City and Performance Centre

Adaptive Artist Spaces

CHALMERS SCHOOL OF ARCHITECTURE

ARCHITECTURE AND URBAN DESIGN

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Abstract

I represent the discourse around social systems that emphasise necessary artist spaces and the permanent city fabric as a shared space prototype. Its design for adaptive agents and different assemblages makes the City and Performance Centre a space for artists, community, and permanent government agencies. The focus of the adaptive system contextualises the sharing of dense spaces within the value generating context at Frihamnen. My discourse is about ways disproportionate and lacking social systems can be provided with adequate art, community, and government spaces.

The City and Performance Centre involves dense artists spaces as social systems designed for adaptive public spheres and different contexts. Its adaptive stakeholders value all fine art categories, dense city fabrics, and active planning criterion. Creating these values at Frihamnen is the state and outcome of the City and Performance Centre's shared spaces. My master thesis tests its discourse through prototype design, drawings, model studies, cultural studies, base precedent systems, and interviews.

My master thesis is a research for design project. I formulate my prototype to involve dense artist spaces as social systems designed for adaptive criteria. My base architectural system identifies this with design for different assemblies to represent the discourse around its social systems. The states and outcomes of the social systems at the City and Performance Centre demonstrates the intrinsic public context for the city of the future; this is shown in terms of shared spaces, culture, values, and social systems.

Keywords: artist space, community programme, government agency, shared space, adaptive agents, design for difference, social system, organisation, public context, research for design

Bachelor Degree:
B.Sc. Architectural Studies

Master´s Programme:
Architecture & Urban Design

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Supervisor: Kengo Skorick

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Part 1: Base Architectural System

Stakeholder Systems

WHAT?

The City and Performance Centre represents the social system discourse around artist spaces and the permanent city fabric as an architectural proposition. I look in what ways the social systems are important for its stakeholders. By comparing temporary events, and permanent backdrop precedent studies the important social lives, social experiences, and social catalysts are distilled as relevant systems for its stakeholders. In becoming the Base Architectural System, these personal and audience social formations define the discourse around the social system sphere and context for the City and Performance Centre's stakeholders. To activate the social system sphere and context of the Base Architectural System I work with a prototype which explores the subject of my master's thesis: adaptive artist spaces. The prototype shares spaces between temporary artist spaces and the permanent city fabric as spatially similar assembly block prototypes. The City and Performance Centre's major field of study takes place within a social system where government agencies, community spaces, and cultural interactions are disproportioned and lacking for its stakeholders.

Göteborg's Kulturkalas

Inspirational Precedence

New Street Spaces: Do it yourself (DIY) mosaics was a ***social experience*** on the busy street and anyone could create their own mosaic here. By breaking apart plates into small chips, arranging them to a drawing, and then glueing them together an art experience was offered to the public.

New Artist Spaces: Many of the tents, which covered the Trädgårdsföreningen park, offered a ***social life*** for child arts and crafts, learning, etc. Barn Radion offered a carnival tent.

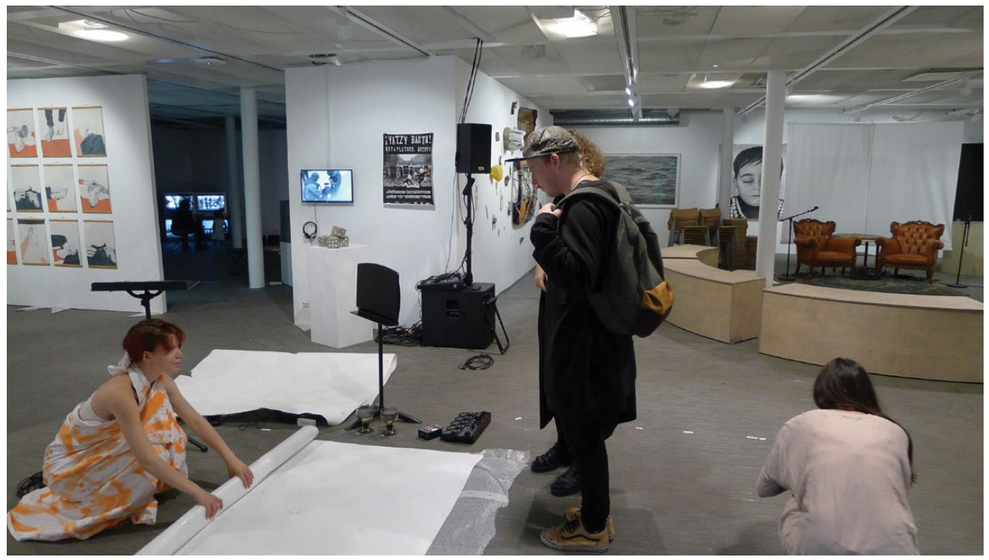
New Shared Functions: Ateljé Vaxthuset offered a ***social life*** for visitors to paint. This greenhouse is normally used to keep the garden maintained, but for the Kulturkalas Göteborg's Kunsthall shared this space by installing a protective floor.

CONTRASTING TEMPORARY EVENT VS. PERMANENT BACKDROP

"In order to move towards a more distinct knowledge economy, ... [c]ulture is one of the [necessary] driving forces. It supports the service sector and is important for regional development, growth, job opportunities and new products" (Jarkiewicz, Shillingford, Andersson, 2012).

Re-purposing Street Spaces: Street performances were plentiful and kept the atmosphere lively, and were organised to offer a pleasant ***social experience***.

Re-purposing Artist Spaces: Existing organisations let cultural groups use their buildings for organised ***social catalyst*** performances.



Re-purposing Gallery Spaces: A-venue teamed up with student artists from Valand academy and made an exhibition space built up from the student's work. At this ***social catalyst***, the broad exhibition space was shared between the different students.

RiverCity Gothenburg

Inspirational Evidence

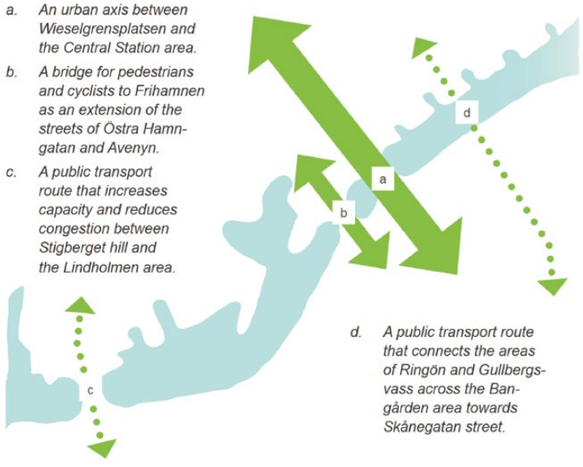
By Ekstedt. J., 2012

LOW VALUE WATERFRONT PROPERTY AS POTENTIAL FOR ARTIST SPACES

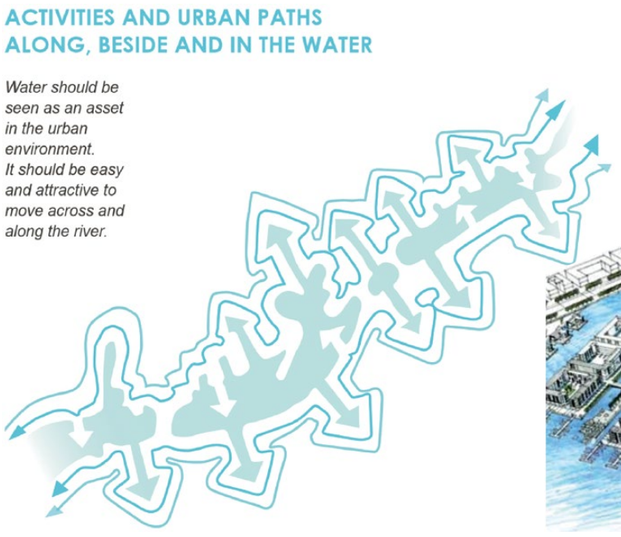
RiverCity Gothenburg is a strategic plan with similarities to my master's thesis outcomes.

The RiverCity Gothenburg planning report includes strategies and a researched account of why it benefits Gothenburg to develop the city in these ways. I first look at each strategy- *Connect the City, Embrace the Water, and Reinforce the Centre* in more detail. I then discuss how the context in the planning report is relevant for active and dense artist spaces. I begin by discussing the prominent designs that inspire my master thesis.

RiverCity Gothenburg is very similar as a plan to the City and Performance Centre's outcomes. It is "built around the principles of the compact city. There is a wide variety of meeting places and activities. RiverCity Gothenburg is dynamic." (pp. 6) The compact city, variety, and dynamic contexts inform me how this planning report is offering development along the lines of shared spaces for artists at a relevant location in Gothenburg. As a system, the city context that the planning report departs from is useful for me to consider how my master thesis uses all sorts of derelict spaces to turn them into active and dense artist spaces while also following Gothenburg's vision to be a sustainable city.

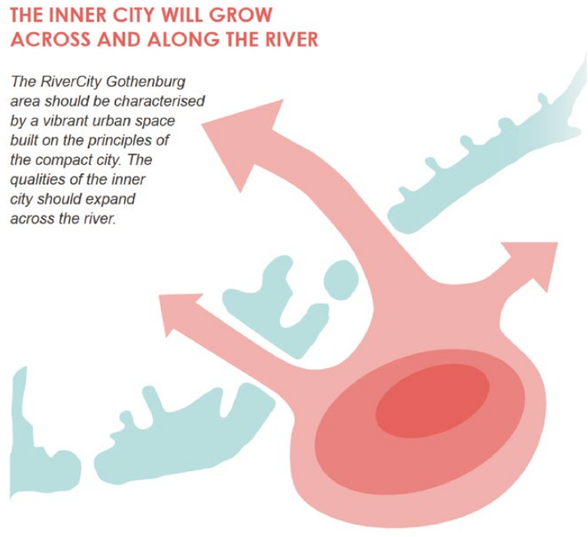


Connect the City is based off the size and density of each development district that is a part of RiverCity Gothenburg, and how that leads to better conditions to develop a strong diversified economy (pp. 10). "The large area covered by RiverCity Gothenburg, over four square kilometres, is in the very heart of the region and will be easily accessible from a large part of West Sweden" (pp. 9). The close relationship between the water and the city has had historical significance for Gothenburg, and a new and improved access to the waterfront is highly important for people to appreciate the plan (pp. 22).



"Through RiverCity Gothenburg, the various parts of the city can be brought together. The river and the water add personality to the area. Shipping and port activities give the area a distinct character and at the same time reflect the rich history of the city" (pp. 9).

Embrace the Water references Gothenburg's relationship to the Gota Älv river. Historically Gothenburg has had a close relationship "between the water and the city with thriving trade and the shipbuilding industry along the river." Recently, people's connection to Gota Älv has diminished and RiverCity Gothenburg intends to restore it back. With more defined river laws for Frihamnen, the shipping industry, upstream of the bridge Älvsborgsbron, and also by dissolving the border between the river and the city this plan restores historically relevant feelings for everyone. "The water should be part of our urban life with river traffic and marinas, walking paths and activities along the quays and banks" (pp. 22).



Reinforce the Centre connects the city centre across the river as an attractive year-round space where "everything we need in day-to-day life is close at hand" (pp. 25). Here, this is accomplished by building a large number of hubs along Göta Älv which *connect the city* (pp. 28). A diverse economy is historically significance for Gothenburg, and "will be reinforced by providing cultural institutions such as museums, performance venues and public arenas alongside small working premises for studios and workshops." RiverCity Gothenburg will take particular account of the potential offered by architecture and art to contribute to a vibrant, welcoming city (pp. 35).

(Jarkiewicz, Shillingford, and Anderson, 2012)

Planning Approach

North Sea Tall Ships Regatta

Problematic Precedence

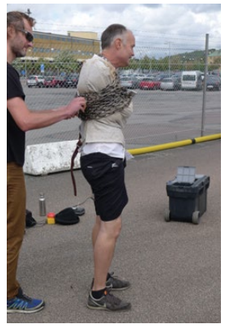
New Street Life: As a way to offer a memorable ***social experience*** the show captured the large audience by recognising Gothenburg with an award, and Sweden by a flyby with a commentary.

New Artist Spaces: Children especially liked to engage with the ***social life*** tools offered for everyone to play with on the sailing ships, and the Swedish armed forces exhibition.

New Shared Functions: The ***social life*** at Frihamnen allowed sailing ships of all sizes ample space, the Swedish armed forces an exhibition space, a vibrant street life, good services, and performance spaces.

CONTRASTING TEMPORARY EVENT VS. PERMANENT BACKDROP

This event evaluates and as a discourse, it brings activity and life to, unused spaces at Frihammen.



Re-purposing Street Life: These ***social experiences*** were themed to sailing and the Swedish armed forces.

Re-purposing Artist Spaces: Uniforms from the sailing ship's contexts were popular ***social catalysts***, and also by people interacting with Swedish armed forces they got this same feeling.

Re-purposing Urban Spaces: Gothenburg knew that so many people are interested in visiting the North Sea Tall Ships Regatta, that the ferry was directed to stop here, and the masses of people were a ***social catalyst*** as expected.

Access Over Ownership

Problematic Evidence

Access Over Ownership – a Typology of Shared Space illustrates the problem I perceive with shared space management. The article first defines the scope of sharing, and then develops a typology for shared spaces. It defines five discriminators that define shared facilities, and then categorically explores the four types of sharing. The working example this article gives is called Mabos in Dublin, Ireland and its research is highly useful for facilities managers.

The findings from the method this article uses are placed together to form the typology. Each of the examples that are similar in "what" spaces they create, are placed together to form the four categories to sharing that are useful for facilities managers and of course for active and dense artist spaces. The other discriminators are, "when", "why", "who", and "how". The first sharing category identified in the typology is sharing a specific facility – a desk or a workspace in a semi-closed community which represents sharing on the smallest physical scale, the second is sharing several facilities in an open or semi-closed community, the third is sharing physical space in a building or a building in itself in a closed community where the most significant growth has been observed, and finally sharing facilities between users in a network of buildings/organisations in an open, semi-closed or closed community is the most extensive type of sharing (pp. 743-745). An example of the discriminators and sharing categories being applied is shown by Mabos in Dublin, Ireland in *Access Over Ownership*.

Type	Sharing a specific facility – a desk or a workspace in a semi- closed community	Sharing several facilities in an open or semi-closed community	Sharing physical space in a building or a building in itself in a closed community	Sharing facilities between users in a network of buildings/organizations in an open, semi-closed or closed community
General attributes	Sharing is facilitated by an owner and directed towards private individuals	Sharing in the form of a building owner making specific facilities available to the general public	Sharing of space inside a building between different groups or organizations	Sharing of facilities between users of different buildings with different owners
When	Simultaneous use	Simultaneous and serial use	Simultaneous and serial use	Simultaneous and serial use
Why	Keep costs down Synergy	Keep costs down Optimized use CSR activity	Keep costs down Optimized use Surplus space	Keep costs down Optimized use Synergy
Who	Access is restricted to individuals approved by the owner	Access is available to a large group of people in addition to own employees	Access is restricted to pre-agreed groups or individuals decided by the owner	Access is available for employees/residents from the buildings involved
How	One party has ownership of the space, and individuals can gain access either free or for a fee	The organization with ownership opens up specific parts of their property for use for the greater public	One party has ownership of the space and makes it available for specific groups or individuals for a fee	Different building owners come together and agree on sharing specific facilities or buildings instead of each having one
Examples	1) Republikken, DK 2) Plywood sheds, USA 3) School sharing, NED 4) The HUB, DK	5) Lyngby Idraetsby, DK 6) Rambøll, DK 7) Frivilligcenter Hillerød, DK 8) Risskov Library, DK	9) FOF Lyngby, DK 10) Fjaltring-Trans, DK 11) Churches, UK 12) Shared use hubs, AUS 13) Space for entrepren., USA 14) Airport passenger buildings 15) Use of school premises, UK 16) Centre for A & E, LTK, DK 17) Denver Shared Spaces, USA	18) Musicon, DK 19) Manchester Media City, UK 20) Shared school campus, NIR

PROBLEMS OF PRESCRIBED MODELS OF SHARED SPACE TYPOLOGY FROM GENERIC GOALS

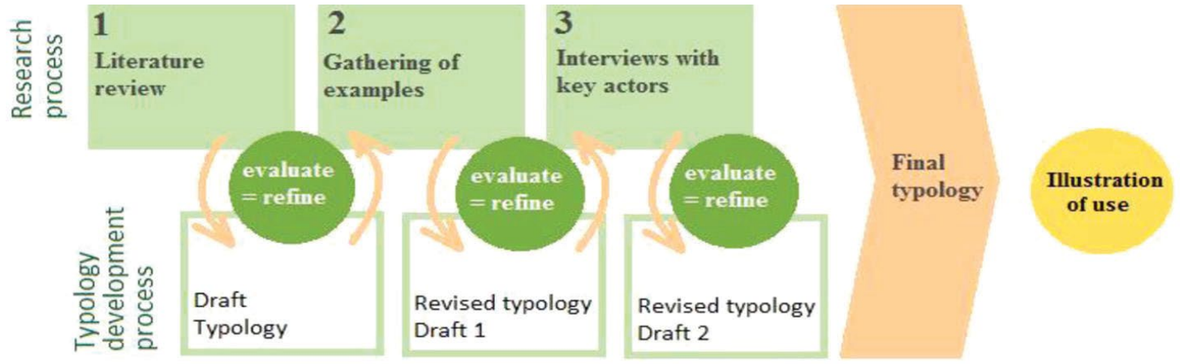
This article evaluates and as a discourse, it provides a prescribed model for both existing and new shared spaces.

Table I. Examples of potential benefits and pitfalls when establishing a shared space

Potential benefits	Potential
• Sustainability (fewer buildings and optimised use) • Synergy (between different users) • Cost reduction (increasing economies of scale) • Better connection with outside world (corporate social responsibility) • Creating a more vibrant atmosphere (avoiding "dead space") • Professional management (in case of third party ownership)	• More complicated logistics • Risk of lack of demand • Management difficulties due to unclear ownership • Less control over availability • Psychological objections due to feelings of territoriality or privacy

Source: Brinkø *et al.* (2014)

The scope of sharing is nothing new, but over the last decade or so, the newly introduced term *sharing economy* has launched a renewed focus on sharing. A *sharing economy* is one in which the border between people's ownership and access has been blurred, largely mitigated by the Internet and social media. However, the sharing has not stopped here and it has now started to move from being about stuff to being about spaces. The history of shared spaces has had relevance for facilities management in the forms of open office spaces, urban shared spaces which include parks, squares, and streets, physically shared spaces, and a common understanding of generic shared spaces (pp. 737-739).



Source: Adapted from Brinkø *et al.* (2014)

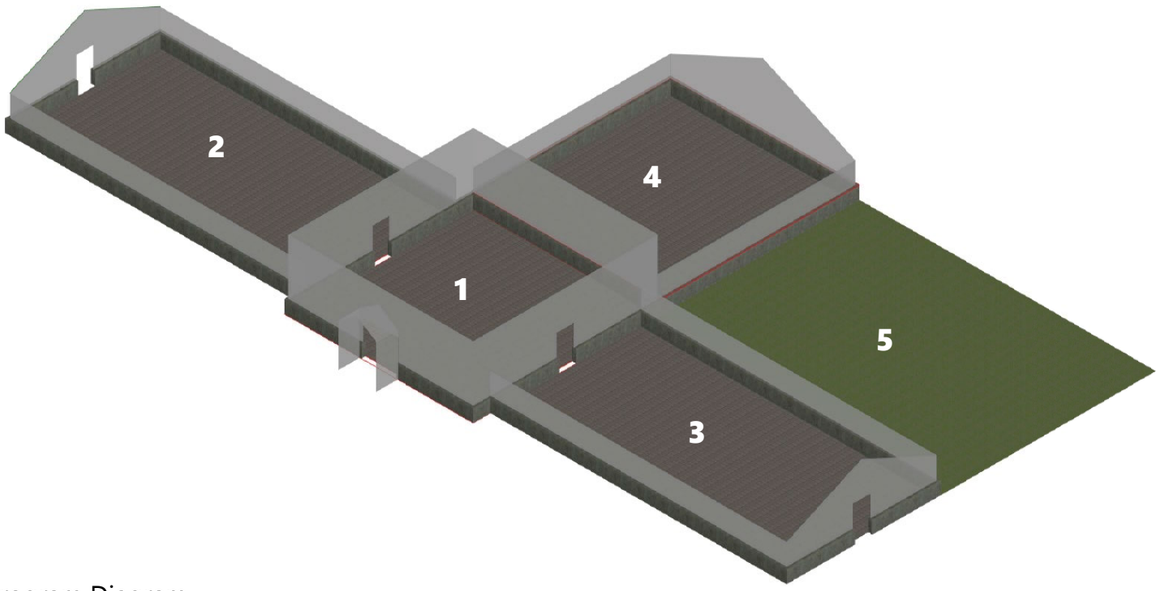
Figure, the typology of shared spaces was developed using this method and research tools.

Access Over Ownership "creat[es] an overview of the different possibilities for working with shared spaces in practice" (pp. 743), which is what the City and Performance Centre approaches through shared space prototypes. It looks at how shared spaces are understood, managed, and what value they bring for companies and cities. Each of these points is important for my master thesis. Even though this paper is "mainly directed towards larger property owners such as municipalities and companies with a facilities management (FM) department" (pp. 737) it illustrates the problem I perceive for active and dense artist spaces too.

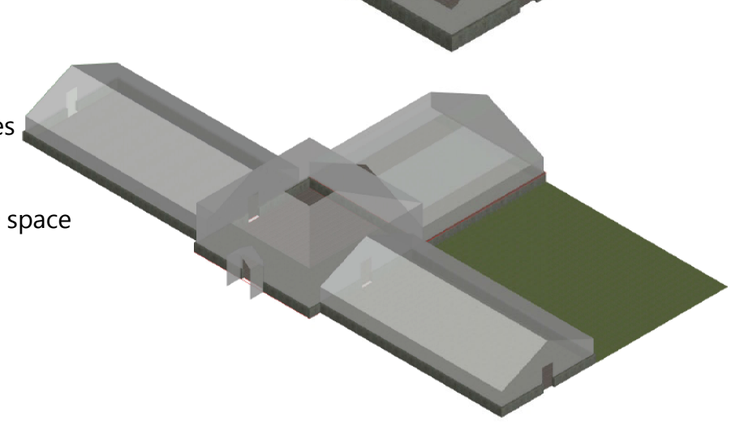
(Brinkø, Nielsen and Meel, 2015).

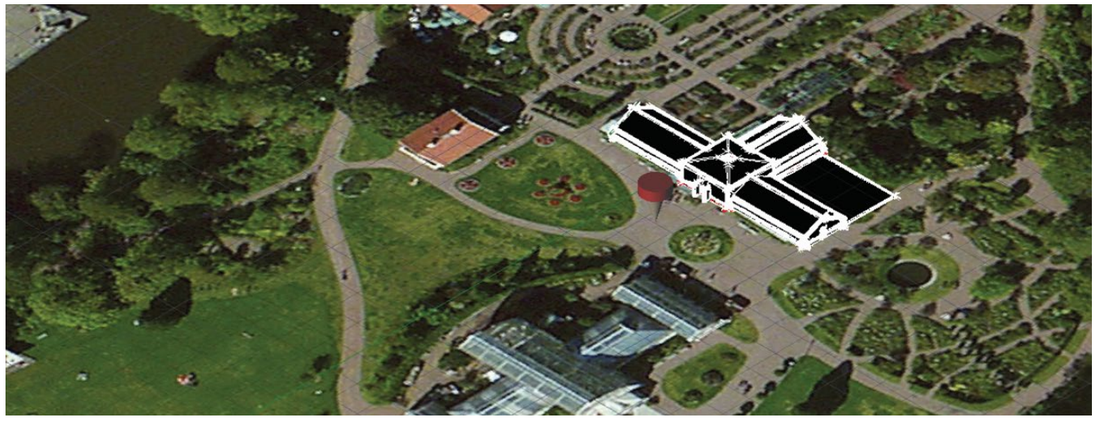
Ateljé Vaxthuset

Base Architectural System



Program Diagram
1. Entry
2. Painting and teaching spaces
3. Child craft spaces
4. Closed space
5. Gardener's outdoor storage space





SHARING SPACE AS AN ADAPTIVE ARCHITECTURAL ARTIST SPACE SYSTEM

Ateljé Vaxthuset was a shared event space which offered people spaces for painting, art and crafts, and culture.

This greenhouse is normally used to keep Trädgårdsföreningen's gardens maintained, but for the Kulturkalas Göteborg's Kunsthall used its central location and appealing neighbourhood as an ateljé. They worked with the gardeners by agreeing to install a protective covering on one of the building's wings and a protective path to this room, and shared the building's spaces.

Adaptive System

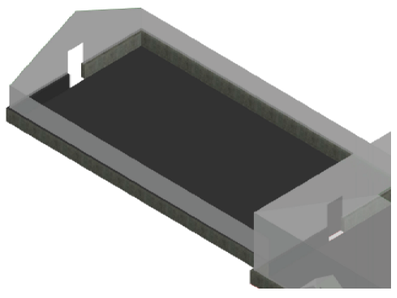
Sharing the greenhouse was done by a polyethylene floor covering.

Difference Discourse

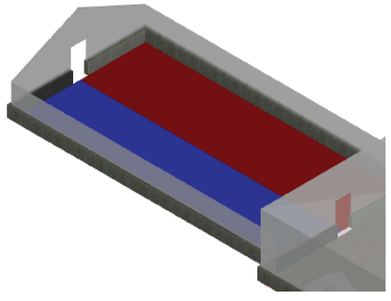
The greenhouse treated the paintings like plants, and they were hung on the wall hooks.

Criteria Focus

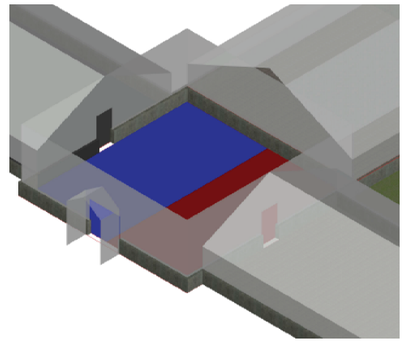
The gardeners did not require the windows to be covered- because of the plants health



The darker colours were surfaces covered with polyethylene so that the space could be shared.



On the blue side were full-height painting spaces, and on the red side were painting courses.



The entry's polyethylene path is the blue side, and the red side was left unprotected.

Difference Discourse

Isolated Social System

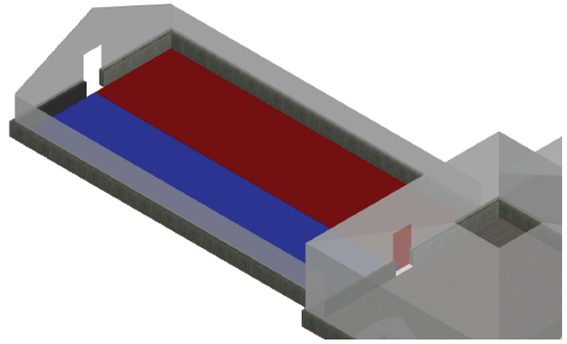
DIFFERENCE BETWEEN PERSONAL AND AUDIENCE SOCIAL SYSTEMS FOR TEMPORARY ARTIST SPACES

Event and backdrop models use different art spaces as social mechanisms, and my prototype mitigates these differences through discourses dealing with physical space.

I compare and contrast the *inspirational precedent*, Göteborgs Kulturkalas Precedent, against the *problematic precedent*, North Sea Tall Ships Regatta. I focus on the social systems in the examples. The personal social systems are offered as physical play spaces. The audience social systems scale to people's social spheres.

ATELJÉ VAXTHUSET, BASE ARCHITECTURAL SYSTEM

The greenhouse treated the paintings like plants, and they were hung on the wall hooks.



On the blue side were full-height painting spaces, and on the red side were painting courses.

	New Street Spaces:	**Re-purposing Street Spaces:**	**New Open/Interaction Spaces:**	**Re-purposing Built/Interaction Spaces:**
GÖTEBORG'S KULTURKALAS:	 Personal ***social experience***	 Audience ***social experience***.	 Personal ***social life***	 Audience ***social catalyst***
NORTH SEA TALL SHIPS REGATTA:	 Audience ***social experience***	 Personal ***social experience***.	 Audience ***social life***	 Personal ***social catalyst***

Adaptive System

Isolated Social System

ADAPTABILITY BETWEEN PERSONAL AND AUDIENCE SOCIAL SYSTEMS FOR PERMANENT ARTIST SPACES

Permanent backdrop models work with adaptive art spaces as undiscriminating social systems.

I compare and contrast the *inspirational precedent*, Göteborg's Kulturkalas Precedent, against the *problematic precedent*, North Sea Tall Ships Regatta. I focus on the social and audience social systems in the examples. The personal social systems are offered as contemplative spaces. The audience social systems work with the backdrop's theme.

New Street Spaces: **Re-purposing Street Spaces:**

GÖTEBORG'S KULTURKALAS:

Personal ***social experience***. The gardens demonstrated a revisited social system.

Personal ***social experience.*** Urban art placed on the busy street.

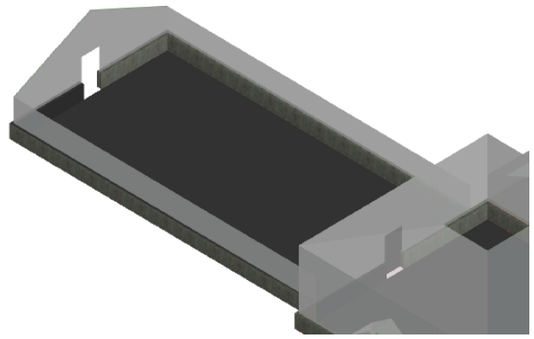
NORTH SEA TALL SHIPS REGATTA:

Audience ***social experience.*** Göteborg's Lord Mayor receiving a reward and opening the event.

Audience ***social experience***.

ATELJÉ VAXTHUSET, BASE ARCHITECTURAL SYSTEM

Sharing the greenhouse was done by a polyethylene floor covering.



The darker colours were surfaces covered with polyethylene so that the space could be shared.

New Open/Interaction Spaces: **Re-purposing Built/Interaction Spaces:**

Audience ***social life.*** The museums were free and worked with this social system.

Audience ***social catalyst***

Personal ***social life.*** People connected to the Göta Älv.

Personal ***social catalyst***

Part 2: Prototype

Shared Space Discourse

PART 2: TABLE OF CONTENTS

WHO?

My prototype explores the potentials of adaptive artist spaces for its agents. This stakeholder discourse responds to social systems designed to work with adaptive assemblages and different discourses that create spaces for artists, permanent government agencies, and community context. The importance of adaptive systems and different discourse values are extracted from my Base Architectural System, which lead to workable shared assembly blocks for the City and Performance Centre. I affirm the assemblage's design for adaptive agents, states, prototype elements, prototype consequences, and prototype parameters as a ***design for difference*** exercise. Discourse responding to my master's thesis social system research places the City and Performance Centre in its Frihamnen context by considering design solutions for states and formations that provide people with adequate art, community, and government spaces.

WHY?

Social systems have an intrinsic public context for values, culture, audience, and personal organisations. The response of my master thesis to social systems for its important stakeholders is a study which has potential to modify enough contexts so that social systems are constructively upheld, and approachable for future uses and generations. Exploring the public considerations for this project to find gaps that artistic interest, the community, and government agency functions exhibit is a part of my master thesis with a relational structure that I hope gives the reader a perspective into the working of the adaptive artist spaces.

Isolated Prototype

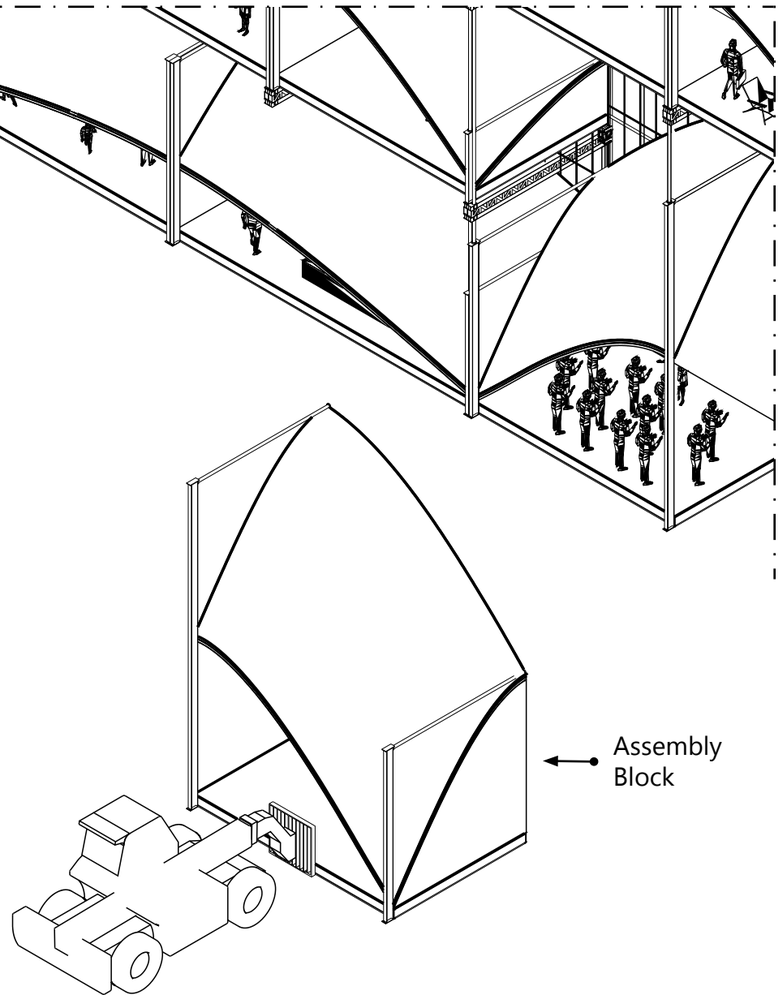
Adaptive Agents

SPATIAL ELEMENTS AS PROTOTYPE FORMATION FOR ASSEMBLY BLOCK CRITERIA

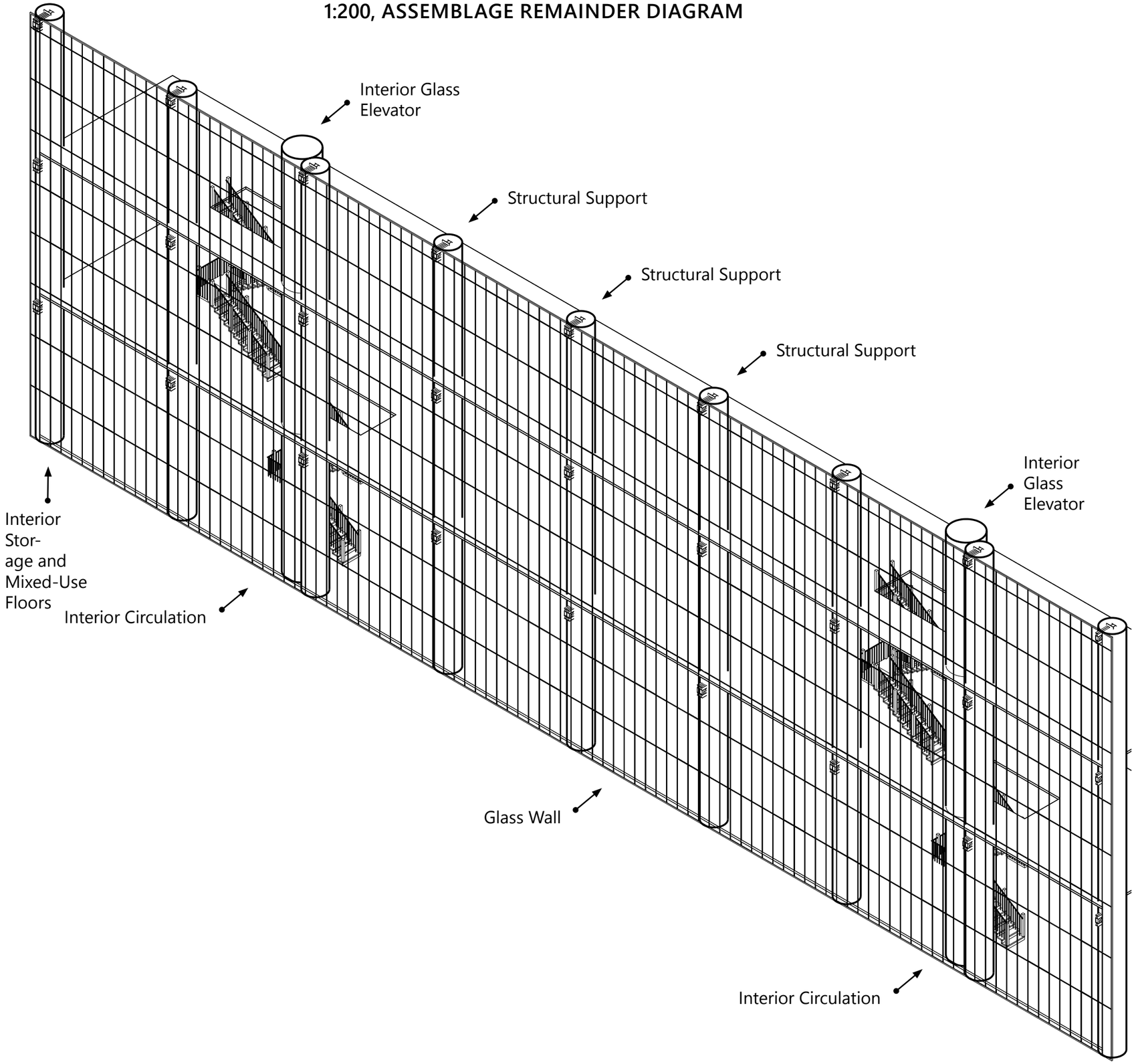
I focus on how to create a prototype which includes adaptive agents, different design discourses,, and on how the assemblage criteria work with the City and Performance Centre's social systems.

I work with the different discourses of artist space's adaptive agents by comparing them with precedent social systems. Artist spaces which value all fine art categories, active communities, and appreciate permanent government contexts define the prototype's assembly block formation. Sharing these spaces for the stakeholders is best accomplished by discourses which spatial element's don't discriminate one space over another based off their backdrops: this is accomplished through their adaptive agents.

1:200, MOVING OF AN ASSEMBLY BLOCK



1:200, ASSEMBLAGE REMAINDER DIAGRAM



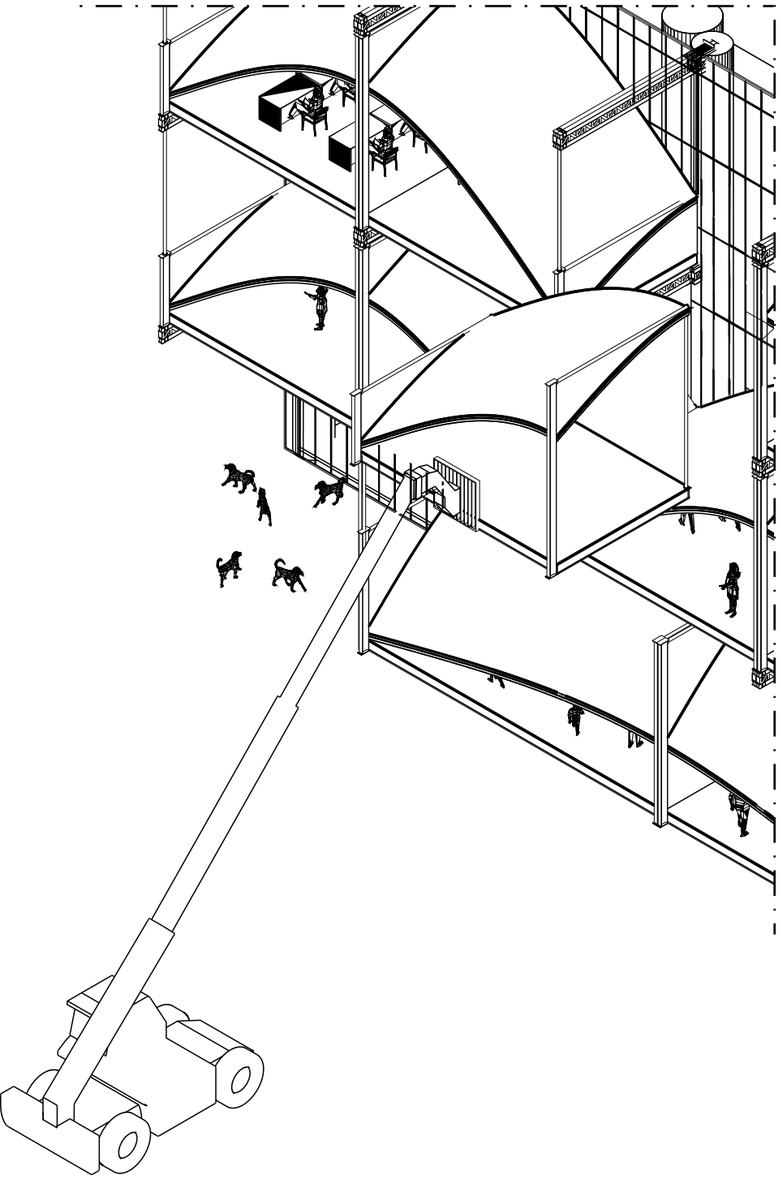
Isolated Prototype

Adaptive Agents

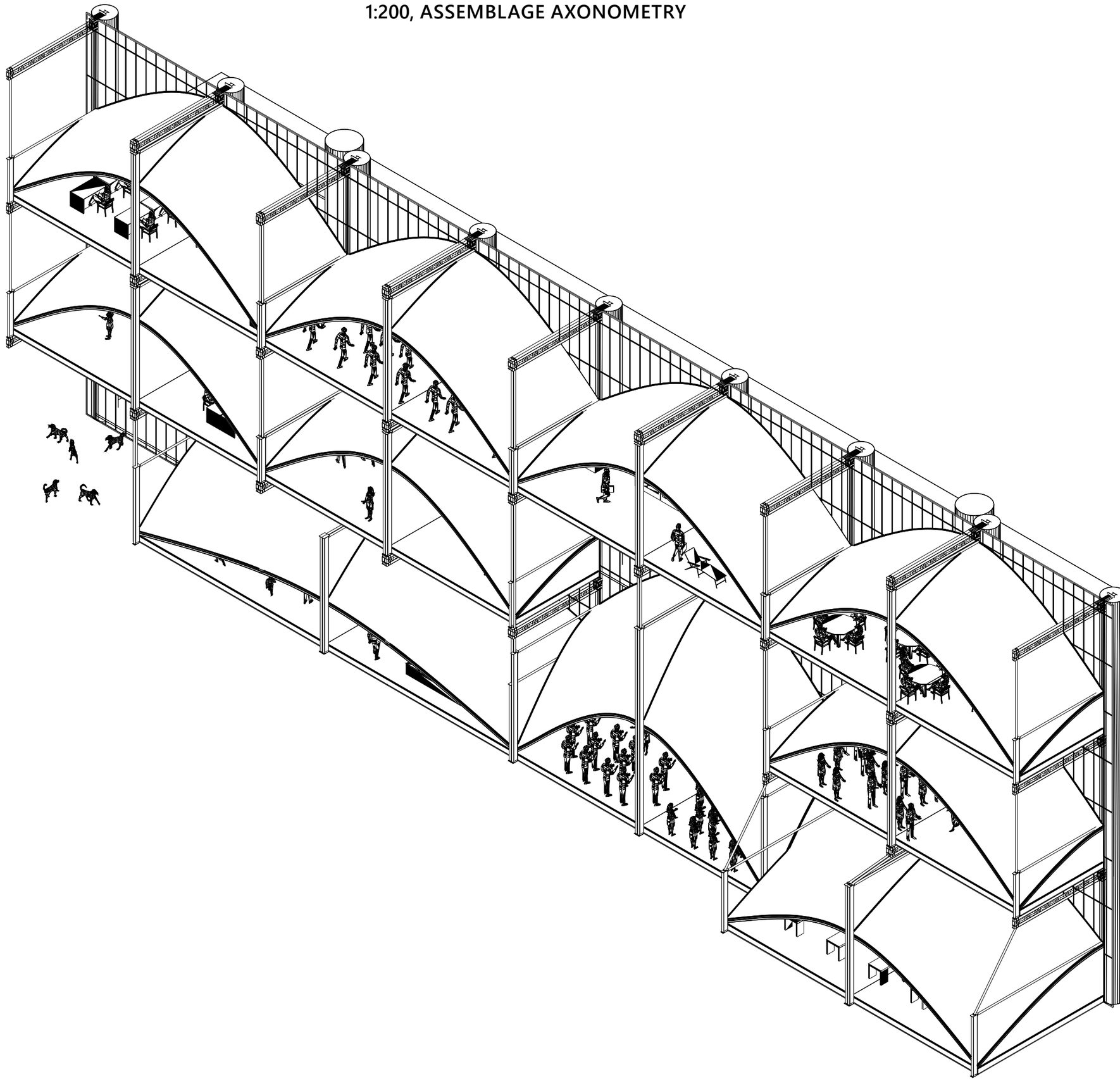
SPATIAL ELEMENTS AS PROTOTYPE FORMATION FOR ASSEMBLY BLOCK CRITERIA

I focus on how to create a prototype which includes adaptive agents, different design discourses,, and on how the assemblage criteria work with the City and Performance Centre's social systems.

1:200, MOVING OF AN ASSEMBLY BLOCK



1:200, ASSEMBLAGE AXONOMETRY



Loading Mass

State

ASSEMBLY BLOCK DEAD WEIGHT AS A GENERIC PROTOTYPE STATE

I determine that a concrete shell system is ideal for the spatial criteria of the City and Performance Centre. Its design is the most lightweight structure for its dimensions and thus it emphasises adaptive shared space's different discourses.

Shell assembly block:

· Reinforced concrete 80 mm
· Wood web truss floor structure
· Floors designed for "Manufacturing, Light" Uniform loading

Max lift 65 tonnes, 637 kN

Max lift 45 tonnes, 441 kN

(Allen, Zalewski and Michel, 2010)
(Bangladesh National Building Code, 2012)
(Konecranes, 2015)
(Magni Telescopic Handlers, 2016)

This side is set with a height increase of .42m for each 1.25m length

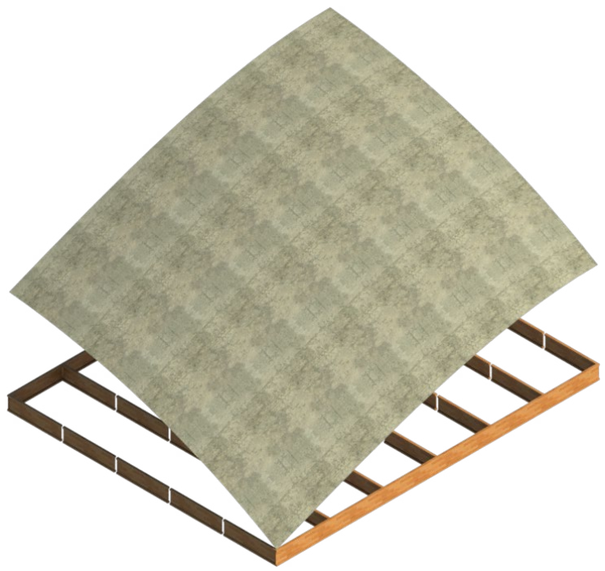
This side is set with a 2m half-crown height

32.7 kN

98 kN

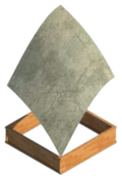
187 kN

230.9 kN



537.9 kN

This side is set with a height increase of .83m for each 1.25m length



This side is set with a 1m half-crown height

32.6 kN

97.9 kN

189.4 kN

238.3 kN

566.5 kN

Prototype Catalogue

State

Crown Height	yL values	xL values: 1.33	1.54	1.82	2.66	3.07	3.64	3.99	4.61	5.45	5.35	6.14	7.27	6.65	7.68	9.09
		← 1.25 m spacing →			← 2.5 m spacing →			← 3.75 m spacing →			← 5 m spacing →			← 6.25 m spacing →		
		0.415	0.83	1.245	0.83	1.66	2.49	1.245	2.49	3.735	1.66	3.32	4.98	2.075	4.15	6.225
		a+.415	b+.83	c.+1.245												
5m	↑	**14.79**	182.4	193.3	208.2	364.8	386.6	416.4	547.3	579.9	624.6	731.2	773.1	832.8	912.0	966.5	1041.0
4m	13.75 m spacing	**14.43**	181.0	191.7	206.3	362.0	383.4	412.6	543.1	575.0	618.9	725.6	766.7	825.2	905.0	958.4	1031.5
3m		**14.14**	179.9	190.4	204.8	359.8	380.8	409.6	539.7	571.1	614.3	721.1	761.5	819.1	899.4	951.9	1023.8
2m		**13.92**	179.1	189.5	203.7	358.1	378.9	407.3	537.3	568.3	611.0	717.8	757.7	814.6	895.3	947.2	1018.2
1m	↓	**13.80**	178.6	188.9	203.0	357.2	377.8	406.0	535.9	566.7	609.0	715.9	755.5	812.0	893.0	944.5	1015.0
...	↑	**13.63**	167.7	178.0	191.9	335.4	355.9	383.8	503.2	533.8	575.7	672.4	711.7	767.5	838.6	889.6	959.4
	12.5 m spacing	**13.24**	166.2	176.2	189.8	332.4	352.4	379.7	498.7	528.5	569.5	666.3	704.7	759.3	831.1	880.9	949.1
		12.92	165.0	174.8	188.2	330.0	349.6	376.3	495.1	524.3	564.5	661.4	699.1	752.6	825.0	873.9	940.8
		12.69	164.1	173.8	186.9	328.2	347.5	373.9	492.4	521.2	560.8	657.8	694.9	747.7	820.5	868.7	934.6
	↓	**12.55**	163.5	173.1	186.2	327.1	346.2	372.4	490.7	519.3	558.6	655.6	692.4	744.7	817.8	865.5	930.9
	↑	**12.49**	153.1	162.7	175.7	306.2	325.3	351.3	459.4	487.9	527.0	613.9	650.5	702.6	765.6	813.2	878.3
	11.25 m spacing	**12.06**	151.5	160.8	173.4	302.9	321.5	346.8	454.5	482.2	520.3	607.3	642.9	693.6	757.4	803.7	867.1
		11.72	150.1	159.2	171.6	300.3	318.4	343.2	450.5	477.6	514.8	601.9	636.7	686.3	750.7	795.9	857.9
		11.46	149.1	158.1	170.2	298.3	316.1	340.5	447.5	474.1	510.7	597.9	**632.2**	680.9	745.8	790.3	851.2
	↓	**11.30**	148.5	157.4	169.4	297.1	314.7	338.8	445.7	472.0	508.2	595.5	629.4	677.6	742.7	786.7	847.0
5m	↑	**11.37**	138.6	147.5	159.6	277.2	294.9	319.1	415.9	442.3	478.7	555.7	589.7	638.2	693.0	737.2	797.7
4m	10 m spacing	**10.90**	136.8	145.4	157.1	273.6	290.7	314.2	410.4	436.1	471.3	548.4	581.4	628.3	684.0	726.8	785.4
3m		**10.52**	135.3	143.7	155.1	270.6	287.3	310.2	406.0	431.0	465.2	542.5	574.6	620.3	676.6	718.3	775.3
2m		**10.24**	134.2	142.4	153.6	268.4	284.8	307.1	402.7	427.1	460.7	538.1	569.5	614.2	671.1	711.9	767.8
1m	↓	**10.06**	133.5	141.6	152.6	267.1	283.2	305.3	400.7	424.8	457.9	535.3	566.4	610.5	667.7	708.0	763.2
...	↑	**10.28**	124.2	132.4	143.6	248.3	264.7	287.2	372.6	397.1	430.8	497.9	529.5	574.3	620.9	661.8	717.9
	8.75 m spacing	**9.76**	122.2	130.1	140.9	244.4	260.2	281.8	366.6	390.2	422.6	489.9	520.3	563.5	611.0	650.4	704.3
		9.34	120.5	128.2	138.6	241.1	256.4	277.3	361.7	384.5	415.9	483.3	512.7	554.5	602.8	640.9	693.1
	↓	**9.02**	119.3	126.8	136.9	238.6	253.5	273.9	358.0	380.2	410.8	478.3	507.0	547.7	596.6	633.7	684.6
		8.82	118.5	125.9	135.9	237.1	251.7	271.8	355.7	377.6	407.6	475.2	503.4	543.5	592.7	629.3	679.3
	↑	**9.22**	109.9	117.5	127.8	219.8	234.9	255.6	329.8	352.4	383.5	440.7	469.8	**511.2**	549.5	587.3	639.1
	7.5 m spacing	**8.66**	107.7	114.9	124.8	215.4	229.9	249.6	323.2	344.8	374.4	**431.9**	459.7	499.2	538.6	574.6	624.0
		8.18	105.9	112.8	122.3	211.7	225.6	244.6	317.6	338.4	366.9	424.5	451.1	489.1	529.3	564.0	611.4
	↓	**7.81**	104.4	111.2	120.4	208.9	222.3	240.7	313.4	333.5	361.1	418.8	444.6	481.4	522.2	555.8	601.7
...		**7.58**	103.5	110.1	119.1	207.1	220.3	238.3	310.7	330.4	357.4	415.2	440.5	476.5	517.8	550.6	595.6
5m	↑	**8.22**	95.8	102.8	112.3	191.7	205.6	224.6	287.5	308.4	337.0	384.4	411.1	449.2	479.2	513.9	561.6
4m	6.25 m spacing	**7.59**	93.4	100.0	109.0	186.8	199.9	217.9	280.2	299.9	326.9	374.5	399.8	435.8	466.9	499.8	544.8
3m		**7.04**	91.3	97.5	106.1	182.6	195.1	212.2	273.9	292.6	318.3	366.0	390.1	424.4	456.4	487.7	530.4
2m		**6.62**	89.6	95.7	103.9	179.3	191.3	207.7	269.0	286.9	311.6	359.5	382.5	415.4	448.2	478.2	519.2
1m	↓	**6.35**	88.6	94.4	102.4	177.2	188.8	204.8	265.8	283.2	307.2	355.2	377.6	409.6	442.9	472.1	512.0
...	↑	**7.29**	82.0	88.4	97.2	164.0	176.8	194.4	246.1	265.2	291.5	329.0	353.6	388.7	410.1	442.1	485.9
	5 m spacing	**6.58**	79.3	85.3	93.4	158.6	170.5	186.9	237.9	255.7	280.3	318.0	341.0	373.7	396.4	426.3	467.1
		5.95	76.9	82.5	90.1	153.7	164.9	180.3	230.6	247.4	270.4	308.3	329.8	360.5	384.4	412.3	450.6
	↓	**5.45**	74.9	80.2	87.5	149.9	160.5	175.0	224.8	240.7	262.4	300.5	320.9	349.9	374.7	401.1	437.4
	↑	**5.12**	73.6	78.8	85.7	147.3	157.5	171.4	221.0	236.2	257.2	295.3	314.9	342.9	368.2	393.7	428.6
	3.75 m spacing	**6.45**	68.6	74.5	82.5	137.1	148.9	165.1	205.8	223.4	247.6	275.2	297.9	330.2	342.9	372.4	412.7
		5.65	65.5	70.9	78.3	131.0	141.9	156.7	196.6	212.8	235.0	262.8	283.7	313.4	327.6	354.6	391.7
		4.93	62.7	67.7	74.5	125.4	135.4	149.1	188.2	203.1	223.6	251.6	270.8	298.2	313.6	338.6	372.7
	↓	**4.33**	60.4	65.0	71.3	120.8	130.0	142.7	181.2	195.0	214.0	242.2	260.0	285.4	302.0	325.1	356.7
...		**3.91**	58.8	63.1	69.1	117.5	126.3	138.2	176.3	189.4	207.3	235.7	252.5	276.4	293.8	315.6	345.5
5m	↑	**5.74**	55.6	61.1	68.6	111.3	122.2	137.2	167.0	183.3	205.8	223.4	244.4	274.4	278.2	305.6	343.0
4m	2.5 m spacing	**4.86**	52.2	57.2	64.0	104.5	114.4	127.9	156.8	171.5	191.9	209.7	228.7	255.8	261.2	285.9	319.7
3m		**4.03**	49.0	53.5	59.6	98.1	107.0	119.1	147.1	160.4	178.7	196.8	213.9	238.2	245.2	267.4	297.8
2m		**3.29**	46.2	50.2	55.7	92.3	100.3	111.3	138.5	150.5	167.0	185.3	200.7	222.6	230.9	250.9	278.2
1m	↓	**2.73**	44.0	47.7	52.7	88.0	95.3	105.4	132.0	143.0	158.0	176.5	190.6	210.7	220.0	238.3	263.4
...	↑	**5.23**	43.5	48.6	55.7	86.9	97.2	111.4	130.4	145.8	167.1	174.6	194.5	222.7	217.3	243.1	278.4
	1.25 m spacing	**4.27**	39.7	44.3	50.6	79.5	88.7	101.2	119.3	133.0	151.8	159.7	177.3	202.4	198.7	221.7	253.0
		3.33	36.1	40.2	45.7	72.2	80.3	91.3	108.4	120.4	137.0	145.1	160.5	182.6	180.6	200.7	228.2
	↓	**2.43**	32.7	36.1	40.9	65.3	72.3	81.8	98.0	108.4	122.7	131.1	144.5	163.6	163.3	180.7	204.5
		1.64	29.6	32.6	36.8	59.2	65.3	73.5	88.9	97.9	110.3	118.9	130.5	147.0	148.1	163.2	183.8

Minimal floor areas

Magni Telehandler HTH 45.14 Max lift 45 tonnes, 441 kN
coloured down to 241 kN (-200 kN)

Konecranes Forklift SMV 65-1200 B Max lift 65 tonnes, 637 kN
coloured down to 442 kN (-195 kN)

Too heavy

- 10.2 * grid location is the live load for Manufacturing, Light prototypes
- The result is multiplied by .95 since the textbook example calculates a portion of the broad valley supported directly by the arch - which is scalar to structural detailing - and its calculation is more than 8% smaller.

EXTRACTED CATALOGUE OPPORTUNITIES FOR LOADED PROTOTYPE SPACES

Assembly block total loads (kN) as loaded Manufacturing, Light spatial opportunities that remain movable.

1094.4	1159.7	1249.2	1276.8	1353.0	1457.5	1463.0	1546.3	1665.7	1641.6	1739.6	1873.9	1824.0	1932.9	2082.1	2006.3	2126.2	2290.2
1086.0	1150.1	1237.8	1267.0	1341.8	1444.1	1451.8	1533.4	1650.4	1629.0	1725.1	1856.7	1810.0	1916.8	2063.0	1991.0	2108.5	2269.2
1079.3	1142.3	1228.6	1259.2	1332.7	1433.4	1002.9	1523.1	1638.2	1618.9	1713.4	1842.9	1798.8	1903.9	2047.7	1377.9	2094.2	2252.4
1074.4	1136.6	1221.9	1253.4	1326.1	1425.5	1436.2	1515.5	1629.2	1611.6	1704.9	1832.8	1790.6	1894.4	2036.5	1969.7	2083.8	2240.1
1071.6	1133.3	1218.0	1250.1	1322.3	1421.0	1432.4	1511.1	1624.0	1607.3	1700.0	1827.0	1785.9	1888.9	2030.0	1964.5	2077.8	2233.0
1006.3	1067.5	1151.3	1174.1	1245.5	1343.2	1345.4	1423.4	1535.1	1509.5	1601.3	1727.0	1677.2	1779.2	1918.9	1844.9	1957.1	2110.7
997.3	1057.0	1138.9	1163.5	1233.3	1328.8	1333.2	1409.4	1518.6	1495.9	1585.6	1708.4	1662.1	1761.8	1898.2	1828.3	1937.9	2088.0
990.0	1048.6	1128.9	1155.0	1223.4	1317.1	921.3	1398.2	1505.3	1484.9	1572.9	1693.4	1649.9	1747.7	1881.6	1265.7	1922.5	2069.7
984.6	1042.4	1121.6	1148.7	1216.2	1308.5	1316.2	1389.9	1495.5	1476.9	1563.6	1682.4	1641.0	1737.4	1869.3	1805.1	1911.1	2056.2
981.3	1038.6	1117.1	1144.9	1211.7	1303.3	1311.8	1384.8	1489.5	1471.9	1557.9	1675.7	1635.5	1731.0	1861.8	1799.0	1904.1	2047.9
918.7	975.8	1054.0	1071.8	1138.4	1229.7	1228.3	1301.1	1405.3	1378.1	1463.7	1581.0	1531.2	1626.3	1756.6	1684.3	1789.0	1932.2
908.8	964.4	1040.5	1060.3	1125.1	1213.9	1215.1	1285.9	1387.3	1363.2	1446.6	1560.7	1514.7	1607.3	918.1	1666.2	1768.0	1907.5
900.8	955.1	1029.5	1051.0	1114.3	1201.1	1204.3	1273.5	1372.7	1351.2	1432.7	1544.3	1501.3	1591.9	1715.8	1651.5	1751.1	1887.4
894.9	948.3	1021.4	1044.1	1106.4	1191.7	1196.3	1264.4	1361.9	1342.3	1422.4	3698.1	1491.5	1580.5	1702.4	1640.6	1738.5	1872.6
891.2	944.1	1016.4	1039.8	1101.4	1185.8	1191.4	1258.8	1355.2	1336.8	1416.1	1524.6	1485.4	1573.4	1694.0	1633.9	1730.8	1863.4
831.6	884.6	957.3	970.2	1032.1	1116.9	1111.9	1179.5	1276.4	1247.3	1326.9	1436.0	1385.9	1474.4	1595.5	1524.5	1621.8	1755.0
820.8	872.1	942.5	957.6	1017.5	1099.6	1097.4	1162.9	1256.7	1231.1	1308.2	1413.8	1367.9	1453.6	1570.9	1504.7	1598.9	1727.9
811.9	861.9	930.4	947.2	1005.6	1085.5	758.1	1149.2	1240.6	1217.9	1292.9	1395.6	1353.2	1436.5	1550.7	1041.3	1580.2	1705.7
805.3	854.3	921.4	939.5	996.7	1074.9	1076.6	1139.1	1228.5	1207.9	1281.4	1382.1	1342.2	1423.8	1535.6	1476.4	1566.2	1689.2
801.2	849.6	915.8	934.8	991.2	1068.4	1071.1	1132.8	1221.1	1201.8	1274.3	1373.7	1335.4	1416.0	1526.3	1468.9	1557.6	1678.9
745.1	794.2	861.5	869.3	926.6	1005.1	996.3	1059.0	1148.7	1117.6	1191.3	1292.3	1241.8	1323.7	1435.8	1366.0	1456.1	1579.4
733.2	780.4	845.2	855.4	910.5	986.1	980.3	1040.6	1127.0	1099.7	1170.7	1267.8	1221.9	1300.8	1408.7	1344.1	1430.8	1549.5
723.3	769.1	831.7	843.9	897.3	970.4	676.5	1025.4	1109.0	1085.0	1153.6	1247.6	1205.5	1281.8	1386.2	929.1	1410.0	1524.8
715.9	760.5	821.6	835.2	887.2	958.5	957.1	1014.0	1095.4	1073.8	1140.7	1232.4	1193.1	1267.5	1369.3	1312.4	1394.2	1506.2
711.2	755.1	815.2	829.8	881.0	951.1	950.9	1006.8	1087.0	1066.8	1132.7	1222.8	1185.4	1258.5	1358.7	1303.9	1384.4	1494.5
659.4	704.8	766.9	769.3	822.3	894.7	881.9	939.7	1022.5	989.2	1057.2	1150.4	1099.1	1174.7	1278.1	1209.0	1292.1	1405.9
646.3	689.5	748.9	754.0	804.5	873.7	864.2	919.4	998.5	969.4	1034.3	1123.3	1077.1	1149.3	738.1	1184.8	1264.2	1372.9
635.2	676.7	733.7	741.0	789.6	856.0	849.3	902.3	978.3	952.7	1015.1	1100.6	1058.6	1127.9	1222.8	1164.5	1240.7	1345.1
626.7	666.9	722.1	731.1	778.1	842.4	838.0	889.3	962.8	940.0	1000.4	3422.7	1044.5	1111.6	1203.5	1148.9	1222.7	1323.8
621.3	660.7	714.7	724.9	770.9	833.9	830.7	881.0	953.0	932.0	991.1	1072.1	1035.5	1101.2	1191.2	1139.0	1211.3	1310.3
575.0	616.7	673.9	670.8	719.5	786.2	769.1	822.3	898.5	862.5	925.1	1010.9	958.3	1027.9	1123.1	1054.1	1130.7	1235.4
560.3	599.7	653.8	653.7	699.7	762.8	749.4	799.7	871.7	840.4	899.6	980.7	933.8	999.6	1089.6	1027.2	1099.5	1198.6
547.7	585.2	636.5	639.0	682.7	742.6	513.3	780.2	848.7	821.5	877.8	954.8	912.8	975.3	1060.9	704.7	1072.8	1167.0
537.9	573.8	623.1	627.5	669.5	727.0	719.3	765.1	830.8	806.8	860.7	934.7	896.4	956.4	1038.5	986.0	1052.0	1142.3
531.5	566.5	614.4	620.1	660.9	716.8	710.7	755.3	819.2	797.2	849.7	921.6	885.8	944.2	1024.0	974.4	1038.6	1126.4
492.1	530.5	583.0	574.1	618.9	680.2	658.4	707.3	777.4	738.2	795.7	874.6	820.2	884.2	971.7	902.2	972.6	1068.9
475.7	511.5	560.6	555.0	596.8	654.0	636.3	682.0	747.4	713.5	767.2	840.9	792.8	852.5	628.3	872.1	937.7	1027.7
461.2	494.8	540.8	538.1	577.3	630.9	616.9	659.7	721.0	691.8	742.2	811.2	768.7	824.7	901.3	845.5	907.1	991.4
449.6	481.3	524.9	524.5	561.6	612.3	601.3	641.8	699.8	674.4	722.0	3239.1	749.3	802.3	874.8	824.2	882.5	962.2
441.9	472.4	514.3	515.5	551.2	600.0	590.9	629.9	685.7	662.8	708.6	771.5	736.4	787.4	857.2	810.1	866.1	942.9
411.5	446.8	495.2	480.0	521.3	577.8	550.7	595.8	660.3	617.2	670.2	742.9	685.8	744.7	825.4	754.3	819.2	907.9
393.1	425.5	470.1	458.6	496.5	548.4	526.0	567.4	626.8	589.6	638.3	705.1	655.1	709.3	783.4	720.6	780.2	861.8
376.4	406.3	447.2	439.1	474.0	521.8	350.1	541.7	596.3	564.5	609.4	670.9	627.3	677.1	745.4	480.3	744.8	819.9
362.3	390.1	428.1	422.7	455.1	499.4	484.8	520.1	570.8	543.5	585.1	642.1	603.9	650.1	713.4	664.3	715.1	784.7
352.5	378.7	414.6	411.3	441.9	483.8	471.6	505.0	552.9	528.8	568.1	622.0	587.5	631.2	691.1	646.3	694.4	760.2
333.9	366.7	411.6	389.5	427.8	480.2	447.1	488.9	548.8	500.8	550.0	617.5	556.4	611.2	686.0	612.1	672.3	754.6
313.5	343.1	383.7	365.7	400.3	447.6	419.7	457.5	511.6	470.2	514.6	575.6	522.4	571.8	639.5	574.6	629.0	703.4
294.2	320.8	357.3	343.2	374.3	416.9	268.5	427.8	476.5	441.3	481.3	536.0	490.3	534.7	595.6	368.1	588.2	655.1
277.0	301.0	333.9	323.2	351.2	389.5	370.8	401.4	445.2	415.5	451.5	500.8	461.7	501.7	556.5	507.9	551.9	612.1
264.0	286.0	316.1	308.0	333.6	368.7	353.3	381.3	421.4	396.0	429.0	474.1	440.0	476.6	526.8	484.0	524.3	579.4
260.7	291.7	334.1	304.2	340.3	389.8	349.5	388.9	445.5	391.1	437.5	501.2	434.5	486.2	556.8	478.0	534.8	612.5
238.5	266.0	303.7	278.2	310.3	354.3	319.6	354.6	404.9	357.7	399.0	455.5	397.5	443.3	506.1	437.2	487.6	556.7
216.7	240.8	273.9	252.8	281.0	319.5	290.4	321.1	365.2	325.1	361.3	410.8	361.2	401.4	456.5	397.3	441.5	502.1
195.9	216.8	245.4	228.6	253.0	286.4	262.5	289.1	327.3	293.9	325.2	368.2	326.5	361.4	409.1	359.2	397.5	450.0
177.7	195.8	220.6	207.3	228.4	257.3	238.0	261.1	294.1	266.6	293.7	330.8	296.2	326.3	367.6	325.8	359.0	404.3
7.98	**9.21**	**10.91**	**9.30**	**10.75**	**12.73**	**10.71**	**12.28**	**14.54**	**11.96**	**13.82**	**16.36**	**13.29**	**15.35**	**18.18**	**14.62**	**16.89**	**20.00**

← 7.5 m spacing → ← 8.75 m spacing → ← 10 m spacing → ← 11.25 m spacing → ← 12.5 m spacing → ← 13.75 m spacing →

2.49	4.98	7.47	2.905	5.81	8.715	3.32	6.64	9.96	3.735	7.47	11.205	4.15	8.3	12.45	4.565	9.13	13.695

Formula: ((3.06 kN/m)(yL)(xL) + (.44 MPa)(xL)(2.4 N/m³)(9.8 m/s²))*.95 + 10.2 * grid location

- 3.06 kN/m is the (dead load .08 concrete thickness * its weight 2,400 kg/m³ + 120 kg/m³ live building code)(9.8 m/s²)
- .44 MPa is the average concrete stress f=P/A

Loading Mass Appendix

State

ASSEMBLY BLOCK DEAD WEIGHT AS A GENERIC PROTOTYPE STATE

I determine that a concrete shell system is ideal for the spatial criteria of the City and Performance Centre. Its design is the most lightweight structure for its dimensions and thus it emphasises adaptive shared space's different discourses.

Wood assembly block:

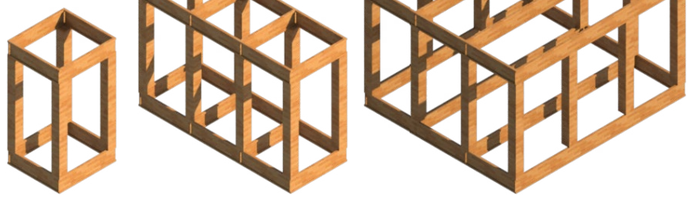
· Wood columns 200 mm x 200 mm, O.C. 1250 mm
· Wood web truss floor and ceiling structures
· Aluminium sheet roof 1.2 mm thick
· Fibrous plaster ceiling 10 mm
· Plasterboard 10 mm interior walls
· Lime on plasterboard exterior safety walls
· Floors designed for "Manufacturing, Light" Uniform loading

Max lift 65 tonnes, 637 kN

Max lift 45 tonnes, 441 kN

(Allen, Zalewski and Michel, 2010)
(Bangladesh National Building Code, 2012)
(Konecranes, 2015)
(Magni Telescopic Handlers, 2016)

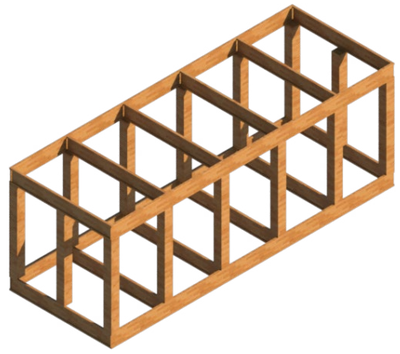
2M TALL



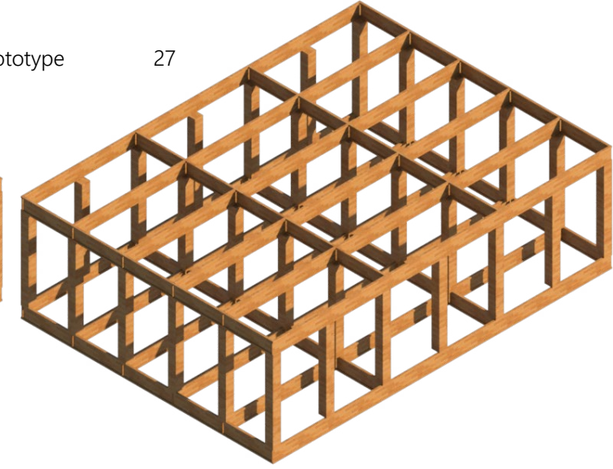
38.4 kN

88.5 kN

185.6 kN

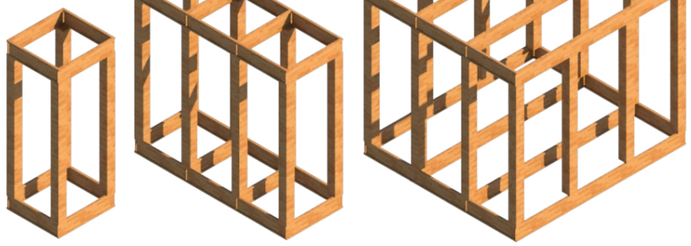


207.6 kN



529.2 kN

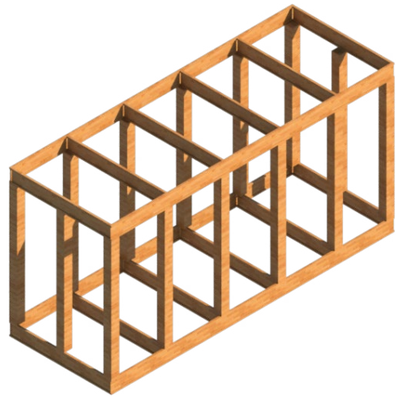
3M TALL



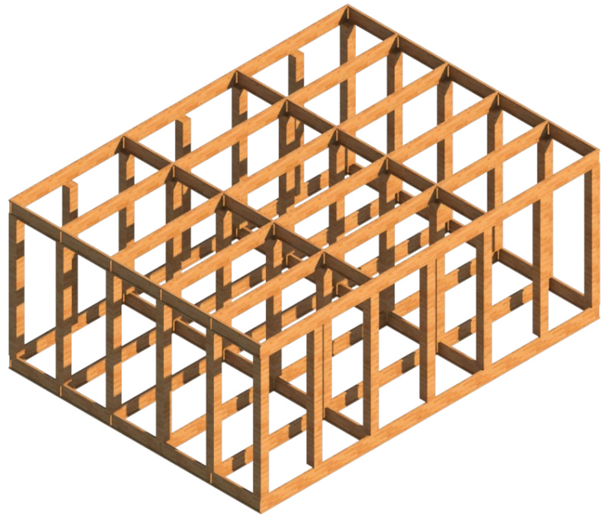
40.2 kN

92 kN

190.9 kN

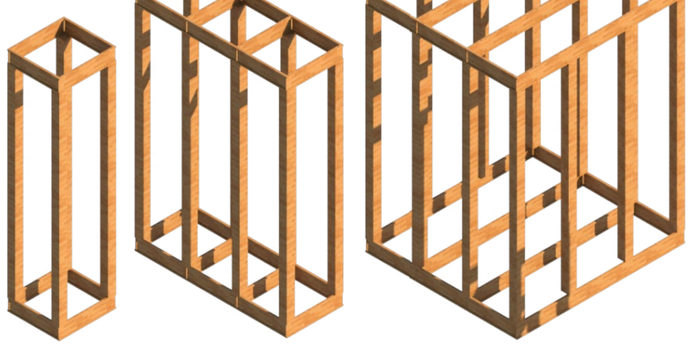


212 kN



543 kN

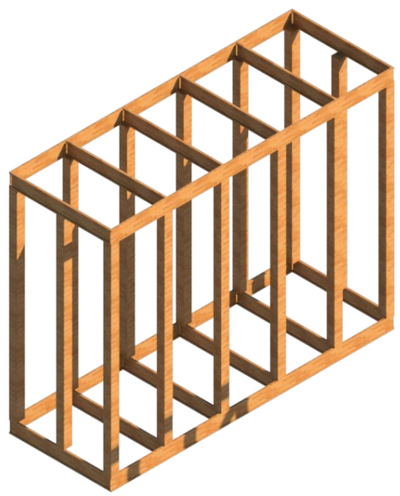
5M TALL



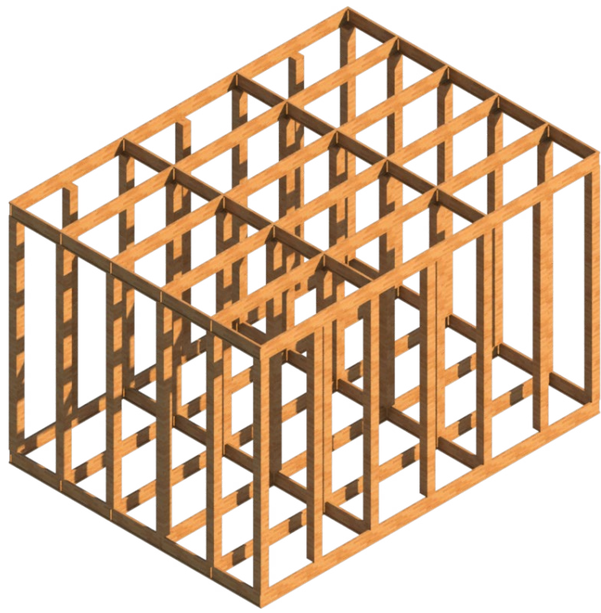
43.7 kN

99.1 kN

201.5 kN



220.8 kN



569.5 kN

Extracted Catalogue Prototype

State

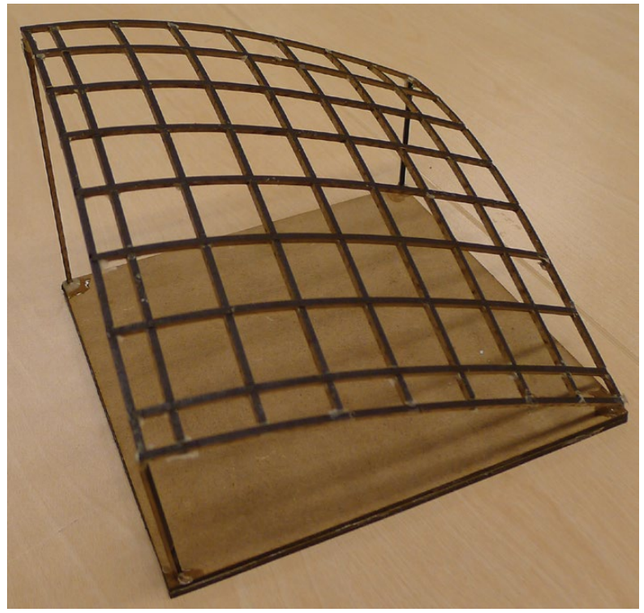
EXTRACTED ASSEMBLY BLOCKS ARE INTRINSICALLY SPATIALLY SIMILAR

The extracted assembly blocks are chosen to fit along side one another through intrinsically similar spatial criteria, and offer spaces which accommodate shared spaces and various artist programmes.

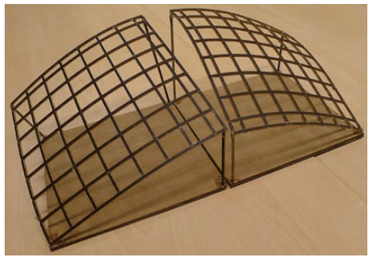
7.5 m spacing												
9.22	109.9	117.5	127.8	219.8	234.9	255.6	329.8	352.4	383.5	440.7	469.8	**511.2**
8.66	107.7	114.9	124.8	215.4	229.9	249.6	323.2	344.8	374.4	**431.9**	459.7	499.2
8.18	105.9	112.8	122.3	211.7	225.6	244.6	317.6	338.4	366.9	424.5	451.1	489.1
7.81	104.4	111.2	120.4	208.9	222.3	240.7	313.4	333.5	361.1	418.8	444.6	481.4
7.58	103.5	110.1	119.1	207.1	220.3	238.3	310.7	330.4	357.4	415.2	440.5	476.5

										659.4	704.8	766.9
										646.3	689.5	748.9
										635.2	677.9	733.7
										626.7	668.9	722.1
										621.3	662.7	714.7
										575.0	616.7	673.9
										560.3	599.7	653.8
										547.7	585.2	636.5
										537.9	573.8	623.1
										531.5	566.5	614.4
										492.1	530.5	583.0
										475.7	511.5	560.6
										461.2	494.8	540.8
										449.6	481.3	524.9
										441.9	472.4	514.3
										411.5	446.8	495.2
										393.1	425.5	470.1
										376.4	406.3	447.2
										362.3	390.1	428.1
										352.5	378.7	414.6
										333.9	366.7	411.6
										313.5	343.1	383.7
										294.2	320.8	357.3
										277.0	301.0	333.9
										264.0	286.0	316.1
										260.7	291.7	334.1
										196.8	217.8	246.6
										216.7	240.8	273.9
										195.9	216.8	245.4
										177.7	195.8	220.6
										7.98	**9.21**	**10.91**

← 7.5 m spacing →

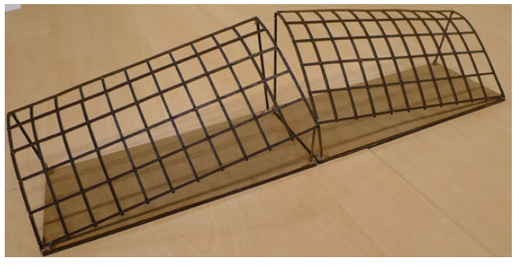


Square Assembly Block: This space has a decent square floor area with the same length and height as the *most common assembly block*. Its width makes this a unique assemblage.



11.25 m spacing												
12.49	153.1	162.7	175.7	306.2	325.3	351.3	459.4	487.9	527.0	613.9	650.5	702.6
12.06	151.5	160.8	173.4	302.9	321.5	346.8	454.5	482.2	520.3	607.3	642.9	693.6
11.72	150.1	159.2	171.6	300.3	318.4	343.2	450.5	477.6	514.8	601.9	636.7	686.3
11.46	149.1	158.1	170.2	298.3	316.1	340.5	447.5	474.1	510.7	597.9	**632.2**	680.9
11.30	148.5	157.4	169.4	297.1	314.7	338.8	445.7	472.0	508.2	595.5	629.4	677.6

Long Assembly Block: This space is good for having a decent floor area for exhibitions, gallery typologies, and production length work. The assembly block's length engages people more contemplatively, having the same width and height as the *most common assembly block*.



Façade view

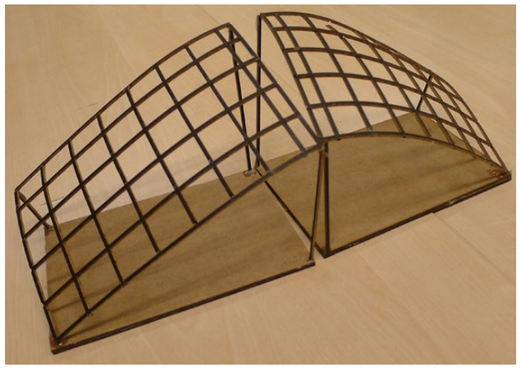
5 m spacing			
			547.7
			543.5
			511.2
			499.2
			489.1
			481.4
440.7	469.8	**511.2**	476.5
431.9	459.7	499.2	449.2
424.5	451.1	489.1	435.8
418.8	444.6	481.4	424.4
415.2	440.5	476.5	415.4
384.4	411.1	449.2	409.6
374.5	399.8	435.8	388.7
366.0	390.1	424.4	373.7
359.5	382.5	415.4	360.5
355.2	377.6	409.6	349.9
329.0	353.6	388.7	342.9
318.0	341.0	373.7	330.2
308.3	329.8	360.5	313.4
300.5	320.9	349.9	298.2
295.3	314.9	342.9	285.4
275.2	297.9	330.2	276.4
262.8	283.7	313.4	274.4
251.6	270.8	298.2	255.8
242.2	260.0	285.4	238.2
235.7	252.5	276.4	222.6
223.4	244.4	274.4	210.7
209.7	228.7	255.8	222.7
196.8	213.9	238.2	164.4
185.3	200.7	222.6	182.6
176.5	190.6	210.7	163.6
174.6	194.5	222.7	147.0
131.7	145.2	164.4	**5.35**
145.1	160.5	182.6	**6.14**
131.1	144.5	163.6	**7.27**
118.9	130.5	147.0	
5.35	**6.14**	**7.27**	

← 5 m spacing →

Tall Assembly Block: This space is good for stacked seating and tall ceilings, with the same length and width as the *most common assembly block*.

7.5 m spacing												
9.22	109.9	117.5	127.8	219.8	234.9	255.6	329.8	352.4	383.5	440.7	469.8	**511.2**
8.66	107.7	114.9	124.8	215.4	229.9	249.6	323.2	344.8	374.4	**431.9**	459.7	499.2
8.18	105.9	112.8	122.3	211.7	225.6	244.6	317.6	338.4	366.9	424.5	451.1	489.1
7.81	104.4	111.2	120.4	208.9	222.3	240.7	313.4	333.5	361.1	418.8	444.6	481.4
7.58	103.5	110.1	119.1	207.1	220.3	238.3	310.7	330.4	357.4	415.2	440.5	476.5

Most Common Assembly Block: The most common extracted assembly block has a reasonable length, width, and height and can be lifted by the telehandler crane. This assembly block makes for dense spatial opportunities.



Façade view

5 m spacing		
384.4	411.1	449.2
374.5	399.8	435.8
366.0	390.1	424.4
359.5	382.5	415.4
355.2	377.6	409.6
329.0	353.6	388.7
318.0	341.0	373.7
308.3	329.8	360.5
300.5	320.9	349.9
295.3	314.9	342.9
275.2	297.9	330.2
262.8	283.7	313.4
251.6	270.8	298.2
242.2	260.0	285.4
235.7	252.5	276.4
223.4	244.4	274.4
209.7	228.7	255.8
196.8	213.9	238.2
185.3	200.7	222.6
176.5	190.6	210.7
174.6	194.5	222.7
131.7	145.2	164.4
145.1	160.5	182.6
131.1	144.5	163.6
118.9	130.5	147.0
5.35	**6.14**	**7.27**

← 5 m spacing →

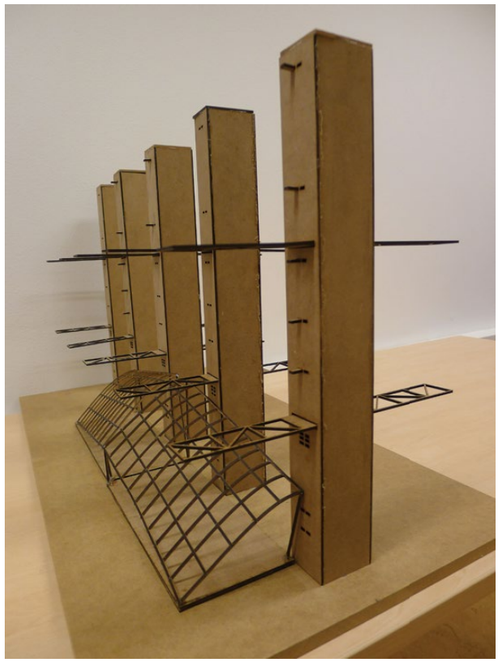
Spatial Narrative

Prototype Element

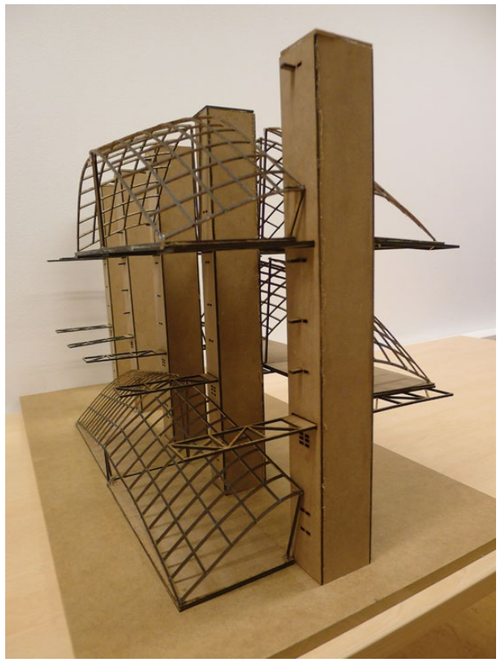
ASSEMBLY BLOCKS EMPHASISE STAKEHOLDER'S VALUES

Adaptive elements are generated as prototypical discourse and consequences of the shell's spaces for the City and Performance Centre's stakeholders.

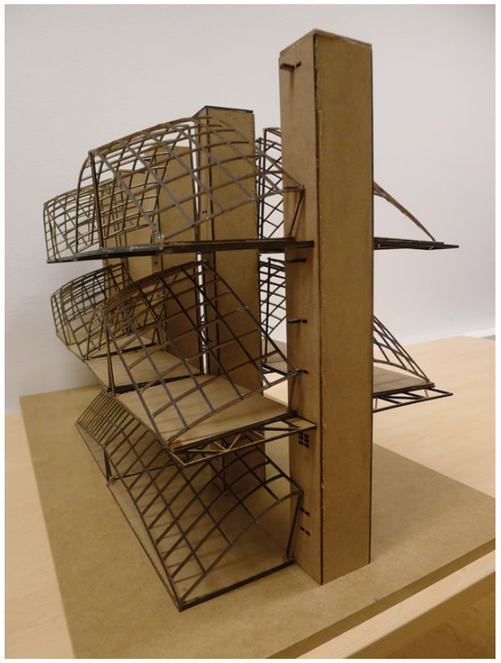
The assemblage façades create a discourse. It talks about the interesting inside/outside criteria through the number of assembly blocks, their locations, and their different ground-level contexts.



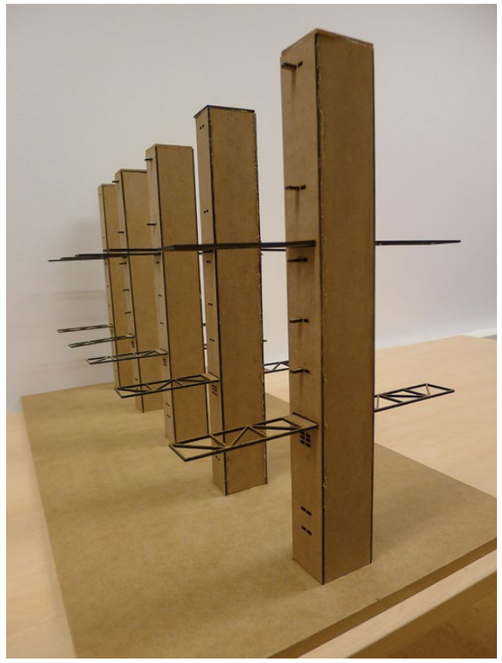
Long Assembly Block Phase 1



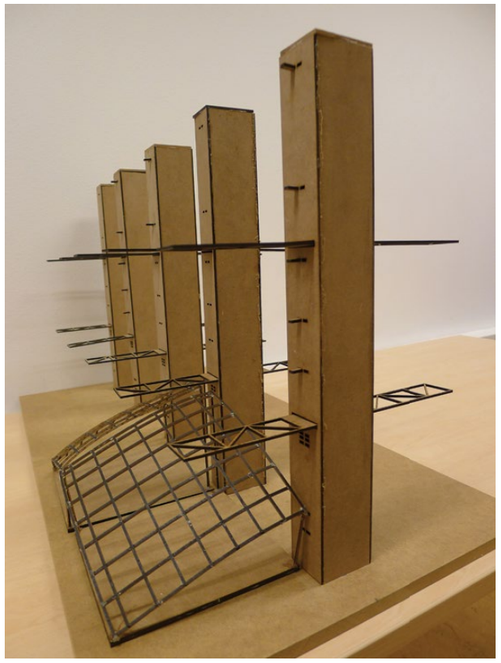
Long Assembly Block Phase 2



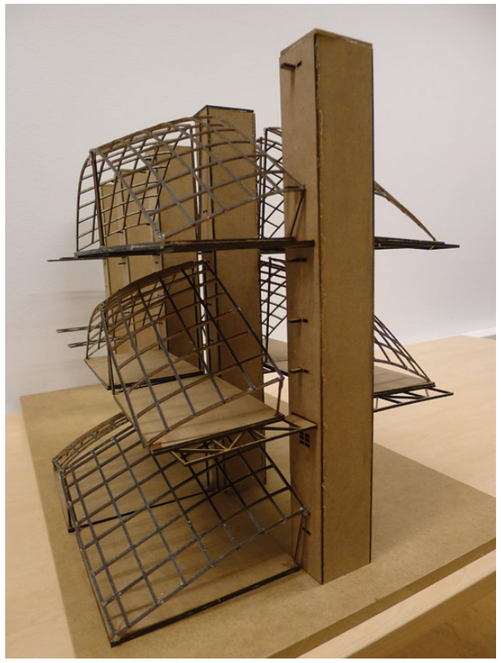
Long Assembly Block Phase 3



Empty Assemblage



Square Assembly Block Phase 1



Square Assembly Block Phase 2

Square Assembly Block Phase 3

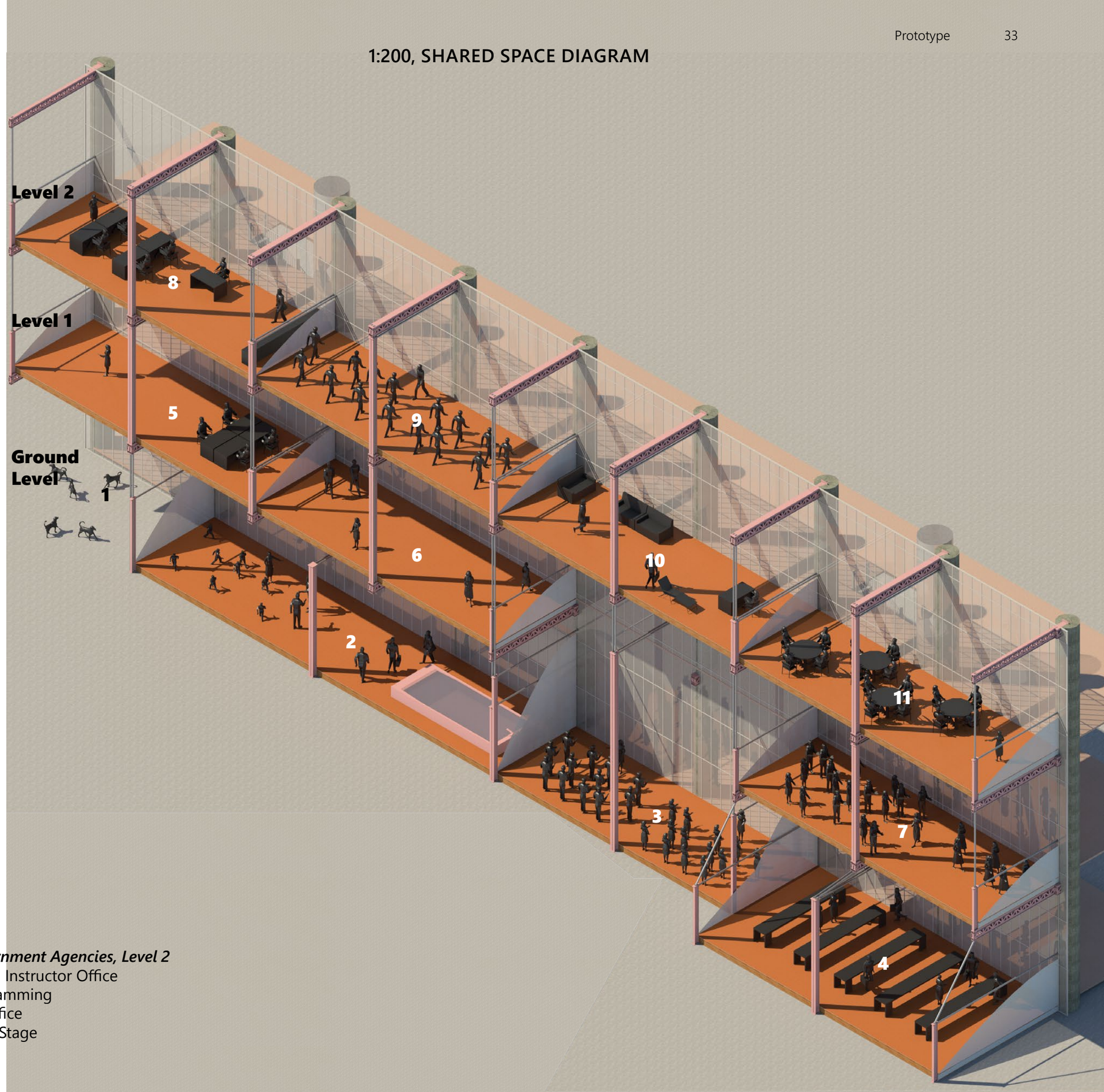
Spatial Narrative

Prototype Element

ASSEMBLY BLOCKS EMPHASISE STAKEHOLDER'S VALUES

Adaptive elements are generated as prototypical discourse and consequences of the shell's spaces for the City and Performance Centre's stakeholders.

1:200, SHARED SPACE DIAGRAM



Public Context, Ground Level

1. Green Access
2. Playground and Botanical Pool
3. Singing Stage
4. Collective Workshop

Artist Spaces, Level 1

5. Artist's Workplace and Offices
6. Art Exhibition
7. Stage for Events- e.g. Fashion Shows

Permanent Government Agencies, Level 2

≈ 8. Classroom and Instructor Office
≈ 9. Exercise Programming
10. Psychiatry Office
≈ 11. Canteen and Stage

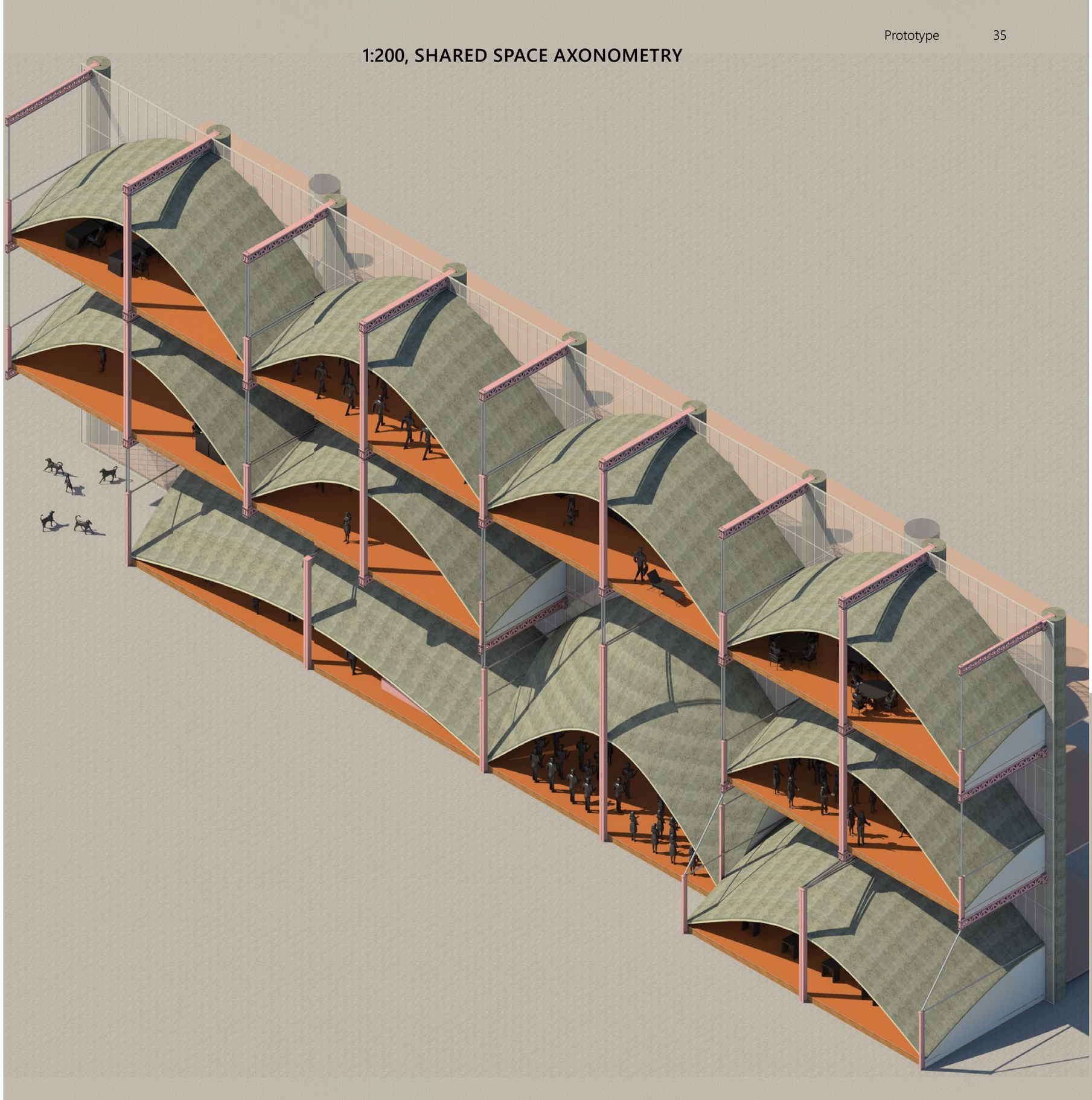
Spatial Narrative

Prototype Element

ASSEMBLY BLOCKS EMPHASISE STAKEHOLDER'S VALUES

Adaptive elements are generated as prototypical discourse and consequences of the shell's spaces for the City and Performance Centre's stakeholders.

1:200, SHARED SPACE AXONOMETRY



Spatial Adaptability

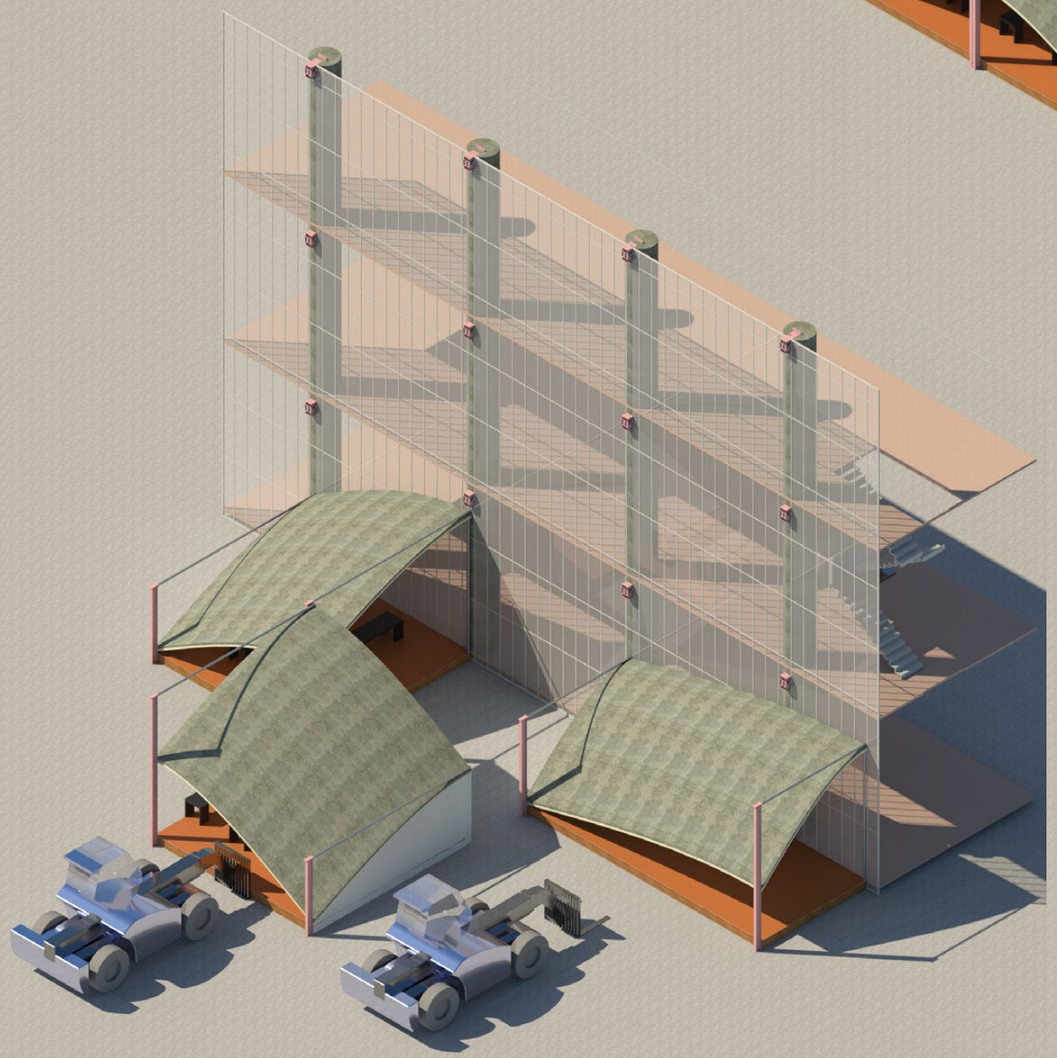
Prototype Element

ADAPTIVE STRUCTURES AS PROTOTYPE FORMATION FOR ASSEMBLY BLOCK SPACES

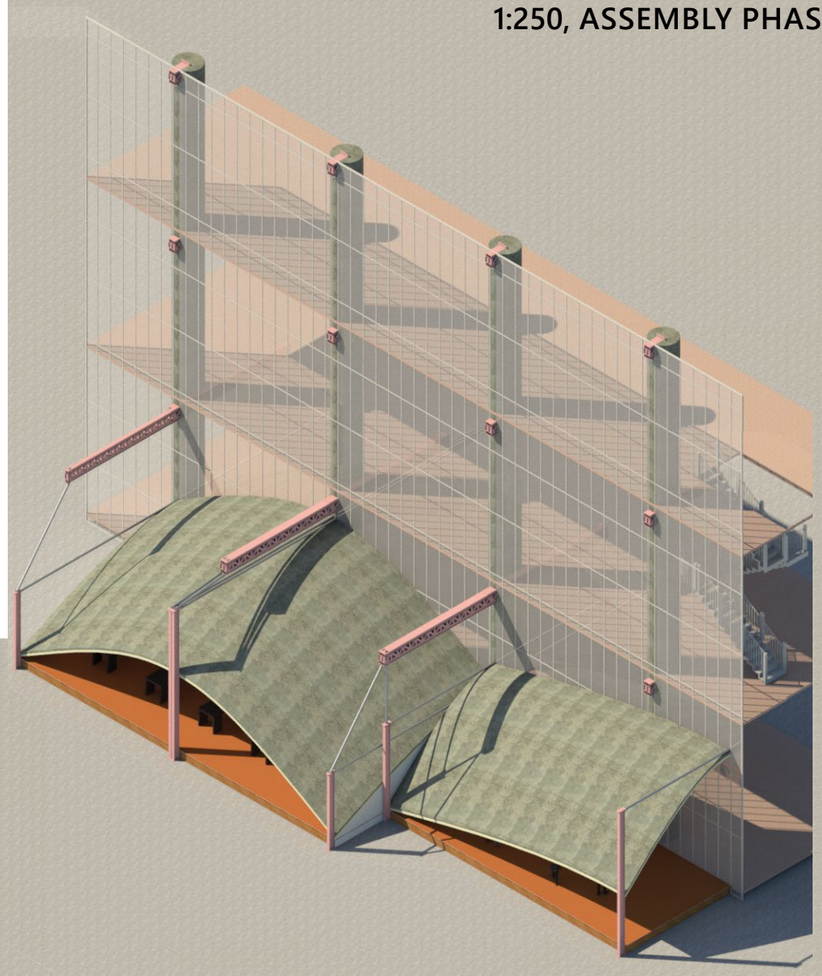
The assembly blocks are easily reconfigurable and their contexts are supported by remaining structural towers that accommodate their moveable adaptability.

So that assembly blocks are adaptive for all the fine art categories, dense city fabrics, and active planning criterion they are reconfigurable. This flexibility takes place between floors, assemblages, and formations based on their ability to be moved around by forklift and telehandler cranes. The City and Performance Centre offers a permanent structure which the assembly blocks can be plugged into without problems.

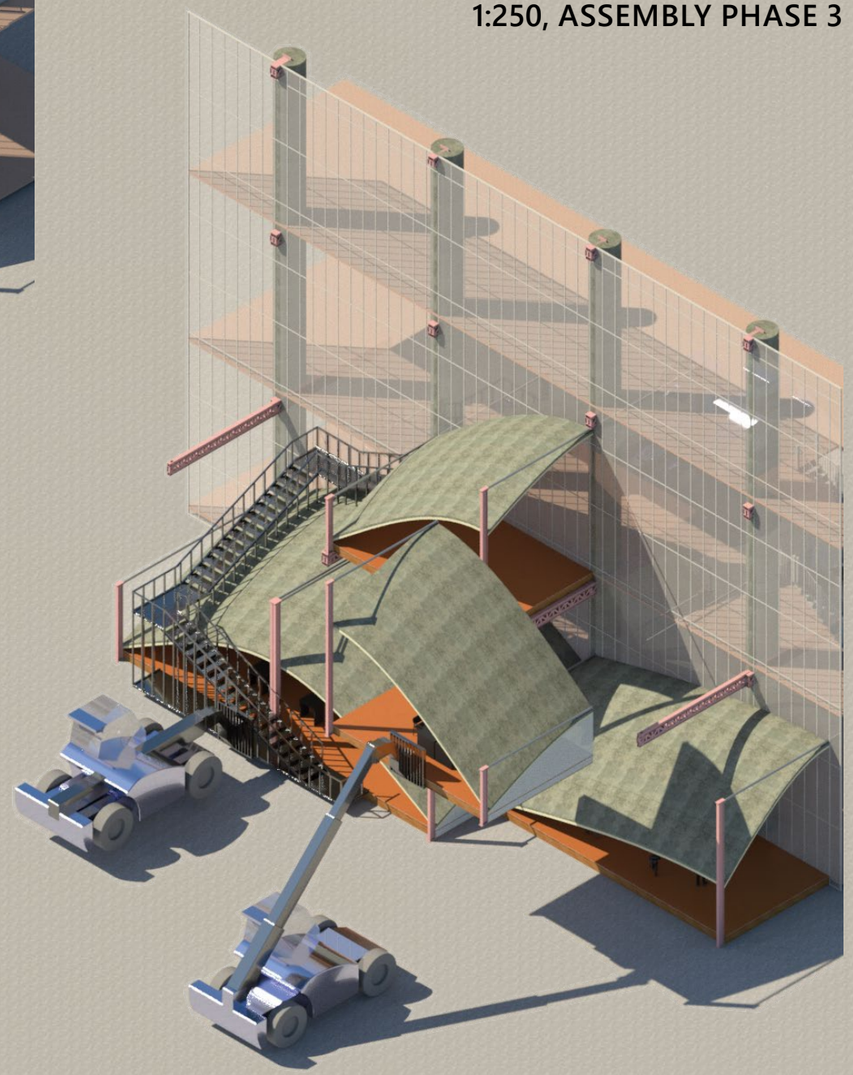
1:250, ASSEMBLY PHASE 1



1:250, ASSEMBLY PHASE 2



1:250, ASSEMBLY PHASE 3



Spatial Adaptability

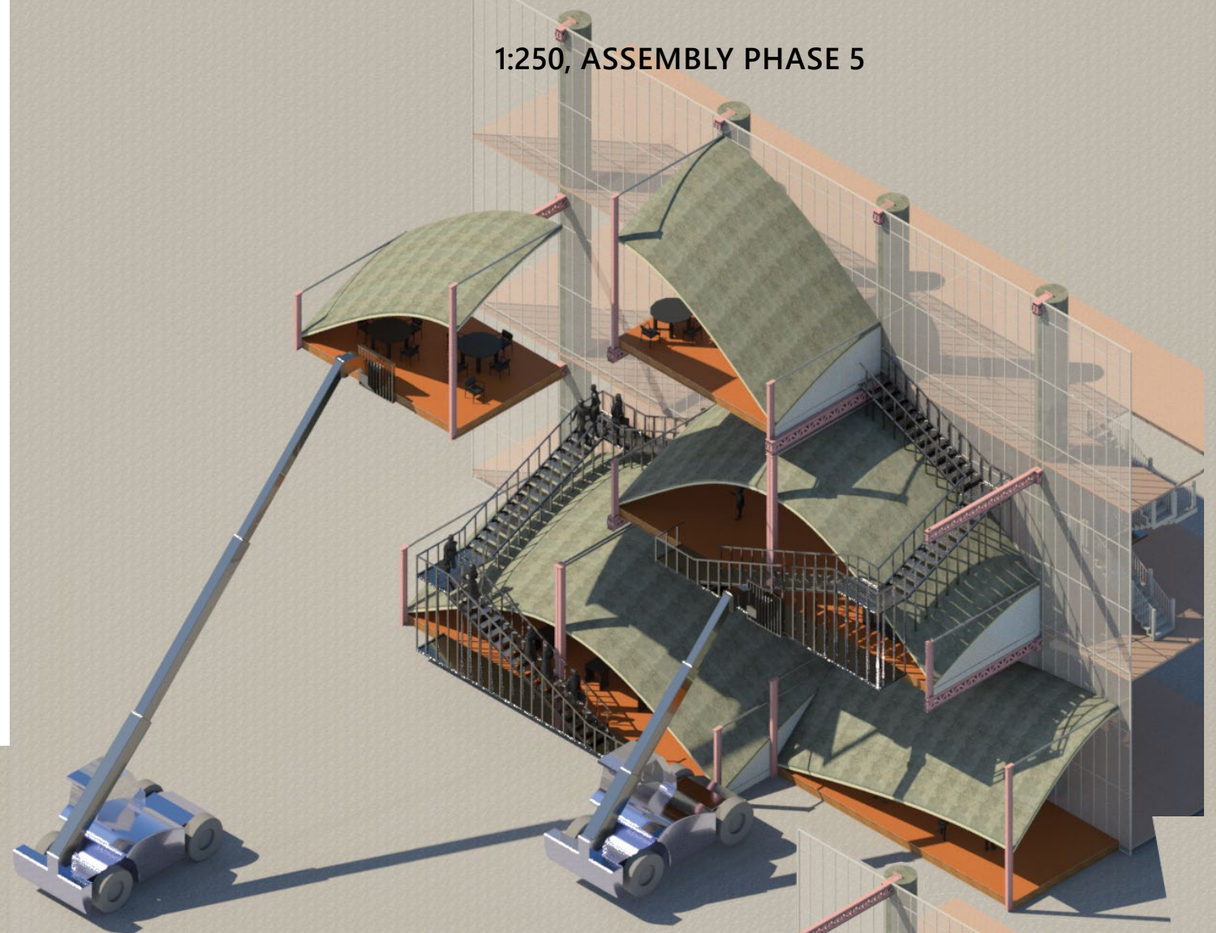
Prototype Element

ADAPTIVE STRUCTURES AS PROTOTYPE FORMATION FOR ASSEMBLY BLOCK SPACES

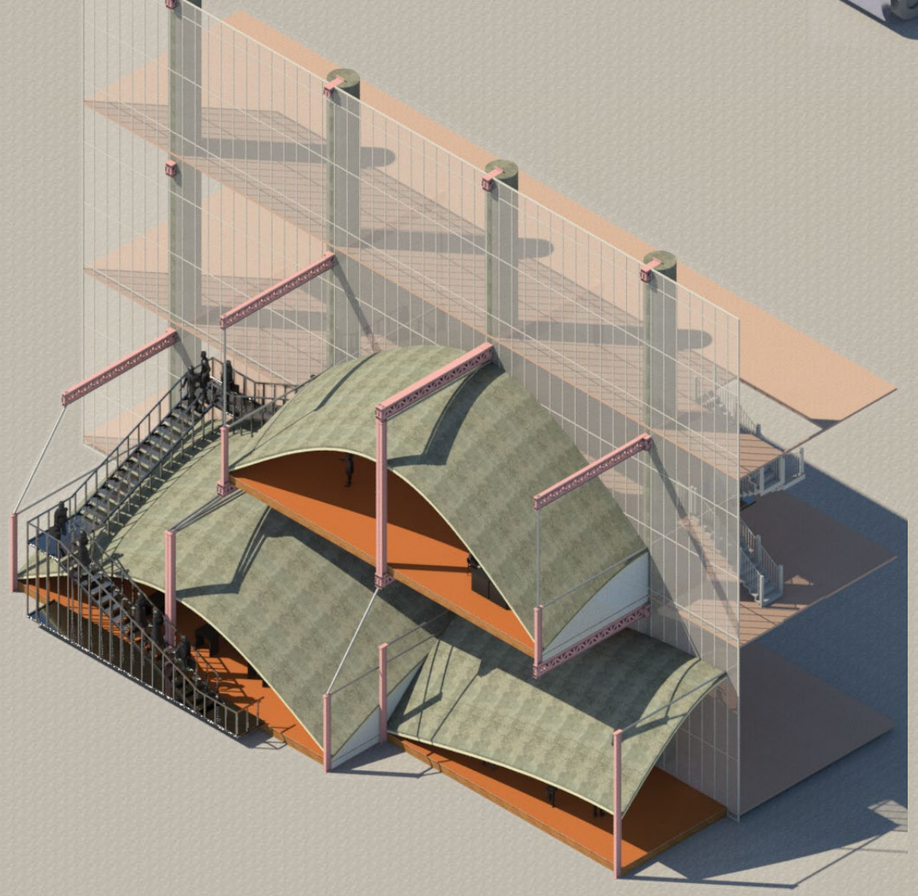
The assembly blocks are easily reconfigurable and their contexts are supported by remaining structural towers that accommodate their moveable adaptability.

So that assembly blocks are adaptive for all the fine art categories, dense city fabrics, and active planning criterion they are reconfigurable. This flexibility takes place between floors, assemblages, and formations based on their ability to be moved around by forklift and telehandler cranes. The City and Performance Centre offers a permanent structure which the assembly blocks can be plugged into without problems.

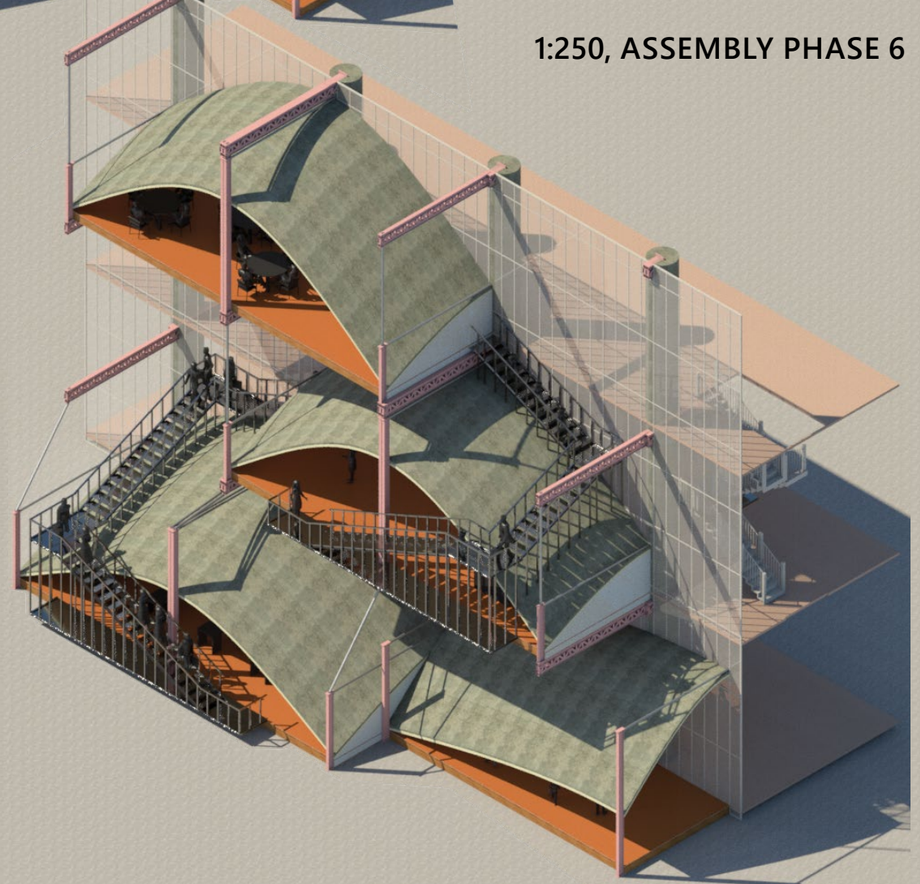
1:250, ASSEMBLY PHASE 5



1:250, ASSEMBLY PHASE 4



1:250, ASSEMBLY PHASE 6



Seasonal Design

Prototype Consequence

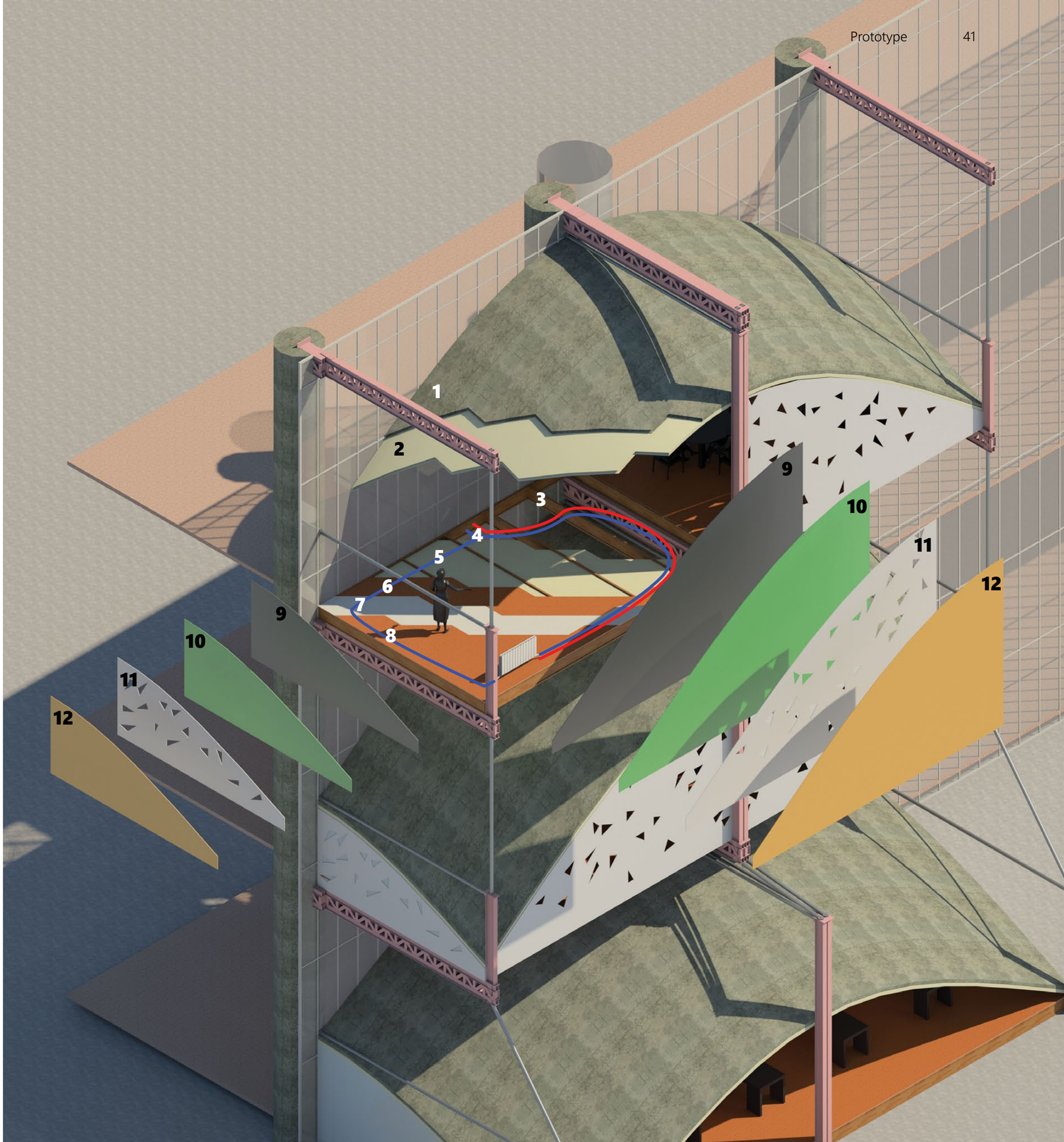
SEASONAL HABITATION SYSTEMS AND THEIR DESIGN PARAMETERS

Spring colours, summer cooling, autumn contexts, and winter sanitation parameters are replicated throughout the year for the assembly blocks.

Green plexiglass fabric façades welcome the new season's growths, temperatures, and cool exteriors. During summer, white perforated plexiglass fabric façades easily cool the assemblages. For autumn, the amber plexiglass fabric façades welcome the season's transitions. When its cold the radiator can be turned on, and for winter the black plexiglass fabric façades bring in needed warmth from the sun and weather. The insulation in the roof and floor keep the temperature stable during all the seasons,, and doors and windows can be customised onto the assembly block's façades.

1:100 SEASONAL DESIGN DIAGRAM

1. Reinforced Concrete Shell 80 mm
2. Insulation Ceiling 80 mm
3. I-Beam Floor Joist 325 mm
4. Hot and Cold Sanitation Connection
5. Insulation
6. Cork Underlay 2 mm
7. Floor Board 7 mm
8. Cork Floor 6 mm
9. Winter, Black Plexiglass Fabric Façades
10. Spring, Green Plexiglass Fabric Façades
11. Summer, White Perforated Plexiglass Fabric Façades
12. Autumn Amber Plexiglass Fabric Façades

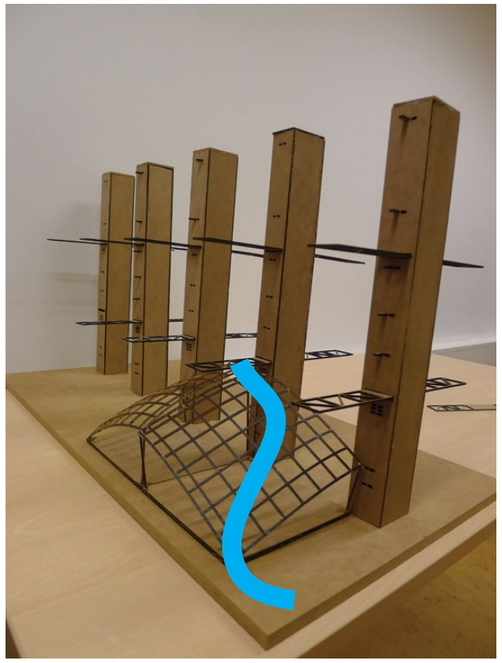


Path Sequence

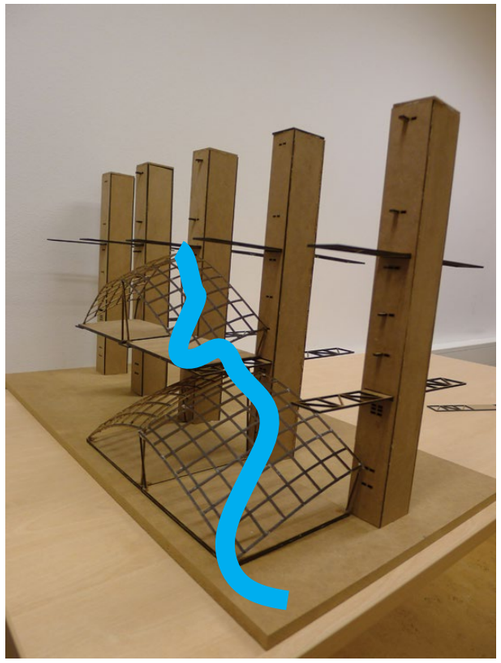
Prototype Consequence

DIFFERENT NARRATIVES ANSWERED BY THE SHELL'S PATH SEQUENCES

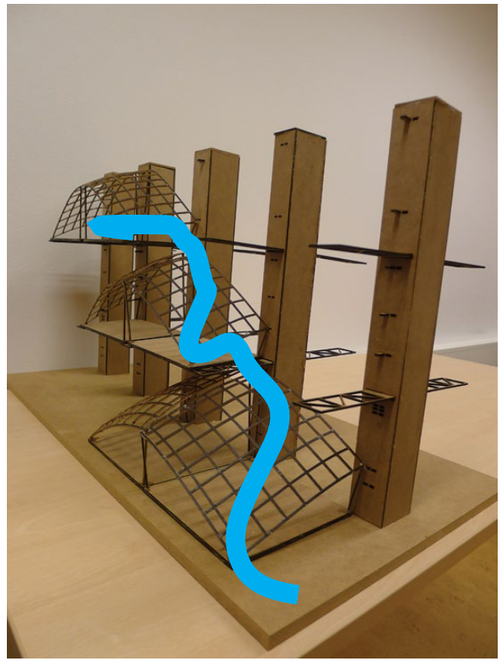
An exterior path is configurable on the shell roofs, and it brings people from one level to another one.



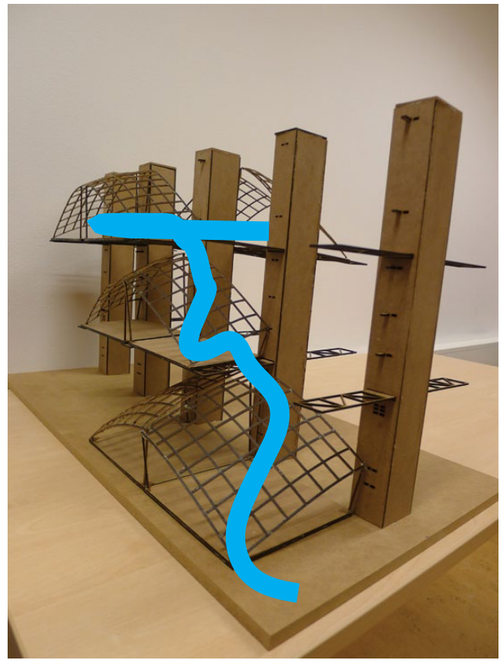
Path Increasing Phase 1



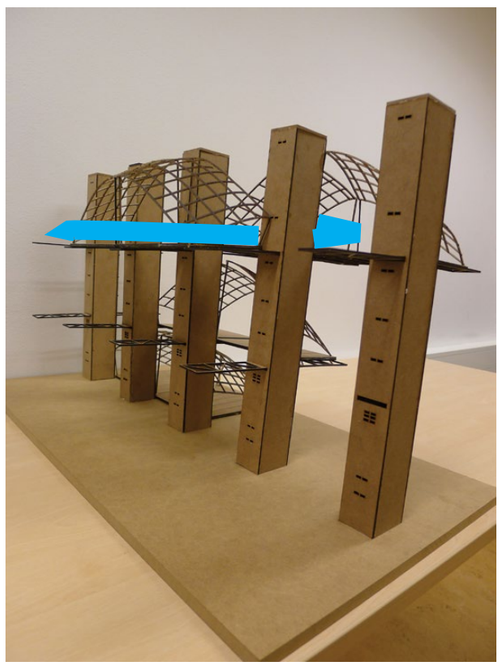
Path Increasing Phase 2



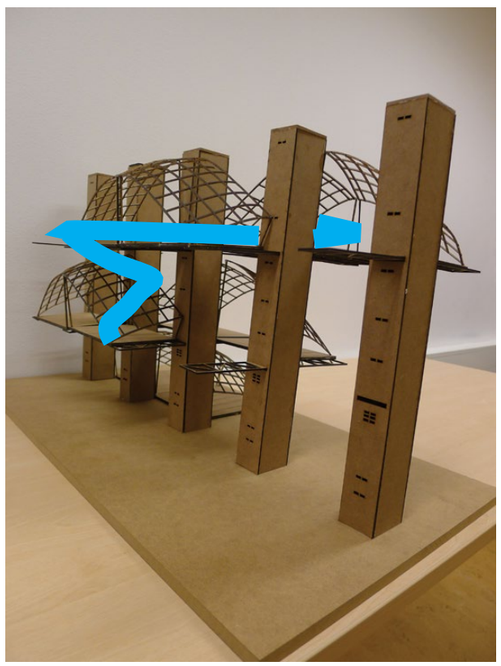
Path Increasing Phase 3



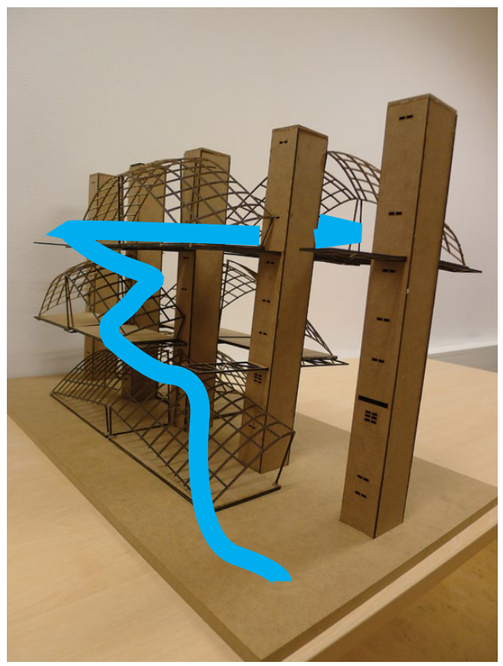
Path Increasing Phase 4



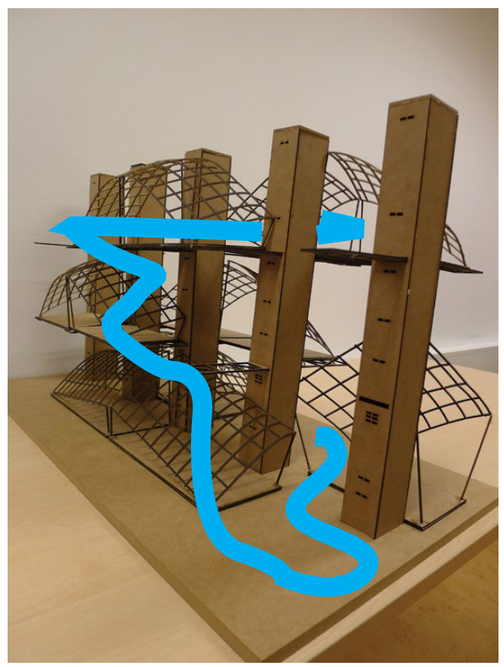
Path Decreasing Phase 1



Path Decreasing Phase 2



Path Decreasing Phase 3



Path Decreasing Phase 4

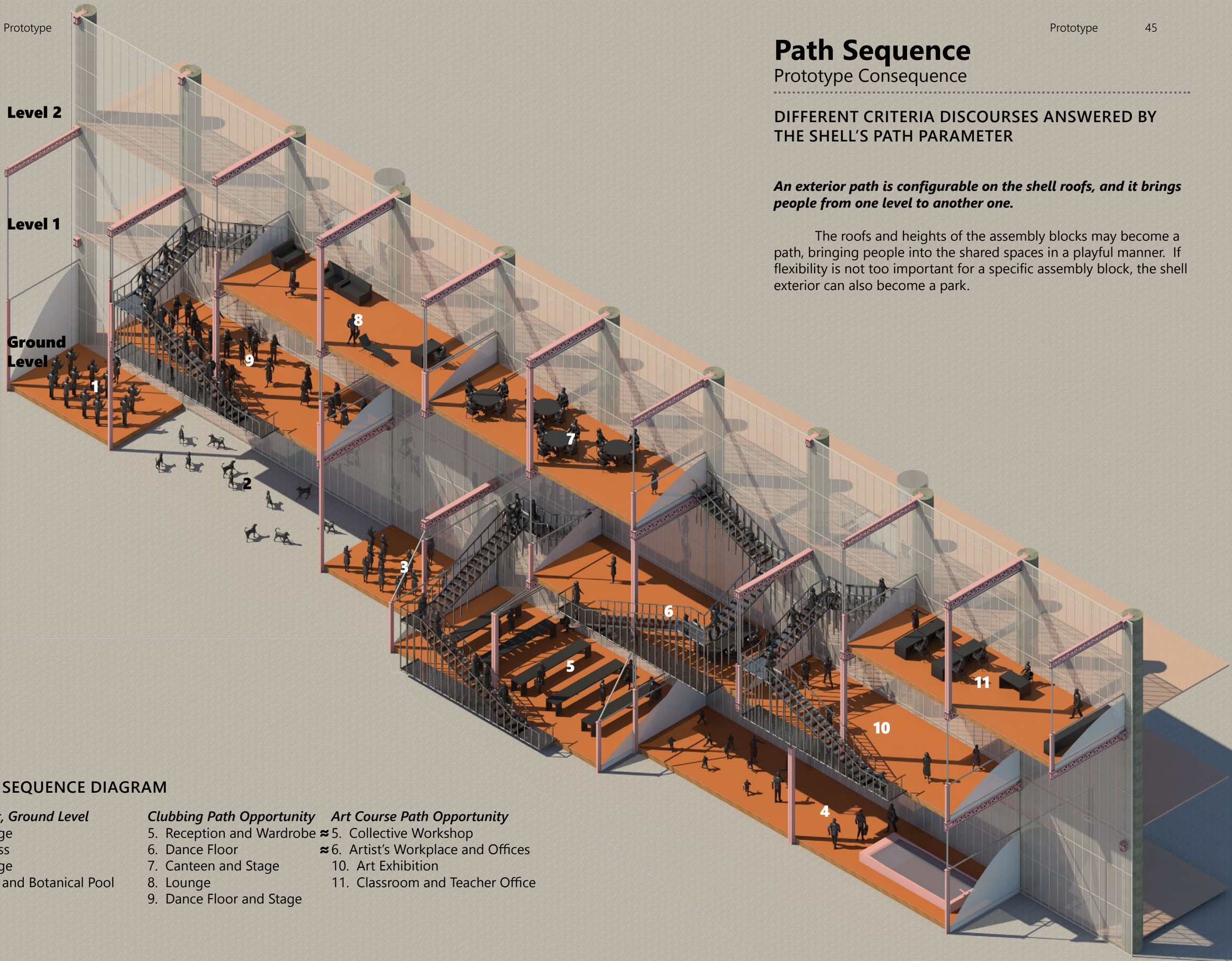
Path Sequence

Prototype Consequence

DIFFERENT CRITERIA DISCOURSES ANSWERED BY THE SHELL'S PATH PARAMETER

An exterior path is configurable on the shell roofs, and it brings people from one level to another one.

The roofs and heights of the assembly blocks may become a path, bringing people into the shared spaces in a playful manner. If flexibility is not too important for a specific assembly block, the shell exterior can also become a park.



1:200, PATH SEQUENCE DIAGRAM

Public Context, Ground Level
1. Singing Stage
2. Green Access
3. Singing Stage
4. Playground and Botanical Pool

Clubbing Path Opportunity
5. Reception and Wardrobe ≈
6. Dance Floor
7. Canteen and Stage
8. Lounge
9. Dance Floor and Stage

Art Course Path Opportunity
≈ 5. Collective Workshop
≈ 6. Artist's Workplace and Offices
10. Art Exhibition
11. Classroom and Teacher Office

Path Sequence

Prototype Consequence

DIFFERENT CRITERIA DISCOURSES ANSWERED BY THE SHELL'S PATH PARAMETER

An exterior path is configurable on the shell roofs, and it brings people from one level to another one.

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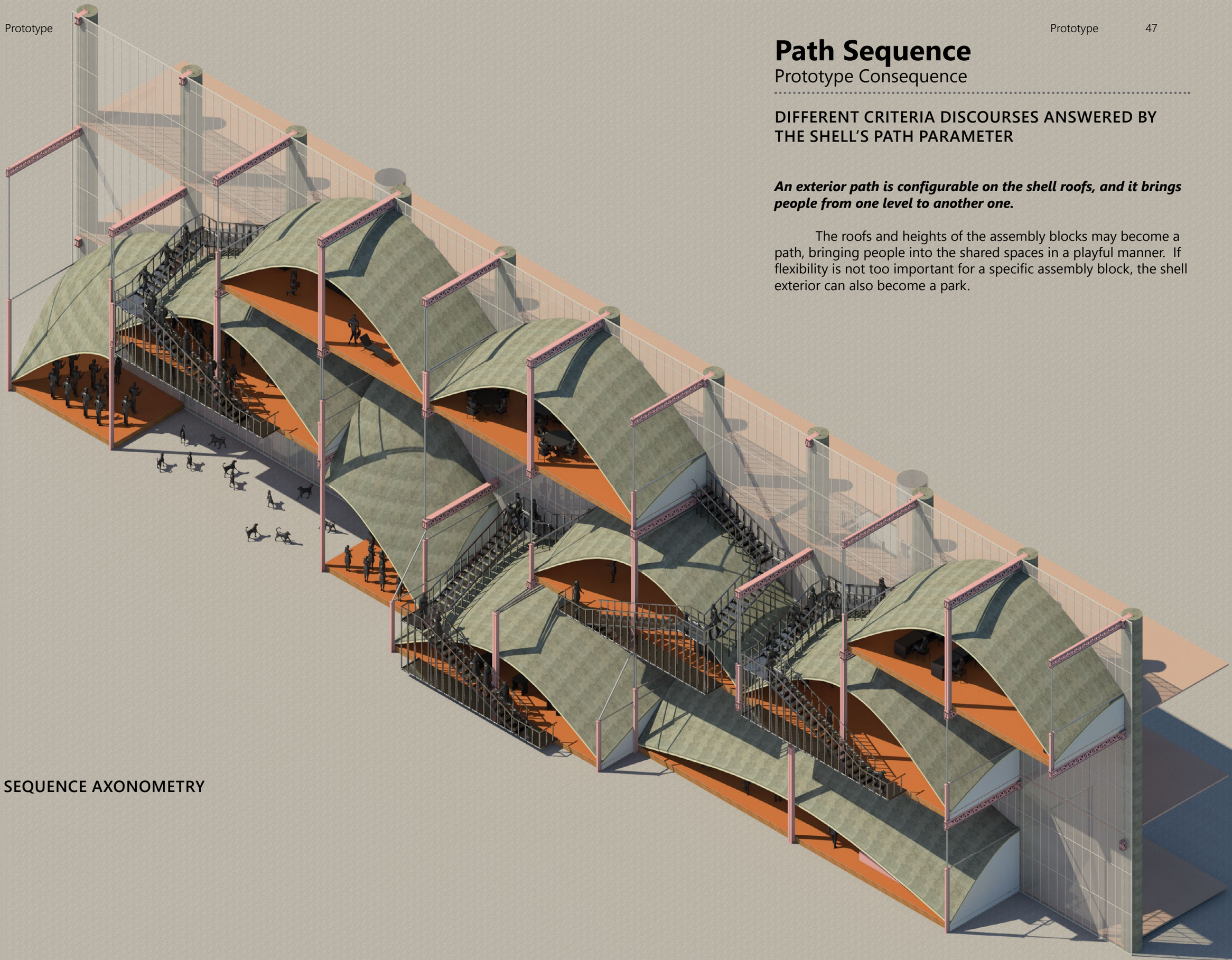


1:200, PATH SEQUENCE AXONOMETRY

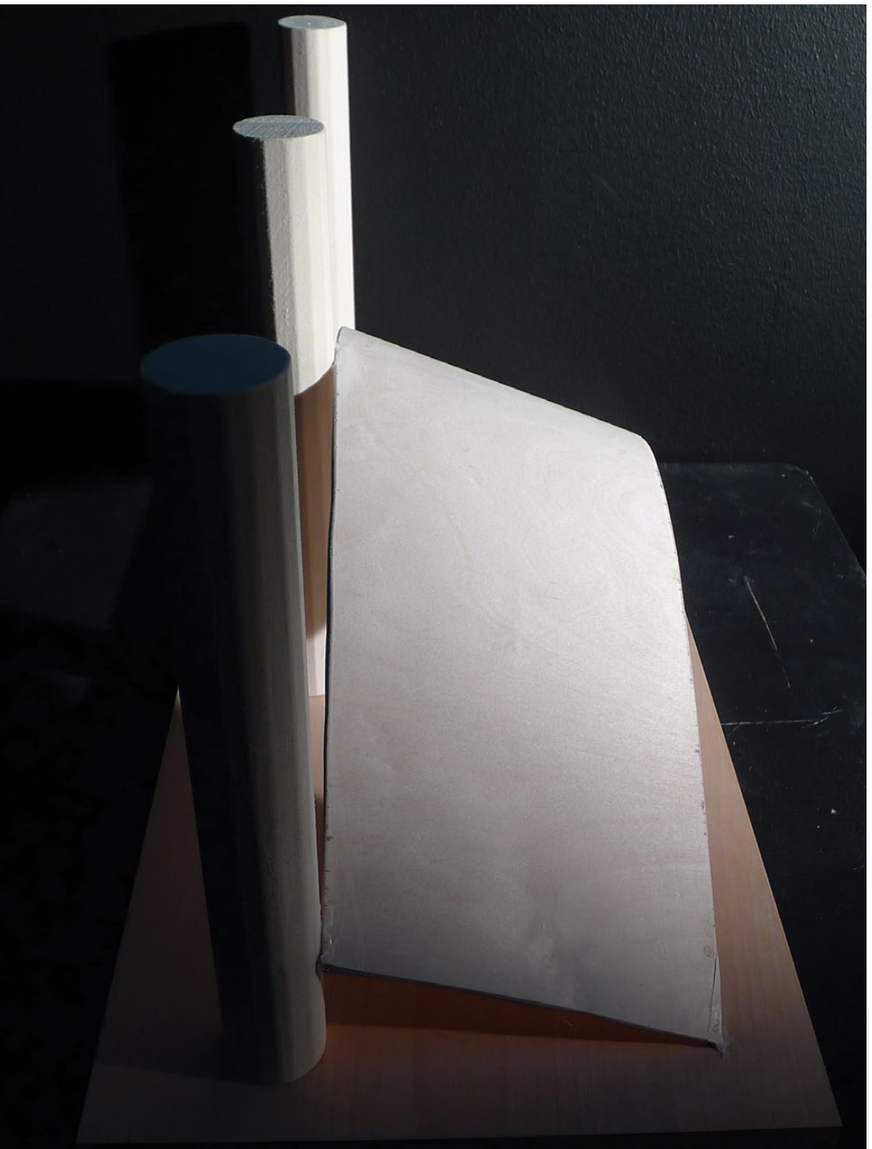
Physical Media Experiment

Prototype Parameter

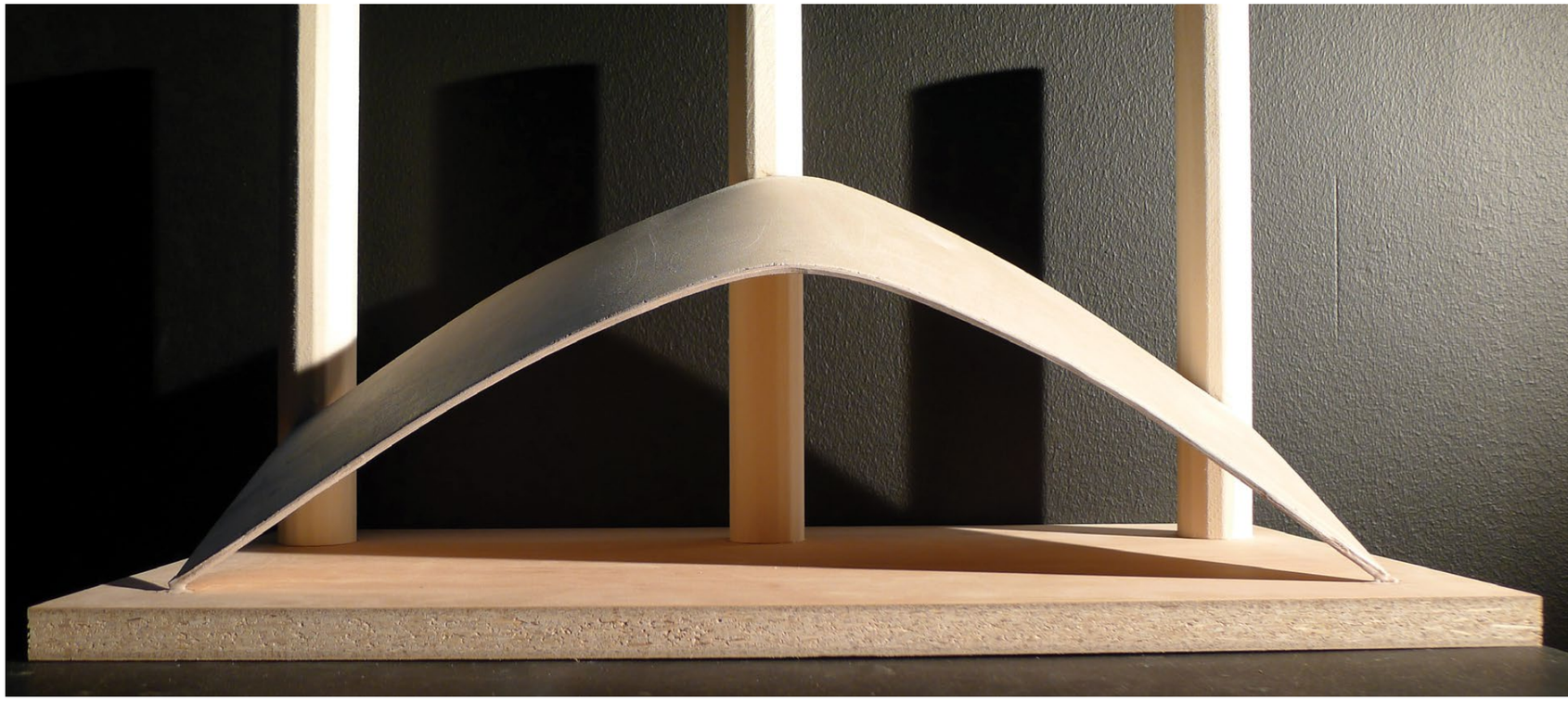
THIS EXPERIMENT LOOKS AT THE ASSEMBLY BLOCK CONSTRUCTION METHOD

This final model beutifually represents the City and Performance Centre's stakeholder's interests, with only minor construction concerns.

The shell structures are formable, and the point loads onto the towers and trusses do not cause a deformation in this experiment. Getting the arch's crown to match the CNC-milled form's shape was not possible, and the crown is slightly deformed. Overall, I think the shape beautifully represents the shared artist, permanent government agency, and community spaces.



FRONT, DIFFICULTY IN ARCH CROWN REINFORCING DETAIL



BACK, DIFFICULTY IN ARCH CROWN REINFORCING DETAIL

Physical Media Experiment

Prototype Parameter

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CRITERION MODEL FOCUS STUDY

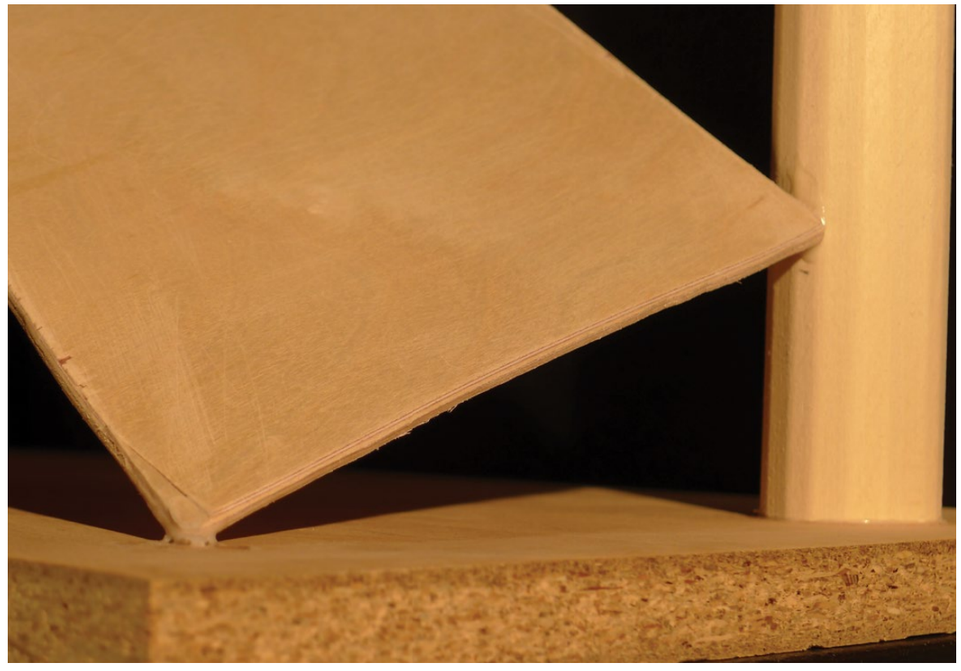
Event and Backdrop Spaces

Inside/Outside Façades

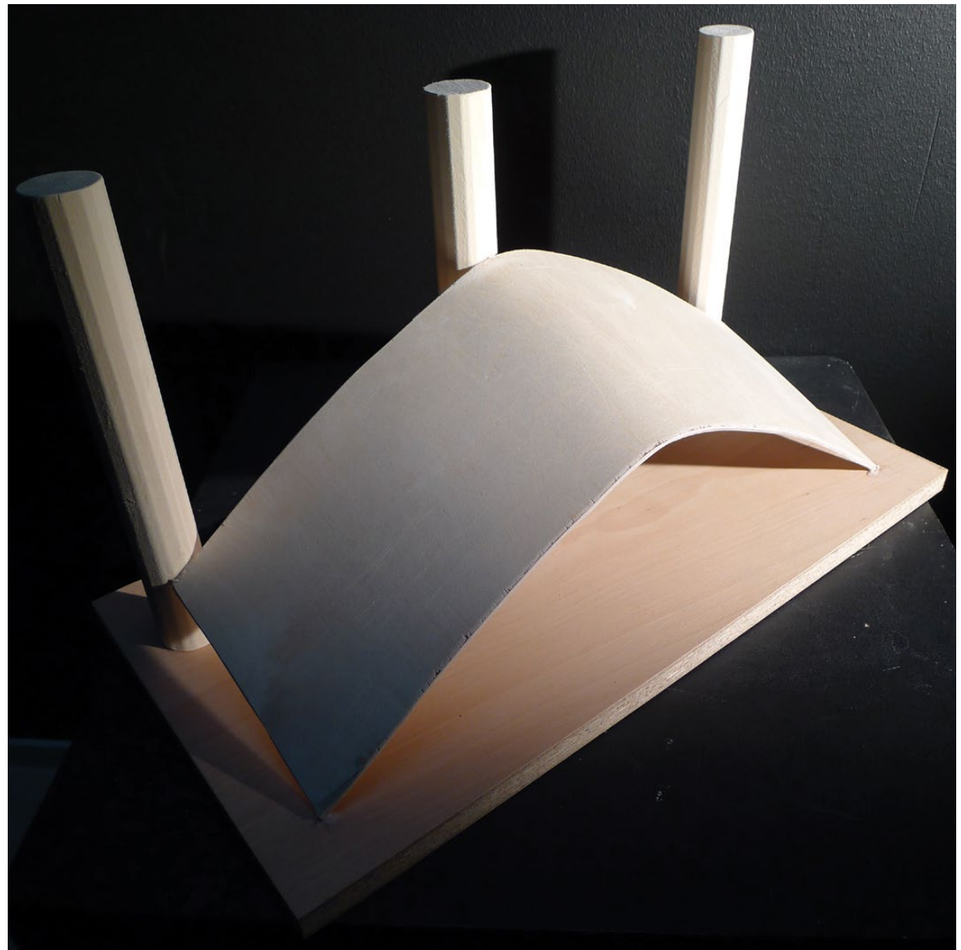
Intrinsically Similar Dimensions

Adaptability Criteria

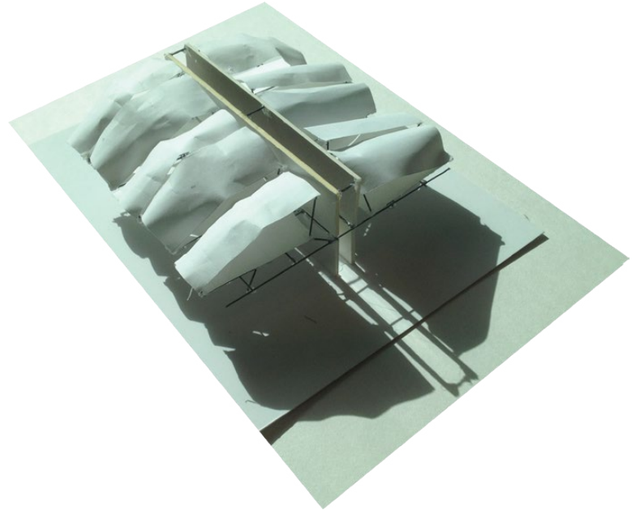
POINT LOAD DETAIL



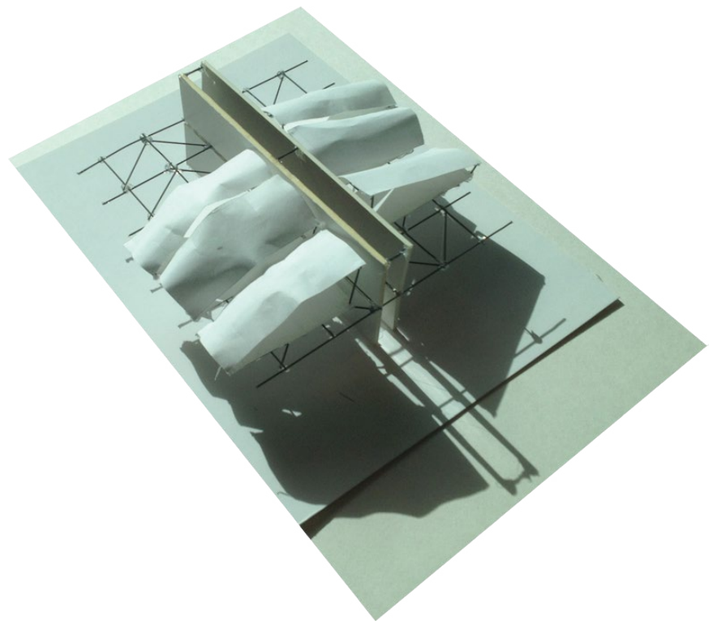
PERSPECTIVE



EXPERIMENT ON METHODS OF MAKING A PROTOTYPE MODEL AND STRUCTURAL DIFFICULTIES



ASSEMBLY BLOCKS DERIVED FROM STAKEHOLDER'S CONTEXTS



Design for Difference

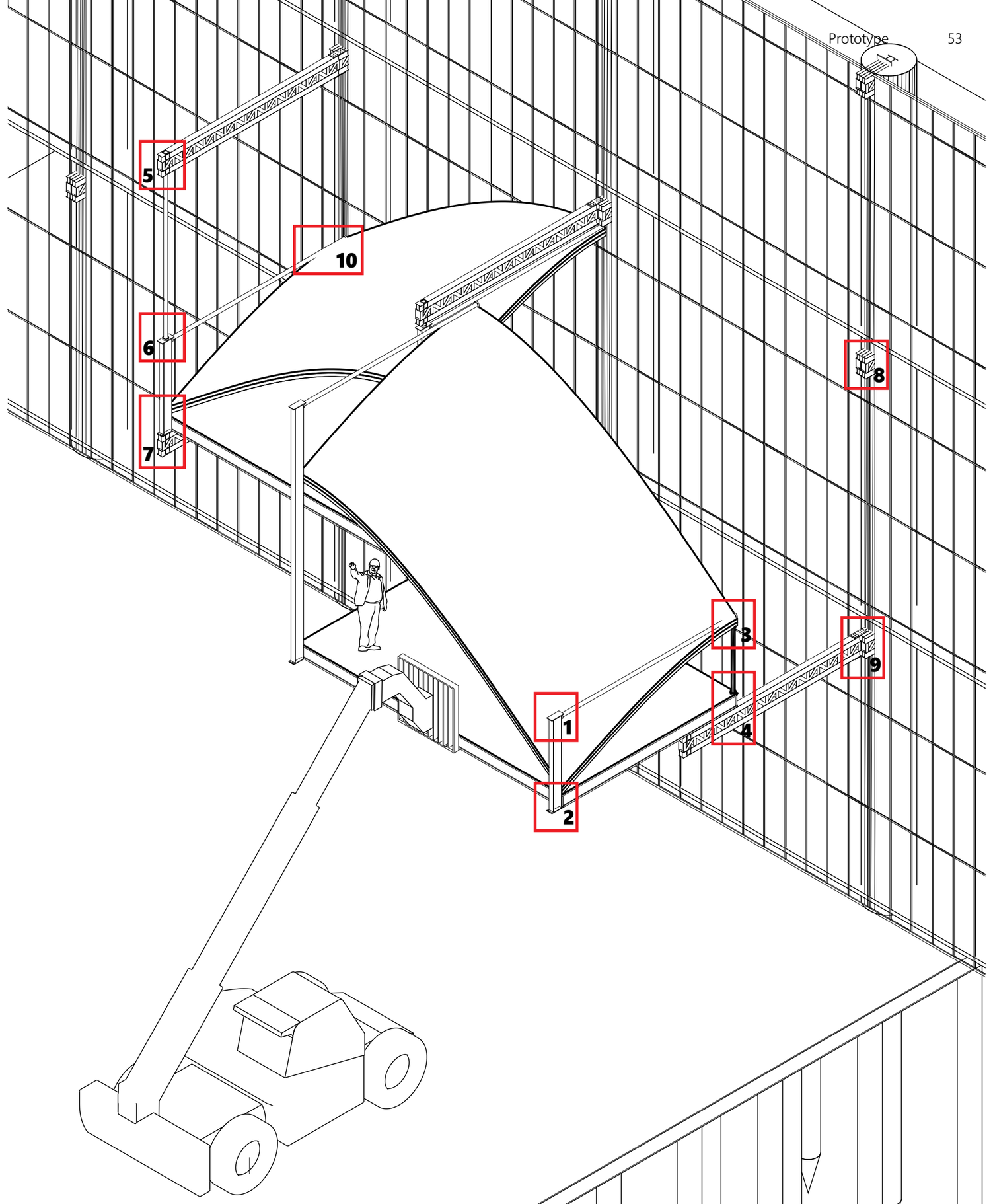
Prototype Parameter

ADAPTIVE SYSTEMS ARE CREATED WITH UNRESTRICTED DESIGN DIFFERENCES

Different spatial discourses are possible because of the assembly block's design in equilibrium and while being moved by cranes.

1:100, DETAIL DIAGRAM

1-4 Details. Details of Reconfiguring the Assembly Blocks by Cranes
5-7 Details. Details of Assembly Blocks in Equilibrium
8-10 Details. Detail Steps to Attach Assembly Blocks with the Remaining Structures



Design for Difference

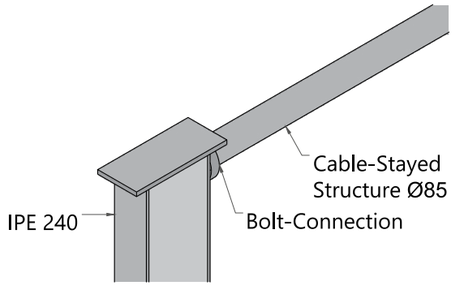
Prototype Parameter

ADAPTIVE SYSTEMS ARE CREATED WITH UNRESTRICTED DESIGN DIFFERENCES

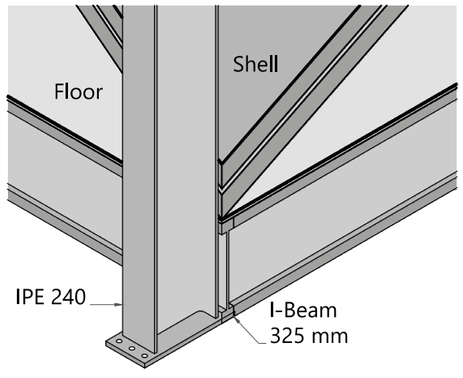
Different spatial discourses are possible because of the assembly block's design in equilibrium and while being moved by cranes.

DETAILS OF RECONFIGURING THE ASSEMBLY BLOCKS BY CRANES

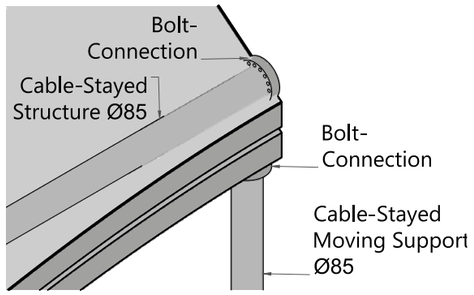
1. Cable Tie 1:10



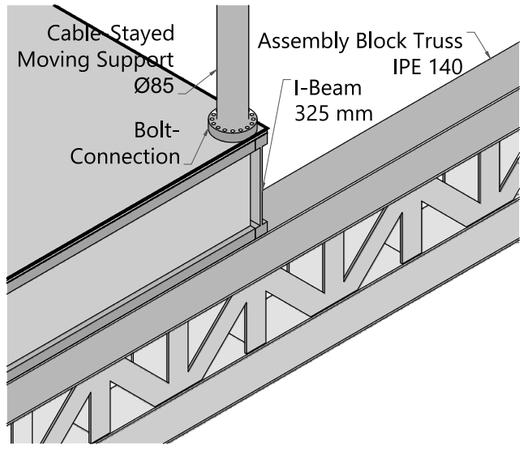
2. Corner 1:10



3. Detachable Cable 1:10



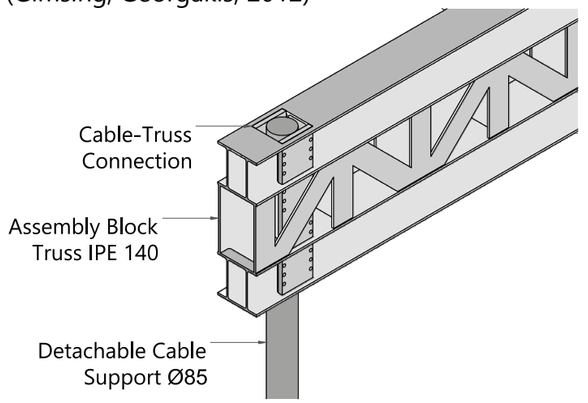
4. Corner and Detachable Cable 1:10



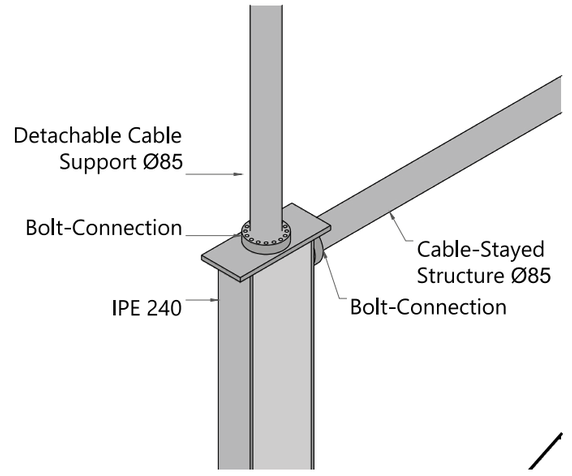
DETAILS OF ASSEMBLY BLOCKS IN EQUILIBRIUM

5. Truss-Cable Connection 1:10

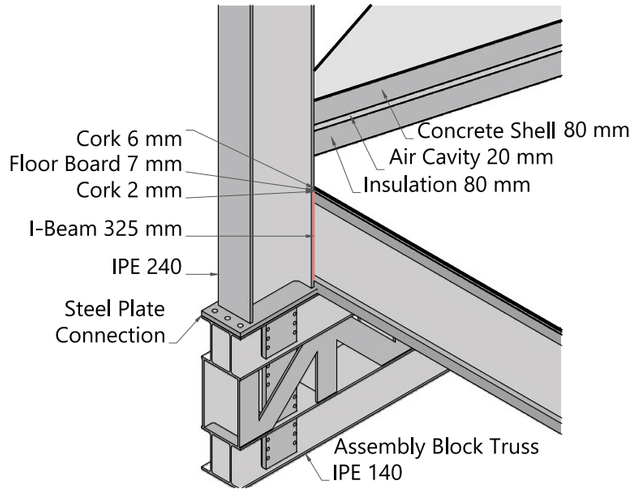
(Gimsing, Georgakis, 2012)



6. Detachable and Structural Cable Ties 1:10

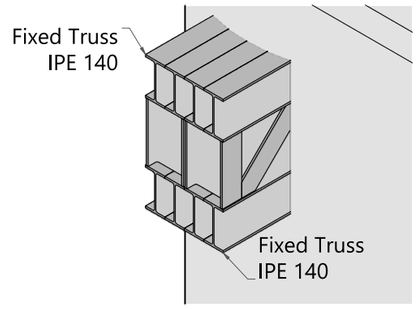


7. Construction and Assembly 1:10

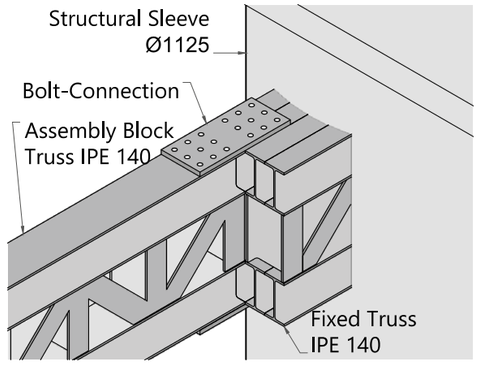


DETAIL STEPS TO ATTACH ASSEMBLY BLOCKS WITH THE REMAINING STRUCTURES

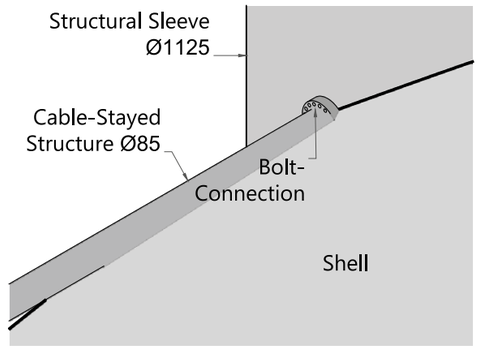
8. Fixed Truss 1:10



9. Truss-Truss Connection 1:10



10. Assembly Block-Remaining Structure Connection 1:10



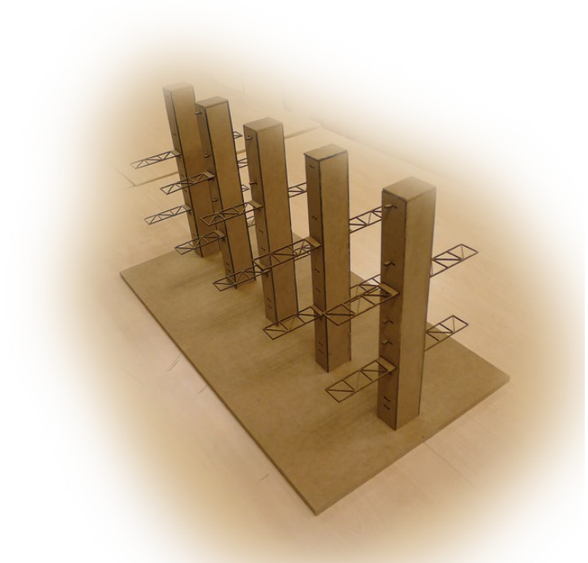
Design for Difference

Prototype Parameter

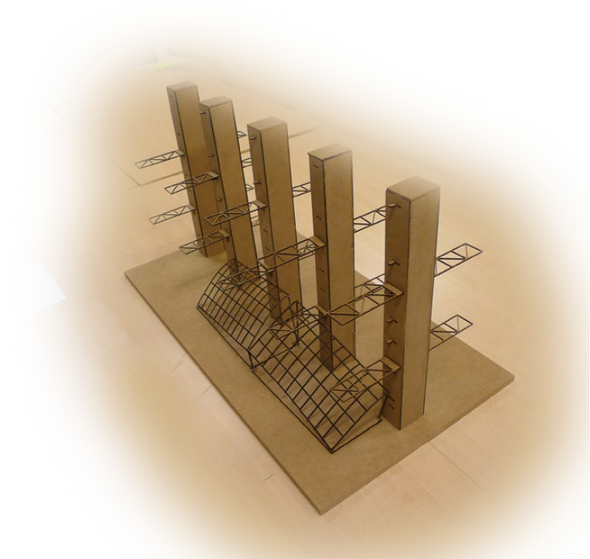
ADAPTIVE SYSTEMS CREATED WITH UNRESTRICTED DESIGN DIFFERENCES

Different spatial discourses are possible because of the assembly block's design in equilibrium and while being moved by cranes.

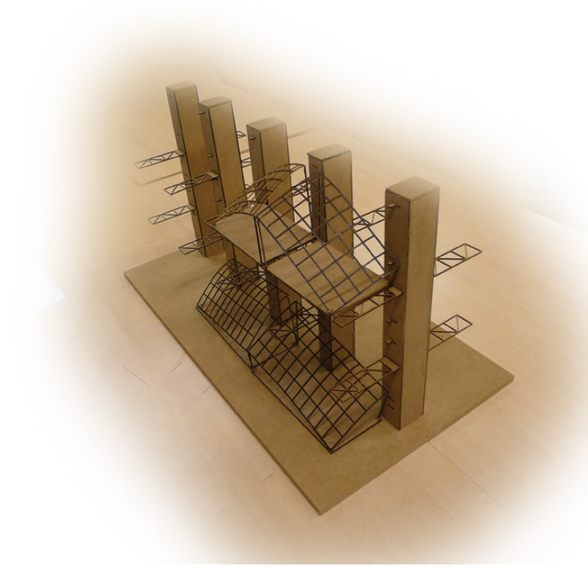
The assemblies are reconfigurable from one location to another one without losing any functionality, thereby contextualising their adaptive criteria. This discourse around Intrinsically similar dimensions, events, and backdrop spaces are important for artist stakeholders. I explore these criteria situations through model studies, while the detail drawings show the assembly block's stability.



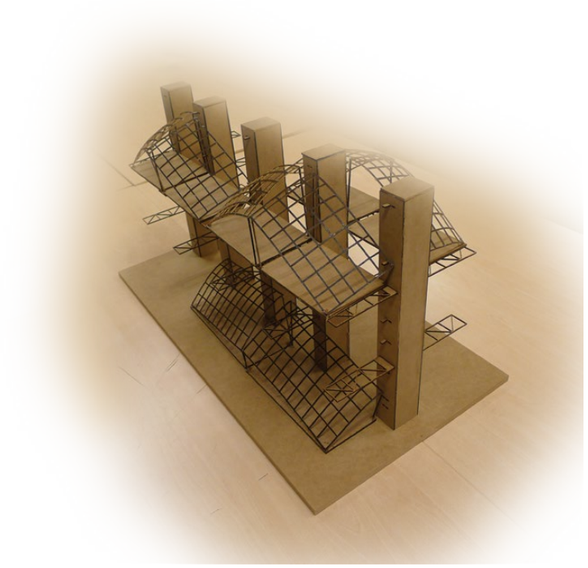
Difference in Emptiness



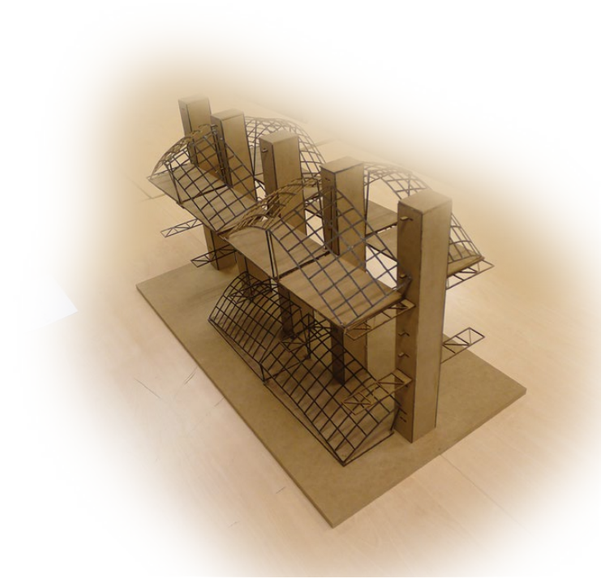
Difference in Singularity



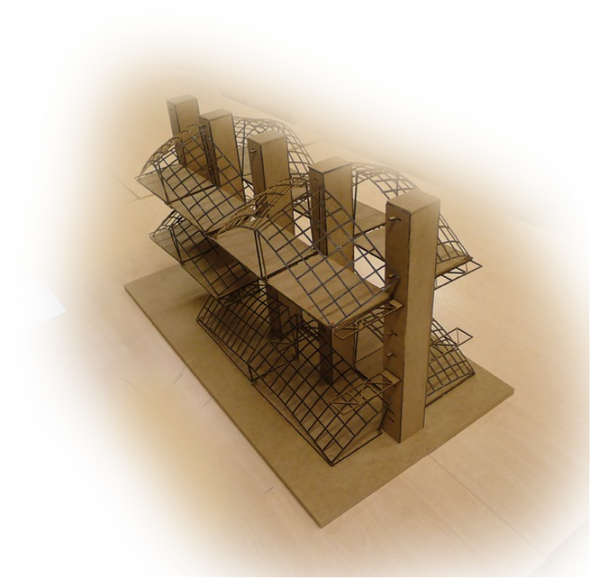
Difference in Programme Heights



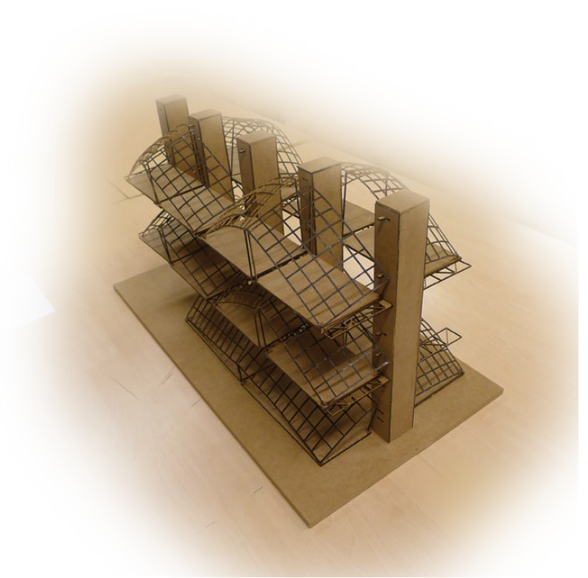
Difference in Clustering



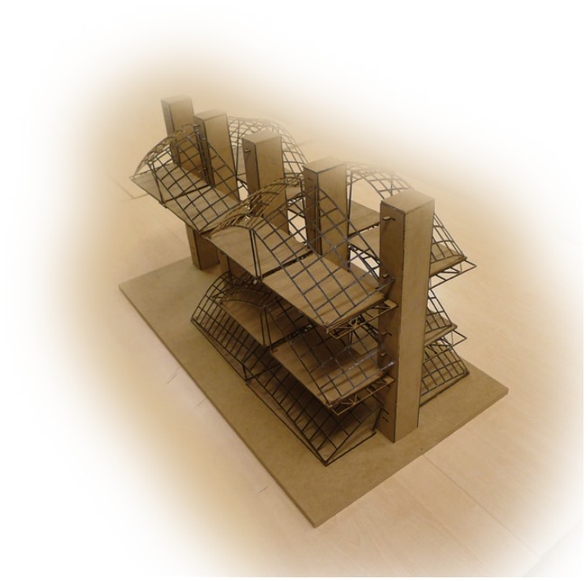
Difference in Hierarchy



Difference in Façade Criteria



Difference in Contexts



Difference in Spatial Adaptability

Part 3: Base Organisational System

Site Context

PART 3: TABLE OF CONTENTS

WHEN?

The City and Performance Centre is a ***research for design*** project. My Base Architectural System identifies this with design for different discourses to represent adaptive artist spaces. My master thesis contextualises the ***design for difference*** parameter through extracted catalogue options, which are movable by forklift and telehandler cranes. I contextualise a design for adaptive artist spaces by researching light-weight and modifiable assembly block prototype consequences formulated at Frihamnen. Discourse around the City and Performance Centre's stakeholders lead to criterion which I work with as ***research for design*** assignments that lead to adaptive artist spaces which benefit formations having unsuccessful policies and elements through their public contexts.

WHERE?

Frihamnen is where the City and Performance Centre is contextualised. Frihamnen is not the place that you would let children play at after dark since theft, damage, derelict, illegal sports, and graffiti are widespread here. Frihamnen is a successful formation for my master's thesis stakeholders since their values are directly contextualised with urban qualities and their social systems.

History of the Port

Inspirational Evidence

HARBOUR ZONES ARE USED PRIMARILY FOR INDUSTRY AND HAVE NOT SUSTAINED A SOCIAL SYSTEM FOR SHARING SPACES WITH ARTISTS

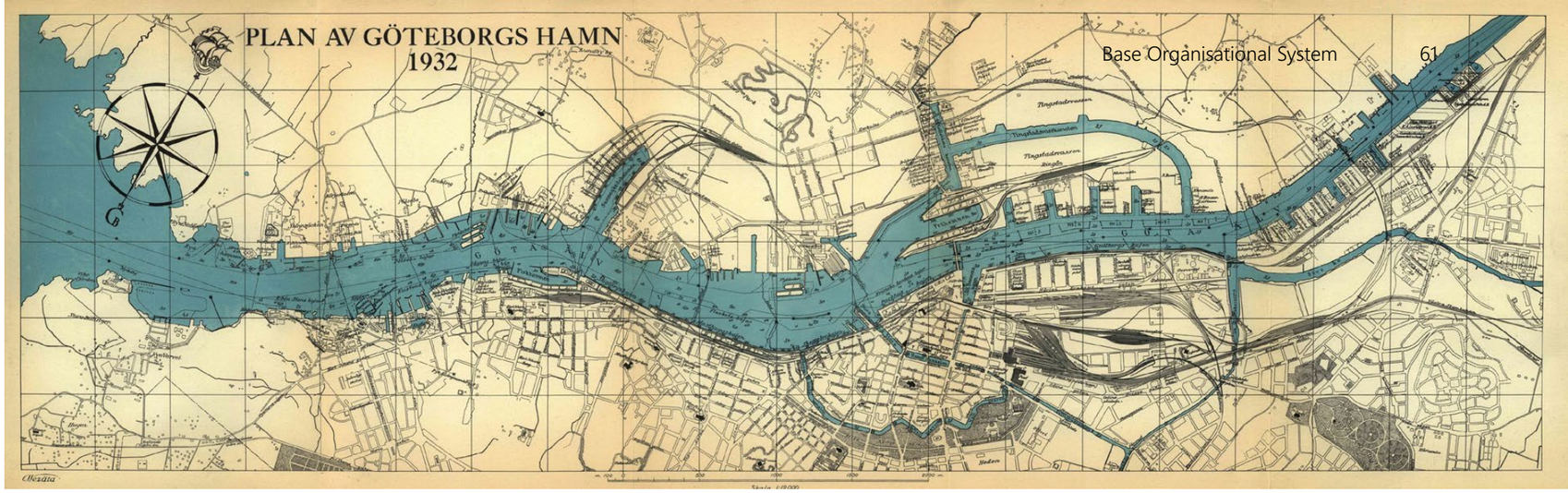
Frihamnen opened in 1922 but it is not vital for Göteborg. It acquires it name since in the past it was possible to bring goods ashore "free" here, meaning that people did not pay a customs duty or VAT.

In the 17th century Göteborg's first harbour was Stora Hamnkanalen. This was a canal dug out in the 1620s and the water was so shallow that larger ships were forced to anchor offshore, beyond Klippan, or at Gamla Varvet (now Stigbergskajen). Exports comprised largely of iron and timber.

In the 19th century the Port of Gothenburg become a major port. Thanks to steam power, the ships could make their way up the Göta Älv river. The first modern riverside quay was Stenpiren, which was completed in 1845.

Frihamnen (Freeport) acquired its name since it was possible to bring goods ashore "free" here, without a customs duty and VAT tax. Frihamnen was officially opened in 1922. Located on the Hisingen side of the river, it comprises three piers – Södra Frihamnspiren ('banana pier'), Norra Frihamnspiren and Kvillepiren. Now, Frihamnen is used exclusively for cruise ships.

(Port of Gothenburg, 2016)



1932 Map

1927

1980

Below: 1992

Below: 1998

Jubilieumsparken

Inspirational Precedent

New Street Spaces: The skateboard playground seating and backdrop elements offer users an inspirational shipyard and industrial history ***social experience***. The board walk, rough wooden planks, and its response to time are characteristic of Frihamnen contexts.

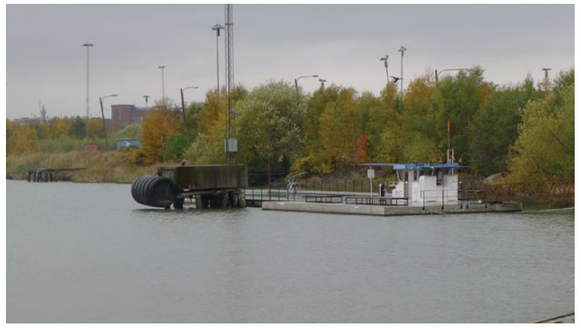
New Characteristic Spaces: The sauna and library offer a ***social life*** for people to relax and work with in the community. The playground uses contextual materials for a characteristic genius loci.

New Shared Functions: During summer this space offers visitors a ***social life*** for picnics and to hold workshops without care for the weather. In winter and spring these shared functions change to become a greenhouse.

CONTRASTING TEMPORARY QUALITIES VS. PERMANENT CHARACTERISTICS

Älvstranden Utveckling is working hard to change Frihamnen's character to an inclusive, green and dynamic city centre around the Göta Älv river. By thinking with a child's perspective, they have preserved Frihamnen's shipyard and industrial history while bringing it together with Göteborg's 2020 vision for Jubilieumsparken.

Re-purposing Street Spaces: The dynamic community gardens and seaside themed sandbox playground offer a ***social experience*** with the possibility to largely define Frihamnen contexts.



Re-purposing Characteristic Spaces: A swimming pool in the Göta Älv, and creating spaces to play boule acts as a ***social catalyst*** for how people define Göteborg and its community.

Re-purposing Characteristic Spaces: Frihamnen has event spaces which are themed for its harbour heritage. As a ***social catalyst*** it ends up offering a performance platform for all its stakeholders.

Gävle Fire of 1869

Problematic Evidence

CONTEXTUAL CITY FIRES HAVE LEFT CARNAGE WHERE ONLY SMOKESTACKS REMAINED

The Gävle fire of 1869 burnt down everything except for brick smokestacks. This burnt tower typology gives a sombre context for the City and Performance Centre's remaining structures.

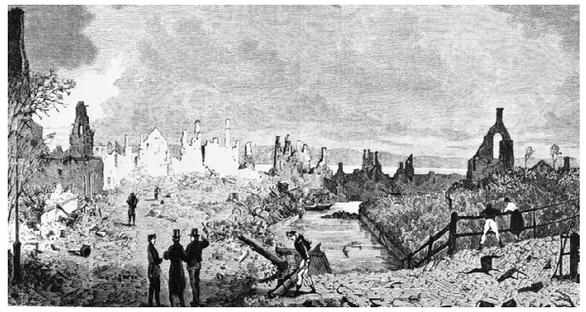
The Gävle fire started at the carpenter Erlandssons workshop. The building was wood, it was not properly cared for, he had left wood shavings on the floor, and there was no way to access the water and stop the fire once it sprung out of the fireplace. This workshop, owned by the city council chairman, was surrounded by other wooden buildings, and soon the fire was jumping from structure to structure in the dry summer of 1869 because of the conditions and the gale-full winds.

Erik Soderstrom recalls hearing the roar of the fire not too far away. Even the window where he was standing became so hot that they knew the fire would soon engulf their entire house. They rushed to gather what they could, got their carriage, and made a desperate attempt to not lose everything because of the fire. He was only six years old, watching the massive flames engulf the theatre, city hall, and shooting up into the sky. 530 houses burned down and 8,000 people were left homeless by the Gävle fire of 1869; It was one of the most terrible accidents that ever hit a Swedish city.

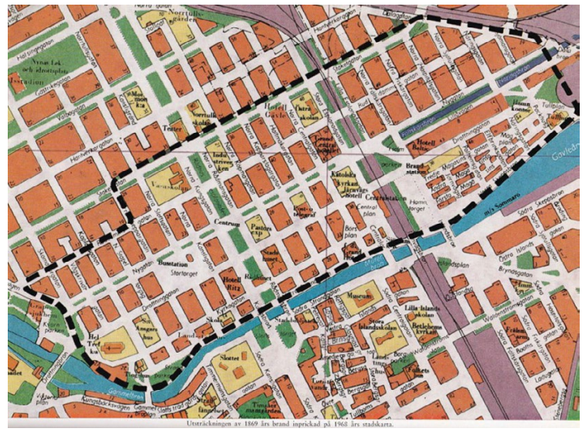
The fire blew burning embers across the water, and as soon as it engulfed the dense streets it could no longer be contained. Although this piece of cultural history takes place in 1869, its relationship to the water, government agencies, dense industrial precedents, and the typology of towers all define a certain narrative for people's relationship to the remaining structures I propose. To work beyond this unfortunate precedent, I create mixed-use spaces in the zones where the remaining structures offer the structural support for the City and Performance Centre's assemblages.

(Danielson, 2012)

Destroying the bridges was a way to divert the fire



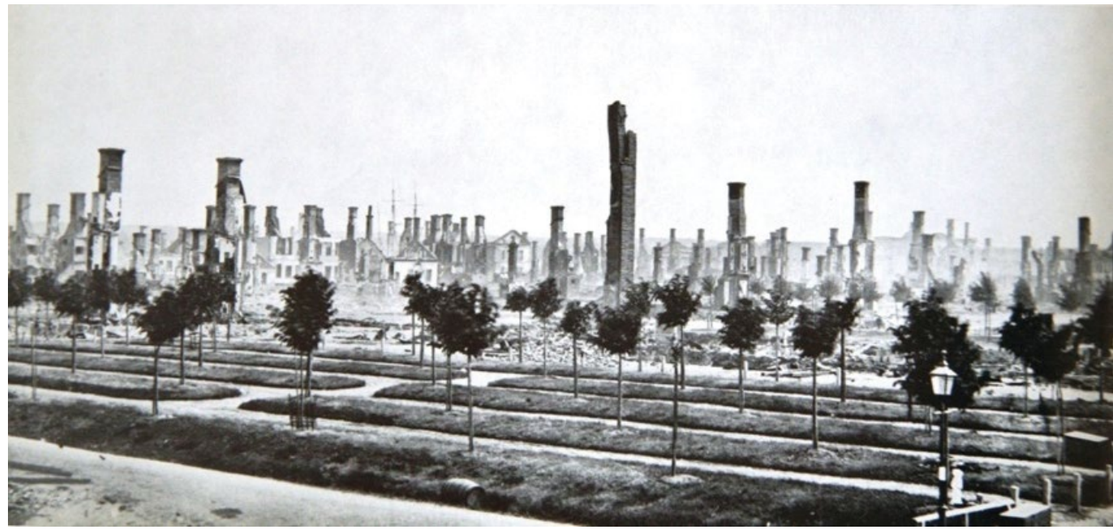
Surveying Gävle after saving what they could



Extents of the fire

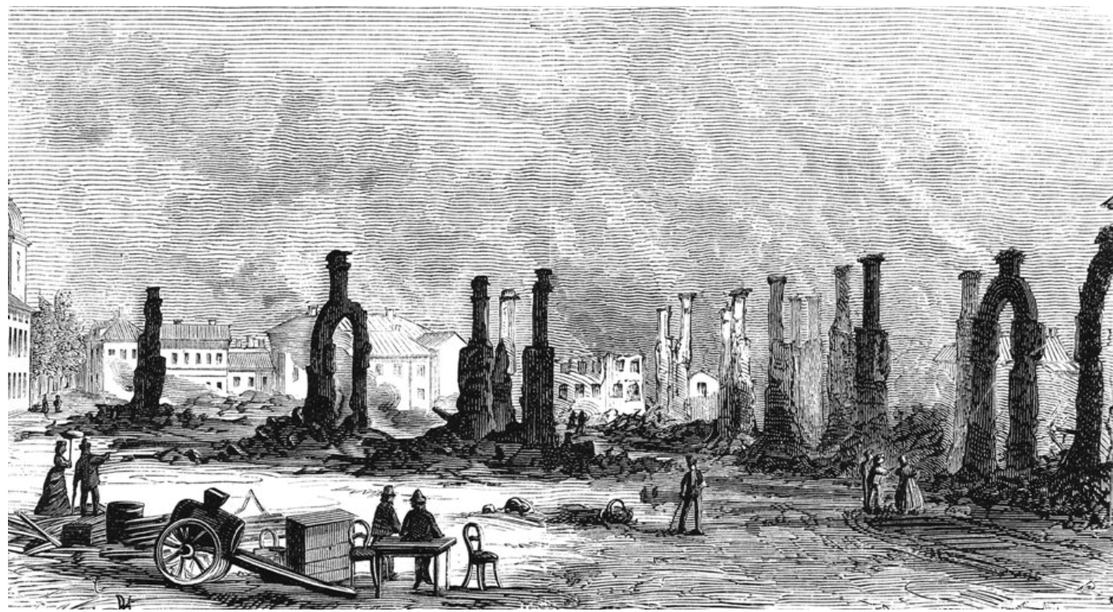
Below: The remains of the city hall

The fire destroyed farms



The fire destroyed gardens

Below: Extents of the damage



Frihamnen Characteristics

Problematic Precedent

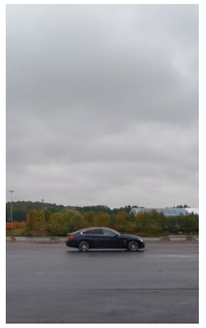
New Street Spaces: Bicycle parking at Frihamnen enters a discourse on vandalism, and its railroad freight corridors no longer offer the ***social experience*** this harbour used to.

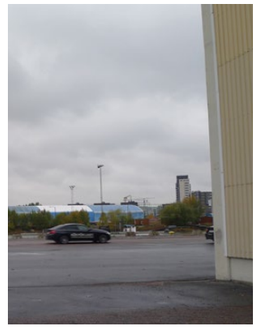
New Characteristic Spaces: Leased buildings at Frihamnen are not maintained well enough to bring in new industrial ***social life***, and the streets do not have sidewalks.

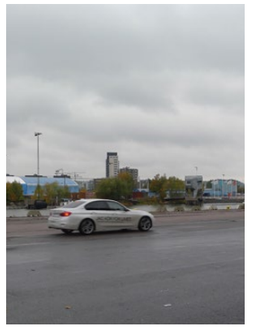
New Shared Functions: To use the spaces offered at Frihamnen businesses need tall barbed-wire fences. As storage spaces they are not inviting and do not work as ***social life*** catalysts.

CONTRASTING TEMPORARY QUALITIES VS. PERMANENT CHARACTERISTICS

Frihamnen is not the place that you would let children play at after dark since theft, damage, derelict, illegal sports, and graffiti are widespread here. Frihamnen is a successful formation for my master's thesis stakeholders since their values are directly contextualised with urban qualities and their social systems.







Re-purposing Street Spaces: The police presence is an attempt to curb the site qualities which have entered the social sphere of Frihamnen. These ***social experiences*** include car races, and other illegal activities.

Re-purposing Characteristic Spaces: Graffiti and theft are widespread as ***social catalysts*** which define the qualities of Frihamnen.

Re-purposing Characteristic Spaces: Frihamnen is a leftover space, and as a ***social catalyst*** it ends up showing the unsuccessful policies and elements which have come to define this derelict harbour.

Site Analysis: Jubileumsparken

Contextual Forces

JUBILEUMSPARKEN CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Jubileumsparken 1:5000. As a project of the city, the park intervenes as a public space in the centre of private spaces, invites a steady flow of people to Frihamnen, and creates a public context in unused space.

Jubileumsparken Site

Site Analysis: Public-Private

Contextual Forces

PUBLIC-PRIVATE CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Public-Private 1:5000. Lots of Frihamnen has no public context.

Public
Private

Site Analysis: Zoning

Contextual Forces

ZONING CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Zoning 1:5000. Frihamnen is highly accessible from the sea. The municipality owns and leases out most of its land parcels.

- Municipality Owned Land
- Industrial Zone
- River
- Housing Zone

Site Analysis: Traffic Flow

Contextual Forces

TRAFFIC FLOW CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Traffic Flow 1:5000. Frihamnen offers access for multiple levels of traffic.

- Highway
- City Street
- Industrial Street

Site Analysis: Figure-Ground

Contextual Forces

FIGURE-GROUND CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Figure-Ground 1:5000. Frihamnen is mostly empty parking lots or private asphalt formations

Figure
Ground

Site Analysis: Public Transit

Contextual Forces

PUBLIC TRANSIT CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Public Transit. Frihamnen is mostly inaccessible

Site Analysis: Fine Art Types

Base Organisational System

FINE ART FIELD CONTEXT FOR DENSE ARTIST SPACES AT FRIHAMNEN

Applied investigation 1:5000. Frihamnen stages rich conflicts for active and dense artist spaces, and how they generate value together.

See my MSS Preparatory Investigation coursework for an explanation of how these categories are classified and their contexts.

Public sphere art

1. Cruise ship and go-cart spaces, ***limited venue***
2. SVT Television, ***media audience***

Spatiality art

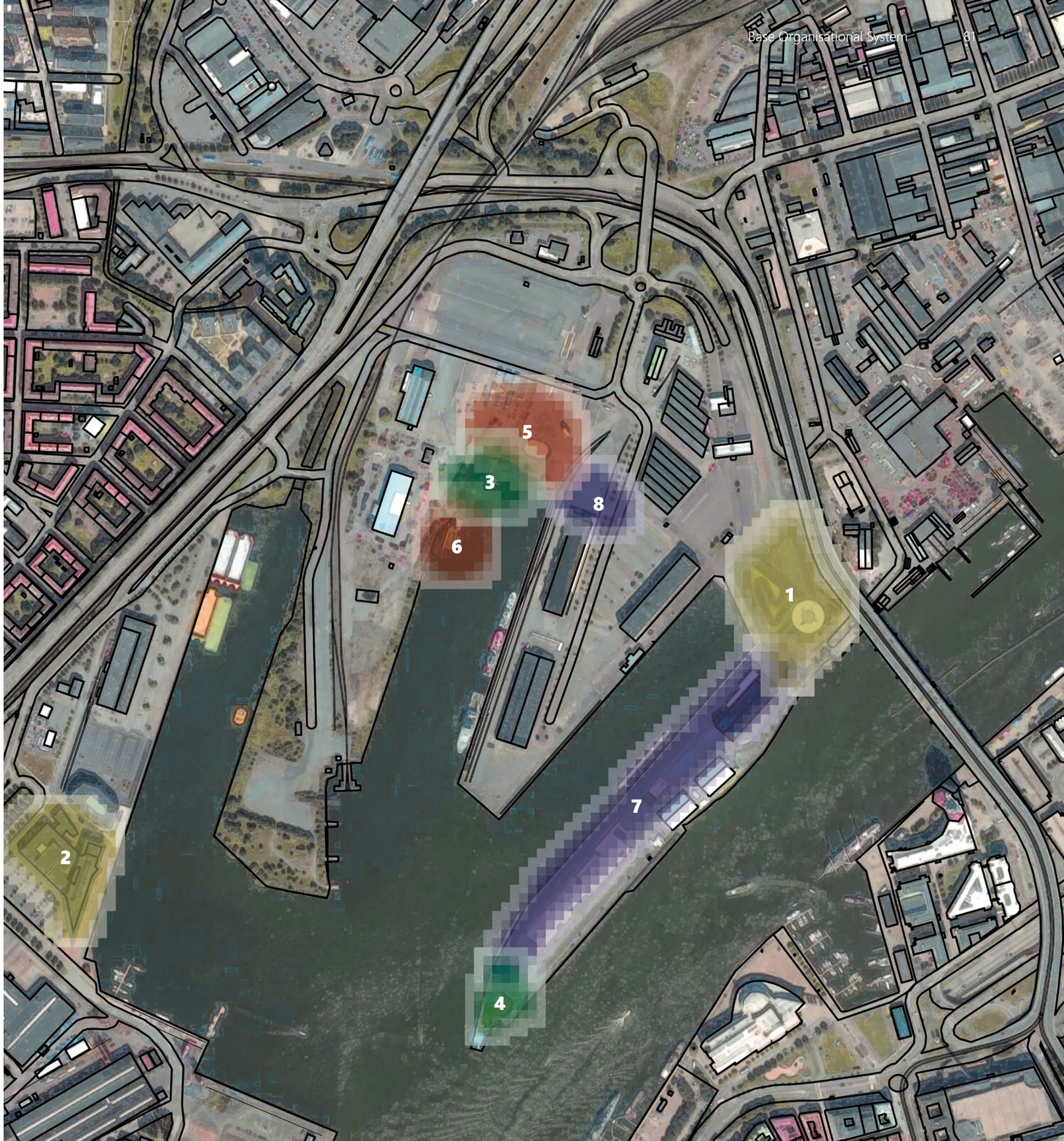
3. Industrial heritage materials, ***restricting interior***
4. Frihamnen iconic installation, ***genius loci***

Viewer art

5. Port-themed playground, ***abstract art***
6. Göta Älv swimming pool, ***rational art***

Community art

7. Södra Frihamnspiren (‘banana pier’) mixed-use performance space, ***visual expression***
8. Limited venue performance space, ***programming***



Part 4: Formation

Formulated Adaptive Artist Spaces

PART 4: TABLE OF CONTENTS

HOW?

The principle for my master's thesis is that artist, permanent government, and community agents at Frihamnen value all fine art categories, dense city fabrics, and active planning criterion. The values which are formulated with the City and Performance Centre is the state of successful artists, an artistically interested community, and government agencies which are interested in Göteborg's culture. The dense city fabric and active planning criterion benefits the production and work outcomes for artists, permanent government agencies, and also for community programmes. These adaptive artist spaces bring successful formations into the urban fabric at Frihamnen for all the City and Performance Centre's stakeholders. Changes in function within artistic expression, for government agencies, and increased urbanisation make formulating shared space prototypes purposeful today for my master's thesis stakeholders and their discourses.

HOW MUCH?

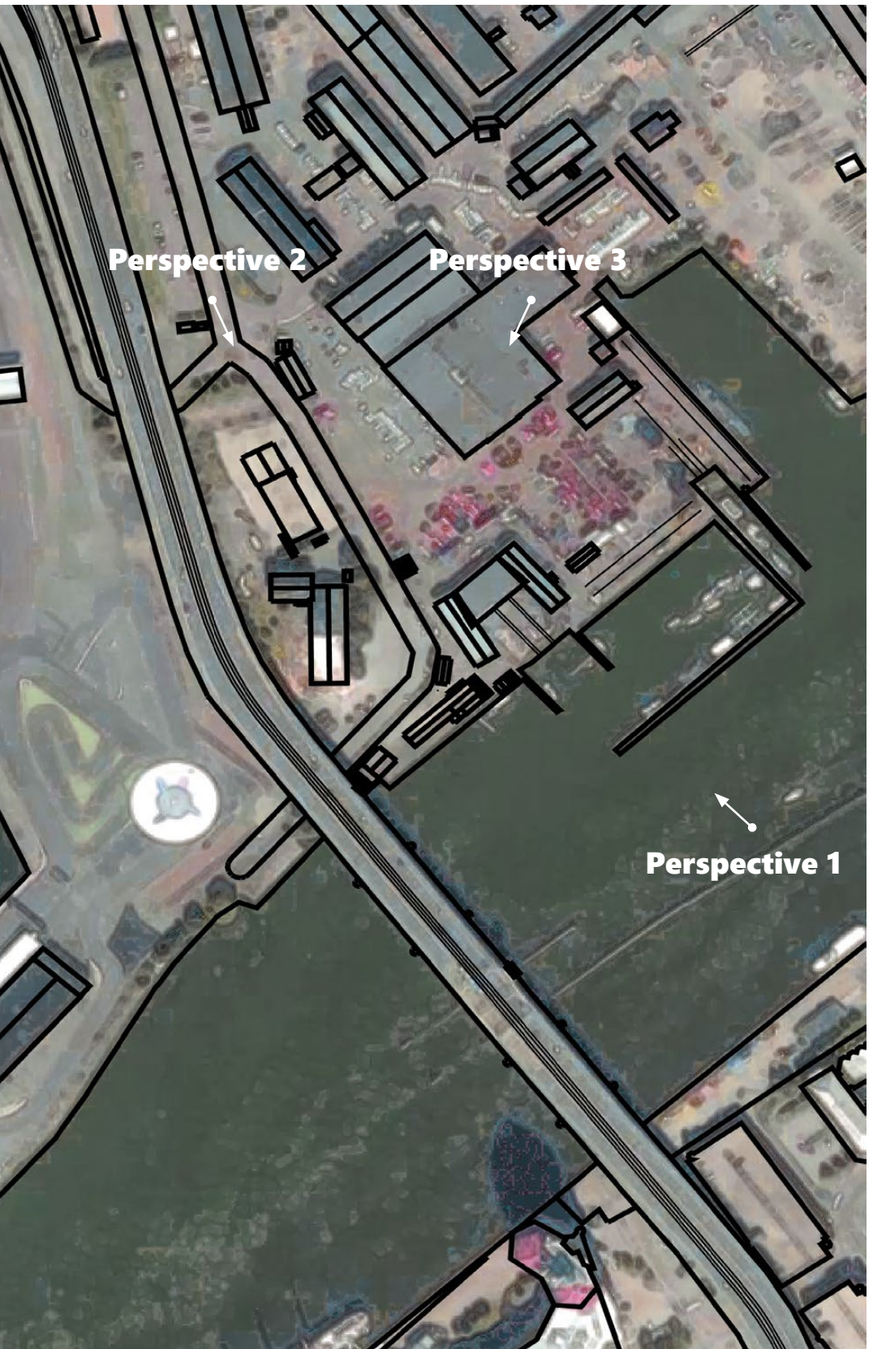
The City and Performance Centre looks at the value base of its Frihamnen context but does not yet expand these unsuccessful policies and elements for a context manifesto. My master thesis is delimited by not yet detailing the adaptive artist spaces between all its stakeholders formations. It also does not yet cover if instead a government and community centre is the best possible shared space architecture with artistic interventions.

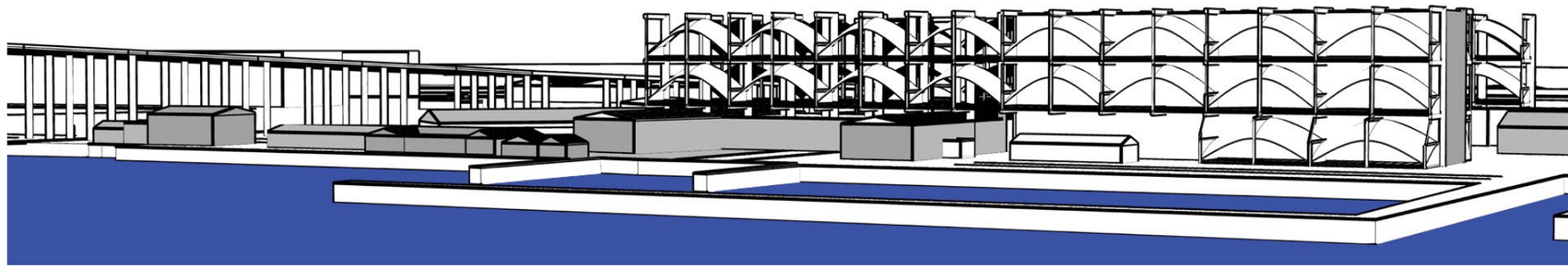
Formation Test: Hybrid

Building Göteborg

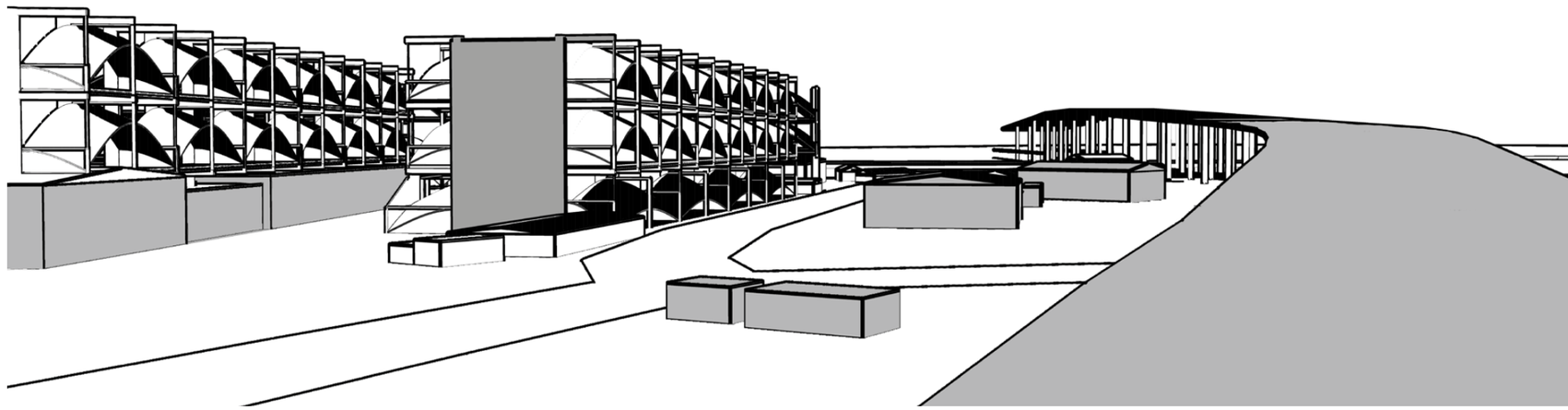
HYBRID FORMATION TESTS DEMONSTRATE SUCCESSFUL QUALITIES FOR SHARED ARTIST SPACES

The hybrid formation references the existing city fabric and it explores ways to integrate the current permanent government agency contexts with assemblages.



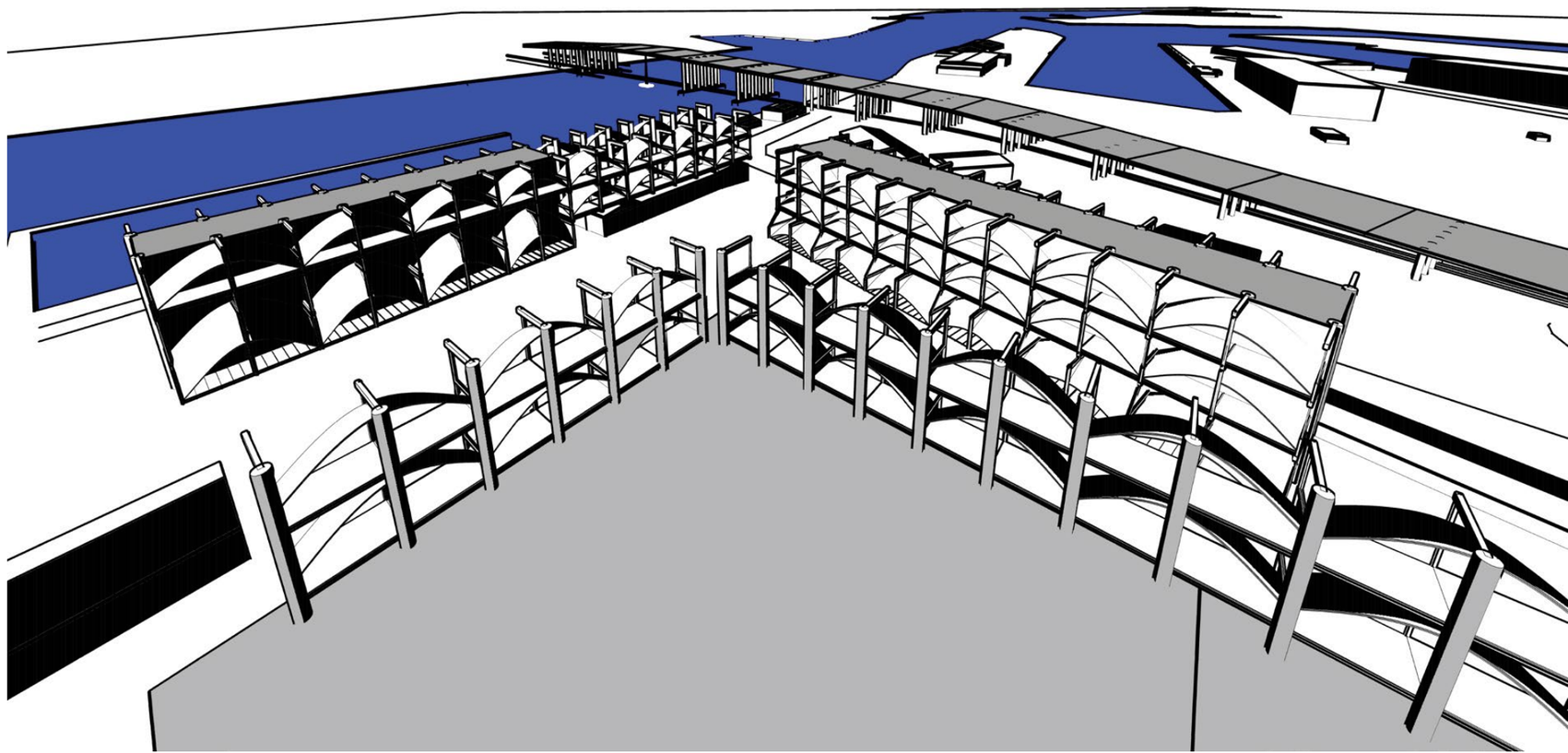


PERSPECTIVE 1: VIEW ACROSS THE GÖTA ÄLV RIVER



PERSPECTIVE 2: STREET VIEW FROM FRIHAMNEN

BELOW, PERSPECTIVE 3: VIEW ACROSS FRIHAMNEN

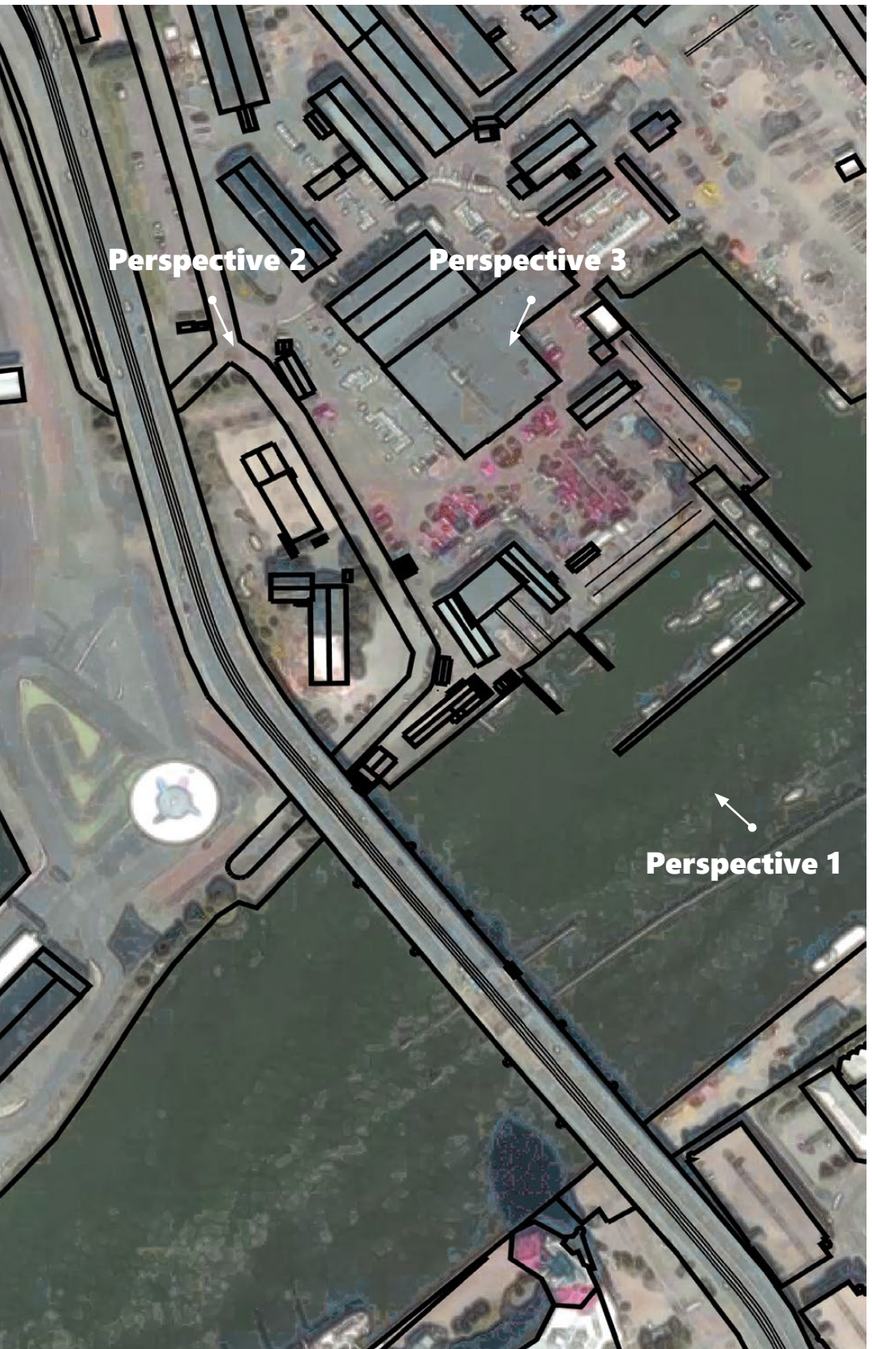


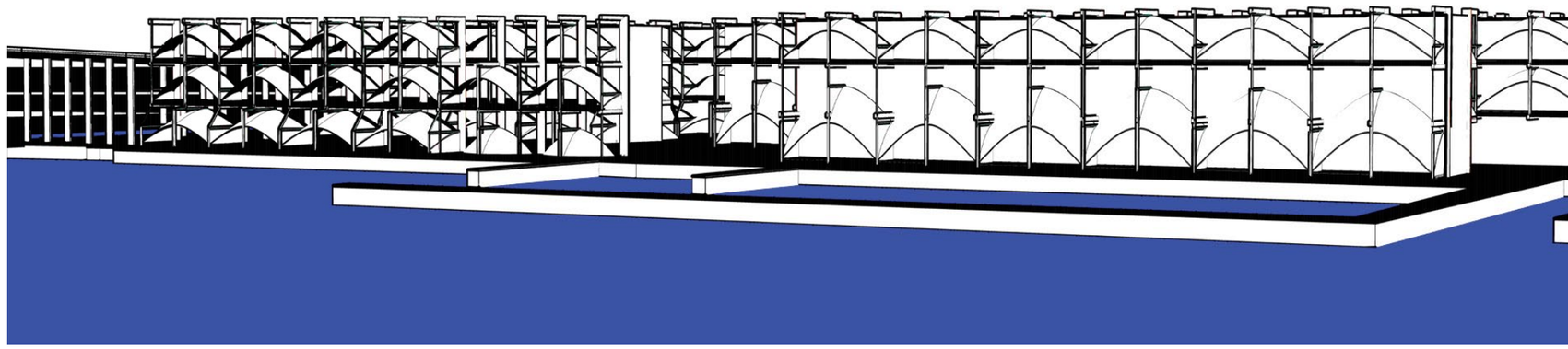
Formation Test: Linearity

Building Göteborg

LINEAR FORMATION TESTS DEMONSTRATE SUCCESSFUL QUALITIES FOR SHARED ARTIST SPACES

The linear formation is oriented to the Göta Älv river, and it provides an argument to integrate mixed use spaces together with the remaining structures.





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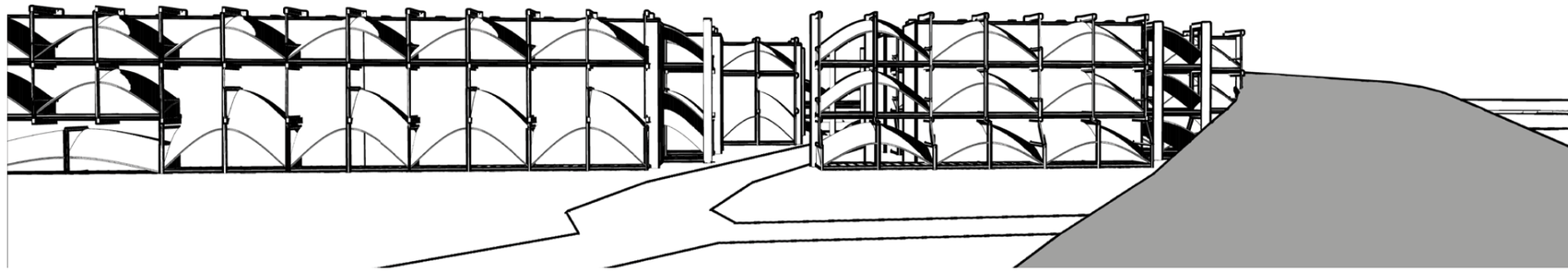
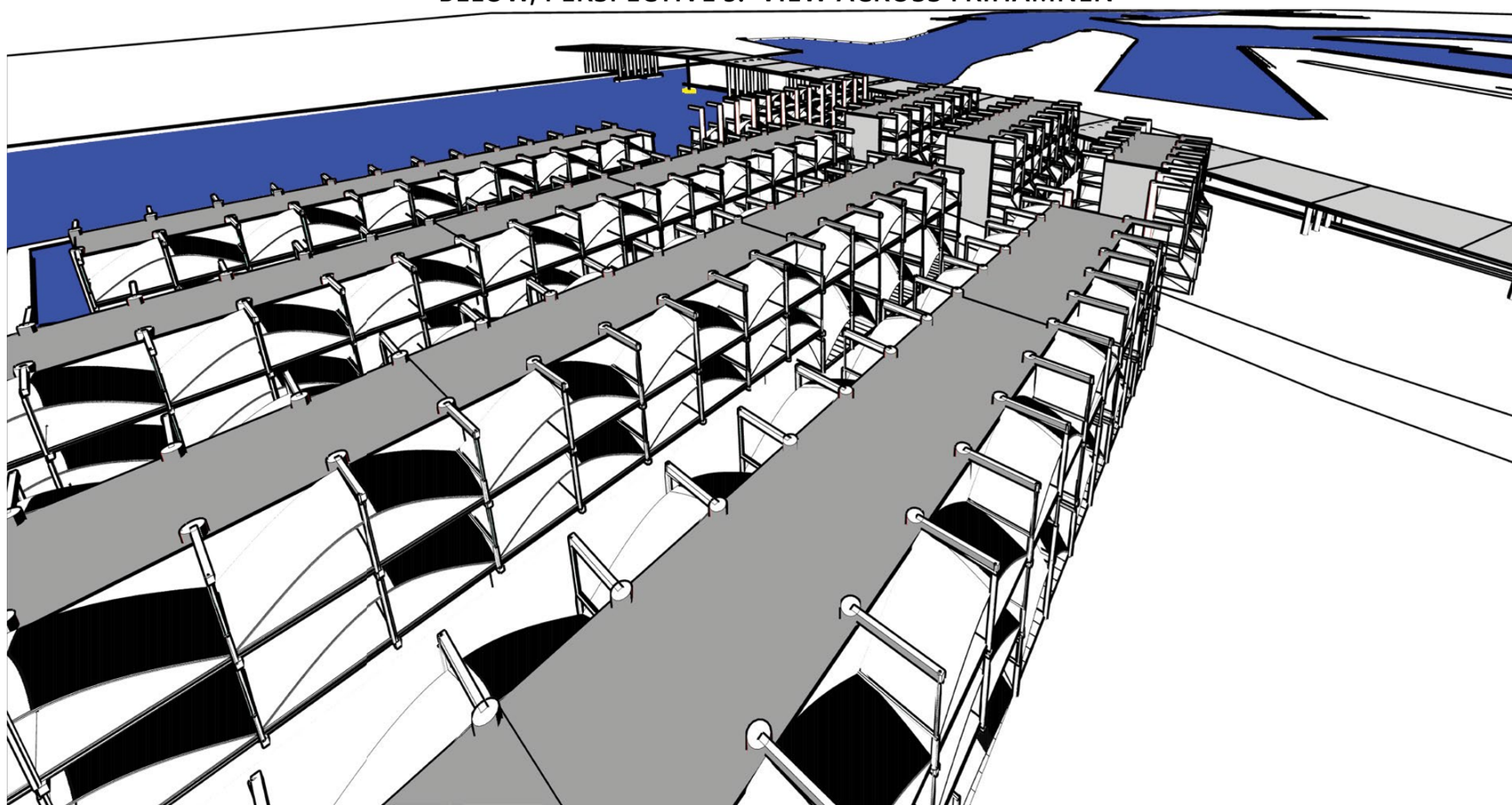


PERSPECTIVE 2: STREET VIEW FROM FRIHAMNEN

BELOW, PERSPECTIVE 3: VIEW ACROSS FRIHAMNEN

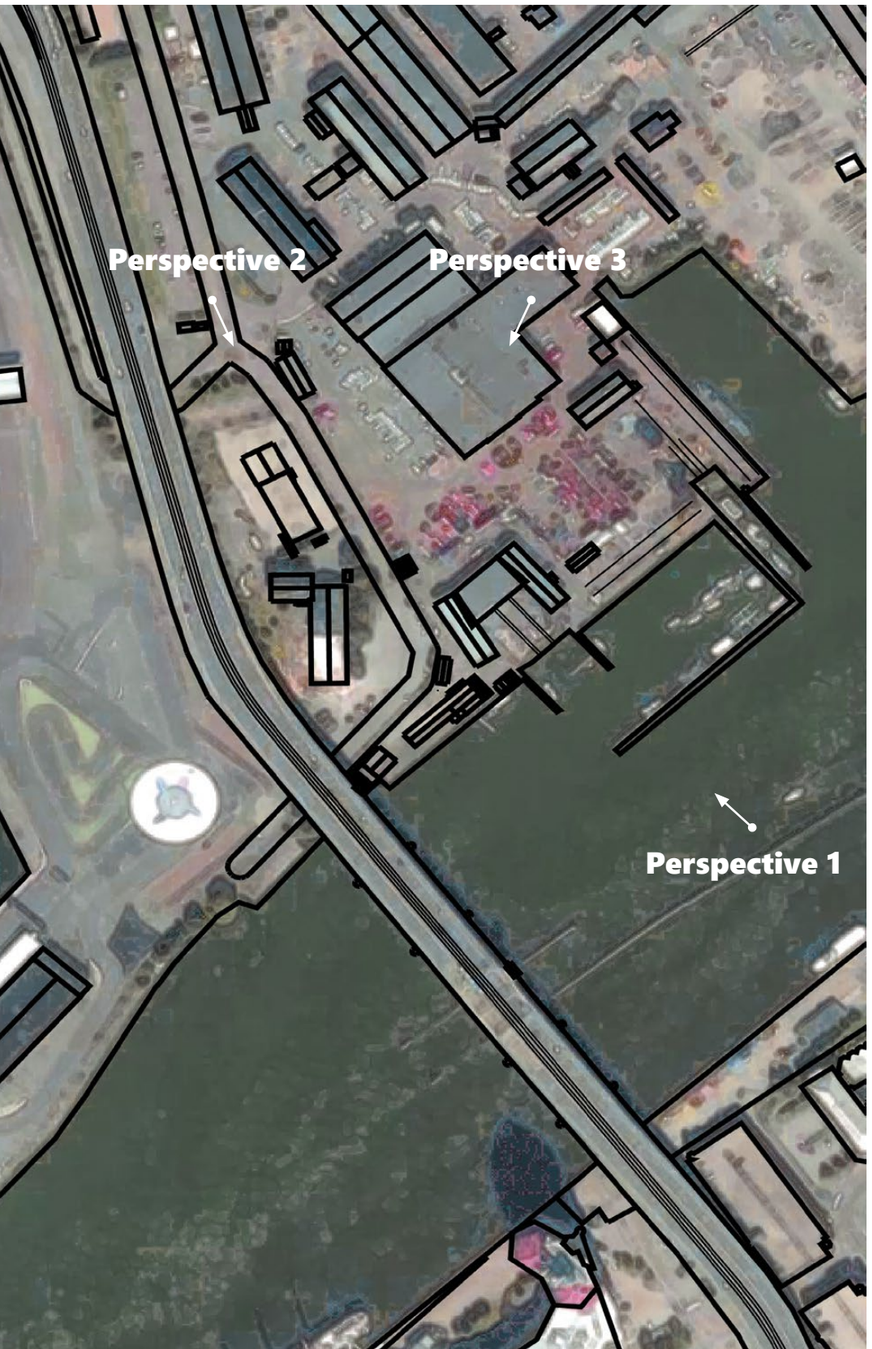


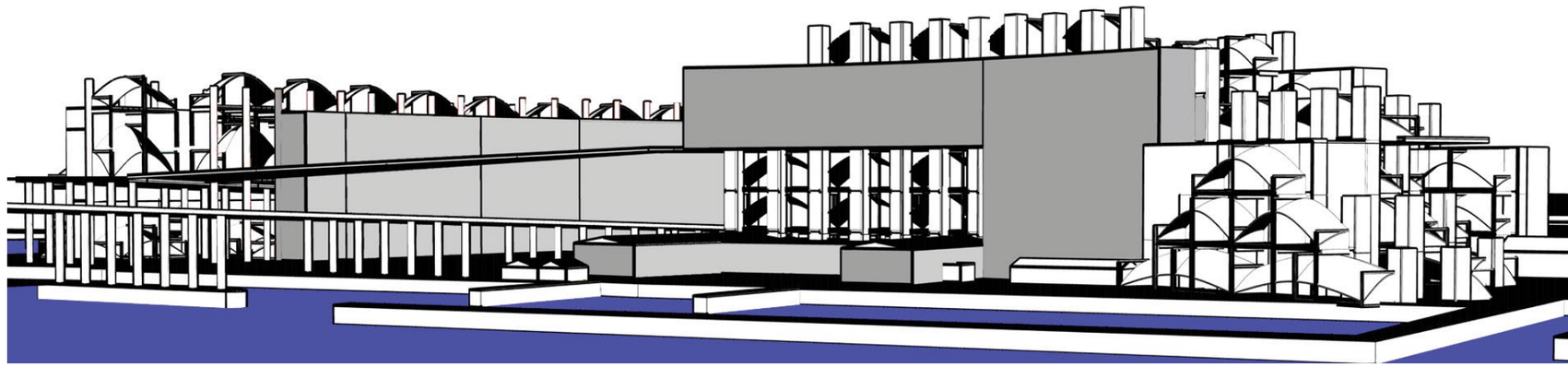
Formation Test: Curves

Building Göteborg

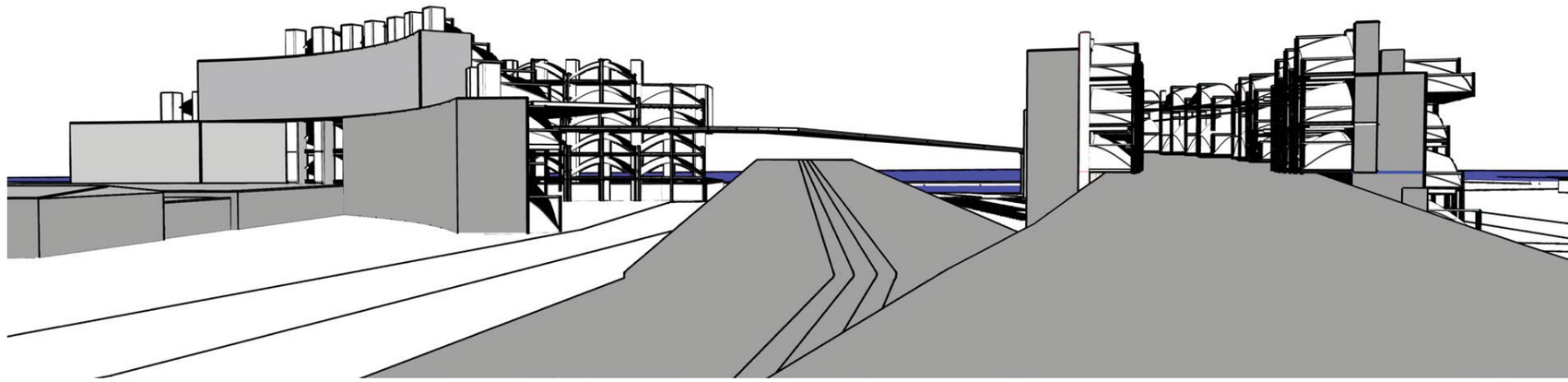
CURVED FORMATION TESTS DEMONSTRATE SUCCESSFUL QUALITIES FOR SHARED ARTIST SPACES

The curved formation is an iconic image between the shell roofs of the assembly blocks, and an urban context between the existing city fabric and shared space functionality.



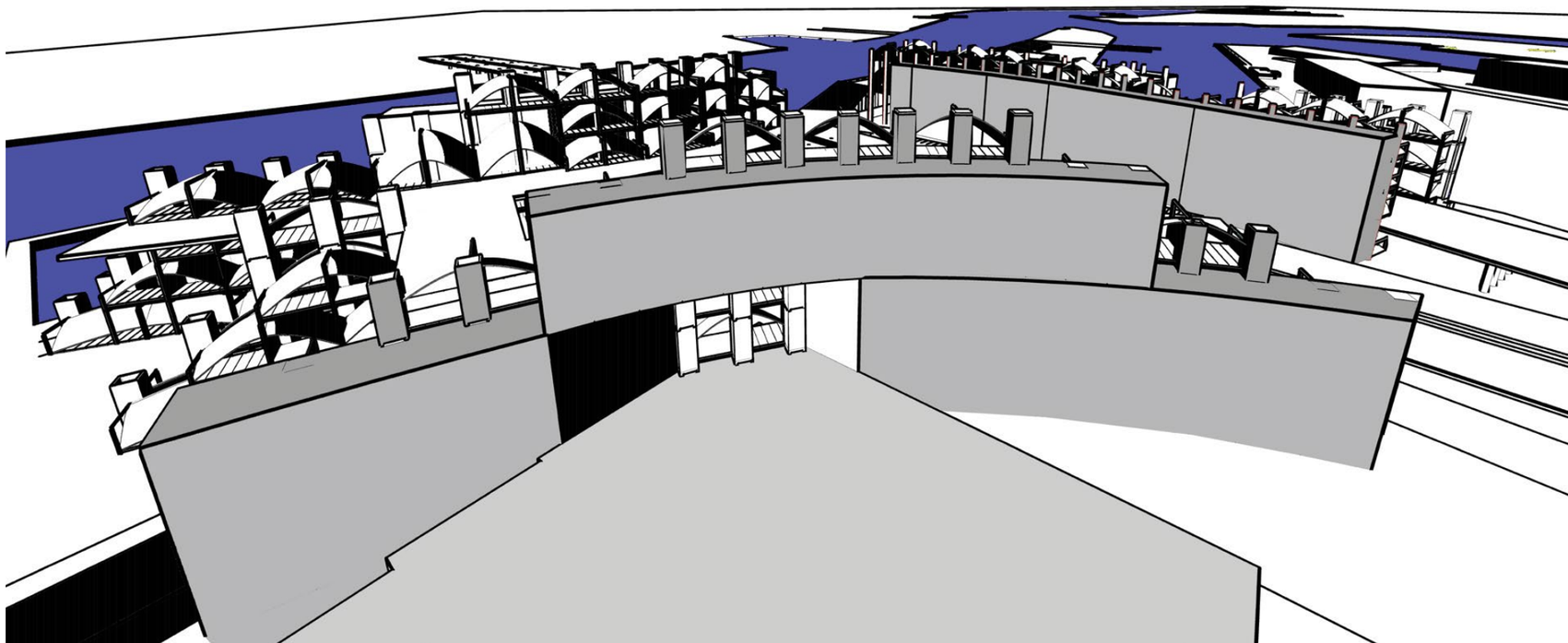


PERSPECTIVE 1: VIEW ACROSS THE GÖTA ÄLV RIVER



PERSPECTIVE 2: STREET VIEW FROM FRIHAMNEN

BELOW, PERSPECTIVE 3: VIEW ACROSS FRIHAMNEN



Site Selection

Building Göteborg

FRIHAMNEN SITE ANALYSIS OVERLAY FOR CITY AND PERFORMANCE FORMATION AT FRIHAMNEN

Site Selection 1:5000. The City and Performance Centre has a site which Frihamnen analyses identify as ideal for sharing spaces between artist and government agency spaces.

The City and Performance Centre is accessibly located along the Göta Älv river. Here, the land is owned by the municipality and the assemblages are leased out from them. The buildings on the site are mostly government agency buildings. The City and Performance Centre brings a public content to the Frihamnen site for adaptive artist spaces.

- City and Performance Centre
- Private
- Figure
- Industrial Zone
- Housing Zone

City and Performance Site

Frihamnen Formation

THE CITY AND PERFORMANCE CENTRE OFFERS ICONIC AND ADAPTIVE SHARED SPACES AT FRIHAMNEN

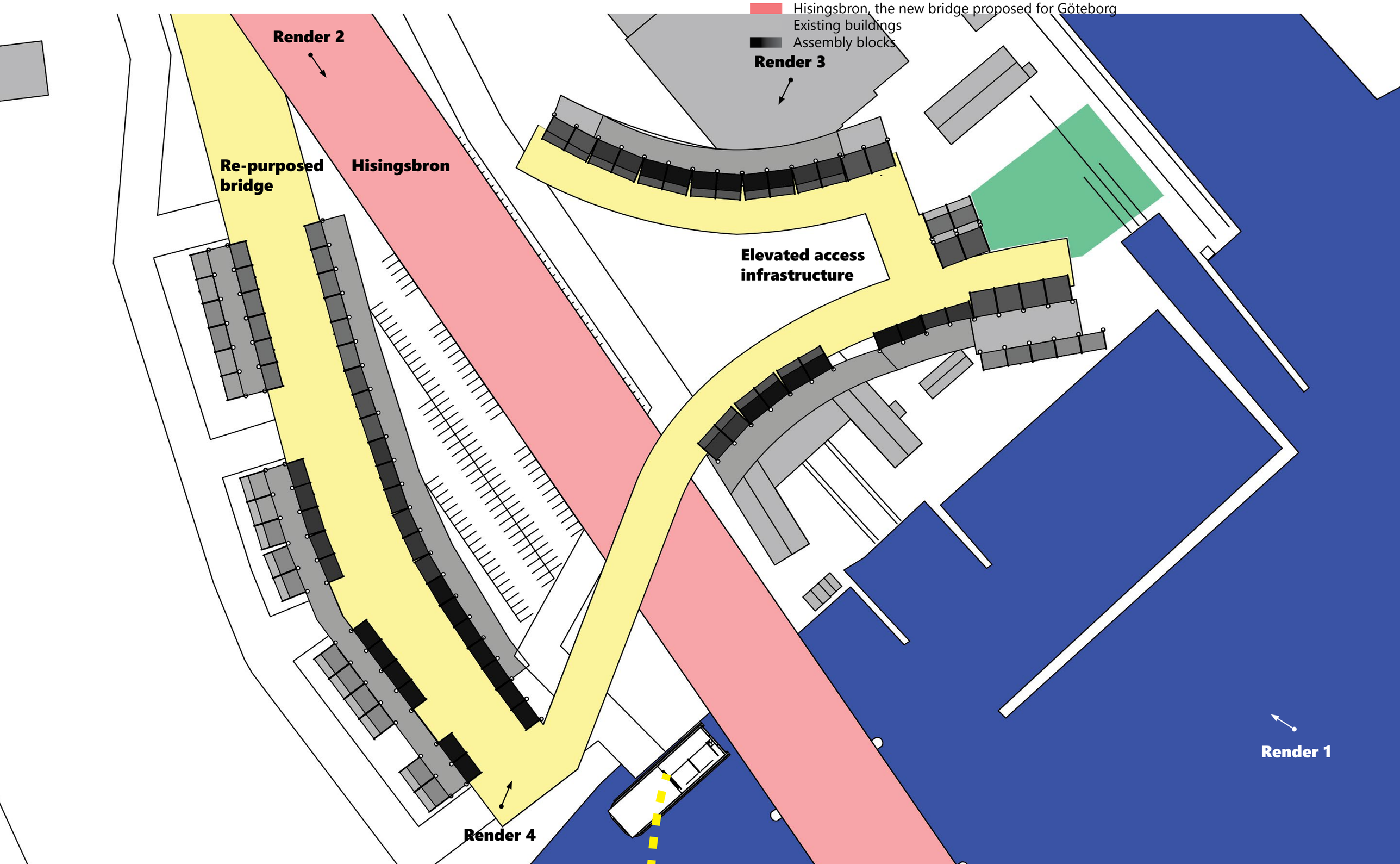
Site Plan 1:1000.

Re-purposed bridge and the new elevated infrastructure

Hisingsbron, the new bridge proposed for Göteborg

Existing buildings

Assembly blocks



Stakeholders

Frihamnen Formation

ADAPTIVE ARTIST SPACES BENEFIT FROM FRIHAMNEN'S PERMANENT GOVERNMENT AGENCY STAKEHOLDERS

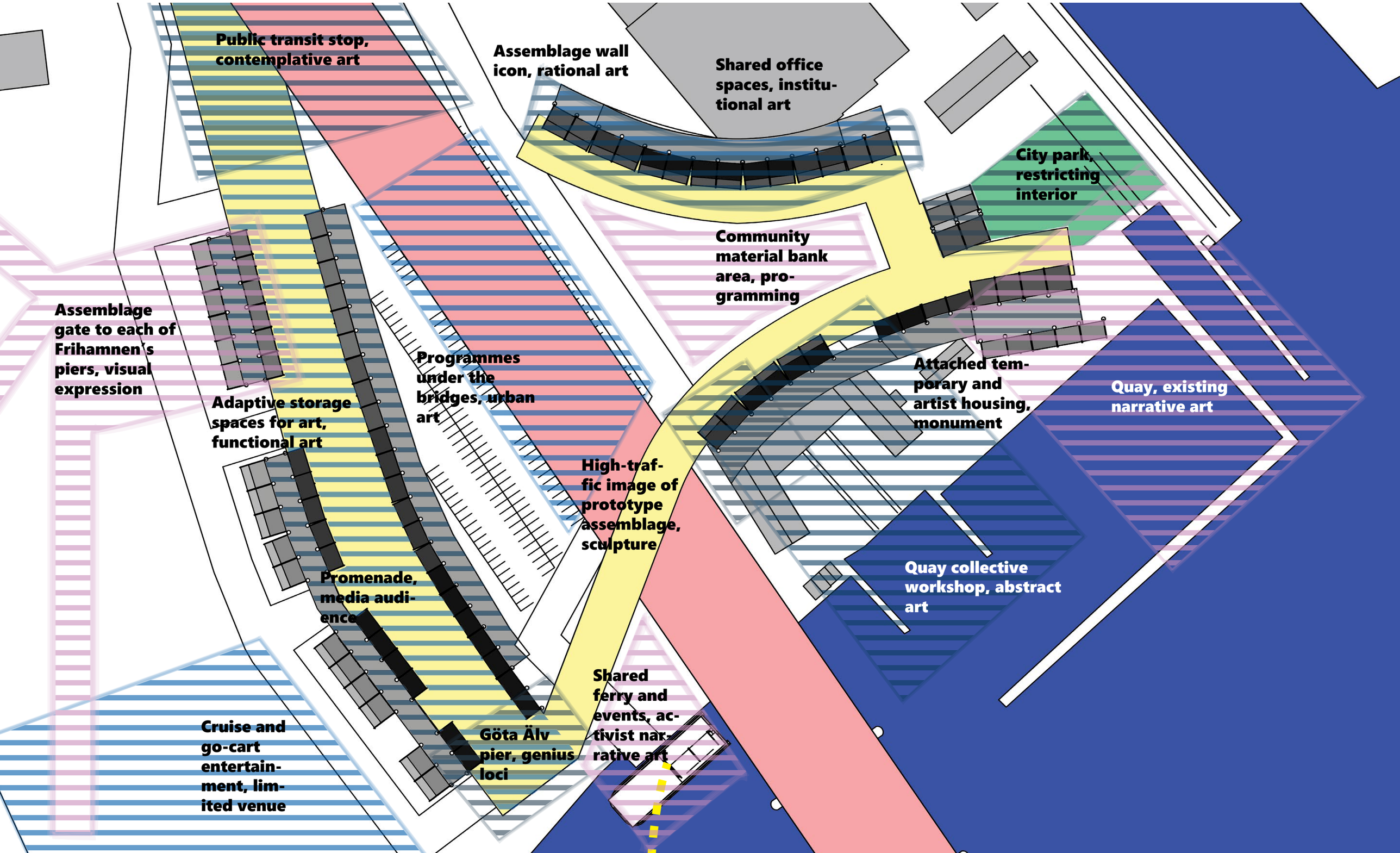
Stakeholders 1:5000. The municipality-owned private land is leased out to government agency and community programme stakeholders for the City and Performance Centre' adaptive artist spaces.

Site Summary

Applied Investigation

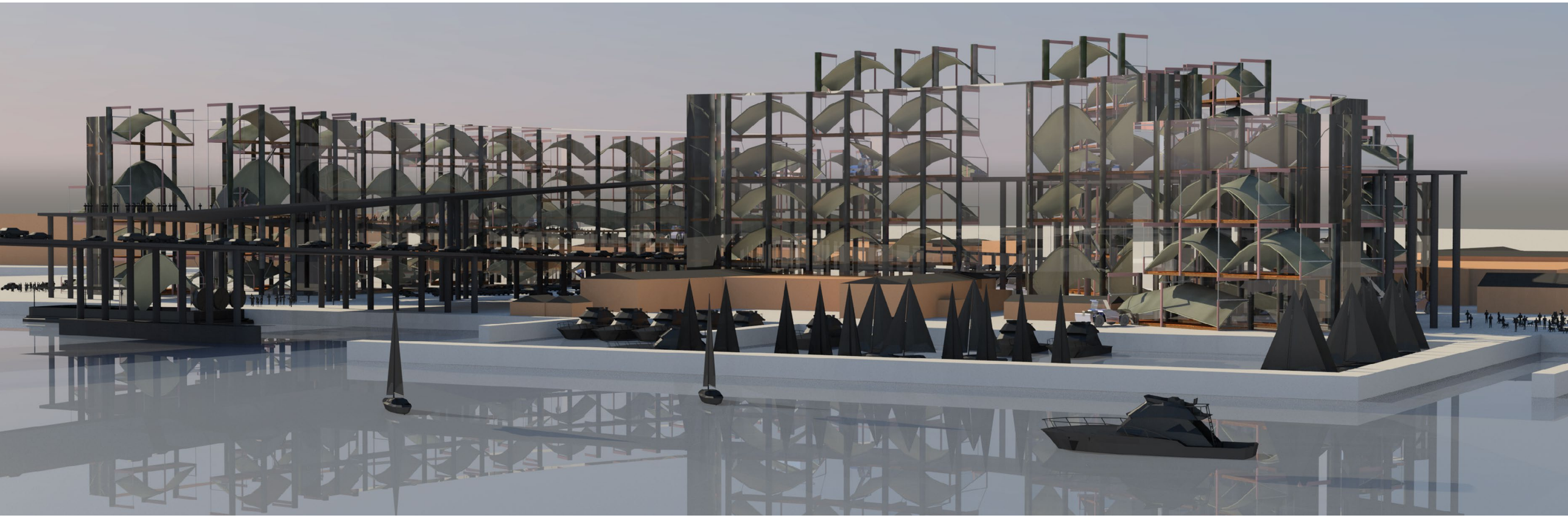
FUTURE STRATEGY FOR THE CITY AND PERFORMANCE CENTRE

Site Plan 1:1000. These fine art categories are all part of the City and Performance Centre's formation. As a future strategy, more fine art categories will be researched, given a context at Frihamnen, or current fine art formations can be repeated in their contexts.



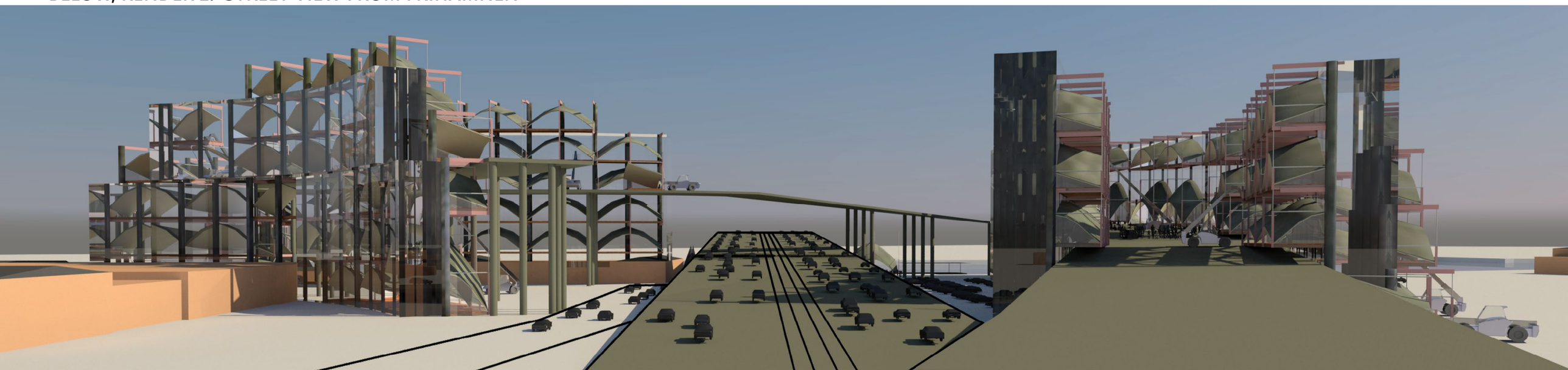
Renders

Formation



RENDER 1: VIEW ACROSS THE GÖTA ÄLV RIVER

BELOW, RENDER 2: STREET VIEW FROM FRIHAMNEN

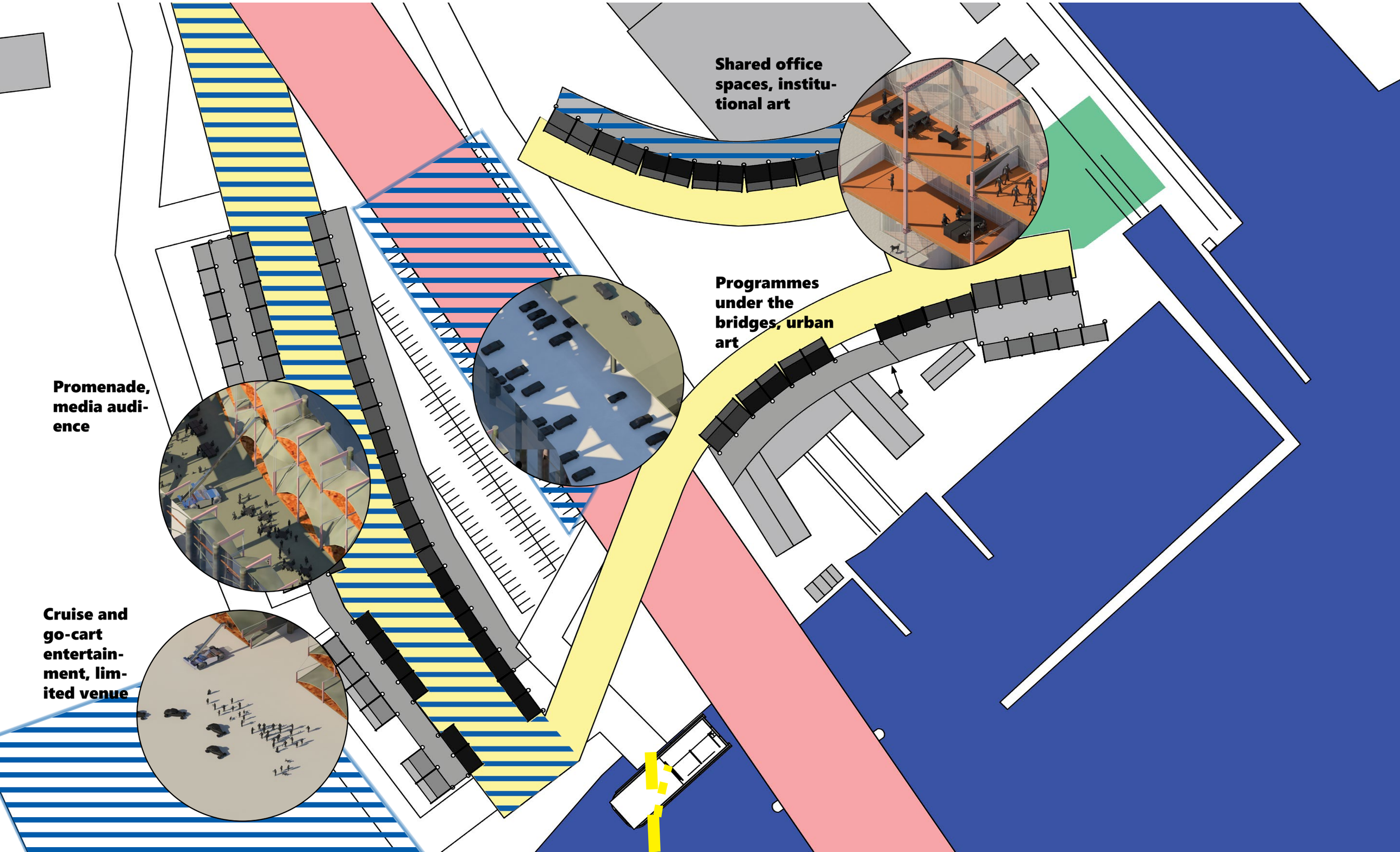


Art Social Sphere Contexts

Applied Investigation

SOCIAL SPHERE FORMATIONS ARE PERPENDICULAR TO THE GÖTA ÄLV RIVER

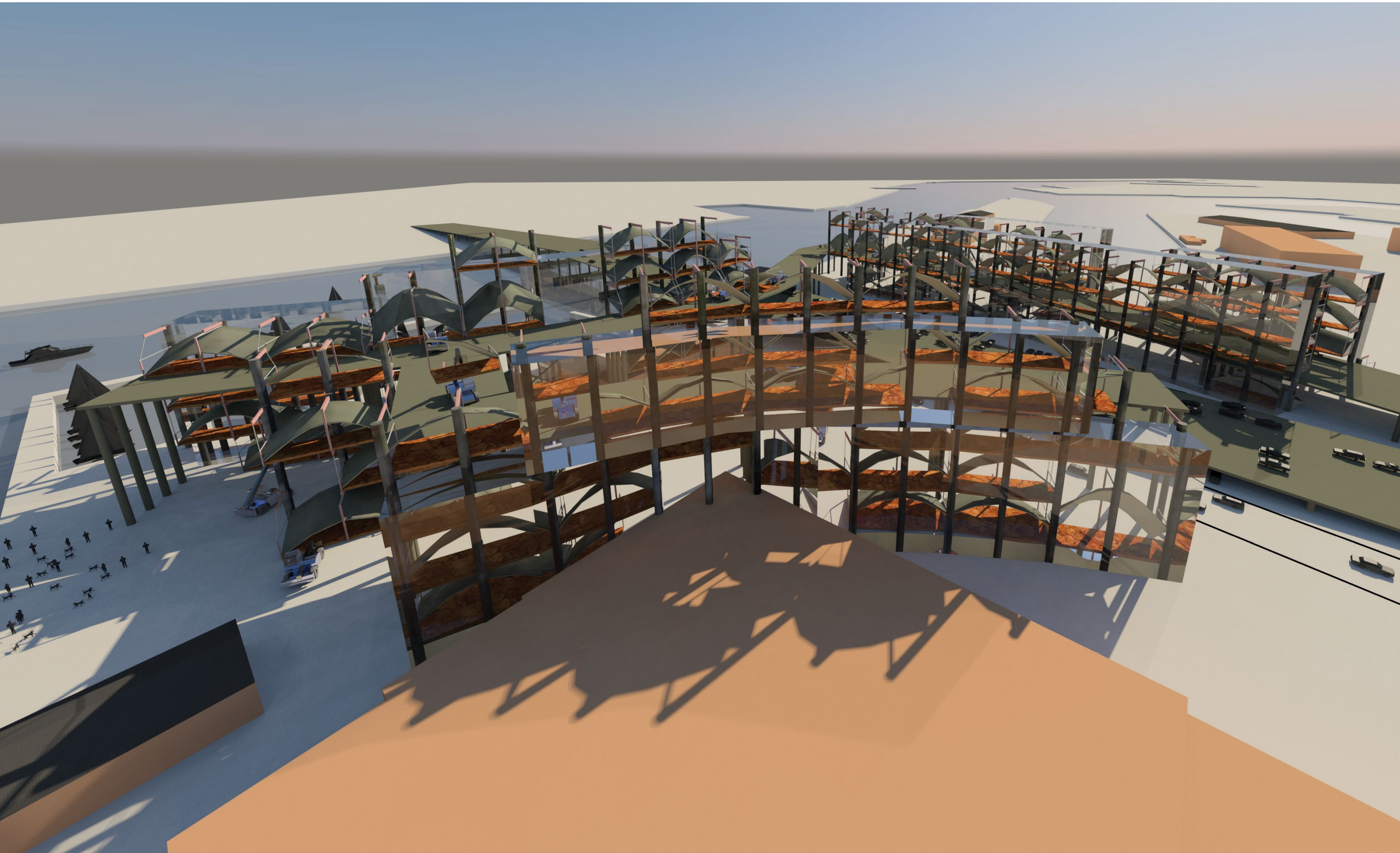
Context 1:1000. Fine art field's social sphere audience engagement categories work with the number of infrastructure development parts in the City and Performance Centre by being long spaces oriented perpendicular to the Göta Älv river.



Renders

Formation

RENDER 3: VIEW OF THE SHARED GOVERNMENT AGENCY SPACES

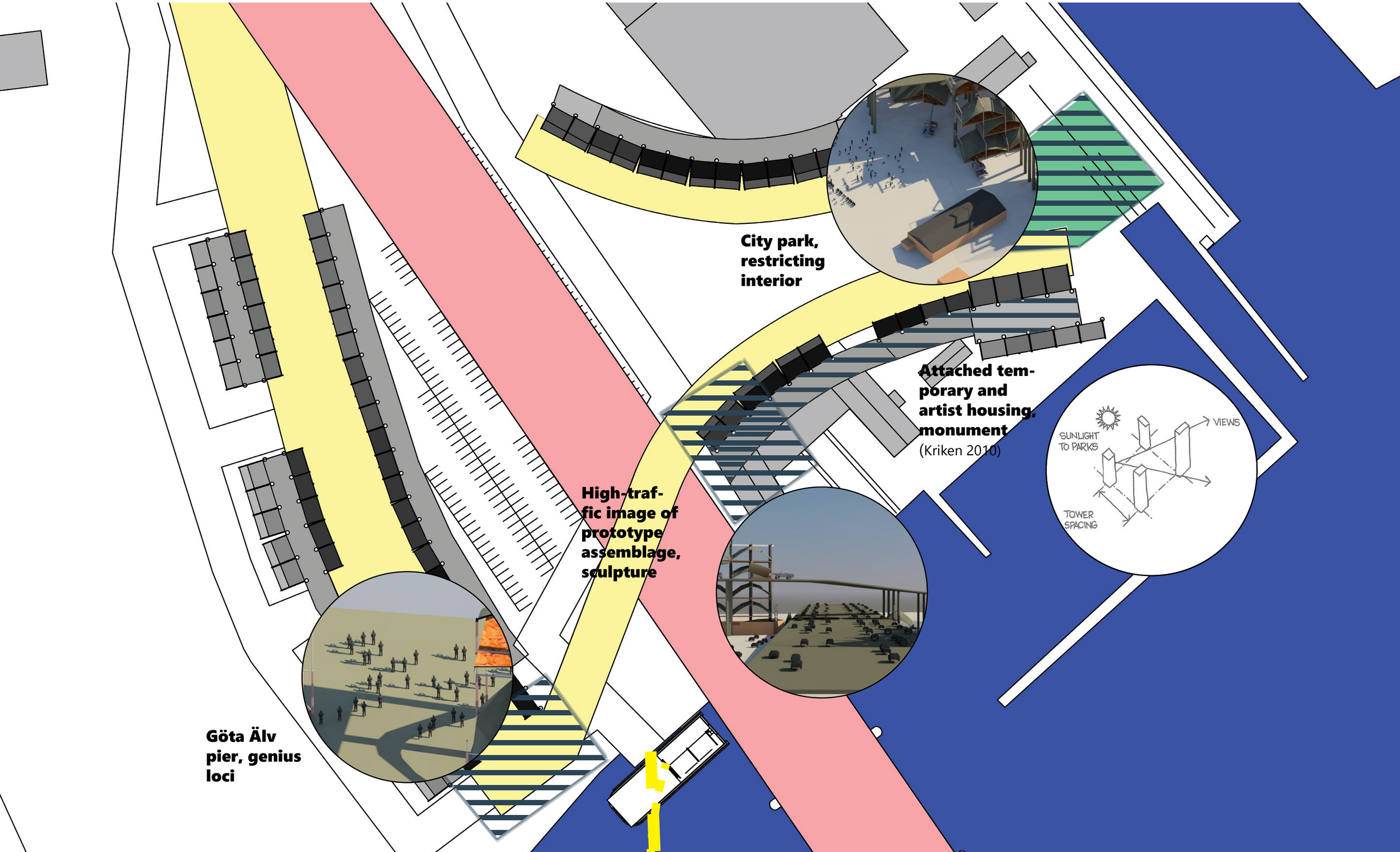


Art Spatiality Contexts

Applied Investigation

SPATIALITY FORMATIONS ARE LINEAR TO THE GÖTA ÄLV RIVER

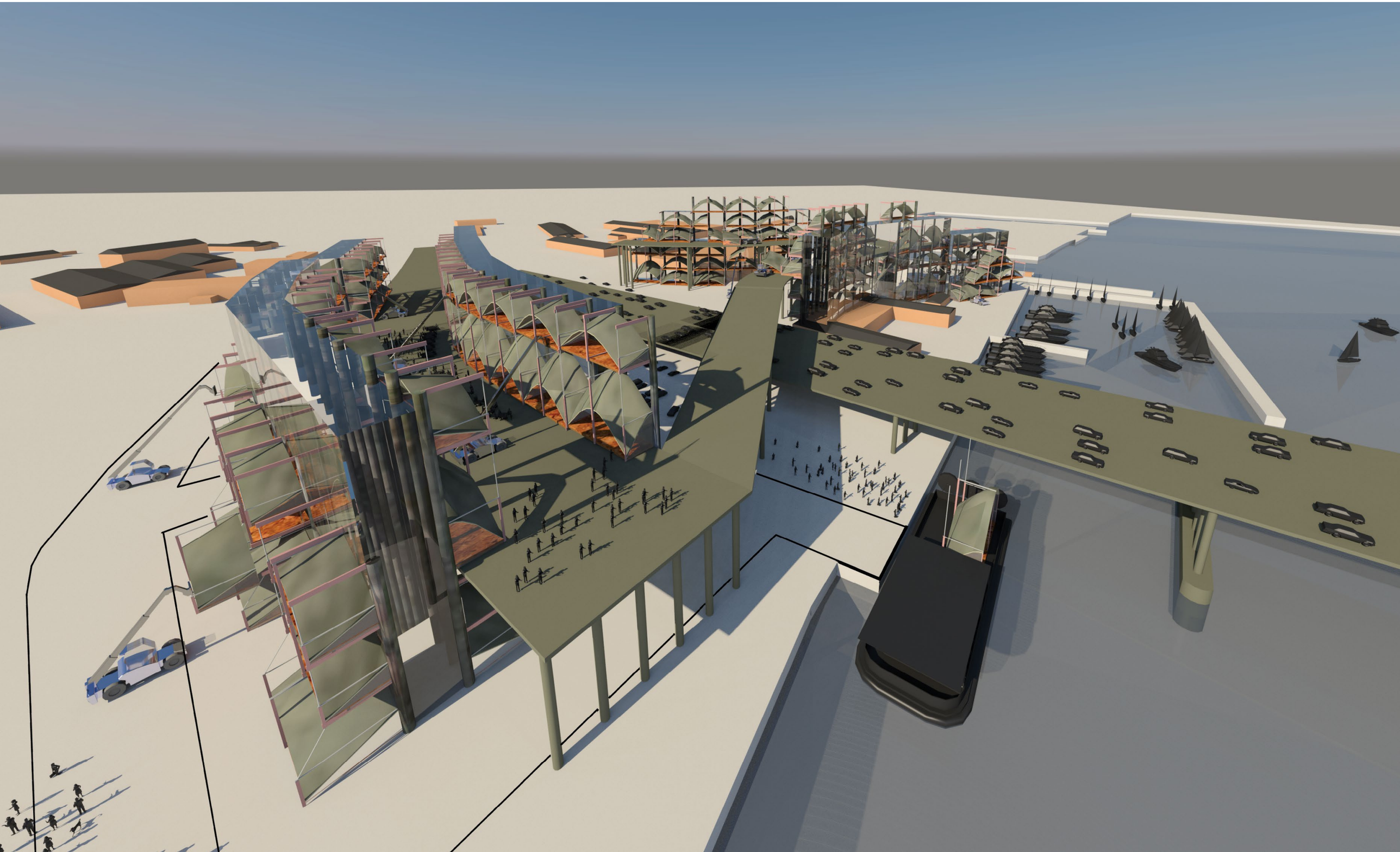
Context 1:1000. Fine art field's spatiality audience engagement categories work with the visual appeal when the City and Performance Centre engages with people's personal social life's connections to the Göta Älv river by being formulated linear to the river.



Renders
Formation

RENDER 4: VIEW OF THE RE-PURPOSED BRIDGE

The iconic curved formation, adaptive heights, assembly blocks, and shared spaces between artists, this public context, and permanent government agency's successfully generates value for the stakeholders at Frihamnen today, and for its future.

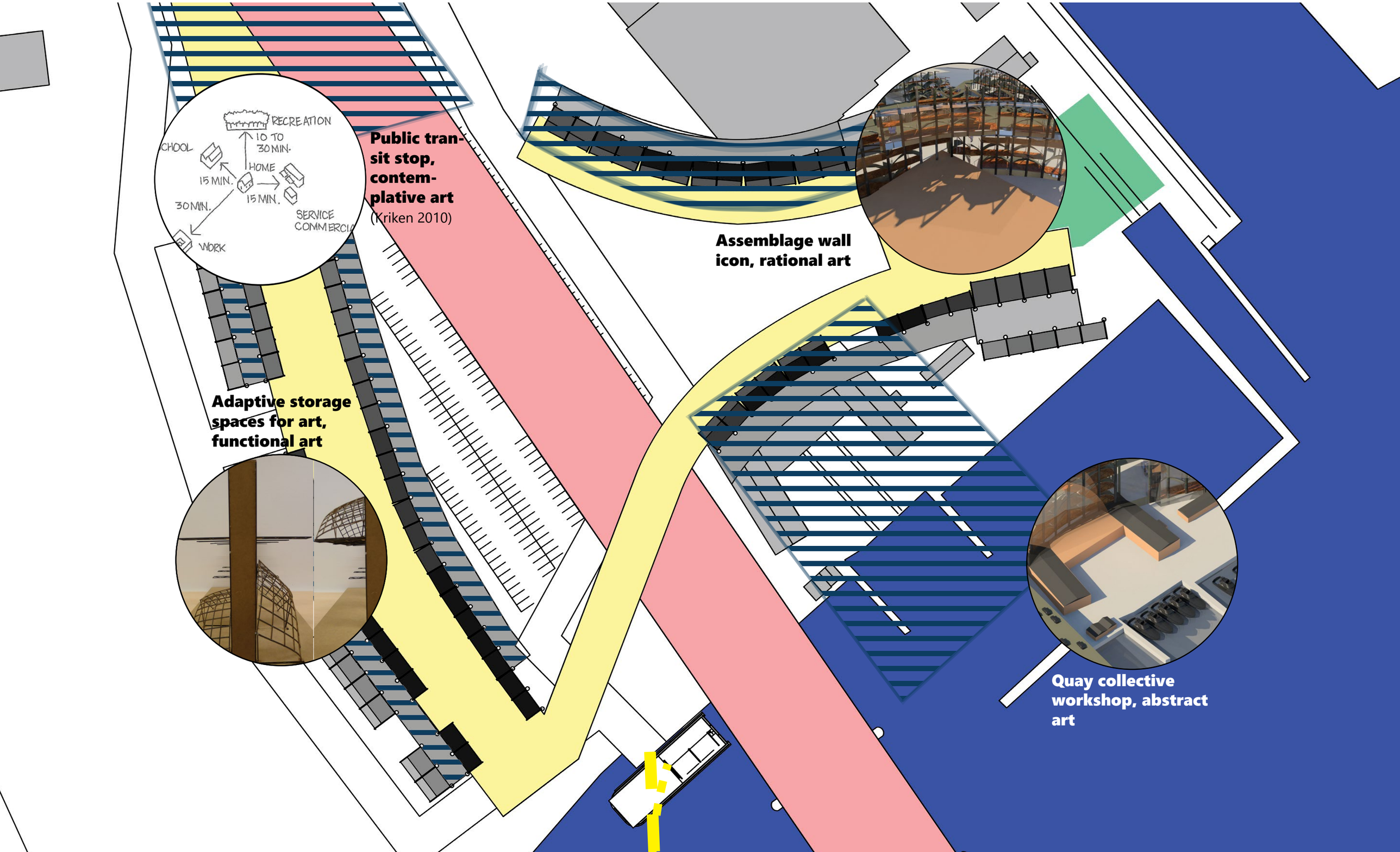


Art Viewer Contexts

Applied Investigation

VIEWER FORMATIONS ARE SITE HUB INTERVENTIONS

Context 1:1000. Fine art field's viewer audience engagement categories work with intervening within the site hubs for the City and Performance Centre. In these ways they link together the City and Performance Centre's site plan and create value in this balance.

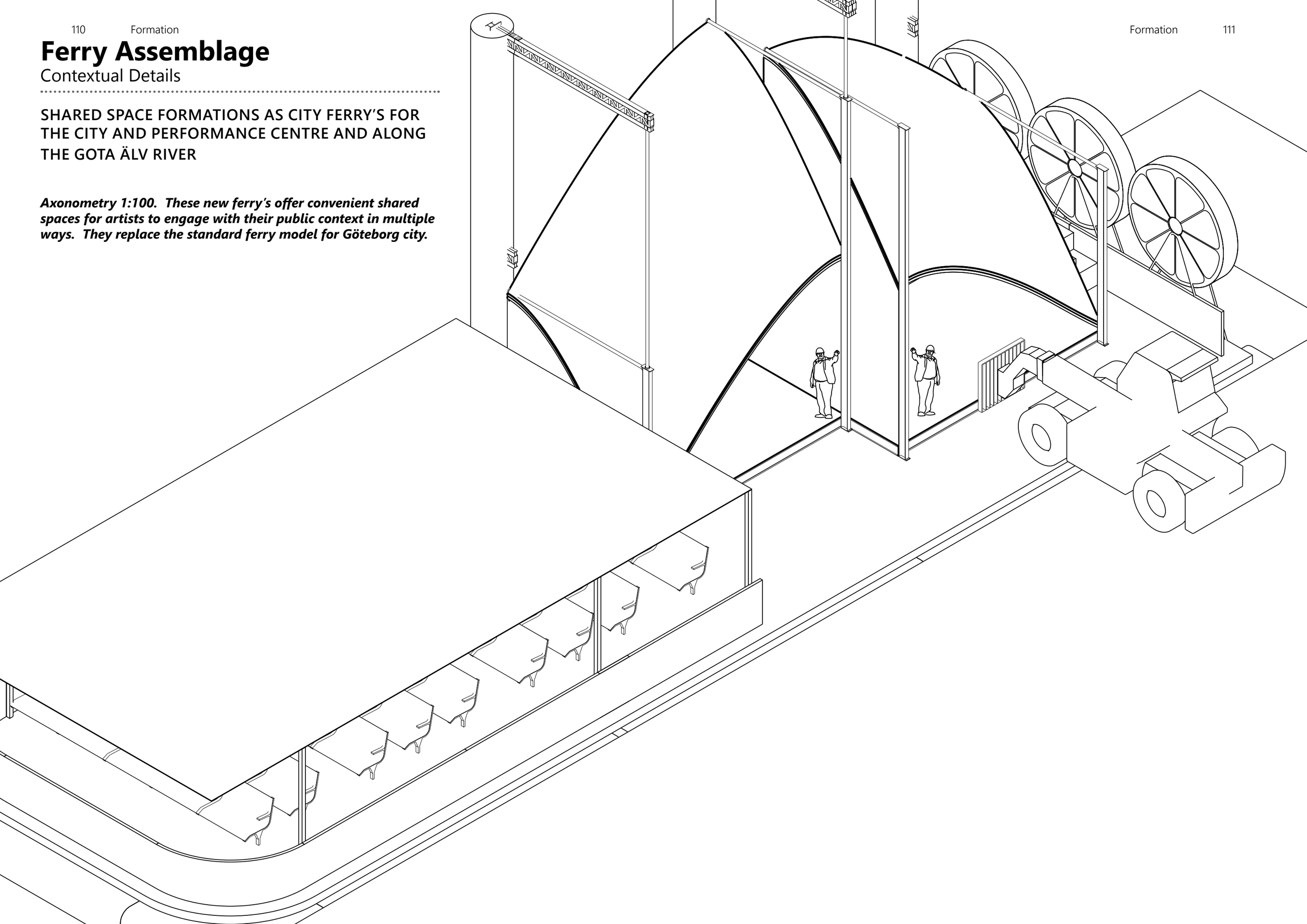


Ferry Assemblage

Contextual Details

SHARED SPACE FORMATIONS AS CITY FERRY'S FOR THE CITY AND PERFORMANCE CENTRE AND ALONG THE GOTA ÄLV RIVER

Axonometry 1:100. These new ferry's offer convenient shared spaces for artists to engage with their public context in multiple ways. They replace the standard ferry model for Göteborg city.

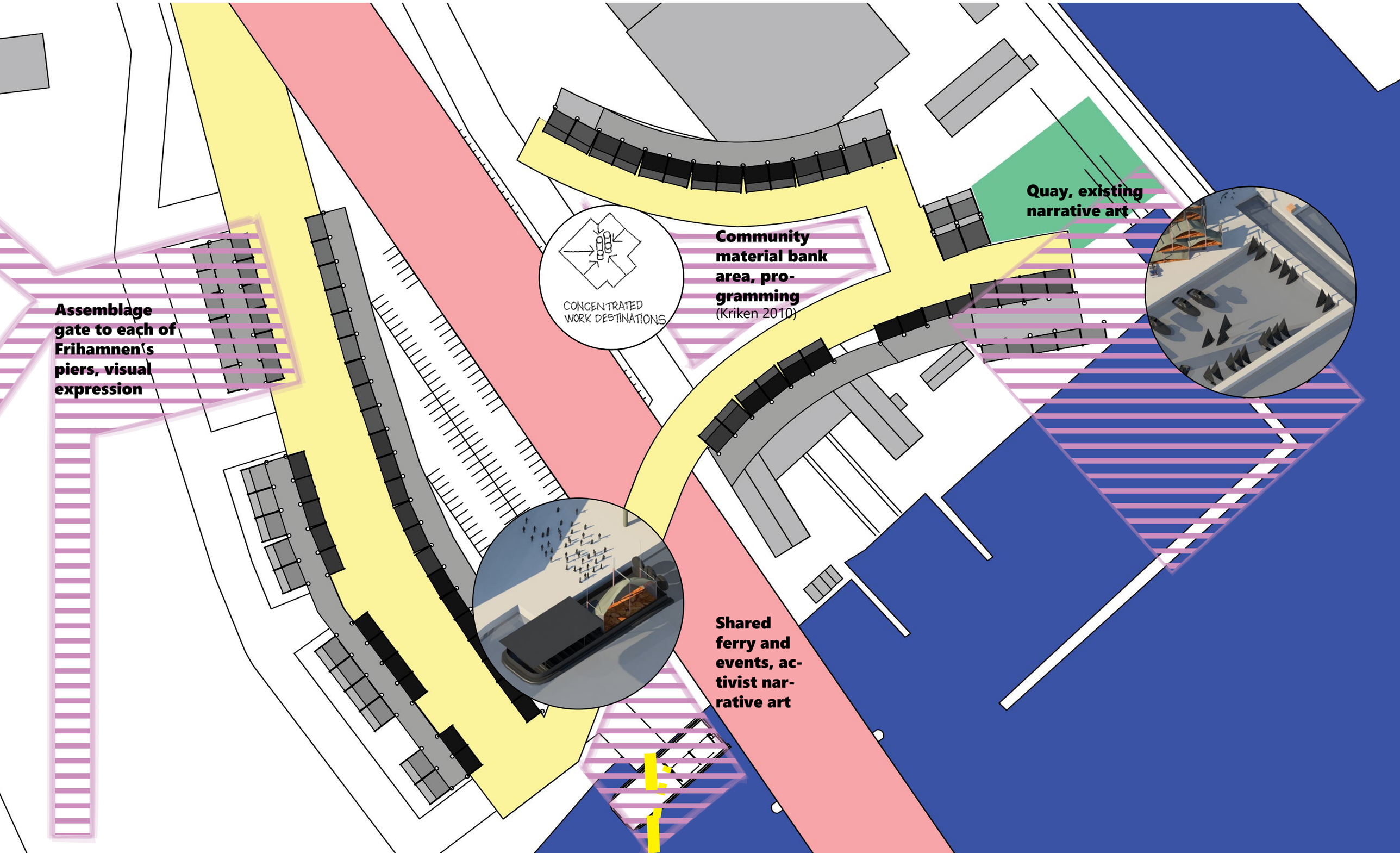


Art Community Contexts

Applied Investigation

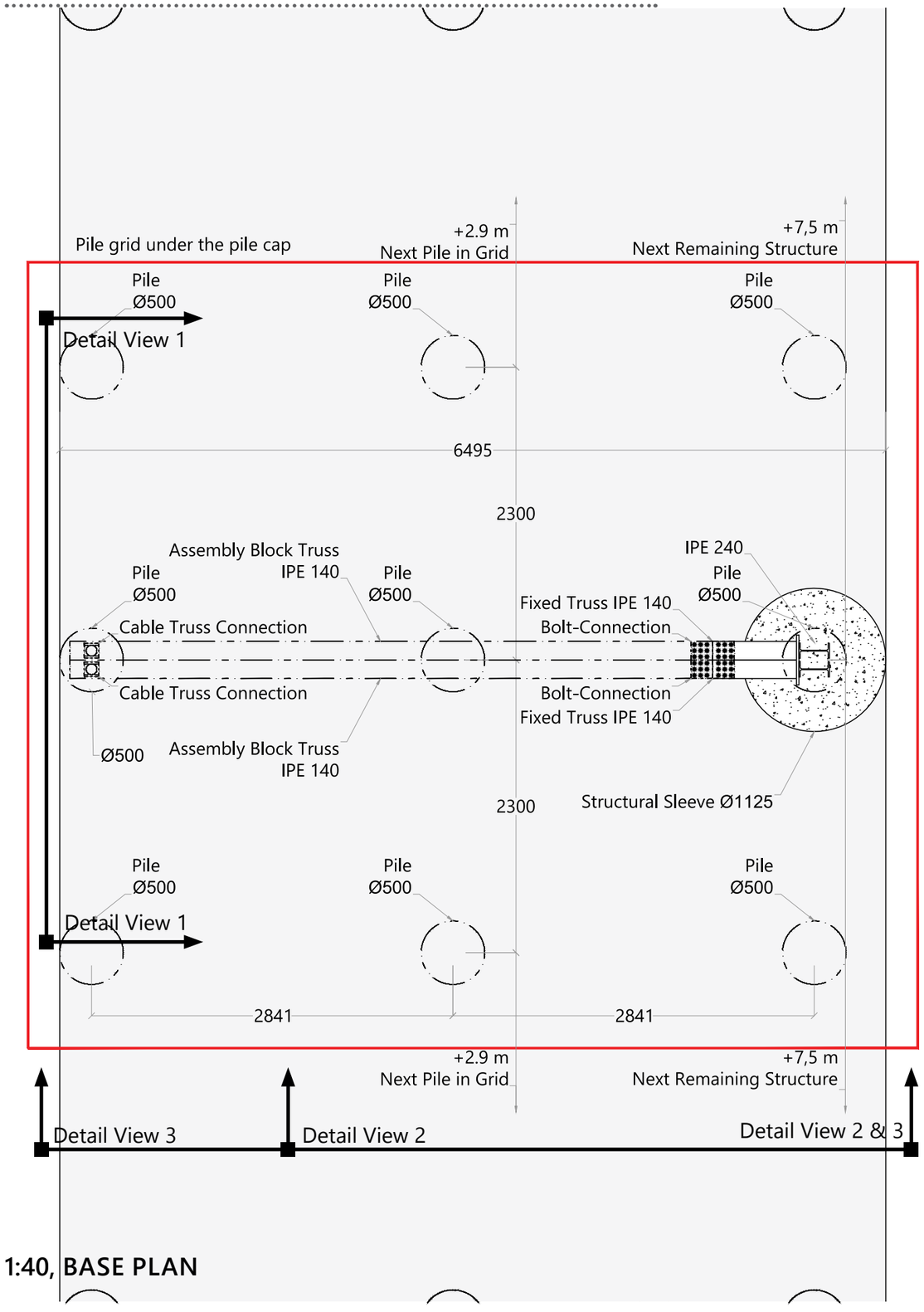
COMMUNITY FORMATIONS WORK AS SITE GATES

Context 1:1000. Fine art field's community audience engagement categories work as gates for people accessing Frihamnen. They work to engage disinterested stakeholders to interact with the City and Performance Centre.

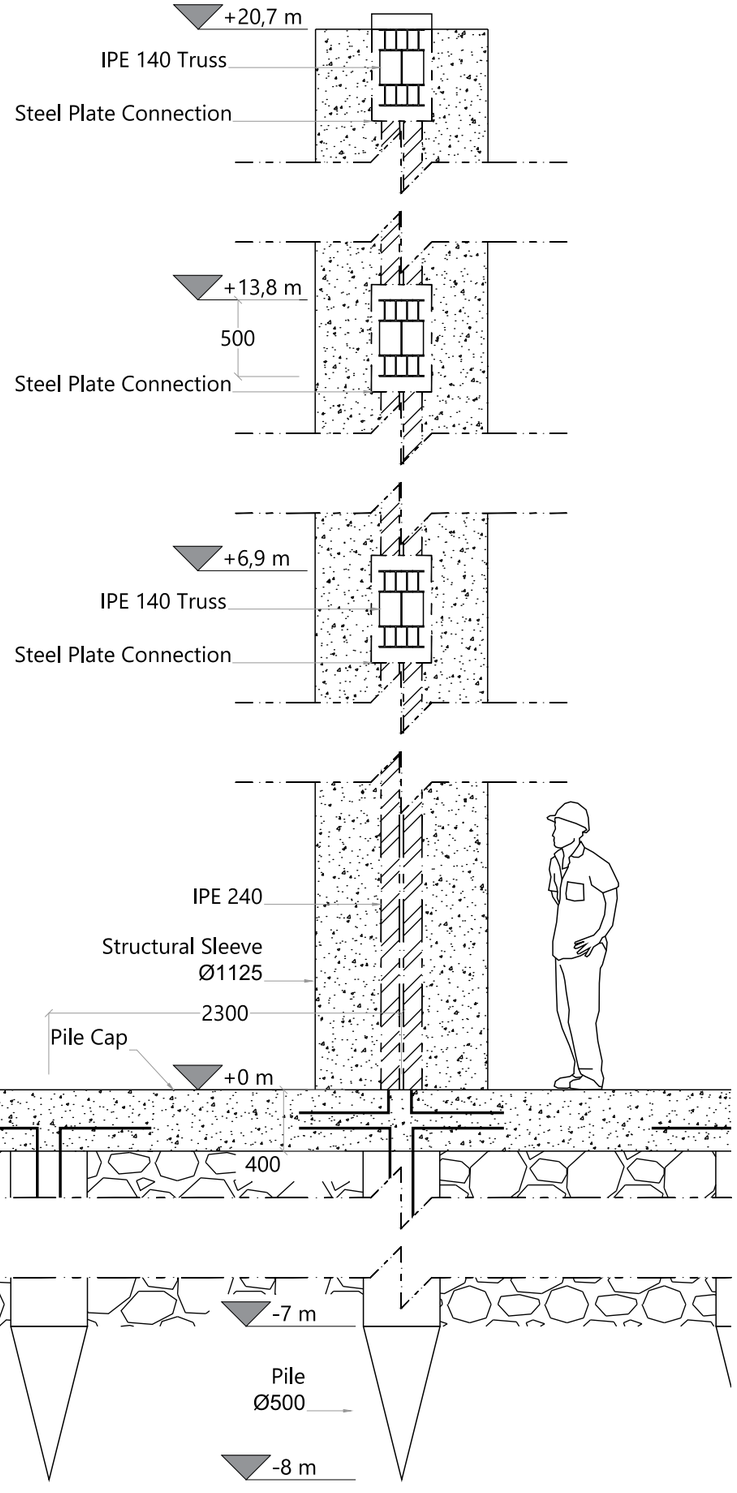


Formation Details

Contextual Details



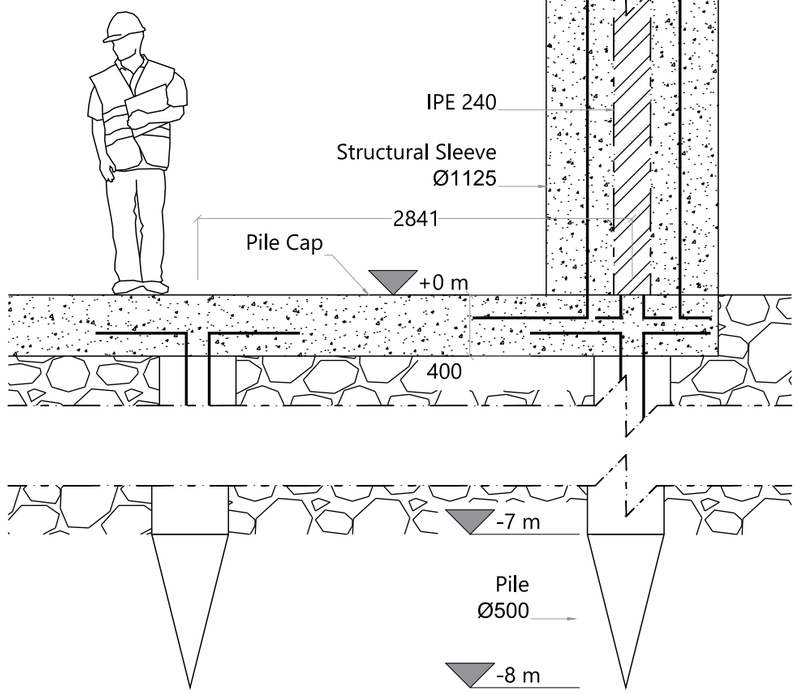
1:40, BASE PLAN



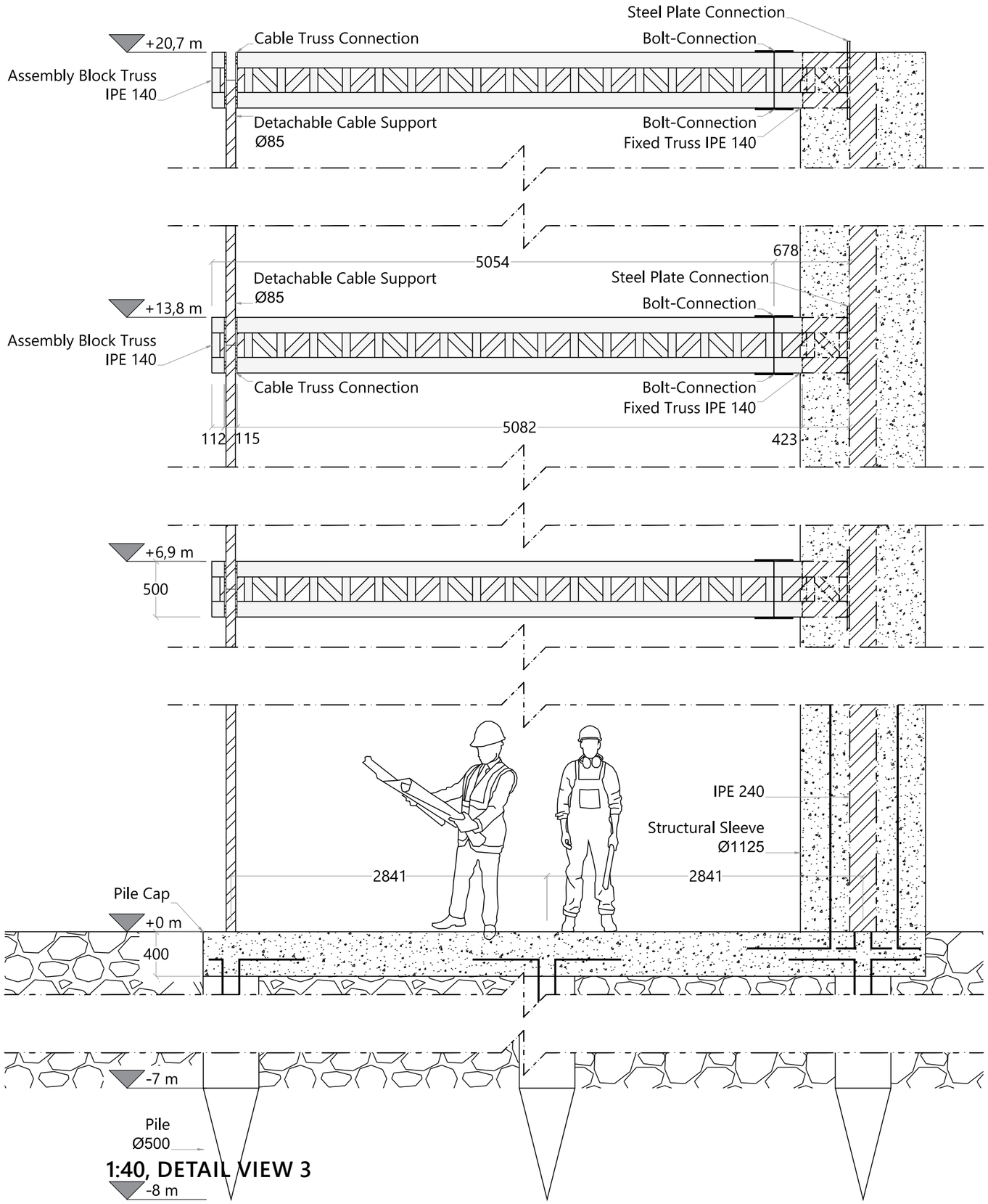
1:40, DETAIL VIEW 1 (GHOSH, 2009)

Formation Details

Contextual Details



1:40, DETAIL VIEW 2



1:40, DETAIL VIEW 3

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