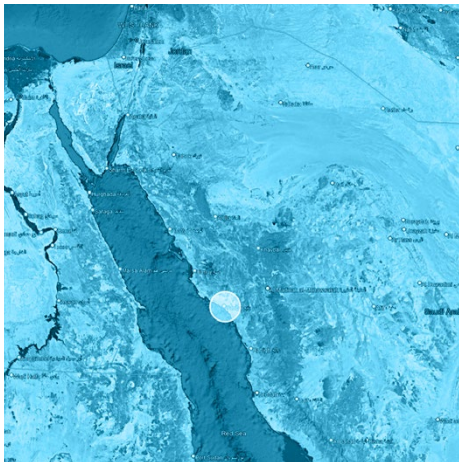
PORTFOLIO

ACALINION

SELECTED WORKS



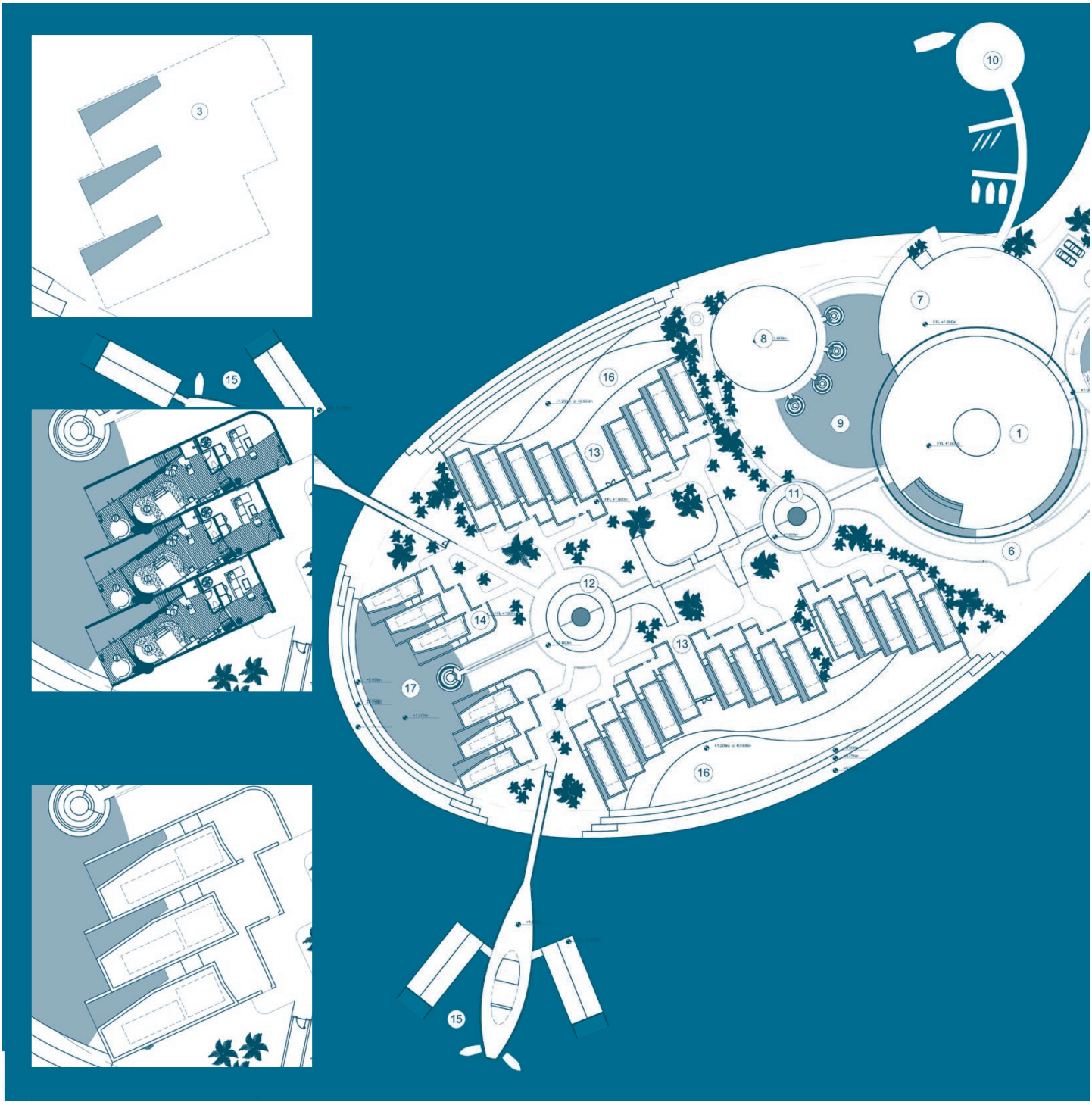
A Wellness Retreat

Project in collaboration with BACA Architects (Architecture) + Wells International (Interior Design)
Project typology - Leisure & Hospitality - Spa, Restaurant and Holiday Lettings
Project stage - SCE stage 1-2 (equivalent to LP 1-4)
Project involvement - concept design/ design development/ masterplanning/ visualisation
Project location - Yanbu, Saudi Arabia
Project scale - 5600sqm

The Wellness Retreat is designed to offer a unique and tranquil experience for guests, promoting relaxation and rejuvenation. It includes a spa, specialty dining, and accommodation areas with a focus on creating a serene atmosphere. The spa entrance conveys a sense of peace with its light colors, curved forms, and flowing lines. The main spa features various spaces designed to enhance relaxation, with different temperatures, humidity levels, and lighting conditions.

A central spine connects all parts of the Wellness Centre, with a boulevard and a central water feature surrounded by palm trees. This design offers guests a serene view of the sea, providing a moment of relaxation. The Retreat also features a specialty seafood restaurant, offering fresh catches from local fishermen and herbs grown on-site, promoting wellness and sustainability.

Beach cabanas are arranged in clusters, each featuring a private plunge pool and outdoor deck, offering luxury and privacy. These cabanas harmonise with nature, creating a beautiful setting for guests. Additionally, overwater villas provide breathtaking ocean views, with private decks, fully stocked kitchens, and private pools that lead into the sea. This Retreat offers a perfect escape for relaxation and an unforgettable vacation experience.



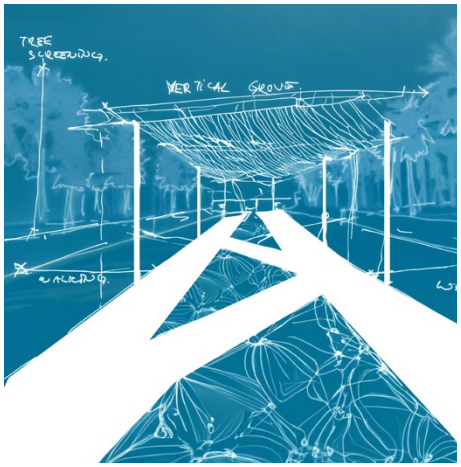
CAD plans co-produced by the author for Baca Architects

Concept Development

During the concept stage of this project, we collaborated with the client to formulate a clear project brief, which was achieved by meticulously collecting data from the hotel operator. This data informed the Gross Floor Area (GFA) requirements for the spa, specialty restaurant, and private lodges, establishing the foundation for the project.

A critical aspect of my role was the constraints analysis, which enabled us to identify key design parameters. This encompassed considerations such as access, environmental factors like wind and solar gain, and ensuring privacy from the neighbouring hotel.

In the strategic site layout phase, I utilised bubble diagrams to inform the access and movement narratives for the different user scenarios. This step allowed us to understand how the key assets interconnected on the site to optimise functionality.



(bottom right) image produced by the author for Baca Architects, (top, bottom left and center) images produced by contractor visualisers

Furthermore, I played a pivotal role in the development feasibility study, determining the plausible quantum of development based on the initial GFA requirements. This was crucial for client approval and marked the transition to the next project stage.

Masterplan Development

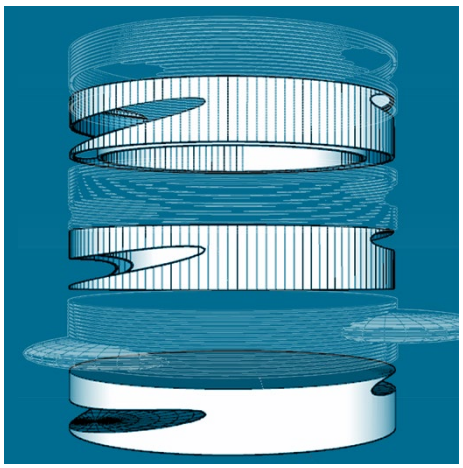
I made another valuable contribution to the project by helping the team with the development of the masterplan design. This involved integrating feedback from the client, the creative director, and the interior designers, and subsequently drafting the planning drawings.

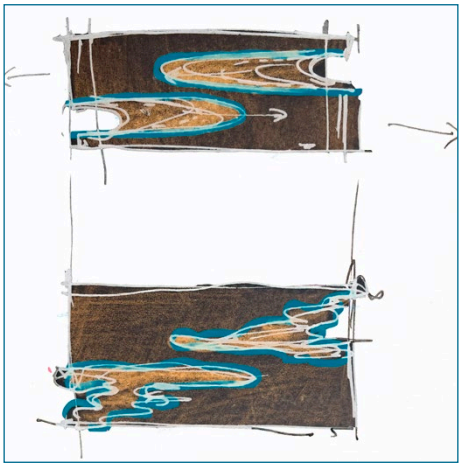
CAD plans co-produced by the author for Baca Architects

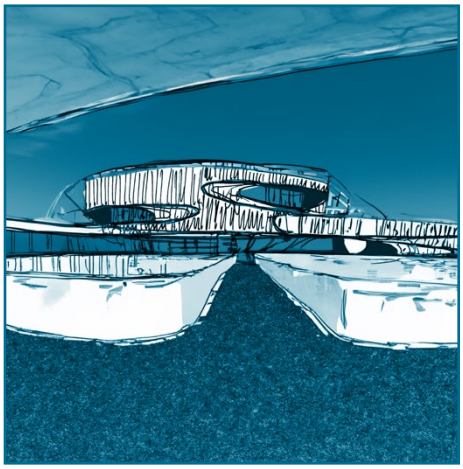
Design Development

In the design development stage of the project, my role was pivotal in advancing the concept and key design elements that define the final scheme. Collaborating closely with interior architects Wells International, we delved together into the placemaking exercise. The conceptual design language of the ring emerged from many insightful conversations between Baca and Wells, and my role was to further refine this concept through spatial explorations in both 2 and 3 dimensions.

I also played a significant role in advancing the design of the Spa Building's facade. Testing various materials and patterns led to a breakthrough moment when we introduced environmentally-driven cut-outs on the facade, simultaneously enhancing the building's sustainability and creating a compelling design language.





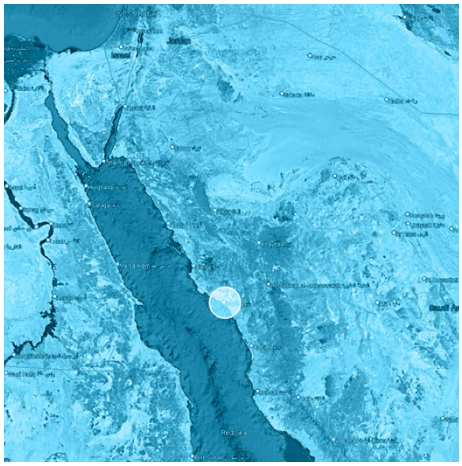


(bottom row) images produced by the author for Baca Architects, (top) images produced by contractor visualisers

Furthermore, considering the scorching sun in Saudi Arabia, the design of the canopy was crucial. I contributed to designing a solution that not only shielded the users from the harsh climate but also ensured an aesthetic harmony between the different elements of the site, delivering a comprehensive and visually striking architectural statement.

CGI Curation

Overseeing the communication with the CGI Team enabled me to further assist the Baca team on this project. Furthermore, I contributed to composing the brief for the visualisation team and provided feedback whenever draft work was submitted.



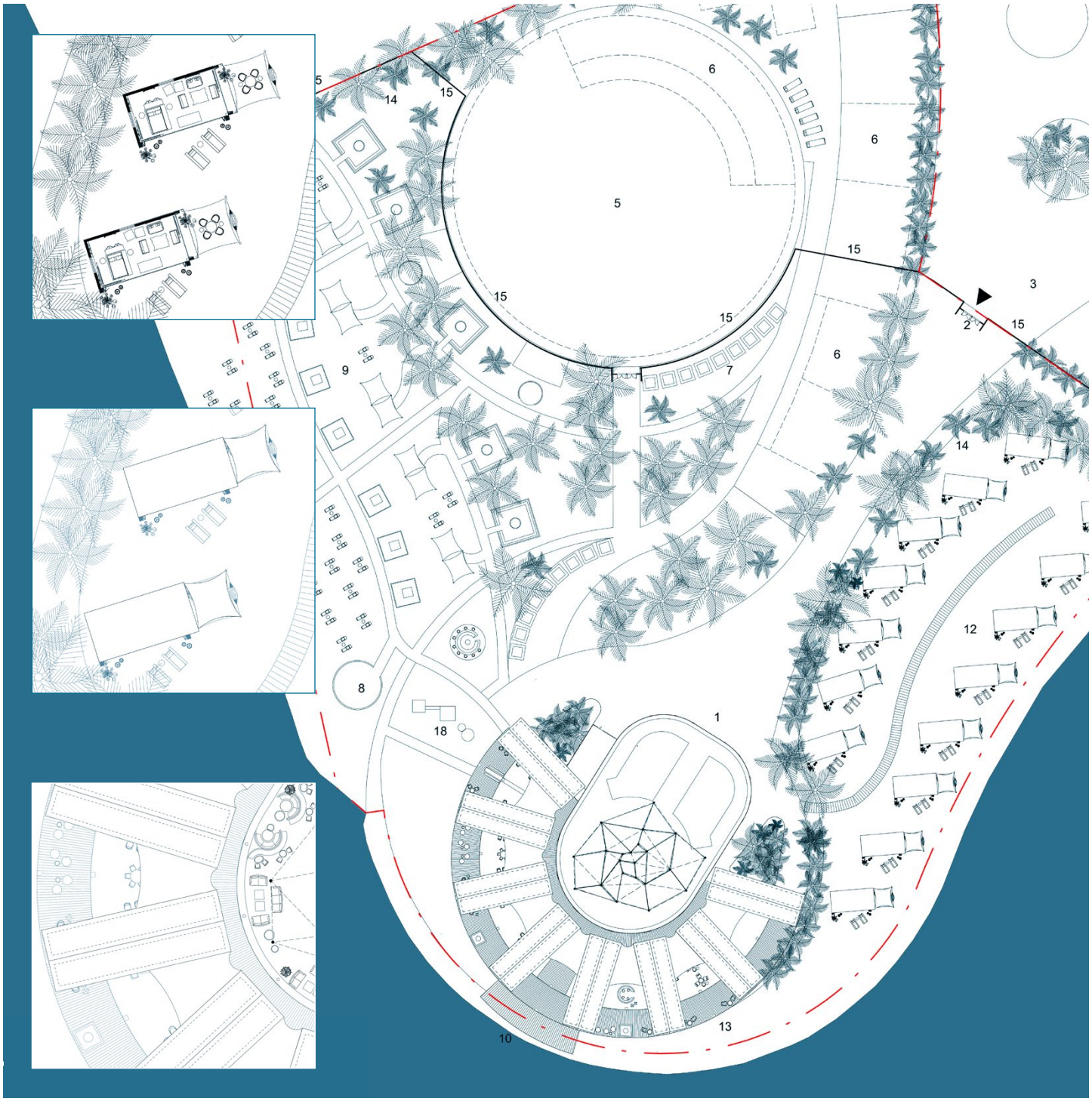
The Beach Escape

Project in collaboration with BACA Architects + Wells International
Project typology - Leisure & Hospitality - Restaurant and Beach Leisure Development
Project stage - SCE stage 1-2 (equivalent to LP 1-4)
Project involvement - concept design/ design development/ masterplanning/ visualisation
Project location - Yanbu, Saudi Arabia
Project scale - 4500sqm

The Beach Escape project, located in Yanbu, Saudi Arabia, is a holiday destination that includes a Beach Club, private beach cabanas, an event space, and beach amenities. Inspired by historical roadside inns, it aims to provide a welcoming environment for guests to relax and enjoy their vacation. Guests can access the site by road or a dedicated jetty connected to the clubhouse.

The design of the beach area combines rustic and contemporary elements, featuring arches, natural light, and a mix of furnishings. The clubhouse has abundant natural light and opens up to the beach, offering shaded seating areas suitable for shisha lounges. The terrace provides a clear view of the beach, making it an ideal space for social gatherings and relaxation with friends or family. The use of natural materials like wood, rattan, and woven textures adds to the overall aesthetic.

Visitors have various options for their beach experience, including private beach areas with cabanas and sunbeds, as well as a public beach for a more social experience with sunbeds and sunken seats. Additionally, there are plans for a second-phase event space with ample seating and amenities to enhance the typical beach experience.



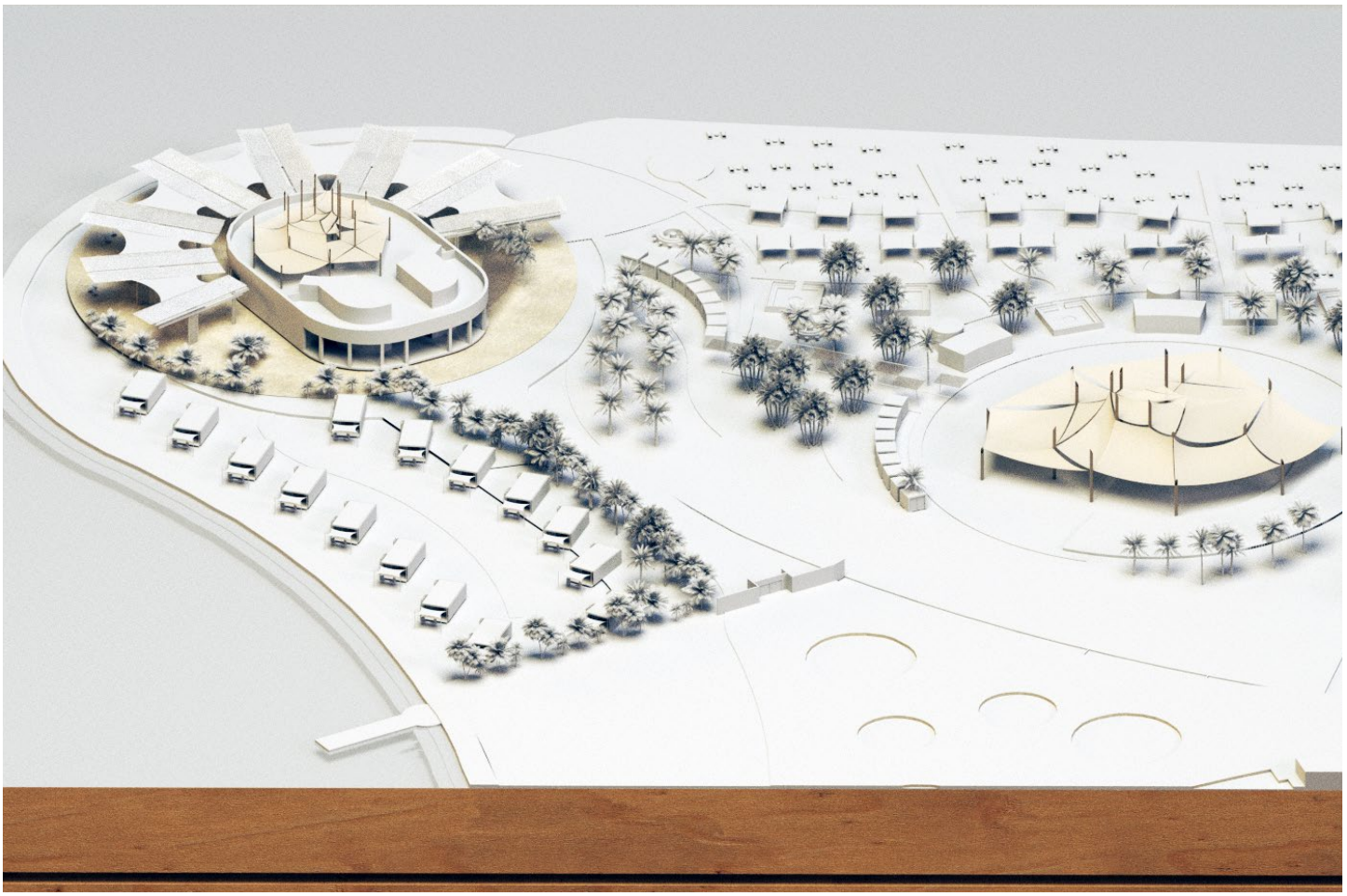
CAD plans produced by the author for Baca Architects

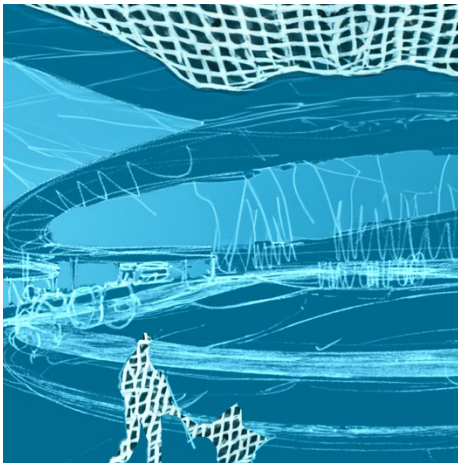
Concept Development

During the concept stage of this project, we collaborated with the client to formulate a clear project brief, which was achieved by meticulously collecting data from the hotel operator. This data informed the Gross Floor Area (GFA) requirements for the beach club, event space, beach infrastructure, and private lodges, establishing the foundation for the project.

A critical aspect of my role was the constraints analysis, which enabled us to identify key design parameters. This encompassed considerations such as access, environmental factors like wind and solar gain, and ensuring privacy from the neighbouring public beach.

In the strategic site layout phase, I utilised bubble diagrams to inform the access and movement narratives for the different user scenarios. This step allowed us to understand how the key assets interconnected on the site to optimise functionality.



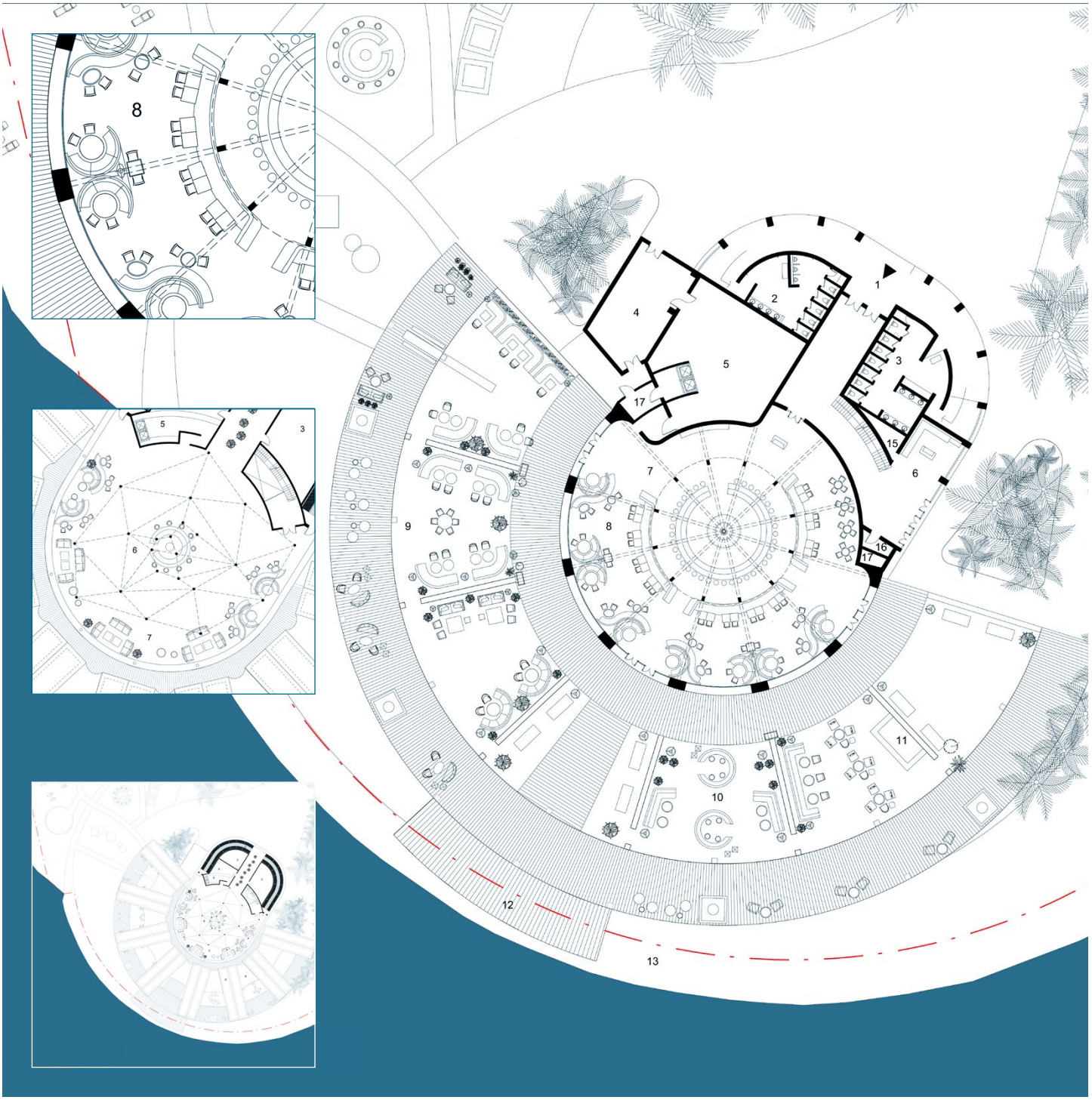


(top and bottom right) images produced by the author for Baca Architects, (bottom left and center) images produced by contractor visualisers

Furthermore, I played a pivotal role in the feasibility study, determining the plausible quantum of development based on the initial GFA requirements. This was crucial for client approval and marked the transition to the next project stage.

Masterplan Development

I made another valuable contribution to the project by helping the team with the development of the masterplan design. This involved integrating feedback from the client, the creative director, and the interior designers, and subsequently drafting the planning drawings.



CAD plans produced by the author for Baca Architects

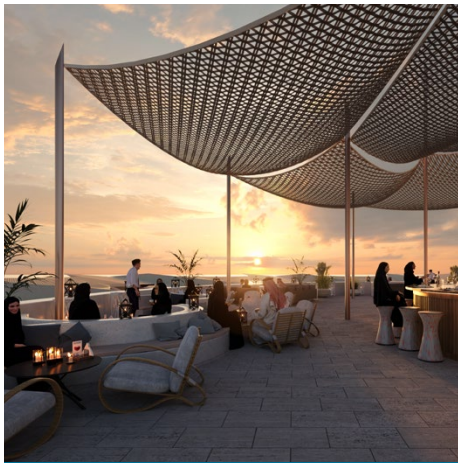
Design Development

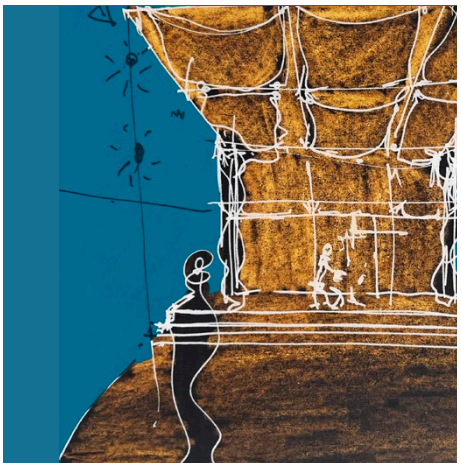
In the design development stage of the project, my role was pivotal in advancing the concept and key design elements that define the final scheme. Collaborating closely with interior architects Wells International, we delved together into the placemaking exercise.

The conceptual design language of the project emerged from many insightful conversations between Baca and Wells, and my role was to further refine this concept through spatial explorations in both 2 and 3 dimensions.

I also played a significant role in advancing the design of the Beach Club's visual language. Testing various materials and patterns led to a breakthrough moment when we introduced the ground level and roof top canopies for the club which enhanced the building's sustainability and created a compelling design language.

Furthermore, considering the scorching sun in Saudi Arabia, the design of the canopy was crucial. I contributed to





(bottom right) image produced by the author for Baca Architects, (top, bottom left and center) images produced by contractor visualisers

designing a solution that not only shielded the users from the harsh climate but also ensured an aesthetic harmony between the different elements of the site, delivering a comprehensive and visually striking architectural statement.

CGI Curation

Overseeing the communication with the CGI Team enabled me to further assist the Baca team on this project. Furthermore, I contributed to composing the brief for the visualisation team and provided feedback whenever draft work was submitted.

Hollybush Lakes

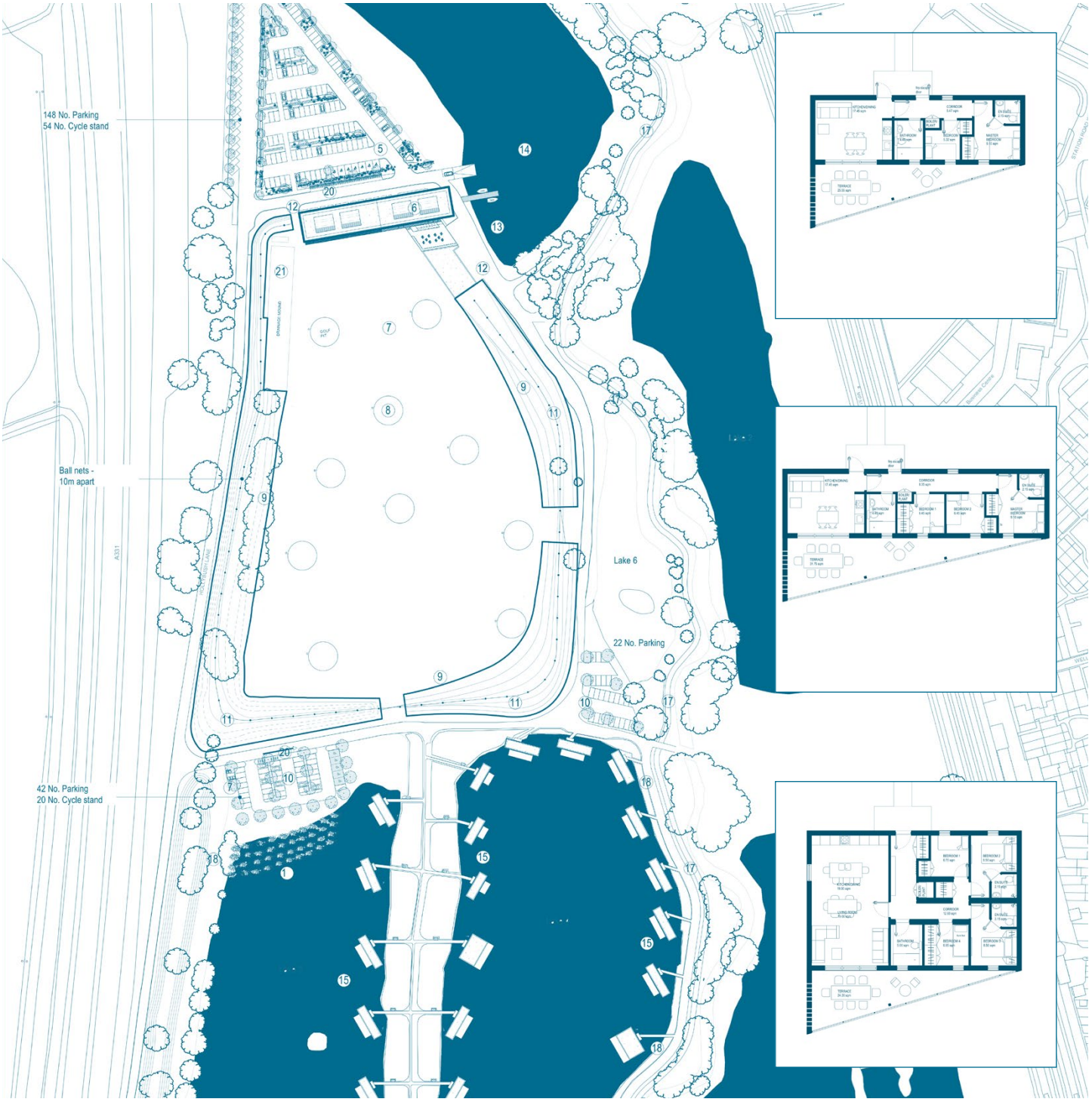
Project in collaboration with BACA Architects
Project typology - Leisure & Hospitality - Sports Centre
Project stage - RIBA stage 3-4 (equivalent to HOAI LP 4-5)
Project involvement - project lead/ design development/ preparation of planning documents
Project location - Hollybush Lakes, Aldershot, Uk
Project scale - 16 hectares

In the serene backdrop of Hollybush Lake, our architectural endeavor seeks to create a distinctive visitor experience that seamlessly integrates with the natural beauty of the lakeside surroundings. The site, nestled amidst six man-made lakes, was once a part of the Blackwater Valley Footpath, its green spaces underutilized and inaccessible to the public. Our vision is to breathe new life into this idyllic setting, with a focus on outdoor sports that not only restore the site's former commercial uses to their natural state but also enhance its ecological value for the public's enjoyment.

Our proposal was driven by the desire to restore the site's former commercial uses back to nature, making it accessible for public enjoyment and ecological enhancement. The primary objective was to reintroduce the Blackwater footpath for public use, encouraging local residents and visitors to reconnect with the stunning lakeside environment through improved connectivity.

Our vision materialized in the form of a Sports Centre that seamlessly blends into the lakeside landscape. It incorporates TopGolf and aqua sports facilities, along with associated parking and 20 floating lodges, all spread across the expansive 15.65-hectare site. The design of the Sports Centre was meticulously crafted to maintain aesthetic harmony with the approved scheme, keeping consistent in size, scale, and choice of materials.

One notable aspect of the project involved incorporating the golf driving range facilities within the building, a strategic decision made to ensure the project's long-term economic sustainability, following insights from a comprehensive Business Case analysis. The Hollybush Lakes Project is poised to provide a one-of-a-kind visitor experience that celebrates the great outdoors and complements the natural beauty of its lakeside setting.

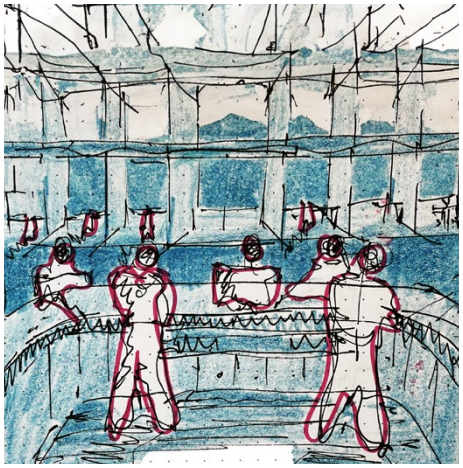


CAD plans produced by the author for Baca Architects

Project Lead

As project lead, my involvement was pivotal in ensuring a seamless and effective collaboration with various consultants. To begin, I facilitated the consultant appointment process, meticulously evaluating their suitability based on planners' feedback and project requirements. I identified the need for updated surveys and engaged with potential consultants for planning, lighting, flooding, drainage, noise, transport, ecology, and BREEAM assessments. I presented comprehensive reports to the client, assisting them in the consultant appointment process.

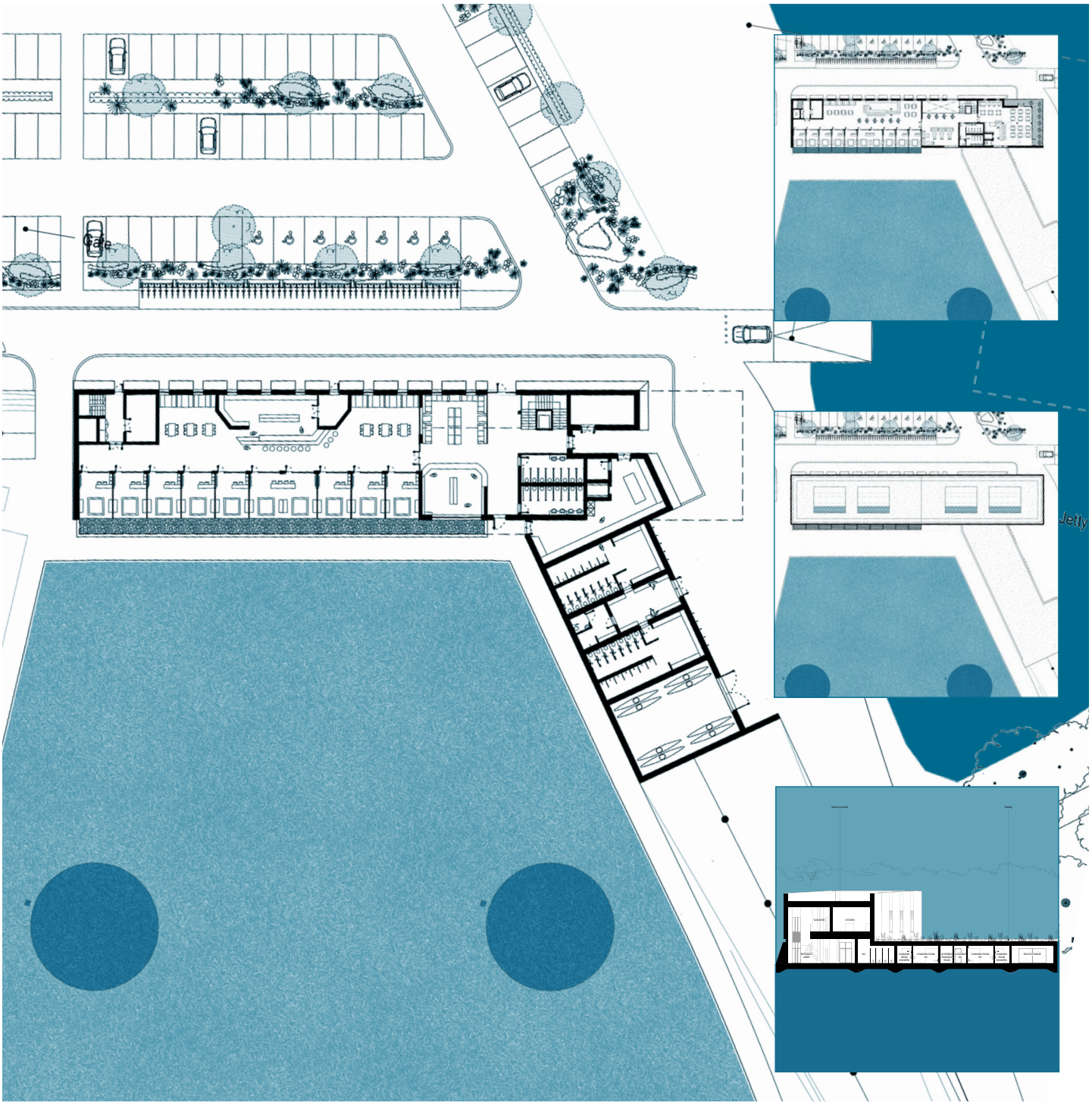
Once the consultants were appointed, I assumed the role of consultant oversight. I organized and led regular design meetings, fostering collaboration between our Baca team and the consultants. I monitored their progress, ensuring they met project milestones and timelines. My responsibility also extended to maintaining strong communication between the consultants, fostering a harmonious working environment conducive to successful project development



Images produced by the author for Baca Architects

Design Development

During the design development stage of this project, my role was instrumental in adapting the initial design to align with the revised project brief. This involved transforming the original aqua sports-focused concept into a golf driving range. I worked closely with our TopGolf consultant, ensuring that the design changes seamlessly integrated the new program.
Furthermore, I played a pivotal role in incorporating valuable feedback from various consultants as the project progressed. This involved meticulously implementing necessary revisions and adjustments as identified through ongoing surveys and analysis.

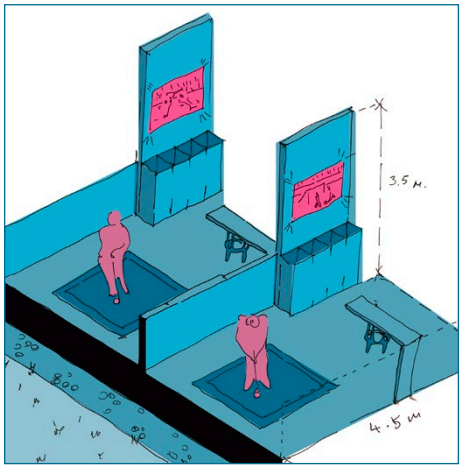


CAD plans produced by the author for Baca Architects

Preparation of Planning Documents

I played a pivotal role in the preparation of planning documents, ensuring a seamless path to project approval. I scoped, produced, and maintained the planning drawings, meticulously preparing each item for submission and approval. Additionally, I took charge of the Design and Access Statement, a comprehensive document that conveyed the design's development, including written and visual descriptions. This statement presented design updates, planning parameters, and the final scheme's layout and aesthetics.

Furthermore, I was responsible for generating the CGI renders for the planning documents and public consultation. While the external envelope had been defined in a previous submission, I innovatively designed the interior of the building to align with the project's program and concept. My dedication to the planning process ensured a cohesive and compelling presentation that greatly contributed to the project's success.



Images produced by the author for Baca Architects

Project Visualisation

Another essential task was to conceptualise and visualise the interior and exterior aesthetics of the structure. To bring these concepts to life, I employed my expertise in 3D modelling and visualisation, utilizing V-ray to render intricate and lifelike models, which were originally built in SketchUp. My aim was to encapsulate the dynamic essence of a bustling yet refined entertainment centre. This was achieved by juxtaposing sleek and elegant interior decor with the raw, industrial appeal of exposed services and vivid neon lights. My comprehensive involvement ensured that the project seamlessly integrated cutting-edge design and functionality, resulting in an innovative and visually captivating entertainment destination.

The Skylark Prototype

Project in collaboration with BACA Architects + h-o-n-e-y
Project typology - Leisure & Hospitality - POD prototype
Project stage - RIBA stage 1-6 (equivalent to LP 1-8)
Project involvement - concept design/ design development/ detailed design/ marketing
Project location - n/a
Project scale - n/a

The Skylark is the first product launched by the Baca-founded Outdoor Sanctuaries company, targeting the European leisure parks market. It consists of tessellating treehouses designed for glamping. These eco-cabins are self-supporting and designed to minimize ground loading. They can be arranged in clusters of singular, dual, and triple pods.

Each individual unit is self-contained, featuring a lounge and kitchenette on the ground floor, and a bedroom with an ensuite bathroom on the first floor. The single pod has a unique design with a large round window in the lounge and a large vertical slot window in the master bedroom for night sky viewing. The two and three-bed configurations have separate lounges and kitchens, as well as roll-top free-standing baths with scenic views.

The three-pod series can accommodate 6-8 people across three levels with staircases leading up into the treetops. There's also a magical second-floor crow's nest and a star gazing terrace above the middle pod.

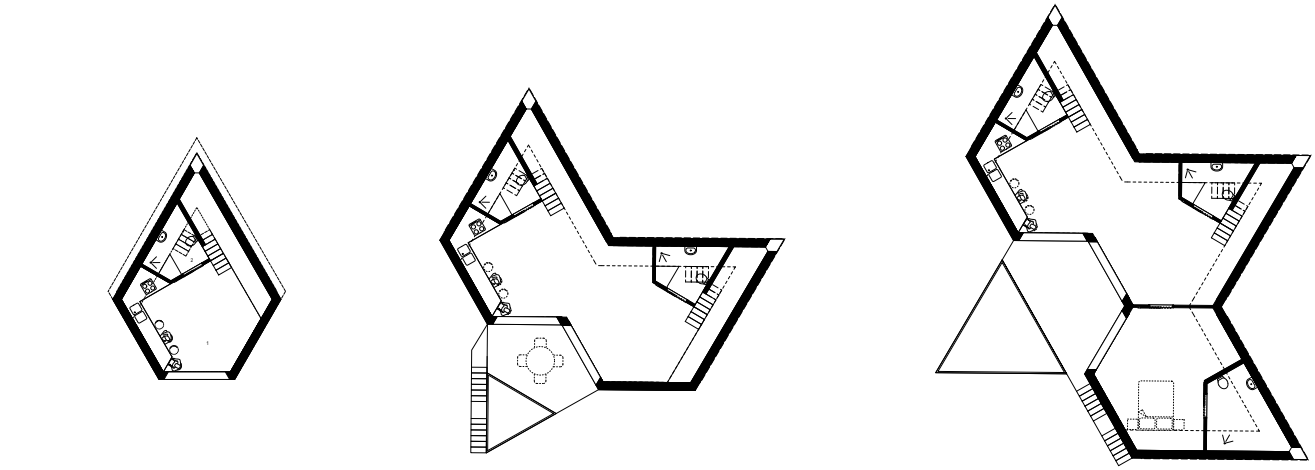
The design focuses on minimizing energy use, with excellent thermal insulation exceeding industry standards and mini-air source heat pumps for heating and cooling. Freshwater and drainage systems can be connected to existing park infrastructure.

The enclosure is prefabricated, and CNC machines craft self-locating components for easy assembly. The facade finishes are adaptable to suit the surroundings, and interior furnishings are sourced from local suppliers.

Image produced by the author for Baca Architects

Concept Design

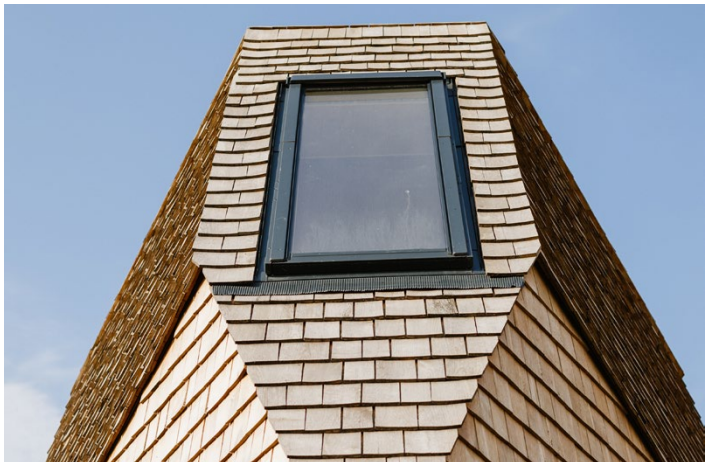
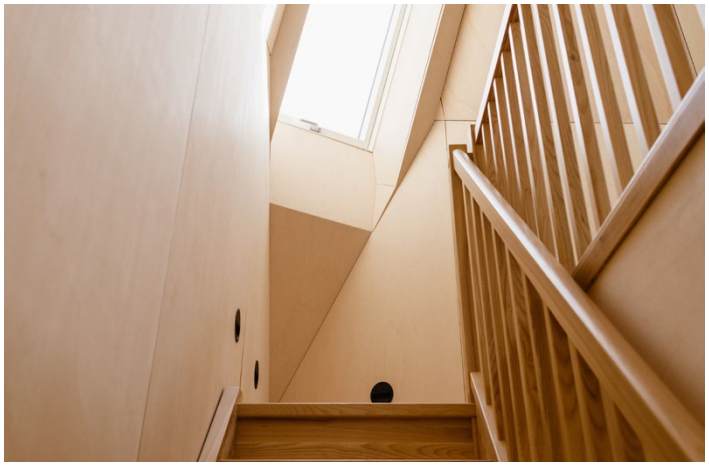
My involvement in project began when, as a junior architectural assistant at Baca Architects, I was tasked to design a treehouse for one of the masteplanning projects that we undertook. I then saw the opportunity to propose a modular tree house concept that could adapt in different scenarios and could serve from 1 up to 3 families. This modularity would help with both the financial viability of the proposal as well as ensuring environmental sustainability by allowing the modules to be reused in many different scenarios.



Images produced by the author for Baca Architects

Design Development

After defining the brief for the tree houses and creating initial layouts, the creative director recognized the scheme's potential to evolve beyond just an additional hospitality offering within a larger masterplan. This led us to embark on the journey of developing a prototype for the treehouse, which could serve as a foundation for an off-the-shelf product. In this endeavor, I took charge of the design while working under the director's guidance.



Images showing the built prototype

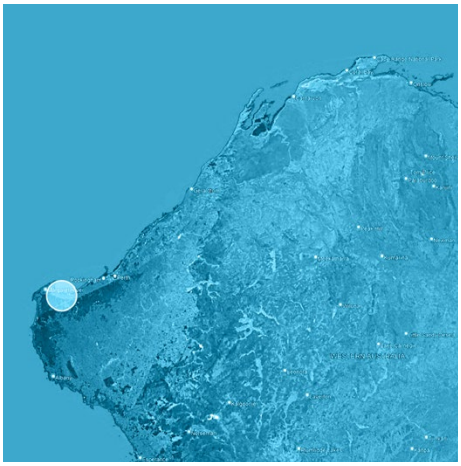
Detailed Design

The subsequent phase in the Sylark project involved refining the design to create a more compact and economically viable product. Collaborating with h-o-n-e-y architects, we developed the tree house design and progressed to constructing the initial prototype. I was responsible for testing out various architectural moments in three dimensions and establishing the interior design language of the pods.

Images produced by the author for Baca Architects

Marketing Materials

Another important aspect of my involvement in this project was the creating and curation of the marketing brochure and its contents. This helped the practice reach out to potential clients and investors which was pivotal in assuring the success of the project. The brochure contained details about the possible layouts and configurations of the pods, as well as external and internal options – the goal was to create an architectural product that not only be easily assembled but also highly customisable.

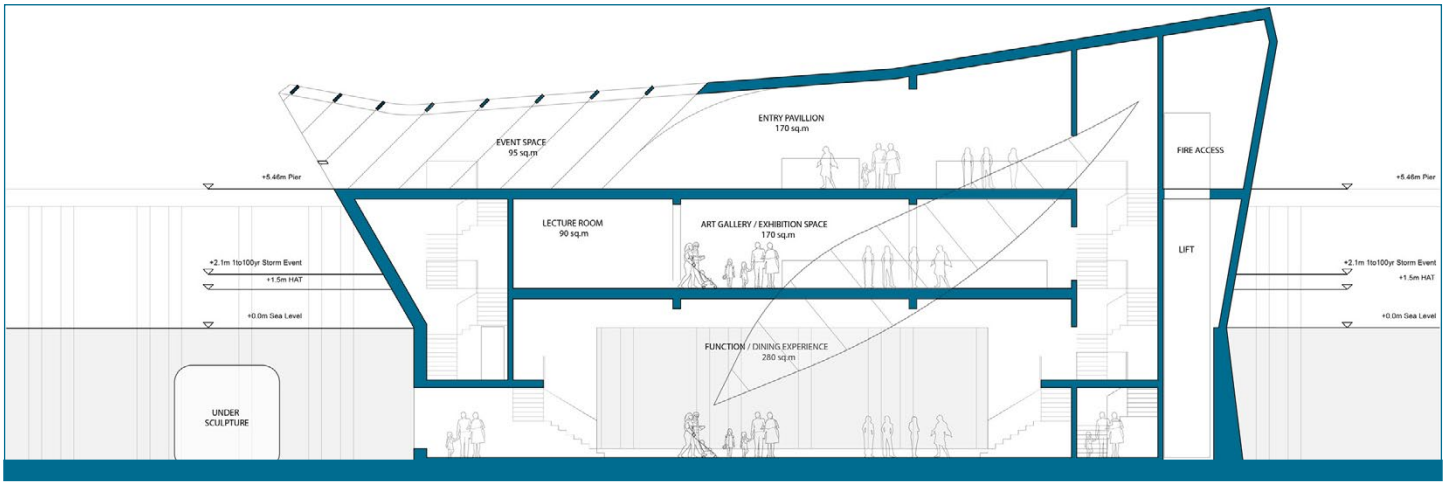


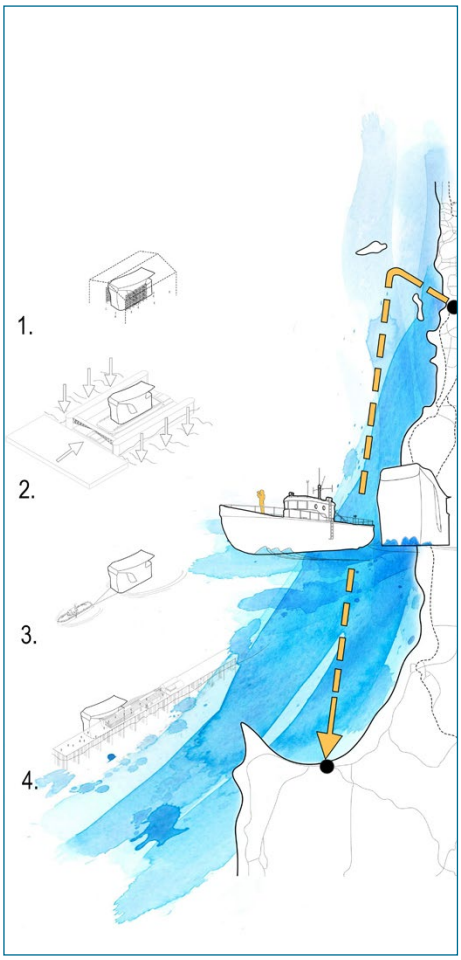
Australian Underwater Discovery Centre

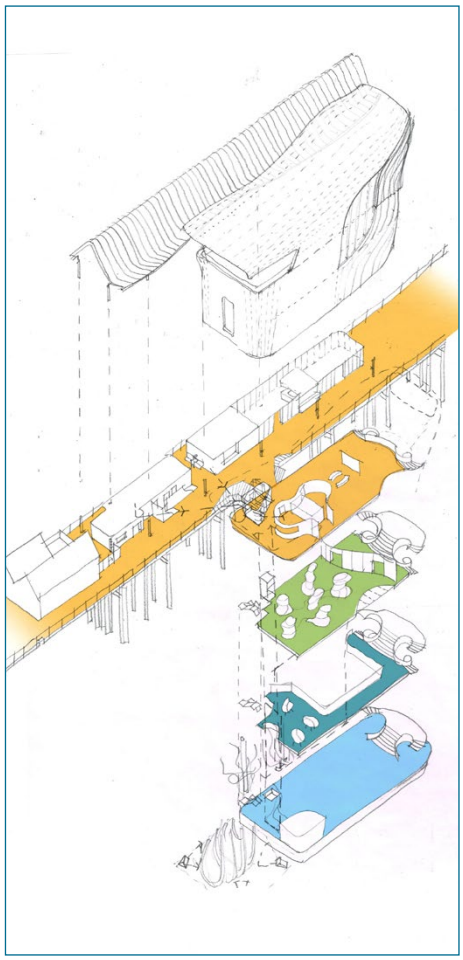
Project in collaboration with BACA Architects + CoreMarine
Project typology - Leisure & Hospitality - Marine Observatory
Project stage - AIA stage 1-3 (equivalent to LP 1-4)
Project involvement - concept design/ design development/ planning drawings
Project location - Busselton, Australia
Project scale - 900 sqm

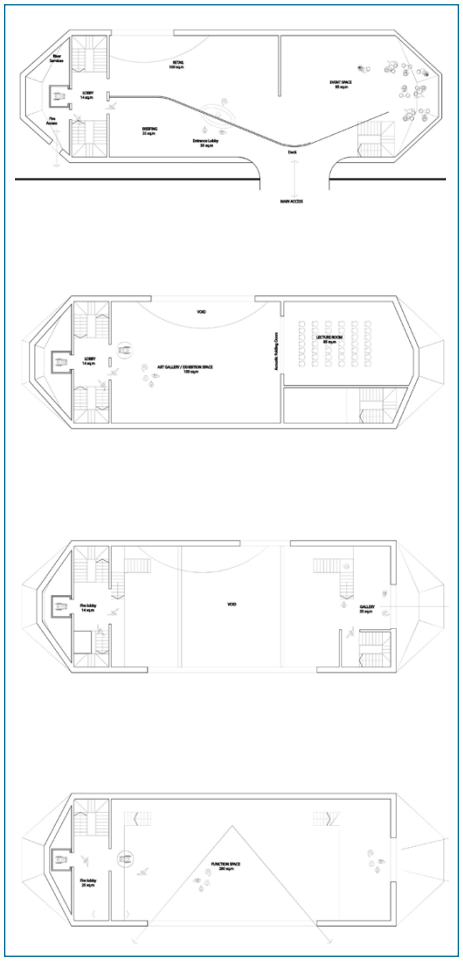
Located at the end of Busselton Jetty, a picturesque 2-hour drive south of Perth in Western Australia, this project seeks to establish Australia's most extensive natural marine observatory, situated 2 kilometres out at sea.

The architectural approach embraces the entire visitor experience, curating a seamless journey from their moment of arrival. Guests leave their vehicles in a park adorned with captivating rain gardens, setting the stage for the extraordinary adventure that awaits. Barry House, Chairman of Busselton Jetty, emphasizes the authenticity of the AUDC, where visitors find themselves immersed in a marine wonderland, with fish curiously observing them from the depths. This transformative project, enriched with underwater dining, marine sculptures, and captivating art installations, promises to enhance the 155-year-old Busselton Jetty experience.









Images produced by the author for Baca Architects

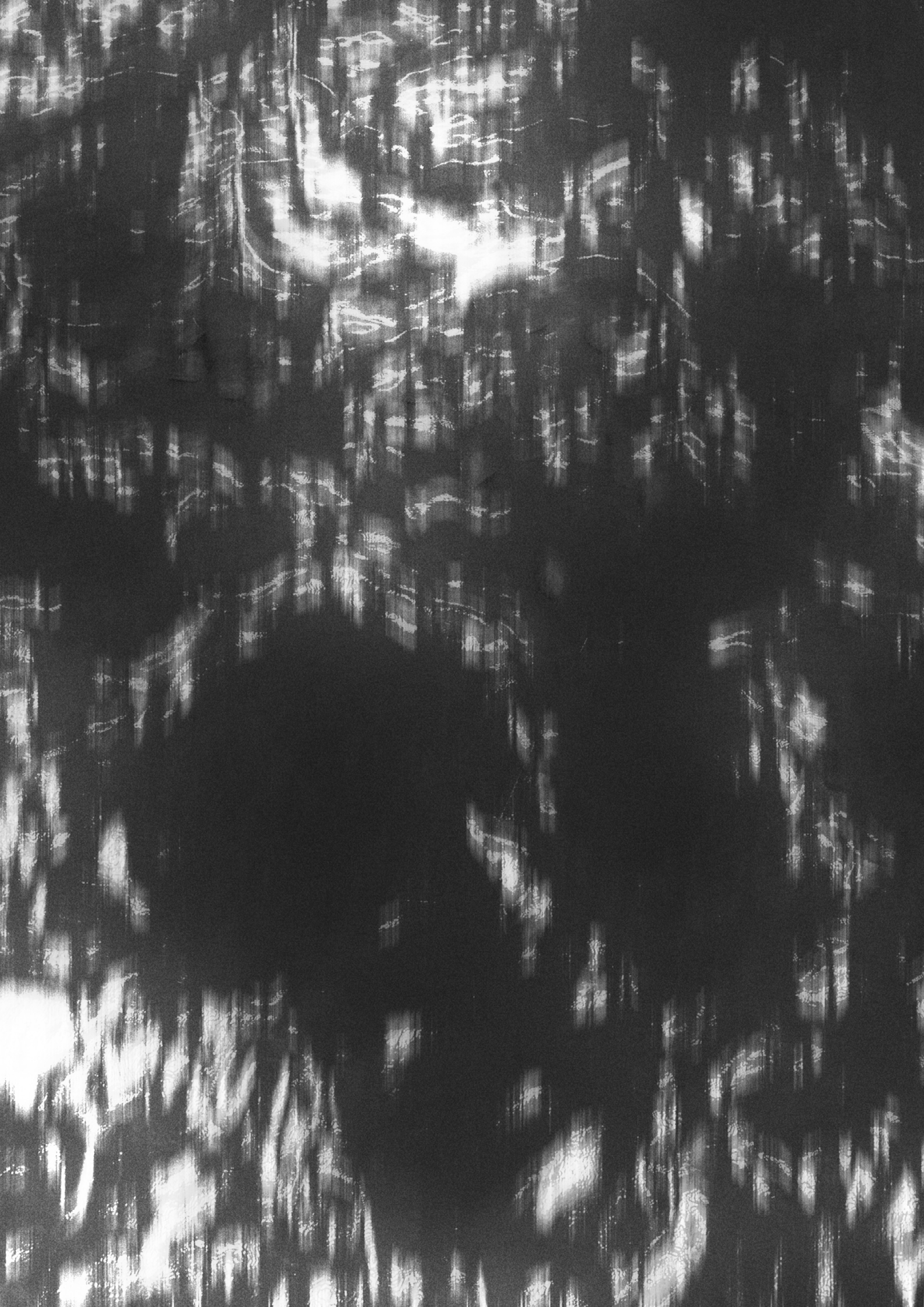
Concept and Design Development

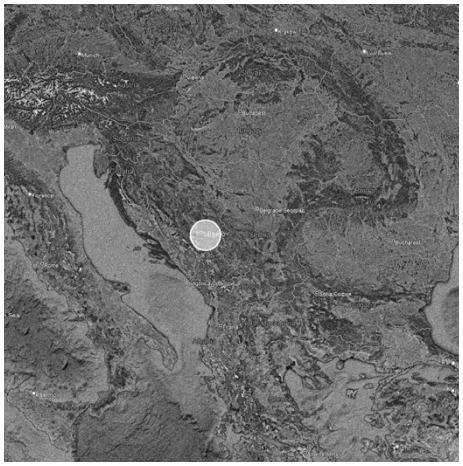
My integral role in the project commenced at the very outset, in the concept stage. I played a vital part in shaping the project's vision, actively contributing to the development of one of the three design alternatives presented to the public consultation board. Following the public's enthusiastic selection of the 'whale' concept, my involvement expanded into a multifaceted role. I took charge of developing the design in both 2D and 3D, bringing the concept to life visually. My contribution extended to conducting visual tests for the project, ensuring its visual appeal and feasibility. As the project progressed, I collaborated with Baca to refine and elevate the facade design, marking a pivotal phase of my involvement in this unique architectural venture.

(bottom right) image produced by the author for Baca Architects, (top, bottom left and center) images produced by contractor visualisers

Planning Drawings

In my role as an architectural assistant on this recent project, I played a pivotal role in preparing essential planning documents. My primary responsibility involved collaborating closely with the CoreMarine team, who provided invaluable insights into the engineering feasibility of the project. With their support, I was tasked with drafting the 2D drawings required for the planning submission. This meticulous preparation ensured that the project met all regulatory requirements and successfully received approval from the council. This approval marked a significant milestone, allowing the project to progress to the detailed design stage, which was subsequently handled by a local architect. My contributions in this phase were instrumental in laying the foundation for the project's eventual success.





Subterranean Insurgency: Sarajevo

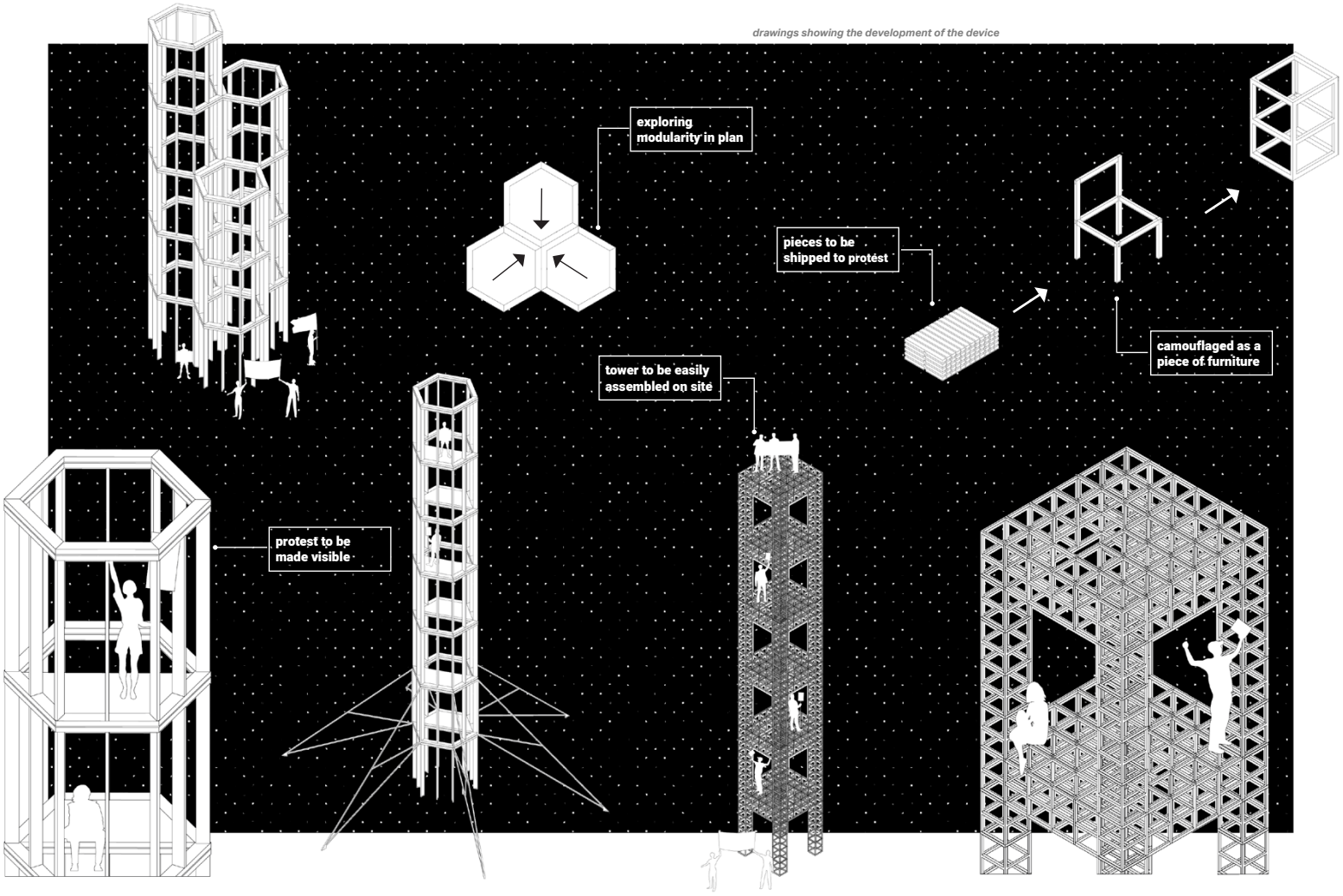
An Exploration Into How Public Space Can Act as Political Space For Democratic Action

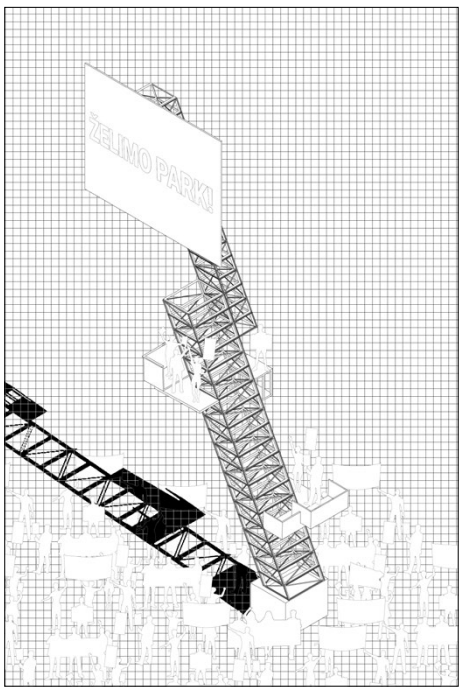
Project as part of the M.Arch SSOA unit Sarajevo - Resilient Futures
Project typology - Speculative
Project location - Sarajevo, Bosnia and Herzegovina

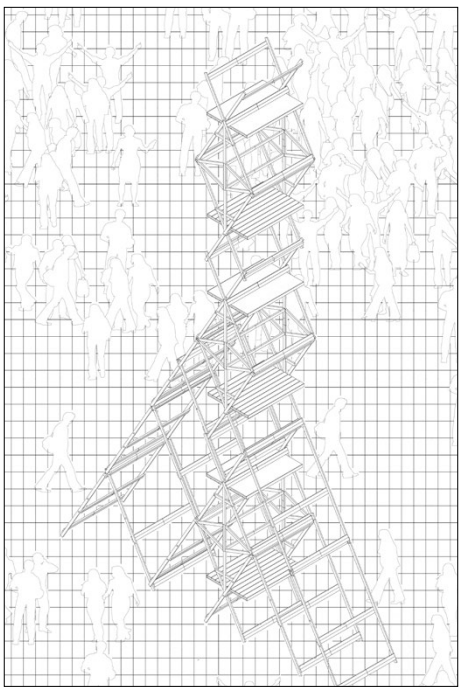
Sarajevo is presently facing a political and climate crisis. Ethnic divisions threaten the city, while the effects of overurbanisation and unsustainable industries continue to harm its citizens. The places that could assist in resolving such emergencies are already dwindling as a result of recent urban developments that prioritise private enterprise over regenerative public spaces. This project aims to contest these spaces by proposing a device that draws precedent from the spatial practices of recent global urban insurgencies. Through the lens of protesting, the scheme explores how public space can be transformed into political space for democratic action.

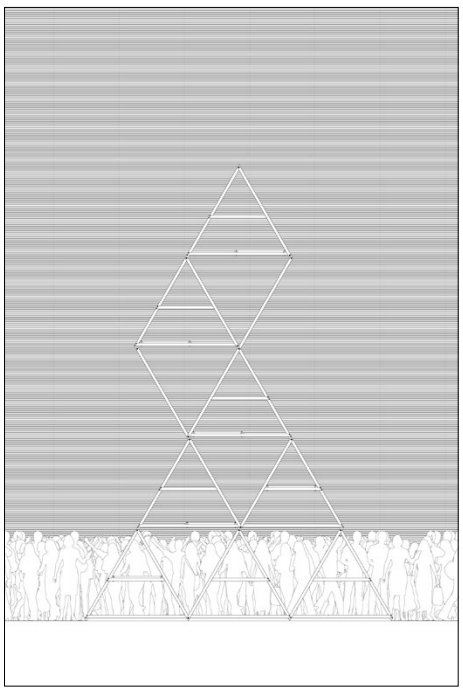
The project will seek to address Sarajevo's climate and political crises by imagining a future in which the three underground parking garages built beneath Stari Grad, Liberation Square, and Hastahana will be used for both flood storage and spaces for cultural and political encounter. Surface flooding in the city will have worsened over the coming decades, rendering the city's parking lots unusable. Furthermore, flooding from the Miljacka will be exacerbated, requiring the construction of an underground infrastructure connecting the city's flooded areas with the inner-city flood storages. The proposal will envision the upper levels of the car parks as places of public inhabitation structures that draw precent from autonomous formations of insurgent urbanism.

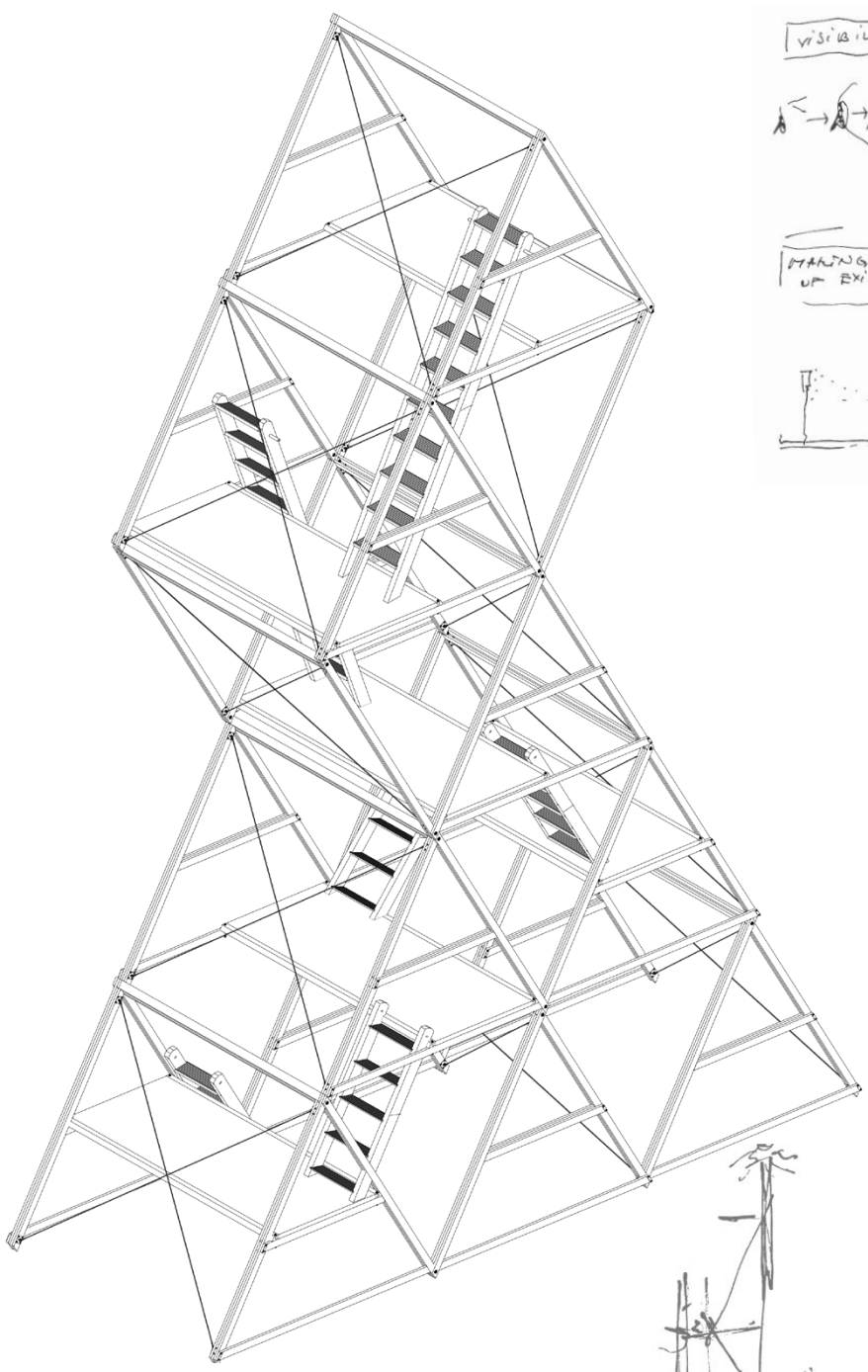
drawings showing the development of the device

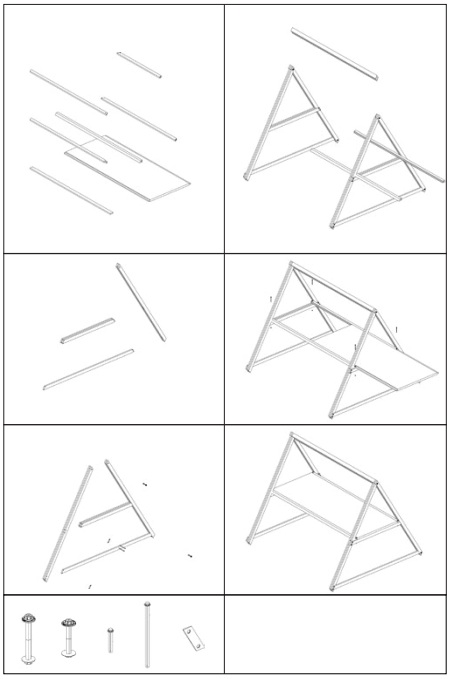


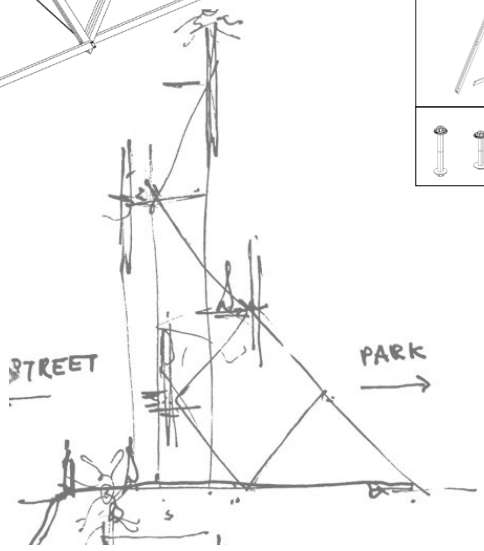




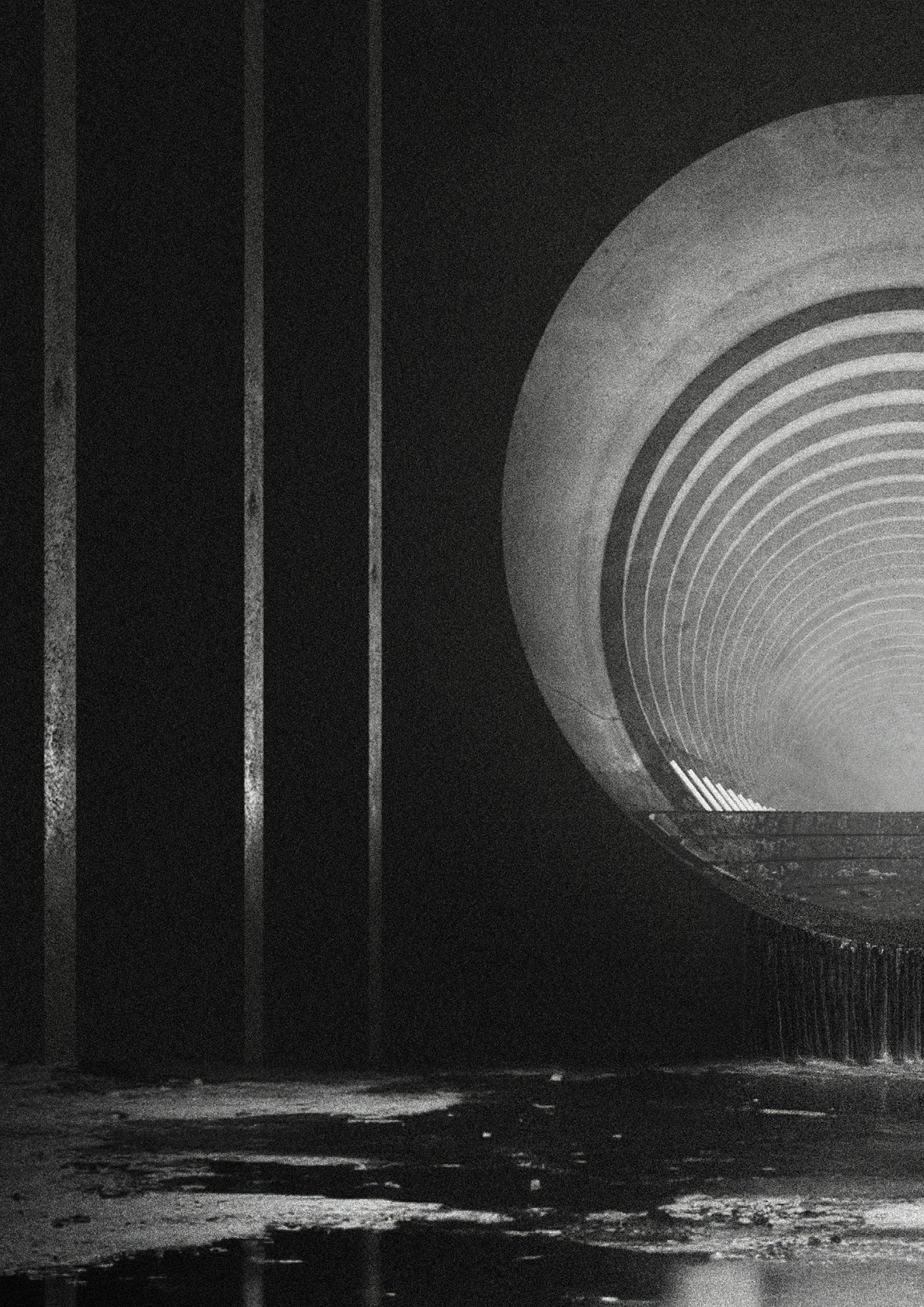








'...but with time, as the protests grew narrower, the insurgents had to grow taller. They had to be seen to remind Sarajevo that it needs democracy to be practiced.
/ the insurgents would build towers out of timber market stalls so the authorities would not suspect their transgressions – the light, agile, peaceful structures would be mantled and dismantled with ease. '



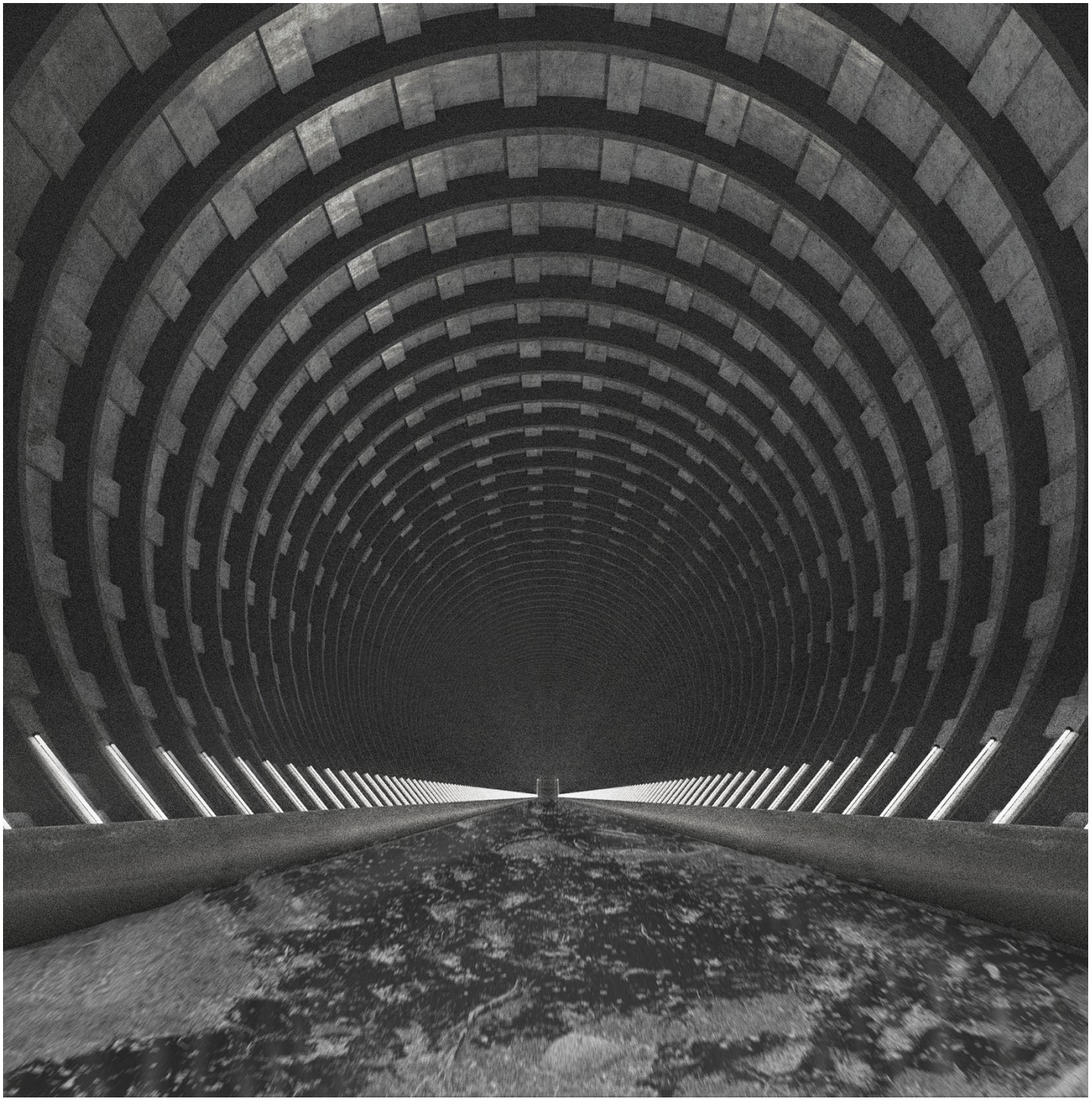


Image produced by the author for the Thesis Project

'Underneath Stari Grad, Liberation Square and Hastahana, flood alleviation tanks were built to retain up to 540 000 meter cubes of water from the Miljacka, connected to each other through a series of tunnels to avoid overflowing.

However, the danger of excess water from melting polar caps was not the only threat Sarajevo is facing. Climate change also threatens the city with hotter and drier summers, making potable and agricultural water scarce.'

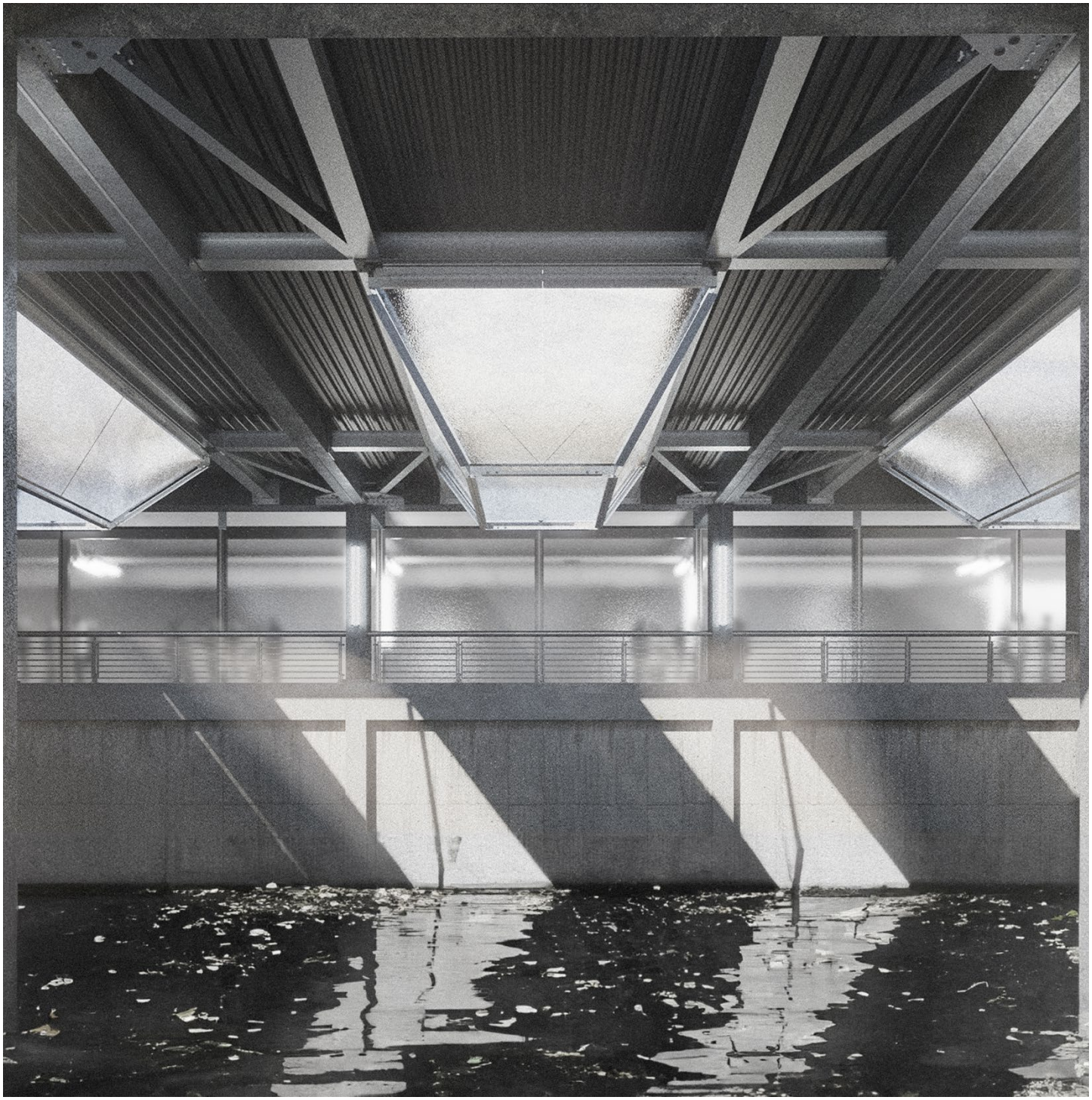
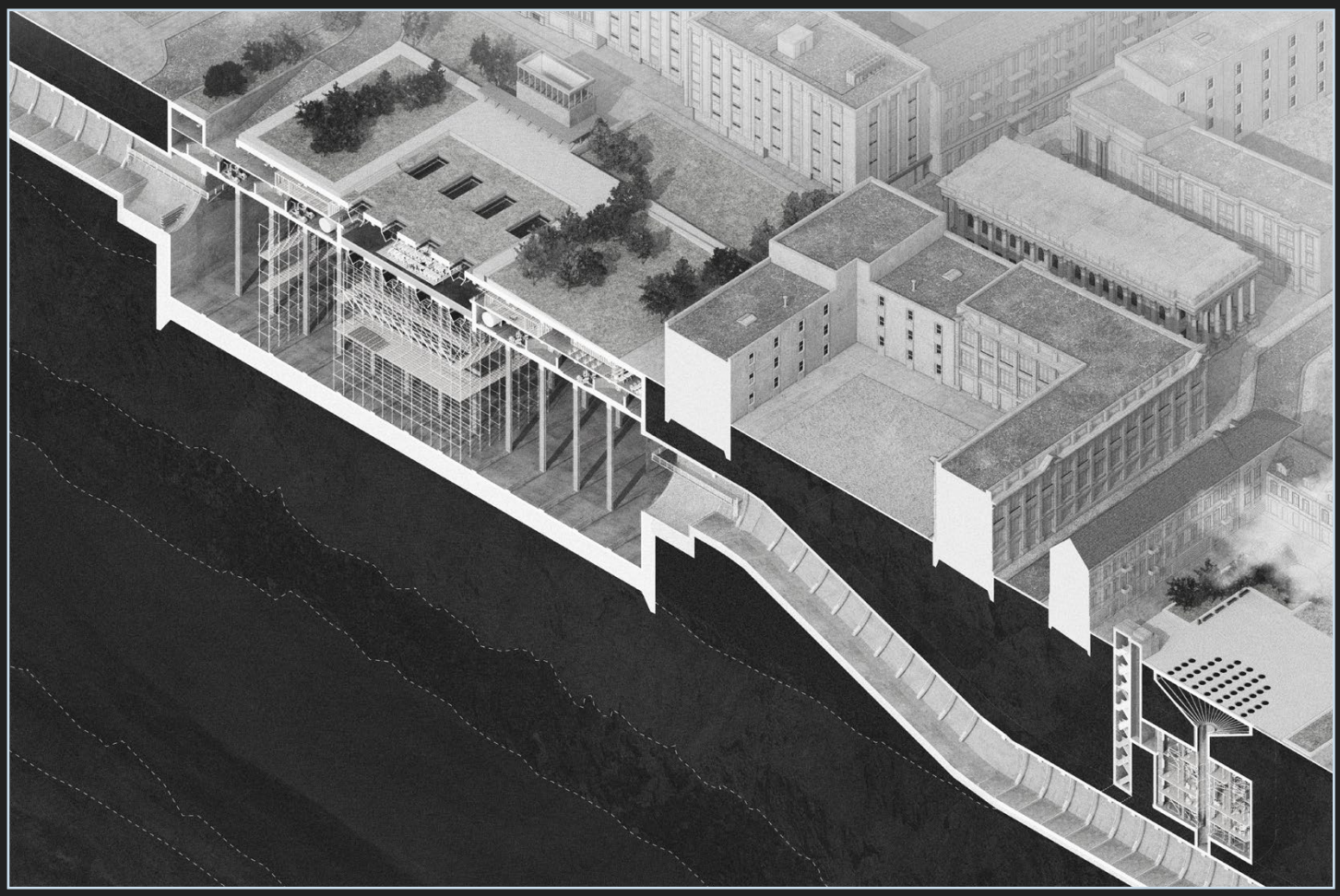


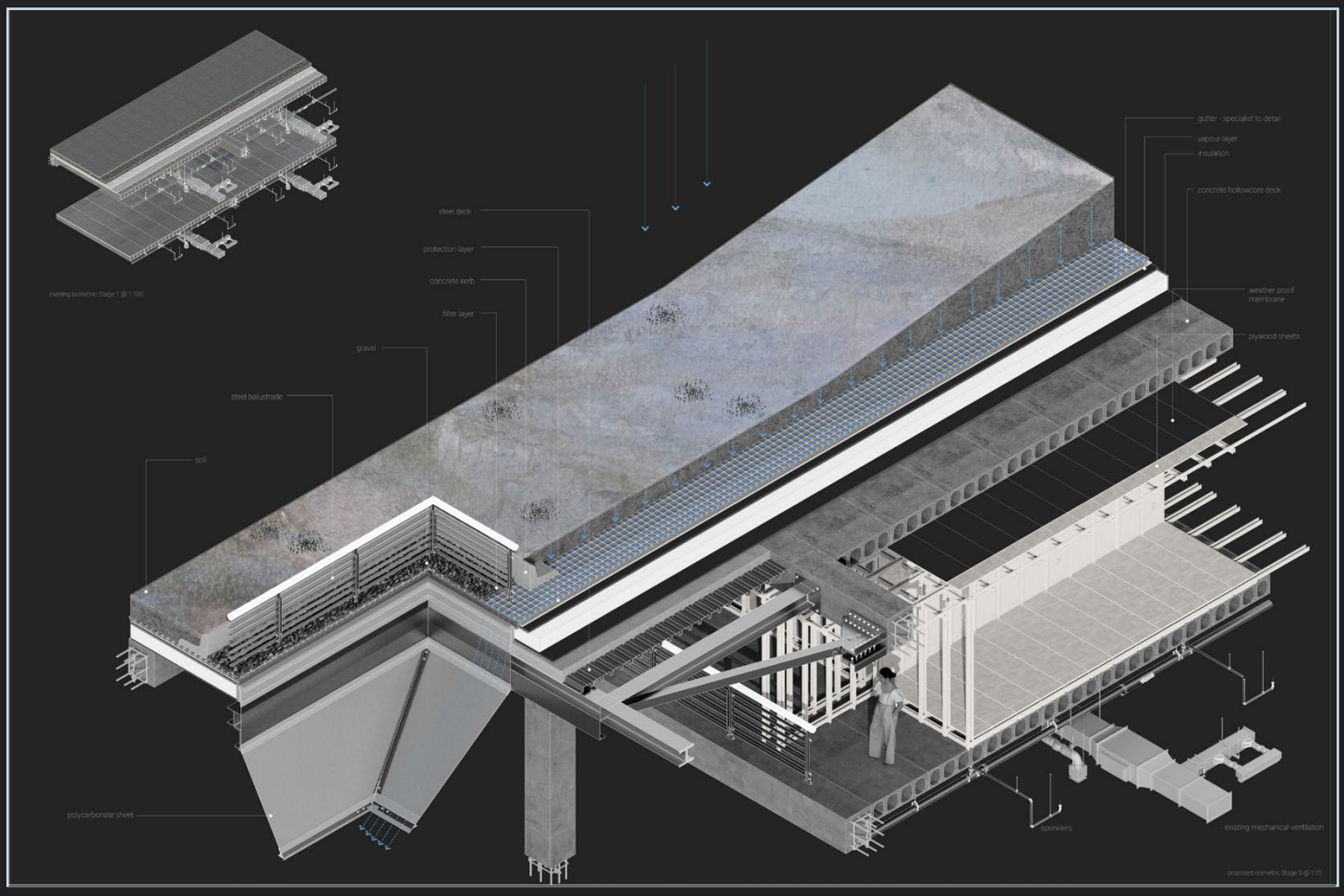
Image produced by the author for the Thesis Project

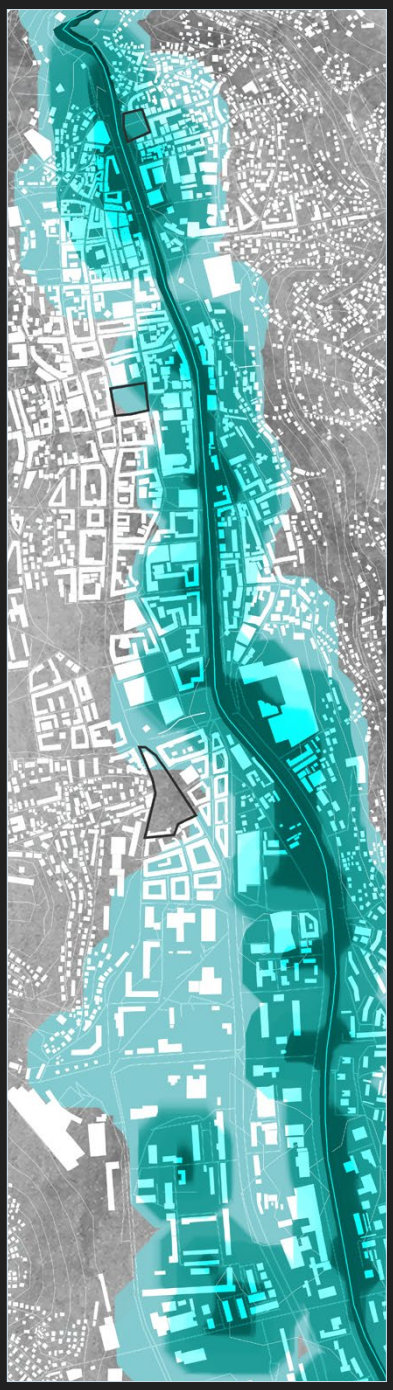
'To tackle this issue, eleven rain tanks are scattered around the city in disused parking lots and unused land. They too are connected to the flood infrastructure to dispose of excess water.

The surface flood water tank collects rainwater throughout the year until late July when it is emptied, pumped through the ground to hydrate the local urban farms. And then the cycle continues.'

Image produced by the author for the Thesis Project




existing isometric Stage 1 @ 1:100
steel deck
protection layer
concrete kerb
filter layer
gravel
steel balustrade
soil
polycarbonate sheet
gutter - specialist to detail
vapour layer
insulation
concrete hollowcore deck
weather proof membrane
plywood sheets
sprinklers
existing mechanical ventilation
proposed isometric Stage 3 @ 1:25



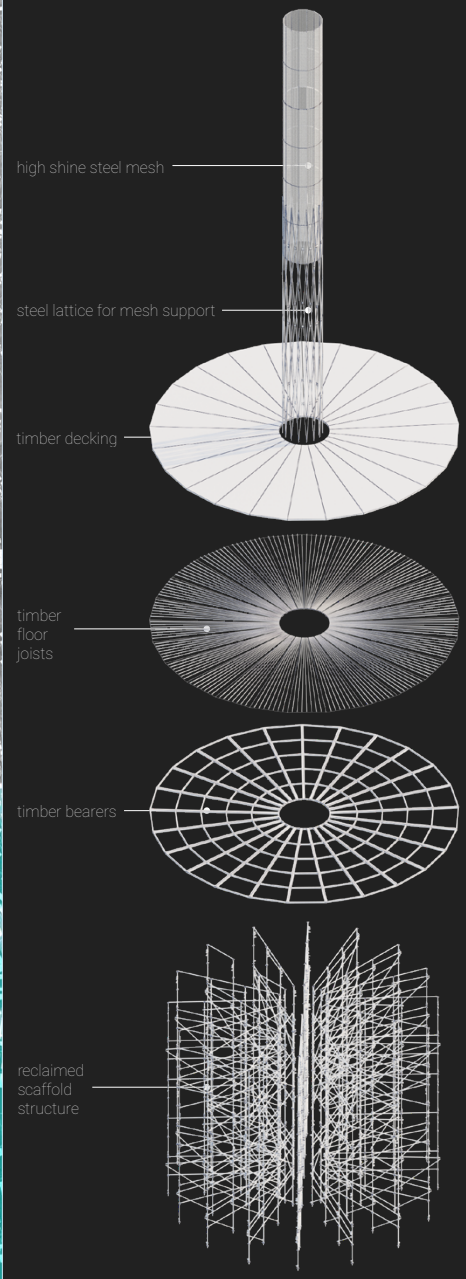
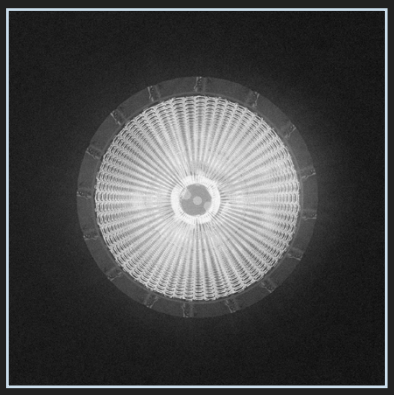


diagram showing the internal build-up of the occupied rainwater tank



'Another rain gathering tank, just beneath the ground level, is here to combat future droughts. The water is collected from the park above and ran through a complex framework of smaller tanks where, before being distributed around the city, it is chemically modified to make it safe to be used in households. Underneath it, lies one of the three flood alleviation tanks that help keep Sarajevo safe from the dangers of flooding. When the riverbanks flood, the excess water is carried through the tunnels and into chamber but, flowing through a series of flood skirting to ensure that debris is stored in places where it can be easily accessed and removed.'

Image produced by the author for the Thesis Project

'...and then he saw the bright and punishing rays of the July Sun pouring through the ceiling and bouncing off the polycarbonate into the damp rain chamber.

They soaked the linen wrapped around the narrow dinner tables in warmth and lit up the faces of the men and women sitting on the beaten-up plastic chairs on either side.

They drank black coffee and talked loudly between hearty drags of Viceroy, though their lungs were heavy with exhaustion. They had crossed the continent to find shelter from drought and famine.'

Image produced by the author for the Thesis Project

'And here, amidst the constant hum of the water pumps that drowns the buzz of the world above, they rest until the Earth is cold enough to welcome them again.

They would rest here for days, weeks, months... they read, eat and pray together in the timber fitted walls that hold a library, a place of worship, a workshop and a playground.

The skeletal scaffolding holds six long, narrow tables where everyone gathers to eat the food that they prepare in the communal kitchen.'