



The Winter City

STUBBERGAARD MASTER STUDIO
University Of Washington 2015

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Introduction

In spring 2015, Dan Stubbergaard, founder and creative director of COBE Architects in Copenhagen, served as the Scan|Design Foundation Visiting Professor at the University of Washington in Seattle. In that role Stubbergaard taught a graduate design studio in the Department of Architecture with Associate Professor Peter Cohan. The brief for the studio, “The Winter City,” posited that it was possible, indeed necessary, to create vibrant public spaces for wintertime use - even in cities with northern climates, like Copenhagen or Seattle. Picking up where the seminal work on the development of public spaces in Copenhagen, “Public Spaces Public Life” by Jan Gehl and Lars Gemzøe, leaves off, the studio brief proposes that the cultural life of a winter city can be improved significantly by developing strategies to extend the use of public spaces year-round.

The studio began with a trip to Copenhagen, providing an opportunity to conduct analysis on three typologically different sites (square, garden and harbor), as well as to experience the challenges of trying to create useful and engaging public space in the wintertime. Using a studio set up in COBE’s office in Copenhagen as their base, the students conducted a thorough analysis of the three sites and proposed strategies for nurturing a specific range of winter activities for each one. Summer activities were considered as well, along with studies of how the sites might be transformed in order to accommodate changing seasonal uses. A review of the site analysis and design strategies marked the culmination of the Copenhagen phase of the studio.

Upon returning to Seattle the studio focused on testing the validity of various site strategies through individual and group design projects. Intensive studio charrettes that occurred during Stubbergaard’s two Seattle visits were essential in maintaining the focus of the studio - as well as providing a critical Danish cultural perspective.

The ten projects shown on the following pages demonstrate a range of approaches for implementing the site strategies developed during the first phase of the studio. Several projects are clearly derived from specific strategies developed for a particular site, while others are hybrids of several approaches. The remaining proposals employ site strategies quite different from those developed during the original study – the result of a continued critical analysis of the site and its potential to accommodate winter activities. Taken together these projects demonstrate the potential for winter cities to vastly improve the opportunities for its citizens to engage in meaningful civic activities the year around.

Participants

Corey Collier
Gabrel Gonzales
Brad Hutchinson
Xiaoxi Jiao
Daniel Novak
Siyu Qu
Claire Shigekawa Rennhack
Doug Smith
Lipepei Sun
Becca White
Andy Wolfgang
Kejia Zhang





COBE Master Studio DAN STUBBERGAARD | PETER COHAN

Dan Stubbergaard (b. 1974) graduated from The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation (Copenhagen, DK) in 2002. After working as an architect in both the Netherlands and Denmark, he founded COBE in 2005. Today, COBE employs some 75 architects, urban planners and landscape architects. Since its founding, COBE has created a number of high-profile, prize-winning projects in Denmark and abroad, including urban master plans, public spaces and buildings. Among COBE's most important projects are the combined library and cultural center in Copenhagen's Northwest district, the Nørreport Train Station – Copenhagen's busiest station – and the development of the harbor area Nordhavnen in Copenhagen – Scandinavia's largest metropolis development project.



All of COBE's projects emphasize that architecture is not a matter of a certain style or form, but more importantly its adaptability to context, society and the life of its users. COBE's mission is to create cities, public spaces and buildings that work as social engines and are intuitively understood by the people who experience them.

In addition to his practice, Dan Stubbergaard taught at The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation from 2004 to 2008. In 2012, he received Nykredit's Architecture Prize – Scandinavia's largest architecture award. Other awards include Nykredit's Motivation Prize for young architects (2007) and the Golden Lion Award at the 10th International Venice Biennale of Architecture (2006).



Top (left to right) : Porsgrunn Maritime Museum | Nørreport Station | The Library



Bottom : The Silo | Forfatterhuset Kindergarten | Tampere Travel and Service Center





Copenhagen / a winter city

Winter usually comes to Copenhagen in December and ends in February. A typical winter day will have an average high of around 5° C (39° F) and an average low of -2° C (28° F). There is less precipitation during the winter months, but when it comes it can be in the form of snow, sleet or freezing rain. On the winter solstice in Copenhagen, the sun rises at 8:37am and sets at 3:39 pm, providing the city with 7 hours of daylight.

In spite of a scarcity of sunlight, cold temperatures and occasional bad weather Copenhagen has become a vibrant city in the wintertime. The gradual reduction of automobiles in the city center (through the creation of pedestrian streets and efforts to encourage more people to commute by bicycle) has had the effect of putting more "feet on the street." This has in turn nourished a café-culture; one that initially occurred only in the summertime, but over time has expanded to the fall, winter and spring. Today it is not uncommon to see blanket-covered Copenhageners enjoying their coffee outside in the dead of winter - warding off the cold with a heat lamp and the snow with a café canopy or umbrella.

However Copenhagen still lacks enough of the kind of public spaces that truly work in the wintertime - ones that collect the sun, shield the wind and block the freezing rain - spaces that effectively nurture dynamic social activities in the wintertime - places that might celebrate traditional winter activities, while at the same time extending the season for activities that normally take place in the warmth of summer. The goal of this studio will be to develop strategies aimed at making Copenhagen (and by inference any northern city) a more livable winter city. We will do this through research, analysis and design.

A circular map of the Northern Hemisphere, centered on the North Pole. The map shows the outlines of continents and major cities. Latitude and longitude lines are drawn across the map. Cities marked with dots and labels include: Vancouver, Seattle, Chicago, Toronto, Quebec, Newk, Stockholm, St. Petersburg, Moscow, Dublin, London, and Copenhagen. The map is oriented with the North Pole at the center.

**Around 40 % live above 30° north
and around 6 % above 50° north**



The majority of the year is wet, dark, cold and windy

Copenhagen is one of the most liveable cities in the world



But that is mainly based on the three months a year when the city flourishes and everyone is out



How can we develop strategies that allow for urban liveability throughout all the seasons?



**Could urban transformation create public space,
which is a hybrid between a open public space and a building?**

"Cities have functioned traditionally as meeting and market places. The city's public spaces have served these two city functions, plus providing access and connection with the two city functions.

[...]

- It's important therefore that a good winter city (like the city in any season) provide a good balance between meeting, market and traffic places. The need for the city to function as a meeting place is gaining new importance in present-day society, given a large number of social, cultural and economic changes. Smaller families, many single-person households and more leisure time all place new importance on the need for cities that can respond to the need for social interaction and a sharing of cultural and social experiences."

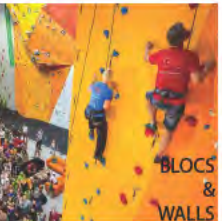
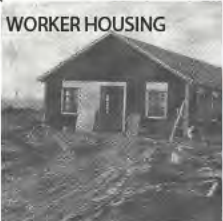
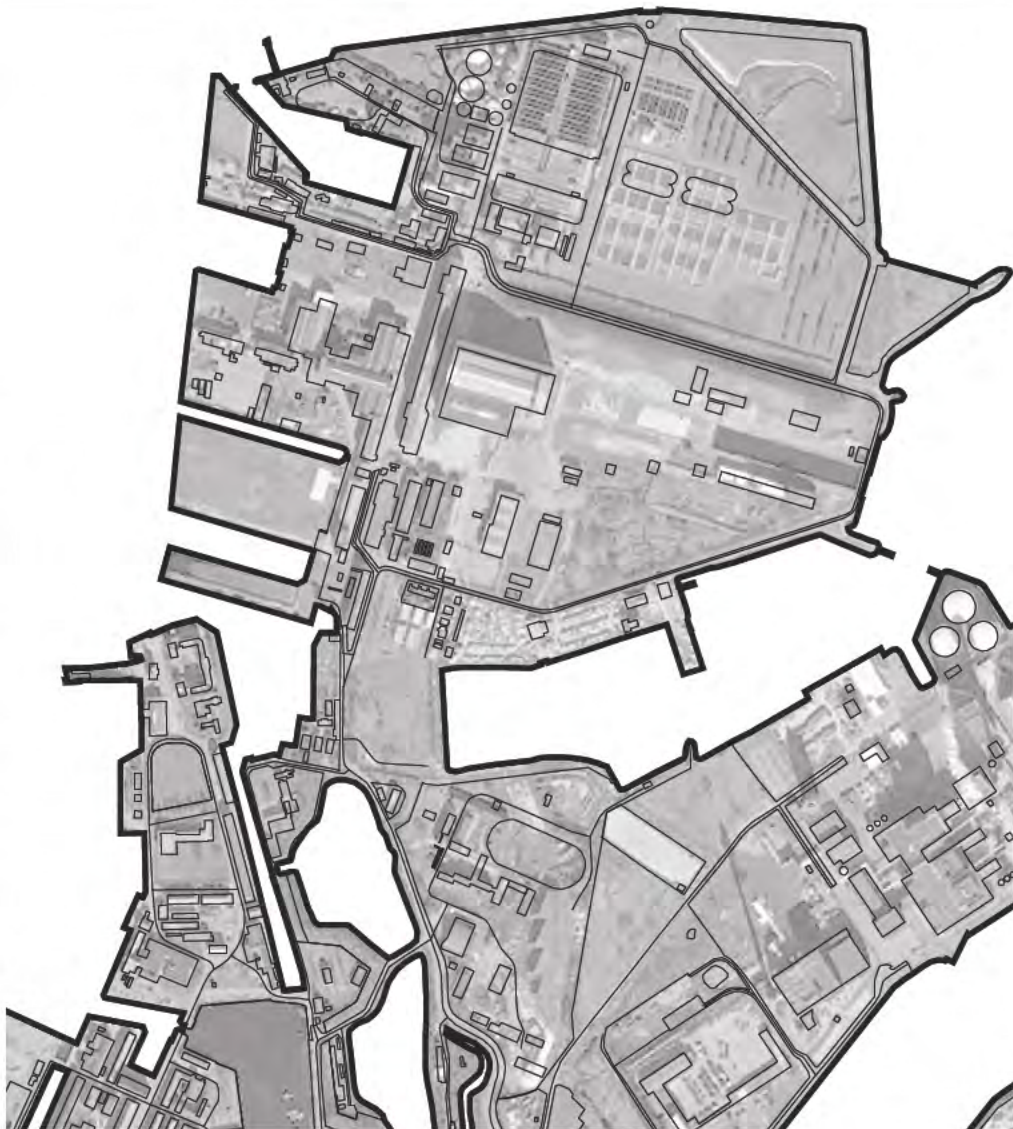
- Jan Gehl, from "A Good City All Seasons"

SITE ONE : INDUSTRIAL HARBOR

Daniel Novak | Doug Smith
Peipei Sun | Becca White

Refshaleøen is an island in Copenhagen harbor, which was home to the Burmeister & Wain shipyard from 1872 to 1996. In its heyday the facility employed 10,000 workers, and the island stands today as testament to Danish maritime industrial history. Before 1872 the area consisted largely of sand banks, but as Copenhagen harbor was gradually filled in with tons of earth new flat land was created for the first buildings.

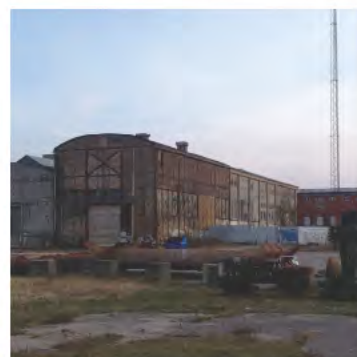
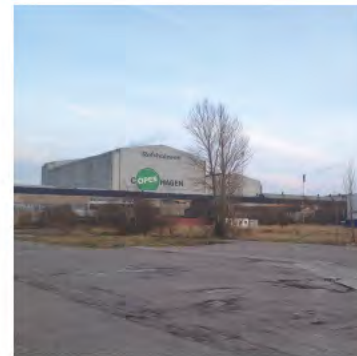
Burmeister & Wain went bankrupt in 1996 and the site was abandoned for many years, but today Refshaleøen is rapidly changing. An innovative arts community, Skabelonloftet, is located there and in 2011 Copenhagen opened Yacht Service - Denmark's first yacht garage on the island. It has become a place to go to concerts, to enjoy a gourmet meal at "mass" restaurant, to play beach volleyball, go to a gallery or to enjoy the views of Langeliniehaven and Frederiksstaden from its rough industrial surroundings. Yet, a lot of buildings on the site are still vacant and in wintertime most of the activities shut down. The challenge for future development of the site is to provide venues for new activities that will attract both tourists and Copenhageners out to Refshaleøen the whole year round.

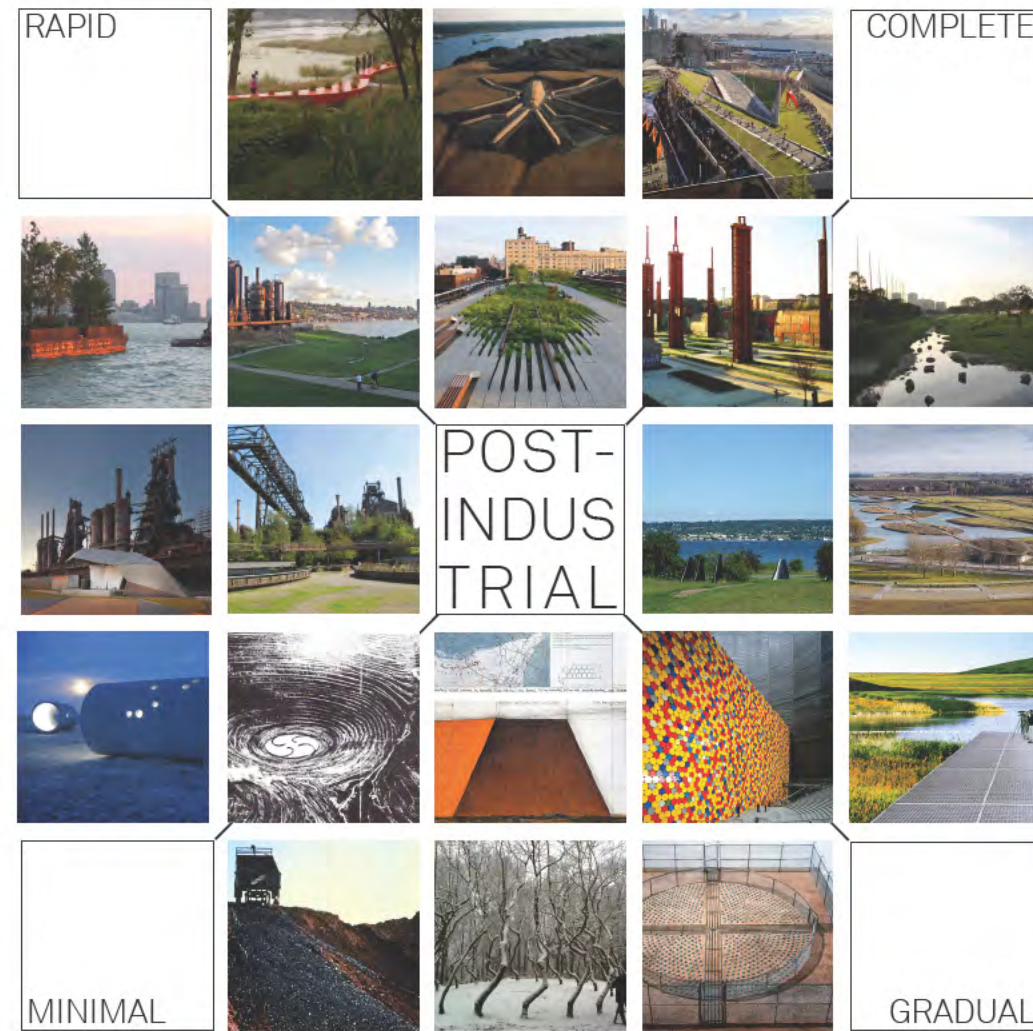


WAIN



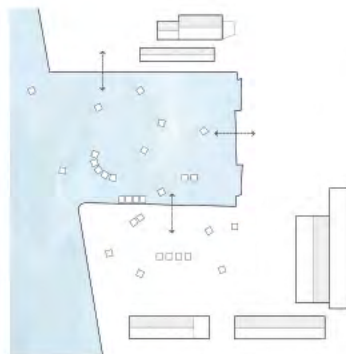
BURMEISTER



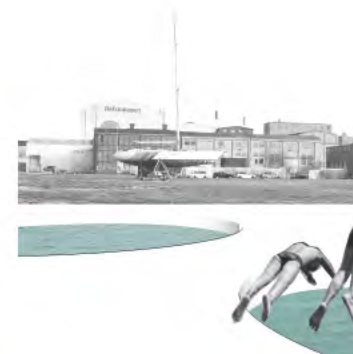
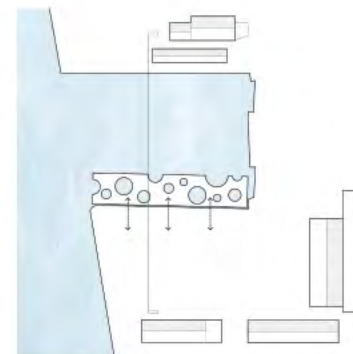




MODULAR
FLEXIBLE - PLAYFUL | MOBILE - AMPHIBIOUS

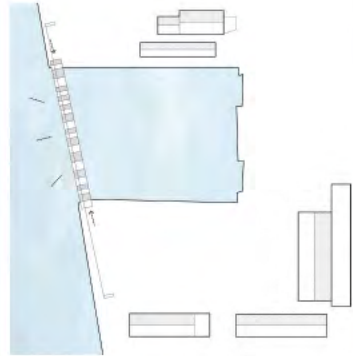


BARGE
ACCESSIBLE | CAPTURING WATER | SHELTER/EXPOSURE | LONG TERM MOBILITY

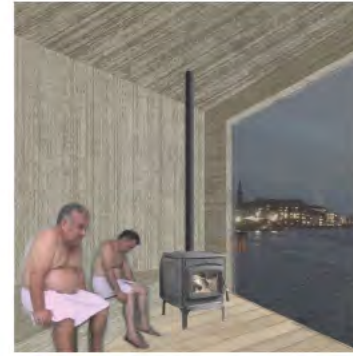
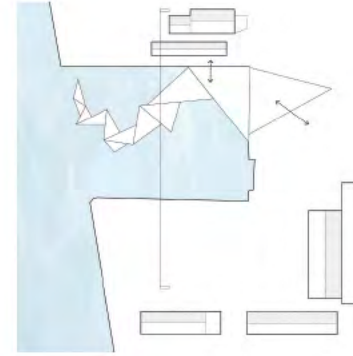




BRIDGE
CONNECTION | CROSS-HARBOR | ICONIC VIEWS



LANDFORM
WATER/LAND EDGE | TOPOGRAPHY | BELOW/ABOVE



KBH TERMISKE BADE

CPH thermal bath

Daniel Novak

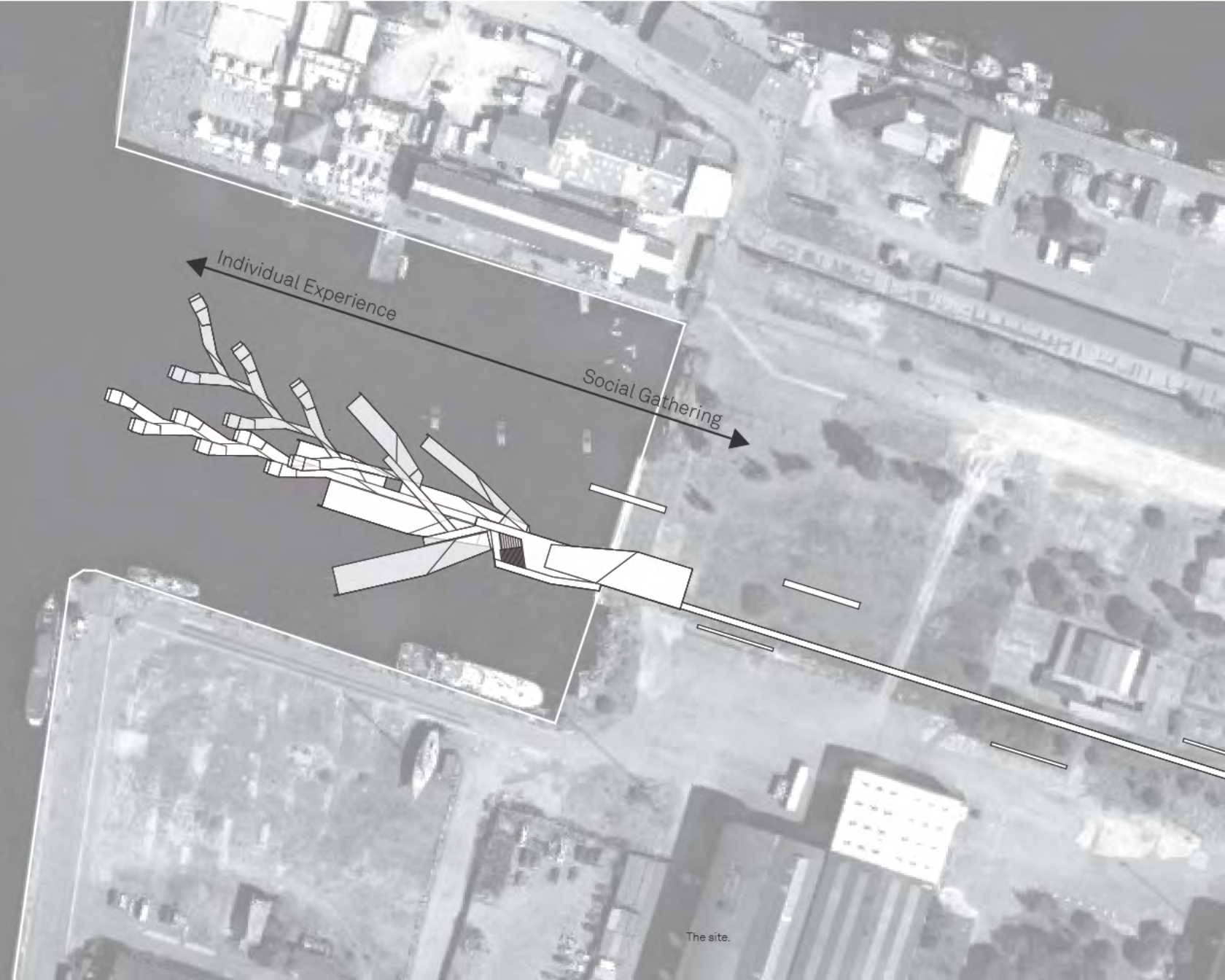
This is a structure that seeks extremes of experience.

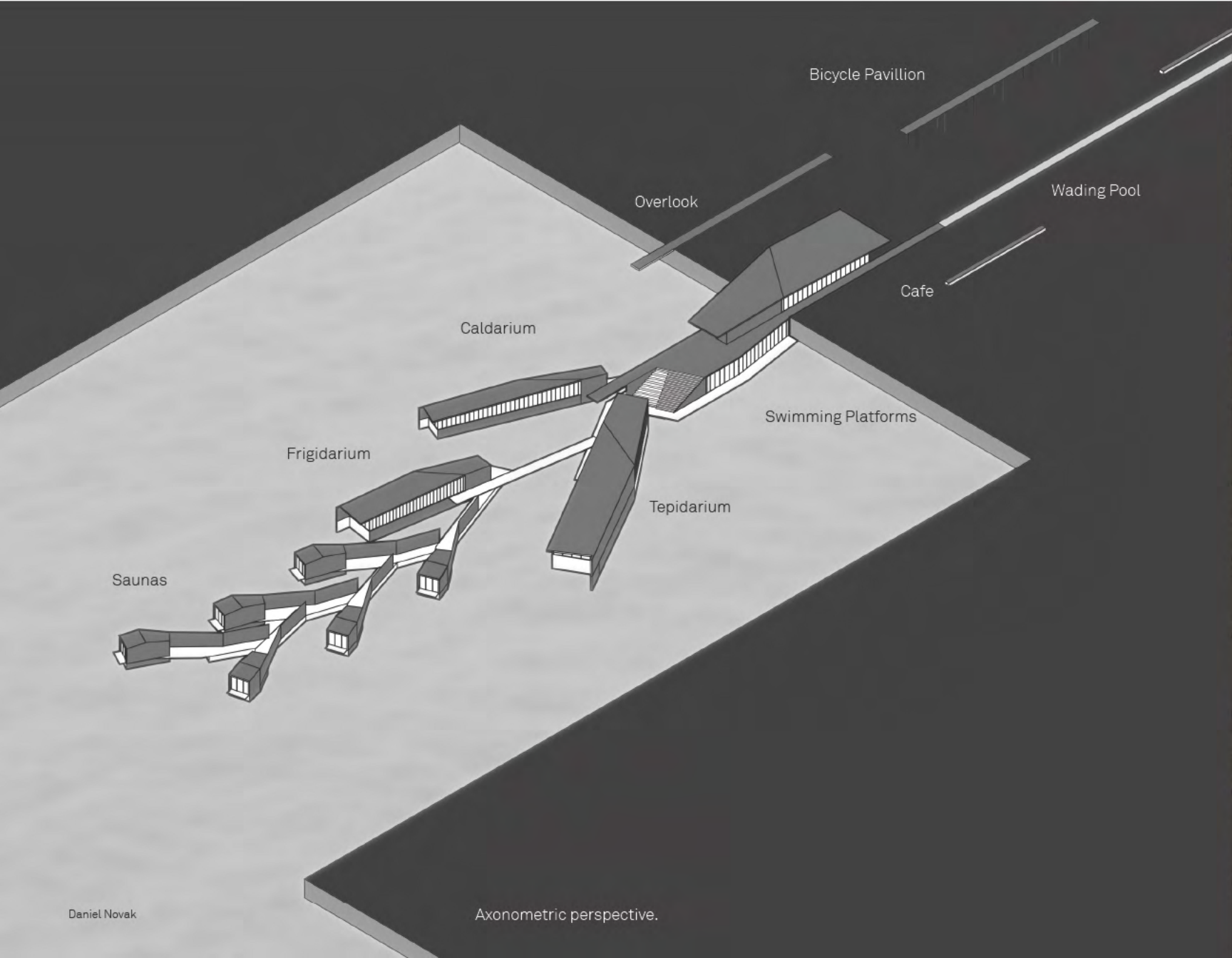
As Copenhagen grows to become a leading global city the harbor will become increasingly important as a place of contrast in the urban environment. The thermal bath is a place to experience the dichotomies of exposure and shelter, isolation and society, nature and industry.

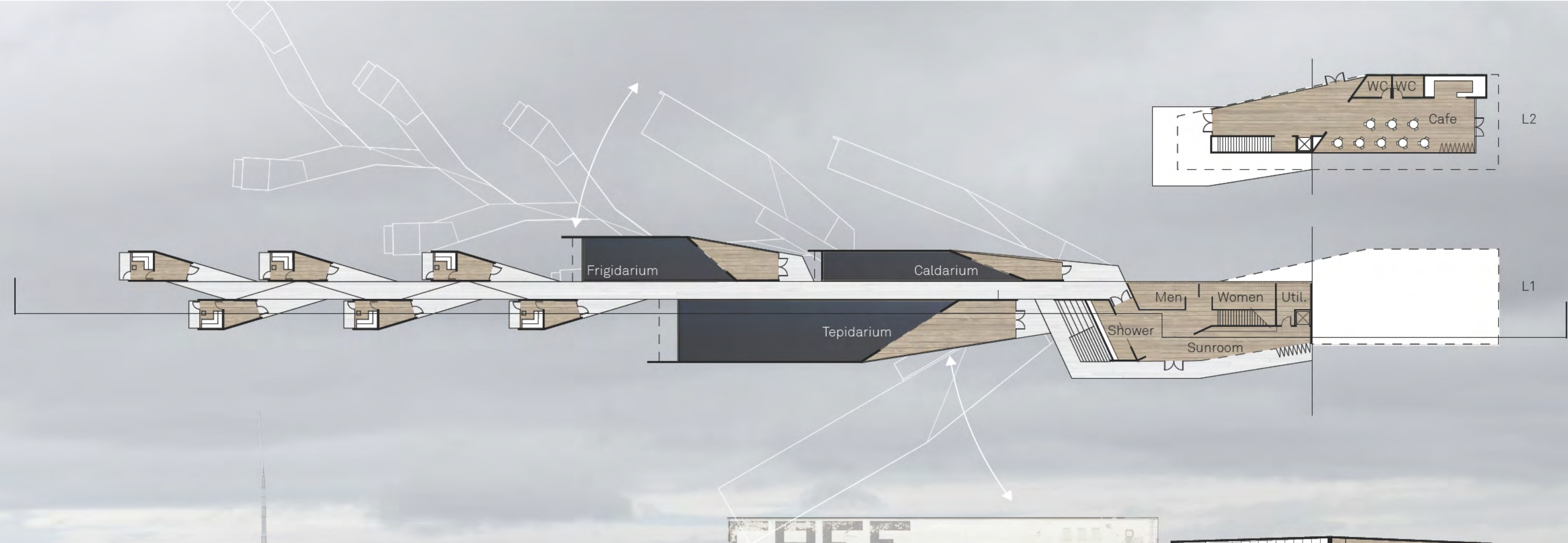
By floating on the surface of the water the bath can move, transforming itself throughout the year and attuning itself to the varied climate.

The site for the bath is a former shipyard - an intermediary between the water and the city. It is an appropriate place to reconsider the way we relate to the environment, the industrial infrastructure remains in its place alongside renewed natural growth.

Although the city will grow with the advances of technology the harbor will remain a place to experience the primitive elements of salt, water heat and changes in the weather.







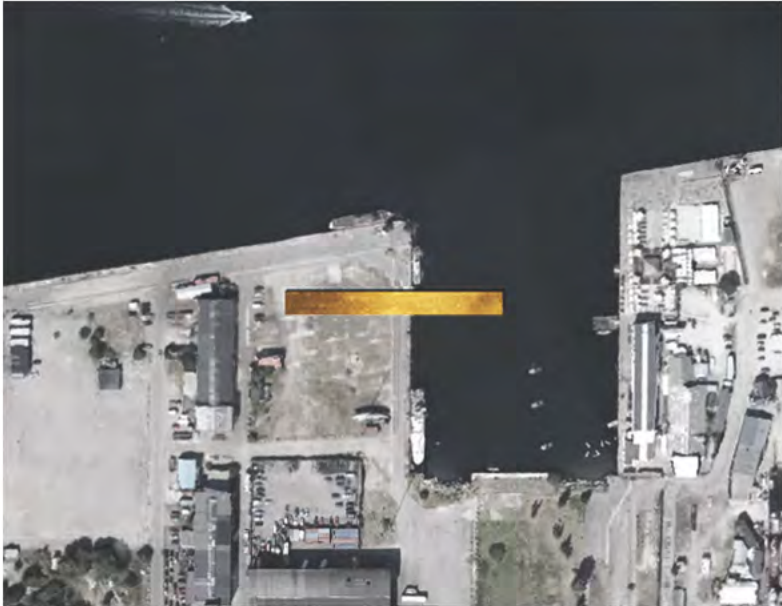


POST-INDUSTRIAL BATH + HARBORFRONT Doug Smith

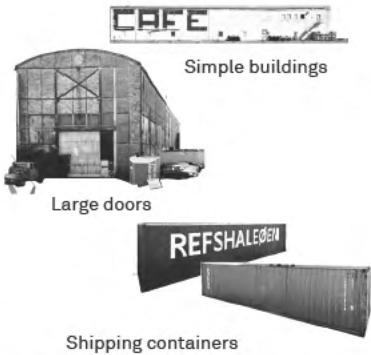
A bathhouse and harborfront that takes its cues from the immediate post-industrial context and is able to transform like a swiss knife to accommodate all seasons.

The project includes a tepidarium, caldarium, frigidarium, four saunas, a cafe, water access for small boats, winter ice skating and a summer beach.

The exterior is clad in gold-painted corrugated steel referencing the history of the shipping industry. The interior is clad in black-stained wood to contrast the bright exterior. The project fits into the existing grid established by the buildings in the harbor and extends into the water like a pier.



Site Plan



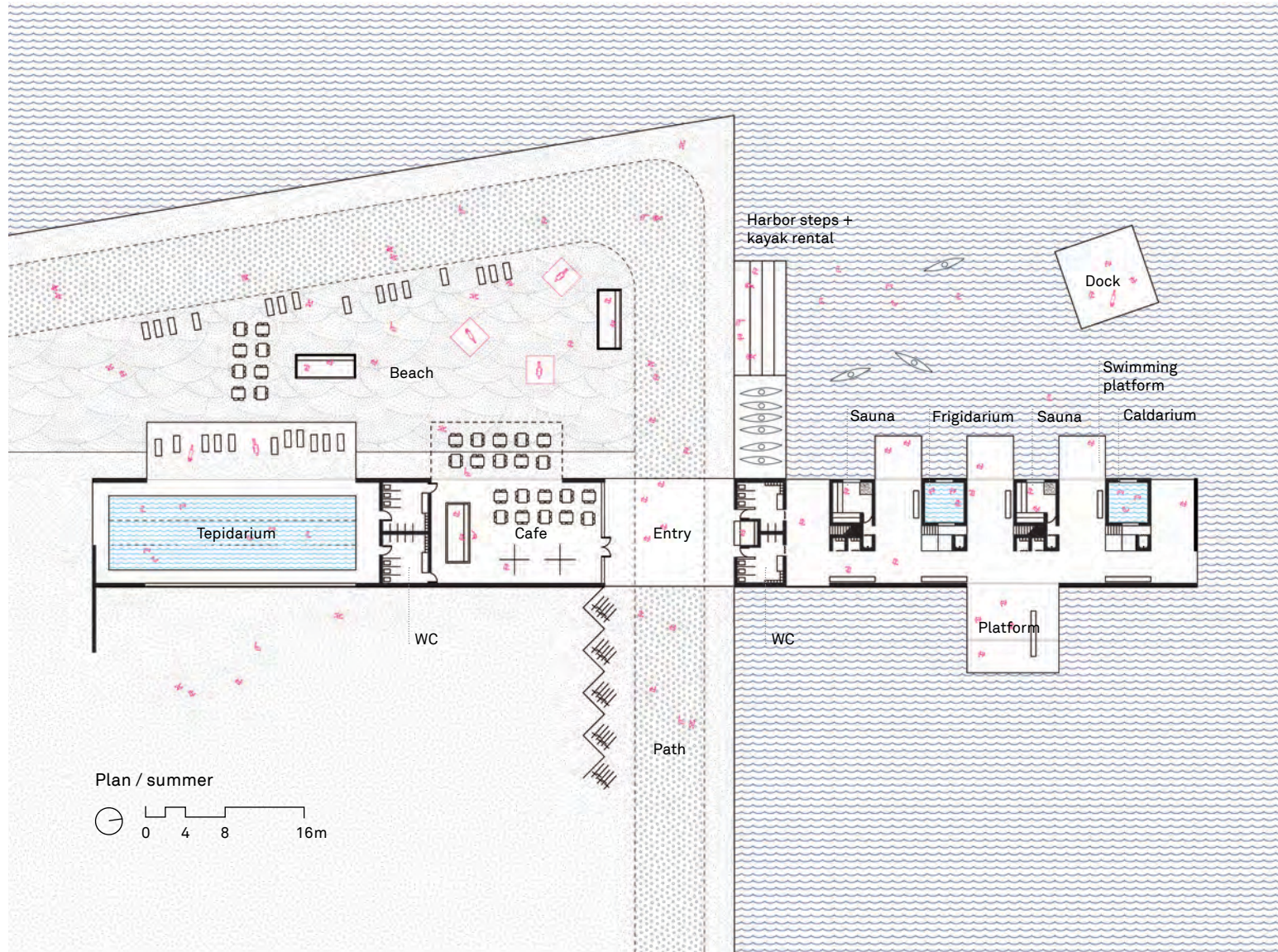
Site Context

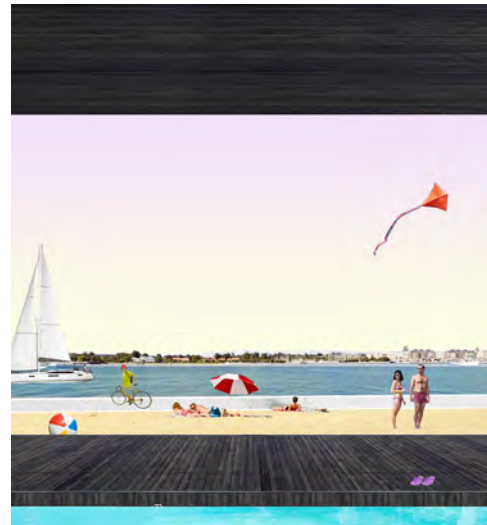
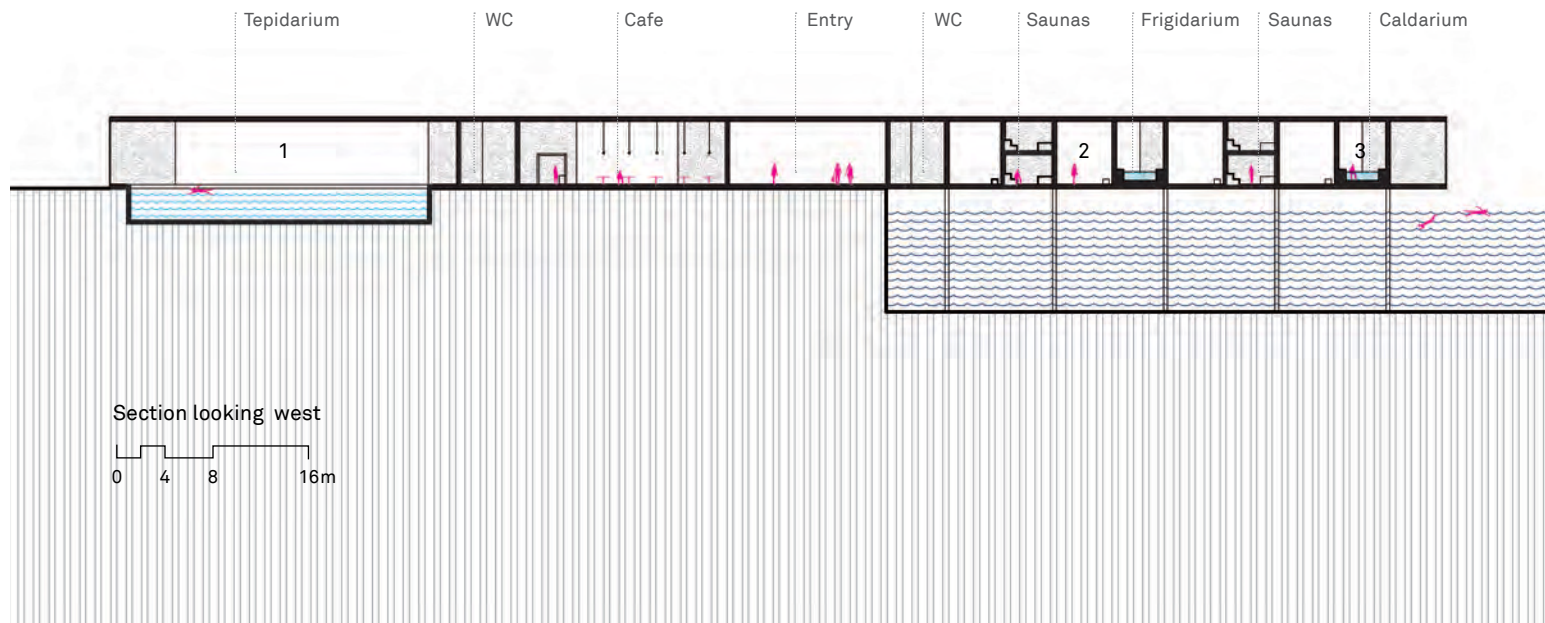


Project Concept



Approach from the east in winter

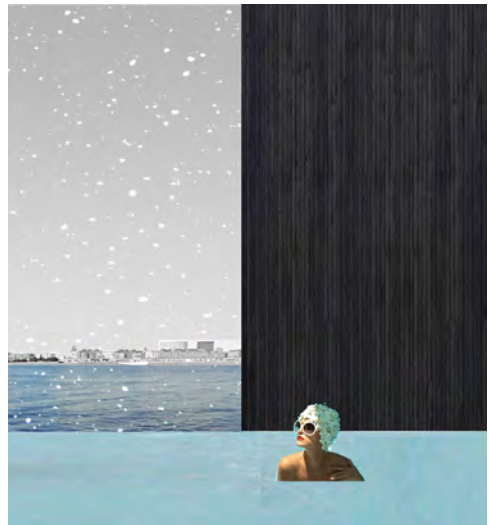




1. Tepidarium in summer



2. Swimming platform in autumn



3. Caldarium in winter



Winter harborfront



Summer harborfront

HARBORSCAPE

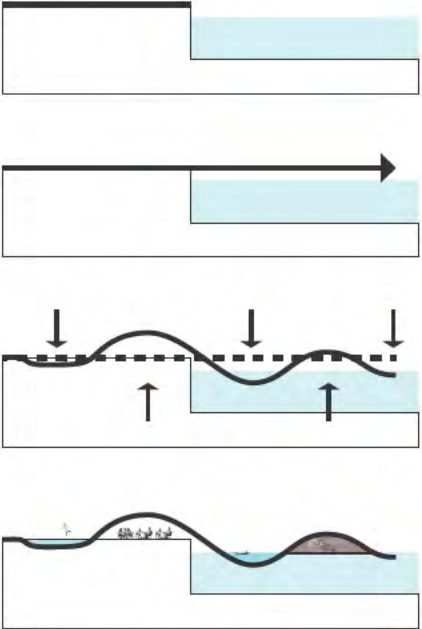
Peipei Sun

Copenhagen's harbor is in transformation from being a postindustrial site to a cultural and social center of the city. The design of the Harborscape refers to a traditional beach landscape and introduces a new typology to Copenhagen. The Harborscape gives people opportunity to enjoy beach activities in the city center. By introducing saunas and thermal baths, Harborspace acts as a year-round public social space. Swimming, sunbathing, kayaking and playing water polo keeps the site vigorous in the summertime; saunas, thermal baths and indoor swimming pools activate the site during the winter season.

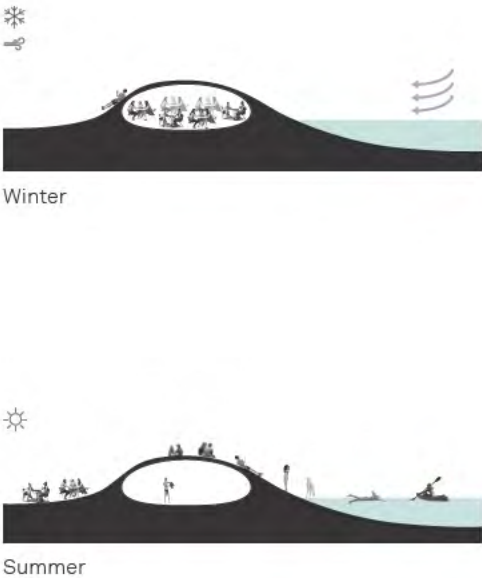
In a traditional beach landscape, there are small grassy hills that block the wind and create a protected area for people to rest during windy condition. Inspired by the beach landscape, the Harborscape provides saunas and tepidariums underneath the topography and generates protected areas behind the hills. The Haborscape also provides easy access to the waterfront, and improves the experience of various water activities.

The beach and water activity area is located on the north part of the site, which takes advantage of the southern sun exposure as well as responding to existing summer sunbathing activity. The individual saunas are located on the southern part of the site since sun exposure is not essential. Large indoor public saunas, pools and a dining area are located on the east side of the site and act as the main entrance to the Harborscape.

LANDFORM CONCEPT



SEASONAL CHANGE



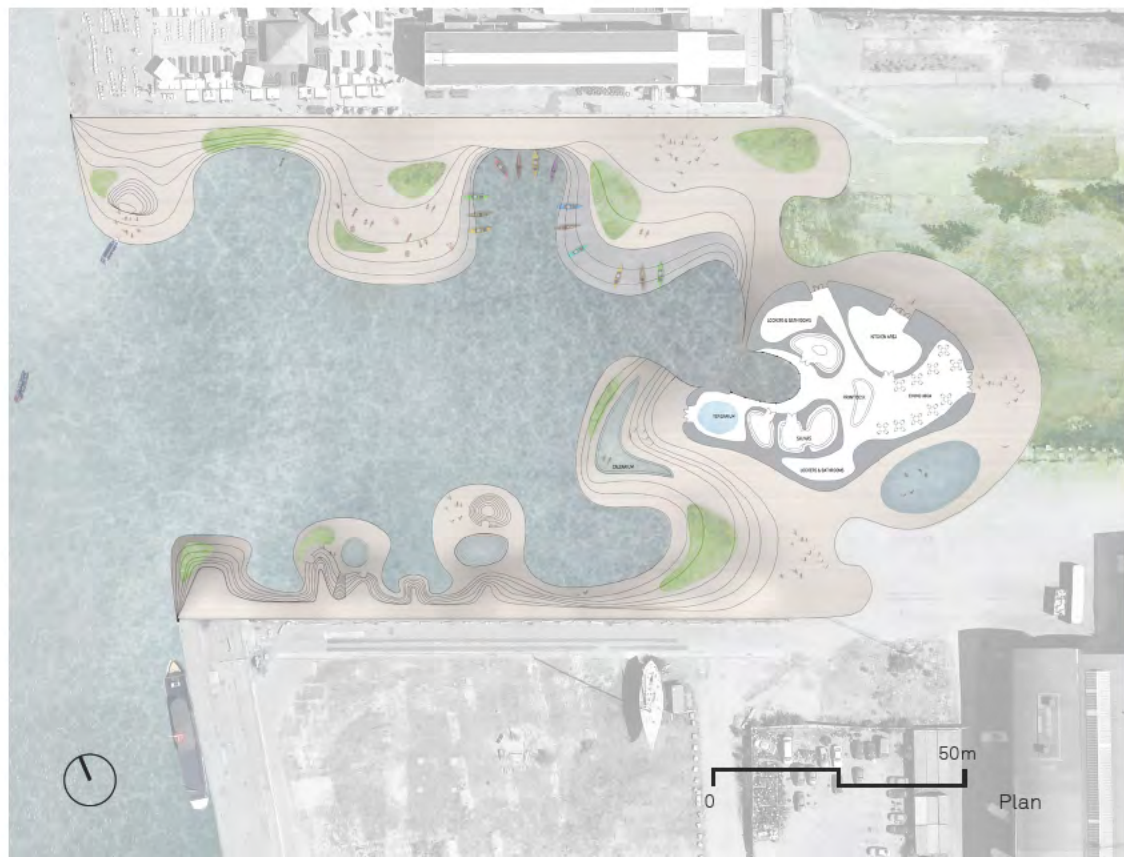
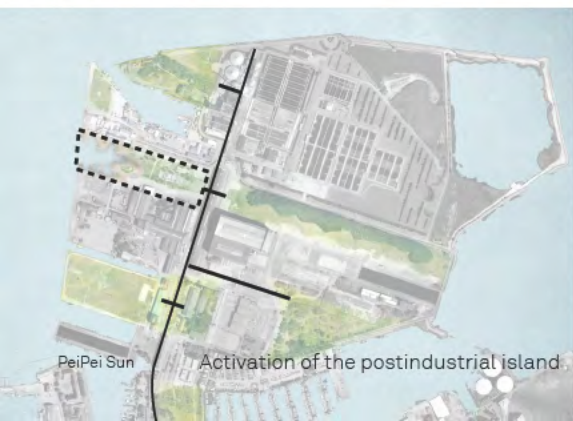
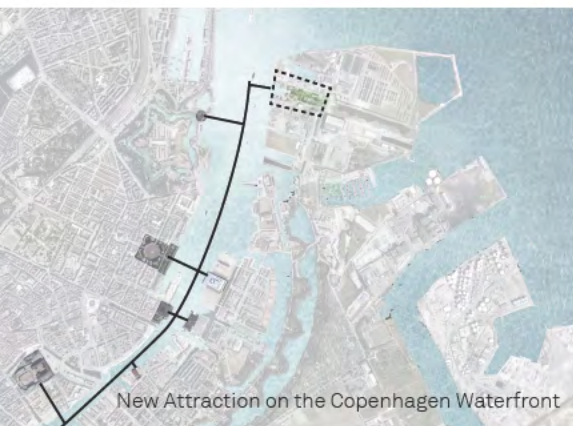
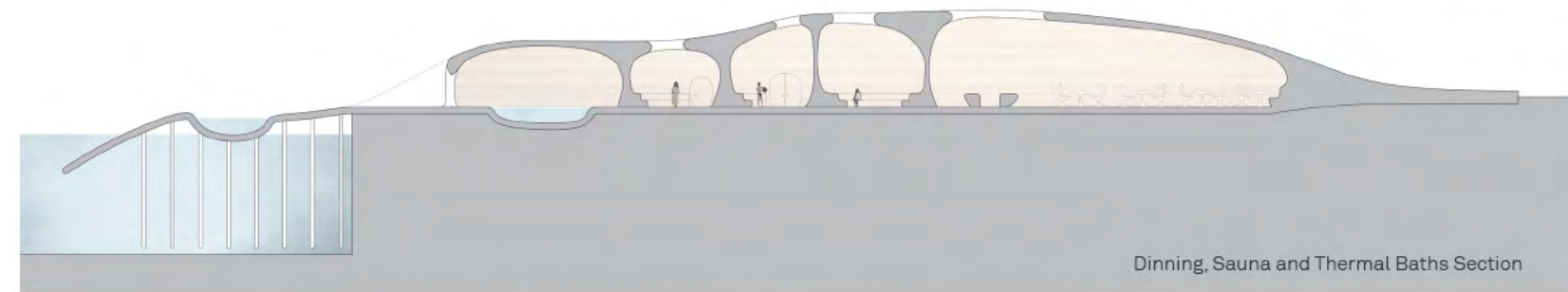
A Danish Beach

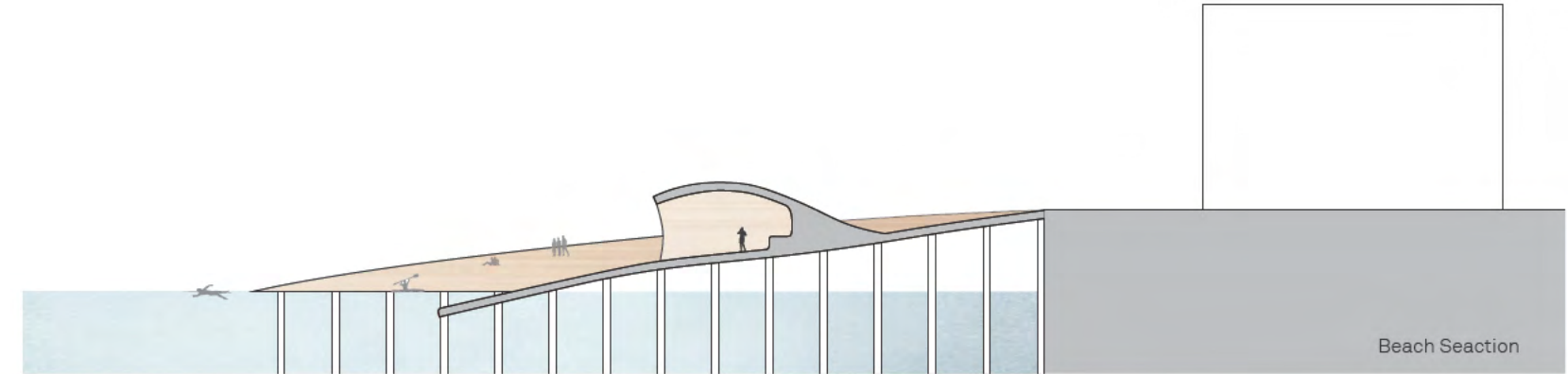


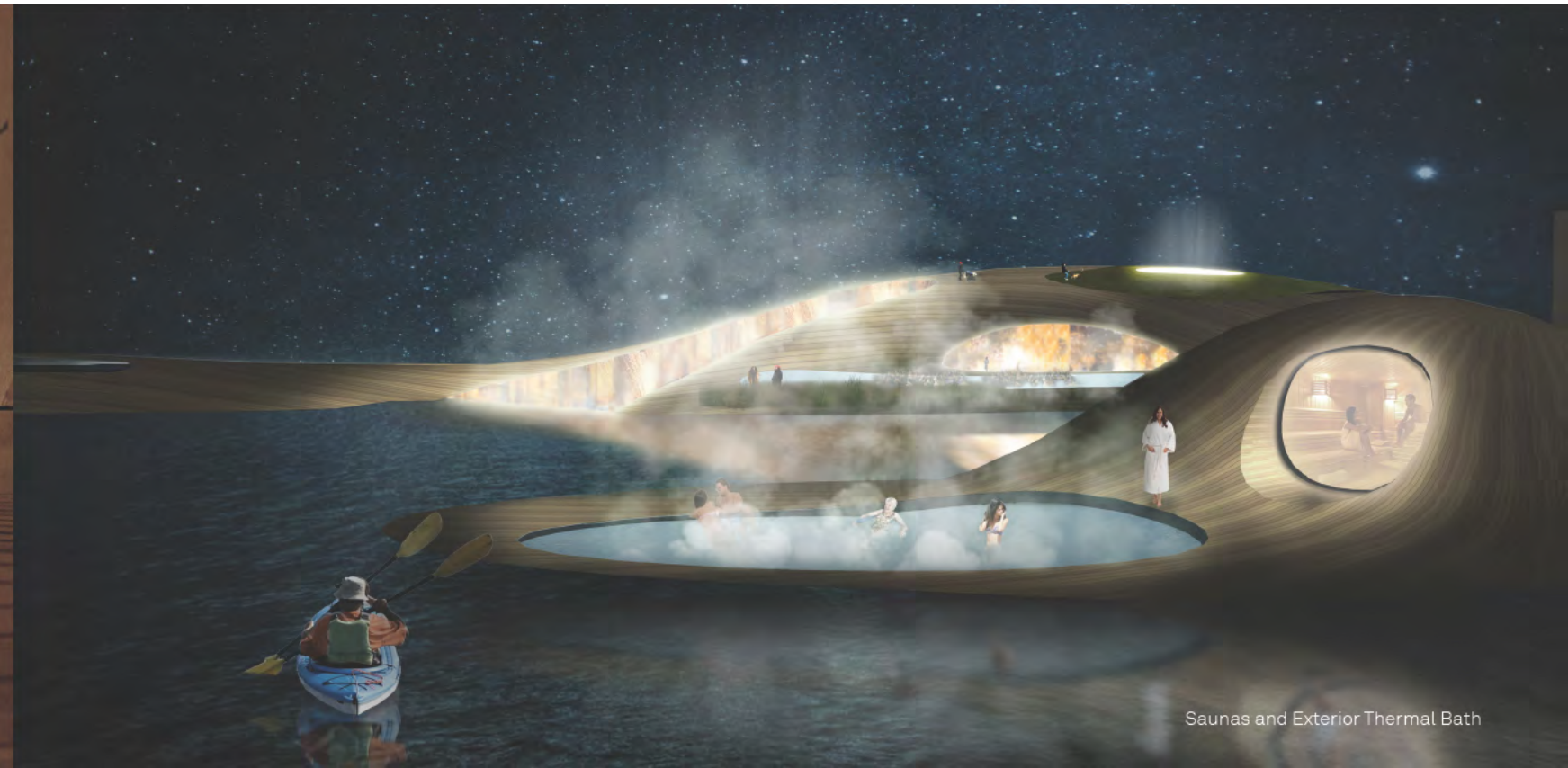
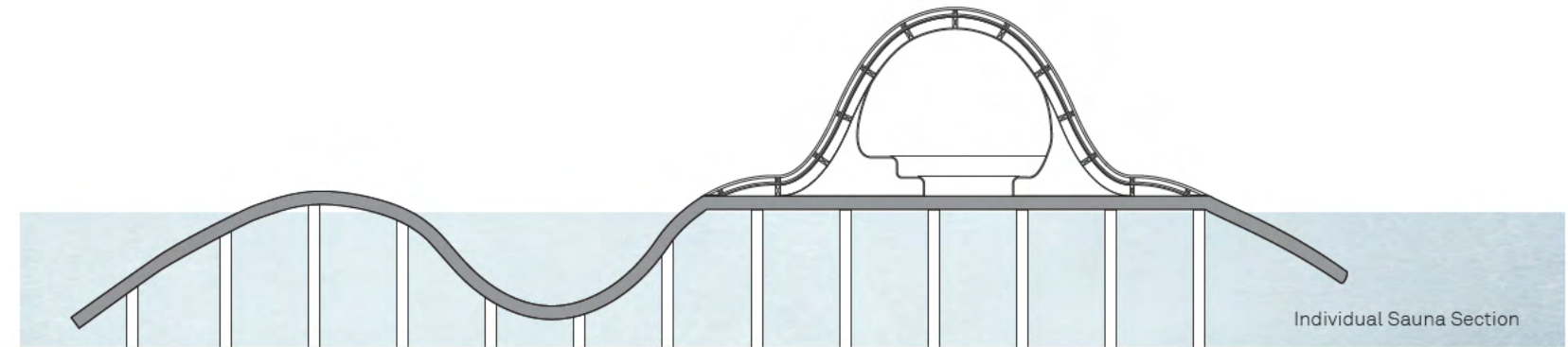
Postindustrial Site Context



Harborscape







THE WAVE

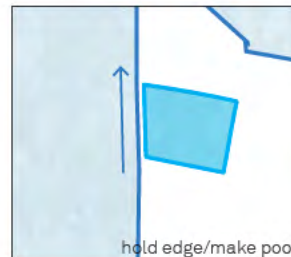
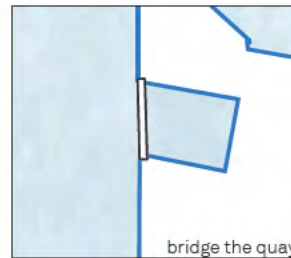
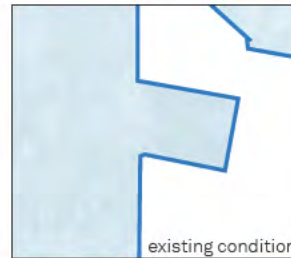
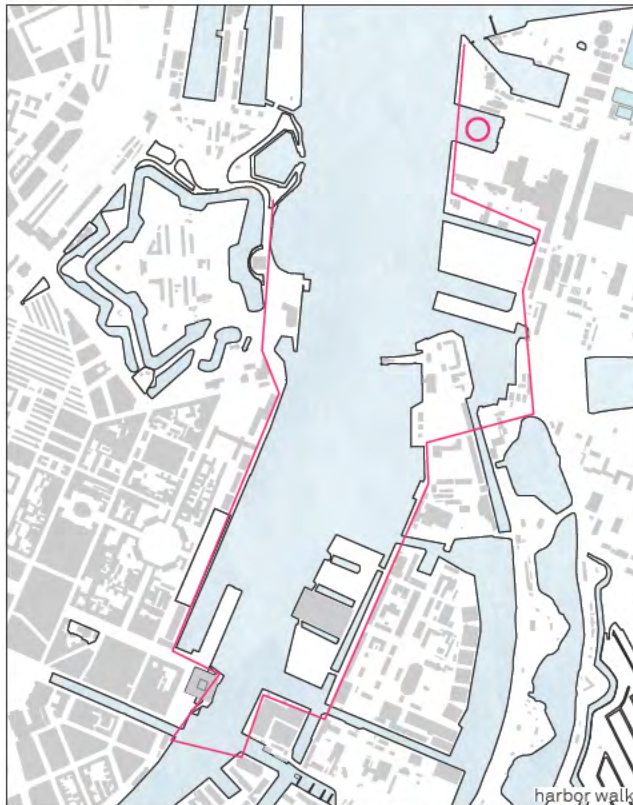
Becca White



The iconic form of the wave attracts people to the underused and developing site of Refshaleøen. The bridge touches lightly on the site so as not to impede future development around it. It holds the edge of the harbor and forms a promenade across the water, connecting the north and south quay and taming the inlet into a calmer harbor pool.

The form undulates to allow for varied experiences above and makes spaces for program below. The rises and dips on each side of the wave alternate to create a corresponding exterior space for every interior space.

The wider ribbon on the open harbor side houses the more fixed program—restaurant and harbor bath, while the smaller ribbon responds more to the community of Refshaleøen offering more flexible space—water equipment storage, a harbor bus stop and a multipurpose room.



the wave from the harbor



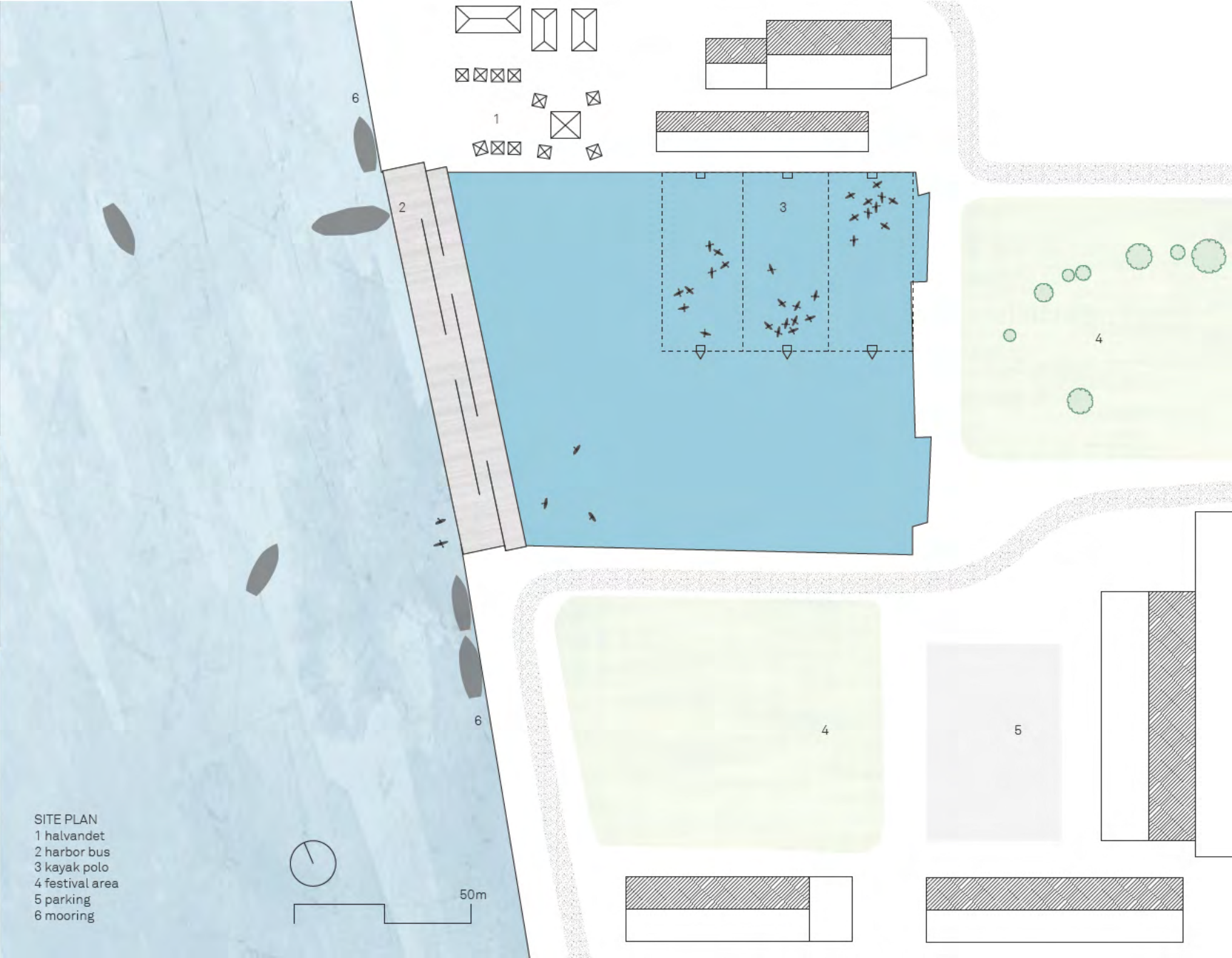


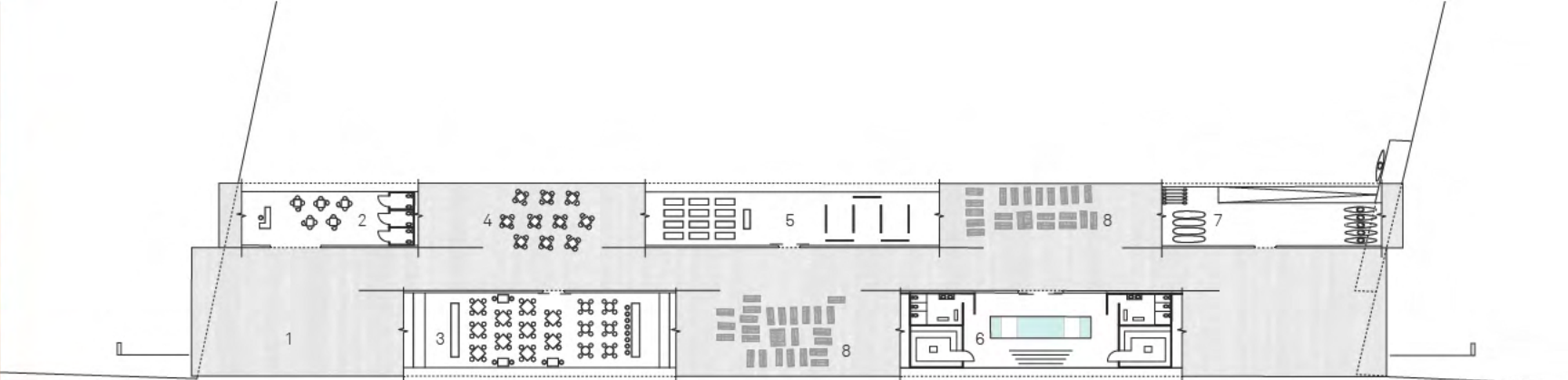
restaurant



sauna

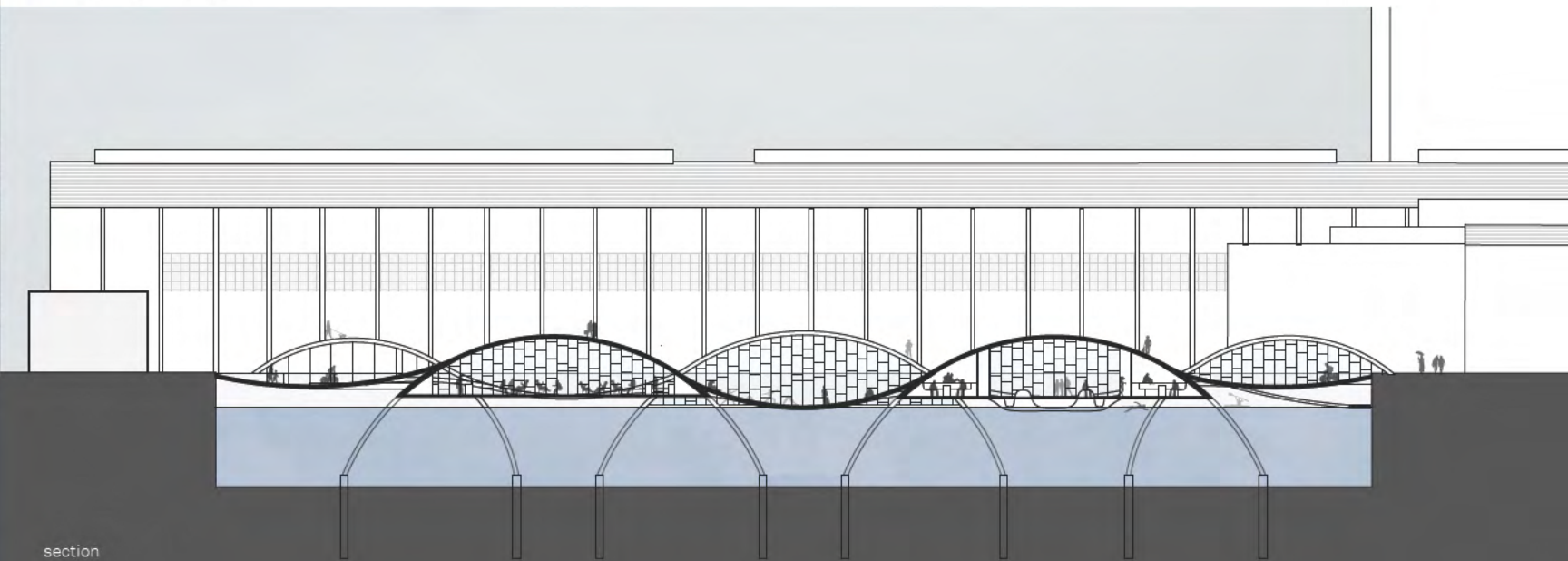
Becca White





FLOOR PLAN

- 1 harbor bus
- 2 coffee shop/restroom
- 3 restaurant
- 4 picnic area
- 5 multi-purpose room
- 6 harbor bath
- 7 boat storage and ramp
- 8 sunbathing/swimming



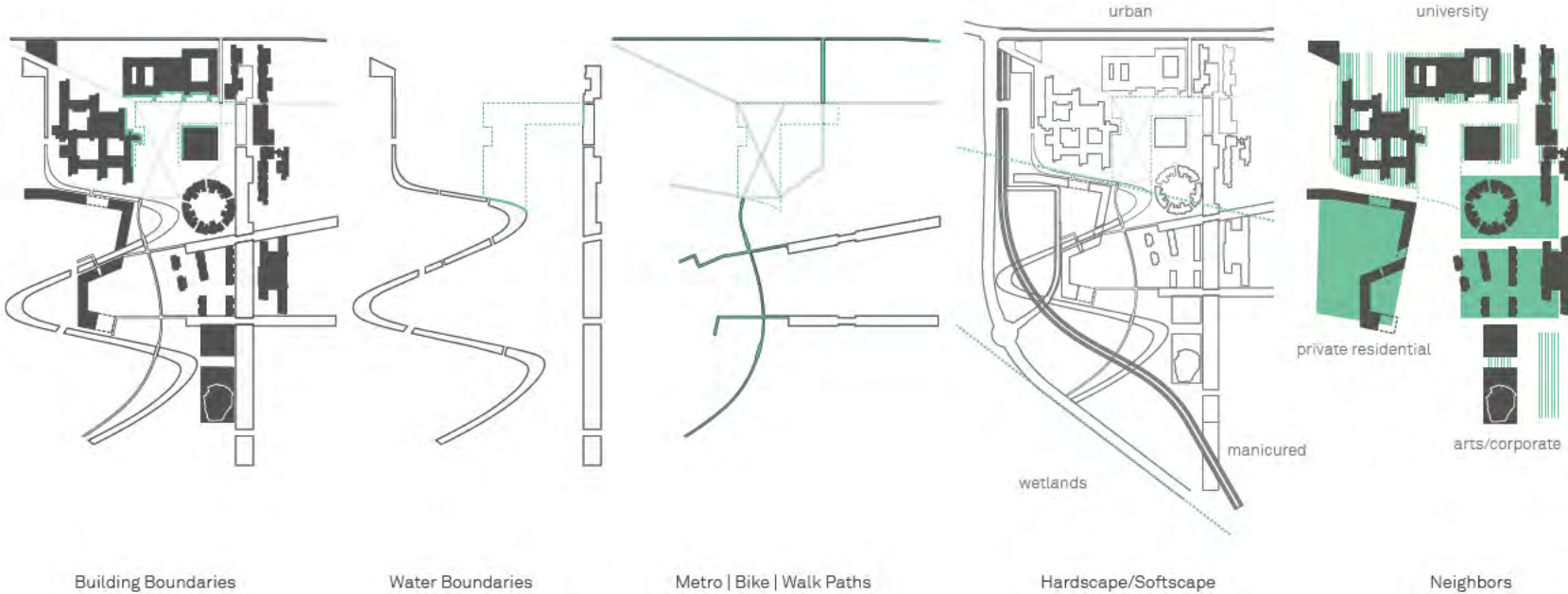


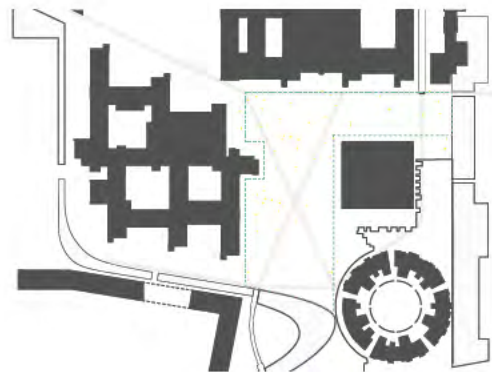
summer and winter views of wave entrance from the south

SITE TWO : CAMPUS GREEN
Gabrel Gonzales | Xiaoxi Jiao
Siyu Qu | Claire Shigekawa Rennhack

University of Copenhagen's southernmost campus, KUA (Copenhagen University Amager) is located south of Njalsgade on Amager, in the northernmost part of Ørestad. The old KUA buildings are being replaced with new university buildings forming a big square that, on a daily basis, is occupied by students from the two dormitories "Bikuben" and "Tietgen-kollegiet", students from the IT University located southwest of the site, employees, resident families and commuters from all over the city. The challenge for this site is not to bring people here, but to tranform the space into a new lively place where people can socialize, play, and gather.

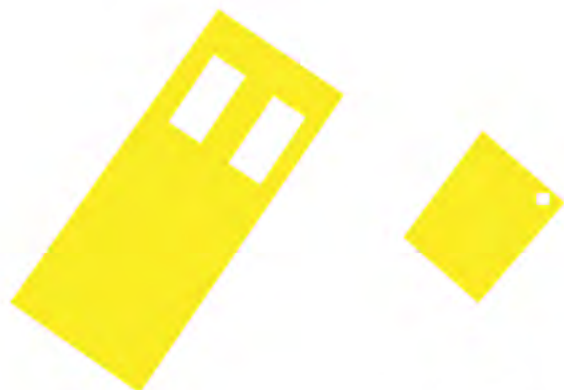
A study of the site's existing conditions, climate characteristics, and potential gathering program and opportunities helped to develop four separate strategic approaches.





people density (per 100 m2)

public zone (strangers) 3.6m
 social zone (strangers, acquaintances) 1.5-3m
 personal zone (friends, family) 0.6-1m
 intimate zone (partners, besties) 0-0.6m

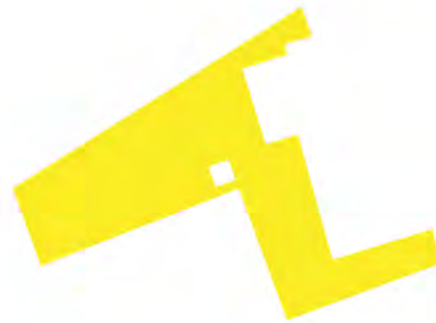


Israels Plads
23,000m2

Radhuspladsen
4,800m2



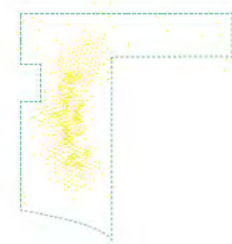
Red Square
7,200m2



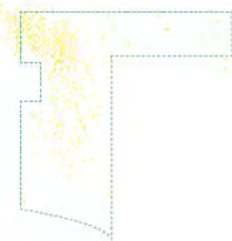
San Marco
13,680m2



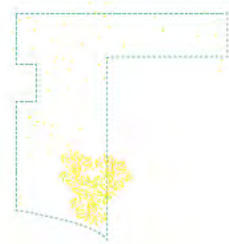
KUA
13,600m2



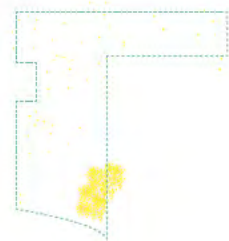
street fair
500 ppl / 5000 m2



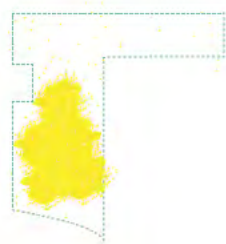
metro rush hour
275 ppl / 5000 m2



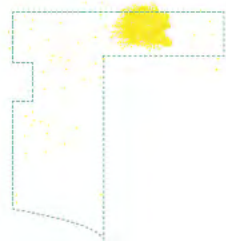
Teitgen move-in day
361 ppl / 2000 m2



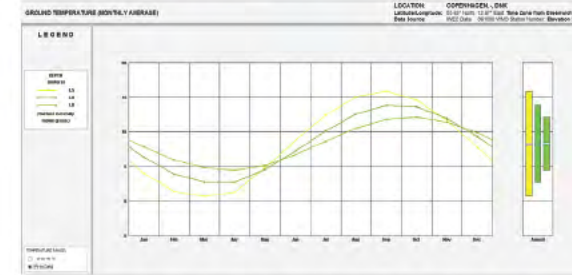
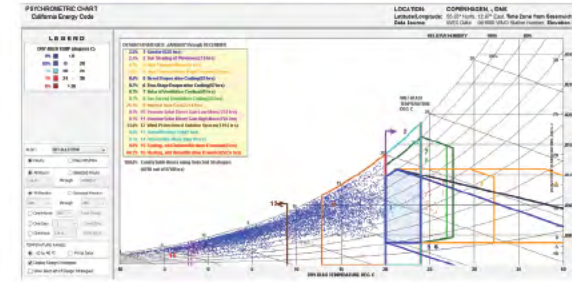
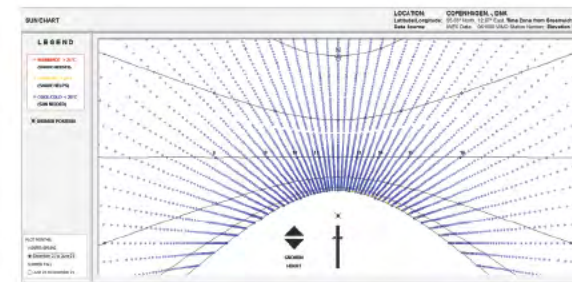
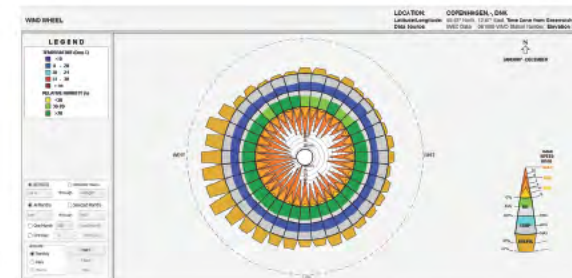
Teitgen friday bar
361 ppl / 1000 m2



rock concert
5000 ppl / 5000 m2



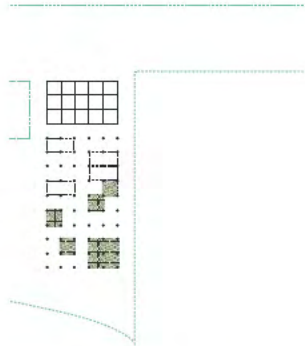
rally
1000 ppl / 1400 m2



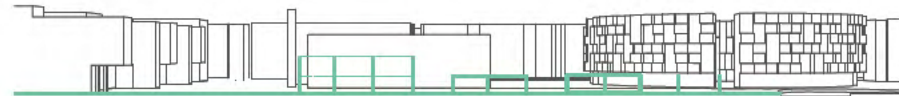
Environmental aspects of the site were investigated. Based on the weather, climate data, user groups and adjacencies, we brainstormed year round programming for the KUA site.



CHES Light frame structure pavillions



vinter

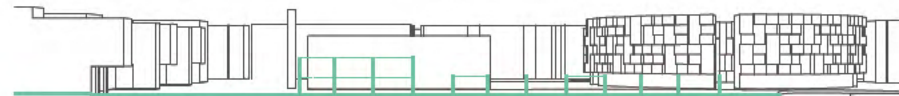


walkway

café /bar / concert
bike parking

winter garden green house rows/market/classroom

sommer



courtyard
/lunch carts

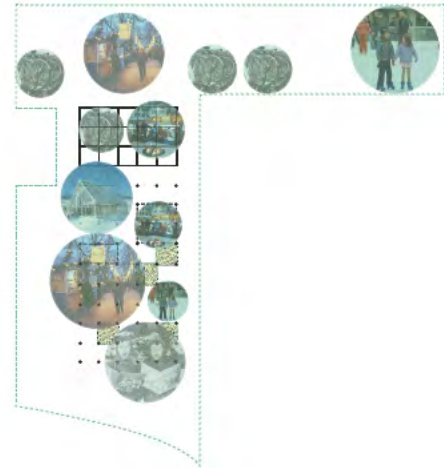
bike parking

café /bar
market / concert

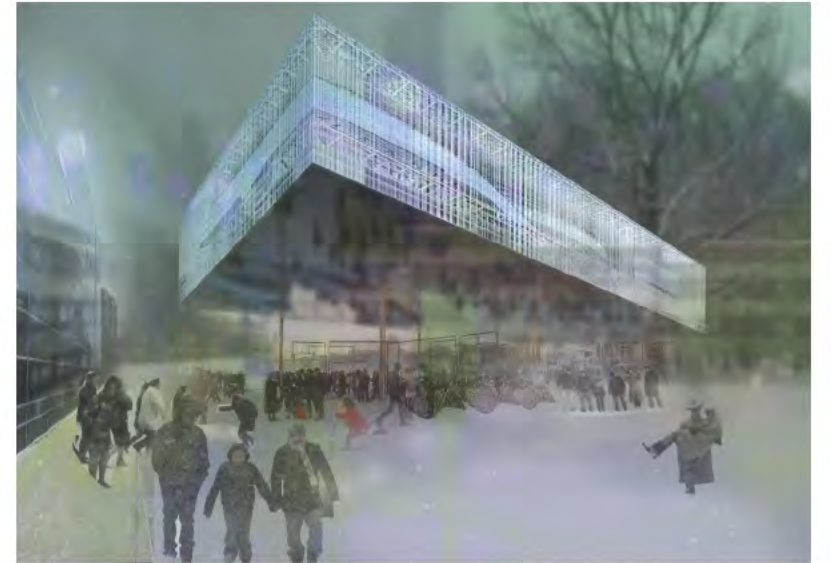
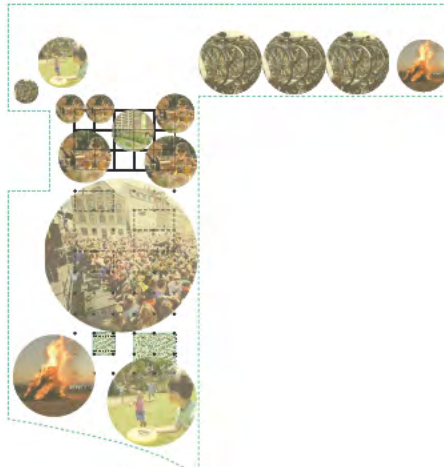
lectures

large performance agriculture

Winter

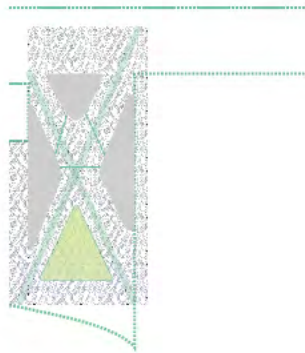


Summer





PUDDLE
Manufactured landscape topography



section A



section B



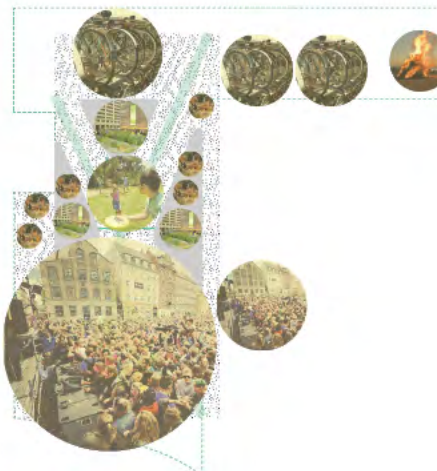
section C



section D



Winter



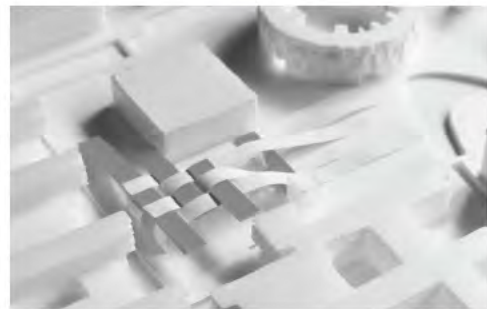
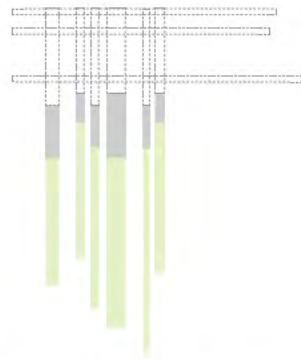
Summer





MIXINGBOARD

Light frame structure integrated with landscape topography

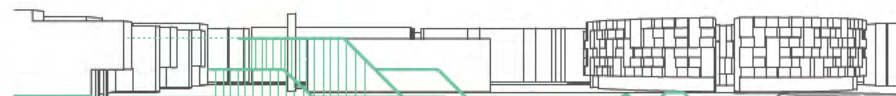


winter



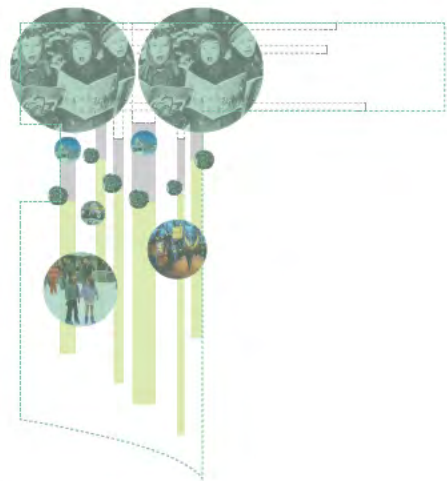
lrg performance, market, lecture
café / bar
winter garden
sheltered bike parking
ice rink, fire pits, outdoor gathering

sommer

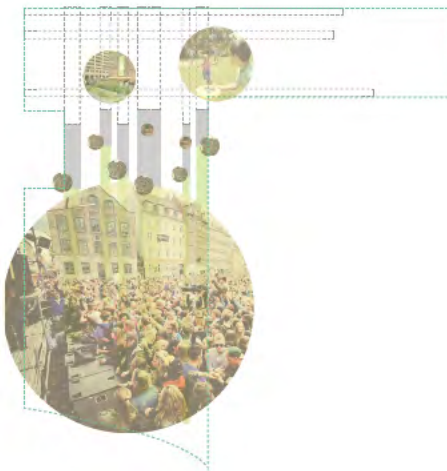


operable skylights open air
café / bar
seating
sheltered bike parking
outdoor: performance space, lecture, market, garden, recreation, sml gathering spaces

Winter



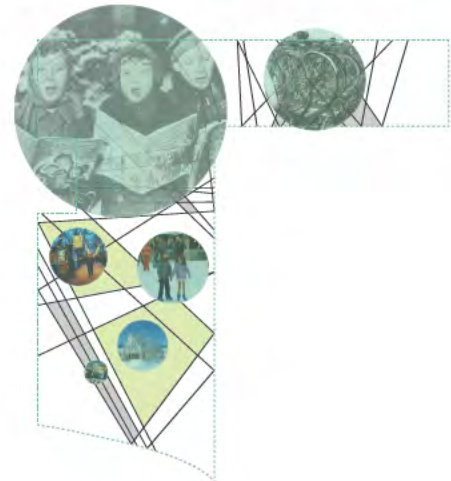
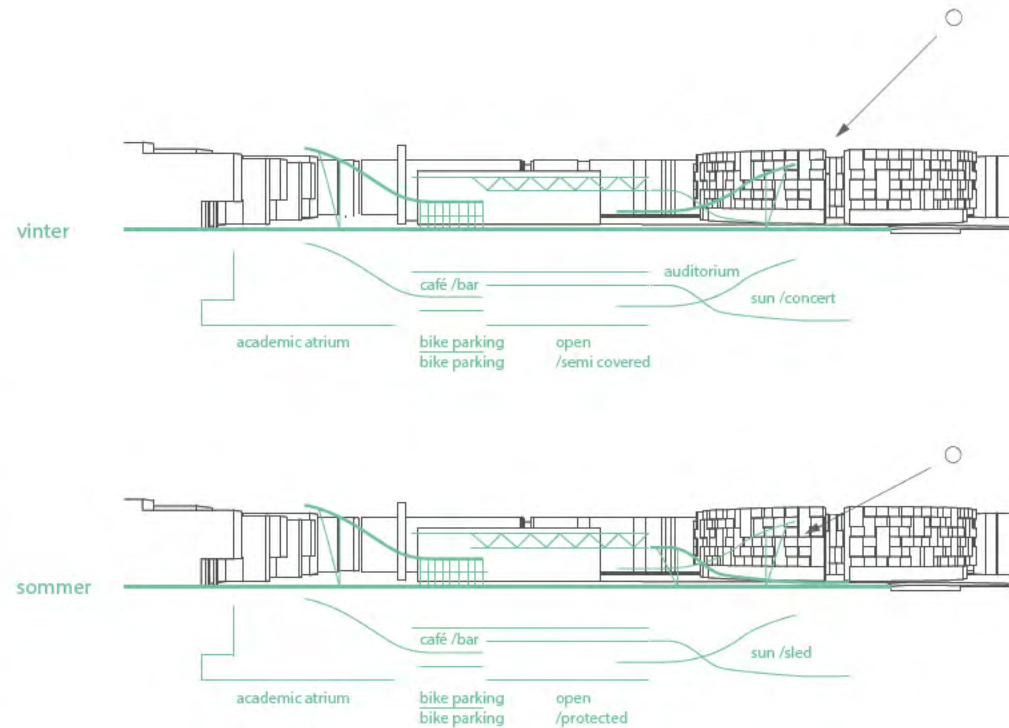
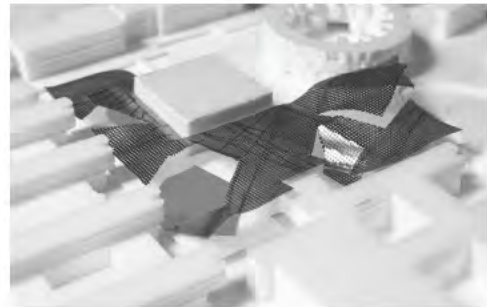
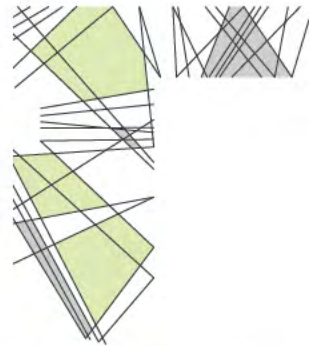
Summer



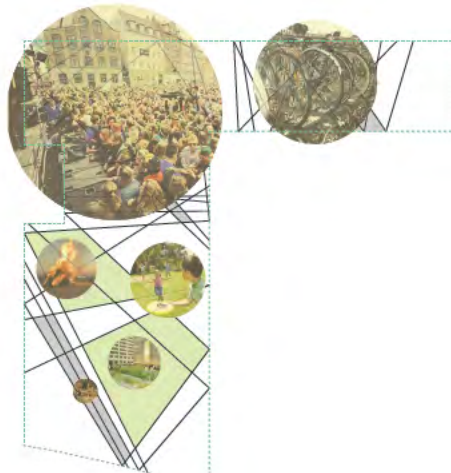


CIRRUS

Framed structure integrated with landscape roof canopy



Winter



Summer



MØD MIG VED JORDNØDDEN

Meet me at the Peanut

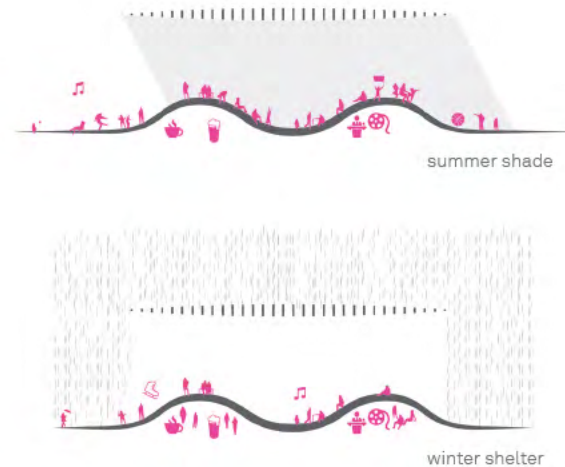
Gabrel Gonzales | Claire Rennhack



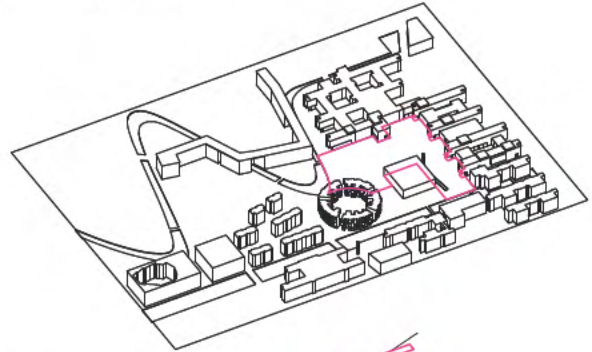
KUA's main campus is located between the new neighborhood of Ørestad and the city center. This instant city is used precisely as it was planned: to be commuted to and through. We now need more from our cities. The challenge of this site is not to attract people to it, but to maintain and foster interest and activity within it.

An immediate response to the site is to provide a place humane in scale that affords spaces for a variety of social activities. A large canopy mediates the scale of the site, relating to the larger surrounding buildings while providing summer shade and a generous winter shelter for a variety of outside events and activities. The topography below is manipulated to create a number of more intimate conditioned spaces for smaller events within.

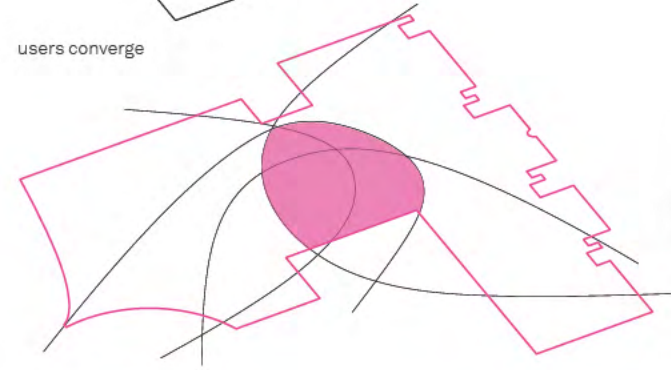
The expansive, empty landscape between the impersonal institutional buildings is appropriated to form a new urban living room. The Peanut will be an architectural beacon that will become a new meeting center during all times of the year.



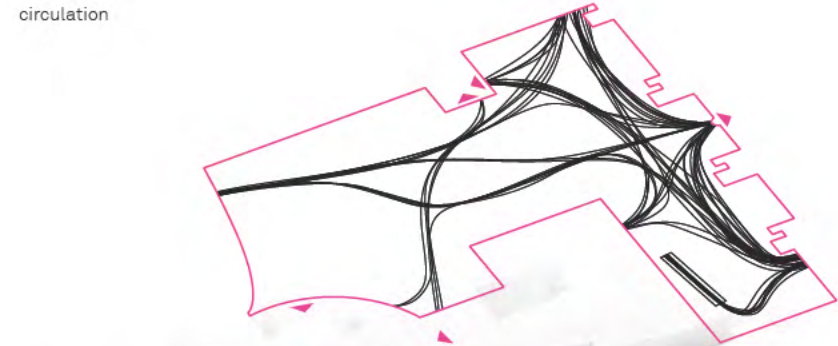
institutional scale



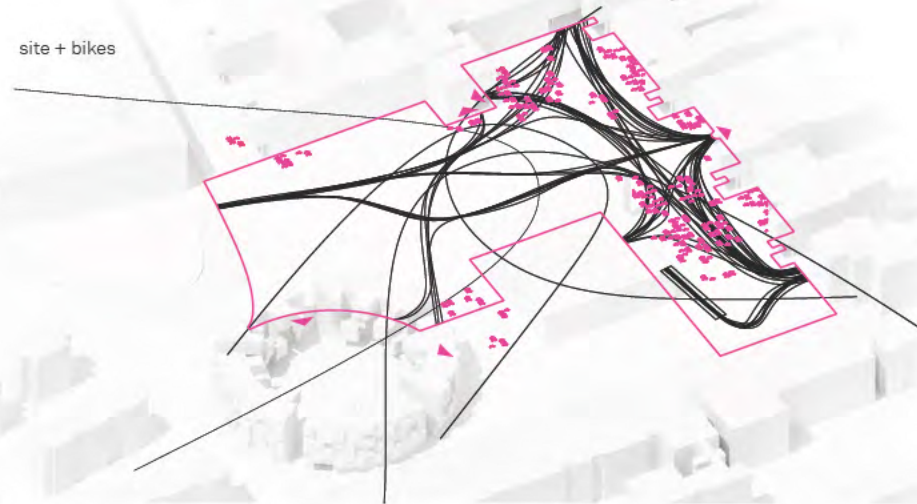
users converge



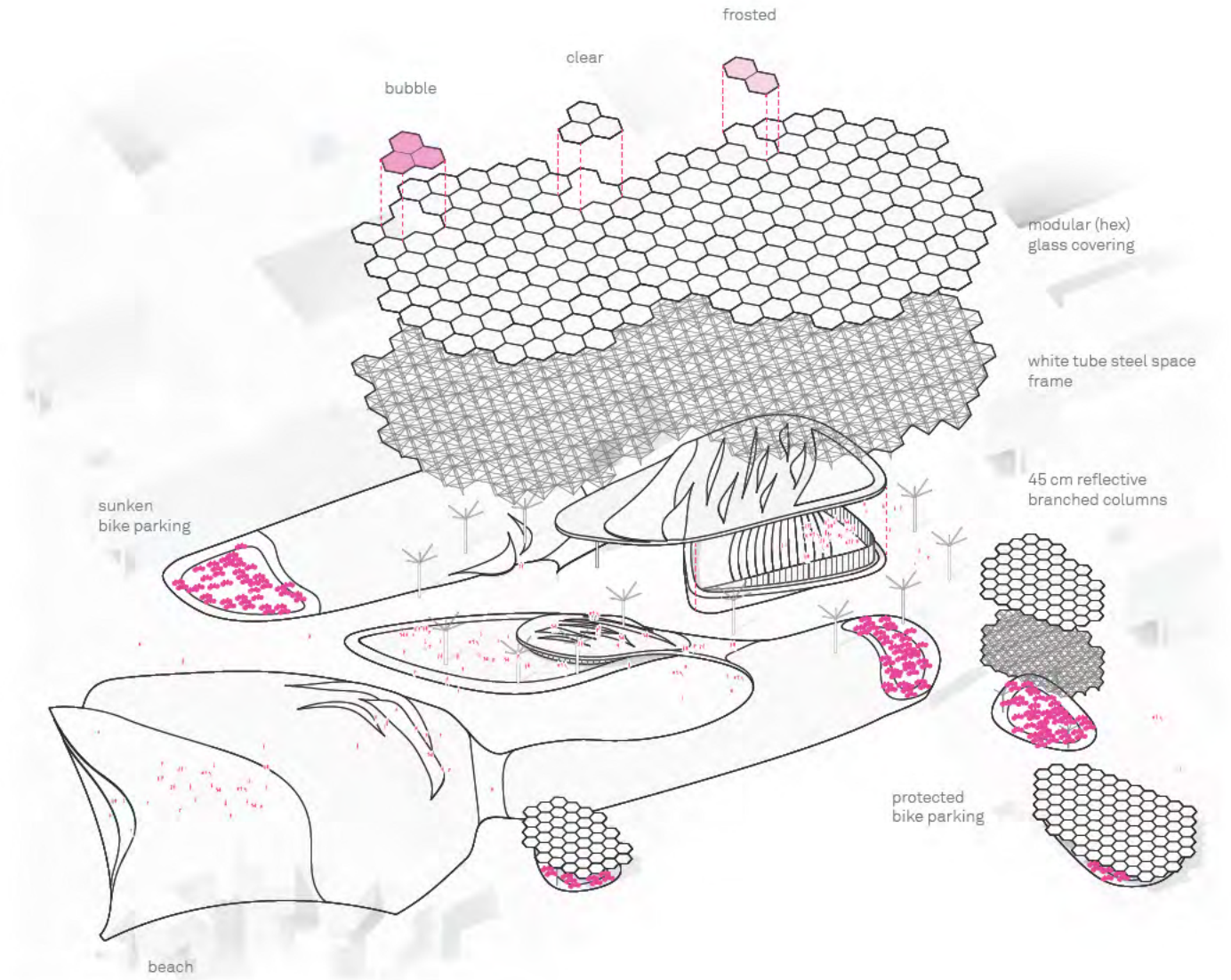
circulation

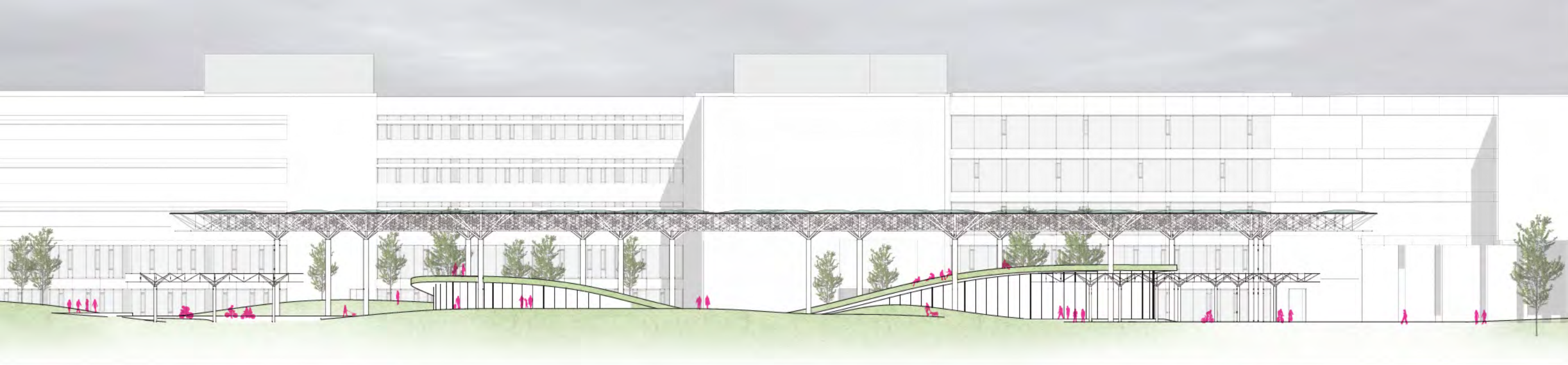


site + bikes



the Peanut

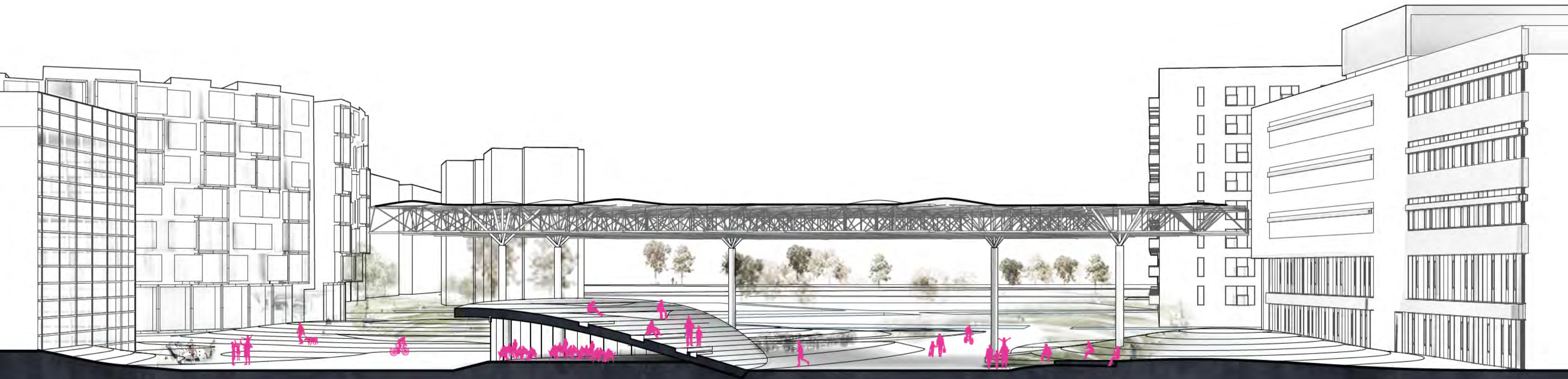




east elevation



longitudinal section



east-west section perspective



the southern approach



a commuter's view from the northwestern metro stop

KUA CAMPUS CENTER
Xiaoxi Jiao | Siyu Qu

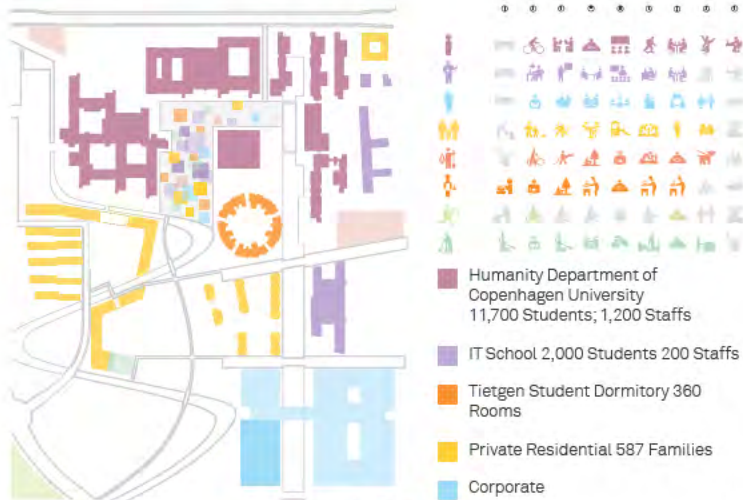
A natural green landscape overlaps a small cluster of buildings below to form the new KUA Campus Center, which serves as a public gathering hub for the community all year round. This project is dedicated to the university as well as to the surrounding neighborhood by providing a wide range of programs for a diverse group of users. To preserve the existing pedestrain flows on the site, a “village” composed of program boxes is located along the circulation paths. By subdividing building programs into smaller units, each of them obtains a more human scale, accommodating diverse activities to discover and enjoy, and creating a rich experience as people move through the building. At a larger scale, KUA Campus Center also creates a smooth transition from the southern natural landscape to the northern urban context by the use of a lifted green roof and several constructed landscape puddles, which provides spaces for different outdoor programs. The solid village boxes and void open spaces provide public gathering spaces for activities during all seasons of the year.



Site Analysis



Existing Circulation



Mixed-Users



Hard and Soft Edges

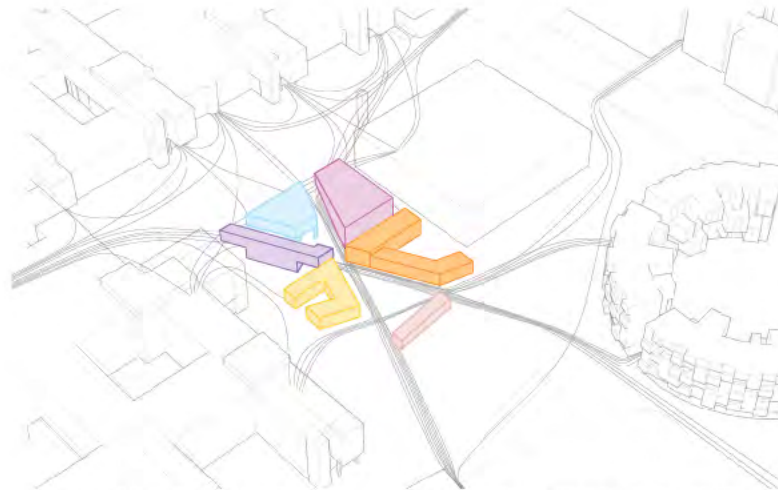


Urban / Nature Transition

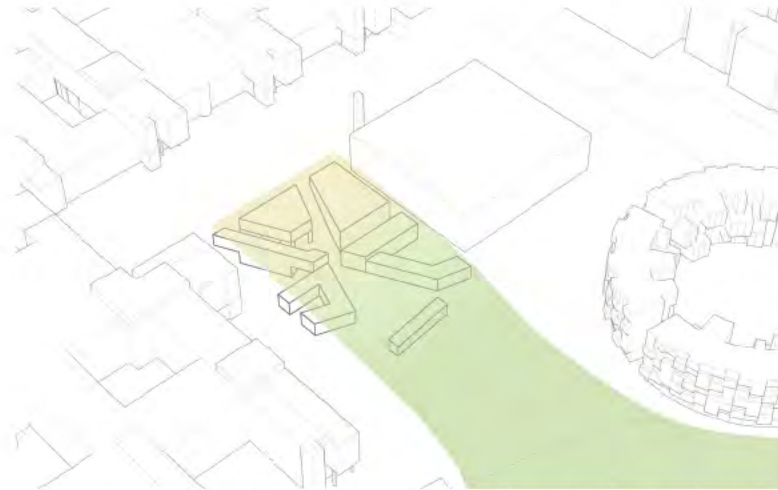
Response



Built area correspond to the existing circulation on the site.



Different programmed boxes are located along circulation paths to create a village.



The green roof connects to the large park to the south and covers the village underneath.



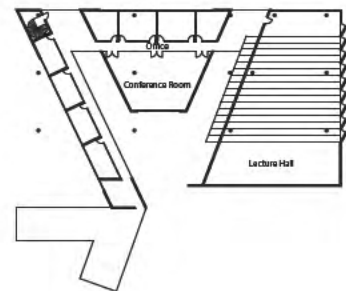
Landscape elements spread out on the site and smooth the transition between natural and urban conditions.



Site Plan



Ground Floor Plan



Second Floor Plan



Xiaoxi Jiao | Siyu Qu

Winter view of southwest entry



Looking north toward the green roof



Greenhouse and courtyard in winter

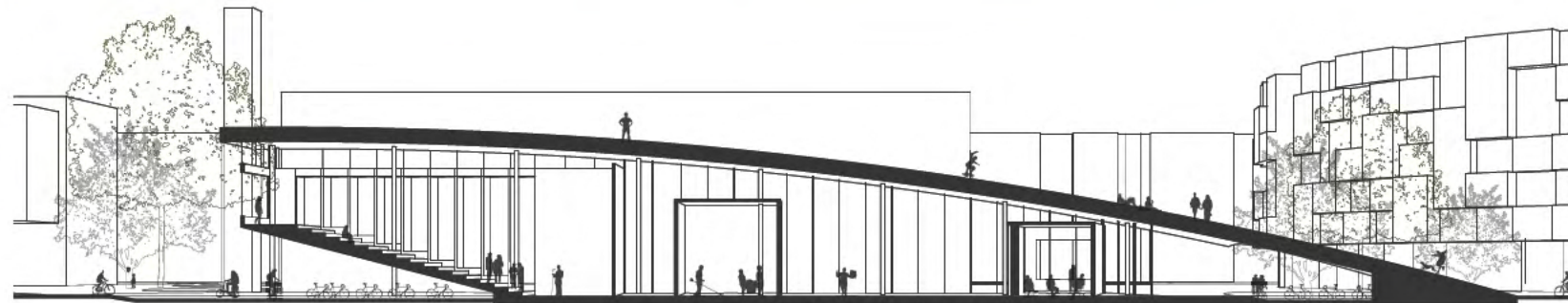


Lecture Hall



Xiaoxi Jiao | Siyu Qu

5m
A-A Section



5m
B-B Section



Food Court



Study Area

SITE THREE : URBAN HUB
Corey Collier | Brad Hutchinson
Andy Wolfgang | Kejia Zhang

The current Nørrebro Station opened in 1930 in conjunction with the construction of the new freight rail ring (today Ringbanen). At the same time the old station that was located in Nørrebroparken closed down. Nørrebro station has functioned as a passenger rail station since 1934. It is a crossing point for many different types of transportation; cars, buses, trains, pedestrians, and bicycles. A new metro station is expected to open here in 2019.

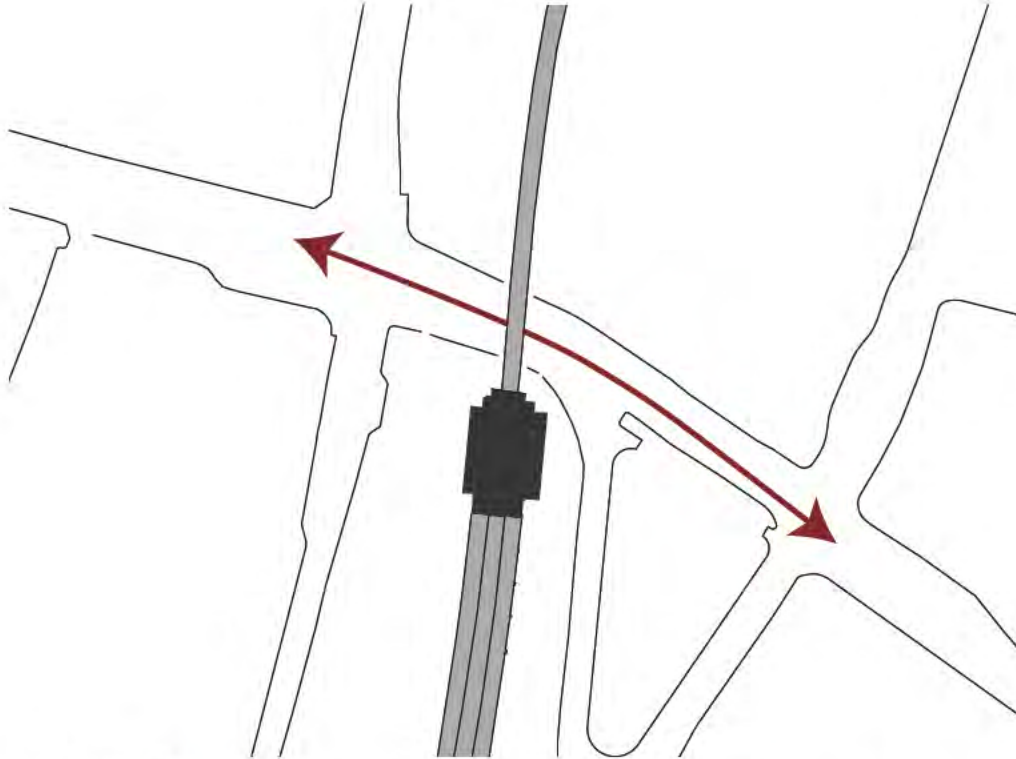
The Nørrebro neighborhood is among the most ethnically diverse in Denmark and the area around the station is used quite heavily by its inhabitants — in spite of its extremely run-down condition. Because it is an infrastructural intersection as well, a great opportunity exists to provide new program elements and activities for both neighborhood residents and the many commuters who move through it.

The site consists of three plots: “Skoda-grunden”, “Lynsies plads” and “Basar-grunden”. The challenge of the site is to create dynamic urban spaces that offer a variety of amenities for the people living there, visiting or just passing through.



SITE FLOWS

An analysis of the movement and traffic surrounding the three site parcels



Pedestrian movement



Bicycle and Car traffic



Mass transit



SITE VISIBILITY

An analysis of the sight lines around the three site parcels



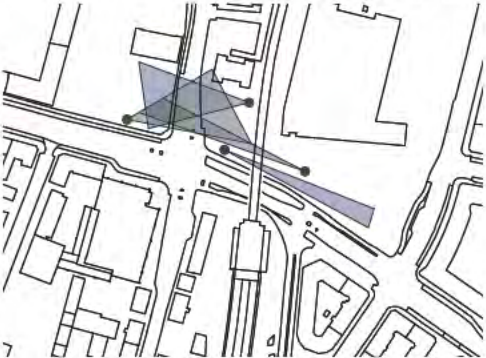
Sight lines to the sites



Sight lines from the sites

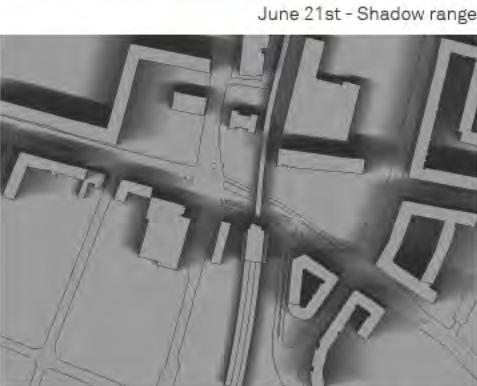
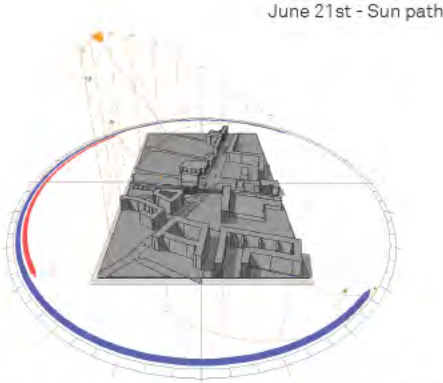
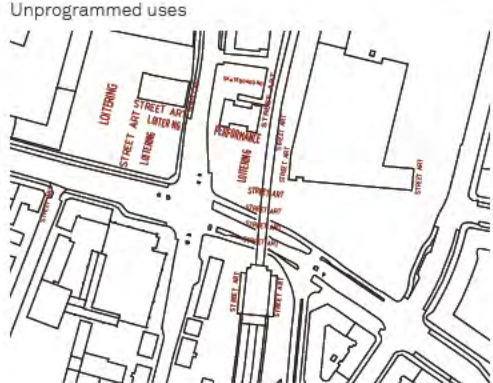
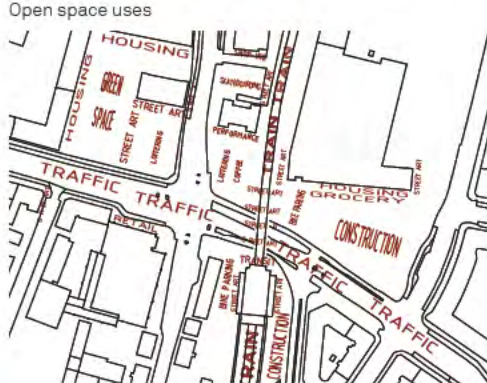
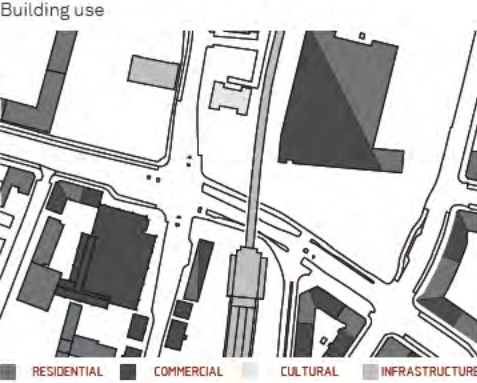


Sight lines between the sites

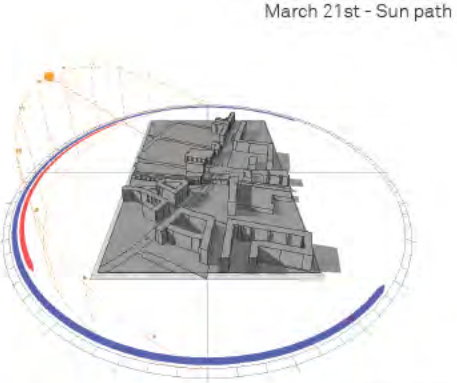


SITE USE

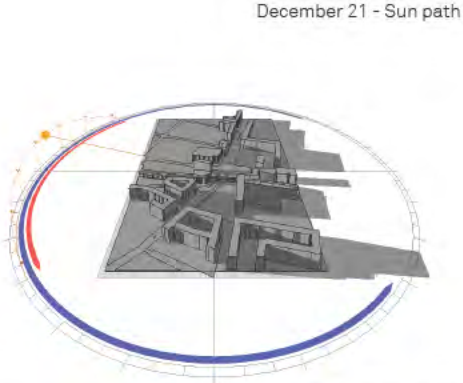
An analysis of the current uses — programmed and un-programmed — that take place in the site area



March 21st - Sun path



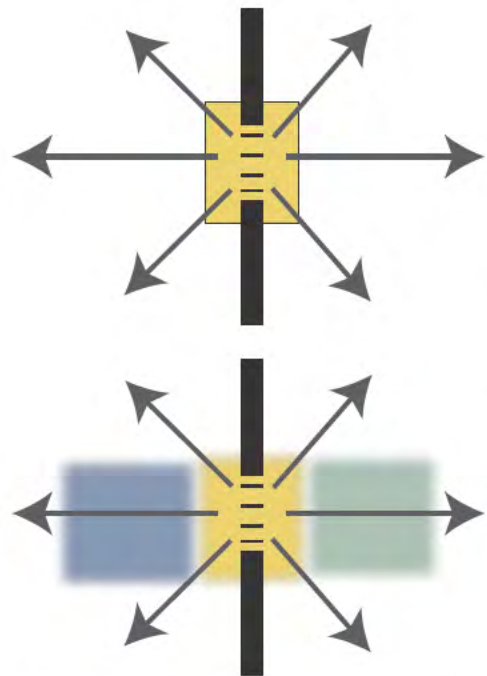
December 21 - Sun path





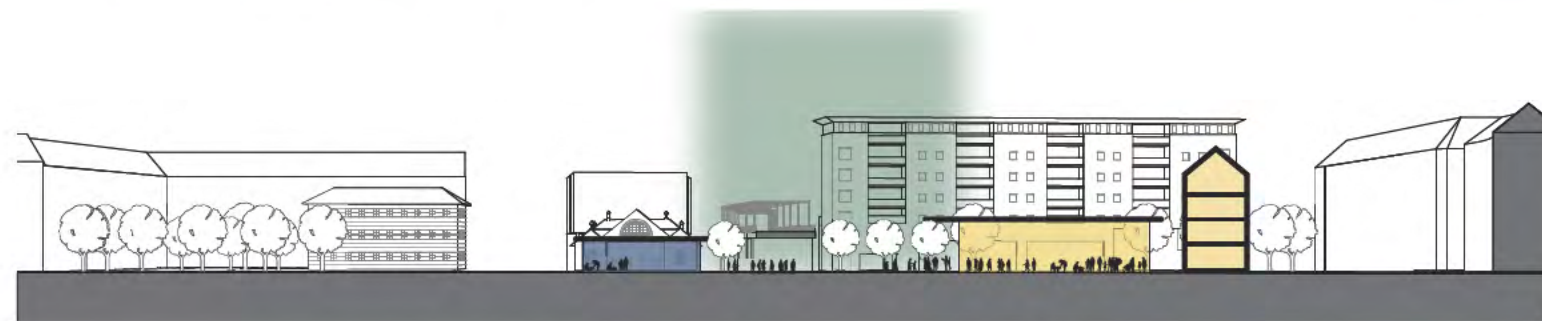
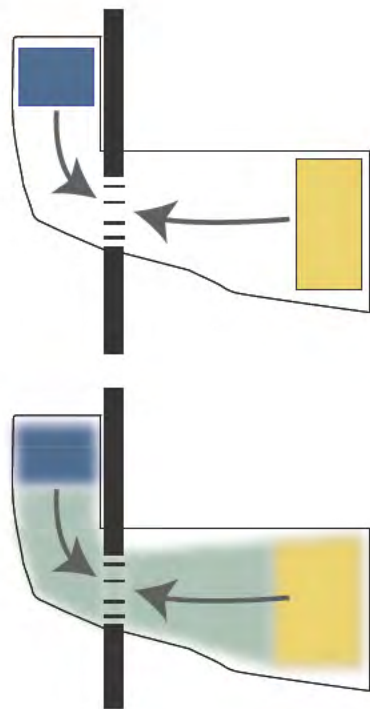
NODE CENTRALITY | EXPANSION | OUTREACH

The Node scheme attempts to focus on the prominent elevated railway on this site as a potential focal point. In this way, it recognizes an opportunity to stitch together the three parcels that constitute the site. The railway becomes the epicenter from which activity radiates outward.





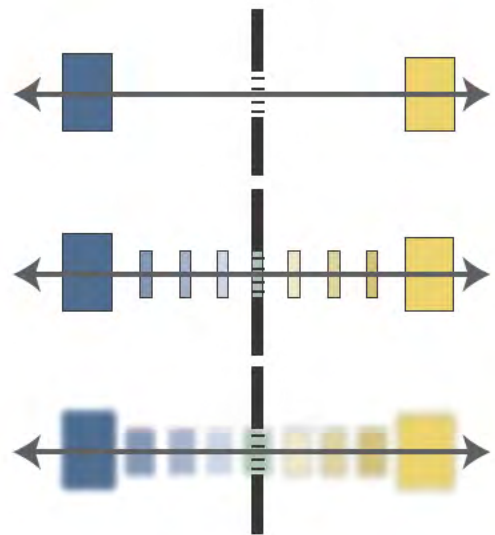
The Elbow scheme also recognizes the importance of the raised railway as a potential focal point. However, the Elbow scheme treats it as the center of a continuous space, anchored by two nodes of activity on either end.





BARCODE DISCREET | DIVERSE | MULTIPLICITY

The Barcode scheme recognizes that diversity and vibrancy are existing site conditions. It attempts to breakdown the scale of the structures on the site in order to provide a number of spaces varying in size, program and character. This scheme imagines these spaces as discreet, but pieces of a whole - a system of spaces that work together and support each other.



FÆLLESSKAB PLADS

Community Plaza

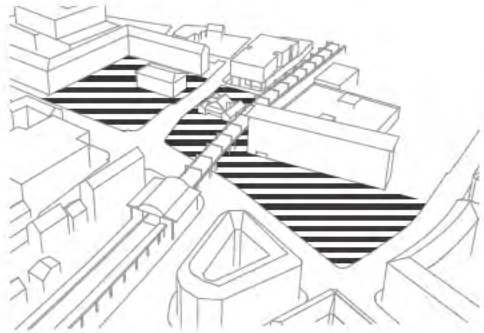
Corey Collier

Fællesskab plads is a proposal for an architectural intervention where human responses to an intricate context defines form. A series of penetrable fluid canopies are created, their form and continuity defines the visual and spatial impact of the place.

Enclosed space provides refuge and encourages winter-time actives, while also serving as a market hall year round. The market hall offers not only a variety of local and international provisions, but serves as a communal gathering place for this ethnically diverse and socially challenged district in Copenhagen.

The canopies are light in color and evoke a cloud-like appearance. Drawing from the surrounding context the grid of the neighboring buildings is introduced to the plaza in the form of stone which creates contrast with the fluid forms. The grid informs the structural column layout and is reflected on a chrome ceiling surface, reflecting not only the plaza but the surrounding context both old and new, static and dynamic.

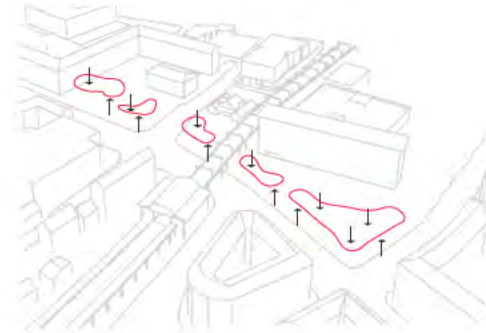




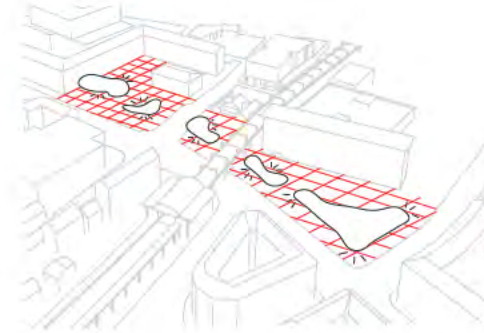
Overall site physically separated by artillery street and elevated railway both running north south



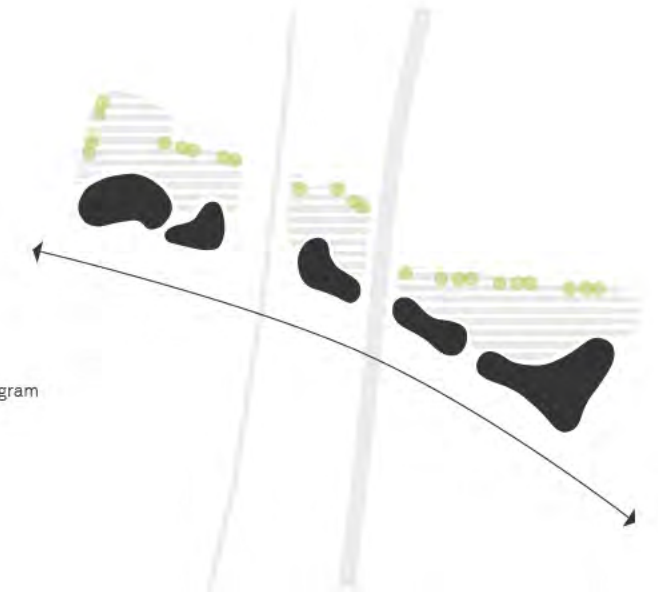
Pedestrian circulation paths based on site entrances and existing adjacent programs inform canopy locations and form



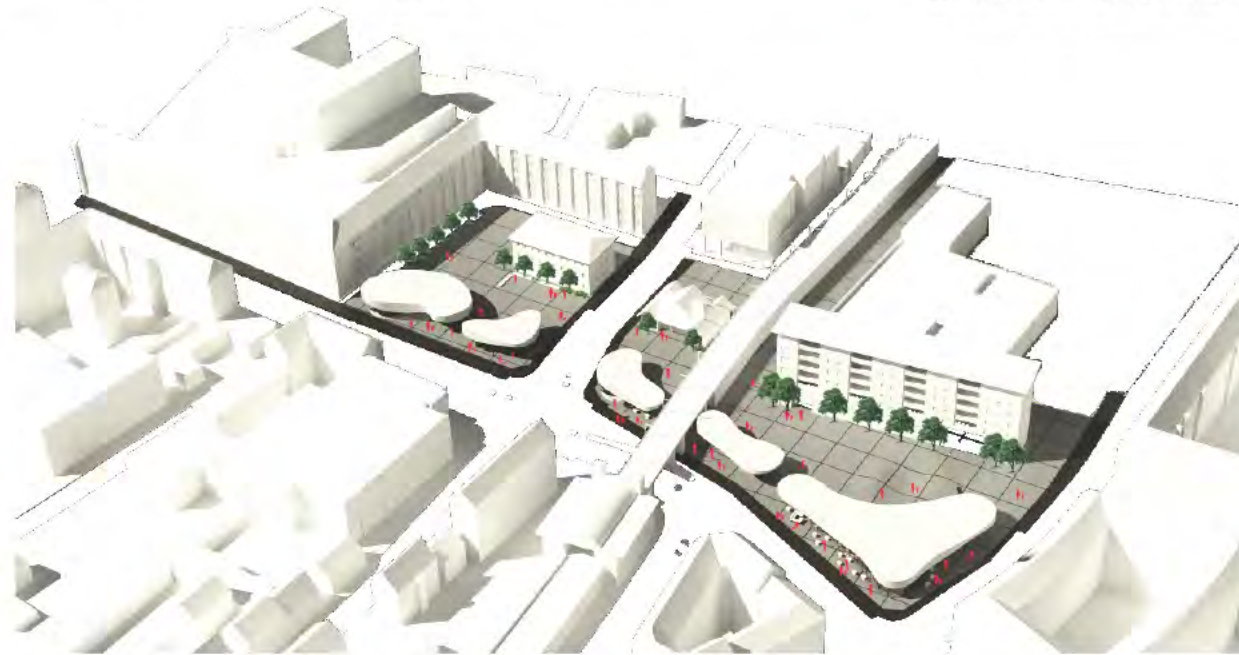
Canopies are articulated up and down creating similar experience in section between ground plane and canopy as in plan between canopy and adjacent context.



Grid of existing buildings is introduced to the plaza in the form of stone paving. The grid informs the structural column system and is expressed on the canopies through a highly reflective chrome ceiling



Concept Diagram



Aerial view of site

Canopy form study





View from east canopy looking west

Corey J Collier



Main Building Plan



Main Plaza in Summer

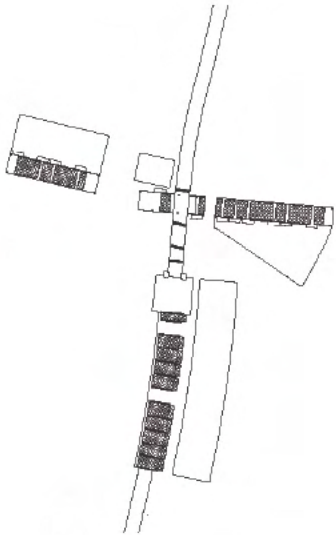


Main Plaza in Winter

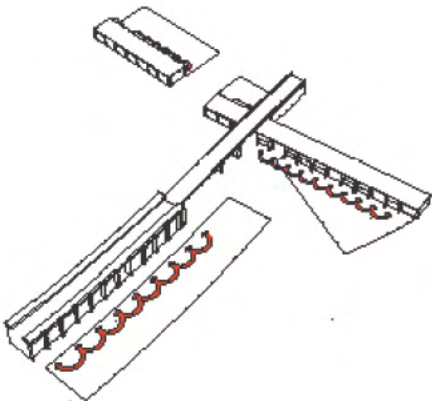
NØRREBRO RAIL MARKET
Brad Hutchinson

Traditionally one of the most ethnically diverse neighborhoods in Denmark, Nørrebro is rapidly becoming a proximate, cheap, and hip place for young Copenhageners to live, exerting new pressure on existing neighborhood resources. The busy Nørrebro train station lies at the confluence of many different paths; bikes, pedestrians, cars, and the metro all converge at the intersection of Nørrebrogade and Lygten, producing a vibrant, varied space that is among the most trafficked in the city. Despite this, the spaces at the center of the neighborhood remain void, ripe for development as public spaces that facilitate year-round usefulness and fill a niche currently lacking in the area.

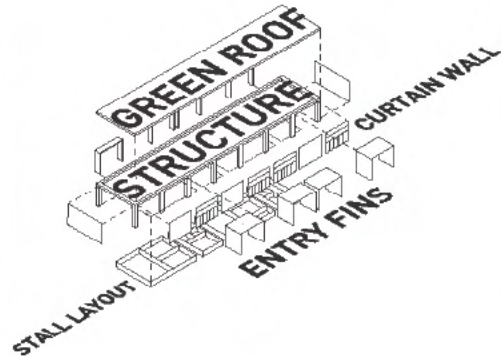
This project proposes two market halls linking three sites in the center of Nørrebro. The first is an infrastructural intervention; space underneath the elevated rail line to the south is excavated, and stalls are inserted into the existing structural framework, activating the street near a future metro expansion. The second bar of interior market stalls frames two separate public spaces on the north side of the street. The buildings anchor the new plazas with a scale appropriate for both summer and winter, easily expanding to include the outdoors in good weather and provide haven during the colder months. The new market passes underneath the existing rail line at the center of the site, forming a crossing point both iconic and useful for wayfinding. The new integrates with the old rather than displacing it, making quotidian life better for residents of Nørrebro both old and new.



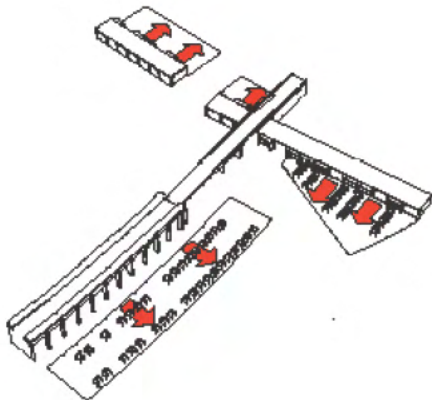
concept diagram



winter circulation



tectonic axon

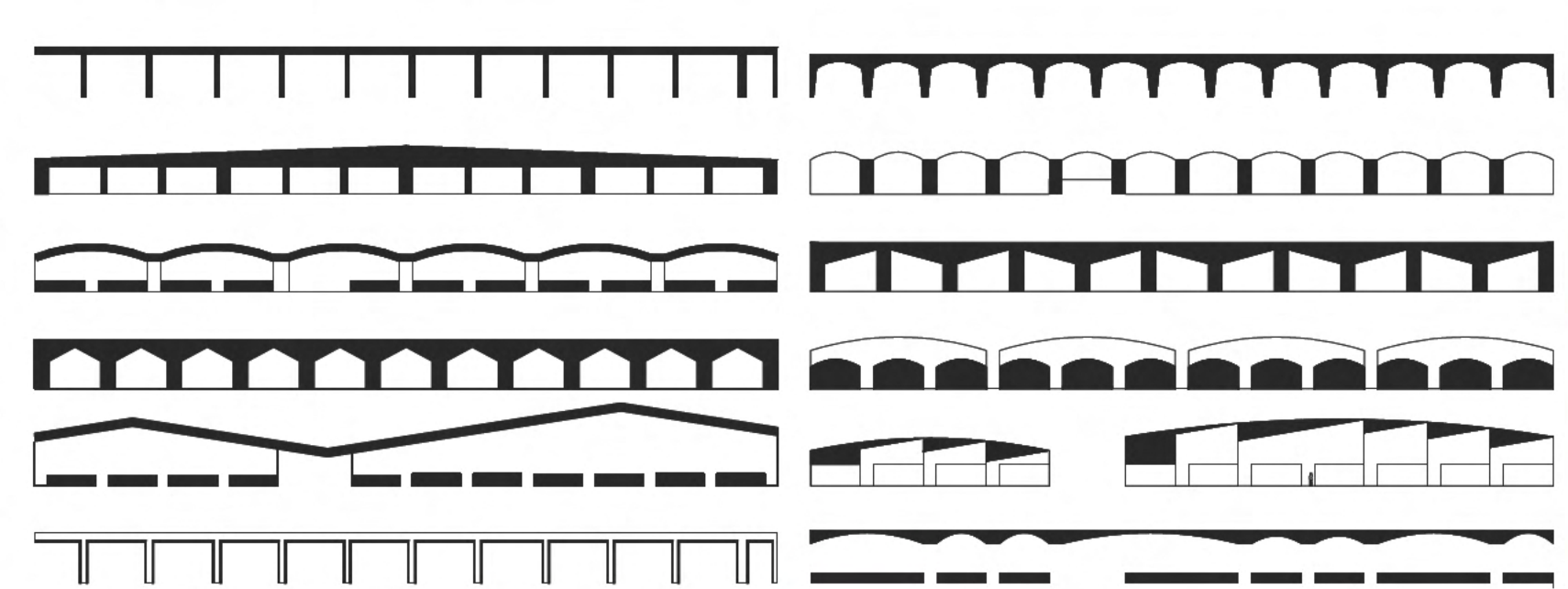


summer configuration



aerial from east



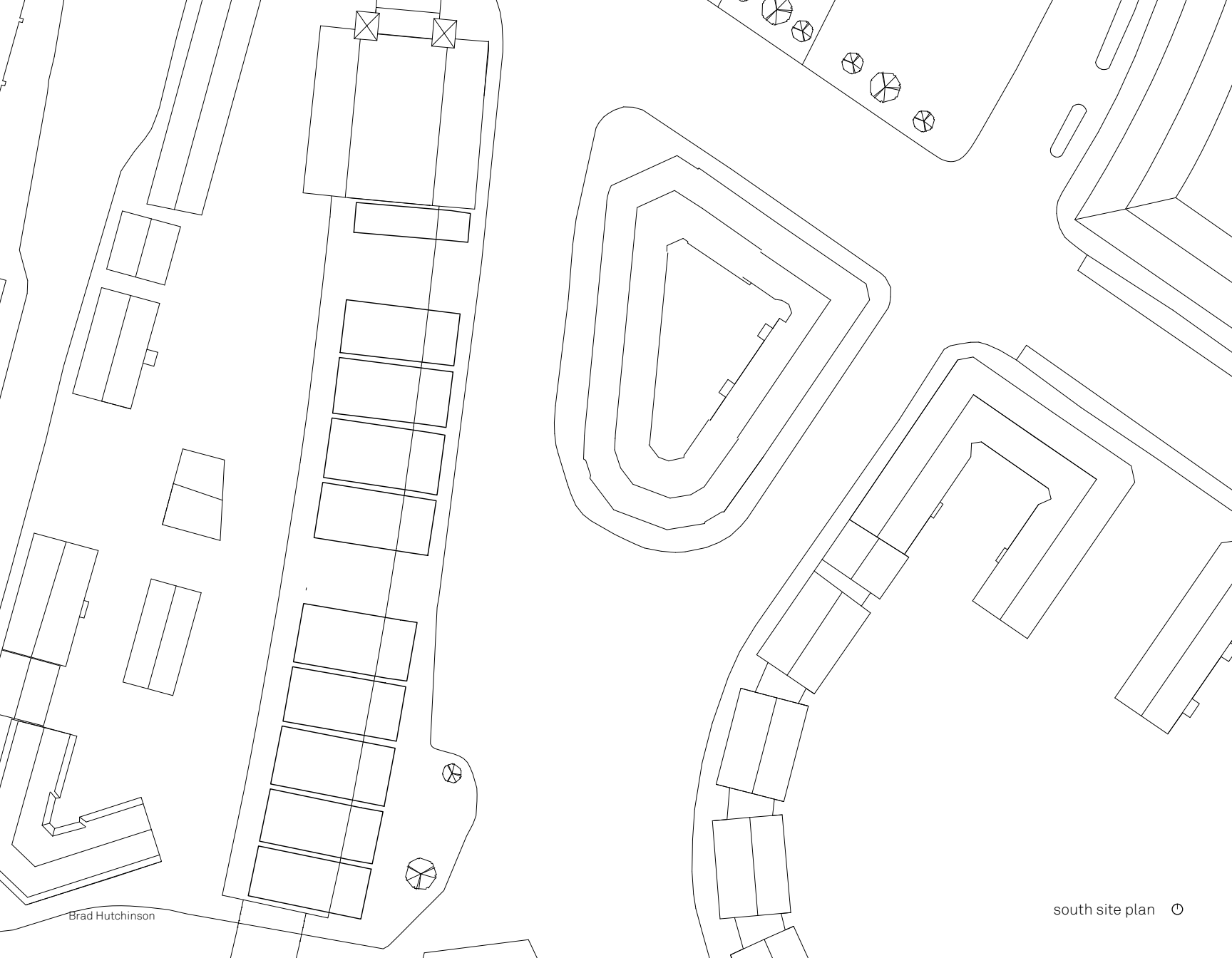


Brad Hutohinson

looking southwest



looking east



south site plan



looking south



NØRREBRO URBAN FOREST:
market & bazaar
Andy Wolfgang

In the dynamic and ethnically diverse neighborhood of Nørrebro, activity can often be spontaneous and un-programmed. A public market proposed for the site surrounding Nørrebro Station must respond to the dynamic natures of the neighborhood, market activity, and seasonal weather shifts in Copenhagen.

The Nørrebro Urban Forest proposes a series of highly visible, user operated canopies stretching between two enclosed market halls to allow for variations in use as well as changes in weather conditions. While the whimsical nature of the canopies assert their presense in the neighborhood, they also allow for the kind of kinetic interaction that permits users to make the space their own.

From summer to winter, from performance to flea market, from rain to sun, the canopies open and close in a dance that mimics the shifting seasons, the temporality of market activity, and the dynamism of everyday public life.



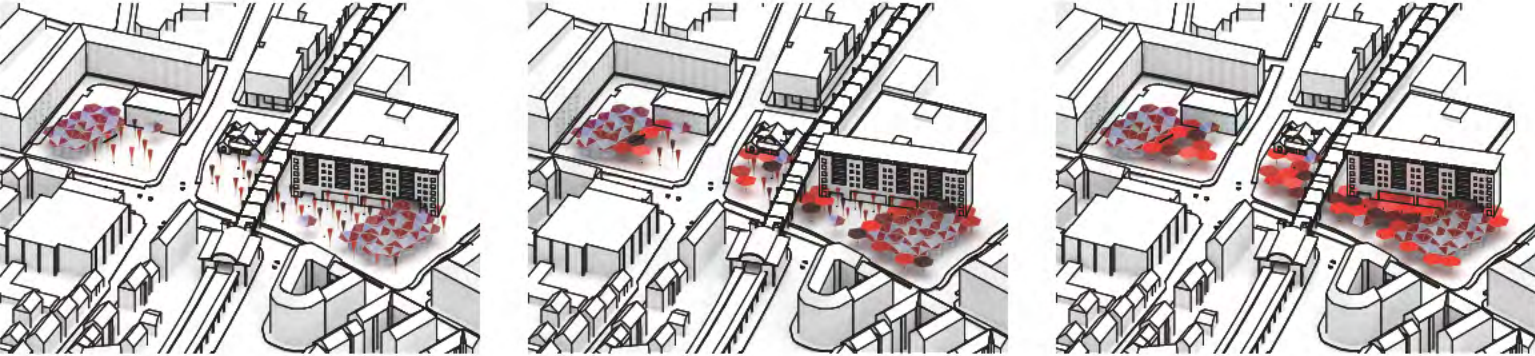
Site Strategy



Concept

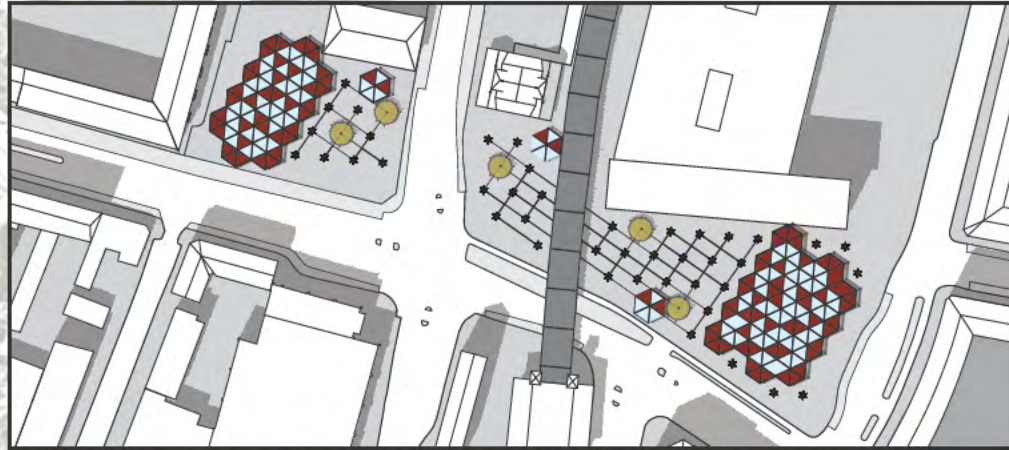


Unit Scale



Urban Scale

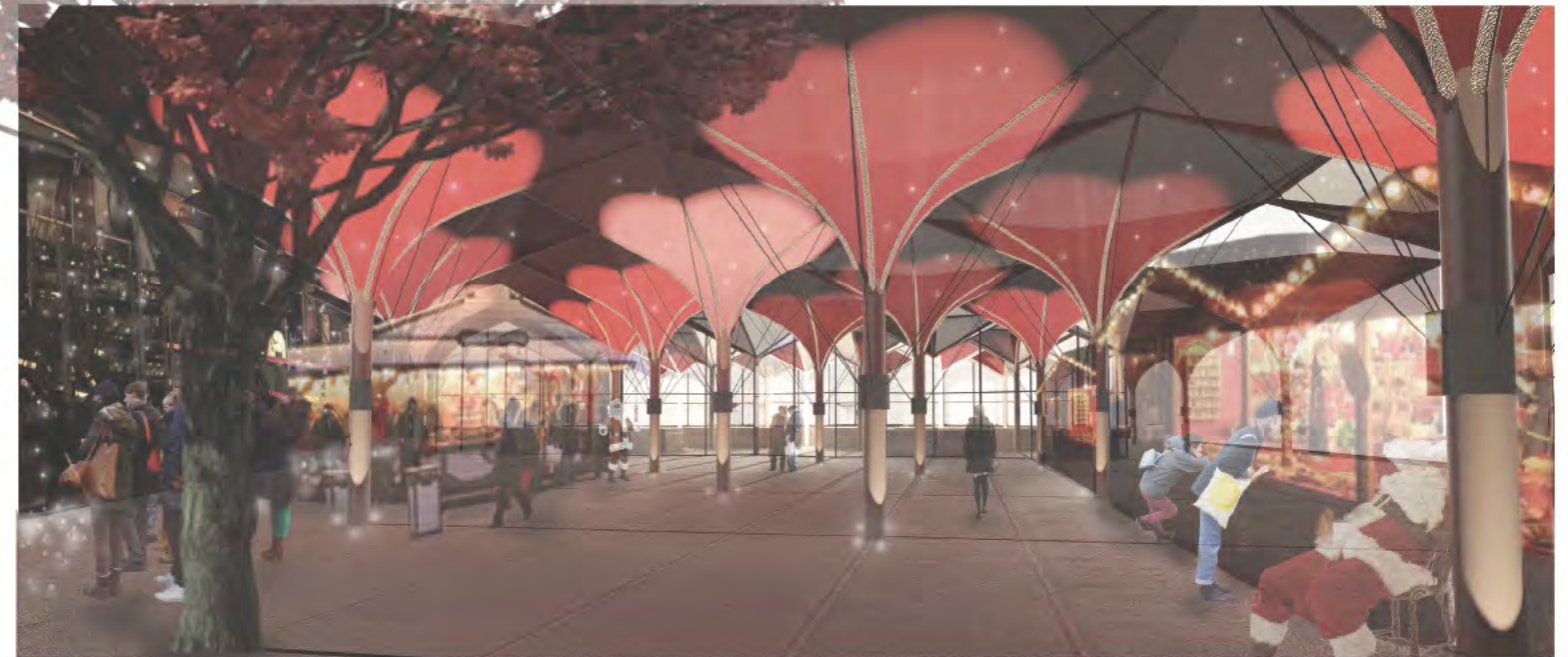
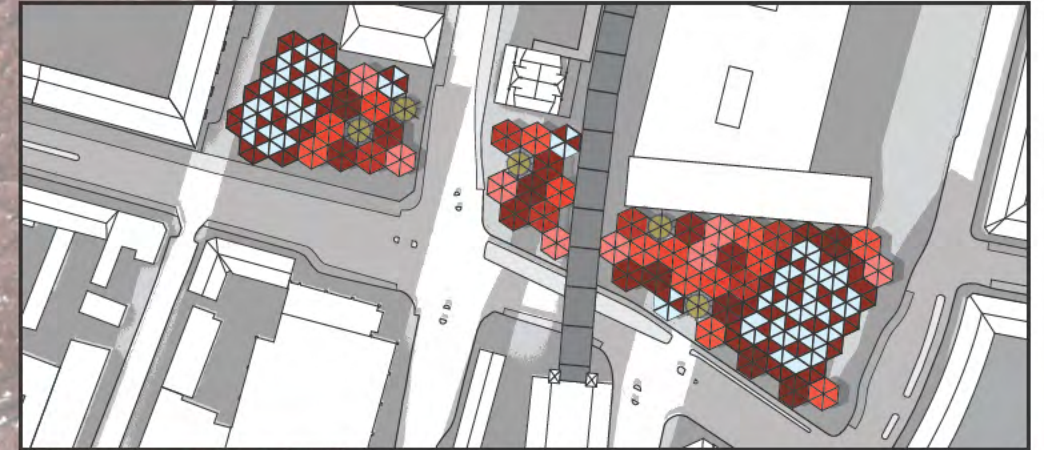
Closed Canopy Site Plan



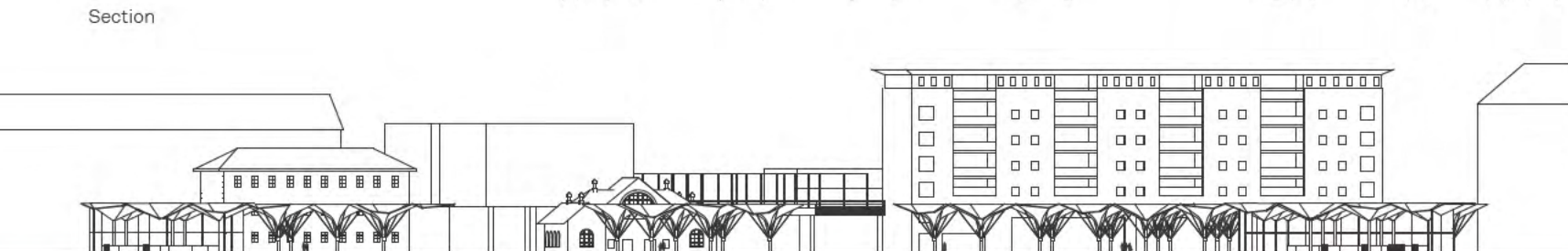
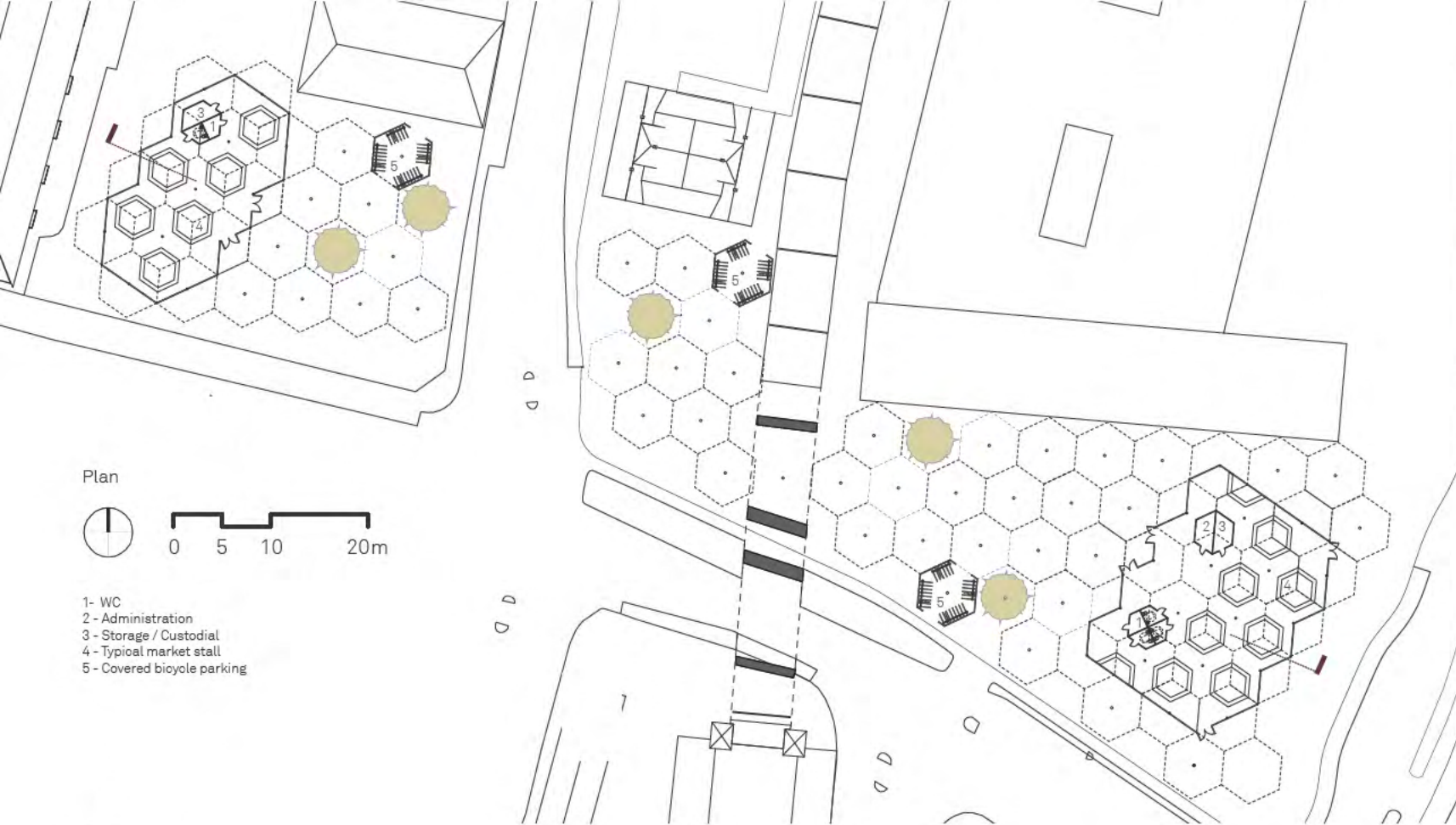
Andy Wolfgang

closed canopies allow for full sun exposure when desired

Open Canopy Site Plan

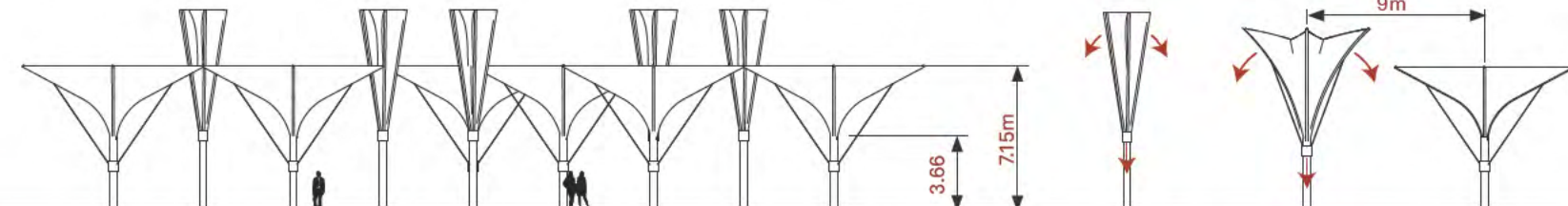


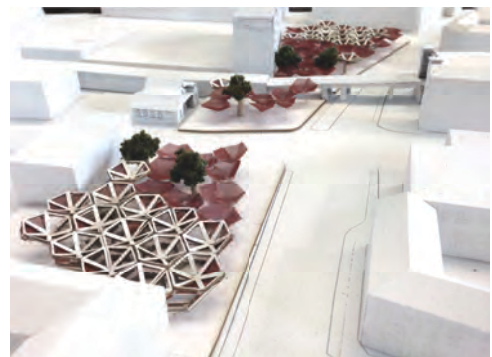
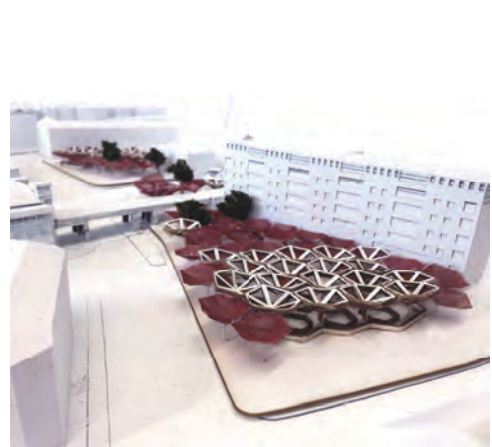
open canopies protect the plaza in inclement weather



Below : module elevation

Above : looking east on Nørrebrogade





Andy Wolfgang



East Market Hall

THE HEALTHY EDGE : Nørrebro market & canopy

Kejia Zhang

WHY

The railway viaduct at Nørrebro station is a hard edge, dividing the connection between east and west. The existing public spaces need to be more clearly defined.

WHAT

A linkage between two sides that re-defines public spaces and their use in all seasons.

HOW

One continuous structure becomes a canopy and an edge, defining multiple small public spaces and the street, but allowing the spaces to flow together.

SUMMER/WINTER

In a climate like Copenhagen's, to keep public spaces active, a strategy should be adopted to accommodate different seasons. In the summertime it is likely that the space can take care of itself with spontaneous activities, so it can function as one big space. However, in the wintertime, because of the bad weather, the space needs to be divided into multiple interconnected and intimate spaces to accommodate multiple activities at the same time.

SUMMER

WINTER

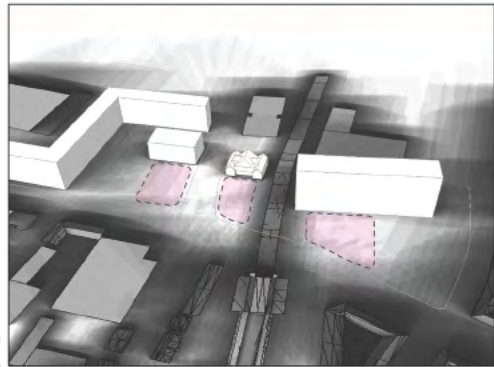


Looking west on Nørrebrogade

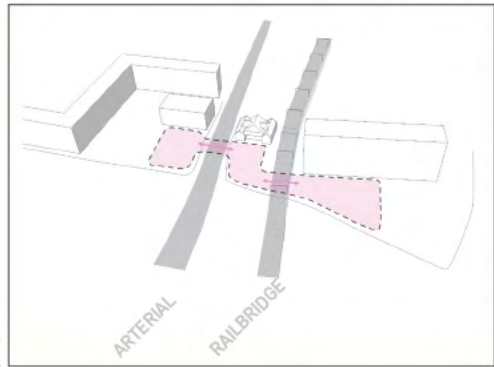


Kejia Zhang

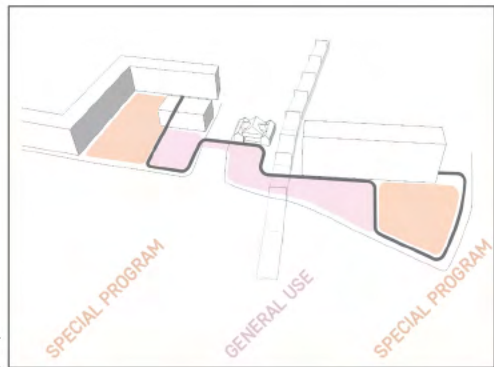
Looking at eastern plaza from the market in the wintertime



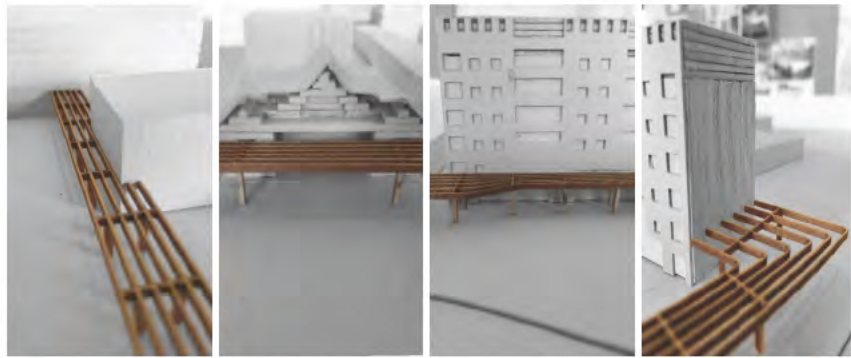
An annual shadow study suggests suitable locations for open public space.



A connection between spaces breaks the physical boundaries.



A single ribbon ties spaces together and holds the street edge.



The ribbon ties into existing buildings, giving them new façades.
All existing trees are kept and incorporated into the canopy.





The ribbon shape reflects the way exterior spaces are wrapped by buildings in the existing urban context.



Typical market section



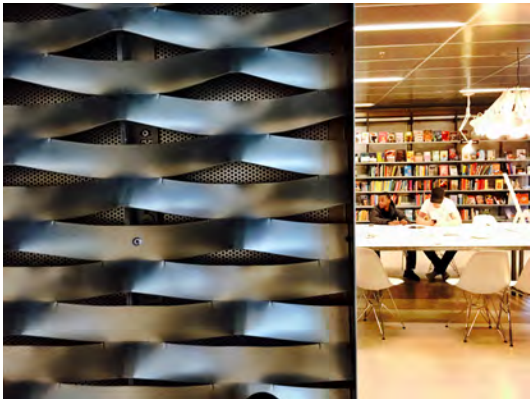
Western plaza in the summertime

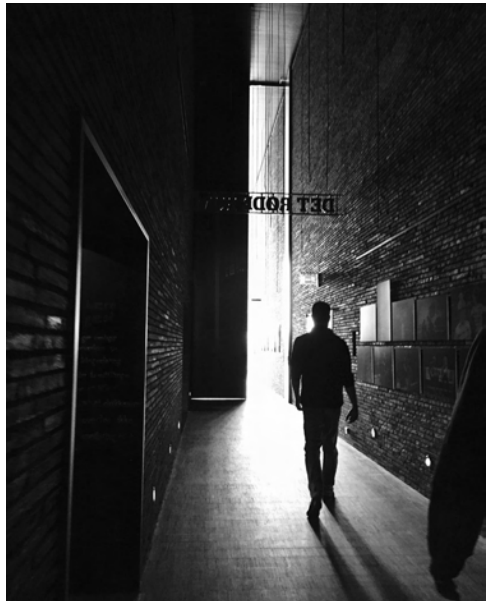
Trip to Copenhagen



Opposite, clockwise:
Prismen (Dorte Madrup Arkitekter).
Tour of Danish National Maritime Museum (BIG).
Bike tour of CPH: the Superkilen (Superflex).
Biking to the COBE office.

Clockwise:
CPH walking tour.
The Library in Nørrebro (COBE).
Renovation (Dorte Madrup Arkitekter).
Jemtelandsgade Neighborhood Center.





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Opposite, clockwise:

Students at work in the COBE office.

Tour of Kongliege Teater.

COBE offices.

Reviews with Dan.

