

Architectures of Water

Design Research: A Place for Water, People and Dreams

"Peculiar Tectonics"

It is unsuitable as a construct but as an architectural element has the power to foster atmosphere no other...

KEEP FIT & WELL-BEING
REGULAR VISITS TO
BATHS
86 & 86A BRICK LANE: E.I.
3 MINUTES FROM LIVERPOOL ST & ALCATE STATIONS

"Connectness"

Water carries time, disaster, life and many more, it flows through our shared bodies and spaces.

"Corporeal Sensation"

Water has an immediate poetry about it, as it encourages us to sense, interact and reflect as we see, hear, smell, taste and feel its presence.

How can we reintroduce the ancient uses and meanings of bathing lost in time and our eagerness to harness water's power into the contemporary urban context of London?

design question

"Our skin is a permeable boundary letting in the water as well as the city."

"TRANSGRESSIVE ACT"

Each time we swim in a city's river, we re-imagine it from the inside out.

A.S.

WATER HAS BECOME DISLOCATED IN TODAY'S GLOBAL METROPOLIS. We have favoured controlling it and in doing so become indifferent to an element we cannot live without.

"BALANCE"

Water shows us, very explicitly, how the balance between the forces that threaten and sustain us needs to be exactly right. We are a part of nature that needs to be in balance with the other parts, accepting weight and value.

"We have the responsibility to reconsider and rethink our relationship with water in the contemporary urban context. There is an opportunity to re-examine the current programmes of water that is capable of initiating new social dynamics and opportunities."

Architectures of Water

Design Research

TU Delft

Architecture and the Built Environment
Graduation Studio Architectural Design Crossovers
Year 2023

Tutors:
Agnes van der Meij
Jelke Fokkinga
Alper Semih Alkan

Dévi Jossane Venneman

Contents

Part I - Contextual Research	
01. Roman London	p. 12
02. Victorian London	p. 16
03. Contemporary London	p. 22
04. Site Survey	p. 24
05. Project Formulation	p. 38
Part II - Conceptual Research	
01. Precedent: SWIM	p. 42
02. Precedent: Con-nect-ed-ness	p. 46
03. Precedent: Tower Beach	p. 52
04. Precedent: Pscina Municipal	p. 64
05. Precedent: Therme Vals	p. 66
06. Precedent: Moseley Baths	p. 72
07. Precedent: Canal Swimmer's Club	p. 76
08. Precedent: Bagno Publico	p. 78
09. Precedent: Jubilee Pool	p. 84
10. Design Intentions	p. 90
Reflection Report	p. 94
Illustration List	p. 96
Bibliography	p. 100

Les baigneuses, Pablo Picasso, 1918



This image of the female nude by the sea represents the idea of an active and healthy lifestyle, free from the yoke of everyday life. Nevertheless, the softly cut rocks, the diffuse light and the stillness of the ocean give a surreal atmosphere. The shocked look of the woman in blue, the tense sail of the sailboat and the lighthouse in the background make the viewer aware of the danger lurking around the corner. The sea is a place of relaxation and entertainment, but can turn into dangerous power in no time.

Part I - Contextual Research

The Thames Below Westminster, Claude Monet, 1871

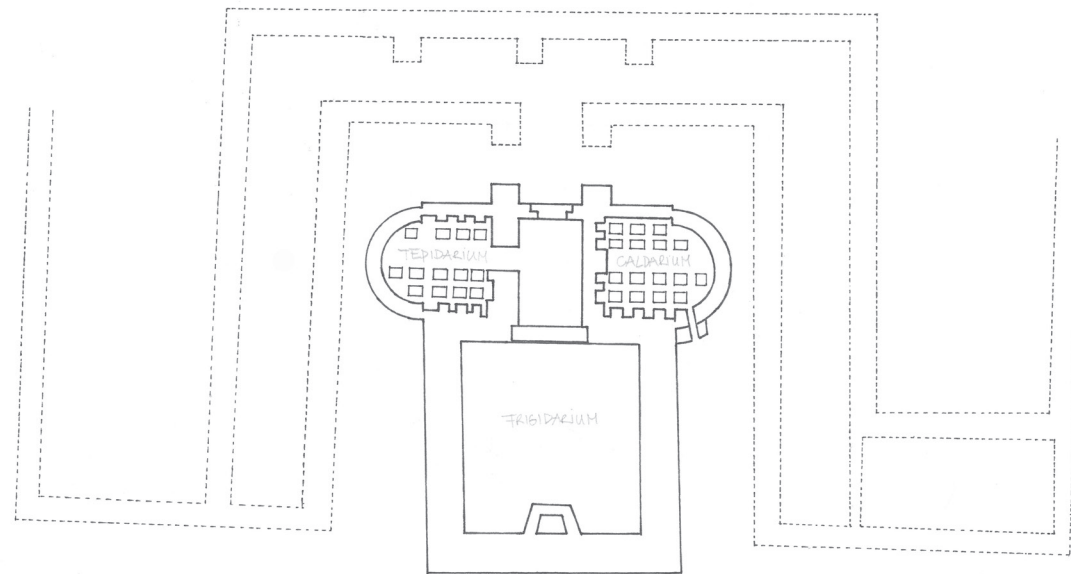


01 Roman London

Thames Valley water has undergone urbanisation since at least as soon as the first settlement of Londinium under the Roman Empire. The tactical location along the Thames made it the perfect base to support Roman reign and trade. High grounds kept the settlement from flooding and a narrow with made it possible to build a bridge. An urban program starts to develop and with that a management of the natural river and streams. Next to a wharf and sewers the settlement included multiple bathhouses. The Wall-brook river seperated east from west and provided a clean flow of water through the centre.

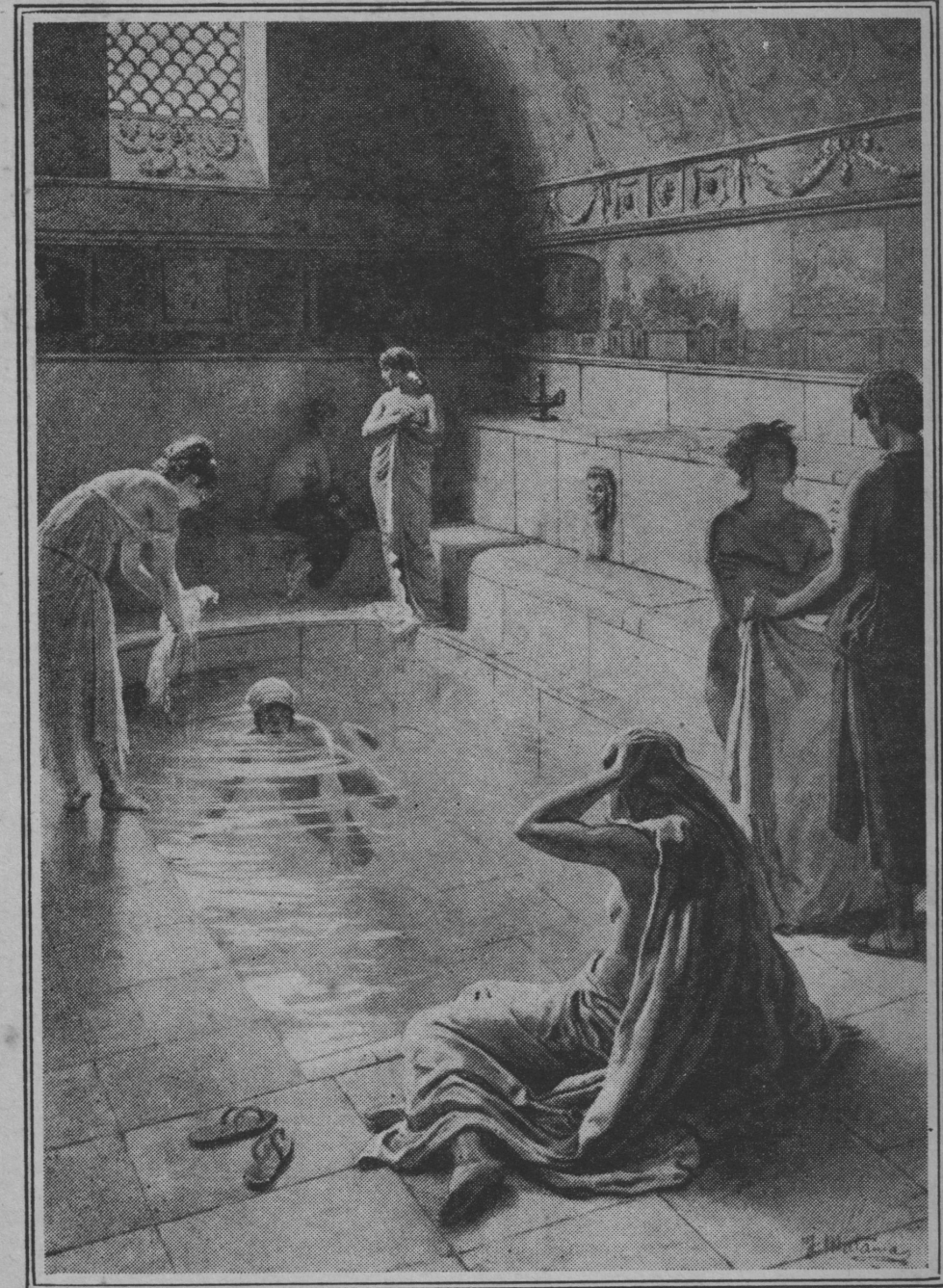
Hydrology of Roman London





The Romans brought with them their norms and values and with that their rituals of bathing. The Billingsgate baths were found during construction work for the underground. It was the private estate of a well-to-do family, it included living quarters and a private bathhouse at it's centre. The bathhouse included the the characteristic hot chambers and plunging pool. Other reliqs like the bath in Strand Lane, however arguably not original, carried through the values of the Roman bathing culture.

THE ROMAN BATH IN STRAND LANE, LONDON
dating from the 2nd Century.
(Reconstructed by SIGNOR MATANIA).



With kind permission of "The Sphere."

02 Victorian London



Advances in sciences of epidemiology and microbiology and new forms of technical, financial and managerial expertise gave rise to a city in which the intersection between technology, space and society was carefully arranged into an sophisticated urban machine. The gravel banks of the Thames made space for sophisticated embankments that housed sewage and public transportation. Natural streams were turned in to sewers and pipelines and became part of technical system supporting the cities hygiene. The engineering of the bacteriological city hides how the natural streams were engineered away water appears magically from the tap and flushes away, the connections between water and humanity become a hidden domain.

Cannon Row Wharf, Unknown, 1856



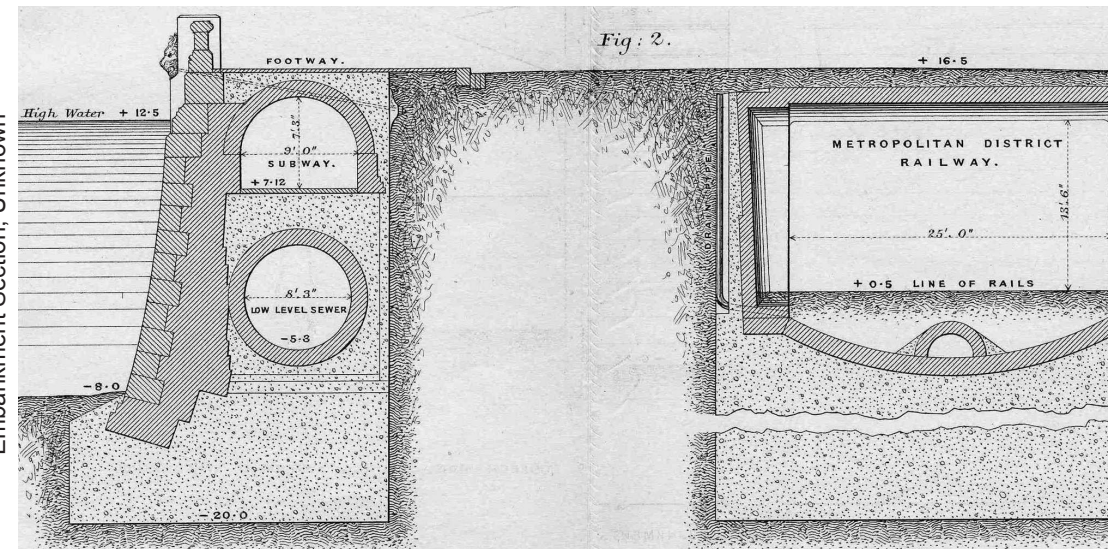
Thames foreshore Lambeth Palace, W. Strudwick, 1860-1865



Constrution of the Chelsea Embankment , J. Hedderly, 1873



Embankment Section, Unknown



Construction of the embankments, sewage and potable water systems celebrated mankind's power over the natural. But by pulling up a wall between water and the city the direct relation of people living on and of the water was lost.

Streatham Pumping Station, Unknown, 1895



Pond at Hempsteadheath



The architecture of pumping stations, embankments and fountains celebrated mankind's power over water. Fountains, ponds and parks glorified the natural element as something holy.

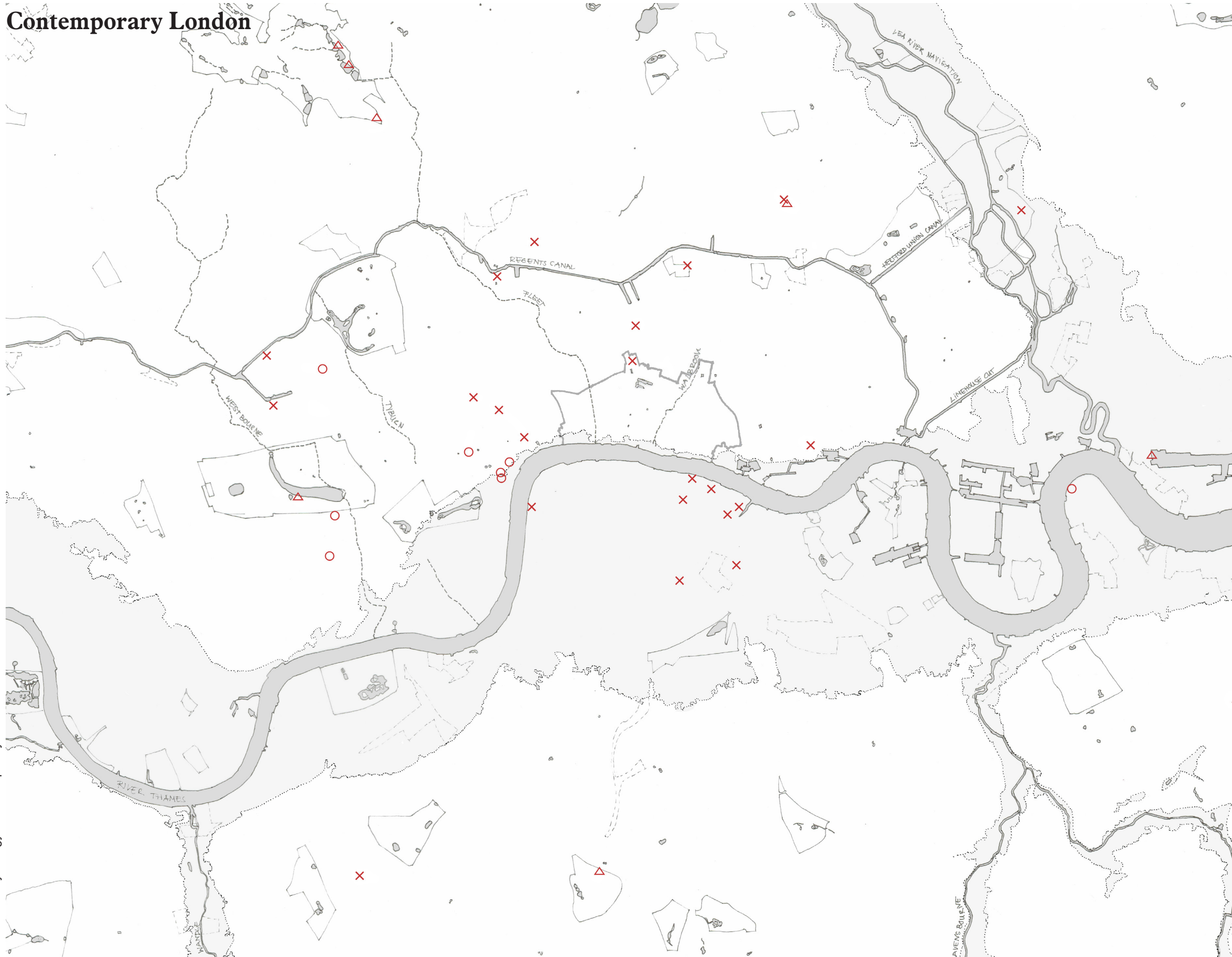
The Distribution of Public Baths in the UK, Agnes Campbell, 1918



At the same time a network of bathouses spread over the city. The intent was that each neighborhood would be provided with their own. The architecture often fit in with the streetscape, the facades brick and beautifully ornate to make them into an object of pride. At the summit of their popularity, the bathhouses functioned as community centre.

03 Contemporary London

Hydrology of contemporary London



In the current landscape of the metropole the typology of the bathhouse has been replaced by swimming pools for lessons and sports (X's) and pricy spa experiences (O's). Little social programs are left, the ones that are like lido's and swimming ponds we find along a more nature like sitting in parks (triangles). Since the bacteriological model water has been a big part of the city, but mostly in terms of infrastructure, hygiene and economics not in terms of the personal body.

In the context of the city water is not something purely natural. Once it enters the sphere of the city it becomes an element of hygiene of trade, politics, legislation, use, ritual and social gathering. Water is less a product of nature than it is of culture.

04 Site Survey

Drifting London according to it's visible waterstructures

In addition to the historical research, a site visit and survey was planned to build on the understanding of London's current water infrastructure. The intent of the survey was to get answers to the questions:

- *What is the affect of the particular programme of water on it's surroundings?*
- *What are the urban conditions that define the setting of the programme of water?*
- *How does the city behave around the water and how do it's inhabitants?*
- *What are the architectural objects and/or artifacts related to water in the city?*

The site visit was structured with the help of a map (page 26 & 27). In the exercise of mapping information about site criteria, land use zones and present water was combined into a geographical translation. A descision on the itenerary was made accordingly. From the intention of reconnecting body and water in the city, a problem of awareness, two creteria arose: a prominent location and the presence of water.

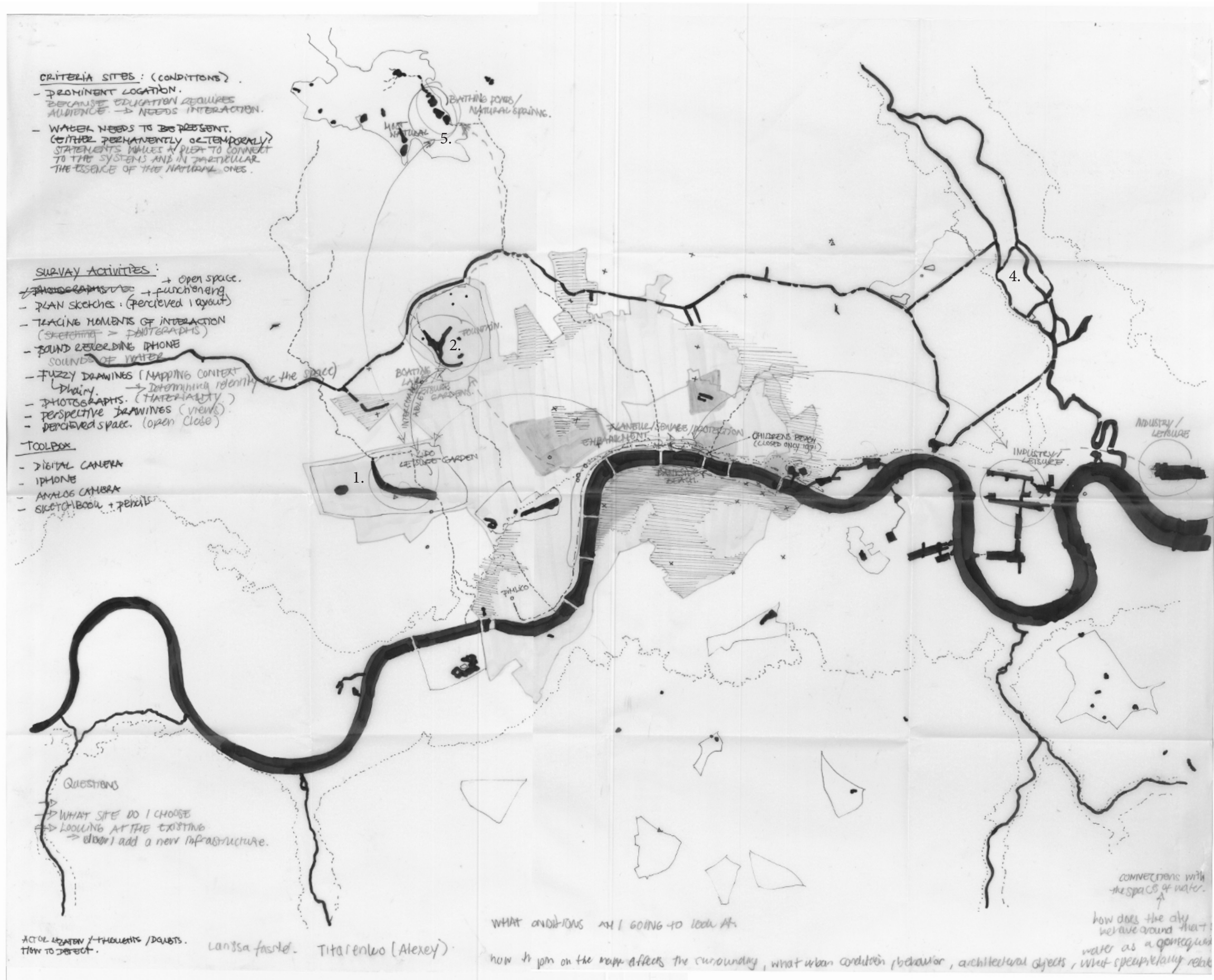
As established during the exploratory research, the urban networks of water can be devided into the following types: the natural (rivers, streams and springs), the human (water supply, sewage and embankments), the industrie (docks and powerstations) and the programmes (lido's, swimming ponds, watersport, spa's and more). From each category one ore more examples were chosen given that the water is visible and they are in a central location.

Due to a lack of structure of the survey activities the site visit turned out to be a fragmantary collection of pictures drawings and sound recordings. Although fragmentary the collection of drawing and pictures illustrate an overall view of the athmosphere and daily use of the obvious bodies of water in the city. The visit however did not provide an explicit answer to the earlier mentioned questions.



The survey toolbox

1. Diary: a daily log of findings and experiences
2. Analog camera: capturing images of the city with a particular focus on atmosphere which film helps to reveal
3. Pens & Pensils: drawing materials of different thickness, colour and opacity (from left to right: artpen, fineliner, Koh-I-Noor B4, refillable pencil HB, refillable pencil B2)
4. Digital Camera: capturing images "in the moment", overviews and zooms
5. Sketch book: miniture sketchbook for a quick visual notation of thoughts
6. Tape measure: measuring dimensions of elements
7. Tape: to tape down drawings, paper or relics of the visit
8. Iphone: "incognito" snapshots and navigation

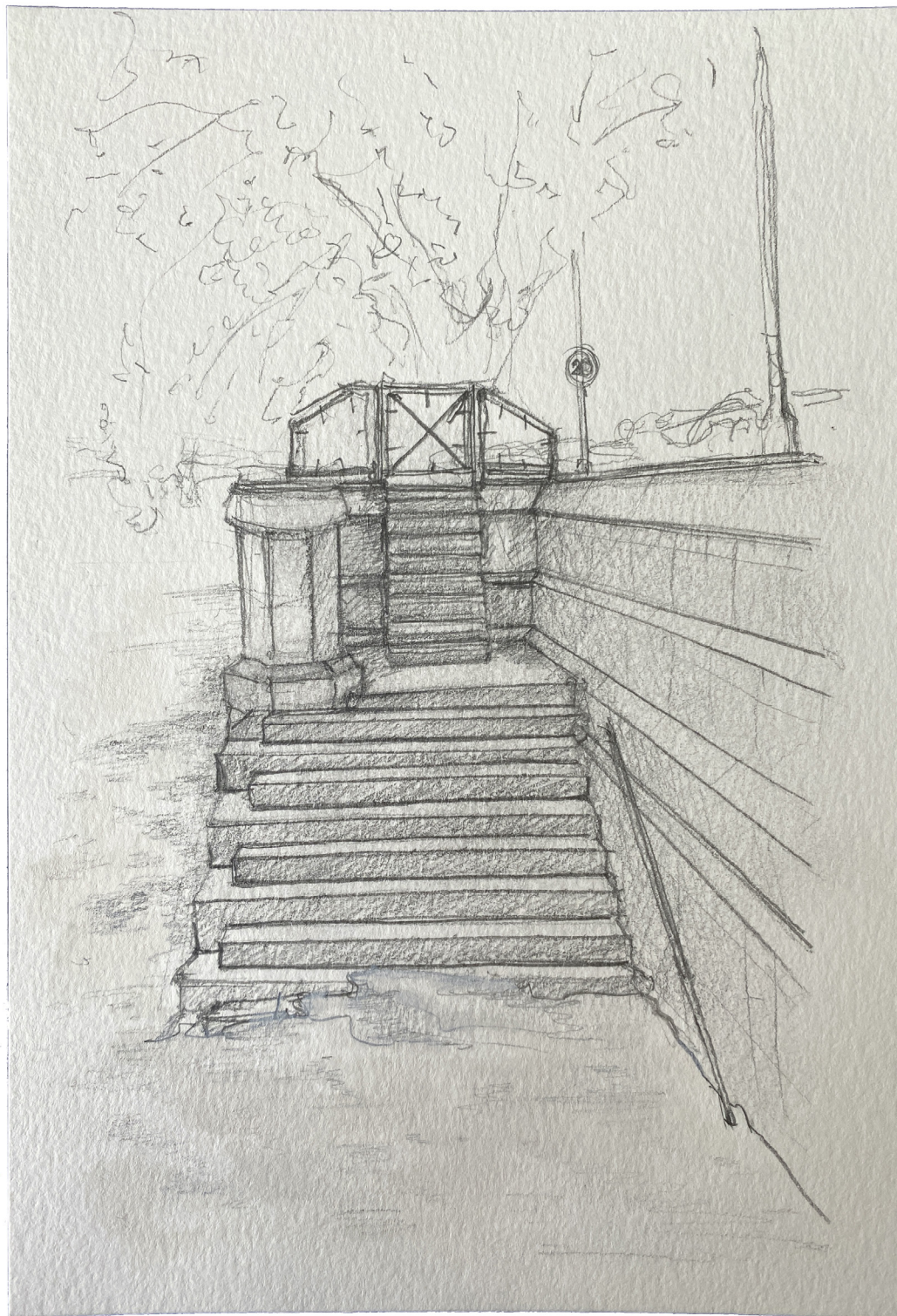


This maps shows the geographical cross-reference of the Central activity zone and cultural and educational areas of interest with the apparent urban water typologies of; river, docks, ponds and leisure programmes.

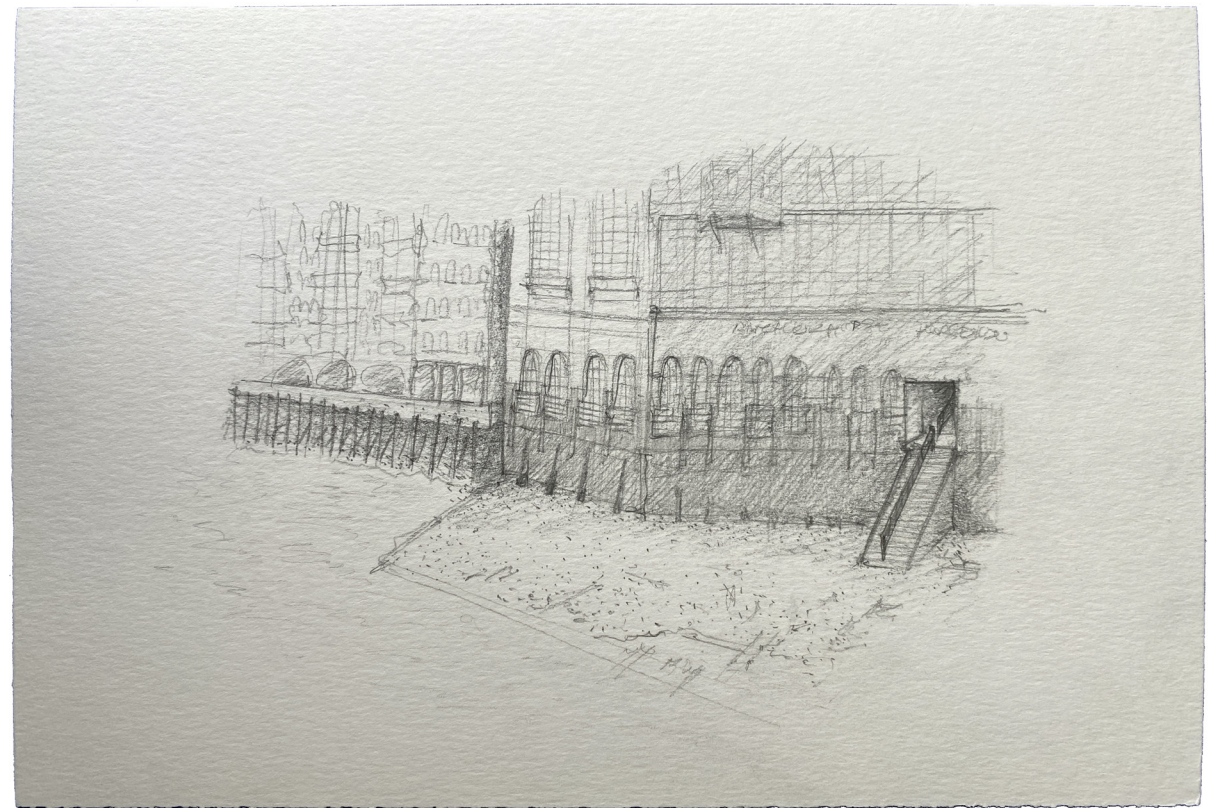
Chosen sites of inquiry:

1. Hyde park and Serpentine lido
2. Regent's park boating lake
3. Section of the Thames walk
4. Lea River walk and Olympic park
5. Hempstead Heath ponds and lido

Thames Embankment at High tide



Thames Shoreline at Southbank low tide



The high concrete walls of the boardwalk embankments form a rigid partition between the stroller and the Thames. While the sounds of the unruly water greet you somewhat subconsciously, the Thames only becomes visible when you are right next to the quay wall. On the southbank of the Thames, the shoreline is characterised by a more organic development alternating between closed and open spaces. Sometimes allowing access to remaining pebble beaches at low tide.

Millbank from Vauxhall Bridge



Bazalgette Memorial at Hungerford Bridge





Ready Money Drinking Fountain at Regent's Park



A young kid at Regent's Park is attracted to a monument and fountain. Water, wether it is in natural form or an ornate architectural reliq, attrackts people. Both bring joy.

Buxton Memorial Fountain at Victoria Tower Gardens





05 Project Formulation

The theme of water plays a significant role in the history and culture of the city. At the same time the relationship between city water and inhabitants had become problematized. Where the city once grew and flourished around water it now does so independent of its natural availability. A lack of connectedness and awareness has dislocated water in the city. The contemporary situation results in a city that treats water as other, while it will always be an elusive element of nature, the human body and the environment.

The transformation of natural into commodity, the urbanisation of water, is a deeply social and thus political process. Water infrastructures are active agents in the production of urban space and culture. Water's essentiality and omnipresence render the spheres of interaction persistent across space and time.

In the context of the city water is more a product of culture than it is of nature. Technology, hygiene and our power over water have been the predominant factors in shaping the urbanisation of water, but given the persistence of interactions it is time to bring the spheres closer together. Architecture has the ability to shape and organise these interactions.

A recurring architectural typology to do with the use of city water is the public bathhouse. The bathhouse took on a central role in local communities. Not only did it provide neighborhoods with public facilities and amenities, it provided them with liveliness and a better standard of living. In the current landscape of the metropole the typology of the bathhouse has been replaced by swimming pools for lessons and sports and pricey spa experiences. Above all we see that people need water, in the first place for practical reasons, in the second because it brings us joy, relaxation and excitement. People need water, and at this point in time there is a lack of connectedness and engagement.

This raises my design question;
“How can we redesign city water into practices that reconnect us to the element and its

natural and social qualities?”

In the following chapter I continue the research with an elaborate case study analysis. To uncover what architectural concepts and design could bring the city dweller closer to the water again.

The Swimmers, Attilio Fiumarella, 2014

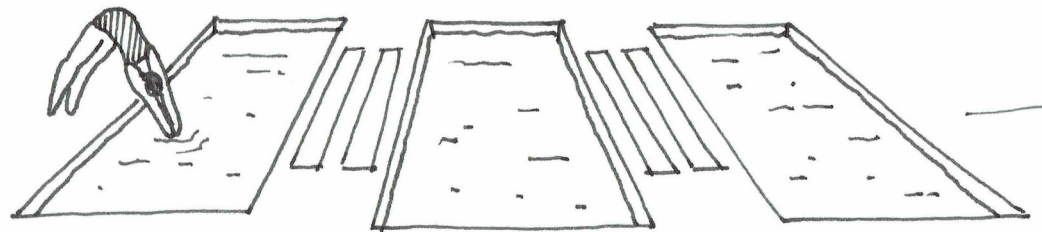


Part II - Conceptual Research

01 Precedent: SWIM

On the 12th of July in 2007, 50 people swam across London, connecting the blue of public lido's, swimming pools and ponds against a grey city scape. SWIM was an event, a live artwork by artist Amy Sharrocks in which people of all ages, sizes and abilities were invited to explore an idea of freedom, of gaining acces to London's water by means of their bodies. The spectacle of oddness created by people running around the streets of central London in their bathing suits questioned the "usual nature" of things. By swimming the city Londoners were challenged to explore a different way of living in their city, swimming invited them to reimagine it from the inside out and make the city's water their own.

Although Swim is not an architectural project it challenges the logic and missteps of the built environment. It puts a finger on the sore spots and shows us where our relation with water in the city could be improved. It is about creating spaces to engage, with the element and eachother and spaces to let go, escape the city and imagine a different reality.



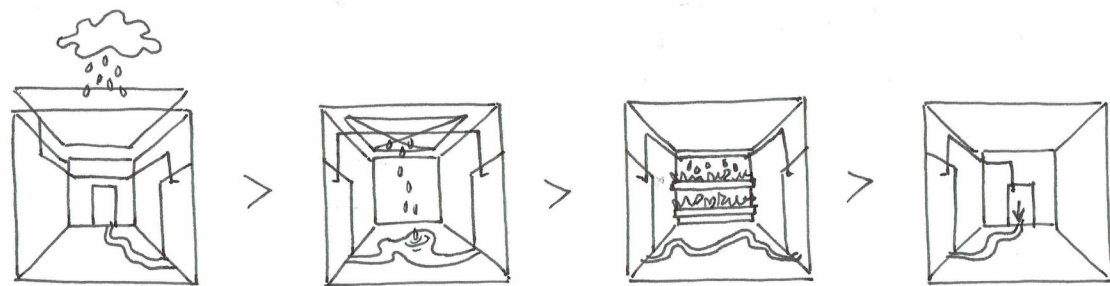
SWIM, Amy Scharrocks, 2007



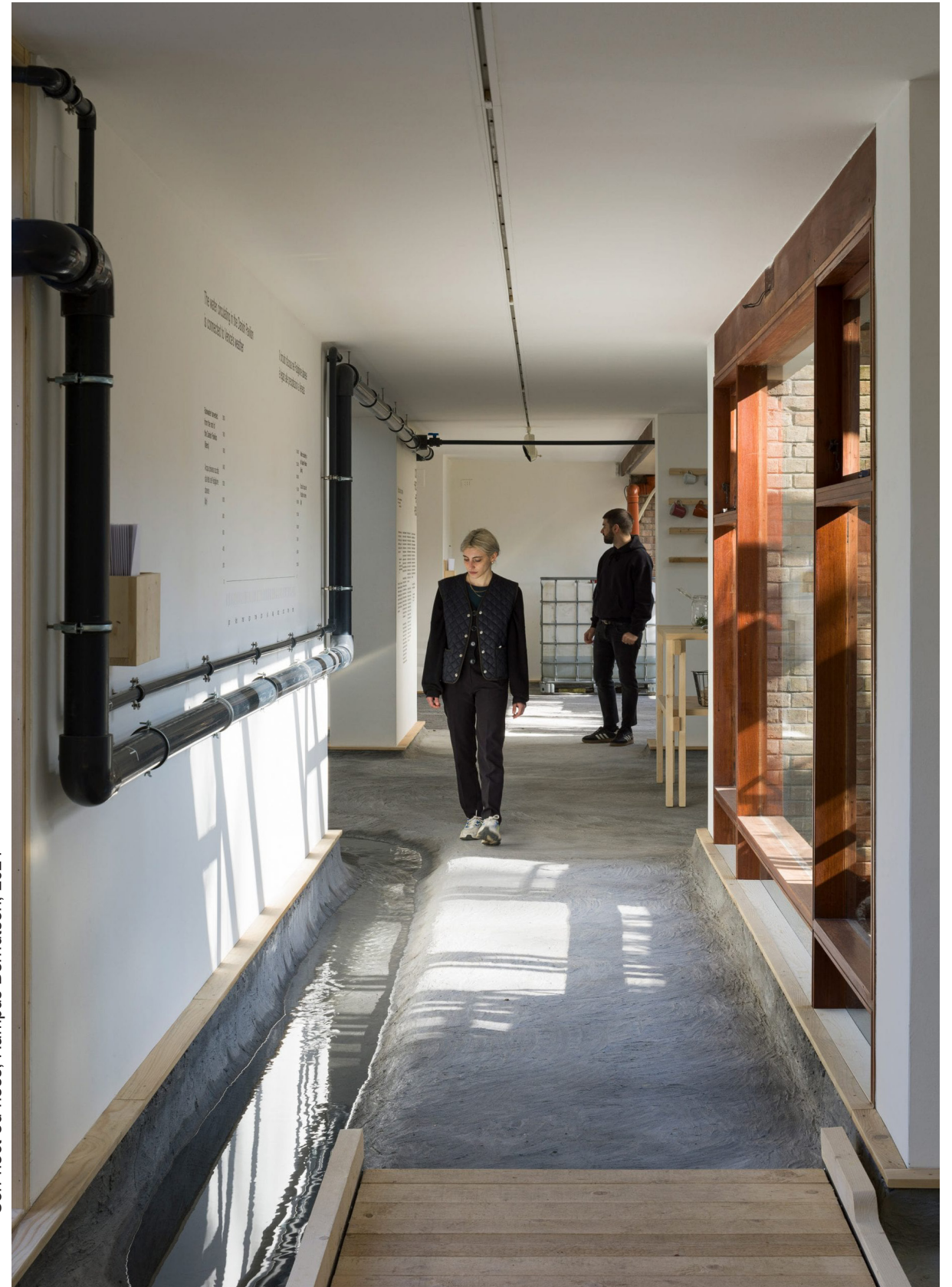


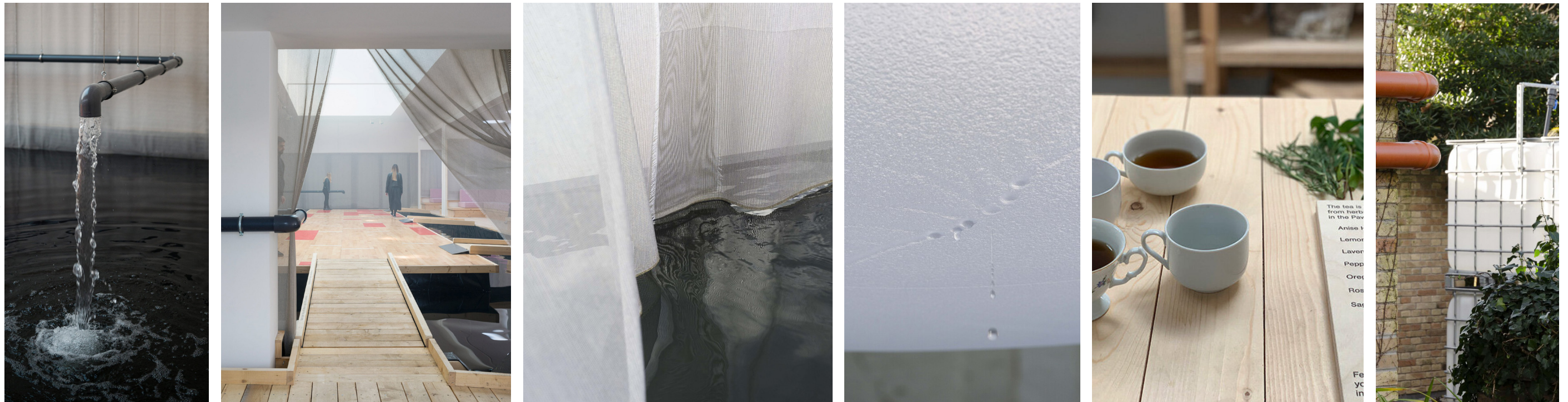
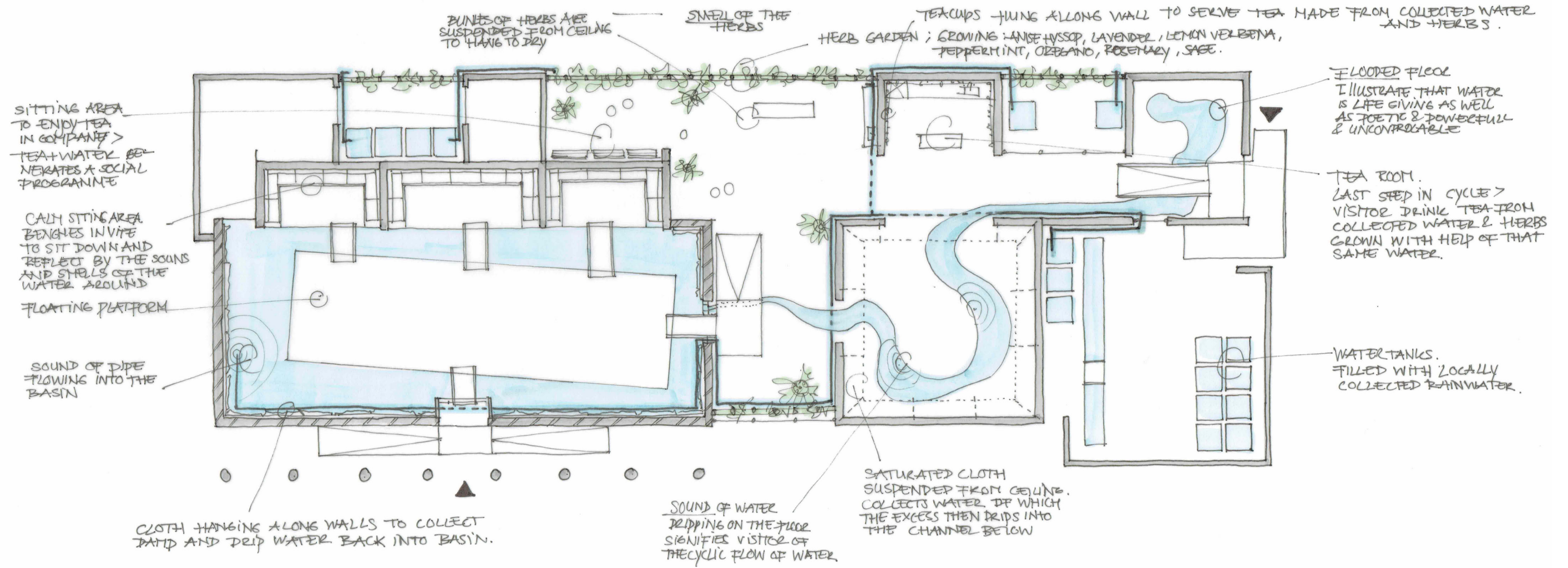
02 Precedent: Con-nect-ed-ness

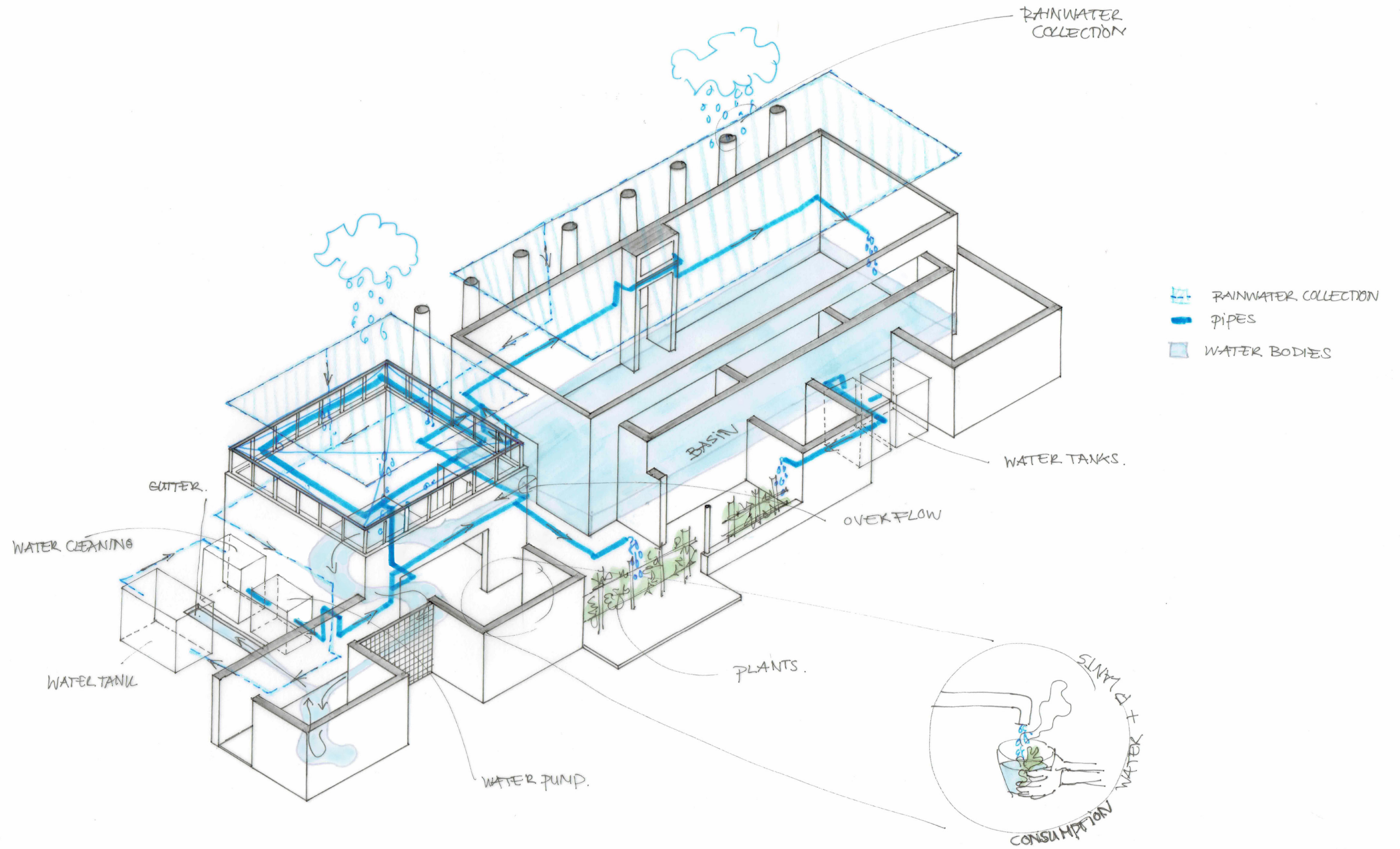
Con-nect-ed-ness, Hampus Berndtson, 2021



Con-nect-ed-ness, Hampus Berndtson, 2021







03 Precedent: Tower Beach

One of the most surprising programmes of water that presented itself during the hunt for water in the city was Tower Beach or otherwise called the Children's Beach. Donated by King Charles V, the beach provided the poorer families of London with an opportunity to visit a waterfront for free as many of them were not able to visit the seaside. The beach is wedged inbetween the Tower of London and Tower Bridge, one of London's most prominent historic and touristic sites. The programme's social character is in stark contrast with the commercial character of the area nowadays.

The Children's beach, also known as Tower Beach or Pleasure Beach, was one of the city's many stony foreshores. According to COLAS (City of London Archeological Society) the beach was a brainchild of Reverend Phillip Thomas Bayard Clayton (All Hallows by the Tower Church, right around the corner of Tower of London). He believed the availability of a beach, a place where children could venture in to the water, explore and play, would be a real delight for the poorer families of the Tower Hill area.

In 1934 the foreshore's stony surface was covered with a layer of sand. Between April and September, depending on the tides, a ladder was lowered for up to six hours a day. Where you would find children playing with the sand and water, swimming and mothers and fathers snoozing and sunbathing in deckchairs. Around 70.000 children visited the beach in that first year, coming from all corners of London's "Eastend". Even teachers would bring their classes to the beach, just like state- and publicschool children were taught to swim in other parts of or even baths in the river. Up until the late nineteen sixties, one would find London's very own rivièra packed with people at the weekends. The beach was conceived as a place of pure joy, a place freedom within the inner city a point of pride for surrounding neighborhoods.

In the course of it's existence main concerns about the beach where mostly

related to safety. A beach guard kept an eye on the playing children, lifeguards were stationed downstream, and on buisy days the Ambulance was on hand to help. De quality of the water itself didn't seem to be a concern, instead it was increasingly being used by hospital convalescents. Eventually the realities of swimming in polluted water, costs and safety risks caused the beach to close down in 1971. (Davies, 2015)

Despite the earlier mentioned concerns, initiatives to reopen the beach and allow the people to swim in the Thames again keep reappearing. First in 1990, a commity campained for a trial to open the beach for twelve days a month. In 1998 Historic Royal Palaces, COLAS and Thames21 started an event with free activities, where children and adults can search for treasures washed up along the shore. The only time of the year the public is allowed access on the beach. And another initiative in 2013, The Thames Baths, that aims to reintroduce swimming in the Thames by launcing a series of natural swimming baths in the river.

The Thames' foreshore proves to be an area Londoners and visitors alike want to explore. An area of increasing interest as an environmental and archaeological resource. Next to that there is a growing believe in reclaiming the river for swimming and public use. Throughout it's discourse the beach posed as a public amenity, a privilege free for all, a place for families to relax, children to play, learn to swim and hospital convalescents to recharge and heal. It was London's very own tidal playground.



An Introduction to the Thames, Unknown, 1951

Sister introducing her baby brother to "Old Father Thames" at Tower Beach London. Passing ships ripple the water and provide waves for the children to play around in. The feeling of sand inbetween your toes forms an exciting new experience in contrast to the hard surfaces of the city.



Children Digging in the Sand, Unknown, 1965

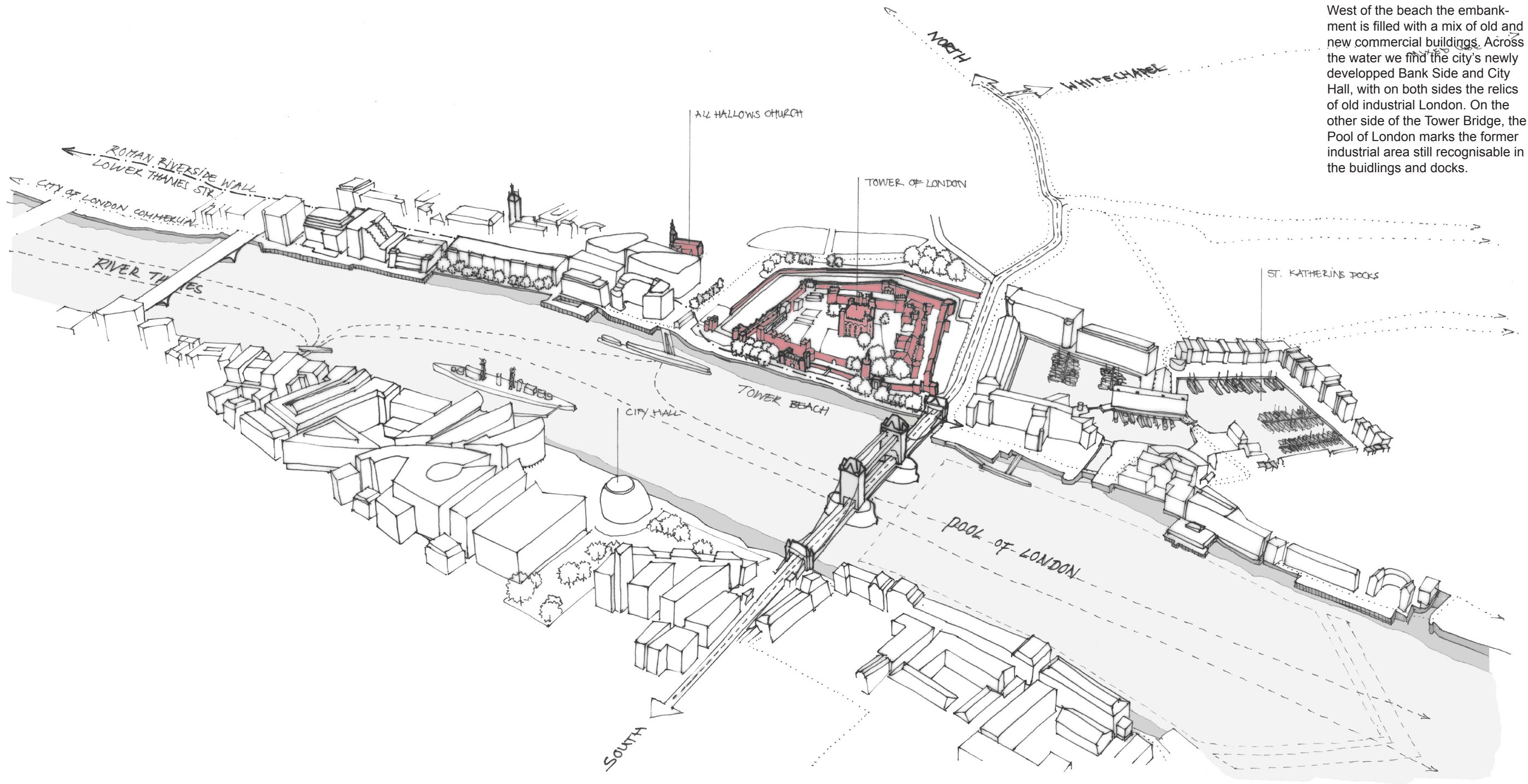


Crowds for the Reopening of Tower Beach after closing during WWII, Unknown, 1946





The children's beach had many functions for its many users. Next to its function as waterfront playground first and foremost, it has been a place for gatherings, a place to relax the senses and restore and since recently also a place of discovery (relics from former histories wash up on its pebblestone shore). In this image two mothers have taken their children to the beach to ensure a quiet home for their night-working husbands. This shows that the beach, next to introducing children and adults alike to water and sand, its qualities and dangers, also offered added space that could not be found in the private spheres of Londoner's homes.

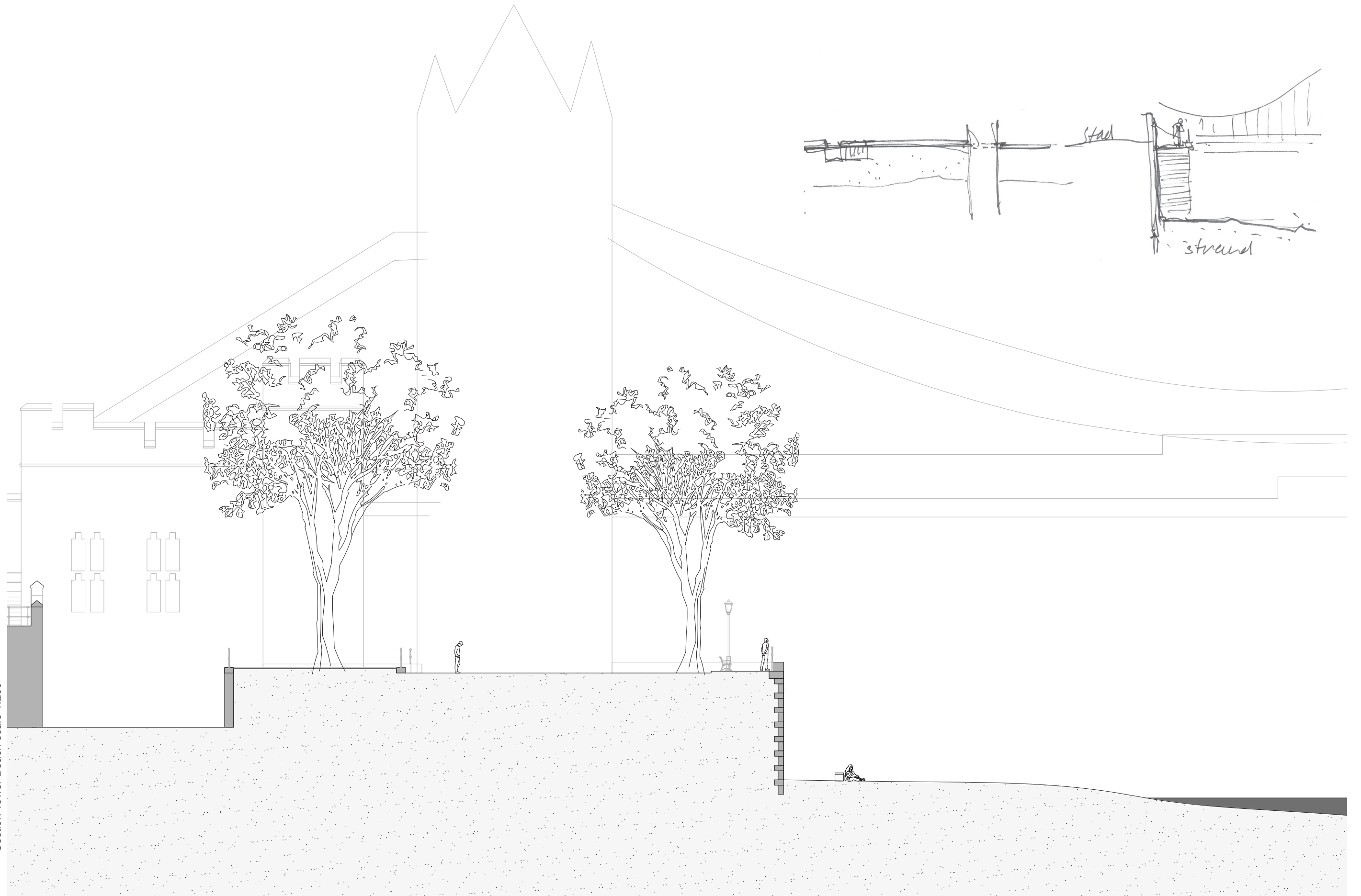


Urban Conditions

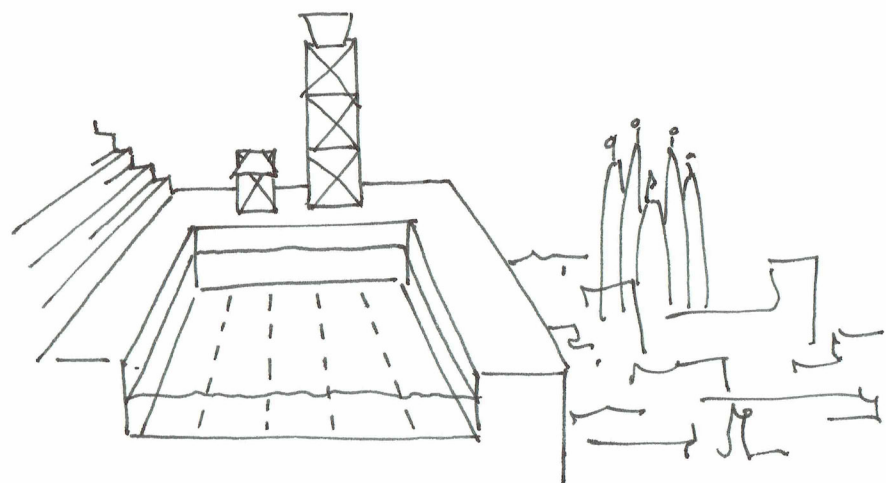
Tower Beach was founded as a philanthropic act, space situated in central London was gifted to the public by king Charles V. The backdrop of the Tower of London underlines the presence of this power structure, whilst at the same time allowing people to feel like they have appropriated this special piece of the city along the Thames.

West of the beach the embankment is filled with a mix of old and new commercial buildings. Across the water we find the city's newly developed Bank Side and City Hall, with on both sides the relics of old industrial London. On the other side of the Tower Bridge, the Pool of London marks the former industrial area still recognisable in the buildings and docks.

Section Tower Beach scale 1:200



04 Precedent: Piscina Municipal de Montjuïc



Platform Overlooking Barcelona, Martijn Giebels



Springboards Against Cityscape, Friedrich, 2016



Simple Elements: Platform and Tribune, Martijn Giebels



05 Precedent: Therme Vals

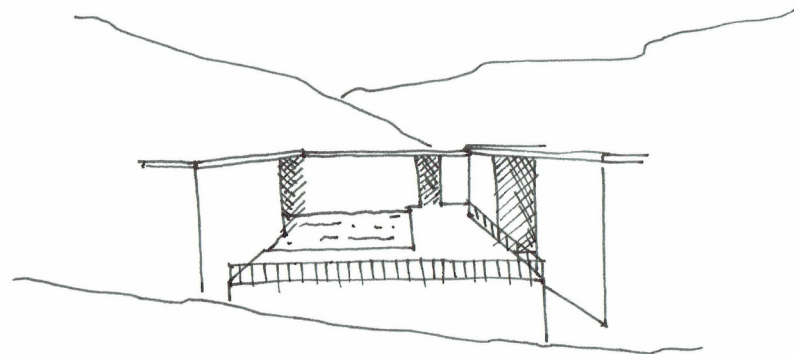
Just beyond the warm waters of a natural spring, the thermal baths of Vals find their place in the Valserrhein river Valley in Switzerland. The 1996 building by Peter Zumthor follows in a succession of spa hotels that have been at Vals since 1893 (Zumthor, 1996). The baths, now set in an independent building, are nestled in the slope of the mountain and can be accessed through an underground passage via the Hotel. The space was designed to indulge and rediscover the ancients benefits of bathing by focussing on the primary bodily experiences of stone, water and light (p.47).

The building takes on the shape of a solid monolith structure build out Valser stone mined from quarries further on in the valley. The goal is to engage a special relationship with the mountain landscape and its natural power convinced of the mystic and sensual qualities of a stony watery world in the mountain (Zumthor, 1996). For its experiential power the architecture relies on the tranquil primary rituals of bathing; cleansing oneself, relaxing the body in a water and the contact between water and skin.

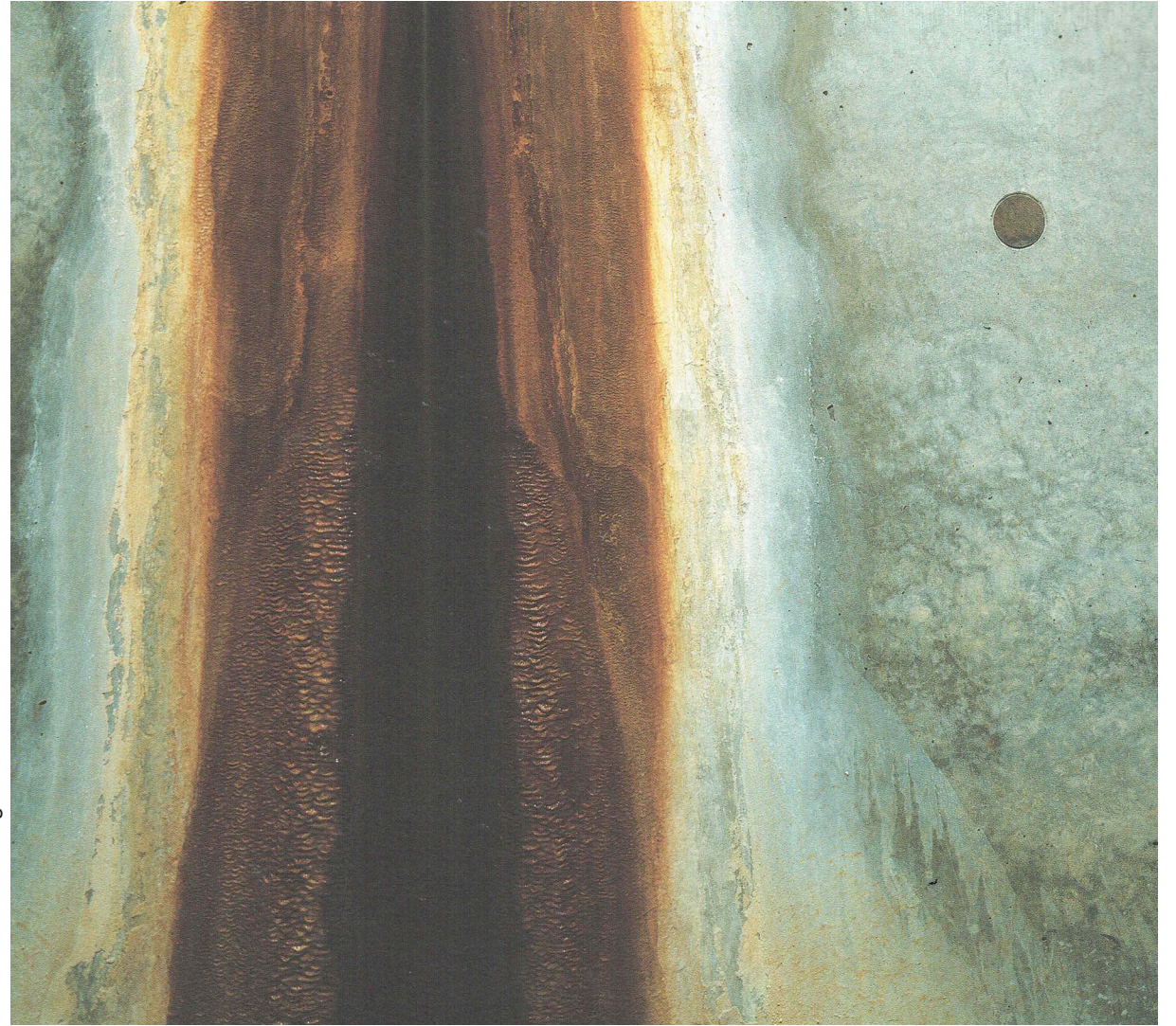
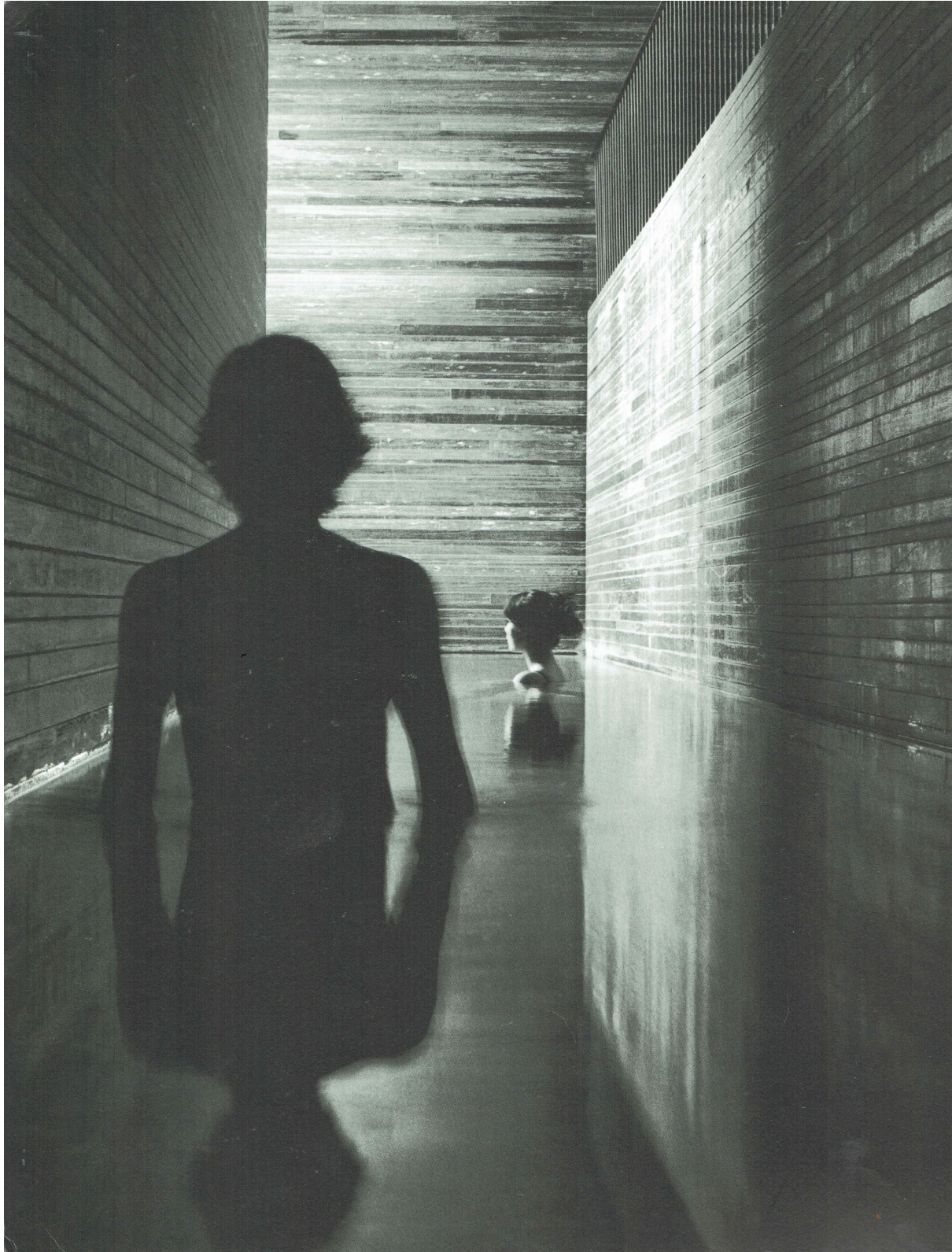
The sequence of rituals or experiences is to a greater or lesser extent predetermined by the architecture. After a set route along the ticket desk, changing rooms and showers the bathers enter a continuous internal space (p.46). The cave-like surroundings emerge as the negative space of a composition of seemingly scatter but carefully placed

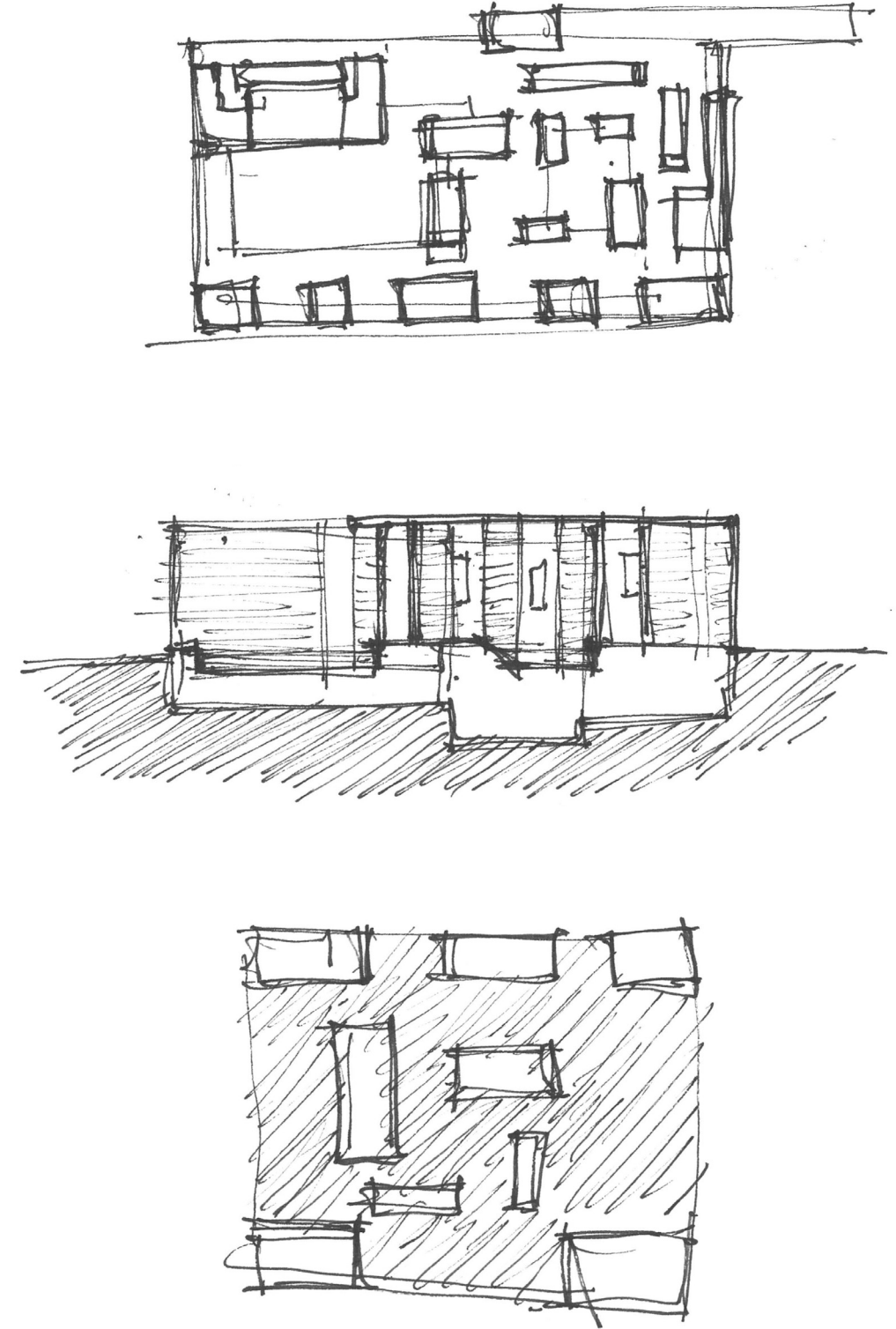
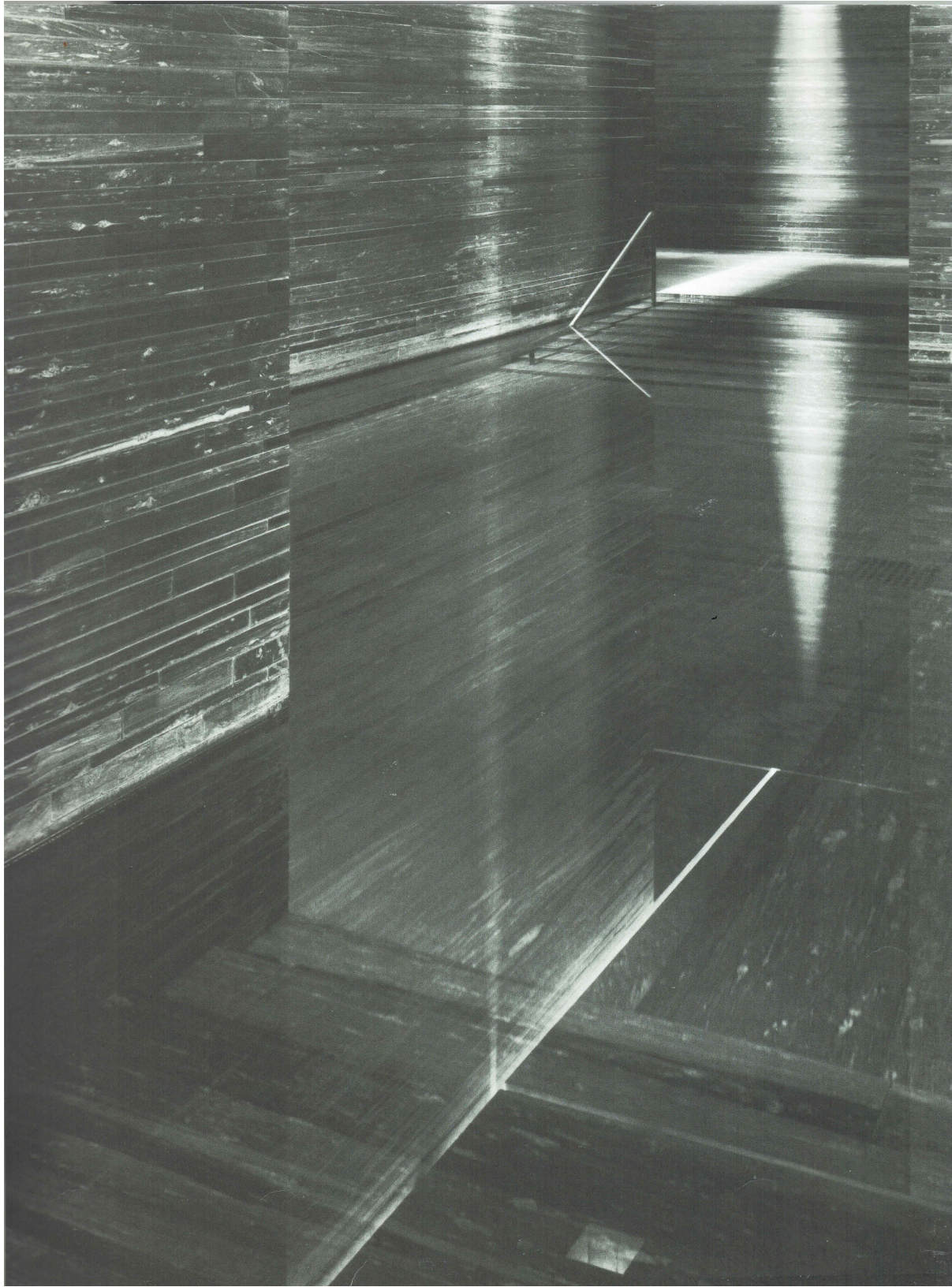
enclosed blocks. The blocks themselves house even more intimate bathing spaces. The baths speak to our primary bodily senses by presenting the bather with different compositions of texture, temperature, sound and smell of the stone and water. The light guides the user through the landscape of enclosed blocks, wandering between comfort and stimulation (p. 45). As one moves away from the interior of the mountain and meets the facade, the openings between the blocks unfold as paintings of an untouched grotesque mountain landscape (p. 49).

By using the interior world of the mountain grotto, the architect creates an enclosed space by which he enables himself to be very precise about the encounters he establishes between the body and the water (p.48). The stimulation of the senses is carefully arranged by the choice to take away or allow certain stimuli and spheres to water, allowing the bather to experience the poetics of the element.



A Special Relationship with the Mountain Landscape

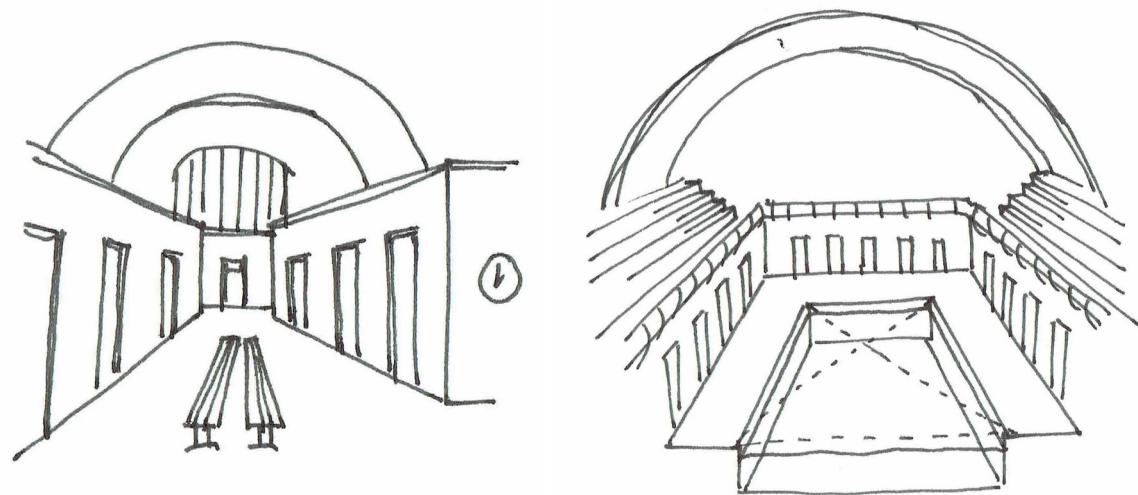




The spatial principle of Therme Vals can be identified as a box-in-box principle. The space is a consequence of how smaller boxes are placed within a bigger box. The scattered placement of the boxes creates a constantly changing space when moving through the building.

06 Precedent: Moseley Baths

Moseley Road Baths Exterior

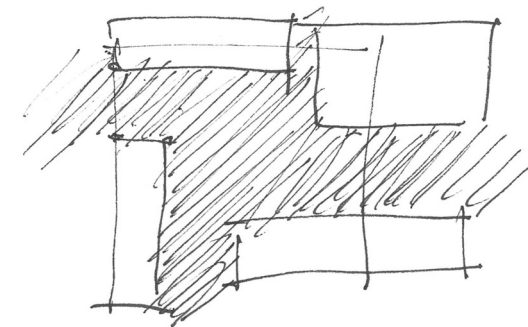
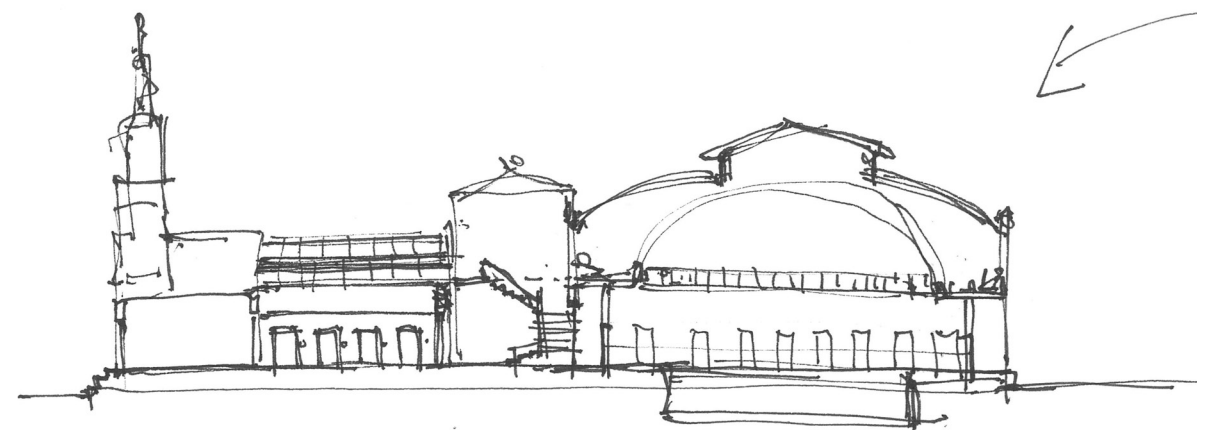
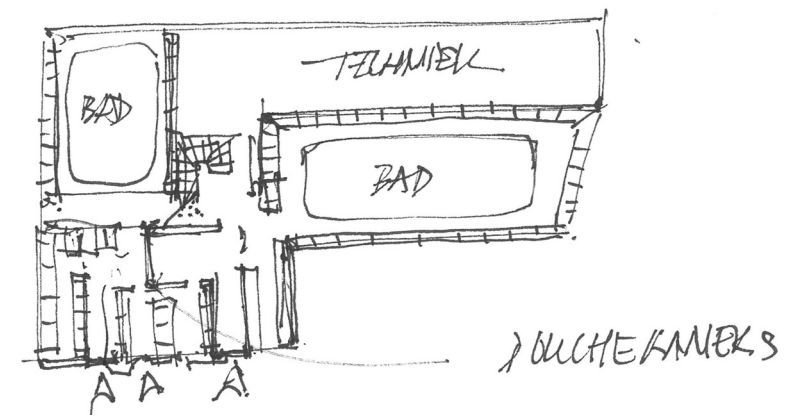


Dancefloor at Moseley Road Baths



Swimming Pool at Moseley Road Baths

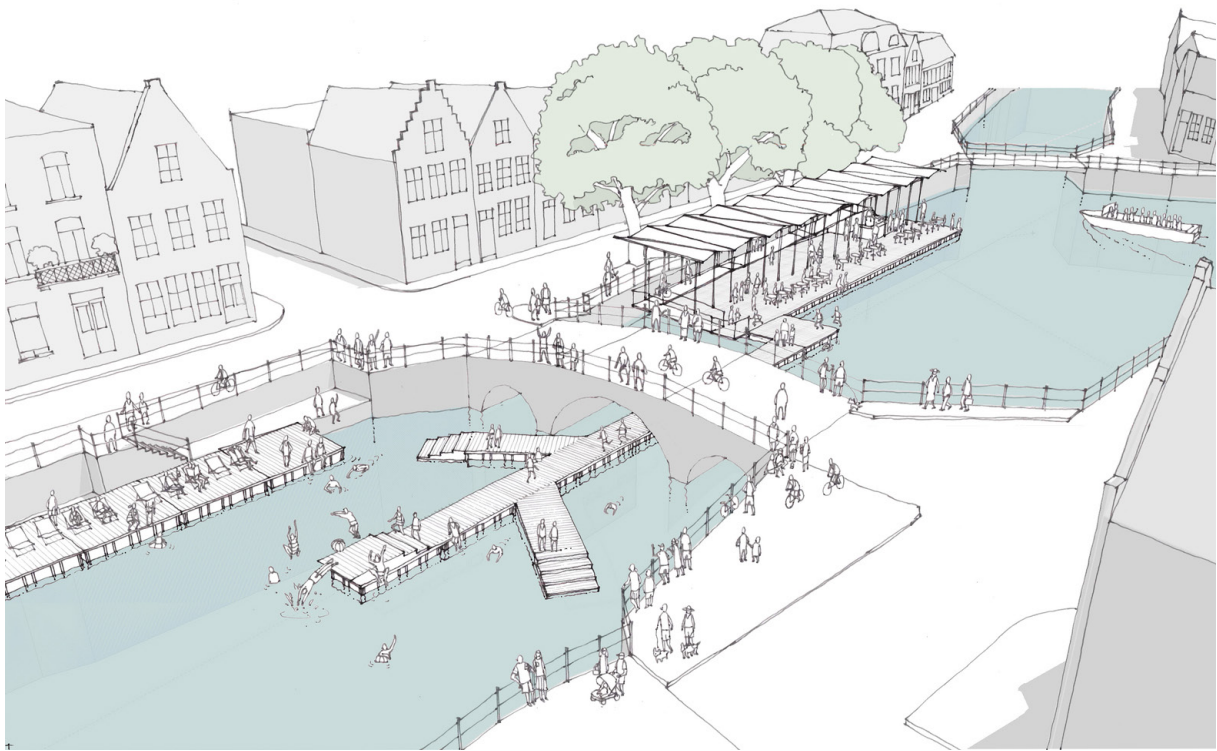




The spatial principle of the Moseley Road Baths can be characterised as a concatenation of rooms of which size and shape are dependent on the intended function. In this way the rooms help to dictate how the spaces are used. The negative space is used for circulation. The concatenation of space and function directs the shape of the building, it is designed from the inside out. For example, the roof landscape depends on the underlying functions.

07 Precedent: Canal Swimmer's Club

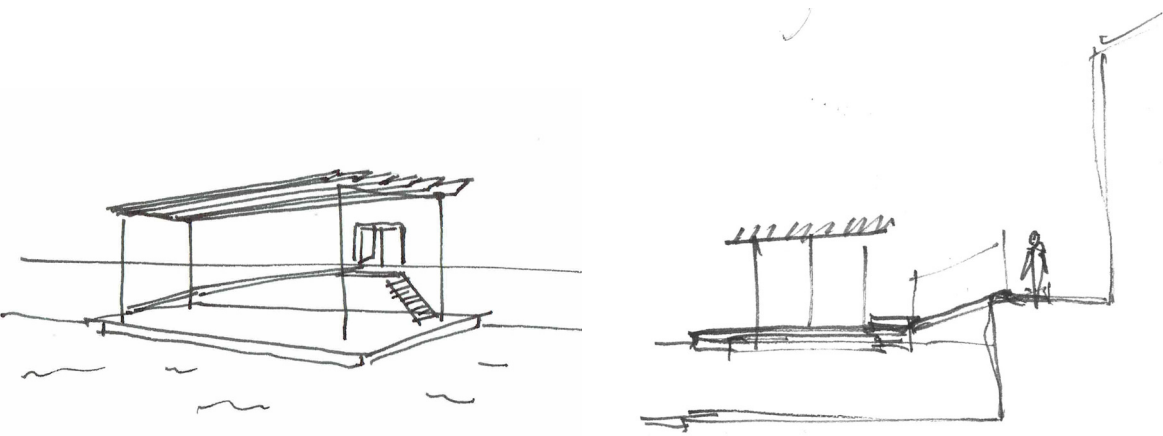
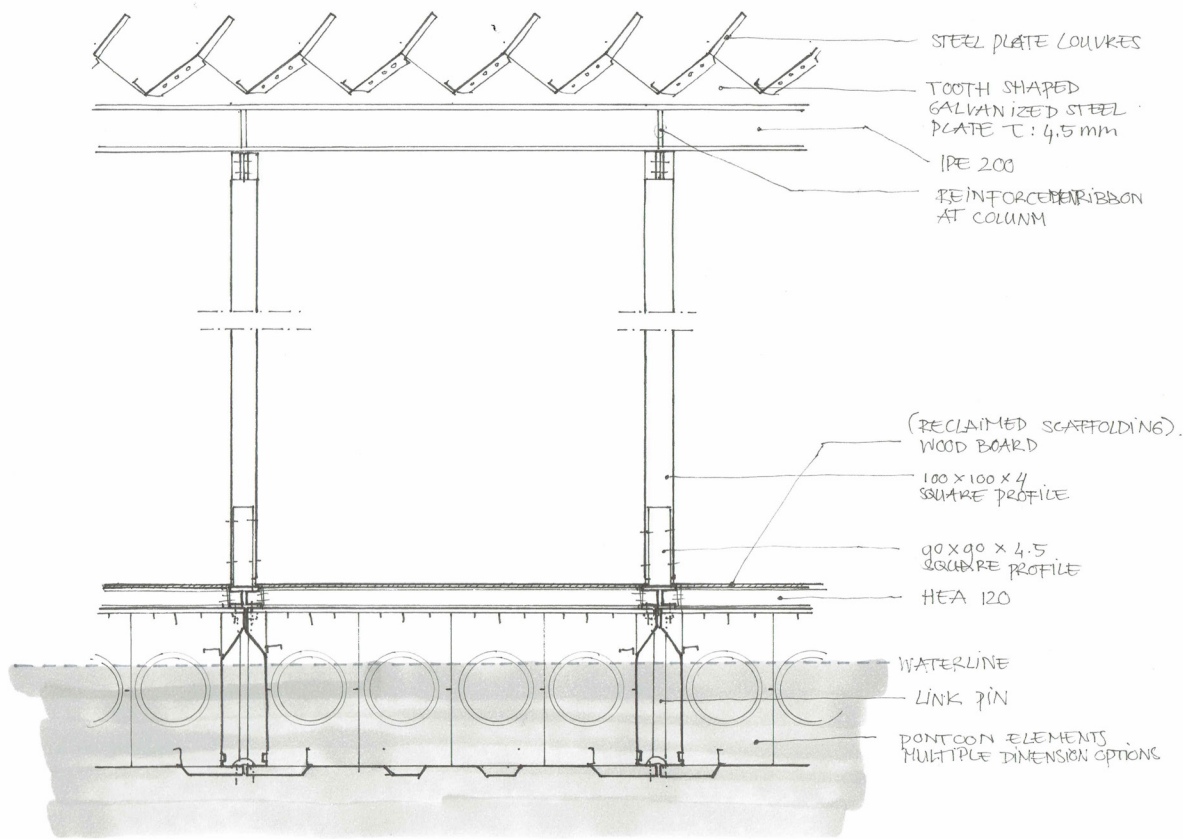
Sketch of Canal Swimmer's Club, 2015



Sunbathing, Playing and Swimming Around the Platform



Technical Deduction of the Used Building Methods

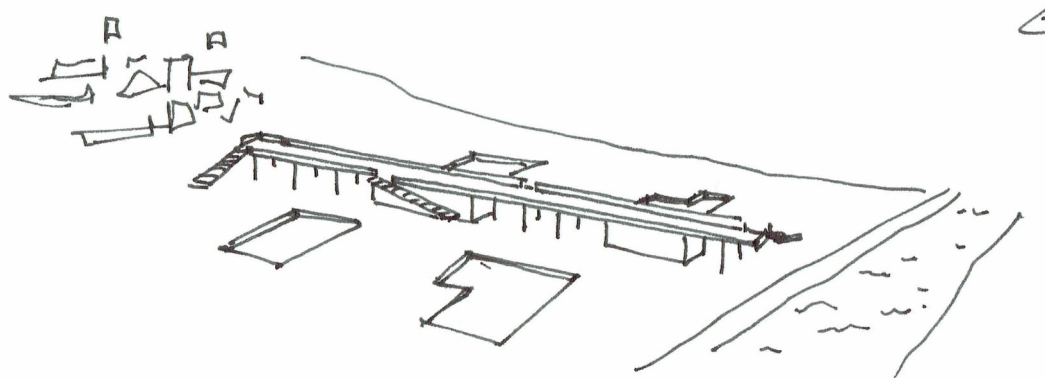


The spatial concept of the Canal Swimmers Club is very simple at it's core. It is a floating surface that works as an extension of public space. Some shelter is provided by a louvered roof. The sides are open.

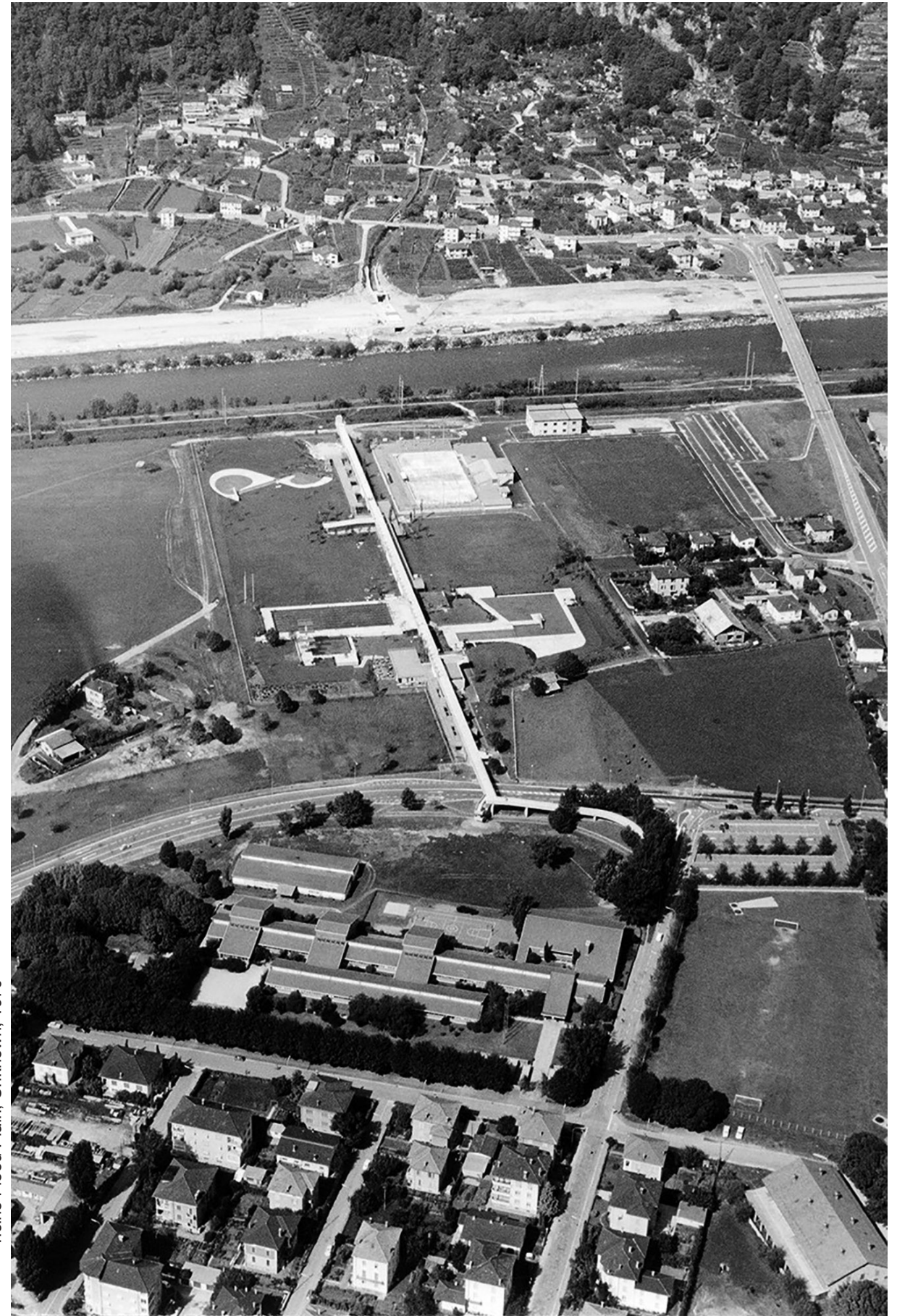
08 Precedent: Il Bagno Publico di Bellinzona

In many ways the setting of the Bagno Publico differs distinctly from that of central London. For instance the climate or the plain in contrast towards London's density. But take all of that away and you have a similar geographical situation. Both Bellinzona and London have nestled along the banks of a river, in a valley between hills and mountains. Both have grown into the rivers floodplain.

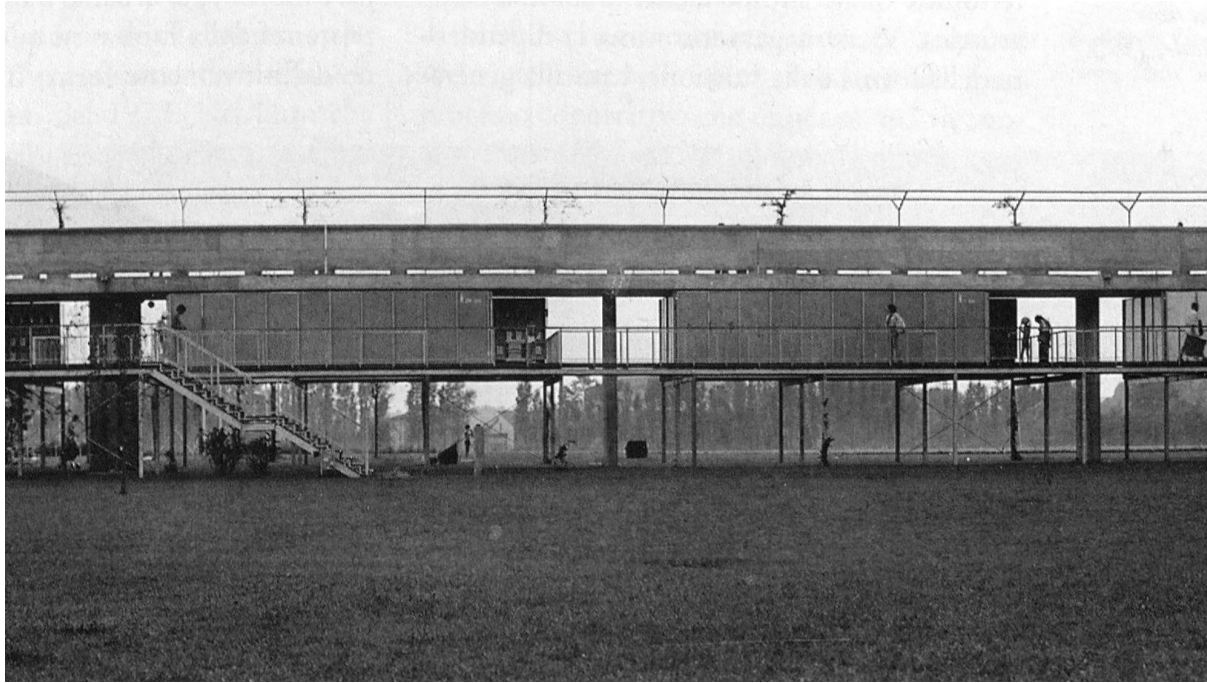
The Bagno Publico presents itself almost like an extended arm connecting town to river. Both physically and metaphorically. A long elevated reinforced concrete pathway stretches from the edge of the town to the river, crossing the emptiness of the floodplain. At the same time this longitudinal architecture functions as the backbone to the programme of the public baths. The elevated walkway relates the public space with the empty plain, town, sky and the river. The programme of the baths brings the natural element of water closer into the town, or at least a controlled version of it.



Ticino Flood Plain, Unknown, 1970



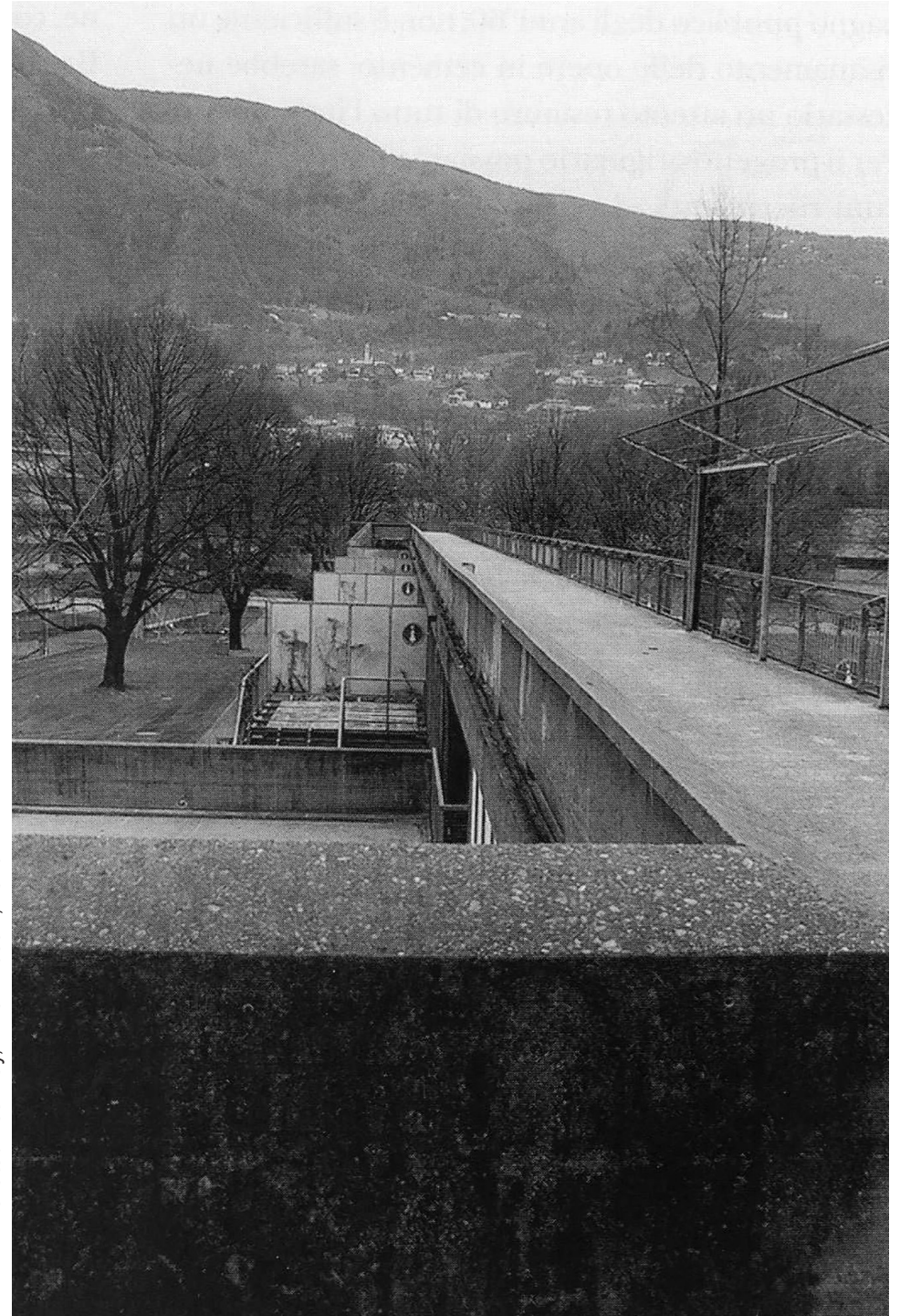
Pathway and Functions, Pino Brioschi, 1970

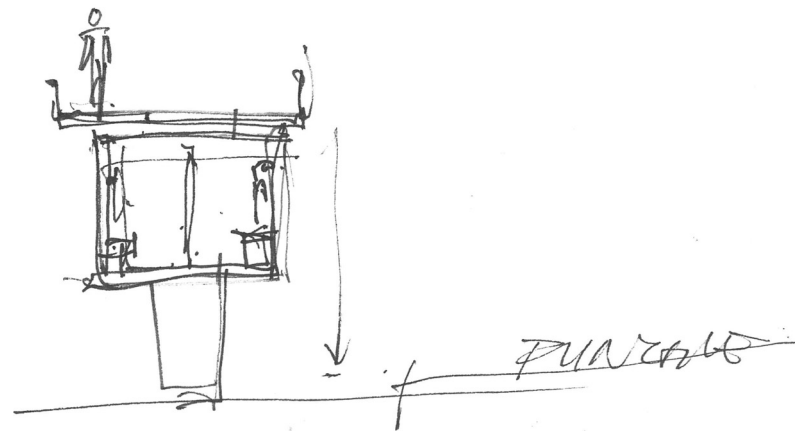
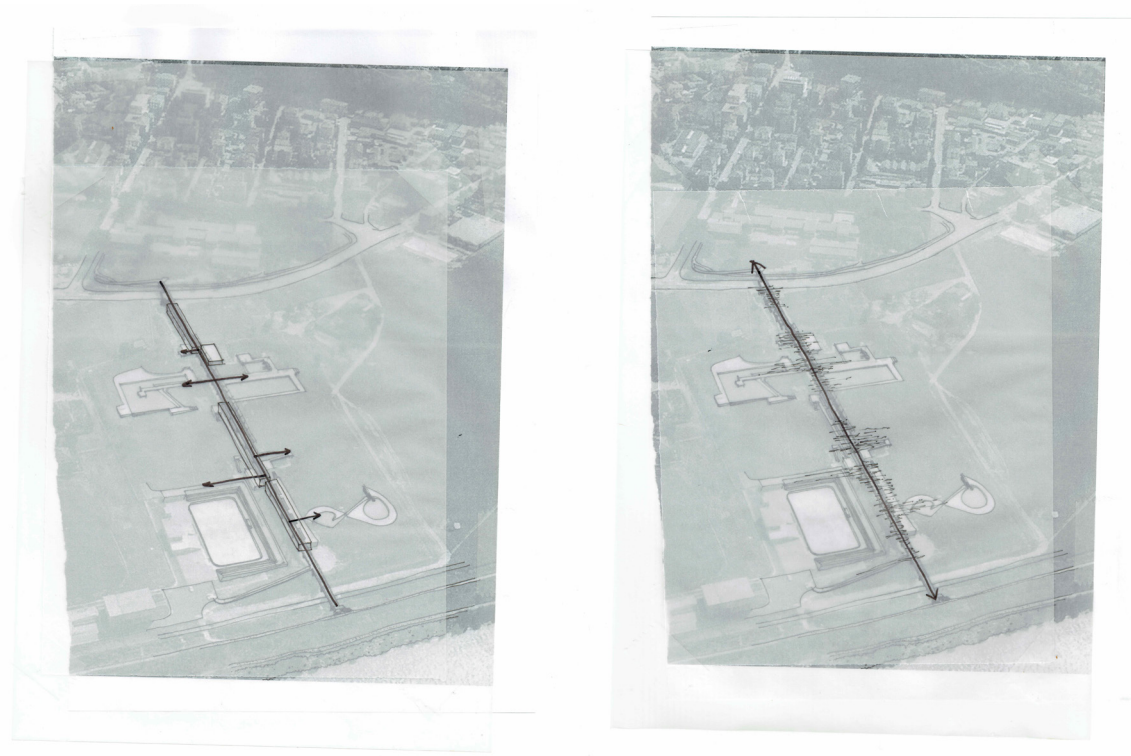


Swimming Pool and Slide, Pino Brioschi, 1970



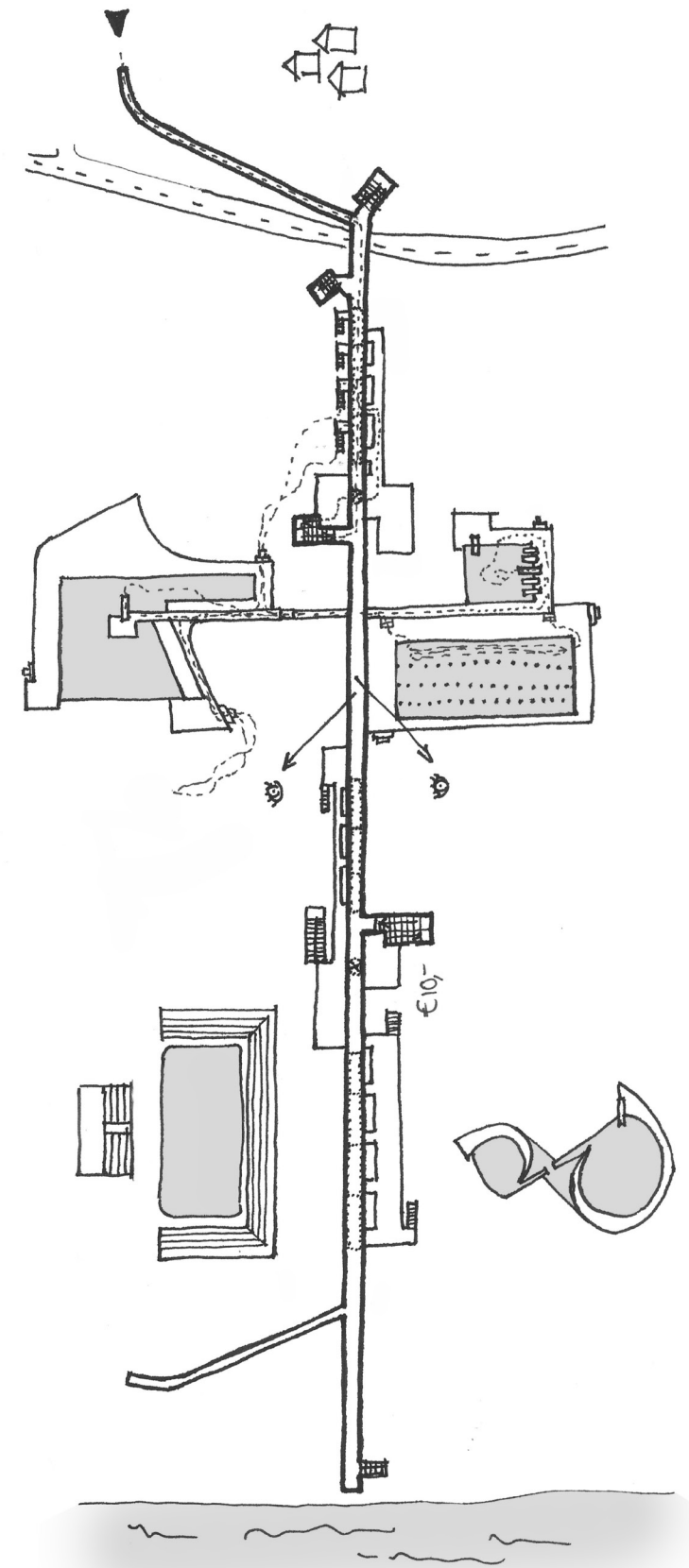
Elevated Pathway, Pino Brioschi, 1970





The spatial concept of the Bagno Pubbico can be characterised as a long spine on which different elements of the programme are linked. The spine is an elevated pathway and houses support functions such as changing rooms. The main functions, the swimming pools, are at ground level and stitch together landscape and architecture.

Plan of Bagno Pubbico and Routing



09 Precedent: Jubilee Pool

The Jubilee Pool is set along the the southwestern shoreline of Cornwall England at the town of Penzance. The pool nestles itself in-between the boulevard and a natural rock formation and can be identified as one of the remaining 1930's sea lido's in which a sheltered swimming environment is created in sea water. Recent renovations, in 2019, enabled the pool to run at full capacity again. Its continuous central role in the community of Penzance makes it a valuable example to analyse.

During the renovations the programme received several valuable upgrades, accommodating different types of swimmers and activities. The original cold water swimming pool and children's pool (nestled in the eastern corner of the basin) were extended with a geothermal pool that is kept at 35 degrees Celsius year round and accessible via ramp and hoist. The clubhouse was renovated and complemented with a new cafe and seating area providing double the seating from the former establishment. Next to that, treatment rooms and multi-purpose community spaces provide a welcoming environment for therapy, meetings, small exhibitions and sports classes. The Jubilee pool is an extension of the village (p. 36/37), a place for meeting and interacting with the seawater that is so inherent to the Cornish culture of Penzance.

The sea pool has a triangular shape derived from the locations pre-existing edges

and is surrounded by a continuous wall that creates a sheltered environment (p.34). Despite not having a direct visual relation to the sea from the pool itself the salty water, temperature, open skies, saline air, crashing of the waves and screams of seagulls all add to a strong connection between inner and outer world. The wall is more than just a means of protection, it houses functions such as dressing boxes, seating areas and viewing points, it creates places to stop or move around.

Jubilee Pool as Extension of Public Space



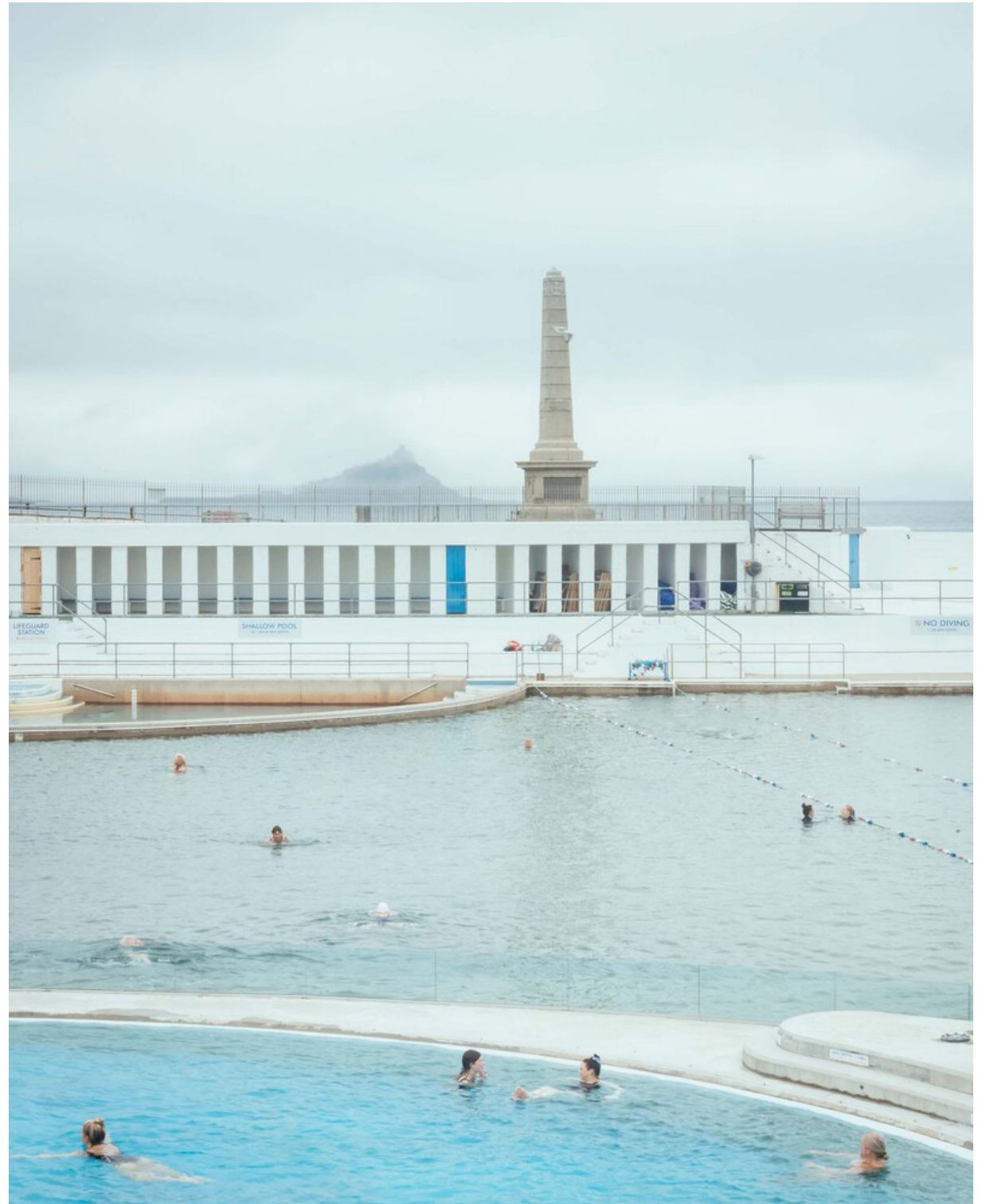
Jubilee Pool

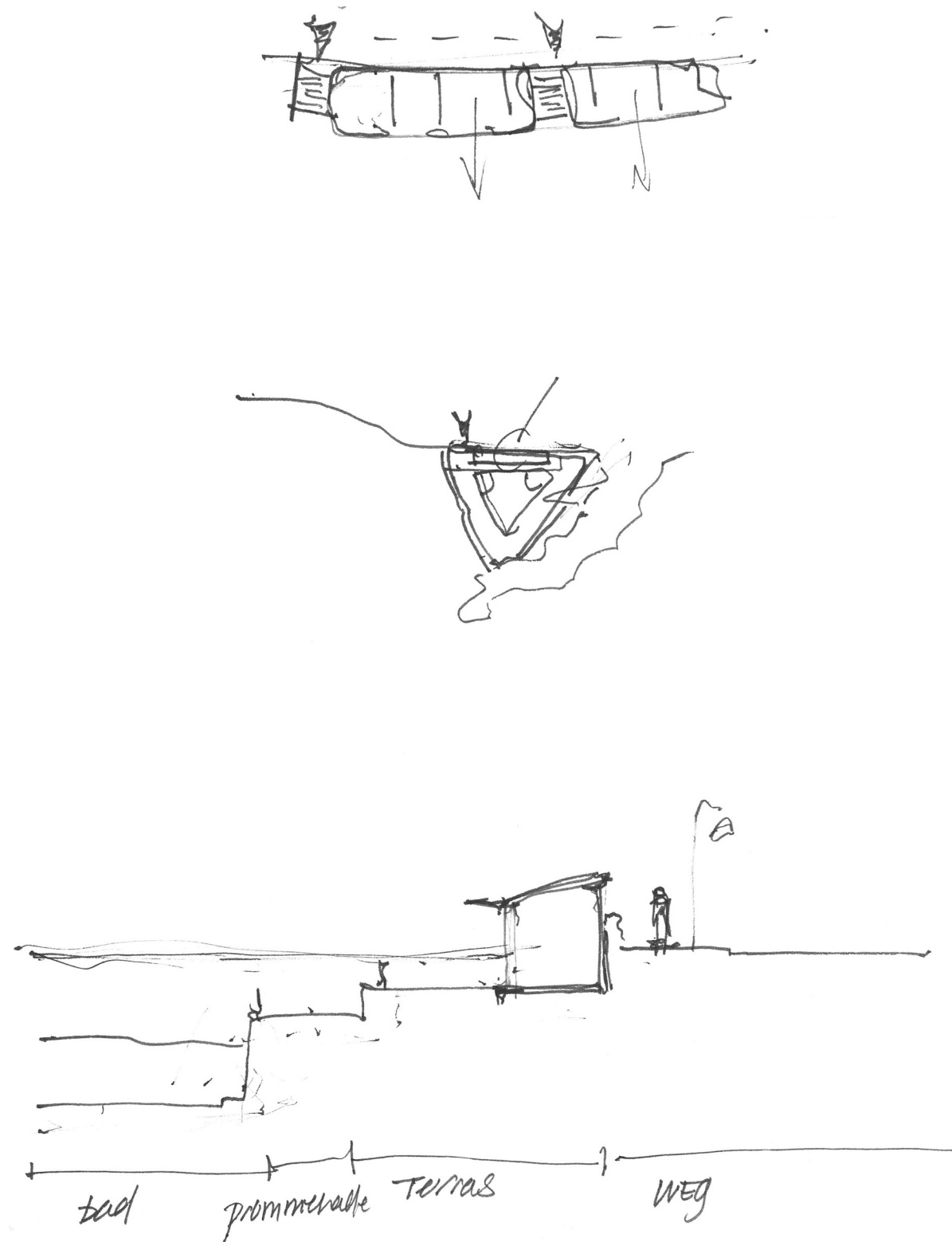


Clubhouse at Jubilee Pool



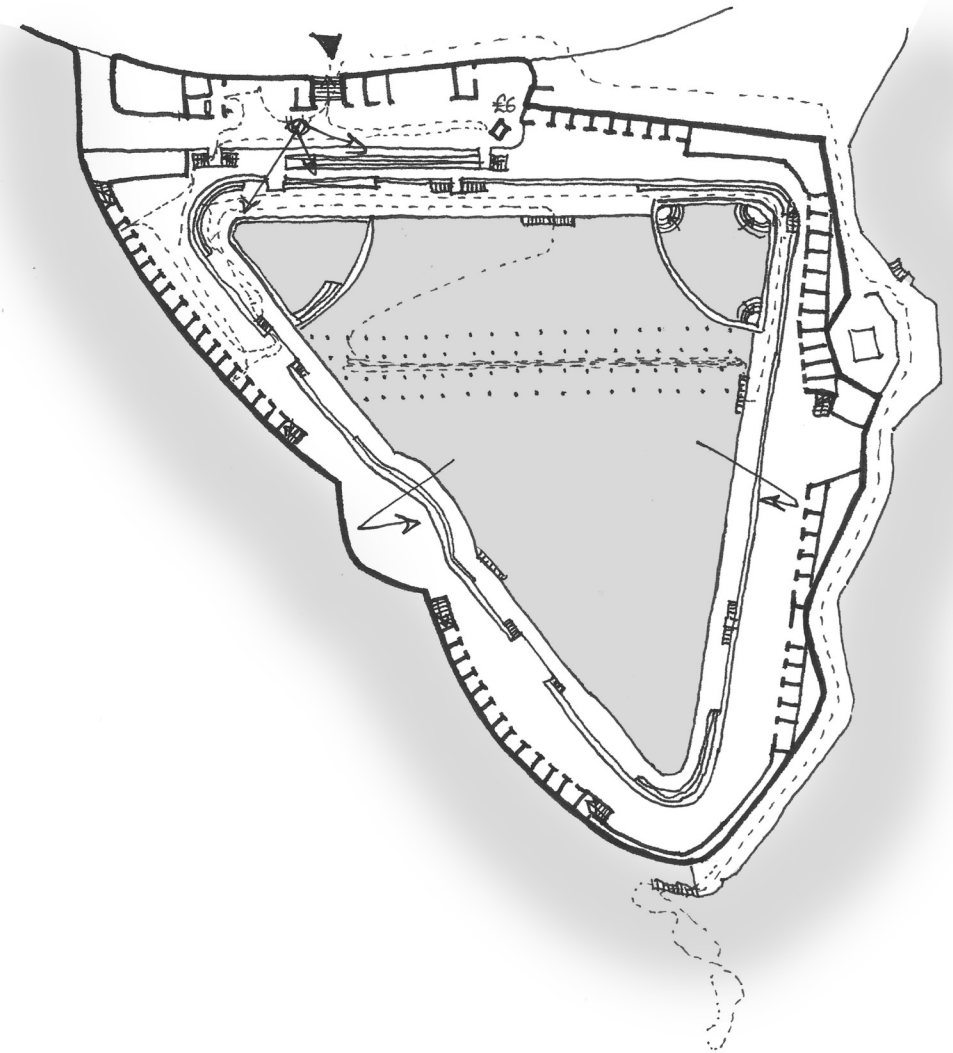
Interior World at Jubilee Pool





The spatial concept of the Bagno Publico can be characterised as a walled open air room. The wall houses supporting functions. The room is sunken and one moves down in order to be in it.

Plan of Jubilee Pool and Routing



10 Design Intentions

Water touches upon a multitude of spheres, some of which, like our physical and emotional interactions, deserve a little more space in the city. One thing is clear water is a common good, it is part of society and the individual and should therefore be accessible. How we relate to it should be transparent. Architecture has the power to create a place where we can relate to water physically and emotionally, a place to engage. So the design goal is to create a space in the city where people can engage with water, that allows them to connect and puts the Thames into another perspective, that reestablishes another use and position.

The precedents covered each portray a unique way of relating to the water, some more traditionally through architecture than others. Throughout the studies I found four key characteristics or themes that keep reappearing. These themes pin point specific elements to the design that prove to be important when designing new relationships between water and people. The precedent matrix on pages 92 & 93 summarizes the findings of the precedent studies and provides a list of different ways to relate through design.



In order of small to urban scale

Aim

Commodity

(Re)-Connection

Spontaneity

Responsibility

Language

Physical Acces | Choise

Human - Nature | Human - Human

Body | Psyche

Caring | Demonstrating

| SWIM

exploring **freedom**, **reimagining** city life from the inside out



an **invitation** to engage and swim



through a **shared activity** and **conditions** (bodies and bathingsuits)

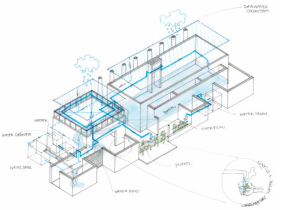
through **physically entering** different waters



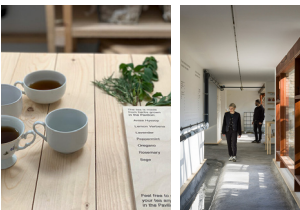
un-ordinary activity and clothing

| Con-nect-ed-ness

explaining **bundle-ness** and **interconnectedness**



systems of water **take over** the built (body and nature over brick and mortar, and where they connect)



through **participation** in the system, that creates **understanding** of our interconnected-nes and place in the system



interactive exhibition, **stimulating** the senses

| Tower Beach

create a place of **joy** and **relaxation** for the **poor**



making available prime location (royal ground) for the unprivileged of society



through **shared** space, activity and point of pride

through **physical access** to Thames water



uncommon materialities such as sand and waves

through **safe space** to play (no cars and beach guards)

| Piscina Municipal

use olympic regeneration to create a **swimming facility** for locals

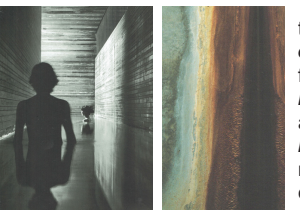


programme for fun and sports (springboards, pool lanes)

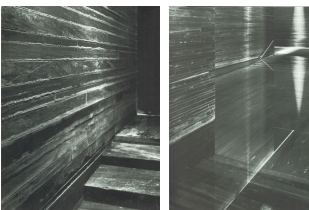
swimming with a view

| Therme Vals

reviving local society and establishing **relationship with locality**



through **bodily experience** fed by primary **rituals of bathing** and **architectural atmosphere** relating to local environment



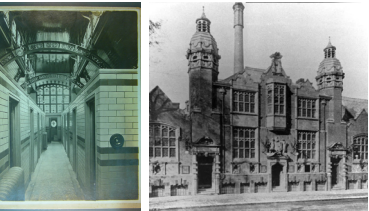
a **meandering floorplan** and **variety in spaces** that invite exploration



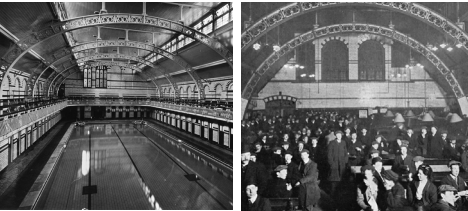
through **elevation of** water as an element and its relationship to the environment and people

| Moseley Baths

promoting **cleanliness** and **exercise** to **elevate** society

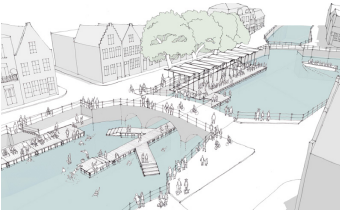


accessibility of washing and bathing for poorer members of society



| Canal Swimmer's Club

enlarging public space and **signaling** improved water quality



access to canal in city centre and a **facility** to enjoy it (gathering, relaxing, sun-bathing and swimming)



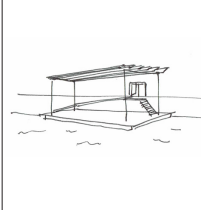
through **physically entering** the city's waters

through **shared** activity and **space to gather**



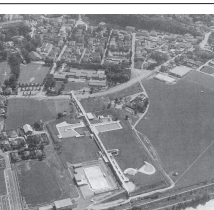
autonomous activity in **institutionalized space** originally otherwise intended

through creating **awareness** of the improved water quality



| Bagno Publico

connecting village to water and creating a **public swimming facility**



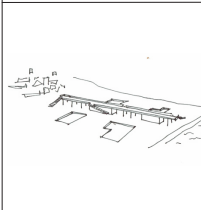
through **shared** activity and **space to gather**

through **architectural programme** that initiates interaction between people and floodplain



a **variety in pools** that invite exploration

programme for fun (springboards, fountains)



Reflection Report

My fascination for water was the starting point for this graduation project. Ever since I can remember I have had a love for it and especially how it feels to be in it. I loved to swim and would spend hours in the water. Throughout the years playing and sports turned into an understanding of the element. My studies in architecture provided me with another way to discover my surroundings, helping me to see common ground between the two passions water and architecture. In line with that I devoted a history thesis earlier on in my studies to children's bathhouses in 20th century Netherlands. I focussed on what those bathhouses meant for Dutch bathing culture. Until the twentieth century water was closely associated with learning about hygiene, the children's baths had a pivotal role in creating a culture of personal cleanliness. To this day Dutch cities and others alike are hugely dependent on water management, but in the built environment this dependency on water is hardly made explicit.

The graduation studio of Architectural Design Crossovers Heterogenous City focuses on the metropolis of London. I dived into the city's waters and let myself be guided by the rivers and underground networks. At the same time a prominent amount of ponds, lido's and historic bathing facilities kept coming up. The Netflix documentary "The Ponds", for instance, aptly depicts the community rooted outdoor swimming culture in Hempstead Heath London.

Research & Design

My history thesis provided me with a set of prior knowledge about the typology of bathhouses and peripheral matters that supported that story. In the first period of this graduation project, I expanded this theoretical framework and made it specific to London. The following section depicts a selection of important moments in the research process which highly influenced the design process.

The extent of water in the metropolis seemed dauntingly large. By collecting maps, background information (in the shape of

archival material and literature) and tracing technical networks a layered understanding of how water finds its place in London was formed. In addition I inventoried what kind of buildings are and have historically been dedicated to water. I came across pumping stations, ice cellars, drinking fountains, monuments and power plants. Those separate buildings all tell a story about the cities systems of water at building level. I chose to continue with the bathhouse typology as the relationship between the individual body and water in the city is what fascinated me most. Mapping the cities natural and technical systems against the bathhouses at different periods in time created an understanding of the cohesion between system and building. The comparison between those maps gave a spatial understanding of bigger cultural changes. In addition to the maps, atmospheric drawings gave me the opportunity to grasp the characteristics of water on a more sensitive level. In short, the parallel processes of mapping and doing inventory gave me a theoretically based understanding of how water and architecture can be expressed.

In today's metropolitan London the origin of many systems of water can be traced back to the time of the Industrial Evolution. Most prominently traditions of controlling nature, turning the natural into something technical and hiding it neatly away from the street scene. However, I came across the Children's beach, in front of the Tower of London. Which later turned out to be a leading precedent for my research and design proposal. The Children's beach was a conscious effort to bring a relatively poor audience in contact with water. A physical encounter with the city was brought about because people could actually enter the water of the Thames. Its leisurely purpose and sandy materiality made it into a popular setting for people to meet up and enjoy each others company.

I was looking for the role of contemporary architecture in the relationship between man and water in the urban environment. I think it is important to make the

distinction between the analysis of water in London and the case studies on the water-human relationship. The question of what could be, was investigated through case studies and design references. The two research methods met in the formulation of the program of requirements for the design and eventually also led to the East India Dock: the design location of Dockland Baths. At that moment, I formulated the relationship I wanted to effectuate through architecture; where the skin meets the water and turning it into a public amenity.

Finding Relevance Through Engagement With the Site

The name Dockland Baths is a direct reference to the place. In an almost forgotten body of water on the north bank of the Thames, the former East India Dock basin becomes a contemporary bathhouse. Two different visits to London brought me there. Based on these site visits, I will discuss the relevance of my theme of water and architecture.

In November 2021 I traced the obvious places of water in London. I walked down the Thames, where I found the starting point for the project: the children's beach. White metal information boards introduced me to what was once a very important and highly beloved public facility. From the high quays, the Thames seemed inaccessible to Londoners. My walks in London certainly made it clear to me that there are hardly any places where Londoners come into contact with water as a public good. My project responds to the contradiction of an abundance of water but yet its unattainable use.

At home I looked at the river again. I followed the banks of the Thames on Google Maps. Satellite images gave me a clear picture of the change from west to east; upstream (west) very green and accessible, to hard inaccessible quays in the city, to industry downstream. North of the O2 Arena I noticed the East India Docks.

In May 2022 I returned to London and visited the Docks. Between development sites, the tidal movement of the river entered

the domain of land and people. The attraction of this place can be characterised as an oasis on the boundary of being forgotten and new developments. As Patrick Abercrombie once proposed in his plans for London's Green Belt, this place (the Lea River Valley) should be set up as a 'playground' for the city and connect the city dweller to the last natural relics.

ADC in the Domain of Architecture

The graduation studio ADC Heterogenous city has shown me that objects, and thus disciplines, do not stand alone. They nestle themselves in a multitude of networks of the metropolis. In relation to the architecture track, I think I learned a lot from the studio's methodology. To be able to think big in terms of networks and through that being able to zoom down on a specific aspect, in my case water. In previous studios I focused on Dutch contexts, environments that I, as a Dutch person, relate to comfortably. The ADC studio gave me tools to relate to metropolitan areas as a designer and to do so in an international context.

Position

In my research I relate to a variety of theories from different disciplines. That multidisciplinary view, perhaps taken from the studio, ensures that I have been able to formulate a carefully considered position with regard to architecture. Which, I have found, is really a requirement in the context of water in the city. This not only reflects back on architecture, but on the multitude of organs that give the water in the city its eventual shape.

The final design of the Dockland Baths relates, although unintentionally, to the recent trend of "healing architecture". Where it is important to look for potential places that can serve as a catalyst for the improved health of people and city. I was looking for a place where people and water could meet, but in my search I came across such a potential place. The final building and bathhouse program can ultimately be seen as a place of relaxation, letting go,

daydreaming and healing. The promenade provides an improvement on an urban scale. It connects two new city districts and turns a run-down part of the city into a public place and destination.

Discourse and Lessons

I chose the typology of the bathhouse as the subject of my research. However, the Victorian bathhouse, although conceived in good intentions as a place of hygiene and dignity, also carried a number of ethically sensitive issues. For example, a strict division was made between different population classes and gender and the matter of personal hygiene became part of the agenda of the city instead of being left to the individual.

In addition, a visit to the bathhouse almost always is and was associated with a price tag. In architecture, this is actually expressed in a simple way in the form of creating private or public places, for example by making a wall and payment desk. As a designer I became aware of the dilemma of the ticket and the designer's choice in making the bathhouse accessible for every budget and every kind of swimmer. In a larger context, places of high quality often go hand in hand with a ticket, these places are then aimed at consumption or, not uncommonly, even private property.

With the Dockland Baths I initiate a place where there is room for different types of residents, such as fanatical swimmers, therapy patients, school classes or people with a small budget. With the design I add my attempt to the discourse of urban development. This has often come down to a gentrification of neighbourhoods in which old residents are chased out. Think of the nearby Isle of Dogs, which was transformed from a working-class and industrial area into a highly commercial part of London. With the promenade and the varied program, I try to relate to different groups in an inclusive way, including the water.

Illustration List

In order of appearance. Unlisted drawings are produced by the author.

Introduction

p.7 - Les Baigneuses
Pablo Picasso (1918).

Part I - Contextual Research

p.11 - The Thames Below Westminster
Claude Monet (1871).

p.14 - Billingsgate Roman House and Baths
Judith Dobie (2020). Watercolour interpretation of Billingsgate house and baths around AD 250. City of London Corporation. <https://artsandculture.google.com/story/billingsgate-roman-house-and-baths/NglSZAA1hOiLg>. Retrieved 10-04-2023.

p.15 - The Roman Bath in Strand Lane
Michael Trapp (2016). The Roman Bath in Strand Lane as reconstructed by Fortunino Matania. https://commons.wikimedia.org/wiki/File:MataniaCard_MBT_ed.jpg. Retrieved 10-04-2023.

p.18 - Cannon Row Wharf
Unknown (1856). Cannon Row Wharf, Greater London, circa 1856. BB57/01541. Historic England Archichive. <https://historicengland.org.uk/images-books/archive/collections/photographs/the-great-stink/>. Retrieved 10-04-2023.

p.18 - Thames Foreshore Lambeth Palace
William Strudwick (1860-1865). The Thames foreshore near Lambeth Palace, Greater London, 1860-1865. BB94/20526. Historic England Archichive. <https://historicengland.org.uk/images-books/archive/collections/photographs/the-great-stink/>. Retrieved 10-04-2023.

p.19 - Construction of the Chelsea Embankment
J. Hedderly (1873). Construction of the Chelsea Embankment with the Albert Bridge and Chelsea Old Church in the background. OP04624. Historic England Archichive. <https://historicengland.org.uk/images-books/photographs/item/BL12379>. Retrieved 10-04-2023.

[tps://historicengland.org.uk/images-books/archive/collections/photographs/the-great-stink/](https://historicengland.org.uk/images-books/archive/collections/photographs/the-great-stink/). Retrieved 10-04-2023.

p.19 Embankment Section.
Unknown. <https://wondersofworldengineering.com/embankment.html>. Retrieved 10-04-2023.

p.20 Streatham Pumping Station.
Unknown (1895, march 13). Streatham Pumping Station, Conyers Road, Streatham, Greater London. BL13026. Historic England Archive. <https://historicengland.org.uk/services-skills/education/educational-images/streatham-pumping-station-conyers-road-streatham-11242>. Retrieved 28-02-2022.

p.20 Pond at Hempstead Heath.
Unknown. <https://www.hampsteadheath.net/the-ponds/2hb4z128pxxgi0gt02ypf42ddiw-p0p>. Retrieved 28-02-2022.

p.21 - The Distribution of Public Baths in the UK
Agnes Campbell (1918). Map of the United Kingdom to illustrate the distribution of public baths. Report on Public Baths and Wash-houses in the United Kingdom. The Carnegie United Kingdom Trust. Edinburgh University Press.

p.21 - Moseley Road Baths
Unknown. <https://moseleyroadbaths.org.uk/history>. Retrieved 11-01-2022.

p.21 - Bermondsey Public Baths
Unknown (Oct 1927). Bermondsey public baths and wash houses viewed from the junction of spa road. BL29281. Historic England Archichive. <https://historicengland.org.uk/images-books/photos/item/BL29281>. Retrieved 10-04-2023.

p.21 - Westminster Public Baths
J. H. A.; Bedford Lemere and Company (Sep 1893). Exterior of Westminster Public Baths on Great Smith Street. BL12379. Historic England Archichive. <https://historicengland.org.uk/images-books/photos/item/BL12379>. Retrieved 10-04-2023.

[org.uk/images-books/photos/item/BL12379](https://historicengland.org.uk/images-books/photos/item/BL12379). Retrieved 10-04-2023.

p.39 - The Swimmers
Attilio Fiumarella (2014). <https://culturalintermediation.wordpress.com/2014/07/20/culture-sport-and-protest/>. Retrieved 02-12-2022.

Part II - Conceptual Research

p.43 - SWIMM
Corney, R. (2007). Amy Sharrocks, SWIM (2007). <https://www.artsadmin.co.uk/profiles/amy-sharrocks/>. Retrieved 02-12-2022.

p.44/45 - SWIMM
Corney, R. (2007). Amy Sharrocks, SWIM (2007). <https://www.artsadmin.co.uk/profiles/amy-sharrocks/>. Retrieved 02-12-2022.

p.47 - Connectedness
Berndtson, H. (2021). <https://www.dezeen.com/2021/05/20/lundgaard-tranberg-architects-danish-pavillion-venice-architecture-biennale/>. Retrieved 02-12-2022.

p.47 - Connectedness
Berndtson, H. (2021). <https://www.dezeen.com/2021/05/20/lundgaard-tranberg-architects-danish-pavillion-venice-architecture-biennale/>. Retrieved 02-12-2022.

p.48/49 - Connectedness
Berndtson, H. (2021). <https://www.dezeen.com/2021/05/20/lundgaard-tranberg-architects-danish-pavillion-venice-architecture-biennale/>. Retrieved 02-12-2022.

p.53 - An Introduction to the Thames
Unknown (1951). 1126684. Topfoto. <https://www.topfoto.co.uk/asset/3116825>. Retrieved 11-01-2022.

p.54/55 - Tower Beach
Rawlings, S.W. (1945/1965). Tower Beach, Tower Hamlets, Greater London. Historic England Archive. <https://artsandculture.google.com/asset/tower-beach-tower-hamlets-greater-london-stanley-w-rawlings/>

UQEg0TNWeI8FDQ. Retrieved 11-01-2022.

p.56 - Children Digging in the Sand
Unknown (1965, June 5). 1126690. TopFoto <https://www.topfoto.co.uk/asset/3116830>. Retrieved 14-01-2022.

p.57 - Crowds for the Reopening of Tower Beach after closing during WWII.
Unknown (1946). PAST20382. Pastpix/TopFoto. <https://www.topfoto.co.uk/asset/1384232>. Retrieved 14-01-2022.

p.58/59 - Mothers and Children Enjoying London's "Seaside".
Unknown (1942, July 23). 1126693. TopFoto. <https://www.topfoto.co.uk/asset/16842>. Retrieved 14-01-2022.

p.64 - Springboards Against Cityscape
Friedrich, G. (2016). <https://www.flickr.com/photos/29080473@N05/29078019326>. Retrieved 18-05-2022.

p.65 - Platform Overlooking Barcelona
Martijn Giebels. <https://architecture-ofthegames.net/1992-barcelona/barcelona-1992-25-years-later-piscina-municipal-de-montjuic-2/>. Retrieved 18-05-2022.

p.65 - Simple Elements: Platform and Tribune
Martijn Giebels. <https://architecture-ofthegames.net/1992-barcelona/barcelona-1992-25-years-later-piscina-municipal-de-montjuic-2/>. Retrieved 18-05-2022.

p.67 - A Special Relationship with the Mountain Landscape
Zumthor, P. (1996). Thermal bath at Vals. Architectural Association: exemplary projects 1. London: E.G. Bond Ltd.

p.68 - An Encounter Between the Body and Water
Zumthor, P. (1996). Thermal bath at Vals. Architectural Association: exemplary projects 1. London: E.G. Bond Ltd.

p.69 - The Meeting of Stone and Water
Zumthor, P. (1996). Thermal bath at Vals.
Architectural Association: exemplary projects
1. London: E.G. Bond Ltd.

p.70 - Negative Space of a Composition of
Enclosed Blocks
Zumthor, P. (1996). Thermal bath at Vals.
Architectural Association: exemplary projects
1. London: E.G. Bond Ltd.

p.72 - Moseley Road Baths Exterior
Unknown. [https://moseleyroadbaths.org.uk/
history](https://moseleyroadbaths.org.uk/history). Retrieved 02-12-2022.

p.73 - Dancefloor at Moseley Road Baths
Unknown. [https://moseleyroadbaths.org.uk/
history](https://moseleyroadbaths.org.uk/history). Retrieved 02-12-2022.

p.73 - Swimming Pool at Moseley Road
Baths
Unknown. [https://moseleyroadbaths.org.uk/
history](https://moseleyroadbaths.org.uk/history). Retrieved 02-12-2022.

p.74 - Slipper Baths at Moseley Road Baths
Unknown. [https://moseleyroadbaths.org.uk/
history](https://moseleyroadbaths.org.uk/history). Retrieved 02-12-2022.

p.76 - Sketch of Canal Swimmer's Club
Atelier Bow-Wow & Architectuuratelier
Dertien 12 (2015). [https://www.archdaily.
com/774286/canal-swimmers-club-ate-
lier-bow-wow-plus-architectuuratelier-der-
tien-12](https://www.archdaily.com/774286/canal-swimmers-club-atelier-bow-wow-plus-architectuuratelier-dertien-12). Retrieved 02-12-2022.

p.76 - Sunbathing, Playing and Swimming
Around the Platform.
Declerck, S. (2015). [https://www.archdaily.
com/774286/canal-swimmers-club-ate-
lier-bow-wow-plus-architectuuratelier-der-
tien-12](https://www.archdaily.com/774286/canal-swimmers-club-atelier-bow-wow-plus-architectuuratelier-dertien-12). Retrieved 02-12-2022.

p.79 - Ticino Flood Plain, 1970
Archivio del Moderno (1970). [https://www.at-
lasofplaces.com/architecture/il-bagno-di-bel-
linzona/](https://www.atlasofplaces.com/architecture/il-bagno-di-bellinzona/). Retrieved 22-01-2022

p.80 - Pathway and Functions
Pino Brioschi (1970). <https://www.atlasofpla->

[ces.com/architecture/il-bagno-di-bellinzona/](https://www.atlasofplaces.com/architecture/il-bagno-di-bellinzona/).
Retrieved 22-01-2022

p.80 - Swimming Pool and Springboards
Pino Brioschi (1970). [https://www.atlasofpla-
ces.com/architecture/il-bagno-di-bellinzona/](https://www.atlasofplaces.com/architecture/il-bagno-di-bellinzona/).
Retrieved 22-01-2022

p.81 - Elevated Pathway
Pino Brioschi (1970). [https://www.atlasofpla-
ces.com/architecture/il-bagno-di-bellinzona/](https://www.atlasofplaces.com/architecture/il-bagno-di-bellinzona/).
Retrieved 22-01-2022

p.84 - Jubilee Pool as Extension of Public
Space
Scott Withby Studio. [https://thespaces.com/
one-of-the-uks-last-remaining-saltwater-li-
dos-is-set-for-a-revamp/](https://thespaces.com/one-of-the-uks-last-remaining-saltwater-lidos-is-set-for-a-revamp/). Retrieved 10-08-
2022.

p.84 - Jubilee Pool
Stephenson, J. (2002). [https://www.dezeen.
com/2022/02/22/jubilee-pool-penzance-geo-
thermal-scott-whitby-studio/](https://www.dezeen.com/2022/02/22/jubilee-pool-penzance-geothermal-scott-whitby-studio/). Retrieved 10-
08-2022.

p.86 - Clubhouse at Jubilee Pool
Stephenson, J. (2002). [https://www.dezeen.
com/2022/02/22/jubilee-pool-penzance-geo-
thermal-scott-whitby-studio/](https://www.dezeen.com/2022/02/22/jubilee-pool-penzance-geothermal-scott-whitby-studio/) Retrieved 10-08-
2022.

p.87 - Interior World at Jubilee Pool
Stephenson, J. (2002). [https://www.dezeen.
com/2022/02/22/jubilee-pool-penzance-geo-
thermal-scott-whitby-studio/](https://www.dezeen.com/2022/02/22/jubilee-pool-penzance-geothermal-scott-whitby-studio/) Retrieved 10-08-
2022

Bibliography

Davies, Caitlin (2015). *Downstream: A History and Celebration of Swimming the River Thames*. London: Aurum press. <https://publicism.info/sports/downstream/19.html>

MOLA. *The Archeology of Greater London online map*. MOLA. <https://molarchaeology.maps.arcgis.com/apps/MapSeries/index.html?appid=9a85640effc042ae91af6b0d43abbafb>. Retrieved 10-10-2021.

Strang, V. (2004). *The Meaning of Water*. Oxford: Berg.