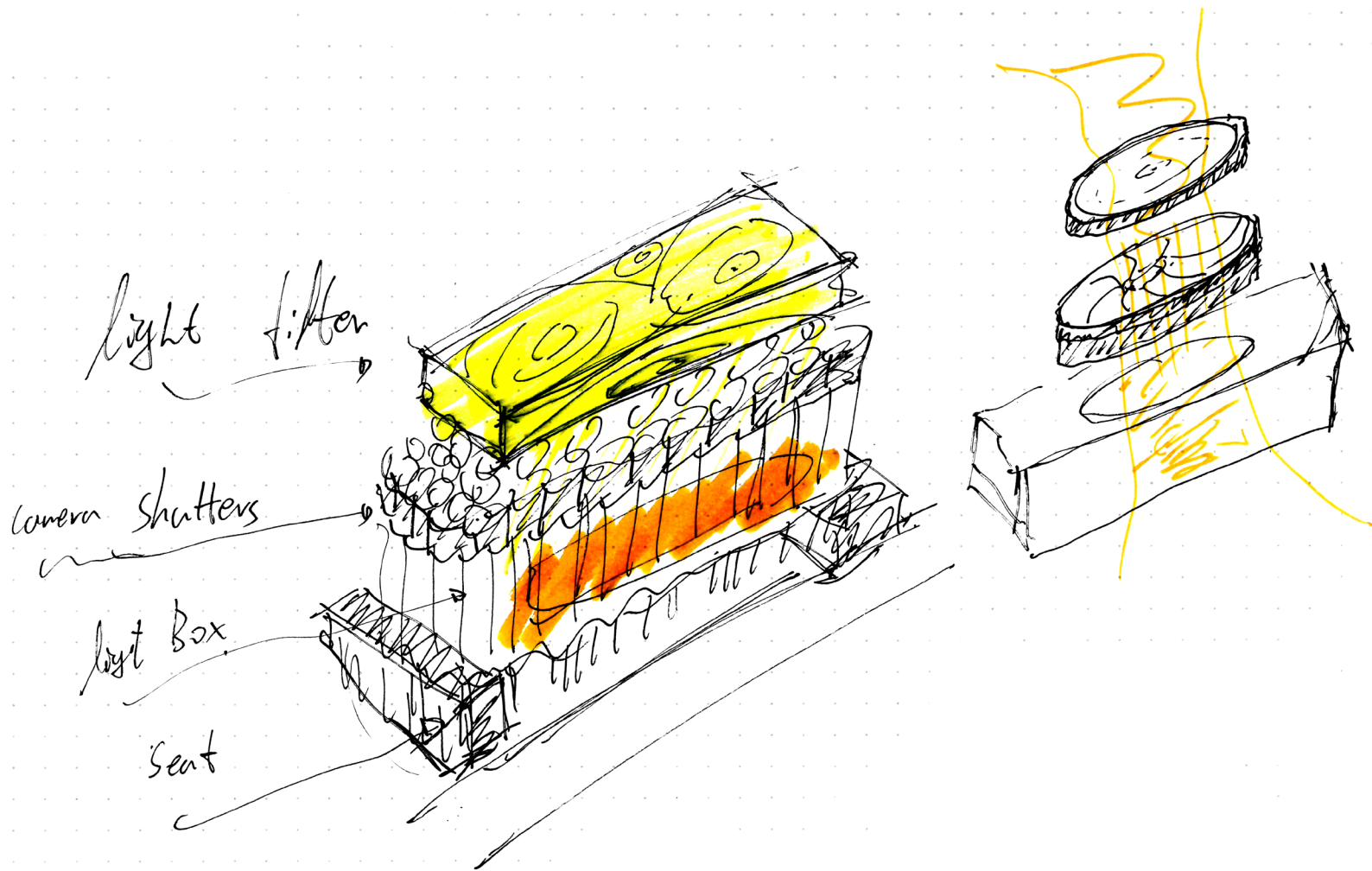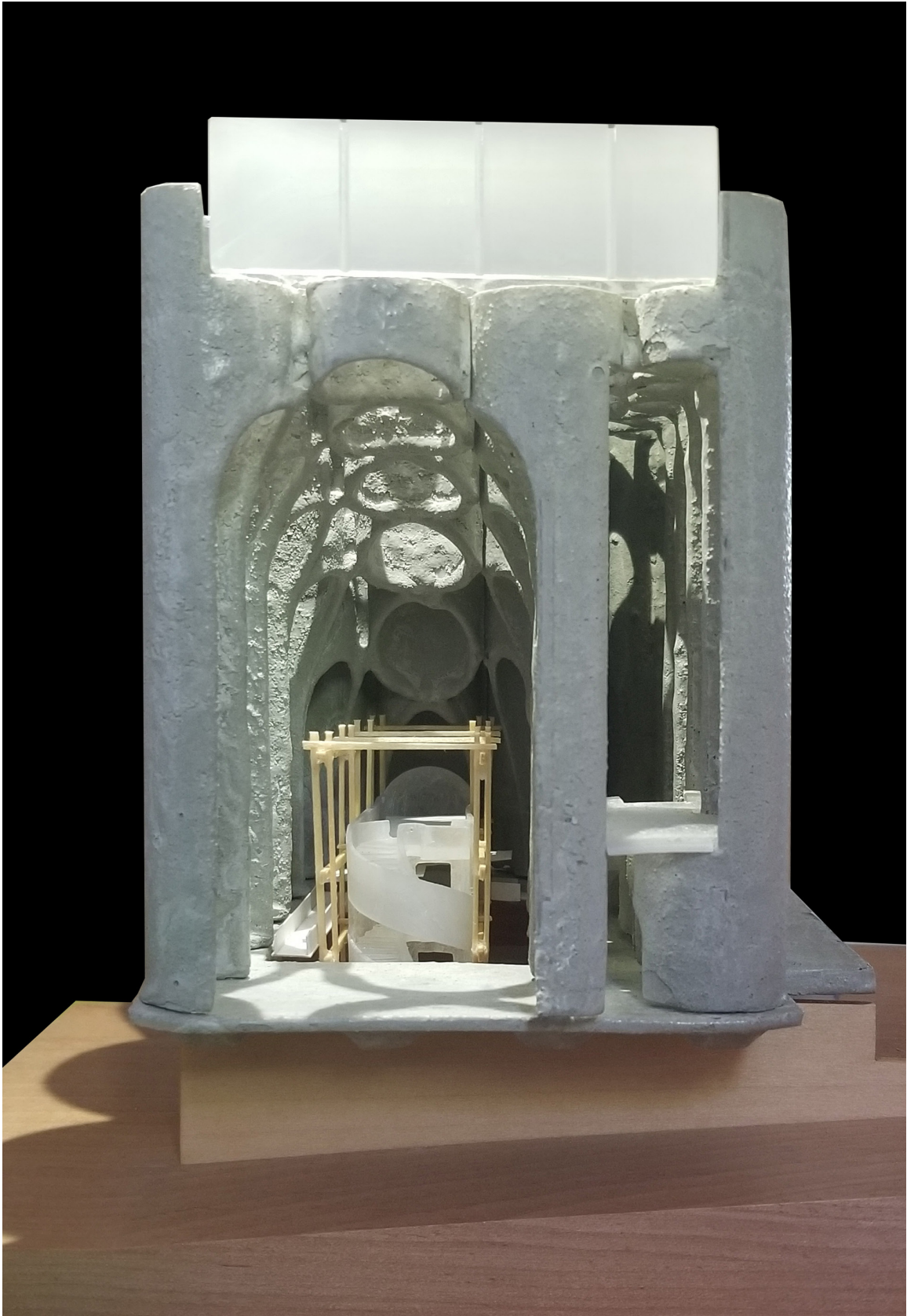
Resident

UNITS SKYLIGHT WELL UNITS

LOBBY

RESIDENT COURTYARD

LOOKOUT

Ground floor plan and the 2nd floor plan showing programming layout - resident

7 floor plans in series

light filter

camera shutters

light Box
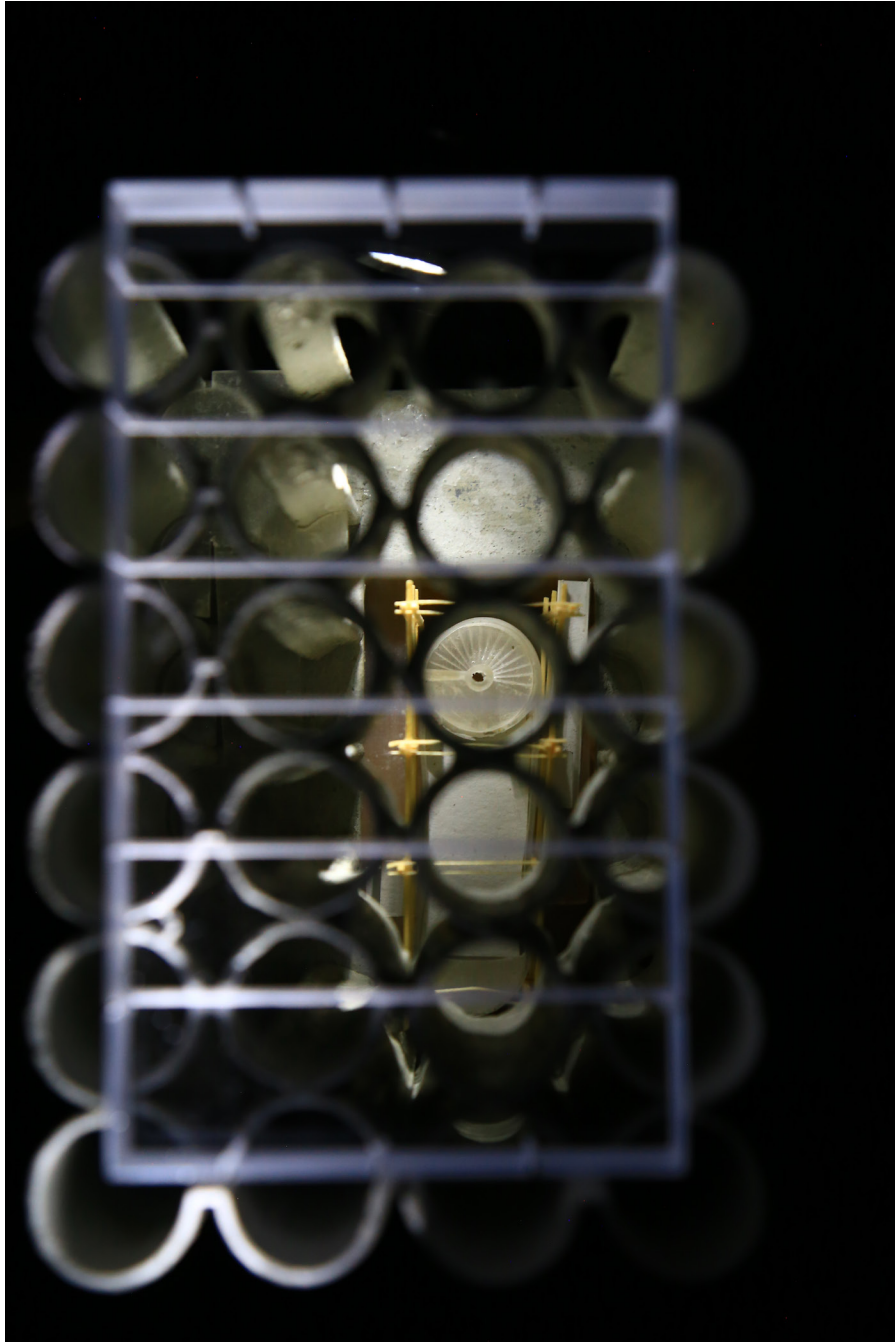
Seat

Sketch showing the idea of "natural light assembly"

Model photo showing the main hall space with light coming through the top floor

Model photo showing the idea of transparent floor

CHAPTER 5: CONCLUSION

The city of Halifax is experiencing rapid growth and transformation. With a significant identity of a modern dwelling city, public life and education are playing vital roles in the city's development. Many historical monuments in the city are positively participating in daily public life. They also geographically form a linear pedestrian zone that provides an environment for the growth of education, art, music programs, public recreation, and commercial activities. However, the Halifax granary and its surrounding landscape are becoming a missing point in this continuous "monuments link". At the same time, the Halifax granary is a monument that is part of history and the city's identity. It carries a strong monumental and spatial quality. It has the potential to embrace the public realm and relink the continuity of the public pedestrian band in the city through reprogramming and design.

In this thesis, a series of design interventions are tested from a "counter-monument" point of view. The idea of "three families" imported and brought to the various public programs came together and made the old monument a hybrid building. The "three families" strategy took advantage of the linear form of the building and the landscape. The building provides various spaces for public programs with a high level of flexibility. A linear pedestrian pathway and a series of courtyards were formed on the site to create a correspondence between the inside and outside programmatic-

ally, and the pedestrian pathway is connecting the site to the city from multiple directions. The street interface is opened up. And the inner space of the granary and the public courtyard connect with the street on the other side. The previous missing elements in the urban public realm are addressed by turning the granary into a "counter-monument".
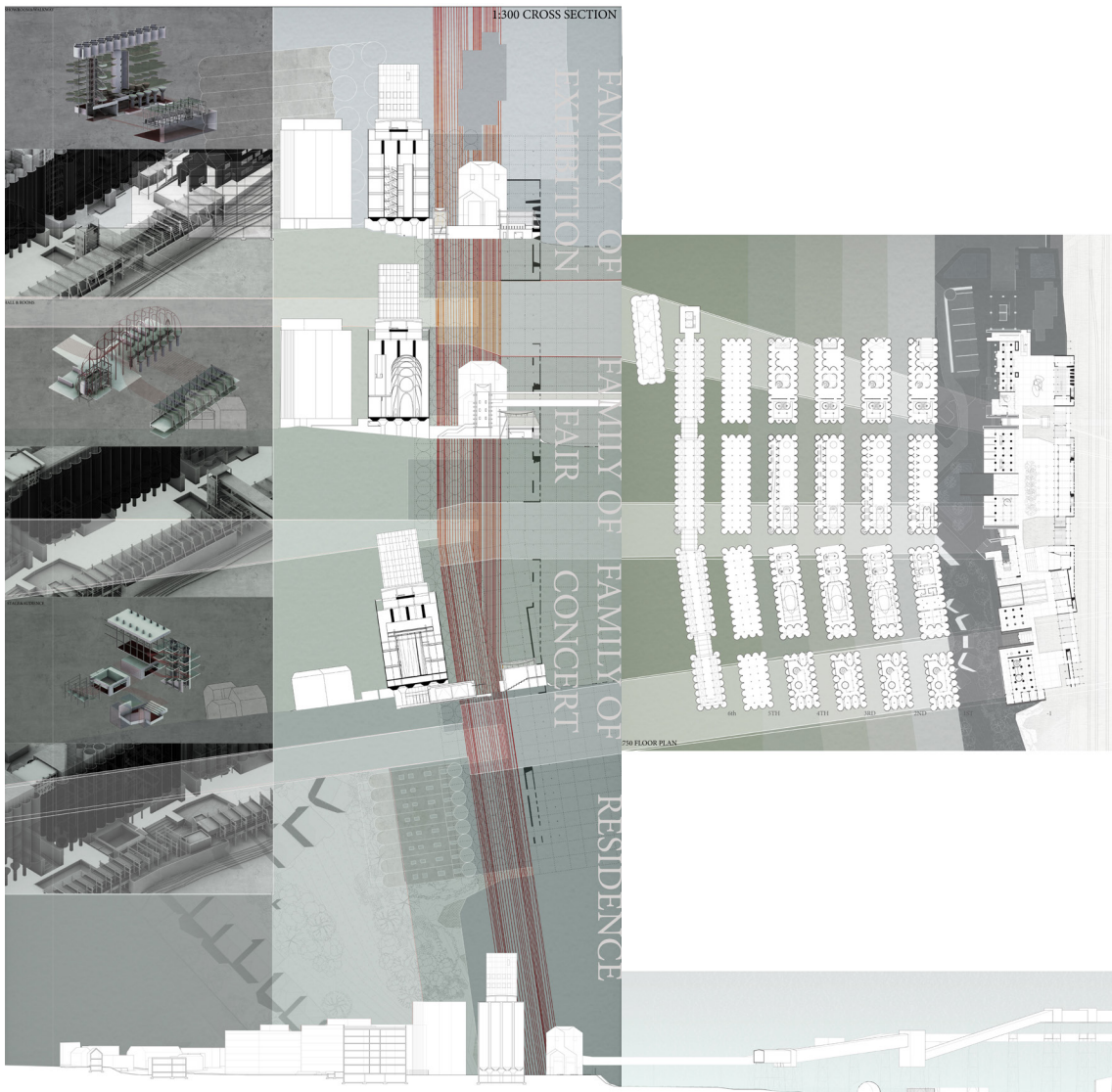
Hybrid drawing showing the programming idea and showing the camparison of "old and new" in cross- section.
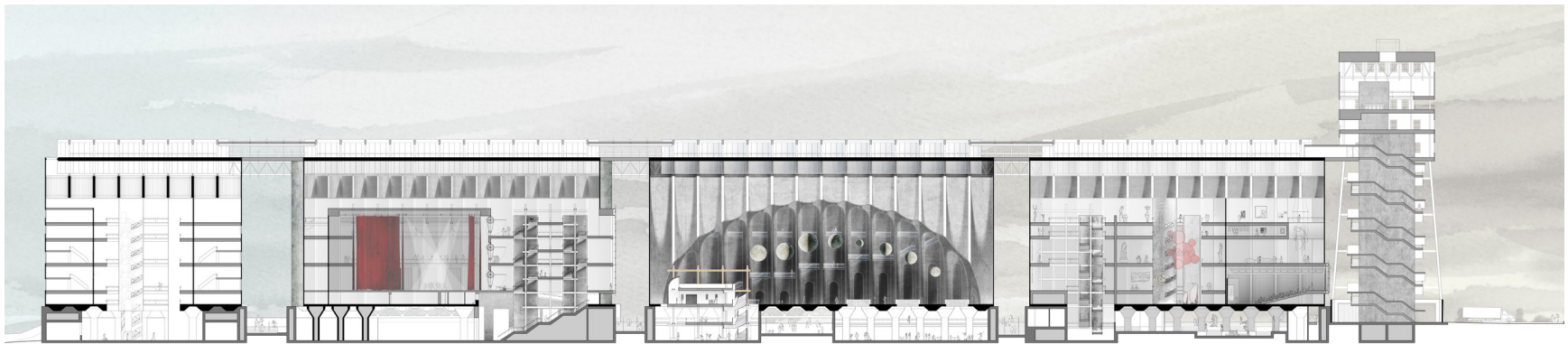
1:100 scale inhabited long section

Inhabited cross section - family of fairs

Rendered image looking from the "family of exhibition" courtyard showing a sculpture exhibition taking place
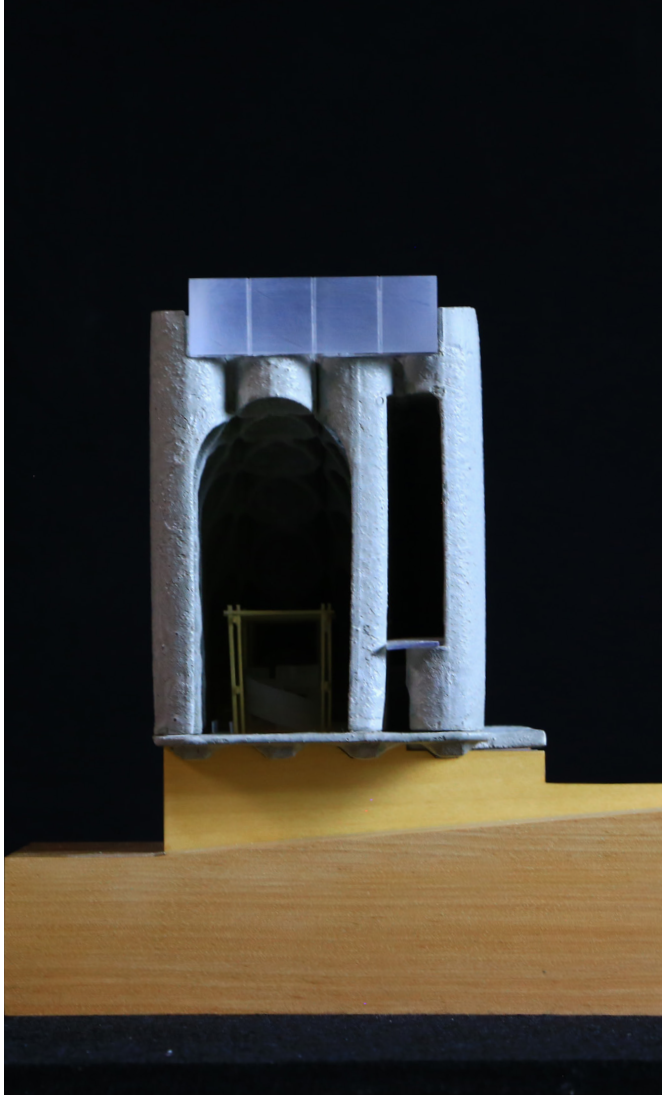
Rendered image looking from the "family of fair" main hall showing "Ai Weiwei's sunflower seeds" exhibition in imagination.(Base photo from Ai Wei Wei/Tate Photography, 2010)
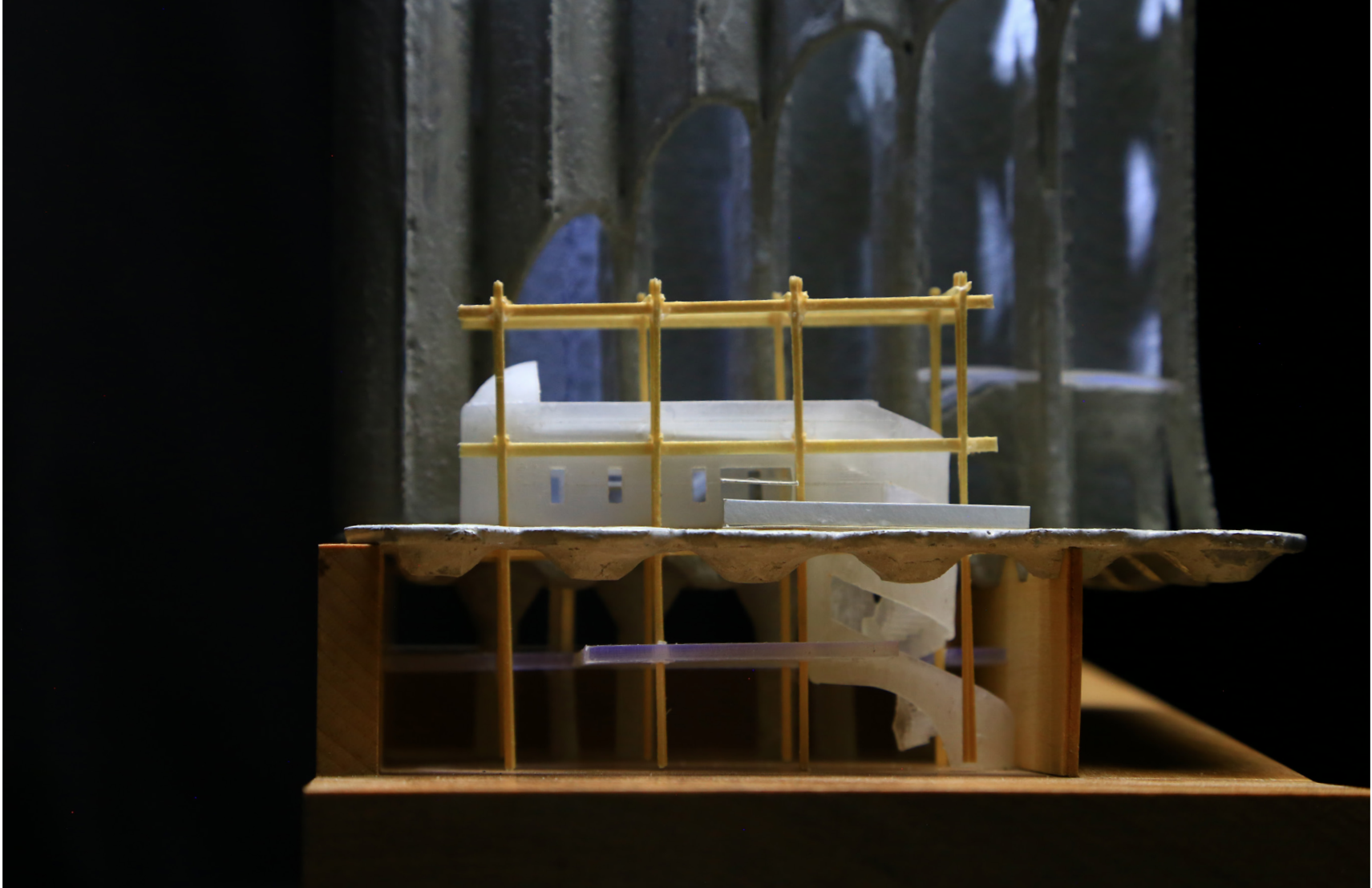
Rendering image showing the proposed design with the urban context - looking at the building from the industrial port area

Photo showing the sectional model assembly

1:100 sectional model showing the components assembly and the idea of materials

Model photo showing the infilled new architectural piece in the grand cutting hall

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